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

Certification Number: CA1312
NELAP Certification number: 05233CA
DoD-ELAP Certificate number: ADE-1410

Data Validatable Report

May 18, 2012

Environet, Inc.
650 Iwilei Road, #204
Honolulu, Hawaii 96817

Attn: Max Solmssen

Title: Report of Data: Case 67512

Project: LTM Red Hill/1022-024

Contract #: Prime contract # for DoD: N62742-08-D-1930, CTO HC21

Dear Mr. Solmssen:

Six water samples were received April 17, 2012, in good condition. Written results for the requested analyses are provided on this May 18, 2012.

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

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

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

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/sdm
Enclosure
cc: File

Number of pages in this report: 473

Data Validation Package
for
LTM Red Hill Bulk Fuel Storage Facility
SDG 67512

TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

SAMPLE RECEIPT INFORMATION

Sample receipt information

ARF: 67512

Project: Red Hill/1022-024

Sample Receipt Information:

The samples were received on April 17, 2012, at 4.0°C and 4.0°C. The samples were assigned Analytical Request Form (ARF) number 67512. The sample numbers and requested analyses were compared to the chain of custody and email communications. The trip blank samples (ES074 and ES075) were not listed on the CoC; the client was notified. Both trip blank samples were added to the log in and their IDs were changed to Trip Blank-1 and Trip Blank-2, as instructed. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES070	AY59184	WATER	04/16/12	04/17/12
ES071	AY59185	WATER	04/16/12	04/17/12
ES072	AY59186	WATER	04/16/12	04/17/12
ES073	AY59187	WATER	04/16/12	04/17/12
TRIP BLANK-1	AY59208	WATER	04/16/12	04/17/12
TRIP BLANK-2	AY59209	WATER	04/16/12	04/17/12

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

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

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

Measurement uncertainty can be reported upon request.

CASE NARRATIVE

EPA Method 8015B

Total Petroleum Hydrocarbons – Diesel

Sample Preparation:

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

Sample Analysis Information:

The samples were analyzed according to the method using an Agilent 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.

No sample was designated for MS/MSD analysis.

Surrogates:

The surrogate recoveries are summarized on the form 2 & 8. All surrogate recoveries were within the control limits.

Summary:

No problem was encountered

EPA Method 8270D SIM

Polynuclear Aromatic Hydrocarbons

Sample Preparation:

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

Sample Analysis Information:

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

Quality Control/Assurance

Calibrations:

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

Blanks:

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

Spikes:

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

No sample was designated for MS/MSD analysis.

Surrogates

Surrogate recoveries are summarized on the form 2&8. All surrogate recoveries were within the 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 holding times were met. The samples were received in unpreserved vials; they were analyzed within seven days of collection. Manual integrations were performed in accordance with APPL's Manual integration for gasoline was performed on every sample, LCS, method blank, second-source, and gasoline curve calibration point due to the computer integration not following the baseline. 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 its detection limit in the method blanks.

Spikes:

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

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

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
Dissolved Lead

Digestion Information:

The water samples were digested according to EPA method 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 Dilution Test (DT) were used for quality assurance. All LCS recoveries were within the acceptance limits.

Sample ES073 was selected by the laboratory as the QC sample for the analytical batch. The MS/MSD, PDS, and DT met all acceptance criteria.

Summary:

No analytical exception is noted.

Abbreviations and Flags

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

CHAIN OF CUSTODY,
ARF, CRF, AND
CLIENT COMMUNICATION

APPL - Analysis Request Form 67512

Client: **Environet, Inc.**
Address: **650 Iwilei Rd, #204**
Honolulu, HI 96817
Attn: **Max Solmssen**
Phone: **808-833-2225** Fax: **808-833-2231**
Job: **LTM Red Hill / 1022-024**
PO #: **1022-024**
Chain of Custody (Y/N): **Y** # **37947**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **2 WEEKS**

Received by: **TBV**
Date Received: **04/17/12** Time: **09:40**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **N** Time Zone: **-10**
Chest Temp(s): **4.0,4.0°C**
Color: **VOA,D-YELL,Q-ORYELL**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark**
QC Report Type: **DVP4/ADRDOD/HI**
Due Date: **05/01/12**

Comments:
14 day TAT for Form 1s & 30 day TAT for full package.
OSDas@, MSolmssen@ & 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, DoD Forms, J flag to DL, U flag at LOD
EDD ADR A1/A3 (ADR 8.3a unchecked) to OSDas@ VDupra@ & MSolmssen@environetinc.com
metals 6020: report Lead with 0.5ug/L RL
TPH-Diesel only; VOCs: include gasoline by 8260B
Please see attached email for sample deficiencies
IDs for ES074 & ES075 changed per Max email - chc 4-23-12

Sample Distribution:
GC: 4-$SIMHC12W, 4-$TPETD2
Extractions: 4-_SEP004S, 4-_SEP011
VOA: 6-$86RHBF
Metals: 4-$602D(Pb)
Other: 4-_M3015

Charges:

Invoice To:
same

	Client ID	APPL ID	Sampled	Analyses Requested
1.	ES070	AY59184W	04/16/12 09:50	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- un-preserved VOA vials
2.	ES071	AY59185W	04/16/12 11:10	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- un-preserved VOA vials
3.	ES072	AY59186W	04/16/12 08:00	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- un-preserved VOA vials
4.	ES073	AY59187W	04/16/12 12:45	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- un-preserved VOA vials
5.	TRIP BLANK-1	AY59208W	04/16/12 00:00	$86RHBF -- un-preserved VOA vials

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

6. TRIP BLANK-2	AY59209W	04/16/12	00:00	$86RHBF -- un-preserved VOA vials

APPL Sample Receipt Form

ARF# **67512**

Sample	Container Type	Count	pH
AY59184	[6] PL 500mL - HNO3	1	1.7
	[15] VOAs - NP	3	na
	[17] Amber Liter	4	na
AY59185	[6] PL 500mL - HNO3	1	1.7
	[15] VOAs - NP	3	na
	[17] Amber Liter	4	na
AY59186	[6] PL 500mL - HNO3	1	1.7
	[15] VOAs - NP	3	na
	[17] Amber Liter	4	na
AY59187	[6] PL 500mL - HNO3	1	1.7
	[15] VOAs - NP	3	na
	[17] Amber Liter	4	na
AY59208	[15] VOAs - NP	3	na
AY59209	[15] VOAs - NP	3	na

Sample	Container Type	Count	pH

APPL LABS

CHAIN OF CUSTODY RECORD

62512-4.0

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

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

C.O.C. 37947

Report to: Max Solmssen PLEASE PRINT	Invoice to: A. P. PLEASE PRINT
Company Name: Environet, Inc Phone: 808-833-2225	Company Name: Environet, Inc Phone: 808-833-2225
Address: 650 Iwilei Rd, Suite 204 Honolulu, HI 96817 Fax: 808-833-2123	Address: 650 Iwilei Rd, Suite 204 Honolulu, HI 96817 Fax: 808-833-223,
Attn: msolmssen@environetinc.com	Attn: A. P.

Project Name/Number	Sampler (Print)
Red Hill/1022-024	Max Solmssen
Purchase Order Number	Sampler (Signature)
1022-024	Max R Sol

Sample Identification	Location	Date Collected	Time Collected	Time Zone	No. of Containers	Matrix: Aq	Sed.	Soil	VOCs (8260B)	TPH-G (8260B)	TPH-D (8015B)	PAHs (EPA 3510)	dissolved lead	Date Shipped: / Carrier: / Waybill No.: / Comments:
ESO 70	Red Hill	4/16/12	950	HI	8	X			X	X	X	X	X	Lead samples have been field-filtered
ESO 71			1110											
ESO 72			800											
ESO 73			1245											

Shuttle Temperature:

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

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

Relinquished by sampler:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
	4/16/12	2:30 pm					
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received at lab by:
					4/17/12	1040 0940	

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: LTM Red Hill / 1022-024 Date Received: 4/17/12
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?_____ Date on seal? _____
5) Name on seal? _____
6) YES NO NA Were custody seals unbroken and intact at the time of arrival?
7) YES NO Did the cooler come with a shipping slip (air bill, etc.)? Carrier name: Fed Ex
8) Shipping slip numbers: 1) MASTER 2) 8764 1243 3313 3) _____
9) YES NO NA Was the shipping slip scanned into the database?
10) YES NO NA If cooler belongs to APPL, has it been logged into the ice chest database?
11) Describe type of packing in cooler (bubble wrap, popcorn, type of ice, etc.): bubble bag in wet ice
12) YES NO NA For hand delivered samples was sufficient ice present to start the cooling process?
13) YES NO Was a temperature blank included in the cooler?
14) Serial number of certified NIST thermometer used: A39267 Correction factor: 0
15) Cooler temp(s): 1) 4.0°C 2) 4.0°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: AY59185W02-W03, AY59186W01-W03, AY59187 W02-W03

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 > 12?
37) YES NO NA Unpreserved VOA Vials received? _____
38) YES NO NA Are unpreserved VOA vials noted in the ADD TEST FIELD on the ARF? _____

Lab notified if pH was not adequate: _____
Deficiencies: Received 2 Set of TRIP BLANK ID is ES074 and ES075 (3 VOA vial) no collection time on label and not listed on COC. (Non-preserved Trip Blank)

Note: Both Set of Trip Blank have bubble smaller than pea

Signature of personnel receiving samples: _____ Second reviewer: _____
Signature of project manager notified: _____ Date and Time of notification: 4/17 12:05
Name of client notified: _____ Date and Time of notification: _____
Information given to client: _____
_____ by whom (Initials): _____

EPA 8015 Modified
Total Petroleum Hydrocarbons

EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary

Method Blank
TPH Diesel Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120418W-59184 - 166388**
Batch ID: #TPETD-120418B

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	04/18/12	04/20/12
BLANK	SURROGATE: OCTACOSANE (S)	92.7	28-142			%	04/18/12	04/20/12
BLANK	SURROGATE: ORTHO-TERPHEN	77.0	57-132			%	04/18/12	04/20/12

Quant Method: TPH0306.M
Run #: 419039
Instrument: Apollo
Sequence: 120419
Initials: TRL

Printed: 05/01/12 2:58:04 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/20/12

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120418B-BLK	Blank	28-142	92.7		57-132	77.0	
120418B-LCS	Lab Control Spike	28-142	88.7		57-132	88.0	
AY59184	ES070	28-142	89.0		57-132	79.2	
AY59185	ES071	28-142	93.7		57-132	86.2	
AY59186	ES072	28-142	81.9		57-132	77.7	
AY59187	ES073	28-142	87.1		57-132	78.0	

Comments: Batch: #TPETD-120418B

Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **120418W-59184 LCS - 166388**
Batch ID: #TPETD-120418B

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	1540	77.0	61-143
SURROGATE: OCTACOSANE (S)	150	133	88.7	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	132	88.0	57-132

Comments:

Primary	SPK
Quant Method :	TPH0306.M
Extraction Date :	04/18/12
Analysis Date :	04/20/12
Instrument :	Apollo
Run :	419040
Initials :	TRL

Printed: 05/01/12 2:58:10 PM
APPL Standard LCS

EPA 8015B-e

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/20/12

Matrix: WATER Instrument: Apollo

Blank ID: 120418B-BLK Time Analyzed: 1933

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120418B-BLK	Blank	419039	04/20/12 1933
120418B-LCS	Lab Control Spike	419040	04/20/12 1958
AY59184	ES070	419041	04/20/12 2022
AY59185	ES071	419042	04/20/12 2046
AY59186	ES072	419043	04/20/12 2110
AY59187	ES073	419044	04/20/12 2135

Comments: Batch: #TPETD-120418B

Printed: 05/01/12 2:58:14 PM
Form 4, Blank Summary

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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES070

APPL ID: AY59184

Sample Collection Date: 04/16/12

QCG: #TPETD-120418B-166388

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	04/18/12	04/20/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	89.0	28-142			%	04/18/12	04/20/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	79.2	57-132			%	04/18/12	04/20/12

Quant Method: TPH0306.M
Run #: 419041
Instrument: Apollo
Sequence: 120419
Dilution Factor: 1
Initials: TRL

Printed: 05/10/12 8:02:46 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

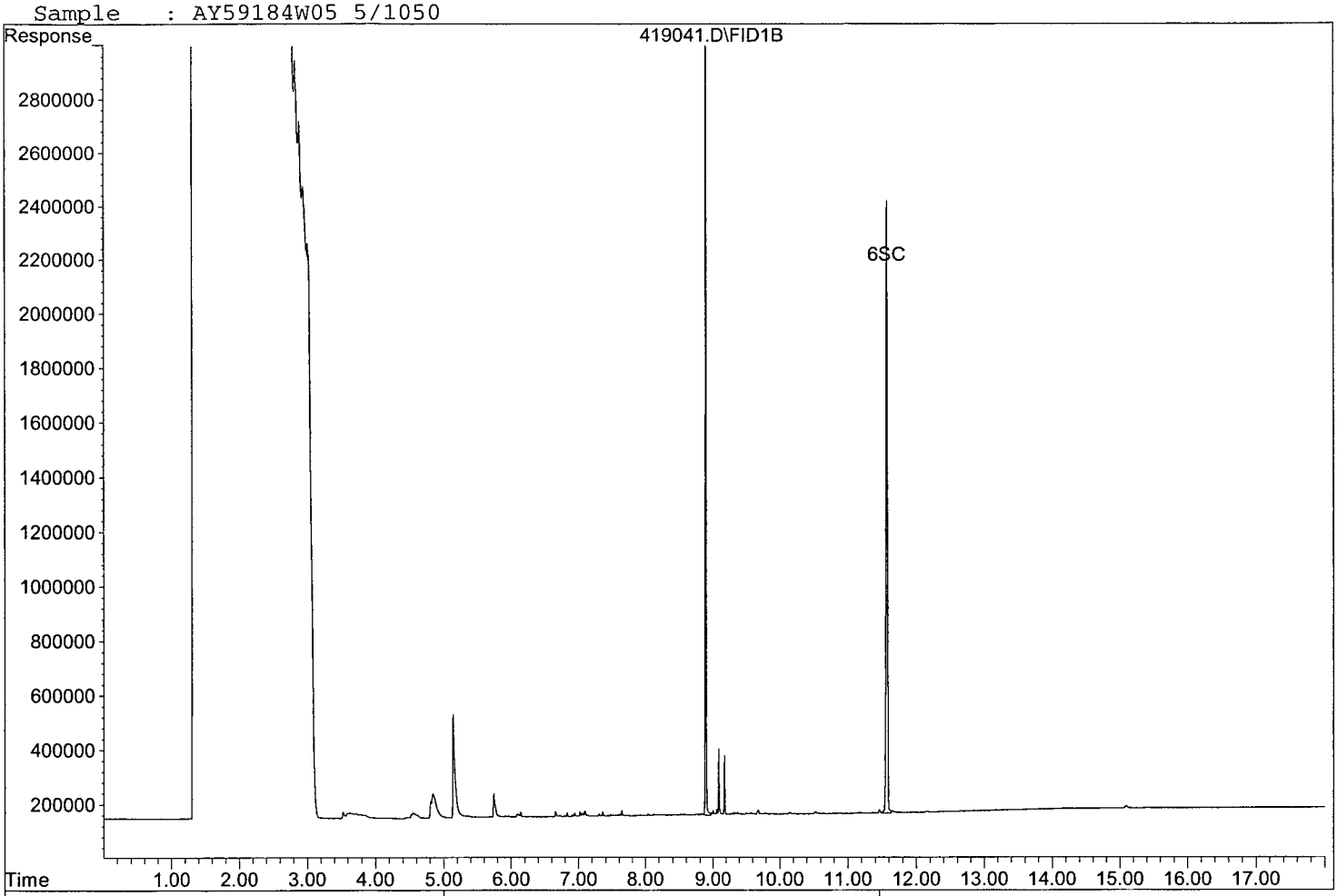
Data File : G:\APOLLO\DATA\120419\419041.D Vial: 41
Acq On : 4-20-12 20:22:35 Operator: LAC
Sample : AY59184W05 5/1050 Inst : Apollo
Misc : Water Multiplr: 4.76
IntFile : events.e
Quant Time: May 10 19:51 2012 Quant Results File: TPH0306.RES

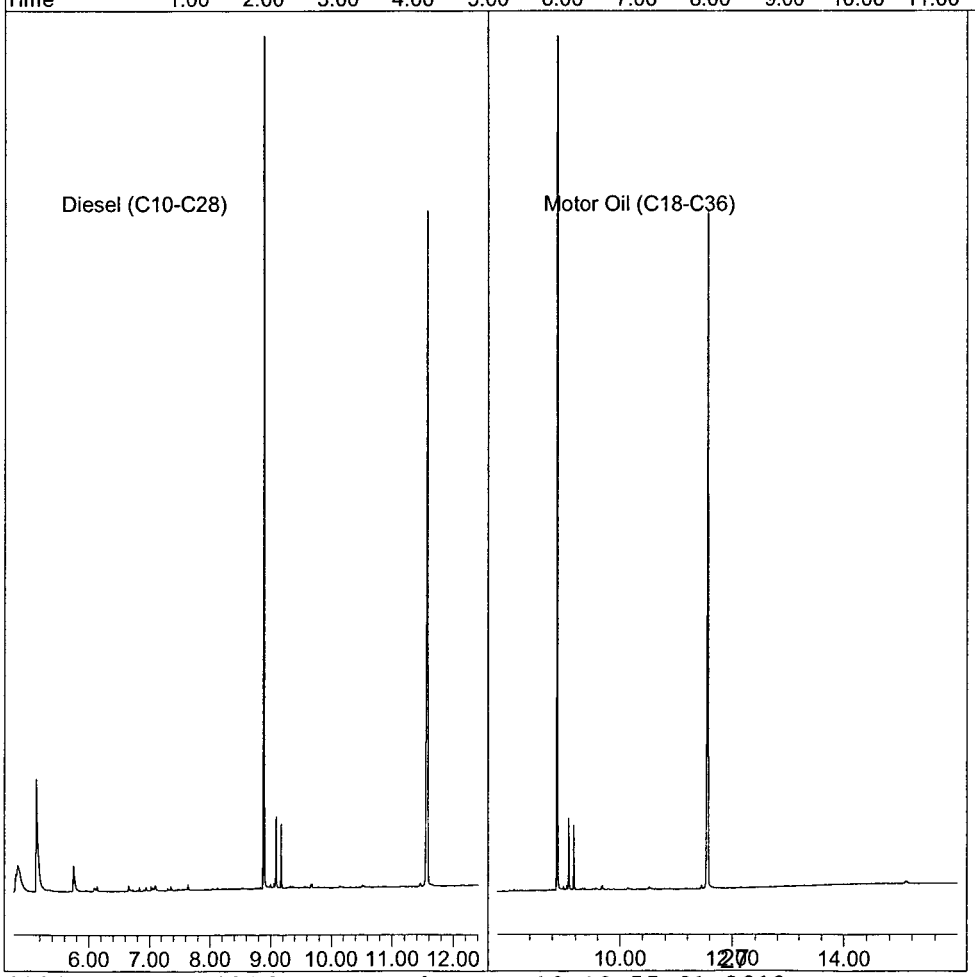
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	32826100	113.080 ppb
Surrogate Spike 142.857		Recovery =	79.16%
6) SC Octacosane(S)	11.57	31556739	127.204 ppb
Surrogate Spike 142.857		Recovery =	89.04%
Target Compounds			

Data File: G:\APOLLO\DATA\120419\419041.D
Sample : AY59184W05 5/1050





TPH Diesel Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES071

APPL ID: AY59185

Sample Collection Date: 04/16/12

QCG: #TPETD-120418B-166388

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	1200 ++	150	80.8	40.4	ug/L	04/18/12	04/20/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	93.7	28-142			%	04/18/12	04/20/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	86.2	57-132			%	04/18/12	04/20/12

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

Quant Method: TPH0306.M
Run #: 419042
Instrument: Apollo
Sequence: 120419
Dilution Factor: 1
Initials: TRL

Printed: 05/10/12 8:02:47 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\120419\419042.D Vial: 42
Acq On : 4-20-12 20:46:48 Operator: LAC
Sample : AY59185W07 5/1050 Inst : Apollo
Misc : Water Multiplr: 4.76
IntFile : events.e
Quant Time: May 10 19:49 2012 Quant Results File: TPH0306.RES

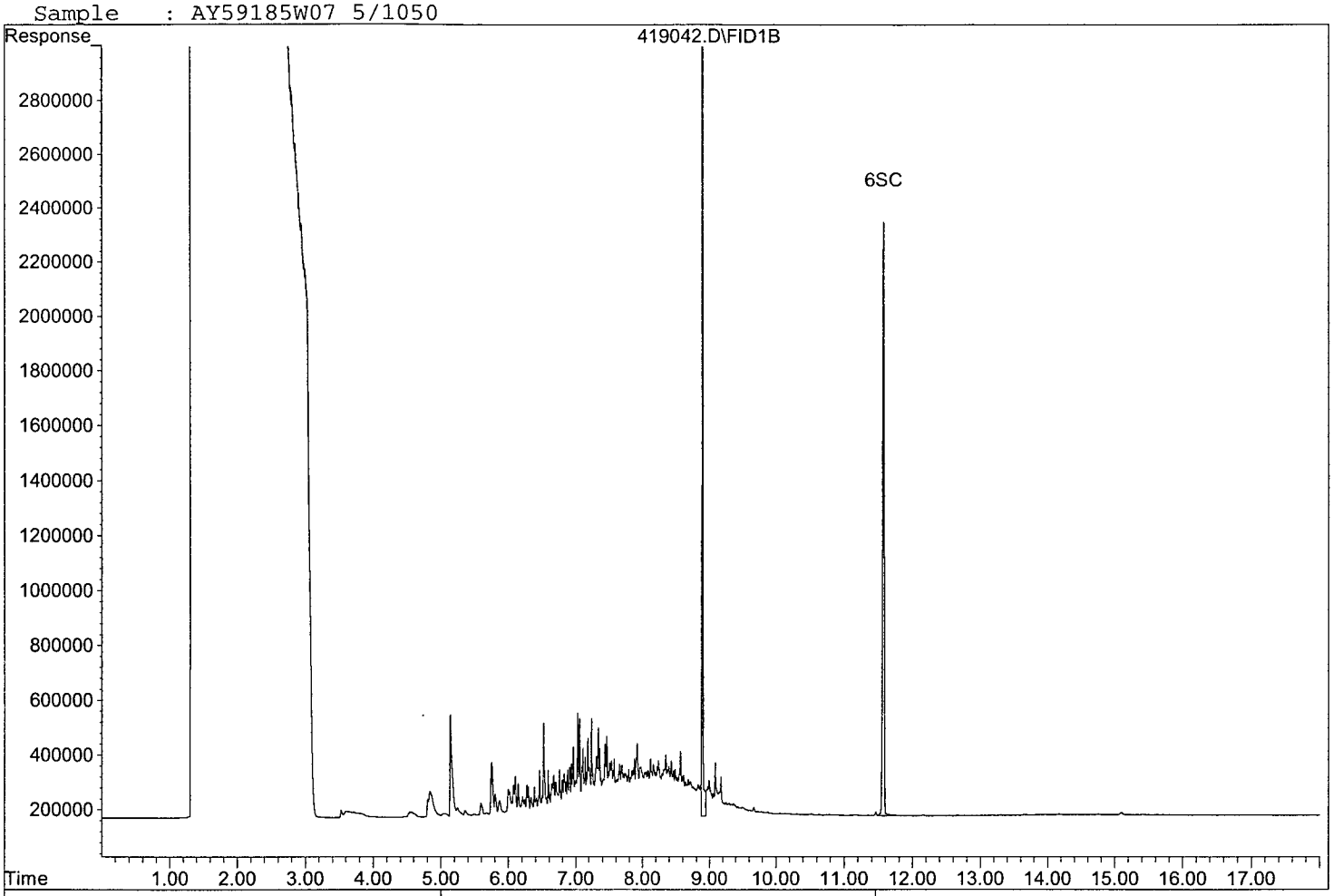
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

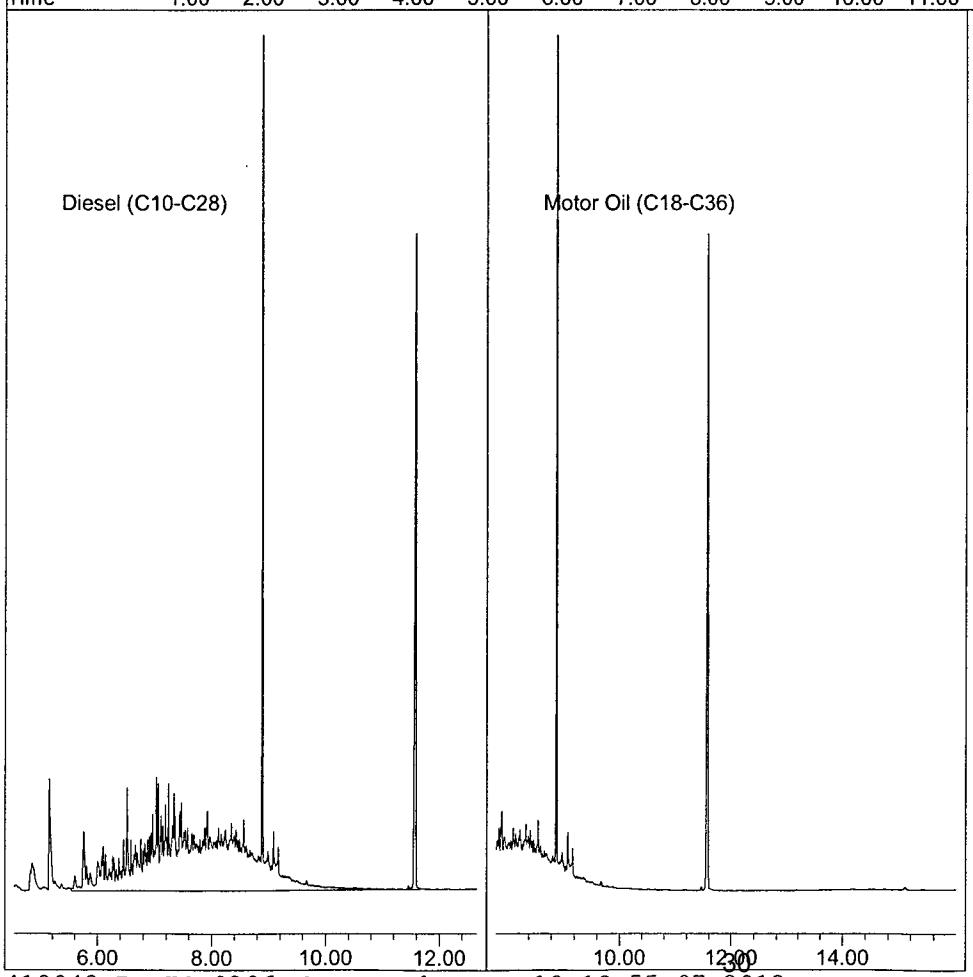
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	35754948	123.169 ppb
Surrogate Spike 142.857		Recovery =	86.22%
6) SC Octacosane(S)	11.57	33199002	133.824 ppb
Surrogate Spike 142.857		Recovery =	93.68%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	275364404	1198.569 ppb

TG 5/10/12

Data File: G:\APOLLO\DATA\120419\419042.D
Sample : AY59185W07 5/1050





TPH Diesel Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES072

APPL ID: AY59186

Sample Collection Date: 04/16/12

QCG: #TPETD-120418B-166388

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	1100 ++	150	80.8	40.4	ug/L	04/18/12	04/20/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	81.9	28-142			%	04/18/12	04/20/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	77.7	57-132			%	04/18/12	04/20/12

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

Quant Method: TPH0306.M
Run #: 419043
Instrument: Apollo
Sequence: 120419
Dilution Factor: 1
Initials: TRL

Printed: 05/10/12 8:02:47 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\120419\419043.D Vial: 43
Acq On : 4-20-12 21:10:59 Operator: LAC
Sample : AY59186W06 5/1050 Inst : Apollo
Misc : Water Multiplr: 4.76
IntFile : events.e
Quant Time: May 10 19:53 2012 Quant Results File: TPH0306.RES

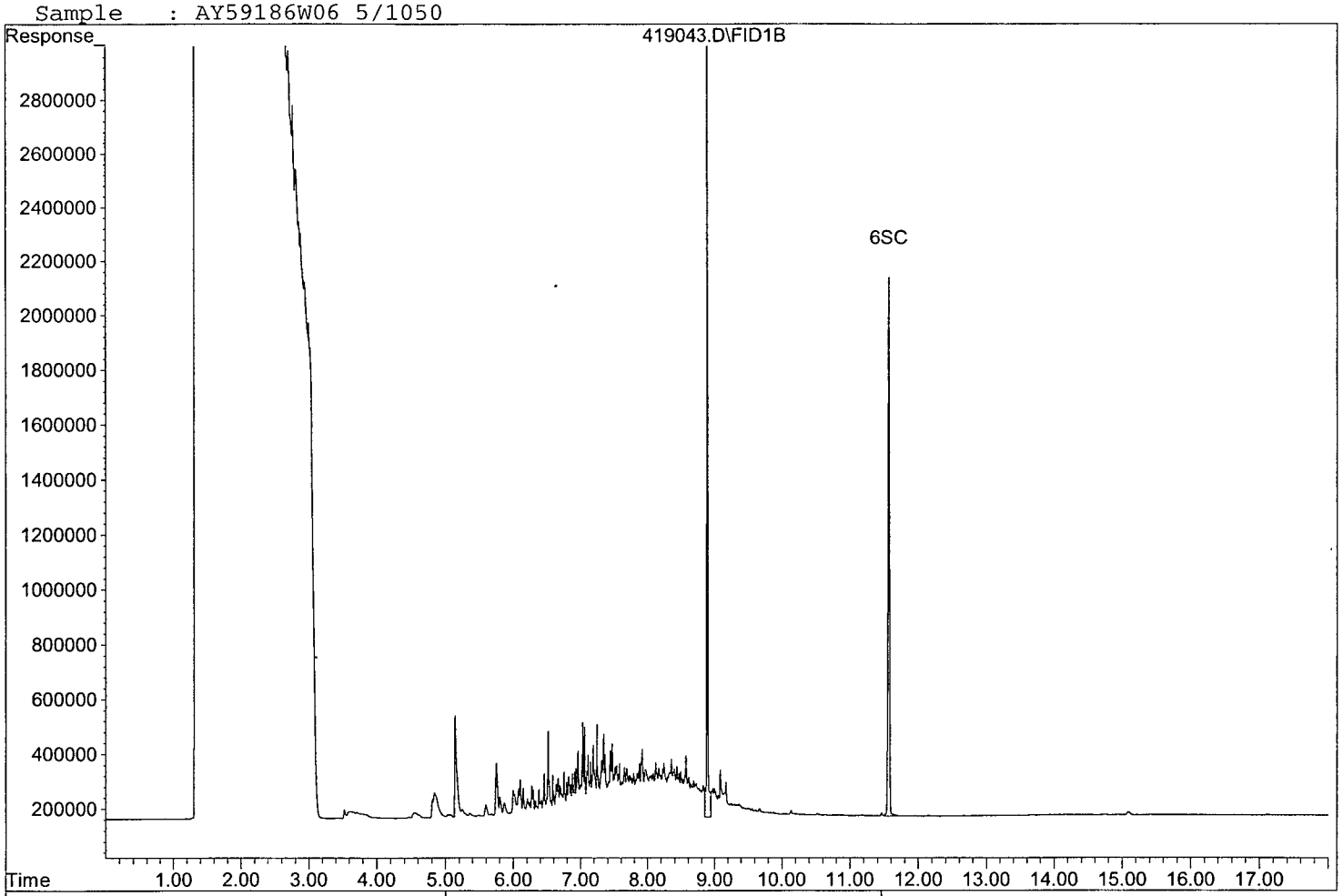
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

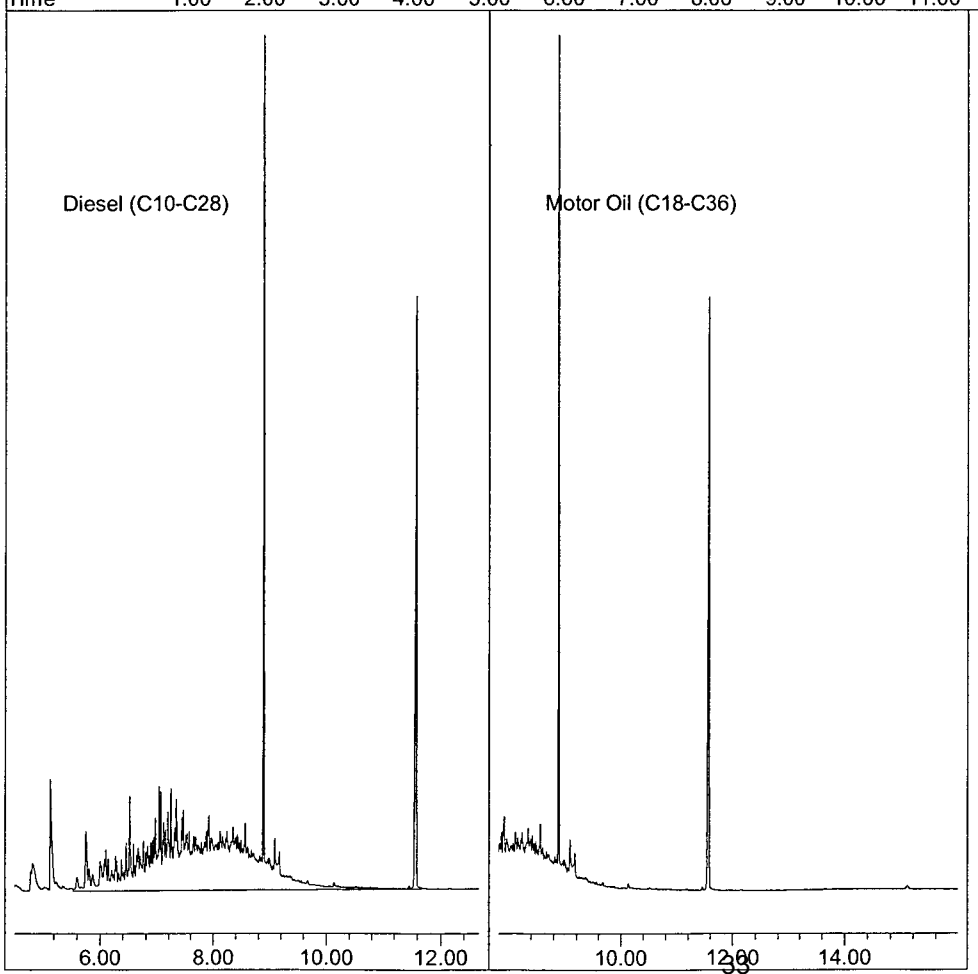
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	32212895	110.967 ppb
Surrogate Spike 142.857		Recovery =	77.68%
6) SC Octacosane(S)	11.57	29013156	116.951 ppb
Surrogate Spike 142.857		Recovery =	81.87%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	261492678	1138.190 ppb

TG 5/10/12

Data File: G:\APOLLO\DATA\120419\419043.D
Sample : AY59186W06 5/1050





TPH Diesel Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES073

APPL ID: AY59187

Sample Collection Date: 04/16/12

QCG: #TPETD-120418B-166388

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	04/18/12	04/20/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	87.1	28-142			%	04/18/12	04/20/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	78.0	57-132			%	04/18/12	04/20/12

Quant Method: TPH0306.M
Run #: 419044
Instrument: Apollo
Sequence: 120419
Dilution Factor: 1
Initials: TRL

Printed: 05/10/12 8:02:47 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

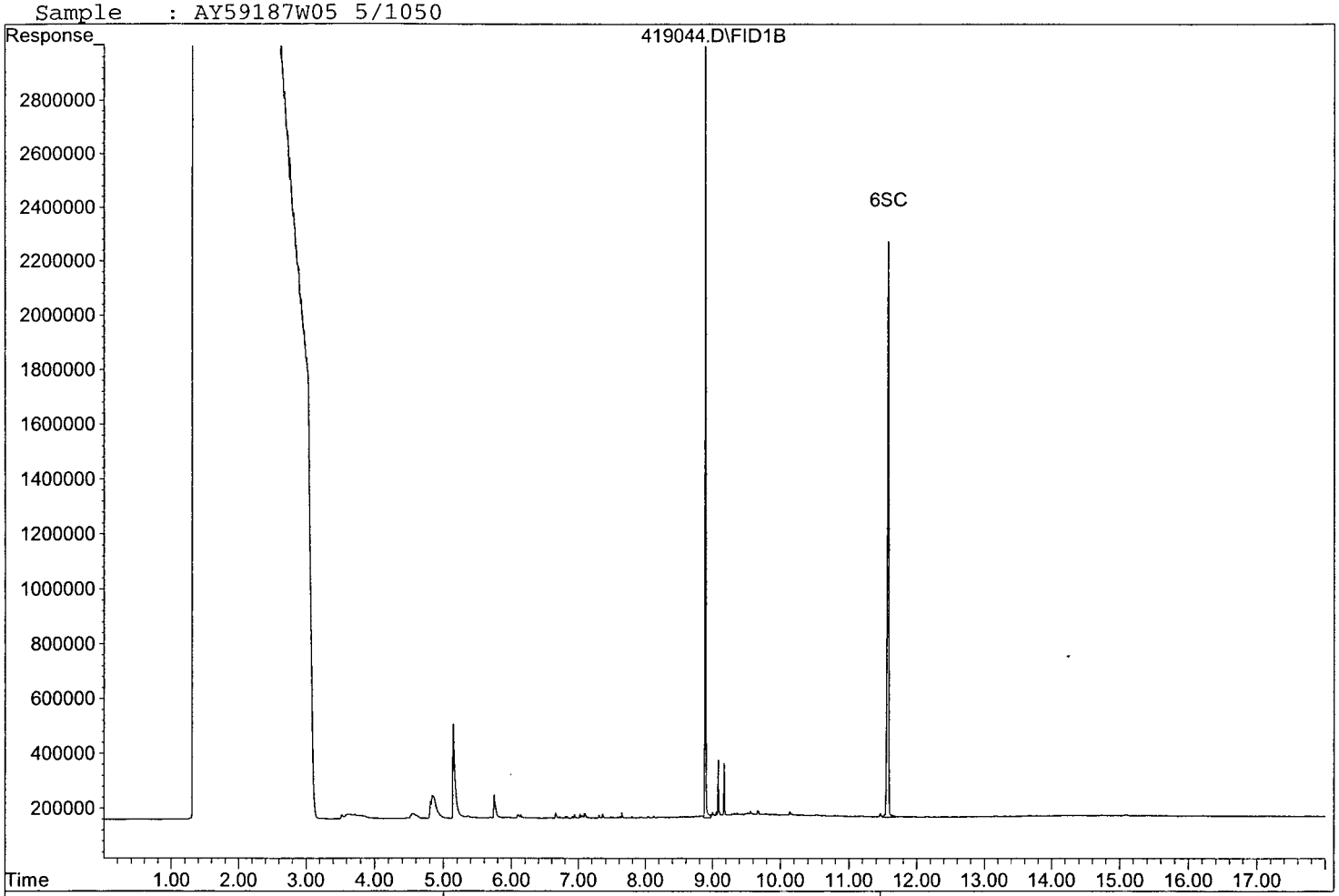
Data File : G:\APOLLO\DATA\120419\419044.D Vial: 44
Acq On : 4-20-12 21:35:08 Operator: LAC
Sample : AY59187W05 5/1050 Inst : Apollo
Misc : Water Multiplr: 4.76
IntFile : events.e
Quant Time: May 10 19:54 2012 Quant Results File: TPH0306.RES

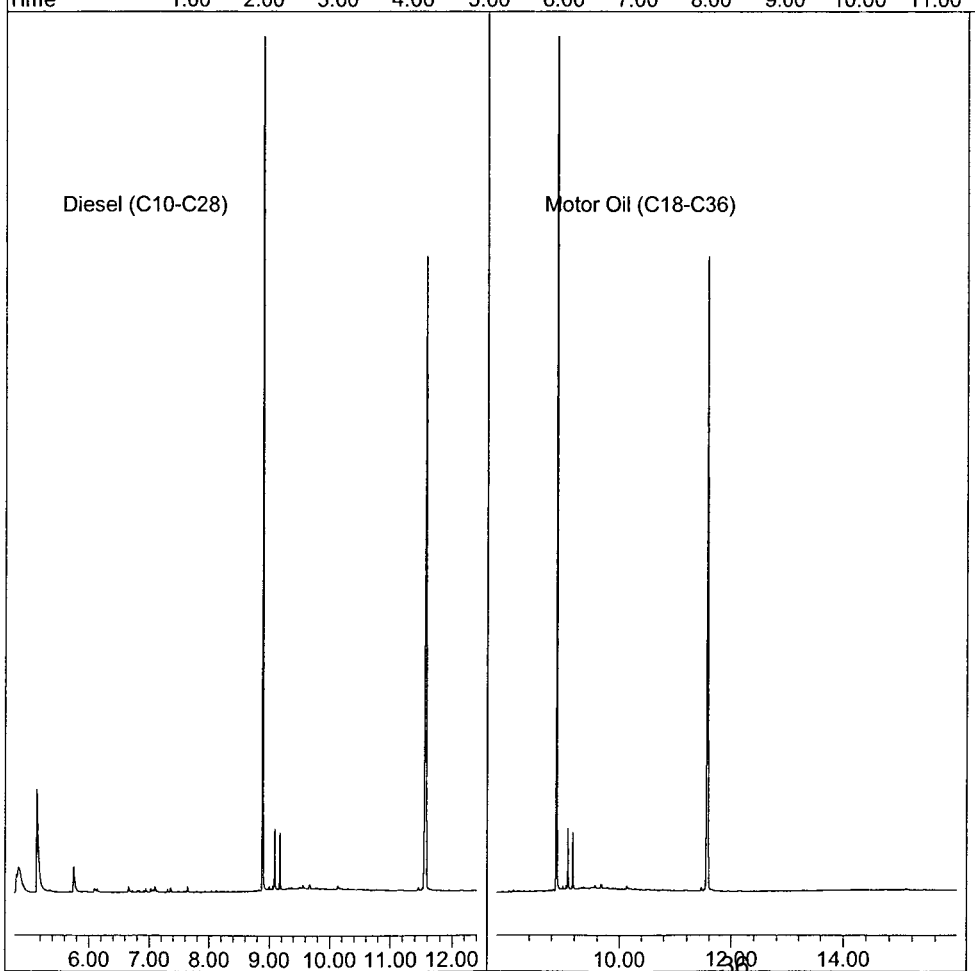
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	32340089	111.405 ppb
Surrogate Spike 142.857		Recovery =	77.98%
6) SC Octacosane(S)	11.57	30857566	124.385 ppb
Surrogate Spike 142.857		Recovery =	87.07%
Target Compounds			

Data File: G:\APOLLO\DATA\120419\419044.D
Sample : AY59187W05 5/1050





EPA 8015 Modified
Total Petroleum Hydrocarbons

Calibration Data

TPH Extractables
TPH0306

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67512
Case No: Initial Cal. Date: 03/06/12
Matrix: Instrument: Apollo Initials: LAC

306021.D 306022.D 306023.D 306024.D 306025.D 306026.D
306028.D 306029.D 306030.D 306031.D 306032.D 306033.D
306034.D 306035.D 306036.D 306037.D 306038.D 306039.D

		Compound	1	2	3	4	5	6			Avg	%RSD		
1	HATM	Diesel (C10-C28)	529470	572376	554327	532214	548865	544808			547010	2.9	HATM	
2	HBTM	Motor Oil (C18-C36)	330338	392850	386776	387626	385763	416808			383360	7.4	HBTM	
3	SA	Not Used(S)	818070	901397	771640	752170	778035	779206			800086	6.8	SA	
4	SC	Ortho-Terphenyl(S)		758155	695456	669026	662710	670505			691170	5.7	SC	
5	SA	Not Used2(S)	639279	629664	580197	560231	582428	580127			595321	5.3	SA	
6	SC	Octacosane(S)		649248	593354	568152	567907	574675			590667	5.8	SC	
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														

0.967941

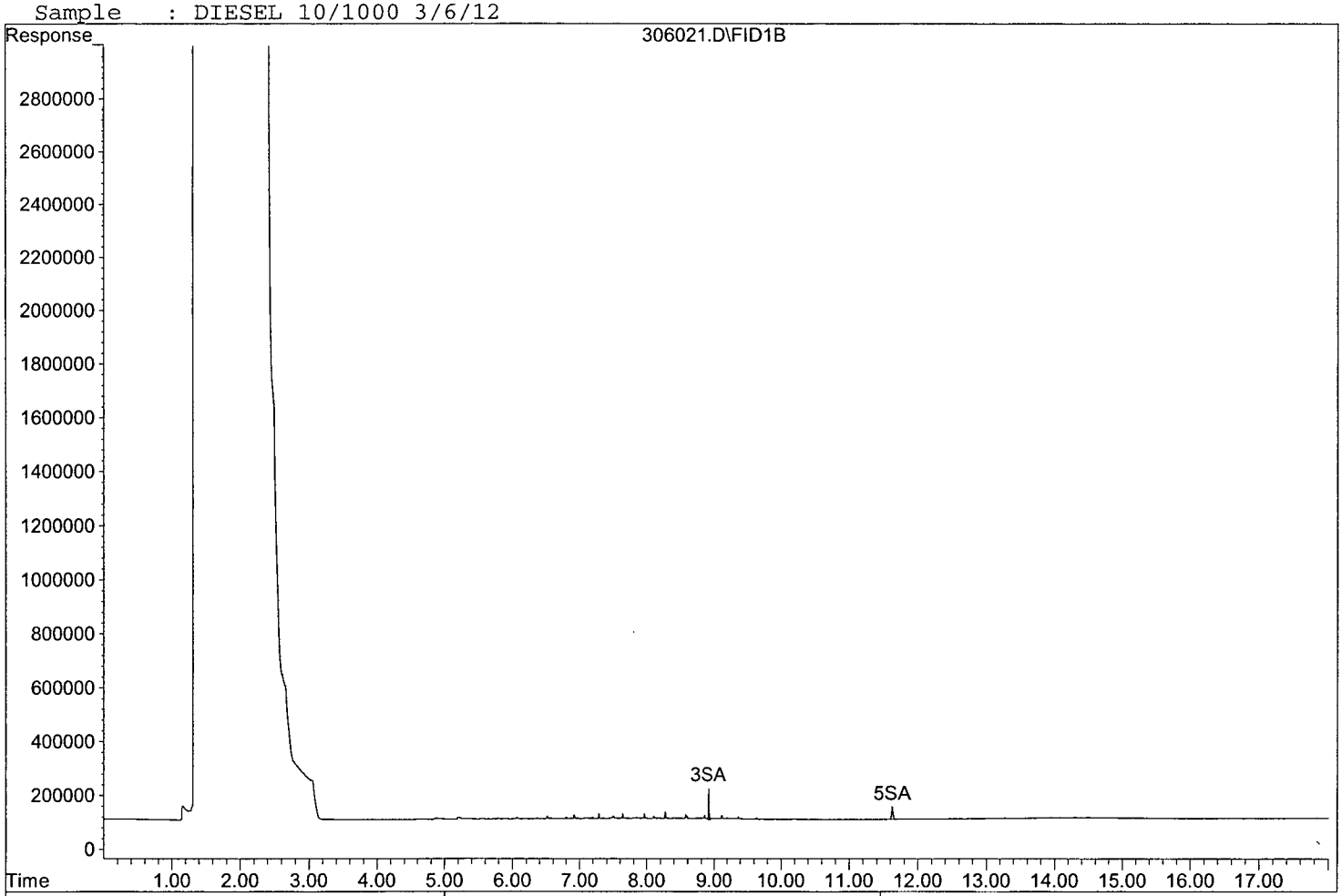
Data File : G:\APOLLO\DATA\120306\306021.D Vial: 21
Acq On : 3-6-12 17:25:38 Operator: LAC
Sample : DIESEL 10/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:48 2012 Quant Results File: TPH0306.RES

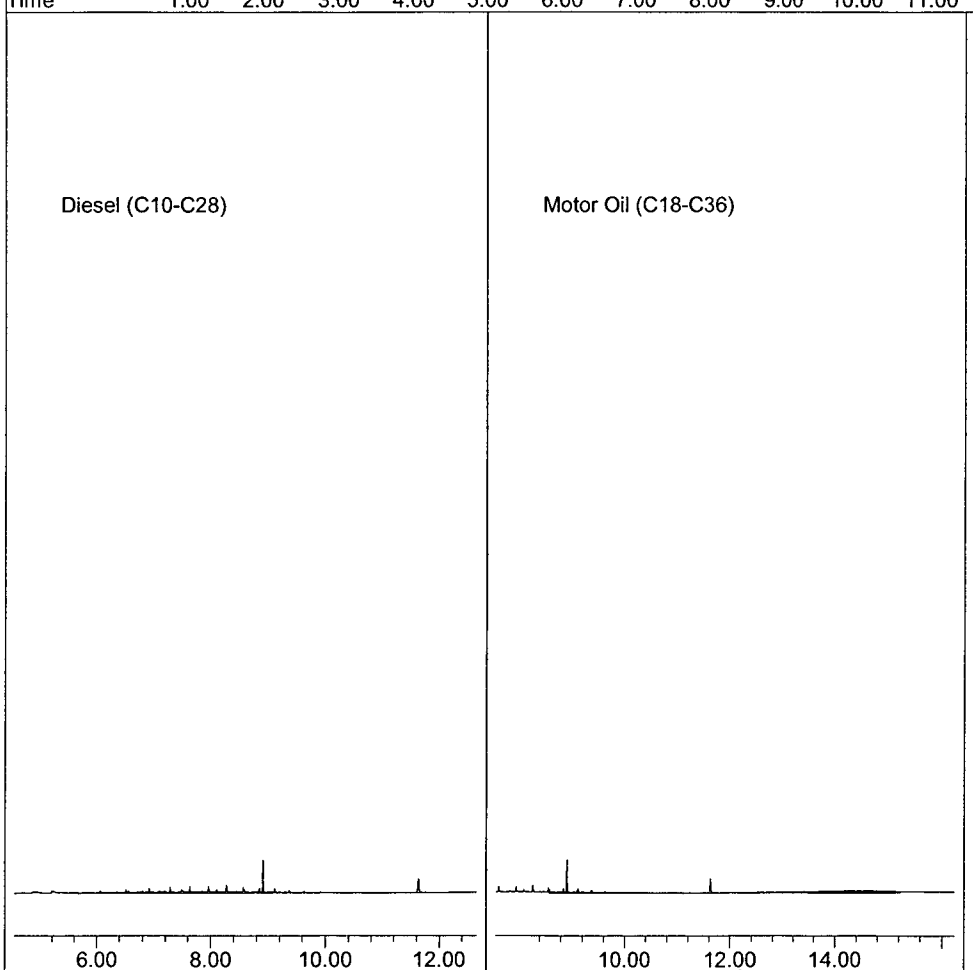
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	818070	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
5) SA Not Used2(S)	11.63	639279	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	10589402	10.000 ppb

Data File: G:\APOLLO\DATA\120306\306021.D
Sample : DIESEL 10/1000 3/6/12





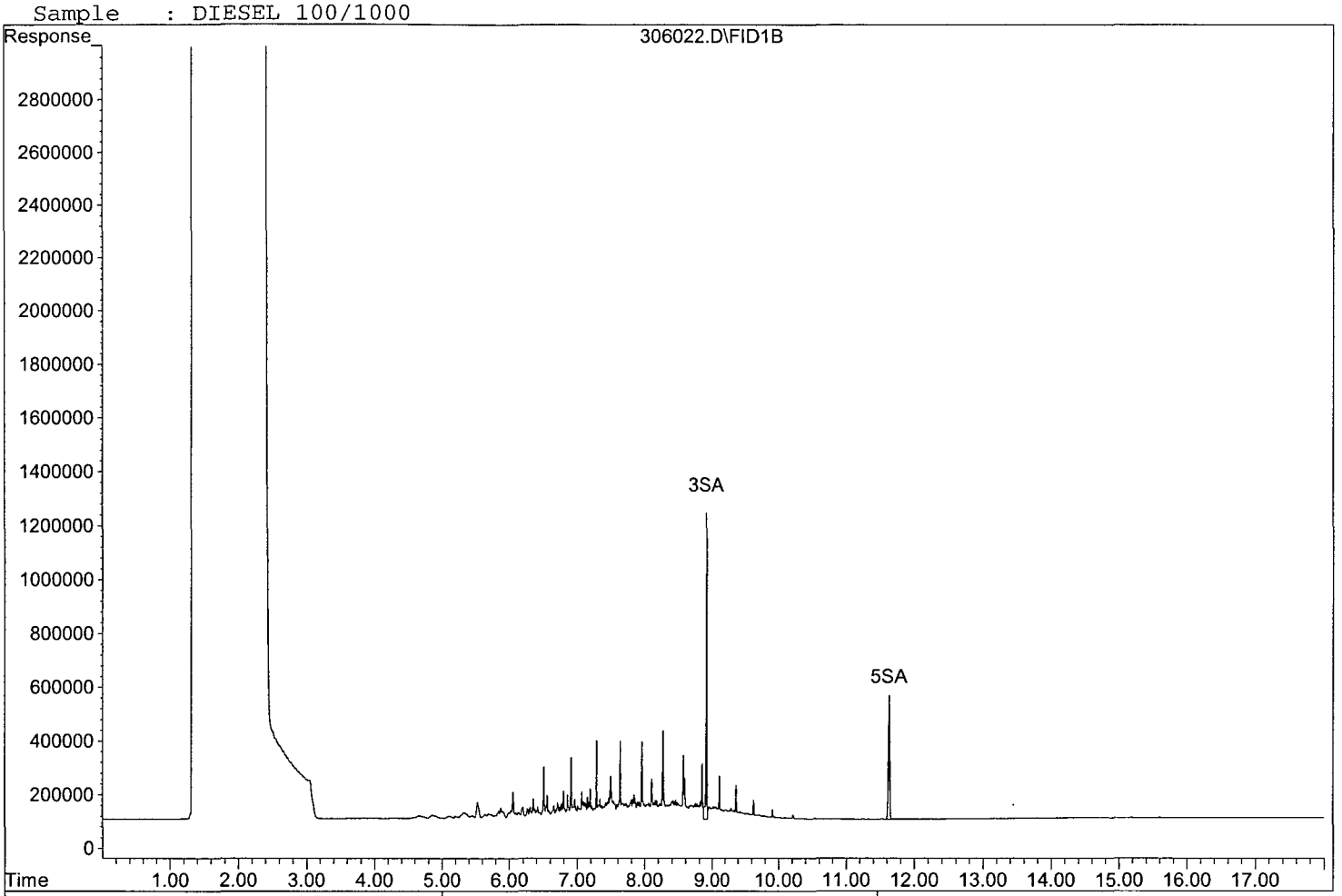
Data File : G:\APOLLO\DATA\120306\306022.D Vial: 22
Acq On : 3-6-12 17:49:21 Operator: LAC
Sample : DIESEL 100/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

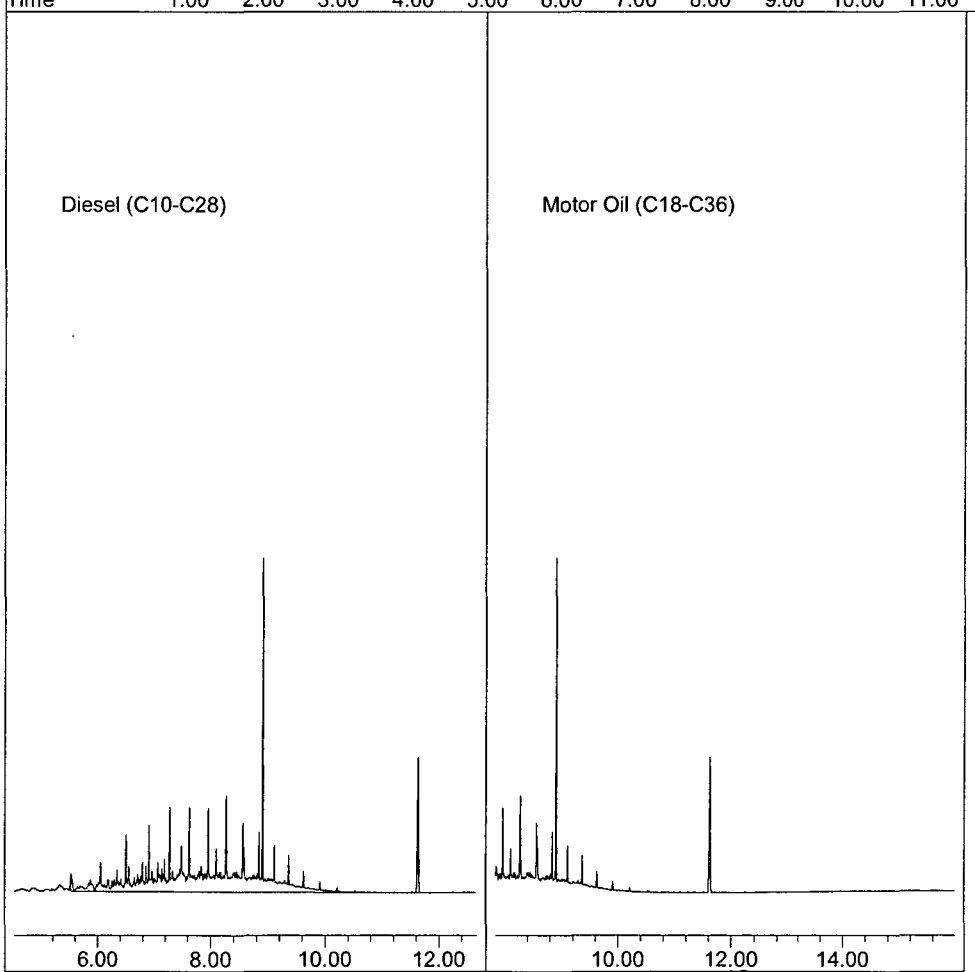
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	9013972	5.509 ppb
Surrogate Spike 30.000	Recovery =		18.36%
5) SA Not Used2(S)	11.63	6296635	4.925 ppb
Surrogate Spike 30.000	Recovery =		16.42%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	114475207	108.104 ppb

Data File: G:\APOLLO\DATA\120306\306022.D
Sample : DIESEL 100/1000





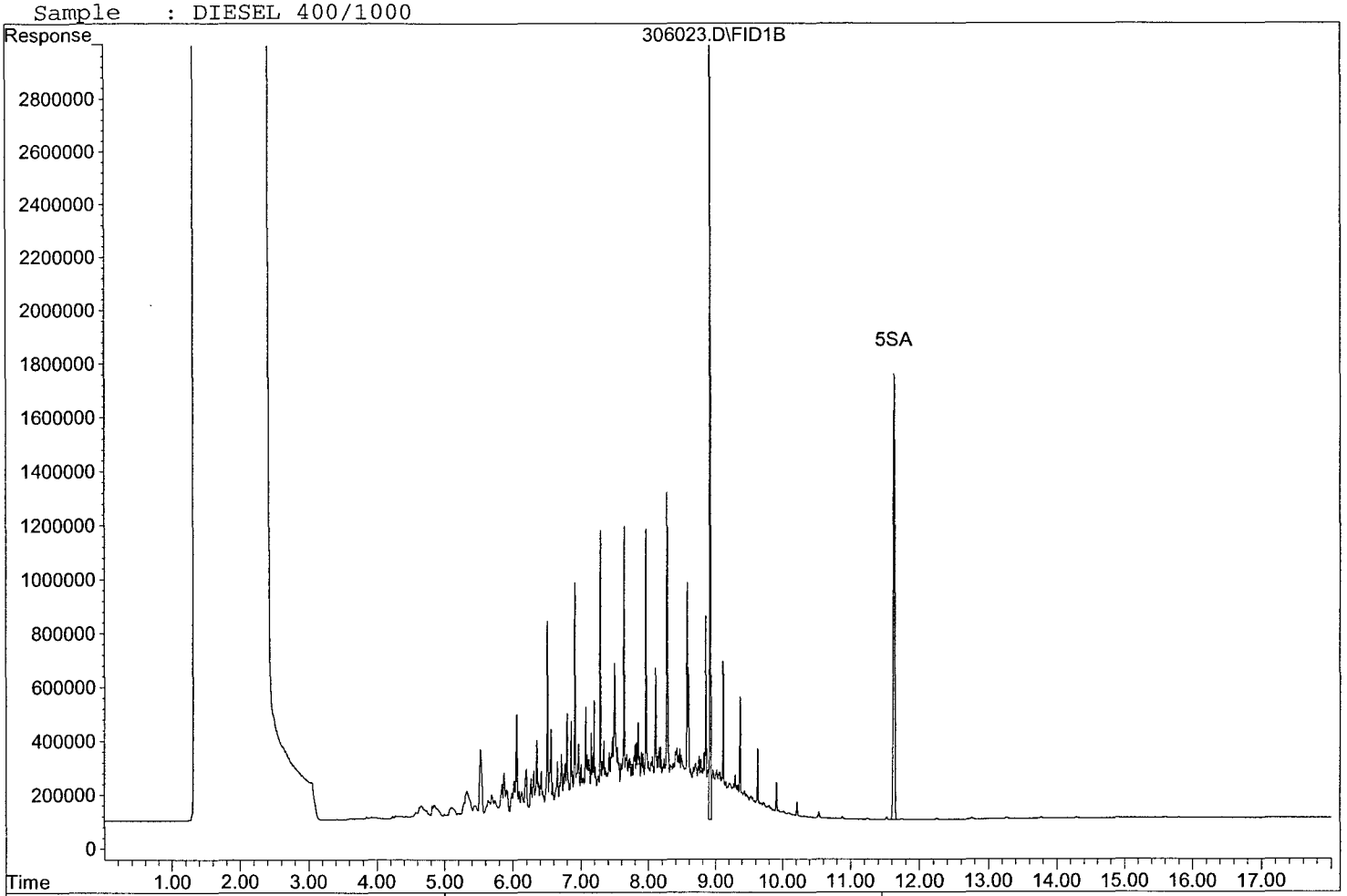
Data File : G:\APOLLO\DATA\120306\306023.D Vial: 23
Acq On : 3-6-12 18:12:55 Operator: LAC
Sample : DIESEL 400/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

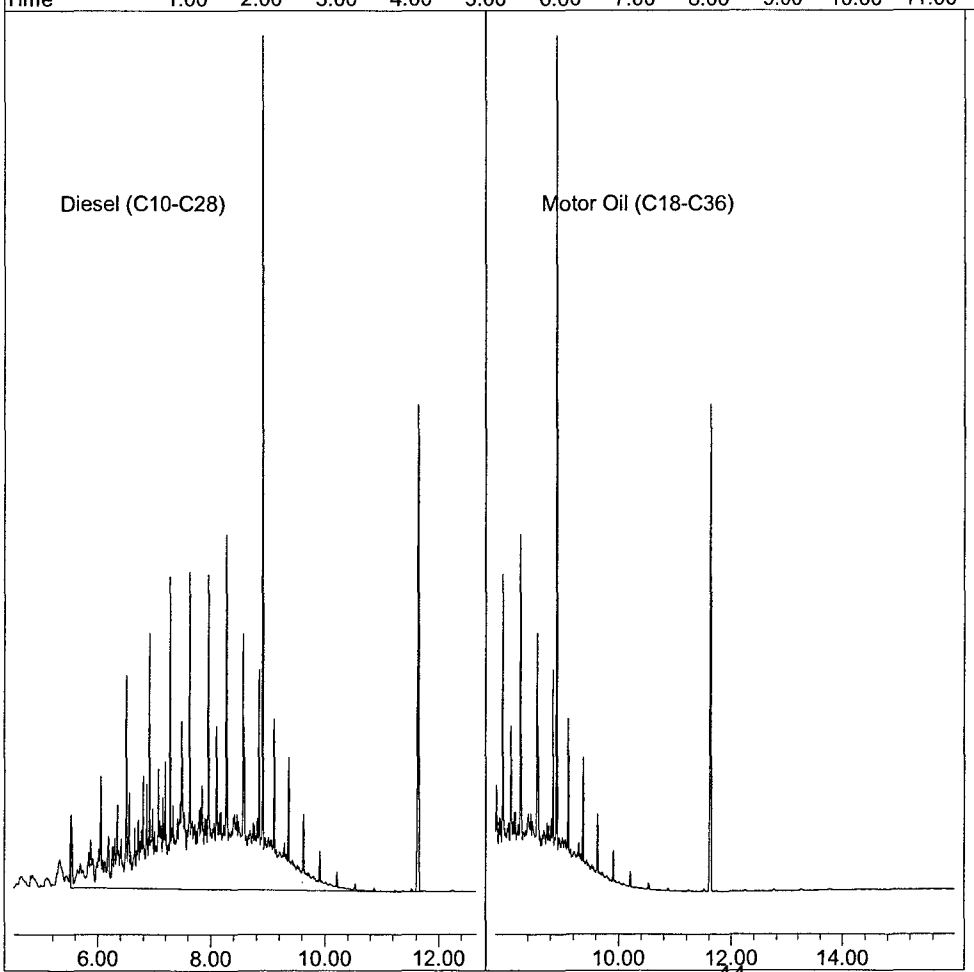
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	30865588	17.951 ppb
Surrogate Spike 30.000	Recovery =		59.84%
5) SA Not Used2(S)	11.64	23207886	18.289 ppb
Surrogate Spike 30.000	Recovery =		60.96%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	443461339	402.471 ppb

Data File: G:\APOLLO\DATA\120306\306023.D
Sample : DIESEL 400/1000





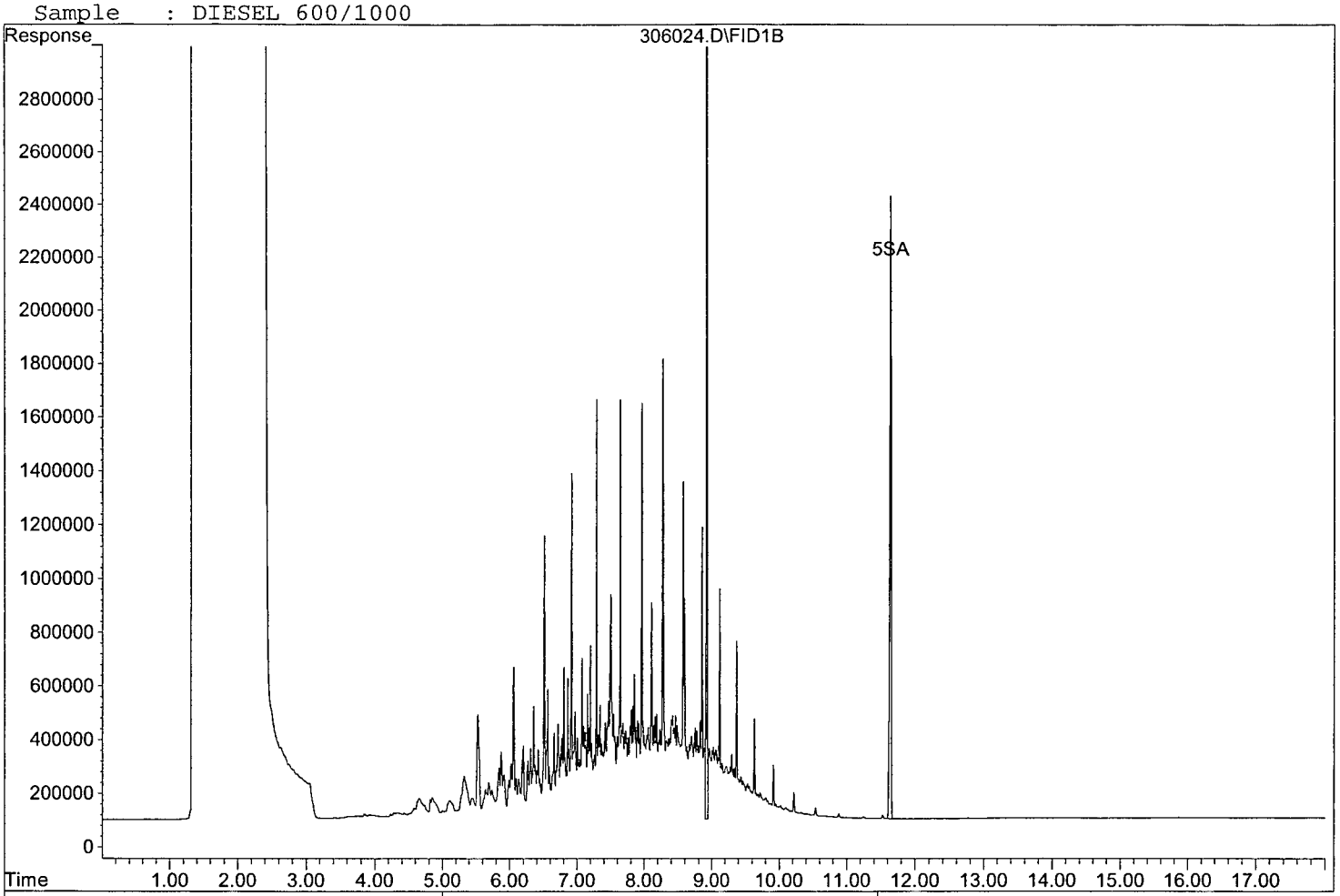
Data File : G:\APOLLO\DATA\120306\306024.D Vial: 24
Acq On : 3-6-12 18:36:31 Operator: LAC
Sample : DIESEL 600/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

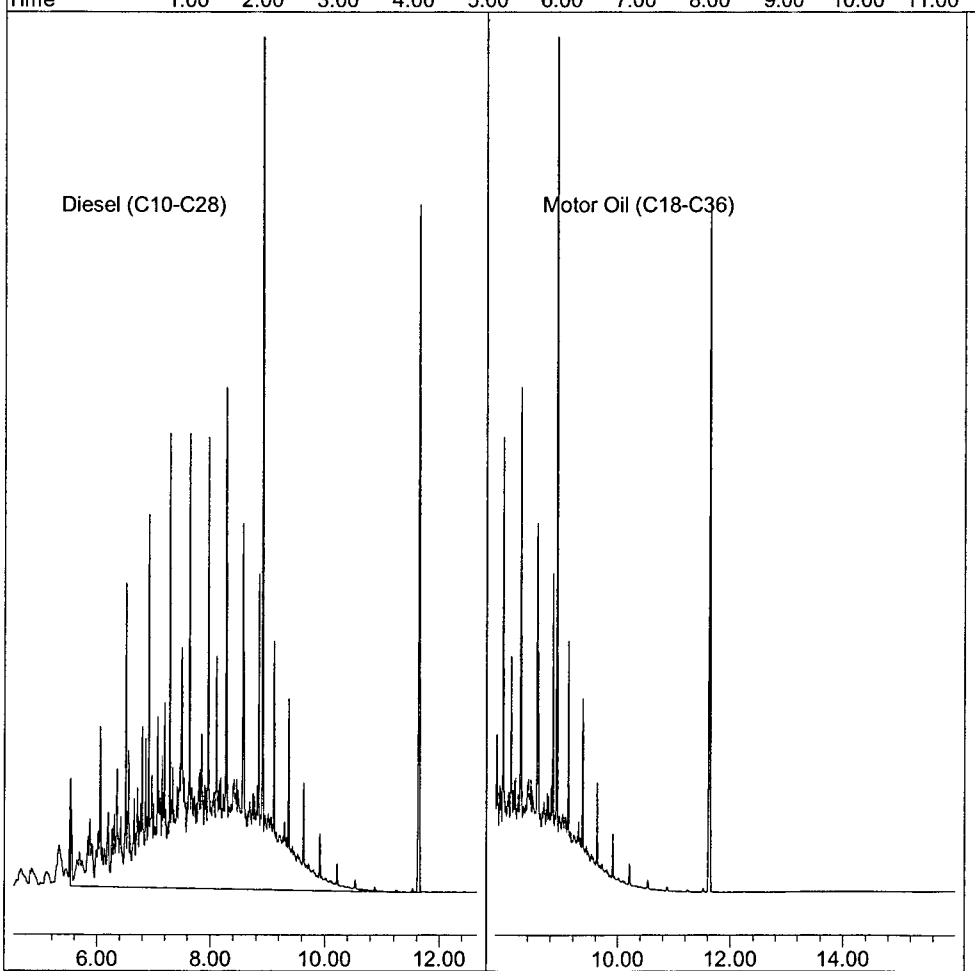
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	45130195	27.175 ppb
Surrogate Spike 30.000	Recovery =		90.58%
5) SA Not Used2(S)	11.64	33613879	27.267 ppb
Surrogate Spike 30.000	Recovery =		90.89%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	638656371	578.433 ppb

Data File: G:\APOLLO\DATA\120306\306024.D
Sample : DIESEL 600/1000





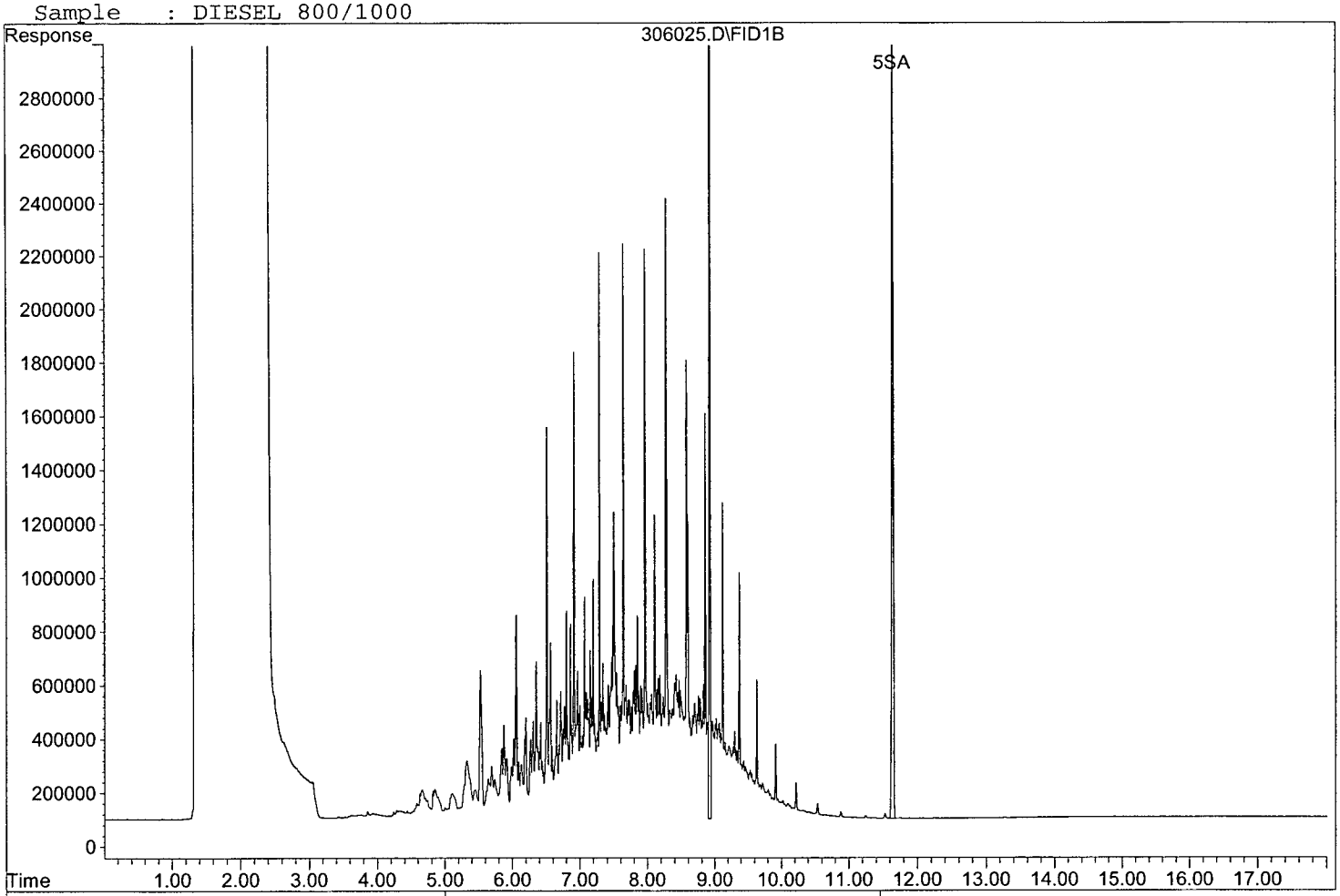
Data File : G:\APOLLO\DATA\120306\306025.D Vial: 25
Acq On : 3-6-12 19:00:08 Operator: LAC
Sample : DIESEL 800/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

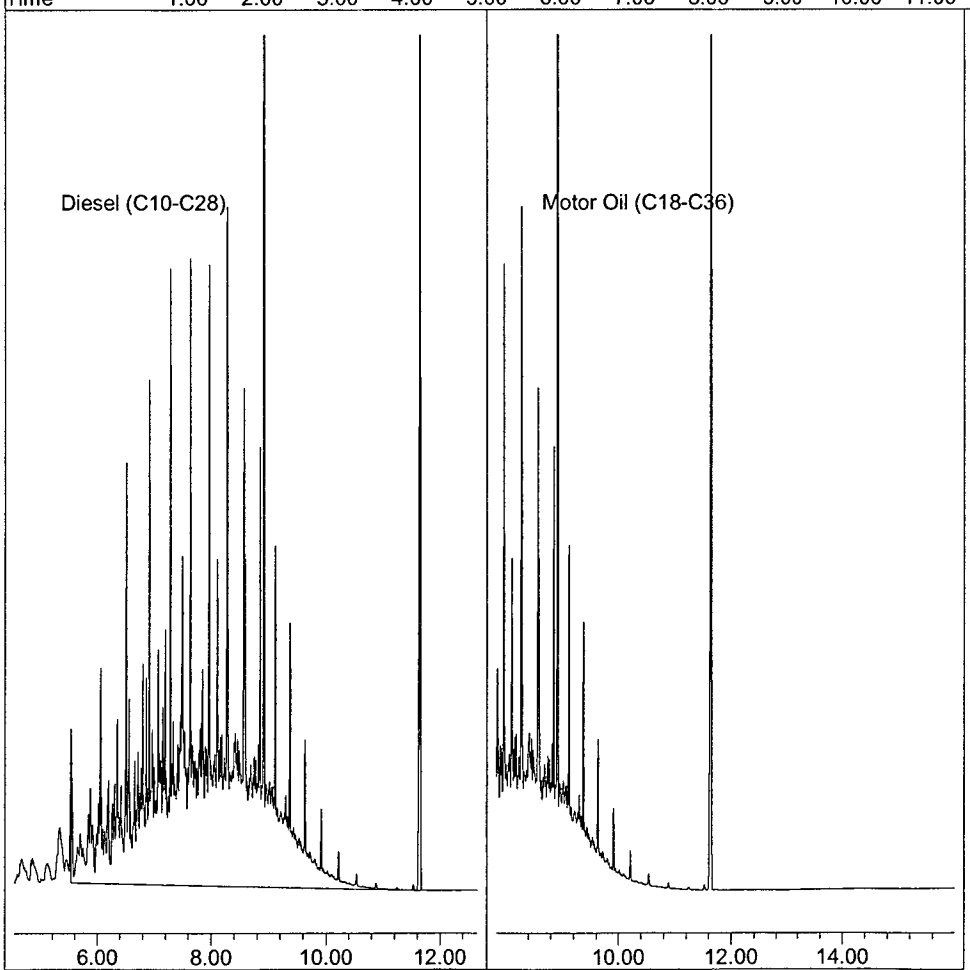
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	62242769	38.383 ppb
Surrogate Spike 30.000	Recovery =		127.94%
5) SA Not Used2(S)	11.65	46594210	38.677 ppb
Surrogate Spike 30.000	Recovery =		128.92%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	878183394	802.585 ppb

Data File: G:\APOLLO\DATA\120306\306025.D
Sample : DIESEL 800/1000





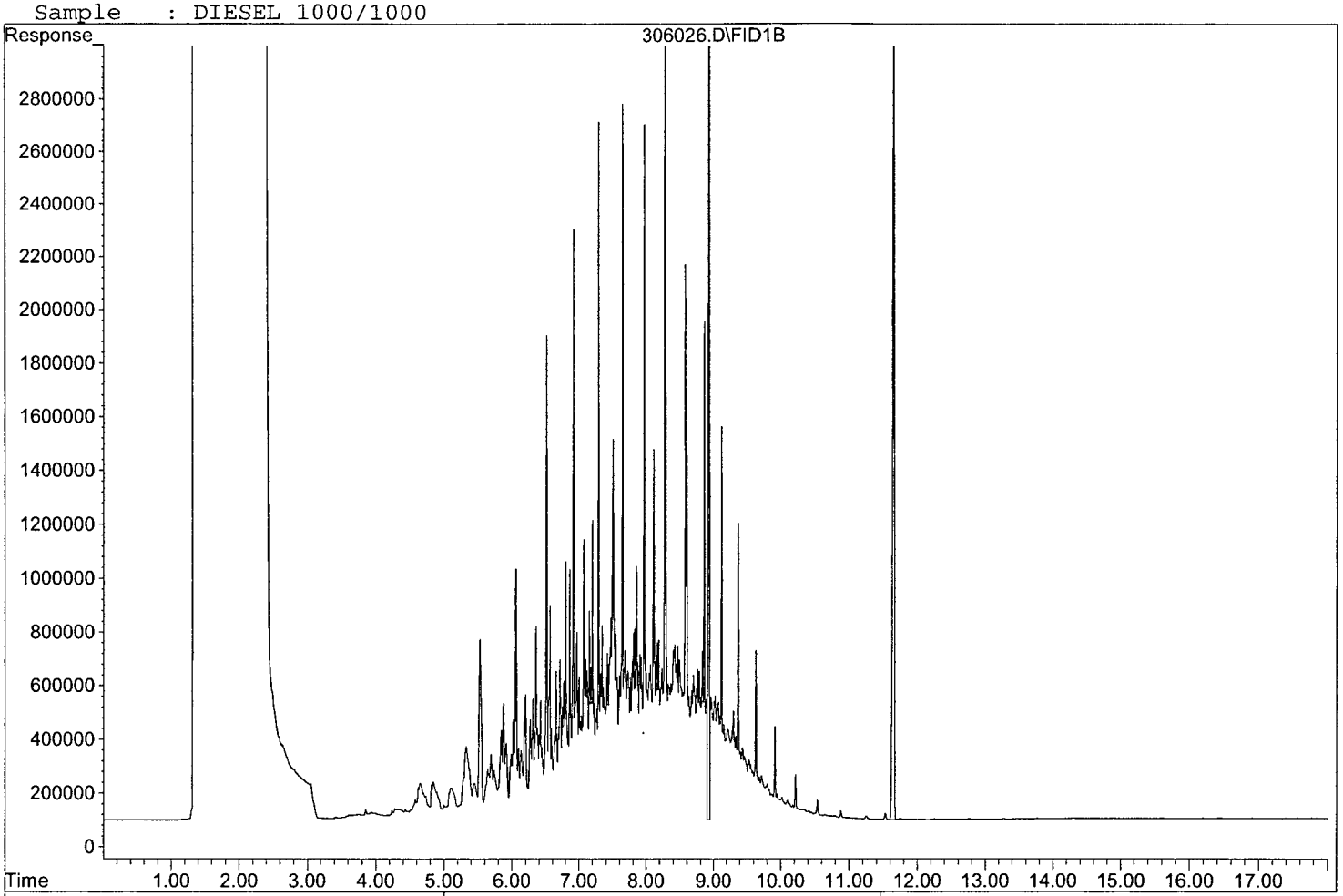
Data File : G:\APOLLO\DATA\120306\306026.D Vial: 26
Acq On : 3-6-12 19:23:45 Operator: LAC
Sample : DIESEL 1000/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

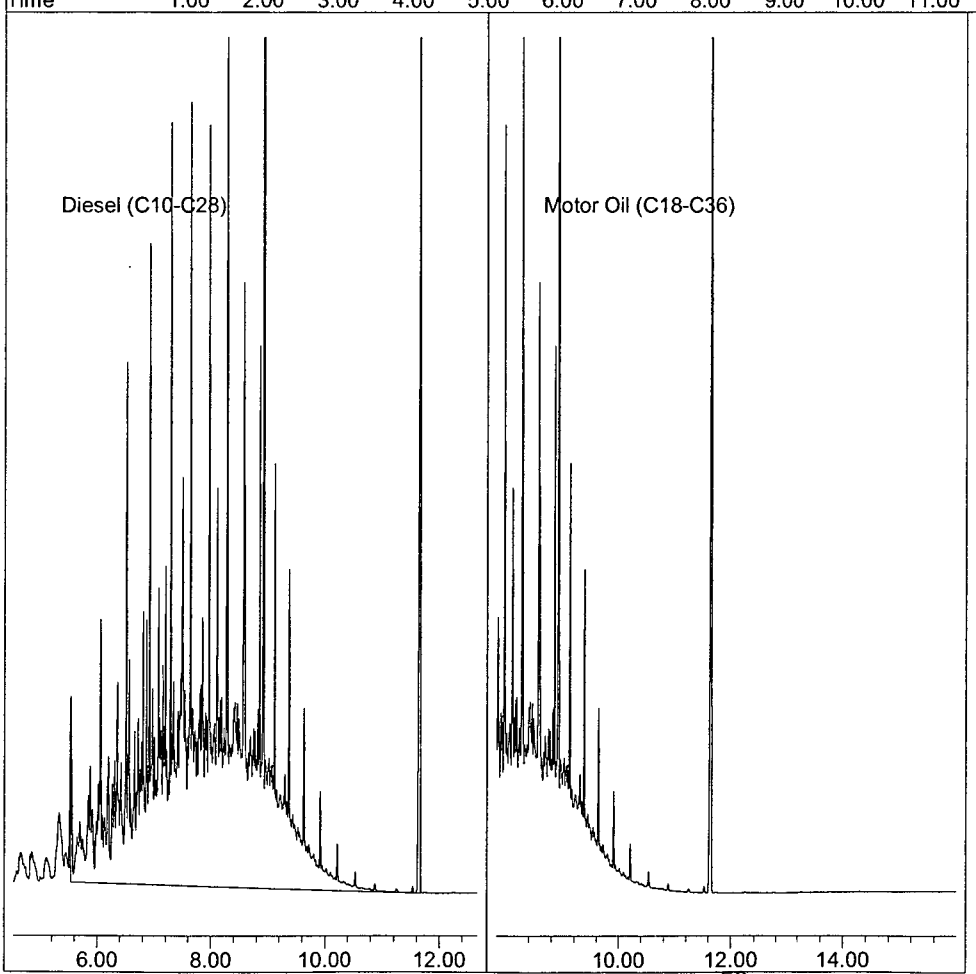
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	77920610	48.442 ppb
Surrogate Spike 30.000	Recovery =		161.47%
5) SA Not Used2(S)	11.65	58012669	48.476 ppb
Surrogate Spike 30.000	Recovery =		161.59%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	1089615924	995.174 ppb

Data File: G:\APOLLO\DATA\120306\306026.D
Sample : DIESEL 1000/1000





TPH Extractables
TPH0306

Form 7

Second Source Calibration

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

SDG No: 67512
Date Analyzed: 03/06/12
Instrument: Apollo
Initial Cal. Date: 03/06/12
Data File: 306027.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C28)	547010	547335	0.06	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			0.1		

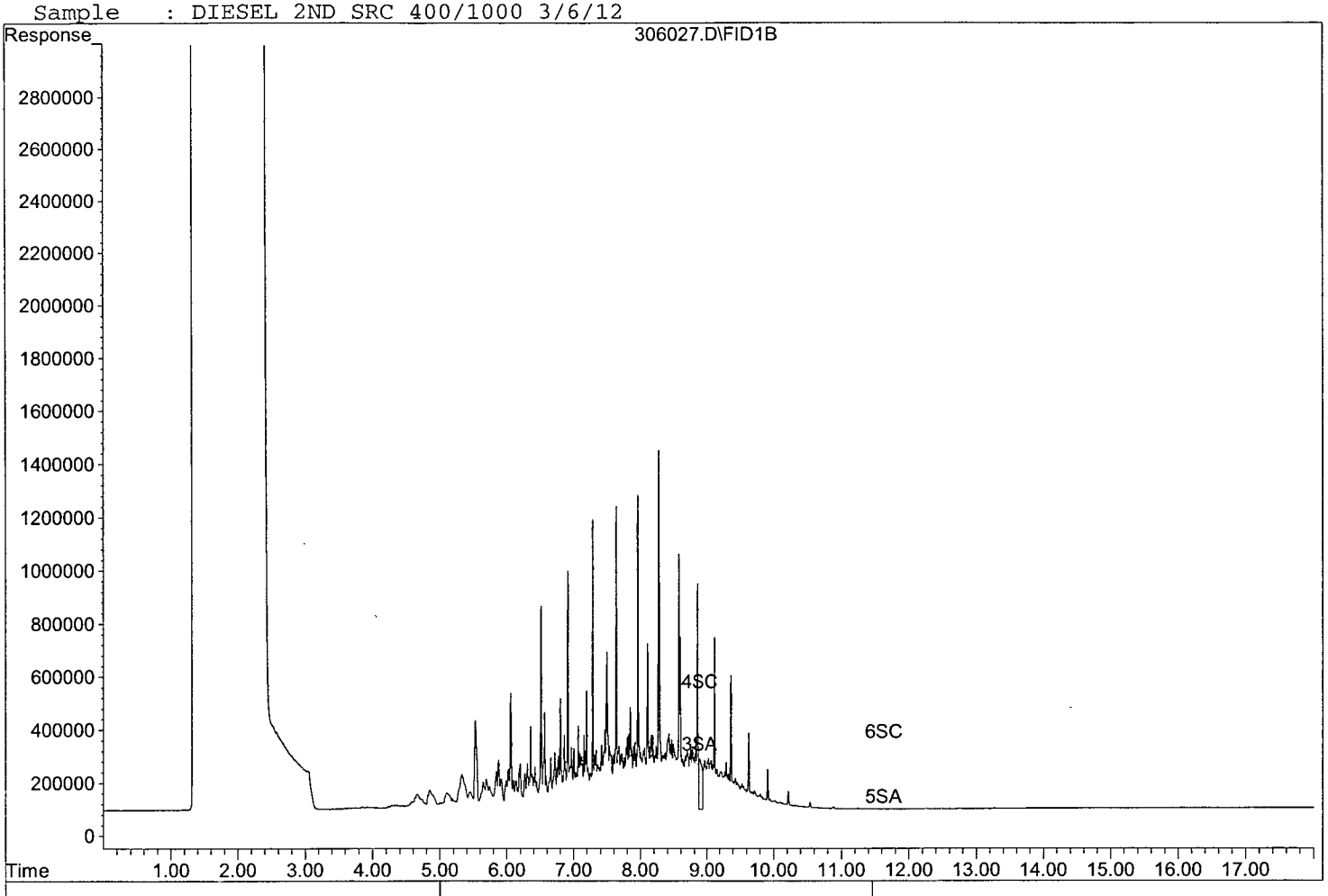
Data File : G:\APOLLO\DATA\120306\306027.D Vial: 27
Acq On : 3-6-12 19:47:20 Operator: LAC
Sample : DIESEL 2ND SRC 400/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 3 12:39 2012 Quant Results File: TPH0306.RES

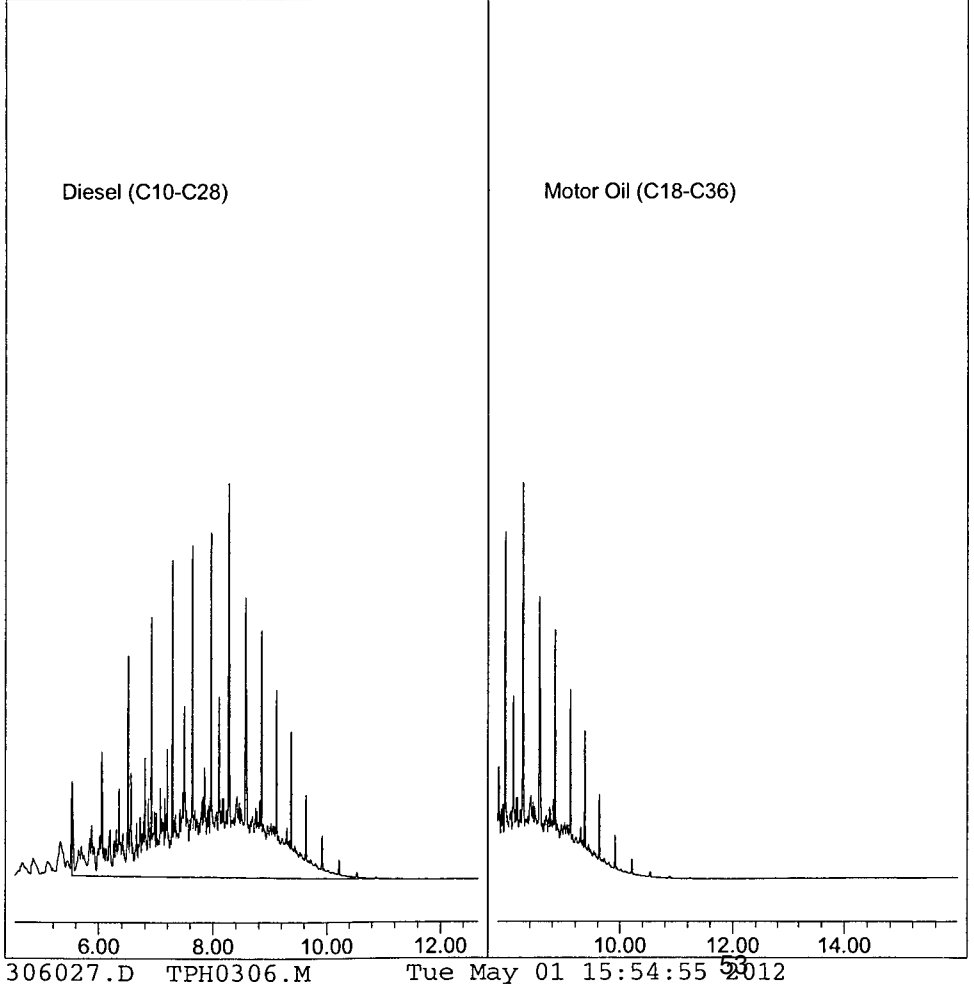
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.88	6428955	4.018	ppb
Surrogate Spike 30.000	Recovery =		13.39%	
4) SC Ortho-Terphenyl(S)	8.88	6428955	4.651	ppb
Surrogate Spike 30.000	Recovery =		15.50%	
5) SA Not Used2(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
6) SC Octacosane(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.60	437868309	400.238	ppb

Data File: G:\APOLLO\DATA\120306\306027.D
Sample : DIESEL 2ND SRC 400/1000 3/6/12





TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67512
Date Analyzed: 04/20/12
Instrument: Apollo
Initial Cal. Date: 04/19/12
Data File: 419038.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	606894	11	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			11.0		

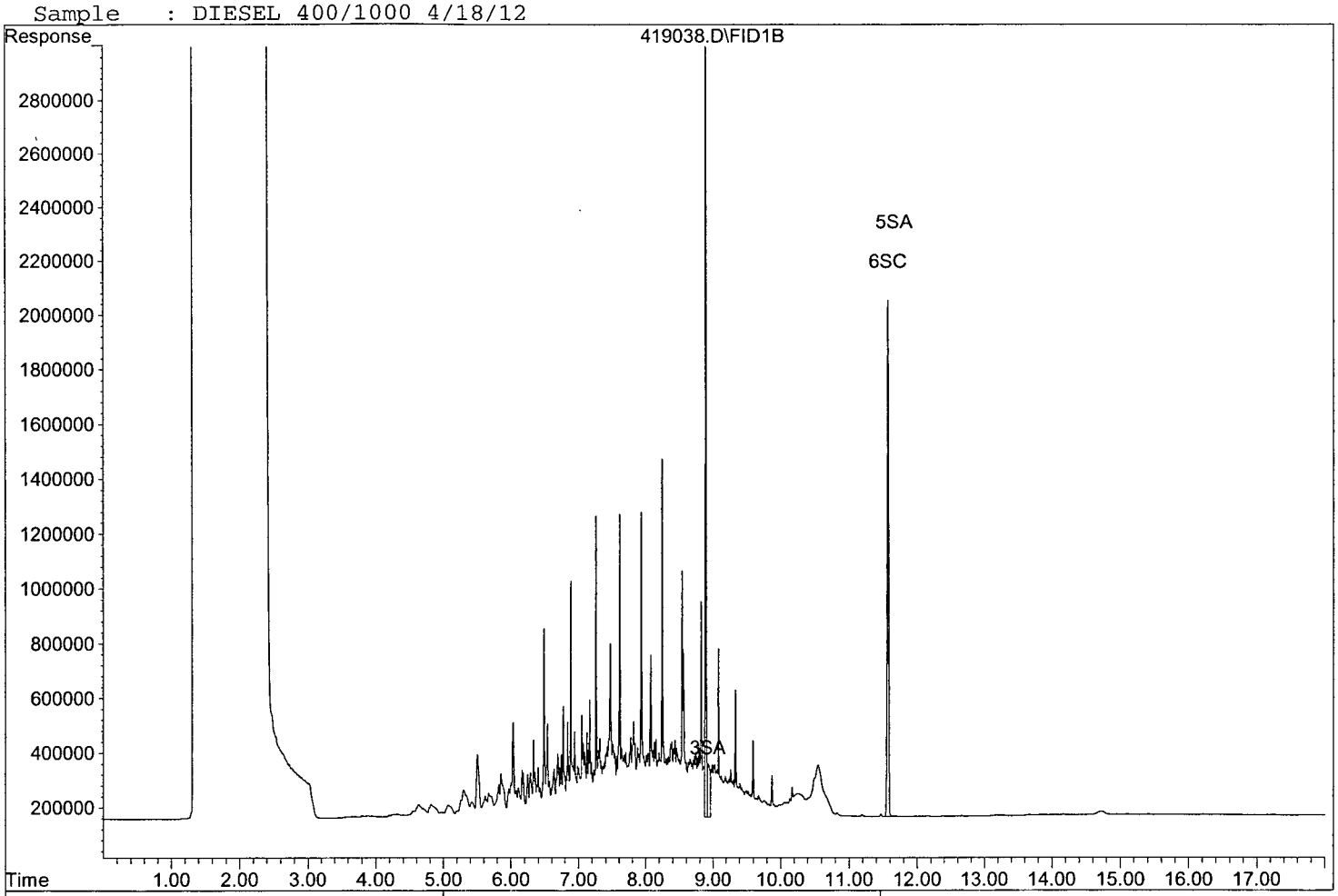
Data File : G:\APOLLO\DATA\120419\419038.D Vial: 38
Acq On : 4-20-12 19:09:41 Operator: LAC
Sample : DIESEL 400/1000 4/18/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 14:42 2012 Quant Results File: TPH0306.RES

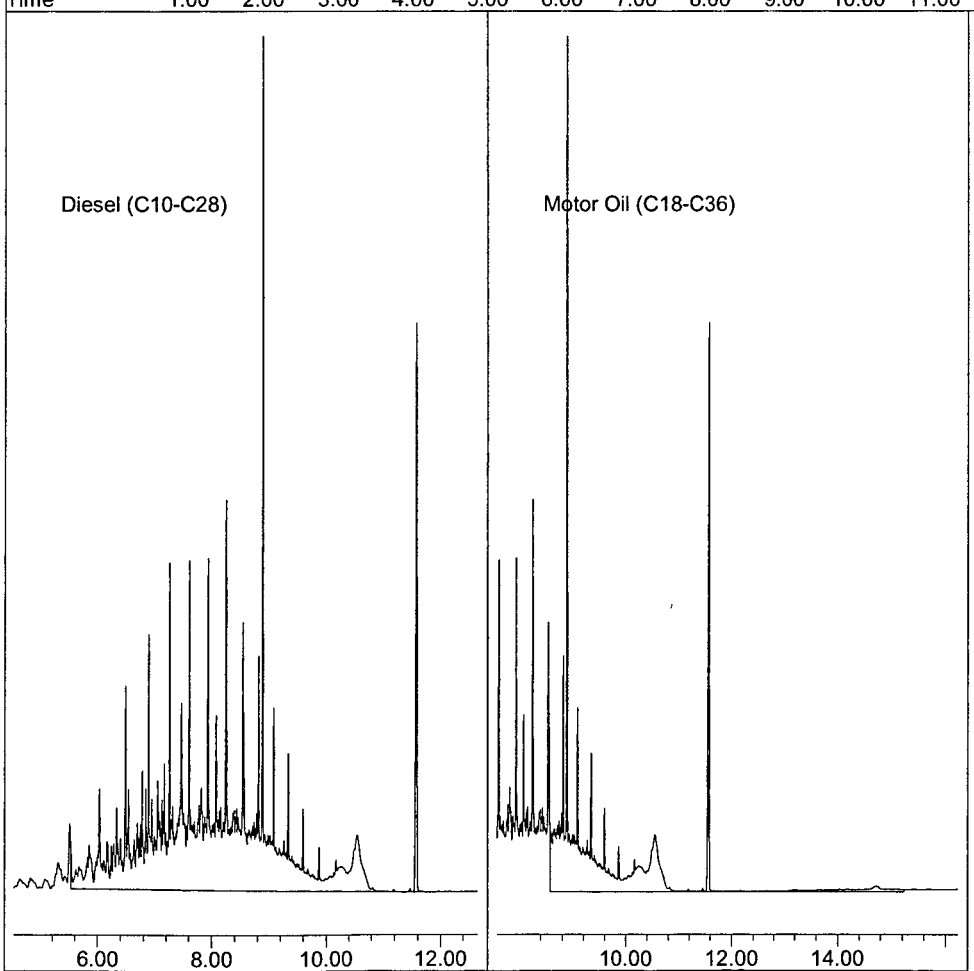
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.93	5634471	3.521	ppb
Surrogate Spike 30.000	Recovery =		11.74%	
4) SC Ortho-Terphenyl(S)	8.89	32315158	23.377	ppb
Surrogate Spike 30.000	Recovery =		77.92%	
5) SA Not Used2(S)	11.67	106270	0.089	ppb
Surrogate Spike 30.000	Recovery =		0.30%	
6) SC Octacosane(S)	11.57	26785254	22.674	ppb
Surrogate Spike 30.000	Recovery =		75.58%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.60	485515346	443.790	ppb
2) HBTM Motor Oil (C18-C36)	11.91	154706455	201.777	ppb

Data File: G:\APOLLO\DATA\120419\419038.D
Sample : DIESEL 400/1000 4/18/12





TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67512
Date Analyzed: 04/20/12
Instrument: Apollo
Initial Cal. Date: 04/19/12
Data File: 419046.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	568279	3.9	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.9		

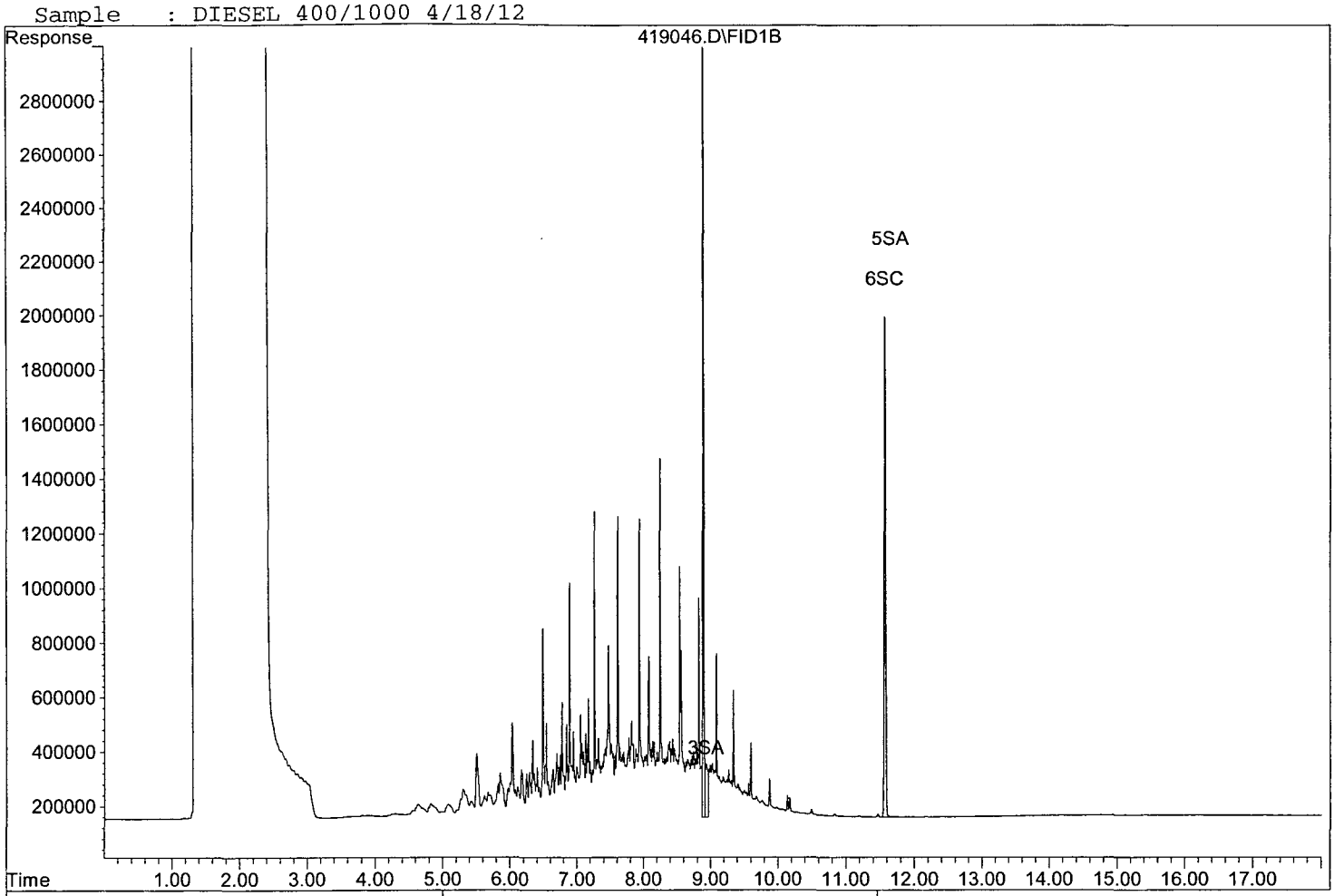
Data File : G:\APOLLO\DATA\120419\419046.D Vial: 46
Acq On : 4-20-12 22:23:25 Operator: LAC
Sample : DIESEL 400/1000 4/18/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 14:44 2012 Quant Results File: TPH0306.RES

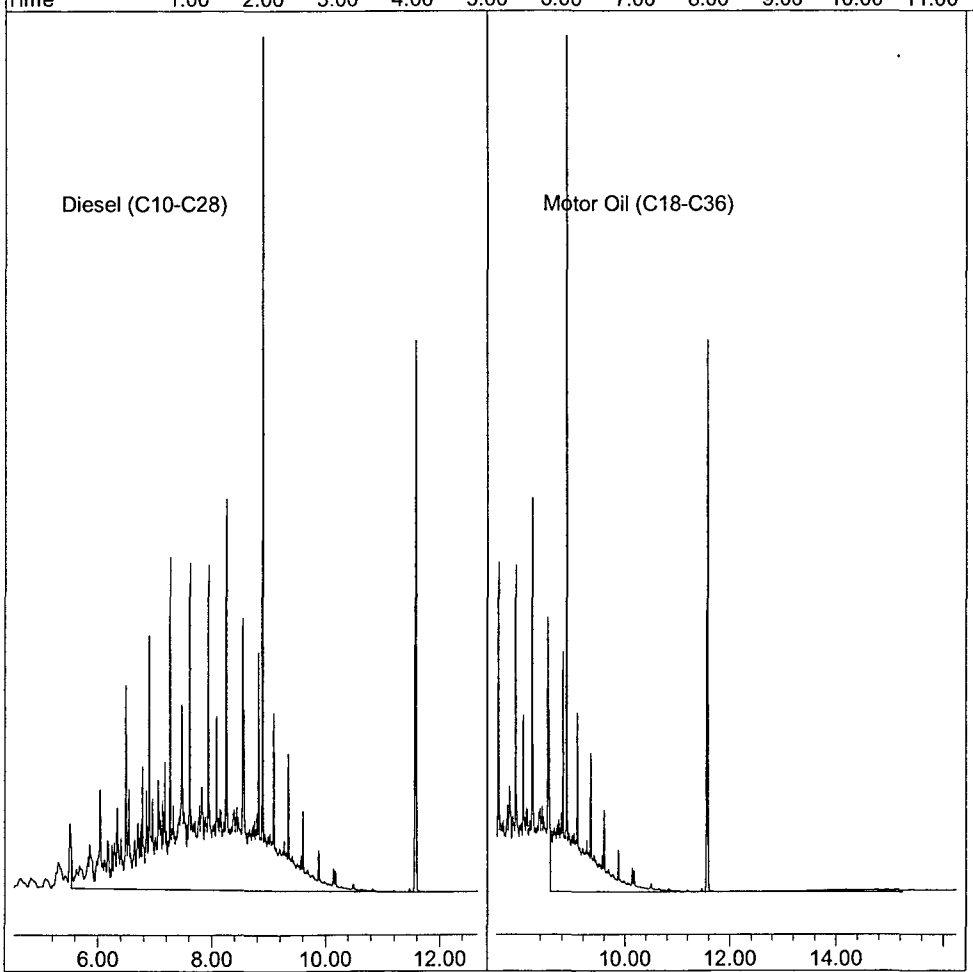
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.93	5621428	3.513	ppb
Surrogate Spike 30.000	Recovery =		11.71%	
4) SC Ortho-Terphenyl(S)	8.89	32661854	23.628	ppb
Surrogate Spike 30.000	Recovery =		78.76%	
5) SA Not Used2(S)	11.67	69163	0.058	ppb
Surrogate Spike 30.000	Recovery =		0.19%	
6) SC Octacosane(S)	11.57	26306893	22.269	ppb
Surrogate Spike 30.000	Recovery =		74.23%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.60	454622867	415.553	ppb
2) HBTM Motor Oil (C18-C36)	11.91	122081613	159.226	ppb

Data File: G:\APOLLO\DATA\120419\419046.D
Sample : DIESEL 400/1000 4/18/12





EPA 8015 Modified
Total Petroleum Hydrocarbons
Raw Data

Method Blank
TPH Diesel Water

Blank Name/QCG: **120418W-59184 - 166388**
Batch ID: #TPETD-120418B

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	04/18/12	04/20/12
BLANK	SURROGATE: OCTACOSANE (S)	92.7	28-142			%	04/18/12	04/20/12
BLANK	SURROGATE: ORTHO-TERPHEN	77.0	57-132			%	04/18/12	04/20/12

Quant Method: TPH0306.M
Run #: 419039
Instrument: Apollo
Sequence: 120419
Initials: TRL

Printed: 05/01/12 2:58:05 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

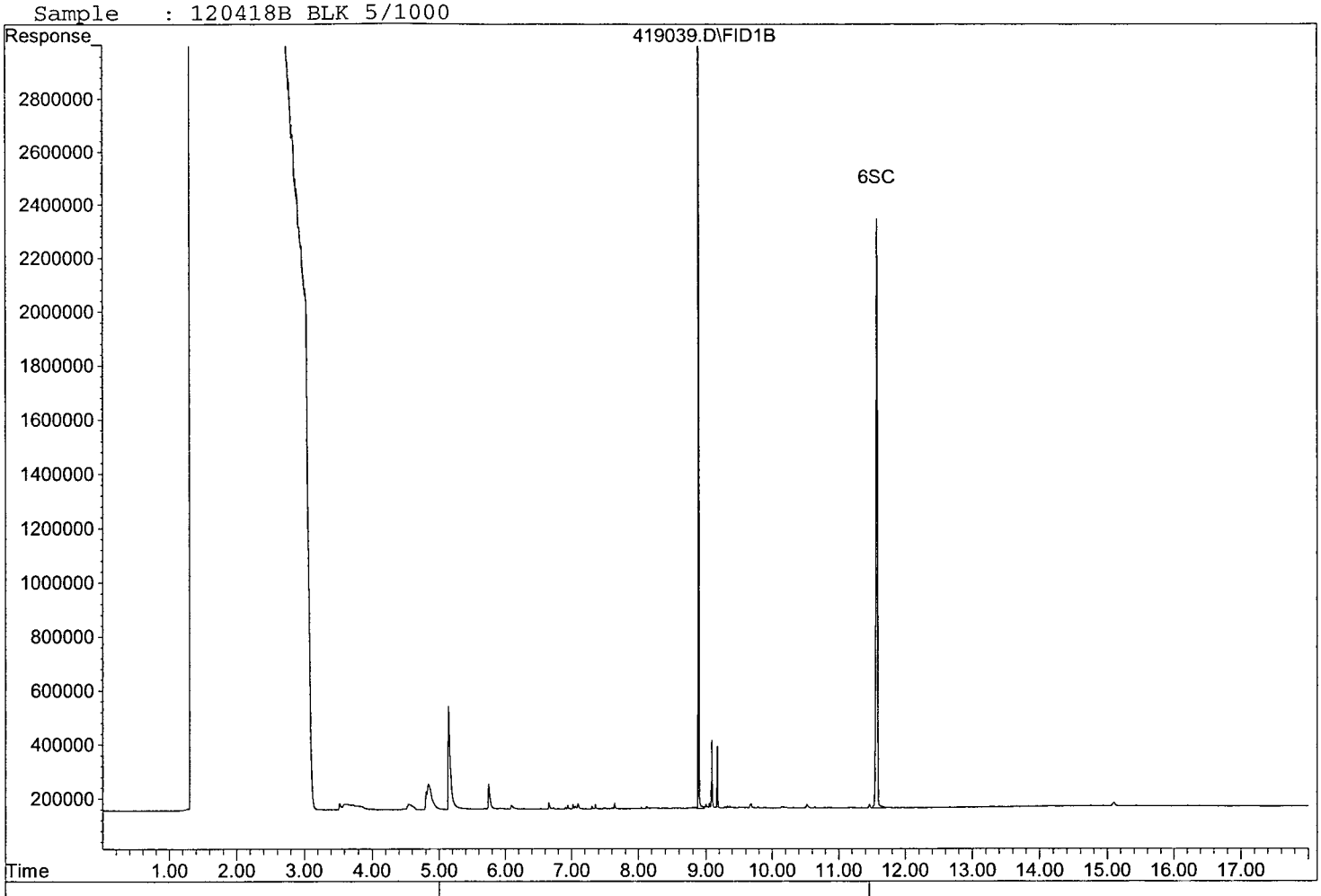
Data File : G:\APOLLO\DATA\120419\419039.D Vial: 39
Acq On : 4-20-12 19:33:59 Operator: LAC
Sample : 120418B BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 10 9:21 2012 Quant Results File: TPH0306.RES

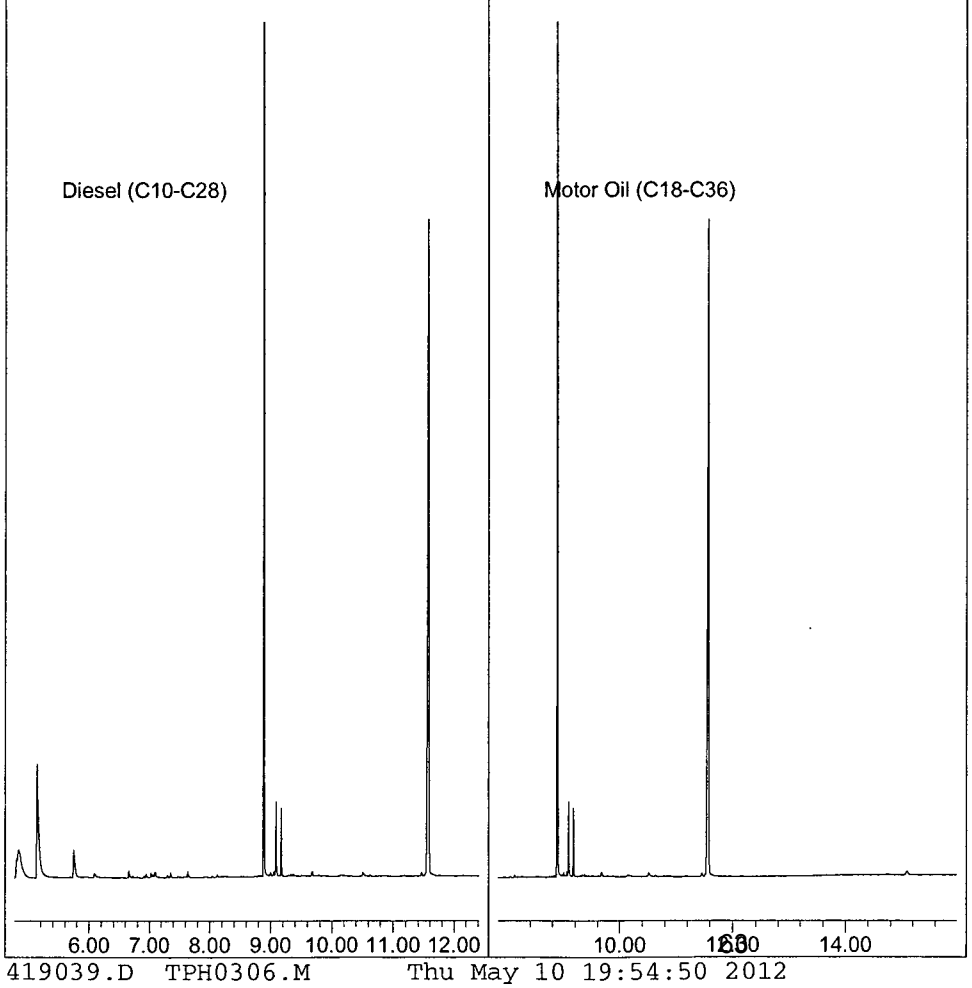
Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	31931521	115.498 ppb
Surrogate Spike 150.000		Recovery =	77.00%
6) SC Octacosane(S)	11.57	32846406	139.022 ppb
Surrogate Spike 150.000		Recovery =	92.68%
Target Compounds			

Data File: G:\APOLLO\DATA\120419\419039.D
Sample : 120418B BLK 5/1000





Laboratory Control Spike Recovery

TPH Diesel Water

APPL ID: **120418W-59184 LCS - 166388**
Batch ID: #TPETD-120418B

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	1540	77.0	61-143
SURROGATE: OCTACOSANE (S)	150	133	88.7	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	132	88.0	57-132

Comments: _____

Primary	SPK
Quant Method :	TPH0306.M
Extraction Date :	04/18/12
Analysis Date :	04/20/12
Instrument :	Apollo
Run :	419040
Initials :	TRL

Printed: 05/01/12 2:58:11 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\120419\419040.D Vial: 40
Acq On : 4-20-12 19:58:18 Operator: LAC
Sample : 120418B LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 10 9:21 2012 Quant Results File: TPH0306.RES

Method : G:\APOLLO\DATA\120419\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 01 14:33:37 2012
Response via : Multiple Level Calibration

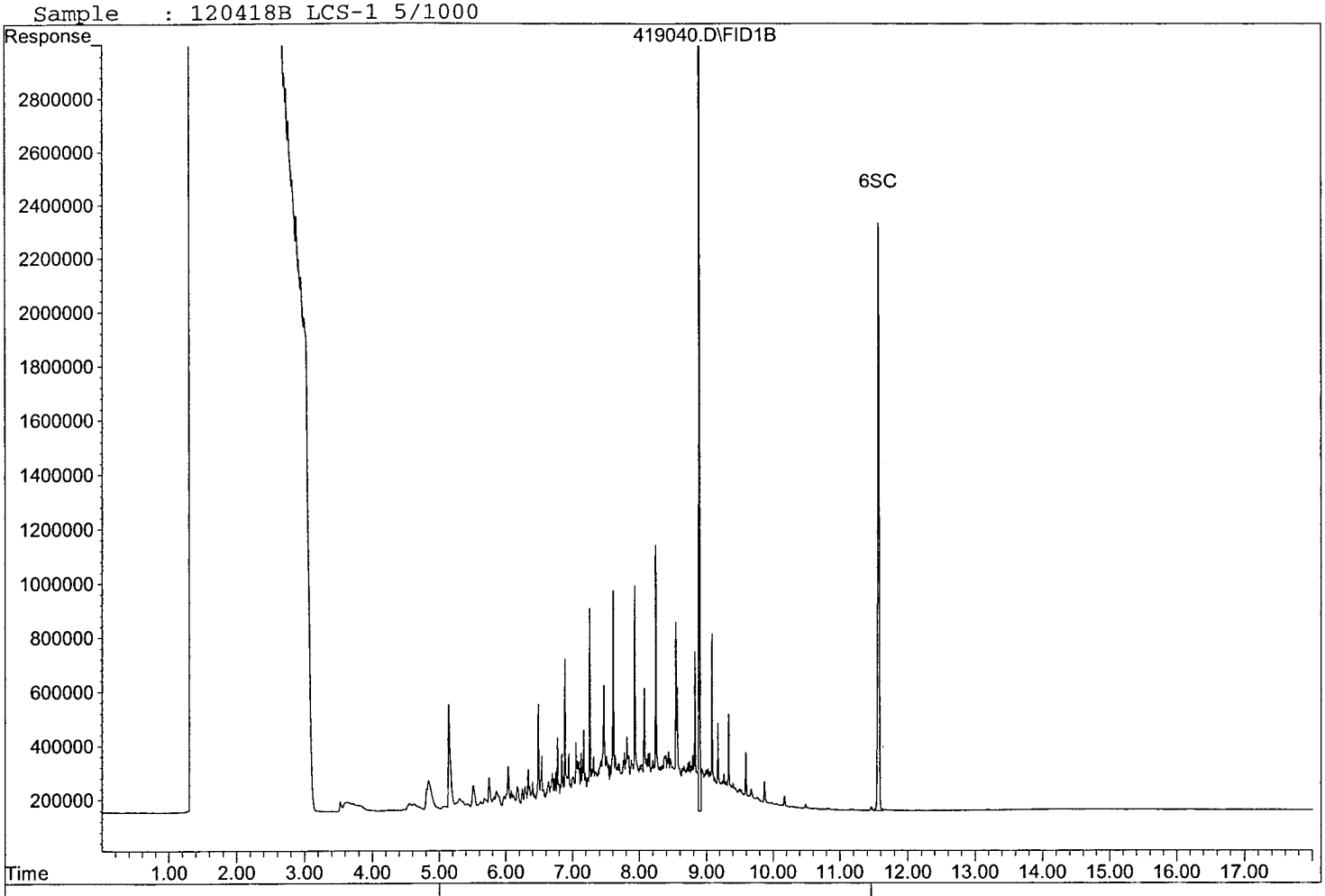
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

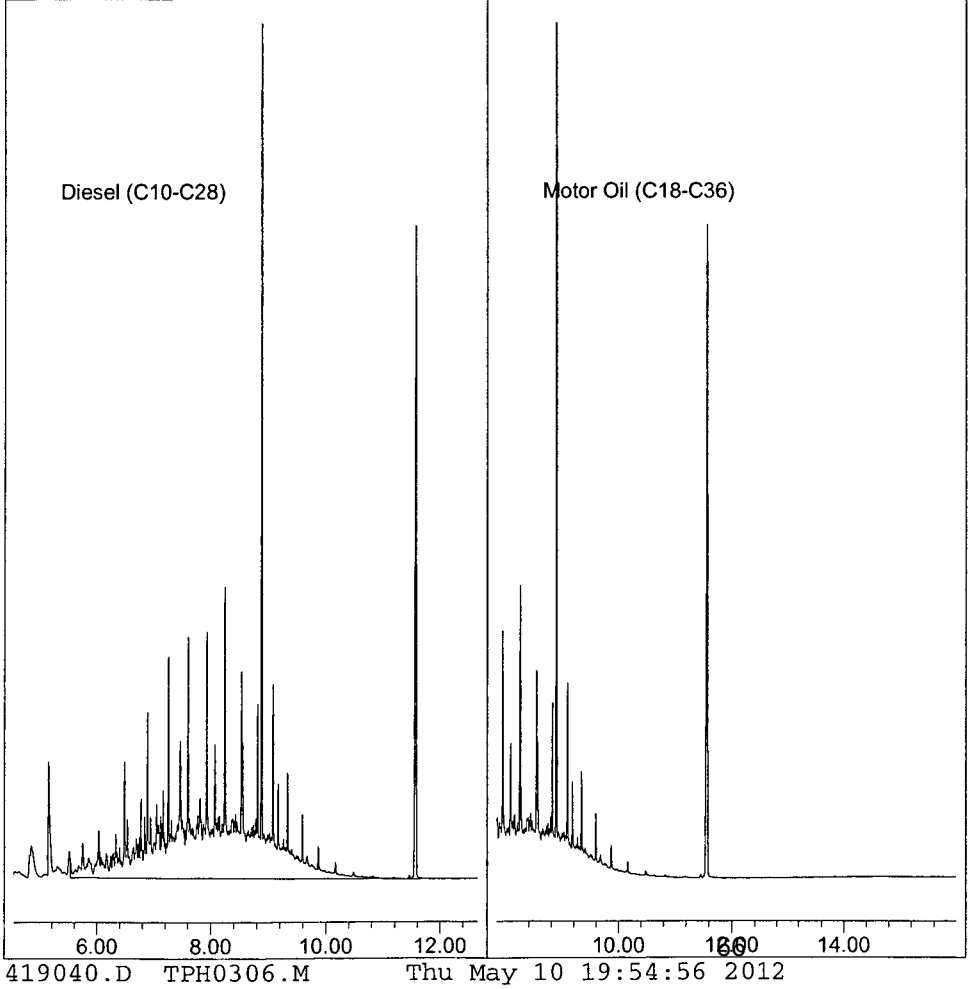
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	36425722	131.754 ppb
Surrogate Spike 150.000		Recovery =	87.84%
6) SC Octacosane(S)	11.57	31494774	133.302 ppb
Surrogate Spike 150.000		Recovery =	88.87%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	337949299	1544.530 ppb

DL Alg ✓ = $\frac{337949299\,(5)}{(2)\,547010}$ = 1544.5298029286484

5/1/12

Data File: G:\APOLLO\DATA\120419\419040.D
Sample : 120418B LCS-1 5/1000





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

045

TNRCC 400/1000 mg/L CCV

TNRCC | 1000/500 mg/L | TNRCC STD | 400 mL | 1 mL | 400 mg/L | Pentane | 3/5/12

Prep: 3/2/12 | #J | EX: 4/2/12

EX: 4/2/12

DIESEL SPIKE

DIESEL FUEL #2 | 50,000 mg/L | O2SI | 2000 mL | 50 mL | 2000 mg/L | MC | 3/6/12

51306 | EX: 6/6/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
011598-03
Lot # 179635 | Storage ≤-10 Degrees C | Expiry 11/8/15
Diesel Fuel #2 Composite
Lot #: 179635 - 30224 OP: 2/6/12 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

3/6/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
011598-03
Lot # 179635 | Storage ≤-10 Degrees C | Expiry 11/8/15
Solv: Methylene Chloride OP:
Diesel Fuel #2 Composite 3/6/12
Lot #: 179635 - 30223 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

3/6/12

DIESEL CAL STD. 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI 179635-30225 CAT#011598-03 LOT#~~150524-27195~~ OP:1/5/11 EXP:1/5/12	1mL	50mL	1000ug/mL	MC LOT# 51306
O-TERPHENYL OCTACOSANE	600 ug/mL	3/6/12 O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	4160 µL		50ug/mL	

3/6/12 EX: 9/6/12

MOTOR OIL CAL STD 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
MOTOR OIL	50,000 ug/mL	O2SI CAT#116390-02 LOT#171363-30230 OP:3/6/12 EXP:3/6/12	1mL	50mL	1000ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

THC SURR CAL STD 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT LOT#
O-TERPHENYL OCTACOSANE	600 ug/mL	O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	834 µL	10mL	50ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

STANDARD 046

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

TCH SURROGATE CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC SURR	50		03/06/12	09/06/12	50	100	400	600	800	1000
MC		51306			950	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

3/6/12 EX. 9/6/12

DIESEL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
DIESEL	1000		03/06/12	09/06/12	10	100	400	600	800	1000
MC		51306			990	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

MOTOR OIL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		03/06/12	09/06/12	50	100	400	600	800	1000
MC		51306			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 2ND SRC	1000µg/ml	O2SI	400µL	1 mL	400 µg/mL	MC
	Prep:	12/28/11				51306
	Exp:	06/28/12				

3/6/12 EX. 6/28/12

TNRCC CAL CURVE

SUPPLIER	STOCK	[µg/mL]	LOT #	DATE	EXP DATE	µL	µL	µL	µL	µL	µL
	TNRCC STD.	1000		03/02/12	04/02/12	50	100	400	600	800	1000
VWR	PENTANE		J04E19			950	900	600	400	200	--
				FINAL VOLUME		1mL	1mL	1mL	1mL	1mL	1mL

3/6/12 EX. 4/2/12

TNRCC 2ND SRC

STANDARD	CONC.	DATE	ALIQUOT	FINAL VOL	CONC.	/LOT#
	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	PENTANE
TNRCC 2ND SRC		02/08/12	03/08/12			J04E19

3/6/12 EX. 3/8/12

PREP DATE:	03/06/12											
OPF CURVE												
EXP:	07/15/12											
							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		02/29/12	07/15/12	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

3/6/12 EX. 7/15/12

PREP DATE:	03/06/12											
OPC CURVE												
EXP:	06/12/12											
							1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	OPC STD	5		12/12/11	06/12/12	10	50	200	500	700	1000	
	Hexane		010711A			990	950	800	500	300	NA	
					Final VOL.	1000	1000	1000	1000	1000	1000	

3/6/12 EX. 6/12/12

3/6/12

OP 2ND SOURCE						
~~EXP~~ Prep	03/06/12					
EX.	7/15/12					
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL
	OP 2ND SRC	5		02/29/12	07/15/12	500
VWR	HEXANE		010711A			500
					Final VOL.	1000

3/6/12 EX. 7/15/12

DATE / INITIALS	STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOL'N LOT #	DATE / INITIALS
		THC Surrogate * GIVE TO EXTRACTION *						
1/5/12 EX: 1/5/13	O-TERPHENYL OCTACOSANE	600 mg/mL	0281	N/A	25mL	600 mg/mL	NA	3/20/12 EX: 3/20/13
		CAT: 1103116-25						
		LOT: 183766-						
		30215 THRU 30219						
		EX: 3/20/13						
3/16/12 EX: 9/16/12								
3/20/12 EX: 9/20/12								
3/20/12 EX: 6/20/12								

NOT used 3/22/12

STANDARD 084

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

4/18/12

Aromatic 250/1000 µg/mL CCV

Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aromatic	200/100 µg/mL	Aromatic Std	250 µL	1 mL	50/25 µg/mL	MC
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				51306

4/18/12
EX: 10/18/12

Aliphatic 200/1000 µg/mL CCV

Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aliphatic	200/100 µg/mL	Aromatic Std	200 µL	1 mL	40/20 µg/mL	Hexane
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				082610B

4/18/12

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			051711B

4/18/12
EX: 7/22/12

MOTOR OIL CCV 600UG/ML

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
	1000UG/ML	O2SI	600µL	1mL	600 µg/ml	MC
MOTOR OIL STD		07/22/11	01/22/12			051711B

4/18/12

HERBICIDE CALIBRATION CURVE

COMPOUND	CONC IN MIX (ug/ml)	CONC OF STOCK (ug/ml)	ALIQUOT (uL)	STOCK SOURCE	FINAL VOL .SOLVENT
HERBICIDE	15	VARIOUS	15 µL	HERB CAL. STD PREP	1 mL
CURVE	50		50 µL	PREP: 4/5/12	MTBE
	100		100 µL	EXP: 10/5/12	
	200		200 µL	CONC.: VARIOUS	Lot#
	300		300 µL		50223
	400		400 µL		
HERBICIDE		VARIOUS		HERB 2nd SOURCE	
SECOND SOURCE	200		200 µL	PREP: 11/17/11 EXP: 5/17/12	

CM
4/18/12
EX: 10/5/12

CM
4/18/12
EX: 5/17/12

4/19/12

PREP:	04/19/12											
PAC ECO CURVE												
EXP:	07/21/12											
PE Lot#	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		04/16/12	07/21/12	2	10	50	200	500	700	1000
VWR	Hexane		082610B			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000
PAC ECO 2ND SRC				DATE	EXP. DATE							
Prep: 4/19/12	Exp: 10/6/12	5µg/ml	082610B	04/06/12	10/06/12	500/1000						

4/19/12
EX: 7/21/12

4/19/12
EX: 10/6/12

4/20/12

PREP:	04/20/12											
PAC ECO CURVE												
EXP:	07/21/12											
PE Lot#	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		04/16/12	07/21/12	2	10	50	200	500	700	1000
VWR	Hexane		082610B			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000
PAC ECO 2ND SRC				DATE	EXP. DATE							
Prep: 4/20/12	Exp: 10/6/12	5µg/ml	082610B	04/06/12	10/06/12	500/1000						

4/20/12
EX: 7/21/12

4/20/12
EX: 10/6/12

_SEP011

Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	120418B	Extraction Method	SEP011	Units	mL

Spiked ID 1	Diesel Spike 03/06/12 EX 06/06/12		Surrogate ID 1	THC Surrogate 183766-30215	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:		
Spiked ID 8			Ext. End Time:		
			GC Requires Extract By:	**05/01/12 0:00**	

pH1			Water Bath Temp Criteria	80 °C
pH2				
pH3				

Spiked By: DL **Date** 04/18/12 **Witnessed By:** DRA **Date** 04/18/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120418B Blk				0.250	1	1000	5	7	04/18/12 9:56	
						equip	E-WB5				
2	120418B LCS-1		1	1	0.250	1	1000	5	7	04/18/12 9:56	
						equip	E-WB5				
3	AY59184	AY59184W05			0.250	1	1050	5	7	04/18/12 9:56	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
4	AY59185	AY59185W07			0.250	1	1050	5	7	04/18/12 9:56	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
5	AY59186	AY59186W06			0.250	1	1050	5	7	04/18/12 9:56	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
6	AY59187	AY59187W05			0.250	1	1050	5	7	04/18/12 9:56	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				

DRA 4-19-12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	GA
Date	4/19/12
Time	15:30
Refrigerator	Hobart

	Technician's Initials
Scanned By	FXR
Sample Preparation	IC
Extraction	DRA
Concentration	IC

Modified	04/18/12 9:20:14 AM

Reviewed By: DRA **Date** 04/19/12

Injection Log

Directory: G:\APOLLO\DATA\120306\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	21	306021.D	1	DIESEL 10/1000 3/6/12	Mix(A)	3-6-12 17:25:38
2	22	306022.D	1	DIESEL 100/1000	Mix(A)	3-6-12 17:49:21
3	23	306023.D	1	DIESEL 400/1000	Mix(A)	3-6-12 18:12:55
4	24	306024.D	1	DIESEL 600/1000	Mix(A)	3-6-12 18:36:31
5	25	306025.D	1	DIESEL 800/1000	Mix(A)	3-6-12 19:00:08
6	26	306026.D	1	DIESEL 1000/1000	Mix(A)	3-6-12 19:23:45
7	27	306027.D	1	DIESEL 2ND SRC 400/1000 3/6/12	Mix(A)	3-6-12 19:47:20
1	38	419038.D	1	DIESEL 400/1000 4/18/12	Mix(A)	4-20-12 19:09:41
2	39	419039.D	5	120418B BLK 5/1000	Water	4-20-12 19:33:59
3	40	419040.D	5	120418B LCS-1 5/1000	Water	4-20-12 19:58:18
4	41	419041.D	4.7619	AY59184W05 5/1050	Water	4-20-12 20:22:35
5	42	419042.D	4.7619	AY59185W07 5/1050	Water	4-20-12 20:46:48
6	43	419043.D	4.7619	AY59186W06 5/1050	Water	4-20-12 21:10:59
7	44	419044.D	4.7619	AY59187W05 5/1050	Water	4-20-12 21:35:08
8	46	419046.D	1	DIESEL 400/1000 4/18/12	Mix(A)	4-20-12 22:23:25

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: **120418W-59184 - 166433**
Batch ID: #SIMHC-120418A

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	04/18/12	04/22/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	SURROGATE: 2-FLUORBIPHENY	50.4	50-110			%	04/18/12	04/22/12
BLANK	SURROGATE: NITROBENZENE-	58.2	40-110			%	04/18/12	04/22/12
BLANK	SURROGATE: TERPHENYL-D14 (	66.0	50-135			%	04/18/12	04/22/12

Quant Method:SIMB.M
Run #:0422L003
Instrument:Linus
Sequence:L120229
Initials:LF

Printed: 05/02/12 1:09:04 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120418A-BLK	Blank	50-110	50.4		40-110	58.2	
120418A-LCS	Lab Control Spike	50-110	51.5		40-110	56.5	
AY59184	ES070	50-110	56.0		40-110	56.3	
AY59185	ES071	50-110	54.0		40-110	49.8	
AY59186	ES072	50-110	60.2		40-110	52.1	
AY59187	ES073	50-110	60.7		40-110	55.2	

Comments: Batch: #SIMHC-120418A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
120418A-BLK	Blank	50-135	66.0				
120418A-LCS	Lab Control Spike	50-135	64.5				
AY59184	ES070	50-135	59.2				
AY59185	ES071	50-135	59.1				
AY59186	ES072	50-135	57.7				
AY59187	ES073	50-135	65.0				

Comments: Batch: #SIMHC-120418A

Laboratory Control Spike Recovery

EPA 8270D SIM

APPL ID: **120418W-59184 LCS - 166433**
Batch ID: #SIMHC-120418A

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	2.28	57.0	45-105
2-METHYLNAPHTHALENE	4.00	2.17	54.3	45-105
ACENAPHTHENE	4.00	2.61	65.3	45-110
ACENAPHTHYLENE	4.00	2.50	62.5	50-105
ANTHRACENE	4.00	2.79	69.8	55-110
BENZO(A)ANTHRACENE	4.00	3.80	95.0	55-110
BENZO(A)PYRENE	4.00	3.28	82.0	55-110
BENZO(B)FLUORANTHENE	4.00	3.34	83.5	45-120
BENZO(GHI)PERYLENE	4.00	3.59	89.8	40-125
BENZO(K)FLUORANTHENE	4.00	3.94	98.5	45-125
CHRYSENE	4.00	3.28	82.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	3.78	94.5	40-125
FLUORANTHENE	4.00	3.60	90.0	55-115
FLUORENE	4.00	2.95	73.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.98	99.5	45-125
NAPHTHALENE	4.00	2.01	50.2	40-100
PHENANTHRENE	4.00	2.98	74.5	50-115
PYRENE	4.00	3.50	87.5	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.03	51.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.13	56.5	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.29	64.5	50-135

Comments: _____

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/18/12
Analysis Date :	04/22/12
Instrument :	Linus
Run :	0422L004
Initials :	LF

Printed: 05/02/12 1:09:11 PM
APPL Standard LCS

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

Blank ID: 120418A-BLK Time Analyzed: 1132

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120418A-BLK	Blank	0422L003	04/22/12 1132
120418A-LCS	Lab Control Spike	0422L004	04/22/12 1158
AY59184	ES070	0422L005	04/22/12 1224
AY59185	ES071	0422L006	04/22/12 1250
AY59186	ES072	0422L007	04/22/12 1315
AY59187	ES073	0422L008	04/22/12 1341

Comments: Batch: #SIMHC-120418A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67512
Matrix: Water
ID: SVTUNE 2-28-12

SDG No: 67512
Date Analyzed: 04/22/12
Instrument: Linus
Time Analyzed: 10:48

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	120418A BLK 1/1000	0422L003.D	04/22/12 11:32
2	Lab Control Spike	120418A LCS-1 1/1000	0422L004.D	04/22/12 11:58
3	ES070	AY59184W07 1/1050	0422L005.D	04/22/12 12:24
4	ES071	AY59185W05 1/1050	0422L006.D	04/22/12 12:50
5	ES072	AY59186W07 1/1050	0422L007.D	04/22/12 13:15
6	ES073	AY59187W06 1/1050	0422L008.D	04/22/12 13:41
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	37.9
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.5
127	40 - 60% of mass 198	49.2
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.4
275	10 - 30% of mass 198	26.7
365	1 - 100% of mass 198	2.8
441	0.01 - 100% of mass 443	73.7
442	40 - 150% of mass 198	72.6
443	17 - 23% of mass 442	20.7

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67512

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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	5710	6.12	2760	8.13	4470	9.86
	UPPER LIMIT	11420	6.62	5520	8.63	8940	10.36
	LOWER LIMIT	2855	5.62	1380	7.63	2235	9.36
	SAMPLE NO.						
01	120418A BLK 1/1000	6252	6.12	3283	8.12	5758	9.86
02	120418A LCS-1 1/1000	5596	6.12	3036	8.12	5168	9.86
03	AY59184W07 1/1050	5781	6.12	3191	8.12	5699	9.86
04	AY59185W05 1/1050	6443	6.12	3269	8.12	5600	9.86
05	AY59186W07 1/1050	6007	6.12	3290	8.12	5493	9.85
06	AY59187W06 1/1050	6343	6.12	3292	8.12	5815	9.86
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 67512

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	6006	12.93	5058	14.54		
	UPPER LIMIT	12012	13.43	10116	15.04		
	LOWER LIMIT	3003	12.43	2529	14.04		
	SAMPLE NO.						
01	120418A BLK 1/1000	7397	12.94	6593	14.56		
02	120418A LCS-1 1/1000	6930	12.94	5907	14.56		
03	AY59184W07 1/1050	7437	12.94	6262	14.56		
04	AY59185W05 1/1050	7797	12.94	6826	14.56		
05	AY59186W07 1/1050	7635	12.94	6584	14.56		
06	AY59187W06 1/1050	7445	12.94	6471	14.56		
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

EPA METHOD 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: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES070
Sample Collection Date: 04/16/12

ARF: 67512
APPL ID: AY59184
QCG: #SIMHC-120418A-166433

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	04/18/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	56.0	50-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	56.3	40-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	59.2	50-135			%	04/18/12	04/22/12

Quant Method: SIMB.M
Run #: 0422L005
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:09:16 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L005.D Vial: 5
Acq On : 22 Apr 12 12:24 Operator: LF
Sample : AY59184W07 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:08 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5781	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3191	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5699	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7437	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6262	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	639	1.07225 ppb	0.01
Spiked Amount 1.905			Recovery = 56.280%		
7) Surrogate Recovery (FBP)	7.36	172	2263	1.06571 ppb	-0.01
Spiked Amount 1.905			Recovery = 55.965%		
18) Surrogate Recovery (TPH)	11.73	244	2746	1.12698 ppb	0.00
Spiked Amount 1.905			Recovery = 59.168%		

Target Compounds Qvalue

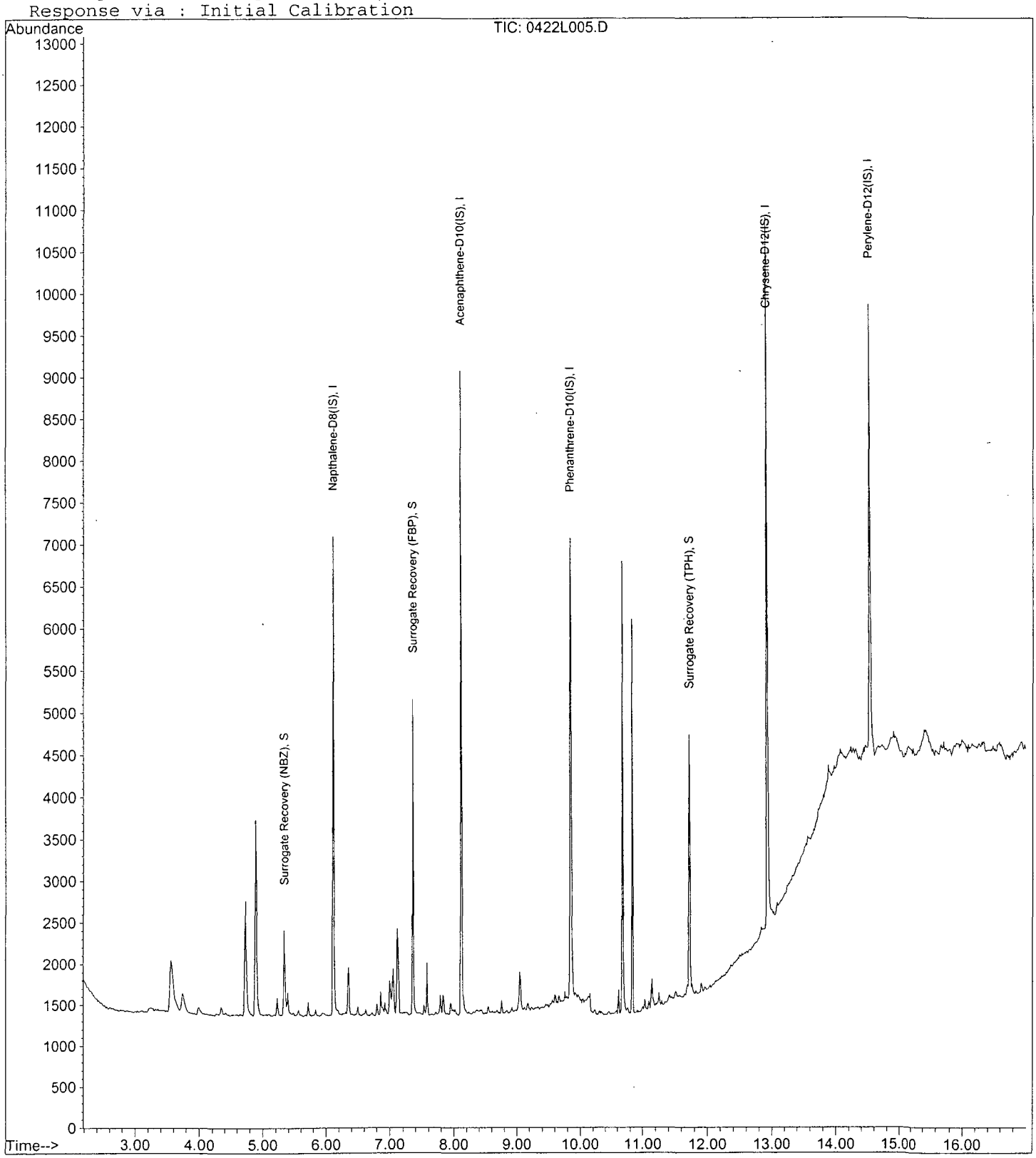
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L005.D Vial: 5
Acq On : 22 Apr 12 12:24 Operator: LF
Sample : AY59184W07 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:08 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
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: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES071
Sample Collection Date: 04/16/12

ARF: 67512
APPL ID: AY59185
QCG: #SIMHC-120418A-166433

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.30	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.26	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORENE	0.14 J	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	NAPHTHALENE	0.86	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	54.0	50-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	49.8	40-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	59.1	50-135			%	04/18/12	04/22/12

J = Estimated value.

Quant Method: SIMB.M
Run #: 0422L006
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:09:17 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L006.D Vial: 6
Acq On : 22 Apr 12 12:50 Operator: LF
Sample : AY59185W05 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:09 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6443	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3269	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5600	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7797	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6826	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	630	0.94853 ppb	0.01
Spiked Amount 1.905			Recovery = 49.823%		
7) Surrogate Recovery (FBP)	7.36	172	2237	1.02833 ppb	-0.01
Spiked Amount 1.905			Recovery = 53.970%		
18) Surrogate Recovery (TPH)	11.73	244	2874	1.12505 ppb	0.00
Spiked Amount 1.905			Recovery = 59.063%		
Target Compounds					Qvalue
3) Naphthalene	6.14	128	3302	0.85529 ppb #	43
5) 1-Methylnaphthalene	7.04	142	642	0.29644 ppb	85
10) Acenaphthene	8.16	154	492	0.25621 ppb	93
11) Fluorene	8.76	166	327	0.14052 ppb	99

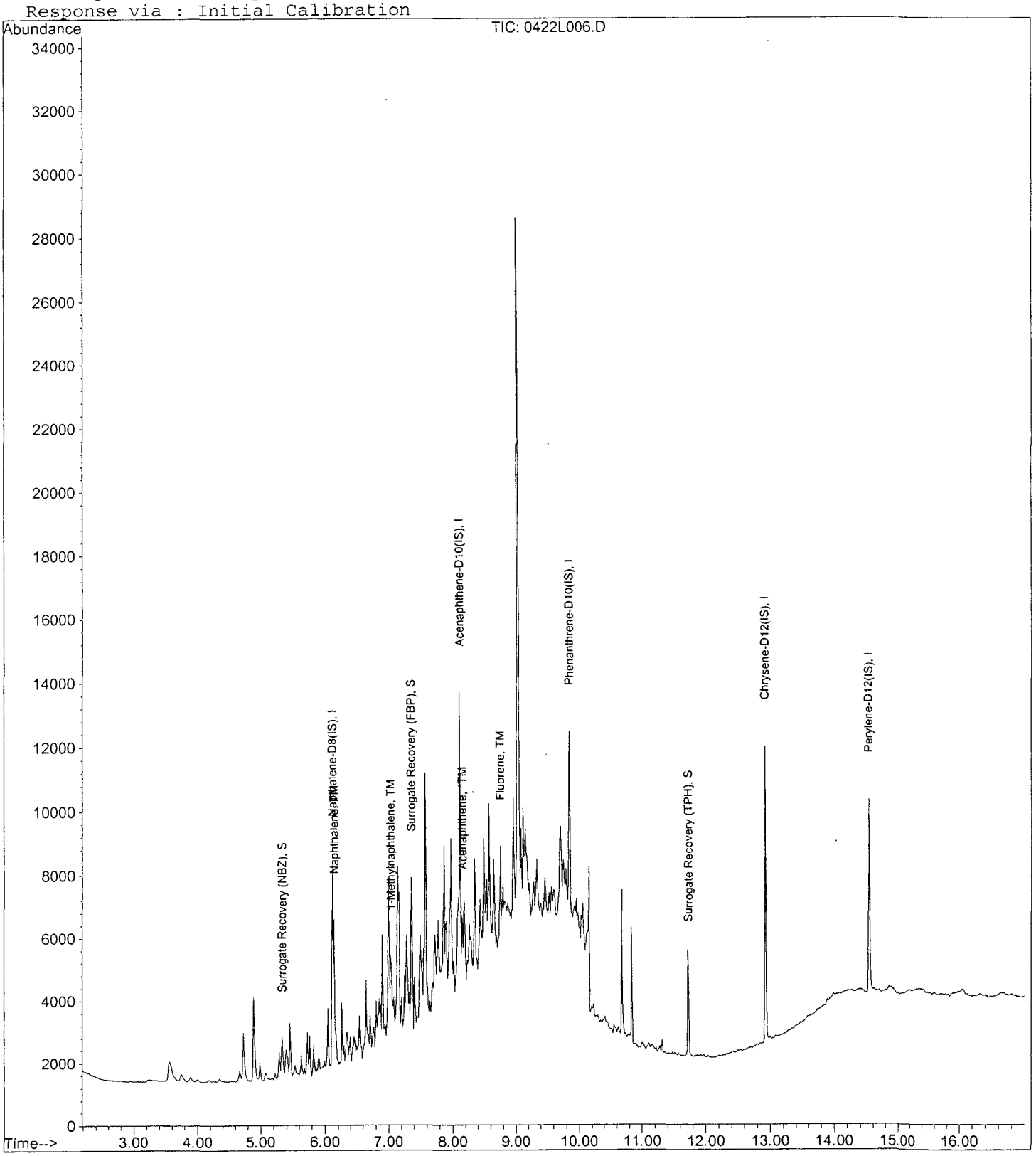
(#) = qualifier out of range (m) = manual integration

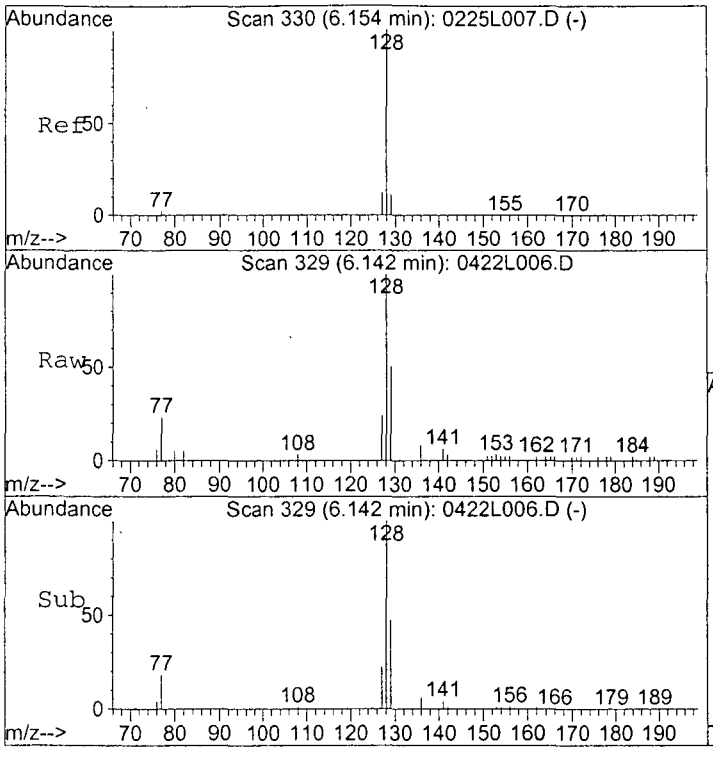
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L006.D Vial: 6
Acq On : 22 Apr 12 12:50 Operator: LF
Sample : AY59185W05 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:09 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration

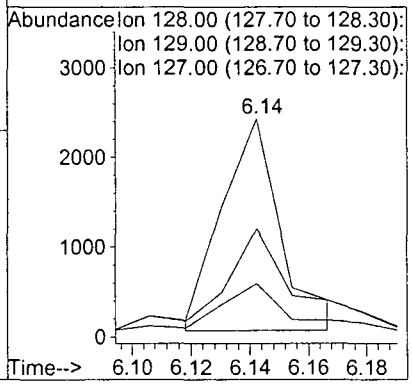


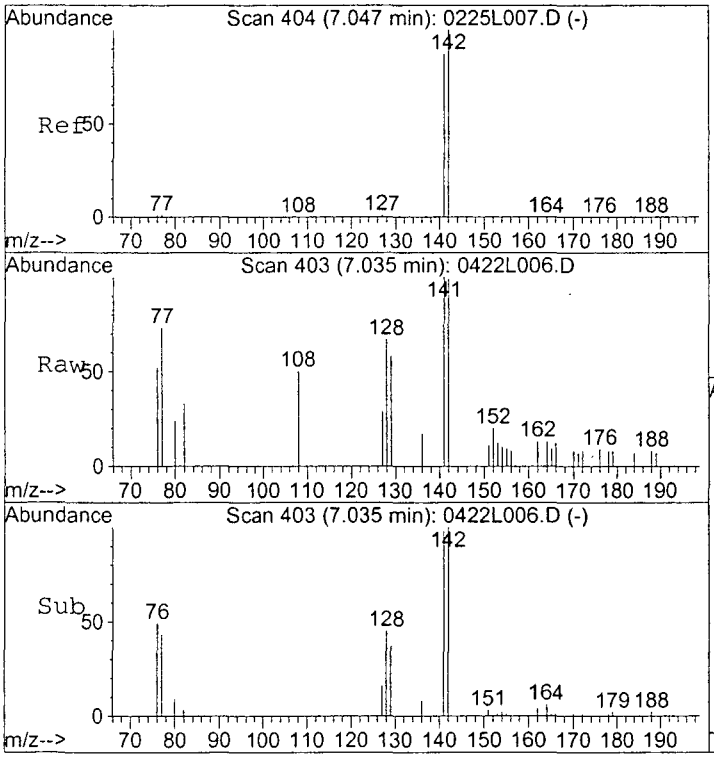


#3
Naphthalene
Concen: 0.85529 ppb
RT: 6.14 min Scan# 329
Delta R.T. 0.00 min
Lab File: 0422L006.D
Acq: 22 Apr 12 12:50

Tgt Ion:128 Resp: 3302

Ion	Ratio	Lower	Upper
128	100		
129	46.1	7.8	14.4#
127	22.0	8.6	16.0#

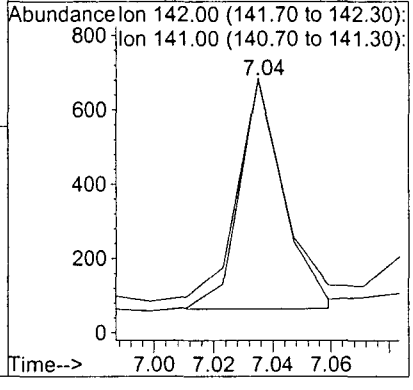


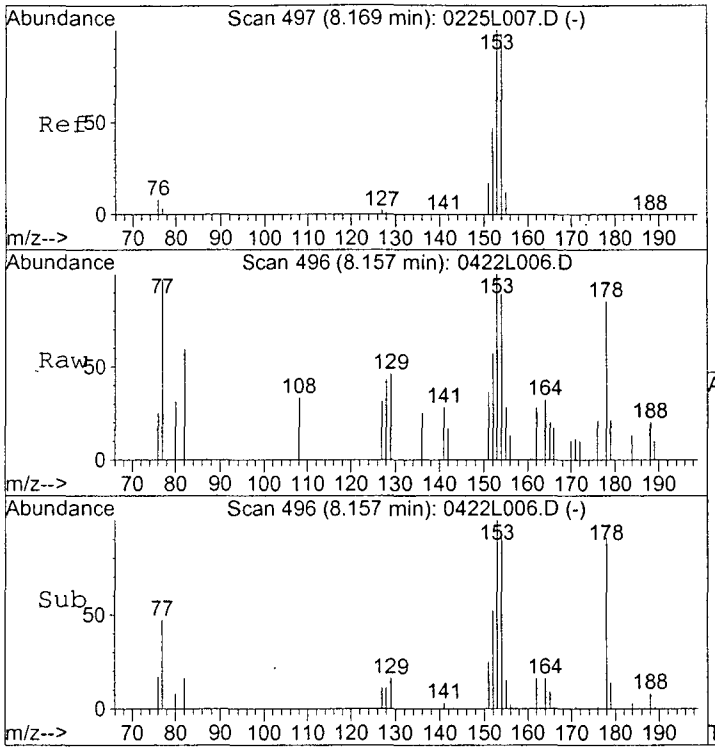


#5
1-Methylnaphthalene
Concen: 0.29644 ppb
RT: 7.04 min Scan# 403
Delta R.T. -0.01 min
Lab File: 0422L006.D
Acq: 22 Apr 12 12:50

Tgt Ion:142 Resp: 642

Ion	Ratio	Lower	Upper
142	100		
141	96.4	57.8	107.3

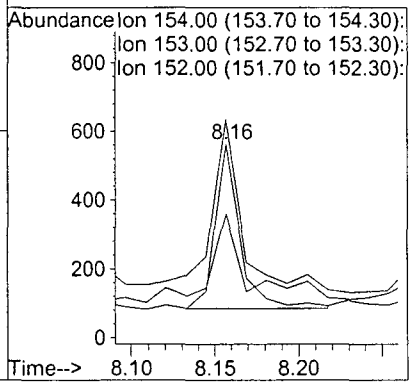


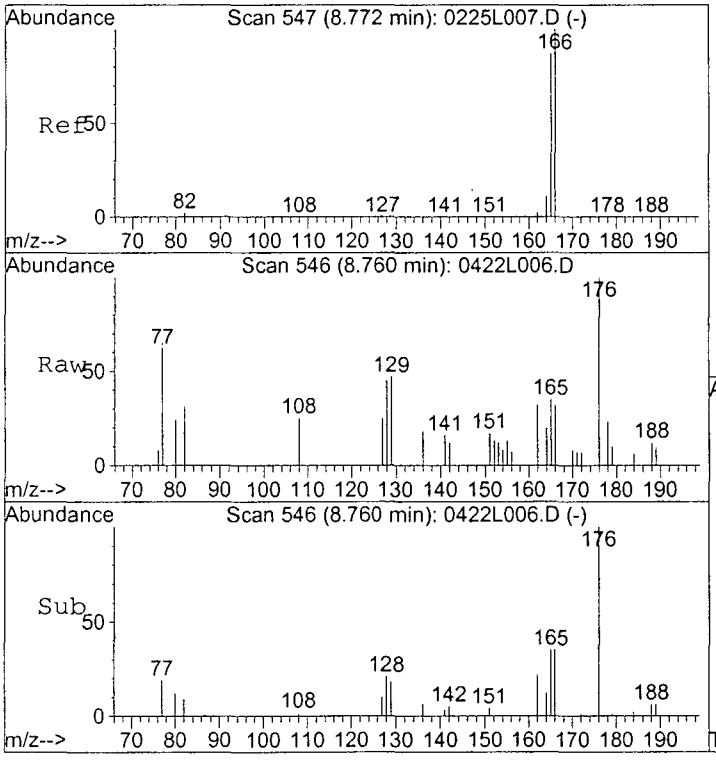


#10
Acenaphthene
Concen: 0.25621 ppb
RT: 8.16 min Scan# 496
Delta R.T. -0.01 min
Lab File: 0422L006.D
Acq: 22 Apr 12 12:50

Tgt Ion:154 Resp: 492

Ion	Ratio	Lower	Upper
154	100		
153	103.8	68.8	127.8
152	50.8	31.5	58.5

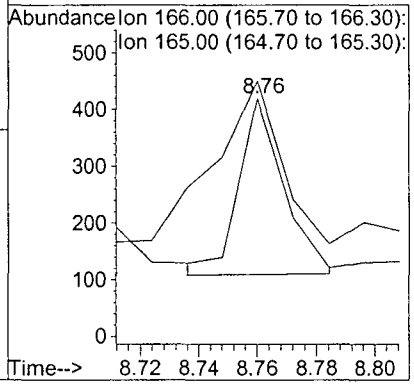




#11
Fluorene
Concen: 0.14052 ppb
RT: 8.76 min Scan# 546
Delta R.T. -0.00 min
Lab File: 0422L006.D
Acq: 22 Apr 12 12:50

Tgt Ion:166 Resp: 327

Ion	Ratio	Lower	Upper
166	100		
165	96.3	66.8	124.0



EPA 8270D SIM

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES072
Sample Collection Date: 04/16/12

ARF: 67512
APPL ID: AY59186
QCG: #SIMHC-120418A-166433

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	1.2	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.61	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.23	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORENE	0.12 J	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	NAPHTHALENE	2.9	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	60.2	50-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	52.1	40-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	57.7	50-135			%	04/18/12	04/22/12

J = Estimated value.

Quant Method: SIMB.M
Run #: 0422L007
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:09:17 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L007.D Vial: 7
Acq On : 22 Apr 12 13:15 Operator: LF
Sample : AY59186W07 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6007	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3290	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.85	188	5493	2.50000 ppb	-0.01
16) Chrysene-D12(IS)	12.94	240	7635	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6584	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	615	0.99315 ppb	0.01
Spiked Amount 1.905			Recovery	= 52.133%	
7) Surrogate Recovery (FBP)	7.36	172	2508	1.14555 ppb	-0.01
Spiked Amount 1.905			Recovery	= 60.165%	
18) Surrogate Recovery (TPH)	11.72	244	2748	1.09855 ppb	-0.01
Spiked Amount 1.905			Recovery	= 57.698%	
Target Compounds					Qvalue
3) Naphthalene	6.14	128	10581	2.93964 ppb #	84
4) 2-Methylnaphthalene	6.93	142	1321	0.61027 ppb	94
5) 1-Methylnaphthalene	7.03	142	2346	1.16189 ppb	92
10) Acenaphthene	8.16	154	447	0.23129 ppb	98
11) Fluorene	8.76	166	291	0.12425 ppb	99

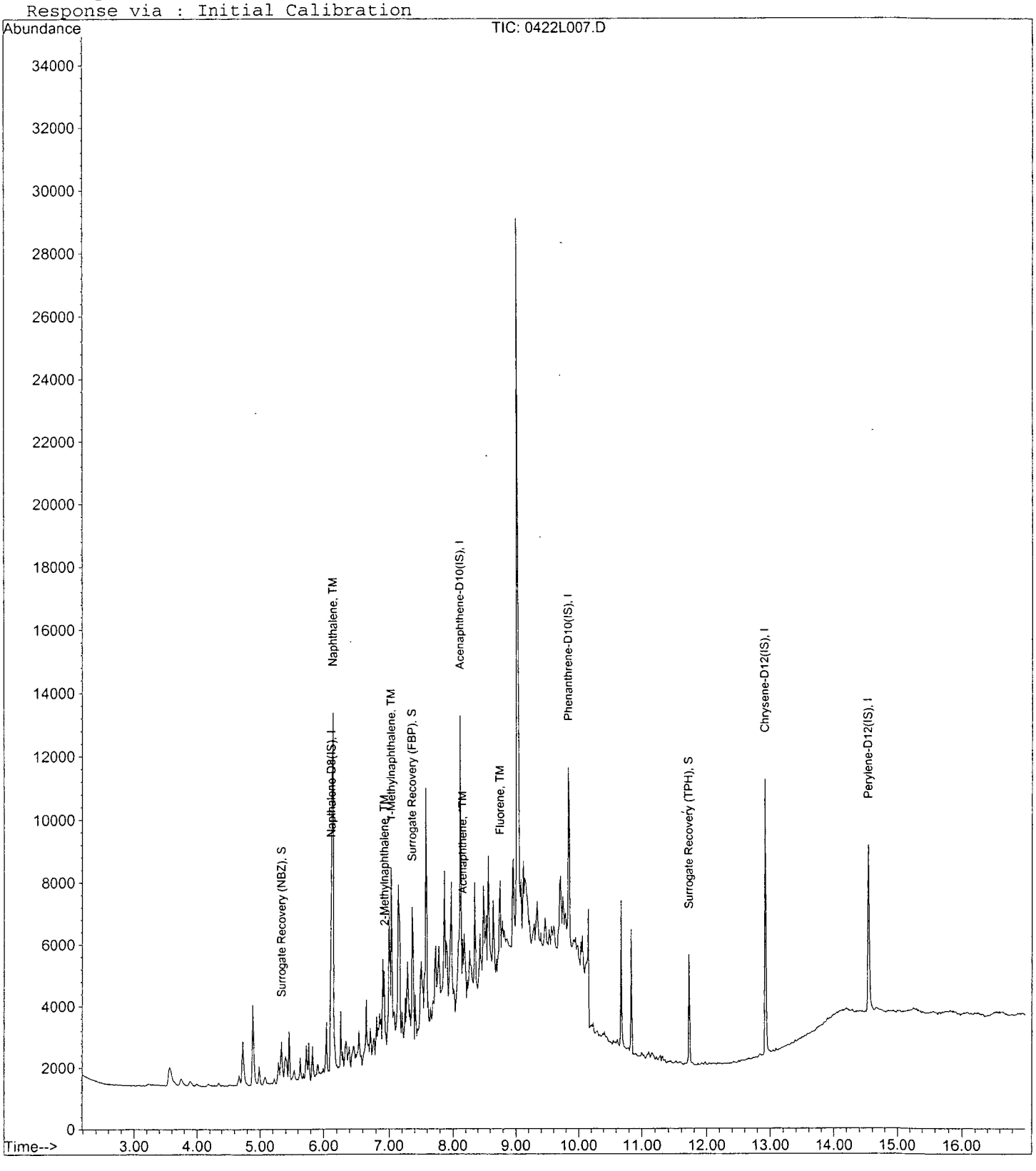
(#) = qualifier out of range (m) = manual integration

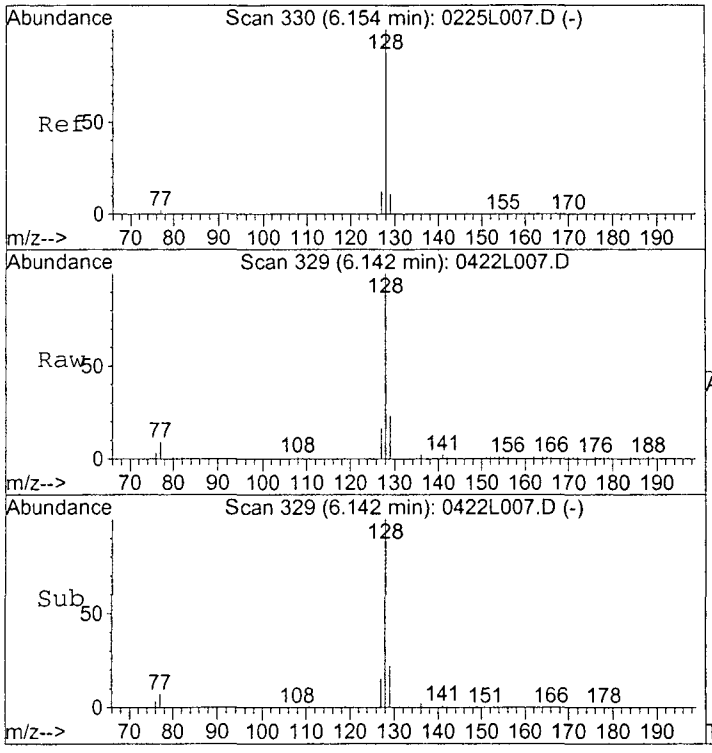
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L007.D Vial: 7
Acq On : 22 Apr 12 13:15 Operator: LF
Sample : AY59186W07 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration

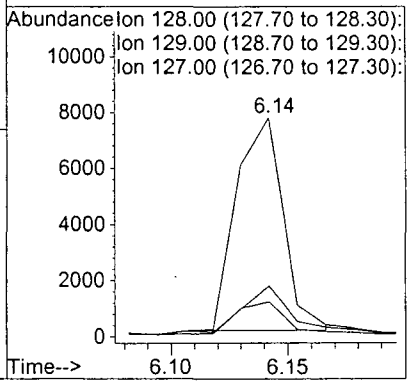


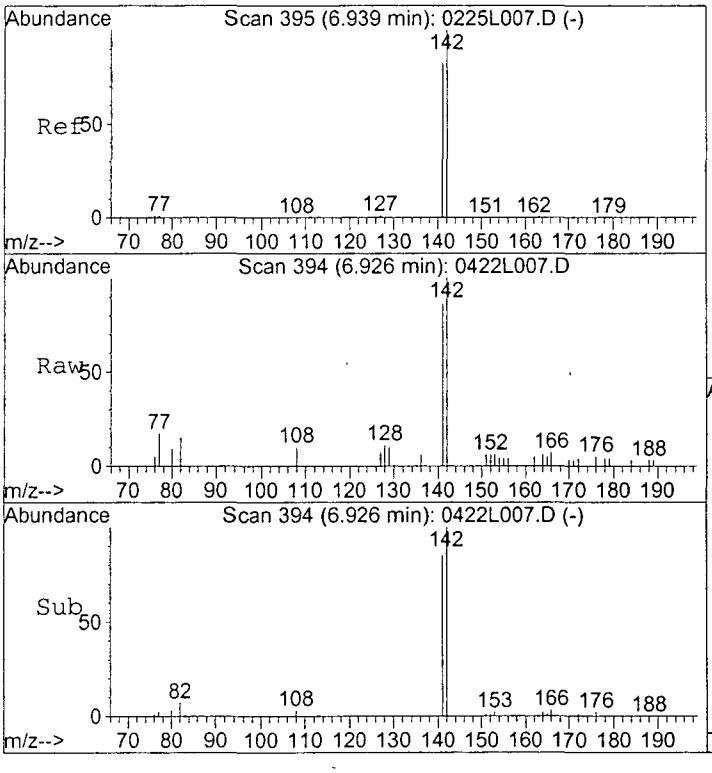


#3
Naphthalene
Concen: 2.93964 ppb
RT: 6.14 min Scan# 329
Delta R.T. 0.00 min
Lab File: 0422L007.D
Acq: 22 Apr 12 13:15

Tgt Ion:128 Resp: 10581

Ion	Ratio	Lower	Upper
128	100		
129	21.0	7.8	14.4#
127	14.8	8.6	16.0

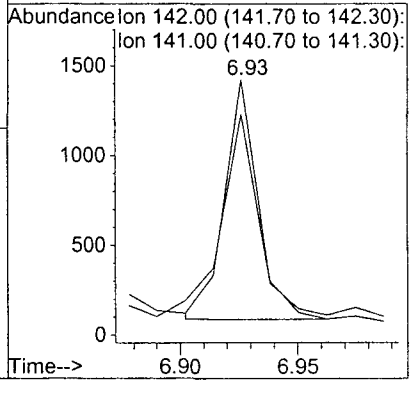


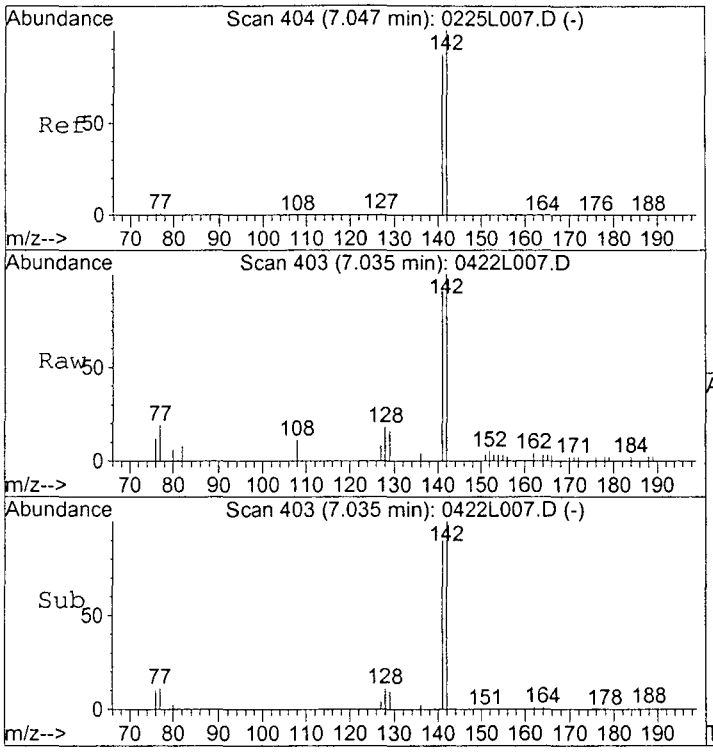


#4
2-Methylnaphthalene
Concen: 0.61027 ppb
RT: 6.93 min Scan# 394
Delta R.T. -0.00 min
Lab File: 0422L007.D
Acq: 22 Apr 12 13:15

Tgt Ion:142 Resp: 1321

Ion	Ratio	Lower	Upper
142	100		
141	83.9	62.7	116.5

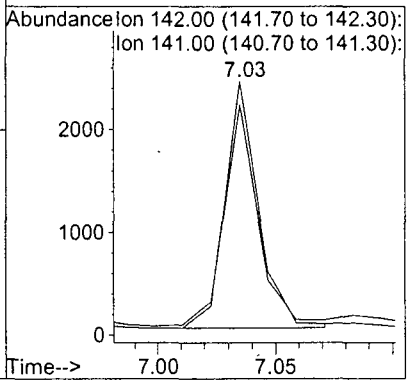


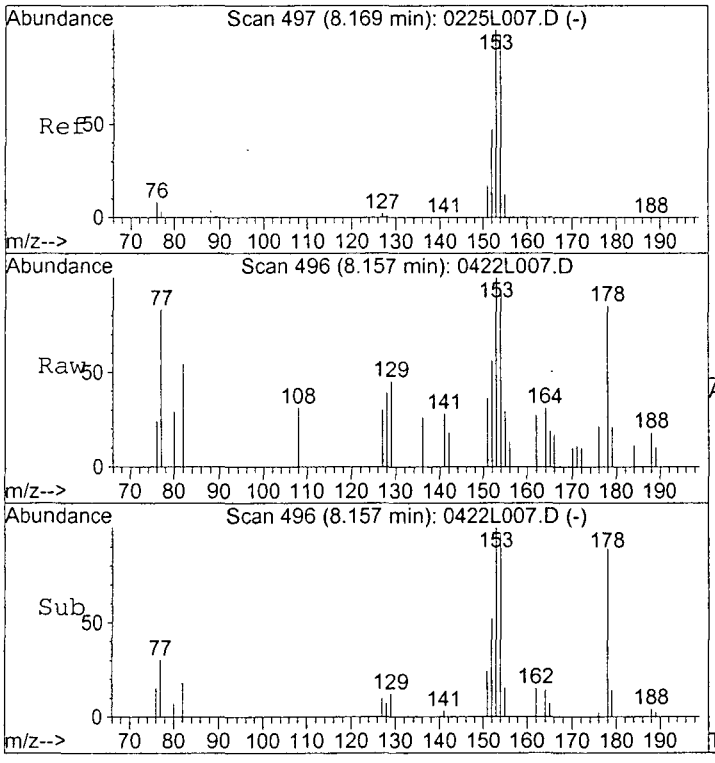


#5
1-Methylnaphthalene
Concen: 1.16189 ppb
RT: 7.03 min Scan# 403
Delta R.T. -0.01 min
Lab File: 0422L007.D
Acq: 22 Apr 12 13:15

Tgt Ion:142 Resp: 2346

Ion	Ratio	Lower	Upper
142	100		
141	89.5	57.8	107.3

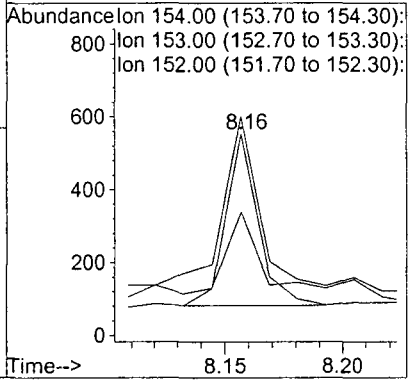


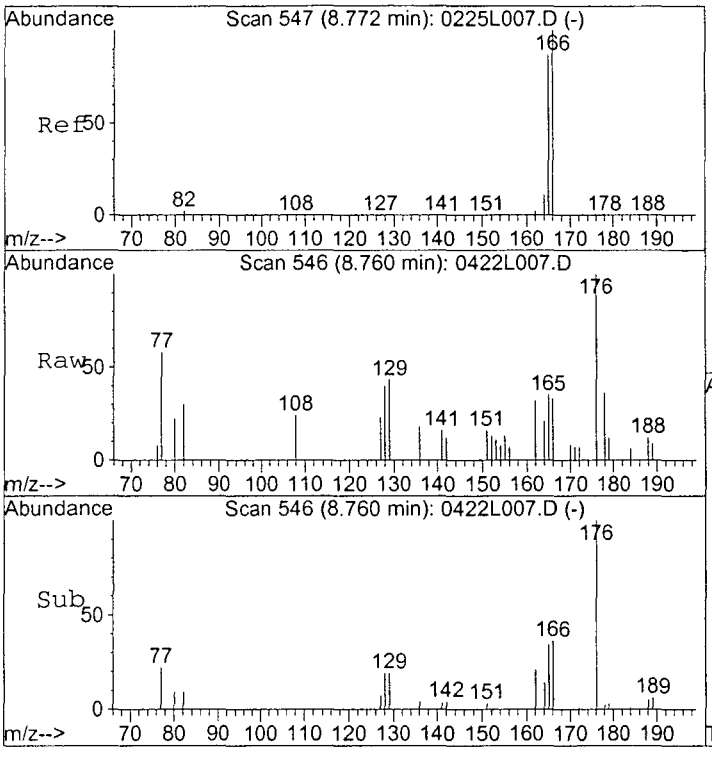


#10
Acenaphthene
Concen: 0.23129 ppb
RT: 8.16 min Scan# 496
Delta R.T. -0.01 min
Lab File: 0422L007.D
Acq: 22 Apr 12 13:15

Tgt Ion:154 Resp: 447

Ion	Ratio	Lower	Upper
154	100		
153	98.7	68.8	127.8
152	47.8	31.5	58.5

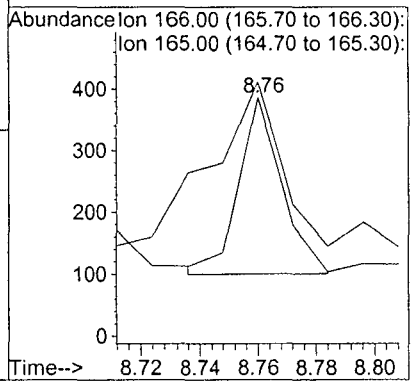




#11
Fluorene
Concen: 0.12425 ppb
RT: 8.76 min Scan# 546
Delta R.T. -0.00 min
Lab File: 0422L007.D
Acq: 22 Apr 12 13:15

Tgt Ion:166 Resp: 291

Ion	Ratio	Lower	Upper
166	100		
165	94.7	66.8	124.0



EPA 8270D SIM

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES073
Sample Collection Date: 04/16/12

ARF: 67512
APPL ID: AY59187
QCG: #SIMHC-120418A-166433

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	04/18/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	60.7	50-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	55.2	40-110			%	04/18/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	65.0	50-135			%	04/18/12	04/22/12

Quant Method: SIMB.M
Run #: 0422L008
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:09:17 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L008.D Vial: 8
Acq On : 22 Apr 12 13:41 Operator: LF
Sample : AY59187W06 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6343	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3292	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5815	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7445	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6471	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	687	1.05065 ppb	0.01
Spiked Amount 1.905			Recovery = 55.178%		
7) Surrogate Recovery (FBP)	7.36	172	2533	1.15627 ppb	-0.01
Spiked Amount 1.905			Recovery = 60.690%		
18) Surrogate Recovery (TPH)	11.73	244	3023	1.23932 ppb	0.00
Spiked Amount 1.905			Recovery = 65.048%		

Target Compounds Qvalue

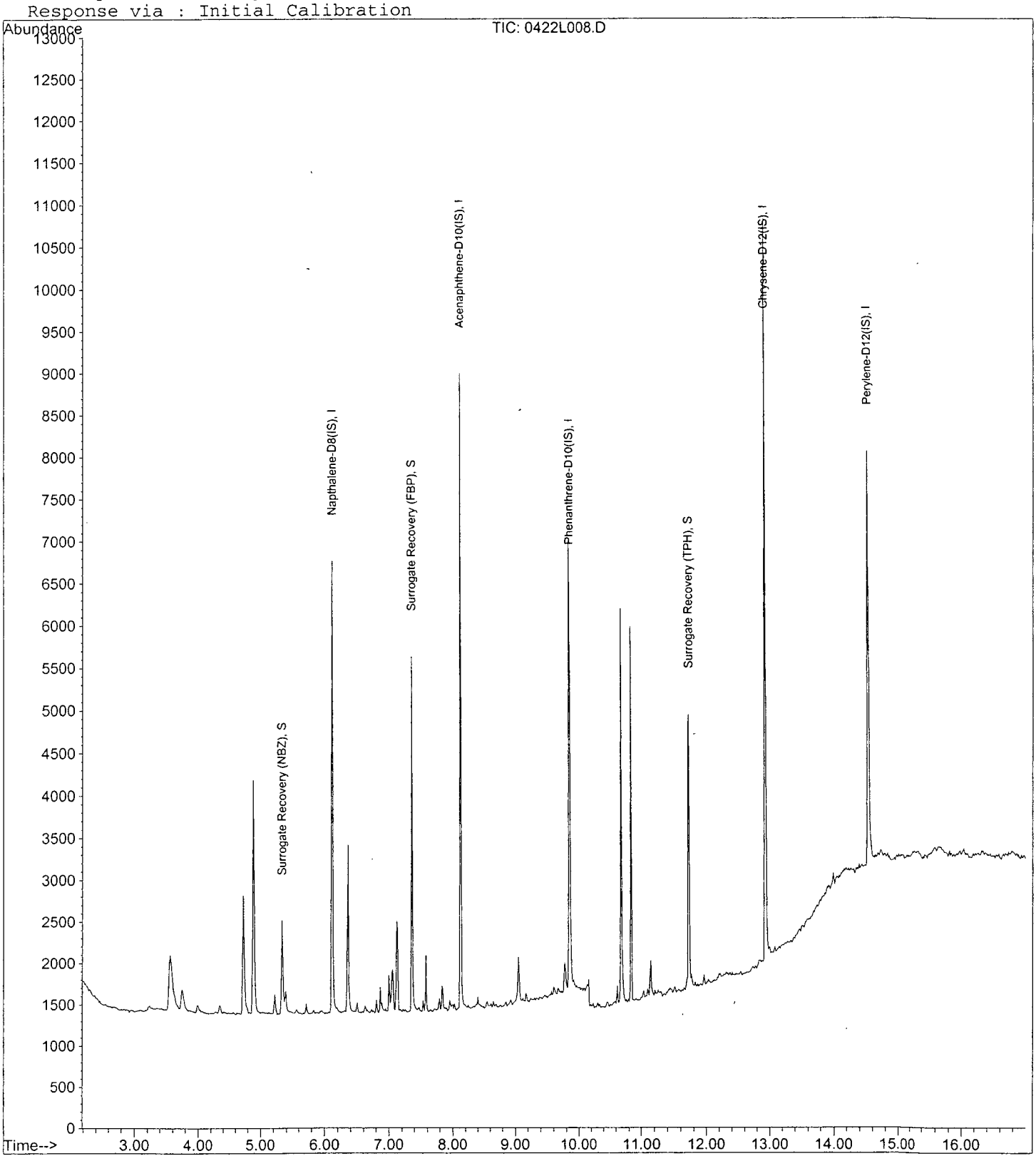
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L008.D Vial: 8
Acq On : 22 Apr 12 13:41 Operator: LF
Sample : AY59187W06 1/1050 Inst : Linus
Misc : Multiplr: 0.95

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67572
Case No: Initial Cal. Date: 02/29/12
Matrix: Instrument: Linus Initials:

		Compound	0229L003 D 0.1	0229L004 D 0.2	0229L005 D 0.5	0229L006.D 1	0229L007.D 5	0229L008.D 10	0229L009.D 50	0229L010.D 100			Avg	%RSD		r
1	I	Napthalene-D8(IS)														
2	S	Surrogate Recovery (NBZ)	0.2482	0.2256	0.2462	0.2440	0.2171	0.2327	0.2670	0.2827			0.25	8.7	S	
3	TM	Naphthalene	1.506	1.608	1.562	1.574	1.325	1.287	1.126				1.4	13	TM	
4	TM	2-Methylnaphthalene	0.8962	0.9576	0.9479	0.9511	0.8263	0.8144	0.7431	0.7273			0.86	11	TM	
5	TM	1-Methylnaphthalene	0.8541	0.8647	0.8796	0.8802	0.7838	0.7780	0.6922	0.6698			0.80	10	TM	
6	I	Acenaphthene-D10(IS)														
7	S	Surrogate Recovery (FBP)	1.606	1.554	1.731	1.634	1.565	1.629	1.553	1.403			1.6	5.9	S	
8	TM	1,1'-Biphenyl	2.138	2.145	2.246	2.082	1.979	1.931	1.704	1.571			2.0	12	TM	
9	TM	Acenaphthylene	2.594	2.556	2.650	2.501	2.372	2.428	2.200	1.916			2.4	10	TM	
10	*TM	Acenaphthene	1.563	1.492	1.519	1.435	1.390	1.363	1.267	1.160			1.4	9.6	*TM	
11	TM	Fluorene	1.795	1.796	1.859	1.726	1.669	1.690	1.582	1.441			1.7	7.9	TM	
12	I	Phenanthrene-D10(IS)														
13	TM	Phenanthrene	1.714	1.615	1.639	1.576	1.495	1.438	1.290	1.104			1.5	14	TM	
14	TM	Anthracene	1.369	1.458	1.377	1.380	1.423	1.368	1.259	1.082			1.3	8.9	TM	
15	*TM	Fluoranthene	1.923	1.896	1.919	1.851	1.865	1.835	1.685	1.576			1.8	6.8	*TM	
16	I	Chrysene-D12(IS)														
17	TM	Pyrene	1.588	1.532	1.612	1.507	1.443	1.392	1.268	1.182			1.4	11	TM	
18	S	Surrogate Recovery (TPH)	0.8061	0.7442	0.8201	0.7874	0.8133	0.8544	0.7588	0.6563			0.78	7.8	S	
19	TM	Benz (a) anthracene	1.403	1.361	1.365	1.258	1.212	1.147	1.063	1.065			1.2	11	TM	
20	TM	Chrysene	1.320	1.398	1.410	1.346	1.276	1.241	1.056	0.9180			1.2	14	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	7.776	4.408	2.527	1.790	1.291	0.9457	0.9123	0.9049			2.6	94	TMQ	1.00
22	I	Perylene-D12(IS)														
23	TM	Benzo (b) fluoranthene	1.941	1.771	1.720	1.677	1.526	1.484	1.245	1.286			1.6	15	TM	
24	TM	Benzo (k) fluoranthene	1.461	1.239	1.438	1.321	1.364	1.390	1.356	0.9323			1.3	13	TM	
25	*TM	Benzo (a) pyrene	1.645	1.593	1.481	1.396	1.362	1.366	1.253	1.136			1.4	12	*TM	
26	TMQ	Dibenz (a,h) anthracene	2.398	1.892	1.442	1.259	1.148	1.160	1.097	1.028			1.4	34	TMQ	1.00
27	TMQ	Benzo (g,h,i) perylene	12.9	7.045	3.555	2.361	1.431	1.308	1.150	1.082			3.9	108	TMQ	1.00
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L003.D Vial: 3
Acq On : 1 Mar 12 00:20 Operator: LF
Sample : 0.1ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5942	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2911	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	5004	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6327	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.54	264	5577	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	59	0.11037	ppb		0.00
Spiked Amount 2.000			Recovery = 5.500%				
7) Surrogate Recovery (FBP)	7.37	172	187	0.10055	ppb		0.00
Spiked Amount 2.000			Recovery = 5.050%				
18) Surrogate Recovery (TPH)	11.73	244	204	0.09667	ppb		0.00
Spiked Amount 2.000			Recovery = 4.850%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	358	0.11535	ppb		98
4) 2-Methylnaphthalene	6.93	142	213	0.10924	ppb		96
5) 1-Methylnaphthalene	7.05	142	203	0.10937	ppb		99
8) 1,1'-Biphenyl	7.47	154	249	0.10939	ppb		99
9) Acenaphthylene	7.96	152	302	0.10805	ppb		98
10) Acenaphthene	8.17	154	182	0.11354	ppb		93
11) Fluorene	8.76	166	209	0.10687	ppb		91
13) Phenanthrene	9.88	178	343	0.11685	ppb		98
14) Anthracene	9.94	178	274	0.09809	ppb		96
15) Fluoranthene	11.26	202	385	0.10399	ppb		97
17) Pyrene	11.51	202	402	0.11205	ppb		94
19) Benz (a) anthracene	12.91	228	355	0.11892	ppb		98
20) Chrysene	12.96	228	334	0.10484	ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	1968	0.69525	ppb	#	96
23) Benzo (b) fluoranthene	14.09	252	433	0.12898	ppb	#	94
24) Benzo (k) fluoranthene	14.13	252	326	0.10614	ppb		98
25) Benzo (a) pyrene	14.47	252	367	0.12057	ppb		99
26) Dibenz (a,h) anthracene	16.04	278	535	0.20789	ppb		98
27) Benzo (g,h,i) perylene	16.41	276	2880	0.94271	ppb	#	91

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

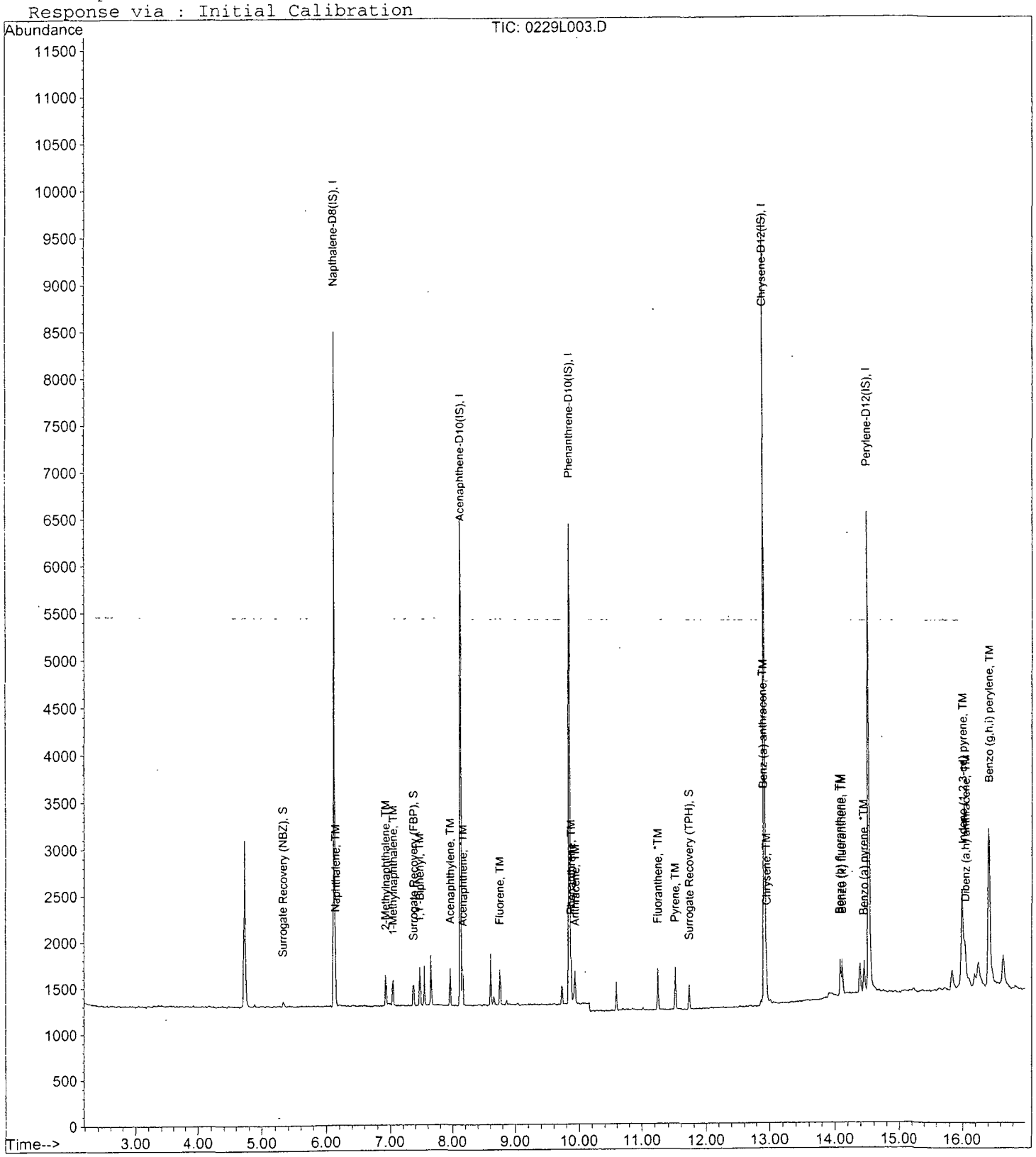
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L003.D
Acq On : 1 Mar 12 00:20
Sample : 0.1ug/ml PAH 02-29-12
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L004.D Vial: 4
Acq On : 1 Mar 12 00:44 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5652	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4715	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6080	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.53	264	5399	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	102	0.20060	ppb		0.00
Spiked Amount 2.000			Recovery =	10.050%			
7) Surrogate Recovery (FBP)	7.37	172	352	0.19455	ppb		0.00
Spiked Amount 2.000			Recovery =	9.750%			
18) Surrogate Recovery (TPH)	11.73	244	362	0.17851	ppb		0.00
Spiked Amount 2.000			Recovery =	8.950%			
Target Compounds							Qvalue
3) Naphthalene	6.14	128	727	0.24627	ppb		97
4) 2-Methylnaphthalene	6.93	142	433	0.23347	ppb		94
5) 1-Methylnaphthalene	7.05	142	391	0.22147	ppb		97
8) 1,1'-Biphenyl	7.48	154	486	0.21945	ppb	#	84
9) Acenaphthylene	7.96	152	579	0.21294	ppb		100
10) Acenaphthene	8.17	154	338	0.21674	ppb		98
11) Fluorene	8.76	166	407	0.21392	ppb		95
13) Phenanthrene	9.88	178	609	0.22018	ppb		99
14) Anthracene	9.94	178	550	0.20897	ppb		97
15) Fluoranthene	11.26	202	715	0.20496	ppb		97
17) Pyrene	11.51	202	745	0.21610	ppb		97
19) Benz (a) anthracene	12.91	228	662	0.23077	ppb		98
20) Chrysene	12.96	228	680	0.22213	ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	2144	0.78820	ppb	#	93
23) Benzo (b) fluoranthene	14.09	252	765	0.23539	ppb		96
24) Benzo (k) fluoranthene	14.13	252	535	0.17993	ppb	#	96
25) Benzo (a) pyrene	14.46	252	688	0.23348	ppb		98
26) Dibenz (a,h) anthracene	16.03	278	817	0.32794	ppb		96
27) Benzo (g,h,i) perylene	16.41	276	3043	1.02890	ppb		95

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

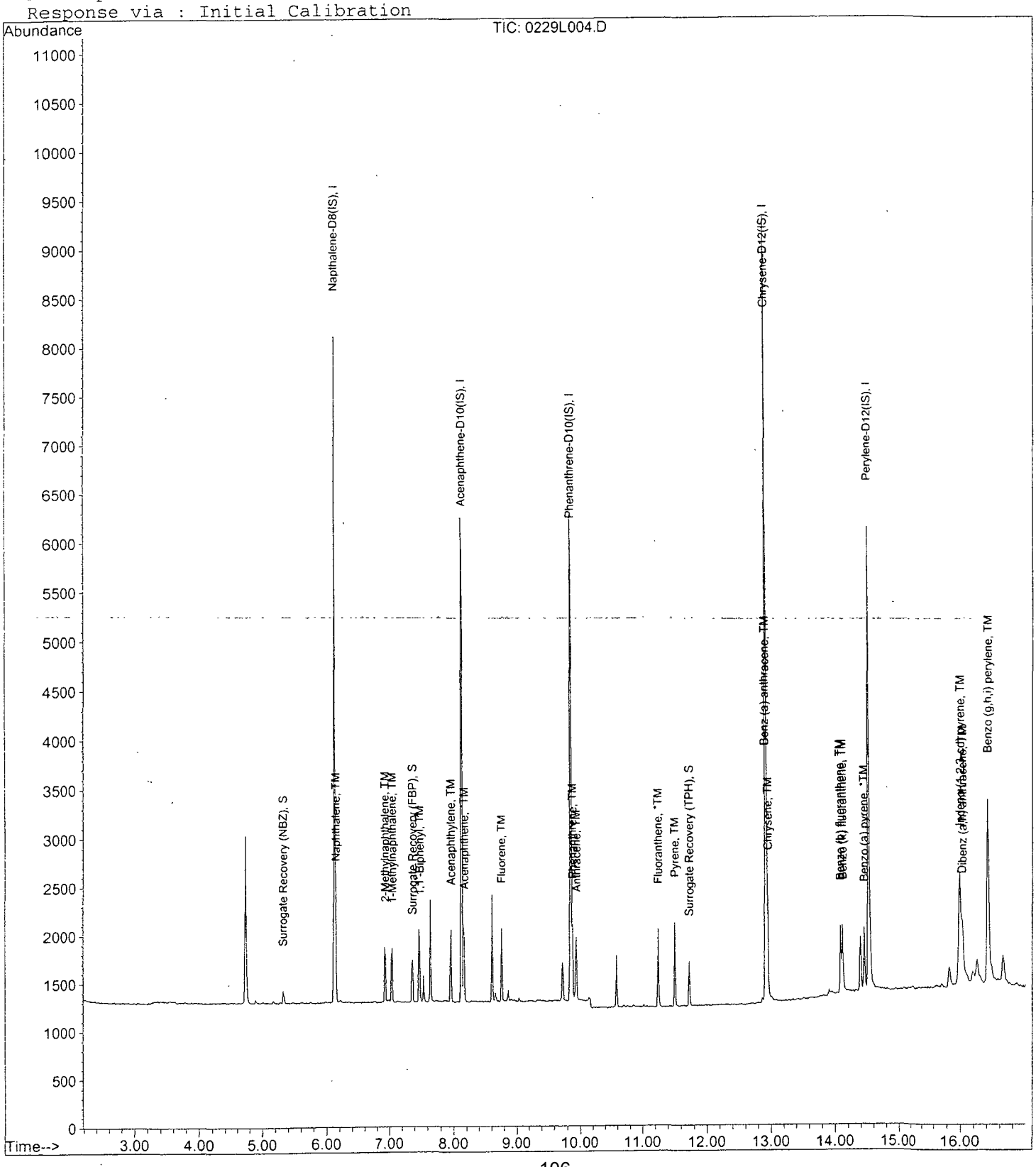
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L004.D
Acq On : 1 Mar 12 00:44
Sample : 0.2ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L005.D Vial: 5
Acq On : 1 Mar 12 1:09 Operator: LF
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5565	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.13	164	2781	2.50000 ppb	0.00
12) Phenanthrene-D10(IS)	9.86	188	4739	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.92	240	5969	2.50000 ppb	0.00
22) Perylene-D12(IS)	14.54	264	5253	2.50000 ppb	0.00
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.32	82	274	0.54730 ppb	0.00
Spiked Amount 2.000			Recovery = 27.350%		
7) Surrogate Recovery (FBP)	7.37	172	963	0.54201 ppb	0.00
Spiked Amount 2.000			Recovery = 27.100%		
18) Surrogate Recovery (TPH)	11.73	244	979	0.49173 ppb	0.00
Spiked Amount 2.000			Recovery = 24.600%		
Target Compounds					Qvalue
3) Naphthalene	6.14	128	1738	0.59795 ppb	99
4) 2-Methylnaphthalene	6.93	142	1055	0.57775 ppb	98
5) 1-Methylnaphthalene	7.05	142	979	0.56319 ppb	97
8) 1,1'-Biphenyl	7.47	154	1249	0.57433 ppb	98
9) Acenaphthylene	7.96	152	1474	0.55203 ppb	99
10) Acenaphthene	8.16	154	845	0.55178 ppb	83
11) Fluorene	8.76	166	1034	0.55344 ppb	100
13) Phenanthrene	9.88	178	1553	0.55864 ppb	99
14) Anthracene	9.94	178	1305	0.49333 ppb	99
15) Fluoranthene	11.26	202	1819	0.51879 ppb	98
17) Pyrene	11.51	202	1925	0.56875 ppb	95
19) Benz(a)anthracene	12.91	228	1629	0.57842 ppb	99
20) Chrysene	12.96	228	1683	0.55999 ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	3017	1.12977 ppb	98
23) Benzo (b) fluoranthene	14.09	252	1807	0.57147 ppb	96
24) Benzo (k) fluoranthene	14.13	252	1511	0.52230 ppb	98
25) Benzo (a) pyrene	14.47	252	1556	0.54272 ppb	99
26) Dibenz (a,h) anthracene	16.04	278	1515	0.62501 ppb	98
27) Benzo (g,h,i) perylene	16.41	276	3735	1.29798 ppb	94

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

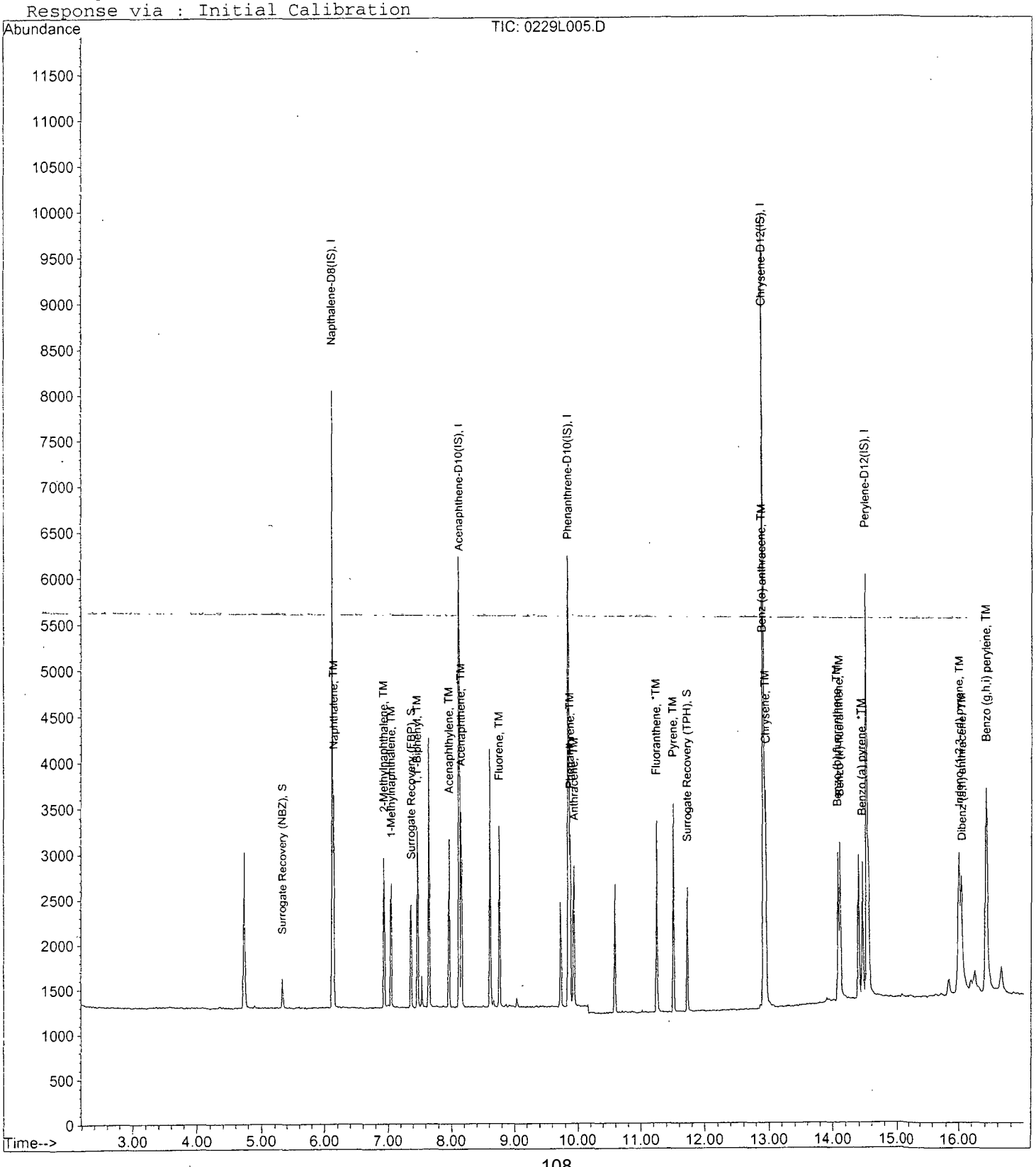
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L005.D
Acq On : 1 Mar 12 1:09
Sample : 0.5ug/ml PAH
Misc :

Vial: 5
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L006.D Vial: 6
Acq On : 1 Mar 12 1:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5215	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2733	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4543	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	5902	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5053	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	509	1.08494 ppb		0.00
Spiked Amount 2.000			Recovery = 54.250%			
7) Surrogate Recovery (FBP)	7.37	172	1786	1.02288 ppb		0.00
Spiked Amount 2.000			Recovery = 51.150%			
18) Surrogate Recovery (TPH)	11.73	244	1859	0.94434 ppb		0.00
Spiked Amount 2.000			Recovery = 47.200%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	3283	1.20530 ppb		99
4) 2-Methylnaphthalene	6.93	142	1984	1.15942 ppb		98
5) 1-Methylnaphthalene	7.05	142	1836	1.12708 ppb		99
8) 1,1'-Biphenyl	7.48	154	2276	1.06496 ppb	#	84
9) Acenaphthylene	7.96	152	2734	1.04189 ppb		99
10) Acenaphthene	8.16	154	1569	1.04254 ppb	#	81
11) Fluorene	8.76	166	1887	1.02774 ppb		97
13) Phenanthrene	9.88	178	2864	1.07467 ppb		99
14) Anthracene	9.94	178	2508	0.98900 ppb		99
15) Fluoranthene	11.26	202	3364	1.00084 ppb		98
17) Pyrene	11.51	202	3558	1.06316 ppb		94
19) Benz(a)anthracene	12.91	228	2969	1.06618 ppb		100
20) Chrysene	12.96	228	3178	1.06942 ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	4226	1.60046 ppb	#	98
23) Benzo (b) fluoranthene	14.09	252	3390	1.11454 ppb		98
24) Benzo (k) fluoranthene	14.13	252	2669	0.95910 ppb		99
25) Benzo (a) pyrene	14.47	252	2821	1.02288 ppb		97
26) Dibenz (a,h) anthracene	16.04	278	2545	1.09150 ppb		99
27) Benzo (g,h,i) perylene	16.41	276	4772	1.72400 ppb		94

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

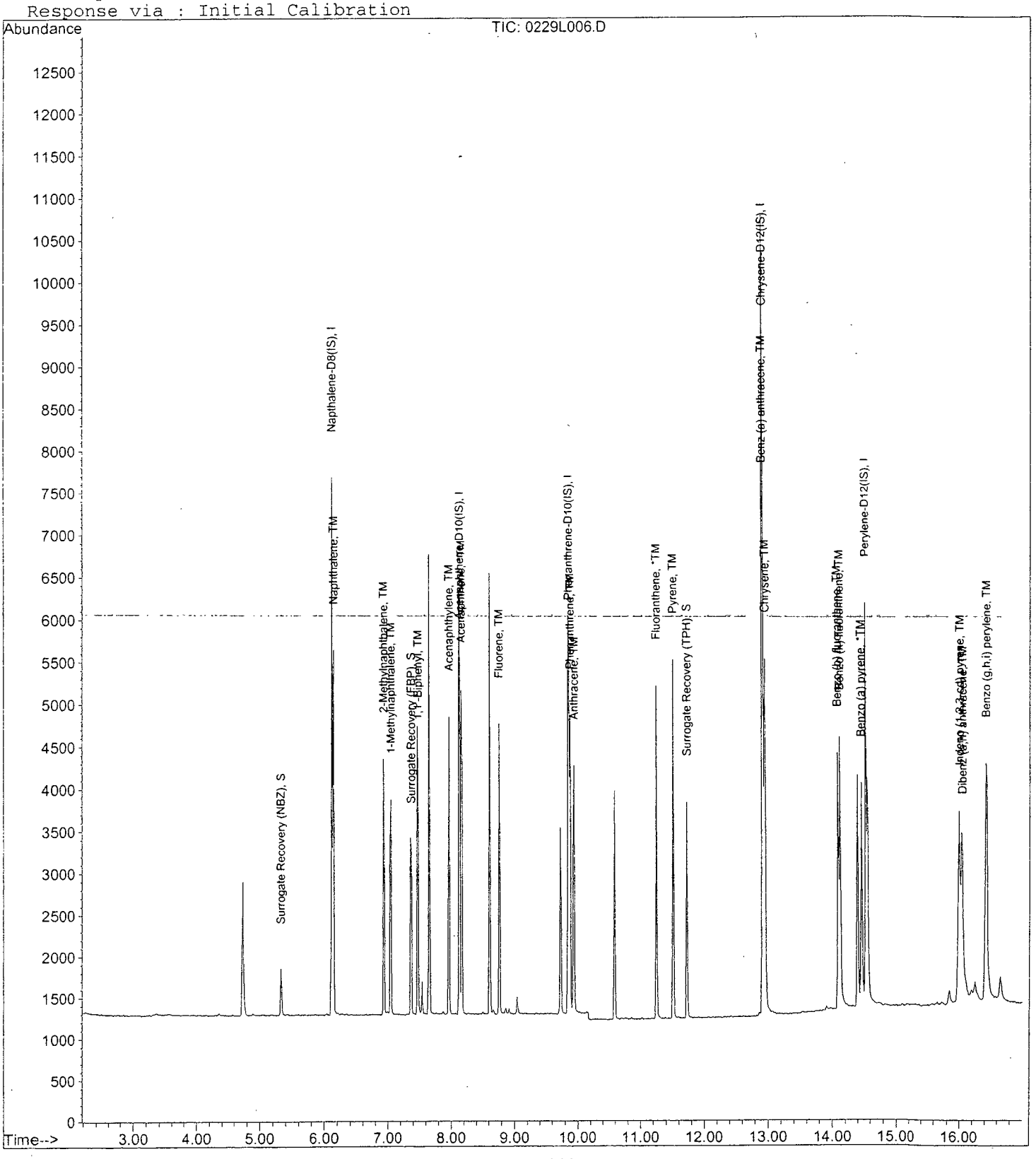
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L006.D
Acq On : 1 Mar 12 1:34
Sample : 1.0ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L007.D Vial: 7
Acq On : 1 Mar 12 1:59 Operator: LF
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5710	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2760	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4470	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6006	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5058	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	2479	4.82594 ppb		0.00
Spiked Amount 2.000			Recovery	= 241.300%		
7) Surrogate Recovery (FBP)	7.37	172	8641	4.90046 ppb		0.00
Spiked Amount 2.000			Recovery	= 245.000%		
18) Surrogate Recovery (TPH)	11.73	244	9769	4.87655 ppb		0.00
Spiked Amount 2.000			Recovery	= 243.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15130	5.07319 ppb		100
4) 2-Methylnaphthalene	6.93	142	9436	5.03624 ppb		100
5) 1-Methylnaphthalene	7.05	142	8951	5.01847 ppb		100
8) 1,1'-Biphenyl	7.47	154	10923	5.06097 ppb		100
9) Acenaphthylene	7.96	152	13095	4.94152 ppb		100
10) Acenaphthene	8.17	154	7674	5.04922 ppb		100
11) Fluorene	8.76	166	9212	4.96816 ppb		100
13) Phenanthrene	9.88	178	13364	5.09651 ppb		100
14) Anthracene	9.94	178	12720	5.09789 ppb		100
15) Fluoranthene	11.26	202	16671	5.04085 ppb		100
17) Pyrene	11.51	202	17331	5.08899 ppb		100
19) Benz(a) anthracene	12.91	228	14556	5.13662 ppb		100
20) Chrysene	12.96	228	15329	5.06901 ppb		100
21) Indeno (1,2,3-cd) pyrene	15.99	276	15511	5.77257 ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	15432	5.06859 ppb		100
24) Benzo (k) fluoranthene	14.13	252	13796	4.95267 ppb		100
25) Benzo (a) pyrene	14.47	252	13783	4.99271 ppb		100
26) Dibenz (a,h) anthracene	16.04	278	11610	4.97436 ppb		100
27) Benzo (g,h,i) perylene	16.43	276	14480	5.22607 ppb		100

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

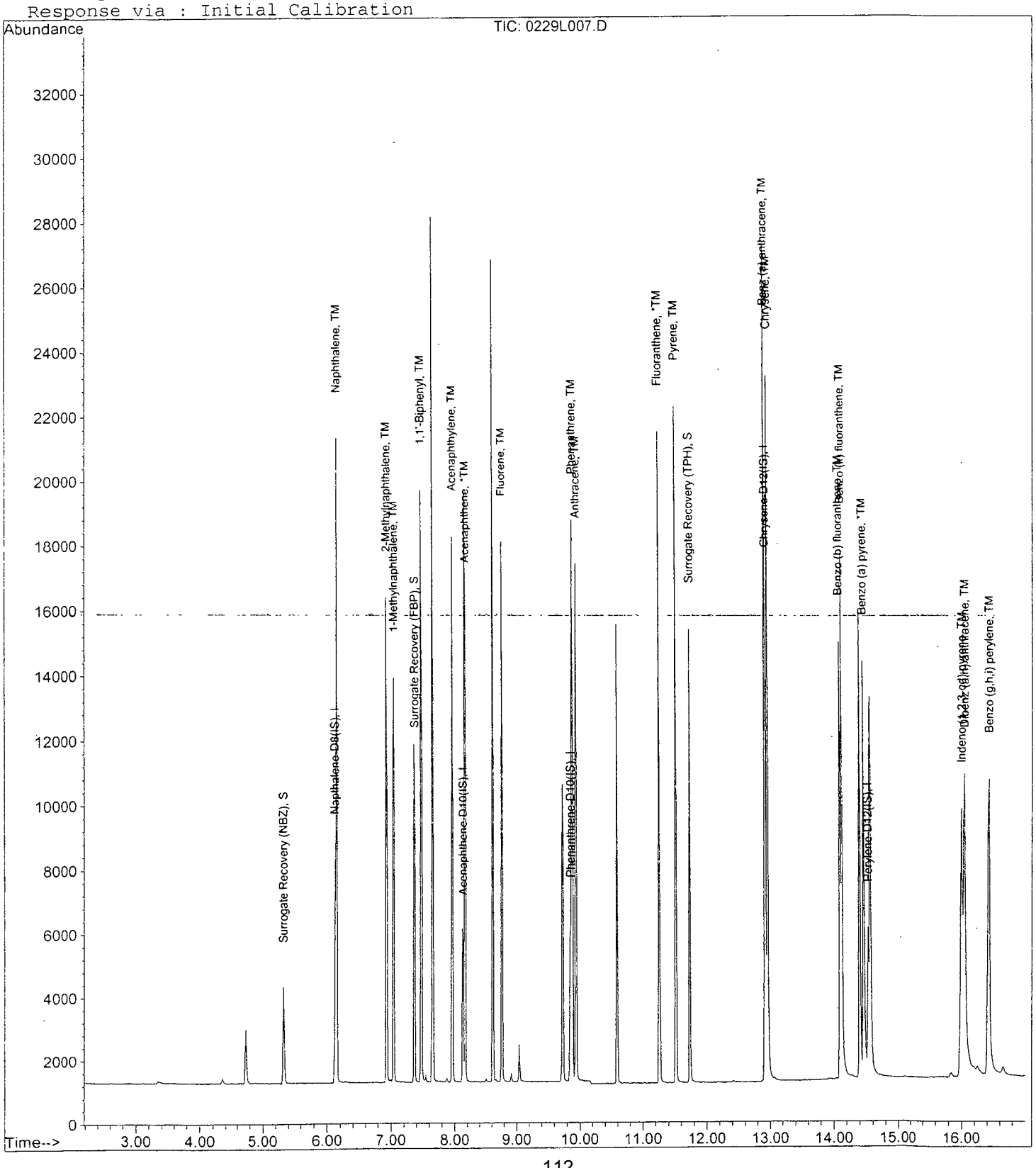
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L007.D
Acq On : 1 Mar 12 1:59
Sample : 5.0ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L008.D Vial: 8
Acq On : 1 Mar 12 2:24 Operator: LF
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5922	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2882	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4817	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6477	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.53	264	5338	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	5513	10.34812	ppb		0.00
Spiked Amount 2.000			Recovery = 517.400%				
7) Surrogate Recovery (FBP)	7.37	172	18779	10.19907	ppb		0.00
Spiked Amount 2.000			Recovery = 509.950%				
18) Surrogate Recovery (TPH)	11.73	244	22137	10.24690	ppb		0.00
Spiked Amount 2.000			Recovery = 512.350%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	30478	9.85363	ppb		100
4) 2-Methylnaphthalene	6.93	142	19291	9.92752	ppb		99
5) 1-Methylnaphthalene	7.05	142	18430	9.96306	ppb		100
8) 1,1'-Biphenyl	7.48	154	22262	9.87805	ppb	#	83
9) Acenaphthylene	7.96	152	27995	10.11697	ppb		100
10) Acenaphthene	8.17	154	15714	9.90157	ppb		99
11) Fluorene	8.76	166	19485	10.06368	ppb		98
13) Phenanthrene	9.88	178	27712	9.80698	ppb		99
14) Anthracene	9.94	178	26362	9.80421	ppb		100
15) Fluoranthene	11.26	202	35348	9.91831	ppb		100
17) Pyrene	11.51	202	36073	9.82203	ppb		97
19) Benz(a)anthracene	12.91	228	29725	9.72677	ppb		99
20) Chrysene	12.96	228	32162	9.86198	ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	24500	8.45487	ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	31691	9.86282	ppb		99
24) Benzo (k) fluoranthene	14.13	252	29676	10.09466	ppb		99
25) Benzo (a) pyrene	14.46	252	29177	10.01459	ppb		100
26) Dibenz (a,h) anthracene	16.04	278	24758	10.05127	ppb		99
27) Benzo (g,h,i) perylene	16.43	276	27919	9.54787	ppb		100

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

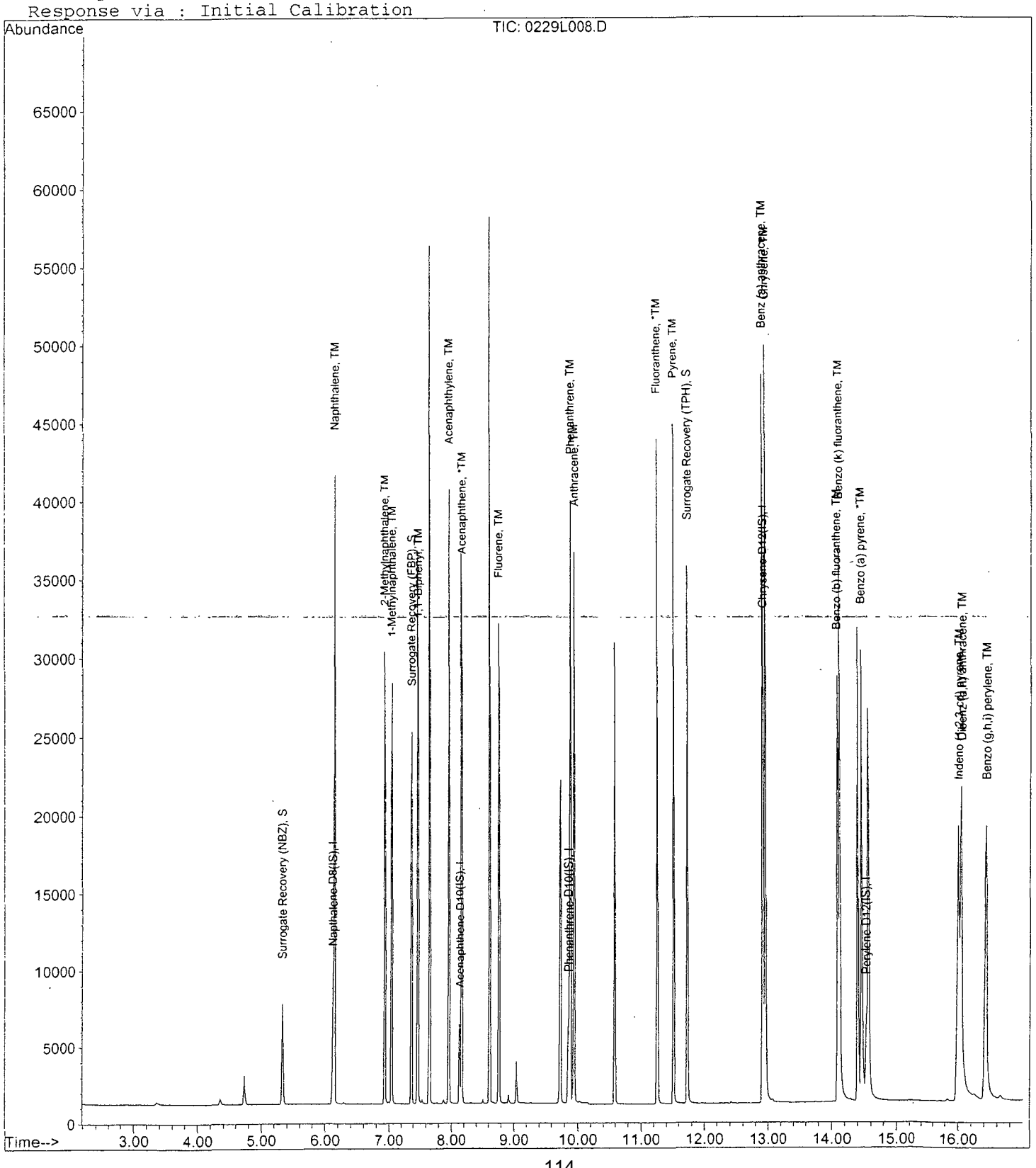
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L008.D
Acq On : 1 Mar 12 2:24
Sample : 10ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L009.D Vial: 9
Acq On : 1 Mar 12 2:49 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5719	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2718	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4593	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6372	2.50000	ppb		0.01
22) Perylene-D12(IS)	14.54	264	5338	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	30540	59.35955	ppb		0.00
Spiked Amount 2.000			Recovery	= 2968.000%			
7) Surrogate Recovery (FBP)	7.37	172	84407	48.60839	ppb		0.00
Spiked Amount 2.000			Recovery	= 2430.400%			
18) Surrogate Recovery (TPH)	11.73	244	96696	45.49676	ppb		0.00
Spiked Amount 2.000			Recovery	= 2274.850%			
Target Compounds							Qvalue
3) Naphthalene	6.14	128	128767	43.10846	ppb		99
4) 2-Methylnaphthalene	6.94	142	84994	45.29212	ppb		87
5) 1-Methylnaphthalene	7.05	142	79171	44.31818	ppb		100
8) 1,1'-Biphenyl	7.48	154	92639	43.58586	ppb	#	84
9) Acenaphthylene	7.96	152	119609	45.83300	ppb		98
10) Acenaphthene	8.17	154	68862	46.00885	ppb		98
11) Fluorene	8.77	166	86013	47.10480	ppb		90
13) Phenanthrene	9.88	178	118464	43.96772	ppb		98
14) Anthracene	9.94	178	115636	45.10324	ppb		98
15) Fluoranthene	11.26	202	154795	45.55225	ppb	#	92
17) Pyrene	11.52	202	161556	44.71366	ppb	#	81
19) Benz (a) anthracene	12.92	228	135460	45.05633	ppb		95
20) Chrysene	12.96	228	134623	41.96027	ppb	#	96
21) Indeno (1,2,3-cd) pyrene	16.01	276	116267	40.78451	ppb		95
23) Benzo (b) fluoranthene	14.10	252	132868	41.35096	ppb	#	92
24) Benzo (k) fluoranthene	14.14	252	144725	49.23001	ppb	#	96
25) Benzo (a) pyrene	14.48	252	133729	45.90057	ppb		96
26) Dibenz (a,h) anthracene	16.05	278	117167	47.56756	ppb		99
27) Benzo (g,h,i) perylene	16.44	276	122767	41.98443	ppb		94

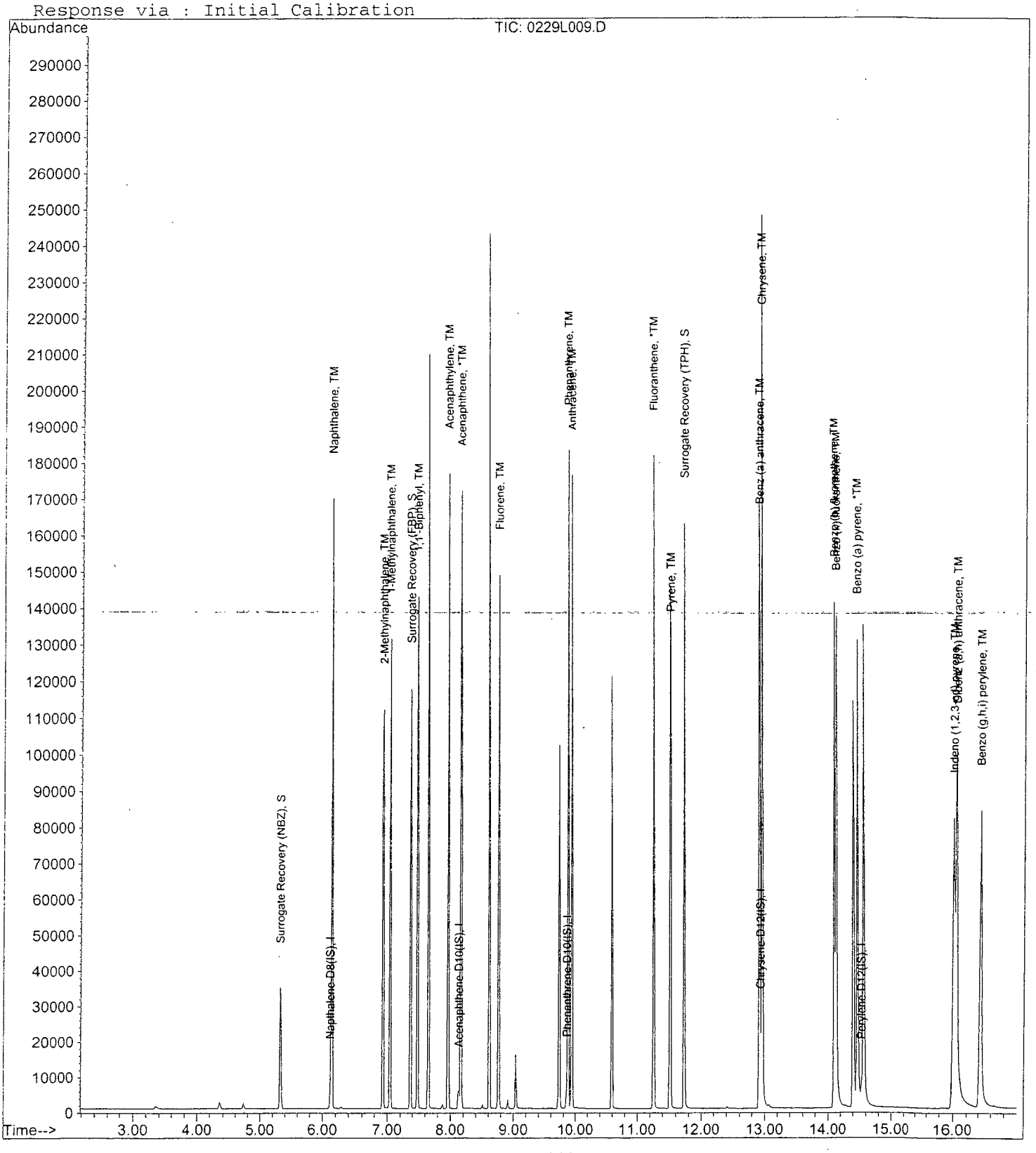
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L009.D Vial: 9
Acq On : 1 Mar 12 2:49 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L010.D Vial: 10
Acq On : 1 Mar 12 3:14 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5584	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4766	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6566	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.55	264	5654	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	63151	125.71194 ppb		0.01
Spiked Amount 2.000			Recovery	= 6285.600%		
7) Surrogate Recovery (FBP)	7.37	172	158975	87.86538 ppb		0.00
Spiked Amount 2.000			Recovery	= 4393.250%		
18) Surrogate Recovery (TPH)	11.73	244	172379	78.71024 ppb		0.00
Spiked Amount 2.000			Recovery	= 3935.500%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	230712	79.10479 ppb		98
4) 2-Methylnaphthalene	6.94	142	162439	88.65422 ppb		89
5) 1-Methylnaphthalene	7.05	142	149617	85.77710 ppb		98
8) 1,1'-Biphenyl	7.48	154	177959	80.35777 ppb	#	87
9) Acenaphthylene	7.96	152	217090	79.83814 ppb		97
10) Acenaphthene	8.17	154	131352	84.22765 ppb		96
11) Fluorene	8.77	166	163286	85.82351 ppb		93
13) Phenanthrene	9.88	178	210497	75.28975 ppb		97
14) Anthracene	9.94	178	206234	77.52064 ppb		97
15) Fluoranthene	11.27	202	300423	85.19782 ppb	#	88
17) Pyrene	11.52	202	310532	83.40621 ppb	#	89
19) Benz (a) anthracene	12.93	228	279782	90.31073 ppb		97
20) Chrysene	12.97	228	241095	72.92596 ppb		97
21) Indeno (1,2,3-cd) pyrene	16.02	276	237656	80.90259 ppb		92
23) Benzo (b) fluoranthene	14.10	252	290761	85.43269 ppb		97
24) Benzo (k) fluoranthene	14.14	252	210844	67.71274 ppb	#	94
25) Benzo (a) pyrene	14.48	252	256847	83.23189 ppb	#	94
26) Dibenz (a,h) anthracene	16.06	278	232404	89.07830 ppb		99
27) Benzo (g,h,i) perylene	16.46	276	244670	78.99690 ppb		96

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

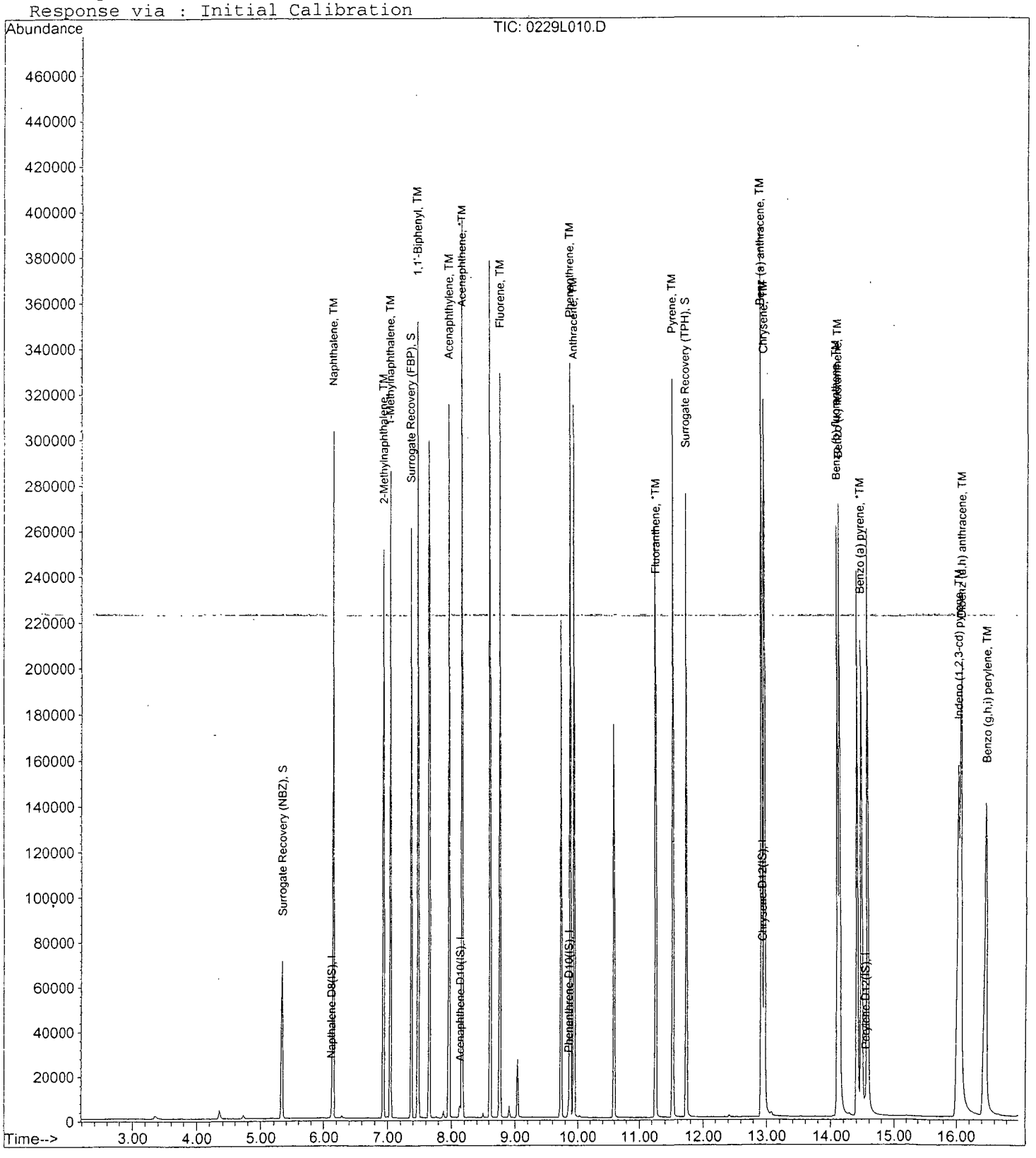
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L010.D
Acq On : 1 Mar 12 3:14
Sample : 100ug/ml PAH
Misc :

Vial: 10
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Form 7

Second Source Calibration

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

SDG No: 67512
Date Analyzed: 1 Mar 12 3:39
Instrument: Linus
Initial Cal. Date: 02/29/12
Data File: 0229L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	1.427	1.252	12	TM	
3	TM	2-Methylnaphthalene	0.8580	0.7746	9.7	TM	
4	TM	1-Methylnaphthalene	0.8003	0.7468	6.7	TM	
5	I	Acenaphthene-D10(IS)	ISTD			I	
6	TM	1,1'-Biphenyl	1.975	1.861	5.8	TM	
7	TM	Acenaphthylene	2.402	2.280	5.1	TM	
8	*TM	Acenaphthene	1.399	1.340	4.2	*TM	
9	TM	Fluorene	1.695	1.647	2.9	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.484	1.434	3.3	TM	
12	TM	Anthracene	1.339	1.306	2.5	TM	
13	*TM	Fluoranthene	1.819	1.764	3.0	*TM	
14	I	Chrysene-D12(IS)	ISTD			I	
15	TM	Pyrene	1.441	1.394	3.2	TM	
16	TM	Benz (a) anthracene	1.234	1.133	8.2	TM	
17	TM	Chrysene	1.246	1.237	0.66	TM	
18	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.086	58	TMQ	16
19	I	Perylene-D12(IS)	ISTD			I	
20	TM	Benzo (b) fluoranthene	1.581	1.584	0.20	TM	
21	TM	Benzo (k) fluoranthene	1.313	1.334	1.6	TM	
22	*TM	Benzo (a) pyrene	1.404	1.397	0.53	*TM	
23	TMQ	Dibenz (a,h) anthracene	1.428	1.298	9.1	TMQ	12
24	TMQ	Benzo (g,h,i) perylene	3.855	1.401	64	TMQ	14
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			10.6		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6095	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	2897	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	4786	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.92	240	6313	2.50000 ppb	0.00
22) Perylene-D12(IS)	14.53	264	5186	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%	
18) Surrogate Recovery (TPH)	0.00	244	0d	0.00000 ppb	
Spiked Amount 2.000			Recovery =	0.000%	
Target Compounds					Qvalue
3) Naphthalene	6.14	128	15266	4.38901 ppb	100
4) 2-Methylnaphthalene	6.93	142	9442	4.51396 ppb	100
5) 1-Methylnaphthalene	7.05	142	9103	4.66547 ppb	99
8) 1,1'-Biphenyl	7.47	154	10782	4.71225 ppb	100
9) Acenaphthylene	7.96	152	13210	4.74551 ppb	100
10) Acenaphthene	8.16	154	7765	4.79105 ppb	85
11) Fluorene	8.76	166	9540	4.85727 ppb	100
13) Phenanthrene	9.88	178	13730	4.83383 ppb	100
14) Anthracene	9.94	178	12504	4.87627 ppb	100
15) Fluoranthene	11.26	202	16883	4.84901 ppb	99
17) Pyrene	11.51	202	17602	4.83859 ppb	100
19) Benz (a) anthracene	12.91	228	14301	4.58882 ppb	99
20) Chrysene	12.96	228	15624	4.96689 ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	13708	5.79850 ppb	99
23) Benzo (b) fluoranthene	14.09	252	16432	5.00982 ppb	99
24) Benzo (k) fluoranthene	14.13	252	13837	5.08206 ppb	99
25) Benzo (a) pyrene	14.46	252	14485	4.97343 ppb	98
26) Dibenz (a,h) anthracene	16.04	278	13464	5.59460 ppb	100
27) Benzo (g,h,i) perylene	16.43	276	14534	5.68375 ppb	99

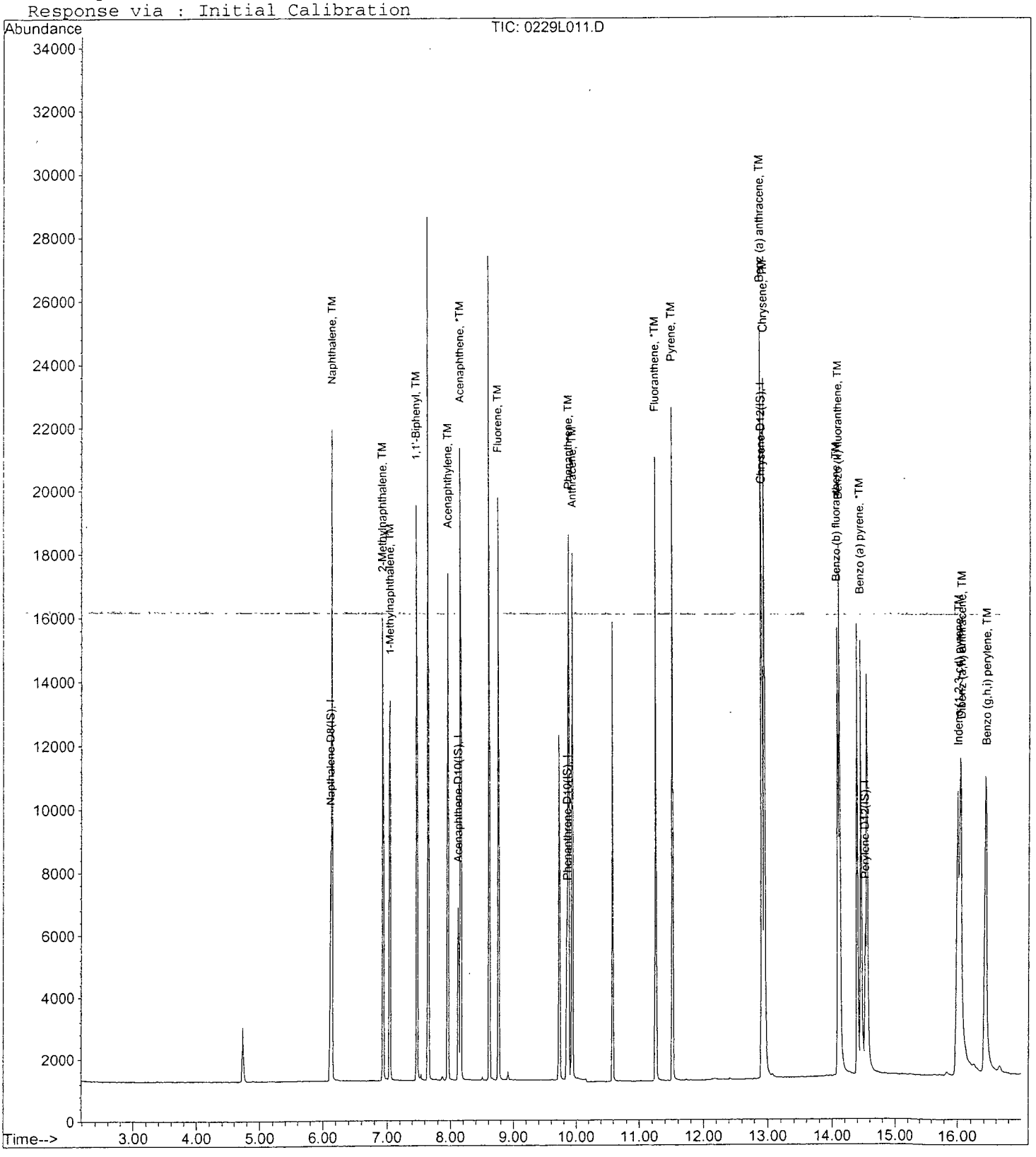
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 6752
Date Analyzed: 04/22/12
Instrument: Linus
Initial Cal. Date: 02/29/12
Data File: 0422L002.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.2454	0.2522	2.8	S	
3	TM	Naphthalene	1.427	1.234	13	TM	
4	TM	2-Methylnaphthalene	0.8580	0.8338	2.8	TM	
5	TM	1-Methylnaphthalene	0.8003	0.7765	3.0	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.584	1.750	10	S	
8	TM	1,1'-Biphenyl	1.975	1.865	5.6	TM	
9	TM	Acenaphthylene	2.402	2.281	5.1	TM	
10	*TM	Acenaphthene	1.399	1.341	4.1	*TM	
11	TM	Fluorene	1.695	1.590	6.2	TM	
12	I	Phenanthrene-D10(IS)	ISTD			I	
13	TM	Phenanthrene	1.484	1.368	7.8	TM	
14	TM	Anthracene	1.339	1.313	2.0	TM	
15	*TM	Fluoranthene	1.819	1.841	1.2	*TM	
16	I	Chrysene-D12(IS)	ISTD			I	
17	TM	Pyrene	1.441	1.516	5.2	TM	
18	S	Surrogate Recovery (TPH)	0.7801	0.9281	19	S	
19	TM	Benz (a) anthracene	1.234	1.271	3.0	TM	
20	TM	Chrysene	1.246	1.183	5.0	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.050	59	TMQ	12
22	I	Perylene-D12(IS)	ISTD			I	
23	TM	Benzo (b) fluoranthene	1.581	1.346	15	TM	
24	TM	Benzo (k) fluoranthene	1.313	1.457	11	TM	
25	*TM	Benzo (a) pyrene	1.404	1.334	5.0	*TM	
26	TMQ	Dibenz (a,h) anthracene	1.428	1.185	17	TMQ	2.1
27	TMQ	Benzo (g,h,i) perylene	3.855	1.205	69	TMQ	2.4
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			12.4		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L002.D Vial: 2
Acq On : 22 Apr 12 11:06 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:03 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:02:34 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6084	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3082	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.86	188	5219	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6560	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	5823	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	3069	5.13801 ppb		0.01
Spiked Amount 2.000			Recovery	= 256.900%		
7) Surrogate Recovery (FBP)	7.36	172	10789	5.52358 ppb		-0.01
Spiked Amount 2.000			Recovery	= 276.200%		
18) Surrogate Recovery (TPH)	11.73	244	12177	5.94892 ppb		0.00
Spiked Amount 2.000			Recovery	= 297.450%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15020	4.32609 ppb		100
4) 2-Methylnaphthalene	6.93	142	10146	4.85930 ppb		95
5) 1-Methylnaphthalene	7.03	142	9448	4.85104 ppb		91
8) 1,1'-Biphenyl	7.47	154	11494	4.72189 ppb	#	91
9) Acenaphthylene	7.96	152	14058	4.74700 ppb		100
10) Acenaphthene	8.16	154	8268	4.79518 ppb		89
11) Fluorene	8.76	166	9800	4.69014 ppb		99
13) Phenanthrene	9.88	178	14280	4.61036 ppb		98
14) Anthracene	9.94	178	13707	4.90192 ppb		98
15) Fluoranthene	11.27	202	19212	5.06013 ppb	#	93
17) Pyrene	11.52	202	19890	5.26167 ppb	#	89
19) Benz (a) anthracene	12.92	228	16682	5.15128 ppb		99
20) Chrysene	12.97	228	15523	4.74897 ppb		99
21) Indeno (1,2,3-cd) pyrene	16.05	276	13772	5.60583 ppb		99
23) Benzo (b) fluoranthene	14.11	252	15671	4.25515 ppb		95
24) Benzo (k) fluoranthene	14.15	252	16972	5.55158 ppb	#	90
25) Benzo (a) pyrene	14.49	252	15539	4.75167 ppb		99
26) Dibenz (a,h) anthracene	16.08	278	13798	5.10315 ppb	#	94
27) Benzo (g,h,i) perylene	16.50	276	14031	4.88167 ppb		98

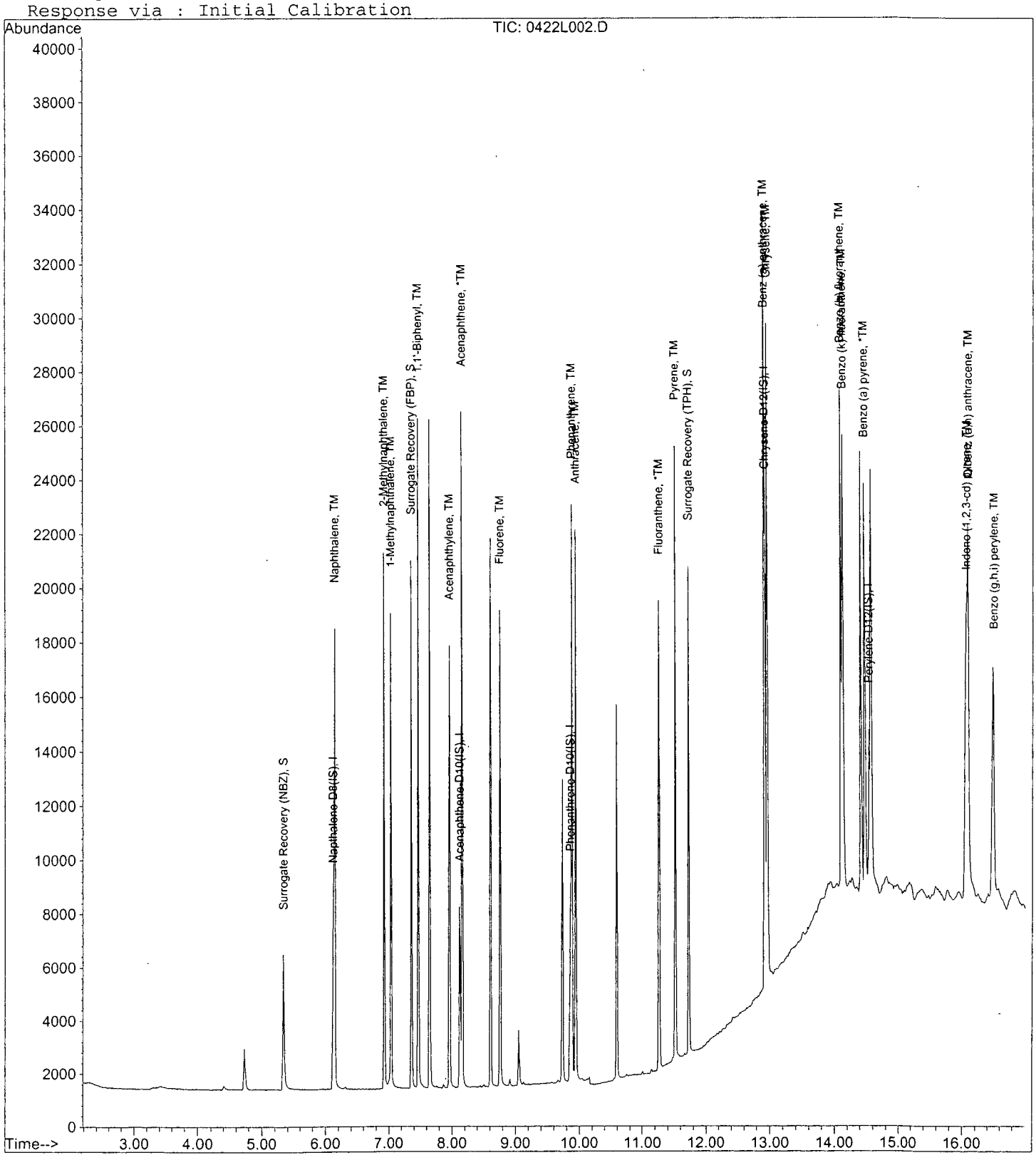
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L002.D Vial: 2
Acq On : 22 Apr 12 11:06 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:03 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Raw Data

APPL, INC.

Method Blank
EPA 8270D SIM

Blank Name/QCG: **120418W-59184 - 166433**
Batch ID: #SIMHC-120418A

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	04/18/12	04/22/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/18/12	04/22/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/18/12	04/22/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/18/12	04/22/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/18/12	04/22/12
BLANK	SURROGATE: 2-FLUORBIPHENY	50.4	50-110			%	04/18/12	04/22/12
BLANK	SURROGATE: NITROBENZENE-	58.2	40-110			%	04/18/12	04/22/12
BLANK	SURROGATE: TERPHENYL-D14 (	66.0	50-135			%	04/18/12	04/22/12

Quant Method: SIMB.M
Run #: 0422L003
Instrument: Linus
Sequence: L120229
Initials: LF

Printed: 05/02/12 1:09:19 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L003.D Vial: 3
Acq On : 22 Apr 12 11:32 Operator: LF
Sample : 120418A BLK 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:07 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6252	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3283	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5758	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7397	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6593	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	714	1.16323 ppb	0.01
Spiked Amount 2.000			Recovery =	58.150%	
7) Surrogate Recovery (FBP)	7.36	172	2095	1.00690 ppb	-0.01
Spiked Amount 2.000			Recovery =	50.350%	
18) Surrogate Recovery (TPH)	11.73	244	3046	1.31970 ppb	0.00
Spiked Amount 2.000			Recovery =	66.000%	

Target Compounds Qvalue

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

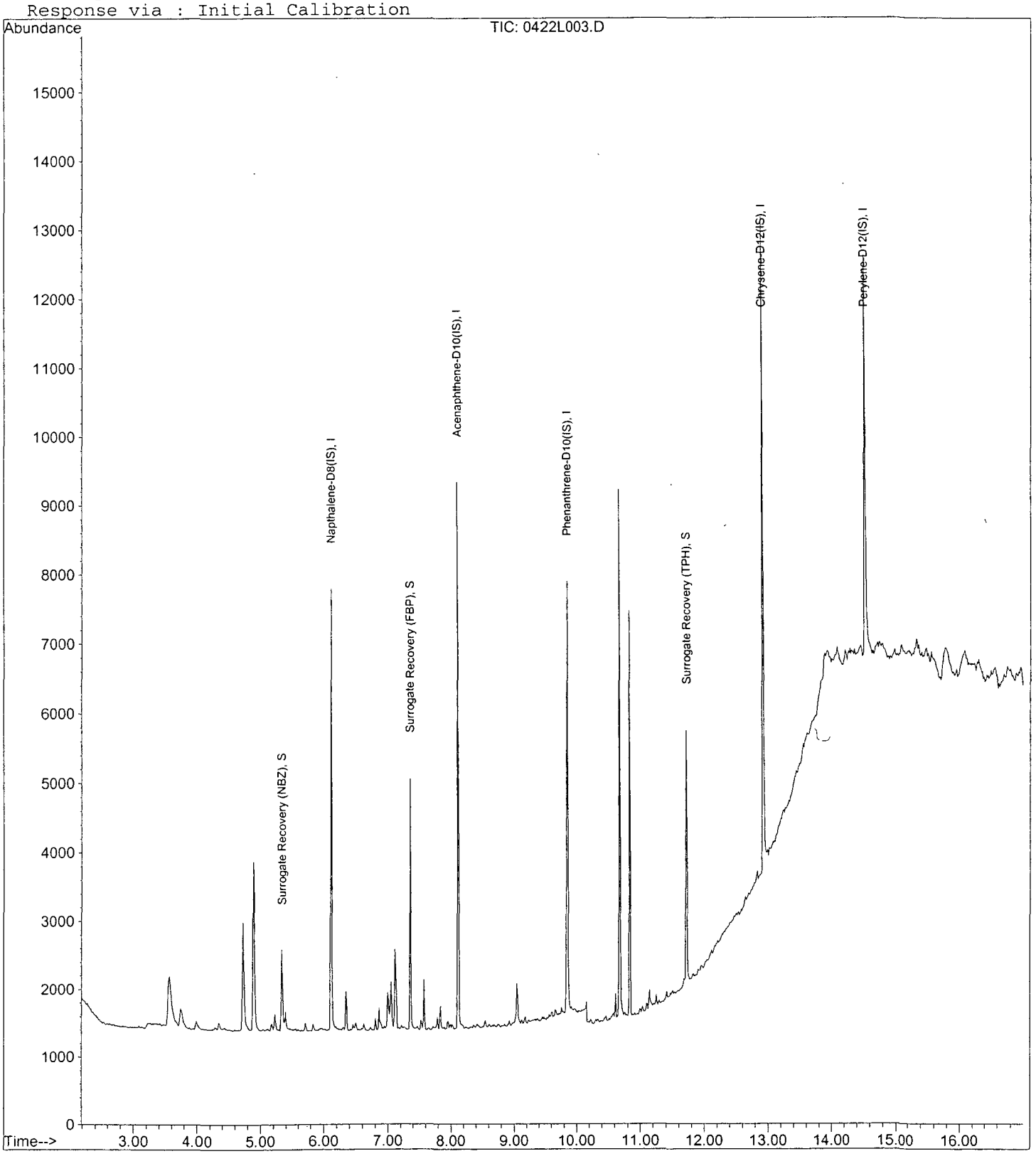
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L003.D
Acq On : 22 Apr 12 11:32
Sample : 120418A BLK 1/1000
Misc :

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

Quant Time: Apr 23 16:07 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8270D SIM

APPL ID: **120418W-59184 LCS - 166433**
Batch ID: #SIMHC-120418A

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	2.28	57.0	45-105
2-METHYLNAPHTHALENE	4.00	2.17	54.3	45-105
ACENAPHTHENE	4.00	2.61	65.3	45-110
ACENAPHTHYLENE	4.00	2.50	62.5	50-105
ANTHRACENE	4.00	2.79	69.8	55-110
BENZO(A)ANTHRACENE	4.00	3.80	95.0	55-110
BENZO(A)PYRENE	4.00	3.28	82.0	55-110
BENZO(B)FLUORANTHENE	4.00	3.34	83.5	45-120
BENZO(GHI)PERYLENE	4.00	3.59	89.8	40-125
BENZO(K)FLUORANTHENE	4.00	3.94	98.5	45-125
CHRYSENE	4.00	3.28	82.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	3.78	94.5	40-125
FLUORANTHENE	4.00	3.60	90.0	55-115
FLUORENE	4.00	2.95	73.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.98	99.5	45-125
NAPHTHALENE	4.00	2.01	50.2	40-100
PHENANTHRENE	4.00	2.98	74.5	50-115
PYRENE	4.00	3.50	87.5	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.03	51.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.13	56.5	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.29	64.5	50-135

Comments:

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/18/12
Analysis Date :	04/22/12
Instrument :	Linus
Run :	0422L004
Initials :	LF

Printed: 05/02/12 1:09:21 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L004.D Vial: 4
Acq On : 22 Apr 12 11:58 Operator: LF
Sample : 120418A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:08 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5596	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3036	2.50000	ppb		-0.01
12) Phenanthrene-D10(IS)	9.86	188	5168	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6930	2.50000	ppb		0.01
22) Perylene-D12(IS)	14.56	264	5907	2.50000	ppb		0.02
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.33	82	620	1.12850	ppb		0.01
Spiked Amount 2.000			Recovery =	56.450%			
7) Surrogate Recovery (FBP)	7.36	172	1974	1.02593	ppb		-0.01
Spiked Amount 2.000			Recovery =	51.300%			
18) Surrogate Recovery (TPH)	11.73	244	2782	1.28655	ppb		0.00
Spiked Amount 2.000			Recovery =	64.350%			
Target Compounds							Qvalue
3) Naphthalene	6.14	128	6422	2.01098	ppb		100
4) 2-Methylnaphthalene	6.93	142	4172	2.17237	ppb		96
5) 1-Methylnaphthalene	7.03	142	4090	2.28313	ppb		92
8) 1,1'-Biphenyl	7.47	154	5540	2.31039	ppb	#	89
9) Acenaphthylene	7.96	152	7297	2.50133	ppb		99
10) Acenaphthene	8.16	154	4427	2.60642	ppb		91
11) Fluorene	8.76	166	6064	2.94612	ppb		99
13) Phenanthrene	9.88	178	9148	2.98262	ppb		99
14) Anthracene	9.94	178	7716	2.78664	ppb		99
15) Fluoranthene	11.26	202	13543	3.60221	ppb	#	90
17) Pyrene	11.52	202	13994	3.50430	ppb	#	86
19) Benz (a) anthracene	12.92	228	12994	3.79822	ppb		99
20) Chrysene	12.96	228	11337	3.28317	ppb	#	91
21) Indeno (1,2,3-cd) pyrene	16.04	276	10328	3.97713	ppb		96
23) Benzo (b) fluoranthene	14.12	252	12470	3.33783	ppb	#	93
24) Benzo (k) fluoranthene	14.14	252	12224	3.94163	ppb		97
25) Benzo (a) pyrene	14.49	252	10885	3.28119	ppb		98
26) Dibenz (a,h) anthracene	16.08	278	10387	3.78092	ppb		99
27) Benzo (g,h,i) perylene	16.48	276	10471	3.58519	ppb		98

$\frac{6422 \times 2.5}{5596 \times 1.427} = 2.01$ 4/10/12

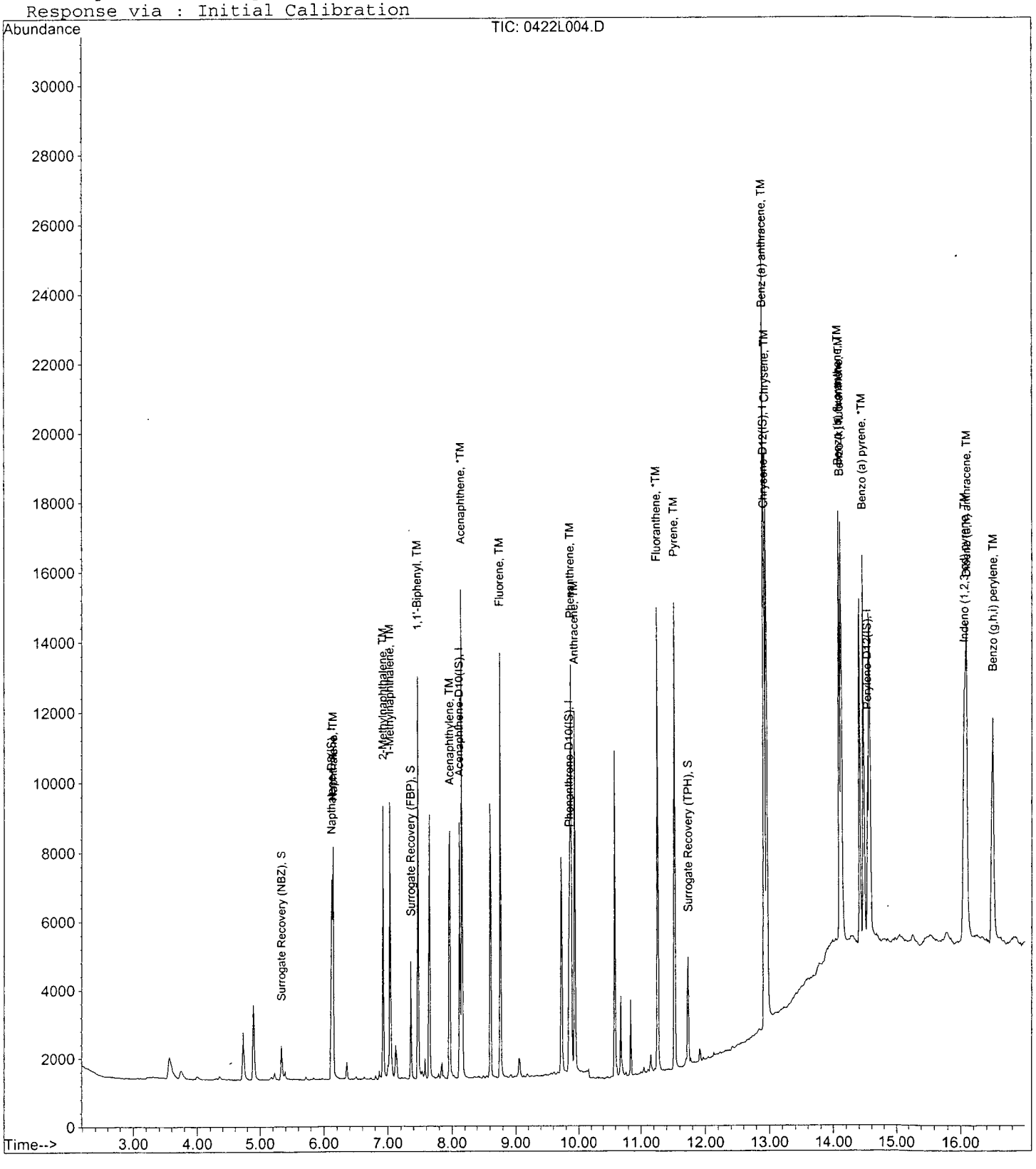
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L004.D Vial: 4
Acq On : 22 Apr 12 11:58 Operator: LF
Sample : 120418A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:08 2012 Quant Results File: SIMB.RES

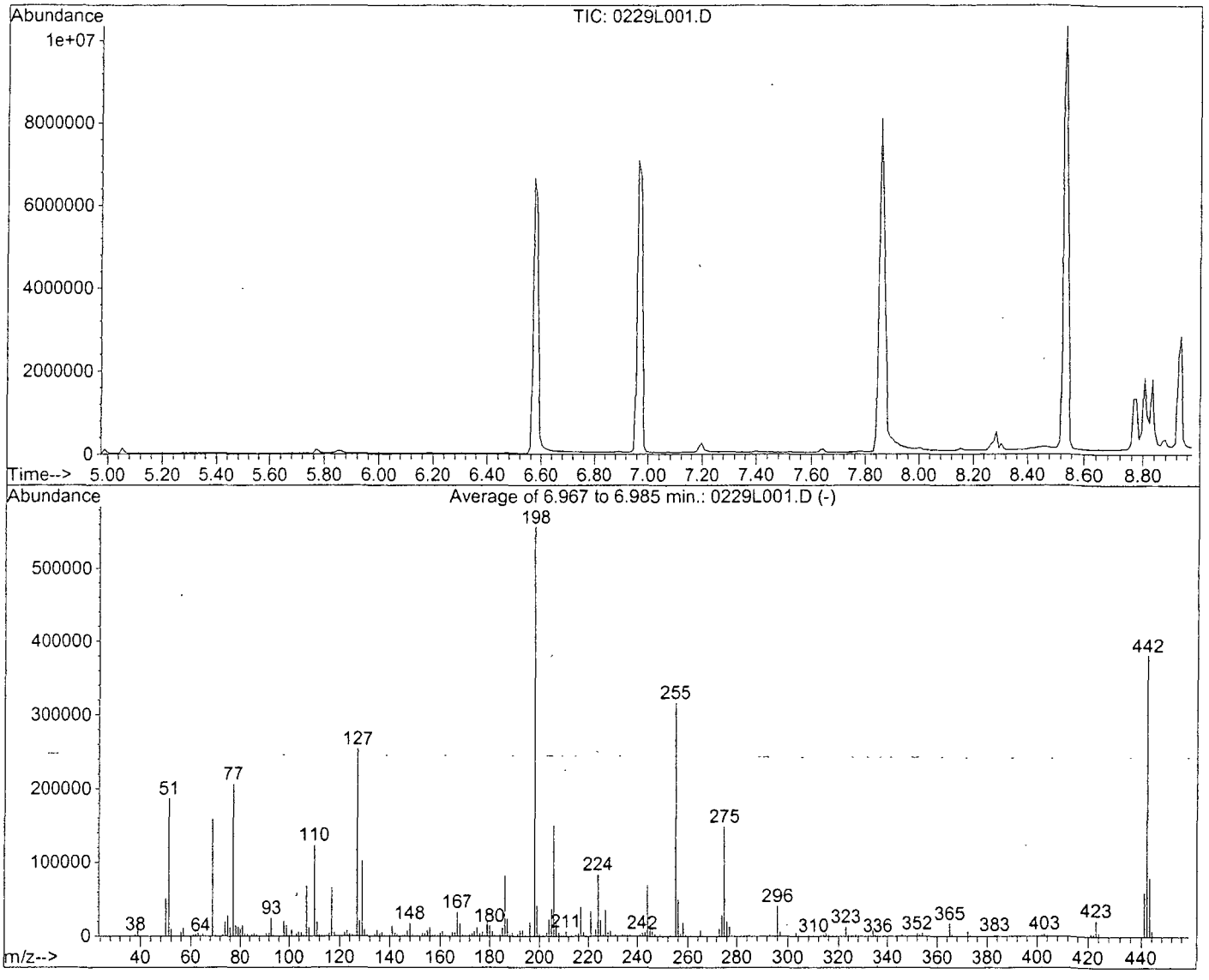
Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L120229\0229L001.D Vial: 1
Acq On : 29 Feb 12 21:31 Operator: LF
Sample : SVTUNE 2-28-12 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



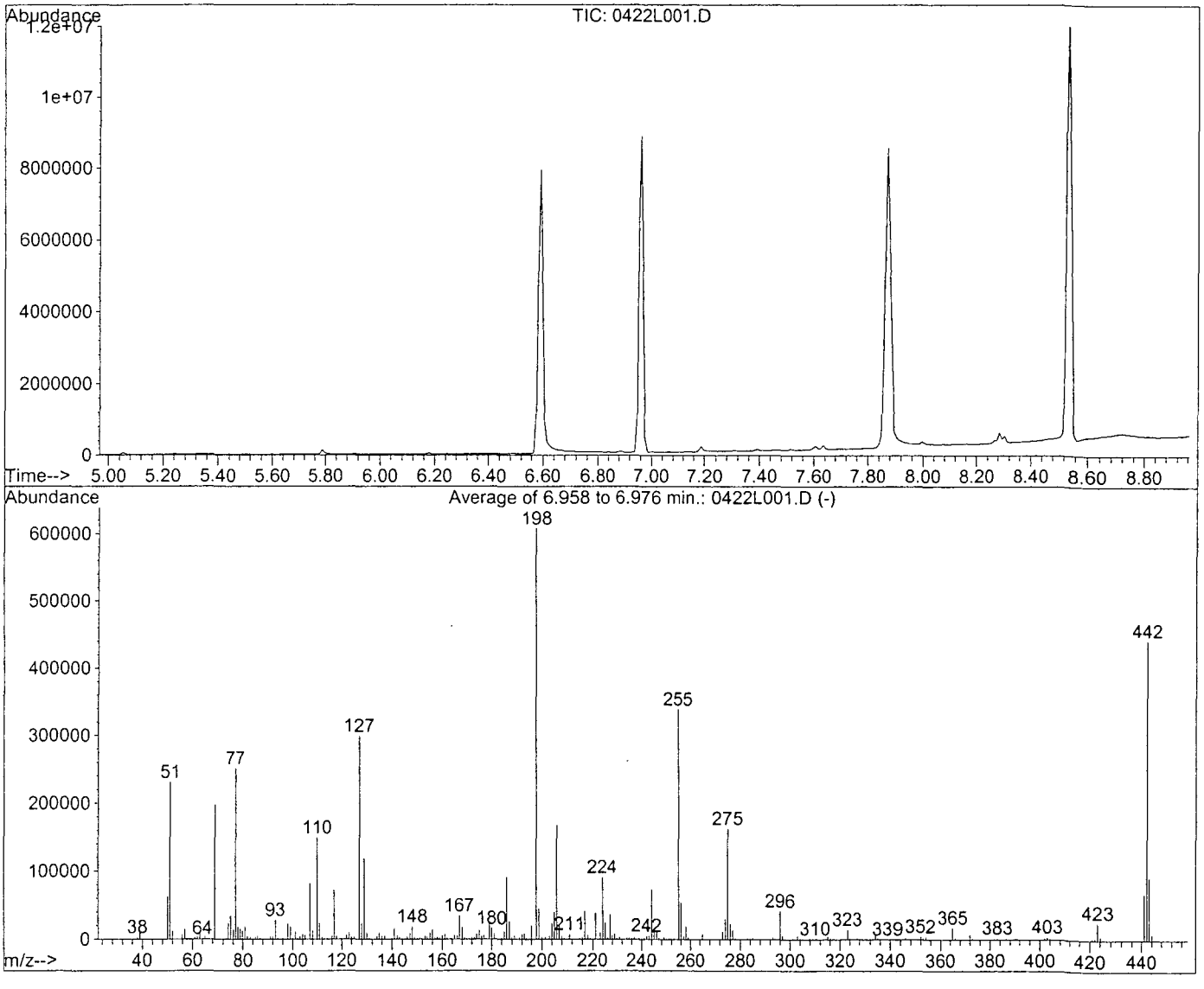
Spectrum Information: Average of 6.967 to 6.985 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.4	186212	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	747	PASS
127	198	40	60	45.5	253515	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	556758	PASS
199	198	5	9	7.4	41091	PASS
275	198	10	30	26.6	148178	PASS
365	198	1	100	3.0	16881	PASS
441	443	0.01	100	74.7	59029	PASS
442	198	40	150	68.4	380557	PASS
443	442	17	23	20.8	78999	PASS

DFTPP

Data File : M:\LINUS\DATA\L120229\0422L001.D Vial: 1
Acq On : 22 Apr 12 10:48 Operator: LF
Sample : SVTUNE 2-28-12 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 6.958 to 6.976 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.9	230526	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	1014	PASS
127	198	40	60	49.2	299026	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	608168	PASS
199	198	5	9	7.4	45143	PASS
275	198	10	30	26.7	162174	PASS
365	198	1	100	2.8	16853	PASS
441	443	0.01	100	73.7	67245	PASS
442	198	40	150	72.6	441237	PASS
443	442	17	23	20.7	91240	PASS

VF 1/17/11

PREP DATE:	01-17-11					
8270C Stock/Spike Standard						
Exp:	05-29-11					
		Conc.		Date	**CODE:**	**P**
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	10001	2000	032009-28092	01/17/11	03-20-12	1000
Absolute	10001	2000	032009-28091	01/17/11	03-20-12	1000
Absolute	10002	2000	073109-27974	01/17/11	07-31-12	1000
Absolute	10002	2000	073109-27973	01/17/11	07-31-12	1000
Absolute	10004	2000	101509-27979	01/17/11	10-15-14	1000
Absolute	10004	2000	101509-27978	01/17/11	10-15-14	1000
Absolute	10005	2000	061209-27984	01/17/11	06-12-14	1000
Absolute	10005	2000	061209-27983	01/17/11	06-12-14	1000
Absolute	10006	2000	120810-27989	01/17/11	12-08-13	1000
Absolute	10006	2000	120810-27988	01/17/11	12-08-13	1000
Absolute	10007	2000	100909-28010	01/17/11	10-09-14	1000
Absolute	10007	2000	100909-28013	01/17/11	10-09-14	1000
Absolute	10018	2000	073109-27994	01/17/11	07-31-14	1000
Absolute	10018	2000	073109-27993	01/17/11	07-31-14	1000
Absolute	70023	1000	080310-28008	01/17/11	08-03-15	1000
Absolute	70023	1000	080310-28009	01/17/11	08-03-15	1000
Absolute	82705	2000	121010-27999	01/17/11	12-10-13	1000
Absolute	82705	2000	121010-27998	01/17/11	12-10-13	1000
Absolute	94552	2000	052908-28004	01/17/11	05-29-11	1000
Absolute	94552	2000	052908-28003	01/17/11	05-29-11	1000
					Final Vol	20000

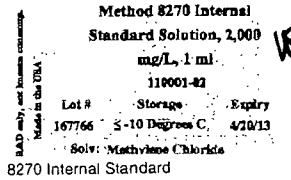
VF 1/25/11

PREP DATE:	01-25-11																
8270T STANDARD CURVE																	
Exp:	02-24-11					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		12/17/10	05-29-11	0	0	0	5	5	10	20	25	30	40	50	
	5.0ug/mL			01/25/11		0	0	20	0	0	0	0	0	0	0	0	
	1.0ug/mL			01/25/11		10	20	0	0	0	0	0	0	0	0	0	
	Surrogate Stock	VAR	160538-27570	11/11/10	11-11-11	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 1/25/11

PREP DATE.	01-25-11					
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 1/25/11



VF

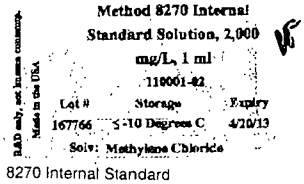
exp 1/25/12

8270 Internal Standard

Lot #: 167766 - 28148

Rec: 1/20/11 MFR exp. 04/20/13

VF 1/25/11



VF

exp 1/25/12

8270 Internal Standard

Lot #: 167766 - 28147

Rec: 1/20/11 MFR exp. 04/20/13

LF 3/23/11

Part #: 94552 Laboratory Use Only-See MSDS
Lot #: 052908 Exp: 052911 1 mL

Semi-Volatile Standard
11 components
Varied ug/mL in
ABSOLUTE STANDA

Semi-Volatile Standard
Lot #: 052908 - 28001
Rec: 12/16/10 MFR exp. 05/29/11

LF exp 5/29/11

LF 3/23/11

Part #: 94552 Laboratory Use Only-See MSDS
Lot #: 052908 Exp: 052911 1 mL

Semi-Volatile Standard
11 components
Varied ug/mL in
ABSOLUTE STANDA

Semi-Volatile Standard
Lot #: 052908 - 28002
Rec: 12/16/10 MFR exp. 05/29/11

LF exp 5/29/11

LF 3/23/11

Part #: 82705 Laboratory Use Only - See MSDS
Lot #: 121010 Exp: 121013 Storage 4 °C

EPA Method 8270A
4 components
2000 ug/mL in ace
ABSOLUTE STANDARDS, INC.

EPA Method 8270A-Mix#11
Lot #: 121010 - 27996
Rec: 12/16/10 MFR exp. 12/10/13

LF exp 5/29/11

LF 3/23/11

Part #: 82705 Laboratory Use Only - See MSDS
Lot #: 121010 Exp: 121013 Storage 4 °C

EPA Method 8270A - Mix #11
4 components
2000 ug/mL in ace
ABSOLUTE STANDAI

EPA Method 8270A-Mix#11
Lot #: 121010 - 27997
Rec: 12/16/10 MFR exp. 12/10/13

LF exp 5/29/11

LF 3/23/11

PREP DATE:	03-23-11					
8270C Stock/Spike Standard						
Exp.	05-29-11					
		Conc.		Date	CODE:	P
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	10001	2000	032009-28089	03/23/11	03-20-12	1000
Absolute	10001	2000	320009-28090	03/23/11	03-20-12	1000
Absolute	10002	2000	073109-27971	03/23/11	07-31-12	1000
Absolute	10002	2000	073109-27972	03/23/11	07-31-12	1000
Absolute	10004	2000	101509-27976	03/23/11	10-15-14	1000
Absolute	10004	2000	101509-27977	03/23/11	10-15-14	1000
Absolute	10005	2000	061209-27981	03/23/11	06-12-14	1000
Absolute	10005	2000	061209-27982	03/23/11	06-12-14	1000
Absolute	10006	2000	120810-27986	03/23/11	12-08-13	1000
Absolute	10006	2000	120810-27987	03/23/11	12-08-13	1000
Absolute	10007	2000	100909-28015	03/23/11	10-09-14	1000
Absolute	10007	2000	100909-28014	03/23/11	10-09-14	1000
Absolute	10018	2000	073109-27991	03/23/11	07-31-14	1000
Absolute	10018	2000	073109-27992	03/23/11	07-31-14	1000
Absolute	70023	1000	080310-28006	03/23/11	08-03-15	1000
Absolute	70023	1000	080310-28007	03/23/11	08-03-15	1000
Absolute	82705	2000	052908-28001	03/23/11	05-29-11	1000
Absolute	82705	2000	052908-28002	03/23/11	05-29-11	1000
Absolute	94552	2000	121010-27996	03/23/11	12-10-13	1000
Absolute	94552	2000	121010-27997	03/23/11	12-10-13	1000
					Final Vol	20000

LF 3/23/11

Surr IS exp 1/25/12
1500µl EM Science MC Lot #47080
100µl 8270 IS opened 1/25/11 exp 1/25/12

UF 3/28/11

o2si smart solutions

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

110004-17

Storage: </= -10 Degrees C

Made in USA Lot No: 160538

Solvent: Methylene Chloride

Exp: 6/10/2012

UF 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

UF 3/28/11

UF

PREP DATE:	03-28-11															
8270T STANDARD CURVE																
Exp:	04-27-11						0.1	0.2	1	5	10	20	40	50	60	80	100
		Conc.		Date													
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date				µL	µL	µL	µL	µL	µL	µL	µL	µL
	8270T Stock	200		03/23/11	05-29-11	0	0	0	5	5	10	20	25	30	40	50
	5.0ug/mL			03/28/11		0	0	20	0	0	0	0	0	0	0	0
	1.0ug/mL			03/28/11		10	20	0	0	0	0	0	0	0	0	0
	Surrogate Stock	VAR	160538-27574	03/28/11	03-28-12	0	0	0	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47080			90	80	80	190	90	80	60	50	40	20	0
					Final Vol.			100	200	100	100	100	100	100	100	100

UF 3/28/11

PREP DATE:	03-28-11					
8270 Second Source (SS) 50ug/mL						50 UF
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/06/10	10-06-11	25
						75
EM Science	Methylene Chloride		47080		Final Vol.	100

UF 4/18/11

GCM-160-1

Lot: CF-2995

Exp 08/31/2011

ULTRA

1 mL

Semi-Volatiles GC/MS Tuning Standard

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

250 Smith St, N Kingstown, RI 02852 USA

Semi-volatiles GC/MS Tuning Standard

Lot #: CF-2995 - 26131

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

UF exp 8/31/11

UF 4/13/11

PREP DATE:	04-13-11					
SV Tune Mix 50ug/ml						UF
Exp:	08-31-11					
		Conc.		Date	CODE:	B
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
U. Scientific	GCM-150	1000	CF-2995-26131	04/13/11	08-31-11	1000
EM Science	MeCl2		47080			19000
					Final Vol	20000

exp 8/31/11

UF 4/20/11

Per RAD only, not license concern. Made in the USA

8270D PAH SIM Solution, 200 mg/L, 1 ml

110780-01

Lot #	Storage	Expiry
170253	≤-10 Degrees C	3/3/13

Solv: Methylene Chloride

UF exp 4/20/12

8270D PAH SIM

Lot #: 170253 - 28485

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

UF 4/20/11

Per RAD only, not license concern. Made in the USA

8270D PAH SIM Solution, Second Source, 200 mg/L, 1 ml

110780-01-SS

Lot #	Storage	Expiry
170256	≤-10 Degrees C	3/3/13

Solv: Methylene Chloride

UF exp 4/20/12

8270D PAH SIM (SS)

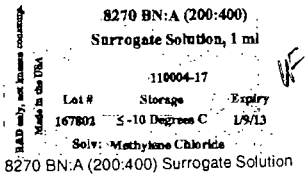
Lot #: 170256 - 28487

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

VF 8/16/11

PREP DATE:	08/16/11		exp:	08/23/11			
10ug/mL 1,2,3-TCP							
	50uL of 1000ug/mL 1,2,3 TCP into a final volume of 5mL of P&T Methanol						
	1000ug/mL 1,2,3 TCP date code:				05/27/11		
	P & T Methonal Lot #				9077-02		
PREP DATE:	08/16/11		exp:	08/23/11			
1ug/mL 1,2,3-TCP							
	5uL of 1000ug/mL 1,2,3 TCP into a final volume of 5mL of P&T Methanol						
	1000ug/mL 1,2,3 TCP date code:				05/27/11		
	P & T Methanol Lot #			JT Baker H46E44			
PREP DATE:	08/16/11		exp:	08/23/11			
2ug/mL 1,2,3-TCPd5							
	10uL of 2000ug/mL 1,2,3 TCP into a final volume of 10mL of P&T Methanol						
	2000ug/mL 1,2,3 TCP-d5 date code:				05/27/11		
	P & T Methanol Lot #				9077-02		

VF 8/22/11



VF exp 8/22/12

8270 BN:A (200:400) Surrogate Solution
Lot #: 167802 - 29313
Rec: 8/8/11 MFR exp. 01/09/13

VF 8/22/11

PREP DATE.	08-22-11													
8270 STANDARD CURVE														
Exp:	08-29-11						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			07/26/11	01-26-12	5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	167802-29313		08/22/11	08-22-12	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47186				190	90	80	60	50	40	20	0
						Final Vol.	200	100	100	100	100	100	100	100

VF 8/22/11

PREP DATE:	08-22-11					
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		47186			75
					Final Vol.	100

VF 8/31/11

PREP DATE:	09-21-11												
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	170253-28485	04/20/11	04-20-12	0	0	0	0	5	5	25	50
	5.0ug/mL	5		09/21/11		0	0	10	20	0	0	0	0
	1.0ug/mL	1		09/21/11		10	20	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29313	08/22/11	08-23-11	0	0	0	0	5	5	25	50
EM Science	Methylene Chloride		47186			90	80	90	80	190	90	50	0
					Final Vol.	100	100	100	100	200	100	100	100

PREP DATE:	09-21-11						
SIM 8270 Second Source (5µg/mL)							
Exp:	10-05-11						
				Conc.	Date	CODE:	
Supplier	ID #		Lot #	µg/mL	Code	Exp.Date	µL
	8270D PAH SIM (SS)		170256-28487	200	04/20/11	04-20-12	5
	MeCl2			Lot#47186			195
					Final Volume		200

8270 BN Solution 14-4, 2,000 mg/L, 1 ml

Cat. No: 110391-01
Lot No: 158119
8270BN Solution 14-4
Lot #: 158119 - 28021
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

8270 BN Solution 14-3, 2,000 mg/L, 1 ml

Cat. No: 110392-01
Lot No: 158120
8270BN Solution 14-3
Lot #: 158120 - 28023
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ened: _____

8270 Acid Solution 4-6, 2,000 mg/L, 1 ml

Cat. No: 110393-01
Lot No: 158121
8270B Acid Solution 4-6
Lot #: 158121 - 28025
Rec: 12/16/10 MFR exp 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ned: _____

TCL Hazardous Substances Solution 2, 2,000 mg/L, 1 ml

Cat. No: 110394-01
Lot No: 158122
TCL Hzd. Soln. 2
Lot #: 158122 - 28018
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

PAH Solution 17-3, 2,000 mg/L, 1 ml

Cat. No: 116070-02
Lot No: 158123
PAH Solution
Lot #: 158123 - 28027
Rec: 12/16/10 MFR exp. 07/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

8270 Acid Solution 13-4, 2,000 mg/L, 1 ml

Cat. No: 110396-01
Lot No: 158124
8270 Acid Solution 13-4
Lot #: 158124 - 28029
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

10/11/11

8270 BN Solution 4-21, 2,000 mg/L, 1 ml

o2si

Cat. No: 110395-01
Lot No: 158125

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only

8270BN Solution 4-21
Lot #: 158125 - 28031
Rec: 12/16/10 MFR exp. 04/17/13

UF exp 10/17/11

10/11/11

8270 11 Compound Custom Mix, 200:2,000 mg/L, 1 ml

o2si

Cat. No: 110397-01
Lot No: 158127

Exp: 4/12/2012
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only

8270 11 Compound Mix
Lot #: 158127 - 28033
Rec: 12/16/10 MFR exp. 04/12/12

UF exp 4/12/12

10/11/11

Atrazine Solution, 1,000 mg/L, 1 ml

o2si

Cat. No: 010337-01
Lot No: 158126

Exp: 4/12/2012
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only

Atrazine
Lot #: 158126 - 28019
Rec: 12/16/10 MFR exp. 04/12/12

UF exp 4/12/12

10/11/11

PREP DATE:	10-11-11						
8270C Second Source Stock Standard							
Exp:	04-12-12						
		Conc.			Date	CODE:	P
Supplier	ID #	µg/mL	Lot #		Code	Exp.Date	µL
O2SI	110391-01	2000	158119-28021		10-11-11	04-17-13	1000
O2SI	110392-01	2000	158120-28023		10-11-11	04-17-13	1000
O2SI	110393-01	2000	158121-28025		10-11-11	04-17-13	1000
O2SI	110394-01	2000	158122-28018		10-11-11	04-17-13	1000
O2SI	116070-02	2000	158123-28027		10-11-11	04-17-13	1000
O2SI	110395-01	2000	158125-28031		10-11-11	04-17-13	1000
O2SI	110396-01	2000	158124-28029		10-11-11	04-17-13	1000
O2SI	110397-01	2000	158127-28033		10-11-11	04-12-12	1000
O2SI	010337-01	1000	158126-28019		10-11-11	04-12-12	1000
EM Science	MeCl2		47186				1000
						Final Vol	10000

UF

10/11/11

PREP DATE:	10-11-11												
8270 STANDARD CURVE													
Exp:	10-18-11					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		07/26/11	01-26-12	5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	167802-29313	08/22/11	08-22-12	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47186			190	90	80	60	50	40	20	0
					Final Vol.	200	100	100	100	100	100	100	100

UF

10/11/11

PREP DATE:	10-11-11					
8270 Second Source (SS) 50ug/mL						
						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/11/11	04-12-12	25
EM Science	Methylene Chloride		47186			75
					Final Vol.	100

UF

10/11/11

GCM-150-1
Lot. CH-2137
Exp 07/31/2013

ULTRA 1 mL

Semi-Volatiles GC/MS Tuning Standard
4 analyte(s) at 1000 µg/mL in dichloromethane

250 Smith St, N. Kingstown, RI 02852 USA

For Lab Use Only

50µg/mL SV Tune Mix
1 ml of GCM-150-1 opened 10/11/11 into 19mls EM Science MC Lot 47000
exp 10/11/12

10/18/11

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 methy
ABSOLUTE STANDARD

CLP Semi-Volatiles Base/Neutrals Mix #1
Lot # 042910 - 28440
Rec: 3/8/11 MFR exp. 4/29/2013

exp 10/18/12

10/18/11

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 m
ABSOLUTE STANDA

Lot #: 042910 - 29085
Rec: 8/4/11 MFR exp. 04/29/13

exp 10/18/12

10/18/11

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 methyle
ABSOLUTE STANDARDS

CLP Semi-Volatiles Base/Neutrals Mix #2
Lot # 073109 - 28446
Rec 3/8/11 MFR exp 7/31/2012

exp 7/31/12

10/18/11

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 met
ABSOLUTE STANDAF

CLP Semi-Volatiles Base Neutrals Mix #2
Lot #: 073109 - 29090
Rec: 8/4/11 MFR exp. 07/31/12

exp 7/31/12

10/18/11

Part #: 10004 Laboratory Use Only - See MSDS
Lot #: 101509 Exp: 101514 Storage 4 °C

CLP Semi-Volatiles Toxic Substances #1
4 components
2000 ug/mL in methyl
ABSOLUTE STANDARDS

CLP Semi-Volatiles Toxic Substances #1
Lot #: 101509 - 28453
Rec. 3/8/11 MFR exp. 10/15/201

exp 10/18/12

10/18/11

Part #: 10004 Laboratory Use Only - See MSDS
Lot #: 101509 Exp: 101514 Storage 4 °C

CLP Semi-Volatiles Toxic Substances #1
4 components
2000 ug/mL in metl
ABSOLUTE STANDAR

CLP Semi-Volatiles Toxic Substances #1
Lot #: 101509 - 29095
Rec: 8/4/11 MFR exp. 10/15/14

exp 10/18/12

10/18/11

Part #: 10005 Laboratory Use Only - See MSDS
Lot #: 061209 Exp: 061214 Storage 4 °C

CLP Semi-Volatiles Toxic Substances #2
8 components
2000 ug/mL in methy
ABSOLUTE STANDARD

CLP Semi-Volatiles Toxic Substances #2
Lot # 061209 - 28458
Rec 3/8/11 MFR exp. 6/12/2014

exp 10/18/12

10/18/11

Part #: 10005 Laboratory Use Only - See MSDS
Lot #: 121208 Exp: 121213 Storage 4 °C

CLP Semi-Volatiles Toxic Substances #2
8 components
2000 ug/mL in met
ABSOLUTE STANDAR

CLP Semi-Volatiles Toxic Substances #2
Lot #: 121208 - 29100
Rec: 8/4/11 MFR exp. 12/12/13

exp 10/18/12

Part #: 10006 Laboratory Use Only - See MSDS
Lot #: 120810 Exp: 120813 Storage 4 °C
CLP Semi-Volatiles - Benzidines
2 components
2000 ug/mL in methar
ABSOLUTE STANDARD
CLP Semi-Volatiles - Benzidines
Lot # 120810 - 28462
Rec 3/8/11 MFR exp. 12/8/2013

exp 10/18/12

Part #: 10006 Laboratory Use Only - See MSDS
Lot #: 071211 Exp: 071214 Storage 4 °C
CLP Semi-Volatiles - Benzidines
2 components
2000 ug/mL in meth
ABSOLUTE STANDAR
Lot #: 071211 - 29105
Rec: 8/4/11 MFR exp. 07/12/14

exp 10/18/12

Part #: 10007 Laboratory Use Only - See MSDS
Lot #: 100909 Exp: 100914 Storage 4 °C
CLP Semi-Volatiles - PAH Standard
17 components
2000 ug/mL in methy
ABSOLUTE STANDAR
CLP Semi-Volatiles - PAH Mix
Lot #: 100909 - 28469
Rec: 3/8/11 MFR exp. 10/9/2014

exp 10/18/12

Part #: 10007 Laboratory Use Only - See MSDS
Lot #: 100909 Exp: 100914 Storage 4 °C
CLP Semi-Volatiles - PAH Standard
17 components
2000 ug/mL in meth
ABSOLUTE STANDAR
CLP Semi-Volatiles - PAH Mix
Lot #: 100909 - 29110
Rec: 8/4/11 MFR exp. 10/09/14

exp 10/18/12

Part #: 10018 Laboratory Use Only - See MSDS
Lot #: 073109 Exp: 073114 Storage 4 °C
EPA Method 8270A - Analytes Mix #8
13 components - Pher
2000 ug/mL in methyl
ABSOLUTE STANDARD
CLP Semi-Volatiles Mix #8 - Phenols
Lot #: 073109 - 28410
Rec. 3/8/11 MFR exp. 7/31/2014

exp 10/18/12

Part #: 10018 Laboratory Use Only - See MSDS
Lot #: 062111 Exp: 062116 Storage 4 °C
EPA Method 8270A - Analytes Mix #8
13 components - Ph
2000 ug/mL in meth
ABSOLUTE STANDARI
EPA Method 8270A - Analytes Mix #8
Lot #: 062111 - 29115
Rec: 8/4/11 MFR exp. 06/21/16

exp 10/18/12

Part #: 70023 Laboratory Use Only - See MSDS
Lot #: 080310 Exp: 080315 Storage 4 °C
Atrazine
1000 ug/mL in aceto
ABSOLUTE STANDARI
Atrazine
Lot #: 080310 - 28416
Rec: 3/8/11 MFR exp. 8/13/2015

exp 10/18/12

Part #: 70023 Laboratory Use Only - See MSDS
Lot #: 031611 Exp: 031616 Storage 4 °C
Atrazine
1000 ug/mL in ace
ABSOLUTE STANDA
Atrazine
Lot #: 031611 - 29120
Rec: 8/4/11 MFR exp. 03/16/16

exp 10/18/12

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	120418A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 170745-30371		Surrogate ID 1	8270 SIM Surrogate 177982-29476	
Spiked ID 2			Surrogate ID 2		
Spiked ID 3			Surrogate ID 3		
Spiked ID 4			Surrogate ID 4		
Spiked ID 5			Surrogate ID 5		
Spiked ID 6			Sufficient Vol for Matrix QC:	NO	
Spiked ID 7			Ext. Start Time:		
Spiked ID 8			Ext. End Time:		
			GC Requires Extract By:	**05/01/12 0:00**	

pH1	2	4/18/12 10:05:00 AM	Water Bath Temp Criteria	80 °C
pH2	14	04/18/12 4:00:00 PM		
pH3				

Spiked By: DL **Date** 04/18/12 **Witnessed By:** DRA **Date** 04/18/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120418A Blk				0.025	1	1000	1	2/1	04/18/12 9:58	
						equip	E-WB7				
2	120418A LCS-1		0.025	1	0.025	1	1000	1	2/1	04/18/12 9:58	
						equip	E-WB7				
3	AY59184	AY59184W07			0.025	1	1050	1	2/1	04/18/12 9:58	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
4	AY59185	AY59185W05			0.025	1	1050	1	2/1	04/18/12 9:58	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
5	AY59186	AY59186W07			0.025	1	1050	1	2/1	04/18/12 9:58	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
6	AY59187	AY59187W06			0.025	1	1050	1	2/1	04/18/12 9:58	67512-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				

DRA 4-19-12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501
10N NaOH	03/28/12
1+1 Acid	04/06/12
A. Na2SO4	03/19/12

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	LF
Date	4/22/12
Time	1400
Refrigerator	Hood 7

	Technician's Initials
Scanned By	FXR
Sample Preparation	FXR
Extraction	GH
Concentration	IC

Modified	04/18/12 9:19:32 AM

Reviewed By: DRA **Date** 04/19/12

Injection Log

Directory: M:\LINUS\DATA\L120229\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0229L001.D	1	SVTUNE 2-28-12		29 Feb 12 21:31
2	3	0229L003.D	1	0.1ug/ml PAH 02-29-12		1 Mar 12 00:20
3	4	0229L004.D	1	0.2ug/ml PAH		1 Mar 12 00:44
4	5	0229L005.D	1	0.5ug/ml PAH		1 Mar 12 1:09
5	6	0229L006.D	1	1.0ug/ml PAH		1 Mar 12 1:34
6	7	0229L007.D	1	5.0ug/ml PAH		1 Mar 12 1:59
7	8	0229L008.D	1	10ug/ml PAH		1 Mar 12 2:24
8	9	0229L009.D	1	50ug/ml PAH		1 Mar 12 2:49
9	10	0229L010.D	1	100ug/ml PAH		1 Mar 12 3:14
10	11	0229L011.D	1	5.0ug/ml SS PAH 02-29-12		1 Mar 12 3:39
11	1	0422L001.D	1	SVTUNE 2-28-12		22 Apr 12 10:48
12	2	0422L002.D	1	5.0ug/ml PAH 02-29-12		22 Apr 12 11:06
13	3	0422L003.D	1	120418A BLK 1/1000		22 Apr 12 11:32
14	4	0422L004.D	1	120418A LCS-1 1/1000		22 Apr 12 11:58
15	5	0422L005.D	0.95238	AY59184W07 1/1050		22 Apr 12 12:24
16	6	0422L006.D	0.95238	AY59185W05 1/1050		22 Apr 12 12:50
17	7	0422L007.D	0.95238	AY59186W07 1/1050		22 Apr 12 13:15
18	8	0422L008.D	0.95238	AY59187W06 1/1050		22 Apr 12 13:41

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

Blank Name/QCG: **120418W-59184 - 166402**
Batch ID: #86RHB-120418AC

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	04/18/12	04/18/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C10
Instrument: Chico
Sequence: C120410
Initials: ARS

Printed: 05/01/12 5:21:57 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120418W-59184 - 166402**

Batch ID: #86RHB-120418AC

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	04/18/12	04/18/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	SURROGATE: 1,2-DICHLOROET	96.3	70-120			%	04/18/12	04/18/12
BLANK	SURROGATE: 4-BROMOFLUORO	101	75-120			%	04/18/12	04/18/12
BLANK	SURROGATE: DIBROMOFLUOR	100	85-115			%	04/18/12	04/18/12
BLANK	SURROGATE: TOLUENE-D8 (S)	93.4	85-120			%	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C10
Instrument: Chico
Sequence: C120410
Initials: ARS

Printed: 05/01/12 5:21:57 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 5:21:57 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	SURROGATE: 1,2-DICHLOROET	105	70-120			%	04/19/12	04/19/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.2	75-120			%	04/19/12	04/19/12
BLANK	SURROGATE: DIBROMOFLUOR	104	85-115			%	04/19/12	04/19/12
BLANK	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 5:21:57 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/18/12

Matrix: WATER Instrument: Chico

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120418AC-LCS	Lab Control Spike	70-120	91.7		75-120	99.2	
120418AC-BLK	Blank	70-120	96.3		75-120	101	
AY59208	TRIP BLANK-1	70-120	98.5		75-120	101	
AY59209	TRIP BLANK-2	70-120	102		75-120	99.5	
AY59184	ES070	70-120	104		75-120	103	
AY59185	ES071	70-120	101		75-120	102	
AY59186	ES072	70-120	90.1		75-120	98.8	

Comments: Batch: #86RHB-120418AC

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/18/12

Matrix: WATER Instrument: Chico

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120418AC-LCS	Lab Control Spike	85-115	101		85-120	94.3	
120418AC-BLK	Blank	85-115	100		85-120	93.4	
AY59208	TRIP BLANK-1	85-115	101		85-120	95.0	
AY59209	TRIP BLANK-2	85-115	103		85-120	90.8	
AY59184	ES070	85-115	104		85-120	94.3	
AY59185	ES071	85-115	104		85-120	94.2	
AY59186	ES072	85-115	94.5		85-120	93.0	

Comments: Batch: #86RHB-120418AC

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419AT-LCS	Lab Control Spike	70-120	105		75-120	102	
120419AT-BLK	Blank	70-120	105		75-120	96.2	
AY59187	ES073	70-120	107		75-120	91.8	

Comments: Batch: #86RHB-120419AT

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419AT-LCS	Lab Control Spike	85-115	108		85-120	98.8	
120419AT-BLK	Blank	85-115	104		85-120	100	
AY59187	ES073	85-115	105		85-120	97.1	

Comments: Batch: #86RHB-120419AT

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120418W-59184 LCS - 166402**
Batch ID: #86RHB-120418AC

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	9.06	90.6	80-130
1,1,1-TRICHLOROETHANE	10.00	9.15	91.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.65	96.5	65-130
1,1,2-TRICHLOROETHANE	10.00	9.49	94.9	75-125
1,1-DICHLOROETHANE	10.00	9.34	93.4	70-135
1,1-DICHLOROETHENE	10.00	8.63	86.3	70-130
1,2,3-TRICHLOROPROPANE	10.00	8.57	85.7	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.67	96.7	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	7.60	76.0	50-130
1,2-DIBROMOETHANE	10.00	9.04	90.4	70-130
1,2-DICHLOROBENZENE	10.00	9.70	97.0	70-120
1,2-DICHLOROETHANE	10.00	9.10	91.0	70-130
1,2-DICHLOROPROPANE	10.00	9.44	94.4	75-125
1,3-DICHLOROBENZENE	10.00	9.86	98.6	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	18.8	94.0	70-130
1,4-DICHLOROBENZENE	10.00	9.47	94.7	75-125
2-BUTANONE	10.00	8.34	83.4	30-150
4-METHYL-2-PENTANONE	10.00	10.5	105	60-135
ACETONE	10.00	9.15	91.5	40-140
BENZENE	10.00	9.07	90.7	80-120
BROMODICHLOROMETHANE	10.00	9.53	95.3	75-120
BROMOFORM	10.00	8.64	86.4	70-130
BROMOMETHANE	10.00	9.53	95.3	30-145
CARBON TETRACHLORIDE	10.00	8.97	89.7	65-140
CHLOROBENZENE	10.00	9.42	94.2	80-120
CHLORODIBROMOMETHANE	10.00	8.98	89.8	60-135
CHLOROETHANE	10.00	8.93	89.3	60-135
CHLOROFORM	10.00	9.40	94.0	65-135
CHLOROMETHANE	10.00	10.2	102	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.85	98.5	70-125
ETHYLBENZENE	10.00	9.18	91.8	75-125

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/18/12
Analysis Date :	04/18/12
Instrument :	Chico
Run :	0418C04
Initials :	ARS

Comments: _____

Printed: 05/01/12 5:21:41 PM
APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120418W-59184 LCS - 166402**
Batch ID: #86RHB-120418AC

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	286	95.3	75-125
HEXACHLOROBUTADIENE	10.00	9.18	91.8	50-140
METHYL TERT-BUTYL ETHER	10.00	9.21	92.1	65-125
METHYLENE CHLORIDE	10.00	9.56	95.6	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.02	90.2	45-150
TOLUENE	10.00	9.59	95.9	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.17	91.7	60-140
TRICHLOROETHENE	10.00	9.43	94.3	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	28.0	93.3	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	19.3	91.7	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.0	26.8	99.2	75-120
SURROGATE: DIBROMOFLUOROMETH	20.9	21.0	101	85-115
SURROGATE: TOLUENE-D8 (S)	25.4	23.9	94.3	85-120

Comments: _____

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/18/12
Analysis Date :	04/18/12
Instrument :	Chico
Run :	0418C04
Initials :	ARS

Printed: 05/01/12 5:21:42 PM
APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

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	10.1	101	80-130
1,1,1-TRICHLOROETHANE	10.00	9.60	96.0	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.8	108	65-130
1,1,2-TRICHLOROETHANE	10.00	9.92	99.2	75-125
1,1-DICHLOROETHANE	10.00	9.14	91.4	70-135
1,1-DICHLOROETHENE	10.00	9.29	92.9	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.79	97.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.71	97.1	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	11.3	113	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	9.35	93.5	70-120
1,2-DICHLOROETHANE	10.00	9.82	98.2	70-130
1,2-DICHLOROPROPANE	10.00	9.52	95.2	75-125
1,3-DICHLOROBENZENE	10.00	9.15	91.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	20.0	100	70-130
1,4-DICHLOROBENZENE	10.00	9.34	93.4	75-125
2-BUTANONE	10.00	10.1	101	30-150
4-METHYL-2-PENTANONE	10.00	9.58	95.8	60-135
ACETONE	10.00	9.60	96.0	40-140
BENZENE	10.00	9.34	93.4	80-120
BROMODICHLOROMETHANE	10.00	9.61	96.1	75-120
BROMOFORM	10.00	10.8	108	70-130
BROMOMETHANE	10.00	10.1	101	30-145
CARBON TETRACHLORIDE	10.00	9.67	96.7	65-140
CHLOROBENZENE	10.00	9.28	92.8	80-120
CHLORODIBROMOMETHANE	10.00	10.4	104	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	9.64	96.4	65-135
CHLOROMETHANE	10.00	9.78	97.8	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.40	94.0	70-125
ETHYLBENZENE	10.00	8.90	89.0	75-125

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Comments: _____

Printed: 05/01/12 5:21:42 PM
APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	338	113	75-125
HEXACHLOROBUTADIENE	10.00	9.29	92.9	50-140
METHYL TERT-BUTYL ETHER	10.00	9.25	92.5	65-125
METHYLENE CHLORIDE	10.00	8.48	84.8	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.58	95.8	45-150
TOLUENE	10.00	9.33	93.3	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.51	95.1	60-140
TRICHLOROETHENE	10.00	8.94	89.4	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	27.5	91.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	29.6	31.2	105	70-120
SURROGATE: 4-BROMOFLUOROBENZE	29.4	30.0	102	75-120
SURROGATE: DIBROMOFLUOROMETH	29.7	32.0	108	85-115
SURROGATE: TOLUENE-D8 (S)	32.0	31.6	98.8	85-120

Comments: _____

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Printed: 05/01/12 5:21:42 PM
APPL Standard LCS

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/18/12

Matrix: WATER Instrument: Chico

Blank ID: 120418AC-BLK Time Analyzed: 1720

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120418AC-LCS	Lab Control Spike	0418C04	04/18/12 1118
120418AC-BLK	Blank	0418C10	04/18/12 1720
AY59208	TRIP BLANK-1	0418C11	04/18/12 1757
AY59209	TRIP BLANK-2	0418C12	04/18/12 1834
AY59184	ES070	0418C13	04/18/12 1911
AY59185	ES071	0418C14	04/18/12 1948
AY59186	ES072	0418C15	04/18/12 2025

Comments: Batch: #86RHB-120418AC

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67512

Case No: 67512 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

Blank ID: 120419AT-BLK Time Analyzed: 1232

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120419AT-LCS	Lab Control Spike	0419T12	04/19/12 1013
120419AT-BLK	Blank	0419T17	04/19/12 1232
AY59187	ES073	0419T20	04/19/12 1355

Comments: Batch: #86RHB-120419AT

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67512
Matrix: Water
ID: 25ug/ml BFB STD 04-10-12

SDG No: 67512
Date Analyzed: 04/18/12
Instrument: Chico
Time Analyzed: 8:55

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV gas 300ug/L	0418C01W.D	04/18/12 9:27
2	Lab Control Spike	LCS gas 300ug/L	0418C02W.D	04/18/12 10:04
3		10ug/L Vol Std 04-18	0418C03W.D	04/18/12 10:41
4	Lab Control Spike	120418A LCS-1WC	0418C04W.D	04/18/12 11:18
5	Blank	120418A BLK-1WC	0418C10W.D	04/18/12 17:20
6	TRIP BLANK-1	AY59208W01	0418C11W.D	04/18/12 17:57
7	TRIP BLANK-2	AY59209W01	0418C12W.D	04/18/12 18:34
8	ES070	AY59184W01	0418C13W.D	04/18/12 19:11
9	ES071	AY59185W01	0418C14W.D	04/18/12 19:48
10	ES072	AY59186W01	0418C15W.D	04/18/12 20:25
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	19.1
75	30 - 60% of mass 95	42.1
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	72.0
175	5 - 9% of mass 174	7.0
176	95 - 101% of mass 174	98.3
177	5 - 9% of mass 176	6.7

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67512
Matrix: Water
ID: 5ng BFB 4-10-12

SDG No: 67512
Date Analyzed: 04/19/12
Instrument: Thor
Time Analyzed: 9:23

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		10ug/L Vol Std 04-19	0419T11W.D	04/19/12 9:45
2	Lab Control Spike	120419A LCS-1WT	0419T12W.D	04/19/12 10:13
3	Blank	120419A BLK-1WT	0419T17W.D	04/19/12 12:32
4	ES073	AY59187W03	0419T20W.D	04/19/12 13:55
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	14.9 - 40% of mass 95	15.2
75	30 - 60% of mass 95	44.3
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.3
173	0 - 2% of mass 174	0.9
174	50 - 100% of mass 95	97.3
175	5 - 9% of mass 174	6.6
176	95 - 101% of mass 174	97.5
177	5 - 9% of mass 176	6.0

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67512
Matrix: Water
ID: 25ug/ml BFB STD 04-10-12

SDG No: 67512
Date Analyzed: 04/19/12
Instrument: Chico
Time Analyzed: 6:16

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV gas 300ug/L	0419C01W.D	04/19/12 6:48
2	Lab Control Spike	LCS gas 300 ug/L	0419C06W.D	04/19/12 9:52
3	Blank	120419A BLK-1WC	0419C09W.D	04/19/12 11:44
4	ES073	AY59187W02	0419C11W.D	04/19/12 12:58
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	19.0
75	30 - 60% of mass 95	43.5
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.4
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	70.4
175	5 - 9% of mass 174	7.2
176	95 - 101% of mass 174	98.1
177	5 - 9% of mass 176	6.6

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 67512

Lab File ID (Standard): 0410C08W.D Date Analyzed: 04/10/12

Instrument ID: Chico Time Analyzed: 19:04

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	662519	12.85	480192	18.04	230016	22.23
	UPPER LIMIT	1325038	13.35	960384	18.54	460032	22.73
	LOWER LIMIT	331260	12.35	240096	17.54	115008	21.73
	SAMPLE NO.						
01	10ug/L Vol Std 04-18-12	628509	12.81	502912	17.99	224960	22.19
02	120418A LCS-1WC	650996	12.80	518080	17.99	232832	22.19
03	120418A BLK-1WC	640057	12.81	467968	18.00	210496	22.20
04	AY59208W01	625597	12.81	462912	18.00	211392	22.20
05	AY59209W01	620075	12.82	479488	18.00	212224	22.20
06	AY59184W01	616356	12.81	460544	18.01	212800	22.19
07	AY59185W01	578828	12.82	461568	18.00	213440	22.20
08	AY59186W01	652138	12.81	500864	18.00	233984	22.20
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.: 67512

Lab File ID (Standard): 0125C32W.D Date Analyzed: 01/26/12

Instrument ID: Chico Time Analyzed: 21:24

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	1085220	12.79	1323770	17.98	1382630	22.18
	UPPER LIMIT	2170440	13.29	2647540	18.48	2765260	22.68
	LOWER LIMIT	542610	12.29	661885	17.48	691315	21.68
	SAMPLE NO.						
01	CCV gas 300ug/L	1270200	12.79	1364280	17.99	1270550	22.19
02	LCS gas 300ug/L	1221210	12.80	1331980	17.98	1273290	22.18
03	120419A BLK-1WC	1323980	12.80	1379510	17.99	1323330	22.19
04	AY59187W02	1324520	12.81	1407520	17.99	1308810	22.19
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67512

Lab File ID (Standard): 0411T35W.D Date Analyzed: 04/12/12

Instrument ID: Thor Time Analyzed: 0:31

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	482688	6.75	391232	9.89	241024	12.21
	UPPER LIMIT	965376	7.25	782464	10.39	482048	12.71
	LOWER LIMIT	241344	6.25	195616	9.39	120512	11.71
	SAMPLE NO.						
01	10ug/L Vol Std 04-19-12	499136	6.75	420608	9.89	266368	12.21
02	120419A LCS-1WT	439424	6.75	375360	9.89	233344	12.21
03	120419A BLK-1WT	474432	6.75	395840	9.89	232000	12.21
04	AY59187W03	454400	6.75	392640	9.89	209920	12.21
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

EPA METHOD 8260B
Volatile Organic Compounds
Sample Data

APPL, INC.

EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES070

APPL ID: AY59184

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

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	04/18/12	04/18/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C13
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES070

APPL ID: AY59184

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/18/12	04/18/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	104	70-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	75-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	104	85-115			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.3	85-120			%	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C13
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C13W.D Vial: 1
Acq On : 18 Apr 12 19:11 Operator: SV
Sample : AY59184W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:45 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	96	616356	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	460544	25.00000 ppb	-0.03
70) 1,4-Dichlorobenzene-D (IS)	22.19	152	212800	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	388506	21.63608 ppb	-0.04
Spiked Amount 20.866			Recovery = 103.692%		
37) 1,2-DCA-D4(S)	12.20	65	312267	21.96316 ppb	-0.03
Spiked Amount 21.039			Recovery = 104.392%		
55) Toluene-D8(S)	15.47	98	1343723	23.91201 ppb	-0.03
Spiked Amount 25.355			Recovery = 94.308%		
63) 4-Bromofluorobenzene(S)	20.07	95	642192	27.85952 ppb	-0.03
Spiked Amount 27.007			Recovery = 103.158%		

Target Compounds Qvalue

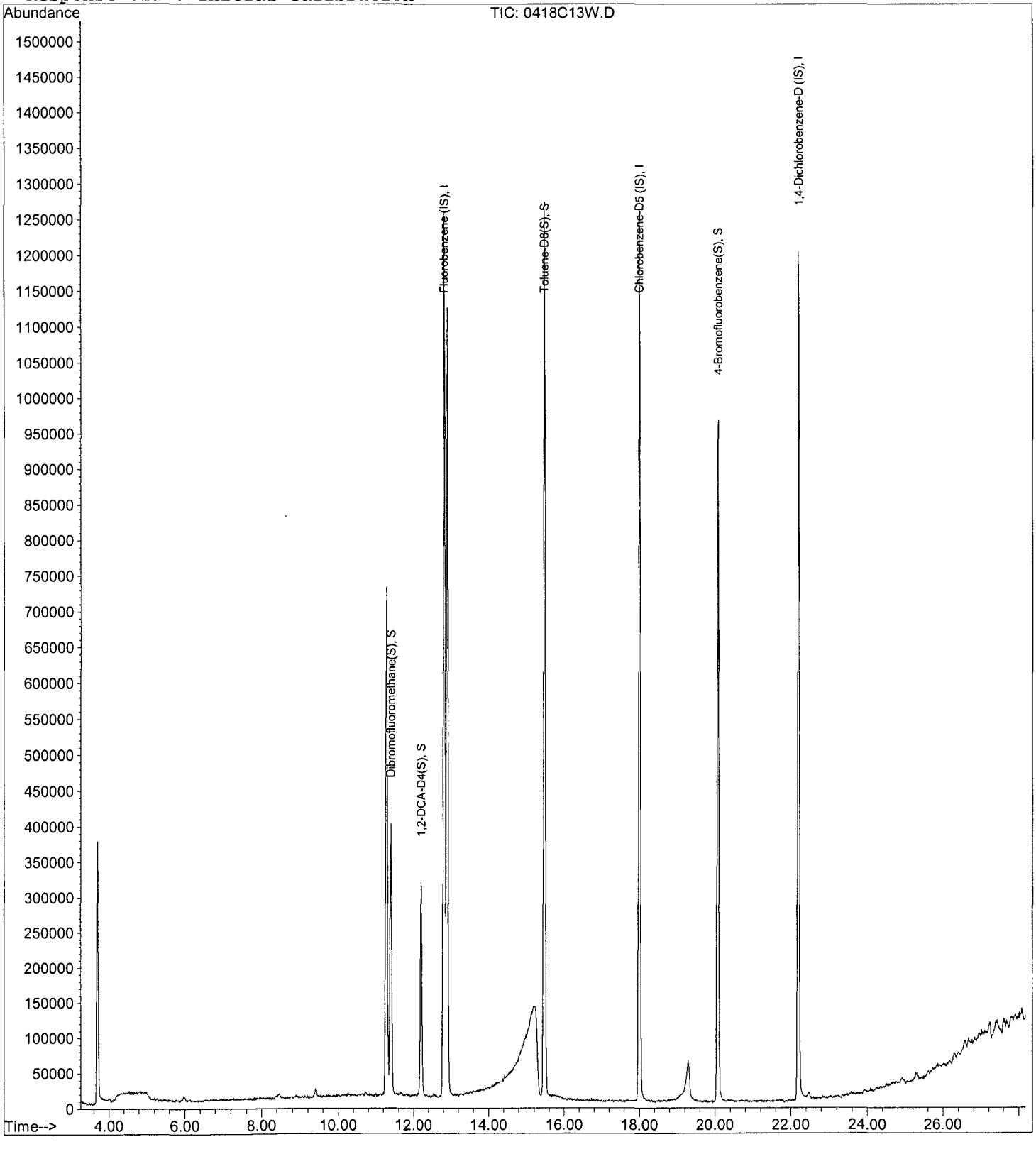
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C13W.D Vial: 1
Acq On : 18 Apr 12 19:11 Operator: SV
Sample : AY59184W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:45 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C13W.D Vial: 1
Acq On : 18 Apr 12 19:11 Operator: SV
Sample : AY59184W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1244303	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.00	TIC	1254366	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1195001	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24404998m	33.56907	ppb ND	100

No gasoline pattern
ARS 5/1/12

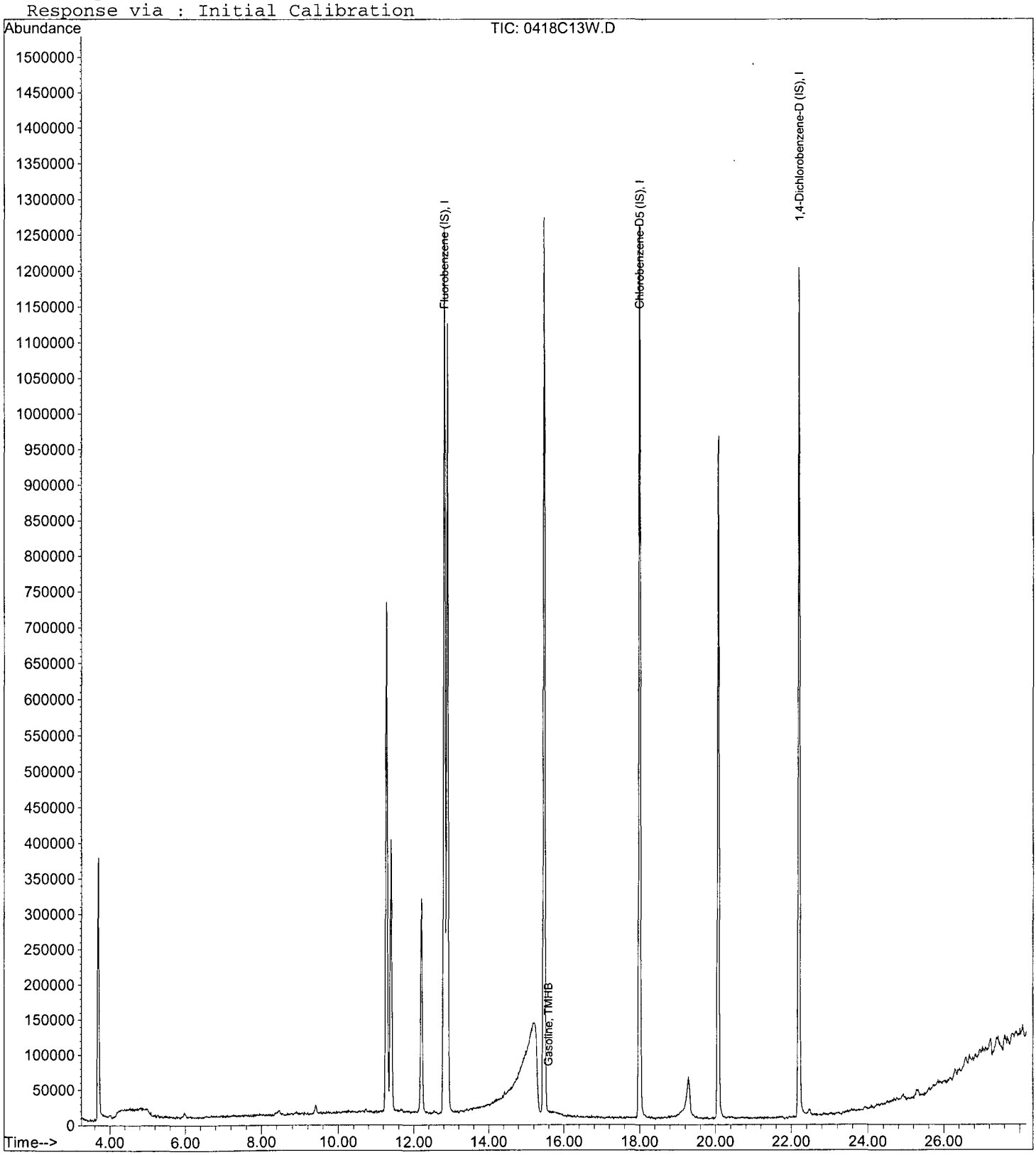
(#) = qualifier out of range (m) = manual integration
0418C13W.D CGAS.M Tue May 01 16:19:19 2012 Page 1

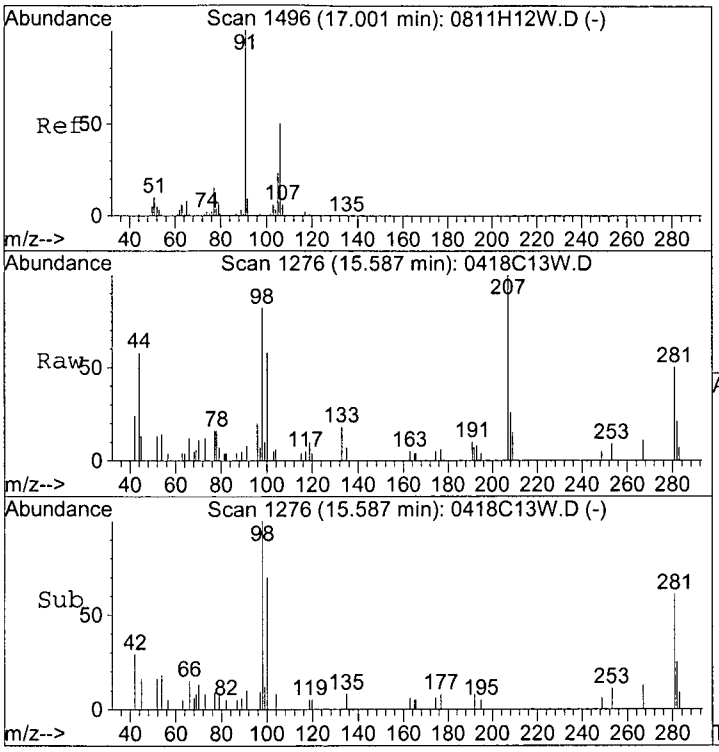
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C13W.D Vial: 1
Acq On : 18 Apr 12 19:11 Operator: SV
Sample : AY59184W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

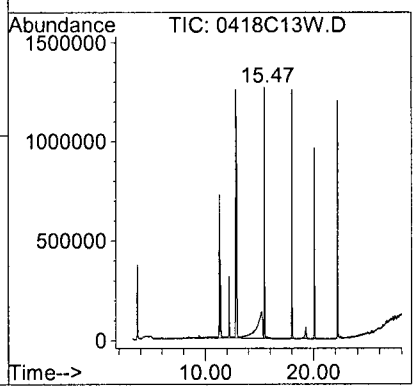
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 33.56907 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0418C13W.D
Acq: 18 Apr 12 19:11

Tgt Ion:TIC Resp:24404998



EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES071
Sample Collection Date: 04/16/12

ARF: 67512
APPL ID: AY59185
QCG: #86RHB-120418AC-166402

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	04/18/12	04/18/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C14
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES071

APPL ID: AY59185

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/18/12	04/18/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	101	70-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	102	75-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	104	85-115			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.2	85-120			%	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C14
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C14W.D Vial: 1
Acq On : 18 Apr 12 19:48 Operator: SV
Sample : AY59185W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:47 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	96	578828	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	461568	25.00000 ppb	-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	213440	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.39	111	364343	21.60595 ppb	-0.05
Spiked Amount 20.866			Recovery	= 103.548%	
37) 1,2-DCA-D4(S)	12.20	65	284793	21.32948 ppb	-0.04
Spiked Amount 21.039			Recovery	= 101.378%	
55) Toluene-D8(S)	15.47	98	1345018	23.88196 ppb	-0.04
Spiked Amount 25.355			Recovery	= 94.190%	
63) 4-Bromofluorobenzene(S)	20.07	95	635735	27.51822 ppb	-0.03
Spiked Amount 27.007			Recovery	= 101.892%	
Target Compounds					Qvalue
34) Cyclohexane	11.97	56	3197	0.16764 ppb NT#	72
46) Methyl Cyclohexane	13.79	83	4332	0.26875 ppb NT	71
72) Isopropylbenzene	19.69	105	303004	3.83456 ppb NT	99
77) n-Propylbenzene	20.40	91	466494	5.04871 ppb NT	98
82) Tert-Butylbenzene	21.31	119	54222	0.73244 ppb NT	96
84) Sec-Butylbenzene	21.71	105	382815	4.29805 ppb NT	98
90) n-Butylbenzene	22.65	91	196551	3.16469 ppb NT	93
95) Naphthalene	25.90	128	48586	1.19556 ppb NT	95

KRS 5/1/12

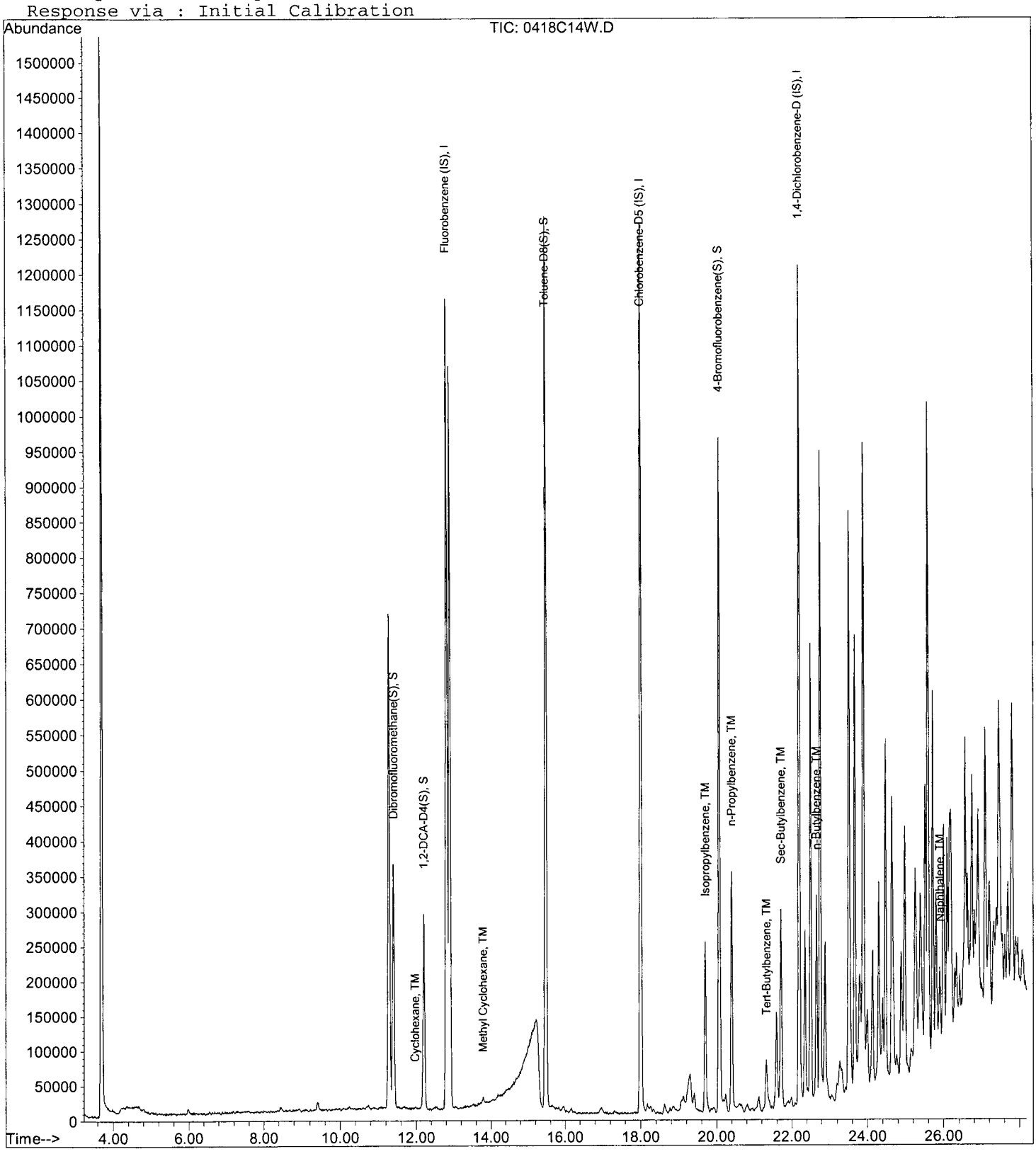
(#) = qualifier out of range (m) = manual integration

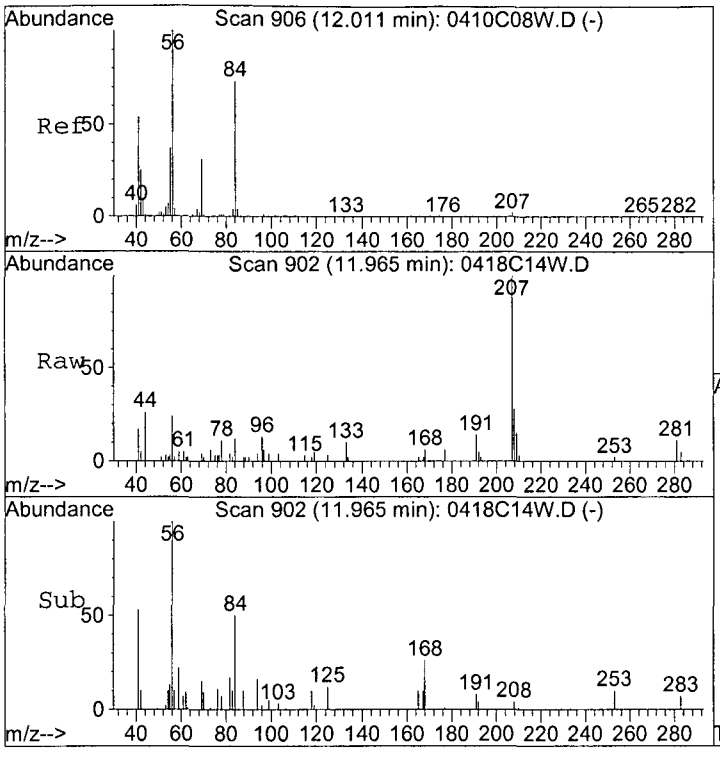
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C14W.D Vial: 1
Acq On : 18 Apr 12 19:48 Operator: SV
Sample : AY59185W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:47 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration

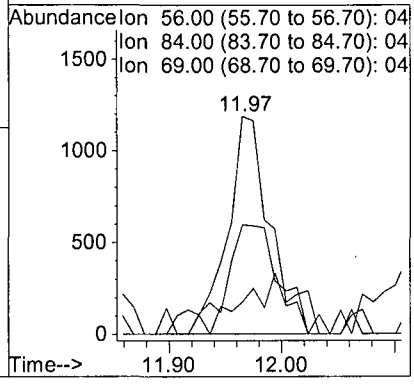


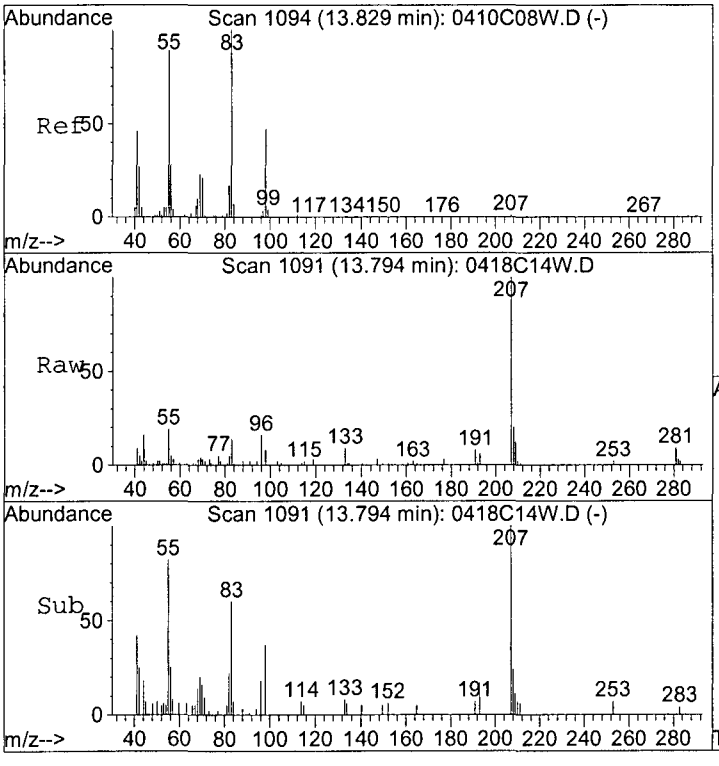


#34
Cyclohexane
Concen: 0.16764 ppb
RT: 11.97 min Scan# 902
Delta R.T. -0.05 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion: 56 Resp: 3197

Ion	Ratio	Lower	Upper
56	100		
84	50.2	50.9	94.5#
69	14.9	21.8	40.4#

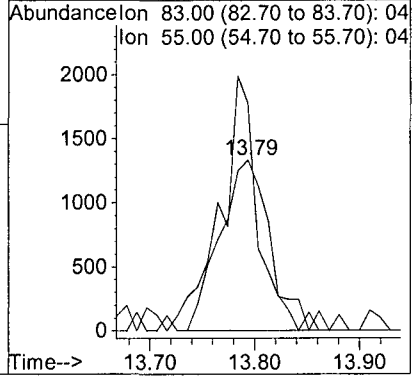


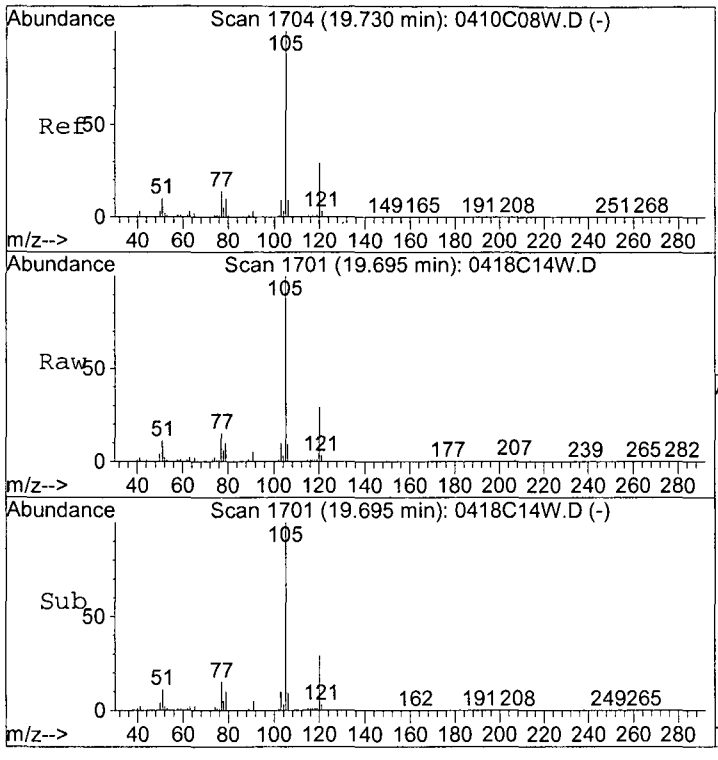


#46
Methyl Cyclohexane
Concen: 0.26875 ppb
RT: 13.79 min Scan# 1091
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion: 83 Resp: 4332

Ion	Ratio	Lower	Upper
83	100		
55	120.3	64.9	120.5

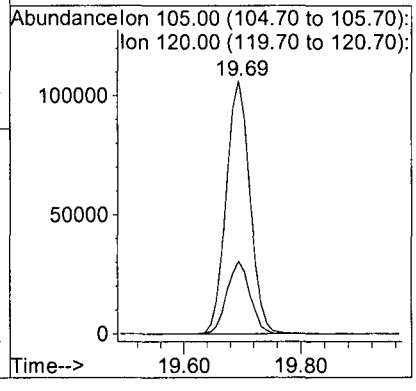


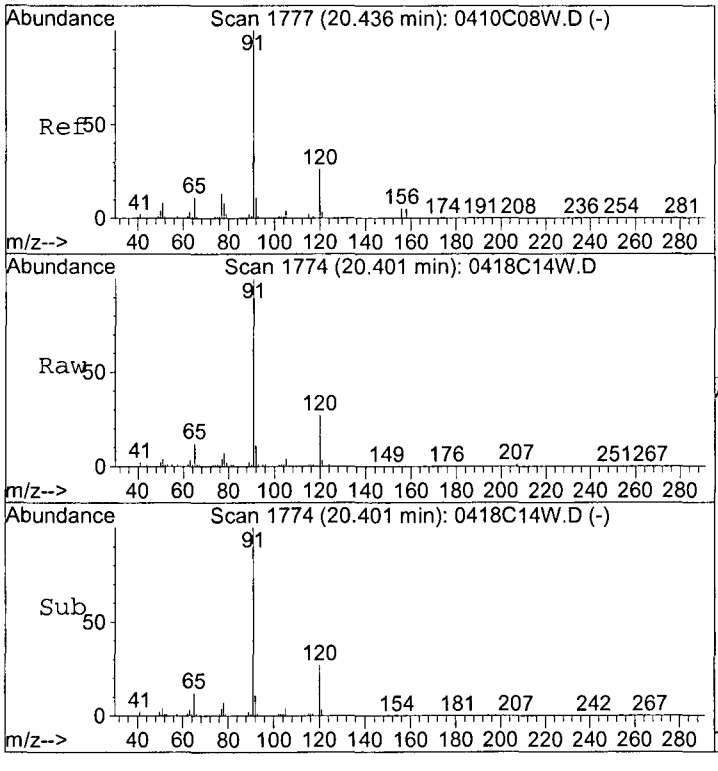


#72
Isopropylbenzene
Concen: 3.83456 ppb
RT: 19.69 min Scan# 1701
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion:105 Resp: 303004

Ion	Ratio	Lower	Upper
105	100		
120	28.7	23.4	35.0

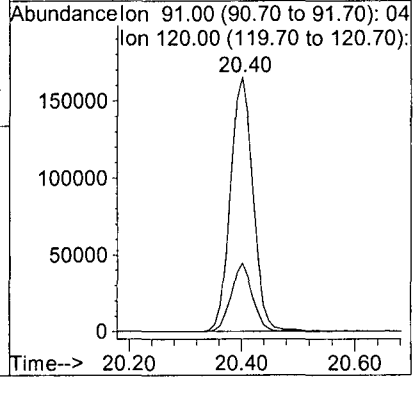


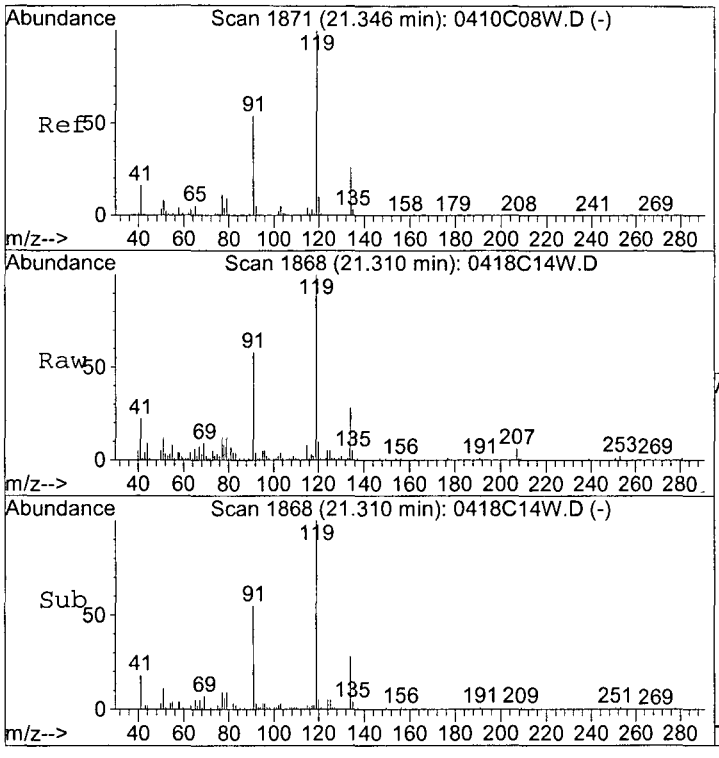


#77
n-Propylbenzene
Concen: 5.04871 ppb
RT: 20.40 min Scan# 1774
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion: 91 Resp: 466494

Ion	Ratio	Lower	Upper
91	100		
120	27.0	18.1	33.5

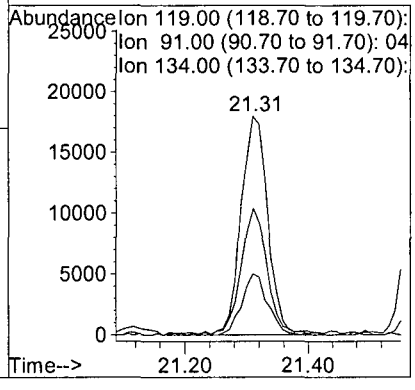


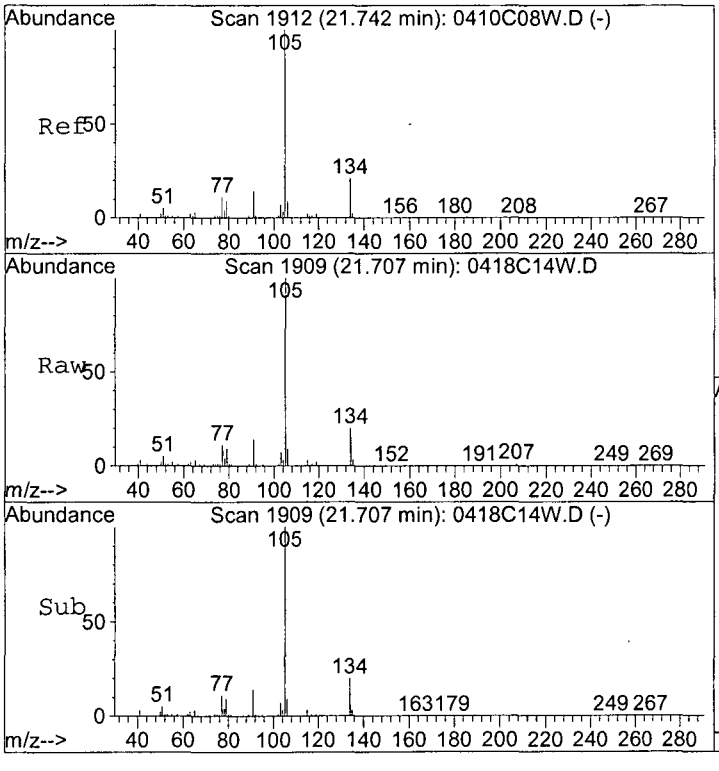


#82
Tert-Butylbenzene
Concen: 0.73244 ppb
RT: 21.31 min Scan# 1868
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion:119 Resp: 54222

Ion	Ratio	Lower	Upper
119	100		
91	56.7	37.9	70.3
134	28.0	18.0	33.4

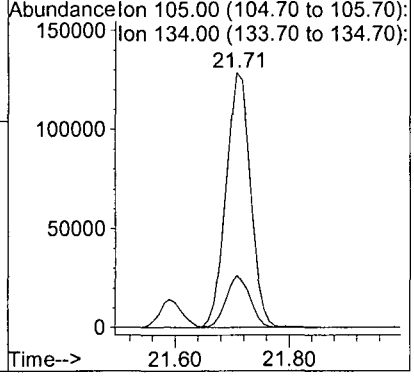


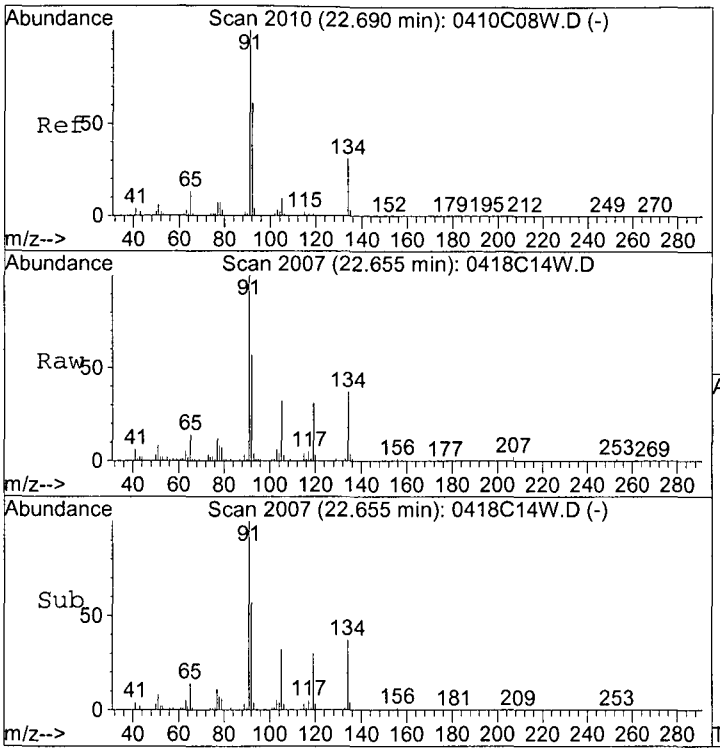


#84
Sec-Butylbenzene
Concen: 4.29805 ppb
RT: 21.71 min Scan# 1909
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion:105 Resp: 382815

Ion	Ratio	Lower	Upper
105	100		
134	20.4	15.0	27.8

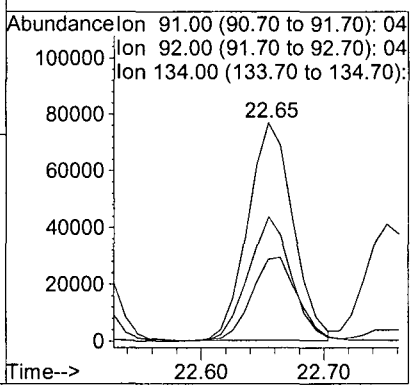


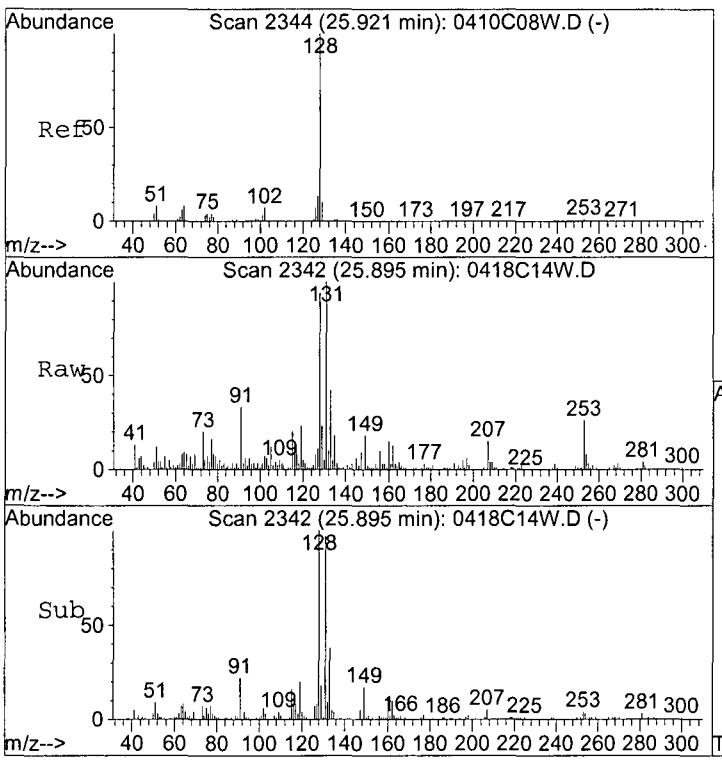


#90
n-Butylbenzene
Concen: 3.16469 ppb
RT: 22.65 min Scan# 2007
Delta R.T. -0.04 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion: 91 Resp: 196551

Ion	Ratio	Lower	Upper
91	100		
92	57.0	42.6	79.2
134	37.2	21.6	40.2

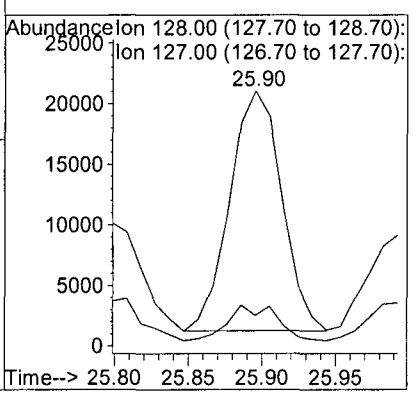




#95
Naphthalene
Concen: 1.19556 ppb
RT: 25.90 min Scan# 2342
Delta R.T. -0.03 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion:128 Resp: 48586

Ion	Ratio	Lower	Upper
128	100		
127	10.6	8.9	16.5



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C14W.D Vial: 1
Acq On : 18 Apr 12 19:48 Operator: SV
Sample : AY59185W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1149577	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.00	TIC	1260294	25.00000	ppb	0.02
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1190259	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	26704745m	75.18494	ppb	ND 100

No gasoline pattern
ARS 5/1/12

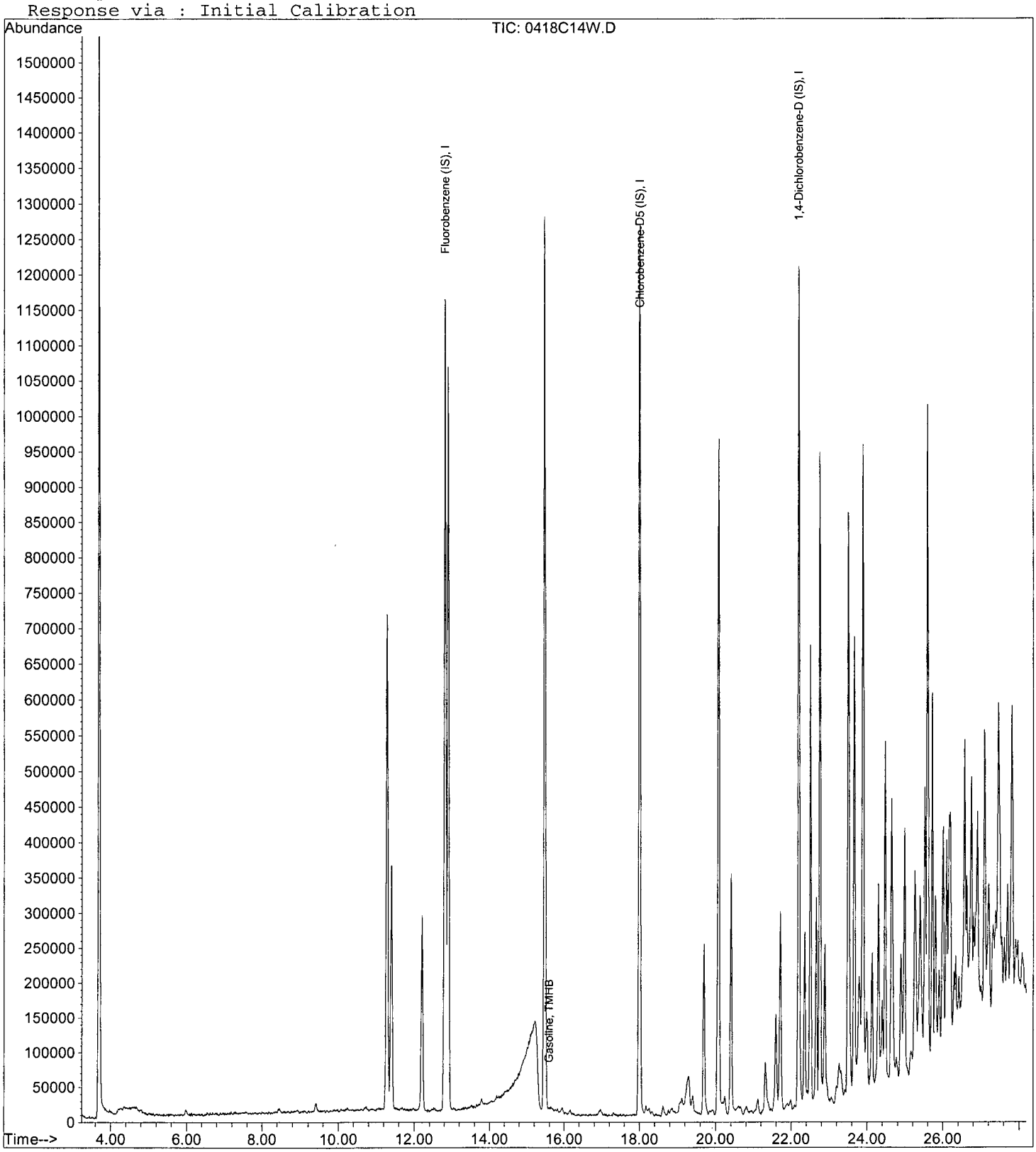
(#) = qualifier out of range (m) = manual integration

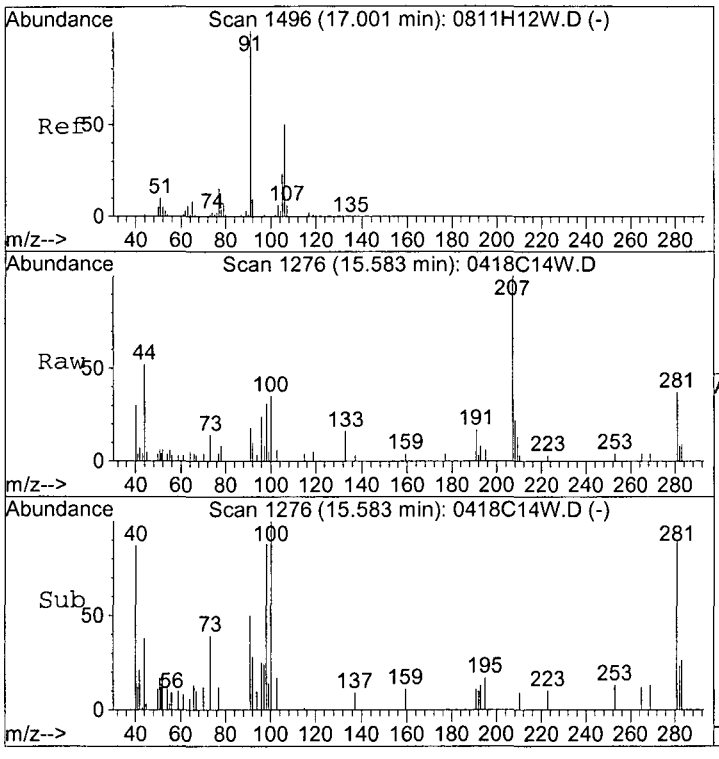
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C14W.D Vial: 1
Acq On : 18 Apr 12 19:48 Operator: SV
Sample : AY59185W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

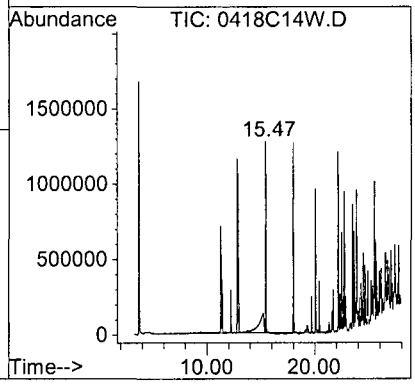
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 75.18494 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0418C14W.D
Acq: 18 Apr 12 19:48

Tgt Ion:TIC Resp:26704745



EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES072

APPL ID: AY59186

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

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	04/18/12	04/18/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	ETHYLBENZENE	0.23 J	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C15
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES072

APPL ID: AY59186

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/18/12	04/18/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	90.1	70-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.8	75-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	94.5	85-115			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	93.0	85-120			%	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C15
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:04 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C15W.D Vial: 1
Acq On : 18 Apr 12 20:25 Operator: SV
Sample : AY59186W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 17:00 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	96	652138	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	500864	25.00000 ppb	-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	233984	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	374474	19.71037 ppb	-0.04
Spiked Amount 20.866			Recovery	= 94.461%	
37) 1,2-DCA-D4(S)	12.20	65	285282	18.96423 ppb	-0.03
Spiked Amount 21.039			Recovery	= 90.137%	
55) Toluene-D8(S)	15.46	98	1440916	23.57743 ppb	-0.04
Spiked Amount 25.355			Recovery	= 92.987%	
63) 4-Bromofluorobenzene(S)	20.07	95	668827	26.67927 ppb	-0.03
Spiked Amount 27.007			Recovery	= 98.785%	
Target Compounds					Qvalue
34) Cyclohexane	11.98	56	3958	0.18421 ppb NT#	79
46) Methyl Cyclohexane	13.80	83	4679	0.25764 ppb NT	99
68) Ethylbenzene	18.18	91	19571	0.23150 ppb J	95 <YLPQL
77) n-Propylbenzene	20.40	91	503900	4.97472 ppb NT	98
82) Tert-Butylbenzene	21.32	119	56238	0.69297 ppb NT	95
84) Sec-Butylbenzene	21.71	105	401456	4.11160 ppb NT	97
90) n-Butylbenzene	22.65	91	209893	3.08278 ppb NT	93
95) Naphthalene	25.90	128	48974	1.09930 ppb NT	97

ARS 5/1/12

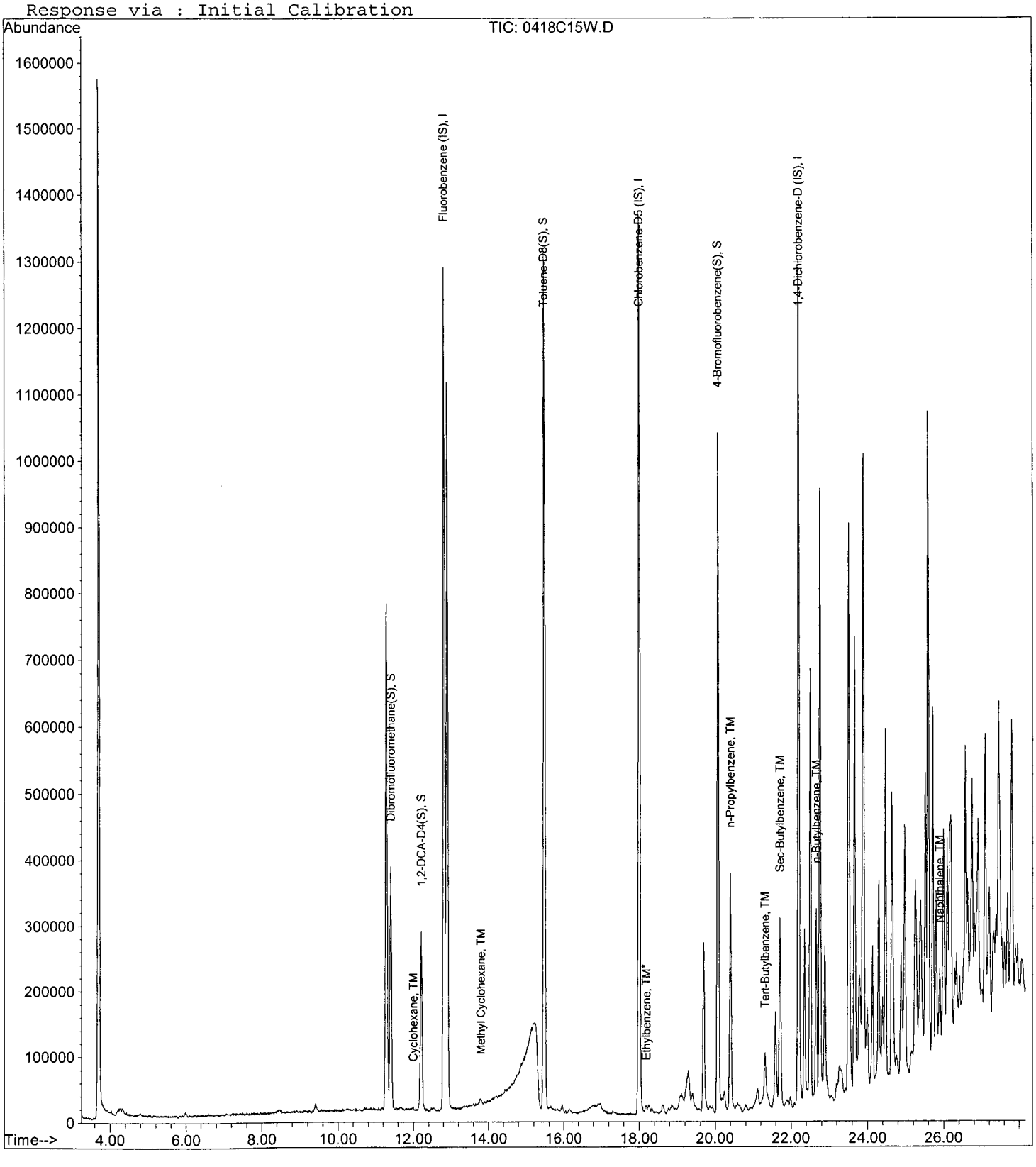
(#) = qualifier out of range (m) = manual integration

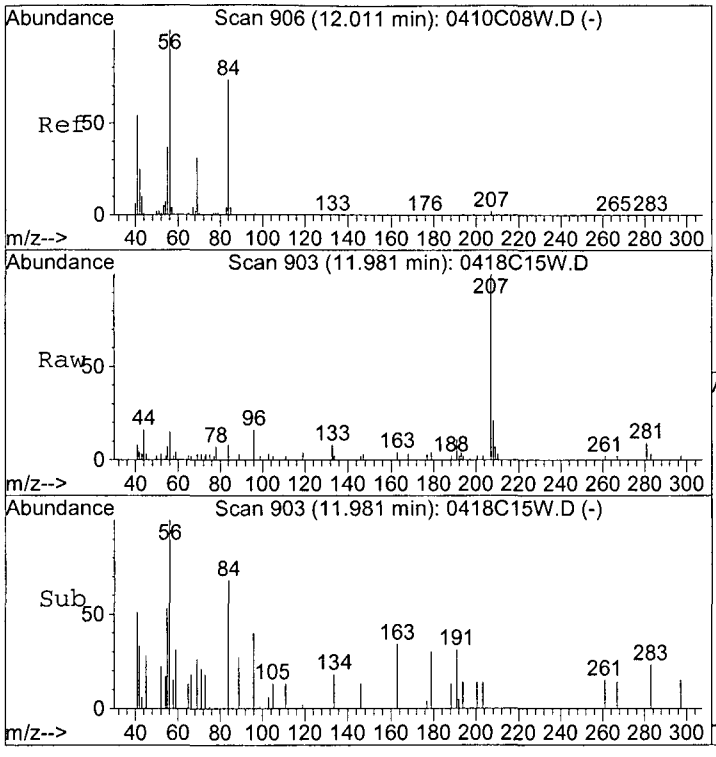
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C15W.D Vial: 1
Acq On : 18 Apr 12 20:25 Operator: SV
Sample : AY59186W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 17:00 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration

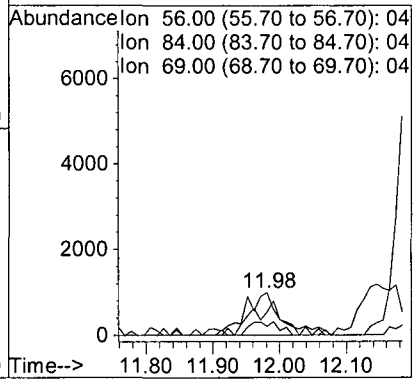


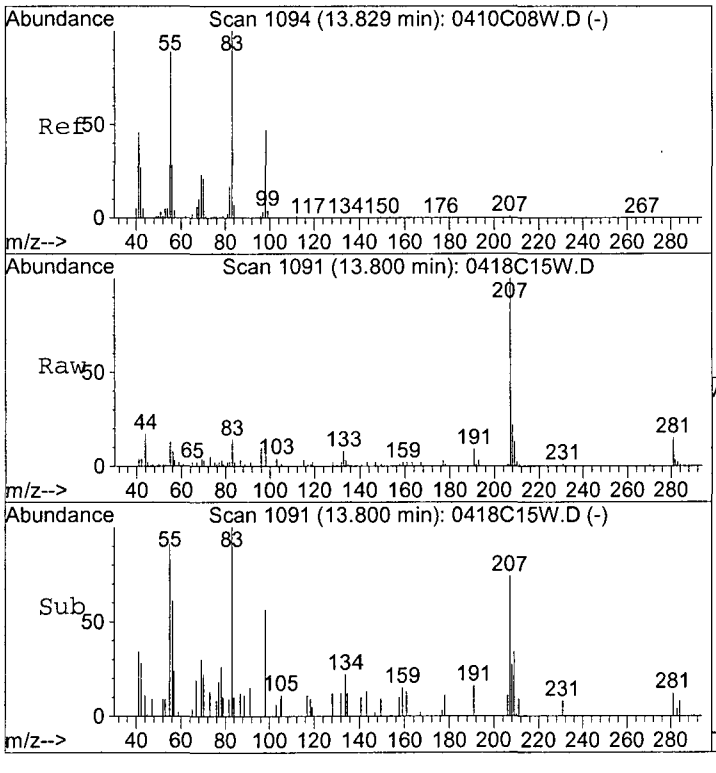


#34
Cyclohexane
Concen: 0.18421 ppb
RT: 11.98 min Scan# 903
Delta R.T. -0.03 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion: 56 Resp: 3958

Ion	Ratio	Lower	Upper
56	100		
84	54.6	50.9	94.5
69	21.0	21.8	40.4#

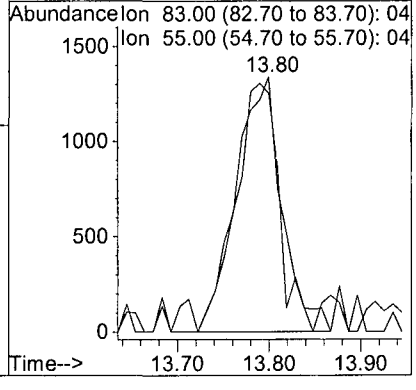


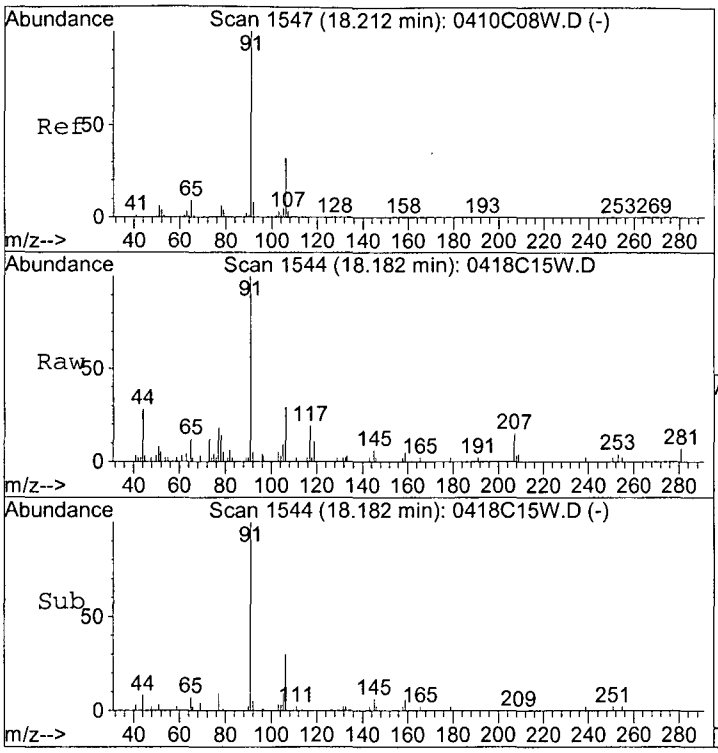


#46
Methyl Cyclohexane
Concen: 0.25764 ppb
RT: 13.80 min Scan# 1091
Delta R.T. -0.03 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion: 83 Resp: 4679

Ion	Ratio	Lower	Upper
83	100		
55	91.6	64.9	120.5

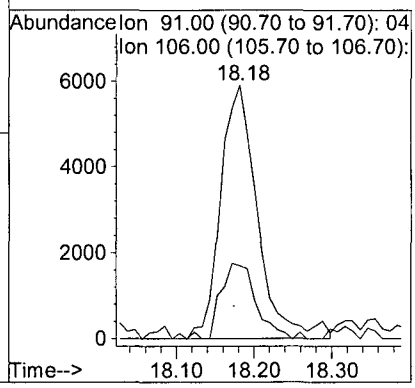


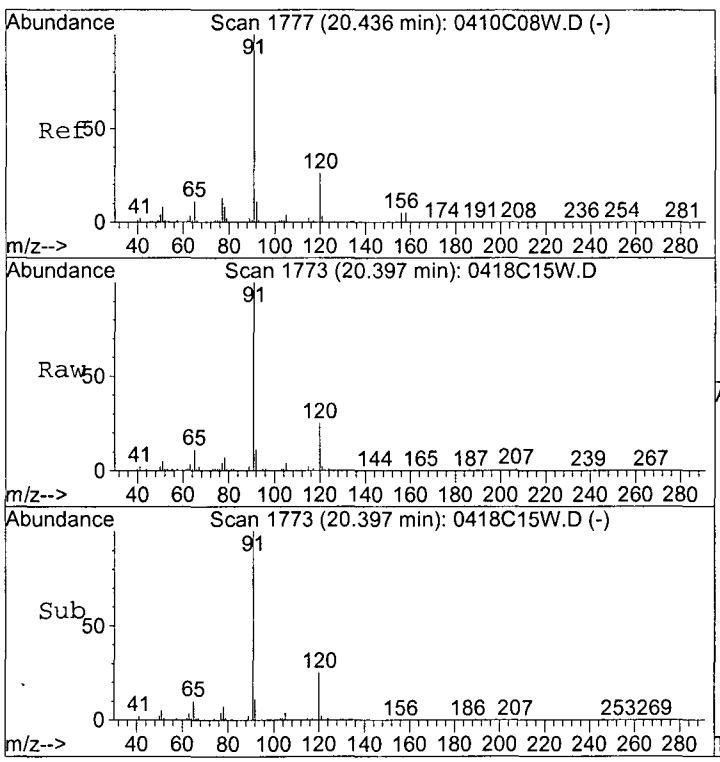


#68
Ethylbenzene
Concen: 0.23150 ppb
RT: 18.18 min Scan# 1544
Delta R.T. -0.03 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion: 91 Resp: 19571

Ion	Ratio	Lower	Upper
91	100		
106	28.7	22.2	41.2

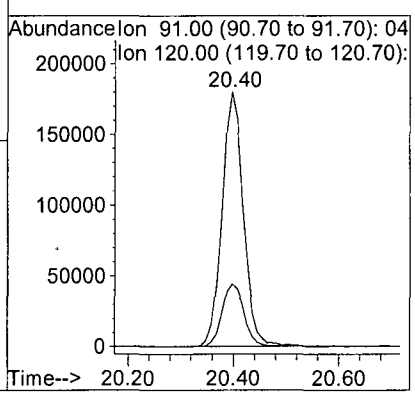


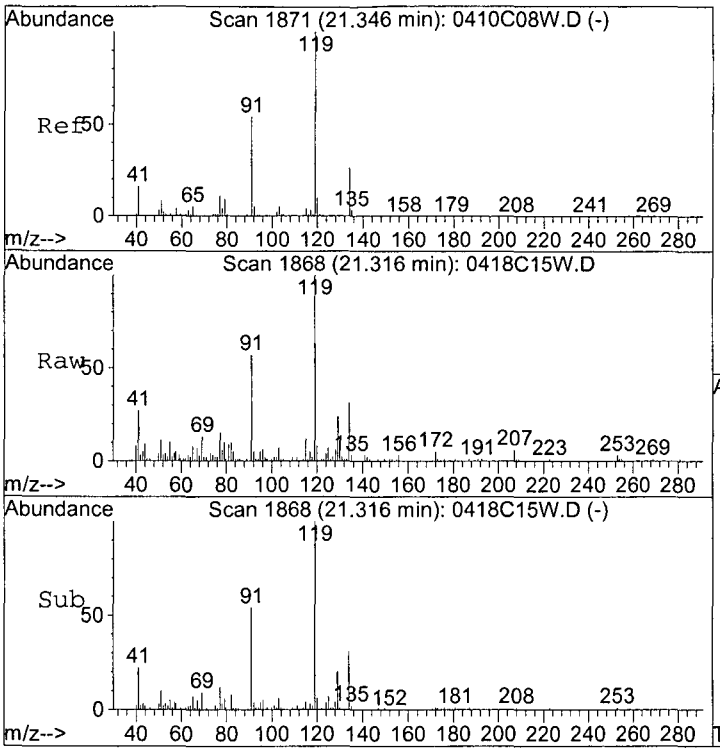


#77
n-Propylbenzene
Concen: 4.97472 ppb
RT: 20.40 min Scan# 1773
Delta R.T. -0.04 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion: 91 Resp: 503900

Ion	Ratio	Lower	Upper
91	100		
120	24.6	18.1	33.5

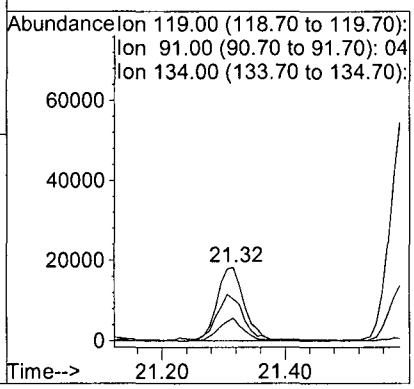


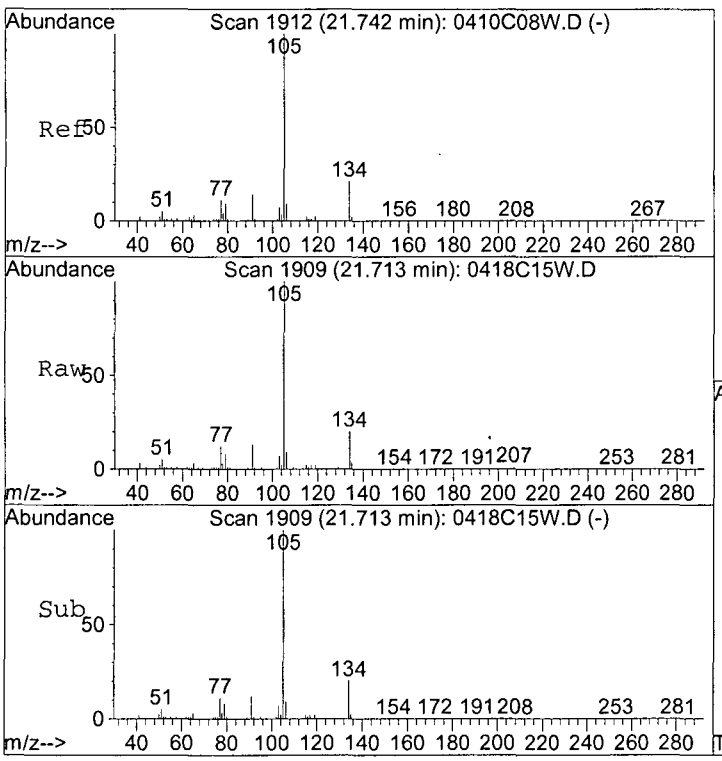


#82
Tert-Butylbenzene
Concen: 0.69297 ppb
RT: 21.32 min Scan# 1868
Delta R.T. -0.03 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion:119 Resp: 56238

Ion	Ratio	Lower	Upper
119	100		
91	55.7	37.9	70.3
134	30.9	18.0	33.4

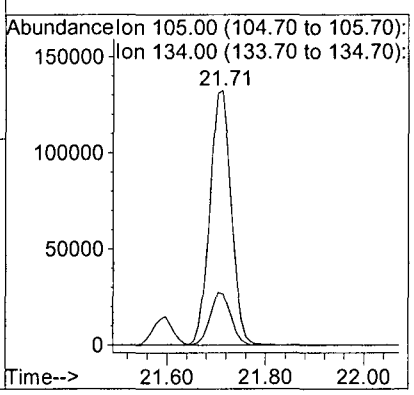


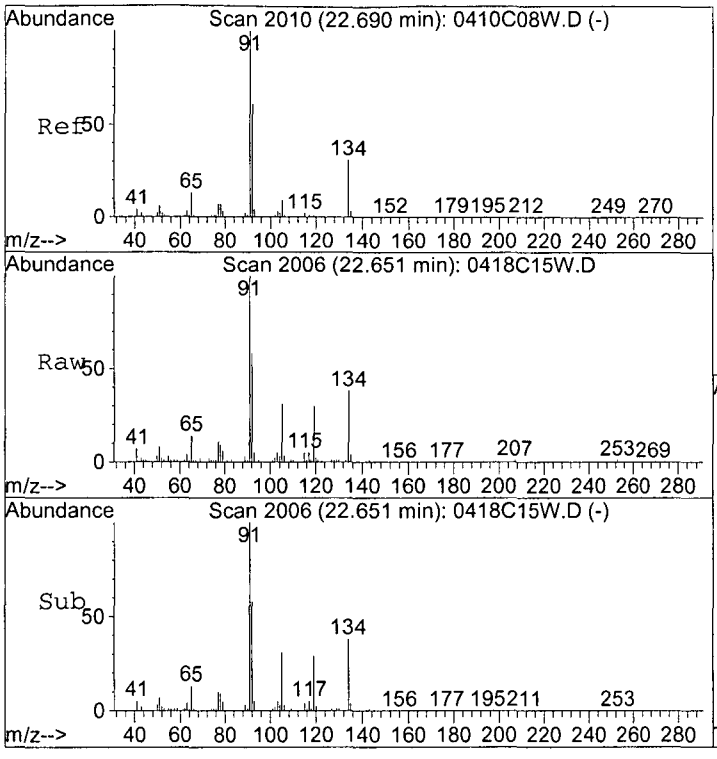


#84
Sec-Butylbenzene
Concen: 4.11160 ppb
RT: 21.71 min Scan# 1909
Delta R.T. -0.03 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion:105 Resp: 401456

Ion	Ratio	Lower	Upper
105	100		
134	20.1	15.0	27.8

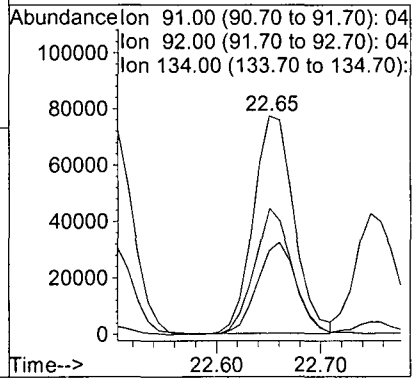


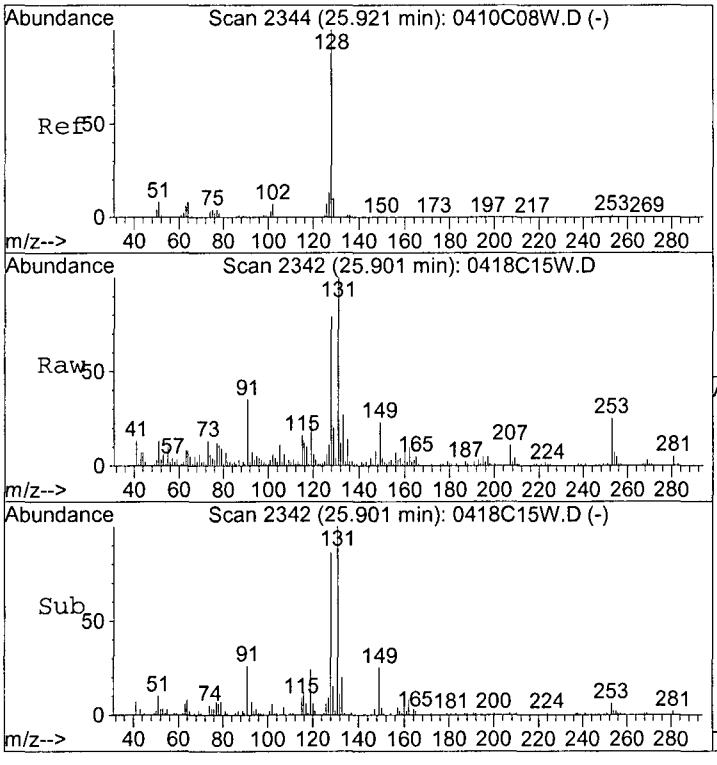


#90
n-Butylbenzene
Concen: 3.08278 ppb
RT: 22.65 min Scan# 2006
Delta R.T. -0.04 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion: 91 Resp: 209893

Ion	Ratio	Lower	Upper
91	100		
92	57.9	42.6	79.2
134	38.0	21.6	40.2

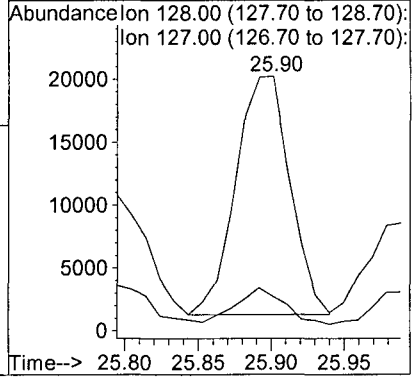




#95
Naphthalene
Concen: 1.09930 ppb
RT: 25.90 min Scan# 2342
Delta R.T. -0.02 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion:128 Resp: 48974

Ion	Ratio	Lower	Upper
128	100		
127	11.6	8.9	16.5



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C15W.D Vial: 1
Acq On : 18 Apr 12 20:25 Operator: SV
Sample : AY59186W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1274310	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.00	TIC	1357574	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.20	TIC	1277217	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	27651371m	57.56858	ppb	ND 100

No Gasoline pattern
RES 5/1/12

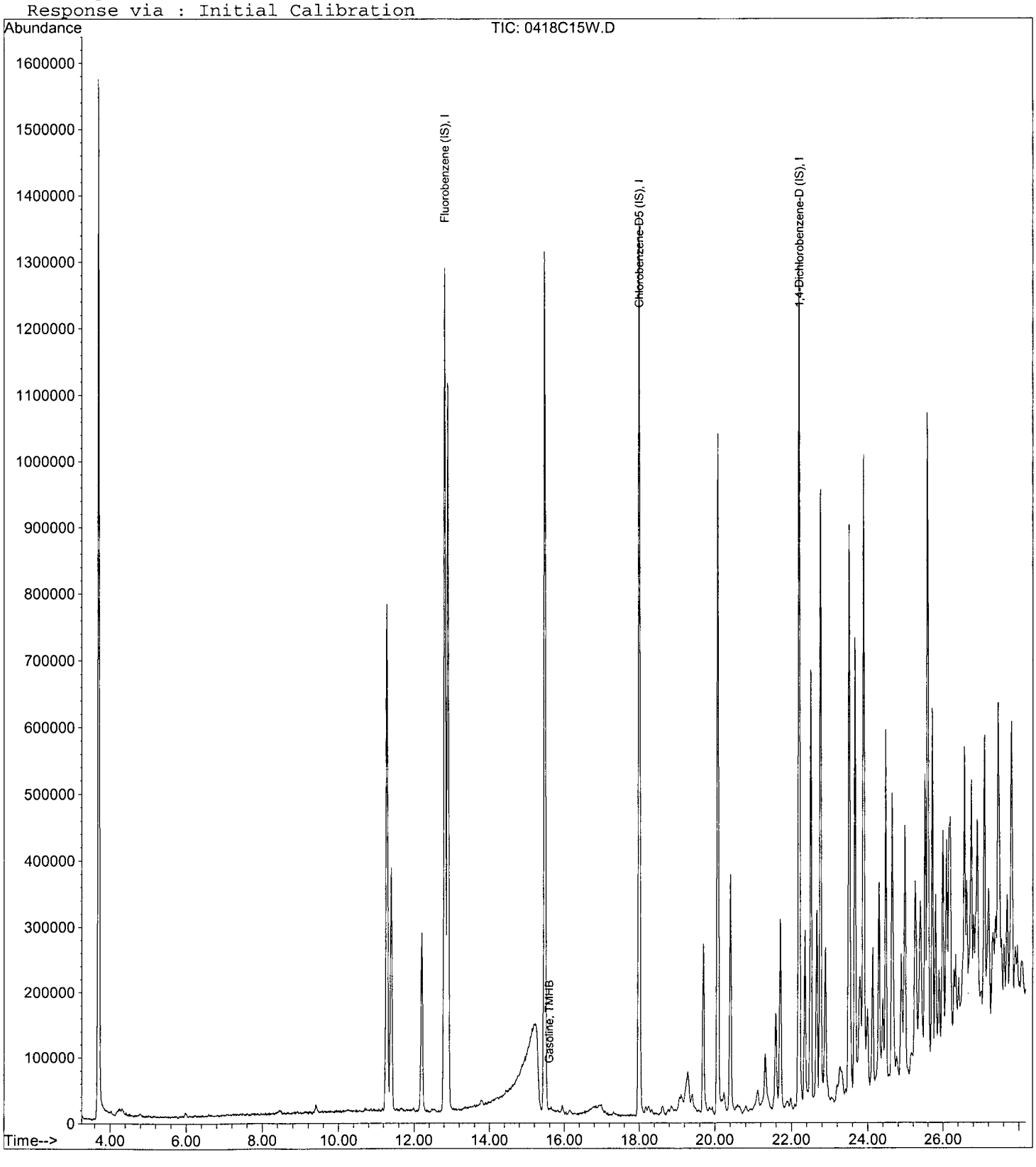
(#) = qualifier out of range (m) = manual integration

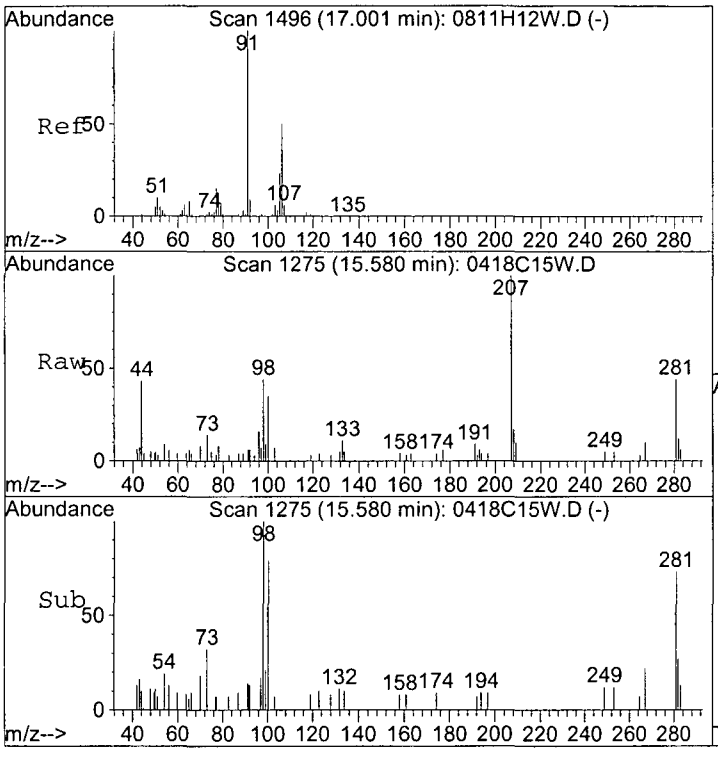
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C15W.D Vial: 1
Acq On : 18 Apr 12 20:25 Operator: SV
Sample : AY59186W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

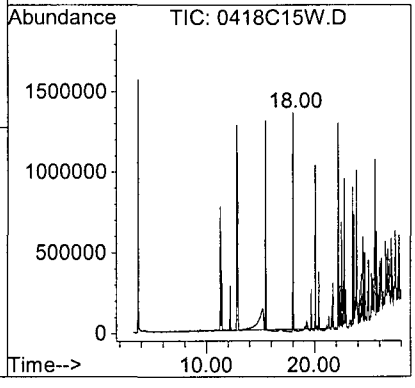
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 57.56858 ppb m
RT: 15.58 min Scan# 1275
Delta R.T. 0.00 min
Lab File: 0418C15W.D
Acq: 18 Apr 12 20:25

Tgt Ion:TIC Resp:27651371



EPA 8260B VOCs + Gas Water

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

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES073
Sample Collection Date: 04/16/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67512
APPL ID: AY59187
QCG: #86RHB-120419AT-166110

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	04/19/12	04/19/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T20
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 5:22:04 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES073

APPL ID: AY59187

Sample Collection Date: 04/16/12

QCG: #86RHB-120419AT-166110

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/19/12	04/19/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	107	70-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	91.8	75-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	97.1	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T20
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 5:22:05 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T20W.D Vial: 10
Acq On : 19 Apr 12 13:55 Operator: DG,RS,HW,ARS,SV
Sample : AY59187W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:39 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	454400	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	392640	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	209920	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	237202	31.30483 ppb	0.00
Spiked Amount 29.720			Recovery = 105.332%		
36) 1,2-DCA-D4(S)	6.34	65	219272	31.72684 ppb	0.00
Spiked Amount 29.608			Recovery = 107.157%		
56) Toluene-D8(S)	8.44	98	813794	31.06506 ppb	0.00
Spiked Amount 31.981			Recovery = 97.137%		
64) 4-Bromofluorobenzene(S)	11.06	95	292329	26.94009 ppb	0.00
Spiked Amount 29.353			Recovery = 91.780%		

Target Compounds Qvalue

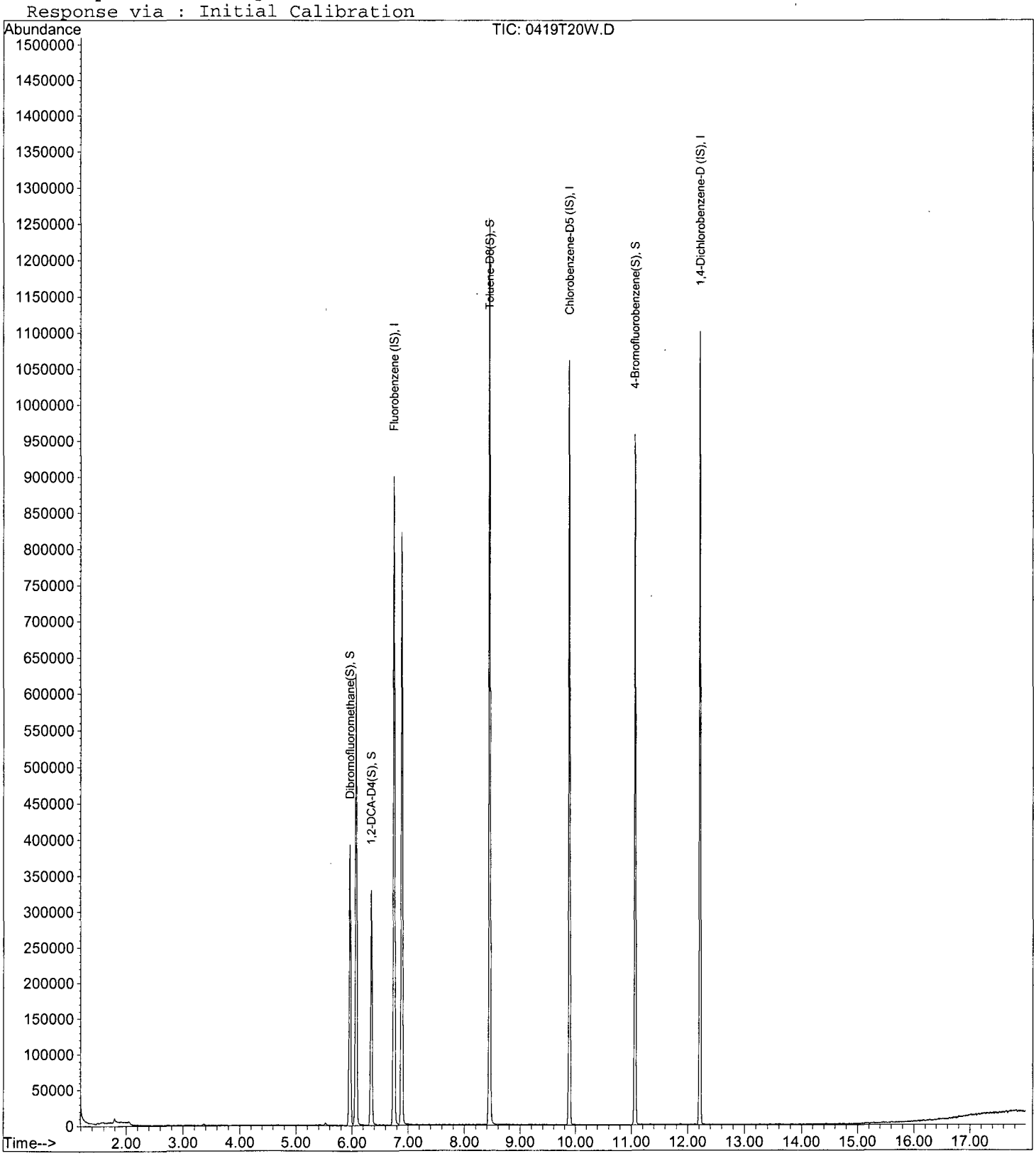
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T20W.D Vial: 10
Acq On : 19 Apr 12 13:55 Operator: DG,RS,HW,ARS,SV
Sample : AY59187W03 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:39 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C11W.D Vial: 1
Acq On : 19 Apr 12 12:58 Operator: SV
Sample : AY59187W02 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1324515	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	17.99	TIC	1407521	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1308809	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	25089432m	25.84769	ppb	ND 100

No gasoline pattern detected.
AMES 5/1/12

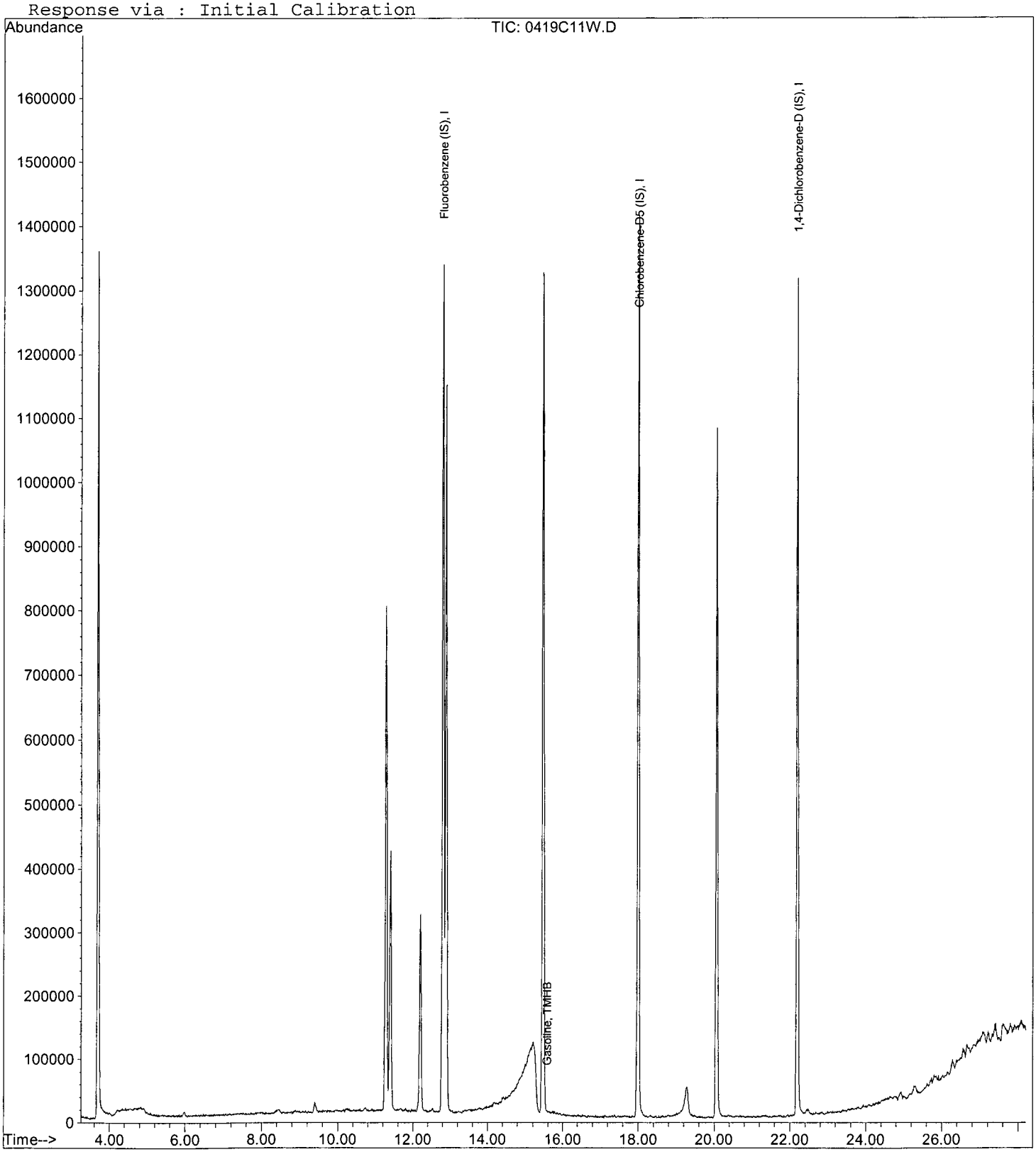
(#) = qualifier out of range (m) = manual integration
0419C11W.D CGAS.M Tue May 01 14:05:33 2012 Page 1

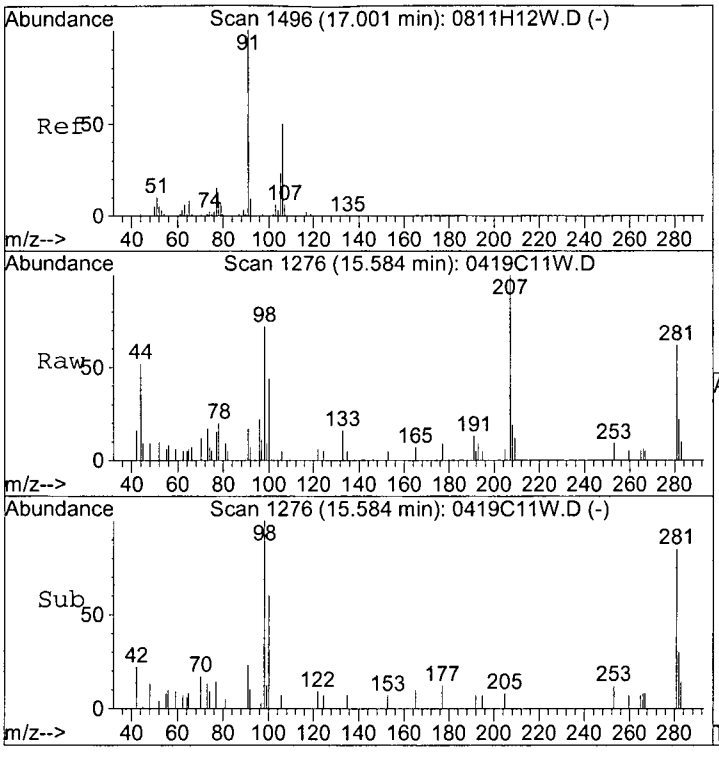
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C11W.D Vial: 1
Acq On : 19 Apr 12 12:58 Operator: SV
Sample : AY59187W02 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

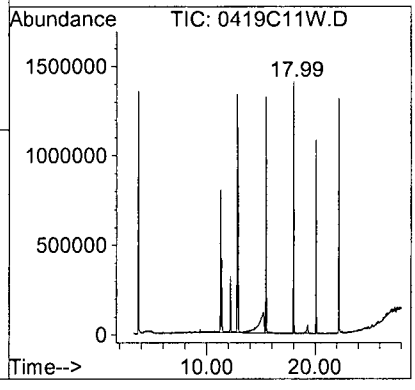
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 25.84769 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0419C11W.D
Acq: 19 Apr 12 12:58

Tgt Ion:TIC Resp:25089432



EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
ARF: 67512
Sample ID: TRIP BLANK-1
APPL ID: AY59208
Sample Collection Date: 04/16/12
QCG: #86RHB-120418AC-166402

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	04/18/12	04/18/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C11
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:05 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: TRIP BLANK-1

APPL ID: AY59208

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.47 J	5.0	0.70	0.35	ug/L	04/18/12	04/18/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	98.5	70-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	101	75-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	101	85-115			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	95.0	85-120			%	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C11
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:05 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C11W.D Vial: 1
Acq On : 18 Apr 12 17:57 Operator: SV
Sample : AY59208W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:22 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	96	625597	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	462912	25.00000 ppb	-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	211392	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	382378	20.98025 ppb	-0.04
Spiked Amount 20.866			Recovery = 100.548%		
37) 1,2-DCA-D4(S)	12.20	65	298976	20.71773 ppb	-0.03
Spiked Amount 21.039			Recovery = 98.474%		
55) Toluene-D8(S)	15.47	98	1360672	24.08976 ppb	-0.03
Spiked Amount 25.355			Recovery = 95.010%		
63) 4-Bromofluorobenzene(S)	20.07	95	631193	27.24229 ppb	-0.03
Spiked Amount 27.007			Recovery = 100.870%		
Target Compounds					Qvalue
19) Methylene chloride	8.47	84	7539	0.46834 ppb J	89

< ½ PQL

AMS 5/1/12

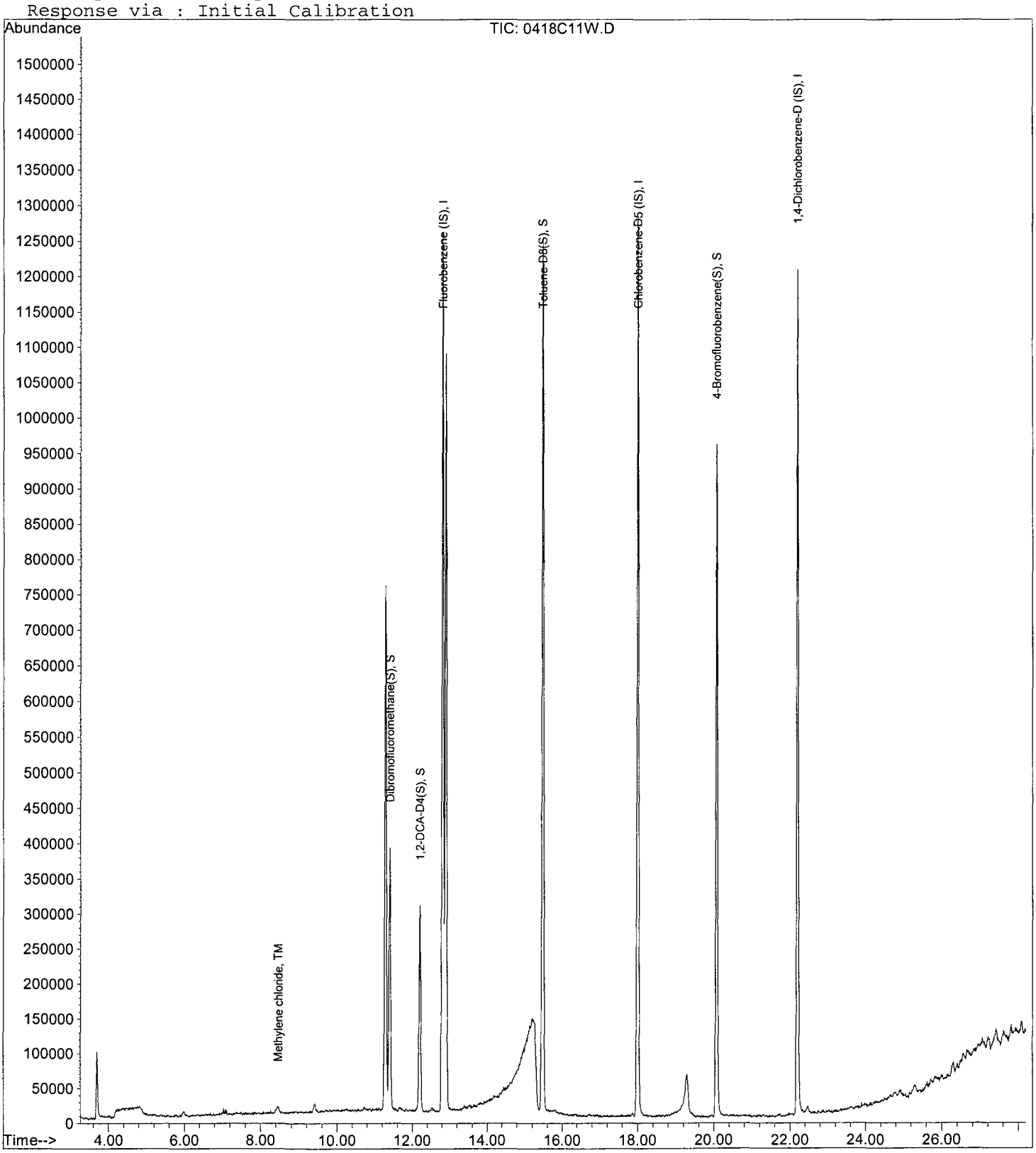
(#) = qualifier out of range (m) = manual integration

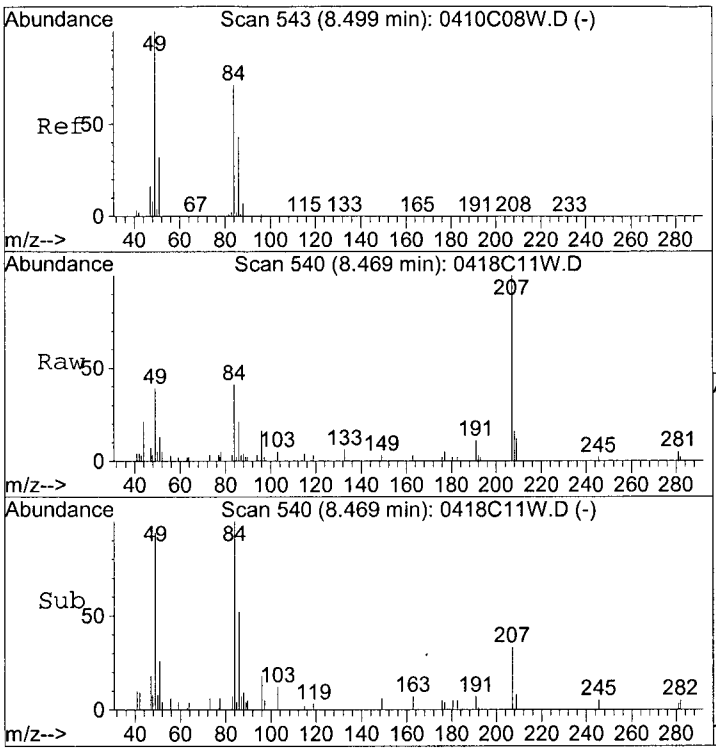
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C11W.D Vial: 1
Acq On : 18 Apr 12 17:57 Operator: SV
Sample : AY59208W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:22 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration

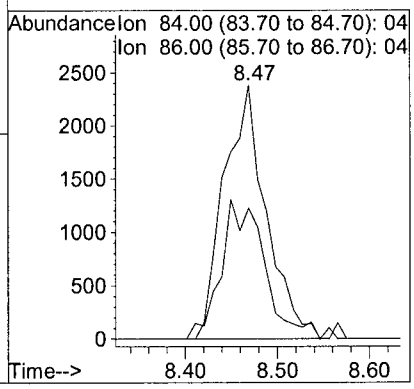




#19
Methylene chloride
Concen: 0.46834 ppb
RT: 8.47 min Scan# 540
Delta R.T. -0.03 min
Lab File: 0418C11W.D
Acq: 18 Apr 12 17:57

Tgt Ion: 84 Resp: 7539

Ion	Ratio	Lower	Upper
84	100		
86	51.6	42.1	78.1



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C11W.D Vial: 1
Acq On : 18 Apr 12 17:57 Operator: SV
Sample : AY59208W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1246665	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.00	TIC	1273503	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.20	TIC	1199326	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24605835m	34.99519	ppb ND	100

No gasoline pattern
ARS 5/1/12

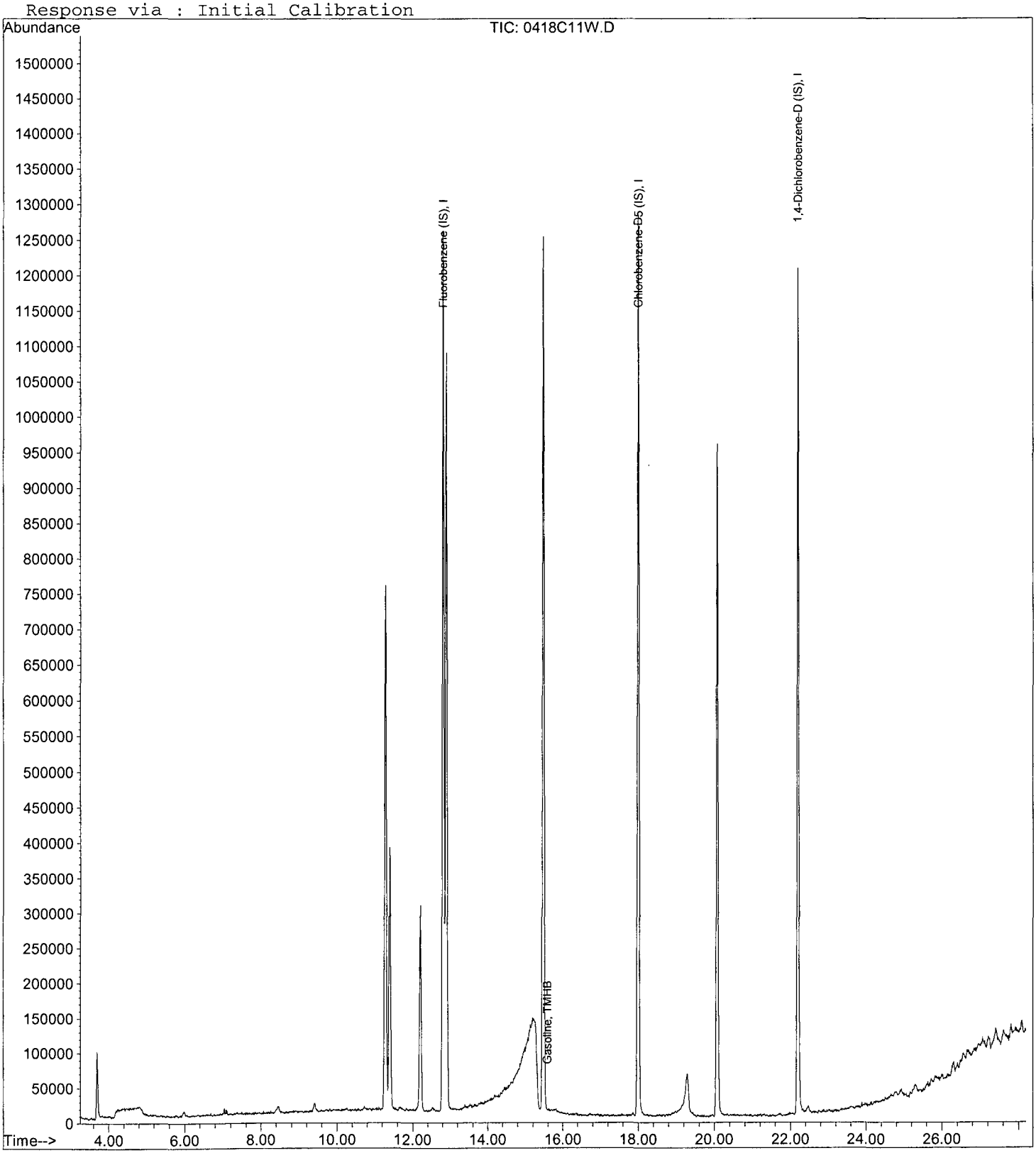
(#) = qualifier out of range (m) = manual integration

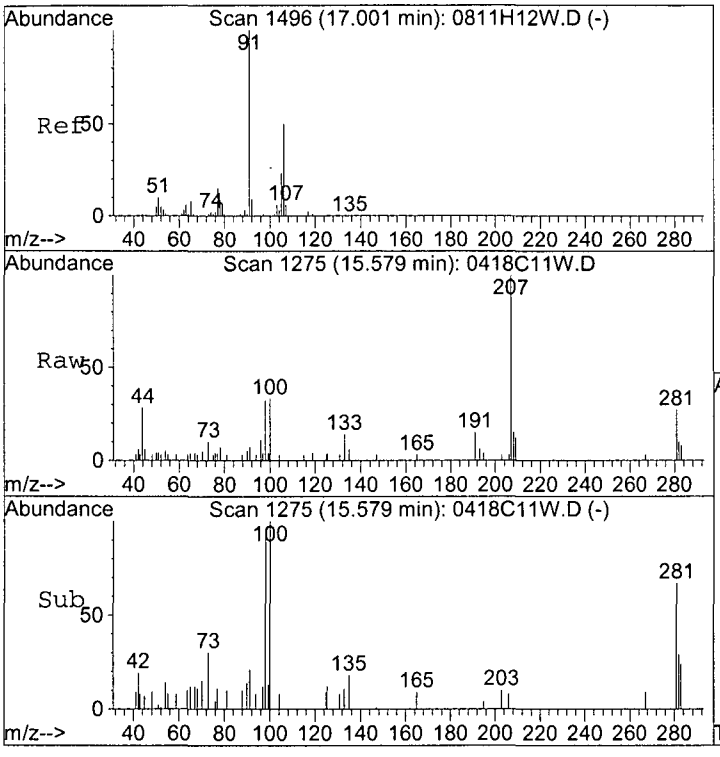
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C11W.D Vial: 1
Acq On : 18 Apr 12 17:57 Operator: SV
Sample : AY59208W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

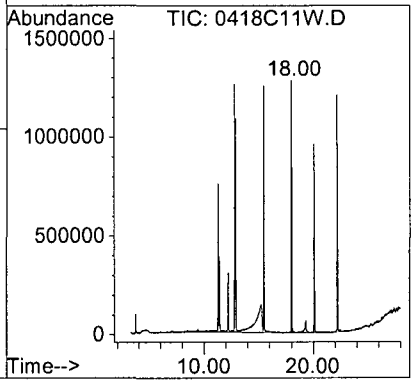
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 34.99519 ppb m
RT: 15.58 min Scan# 1275
Delta R.T. 0.00 min
Lab File: 0418C11W.D
Acq: 18 Apr 12 17:57

Tgt Ion:TIC Resp:24605835



EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: TRIP BLANK-2

APPL ID: AY59209

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

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	04/18/12	04/18/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C12
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:05 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: TRIP BLANK-2

APPL ID: AY59209

Sample Collection Date: 04/16/12

QCG: #86RHB-120418AC-166402

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.46 J	5.0	0.70	0.35	ug/L	04/18/12	04/18/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	102	70-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	99.5	75-120			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	103	85-115			%	04/18/12	04/18/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	90.8	85-120			%	04/18/12	04/18/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0418C12
Instrument: Chico
Sequence: C120410
Dilution Factor: 1
Initials: ARS

Printed: 05/01/12 5:22:05 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C12W.D Vial: 1
Acq On : 18 Apr 12 18:34 Operator: SV
Sample : AY59209W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:42 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	96	620075	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	479488	25.00000 ppb	-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	212224	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	388693	21.51667 ppb	-0.04
Spiked Amount 20.866			Recovery = 103.121%		
37) 1,2-DCA-D4(S)	12.21	65	307767	21.51683 ppb	-0.03
Spiked Amount 21.039			Recovery = 102.272%		
55) Toluene-D8(S)	15.47	98	1347515	23.03209 ppb	-0.04
Spiked Amount 25.355			Recovery = 90.838%		
63) 4-Bromofluorobenzene(S)	20.07	95	644763	26.86595 ppb	-0.03
Spiked Amount 27.007			Recovery = 99.478%		
Target Compounds					Qvalue
19) Methylene chloride	8.45	84	7371	0.46199 ppb J	95
34) Cyclohexane	11.98	56	2068	0.10123 ppb NT#	80

< ½ PQL

ARS 5/1/12

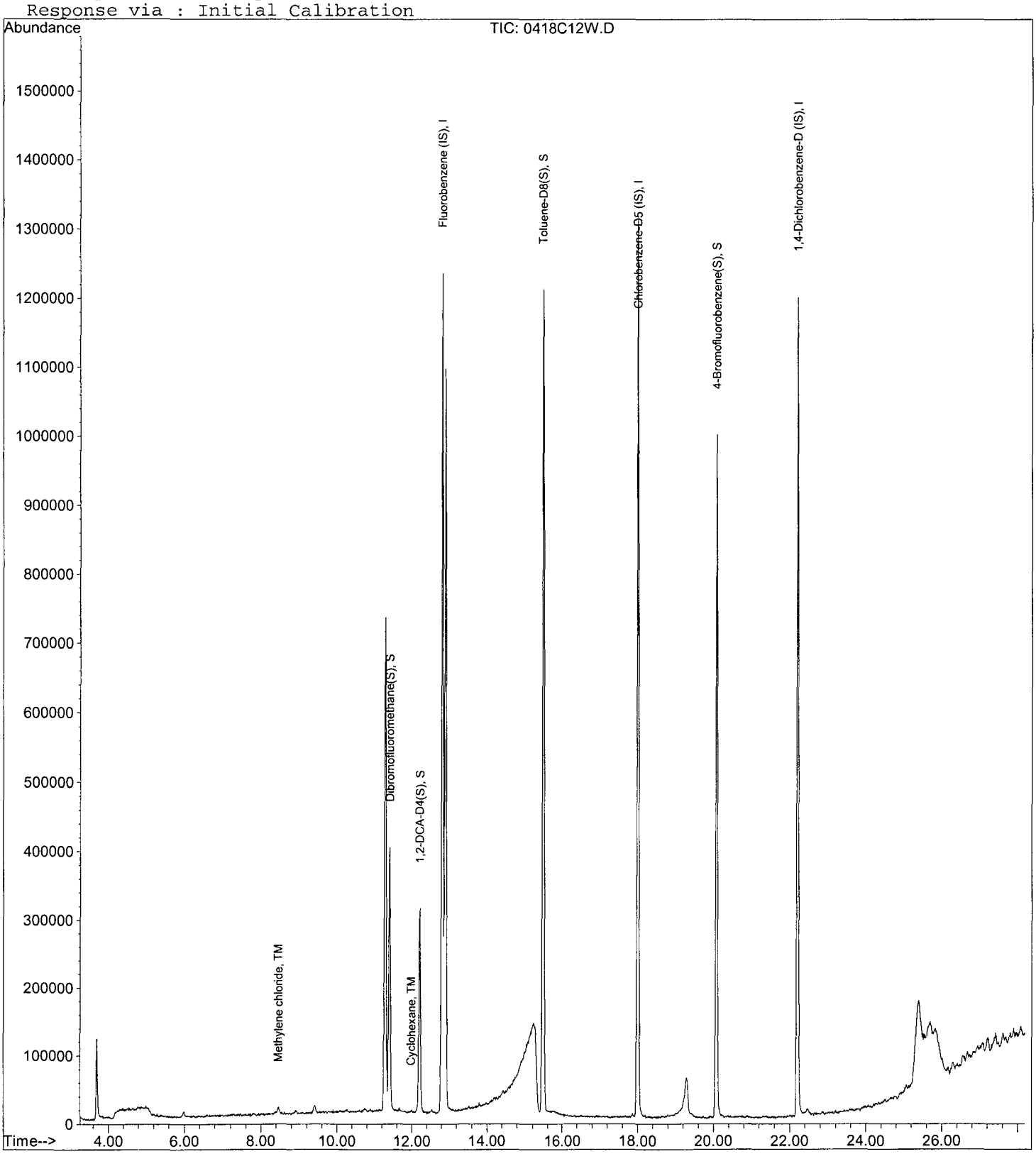
(#) = qualifier out of range (m) = manual integration

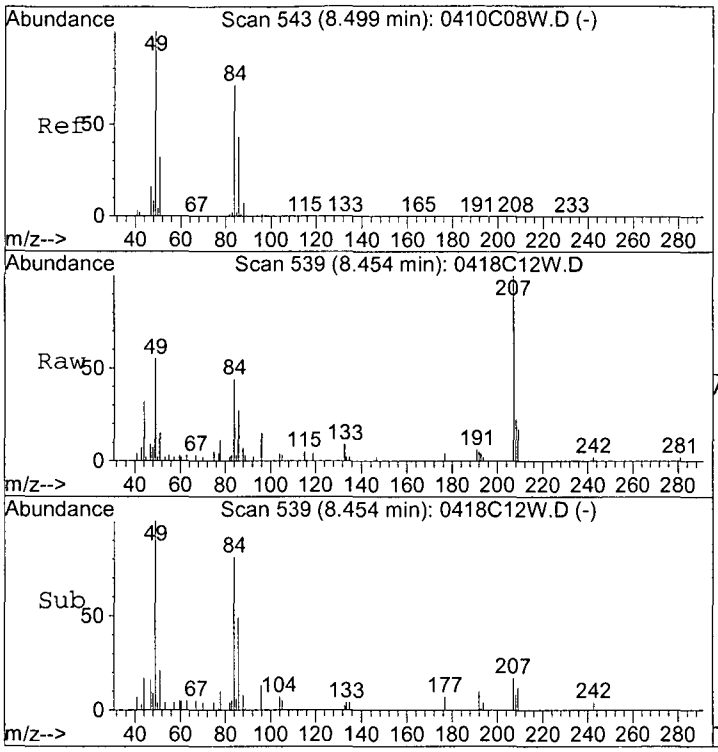
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C12W.D Vial: 1
Acq On : 18 Apr 12 18:34 Operator: SV
Sample : AY59209W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 16:42 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration

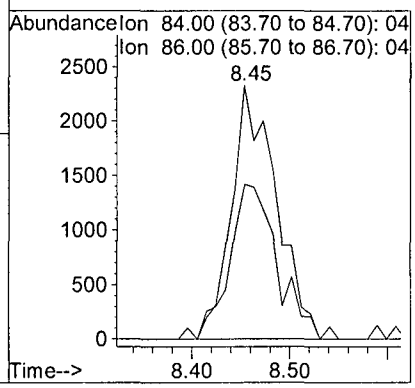


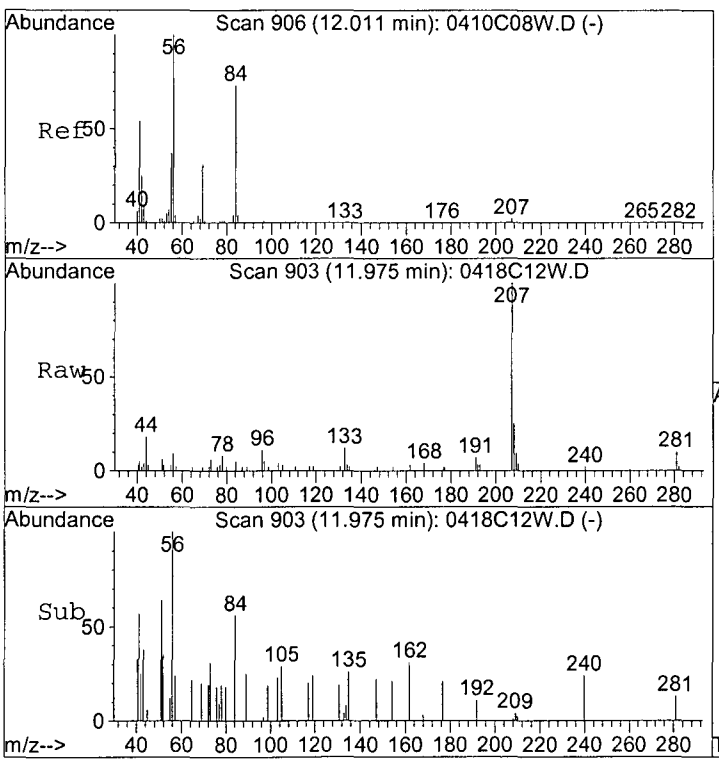


#19
Methylene chloride
Concen: 0.46199 ppb
RT: 8.45 min Scan# 539
Delta R.T. -0.05 min
Lab File: 0418C12W.D
Acq: 18 Apr 12 18:34

Tgt Ion: 84 Resp: 7371

Ion	Ratio	Lower	Upper
84	100		
86	56.4	42.1	78.1

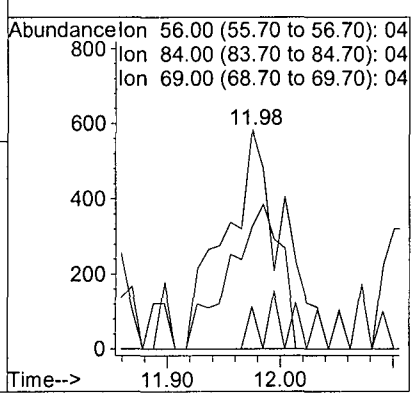




#34
Cyclohexane
Concen: 0.10123 ppb
RT: 11.98 min Scan# 903
Delta R.T. -0.04 min
Lab File: 0418C12W.D
Acq: 18 Apr 12 18:34

Tgt Ion: 56 Resp: 2068

Ion	Ratio	Lower	Upper
56	100		
84	56.2	50.9	94.5
69	19.5	21.8	40.4#



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C12W.D Vial: 1
Acq On : 18 Apr 12 18:34 Operator: SV
Sample : AY59209W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	TIC	1219757	25.00000	ppb	0.03
3) Chlorobenzene-D5 (IS)	18.00	TIC	1306725	25.00000	ppb	0.02
4) 1,4-Dichlorobenzene-D (IS)	22.20	TIC	1190634	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24363487m	37.71908	ppb	ND 100

No gasoline pattern
ARS 5/1/12

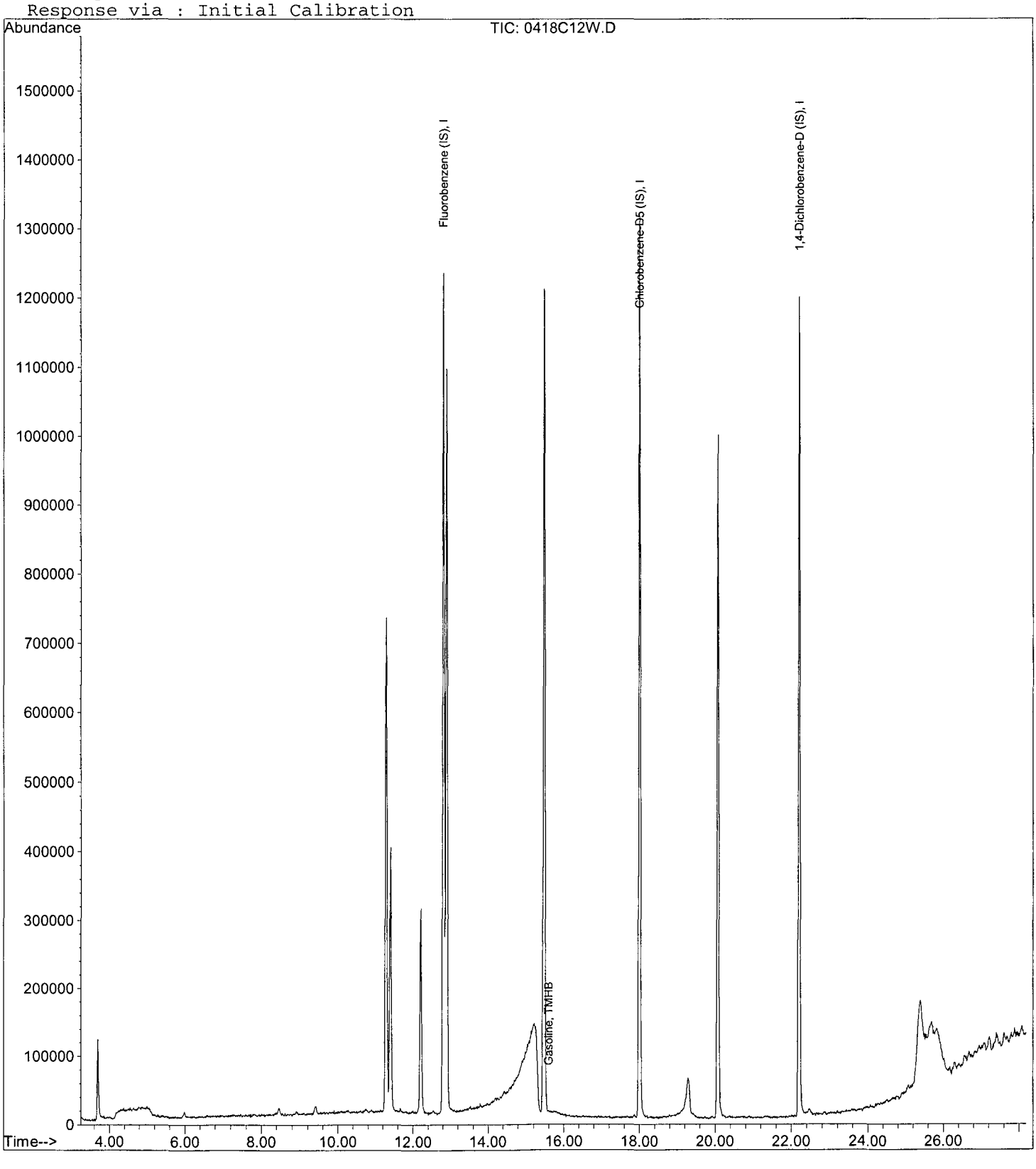
(#) = qualifier out of range (m) = manual integration

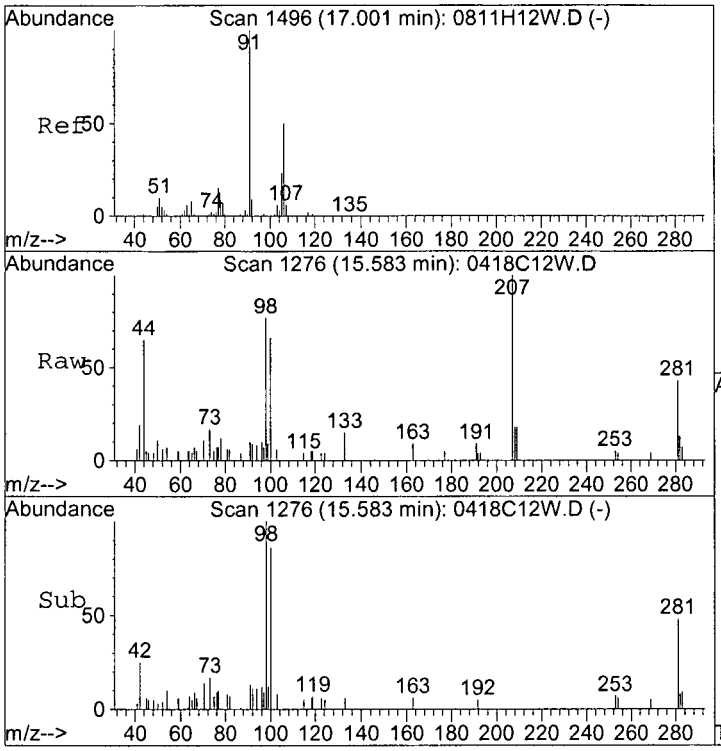
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C12W.D Vial: 1
Acq On : 18 Apr 12 18:34 Operator: SV
Sample : AY59209W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:13 2012 Quant Results File: CGAS.RES

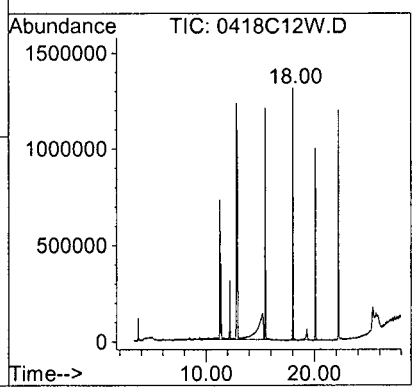
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 37.71908 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0418C12W.D
Acq: 18 Apr 12 18:34

Tgt Ion:TIC Resp:24363487



EPA METHOD 8260B
Volatile Organic Compounds
Calibration Data

APPL, INC.

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 01/25/12
Matrix: Instrument: Chico
Initials:

		Compound	20	50	100	300	600	800	1000				Avg	%RSD		
			0125C29W.D	0125C30W.D	0125C31W.D	0125C32W.D	0125C33W.D	0125C34W.D	0125C35W.D							r
1	I	Fluorobenzene (IS)														
2	TMHBL	Gasoline	23.6	10.6	5.907	3.541	2.892	2.841	2.494				7.4	104	TMHBL	0.997
3	I	Chlorobenzene-D5 (IS)														
4	I	1,4-Dichlorobenzene-D (IS)														
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:34 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:01:13 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1053352	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1266647	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1287754	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	19858101m	31.82421	ppb	100

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

Quantitation Report

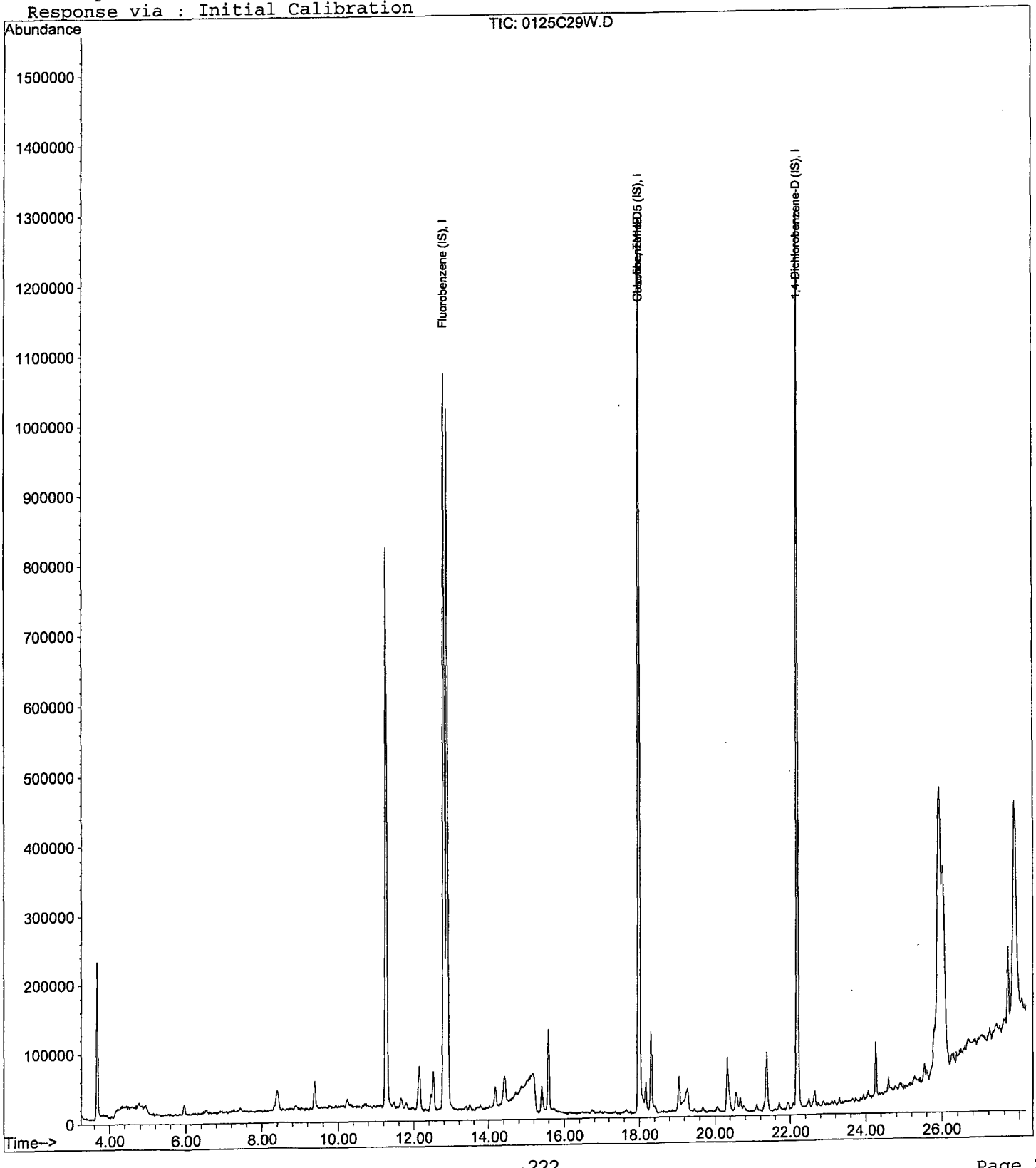
Data File : M:\CHICO\DATA\C120125\0125C29W.D
Acq On : 26 Jan 12 19:32
Sample : Vol. Std. 01-26-12@20ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:34 2012

Quant Results File: CGAS.RES

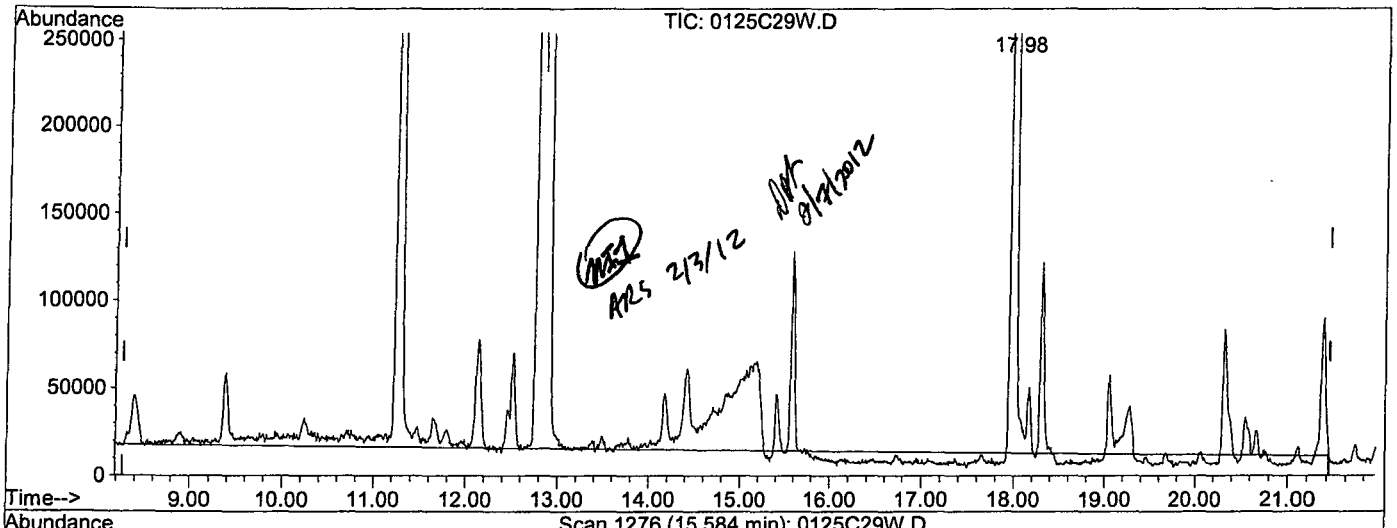
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

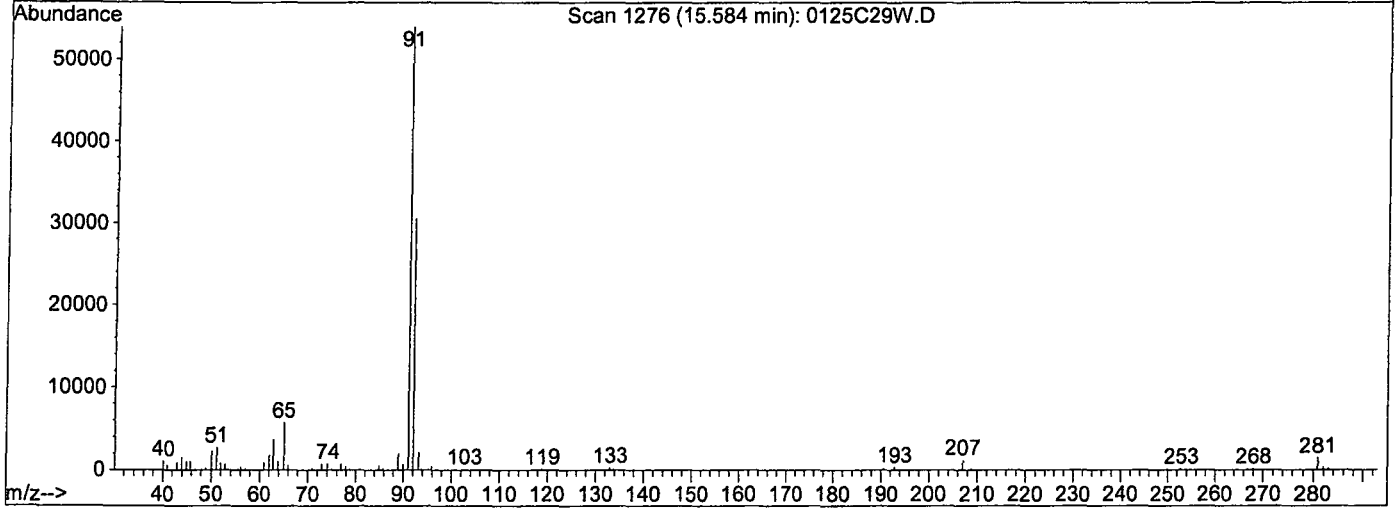


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

15.58min -8.2763ppb m

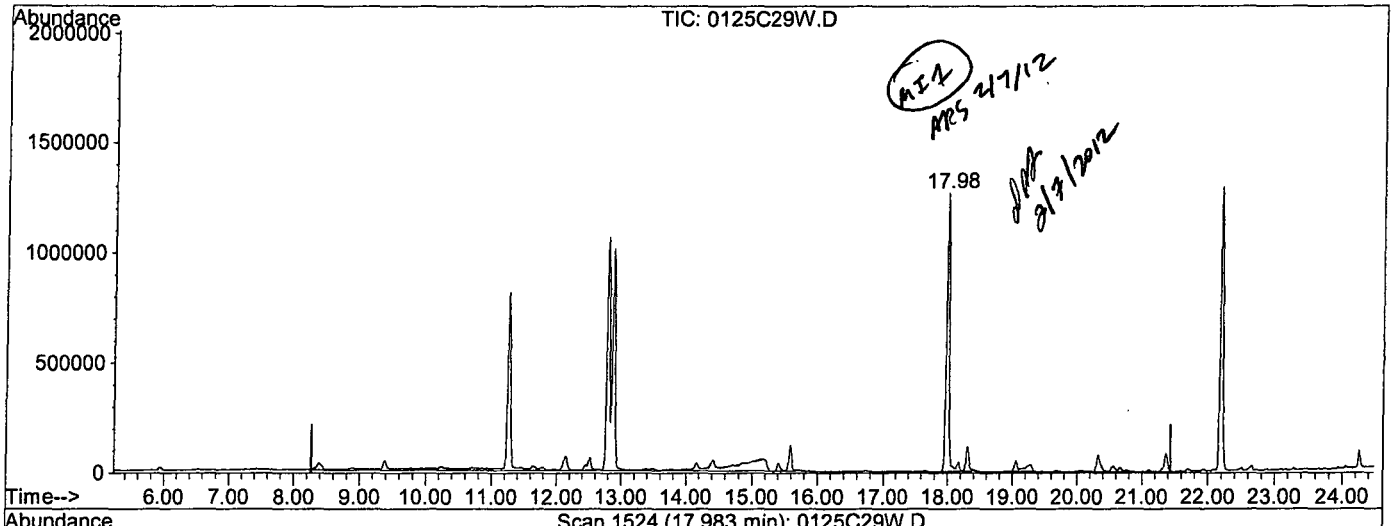
response 16152794

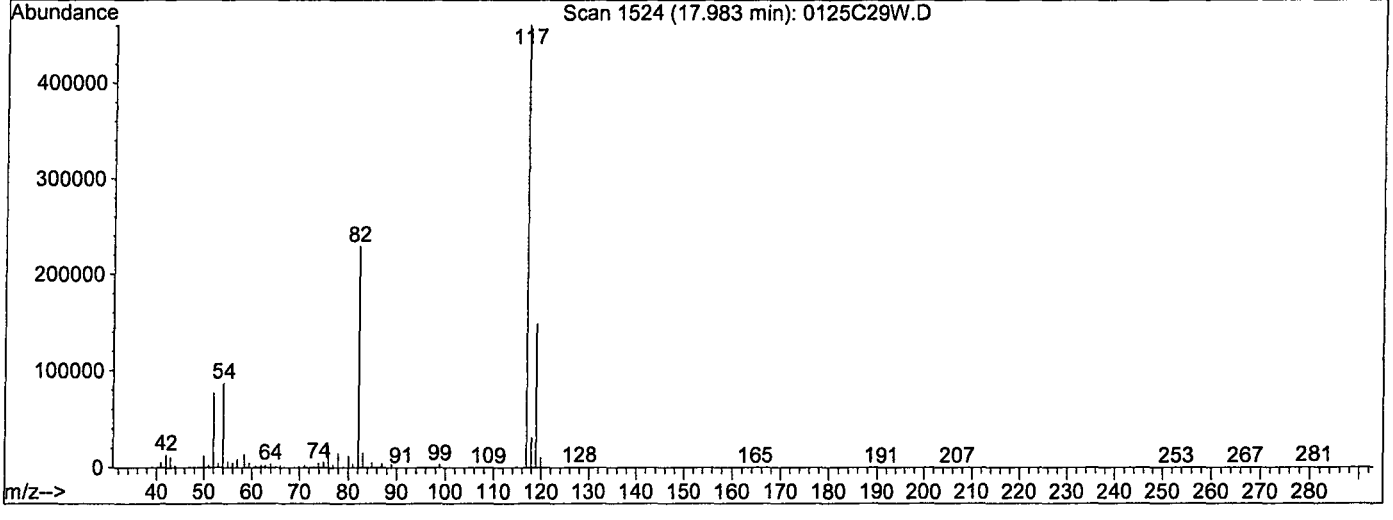
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.79#
0.00	0.00	2.40#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:34 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

17.98min 31.8242ppb m

response 19858101

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.95#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1088272	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.99	TIC	1269196	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1282230	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.99	TIC	23136590m	59.27095	ppb	100

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

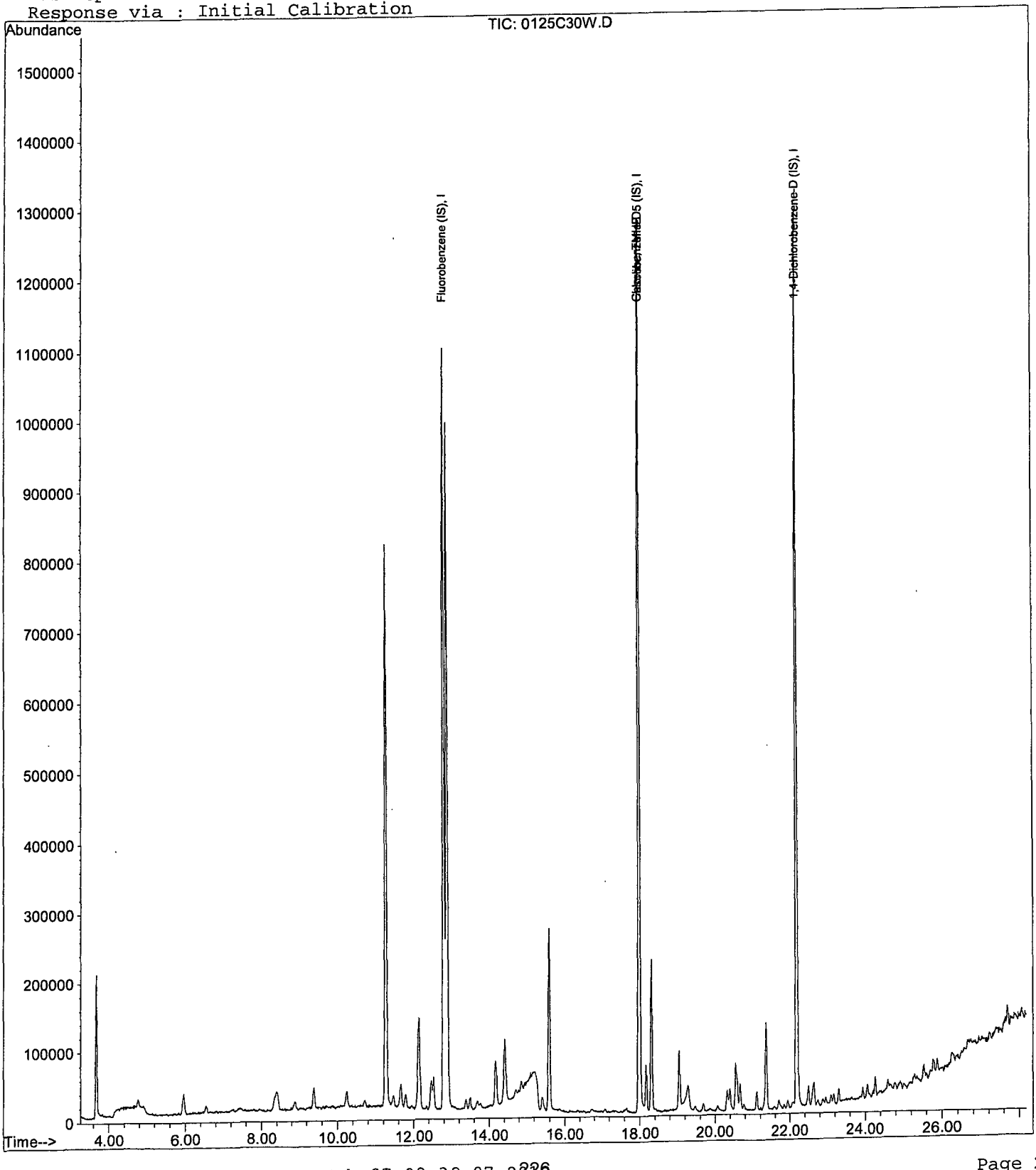
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D
Acq On : 26 Jan 12 20:09
Sample : Vol. Std. 01-26-12@50ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

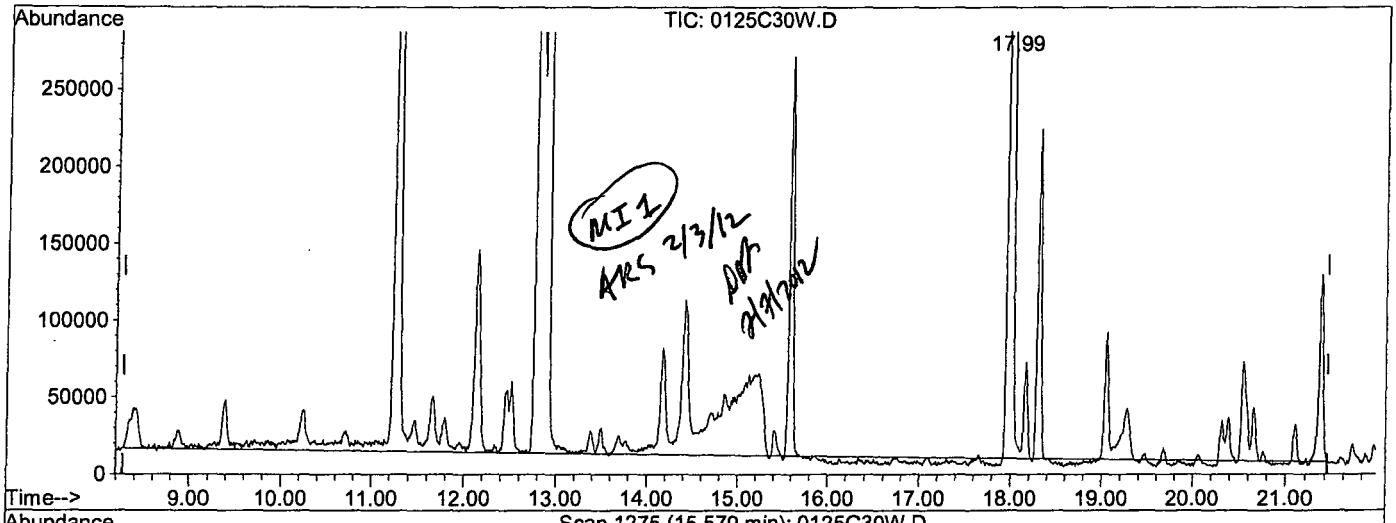
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

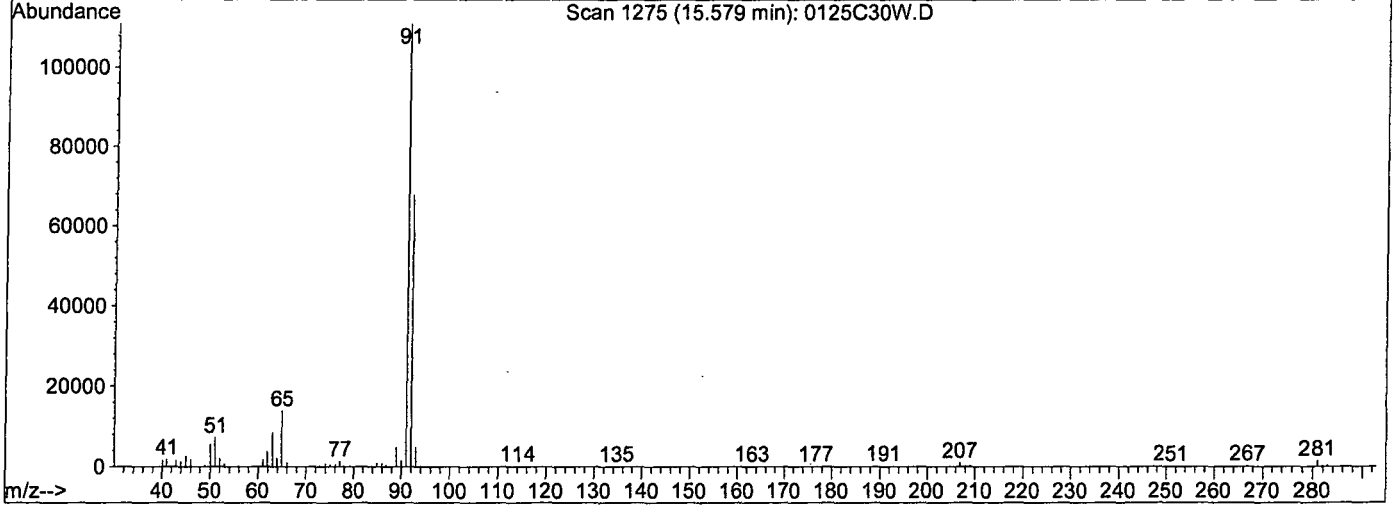


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C30W.D

(2) Gasoline (TMHB)

15.58min -0.0275ppb m

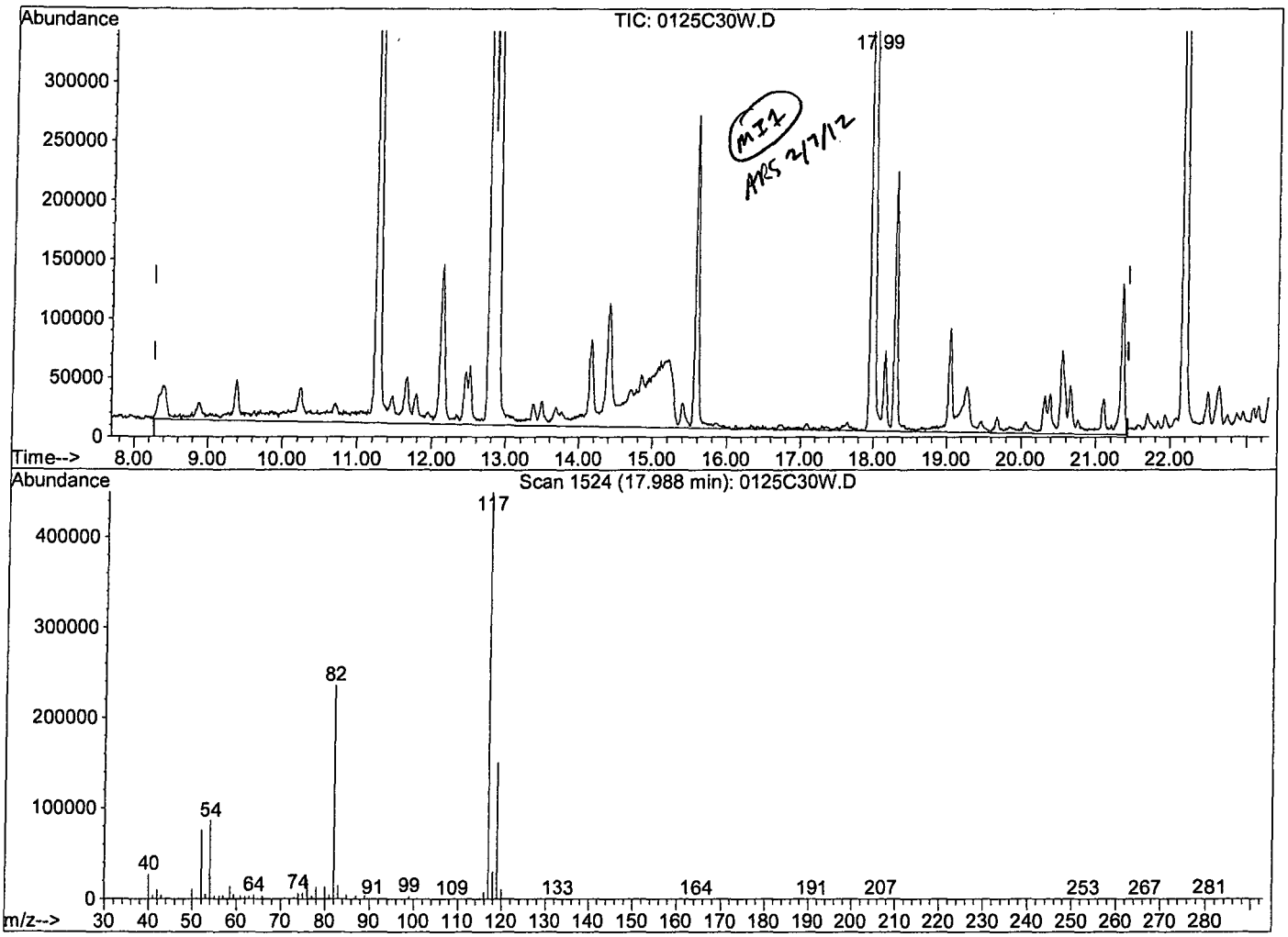
response 17475741

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.72#
0.00	0.00	2.18#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:35 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



TIC: 0125C30W.D

(2) Gasoline (TMHB)

17.99min 59.2710ppb m

response 23136590

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.54#
0.00	0.00	1.65#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1080126	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1280154	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1288106	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	26257782m	94.04042	ppb	100

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

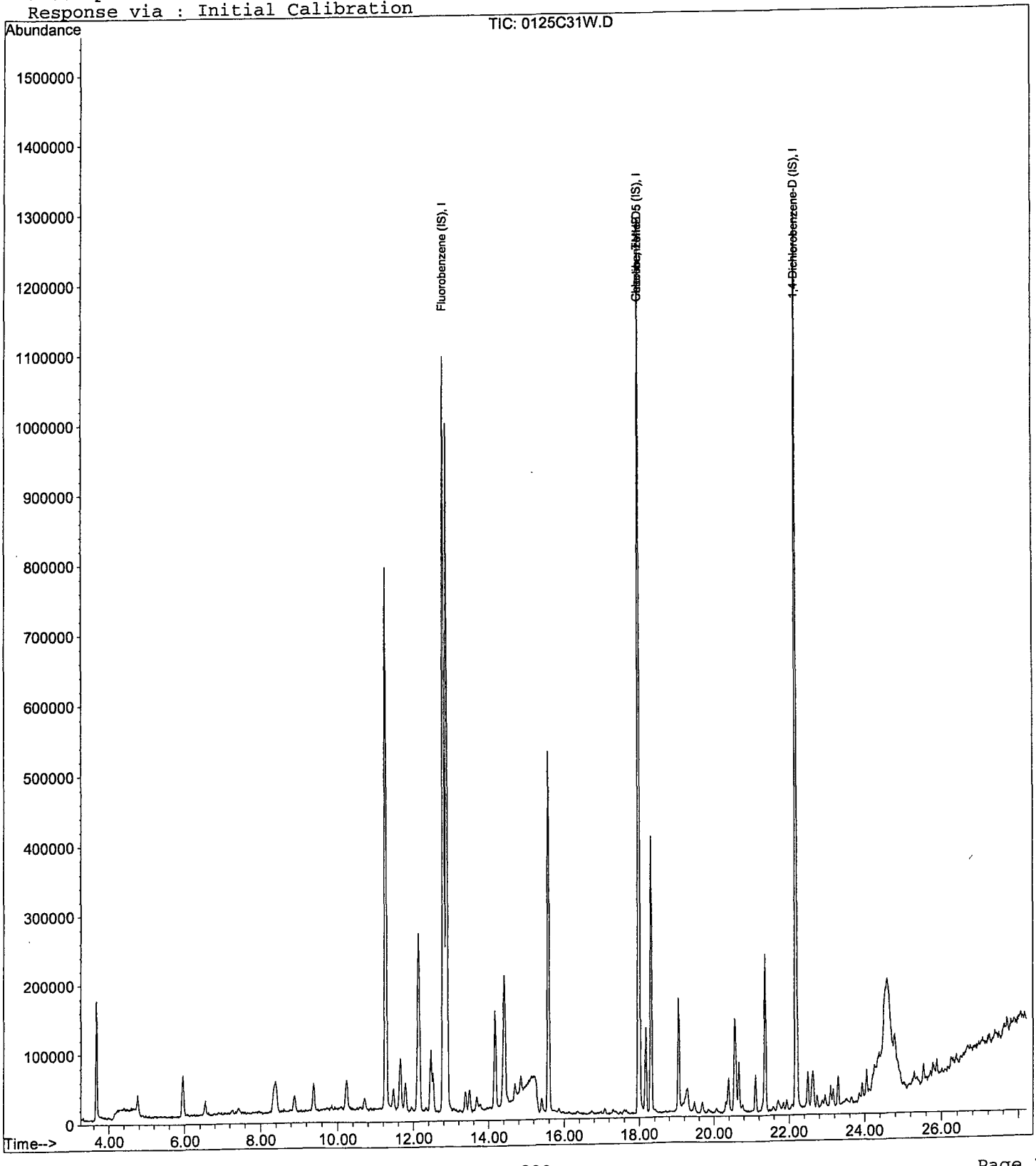
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D
Acq On : 26 Jan 12 20:46
Sample : Vol. Std. 01-26-12@100ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

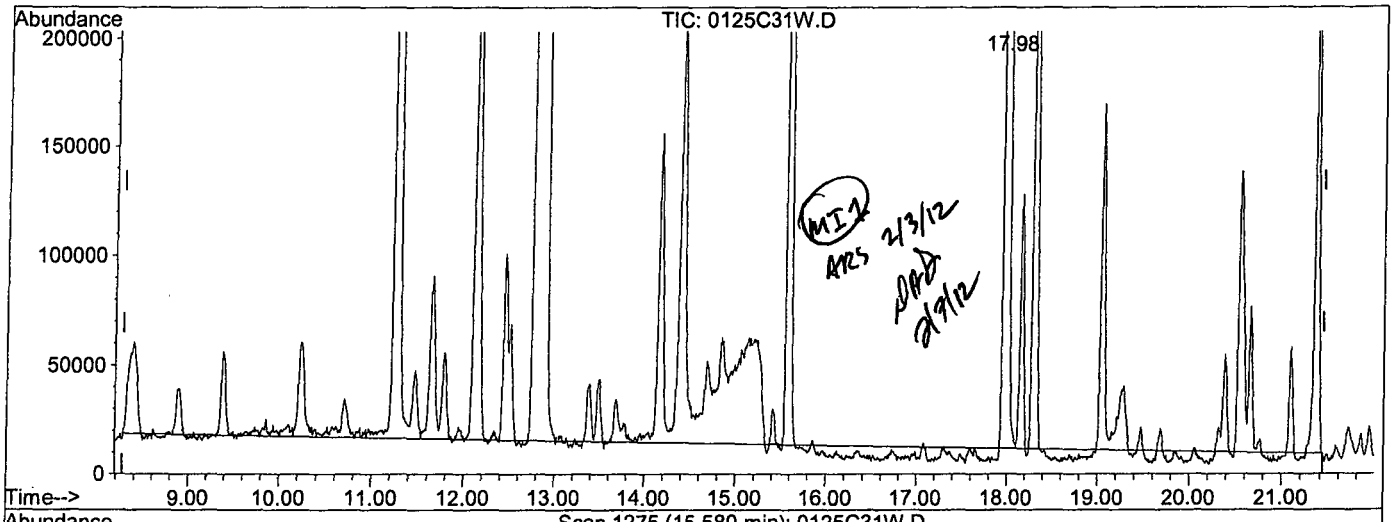
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

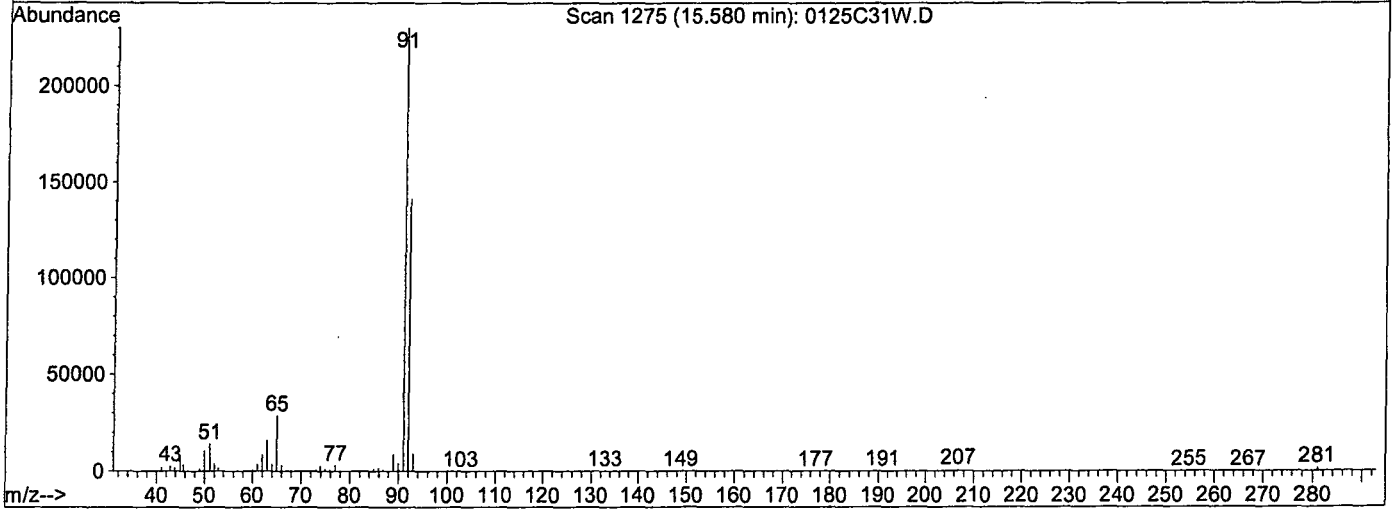


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C31W.D

(2) Gasoline (TMHB)

15.58min 27.4179ppb m

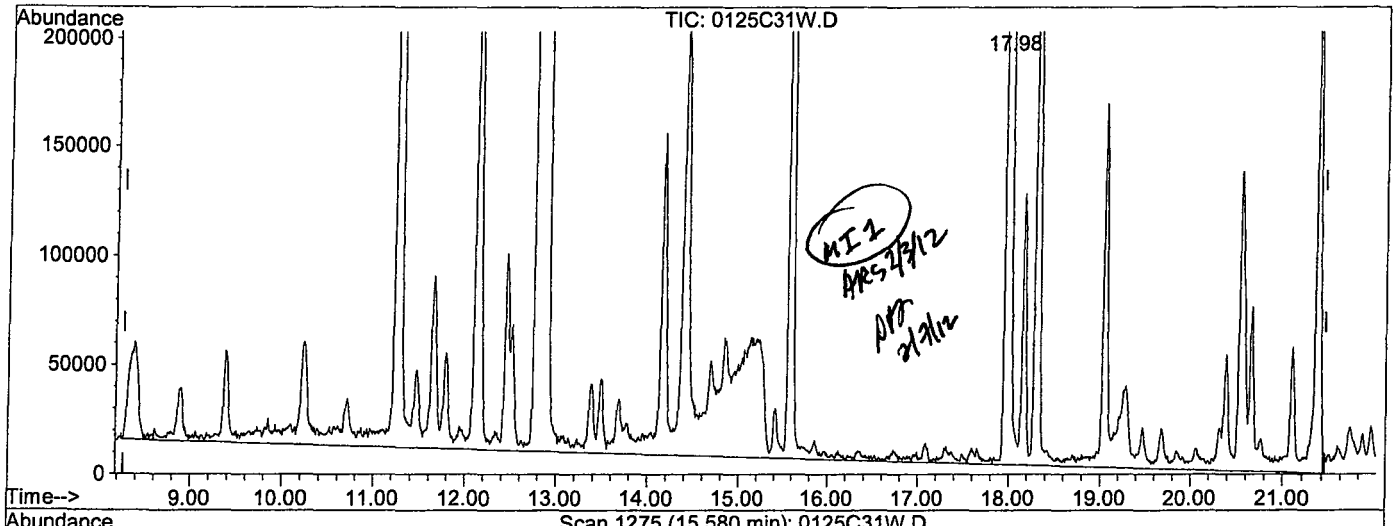
response 19945363

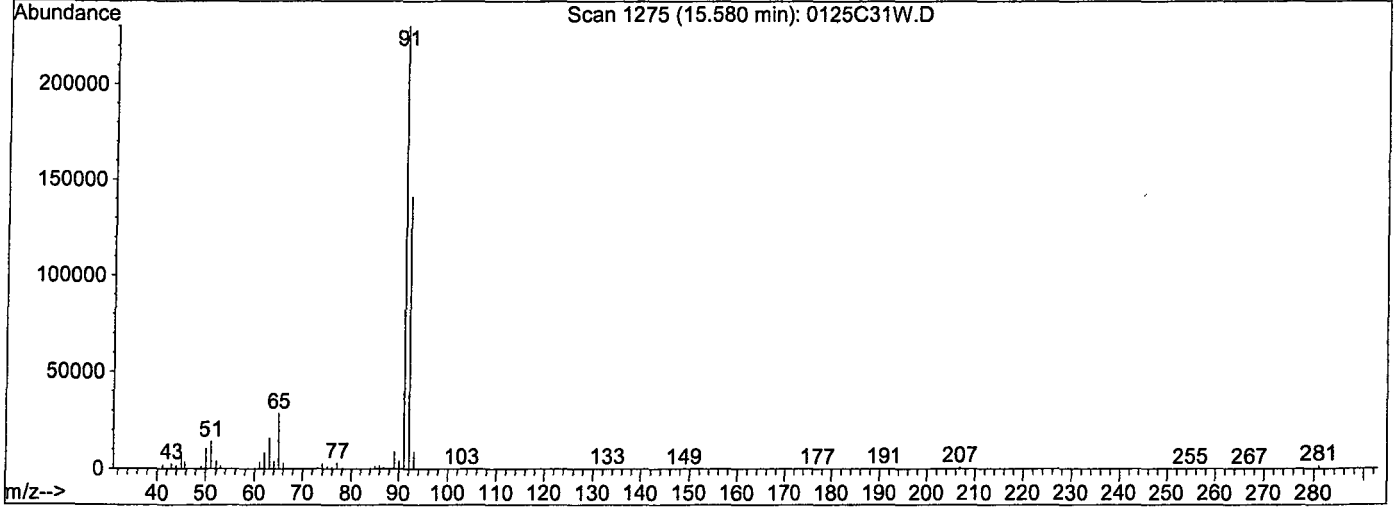
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.85#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:13 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C31W.D

(2) Gasoline (TMHB)

17.98min 94.0404ppb m

response 26257782

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.48#
0.00	0.00	1.40#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1085223	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1323772	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1382634	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	46451061m	304.86153	ppb	100

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

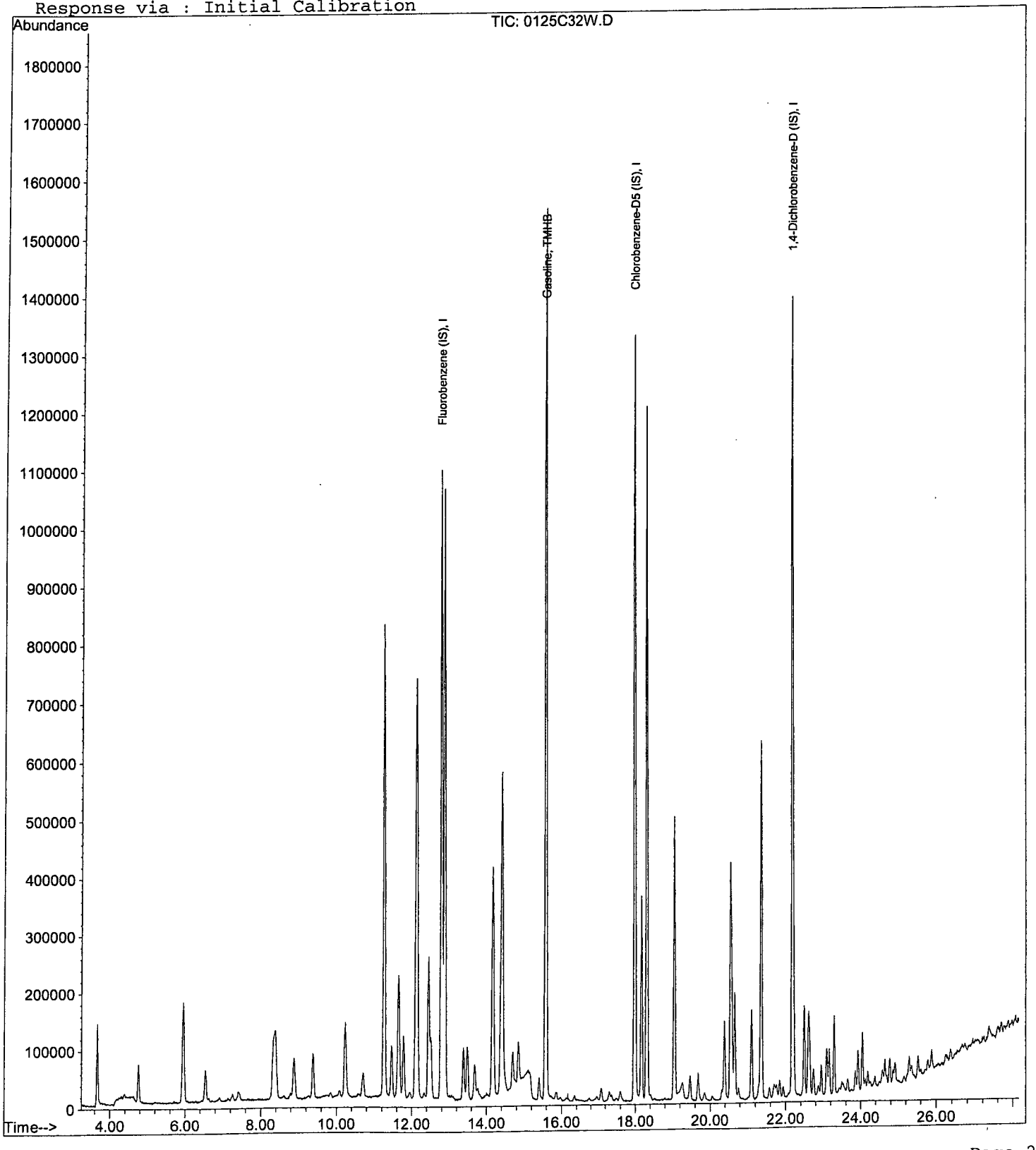
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D
Acq On : 26 Jan 12 21:24
Sample : Vol. Std. 01-26-12@300ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

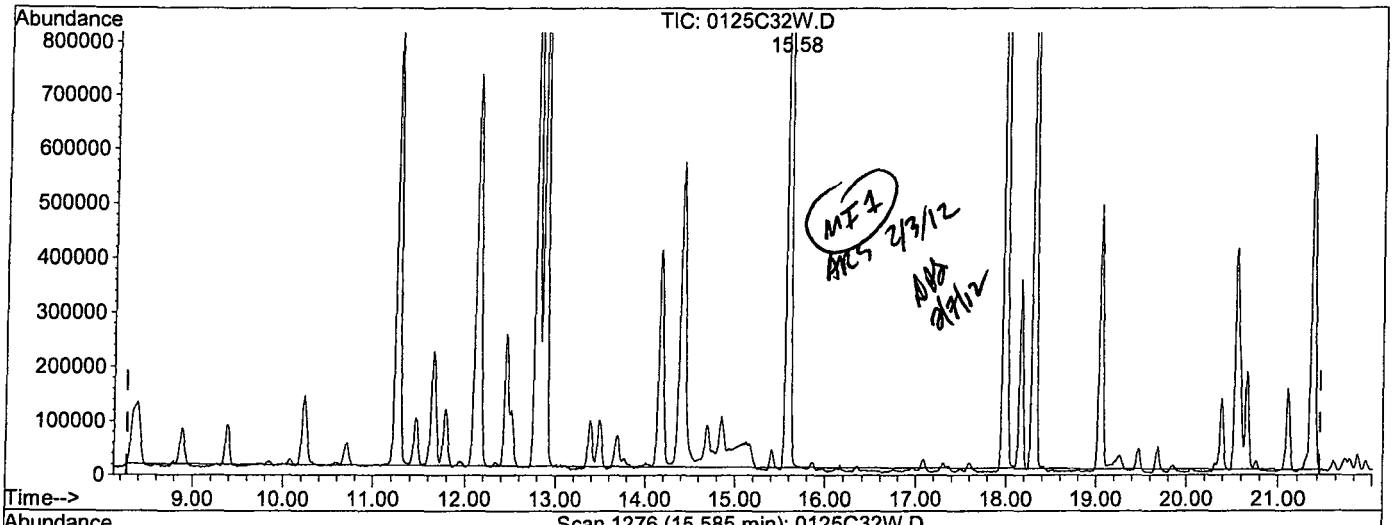
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

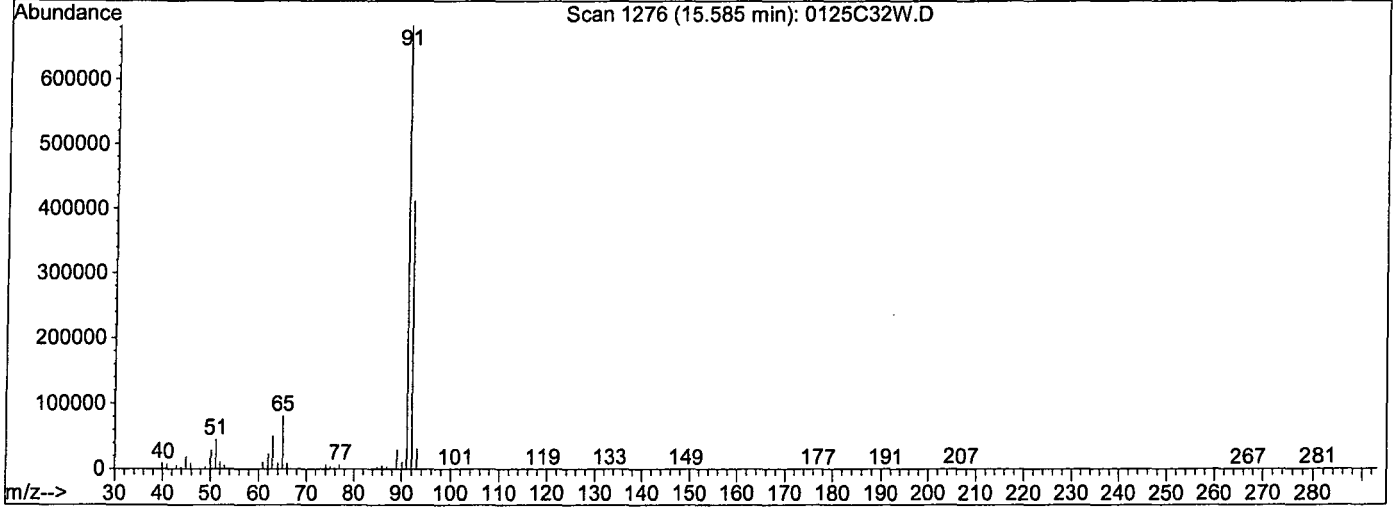


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 245.6055ppb m

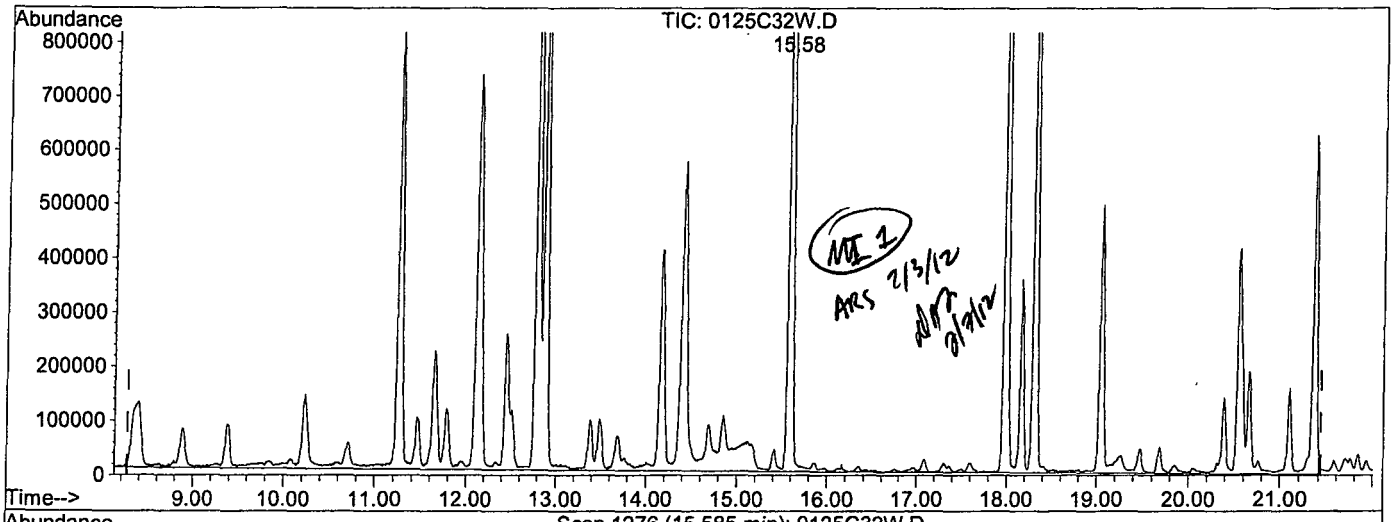
response 40810111

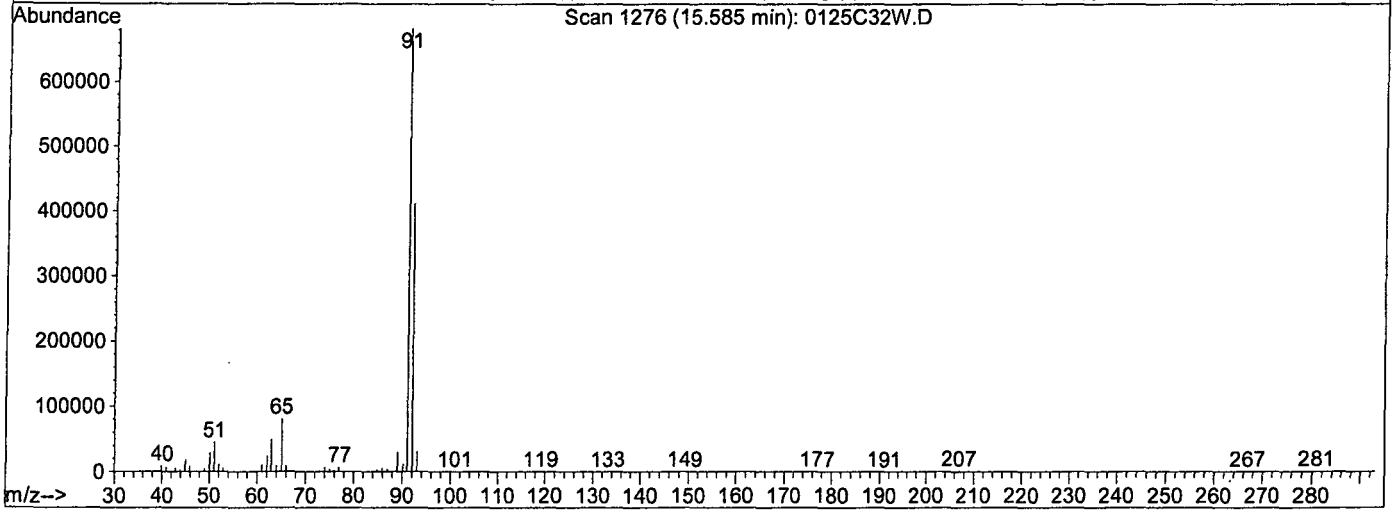
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.33#
0.00	0.00	0.94#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:09 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 304.8615ppb m

response 46451061

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.29#
0.00	0.00	0.83#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:07 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1115516	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1310876	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1420552	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	72391801m	556.70838	ppb	100

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

Quantitation Report

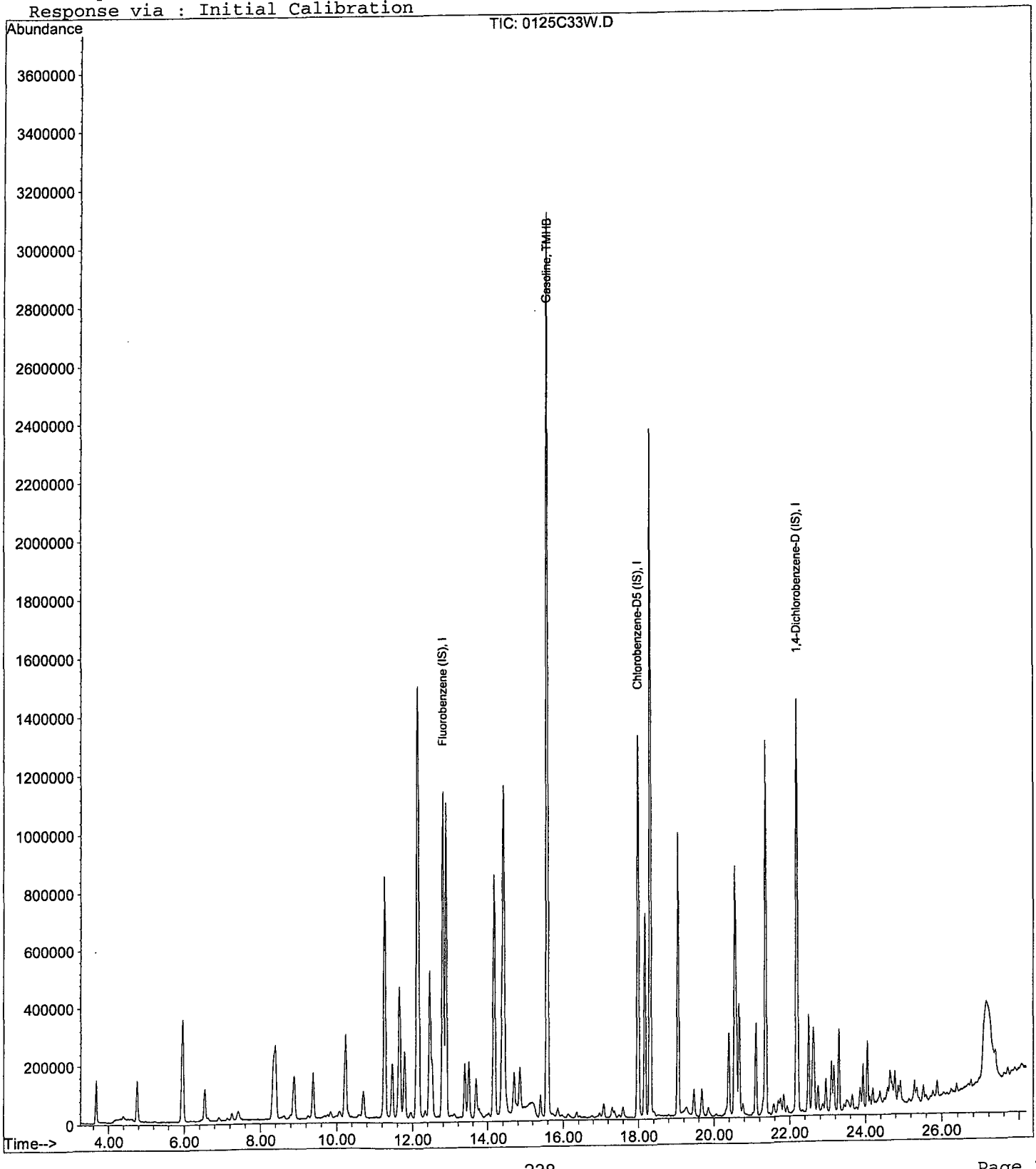
Data File : M:\CHICO\DATA\C120125\0125C33W.D
Acq On : 26 Jan 12 22:01
Sample : Vol. Std. 01-26-12@600ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:07 2012

Quant Results File: CGAS.RES

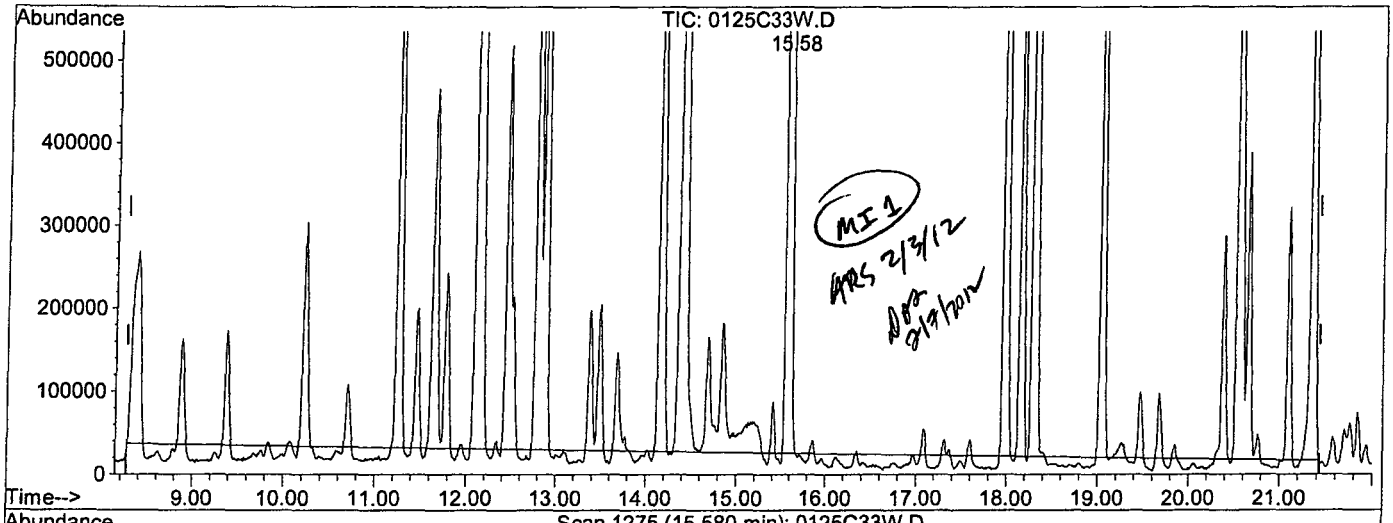
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

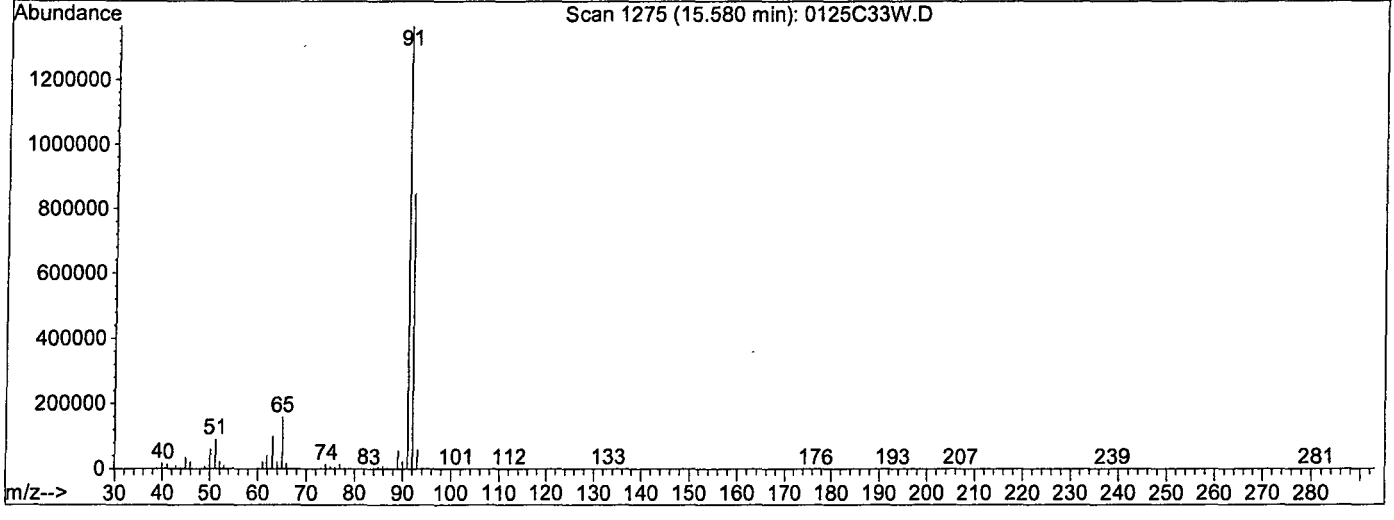


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 556.7084ppb m

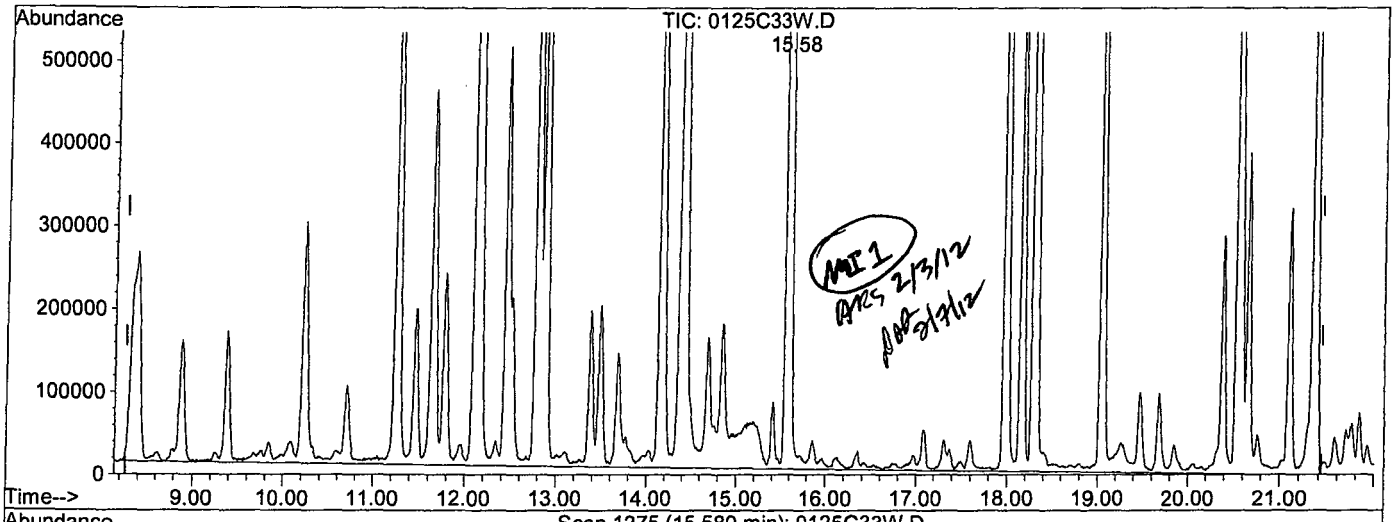
response 72391801

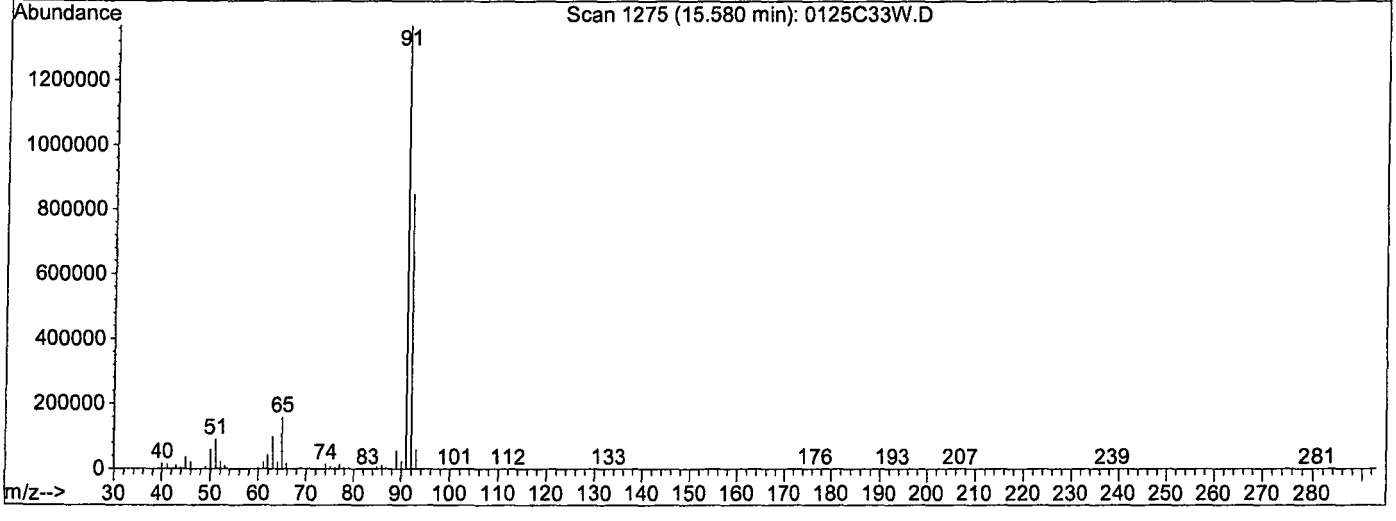
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.18#
0.00	0.00	0.53#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:16 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 621.4121ppb m

response 78723288

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.16#
0.00	0.00	0.49#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1172096	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1436710	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1528793	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	102155823m	810.48263	ppb	100

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

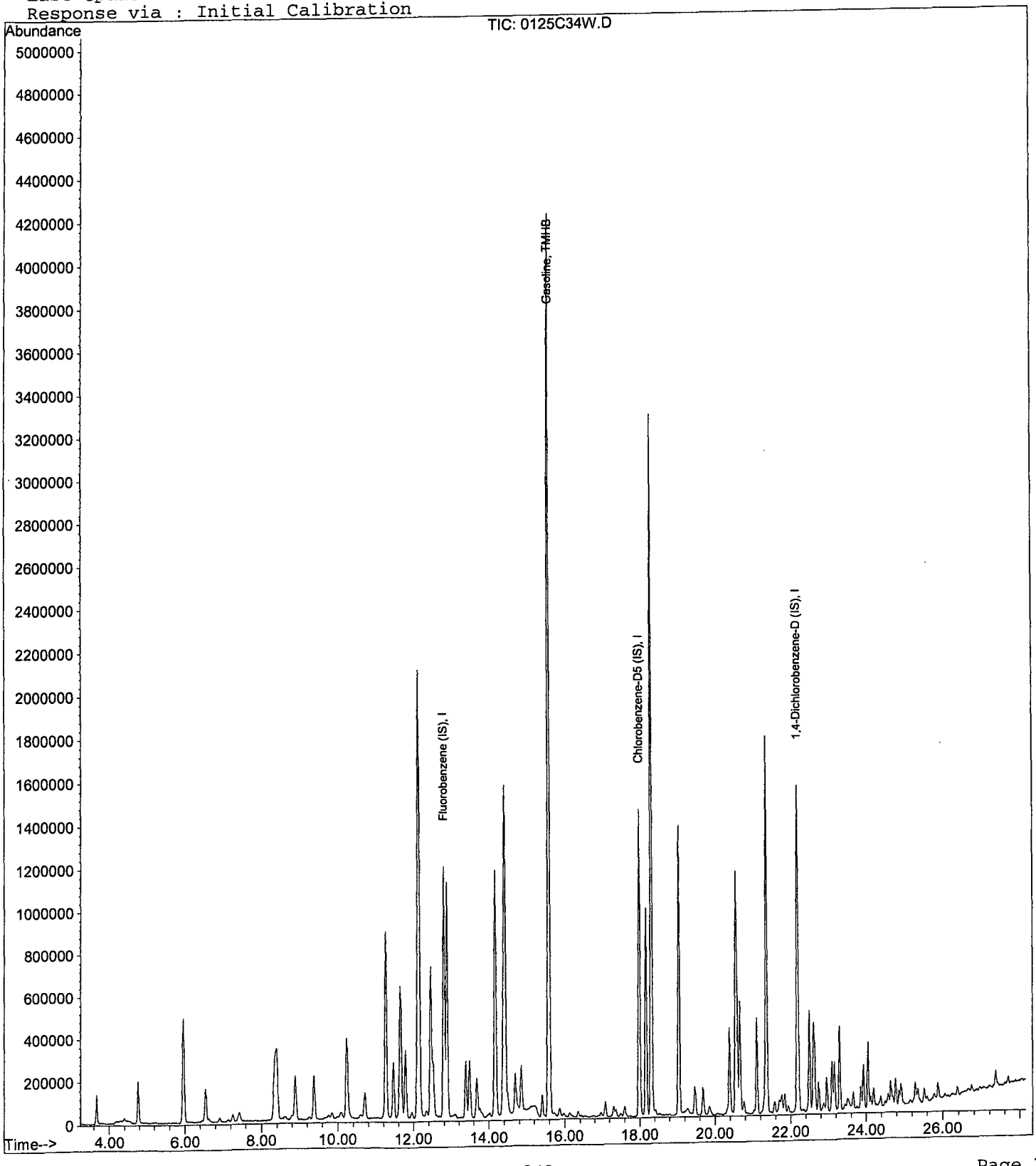
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D
Acq On : 26 Jan 12 22:38
Sample : Vol. Std. 01-26-12@800ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

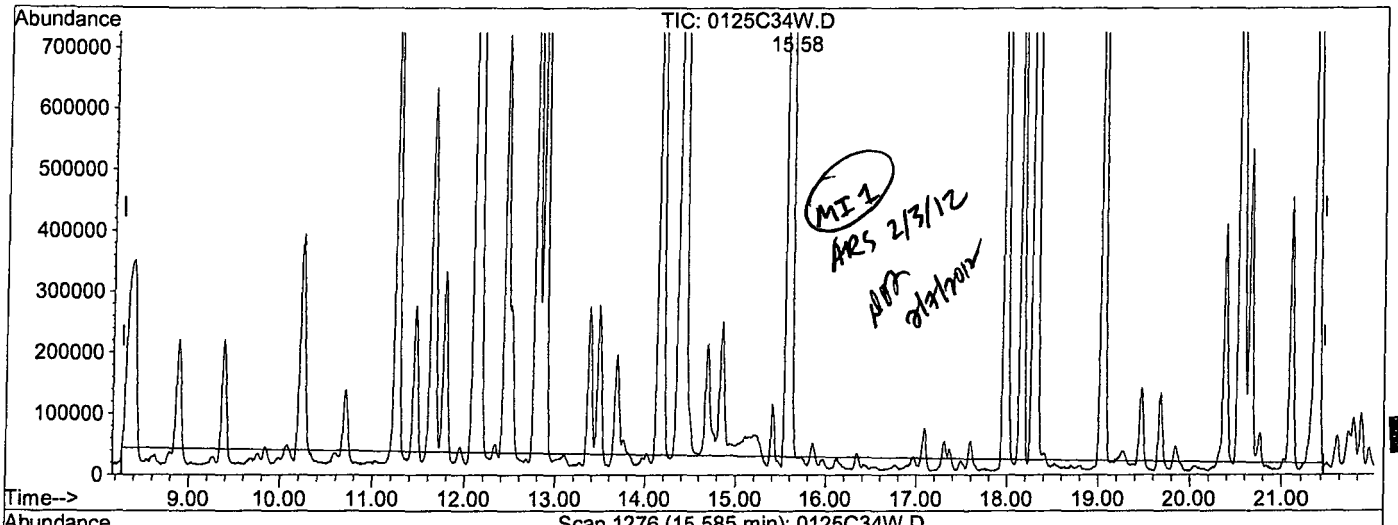
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

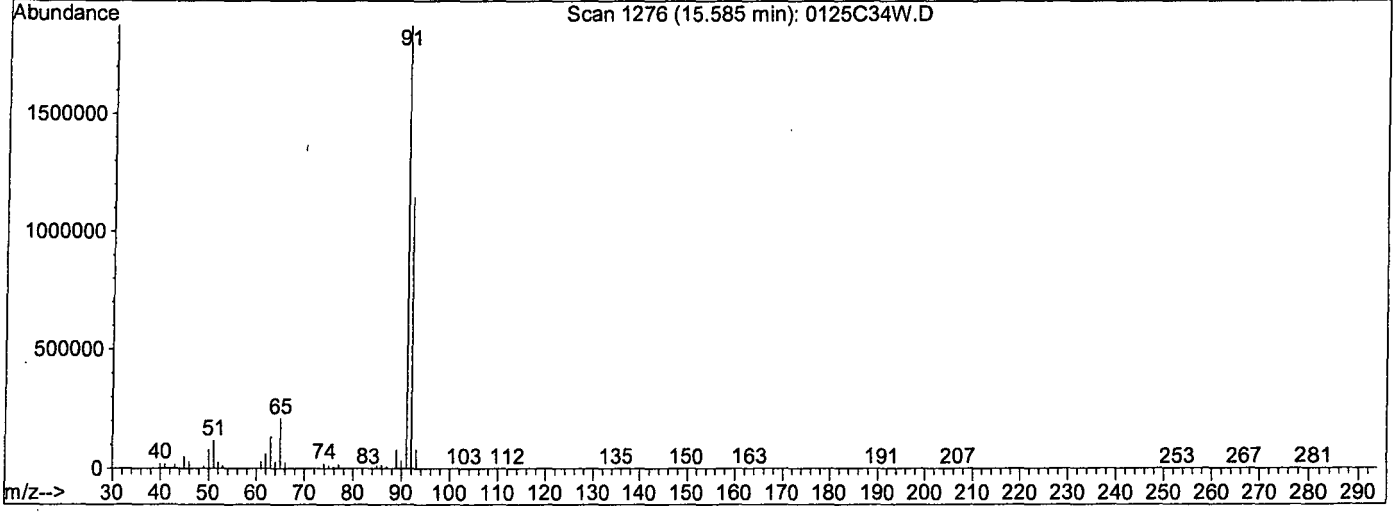


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 730.0328ppb m

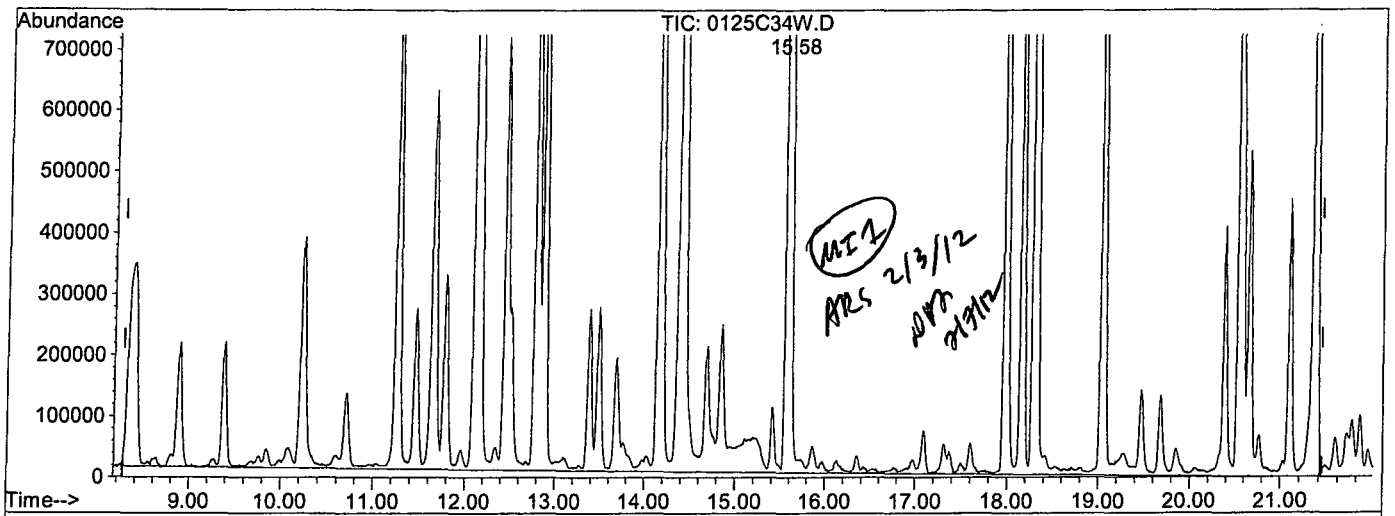
response 93884232

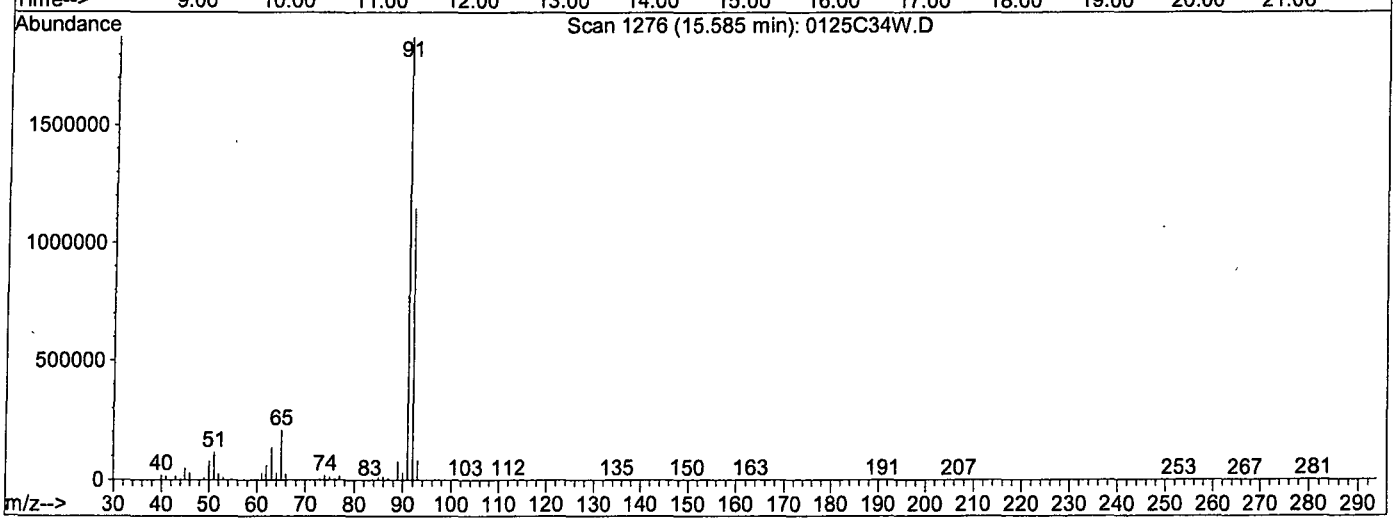
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.14#
0.00	0.00	0.44#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:17 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 810.4826ppb m

response 102155823

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.13#
0.00	0.00	0.41#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1232092	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1442206	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1630956	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	129481006m	1014.92580	ppb	100

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

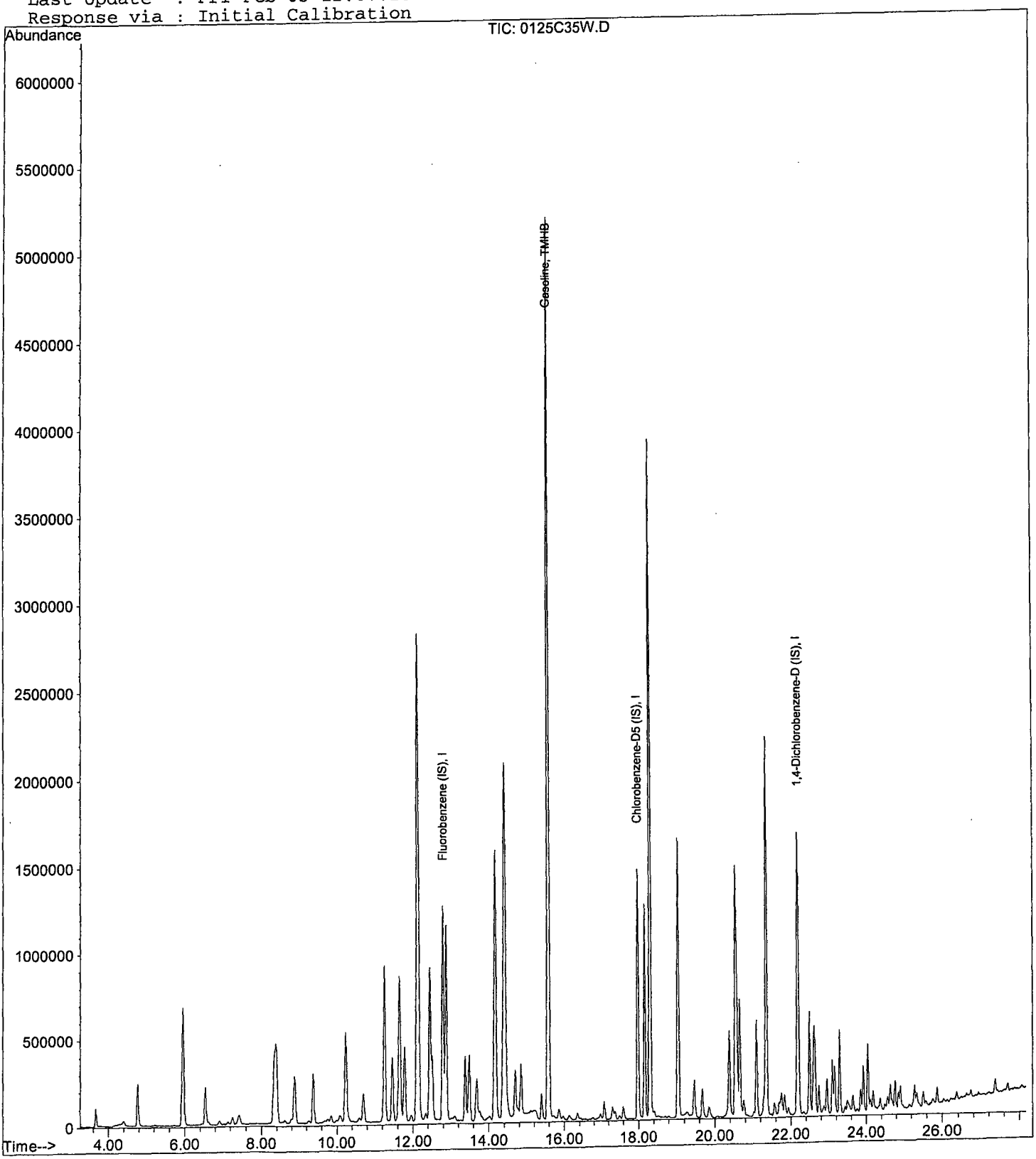
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D
Acq On : 26 Jan 12 23:15
Sample : Vol. Std. 01-26-12@1000ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

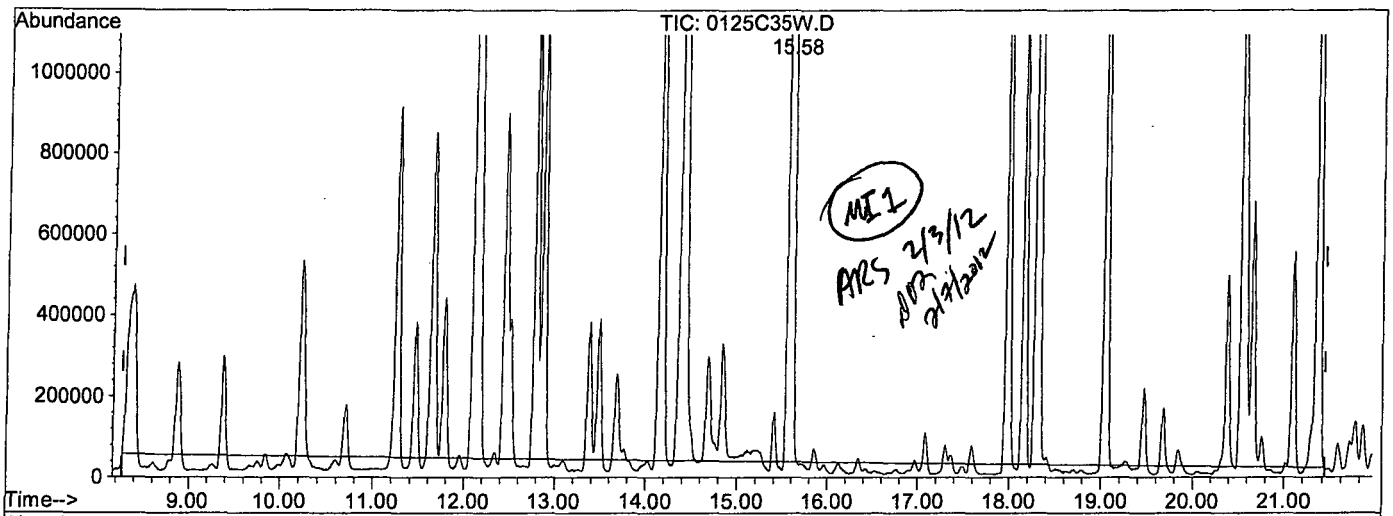
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

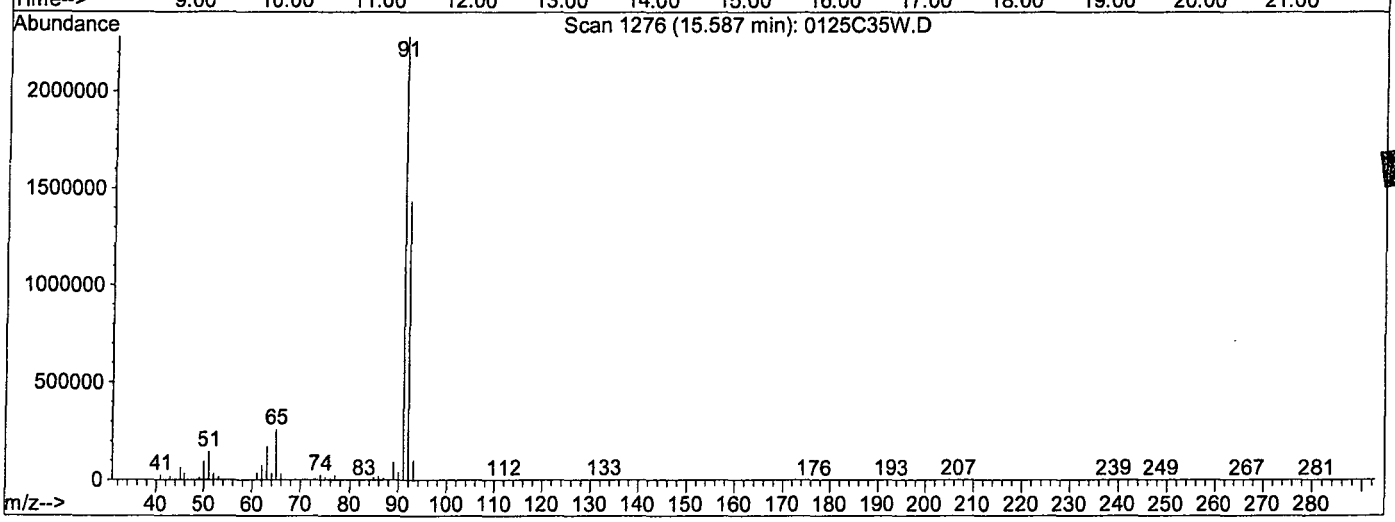


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 923.0372ppb m

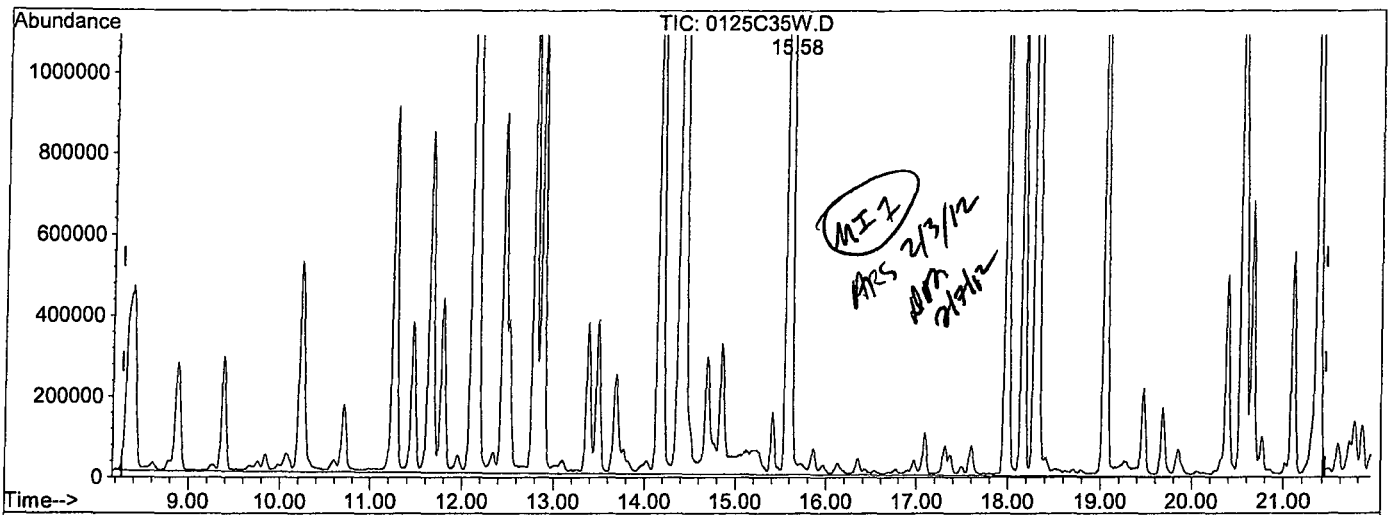
response 119549717

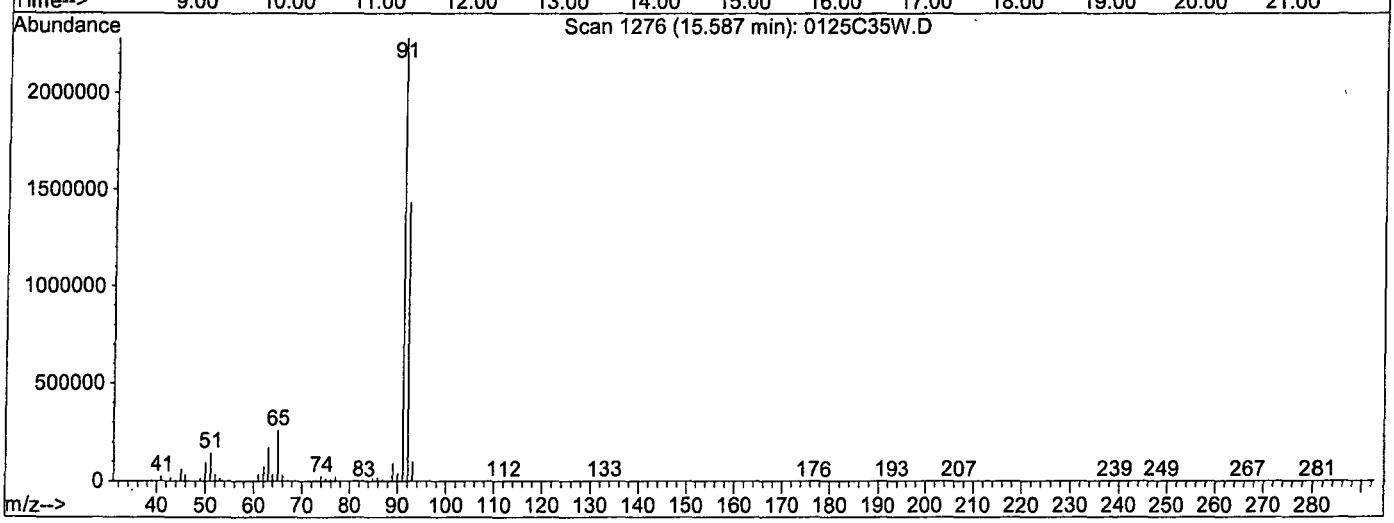
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.12#
0.00	0.00	0.35#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:18 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





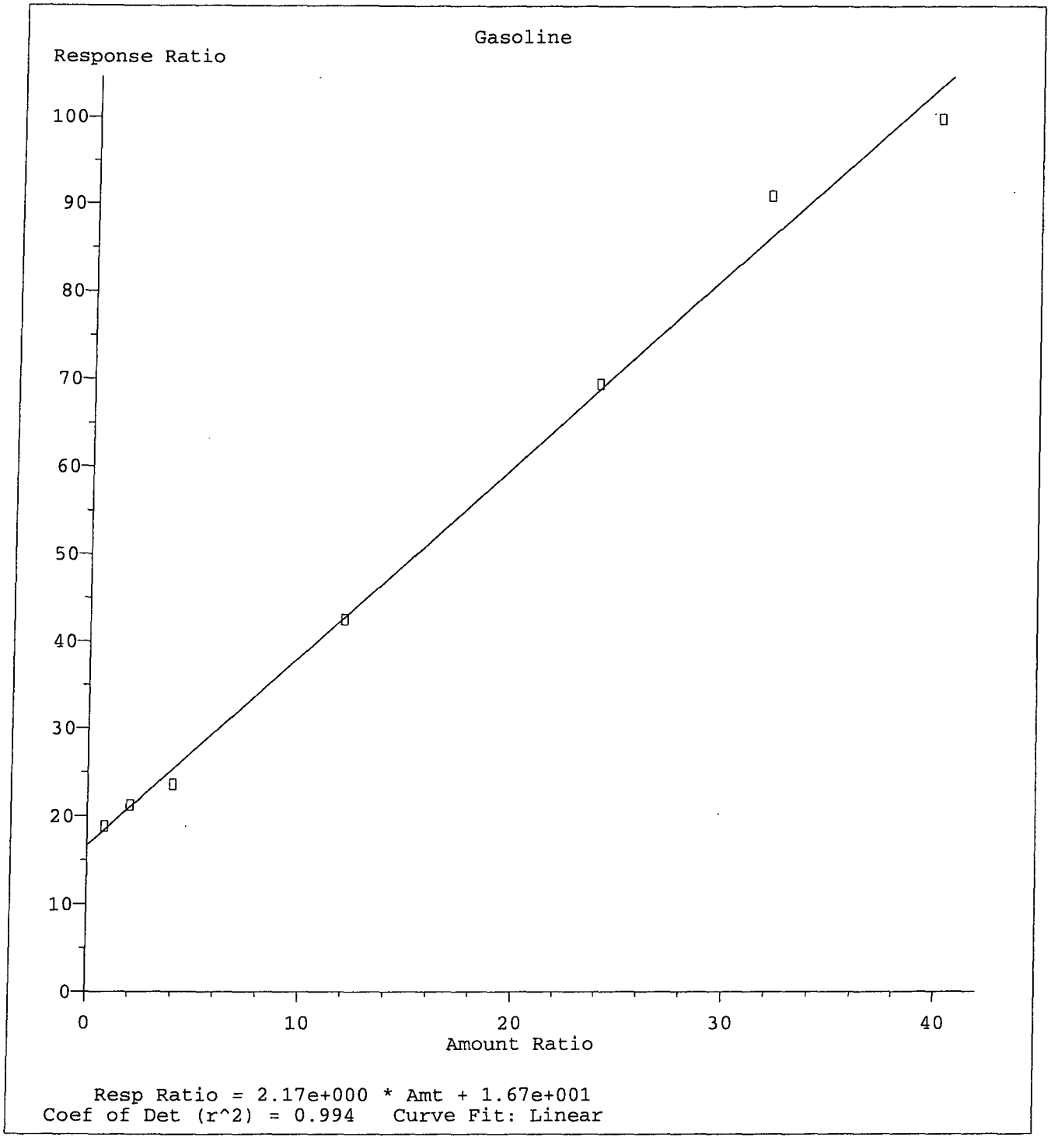
TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 1014.9258ppb m

response 129481006

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.11#
0.00	0.00	0.33#
0.00	0.00	0.00



Method Name: M:\CHICO\DATA\C120125\CGAS.M
Calibration Table Last Updated: Tue Feb 07 09:36:43 2012

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	998565	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	2063547	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1276666	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	68624186m	598.65494	ppb	100

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

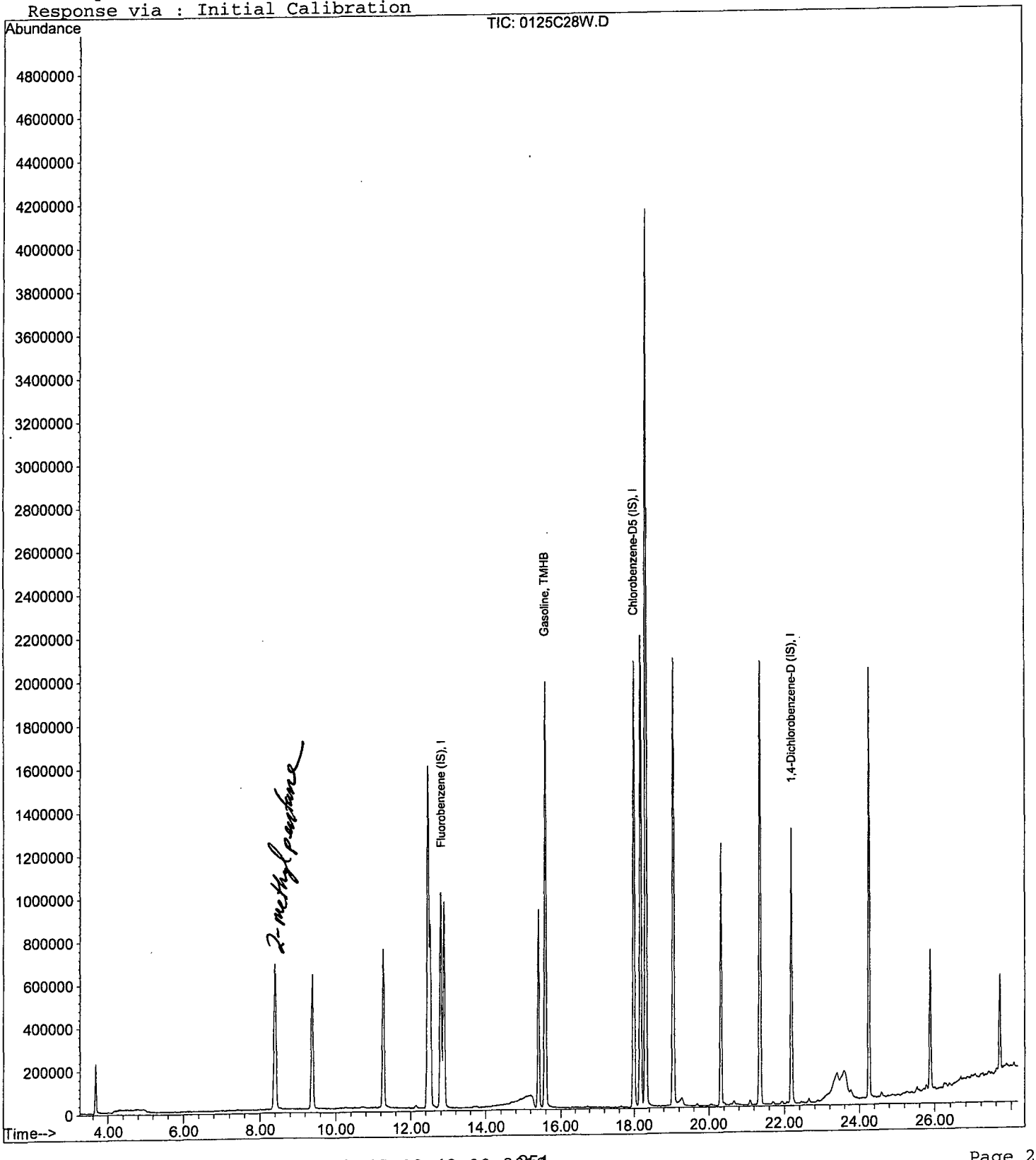
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

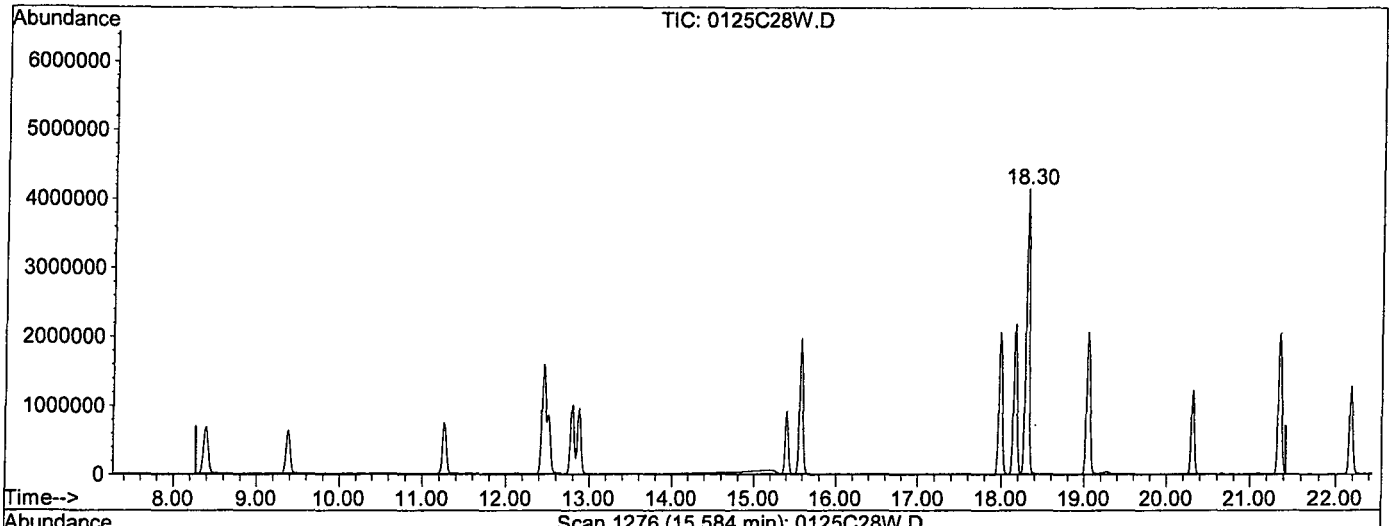
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

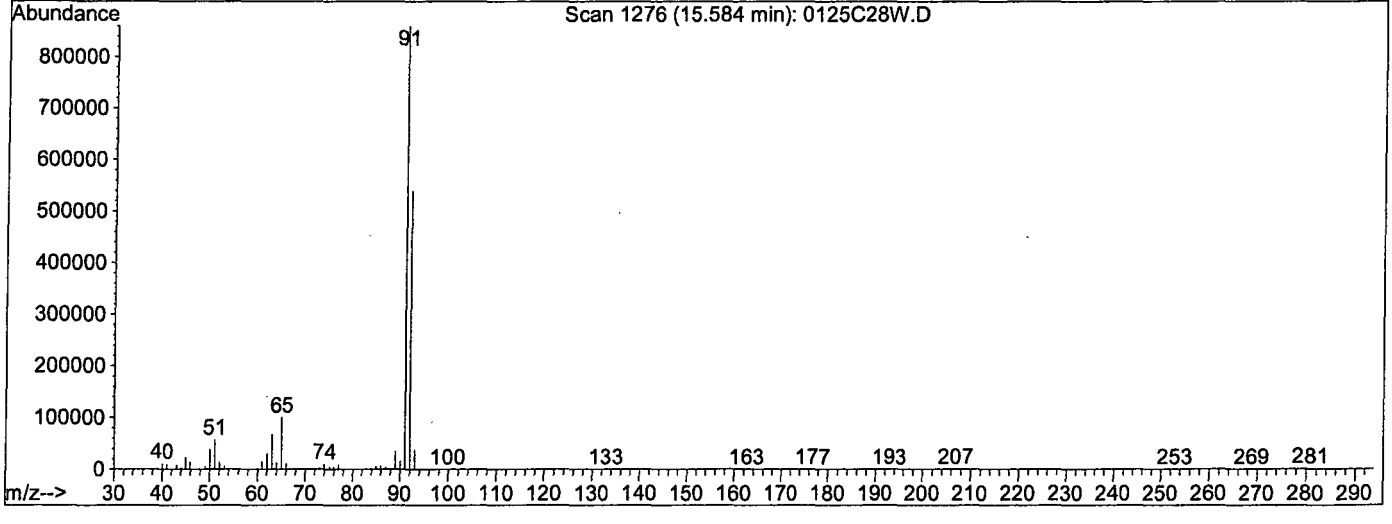


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:41 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C28W.D

(2) Gasoline (TMHB)

15.58min 598.6549ppb m

response 68624186

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.19#
0.00	0.00	0.54#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.80	96	514344	25.00000 ppb		0.03
54) Chlorobenzene-D5 (IS)	17.98	117	426880	25.00000 ppb		0.02
70) 1,4-Dichlorobenzene-D (IS)	22.18	152	243008	25.00000 ppb		0.02
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	814	0.05945 ppb		0.04
Spiked Amount 24.119			Recovery = 0.245%			
37) 1,2-DCA-D4(S)	12.18	65	952	0.09637 ppb		0.02
Spiked Amount 22.874			Recovery = 0.420%			
55) Toluene-D8(S)	15.46	98	5539	0.10268 ppb		0.03
Spiked Amount 24.755			Recovery = 0.416%			
63) 4-Bromofluorobenzene(S)	20.05	95	5181	0.27480 ppb		0.02
Spiked Amount 26.777			Recovery = 1.027%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.06	85	2596	0.82228 ppb		98
3) Freon 114	4.31	85	1957	0.24927 ppb		98
4) Chloromethane	4.53	50	497	-0.25189 ppb	#	1
5) Vinyl chloride	4.81	62	636	0.11072 ppb	#	55
6) Bromomethane	5.66	94	352	1.43494 ppb	#	48
7) Chloroethane	5.89	64	688	0.17146 ppb	#	88
9) Trichlorofluoromethane	6.48	103	598	0.15470 ppb	#	42
11) Acrolein	7.16	56	139	1.20103 ppb		81
12) Acetone	7.25	43	1756	0.17301 ppb	#	49
13) Freon-113	7.44	101	1265	0.10656 ppb		84
14) 1,1-DCE	7.63	96	2136	0.28441 ppb	#	17
15) t-Butanol	7.75	59	112	1.98451 ppb	#	80
17) Iodomethane	8.12	142	488	0.33050 ppb	#	43
18) Acrylonitrile	8.40	53	18247	12.53629 ppb	#	22
19) Methylene chloride	8.44	84	5961	-0.42807 ppb	#	1
20) Carbon disulfide	8.51	76	565	0.07522 ppb	#	75
22) Trans-1,2-DCE	9.06	96	3142	0.09631 ppb	#	9
25) Vinyl Acetate	9.38	43	108176	52.11193 ppb		98
27) MEK (2-Butanone)	10.41	43	403	0.27118 ppb	#	66
28) Cis-1,2-DCE	10.76	96	1544	0.11362 ppb	#	23
34) Cyclohexane	11.97	56	2103	0.11787 ppb		99
35) 1,1-Dichloropropene	12.09	75	2011	0.15580 ppb	#	45
36) 2,2,4-Trimethylpentane	12.13	57	18754	0.54048 ppb		99
38) Carbon Tetrachloride	12.23	117	80	0.91706 ppb	#	41
40) 1,2-DCA	12.45	62	18764	2.04942 ppb	#	75
41) Benzene	12.45	78	2517875	58.71375 ppb		98
42) TCE	13.49	95	1033	0.08724 ppb	#	57
43) 2-Pentanone	13.09	43	1444	0.49565 ppb	#	63
46) Methyl Cyclohexane	13.76	83	4236	0.25633 ppb		93
50) Cis-1,3-Dichloropropene	14.93	75	612	-0.23271 ppb		85
51) Toluene	15.58	91	2516540	49.99585 ppb		96
52) Trans-1,3-Dichloropropene	15.76	75	1112	0.10188 ppb	#	60
57) Tetrachloroethene	16.75	164	1780	0.15371 ppb	#	45
58) 1-Chlorohexane	17.66	91	4450	0.20898 ppb		89
60) m&p-Xylene	18.30	106	2213106	87.61936 ppb		97
61) o-Xylene	19.05	106	1078952	43.01267 ppb		93
62) Styrene	19.05	104	54491	1.45381 ppb	#	1
64) 2-Hexanone	16.02	43	394	0.17017 ppb	#	25
67) Chlorobenzene	18.06	112	2884	0.07867 ppb	#	48

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
68) Ethylbenzene	18.17	91	2939246	43.94023	ppb		100
71) MIBK (methyl isobutyl keto	14.58	43	99	-0.18362	ppb	#	31
72) Isopropylbenzene	19.69	105	9228	0.12704	ppb		92
75) t-1,4-Dichloro-2-Butene	20.31	53	19055	11.41330	ppb	#	8
76) Bromobenzene	20.43	156	3594	0.20876	ppb	#	47
77) n-Propylbenzene	20.39	91	18116	0.20048	ppb		98
78) 4-Ethyltoluene	20.59	105	8271	0.15756	ppb		90
79) 2-Chlorotoluene	20.68	91	7547	0.13199	ppb	#	77
80) 1,3,5-Trimethylbenzene	20.66	105	19818	0.33532	ppb		92
81) 4-Chlorotoluene	20.77	91	9067	0.17883	ppb		97
82) Tert-Butylbenzene	21.36	119	276648	4.08833	ppb	#	71
83) 1,2,4-Trimethylbenzene	21.36	105	2161299	36.78081	ppb		97
84) Sec-Butylbenzene	21.70	105	18537	0.22205	ppb	#	76
85) p-Isopropyltoluene	21.93	119	13390	0.19972	ppb	#	89
86) Benzyl Chloride	22.37	91	1446	0.10670	ppb	#	90
87) 1,3-DCB	22.08	146	7950	0.23447	ppb		83
88) 1,4-DCB	22.25	146	8802	0.26702	ppb	#	79
89) Hexachloroethane	23.52	117	2736	0.90342	ppb	#	25
90) n-Butylbenzene	22.65	91	21345	0.34686	ppb	#	94
91) 1,2-DCB	22.88	146	6887	0.24229	ppb	#	79
92) 1,2-Dibromo-3-chloropropan	24.07	155	120	0.11615	ppb	#	46
93) 1,2,4-Trichlorobenzene	25.53	180	5653	0.69548	ppb		79
94) Hexachlorobutadiene	25.78	223	5853	0.53769	ppb	#	69
95) Naphthalene	25.89	128	857570	35.27522	ppb		99
96) 1,2,3-Trichlorobenzene	26.24	180	4574	0.69979	ppb		85

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

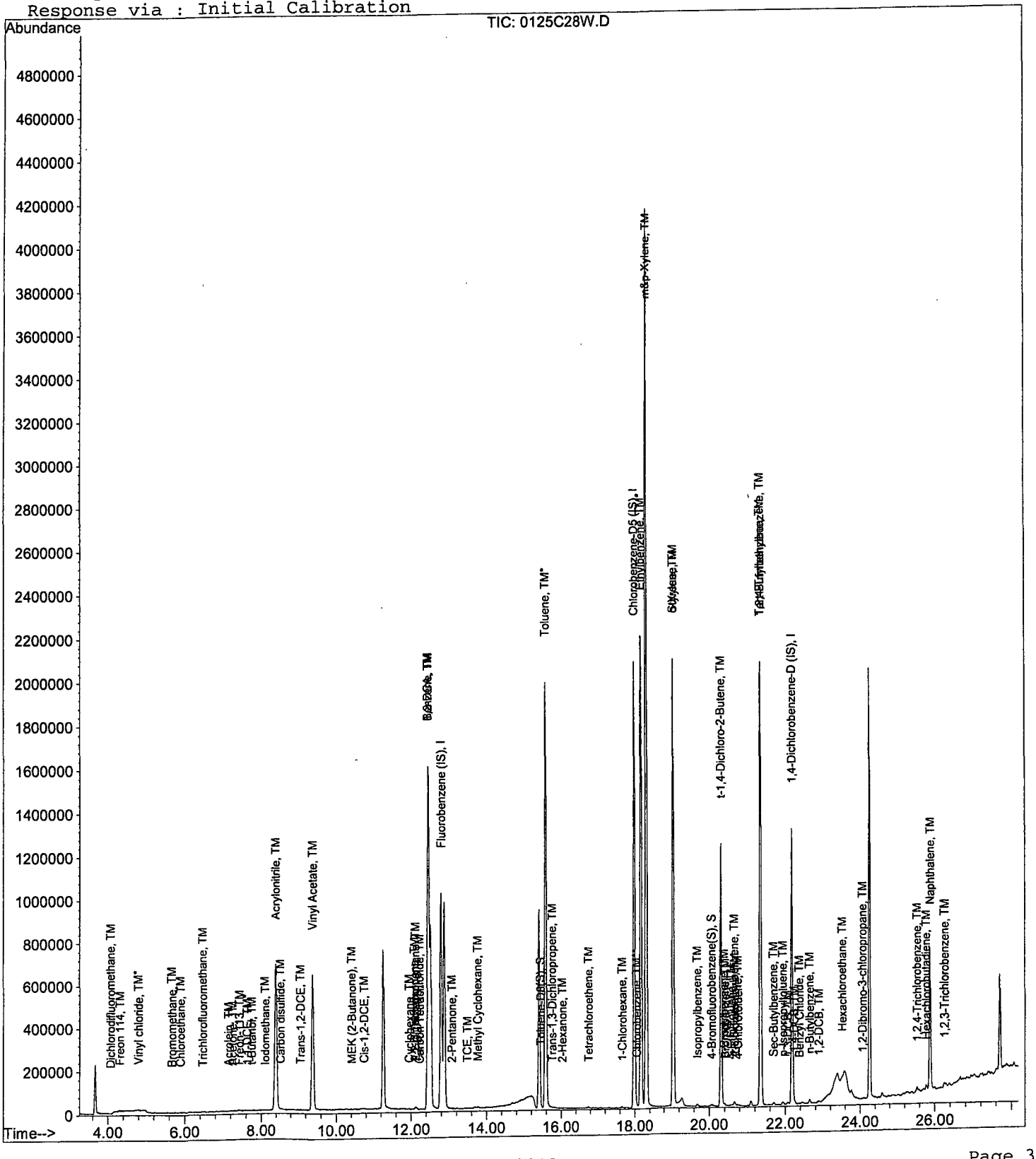
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration



255

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No:
Date Analyzed: 01/27/12
Instrument: Chico
Initial Cal. Date: 01/25/12
Data File: 0125C38W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.556	52	TMHBL	0.36
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			52.0		

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1138336	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1375303	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1433410	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	48578324m	298.92978	ppb	100

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

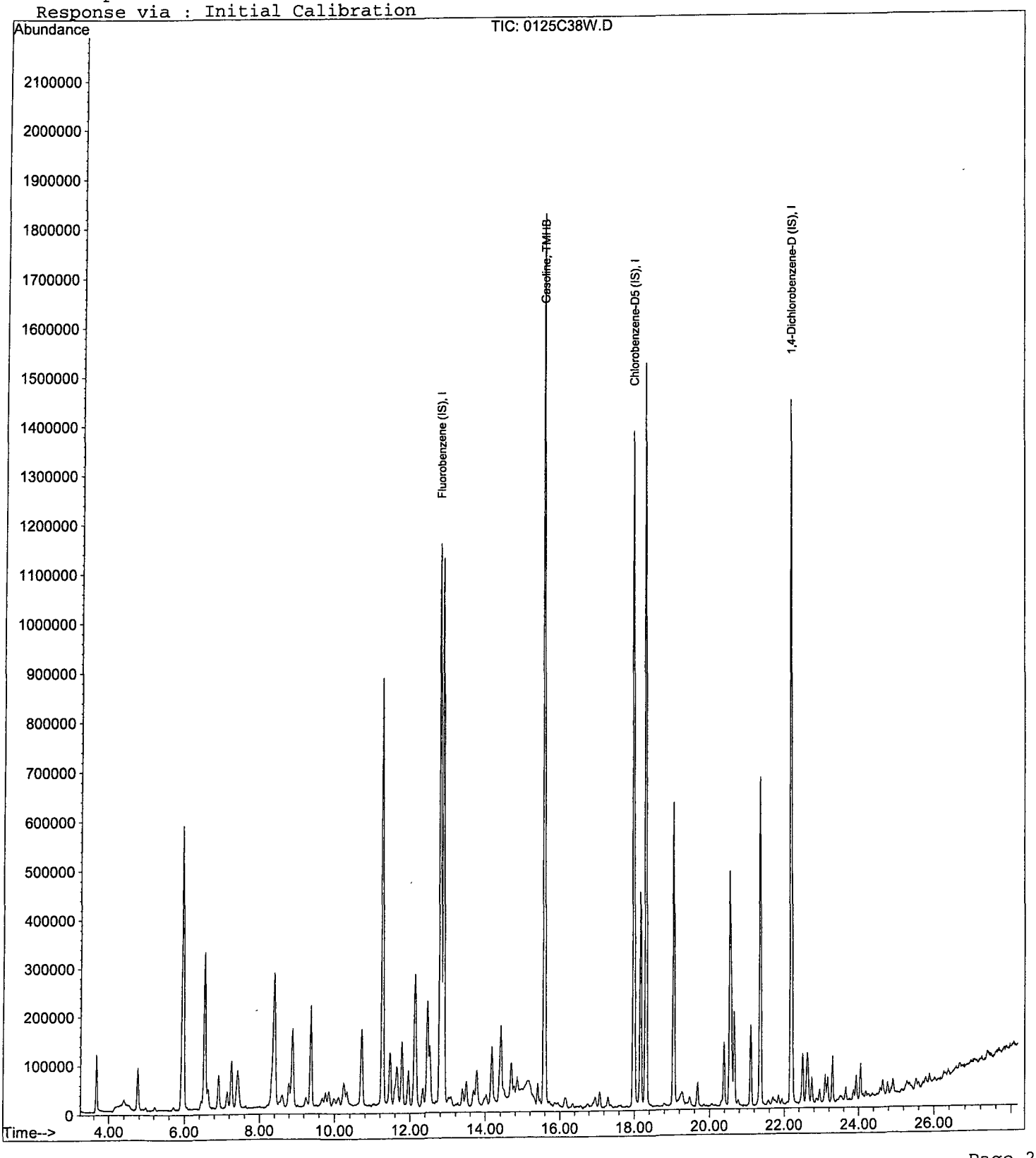
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D
Acq On : 27 Jan 12 1:06
Sample : Second Source 01-26-12
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

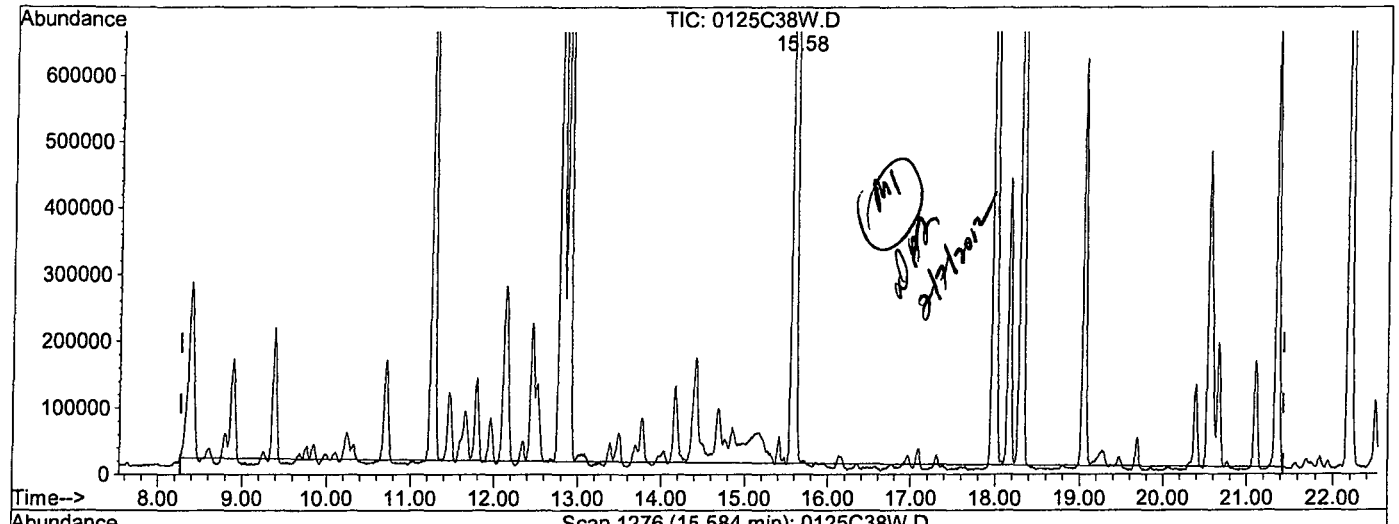
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

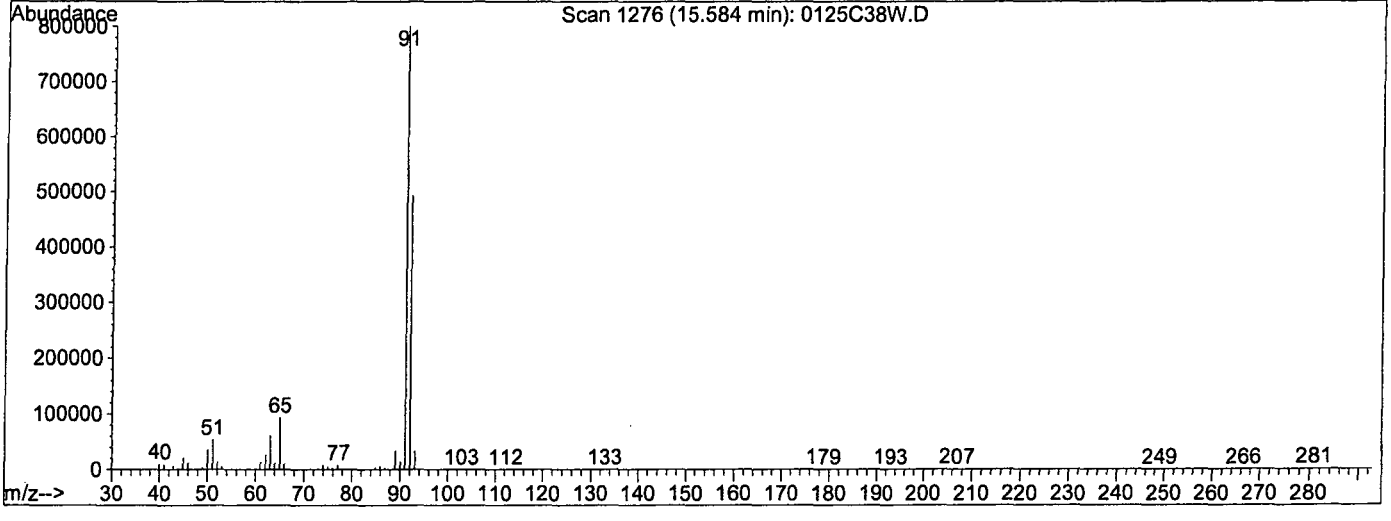


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 202.8575ppb m

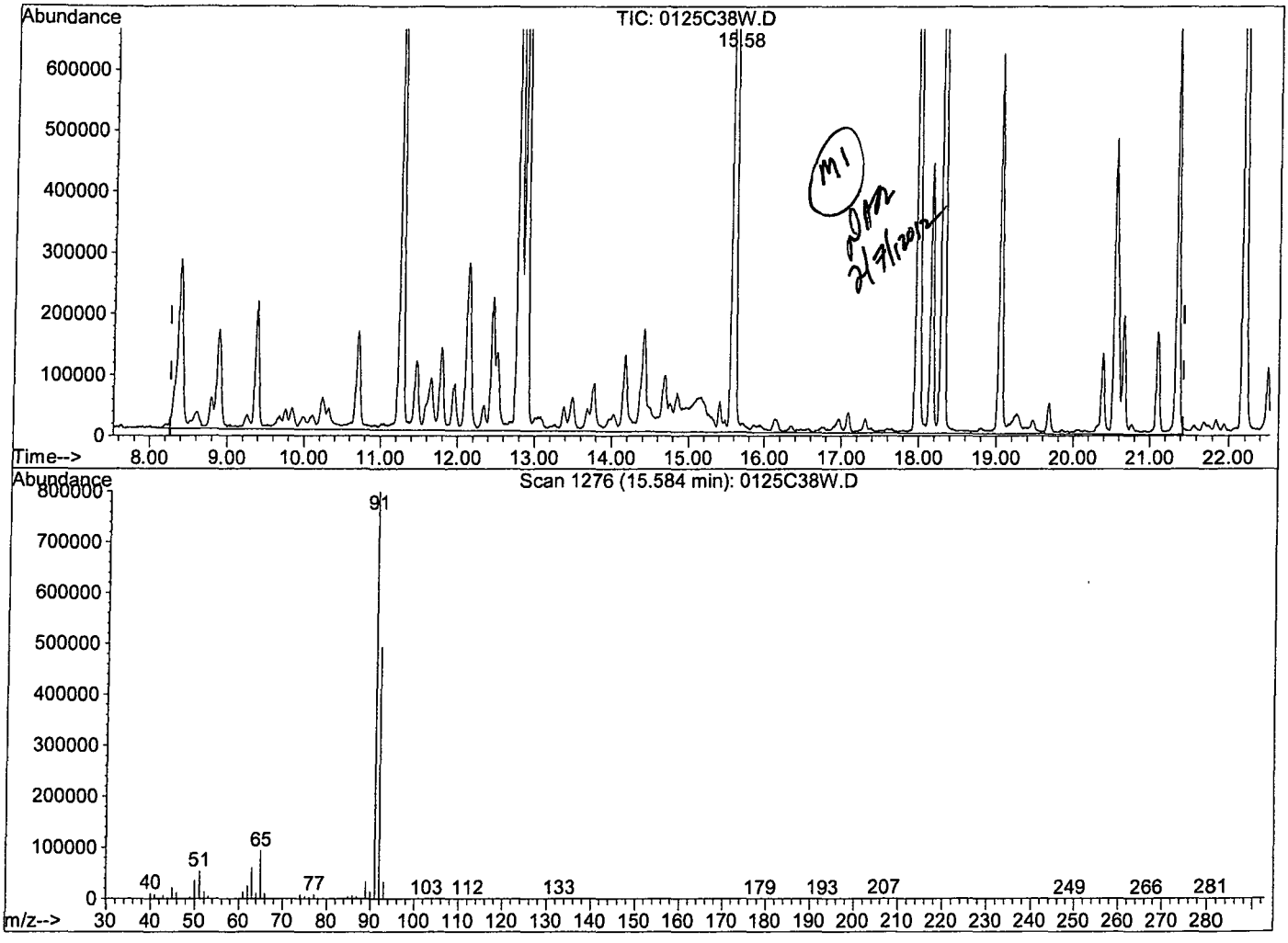
response 39074056

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.34#
0.00	0.00	1.04#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration



TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 298.9298ppb m

response 48578324

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.28#
0.00	0.00	0.84#
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67512
Date Analyzed: 04/18/12
Instrument: Chico
Initial Cal. Date: 04/10/12
Data File: 0418C01W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.697	50	TMHBL	6.1
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			50.0		

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C01W.D Vial: 1
Acq On : 18 Apr 12 9:27 Operator: SV
Sample : CCV gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:18 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1228181	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1307838	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1304626	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	54482163m	318.32069	ppb	100

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

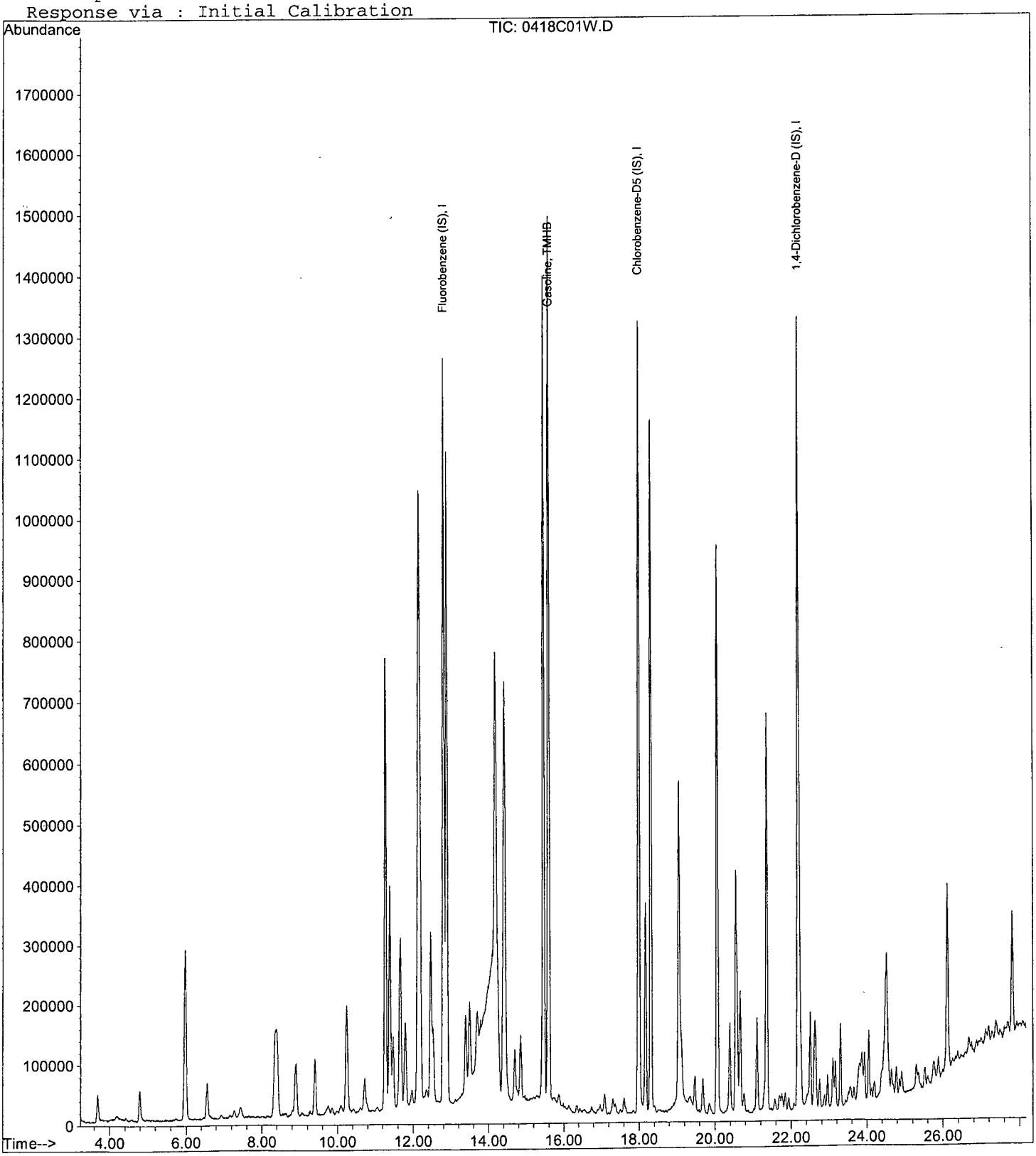
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C01W.D
Acq On : 18 Apr 12 9:27
Sample : CCV gas 300ug/L
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 18 11:18 2012 Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 04/19/12
Instrument: Chico
Initial Cal. Date: 04/10/12
Data File: 0419C01W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.632	51	TMHBL	3.1
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			51.0		

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C01W.D Vial: 1
Acq On : 19 Apr 12 6:48 Operator: SV
Sample : CCV gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1270199	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.99	TIC	1364281	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1270549	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	55359171m	309.38030	ppb	100

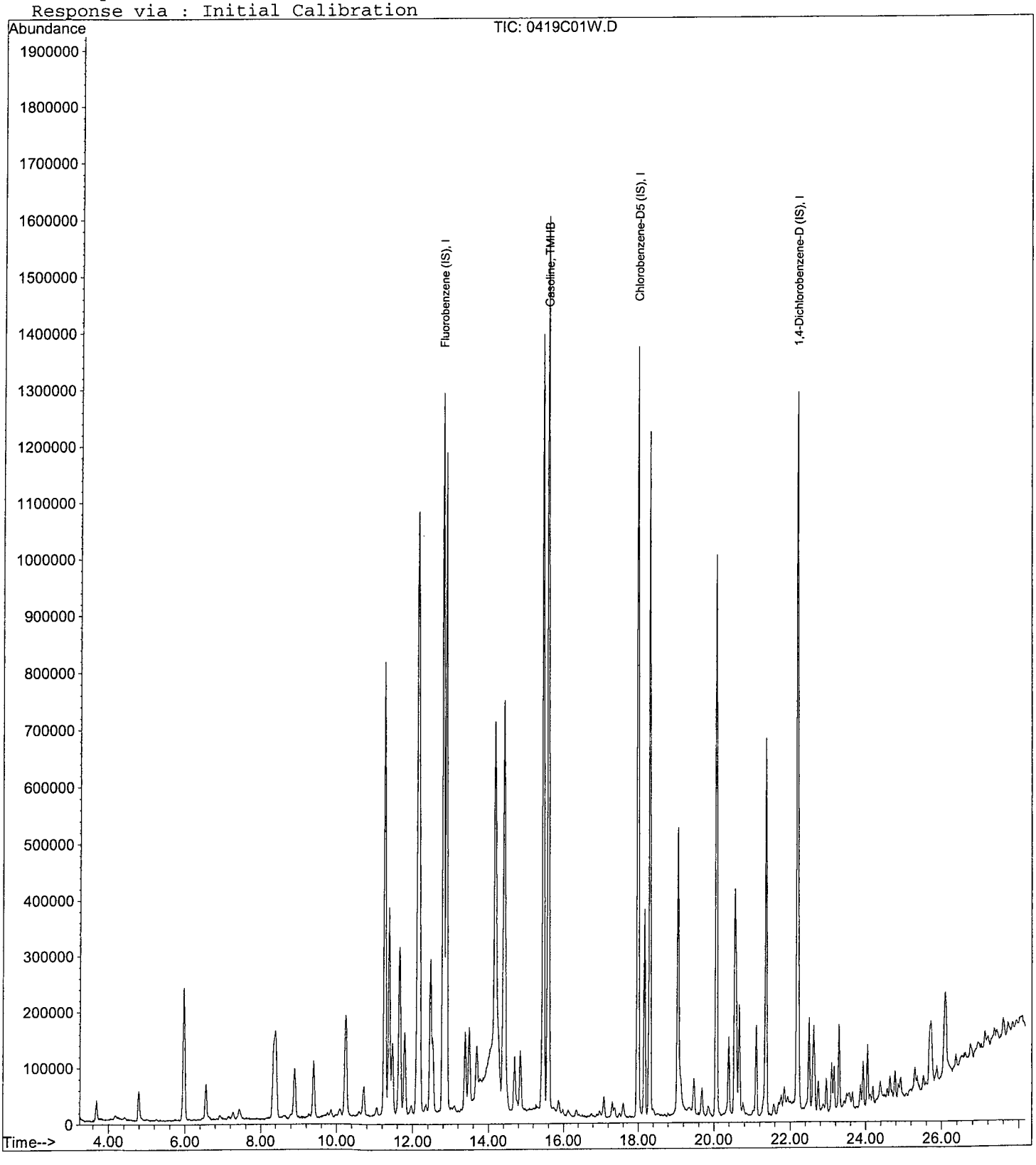
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C01W.D Vial: 1
Acq On : 19 Apr 12 6:48 Operator: SV
Sample : CCV gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C06W.D Vial: 1
Acq On : 19 Apr 12 9:52 Operator: SV
Sample : LCS gas 300 ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1333745	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1439521	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1368841	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	61479673m	338.29027	ppb	100

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

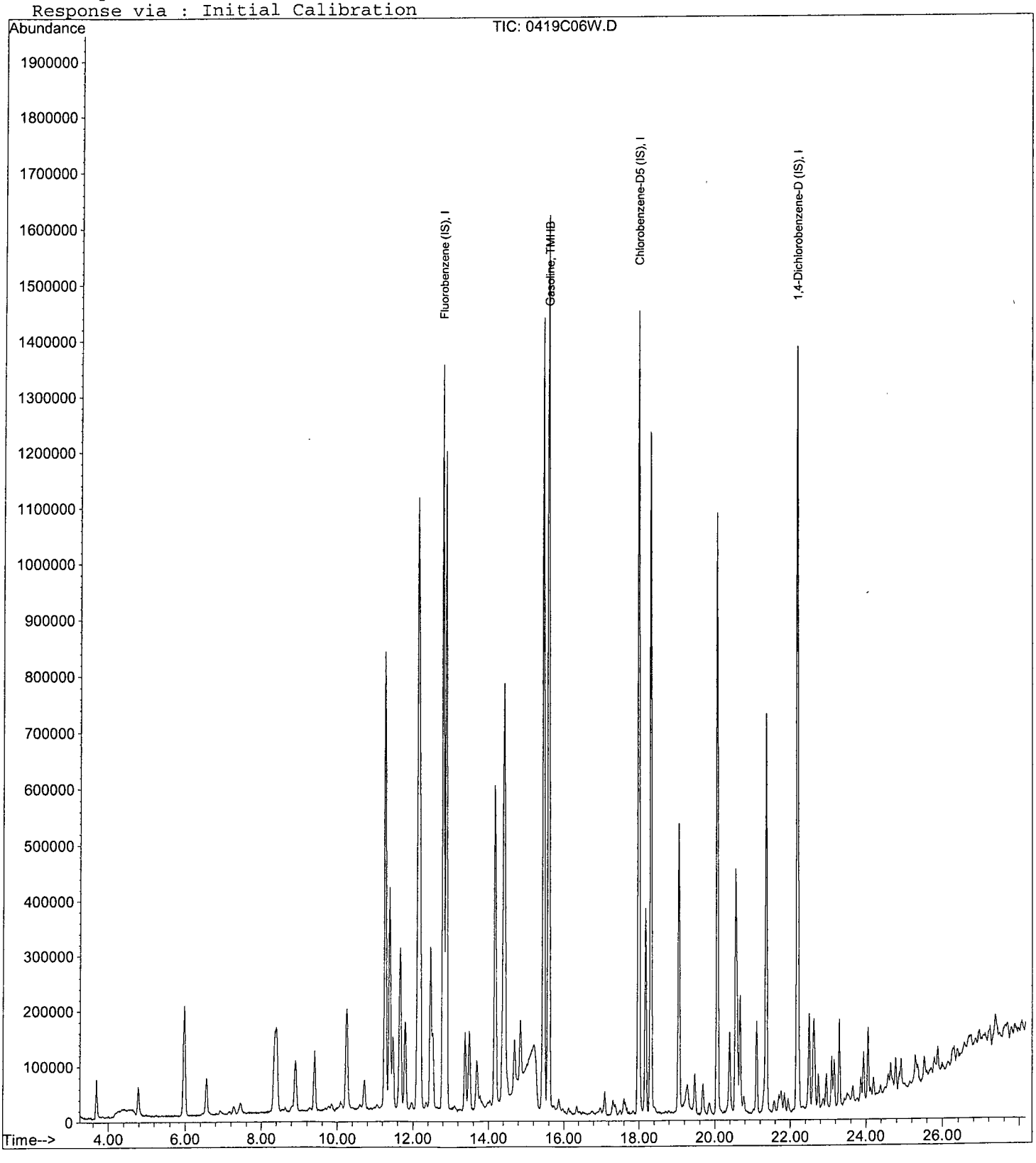
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C06W.D
Acq On : 19 Apr 12 9:52
Sample : LCS gas 300 ug/L
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 04/10/12
Matrix: Water Instrument: Chico
Initials:

		Compound	0410C04W.D 0.3	0410C05W.D 0.5	0410C06W.D 1	0410C07W.D 5	0410C08W.D 10	0410C09W.D 20	0410C10W.D 40	0410C11W.D 100			Avg	%RSD		r2
1	I	Fluorobenzene (IS)														
2	TM	Dichlorodifluoromethane	0.7223	0.8337	0.8725	0.7151	0.7614	0.8793	0.9029	0.8194			0.81	8.9	TM	
3	TM	Freon 114	0.3412	0.3865	0.2868	0.2781	0.2810	0.3209	0.3203	0.2914			0.31	12	TM	
4	TM**	Chloromethane		0.4169	0.3376	0.3496	0.3214	0.3147	0.3656	0.3422			0.35	9.8	TM**	
5	TM*	Vinyl chloride	0.3352	0.2353	0.2449	0.2303	0.1987	0.2134	0.2066	0.1954			0.23	19	TM*	
6	TM	Bromomethane	0.1468	0.1365	0.1581	0.1658	0.1661	0.1666	0.1713	0.1680			0.16	7.6	TM	
7	TM	Chloroethane	0.2048	0.2589	0.2215	0.1757	0.1960	0.1824	0.1804	0.1705			0.20	15	TM	
8	TM	Dichlorofluoromethane	1.568	1.583	1.547	1.519	1.436	1.442	1.403	1.352			1.5	5.7	TM	
9	TM	Trichlorofluoromethane	0.2111	0.1937	0.1896	0.1652	0.1705	0.1699	0.1670	0.1342			0.18	13	TM	
10		Acetonitrile	0.0360	0.0450	0.0500	0.0476	0.0458	0.0410	0.0455	0.0455			0.04	9.6		
11	TM	Acrolein	0.0449	0.0488	0.0503	0.0489	0.0470	0.0477	0.0475	0.0478			0.05	3.3	TM	
12	TML	Acetone	0.2279	0.2401	0.1685	0.1002	0.0980	0.0888	0.0917	0.0882			0.14	47	TML	1.000
13	TM	Freon-113	0.5708	0.5458	0.5472	0.5048	0.5065	0.5210	0.5027	0.4665			0.52	6.3	TM	
14	TM*	1,1-DCE	0.6087	0.6258	0.5545	0.5151	0.4906	0.4740	0.4698	0.4451			0.52	13	TM*	
15	TM	t-Butanol	0.0214	0.0227	0.0218	0.0207	0.0203	0.0200	0.0185	0.0184			0.02	7.4	TM	
16	TML	Methyl Acetate	0.7394	0.6395	0.6318	0.3536	0.3270	0.3227	0.3183	0.3006			0.45	40	TML	1.000
17	TML	Iodomethane	0.2395	0.2456	0.3904	0.7307	0.7451	0.7915	0.7982	0.7664			0.59	43	TML	1.000
18	TM	Acrylonitrile		0.1516	0.1420	0.1252	0.1233	0.1221	0.1212	0.1199			0.13	9.6	TM	
19	TM	Methylene chloride			0.7984	0.6522	0.6124	0.6026	0.6110	0.5830			0.64	12	TM	
20	TM	Carbon disulfide	0.2342	0.2234	0.2197	0.2443	0.2239	0.2324	0.2268	0.2232			0.23	3.5	TM	
21	TM	Methyl t-butyl ether (MtBE)	1.594	1.442	1.297	1.386	1.320	1.288	1.237	1.181			1.3	9.7	TM	
22	TM	Trans-1,2-DCE		0.7728	0.6369	0.6218	0.5922	0.5685	0.5607	0.5353			0.61	13	TM	
23	TM	Diisopropyl Ether	2.848	2.918	2.785	2.781	2.672	2.576	2.501	2.340			2.7	7.3	TM	
24	TM**	1,1-DCA	1.516	1.578	1.492	1.466	1.377	1.315	1.292	1.237			1.4	8.6	TM**	
25	TML	Vinyl Acetate	0.4399	0.3772	0.2611	0.1701	0.1749	0.1762	0.1677	0.1522			0.24	46	TML	0.998
26	TM	Ethyl tert Butyl Ether	2.227	2.050	2.125	2.012	1.937	1.895	1.843	1.744			2.0	7.9	TM	
27	TM	MEK (2-Butanone)	0.0899	0.0995	0.0855	0.0758	0.0811	0.0774	0.0736	0.0697			0.08	12	TM	
28	TML	Cis-1,2-DCE	1.027	1.105	0.8923	0.7915	0.7874	0.7623	0.7433	0.6914			0.85	17	TML	0.999
29	TM	2,2-Dichloropropane	1.073	1.011	1.013	0.9391	0.9443	0.9200	0.8843	0.8339			0.95	8.1	TM	
30	TM*	Chloroform		0.8330	0.8149	0.8018	0.7957	0.7753	0.7574	0.7362			0.79	4.3	TM*	
31	TM	Bromochloromethane	0.3439	0.3571	0.3142	0.3268	0.3160	0.3091	0.3061	0.2913			0.32	6.6	TM	
32	S	Dibromofluoromethane(S)	0.7855	0.7765	0.7813	0.7084	0.7056	0.7027	0.6818	0.6848			0.73	6.1	S	
33	TM	1,1,1-TCA	1.037	1.054	1.043	0.9282	0.9419	0.9320	0.9056	0.8594			0.96	7.5	TM	
34	TM	Cyclohexane	0.8651	0.8869	0.8755	0.8214	0.7961	0.8151	0.7915	0.7379			0.82	6.1	TM	
35	TM	1,1-Dichloropropene	0.9540	0.9191	0.9213	0.8373	0.8027	0.8004	0.7542	0.7407			0.84	9.6	TM	

ARS 4/11/12
CALLW3.M

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 04/10/12
Matrix: Water Instrument: Chico Initials:

		Compound	0.3	0.5	1	5	10	20	40	100			Avg	%RSD		r2
36	TM	2,2,4-Trimethylpentane			1.883	1.653	1.583	1.591	1.592	1.494			1.6	8.1	TM	
37	S	1,2-DCA-D4(S)	0.6311	0.6592	0.6102	0.5627	0.5616	0.5489	0.5259	0.5139			0.58	8.9	S	
38	TM	Carbon Tetrachloride	0.8554	0.8723	0.9421	0.8436	0.8212	0.8067	0.8034	0.7669			0.84	6.3	TM	
39	TM	Tert Amyl Methyl Ether	1.884	1.583	1.594	1.589	1.482	1.488	1.447	1.398			1.6	9.6	TM	
40	TM	1,2-DCA	0.7226	0.6816	0.6460	0.6876	0.6361	0.6255	0.5957	0.5685			0.65	7.8	TM	
41	TM	Benzene	3.244	3.109	2.921	2.816	2.683	2.651	2.614	2.530			2.8	9.0	TM	
42	TM	TCE	0.6742	0.7380	0.6993	0.6812	0.6826	0.6741	0.6607	0.6185			0.68	5.0	TM	
43	TM	2-Pentanone	0.2151	0.2714	0.2631	0.2591	0.2495	0.2557	0.2484	0.2512			0.25	6.6	TM	
44	TM*	1,2-Dichloropropane	0.8935	0.8621	0.8665	0.8704	0.8261	0.8221	0.7885	0.7458			0.83	5.9	TM*	
45	TM	Bromodichloromethane	0.7791	0.7941	0.8152	0.8268	0.8285	0.8167	0.8213	0.7888			0.81	2.3	TM	
46	TM	Methyl Cyclohexane	0.6967	0.7825	0.7368	0.6655	0.6641	0.6883	0.6858	0.6498			0.70	6.3	TM	
47	TM	Dibromomethane	0.3138	0.3362	0.3487	0.3453	0.3239	0.3298	0.3103	0.3051			0.33	5.0	TM	
48	TM	2-Chloroethyl vinyl ether	0.2373	0.2927	0.2847	0.2880	0.2851	0.2986	0.2902	0.2902			0.28	6.8	TM	
49	TM	1-Bromo-2-chloroethane	0.7817	0.8480	0.7907	0.7742	0.7433	0.7339	0.7195	0.6895			0.76	6.5	TM	
50	TM	Cis-1,3-Dichloropropene	1.469	1.169	1.074	1.040	1.031	1.029	1.020	0.9704			1.1	15	TM	
51	TM*	Toluene	3.190	2.940	2.841	2.721	2.625	2.642	2.581	2.479			2.8	8.3	TM*	
52	TM	Trans-1,3-Dichloropropene	0.8661	0.8729	0.6766	0.7732	0.7701	0.7764	0.7730	0.7683			0.78	7.9	TM	
53	TM	1,1,2-TCA	0.4055	0.4361	0.4047	0.4053	0.3945	0.3834	0.3761	0.3635			0.40	5.6	TM	
54	I	Chlorobenzene-D5 (IS)														
55	S	Toluene-D8(S)	3.253	3.205	3.280	2.961	3.056	2.890	2.885	2.874			3.1	5.7	S	
56	TM	1,2-EDB	0.4958	0.6036	0.5604	0.6013	0.6055	0.5741	0.5993	0.5911			0.58	6.4	TM	
57	TM	Tetrachloroethene	0.8409	0.6986	0.7214	0.6993	0.7022	0.6591	0.6819	0.6335			0.70	8.7	TM	
58	TM	1-Chlorohexane	1.247	1.445	1.385	1.281	1.346	1.264	1.296	1.228			1.3	5.7	TM	
59	TM	1,1,1,2-Tetrachloroethane	0.9231	0.9333	0.9925	0.9721	0.9698	0.9285	0.9617	0.9455			0.95	2.6	TM	
60	TM	m&p-Xylene	1.743	1.823	1.748	1.730	1.755	1.617	1.641	1.599			1.7	4.6	TM	
61	TM	o-Xylene	1.949	1.795	1.812	1.791	1.810	1.701	1.731	1.640			1.8	5.2	TM	
62	TM	Styrene	2.846	2.920	2.813	2.898	2.852	2.734	2.766	2.634			2.8	3.3	TM	
63	S	4-Bromofluorobenzene(S)	1.435	1.316	1.339	1.189	1.236	1.173	1.163	1.159			1.3	8.1	S	
64	TM	2-Hexanone	0.2065	0.3405	0.2357	0.2717	0.2793	0.2802	0.2822	0.2845			0.27	14	TM	
65	TM	1,3-Dichloropropane	1.225	1.237	1.135	1.144	1.127	1.035	1.038	1.028			1.1	7.4	TM	
66	TM	Dibromochloromethane	0.6853	0.7250	0.7014	0.7712	0.8023	0.7797	0.8028	0.8086			0.76	6.4	TM	
67	TM**	Chlorobenzene	2.732	2.700	2.773	2.615	2.708	2.542	2.617	2.491			2.6	3.7	TM**	
68	TM*	Ethylbenzene	4.434	4.366	4.327	4.293	4.305	4.027	4.103	3.902			4.2	4.4	TM*	
69	TM**	Bromoform	0.2832	0.3014	0.3151	0.3265	0.3438	0.3596	0.3803	0.4005			0.34	12	TM**	
70	I	1,4-Dichlorobenzene-D (IS)														

ARS 4/11/12
CALLW3.M

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 04/10/12
Matrix: Water Instrument: Chico Initials:

		Compound	0.3	0.5	1	5	10	20	40	100			Avg	%RSD		r2
71	TM	MIBK (methyl isobutyl ketone)		0.6191	0.9061	1.044	0.9864	0.9844	0.9548	0.9462			0.92	15	TM	
72	TM	Isopropylbenzene	9.954	9.972	9.476	9.537	9.203	8.861	8.645	8.396			9.3	6.3	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.347	1.370	1.160	1.386	1.308	1.273	1.267	1.307			1.3	5.5	TM**	
74	TM	1,2,3-Trichloropropane	0.1509	0.1679	0.1377	0.1448	0.1279	0.1358	0.1193	0.1199			0.14	12	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.3001	0.2988	0.2805	0.3159	0.2857	0.3091	0.3002	0.3134			0.30	4.2	TM	
76	TM	Bromobenzene		2.696	2.507	2.279	2.098	2.069	2.057	2.004			2.2	12	TM	
77	TM	n-Propylbenzene	12.0	11.5	11.1	11.2	10.5	10.4	10.1	9.754			11	7.0	TM	
78	TM	4-Ethyltoluene	7.178	6.227	6.779	6.434	6.372	6.162	6.013	5.888			6.4	6.6	TM	
79	TM	2-Chlorotoluene	8.086	7.252	7.439	7.457	6.836	6.786	6.675	6.367			7.1	7.7	TM	
80	TM	1,3,5-Trimethylbenzene	8.956	8.508	7.498	7.843	7.231	7.168	7.115	6.858			7.6	9.7	TM	
81	TM	4-Chlorotoluene	7.215	7.011	6.725	6.452	6.326	5.905	5.872	5.798			6.4	8.4	TM	
82	TM	Tert-Butylbenzene	10.4	9.026	9.250	8.666	8.334	8.138	7.855	7.717			8.7	10	TM	
83	TM	1,2,4-Trimethylbenzene	8.202	8.214	7.965	7.964	7.703	7.412	7.209	7.059			7.7	5.8	TM	
84	TM	Sec-Butylbenzene	11.9	10.9	10.7	10.5	10.2	9.999	9.705	9.472			10	7.5	TM	
85	TM	p-Isopropyltoluene	10.2	8.938	9.677	8.960	8.622	8.470	8.355	8.011			8.9	8.0	TM	
86	TM	Benzyl Chloride	2.298	2.287	2.278	1.958	1.959	1.981	1.960	2.060			2.1	7.7	TM	
87	TM	1,3-DCB	4.777	4.613	4.779	4.722	4.561	4.390	4.333	4.194			4.5	4.8	TM	
88	TM	1,4-DCB	4.765	4.680	4.453	4.540	4.313	4.242	4.137	4.102			4.4	5.6	TM	
89	TM	Hexachloroethane	1.658	1.505	1.613	1.849	1.882	1.941	1.940	1.958			1.8	9.8	TM	
90	TM	n-Butylbenzene	8.354	7.356	7.504	7.418	7.211	6.998	6.817	6.539			7.3	7.5	TM	
91	TM	1,2-DCB	3.934	4.161	4.074	4.247	4.007	3.925	3.772	3.695			4.0	4.7	TM	
92	TM	1,2-Dibromo-3-chloropropane		0.2149	0.1921	0.1796	0.1653	0.1727	0.1778	0.1895			0.18	8.8	TM	
93	TM	1,2,4-Trichlorobenzene	1.016	1.029	1.021	1.039	1.045	1.032	1.000	0.9538			1.0	2.9	TM	
94	TM	Hexachlorobutadiene		1.409	1.057	1.081	1.002	0.9969	0.9872	0.9681			1.1	14	TM	
95	TM	Naphthalene	5.284	5.295	4.608	5.017	4.610	4.545	4.396	4.325			4.8	8.1	TM	
96	TM	1,2,3-Trichlorobenzene	0.8383	0.9791	0.9398	0.9118	0.8990	0.9064	0.8504	0.8245			0.89	5.9	TM	
97																
98																
99																
100																
101																
102																
103																
104																
105																

ARS 4/11/12
CALLW 3.M

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C04W.D Vial: 1
Acq On : 10 Apr 12 16:36 Operator: SV
Sample : 0.3ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	665847	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.04	117	495872	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.24	152	227456	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.45	111	12552	0.64707 ppb		0.00
Spiked Amount 20.866			Recovery =	3.101%		
37) 1,2-DCA-D4(S)	12.23	65	10085	0.65660 ppb		0.00
Spiked Amount 21.039			Recovery =	3.123%		
55) Toluene-D8(S)	15.51	98	38713	0.63983 ppb		0.00
Spiked Amount 25.355			Recovery =	2.524%		
63) 4-Bromofluorobenzene(S)	20.11	95	17082	0.68825 ppb		0.00
Spiked Amount 27.007			Recovery =	2.547%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.12	85	5771	0.26641 ppb	#	55
3) Freon 114	4.37	85	2726	0.32671 ppb		96
4) Chloromethane	4.60	52	5670	0.60873 ppb	#	7
5) Vinyl chloride	4.86	62	2678	0.43254 ppb		89
6) Bromomethane	5.77	94	1173	0.27541 ppb		73
7) Chloroethane	5.95	64	1636	0.30905 ppb		95
8) Dichlorofluoromethane	6.04	67	12529	0.31755 ppb		83
9) Trichlorofluoromethane	6.56	103	1687	0.36165 ppb	#	67
10) Acetonitrile	7.70	41	14367	12.10703 ug/l		100
11) Acrolein	7.20	56	17936	14.07076 ppb		96
13) Freon-113	7.49	101	4561	0.32889 ppb		92
14) 1,1-DCE	7.72	96	4864	0.34921 ppb		97
15) t-Butanol	7.81	59	8564	15.69887 ppb	#	89
16) Methyl Acetate	8.24	43	5908	-0.30934 ppb		96
17) Iodomethane	8.20	142	1914	0.15294 ppb	#	77
18) Acrylonitrile	8.58	53	1435	0.41656 ppb	#	56
19) Methylene chloride	8.50	84	11024	0.64344 ppb		83
20) Carbon disulfide	8.59	76	1871	0.30747 ppb	#	48
21) Methyl t-butyl ether (MtBE	8.92	73	12736	0.35606 ppb	#	87
22) Trans-1,2-DCE	9.12	96	7659	0.46942 ppb		81
23) Diisopropyl Ether	9.78	45	22758	0.31914 ppb	#	85
24) 1,1-DCA	9.80	63	12111	0.32274 ppb		97
25) Vinyl Acetate	9.46	43	3515	-0.56371 ppb		96
26) Ethyl tert Butyl Ether	10.47	59	17794	0.33760 ppb		92
27) MEK (2-Butanone)	10.48	43	718	0.33052 ppb	#	66
28) Cis-1,2-DCE	10.84	96	8206	-0.53009 ppb	#	64
29) 2,2-Dichloropropane	10.83	77	8570	0.33789 ppb	#	63
30) Chloroform	11.12	85	12517	0.59658 ppb		97
31) Bromochloromethane	11.33	128	2748	0.32186 ppb		83
33) 1,1,1-TCA	11.86	97	8287	0.32322 ppb	#	79
34) Cyclohexane	12.00	56	6912	0.31507 ppb	#	66
35) 1,1-Dichloropropene	12.13	75	7623	0.34024 ppb	#	90
36) 2,2,4-Trimethylpentane	12.19	57	20794	0.47822 ppb		94
38) Carbon Tetrachloride	12.30	117	6835	0.30589 ppb		96
39) Tert Amyl Methyl Ether	12.37	73	15054	0.36276 ppb	#	89
40) 1,2-DCA	12.39	62	5774	0.33587 ppb		97
41) Benzene	12.51	78	25917	0.34497 ppb		95
42) TCE	13.54	95	5387	0.29806 ppb	#	72
43) 2-Pentanone	13.22	43	85921	12.81697 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C04W.D Vial: 1
Acq On : 10 Apr 12 16:36 Operator: SV
Sample : 0.3ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44) 1,2-Dichloropropane	13.77	63	7139	0.32125	ppb	#	93
45) Bromodichloromethane	14.13	83	6225	0.28897	ppb		81
46) Methyl Cyclohexane	13.83	83	5567	0.30023	ppb		79
47) Dibromomethane	14.19	93	2507	0.28818	ppb		88
48) 2-Chloroethyl vinyl ether	14.58	63	1896	0.25123	ppb	#	82
49) 1-Bromo-2-chloroethane	14.90	63	6246	0.30853	ppb	#	72
50) Cis-1,3-Dichloropropene	15.02	75	11741	0.40069	ppb		84
51) Toluene	15.64	91	25488	0.34770	ppb		98
52) Trans-1,3-Dichloropropene	15.80	75	6920	0.33116	ppb	#	81
53) 1,1,2-TCA	16.08	83	3240	0.30709	ppb		79
56) 1,2-EDB	17.33	107	2950	0.25693	ppb	#	85
57) Tetrachloroethene	16.79	164	5004	0.35804	ppb		94
58) 1-Chlorohexane	17.71	91	7418	0.28517	ppb		88
59) 1,1,1,2-Tetrachloroethane	18.16	131	5493	0.29049	ppb	#	66
60) m&p-Xylene	18.36	106	20744	0.61261	ppb		96
61) o-Xylene	19.09	106	11596	0.32868	ppb		75
62) Styrene	19.12	104	16937	0.30412	ppb		83
64) 2-Hexanone	16.14	43	1229	0.22730	ppb	#	63
65) 1,3-Dichloropropane	16.50	76	7288	0.32778	ppb		86
66) Dibromochloromethane	16.96	129	4078	0.27069	ppb		90
67) Chlorobenzene	18.10	112	16259	0.30963	ppb		94
68) Ethylbenzene	18.21	91	26386	0.31526	ppb		85
69) Bromoform	19.63	173	1685	0.25076	ppb		92
71) MIBK (methyl isobutyl keto	14.69	43	3087	0.36873	ppb	#	46
72) Isopropylbenzene	19.74	105	27170	0.32265	ppb		92
73) 1,1,2,2-Tetrachloroethane	19.89	83	3677	0.31038	ppb		86
74) 1,2,3-Trichloropropane	20.16	110	412	0.32810	ppb	#	60
75) t-1,4-Dichloro-2-Butene	20.22	53	819	0.29960	ppb	#	41
76) Bromobenzene	20.48	156	9051	0.44332	ppb		83
77) n-Propylbenzene	20.44	91	32700	0.33209	ppb		91
78) 4-Ethyltoluene	20.63	105	19593	0.33745	ppb		92
79) 2-Chlorotoluene	20.74	91	22071	0.34108	ppb		98
80) 1,3,5-Trimethylbenzene	20.71	105	24445	0.35135	ppb		91
81) 4-Chlorotoluene	20.81	91	19694	0.33753	ppb		90
82) Tert-Butylbenzene	21.36	119	28334	0.35916	ppb		93
83) 1,2,4-Trimethylbenzene	21.41	105	22386	0.31888	ppb		97
84) Sec-Butylbenzene	21.75	105	32556	0.34300	ppb		97
85) p-Isopropyltoluene	21.98	119	27785	0.34307	ppb		90
86) Benzyl Chloride	22.43	91	6272	0.32863	ppb	#	89
87) 1,3-DCB	22.12	146	13038	0.31521	ppb		95
88) 1,4-DCB	22.28	146	13006	0.32460	ppb	#	78
89) Hexachloroethane	23.59	117	4526	0.27744	ppb	#	84
90) n-Butylbenzene	22.69	91	22803	0.34453	ppb	#	88
91) 1,2-DCB	22.92	146	10739	0.29680	ppb		95
92) 1,2-Dibromo-3-chloropropan	24.15	155	896	0.53364	ppb	#	3
93) 1,2,4-Trichlorobenzene	25.57	180	2772	0.29959	ppb		88
94) Hexachlorobutadiene	25.83	223	3666	0.37601	ppb		73
95) Naphthalene	25.93	128	14423	0.33304	ppb		94
96) 1,2,3-Trichlorobenzene	26.29	180	2288	0.28140	ppb	#	90

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

Quantitation Report

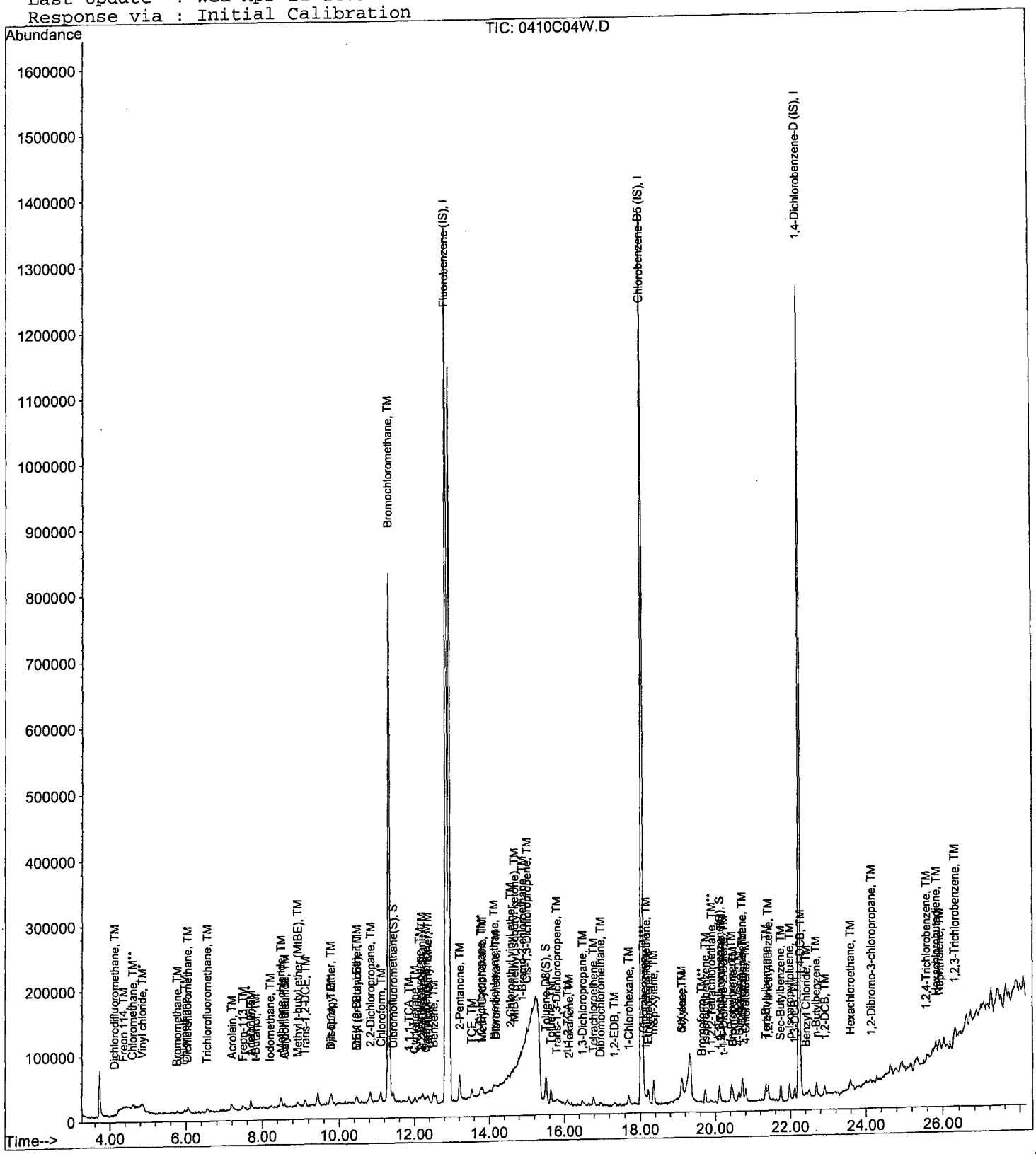
Data File : M:\CHICO\DATA\C120410\0410C04W.D
Acq On : 10 Apr 12 16:36
Sample : 0.3ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C05W.D Vial: 1
Acq On : 10 Apr 12 17:13 Operator: SV
Sample : 0.5ug/L Vol Std 04-10-12 Inst ' : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	643616	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.04	117	490560	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.24	152	225728	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.44	111	19991	1.06615 ppb		0.00
Spiked Amount 20.866			Recovery = 5.109%			
37) 1,2-DCA-D4(S)	12.24	65	16972	1.14316 ppb		0.00
Spiked Amount 21.039			Recovery = 5.433%			
55) Toluene-D8(S)	15.51	98	62897	1.05079 ppb		0.00
Spiked Amount 25.355			Recovery = 4.145%			
63) 4-Bromofluorobenzene(S)	20.11	95	25818	1.05150 ppb		0.00
Spiked Amount 27.007			Recovery = 3.895%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.11	85	10732	0.51254 ppb		83
3) Freon 114	4.36	85	4975	0.61685 ppb		86
4) Chloromethane	4.61	52	5367	0.59610 ppb		97
5) Vinyl chloride	4.85	62	3029	0.50613 ppb	#	86
6) Bromomethane	5.75	94	1757	0.42678 ppb	#	63
7) Chloroethane	5.95	64	3332	0.65117 ppb		99
8) Dichlorofluoromethane	6.04	67	20371	0.53414 ppb		94
9) Trichlorofluoromethane	6.57	103	2494	0.55312 ppb	#	76
10) Acetonitrile	7.69	41	28941	25.23089 ug/l		100
11) Acrolein	7.19	56	31431	25.50925 ppb		92
12) Acetone	7.33	43	3090	0.52362 ppb		94
13) Freon-113	7.50	101	7026	0.52414 ppb		90
14) 1,1-DCE	7.70	96	8056	0.59836 ppb	#	59
15) t-Butanol	7.79	59	14598	27.68425 ppb	#	88
17) Iodomethane	8.21	142	3161	0.21891 ppb		87
18) Acrylonitrile	8.60	53	1952	0.58621 ppb	#	42
19) Methylene chloride	8.51	84	15701	0.94808 ppb		97
20) Carbon disulfide	8.60	76	2876	0.48895 ppb	#	82
21) Methyl t-butyl ether (MtBE	8.93	73	18556	0.53668 ppb		90
22) Trans-1,2-DCE	9.12	96	9948	0.63078 ppb		88
23) Diisopropyl Ether	9.79	45	37555	0.54483 ppb		96
24) 1,1-DCA	9.81	63	20311	0.55995 ppb		97
25) Vinyl Acetate	9.45	43	4855	-0.19156 ppb	#	85
26) Ethyl tert Butyl Ether	10.47	59	26388	0.51795 ppb		98
27) MEK (2-Butanone)	10.47	43	1281	0.61006 ppb	#	84
28) Cis-1,2-DCE	10.84	96	14225	-0.17673 ppb		79
29) 2,2-Dichloropropane	10.84	77	13016	0.53090 ppb	#	74
30) Chloroform	11.11	85	10723	0.52873 ppb		91
31) Bromochloromethane	11.34	128	4597	0.55703 ppb		94
33) 1,1,1-TCA	11.86	97	13570	0.54755 ppb		91
34) Cyclohexane	12.02	56	11416	0.53836 ppb		90
35) 1,1-Dichloropropene	12.13	75	11831	0.54629 ppb		93
36) 2,2,4-Trimethylpentane	12.20	57	31969	0.76062 ppb		97
38) Carbon Tetrachloride	12.32	117	11228	0.51985 ppb		91
39) Tert Amyl Methyl Ether	12.37	73	20372	0.50787 ppb		96
40) 1,2-DCA	12.40	62	8774	0.52801 ppb	#	87
41) Benzene	12.51	78	40014	0.55100 ppb		92
42) TCE	13.54	95	9500	0.54379 ppb		87
43) 2-Pentanone	13.22	43	174708	26.96164 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C05W.D Vial: 1
Acq On : 10 Apr 12 17:13 Operator: SV
Sample : 0.5ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
44) 1,2-Dichloropropane	13.77	63	11097	0.51661 ppb	#	94
45) Bromodichloromethane	14.13	83	10222	0.49091 ppb	#	93
46) Methyl Cyclohexane	13.83	83	10073	0.56200 ppb		100
47) Dibromomethane	14.19	93	4328	0.51469 ppb		97
48) 2-Chloroethyl vinyl ether	14.57	63	3768	0.51653 ppb	#	79
49) 1-Bromo-2-chloroethane	14.88	63	10916	0.55783 ppb		100
50) Cis-1,3-Dichloropropene	15.01	75	15042	0.53108 ppb		99
51) Toluene	15.64	91	37851	0.53419 ppb		97
52) Trans-1,3-Dichloropropene	15.81	75	11236	0.55628 ppb		99
53) 1,1,2-TCA	16.08	83	5613	0.55038 ppb		95
56) 1,2-EDB	17.33	107	5922	0.52136 ppb	#	79
57) Tetrachloroethene	16.79	164	6854	0.49573 ppb		83
58) 1-Chlorohexane	17.71	91	14176	0.55088 ppb	#	80
59) 1,1,1,2-Tetrachloroethane	18.16	131	9157	0.48951 ppb		81
60) m&p-Xylene	18.36	106	35781	1.06813 ppb		86
61) o-Xylene	19.10	106	17608	0.50450 ppb		97
62) Styrene	19.12	104	28646	0.51993 ppb		90
64) 2-Hexanone	16.13	43	3341	0.62460 ppb		85
65) 1,3-Dichloropropane	16.50	76	12136	0.55172 ppb		94
66) Dibromochloromethane	16.96	129	7113	0.47726 ppb		85
67) Chlorobenzene	18.10	112	26487	0.50987 ppb		90
68) Ethylbenzene	18.22	91	42836	0.51735 ppb		95
69) Bromoform	19.63	173	2957	0.44482 ppb		92
71) MIBK (methyl isobutyl keto	14.60	43	2795	0.33641 ppb		82
72) Isopropylbenzene	19.73	105	45019	0.53871 ppb		98
73) 1,1,2,2-Tetrachloroethane	19.89	83	6183	0.52590 ppb		91
74) 1,2,3-Trichloropropane	20.16	110	758	0.60827 ppb		91
75) t-1,4-Dichloro-2-Butene	20.23	53	1349	0.49725 ppb	#	74
76) Bromobenzene	20.47	156	12169	0.60061 ppb		88
77) n-Propylbenzene	20.44	91	52127	0.53344 ppb		96
78) 4-Ethyltoluene	20.64	105	28111	0.48786 ppb		90
79) 2-Chlorotoluene	20.73	91	32738	0.50980 ppb		86
80) 1,3,5-Trimethylbenzene	20.72	105	38411	0.55631 ppb		96
81) 4-Chlorotoluene	20.81	91	31652	0.54664 ppb		96
82) Tert-Butylbenzene	21.35	119	40750	0.52049 ppb		94
83) 1,2,4-Trimethylbenzene	21.41	105	37084	0.53230 ppb		96
84) Sec-Butylbenzene	21.75	105	49160	0.52190 ppb		100
85) p-Isopropyltoluene	21.98	119	40353	0.50206 ppb		98
86) Benzyl Chloride	22.43	91	10324	0.54508 ppb		96
87) 1,3-DCB	22.12	146	20824	0.50731 ppb		99
88) 1,4-DCB	22.29	146	21126	0.53128 ppb		95
89) Hexachloroethane	23.59	117	6795	0.41971 ppb		89
90) n-Butylbenzene	22.70	91	33209	0.50559 ppb		95
91) 1,2-DCB	22.92	146	18785	0.52314 ppb		95
92) 1,2-Dibromo-3-chloropropan	24.13	155	970	0.58213 ppb	#	23
93) 1,2,4-Trichlorobenzene	25.58	180	4645	0.50586 ppb		94
94) Hexachlorobutadiene	25.83	223	6359	0.65722 ppb		79
95) Naphthalene	25.93	128	23903	0.55617 ppb		94
96) 1,2,3-Trichlorobenzene	26.30	180	4420	0.54778 ppb		91

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

Quantitation Report

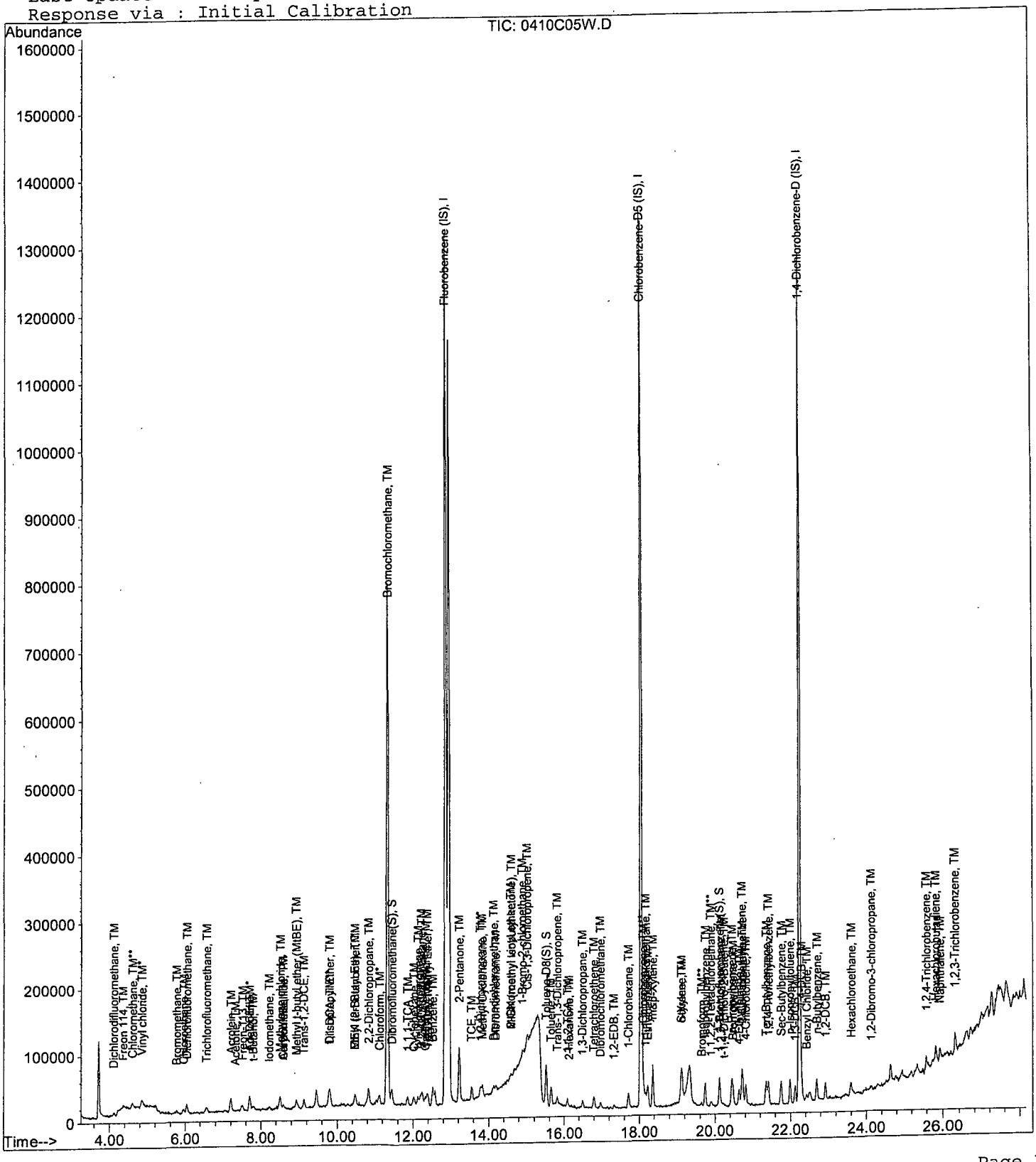
Data File : M:\CHICO\DATA\C120410\0410C05W.D
Acq On : 10 Apr 12 17:13
Sample : 0.5ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C06W.D Vial: 1
Acq On : 10 Apr 12 17:50 Operator: SV
Sample : 1.0ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	634869	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.04	117	468032	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.24	152	217728	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.44	111	39682	2.14547 ppb		0.00
Spiked Amount 20.866			Recovery	= 10.280%		
37) 1,2-DCA-D4(S)	12.24	65	30994	2.11638 ppb		0.00
Spiked Amount 21.039			Recovery	= 10.058%		
55) Toluene-D8(S)	15.51	98	122799	2.15029 ppb		0.00
Spiked Amount 25.355			Recovery	= 8.480%		
63) 4-Bromofluorobenzene(S)	20.11	95	50148	2.14071 ppb		0.00
Spiked Amount 27.007			Recovery	= 7.928%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.12	85	22157	1.07276 ppb		87
3) Freon 114	4.37	85	7283	0.91546 ppb		93
4) Chloromethane	4.61	52	8573	0.96530 ppb		86
5) Vinyl chloride	4.85	62	6219	1.05347 ppb	#	85
6) Bromomethane	5.76	94	4016	0.98893 ppb		72
7) Chloroethane	5.95	64	5625	1.11444 ppb	#	86
8) Dichlorofluoromethane	6.05	67	39290	1.04440 ppb		98
9) Trichlorofluoromethane	6.56	103	4814	1.08235 ppb		95
10) Acetonitrile	7.70	41	63549	56.16562 ug/l		100
11) Acrolein	7.19	56	63814	52.50469 ppb		97
12) Acetone	7.32	43	4278	1.07587 ppb	#	51
13) Freon-113	7.50	101	13896	1.05093 ppb	#	86
14) 1,1-DCE	7.71	96	14081	1.06029 ppb		93
15) t-Butanol	7.80	59	27671	53.19942 ppb	#	82
16) Methyl Acetate	8.22	43	16044	1.05968 ppb		97
17) Iodomethane	8.21	142	9913	0.56559 ppb	#	84
18) Acrylonitrile	8.60	53	3607	1.09815 ppb		80
19) Methylene chloride	8.51	84	20275	1.24115 ppb		89
20) Carbon disulfide	8.60	76	5578	0.96139 ppb		94
21) Methyl t-butyl ether (MtBE	8.92	73	32942	0.96589 ppb		92
22) Trans-1,2-DCE	9.14	96	16173	1.03961 ppb		90
23) Diisopropyl Ether	9.79	45	70729	1.04023 ppb		96
24) 1,1-DCA	9.81	63	37878	1.05864 ppb	#	91
25) Vinyl Acetate	9.46	43	6630	0.28503 ppb		96
26) Ethyl tert Butyl Ether	10.47	59	53962	1.07376 ppb		93
27) MEK (2-Butanone)	10.47	43	2171	1.04815 ppb	#	82
28) Cis-1,2-DCE	10.83	96	22660	0.31444 ppb		94
29) 2,2-Dichloropropane	10.83	77	25729	1.06391 ppb		95
30) Chloroform	11.12	85	20694	1.03443 ppb		96
31) Bromochloromethane	11.33	128	7979	0.98016 ppb		78
33) 1,1,1-TCA	11.85	97	26479	1.08316 ppb		85
34) Cyclohexane	12.02	56	22232	1.06286 ppb		93
35) 1,1-Dichloropropene	12.13	75	23397	1.09523 ppb		95
36) 2,2,4-Trimethylpentane	12.20	57	47811	1.15321 ppb		96
38) Carbon Tetrachloride	12.31	117	23925	1.12298 ppb		84
39) Tert Amyl Methyl Ether	12.38	73	40483	1.02314 ppb	#	93
40) 1,2-DCA	12.40	62	16404	1.00078 ppb		94
41) Benzene	12.51	78	74189	1.03568 ppb		100
42) TCE	13.55	95	17758	1.03050 ppb		92

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

Data File : M:\CHICO\DATA\C120410\0410C06W.D Vial: 1
Acq On : 10 Apr 12 17:50 Operator: SV
Sample : 1.0ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.22	43	334120	52.27316	ppb		98
44)	1,2-Dichloropropane	13.78	63	22004	1.03848	ppb		97
45)	Bromodichloromethane	14.13	83	20703	1.00795	ppb	#	93
46)	Methyl Cyclohexane	13.84	83	18711	1.05832	ppb		99
47)	Dibromomethane	14.19	93	8854	1.06743	ppb		93
48)	2-Chloroethyl vinyl ether	14.58	63	7230	1.00477	ppb		94
49)	1-Bromo-2-chloroethane	14.89	63	20080	1.04028	ppb		85
50)	Cis-1,3-Dichloropropene	15.01	75	27264	0.97586	ppb		94
51)	Toluene	15.65	91	72147	1.03224	ppb		90
52)	Trans-1,3-Dichloropropene	15.81	75	17181	0.86233	ppb		99
53)	1,1,2-TCA	16.09	83	10278	1.02168	ppb		98
56)	1,2-EDB	17.34	107	10491	0.96805	ppb	#	94
57)	Tetrachloroethene	16.80	164	13505	1.02378	ppb		92
58)	1-Chlorohexane	17.71	91	25923	1.05585	ppb		93
59)	1,1,1,2-Tetrachloroethane	18.15	131	18581	1.04110	ppb		97
60)	m&p-Xylene	18.36	106	65454	2.04798	ppb		96
61)	o-Xylene	19.10	106	33929	1.01891	ppb		97
62)	Styrene	19.12	104	52671	1.00200	ppb		96
64)	2-Hexanone	16.14	43	4413	0.86472	ppb	#	57
65)	1,3-Dichloropropane	16.50	76	21246	1.01237	ppb		96
66)	Dibromochloromethane	16.97	129	13132	0.92352	ppb		92
67)	Chlorobenzene	18.10	112	51911	1.04738	ppb		93
68)	Ethylbenzene	18.22	91	81015	1.02554	ppb		100
69)	Bromoform	19.63	173	5899	0.93009	ppb	#	78
71)	MIBK (methyl isobutyl keto	14.70	43	7891	0.98467	ppb		84
72)	Isopropylbenzene	19.74	105	82529	1.02385	ppb		95
73)	1,1,2,2-Tetrachloroethane	19.89	83	10100	0.89064	ppb	#	95
74)	1,2,3-Trichloropropane	20.15	110	1199	0.99750	ppb		92
75)	t-1,4-Dichloro-2-Butene	20.24	53	2443	0.93360	ppb	#	40
76)	Bromobenzene	20.47	156	21830	1.11702	ppb		83
77)	n-Propylbenzene	20.44	91	97061	1.02977	ppb		96
78)	4-Ethyltoluene	20.64	105	59042	1.06232	ppb		98
79)	2-Chlorotoluene	20.74	91	64790	1.04599	ppb		97
80)	1,3,5-Trimethylbenzene	20.72	105	65302	0.98052	ppb		96
81)	4-Chlorotoluene	20.81	91	58567	1.04863	ppb		88
82)	Tert-Butylbenzene	21.35	119	80558	1.06676	ppb		99
83)	1,2,4-Trimethylbenzene	21.41	105	69364	1.03222	ppb		90
84)	Sec-Butylbenzene	21.75	105	93565	1.02981	ppb		99
85)	p-Isopropyltoluene	21.98	119	84276	1.08707	ppb		99
86)	Benzyl Chloride	22.42	91	19840	1.08600	ppb		93
87)	1,3-DCB	22.12	146	41619	1.05116	ppb		90
88)	1,4-DCB	22.29	146	38778	1.01104	ppb		97
89)	Hexachloroethane	23.59	117	14044	0.89934	ppb		90
90)	n-Butylbenzene	22.69	91	65351	1.03150	ppb		95
91)	1,2-DCB	22.92	146	35481	1.02442	ppb		94
92)	1,2-Dibromo-3-chloropropan	24.14	155	1673	1.04092	ppb	#	69
93)	1,2,4-Trichlorobenzene	25.58	180	8894	1.00418	ppb		89
94)	Hexachlorobutadiene	25.82	223	9209	0.98674	ppb		87
95)	Naphthalene	25.93	128	40132	0.96809	ppb		95
96)	1,2,3-Trichlorobenzene	26.29	180	8185	1.05166	ppb		88

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

Quantitation Report

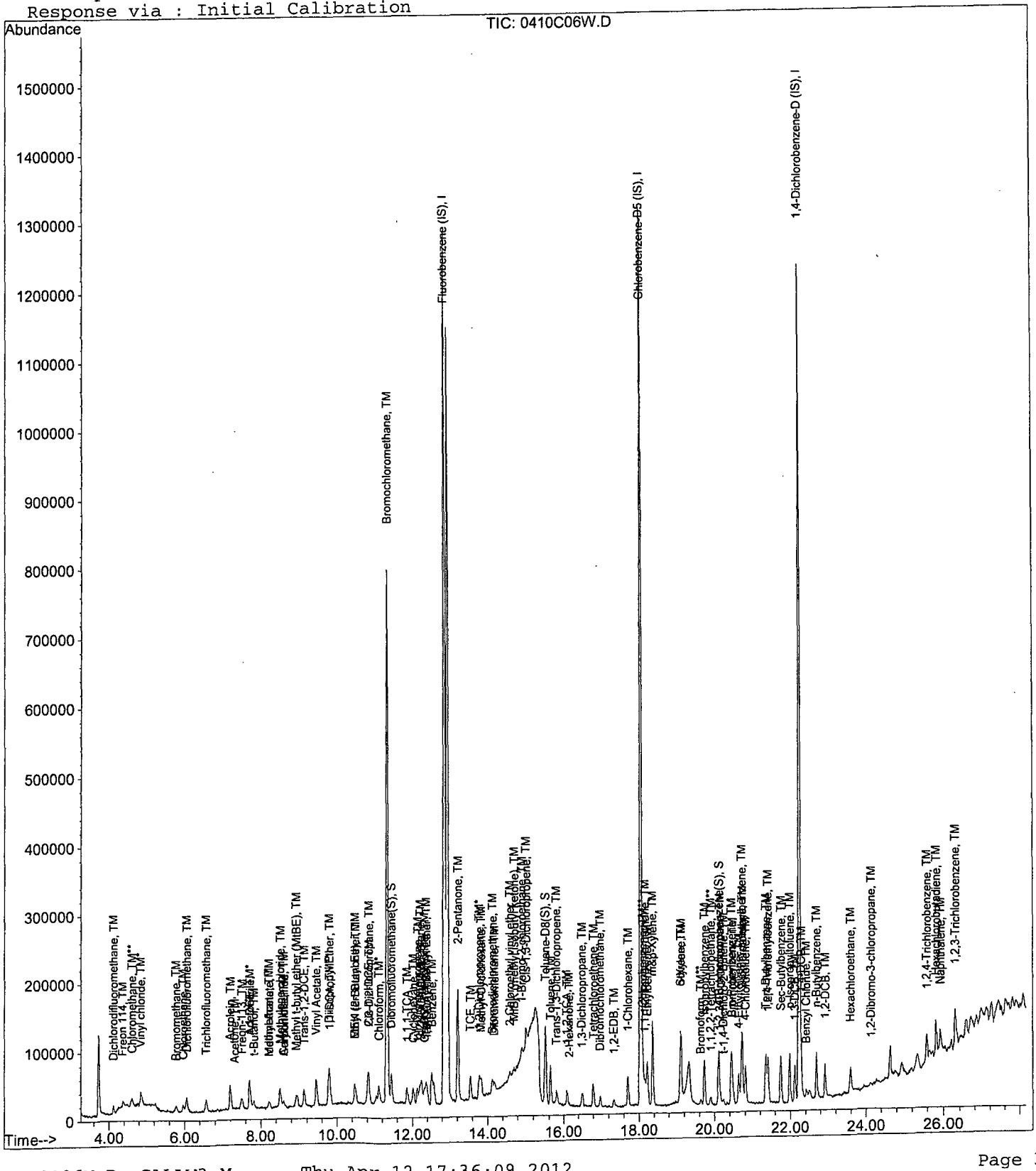
Data File : M:\CHICO\DATA\C120410\0410C06W.D
Acq On : 10 Apr 12 17:50
Sample : 1.0ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C07W.D Vial: 1
Acq On : 10 Apr 12 18:27 Operator: SV
Sample : 5.0ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	653447	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.04	117	486272	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	222912	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.44	111	185151	9.72586 ppb		0.00
Spiked Amount 20.866			Recovery = 46.612%			
37) 1,2-DCA-D4(S)	12.24	65	147069	9.75689 ppb		0.00
Spiked Amount 21.039			Recovery = 46.376%			
55) Toluene-D8(S)	15.51	98	575910	9.70628 ppb		0.00
Spiked Amount 25.355			Recovery = 38.280%			
63) 4-Bromofluorobenzene(S)	20.11	95	231236	9.50071 ppb		0.00
Spiked Amount 27.007			Recovery = 35.180%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.13	85	93462	4.39641 ppb		91
3) Freon 114	4.38	85	36348	4.43896 ppb		85
4) Chloromethane	4.61	52	45683	4.99756 ppb		80
5) Vinyl chloride	4.87	62	30104	4.95450 ppb		99
6) Bromomethane	5.77	94	21672	5.18496 ppb		93
7) Chloroethane	5.95	64	22968	4.42110 ppb	#	88
8) Dichlorofluoromethane	6.05	67	198545	5.12765 ppb		97
9) Trichlorofluoromethane	6.56	103	21592	4.71660 ppb		99
10) Acetonitrile	7.69	41	124332	106.76244 ug/l		100
11) Acrolein	7.19	56	127774	102.14060 ppb		97
12) Acetone	7.32	43	13089	4.86480 ppb	#	66
13) Freon-113	7.49	101	65978	4.84792 ppb		97
14) 1,1-DCE	7.70	96	67319	4.92494 ppb		94
15) t-Butanol	7.80	59	54068	100.99412 ppb		96
16) Methyl Acetate	8.22	43	46211	4.85386 ppb		100
17) Iodomethane	8.20	142	95491	4.79326 ppb		95
18) Acrylonitrile	8.58	53	16361	4.83948 ppb		84
19) Methylene chloride	8.51	84	85236	5.06942 ppb		87
20) Carbon disulfide	8.59	76	31928	5.34644 ppb		94
21) Methyl t-butyl ether (MtBE	8.92	73	181171	5.16106 ppb		96
22) Trans-1,2-DCE	9.13	96	81259	5.07489 ppb		92
23) Diisopropyl Ether	9.77	45	363423	5.19300 ppb		97
24) 1,1-DCA	9.81	63	191530	5.20083 ppb		97
25) Vinyl Acetate	9.45	43	22224	4.15838 ppb		91
26) Ethyl tert Butyl Ether	10.46	59	262890	5.08239 ppb		98
27) MEK (2-Butanone)	10.46	43	9907	4.64709 ppb		99
28) Cis-1,2-DCE	10.83	96	103439	4.74540 ppb		98
29) 2,2-Dichloropropane	10.83	77	122726	4.93051 ppb		98
30) Chloroform	11.11	85	104792	5.08931 ppb		97
31) Bromochloromethane	11.33	128	42704	5.09671 ppb		90
33) 1,1,1-TCA	11.85	97	121309	4.82122 ppb		97
34) Cyclohexane	12.01	56	107347	4.98610 ppb		95
35) 1,1-Dichloropropene	12.13	75	109422	4.97648 ppb		93
36) 2,2,4-Trimethylpentane	12.19	57	215976	5.06127 ppb		96
38) Carbon Tetrachloride	12.31	117	110247	5.02759 ppb		97
39) Tert Amyl Methyl Ether	12.37	73	207684	5.09964 ppb		98
40) 1,2-DCA	12.40	62	89863	5.32654 ppb		99
41) Benzene	12.51	78	368051	4.99191 ppb		97
42) TCE	13.55	95	89028	5.01943 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C07W.D Vial: 1
Acq On : 10 Apr 12 18:27 Operator: SV
Sample : 5.0ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43) 2-Pentanone	13.21	43	677270	102.94656	ppb		100
44) 1,2-Dichloropropane	13.77	63	113747	5.21568	ppb		97
45) Bromodichloromethane	14.13	83	108054	5.11118	ppb		93
46) Methyl Cyclohexane	13.83	83	86980	4.77984	ppb		97
47) Dibromomethane	14.18	93	45132	5.28639	ppb		95
48) 2-Chloroethyl vinyl ether	14.58	63	37641	5.08234	ppb	#	92
49) 1-Bromo-2-chloroethane	14.89	63	101184	5.09296	ppb		95
50) Cis-1,3-Dichloropropene	15.01	75	135896	4.72582	ppb		96
51) Toluene	15.64	91	355580	4.94282	ppb		99
52) Trans-1,3-Dichloropropene	15.80	75	101046	4.92740	ppb		97
53) 1,1,2-TCA	16.08	83	52967	5.11548	ppb		93
56) 1,2-EDB	17.33	107	58481	5.19389	ppb		95
57) Tetrachloroethene	16.79	164	68011	4.96237	ppb		96
58) 1-Chlorohexane	17.71	91	124594	4.88438	ppb		95
59) 1,1,1,2-Tetrachloroethane	18.16	131	94537	5.09823	ppb		97
60) m&p-Xylene	18.36	106	336588	10.13641	ppb		98
61) o-Xylene	19.10	106	174205	5.03525	ppb		95
62) Styrene	19.12	104	281827	5.16033	ppb		99
64) 2-Hexanone	16.11	43	26421	4.98297	ppb		89
65) 1,3-Dichloropropane	16.50	76	111251	5.10227	ppb		98
66) Dibromochloromethane	16.97	129	75006	5.07702	ppb		97
67) Chlorobenzene	18.10	112	254359	4.93956	ppb		99
68) Ethylbenzene	18.22	91	417482	5.08654	ppb		97
69) Bromoform	19.63	173	31749	4.81805	ppb		96
71) MIBK (methyl isobutyl keto	14.68	43	46553	5.67395	ppb		99
72) Isopropylbenzene	19.73	105	425167	5.15191	ppb		93
73) 1,1,2,2-Tetrachloroethane	19.89	83	61776	5.32084	ppb		97
74) 1,2,3-Trichloropropane	20.14	110	6454	5.24452	ppb		91
75) t-1,4-Dichloro-2-Butene	20.21	53	14082	5.25634	ppb		73
76) Bromobenzene	20.47	156	101590	5.07739	ppb		90
77) n-Propylbenzene	20.44	91	497702	5.15758	ppb		98
78) 4-Ethyltoluene	20.63	105	286857	5.04127	ppb		99
79) 2-Chlorotoluene	20.73	91	332439	5.24217	ppb		96
80) 1,3,5-Trimethylbenzene	20.71	105	349663	5.12816	ppb		94
81) 4-Chlorotoluene	20.81	91	287638	5.03031	ppb		96
82) Tert-Butylbenzene	21.34	119	386345	4.99707	ppb		99
83) 1,2,4-Trimethylbenzene	21.40	105	355033	5.16044	ppb		99
84) Sec-Butylbenzene	21.75	105	469436	5.04663	ppb		98
85) p-Isopropyltoluene	21.98	119	399463	5.03281	ppb		99
86) Benzyl Chloride	22.42	91	87311	4.66806	ppb	#	89
87) 1,3-DCB	22.12	146	210540	5.19390	ppb		98
88) 1,4-DCB	22.28	146	202413	5.15467	ppb		95
89) Hexachloroethane	23.59	117	82414	5.15485	ppb		95
90) n-Butylbenzene	22.69	91	330699	5.09836	ppb		97
91) 1,2-DCB	22.92	146	189332	5.33932	ppb		96
92) 1,2-Dibromo-3-chloropropan	24.14	155	8005	4.86480	ppb		94
93) 1,2,4-Trichlorobenzene	25.57	180	46336	5.10991	ppb		99
94) Hexachlorobutadiene	25.82	223	48184	5.04285	ppb		88
95) Naphthalene	25.92	128	223688	5.27043	ppb		96
96) 1,2,3-Trichlorobenzene	26.29	180	40651	5.10161	ppb		96

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

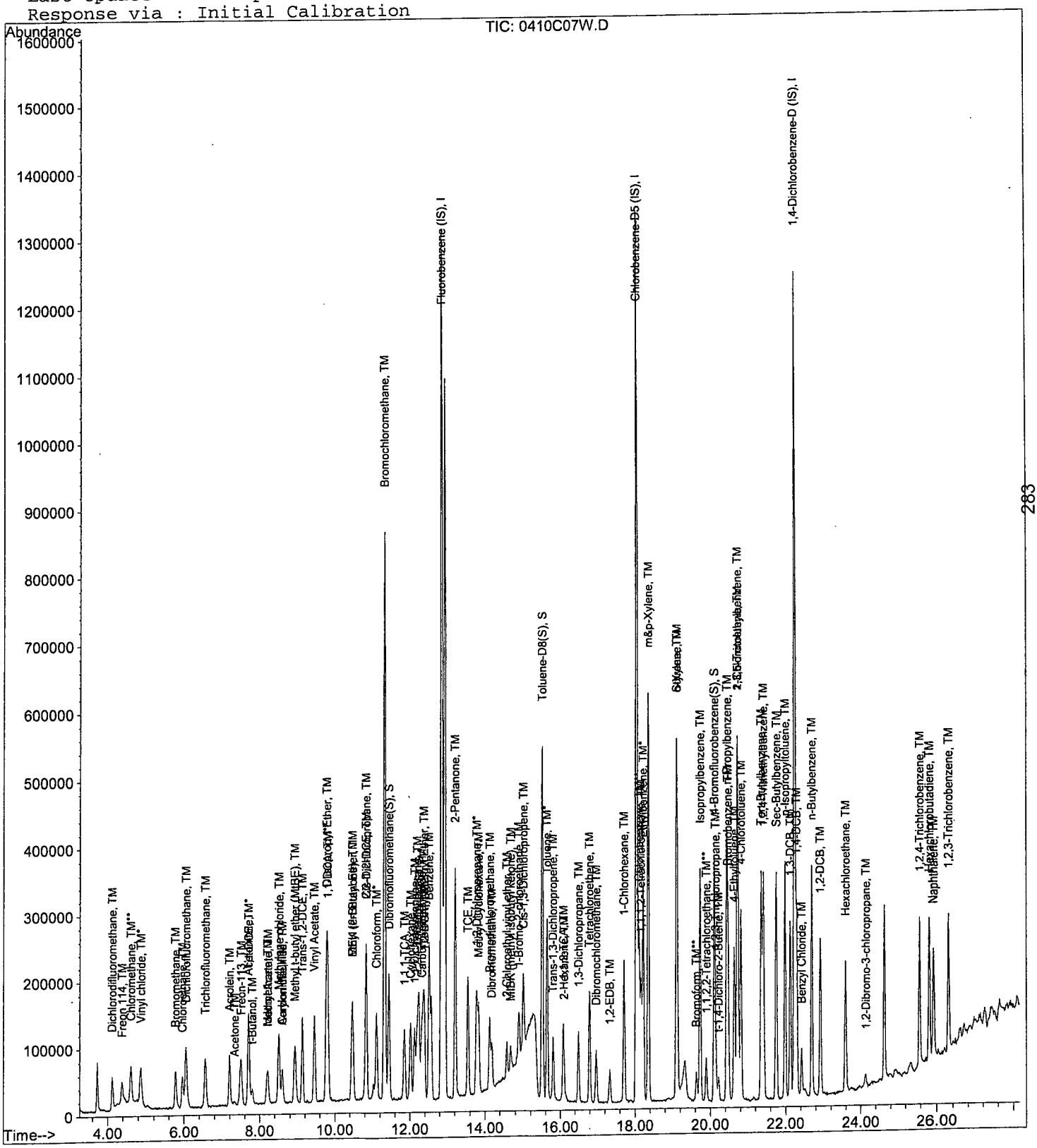
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0410C07W.D
Acq On : 10 Apr 12 18:27
Sample : 5.0ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



283

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C08W.D Vial: 1
Acq On : 10 Apr 12 19:04 Operator: SV
Sample : 10ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	662519	25.00000	ppb	0.00
54) Chlorobenzene-D5 (IS)	18.04	117	480192	25.00000	ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	230016	25.00000	ppb	0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.44	111	467495	24.22095	ppb	0.00
Spiked Amount 20.866			Recovery = 116.080%			
37) 1,2-DCA-D4(S)	12.23	65	372076	24.34634	ppb	0.00
Spiked Amount 21.039			Recovery = 115.718%			
55) Toluene-D8(S)	15.50	98	1467286	25.04248	ppb	0.00
Spiked Amount 25.355			Recovery = 98.765%			
63) 4-Bromofluorobenzene(S)	20.10	95	593501	24.69371	ppb	0.00
Spiked Amount 27.007			Recovery = 91.435%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.12	85	201778	9.36159	ppb	100
3) Freon 114	4.38	85	74465	8.96943	ppb	100
4) Chloromethane	4.61	52	85185	9.19134	ppb	100
5) Vinyl chloride	4.85	62	52648	8.54613	ppb	100
6) Bromomethane	5.76	94	44024	10.38838	ppb	100
7) Chloroethane	5.96	64	51944	9.86176	ppb	100
8) Dichlorofluoromethane	6.05	67	380608	9.69503	ppb	100
9) Trichlorofluoromethane	6.55	103	45176	9.73320	ppb	100
10) Acetonitrile	7.69	41	151787	128.55298	ug/l	100
11) Acrolein	7.19	56	155810	122.84663	ppb	100
12) Acetone	7.32	43	25965	10.32648	ppb	100
13) Freon-113	7.49	101	134236	9.72830	ppb	100
14) 1,1-DCE	7.71	96	130016	9.38149	ppb	100
15) t-Butanol	7.80	59	67332	124.04788	ppb	100
16) Methyl Acetate	8.21	43	86667	9.87094	ppb	100
17) Iodomethane	8.19	142	197446	9.71308	ppb	100
18) Acrylonitrile	8.59	53	32684	9.53535	ppb	100
19) Methylene chloride	8.50	84	162296	9.52040	ppb	100
20) Carbon disulfide	8.59	76	59336	9.79994	ppb	100
21) Methyl t-butyl ether (MtBE	8.92	73	349777	9.82774	ppb	100
22) Trans-1,2-DCE	9.12	96	156926	9.66635	ppb	100
23) Diisopropyl Ether	9.78	45	707991	9.97805	ppb	100
24) 1,1-DCA	9.81	63	364993	9.77535	ppb	100
25) Vinyl Acetate	9.45	43	46344	10.06534	ppb	100
26) Ethyl tert Butyl Ether	10.46	59	513211	9.78592	ppb	100
27) MEK (2-Butanone)	10.45	43	21487	9.94092	ppb	100
28) Cis-1,2-DCE	10.83	96	208668	10.40726	ppb	100
29) 2,2-Dichloropropane	10.83	77	250241	9.91575	ppb	100
30) Chloroform	11.11	85	210863	10.10052	ppb	100
31) Bromochloromethane	11.33	128	83740	9.85748	ppb	100
33) 1,1,1-TCA	11.85	97	249602	9.78416	ppb	100
34) Cyclohexane	12.01	56	210984	9.66569	ppb	100
35) 1,1-Dichloropropene	12.12	75	212732	9.54250	ppb	100
36) 2,2,4-Trimethylpentane	12.19	57	419531	9.69683	ppb	100
38) Carbon Tetrachloride	12.31	117	217612	9.78787	ppb	100
39) Tert Amyl Methyl Ether	12.36	73	392663	9.50974	ppb	100
40) 1,2-DCA	12.39	62	168560	9.85441	ppb	100
41) Benzene	12.51	78	710910	9.51010	ppb	100
42) TCE	13.55	95	180905	10.05982	ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C08W.D Vial: 1
Acq On : 10 Apr 12 19:04 Operator: SV
Sample : 10ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 2-Pentanone	13.21	43	826384	123.89219 ppb	100
44) 1,2-Dichloropropane	13.77	63	218922	9.90085 ppb	100
45) Bromodichloromethane	14.12	83	219550	10.24296 ppb	100
46) Methyl Cyclohexane	13.83	83	176001	9.53939 ppb	100
47) Dibromomethane	14.18	93	85846	9.91760 ppb	100
48) 2-Chloroethyl vinyl ether	14.57	63	75542	10.06011 ppb	100
49) 1-Bromo-2-chloroethane	14.88	63	196980	9.77896 ppb	100
50) Cis-1,3-Dichloropropene	15.01	75	273109	9.36739 ppb	100
51) Toluene	15.64	91	695535	9.53605 ppb	100
52) Trans-1,3-Dichloropropene	15.80	75	204079	9.81542 ppb	100
53) 1,1,2-TCA	16.08	83	104541	9.95818 ppb	100
56) 1,2-EDB	17.32	107	116295	10.45932 ppb	100
57) Tetrachloroethene	16.79	164	134877	9.96581 ppb	100
58) 1-Chlorohexane	17.70	91	258627	10.26717 ppb	100
59) 1,1,1,2-Tetrachloroethane	18.15	131	186278	10.17287 ppb	100
60) m&p-Xylene	18.36	106	674113	20.55808 ppb	100
61) o-Xylene	19.10	106	347697	10.17714 ppb	100
62) Styrene	19.12	104	547732	10.15610 ppb	100
64) 2-Hexanone	16.11	43	53655	10.24740 ppb	100
65) 1,3-Dichloropropane	16.49	76	216414	10.05101 ppb	100
66) Dibromochloromethane	16.97	129	154099	10.56275 ppb	100
67) Chlorobenzene	18.11	112	520165	10.22931 ppb	100
68) Ethylbenzene	18.21	91	826805	10.20122 ppb	100
69) Bromoform	19.63	173	66031	10.14737 ppb	100
71) MIBK (methyl isobutyl keto	14.67	43	90757	10.71996 ppb	100
72) Isopropylbenzene	19.73	105	846695	9.94286 ppb	100
73) 1,1,2,2-Tetrachloroethane	19.89	83	120386	10.04874 ppb	100
74) 1,2,3-Trichloropropane	20.15	110	11765	9.26497 ppb	100
75) t-1,4-Dichloro-2-Butene	20.21	53	26288	9.50937 ppb	100
76) Bromobenzene	20.47	156	193045	9.35025 ppb	100
77) n-Propylbenzene	20.44	91	966883	9.71015 ppb	100
78) 4-Ethyltoluene	20.63	105	586227	9.98426 ppb	100
79) 2-Chlorotoluene	20.73	91	628947	9.61144 ppb	100
80) 1,3,5-Trimethylbenzene	20.71	105	665290	9.45579 ppb	100
81) 4-Chlorotoluene	20.80	91	582027	9.86432 ppb	100
82) Tert-Butylbenzene	21.35	119	766779	9.61137 ppb	100
83) 1,2,4-Trimethylbenzene	21.40	105	708748	9.98356 ppb	100
84) Sec-Butylbenzene	21.74	105	937752	9.76987 ppb	100
85) p-Isopropyltoluene	21.97	119	793275	9.68574 ppb	100
86) Benzyl Chloride	22.42	91	180203	9.33694 ppb	100
87) 1,3-DCB	22.12	146	419654	10.03289 ppb	100
88) 1,4-DCB	22.28	146	396791	9.79263 ppb	100
89) Hexachloroethane	23.59	117	173112	10.49344 ppb	100
90) n-Butylbenzene	22.69	91	663432	9.91219 ppb	100
91) 1,2-DCB	22.91	146	368700	10.07653 ppb	100
92) 1,2-Dibromo-3-chloropropan	24.13	155	15206	8.95559 ppb	100
93) 1,2,4-Trichlorobenzene	25.57	180	96168	10.27782 ppb	100
94) Hexachlorobutadiene	25.82	223	92218	9.35328 ppb	100
95) Naphthalene	25.92	128	424128	9.68447 ppb	100
96) 1,2,3-Trichlorobenzene	26.28	180	82712	10.05959 ppb	100

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

Quantitation Report

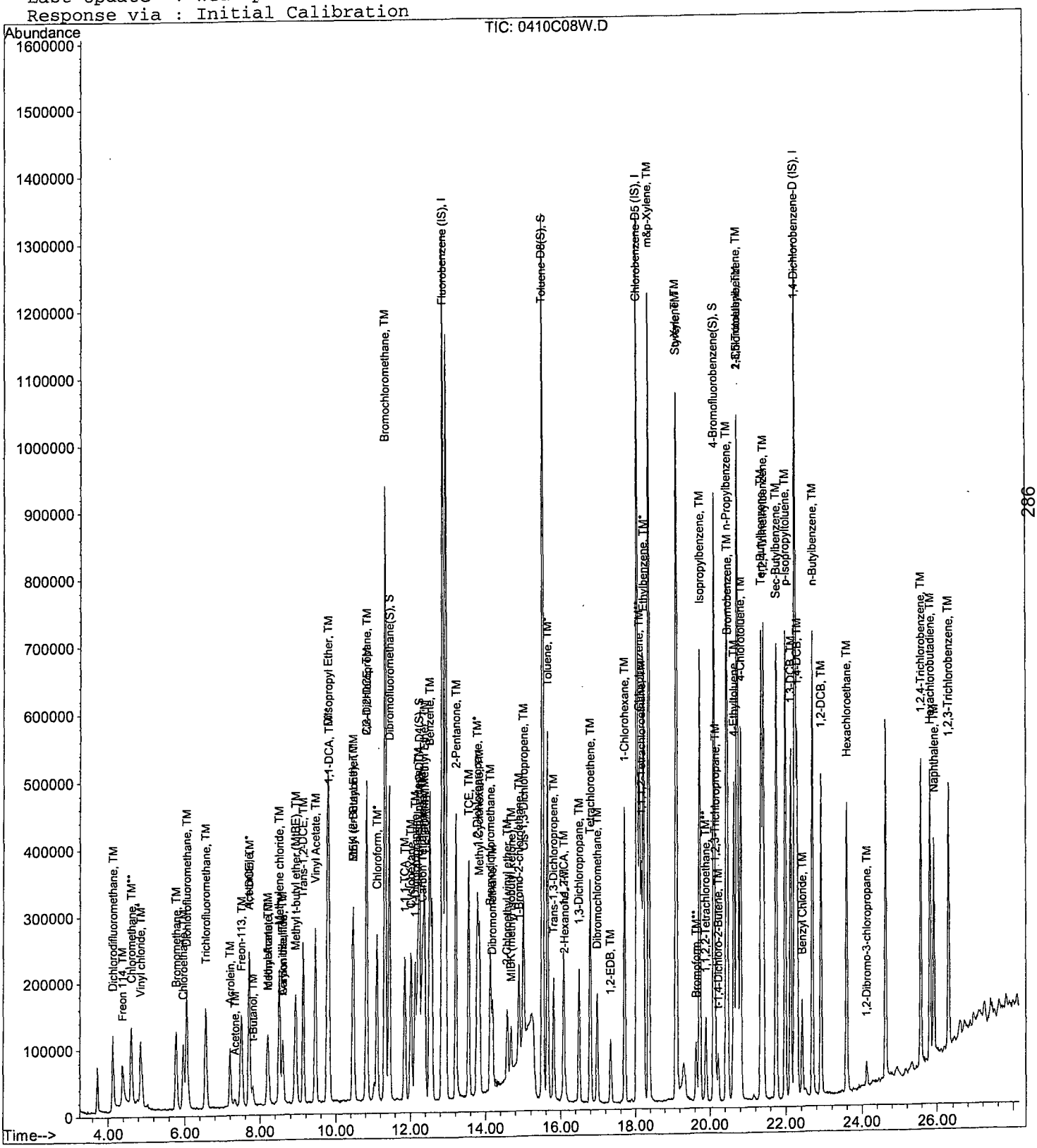
Data File : M:\CHICO\DATA\C120410\0410C08W.D
Acq On : 10 Apr 12 19:04
Sample : 10ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



286

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C09W.D Vial: 1
Acq On : 10 Apr 12 19:41 Operator: SV
Sample : 20ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	658995	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.03	117	510848	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	236736	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.43	111	740951	38.59401 ppb		0.00
Spiked Amount 20.866			Recovery = 184.964%			
37) 1,2-DCA-D4(S)	12.24	65	578743	38.07186 ppb		0.00
Spiked Amount 21.039			Recovery = 180.959%			
55) Toluene-D8(S)	15.51	98	2362086	37.89497 ppb		0.00
Spiked Amount 25.355			Recovery = 149.457%			
63) 4-Bromofluorobenzene(S)	20.10	95	958939	37.50414 ppb		0.00
Spiked Amount 27.007			Recovery = 138.867%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.12	85	463576	21.62284 ppb		98
3) Freon 114	4.37	85	169169	20.48565 ppb		84
4) Chloromethane	4.61	52	165907	17.99685 ppb		93
5) Vinyl chloride	4.85	62	112488	18.35735 ppb		98
6) Bromomethane	5.76	94	87816	20.83282 ppb		94
7) Chloroethane	5.96	64	96136	18.34938 ppb		97
8) Dichlorofluoromethane	6.05	67	760257	19.46919 ppb		99
9) Trichlorofluoromethane	6.56	103	89556	19.39808 ppb		96
10) Acetonitrile	7.69	41	162294	138.18671 ug/l		100
11) Acrolein	7.19	56	188527	149.43685 ppb		100
12) Acetone	7.31	43	46801	19.39878 ppb	#	79
13) Freon-113	7.50	101	274681	20.01304 ppb		96
14) 1,1-DCE	7.70	96	249896	18.12803 ppb		92
15) t-Butanol	7.80	59	79158	146.61515 ppb	#	86
16) Methyl Acetate	8.21	43	170152	20.50567 ppb		99
17) Iodomethane	8.19	142	417250	20.56852 ppb		98
18) Acrylonitrile	8.59	53	64362	18.87761 ppb		92
19) Methylene chloride	8.49	84	317690	18.73558 ppb		97
20) Carbon disulfide	8.59	76	122528	20.34494 ppb		96
21) Methyl t-butyl ether (MtBE	8.92	73	678838	19.17541 ppb		98
22) Trans-1,2-DCE	9.12	96	299715	18.56061 ppb		96
23) Diisopropyl Ether	9.77	45	1358083	19.24245 ppb		100
24) 1,1-DCA	9.81	63	693460	18.67176 ppb		99
25) Vinyl Acetate	9.44	43	92904	21.73884 ppb		92
26) Ethyl tert Butyl Ether	10.47	59	999156	19.15382 ppb		100
27) MEK (2-Butanone)	10.46	43	40826	18.98908 ppb		97
28) Cis-1,2-DCE	10.82	96	401860	21.06303 ppb		97
29) 2,2-Dichloropropane	10.82	77	485005	19.32099 ppb		96
30) Chloroform	11.10	85	408735	19.68345 ppb		97
31) Bromochloromethane	11.33	128	162938	19.28287 ppb		92
33) 1,1,1-TCA	11.85	97	491354	19.36361 ppb		96
34) Cyclohexane	12.00	56	429712	19.79143 ppb		96
35) 1,1-Dichloropropene	12.12	75	421982	19.03003 ppb		97
36) 2,2,4-Trimethylpentane	12.19	57	838931	19.49433 ppb		98
38) Carbon Tetrachloride	12.31	117	425290	19.23122 ppb		100
39) Tert Amyl Methyl Ether	12.35	73	784496	19.10097 ppb		99
40) 1,2-DCA	12.38	62	329771	19.38227 ppb		99
41) Benzene	12.51	78	1397411	18.79364 ppb		99
42) TCE	13.54	95	355383	19.86792 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C09W.D Vial: 1
Acq On : 10 Apr 12 19:41 Operator: SV
Sample : 20ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	2-Pentanone	13.20	43	1011164	152.40523	ppb	99
44)	1,2-Dichloropropane	13.76	63	433413	19.70613	ppb	98
45)	Bromodichloromethane	14.12	83	430571	20.19543	ppb	99
46)	Methyl Cyclohexane	13.82	83	362871	19.77307	ppb	99
47)	Dibromomethane	14.17	93	173847	20.19156	ppb	98
48)	2-Chloroethyl vinyl ether	14.58	63	157439	21.07865	ppb	94
49)	1-Bromo-2-chloroethane	14.89	63	386885	19.30940	ppb	98
50)	Cis-1,3-Dichloropropene	15.00	75	542375	18.70244	ppb	99
51)	Toluene	15.63	91	1392739	19.19709	ppb	96
52)	Trans-1,3-Dichloropropene	15.80	75	409338	19.79288	ppb	96
53)	1,1,2-TCA	16.08	83	202136	19.35767	ppb	96
56)	1,2-EDB	17.32	107	234625	19.83535	ppb	87
57)	Tetrachloroethene	16.79	164	269340	18.70676	ppb	97
58)	1-Chlorohexane	17.70	91	516633	19.27889	ppb	98
59)	1,1,1,2-Tetrachloroethane	18.15	131	379469	19.47967	ppb	97
60)	m&p-Xylene	18.35	106	1321488	37.88229	ppb	99
61)	o-Xylene	19.09	106	695306	19.13040	ppb	99
62)	Styrene	19.11	104	1117178	19.47173	ppb	97
64)	2-Hexanone	16.11	43	114531	20.56127	ppb	98
65)	1,3-Dichloropropane	16.49	76	423111	18.47148	ppb	96
66)	Dibromochloromethane	16.97	129	318626	20.52965	ppb	99
67)	Chlorobenzene	18.10	112	1038975	19.20584	ppb	97
68)	Ethylbenzene	18.21	91	1645656	19.08584	ppb	94
69)	Bromoform	19.63	173	146944	21.22661	ppb	99
71)	MIBK (methyl isobutyl keto	14.67	43	186437	21.39631	ppb	97
72)	Isopropylbenzene	19.72	105	1678220	19.14816	ppb	100
73)	1,1,2,2-Tetrachloroethane	19.89	83	241073	19.55140	ppb	98
74)	1,2,3-Trichloropropane	20.14	110	25712	19.67350	ppb	94
75)	t-1,4-Dichloro-2-Butene	20.21	53	58537	20.57398	ppb	98
76)	Bromobenzene	20.47	156	391773	18.43711	ppb	98
77)	n-Propylbenzene	20.43	91	1970504	19.22752	ppb	100
78)	4-Ethyltoluene	20.62	105	1167011	19.31163	ppb	98
79)	2-Chlorotoluene	20.73	91	1285218	19.08292	ppb	98
80)	1,3,5-Trimethylbenzene	20.70	105	1357519	18.74677	ppb	100
81)	4-Chlorotoluene	20.81	91	1118357	18.41612	ppb	97
82)	Tert-Butylbenzene	21.34	119	1541286	18.77121	ppb	97
83)	1,2,4-Trimethylbenzene	21.41	105	1403681	19.21125	ppb	99
84)	Sec-Butylbenzene	21.75	105	1893768	19.16996	ppb	100
85)	p-Isopropyltoluene	21.98	119	1604195	19.03093	ppb	99
86)	Benzyl Chloride	22.41	91	375200	18.88857	ppb	97
87)	1,3-DCB	22.11	146	831470	19.31412	ppb	99
88)	1,4-DCB	22.29	146	803459	19.26615	ppb	97
89)	Hexachloroethane	23.58	117	367579	21.64887	ppb	92
90)	n-Butylbenzene	22.68	91	1325278	19.23863	ppb	98
91)	1,2-DCB	22.92	146	743267	19.73678	ppb	98
92)	1,2-Dibromo-3-chloropropan	24.13	155	32713	18.71946	ppb	88
93)	1,2,4-Trichlorobenzene	25.57	180	195392	20.28947	ppb	98
94)	Hexachlorobutadiene	25.83	223	188798	18.60541	ppb	96
95)	Naphthalene	25.92	128	860845	19.09844	ppb	98
96)	1,2,3-Trichlorobenzene	26.28	180	171659	20.28485	ppb	99

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

Quantitation Report

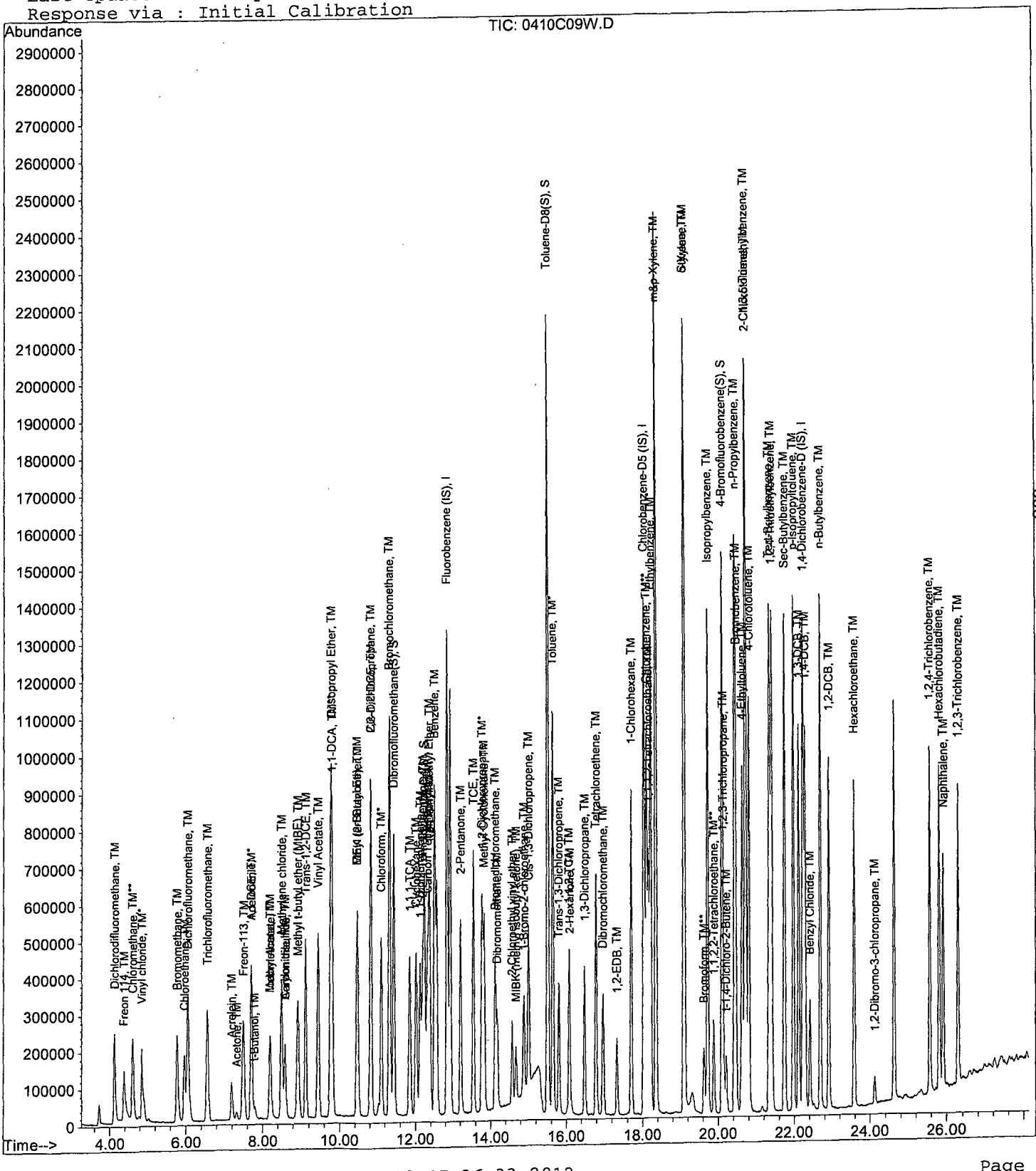
Data File : M:\CHICO\DATA\C120410\0410C09W.D
Acq On : 10 Apr 12 19:41
Sample : 20ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



289

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C10W.D Vial: 1
Acq On : 10 Apr 12 20:18 Operator: SV
Sample : 40ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.85	96	680346	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.03	117	512064	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	246464	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.43	111	1484309	74.88710 ppb		0.00
Spiked Amount 20.866			Recovery = 358.900%			
37) 1,2-DCA-D4(S)	12.24	65	1144934	72.95433 ppb		0.00
Spiked Amount 21.039			Recovery = 346.756%			
55) Toluene-D8(S)	15.51	98	4727610	75.66498 ppb		0.00
Spiked Amount 25.355			Recovery = 298.421%			
63) 4-Bromofluorobenzene(S)	20.10	95	1906357	74.38063 ppb		0.00
Spiked Amount 27.007			Recovery = 275.413%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.12	85	982811	44.40318 ppb		98
3) Freon 114	4.37	85	348717	40.90293 ppb		91
4) Chloromethane	4.60	52	397973	41.81555 ppb		88
5) Vinyl chloride	4.84	62	224896	35.54986 ppb		100
6) Bromomethane	5.77	94	186481	42.85104 ppb		93
7) Chloroethane	5.96	64	196352	36.30137 ppb		96
8) Dichlorofluoromethane	6.05	67	1527720	37.89515 ppb		100
9) Trichlorofluoromethane	6.56	103	181760	38.13421 ppb		99
10) Acetonitrile	7.68	41	216869	178.86014 ug/l		100
11) Acrolein	7.19	56	226418	173.83907 ppb		99
12) Acetone	7.30	43	99800	40.96865 ppb	#	72
13) Freon-113	7.49	101	547182	38.61610 ppb		93
14) 1,1-DCE	7.70	96	511394	35.93347 ppb		99
15) t-Butanol	7.80	59	88050	157.96675 ppb		92
16) Methyl Acetate	8.21	43	346466	41.46462 ppb		100
17) Iodomethane	8.19	142	868884	41.42698 ppb		99
18) Acrylonitrile	8.59	53	131899	37.47238 ppb		97
19) Methylene chloride	8.50	84	665084	37.99203 ppb		96
20) Carbon disulfide	8.59	76	246848	39.70115 ppb		95
21) Methyl t-butyl ether (MtBE	8.92	73	1346218	36.83377 ppb		97
22) Trans-1,2-DCE	9.12	96	610354	36.61153 ppb		98
23) Diisopropyl Ether	9.77	45	2722191	37.35984 ppb		100
24) 1,1-DCA	9.81	63	1406044	36.67035 ppb		97
25) Vinyl Acetate	9.44	43	182592	42.67783 ppb		100
26) Ethyl tert Butyl Ether	10.46	59	2005748	37.24352 ppb		100
27) MEK (2-Butanone)	10.45	43	80169	36.11818 ppb		97
28) Cis-1,2-DCE	10.82	96	809166	42.00760 ppb		99
29) 2,2-Dichloropropane	10.82	77	962607	37.14364 ppb		96
30) Chloroform	11.10	85	824519	38.46028 ppb		98
31) Bromochloromethane	11.33	128	333182	38.19294 ppb		95
33) 1,1,1-TCA	11.85	97	985796	37.62974 ppb		97
34) Cyclohexane	12.01	56	861596	38.43754 ppb		96
35) 1,1-Dichloropropene	12.12	75	820960	35.86079 ppb		96
36) 2,2,4-Trimethylpentane	12.19	57	1733309	39.01309 ppb		98
38) Carbon Tetrachloride	12.30	117	874570	38.30614 ppb		97
39) Tert Amyl Methyl Ether	12.35	73	1575294	37.15170 ppb		98
40) 1,2-DCA	12.39	62	648486	36.91859 ppb		96
41) Benzene	12.51	78	2845036	37.06182 ppb		99
42) TCE	13.54	95	719187	38.94484 ppb		97

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

Data File : M:\CHICO\DATA\C120410\0410C10W.D Vial: 1
Acq On : 10 Apr 12 20:18 Operator: SV
Sample : 40ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	2-Pentanone	13.20	43	1182975	172.70548 ppb		100
44)	1,2-Dichloropropane	13.77	63	858345	37.80189 ppb		99
45)	Bromodichloromethane	14.12	83	893998	40.61599 ppb		97
46)	Methyl Cyclohexane	13.82	83	746542	39.40292 ppb		98
47)	Dibromomethane	14.17	93	337775	37.99990 ppb		97
48)	2-Chloroethyl vinyl ether	14.58	63	315916	40.96890 ppb		95
49)	1-Bromo-2-chloroethane	14.89	63	783214	37.86340 ppb		96
50)	Cis-1,3-Dichloropropene	15.00	75	1110480	37.09041 ppb		100
51)	Toluene	15.63	91	2809279	37.50704 ppb		98
52)	Trans-1,3-Dichloropropene	15.80	75	841486	39.41178 ppb		99
53)	1,1,2-TCA	16.08	83	409458	37.98141 ppb		98
56)	1,2-EDB	17.33	107	490973	41.40861 ppb		97
57)	Tetrachloroethene	16.78	164	558676	38.71018 ppb		96
58)	1-Chlorohexane	17.70	91	1061474	39.51635 ppb		96
59)	1,1,1,2-Tetrachloroethane	18.16	131	787957	40.35295 ppb		100
60)	m&p-Xylene	18.35	106	2689324	76.91013 ppb		100
61)	o-Xylene	19.10	106	1418201	38.92721 ppb		97
62)	Styrene	19.11	104	2266141	39.40365 ppb		99
64)	2-Hexanone	16.10	43	231218	41.41102 ppb		90
65)	1,3-Dichloropropane	16.49	76	850280	37.03198 ppb		96
66)	Dibromochloromethane	16.97	129	657730	42.27810 ppb		99
67)	Chlorobenzene	18.10	112	2144217	39.54253 ppb		98
68)	Ethylbenzene	18.21	91	3361591	38.89417 ppb		97
69)	Bromoform	19.63	173	311589	44.90331 ppb		99
71)	MIBK (methyl isobutyl keto	14.67	43	376505	41.50385 ppb		97
72)	Isopropylbenzene	19.72	105	3409124	37.36214 ppb		99
73)	1,1,2,2-Tetrachloroethane	19.89	83	499491	38.91058 ppb		99
74)	1,2,3-Trichloropropane	20.14	110	47040	34.57194 ppb		78
75)	t-1,4-Dichloro-2-Butene	20.21	53	118395	39.96980 ppb		91
76)	Bromobenzene	20.47	156	811055	36.66228 ppb		95
77)	n-Propylbenzene	20.43	91	3974080	37.24718 ppb		99
78)	4-Ethyltoluene	20.62	105	2371002	37.68657 ppb		100
79)	2-Chlorotoluene	20.73	91	2632307	37.54182 ppb		98
80)	1,3,5-Trimethylbenzene	20.70	105	2805556	37.21434 ppb		98
81)	4-Chlorotoluene	20.81	91	2315427	36.62348 ppb		97
82)	Tert-Butylbenzene	21.35	119	3097684	36.23739 ppb		99
83)	1,2,4-Trimethylbenzene	21.41	105	2842868	37.37273 ppb		99
84)	Sec-Butylbenzene	21.75	105	3827189	37.21219 ppb		100
85)	p-Isopropyltoluene	21.98	119	3294696	37.54301 ppb		98
86)	Benzyl Chloride	22.41	91	773083	37.38292 ppb		94
87)	1,3-DCB	22.11	146	1708729	38.12522 ppb		99
88)	1,4-DCB	22.29	146	1631436	37.57613 ppb		98
89)	Hexachloroethane	23.58	117	764927	43.27283 ppb		97
90)	n-Butylbenzene	22.68	91	2688346	37.48548 ppb		99
91)	1,2-DCB	22.92	146	1487584	37.94231 ppb		99
92)	1,2-Dibromo-3-chloropropan	24.13	155	70102	38.53133 ppb	#	83
93)	1,2,4-Trichlorobenzene	25.57	180	394368	39.33475 ppb		98
94)	Hexachlorobutadiene	25.83	223	389299	36.84988 ppb		100
95)	Naphthalene	25.92	128	1733380	36.93835 ppb		98
96)	1,2,3-Trichlorobenzene	26.28	180	335367	38.06593 ppb		98

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

Quantitation Report

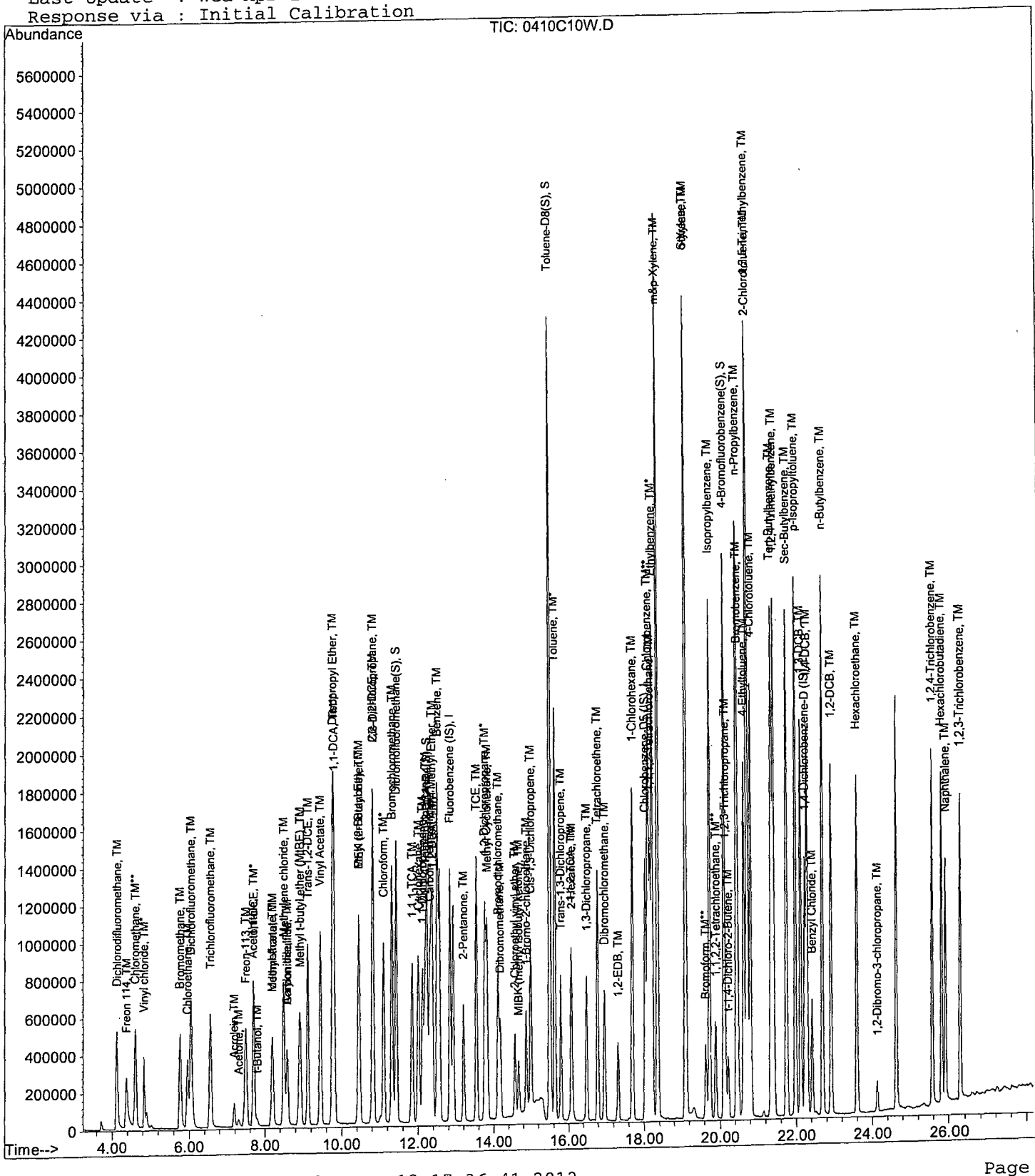
Data File : M:\CHICO\DATA\C120410\0410C10W.D
Acq On : 10 Apr 12 20:18
Sample : 40ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: Apr 12 17:34 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0410C11W.D Vial: 1
Acq On : 10 Apr 12 20:55 Operator: SV
Sample : 100ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:35 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	697893	25.00000 ppb	0.00
54) Chlorobenzene-D5 (IS)	18.03	117	526720	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	249024	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.43	111	1911799	94.02989 ppb	0.00
Spiked Amount 20.866			Recovery = 450.644%		
37) 1,2-DCA-D4(S)	12.24	65	1434461	89.10465 ppb	0.00
Spiked Amount 21.039			Recovery = 423.523%		
55) Toluene-D8(S)	15.51	98	6055238	94.21693 ppb	0.00
Spiked Amount 25.355			Recovery = 371.590%		
63) 4-Bromofluorobenzene(S)	20.10	95	2440901	92.58705 ppb	0.00
Spiked Amount 27.007			Recovery = 342.825%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.11	85	2287422	100.74682 ppb	98
3) Freon 114	4.37	85	813515	93.02248 ppb	88
4) Chloromethane	4.60	52	955410	97.86220 ppb	95
5) Vinyl chloride	4.84	62	545344	84.03645 ppb	98
6) Bromomethane	5.76	94	469056	105.07331 ppb	96
7) Chloroethane	5.95	64	475867	85.76582 ppb	94
8) Dichlorofluoromethane	6.04	67	3775420	91.29481 ppb	98
9) Trichlorofluoromethane	6.56	103	374528	76.60228 ppb	98
10) Acetonitrile	7.68	41	253971	204.19317 ug/l	100
11) Acrolein	7.19	56	266594	199.53901 ppb	97
12) Acetone	7.30	43	246186	99.70711 ppb #	75
13) Freon-113	7.49	101	1302388	89.60207 ppb	97
14) 1,1-DCE	7.71	96	1242443	85.10616 ppb	99
15) t-Butanol	7.80	59	102876	179.92495 ppb	94
16) Methyl Acetate	8.21	43	839185	99.33687 ppb	99
17) Iodomethane	8.19	142	2139530	99.36072 ppb	98
18) Acrylonitrile	8.59	53	334822	92.73097 ppb	85
19) Methylene chloride	8.50	84	1627568	90.63503 ppb	95
20) Carbon disulfide	8.59	76	622976	97.67553 ppb	96
21) Methyl t-butyl ether (MtBE	8.92	73	3296558	87.92906 ppb	99
22) Trans-1,2-DCE	9.12	96	1494463	87.39011 ppb	97
23) Diisopropyl Ether	9.77	45	6531146	87.38095 ppb	93
24) 1,1-DCA	9.81	63	3451795	87.76112 ppb	98
25) Vinyl Acetate	9.44	43	424891	98.62984 ppb	99
26) Ethyl tert Butyl Ether	10.46	59	4867894	88.11633 ppb	99
27) MEK (2-Butanone)	10.45	43	194462	85.40733 ppb	98
28) Cis-1,2-DCE	10.82	96	1930004	98.96909 ppb	97
29) 2,2-Dichloropropane	10.82	77	2327918	87.56773 ppb	98
30) Chloroform	11.10	85	2055116	93.45210 ppb	99
31) Bromochloromethane	11.33	128	813290	90.88413 ppb	95
33) 1,1,1-TCA	11.85	97	2399090	89.27538 ppb	97
34) Cyclohexane	12.01	56	2059965	89.58861 ppb	94
35) 1,1-Dichloropropene	12.12	75	2067743	88.05123 ppb	96
36) 2,2,4-Trimethylpentane	12.19	57	4169231	91.48108 ppb	99
38) Carbon Tetrachloride	12.30	117	2140952	91.41591 ppb	100
39) Tert Amyl Methyl Ether	12.36	73	3902217	89.71591 ppb	98
40) 1,2-DCA	12.39	62	1587022	88.07821 ppb	97
41) Benzene	12.51	78	7061842	89.68048 ppb	99
42) TCE	13.54	95	1726621	91.14779 ppb	95

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

Data File : M:\CHICO\DATA\C120410\0410C11W.D Vial: 1
Acq On : 10 Apr 12 20:55 Operator: SV
Sample : 100ug/L Vol Std 04-10-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: Apr 12 17:35 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 2-Pentanone	13.20	43	1402568	199.61605 ppb	98
44) 1,2-Dichloropropane	13.76	63	2082059	89.38932 ppb	99
45) Bromodichloromethane	14.12	83	2202083	97.52932 ppb	98
46) Methyl Cyclohexane	13.82	83	1813847	93.32883 ppb	96
47) Dibromomethane	14.17	93	851606	93.39738 ppb	96
48) 2-Chloroethyl vinyl ether	14.58	63	810056	102.40915 ppb	96
49) 1-Bromo-2-chloroethane	14.89	63	1924709	90.70792 ppb	97
50) Cis-1,3-Dichloropropene	15.00	75	2708975	88.20575 ppb	99
51) Toluene	15.63	91	6919934	90.06600 ppb	96
52) Trans-1,3-Dichloropropene	15.80	75	2144787	97.92743 ppb	100
53) 1,1,2-TCA	16.08	83	1014737	91.76060 ppb	95
56) 1,2-EDB	17.32	107	1245375	102.11220 ppb	94
57) Tetrachloroethene	16.79	164	1334796	89.91343 ppb	98
58) 1-Chlorohexane	17.70	91	2587255	93.63777 ppb	95
59) 1,1,1,2-Tetrachloroethane	18.16	131	1992159	99.18390 ppb	98
60) m&p-Xylene	18.35	106	6739488	187.37506 ppb	96
61) o-Xylene	19.09	106	3455270	92.20232 ppb	97
62) Styrene	19.11	104	5549262	93.80570 ppb	96
64) 2-Hexanone	16.11	43	599446	104.37315 ppb	93
65) 1,3-Dichloropropane	16.49	76	2164951	91.66583 ppb	96
66) Dibromochloromethane	16.97	129	1703554	106.45550 ppb	99
67) Chlorobenzene	18.10	112	5249107	94.10780 ppb	97
68) Ethylbenzene	18.21	91	8221967	92.48256 ppb	93
69) Bromoform	19.64	173	843800	118.21707 ppb	98
71) MIBK (methyl isobutyl keto	14.67	43	942536	102.83190 ppb	96
72) Isopropylbenzene	19.72	105	8362851	90.71010 ppb	99
73) 1,1,2,2-Tetrachloroethane	19.89	83	1301677	100.35881 ppb	97
74) 1,2,3-Trichloropropane	20.14	110	119456	86.89139 ppb	86
75) t-1,4-Dichloro-2-Butene	20.22	53	312182	104.30828 ppb	91
76) Bromobenzene	20.47	156	1995695	89.28440 ppb	95
77) n-Propylbenzene	20.43	91	9716046	90.12777 ppb	98
78) 4-Ethyltoluene	20.63	105	5865255	92.26860 ppb	96
79) 2-Chlorotoluene	20.73	91	6342135	89.52133 ppb	100
80) 1,3,5-Trimethylbenzene	20.70	105	6831085	89.67955 ppb	100
81) 4-Chlorotoluene	20.81	91	5775317	90.41003 ppb	97
82) Tert-Butylbenzene	21.35	119	7687148	89.00151 ppb	98
83) 1,2,4-Trimethylbenzene	21.41	105	7031933	91.49242 ppb	98
84) Sec-Butylbenzene	21.74	105	9435029	90.79477 ppb	98
85) p-Isopropyltoluene	21.98	119	7980162	89.99900 ppb	98
86) Benzyl Chloride	22.41	91	2052074	98.20925 ppb	94
87) 1,3-DCB	22.11	146	4177941	92.26007 ppb	99
88) 1,4-DCB	22.29	146	4086303	93.15043 ppb	98
89) Hexachloroethane	23.58	117	1950108	109.18582 ppb	97
90) n-Butylbenzene	22.68	91	6513753	89.89209 ppb	100
91) 1,2-DCB	22.92	146	3680311	92.90499 ppb	98
92) 1,2-Dibromo-3-chloropropan	24.12	155	188794	102.70323 ppb	86
93) 1,2,4-Trichlorobenzene	25.57	180	950073	93.78730 ppb	98
94) Hexachlorobutadiene	25.82	223	964312	90.34052 ppb	99
95) Naphthalene	25.92	128	4307716	90.85378 ppb	98
96) 1,2,3-Trichlorobenzene	26.28	180	821270	92.26019 ppb	97

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

Quantitation Report

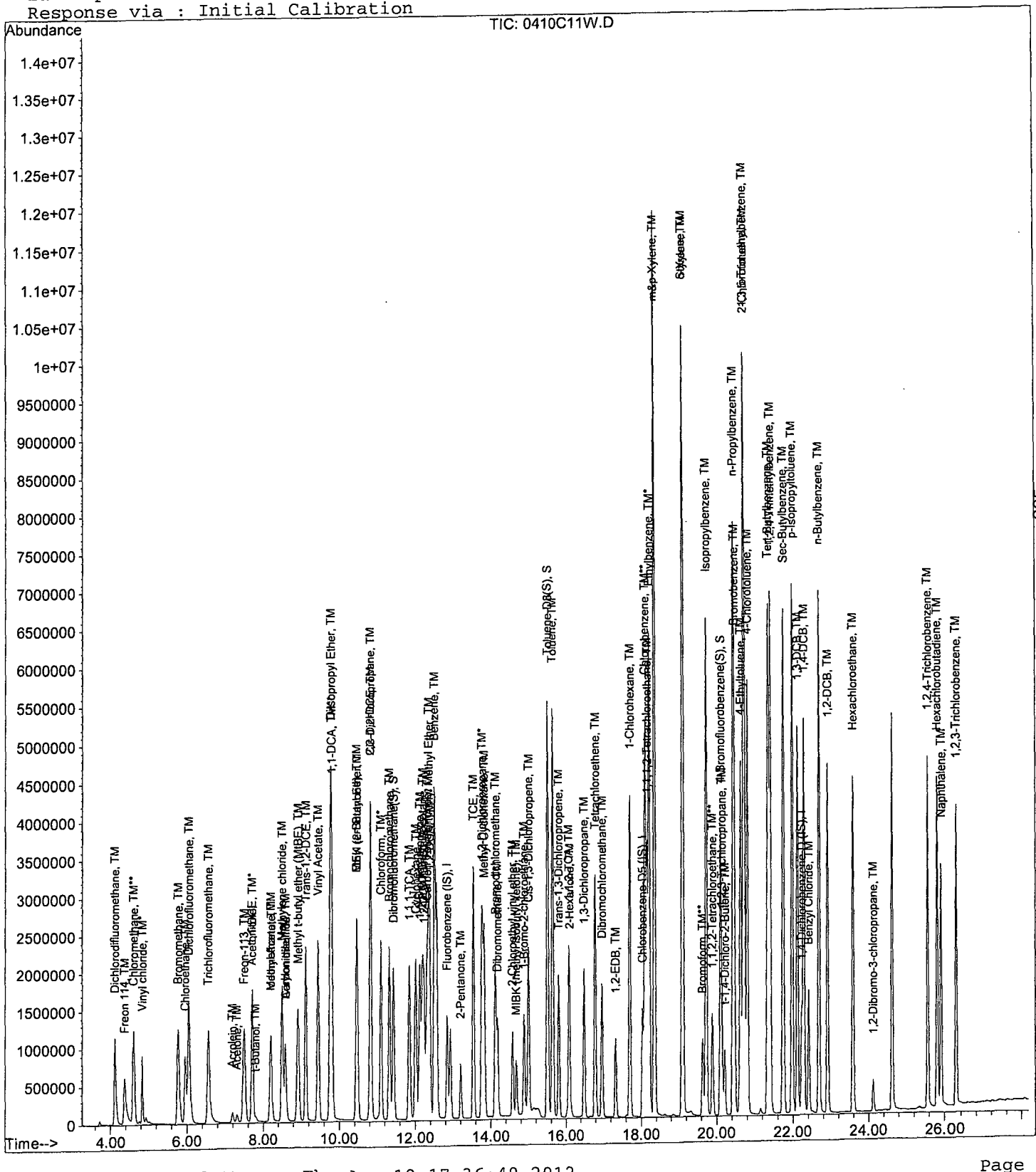
Data File : M:\CHICO\DATA\C120410\0410C11W.D
Acq On : 10 Apr 12 20:55
Sample : 100ug/L Vol Std 04-10-12
Misc : Water 10mL w/IS:04-10-12

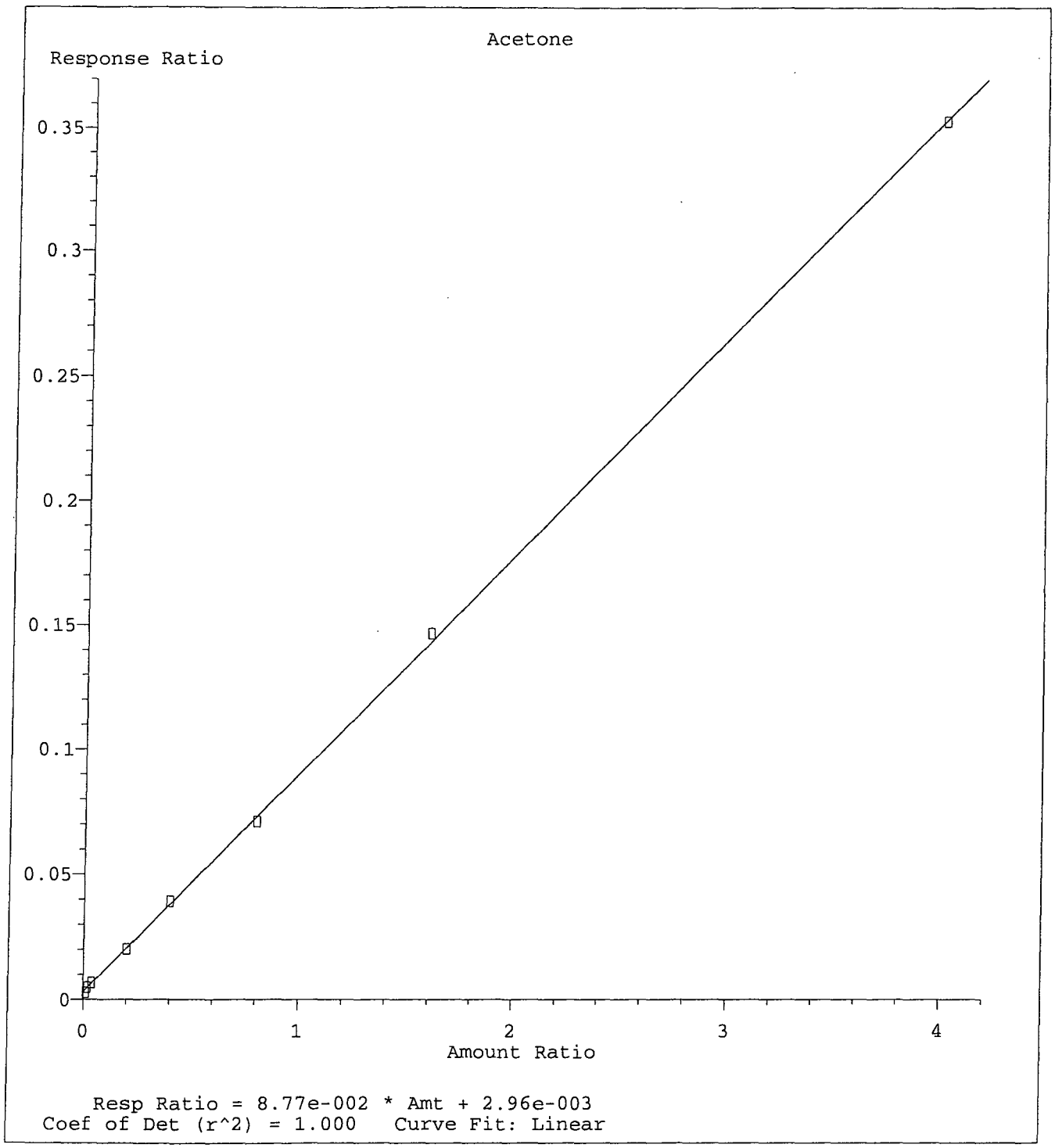
Vial: 1
Operator: SV
Inst : Chico
Multiplr: 1.00

Quant Time: Apr 12 17:35 2012

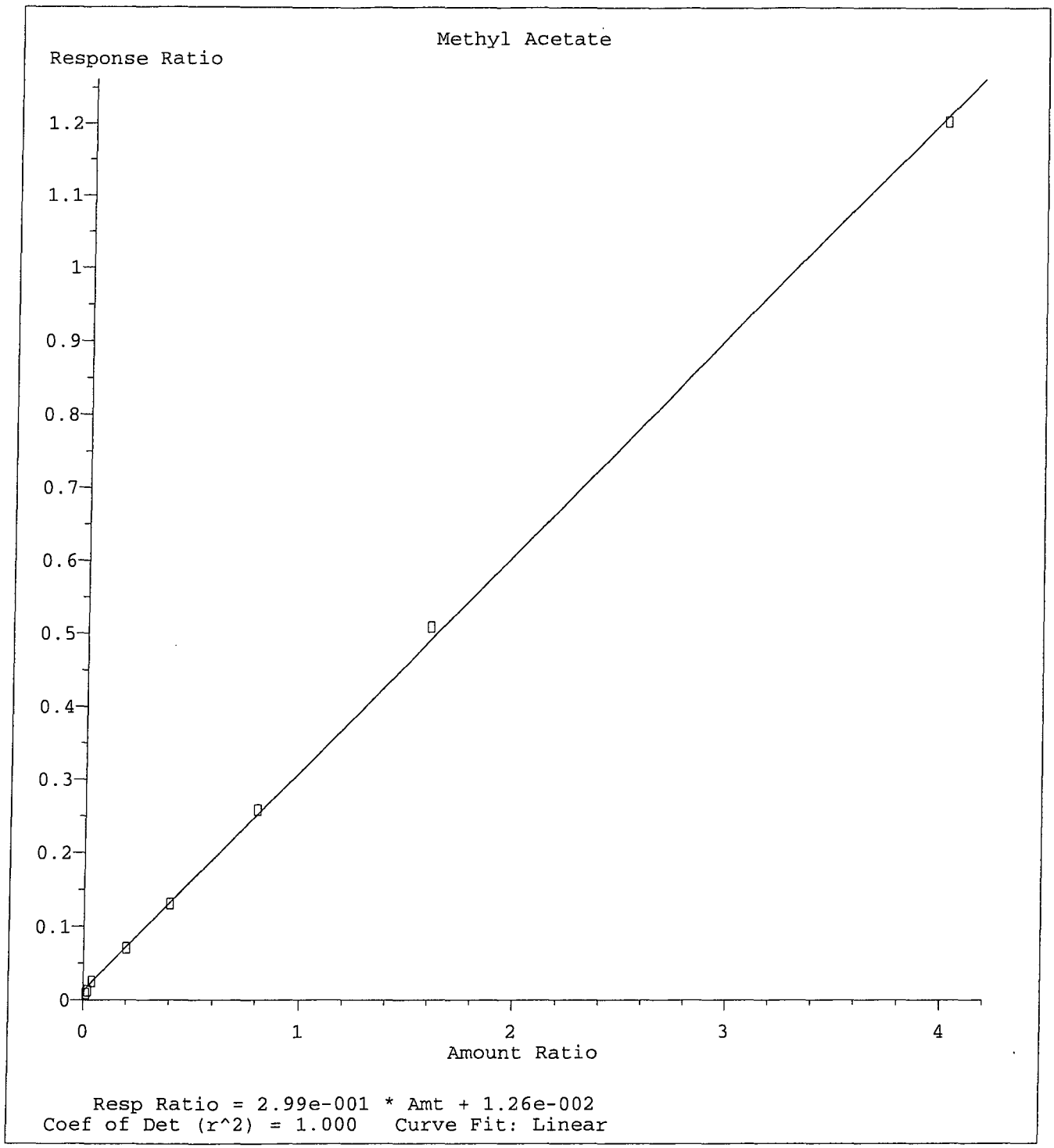
Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration

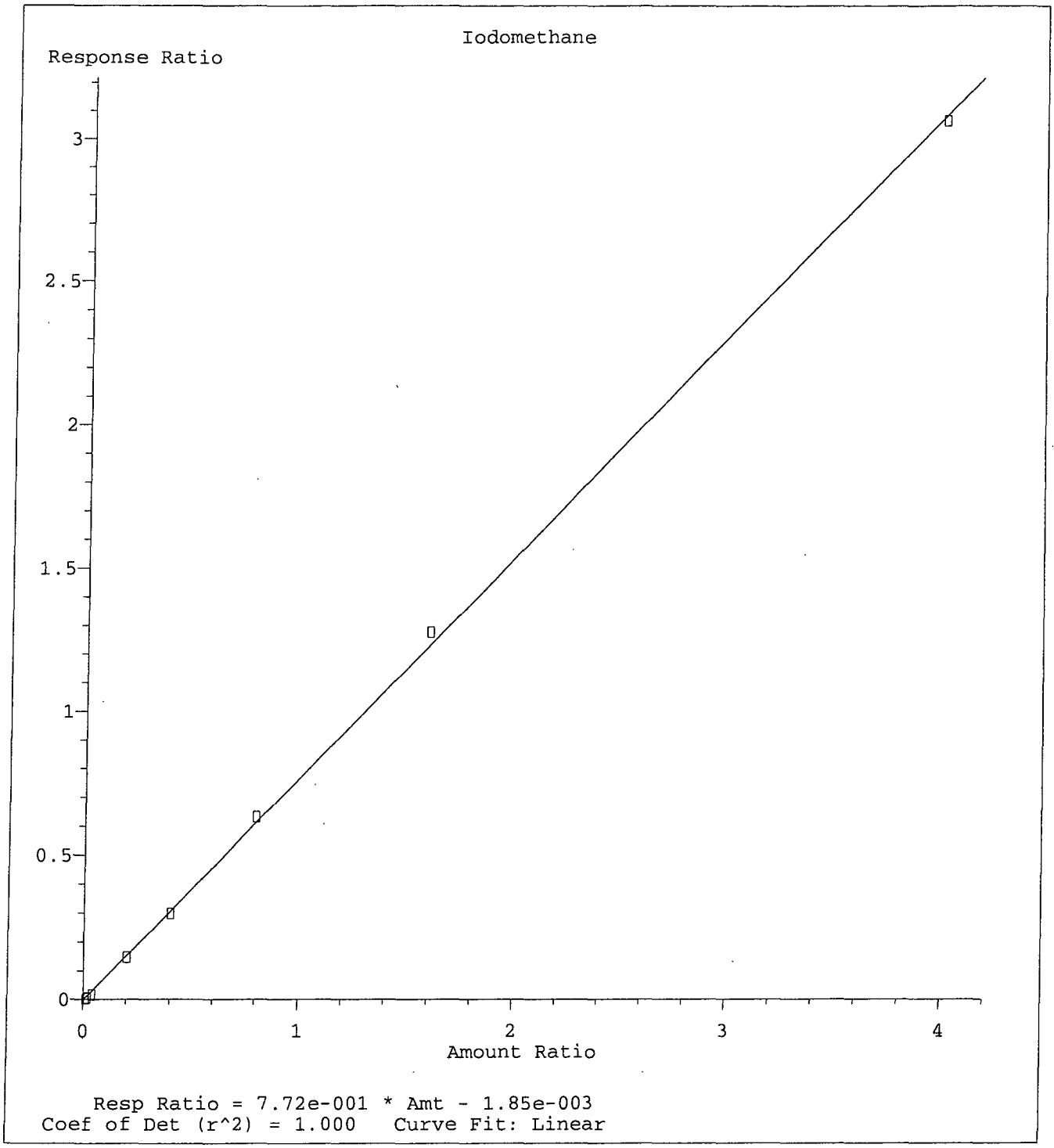




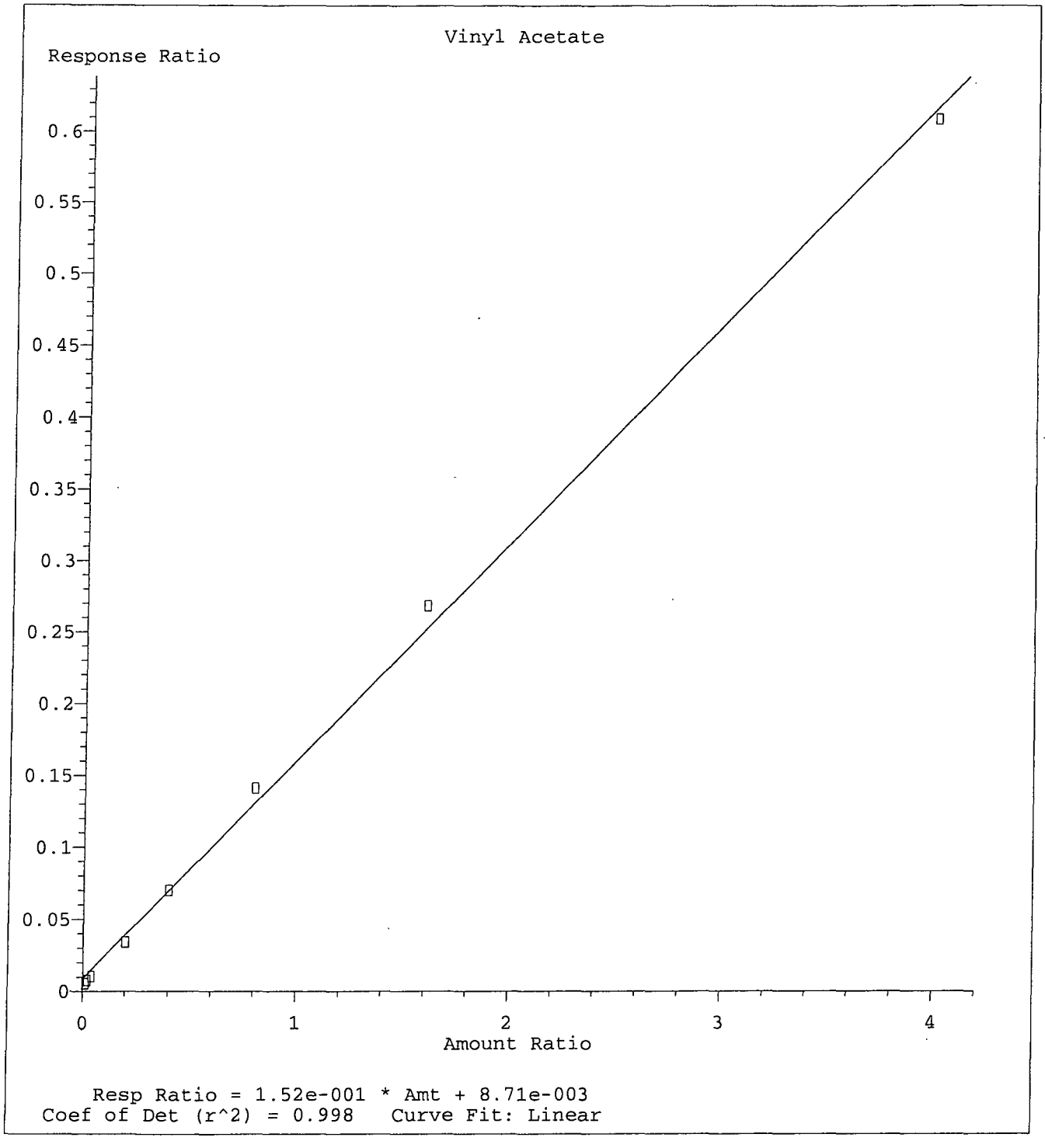
Method Name: M:\CHICO\DATA\C120410\CALLW3.M
Calibration Table Last Updated: Wed Apr 11 14:32:33 2012



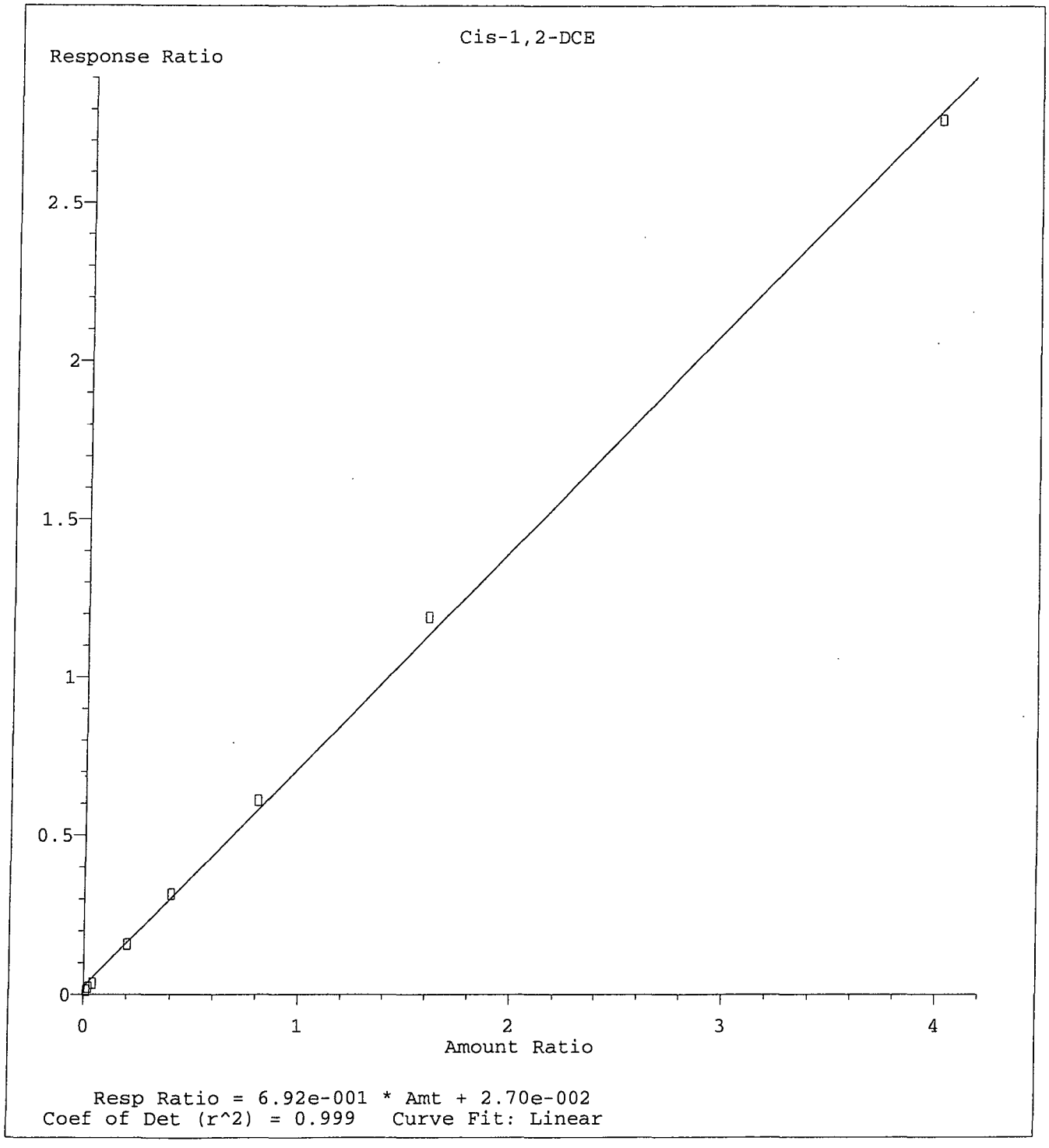
Method Name: M:\CHICO\DATA\C120410\CALLW3.M
Calibration Table Last Updated: Wed Apr 11 14:32:33 2012



Method Name: M:\CHICO\DATA\C120410\CALLW3.M
Calibration Table Last Updated: Wed Apr 11 14:32:33 2012



Method Name: M:\CHICO\DATA\C120410\CALLW3.M
Calibration Table Last Updated: Wed Apr 11 14:32:33 2012



Method Name: M:\CHICO\DATA\C120410\CALLW3.M
Calibration Table Last Updated: Wed Apr 11 14:32:33 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No:
Date Analyzed: 04/11/12
Instrument: Chico
Initial Cal. Date: 04/10/12
Data File: 0411C05W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.8133	0.7744	4.8	TM	
3	TM	Freon 114	0.3133	0.2997	4.3	TM	
4	TM**	Chloromethane	0.3497	0.3961	13	TM**	✓
5	TM*	Vinyl chloride	0.2325	0.2339	0.61	TM*	✓
6	TM	Bromomethane	0.1599	0.1656	3.5	TM	
7	TM	Chloroethane	0.1988	0.1934	2.7	TM	
8	TM	Dichlorofluoromethane	1.481	1.496	1.0	TM	
9	TM	Trichlorofluoromethane	0.1751	0.1675	4.4	TM	
10		Acetonitrile	0.0446	0.0410	8.1		
11	TM	Acrolein	0.0479	0.0430	10	TM	
12	TML	Acetone	0.1379	0.0856	38	TML	11
13	TM	Freon-113	0.5207	0.4732	9.1	TM	
14	TM*	1,1-DCE	0.5230	0.4666	11	TM*	✓
15	TM	t-Butanol	0.0205	0.0207	0.88	TM	
16	TML	Methyl Acetate	0.4541	0.2896	36	TML	14
17	TML	Iodomethane	0.5884	0.8033	37	TML	4.7
18	TM	Acrylonitrile	0.1293	0.1128	13	TM	
19	TM	Methylene chloride	0.6433	0.6195	3.7	TM	
20	TM	Carbon disulfide	0.2285	0.2361	3.3	TM	
21	TM	Methyl t-butyl ether (MtBE)	1.343	1.228	8.6	TM	
22	TM	Trans-1,2-DCE	0.6126	0.5943	3.0	TM	
23	TM	Diisopropyl Ether	2.677	2.535	5.3	TM	
24	TM**	1,1-DCA	1.409	1.349	4.2	TM**	✓
25	TML	Vinyl Acetate	0.2399	0.1768	26	TML	1.9
26	TM	Ethyl tert Butyl Ether	1.979	1.826	7.7	TM	
27	TM	MEK (2-Butanone)	0.0816	0.0686	16	TM	
28	TML	Cis-1,2-DCE	0.8500	0.7711	9.3	TML	1.7
29	TM	2,2-Dichloropropane	0.9523	0.9533	0.10	TM	
30	TM*	Chloroform	0.7878	0.7667	2.7	TM*	✓
31	TM	Bromochloromethane	0.3206	0.2991	6.7	TM	
32	S	Dibromofluoromethane(S)	0.7283	0.6973	4.3	S	
33	TM	1,1,1-TCA	0.9626	0.8979	6.7	TM	
34	TM	Cyclohexane	0.8237	0.7197	13	TM	
35	TM	1,1-Dichloropropene	0.8412	0.8042	4.4	TM	
36	TM	2,2,4-Trimethylpentane	1.633	1.567	4.0	TM	
37	S	1,2-DCA-D4(S)	0.5767	0.5278	8.5	S	
38	TM	Carbon Tetrachloride	0.8389	0.7705	8.2	TM	
39	TM	Tert Amyl Methyl Ether	1.558	1.437	7.8	TM	
40	TM	1,2-DCA	0.6455	0.6033	6.5	TM	
		Average			9.2		

AR 4/19/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No:
Date Analyzed: 04/11/12
Instrument: Chico
Cal. Date: 04/10/12
Data File: 0411C05W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Benzene	2.821	2.732	3.2	TM	
42	TM	TCE	0.6786	0.6656	1.9	TM	
43	TM	2-Pentanone	0.2517	0.2206	12	TM	
44	TM*	1,2-Dichloropropane	0.8344	0.8133	2.5	TM*	
45	TM	Bromodichloromethane	0.8088	0.7769	3.9	TM	
46	TM	Methyl Cyclohexane	0.6962	0.6649	4.5	TM	
47	TM	Dibromomethane	0.3266	0.2954	9.5	TM	
48	TM	2-Chloroethyl vinyl ether	0.2834	0.2673	5.7	TM	
49	TM	1-Bromo-2-chloroethane	0.7601	0.6722	12	TM	
50	TM	Cis-1,3-Dichloropropene	1.100	1.022	7.1	TM	
51	TM*	Toluene	2.752	2.742	0.36	TM*	
52	TM	Trans-1,3-Dichloropropene	0.7846	0.7579	3.4	TM	
53	TM	1,1,2-TCA	0.3961	0.3700	6.6	TM	
54	I	Chlorobenzene-D5 (IS)	ISTD			I	
55	S	Toluene-D8(S)	3.050	2.804	8.1	S	
56	TM	1,2-EDB	0.5789	0.5301	8.4	TM	
57	TM	Tetrachloroethene	0.7046	0.6654	5.6	TM	
58	TM	1-Chlorohexane	1.311	1.297	1.1	TM	
59	TM	1,1,1,2-Tetrachloroethane	0.9533	0.9020	5.4	TM	
60	TM	m&p-Xylene	1.707	1.667	2.3	TM	
61	TM	o-Xylene	1.779	1.714	3.6	TM	
62	TM	Styrene	2.808	2.713	3.4	TM	
63	S	4-Bromofluorobenzene(S)	1.251	1.159	7.3	S	
64	TM	2-Hexanone	0.2726	0.2256	17	TM	
65	TM	1,3-Dichloropropane	1.121	0.9963	11	TM	
66	TM	Dibromochloromethane	0.7595	0.6858	9.7	TM	
67	TM**	Chlorobenzene	2.647	2.576	2.7	TM**	
68	TM*	Ethylbenzene	4.220	4.129	2.2	TM*	
69	TM**	Bromoform	0.3388	0.2965	12	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	MIBK (methyl isobutyl ketone)	0.9202	0.8454	8.1	TM	
72	TM	Isopropylbenzene	9.255	9.261	0.06	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.302	1.201	7.8	TM**	
74	TM	1,2,3-Trichloropropane	0.1380	0.1165	16	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.3005	0.2793	7.1	TM	
76	TM	Bromobenzene	2.244	2.129	5.1	TM	
77	TM	n-Propylbenzene	10.8	11.0	2.0	TM	
78	TM	4-Ethyltoluene	6.382	6.516	2.1	TM	
79	TM	2-Chlorotoluene	7.112	6.984	1.8	TM	
80	TM	1,3,5-Trimethylbenzene	7.647	7.281	4.8	TM	
		Average			6.0		

ARS 4/19/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No:
Date Analyzed: 04/11/12
Instrument: Chico
Cal. Date: 04/10/12
Data File: 0411C05W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	4-Chlorotoluene	6.413	6.251	2.5	TM	
82	TM	Tert-Butylbenzene	8.671	8.331	3.9	TM	
83	TM	1,2,4-Trimethylbenzene	7.716	7.679	0.48	TM	
84	TM	Sec-Butylbenzene	10.4	10.5	1.1	TM	
85	TM	p-Isopropyltoluene	8.902	8.801	1.1	TM	
86	TM	Benzyl Chloride	2.098	2.002	4.6	TM	
87	TM	1,3-DCB	4.546	4.626	1.8	TM	
88	TM	1,4-DCB	4.404	4.368	0.82	TM	
89	TM	Hexachloroethane	1.793	1.931	7.7	TM	
90	TM	n-Butylbenzene	7.275	7.481	2.8	TM	
91	TM	1,2-DCB	3.977	4.021	1.1	TM	
92	TM	1,2-Dibromo-3-chloropropane	0.1845	0.1534	17	TM	
93	TM	1,2,4-Trichlorobenzene	1.017	1.035	1.7	TM	
94	TM	Hexachlorobutadiene	1.072	1.033	3.6	TM	
95	TM	Naphthalene	4.760	4.309	9.5	TM	
96	TM	1,2,3-Trichlorobenzene	0.8937	0.8729	2.3	TM	
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.9		

MRS 4/19/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0411C05W.D Vial: 1
Acq On : 11 Apr 12 13:39 Operator: SV
Sample : 120411A LCS-1WC (SS) Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 11 14:35 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.82	96	704941	25.00000 ppb		-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	553280	25.00000 ppb		-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	250880	25.00000 ppb		-0.03
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	410295	19.97818 ppb		-0.04
Spiked Amount 20.866			Recovery =	95.746%		
37) 1,2-DCA-D4(S)	12.21	65	313140	19.25689 ppb		-0.03
Spiked Amount 21.039			Recovery =	91.530%		
55) Toluene-D8(S)	15.48	98	1573328	23.30515 ppb		-0.03
Spiked Amount 25.355			Recovery =	91.914%		
63) 4-Bromofluorobenzene(S)	20.07	95	692955	25.02303 ppb		-0.03
Spiked Amount 27.007			Recovery =	92.653%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.10	85	218360	9.52126 ppb		100
3) Freon 114	4.35	85	84497	9.56532 ppb		85
4) Chloromethane	4.59	52	111678	11.32476 ppb		99
5) Vinyl chloride	4.85	62	65952	10.06146 ppb		99
6) Bromomethane	5.75	94	46688	10.35402 ppb		91
7) Chloroethane	5.93	64	54536	9.73079 ppb		95
8) Dichlorofluoromethane	6.03	67	421927	10.10076 ppb		95
9) Trichlorofluoromethane	6.53	103	47232	9.56379 ppb		99
10) Acetonitrile	7.66	41	144385	114.92519 ug/l		100
11) Acrolein	7.17	56	151425	112.20471 ppb		98
12) Acetone	7.27	43	24144	8.91787 ppb	#	73
13) Freon-113	7.47	101	133427	9.08777 ppb		96
14) 1,1-DCE	7.68	96	131561	8.92170 ppb		96
15) t-Butanol	7.76	59	72831	126.10423 ppb		94
16) Methyl Acetate	8.19	43	81652	8.61982 ppb		100
17) Iodomethane	8.16	142	226500	10.46715 ppb		98
18) Acrylonitrile	8.57	53	31818	8.72408 ppb		94
19) Methylene chloride	8.47	84	174672	9.62978 ppb		99
20) Carbon disulfide	8.56	76	66568	10.33275 ppb		96
21) Methyl t-butyl ether (MtBE	8.89	73	346308	9.14472 ppb		97
22) Trans-1,2-DCE	9.09	96	167572	9.70096 ppb		98
23) Diisopropyl Ether	9.74	45	714692	9.46635 ppb		97
24) 1,1-DCA	9.78	63	380422	9.57544 ppb		98
25) Vinyl Acetate	9.41	43	49864	10.19416 ppb		94
26) Ethyl tert Butyl Ether	10.43	59	515023	9.22950 ppb		98
27) MEK (2-Butanone)	10.43	43	19338	8.40830 ppb		99
28) Cis-1,2-DCE	10.80	96	217442	10.17209 ppb		99
29) 2,2-Dichloropropane	10.80	77	268804	10.01033 ppb		100
30) Chloroform	11.08	85	216184	9.73223 ppb		96
31) Bromochloromethane	11.30	128	84348	9.33154 ppb		98
33) 1,1,1-TCA	11.82	97	253186	9.32741 ppb		97
34) Cyclohexane	11.98	56	202933	8.73739 ppb		96
35) 1,1-Dichloropropene	12.09	75	226754	9.55938 ppb		97
36) 2,2,4-Trimethylpentane	12.16	57	441876	9.59869 ppb		97
38) Carbon Tetrachloride	12.28	117	217260	9.18398 ppb		99
39) Tert Amyl Methyl Ether	12.33	73	405194	9.22268 ppb		97
40) 1,2-DCA	12.35	62	170115	9.34683 ppb		99
41) Benzene	12.48	78	770339	9.68496 ppb		99
42) TCE	13.51	95	187686	9.80883 ppb		99

Algorithm Check: $\frac{(218360)(25)}{(704941)(0.813329)} = 9.521252$ ✓ ARS 4/12/12

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0411C05W.D Vial: 1
Acq On : 11 Apr 12 13:39 Operator: SV
Sample : 120411A LCS-1WC (SS) Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 11 14:35 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	777685	109.57496	ppb		99
44)	1,2-Dichloropropane	13.74	63	229328	9.74733	ppb		99
45)	Bromodichloromethane	14.09	83	219067	9.60538	ppb		95
46)	Methyl Cyclohexane	13.79	83	187480	9.55006	ppb		98
47)	Dibromomethane	14.15	93	83309	9.04532	ppb		86
48)	2-Chloroethyl vinyl ether	14.55	63	75382	9.43469	ppb		95
49)	1-Bromo-2-chloroethane	14.86	63	189551	8.84387	ppb		100
50)	Cis-1,3-Dichloropropene	14.97	75	288128	9.28781	ppb		99
51)	Toluene	15.61	91	773304	9.96426	ppb		100
52)	Trans-1,3-Dichloropropene	15.78	75	213711	9.66013	ppb		96
53)	1,1,2-TCA	16.05	83	104335	9.34047	ppb		92
56)	1,2-EDB	17.30	107	117326	9.15813	ppb		97
57)	Tetrachloroethene	16.76	164	147262	9.44355	ppb		94
58)	1-Chlorohexane	17.67	91	287055	9.89035	ppb		99
59)	1,1,1,2-Tetrachloroethane	18.13	131	199613	9.46108	ppb		100
60)	m&p-Xylene	18.32	106	738051	19.53467	ppb		99
61)	o-Xylene	19.07	106	379303	9.63565	ppb		95
62)	Styrene	19.09	104	600326	9.66086	ppb		99
64)	2-Hexanone	16.09	43	49931	8.27645	ppb		93
65)	1,3-Dichloropropane	16.46	76	220499	8.88793	ppb		97
66)	Dibromochloromethane	16.94	129	151783	9.02963	ppb		100
67)	Chlorobenzene	18.07	112	570127	9.73076	ppb		98
68)	Ethylbenzene	18.19	91	913740	9.78457	ppb		97
69)	Bromoform	19.61	173	65626	8.75289	ppb		98
71)	MIBK (methyl isobutyl keto	14.65	43	84840	9.18768	ppb		99
72)	Isopropylbenzene	19.69	105	929316	10.00552	ppb		100
73)	1,1,2,2-Tetrachloroethane	19.86	83	120518	9.22315	ppb		100
74)	1,2,3-Trichloropropane	20.12	110	11690	8.44031	ppb		82
75)	t-1,4-Dichloro-2-Butene	20.19	53	28026	9.29495	ppb		98
76)	Bromobenzene	20.44	156	213613	9.48603	ppb		95
77)	n-Propylbenzene	20.40	91	1107410	10.19654	ppb		97
78)	4-Ethyltoluene	20.60	105	653860	10.21003	ppb		100
79)	2-Chlorotoluene	20.70	91	700817	9.81908	ppb		98
80)	1,3,5-Trimethylbenzene	20.68	105	730642	9.52102	ppb		98
81)	4-Chlorotoluene	20.78	91	627270	9.74699	ppb		100
82)	Tert-Butylbenzene	21.32	119	835991	9.60747	ppb		97
83)	1,2,4-Trimethylbenzene	21.38	105	770568	9.95168	ppb		99
84)	Sec-Butylbenzene	21.72	105	1058030	10.10627	ppb		99
85)	p-Isopropyltoluene	21.95	119	883167	9.88653	ppb		100
86)	Benzyl Chloride	22.39	91	200859	9.54170	ppb		94
87)	1,3-DCB	22.09	146	464254	10.17612	ppb		98
88)	1,4-DCB	22.26	146	438304	9.91756	ppb		97
89)	Hexachloroethane	23.56	117	193779	10.76935	ppb		96
90)	n-Butylbenzene	22.66	91	750726	10.28364	ppb		98
91)	1,2-DCB	22.89	146	403534	10.11137	ppb		98
92)	1,2-Dibromo-3-chloropropan	24.11	155	15393	8.31179	ppb	#	78
93)	1,2,4-Trichlorobenzene	25.55	180	103816	10.17247	ppb		99
94)	Hexachlorobutadiene	25.80	223	103702	9.64334	ppb		96
95)	Naphthalene	25.90	128	432444	9.05318	ppb		99
96)	1,2,3-Trichlorobenzene	26.26	180	87594	9.76738	ppb		99

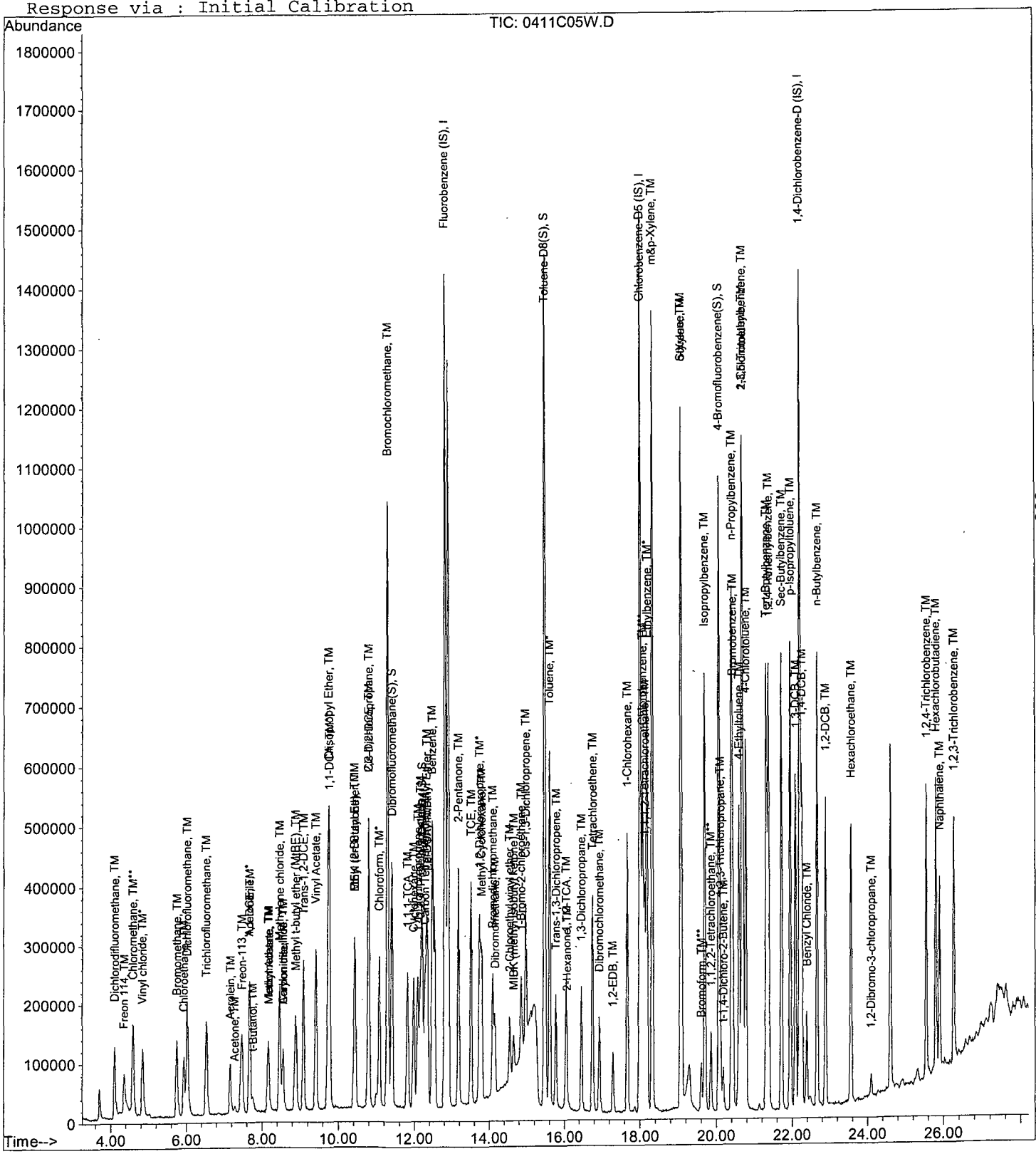
(#) = qualifier out of range (m) = manual integration

Data File : M:\CHICO\DATA\C120410\0411C05W.D
Acq On : 11 Apr 12 13:39
Sample : 120411A LCS-1WC (SS)
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 11 14:35 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 04/18/12
Matrix: Water Instrument: Chico
Initial Cal. Date: 04/10/12
Data File: 0418C03W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.8133	0.6355	22	TM		*NT
3	TM	Freon 114	0.3133	0.2923	6.7	TM		
4	TM**	Chloromethane	0.3497	0.3826	9.4	TM**	✓	
5	TM*	Vinyl chloride	0.2325	0.2387	2.7	TM*	✓	
6	TM	Bromomethane	0.1599	0.1437	10	TM		
7	TM	Chloroethane	0.1988	0.1726	13	TM		
8	TM	Dichlorofluoromethane	1.481	1.509	1.9	TM		
9	TM	Trichlorofluoromethane	0.1751	0.1646	6.0	TM		
10		Acetonitrile	0.0446	0.0487	9.3			
11	TM	Acrolein	0.0479	0.0403	16	TM		
12	TML	Acetone	0.1379	0.0913	34	TML	4.3	
13	TM	Freon-113	0.5207	0.4798	7.8	TM		
14	TM*	1,1-DCE	0.5230	0.4446	15	TM*	✓	
15	TM	t-Butanol	0.0205	0.0198	3.5	TM		
16	TML	Methyl Acetate	0.4541	0.3261	28	TML	1.6	
17	TML	Iodomethane	0.5884	0.6585	12	TML	14	
18	TM	Acrylonitrile	0.1293	0.1220	5.7	TM		
19	TM	Methylene chloride	0.6433	0.6134	4.6	TM		
20	TM	Carbon disulfide	0.2285	0.1894	17	TM		
21	TM	Methyl t-butyl ether (MtBE)	1.343	1.220	9.2	TM		
22	TM	Trans-1,2-DCE	0.6126	0.5534	9.7	TM		
23	TM	Diisopropyl Ether	2.677	2.590	3.3	TM		
24	TM**	1,1-DCA	1.409	1.327	5.8	TM**	✓	
25	TML	Vinyl Acetate	0.2399	0.1662	31	TML	5.1	
26	TM	Ethyl tert Butyl Ether	1.979	1.835	7.3	TM		
27	TM	MEK (2-Butanone)	0.0816	0.0709	13	TM		
28	TML	Cis-1,2-DCE	0.8500	0.7736	9.0	TML	2.1	
29	TM	2,2-Dichloropropane	0.9523	0.9532	0.09	TM		
30	TM*	Chloroform	0.7878	0.7590	3.7	TM*	✓	
31	TM	Bromochloromethane	0.3206	0.2989	6.8	TM		
32	S	Dibromofluoromethane(S)	0.7283	0.7244	0.54	S		
33	TM	1,1,1-TCA	0.9626	0.8990	6.6	TM		
34	TM	Cyclohexane	0.8237	0.7466	9.4	TM		
35	TM	1,1-Dichloropropene	0.8412	0.7687	8.6	TM		
36	TM	2,2,4-Trimethylpentane	1.633	1.918	17	TM		
37	S	1,2-DCA-D4(S)	0.5767	0.5314	7.9	S		
38	TM	Carbon Tetrachloride	0.8389	0.7646	8.9	TM		
39	TM	Tert Amyl Methyl Ether	1.558	1.451	6.9	TM		
40	TM	1,2-DCA	0.6455	0.5941	8.0	TM		
		Average			10.2			

ARG 4/19/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 04/18/12
Matrix: Water Instrument: Chico
Cal. Date: 04/10/12
Data File: 0418C03W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Benzene	2.821	2.618	7.2	TM	
42	TM	TCE	0.6786	0.6487	4.4	TM	
43	TM	2-Pentanone	0.2517	0.2427	3.6	TM	
44	TM*	1,2-Dichloropropane	0.8344	0.7949	4.7	TM*	
45	TM	Bromodichloromethane	0.8088	0.7837	3.1	TM	
46	TM	Methyl Cyclohexane	0.6962	0.6543	6.0	TM	
47	TM	Dibromomethane	0.3266	0.3053	6.5	TM	
48	TM	2-Chloroethyl vinyl ether	0.2834	0.2743	3.2	TM	
49	TM	1-Bromo-2-chloroethane	0.7601	0.6887	9.4	TM	
50	TM	Cis-1,3-Dichloropropene	1.100	0.9934	9.7	TM	
51	TM*	Toluene	2.752	2.684	2.5	TM*	
52	TM	Trans-1,3-Dichloropropene	0.7846	0.7368	6.1	TM	
53	TM	1,1,2-TCA	0.3961	0.3817	3.6	TM	
54	I	Chlorobenzene-D5 (IS)	ISTD			I	
55	S	Toluene-D8(S)	3.050	2.850	6.6	S	
56	TM	1,2-EDB	0.5789	0.5315	8.2	TM	
57	TM	Tetrachloroethene	0.7046	0.6070	14	TM	
58	TM	1-Chlorohexane	1.311	1.255	4.3	TM	
59	TM	1,1,1,2-Tetrachloroethane	0.9533	0.8861	7.1	TM	
60	TM	m&p-Xylene	1.707	1.591	6.8	TM	
61	TM	o-Xylene	1.779	1.647	7.4	TM	
62	TM	Styrene	2.808	2.608	7.1	TM	
63	S	4-Bromofluorobenzene(S)	1.251	1.236	1.2	S	
64	TM	2-Hexanone	0.2726	0.2291	16	TM	
65	TM	1,3-Dichloropropane	1.121	0.9930	11	TM	
66	TM	Dibromochloromethane	0.7595	0.6886	9.3	TM	
67	TM**	Chlorobenzene	2.647	2.510	5.2	TM**	
68	TM*	Ethylbenzene	4.220	4.039	4.3	TM*	
69	TM**	Bromoform	0.3388	0.2972	12	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	MIBK (methyl isobutyl ketone)	0.9202	0.9304	1.1	TM	
72	TM	Isopropylbenzene	9.255	9.075	2.0	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.302	1.268	2.7	TM**	
74	TM	1,2,3-Trichloropropane	0.1380	0.1211	12	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.3005	0.2821	6.1	TM	
76	TM	Bromobenzene	2.244	2.030	9.5	TM	
77	TM	n-Propylbenzene	10.8	10.8	0.42	TM	
78	TM	4-Ethyltoluene	6.382	6.290	1.4	TM	
79	TM	2-Chlorotoluene	7.112	6.743	5.2	TM	
80	TM	1,3,5-Trimethylbenzene	7.647	7.360	3.7	TM	
		Average			6.2		

MR 4/19/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No:
Date Analyzed: 04/18/12
Instrument: Chico
Cal. Date: 04/10/12
Data File: 0418C03W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	4-Chlorotoluene	6.413	6.219	3.0	TM	
82	TM	Tert-Butylbenzene	8.671	8.261	4.7	TM	
83	TM	1,2,4-Trimethylbenzene	7.716	7.614	1.3	TM	
84	TM	Sec-Butylbenzene	10.4	10.1	3.0	TM	
85	TM	p-Isopropyltoluene	8.902	8.581	3.6	TM	
86	TM	Benzyl Chloride	2.098	2.078	0.94	TM	
87	TM	1,3-DCB	4.546	4.370	3.9	TM	
88	TM	1,4-DCB	4.404	4.264	3.2	TM	
89	TM	Hexachloroethane	1.793	1.895	5.7	TM	
90	TM	n-Butylbenzene	7.275	7.137	1.9	TM	
91	TM	1,2-DCB	3.977	3.930	1.2	TM	
92	TM	1,2-Dibromo-3-chloropropane	0.1845	0.1626	12	TM	
93	TM	1,2,4-Trichlorobenzene	1.017	0.9559	6.0	TM	
94	TM	Hexachlorobutadiene	1.072	0.9856	8.0	TM	
95	TM	Naphthalene	4.760	4.126	13	TM	
96	TM	1,2,3-Trichlorobenzene	0.8937	0.7780	13	TM	
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			5.3		

ARS 4/19/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C03W.D Vial: 1
Acq On : 18 Apr 12 10:41 Operator: SV
Sample : 10ug/L Vol Std 04-18-12 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:24 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.81	96	628509	25.00000 ppb		-0.05
54) Chlorobenzene-D5 (IS)	17.99	117	502912	25.00000 ppb		-0.05
70) 1,4-Dichlorobenzene-D (IS)	22.19	152	224960	25.00000 ppb		-0.04
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.38	111	379992	20.75274 ppb		-0.06
Spiked Amount 20.866			Recovery = 99.460%			
37) 1,2-DCA-D4(S)	12.19	65	281073	19.38689 ppb		-0.05
Spiked Amount 21.039			Recovery = 92.148%			
55) Toluene-D8(S)	15.46	98	1453844	23.69209 ppb		-0.05
Spiked Amount 25.355			Recovery = 93.441%			
63) 4-Bromofluorobenzene(S)	20.06	95	671498	26.67673 ppb		-0.04
Spiked Amount 27.007			Recovery = 98.778%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.09	85	159768	7.81362 ppb		98
3) Freon 114	4.34	85	73484	9.33023 ppb		93
4) Chloromethane	4.58	52	96178	10.93902 ppb		94
5) Vinyl chloride	4.84	62	60016	10.26932 ppb		96
6) Bromomethane	5.73	94	36120	8.98448 ppb		99
7) Chloroethane	5.91	64	43400	8.68552 ppb		97
8) Dichlorofluoromethane	6.01	67	379423	10.18783 ppb		98
9) Trichlorofluoromethane	6.52	103	41392	9.40051 ppb		100
10) Acetonitrile	7.64	41	153034	136.62254 ug/l		100
11) Acrolein	7.15	56	126649	105.25835 ppb		99
12) Acetone	7.27	43	22954	9.56541 ppb	#	80
13) Freon-113	7.45	101	120628	9.21516 ppb		96
14) 1,1-DCE	7.66	96	111785	8.50248 ppb		94
15) t-Butanol	7.75	59	62102	120.60359 ppb	#	86
16) Methyl Acetate	8.16	43	81985	9.83999 ppb		97
17) Iodomethane	8.14	142	165551	8.59169 ppb		100
18) Acrylonitrile	8.54	53	30668	9.43134 ppb		92
19) Methylene chloride	8.45	84	154213	9.53576 ppb		89
20) Carbon disulfide	8.54	76	47616	8.28981 ppb		97
21) Methyl t-butyl ether (MtBE	8.88	73	306605	9.08089 ppb		97
22) Trans-1,2-DCE	9.07	96	139119	9.03318 ppb		99
23) Diisopropyl Ether	9.72	45	651101	9.67282 ppb		99
24) 1,1-DCA	9.76	63	333562	9.41697 ppb		99
25) Vinyl Acetate	9.40	43	41775	9.49268 ppb		94
26) Ethyl tert Butyl Ether	10.42	59	461215	9.27035 ppb		100
27) MEK (2-Butanone)	10.41	43	17830	8.69539 ppb		97
28) Cis-1,2-DCE	10.78	96	194488	10.20784 ppb		96
29) 2,2-Dichloropropane	10.78	77	239629	10.00906 ppb		97
30) Chloroform	11.07	85	190808	9.63444 ppb		98
31) Bromochloromethane	11.28	128	75134	9.32302 ppb		90
33) 1,1,1-TCA	11.80	97	226024	9.33936 ppb		98
34) Cyclohexane	11.97	56	187691	9.06387 ppb		96
35) 1,1-Dichloropropene	12.07	75	193256	9.13796 ppb		98
36) 2,2,4-Trimethylpentane	12.14	57	482071	11.74529 ppb		97
38) Carbon Tetrachloride	12.26	117	192220	9.11362 ppb		99
39) Tert Amyl Methyl Ether	12.31	73	364746	9.31164 ppb		97
40) 1,2-DCA	12.34	62	149355	9.20413 ppb		97
41) Benzene	12.47	78	658167	9.28097 ppb		99
42) TCE	13.49	95	163078	9.55921 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C03W.D Vial: 1
Acq On : 18 Apr 12 10:41 Operator: SV
Sample : 10ug/L Vol Std 04-18-12 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:24 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	2-Pentanone	13.16	43	762795	120.54709 ppb		100
44)	1,2-Dichloropropane	13.72	63	199832	9.52654 ppb		99
45)	Bromodichloromethane	14.07	83	197023	9.68938 ppb		96
46)	Methyl Cyclohexane	13.77	83	164488	9.39781 ppb		99
47)	Dibromomethane	14.13	93	76748	9.34631 ppb		94
48)	2-Chloroethyl vinyl ether	14.53	63	68958	9.68023 ppb		91
49)	1-Bromo-2-chloroethane	14.84	63	173154	9.06129 ppb		100
50)	Cis-1,3-Dichloropropene	14.96	75	249738	9.02930 ppb		95
51)	Toluene	15.59	91	674702	9.75098 ppb		100
52)	Trans-1,3-Dichloropropene	15.76	75	185228	9.39083 ppb		98
53)	1,1,2-TCA	16.04	83	95968	9.63622 ppb		95
56)	1,2-EDB	17.29	107	106922	9.18190 ppb		97
57)	Tetrachloroethene	16.74	164	122112	8.61501 ppb		97
58)	1-Chlorohexane	17.66	91	252364	9.56593 ppb		93
59)	1,1,1,2-Tetrachloroethane	18.11	131	178251	9.29473 ppb		91
60)	m&p-Xylene	18.31	106	640100	18.63891 ppb		98
61)	o-Xylene	19.06	106	331341	9.26025 ppb		95
62)	Styrene	19.08	104	524728	9.29001 ppb		100
64)	2-Hexanone	16.07	43	46077	8.40254 ppb		95
65)	1,3-Dichloropropane	16.44	76	199750	8.85797 ppb		98
66)	Dibromochloromethane	16.93	129	138521	9.06600 ppb		92
67)	Chlorobenzene	18.05	112	504880	9.48017 ppb		98
68)	Ethylbenzene	18.17	91	812556	9.57250 ppb		96
69)	Bromoform	19.59	173	59778	8.77142 ppb		90
71)	MIBK (methyl isobutyl keto	14.63	43	83722	10.11126 ppb		99
72)	Isopropylbenzene	19.68	105	816596	9.80493 ppb		98
73)	1,1,2,2-Tetrachloroethane	19.84	83	114061	9.73476 ppb		97
74)	1,2,3-Trichloropropane	20.10	110	10893	8.77106 ppb		83
75)	t-1,4-Dichloro-2-Butene	20.17	53	25381	9.38762 ppb		91
76)	Bromobenzene	20.42	156	182664	9.04629 ppb		97
77)	n-Propylbenzene	20.39	91	969779	9.95813 ppb		99
78)	4-Ethyltoluene	20.58	105	565992	9.85628 ppb		97
79)	2-Chlorotoluene	20.68	91	606719	9.48014 ppb		97
80)	1,3,5-Trimethylbenzene	20.66	105	662319	9.62513 ppb		98
81)	4-Chlorotoluene	20.77	91	559595	9.69729 ppb		100
82)	Tert-Butylbenzene	21.30	119	743317	9.52669 ppb		97
83)	1,2,4-Trimethylbenzene	21.36	105	685142	9.86795 ppb		98
84)	Sec-Butylbenzene	21.70	105	910955	9.70399 ppb		97
85)	p-Isopropyltoluene	21.94	119	772143	9.63961 ppb		97
86)	Benzyl Chloride	22.37	91	186990	9.90635 ppb		96
87)	1,3-DCB	22.07	146	393222	9.61225 ppb		99
88)	1,4-DCB	22.24	146	383707	9.68255 ppb		97
89)	Hexachloroethane	23.54	117	170550	10.57049 ppb		97
90)	n-Butylbenzene	22.64	91	642200	9.81062 ppb		98
91)	1,2-DCB	22.88	146	353622	9.88166 ppb		97
92)	1,2-Dibromo-3-chloropropan	24.09	155	14633	8.81181 ppb	#	77
93)	1,2,4-Trichlorobenzene	25.54	180	86013	9.39912 ppb		98
94)	Hexachlorobutadiene	25.79	223	88686	9.19721 ppb		99
95)	Naphthalene	25.89	128	371259	8.66780 ppb		99
96)	1,2,3-Trichlorobenzene	26.24	180	70012	8.70636 ppb		97

1,3-dichloropropene, total 18.42013 ppb

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

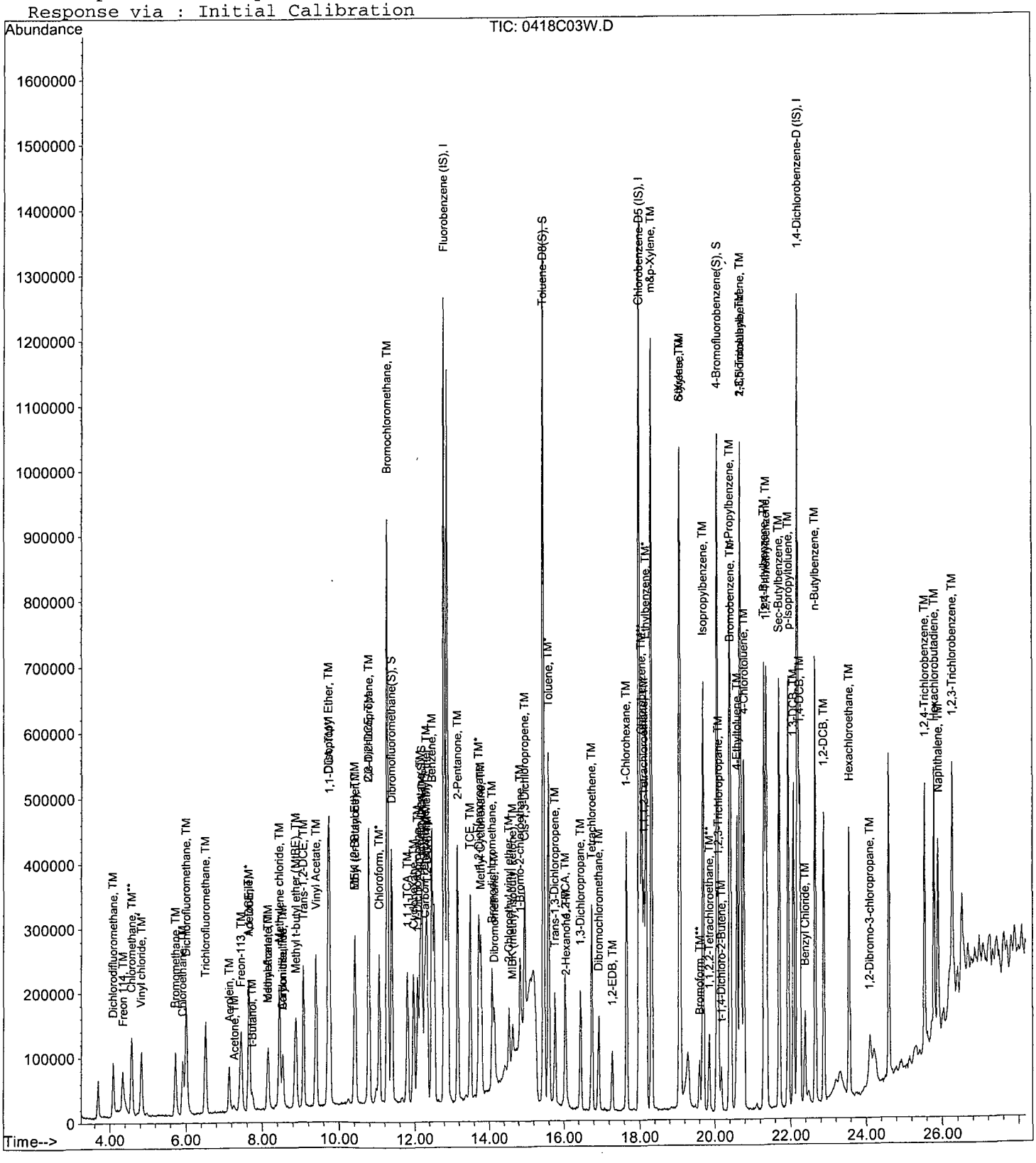
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C03W.D
Acq On : 18 Apr 12 10:41
Sample : 10ug/L Vol Std 04-18-12
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 18 11:24 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



312

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Initial Cal. Date: 04/11/12
Matrix: Instrument: Thor Initials:

		Compound	0.5	1	5	10	20	40	100				Avg	%RSD		r^2
			0411T32W.D	0411T33W.D	0411T34W.D	0411T35W.D	0411T36W.D	0411T37W.D	0411T38W.D							
1	I	Fluorobenzene (IS)														
2	TM	Dichlorodifluoromethane	0.2309	0.2909	0.2778	0.2827	0.3270	0.3248	0.3733				0.30	15	TM	
3	TM	Freon 114	0.1911	0.2083	0.2029	0.2216	0.2222	0.2240	0.2507				0.22	8.8	TM	
4	TM**L	Chloromethane	0.3719	0.3569	0.2650	0.2533	0.2786	0.3012					0.30	16	TM**L	0.997
5	TM*	Vinyl chloride	0.4209	0.4826	0.4792	0.4855	0.4827	0.4720	0.5187				0.48	6.1	TM*	
6	TM	Bromomethane	0.3723	0.3757	0.3369	0.3151	0.3123	0.3213	0.3670				0.34	8.2	TM	
7	TM	Chloroethane	0.2756	0.2503	0.2573	0.2603	0.2700	0.2595	0.2855				0.27	4.6	TM	
8	TMQ	Dichlorofluoromethane	0.0230	0.0255	0.0376	0.0582	0.0760	0.1135	0.2111				0.08	86	TMQ	1.00
9	TMQ	Trichlorofluoromethane	0.1019	0.1372	0.1436	0.1533	0.1750	0.1937	0.2601				0.17	30	TMQ	1.00
10	TM	Acrolein	0.0226	0.0230	0.0248	0.0255	0.0306						0.03	13	TM	
11	TML	Acetone	0.2098	0.1537	0.0859	0.0809	0.0850	0.0794	0.0726				0.11	47	TML	0.999
12	TM	Freon-113	0.2494	0.2244	0.2234	0.2582	0.2625	0.2556	0.2888				0.25	9.0	TM	
13	TM*	1,1-DCE	0.4387	0.4078	0.4046	0.4051	0.4074	0.4095	0.4607				0.42	5.2	TM*	
14	TMQ	t-Butanol	0.0058	0.0060	0.0063	0.0063	0.0076	0.0086					0.01	16	TMQ	0.995
15	TML	Methyl Acetate	0.5902	0.5159	0.2542	0.2337	0.2237	0.2121	0.2247				0.32	50	TML	0.999
16	TM	Iodomethane	0.4180	0.4193	0.4690	0.4478	0.4357	0.4319	0.4782				0.44	5.3	TM	
17	TM	Acrylonitrile	0.0594	0.0643	0.0722	0.0708	0.0697	0.0714	0.0756				0.07	7.9	TM	
18	TM	Methylene chloride	0.1717	0.1526	0.1309	0.1236	0.1225	0.1181	0.1270				0.14	15	TM	
19	TM	Carbon disulfide	0.1374	0.1486	0.1454	0.1516	0.1485	0.1417	0.1565				0.15	4.3	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.4998	0.4459	0.4749	0.4641	0.4492	0.4372	0.4466				0.46	4.7	TM	
21	TM	Trans-1,2-DCE	0.2848	0.2606	0.2919	0.2875	0.2793	0.2752	0.3009				0.28	4.6	TM	
22	TM	Diisopropyl Ether	0.1209	0.1193	0.1231	0.1207	0.1214	0.1201	0.1319				0.12	3.5	TM	
23	TM**	1,1-DCA	0.6265	0.6498	0.6196	0.6123	0.5982	0.5923	0.6445				0.62	3.5	TM**	
24	TM	Vinyl Acetate	0.3180	0.3007	0.2958	0.2984	0.2969	0.3028	0.3234				0.31	3.6	TM	
25	TM	Ethyl tert Butyl Ether	0.6630	0.6687	0.6392	0.6345	0.6206	0.6075	0.6024				0.63	4.1	TM	
26	TML	MEK (2-Butanone)	0.1667	0.1616	0.1122	0.1049	0.1041	0.0998	0.1046				0.12	24	TML	1.000
27	TM	Cis-1,2-DCE	0.4243	0.4140	0.4186	0.4026	0.4022	0.3916	0.4293				0.41	3.3	TM	
28	TM	2,2-Dichloropropane	0.2369	0.2375	0.2410	0.2370	0.2306	0.2271	0.2342				0.23	2.0	TM	
29	TM*	Chloroform	0.7088	0.7099	0.6763	0.6684	0.6560	0.6576	0.7058				0.68	3.6	TM*	
30	TM	Bromochloromethane	0.1920	0.2069	0.1944	0.1938	0.1937	0.1938	0.2048				0.20	3.1	TM	
31	S	Dibromofluoromethane(S)	0.4216	0.4394	0.4062	0.3950	0.4143	0.4069	0.4346				0.42	3.8	S	
32	TM	1,1,1-TCA	0.4508	0.4458	0.4445	0.4358	0.4439	0.4414	0.4825				0.45	3.4	TM	
33	TM	Cyclohexane	0.1713	0.1745	0.1519	0.1605	0.1588	0.1692	0.1836				0.17	6.4	TM	
34	TM	1,1-Dichloropropene	0.4053	0.4150	0.3747	0.3822	0.3797	0.3827	0.4269				0.40	5.1	TM	
35	TM	2,2,4-Trimethylpentane	0.4929	0.4881	0.4614	0.5344	0.5122	0.5460	0.6255				0.52	10	TM	

ARS 4/12/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: _____
Case No: _____ Initial Cal. Date: 04/11/12
Matrix: _____ Instrument: Thor Initials: _____

		Compound	0.5	1	5	10	20	40	100				Avg	%RSD		r²
36	S	1,2-DCA-D4(S)	0.4021	0.3921	0.3878	0.3648	0.3689	0.3637	0.3823				0.38	3.9	S	
37	TM	Carbon Tetrachloride	0.4284	0.4469	0.4076	0.4245	0.4302	0.4421	0.4956				0.44	6.3	TM	
38	TM	Tert Amyl Methyl Ether	0.7212	0.7513	0.7043	0.6886	0.6845	0.6709	0.6717				0.70	4.2	TM	
39	TM	1,2-DCA	0.4508	0.4302	0.4449	0.4378	0.4296	0.4149	0.4456				0.44	2.8	TM	
40	TM	Benzene	1.468	1.441	1.393	1.390	1.358	1.344	1.464				1.4	3.5	TM	
41	TM	TCE	0.4278	0.4235	0.3949	0.3868	0.3765	0.3714	0.4077				0.40	5.6	TM	
42	TM	2-Pentanone	0.1774	0.1766	0.1757	0.1736	0.1778	0.1785	0.1876				0.18	2.5	TM	
43	TM*	1,2-Dichloropropane	0.4530	0.4039	0.4191	0.4200	0.4038	0.3992	0.4305				0.42	4.5	TM*	✓
44	TM	Bromodichloromethane	0.5255	0.5098	0.5199	0.5034	0.5066	0.5028	0.5548				0.52	3.6	TM	
45	TM	Methyl Cyclohexane	0.3136	0.3328	0.2986	0.3321	0.3295	0.3450	0.3883				0.33	8.4	TM	
46	TM	Dibromomethane	0.2157	0.2295	0.2255	0.2173	0.2208	0.2110	0.2283				0.22	3.1	TM	
47	TML	2-Chloroethyl vinyl ether													TML	
48	TM	MIBK (methyl isobutyl ketone	0.1441	0.1503	0.1319	0.1304	0.1278	0.1264	0.1369				0.14	6.6	TM	
49	TM	1-Bromo-2-chloroethane	0.2817	0.3012	0.2766	0.2633	0.2557	0.2585	0.2757				0.27	5.8	TM	
50	TM	Cis-1,3-Dichloropropene	0.5068	0.5408	0.5454	0.5355	0.5504	0.5560	0.6255				0.55	6.6	TM	
51	TM*	Toluene	1.720	1.706	1.588	1.620	1.583	1.593	1.755				1.7	4.4	TM*	✓
52	TM	Trans-1,3-Dichloropropene	0.4049	0.4580	0.4580	0.4572	0.4572	0.4735	0.5274				0.46	7.8	TM	
53	TM	1,1,2-TCA	0.3339	0.2861	0.3058	0.2880	0.2757	0.2754	0.2979				0.29	7.0	TM	
54	TM	2-Hexanone	0.1688	0.1443	0.1515	0.1473	0.1494	0.1449	0.1561				0.15	5.6	TM	
55	I	Chlorobenzene-D5 (IS)														
56	S	Toluene-D8(S)	1.700	1.637	1.626	1.643	1.691	1.645	1.734				1.7	2.4	S	
57	TM	1,2-EDB	0.3430	0.3529	0.3888	0.3881	0.3804	0.3681	0.3953				0.37	5.3	TM	
58	TM	Tetrachloroethene	0.5441	0.5656	0.5108	0.5439	0.5075	0.4983	0.5506				0.53	4.8	TM	
59	TM	1-Chlorohexane	0.6397	0.5987	0.4930	0.5409	0.5279	0.5290	0.6110				0.56	9.5	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5054	0.4801	0.4963	0.5086	0.4944	0.4901	0.5458				0.50	4.2	TM	
61	TM	m&p-Xylene	0.8051	0.8242	0.8245	0.8858	0.8623	0.8617	0.9654				0.86	6.2	TM	
62	TM	o-Xylene	0.8295	0.7829	0.8351	0.8760	0.8568	0.8530	0.9571				0.86	6.2	TM	
63	TM	Styrene	1.258	1.332	1.368	1.462	1.475	1.489	1.684				1.4	9.6	TM	
64	S	4-Bromofluorobenzene(S)	0.7053	0.6824	0.6818	0.6834	0.6802	0.6767	0.7265				0.69	2.6	S	
65	TM	1,3-Dichloropropane	0.6519	0.7194	0.6736	0.6904	0.6435	0.6242	0.6670				0.67	4.7	TM	
66	TM	Dibromochloromethane	0.4218	0.5036	0.4719	0.4912	0.4718	0.4665	0.5172				0.48	6.5	TM	
67	TM**	Chlorobenzene	1.504	1.429	1.414	1.423	1.384	1.359	1.479				1.4	3.5	TM**	✓
68	TM*	Ethylbenzene	2.106	2.245	2.141	2.264	2.223	2.192	2.451				2.2	5.0	TM*	✓
69	TM**	Bromoform	0.3092	0.3060	0.3219	0.3251	0.3119	0.3097	0.3457				0.32	4.4	TM**	✓
70	I	1,4-Dichlorobenzene-D (IS)														

ARS 4/12/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: _____
Case No: _____ Initial Cal. Date: 04/11/12
Matrix: _____ Instrument: Thor Initials: _____

		Compound	0.5	1	5	10	20	40	100				Avg	%RSD		r^2
71	TM	Isopropylbenzene	3.479	3.282	3.341	3.477	3.449	3.541	3.887				3.5	5.6	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7759	0.7724	0.7668	0.7661	0.7397	0.7231	0.7614				0.76	2.5	TM**	
73	TM	1,2,3-Trichloropropane	0.2963	0.2617	0.2395	0.2271	0.2221	0.2142	0.2241				0.24	12	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1536	0.1300	0.1442	0.1395	0.1490	0.1451	0.1583				0.15	6.4	TM	
75	TM	Bromobenzene	1.155	1.195	1.125	1.104	1.077	1.068	1.146				1.1	4.0	TM	
76	TM	n-Propylbenzene	4.017	4.073	4.008	4.316	4.290	4.348	4.749				4.3	6.1	TM	
77	TM	4-Ethyltoluene	2.188	2.281	2.303	2.485	2.490	2.521	2.756				2.4	7.8	TM	
78	TM	2-Chlorotoluene	2.844	2.916	2.872	2.987	2.918	2.926	3.163				2.9	3.6	TM	
79	TM	1,3,5-Trimethylbenzene	2.790	2.875	2.959	3.182	3.153	3.219	3.516				3.1	7.9	TM	
80	TM	4-Chlorotoluene	2.954	3.035	2.983	3.156	3.069	3.052	3.332				3.1	4.1	TM	
81	TM	Tert-Butylbenzene	2.518	2.491	2.562	2.729	2.716	2.744	3.057				2.7	7.2	TM	
82	TM	1,2,4-Trimethylbenzene	2.871	2.852	2.966	3.180	3.241	3.254	3.580				3.1	8.3	TM	
83	TM	Sec-Butylbenzene	3.386	3.406	3.494	3.800	3.749	3.806	4.215				3.7	7.9	TM	
84	TM	p-Isopropyltoluene	2.974	2.992	2.997	3.239	3.226	3.312	3.685				3.2	7.9	TM	
85	TM	Benzyl Chloride	0.9420	0.8639	0.9337	0.9225	0.8974	0.9146	1.036				0.93	5.7	TM	
86	TM	1,3-DCB	2.455	2.277	2.159	2.141	2.069	2.052	2.215				2.2	6.3	TM	
87	TM	1,4-DCB	2.340	2.303	2.139	2.171	2.103	2.086	2.236				2.2	4.5	TM	
88	TM	n-Butylbenzene	2.603	2.514	2.581	2.773	2.728	2.796	3.128				2.7	7.5	TM	
89	TM	1,2-DCB	2.134	2.115	2.002	2.008	1.950	1.926	2.067				2.0	3.9	TM	
90	TM	Hexachloroethane	0.5614	0.6116	0.5473	0.5591	0.5427	0.5488	0.6158				0.57	5.4	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.1281	0.1312	0.1543	0.1546	0.1544	0.1544	0.1677				0.15	9.6	TM	
92	TM	1,2,4-Trichlorobenzene	0.8308	0.8423	0.8413	0.8685	0.8343	0.8735	1.002				0.87	6.9	TM	
93	TM	Hexachlorobutadiene	0.3971	0.4265	0.3512	0.3571	0.3442	0.3465	0.3852				0.37	8.4	TM	
94	TM	Naphthalene	2.035	2.001	2.162	2.258	2.297	2.424	2.755				2.3	11	TM	
95	TM	1,2,3-Trichlorobenzene	1.232	1.175	1.194	1.233	1.194	1.222	1.352				1.2	4.8	TM	
96																
97																
98																
99																
100																
101																
102																
103																
104																
105																

ARS 4/12/12

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T31W.D Vial: 31
Acq On : 11 Apr 12 22:40 Operator: DG,RS,HW,ARS,SV
Sample : 0.3ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	456704	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	372672	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	210688	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	6110	0.80230 ppb		0.00
Spiked Amount 29.720			Recovery =	2.698%		
36) 1,2-DCA-D4(S)	6.34	65	5320	0.76588 ppb		0.00
Spiked Amount 29.608			Recovery =	2.587%		
56) Toluene-D8(S)	8.44	98	19356	0.77847 ppb		0.00
Spiked Amount 31.981			Recovery =	2.433%		
64) 4-Bromofluorobenzene(S)	11.06	95	9435	0.91609 ppb		0.00
Spiked Amount 29.353			Recovery =	3.121%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.31	85	1551	0.28201 ppb		91
3) Freon 114	1.42	85	1031	0.25977 ppb		94
4) Chloromethane	1.46	50	3014	1.05698 ppb		82
5) Vinyl chloride	1.57	62	2744	0.31464 ppb		83
6) Bromomethane	1.88	94	2980	0.47567 ppb		86
7) Chloroethane	1.98	64	1935	0.39893 ppb		96
8) Dichlorofluoromethane	2.19	67	114	1.15218 ppb	#	48
9) Trichlorofluoromethane	2.25	101	366	0.37986 ppb	#	20
10) Acrolein	2.71	55	6751	14.60290 ppb		83
11) Acetone	2.92	43	1407	-0.71772 ppb	#	68
12) Freon-113	2.87	101	1230	0.26745 ppb		92
13) 1,1-DCE	2.84	61	2318	0.30276 ppb	#	84
14) t-Butanol	3.72	59	1750	-25.00000 ppb		98
15) Methyl Acetate	3.36	43	3755	0.46335 ppb		91
16) Iodomethane	3.00	142	4292	0.53054 ppb		92
17) Acrylonitrile	3.84	52	112	0.08876 ppb	#	1
18) Methylene chloride	3.47	84	1861	0.75337 ppb	#	74
19) Carbon disulfide	3.08	76	1191	0.44323 ppb	#	82
20) Methyl t-butyl ether (MtBE	3.93	73	4100	0.48827 ppb		93
21) Trans-1,2-DCE	3.89	96	2351	0.45491 ppb		95
22) Diisopropyl Ether	4.72	59	1031	0.46071 ppb	#	83
23) 1,1-DCA	4.53	63	5427	0.47879 ppb		95
24) Vinyl Acetate	4.72	87	2473	0.44363 ppb		93
25) Ethyl tert Butyl Ether	5.23	59	5139	0.44392 ppb		89
26) MEK (2-Butanone)	5.41	43	1588	0.75189 ppb		98
27) Cis-1,2-DCE	5.34	96	3696	0.49132 ppb		80
28) 2,2-Dichloropropane	5.34	77	1454	0.33882 ppb	#	76
29) Chloroform	5.77	83	5924	0.47462 ppb		96
30) Bromochloromethane	5.64	128	1629	0.45249 ppb		95
32) 1,1,1-TCA	5.98	97	3196	0.38945 ppb		88
33) Cyclohexane	6.05	41	1195	0.39147 ppb	#	1
34) 1,1-Dichloropropene	6.18	75	2495	0.34558 ppb		86
35) 2,2,4-Trimethylpentane	6.56	57	2916	0.30524 ppb	#	40
37) Carbon Tetrachloride	6.18	117	2718	0.33866 ppb	#	95
38) Tert Amyl Methyl Ether	6.61	73	5342	0.41839 ppb	#	89
39) 1,2-DCA	6.44	62	3713	0.46589 ppb	#	91
40) Benzene	6.42	78	13731	0.53369 ppb		93
41) TCE	7.16	95	3389	0.46567 ppb		89
42) 2-Pentanone	7.38	43	50570	15.53597 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T31W.D Vial: 31
Acq On : 11 Apr 12 22:40 Operator: DG,RS,HW,ARS,SV
Sample : 0.3ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) 1,2-Dichloropropane	7.39	63	3630	0.47479 ppb		97
44) Bromodichloromethane	7.69	83	4953	0.52387 ppb	#	84
45) Methyl Cyclohexane	7.38	83	1765	0.28902 ppb		90
46) Dibromomethane	7.50	93	1707	0.42250 ppb	#	84
48) MIBK (methyl isobutyl ket	8.34	43	1065	0.43050 ppb	#	80
49) 1-Bromo-2-chloroethane	8.00	63	2197	0.44014 ppb		92
50) Cis-1,3-Dichloropropene	8.16	75	4443	0.44102 ppb		95
51) Toluene	8.51	91	13063	0.43279 ppb		98
52) Trans-1,3-Dichloropropene	8.74	75	3240	0.38363 ppb	#	43
53) 1,1,2-TCA	8.92	83	2087	0.38768 ppb		88
54) 2-Hexanone	9.19	43	1371	0.49455 ppb		90
57) 1,2-EDB	9.41	107	2380	0.42710 ppb		86
58) Tetrachloroethene	9.07	166	2759	0.34820 ppb		90
59) 1-Chlorohexane	9.91	91	2481	0.29568 ppb		93
60) 1,1,1,2-Tetrachloroethane	10.00	131	3382	0.45109 ppb		100
61) m&p-Xylene	10.16	106	10235	0.79716 ppb		93
62) o-Xylene	10.55	106	5665	0.44408 ppb		98
63) Styrene	10.56	104	8347	0.38932 ppb		90
65) 1,3-Dichloropropane	9.08	76	4604	0.46292 ppb		98
66) Dibromochloromethane	9.30	129	2887	0.40540 ppb		91
67) Chlorobenzene	9.92	112	10717	0.50366 ppb		97
68) Ethylbenzene	10.04	91	14587	0.43847 ppb		92
69) Bromoform	10.73	173	1692	0.35638 ppb		90
71) Isopropylbenzene	10.92	105	10894	0.36998 ppb		97
72) 1,1,2,2-Tetrachloroethane	11.20	83	2918	0.45685 ppb	#	78
73) 1,2,3-Trichloropropane	11.24	110	1036	0.51071 ppb		78
74) t-1,4-Dichloro-2-Butene	11.25	53	389	0.31687 ppb		99
75) Bromobenzene	11.21	156	4731	0.49934 ppb		87
76) n-Propylbenzene	11.33	91	12612	0.35152 ppb		95
77) 4-Ethyltoluene	11.45	105	7778	0.37949 ppb		95
78) 2-Chlorotoluene	11.40	91	11643	0.46887 ppb		95
79) 1,3,5-Trimethylbenzene	11.51	105	9635	0.36890 ppb		95
80) 4-Chlorotoluene	11.51	91	11768	0.45292 ppb		93
81) Tert-Butylbenzene	11.83	119	6976	0.30793 ppb		93
82) 1,2,4-Trimethylbenzene	11.88	105	10539	0.39890 ppb		83
83) Sec-Butylbenzene	12.05	105	9864	0.31689 ppb		98
84) p-Isopropyltoluene	12.20	119	8332	0.30861 ppb	#	91
85) Benzyl Chloride	12.37	91	2833	0.36145 ppb	#	91
86) 1,3-DCB	12.14	146	9041	0.48865 ppb		98
87) 1,4-DCB	12.24	146	9239	0.49902 ppb		93
88) n-Butylbenzene	12.61	91	7940	0.34487 ppb		99
89) 1,2-DCB	12.60	146	8667	0.50690 ppb		93
90) Hexachloroethane	12.86	117	2160	0.45004 ppb	#	68
91) 1,2-Dibromo-3-chloropropan	13.38	157	417	0.33154 ppb		85
92) 1,2,4-Trichlorobenzene	14.21	180	3133	0.42712 ppb		96
93) Hexachlorobutadiene	14.40	223	1488	0.47393 ppb	#	67
94) Naphthalene	14.45	128	6417	0.33456 ppb		93
95) 1,2,3-Trichlorobenzene	14.69	180	4225	0.40799 ppb		95

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

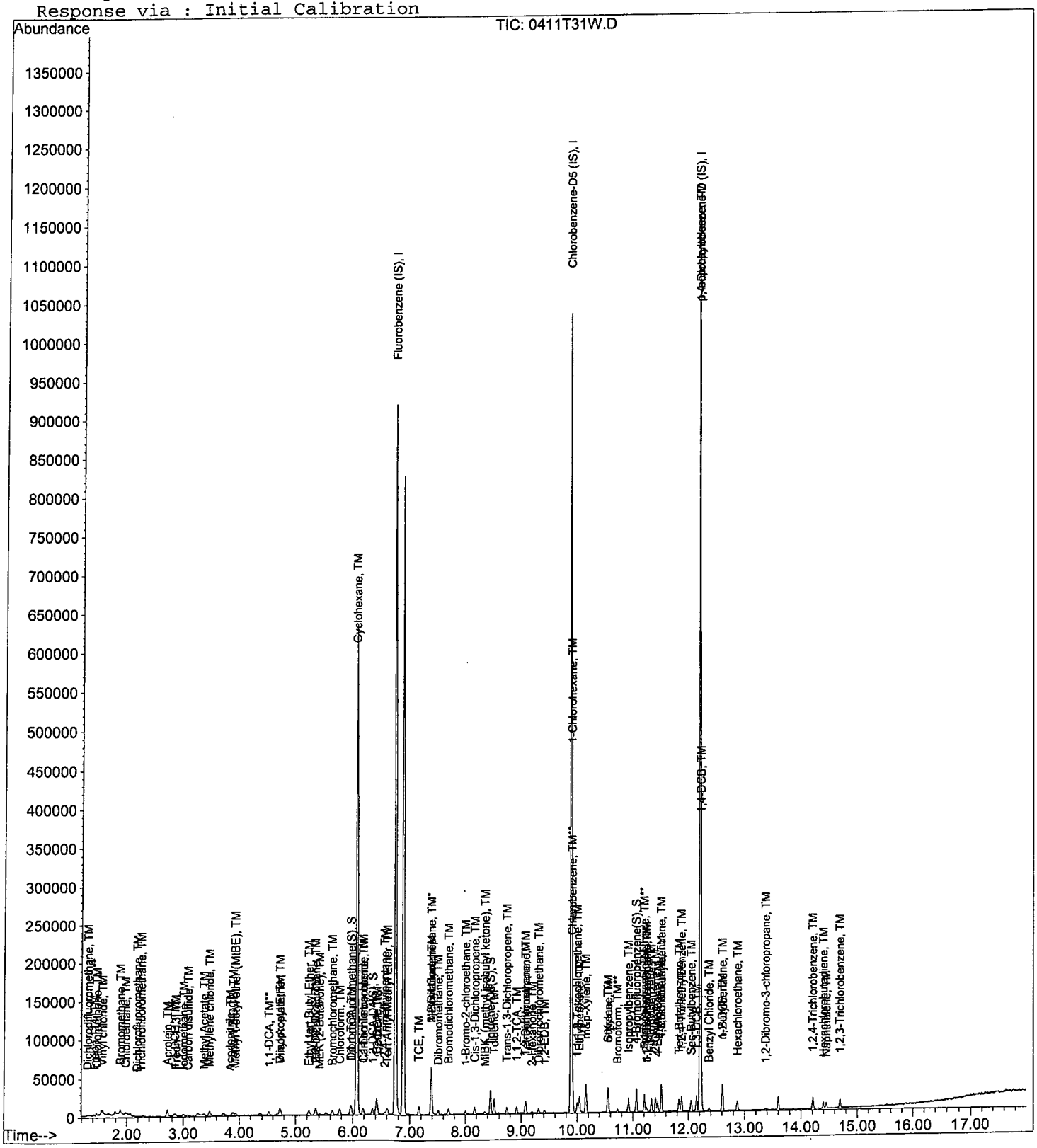
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T31W.D
Acq On : 11 Apr 12 22:40
Sample : 0.3ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 31
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



318

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T32W.D Vial: 32
Acq On : 11 Apr 12 23:07 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	467648	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	388928	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	215808	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	7887	1.01140 ppb		0.00
Spiked Amount 29.720			Recovery = 3.402%			
36) 1,2-DCA-D4(S)	6.35	65	7521	1.05740 ppb		0.00
Spiked Amount 29.608			Recovery = 3.570%			
56) Toluene-D8(S)	8.44	98	26440	1.01893 ppb		0.00
Spiked Amount 31.981			Recovery = 3.186%			
64) 4-Bromofluorobenzene(S)	11.06	95	10973	1.02089 ppb		0.00
Spiked Amount 29.353			Recovery = 3.478%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.31	85	2160	0.38355 ppb		88
3) Freon 114	1.42	85	1787	0.43971 ppb		97
4) Chloromethane	1.46	50	3478	1.12685 ppb		96
5) Vinyl chloride	1.57	62	3937	0.44088 ppb	#	75
6) Bromomethane	1.88	94	3482	0.54280 ppb		99
7) Chloroethane	1.99	64	2578	0.51906 ppb		93
8) Dichlorofluoromethane	2.20	67	215	1.25275 ppb	#	1
9) Trichlorofluoromethane	2.25	101	953	0.58228 ppb		86
10) Acrolein	2.71	55	10580	22.34973 ppb		81
11) Acetone	2.91	43	1962	-0.33137 ppb		98
12) Freon-113	2.87	101	2333	0.49541 ppb		85
13) 1,1-DCE	2.84	61	4103	0.52336 ppb		87
14) t-Butanol	3.71	59	2728	10.66835 ppb		94
15) Methyl Acetate	3.37	43	5520	0.86723 ppb		96
16) Iodomethane	3.00	142	3910	0.47201 ppb		95
17) Acrylonitrile	3.83	52	556	0.43032 ppb	#	54
18) Methylene chloride	3.47	84	1606	0.63493 ppb		91
19) Carbon disulfide	3.07	76	1285	0.46702 ppb		100
20) Methyl t-butyl ether (MtBE	3.93	73	4675	0.54371 ppb	#	90
21) Trans-1,2-DCE	3.88	96	2664	0.50341 ppb		87
22) Diisopropyl Ether	4.73	59	1131	0.49357 ppb		91
23) 1,1-DCA	4.53	63	5860	0.50489 ppb	#	94
24) Vinyl Acetate	4.73	87	2974	0.52102 ppb		88
25) Ethyl tert Butyl Ether	5.23	59	6201	0.52312 ppb		100
26) MEK (2-Butanone)	5.41	43	1559	0.71736 ppb		97
27) Cis-1,2-DCE	5.34	96	3968	0.51514 ppb		95
28) 2,2-Dichloropropane	5.33	77	2216	0.50429 ppb	#	79
29) Chloroform	5.77	83	6629	0.51867 ppb		92
30) Bromochloromethane	5.64	128	1796	0.48720 ppb		94
32) 1,1,1-TCA	5.97	97	4216	0.50172 ppb		91
33) Cyclohexane	6.05	41	1602	0.51252 ppb	#	1
34) 1,1-Dichloropropene	6.18	75	3791	0.51281 ppb		92
35) 2,2,4-Trimethylpentane	6.57	57	4610	0.47127 ppb	#	58
37) Carbon Tetrachloride	6.18	117	4007	0.48758 ppb		77
38) Tert Amyl Methyl Ether	6.60	73	6745	0.51592 ppb		92
39) 1,2-DCA	6.43	62	4216	0.51662 ppb		100
40) Benzene	6.41	78	13727	0.52105 ppb		96
41) TCE	7.16	95	4001	0.53690 ppb		96
42) 2-Pentanone	7.38	43	82943	24.88519 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T32W.D Vial: 32
Acq On : 11 Apr 12 23:07 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) 1,2-Dichloropropane	7.38	63	4237	0.54122 ppb	#	92
44) Bromodichloromethane	7.69	83	4915	0.50769 ppb		98
45) Methyl Cyclohexane	7.37	83	2933	0.46905 ppb		73
46) Dibromomethane	7.51	93	2017	0.48755 ppb		81
48) MIBK (methyl isobutyl ket	8.35	43	1348	0.53214 ppb	#	88
49) 1-Bromo-2-chloroethane	8.00	63	2635	0.51553 ppb		98
50) Cis-1,3-Dichloropropene	8.16	75	4740	0.45949 ppb		98
51) Toluene	8.51	91	16087	0.52051 ppb		99
52) Trans-1,3-Dichloropropene	8.74	75	3787	0.43790 ppb	#	79
53) 1,1,2-TCA	8.92	83	3123	0.56655 ppb	#	76
54) 2-Hexanone	9.20	43	1579	0.55625 ppb	#	96
57) 1,2-EDB	9.41	107	2668	0.45878 ppb		94
58) Tetrachloroethene	9.08	166	4232	0.51177 ppb		87
59) 1-Chlorohexane	9.91	91	4976	0.56824 ppb	#	77
60) 1,1,1,2-Tetrachloroethane	10.00	131	3931	0.50240 ppb		95
61) m&p-Xylene	10.16	106	12525	0.93474 ppb		99
62) o-Xylene	10.55	106	6452	0.48464 ppb		96
63) Styrene	10.56	104	9786	0.43736 ppb		99
65) 1,3-Dichloropropane	9.08	76	5071	0.48857 ppb		99
66) Dibromochloromethane	9.31	129	3281	0.44147 ppb		81
67) Chlorobenzene	9.92	112	11696	0.52670 ppb		91
68) Ethylbenzene	10.04	91	16379	0.47176 ppb		100
69) Bromoform	10.73	173	2405	0.48539 ppb	#	79
71) Isopropylbenzene	10.92	105	15018	0.49794 ppb		97
72) 1,1,2,2-Tetrachloroethane	11.20	83	3349	0.51189 ppb	#	83
73) 1,2,3-Trichloropropane	11.24	110	1279	0.61554 ppb	#	64
74) t-1,4-Dichloro-2-Butene	11.26	53	663	0.52725 ppb		88
75) Bromobenzene	11.21	156	4985	0.51367 ppb		79
76) n-Propylbenzene	11.33	91	17337	0.47175 ppb		99
77) 4-Ethyltoluene	11.45	105	9445	0.44989 ppb		92
78) 2-Chlorotoluene	11.41	91	12275	0.48259 ppb		97
79) 1,3,5-Trimethylbenzene	11.51	105	12044	0.45019 ppb		92
80) 4-Chlorotoluene	11.51	91	12751	0.47910 ppb		99
81) Tert-Butylbenzene	11.83	119	10870	0.46843 ppb		96
82) 1,2,4-Trimethylbenzene	11.88	105	12392	0.45791 ppb		94
83) Sec-Butylbenzene	12.05	105	14613	0.45831 ppb		92
84) p-Isopropyltoluene	12.20	119	12836	0.46416 ppb		93
85) Benzyl Chloride	12.37	91	4066	0.50646 ppb		93
86) 1,3-DCB	12.15	146	10595	0.55906 ppb		84
87) 1,4-DCB	12.24	146	10098	0.53248 ppb		98
88) n-Butylbenzene	12.61	91	11233	0.47633 ppb		94
89) 1,2-DCB	12.60	146	9212	0.52599 ppb		92
90) Hexachloroethane	12.87	117	2423	0.49286 ppb		95
91) 1,2-Dibromo-3-chloropropan	13.37	157	553	0.42924 ppb	#	36
92) 1,2,4-Trichlorobenzene	14.21	180	3586	0.47728 ppb	#	77
93) Hexachlorobutadiene	14.40	223	1714	0.53296 ppb	#	49
94) Naphthalene	14.45	128	8784	0.44710 ppb		99
95) 1,2,3-Trichlorobenzene	14.69	180	5316	0.50116 ppb		90

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

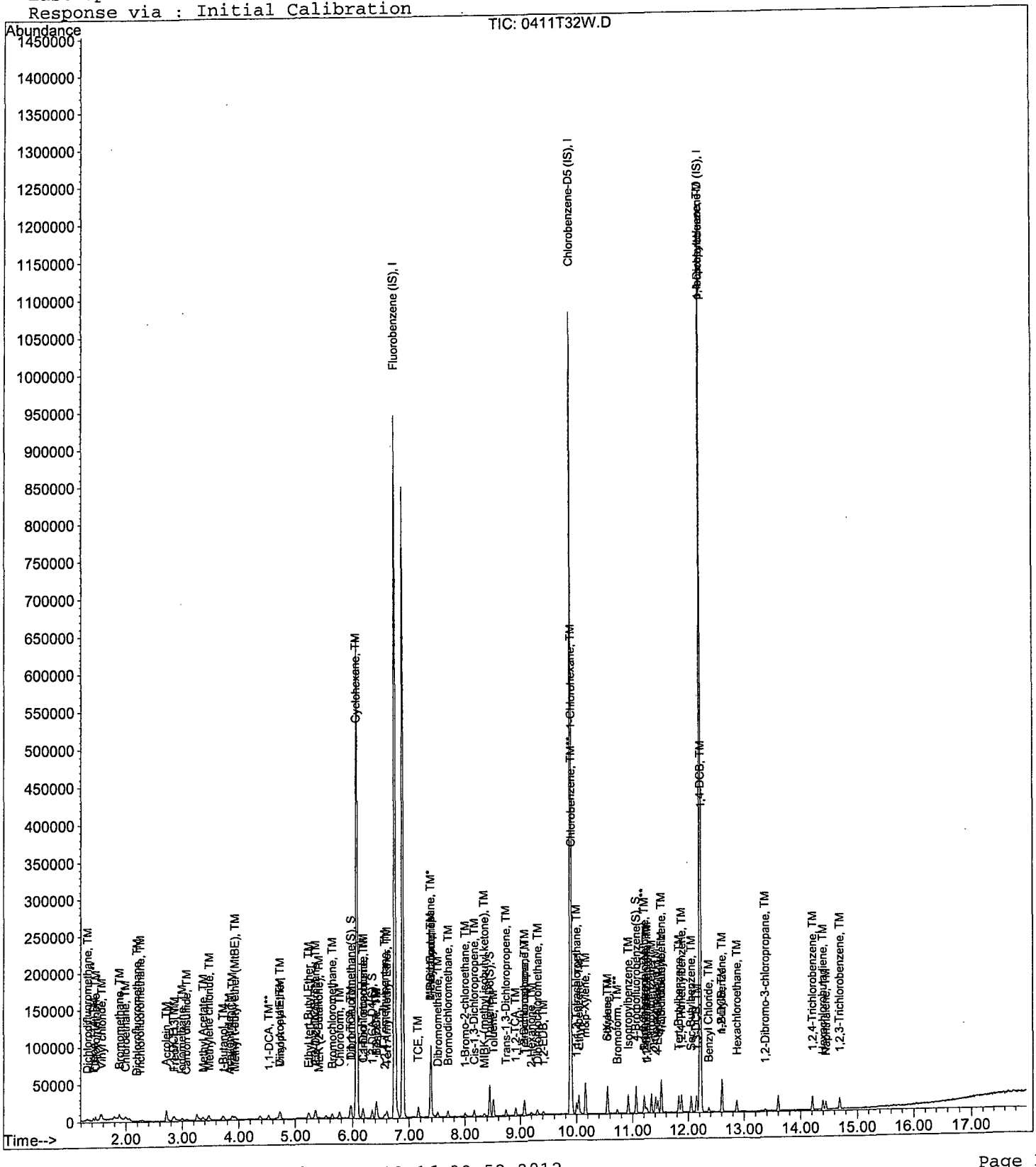
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T32W.D
Acq On : 11 Apr 12 23:07
Sample : 0.5ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 32
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T33W.D Vial: 33
Acq On : 11 Apr 12 23:35 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	444352	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	371264	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	211712	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	15620	2.10807 ppb		0.00
Spiked Amount 29.720			Recovery =	7.093%		
36) 1,2-DCA-D4(S)	6.34	65	13940	2.06261 ppb		0.00
Spiked Amount 29.608			Recovery =	6.968%		
56) Toluene-D8(S)	8.44	98	48633	1.96336 ppb		0.00
Spiked Amount 31.981			Recovery =	6.138%		
64) 4-Bromofluorobenzene(S)	11.06	95	20268	1.97538 ppb		0.00
Spiked Amount 29.353			Recovery =	6.728%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	5171	0.96635 ppb		94
3) Freon 114	1.42	85	3703	0.95894 ppb		96
4) Chloromethane	1.45	50	6343	1.69716 ppb		91
5) Vinyl chloride	1.56	62	8578	1.01095 ppb		96
6) Bromomethane	1.88	94	6677	1.09542 ppb		94
7) Chloroethane	1.98	64	4449	0.94274 ppb		89
8) Dichlorofluoromethane	2.19	67	454	1.51866 ppb	#	83
9) Trichlorofluoromethane	2.25	101	2439	1.14420 ppb		93
10) Acrolein	2.70	55	20453	45.47112 ppb		85
11) Acetone	2.92	43	2731	0.34467 ppb	#	70
12) Freon-113	2.86	101	3989	0.89148 ppb		93
13) 1,1-DCE	2.83	61	7248	0.97300 ppb		93
14) t-Butanol	3.71	59	5339	57.50412 ppb	#	92
15) Methyl Acetate	3.36	43	9170	1.86324 ppb		85
16) Iodomethane	2.99	142	7453	0.94688 ppb	#	95
17) Acrylonitrile	3.83	52	1143	0.93101 ppb		96
18) Methylene chloride	3.47	84	2713	1.12881 ppb		83
19) Carbon disulfide	3.07	76	2642	1.01054 ppb		94
20) Methyl t-butyl ether (MtBE	3.93	73	7925	0.97002 ppb	#	88
21) Trans-1,2-DCE	3.88	96	4632	0.92118 ppb		95
22) Diisopropyl Ether	4.72	59	2121	0.97414 ppb	#	54
23) 1,1-DCA	4.52	63	11550	1.04731 ppb		95
24) Vinyl Acetate	4.73	87	5345	0.98549 ppb		82
25) Ethyl tert Butyl Ether	5.23	59	11885	1.05520 ppb		95
26) MEK (2-Butanone)	5.41	43	2872	1.47108 ppb		84
27) Cis-1,2-DCE	5.34	96	7358	1.00532 ppb		92
28) 2,2-Dichloropropane	5.33	77	4222	1.01117 ppb		96
29) Chloroform	5.77	83	12617	1.03894 ppb		94
30) Bromochloromethane	5.64	128	3677	1.04976 ppb		90
32) 1,1,1-TCA	5.97	97	7923	0.99230 ppb		90
33) Cyclohexane	6.05	41	3102	1.04443 ppb	#	69
34) 1,1-Dichloropropene	6.18	75	7376	1.05005 ppb		97
35) 2,2,4-Trimethylpentane	6.56	57	8676	0.93343 ppb		93
37) Carbon Tetrachloride	6.18	117	7943	1.01719 ppb		92
38) Tert Amyl Methyl Ether	6.60	73	13354	1.07498 ppb		97
39) 1,2-DCA	6.43	62	7647	0.98618 ppb		94
40) Benzene	6.41	78	25620	1.02346 ppb		97
41) TCE	7.16	95	7528	1.06315 ppb		90
42) 2-Pentanone	7.38	43	156962	49.56187 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T33W.D Vial: 33
Acq On : 11 Apr 12 23:35 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) 1,2-Dichloropropane	7.39	63	7179	0.96509 ppb		97
44) Bromodichloromethane	7.69	83	9061	0.98501 ppb		97
45) Methyl Cyclohexane	7.37	83	5915	0.99553 ppb		99
46) Dibromomethane	7.50	93	4080	1.03792 ppb		92
48) MIBK (methyl isobutyl ket	8.35	43	2671	1.10969 ppb		93
49) 1-Bromo-2-chloroethane	8.00	63	5354	1.10241 ppb		97
50) Cis-1,3-Dichloropropene	8.17	75	9612	0.98062 ppb		97
51) Toluene	8.51	91	30324	1.03259 ppb		99
52) Trans-1,3-Dichloropropene	8.74	75	8141	0.99072 ppb	#	82
53) 1,1,2-TCA	8.91	83	5085	0.97084 ppb		88
54) 2-Hexanone	9.19	43	2564	0.95060 ppb	#	90
57) 1,2-EDB	9.41	107	5241	0.94409 ppb		96
58) Tetrachloroethene	9.07	166	8399	1.06401 ppb		94
59) 1-Chlorohexane	9.92	91	8891	1.06362 ppb		93
60) 1,1,1,2-Tetrachloroethane	10.00	131	7130	0.95459 ppb		99
61) m&p-Xylene	10.16	106	24479	1.91379 ppb		99
62) o-Xylene	10.55	106	11626	0.91483 ppb		98
63) Styrene	10.56	104	19781	0.92613 ppb		97
65) 1,3-Dichloropropane	9.08	76	10684	1.07833 ppb		95
66) Dibromochloromethane	9.31	129	7479	1.05420 ppb		86
67) Chlorobenzene	9.92	112	21216	1.00086 ppb		97
68) Ethylbenzene	10.04	91	33344	1.00608 ppb		96
69) Bromoform	10.73	173	4545	0.96093 ppb		100
71) Isopropylbenzene	10.92	105	27793	0.93933 ppb		99
72) 1,1,2,2-Tetrachloroethane	11.20	83	6541	1.01912 ppb		87
73) 1,2,3-Trichloropropane	11.24	110	2216	1.08712 ppb		81
74) t-1,4-Dichloro-2-Butene	11.26	53	1101	0.89251 ppb		98
75) Bromobenzene	11.21	156	10122	1.06317 ppb		98
76) n-Propylbenzene	11.33	91	34494	0.95677 ppb		99
77) 4-Ethyltoluene	11.45	105	19317	0.93792 ppb		93
78) 2-Chlorotoluene	11.40	91	24694	0.98963 ppb		99
79) 1,3,5-Trimethylbenzene	11.51	105	24345	0.92760 ppb		96
80) 4-Chlorotoluene	11.51	91	25703	0.98445 ppb		94
81) Tert-Butylbenzene	11.83	119	21099	0.92683 ppb		97
82) 1,2,4-Trimethylbenzene	11.88	105	24153	0.90977 ppb		100
83) Sec-Butylbenzene	12.05	105	28844	0.92215 ppb		99
84) p-Isopropyltoluene	12.20	119	25341	0.93408 ppb		97
85) Benzyl Chloride	12.37	91	7316	0.92891 ppb		95
86) 1,3-DCB	12.15	146	19286	1.03734 ppb		96
87) 1,4-DCB	12.24	146	19504	1.04836 ppb		95
88) n-Butylbenzene	12.61	91	21287	0.92013 ppb		98
89) 1,2-DCB	12.60	146	17915	1.04271 ppb		98
90) Hexachloroethane	12.87	117	5179	1.07384 ppb		87
91) 1,2-Dibromo-3-chloropropan	13.37	157	1111	0.87904 ppb		80
92) 1,2,4-Trichlorobenzene	14.21	180	7133	0.96774 ppb		97
93) Hexachlorobutadiene	14.40	223	3612	1.14486 ppb	#	74
94) Naphthalene	14.45	128	16942	0.87902 ppb		99
95) 1,2,3-Trichlorobenzene	14.69	180	9948	0.95598 ppb		95

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

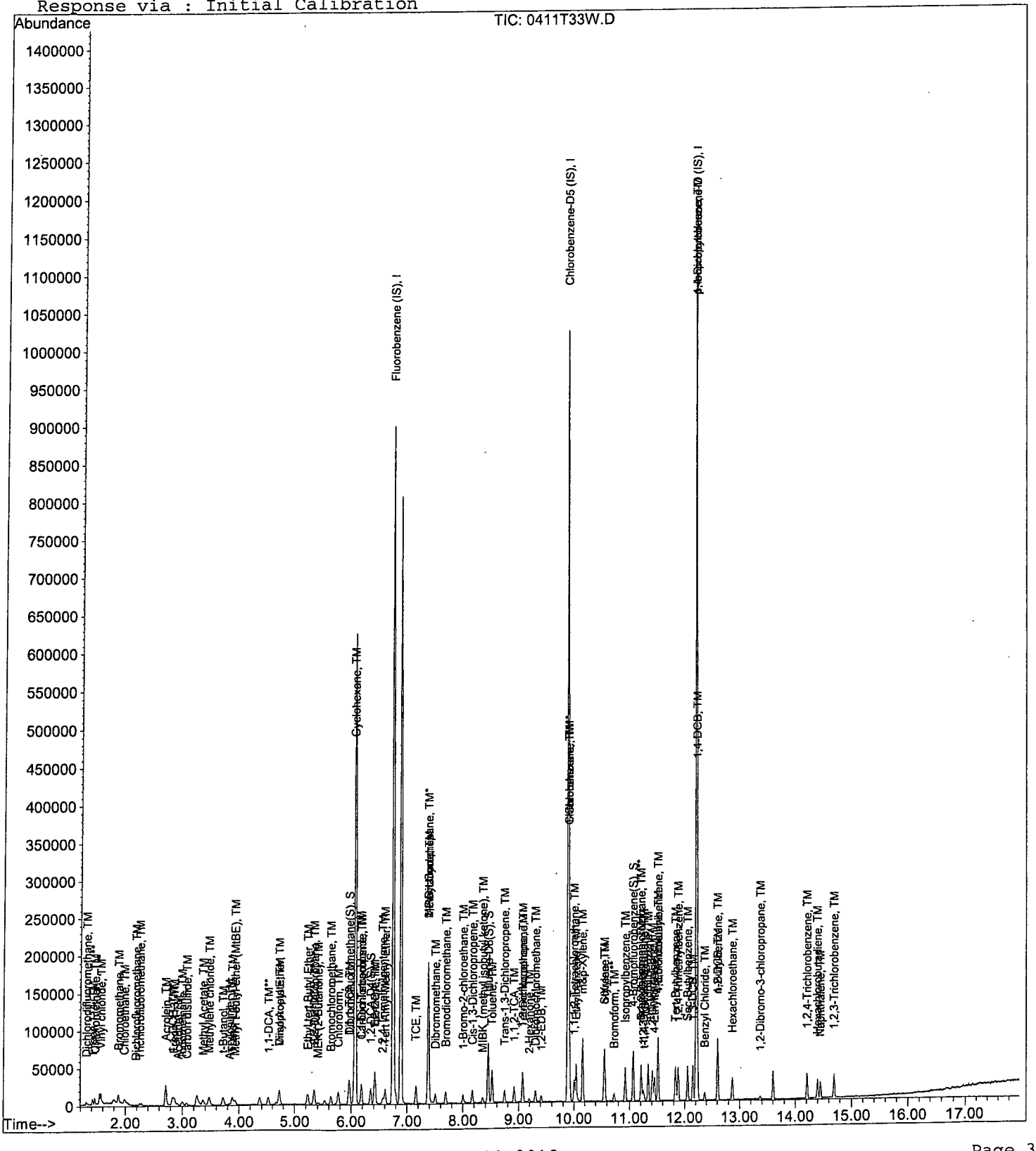
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T33W.D
Acq On : 11 Apr 12 23:35
Sample : 1.0ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 33
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T34W.D Vial: 34
Acq On : 12 Apr 12 00:03 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	474816	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	397952	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	240384	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	77152	9.74436 ppb	0.00
Spiked Amount 29.720			Recovery = 32.786%		
36) 1,2-DCA-D4(S)	6.34	65	73660	10.19972 ppb	0.00
Spiked Amount 29.608			Recovery = 34.450%		
56) Toluene-D8(S)	8.44	98	258761	9.74587 ppb	0.00
Spiked Amount 31.981			Recovery = 30.475%		
64) 4-Bromofluorobenzene(S)	11.06	95	108524	9.86772 ppb	0.00
Spiked Amount 29.353			Recovery = 33.619%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.31	85	26377	4.61302 ppb	96
3) Freon 114	1.42	85	19269	4.66979 ppb	92
4) Chloromethane	1.46	50	25168	4.92766 ppb	94
5) Vinyl chloride	1.57	62	45511	5.01952 ppb	96
6) Bromomethane	1.88	94	31992	4.91183 ppb	97
7) Chloroethane	1.99	64	24436	4.84574 ppb	98
8) Dichlorofluoromethane	2.20	67	3566	4.32273 ppb #	62
9) Trichlorofluoromethane	2.25	101	13640	4.81772 ppb	95
10) Acrolein	2.71	55	47109	98.01314 ppb	98
11) Acetone	2.91	43	8156	4.16796 ppb	97
12) Freon-113	2.87	101	21214	4.43680 ppb	94
13) 1,1-DCE	2.84	61	38418	4.82647 ppb	96
14) t-Butanol	3.72	59	12038	103.95431 ppb	100
15) Methyl Acetate	3.36	43	24143	5.26974 ppb	91
16) Iodomethane	3.00	142	44535	5.29503 ppb	94
17) Acrylonitrile	3.83	52	6860	5.22916 ppb	97
18) Methylene chloride	3.47	84	12432	4.84077 ppb	99
19) Carbon disulfide	3.08	76	13805	4.94152 ppb	99
20) Methyl t-butyl ether (MtBE	3.93	73	45095	5.16548 ppb	97
21) Trans-1,2-DCE	3.88	96	27723	5.15964 ppb	91
22) Diisopropyl Ether	4.73	59	11687	5.02326 ppb	95
23) 1,1-DCA	4.53	63	58843	4.99331 ppb	97
24) Vinyl Acetate	4.73	87	28094	4.84753 ppb	99
25) Ethyl tert Butyl Ether	5.23	59	60705	5.04384 ppb	98
26) MEK (2-Butanone)	5.40	43	10654	5.31834 ppb	100
27) Cis-1,2-DCE	5.34	96	39756	5.08332 ppb	95
28) 2,2-Dichloropropane	5.34	77	22884	5.12909 ppb	95
29) Chloroform	5.77	83	64224	4.94918 ppb	95
30) Bromochloromethane	5.64	128	18460	4.93208 ppb	84
32) 1,1,1-TCA	5.98	97	42207	4.94697 ppb	100
33) Cyclohexane	6.05	41	14421	4.54396 ppb	93
34) 1,1-Dichloropropene	6.18	75	35579	4.74009 ppb	96
35) 2,2,4-Trimethylpentane	6.57	57	43820	4.41200 ppb	98
37) Carbon Tetrachloride	6.18	117	38711	4.63931 ppb	92
38) Tert Amyl Methyl Ether	6.60	73	66882	5.03849 ppb	99
39) 1,2-DCA	6.43	62	42249	5.09900 ppb	99
40) Benzene	6.41	78	132267	4.94477 ppb	99
41) TCE	7.16	95	37497	4.95579 ppb	92
42) 2-Pentanone	7.38	43	333668	98.59832 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T34W.D Vial: 34
Acq On : 12 Apr 12 00:03 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	39801	5.00726 ppb	100
44) Bromodichloromethane	7.69	83	49374	5.02301 ppb	99
45) Methyl Cyclohexane	7.37	83	28359	4.46674 ppb	90
46) Dibromomethane	7.50	93	21416	5.09852 ppb	94
48) MIBK (methyl isobutyl ket	8.34	43	12530	4.87169 ppb	94
49) 1-Bromo-2-chloroethane	8.00	63	26264	5.06091 ppb	94
50) Cis-1,3-Dichloropropene	8.17	75	51792	4.94484 ppb	95
51) Toluene	8.51	91	150763	4.80440 ppb	98
52) Trans-1,3-Dichloropropene	8.74	75	43494	4.95342 ppb	98
53) 1,1,2-TCA	8.92	83	29041	5.18883 ppb	96
54) 2-Hexanone	9.19	43	14384	4.99072 ppb	98
57) 1,2-EDB	9.41	107	30948	5.20099 ppb	98
58) Tetrachloroethene	9.07	166	40654	4.80479 ppb	98
59) 1-Chlorohexane	9.92	91	39239	4.37933 ppb	97
60) 1,1,1,2-Tetrachloroethane	10.00	131	39499	4.93364 ppb	98
61) m&p-Xylene	10.16	106	131250	9.57308 ppb	99
62) o-Xylene	10.55	106	66462	4.87903 ppb	99
63) Styrene	10.56	104	108840	4.75407 ppb	98
65) 1,3-Dichloropropane	9.08	76	53616	5.04854 ppb	94
66) Dibromochloromethane	9.31	129	37561	4.93936 ppb	100
67) Chlorobenzene	9.92	112	112571	4.95436 ppb	98
68) Ethylbenzene	10.04	91	170399	4.79663 ppb	98
69) Bromoform	10.72	173	25618	5.05308 ppb	98
71) Isopropylbenzene	10.92	105	160644	4.78176 ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	36865	5.05867 ppb	97
73) 1,2,3-Trichloropropane	11.24	110	11513	4.97434 ppb	84
74) t-1,4-Dichloro-2-Butene	11.26	53	6933	4.94977 ppb	92
75) Bromobenzene	11.21	156	54102	5.00485 ppb	95
76) n-Propylbenzene	11.33	91	192715	4.70780 ppb	97
77) 4-Ethyltoluene	11.45	105	110728	4.73502 ppb	99
78) 2-Chlorotoluene	11.41	91	138074	4.87339 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	142270	4.77421 ppb	100
80) 4-Chlorotoluene	11.51	91	143418	4.83785 ppb	98
81) Tert-Butylbenzene	11.83	119	123163	4.76496 ppb	100
82) 1,2,4-Trimethylbenzene	11.88	105	142601	4.73066 ppb	99
83) Sec-Butylbenzene	12.05	105	167967	4.72944 ppb	98
84) p-Isopropyltoluene	12.20	119	144081	4.67742 ppb	97
85) Benzyl Chloride	12.37	91	44888	5.01960 ppb	99
86) 1,3-DCB	12.15	146	103781	4.91627 ppb	98
87) 1,4-DCB	12.23	146	102838	4.86835 ppb	98
88) n-Butylbenzene	12.61	91	124107	4.72466 ppb	99
89) 1,2-DCB	12.60	146	96227	4.93269 ppb	97
90) Hexachloroethane	12.87	117	26311	4.80475 ppb	95
91) 1,2-Dibromo-3-chloropropan	13.37	157	7417	5.16845 ppb	95
92) 1,2,4-Trichlorobenzene	14.21	180	40448	4.83307 ppb	98
93) Hexachlorobutadiene	14.40	223	16885	4.71350 ppb	88
94) Naphthalene	14.45	128	103949	4.75001 ppb	98
95) 1,2,3-Trichlorobenzene	14.69	180	57419	4.85970 ppb	95

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

Quantitation Report

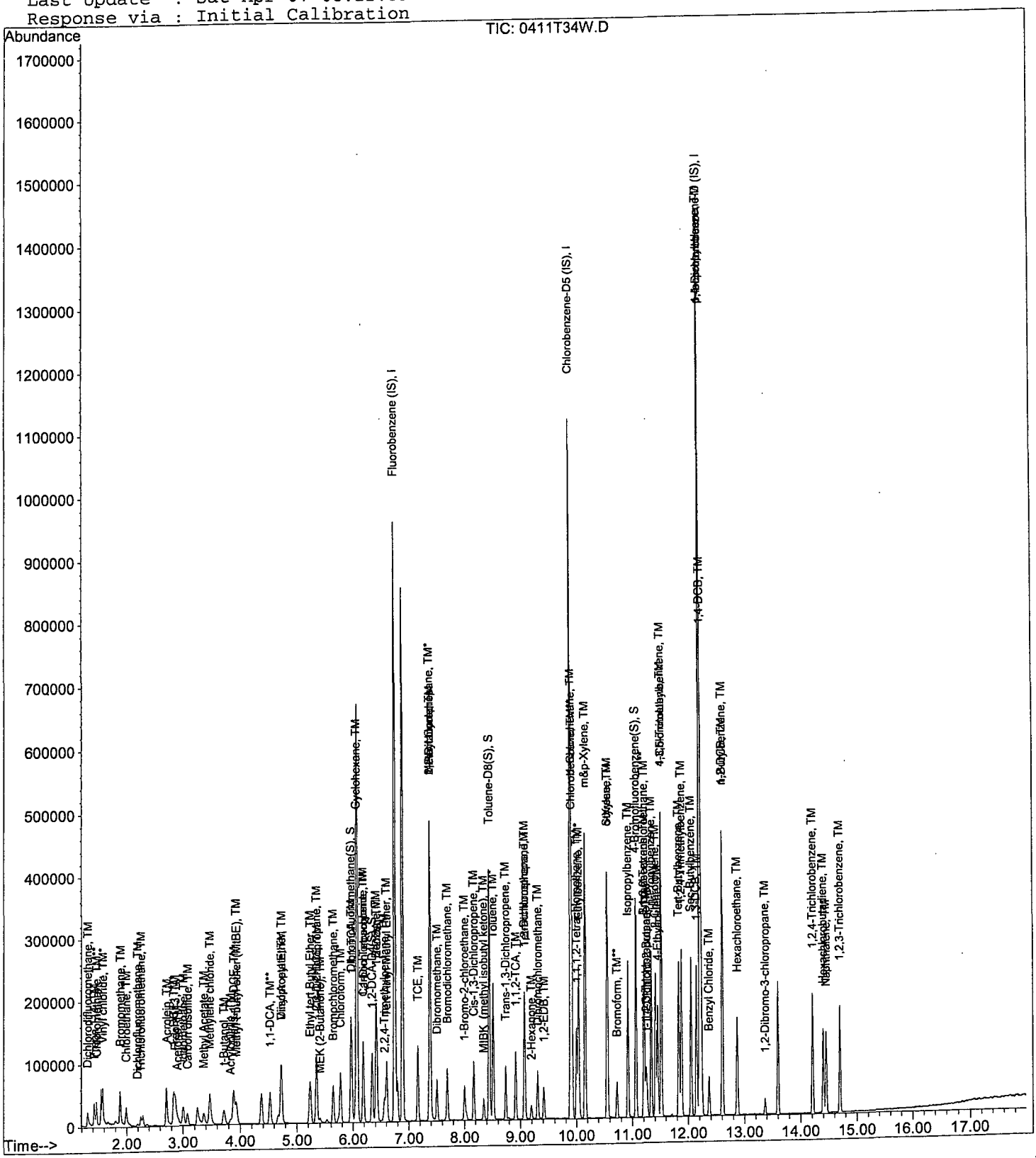
Data File : M:\THOR\DATA\T120411\0411T34W.D
Acq On : 12 Apr 12 00:03
Sample : 5.0ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 34
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012

Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T35W.D Vial: 35
Acq On : 12 Apr 12 00:31 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	482688	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	391232	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	241024	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	190685	23.69089 ppb	0.00
Spiked Amount 29.720			Recovery =	79.713%	
36) 1,2-DCA-D4(S)	6.34	65	176098	23.98666 ppb	0.00
Spiked Amount 29.608			Recovery =	81.015%	
56) Toluene-D8(S)	8.44	98	642685	24.62159 ppb	0.00
Spiked Amount 31.981			Recovery =	76.990%	
64) 4-Bromofluorobenzene(S)	11.06	95	267387	24.73020 ppb	0.00
Spiked Amount 29.353			Recovery =	84.251%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	54584	9.39041 ppb	100
3) Freon 114	1.42	85	42783	10.19924 ppb	100
4) Chloromethane	1.46	50	48904	8.95713 ppb	100
5) Vinyl chloride	1.56	62	93740	10.17020 ppb	100
6) Bromomethane	1.87	94	60845	9.18938 ppb	100
7) Chloroethane	1.98	64	50259	9.80398 ppb	100
8) Dichlorofluoromethane	2.19	67	11231	9.83687 ppb	100
9) Trichlorofluoromethane	2.24	101	29589	9.68132 ppb	100
10) Acrolein	2.70	55	61589	126.04987 ppb	100
11) Acetone	2.90	43	15627	9.43536 ppb	100
12) Freon-113	2.86	101	49848	10.25543 ppb	100
13) 1,1-DCE	2.83	61	78209	9.66518 ppb	100
14) t-Butanol	3.71	59	15182	119.58008 ppb	100
15) Methyl Acetate	3.35	43	45130	10.07895 ppb	100
16) Iodomethane	2.99	142	86451	10.11104 ppb	100
17) Acrylonitrile	3.82	52	13660	10.24277 ppb	100
18) Methylene chloride	3.46	84	23864	9.14062 ppb	100
19) Carbon disulfide	3.07	76	29264	10.30425 ppb	100
20) Methyl t-butyl ether (MtBE	3.92	73	89610	10.09712 ppb	100
21) Trans-1,2-DCE	3.88	96	55501	10.16106 ppb	100
22) Diisopropyl Ether	4.72	59	23298	9.85054 ppb	100
23) 1,1-DCA	4.52	63	118223	9.86857 ppb	100
24) Vinyl Acetate	4.72	87	57618	9.77966 ppb	100
25) Ethyl tert Butyl Ether	5.23	59	122506	10.01275 ppb	100
26) MEK (2-Butanone)	5.40	43	20245	10.01556 ppb	100
27) Cis-1,2-DCE	5.34	96	77725	9.77608 ppb	100
28) 2,2-Dichloropropane	5.33	77	45757	10.08845 ppb	100
29) Chloroform	5.77	83	129058	9.78318 ppb	100
30) Bromochloromethane	5.64	128	37412	9.83260 ppb	100
32) 1,1,1-TCA	5.97	97	84135	9.70041 ppb	100
33) Cyclohexane	6.05	41	30983	9.60332 ppb	100
34) 1,1-Dichloropropene	6.18	75	73787	9.67010 ppb	100
35) 2,2,4-Trimethylpentane	6.56	57	103183	10.21950 ppb	100
37) Carbon Tetrachloride	6.18	117	81968	9.66322 ppb	100
38) Tert Amyl Methyl Ether	6.60	73	132942	9.85171 ppb	100
39) 1,2-DCA	6.43	62	84526	10.03500 ppb	100
40) Benzene	6.42	78	268385	9.86987 ppb	100
41) TCE	7.16	95	74689	9.71029 ppb	100
42) 2-Pentanone	7.38	43	419063	121.81285 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T35W.D Vial: 35
Acq On : 12 Apr 12 00:31 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.38	63	81094	10.03583 ppb	100
44) Bromodichloromethane	7.69	83	97202	9.72746 ppb	100
45) Methyl Cyclohexane	7.37	83	64129	9.93603 ppb	100
46) Dibromomethane	7.51	93	41959	9.82630 ppb	100
48) MIBK (methyl isobutyl ket	8.34	43	25184	9.63191 ppb	100
49) 1-Bromo-2-chloroethane	8.00	63	50840	9.63678 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	103394	9.71055 ppb	100
51) Toluene	8.51	91	312713	9.80278 ppb	100
52) Trans-1,3-Dichloropropene	8.74	75	88272	9.88912 ppb	100
53) 1,1,2-TCA	8.92	83	55611	9.77412 ppb	100
54) 2-Hexanone	9.19	43	28438	9.70603 ppb	100
57) 1,2-EDB	9.41	107	60737	10.38252 ppb	100
58) Tetrachloroethene	9.07	166	85123	10.23327 ppb	100
59) 1-Chlorohexane	9.92	91	84646	9.60931 ppb	100
60) 1,1,1,2-Tetrachloroethane	10.00	131	79591	10.11211 ppb	100
61) m&p-Xylene	10.16	106	277258	20.56992 ppb	100
62) o-Xylene	10.55	106	137083	10.23623 ppb	100
63) Styrene	10.56	104	228759	10.16369 ppb	100
65) 1,3-Dichloropropane	9.08	76	108048	10.34867 ppb	100
66) Dibromochloromethane	9.31	129	76871	10.28234 ppb	100
67) Chlorobenzene	9.92	112	222718	9.97041 ppb	100
68) Ethylbenzene	10.04	91	354333	10.14558 ppb	100
69) Bromoform	10.73	173	50876	10.20753 ppb	100
71) Isopropylbenzene	10.92	105	335255	9.95277 ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	73856	10.10773 ppb	100
73) 1,2,3-Trichloropropane	11.24	110	21890	9.43274 ppb	100
74) t-1,4-Dichloro-2-Butene	11.26	53	13448	9.57562 ppb	100
75) Bromobenzene	11.21	156	106439	9.82027 ppb	100
76) n-Propylbenzene	11.33	91	416103	10.13792 ppb	100
77) 4-Ethyltoluene	11.45	105	239555	10.21679 ppb	100
78) 2-Chlorotoluene	11.41	91	287968	10.13699 ppb	100
79) 1,3,5-Trimethylbenzene	11.51	105	306748	10.26634 ppb	100
80) 4-Chlorotoluene	11.51	91	304243	10.23562 ppb	100
81) Tert-Butylbenzene	11.83	119	263113	10.15234 ppb	100
82) 1,2,4-Trimethylbenzene	11.88	105	306569	10.14315 ppb	100
83) Sec-Butylbenzene	12.05	105	366323	10.28715 ppb	100
84) p-Isopropyltoluene	12.20	119	312314	10.11199 ppb	100
85) Benzyl Chloride	12.37	91	88937	9.91896 ppb	100
86) 1,3-DCB	12.15	146	206401	9.75159 ppb	100
87) 1,4-DCB	12.23	146	209337	9.88371 ppb	100
88) n-Butylbenzene	12.61	91	267339	10.15037 ppb	100
89) 1,2-DCB	12.60	146	193575	9.89650 ppb	100
90) Hexachloroethane	12.87	117	53904	9.81748 ppb	100
91) 1,2-Dibromo-3-chloropropan	13.37	157	14907	10.36019 ppb	100
92) 1,2,4-Trichlorobenzene	14.21	180	83736	9.97893 ppb	100
93) Hexachlorobutadiene	14.40	223	34426	9.58461 ppb	100
94) Naphthalene	14.45	128	217652	9.91932 ppb	100
95) 1,2,3-Trichlorobenzene	14.69	180	118921	10.03824 ppb	100

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

Quantitation Report

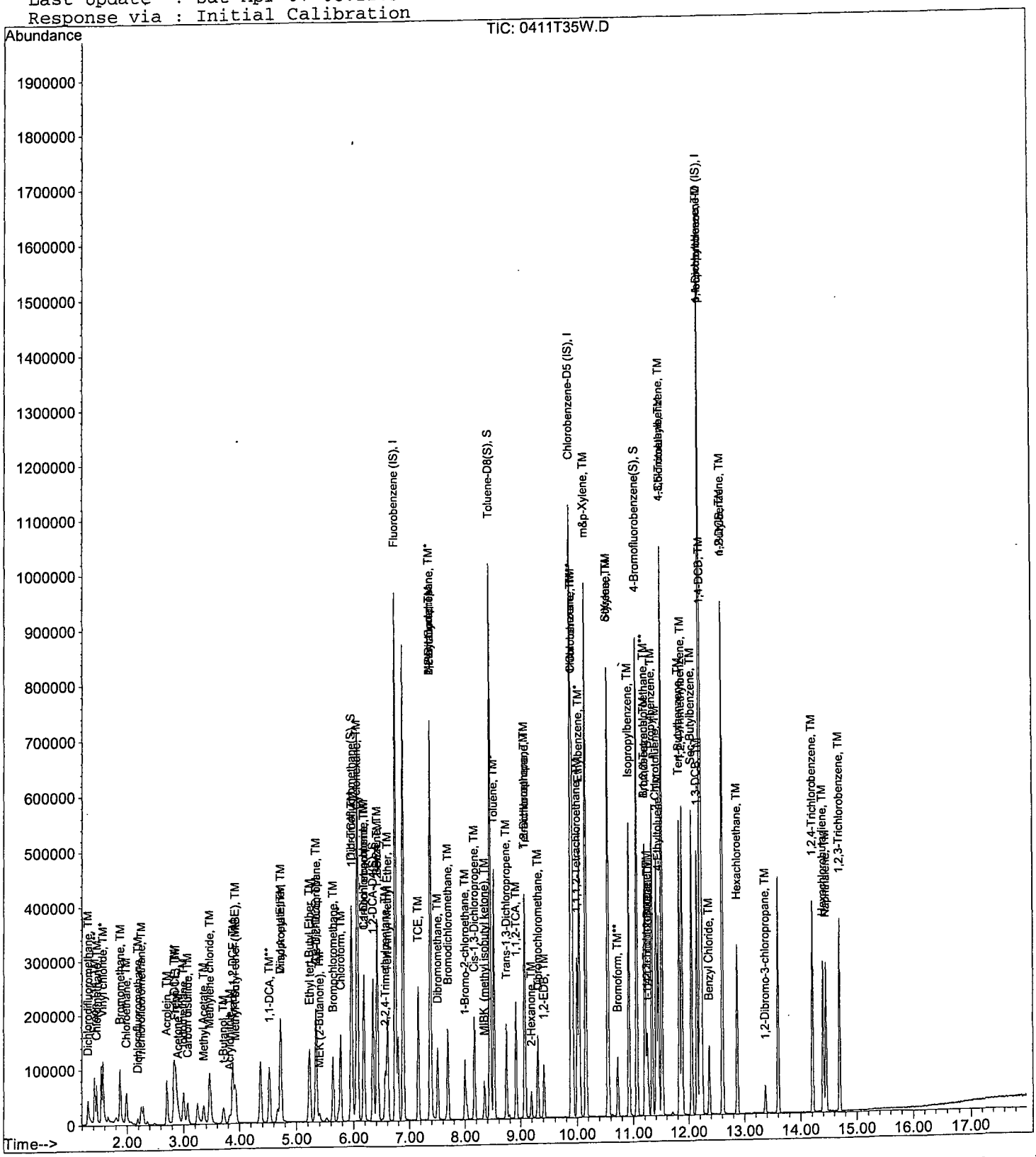
Data File : M:\THOR\DATA\T120411\0411T35W.D
Acq On : 12 Apr 12 00:31
Sample : 10ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 35
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012

Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T36W.D Vial: 36
Acq On : 12 Apr 12 00:58 Operator: DG,RS,HW,ARS,SV
Sample : 20ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	476800	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	398720	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	243648	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	316087	39.75591 ppb	0.00
Spiked Amount 29.720			Recovery = 133.767%		
36) 1,2-DCA-D4(S)	6.34	65	281400	38.80340 ppb	0.00
Spiked Amount 29.608			Recovery = 131.056%		
56) Toluene-D8(S)	8.44	98	1078758	40.55163 ppb	0.00
Spiked Amount 31.981			Recovery = 126.802%		
64) 4-Bromofluorobenzene(S)	11.06	95	433924	39.37924 ppb	0.00
Spiked Amount 29.353			Recovery = 134.158%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	124716	21.72058 ppb	98
3) Freon 114	1.42	85	84752	20.45394 ppb	99
4) Chloromethane	1.46	50	106251	19.09341 ppb	96
5) Vinyl chloride	1.57	62	184111	20.22155 ppb	99
6) Bromomethane	1.87	94	119106	18.21064 ppb	97
7) Chloroethane	1.98	64	102981	20.33648 ppb	98
8) Dichlorofluoromethane	2.19	67	28980	19.56996 ppb	91
9) Trichlorofluoromethane	2.25	101	66767	20.35841 ppb	94
10) Acrolein	2.70	55	87460	181.20868 ppb	90
11) Acetone	2.90	43	32413	21.77581 ppb	100
12) Freon-113	2.87	101	100123	20.85308 ppb	93
13) 1,1-DCE	2.83	61	155387	19.44009 ppb	95
14) t-Butanol	3.71	59	21608	149.34300 ppb	97
15) Methyl Acetate	3.35	43	85331	19.71637 ppb	95
16) Iodomethane	2.99	142	166183	19.67626 ppb	98
17) Acrylonitrile	3.82	52	26602	20.19349 ppb	96
18) Methylene chloride	3.46	84	46744	18.12543 ppb	97
19) Carbon disulfide	3.07	76	56648	20.19285 ppb	99
20) Methyl t-butyl ether (MtBE	3.92	73	171335	19.54417 ppb	97
21) Trans-1,2-DCE	3.88	96	106554	19.74868 ppb	96
22) Diisopropyl Ether	4.72	59	46321	19.82666 ppb	100
23) 1,1-DCA	4.52	63	228167	19.28125 ppb	96
24) Vinyl Acetate	4.72	87	113251	19.45977 ppb	97
25) Ethyl tert Butyl Ether	5.23	59	236729	19.58744 ppb	100
26) MEK (2-Butanone)	5.40	43	39715	19.97464 ppb	95
27) Cis-1,2-DCE	5.34	96	153403	19.53296 ppb	99
28) 2,2-Dichloropropane	5.33	77	87964	19.63370 ppb	98
29) Chloroform	5.77	83	250217	19.20181 ppb	96
30) Bromochloromethane	5.64	128	73899	19.66193 ppb	93
32) 1,1,1-TCA	5.97	97	169304	19.76110 ppb	100
33) Cyclohexane	6.05	41	60559	19.00234 ppb	93
34) 1,1-Dichloropropene	6.18	75	144842	19.21658 ppb	93
35) 2,2,4-Trimethylpentane	6.56	57	195355	19.58738 ppb	99
37) Carbon Tetrachloride	6.18	117	164092	19.58372 ppb	97
38) Tert Amyl Methyl Ether	6.60	73	261079	19.58627 ppb	98
39) 1,2-DCA	6.43	62	163881	19.69636 ppb	99
40) Benzene	6.41	78	518042	19.28628 ppb	99
41) TCE	7.16	95	143630	18.90388 ppb	97
42) 2-Pentanone	7.38	43	508657	149.68182 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T36W.D Vial: 36
Acq On : 12 Apr 12 00:58 Operator: DG,RS,HW,ARS,SV
Sample : 20ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	154042	19.29897 ppb	99
44) Bromodichloromethane	7.69	83	193222	19.57542 ppb	99
45) Methyl Cyclohexane	7.37	83	125701	19.71639 ppb	95
46) Dibromomethane	7.50	93	84204	19.96310 ppb	98
48) MIBK (methyl isobutyl ket	8.34	43	48757	18.87795 ppb	97
49) 1-Bromo-2-chloroethane	8.00	63	97528	18.71484 ppb	99
50) Cis-1,3-Dichloropropene	8.17	75	209935	19.96014 ppb	98
51) Toluene	8.51	91	603953	19.16623 ppb	99
52) Trans-1,3-Dichloropropene	8.74	75	174409	19.78034 ppb	99
53) 1,1,2-TCA	8.92	83	105155	18.71014 ppb	96
54) 2-Hexanone	9.19	43	56991	19.69152 ppb	96
57) 1,2-EDB	9.41	107	121352	20.35462 ppb	97
58) Tetrachloroethene	9.07	166	161888	19.09628 ppb	96
59) 1-Chlorohexane	9.92	91	168377	18.75576 ppb	96
60) 1,1,1,2-Tetrachloroethane	10.00	131	157707	19.66053 ppb	100
61) m&p-Xylene	10.16	106	550133	40.04816 ppb	100
62) o-Xylene	10.55	106	273312	20.02541 ppb	98
63) Styrene	10.56	104	470603	20.51607 ppb	98
65) 1,3-Dichloropropane	9.08	76	205264	19.29065 ppb	94
66) Dibromochloromethane	9.31	129	150481	19.75048 ppb	98
67) Chlorobenzene	9.92	112	441605	19.39805 ppb	99
68) Ethylbenzene	10.04	91	709179	19.92451 ppb	99
69) Bromoform	10.73	173	99479	19.58418 ppb	95
71) Isopropylbenzene	10.92	105	672269	19.74282 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	144180	19.51957 ppb	99
73) 1,2,3-Trichloropropane	11.24	110	43290	18.45343 ppb	99
74) t-1,4-Dichloro-2-Butene	11.26	53	29050	20.46222 ppb	87
75) Bromobenzene	11.21	156	209850	19.15266 ppb	97
76) n-Propylbenzene	11.33	91	836195	20.15361 ppb	99
77) 4-Ethyltoluene	11.45	105	485323	20.47564 ppb	100
78) 2-Chlorotoluene	11.41	91	568717	19.80425 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	614496	20.34466 ppb	99
80) 4-Chlorotoluene	11.51	91	598258	19.91038 ppb	98
81) Tert-Butylbenzene	11.83	119	529315	20.20392 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	631718	20.67595 ppb	100
83) Sec-Butylbenzene	12.05	105	730752	20.30011 ppb	98
84) p-Isopropyltoluene	12.20	119	628711	20.13696 ppb	99
85) Benzyl Chloride	12.37	91	174911	19.29738 ppb	99
86) 1,3-DCB	12.15	146	403216	18.84511 ppb	99
87) 1,4-DCB	12.24	146	409857	19.14272 ppb	99
88) n-Butylbenzene	12.61	91	531750	19.97213 ppb	99
89) 1,2-DCB	12.60	146	380068	19.22167 ppb	97
90) Hexachloroethane	12.87	117	105786	19.05920 ppb	98
91) 1,2-Dibromo-3-chloropropan	13.37	157	30093	20.68904 ppb	90
92) 1,2,4-Trichlorobenzene	14.21	180	162624	19.17140 ppb	98
93) Hexachlorobutadiene	14.40	223	67094	18.47860 ppb	87
94) Naphthalene	14.45	128	447769	20.18694 ppb	97
95) 1,2,3-Trichlorobenzene	14.69	180	232648	19.42656 ppb	96

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

Quantitation Report

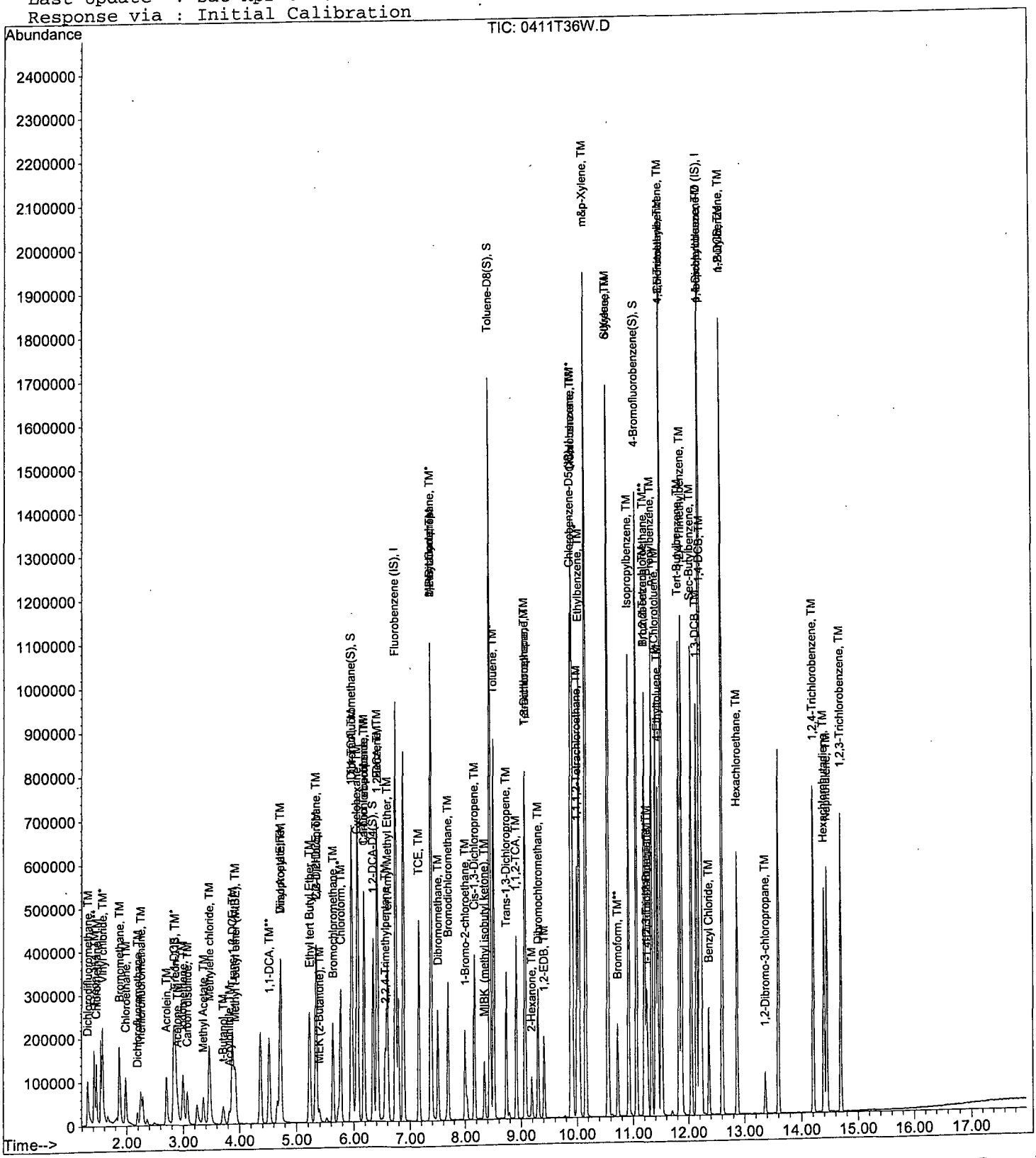
Data File : M:\THOR\DATA\T120411\0411T36W.D
Acq On : 12 Apr 12 00:58
Sample : 20ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 36
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012

Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



333

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T37W.D Vial: 37
Acq On : 12 Apr 12 1:26 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	482496	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	411136	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	246912	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	628249	78.08533 ppb		0.00
Spiked Amount 29.720			Recovery = 262.732%			
36) 1,2-DCA-D4(S)	6.34	65	561508	76.51457 ppb		0.00
Spiked Amount 29.608			Recovery = 258.427%			
56) Toluene-D8(S)	8.44	98	2164701	78.91593 ppb		0.00
Spiked Amount 31.981			Recovery = 246.762%			
64) 4-Bromofluorobenzene(S)	11.06	95	890289	78.35508 ppb		0.00
Spiked Amount 29.353			Recovery = 266.942%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	250781	43.16049 ppb		96
3) Freon 114	1.42	85	172914	41.23819 ppb		98
4) Chloromethane	1.46	50	232496	40.69779 ppb		96
5) Vinyl chloride	1.56	62	364412	39.55213 ppb		99
6) Bromomethane	1.86	94	248056	37.47863 ppb		99
7) Chloroethane	1.97	64	200335	39.09472 ppb		98
8) Dichlorofluoromethane	2.19	67	87598	40.24479 ppb		93
9) Trichlorofluoromethane	2.24	101	149540	39.91045 ppb		95
10) Acrolein	2.70	55	131731	269.71186 ppb	#	58
11) Acetone	2.90	43	61312	42.25660 ppb		91
12) Freon-113	2.86	101	197286	40.60459 ppb		97
13) 1,1-DCE	2.83	61	316140	39.08459 ppb		96
14) t-Butanol	3.71	59	29192	176.43499 ppb		96
15) Methyl Acetate	3.35	43	163727	37.79931 ppb		98
16) Iodomethane	2.99	142	333439	39.01350 ppb		98
17) Acrylonitrile	3.82	52	55143	41.36471 ppb		96
18) Methylene chloride	3.46	84	91208	34.94926 ppb		98
19) Carbon disulfide	3.07	76	109360	38.52247 ppb		100
20) Methyl t-butyl ether (MtBE	3.92	73	337480	38.04186 ppb		98
21) Trans-1,2-DCE	3.88	96	212470	38.91423 ppb		97
22) Diisopropyl Ether	4.72	59	92744	39.22835 ppb		98
23) 1,1-DCA	4.52	63	457255	38.18418 ppb		98
24) Vinyl Acetate	4.72	87	233754	39.69148 ppb		100
25) Ethyl tert Butyl Ether	5.23	59	468949	38.34372 ppb		99
26) MEK (2-Butanone)	5.39	43	77041	38.36872 ppb		99
27) Cis-1,2-DCE	5.34	96	302312	38.03926 ppb		97
28) 2,2-Dichloropropane	5.33	77	175332	38.67239 ppb		99
29) Chloroform	5.77	83	507633	38.49619 ppb		96
30) Bromochloromethane	5.64	128	149643	39.34472 ppb		89
32) 1,1,1-TCA	5.97	97	340792	39.30753 ppb		99
33) Cyclohexane	6.05	41	130599	40.49587 ppb		93
34) 1,1-Dichloropropene	6.18	75	295434	38.73331 ppb		95
35) 2,2,4-Trimethylpentane	6.56	57	421521	41.76511 ppb		97
37) Carbon Tetrachloride	6.18	117	341285	40.25016 ppb		96
38) Tert Amyl Methyl Ether	6.60	73	517917	38.39570 ppb		97
39) 1,2-DCA	6.43	62	320306	38.04215 ppb		98
40) Benzene	6.41	78	1037914	38.18453 ppb		99
41) TCE	7.16	95	286701	37.28873 ppb		98
42) 2-Pentanone	7.38	43	603024	175.35621 ppb		100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T37W.D Vial: 37
Acq On : 12 Apr 12 1:26 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	308167	38.15255 ppb	99
44) Bromodichloromethane	7.69	83	388137	38.85815 ppb	98
45) Methyl Cyclohexane	7.37	83	266352	41.28451 ppb	95
46) Dibromomethane	7.50	93	162915	38.16795 ppb	97
48) MIBK (methyl isobutyl ket	8.34	43	97600	37.34308 ppb	98
49) 1-Bromo-2-chloroethane	8.00	63	199552	37.84036 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	429208	40.32636 ppb	96
51) Toluene	8.51	91	1230132	38.57693 ppb	98
52) Trans-1,3-Dichloropropene	8.74	75	365532	40.96686 ppb	99
53) 1,1,2-TCA	8.91	83	212622	37.38504 ppb	99
54) 2-Hexanone	9.19	43	111853	38.19118 ppb	96
57) 1,2-EDB	9.41	107	242130	39.38647 ppb	99
58) Tetrachloroethene	9.07	166	327777	37.49687 ppb	98
59) 1-Chlorohexane	9.92	91	347983	37.59174 ppb	99
60) 1,1,1,2-Tetrachloroethane	10.00	131	322428	38.98158 ppb	99
61) m&p-Xylene	10.16	106	1133680	80.03645 ppb	100
62) o-Xylene	10.55	106	561119	39.87128 ppb	98
63) Styrene	10.56	104	979430	41.40906 ppb	98
65) 1,3-Dichloropropane	9.08	76	410625	37.42501 ppb	97
66) Dibromochloromethane	9.31	129	306876	39.06083 ppb	97
67) Chlorobenzene	9.92	112	893888	38.07936 ppb	99
68) Ethylbenzene	10.04	91	1441837	39.28533 ppb	100
69) Bromoform	10.73	173	203730	38.89658 ppb	96
71) Isopropylbenzene	10.92	105	1398944	40.54031 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	285659	38.16223 ppb	99
73) 1,2,3-Trichloropropane	11.24	110	84625	35.59663 ppb	97
74) t-1,4-Dichloro-2-Butene	11.26	53	57317	39.83922 ppb	90
75) Bromobenzene	11.21	156	421877	37.99502 ppb	98
76) n-Propylbenzene	11.33	91	1717520	40.84771 ppb	99
77) 4-Ethyltoluene	11.45	105	995916	41.46198 ppb	99
78) 2-Chlorotoluene	11.41	91	1156097	39.72620 ppb	100
79) 1,3,5-Trimethylbenzene	11.51	105	1271860	41.55194 ppb	100
80) 4-Chlorotoluene	11.51	91	1205584	39.59216 ppb	98
81) Tert-Butylbenzene	11.83	119	1084027	40.83027 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	1285665	41.52319 ppb	100
83) Sec-Butylbenzene	12.05	105	1503607	41.21766 ppb	98
84) p-Isopropyltoluene	12.20	119	1308500	41.35587 ppb	99
85) Benzyl Chloride	12.37	91	361316	39.33590 ppb	98
86) 1,3-DCB	12.15	146	810718	37.38965 ppb	98
87) 1,4-DCB	12.24	146	824255	37.98862 ppb	99
88) n-Butylbenzene	12.61	91	1104682	40.94255 ppb	99
89) 1,2-DCB	12.60	146	760757	37.96614 ppb	96
90) Hexachloroethane	12.87	117	216790	38.54219 ppb	99
91) 1,2-Dibromo-3-chloropropan	13.37	157	61007	41.38807 ppb	90
92) 1,2,4-Trichlorobenzene	14.21	180	345088	40.14390 ppb	98
93) Hexachlorobutadiene	14.40	223	136894	37.20407 ppb	88
94) Naphthalene	14.45	128	957617	42.60191 ppb	99
95) 1,2,3-Trichlorobenzene	14.69	180	482671	39.77118 ppb	96

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

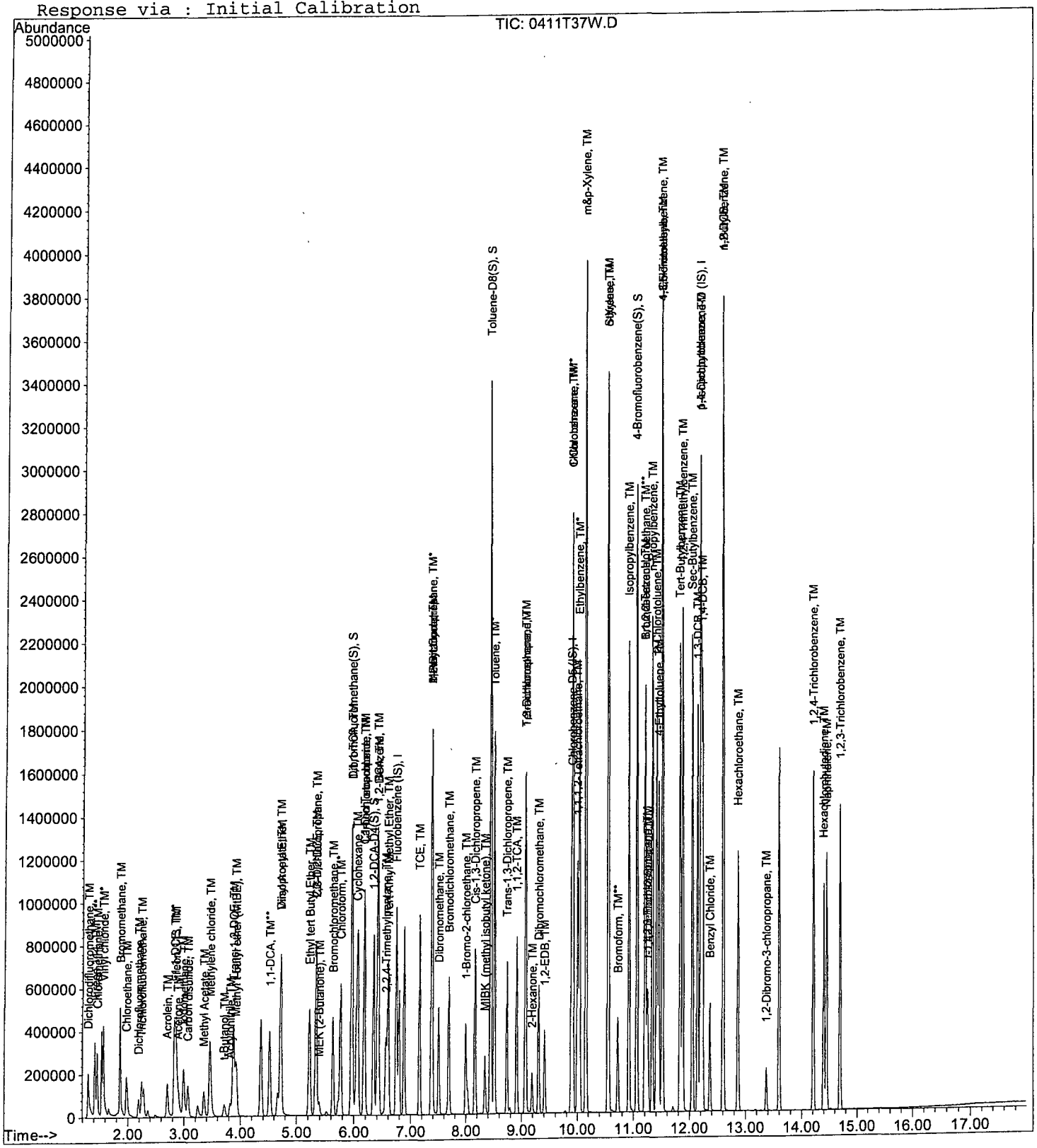
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T37W.D
Acq On : 12 Apr 12 1:26
Sample : 40ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 37
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T38W.D Vial: 38
Acq On : 12 Apr 12 1:53 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	479168	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	413824	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	254336	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	832997	104.25262 ppb		0.00
Spiked Amount 29.720			Recovery = 350.779%			
36) 1,2-DCA-D4(S)	6.34	65	732688	100.53405 ppb		0.00
Spiked Amount 29.608			Recovery = 339.550%			
56) Toluene-D8(S)	8.44	98	2870588	103.96986 ppb		0.00
Spiked Amount 31.981			Recovery = 325.103%			
64) 4-Bromofluorobenzene(S)	11.06	95	1202580	105.15258 ppb		0.00
Spiked Amount 29.353			Recovery = 358.238%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	715449	123.98706 ppb		99
3) Freon 114	1.42	85	480585	115.41057 ppb		99
4) Chloromethane	1.46	50	758768	132.58471 ppb		96
5) Vinyl chloride	1.57	62	994130	108.64915 ppb		98
6) Bromomethane	1.86	94	703424	107.01806 ppb		98
7) Chloroethane	1.97	64	547273	107.54030 ppb		97
8) Dichlorofluoromethane	2.19	67	404670	99.98707 ppb		90
9) Trichlorofluoromethane	2.24	101	498539	100.00335 ppb		95
10) Acrolein	2.70	55	283768	585.03437 ppb	#	21
11) Acetone	2.91	43	139132	98.85097 ppb		97
12) Freon-113	2.86	101	553462	114.70243 ppb		96
13) 1,1-DCE	2.83	61	883088	109.93500 ppb		97
14) t-Butanol	3.74	59	49256	236.40490 ppb		96
15) Methyl Acetate	3.36	43	430764	100.90515 ppb		95
16) Iodomethane	2.99	142	916547	107.98395 ppb		96
17) Acrylonitrile	3.83	52	144895	109.44575 ppb		99
18) Methylene chloride	3.47	84	243392	93.91117 ppb		97
19) Carbon disulfide	3.07	76	299968	106.39874 ppb		99
20) Methyl t-butyl ether (MtBE	3.93	73	855894	97.14929 ppb		98
21) Trans-1,2-DCE	3.88	96	576758	106.36785 ppb		98
22) Diisopropyl Ether	4.72	59	252861	107.69659 ppb		94
23) 1,1-DCA	4.52	63	1235296	103.87282 ppb		98
24) Vinyl Acetate	4.72	87	619796	105.97243 ppb		97
25) Ethyl tert Butyl Ether	5.23	59	1154510	95.05441 ppb		99
26) MEK (2-Butanone)	5.39	43	200395	100.63431 ppb		96
27) Cis-1,2-DCE	5.34	96	822804	104.25070 ppb		99
28) 2,2-Dichloropropane	5.33	77	448937	99.70825 ppb		100
29) Chloroform	5.77	83	1352872	103.30717 ppb		97
30) Bromochloromethane	5.64	128	392612	103.94404 ppb		93
32) 1,1,1-TCA	5.97	97	924794	107.40817 ppb		99
33) Cyclohexane	6.05	41	351950	109.88989 ppb		92
34) 1,1-Dichloropropene	6.18	75	818187	108.01463 ppb		95
35) 2,2,4-Trimethylpentane	6.56	57	1198942	119.61855 ppb		94
37) Carbon Tetrachloride	6.18	117	949871	112.80308 ppb		97
38) Tert Amyl Methyl Ether	6.60	73	1287498	96.11139 ppb		95
39) 1,2-DCA	6.43	62	854060	102.13962 ppb		99
40) Benzene	6.42	78	2806241	103.95776 ppb		99
41) TCE	7.16	95	781473	102.34539 ppb		98
42) 2-Pentanone	7.38	43	719196	210.59097 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T38W.D Vial: 38
Acq On : 12 Apr 12 1:53 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	825159	102.86816 ppb	99
44) Bromodichloromethane	7.69	83	1063435	107.20473 ppb	99
45) Methyl Cyclohexane	7.37	83	744183	116.14937 ppb	94
46) Dibromomethane	7.51	93	437581	103.22911 ppb	97
48) MIBK (methyl isobutyl ket	8.35	43	262421	101.10318 ppb	98
49) 1-Bromo-2-chloroethane	8.00	63	528384	100.89155 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	1198858	113.42136 ppb	97
51) Toluene	8.51	91	3364716	106.25033 ppb	99
52) Trans-1,3-Dichloropropene	8.74	75	1010775	114.06902 ppb	99
53) 1,1,2-TCA	8.92	83	570887	101.07546 ppb	98
54) 2-Hexanone	9.19	43	299229	102.87860 ppb	96
57) 1,2-EDB	9.41	107	654360	105.75114 ppb	98
58) Tetrachloroethene	9.07	166	911462	103.59170 ppb	99
59) 1-Chlorohexane	9.92	91	1011426	108.55214 ppb	96
60) 1,1,1,2-Tetrachloroethane	10.00	131	903393	108.51087 ppb	99
61) m&p-Xylene	10.16	106	3196175	224.18044 ppb	99
62) o-Xylene	10.55	106	1584273	111.84205 ppb	98
63) Styrene	10.56	104	2787649	117.09272 ppb	97
65) 1,3-Dichloropropane	9.08	76	1104141	99.97949 ppb	95
66) Dibromochloromethane	9.31	129	856174	108.27056 ppb	98
67) Chlorobenzene	9.92	112	2447723	103.59495 ppb	99
68) Ethylbenzene	10.04	91	4056777	109.81590 ppb	99
69) Bromoform	10.73	173	572169	108.53019 ppb	96
71) Isopropylbenzene	10.92	105	3954451	111.25187 ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	774559	100.45573 ppb	98
73) 1,2,3-Trichloropropane	11.24	110	228003	93.10759 ppb	96
74) t-1,4-Dichloro-2-Butene	11.26	53	160999	108.63878 ppb	90
75) Bromobenzene	11.21	156	1165453	101.89901 ppb	99
76) n-Propylbenzene	11.33	91	4831367	111.55020 ppb	99
77) 4-Ethyltoluene	11.45	105	2804023	113.32957 ppb	99
78) 2-Chlorotoluene	11.41	91	3217839	107.34490 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	3577037	113.45137 ppb	100
80) 4-Chlorotoluene	11.51	91	3390276	108.08891 ppb	100
81) Tert-Butylbenzene	11.83	119	3109798	113.71262 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	3642528	114.20894 ppb	99
83) Sec-Butylbenzene	12.05	105	4288136	114.11740 ppb	98
84) p-Isopropyltoluene	12.20	119	3748564	115.01717 ppb	99
85) Benzyl Chloride	12.37	91	1054108	111.40929 ppb	100
86) 1,3-DCB	12.15	146	2253891	100.91341 ppb	99
87) 1,4-DCB	12.24	146	2274733	101.77865 ppb	99
88) n-Butylbenzene	12.61	91	3182444	114.50718 ppb	99
89) 1,2-DCB	12.60	146	2102993	101.88792 ppb	98
90) Hexachloroethane	12.87	117	626446	108.12226 ppb	98
91) 1,2-Dibromo-3-chloropropan	13.37	157	170606	112.36321 ppb	93
92) 1,2,4-Trichlorobenzene	14.21	180	1019200	115.10218 ppb	100
93) Hexachlorobutadiene	14.40	223	391919	103.40386 ppb	88
94) Naphthalene	14.45	128	2802700	121.04537 ppb	98
95) 1,2,3-Trichlorobenzene	14.69	180	1375528	110.03251 ppb	97

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

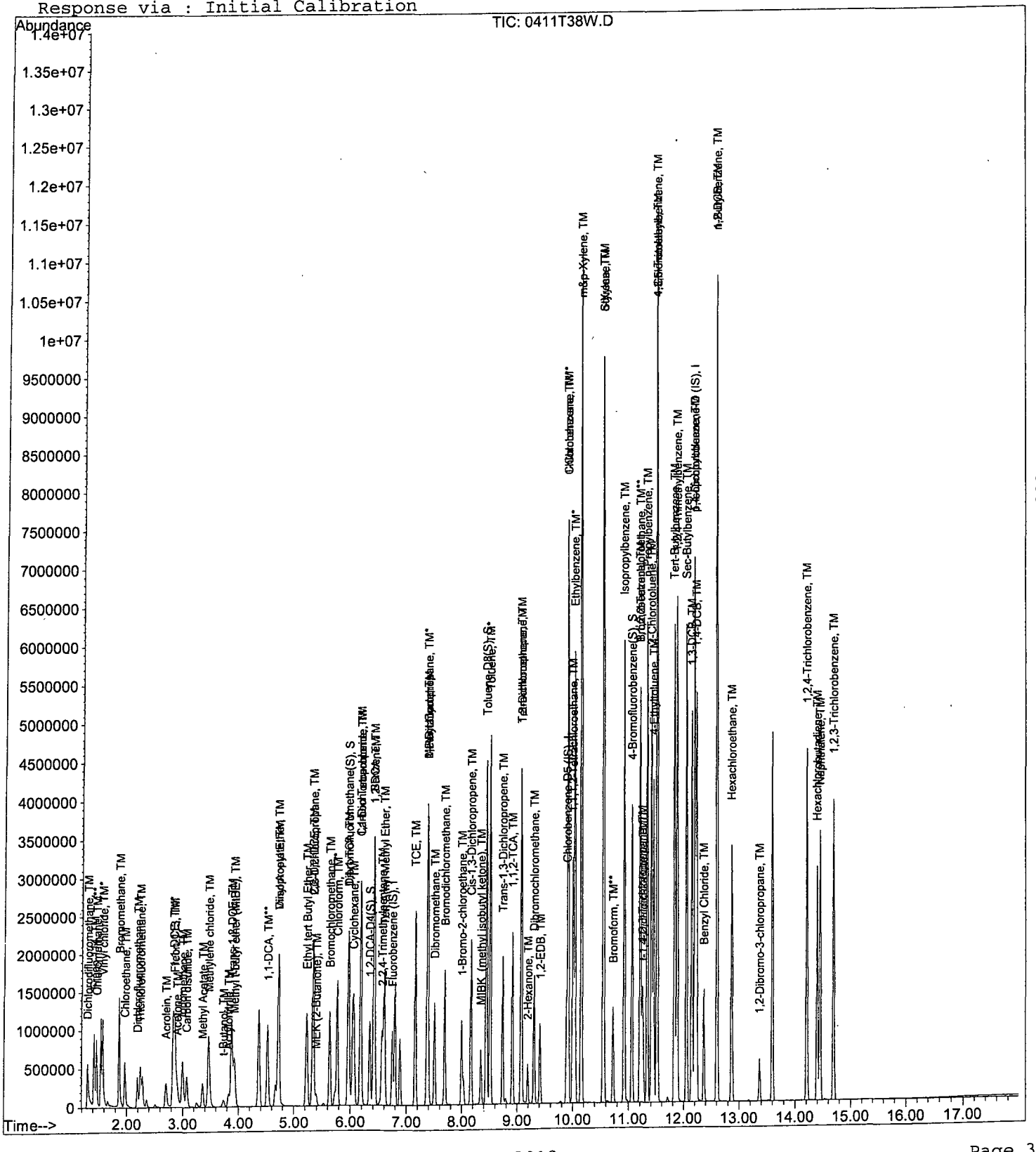
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T38W.D
Acq On : 12 Apr 12 1:53
Sample : 100ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

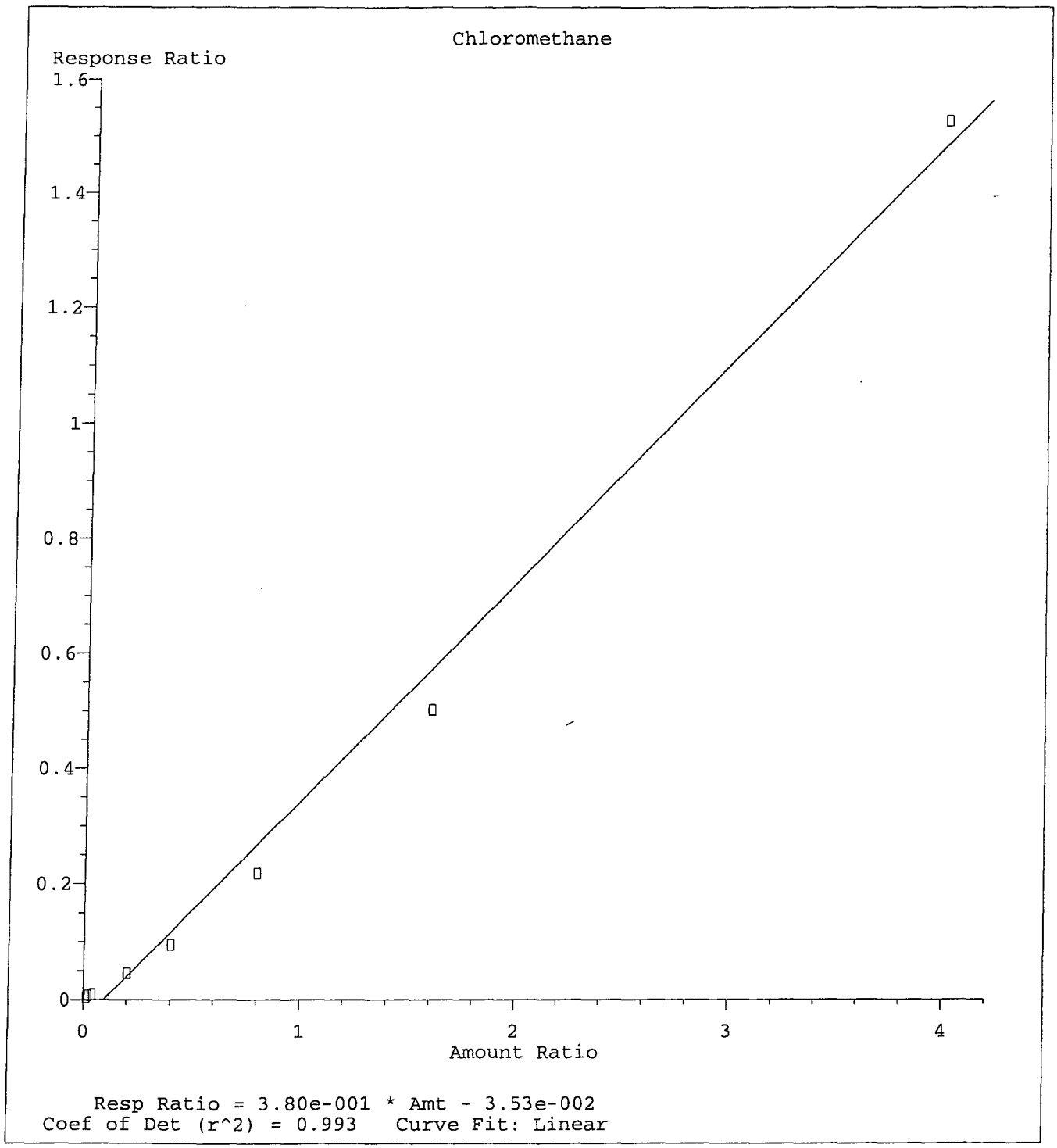
Vial: 38
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

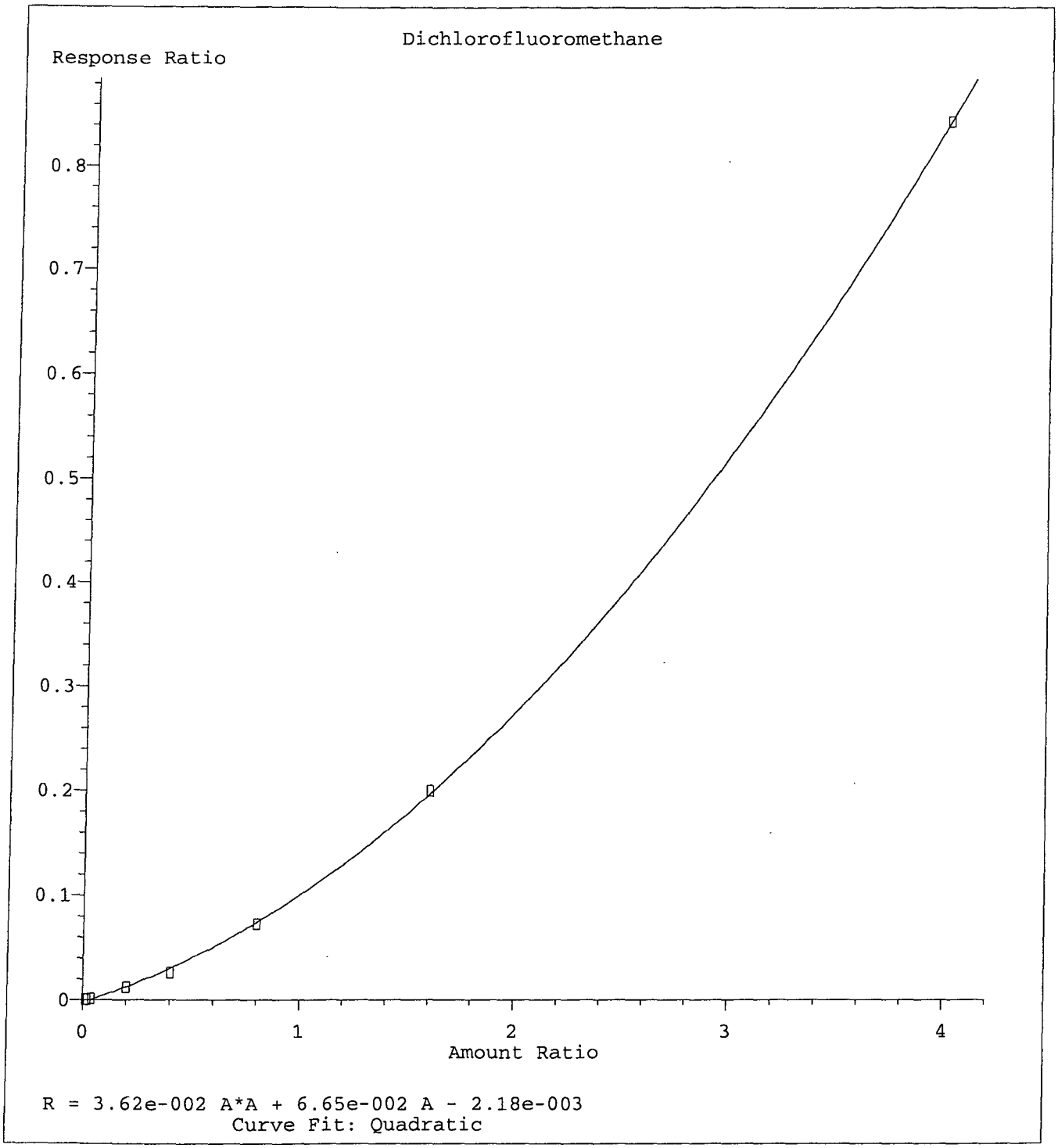
Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



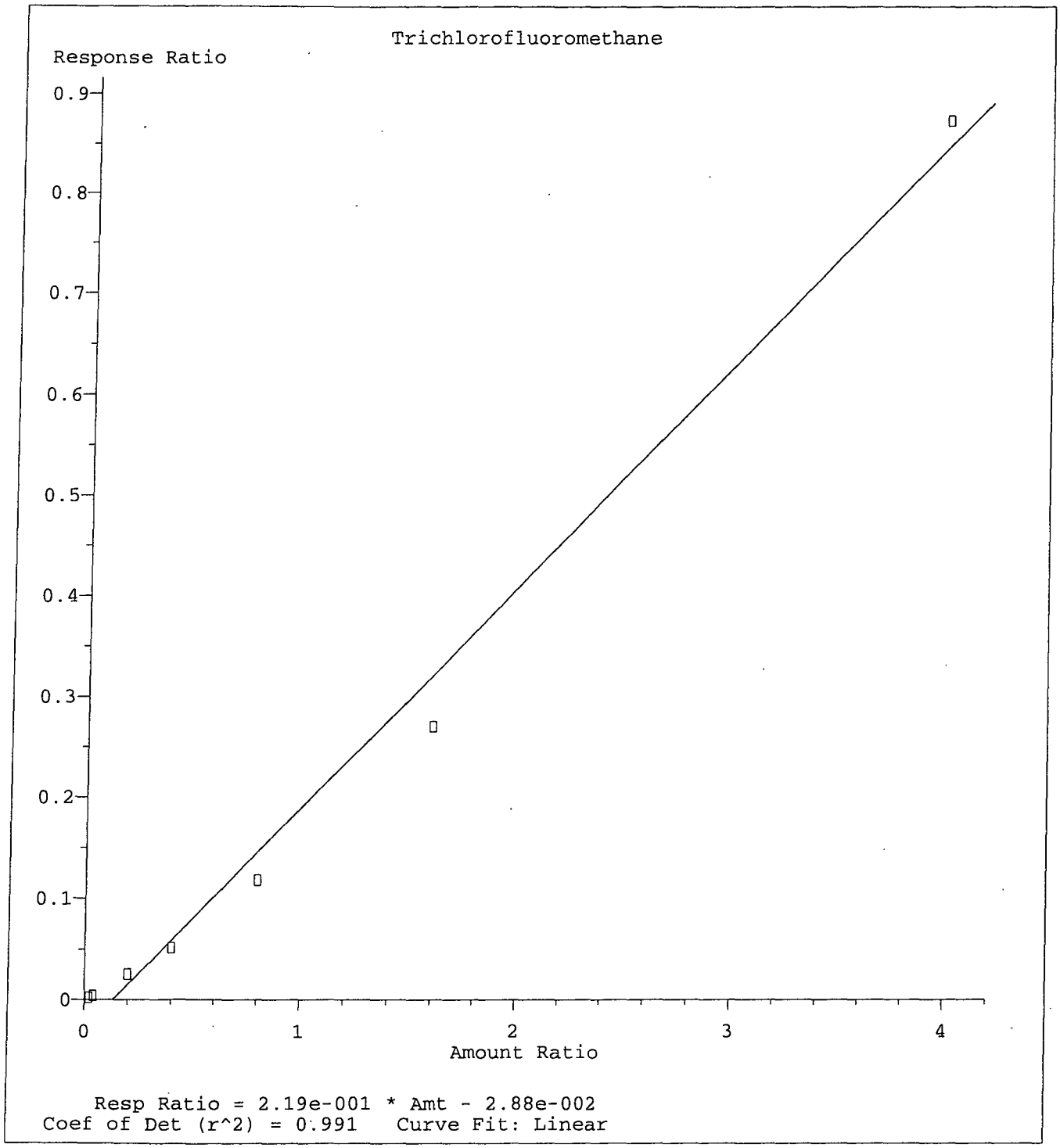
339



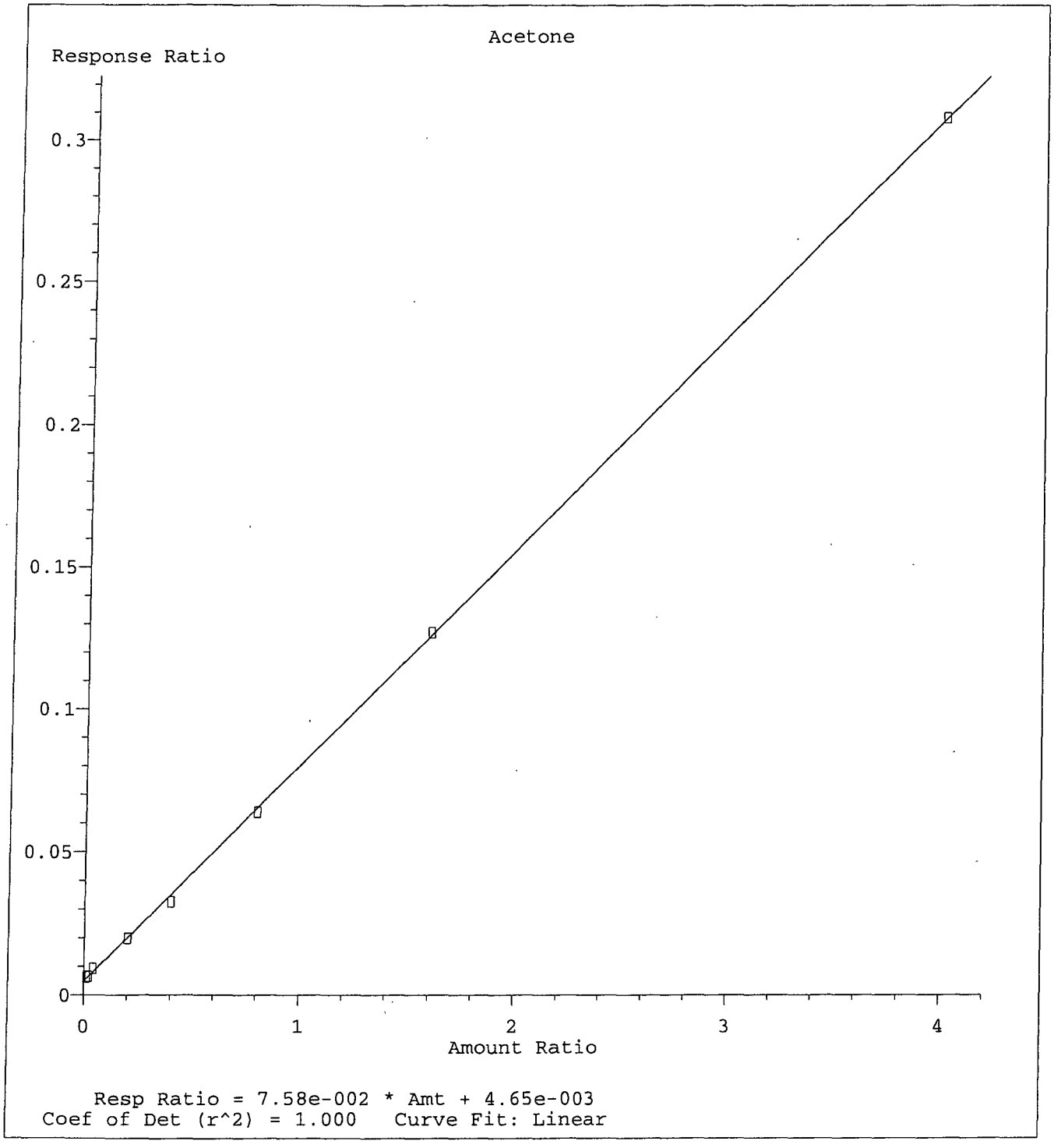
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



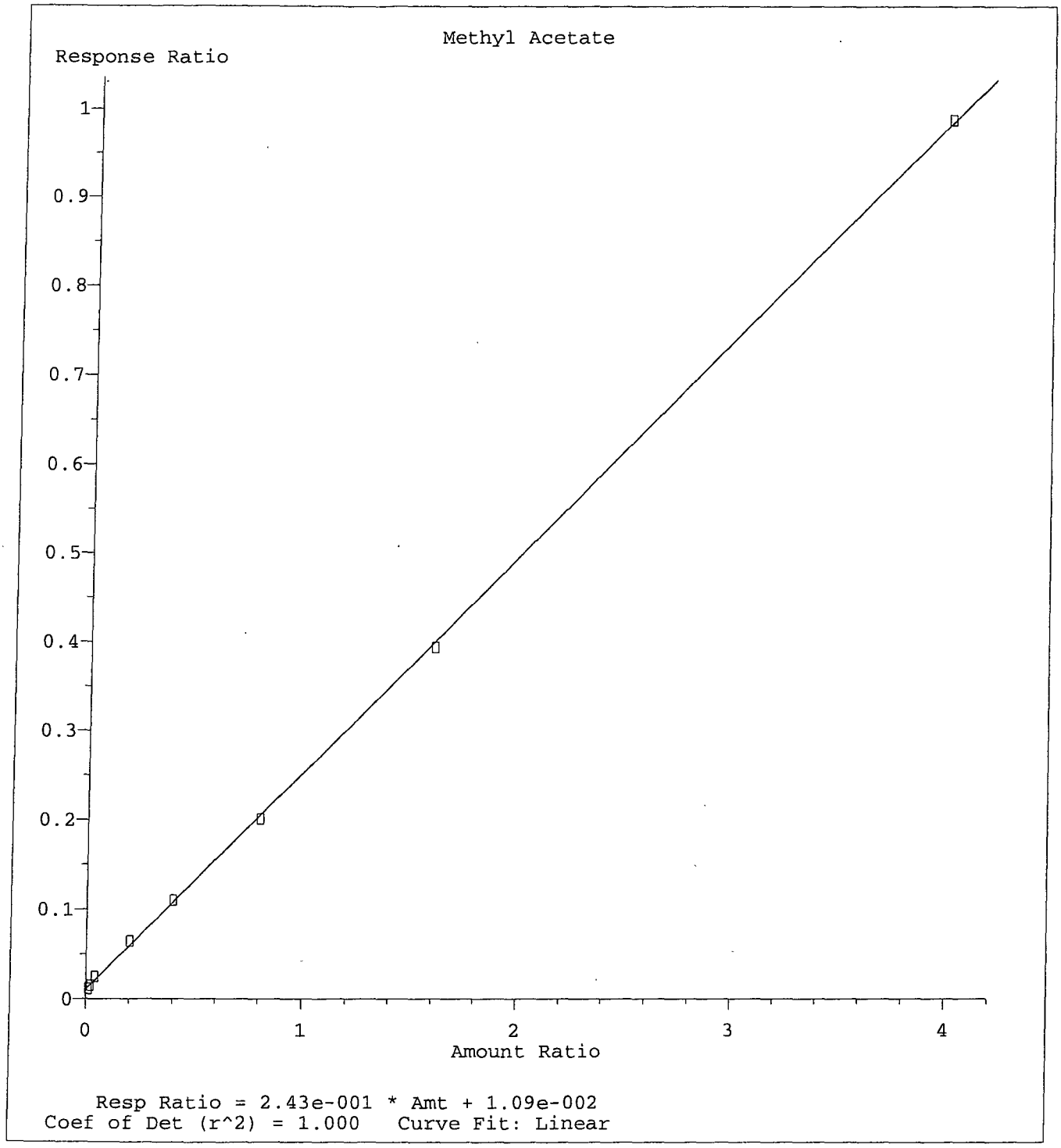
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



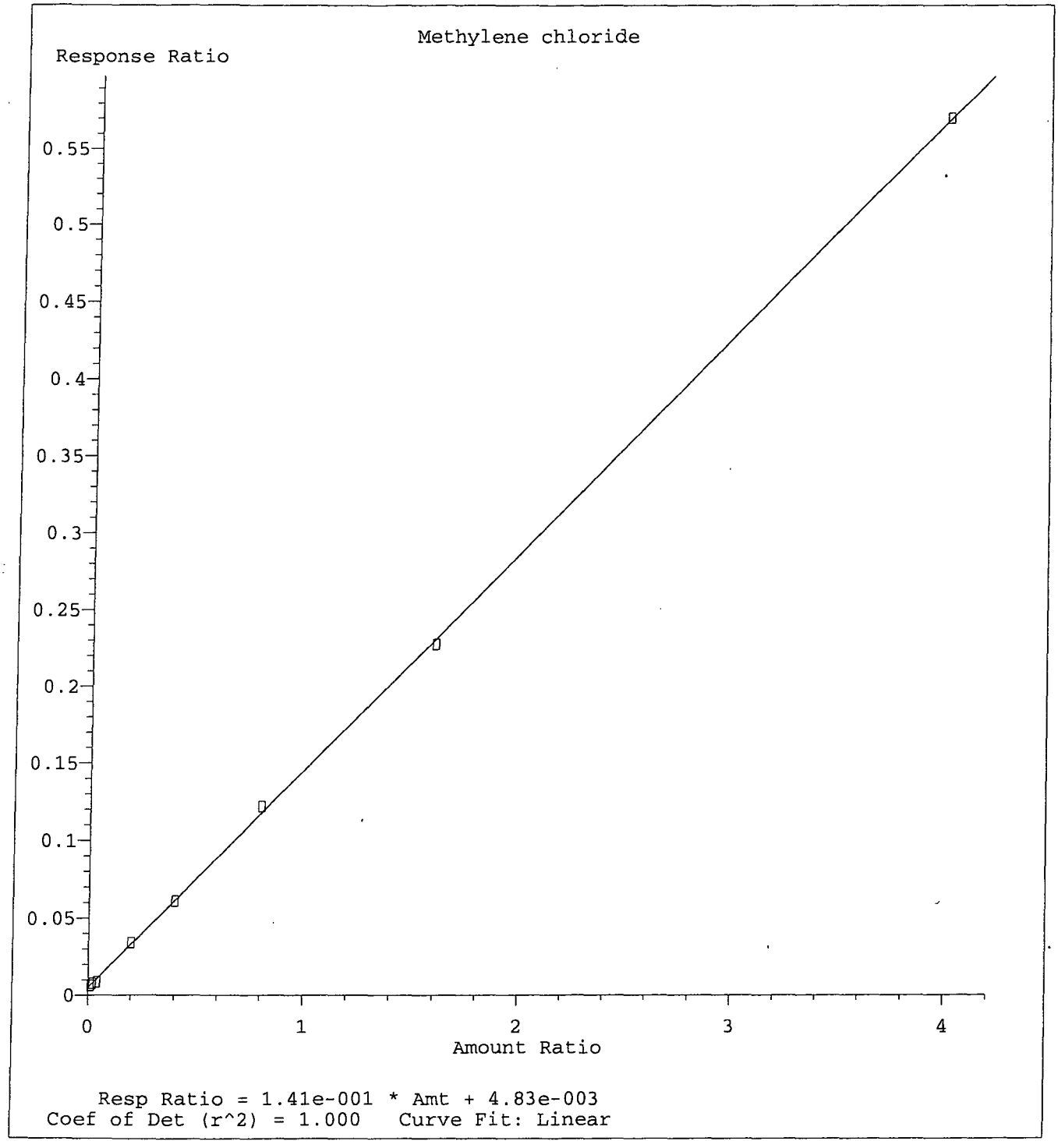
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



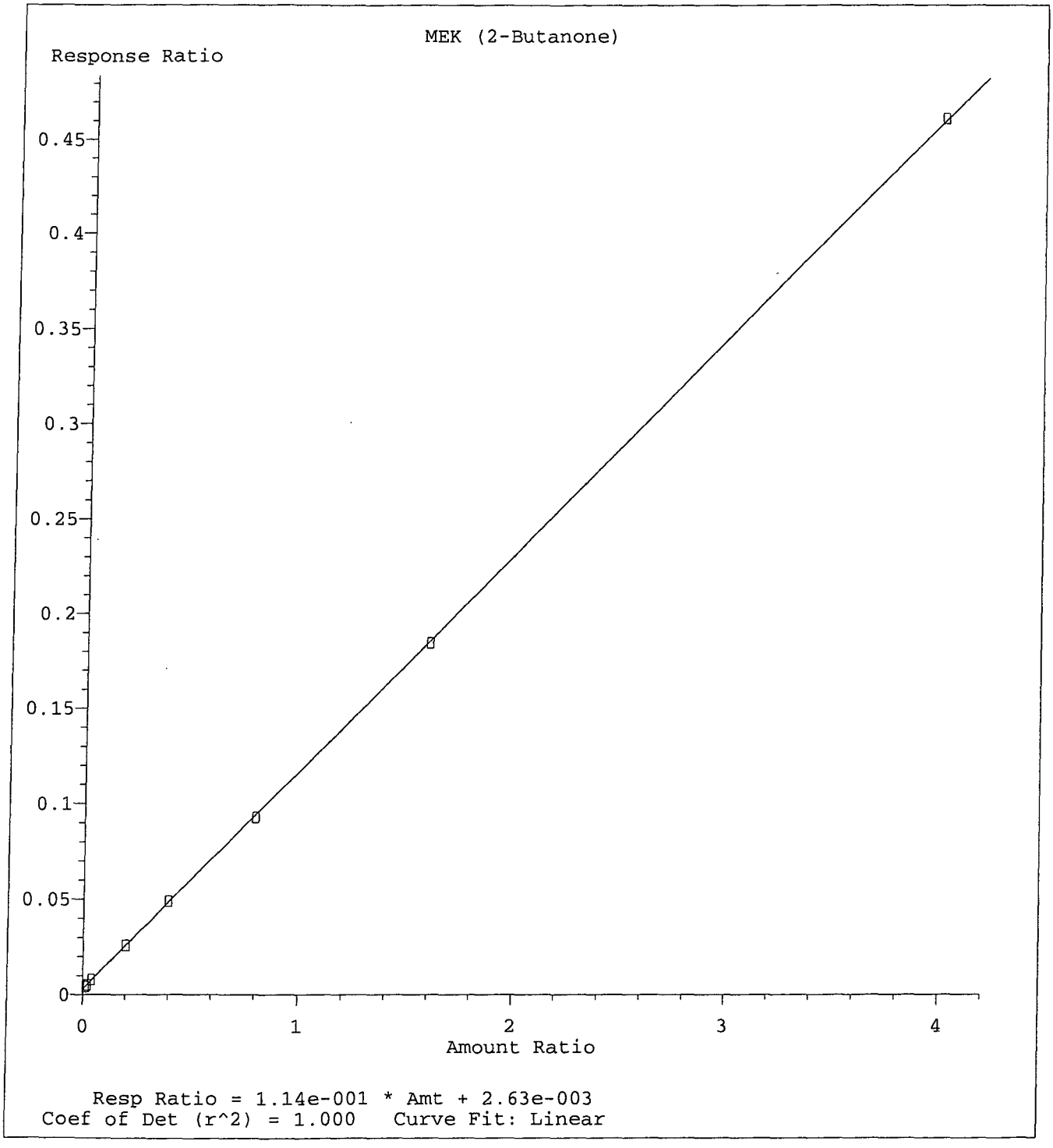
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



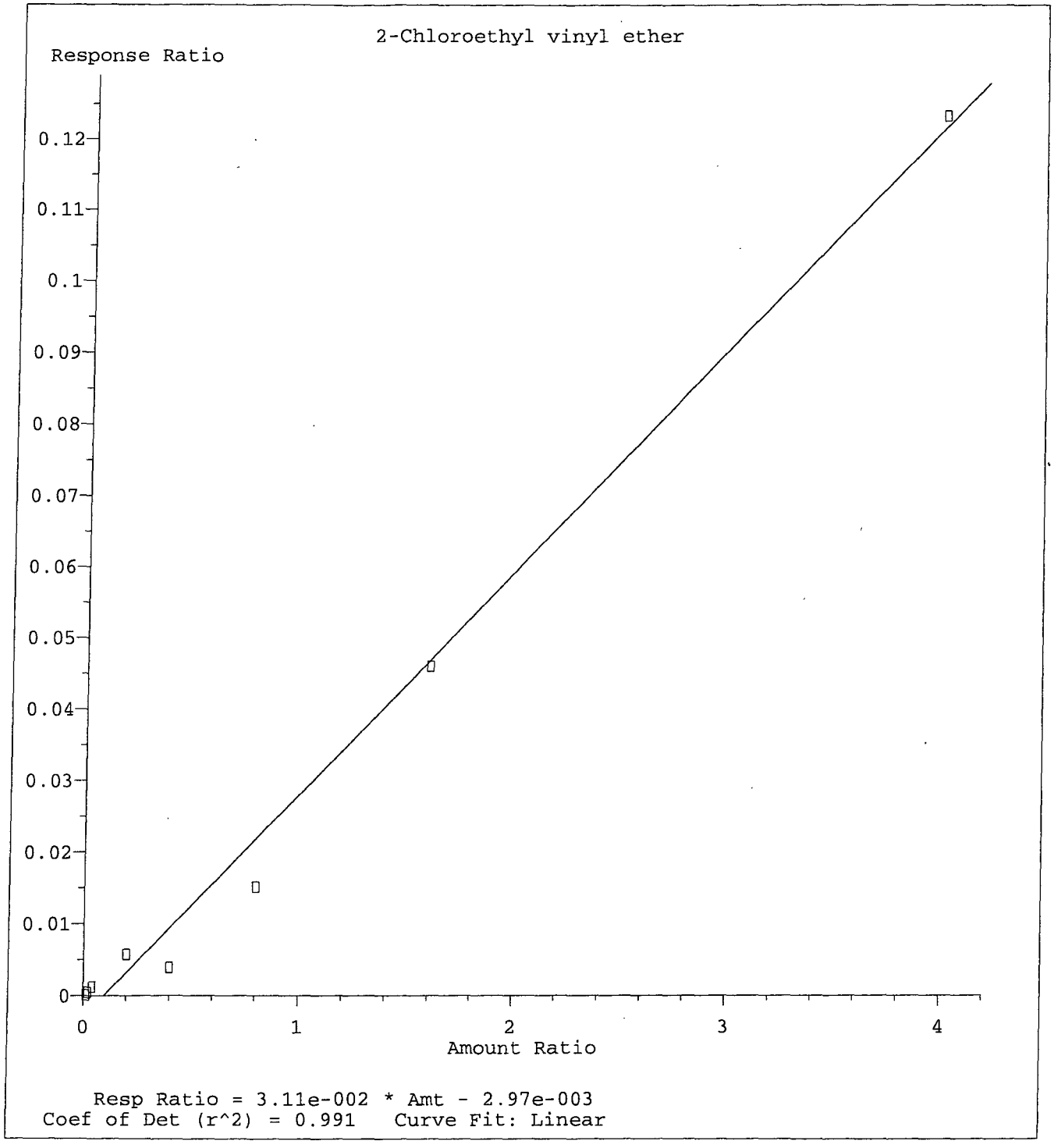
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No:
Date Analyzed: 04/12/12
Instrument: Thor
Initial Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.3011	0.3128	3.9	TM	
3	TM	Freon 114	0.2173	0.2160	0.56	TM	
4	TM**L	Chloromethane	0.3045	0.2786	8.5	TM**L	2.0
5	TM*	Vinyl chloride	0.4774	0.5239	9.7	TM*	
6	TM	Bromomethane	0.3429	0.3264	4.8	TM	
7	TM	Chloroethane	0.2655	0.2701	1.7	TM	
8	TMQ	Dichlorofluoromethane	0.0778	0.0640	18	TMQ	5.5
9	TMQ	Trichlorofluoromethane	0.1664	0.1691	1.6	TMQ	5.9
10	TM	Acrolein	0.0253	0.0271	7.1	TM	
11	TML	Acetone	0.1096	0.0894	18	TML	6.1
12	TM	Freon-113	0.2517	0.2775	10	TM	
13	TM*	1,1-DCE	0.4191	0.4234	1.0	TM*	
14	TMQ	t-Butanol	0.0068	0.0073	7.9	TMQ	5.1
15	TML	Methyl Acetate	0.3221	0.2389	26	TML	3.1
16	TM	Iodomethane	0.4428	0.4736	7.0	TM	
17	TM	Acrylonitrile	0.0691	0.0756	9.5	TM	
18	TM	Methylene chloride	0.1352	0.1305	3.5	TM	
19	TM	Carbon disulfide	0.1471	0.1627	11	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.4597	0.4997	8.7	TM	
21	TM	Trans-1,2-DCE	0.2829	0.3022	6.8	TM	
22	TM	Diisopropyl Ether	0.1225	0.1267	3.4	TM	
23	TM**	1,1-DCA	0.6205	0.6383	2.9	TM**	
24	TM	Vinyl Acetate	0.3051	0.3087	1.2	TM	
25	TM	Ethyl tert Butyl Ether	0.6337	0.6762	6.7	TM	
26	TML	MEK (2-Butanone)	0.1220	0.1145	6.1	TML	9.5
27	TM	Cis-1,2-DCE	0.4118	0.4230	2.7	TM	
28	TM	2,2-Dichloropropane	0.2349	0.2417	2.9	TM	
29	TM*	Chloroform	0.6832	0.6942	1.6	TM*	
30	TM	Bromochloromethane	0.1971	0.2035	3.3	TM	
31	S	Dibromofluoromethane(S)	0.4169	0.4187	0.43	S	
32	TM	1,1,1-TCA	0.4492	0.4718	5.0	TM	
33	TM	Cyclohexane	0.1671	0.1669	0.10	TM	
34	TM	1,1-Dichloropropene	0.3952	0.4094	3.6	TM	
35	TM	2,2,4-Trimethylpentane	0.5229	0.5433	3.9	TM	
36	S	1,2-DCA-D4(S)	0.3802	0.3728	2.0	S	
37	TM	Carbon Tetrachloride	0.4393	0.4557	3.7	TM	
38	TM	Tert Amyl Methyl Ether	0.6989	0.7565	8.2	TM	
39	TM	1,2-DCA	0.4363	0.4538	4.0	TM	
40	TM	Benzene	1.408	1.436	2.0	TM	
		Average			5.9		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 04/12/12
Matrix: 0 Instrument: Thor
Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	TCE	0.3984	0.4211	5.7	TM	
42	TM	2-Pentanone	0.1782	0.1894	6.3	TM	
43	TM*	1,2-Dichloropropane	0.4185	0.4263	1.9	TM*	
44	TM	Bromodichloromethane	0.5175	0.5269	1.8	TM	
45	TM	Methyl Cyclohexane	0.3343	0.3462	3.6	TM	
46	TM	Dibromomethane	0.2212	0.2309	4.4	TM	
47	TML	2-Chloroethyl vinyl ether	0.0000	0.0000	0.00	TML	
48	TM	MIBK (methyl isobutyl ketone)	0.1354	0.1344	0.78	TM	
49	TM	1-Bromo-2-chloroethane	0.2732	0.2831	3.6	TM	
50	TM	Cis-1,3-Dichloropropene	0.5515	0.5660	2.6	TM	
51	TM*	Toluene	1.652	1.699	2.8	TM*	
52	TM	Trans-1,3-Dichloropropene	0.4623	0.4742	2.6	TM	
53	TM	1,1,2-TCA	0.2947	0.2997	1.7	TM	
54	TM	2-Hexanone	0.1518	0.1466	3.4	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	S	Toluene-D8(S)	1.668	1.679	0.68	S	
57	TM	1,2-EDB	0.3738	0.3956	5.8	TM	
58	TM	Tetrachloroethene	0.5315	0.5514	3.7	TM	
59	TM	1-Chlorohexane	0.5629	0.5638	0.16	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5030	0.5159	2.6	TM	
61	TM	m&p-Xylene	0.8613	0.8987	4.3	TM	
62	TM	o-Xylene	0.8558	0.8962	4.7	TM	
63	TM	Styrene	1.438	1.485	3.3	TM	
64	S	4-Bromofluorobenzene(S)	0.6909	0.7019	1.6	S	
65	TM	1,3-Dichloropropane	0.6672	0.6750	1.2	TM	
66	TM	Dibromochloromethane	0.4777	0.4999	4.6	TM	
67	TM**	Chlorobenzene	1.427	1.465	2.7	TM**	
68	TM*	Ethylbenzene	2.232	2.323	4.1	TM*	
69	TM**	Bromoform	0.3185	0.3247	2.0	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.494	3.624	3.7	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7579	0.7620	0.54	TM**	
73	TM	1,2,3-Trichloropropane	0.2407	0.2347	2.5	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1457	0.1509	3.6	TM	
75	TM	Bromobenzene	1.124	1.133	0.81	TM	
76	TM	n-Propylbenzene	4.257	4.388	3.1	TM	
77	TM	4-Ethyltoluene	2.432	2.617	7.6	TM	
78	TM	2-Chlorotoluene	2.947	3.101	5.2	TM	
79	TM	1,3,5-Trimethylbenzene	3.099	3.261	5.2	TM	
80	TM	4-Chlorotoluene	3.083	3.216	4.3	TM	
		Average			3.1		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 04/12/12
Instrument: Thor
Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Tert-Butylbenzene	2.688	2.833	5.4	TM	
82	TM	1,2,4-Trimethylbenzene	3.135	3.320	5.9	TM	
83	TM	Sec-Butylbenzene	3.694	3.943	6.8	TM	
84	TM	p-Isopropyltoluene	3.204	3.310	3.3	TM	
85	TM	Benzyl Chloride	0.9300	0.8793	5.5	TM	
86	TM	1,3-DCB	2.195	2.175	0.92	TM	
87	TM	1,4-DCB	2.197	2.200	0.16	TM	
88	TM	n-Butylbenzene	2.732	2.840	4.0	TM	
89	TM	1,2-DCB	2.029	2.047	0.92	TM	
90	TM	Hexachloroethane	0.5695	0.5452	4.3	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.1492	0.1575	5.5	TM	
92	TM	1,2,4-Trichlorobenzene	0.8704	0.9120	4.8	TM	
93	TM	Hexachlorobutadiene	0.3726	0.3742	0.44	TM	
94	TM	Naphthalene	2.276	2.321	2.0	TM	
95	TM	1,2,3-Trichlorobenzene	1.229	1.279	4.1	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.6		

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0412T12W.D Vial: 42
Acq On : 12 Apr 12 3:44 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-11-12 (SS) DG 4/19/12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	467840	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	389056	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	238272	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	232857	29.84855 ppb	0.00
Spiked Amount 29.720			Recovery	= 100.433%	
36) 1,2-DCA-D4(S)	6.34	65	206556	29.02835 ppb	0.00
Spiked Amount 29.608			Recovery	= 98.041%	
56) Toluene-D8(S)	8.44	98	835757	32.19735 ppb	0.00
Spiked Amount 31.981			Recovery	= 100.677%	
64) 4-Bromofluorobenzene(S)	11.06	95	320616	29.81911 ppb	0.00
Spiked Amount 29.353			Recovery	= 101.588%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.31	85	58541	10.39078 ppb	98
3) Freon 114	1.42	85	40429	9.94395 ppb	93
4) Chloromethane	1.46	50	52128	9.80012 ppb	100
5) Vinyl chloride	1.57	62	98043	10.97464 ppb	99
6) Bromomethane	1.88	94	61078	9.51733 ppb	93
7) Chloroethane	1.98	64	50539	10.17148 ppb	92
8) Dichlorofluoromethane	2.20	67	11978	10.55213 ppb	94
9) Trichlorofluoromethane	2.25	101	31649	10.59495 ppb	100
10) Acrolein	2.71	55	63408	133.89133 ppb	99
11) Acetone	2.91	43	16729	10.60787 ppb	100
12) Freon-113	2.87	101	51932	11.02327 ppb	95
13) 1,1-DCE	2.84	61	79239	10.10326 ppb	96
14) t-Butanol	3.71	59	17112	131.33354 ppb	95
15) Methyl Acetate	3.36	43	44709	10.31208 ppb	94
16) Iodomethane	3.00	142	88633	10.69524 ppb	97
17) Acrylonitrile	3.83	52	14152	10.94848 ppb	100
18) Methylene chloride	3.47	84	24424	9.65202 ppb	99
19) Carbon disulfide	3.08	76	30448	11.06142 ppb	98
20) Methyl t-butyl ether (MtBE	3.93	73	93508	10.87073 ppb	96
21) Trans-1,2-DCE	3.88	96	56551	10.68187 ppb	95
22) Diisopropyl Ether	4.73	59	23710	10.34290 ppb	98
23) 1,1-DCA	4.53	63	119447	10.28719 ppb	97
24) Vinyl Acetate	4.72	87	57764	10.11560 ppb	99
25) Ethyl tert Butyl Ether	5.23	59	126546	10.67120 ppb	96
26) MEK (2-Butanone)	5.40	43	21430	10.94615 ppb	93
27) Cis-1,2-DCE	5.34	96	79159	10.27243 ppb	97
28) 2,2-Dichloropropane	5.34	77	45235	10.28989 ppb	100
29) Chloroform	5.77	83	129901	10.15960 ppb	92
30) Bromochloromethane	5.64	128	38088	10.32796 ppb	94
32) 1,1,1-TCA	5.98	97	88285	10.50194 ppb	100
33) Cyclohexane	6.05	41	31238	9.98965 ppb	90
34) 1,1-Dichloropropene	6.18	75	76611	10.35885 ppb	95
35) 2,2,4-Trimethylpentane	6.57	57	101671	10.38934 ppb	100
37) Carbon Tetrachloride	6.18	117	85280	10.37275 ppb	93
38) Tert Amyl Methyl Ether	6.60	73	141562	10.82344 ppb	100
39) 1,2-DCA	6.43	62	84923	10.40211 ppb	98
40) Benzene	6.41	78	268704	10.19522 ppb	99
41) TCE	7.16	95	78804	10.57044 ppb	97
42) 2-Pentanone	7.38	43	443016	132.86248 ppb	99

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

Data File : M:\THOR\DATA\T120411\0412T12W.D Vial: 42
Acq On : 12 Apr 12 3:44 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloropropane	7.39	63	79768	10.18503	ppb	99
44)	Bromodichloromethane	7.69	83	98596	10.18012	ppb	95
45)	Methyl Cyclohexane	7.37	83	64779	10.35528	ppb	94
46)	Dibromomethane	7.50	93	43218	10.44236	ppb	96
48)	MIBK (methyl isobutyl ket	8.35	43	25144	9.92181	ppb	97
49)	1-Bromo-2-chloroethane	8.00	63	52984	10.36192	ppb	99
50)	Cis-1,3-Dichloropropene	8.17	75	105913	10.26282	ppb	98
51)	Toluene	8.51	91	317983	10.28434	ppb	100
52)	Trans-1,3-Dichloropropene	8.74	75	88745	10.25764	ppb	100
53)	1,1,2-TCA	8.92	83	56091	10.17136	ppb	97
54)	2-Hexanone	9.19	43	27437	9.66159	ppb	99
57)	1,2-EDB	9.41	107	61559	10.58189	ppb	99
58)	Tetrachloroethene	9.07	166	85805	10.37296	ppb	96
59)	1-Chlorohexane	9.92	91	87735	10.01569	ppb	99
60)	1,1,1,2-Tetrachloroethane	10.00	131	80293	10.25836	ppb	98
61)	m&p-Xylene	10.16	106	279701	20.86723	ppb	99
62)	o-Xylene	10.55	106	139464	10.47227	ppb	99
63)	Styrene	10.56	104	231157	10.32767	ppb	98
65)	1,3-Dichloropropane	9.08	76	105041	10.11693	ppb	93
66)	Dibromochloromethane	9.31	129	77794	10.46401	ppb	95
67)	Chlorobenzene	9.92	112	228040	10.26576	ppb	99
68)	Ethylbenzene	10.04	91	361467	10.40774	ppb	100
69)	Bromoform	10.73	173	50532	10.19521	ppb	92
71)	Isopropylbenzene	10.92	105	345420	10.37298	ppb	100
72)	1,1,2,2-Tetrachloroethane	11.20	83	72625	10.05405	ppb	99
73)	1,2,3-Trichloropropane	11.24	110	22366	9.74917	ppb	93
74)	t-1,4-Dichloro-2-Butene	11.26	53	14383	10.35967	ppb	86
75)	Bromobenzene	11.21	156	108015	10.08078	ppb	99
76)	n-Propylbenzene	11.33	91	418167	10.30588	ppb	99
77)	4-Ethyltoluene	11.45	105	249432	10.76090	ppb	99
78)	2-Chlorotoluene	11.41	91	295571	10.52480	ppb	99
79)	1,3,5-Trimethylbenzene	11.51	105	310832	10.52318	ppb	100
80)	4-Chlorotoluene	11.51	91	306556	10.43256	ppb	98
81)	Tert-Butylbenzene	11.83	119	269992	10.53810	ppb	99
82)	1,2,4-Trimethylbenzene	11.88	105	316455	10.59117	ppb	99
83)	Sec-Butylbenzene	12.05	105	375806	10.67534	ppb	100
84)	p-Isopropyltoluene	12.20	119	315519	10.33375	ppb	98
85)	Benzyl Chloride	12.37	91	83805	9.45455	ppb	99
86)	1,3-DCB	12.15	146	207309	9.90761	ppb	100
87)	1,4-DCB	12.23	146	209716	10.01596	ppb	98
88)	n-Butylbenzene	12.61	91	270707	10.39696	ppb	98
89)	1,2-DCB	12.60	146	195145	10.09200	ppb	98
90)	Hexachloroethane	12.87	117	51961	9.57291	ppb	96
91)	1,2-Dibromo-3-chloropropan	13.37	157	15013	10.55437	ppb	85
92)	1,2,4-Trichlorobenzene	14.21	180	86920	10.47801	ppb	99
93)	Hexachlorobutadiene	14.40	223	35665	10.04425	ppb	83
94)	Naphthalene	14.45	128	221248	10.19966	ppb	98
95)	1,2,3-Trichlorobenzene	14.69	180	121944	10.41230	ppb	98

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

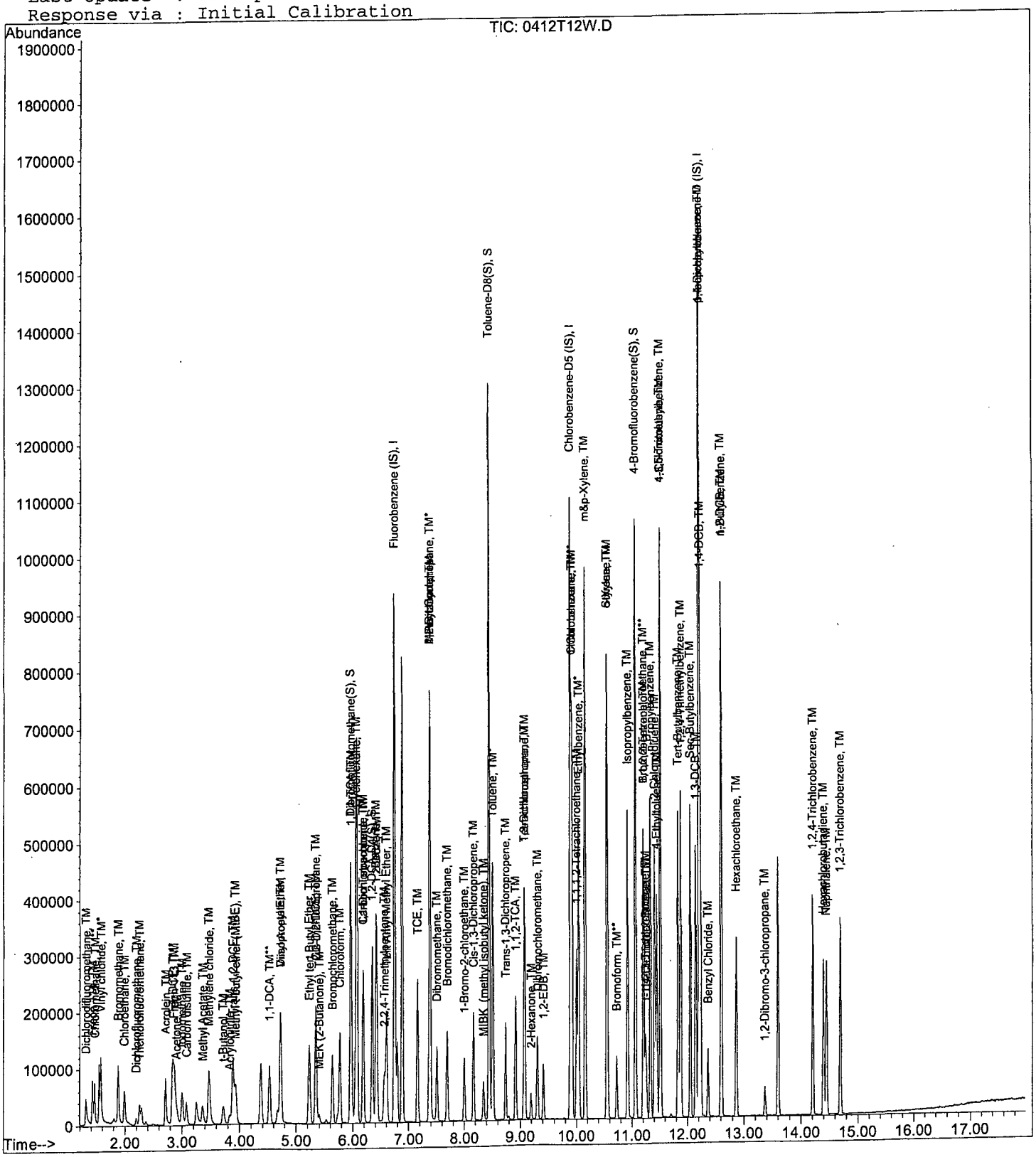
Quantitation Report

Data File : M:\THOR\DATA\T120411\0412T12W.D
Acq On : 12 Apr 12 3:44
Sample : 10ug/L VOC STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 42
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 4/19/12
Matrix: Instrument: Thor
Initial Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.3011	0.3251	8.0	TM		
3	TM	Freon 114	0.2173	0.2142	1.4	TM		
4	TM**L	Chloromethane	0.3045	0.2923	4.0	TM**L	2.6	
5	TM*	Vinyl chloride	0.4774	0.4884	2.3	TM*		
6	TM	Bromomethane	0.3429	0.3394	1.0	TM		
7	TM	Chloroethane	0.2655	0.2779	4.7	TM		
8	TMQ	Dichlorofluoromethane	0.0778	0.0477	39	TMQ	15	
9	TMQ	Trichlorofluoromethane	0.1664	0.1620	2.7	TMQ	1.8	
10	TM	Acrolein	0.0253	0.0159	37	TM		nt
11	TML	Acetone	0.1096	0.0769	30	TML	11	
12	TM	Freon-113	0.2517	0.2754	9.4	TM		
13	TM*	1,1-DCE	0.4191	0.3839	8.4	TM*		
14	TMQ	t-Butanol	0.0068	0.0023	66	TMQ	55	nt
15	TML	Methyl Acetate	0.3221	0.2096	35	TML	10	
16	TM	Iodomethane	0.4428	0.4260	3.8	TM		
17	TM	Acrylonitrile	0.0691	0.0705	2.1	TM		
18	TM	Methylene chloride	0.1352	0.1095	19	TM		
19	TM	Carbon disulfide	0.1471	0.1287	13	TM		
20	TM	Methyl t-butyl ether (MtBE)	0.4597	0.4046	12	TM		
21	TM	Trans-1,2-DCE	0.2829	0.2761	2.4	TM		
22	TM	Diisopropyl Ether	0.1225	0.1125	8.1	TM		
23	TM**	1,1-DCA	0.6205	0.5808	6.4	TM**		
24	TM	Vinyl Acetate	0.3051	0.2727	11	TM		
25	TM	Ethyl tert Butyl Ether	0.6337	0.5153	19	TM		
26	TML	MEK (2-Butanone)	0.1220	0.0933	24	TML	11	
27	TM	Cis-1,2-DCE	0.4118	0.3634	12	TM		
28	TM	2,2-Dichloropropane	0.2349	0.2618	11	TM		
29	TM*	Chloroform	0.6832	0.6431	5.9	TM*		
30	TM	Bromochloromethane	0.1971	0.1925	2.3	TM		
31	S	Dibromofluoromethane(S)	0.4169	0.4366	4.7	S		
32	TM	1,1,1-TCA	0.4492	0.4257	5.2	TM		
33	TM	Cyclohexane	0.1671	0.1367	18	TM		
34	TM	1,1-Dichloropropene	0.3952	0.3463	12	TM		
35	TM	2,2,4-Trimethylpentane	0.5229	0.5583	6.8	TM		
36	S	1,2-DCA-D4(S)	0.3802	0.3847	1.2	S		
37	TM	Carbon Tetrachloride	0.4393	0.4311	1.9	TM		
38	TM	Tert Amyl Methyl Ether	0.6989	0.5900	16	TM		
39	TM	1,2-DCA	0.4363	0.3826	12	TM		
40	TM	Benzene	1.408	1.245	12	TM		
		Average			12.6			

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No: 0
Date Analyzed: 4/19/12
Instrument: Thor
Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	TCE	0.3984	0.3506	12	TM	
42	TM	2-Pentanone	0.1782	0.1704	4.4	TM	
43	TM*	1,2-Dichloropropane	0.4185	0.3830	8.5	TM*	
44	TM	Bromodichloromethane	0.5175	0.4812	7.0	TM	
45	TM	Methyl Cyclohexane	0.3343	0.3270	2.2	TM	
46	TM	Dibromomethane	0.2212	0.2035	8.0	TM	
47	TML	2-Chloroethyl vinyl ether	0.0000	0.0064	0.00	TML	
48	TM	MIBK (methyl isobutyl ketone)	0.1354	0.1124	17	TM	
49	TM	1-Bromo-2-chloroethane	0.2732	0.2381	13	TM	
50	TM	Cis-1,3-Dichloropropene	0.5515	0.5148	6.6	TM	
51	TM*	Toluene	1.652	1.493	9.6	TM*	
52	TM	Trans-1,3-Dichloropropene	0.4623	0.4426	4.3	TM	
53	TM	1,1,2-TCA	0.2947	0.2687	8.8	TM	
54	TM	2-Hexanone	0.1518	0.1378	9.2	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	S	Toluene-D8(S)	1.668	1.675	0.43	S	
57	TM	1,2-EDB	0.3738	0.3585	4.1	TM	
58	TM	Tetrachloroethene	0.5315	0.5024	5.5	TM	
59	TM	1-Chlorohexane	0.5629	0.5127	8.9	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5030	0.4925	2.1	TM	
61	TM	m&p-Xylene	0.8613	0.8167	5.2	TM	
62	TM	o-Xylene	0.8558	0.7763	9.3	TM	
63	TM	Styrene	1.438	1.351	6.1	TM	
64	S	4-Bromofluorobenzene(S)	0.6909	0.7210	4.3	S	
65	TM	1,3-Dichloropropane	0.6672	0.5881	12	TM	
66	TM	Dibromochloromethane	0.4777	0.4584	4.0	TM	
67	TM**	Chlorobenzene	1.427	1.318	7.7	TM**	
68	TM*	Ethylbenzene	2.232	2.056	7.9	TM*	
69	TM**	Bromoform	0.3185	0.3043	4.5	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.494	3.095	11	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7579	0.7168	5.4	TM**	
73	TM	1,2,3-Trichloropropane	0.2407	0.2038	15	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1457	0.1322	9.3	TM	
75	TM	Bromobenzene	1.124	1.011	10	TM	
76	TM	n-Propylbenzene	4.257	3.920	7.9	TM	
77	TM	4-Ethyltoluene	2.432	2.332	4.1	TM	
78	TM	2-Chlorotoluene	2.947	2.670	9.4	TM	
79	TM	1,3,5-Trimethylbenzene	3.099	2.893	6.7	TM	
80	TM	4-Chlorotoluene	3.083	2.811	8.8	TM	
		Average			7.4		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No: 0
Date Analyzed: 4/19/12
Instrument: Thor
Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D		%Drift	
81	TM	Tert-Butylbenzene	2.688	2.445	9.0	TM		
82	TM	1,2,4-Trimethylbenzene	3.135	2.885	8.0	TM		
83	TM	Sec-Butylbenzene	3.694	3.465	6.2	TM		
84	TM	p-Isopropyltoluene	3.204	3.027	5.5	TM		
85	TM	Benzyl Chloride	0.9300	1.133	22	TM		*
86	TM	1,3-DCB	2.195	1.981	9.8	TM		
87	TM	1,4-DCB	2.197	2.011	8.5	TM		
88	TM	n-Butylbenzene	2.732	2.604	4.7	TM		
89	TM	1,2-DCB	2.029	1.814	11	TM		
90	TM	Hexachloroethane	0.5695	0.5493	3.6	TM		
91	TM	1,2-Dibromo-3-chloropropane	0.1492	0.1477	1.1	TM		
92	TM	1,2,4-Trichlorobenzene	0.8704	0.8328	4.3	TM		
93	TM	Hexachlorobutadiene	0.3726	0.3709	0.44	TM		
94	TM	Naphthalene	2.276	2.087	8.3	TM		
95	TM	1,2,3-Trichlorobenzene	1.229	1.179	4.0	TM		
96								
97								
98								
99								
100								
101								
102								
103								
104								
105								
106								
107								
108								
109								
110								
111								
112								
113								
114								
115								
116								
117								
118								
119								
120								
		Average			7.1			

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	499136	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	420608	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	266368	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	259074	31.12693 ppb		0.00
Spiked Amount 29.720			Recovery = 104.733%			
36) 1,2-DCA-D4(S)	6.34	65	227385	29.95193 ppb		0.00
Spiked Amount 29.608			Recovery = 101.162%			
56) Toluene-D8(S)	8.44	98	901334	32.11889 ppb		0.00
Spiked Amount 31.981			Recovery = 100.433%			
64) 4-Bromofluorobenzene(S)	11.06	95	356040	30.62971 ppb		0.00
Spiked Amount 29.353			Recovery = 104.351%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.29	85	64912	10.79920 ppb		100
3) Freon 114	1.41	85	42766	9.85923 ppb		93
4) Chloromethane	1.45	50	58361	10.25898 ppb		98
5) Vinyl chloride	1.56	62	97507	10.23029 ppb		98
6) Bromomethane	1.87	94	67767	9.89754 ppb		98
7) Chloroethane	1.97	64	55487	10.46712 ppb		100
8) Dichlorofluoromethane	2.18	67	9532	8.50481 ppb		84
9) Trichlorofluoromethane	2.24	101	32335	10.18362 ppb		93
10) Acrolein	2.69	55	39595	78.36592 ppb	#	7
11) Acetone	2.95	43	15349m	8.87256 ppb		93
12) Freon-113	2.85	101	54981	10.93872 ppb		95
13) 1,1-DCE	2.82	61	76639	9.15906 ppb		93
14) t-Butanol	3.87	59	5822	55.80855 ppb		97
15) Methyl Acetate	3.37	43	41853	8.99123 ppb		95
16) Iodomethane	2.98	142	85051	9.61951 ppb		94
17) Acrylonitrile	3.85	52	14084	10.21270 ppb		97
18) Methylene chloride	3.46	84	21872	8.10155 ppb		90
19) Carbon disulfide	3.06	76	25696	8.74976 ppb		97
20) Methyl t-butyl ether (MtBE	3.93	73	80779	8.80212 ppb		98
21) Trans-1,2-DCE	3.87	96	55134	9.76124 ppb		94
22) Diisopropyl Ether	4.73	59	22468	9.18657 ppb		99
23) 1,1-DCA	4.51	63	115960	9.36069 ppb		98
24) Vinyl Acetate	4.73	87	54440	8.93575 ppb		95
25) Ethyl tert Butyl Ether	5.24	59	102883	8.13181 ppb		97
26) MEK (2-Butanone)	5.43	43	18624	8.90056 ppb		100
27) Cis-1,2-DCE	5.34	96	72548	8.82423 ppb		95
28) 2,2-Dichloropropane	5.32	77	52273	11.14531 ppb		95
29) Chloroform	5.77	83	128388	9.41168 ppb		94
30) Bromochloromethane	5.64	128	38440	9.76986 ppb		79
32) 1,1,1-TCA	5.97	97	85001	9.47731 ppb		97
33) Cyclohexane	6.04	41	27292	8.18052 ppb		97
34) 1,1-Dichloropropene	6.18	75	69140	8.76251 ppb		93
35) 2,2,4-Trimethylpentane	6.56	57	111459	10.67541 ppb		100
37) Carbon Tetrachloride	6.17	117	86062	9.81153 ppb		90
38) Tert Amyl Methyl Ether	6.61	73	117793	8.44144 ppb		98
39) 1,2-DCA	6.43	62	76395	8.77081 ppb		100
40) Benzene	6.41	78	248623	8.84183 ppb		100
41) TCE	7.16	95	69991	8.79965 ppb		98
42) 2-Pentanone	7.39	43	425179	119.51797 ppb		99

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

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	76469	9.15161 ppb	98
44) Bromodichloromethane	7.69	83	96075	9.29785 ppb	99
45) Methyl Cyclohexane	7.37	83	65290	9.78256 ppb	89
46) Dibromomethane	7.50	93	40638	9.20333 ppb	94
48) MIBK (methyl isobutyl ket	8.35	43	22432	8.29666 ppb	97
49) 1-Bromo-2-chloroethane	8.00	63	47544	8.71505 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	102786	9.33534 ppb	95
51) Toluene	8.51	91	298093	9.03655 ppb	99
52) Trans-1,3-Dichloropropene	8.74	75	88369	9.57375 ppb	98
53) 1,1,2-TCA	8.92	83	53642	9.11737 ppb	98
54) 2-Hexanone	9.20	43	27517	9.08221 ppb	95
57) 1,2-EDB	9.41	107	60311	9.58966 ppb	99
58) Tetrachloroethene	9.07	166	84527	9.45192 ppb	96
59) 1-Chlorohexane	9.92	91	86259	9.10850 ppb	97
60) 1,1,1,2-Tetrachloroethane	10.00	131	82859	9.79207 ppb	98
61) m&p-Xylene	10.16	106	274798	18.96352 ppb	95
62) o-Xylene	10.55	106	130605	9.07137 ppb	95
63) Styrene	10.56	104	227212	9.38991 ppb	96
65) 1,3-Dichloropropane	9.08	76	98940	8.81447 ppb	93
66) Dibromochloromethane	9.31	129	77123	9.59556 ppb	96
67) Chlorobenzene	9.92	112	221715	9.23229 ppb	99
68) Ethylbenzene	10.04	91	345872	9.21165 ppb	99
69) Bromoform	10.73	173	51195	9.55415 ppb	92
71) Isopropylbenzene	10.92	105	329772	8.85851 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	76375	9.45795 ppb	97
73) 1,2,3-Trichloropropane	11.24	110	21716	8.46740 ppb	96
74) t-1,4-Dichloro-2-Butene	11.26	53	14083	9.07366 ppb	91
75) Bromobenzene	11.21	156	107715	8.99243 ppb	98
76) n-Propylbenzene	11.33	91	417619	9.20675 ppb	99
77) 4-Ethyltoluene	11.45	105	248440	9.58758 ppb	100
78) 2-Chlorotoluene	11.41	91	284530	9.06298 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	308242	9.33478 ppb	99
80) 4-Chlorotoluene	11.51	91	299480	9.11674 ppb	100
81) Tert-Butylbenzene	11.83	119	260511	9.09554 ppb	98
82) 1,2,4-Trimethylbenzene	11.88	105	307414	9.20336 ppb	99
83) Sec-Butylbenzene	12.05	105	369141	9.37997 ppb	96
84) p-Isopropyltoluene	12.20	119	322515	9.44873 ppb	98
85) Benzyl Chloride	12.37	91	120705	12.18112 ppb	98
86) 1,3-DCB	12.15	146	211093	9.02434 ppb	97
87) 1,4-DCB	12.23	146	214236	9.15260 ppb	98
88) n-Butylbenzene	12.61	91	277441	9.53166 ppb	99
89) 1,2-DCB	12.60	146	193280	8.94124 ppb	99
90) Hexachloroethane	12.87	117	58525	9.64492 ppb	99
91) 1,2-Dibromo-3-chloropropan	13.37	157	15734	9.89452 ppb	91
92) 1,2,4-Trichlorobenzene	14.21	180	88728	9.56777 ppb	98
93) Hexachlorobutadiene	14.40	223	39521	9.95621 ppb	87
94) Naphthalene	14.45	128	222363	9.16980 ppb	100
95) 1,2,3-Trichlorobenzene	14.69	180	125663	9.59809 ppb	97

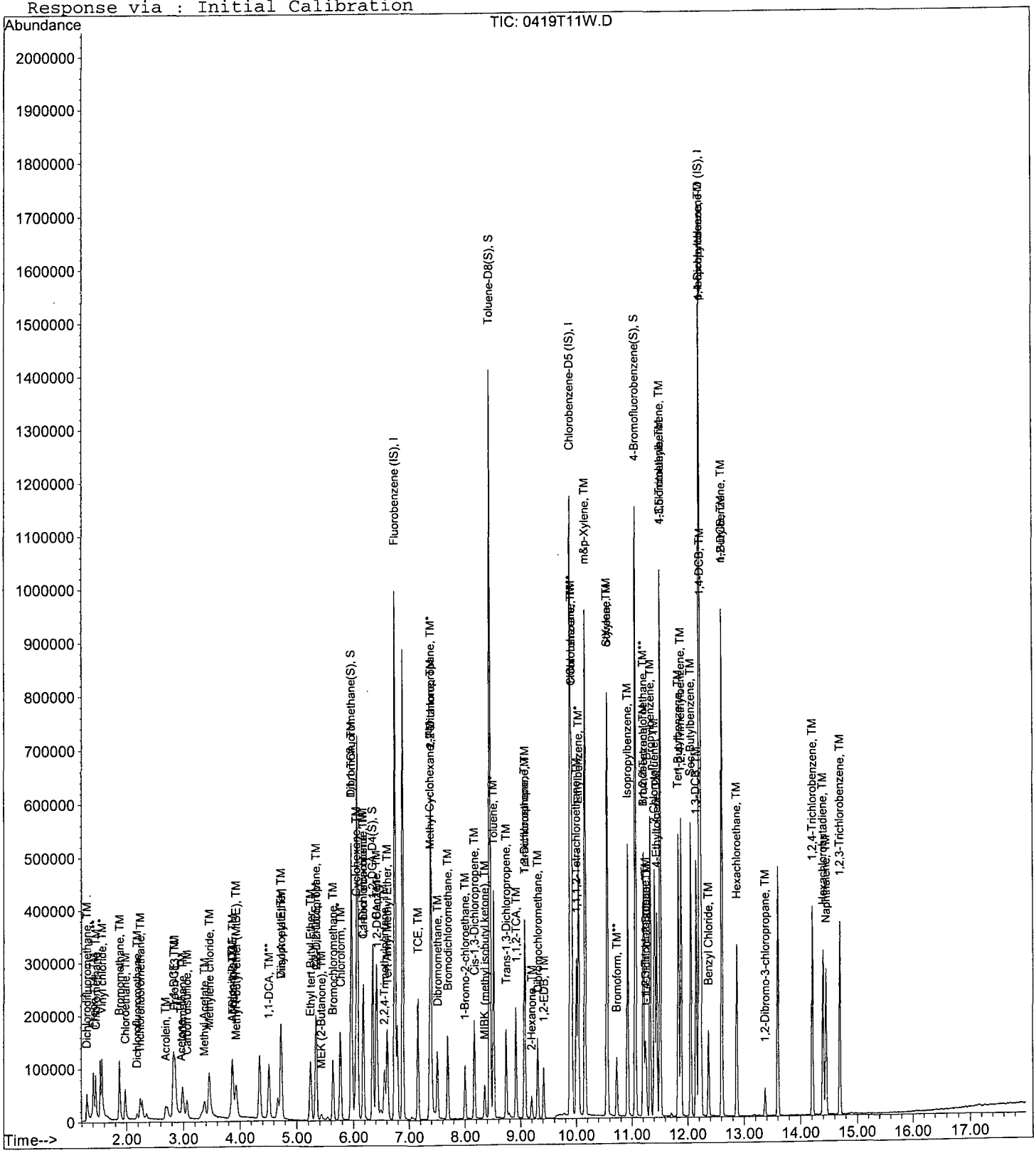
(#) = qualifier out of range (m) = manual integration

Data File : M:\THOR\DATA\T120411\0419T11W.D
Acq On : 19 Apr 12 9:45
Sample : 10ug/L Vol Std 04-19-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

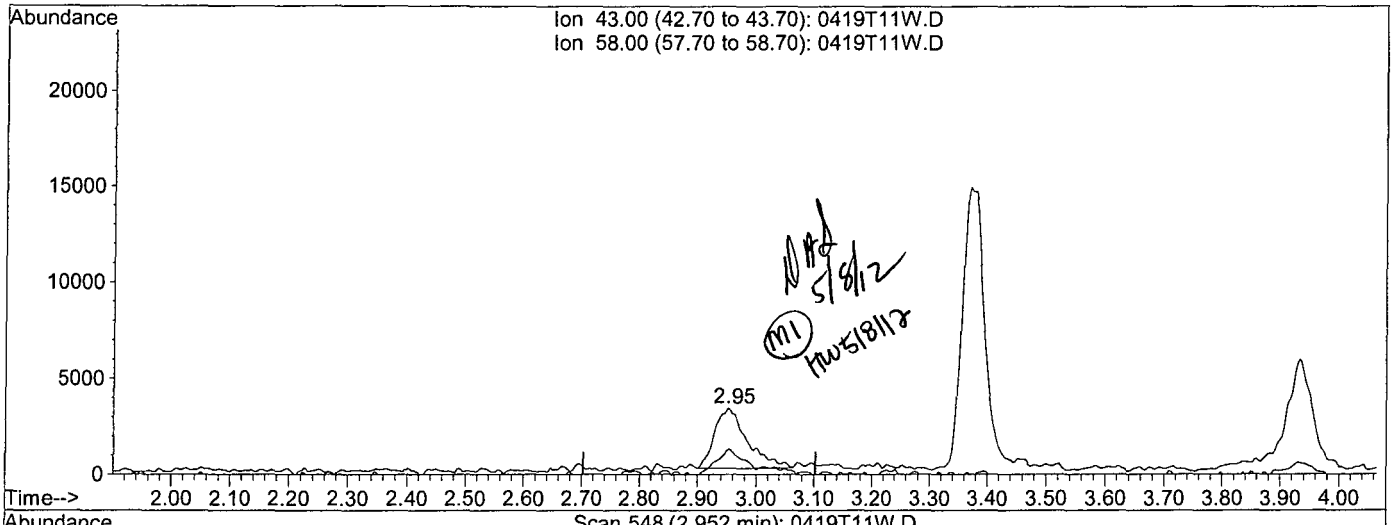
Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration

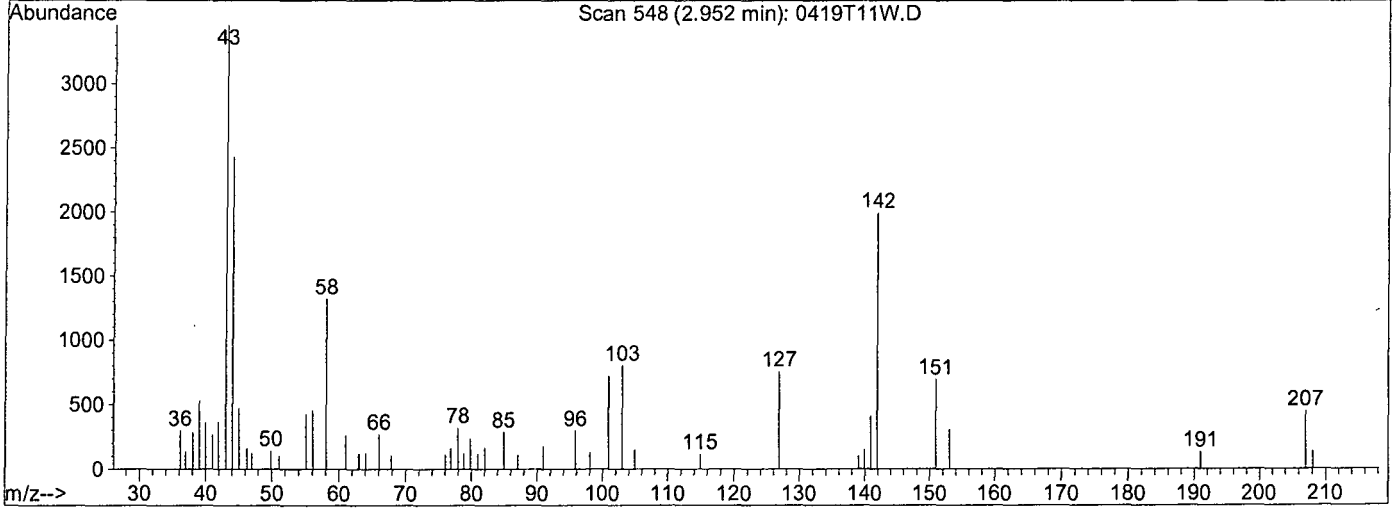


Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00
Quant Time: May 8 14:38 2012 Quant Results File: temp.res

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Multiple Level Calibration





TIC: 0419T11W.D

(11) Acetone (TM)

2.95min 6.7290ppb

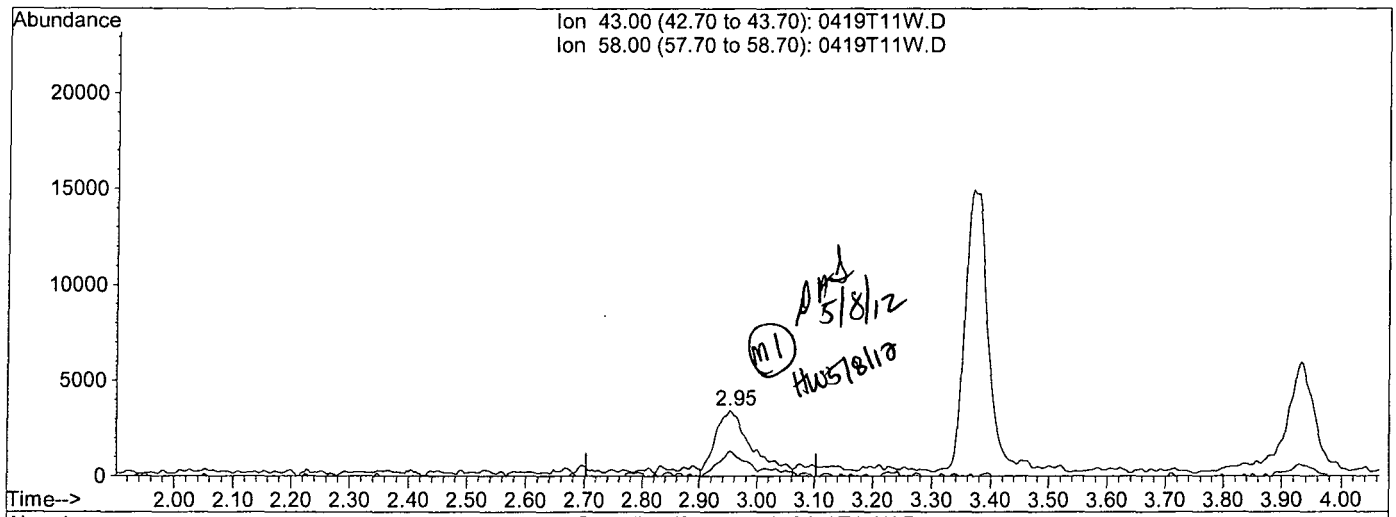
response 12262

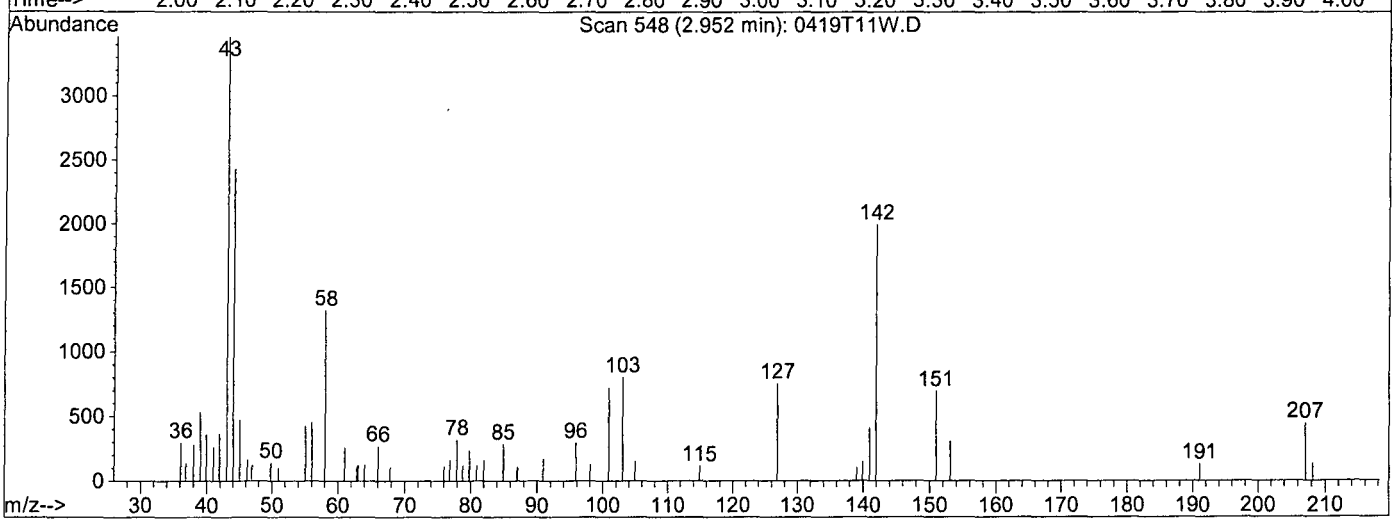
Ion	Exp%	Act%
43.00	100	100
58.00	37.80	42.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00
Quant Time: May 8 14:39 2012 Quant Results File: temp.res

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Multiple Level Calibration





TIC: 0419T11W.D

(11) Acetone (TM)

2.95min 8.8726ppb m

response 15349

Ion	Exp%	Act%
43.00	100	100
58.00	37.80	38.26
0.00	0.00	0.00
0.00	0.00	0.00

EPA METHOD 8260B
Volatile Organic Compounds
Raw Data

APPL, INC.

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120418W-59184 - 166402**
Batch ID: #86RHB-120418AC

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	04/18/12	04/18/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/18/12	04/18/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/18/12	04/18/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/18/12	04/18/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/18/12	04/18/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/18/12	04/18/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/18/12	04/18/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/18/12	04/18/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/18/12	04/18/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/18/12	04/18/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/18/12	04/18/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/18/12	04/18/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/18/12	04/18/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/18/12	04/18/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/18/12	04/18/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/18/12	04/18/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C10
Instrument: Chico
Sequence: C120410
Initials: ARS

Printed: 05/01/12 5:21:59 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120418W-59184 - 166402**
Batch ID: #86RHB-120418AC

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	04/18/12	04/18/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/18/12	04/18/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/18/12	04/18/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/18/12	04/18/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/18/12	04/18/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/18/12	04/18/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/18/12	04/18/12
BLANK	SURROGATE: 1,2-DICHLOROET	96.3	70-120			%	04/18/12	04/18/12
BLANK	SURROGATE: 4-BROMOFLUORO	101	75-120			%	04/18/12	04/18/12
BLANK	SURROGATE: DIBROMOFLUOR	100	85-115			%	04/18/12	04/18/12
BLANK	SURROGATE: TOLUENE-D8 (S)	93.4	85-120			%	04/18/12	04/18/12

Quant Method: CALLW3.M
Run #: 0418C10
Instrument: Chico
Sequence: C120410
Initials: ARS

Printed: 05/01/12 5:21:59 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C10W.D Vial: 1
Acq On : 18 Apr 12 17:20 Operator: SV
Sample : 120418A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:19 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	96	640057	25.00000 ppb	-0.04
54) Chlorobenzene-D5 (IS)	18.00	117	467968	25.00000 ppb	-0.04
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	210496	25.00000 ppb	-0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	390814	20.95868 ppb	-0.04
Spiked Amount 20.866			Recovery = 100.447%		
37) 1,2-DCA-D4(S)	12.20	65	299077	20.25652 ppb	-0.04
Spiked Amount 21.039			Recovery = 96.283%		
55) Toluene-D8(S)	15.47	98	1352589	23.68794 ppb	-0.04
Spiked Amount 25.355			Recovery = 93.425%		
63) 4-Bromofluorobenzene(S)	20.07	95	638380	27.25480 ppb	-0.03
Spiked Amount 27.007			Recovery = 100.918%		

Target Compounds Qvalue

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

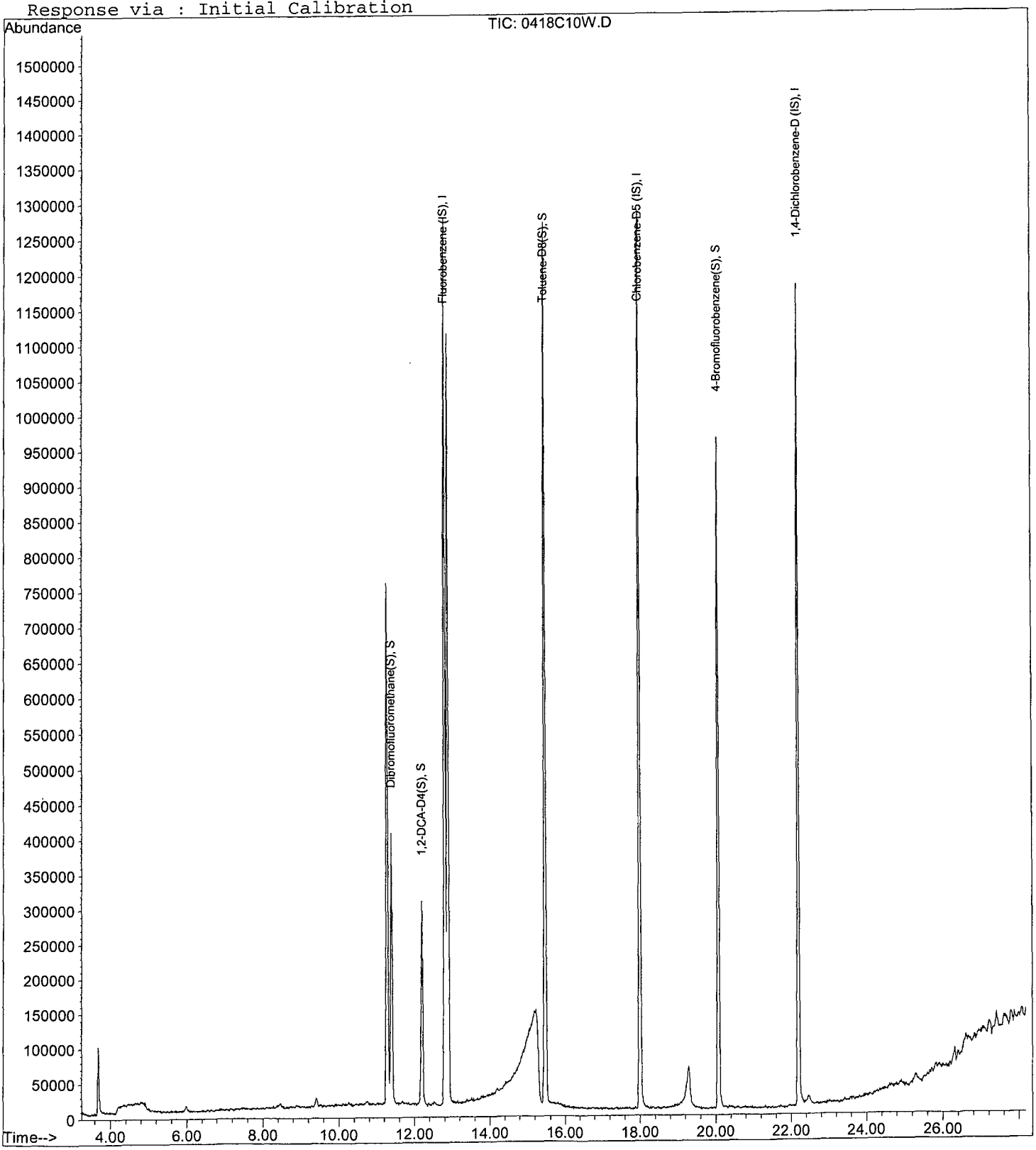
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C10W.D
Acq On : 18 Apr 12 17:20
Sample : 120418A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 19 11:19 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C10W.D Vial: 1
Acq On : 18 Apr 12 17:20 Operator: SV
Sample : 120418A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 19 11:12 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1262483	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.00	TIC	1277666	25.00000	ppb	0.02
4) 1,4-Dichlorobenzene-D (IS)	22.20	TIC	1171131	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24725600m	33.24123	ppb	ND 100

No gasoline pattern
ARS 5/1/12

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

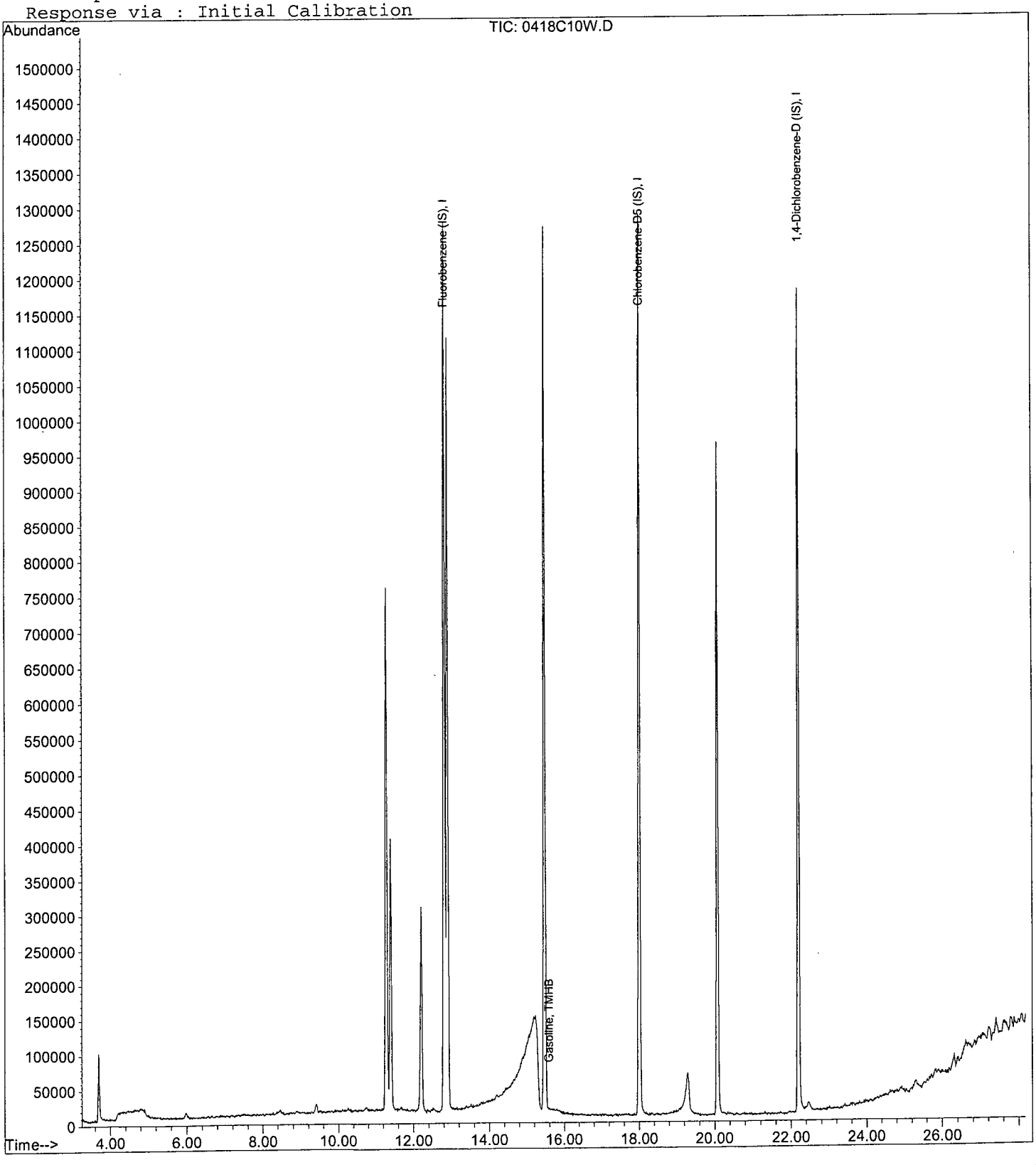
Quantitation Report

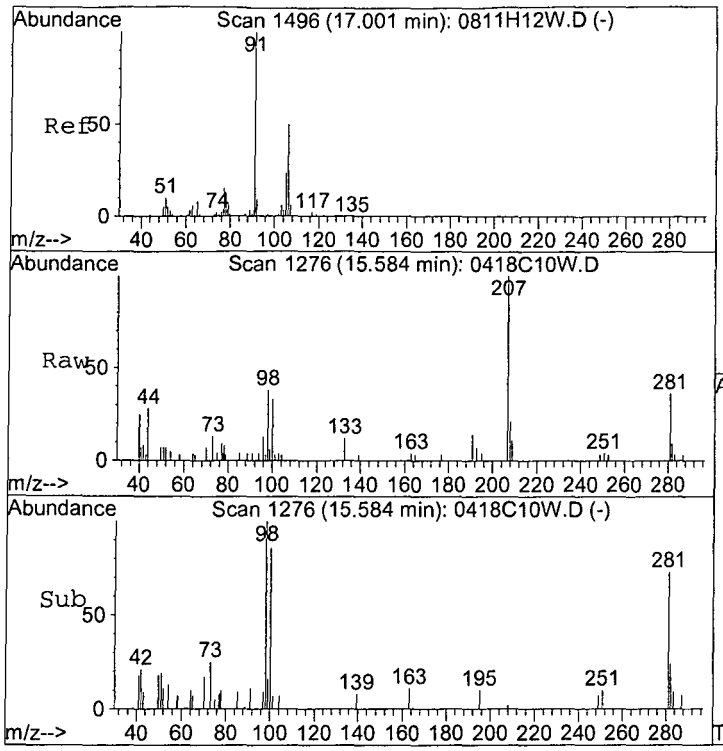
Data File : M:\CHICO\DATA\C120410\0418C10W.D
Acq On : 18 Apr 12 17:20
Sample : 120418A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 19 11:12 2012 Quant Results File: CGAS.RES

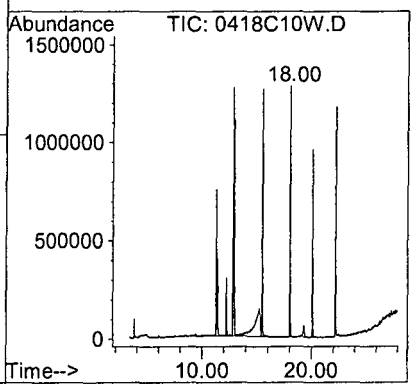
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 33.24123 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0418C10W.D
Acq: 18 Apr 12 17:20

Tgt Ion:TIC Resp:24725600



Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 5:21:59 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	SURROGATE: 1,2-DICHLOROET	105	70-120			%	04/19/12	04/19/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.2	75-120			%	04/19/12	04/19/12
BLANK	SURROGATE: DIBROMOFLUOR	104	85-115			%	04/19/12	04/19/12
BLANK	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 5:21:59 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T17W.D Vial: 7
Acq On : 19 Apr 12 12:32 Operator: DG,RS,HW,ARS,SV
Sample : 120419A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:30 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	474432	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	395840	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	232000	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	245593	31.04369 ppb	0.00
Spiked Amount 29.720			Recovery = 104.454%		
36) 1,2-DCA-D4(S)	6.34	65	223389	30.95777 ppb	0.00
Spiked Amount 29.608			Recovery = 104.560%		
56) Toluene-D8(S)	8.44	98	845144	32.00098 ppb	0.00
Spiked Amount 31.981			Recovery = 100.064%		
64) 4-Bromofluorobenzene(S)	11.06	95	308916	28.23855 ppb	0.00
Spiked Amount 29.353			Recovery = 96.205%		

Target Compounds Qvalue

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

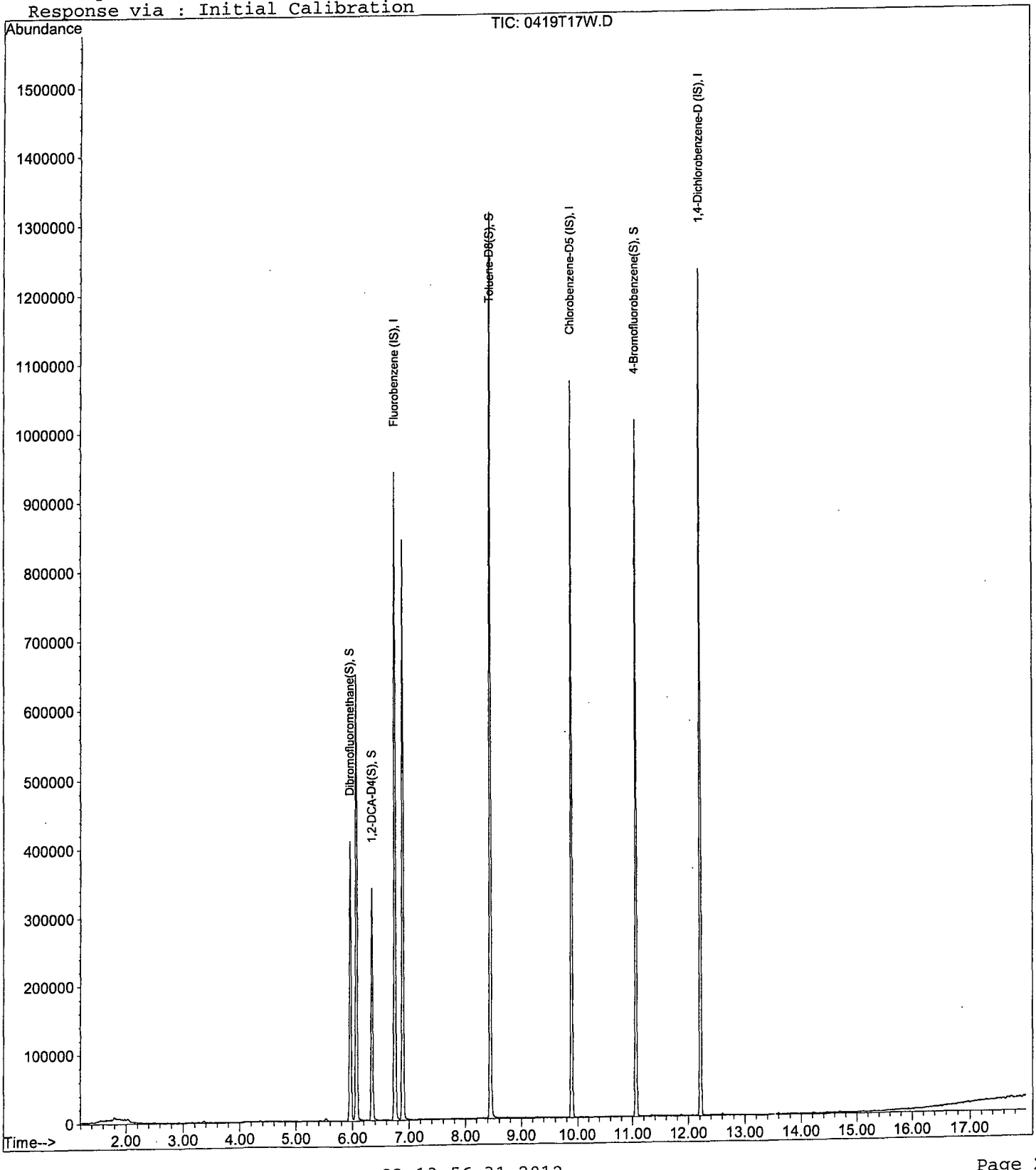
Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T17W.D
Acq On : 19 Apr 12 12:32
Sample : 120419A BLK-1WT
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 7
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 20 10:30 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C09W.D Vial: 1
Acq On : 19 Apr 12 11:44 Operator: SV
Sample : 120419A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1323975	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	17.99	TIC	1379507	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1323331	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24653554m	22.14838	ppb	ND 100

No gasoline pattern detected.
ARS 5/1/12

(#) = qualifier out of range (m) = manual integration
0419C09W.D CGAS.M Tue May 01 14:04:51 2012 Page 1

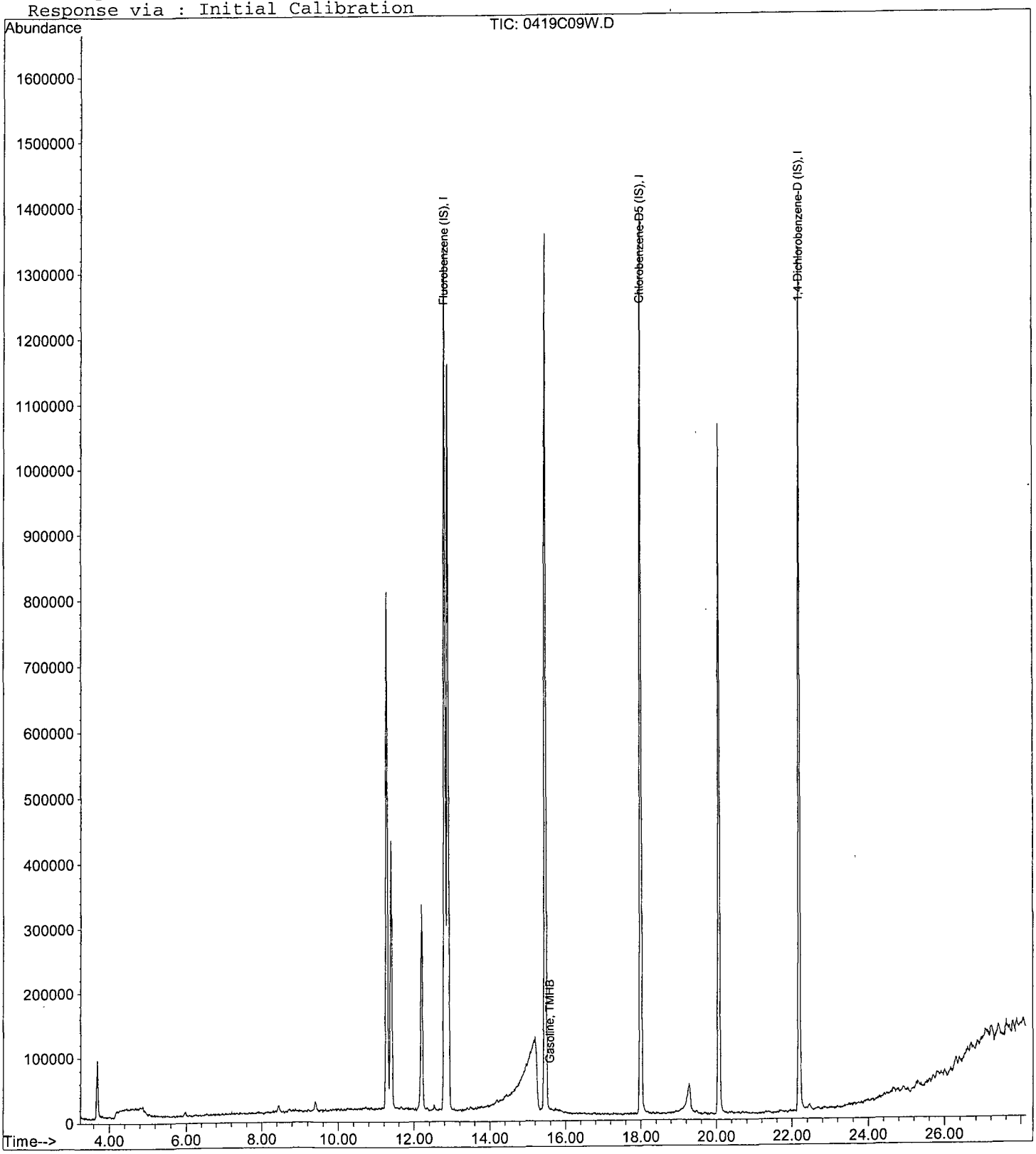
Quantitation Report

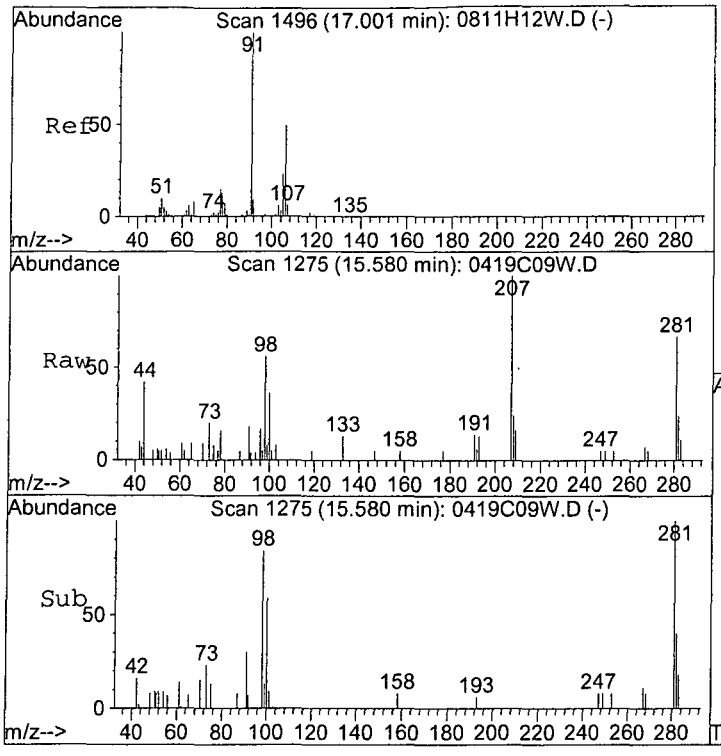
Data File : M:\CHICO\DATA\C120410\0419C09W.D
Acq On : 19 Apr 12 11:44
Sample : 120419A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

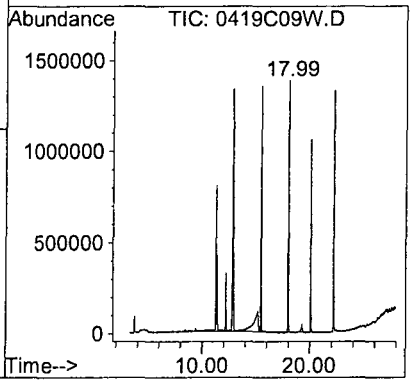
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 22.14838 ppb m
RT: 15.58 min Scan# 1275
Delta R.T. 0.00 min
Lab File: 0419C09W.D
Acq: 19 Apr 12 11:44

Tgt Ion:TIC Resp:24653554



Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120418W-59184 LCS - 166402**
Batch ID: #86RHB-120418AC

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	9.06	90.6	80-130
1,1,1-TRICHLOROETHANE	10.00	9.15	91.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.65	96.5	65-130
1,1,2-TRICHLOROETHANE	10.00	9.49	94.9	75-125
1,1-DICHLOROETHANE	10.00	9.34	93.4	70-135
1,1-DICHLOROETHENE	10.00	8.63	86.3	70-130
1,2,3-TRICHLOROPROPANE	10.00	8.57	85.7	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.67	96.7	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	7.60	76.0	50-130
1,2-DIBROMOETHANE	10.00	9.04	90.4	70-130
1,2-DICHLOROBENZENE	10.00	9.70	97.0	70-120
1,2-DICHLOROETHANE	10.00	9.10	91.0	70-130
1,2-DICHLOROPROPANE	10.00	9.44	94.4	75-125
1,3-DICHLOROBENZENE	10.00	9.86	98.6	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	18.8	94.0	70-130
1,4-DICHLOROBENZENE	10.00	9.47	94.7	75-125
2-BUTANONE	10.00	8.34	83.4	30-150
4-METHYL-2-PENTANONE	10.00	10.5	105	60-135
ACETONE	10.00	9.15	91.5	40-140
BENZENE	10.00	9.07	90.7	80-120
BROMODICHLOROMETHANE	10.00	9.53	95.3	75-120
BROMOFORM	10.00	8.64	86.4	70-130
BROMOMETHANE	10.00	9.53	95.3	30-145
CARBON TETRACHLORIDE	10.00	8.97	89.7	65-140
CHLOROBENZENE	10.00	9.42	94.2	80-120
CHLORODIBROMOMETHANE	10.00	8.98	89.8	60-135
CHLOROETHANE	10.00	8.93	89.3	60-135
CHLOROFORM	10.00	9.40	94.0	65-135
CHLOROMETHANE	10.00	10.2	102	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.85	98.5	70-125
ETHYLBENZENE	10.00	9.18	91.8	75-125

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/18/12
Analysis Date :	04/18/12
Instrument :	Chico
Run :	0418C04
Initials :	ARS

Comments: _____

Printed: 05/01/12 5:21:43 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120418W-59184 LCS - 166402**
Batch ID: #86RHB-120418AC

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	286	95.3	75-125
HEXACHLOROBUTADIENE	10.00	9.18	91.8	50-140
METHYL TERT-BUTYL ETHER	10.00	9.21	92.1	65-125
METHYLENE CHLORIDE	10.00	9.56	95.6	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.02	90.2	45-150
TOLUENE	10.00	9.59	95.9	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.17	91.7	60-140
TRICHLOROETHENE	10.00	9.43	94.3	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	28.0	93.3	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	19.3	91.7	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.0	26.8	99.2	75-120
SURROGATE: DIBROMOFLUOROMETH	20.9	21.0	101	85-115
SURROGATE: TOLUENE-D8 (S)	25.4	23.9	94.3	85-120

Comments: _____

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/18/12
Analysis Date :	04/18/12
Instrument :	Chico
Run :	0418C04
Initials :	ARS

Printed: 05/01/12 5:21:43 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C04W.D Vial: 1
Acq On : 18 Apr 12 11:18 Operator: SV
Sample : 120418A LCS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:43 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.80	96	650996	25.00000 ppb		-0.06
54) Chlorobenzene-D5 (IS)	17.99	117	518080	25.00000 ppb		-0.05
70) 1,4-Dichlorobenzene-D (IS)	22.19	152	232832	25.00000 ppb		-0.04
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.38	111	398577	21.01582 ppb		-0.06
Spiked Amount 20.866			Recovery = 100.720%			
37) 1,2-DCA-D4(S)	12.19	65	289552	19.28185 ppb		-0.05
Spiked Amount 21.039			Recovery = 91.649%			
55) Toluene-D8(S)	15.46	98	1509444	23.87799 ppb		-0.05
Spiked Amount 25.355			Recovery = 94.174%			
63) 4-Bromofluorobenzene(S)	20.06	95	693865	26.75827 ppb		-0.04
Spiked Amount 27.007			Recovery = 99.078%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.09	85	164136	7.74996 ppb		96
3) Freon 114	4.34	85	74162	9.09106 ppb		83
4) Chloromethane	4.57	52	93193	10.23338 ppb		98
5) Vinyl chloride	4.84	62	62312	10.29389 ppb		99
6) Bromomethane	5.73	94	39704	9.53482 ppb		97
7) Chloroethane	5.91	64	46199	8.92631 ppb		100
8) Dichlorofluoromethane	6.00	67	380018	9.85134 ppb		96
9) Trichlorofluoromethane	6.52	103	39888	8.74601 ppb		95
10) Acetonitrile	7.64	41	155843	134.32440 ug/l		100
11) Acrolein	7.14	56	138831	111.39723 ppb		95
12) Acetone	7.26	43	22817	9.14583 ppb	#	61
13) Freon-113	7.44	101	127297	9.38872 ppb		98
14) 1,1-DCE	7.66	96	117565	8.63323 ppb		99
15) t-Butanol	7.74	59	64108	120.19878 ppb	#	87
16) Methyl Acetate	8.17	43	82203	9.49178 ppb		100
17) Iodomethane	8.14	142	178665	8.94948 ppb		96
18) Acrylonitrile	8.54	53	31047	9.21809 ppb		91
19) Methylene chloride	8.45	84	160102	9.55794 ppb		88
20) Carbon disulfide	8.54	76	51720	8.69328 ppb		100
21) Methyl t-butyl ether (MtBE	8.87	73	322232	9.21406 ppb		98
22) Trans-1,2-DCE	9.07	96	146315	9.17226 ppb		98
23) Diisopropyl Ether	9.72	45	658710	9.44783 ppb		99
24) 1,1-DCA	9.76	63	342824	9.34413 ppb		100
25) Vinyl Acetate	9.39	43	42856	9.38825 ppb		98
26) Ethyl tert Butyl Ether	10.42	59	485199	9.41555 ppb		97
27) MEK (2-Butanone)	10.41	43	17704	8.33570 ppb		90
28) Cis-1,2-DCE	10.79	96	195035	9.85191 ppb		95
29) 2,2-Dichloropropane	10.78	77	241481	9.73800 ppb		98
30) Chloroform	11.06	85	192834	9.40041 ppb		97
31) Bromochloromethane	11.28	128	77138	9.24105 ppb		87
33) 1,1,1-TCA	11.80	97	229242	9.14513 ppb		98
34) Cyclohexane	11.97	56	190447	8.87928 ppb		96
35) 1,1-Dichloropropene	12.07	75	200756	9.16469 ppb		98
36) 2,2,4-Trimethylpentane	12.14	57	456260	10.73243 ppb		96
38) Carbon Tetrachloride	12.27	117	196031	8.97326 ppb		98
39) Tert Amyl Methyl Ether	12.31	73	373383	9.20287 ppb		98
40) 1,2-DCA	12.34	62	152939	9.09943 ppb		97
41) Benzene	12.46	78	666078	9.06808 ppb		99
42) TCE	13.49	95	166627	9.42985 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C04W.D Vial: 1
Acq On : 18 Apr 12 11:18 Operator: SV
Sample : 120418A LCS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:43 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.16	43	786862	120.05511	ppb		100
44)	1,2-Dichloropropane	13.73	63	205110	9.44039	ppb		99
45)	Bromodichloromethane	14.07	83	200783	9.53321	ppb		94
46)	Methyl Cyclohexane	13.77	83	171962	9.48546	ppb		100
47)	Dibromomethane	14.13	93	78965	9.28413	ppb		94
48)	2-Chloroethyl vinyl ether	14.53	63	71800	9.73103	ppb		98
49)	1-Bromo-2-chloroethane	14.84	63	178446	9.01566	ppb		99
50)	Cis-1,3-Dichloropropene	14.96	75	265286	9.26012	ppb		99
51)	Toluene	15.59	91	687237	9.58906	ppb		99
52)	Trans-1,3-Dichloropropene	15.76	75	193918	9.49181	ppb		99
53)	1,1,2-TCA	16.04	83	97929	9.49346	ppb		98
56)	1,2-EDB	17.28	107	108450	9.04045	ppb		97
57)	Tetrachloroethene	16.74	164	131708	9.01996	ppb		95
58)	1-Chlorohexane	17.65	91	256737	9.44677	ppb		97
59)	1,1,1,2-Tetrachloroethane	18.11	131	178911	9.05602	ppb		95
60)	m&p-Xylene	18.31	106	659023	18.62809	ppb		95
61)	o-Xylene	19.06	106	344238	9.33903	ppb		97
62)	Styrene	19.08	104	550369	9.45869	ppb		99
64)	2-Hexanone	16.07	43	48292	8.54864	ppb		98
65)	1,3-Dichloropropane	16.44	76	200082	8.61292	ppb		93
66)	Dibromochloromethane	16.93	129	141272	8.97535	ppb		99
67)	Chlorobenzene	18.05	112	516629	9.41677	ppb		97
68)	Ethylbenzene	18.17	91	802676	9.17925	ppb		98
69)	Bromoform	19.59	173	60674	8.64224	ppb		100
71)	MIBK (methyl isobutyl keto	14.64	43	89655	10.46172	ppb		98
72)	Isopropylbenzene	19.68	105	840230	9.74761	ppb		100
73)	1,1,2,2-Tetrachloroethane	19.84	83	116968	9.64535	ppb		97
74)	1,2,3-Trichloropropane	20.10	110	11015	8.56943	ppb	#	77
75)	t-1,4-Dichloro-2-Butene	20.17	53	26110	9.33075	ppb		97
76)	Bromobenzene	20.42	156	194924	9.32707	ppb		97
77)	n-Propylbenzene	20.39	91	988511	9.80729	ppb		99
78)	4-Ethyltoluene	20.58	105	573460	9.64870	ppb		99
79)	2-Chlorotoluene	20.68	91	628506	9.48853	ppb		96
80)	1,3,5-Trimethylbenzene	20.66	105	681630	9.57086	ppb		99
81)	4-Chlorotoluene	20.76	91	566781	9.48975	ppb		100
82)	Tert-Butylbenzene	21.30	119	765617	9.48074	ppb		97
83)	1,2,4-Trimethylbenzene	21.36	105	704137	9.79865	ppb		100
84)	Sec-Butylbenzene	21.70	105	942768	9.70333	ppb		98
85)	p-Isopropyltoluene	21.94	119	792687	9.56150	ppb		99
86)	Benzyl Chloride	22.37	91	195140	9.98859	ppb		97
87)	1,3-DCB	22.07	146	417477	9.86013	ppb		99
88)	1,4-DCB	22.24	146	388378	9.46907	ppb		99
89)	Hexachloroethane	23.54	117	174112	10.42641	ppb		96
90)	n-Butylbenzene	22.65	91	677114	9.99426	ppb		97
91)	1,2-DCB	22.88	146	359290	9.70059	ppb		100
92)	1,2-Dibromo-3-chloropropan	24.10	155	13055	7.59576	ppb		78
93)	1,2,4-Trichlorobenzene	25.54	180	91583	9.66942	ppb		97
94)	Hexachlorobutadiene	25.79	223	91641	9.18234	ppb		96
95)	Naphthalene	25.89	128	396310	8.93984	ppb		97
96)	1,2,3-Trichlorobenzene	26.24	180	77954	9.36624	ppb		97

1,3-dichloropropene, total 18.75/93 ppb

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

Quantitation Report

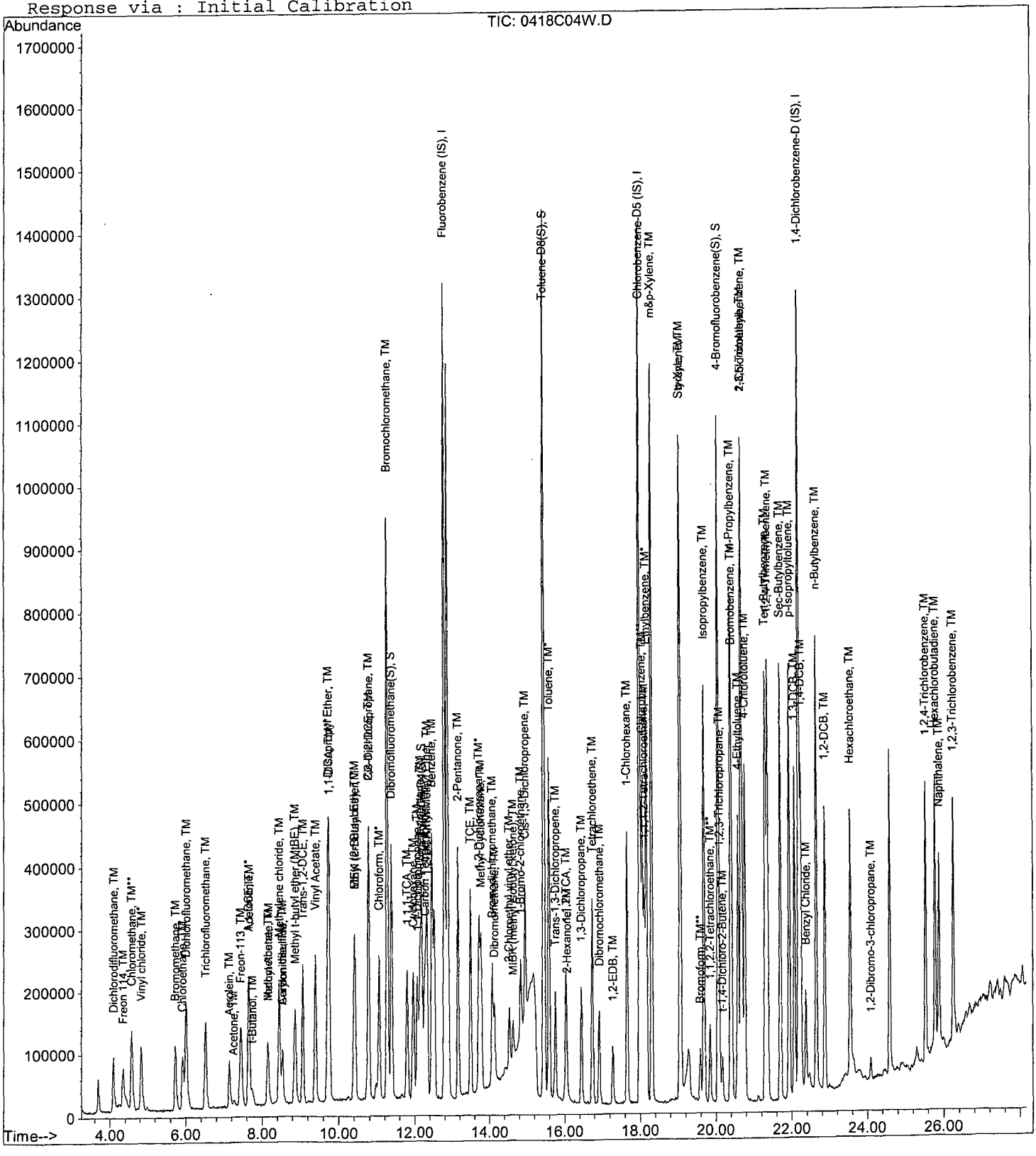
Data File : M:\CHICO\DATA\C120410\0418C04W.D
Acq On : 18 Apr 12 11:18
Sample : 120418A LCS-1WC
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 18 11:43 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Wed Apr 11 14:32:33 2012
Response via : Initial Calibration



381

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0418C02W.D Vial: 1
Acq On : 18 Apr 12 10:04 Operator: SV
Sample : LCS gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 18 11:18 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1243671	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	17.99	TIC	1374752	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1342497	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	51632977m	285.60198	ppb	100

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

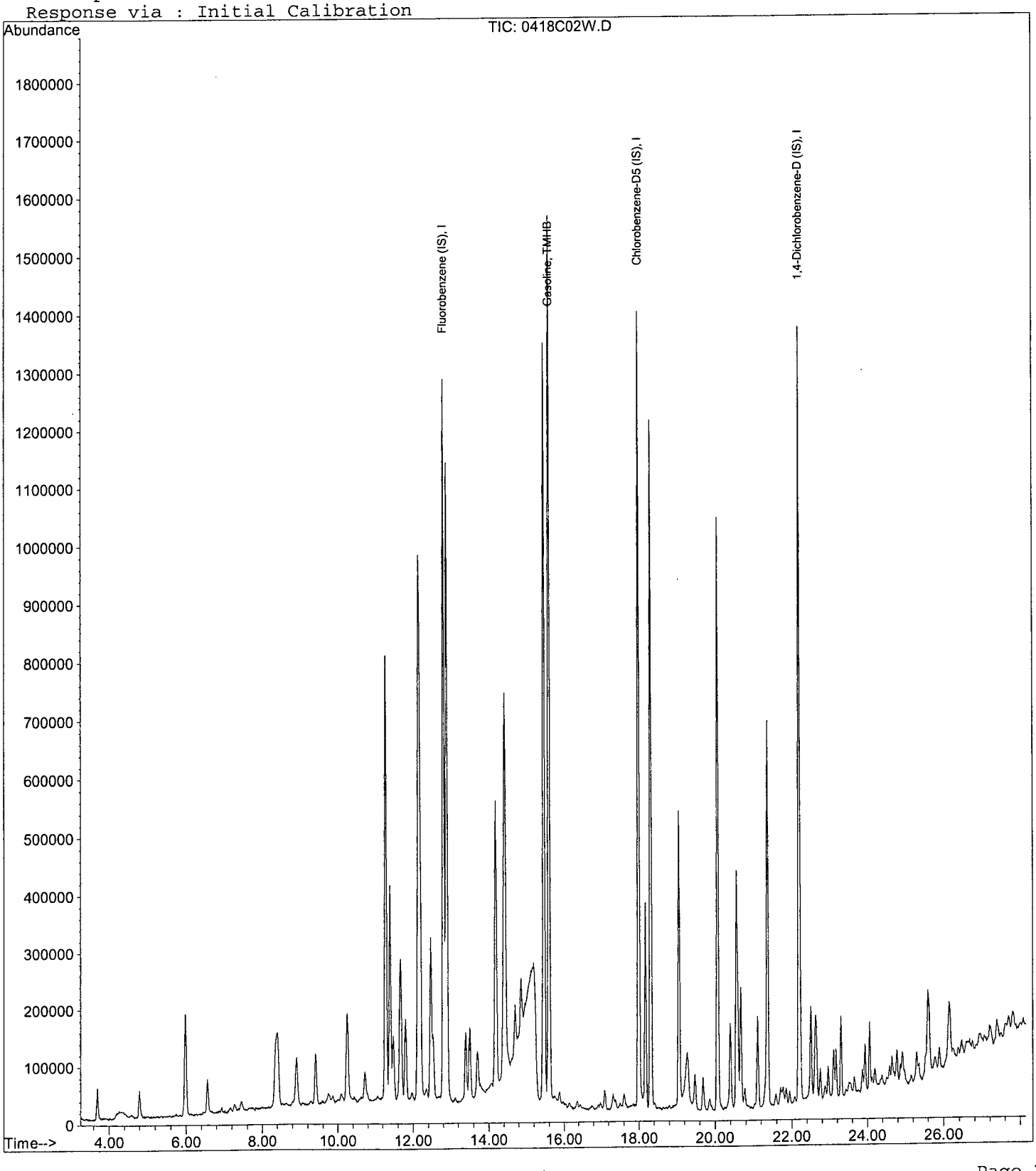
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0418C02W.D
Acq On : 18 Apr 12 10:04
Sample : LCS gas 300ug/L
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: Apr 18 11:18 2012 Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

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	10.1	101	80-130
1,1,1-TRICHLOROETHANE	10.00	9.60	96.0	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.8	108	65-130
1,1,2-TRICHLOROETHANE	10.00	9.92	99.2	75-125
1,1-DICHLOROETHANE	10.00	9.14	91.4	70-135
1,1-DICHLOROETHENE	10.00	9.29	92.9	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.79	97.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.71	97.1	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	11.3	113	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	9.35	93.5	70-120
1,2-DICHLOROETHANE	10.00	9.82	98.2	70-130
1,2-DICHLOROPROPANE	10.00	9.52	95.2	75-125
1,3-DICHLOROBENZENE	10.00	9.15	91.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	20.0	100	70-130
1,4-DICHLOROBENZENE	10.00	9.34	93.4	75-125
2-BUTANONE	10.00	10.1	101	30-150
4-METHYL-2-PENTANONE	10.00	9.58	95.8	60-135
ACETONE	10.00	9.60	96.0	40-140
BENZENE	10.00	9.34	93.4	80-120
BROMODICHLOROMETHANE	10.00	9.61	96.1	75-120
BROMOFORM	10.00	10.8	108	70-130
BROMOMETHANE	10.00	10.1	101	30-145
CARBON TETRACHLORIDE	10.00	9.67	96.7	65-140
CHLOROBENZENE	10.00	9.28	92.8	80-120
CHLORODIBROMOMETHANE	10.00	10.4	104	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	9.64	96.4	65-135
CHLOROMETHANE	10.00	9.78	97.8	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.40	94.0	70-125
ETHYLBENZENE	10.00	8.90	89.0	75-125

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Comments: _____

Printed: 05/01/12 5:21:43 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas, Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	338	113	75-125
HEXACHLOROBUTADIENE	10.00	9.29	92.9	50-140
METHYL TERT-BUTYL ETHER	10.00	9.25	92.5	65-125
METHYLENE CHLORIDE	10.00	8.48	84.8	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.58	95.8	45-150
TOLUENE	10.00	9.33	93.3	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.51	95.1	60-140
TRICHLOROETHENE	10.00	8.94	89.4	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	27.5	91.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	29.6	31.2	105	70-120
SURROGATE: 4-BROMOFLUOROBENZE	29.4	30.0	102	75-120
SURROGATE: DIBROMOFLUOROMETH	29.7	32.0	108	85-115
SURROGATE: TOLUENE-D8 (S)	32.0	31.6	98.8	85-120

Comments: _____

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Printed: 05/01/12 5:21:43 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0419T12W.D Vial: 2
Acq On : 19 Apr 12 10:13 Operator: DG,RS,HW,ARS,SV
Sample : 120419A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	439424	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	375360	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	233344	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	234443	31.99520 ppb		0.00
Spiked Amount 29.720			Recovery = 107.653%			
36) 1,2-DCA-D4(S)	6.34	65	208330	31.17094 ppb		0.00
Spiked Amount 29.608			Recovery = 105.279%			
56) Toluene-D8(S)	8.44	98	790791	31.57665 ppb		0.00
Spiked Amount 31.981			Recovery = 98.738%			
64) 4-Bromofluorobenzene(S)	11.06	95	311312	30.01024 ppb		0.00
Spiked Amount 29.353			Recovery = 102.239%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	56966	10.76508 ppb		100
3) Freon 114	1.42	85	36271	9.49815 ppb		96
4) Chloromethane	1.46	50	48860	9.78079 ppb		100
5) Vinyl chloride	1.57	62	86298	10.28461 ppb		99
6) Bromomethane	1.88	94	60602	10.05382 ppb		97
7) Chloroethane	1.98	64	48195	10.32698 ppb		95
8) Dichlorofluoromethane	2.19	67	6033	6.66903 ppb		87
9) Trichlorofluoromethane	2.25	101	24698	8.94042 ppb		88
10) Acrolein	2.70	55	35878	80.65851 ppb	#	62
11) Acetone	2.91	43	14435	9.59994 ppb		95
12) Freon-113	2.86	101	47145	10.65429 ppb		95
13) 1,1-DCE	2.83	61	68422	9.28820 ppb		97
14) t-Butanol	3.71	59	13687	118.84435 ppb		99
15) Methyl Acetate	3.36	43	42055	10.32788 ppb		98
16) Iodomethane	3.00	142	75890	9.74974 ppb		94
17) Acrylonitrile	3.83	52	13569	11.17628 ppb		90
18) Methylene chloride	3.46	84	20152	8.47878 ppb		93
19) Carbon disulfide	3.07	76	22488	8.69794 ppb		100
20) Methyl t-butyl ether (MtBE	3.93	73	74723	9.24864 ppb		97
21) Trans-1,2-DCE	3.88	96	47307	9.51363 ppb		94
22) Diisopropyl Ether	4.72	59	20092	9.33141 ppb		95
23) 1,1-DCA	4.52	63	99676	9.13956 ppb		95
24) Vinyl Acetate	4.72	87	50509	9.41709 ppb		84
25) Ethyl tert Butyl Ether	5.23	59	97609	8.76332 ppb		99
26) MEK (2-Butanone)	5.40	43	18626	10.12275 ppb		99
27) Cis-1,2-DCE	5.34	96	68005	9.39566 ppb		97
28) 2,2-Dichloropropane	5.33	77	45569	11.03619 ppb		99
29) Chloroform	5.77	83	115732	9.63676 ppb		97
30) Bromochloromethane	5.64	128	34254	9.88898 ppb		98
32) 1,1,1-TCA	5.97	97	75801	9.60000 ppb		96
33) Cyclohexane	6.04	41	25029	8.52166 ppb		91
34) 1,1-Dichloropropene	6.18	75	60279	8.67761 ppb		93
35) 2,2,4-Trimethylpentane	6.56	57	92107	10.02068 ppb		98
37) Carbon Tetrachloride	6.18	117	74701	9.67357 ppb		94
38) Tert Amyl Methyl Ether	6.60	73	113060	9.20325 ppb		99
39) 1,2-DCA	6.43	62	75306	9.82063 ppb		99
40) Benzene	6.42	78	231183	9.33882 ppb		99
41) TCE	7.16	95	62586	8.93790 ppb		97
42) 2-Pentanone	7.38	43	408121	130.31231 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0419T12W.D Vial: 2
Acq On : 19 Apr 12 10:13 Operator: DG,RS,HW,ARS,SV
Sample : 120419A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	70049	9.52246 ppb		97
44)	Bromodichloromethane	7.69	83	87410	9.60878 ppb		98
45)	Methyl Cyclohexane	7.37	83	55500	9.44570 ppb		95
46)	Dibromomethane	7.51	93	38726	9.96209 ppb		94
48)	MIBK (methyl isobutyl ket	8.34	43	22808	9.58203 ppb		99
49)	1-Bromo-2-chloroethane	8.00	63	46504	9.68277 ppb		97
50)	Cis-1,3-Dichloropropene	8.17	75	94950	9.79549 ppb		96
51)	Toluene	8.51	91	270905	9.32831 ppb		99
52)	Trans-1,3-Dichloropropene	8.74	75	83061	10.22149 ppb		96
53)	1,1,2-TCA	8.91	83	51385	9.92056 ppb		99
54)	2-Hexanone	9.19	43	24503	9.18639 ppb		93
57)	1,2-EDB	9.41	107	58015	10.33657 ppb		98
58)	Tetrachloroethene	9.07	166	76445	9.57862 ppb		97
59)	1-Chlorohexane	9.92	91	73855	8.73880 ppb		95
60)	1,1,1,2-Tetrachloroethane	10.00	131	76155	10.08469 ppb		100
61)	m&p-Xylene	10.16	106	238338	18.43012 ppb		98
62)	o-Xylene	10.55	106	116140	9.03909 ppb		96
63)	Styrene	10.56	104	204283	9.46001 ppb		98
65)	1,3-Dichloropropane	9.08	76	94757	9.45944 ppb		94
66)	Dibromochloromethane	9.31	129	74848	10.43509 ppb		99
67)	Chlorobenzene	9.92	112	198784	9.27525 ppb		97
68)	Ethylbenzene	10.04	91	298054	8.89502 ppb		98
69)	Bromoform	10.73	173	51435	10.75605 ppb		96
71)	Isopropylbenzene	10.92	105	286048	8.77145 ppb		99
72)	1,1,2,2-Tetrachloroethane	11.20	83	76317	10.78829 ppb		96
73)	1,2,3-Trichloropropane	11.24	110	22000	9.79216 ppb		92
74)	t-1,4-Dichloro-2-Butene	11.26	53	13845	10.18277 ppb		87
75)	Bromobenzene	11.21	156	100146	9.54377 ppb		98
76)	n-Propylbenzene	11.33	91	356974	8.98355 ppb		97
77)	4-Ethyltoluene	11.45	105	215636	9.49936 ppb		99
78)	2-Chlorotoluene	11.41	91	254004	9.23568 ppb		99
79)	1,3,5-Trimethylbenzene	11.51	105	264731	9.15171 ppb		98
80)	4-Chlorotoluene	11.51	91	264969	9.20772 ppb		99
81)	Tert-Butylbenzene	11.83	119	226943	9.04492 ppb		97
82)	1,2,4-Trimethylbenzene	11.88	105	268510	9.17633 ppb		99
83)	Sec-Butylbenzene	12.05	105	314837	9.13230 ppb		97
84)	p-Isopropyltoluene	12.20	119	271486	9.07938 ppb		98
85)	Benzyl Chloride	12.37	91	111655	12.86251 ppb		99
86)	1,3-DCB	12.15	146	187484	9.14937 ppb		99
87)	1,4-DCB	12.23	146	191603	9.34415 ppb		99
88)	n-Butylbenzene	12.61	91	228352	8.95546 ppb		99
89)	1,2-DCB	12.60	146	177046	9.34937 ppb		97
90)	Hexachloroethane	12.87	117	49433	9.29950 ppb		97
91)	1,2-Dibromo-3-chloropropan	13.37	157	15717	11.28264 ppb	#	82
92)	1,2,4-Trichlorobenzene	14.21	180	78896	9.71159 ppb		99
93)	Hexachlorobutadiene	14.40	223	32320	9.29443 ppb		85
94)	Naphthalene	14.45	128	203963	9.60139 ppb		100
95)	1,2,3-Trichlorobenzene	14.69	180	113934	9.93382 ppb		97

1,3-dichloropropene, total 20.01698 ppb
ARS 5/1/12

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

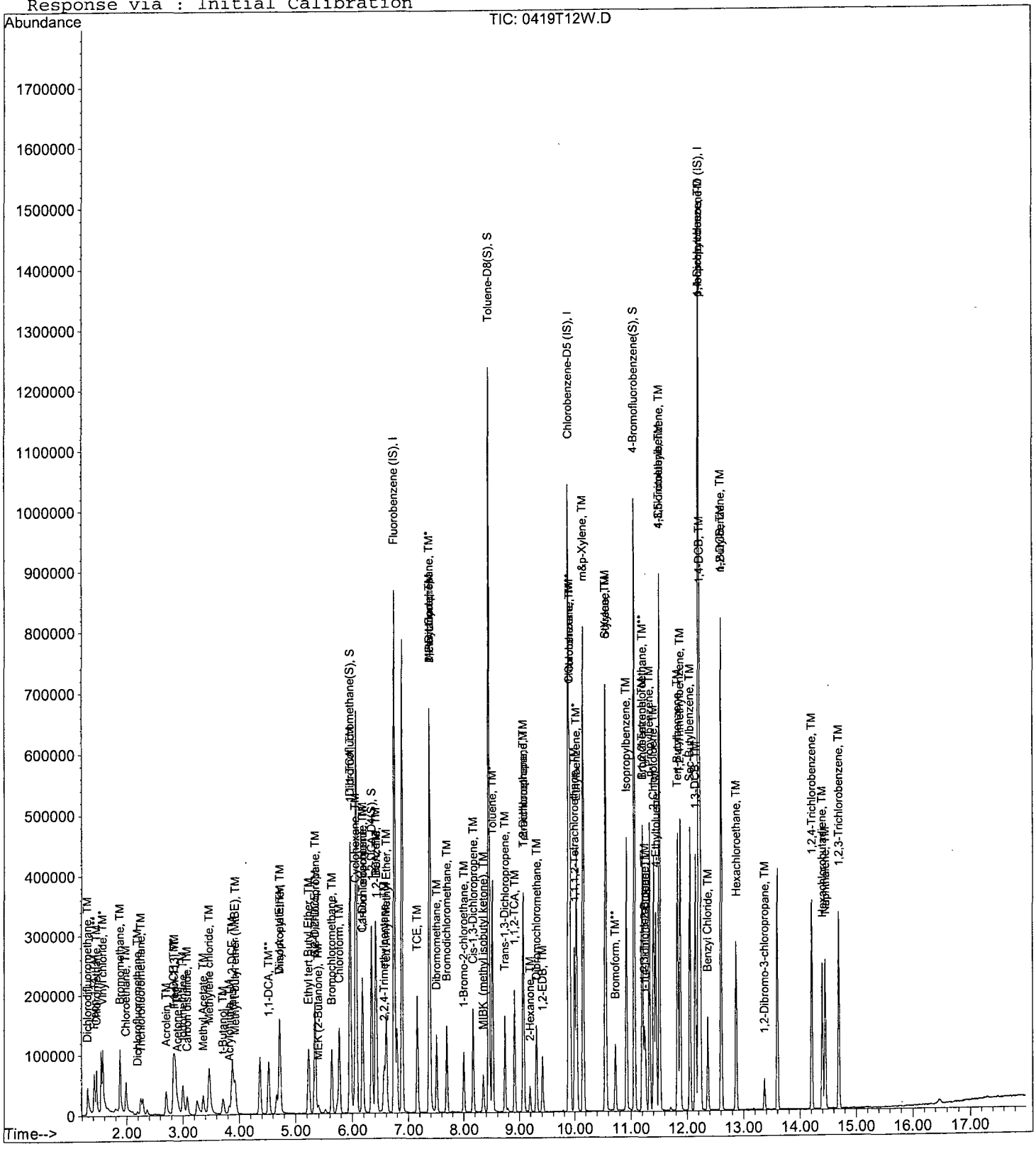
Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T12W.D
Acq On : 19 Apr 12 10:13
Sample : 120419A LCS-1WT
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 2
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C06W.D Vial: 1
Acq On : 19 Apr 12 9:52 Operator: SV
Sample : LCS gas 300 ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1333745	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1439521	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1368841	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	61479673m	338.29027	ppb	100

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

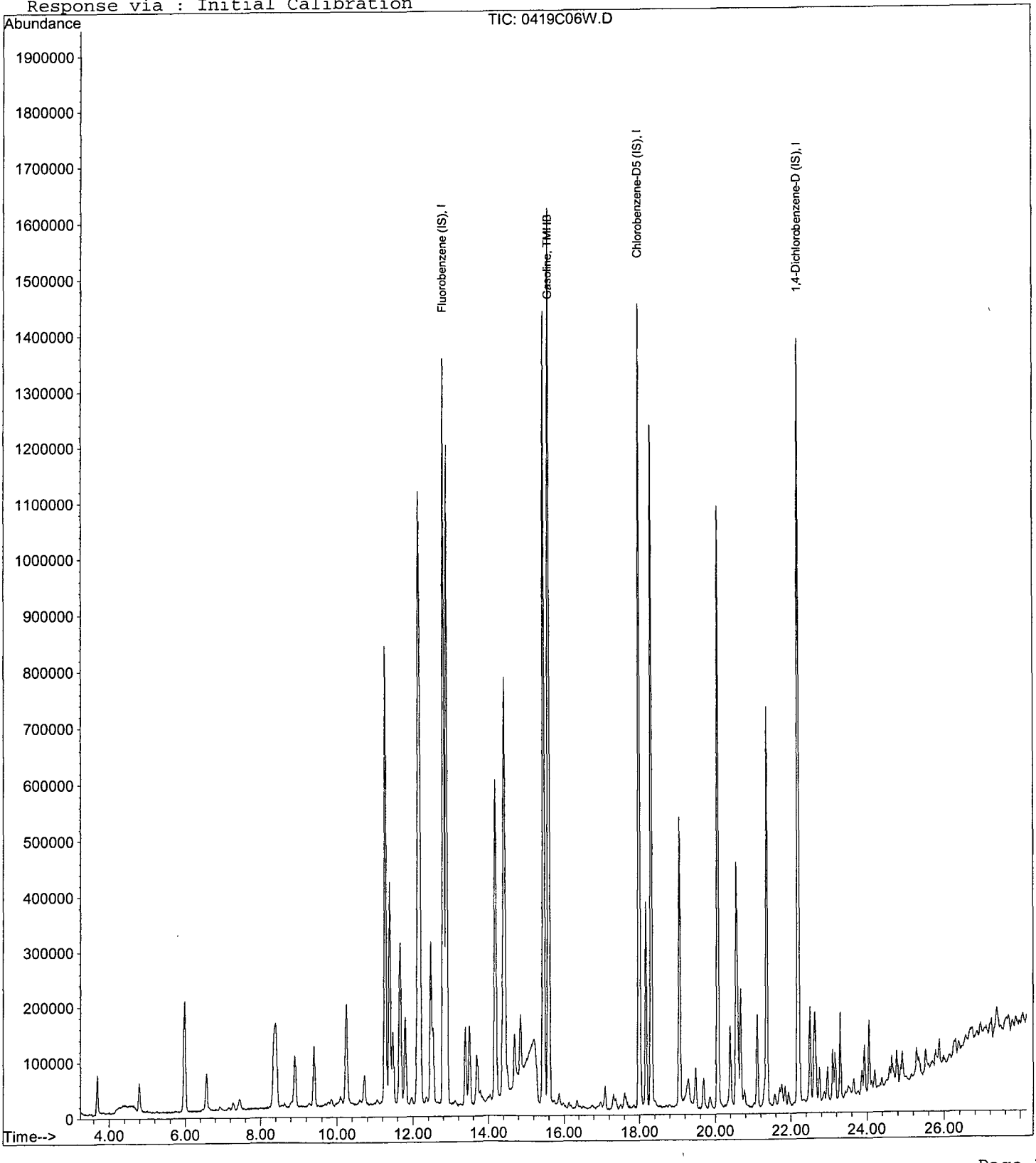
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C06W.D
Acq On : 19 Apr 12 9:52
Sample : LCS gas 300 ug/L
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

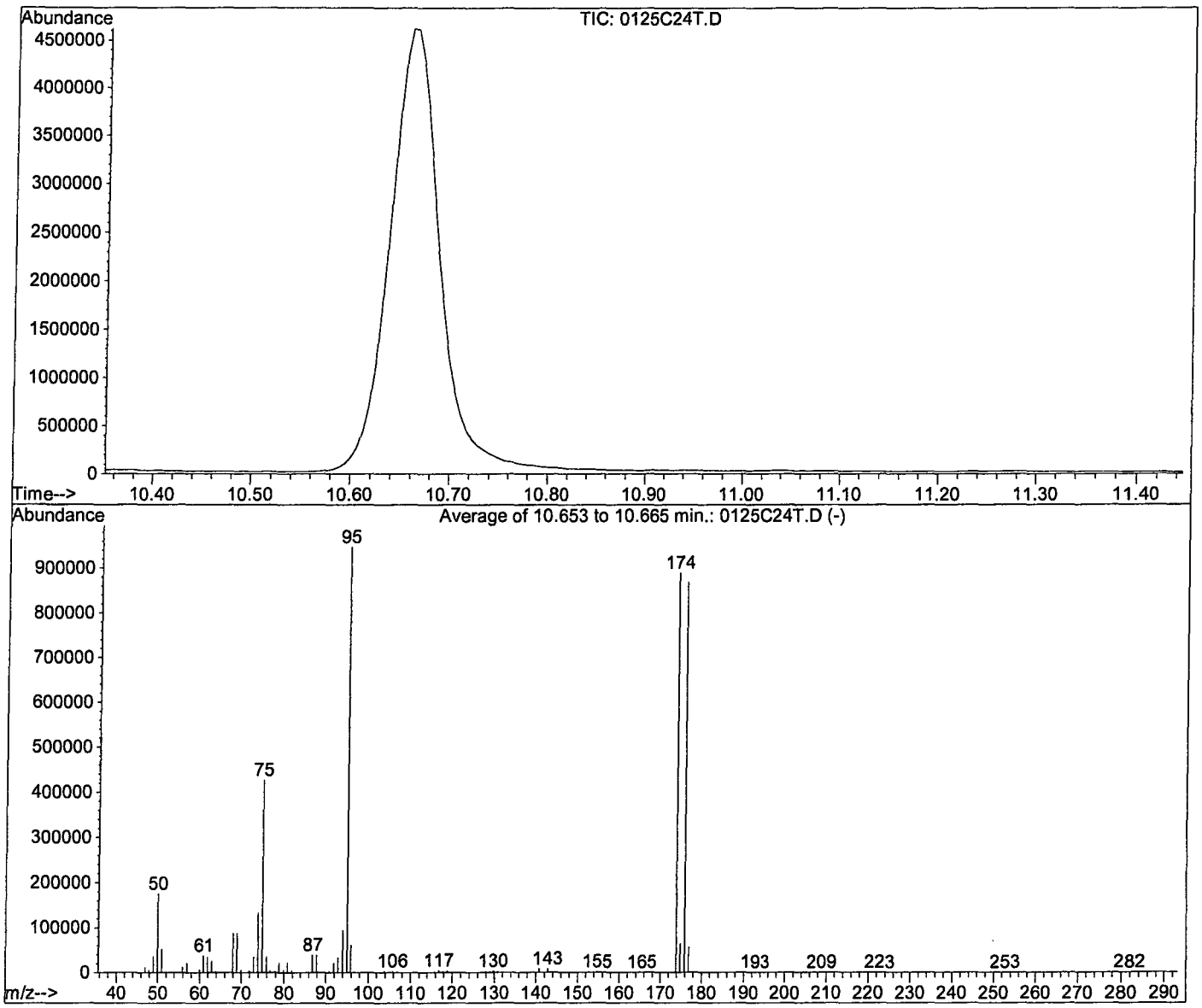
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C120125\0125C24T.D
Acq On : 26 Jan 12 16:30
Sample : 25ug/mL BFB Std. 01-12-12
Misc : 2uL

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B

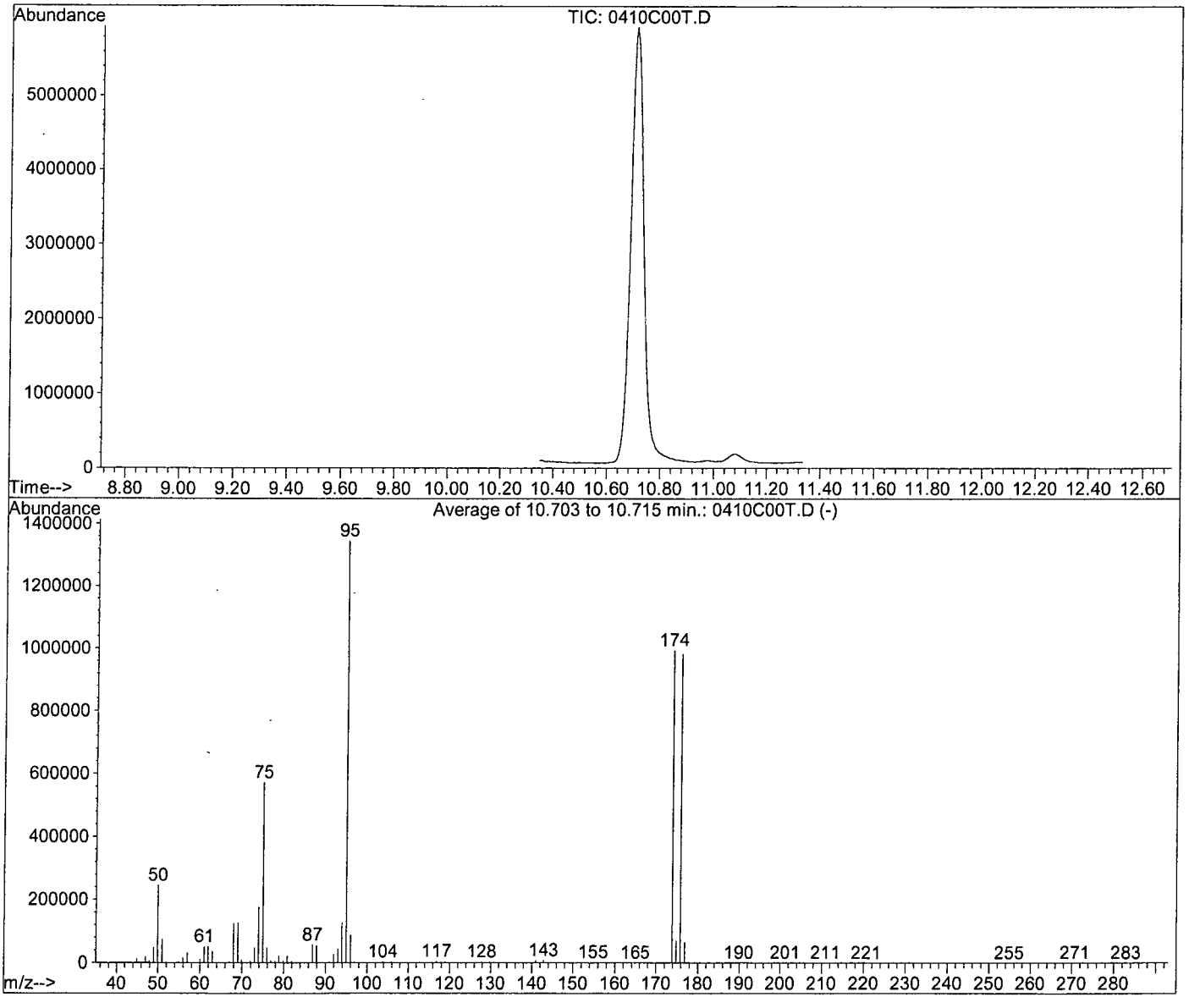


Spectrum Information: Average of 10.653 to 10.665 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	175569	PASS
75	95	30	60	45.1	426726	PASS
95	95	100	100	100.0	947029	PASS
96	95	5	9	6.5	61164	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	93.9	889685	PASS
175	174	5	9	7.3	64552	PASS
176	174	95	101	97.7	869568	PASS
177	176	5	9	6.5	56475	PASS

Data File : M:\CHICO\DATA\C120410\0410C00T.D Vial: 1
Acq On : 10 Apr 12 14:14 Operator: SV
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260



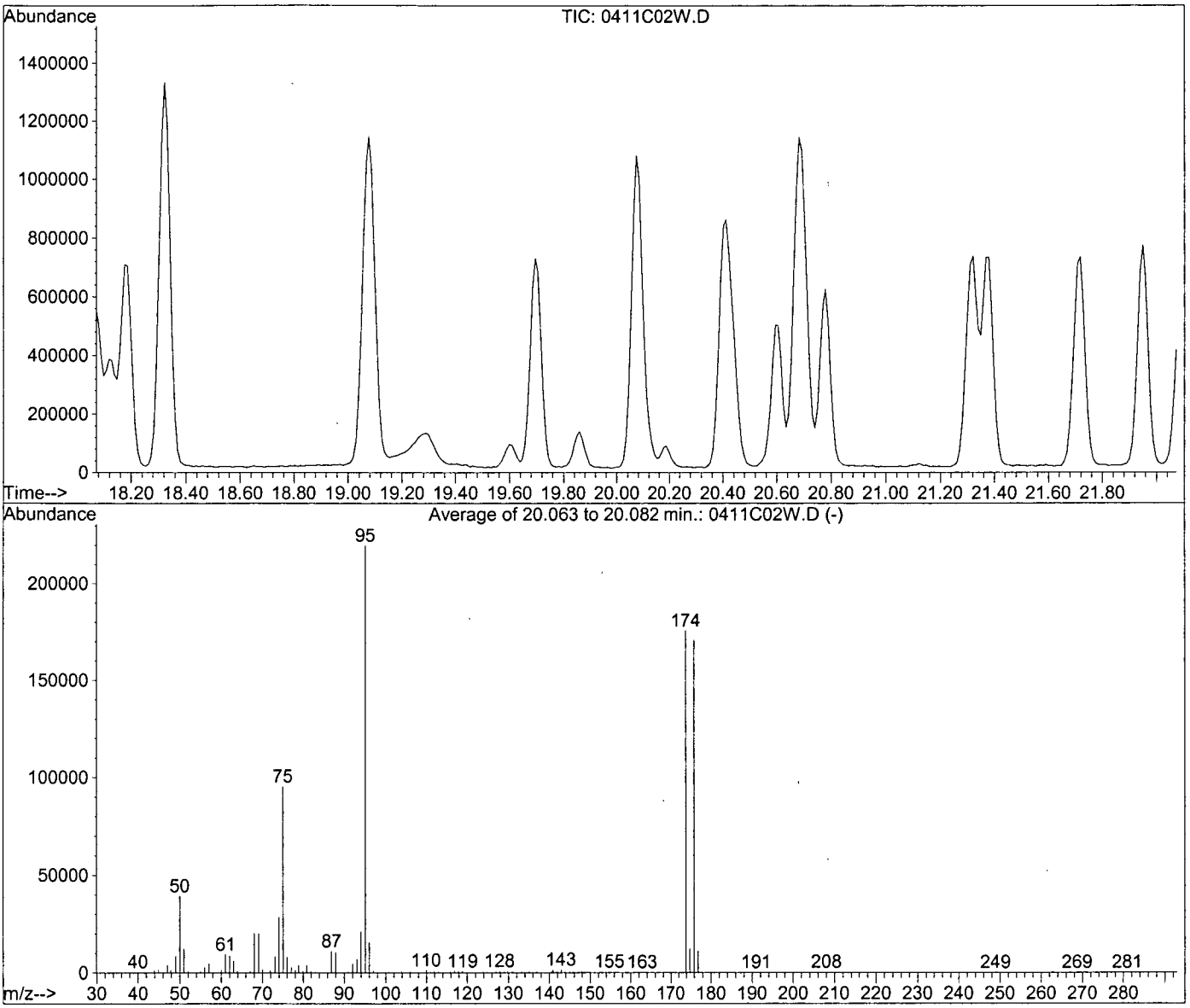
Spectrum Information: Average of 10.703 to 10.715 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	246633	PASS
75	95	30	60	42.6	573121	PASS
95	95	100	100	100.0	1345707	PASS
96	95	5	9	6.6	88371	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	73.9	994283	PASS
175	174	5	9	7.1	70472	PASS
176	174	95	101	98.7	981772	PASS
177	176	5	9	6.6	64529	PASS

0410C00T.D CALLW3.M Wed Apr 11 14:46:53 2012

Data File : M:\CHICO\DATA\C120410\0411C02W.D Vial: 1
Acq On : 11 Apr 12 11:47 Operator: SV
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260



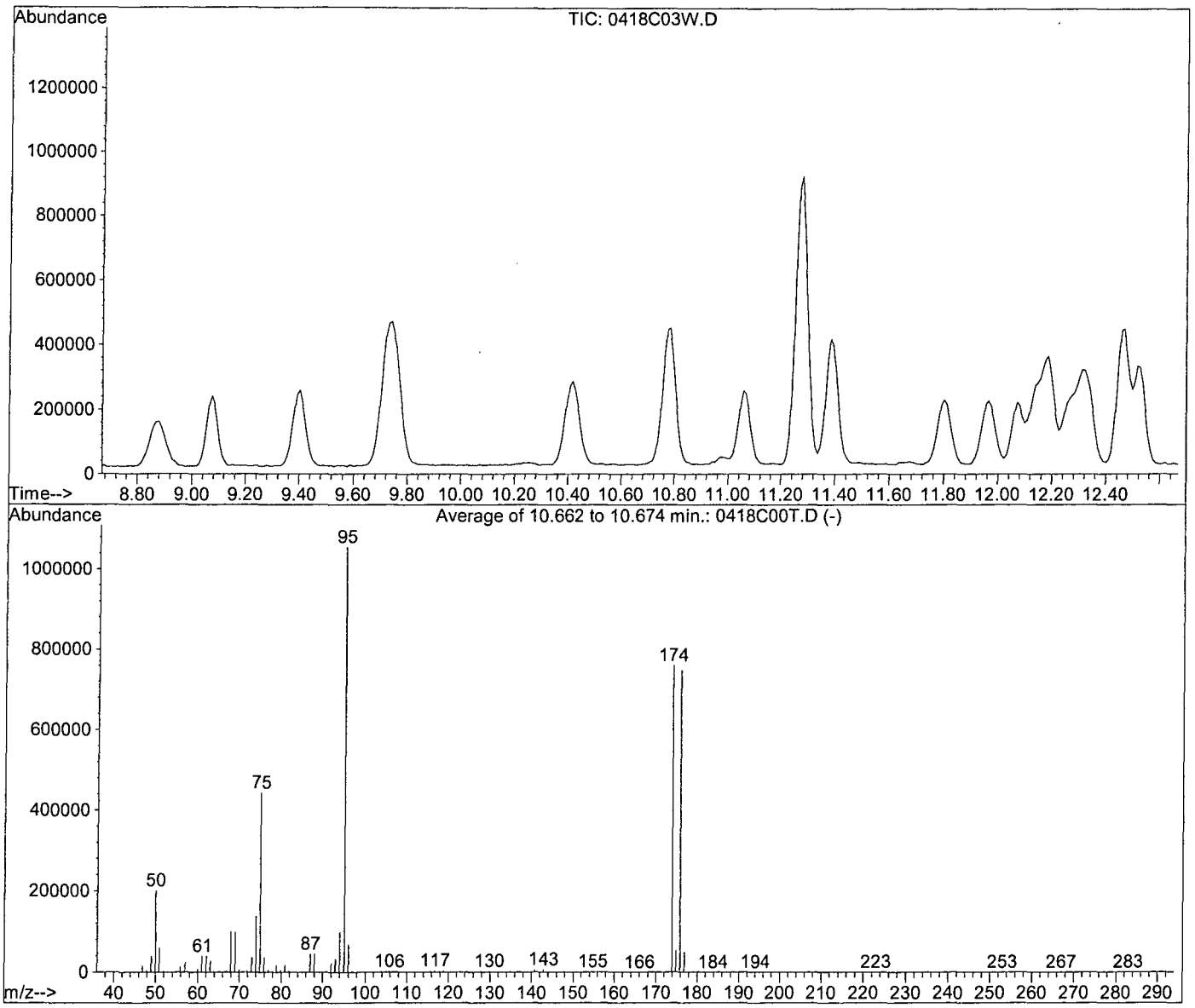
Spectrum Information: Average of 20.063 to 20.082 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.9	39272	PASS
75	95	30	60	43.4	95400	PASS
95	95	100	100	100.0	219819	PASS
96	95	5	9	7.1	15549	PASS
173	174	0.00	2	0.2	340	PASS
174	95	50	100	80.0	175765	PASS
175	174	5	9	7.0	12248	PASS
176	174	95	101	97.2	170837	PASS
177	176	5	9	6.6	11216	PASS

Data File : M:\CHICO\DATA\C120410\0418C00T.D
Acq On : 18 Apr 12 8:55
Sample : 25ug/ml BFB STD 04-10-12
Misc : 2uL

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

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260

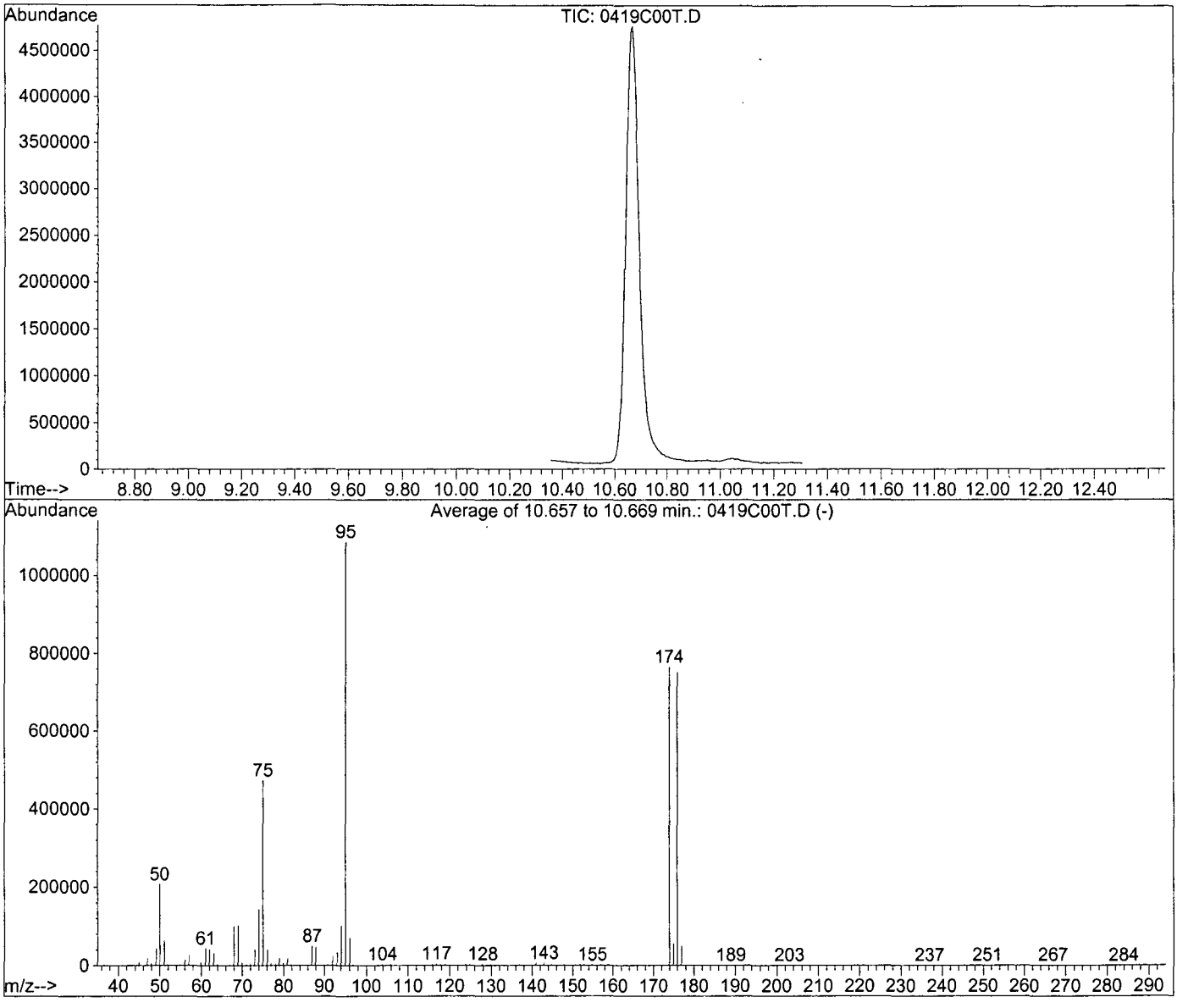


Spectrum Information: Average of 10.662 to 10.674 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.1	201334	PASS
75	95	30	60	42.1	444492	PASS
95	95	100	100	100.0	1055936	PASS
96	95	5	9	6.6	70160	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.0	760043	PASS
175	174	5	9	7.0	53360	PASS
176	174	95	101	98.3	747272	PASS
177	176	5	9	6.7	50324	PASS

Data File : M:\CHICO\DATA\C120410\0419C00T.D Vial: 1
Acq On : 19 Apr 12 6:16 Operator: SV
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120410\CALLW3.M (RTE Integrator)
Title : METHOD 8260



Spectrum Information: Average of 10.657 to 10.669 min.

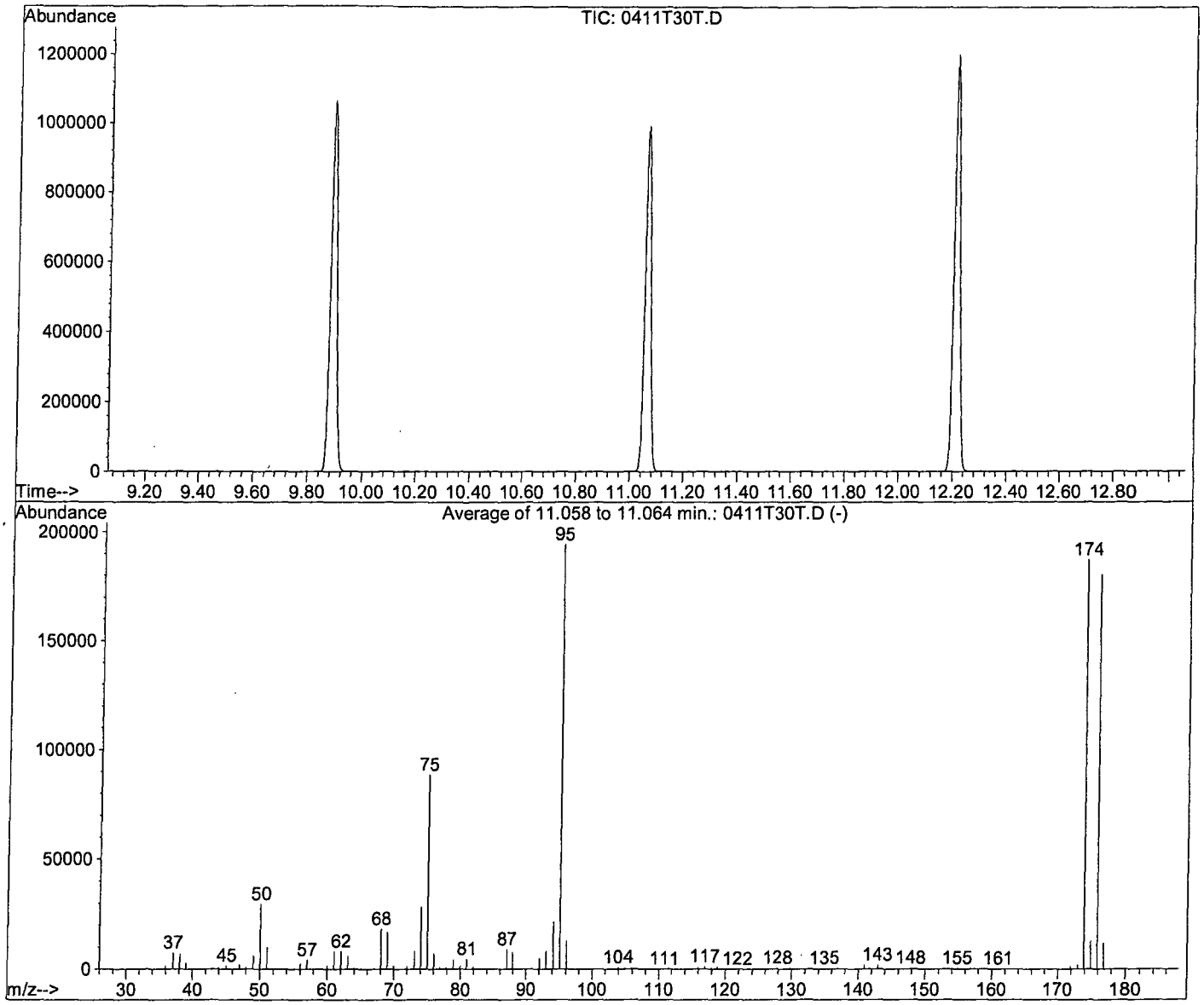
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	206741	PASS
75	95	30	60	43.5	473581	PASS
95	95	100	100	100.0	1087659	PASS
96	95	5	9	6.4	70085	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.4	765781	PASS
175	174	5	9	7.2	54891	PASS
176	174	95	101	98.1	751296	PASS
177	176	5	9	6.6	49875	PASS

BFB

Data File : M:\THOR\DATA\T120411\0411T30T.D
Acq On : 11 Apr 12 22:12
Sample : 5ng BFB STD 4-10-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 30
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B



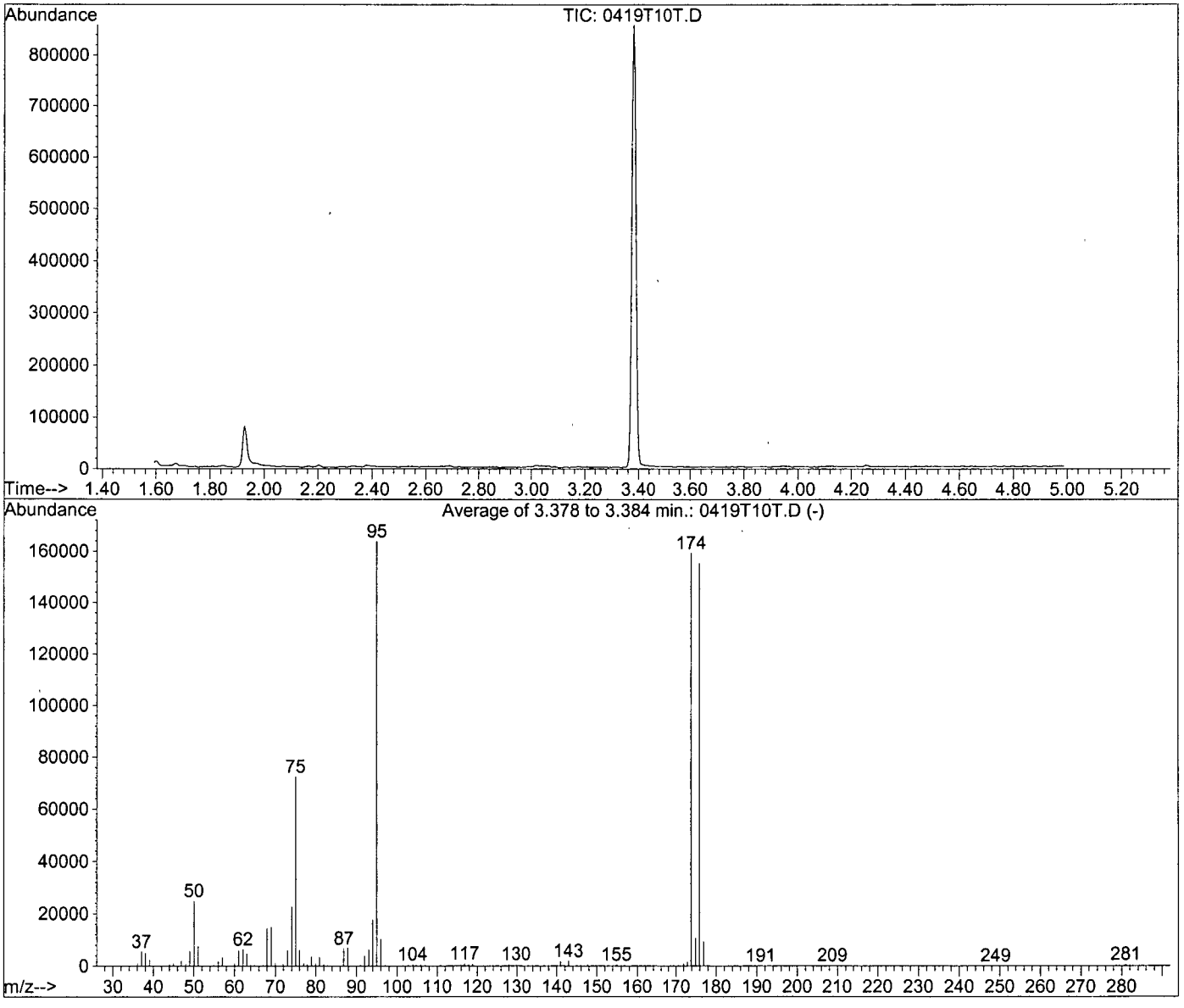
Spectrum Information: Average of 11.058 to 11.064 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	29645	PASS
75	95	30	60	45.7	88797	PASS
95	95	100	100	100.0	194411	PASS
96	95	5	9	6.6	12734	PASS
173	174	0.00	2	1.0	1853	PASS
174	95	50	100	96.3	187221	PASS
175	174	5	9	6.8	12729	PASS
176	174	95	101	96.4	180416	PASS
177	176	5	9	6.6	11857	PASS

Data File : M:\THOR\DATA\T120411\0419T10T.D
Acq On : 19 Apr 12 9:23
Sample : 5ng BFB 4-10-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 3.378 to 3.384 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	24875	PASS
75	95	30	60	44.3	72627	PASS
95	95	100	100	100.0	163861	PASS
96	95	5	9	6.3	10363	PASS
173	174	0.00	2	0.9	1450	PASS
174	95	50	100	97.3	159360	PASS
175	174	5	9	6.6	10583	PASS
176	174	95	101	97.5	155413	PASS
177	176	5	9	6.0	9394	PASS

4/05/12 RS.

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

		Expiration Date:	04/06/12							
		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.	04-01-12X	04-01-12AB	04-01-12T	04-01-12V	04-01-12AA	04-01-12Y	04-01-12U	04-01-12W	04-01-122
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-05-12A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-05-12B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-05-12C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-05-12D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-05-12E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-05-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-05-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-01-12AC	w/P&T H2O
Exp:04-07-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

4/06/12 RS.

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

		Expiration Date:	04/07/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #1
Date	Conc.	04-01-12K	04-01-12O	04-01-12G	04-01-12I	04-01-12N	04-01-12L	04-01-12H	04-01-12J	04-01-12M
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-06-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-06-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-06-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-06-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-06-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-06-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-06-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-06-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-06-12I	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-01-12P	w/P&T H2O
Exp:04-07-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50
45	50

4/06/12 RS.

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

		Expiration Date:	04/07/12							
		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.	04-01-12X	04-01-12AB	04-01-12T	04-01-12V	04-01-12AA	04-01-12Y	04-01-12U	04-01-12W	04-01-122
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-06-12J	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-06-12K	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-06-12L	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-06-12M	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-06-12N	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-06-12O	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-06-12P	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-01-12AC	w/P&T H2O
Exp:04-07-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

A-
RS-

4/09/12
RS

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

120016-03

Lot #	Storage	Expiry
180013	≤ -10 Degrees C	10/17/14

Solv: P/T Methanol

Made in the USA

Method 8260 Gases

Lot #: 180013 - 29771

Rec: 10/24/11 MFR exp. 10/17/14

RS.

ug/mL Vol Std #12
04-01-12Z
Exp:04-07-12
n/a
n/a
n/a
n/a
5
10
20

BA	Final Vol w/P&T H2O
12	mL
	5
	5
	5
	5
	5
	5
	5

4/09/12 RS

B-

Hexachloroethane Solution, 1000 mg/L, 1 ml
020049-02
Lot # 176700 Storage ≤-10 Degrees C Expiry 7/31/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA
Solutions

Hexachloroethane
Lot #: 176700 - 29159
Rec: 8/5/11 MFR exp. 07/31/13

RS

ug/mL Vol Std #12
04-01-12M
Exp:04-07-12
3
5
10
n/a
n/a
n/a
n/a
n/a
n/a

4/09/12 RS

C-

Benzyl Chloride Solution, 1000 mg/L, 1 ml
020228-02
Lot # 176701 Storage ≤-10 Degrees C Expiry 7/31/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA
Solutions

Benzyl Chloride
Lot #: 176701 - 29162
Rec: 8/5/11 MFR exp. 07/31/13

RS

D	Final Vol w/P&T H2O
	mL
	50
	50
	50
	50
	50
	50
	50
	50

4/09/12 RS

D-

n-Hexane Solution, 1,000 mg/L, 1 ml
020620-02
Lot # 163378 Storage ≤-10 Degrees Expiry 8/29/15
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

n-Hexane Solution
Lot #: 163378 - 29227
Rec: 8/5/11 MFR exp. 08/29/15

RS

ug/mL Vol Std #12
04-01-12Z
Exp:04-07-12
n/a
n/a
n/a
n/a
5
10
20

4/09/12 RS

E-

Heptane Solution, 1000 mg/L, 1 ml
020546-02
Lot # 169174 Storage ≤-10 Degrees C Expiry 2/18/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Heptane Solution
Lot #: 169174 - 29253
Rec: 8/5/11 MFR exp. 02/18/14

RS

Final Vol w/P&T H2O
mL
5
5
5
5
5
5

4/09/12 RS

F-

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 178651 Storage ≤0 Degrees C Expiry 9/11/13
Solv: P/T Methanol
Made in the USA

VOC Mix 4-3, 2000mg/L
Lot #: 178651 - 30411
Rec: 2/20/12 MFR exp. 09/11/13

RS

4/09/12 RS

G -

Acrolein Solution, 10,000 mg/L, 2 x 0.6 ml
020229-09-02
R&D only, not human consump. Made in the USA.

Lot #	Storage	Expiry
186936	≤ 6 Degrees C	4/23/12

Solv: Water, HPLC Grade

Acrolein solution
Lot #: 186936 - 30514
Rec: 3/19/12 MFR exp. 04/23/12 RS

4/09/12 RS

H -

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
R&D only, not human consump. Made in the USA.

Lot #	Storage	Expiry
178557	≤ -10 Degrees C	9/13/14

Solv: P/T Methanol

Method 8260 Gases (SS)
Lot #: 178557 - 29521
Rec: 9/20/11 MFR exp. 09/13/14 RS

4/09/12 RS

I -

Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1ml
020232-02-SS
R&D only, not human consump. Made in the USA.

Lot #	Storage	Expiry
184399	≤ -10 Degrees C	4/15/12

Solv: P/T Methanol

Vinyl Acetate (SS)
Lot #: 184399 - 30240
Rec: 1/19/12 MFR exp. 04/15/12 RS

04-09-12J							
50ug/ml Vol Work Std #7							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29771	04-09-12A	04/16/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3500
04-09-12K							
50ug/ml Vol Work Std #1							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1950
04-09-12L							
50ug/ml Vol Work Std #8							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29200	03-22-12D	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27878	03-22-12E	06/08/12	100
O2SI	020232-02	Vinyl Acetate	2000	185696-30409	03-22-12F	05/13/12	100
O2SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3300
04-09-12M							
50ug/ml Vol Work Std #2							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29217	03-22-12H	02/08/12	100
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	06/08/12	3900

4/09/12 RS

		04-09-12N	Exp:	04/16/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-09-12J	04/16/12	200	
		50ug/ml Vol Work Std #8		04-09-12L	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1600	
		04-09-12O	Exp:	04/16/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-09-12K	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
		04-09-12P	Exp:	04/16/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-09-12M	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
04-09-12Q							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/16/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30466	04-02-12C	04/16/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/26/12	3900
04-09-12R			Exp:	04/16/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-09-12Q	04/16/12	200	
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	1800	
04-09-12S							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-30411	04-09-12F	05/14/12	500
O2SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3400

4/09/12 RS

04-09-12T							
50ug/ml VOC Std#5							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29521	04-09-12H	04/16/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1900
04-09-12U							
50ug/ml VOC Std#6							
Exp:04/16/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	184399-30240	04-09-12I	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1550
04-09-12V							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	03-22-12S	04/23/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1700

4/09/12 RS

04-09-12W							
50ug/ml Vol Work Std #7							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29771	04-09-12A	04/16/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3500
04-09-12X							
50ug/ml Vol Work Std #1							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1950
04-09-12Y							
50ug/ml Vol Work Std #8							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29200	03-22-12D	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27878	03-22-12E	06/08/12	100
O2SI	020232-02	Vinyl Acetate	2000	185696-30409	03-22-12F	05/13/12	100
O2SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3300
04-09-12Z							
50ug/ml Vol Work Std #2							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29217	03-22-12H	02/08/12	100
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	06/08/12	3900
		04-09-12AA	Exp:	04/16/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-09-12W	04/16/12	200	
		50ug/ml Vol Work Std #8		04-09-12Y	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1600	
		04-09-12AB	Exp:	04/16/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-09-12X	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
		04-09-12AC	Exp:	04/16/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-09-12Z	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
04-09-12AD							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/16/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30466	04-02-12C	04/16/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/26/12	3900
04-09-12AE			Exp:	04/16/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-09-12AD	04/16/12	200	
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	1800	
04-09-12AF							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-30411	04-09-12F	05/14/12	500
02SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3400

4/09/12
RS

4/09/12 AG
RS

EPA Method 502/524
Fortification Solution, 3-1,
1000 mg/L, 1 ml
122450-02
Lot# 166726 | Storage -10 Degrees C | Expiry 12/2/12
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

EPA Method 502/524 Fortification
Lot #: 166726 - 27968
Rec: 12/15/10 MFR exp. 12/02/12

RS

RS

CHICO

04-09-12AH

50ug/ml 524 Internal Standard w/ Surrogate			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27968	04-09-12AG	03/10/12	200
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/11	10/22/12	3800

4/09/12 RS

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

Expiration Date: 04/10/12

Date	Conc.	5µg/mL Vol Std #9	5µg/mL Vol Std #12	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Vol Std #2	250µg/mL TAPD	Final Vol
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp.04-16-12	mL
04-09-12AI	0.2	2	2	n/a	n/a	n/a	2	50
04-09-12AJ	0.5	5	5	n/a	n/a	n/a	5	50
04-09-12AK	1	10	10	n/a	n/a	n/a	10	50
04-09-12AL	2	20	20	n/a	n/a	n/a	15	50
04-09-12AM	5	n/a	n/a	5	5	5	20	50
04-09-12AN	40	n/a	n/a	40	40	40	35	50
04-09-12AO	100	n/a	n/a	100	100	100	40	50

4/09/12 RS

RS

RS

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

Expiration Date: 04/10/12

Date	Conc.	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
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-09-12AP	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-09-12AQ	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-09-12AR	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-09-12AS	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-09-12AT	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-09-12AU	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-09-12AV	200	n/a	n/a	20	20	20	n/a	20	n/a	20

4/09/12 RS

250µg/mL TBA	Final Vol
04-09-12AF	w/P&T H2O
Exp:04-16-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

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

Expiration Date: 04/11/12

Date	Conc.	5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	04-09-12M	04-09-12P
04-10-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	Exp:04-16-12	Exp:04-16-12
04-10-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	3
04-10-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	5
04-10-12D	5	n/a	n/a	5	5	10	n/a	5	5	10
04-10-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-10-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-10-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-10-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-10-12I	200	n/a	n/a	200	200	125	n/a	200	200	n/a

4/10/12 RS

250µg/mL TAPD	Final Vol
04-09-12S	w/P&T H2O
Exp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50
45	50

4/10/12 RS

CHICO							
04-10-12J							
250ug/ml 8260 Internal Standard - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120302-03	Internal Standard Mix	2000	166255-2858	04-02-12A	07/23/12	500
02SI	020132-02	Fluorobenzene Standard	2000	169170-29853	04-02-12B	07/23/12	500
J&T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	11/14/12	3000
04-10-12K							
250ug/ml 8260 Surrogate - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120002-01	Surrogate Standard	2000	164585-30466	04-02-12C	10/23/12	500
J&T Baker		Purge & Trap MeOH		K07E34-00543	08/12/11	11/14/12	3500

4/10/12 RS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-CHICO											
	Expiration Date:		04/11/12								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-09-12N	04-09-12R	04-09-12J	04-09-12L	04-09-12Q	04-09-12O	04-09-12K	04-09-12M	04-09-12P
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-10-12L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-10-12M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-10-12N	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-10-12O	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-10-12P	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-10-12Q	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-10-12R	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-10-12S	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250µg/mL TAPD	Final Vol
04-09-12S	w/P&T H2O
Exp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

4/10/12 - BFB on pg. 120 RS.

4/11/12 RS

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-THOR											
	Expiration Date:		04/12/12								
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-09-12AA	04-09-12AE	04-09-12W	04-09-12Y	04-09-12AD	04-09-12AB	04-09-12X	04-09-12Z	04-09-12AC
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-11-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-11-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-11-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-11-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-11-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-11-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-11-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-11-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250µg/mL TAPD	Final Vol
04-09-12AF	w/P&T H2O
Exp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

* Sweetpea's soil curve on 4/11/12 RS. on page 120.

4/12/12 RS

Max 524							
04-12-12A							
50ug/ml 524 Internal Standard w/ Surrogate			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27968	04-09-12AG	08/04/12	150
J.T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	12/14/12	14850

4/12/12 RS

Volatile Standard Curve Preparation for 10mL Purge (524 water)-MAX								
	Expiration Date:		04/13/12					
		5µg/mL Vol Std #9	5µg/mL Vol Std #12	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Vol Std #2	250µg/mL TAPD	Final Vol
Date	Conc.	04-09-12N	04-09-12P	04-09-12J	04-09-12L	04-09-12M	04-09-12S	w/P&T H2O
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	mL
04-12-12B	0.2	2	2	n/a	n/a	n/a	2	50
04-12-12C	0.5	5	5	n/a	n/a	n/a	5	50
04-12-12D	1	10	10	n/a	n/a	n/a	10	50
04-12-12E	10	n/a	n/a	10	10	10	25	50
04-12-12F	20	n/a	n/a	20	20	20	30	50

4/17/12 RS. A-

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml
120016-03
Lot# 180013 | Storage ≤ -10 Degrees C | Expiry 10/17/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Method 8260 Gases
Lot #: 180013 - 29770
Rec: 10/24/11 MFR exp. 10/17/14
RS.

4/17/12 RS. B-

Volatile Mix, 20-29, 2,000 mg/L, 1 ml
122039-02
Lot# 180114 | Storage ≤ -10 Degrees C | Expiry 10/17/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Volatile Mix, 20-29
Lot #: 180114 - 29791
Rec: 10/24/11 MFR exp. 10/17/13
RS

4/17/12 RS C.

Method 8260 VOC Liquids, 54 Compounds, 2,000 mg/L, 1 ml
120023-03
Lot# 164454 | Storage ≤ -10 Degrees C | Expiry 10/4/12
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

8260 VOC Liquids, 54 Comp.
Lot #: 164454 - 27879
Rec: 12/15/10 MFR exp. 10/04/12
RS

4/17/12 RS. D.

Vinyl Acetate Solution, 2,000 mg/L, 1ml
020232-02
Lot# 185696 | Storage ≤ -10 Degrees C | Expiry 5/13/12
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Vinyl Acetate
Lot #: 185696 - 30408
Rec: 2/20/12 MFR exp. 05/13/12
RS

4/17/12 RS E.

Ketones Solution, 2,000 mg/L, 1 ml
121020-05
Lot# 169173 | Storage ≤ -10 Degrees C | Expiry 2/13/13
Solv: P/T MeOH:Water 9:1
R&D only, not human consump. Made in the USA

Ketones
Lot #: 169173 - 29218
Rec: 8/5/11 MFR exp. 02/13/13
RS

4/17/12 RS

E-

8260B Surrogate Solution, 2,000 mg/L, 5 x 1 ml
120002-01-5PAK
Lot # 178653 Storage ≤-10 Degrees C Expiry 9/11/13
Solv: P/T Methanol
Made in the USA. For R&D only, not human consump.

8260B Surrogate Solution
Lot #: 178653 - 29565
Rec: 9/22/11 MFR exp. 09/11/13

RS

4/17/12 RS.

E.G

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 185760 Storage ≤ 6 Degrees C Expiry 2/14/14
Solv: P/T Methanol
Made in the USA. For R&D only, not human consump.

VOC Mix 4-3, 2000mg/L
Lot #: 185760 - 30413
Rec: 2/20/12 MFR exp. 02/14/14

RS

4/17/12 RS

H.

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 178557 Storage ≤-10 Degrees C Expiry 9/13/14
Solv: P/T Methanol
Made in the USA. For R&D only, not human consump.

Method 8260 Gases (SS)
Lot #: 178557 - 29530
Rec: 9/20/11 MFR exp. 09/13/14

RS

RS.

04-17-12I							
50ug/ml Vol Work Std #7							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29770	04-17-12A	04/24/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3500
04-17-12J							
50ug/ml Vol Work Std #1							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1950
04-17-12K							
50ug/ml Vol Work Std #8							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	180114-29791	04-17-12B	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27879	04-17-12C	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30408	04-17-12D	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3300
04-17-12L							
50ug/ml Vol Work Std #2							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12	100
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	06/08/12	3900

4/19/12 RS

		04-17-12M	Exp:	04/24/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-17-12I	04/24/12	200	
		50ug/ml Vol Work Std #8		04-17-12K	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1600	
		04-17-12N	Exp:	04/24/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-17-12J	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
		04-17-12O	Exp:	04/24/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-17-12L	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
04-17-12P							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/24/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30465	04-17-12F	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/26/12	3900
04-17-12Q			Exp:	04/24/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-17-12P	04/24/12	200	
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	1800	
04-17-12R							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-30413	04-17-12G	05/14/12	500
O2SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3400

4/17/12 RB

RB

04-17-12S							
50ug/ml VOC Std#5							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29530	04-17-12H	04/16/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1900
04-17-12T							
50ug/ml VOC Std#6							
Exp:04/24/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	184399-30240	04-09-12I	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1550
04-17-12U							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	03-22-12S	04/23/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1700

4/17/12 RB

RB

04-17-12V							
50ug/ml Vol Work Std #7							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29770	04-17-12A	04/24/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3500
04-17-12W							
50ug/ml Vol Work Std #1							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1950
04-17-12X							
50ug/ml Vol Work Std #8							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	180114-29791	04-17-12B	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27879	04-17-12C	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30408	04-17-12D	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3300
04-17-12Y							
50ug/ml Vol Work Std #2							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12	100
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	06/08/12	3900
		04-17-12Z	Exp:	04/24/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-17-12V	04/24/12	200	
		50ug/ml Vol Work Std #8		04-17-12X	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1600	
		04-17-12AA	Exp:	04/24/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-17-12W	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
		04-17-12AB	Exp:	04/24/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-17-12Y	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
04-17-12AC							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/24/12			ug/ml	Lot #	Code	Date	uL
02SI	120002-01	8260B Surr Solution	2000	164585-30465	04-17-12F	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/26/12	3900
04-17-12AD			Exp:	04/24/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-17-12AC	04/24/12	200	
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	1800	
04-17-12AE							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-30413	04-17-12G	05/14/12	500
02SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3400

4/17/12
RS

4/17/12 RS

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

	Expiration Date:		04/18/12							
		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.	04-17-12Z	04-17-12AD	04-17-12V	04-17-12X	04-17-12AC	04-17-12AA	04-17-12W	04-17-12Y	04-17-12AB
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-17-12AF	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-17-12AG	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-17-12AH	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-17-12AI	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-17-12AJ	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-17-12AK	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-17-12AL	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

4/17/12 RS

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

	Expiration Date:		04/18/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12Z	04-17-12AD	04-17-12V	04-17-12X	04-17-12AC	04-17-12AA	04-17-12W	04-17-12Y	04-17-12AB
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-17-12AM	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-17-12AN	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-17-12AO	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-17-12AP	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-17-12AQ	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-17-12AR	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-17-12AS	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-17-12AT	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

4/19/12 RS

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

	Expiration Date:		04/20/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12K	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-19-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-19-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-19-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-19-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-19-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-19-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-19-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-19-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

4/20/12 RS

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

	Expiration Date:		04/21/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12K	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-20-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-20-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-20-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-20-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-20-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-20-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-20-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-20-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

Injection Log

Directory: M:\CHICO\DATA\C120125\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0125C24T.D	1	25ug/mL BFB Std. 01-12-12	2uL	26 Jan 12 16:30
2	1	0125C29W.D	1	Vol. Std. 01-26-12@20ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 19:32
3	1	0125C30W.D	1	Vol. Std. 01-26-12@50ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:09
4	1	0125C31W.D	1	Vol. Std. 01-26-12@100ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:46
5	1	0125C32W.D	1	Vol. Std. 01-26-12@300ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 21:24
6	1	0125C33W.D	1	Vol. Std. 01-26-12@600ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:01
7	1	0125C34W.D	1	Vol. Std. 01-26-12@800ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:38
8	1	0125C35W.D	1	Vol. Std. 01-26-12@1000ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 23:15
9	1	0125C38W.D	1	Second Source 01-26-12	Water 10mLw/ IS:12-06-11	27 Jan 12 1:06
10	1	0410C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	10 Apr 12 14:14
11	1	0410C04W.D	1	0.3ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 16:36
12	1	0410C05W.D	1	0.5ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 17:13
13	1	0410C06W.D	1	1.0ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 17:50
14	1	0410C07W.D	1	5.0ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 18:27
15	1	0410C08W.D	1	10ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 19:04
16	1	0410C09W.D	1	20ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 19:41
17	1	0410C10W.D	1	40ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 20:18
18	1	0410C11W.D	1	100ug/L Vol Std 04-10-12	Water 10mL w/IS:04-10-12	10 Apr 12 20:55
19	1	0411C02W.D	1	25ug/ml BFB STD 04-10-12	2uL	11 Apr 12 11:47
20	1	0411C05W.D	1	120411A LCS-1WC (SS)	Water 10mL w/IS&S:04-10-1	11 Apr 12 13:39
21	1	0418C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	18 Apr 12 8:55
22	1	0418C01W.D	1	CCV gas 300ug/L	Water 10mL w/IS&S:04-10-1	18 Apr 12 9:27
23	1	0418C02W.D	1	LCS gas 300ug/L	Water 10mL w/IS&S:04-10-1	18 Apr 12 10:04
24	1	0418C03W.D	1	10ug/L Vol Std 04-18-12	Water 10mL w/IS&S:04-10-1	18 Apr 12 10:41
25	1	0418C04W.D	1	120418A LCS-1WC	Water 10mL w/IS&S:04-10-1	18 Apr 12 11:18
26	1	0418C10W.D	1	120418A BLK-1WC	Water 10mL w/IS&S:04-10-1	18 Apr 12 17:20
27	1	0418C11W.D	1	AY59208W01	Water 10mL w/IS&S:04-10-1	18 Apr 12 17:57
28	1	0418C12W.D	1	AY59209W01	Water 10mL w/IS&S:04-10-1	18 Apr 12 18:34
29	1	0418C13W.D	1	AY59184W01	Water 10mL w/IS&S:04-10-1	18 Apr 12 19:11
30	1	0418C14W.D	1	AY59185W01	Water 10mL w/IS&S:04-10-1	18 Apr 12 19:48
31	1	0418C15W.D	1	AY59186W01	Water 10mL w/IS&S:04-10-1	18 Apr 12 20:25
32	1	0419C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	19 Apr 12 6:16
33	1	0419C01W.D	1	CCV gas 300ug/L	Water 10mL w/IS&S:04-10-1	19 Apr 12 6:48
34	1	0419C06W.D	1	LCS gas 300 ug/L	Water 10mL w/IS&S:04-10-1	19 Apr 12 9:52
35	1	0419C09W.D	1	120419A BLK-1WC	Water 10mL w/IS&S:04-10-1	19 Apr 12 11:44
36	1	0419C11W.D	1	AY59187W02	Water 10mL w/IS&S:04-10-1	19 Apr 12 12:58

Injection Log

Directory: M:\THOR\DATA\T120411\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	30	0411T30T.D	1	5ng BFB STD 4-10-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 22:12
2	32	0411T32W.D	1	0.5ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 23:07
3	33	0411T33W.D	1	1.0ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 23:35
4	34	0411T34W.D	1	5.0ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:03
5	35	0411T35W.D	1	10ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:31
6	36	0411T36W.D	1	20ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:58
7	37	0411T37W.D	1	40ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 1:26
8	38	0411T38W.D	1	100ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 1:53
9	42	0412T12W.D	1	10ug/L VOC STD 4-11-12 (SS)	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 3:44
10	1	0419T10T.D	1	5ng BFB 4-10-12	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 9:23
11	1	0419T11W.D	1	10ug/L Vol Std 04-19-12	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 9:45
12	2	0419T12W.D	1	120419A LCS-1WT	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 10:13
13	7	0419T17W.D	1	120419A BLK-1WT	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 12:32
14	10	0419T20W.D	1	AY59187W03	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 13:55

METALS
EPA SW846 - 6020

APPL, INC.

METALS
EPA SW846 - 6020
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	04/18/12	04/29/12	#602D-120418A-AY59187

Printed: 05/03/12 1:02:11 PM
Metals SC-Blank-REG MDLs

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)	50.0	52.3	105	80-120	04/18/12	04/29/12	#602D-120418A-AY59187

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **120418W-59187 MS - 166407**

Sample ID: AY59187

Client ID: ES073

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	50.0	1.4	49.3	49.1	95.8	95.4	0.4	20	80-120	04/18/12	04/30/12	04/18/12	04/30/12	166407	AY59187

Comments: _____

METALS
EPA SW846 - 6020
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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES070

APPL ID: AY59184

Sample Collection Date: 04/16/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22U	0.5	0.22	0.11	ug/L	1	04/18/12	04/30/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\133SMPL.D\133SMPL.D#
Date Acquired: Apr 30 2012 05:26 am
Operator: SDM
Sample Name: AY59184W08
Misc Info: 120418A-3015
Vial Number: 4208
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.00 ug/l	0.00	186.51	1000	
11 B	195.60 ug/l	217.31	0.02	1000	
23 Na	41950.00 ug/l	46606.45	0.33	25000	>Cal
24 Mg	11200.00 ug/l	12443.20	1.33	50000	
27 Al	15.44 ug/l	17.15	6.71	20000	
39 K	2066.00 ug/l	2295.33	0.95	20000	
44 Ca	9207.00 ug/l	10228.98	0.56	50000	
47 Ti	0.60 ug/l	0.67	15.23	1000	
51 V	23.12 ug/l	25.69	1.37	1000	
52 Cr	2.78 ug/l	3.08	2.43	1000	
55 Mn	0.95 ug/l	1.06	3.34	1000	
56 Fe	8.01 ug/l	8.90	1.14	20000	
59 Co	0.61 ug/l	0.67	5.01	1000	
60 Ni	0.79 ug/l	0.87	6.17	1000	
63 Cu	0.45 ug/l	0.50	4.28	1000	
65 Cu	0.46 ug/l	0.51	13.16	1000	
66 Zn	2.45 ug/l	2.72	5.90	1000	
75 As	0.24 ug/l	0.26	5.33	1000	
78 Se	0.23 ug/l	0.26	20.48	1000	
78 Se	2.08 ug/l	2.31	21.90	1000	
88 Sr	75.81 ug/l	84.22	1.68	1000	
88 Sr	75.41 ug/l	83.78	0.51	1000	
95 Mo	0.77 ug/l	0.86	4.34	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	0.00 ug/l	0.00	42.77	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.17 ug/l	0.19	14.15	1000	
118 Sn	0.93 ug/l	1.04	4.10	#######	
118 Sn	1.03 ug/l	1.15	11.11	#######	
118 Sn	0.98 ug/l	1.09	3.08	1000	
121 Sb	1.84 ug/l	2.05	3.89	1000	
137 Ba	4.00 ug/l	4.44	1.13	1000	
205 Tl	0.02 ug/l	0.02	7.58	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	-0.25 ug/l	-0.27	2.72	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2839268.00	0.78	3376647.30	84.1	70 - 120	
45 Sc	1227760.60	1.13	1470535.00	83.5	70 - 120	
45 Sc	190650.91	2.65	211970.81	89.9	70 - 120	
45 Sc	4512307.00	0.77	5338272.50	84.5	70 - 120	
72 Ge	274431.44	0.15	357467.25	76.8	70 - 120	
72 Ge	120673.53	3.46	134894.38	89.5	70 - 120	
72 Ge	926559.25	1.59	1118516.60	82.8	70 - 120	
115 In	2005765.60	1.81	2502525.50	80.1	70 - 120	
115 In	1220688.40	4.19	1421320.90	85.9	70 - 120	
115 In	6237191.00	0.75	7622565.50	81.8	70 - 120	
159 Tb	7837156.50	0.81	9867540.00	79.4	70 - 120	
165 Ho	7542349.50	1.40	9489315.00	79.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

Metals Analysis

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES071

APPL ID: AY59185

Sample Collection Date: 04/16/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.44 J	0.5	0.22	0.11	ug/L	1	04/18/12	04/30/12

J = Estimated value.

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\134SMPL.D\134SMPL.D#
Date Acquired: Apr 30 2012 05:33 am
Operator: SDM
Sample Name: AY59185W08
Misc Info: 120418A-3015
Vial Number: 4209
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.01	ug/l	0.01	42.24	1000	
11 B	140.50	ug/l	156.10	0.12	1000	
23 Na	61570.00	ug/l	68404.27	0.22	25000	>Cal
24 Mg	24920.00	ug/l	27686.12	1.50	50000	
27 Al	12.40	ug/l	13.78	17.35	20000	
39 K	2777.00	ug/l	3085.25	1.15	20000	
44 Ca	13920.00	ug/l	15465.12	1.23	50000	
47 Ti	1.31	ug/l	1.46	13.99	1000	
51 V	1.07	ug/l	1.19	0.69	1000	
52 Cr	0.36	ug/l	0.40	3.91	1000	
55 Mn	1427.00	ug/l	1585.40	1.15	1000	>Cal
56 Fe	1468.00	ug/l	1630.95	1.33	20000	
59 Co	0.43	ug/l	0.48	1.27	1000	
60 Ni	0.70	ug/l	0.78	1.88	1000	
63 Cu	0.29	ug/l	0.32	3.23	1000	
65 Cu	0.32	ug/l	0.36	8.50	1000	
66 Zn	3.38	ug/l	3.75	1.58	1000	
75 As	0.10	ug/l	0.11	5.11	1000	
78 Se	0.08	ug/l	0.09	22.73	1000	
78 Se	1.69	ug/l	1.87	3.43	1000	
88 Sr	116.40	ug/l	129.32	0.66	1000	
88 Sr	115.20	ug/l	127.99	2.02	1000	
95 Mo	0.26	ug/l	0.29	2.48	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.00	ug/l	0.00	519.28	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.30	ug/l	0.33	8.59	1000	
118 Sn	0.55	ug/l	0.62	3.55	#######	
118 Sn	0.64	ug/l	0.71	2.13	#######	
118 Sn	0.65	ug/l	0.73	4.33	1000	
121 Sb	0.64	ug/l	0.71	6.03	1000	
137 Ba	23.54	ug/l	26.15	0.29	1000	
205 Tl	0.02	ug/l	0.02	18.10	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.40	ug/l	0.44	0.53	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2701483.80	1.23	3376647.30	80.0	70 - 120	
45 Sc	1398129.80	1.43	1470535.00	95.1	70 - 120	
45 Sc	192173.30	0.95	211970.81	90.7	70 - 120	
45 Sc	4359655.00	1.36	5338272.50	81.7	70 - 120	
72 Ge	315692.25	1.50	357467.25	88.3	70 - 120	
72 Ge	120737.55	0.87	134894.38	89.5	70 - 120	
72 Ge	876948.31	0.57	1118516.60	78.4	70 - 120	
115 In	2305805.50	0.22	2502525.50	92.1	70 - 120	
115 In	1229292.10	1.92	1421320.90	86.5	70 - 120	
115 In	5939088.00	0.67	7622565.50	77.9	70 - 120	
159 Tb	7538502.50	0.41	9867540.00	76.4	70 - 120	
165 Ho	7321239.50	2.06	9489315.00	77.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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 Analysis

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES072

APPL ID: AY59186

Sample Collection Date: 04/16/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22 U	0.5	0.22	0.11	ug/L	1	04/18/12	04/30/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\135SMPL.D\135SMPL.D#
Date Acquired: Apr 30 2012 05:40 am
Operator: SDM
Sample Name: AY59186W08
Misc Info: 120418A-3015
Vial Number: 4210
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.01	ug/l	0.01	35.48	1000	
11 B	134.60	ug/l	149.54	0.84	1000	
23 Na	60930.00	ug/l	67693.23	1.80	25000	>Cal
24 Mg	24720.00	ug/l	27463.92	1.37	50000	
27 Al	19.33	ug/l	21.48	5.28	20000	
39 K	2734.00	ug/l	3037.47	1.25	20000	
44 Ca	13670.00	ug/l	15187.37	1.04	50000	
47 Ti	1.23	ug/l	1.37	6.21	1000	
51 V	1.05	ug/l	1.17	0.20	1000	
52 Cr	0.37	ug/l	0.41	15.09	1000	
55 Mn	1405.00	ug/l	1560.96	3.34	1000	>Cal
56 Fe	1442.00	ug/l	1602.06	2.76	20000	
59 Co	1.05	ug/l	1.17	1.93	1000	
60 Ni	0.71	ug/l	0.79	11.28	1000	
63 Cu	0.26	ug/l	0.28	2.23	1000	
65 Cu	0.31	ug/l	0.34	11.58	1000	
66 Zn	2.99	ug/l	3.32	2.94	1000	
75 As	0.11	ug/l	0.12	14.71	1000	
78 Se	0.06	ug/l	0.07	70.16	1000	
78 Se	1.74	ug/l	1.94	20.99	1000	
88 Sr	115.80	ug/l	128.65	1.58	1000	
88 Sr	113.80	ug/l	126.43	1.74	1000	
95 Mo	0.26	ug/l	0.29	3.27	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.01	ug/l	0.01	58.05	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.17	ug/l	0.18	11.72	1000	
118 Sn	0.39	ug/l	0.44	6.63	#######	
118 Sn	0.35	ug/l	0.39	13.95	#######	
118 Sn	0.42	ug/l	0.47	4.91	1000	
121 Sb	0.38	ug/l	0.42	1.45	1000	
137 Ba	23.04	ug/l	25.60	1.55	1000	
205 Tl	0.01	ug/l	0.01	12.54	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.32	ug/l	-0.36	0.58	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2776528.50	0.41	3376647.30	82.2	70 - 120	
45 Sc	1388805.90	0.86	1470535.00	94.4	70 - 120	
45 Sc	187395.02	2.68	211970.81	88.4	70 - 120	
45 Sc	4558854.50	0.88	5338272.50	85.4	70 - 120	
72 Ge	307988.16	0.89	357467.25	86.2	70 - 120	
72 Ge	116867.09	1.78	134894.38	86.6	70 - 120	
72 Ge	924503.81	0.96	1118516.60	82.7	70 - 120	
115 In	2261259.80	1.16	2502525.50	90.4	70 - 120	
115 In	1191034.00	2.48	1421320.90	83.8	70 - 120	
115 In	6241777.00	2.14	7622565.50	81.9	70 - 120	
159 Tb	7873098.50	0.15	9867540.00	79.8	70 - 120	
165 Ho	7579158.00	0.70	9489315.00	79.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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 Analysis

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67512

Sample ID: ES073

APPL ID: AY59187

Sample Collection Date: 04/16/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	1.4	0.5	0.22	0.11	ug/L	1	04/18/12	04/30/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\136SMPL.D\136SMPL.D#
Date Acquired: Apr 30 2012 05:47 am
Operator: SDM
Sample Name: AY59187W08
Misc Info: 120418A-3015
Vial Number: 4211
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.00	ug/l	0.00	92.91	1000	
11 B	200.60	ug/l	222.87	0.06	1000	
23 Na	79670.00	ug/l	88513.37	1.31	25000	>Cal
24 Mg	26380.00	ug/l	29308.18	0.78	50000	
27 Al	5.90	ug/l	6.55	2.87	20000	
39 K	3376.00	ug/l	3750.74	1.32	20000	
44 Ca	22690.00	ug/l	25208.59	0.76	50000	
47 Ti	0.40	ug/l	0.44	11.98	1000	
51 V	18.57	ug/l	20.63	1.15	1000	
52 Cr	1.05	ug/l	1.17	1.11	1000	
55 Mn	38.82	ug/l	43.13	1.83	1000	
56 Fe	25.01	ug/l	27.79	0.61	20000	
59 Co	0.46	ug/l	0.51	7.02	1000	
60 Ni	3.28	ug/l	3.64	1.28	1000	
63 Cu	0.81	ug/l	0.90	4.01	1000	
65 Cu	0.87	ug/l	0.96	3.61	1000	
66 Zn	5.11	ug/l	5.67	5.32	1000	
75 As	0.54	ug/l	0.60	3.32	1000	
78 Se	0.15	ug/l	0.17	10.09	1000	
78 Se	1.43	ug/l	1.59	16.47	1000	
88 Sr	142.30	ug/l	158.10	0.14	1000	
88 Sr	139.00	ug/l	154.43	1.39	1000	
95 Mo	10.93	ug/l	12.14	0.94	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.01	ug/l	0.01	59.28	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.56	ug/l	0.62	10.53	1000	
118 Sn	0.48	ug/l	0.54	12.03	#######	
118 Sn	0.48	ug/l	0.53	7.46	#######	
118 Sn	0.50	ug/l	0.56	6.46	1000	
121 Sb	0.27	ug/l	0.31	1.83	1000	
137 Ba	11.49	ug/l	12.77	0.44	1000	
205 Tl	0.02	ug/l	0.02	3.63	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	1.28	ug/l	1.42	1.25	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2849814.30	0.90	3376647.30	84.4	70 - 120	
45 Sc	1383947.90	0.33	1470535.00	94.1	70 - 120	
45 Sc	203965.77	0.32	211970.81	96.2	70 - 120	
45 Sc	4646480.50	0.73	5338272.50	87.0	70 - 120	
72 Ge	313463.06	0.68	357467.25	87.7	70 - 120	
72 Ge	126649.98	2.18	134894.38	93.9	70 - 120	
72 Ge	933652.31	0.48	1118516.60	83.5	70 - 120	
115 In	2287655.30	1.58	2502525.50	91.4	70 - 120	
115 In	1299876.80	0.13	1421320.90	91.5	70 - 120	
115 In	6315046.50	0.96	7622565.50	82.8	70 - 120	
159 Tb	8024685.00	1.23	9867540.00	81.3	70 - 120	
165 Ho	7723608.00	1.09	9489315.00	81.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

METALS
EPA SW846 - 6020
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: 67512 SDG: 67512
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 04/29/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 15:32	%R(1)	True CCV1	Found 15:59	%R(1)	True CCV1	Found 19:00	%R(1)	
Lead (Pb)	100	99.5	99.5	50	50.87	102	50	50.86	102	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.
ARF No: 67512 SDG: 67512
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 04/29/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 15:32	%R(1)	True CCV1	Found 20:34	%R(1)	True CCV1	Found 4:26	%R(1)	
Lead (Pb)	100	99.5	99.5	50	49.63	99.3	50	49.26	98.5	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: 67512 SDG: 67512
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 04/29/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 15:32	%R(1)	True CCV1	Found 6:00	%R(1)	True CCV1	Found 8:15	%R(1)	
Lead (Pb)	100	99.5	99.5	50	49.43	98.9	50	49.88	99.8	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.: 67512 SDG: 67512

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 04/29/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C				C	
	15:52		16:06		19:13		20:48				20:14		
Lead (Pb)	.20	U	.20	U	.20	U	.20	U			.20	U	P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67512 SDG: 67512

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 04/29/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	15:52		04:39		06:13		08:22		20:14		
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.:	67512	SDG:	67512
ICP ID Number:	Optimus	ICS Source:	Environmental Express

Analysis Date: 04/29/12 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 16:26	Sol AB 16:32	%R(1)
Lead (Pb)		500	0.09073	512.1	102

(1) Control Limits: Metals 80-120

A.P.P.L. INC.
9
ICP SERIAL DILUTION

CLIENT SAMPLE NO.
ES073

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67512 SDG: 67512

Matrix: water

Analysis Date: 04/30/12 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Lead (Pb)	1.41858		ND		NA		

Comments:

04/30/12 05:47 AY59187W08

04/30/12 06:40 AY59187W08-1/5

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\144SMPL.D\144SMPL.D#
Date Acquired: Apr 30 2012 06:40 am
Operator: SDM
Sample Name: AY59187W08-1/5
Misc Info: 120418A-3015
Vial Number: 4303
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.03	ug/l	0.17	17.53	1000	
11 B	55.92	ug/l	310.69	1.69	1000	
23 Na	16390.00	ug/l	91062.84	2.11	25000	
24 Mg	5762.00	ug/l	32013.67	1.61	50000	
27 Al	5.60	ug/l	31.09	9.25	20000	
39 K	694.90	ug/l	3860.86	2.75	20000	
44 Ca	4515.00	ug/l	25085.34	2.33	50000	
47 Ti	0.25	ug/l	1.42	50.65	1000	
51 V	3.82	ug/l	21.21	3.11	1000	
52 Cr	0.24	ug/l	1.33	9.69	1000	
55 Mn	7.54	ug/l	41.90	1.47	1000	
56 Fe	6.85	ug/l	38.05	2.13	20000	
59 Co	0.11	ug/l	0.59	10.60	1000	
60 Ni	1.21	ug/l	6.70	4.87	1000	
63 Cu	0.28	ug/l	1.58	3.08	1000	
65 Cu	0.32	ug/l	1.77	14.13	1000	
66 Zn	2.32	ug/l	12.88	3.06	1000	
75 As	0.40	ug/l	2.25	4.13	1000	
78 Se	0.66	ug/l	3.65	13.24	1000	
78 Se	1.12	ug/l	6.22	21.99	1000	
88 Sr	28.38	ug/l	157.68	1.33	1000	
88 Sr	29.39	ug/l	163.29	1.28	1000	
95 Mo	2.70	ug/l	15.01	2.98	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.69	ug/l	3.83	2.70	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.14	ug/l	0.78	15.51	1000	
118 Sn	4.13	ug/l	22.92	4.15	#######	
118 Sn	3.42	ug/l	19.02	5.37	#######	
118 Sn	2.52	ug/l	13.97	5.61	1000	
121 Sb	6.16	ug/l	34.23	5.31	1000	
137 Ba	2.32	ug/l	12.86	0.90	1000	
205 Tl	0.06	ug/l	0.35	10.67	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.00	ug/l	-0.01	329.03	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3165249.30	1.06	3376647.30	93.7	70 - 120	
45 Sc	1529105.80	2.88	1470535.00	104.0	70 - 120	
45 Sc	206970.11	2.47	211970.81	97.6	70 - 120	
45 Sc	4775627.50	0.32	5338272.50	89.5	70 - 120	
72 Ge	340448.75	1.82	357467.25	95.2	70 - 120	
72 Ge	128754.98	1.00	134894.38	95.4	70 - 120	
72 Ge	992414.69	0.58	1118516.60	88.7	70 - 120	
115 In	2489082.80	1.34	2502525.50	99.5	70 - 120	
115 In	1336357.50	0.97	1421320.90	94.0	70 - 120	
115 In	6673926.00	1.22	7622565.50	87.6	70 - 120	
159 Tb	8340122.00	0.92	9867540.00	84.5	70 - 120	
165 Ho	8057368.00	0.75	9489315.00	84.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

ES073

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67512 SDG: 67512

Analysis Date: 04/30/12 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	253.191		1.41858		277.500	90.7		

Comments:

04/30/12 05:47 AY59187W08

04/30/12 06:34 AY59187W08-A

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\143SMPL.D\143SMPL.D#
Date Acquired: Apr 30 2012 06:34 am
Operator: SDM
Sample Name: AY59187W08-A
Misc Info: 120418A-3015
Vial Number: 4302
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	42.60	ug/l	47.33	0.56	1000	
11 B	431.40	ug/l	479.29	1.68	1000	
23 Na	99450.00	ug/l	110488.95	0.39	25000	>Cal
24 Mg	46970.00	ug/l	52183.67	0.88	50000	
27 Al	1920.00	ug/l	2133.12	1.03	20000	
39 K	7762.00	ug/l	8623.58	0.58	20000	
44 Ca	45690.00	ug/l	50761.59	0.84	50000	
47 Ti	247.40	ug/l	274.86	3.49	1000	
51 V	262.80	ug/l	291.97	0.75	1000	
52 Cr	242.20	ug/l	269.08	0.96	1000	
55 Mn	281.50	ug/l	312.75	1.19	1000	
56 Fe	980.00	ug/l	1088.78	0.51	20000	
59 Co	230.80	ug/l	256.42	1.36	1000	
60 Ni	232.90	ug/l	258.75	0.24	1000	
63 Cu	225.10	ug/l	250.09	0.35	1000	
65 Cu	225.50	ug/l	250.53	0.79	1000	
66 Zn	415.70	ug/l	461.84	0.42	1000	
75 As	216.70	ug/l	240.75	0.10	1000	
78 Se	168.50	ug/l	187.20	3.31	1000	
78 Se	176.80	ug/l	196.42	1.10	1000	
88 Sr	390.40	ug/l	433.73	1.31	1000	
88 Sr	376.00	ug/l	417.74	0.71	1000	
95 Mo	262.40	ug/l	291.53	0.13	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	62.64	ug/l	69.59	1.58	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	44.49	ug/l	49.43	0.88	1000	
118 Sn	248.70	ug/l	276.31	2.30	#######	
118 Sn	263.70	ug/l	292.97	0.71	#######	
118 Sn	252.10	ug/l	280.08	0.23	1000	
121 Sb	259.40	ug/l	288.19	0.44	1000	
137 Ba	260.40	ug/l	289.30	0.10	1000	
205 Tl	224.90	ug/l	249.86	0.43	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	228.10	ug/l	253.42	0.39	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2635270.00	0.79	3376647.30	78.0	70 - 120	
45 Sc	1218946.80	2.23	1470535.00	82.9	70 - 120	
45 Sc	169408.34	2.91	211970.81	79.9	70 - 120	
45 Sc	4387175.00	0.61	5338272.50	82.2	70 - 120	
72 Ge	269299.88	1.66	357467.25	75.3	70 - 120	
72 Ge	107222.90	2.97	134894.38	79.5	70 - 120	
72 Ge	886254.06	0.90	1118516.60	79.2	70 - 120	
115 In	1996906.30	1.16	2502525.50	79.8	70 - 120	
115 In	1081396.30	3.39	1421320.90	76.1	70 - 120	
115 In	6014338.00	0.66	7622565.50	78.9	70 - 120	
159 Tb	7841627.00	0.58	9867540.00	79.5	70 - 120	
165 Ho	7522084.50	0.35	9489315.00	79.3	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\12D29o01.B\004CAL
Date Acquired:	Apr 29 2012 02:59 pm
Operator:	SDM
Sample Name:	Calibration Blank
Misc Info:	
Vial Number:	1102
Current Method:	C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File:	C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update:	Apr 29 2012 02:56 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	3376647.00	A	30990.00	0.92
7	(Li)	233074.50	P	3000.00	1.29
9	Be	26.67	P	14.53	54.49
11	B	10419.50	P	324.30	3.11
23	Na	61878.77	P	701.20	1.13
24	Mg	65.56	P	20.37	31.07
27	Al	48.89	P	11.71	23.95
39	K	32976.43	P	953.10	2.89
44	Ca	325.75	P	31.90	9.79
45	Sc	1470535.00	A	41050.00	2.79
45	Sc	211970.80	A	1561.00	0.74
45	Sc	5338273.00	A	46900.00	0.88
47	Ti	2.67	P	2.31	86.59
51	V	40.45	P	5.39	13.32
52	Cr	226.23	P	37.29	16.48
55	Mn	392.01	P	48.46	12.36
56	Fe	1653.45	P	51.97	3.14
59	Co	28.44	P	9.08	31.91
60	Ni	23.56	P	4.07	17.29
63	Cu	166.67	P	8.33	5.00
65	Cu	62.22	P	3.36	5.39
66	Zn	135.56	P	16.99	12.53
72	Ge	357467.19	A	11570.00	3.24
72	Ge	134894.41	A	1296.00	0.96
72	Ge	1118517.00	A	7347.00	0.66
75	As	13.67	P	1.67	12.20
78	Se	13.67	P	1.20	8.80
78	Se	147.33	P	7.62	5.17
88	Sr	62.22	P	7.70	12.37
88	Sr	603.37	P	70.56	11.69
95	Mo	83.34	P	24.04	28.85
106	(Cd)	11.11	P	1.93	17.32
107	Ag	605.59	P	23.41	3.87
108	(Cd)	5.56	P	5.09	91.65
111	Cd	19.73	P	6.43	32.59
115	In	2502525.00	A	13690.00	0.55
115	In	1421321.00	A	12230.00	0.86
115	In	7622565.00	A	47760.00	0.63
118	Sn	136.67	P	37.86	27.70
118	Sn	102.23	P	30.97	30.30
118	Sn	458.91	P	37.47	8.16
121	Sb	242.23	P	18.36	7.58
137	Ba	44.45	P	11.71	26.35
159	Tb	9867540.00	A	30360.00	0.31
165	Ho	9489315.00	A	52760.00	0.56
205	Tl	261.12	P	28.74	11.01
206	(Pb)	2439.21	P	121.00	4.96
207	(Pb)	2128.04	P	80.66	3.79
208	Pb	9675.08	P	375.80	3.88

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\005CALS.D\005CALS.D#
Date Acquired: Apr 29 2012 03:05 pm
Operator: SDM
Sample Name: 120429 Standard 1
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:03 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	3146043.00	A	54010.00	1.72	0.0000
7 (Li)	214355.50	P	3594.00	1.68	0.0000
9 Be	312.24	P	15.40	4.93	0.0000
11 B	13895.74	P	355.00	2.55	0.0000
23 Na	65545.48	P	1332.00	2.03	0.0000
24 Mg	697.82	P	32.72	4.69	0.0000
27 Al	162.23	P	11.71	7.22	0.0000
39 K	33476.42	P	988.90	2.95	0.0000
44 Ca	365.12	P	32.20	8.82	0.0000
45 Sc	1314536.00	A	10880.00	0.83	0.0000
45 Sc	181257.50	A	3355.00	1.85	0.0000
45 Sc	4768675.00	A	11960.00	0.25	0.0000
47 Ti	6.67	P	3.53	52.92	0.0000
51 V	263.12	P	28.04	10.66	0.0000
52 Cr	360.45	P	48.30	13.40	0.0000
55 Mn	376.90	P	40.39	10.72	0.0000
56 Fe	5389.95	P	46.45	0.86	0.0000
59 Co	235.12	P	26.00	11.06	0.0000
60 Ni	94.67	P	12.72	13.44	0.0000
63 Cu	368.90	P	23.90	6.48	0.0000
65 Cu	184.45	P	33.26	18.03	0.0000
66 Zn	491.57	P	41.79	8.50	0.0000
72 Ge	307672.91	A	2615.00	0.85	0.0000
72 Ge	119422.20	A	943.90	0.79	0.0000
72 Ge	1010240.00	A	24340.00	2.41	0.0000
75 As	45.22	P	3.72	8.22	0.0000
78 Se	22.00	P	4.41	20.05	0.0000
78 Se	142.78	P	7.07	4.95	0.0000
88 Sr	326.68	P	34.80	10.65	0.0000
88 Sr	3156.02	P	91.70	2.91	0.0000
95 Mo	388.91	P	53.89	13.86	0.0000
106 (Cd)	32.22	P	1.93	5.97	0.0000
107 Ag	1102.31	P	20.10	1.82	0.0000
108 (Cd)	20.00	P	3.33	16.66	0.0000
111 Cd	258.16	P	32.45	12.57	0.0000
115 In	2279892.00	A	31040.00	1.36	0.0000
115 In	1212405.00	A	15100.00	1.25	0.0000
115 In	6857579.00	A	87190.00	1.27	0.0000
118 Sn	765.61	P	49.49	6.46	0.0000
118 Sn	462.25	P	45.38	9.82	0.0000
118 Sn	2338.06	P	45.26	1.94	0.0000
121 Sb	1550.14	P	72.36	4.67	0.0000
137 Ba	362.24	P	5.09	1.41	0.0000
159 Tb	8772410.00	A	196900.00	2.24	0.0000
165 Ho	8486631.00	A	127900.00	1.51	0.0000
205 Tl	1810.19	P	60.65	3.35	0.0000
206 (Pb)	972.30	P	51.03	5.25	0.0000
207 (Pb)	874.51	P	32.03	3.66	0.0000
208 Pb	3970.38	P	78.41	1.97	0.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3146043.00	1.72	3376647.30	93.2	70 -	120	
45 Sc	1314535.60	0.83	1470535.00	89.4	70 -	120	
45 Sc	181257.50	1.85	211970.81	85.5	70 -	120	
45 Sc	4768675.50	0.25	5338272.50	89.3	70 -	120	
72 Ge	307672.88	0.85	357467.25	86.1	70 -	120	
72 Ge	119422.18	0.79	134894.38	88.5	70 -	120	
72 Ge	1010240.30	2.41	1118516.60	90.3	70 -	120	
115 In	2279892.30	1.36	2502525.50	91.1	70 -	120	
115 In	1212405.30	1.25	1421320.90	85.3	70 -	120	
115 In	6857579.00	1.27	7622565.50	90.0	70 -	120	
159 Tb	8772410.00	2.24	9867540.00	88.9	70 -	120	
165 Ho	8486631.00	1.51	9489315.00	89.4	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\006CALS.D\006CALS.D#
Date Acquired: Apr 29 2012 03:12 pm
Operator: SDM
Sample Name: 120429 Standard 2
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:09 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	3118485.00	A	29760.00	0.95	0.0000
7 (Li)	214045.09	P	1393.00	0.65	-1.0000
9 Be	2711.45	P	124.00	4.57	1.0000
11 B	14438.48	P	228.70	1.58	1.0000
23 Na	70000.10	P	779.10	1.11	1.0000
24 Mg	5192.19	P	95.84	1.85	1.0000
27 Al	952.28	P	27.96	2.94	1.0000
39 K	34947.60	P	641.10	1.83	1.0000
44 Ca	668.72	P	58.96	8.82	1.0000
45 Sc	1319250.00	A	12430.00	0.94	0.0000
45 Sc	182634.70	A	632.90	0.35	0.0000
45 Sc	4794841.00	A	7917.00	0.17	0.0000
47 Ti	36.00	P	9.61	26.71	1.0000
51 V	1298.74	P	20.83	1.60	1.0000
52 Cr	1572.11	P	34.87	2.22	1.0000
55 Mn	1189.84	P	60.99	5.13	1.0000
56 Fe	27685.45	P	281.80	1.02	1.0000
59 Co	1982.83	P	31.19	1.57	1.0000
60 Ni	536.91	P	32.12	5.98	1.0000
63 Cu	1496.99	P	42.19	2.82	1.0000
65 Cu	730.25	P	18.97	2.60	1.0000
66 Zn	649.36	P	33.49	5.16	1.0000
72 Ge	309559.59	A	1969.00	0.64	0.0000
72 Ge	118594.70	A	2977.00	2.51	0.0000
72 Ge	1008078.00	A	10070.00	1.00	0.0000
75 As	216.22	P	19.41	8.98	1.0000
78 Se	121.89	P	2.22	1.82	1.0000
78 Se	171.67	P	12.98	7.56	1.0000
88 Sr	1865.74	P	75.83	4.06	1.0000
88 Sr	19434.90	P	212.10	1.09	1.0000
95 Mo	2918.18	P	118.80	4.07	1.0000
106 (Cd)	174.45	P	15.40	8.83	1.0000
107 Ag	4801.00	P	26.48	0.55	1.0000
108 (Cd)	138.89	P	10.18	7.33	1.0000
111 Cd	1907.60	P	43.62	2.29	1.0000
115 In	2288758.00	A	16140.00	0.71	0.0000
115 In	1215674.00	A	9280.00	0.76	0.0000
115 In	6946601.00	A	95660.00	1.38	0.0000
118 Sn	2053.56	P	73.57	3.58	1.0000
118 Sn	1228.99	P	56.41	4.59	1.0000
118 Sn	6747.41	P	53.19	0.79	1.0000
121 Sb	5998.17	P	110.30	1.84	1.0000
137 Ba	2741.48	P	123.90	4.52	1.0000
159 Tb	8857915.00	A	22430.00	0.25	0.0000
165 Ho	8569195.00	A	37030.00	0.43	0.0000
205 Tl	15302.67	P	153.20	1.00	1.0000
206 (Pb)	5654.74	P	173.40	3.07	-1.0000
207 (Pb)	4755.46	P	148.60	3.12	-1.0000
208 Pb	22135.81	P	357.00	1.61	-1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3118484.50	0.95	3376647.30	92.4	70 -	120	
45 Sc	1319249.60	0.94	1470535.00	89.7	70 -	120	
45 Sc	182634.73	0.35	211970.81	86.2	70 -	120	
45 Sc	4794841.00	0.17	5338272.50	89.8	70 -	120	
72 Ge	309559.63	0.64	357467.25	86.6	70 -	120	
72 Ge	118594.73	2.51	134894.38	87.9	70 -	120	
72 Ge	1008078.00	1.00	1118516.60	90.1	70 -	120	
115 In	2288758.00	0.71	2502525.50	91.5	70 -	120	
115 In	1215673.60	0.76	1421320.90	85.5	70 -	120	
115 In	6946601.50	1.38	7622565.50	91.1	70 -	120	
159 Tb	8857915.00	0.25	9867540.00	89.8	70 -	120	
165 Ho	8569195.00	0.43	9489315.00	90.3	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\007CALS.D\007CALS.D#
Date Acquired: Apr 29 2012 03:19 pm
Operator: SDM
Sample Name: 120429 Standard 3
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:16 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	3192696.00	A	9418.00	0.29	0.0000
7 (Li)	217660.50	P	1533.00	0.70	-0.5881
9 Be	137263.09	P	1460.00	1.06	1.0000
11 B	91937.46	P	727.40	0.79	0.6425
23 Na	319351.19	P	1819.00	0.57	0.7456
24 Mg	256667.91	P	1133.00	0.44	0.9997
27 Al	43536.76	P	327.00	0.75	0.9995
39 K	174935.30	P	1277.00	0.73	0.7090
44 Ca	17988.93	P	250.60	1.39	0.9923
45 Sc	1339230.00	A	16240.00	1.21	0.0000
45 Sc	186806.80	A	2568.00	1.37	0.0000
45 Sc	4863141.00	A	44340.00	0.91	0.0000
47 Ti	2149.07	P	46.43	2.16	0.9996
51 V	57035.36	P	183.50	0.32	0.9967
52 Cr	66463.94	P	280.30	0.42	0.9998
55 Mn	48881.48	P	435.80	0.89	0.9989
56 Fe	1166878.00	A	2608.00	0.22	0.9987
59 Co	94812.93	P	612.10	0.65	1.0000
60 Ni	23738.59	P	121.80	0.51	0.9990
63 Cu	65234.74	P	225.00	0.34	0.9977
65 Cu	31405.97	P	105.10	0.33	0.9956
66 Zn	14290.27	P	126.00	0.88	0.7853
72 Ge	313606.69	A	1656.00	0.53	0.0000
72 Ge	120532.90	A	1410.00	1.17	0.0000
72 Ge	1018812.00	A	6373.00	0.63	0.0000
75 As	9802.77	P	34.62	0.35	0.9980
78 Se	5491.84	P	96.73	1.76	0.9999
78 Se	1609.65	P	18.48	1.15	0.9583
88 Sr	90064.01	P	421.30	0.47	0.9988
88 Sr	872416.38	A	9650.00	1.11	0.9992
95 Mo	152294.20	P	1251.00	0.82	0.9999
106 (Cd)	8322.75	P	316.60	3.80	0.9996
107 Ag	210981.41	P	1775.00	0.84	0.9995
108 (Cd)	6176.00	P	101.00	1.64	1.0000
111 Cd	91122.56	P	414.90	0.46	0.9996
115 In	2339964.00	A	20890.00	0.89	0.0000
115 In	1262965.00	A	12110.00	0.96	0.0000
115 In	6999441.00	A	86090.00	1.23	0.0000
118 Sn	73197.49	P	1065.00	1.46	0.9707
118 Sn	44339.85	P	322.00	0.73	0.9717
118 Sn	241858.91	P	2338.00	0.97	0.9771
121 Sb	266695.09	P	2042.00	0.77	0.9910
137 Ba	132514.50	P	353.80	0.27	0.9998
159 Tb	9006218.00	A	96330.00	1.07	0.0000
165 Ho	8788406.00	A	83670.00	0.95	0.0000
205 Tl	749022.13	P	4175.00	0.56	1.0000
206 (Pb)	258423.91	P	2470.00	0.96	0.9202
207 (Pb)	217324.80	P	2312.00	1.06	0.9160
208 Pb	1016936.00	P	4296.00	0.42	0.9421

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3192696.30	0.29	3376647.30	94.6	70 -	120	
45 Sc	1339230.10	1.21	1470535.00	91.1	70 -	120	
45 Sc	186806.84	1.37	211970.81	88.1	70 -	120	
45 Sc	4863141.50	0.91	5338272.50	91.1	70 -	120	
72 Ge	313606.66	0.53	357467.25	87.7	70 -	120	
72 Ge	120532.87	1.17	134894.38	89.4	70 -	120	
72 Ge	1018812.40	0.63	1118516.60	91.1	70 -	120	
115 In	2339963.80	0.89	2502525.50	93.5	70 -	120	
115 In	1262965.00	0.96	1421320.90	88.9	70 -	120	
115 In	6999441.00	1.23	7622565.50	91.8	70 -	120	
159 Tb	9006219.00	1.07	9867540.00	91.3	70 -	120	
165 Ho	8788406.00	0.95	9489315.00	92.6	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\008CALS.D\008CALS.D#
Date Acquired: Apr 29 2012 03:26 pm
Operator: SDM
Sample Name: 120429 Standard 4
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:23 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	3168863.00	A	75720.00	2.39	0.0000
7 (Li)	213895.30	P	1399.00	0.65	-0.1676
9 Be	273620.59	P	2407.00	0.88	1.0000
11 B	177402.59	P	1564.00	0.88	0.9988
23 Na	570026.19	P	1779.00	0.31	0.9990
24 Mg	515284.69	P	8170.00	1.59	1.0000
27 Al	87512.07	P	1407.00	1.61	1.0000
39 K	317692.59	P	414.20	0.13	0.9995
44 Ca	35650.82	P	77.29	0.22	1.0000
45 Sc	1345688.00	A	6261.00	0.47	0.0000
45 Sc	187371.80	A	1806.00	0.96	0.0000
45 Sc	4848522.00	A	53920.00	1.11	0.0000
47 Ti	4321.14	P	67.37	1.56	1.0000
51 V	114968.90	P	595.90	0.52	1.0000
52 Cr	133981.50	P	479.20	0.36	1.0000
55 Mn	98714.57	P	761.10	0.77	1.0000
56 Fe	2299299.00	A	22190.00	0.97	1.0000
59 Co	190321.50	P	1128.00	0.59	1.0000
60 Ni	47346.44	P	424.60	0.90	1.0000
63 Cu	129678.00	P	1022.00	0.79	1.0000
65 Cu	63058.22	P	582.90	0.92	1.0000
66 Zn	28108.62	P	130.70	0.46	0.9997
72 Ge	313095.41	A	2413.00	0.77	0.0000
72 Ge	122174.20	A	2457.00	2.01	0.0000
72 Ge	1014220.00	A	2417.00	0.24	0.0000
75 As	19754.32	P	69.11	0.35	1.0000
78 Se	11133.74	P	130.70	1.17	1.0000
78 Se	3089.12	P	31.98	1.04	0.9999
88 Sr	181557.59	P	787.40	0.43	1.0000
88 Sr	1749212.00	A	11860.00	0.68	1.0000
95 Mo	312322.00	P	644.10	0.21	1.0000
106 (Cd)	16525.73	P	116.30	0.70	1.0000
107 Ag	418027.09	P	1844.00	0.44	1.0000
108 (Cd)	12101.15	P	222.40	1.84	1.0000
111 Cd	182482.59	P	601.00	0.33	1.0000
115 In	2326261.00	A	33490.00	1.44	0.0000
115 In	1255491.00	A	7071.00	0.56	0.0000
115 In	6972278.00	A	61840.00	0.89	0.0000
118 Sn	151128.30	P	1789.00	1.18	1.0000
118 Sn	90873.54	P	869.80	0.96	1.0000
118 Sn	490358.81	P	2588.00	0.53	1.0000
121 Sb	541916.19	P	7083.00	1.31	1.0000
137 Ba	264718.00	P	1822.00	0.69	1.0000
159 Tb	8913186.00	A	80430.00	0.90	0.0000
165 Ho	8695783.00	A	80420.00	0.92	0.0000
205 Tl	1466200.00	A	12970.00	0.88	1.0000
206 (Pb)	511181.59	P	3956.00	0.77	1.0000
207 (Pb)	431954.19	P	2850.00	0.66	1.0000
208 Pb	1985059.00	A	16320.00	0.82	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3168863.30	2.39	3376647.30	93.8	70 -	120	
45 Sc	1345687.90	0.47	1470535.00	91.5	70 -	120	
45 Sc	187371.83	0.96	211970.81	88.4	70 -	120	
45 Sc	4848522.00	1.11	5338272.50	90.8	70 -	120	
72 Ge	313095.44	0.77	357467.25	87.6	70 -	120	
72 Ge	122174.20	2.01	134894.38	90.6	70 -	120	
72 Ge	1014220.30	0.24	1118516.60	90.7	70 -	120	
115 In	2326261.00	1.44	2502525.50	93.0	70 -	120	
115 In	1255490.90	0.56	1421320.90	88.3	70 -	120	
115 In	6972278.00	0.89	7622565.50	91.5	70 -	120	
159 Tb	8913186.00	0.90	9867540.00	90.3	70 -	120	
165 Ho	8695784.00	0.92	9489315.00	91.6	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\009_QCS.D\009_QCS.D#
Date Acquired: Apr 29 2012 03:32 pm
Operator: SDM
Sample Name: ICV 120429
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	98.58	ug/l	0.16	100.00	90 -	110	
11 B	106.60	ug/l	0.51	100.00	90 -	110	
23 Na	2465.00	ug/l	2.02	2500.00	90 -	110	
24 Mg	2424.00	ug/l	1.90	2500.00	90 -	110	
27 Al	2418.00	ug/l	1.94	2500.00	90 -	110	
39 K	2449.00	ug/l	2.09	2500.00	90 -	110	
44 Ca	2495.00	ug/l	4.04	2500.00	90 -	110	
47 Ti	97.25	ug/l	1.71	100.00	90 -	110	
51 V	100.50	ug/l	2.02	100.00	90 -	110	
52 Cr	101.40	ug/l	1.86	100.00	90 -	110	
55 Mn	100.70	ug/l	2.51	100.00	90 -	110	
56 Fe	2396.00	ug/l	1.84	2500.00	90 -	110	
59 Co	98.37	ug/l	1.61	100.00	90 -	110	
60 Ni	100.70	ug/l	1.91	100.00	90 -	110	
63 Cu	98.40	ug/l	2.29	100.00	90 -	110	
65 Cu	98.76	ug/l	2.02	100.00	90 -	110	
66 Zn	100.30	ug/l	0.84	100.00	90 -	110	
75 As	97.02	ug/l	0.84	100.00	90 -	110	
78 Se	99.74	ug/l	0.86	100.00	90 -	110	
78 Se	97.90	ug/l	0.41	100.00	90 -	110	
88 Sr	97.08	ug/l	0.87	100.00	90 -	110	
88 Sr	96.92	ug/l	0.50	100.00	90 -	110	
95 Mo	98.39	ug/l	0.35	100.00	90 -	110	
106 (Cd)	--------	ug/l	--------	100.00	90 -	110	
107 Ag	50.15	ug/l	0.48	50.00	90 -	110	
108 (Cd)	--------	ug/l	--------	100.00	90 -	110	
111 Cd	98.37	ug/l	0.51	100.00	90 -	110	
118 Sn	61.38	ug/l	13.09	50.00	90 -	110	Fail
118 Sn	52.45	ug/l	18.34	50.00	90 -	110	
118 Sn	47.74	ug/l	6.65	50.00	90 -	110	
121 Sb	120.70	ug/l	0.48	100.00	90 -	110	Fail
137 Ba	97.79	ug/l	0.68	100.00	90 -	110	
205 Tl	96.62	ug/l	0.91	100.00	90 -	110	
206 (Pb)	--------	ug/l	--------	100.00	90 -	110	
207 (Pb)	--------	ug/l	--------	100.00	90 -	110	
208 Pb	99.50	ug/l	1.20	100.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3173671.00	0.78	3376647.30	94.0	70 -	120	
45 Sc	1376815.30	0.99	1470535.00	93.6	70 -	120	
45 Sc	188648.61	1.99	211970.81	89.0	70 -	120	
45 Sc	4860080.00	0.36	5338272.50	91.0	70 -	120	
72 Ge	315843.56	2.14	357467.25	88.4	70 -	120	
72 Ge	121793.95	0.26	134894.38	90.3	70 -	120	
72 Ge	1025962.80	0.61	1118516.60	91.7	70 -	120	
115 In	2363610.30	1.39	2502525.50	94.4	70 -	120	
115 In	1283711.60	0.51	1421320.90	90.3	70 -	120	
115 In	6965782.50	0 34	7622565.50	91.4	70 -	120	
159 Tb	8961752.00	0.77	9867540.00	90.8	70 -	120	
165 Ho	8661485.00	0.54	9489315.00	91.3	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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\12D29o01.B\012_CCB.D\012_CCB.D#
Date Acquired: Apr 29 2012 03:52 pm
Operator: SDM
Sample Name: ICB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#######	
9 Be	0.00 ug/l	551.25	0.12	
11 B	-0.66 ug/l	2.18	15.00	
23 Na	-18.43 ug/l	33.12	77.10	
24 Mg	0.33 ug/l	12.13	7.50	
27 Al	-0.31 ug/l	34.04	3.96	
39 K	-27.19 ug/l	15.93	19.20	
44 Ca	-14.45 ug/l	30.57	90.00	
47 Ti	-0.02 ug/l	157.68	0.78	
51 V	-0.00 ug/l	10485.00	0.21	
52 Cr	-0.01 ug/l	117.10	0.12	
55 Mn	-0.06 ug/l	42.38	0.18	
56 Fe	0.01 ug/l	531.47	40.80	
59 Co	0.00 ug/l	157.72	0.09	
60 Ni	0.01 ug/l	43.08	0.48	
63 Cu	-0.01 ug/l	68.17	0.39	
65 Cu	0.02 ug/l	83.36	0.39	
66 Zn	0.03 ug/l	162.68	6.90	
75 As	0.01 ug/l	117.42	0.27	
78 Se	0.01 ug/l	250.65	0.30	
78 Se	-0.27 ug/l	28.24	0.30	
88 Sr	0.00 ug/l	178.68	0.03	
88 Sr	0.00 ug/l	944.02	0.03	
95 Mo	0.09 ug/l	2.66	0.21	
106 (Cd)	-------- ug/l	--------	#######	
107 Ag	0.01 ug/l	28.92	0.09	
108 (Cd)	-------- ug/l	--------	#######	
111 Cd	0.00 ug/l	271.13	0.06	
118 Sn	0.03 ug/l	25.87	#######	
118 Sn	0.00 ug/l	391.45	#######	
118 Sn	0.04 ug/l	138.24	0.30	
121 Sb	0.07 ug/l	18.37	0.03	Fail
137 Ba	0.00 ug/l	250.11	0.12	
205 Tl	0.01 ug/l	18.74	0.03	
206 (Pb)	-------- ug/l	--------	#######	
207 (Pb)	-------- ug/l	--------	#######	
208 Pb	0.04 ug/l	22.34	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3120835.30	1.24	3376647.30	92.4	70 - 120	
45 Sc	1496764.50	1.86	1470535.00	101.8	70 - 120	
45 Sc	218600.33	0.99	211970.81	103.1	70 - 120	
45 Sc	5112487.50	1.53	5338272.50	95.8	70 - 120	
72 Ge	364010.16	0.18	357467.25	101.8	70 - 120	
72 Ge	139267.33	0.88	134894.38	103.2	70 - 120	
72 Ge	1098100.90	1.26	1118516.60	98.2	70 - 120	
115 In	2585124.30	0.54	2502525.50	103.3	70 - 120	
115 In	1486285.40	1.27	1421320.90	104.6	70 - 120	
115 In	7654269.50	0.90	7622565.50	100.4	70 - 120	
159 Tb	9988171.00	0.38	9867540.00	101.2	70 - 120	
165 Ho	9594655.00	1.47	9489315.00	101.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\013_CCV.D\013_CCV.D#
Date Acquired: Apr 29 2012 03:59 pm
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	49.49	ug/l	2.46	50.00	90 - 110	
11 B	48.77	ug/l	1.64	50.00	90 - 110	
23 Na	1232.00	ug/l	1.92	1250.00	90 - 110	
24 Mg	2457.00	ug/l	1.63	2500.00	90 - 110	
27 Al	981.00	ug/l	2.38	1000.00	90 - 110	
39 K	989.50	ug/l	2.36	1000.00	90 - 110	
44 Ca	2475.00	ug/l	1.81	2500.00	90 - 110	
47 Ti	49.14	ug/l	1.59	50.00	90 - 110	
51 V	48.83	ug/l	1.19	50.00	90 - 110	
52 Cr	48.81	ug/l	1.63	50.00	90 - 110	
55 Mn	48.81	ug/l	1.29	50.00	90 - 110	
56 Fe	997.00	ug/l	1.15	1000.00	90 - 110	
59 Co	48.80	ug/l	1.24	50.00	90 - 110	
60 Ni	49.40	ug/l	1.79	50.00	90 - 110	
63 Cu	48.98	ug/l	1.40	50.00	90 - 110	
65 Cu	49.44	ug/l	1.13	50.00	90 - 110	
66 Zn	50.59	ug/l	1.53	50.00	90 - 110	
75 As	49.60	ug/l	0.12	50.00	90 - 110	
78 Se	49.32	ug/l	1.09	50.00	90 - 110	
78 Se	49.16	ug/l	2.59	50.00	90 - 110	
88 Sr	49.86	ug/l	0.43	50.00	90 - 110	
88 Sr	49.79	ug/l	1.49	50.00	90 - 110	
95 Mo	49.12	ug/l	1.60	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.89	ug/l	1.96	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.47	ug/l	1.10	50.00	90 - 110	
118 Sn	49.63	ug/l	0.99	---	##### - #####	
118 Sn	49.77	ug/l	1.74	---	##### - #####	
118 Sn	49.41	ug/l	1.31	50.00	90 - 110	
121 Sb	49.74	ug/l	1.07	50.00	90 - 110	
137 Ba	50.21	ug/l	2.47	50.00	90 - 110	
205 Tl	50.93	ug/l	1.44	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	50.87	ug/l	0.42	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3106888.50	1.38	3376647.30	92.0	70 - 120	
45 Sc	1345761.80	1.12	1470535.00	91.5	70 - 120	
45 Sc	191077.67	1.63	211970.81	90.1	70 - 120	
45 Sc	4774637.00	1.40	5338272.50	89.4	70 - 120	
72 Ge	310528.69	1.97	357467.25	86.9	70 - 120	
72 Ge	122808.61	1.93	134894.38	91.0	70 - 120	
72 Ge	1005796.40	0.28	1118516.60	89.9	70 - 120	
115 In	2333582.50	0.96	2502525.50	93.2	70 - 120	
115 In	1271369.40	0.38	1421320.90	89.4	70 - 120	
115 In	6909954.00	1.56	7622565.50	90.7	70 - 120	
159 Tb	8833338.00	0.73	9867540.00	89.5	70 - 120	
165 Ho	8618807.00	0.77	9489315.00	90.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\014_CCB.D\014_CCB.D#
Date Acquired: Apr 29 2012 04:06 pm
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	176.81	0.12	
11 B	0.08	ug/l	284.70	15.00	
23 Na	-31.53	ug/l	21.39	77.10	
24 Mg	0.17	ug/l	35.98	7.50	
27 Al	-0.28	ug/l	41.33	3.96	
39 K	-27.53	ug/l	16.97	19.20	
44 Ca	-10.23	ug/l	25.21	90.00	
47 Ti	-0.03	ug/l	1.23	0.78	
51 V	0.00	ug/l	266.00	0.21	
52 Cr	0.00	ug/l	30438.00	0.12	
55 Mn	-0.09	ug/l	38.42	0.18	
56 Fe	0.03	ug/l	96.61	40.80	
59 Co	0.00	ug/l	60.99	0.09	
60 Ni	0.02	ug/l	75.84	0.48	
63 Cu	-0.03	ug/l	34.96	0.39	
65 Cu	0.01	ug/l	205.06	0.39	
66 Zn	0.03	ug/l	174.79	6.90	
75 As	0.02	ug/l	91.45	0.27	
78 Se	0.09	ug/l	9.69	0.30	
78 Se	-0.02	ug/l	962.79	0.30	
88 Sr	0.01	ug/l	89.41	0.03	
88 Sr	0.00	ug/l	166.72	0.03	
95 Mo	0.35	ug/l	5.93	0.21	Fail
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.01	ug/l	20.71	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	355.70	0.06	
118 Sn	0.14	ug/l	19.33	#######	
118 Sn	0.05	ug/l	19.08	#######	
118 Sn	0.06	ug/l	17.90	0.30	
121 Sb	0.52	ug/l	4.32	0.03	Fail
137 Ba	0.01	ug/l	35.00	0.12	
205 Tl	0.02	ug/l	21.38	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.03	ug/l	32.02	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3051166.50	0.42	3376647.30	90.4	70 - 120	
45 Sc	1489764.80	1.23	1470535.00	101.3	70 - 120	
45 Sc	223230.92	1.36	211970.81	105.3	70 - 120	
45 Sc	5130215.50	0.14	5338272.50	96.1	70 - 120	
72 Ge	361118.47	1.26	357467.25	101.0	70 - 120	
72 Ge	137921.89	1.19	134894.38	102.2	70 - 120	
72 Ge	1084900.60	0.54	1118516.60	97.0	70 - 120	
115 In	2570952.50	1.26	2502525.50	102.7	70 - 120	
115 In	1509315.80	0.11	1421320.90	106.2	70 - 120	
115 In	7597001.00	0.34	7622565.50	99.7	70 - 120	
159 Tb	9881883.00	0.91	9867540.00	100.1	70 - 120	
165 Ho	9629127.00	0.29	9489315.00	101.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\015SMPL.D\015SMPL.D#
Date Acquired: Apr 29 2012 04:13 pm
Operator: SDM
Sample Name: LDR-1000ppb 120429
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	874.80	ug/l	874.80	0.77	1000	
11 B	964.30	ug/l	964.30	1.46	1000	
23 Na	21930.00	ug/l	21930.00	1.17	25000	
24 Mg	45060.00	ug/l	45060.00	0.33	50000	
27 Al	19300.00	ug/l	19300.00	0.39	20000	
39 K	17780.00	ug/l	17780.00	1.93	20000	
44 Ca	49320.00	ug/l	49320.00	0.38	50000	
47 Ti	987.70	ug/l	987.70	0.87	1000	
51 V	912.10	ug/l	912.10	1.51	1000	
52 Cr	895.20	ug/l	895.20	1.74	1000	
55 Mn	911.30	ug/l	911.30	0.88	1000	
56 Fe	18690.00	ug/l	18690.00	0.43	20000	
59 Co	876.00	ug/l	876.00	0.41	1000	
60 Ni	929.00	ug/l	929.00	0.54	1000	
63 Cu	867.80	ug/l	867.80	0.94	1000	
65 Cu	934.60	ug/l	934.60	0.75	1000	
66 Zn	891.80	ug/l	891.80	1.85	1000	
75 As	945.90	ug/l	945.90	1.82	1000	
78 Se	918.20	ug/l	918.20	1.72	1000	
78 Se	907.60	ug/l	907.60	1.03	1000	
88 Sr	919.60	ug/l	919.60	1.39	1000	
88 Sr	939.90	ug/l	939.90	0.78	1000	
95 Mo	923.30	ug/l	923.30	1.22	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	412.20	ug/l	412.20	2.44	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	883.10	ug/l	883.10	0.56	1000	
118 Sn	920.50	ug/l	920.50	1.45	#######	
118 Sn	984.00	ug/l	984.00	1.39	#######	
118 Sn	907.40	ug/l	907.40	0.61	1000	
121 Sb	907.10	ug/l	907.10	1.83	1000	
137 Ba	940.00	ug/l	940.00	0.78	1000	
205 Tl	908.80	ug/l	908.80	0.59	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	900.70	ug/l	900.70	0.25	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2918665.00	0.53	3376647.30	86.4	70 - 120	
45 Sc	1296454.50	1.47	1470535.00	88.2	70 - 120	
45 Sc	180100.05	1.11	211970.81	85.0	70 - 120	
45 Sc	4503144.50	1.17	5338272.50	84.4	70 - 120	
72 Ge	303364.97	1.15	357467.25	84.9	70 - 120	
72 Ge	116848.66	1.00	134894.38	86.6	70 - 120	
72 Ge	964082.69	1.10	1118516.60	86.2	70 - 120	
115 In	2240127.50	1.11	2502525.50	89.5	70 - 120	
115 In	1207821.40	1.93	1421320.90	85.0	70 - 120	
115 In	6553753.00	1.40	7622565.50	86.0	70 - 120	
159 Tb	8608572.00	0.50	9867540.00	87.2	70 - 120	
165 Ho	8228064.00	0.90	9489315.00	86.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\017SMPL.D\017SMPL.D#
Date Acquired: Apr 29 2012 04:26 pm
Operator: SDM
Sample Name: ICSA 120429
Misc Info:
Vial Number: 2105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.01	ug/l	0.01	12.16	1000	
11 B	26.58	ug/l	26.58	4.05	1000	
23 Na	92430.00	ug/l	92430.00	2.54	25000	>Cal
24 Mg	92080.00	ug/l	92080.00	2.60	50000	>Cal
27 Al	91050.00	ug/l	91050.00	1.69	20000	>Cal
39 K	92510.00	ug/l	92510.00	2.49	20000	>Cal
44 Ca	101600.00	ug/l	101600.00	2.78	50000	>Cal
47 Ti	2127.00	ug/l	2127.00	2.50	1000	>Cal
51 V	0.44	ug/l	0.44	8.11	1000	
52 Cr	1.29	ug/l	1.29	5.65	1000	
55 Mn	5.42	ug/l	5.42	2.93	1000	
56 Fe	95260.00	ug/l	95260.00	3.18	20000	>Cal
59 Co	1.42	ug/l	1.42	2.86	1000	
60 Ni	2.01	ug/l	2.01	4.16	1000	
63 Cu	1.03	ug/l	1.03	1.68	1000	
65 Cu	1.09	ug/l	1.09	5.23	1000	
66 Zn	1.95	ug/l	1.95	9.71	1000	
75 As	0.56	ug/l	0.56	3.11	1000	
78 Se	0.25	ug/l	0.25	8.57	1000	
78 Se	1.12	ug/l	1.12	29.10	1000	
88 Sr	0.53	ug/l	0.53	1.48	1000	
88 Sr	0.56	ug/l	0.56	1.00	1000	
95 Mo	1849.00	ug/l	1849.00	0.72	1000	>Cal
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.15	ug/l	0.15	7.37	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.38	ug/l	0.38	20.89	1000	
118 Sn	4.14	ug/l	4.14	5.33	#######	
118 Sn	4.99	ug/l	4.99	7.05	#######	
118 Sn	5.07	ug/l	5.07	2.40	1000	
121 Sb	6.59	ug/l	6.59	1.95	1000	
137 Ba	2.34	ug/l	2.34	2.17	1000	
205 Tl	0.19	ug/l	0.19	2.43	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.09	ug/l	0.09	12.50	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3029842.00	2.18	3376647.30	89.7	70 - 120	
45 Sc	1199464.30	1.69	1470535.00	81.6	70 - 120	
45 Sc	163871.88	3.19	211970.81	77.3	70 - 120	
45 Sc	4370775.00	0.63	5338272.50	81.9	70 - 120	
72 Ge	298302.25	0.94	357467.25	83.4	70 - 120	
72 Ge	116355.88	0.67	134894.38	86.3	70 - 120	
72 Ge	1028614.90	1.27	1118516.60	92.0	70 - 120	
115 In	2177284.00	0.29	2502525.50	87.0	70 - 120	
115 In	1159143.50	0.32	1421320.90	81.6	70 - 120	
115 In	6420831.00	0.68	7622565.50	84.2	70 - 120	
159 Tb	7734300.00	0.82	9867540.00	78.4	70 - 120	
165 Ho	7408320.50	1.41	9489315.00	78.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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\12D29o01.B\018ICSB.D\018ICSB.D#
Date Acquired: Apr 29 2012 04:32 pm
Acq. Method: 62A0429A.M
Operator: SDM
Sample Name: ICSAB 120429
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal. Update: Apr 29 2012 03:29 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	242.80	3.46	250	97.1	80 - 120	
11 B	45	3	18.59	1.95	---		-	
23 Na	45	2	93460.00	1.56	---		-	
24 Mg	45	2	93290.00	0.56	---		-	
27 Al	45	2	91890.00	0.97	---		-	
39 K	45	2	93080.00	1.02	---		-	
44 Ca	45	2	102500.00	0.87	---		-	
47 Ti	45	2	2150.00	1.01	2000	107.5	80 - 120	
51 V	45	2	279.60	0.98	250	111.8	80 - 120	
52 Cr	45	2	269.00	0.95	250	107.6	80 - 120	
55 Mn	45	2	274.70	0.99	250	109.9	80 - 120	
56 Fe	45	2	95110.00	1.43	---		-	
59 Co	45	2	258.10	1.45	250	103.2	80 - 120	
60 Ni	45	2	512.60	0.76	500	102.5	80 - 120	
63 Cu	45	2	251.60	1.71	250	100.6	80 - 120	
65 Cu	45	2	252.50	1.44	250	101.0	80 - 120	
66 Zn	115	2	450.20	1.08	500	90.0	80 - 120	
75 As	115	2	245.70	0.89	250	98.3	80 - 120	
78 Se	115	1	220.60	1.03	250	88.2	80 - 120	
78 Se	115	2	220.50	0.94	250	88.2	80 - 120	
88 Sr	115	2	0.57	2.11	---		-	
88 Sr	115	3	0.59	1.30	---		-	
95 Mo	115	3	2123.00	1.35	2000	106.2	80 - 120	
106 (Cd)	---	3	---	---	---		-	
107 Ag	115	3	467.00	5.48	500	93.4	80 - 120	
108 (Cd)	---	3	---	---	---		-	
111 Cd	115	3	468.00	0.54	500	93.6	80 - 120	
118 Sn	115	1	1.83	2.93	---		-	
118 Sn	115	2	2.52	6.77	---		-	
118 Sn	115	3	2.56	0.36	---		-	
121 Sb	115	3	243.80	1.10	250	97.5	80 - 120	
137 Ba	115	3	261.20	0.52	250	104.5	80 - 120	
205 Tl	159	3	253.00	0.79	250	101.2	80 - 120	
206 (Pb)	---	3	---	---	---		-	
207 (Pb)	---	3	---	---	---		-	
208 Pb	159	3	512.10	1.02	500	102.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	3173016	1.19	3376647	94.0	70 - 120	
45 Sc	1	1214374	0.58	1470535	82.6	70 - 120	
45 Sc	2	169847	1.24	211971	80.1	70 - 120	
45 Sc	3	4431124	0.29	5338273	83.0	70 - 120	
72 Ge	1	304164	1.07	357467	85.1	70 - 120	
72 Ge	2	119773	2.33	134894	88.8	70 - 120	
72 Ge	3	1038917	0.69	1118517	92.9	70 - 120	
115 In	1	2213476	1.43	2502526	88.4	70 - 120	
115 In	2	1173905	0.75	1421321	82.6	70 - 120	
115 In	3	6485618	0.83	7622566	85.1	70 - 120	
159 Tb	3	7787618	0.26	9867540	78.9	70 - 120	
165 Ho	3	7477252	0.63	9489315	78.8	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2_hmi.u
Tune File# 2 c:\icpchem\1\7500\he_hmi.u
Tune File# 3 c:\icpchem\1\7500\ng_hmi.u

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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\12D29o01.B\040_CCV.D\040_CCV.D#
Date Acquired: Apr 29 2012 07:00 pm
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	51.77	ug/l	0.27	50.00	90 - 110	
11 B	65.50	ug/l	1.64	50.00	90 - 110	Fail
23 Na	1390.00	ug/l	1.34	1250.00	90 - 110	Fail
24 Mg	2529.00	ug/l	1.02	2500.00	90 - 110	
27 Al	1009.00	ug/l	1.01	1000.00	90 - 110	
39 K	1046.00	ug/l	1.54	1000.00	90 - 110	
44 Ca	2490.00	ug/l	1.74	2500.00	90 - 110	
47 Ti	50.48	ug/l	2.02	50.00	90 - 110	
51 V	48.29	ug/l	1.16	50.00	90 - 110	
52 Cr	48.05	ug/l	1.73	50.00	90 - 110	
55 Mn	48.16	ug/l	0.77	50.00	90 - 110	
56 Fe	969.80	ug/l	2.00	1000.00	90 - 110	
59 Co	47.85	ug/l	1.62	50.00	90 - 110	
60 Ni	47.78	ug/l	0.65	50.00	90 - 110	
63 Cu	47.87	ug/l	2.12	50.00	90 - 110	
65 Cu	48.05	ug/l	2.09	50.00	90 - 110	
66 Zn	51.45	ug/l	1.98	50.00	90 - 110	
75 As	49.71	ug/l	1.41	50.00	90 - 110	
78 Se	50.79	ug/l	2.97	50.00	90 - 110	
78 Se	51.82	ug/l	3.19	50.00	90 - 110	
88 Sr	49.99	ug/l	0.24	50.00	90 - 110	
88 Sr	51.39	ug/l	0.70	50.00	90 - 110	
95 Mo	49.98	ug/l	0.76	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	25.22	ug/l	1.36	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	50.04	ug/l	0.86	50.00	90 - 110	
118 Sn	48.78	ug/l	1.66	---	##### - #####	
118 Sn	49.06	ug/l	2.55	---	##### - #####	
118 Sn	49.32	ug/l	1.33	50.00	90 - 110	
121 Sb	49.64	ug/l	1.85	50.00	90 - 110	
137 Ba	50.57	ug/l	1.22	50.00	90 - 110	
205 Tl	51.13	ug/l	0.58	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	50.86	ug/l	1.29	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3599266.80	1.46	3376647.30	106.6	70 - 120	
45 Sc	1279150.60	1.40	1470535.00	87.0	70 - 120	
45 Sc	180990.47	1.34	211970.81	85.4	70 - 120	
45 Sc	4947416.00	0.78	5338272.50	92.7	70 - 120	
72 Ge	294487.06	0.97	357467.25	82.4	70 - 120	
72 Ge	114463.32	3.37	134894.38	84.9	70 - 120	
72 Ge	1021466.50	1.18	1118516.60	91.3	70 - 120	
115 In	2148336.80	1.32	2502525.50	85.8	70 - 120	
115 In	1153497.80	1.15	1421320.90	81.2	70 - 120	
115 In	6757549.50	0.73	7622565.50	88.7	70 - 120	
159 Tb	8508272.00	0.19	9867540.00	86.2	70 - 120	
165 Ho	8343297.50	0.51	9489315.00	87.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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\12D29o01.B\042_CCB.D\042_CCB.D#
Date Acquired: Apr 29 2012 07:13 pm
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	64.88	0.12	
11 B	5.80	ug/l	3.88	15.00	
23 Na	62.40	ug/l	10.86	77.10	
24 Mg	0.58	ug/l	49.17	7.50	
27 Al	-0.17	ug/l	101.95	3.96	
39 K	18.42	ug/l	26.82	19.20	
44 Ca	-0.06	ug/l	4697.60	90.00	
47 Ti	-0.04	ug/l	38.29	0.78	
51 V	0.00	ug/l	86.54	0.21	
52 Cr	0.01	ug/l	260.57	0.12	
55 Mn	-0.10	ug/l	31.85	0.18	
56 Fe	0.10	ug/l	34.13	40.80	
59 Co	0.00	ug/l	94.61	0.09	
60 Ni	0.00	ug/l	128.39	0.48	
63 Cu	0.00	ug/l	661.79	0.39	
65 Cu	0.02	ug/l	51.17	0.39	
66 Zn	0.03	ug/l	114.65	6.90	
75 As	0.01	ug/l	139.03	0.27	
78 Se	0.04	ug/l	106.43	0.30	
78 Se	1.05	ug/l	13.54	0.30	Fail
88 Sr	0.01	ug/l	50.69	0.03	
88 Sr	0.00	ug/l	261.57	0.03	
95 Mo	0.12	ug/l	13.57	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.02	ug/l	16.06	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	1374.60	0.06	
118 Sn	0.04	ug/l	55.96	#######	
118 Sn	0.02	ug/l	29.35	#######	
118 Sn	0.02	ug/l	40.32	0.30	
121 Sb	0.17	ug/l	1.87	0.03	Fail
137 Ba	0.01	ug/l	7.91	0.12	
205 Tl	0.01	ug/l	27.16	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.11	ug/l	2.12	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3776893.30	0.19	3376647.30	111.9	70 - 120	
45 Sc	1333430.10	1.73	1470535.00	90.7	70 - 120	
45 Sc	199110.20	1.39	211970.81	93.9	70 - 120	
45 Sc	5322873.00	1.11	5338272.50	99.7	70 - 120	
72 Ge	325249.13	1.02	357467.25	91.0	70 - 120	
72 Ge	125278.34	1.04	134894.38	92.9	70 - 120	
72 Ge	1113328.80	0.45	1118516.60	99.5	70 - 120	
115 In	2238391.30	0.40	2502525.50	89.4	70 - 120	
115 In	1269218.10	1.04	1421320.90	89.3	70 - 120	
115 In	7462363.00	1.00	7622565.50	97.9	70 - 120	
159 Tb	9592049.00	1.63	9867540.00	97.2	70 - 120	
165 Ho	9171246.00	1.38	9489315.00	96.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\054_CCV.D\054_CCV.D#
Date Acquired: Apr 29 2012 08:34 pm
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	51.57	ug/l	0.74	50.00	90 - 110	
11 B	59.22	ug/l	1.14	50.00	90 - 110	Fail
23 Na	1395.00	ug/l	0.89	1250.00	90 - 110	Fail
24 Mg	2581.00	ug/l	1.01	2500.00	90 - 110	
27 Al	1037.00	ug/l	1.54	1000.00	90 - 110	
39 K	1061.00	ug/l	1.99	1000.00	90 - 110	
44 Ca	2498.00	ug/l	1.29	2500.00	90 - 110	
47 Ti	50.54	ug/l	4.73	50.00	90 - 110	
51 V	49.18	ug/l	1.08	50.00	90 - 110	
52 Cr	48.86	ug/l	1.61	50.00	90 - 110	
55 Mn	48.80	ug/l	0.40	50.00	90 - 110	
56 Fe	986.20	ug/l	1.00	1000.00	90 - 110	
59 Co	48.31	ug/l	1.52	50.00	90 - 110	
60 Ni	48.19	ug/l	1.38	50.00	90 - 110	
63 Cu	48.17	ug/l	1.04	50.00	90 - 110	
65 Cu	48.57	ug/l	2.23	50.00	90 - 110	
66 Zn	51.86	ug/l	2.10	50.00	90 - 110	
75 As	50.35	ug/l	0.85	50.00	90 - 110	
78 Se	51.16	ug/l	2.00	50.00	90 - 110	
78 Se	52.43	ug/l	1.71	50.00	90 - 110	
88 Sr	50.42	ug/l	1.62	50.00	90 - 110	
88 Sr	50.93	ug/l	1.60	50.00	90 - 110	
95 Mo	48.98	ug/l	0.68	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	25.00	ug/l	1.85	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.14	ug/l	0.58	50.00	90 - 110	
118 Sn	49.46	ug/l	1.70	---	##### - #####	
118 Sn	49.36	ug/l	1.26	---	##### - #####	
118 Sn	49.19	ug/l	0.67	50.00	90 - 110	
121 Sb	50.04	ug/l	1.95	50.00	90 - 110	
137 Ba	49.55	ug/l	1.69	50.00	90 - 110	
205 Tl	49.95	ug/l	1.31	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	49.63	ug/l	1.59	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4084479.50	1.24	3376647.30	121.0	70 - 120	IS Fail
45 Sc	1325304.80	0.38	1470535.00	90.1	70 - 120	
45 Sc	184027.44	0.77	211970.81	86.8	70 - 120	
45 Sc	5750532.00	0.95	5338272.50	107.7	70 - 120	
72 Ge	309222.06	1.46	357467.25	86.5	70 - 120	
72 Ge	120337.91	1.77	134894.38	89.2	70 - 120	
72 Ge	1202986.10	0.62	1118516.60	107.6	70 - 120	
115 In	2240788.00	0.11	2502525.50	89.5	70 - 120	
115 In	1182942.40	1.49	1421320.90	83.2	70 - 120	
115 In	8053842.50	1.20	7622565.50	105.7	70 - 120	
159 Tb	10253045.00	0.95	9867540.00	103.9	70 - 120	
165 Ho	9863840.00	0.42	9489315.00	103.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\056_CCB.D\056_CCB.D#
Date Acquired: Apr 29 2012 08:48 pm
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	331.77	0.12	
11 B	1.71	ug/l	8.78	15.00	
23 Na	11.62	ug/l	79.20	77.10	
24 Mg	0.64	ug/l	37.84	7.50	
27 Al	-0.33	ug/l	24.05	3.96	
39 K	-19.53	ug/l	26.04	19.20	
44 Ca	-6.74	ug/l	46.46	90.00	
47 Ti	0.01	ug/l	274.63	0.78	
51 V	0.00	ug/l	392.17	0.21	
52 Cr	-0.03	ug/l	11.84	0.12	
55 Mn	-0.18	ug/l	10.43	0.18	
56 Fe	-0.09	ug/l	28.07	40.80	
59 Co	0.00	ug/l	89.18	0.09	
60 Ni	0.01	ug/l	52.29	0.48	
63 Cu	-0.03	ug/l	16.66	0.39	
65 Cu	-0.01	ug/l	287.34	0.39	
66 Zn	0.03	ug/l	256.83	6.90	
75 As	0.01	ug/l	109.68	0.27	
78 Se	0.02	ug/l	87.42	0.30	
78 Se	-0.16	ug/l	103.64	0.30	
88 Sr	0.01	ug/l	65.00	0.03	
88 Sr	0.00	ug/l	112.20	0.03	
95 Mo	0.10	ug/l	10.78	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.01	ug/l	94.09	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	117.60	0.06	
118 Sn	0.04	ug/l	23.66	#######	
118 Sn	-0.02	ug/l	115.30	#######	
118 Sn	0.01	ug/l	21.59	0.30	
121 Sb	0.17	ug/l	6.19	0.03	Fail
137 Ba	0.00	ug/l	257.67	0.12	
205 Tl	0.00	ug/l	30.36	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.16	ug/l	6.23	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4085288.80	0.97	3376647.30	121.0	70 - 120	IS Fai
45 Sc	1586272.80	0.73	1470535.00	107.9	70 - 120	
45 Sc	237369.17	4.80	211970.81	112.0	70 - 120	
45 Sc	6151997.00	0.54	5338272.50	115.2	70 - 120	
72 Ge	384889.41	1.22	357467.25	107.7	70 - 120	
72 Ge	149314.09	2.80	134894.38	110.7	70 - 120	
72 Ge	1271881.50	0.43	1118516.60	113.7	70 - 120	
115 In	2714494.30	0.76	2502525.50	108.5	70 - 120	
115 In	1535405.60	2.02	1421320.90	108.0	70 - 120	
115 In	8577557.00	0.91	7622565.50	112.5	70 - 120	
159 Tb	10979286.00	1.58	9867540.00	111.3	70 - 120	
165 Ho	10664691.00	0.73	9489315.00	112.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\124_CCV.D\124_CCV.D#
Date Acquired: Apr 30 2012 04:26 am
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	48.92	ug/l	0.94	50.00	90 -	110	
11 B	60.37	ug/l	0.66	50.00	90 -	110	Fail
23 Na	1530.00	ug/l	1.55	1250.00	90 -	110	Fail
24 Mg	2576.00	ug/l	1.05	2500.00	90 -	110	
27 Al	1035.00	ug/l	0.98	1000.00	90 -	110	
39 K	1092.00	ug/l	1.34	1000.00	90 -	110	
44 Ca	2560.00	ug/l	2.21	2500.00	90 -	110	
47 Ti	50.68	ug/l	2.35	50.00	90 -	110	
51 V	49.29	ug/l	1.39	50.00	90 -	110	
52 Cr	49.09	ug/l	0.75	50.00	90 -	110	
55 Mn	49.44	ug/l	1.84	50.00	90 -	110	
56 Fe	987.40	ug/l	1.90	1000.00	90 -	110	
59 Co	48.51	ug/l	1.66	50.00	90 -	110	
60 Ni	48.22	ug/l	1.67	50.00	90 -	110	
63 Cu	48.18	ug/l	1.77	50.00	90 -	110	
65 Cu	47.86	ug/l	1.78	50.00	90 -	110	
66 Zn	51.75	ug/l	2.59	50.00	90 -	110	
75 As	50.80	ug/l	1.20	50.00	90 -	110	
78 Se	49.99	ug/l	0.37	50.00	90 -	110	
78 Se	52.15	ug/l	2.55	50.00	90 -	110	
88 Sr	51.09	ug/l	0.99	50.00	90 -	110	
88 Sr	50.99	ug/l	0.93	50.00	90 -	110	
95 Mo	49.34	ug/l	1.41	50.00	90 -	110	
106 (Cd)	--------	ug/l	--------	50.00	90 -	110	
107 Ag	24.91	ug/l	1.38	25.00	90 -	110	
108 (Cd)	--------	ug/l	--------	50.00	90 -	110	
111 Cd	49.42	ug/l	0.25	50.00	90 -	110	
118 Sn	50.08	ug/l	1.06	---	##### -	#####	
118 Sn	49.75	ug/l	1.56	---	##### -	#####	
118 Sn	49.59	ug/l	0.80	50.00	90 -	110	
121 Sb	50.55	ug/l	0.36	50.00	90 -	110	
137 Ba	50.02	ug/l	0.82	50.00	90 -	110	
205 Tl	49.65	ug/l	1.59	50.00	90 -	110	
206 (Pb)	--------	ug/l	--------	50.00	90 -	110	
207 (Pb)	--------	ug/l	--------	50.00	90 -	110	
208 Pb	49.26	ug/l	1.76	50.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3400222.30	1.04	3376647.30	100.7	70 -	120	
45 Sc	1302554.30	0.78	1470535.00	88.6	70 -	120	
45 Sc	180802.42	0.86	211970.81	85.3	70 -	120	
45 Sc	5052986.00	0.27	5338272.50	94.7	70 -	120	
72 Ge	301966.13	1.66	357467.25	84.5	70 -	120	
72 Ge	113243.97	1.57	134894.38	84.0	70 -	120	
72 Ge	1054173.50	0.71	1118516.60	94.2	70 -	120	
115 In	2165327.50	1.24	2502525.50	86.5	70 -	120	
115 In	1160966.40	1.30	1421320.90	81.7	70 -	120	
115 In	6928449.50	0.19	7622565.50	90.9	70 -	120	
159 Tb	8709664.00	1.20	9867540.00	88.3	70 -	120	
165 Ho	6371190.00	0.54	9489315.00	88.2	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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\12D29o01.B\126_CCB.D\126_CCB.D#
Date Acquired: Apr 30 2012 04:39 am
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	########	
9 Be	0.00	ug/l	1505.20	0.12	
11 B	4.85	ug/l	3.30	15.00	
23 Na	75.21	ug/l	20.74	77.10	
24 Mg	0.25	ug/l	67.63	7.50	
27 Al	0.00	ug/l	25204.00	3.96	
39 K	-6.90	ug/l	167.37	19.20	
44 Ca	-4.06	ug/l	126.65	90.00	
47 Ti	-0.04	ug/l	36.08	0.78	
51 V	0.00	ug/l	287.84	0.21	
52 Cr	-0.06	ug/l	22.18	0.12	
55 Mn	-0.24	ug/l	9.84	0.18	
56 Fe	-0.09	ug/l	19.93	40.80	
59 Co	0.00	ug/l	129.50	0.09	
60 Ni	0.00	ug/l	252.15	0.48	
63 Cu	-0.04	ug/l	21.24	0.39	
65 Cu	0.00	ug/l	367.84	0.39	
66 Zn	0.02	ug/l	295.47	6.90	
75 As	0.01	ug/l	100.43	0.27	
78 Se	0.05	ug/l	28.44	0.30	
78 Se	0.37	ug/l	86.38	0.30	Fail
88 Sr	0.01	ug/l	45.81	0.03	
88 Sr	0.01	ug/l	23.18	0.03	
95 Mo	0.10	ug/l	2.17	0.21	
106 (Cd)	--------	ug/l	--------	########	
107 Ag	0.01	ug/l	38.83	0.09	
108 (Cd)	--------	ug/l	--------	########	
111 Cd	0.00	ug/l	120.43	0.06	
118 Sn	0.05	ug/l	37.55	########	
118 Sn	0.02	ug/l	69.98	########	
118 Sn	0.02	ug/l	17.14	0.30	
121 Sb	0.18	ug/l	9.88	0.03	Fail
137 Ba	0.01	ug/l	47.83	0.12	
205 Tl	0.01	ug/l	6.79	0.03	
206 (Pb)	--------	ug/l	--------	########	
207 (Pb)	--------	ug/l	--------	########	
208 Pb	-0.29	ug/l	1.42	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3433924.50	0.81	3376647.30	101.7	70 - 120	
45 Sc	1377849.80	2.20	1470535.00	93.7	70 - 120	
45 Sc	245378.52	2.88	211970.81	115.8	70 - 120	
45 Sc	5232968.00	0.80	5338272.50	98.0	70 - 120	
72 Ge	345661.78	0.86	357467.25	96.7	70 - 120	
72 Ge	153369.84	3.41	134894.38	113.7	70 - 120	
72 Ge	1103968.80	0.66	1118516.60	98.7	70 - 120	
115 In	2337431.50	1.00	2502525.50	93.4	70 - 120	
115 In	1591212.00	2.87	1421320.90	112.0	70 - 120	
115 In	7361426.50	1.18	7622565.50	96.6	70 - 120	
159 Tb	9214957.00	0.42	9867540.00	93.4	70 - 120	
165 Ho	8903479.00	0.71	9489315.00	93.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\138_CCV.D\138_CCV.D#
Date Acquired: Apr 30 2012 06:00 am
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	49.03	ug/l	1.66	50.00	90 - 110	
11 B	58.73	ug/l	1.44	50.00	90 - 110	Fail
23 Na	1413.00	ug/l	0.79	1250.00	90 - 110	Fail
24 Mg	2492.00	ug/l	1.73	2500.00	90 - 110	
27 Al	1006.00	ug/l	2.74	1000.00	90 - 110	
39 K	1036.00	ug/l	0.86	1000.00	90 - 110	
44 Ca	2536.00	ug/l	2.71	2500.00	90 - 110	
47 Ti	49.28	ug/l	3.11	50.00	90 - 110	
51 V	48.53	ug/l	1.50	50.00	90 - 110	
52 Cr	48.38	ug/l	1.07	50.00	90 - 110	
55 Mn	48.76	ug/l	1.19	50.00	90 - 110	
56 Fe	974.90	ug/l	1.19	1000.00	90 - 110	
59 Co	48.49	ug/l	1.19	50.00	90 - 110	
60 Ni	48.32	ug/l	2.10	50.00	90 - 110	
63 Cu	48.03	ug/l	2.19	50.00	90 - 110	
65 Cu	48.30	ug/l	2.29	50.00	90 - 110	
66 Zn	51.81	ug/l	1.39	50.00	90 - 110	
75 As	50.38	ug/l	1.18	50.00	90 - 110	
78 Se	50.17	ug/l	1.89	50.00	90 - 110	
78 Se	51.71	ug/l	1.13	50.00	90 - 110	
88 Sr	50.22	ug/l	0.61	50.00	90 - 110	
88 Sr	50.29	ug/l	1.15	50.00	90 - 110	
95 Mo	48.68	ug/l	1.56	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.67	ug/l	0.78	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.27	ug/l	0.24	50.00	90 - 110	
118 Sn	49.88	ug/l	0.74	---	##### - #####	
118 Sn	49.99	ug/l	2.21	---	##### - #####	
118 Sn	49.34	ug/l	0.14	50.00	90 - 110	
121 Sb	50.31	ug/l	1.53	50.00	90 - 110	
137 Ba	49.87	ug/l	0.58	50.00	90 - 110	
205 Tl	49.64	ug/l	0.49	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	49.43	ug/l	1.03	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3361374.30	1.10	3376647.30	99.5	70 - 120	
45 Sc	1306382.30	1.27	1470535.00	88.8	70 - 120	
45 Sc	187246.45	0.49	211970.81	88.3	70 - 120	
45 Sc	4973403.50	1.02	5338272.50	93.2	70 - 120	
72 Ge	304093.44	1.12	357467.25	85.1	70 - 120	
72 Ge	120386.41	2.92	134894.38	89.2	70 - 120	
72 Ge	1043649.60	0.59	1118516.60	93.3	70 - 120	
115 In	2188951.30	0.84	2502525.50	87.5	70 - 120	
115 In	1217913.90	0.67	1421320.90	85.7	70 - 120	
115 In	6930506.00	0.67	7622565.50	90.9	70 - 120	
159 Tb	8701002.00	0.90	9867540.00	88.2	70 - 120	
165 Ho	8410236.00	1.16	9489315.00	88.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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\12D29o01.B\140_CCB.D\140_CCB.D#
Date Acquired: Apr 30 2012 06:13 am
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	84.28	0.12	
11 B	3.18	ug/l	6.23	15.00	
23 Na	63.04	ug/l	12.38	77.10	
24 Mg	0.26	ug/l	56.10	7.50	
27 Al	-0.07	ug/l	1097.60	3.96	
39 K	2.93	ug/l	327.90	19.20	
44 Ca	-2.61	ug/l	31.17	90.00	
47 Ti	-0.01	ug/l	123.94	0.78	
51 V	-0.01	ug/l	168.32	0.21	
52 Cr	-0.06	ug/l	6.23	0.12	
55 Mn	-0.27	ug/l	2.24	0.18	
56 Fe	0.02	ug/l	653.14	40.80	
59 Co	0.00	ug/l	11.22	0.09	
60 Ni	0.00	ug/l	540.91	0.48	
63 Cu	-0.03	ug/l	13.69	0.39	
65 Cu	-0.02	ug/l	39.72	0.39	
66 Zn	0.01	ug/l	355.92	6.90	
75 As	0.01	ug/l	332.81	0.27	
78 Se	0.01	ug/l	116.17	0.30	
78 Se	0.35	ug/l	94.23	0.30	Fail
88 Sr	0.01	ug/l	82.89	0.03	
88 Sr	0.00	ug/l	81.26	0.03	
95 Mo	0.09	ug/l	24.73	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.01	ug/l	59.85	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	1075.20	0.06	
118 Sn	0.04	ug/l	43.32	#######	
118 Sn	0.00	ug/l	5126.70	#######	
118 Sn	0.00	ug/l	65.56	0.30	
121 Sb	0.17	ug/l	9.84	0.03	Fail
137 Ba	0.01	ug/l	75.17	0.12	
205 Tl	0.01	ug/l	90.26	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.31	ug/l	2.04	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3356934.30	1.42	3376647.30	99.4	70 - 120	
45 Sc	1499579.00	3.36	1470535.00	102.0	70 - 120	
45 Sc	228556.16	3.87	211970.81	107.8	70 - 120	
45 Sc	5179125.50	1.41	5338272.50	97.0	70 - 120	
72 Ge	375921.34	1.27	357467.25	105.2	70 - 120	
72 Ge	142462.67	2.65	134894.38	105.6	70 - 120	
72 Ge	1094626.30	1.62	1118516.60	97.9	70 - 120	
115 In	2599630.30	0.59	2502525.50	103.9	70 - 120	
115 In	1484259.60	3.07	1421320.90	104.4	70 - 120	
115 In	7267902.00	0.53	7622565.50	95.3	70 - 120	
159 Tb	9185472.00	0.37	9867540.00	93.1	70 - 120	
165 Ho	8830879.00	0.33	9489315.00	93.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12D30i00.B\003_CCV.D\003_CCV.D#
Date Acquired: Apr 30 2012 08:15 am
Operator: SDM
Sample Name: CCV 120429
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 30 2012 08:06 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	48.93	ug/l	1.00	50.00	90 - 110	
11 B	49.34	ug/l	0.85	50.00	90 - 110	
23 Na	1292.00	ug/l	0.56	1250.00	90 - 110	
24 Mg	2539.00	ug/l	0.86	2500.00	90 - 110	
27 Al	1011.00	ug/l	0.42	1000.00	90 - 110	
39 K	1009.00	ug/l	0.14	1000.00	90 - 110	
44 Ca	2520.00	ug/l	0.71	2500.00	90 - 110	
47 Ti	49.25	ug/l	2.67	50.00	90 - 110	
51 V	49.63	ug/l	0.40	50.00	90 - 110	
52 Cr	49.24	ug/l	0.31	50.00	90 - 110	
55 Mn	49.66	ug/l	0.53	50.00	90 - 110	
56 Fe	995.90	ug/l	1.23	1000.00	90 - 110	
59 Co	49.37	ug/l	0.96	50.00	90 - 110	
60 Ni	49.16	ug/l	0.92	50.00	90 - 110	
63 Cu	49.07	ug/l	1.03	50.00	90 - 110	
65 Cu	49.33	ug/l	0.89	50.00	90 - 110	
66 Zn	50.22	ug/l	1.43	50.00	90 - 110	
75 As	49.17	ug/l	1.70	50.00	90 - 110	
78 Se	47.52	ug/l	3.45	50.00	90 - 110	
78 Se	47.72	ug/l	3.58	50.00	90 - 110	
88 Sr	50.02	ug/l	2.05	50.00	90 - 110	
88 Sr	50.71	ug/l	0.69	50.00	90 - 110	
95 Mo	48.95	ug/l	0.54	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.92	ug/l	1.23	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.45	ug/l	0.21	50.00	90 - 110	
118 Sn	48.10	ug/l	1.54	---	##### - #####	
118 Sn	48.94	ug/l	1.52	---	##### - #####	
118 Sn	49.15	ug/l	1.13	50.00	90 - 110	
121 Sb	50.15	ug/l	2.08	50.00	90 - 110	
137 Ba	49.94	ug/l	2.09	50.00	90 - 110	
205 Tl	49.97	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	49.88	ug/l	0.56	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3517271.30	0.45	3441458.50	102.2	70 - 120	
45 Sc	1692182.40	1.82	1751436.00	96.6	70 - 120	
45 Sc	221414.05	0.59	243714.48	90.8	70 - 120	
45 Sc	5288677.00	0.26	5411131.50	97.7	70 - 120	
72 Ge	411650.03	1.38	422531.00	97.4	70 - 120	
72 Ge	148849.44	0.96	157013.34	94.8	70 - 120	
72 Ge	1125733.80	0.64	1171430.50	96.1	70 - 120	
115 In	2775916.80	0.68	2958692.50	93.8	70 - 120	
115 In	1488046.00	1.24	1612758.60	92.3	70 - 120	
115 In	7403881.50	0.92	7741434.00	95.6	70 - 120	
159 Tb	9345039.00	0.22	9705795.00	96.3	70 - 120	
165 Ho	9000266.00	1.21	9312349.00	96.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D30i00.B\001CALB.D\001CALB.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\12D30i00.B\004_CCB.D\004_CCB.D#
Date Acquired: Apr 30 2012 08:22 am
Operator: SDM
Sample Name: CCB 120429
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 30 2012 08:06 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	66.10	0.12	
11 B	-2.14	ug/l	1.76	15.00	
23 Na	22.25	ug/l	42.14	77.10	
24 Mg	-0.42	ug/l	7.98	7.50	
27 Al	-1.00	ug/l	42.21	3.96	
39 K	-1.77	ug/l	436.81	19.20	
44 Ca	-5.73	ug/l	83.41	90.00	
47 Ti	-0.04	ug/l	35.68	0.78	
51 V	-0.02	ug/l	14.08	0.21	
52 Cr	-0.04	ug/l	14.59	0.12	
55 Mn	0.01	ug/l	45.19	0.18	
56 Fe	-0.71	ug/l	55.96	40.80	
59 Co	0.00	ug/l	30.83	0.09	
60 Ni	-0.01	ug/l	153.79	0.48	
63 Cu	-0.07	ug/l	12.75	0.39	
65 Cu	-0.07	ug/l	3.10	0.39	
66 Zn	-0.16	ug/l	18.27	6.90	
75 As	0.00	ug/l	450.85	0.27	
78 Se	0.11	ug/l	6.32	0.30	
78 Se	-0.31	ug/l	72.60	0.30	
88 Sr	-0.01	ug/l	18.23	0.03	
88 Sr	-0.02	ug/l	7.35	0.03	
95 Mo	0.16	ug/l	10.01	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	-0.01	ug/l	30.94	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	-0.01	ug/l	20.44	0.06	
118 Sn	-0.36	ug/l	4.99	#######	
118 Sn	-0.42	ug/l	5.84	#######	
118 Sn	-0.42	ug/l	1.21	0.30	
121 Sb	0.12	ug/l	8.70	0.03	Fail
137 Ba	-0.01	ug/l	25.33	0.12	
205 Tl	0.01	ug/l	20.69	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.07	ug/l	10.69	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3561747.30	0.77	3441458.50	103.5	70 - 120	
45 Sc	1665296.10	2.46	1751436.00	95.1	70 - 120	
45 Sc	245946.92	2.03	243714.48	100.9	70 - 120	
45 Sc	5604244.00	0.66	5411131.50	103.6	70 - 120	
72 Ge	422115.81	1.79	422531.00	99.9	70 - 120	
72 Ge	159716.84	1.42	157013.34	101.7	70 - 120	
72 Ge	1202943.40	0.88	1171430.50	102.7	70 - 120	
115 In	2885431.50	1.14	2958692.50	97.5	70 - 120	
115 In	1656872.90	0.54	1612758.60	102.7	70 - 120	
115 In	8077047.50	0.73	7741434.00	104.3	70 - 120	
159 Tb	10226458.00	1.01	9705795.00	105.4	70 - 120	
165 Ho	9850090.00	0.18	9312349.00	105.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D30i00.B\001CALB.D\001CALB.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
EPA SW846 - 6020
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	04/18/12	04/29/12	#602D-120418A-AY59187

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\051SMPL.D\051SMPL.D#
Date Acquired: Apr 29 2012 08:14 pm
Operator: SDM
Sample Name: 120418A-3015-BLK
Misc Info: 120418A-3015
Vial Number: 4205
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	0.00	ug/l	0.00	383.62	1000	
11 B	27.41	ug/l	30.45	5.11	1000	
23 Na	174.70	ug/l	194.09	6.23	25000	
24 Mg	4.09	ug/l	4.54	6.80	50000	
27 Al	3.55	ug/l	3.94	8.60	20000	
39 K	82.22	ug/l	91.35	15.90	20000	
44 Ca	7.74	ug/l	8.60	72.22	50000	
47 Ti	0.14	ug/l	0.16	31.50	1000	
51 V	0.02	ug/l	0.02	19.39	1000	
52 Cr	0.10	ug/l	0.11	13.34	1000	
55 Mn	0.33	ug/l	0.37	57.37	1000	
56 Fe	1.07	ug/l	1.19	11.68	20000	
59 Co	0.45	ug/l	0.50	19.13	1000	
60 Ni	0.10	ug/l	0.12	16.14	1000	
63 Cu	0.00	ug/l	0.00	308.20	1000	
65 Cu	0.03	ug/l	0.03	89.60	1000	
66 Zn	0.34	ug/l	0.38	16.28	1000	
75 As	0.04	ug/l	0.04	32.15	1000	
78 Se	0.09	ug/l	0.10	42.20	1000	
78 Se	2.74	ug/l	3.04	6.53	1000	
88 Sr	0.12	ug/l	0.13	6.34	1000	
88 Sr	0.08	ug/l	0.08	3.80	1000	
95 Mo	0.09	ug/l	0.10	3.10	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.21	ug/l	0.23	3.88	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.18	ug/l	0.19	10.35	1000	
118 Sn	0.23	ug/l	0.25	7.42	#######	
118 Sn	0.23	ug/l	0.25	7.49	#######	
118 Sn	0.23	ug/l	0.25	1.40	1000	
121 Sb	0.14	ug/l	0.15	4.76	1000	
137 Ba	0.01	ug/l	0.01	92.35	1000	
205 Tl	0.03	ug/l	0.03	10.84	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.33	ug/l	-0.37	0.50	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3234817.30	0.90	3376647.30	95.8	70 - 120	
45 Sc	1041155.50	0.50	1470535.00	70.8	70 - 120	
45 Sc	155228.02	1.58	211970.81	73.2	70 - 120	
45 Sc	4946234.00	1.09	5338272.50	92.7	70 - 120	
72 Ge	243592.73	0.94	357467.25	68.1	70 - 120	IS Fai
72 Ge	97860.04	1.33	134894.38	72.5	70 - 120	
72 Ge	1028130.90	0.76	1118516.60	91.9	70 - 120	
115 In	1738743.10	0.69	2502525.50	69.5	70 - 120	IS Fai
115 In	951975.19	0.69	1421320.90	67.0	70 - 120	IS Fai
115 In	6917858.50	1.07	7622565.50	90.8	70 - 120	
159 Tb	8818295.00	0.55	9867540.00	89.4	70 - 120	
165 Ho	8494737.00	0.76	9489315.00	89.5	70 - 120	

NT NDS 05/03/12

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
3 :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)	50.0	52.3	105	80-120	04/18/12	04/29/12	#602D-120418A-AY59187

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\052SMPL.D\052SMPL.D#
Date Acquired: Apr 29 2012 08:21 pm
Operator: SDM
Sample Name: 120418A-3015-LCS
Misc Info: 120418A-3015
Vial Number: 4206
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	8.62	ug/l	9.58	2.05	1000	
11 B	65.21	ug/l	72.45	2.38	1000	
23 Na	4623.00	ug/l	5136.15	1.39	25000	
24 Mg	4585.00	ug/l	5093.94	0.72	50000	
27 Al	378.80	ug/l	420.85	0.70	20000	
39 K	981.60	ug/l	1090.56	1.66	20000	
44 Ca	4556.00	ug/l	5061.72	0.46	50000	
47 Ti	45.95	ug/l	51.05	4.38	1000	
51 V	45.86	ug/l	50.95	1.62	1000	
52 Cr	45.27	ug/l	50.29	1.26	1000	
55 Mn	46.41	ug/l	51.56	0.96	1000	
56 Fe	193.60	ug/l	215.09	1.02	20000	
59 Co	44.59	ug/l	49.54	1.05	1000	
60 Ni	44.70	ug/l	49.66	1.38	1000	
63 Cu	42.66	ug/l	47.40	0.65	1000	
65 Cu	42.56	ug/l	47.28	0.65	1000	
66 Zn	81.87	ug/l	90.96	0.98	1000	
75 As	41.15	ug/l	45.72	1.00	1000	
78 Se	36.30	ug/l	40.33	1.90	1000	
78 Se	38.00	ug/l	42.22	0.46	1000	
88 Sr	46.89	ug/l	52.09	1.82	1000	
88 Sr	48.59	ug/l	53.98	2.32	1000	
95 Mo	46.94	ug/l	52.15	1.47	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	17.26	ug/l	19.18	1.09	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.53	ug/l	9.47	1.72	1000	
118 Sn	49.59	ug/l	55.09	3.30	#######	
118 Sn	48.20	ug/l	53.55	2.61	#######	
118 Sn	49.09	ug/l	54.54	1.53	1000	
121 Sb	48.51	ug/l	53.89	2.12	1000	
137 Ba	46.43	ug/l	51.58	1.53	1000	
205 Tl	47.15	ug/l	52.38	1.11	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	47.11	ug/l	52.34	0.69	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3175039.00	0.45	3376647.30	94.0	70 - 120	
45 Sc	1108480.10	0.29	1470535.00	75.4	70 - 120	
45 Sc	162455.11	1.24	211970.81	76.6	70 - 120	
45 Sc	4832960.50	0.78	5338272.50	90.5	70 - 120	
72 Ge	258131.75	1.57	357467.25	72.2	70 - 120	
72 Ge	103289.38	0.25	134894.38	76.6	70 - 120	
72 Ge	998274.75	0.24	1118516.60	89.2	70 - 120	
115 In	1837555.50	0.70	2502525.50	73.4	70 - 120	
115 In	1034382.90	0.57	1421320.90	72.8	70 - 120	
115 In	6863728.00	1.82	7622565.50	90.0	70 - 120	
159 Tb	8682474.00	0.46	9867540.00	88.0	70 - 120	
165 Ho	8390024.00	0.41	9489315.00	88.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

Matrix Spike Recoveries

METALS

APPL ID: **120418W-59187 MS - 166407**

Sample ID: AY59187

Client ID: ES073

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	50.0	1.4	49.3	49.1	95.8	95.4	0.4	20	80-120	04/18/12	04/30/12	04/18/12	04/30/12	166407	AY59187

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\141SMPL.D\141SMPL.D#
Date Acquired: Apr 30 2012 06:20 am
Operator: SDM
Sample Name: AY59187W08 MS
Misc Info: 120418A-3015
Vial Number: 4212
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	7.92	ug/l	8.80	1.85	1000	
11 B	234.30	ug/l	260.31	0.90	1000	
23 Na	83130.00	ug/l	92357.43	1.64	25000	>Cal
24 Mg	30230.00	ug/l	33585.53	2.48	50000	
27 Al	362.70	ug/l	402.96	1.98	20000	
39 K	4284.00	ug/l	4759.52	1.51	20000	
44 Ca	26480.00	ug/l	29419.28	1.71	50000	
47 Ti	47.45	ug/l	52.72	3.59	1000	
51 V	63.89	ug/l	70.98	2.89	1000	
52 Cr	45.89	ug/l	50.98	2.34	1000	
55 Mn	82.94	ug/l	92.15	1.72	1000	
56 Fe	209.90	ug/l	233.20	1.91	20000	
59 Co	43.72	ug/l	48.57	1.66	1000	
60 Ni	46.59	ug/l	51.76	1.68	1000	
63 Cu	42.83	ug/l	47.58	2.44	1000	
65 Cu	42.98	ug/l	47.75	2.97	1000	
66 Zn	79.44	ug/l	88.26	0.66	1000	
75 As	41.27	ug/l	45.85	0.95	1000	
78 Se	34.26	ug/l	38.06	0.60	1000	
78 Se	36.14	ug/l	40.15	2.04	1000	
88 Sr	187.10	ug/l	207.87	0.78	1000	
88 Sr	184.30	ug/l	204.76	0.49	1000	
95 Mo	57.64	ug/l	64.04	0.35	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.63	ug/l	18.48	0.42	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.28	ug/l	9.20	1.15	1000	
118 Sn	49.58	ug/l	55.08	0.12	#######	
118 Sn	49.53	ug/l	55.03	0.59	#######	
118 Sn	49.50	ug/l	54.99	0.55	1000	
121 Sb	52.69	ug/l	58.54	0.84	1000	
137 Ba	56.98	ug/l	63.30	1.12	1000	
205 Tl	44.06	ug/l	48.95	0.95	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	44.41	ug/l	49.34	0.78	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2687667.00	0.63	3376647.30	79.6	70 - 120	
45 Sc	1088059.30	1.50	1470535.00	74.0	70 - 120	
45 Sc	162736.78	3.16	211970.81	76.8	70 - 120	
45 Sc	4377063.50	1.23	5338272.50	82.0	70 - 120	
72 Ge	246695.91	0.78	357467.25	69.0	70 - 120	IS Fail NT NBS 05/03/12
72 Ge	103302.95	2.73	134894.38	76.6	70 - 120	
72 Ge	880783.94	1.79	1118516.60	78.7	70 - 120	
115 In	1798285.60	0.94	2502525.50	71.9	70 - 120	
115 In	1049557.60	1.98	1421320.90	73.8	70 - 120	
115 In	5912653.50	0.42	7622565.50	77.6	70 - 120	
159 Tb	7520766.00	1.02	9867540.00	76.2	70 - 120	
165 Ho	7300470.50	0.61	9489315.00	76.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
1 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12D29o01.B\142SMPL.D\142SMPL.D#
Date Acquired: Apr 30 2012 06:27 am
Operator: SDM
Sample Name: AY59187W08 MSD
Misc Info: 120418A-3015
Vial Number: 4301
Current Method: C:\ICPCHEM\1\METHODS\62A0429A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0429A.C
Last Cal Update: Apr 29 2012 03:29 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	8.03	ug/l	8.93	0.50	1000	
11 B	238.60	ug/l	265.08	1.07	1000	
23 Na	82690.00	ug/l	91868.59	0.73	25000	>Cal
24 Mg	30240.00	ug/l	33596.64	1.26	50000	
27 Al	364.50	ug/l	404.96	1.22	20000	
39 K	4278.00	ug/l	4752.86	0.87	20000	
44 Ca	26550.00	ug/l	29497.05	0.80	50000	
47 Ti	46.52	ug/l	51.68	4.05	1000	
51 V	63.70	ug/l	70.77	0.95	1000	
52 Cr	45.76	ug/l	50.84	0.76	1000	
55 Mn	82.87	ug/l	92.07	1.24	1000	
56 Fe	216.90	ug/l	240.98	1.01	20000	
59 Co	43.48	ug/l	48.31	0.85	1000	
60 Ni	46.41	ug/l	51.56	1.85	1000	
63 Cu	42.76	ug/l	47.51	0.91	1000	
65 Cu	43.53	ug/l	48.36	1.22	1000	
66 Zn	81.51	ug/l	90.56	1.21	1000	
75 As	40.65	ug/l	45.16	1.75	1000	
78 Se	34.00	ug/l	37.77	2.53	1000	
78 Se	34.13	ug/l	37.92	0.92	1000	
88 Sr	186.80	ug/l	207.53	0.12	1000	
88 Sr	184.10	ug/l	204.54	0.96	1000	
95 Mo	57.54	ug/l	63.93	0.87	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.54	ug/l	18.38	0.81	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.41	ug/l	9.34	0.43	1000	
118 Sn	49.08	ug/l	54.53	2.44	#######	
118 Sn	49.67	ug/l	55.18	0.28	#######	
118 Sn	49.16	ug/l	54.62	0.79	1000	
121 Sb	52.08	ug/l	57.86	0.48	1000	
137 Ba	56.99	ug/l	63.32	0.55	1000	
205 Tl	44.20	ug/l	49.11	0.44	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	44.21	ug/l	49.12	0.68	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2666541.00	2.04	3376647.30	79.0	70 - 120	
45 Sc	1163994.30	1.19	1470535.00	79.2	70 - 120	
45 Sc	165654.41	3.09	211970.81	78.1	70 - 120	
45 Sc	4371544.50	2.61	5338272.50	81.9	70 - 120	
72 Ge	262923.75	1.35	357467.25	73.6	70 - 120	
72 Ge	103743.34	1.79	134894.38	76.9	70 - 120	
72 Ge	879649.81	2.82	1118516.60	78.6	70 - 120	
115 In	1922906.30	1.00	2502525.50	76.8	70 - 120	
115 In	1074117.00	1.52	1421320.90	75.6	70 - 120	
115 In	5981312.50	1.94	7622565.50	78.5	70 - 120	
159 Tb	7653753.00	1.77	9867540.00	77.6	70 - 120	
165 Ho	7446132.50	2.69	9489315.00	78.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12D29o01.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

Metals Standards Log Book # 34 Page # ~~115~~

NBS 04/27/12

ICP-MS STANDARDS 6020/6020A/3015/3051A
Today's Date: 04/27/12
Expires: 05/04/12
Prep 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL DI Water
Lot # K23022
20mL HCL / 2000mL DI Water
Lot #K43032
Expires: 05/04/12

Internal Standard Mix: Prep 04/25/2012

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 04/27/12

Standard 3 05/04/12

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 04/27/12

Intermediate-Sb 05/04/12
100 uL of Sb STD (CPI 12A011-30298) in 10 mL of 1% HNO3/1.0% HCL
ICV-Sb 05/04/12
100 uL of Intermediate-Sb in 10 mL of 1% HNO3/1.0% HCL

Standard 2 05/04/12

Amount	STD		
500 uL	Standard 4		04/27/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 04/27/12

Standard 1 05/04/12

Amount	STD		
50 uL	Standard 4		04/27/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 04/27/12

ICP-MS ICV 05/04/12

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 04/27/12

ICSA Prep: 05/04/12

1 mL	ICSA	CPI	11C086-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 04/27/12

ICSAB Prep: 05/04/12

1mL	ICSA	CPI	11C086-28529
0.025mL	INT	O2SI	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 04/27/12

ICP-LDR 05/04/12

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 04/27/12

NBS 04/29/12

Internal Standard Concentration

Amt	STD	Element	Vendor	Lot#	Final Conc. in Std	Expires
500uL	1000 ug/mL	Li	CPI	10L079-27839	5000 ug/L	06/10/12
500uL	1000 ug/mL	In	CPI	10J155-28574	5000 ug/L	09/25/12
500uL	1000 ug/mL	Ho	CPI	10A107-28576	5000 ug/L	09/25/12
500uL	1000 ug/mL	Tb	CPI	11B054-28575	5000 ug/L	09/25/12
500uL	1000 ug/mL	Sc	o2si	1024073-28527	5000 ug/L	08/18/12
500uL	1000 ug/mL	Ge	Environmental Express	1116011-29381	5000 ug/L	02/08/13

Prep:	04/29/12	NBS	Prep in -	1%HNO3/1.0%HCL:	Lot #KK23022/43032	in 100mL
Expires:	05/29/12					

NBS 04/29/12

ICP-MS STANDARDS 6020/6020A/3015/3051A
Today's Date: 04/29/12
Expires: 05/06/12
Prep 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL DI Water
Lot # K23022
20mL HCL / 2000mL DI Water
Lot #K43032
Expires: 05/06/12

Internal Standard Mix: Prep 04/29/2012

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 04/29/12

Standard 3 05/06/12

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 04/29/12

Intermediate-Sb 05/06/12
100 uL of Sb STD (CPI 12A011-30298) in 10 mL of 1% HNO3/1.0% HCL
ICV-Sb 05/06/12
100 uL of Intermediate-Sb in 10 mL of 1% HNO3/1.0% HCL

Standard 2 05/06/12

Amount	STD		
500 uL	Standard 4		04/29/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 04/29/12

Standard 1 05/06/12

Amount	STD		
50 uL	Standard 4		04/29/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 04/29/12

ICP-MS ICV 05/06/12

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 04/29/12

ICSA Prep: 05/06/12

1 mL	ICSA	CPI	11C086-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 04/29/12

ICSAB Prep: 05/06/12

1mL	ICSA	CPI	11C086-28529
0.025mL	INT	O2SI	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 04/29/12

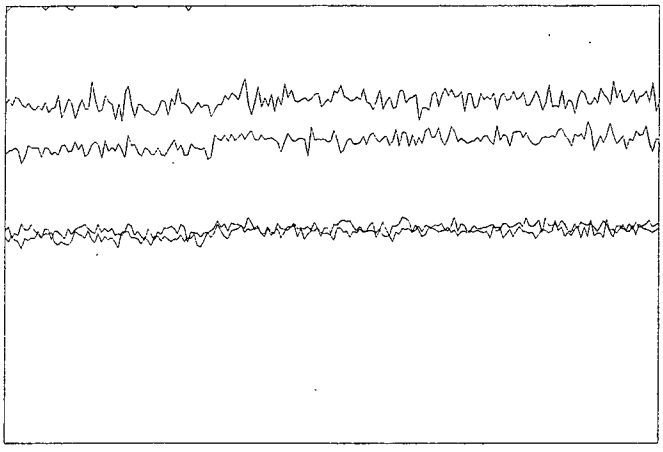
ICP-LDR 05/06/12

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 04/29/12

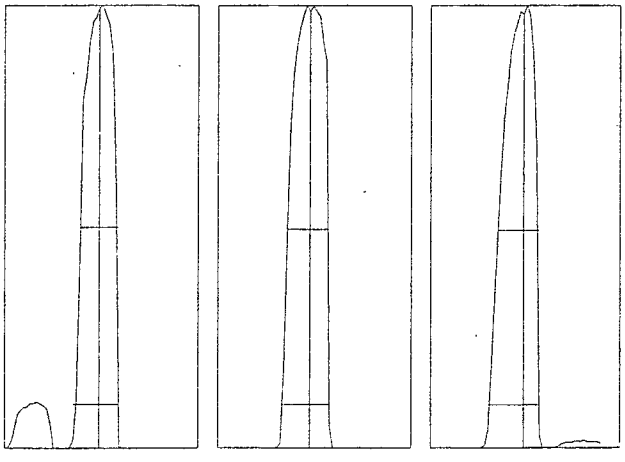
Tune Report

Tune File : NG_HMI.u
Comment : 120429



Integration Time:	0.1000 sec	
Sampling Period:	0.7200 sec	
n:	200	
Oxide:	156/140	0.614%
Doubly Charged:	70/140	1.333%

m/z	Range	Count	Mean	RSD%	Background
7	10,000	10835.0	10711.4	3.67	0.80
89	50,000	24499.0	23873.6	2.60	0.90
205	20,000	15652.0	15616.2	2.43	7.70
156/140	2	0.692%	0.618%	8.49	
70/140	2	1.325%	1.319%	7.46	
140	50,000	25139.0	24505.2	2.28	4.70
59	20,000	13838.0	13741.4	2.65	1.80



m/z:	7	89	205
Height:	11,003	24,018	15,647
Axis:	7.00	88.95	205.00
W-50%:	0.60	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 : Apr 29, 2012 14:17:58
Printed : Apr 29, 2012 14:18:00

Tune Report

Tune File : NG_HMI.u
Comment : 120429

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.84 V	Extract 2	:	-145 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias-ce	:	-18 V	Axis Gain	:	1.0002
Torch-H	:	-0.1 mm	Omega Lens-ce	:	0.2 V	Axis Offset	:	-0.05
Torch-V	:	0 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.5 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.5 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1710 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1260 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	:	--- %

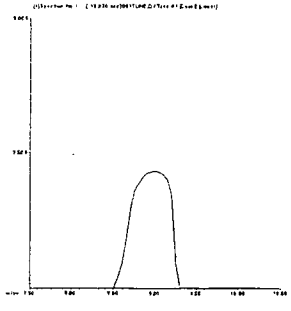
Generated : Apr 29, 2012 14:17:58
Printed : Apr 29, 2012 14:18:02

200.8 QC Tune Report

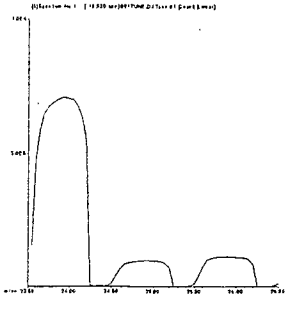
Data File: C:\ICPCHEM\1\DATA\12D29o01.B\001TUNE.D
Date Acquired: Apr 29 2012 02:40 pm
Acq. Method: TN200_8.M
Operator: SDM
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

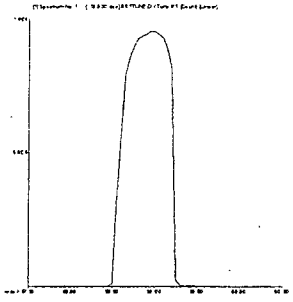
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	1188618	1184538	1186137	1185188	1192323	1194902	**0.33**	5.00	
24 Mg	4318915	4272462	4294700	4328542	4336538	4362331	**0.96**	5.00	
59 Co	5864135	5804865	5888918	5860280	5876306	5890308	**0.76**	5.00	
115 In	24775930	24694378	24698708	24730360	24791936	24964266	**0.40**	5.00	
208 Pb	4672319	4633447	4657455	4690072	4680141	4700482	**0.80**	5.00	



9 Be
Mass Calib.
Actual: 9.00
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 23.95
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



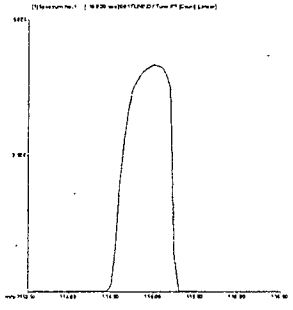
59 Co

Mass Calib.

Actual:	58.95		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65
Required:	0.90
Flag:	



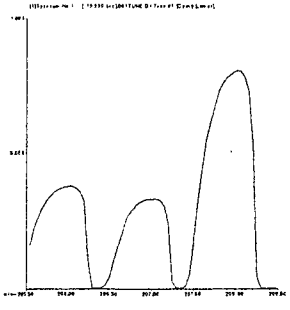
115 In

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:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.65
Required:	0.80
Flag:	

Tune Result: Pass

Metals Digestion Worksheet

Method Name 3015 Digestion **Prep Method** M3015 **Set** 120418A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1034534-30503		
Spiked ID 2	LCSW LOT# 1034538-30505		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	04/18/12 9:20:00 AM
Witnessed By	BC	Date:	04/18/12 9:20:00 AM

Starting Temp:	20 c
Ending Temp:	170 c
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	Yes
End Date/Time	04/18/12 10:30

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	120418A Blk				45mL	50mL	04/18/12 9:20	equip: Venus
2	120418A LCS		90uL	1+2	45mL	50mL	04/18/12 9:20	equip: Venus
3	AY59184	AY59184W08			45mL	50mL	04/18/12 9:20	equip: Venus
4	AY59185	AY59185W08			45mL	50mL	04/18/12 9:20	equip: Venus
5	AY59186	AY59186W08			45mL	50mL	04/18/12 9:20	equip: Venus
6	AY59187	AY59187W08			45mL	50mL	04/18/12 9:20	equip: Venus
7	AY59187 MS	AY59187W08	90uL	1+2	45mL	50mL	04/18/12 9:20	equip: Venus
8	AY59187 MSD	AY59187W08	90uL	1+2	45mL	50mL	04/18/12 9:20	equip: Venus
9	AY59201	AY59201W10			45mL	50mL	04/18/12 9:20	equip: Venus
10	AY59202	AY59202W10			45mL	50mL	04/18/12 9:20	equip: Venus
11	AY59203	AY59203W10			45mL	50mL	04/18/12 9:20	equip: Venus

Solvent and Lot#
HNO3 J.T.B L02030 0177

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	EA
Date	4-18-12
Time	10:30
Moved to	Metals

Technician's Initials	
Scanned By	lo
Sample Preparation	nm
Digestion	nm
Bring up to volume	lo
Modified	04/18/12 8:44:11 AM

Reviewed By: NBS **Date:** 05/03/12

6020/200.8 Injection Log

Directory: K:\ICP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	29 Apr 2012	14:59	Calibration Blank		120429Arev	1.
2	29 Apr 2012	15:05	120429 Standard 1		120429Arev	1.
3	29 Apr 2012	15:12	120429 Standard 2		120429Arev	1.
4	29 Apr 2012	15:19	120429 Standard 3		120429Arev	1.
5	29 Apr 2012	15:26	120429 Standard 4		120429Arev	1.
6	29 Apr 2012	15:32	ICV 120429		120429Arev	1.
8	29 Apr 2012	15:52	ICB 120429		120429Arev	1.
9	29 Apr 2012	15:59	CCV 120429		120429Arev	1.
10	29 Apr 2012	16:06	CCB 120429		120429Arev	1.
11	29 Apr 2012	16:13	LDR-1000ppb 120429		120429Arev	1.
12	29 Apr 2012	16:26	ICSA 120429		120429Arev	1.
13	29 Apr 2012	16:32	ICSAB 120429		120429Arev	1.
34	29 Apr 2012	19:00	CCV 120429		120429Arev	1.
35	29 Apr 2012	19:13	CCB 120429		120429Arev	1.
44	29 Apr 2012	20:14	120418A-3015-BLK		120429Arev	1.
45	29 Apr 2012	20:21	120418A-3015-LCS		120429Arev	1.
47	29 Apr 2012	20:34	CCV 120429		120429Arev	1.
48	29 Apr 2012	20:48	CCB 120429		120429Arev	1.
112	30 Apr 2012	04:26	CCV 120429		120429Arev	1.
113	30 Apr 2012	04:39	CCB 120429		120429Arev	1.
120	30 Apr 2012	05:26	AY59184W08		120429Arev	1.
121	30 Apr 2012	05:33	AY59185W08		120429Arev	1.
122	30 Apr 2012	05:40	AY59186W08		120429Arev	1.
123	30 Apr 2012	05:47	AY59187W08		120429Arev	1.
125	30 Apr 2012	06:00	CCV 120429		120429Arev	1.
126	30 Apr 2012	06:13	CCB 120429		120429Arev	1.
127	30 Apr 2012	06:20	AY59187W08 MS		120429Arev	1.
128	30 Apr 2012	06:27	AY59187W08 MSD		120429Arev	1.
129	30 Apr 2012	06:34	AY59187W08-A		120429Arev	1.
130	30 Apr 2012	06:40	AY59187W08-1/5		120429Arev	5.
132	30 Apr 2012	08:15	CCV 120429		120429Arev	1.
133	30 Apr 2012	08:22	CCB 120429		120429Arev	1.

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

Certification Number: CA1312
NELAP Certification number: 05233CA
DoD-ELAP Certificate number: ADE-1410

Data Validatable Report

May 17, 2012

Environet, Inc.
650 Iwilei Road, #204
Honolulu, Hawaii 96817

Attn: Max Solmssen

Title: Report of Data: Case 67525

Project: LTM Red Hill/1022-024

Contract #: Prime contract # for DoD: N62742-08-D-1930, CTO HC21

Dear Mr. Solmssen:

Three water samples were received April 18, 2012, in good condition. Written results for the requested analyses are provided on this May 17, 2012.

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

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

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

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/sdm
Enclosure
cc: File

Number of pages in this report: 361

Data Validation Package
for
LTM Red Hill/1022-024
SDG 67525

TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

SAMPLE RECEIPT INFORMATION

Sample receipt information

ARF: 67525

Project: LTM Red Hill/1022-024

Sample Receipt Information:

The samples were received on April 18, 2012, at 5.0°C. The samples were assigned Analytical Request Form (ARF) number 67525. The sample numbers and requested analyses were compared to the chains of custody and email communications. Some containers were received broken; the client was notified. The 8260B MS/MSD analysis for sample ES074 was cancelled, as per client's instructions. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES074	AY59236	WATER	04/17/12	04/18/12
ES075	AY59237	WATER	04/17/12	04/18/12
ES076 TRIP BLANK	AY59238	WATER	04/17/12	04/18/12

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

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

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

Measurement uncertainty can be reported upon request.

CASE NARRATIVE

EPA Method 8015B

Total Petroleum Hydrocarbons – Diesel

Sample Preparation:

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

Sample Analysis Information:

The samples were analyzed according to the method using an Agilent 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 ES074 was designated by the client for MS/MSD analysis. All recoveries met acceptance criteria.

Surrogates:

The surrogate recoveries are summarized on the form 2 & 8. All surrogate recoveries were within control limits.

Summary:

No problem was encountered

EPA Method 8270D SIM

Polynuclear Aromatic Hydrocarbons

Sample Preparation:

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

Sample Analysis Information:

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

Quality Control/Assurance

Calibrations:

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

Blanks:

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

Spikes:

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

Sample ES074 was designated by the client for MS/MSD analysis. For the MS/MSD, Anthracene recovered slightly below the 55% lower control limit at 51.2% and 50.0%. All other recoveries met acceptance criteria.

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 other 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 holding times were met. The samples were received in unpreserved vials; they were analyzed within seven days of collection

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 its detection limit in the method blanks

Spikes:

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

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

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 problem was encountered. The data generated are acceptable.

EPA Method 6020
Dissolved Lead

Digestion Information:

The water samples were digested according to EPA method 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 Dilution Test were used for quality assurance. All LCS recoveries were within the acceptance limits.

Sample ES074 was designated by the client for MS/MSD analysis. The MS/MSD, PDS, and DT met all acceptance criteria.

Summary:

No problem was encountered. The data generated are acceptable.

Abbreviations and Flags

FLAG	DESCRIPTION
#	Recovery or RPD outside control limits
*	Recovery or RPD outside control limits
B	Analyte detected in associated method blank
C1	Reason for correction: wrote incorrect response
C2	Reason for correction: calculated incorrectly
C3	Reason for correction: needs to be rechecked
C4	Reason for correction: data not usable
DO	Diluted out
E	Exceeds linear range
F	Estimated value
G1	Includes a wide range of hydrocarbons which does not match our gasoline standard
G10	Includes a match to hydrocarbon profiles within the range of mineral spirits
G11	Includes a match to hydrocarbon profiles within the range of JP-4
G12	Pattern does not match the gasoline standard; the carbon range for this sample is consistent with JP8
G13	Closely resembles the hydrocarbon profile of aviation gasoline
G14	Analyte concentration may be biased due to carry over
G2	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G3	Includes higher boiling hydrocarbons
G4	Includes dominant peak(s) not indicative of petroleum hydrocarbons
G5	Is mainly dominant peak(s) not indicative of petroleum hydrocarbons
G6	Contains recognizable contaminant peak(s) which has been removed from quantitation
G7	Is mainly a match to hydrocarbons within the range of gasoline
G8	Closely resembles the boiling point hydrocarbon profile consistent with weathered gasoline
G9	Includes hydrocarbons within the range of kerosene
J	Estimated value
M	Matrix effect
M1	Manual integration: integration does not follow baseline
M2	Manual integration: non-target peak interference
M3	Manual integration: to split a peak that was integrated as one peak by the computer
M4	Manual integration: to integrate a split peak
M5	Manual integration: the whole peak or part of the peak was not integrated
M6	Manual integration: computer integrated wrong peak
M7	Manual integration: other - explain
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, i.e. asphaltene, waster oil, motor oil, or weathered diesel fuel
T4 I	Includes dominant peak(s) not indicative of hydrocarbons
T4 M	Is mainly dominant peak(s) not indicative of hydrocarbons
T5	Contains recognizable contaminant peak(s) which has been removed from quantitation
T6	Is mainly a match to hydrocarbons within range of diesel fuel
T7	Closely resembles the boiling point hydrocarbon profile consistent with diesel fuel
T8	Includes a match to hydrocarbon profiles within range of diesel and kerosene fuel
T9 I	Includes non-diesel hydrocarbons within boiling point range of diesel fuel
T9 M	Is mainly non-diesel hydrocarbons within boiling point range of diesel fuel.
Y	Percent difference between primary and confirmation column > 40%

CHAIN OF CUSTODY,

ARF, CRF, AND

CLIENT COMMUNICATION

APPL - Analysis Request Form 67525

Client: **Environet, Inc.**
Address: **650 Iwilei Rd, #204**
Honolulu, HI 96817
Attn: **Max Solmssen**
Phone: **808-833-2225** Fax: **808-833-2231**
Job: **LTM Red Hill / 1022-024**
PO #: **1022-024**
Chain of Custody (Y/N): **Y** # **33005**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **2 WEEKS**

Received by: **TBV**
Date Received: **04/18/12** Time: **09:50**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **N** Time Zone: **-10**
Chest Temp(s): **5.0°C**
Color: **VOA,F-PINKK,Q-ORYELL**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark**
QC Report Type: **DVP4/ADRDOD/HI**
Due Date: **05/02/12**

Comments:
14 day TAT for Form 1s & 30 day TAT for full package.
OSDas@, MSolmssen@ & 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, DoD Forms, J flag to DL, U flag at LOD
EDD ADR A1/A3 (ADR 8.3a unchecked) to OSDas@ VDupra@ & MSolmssen@environetinc.com
metals 6020: report Lead with 0.5ug/L RL
TPH-Diesel only; VOCs: include gasoline by 8260B
Please see attached emails for sample breakage and MS/MSD correction: no voc/gas ms/msd

Sample Distribution:
GC: 2-$SIMHC12W, 2-$TPETD2
Extractions: 2-_SEP004S, 2-_SEP011
VOA: 3-$86RHBF
Metals: 2-$602D(Pb)
Other: 2-_M3015

Charges:

Invoice To:
same

	Client ID		APPL ID	Sampled	Analyses Requested
1.	ES074	MS/MSD,LTDVOL	AY59236W	04/17/12 09:30	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- Unpreserved VOA, No voc/gas MS/MSD
2.	ES075	LTDVOL	AY59237W	04/17/12 12:30	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- Unpreserved VOA, ltdvol on VOA
3.	ES076 TRIP BLANK		AY59238W	04/17/12 00:01	$86RHBF -- Unpreserved VOA

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

APPL Sample Receipt Form

ARF# **67525**

Sample	Container Type	Count	pH
AY59236	[6] PL 500mL - HNO3	2	1.7
	[15] VOAs - NP	4	NA
	[17] Amber Liter	7	NA
AY59237	[6] PL 500mL - HNO3	1	1.7
	[15] VOAs - NP	2	NA
	[17] Amber Liter	4	NA
AY59238	[15] VOAs - NP	3	NA

Sample	Container Type	Count	pH

Chue Moua

From: "Cynthia Clark" <cclark@applinc.com>
To: "Receiving" <receiving@applinc.com>; "Chue Moua" <cmoua@applinc.com>
Sent: Wednesday, April 18, 2012 2:39 PM
Attach: COC67525.pdf; ARF 67525 broken voa and amber.jpg
Subject: FW: Red Hill Groundwater Samples (67525)

Per Max:
run limited volume extraction for TPHe MS/MSD. Full volume extraction for PAHs MS/MSD. Do not run MS/MSD for VOC/GRO.

Cynthia Clark, Project Manager

APPL, Inc.
908 North Temperance Ave., Clovis, CA 93611
Phone: 559-275-2175
Fax: 559-275-4422
cclark@applinc.com
www.applinc.com

-----Original Message-----
From: Cynthia Clark [mailto:cclark@applinc.com]
Sent: Wednesday, April 18, 2012 1:58 PM
To: 'Max R. Solmssen'
Subject: RE: Red Hil Groundwater Samples
Importance: High

Hi Max,
for samples received today,
sample ES074 arrived with one broken amber liter and 2 broken VOAs (4 VOAs and 7 AL left) This is an MS/MSD sample. For VOCs and gas I think we need 7 vials to perform analysis of the parent and MS/MSD. We need 3 amber liters for PAHs (parent/MS/MSD), and we need 5 amber liters for TPH (parent/DRO-MS/DRO-MSD/MO-MS/MO-MSD)

sample ES075 arrived with one broken VOA, 2 left. Barring the need for dilution, I think we will be okay for this sample.

Please let me know how you would like us to proceed for sample ES074.

Thanks,

5.0
67525

APPL LABS

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

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

CHAIN OF CUSTODY RECORD

C.O.C. 33005

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Environet, Inc	Phone: 808-833-2225	Company Name: Environet, Inc	Phone: 808-833-2225
Address: 650 Iwilei RD suite 204 Honolulu, HI 96817	Fax: 808-833-2231	Address: 650 Iwilei RD, suite 204 Honolulu, HI 96817	Fax: 808-833-2231
Attn: Max Solmssen - msolmssen@environetinc.com		Attn: Attn A.P.	

Project Name/Number	Sampler (Print)								Analysis Requested/Method Number												Date Shipped: 4/17/12
1022-024 / Red Hill	Max Solmssen																				Carrier: Fedex
Purchase Order Number	Sampler (Signature)																				Waybill No.: 876412433324
1022-024	Max K Sol																				Comments: * lead samples have been field-filtered.
Sample Identification	Location	Date Collected	Time Collected	No. of Containers	Matrix: Aq	Sed.	Soil		VOCs (8260B)	TPHG (8260B)	TPH-D (8015B)	PAHs (8270C SIM)	Pb (6020)								
ES074 MS/MSD	Red Hill	4/17/12	930	16	X				X	X	X	X	X								
ES075			1230	8																	
ES076 Trip Blank			N/A	3																	

Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE	Sample Disposal:
	☑ Standard (2-3 week) ☐ One week ☐ 24-48 hour	☐ Return to client ☑ Disposal by Lab (30-day retention)

Relinquished by sampler: MS	Date 4/17/12	Time 2:30 pm	Received by:	Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by:	Relinquished by:	Date 4/18/12	Time 0950	Received at lab by:

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: 1022-024 / RED HILL Date Received: 4/18/12

2) Coolers: Number of Coolers: 1

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

4) YES NO Were custody seals on outside of cooler? How many? _____ Date on seal? _____

5) Name on seal? _____

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

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

8) Shipping slip numbers: 1) 8764 1243 3324 2) _____ 3) _____

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

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

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

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

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

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

15) Cooler temp(s): 1) 5.0°C 2) _____ 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: AY59236W03-W04, AY59238W01-W03

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 > 12?

37) YES NO NA Unpreserved VOA Vials received? _____

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

Lab notified if pH was not adequate: _____

Deficiencies: Received broken 2 voa Vial, 1 Amber liter from Sample ES074 and 4 voa and 7 Amber liter left. Received 1 voa vial broken 2 left for Sample ES075.

Signature of personnel receiving samples: _____ Second reviewer: _____

Signature of project manager notified: Renée Date and Time of notification: 4-18-12

Name of client notified: _____ Date and Time of notification: _____

Information given to client: _____

_____ by whom (Initials): _____

EPA 8015 Modified
Total Petroleum Hydrocarbons

EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary

Method Blank
TPH Diesel Water

Blank Name/QCG: **120419W-59236 - 166194**
Batch ID: #TPETD-120419A

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	04/19/12	04/24/12
BLANK	SURROGATE: OCTACOSANE (S)	106	28-142			%	04/19/12	04/24/12
BLANK	SURROGATE: ORTHO-TERPHEN	79.7	57-132			%	04/19/12	04/24/12

Quant Method: TPH0306.M
Run #: 423068
Instrument: Apollo
Sequence: 120423
Initials: TRL

Printed: 04/25/12 5:41:34 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/24/12

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419A-BLK	Blank	28-142	106		57-132	79.7	
120419A-LCS	Lab Control Spike	28-142	113		57-132	103	
AY59236-MSD	Matrix SpikeD	28-142	122		57-132	89.3	
AY59236	ES074	28-142	110		57-132	85.8	
AY59237	ES075	28-142	106		57-132	82.2	
AY59236-MS	Matrix Spike	28-142	114		57-132	84.7	

Comments: Batch: #TPETD-120419A

Laboratory Control Spike Recovery

TPH Diesel Water

APPL ID: **120419W-59236 LCS - 166194**
Batch ID: #TPETD-120419A

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	1620	81.0	61-143
SURROGATE: OCTACOSANE (S)	150	170	113	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	155	103	57-132

Comments: _____

Primary	SPK
Quant Method :	TPH0306.M
Extraction Date :	04/19/12
Analysis Date :	04/24/12
Instrument :	Apollo
Run :	423069
Initials :	TRL

Printed: 04/25/12 5:41:41 PM
APPL Standard LCS

Matrix Spike Recoveries

TPH Diesel Water

APPL ID: **120419W-59236 MS - 166194**
Batch ID: #TPETD-120419A
Sample ID: AY59236
Client ID: ES074

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	1530	1570	76.5	78.5	61-143	2.6	30
SURROGATE: OCTACOSANE (S)	150	NA	171	183	114	122	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	127	134	84.7	89.3	57-132		

Comments: _____

Primary	SPK	DUP
Quant Method :	TPH0306.M	TPH0306.M
Extraction Date :	04/19/12	04/19/12
Analysis Date :	04/28/12	04/25/12
Instrument :	Apollo	Apollo
Run :	427047	423072
Initials :	TRL	

Printed: 04/30/12 3:47:55 PM
APPL MSD SCII

EPA 8015B-e

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/24/12

Matrix: WATER Instrument: Apollo

Blank ID: 120419A-BLK Time Analyzed: 2233

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120419A-BLK	Blank	423068	04/24/12 2233
120419A-LCS	Lab Control Spike	423069	04/24/12 2257
120419A-MSD	Matrix SpikeD	423072	04/25/12 0009
AY59236	ES074	423075	04/25/12 0121
AY59237	ES075	423076	04/25/12 0145
120419A-MS	Matrix Spike	427047	04/28/12 0308

Comments: Batch: #TPETD-120419A

Printed: 04/30/12 3:47:36 PM
Form 4, Blank Summary

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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES074

APPL ID: AY59236

Sample Collection Date: 04/17/12

QCG: #TPETD-120419A-166194

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	04/19/12	04/25/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	110	28-142			%	04/19/12	04/25/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	85.8	57-132			%	04/19/12	04/25/12

Quant Method:	TPH0306.M
Run #:	423075
Instrument:	Apollo
Sequence:	120423
Dilution Factor:	1
Initials:	TRL

Printed: 04/25/12 5:41:57 PM
APPL-F1-SC-NoMC-REG MDLs

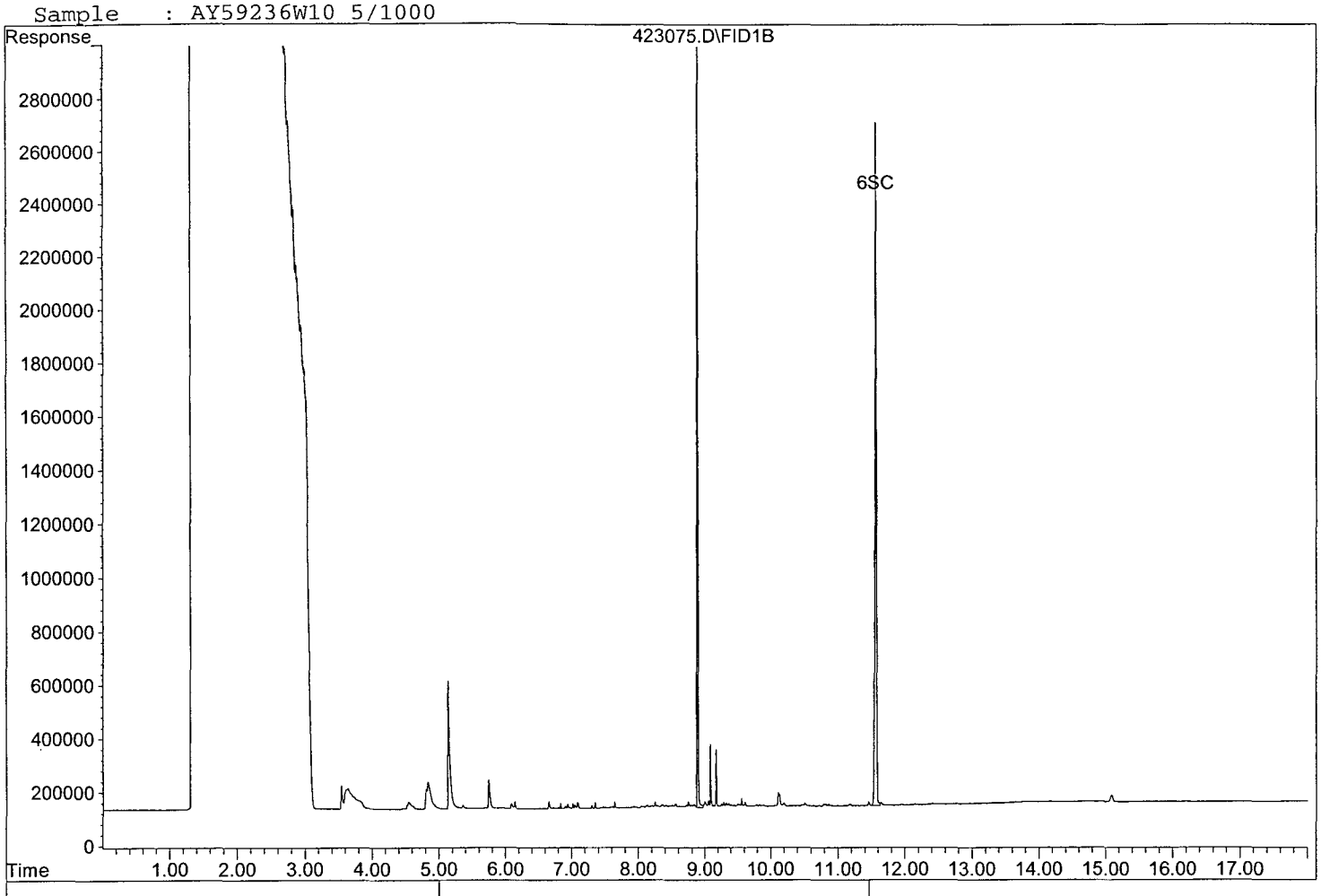
Data File : G:\APOLLO\DATA\120423\423075.D Vial: 75
Acq On : 4-25-12 1:21:48 Operator: LAC
Sample : AY59236W10 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 3 13:37 2012 Quant Results File: TPH0306.RES

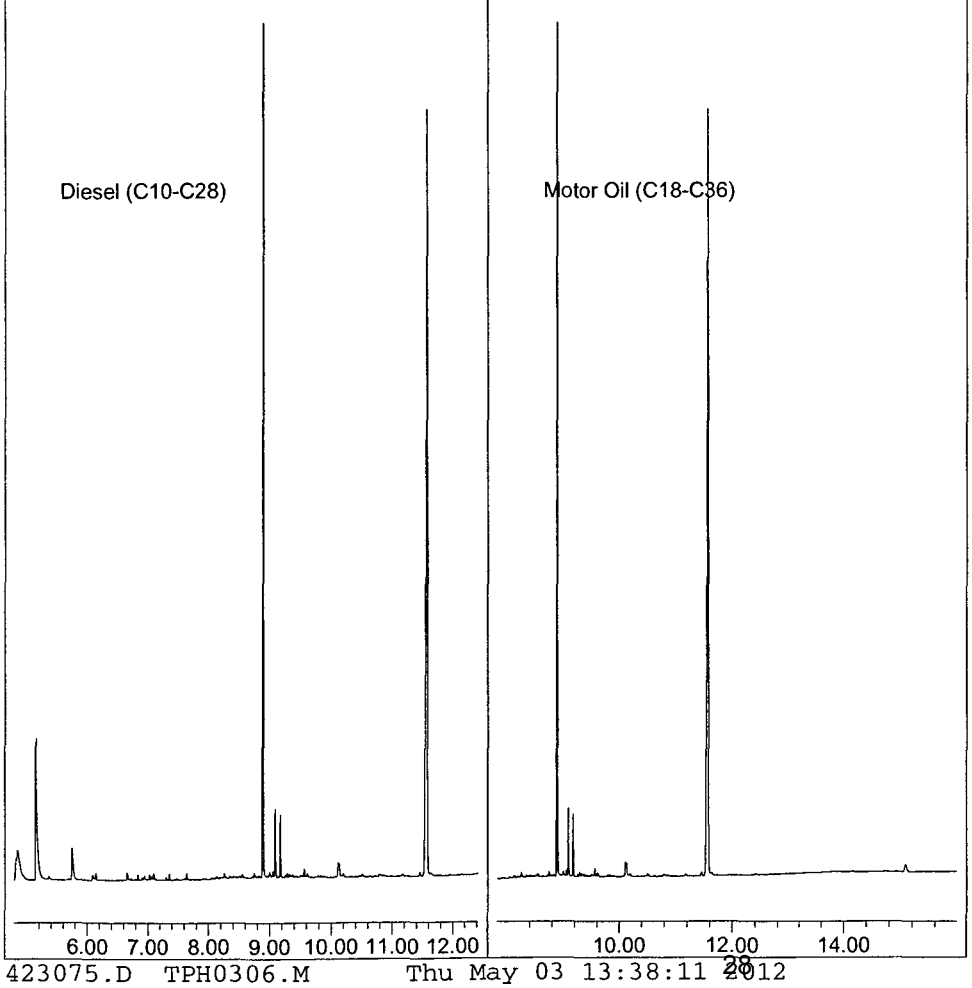
Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	35573879	128.673 ppb
Surrogate Spike 150.000		Recovery =	85.78%
6) SC Octacosane(S)	11.57	39020628	165.155 ppb
Surrogate Spike 150.000		Recovery =	110.10%
Target Compounds			

Data File: G:\APOLLO\DATA\120423\423075.D
Sample : AY59236W10 5/1000





TPH Diesel Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES075

APPL ID: AY59237

Sample Collection Date: 04/17/12

QCG: #TPETD-120419A-166194

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	04/19/12	04/25/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	106	28-142			%	04/19/12	04/25/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	82.2	57-132			%	04/19/12	04/25/12

Quant Method: TPH0306.M
Run #: 423076
Instrument: Apollo
Sequence: 120423
Dilution Factor: 1
Initials: TRL

Printed: 04/25/12 5:41:57 PM
APPL-F1-SC-NoMC-REG MDLs

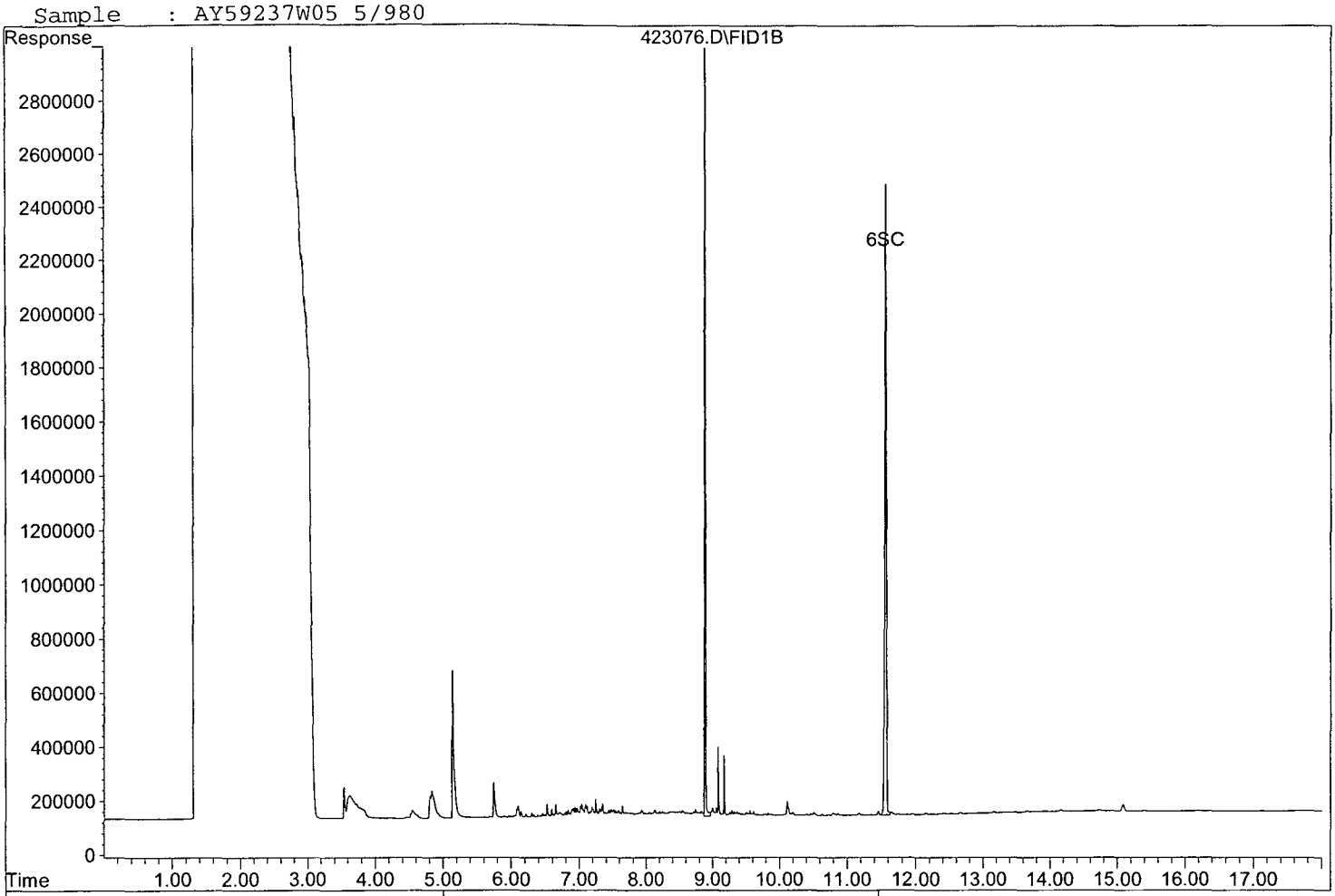
Data File : G:\APOLLO\DATA\120423\423076.D Vial: 76
Acq On : 4-25-12 1:45:39 Operator: LAC
Sample : AY59237W05 5/980 Inst : Apollo
Misc : Water Multiplr: 5.10
IntFile : events.e
Quant Time: May 3 13:37 2012 Quant Results File: TPH0306.RES

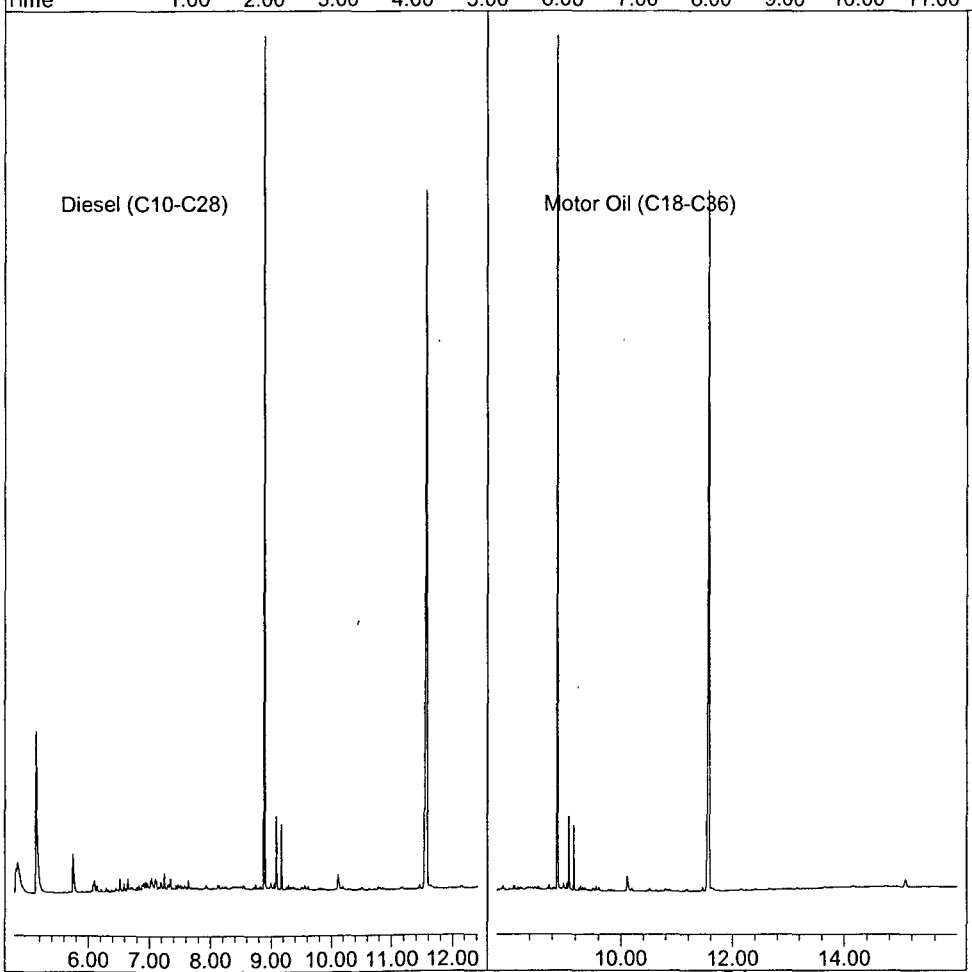
Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	34068491	125.742 ppb
Surrogate Spike 153.061		Recovery =	82.15%
6) SC Octacosane(S)	11.57	37475491	161.852 ppb
Surrogate Spike 153.061		Recovery =	105.74%
Target Compounds			

Data File: G:\APOLLO\DATA\120423\423076.D
Sample : AY59237W05 5/980





EPA 8015 Modified
Total Petroleum Hydrocarbons

Calibration Data

TPH Extractables
TPH0306

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67525
Case No: Initial Cal. Date: 03/06/12
Matrix: Instrument: Apollo Initials: LAC

306021.D 306022.D 306023.D 306024.D 306025.D 306026.D
306028.D 306029.D 306030.D 306031.D 306032.D 306033.D
306034.D 306035.D 306036.D 306037.D 306038.D 306039.D

		Compound	1	2	3	4	5	6			Avg	%RSD		
1	HATM	Diesel (C10-C28)	529470	572376	554327	532214	548865	544808			547010	2.9	HATM	
2	HBTM	Motor Oil (C18-C36)	330338	392850	386776	387626	385763	416808			383360	7.4	HBTM	
3	SA	Not Used(S)	818070	901397	771640	752170	778035	779206			800086	6.8	SA	
4	SC	Ortho-Terphenyl(S)		758155	695456	669026	662710	670505			691170	5.7	SC	
5	SA	Not Used2(S)	639279	629664	580197	560231	582428	580127			595321	5.3	SA	
6	SC	Octacosane(S)		649248	593354	568152	567907	574675			590667	5.8	SC	
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														

0.967941

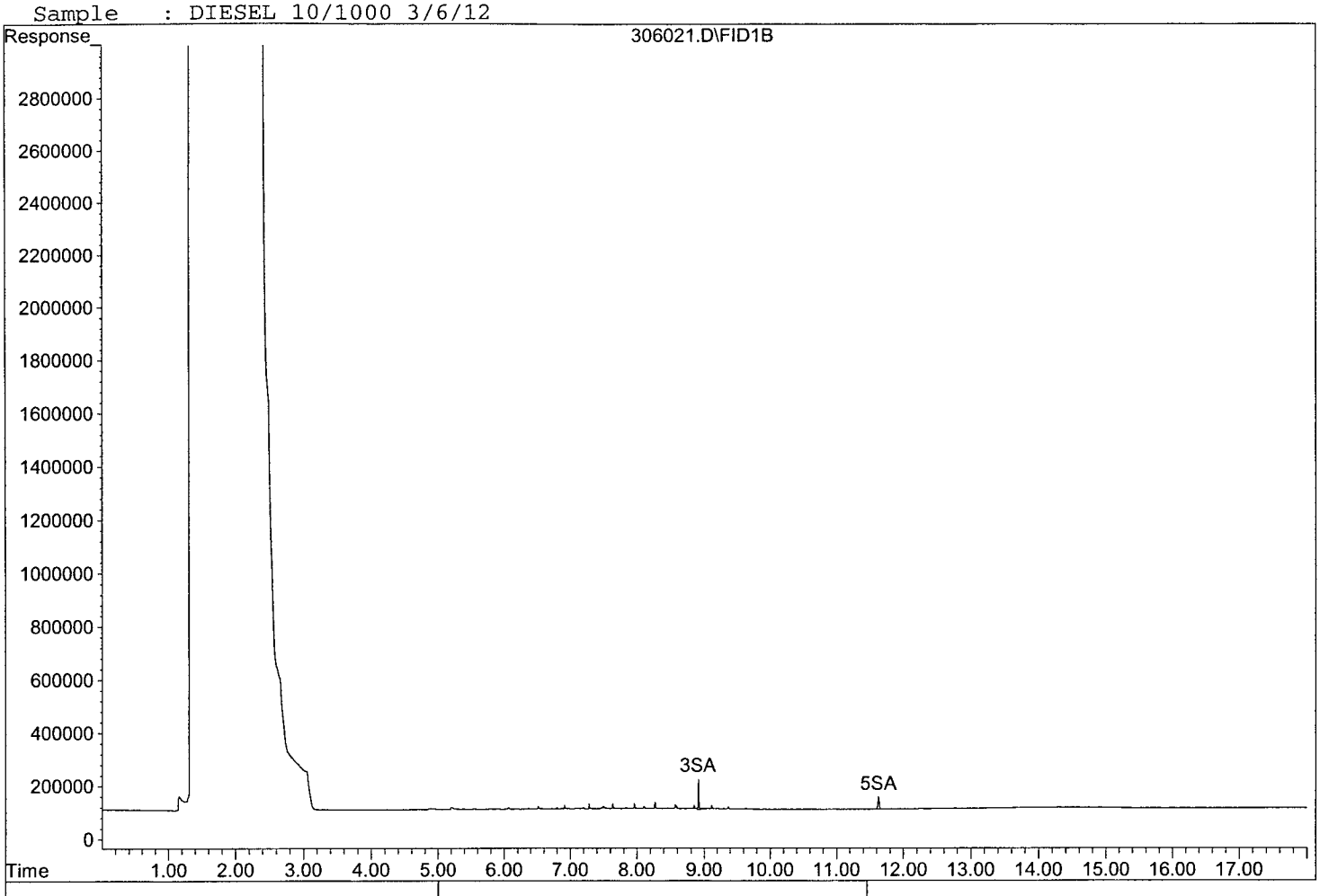
Data File : G:\APOLLO\DATA\120306\306021.D Vial: 21
Acq On : 3-6-12 17:25:38 Operator: LAC
Sample : DIESEL 10/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:48 2012 Quant Results File: TPH0306.RES

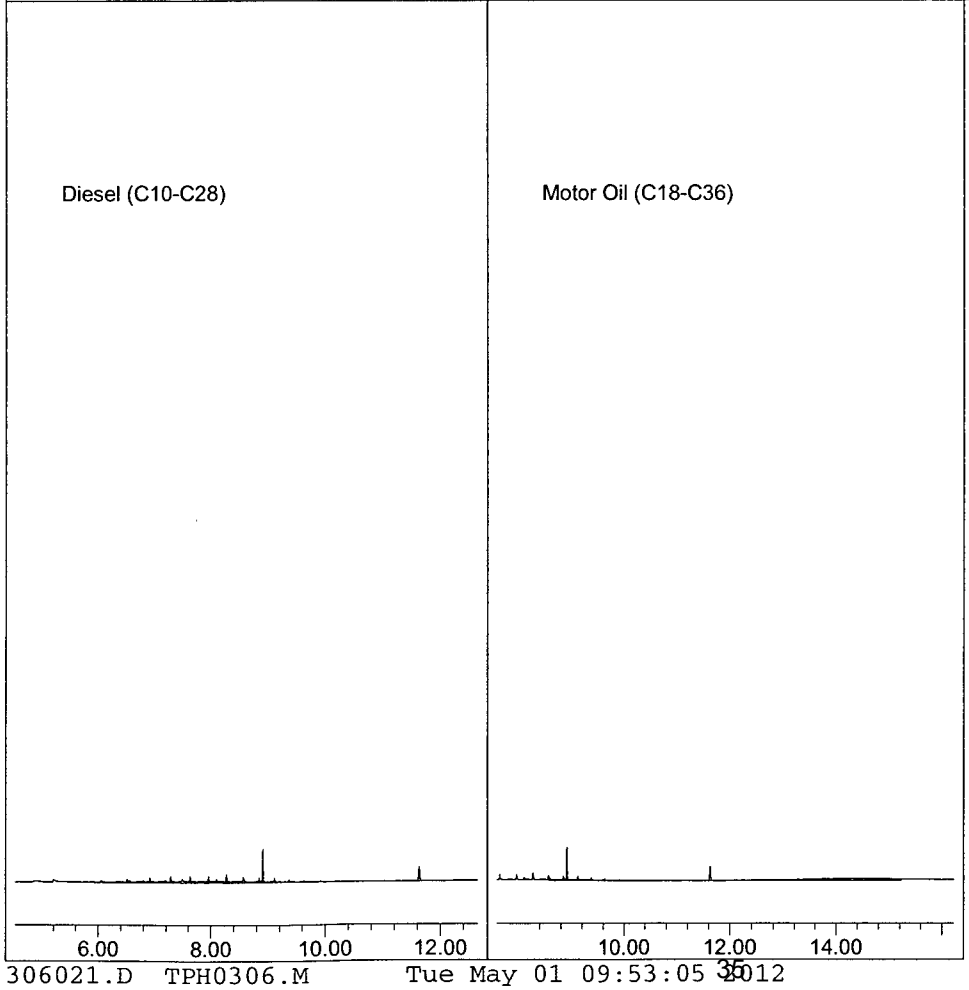
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	818070	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
5) SA Not Used2(S)	11.63	639279	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	10589402	10.000 ppb

Data File: G:\APOLLO\DATA\120306\306021.D
Sample : DIESEL 10/1000 3/6/12





306021.D TPH0306.M Tue May 01 09:53:05 2012

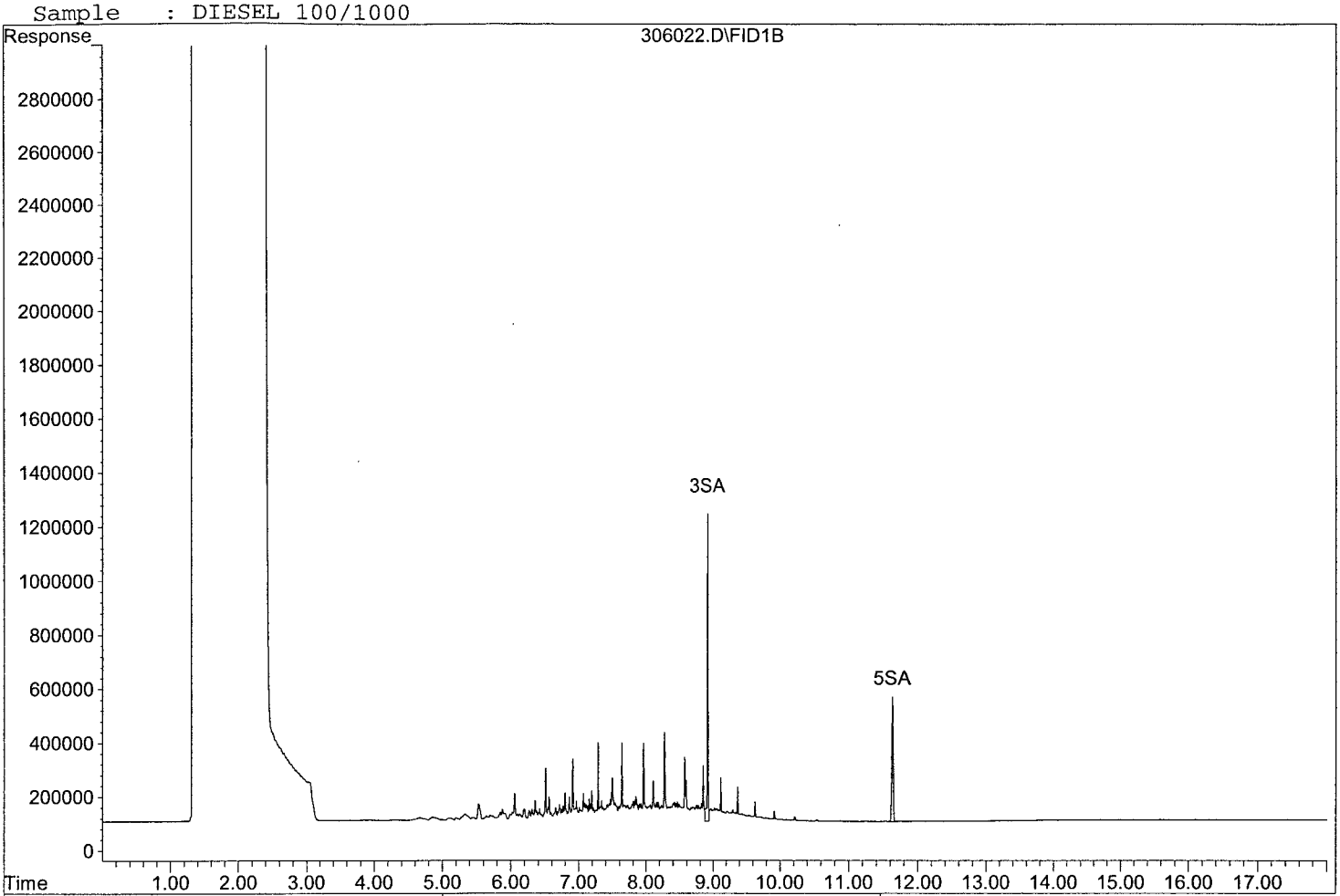
Data File : G:\APOLLO\DATA\120306\306022.D Vial: 22
Acq On : 3-6-12 17:49:21 Operator: LAC
Sample : DIESEL 100/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

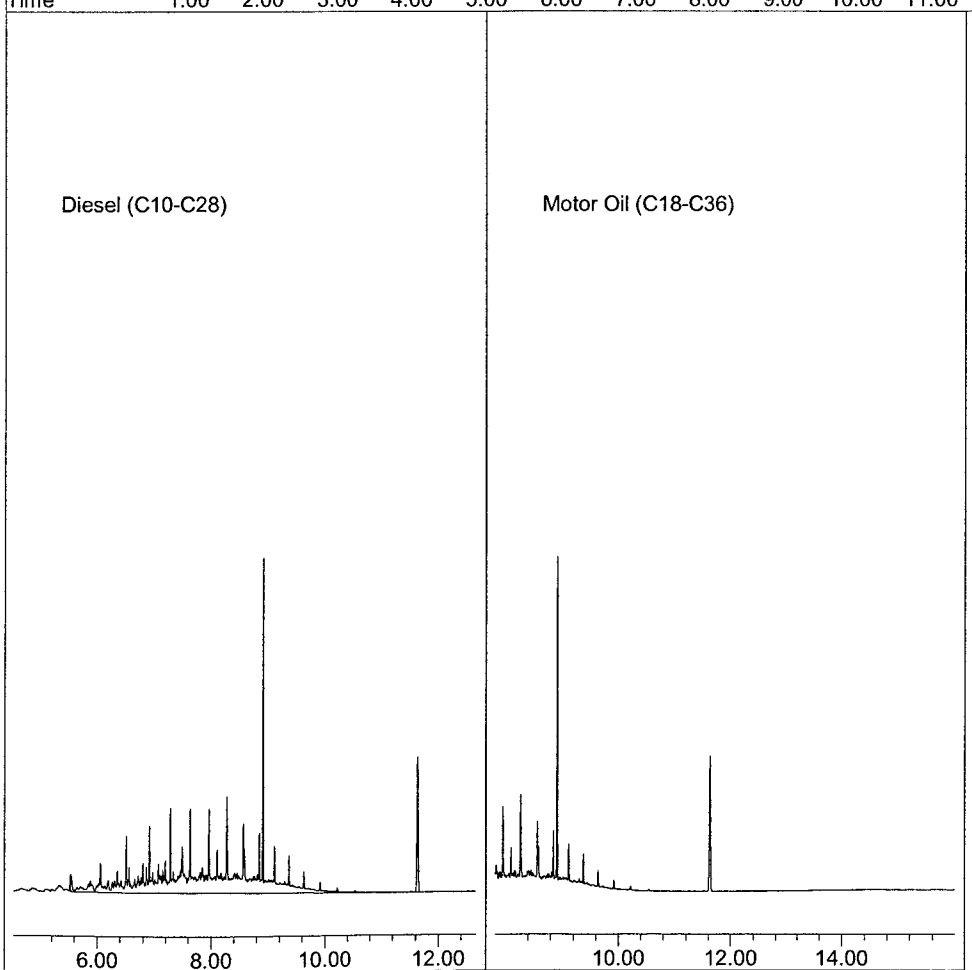
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	9013972	5.509 ppb
Surrogate Spike 30.000	Recovery =		18.36%
5) SA Not Used2(S)	11.63	6296635	4.925 ppb
Surrogate Spike 30.000	Recovery =		16.42%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	114475207	108.104 ppb

Data File: G:\APOLLO\DATA\120306\306022.D
Sample : DIESEL 100/1000





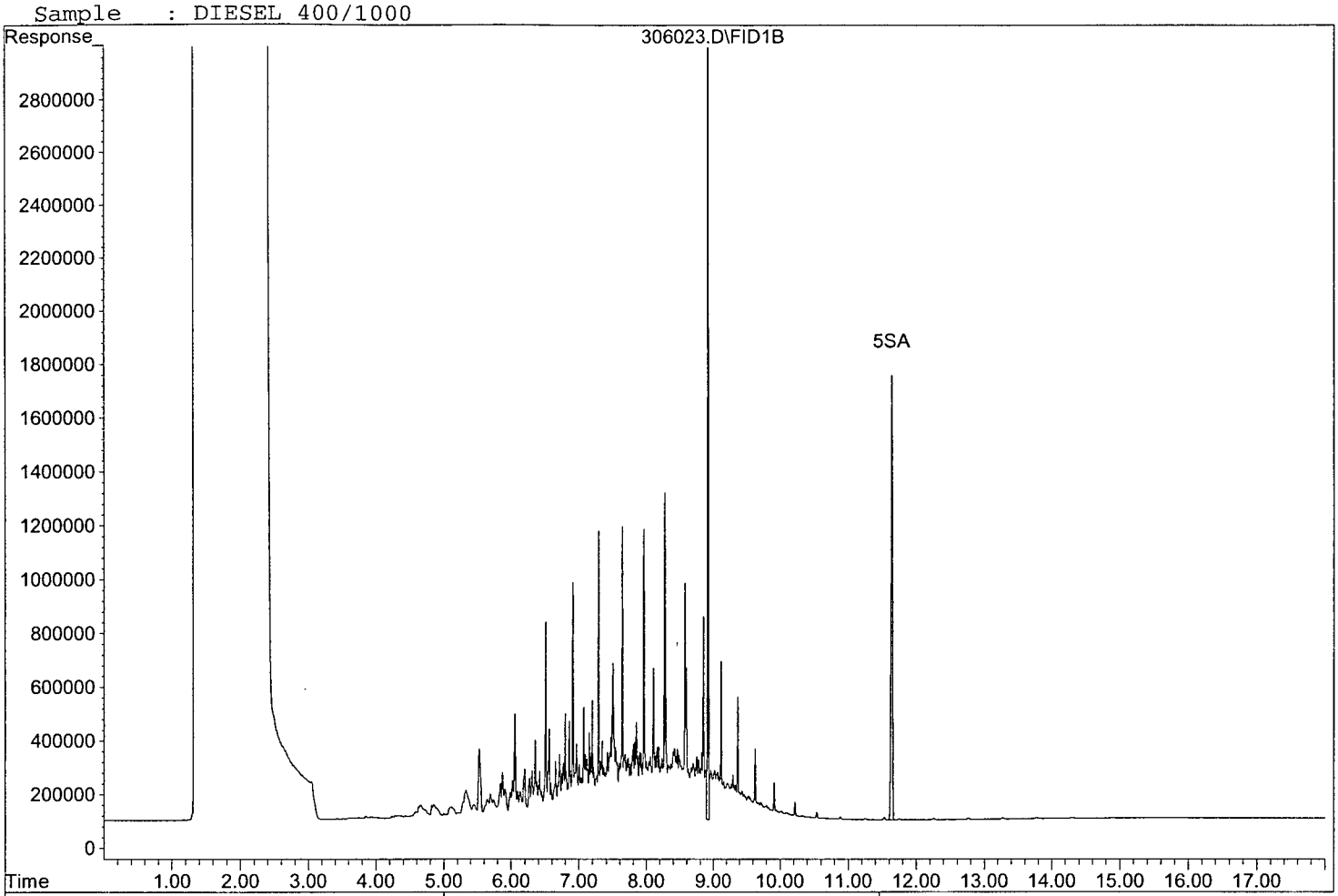
Data File : G:\APOLLO\DATA\120306\306023.D Vial: 23
Acq On : 3-6-12 18:12:55 Operator: LAC
Sample : DIESEL 400/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

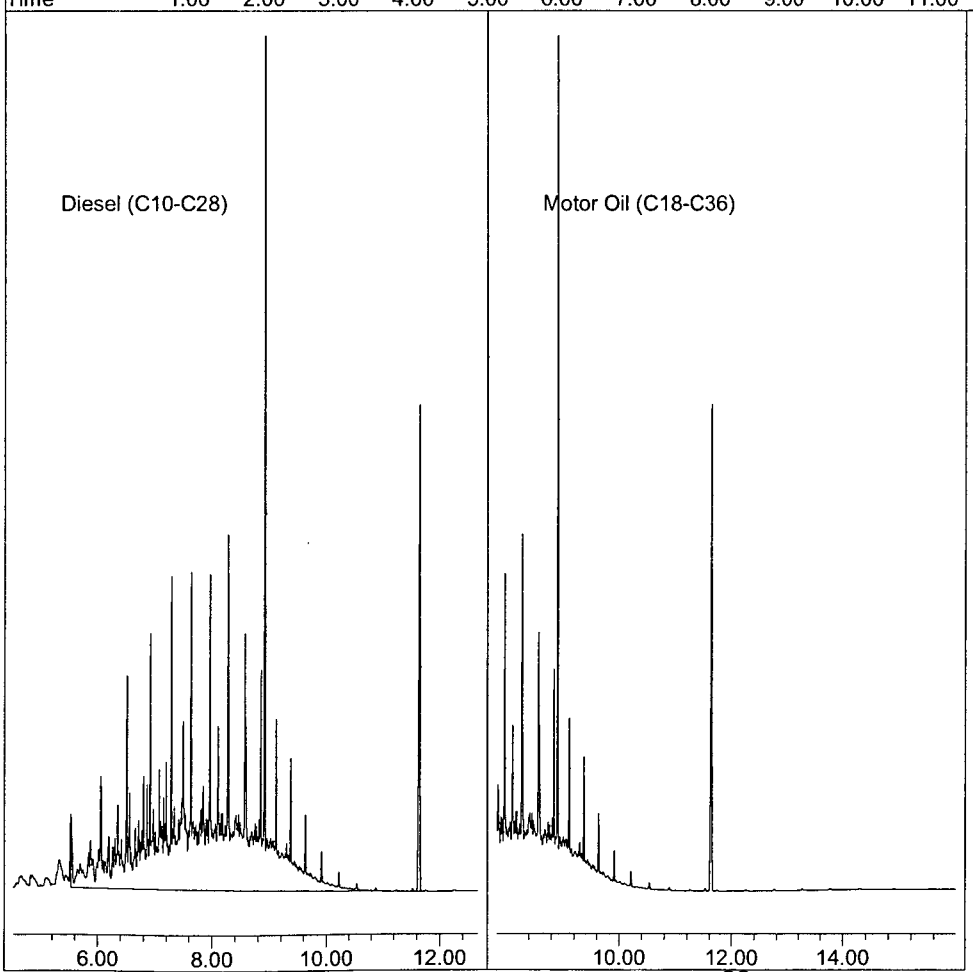
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	30865588	17.951 ppb
Surrogate Spike 30.000	Recovery =		59.84%
5) SA Not Used2(S)	11.64	23207886	18.289 ppb
Surrogate Spike 30.000	Recovery =		60.96%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	443461339	402.471 ppb

Data File: G:\APOLLO\DATA\120306\306023.D
Sample : DIESEL 400/1000





Data File : G:\APOLLO\DATA\120306\306024.D Vial: 24
Acq On : 3-6-12 18:36:31 Operator: LAC
Sample : DIESEL 600/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

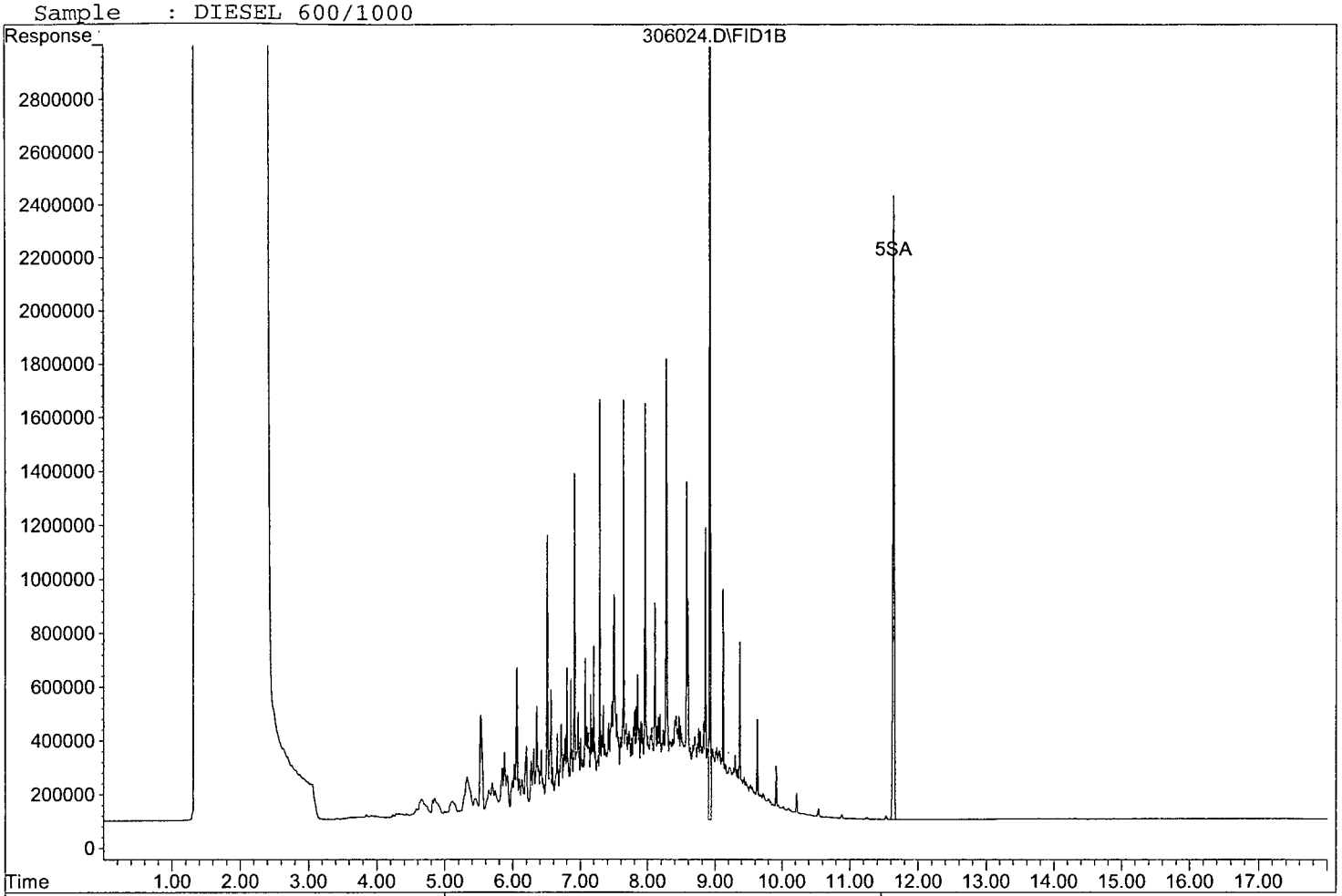
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

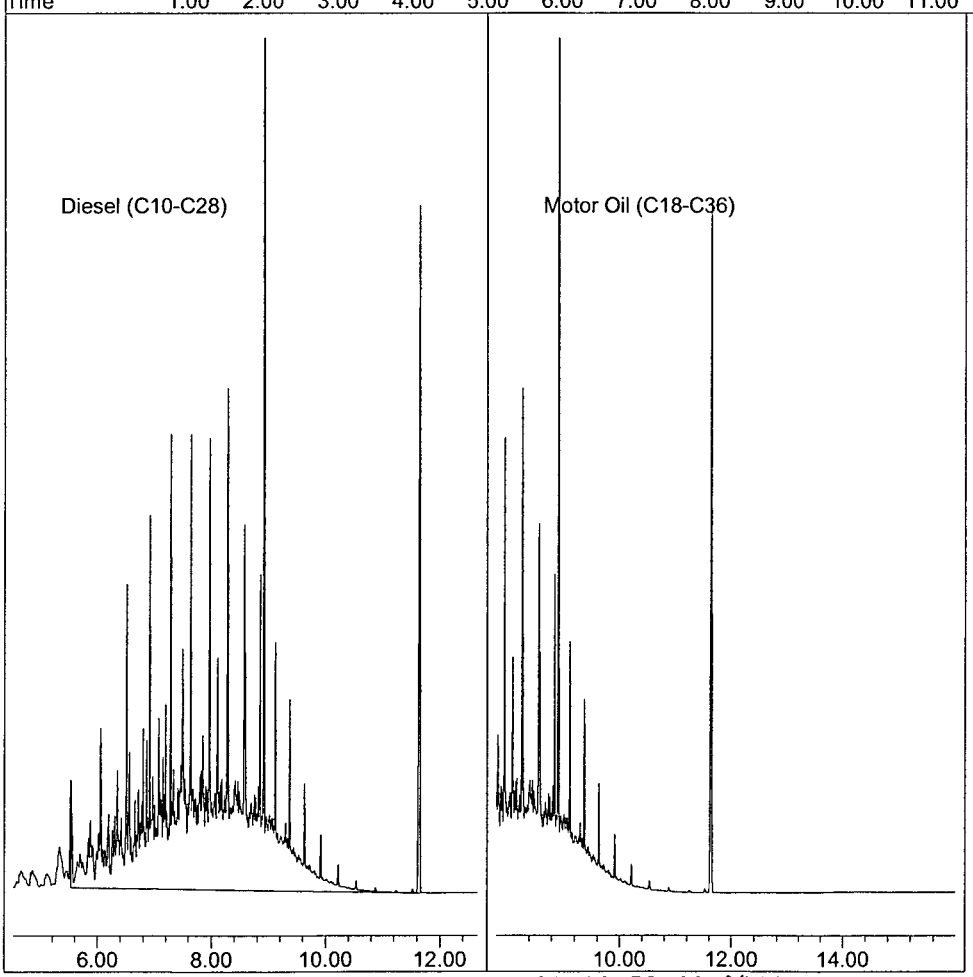
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	45130195	27.175 ppb
Surrogate Spike 30.000	Recovery =		90.58%
5) SA Not Used2(S)	11.64	33613879	27.267 ppb
Surrogate Spike 30.000	Recovery =		90.89%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	638656371	578.433 ppb

(f)=RT Delta > 1/2 Window 40 (m)=manual int.

Data File: G:\APOLLO\DATA\120306\306024.D
Sample : DIESEL 600/1000





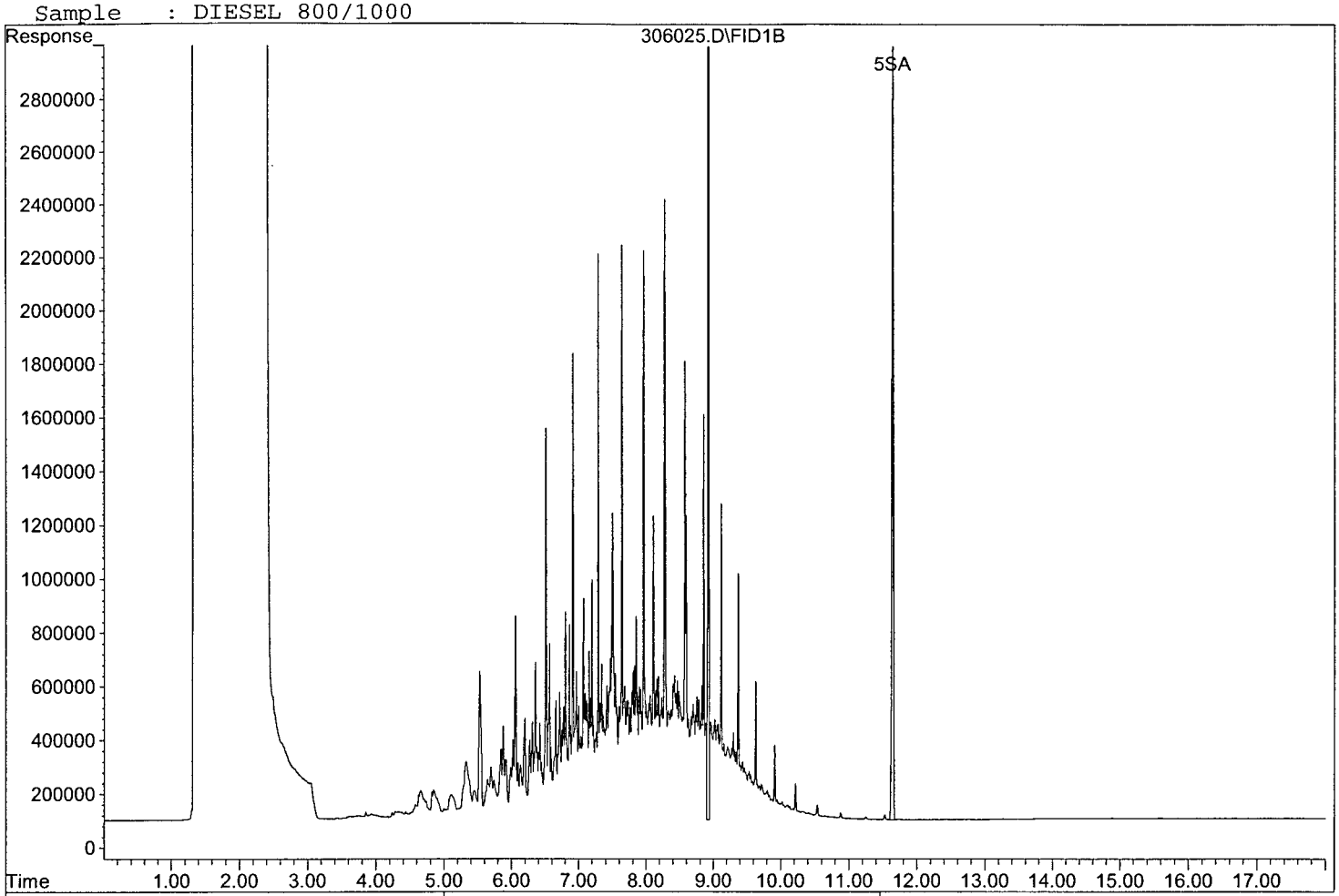
Data File : G:\APOLLO\DATA\120306\306025.D Vial: 25
Acq On : 3-6-12 19:00:08 Operator: LAC
Sample : DIESEL 800/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

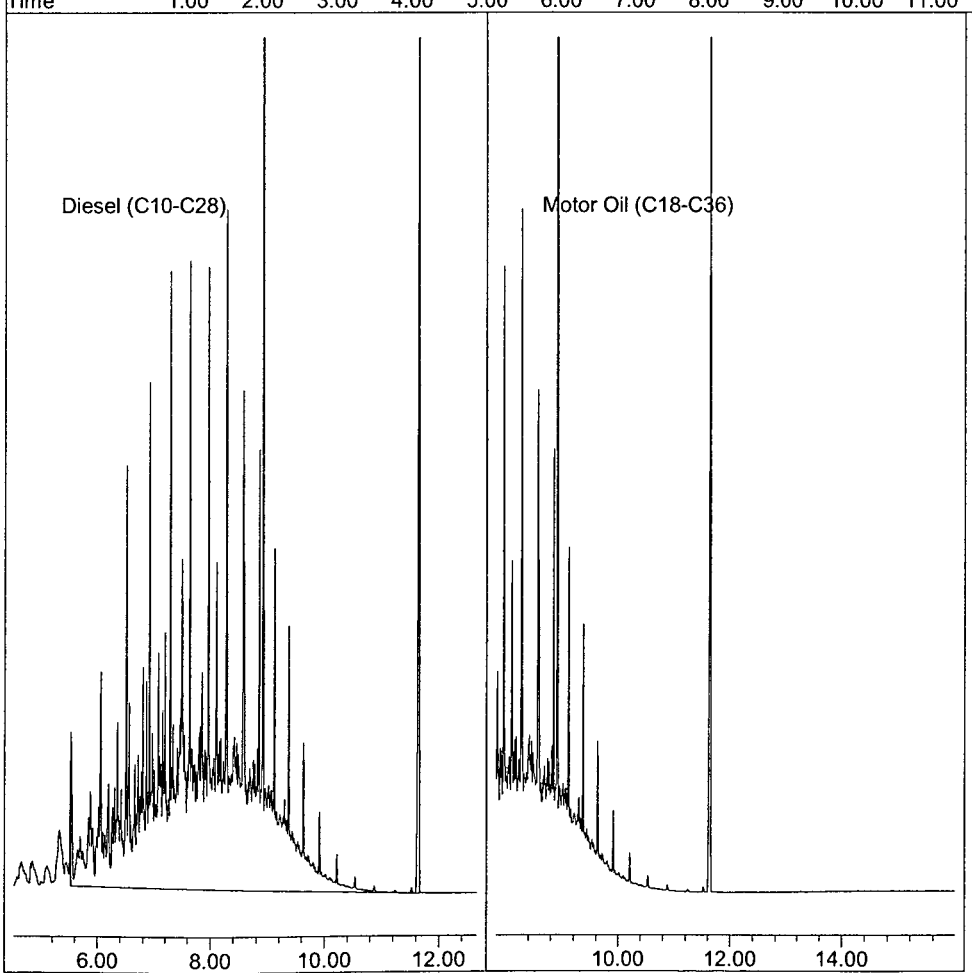
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	62242769	38.383 ppb
Surrogate Spike 30.000	Recovery =		127.94%
5) SA Not Used2(S)	11.65	46594210	38.677 ppb
Surrogate Spike 30.000	Recovery =		128.92%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	878183394	802.585 ppb

Data File: G:\APOLLO\DATA\120306\306025.D
Sample : DIESEL 800/1000





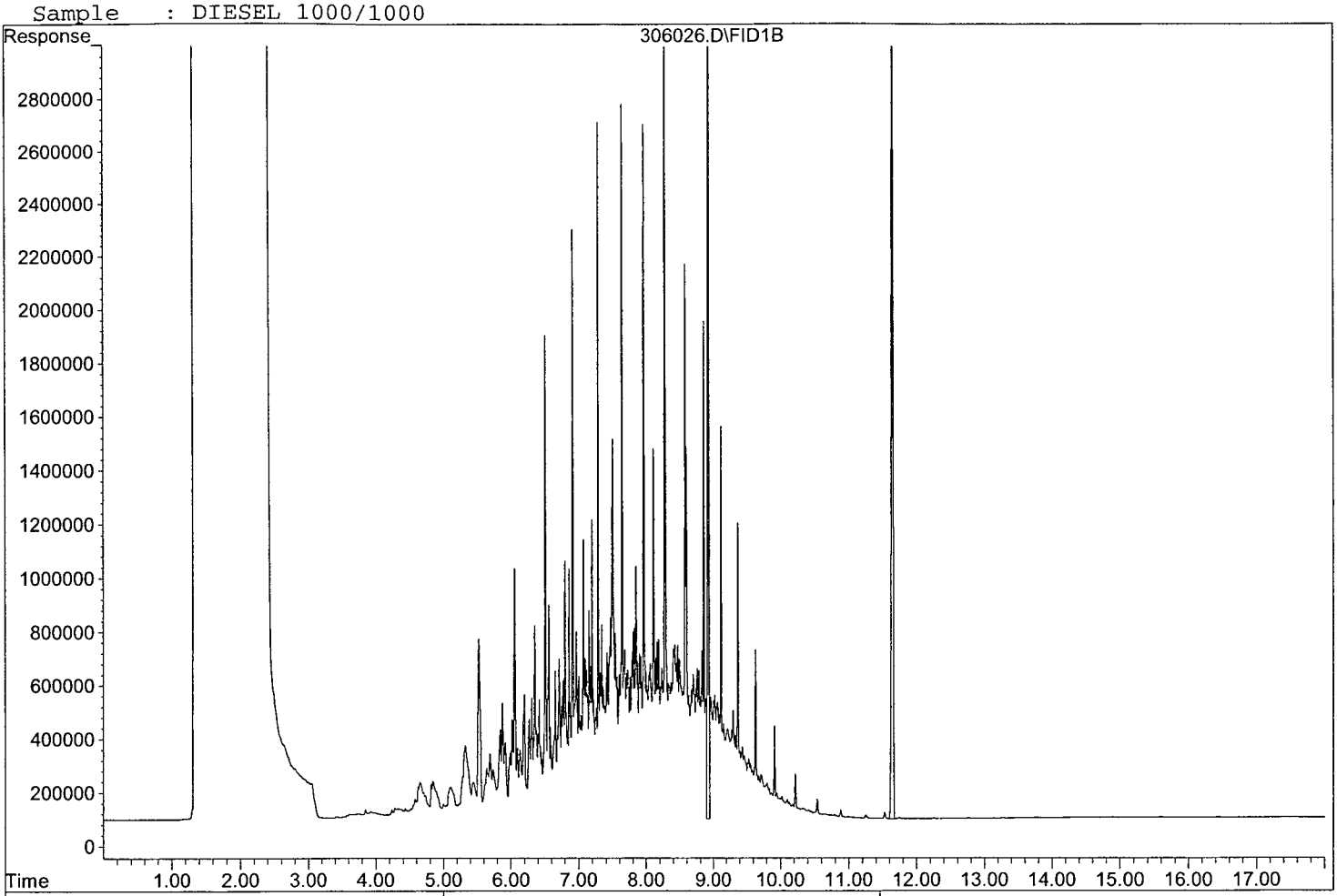
Data File : G:\APOLLO\DATA\120306\306026.D Vial: 26
Acq On : 3-6-12 19:23:45 Operator: LAC
Sample : DIESEL 1000/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

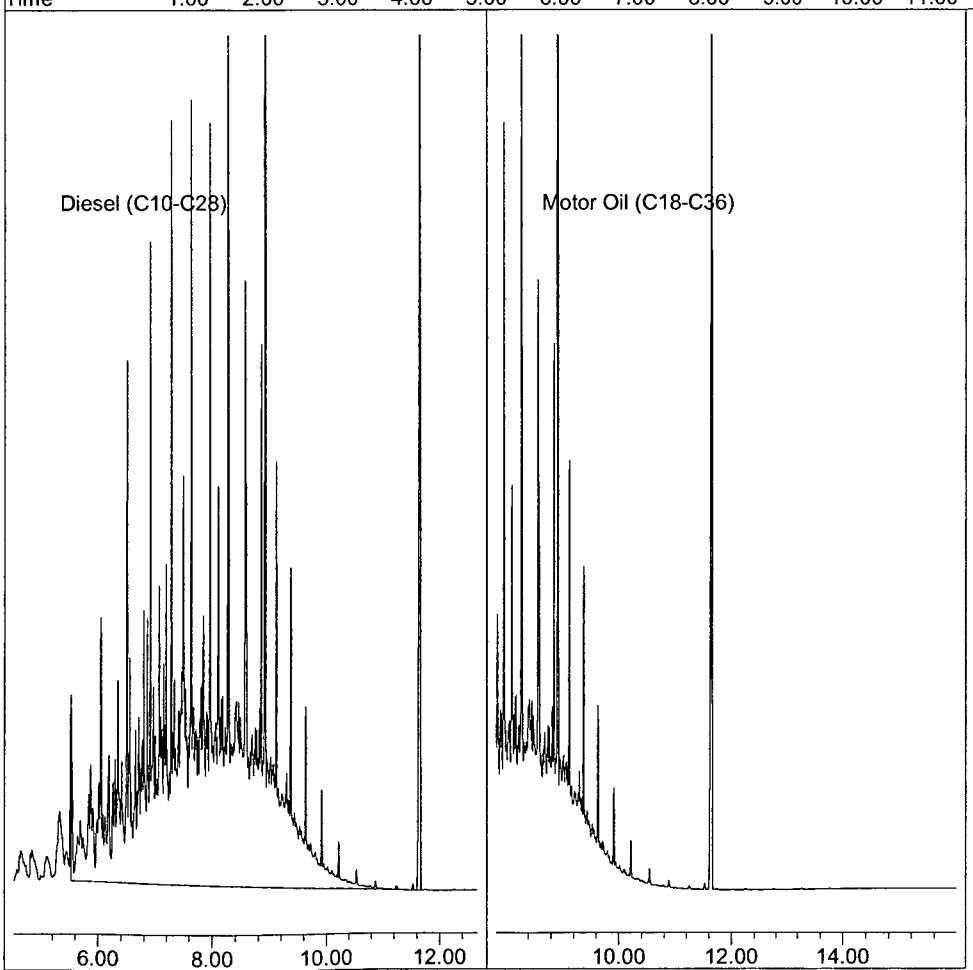
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	77920610	48.442 ppb
Surrogate Spike 30.000	Recovery =		161.47%
5) SA Not Used2(S)	11.65	58012669	48.476 ppb
Surrogate Spike 30.000	Recovery =		161.59%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	1089615924	995.174 ppb

Data File: G:\APOLLO\DATA\120306\306026.D
Sample : DIESEL 1000/1000





TPH Extractables
TPH0306

Form 7

Second Source Calibration

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

SDG No: 67525
Date Analyzed: 03/06/12
Instrument: Apollo
Initial Cal. Date: 03/06/12
Data File: 306027.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	547335	0.06	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			0.1		

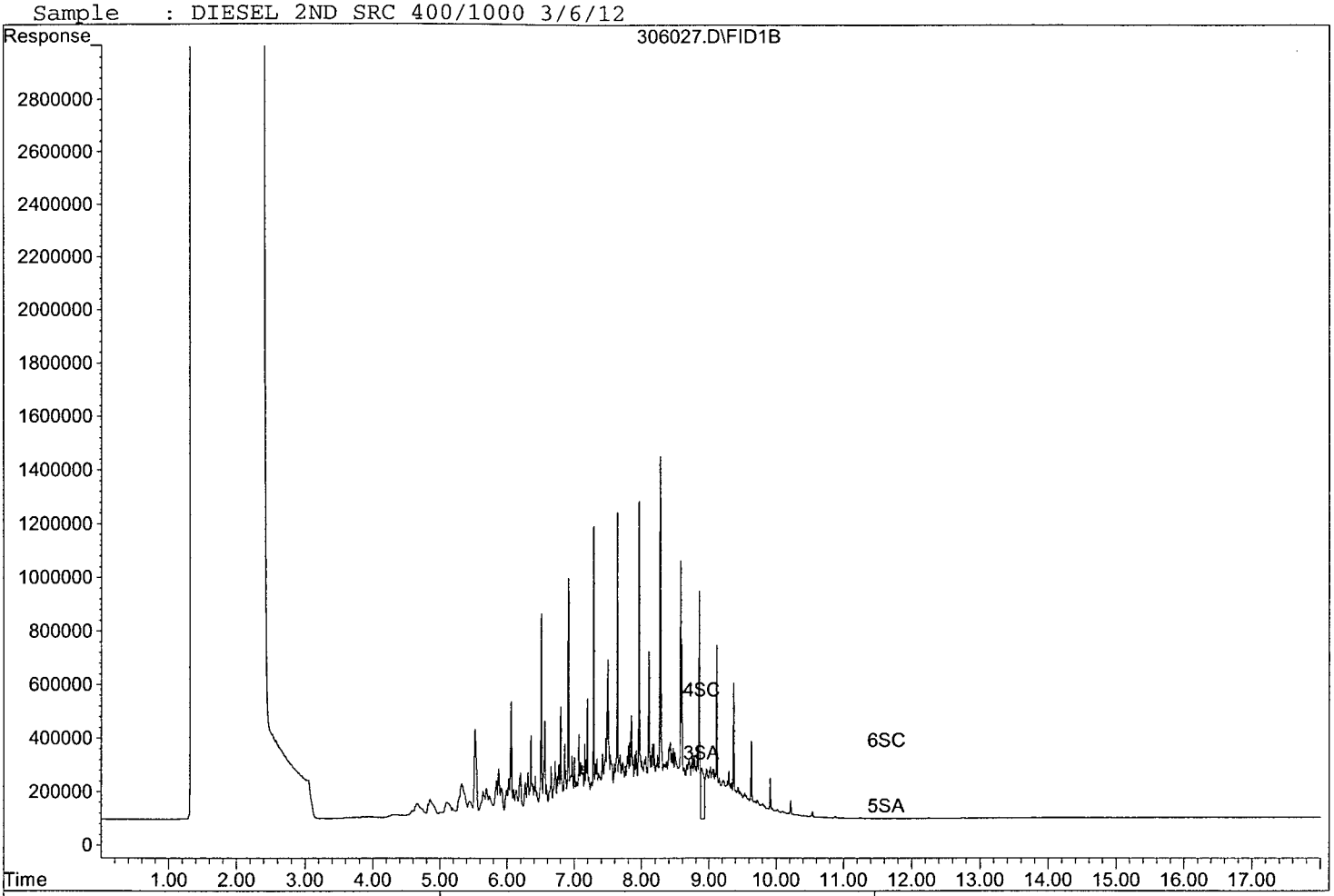
Data File : G:\APOLLO\DATA\120306\306027.D Vial: 27
Acq On : 3-6-12 19:47:20 Operator: LAC
Sample : DIESEL 2ND SRC 400/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 3 12:39 2012 Quant Results File: TPH0306.RES

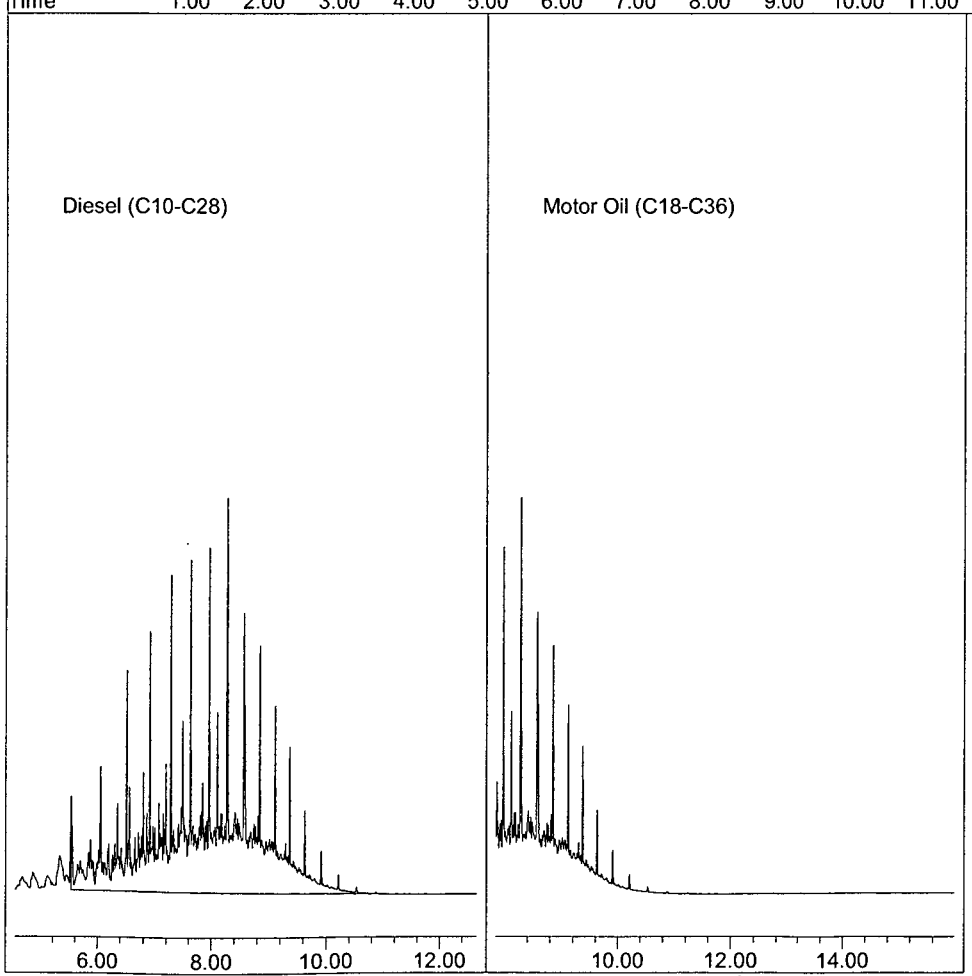
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.88	6428955	4.018	ppb
Surrogate Spike 30.000	Recovery =		13.39%	
4) SC Ortho-Terphenyl(S)	8.88	6428955	4.651	ppb
Surrogate Spike 30.000	Recovery =		15.50%	
5) SA Not Used2(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
6) SC Octacosane(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.60	437868309	400.238	ppb

Data File: G:\APOLLO\DATA\120306\306027.D
Sample : DIESEL 2ND SRC 400/1000 3/6/12





306027.D TPH0306.M Tue May 01 09:53:41 2012

TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67525
Date Analyzed: 04/24/12
Instrument: Apollo
Initial Cal. Date: 04/23/12
Data File: 423066.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	601270	9.9	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			9.9		

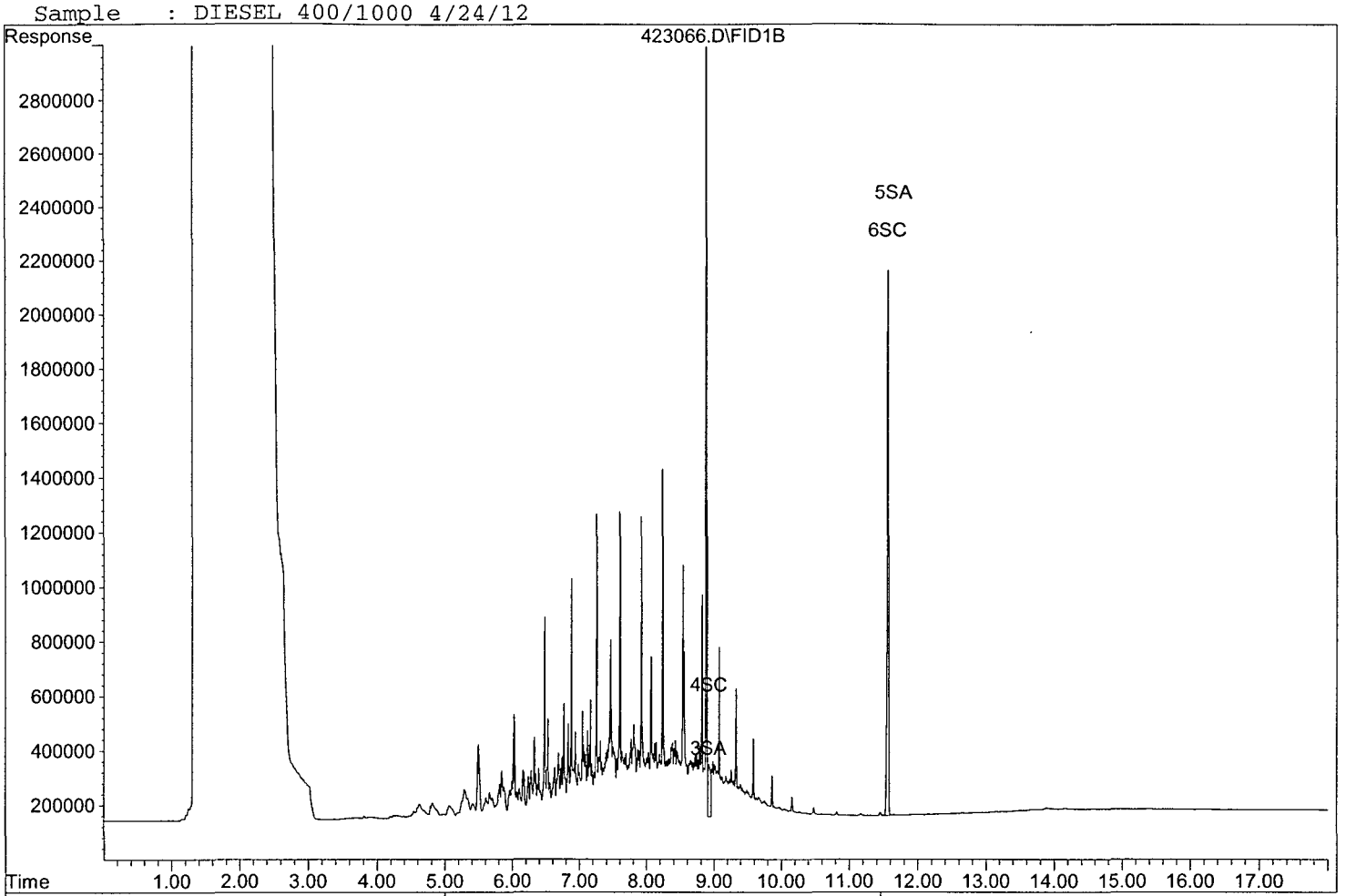
Data File : G:\APOLLO\DATA\120423\423066.D Vial: 66
Acq On : 4-24-12 21:44:51 Operator: LAC
Sample : DIESEL 400/1000 4/24/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 25 8:28 2012 Quant Results File: TPH0306.RES

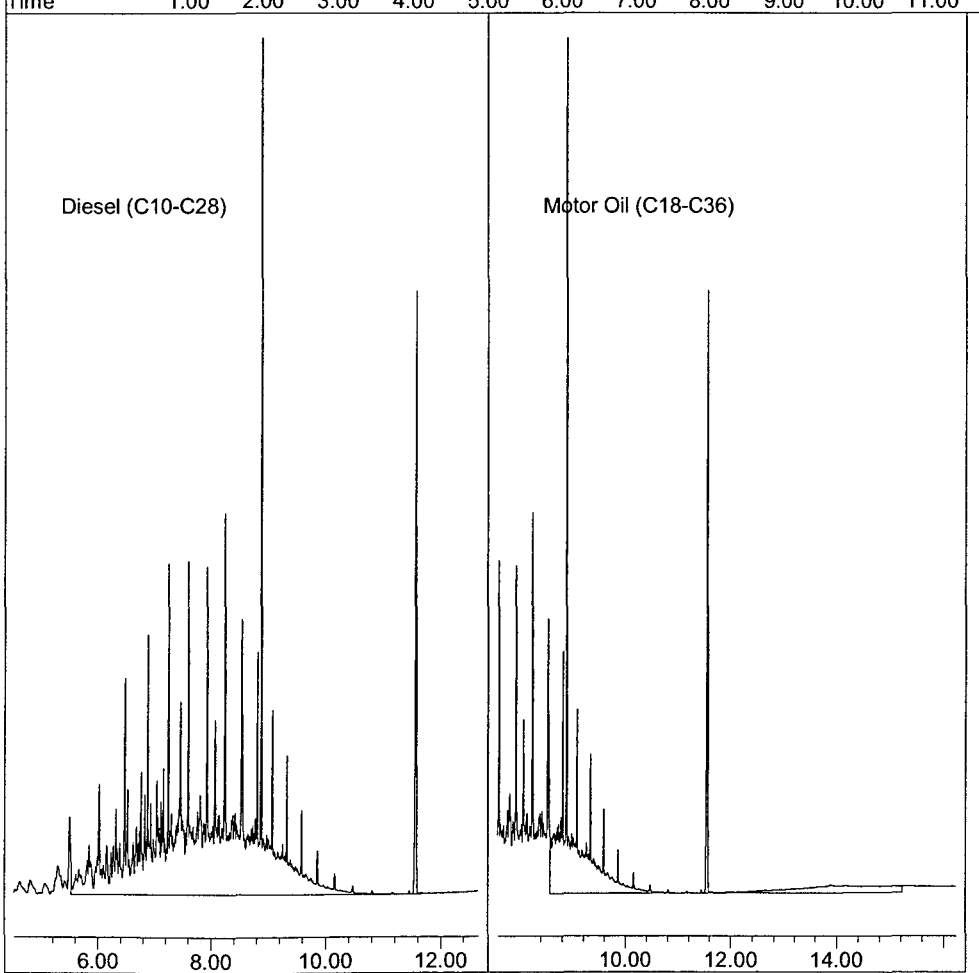
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5076601	3.173 ppb
Surrogate Spike 30.000	Recovery =		10.58%
4) SC Ortho-Terphenyl(S)	8.92	5076601	3.672 ppb
Surrogate Spike 30.000	Recovery =		12.24%
5) SA Not Used2(S)	11.66	91709	0.077 ppb
Surrogate Spike 30.000	Recovery =		0.26%
6) SC Octacosane(S)	11.57	27771415	23.509 ppb
Surrogate Spike 30.000	Recovery =		78.36%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	481015774	439.677 ppb
2) HBTM Motor Oil (C18-C36)	11.91	167885873	218.966 ppb

Data File: G:\APOLLO\DATA\120423\423066.D
Sample : DIESEL 400/1000 4/24/12





TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67525
Date Analyzed: 04/25/12
Instrument: Apollo
Initial Cal. Date: 04/23/12
Data File: 423077.D

		Compound	MEAN	CCRF	%D		%Drift
1	HATM	Diesel (C10-C28)	547010	633769	16	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			16.0		

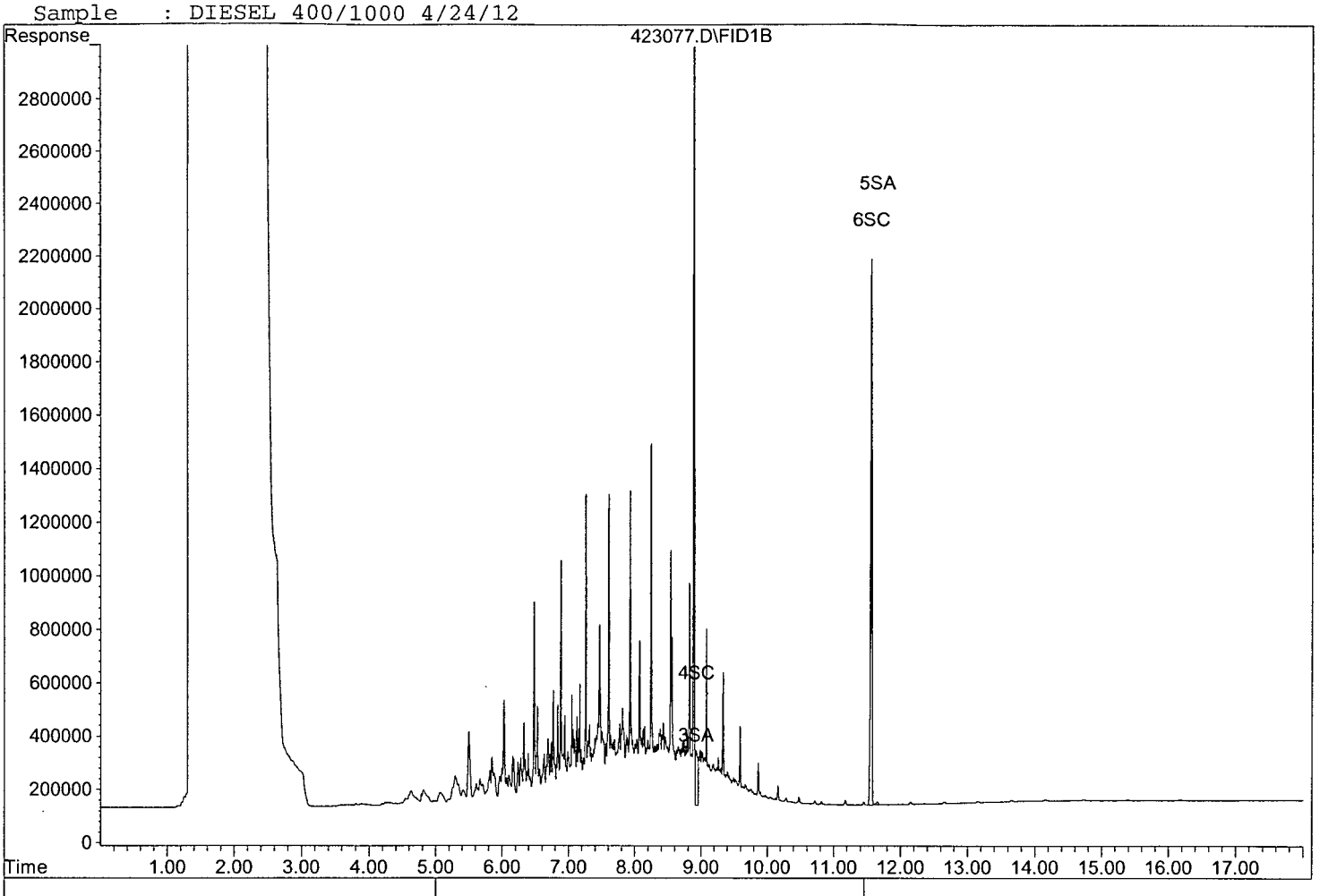
Data File : G:\APOLLO\DATA\120423\423077.D Vial: 77
Acq On : 4-25-12 2:09:29 Operator: LAC
Sample : DIESEL 400/1000 4/24/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 25 9:13 2012 Quant Results File: TPH0306.RES

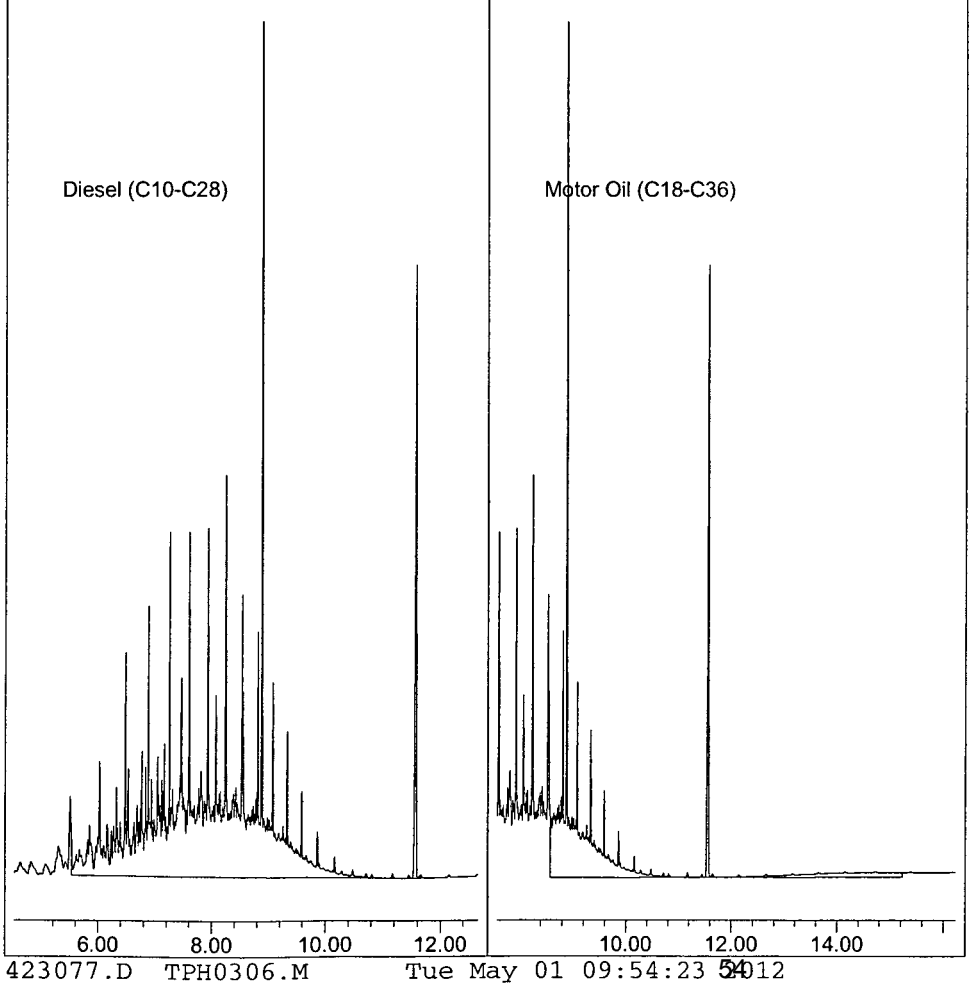
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5511954	3.445 ppb
Surrogate Spike 30.000	Recovery =		11.48%
4) SC Ortho-Terphenyl(S)	8.92	5511954	3.987 ppb
Surrogate Spike 30.000	Recovery =		13.29%
5) SA Not Used2(S)	11.66	264168	0.222 ppb
Surrogate Spike 30.000	Recovery =		0.74%
6) SC Octacosane(S)	11.56	29006021	24.554 ppb
Surrogate Spike 30.000	Recovery =		81.85%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	507015307	463.443 ppb
2) HBTM Motor Oil (C18-C36)	11.91	169904243	221.599 ppb

Data File: G:\APOLLO\DATA\120423\423077.D
Sample : DIESEL 400/1000 4/24/12





TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67525
Date Analyzed: 04/27/12
Instrument: Apollo
Initial Cal. Date: 04/27/12
Data File: 427035.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	527112	3.6	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.6		

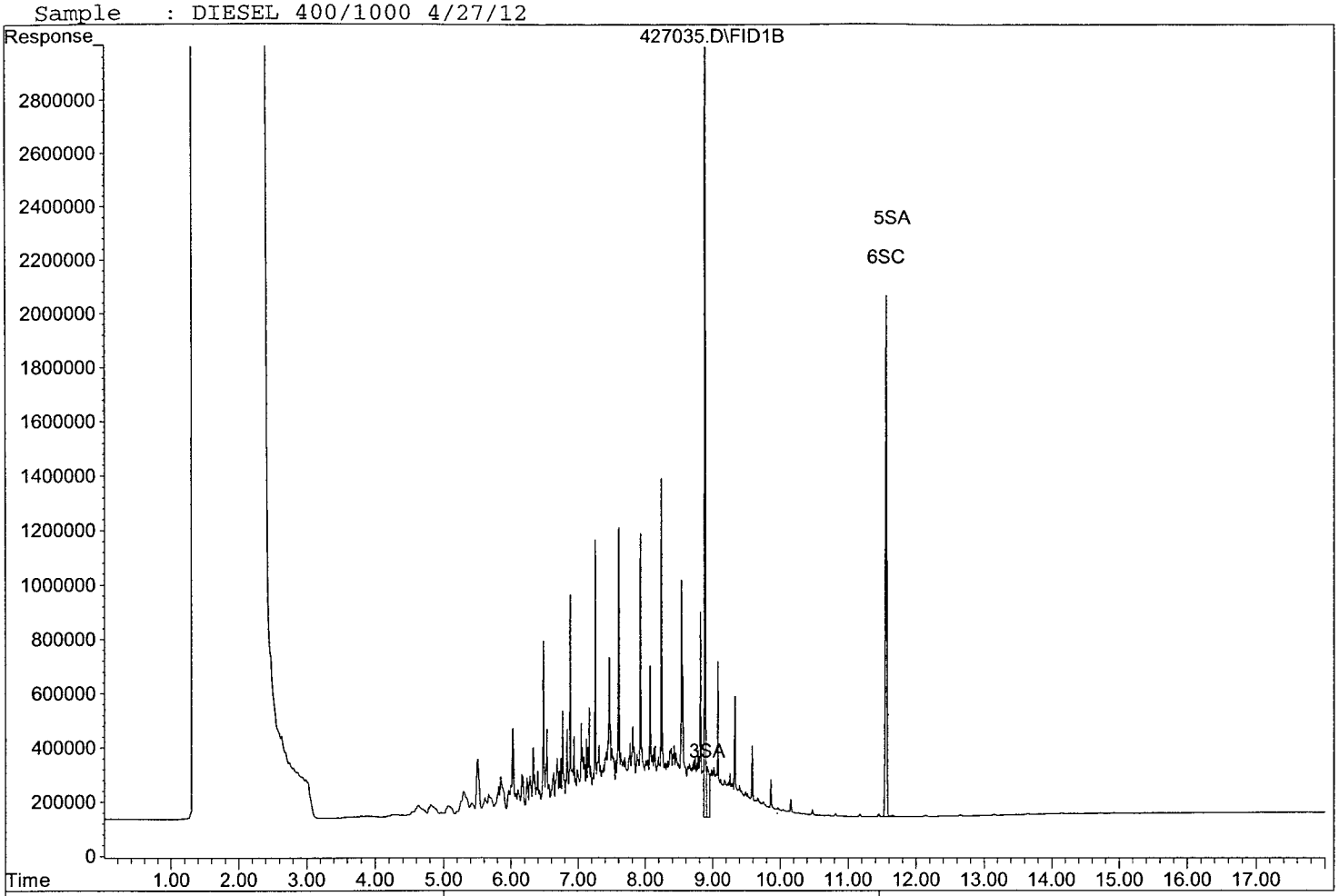
Data File : G:\APOLLO\DATA\120427\427035.D Vial: 35
Acq On : 4-27-12 22:25:15 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 9:56 2012 Quant Results File: TPH0306.RES

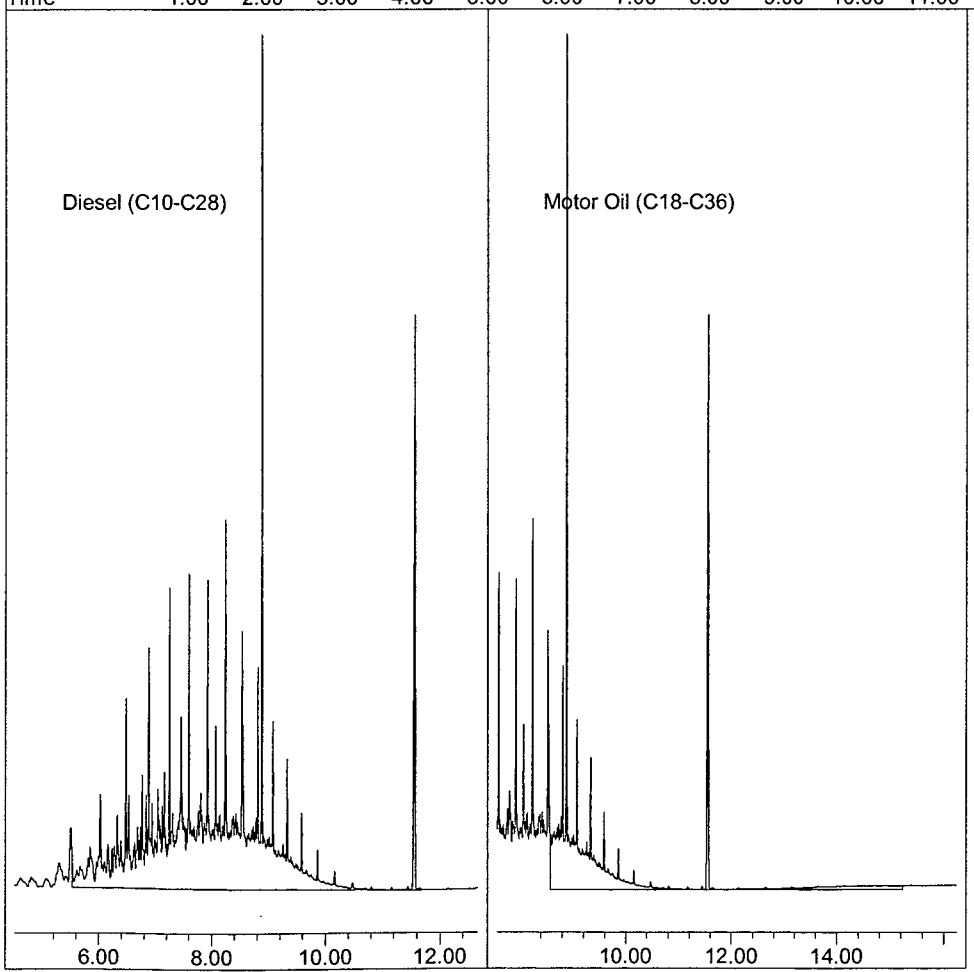
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5005038	3.128 ppb
Surrogate Spike 30.000	Recovery =		10.43%
4) SC Ortho-Terphenyl(S)	8.88	30767127	22.257 ppb
Surrogate Spike 30.000	Recovery =		74.19%
5) SA Not Used2(S)	11.65	130670	0.110 ppb
Surrogate Spike 30.000	Recovery =		0.37%
6) SC Octacosane(S)	11.56	26963900	22.825 ppb
Surrogate Spike 30.000	Recovery =		76.08%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	421689428	385.450 ppb
2) HBTM Motor Oil (C18-C36)	11.91	118173332	154.128 ppb

Data File: G:\APOLLO\DATA\120427\427035.D
Sample : DIESEL 400/1000 4/27/12





TPH Extractables
TPH0306

Form 7

Continuing Calibration

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

SDG No: 67525
Date Analyzed: 04/28/12
Instrument: Apollo
Initial Cal. Date: 04/27/12
Data File: 427048.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	553526	1.2	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			1.2		

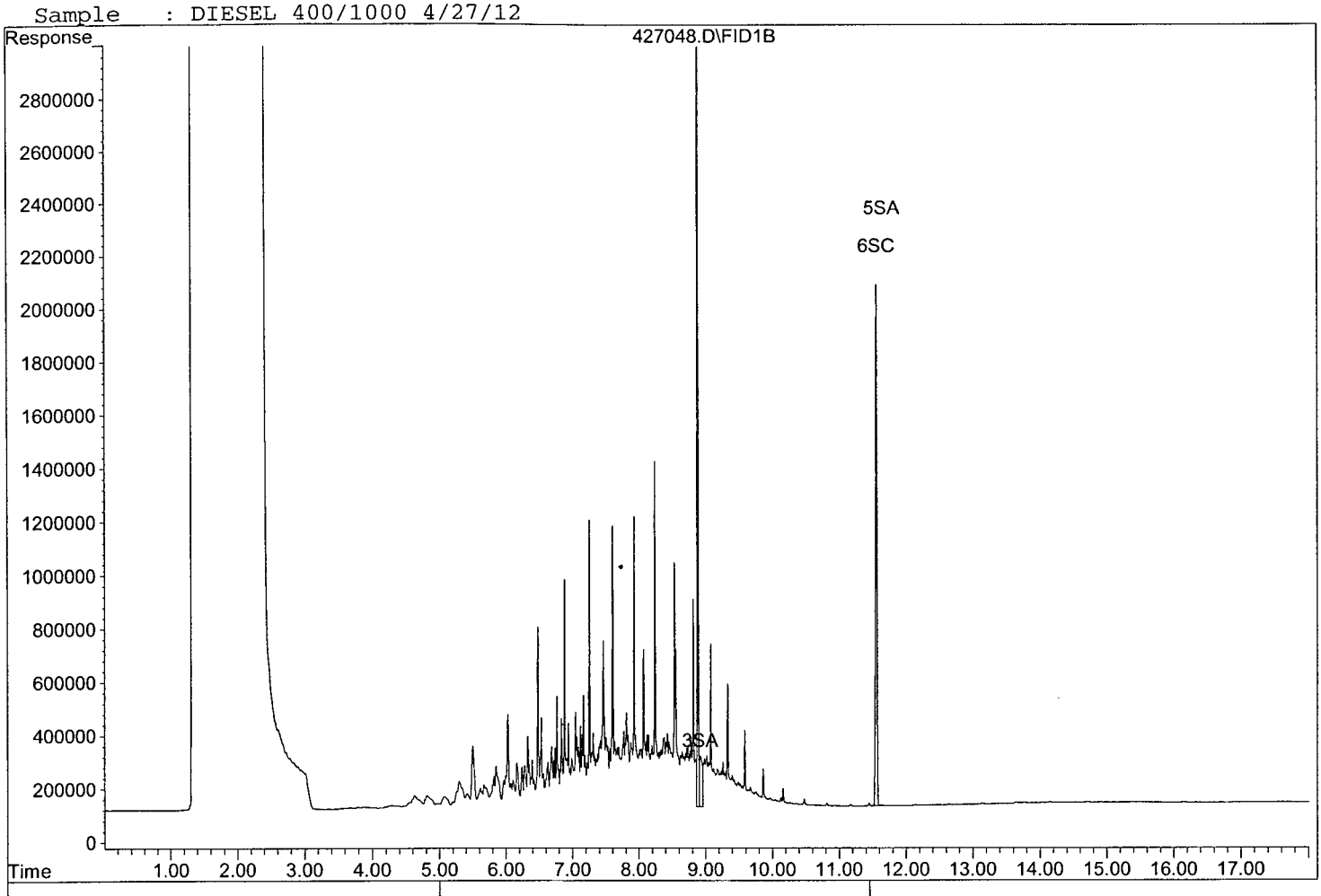
Data File : G:\APOLLO\DATA\120427\427048.D Vial: 48
Acq On : 4-28-12 3:31:33 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 1 9:55 2012 Quant Results File: TPH0306.RES

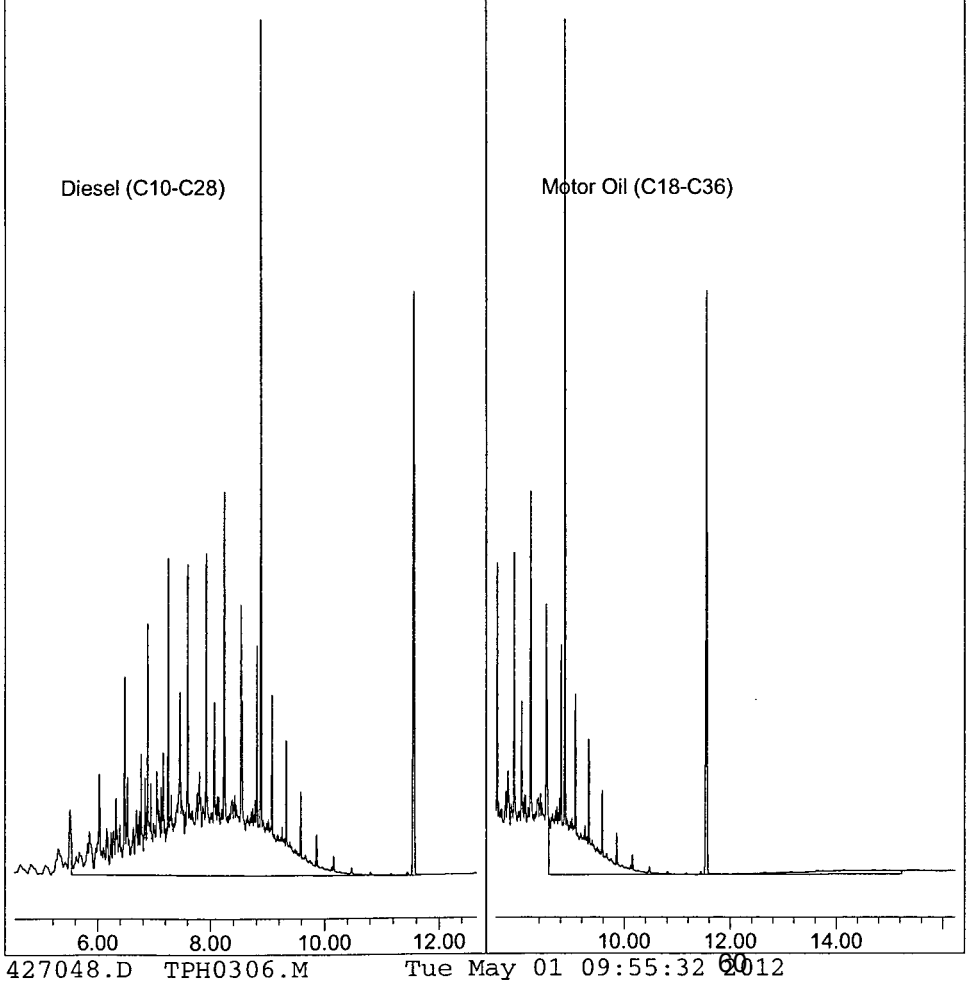
Method : G:\APOLLO\DATA\120427\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Mon Apr 30 15:43:58 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5005927	3.128 ppb
Surrogate Spike 30.000	Recovery =		10.43%
4) SC Ortho-Terphenyl(S)	8.88	32548860	23.546 ppb
Surrogate Spike 30.000	Recovery =		78.49%
5) SA Not Used2(S)	11.65	84299	0.071 ppb
Surrogate Spike 30.000	Recovery =		0.24%
6) SC Octacosane(S)	11.56	28318602	23.972 ppb
Surrogate Spike 30.000	Recovery =		79.91%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	442820738	404.765 ppb
2) HBTM Motor Oil (C18-C36)	11.91	120983509	157.793 ppb

Data File: G:\APOLLO\DATA\120427\427048.D
Sample : DIESEL 400/1000 4/27/12





EPA 8015 Modified
Total Petroleum Hydrocarbons
Raw Data

Method Blank
TPH Diesel Water

Blank Name/QCG: **120419W-59236 - 166194**
Batch ID: #TPETD-120419A

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	04/19/12	04/24/12
BLANK	SURROGATE: OCTACOSANE (S)	106	28-142			%	04/19/12	04/24/12
BLANK	SURROGATE: ORTHO-TERPHEN	79.7	57-132			%	04/19/12	04/24/12

Quant Method: TPH0306.M
Run #: 423068
Instrument: Apollo
Sequence: 120423
Initials: TRL

Printed: 04/25/12 5:41:33 PM
GC SC-Blank-REG MDLs

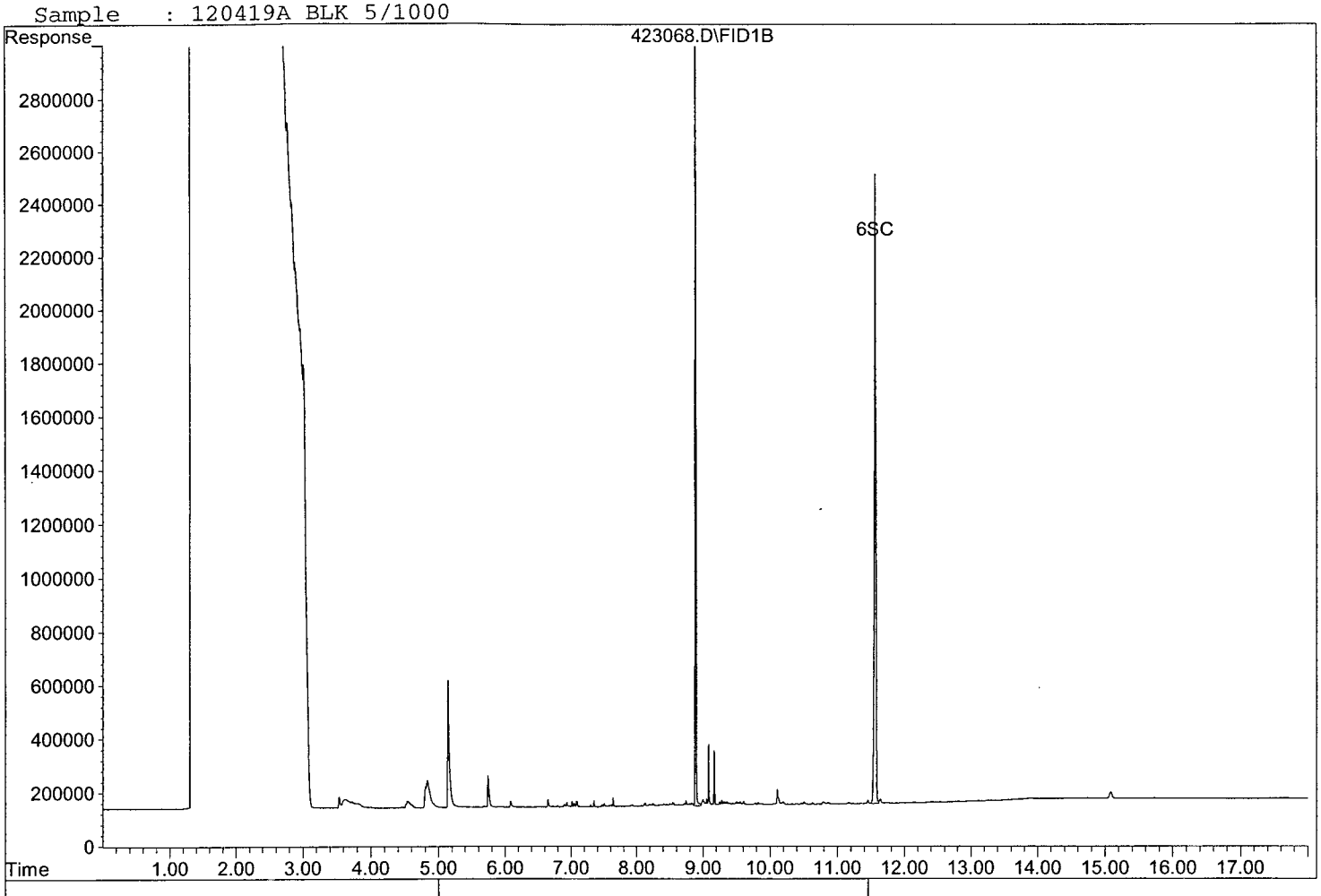
Data File : G:\APOLLO\DATA\120423\423068.D Vial: 68
Acq On : 4-24-12 22:33:21 Operator: LAC
Sample : 120419A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 3 13:36 2012 Quant Results File: TPH0306.RES

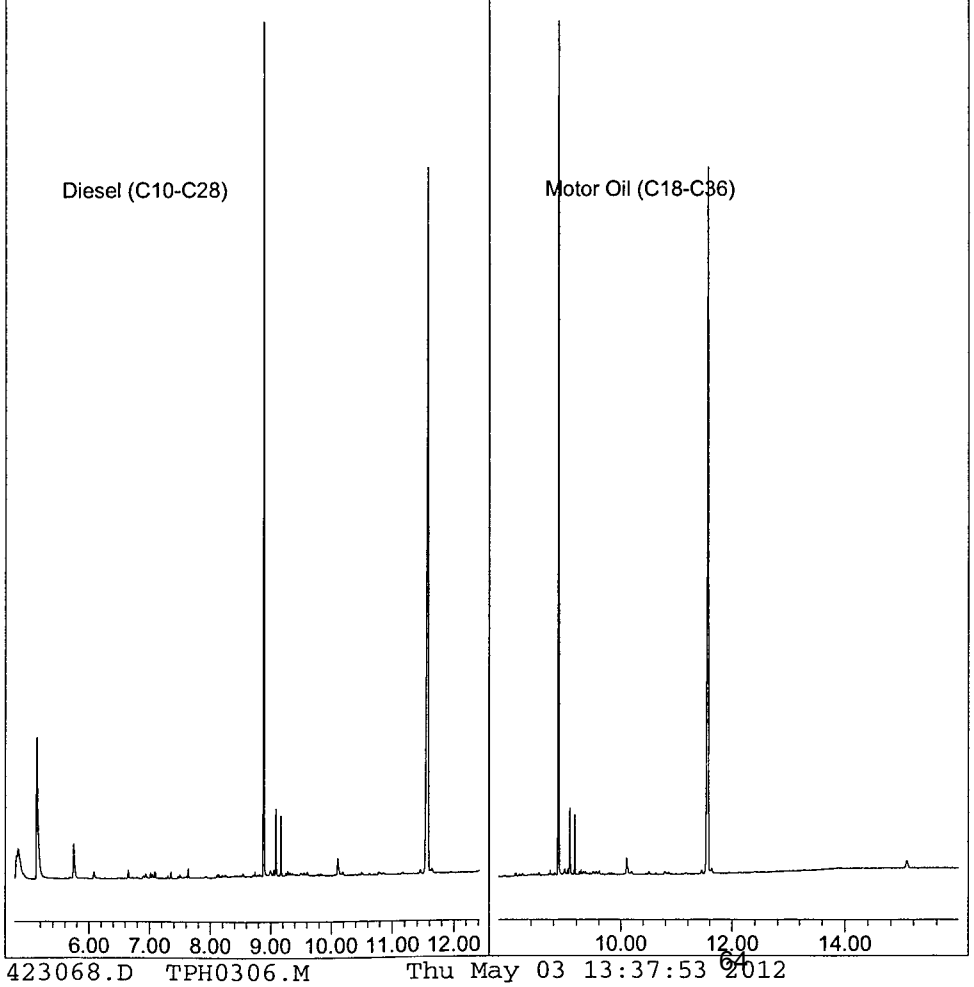
Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	33050984	119.547 ppb
Surrogate Spike 150.000		Recovery =	79.70%
6) SC Octacosane(S)	11.57	37411132	158.343 ppb
Surrogate Spike 150.000		Recovery =	105.56%
Target Compounds			

Data File: G:\APOLLO\DATA\120423\423068.D
Sample : 120419A BLK 5/1000





Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **120419W-59236 LCS - 166194**
Batch ID: #TPETD-120419A

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	1620	81.0	61-143
SURROGATE: OCTACOSANE (S)	150	170	113	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	155	103	57-132

Comments: _____

Primary	SPK
Quant Method :	TPH0306.M
Extraction Date :	04/19/12
Analysis Date :	04/24/12
Instrument :	Apollo
Run :	423069
Initials :	TRL

Printed: 04/25/12 5:41:40 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : G:\APOLLO\DATA\120423\423069.D Vial: 69
Acq On : 4-24-12 22:57:36 Operator: LAC
Sample : 120419A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 3 13:36 2012 Quant Results File: TPH0306.RES

Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

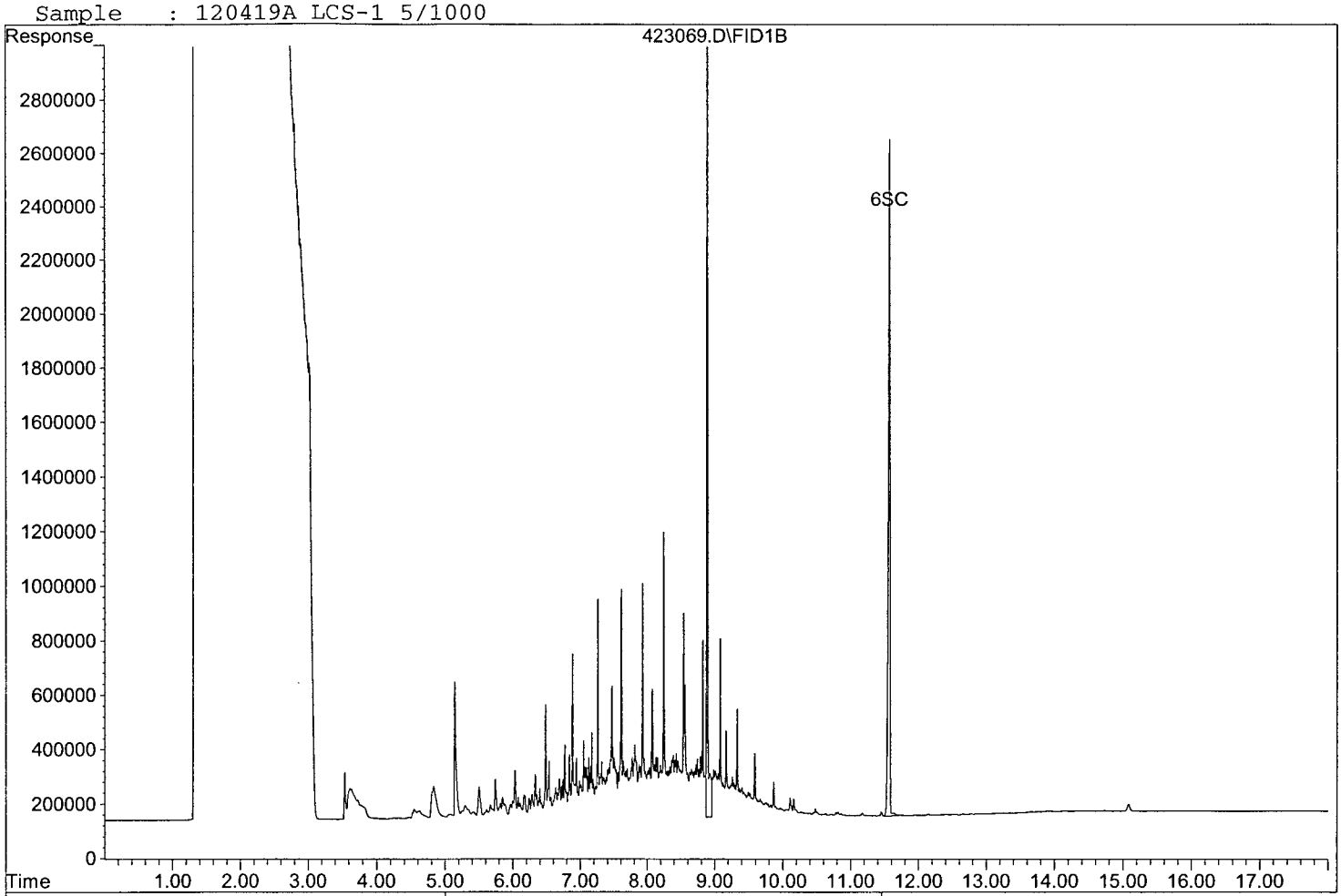
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

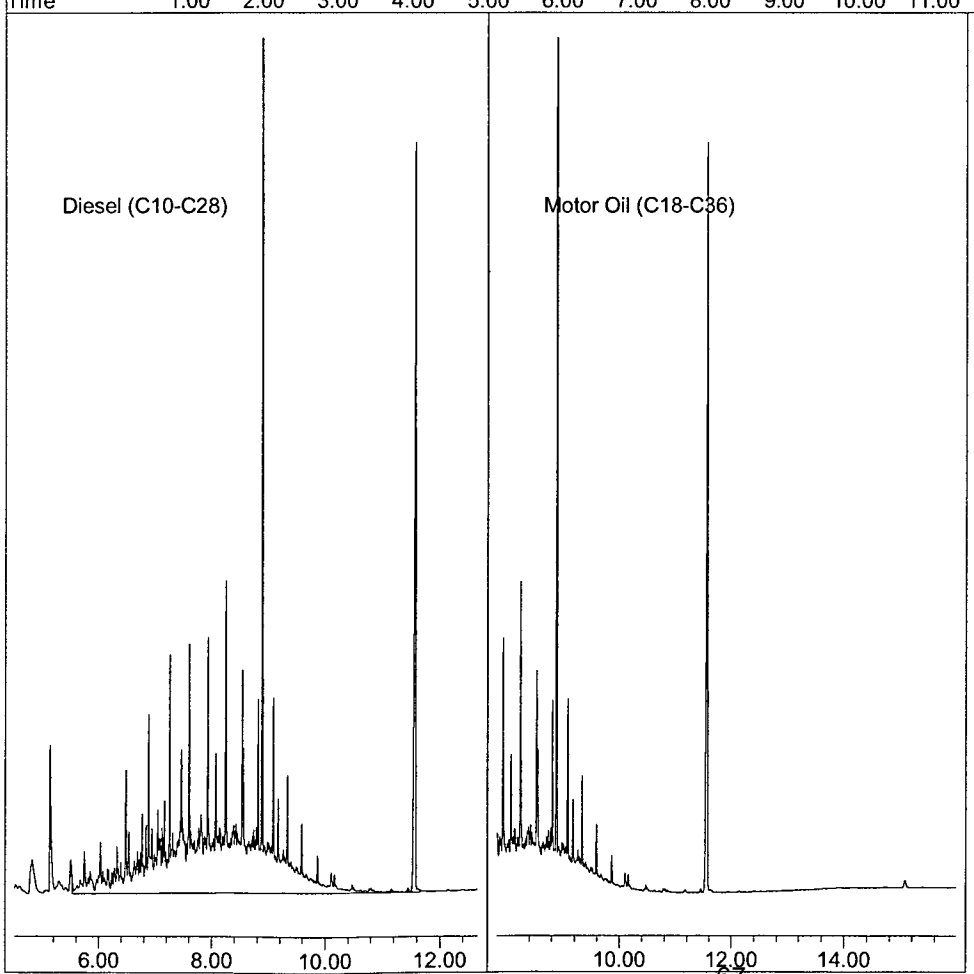
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	42851954	154.998 ppb
Surrogate Spike 150.000		Recovery =	103.33%
6) SC Octacosane(S)	11.57	40232003	170.282 ppb
Surrogate Spike 150.000		Recovery =	113.52%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	353524223	1615.712 ppb

DL Alg✓ = $\frac{353524223(5)}{(2)\ 547010} = 1615.711883694996435$

4/30/12

Data File: G:\APOLLO\DATA\120423\423069.D
Sample : 120419A LCS-1 5/1000





Matrix Spike Recoveries

TPH Diesel Water

APPL ID: **120419W-59236 MS - 166194**
Batch ID: #TPETD-120419A
Sample ID: AY59236
Client ID: ES074

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	1530	1570	76.5	78.5	61-143	2.6	30
SURROGATE: OCTACOSANE (S)	150	NA	171	183	114	122	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	127	134	84.7	89.3	57-132		

Comments: _____

Primary	SPK	DUP
Quant Method :	TPH0306.M	TPH0306.M
Extraction Date :	04/19/12	04/19/12
Analysis Date :	04/28/12	04/25/12
Instrument :	Apollo	Apollo
Run :	427047	423072
Initials :	TRL	

Printed: 04/30/12 3:47:56 PM
APPL MSD SCII

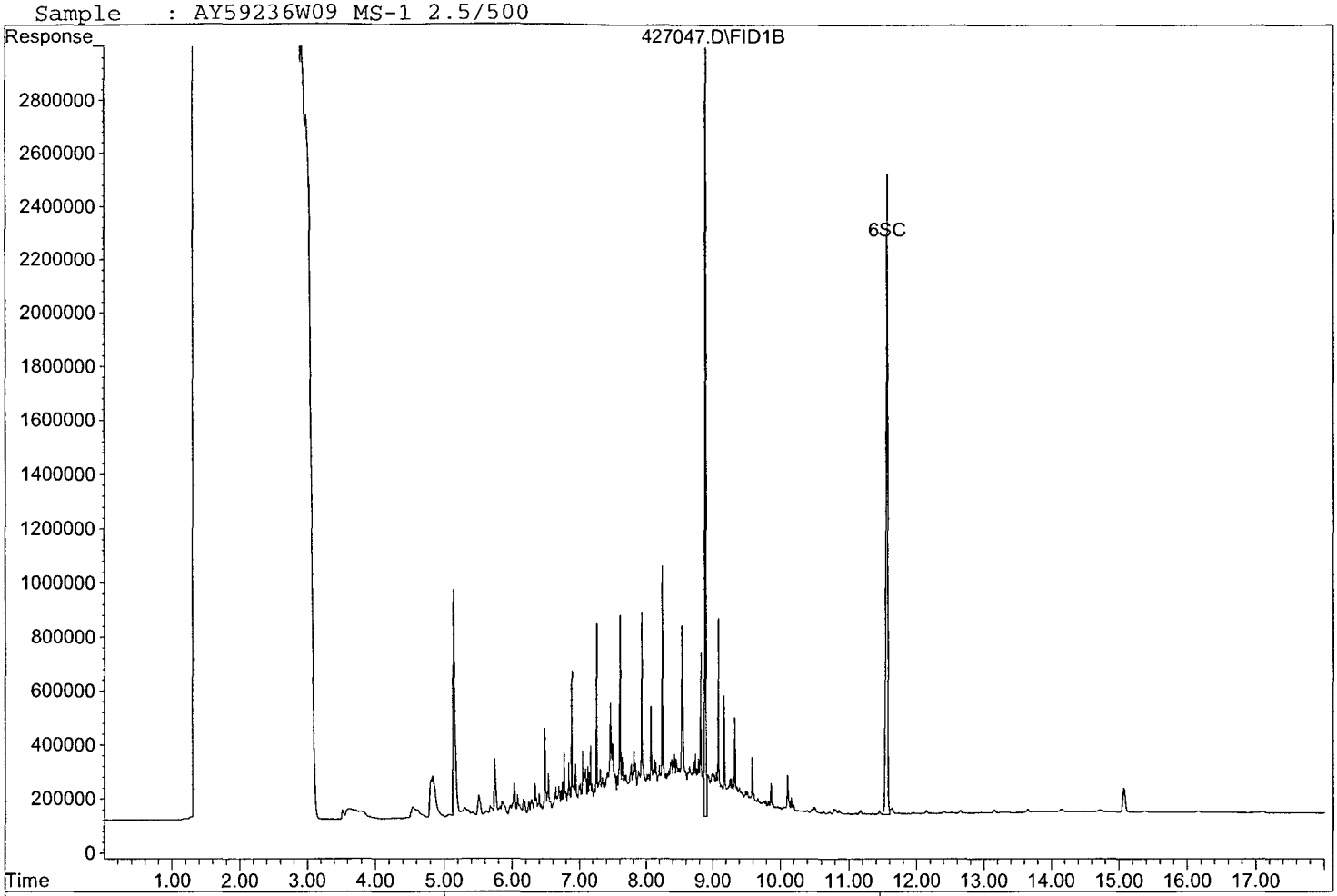
Data File : G:\APOLLO\DATA\120427\427047.D Vial: 47
Acq On : 4-28-12 3:08:08 Operator: LAC
Sample : AY59236W09 MS-1 2.5/500 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 3 13:39 2012 Quant Results File: TPH0306.RES

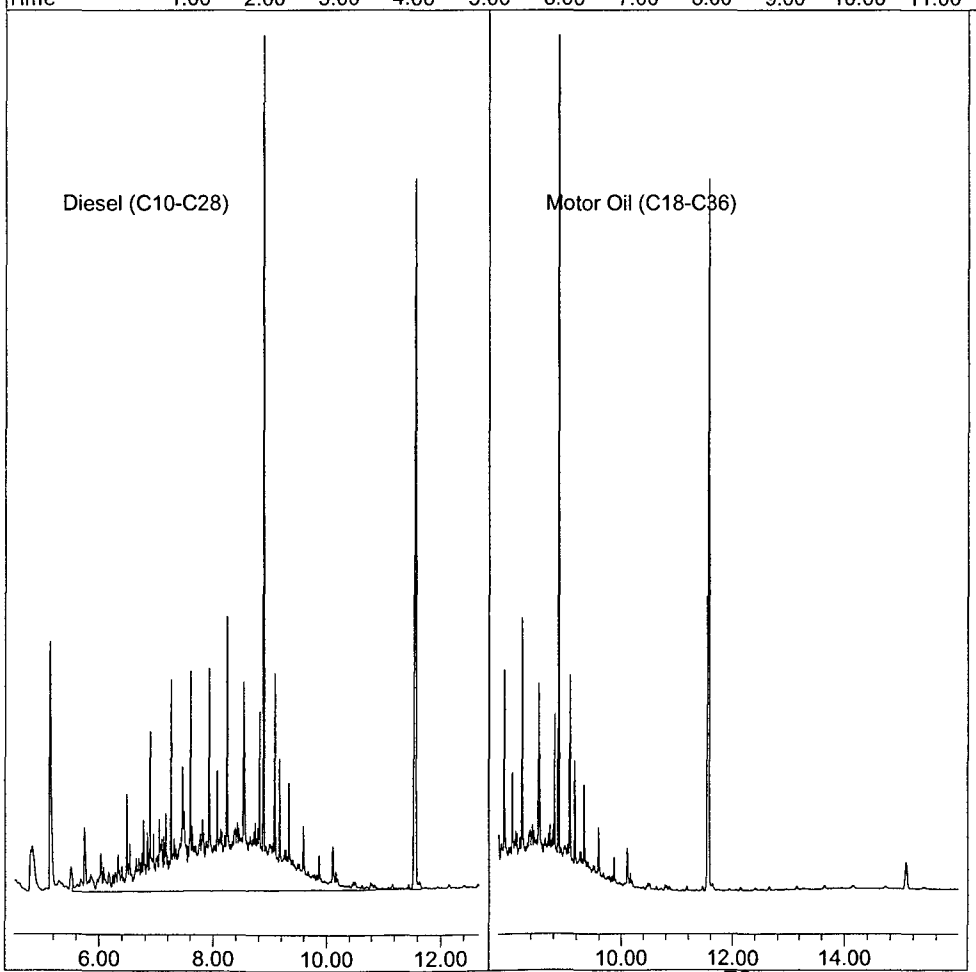
Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	35180300	127.249 ppb
Surrogate Spike 150.000		Recovery =	84.83%
6) SC Octacosane(S)	11.56	40409653	171.034 ppb
Surrogate Spike 150.000		Recovery =	114.02%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	335344311	1532.625 ppb

Data File: G:\APOLLO\DATA\120427\427047.D
Sample : AY59236W09 MS-1 2.5/500





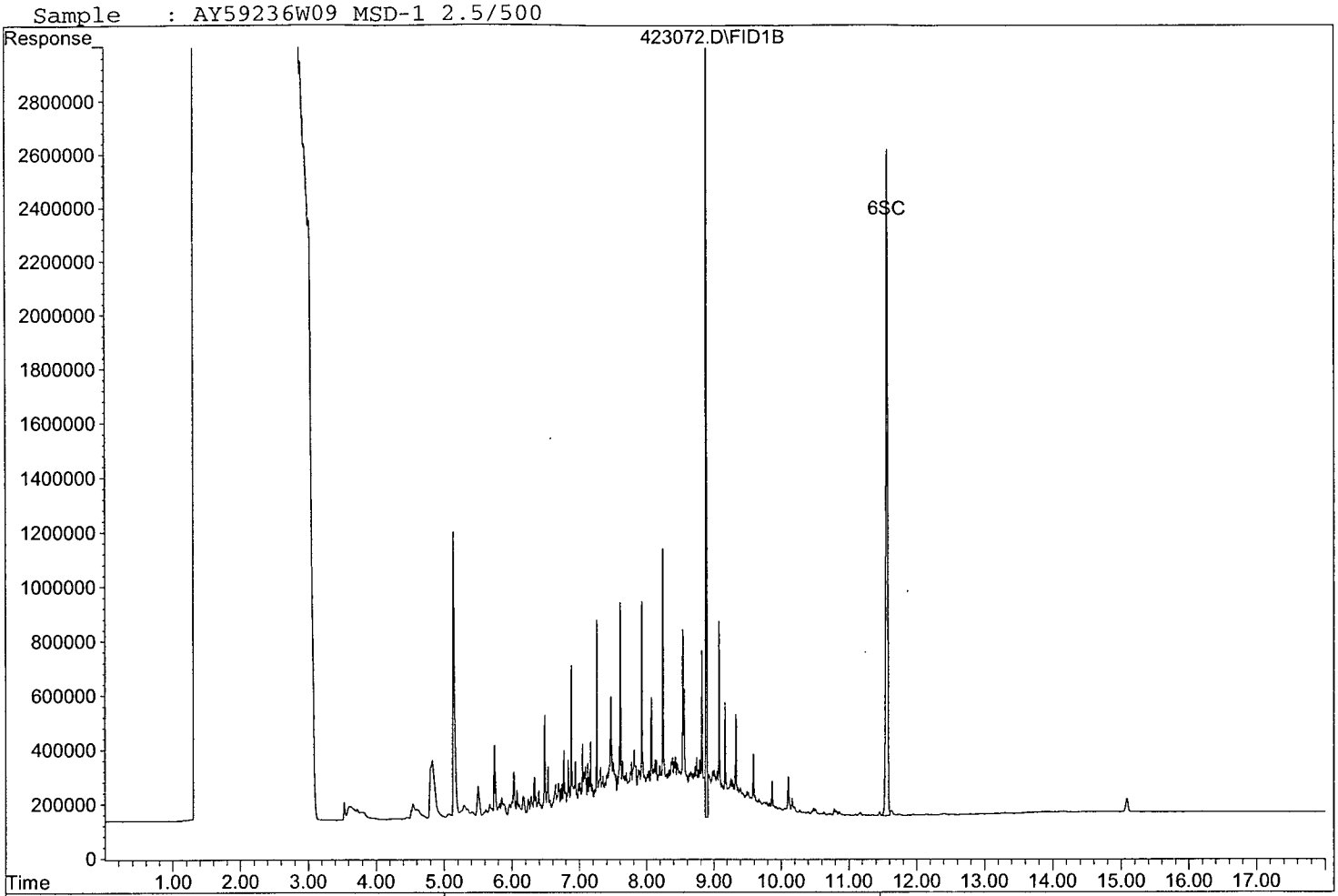
Data File : G:\APOLLO\DATA\120423\423072.D Vial: 72
Acq On : 4-25-12 0:09:58 Operator: LAC
Sample : AY59236W09 MSD-1 2.5/500 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 3 13:36 2012 Quant Results File: TPH0306.RES

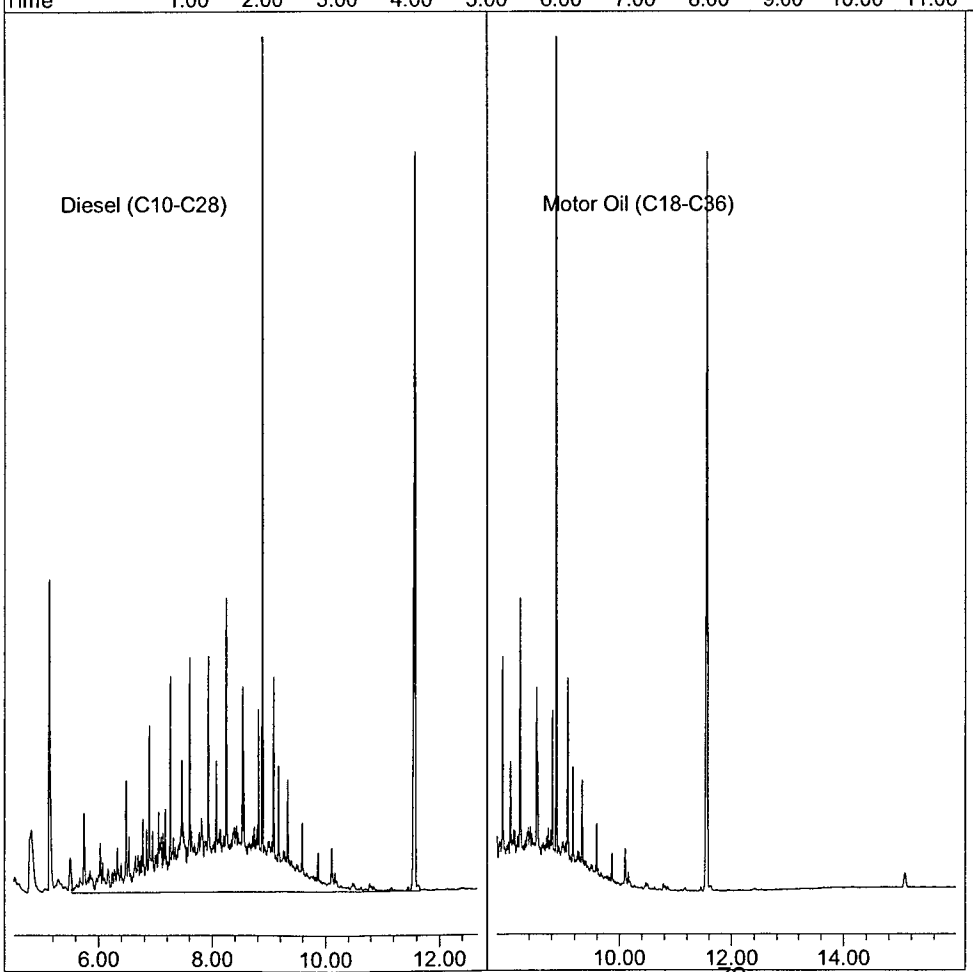
Method : G:\APOLLO\DATA\120423\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Apr 25 16:50:48 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.89	36925076	133.560 ppb
Surrogate Spike 150.000		Recovery =	89.04%
6) SC Octacosane(S)	11.57	43293503	183.240 ppb
Surrogate Spike 150.000		Recovery =	122.16%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	343078803	1567.974 ppb

Data File: G:\APOLLO\DATA\120423\423072.D
Sample : AY59236W09 MSD-1 2.5/500





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

069

AR1254/1260 MIX

1 ug/mL AR1254 — 500 uL — 1 mL — 0.5 ug/mL — — HA 3/29/12
µg. 3/26/12
Exp: 9/26/12
Exp 9/22/12

1 ug/mL AR1260 — 500 uL — ↓ — 0.5 ug/mL — —
µg. 3/22/12
Exp. 9/22/12

DIESEL SPIKE

DIESEL FUEL #2 — 50,000 mg/mL — 0251 — 1000 mL — 25 mL — 2000 mg/L — MC #51306 — 3/30/12 Ex 6/30/12

Diesel Fuel #2 Composite,
50,000 mg/L, 1 ml
011593-03
Lot# 179635 Storage ≤ -10 Degrees C Expiry 11/8/15
Solv: Methylene Chl
Diesel Fuel #2 Composite op: 3/30/12
Lot #: 179635 - 30220 Ex: 3/30/13
Rec: 1/10/12 MFR exp. 11/08/15
R&D only, not human consump. Made in the USA
3/30/12

MOTOR OIL SPIKE

MOTOR OIL — 50,000 mg/mL — 0251 — 2000 mL — 50 mL — 2000 mg/L — MC #51306 — 3/30/12 Ex. 6/30/12

Motor Oil Composite,
50,000 mg/L, 1 ml
116390-02
Lot# 183768 Storage ≤ -10 Degrees C Expiry 1/8/15
Solv: Methylene Chloride
Motor oil composite op: 3/30/12
Lot #: 183768 - 30237 Ex: 3/30/13
Rec: 1/10/12 MFR exp. 01/08/15
R&D only, not human consump. Made in the USA
3/30/12

Motor Oil Composite,
50,000 mg/L, 1 ml
116390-02
Lot# 183768 Storage ≤ -10 Degrees C Expiry 1/8/15
Solv: Methylene Chloride
Motor oil composite op: 3/30/12
Lot #: 183768 - 30236 Ex: 3/30/13
Rec: 1/10/12 MFR exp. 01/08/15
3/30/12

AROMATIC CURVE 3/30/12

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
AROMATIC	200/100 µg/mL		03/12/12	09/12/12	25	50	100	250	500	750	1000
MC		51306			975	950	900	750	500	250	NA
				Final Vol	1000	1000	1000	1000	1000	1000	1000

3/30/12 Ex: 9/12/12

ALIPHATIC CURVE

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
ALIPHATIC	200/100 µg/mL		03/12/12	09/12/12	20	40	100	200	500	1000
Hexane		082911B			980	960	900	800	500	na
				Final Vol	1000	1000	1000	1000	1000	1000

PREP:	03/30/12								3/30/12		
MITC CURVE											
EXP:	07/27/12										
						1	2	3	4	5	6
SUPPLIER	ID#	ug/mL	LOT #	DATE	EXP.	µL	µL	µL	µL	µL	µL
	MITC STD	5		03/29/12	07/27/12	4	50	200	500	700	1000
VWR	ETHYL ACETATE		CB664			996	950	800	500	300	N/A
					Final Vol	1000	1000	1000	1000	1000	1000

3/30/12 Ex: 7/27/12

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

045

TNRCC 400/1000 ug/mL CCV

TNRCC | 1000/500 ug/mL | TNRCC STD | 400 mL | 1 mL | 400 ug/mL | Pentane | #J | 3/5/12 EX: 4/2/12

Prep: 3/2/12
EX: 4/2/12

DIESEL SPIKE

DIESEL FUEL #2 | 50,000 ug/mL | O2SI | 2000 mL | 50 mL | 2000 ug/mL | MC | #51306 | 3/6/12 EX: 6/6/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
#11598-03
Lot # 179635 Storage ≤-10 Degrees C Expiry 11/8/15
Diesel Fuel #2 Composite OP: 3/6/12 EX: 3/6/13
Lot #: 179635 - 30224
Rec: 1/10/12 MFR exp. 11/08/15

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
#11598-03
Lot # 179635 Storage ≤-10 Degrees C Expiry 11/8/15
Solv: Methylene Chloride OP: 3/6/12
Diesel Fuel #2 Composite
Lot #: 179635 - 30223 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

3/6/12

DIESEL CAL STD.

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI 179635-80225 CAT#011598-03 LOT#~~156524-27195~~ OP:1/5/11 EXP:1/5/12 3/6/12	1mL	50mL	1000ug/mL	MC LOT# 51306
O-TERPHENYL OCTACOSANE	600 ug/mL	O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	4160 µL		50ug/mL	

3/6/12 EX: 9/6/12

3/6/12

MOTOR OIL CAL STD

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
MOTOR OIL	50,000 ug/mL	O2SI CAT#116390-02 LOT#171363-30230 OP:3/6/12 EXP:3/6/12	1mL	50mL	1000ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

3/6/12

THC SURR CAL STD

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT LOT#
O-TERPHENYL OCTACOSANE	600 ug/mL	O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	834 µL	10mL	50ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

STANDARD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE INTV
	THC Surrogate			* GIVE TO EXTRACTION *			
O-TERPHENYL	600 mg/mL	0281	N/A	25mL	600 mg/mL	NA	
OCTACOSANE		CAT: 110316-05					3/20/12
		LOT: 183766-					EX: 3/20/13
		30215 THRU 30219					
		EX: 3/20/13					

NOT used 3/22/12

75

STANDARD 086

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

4/23/12

AROMATIC CURVE

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
AROMATIC	200/100 µg/mL		04/18/12	10/18/12	25	50	100	250	500	750	1000
MC		51306			975	950	900	750	500	250	NA
				Final Vol	1000	1000	1000	1000	1000	1000	1000

4/23/12 EX: 10/18/12

ALIPHATIC CURVE

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
ALIPHATIC	200/100 µg/mL		04/18/12	10/18/12	20	40	100	200	500	1000
Hexane		082911B			980	960	900	800	500	na
				Final Vol	1000	1000	1000	1000	1000	1000

PCB WATER SPIKE

AR1016 1000ng/ml 0281 250ml 50ml 5ng/ml ACETONE 4/24/12

AR1260 CAT: 130011-03 EX: 7/24/12

LOT: 1635591-29971

OP: 2/14/12

EX: 2/14/13

081111B

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
		03/06/12	09/06/12			51306

4/24/12 EX: 9/6/12

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
		03/06/12	09/06/12			51306

4/24/12

PREP:	04/24/12											
PAC ECO CURVE												
EXP:	07/21/12											
PE Lot#	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		04/16/12	07/21/12	2	10	50	200	500	700	1000
VWR	Hexane		082610B			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000
PAC ECO 2ND SRC				DATE	EXP. DATE							
Prep: 4/24/12	Exp: 10/6/12	5µg/ml	0826108	04/06/12	10/06/12	500/1000						

4/24/12 EX: 7/21/12

4/24/12 EX: 10/6/12

4/25/12

OP FAMPHUR CURVE												
PREP:	04/25/12	EXP:	07/28/12			IA	1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	OP/FAMPHUR S	5		04/05/12	07/28/12	2	10	50	200	500	700	1000
VWR	Hexane		082610B			998	990	950	800	500	300	NA
					Final VOL.	1000	1000	1000	1000	1000	1000	1000
OP 2ND SRC		[µg/mL]										
PREP: 4/25		5		DATE	EXP. DATE	500						
EXP: 9/23/12	Hexane Lot#		082610B	04/05/12	09/23/12	1000						

4/25/12 EX: 7/28/12

4/23/12 EX: 9/23/12

STANDARD 088

INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE / INITIALS

4/27/12

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
		03/06/12	09/06/12			51306

4/27/12 EX: 9/6/12

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
		03/06/12	09/06/12			51306

4/27/12

Aromatic 250/1000 µg/mL CCV						
Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aromatic	200/100 µg/mL	Aromatic Std	250 µL	1 mL	50/25 µg/mL	MC
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				51306

4/27/12 EX: 10/18/12

Aliphatic 200/1000 µg/mL CCV						
Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aliphatic	200/100 µg/mL	Aromatic Std	200 µL	1 mL	40/20 µg/mL	Hexane
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				082911B

504/8011 Surrogate

1,3 DBP | 100 ug/mL | 1,3 DBP STOCK prep. 12-13-11 exp. 12-13-12 | 35 mL | 10 mL | 0.35 ug/mL | Methanol #04611A CM 4-30- exp. 5-31-

4/27/12

PAC ECO STD					
DIAZINON	5ug/ml	200ug/ml	250ul	O2SI	10ml
DISULFOTON	5	200		CAT:130169-01	HEXANE
MALATHION	5	200		LOT: 184710-30286	LOT#
MOLINATE	5	200		Op: 4/16/12	082610B
PHORATE	5	200		Exp: 7/21/12	
THIOBENCARB	5	200			
TRIBUTYL PHOSPHATE	5	200			
DEMETON	5	200			
DISCHLORVOS	5	200			
EPTC	5	200			
PARATHION	5	200			
AZINPHOS METHYL	5	200			
CHLORPYRIFOS	5	200			
DIMETHOATE	5	200			
METHIDATHION	5	200			
METHYL PARATHION	5	200			
ATRAZINE	5	200			
CYANIZINE	5	200			
TRIPHENYL PHOSPHAT	5	200			
PENDIMETHALIN	5	200			
TRIFLURALIN	5	200			
SIMAZINE	5	200			
PHOSMET	5	1000ug/ml	50ul	ABSOLUTE	
				PART:70798	
				LOT:111010-29426	
				OP: 9/19/11	
				EXP: 9/19/12	

* NAS NOT RECORDED 4/27/12

4/27/12 EX: 7/21/12

_SEP011

Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	120419A	Extraction Method	SEP011	Units	mL

Spiked ID 1	Diesel Spike 03/06/12 ex 06/06/12		Surrogate ID 1	THC Surrogate 183766-30215	
Spiked ID 2	Motor Oil Spike 03/30/12 ex 06/30/12		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:	**05/02/12 0:00**	

pH1			Water Bath Temp Criteria	80 °C
pH2				
pH3				

Spiked By: DL **Date** 04/19/12 **Witnessed By:** DRA **Date** 04/19/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120419A Blk				0.250	1 equip	1000 E-WB5	5	7	04/19/12 11:55	
2	120419A LCS-1		1	1	0.250	1 equip	1000 E-WB5	5	7	04/19/12 11:55	
3	120419A LCS-2		1	2	0.250	1 equip	1000 E-WB5	5	7	04/19/12 11:55	
4	AY59236 MS-1	AY59236W09	0.500	1	0.125	1 equip	500 E-WB5	2.5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
5	AY59236 MSD-1	AY59236W09	0.500	1	0.125	1 equip	500 E-WB5	2.5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
6	AY59236 MS-2	AY59236W08	0.500	2	0.125	1 equip	500 E-WB5	2.5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
7	AY59236 MSD-2	AY59236W08	0.500	2	0.125	1 equip	500 E-WB5	2.5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
8	AY59236	AY59236W10			0.250	1 equip	1000 E-WB6	5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
9	AY59237	AY59237W05			0.250	1 equip	980 E-WB6	5	7	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter

DRA 4-20-12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	
Date	4/23/12
Time	15:28
Refrigerator	Hoosier

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

Modified	04/20/12 12:14:27 PM

Reviewed By: DRA **Date** 04/20/12

Injection Log

Directory: G:\APOLLO\DATA\120306\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	21	306021.D	1	DIESEL 10/1000 3/6/12	Mix(A)	3-6-12 17:25:38
2	22	306022.D	1	DIESEL 100/1000	Mix(A)	3-6-12 17:49:21
3	23	306023.D	1	DIESEL 400/1000	Mix(A)	3-6-12 18:12:55
4	24	306024.D	1	DIESEL 600/1000	Mix(A)	3-6-12 18:36:31
5	25	306025.D	1	DIESEL 800/1000	Mix(A)	3-6-12 19:00:08
6	26	306026.D	1	DIESEL 1000/1000	Mix(A)	3-6-12 19:23:45
7	27	306027.D	1	DIESEL 2ND SRC 400/1000 3/6/12	Mix(A)	3-6-12 19:47:20
1	66	423066.D	1	DIESEL 400/1000 4/24/12	Mix(A)	4-24-12 21:44:51
2	68	423068.D	5	120419A BLK 5/1000	Water	4-24-12 22:33:21
3	69	423069.D	5	120419A LCS-1 5/1000	Water	4-24-12 22:57:36
4	72	423072.D	5	AY59236W09 MSD-1 2.5/500	Water	4-25-12 0:09:58
5	75	423075.D	5	AY59236W10 5/1000	Water	4-25-12 1:21:48
6	76	423076.D	5.10204	AY59237W05 5/980	Water	4-25-12 1:45:39
7	77	423077.D	1	DIESEL 400/1000 4/24/12	Mix(A)	4-25-12 2:09:29
8	35	427035.D	1	DIESEL 400/1000 4/27/12	Mix(A)	4-27-12 22:25:15
9	47	427047.D	5	AY59236W09 MS-1 2.5/500	Water	4-28-12 3:08:08
10	48	427048.D	1	DIESEL 400/1000 4/27/12	Mix(A)	4-28-12 3:31:33

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: **120419W-59236 - 166432**
Batch ID: #SIMHC-120419A

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	04/19/12	04/22/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	SURROGATE: 2-FLUORBIPHENY	56.7	50-110			%	04/19/12	04/22/12
BLANK	SURROGATE: NITROBENZENE-	56.9	40-110			%	04/19/12	04/22/12
BLANK	SURROGATE: TERPHENYL-D14 (	65.4	50-135			%	04/19/12	04/22/12

Quant Method:SIMB.M
Run #:0422L009
Instrument:Linus
Sequence:L120229
Initials:LF

Printed: 05/02/12 1:26:00 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419A-BLK	Blank	50-110	56.7		40-110	56.9	
120419A-LCS	Lab Control Spike	50-110	57.5		40-110	49.1	
AY59236-MS	Matrix Spike	50-110	56.5		40-110	55.5	
AY59236-MSD	Matrix SpikeD	50-110	52.0		40-110	51.5	
AY59236	ES074	50-110	58.9		40-110	60.2	
AY59237	ES075	50-110	60.4		40-110	83.0	

Comments: Batch: #SIMHC-120419A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419A-BLK	Blank	50-135	65.4				
120419A-LCS	Lab Control Spike	50-135	64.0				
AY59236-MS	Matrix Spike	50-135	61.5				
AY59236-MSD	Matrix SpikeD	50-135	60.0				
AY59236	ES074	50-135	54.4				
AY59237	ES075	50-135	56.9				

Comments: Batch: #SIMHC-120419A

Laboratory Control Spike Recovery
EPA 8270D SIM

APPL ID: **120419W-59236 LCS - 166432**
Batch ID: #SIMHC-120419A

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	2.29	57.3	45-105
2-METHYLNAPHTHALENE	4.00	2.19	54.8	45-105
ACENAPHTHENE	4.00	2.36	59.0	45-110
ACENAPHTHYLENE	4.00	2.39	59.8	50-105
ANTHRACENE	4.00	2.23	55.8	55-110
BENZO(A)ANTHRACENE	4.00	2.98	74.5	55-110
BENZO(A)PYRENE	4.00	2.65	66.3	55-110
BENZO(B)FLUORANTHENE	4.00	2.88	72.0	45-120
BENZO(GHI)PERYLENE	4.00	2.90	72.5	40-125
BENZO(K)FLUORANTHENE	4.00	3.05	76.3	45-125
CHRYSENE	4.00	2.84	71.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.93	73.3	40-125
FLUORANTHENE	4.00	2.75	68.8	55-115
FLUORENE	4.00	2.59	64.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.83	95.8	45-125
NAPHTHALENE	4.00	2.17	54.3	40-100
PHENANTHRENE	4.00	2.44	61.0	50-115
PYRENE	4.00	2.82	70.5	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.15	57.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	0.983	49.1	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.28	64.0	50-135

Comments:

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/19/12
Analysis Date :	04/22/12
Instrument :	Linus
Run :	0422L010
Initials :	LF

Printed: 05/02/12 1:26:06 PM
APPL Standard LCS

Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **120419W-59236 MS - 166432**
Batch ID: #SIMHC-120419A
Sample ID: AY59236
Client ID: ES074

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	4.00	ND	2.34	2.45	58.5	61.3	45-105	4.6	25
2-METHYLNAPHTHALENE	4.00	ND	2.39	2.25	59.8	56.3	45-105	6.0	25
ACENAPHTHENE	4.00	ND	2.18	2.24	54.5	56.0	45-110	2.7	25
ACENAPHTHYLENE	4.00	ND	2.16	2.15	54.0	53.8	50-105	0.46	25
ANTHRACENE	4.00	ND	2.05	2.00	51.2 #	50.0 #	55-110	2.5	25
BENZO(A)ANTHRACENE	4.00	ND	2.90	2.73	72.5	68.3	55-110	6.0	25
BENZO(A)PYRENE	4.00	ND	2.59	2.49	64.8	62.3	55-110	3.9	25
BENZO(B)FLUORANTHENE	4.00	ND	2.96	2.74	74.0	68.5	45-120	7.7	25
BENZO(GHI)PERYLENE	4.00	ND	2.78	2.69	69.5	67.3	40-125	3.3	25
BENZO(K)FLUORANTHENE	4.00	ND	2.68	2.73	67.0	68.3	45-125	1.8	25
CHRYSENE	4.00	ND	2.48	2.36	62.0	59.0	55-110	5.0	25
DIBENZ(A,H)ANTHRACENE	4.00	ND	2.78	2.73	69.5	68.3	40-125	1.8	25
FLUORANTHENE	4.00	ND	2.83	2.66	70.8	66.5	55-115	6.2	25
FLUORENE	4.00	ND	2.60	2.44	65.0	61.0	50-110	6.3	25
INDENO(1,2,3-CD)PYRENE	4.00	ND	3.72	3.55	93.0	88.8	45-125	4.7	25
NAPHTHALENE	4.00	ND	2.17	2.15	54.3	53.8	40-100	0.93	25
PHENANTHRENE	4.00	ND	2.56	2.36	64.0	59.0	50-115	8.1	25
PYRENE	4.00	ND	2.70	2.51	67.5	62.7	50-130	7.3	25
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	NA	1.13	1.04	56.5	52.0	50-110		
SURROGATE: NITROBENZENE-D5 (S)	2.00	NA	1.11	1.03	55.5	51.5	40-110		
SURROGATE: TERPHENYL-D14 (S)	2.00	NA	1.23	1.20	61.5	60.0	50-135		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	SIMB.M	SIMB.M
Extraction Date :	04/19/12	04/19/12
Analysis Date :	04/22/12	04/22/12
Instrument :	Linus	Linus
Run :	0422L011	0422L012
Initials :	LF	

Printed: 05/02/12 1:26:08 PM
APPL MSD SCII

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/22/12

Matrix: WATER Instrument: Linus

Blank ID: 120419A-BLK Time Analyzed: 1407

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120419A-BLK	Blank	0422L009	04/22/12 1407
120419A-LCS	Lab Control Spike	0422L010	04/22/12 1433
120419A-MS	Matrix Spike	0422L011	04/22/12 1500
120419A-MSD	Matrix SpikeD	0422L012	04/22/12 1525
AY59236	ES074	0422L013	04/22/12 1552
AY59237	ES075	0422L014	04/22/12 1618

Comments: Batch: #SIMHC-120419A

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67525
Matrix: Water
ID: SVTUNE 2-28-12

SDG No: 67525
Date Analyzed: 04/22/12
Instrument: Linus
Time Analyzed: 10:48

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	120419A BLK 1/1000	0422L009.D	04/22/12 14:07
2	Lab Control Spike	120419A LCS-1 1/1000	0422L010.D	04/22/12 14:33
3	Matrix Spike	AY59236W11 MS-1 1/10	0422L011.D	04/22/12 15:00
4	Matrix Spike Dup	AY59236W13 MSD-1 1/1	0422L012.D	04/22/12 15:25
5	ES074	AY59236W07 1/1030	0422L013.D	04/22/12 15:52
6	ES075	AY59237W06 1/1000	0422L014.D	04/22/12 16:18
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	37.9
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.5
127	40 - 60% of mass 198	49.2
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.4
275	10 - 30% of mass 198	26.7
365	1 - 100% of mass 198	2.8
441	0.01 - 100% of mass 443	73.7
442	40 - 150% of mass 198	72.6
443	17 - 23% of mass 442	20.7

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 67525

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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	5710	6.12	2760	8.13	4470	9.86
	UPPER LIMIT	11420	6.62	5520	8.63	8940	10.36
	LOWER LIMIT	2855	5.62	1380	7.63	2235	9.36
	SAMPLE NO.						
01	120419A BLK 1/1000	5620	6.12	3234	8.12	5679	9.86
02	120419A LCS-1 1/1000	6164	6.12	3244	8.12	5954	9.85
03	AY59236W11 MS-1 1/1(	6364	6.12	3620	8.12	6258	9.85
04	AY59236W13 MSD-1 1/	5990	6.12	3428	8.12	6094	9.85
05	AY59236W07 1/1030	6504	6.12	3262	8.12	5948	9.86
06	AY59237W06 1/1000	6327	6.12	3506	8.12	6211	9.85
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67525

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	6006	12.93	5058	14.54		
	UPPER LIMIT	12012	13.43	10116	15.04		
	LOWER LIMIT	3003	12.43	2529	14.04		
	SAMPLE NO.						
01	120419A BLK 1/1000	7289	12.94	6388	14.56		
02	120419A LCS-1 1/1000	7610	12.94	6504	14.56		
03	AY59236W11 MS-1 1/1(	8229	12.94	7141	14.56		
04	AY59236W13 MSD-1 1/	7944	12.94	6751	14.56		
05	AY59236W07 1/1030	7256	12.94	6524	14.56		
06	AY59237W06 1/1000	7744	12.94	6759	14.56		
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

EPA METHOD 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: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES074
Sample Collection Date: 04/17/12

ARF: 67525
APPL ID: AY59236
QCG: #SIMHC-120419A-166432

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	04/19/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	58.9	50-110			%	04/19/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	60.2	40-110			%	04/19/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	54.4	50-135			%	04/19/12	04/22/12

Quant Method: SIMB.M
Run #: 0422L013
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:26:14 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L013.D Vial: 13
Acq On : 22 Apr 12 15:52 Operator: LF
Sample : AY59236W07 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Apr 23 16:14 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6504	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3262	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5948	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7256	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6524	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	768	1.16769 ppb	0.01
Spiked Amount 1.942			Recovery = 60.152%		
7) Surrogate Recovery (FBP)	7.36	172	2436	1.14400 ppb	-0.01
Spiked Amount 1.942			Recovery = 58.916%		
18) Surrogate Recovery (TPH)	11.73	244	2466	1.05745 ppb	0.00
Spiked Amount 1.942			Recovery = 54.435%		

Target Compounds Qvalue

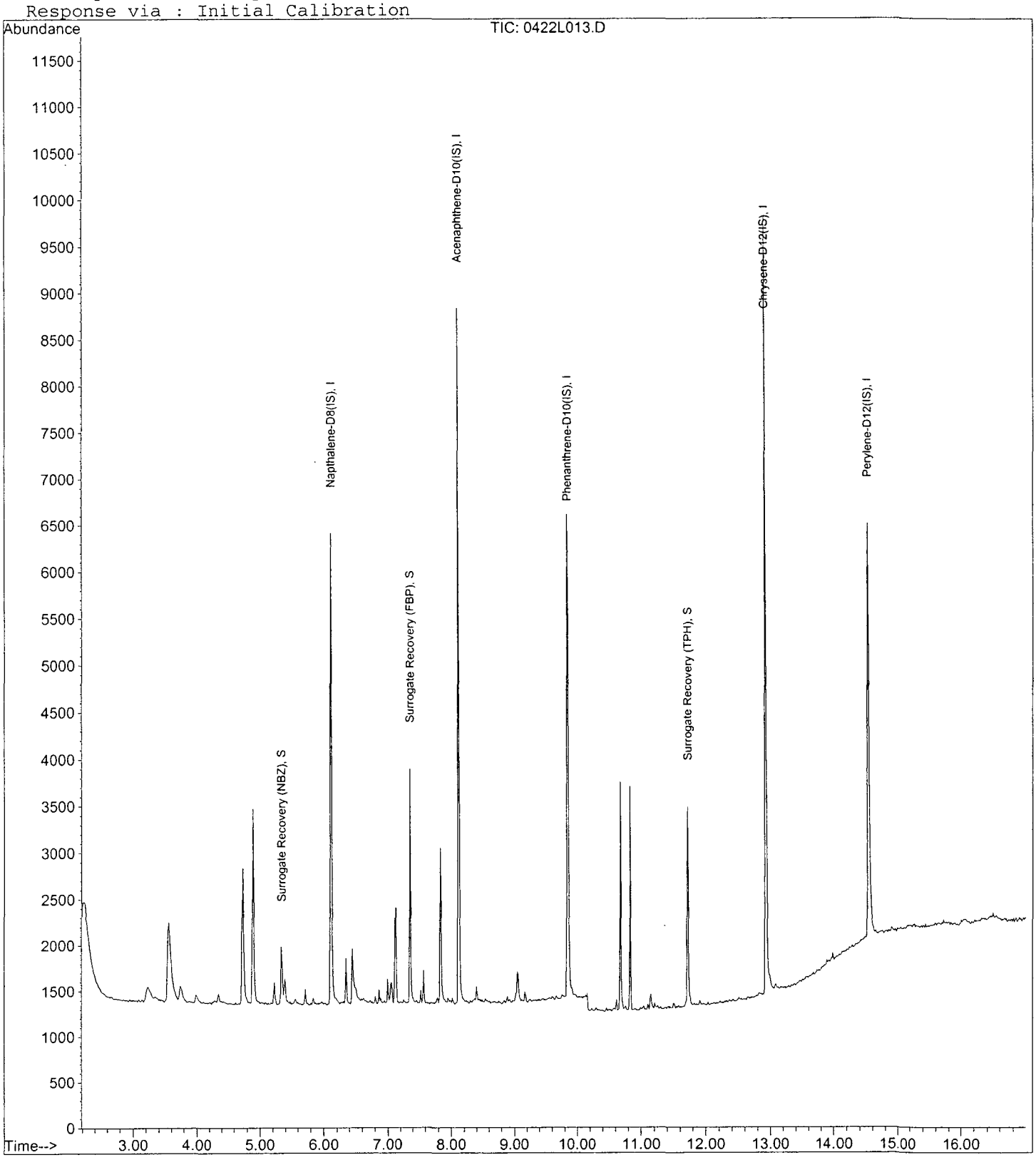
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L013.D Vial: 13
Acq On : 22 Apr 12 15:52 Operator: LF
Sample : AY59236W07 1/1030 Inst : Linus
Misc : Multiplr: 0.97

Quant Time: Apr 23 16:14 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



EPA 8270D SIM

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

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES075
Sample Collection Date: 04/17/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67525
APPL ID: AY59237
QCG: #SIMHC-120419A-166432

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	04/19/12	04/22/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	60.4	50-110			%	04/19/12	04/22/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	83.0	40-110			%	04/19/12	04/22/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	56.9	50-135			%	04/19/12	04/22/12

Quant Method: SIMB.M
Run #: 0422L014
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/02/12 1:26:14 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L014.D Vial: 14
Acq On : 22 Apr 12 16:18 Operator: LF
Sample : AY59237W06 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:15 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6327	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3506	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.85	188	6211	2.50000 ppb	-0.01
16) Chrysene-D12(IS)	12.94	240	7744	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6759	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	1031	1.65977 ppb	0.01
Spiked Amount 2.000			Recovery = 83.000%		
7) Surrogate Recovery (FBP)	7.36	172	2685	1.20838 ppb	-0.01
Spiked Amount 2.000			Recovery = 60.400%		
18) Surrogate Recovery (TPH)	11.72	244	2749	1.13766 ppb	-0.01
Spiked Amount 2.000			Recovery = 56.900%		
Target Compounds					Qvalue

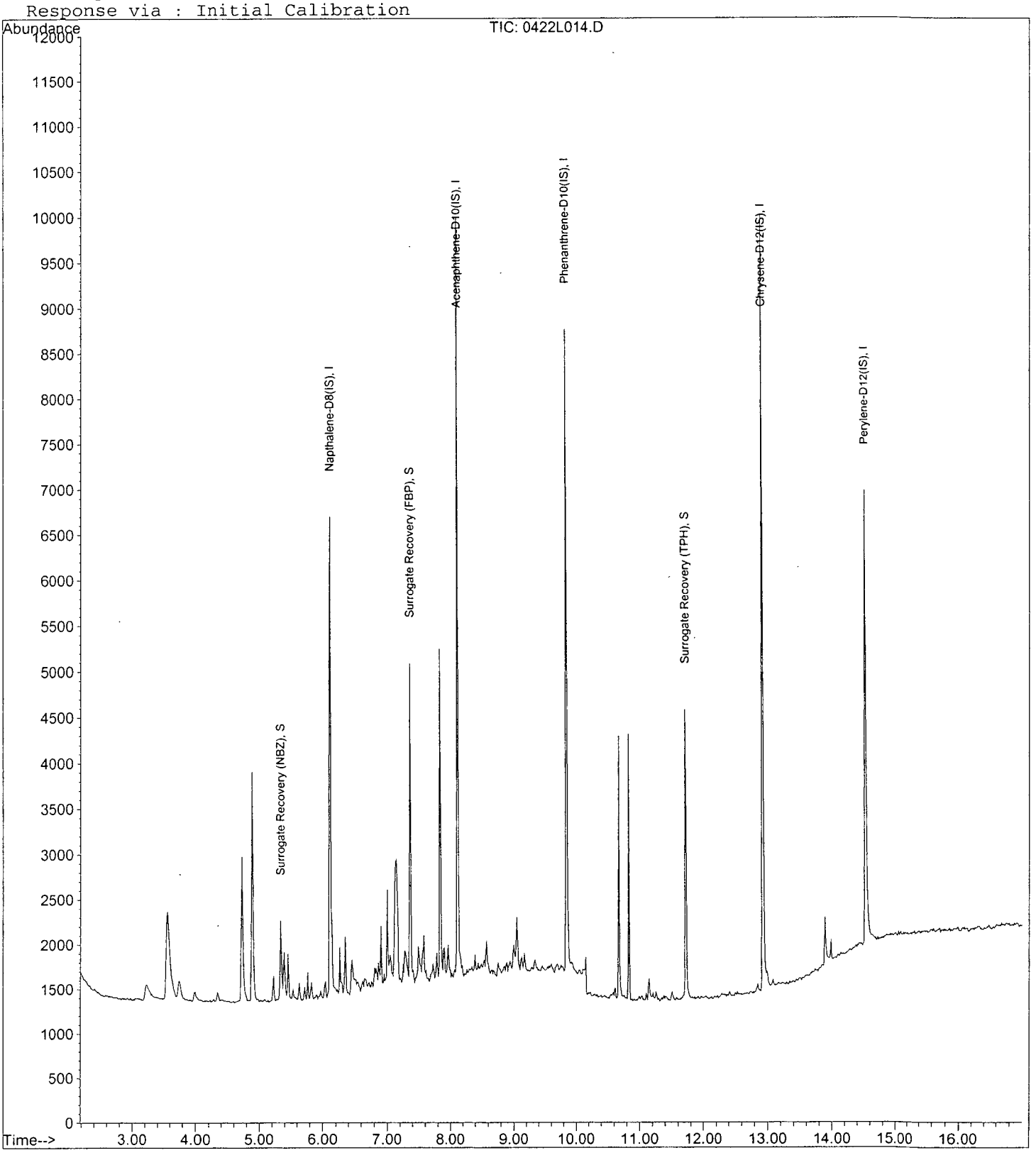
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L014.D Vial: 14
Acq On : 22 Apr 12 16:18 Operator: LF
Sample : AY59237W06 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:15 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67525
Case No: Initial Cal. Date: 02/29/12
Matrix: Instrument: Linus Initials:

			0229L003.D	0229L004.D	0229L005.D	0229L006.D	0229L007.D	0229L008.D	0229L009.D	0229L010.D						
		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD		r
1	I	Napthalene-D8(IS)														
2	S	Surrogate Recovery (NBZ)	0.2482	0.2256	0.2462	0.2440	0.2171	0.2327	0.2670	0.2827			0.25	8.7	S	
3	TM	Naphthalene	1.506	1.608	1.562	1.574	1.325	1.287	1.126				1.4	13	TM	
4	TM	2-Methylnaphthalene	0.8962	0.9576	0.9479	0.9511	0.8263	0.8144	0.7431	0.7273			0.86	11	TM	
5	TM	1-Methylnaphthalene	0.8541	0.8647	0.8796	0.8802	0.7838	0 7780	0.6922	0.6698			0.80	10	TM	
6	I	Acenaphthene-D10(IS)														
7	S	Surrogate Recovery (FBP)	1.606	1.554	1.731	1.634	1.565	1.629	1.553	1.403			1.6	5.9	S	
8	TM	1,1'-Biphenyl	2.138	2.145	2.246	2.082	1.979	1.931	1.704	1.571			2.0	12	TM	
9	TM	Acenaphthylene	2.594	2.556	2.650	2.501	2.372	2.428	2.200	1.916			2.4	10	TM	
10	*TM	Acenaphthene	1.563	1 492	1.519	1.435	1.390	1.363	1.267	1.160			1.4	9.6	*TM	
11	TM	Fluorene	1.795	1.796	1.859	1.726	1.669	1.690	1.582	1.441			1.7	7.9	TM	
12	I	Phenanthrene-D10(IS)														
13	TM	Phenanthrene	1.714	1.615	1.639	1.576	1.495	1.438	1.290	1.104			1.5	14	TM	
14	TM	Anthracene	1.369	1.458	1.377	1.380	1.423	1.368	1.259	1.082			1.3	8.9	TM	
15	*TM	Fluoranthene	1.923	1.896	1.919	1.851	1.865	1.835	1.685	1.576			1.8	6.8	*TM	
16	I	Chrysene-D12(IS)														
17	TM	Pyrene	1.588	1.532	1.612	1.507	1.443	1.392	1.268	1.182			1.4	11	TM	
18	S	Surrogate Recovery (TPH)	0.8061	0.7442	0.8201	0.7874	0.8133	0.8544	0.7588	0.6563			0.78	7.8	S	
19	TM	Benz (a) anthracene	1.403	1.361	1.365	1.258	1.212	1.147	1.063	1.065			1.2	11	TM	
20	TM	Chrysene	1.320	1.398	1.410	1.346	1.276	1.241	1.056	0.9180			1.2	14	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	7.776	4.408	2.527	1.790	1.291	0.9457	0.9123	0.9049			2.6	94	TMQ	1.00
22	I	Perylene-D12(IS)														
23	TM	Benzo (b) fluoranthene	1.941	1.771	1.720	1.677	1.526	1.484	1.245	1.286			1.6	15	TM	
24	TM	Benzo (k) fluoranthene	1.461	1.239	1.438	1.321	1.364	1.390	1.356	0.9323			1.3	13	TM	
25	*TM	Benzo (a) pyrene	1.645	1.593	1.481	1.396	1.362	1.366	1.253	1.136			1.4	12	*TM	
26	TMQ	Dibenz (a,h) anthracene	2.398	1.892	1.442	1.259	1.148	1.160	1.097	1.028			1.4	34	TMQ	1.00
27	TMQ	Benzo (g,h,i) perylene	12.9	7.045	3.555	2.361	1.431	1.308	1.150	1.082			3.9	108	TMQ	1.00
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L003.D Vial: 3
Acq On : 1 Mar 12 00:20 Operator: LF
Sample : 0.1ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5942	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2911	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	5004	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6327	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5577	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	59	0.11037 ppb		0.00
Spiked Amount 2.000			Recovery = 5.500%			
7) Surrogate Recovery (FBP)	7.37	172	187	0.10055 ppb		0.00
Spiked Amount 2.000			Recovery = 5.050%			
18) Surrogate Recovery (TPH)	11.73	244	204	0.09667 ppb		0.00
Spiked Amount 2.000			Recovery = 4.850%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	358	0.11535 ppb		98
4) 2-Methylnaphthalene	6.93	142	213	0.10924 ppb		96
5) 1-Methylnaphthalene	7.05	142	203	0.10937 ppb		99
8) 1,1'-Biphenyl	7.47	154	249	0.10939 ppb		99
9) Acenaphthylene	7.96	152	302	0.10805 ppb		98
10) Acenaphthene	8.17	154	182	0.11354 ppb		93
11) Fluorene	8.76	166	209	0.10687 ppb		91
13) Phenanthrene	9.88	178	343	0.11685 ppb		98
14) Anthracene	9.94	178	274	0.09809 ppb		96
15) Fluoranthene	11.26	202	385	0.10399 ppb		97
17) Pyrene	11.51	202	402	0.11205 ppb		94
19) Benz (a) anthracene	12.91	228	355	0.11892 ppb		98
20) Chrysene	12.96	228	334	0.10484 ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	1968	0.69525 ppb	#	96
23) Benzo (b) fluoranthene	14.09	252	433	0.12898 ppb	#	94
24) Benzo (k) fluoranthene	14.13	252	326	0.10614 ppb		98
25) Benzo (a) pyrene	14.47	252	367	0.12057 ppb		99
26) Dibenz (a,h) anthracene	16.04	278	535	0.20789 ppb		98
27) Benzo (g,h,i) perylene	16.41	276	2880	0.94271 ppb	#	91

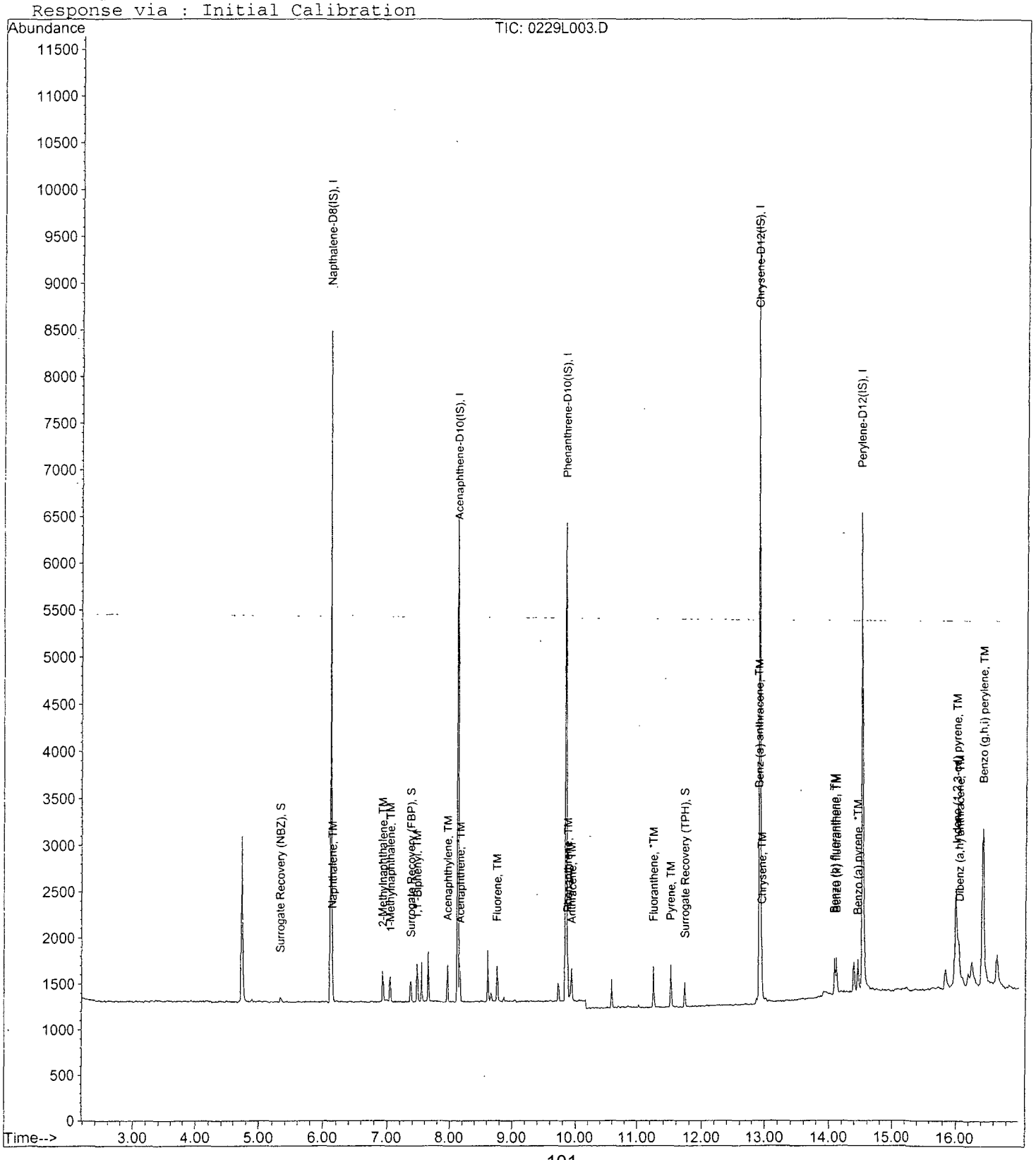
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L003.D Vial: 3
Acq On : 1 Mar 12 00:20 Operator: LF
Sample : 0.1ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L004.D Vial: 4
Acq On : 1 Mar 12 00:44 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5652	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4715	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6080	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.53	264	5399	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	102	0.20060 ppb		0.00
Spiked Amount 2.000			Recovery = 10.050%			
7) Surrogate Recovery (FBP)	7.37	172	352	0.19455 ppb		0.00
Spiked Amount 2.000			Recovery = 9.750%			
18) Surrogate Recovery (TPH)	11.73	244	362	0.17851 ppb		0.00
Spiked Amount 2.000			Recovery = 8.950%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	727	0.24627 ppb		97
4) 2-Methylnaphthalene	6.93	142	433	0.23347 ppb		94
5) 1-Methylnaphthalene	7.05	142	391	0.22147 ppb		97
8) 1,1'-Biphenyl	7.48	154	486	0.21945 ppb	#	84
9) Acenaphthylene	7.96	152	579	0.21294 ppb		100
10) Acenaphthene	8.17	154	338	0.21674 ppb		98
11) Fluorene	8.76	166	407	0.21392 ppb		95
13) Phenanthrene	9.88	178	609	0.22018 ppb		99
14) Anthracene	9.94	178	550	0.20897 ppb		97
15) Fluoranthene	11.26	202	715	0.20496 ppb		97
17) Pyrene	11.51	202	745	0.21610 ppb		97
19) Benz (a) anthracene	12.91	228	662	0.23077 ppb		98
20) Chrysene	12.96	228	680	0.22213 ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	2144	0.78820 ppb	#	93
23) Benzo (b) fluoranthene	14.09	252	765	0.23539 ppb		96
24) Benzo (k) fluoranthene	14.13	252	535	0.17993 ppb	#	96
25) Benzo (a) pyrene	14.46	252	688	0.23348 ppb		98
26) Dibenz (a,h) anthracene	16.03	278	817	0.32794 ppb		96
27) Benzo (g,h,i) perylene	16.41	276	3043	1.02890 ppb		95

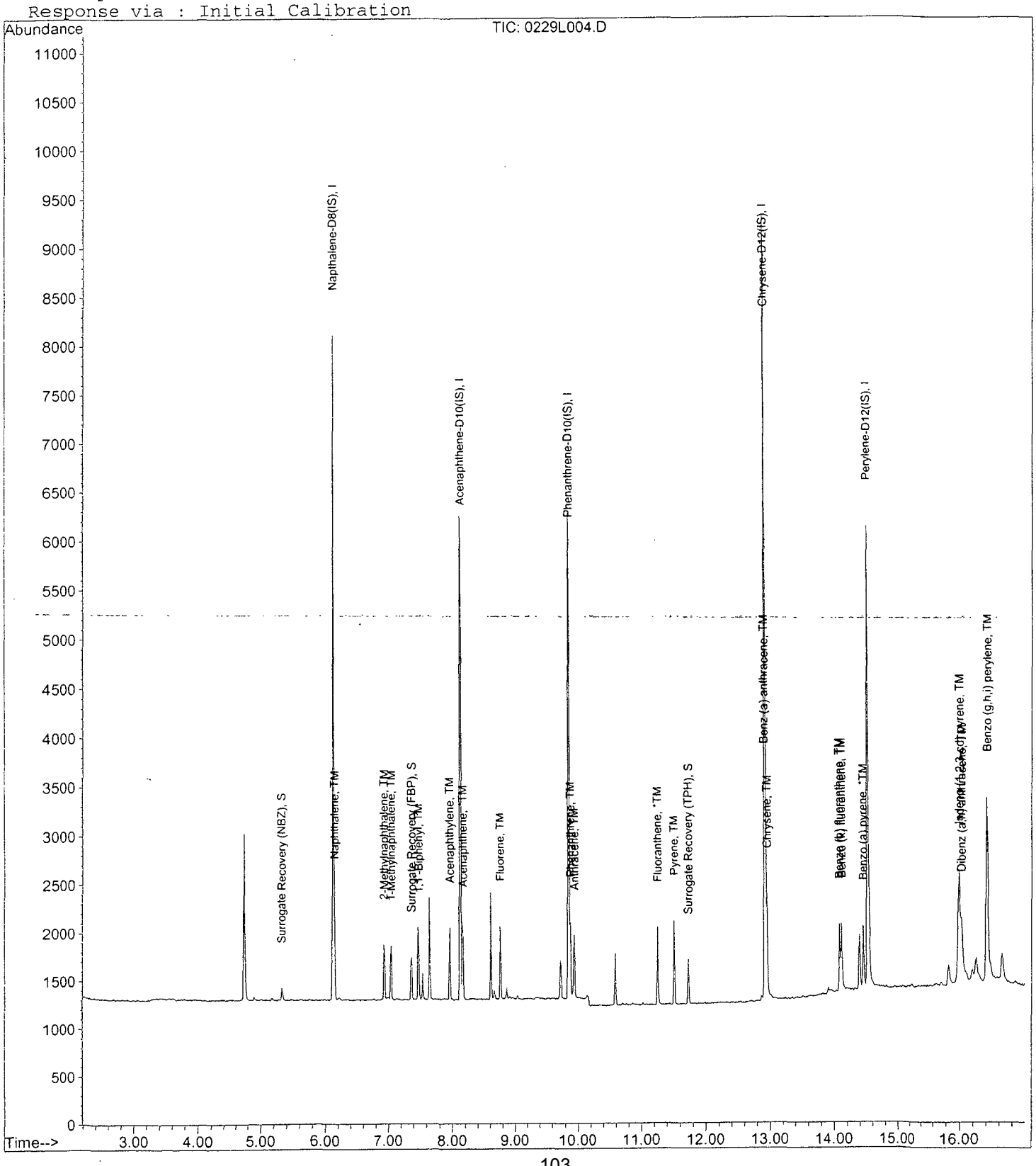
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L004.D Vial: 4
Acq On : 1 Mar 12 00:44 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L005.D Vial: 5
Acq On : 1 Mar 12 1:09 Operator: LF
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5565	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.13	164	2781	2.50000 ppb	0.00
12) Phenanthrene-D10(IS)	9.86	188	4739	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.92	240	5969	2.50000 ppb	0.00
22) Perylene-D12(IS)	14.54	264	5253	2.50000 ppb	0.00
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.32	82	274	0.54730 ppb	0.00
Spiked Amount 2.000			Recovery = 27.350%		
7) Surrogate Recovery (FBP)	7.37	172	963	0.54201 ppb	0.00
Spiked Amount 2.000			Recovery = 27.100%		
18) Surrogate Recovery (TPH)	11.73	244	979	0.49173 ppb	0.00
Spiked Amount 2.000			Recovery = 24.600%		
Target Compounds					Qvalue
3) Naphthalene	6.14	128	1738	0.59795 ppb	99
4) 2-Methylnaphthalene	6.93	142	1055	0.57775 ppb	98
5) 1-Methylnaphthalene	7.05	142	979	0.56319 ppb	97
8) 1,1'-Biphenyl	7.47	154	1249	0.57433 ppb	98
9) Acenaphthylene	7.96	152	1474	0.55203 ppb	99
10) Acenaphthene	8.16	154	845	0.55178 ppb	83
11) Fluorene	8.76	166	1034	0.55344 ppb	100
13) Phenanthrene	9.88	178	1553	0.55864 ppb	99
14) Anthracene	9.94	178	1305	0.49333 ppb	99
15) Fluoranthene	11.26	202	1819	0.51879 ppb	98
17) Pyrene	11.51	202	1925	0.56875 ppb	95
19) Benz (a) anthracene	12.91	228	1629	0.57842 ppb	99
20) Chrysene	12.96	228	1683	0.55999 ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	3017	1.12977 ppb	98
23) Benzo (b) fluoranthene	14.09	252	1807	0.57147 ppb	96
24) Benzo (k) fluoranthene	14.13	252	1511	0.52230 ppb	98
25) Benzo (a) pyrene	14.47	252	1556	0.54272 ppb	99
26) Dibenz (a,h) anthracene	16.04	278	1515	0.62501 ppb	98
27) Benzo (g,h,i) perylene	16.41	276	3735	1.29798 ppb	94

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

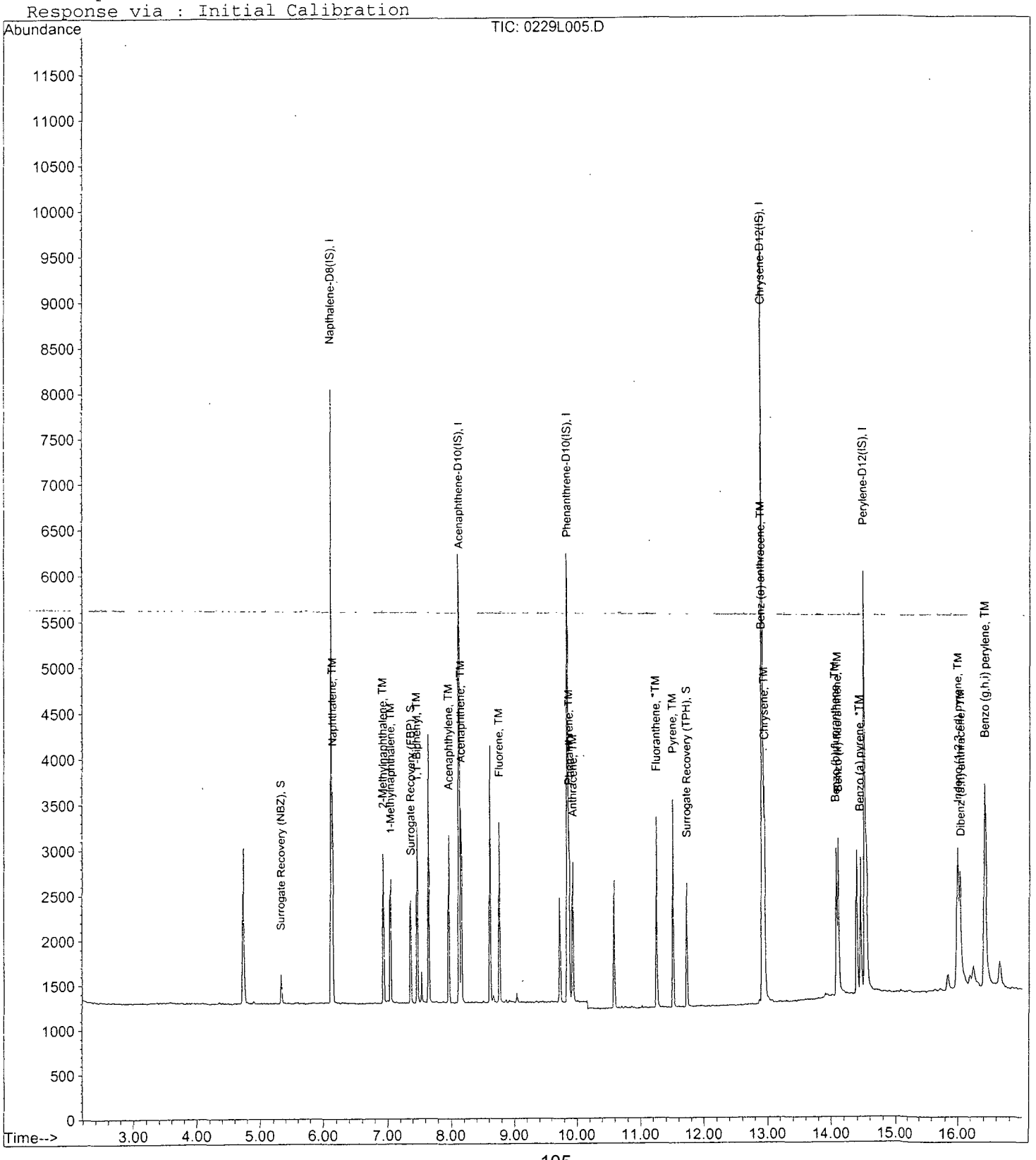
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L005.D
Acq On : 1 Mar 12 1:09
Sample : 0.5ug/ml PAH
Misc :

Vial: 5
Operator: LF
Inst : Linus
Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L006.D Vial: 6
Acq On : 1 Mar 12 1:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5215	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2733	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4543	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	5902	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5053	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	509	1.08494 ppb		0.00
Spiked Amount 2.000			Recovery = 54.250%			
7) Surrogate Recovery (FBP)	7.37	172	1786	1.02288 ppb		0.00
Spiked Amount 2.000			Recovery = 51.150%			
18) Surrogate Recovery (TPH)	11.73	244	1859	0.94434 ppb		0.00
Spiked Amount 2.000			Recovery = 47.200%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	3283	1.20530 ppb		99
4) 2-Methylnaphthalene	6.93	142	1984	1.15942 ppb		98
5) 1-Methylnaphthalene	7.05	142	1836	1.12708 ppb		99
8) 1,1'-Biphenyl	7.48	154	2276	1.06496 ppb	#	84
9) Acenaphthylene	7.96	152	2734	1.04189 ppb		99
10) Acenaphthene	8.16	154	1569	1.04254 ppb	#	81
11) Fluorene	8.76	166	1887	1.02774 ppb		97
13) Phenanthrene	9.88	178	2864	1.07467 ppb		99
14) Anthracene	9.94	178	2508	0.98900 ppb		99
15) Fluoranthene	11.26	202	3364	1.00084 ppb		98
17) Pyrene	11.51	202	3558	1.06316 ppb		94
19) Benz (a) anthracene	12.91	228	2969	1.06618 ppb		100
20) Chrysene	12.96	228	3178	1.06942 ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	4226	1.60046 ppb	#	98
23) Benzo (b) fluoranthene	14.09	252	3390	1.11454 ppb		98
24) Benzo (k) fluoranthene	14.13	252	2669	0.95910 ppb		99
25) Benzo (a) pyrene	14.47	252	2821	1.02288 ppb		97
26) Dibenz (a,h) anthracene	16.04	278	2545	1.09150 ppb		99
27) Benzo (g,h,i) perylene	16.41	276	4772	1.72400 ppb		94

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

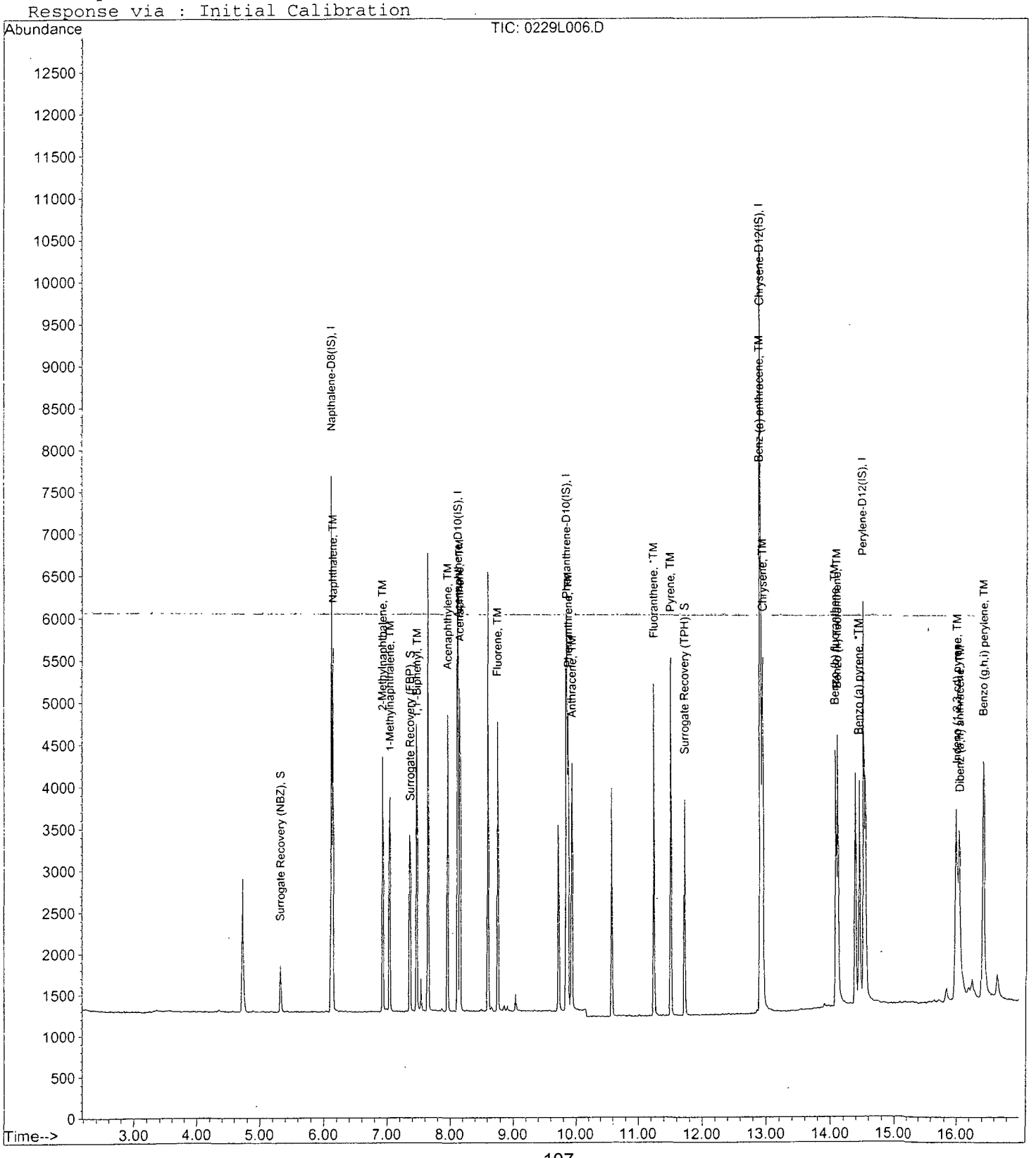
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L006.D
Acq On : 1 Mar 12 1:34
Sample : 1.0ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L007.D Vial: 7
Acq On : 1 Mar 12 1:59 Operator: LF
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5710	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2760	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4470	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6006	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5058	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	2479	4.82594 ppb		0.00
Spiked Amount 2.000			Recovery	= 241.300%		
7) Surrogate Recovery (FBP)	7.37	172	8641	4.90046 ppb		0.00
Spiked Amount 2.000			Recovery	= 245.000%		
18) Surrogate Recovery (TPH)	11.73	244	9769	4.87655 ppb		0.00
Spiked Amount 2.000			Recovery	= 243.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15130	5.07319 ppb		100
4) 2-Methylnaphthalene	6.93	142	9436	5.03624 ppb		100
5) 1-Methylnaphthalene	7.05	142	8951	5.01847 ppb		100
8) 1,1'-Biphenyl	7.47	154	10923	5.06097 ppb		100
9) Acenaphthylene	7.96	152	13095	4.94152 ppb		100
10) Acenaphthene	8.17	154	7674	5.04922 ppb		100
11) Fluorene	8.76	166	9212	4.96816 ppb		100
13) Phenanthrene	9.88	178	13364	5.09651 ppb		100
14) Anthracene	9.94	178	12720	5.09789 ppb		100
15) Fluoranthene	11.26	202	16671	5.04085 ppb		100
17) Pyrene	11.51	202	17331	5.08899 ppb		100
19) Benz (a) anthracene	12.91	228	14556	5.13662 ppb		100
20) Chrysene	12.96	228	15329	5.06901 ppb		100
21) Indeno (1,2,3-cd) pyrene	15.99	276	15511	5.77257 ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	15432	5.06859 ppb		100
24) Benzo (k) fluoranthene	14.13	252	13796	4.95267 ppb		100
25) Benzo (a) pyrene	14.47	252	13783	4.99271 ppb		100
26) Dibenz (a,h) anthracene	16.04	278	11610	4.97436 ppb		100
27) Benzo (g,h,i) perylene	16.43	276	14480	5.22607 ppb		100

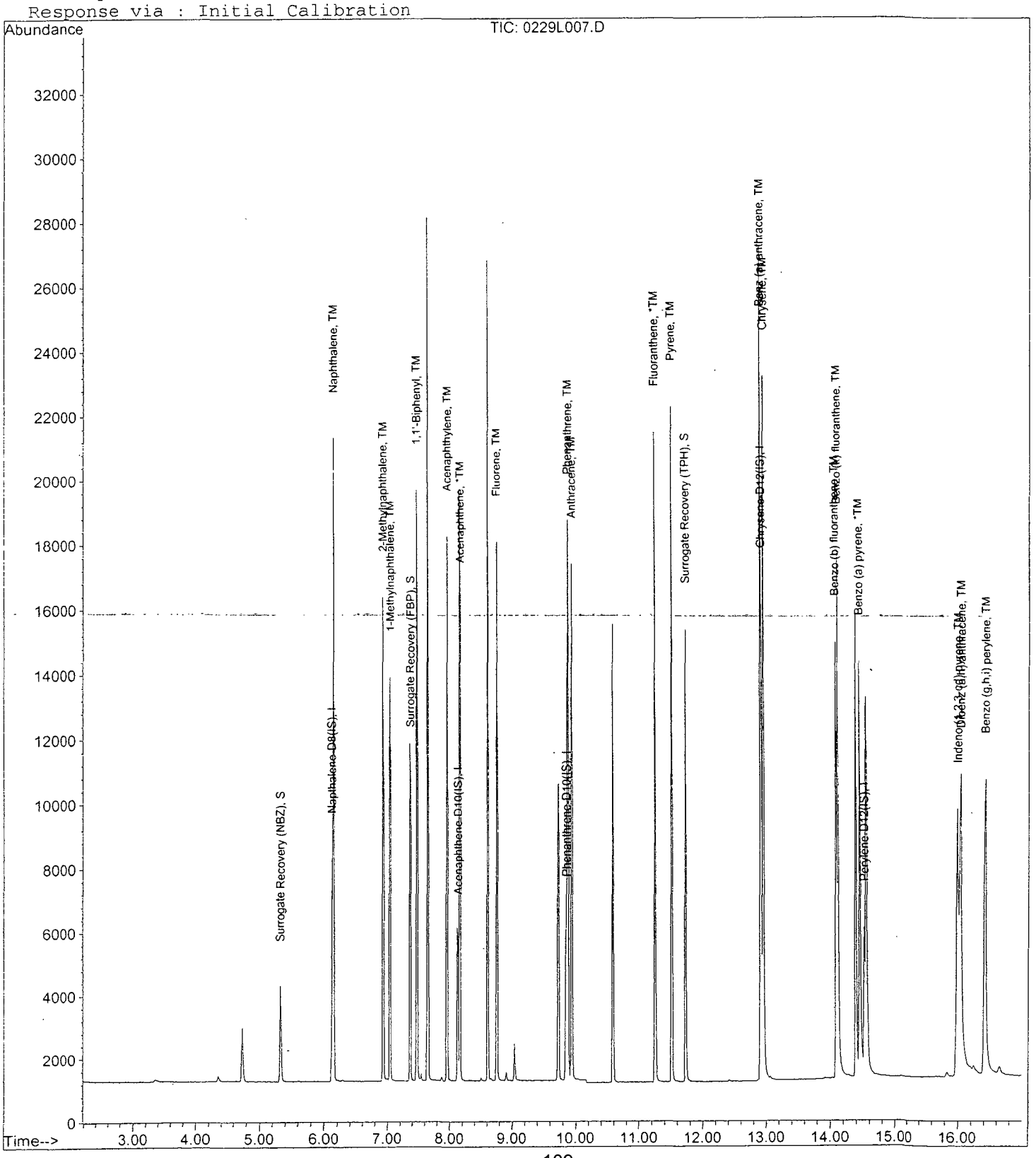
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L007.D Vial: 7
Acq On : 1 Mar 12 1:59 Operator: LF
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L008.D Vial: 8
Acq On : 1 Mar 12 2:24 Operator: LF
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5922	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2882	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4817	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6477	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.53	264	5338	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	5513	10.34812 ppb		0.00
Spiked Amount 2.000			Recovery = 517.400%			
7) Surrogate Recovery (FBP)	7.37	172	18779	10.19907 ppb		0.00
Spiked Amount 2.000			Recovery = 509.950%			
18) Surrogate Recovery (TPH)	11.73	244	22137	10.24690 ppb		0.00
Spiked Amount 2.000			Recovery = 512.350%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	30478	9.85363 ppb		100
4) 2-Methylnaphthalene	6.93	142	19291	9.92752 ppb		99
5) 1-Methylnaphthalene	7.05	142	18430	9.96306 ppb		100
8) 1,1'-Biphenyl	7.48	154	22262	9.87805 ppb	#	83
9) Acenaphthylene	7.96	152	27995	10.11697 ppb		100
10) Acenaphthene	8.17	154	15714	9.90157 ppb		99
11) Fluorene	8.76	166	19485	10.06368 ppb		98
13) Phenanthrene	9.88	178	27712	9.80698 ppb		99
14) Anthracene	9.94	178	26362	9.80421 ppb		100
15) Fluoranthene	11.26	202	35348	9.91831 ppb		100
17) Pyrene	11.51	202	36073	9.82203 ppb		97
19) Benz (a) anthracene	12.91	228	29725	9.72677 ppb		99
20) Chrysene	12.96	228	32162	9.86198 ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	24500	8.45487 ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	31691	9.86282 ppb		99
24) Benzo (k) fluoranthene	14.13	252	29676	10.09466 ppb		99
25) Benzo (a) pyrene	14.46	252	29177	10.01459 ppb		100
26) Dibenz (a,h) anthracene	16.04	278	24758	10.05127 ppb		99
27) Benzo (g,h,i) perylene	16.43	276	27919	9.54787 ppb		100

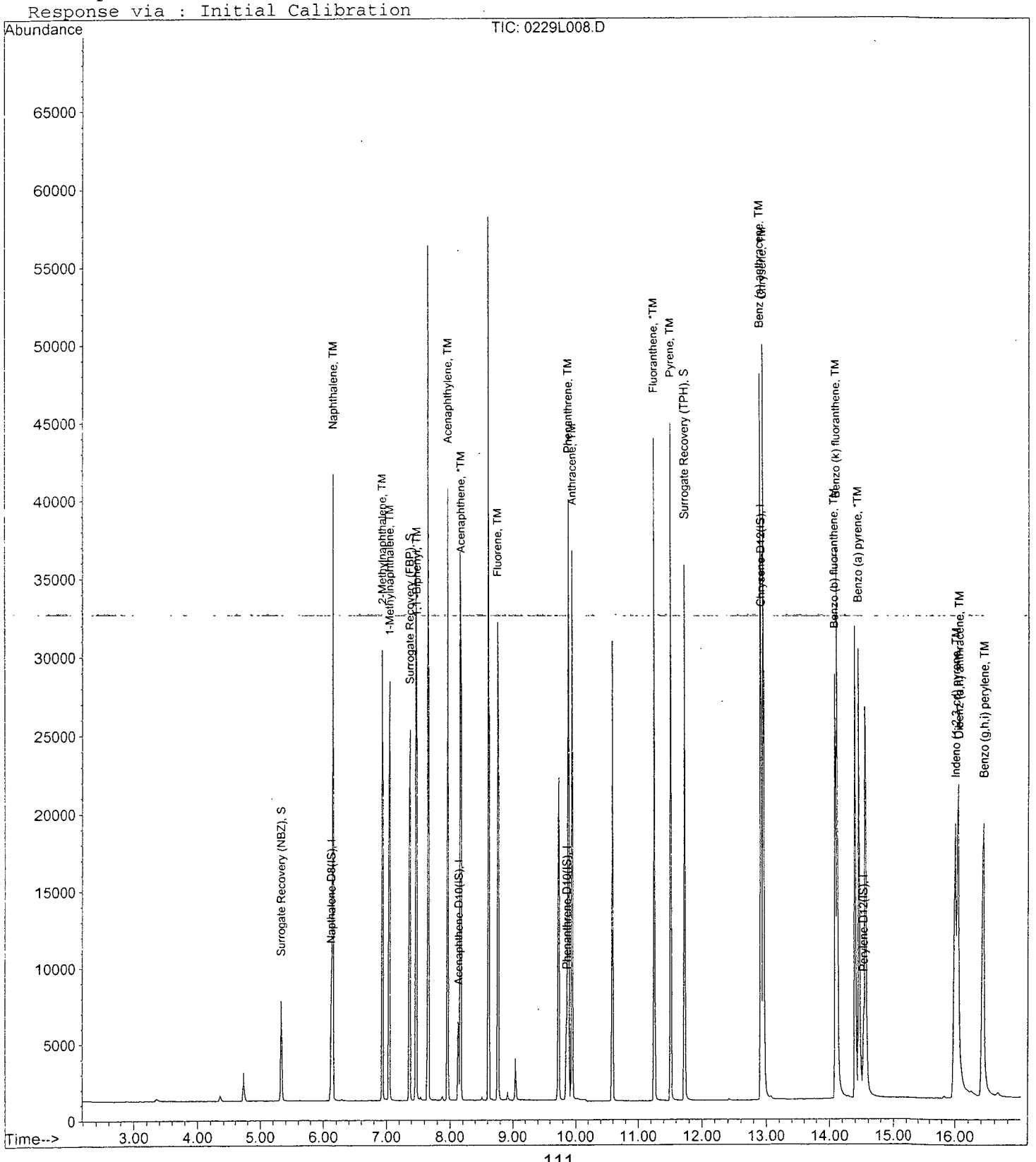
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L008.D Vial: 8
Acq On : 1 Mar 12 2:24 Operator: LF
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L009.D Vial: 9
Acq On : 1 Mar 12 2:49 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5719	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2718	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4593	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6372	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.54	264	5338	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	30540	59.35955 ppb		0.00
Spiked Amount 2.000			Recovery	= 2968.000%		
7) Surrogate Recovery (FBP)	7.37	172	84407	48.60839 ppb		0.00
Spiked Amount 2.000			Recovery	= 2430.400%		
18) Surrogate Recovery (TPH)	11.73	244	96696	45.49676 ppb		0.00
Spiked Amount 2.000			Recovery	= 2274.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	128767	43.10846 ppb		99
4) 2-Methylnaphthalene	6.94	142	84994	45.29212 ppb		87
5) 1-Methylnaphthalene	7.05	142	79171	44.31818 ppb		100
8) 1,1'-Biphenyl	7.48	154	92639	43.58586 ppb	#	84
9) Acenaphthylene	7.96	152	119609	45.83300 ppb		98
10) Acenaphthene	8.17	154	68862	46.00885 ppb		98
11) Fluorene	8.77	166	86013	47.10480 ppb		90
13) Phenanthrene	9.88	178	118464	43.96772 ppb		98
14) Anthracene	9.94	178	115636	45.10324 ppb		98
15) Fluoranthene	11.26	202	154795	45.55225 ppb	#	92
17) Pyrene	11.52	202	161556	44.71366 ppb	#	81
19) Benz(a)anthracene	12.92	228	135460	45.05633 ppb		95
20) Chrysene	12.96	228	134623	41.96027 ppb	#	96
21) Indeno (1,2,3-cd) pyrene	16.01	276	116267	40.78451 ppb		95
23) Benzo (b) fluoranthene	14.10	252	132868	41.35096 ppb	#	92
24) Benzo (k) fluoranthene	14.14	252	144725	49.23001 ppb	#	96
25) Benzo (a) pyrene	14.48	252	133729	45.90057 ppb		96
26) Dibenz (a,h) anthracene	16.05	278	117167	47.56756 ppb		99
27) Benzo (g,h,i) perylene	16.44	276	122767	41.98443 ppb		94

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

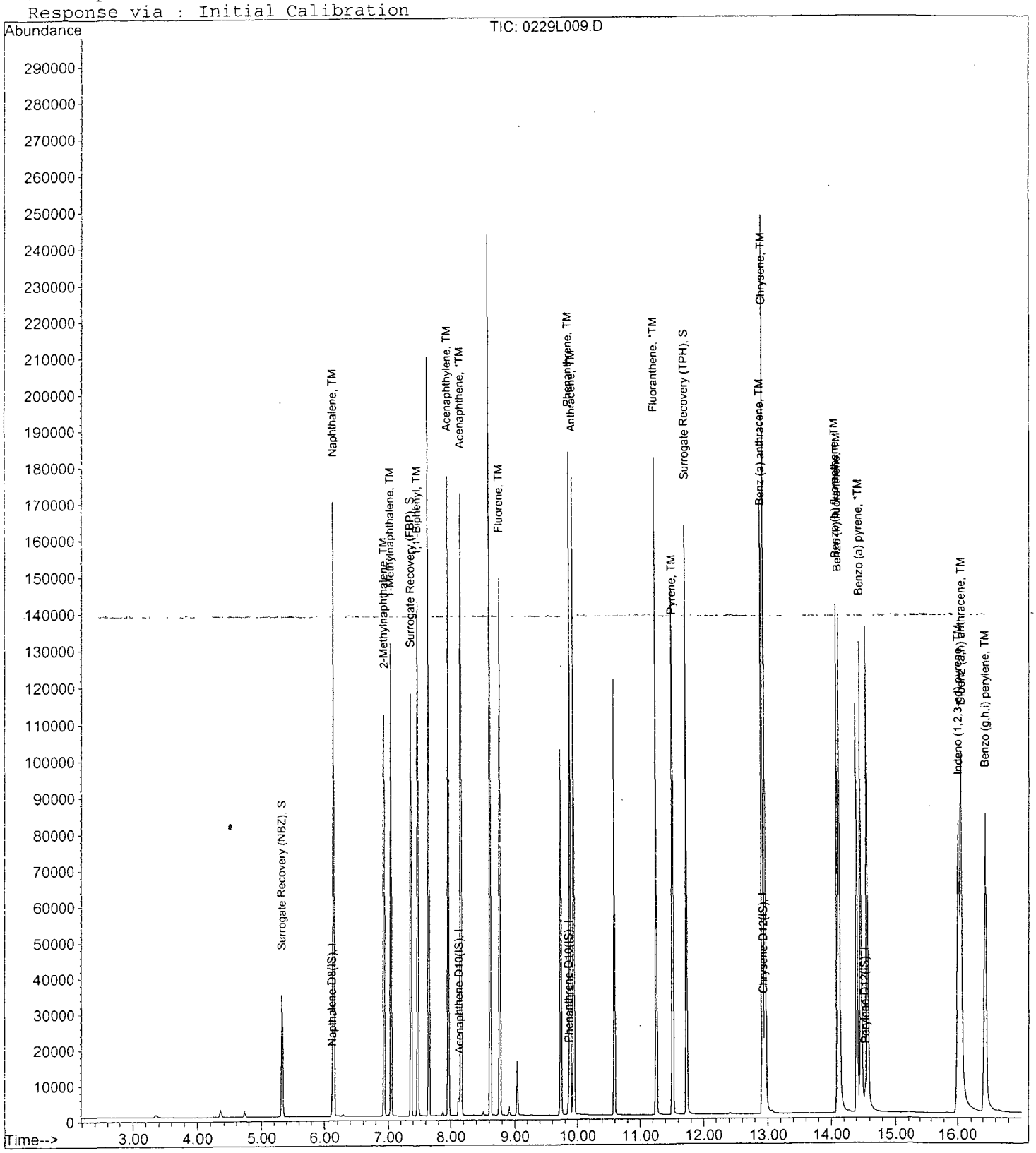
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L009.D
Acq On : 1 Mar 12 2:49
Sample : 50ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L010.D Vial: 10
Acq On : 1 Mar 12 3:14 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5584	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4766	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6566	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.55	264	5654	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	63151	125.71194 ppb		0.01
Spiked Amount 2.000			Recovery	= 6285.600%		
7) Surrogate Recovery (FBP)	7.37	172	158975	87.86538 ppb		0.00
Spiked Amount 2.000			Recovery	= 4393.250%		
18) Surrogate Recovery (TPH)	11.73	244	172379	78.71024 ppb		0.00
Spiked Amount 2.000			Recovery	= 3935.500%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	230712	79.10479 ppb		98
4) 2-Methylnaphthalene	6.94	142	162439	88.65422 ppb		89
5) 1-Methylnaphthalene	7.05	142	149617	85.77710 ppb		98
8) 1,1'-Biphenyl	7.48	154	177959	80.35777 ppb	#	87
9) Acenaphthylene	7.96	152	217090	79.83814 ppb		97
10) Acenaphthene	8.17	154	131352	84.22765 ppb		96
11) Fluorene	8.77	166	163286	85.82351 ppb		93
13) Phenanthrene	9.88	178	210497	75.28975 ppb		97
14) Anthracene	9.94	178	206234	77.52064 ppb		97
15) Fluoranthene	11.27	202	300423	85.19782 ppb	#	88
17) Pyrene	11.52	202	310532	83.40621 ppb	#	89
19) Benz (a) anthracene	12.93	228	279782	90.31073 ppb		97
20) Chrysene	12.97	228	241095	72.92596 ppb		97
21) Indeno (1,2,3-cd) pyrene	16.02	276	237656	80.90259 ppb		92
23) Benzo (b) fluoranthene	14.10	252	290761	85.43269 ppb		97
24) Benzo (k) fluoranthene	14.14	252	210844	67.71274 ppb	#	94
25) Benzo (a) pyrene	14.48	252	256847	83.23189 ppb	#	94
26) Dibenz (a,h) anthracene	16.06	278	232404	89.07830 ppb		99
27) Benzo (g,h,i) perylene	16.46	276	244670	78.99690 ppb		96

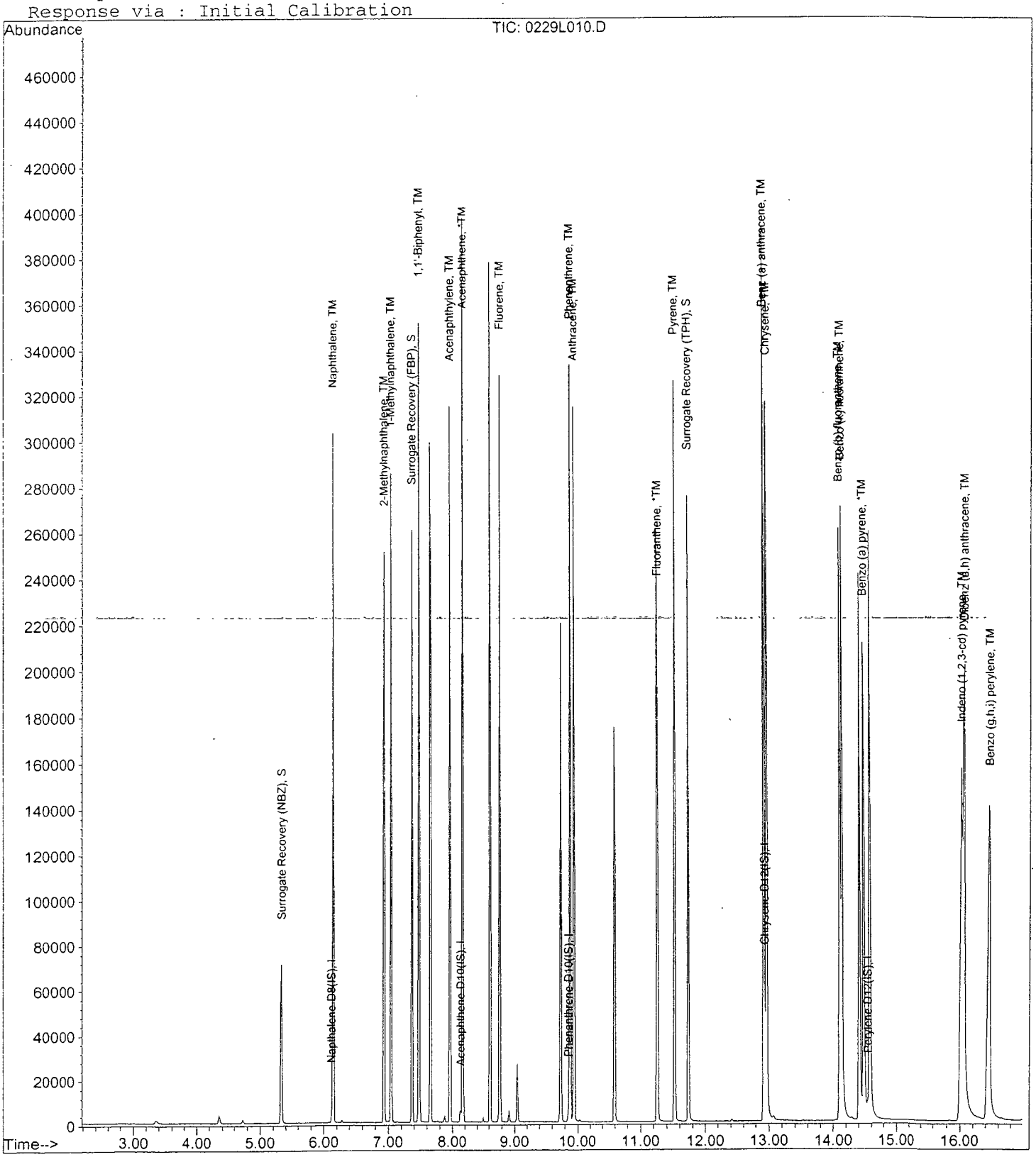
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L010.D Vial: 10
Acq On : 1 Mar 12 3:14 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



EPA 8270C SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No: 67525

Case No: Date Analyzed: 1 Mar 12 3:39

Matrix: Instrument: Linus

Initial Cal. Date: 02/29/12

Data File: 0229L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	1.427	1.252	12	TM	
3	TM	2-Methylnaphthalene	0.8580	0.7746	9.7	TM	
4	TM	1-Methylnaphthalene	0.8003	0.7468	6.7	TM	
5	I	Acenaphthene-D10(IS)	ISTD			I	
6	TM	1,1'-Biphenyl	1.975	1.861	5.8	TM	
7	TM	Acenaphthylene	2.402	2.280	5.1	TM	
8	*TM	Acenaphthene	1.399	1.340	4.2	*TM	
9	TM	Fluorene	1.695	1.647	2.9	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.484	1.434	3.3	TM	
12	TM	Anthracene	1.339	1.306	2.5	TM	
13	*TM	Fluoranthene	1.819	1.764	3.0	*TM	
14	I	Chrysene-D12(IS)	ISTD			I	
15	TM	Pyrene	1.441	1.394	3.2	TM	
16	TM	Benz (a) anthracene	1.234	1.133	8.2	TM	
17	TM	Chrysene	1.246	1.237	0.66	TM	
18	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.086	58	TMQ	16
19	I	Perylene-D12(IS)	ISTD			I	
20	TM	Benzo (b) fluoranthene	1.581	1.584	0.20	TM	
21	TM	Benzo (k) fluoranthene	1.313	1.334	1.6	TM	
22	*TM	Benzo (a) pyrene	1.404	1.397	0.53	*TM	
23	TMQ	Dibenz (a,h) anthracene	1.428	1.298	9.1	TMQ	12
24	TMQ	Benzo (g,h,i) perylene	3.855	1.401	64	TMQ	14
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			10.6		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6095	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	2897	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	4786	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.92	240	6313	2.50000 ppb	0.00
22) Perylene-D12(IS)	14.53	264	5186	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%	
18) Surrogate Recovery (TPH)	0.00	244	0d	0.00000 ppb	
Spiked Amount 2.000			Recovery	= 0.000%	
Target Compounds					Qvalue
3) Naphthalene	6.14	128	15266	4.38901 ppb	100
4) 2-Methylnaphthalene	6.93	142	9442	4.51396 ppb	100
5) 1-Methylnaphthalene	7.05	142	9103	4.66547 ppb	99
8) 1,1'-Biphenyl	7.47	154	10782	4.71225 ppb	100
9) Acenaphthylene	7.96	152	13210	4.74551 ppb	100
10) Acenaphthene	8.16	154	7765	4.79105 ppb	85
11) Fluorene	8.76	166	9540	4.85727 ppb	100
13) Phenanthrene	9.88	178	13730	4.83383 ppb	100
14) Anthracene	9.94	178	12504	4.87627 ppb	100
15) Fluoranthene	11.26	202	16883	4.84901 ppb	99
17) Pyrene	11.51	202	17602	4.83859 ppb	100
19) Benz (a) anthracene	12.91	228	14301	4.58882 ppb	99
20) Chrysene	12.96	228	15624	4.96689 ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	13708	5.79850 ppb	99
23) Benzo (b) fluoranthene	14.09	252	16432	5.00982 ppb	99
24) Benzo (k) fluoranthene	14.13	252	13837	5.08206 ppb	99
25) Benzo (a) pyrene	14.46	252	14485	4.97343 ppb	98
26) Dibenz (a,h) anthracene	16.04	278	13464	5.59460 ppb	100
27) Benzo (g,h,i) perylene	16.43	276	14534	5.68375 ppb	99

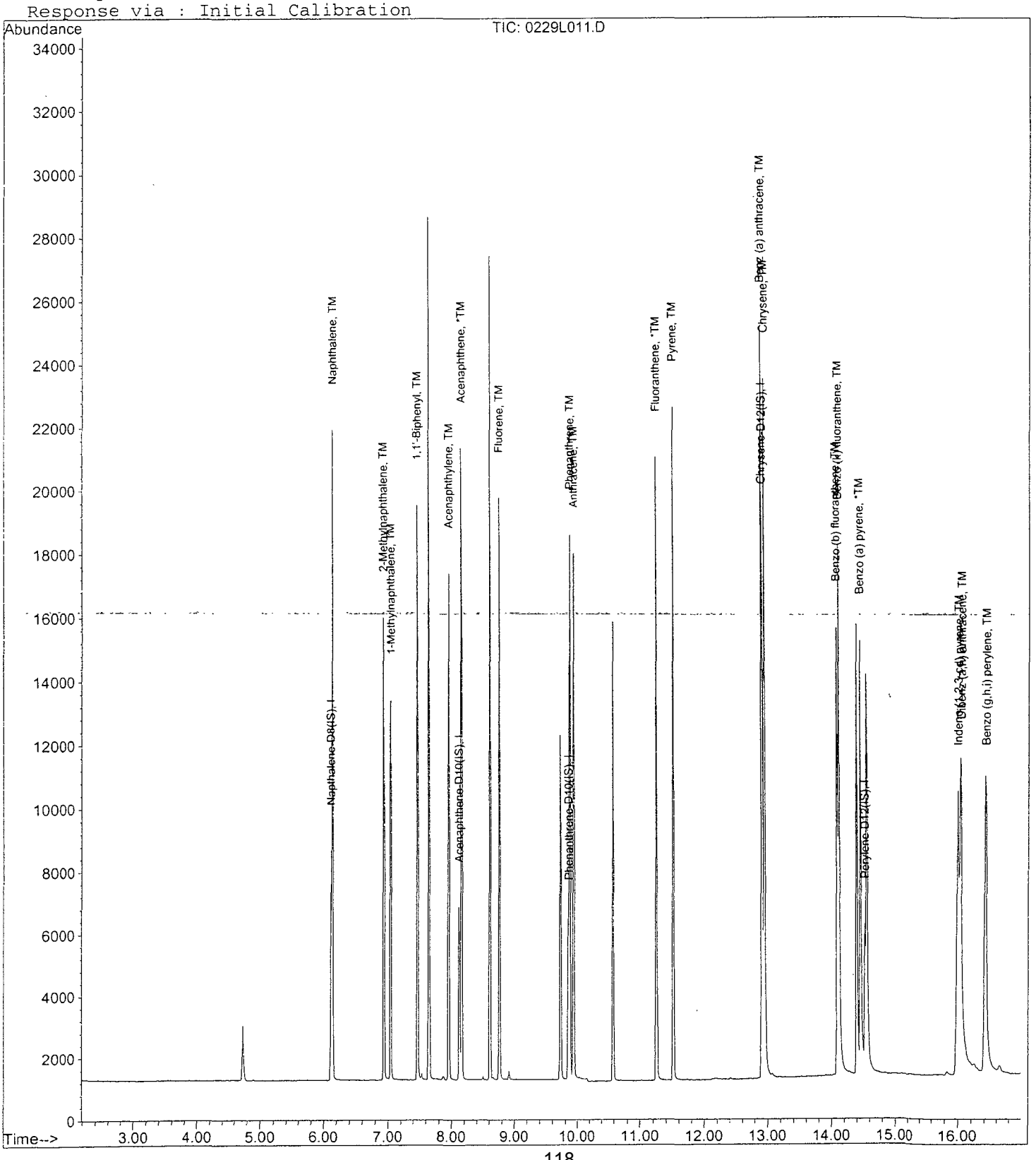
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 6535
Date Analyzed: 04/22/12
Instrument: Linus
Initial Cal. Date: 02/29/12
Data File: 0422L002.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.2454	0.2522	2.8	S	
3	TM	Naphthalene	1.427	1.234	13	TM	
4	TM	2-Methylnaphthalene	0.8580	0.8338	2.8	TM	
5	TM	1-Methylnaphthalene	0.8003	0.7765	3.0	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.584	1.750	10	S	
8	TM	1,1'-Biphenyl	1.975	1.865	5.6	TM	
9	TM	Acenaphthylene	2.402	2.281	5.1	TM	
10	*TM	Acenaphthene	1.399	1.341	4.1	*TM	
11	TM	Fluorene	1.695	1.590	6.2	TM	
12	I	Phenanthrene-D10(IS)	ISTD			I	
13	TM	Phenanthrene	1.484	1.368	7.8	TM	
14	TM	Anthracene	1.339	1.313	2.0	TM	
15	*TM	Fluoranthene	1.819	1.841	1.2	*TM	
16	I	Chrysene-D12(IS)	ISTD			I	
17	TM	Pyrene	1.441	1.516	5.2	TM	
18	S	Surrogate Recovery (TPH)	0.7801	0.9281	19	S	
19	TM	Benz (a) anthracene	1.234	1.271	3.0	TM	
20	TM	Chrysene	1.246	1.183	5.0	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.050	59	TMQ	12
22	I	Perylene-D12(IS)	ISTD			I	
23	TM	Benzo (b) fluoranthene	1.581	1.346	15	TM	
24	TM	Benzo (k) fluoranthene	1.313	1.457	11	TM	
25	*TM	Benzo (a) pyrene	1.404	1.334	5.0	*TM	
26	TMQ	Dibenz (a,h) anthracene	1.428	1.185	17	TMQ	2.1
27	TMQ	Benzo (g,h,i) perylene	3.855	1.205	69	TMQ	2.4
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			12.4		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L002.D Vial: 2
Acq On : 22 Apr 12 11:06 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:03 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:02:34 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6084	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3082	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.86	188	5219	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6560	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	5823	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	3069	5.13801 ppb		0.01
Spiked Amount 2.000			Recovery	= 256.900%		
7) Surrogate Recovery (FBP)	7.36	172	10789	5.52358 ppb		-0.01
Spiked Amount 2.000			Recovery	= 276.200%		
18) Surrogate Recovery (TPH)	11.73	244	12177	5.94892 ppb		0.00
Spiked Amount 2.000			Recovery	= 297.450%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15020	4.32609 ppb		100
4) 2-Methylnaphthalene	6.93	142	10146	4.85930 ppb		95
5) 1-Methylnaphthalene	7.03	142	9448	4.85104 ppb		91
8) 1,1'-Biphenyl	7.47	154	11494	4.72189 ppb	#	91
9) Acenaphthylene	7.96	152	14058	4.74700 ppb		100
10) Acenaphthene	8.16	154	8268	4.79518 ppb		89
11) Fluorene	8.76	166	9800	4.69014 ppb		99
13) Phenanthrene	9.88	178	14280	4.61036 ppb		98
14) Anthracene	9.94	178	13707	4.90192 ppb		98
15) Fluoranthene	11.27	202	19212	5.06013 ppb	#	93
17) Pyrene	11.52	202	19890	5.26167 ppb	#	89
19) Benz (a) anthracene	12.92	228	16682	5.15128 ppb		99
20) Chrysene	12.97	228	15523	4.74897 ppb		99
21) Indeno (1,2,3-cd) pyrene	16.05	276	13772	5.60583 ppb		99
23) Benzo (b) fluoranthene	14.11	252	15671	4.25515 ppb		95
24) Benzo (k) fluoranthene	14.15	252	16972	5.55158 ppb	#	90
25) Benzo (a) pyrene	14.49	252	15539	4.75167 ppb		99
26) Dibenz (a,h) anthracene	16.08	278	13798	5.10315 ppb	#	94
27) Benzo (g,h,i) perylene	16.50	276	14031	4.88167 ppb		98

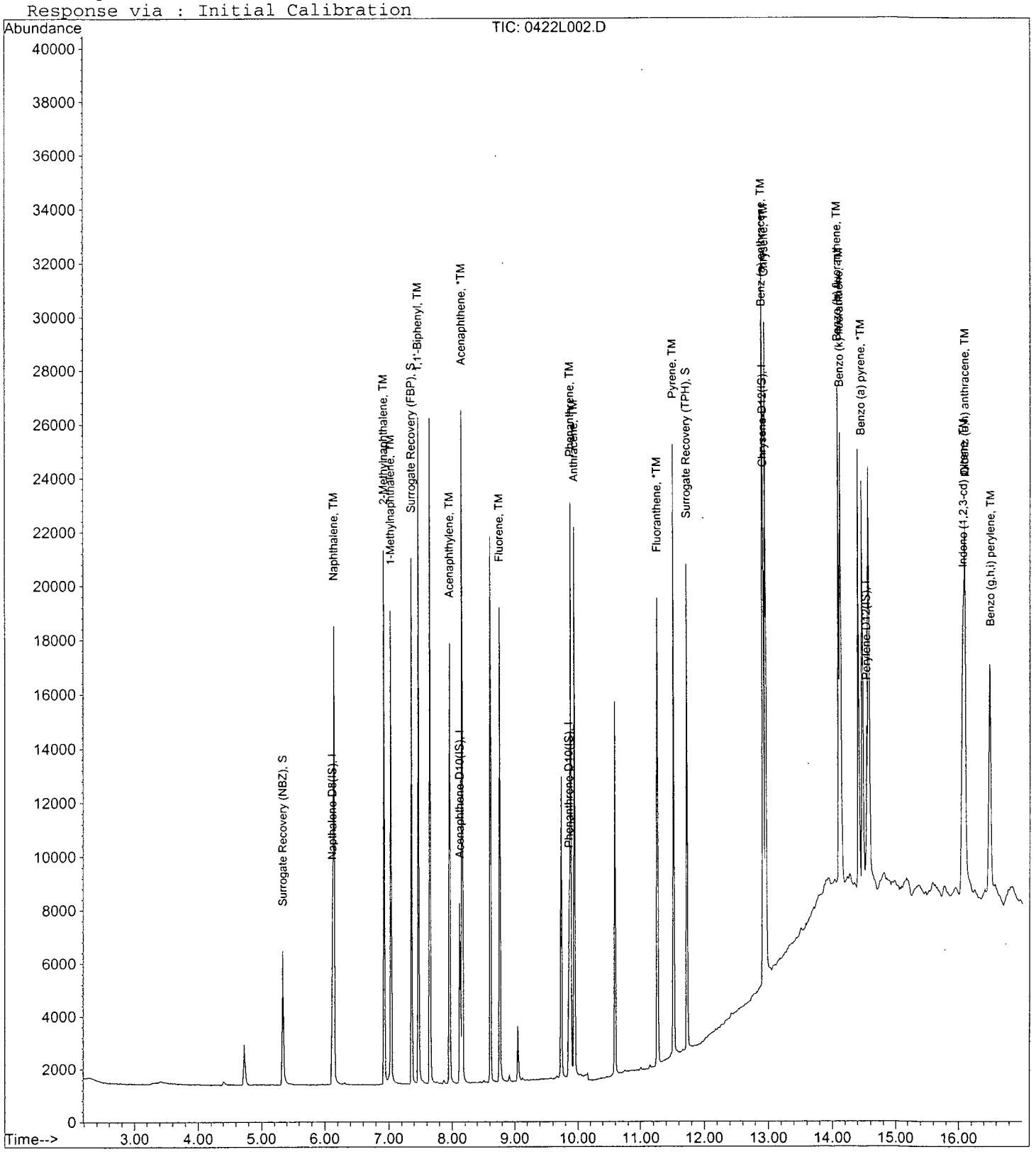
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L002.D Vial: 2
Acq On : 22 Apr 12 11:06 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:03 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



EPA METHOD 8270
Polynuclear Aromatic Hydrocarbons
Raw Data

APPL, INC.

Method Blank
EPA 8270D SIM

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120419W-59236 - 166432**
Batch ID: #SIMHC-120419A

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	04/19/12	04/22/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/19/12	04/22/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/19/12	04/22/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/19/12	04/22/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/19/12	04/22/12
BLANK	SURROGATE: 2-FLUORBIPHENY	56.7	50-110			%	04/19/12	04/22/12
BLANK	SURROGATE: NITROBENZENE-	56.9	40-110			%	04/19/12	04/22/12
BLANK	SURROGATE: TERPHENYL-D14 (	65.4	50-135			%	04/19/12	04/22/12

Quant Method:SIMB.M
Run #:0422L009
Instrument:Linus
Sequence:L120229
Initials:LF

Printed: 05/02/12 1:26:15 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L009.D Vial: 9
Acq On : 22 Apr 12 14:07 Operator: LF
Sample : 120419A BLK 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5620	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3234	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5679	2.50000	ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7289	2.50000	ppb	0.01
22) Perylene-D12(IS)	14.56	264	6388	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	628	1.13818	ppb	0.01
Spiked Amount 2.000			Recovery = 56.900%			
7) Surrogate Recovery (FBP)	7.36	172	2324	1.13388	ppb	-0.01
Spiked Amount 2.000			Recovery = 56.700%			
18) Surrogate Recovery (TPH)	11.73	244	2973	1.30716	ppb	0.00
Spiked Amount 2.000			Recovery = 65.350%			

Target Compounds Qvalue

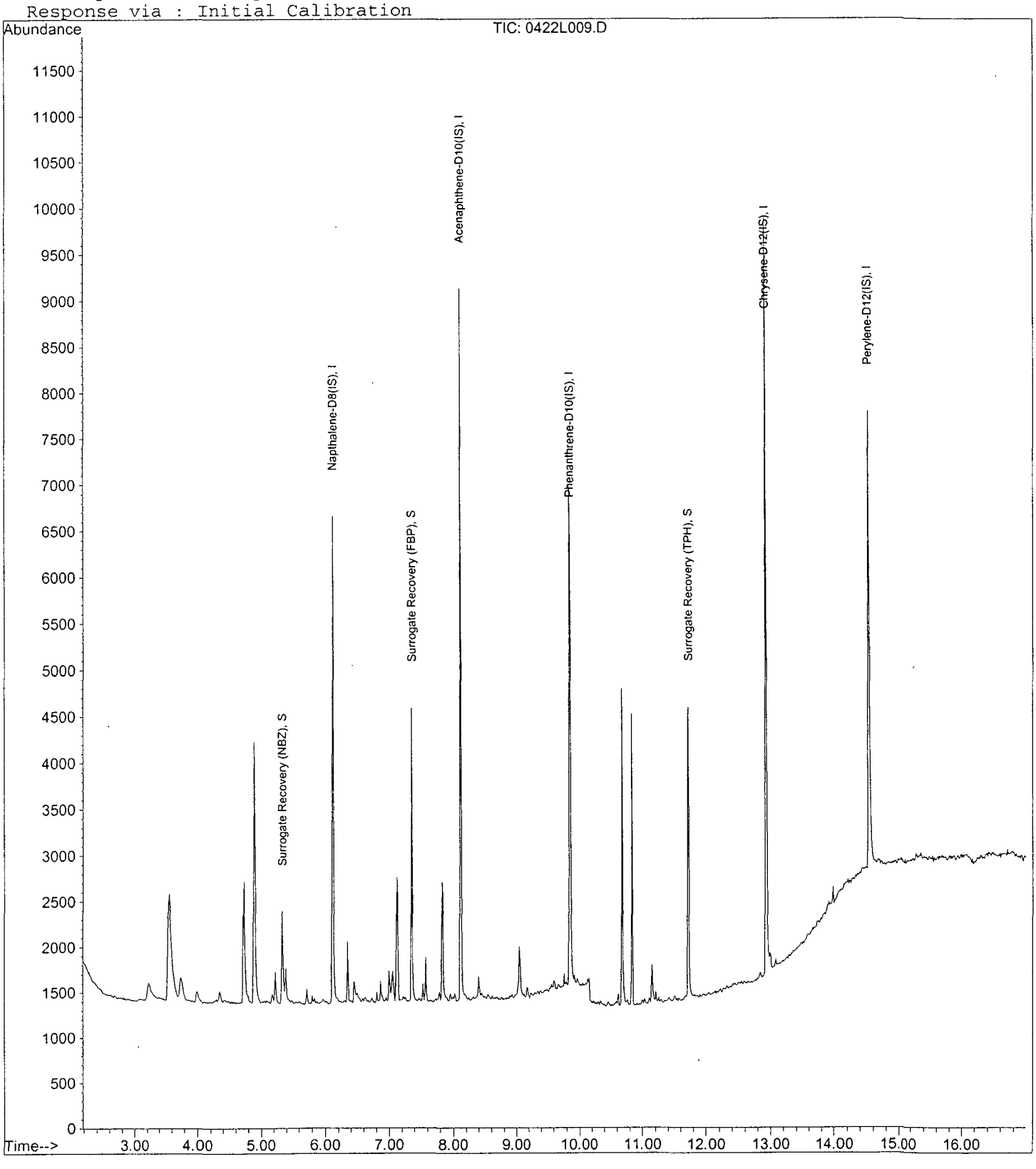
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L009.D Vial: 9
Acq On : 22 Apr 12 14:07 Operator: LF
Sample : 120419A BLK 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:10 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



Laboratory Control Spike Recovery
EPA 8270D SIM

APPL ID: **120419W-59236 LCS - 166432**
Batch ID: #SIMHC-120419A

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	2.29	57.3	45-105
2-METHYLNAPHTHALENE	4.00	2.19	54.8	45-105
ACENAPHTHENE	4.00	2.36	59.0	45-110
ACENAPHTHYLENE	4.00	2.39	59.8	50-105
ANTHRACENE	4.00	2.23	55.8	55-110
BENZO(A)ANTHRACENE	4.00	2.98	74.5	55-110
BENZO(A)PYRENE	4.00	2.65	66.3	55-110
BENZO(B)FLUORANTHENE	4.00	2.88	72.0	45-120
BENZO(GHI)PERYLENE	4.00	2.90	72.5	40-125
BENZO(K)FLUORANTHENE	4.00	3.05	76.3	45-125
CHRYSENE	4.00	2.84	71.0	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.93	73.3	40-125
FLUORANTHENE	4.00	2.75	68.8	55-115
FLUORENE	4.00	2.59	64.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.83	95.8	45-125
NAPHTHALENE	4.00	2.17	54.3	40-100
PHENANTHRENE	4.00	2.44	61.0	50-115
PYRENE	4.00	2.82	70.5	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.15	57.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	0.983	49.1	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.28	64.0	50-135

Comments: _____

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/19/12
Analysis Date :	04/22/12
Instrument :	Linus
Run :	0422L010
Initials :	LF

Printed: 05/02/12 1:26:17 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L010.D Vial: 10
Acq On : 22 Apr 12 14:33 Operator: LF
Sample : 120419A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:11 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6164	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3244	2.50000	ppb		-0.01
12) Phenanthrene-D10(IS)	9.85	188	5954	2.50000	ppb		-0.01
16) Chrysene-D12(IS)	12.94	240	7610	2.50000	ppb		0.01
22) Perylene-D12(IS)	14.56	264	6504	2.50000	ppb		0.02
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.33	82	595	0.98320	ppb		0.01
Spiked Amount 2.000			Recovery = 49.150%				
7) Surrogate Recovery (FBP)	7.36	172	2372	1.15373	ppb		-0.01
Spiked Amount 2.000			Recovery = 57.700%				
18) Surrogate Recovery (TPH)	11.73	244	3033	1.27729	ppb		0.00
Spiked Amount 2.000			Recovery = 63.850%				
Target Compounds							Qvalue
3) Naphthalene	6.13	128	7645	2.17335	ppb		98
4) 2-Methylnaphthalene	6.93	142	4635	2.19106	ppb		92
5) 1-Methylnaphthalene	7.04	142	4523	2.29218	ppb		96
8) 1,1'-Biphenyl	7.47	154	5802	2.26451	ppb		88
9) Acenaphthylene	7.95	152	7449	2.38971	ppb		96
10) Acenaphthene	8.16	154	4289	2.36327	ppb		93
11) Fluorene	8.76	166	5700	2.59171	ppb		96
13) Phenanthrene	9.88	178	8605	2.43521	ppb		100
14) Anthracene	9.94	178	7110	2.22880	ppb		100
15) Fluoranthene	11.26	202	11890	2.74505	ppb	#	93
17) Pyrene	11.52	202	12373	2.82152	ppb	#	84
19) Benz (a) anthracene	12.93	228	11179	2.97570	ppb		98
20) Chrysene	12.96	228	10766	2.83921	ppb	#	95
21) Indeno (1,2,3-cd) pyrene	16.04	276	10909	3.82528	ppb	#	98
23) Benzo (b) fluoranthene	14.10	252	11838	2.87781	ppb		95
24) Benzo (k) fluoranthene	14.14	252	10413	3.04948	ppb	#	94
25) Benzo (a) pyrene	14.49	252	9683	2.65094	ppb		97
26) Dibenz (a,h) anthracene	16.08	278	8879	2.93233	ppb		99
27) Benzo (g,h,i) perylene	16.47	276	9333	2.89964	ppb		94

$\frac{7645 \times 2.5}{6164 \times 1.427} = 2.17$ LRS 4/19/12

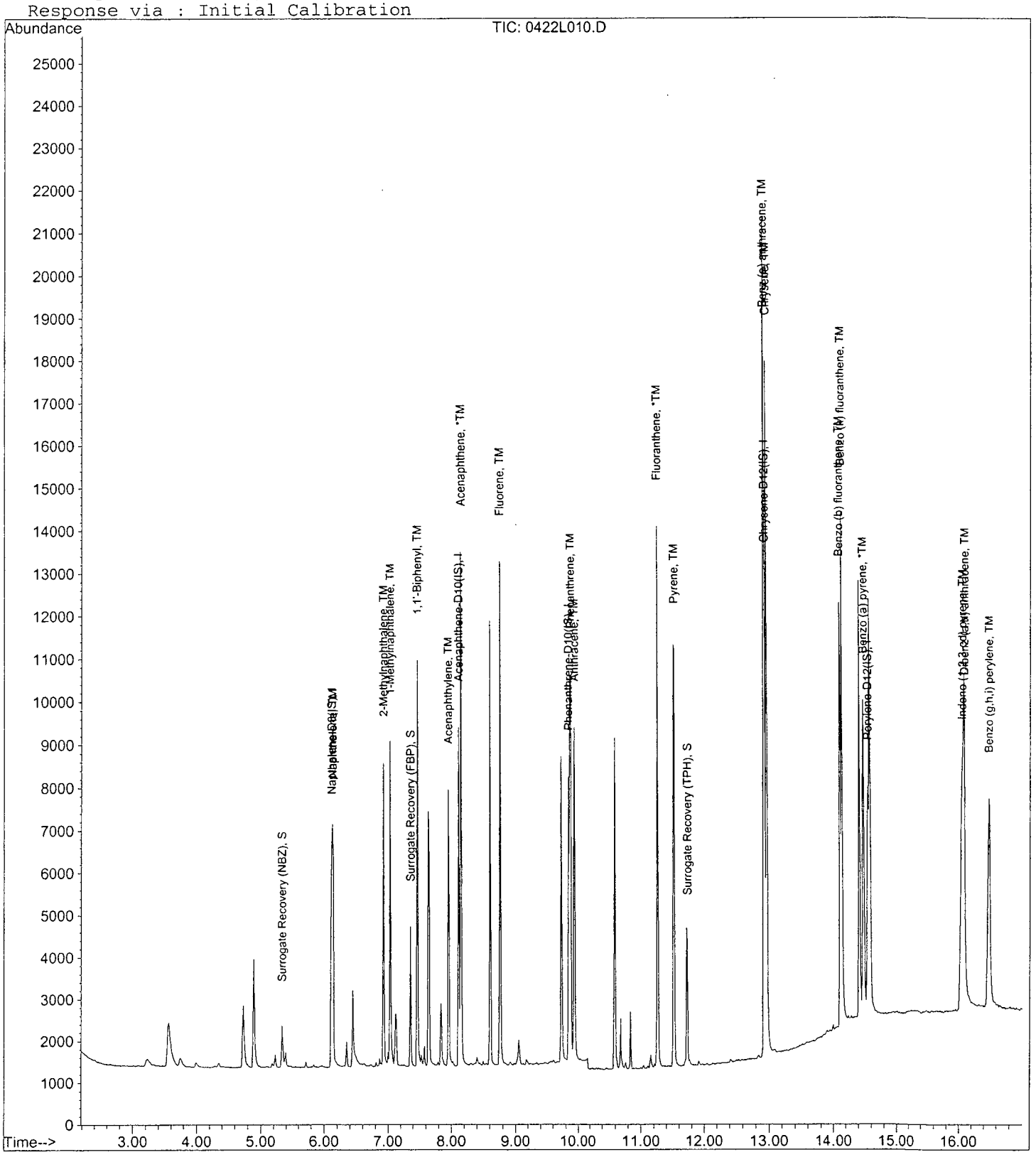
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L010.D Vial: 10
Acq On : 22 Apr 12 14:33 Operator: LF
Sample : 120419A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:11 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **120419W-59236 MS - 166432**
Batch ID: #SIMHC-120419A
Sample ID: AY59236
Client ID: ES074

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	4.00	ND	2.34	2.45	58.5	61.3	45-105	4.6	25
2-METHYLNAPHTHALENE	4.00	ND	2.39	2.25	59.8	56.3	45-105	6.0	25
ACENAPHTHENE	4.00	ND	2.18	2.24	54.5	56.0	45-110	2.7	25
ACENAPHTHYLENE	4.00	ND	2.16	2.15	54.0	53.8	50-105	0.46	25
ANTHRACENE	4.00	ND	2.05	2.00	51.2 #	50.0 #	55-110	2.5	25
BENZO(A)ANTHRACENE	4.00	ND	2.90	2.73	72.5	68.3	55-110	6.0	25
BENZO(A)PYRENE	4.00	ND	2.59	2.49	64.8	62.3	55-110	3.9	25
BENZO(B)FLUORANTHENE	4.00	ND	2.96	2.74	74.0	68.5	45-120	7.7	25
BENZO(GHI)PERYLENE	4.00	ND	2.78	2.69	69.5	67.3	40-125	3.3	25
BENZO(K)FLUORANTHENE	4.00	ND	2.68	2.73	67.0	68.3	45-125	1.8	25
CHRYSENE	4.00	ND	2.48	2.36	62.0	59.0	55-110	5.0	25
DIBENZ(A,H)ANTHRACENE	4.00	ND	2.78	2.73	69.5	68.3	40-125	1.8	25
FLUORANTHENE	4.00	ND	2.83	2.66	70.8	66.5	55-115	6.2	25
FLUORENE	4.00	ND	2.60	2.44	65.0	61.0	50-110	6.3	25
INDENO(1,2,3-CD)PYRENE	4.00	ND	3.72	3.55	93.0	88.8	45-125	4.7	25
NAPHTHALENE	4.00	ND	2.17	2.15	54.3	53.8	40-100	0.93	25
PHENANTHRENE	4.00	ND	2.56	2.36	64.0	59.0	50-115	8.1	25
PYRENE	4.00	ND	2.70	2.51	67.5	62.7	50-130	7.3	25
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	NA	1.13	1.04	56.5	52.0	50-110		
SURROGATE: NITROBENZENE-D5 (S)	2.00	NA	1.11	1.03	55.5	51.5	40-110		
SURROGATE: TERPHENYL-D14 (S)	2.00	NA	1.23	1.20	61.5	60.0	50-135		

= Recovery is outside QC limits.

Comments: _____

Primary	SPK	DUP
Quant Method :	SIMB.M	SIMB.M
Extraction Date :	04/19/12	04/19/12
Analysis Date :	04/22/12	04/22/12
Instrument :	Linus	Linus
Run :	0422L011	0422L012
Initials :	LF	

Printed: 05/02/12 1:26:19 PM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L011.D Vial: 11
Acq On : 22 Apr 12 15:00 Operator: LF
Sample : AY59236W11 MS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:13 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6364	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3620	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.85	188	6258	2.50000 ppb		-0.01
16) Chrysene-D12(IS)	12.94	240	8229	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	7141	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	695	1.11235 ppb		0.01
Spiked Amount 2.000			Recovery = 55.600%			
7) Surrogate Recovery (FBP)	7.36	172	2584	1.12631 ppb		-0.01
Spiked Amount 2.000			Recovery = 56.300%			
18) Surrogate Recovery (TPH)	11.73	244	3160	1.23067 ppb		0.00
Spiked Amount 2.000			Recovery = 61.550%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	7895	2.17389 ppb		99
4) 2-Methylnaphthalene	6.93	142	5228	2.39372 ppb		91
5) 1-Methylnaphthalene	7.03	142	4759	2.33599 ppb		95
8) 1,1'-Biphenyl	7.47	154	6222	2.17620 ppb	#	87
9) Acenaphthylene	7.95	152	7499	2.15587 ppb		96
10) Acenaphthene	8.16	154	4414	2.17952 ppb		94
11) Fluorene	8.76	166	6387	2.60244 ppb		95
13) Phenanthrene	9.88	178	9517	2.56247 ppb		100
14) Anthracene	9.94	178	6877	2.05104 ppb		99
15) Fluoranthene	11.26	202	12886	2.83047 ppb		98
17) Pyrene	11.51	202	12805	2.70038 ppb		92
19) Benz (a) anthracene	12.92	228	11764	2.89587 ppb		97
20) Chrysene	12.96	228	10175	2.48151 ppb	#	95
21) Indeno (1,2,3-cd) pyrene	16.04	276	11476	3.72126 ppb	#	98
23) Benzo (b) fluoranthene	14.10	252	13381	2.96274 ppb		94
24) Benzo (k) fluoranthene	14.14	252	10044	2.67903 ppb	#	93
25) Benzo (a) pyrene	14.49	252	10378	2.58776 ppb	#	95
26) Dibenz (a,h) anthracene	16.08	278	9234	2.77702 ppb		99
27) Benzo (g,h,i) perylene	16.47	276	9810	2.77551 ppb		96

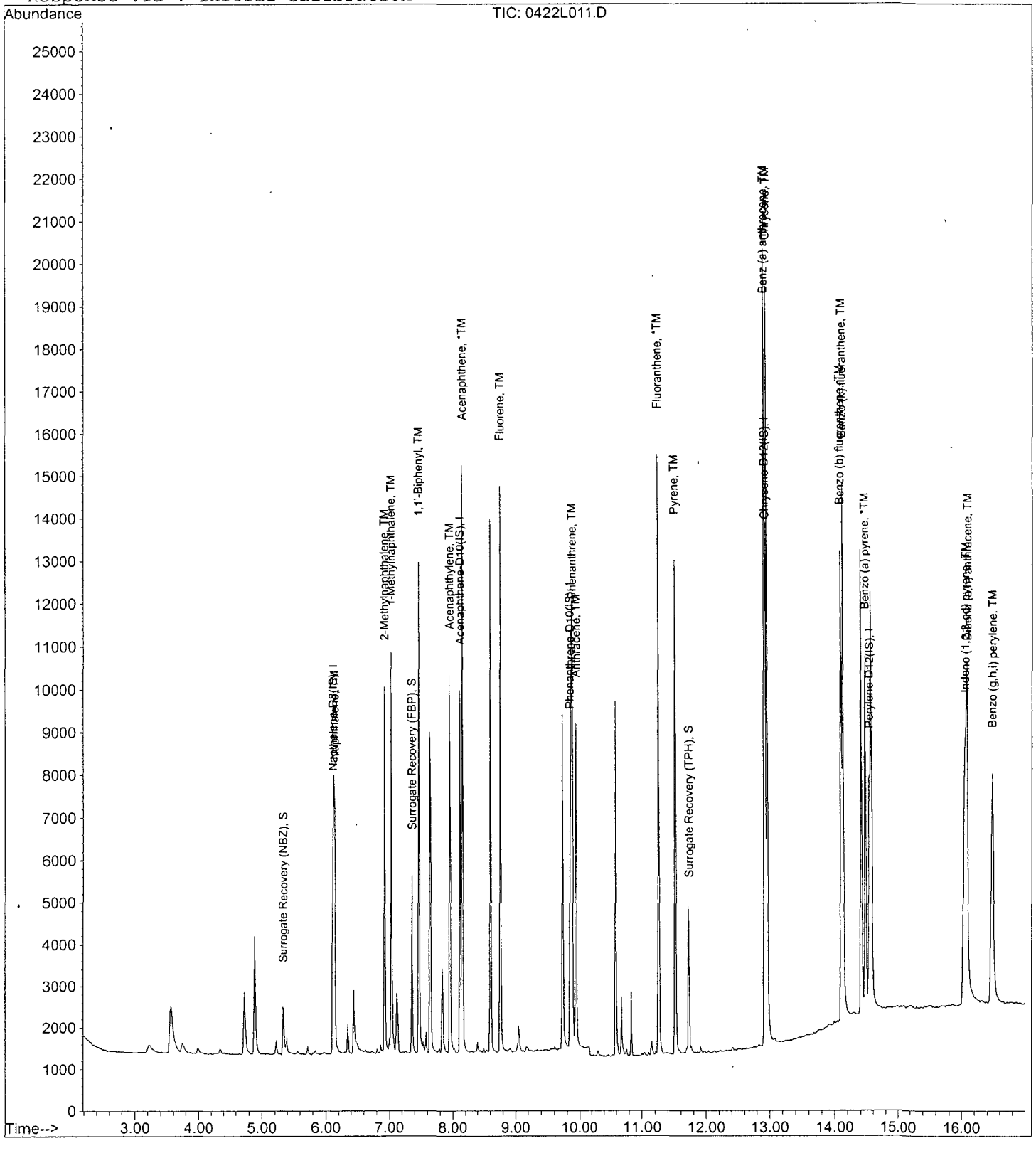
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L011.D Vial: 11
Acq On : 22 Apr 12 15:00 Operator: LF
Sample : AY59236W11 MS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:13 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0422L012.D Vial: 12
Acq On : 22 Apr 12 15:25 Operator: LF
Sample : AY59236W13 MSD-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:13 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:03:12 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5990	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3428	2.50000	ppb		-0.01
12) Phenanthrene-D10(IS)	9.85	188	6094	2.50000	ppb		-0.01
16) Chrysene-D12(IS)	12.94	240	7944	2.50000	ppb		0.01
22) Perylene-D12(IS)	14.56	264	6751	2.50000	ppb		0.02
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.33	82	608	1.03387	ppb		0.01
Spiked Amount 2.000			Recovery = 51.700%				
7) Surrogate Recovery (FBP)	7.36	172	2265	1.04256	ppb		-0.01
Spiked Amount 2.000			Recovery = 52.150%				
18) Surrogate Recovery (TPH)	11.72	244	2981	1.20261	ppb		-0.01
Spiked Amount 2.000			Recovery = 60.150%				
Target Compounds							Qvalue
3) Naphthalene	6.13	128	7361	2.15340	ppb		98
4) 2-Methylnaphthalene	6.93	142	4630	2.25228	ppb		94
5) 1-Methylnaphthalene	7.04	142	4698	2.45003	ppb		96
8) 1,1'-Biphenyl	7.47	154	5829	2.15293	ppb		86
9) Acenaphthylene	7.95	152	7097	2.15458	ppb		96
10) Acenaphthene	8.16	154	4304	2.24424	ppb		95
11) Fluorene	8.76	166	5668	2.43883	ppb		95
13) Phenanthrene	9.87	178	8534	2.35963	ppb		96
14) Anthracene	9.94	178	6546	2.00486	ppb		99
15) Fluoranthene	11.26	202	11779	2.65694	ppb		99
17) Pyrene	11.51	202	11497	2.51153	ppb		97
19) Benz (a) anthracene	12.93	228	10714	2.73202	ppb		98
20) Chrysene	12.96	228	9350	2.36211	ppb	#	95
21) Indeno (1,2,3-cd) pyrene	16.04	276	10558	3.54618	ppb	#	97
23) Benzo (b) fluoranthene	14.10	252	11703	2.74090	ppb		95
24) Benzo (k) fluoranthene	14.14	252	9689	2.73364	ppb	#	94
25) Benzo (a) pyrene	14.49	252	9454	2.49355	ppb	#	96
26) Dibenz (a,h) anthracene	16.08	278	8567	2.72510	ppb		98
27) Benzo (g,h,i) perylene	16.47	276	8989	2.68985	ppb		98

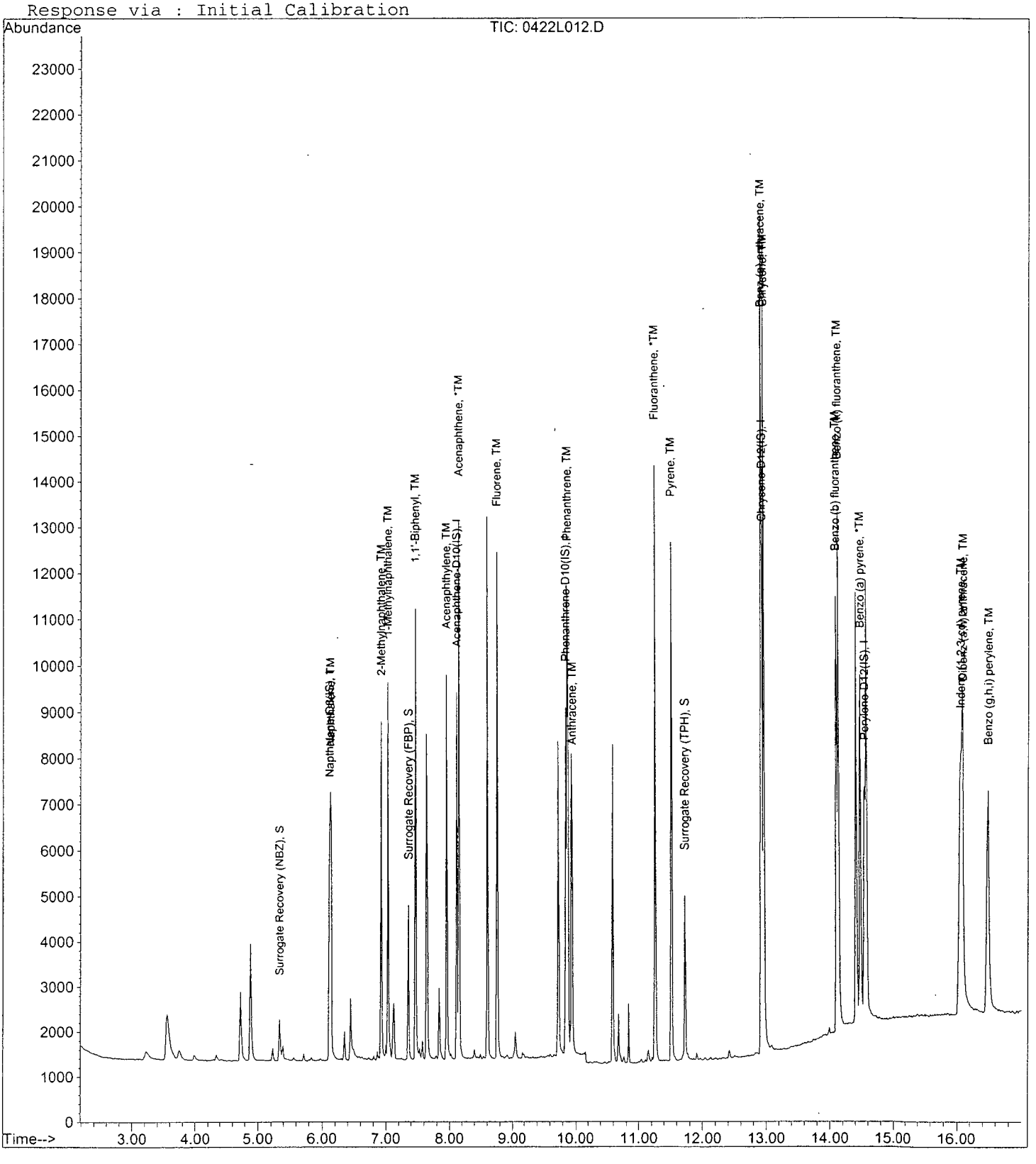
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0422L012.D Vial: 12
Acq On : 22 Apr 12 15:25 Operator: LF
Sample : AY59236W13 MSD-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Apr 23 16:13 2012 Quant Results File: SIMB.RES

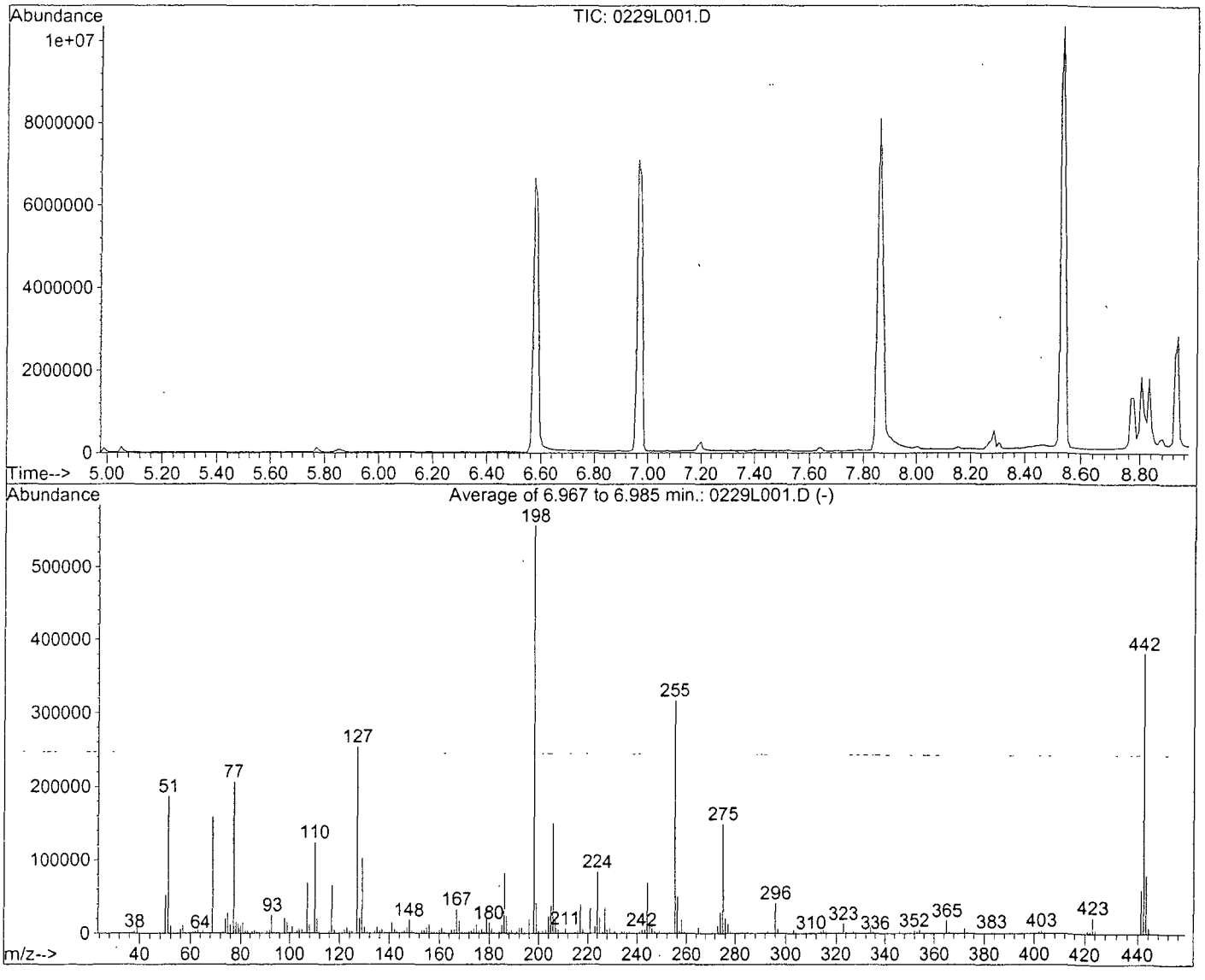
Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon Apr 23 16:14:14 2012
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L120229\0229L001.D Vial: 1
Acq On : 29 Feb 12 21:31 Operator: LF
Sample : SVTUNE 2-28-12 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



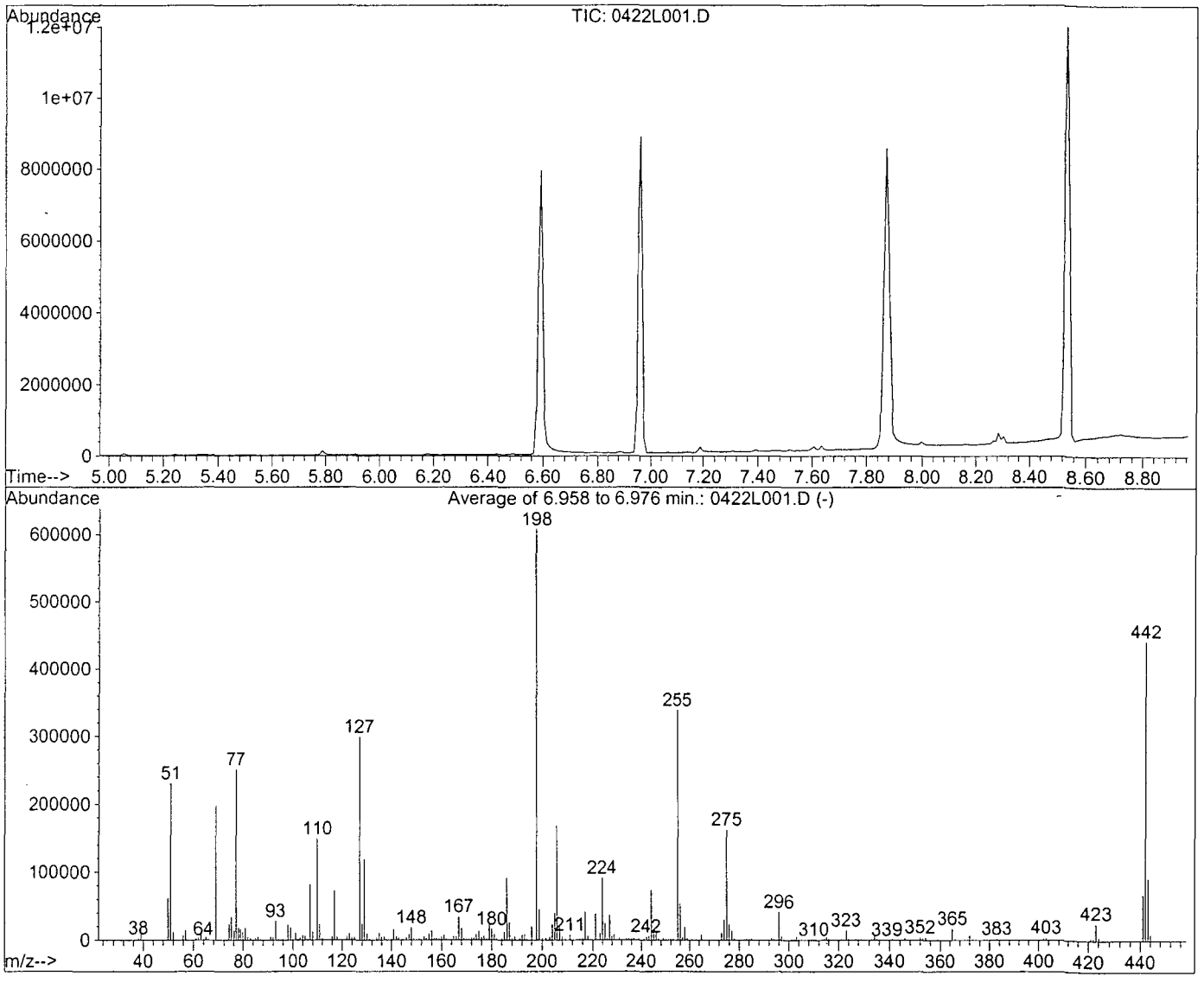
Spectrum Information: Average of 6.967 to 6.985 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.4	186212	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	747	PASS
127	198	40	60	45.5	253515	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	556758	PASS
199	198	5	9	7.4	41091	PASS
275	198	10	30	26.6	148178	PASS
365	198	1	100	3.0	16881	PASS
441	443	0.01	100	74.7	59029	PASS
442	198	40	150	68.4	380557	PASS
443	442	17	23	20.8	78999	PASS

DFTPP

Data File : M:\LINUS\DATA\L120229\0422L001.D Vial: 1
Acq On : 22 Apr 12 10:48 Operator: LF
Sample : SVTUNE 2-28-12 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 6.958 to 6.976 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.9	230526	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	1014	PASS
127	198	40	60	49.2	299026	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	608168	PASS
199	198	5	9	7.4	45143	PASS
275	198	10	30	26.7	162174	PASS
365	198	1	100	2.8	16853	PASS
441	443	0.01	100	73.7	67245	PASS
442	198	40	150	72.6	441237	PASS
443	442	17	23	20.7	91240	PASS

VF 1/17/11

PREP DATE:	01-17-11					
8270C Stock/Spike Standard						
Exp:	05-29-11					
		Conc.		Date	CODE:	P
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	10001	2000	032009-28092	01/17/11	03-20-12	1000
Absolute	10001	2000	032009-28091	01/17/11	03-20-12	1000
Absolute	10002	2000	073109-27974	01/17/11	07-31-12	1000
Absolute	10002	2000	073109-27973	01/17/11	07-31-12	1000
Absolute	10004	2000	101509-27979	01/17/11	10-15-14	1000
Absolute	10004	2000	101509-27978	01/17/11	10-15-14	1000
Absolute	10005	2000	061209-27984	01/17/11	06-12-14	1000
Absolute	10005	2000	061209-27983	01/17/11	06-12-14	1000
Absolute	10006	2000	120810-27989	01/17/11	12-08-13	1000
Absolute	10006	2000	120810-27988	01/17/11	12-08-13	1000
Absolute	10007	2000	100909-28010	01/17/11	10-09-14	1000
Absolute	10007	2000	100909-28013	01/17/11	10-09-14	1000
Absolute	10018	2000	073109-27994	01/17/11	07-31-14	1000
Absolute	10018	2000	073109-27993	01/17/11	07-31-14	1000
Absolute	70023	1000	080310-28008	01/17/11	08-03-15	1000
Absolute	70023	1000	080310-28009	01/17/11	08-03-15	1000
Absolute	82705	2000	121010-27999	01/17/11	12-10-13	1000
Absolute	82705	2000	121010-27998	01/17/11	12-10-13	1000
Absolute	94552	2000	052908-28004	01/17/11	05-29-11	1000
Absolute	94552	2000	052908-28003	01/17/11	05-29-11	1000
					Final Vol	20000

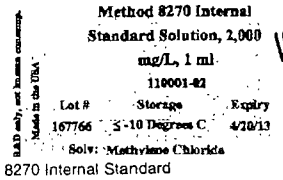
VF 1/25/11

PREP DATE:	01-25-11																
8270T STANDARD CURVE																	
Exp:	02-24-11					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		12/17/10	05-29-11	0	0	0	5	5	10	20	25	30	40	50	
	5.0ug/mL			01/25/11		0	0	20	0	0	0	0	0	0	0	0	
	1.0ug/mL			01/25/11		10	20	0	0	0	0	0	0	0	0	0	
	Surrogate Stock	VAR	160538-27570	11/11/10	11-11-11	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 1/25/11

PREP DATE:	01-25-11					
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 1/25/11



VF

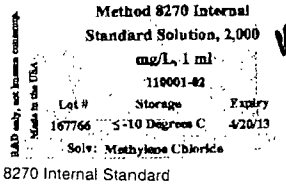
exp 1/25/12

8270 Internal Standard

Lot #: 167766 - 28148

Rec: 1/20/11 MFR exp. 04/20/13

VF 1/25/11



VF

exp 1/25/12

8270 Internal Standard

Lot #: 167766 - 28147

Rec: 1/20/11 MFR exp. 04/20/13

LF 3/23/11

Part #: 94552 Laboratory Use Only-See MSDS
Lot #: 052908 Exp: 052911 1 mL
Semi-Volatile Standard
11 components
Varied ug/mL in
ABSOLUTE STANDA
Semi-Volatile Standard
Lot #: 052908 - 28001
Rec: 12/16/10 MFR exp. 05/29/11

LF

exp 5/29/11

LF 3/23/11

Part #: 94552 Laboratory Use Only-See MSDS
Lot #: 052908 Exp: 052911 1 mL
Semi-Volatile Standard
11 components
Varied ug/mL in
ABSOLUTE STANDA
Semi-Volatile Standard
Lot #: 052908 - 28002
Rec: 12/16/10 MFR exp. 05/29/11

LF

exp 5/29/11

LF 3/23/11

Part #: 82705 Laboratory Use Only - See MSDS
Lot #: 121010 Exp: 121013 Storage 4 °C
EPA Method 8270A
4 components
2000 ug/mL in ace
EPA Method 8270A-Mix#11
Lot #: 121010 - 27996
Rec: 12/16/10 MFR exp. 12/10/13
ABSOLUTE STANDARDS, INC.

LF

exp 5/29/11

LF 3/23/11

Part #: 82705 Laboratory Use Only - See MSDS
Lot #: 121010 Exp: 121013 Storage 4 °C
EPA Method 8270A - Mix #11
4 components
2000 ug/mL in ace
EPA Method 8270A-Mix#11
Lot #: 121010 - 27997
Rec: 12/16/10 MFR exp. 12/10/13
ABSOLUTE STANDAF

LF

exp 5/29/11

LF 3/23/11

PREP_DATE:	03-23-11					
8270C Stock/Spike Standard						
Exp:	05-29-11					
		Conc.		Date	CODE:	P
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
Absolute	10001	2000	032009-28089	03/23/11	03-20-12	1000
Absolute	10001	2000	320009-28090	03/23/11	03-20-12	1000
Absolute	10002	2000	073109-27971	03/23/11	07-31-12	1000
Absolute	10002	2000	073109-27972	03/23/11	07-31-12	1000
Absolute	10004	2000	101509-27976	03/23/11	10-15-14	1000
Absolute	10004	2000	101509-27977	03/23/11	10-15-14	1000
Absolute	10005	2000	061209-27981	03/23/11	06-12-14	1000
Absolute	10005	2000	061209-27982	03/23/11	06-12-14	1000
Absolute	10006	2000	120810-27986	03/23/11	12-08-13	1000
Absolute	10006	2000	120810-27987	03/23/11	12-08-13	1000
Absolute	10007	2000	100909-28015	03/23/11	10-09-14	1000
Absolute	10007	2000	100909-28014	03/23/11	10-09-14	1000
Absolute	10018	2000	073109-27991	03/23/11	07-31-14	1000
Absolute	10018	2000	073109-27992	03/23/11	07-31-14	1000
Absolute	70023	1000	080310-28006	03/23/11	08-03-15	1000
Absolute	70023	1000	080310-28007	03/23/11	08-03-15	1000
Absolute	82705	2000	052908-28001	03/23/11	05-29-11	1000
Absolute	82705	2000	052908-28002	03/23/11	05-29-11	1000
Absolute	94552	2000	121010-27996	03/23/11	12-10-13	1000
Absolute	94552	2000	121010-27997	03/23/11	12-10-13	1000
					Final Vol	20000

LF 3/23/11

Surr IS exp 4/25/12
1500µL EM Science MC Lot #47080
100µL 8270 IS opened 4/25/11 exp 4/25/12

VF 3/28/11

o2si smart solutions

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

110004-17

Storage: </= -10 Degrees C

Made in USA Lot No 160538

Solvent: Methylene Chloride

Exp: 6/10/2012

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					0.1	0.2	1	5	10	20	40	50	60	80	100	
		Conc.		Date													
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date			µL	µL	µL	µL	µL	µL	µL	µL	µL	
	8270T Stock	200		03/23/11	05-29-11	0	0	0	5	5	10	20	25	30	40	50	
	5.0ug/mL			03/28/11		0	0	20	0	0	0	0	0	0	0	0	
	1.0ug/mL			03/28/11		10	20	0	0	0	0	0	0	0	0	0	
	Surrogate Stock	VAR	160538-27574	03/28/11	03-28-12	0	0	0	5	5	10	20	25	30	40	50	
EM Science	Methylene Chloride		47080			90	80	80	190	90	80	60	50	40	20	0	
					Final Vol.			100	200	100	100	100	100	100	100	100	

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

GCM-160-1

Lot: CF-2995

Exp. 08/31/2011

ULTRA

1 mL

Semi-Volatiles GC/MS Tuning Standard

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

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						
SV 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

Per R&D only, not license concerns. Made in the USA

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

Per R&D only, not license concerns. Made in the USA

VF exp 4/20/12

8270D PAH SIM (SS)

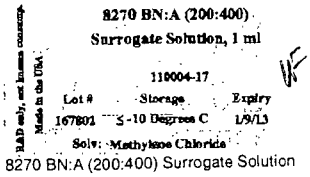
Lot #: 170256 - 28487

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

VF 8/16/11

PREP DATE:	08/16/11		exp:	08/23/11			
10ug/mL 1,2,3-TCP							
	50uL of 1000ug/mL 1,2,3 TCP into a final volume of 5mL of P&T Methanol						
	1000ug/mL 1,2,3 TCP date code:			05/27/11			
	P & T Methonal Lot #			9077-02			
PREP DATE:	08/16/11		exp:	08/23/11			
1ug/mL 1,2,3-TCP							
	5uL of 1000ug/mL 1,2,3 TCP into a final volume of 5mL of P&T Methanol						
	1000ug/mL 1,2,3 TCP date code:			05/27/11			
	P & T Methanol Lot #			JT Baker H46E44			
PREP DATE:	08/16/11		exp:	08/23/11			
2ug/mL 1,2,3-TCPd5							
	10uL of 2000ug/mL 1,2,3 TCP into a final volume of 10mL of P&T Methanol						
	2000ug/mL 1,2,3 TCP-d5 date code:			05/27/11			
	P & T Methanol Lot #			9077-02			

VF 8/22/11



VF exp 8/22/12

8270 BN:A (200:400) Surrogate Solution

Lot #: 167802 - 29313

Rec: 8/8/11 MFR exp. 01/09/13

VF 8/22/11

PREP DATE:	08-22-11												
8270 STANDARD CURVE													
Exp:	08-29-11						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		07/26/11	01-26-12		5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	167802-29313	08/22/11	08-22-12		5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47186				190	90	80	60	50	40	20	0
						Final Vol.	200	100	100	100	100	100	200	100

VF 8/22/11

PREP DATE:	08-22-11					
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		47186			75
					Final Vol.	100

VF 9/21/11

PREP DATE:	09-21-11												
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	170253-28485	04/20/11	04-20-12	0	0	0	0	5	5	25	50
	5.0ug/mL	5		09/21/11		0	0	10	20	0	0	0	0
	1.0ug/mL	1		09/21/11		10	20	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29313	08/22/11	08-23-11	0	0	0	0	5	5	25	50
EM Science	Methylene Chloride		47186			90	80	90	80	190	90	50	0
					Final Vol.	100	100	100	100	200	100	100	100

PREP DATE:	09-21-11						
SIM 8270 Second Source (5µg/mL)							
Exp:	10-05-11						
				Conc.	Date	CODE:	
Supplier	ID #		Lot #	µg/mL	Code	Exp.Date	µL
	8270D PAH SIM (SS)		170256-28487	200	04/20/11	04-20-12	5
	MeCl2			Lot#47186			195
					Final Volume		200

8270 BN Solution 14-4, 2,000 mg/L, 1 ml

Cat. No: 110391-01
Lot No: 158119
8270BN Solution 14-4
Lot #. 158119 - 28021
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

8270 BN Solution 14-3, 2,000 mg/L, 1 ml

Cat. No: 110392-01
Lot No: 158120
8270BN Solution 14-3
Lot #: 158120 - 28023
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ened: _____

8270 Acid Solution 4-6, 2,000 mg/L, 1 ml

Cat. No: 110393-01
Lot No: 158121
8270B Acid Solution 4-6
Lot #: 158121 - 28025
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ned: _____

TCL Hazardous Substances Solution 2, 2,000 mg/L, 1 ml

Cat. No: 110394-01
Lot No: 158122
TCL Hzd. Soln. 2
Lot #: 158122 - 28018
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

PAH Solution 17-3, 2,000 mg/L, 1 ml

Cat. No: 116070-02
Lot No: 158123
PAH Solution
Lot #: 158123 - 28027
Rec: 12/16/10 MFR exp. 07/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

8270 Acid Solution 13-4, 2,000 mg/L, 1 ml

Cat. No: 110396-01
Lot No: 158124
8270 Acid Solution 13-4
Lot #: 158124 - 28029
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
d: _____

8270 BN Solution 4-21, 2,000 mg/L, 1 ml

O2SI

Cat. No. 110395-01
Lot No: 158125

8270BN Solution 4-21
Lot #: 158125 - 28031
Rec: 12/16/10 MFR exp. 04/17/13

Exp: 4/17/2013
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
pened: _____

exp 10/12/11

8270 11 Compound Custom Mix, 200:2,000 mg/L, 1 ml

O2SI

Cat. No: 110397-01
Lot No: 158127

8270 11 Compound Mix
Lot #: 158127 - 28033
Rec: 12/16/10 MFR exp. 04/12/12

Exp: 4/12/2012
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ened: _____

exp 4/12/12

Atrazine Solution, 1,000 mg/L, 1 ml

O2SI

Cat. No: 010337-01
Lot No: 158126

Atrazine
Lot #: 158126 - 28019
Rec: 12/16/10 MFR exp. 04/12/12

Exp: 4/12/2012
Storage: </= -10 Degrees C
Solvent: Methylene Chloride
For Research Use Only
ed: _____

exp 4/12/12

PREP DATE:	10-11-11					
8270C Second Source Stock Standard						
Exp:	04-12-12					
		Conc.		Date	CODE:	P
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
O2SI	110391-01	2000	158119-28021	10-11-11	04-17-13	1000
O2SI	110392-01	2000	158120-28023	10-11-11	04-17-13	1000
O2SI	110393-01	2000	158121-28025	10-11-11	04-17-13	1000
O2SI	110394-01	2000	158122-28018	10-11-11	04-17-13	1000
O2SI	116070-02	2000	158123-28027	10-11-11	04-17-13	1000
O2SI	110395-01	2000	158125-28031	10-11-11	04-17-13	1000
O2SI	110396-01	2000	158124-28029	10-11-11	04-17-13	1000
O2SI	110397-01	2000	158127-28033	10-11-11	04-12-12	1000
O2SI	010337-01	1000	158126-28019	10-11-11	04-12-12	1000
EM Science	MeCl2		47186			1000
					Final Vol	10000

PREP DATE:	10-11-11												
8270 STANDARD CURVE													
Exp:	10-18-11					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		07/26/11	01-26-12	5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	167802-29313	08/22/11	08-22-12	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47186			190	90	80	60	50	40	20	0
					Final Vol.	200	100	100	100	100	100	100	100

PREP DATE:	10-11-11					
8270 Second Source (SS) 50ug/mL						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/11/11	04-12-12	25
EM Science	Methylene Chloride		47186			75
					Final Vol.	100

GCM-150-1
Lot. CH-2137
Exp 07/31/2013

ULTRA 1 mL

Semi-Volatiles GC/MS Tuning Standard
4 analyte(s) at 1000 µg/mL in dichloromethane
For Lab Use Only
250 Smith St, N o Kingstown, RI 02852 USA

50µg/mL SV Tune Mix
1ml of GCM-150-1 opened 10/11/11 into 19mls EM Science MC Lot-47186
exp 10/11/12

10/18/12

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 methy
ABSOLUTE STANDARD
CLP Semi-Volatiles Base/Neutrals Mix #1
Lot #: 042910 - 28440
Rec: 3/8/11 MFR exp. 4/29/2013

exp 10/18/12

10/18/12

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 m
ABSOLUTE STANDA
Lot #: 042910 - 29085
Rec: 8/4/11 MFR exp. 04/29/13

exp 10/18/12

10/18/12

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 methyle
ABSOLUTE STANDARDS
CLP Semi-Volatiles Base/Neutrals Mix #2
Lot # 073109 - 28446
Rec. 3/8/11 MFR exp. 7/31/2012

exp 7/31/12

10/18/12

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 met
ABSOLUTE STANDAF
CLP Semi-Volatiles Base Neutrals Mix #2
Lot #: 073109 - 29090
Rec: 8/4/11 MFR exp. 07/31/12

exp 7/31/12

10/18/12

Part #: 10004 Laboratory Use Only - See MSDS
Lot #: 101509 Exp: 101514 Storage 4 °C
CLP Semi-Volatiles Toxic Substances #1
4 components
2000 ug/mL in methyl
ABSOLUTE STANDARDS
CLP Semi-Volatiles Toxic Substances #1
Lot #: 101509 - 28453
Rec: 3/8/11 MFR exp. 10/15/201

exp 10/18/12

10/18/12

Part #: 10004 Laboratory Use Only - See MSDS
Lot #: 101509 Exp: 101514 Storage 4 °C
CLP Semi-Volatiles Toxic Substances #1
4 components
2000 ug/mL in metl
ABSOLUTE STANDAR
CLP Semi-Volatiles Toxic Substances #1
Lot #: 101509 - 29095
Rec: 8/4/11 MFR exp. 10/15/14

exp 10/18/12

10/18/12

Part #: 10005 Laboratory Use Only - See MSDS
Lot #: 061209 Exp: 061214 Storage 4 °C
CLP Semi-Volatiles Toxic Substances #2
8 components
2000 ug/mL in methy
ABSOLUTE STANDARD
CLP Semi-Volatiles Toxic Substances #2
Lot #: 061209 - 28458
Rec: 3/8/11 MFR exp. 6/12/2014

exp 10/18/12

10/18/12

Part #: 10005 Laboratory Use Only - See MSDS
Lot #: 121208 Exp: 121213 Storage 4 °C
CLP Semi-Volatiles Toxic Substances #2
8 components
2000 ug/mL in met
ABSOLUTE STANDAR
CLP Semi-Volatiles Toxic Substances #2
Lot #: 121208 - 29100
Rec: 8/4/11 MFR exp. 12/12/13

exp 10/18/12

Part #: 10006
Lot #: 120810
Laboratory Use Only - See MSDS
Exp: 120813 Storage 4 °C
CLP Semi-Volatiles - Benzidines
2 components
2000 ug/mL in methar
ABSOLUTE STANDARDS
CLP Semi-Volatiles - Benzidines
Lot # 120810 - 28462
Rec: 3/8/11 MFR exp. 12/8/2013

exp 10/18/12

Part #: 10006
Lot #: 071211
Laboratory Use Only - See MSDS
Exp: 071214 Storage 4 °C
CLP Semi-Volatiles - Benzidines
2 components
2000 ug/mL in meth
ABSOLUTE STANDAR
Lot #: 071211 - 29105
Rec: 8/4/11 MFR exp. 07/12/14

exp 10/18/12

Part #: 10007
Lot #: 100909
Laboratory Use Only - See MSDS
Exp: 100914 Storage 4 °C
CLP Semi-Volatiles - PAH Standard
17 components
2000 ug/mL in methy
ABSOLUTE STANDAR
CLP Semi-Volatiles - PAH Mix
Lot #: 100909 - 28469
Rec: 3/8/11 MFR exp 10/9/2014

exp 10/18/12

Part #: 10007
Lot #: 100909
Laboratory Use Only - See MSDS
Exp: 100914 Storage 4 °C
CLP Semi-Volatiles - PAH Standard
17 components
2000 ug/mL in meth
ABSOLUTE STANDAR
CLP Semi-Volatiles - PAH Mix
Lot #: 100909 - 29110
Rec: 8/4/11 MFR exp. 10/09/14

exp 10/18/12

Part #: 10018
Lot #: 073109
Laboratory Use Only - See MSDS
Exp: 073114 Storage 4 °C
EPA Method 8270A - Analytes Mix #8
13 components - Pher
2000 ug/mL in methyl
ABSOLUTE STANDARD
CLP Semi-Volatiles Mix #8 - Phenols
Lot # 073109 - 28410
Rec: 3/8/11 MFR exp. 7/31/2014

exp 10/18/12

Part #: 10018
Lot #: 062111
Laboratory Use Only - See MSDS
Exp: 062116 Storage 4 °C
EPA Method 8270A - Analytes Mix #8
13 components - Phr
2000 ug/mL in meth
ABSOLUTE STANDARI
EPA Method 8270A - Analytes Mix #8
Lot #: 062111 - 29115
Rec: 8/4/11 MFR exp. 06/21/16

exp 10/18/12

Part #: 70023
Lot #: 080310
Laboratory Use Only - See MSDS
Exp: 080315 Storage 4 °C
Atrazine
1000 ug/mL in aceto
ABSOLUTE STANDARI
Atrazine
Lot # 080310 - 28416
Rec 3/8/11 MFR exp. 8/13/2015

exp 10/18/12

Part #: 70023
Lot #: 031611
Laboratory Use Only - See MSDS
Exp: 031616 Storage 4 °C
Atrazine
1000 ug/mL in ace
ABSOLUTE STANDA
Atrazine
Lot #: 031611 - 29120
Rec: 8/4/11 MFR exp. 03/16/16

exp 10/18/12

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	120419A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 170745-30370		Surrogate ID 1	8270 SIM Surrogate 177982-29476	
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:	**05/02/12 0:00**	

pH1	2	04/19/12 12:00:00 PM	Water Bath Temp Criteria	80 °C
pH2	14	04/19/12 1:00:00 PM		
pH3				

Spiked By: DL **Date** 04/19/12 **Witnessed By:** DRA **Date** 04/19/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120419A Blk				0.025	1	1000	1	2/1	04/19/12 11:55	
						equip	E-WB7				
2	120419A LCS-1		0.025	1	0.025	1	1000	1	2/1	04/19/12 11:55	
						equip	E-WB7				
3	AY59236 MS-1	AY59236W11	0.025	1	0.025	1	1000	1	2/1	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
4	AY59236 MSD-1	AY59236W13	0.025	1	0.025	1	1000	1	2/1	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
5	AY59236	AY59236W07			0.025	1	1030	1	2/1	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
6	AY59237	AY59237W06			0.025	1	1000	1	2/1	04/19/12 11:55	67525-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				

DRA 4-20-12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501
10N NaOH	03/28/12
1+1 Acid	04/06/12
A. Na2SO4	03/19/12

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	JF
Date	4/20/12
Time	1200
Refrigerator	Hobby

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

Modified	04/19/12 10:24:26 AM

Reviewed By: DRA **Date** 04/20/12

Injection Log

Directory: M:\LINUS\DATA\L120229\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0229L001.D	1	SVTUNE 2-28-12		29 Feb 12 21:31
2	3	0229L003.D	1	0.1ug/ml PAH 02-29-12		1 Mar 12 00:20
3	4	0229L004.D	1	0.2ug/ml PAH		1 Mar 12 00:44
4	5	0229L005.D	1	0.5ug/ml PAH		1 Mar 12 1:09
5	6	0229L006.D	1	1.0ug/ml PAH		1 Mar 12 1:34
6	7	0229L007.D	1	5.0ug/ml PAH		1 Mar 12 1:59
7	8	0229L008.D	1	10ug/ml PAH		1 Mar 12 2:24
8	9	0229L009.D	1	50ug/ml PAH		1 Mar 12 2:49
9	10	0229L010.D	1	100ug/ml PAH		1 Mar 12 3:14
10	11	0229L011.D	1	5.0ug/ml SS PAH 02-29-12		1 Mar 12 3:39
11	1	0422L001.D	1	SVTUNE 2-28-12		22 Apr 12 10:48
12	2	0422L002.D	1	5.0ug/ml PAH 02-29-12		22 Apr 12 11:06
13	9	0422L009.D	1	120419A BLK 1/1000		22 Apr 12 14:07
14	10	0422L010.D	1	120419A LCS-1 1/1000		22 Apr 12 14:33
15	11	0422L011.D	1	AY59236W11 MS-1 1/1000		22 Apr 12 15:00
16	12	0422L012.D	1	AY59236W13 MSD-1 1/1000		22 Apr 12 15:25
17	13	0422L013.D	0.97087	AY59236W07 1/1030		22 Apr 12 15:52
18	14	0422L014.D	1	AY59237W06 1/1000		22 Apr 12 16:18

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

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 3:52:45 PM
GC SC-Blank-REG MDLs

Method Blank
EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	SURROGATE: 1,2-DICHLOROET	105	70-120			%	04/19/12	04/19/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.2	75-120			%	04/19/12	04/19/12
BLANK	SURROGATE: DIBROMOFLUOR	104	85-115			%	04/19/12	04/19/12
BLANK	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 3:52:46 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419AT-LCS	Lab Control Spike	70-120	105		75-120	102	
120419AT-BLK	Blank	70-120	105		75-120	96.2	
AY59238	ES076 TRIP BLANK	70-120	105		75-120	96.8	
AY59236	ES074	70-120	105		75-120	96.6	
AY59237	ES075	70-120	104		75-120	94.1	

Comments: Batch: #86RHB-120419AT

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120419AT-LCS	Lab Control Spike	85-115	108		85-120	98.8	
120419AT-BLK	Blank	85-115	104		85-120	100	
AY59238	ES076 TRIP BLANK	85-115	105		85-120	103	
AY59236	ES074	85-115	106		85-120	98.3	
AY59237	ES075	85-115	105		85-120	97.2	

Comments: Batch: #86RHB-120419AT

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

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	10.1	101	80-130
1,1,1-TRICHLOROETHANE	10.00	9.60	96.0	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.8	108	65-130
1,1,2-TRICHLOROETHANE	10.00	9.92	99.2	75-125
1,1-DICHLOROETHANE	10.00	9.14	91.4	70-135
1,1-DICHLOROETHENE	10.00	9.29	92.9	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.79	97.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.71	97.1	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	11.3	113	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	9.35	93.5	70-120
1,2-DICHLOROETHANE	10.00	9.82	98.2	70-130
1,2-DICHLOROPROPANE	10.00	9.52	95.2	75-125
1,3-DICHLOROBENZENE	10.00	9.15	91.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	20.0	100	70-130
1,4-DICHLOROBENZENE	10.00	9.34	93.4	75-125
2-BUTANONE	10.00	10.1	101	30-150
4-METHYL-2-PENTANONE	10.00	9.58	95.8	60-135
ACETONE	10.00	9.60	96.0	40-140
BENZENE	10.00	9.34	93.4	80-120
BROMODICHLOROMETHANE	10.00	9.61	96.1	75-120
BROMOFORM	10.00	10.8	108	70-130
BROMOMETHANE	10.00	10.1	101	30-145
CARBON TETRACHLORIDE	10.00	9.67	96.7	65-140
CHLOROBENZENE	10.00	9.28	92.8	80-120
CHLORODIBROMOMETHANE	10.00	10.4	104	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	9.64	96.4	65-135
CHLOROMETHANE	10.00	9.78	97.8	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.40	94.0	70-125
ETHYLBENZENE	10.00	8.90	89.0	75-125

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Comments:

Printed: 05/01/12 3:52:37 PM
APPL Standard LCS

Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	338	113	75-125
HEXACHLOROBUTADIENE	10.00	9.29	92.9	50-140
METHYL TERT-BUTYL ETHER	10.00	9.25	92.5	65-125
METHYLENE CHLORIDE	10.00	8.48	84.8	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.58	95.8	45-150
TOLUENE	10.00	9.33	93.3	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.51	95.1	60-140
TRICHLOROETHENE	10.00	8.94	89.4	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	27.5	91.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	29.6	31.2	105	70-120
SURROGATE: 4-BROMOFLUOROBENZE	29.4	30.0	102	75-120
SURROGATE: DIBROMOFLUOROMETH	29.7	32.0	108	85-115
SURROGATE: TOLUENE-D8 (S)	32.0	31.6	98.8	85-120

Comments:

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Printed: 05/01/12 3:52:37 PM
APPL Standard LCS

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67525

Case No: 67525 Date Analyzed: 04/19/12

Matrix: WATER Instrument: Thor

Blank ID: 120419AT-BLK Time Analyzed: 1232

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120419AT-LCS	Lab Control Spike	0419T12	04/19/12 1013
120419AT-BLK	Blank	0419T17	04/19/12 1232
AY59238	ES076 TRIP BLANK	0419T19	04/19/12 1327
AY59236	ES074	0419T32	04/19/12 1928
AY59237	ES075	0419T33	04/19/12 1956

Comments: Batch: #86RHB-120419AT

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67525
Matrix: Water
ID: 5ng BFB 4-10-12

SDG No: 67525
Date Analyzed: 04/19/12
Instrument: Thor
Time Analyzed: 9:23

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		10ug/L Vol Std 04-19	0419T11W.D	04/19/12 9:45
2	Lab Control Spike	120419A LCS-1WT	0419T12W.D	04/19/12 10:13
3	Blank	120419A BLK-1WT	0419T17W.D	04/19/12 12:32
4	ES076 TRIP BLANK	AY59238W02	0419T19W.D	04/19/12 13:27
5	ES074	AY59236W02	0419T32W.D	04/19/12 19:28
6	ES075	AY59237W02	0419T33W.D	04/19/12 19:56
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	14.9 - 40% of mass 95	15.2
75	30 - 60% of mass 95	44.3
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.3
173	0 - 2% of mass 174	0.9
174	50 - 100% of mass 95	97.3
175	5 - 9% of mass 174	6.6
176	95 - 101% of mass 174	97.5
177	5 - 9% of mass 176	6.0

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67525
Matrix: Water
ID: 25ug/ml BFB STD 04-10-12

SDG No: 67525
Date Analyzed: 04/19/12
Instrument: Chico
Time Analyzed: 6:16

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV gas 300ug/L	0419C01W.D	04/19/12 6:48
2	Lab Control Spike	LCS gas 300 ug/L	0419C06W.D	04/19/12 9:52
3	Blank	120419A BLK-1WC	0419C09W.D	04/19/12 11:44
4	ES076 TRIP BLANK	AY59238W01	0419C10W.D	04/19/12 12:21
5	ES074	AY59236W01	0419C12W.D	04/19/12 13:35
6	ES075	AY59237W01	0419C13W.D	04/19/12 14:11
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	19.0
75	30 - 60% of mass 95	43.5
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.4
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	70.4
175	5 - 9% of mass 174	7.2
176	95 - 101% of mass 174	98.1
177	5 - 9% of mass 176	6.6

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 67525

Lab File ID (Standard): 0411T35W.D Date Analyzed: 04/12/12

Instrument ID: Thor Time Analyzed: 0:31

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	482688	6.75	391232	9.89	241024	12.21
	UPPER LIMIT	965376	7.25	782464	10.39	482048	12.71
	LOWER LIMIT	241344	6.25	195616	9.39	120512	11.71
	SAMPLE NO.						
01	10ug/L Vol Std 04-19-12	499136	6.75	420608	9.89	266368	12.21
02	120419A LCS-1WT	439424	6.75	375360	9.89	233344	12.21
03	120419A BLK-1WT	474432	6.75	395840	9.89	232000	12.21
04	AY59238W02	444160	6.75	371456	9.89	216064	12.21
05	AY59236W02	448448	6.75	384640	9.89	216448	12.21
06	AY59237W02	473152	6.75	403456	9.89	223168	12.21
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67525

Lab File ID (Standard): 0125C32W.D Date Analyzed: 01/26/12

Instrument ID: Chico Time Analyzed: 21:24

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	1085220	12.79	1323770	17.98	1382630	22.18
	UPPER LIMIT	2170440	13.29	2647540	18.48	2765260	22.68
	LOWER LIMIT	542610	12.29	661885	17.48	691315	21.68
	SAMPLE NO.						
01	CCV gas 300ug/L	1270200	12.79	1364280	17.99	1270550	22.19
02	LCS gas 300 ug/L	1333750	12.80	1439520	17.98	1368840	22.18
03	120419A BLK-1WC	1323980	12.80	1379510	17.99	1323330	22.19
04	AY59238W01	1255510	12.80	1342600	18.00	1248290	22.18
05	AY59236W01	1323060	12.81	1390830	17.99	1323350	22.19
06	AY59237W01	1298870	12.81	1401470	17.99	1331360	22.19
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

EPA METHOD 8260B
Volatile Organic Compounds
Sample Data

APPL, INC.

EPA 8260B VOCs + Gas Water

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

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

Sample ID: ES074

Sample Collection Date: 04/17/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67525

APPL ID: AY59236

QCG: #86RHB-120419AT-166110

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	04/19/12	04/19/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

J = Estimated value.

Quant Method: TALLW.M
Run #: 0419T32
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES074

APPL ID: AY59236

Sample Collection Date: 04/17/12

QCG: #86RHB-120419AT-166110

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/19/12	04/19/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	TRICHLOROETHENE	0.17 J	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	105	70-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	96.6	75-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	106	85-115			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	98.3	85-120			%	04/19/12	04/19/12

J = Estimated value.

Quant Method: TALLW.M
Run #: 0419T32
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T32W.D Vial: 22
Acq On : 19 Apr 12 19:28 Operator: DG,RS,HW,ARS,SV
Sample : AY59236W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 23 13:53 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	448448	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	384640	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	216448	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	236123	31.57603 ppb	0.00
Spiked Amount 29.720			Recovery = 106.244%		
36) 1,2-DCA-D4(S)	6.34	65	212812	31.20081 ppb	0.00
Spiked Amount 29.608			Recovery = 105.380%		
56) Toluene-D8(S)	8.44	98	806862	31.44105 ppb	0.00
Spiked Amount 31.981			Recovery = 98.313%		
64) 4-Bromofluorobenzene(S)	11.06	95	301520	28.36503 ppb	0.00
Spiked Amount 29.353			Recovery = 96.635%		
Target Compounds					Qvalue
41) TCE	7.16	95	1246	0.17436 ppb	90

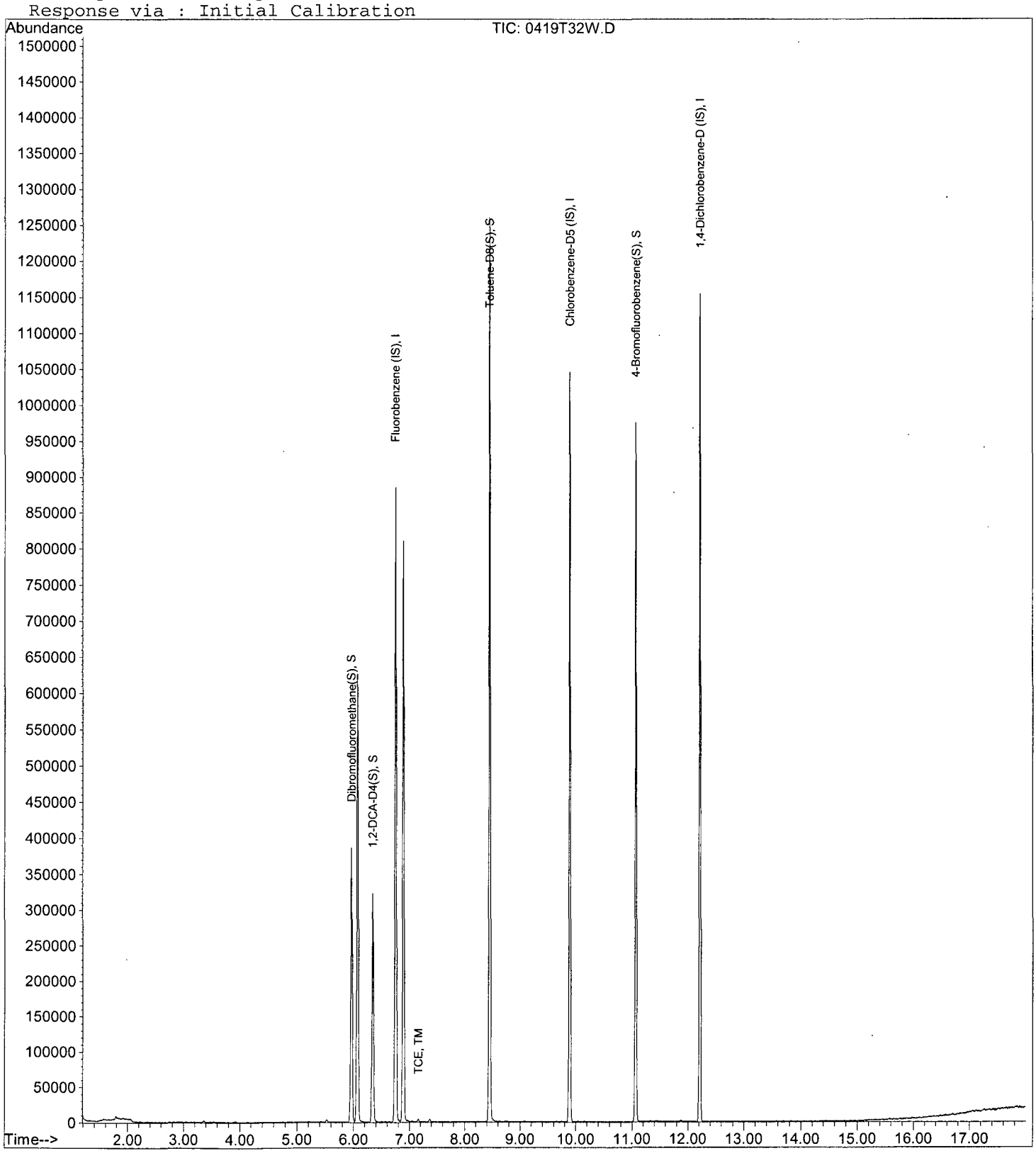
(#) = qualifier out of range (m) = manual integration

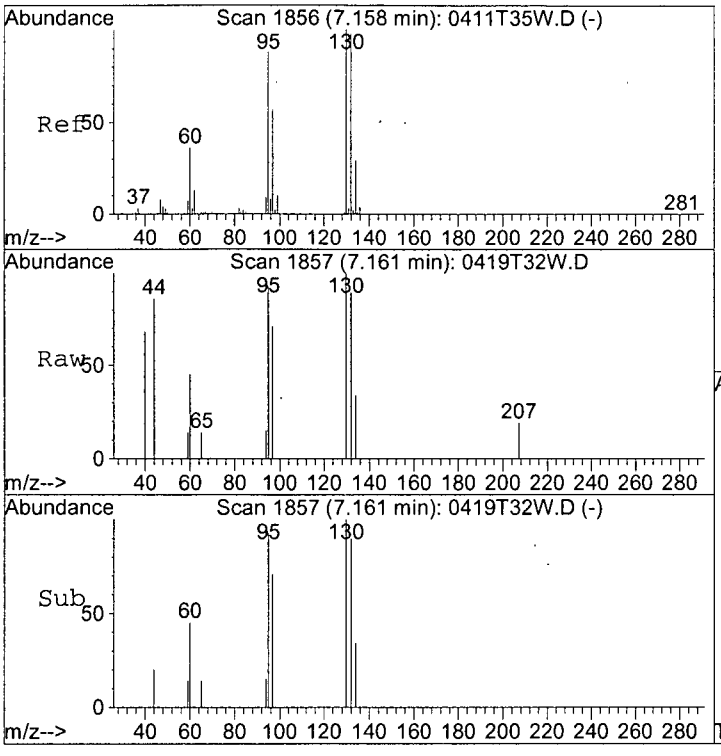
Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T32W.D Vial: 22
Acq On : 19 Apr 12 19:28 Operator: DG,RS,HW,ARS,SV
Sample : AY59236W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 23 13:53 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration

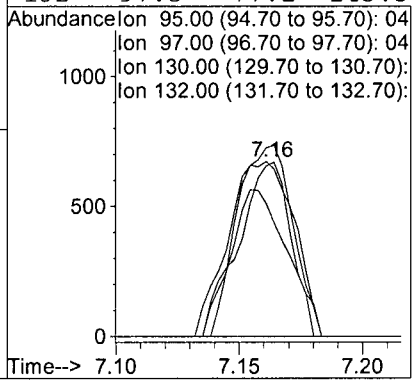




#41
TCE
Concen: 0.17436 ppb
RT: 7.16 min Scan# 1857
Delta R.T. 0.00 min
Lab File: 0419T32W.D
Acq: 19 Apr 12 19:28

Tgt Ion: 95 Resp: 1246

Ion	Ratio	Lower	Upper
95	100		
97	76.2	45.2	84.0
130	107.9	79.1	146.9
132	97.5	77.1	143.3



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C12W.D Vial: 1
Acq On : 19 Apr 12 13:35 Operator: SV
Sample : AY59236W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1323064	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	17.99	TIC	1390830	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1323345	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	25766269m	31.97318	ppb	ND 100

No gasoline pattern detected.

AKS 5/1/12

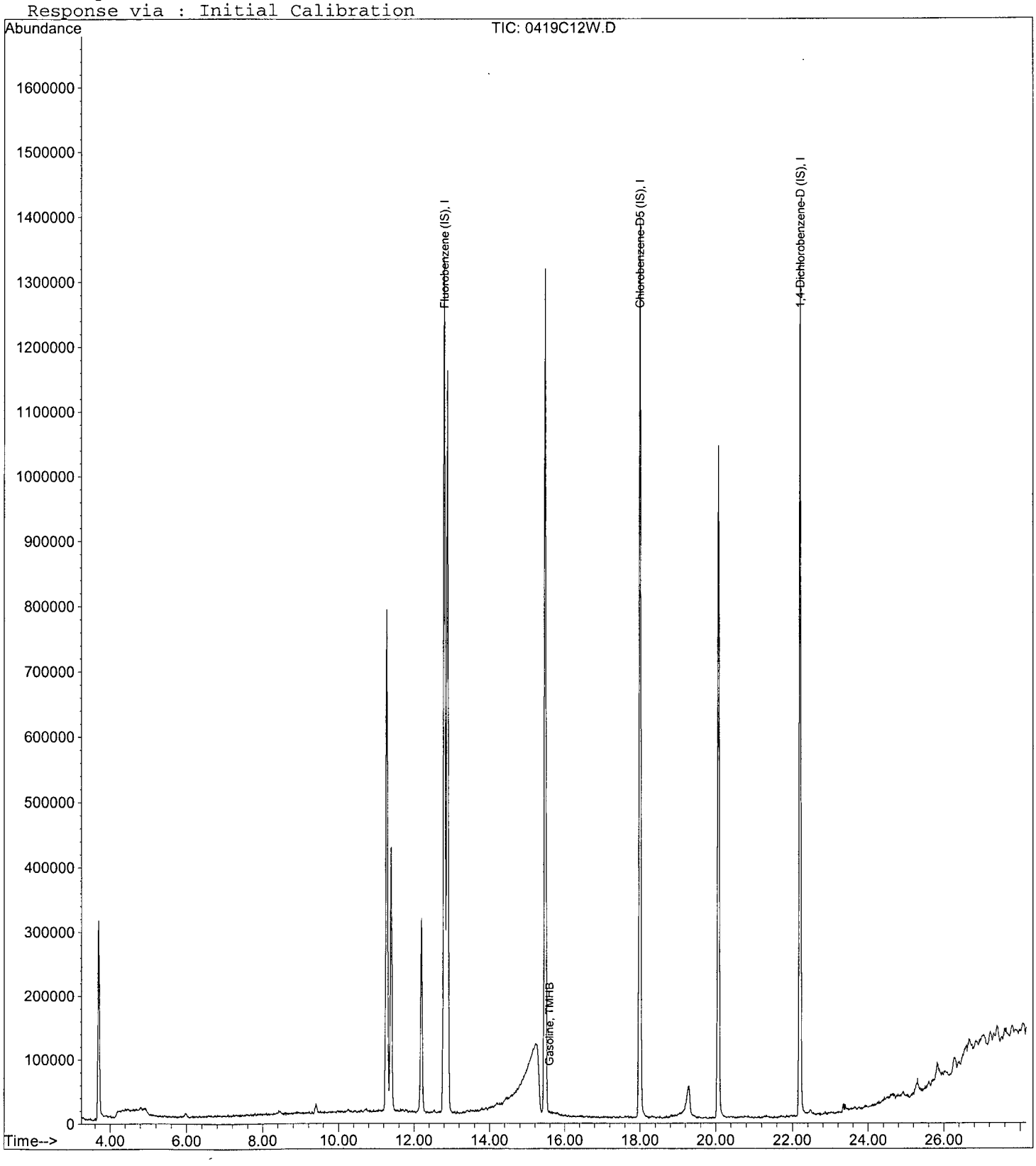
(#) = qualifier out of range (m) = manual integration

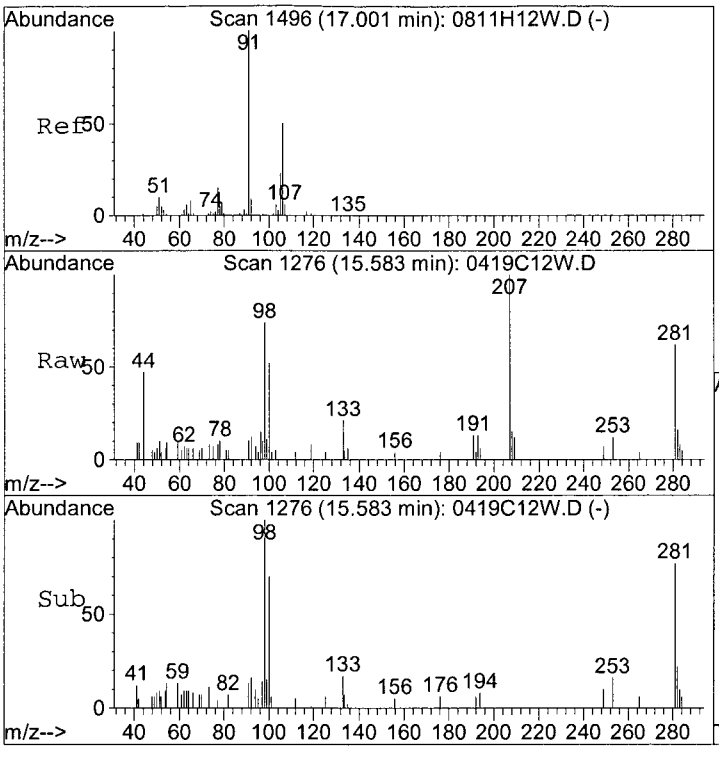
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C12W.D Vial: 1
Acq On : 19 Apr 12 13:35 Operator: SV
Sample : AY59236W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

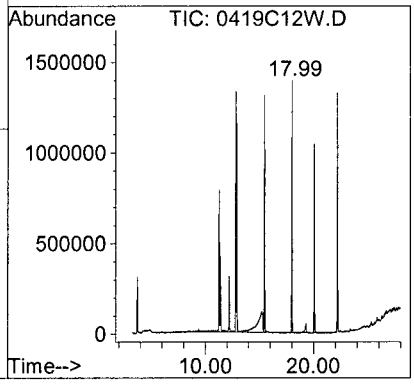
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 31.97318 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0419C12W.D
Acq: 19 Apr 12 13:35

Tgt Ion:TIC Resp:25766269



EPA 8260B VOCs + Gas Water

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

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES075
Sample Collection Date: 04/17/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67525
APPL ID: AY59237
QCG: #86RHB-120419AT-166110

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	04/19/12	04/19/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T33
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES075

APPL ID: AY59237

Sample Collection Date: 04/17/12

QCG: #86RHB-120419AT-166110

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/19/12	04/19/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	104	70-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	94.1	75-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	97.2	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T33
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T33W.D Vial: 23
Acq On : 19 Apr 12 19:56 Operator: DG,RS,HW,ARS,SV
Sample : AY59237W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 23 13:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	473152	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	403456	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	223168	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	245543	31.12133 ppb	0.00
Spiked Amount 29.720			Recovery = 104.713%		
36) 1,2-DCA-D4(S)	6.35	65	220716	30.67009 ppb	0.00
Spiked Amount 29.608			Recovery = 103.587%		
56) Toluene-D8(S)	8.44	98	836915	31.09120 ppb	0.00
Spiked Amount 31.981			Recovery = 97.218%		
64) 4-Bromofluorobenzene(S)	11.06	95	307916	27.61581 ppb	0.00
Spiked Amount 29.353			Recovery = 94.083%		
Target Compounds					Qvalue
81) Tert-Butylbenzene	11.83	119	3418	0.14244 ppb	98

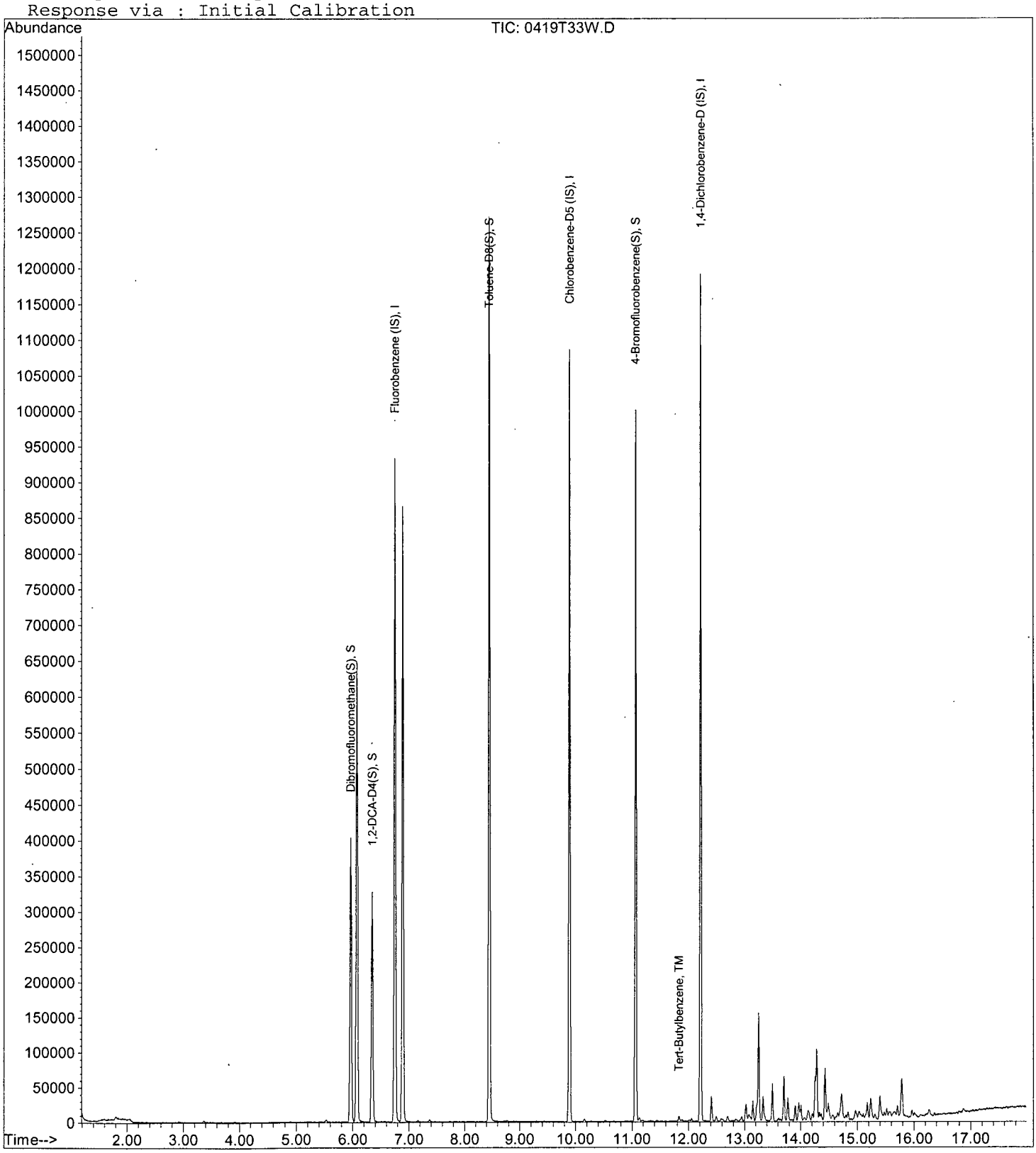
(#) = qualifier out of range (m) = manual integration

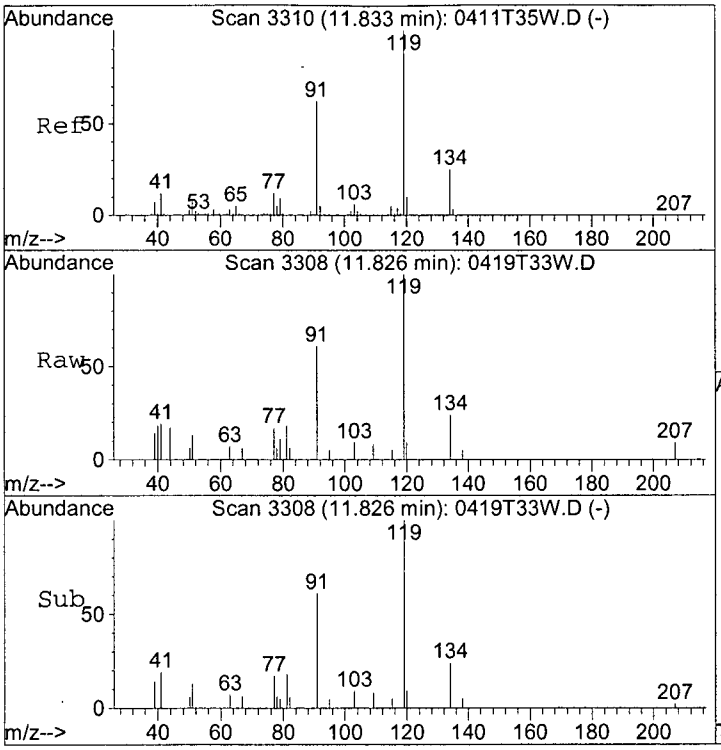
Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T33W.D Vial: 23
Acq On : 19 Apr 12 19:56 Operator: DG,RS,HW,ARS,SV
Sample : AY59237W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 23 13:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration

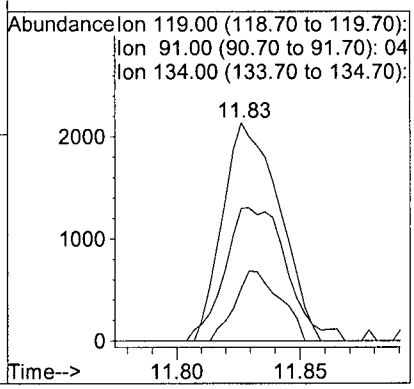




#81
Tert-Butylbenzene
Concen: 0.14244 ppb
RT: 11.83 min Scan# 3308
Delta R.T. -0.01 min
Lab File: 0419T33W.D
Acq: 19 Apr 12 19:56

Tgt Ion:119 Resp: 3418

Ion	Ratio	Lower	Upper
119	100		
91	60.9	43.7	81.1
134	24.2	17.2	31.9



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C13W.D Vial: 1
Acq On : 19 Apr 12 14:11 Operator: SV
Sample : AY59237W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.81	TIC	1298865	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	17.99	TIC	1401472	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1331362	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	25527306m	34.03117	ppb	ND 100

No gasoline pattern detected.
ARS 5/1/12

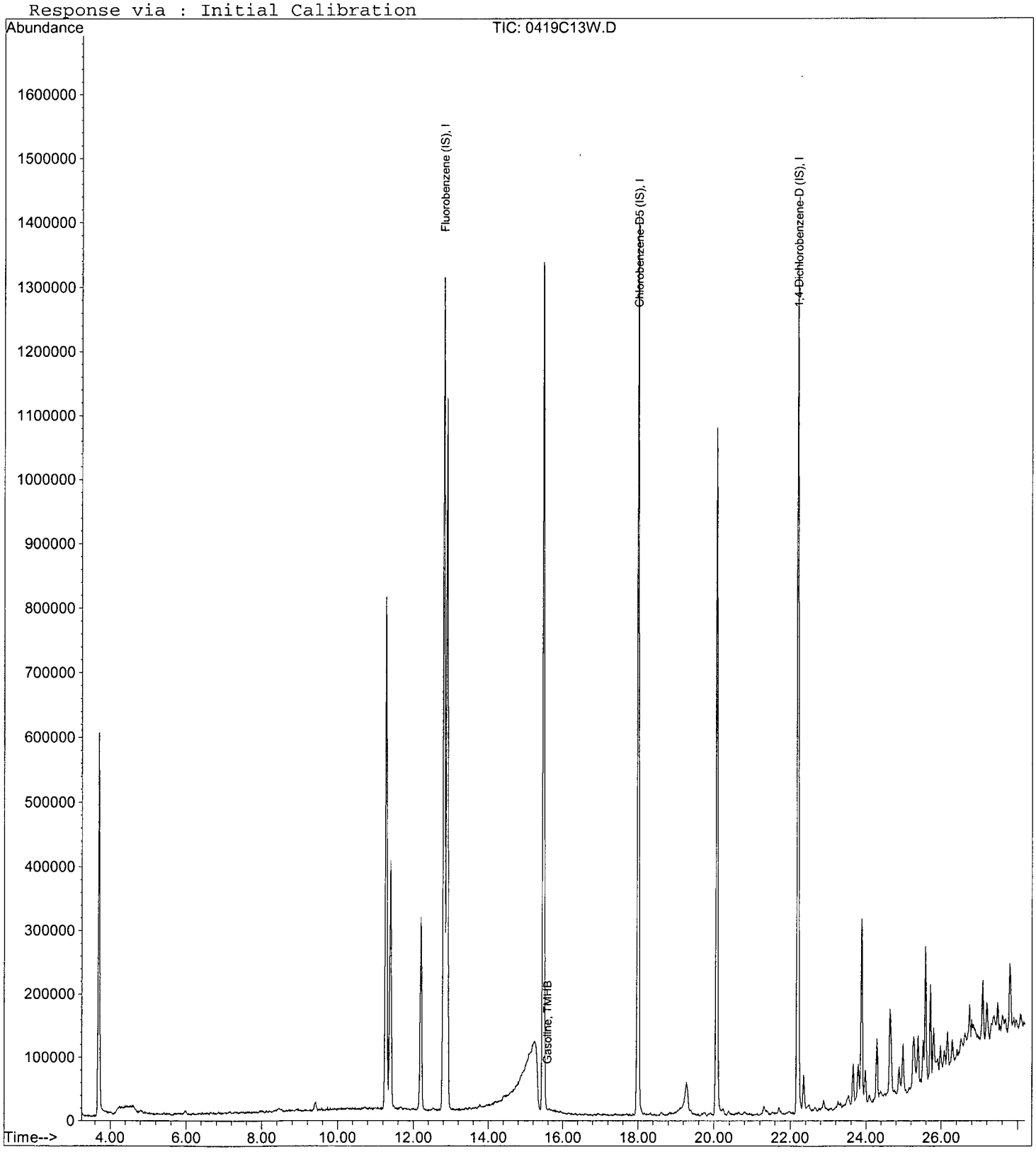
(#) = qualifier out of range (m) = manual integration

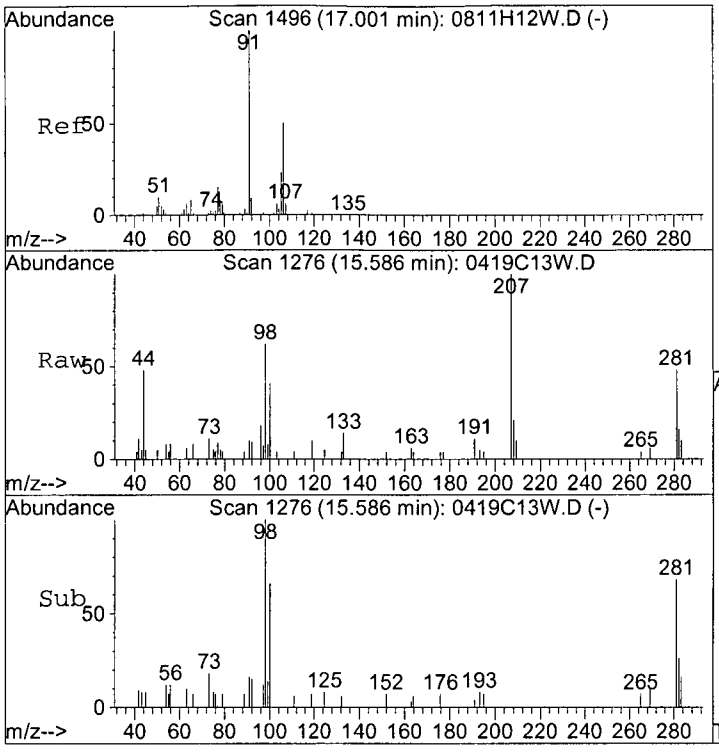
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C13W.D Vial: 1
Acq On : 19 Apr 12 14:11 Operator: SV
Sample : AY59237W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

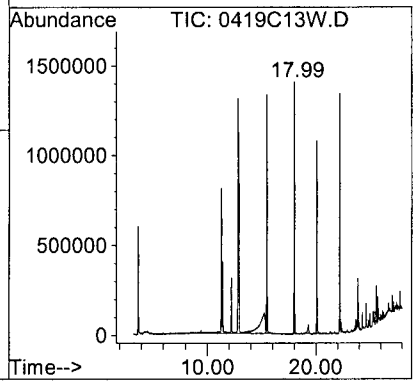
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 34.03117 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0419C13W.D
Acq: 19 Apr 12 14:11

Tgt Ion:TIC Resp:25527306



EPA 8260B VOCs + Gas Water

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

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

Sample ID: ES076 TRIP BLANK

Sample Collection Date: 04/17/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67525

APPL ID: AY59238

QCG: #86RHB-120419AT-166110

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	04/19/12	04/19/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T19
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES076 TRIP BLANK

APPL ID: AY59238

Sample Collection Date: 04/17/12

QCG: #86RHB-120419AT-166110

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/19/12	04/19/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	105	70-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	96.8	75-120			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	04/19/12	04/19/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	103	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T19
Instrument: Thor
Sequence: T120411
Dilution Factor: 1
Initials: DG

Printed: 05/01/12 3:53:11 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T19W.D Vial: 9
Acq On : 19 Apr 12 13:27 Operator: DG,RS,HW,ARS,SV
Sample : AY59238W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:38 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	444160	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	371456	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	216064	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	231422	31.24615 ppb	0.00
Spiked Amount 29.720			Recovery = 105.133%		
36) 1,2-DCA-D4(S)	6.34	65	209045	30.94441 ppb	0.00
Spiked Amount 29.608			Recovery = 104.512%		
56) Toluene-D8(S)	8.44	98	814316	32.85775 ppb	0.00
Spiked Amount 31.981			Recovery = 102.744%		
64) 4-Bromofluorobenzene(S)	11.06	95	291529	28.39854 ppb	0.00
Spiked Amount 29.353			Recovery = 96.751%		

Target Compounds Qvalue

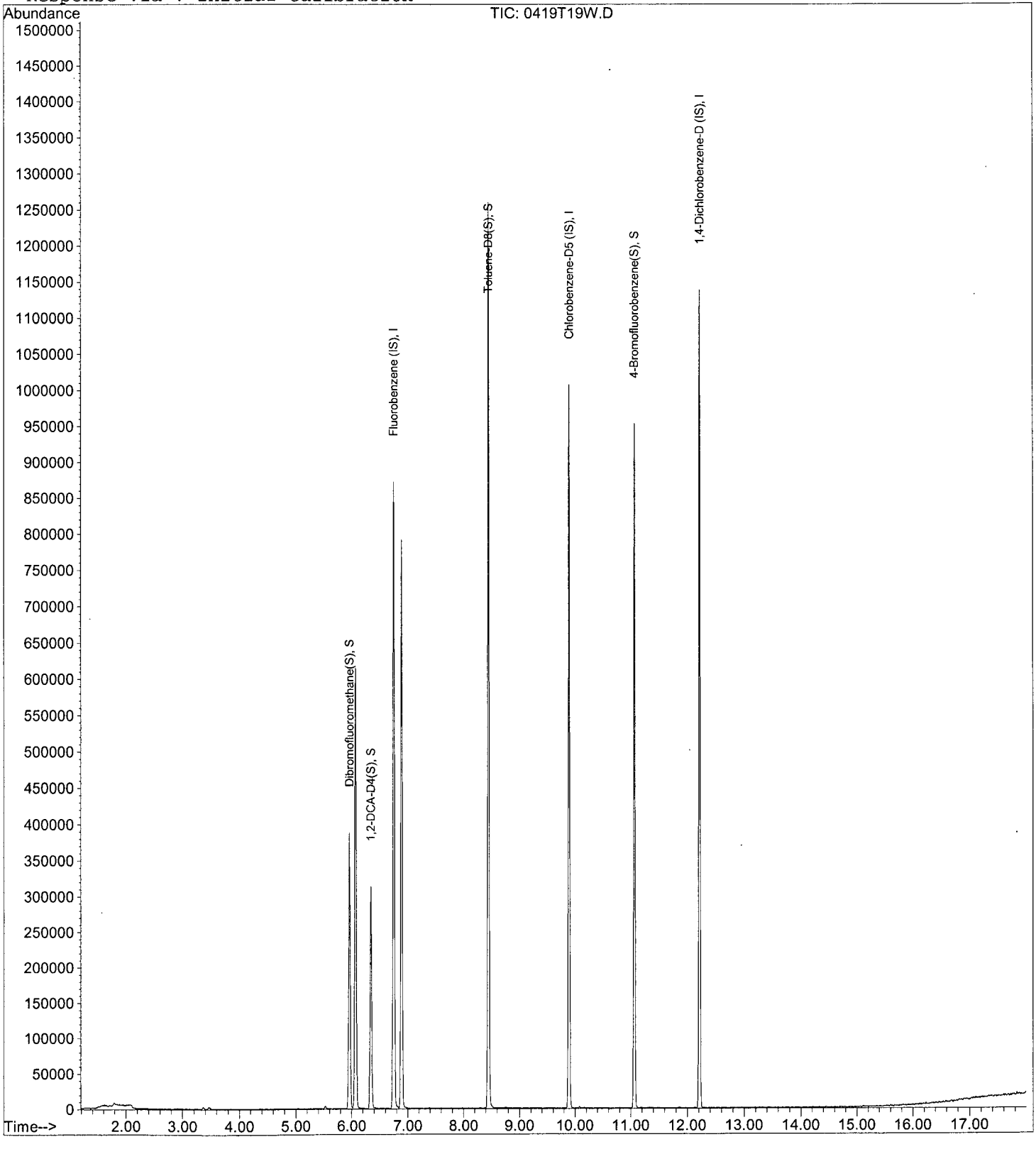
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T19W.D Vial: 9
Acq On : 19 Apr 12 13:27 Operator: DG,RS,HW,ARS,SV
Sample : AY59238W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:38 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C10W.D Vial: 1
Acq On : 19 Apr 12 12:21 Operator: SV
Sample : AY59238W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1255513	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.00	TIC	1342598	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1248287	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24337982m	30.93982	ppb ND	100

No gasoline pattern detected.
ARS 5/1/12

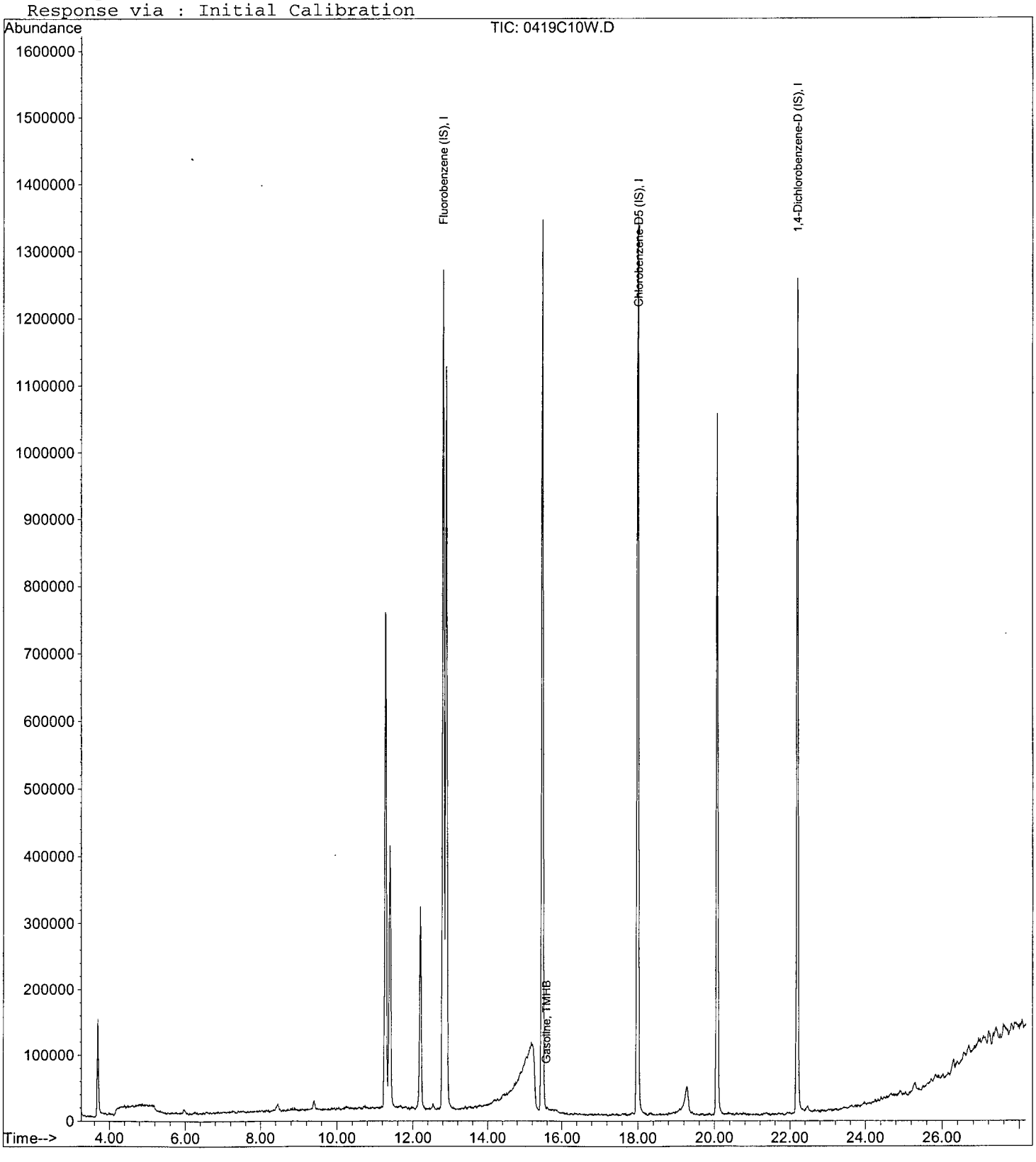
(#) = qualifier out of range (m) = manual integration

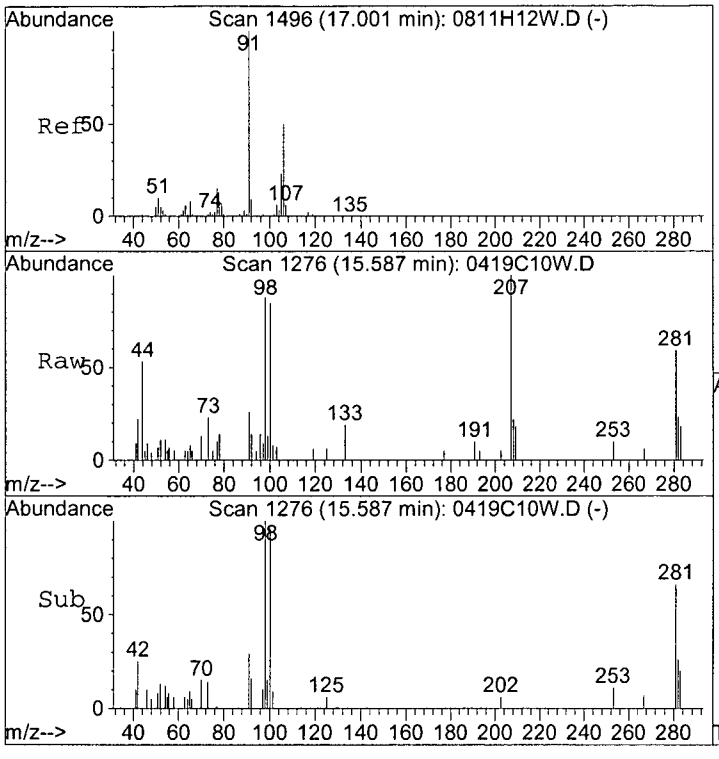
Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C10W.D Vial: 1
Acq On : 19 Apr 12 12:21 Operator: SV
Sample : AY59238W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

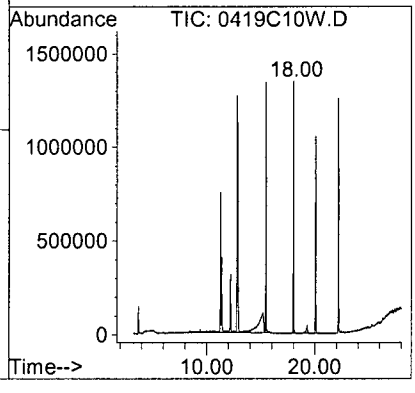
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 30.93982 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0419C10W.D
Acq: 19 Apr 12 12:21

Tgt Ion:TIC Resp:24337982



EPA METHOD 8260B
Volatile Organic Compounds
Calibration Data

APPL, INC.

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67525
Case No: 67525 Initial Cal. Date: 04/11/12
Matrix: Water Instrument: Thor
Initials:

			0411T32W.D	0411T33W.D	0411T34W.D	0411T35W.D	0411T36W.D	0411T37W.D	0411T38W.D								
		Compound	0.5	1	5	10	20	40	100				Avg	%RSD			r^2
1	I	Fluorobenzene (IS)															
2	TM	Dichlorodifluoromethane	0.2309	0.2909	0.2778	0.2827	0.3270	0.3248	0.3733				0.30	15	TM		
3	TM	Freon 114	0.1911	0.2083	0.2029	0.2216	0.2222	0.2240	0.2507				0.22	8.8	TM		
4	TM**L	Chloromethane	0.3719	0.3569	0.2650	0.2533	0.2786	0.3012					0.30	16	TM**L	✓	0.997
5	TM*	Vinyl chloride	0.4209	0.4826	0.4792	0.4855	0.4827	0.4720	0.5187				0.48	6.1	TM*	✓	
6	TM	Bromomethane	0.3723	0.3757	0.3369	0.3151	0.3123	0.3213	0.3670				0.34	8.2	TM		
7	TM	Chloroethane	0.2756	0.2503	0.2573	0.2603	0.2700	0.2595	0.2855				0.27	4.6	TM		
8	TMQ	Dichlorofluoromethane	0.0230	0.0255	0.0376	0.0582	0.0760	0.1135	0.2111				0.08	86	TMQ	1.00	
9	TMQ	Trichlorofluoromethane	0.1019	0.1372	0.1436	0.1533	0.1750	0.1937	0.2601				0.17	30	TMQ	1.00	
10	TM	Acrolein	0.0226	0.0230	0.0248	0.0255	0.0306						0.03	13	TM		
11	TML	Acetone	0.2098	0.1537	0.0859	0.0809	0.0850	0.0794	0.0726				0.11	47	TML	0.999	
12	TM	Freon-113	0.2494	0.2244	0.2234	0.2582	0.2625	0.2556	0.2888				0.25	9.0	TM		
13	TM*	1,1-DCE	0.4387	0.4078	0.4046	0.4051	0.4074	0.4095	0.4607				0.42	5.2	TM*	✓	
14	TMQ	t-Butanol	0.0058	0.0060	0.0063	0.0063	0.0076	0.0086					0.01	16	TMQ	0.995	
15	TML	Methyl Acetate	0.5902	0.5159	0.2542	0.2337	0.2237	0.2121	0.2247				0.32	50	TML	0.999	
16	TM	Iodomethane	0.4180	0.4193	0.4690	0.4478	0.4357	0.4319	0.4782				0.44	5.3	TM		
17	TM	Acrylonitrile	0.0594	0.0643	0.0722	0.0708	0.0697	0.0714	0.0756				0.07	7.9	TM		
18	TM	Methylene chloride	0.1717	0.1526	0.1309	0.1236	0.1225	0.1181	0.1270				0.14	15	TM		
19	TM	Carbon disulfide	0.1374	0.1486	0.1454	0.1516	0.1485	0.1417	0.1565				0.15	4.3	TM		
20	TM	Methyl t-butyl ether (MtBE)	0.4998	0.4459	0.4749	0.4641	0.4492	0.4372	0.4466				0.46	4.7	TM		
21	TM	Trans-1,2-DCE	0.2848	0.2606	0.2919	0.2875	0.2793	0.2752	0.3009				0.28	4.6	TM		
22	TM	Diisopropyl Ether	0.1209	0.1193	0.1231	0.1207	0.1214	0.1201	0.1319				0.12	3.5	TM		
23	TM**	1,1-DCA	0.6265	0.6498	0.6196	0.6123	0.5982	0.5923	0.6445				0.62	3.5	TM**	✓	
24	TM	Vinyl Acetate	0.3180	0.3007	0.2958	0.2984	0.2969	0.3028	0.3234				0.31	3.6	TM		
25	TM	Ethyl tert Butyl Ether	0.6630	0.6687	0.6392	0.6345	0.6206	0.6075	0.6024				0.63	4.1	TM		
26	TML	MEK (2-Butanone)	0.1667	0.1616	0.1122	0.1049	0.1041	0.0998	0.1046				0.12	24	TML	1.000	
27	TM	Cis-1,2-DCE	0.4243	0.4140	0.4186	0.4026	0.4022	0.3916	0.4293				0.41	3.3	TM		
28	TM	2,2-Dichloropropane	0.2369	0.2375	0.2410	0.2370	0.2306	0.2271	0.2342				0.23	2.0	TM		
29	TM*	Chloroform	0.7088	0.7099	0.6763	0.6684	0.6560	0.6576	0.7058				0.68	3.6	TM*	✓	
30	TM	Bromochloromethane	0.1920	0.2069	0.1944	0.1938	0.1937	0.1938	0.2048				0.20	3.1	TM		
31	S	Dibromofluoromethane(S)	0.4216	0.4394	0.4062	0.3950	0.4143	0.4069	0.4346				0.42	3.8	S		
32	TM	1,1,1-TCA	0.4508	0.4458	0.4445	0.4358	0.4439	0.4414	0.4825				0.45	3.4	TM		
33	TM	Cyclohexane	0.1713	0.1745	0.1519	0.1605	0.1588	0.1692	0.1836				0.17	6.4	TM		
34	TM	1,1-Dichloropropene	0.4053	0.4150	0.3747	0.3822	0.3797	0.3827	0.4269				0.40	5.1	TM		
35	TM	2,2,4-Trimethylpentane	0.4929	0.4881	0.4614	0.5344	0.5122	0.5460	0.6255				0.52	10	TM		

ABS 4/12/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67525
Case No: 67525 Initial Cal. Date: 04/11/12
Matrix: Water Instrument: Thor Initials: _____

		Compound	0.5	1	5	10	20	40	100				Avg	%RSD		r²
36	S	1,2-DCA-D4(S)	0.4021	0.3921	0.3878	0.3648	0.3689	0.3637	0.3823				0.38	3.9	S	
37	TM	Carbon Tetrachloride	0.4284	0.4469	0.4076	0.4245	0.4302	0.4421	0.4956				0.44	6.3	TM	
38	TM	Tert Amyl Methyl Ether	0.7212	0.7513	0.7043	0.6886	0.6845	0.6709	0.6717				0.70	4.2	TM	
39	TM	1,2-DCA	0.4508	0.4302	0.4449	0.4378	0.4296	0.4149	0.4456				0.44	2.8	TM	
40	TM	Benzene	1.468	1.441	1.393	1.390	1.358	1.344	1.464				1.4	3.5	TM	
41	TM	TCE	0.4278	0.4235	0.3949	0.3868	0.3765	0.3714	0.4077				0.40	5.6	TM	
42	TM	2-Pentanone	0.1774	0.1766	0.1757	0.1736	0.1778	0.1785	0.1876				0.18	2.5	TM	
43	TM*	1,2-Dichloropropane	0.4530	0.4039	0.4191	0.4200	0.4038	0.3992	0.4305				0.42	4.5	TM*	✓
44	TM	Bromodichloromethane	0.5255	0.5098	0.5199	0.5034	0.5066	0.5028	0.5548				0.52	3.6	TM	
45	TM	Methyl Cyclohexane	0.3136	0.3328	0.2986	0.3321	0.3295	0.3450	0.3883				0.33	8.4	TM	
46	TM	Dibromomethane	0.2157	0.2295	0.2255	0.2173	0.2208	0.2110	0.2283				0.22	3.1	TM	
47	TML	2-Chloroethyl vinyl ether													TML	
48	TM	MIBK (methyl isobutyl ketone	0.1441	0.1503	0.1319	0.1304	0.1278	0.1264	0.1369				0.14	6.6	TM	
49	TM	1-Bromo-2-chloroethane	0.2817	0.3012	0.2766	0.2633	0.2557	0.2585	0.2757				0.27	5.8	TM	
50	TM	Cis-1,3-Dichloropropene	0.5068	0.5408	0.5454	0.5355	0.5504	0.5560	0.6255				0.55	6.6	TM	
51	TM*	Toluene	1.720	1.706	1.588	1.620	1.583	1.593	1.755				1.7	4.4	TM*	✓
52	TM	Trans-1,3-Dichloropropene	0.4049	0.4580	0.4580	0.4572	0.4572	0.4735	0.5274				0.46	7.8	TM	
53	TM	1,1,2-TCA	0.3339	0.2861	0.3058	0.2880	0.2757	0.2754	0.2979				0.29	7.0	TM	
54	TM	2-Hexanone	0.1688	0.1443	0.1515	0.1473	0.1494	0.1449	0.1561				0.15	5.6	TM	
55	I	Chlorobenzene-D5 (IS)														
56	S	Toluene-D8(S)	1.700	1.637	1.626	1.643	1.691	1.645	1.734				1.7	2.4	S	
57	TM	1,2-EDB	0.3430	0.3529	0.3888	0.3881	0.3804	0.3681	0.3953				0.37	5.3	TM	
58	TM	Tetrachloroethene	0.5441	0.5656	0.5108	0.5439	0.5075	0.4983	0.5506				0.53	4.8	TM	
59	TM	1-Chlorohexane	0.6397	0.5987	0.4930	0.5409	0.5279	0.5290	0.6110				0.56	9.5	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5054	0.4801	0.4963	0.5086	0.4944	0.4901	0.5458				0.50	4.2	TM	
61	TM	m&p-Xylene	0.8051	0.8242	0.8245	0.8858	0.8623	0.8617	0.9654				0.86	6.2	TM	
62	TM	o-Xylene	0.8295	0.7829	0.8351	0.8760	0.8568	0.8530	0.9571				0.86	6.2	TM	
63	TM	Styrene	1.258	1.332	1.368	1.462	1.475	1.489	1.684				1.4	9.6	TM	
64	S	4-Bromofluorobenzene(S)	0.7053	0.6824	0.6818	0.6834	0.6802	0.6767	0.7265				0.69	2.6	S	
65	TM	1,3-Dichloropropane	0.6519	0.7194	0.6736	0.6904	0.6435	0.6242	0.6670				0.67	4.7	TM	
66	TM	Dibromochloromethane	0.4218	0.5036	0.4719	0.4912	0.4718	0.4665	0.5172				0.48	6.5	TM	
67	TM**	Chlorobenzene	1.504	1.429	1.414	1.423	1.384	1.359	1.479				1.4	3.5	TM**	✓
68	TM*	Ethylbenzene	2.106	2.245	2.141	2.264	2.223	2.192	2.451				2.2	5.0	TM*	✓
69	TM**	Bromoform	0.3092	0.3060	0.3219	0.3251	0.3119	0.3097	0.3457				0.32	4.4	TM**	✓
70	I	1,4-Dichlorobenzene-D (IS)														

ARS 4/12/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: _____
Case No: _____ Initial Cal. Date: 04/11/12
Matrix: _____ Instrument: Thor Initials: _____

		Compound	0.5	1	5	10	20	40	100				Avg	%RSD		r^2
71	TM	Isopropylbenzene	3.479	3.282	3.341	3.477	3.449	3.541	3.887				3.5	5.6	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7759	0.7724	0.7668	0.7661	0.7397	0.7231	0.7614				0.76	2.5	TM**	
73	TM	1,2,3-Trichloropropane	0.2963	0.2617	0.2395	0.2271	0.2221	0.2142	0.2241				0.24	12	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1536	0.1300	0.1442	0.1395	0.1490	0.1451	0.1583				0.15	6.4	TM	
75	TM	Bromobenzene	1.155	1.195	1.125	1.104	1.077	1.068	1.146				1.1	4.0	TM	
76	TM	n-Propylbenzene	4.017	4.073	4.008	4.316	4.290	4.348	4.749				4.3	6.1	TM	
77	TM	4-Ethyltoluene	2.188	2.281	2.303	2.485	2.490	2.521	2.756				2.4	7.8	TM	
78	TM	2-Chlorotoluene	2.844	2.916	2.872	2.987	2.918	2.926	3.163				2.9	3.6	TM	
79	TM	1,3,5-Trimethylbenzene	2.790	2.875	2.959	3.182	3.153	3.219	3.516				3.1	7.9	TM	
80	TM	4-Chlorotoluene	2.954	3.035	2.983	3.156	3.069	3.052	3.332				3.1	4.1	TM	
81	TM	Tert-Butylbenzene	2.518	2.491	2.562	2.729	2.716	2.744	3.057				2.7	7.2	TM	
82	TM	1,2,4-Trimethylbenzene	2.871	2.852	2.966	3.180	3.241	3.254	3.580				3.1	8.3	TM	
83	TM	Sec-Butylbenzene	3.386	3.406	3.494	3.800	3.749	3.806	4.215				3.7	7.9	TM	
84	TM	p-Isopropyltoluene	2.974	2.992	2.997	3.239	3.226	3.312	3.685				3.2	7.9	TM	
85	TM	Benzyl Chloride	0.9420	0.8639	0.9337	0.9225	0.8974	0.9146	1.036				0.93	5.7	TM	
86	TM	1,3-DCB	2.455	2.277	2.159	2.141	2.069	2.052	2.215				2.2	6.3	TM	
87	TM	1,4-DCB	2.340	2.303	2.139	2.171	2.103	2.086	2.236				2.2	4.5	TM	
88	TM	n-Butylbenzene	2.603	2.514	2.581	2.773	2.728	2.796	3.128				2.7	7.5	TM	
89	TM	1,2-DCB	2.134	2.115	2.002	2.008	1.950	1.926	2.067				2.0	3.9	TM	
90	TM	Hexachloroethane	0.5614	0.6116	0.5473	0.5591	0.5427	0.5488	0.6158				0.57	5.4	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.1281	0.1312	0.1543	0.1546	0.1544	0.1544	0.1677				0.15	9.6	TM	
92	TM	1,2,4-Trichlorobenzene	0.8308	0.8423	0.8413	0.8685	0.8343	0.8735	1.002				0.87	6.9	TM	
93	TM	Hexachlorobutadiene	0.3971	0.4265	0.3512	0.3571	0.3442	0.3465	0.3852				0.37	8.4	TM	
94	TM	Naphthalene	2.035	2.001	2.162	2.258	2.297	2.424	2.755				2.3	11	TM	
95	TM	1,2,3-Trichlorobenzene	1.232	1.175	1.194	1.233	1.194	1.222	1.352				1.2	4.8	TM	
96																
97																
98																
99																
100																
101																
102																
103																
104																
105																

ARS 4/12/12

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T32W.D Vial: 32
Acq On : 11 Apr 12 23:07 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	467648	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	388928	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	215808	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	7887	1.01140 ppb		0.00
Spiked Amount 29.720			Recovery = 3.402%			
36) 1,2-DCA-D4(S)	6.35	65	7521	1.05740 ppb		0.00
Spiked Amount 29.608			Recovery = 3.570%			
56) Toluene-D8(S)	8.44	98	26440	1.01893 ppb		0.00
Spiked Amount 31.981			Recovery = 3.186%			
64) 4-Bromofluorobenzene(S)	11.06	95	10973	1.02089 ppb		0.00
Spiked Amount 29.353			Recovery = 3.478%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.31	85	2160	0.38355 ppb		88
3) Freon 114	1.42	85	1787	0.43971 ppb		97
4) Chloromethane	1.46	50	3478	1.12685 ppb		96
5) Vinyl chloride	1.57	62	3937	0.44088 ppb	#	75
6) Bromomethane	1.88	94	3482	0.54280 ppb		99
7) Chloroethane	1.99	64	2578	0.51906 ppb		93
8) Dichlorofluoromethane	2.20	67	215	1.25275 ppb	#	1
9) Trichlorofluoromethane	2.25	101	953	0.58228 ppb		86
10) Acrolein	2.71	55	10580	22.34973 ppb		81
11) Acetone	2.91	43	1962	-0.33137 ppb		98
12) Freon-113	2.87	101	2333	0.49541 ppb		85
13) 1,1-DCE	2.84	61	4103	0.52336 ppb		87
14) t-Butanol	3.71	59	2728	10.66835 ppb		94
15) Methyl Acetate	3.37	43	5520	0.86723 ppb		96
16) Iodomethane	3.00	142	3910	0.47201 ppb		95
17) Acrylonitrile	3.83	52	556	0.43032 ppb	#	54
18) Methylene chloride	3.47	84	1606	0.63493 ppb		91
19) Carbon disulfide	3.07	76	1285	0.46702 ppb		100
20) Methyl t-butyl ether (MtBE	3.93	73	4675	0.54371 ppb	#	90
21) Trans-1,2-DCE	3.88	96	2664	0.50341 ppb		87
22) Diisopropyl Ether	4.73	59	1131	0.49357 ppb		91
23) 1,1-DCA	4.53	63	5860	0.50489 ppb	#	94
24) Vinyl Acetate	4.73	87	2974	0.52102 ppb		88
25) Ethyl tert Butyl Ether	5.23	59	6201	0.52312 ppb		100
26) MEK (2-Butanone)	5.41	43	1559	0.71736 ppb		97
27) Cis-1,2-DCE	5.34	96	3968	0.51514 ppb		95
28) 2,2-Dichloropropane	5.33	77	2216	0.50429 ppb	#	79
29) Chloroform	5.77	83	6629	0.51867 ppb		92
30) Bromochloromethane	5.64	128	1796	0.48720 ppb		94
32) 1,1,1-TCA	5.97	97	4216	0.50172 ppb		91
33) Cyclohexane	6.05	41	1602	0.51252 ppb	#	1
34) 1,1-Dichloropropene	6.18	75	3791	0.51281 ppb		92
35) 2,2,4-Trimethylpentane	6.57	57	4610	0.47127 ppb	#	58
37) Carbon Tetrachloride	6.18	117	4007	0.48758 ppb		77
38) Tert Amyl Methyl Ether	6.60	73	6745	0.51592 ppb		92
39) 1,2-DCA	6.43	62	4216	0.51662 ppb		100
40) Benzene	6.41	78	13727	0.52105 ppb		96
41) TCE	7.16	95	4001	0.53690 ppb		96
42) 2-Pentanone	7.38	43	82943	24.88519 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T32W.D Vial: 32
Acq On : 11 Apr 12 23:07 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.38	63	4237	0.54122	ppb	#	92
44)	Bromodichloromethane	7.69	83	4915	0.50769	ppb		98
45)	Methyl Cyclohexane	7.37	83	2933	0.46905	ppb		73
46)	Dibromomethane	7.51	93	2017	0.48755	ppb		81
48)	MIBK (methyl isobutyl ket	8.35	43	1348	0.53214	ppb	#	88
49)	1-Bromo-2-chloroethane	8.00	63	2635	0.51553	ppb		98
50)	Cis-1,3-Dichloropropene	8.16	75	4740	0.45949	ppb		98
51)	Toluene	8.51	91	16087	0.52051	ppb		99
52)	Trans-1,3-Dichloropropene	8.74	75	3787	0.43790	ppb	#	79
53)	1,1,2-TCA	8.92	83	3123	0.56655	ppb	#	76
54)	2-Hexanone	9.20	43	1579	0.55625	ppb	#	96
57)	1,2-EDB	9.41	107	2668	0.45878	ppb		94
58)	Tetrachloroethene	9.08	166	4232	0.51177	ppb		87
59)	1-Chlorohexane	9.91	91	4976	0.56824	ppb	#	77
60)	1,1,1,2-Tetrachloroethane	10.00	131	3931	0.50240	ppb		95
61)	m&p-Xylene	10.16	106	12525	0.93474	ppb		99
62)	o-Xylene	10.55	106	6452	0.48464	ppb		96
63)	Styrene	10.56	104	9786	0.43736	ppb		99
65)	1,3-Dichloropropane	9.08	76	5071	0.48857	ppb		99
66)	Dibromochloromethane	9.31	129	3281	0.44147	ppb		81
67)	Chlorobenzene	9.92	112	11696	0.52670	ppb		91
68)	Ethylbenzene	10.04	91	16379	0.47176	ppb		100
69)	Bromoform	10.73	173	2405	0.48539	ppb	#	79
71)	Isopropylbenzene	10.92	105	15018	0.49794	ppb		97
72)	1,1,2,2-Tetrachloroethane	11.20	83	3349	0.51189	ppb	#	83
73)	1,2,3-Trichloropropane	11.24	110	1279	0.61554	ppb	#	64
74)	t-1,4-Dichloro-2-Butene	11.26	53	663	0.52725	ppb		88
75)	Bromobenzene	11.21	156	4985	0.51367	ppb		79
76)	n-Propylbenzene	11.33	91	17337	0.47175	ppb		99
77)	4-Ethyltoluene	11.45	105	9445	0.44989	ppb		92
78)	2-Chlorotoluene	11.41	91	12275	0.48259	ppb		97
79)	1,3,5-Trimethylbenzene	11.51	105	12044	0.45019	ppb		92
80)	4-Chlorotoluene	11.51	91	12751	0.47910	ppb		99
81)	Tert-Butylbenzene	11.83	119	10870	0.46843	ppb		96
82)	1,2,4-Trimethylbenzene	11.88	105	12392	0.45791	ppb		94
83)	Sec-Butylbenzene	12.05	105	14613	0.45831	ppb		92
84)	p-Isopropyltoluene	12.20	119	12836	0.46416	ppb		93
85)	Benzyl Chloride	12.37	91	4066	0.50646	ppb		93
86)	1,3-DCB	12.15	146	10595	0.55906	ppb		84
87)	1,4-DCB	12.24	146	10098	0.53248	ppb		98
88)	n-Butylbenzene	12.61	91	11233	0.47633	ppb		94
89)	1,2-DCB	12.60	146	9212	0.52599	ppb		92
90)	Hexachloroethane	12.87	117	2423	0.49286	ppb		95
91)	1,2-Dibromo-3-chloropropan	13.37	157	553	0.42924	ppb	#	36
92)	1,2,4-Trichlorobenzene	14.21	180	3586	0.47728	ppb	#	77
93)	Hexachlorobutadiene	14.40	223	1714	0.53296	ppb	#	49
94)	Naphthalene	14.45	128	8784	0.44710	ppb		99
95)	1,2,3-Trichlorobenzene	14.69	180	5316	0.50116	ppb		90

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

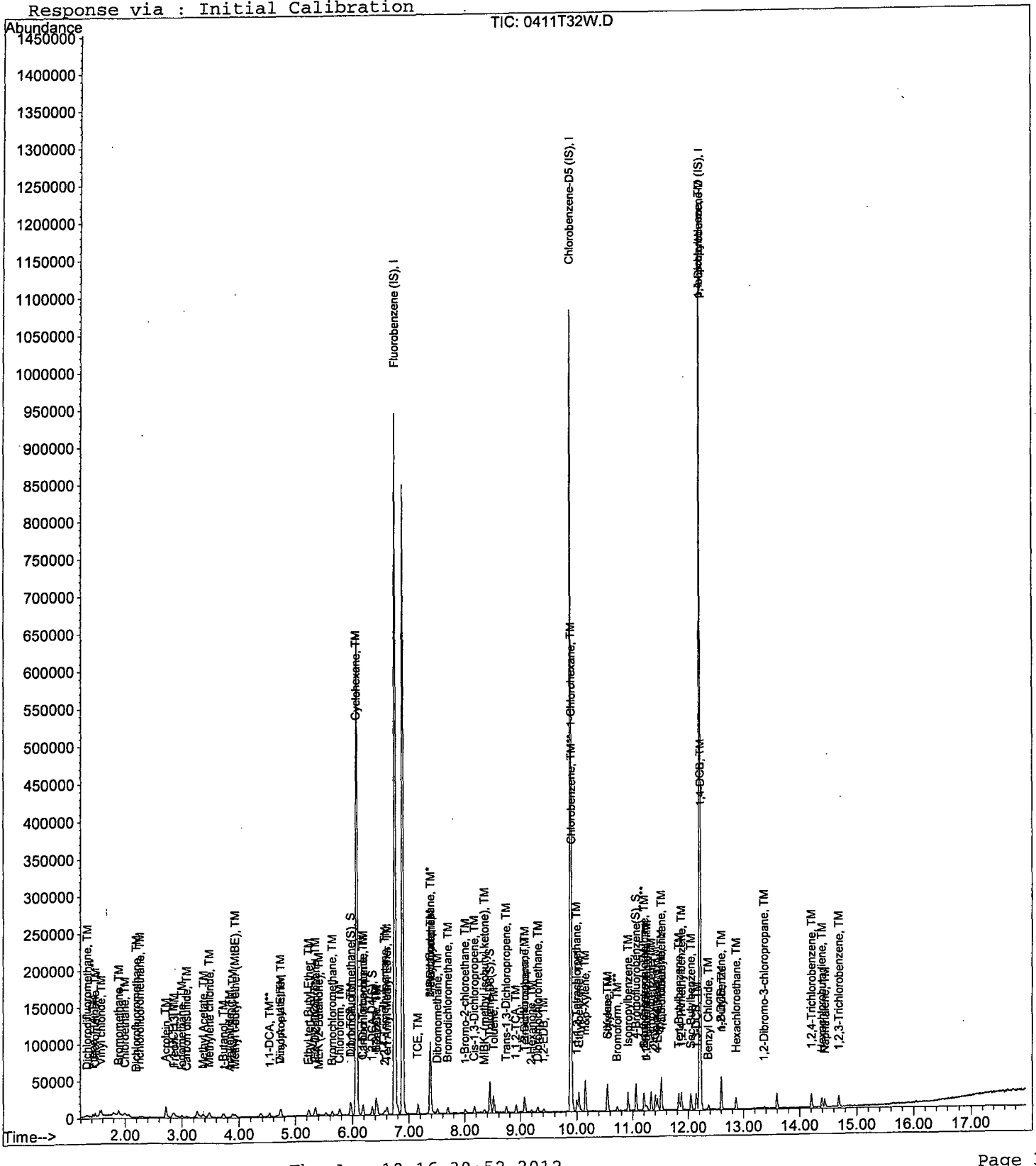
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T32W.D
Acq On : 11 Apr 12 23:07
Sample : 0.5ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 32
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T33W.D Vial: 33
Acq On : 11 Apr 12 23:35 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	444352	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	371264	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	211712	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	15620	2.10807 ppb		0.00
Spiked Amount 29.720			Recovery =	7.093%		
36) 1,2-DCA-D4(S)	6.34	65	13940	2.06261 ppb		0.00
Spiked Amount 29.608			Recovery =	6.968%		
56) Toluene-D8(S)	8.44	98	48633	1.96336 ppb		0.00
Spiked Amount 31.981			Recovery =	6.138%		
64) 4-Bromofluorobenzene(S)	11.06	95	20268	1.97538 ppb		0.00
Spiked Amount 29.353			Recovery =	6.728%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	5171	0.96635 ppb		94
3) Freon 114	1.42	85	3703	0.95894 ppb		96
4) Chloromethane	1.45	50	6343	1.69716 ppb		91
5) Vinyl chloride	1.56	62	8578	1.01095 ppb		96
6) Bromomethane	1.88	94	6677	1.09542 ppb		94
7) Chloroethane	1.98	64	4449	0.94274 ppb		89
8) Dichlorofluoromethane	2.19	67	454	1.51866 ppb	#	83
9) Trichlorofluoromethane	2.25	101	2439	1.14420 ppb		93
10) Acrolein	2.70	55	20453	45.47112 ppb		85
11) Acetone	2.92	43	2731	0.34467 ppb	#	70
12) Freon-113	2.86	101	3989	0.89148 ppb		93
13) 1,1-DCE	2.83	61	7248	0.97300 ppb		93
14) t-Butanol	3.71	59	5339	57.50412 ppb	#	92
15) Methyl Acetate	3.36	43	9170	1.86324 ppb		85
16) Iodomethane	2.99	142	7453	0.94688 ppb	#	95
17) Acrylonitrile	3.83	52	1143	0.93101 ppb		96
18) Methylene chloride	3.47	84	2713	1.12881 ppb		83
19) Carbon disulfide	3.07	76	2642	1.01054 ppb		94
20) Methyl t-butyl ether (MtBE	3.93	73	7925	0.97002 ppb	#	88
21) Trans-1,2-DCE	3.88	96	4632	0.92118 ppb		95
22) Diisopropyl Ether	4.72	59	2121	0.97414 ppb	#	54
23) 1,1-DCA	4.52	63	11550	1.04731 ppb		95
24) Vinyl Acetate	4.73	87	5345	0.98549 ppb		82
25) Ethyl tert Butyl Ether	5.23	59	11885	1.05520 ppb		95
26) MEK (2-Butanone)	5.41	43	2872	1.47108 ppb		84
27) Cis-1,2-DCE	5.34	96	7358	1.00532 ppb		92
28) 2,2-Dichloropropane	5.33	77	4222	1.01117 ppb		96
29) Chloroform	5.77	83	12617	1.03894 ppb		94
30) Bromochloromethane	5.64	128	3677	1.04976 ppb		90
32) 1,1,1-TCA	5.97	97	7923	0.99230 ppb		90
33) Cyclohexane	6.05	41	3102	1.04443 ppb	#	69
34) 1,1-Dichloropropene	6.18	75	7376	1.05005 ppb		97
35) 2,2,4-Trimethylpentane	6.56	57	8676	0.93343 ppb		93
37) Carbon Tetrachloride	6.18	117	7943	1.01719 ppb		92
38) Tert Amyl Methyl Ether	6.60	73	13354	1.07498 ppb		97
39) 1,2-DCA	6.43	62	7647	0.98618 ppb		94
40) Benzene	6.41	78	25620	1.02346 ppb		97
41) TCE	7.16	95	7528	1.06315 ppb		90
42) 2-Pentanone	7.38	43	156962	49.56187 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T33W.D Vial: 33
Acq On : 11 Apr 12 23:35 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43) 1,2-Dichloropropane	7.39	63	7179	0.96509 ppb		97
44) Bromodichloromethane	7.69	83	9061	0.98501 ppb		97
45) Methyl Cyclohexane	7.37	83	5915	0.99553 ppb		99
46) Dibromomethane	7.50	93	4080	1.03792 ppb		92
48) MIBK (methyl isobutyl ket	8.35	43	2671	1.10969 ppb		93
49) 1-Bromo-2-chloroethane	8.00	63	5354	1.10241 ppb		97
50) Cis-1,3-Dichloropropene	8.17	75	9612	0.98062 ppb		97
51) Toluene	8.51	91	30324	1.03259 ppb		99
52) Trans-1,3-Dichloropropene	8.74	75	8141	0.99072 ppb	#	82
53) 1,1,2-TCA	8.91	83	5085	0.97084 ppb		88
54) 2-Hexanone	9.19	43	2564	0.95060 ppb	#	90
57) 1,2-EDB	9.41	107	5241	0.94409 ppb		96
58) Tetrachloroethene	9.07	166	8399	1.06401 ppb		94
59) 1-Chlorohexane	9.92	91	8891	1.06362 ppb		93
60) 1,1,1,2-Tetrachloroethane	10.00	131	7130	0.95459 ppb		99
61) m&p-Xylene	10.16	106	24479	1.91379 ppb		99
62) o-Xylene	10.55	106	11626	0.91483 ppb		98
63) Styrene	10.56	104	19781	0.92613 ppb		97
65) 1,3-Dichloropropane	9.08	76	10684	1.07833 ppb		95
66) Dibromochloromethane	9.31	129	7479	1.05420 ppb		86
67) Chlorobenzene	9.92	112	21216	1.00086 ppb		97
68) Ethylbenzene	10.04	91	33344	1.00608 ppb		96
69) Bromoform	10.73	173	4545	0.96093 ppb		100
71) Isopropylbenzene	10.92	105	27793	0.93933 ppb		99
72) 1,1,2,2-Tetrachloroethane	11.20	83	6541	1.01912 ppb		87
73) 1,2,3-Trichloropropane	11.24	110	2216	1.08712 ppb		81
74) t-1,4-Dichloro-2-Butene	11.26	53	1101	0.89251 ppb		98
75) Bromobenzene	11.21	156	10122	1.06317 ppb		98
76) n-Propylbenzene	11.33	91	34494	0.95677 ppb		99
77) 4-Ethyltoluene	11.45	105	19317	0.93792 ppb		93
78) 2-Chlorotoluene	11.40	91	24694	0.98963 ppb		99
79) 1,3,5-Trimethylbenzene	11.51	105	24345	0.92760 ppb		96
80) 4-Chlorotoluene	11.51	91	25703	0.98445 ppb		94
81) Tert-Butylbenzene	11.83	119	21099	0.92683 ppb		97
82) 1,2,4-Trimethylbenzene	11.88	105	24153	0.90977 ppb		100
83) Sec-Butylbenzene	12.05	105	28844	0.92215 ppb		99
84) p-Isopropyltoluene	12.20	119	25341	0.93408 ppb		97
85) Benzyl Chloride	12.37	91	7316	0.92891 ppb		95
86) 1,3-DCB	12.15	146	19286	1.03734 ppb		96
87) 1,4-DCB	12.24	146	19504	1.04836 ppb		95
88) n-Butylbenzene	12.61	91	21287	0.92013 ppb		98
89) 1,2-DCB	12.60	146	17915	1.04271 ppb		98
90) Hexachloroethane	12.87	117	5179	1.07384 ppb		87
91) 1,2-Dibromo-3-chloropropan	13.37	157	1111	0.87904 ppb		80
92) 1,2,4-Trichlorobenzene	14.21	180	7133	0.96774 ppb		97
93) Hexachlorobutadiene	14.40	223	3612	1.14486 ppb	#	74
94) Naphthalene	14.45	128	16942	0.87902 ppb		99
95) 1,2,3-Trichlorobenzene	14.69	180	9948	0.95598 ppb		95

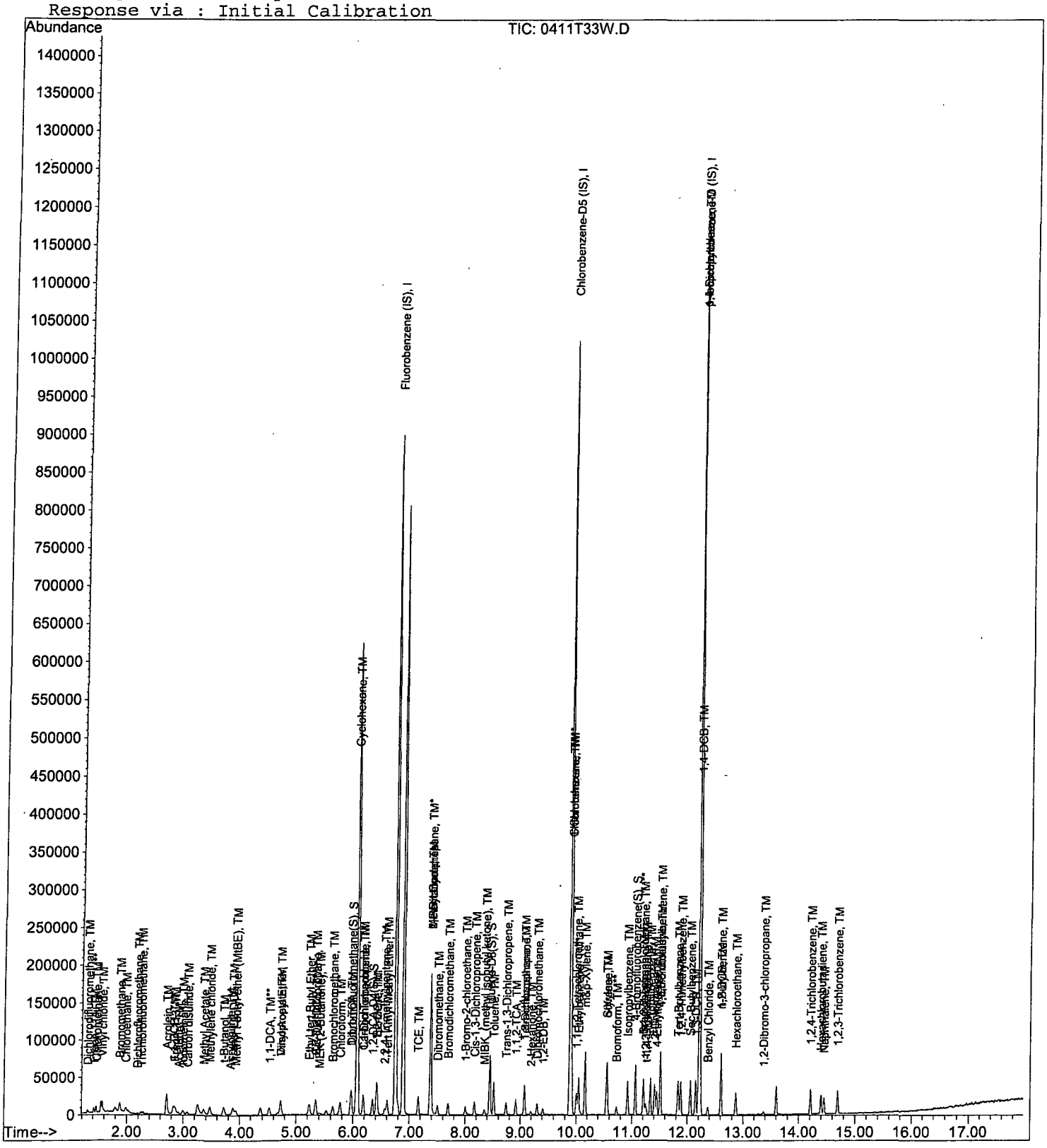
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T33W.D Vial: 33
Acq On : 11 Apr 12 23:35 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T34W.D Vial: 34
Acq On : 12 Apr 12 00:03 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	474816	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	397952	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	240384	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	77152	9.74436 ppb		0.00
Spiked Amount 29.720			Recovery = 32.786%			
36) 1,2-DCA-D4(S)	6.34	65	73660	10.19972 ppb		0.00
Spiked Amount 29.608			Recovery = 34.450%			
56) Toluene-D8(S)	8.44	98	258761	9.74587 ppb		0.00
Spiked Amount 31.981			Recovery = 30.475%			
64) 4-Bromofluorobenzene(S)	11.06	95	108524	9.86772 ppb		0.00
Spiked Amount 29.353			Recovery = 33.619%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.31	85	26377	4.61302 ppb		96
3) Freon 114	1.42	85	19269	4.66979 ppb		92
4) Chloromethane	1.46	50	25168	4.92766 ppb		94
5) Vinyl chloride	1.57	62	45511	5.01952 ppb		96
6) Bromomethane	1.88	94	31992	4.91183 ppb		97
7) Chloroethane	1.99	64	24436	4.84574 ppb		98
8) Dichlorofluoromethane	2.20	67	3566	4.32273 ppb	#	62
9) Trichlorofluoromethane	2.25	101	13640	4.81772 ppb		95
10) Acrolein	2.71	55	47109	98.01314 ppb		98
11) Acetone	2.91	43	8156	4.16796 ppb		97
12) Freon-113	2.87	101	21214	4.43680 ppb		94
13) 1,1-DCE	2.84	61	38418	4.82647 ppb		96
14) t-Butanol	3.72	59	12038	103.95431 ppb		100
15) Methyl Acetate	3.36	43	24143	5.26974 ppb		91
16) Iodomethane	3.00	142	44535	5.29503 ppb		94
17) Acrylonitrile	3.83	52	6860	5.22916 ppb		97
18) Methylene chloride	3.47	84	12432	4.84077 ppb		99
19) Carbon disulfide	3.08	76	13805	4.94152 ppb		99
20) Methyl t-butyl ether (MtBE	3.93	73	45095	5.16548 ppb		97
21) Trans-1,2-DCE	3.88	96	27723	5.15964 ppb		91
22) Diisopropyl Ether	4.73	59	11687	5.02326 ppb		95
23) 1,1-DCA	4.53	63	58843	4.99331 ppb		97
24) Vinyl Acetate	4.73	87	28094	4.84753 ppb		99
25) Ethyl tert Butyl Ether	5.23	59	60705	5.04384 ppb		98
26) MEK (2-Butanone)	5.40	43	10654	5.31834 ppb		100
27) Cis-1,2-DCE	5.34	96	39756	5.08332 ppb		95
28) 2,2-Dichloropropane	5.34	77	22884	5.12909 ppb		95
29) Chloroform	5.77	83	64224	4.94918 ppb		95
30) Bromochloromethane	5.64	128	18460	4.93208 ppb		84
32) 1,1,1-TCA	5.98	97	42207	4.94697 ppb		100
33) Cyclohexane	6.05	41	14421	4.54396 ppb		93
34) 1,1-Dichloropropene	6.18	75	35579	4.74009 ppb		96
35) 2,2,4-Trimethylpentane	6.57	57	43820	4.41200 ppb		98
37) Carbon Tetrachloride	6.18	117	38711	4.63931 ppb		92
38) Tert Amyl Methyl Ether	6.60	73	66882	5.03849 ppb		99
39) 1,2-DCA	6.43	62	42249	5.09900 ppb		99
40) Benzene	6.41	78	132267	4.94477 ppb		99
41) TCE	7.16	95	37497	4.95579 ppb		92
42) 2-Pentanone	7.38	43	333668	98.59832 ppb		100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T34W.D Vial: 34
Acq On : 12 Apr 12 00:03 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	39801	5.00726 ppb	100
44) Bromodichloromethane	7.69	83	49374	5.02301 ppb	99
45) Methyl Cyclohexane	7.37	83	28359	4.46674 ppb	90
46) Dibromomethane	7.50	93	21416	5.09852 ppb	94
48) MIBK (methyl isobutyl ket	8.34	43	12530	4.87169 ppb	94
49) 1-Bromo-2-chloroethane	8.00	63	26264	5.06091 ppb	94
50) Cis-1,3-Dichloropropene	8.17	75	51792	4.94484 ppb	95
51) Toluene	8.51	91	150763	4.80440 ppb	98
52) Trans-1,3-Dichloropropene	8.74	75	43494	4.95342 ppb	98
53) 1,1,2-TCA	8.92	83	29041	5.18883 ppb	96
54) 2-Hexanone	9.19	43	14384	4.99072 ppb	98
57) 1,2-EDB	9.41	107	30948	5.20099 ppb	98
58) Tetrachloroethene	9.07	166	40654	4.80479 ppb	98
59) 1-Chlorohexane	9.92	91	39239	4.37933 ppb	97
60) 1,1,1,2-Tetrachloroethane	10.00	131	39499	4.93364 ppb	98
61) m&p-Xylene	10.16	106	131250	9.57308 ppb	99
62) o-Xylene	10.55	106	66462	4.87903 ppb	99
63) Styrene	10.56	104	108840	4.75407 ppb	98
65) 1,3-Dichloropropane	9.08	76	53616	5.04854 ppb	94
66) Dibromochloromethane	9.31	129	37561	4.93936 ppb	100
67) Chlorobenzene	9.92	112	112571	4.95436 ppb	98
68) Ethylbenzene	10.04	91	170399	4.79663 ppb	98
69) Bromoform	10.72	173	25618	5.05308 ppb	98
71) Isopropylbenzene	10.92	105	160644	4.78176 ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	36865	5.05867 ppb	97
73) 1,2,3-Trichloropropane	11.24	110	11513	4.97434 ppb	84
74) t-1,4-Dichloro-2-Butene	11.26	53	6933	4.94977 ppb	92
75) Bromobenzene	11.21	156	54102	5.00485 ppb	95
76) n-Propylbenzene	11.33	91	192715	4.70780 ppb	97
77) 4-Ethyltoluene	11.45	105	110728	4.73502 ppb	99
78) 2-Chlorotoluene	11.41	91	138074	4.87339 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	142270	4.77421 ppb	100
80) 4-Chlorotoluene	11.51	91	143418	4.83785 ppb	98
81) Tert-Butylbenzene	11.83	119	123163	4.76496 ppb	100
82) 1,2,4-Trimethylbenzene	11.88	105	142601	4.73066 ppb	99
83) Sec-Butylbenzene	12.05	105	167967	4.72944 ppb	98
84) p-Isopropyltoluene	12.20	119	144081	4.67742 ppb	97
85) Benzyl Chloride	12.37	91	44888	5.01960 ppb	99
86) 1,3-DCB	12.15	146	103781	4.91627 ppb	98
87) 1,4-DCB	12.23	146	102838	4.86835 ppb	98
88) n-Butylbenzene	12.61	91	124107	4.72466 ppb	99
89) 1,2-DCB	12.60	146	96227	4.93269 ppb	97
90) Hexachloroethane	12.87	117	26311	4.80475 ppb	95
91) 1,2-Dibromo-3-chloropropan	13.37	157	7417	5.16845 ppb	95
92) 1,2,4-Trichlorobenzene	14.21	180	40448	4.83307 ppb	98
93) Hexachlorobutadiene	14.40	223	16885	4.71350 ppb	88
94) Naphthalene	14.45	128	103949	4.75001 ppb	98
95) 1,2,3-Trichlorobenzene	14.69	180	57419	4.85970 ppb	95

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

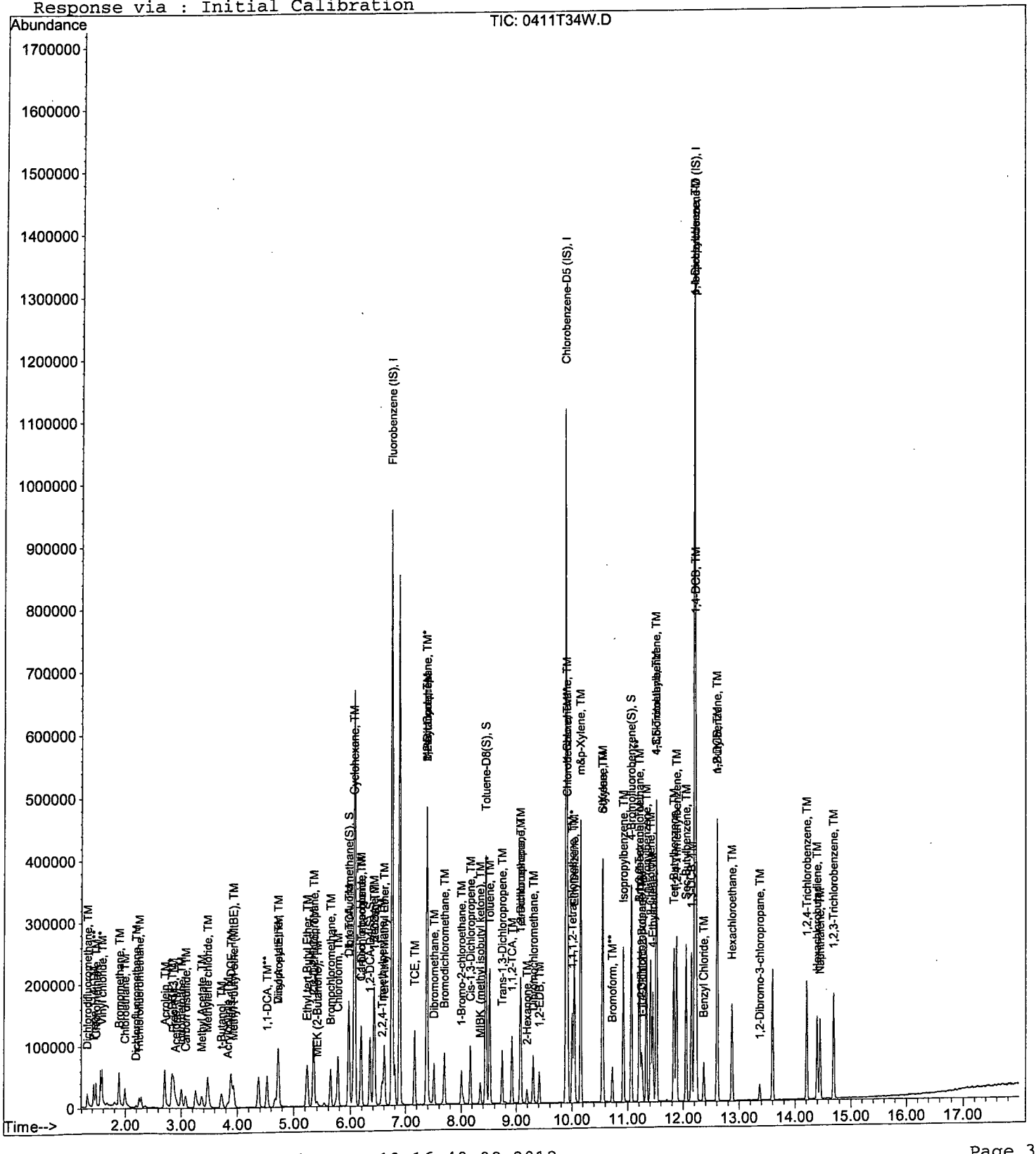
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T34W.D
Acq On : 12 Apr 12 00:03
Sample : 5.0ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 34
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T35W.D Vial: 35
Acq On : 12 Apr 12 00:31 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	482688	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	391232	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	241024	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	190685	23.69089 ppb	0.00
Spiked Amount 29.720			Recovery =	79.713%	
36) 1,2-DCA-D4(S)	6.34	65	176098	23.98666 ppb	0.00
Spiked Amount 29.608			Recovery =	81.015%	
56) Toluene-D8(S)	8.44	98	642685	24.62159 ppb	0.00
Spiked Amount 31.981			Recovery =	76.990%	
64) 4-Bromofluorobenzene(S)	11.06	95	267387	24.73020 ppb	0.00
Spiked Amount 29.353			Recovery =	84.251%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	54584	9.39041 ppb	100
3) Freon 114	1.42	85	42783	10.19924 ppb	100
4) Chloromethane	1.46	50	48904	8.95713 ppb	100
5) Vinyl chloride	1.56	62	93740	10.17020 ppb	100
6) Bromomethane	1.87	94	60845	9.18938 ppb	100
7) Chloroethane	1.98	64	50259	9.80398 ppb	100
8) Dichlorofluoromethane	2.19	67	11231	9.83687 ppb	100
9) Trichlorofluoromethane	2.24	101	29589	9.68132 ppb	100
10) Acrolein	2.70	55	61589	126.04987 ppb	100
11) Acetone	2.90	43	15627	9.43536 ppb	100
12) Freon-113	2.86	101	49848	10.25543 ppb	100
13) 1,1-DCE	2.83	61	78209	9.66518 ppb	100
14) t-Butanol	3.71	59	15182	119.58008 ppb	100
15) Methyl Acetate	3.35	43	45130	10.07895 ppb	100
16) Iodomethane	2.99	142	86451	10.11104 ppb	100
17) Acrylonitrile	3.82	52	13660	10.24277 ppb	100
18) Methylene chloride	3.46	84	23864	9.14062 ppb	100
19) Carbon disulfide	3.07	76	29264	10.30425 ppb	100
20) Methyl t-butyl ether (MtBE	3.92	73	89610	10.09712 ppb	100
21) Trans-1,2-DCE	3.88	96	55501	10.16106 ppb	100
22) Diisopropyl Ether	4.72	59	23298	9.85054 ppb	100
23) 1,1-DCA	4.52	63	118223	9.86857 ppb	100
24) Vinyl Acetate	4.72	87	57618	9.77966 ppb	100
25) Ethyl tert Butyl Ether	5.23	59	122506	10.01275 ppb	100
26) MEK (2-Butanone)	5.40	43	20245	10.01556 ppb	100
27) Cis-1,2-DCE	5.34	96	77725	9.77608 ppb	100
28) 2,2-Dichloropropane	5.33	77	45757	10.08845 ppb	100
29) Chloroform	5.77	83	129058	9.78318 ppb	100
30) Bromochloromethane	5.64	128	37412	9.83260 ppb	100
32) 1,1,1-TCA	5.97	97	84135	9.70041 ppb	100
33) Cyclohexane	6.05	41	30983	9.60332 ppb	100
34) 1,1-Dichloropropene	6.18	75	73787	9.67010 ppb	100
35) 2,2,4-Trimethylpentane	6.56	57	103183	10.21950 ppb	100
37) Carbon Tetrachloride	6.18	117	81968	9.66322 ppb	100
38) Tert Amyl Methyl Ether	6.60	73	132942	9.85171 ppb	100
39) 1,2-DCA	6.43	62	84526	10.03500 ppb	100
40) Benzene	6.42	78	268385	9.86987 ppb	100
41) TCE	7.16	95	74689	9.71029 ppb	100
42) 2-Pentanone	7.38	43	419063	121.81285 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T35W.D Vial: 35
Acq On : 12 Apr 12 00:31 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 1,2-Dichloropropane	7.38	63	81094	10.03583	ppb	100
44) Bromodichloromethane	7.69	83	97202	9.72746	ppb	100
45) Methyl Cyclohexane	7.37	83	64129	9.93603	ppb	100
46) Dibromomethane	7.51	93	41959	9.82630	ppb	100
48) MIBK (methyl isobutyl ket	8.34	43	25184	9.63191	ppb	100
49) 1-Bromo-2-chloroethane	8.00	63	50840	9.63678	ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	103394	9.71055	ppb	100
51) Toluene	8.51	91	312713	9.80278	ppb	100
52) Trans-1,3-Dichloropropene	8.74	75	88272	9.88912	ppb	100
53) 1,1,2-TCA	8.92	83	55611	9.77412	ppb	100
54) 2-Hexanone	9.19	43	28438	9.70603	ppb	100
57) 1,2-EDB	9.41	107	60737	10.38252	ppb	100
58) Tetrachloroethene	9.07	166	85123	10.23327	ppb	100
59) 1-Chlorohexane	9.92	91	84646	9.60931	ppb	100
60) 1,1,1,2-Tetrachloroethane	10.00	131	79591	10.11211	ppb	100
61) m&p-Xylene	10.16	106	277258	20.56992	ppb	100
62) o-Xylene	10.55	106	137083	10.23623	ppb	100
63) Styrene	10.56	104	228759	10.16369	ppb	100
65) 1,3-Dichloropropane	9.08	76	108048	10.34867	ppb	100
66) Dibromochloromethane	9.31	129	76871	10.28234	ppb	100
67) Chlorobenzene	9.92	112	222718	9.97041	ppb	100
68) Ethylbenzene	10.04	91	354333	10.14558	ppb	100
69) Bromoform	10.73	173	50876	10.20753	ppb	100
71) Isopropylbenzene	10.92	105	335255	9.95277	ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	73856	10.10773	ppb	100
73) 1,2,3-Trichloropropane	11.24	110	21890	9.43274	ppb	100
74) t-1,4-Dichloro-2-Butene	11.26	53	13448	9.57562	ppb	100
75) Bromobenzene	11.21	156	106439	9.82027	ppb	100
76) n-Propylbenzene	11.33	91	416103	10.13792	ppb	100
77) 4-Ethyltoluene	11.45	105	239555	10.21679	ppb	100
78) 2-Chlorotoluene	11.41	91	287968	10.13699	ppb	100
79) 1,3,5-Trimethylbenzene	11.51	105	306748	10.26634	ppb	100
80) 4-Chlorotoluene	11.51	91	304243	10.23562	ppb	100
81) Tert-Butylbenzene	11.83	119	263113	10.15234	ppb	100
82) 1,2,4-Trimethylbenzene	11.88	105	306569	10.14315	ppb	100
83) Sec-Butylbenzene	12.05	105	366323	10.28715	ppb	100
84) p-Isopropyltoluene	12.20	119	312314	10.11199	ppb	100
85) Benzyl Chloride	12.37	91	88937	9.91896	ppb	100
86) 1,3-DCB	12.15	146	206401	9.75159	ppb	100
87) 1,4-DCB	12.23	146	209337	9.88371	ppb	100
88) n-Butylbenzene	12.61	91	267339	10.15037	ppb	100
89) 1,2-DCB	12.60	146	193575	9.89650	ppb	100
90) Hexachloroethane	12.87	117	53904	9.81748	ppb	100
91) 1,2-Dibromo-3-chloropropan	13.37	157	14907	10.36019	ppb	100
92) 1,2,4-Trichlorobenzene	14.21	180	83736	9.97893	ppb	100
93) Hexachlorobutadiene	14.40	223	34426	9.58461	ppb	100
94) Naphthalene	14.45	128	217652	9.91932	ppb	100
95) 1,2,3-Trichlorobenzene	14.69	180	118921	10.03824	ppb	100

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

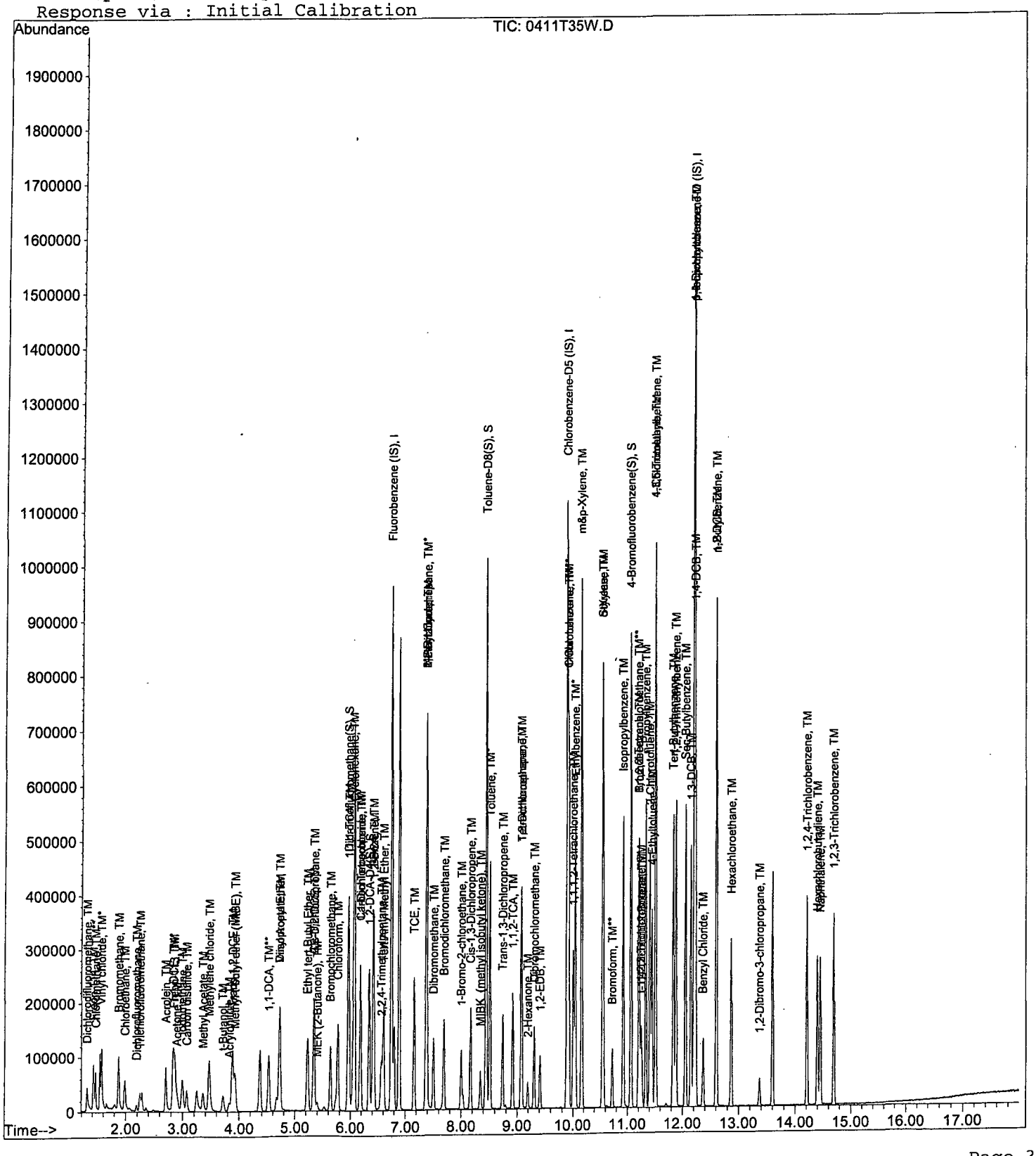
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T35W.D
Acq On : 12 Apr 12 00:31
Sample : 10ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 35
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



198

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T36W.D Vial: 36
Acq On : 12 Apr 12 00:58 Operator: DG,RS,HW,ARS,SV
Sample : 20ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	476800	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	398720	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	243648	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	316087	39.75591 ppb	0.00
Spiked Amount 29.720			Recovery	= 133.767%	
36) 1,2-DCA-D4(S)	6.34	65	281400	38.80340 ppb	0.00
Spiked Amount 29.608			Recovery	= 131.056%	
56) Toluene-D8(S)	8.44	98	1078758	40.55163 ppb	0.00
Spiked Amount 31.981			Recovery	= 126.802%	
64) 4-Bromofluorobenzene(S)	11.06	95	433924	39.37924 ppb	0.00
Spiked Amount 29.353			Recovery	= 134.158%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	124716	21.72058 ppb	98
3) Freon 114	1.42	85	84752	20.45394 ppb	99
4) Chloromethane	1.46	50	106251	19.09341 ppb	96
5) Vinyl chloride	1.57	62	184111	20.22155 ppb	99
6) Bromomethane	1.87	94	119106	18.21064 ppb	97
7) Chloroethane	1.98	64	102981	20.33648 ppb	98
8) Dichlorofluoromethane	2.19	67	28980	19.56996 ppb	91
9) Trichlorofluoromethane	2.25	101	66767	20.35841 ppb	94
10) Acrolein	2.70	55	87460	181.20868 ppb	90
11) Acetone	2.90	43	32413	21.77581 ppb	100
12) Freon-113	2.87	101	100123	20.85308 ppb	93
13) 1,1-DCE	2.83	61	155387	19.44009 ppb	95
14) t-Butanol	3.71	59	21608	149.34300 ppb	97
15) Methyl Acetate	3.35	43	85331	19.71637 ppb	95
16) Iodomethane	2.99	142	166183	19.67626 ppb	98
17) Acrylonitrile	3.82	52	26602	20.19349 ppb	96
18) Methylene chloride	3.46	84	46744	18.12543 ppb	97
19) Carbon disulfide	3.07	76	56648	20.19285 ppb	99
20) Methyl t-butyl ether (MtBE	3.92	73	171335	19.54417 ppb	97
21) Trans-1,2-DCE	3.88	96	106554	19.74868 ppb	96
22) Diisopropyl Ether	4.72	59	46321	19.82666 ppb	100
23) 1,1-DCA	4.52	63	228167	19.28125 ppb	96
24) Vinyl Acetate	4.72	87	113251	19.45977 ppb	97
25) Ethyl tert Butyl Ether	5.23	59	236729	19.58744 ppb	100
26) MEK (2-Butanone)	5.40	43	39715	19.97464 ppb	95
27) Cis-1,2-DCE	5.34	96	153403	19.53296 ppb	99
28) 2,2-Dichloropropane	5.33	77	87964	19.63370 ppb	98
29) Chloroform	5.77	83	250217	19.20181 ppb	96
30) Bromochloromethane	5.64	128	73899	19.66193 ppb	93
32) 1,1,1-TCA	5.97	97	169304	19.76110 ppb	100
33) Cyclohexane	6.05	41	60559	19.00234 ppb	93
34) 1,1-Dichloropropene	6.18	75	144842	19.21658 ppb	93
35) 2,2,4-Trimethylpentane	6.56	57	195355	19.58738 ppb	99
37) Carbon Tetrachloride	6.18	117	164092	19.58372 ppb	97
38) Tert Amyl Methyl Ether	6.60	73	261079	19.58627 ppb	98
39) 1,2-DCA	6.43	62	163881	19.69636 ppb	99
40) Benzene	6.41	78	518042	19.28628 ppb	99
41) TCE	7.16	95	143630	18.90388 ppb	97
42) 2-Pentanone	7.38	43	508657	149.68182 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T36W.D Vial: 36
Acq On : 12 Apr 12 00:58 Operator: DG,RS,HW,ARS,SV
Sample : 20ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	154042	19.29897 ppb	99
44) Bromodichloromethane	7.69	83	193222	19.57542 ppb	99
45) Methyl Cyclohexane	7.37	83	125701	19.71639 ppb	95
46) Dibromomethane	7.50	93	84204	19.96310 ppb	98
48) MIBK (methyl isobutyl ket	8.34	43	48757	18.87795 ppb	97
49) 1-Bromo-2-chloroethane	8.00	63	97528	18.71484 ppb	99
50) Cis-1,3-Dichloropropene	8.17	75	209935	19.96014 ppb	98
51) Toluene	8.51	91	603953	19.16623 ppb	99
52) Trans-1,3-Dichloropropene	8.74	75	174409	19.78034 ppb	99
53) 1,1,2-TCA	8.92	83	105155	18.71014 ppb	96
54) 2-Hexanone	9.19	43	56991	19.69152 ppb	96
57) 1,2-EDB	9.41	107	121352	20.35462 ppb	97
58) Tetrachloroethene	9.07	166	161888	19.09628 ppb	96
59) 1-Chlorohexane	9.92	91	168377	18.75576 ppb	96
60) 1,1,1,2-Tetrachloroethane	10.00	131	157707	19.66053 ppb	100
61) m&p-Xylene	10.16	106	550133	40.04816 ppb	100
62) o-Xylene	10.55	106	273312	20.02541 ppb	98
63) Styrene	10.56	104	470603	20.51607 ppb	98
65) 1,3-Dichloropropane	9.08	76	205264	19.29065 ppb	94
66) Dibromochloromethane	9.31	129	150481	19.75048 ppb	98
67) Chlorobenzene	9.92	112	441605	19.39805 ppb	99
68) Ethylbenzene	10.04	91	709179	19.92451 ppb	99
69) Bromoform	10.73	173	99479	19.58418 ppb	95
71) Isopropylbenzene	10.92	105	672269	19.74282 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	144180	19.51957 ppb	99
73) 1,2,3-Trichloropropane	11.24	110	43290	18.45343 ppb	99
74) t-1,4-Dichloro-2-Butene	11.26	53	29050	20.46222 ppb	87
75) Bromobenzene	11.21	156	209850	19.15266 ppb	97
76) n-Propylbenzene	11.33	91	836195	20.15361 ppb	99
77) 4-Ethyltoluene	11.45	105	485323	20.47564 ppb	100
78) 2-Chlorotoluene	11.41	91	568717	19.80425 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	614496	20.34466 ppb	99
80) 4-Chlorotoluene	11.51	91	598258	19.91038 ppb	98
81) Tert-Butylbenzene	11.83	119	529315	20.20392 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	631718	20.67595 ppb	100
83) Sec-Butylbenzene	12.05	105	730752	20.30011 ppb	98
84) p-Isopropyltoluene	12.20	119	628711	20.13696 ppb	99
85) Benzyl Chloride	12.37	91	174911	19.29738 ppb	99
86) 1,3-DCB	12.15	146	403216	18.84511 ppb	99
87) 1,4-DCB	12.24	146	409857	19.14272 ppb	99
88) n-Butylbenzene	12.61	91	531750	19.97213 ppb	99
89) 1,2-DCB	12.60	146	380068	19.22167 ppb	97
90) Hexachloroethane	12.87	117	105786	19.05920 ppb	98
91) 1,2-Dibromo-3-chloropropan	13.37	157	30093	20.68904 ppb	90
92) 1,2,4-Trichlorobenzene	14.21	180	162624	19.17140 ppb	98
93) Hexachlorobutadiene	14.40	223	67094	18.47860 ppb	87
94) Naphthalene	14.45	128	447769	20.18694 ppb	97
95) 1,2,3-Trichlorobenzene	14.69	180	232648	19.42656 ppb	96

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

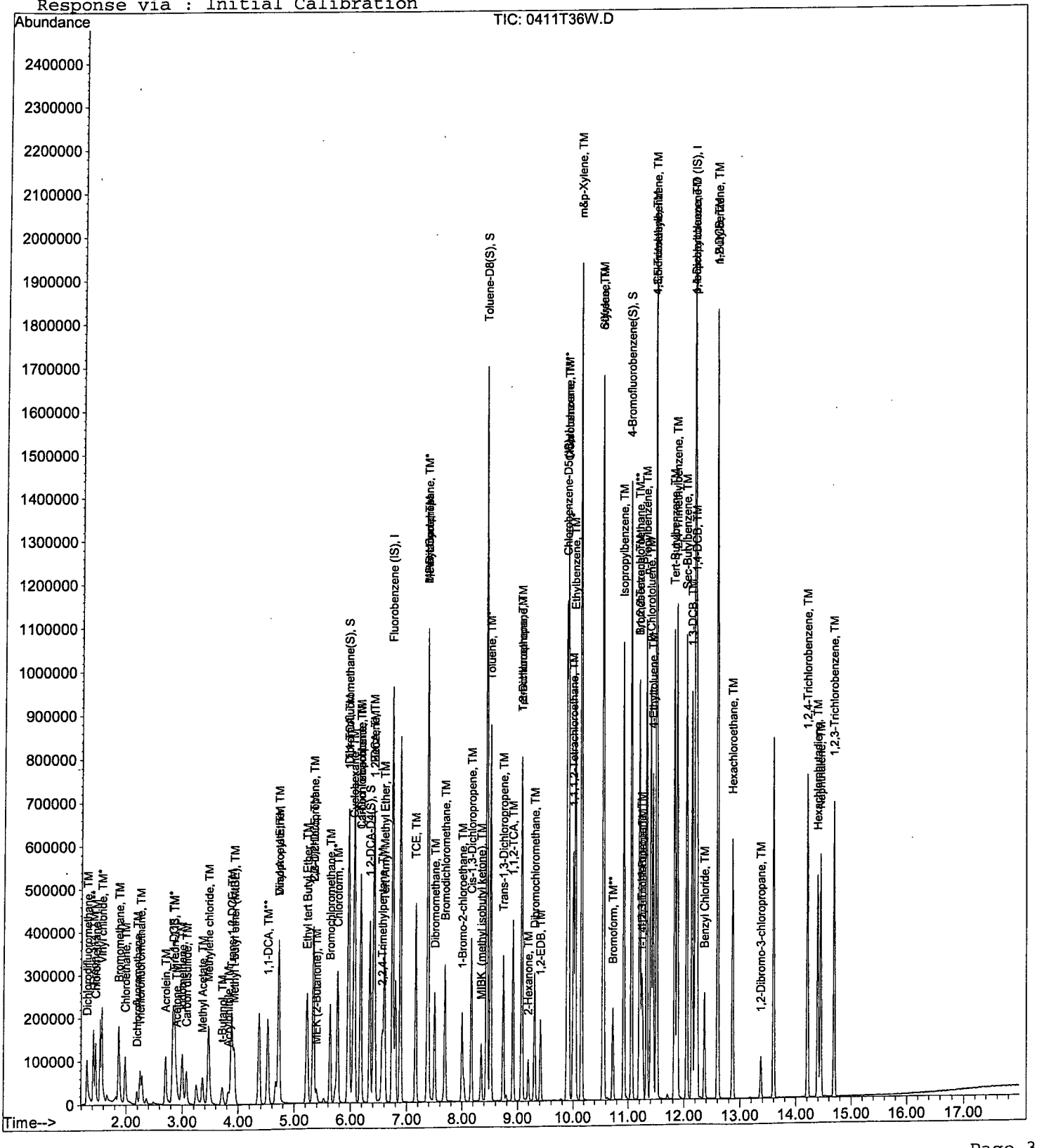
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T36W.D
Acq On : 12 Apr 12 00:58
Sample : 20ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 36
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



201

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T37W.D Vial: 37
Acq On : 12 Apr 12 1:26 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	482496	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	411136	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	246912	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	628249	78.08533 ppb		0.00
Spiked Amount 29.720			Recovery = 262.732%			
36) 1,2-DCA-D4(S)	6.34	65	561508	76.51457 ppb		0.00
Spiked Amount 29.608			Recovery = 258.427%			
56) Toluene-D8(S)	8.44	98	2164701	78.91593 ppb		0.00
Spiked Amount 31.981			Recovery = 246.762%			
64) 4-Bromofluorobenzene(S)	11.06	95	890289	78.35508 ppb		0.00
Spiked Amount 29.353			Recovery = 266.942%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	250781	43.16049 ppb		96
3) Freon 114	1.42	85	172914	41.23819 ppb		98
4) Chloromethane	1.46	50	232496	40.69779 ppb		96
5) Vinyl chloride	1.56	62	364412	39.55213 ppb		99
6) Bromomethane	1.86	94	248056	37.47863 ppb		99
7) Chloroethane	1.97	64	200335	39.09472 ppb		98
8) Dichlorofluoromethane	2.19	67	87598	40.24479 ppb		93
9) Trichlorofluoromethane	2.24	101	149540	39.91045 ppb		95
10) Acrolein	2.70	55	131731	269.71186 ppb	#	58
11) Acetone	2.90	43	61312	42.25660 ppb		91
12) Freon-113	2.86	101	197286	40.60459 ppb		97
13) 1,1-DCE	2.83	61	316140	39.08459 ppb		96
14) t-Butanol	3.71	59	29192	176.43499 ppb		96
15) Methyl Acetate	3.35	43	163727	37.79931 ppb		98
16) Iodomethane	2.99	142	333439	39.01350 ppb		98
17) Acrylonitrile	3.82	52	55143	41.36471 ppb		96
18) Methylene chloride	3.46	84	91208	34.94926 ppb		98
19) Carbon disulfide	3.07	76	109360	38.52247 ppb		100
20) Methyl t-butyl ether (MtBE	3.92	73	337480	38.04186 ppb		98
21) Trans-1,2-DCE	3.88	96	212470	38.91423 ppb		97
22) Diisopropyl Ether	4.72	59	92744	39.22835 ppb		98
23) 1,1-DCA	4.52	63	457255	38.18418 ppb		98
24) Vinyl Acetate	4.72	87	233754	39.69148 ppb		100
25) Ethyl tert Butyl Ether	5.23	59	468949	38.34372 ppb		99
26) MEK (2-Butanone)	5.39	43	77041	38.36872 ppb		99
27) Cis-1,2-DCE	5.34	96	302312	38.03926 ppb		97
28) 2,2-Dichloropropane	5.33	77	175332	38.67239 ppb		99
29) Chloroform	5.77	83	507633	38.49619 ppb		96
30) Bromochloromethane	5.64	128	149643	39.34472 ppb		89
32) 1,1,1-TCA	5.97	97	340792	39.30753 ppb		99
33) Cyclohexane	6.05	41	130599	40.49587 ppb		93
34) 1,1-Dichloropropene	6.18	75	295434	38.73331 ppb		95
35) 2,2,4-Trimethylpentane	6.56	57	421521	41.76511 ppb		97
37) Carbon Tetrachloride	6.18	117	341285	40.25016 ppb		96
38) Tert Amyl Methyl Ether	6.60	73	517917	38.39570 ppb		97
39) 1,2-DCA	6.43	62	320306	38.04215 ppb		98
40) Benzene	6.41	78	1037914	38.18453 ppb		99
41) TCE	7.16	95	286701	37.28873 ppb		98
42) 2-Pentanone	7.38	43	603024	175.35621 ppb		100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T37W.D Vial: 37
Acq On : 12 Apr 12 1:26 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	308167	38.15255 ppb	99
44) Bromodichloromethane	7.69	83	388137	38.85815 ppb	98
45) Methyl Cyclohexane	7.37	83	266352	41.28451 ppb	95
46) Dibromomethane	7.50	93	162915	38.16795 ppb	97
48) MIBK (methyl isobutyl ket	8.34	43	97600	37.34308 ppb	98
49) 1-Bromo-2-chloroethane	8.00	63	199552	37.84036 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	429208	40.32636 ppb	96
51) Toluene	8.51	91	1230132	38.57693 ppb	98
52) Trans-1,3-Dichloropropene	8.74	75	365532	40.96686 ppb	99
53) 1,1,2-TCA	8.91	83	212622	37.38504 ppb	99
54) 2-Hexanone	9.19	43	111853	38.19118 ppb	96
57) 1,2-EDB	9.41	107	242130	39.38647 ppb	99
58) Tetrachloroethene	9.07	166	327777	37.49687 ppb	98
59) 1-Chlorohexane	9.92	91	347983	37.59174 ppb	99
60) 1,1,1,2-Tetrachloroethane	10.00	131	322428	38.98158 ppb	99
61) m&p-Xylene	10.16	106	1133680	80.03645 ppb	100
62) o-Xylene	10.55	106	561119	39.87128 ppb	98
63) Styrene	10.56	104	979430	41.40906 ppb	98
65) 1,3-Dichloropropane	9.08	76	410625	37.42501 ppb	97
66) Dibromochloromethane	9.31	129	306876	39.06083 ppb	97
67) Chlorobenzene	9.92	112	893888	38.07936 ppb	99
68) Ethylbenzene	10.04	91	1441837	39.28533 ppb	100
69) Bromoform	10.73	173	203730	38.89658 ppb	96
71) Isopropylbenzene	10.92	105	1398944	40.54031 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	285659	38.16223 ppb	99
73) 1,2,3-Trichloropropane	11.24	110	84625	35.59663 ppb	97
74) t-1,4-Dichloro-2-Butene	11.26	53	57317	39.83922 ppb	90
75) Bromobenzene	11.21	156	421877	37.99502 ppb	98
76) n-Propylbenzene	11.33	91	1717520	40.84771 ppb	99
77) 4-Ethyltoluene	11.45	105	995916	41.46198 ppb	99
78) 2-Chlorotoluene	11.41	91	1156097	39.72620 ppb	100
79) 1,3,5-Trimethylbenzene	11.51	105	1271860	41.55194 ppb	100
80) 4-Chlorotoluene	11.51	91	1205584	39.59216 ppb	98
81) Tert-Butylbenzene	11.83	119	1084027	40.83027 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	1285665	41.52319 ppb	100
83) Sec-Butylbenzene	12.05	105	1503607	41.21766 ppb	98
84) p-Isopropyltoluene	12.20	119	1308500	41.35587 ppb	99
85) Benzyl Chloride	12.37	91	361316	39.33590 ppb	98
86) 1,3-DCB	12.15	146	810718	37.38965 ppb	98
87) 1,4-DCB	12.24	146	824255	37.98862 ppb	99
88) n-Butylbenzene	12.61	91	1104682	40.94255 ppb	99
89) 1,2-DCB	12.60	146	760757	37.96614 ppb	96
90) Hexachloroethane	12.87	117	216790	38.54219 ppb	99
91) 1,2-Dibromo-3-chloropropan	13.37	157	61007	41.38807 ppb	90
92) 1,2,4-Trichlorobenzene	14.21	180	345088	40.14390 ppb	98
93) Hexachlorobutadiene	14.40	223	136894	37.20407 ppb	88
94) Naphthalene	14.45	128	957617	42.60191 ppb	99
95) 1,2,3-Trichlorobenzene	14.69	180	482671	39.77118 ppb	96

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

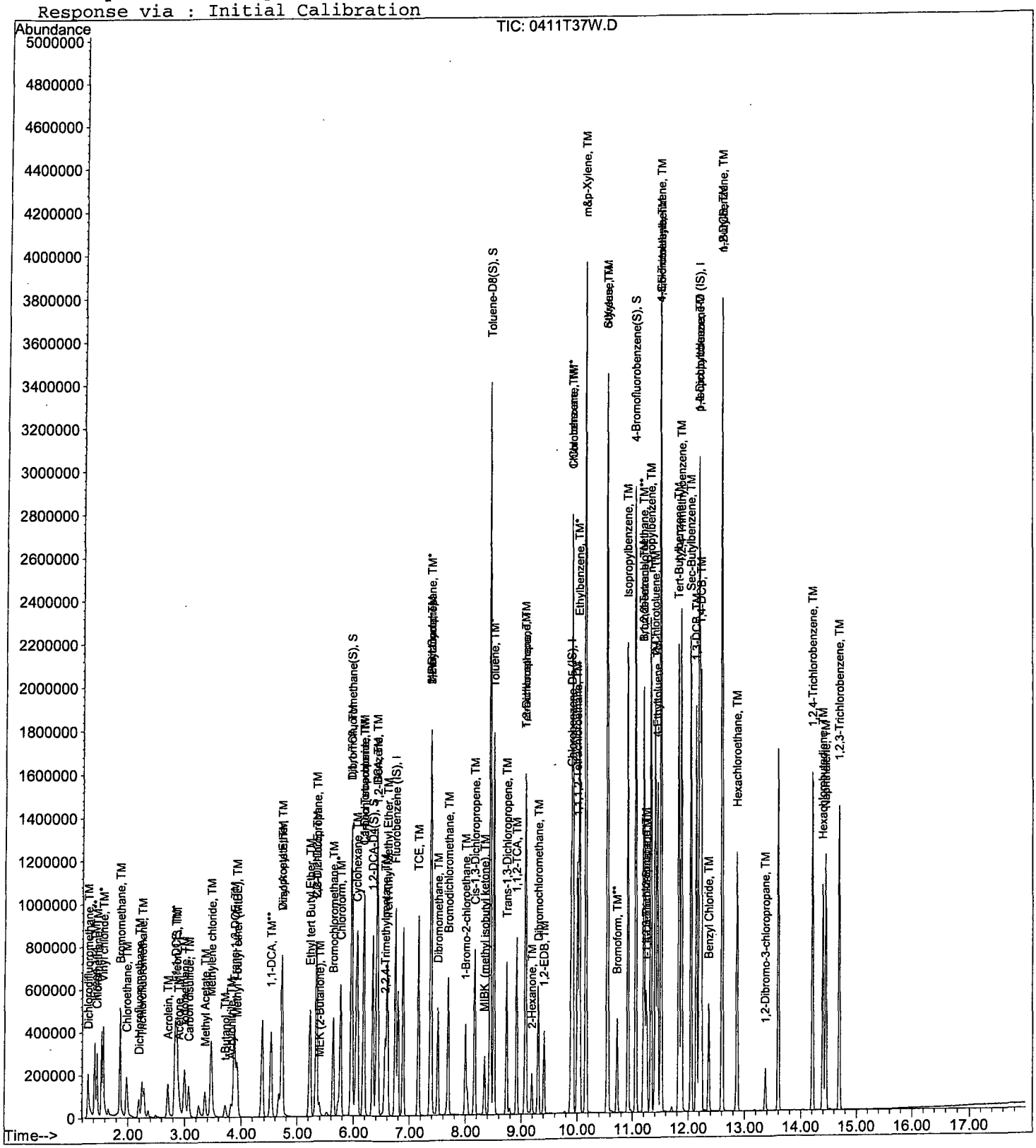
Quantitation Report

Data File : M:\THOR\DATA\T120411\0411T37W.D
Acq On : 12 Apr 12 1:26
Sample : 40ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 37
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration



204

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T38W.D Vial: 38
Acq On : 12 Apr 12 1:53 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	479168	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	413824	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	254336	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	832997	104.25262 ppb		0.00
Spiked Amount 29.720			Recovery = 350.779%			
36) 1,2-DCA-D4(S)	6.34	65	732688	100.53405 ppb		0.00
Spiked Amount 29.608			Recovery = 339.550%			
56) Toluene-D8(S)	8.44	98	2870588	103.96986 ppb		0.00
Spiked Amount 31.981			Recovery = 325.103%			
64) 4-Bromofluorobenzene(S)	11.06	95	1202580	105.15258 ppb		0.00
Spiked Amount 29.353			Recovery = 358.238%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	715449	123.98706 ppb		99
3) Freon 114	1.42	85	480585	115.41057 ppb		99
4) Chloromethane	1.46	50	758768	132.58471 ppb		96
5) Vinyl chloride	1.57	62	994130	108.64915 ppb		98
6) Bromomethane	1.86	94	703424	107.01806 ppb		98
7) Chloroethane	1.97	64	547273	107.54030 ppb		97
8) Dichlorofluoromethane	2.19	67	404670	99.98707 ppb		90
9) Trichlorofluoromethane	2.24	101	498539	100.00335 ppb		95
10) Acrolein	2.70	55	283768	585.03437 ppb	#	21
11) Acetone	2.91	43	139132	98.85097 ppb		97
12) Freon-113	2.86	101	553462	114.70243 ppb		96
13) 1,1-DCE	2.83	61	883088	109.93500 ppb		97
14) t-Butanol	3.74	59	49256	236.40490 ppb		96
15) Methyl Acetate	3.36	43	430764	100.90515 ppb		95
16) Iodomethane	2.99	142	916547	107.98395 ppb		96
17) Acrylonitrile	3.83	52	144895	109.44575 ppb		99
18) Methylene chloride	3.47	84	243392	93.91117 ppb		97
19) Carbon disulfide	3.07	76	299968	106.39874 ppb		99
20) Methyl t-butyl ether (MtBE	3.93	73	855894	97.14929 ppb		98
21) Trans-1,2-DCE	3.88	96	576758	106.36785 ppb		98
22) Diisopropyl Ether	4.72	59	252861	107.69659 ppb		94
23) 1,1-DCA	4.52	63	1235296	103.87282 ppb		98
24) Vinyl Acetate	4.72	87	619796	105.97243 ppb		97
25) Ethyl tert Butyl Ether	5.23	59	1154510	95.05441 ppb		99
26) MEK (2-Butanone)	5.39	43	200395	100.63431 ppb		96
27) Cis-1,2-DCE	5.34	96	822804	104.25070 ppb		99
28) 2,2-Dichloropropane	5.33	77	448937	99.70825 ppb		100
29) Chloroform	5.77	83	1352872	103.30717 ppb		97
30) Bromochloromethane	5.64	128	392612	103.94404 ppb		93
32) 1,1,1-TCA	5.97	97	924794	107.40817 ppb		99
33) Cyclohexane	6.05	41	351950	109.88989 ppb		92
34) 1,1-Dichloropropene	6.18	75	818187	108.01463 ppb		95
35) 2,2,4-Trimethylpentane	6.56	57	1198942	119.61855 ppb		94
37) Carbon Tetrachloride	6.18	117	949871	112.80308 ppb		97
38) Tert Amyl Methyl Ether	6.60	73	1287498	96.11139 ppb		95
39) 1,2-DCA	6.43	62	854060	102.13962 ppb		99
40) Benzene	6.42	78	2806241	103.95776 ppb		99
41) TCE	7.16	95	781473	102.34539 ppb		98
42) 2-Pentanone	7.38	43	719196	210.59097 ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0411T38W.D Vial: 38
Acq On : 12 Apr 12 1:53 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOL STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	825159	102.86816	ppb	99
44)	Bromodichloromethane	7.69	83	1063435	107.20473	ppb	99
45)	Methyl Cyclohexane	7.37	83	744183	116.14937	ppb	94
46)	Dibromomethane	7.51	93	437581	103.22911	ppb	97
48)	MIBK (methyl isobutyl ket	8.35	43	262421	101.10318	ppb	98
49)	1-Bromo-2-chloroethane	8.00	63	528384	100.89155	ppb	100
50)	Cis-1,3-Dichloropropene	8.17	75	1198858	113.42136	ppb	97
51)	Toluene	8.51	91	3364716	106.25033	ppb	99
52)	Trans-1,3-Dichloropropene	8.74	75	1010775	114.06902	ppb	99
53)	1,1,2-TCA	8.92	83	570887	101.07546	ppb	98
54)	2-Hexanone	9.19	43	299229	102.87860	ppb	96
57)	1,2-EDB	9.41	107	654360	105.75114	ppb	98
58)	Tetrachloroethene	9.07	166	911462	103.59170	ppb	99
59)	1-Chlorohexane	9.92	91	1011426	108.55214	ppb	96
60)	1,1,1,2-Tetrachloroethane	10.00	131	903393	108.51087	ppb	99
61)	m&p-Xylene	10.16	106	3196175	224.18044	ppb	99
62)	o-Xylene	10.55	106	1584273	111.84205	ppb	98
63)	Styrene	10.56	104	2787649	117.09272	ppb	97
65)	1,3-Dichloropropane	9.08	76	1104141	99.97949	ppb	95
66)	Dibromochloromethane	9.31	129	856174	108.27056	ppb	98
67)	Chlorobenzene	9.92	112	2447723	103.59495	ppb	99
68)	Ethylbenzene	10.04	91	4056777	109.81590	ppb	99
69)	Bromoform	10.73	173	572169	108.53019	ppb	96
71)	Isopropylbenzene	10.92	105	3954451	111.25187	ppb	100
72)	1,1,2,2-Tetrachloroethane	11.20	83	774559	100.45573	ppb	98
73)	1,2,3-Trichloropropane	11.24	110	228003	93.10759	ppb	96
74)	t-1,4-Dichloro-2-Butene	11.26	53	160999	108.63878	ppb	90
75)	Bromobenzene	11.21	156	1165453	101.89901	ppb	99
76)	n-Propylbenzene	11.33	91	4831367	111.55020	ppb	99
77)	4-Ethyltoluene	11.45	105	2804023	113.32957	ppb	99
78)	2-Chlorotoluene	11.41	91	3217839	107.34490	ppb	99
79)	1,3,5-Trimethylbenzene	11.51	105	3577037	113.45137	ppb	100
80)	4-Chlorotoluene	11.51	91	3390276	108.08891	ppb	100
81)	Tert-Butylbenzene	11.83	119	3109798	113.71262	ppb	99
82)	1,2,4-Trimethylbenzene	11.88	105	3642528	114.20894	ppb	99
83)	Sec-Butylbenzene	12.05	105	4288136	114.11740	ppb	98
84)	p-Isopropyltoluene	12.20	119	3748564	115.01717	ppb	99
85)	Benzyl Chloride	12.37	91	1054108	111.40929	ppb	100
86)	1,3-DCB	12.15	146	2253891	100.91341	ppb	99
87)	1,4-DCB	12.24	146	2274733	101.77865	ppb	99
88)	n-Butylbenzene	12.61	91	3182444	114.50718	ppb	99
89)	1,2-DCB	12.60	146	2102993	101.88792	ppb	98
90)	Hexachloroethane	12.87	117	626446	108.12226	ppb	98
91)	1,2-Dibromo-3-chloropropan	13.37	157	170606	112.36321	ppb	93
92)	1,2,4-Trichlorobenzene	14.21	180	1019200	115.10218	ppb	100
93)	Hexachlorobutadiene	14.40	223	391919	103.40386	ppb	88
94)	Naphthalene	14.45	128	2802700	121.04537	ppb	98
95)	1,2,3-Trichlorobenzene	14.69	180	1375528	110.03251	ppb	97

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

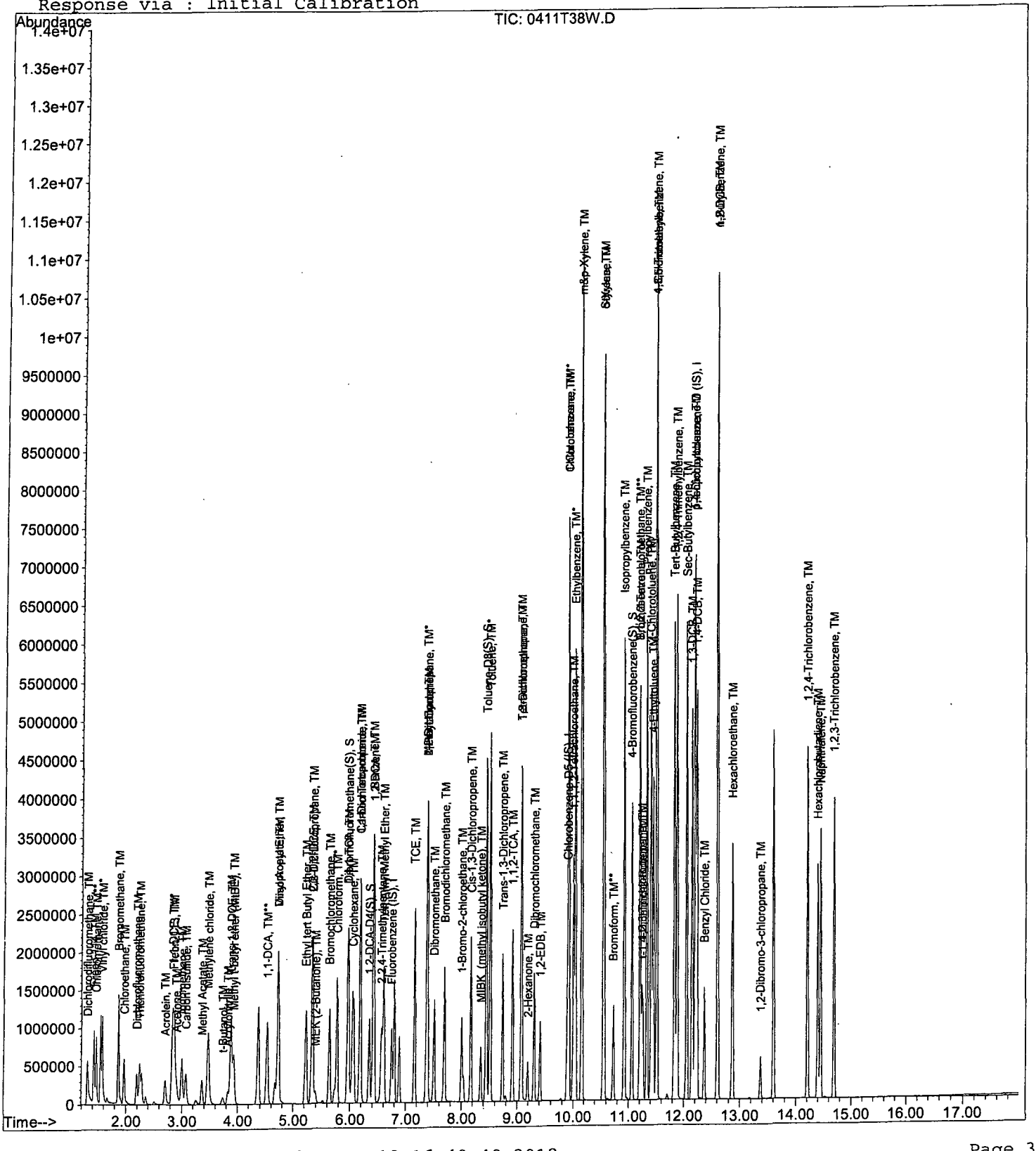
Quantitation Report

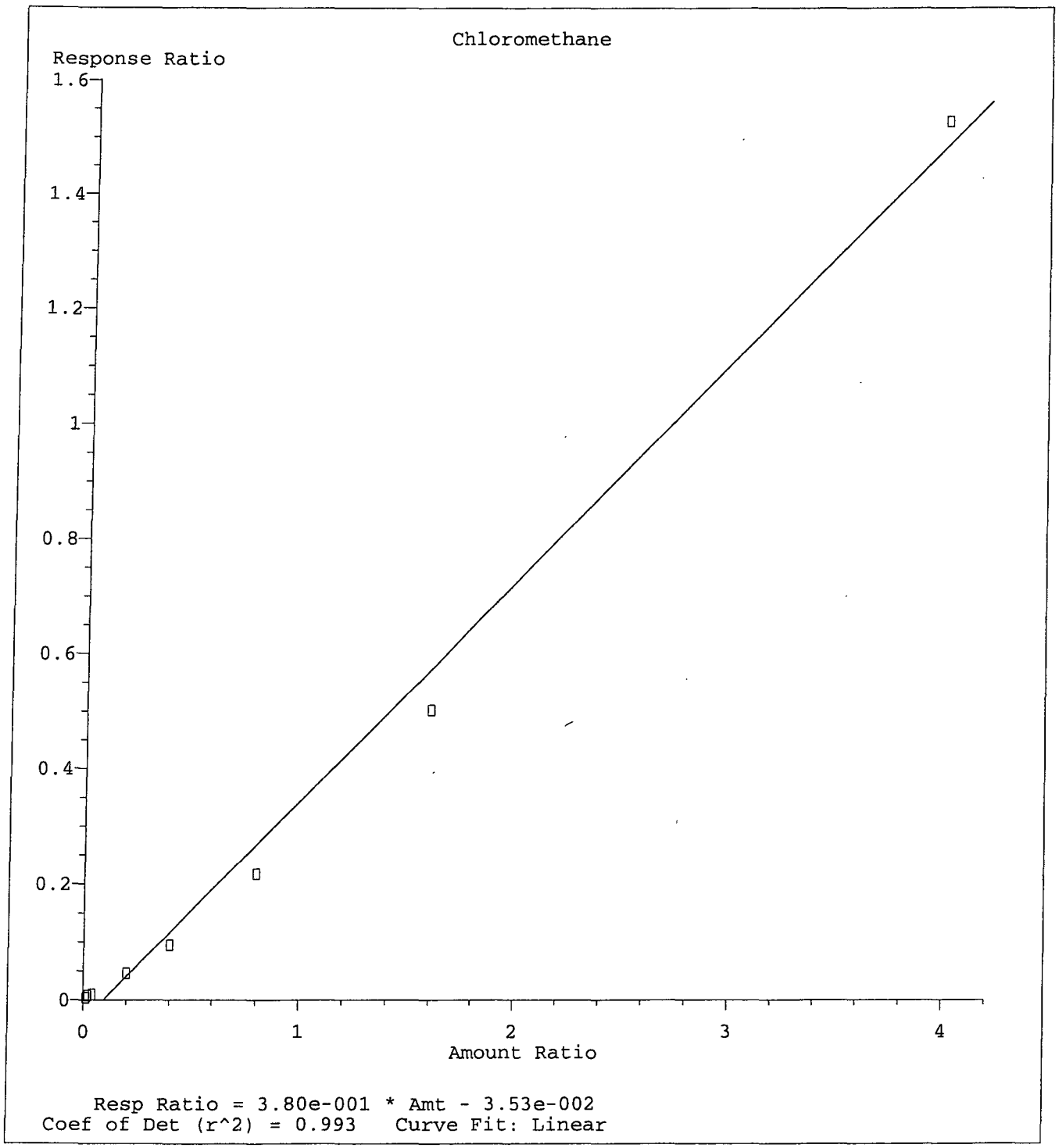
Data File : M:\THOR\DATA\T120411\0411T38W.D
Acq On : 12 Apr 12 1:53
Sample : 100ug/L VOL STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 38
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

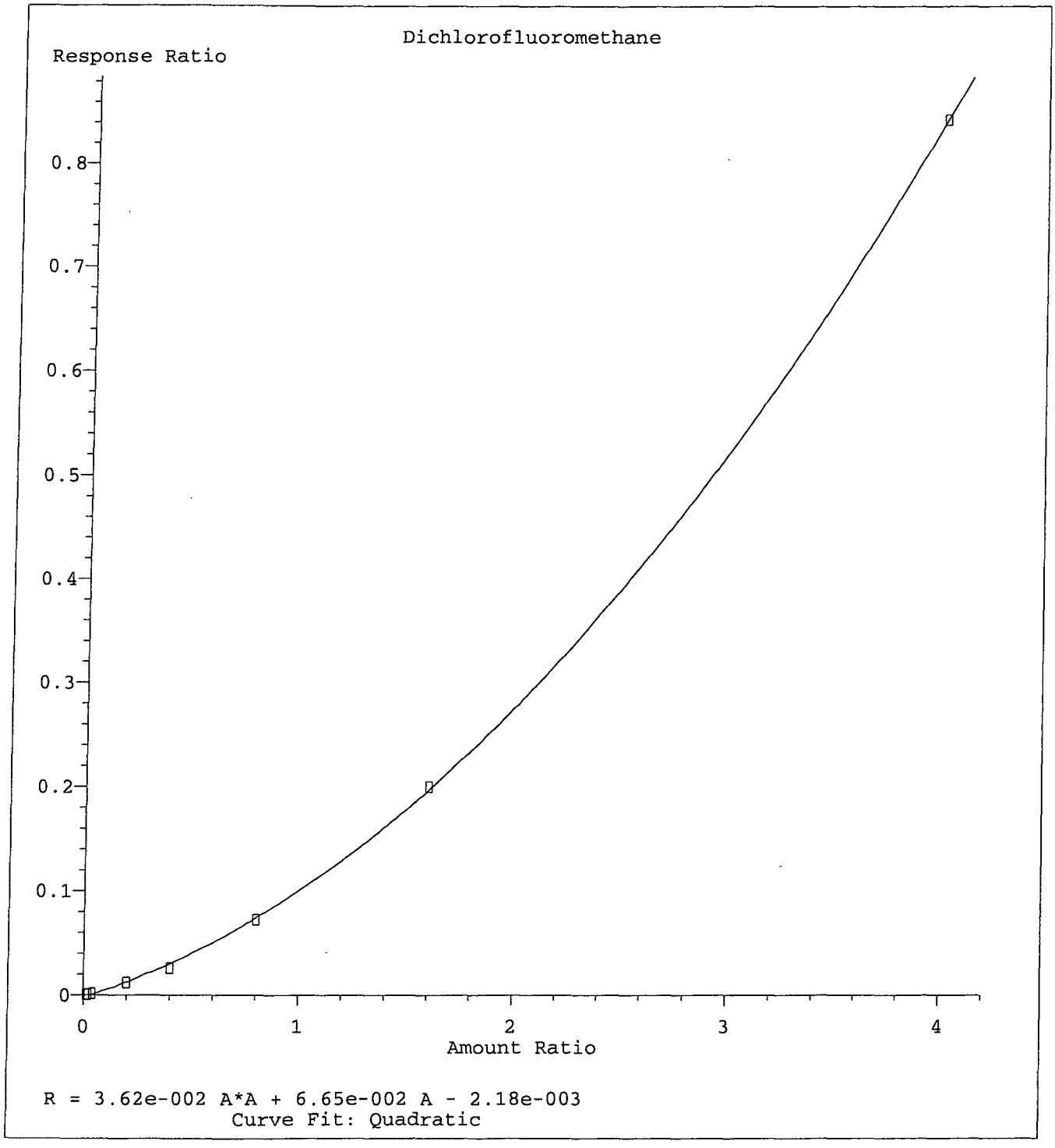
Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120402\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Sat Apr 07 08:12:59 2012
Response via : Initial Calibration

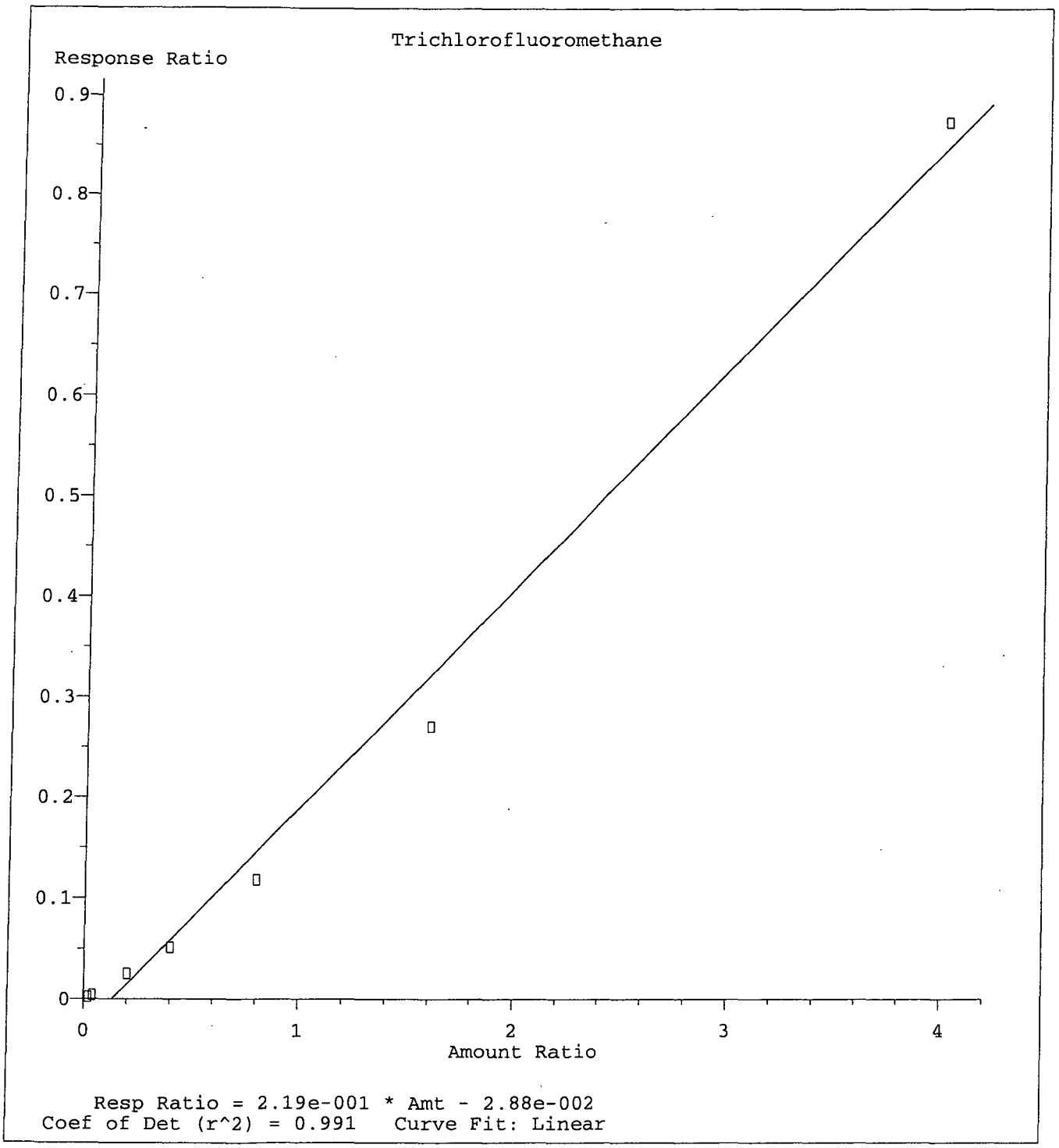




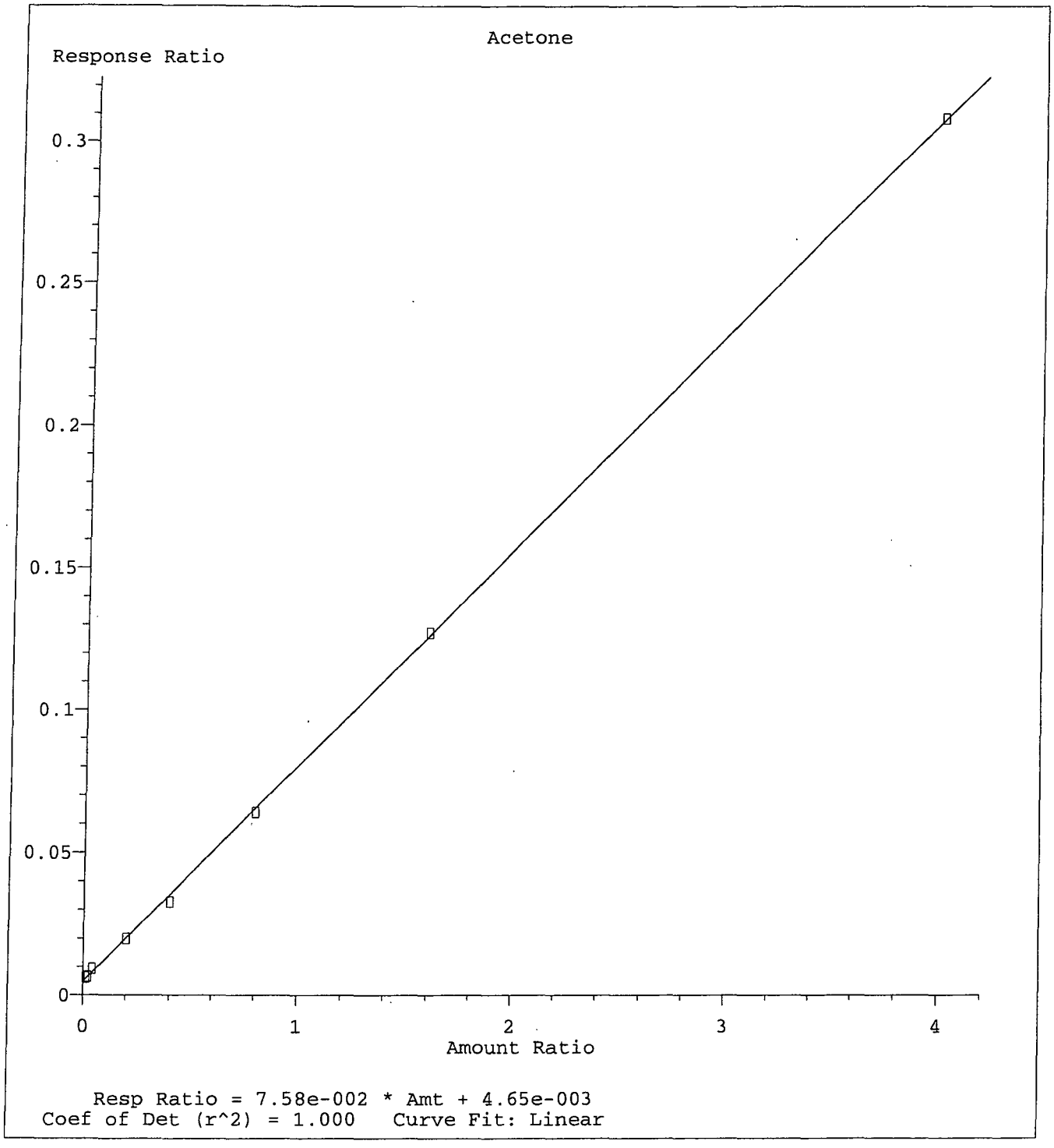
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



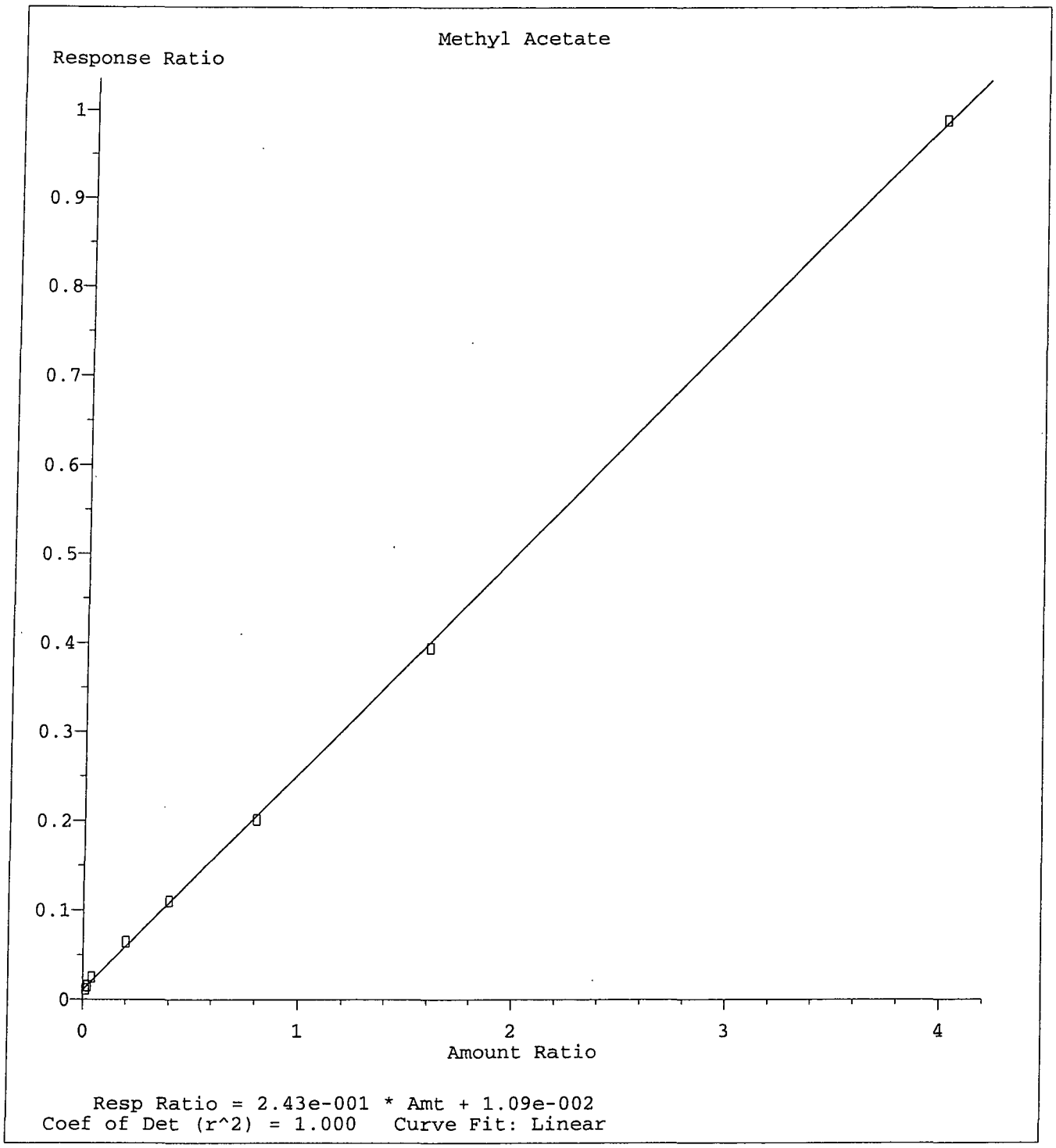
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



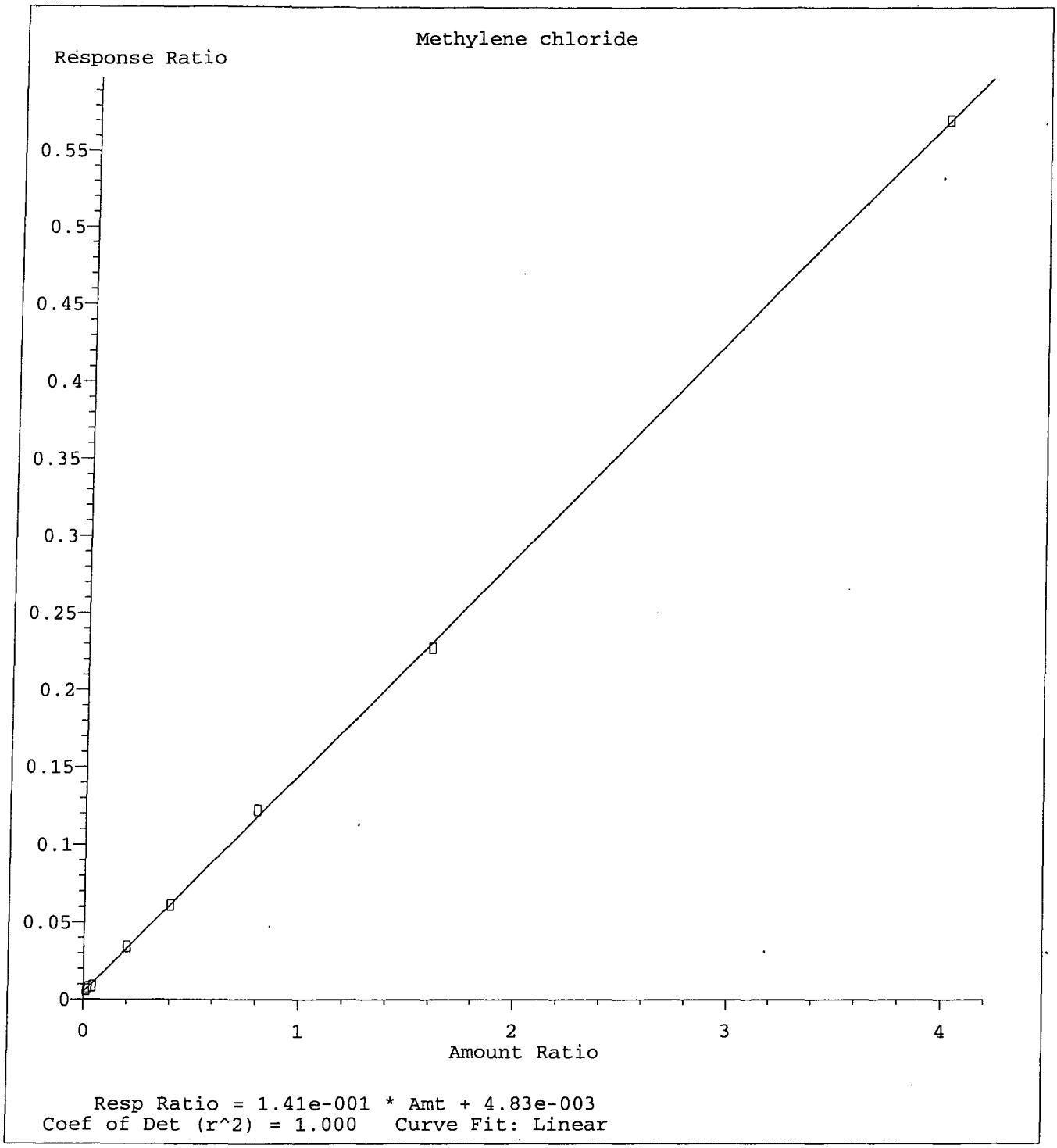
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



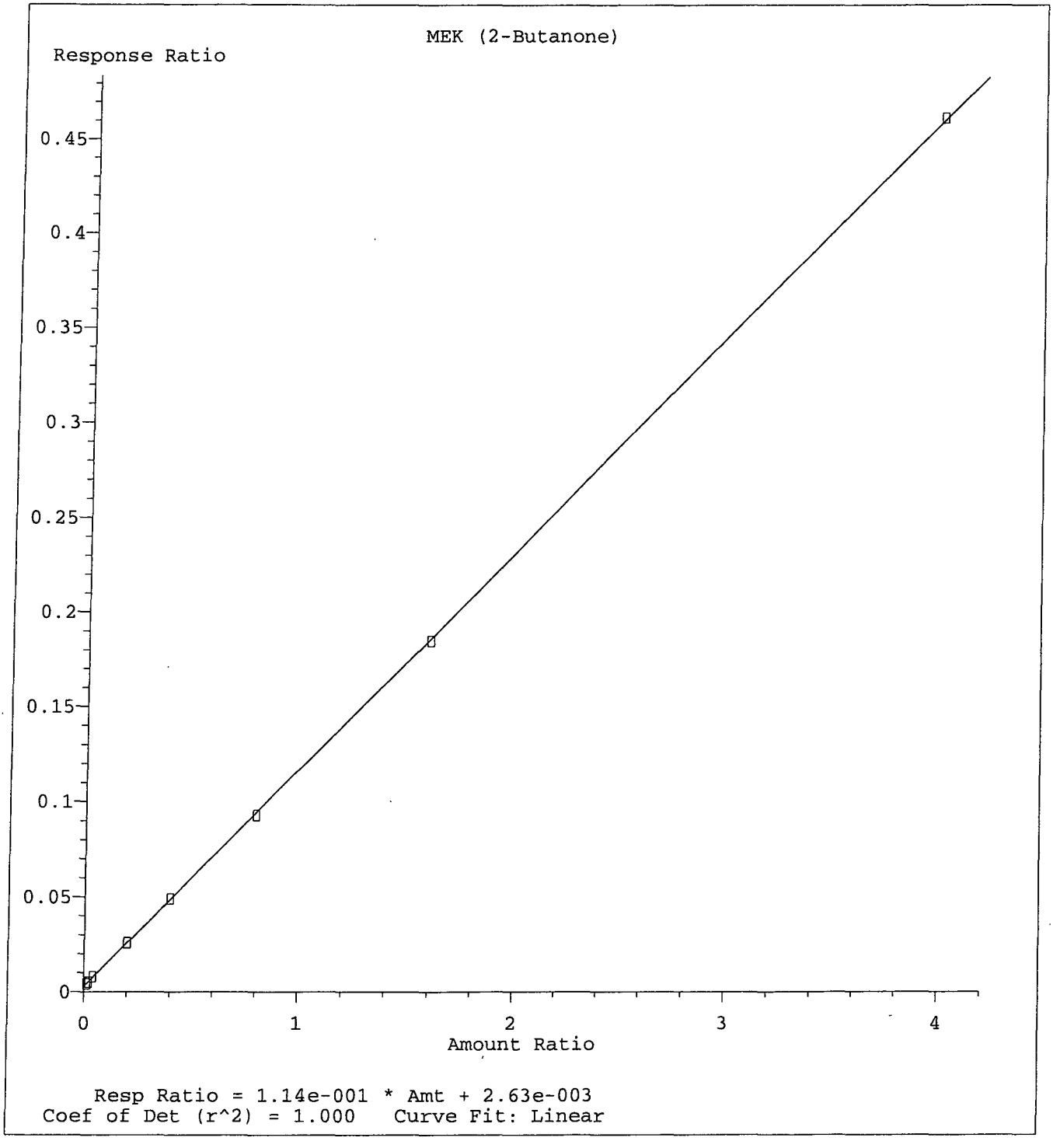
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



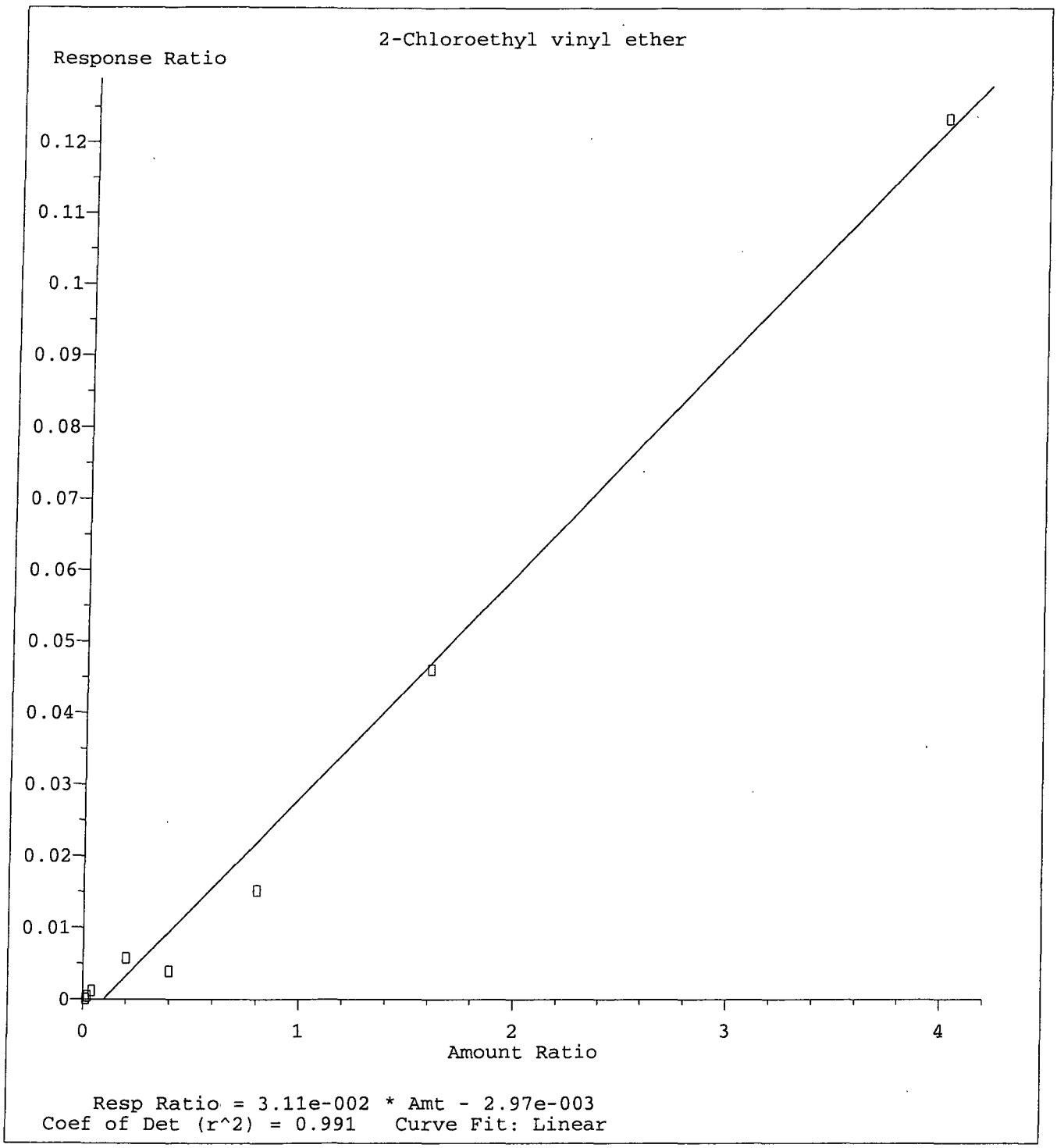
Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012



Method Name: M:\THOR\DATA\T120402\TALLW.M
Calibration Table Last Updated: Sat Apr 07 08:12:59 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 04/12/12
Matrix: Instrument: Thor
Initial Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.3011	0.3128	3.9	TM	
3	TM	Freon 114	0.2173	0.2160	0.56	TM	
4	TM**L	Chloromethane	0.3045	0.2786	8.5	TM**L	2.0
5	TM*	Vinyl chloride	0.4774	0.5239	9.7	TM*	
6	TM	Bromomethane	0.3429	0.3264	4.8	TM	
7	TM	Chloroethane	0.2655	0.2701	1.7	TM	
8	TMQ	Dichlorofluoromethane	0.0778	0.0640	18	TMQ	5.5
9	TMQ	Trichlorofluoromethane	0.1664	0.1691	1.6	TMQ	5.9
10	TM	Acrolein	0.0253	0.0271	7.1	TM	
11	TML	Acetone	0.1096	0.0894	18	TML	6.1
12	TM	Freon-113	0.2517	0.2775	10	TM	
13	TM*	1,1-DCE	0.4191	0.4234	1.0	TM*	
14	TMQ	t-Butanol	0.0068	0.0073	7.9	TMQ	5.1
15	TML	Methyl Acetate	0.3221	0.2389	26	TML	3.1
16	TM	Iodomethane	0.4428	0.4736	7.0	TM	
17	TM	Acrylonitrile	0.0691	0.0756	9.5	TM	
18	TM	Methylene chloride	0.1352	0.1305	3.5	TM	
19	TM	Carbon disulfide	0.1471	0.1627	11	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.4597	0.4997	8.7	TM	
21	TM	Trans-1,2-DCE	0.2829	0.3022	6.8	TM	
22	TM	Diisopropyl Ether	0.1225	0.1267	3.4	TM	
23	TM**	1,1-DCA	0.6205	0.6383	2.9	TM**	
24	TM	Vinyl Acetate	0.3051	0.3087	1.2	TM	
25	TM	Ethyl tert Butyl Ether	0.6337	0.6762	6.7	TM	
26	TML	MEK (2-Butanone)	0.1220	0.1145	6.1	TML	9.5
27	TM	Cis-1,2-DCE	0.4118	0.4230	2.7	TM	
28	TM	2,2-Dichloropropane	0.2349	0.2417	2.9	TM	
29	TM*	Chloroform	0.6832	0.6942	1.6	TM*	
30	TM	Bromochloromethane	0.1971	0.2035	3.3	TM	
31	S	Dibromofluoromethane(S)	0.4169	0.4187	0.43	S	
32	TM	1,1,1-TCA	0.4492	0.4718	5.0	TM	
33	TM	Cyclohexane	0.1671	0.1669	0.10	TM	
34	TM	1,1-Dichloropropene	0.3952	0.4094	3.6	TM	
35	TM	2,2,4-Trimethylpentane	0.5229	0.5433	3.9	TM	
36	S	1,2-DCA-D4(S)	0.3802	0.3728	2.0	S	
37	TM	Carbon Tetrachloride	0.4393	0.4557	3.7	TM	
38	TM	Tert Amyl Methyl Ether	0.6989	0.7565	8.2	TM	
39	TM	1,2-DCA	0.4363	0.4538	4.0	TM	
40	TM	Benzene	1.408	1.436	2.0	TM	
		Average			5.9		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc. SDG No:
Case No: Date Analyzed: 04/12/12
Matrix: 0 Instrument: Thor
Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	TCE	0.3984	0.4211	5.7	TM	
42	TM	2-Pentanone	0.1782	0.1894	6.3	TM	
43	TM*	1,2-Dichloropropane	0.4185	0.4263	1.9	TM*	
44	TM	Bromodichloromethane	0.5175	0.5269	1.8	TM	
45	TM	Methyl Cyclohexane	0.3343	0.3462	3.6	TM	
46	TM	Dibromomethane	0.2212	0.2309	4.4	TM	
47	TML	2-Chloroethyl vinyl ether	0.0000	0.0000	0.00	TML	
48	TM	MIBK (methyl isobutyl ketone)	0.1354	0.1344	0.78	TM	
49	TM	1-Bromo-2-chloroethane	0.2732	0.2831	3.6	TM	
50	TM	Cis-1,3-Dichloropropene	0.5515	0.5660	2.6	TM	
51	TM*	Toluene	1.652	1.699	2.8	TM*	
52	TM	Trans-1,3-Dichloropropene	0.4623	0.4742	2.6	TM	
53	TM	1,1,2-TCA	0.2947	0.2997	1.7	TM	
54	TM	2-Hexanone	0.1518	0.1466	3.4	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	S	Toluene-D8(S)	1.668	1.679	0.68	S	
57	TM	1,2-EDB	0.3738	0.3956	5.8	TM	
58	TM	Tetrachloroethene	0.5315	0.5514	3.7	TM	
59	TM	1-Chlorohexane	0.5629	0.5638	0.16	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5030	0.5159	2.6	TM	
61	TM	m&p-Xylene	0.8613	0.8987	4.3	TM	
62	TM	o-Xylene	0.8558	0.8962	4.7	TM	
63	TM	Styrene	1.438	1.485	3.3	TM	
64	S	4-Bromofluorobenzene(S)	0.6909	0.7019	1.6	S	
65	TM	1,3-Dichloropropane	0.6672	0.6750	1.2	TM	
66	TM	Dibromochloromethane	0.4777	0.4999	4.6	TM	
67	TM**	Chlorobenzene	1.427	1.465	2.7	TM**	
68	TM*	Ethylbenzene	2.232	2.323	4.1	TM*	
69	TM**	Bromoform	0.3185	0.3247	2.0	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.494	3.624	3.7	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7579	0.7620	0.54	TM**	
73	TM	1,2,3-Trichloropropane	0.2407	0.2347	2.5	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1457	0.1509	3.6	TM	
75	TM	Bromobenzene	1.124	1.133	0.81	TM	
76	TM	n-Propylbenzene	4.257	4.388	3.1	TM	
77	TM	4-Ethyltoluene	2.432	2.617	7.6	TM	
78	TM	2-Chlorotoluene	2.947	3.101	5.2	TM	
79	TM	1,3,5-Trimethylbenzene	3.099	3.261	5.2	TM	
80	TM	4-Chlorotoluene	3.083	3.216	4.3	TM	
		Average			3.1		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No:
Matrix: 0

SDG No:
Date Analyzed: 04/12/12
Instrument: Thor
Cal. Date: 04/11/12
Data File: 0412T12W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Tert-Butylbenzene	2.688	2.833	5.4	TM	
82	TM	1,2,4-Trimethylbenzene	3.135	3.320	5.9	TM	
83	TM	Sec-Butylbenzene	3.694	3.943	6.8	TM	
84	TM	p-Isopropyltoluene	3.204	3.310	3.3	TM	
85	TM	Benzyl Chloride	0.9300	0.8793	5.5	TM	
86	TM	1,3-DCB	2.195	2.175	0.92	TM	
87	TM	1,4-DCB	2.197	2.200	0.16	TM	
88	TM	n-Butylbenzene	2.732	2.840	4.0	TM	
89	TM	1,2-DCB	2.029	2.047	0.92	TM	
90	TM	Hexachloroethane	0.5695	0.5452	4.3	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.1492	0.1575	5.5	TM	
92	TM	1,2,4-Trichlorobenzene	0.8704	0.9120	4.8	TM	
93	TM	Hexachlorobutadiene	0.3726	0.3742	0.44	TM	
94	TM	Naphthalene	2.276	2.321	2.0	TM	
95	TM	1,2,3-Trichlorobenzene	1.229	1.279	4.1	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.6		

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0412T12W.D Vial: 42
Acq On : 12 Apr 12 3:44 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-11-12 (SS) 4/19/12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	467840	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	389056	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	238272	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	232857	29.84855 ppb	0.00
Spiked Amount 29.720			Recovery =	100.433%	
36) 1,2-DCA-D4(S)	6.34	65	206556	29.02835 ppb	0.00
Spiked Amount 29.608			Recovery =	98.041%	
56) Toluene-D8(S)	8.44	98	835757	32.19735 ppb	0.00
Spiked Amount 31.981			Recovery =	100.677%	
64) 4-Bromofluorobenzene(S)	11.06	95	320616	29.81911 ppb	0.00
Spiked Amount 29.353			Recovery =	101.588%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.31	85	58541	9.39078 ppb	98
3) Freon 114	1.42	85	40429	9.94395 ppb	93
4) Chloromethane	1.46	50	52128	9.80012 ppb	100
5) Vinyl chloride	1.57	62	98043	10.97464 ppb	99
6) Bromomethane	1.88	94	61078	9.51733 ppb	93
7) Chloroethane	1.98	64	50539	10.17148 ppb	92
8) Dichlorofluoromethane	2.20	67	11978	10.55213 ppb	94
9) Trichlorofluoromethane	2.25	101	31649	10.59495 ppb	100
10) Acrolein	2.71	55	63408	133.89133 ppb	99
11) Acetone	2.91	43	16729	10.60787 ppb	100
12) Freon-113	2.87	101	51932	11.02327 ppb	95
13) 1,1-DCE	2.84	61	79239	10.10326 ppb	96
14) t-Butanol	3.71	59	17112	131.33354 ppb	95
15) Methyl Acetate	3.36	43	44709	10.31208 ppb	94
16) Iodomethane	3.00	142	88633	10.69524 ppb	97
17) Acrylonitrile	3.83	52	14152	10.94848 ppb	100
18) Methylene chloride	3.47	84	24424	9.65202 ppb	99
19) Carbon disulfide	3.08	76	30448	11.06142 ppb	98
20) Methyl t-butyl ether (MtBE	3.93	73	93508	10.87073 ppb	96
21) Trans-1,2-DCE	3.88	96	56551	10.68187 ppb	95
22) Diisopropyl Ether	4.73	59	23710	10.34290 ppb	98
23) 1,1-DCA	4.53	63	119447	10.28719 ppb	97
24) Vinyl Acetate	4.72	87	57764	10.11560 ppb	99
25) Ethyl tert Butyl Ether	5.23	59	126546	10.67120 ppb	96
26) MEK (2-Butanone)	5.40	43	21430	10.94615 ppb	93
27) Cis-1,2-DCE	5.34	96	79159	10.27243 ppb	97
28) 2,2-Dichloropropane	5.34	77	45235	10.28989 ppb	100
29) Chloroform	5.77	83	129901	10.15960 ppb	92
30) Bromochloromethane	5.64	128	38088	10.32796 ppb	94
32) 1,1,1-TCA	5.98	97	88285	10.50194 ppb	100
33) Cyclohexane	6.05	41	31238	9.98965 ppb	90
34) 1,1-Dichloropropene	6.18	75	76611	10.35885 ppb	95
35) 2,2,4-Trimethylpentane	6.57	57	101671	10.38934 ppb	100
37) Carbon Tetrachloride	6.18	117	85280	10.37275 ppb	93
38) Tert Amyl Methyl Ether	6.60	73	141562	10.82344 ppb	100
39) 1,2-DCA	6.43	62	84923	10.40211 ppb	98
40) Benzene	6.41	78	268704	10.19522 ppb	99
41) TCE	7.16	95	78804	10.57044 ppb	97
42) 2-Pentanone	7.38	43	443016	132.86248 ppb	99

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

Data File : M:\THOR\DATA\T120411\0412T12W.D Vial: 42
Acq On : 12 Apr 12 3:44 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-11-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	79768	10.18503 ppb	99
44) Bromodichloromethane	7.69	83	98596	10.18012 ppb	95
45) Methyl Cyclohexane	7.37	83	64779	10.35528 ppb	94
46) Dibromomethane	7.50	93	43218	10.44236 ppb	96
48) MIBK (methyl isobutyl ket	8.35	43	25144	9.92181 ppb	97
49) 1-Bromo-2-chloroethane	8.00	63	52984	10.36192 ppb	99
50) Cis-1,3-Dichloropropene	8.17	75	105913	10.26282 ppb	98
51) Toluene	8.51	91	317983	10.28434 ppb	100
52) Trans-1,3-Dichloropropene	8.74	75	88745	10.25764 ppb	100
53) 1,1,2-TCA	8.92	83	56091	10.17136 ppb	97
54) 2-Hexanone	9.19	43	27437	9.66159 ppb	99
57) 1,2-EDB	9.41	107	61559	10.58189 ppb	99
58) Tetrachloroethene	9.07	166	85805	10.37296 ppb	96
59) 1-Chlorohexane	9.92	91	87735	10.01569 ppb	99
60) 1,1,1,2-Tetrachloroethane	10.00	131	80293	10.25836 ppb	98
61) m&p-Xylene	10.16	106	279701	20.86723 ppb	99
62) o-Xylene	10.55	106	139464	10.47227 ppb	99
63) Styrene	10.56	104	231157	10.32767 ppb	98
65) 1,3-Dichloropropane	9.08	76	105041	10.11693 ppb	93
66) Dibromochloromethane	9.31	129	77794	10.46401 ppb	95
67) Chlorobenzene	9.92	112	228040	10.26576 ppb	99
68) Ethylbenzene	10.04	91	361467	10.40774 ppb	100
69) Bromoform	10.73	173	50532	10.19521 ppb	92
71) Isopropylbenzene	10.92	105	345420	10.37298 ppb	100
72) 1,1,2,2-Tetrachloroethane	11.20	83	72625	10.05405 ppb	99
73) 1,2,3-Trichloropropane	11.24	110	22366	9.74917 ppb	93
74) t-1,4-Dichloro-2-Butene	11.26	53	14383	10.35967 ppb	86
75) Bromobenzene	11.21	156	108015	10.08078 ppb	99
76) n-Propylbenzene	11.33	91	418167	10.30588 ppb	99
77) 4-Ethyltoluene	11.45	105	249432	10.76090 ppb	99
78) 2-Chlorotoluene	11.41	91	295571	10.52480 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	310832	10.52318 ppb	100
80) 4-Chlorotoluene	11.51	91	306556	10.43256 ppb	98
81) Tert-Butylbenzene	11.83	119	269992	10.53810 ppb	99
82) 1,2,4-Trimethylbenzene	11.88	105	316455	10.59117 ppb	99
83) Sec-Butylbenzene	12.05	105	375806	10.67534 ppb	100
84) p-Isopropyltoluene	12.20	119	315519	10.33375 ppb	98
85) Benzyl Chloride	12.37	91	83805	9.45455 ppb	99
86) 1,3-DCB	12.15	146	207309	9.90761 ppb	100
87) 1,4-DCB	12.23	146	209716	10.01596 ppb	98
88) n-Butylbenzene	12.61	91	270707	10.39696 ppb	98
89) 1,2-DCB	12.60	146	195145	10.09200 ppb	98
90) Hexachloroethane	12.87	117	51961	9.57291 ppb	96
91) 1,2-Dibromo-3-chloropropan	13.37	157	15013	10.55437 ppb	85
92) 1,2,4-Trichlorobenzene	14.21	180	86920	10.47801 ppb	99
93) Hexachlorobutadiene	14.40	223	35665	10.04425 ppb	83
94) Naphthalene	14.45	128	221248	10.19966 ppb	98
95) 1,2,3-Trichlorobenzene	14.69	180	121944	10.41230 ppb	98

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

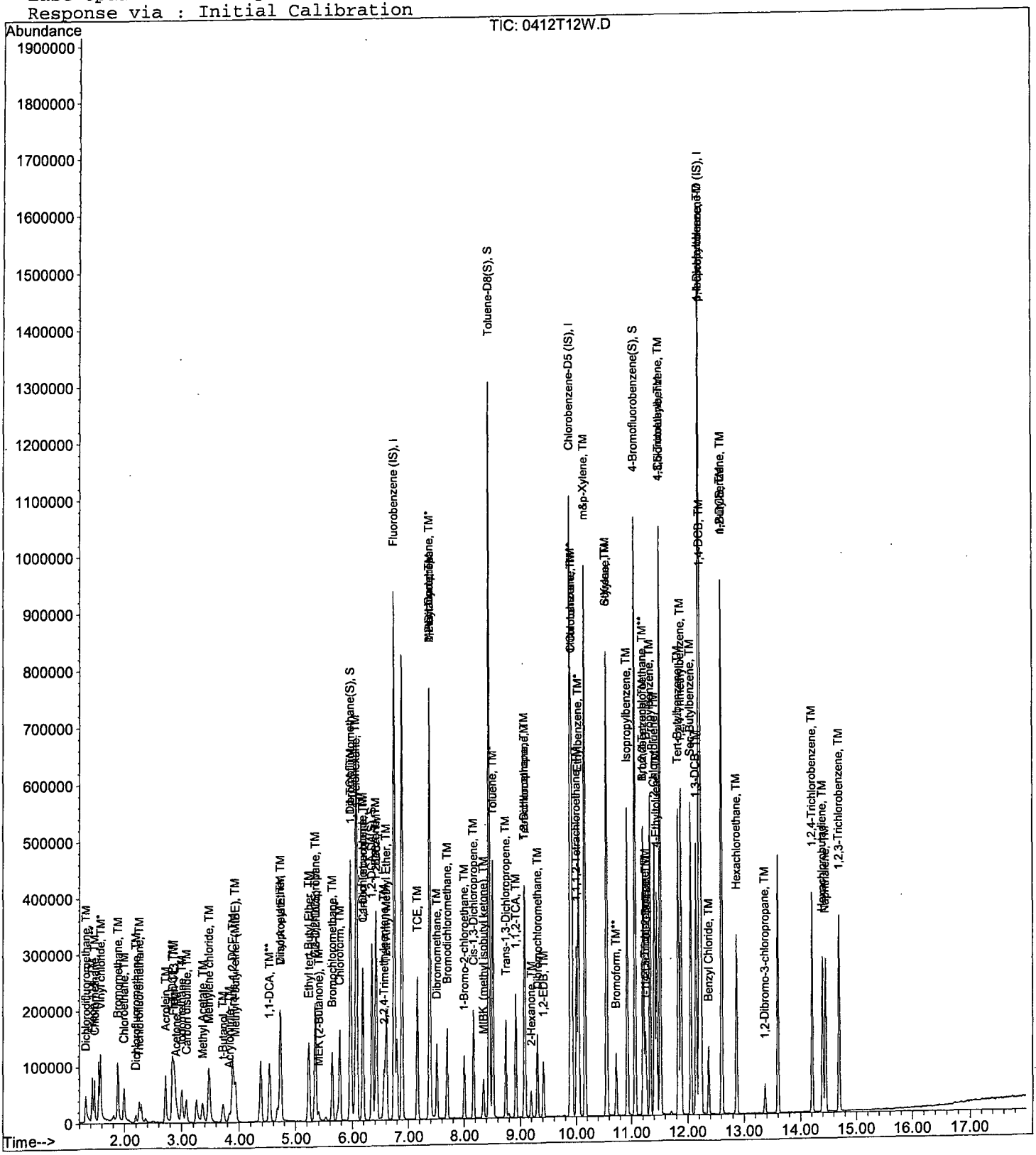
Quantitation Report

Data File : M:\THOR\DATA\T120411\0412T12W.D
Acq On : 12 Apr 12 3:44
Sample : 10ug/L VOC STD 4-11-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 42
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 12 8:55 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: 67525
Matrix: water

SDG No: 67525
Date Analyzed: 4/19/12
Instrument: Thor
Initial Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.3011	0.3251	8.0	TM		
3	TM	Freon 114	0.2173	0.2142	1.4	TM		
4	TM**L	Chloromethane	0.3045	0.2923	4.0	TM**L	2.6	
5	TM*	Vinyl chloride	0.4774	0.4884	2.3	TM*		
6	TM	Bromomethane	0.3429	0.3394	1.0	TM		
7	TM	Chloroethane	0.2655	0.2779	4.7	TM		
8	TMQ	Dichlorofluoromethane	0.0778	0.0477	39	TMQ	15	
9	TMQ	Trichlorofluoromethane	0.1664	0.1620	2.7	TMQ	1.8	
10	TM	Acrolein	0.0253	0.0159	37	TM		nt
11	TML	Acetone	0.1096	0.0769	30	TML	11	
12	TM	Freon-113	0.2517	0.2754	9.4	TM		
13	TM*	1,1-DCE	0.4191	0.3839	8.4	TM*		
14	TMQ	t-Butanol	0.0068	0.0023	66	TMQ	55	nt
15	TML	Methyl Acetate	0.3221	0.2096	35	TML	10	
16	TM	Iodomethane	0.4428	0.4260	3.8	TM		
17	TM	Acrylonitrile	0.0691	0.0705	2.1	TM		
18	TM	Methylene chloride	0.1352	0.1095	19	TM		
19	TM	Carbon disulfide	0.1471	0.1287	13	TM		
20	TM	Methyl t-butyl ether (MtBE)	0.4597	0.4046	12	TM		
21	TM	Trans-1,2-DCE	0.2829	0.2761	2.4	TM		
22	TM	Diisopropyl Ether	0.1225	0.1125	8.1	TM		
23	TM**	1,1-DCA	0.6205	0.5808	6.4	TM**		
24	TM	Vinyl Acetate	0.3051	0.2727	11	TM		
25	TM	Ethyl tert Butyl Ether	0.6337	0.5153	19	TM		
26	TML	MEK (2-Butanone)	0.1220	0.0933	24	TML	11	
27	TM	Cis-1,2-DCE	0.4118	0.3634	12	TM		
28	TM	2,2-Dichloropropane	0.2349	0.2618	11	TM		
29	TM*	Chloroform	0.6832	0.6431	5.9	TM*		
30	TM	Bromochloromethane	0.1971	0.1925	2.3	TM		
31	S	Dibromofluoromethane(S)	0.4169	0.4366	4.7	S		
32	TM	1,1,1-TCA	0.4492	0.4257	5.2	TM		
33	TM	Cyclohexane	0.1671	0.1367	18	TM		
34	TM	1,1-Dichloropropene	0.3952	0.3463	12	TM		
35	TM	2,2,4-Trimethylpentane	0.5229	0.5583	6.8	TM		
36	S	1,2-DCA-D4(S)	0.3802	0.3847	1.2	S		
37	TM	Carbon Tetrachloride	0.4393	0.4311	1.9	TM		
38	TM	Tert Amyl Methyl Ether	0.6989	0.5900	16	TM		
39	TM	1,2-DCA	0.4363	0.3826	12	TM		
40	TM	Benzene	1.408	1.245	12	TM		
		Average			12.6			

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

SDM 5.17.12

Lab Name: APPL, Inc.
Case No: 67525
Matrix: ~~0~~ Water
SDM 5.17.12

SDG No: ~~0~~ 62525
Date Analyzed: 4/19/12
Instrument: Thor
Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	TCE	0.3984	0.3506	12	TM	
42	TM	2-Pentanone	0.1782	0.1704	4.4	TM	
43	TM*	1,2-Dichloropropane	0.4185	0.3830	8.5	TM*	
44	TM	Bromodichloromethane	0.5175	0.4812	7.0	TM	
45	TM	Methyl Cyclohexane	0.3343	0.3270	2.2	TM	
46	TM	Dibromomethane	0.2212	0.2035	8.0	TM	
47	TML	2-Chloroethyl vinyl ether	0.0000	0.0064	0.00	TML	
48	TM	MIBK (methyl isobutyl ketone)	0.1354	0.1124	17	TM	
49	TM	1-Bromo-2-chloroethane	0.2732	0.2381	13	TM	
50	TM	Cis-1,3-Dichloropropene	0.5515	0.5148	6.6	TM	
51	TM*	Toluene	1.652	1.493	9.6	TM*	
52	TM	Trans-1,3-Dichloropropene	0.4623	0.4426	4.3	TM	
53	TM	1,1,2-TCA	0.2947	0.2687	8.8	TM	
54	TM	2-Hexanone	0.1518	0.1378	9.2	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	S	Toluene-D8(S)	1.668	1.675	0.43	S	
57	TM	1,2-EDB	0.3738	0.3585	4.1	TM	
58	TM	Tetrachloroethene	0.5315	0.5024	5.5	TM	
59	TM	1-Chlorohexane	0.5629	0.5127	8.9	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5030	0.4925	2.1	TM	
61	TM	m&p-Xylene	0.8613	0.8167	5.2	TM	
62	TM	o-Xylene	0.8558	0.7763	9.3	TM	
63	TM	Styrene	1.438	1.351	6.1	TM	
64	S	4-Bromofluorobenzene(S)	0.6909	0.7210	4.3	S	
65	TM	1,3-Dichloropropane	0.6672	0.5881	12	TM	
66	TM	Dibromochloromethane	0.4777	0.4584	4.0	TM	
67	TM**	Chlorobenzene	1.427	1.318	7.7	TM**	
68	TM*	Ethylbenzene	2.232	2.056	7.9	TM*	
69	TM**	Bromoform	0.3185	0.3043	4.5	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.494	3.095	11	TM	
72	TM**	1,1,2,2-Tetrachloroethane	0.7579	0.7168	5.4	TM**	
73	TM	1,2,3-Trichloropropane	0.2407	0.2038	15	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1457	0.1322	9.3	TM	
75	TM	Bromobenzene	1.124	1.011	10	TM	
76	TM	n-Propylbenzene	4.257	3.920	7.9	TM	
77	TM	4-Ethyltoluene	2.432	2.332	4.1	TM	
78	TM	2-Chlorotoluene	2.947	2.670	9.4	TM	
79	TM	1,3,5-Trimethylbenzene	3.099	2.893	6.7	TM	
80	TM	4-Chlorotoluene	3.083	2.811	8.8	TM	
		Average			7.4		

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: 67525
Matrix: ~~067525~~ Water
SAM 5.17.12

SDG No: 067525
Date Analyzed: 4/19/12
Instrument: Thor
Cal. Date: 4/11/12
Data File: 0419T11W.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	Tert-Butylbenzene	2.688	2.445	9.0	TM	
82	TM	1,2,4-Trimethylbenzene	3.135	2.885	8.0	TM	
83	TM	Sec-Butylbenzene	3.694	3.465	6.2	TM	
84	TM	p-Isopropyltoluene	3.204	3.027	5.5	TM	
85	TM	Benzyl Chloride	0.9300	1.133	22	TM	*
86	TM	1,3-DCB	2.195	1.981	9.8	TM	
87	TM	1,4-DCB	2.197	2.011	8.5	TM	
88	TM	n-Butylbenzene	2.732	2.604	4.7	TM	
89	TM	1,2-DCB	2.029	1.814	11	TM	
90	TM	Hexachloroethane	0.5695	0.5493	3.6	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.1492	0.1477	1.1	TM	
92	TM	1,2,4-Trichlorobenzene	0.8704	0.8328	4.3	TM	
93	TM	Hexachlorobutadiene	0.3726	0.3709	0.44	TM	
94	TM	Naphthalene	2.276	2.087	8.3	TM	
95	TM	1,2,3-Trichlorobenzene	1.229	1.179	4.0	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			7.1		

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	499136	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	420608	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	266368	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	259074	31.12693 ppb		0.00
Spiked Amount 29.720			Recovery = 104.733%			
36) 1,2-DCA-D4(S)	6.34	65	227385	29.95193 ppb		0.00
Spiked Amount 29.608			Recovery = 101.162%			
56) Toluene-D8(S)	8.44	98	901334	32.11889 ppb		0.00
Spiked Amount 31.981			Recovery = 100.433%			
64) 4-Bromofluorobenzene(S)	11.06	95	356040	30.62971 ppb		0.00
Spiked Amount 29.353			Recovery = 104.351%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.29	85	64912	10.79920 ppb		100
3) Freon 114	1.41	85	42766	9.85923 ppb		93
4) Chloromethane	1.45	50	58361	10.25898 ppb		98
5) Vinyl chloride	1.56	62	97507	10.23029 ppb		98
6) Bromomethane	1.87	94	67767	9.89754 ppb		98
7) Chloroethane	1.97	64	55487	10.46712 ppb		100
8) Dichlorofluoromethane	2.18	67	9532	8.50481 ppb		84
9) Trichlorofluoromethane	2.24	101	32335	10.18362 ppb		93
10) Acrolein	2.69	55	39595	78.36592 ppb	#	7
11) Acetone	2.95	43	15349m	8.87256 ppb		93
12) Freon-113	2.85	101	54981	10.93872 ppb		95
13) 1,1-DCE	2.82	61	76639	9.15906 ppb		93
14) t-Butanol	3.87	59	5822	55.80855 ppb		97
15) Methyl Acetate	3.37	43	41853	8.99123 ppb		95
16) Iodomethane	2.98	142	85051	9.61951 ppb		94
17) Acrylonitrile	3.85	52	14084	10.21270 ppb		97
18) Methylene chloride	3.46	84	21872	8.10155 ppb		90
19) Carbon disulfide	3.06	76	25696	8.74976 ppb		97
20) Methyl t-butyl ether (MtBE	3.93	73	80779	8.80212 ppb		98
21) Trans-1,2-DCE	3.87	96	55134	9.76124 ppb		94
22) Diisopropyl Ether	4.73	59	22468	9.18657 ppb		99
23) 1,1-DCA	4.51	63	115960	9.36069 ppb		98
24) Vinyl Acetate	4.73	87	54440	8.93575 ppb		95
25) Ethyl tert Butyl Ether	5.24	59	102883	8.13181 ppb		97
26) MEK (2-Butanone)	5.43	43	18624	8.90056 ppb		100
27) Cis-1,2-DCE	5.34	96	72548	8.82423 ppb		95
28) 2,2-Dichloropropane	5.32	77	52273	11.14531 ppb		95
29) Chloroform	5.77	83	128388	9.41168 ppb		94
30) Bromochloromethane	5.64	128	38440	9.76986 ppb		79
32) 1,1,1-TCA	5.97	97	85001	9.47731 ppb		97
33) Cyclohexane	6.04	41	27292	8.18052 ppb		97
34) 1,1-Dichloropropene	6.18	75	69140	8.76251 ppb		93
35) 2,2,4-Trimethylpentane	6.56	57	111459	10.67541 ppb		100
37) Carbon Tetrachloride	6.17	117	86062	9.81153 ppb		90
38) Tert Amyl Methyl Ether	6.61	73	117793	8.44144 ppb		98
39) 1,2-DCA	6.43	62	76395	8.77081 ppb		100
40) Benzene	6.41	78	248623	8.84183 ppb		100
41) TCE	7.16	95	69991	8.79965 ppb		98
42) 2-Pentanone	7.39	43	425179	119.51797 ppb		99

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

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 1,2-Dichloropropane	7.39	63	76469	9.15161 ppb	98
44) Bromodichloromethane	7.69	83	96075	9.29785 ppb	99
45) Methyl Cyclohexane	7.37	83	65290	9.78256 ppb	89
46) Dibromomethane	7.50	93	40638	9.20333 ppb	94
48) MIBK (methyl isobutyl ket	8.35	43	22432	8.29666 ppb	97
49) 1-Bromo-2-chloroethane	8.00	63	47544	8.71505 ppb	100
50) Cis-1,3-Dichloropropene	8.17	75	102786	9.33534 ppb	95
51) Toluene	8.51	91	298093	9.03655 ppb	99
52) Trans-1,3-Dichloropropene	8.74	75	88369	9.57375 ppb	98
53) 1,1,2-TCA	8.92	83	53642	9.11737 ppb	98
54) 2-Hexanone	9.20	43	27517	9.08221 ppb	95
57) 1,2-EDB	9.41	107	60311	9.58966 ppb	99
58) Tetrachloroethene	9.07	166	84527	9.45192 ppb	96
59) 1-Chlorohexane	9.92	91	86259	9.10850 ppb	97
60) 1,1,1,2-Tetrachloroethane	10.00	131	82859	9.79207 ppb	98
61) m&p-Xylene	10.16	106	274798	18.96352 ppb	95
62) o-Xylene	10.55	106	130605	9.07137 ppb	95
63) Styrene	10.56	104	227212	9.38991 ppb	96
65) 1,3-Dichloropropane	9.08	76	98940	8.81447 ppb	93
66) Dibromochloromethane	9.31	129	77123	9.59556 ppb	96
67) Chlorobenzene	9.92	112	221715	9.23229 ppb	99
68) Ethylbenzene	10.04	91	345872	9.21165 ppb	99
69) Bromoform	10.73	173	51195	9.55415 ppb	92
71) Isopropylbenzene	10.92	105	329772	8.85851 ppb	99
72) 1,1,2,2-Tetrachloroethane	11.20	83	76375	9.45795 ppb	97
73) 1,2,3-Trichloropropane	11.24	110	21716	8.46740 ppb	96
74) t-1,4-Dichloro-2-Butene	11.26	53	14083	9.07366 ppb	91
75) Bromobenzene	11.21	156	107715	8.99243 ppb	98
76) n-Propylbenzene	11.33	91	417619	9.20675 ppb	99
77) 4-Ethyltoluene	11.45	105	248440	9.58758 ppb	100
78) 2-Chlorotoluene	11.41	91	284530	9.06298 ppb	99
79) 1,3,5-Trimethylbenzene	11.51	105	308242	9.33478 ppb	99
80) 4-Chlorotoluene	11.51	91	299480	9.11674 ppb	100
81) Tert-Butylbenzene	11.83	119	260511	9.09554 ppb	98
82) 1,2,4-Trimethylbenzene	11.88	105	307414	9.20336 ppb	99
83) Sec-Butylbenzene	12.05	105	369141	9.37997 ppb	96
84) p-Isopropyltoluene	12.20	119	322515	9.44873 ppb	98
85) Benzyl Chloride	12.37	91	120705	12.18112 ppb	98
86) 1,3-DCB	12.15	146	211093	9.02434 ppb	97
87) 1,4-DCB	12.23	146	214236	9.15260 ppb	98
88) n-Butylbenzene	12.61	91	277441	9.53166 ppb	99
89) 1,2-DCB	12.60	146	193280	8.94124 ppb	99
90) Hexachloroethane	12.87	117	58525	9.64492 ppb	99
91) 1,2-Dibromo-3-chloropropan	13.37	157	15734	9.89452 ppb	91
92) 1,2,4-Trichlorobenzene	14.21	180	88728	9.56777 ppb	98
93) Hexachlorobutadiene	14.40	223	39521	9.95621 ppb	87
94) Naphthalene	14.45	128	222363	9.16980 ppb	100
95) 1,2,3-Trichlorobenzene	14.69	180	125663	9.59809 ppb	97

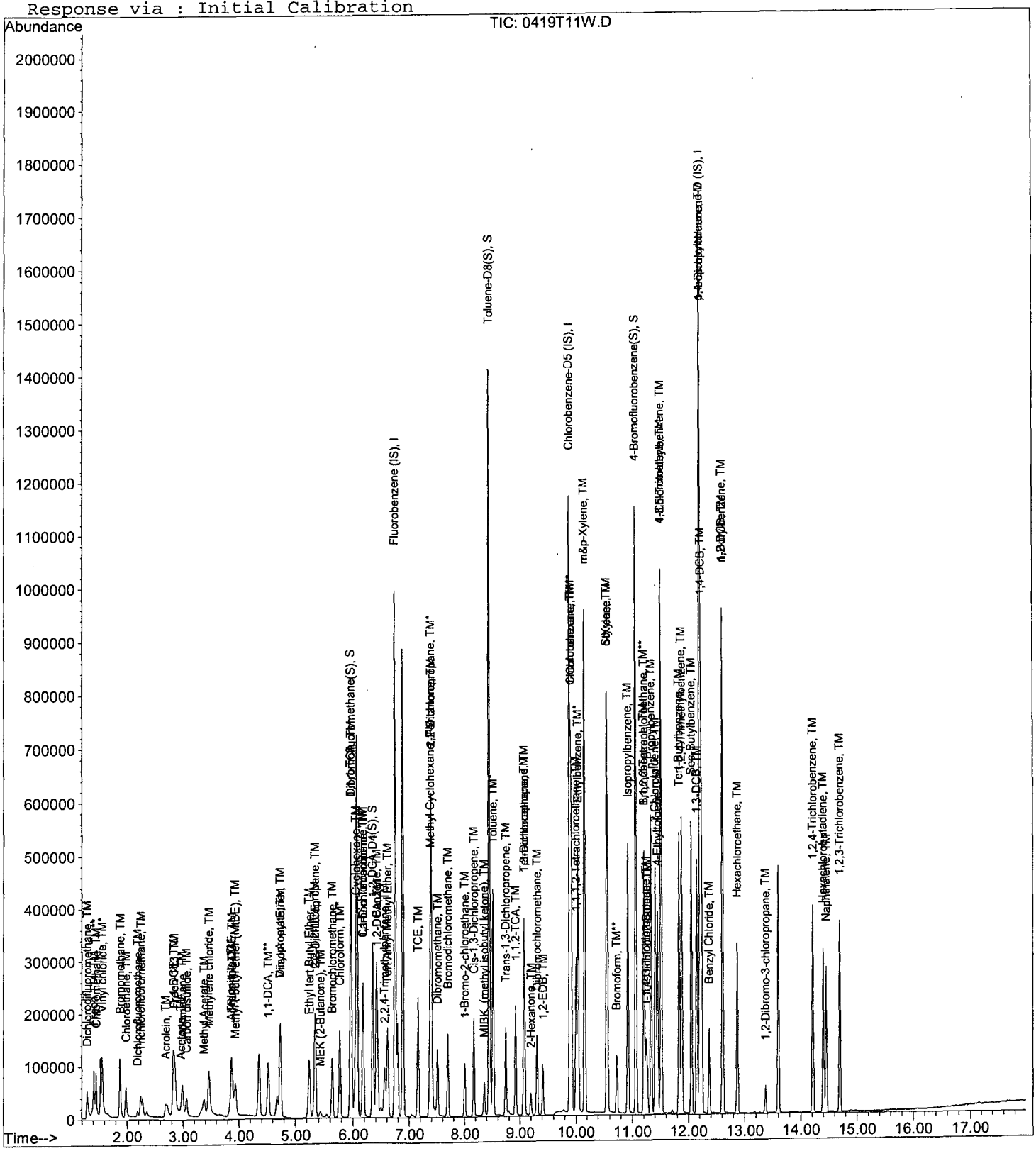
(#) = qualifier out of range (m) = manual integration

Data File : M:\THOR\DATA\T120411\0419T11W.D
Acq On : 19 Apr 12 9:45
Sample : 10ug/L Vol Std 04-19-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: May 8 14:39 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Initial Calibration

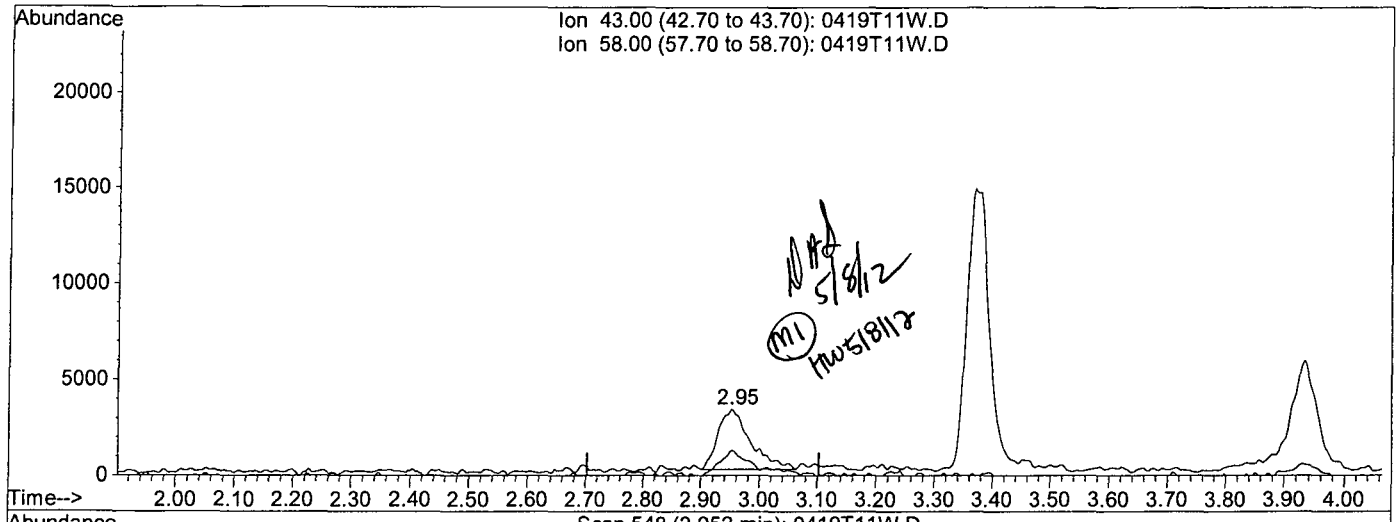


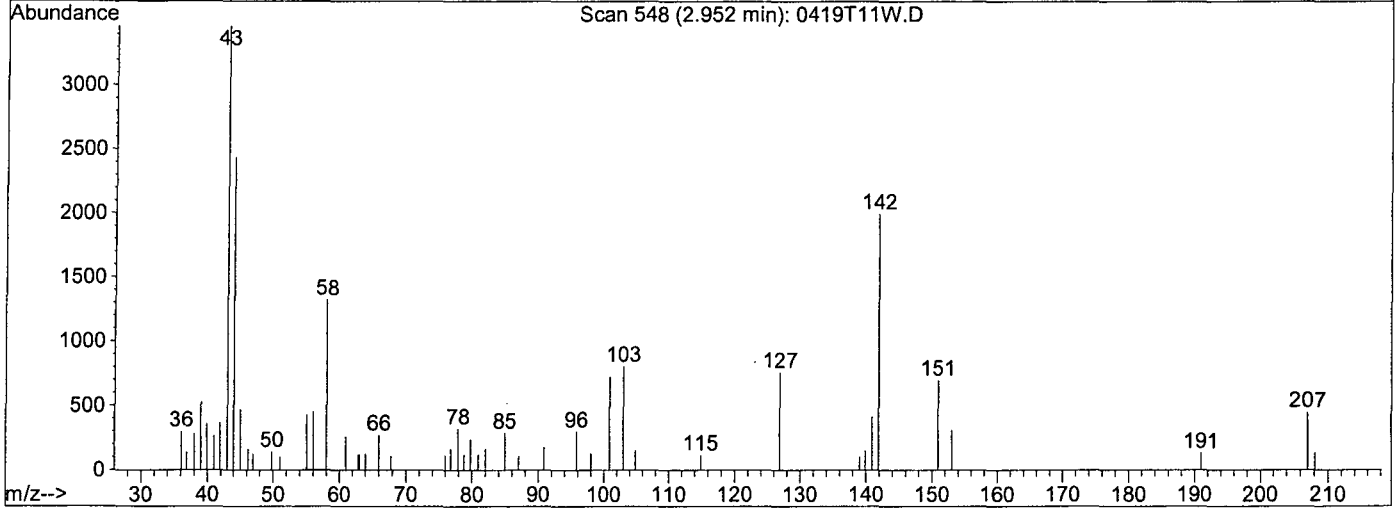
227

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00
Quant Time: May 8 14:38 2012 Quant Results File: temp.res

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Multiple Level Calibration





TIC: 0419T11W.D

(11) Acetone (TM)

2.95min 6.7290ppb

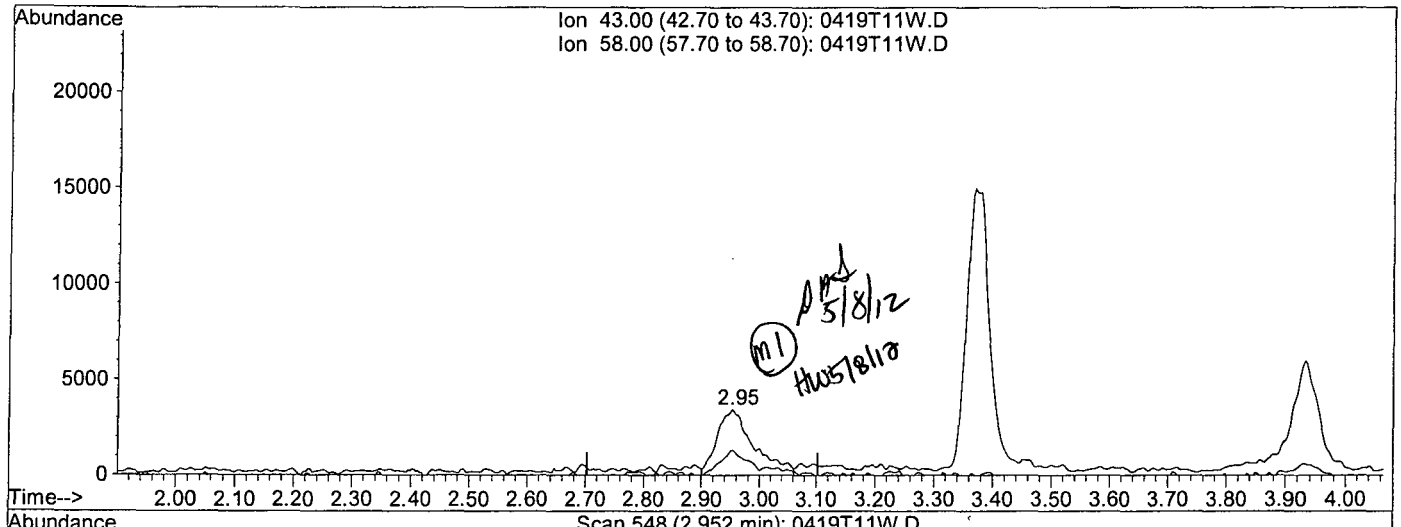
response 12262

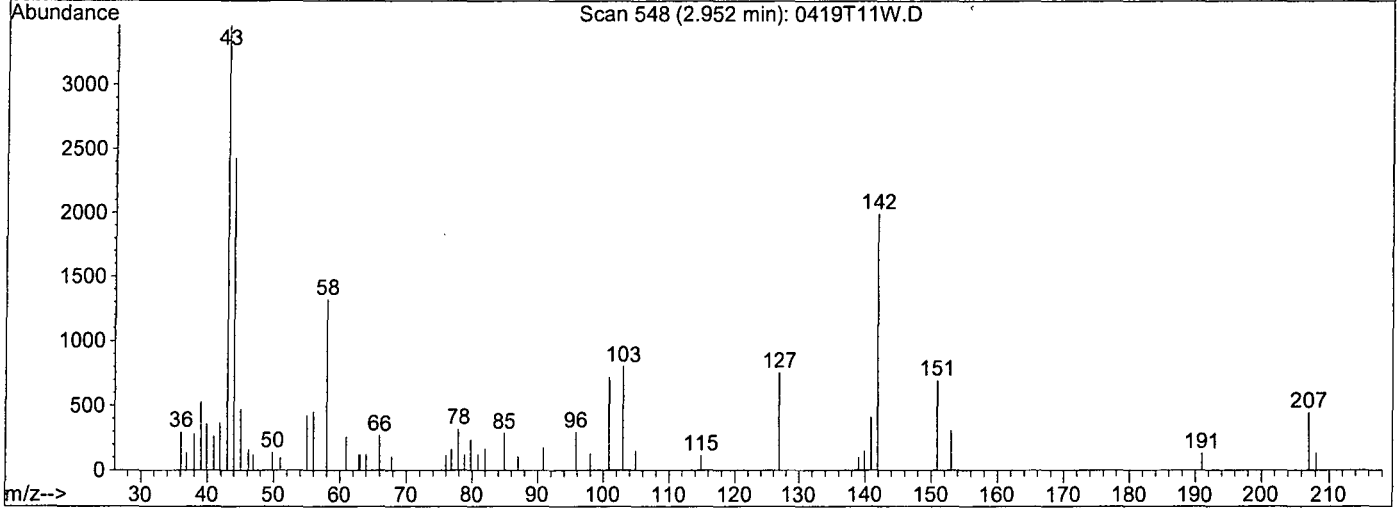
Ion	Exp%	Act%
43.00	100	100
58.00	37.80	42.25
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T11W.D Vial: 1
Acq On : 19 Apr 12 9:45 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 04-19-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00
Quant Time: May 8 14:39 2012 Quant Results File: temp.res

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 08 14:20:01 2012
Response via : Multiple Level Calibration





TIC: 0419T11W.D

(11) Acetone (TM)

2.95min 8.8726ppb m

response 15349

Ion	Exp%	Act%
43.00	100	100
58.00	37.80	38.26
0.00	0.00	0.00
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67525
Case No: 67525 Initial Cal. Date: 01/25/12
Matrix: WATER Instrument: Chico Initials:

0125C29W.D 0125C30W.D 0125C31W D 0125C32W.D 0125C33W.D 0125C34W D 0125C35W D

		Compound	20	50	100	300	600	800	1000				Avg	%RSD		
1	I	Fluorobenzene (IS)														r
2	TMHBL	Gasoline	23.6	10.6	5.907	3.541	2.892	2.841	2.494				7.4	104	TMHBL	0.997
3	I	Chlorobenzene-D5 (IS)														
4	I	1,4-Dichlorobenzene-D (IS)														
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:34 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:01:13 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1053352	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1266647	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1287754	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	19858101m	31.82421	ppb	100

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

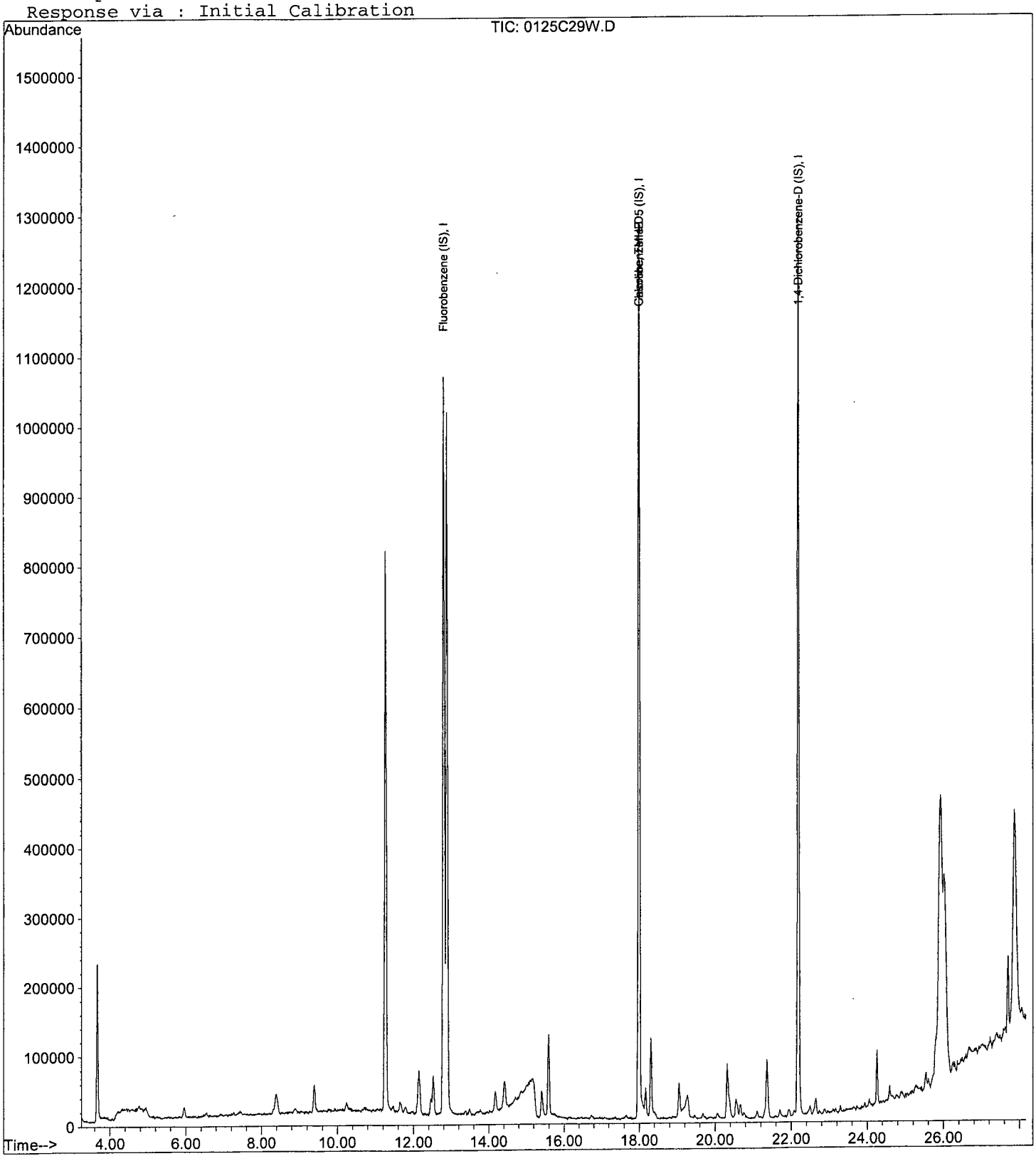
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D
Acq On : 26 Jan 12 19:32
Sample : Vol. Std. 01-26-12@20ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:34 2012 Quant Results File: CGAS.RES

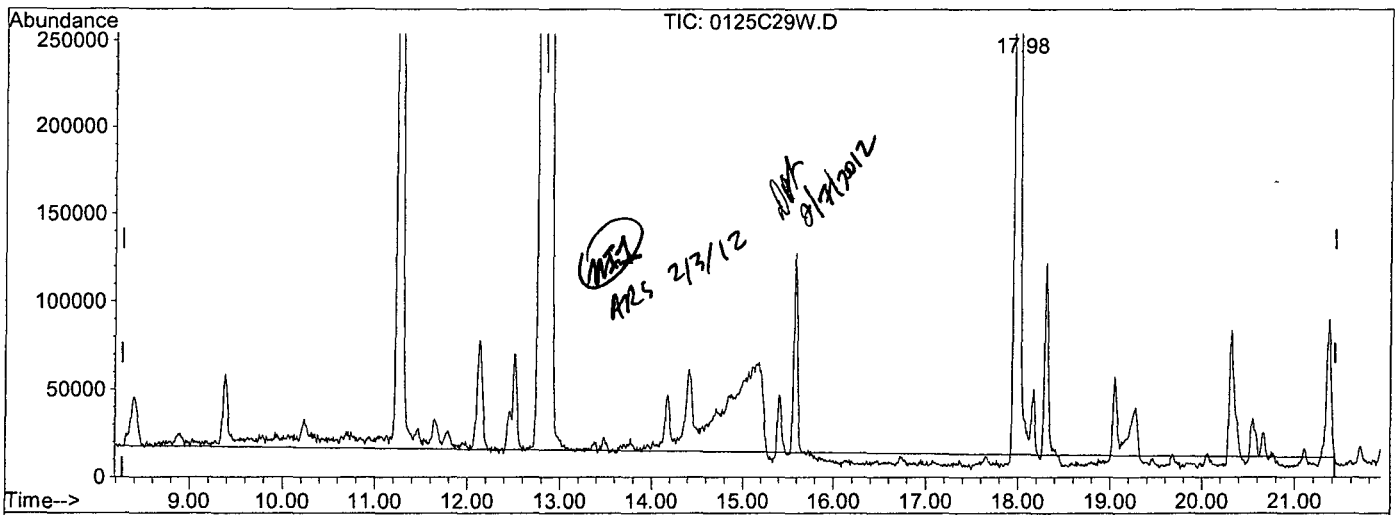
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

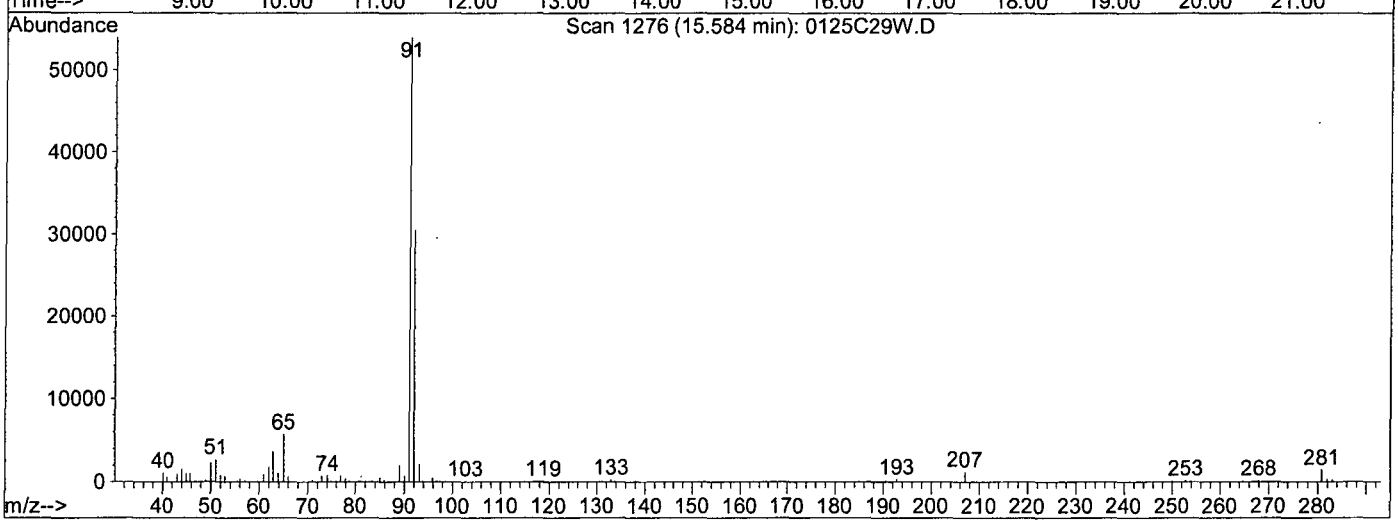


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

15.58min -8.2763ppb m

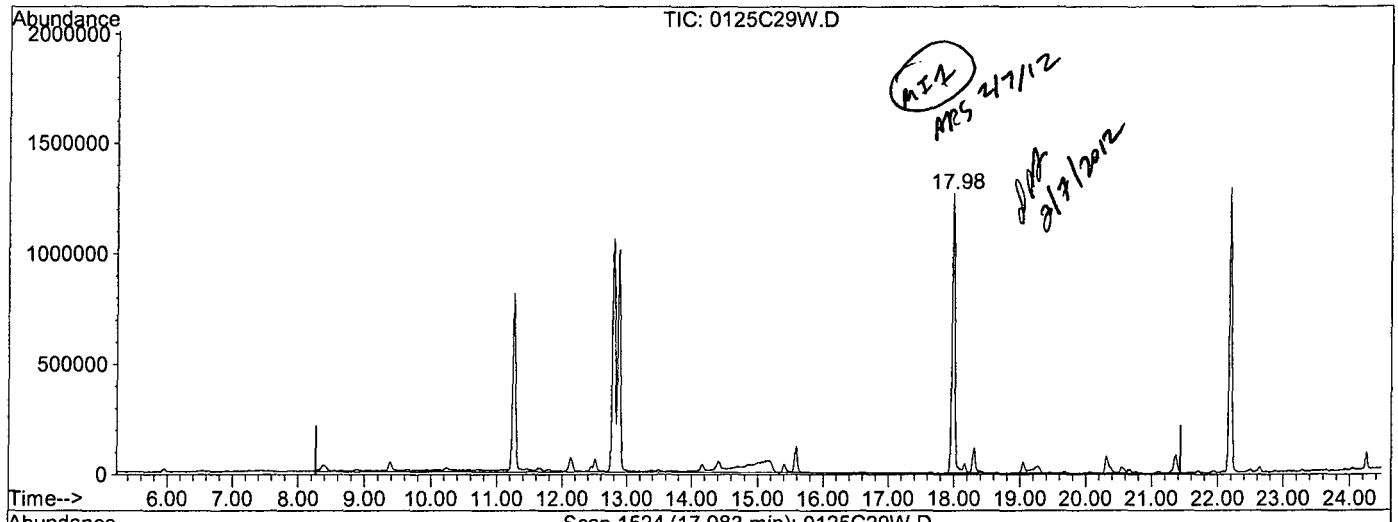
response 16152794

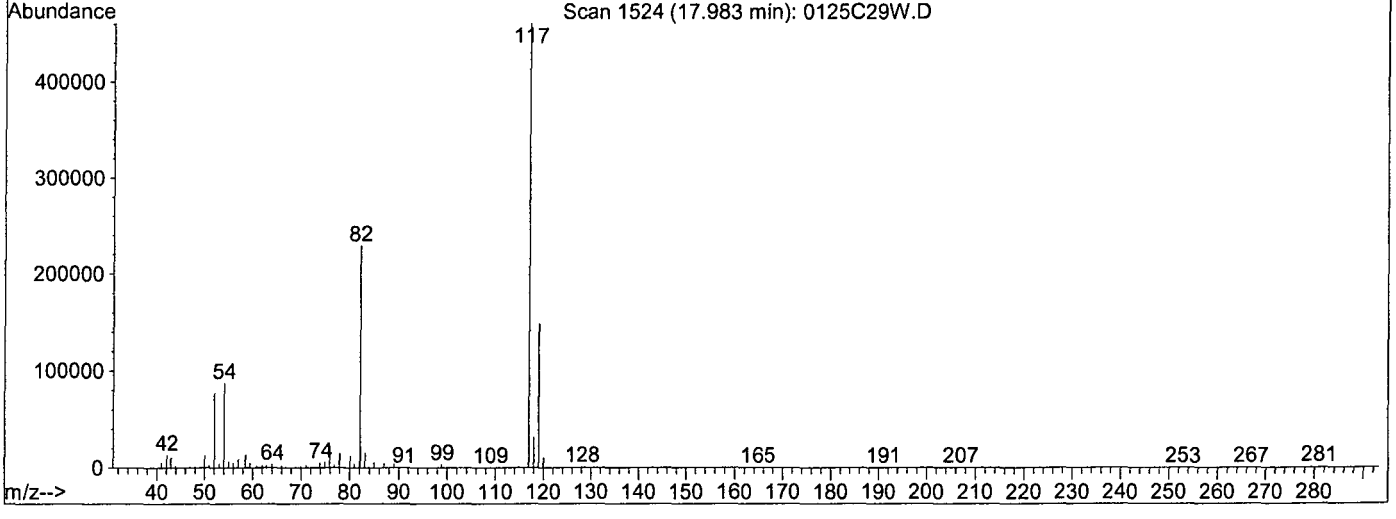
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.79#
0.00	0.00	2.40#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:34 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

17.98min 31.8242ppb m

response 19858101

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.95#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1088272	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.99	TIC	1269196	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1282230	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.99	TIC	23136590m	59.27095	ppb	100

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

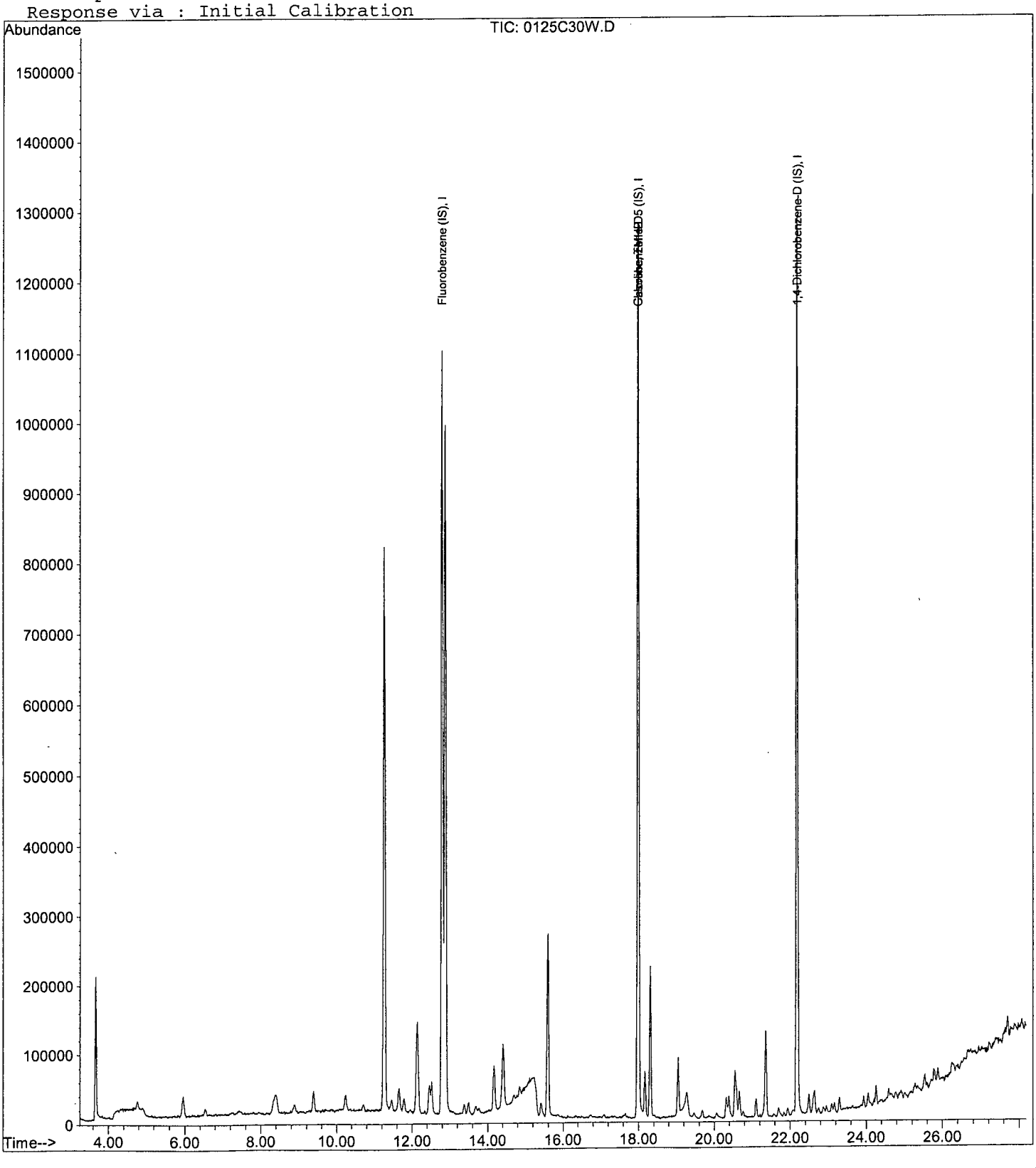
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D
Acq On : 26 Jan 12 20:09
Sample : Vol. Std. 01-26-12@50ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

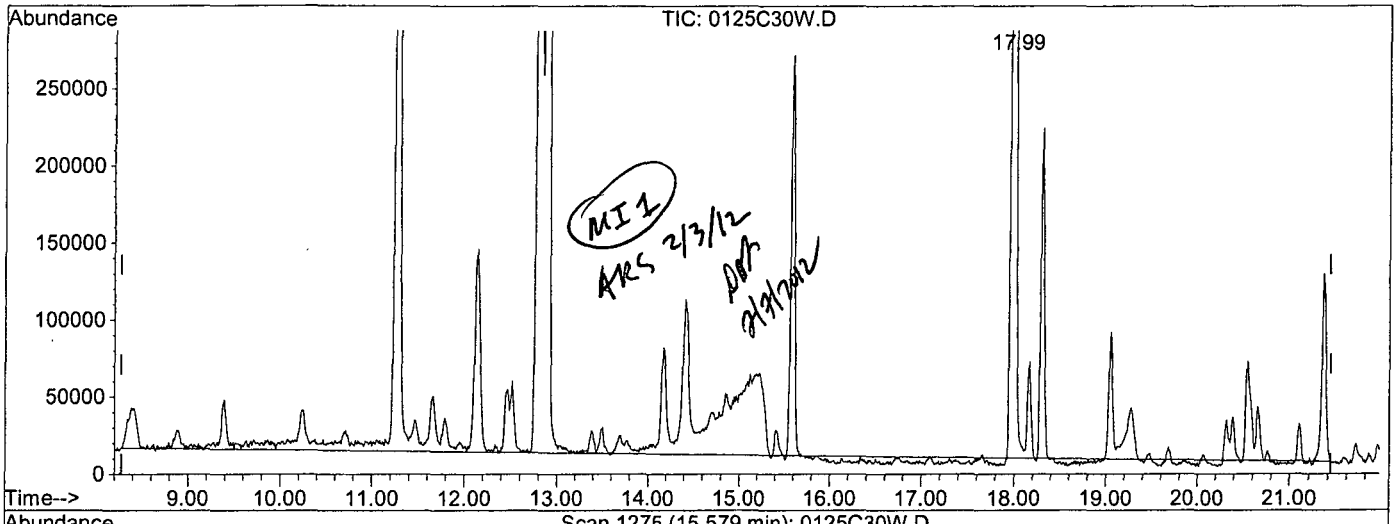
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

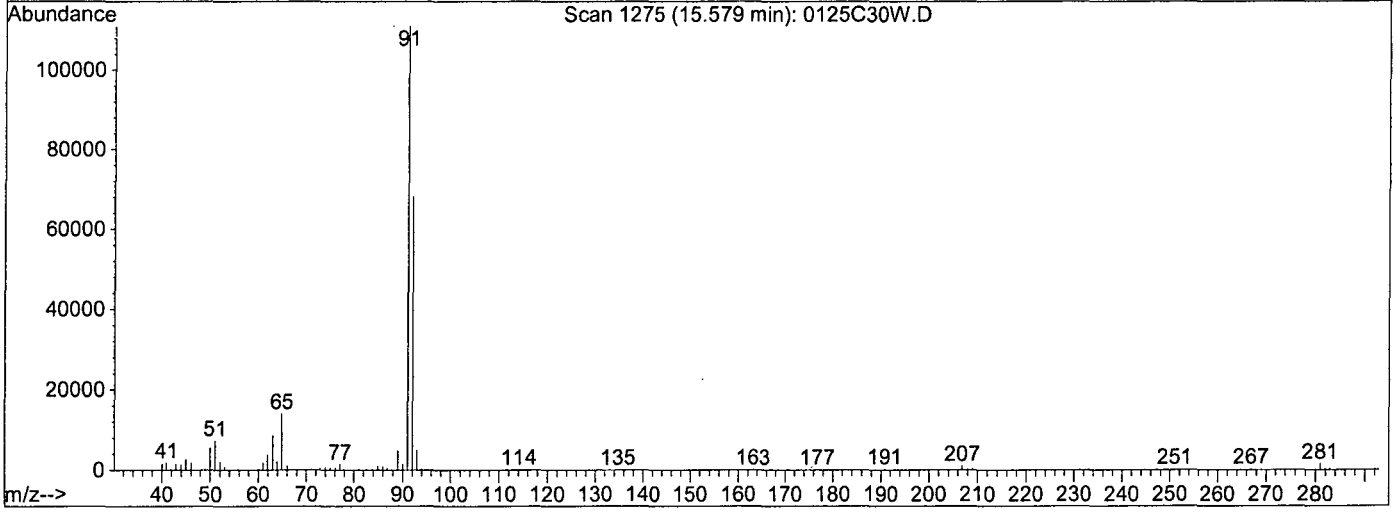


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C30W.D

(2) Gasoline (TMHB)

15.58min -0.0275ppb m

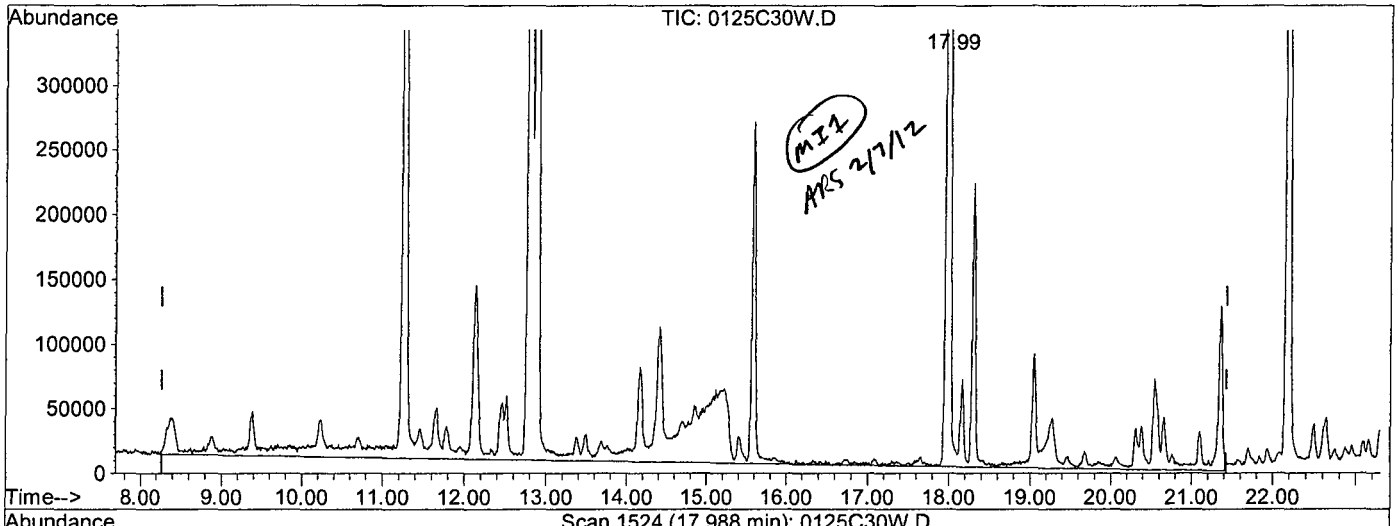
response 17475741

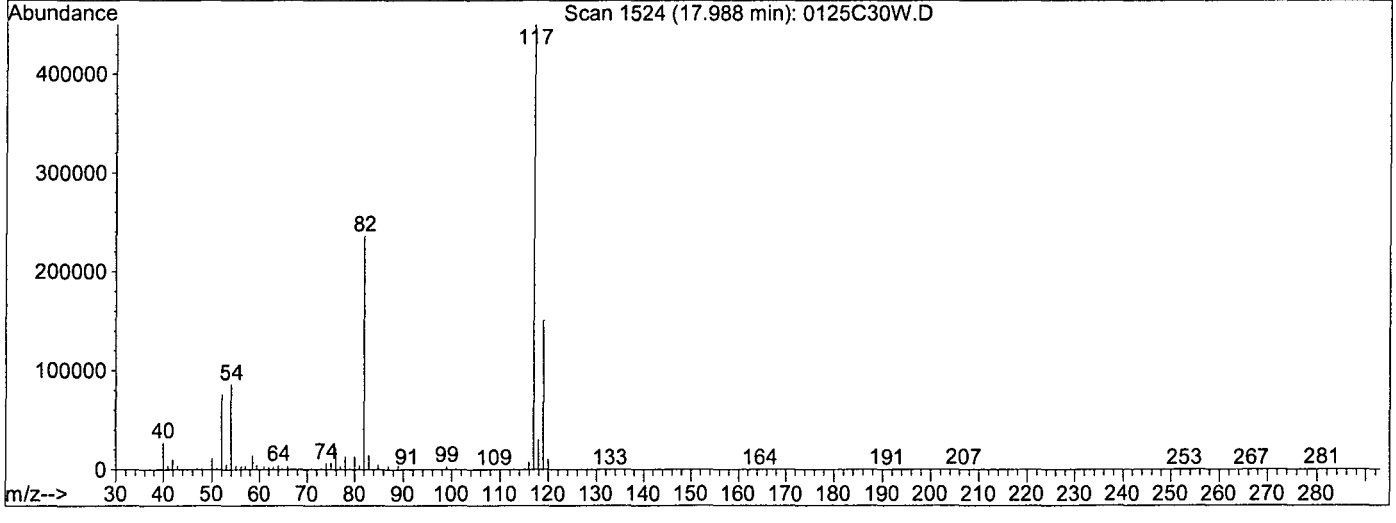
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.72#
0.00	0.00	2.18#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:35 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C30W.D

(2) Gasoline (TMHB)

17.99min 59.2710ppb m

response 23136590

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.54#
0.00	0.00	1.65#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1080126	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1280154	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1288106	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	26257782m	94.04042	ppb	100

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

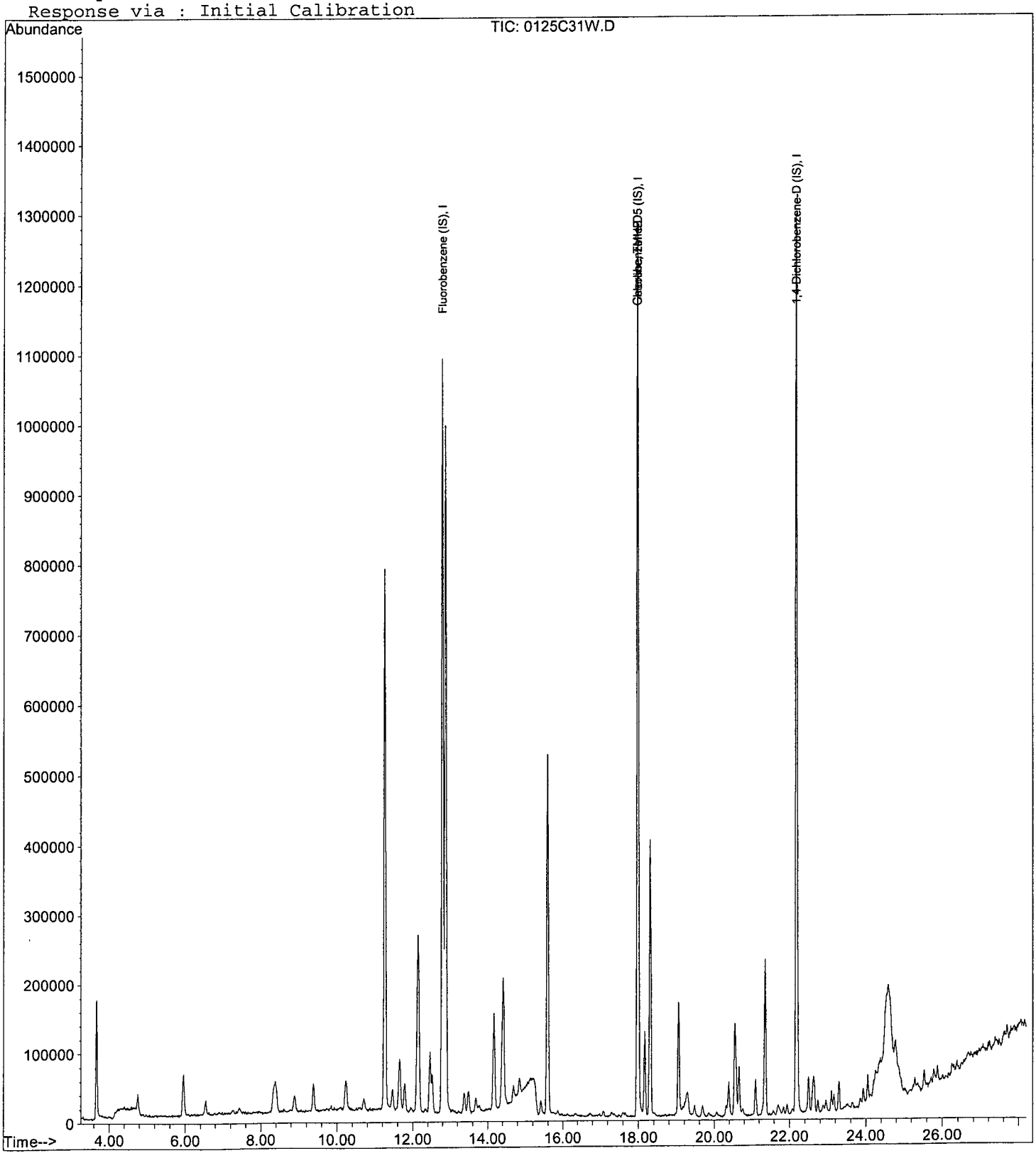
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D
Acq On : 26 Jan 12 20:46
Sample : Vol. Std. 01-26-12@100ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

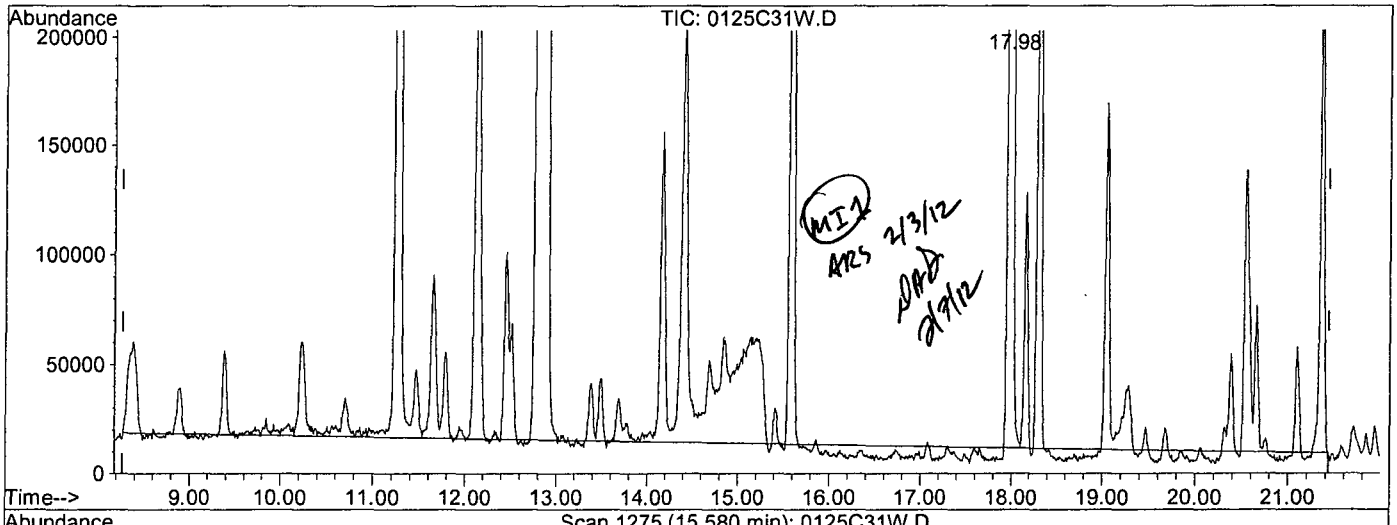
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

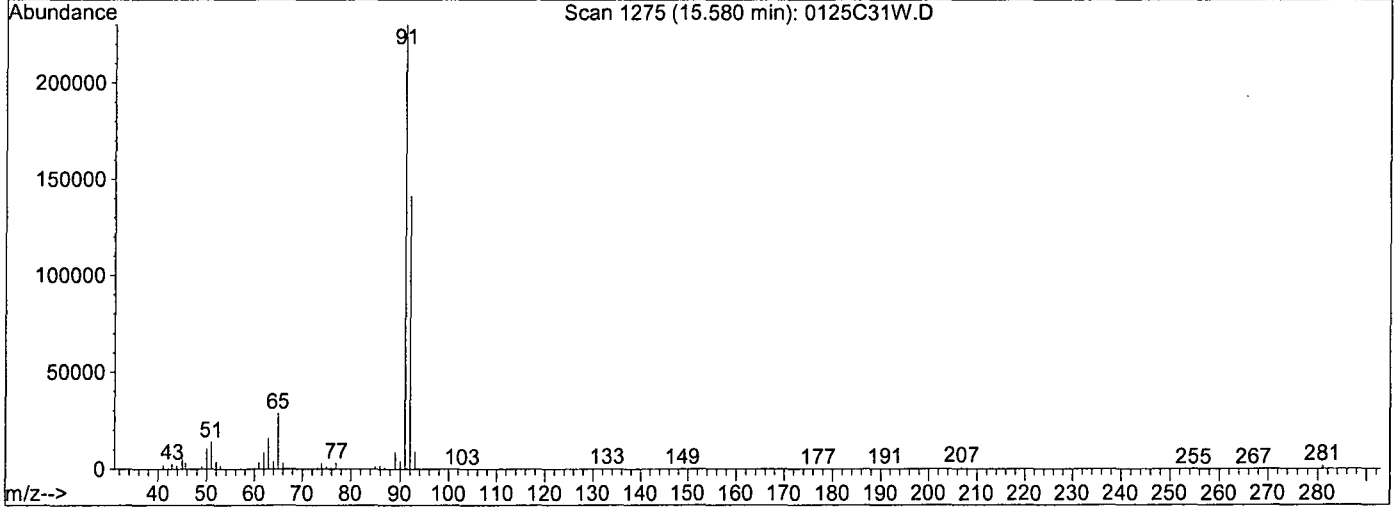


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C31W.D

(2) Gasoline (TMHB)

15.58min 27.4179ppb m

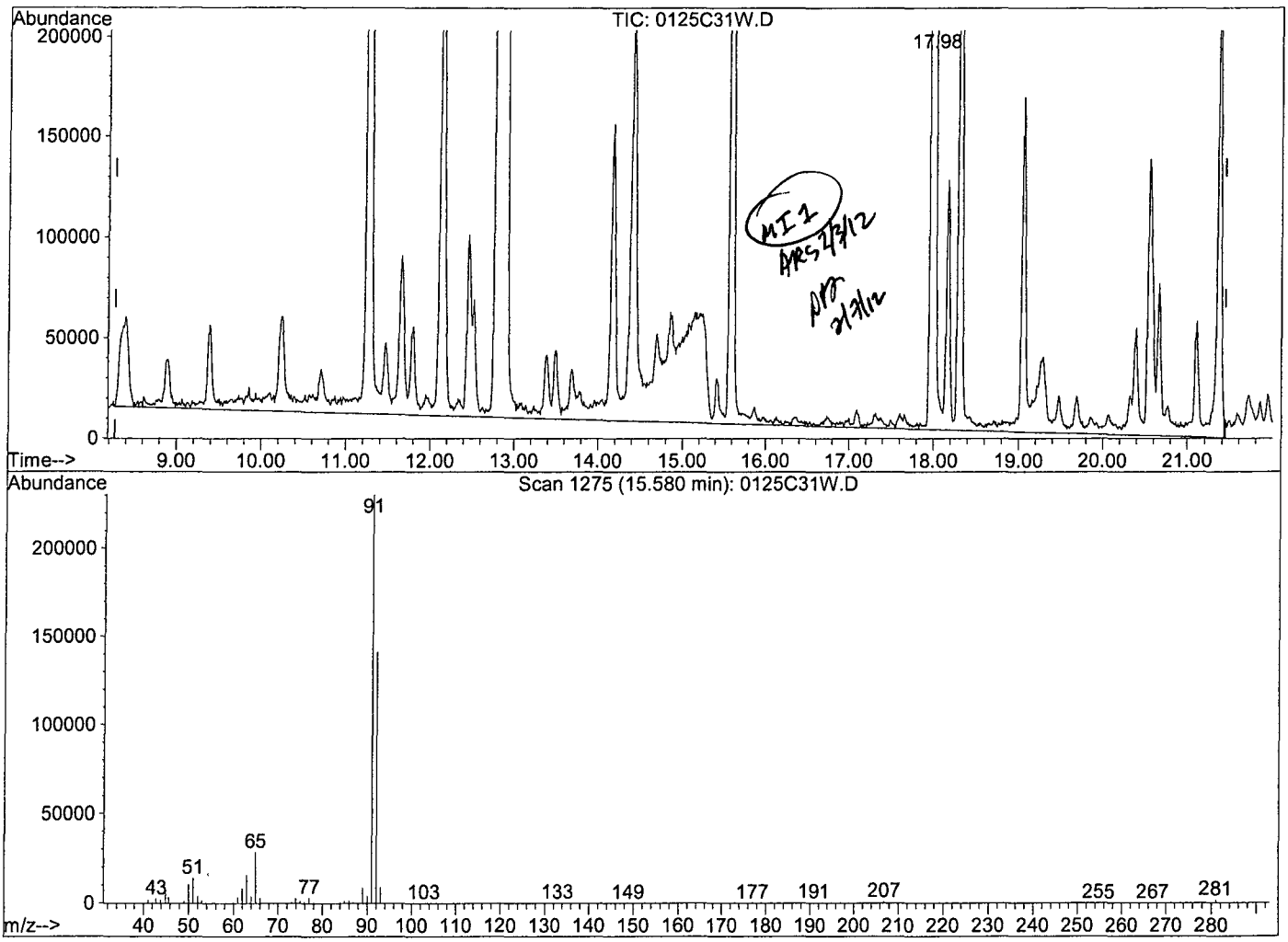
response 19945363

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.85#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:13 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



TIC: 0125C31W.D

(2) Gasoline (TMHB)

17.98min 94.0404ppb m

response 26257782

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.48#
0.00	0.00	1.40#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1085223	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1323772	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1382634	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	46451061m	304.86153	ppb	100

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

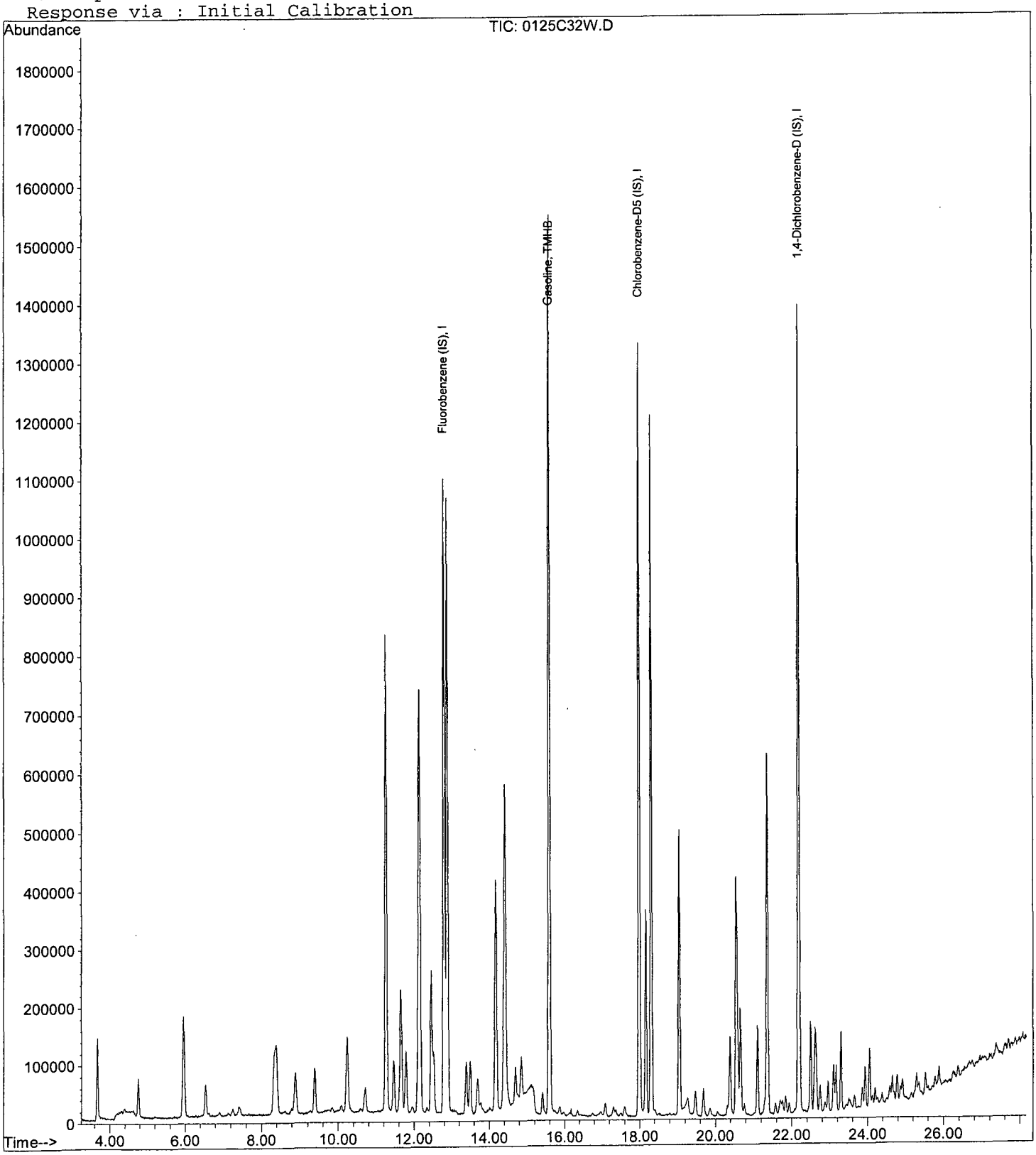
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D
Acq On : 26 Jan 12 21:24
Sample : Vol. Std. 01-26-12@300ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

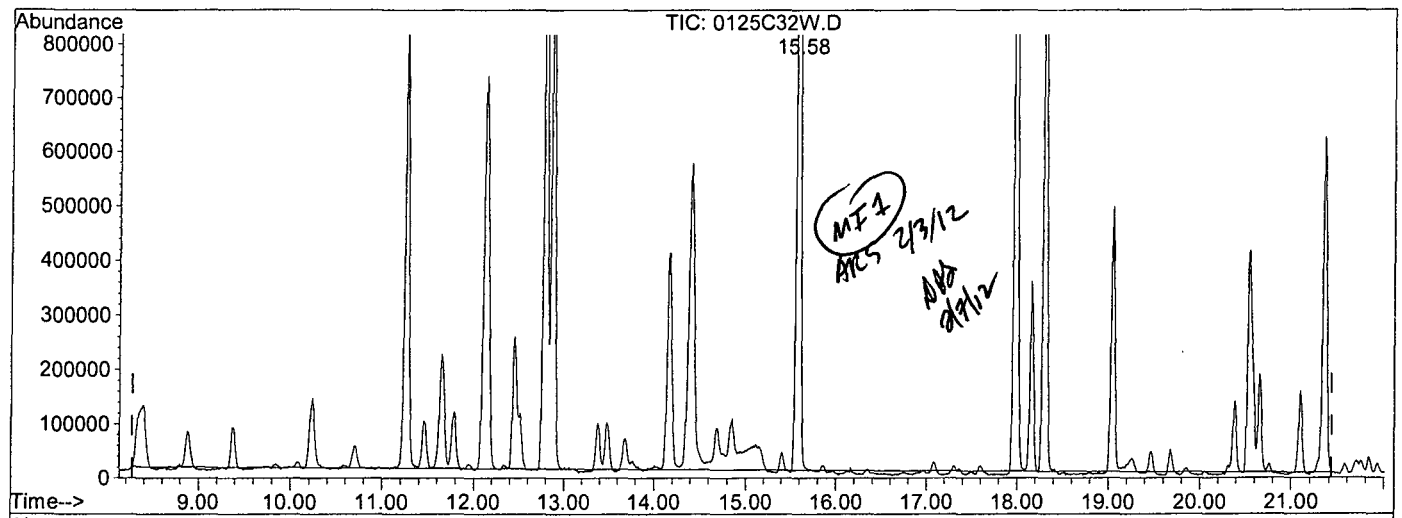
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

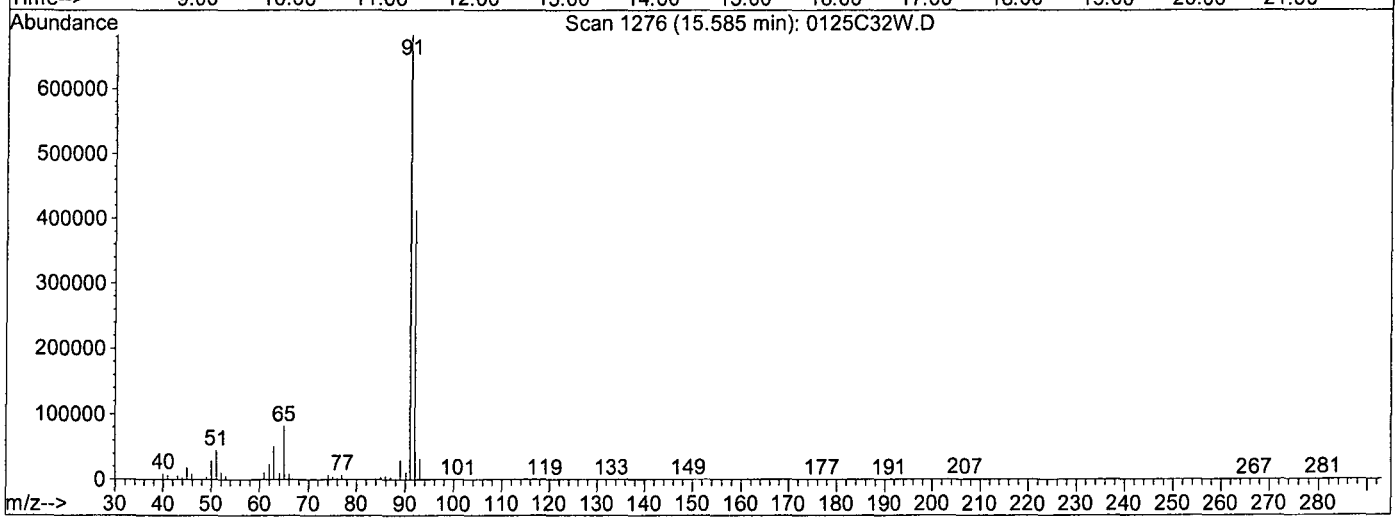


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 245.6055ppb m

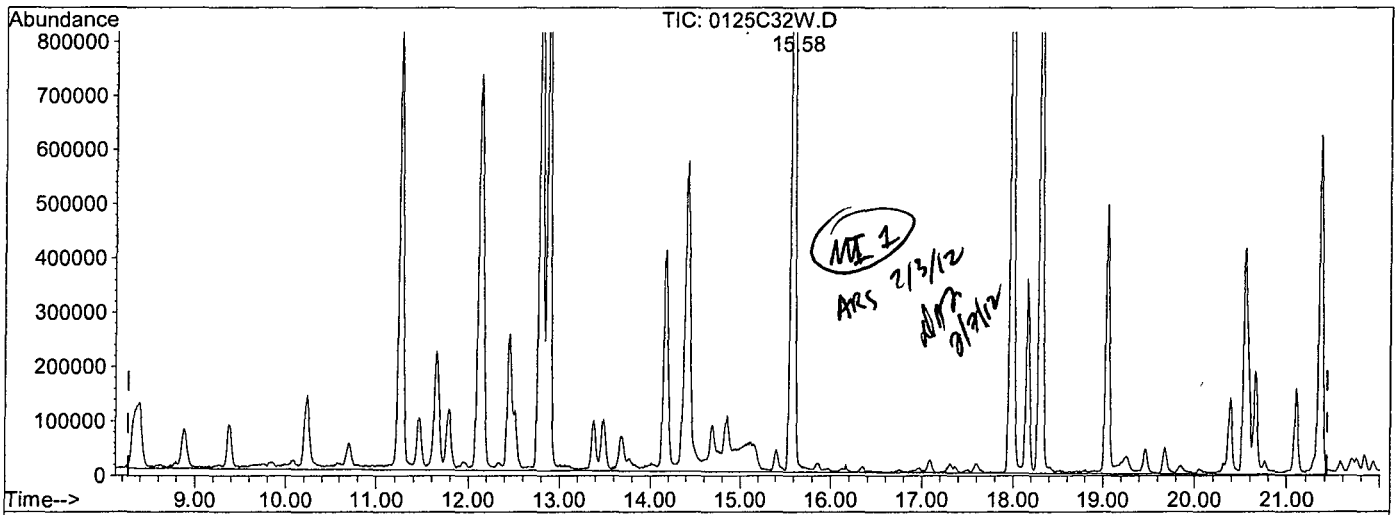
response 40810111

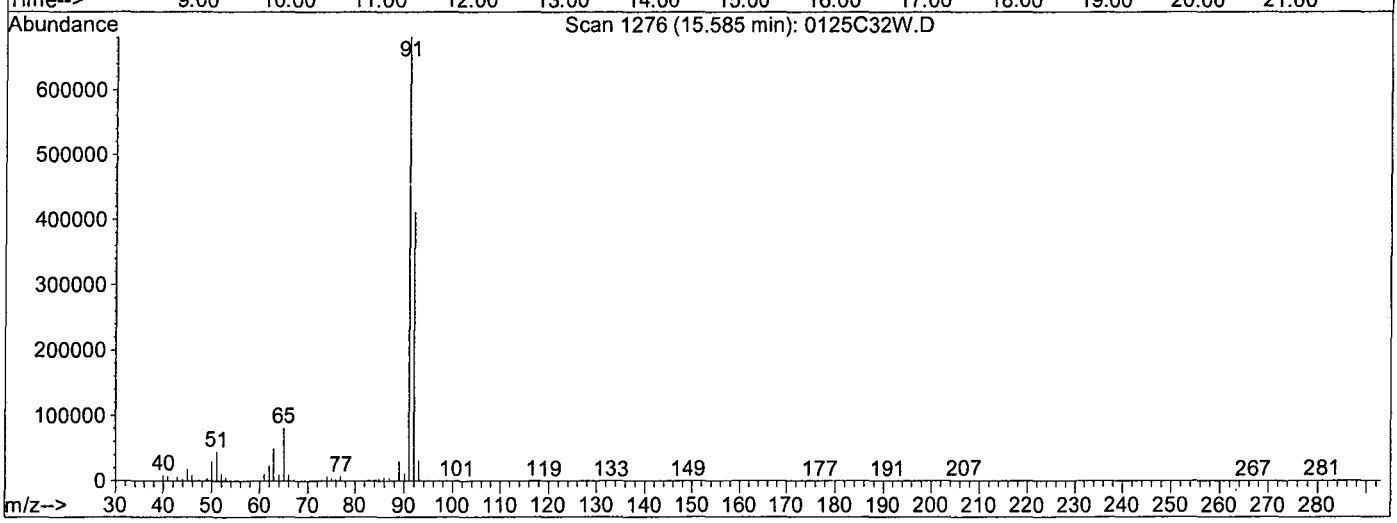
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.33#
0.00	0.00	0.94#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:09 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 304.8615ppb m

response 46451061

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.29#
0.00	0.00	0.83#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:07 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1115516	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1310876	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1420552	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	15.58	TIC	72391801m	556.70838	ppb	100

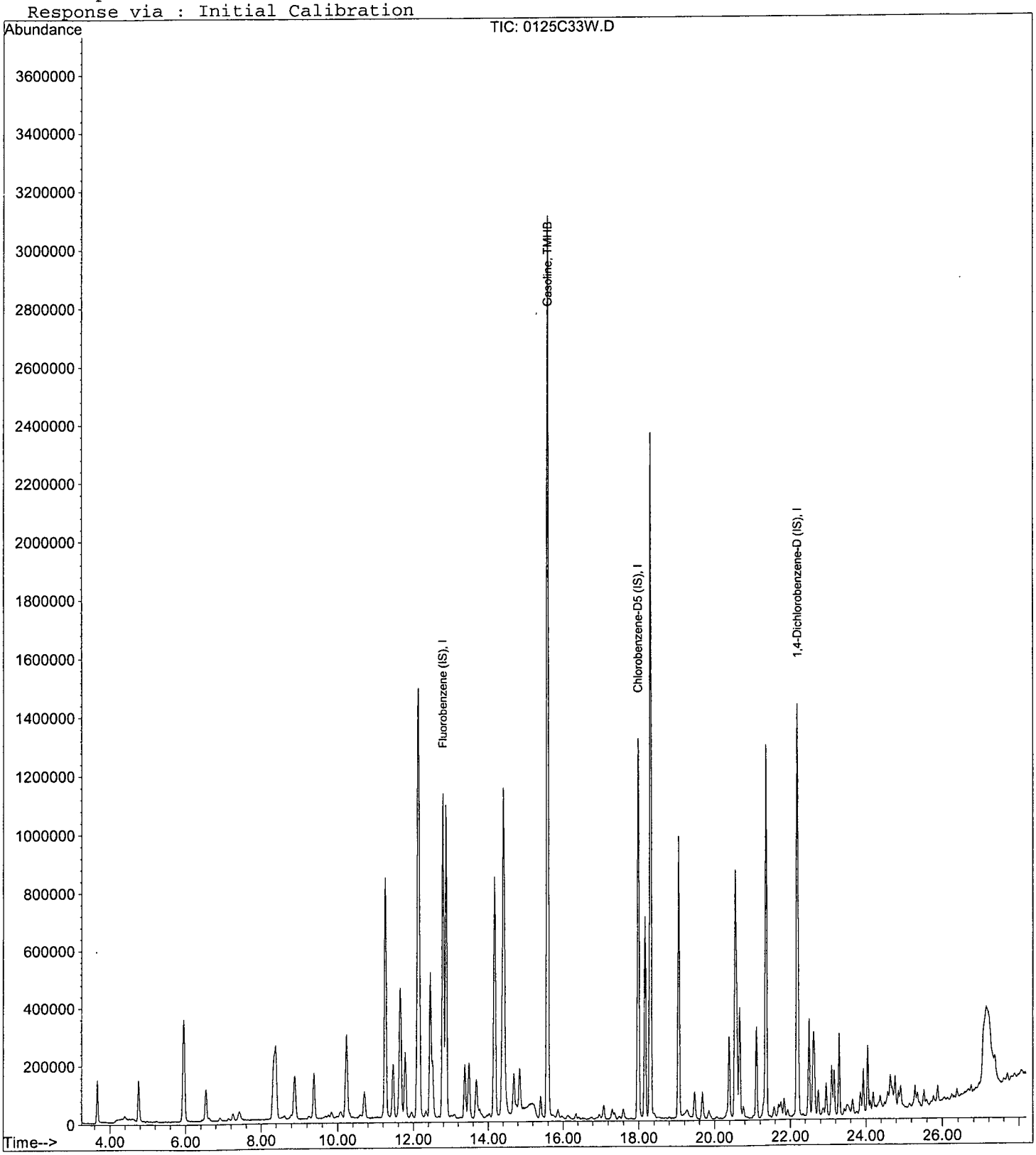
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:07 2012 Quant Results File: CGAS.RES

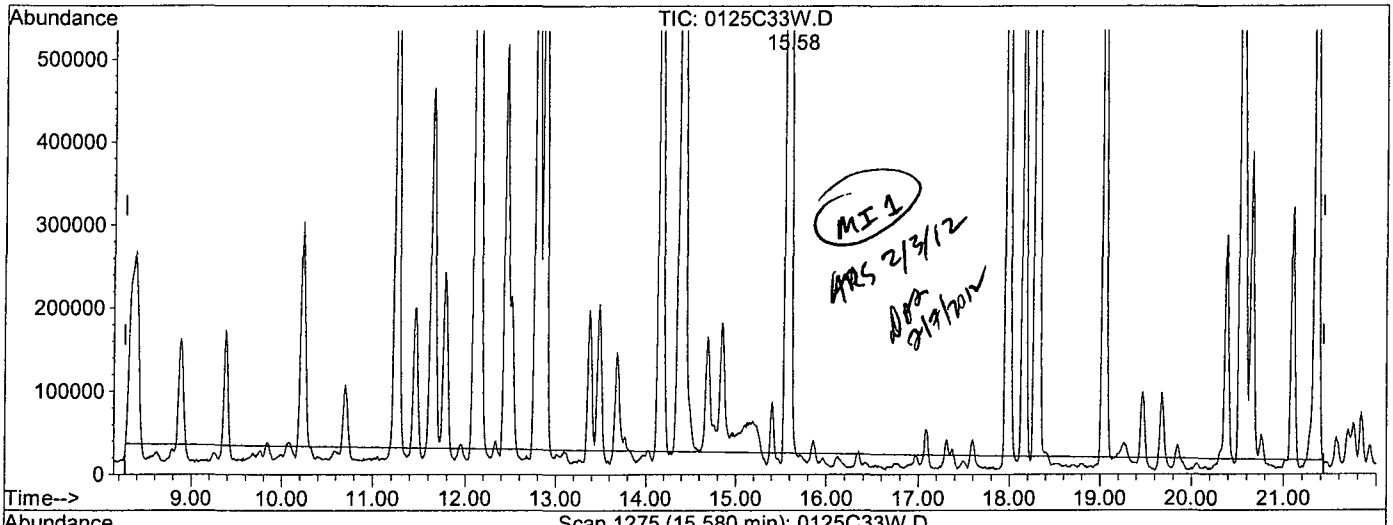
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

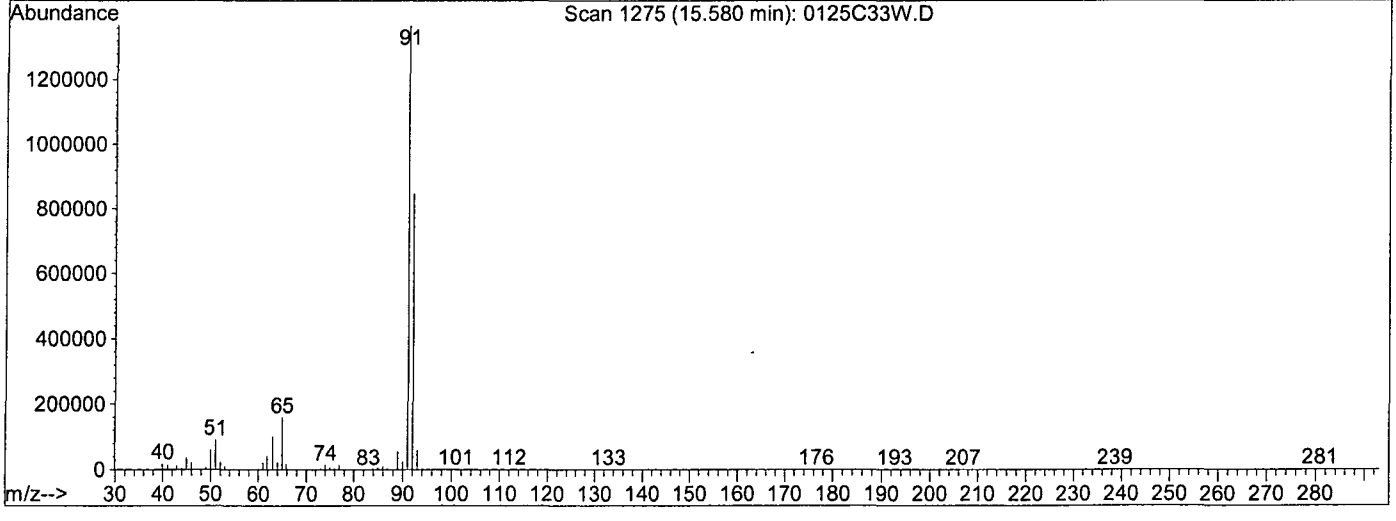


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 556.7084ppb m

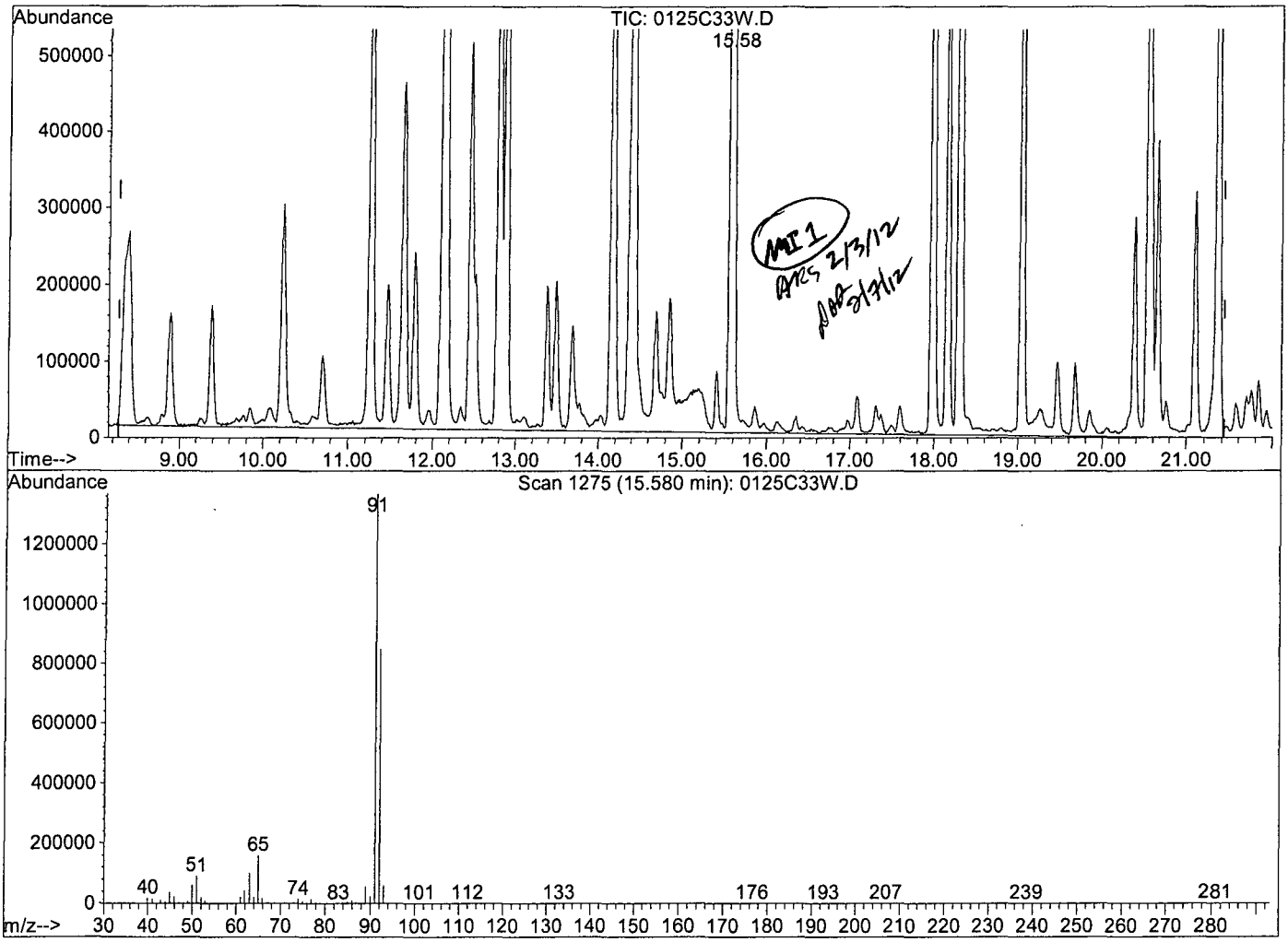
response 72391801

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.18#
0.00	0.00	0.53#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:16 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 621.4121ppb m

response 78723288

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.16#
0.00	0.00	0.49#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1172096	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1436710	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1528793	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	102155823m	810.48263	ppb	100

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

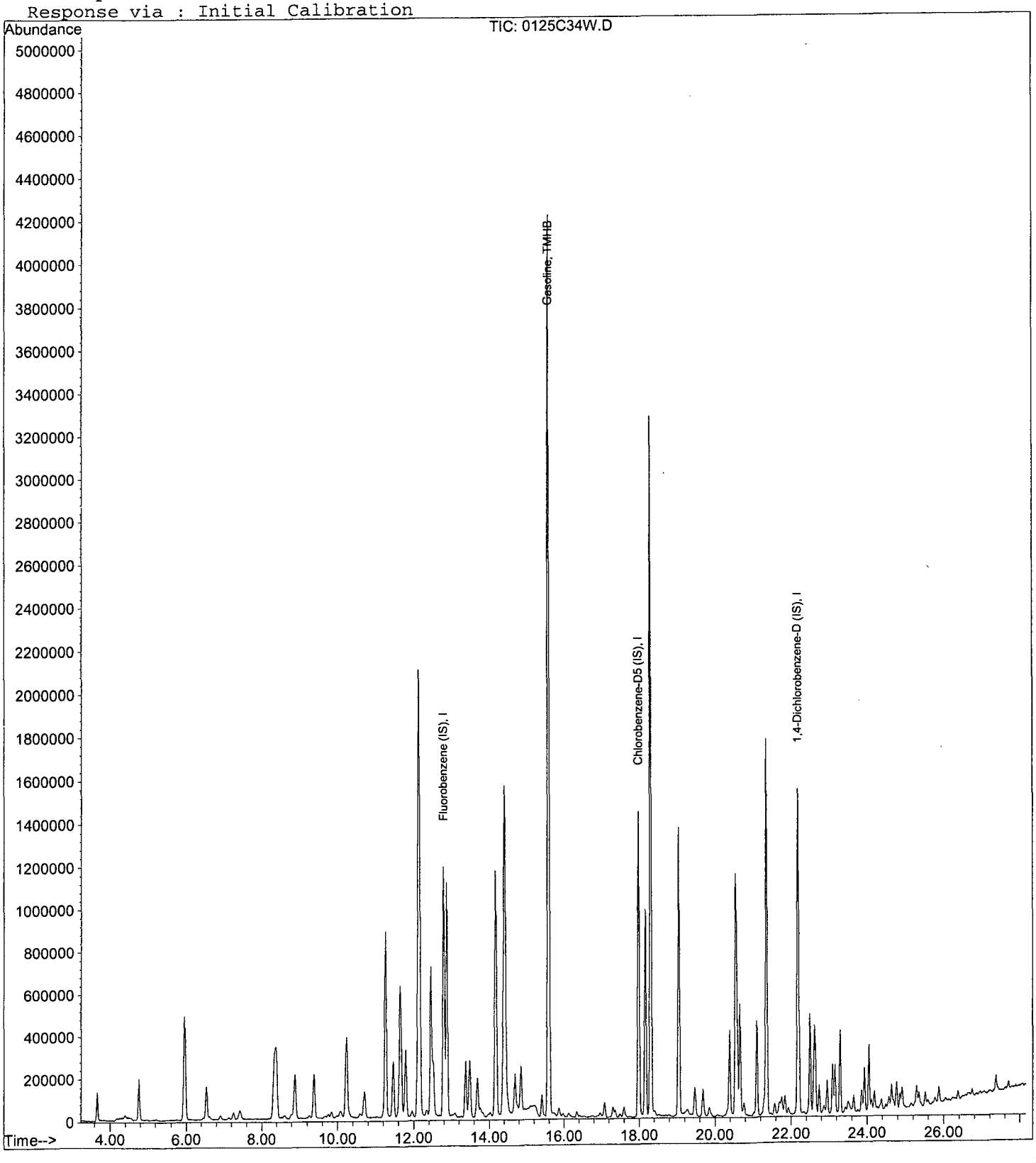
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D
Acq On : 26 Jan 12 22:38
Sample : Vol. Std. 01-26-12@800ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

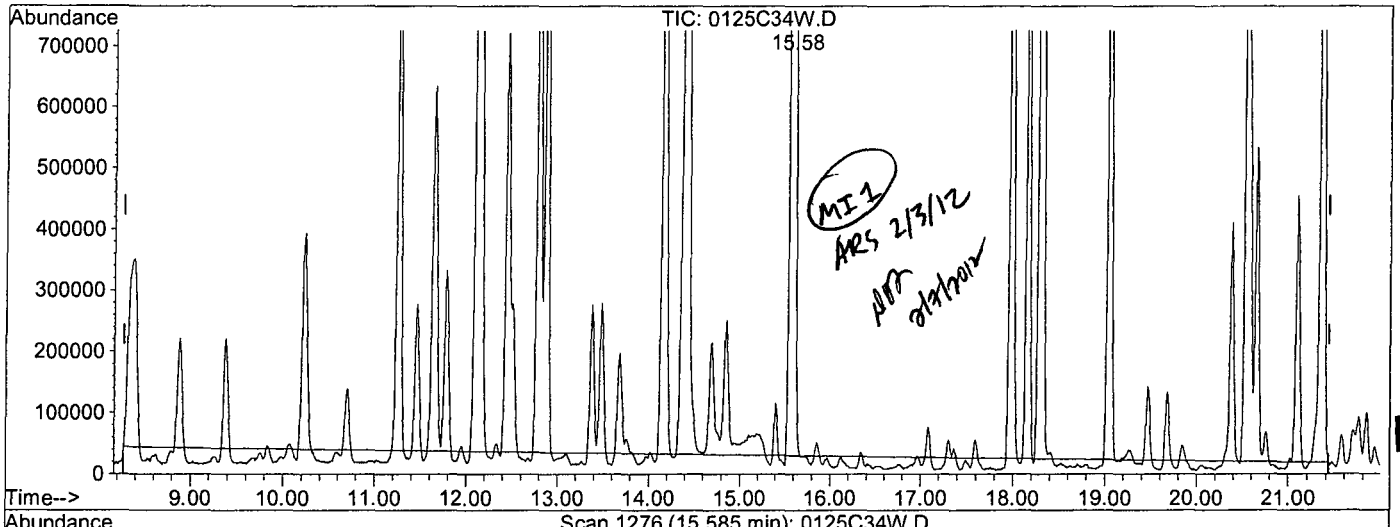
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

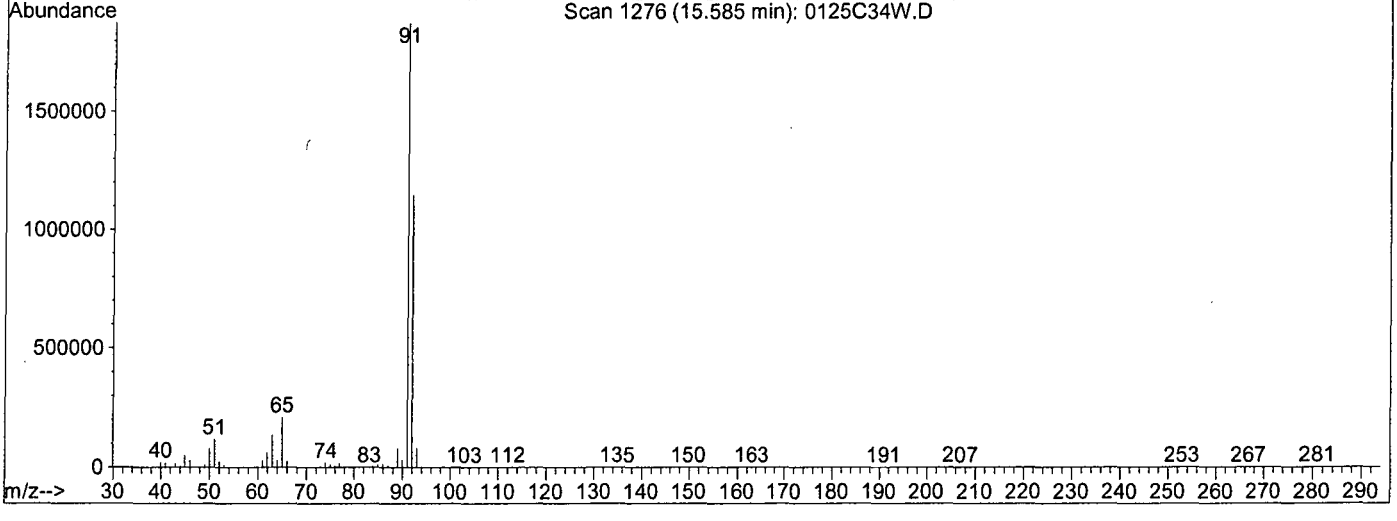


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 730.0328ppb m

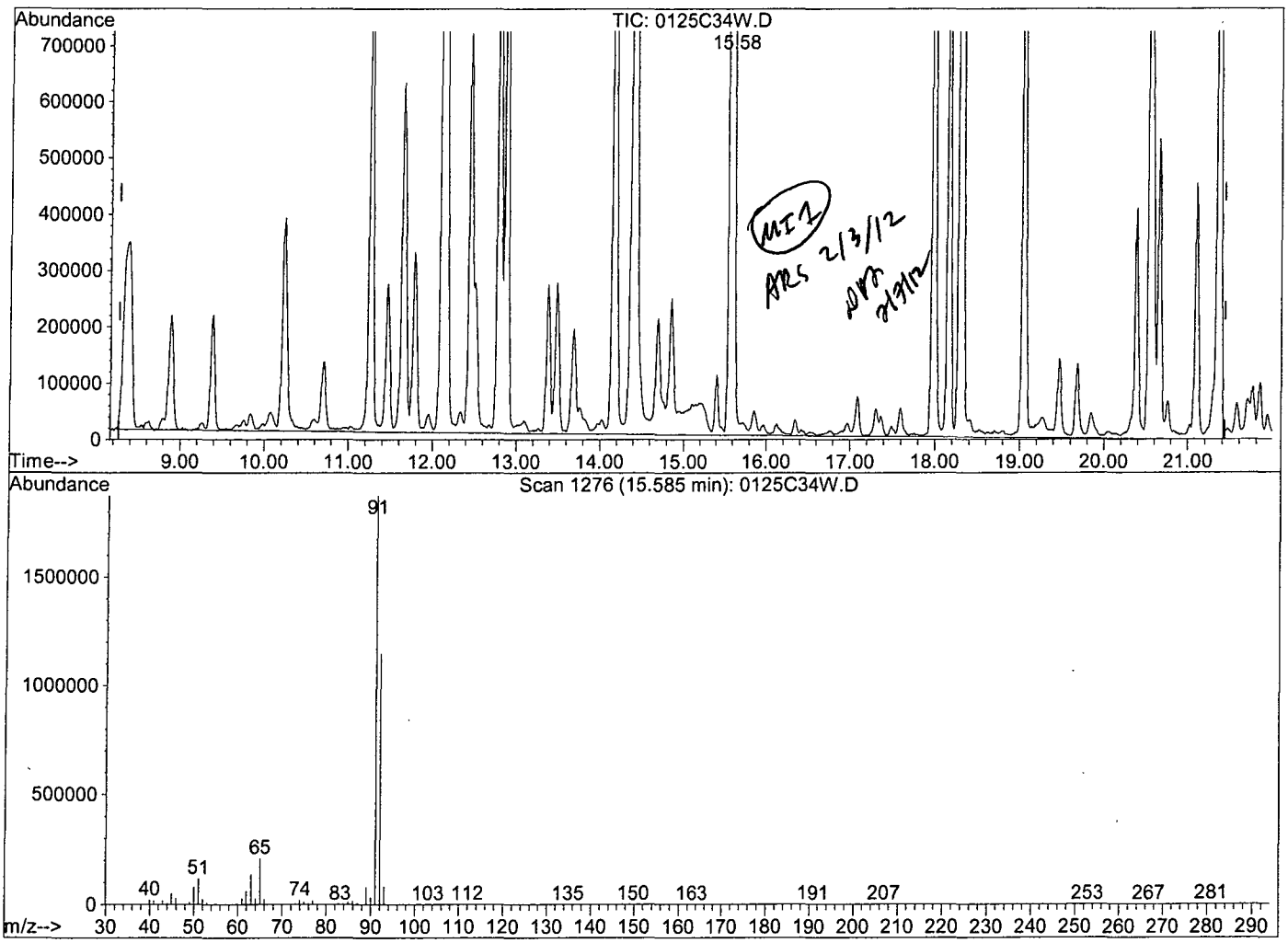
response 93884232

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.14#
0.00	0.00	0.44#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:17 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 810.4826ppb m

response 102155823

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.13#
0.00	0.00	0.41#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1232092	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1442206	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1630956	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	129481006m	1014.92580	ppb	100

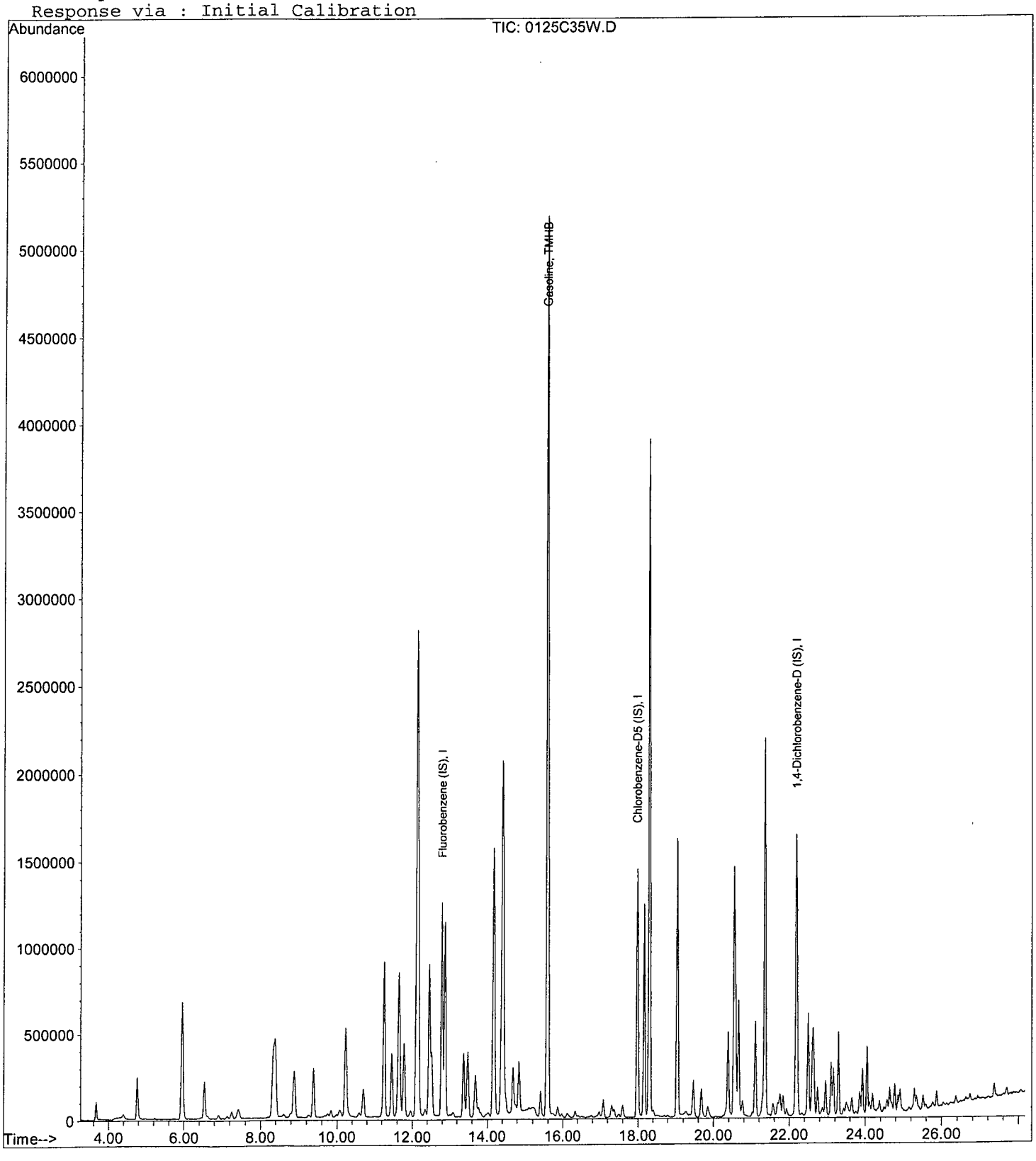
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

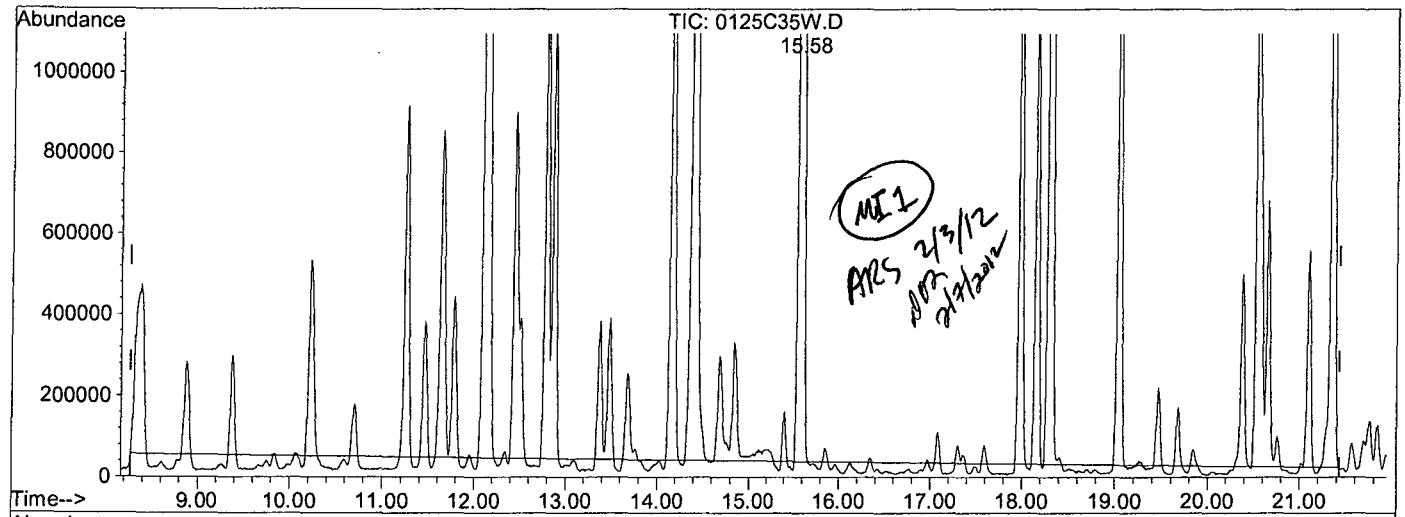
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration



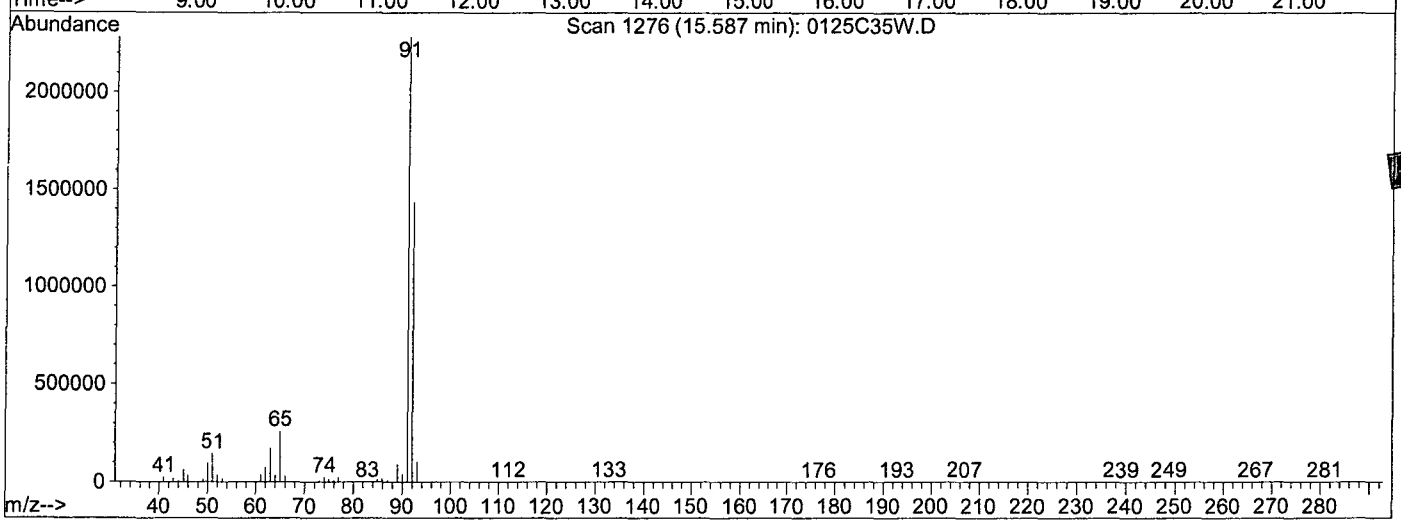
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



MI 1
ARS 2/3/12



TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 923.0372ppb m

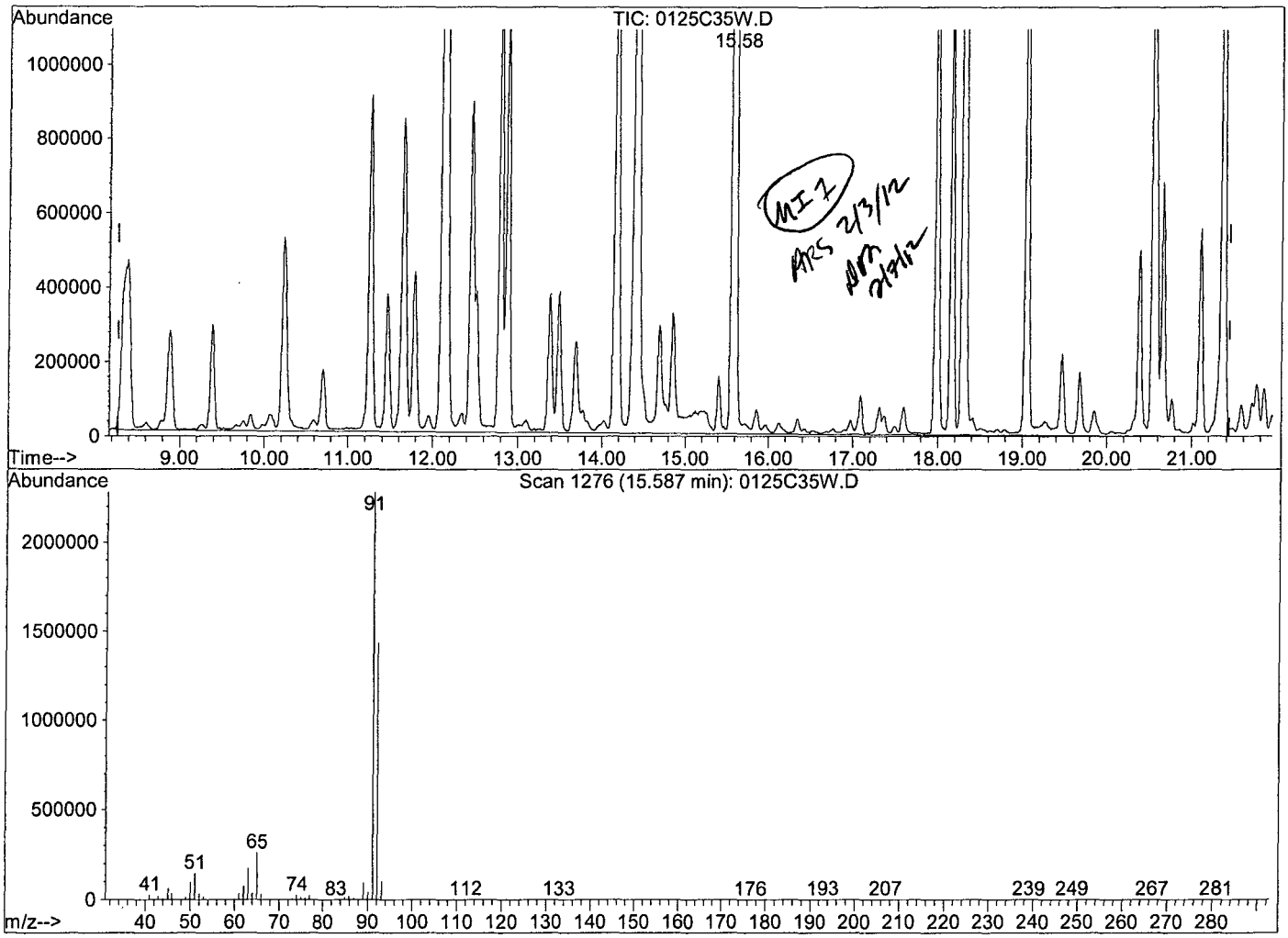
response 119549717

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.12#
0.00	0.00	0.35#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:18 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



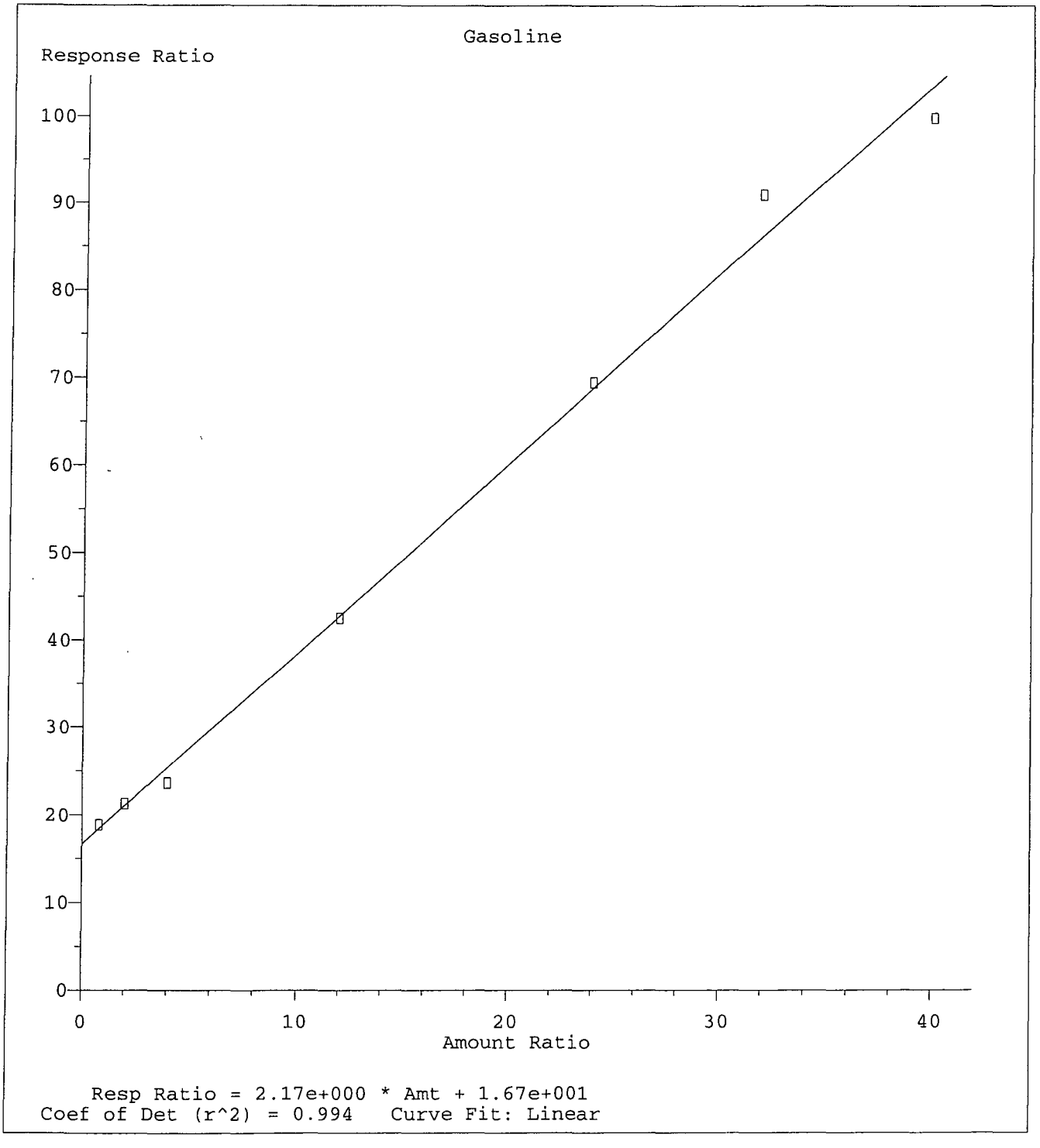
TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 1014.9258ppb m

response 129481006

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.11#
0.00	0.00	0.33#
0.00	0.00	0.00



Method Name: M:\CHICO\DATA\C120125\CGAS.M
Calibration Table Last Updated: Tue Feb 07 09:36:43 2012

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	998565	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	2063547	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1276666	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	68624186m	598.65494	ppb	100

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

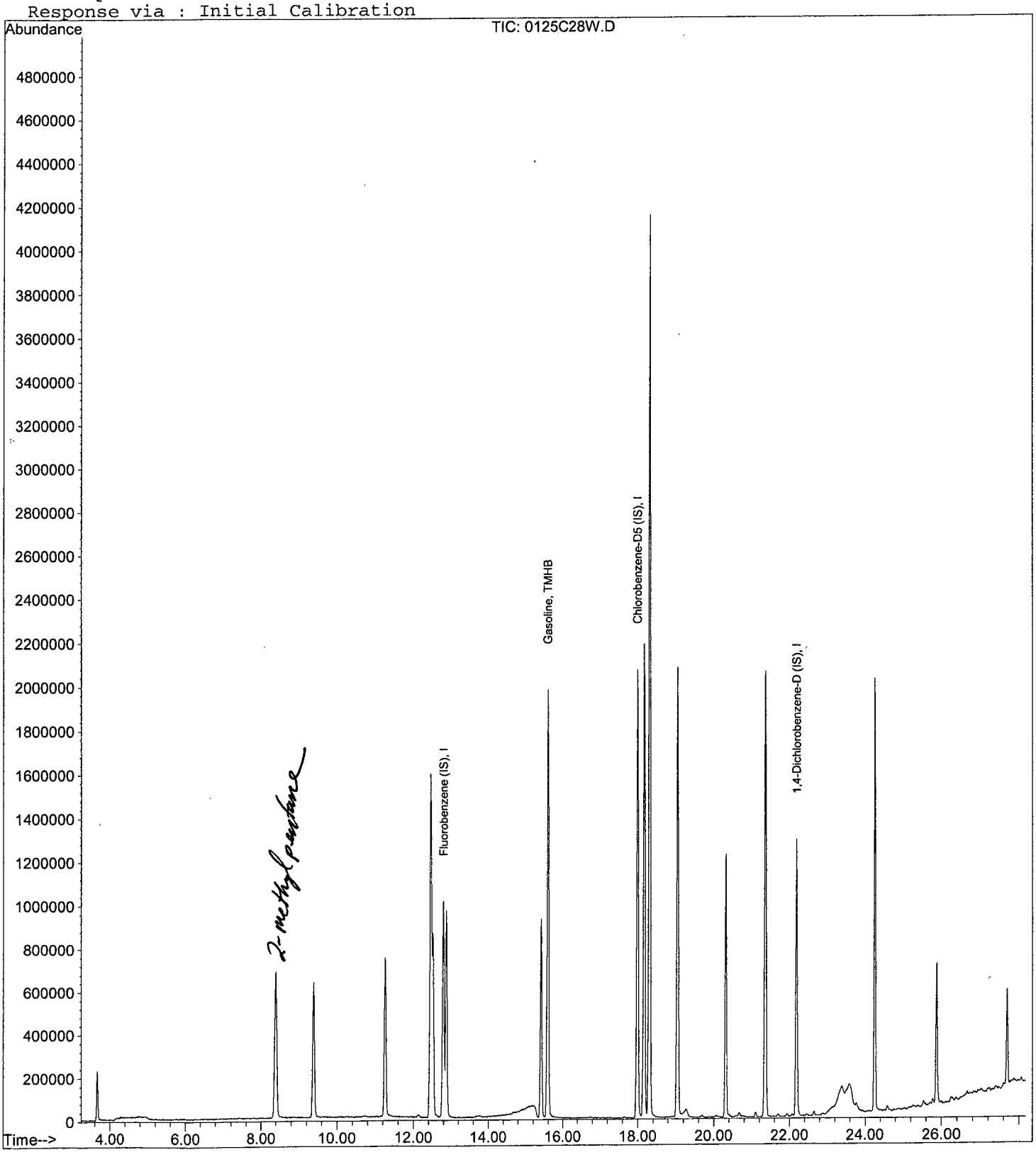
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

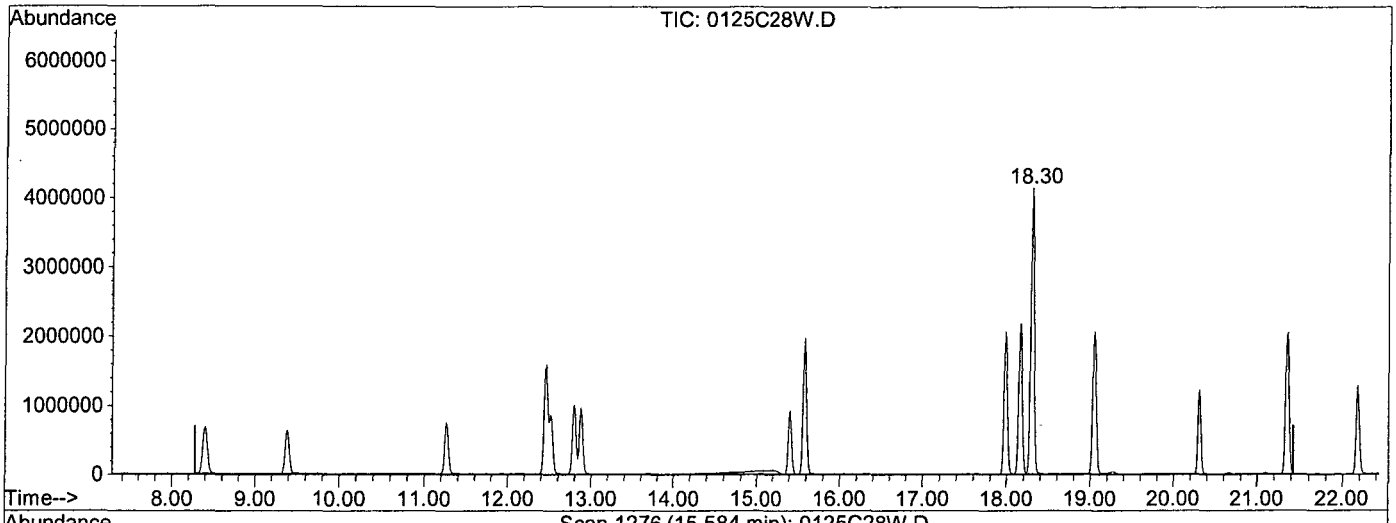
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

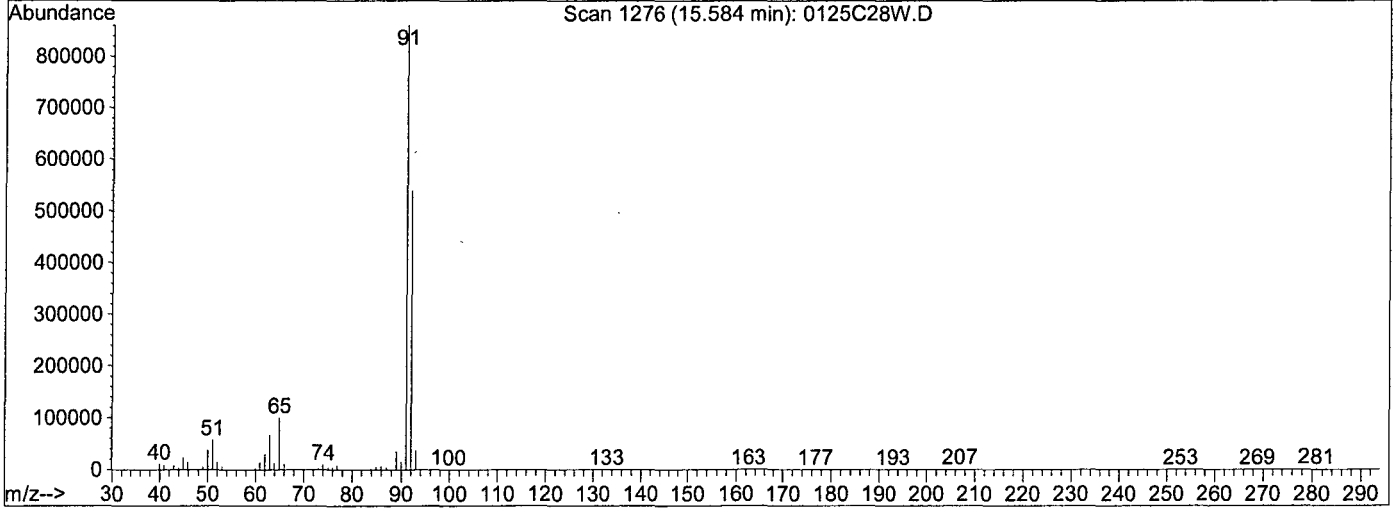


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:41 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C28W.D

(2) Gasoline (TMHB)

15.58min 598.6549ppb m

response 68624186

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.19#
0.00	0.00	0.54#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.80	96	514344	25.00000 ppb		0.03
54) Chlorobenzene-D5 (IS)	17.98	117	426880	25.00000 ppb		0.02
70) 1,4-Dichlorobenzene-D (IS)	22.18	152	243008	25.00000 ppb		0.02
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	814	0.05945 ppb		0.04
Spiked Amount 24.119			Recovery = 0.245%			
37) 1,2-DCA-D4(S)	12.18	65	952	0.09637 ppb		0.02
Spiked Amount 22.874			Recovery = 0.420%			
55) Toluene-D8(S)	15.46	98	5539	0.10268 ppb		0.03
Spiked Amount 24.755			Recovery = 0.416%			
63) 4-Bromofluorobenzene(S)	20.05	95	5181	0.27480 ppb		0.02
Spiked Amount 26.777			Recovery = 1.027%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.06	85	2596	0.82228 ppb		98
3) Freon 114	4.31	85	1957	0.24927 ppb		98
4) Chloromethane	4.53	50	497	-0.25189 ppb	#	1
5) Vinyl chloride	4.81	62	636	0.11072 ppb	#	55
6) Bromomethane	5.66	94	352	1.43494 ppb	#	48
7) Chloroethane	5.89	64	688	0.17146 ppb	#	88
9) Trichlorofluoromethane	6.48	103	598	0.15470 ppb	#	42
11) Acrolein	7.16	56	139	1.20103 ppb		81
12) Acetone	7.25	43	1756	0.17301 ppb	#	49
13) Freon-113	7.44	101	1265	0.10656 ppb		84
14) 1,1-DCE	7.63	96	2136	0.28441 ppb	#	17
15) t-Butanol	7.75	59	112	1.98451 ppb	#	80
17) Iodomethane	8.12	142	488	0.33050 ppb	#	43
18) Acrylonitrile	8.40	53	18247	12.53629 ppb	#	22
19) Methylene chloride	8.44	84	5961	-0.42807 ppb	#	1
20) Carbon disulfide	8.51	76	565	0.07522 ppb	#	75
22) Trans-1,2-DCE	9.06	96	3142	0.09631 ppb	#	9
25) Vinyl Acetate	9.38	43	108176	52.11193 ppb		98
27) MEK (2-Butanone)	10.41	43	403	0.27118 ppb	#	66
28) Cis-1,2-DCE	10.76	96	1544	0.11362 ppb	#	23
34) Cyclohexane	11.97	56	2103	0.11787 ppb		99
35) 1,1-Dichloropropene	12.09	75	2011	0.15580 ppb	#	45
36) 2,2,4-Trimethylpentane	12.13	57	18754	0.54048 ppb		99
38) Carbon Tetrachloride	12.23	117	80	0.91706 ppb	#	41
40) 1,2-DCA	12.45	62	18764	2.04942 ppb	#	75
41) Benzene	12.45	78	2517875	58.71375 ppb		98
42) TCE	13.49	95	1033	0.08724 ppb	#	57
43) 2-Pentanone	13.09	43	1444	0.49565 ppb	#	63
46) Methyl Cyclohexane	13.76	83	4236	0.25633 ppb		93
50) Cis-1,3-Dichloropropene	14.93	75	612	-0.23271 ppb		85
51) Toluene	15.58	91	2516540	49.99585 ppb		96
52) Trans-1,3-Dichloropropene	15.76	75	1112	0.10188 ppb	#	60
57) Tetrachloroethene	16.75	164	1780	0.15371 ppb	#	45
58) 1-Chlorohexane	17.66	91	4450	0.20898 ppb		89
60) m&p-Xylene	18.30	106	2213106	87.61936 ppb		97
61) o-Xylene	19.05	106	1078952	43.01267 ppb		93
62) Styrene	19.05	104	54491	1.45381 ppb	#	1
64) 2-Hexanone	16.02	43	394	0.17017 ppb	#	25
67) Chlorobenzene	18.06	112	2884	0.07867 ppb	#	48

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
68) Ethylbenzene	18.17	91	2939246	43.94023	ppb		100
71) MIBK (methyl isobutyl keto	14.58	43	99	-0.18362	ppb	#	31
72) Isopropylbenzene	19.69	105	9228	0.12704	ppb		92
75) t-1,4-Dichloro-2-Butene	20.31	53	19055	11.41330	ppb	#	8
76) Bromobenzene	20.43	156	3594	0.20876	ppb	#	47
77) n-Propylbenzene	20.39	91	18116	0.20048	ppb		98
78) 4-Ethyltoluene	20.59	105	8271	0.15756	ppb		90
79) 2-Chlorotoluene	20.68	91	7547	0.13199	ppb	#	77
80) 1,3,5-Trimethylbenzene	20.66	105	19818	0.33532	ppb		92
81) 4-Chlorotoluene	20.77	91	9067	0.17883	ppb		97
82) Tert-Butylbenzene	21.36	119	276648	4.08833	ppb	#	71
83) 1,2,4-Trimethylbenzene	21.36	105	2161299	36.78081	ppb		97
84) Sec-Butylbenzene	21.70	105	18537	0.22205	ppb	#	76
85) p-Isopropyltoluene	21.93	119	13390	0.19972	ppb	#	89
86) Benzyl Chloride	22.37	91	1446	0.10670	ppb	#	90
87) 1,3-DCB	22.08	146	7950	0.23447	ppb		83
88) 1,4-DCB	22.25	146	8802	0.26702	ppb	#	79
89) Hexachloroethane	23.52	117	2736	0.90342	ppb	#	25
90) n-Butylbenzene	22.65	91	21345	0.34686	ppb	#	94
91) 1,2-DCB	22.88	146	6887	0.24229	ppb	#	79
92) 1,2-Dibromo-3-chloropropan	24.07	155	120	0.11615	ppb	#	46
93) 1,2,4-Trichlorobenzene	25.53	180	5653	0.69548	ppb		79
94) Hexachlorobutadiene	25.78	223	5853	0.53769	ppb	#	69
95) Naphthalene	25.89	128	857570	35.27522	ppb		99
96) 1,2,3-Trichlorobenzene	26.24	180	4574	0.69979	ppb		85

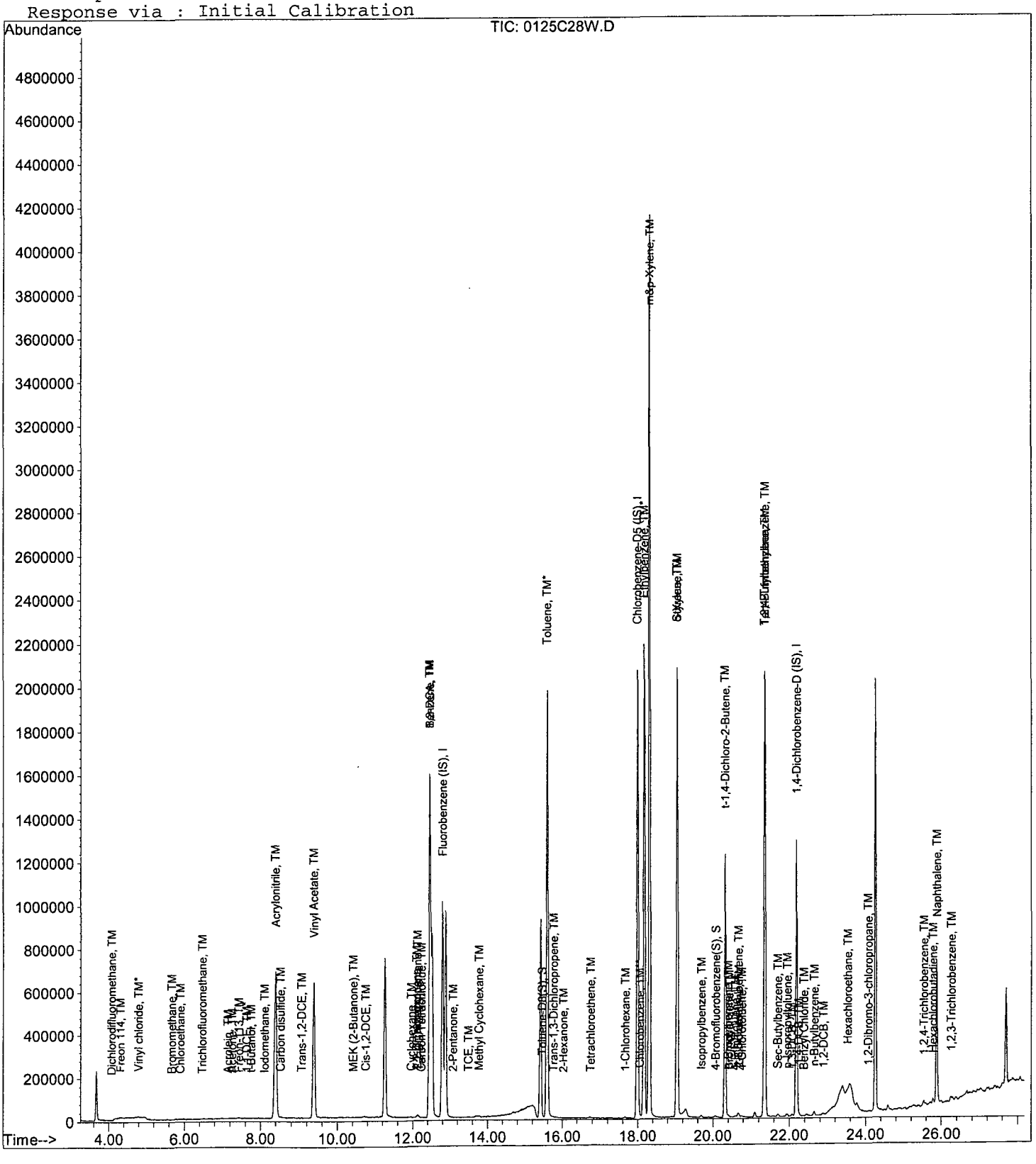
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.
Case No: 67525
Matrix: Water

SDG No: 67525
Date Analyzed: 01/27/12
Instrument: Chico
Initial Cal. Date: 01/25/12
Data File: 0125C38W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.556	52	TMHBL	0.36
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			52.0		

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1138336	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1375303	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1433410	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	48578324m	298.92978	ppb	100

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

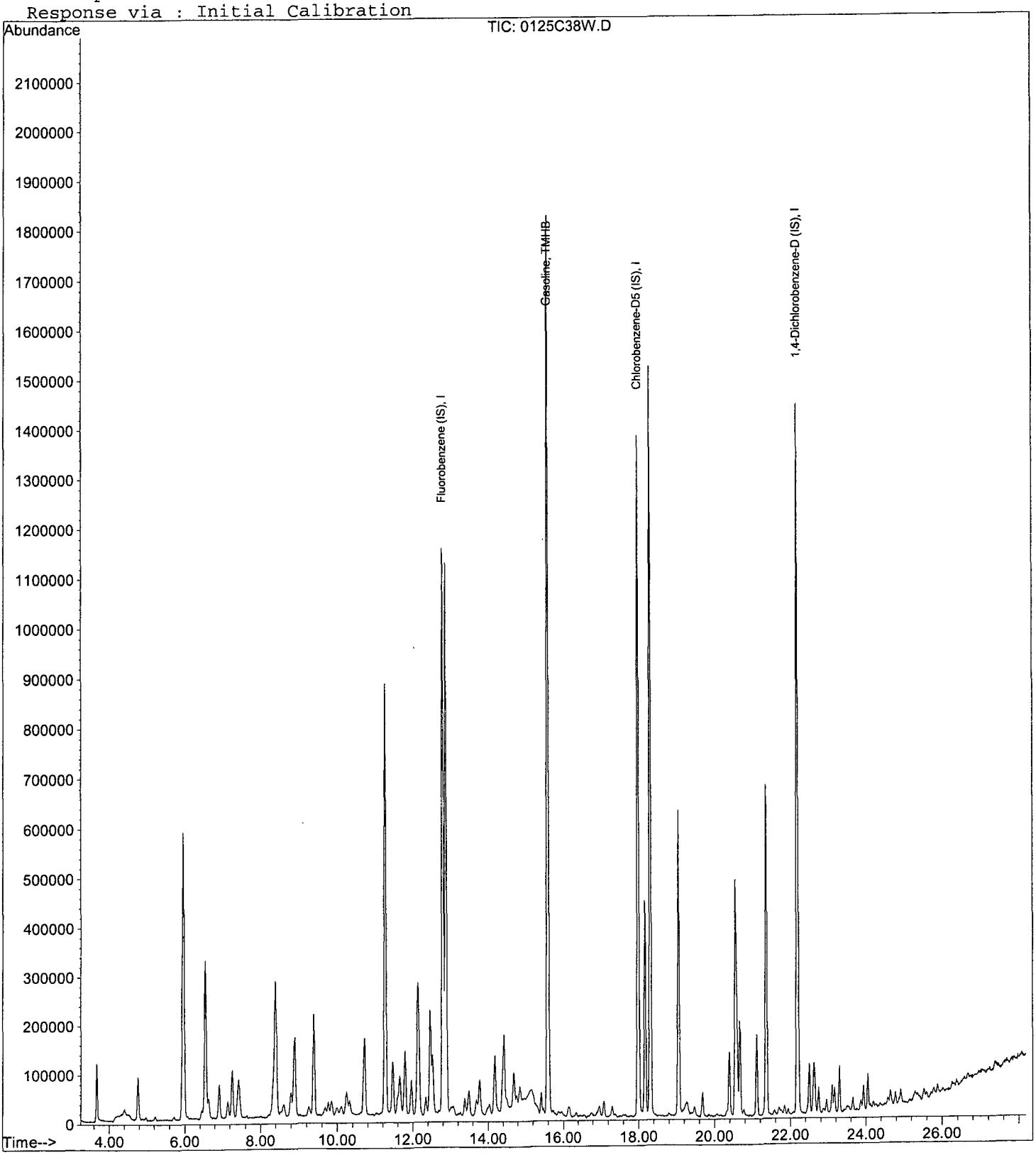
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D
Acq On : 27 Jan 12 1:06
Sample : Second Source 01-26-12
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

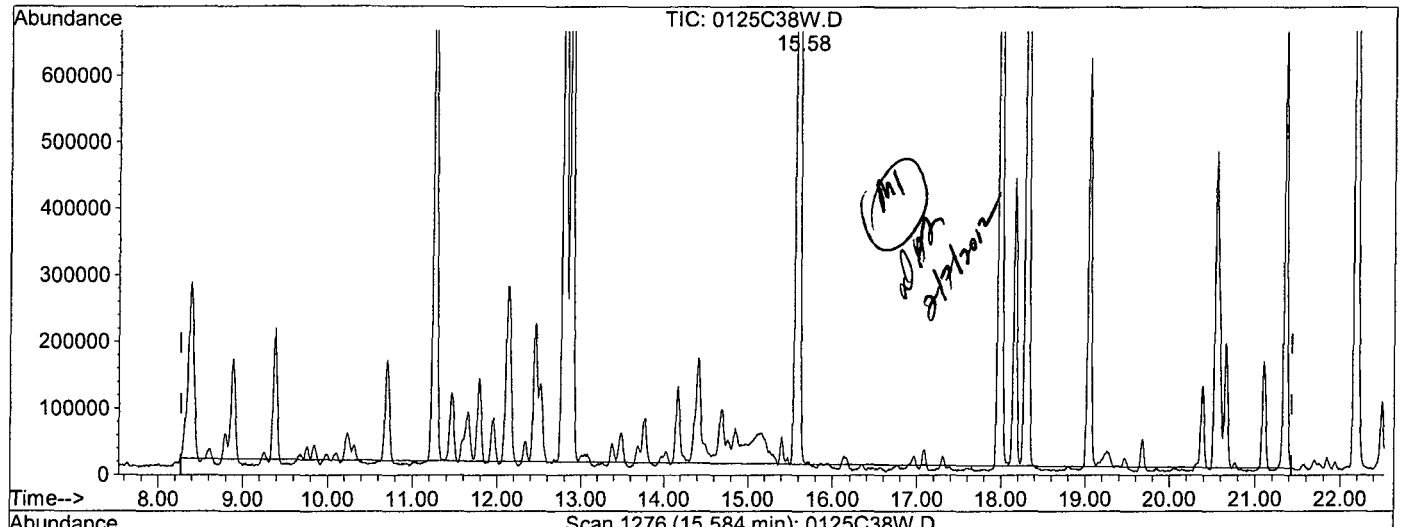
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

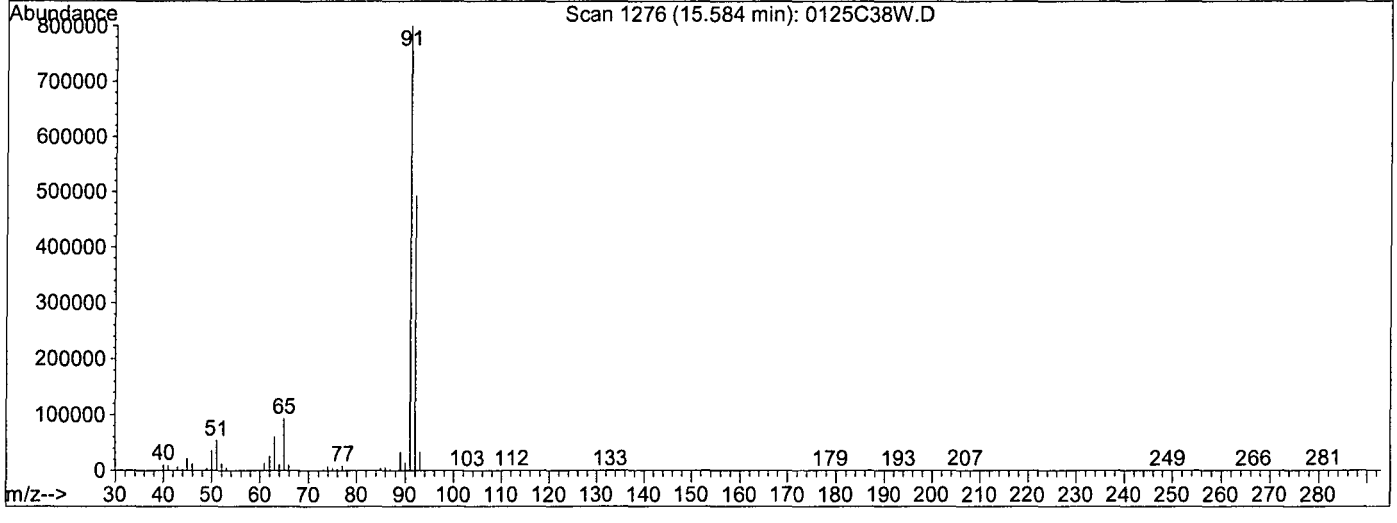


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 202.8575ppb m

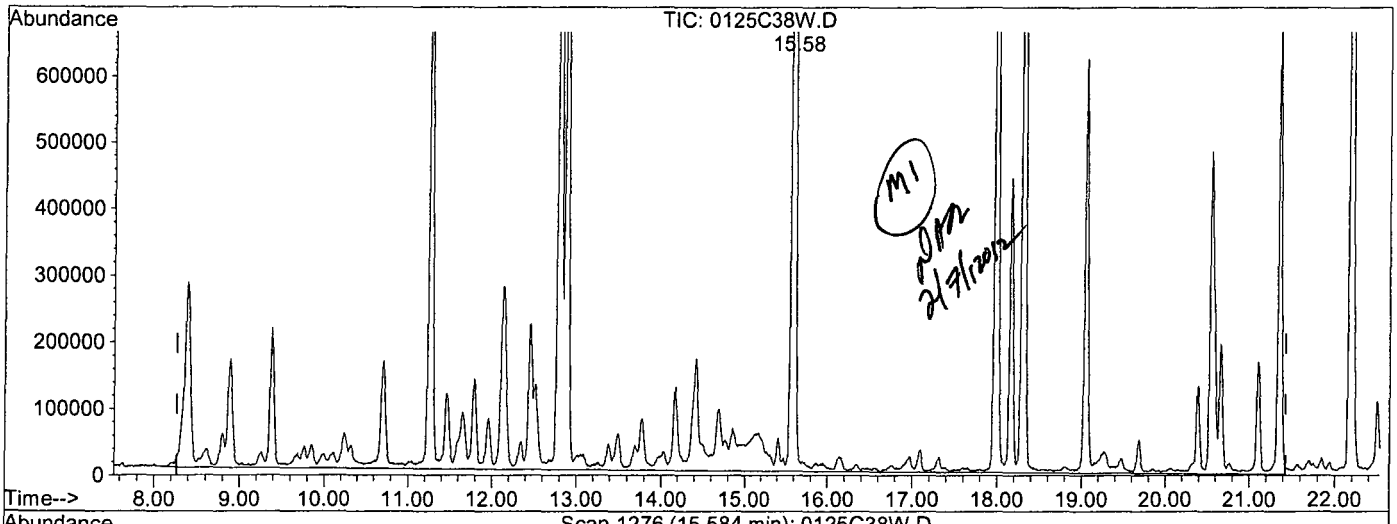
response 39074056

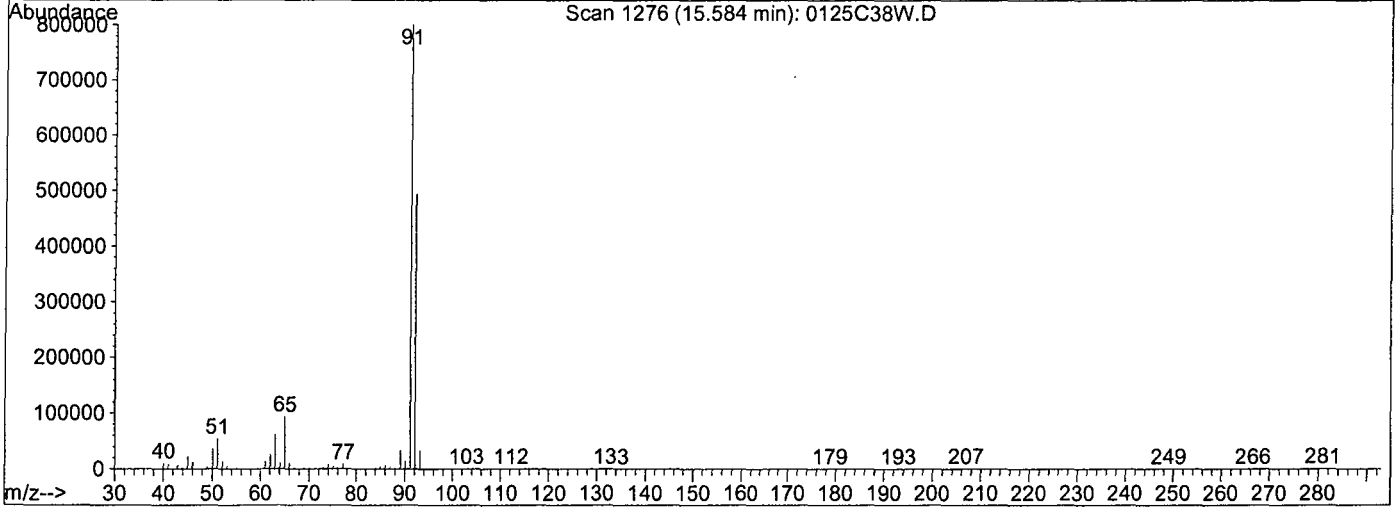
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.34#
0.00	0.00	1.04#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 298.9298ppb m

response 48578324

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.28#
0.00	0.00	0.84#
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.
Case No: 67525
Matrix: Water

SDG No: 67525
Date Analyzed: 04/19/12
Instrument: Chico
Initial Cal. Date: 04/10/12
Data File: 0419C01W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.632	51	TMHBL	3.1
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			51.0		

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C01W.D Vial: 1
Acq On : 19 Apr 12 6:48 Operator: SV
Sample : CCV gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1270199	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.99	TIC	1364281	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1270549	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	55359171m	309.38030	ppb	100

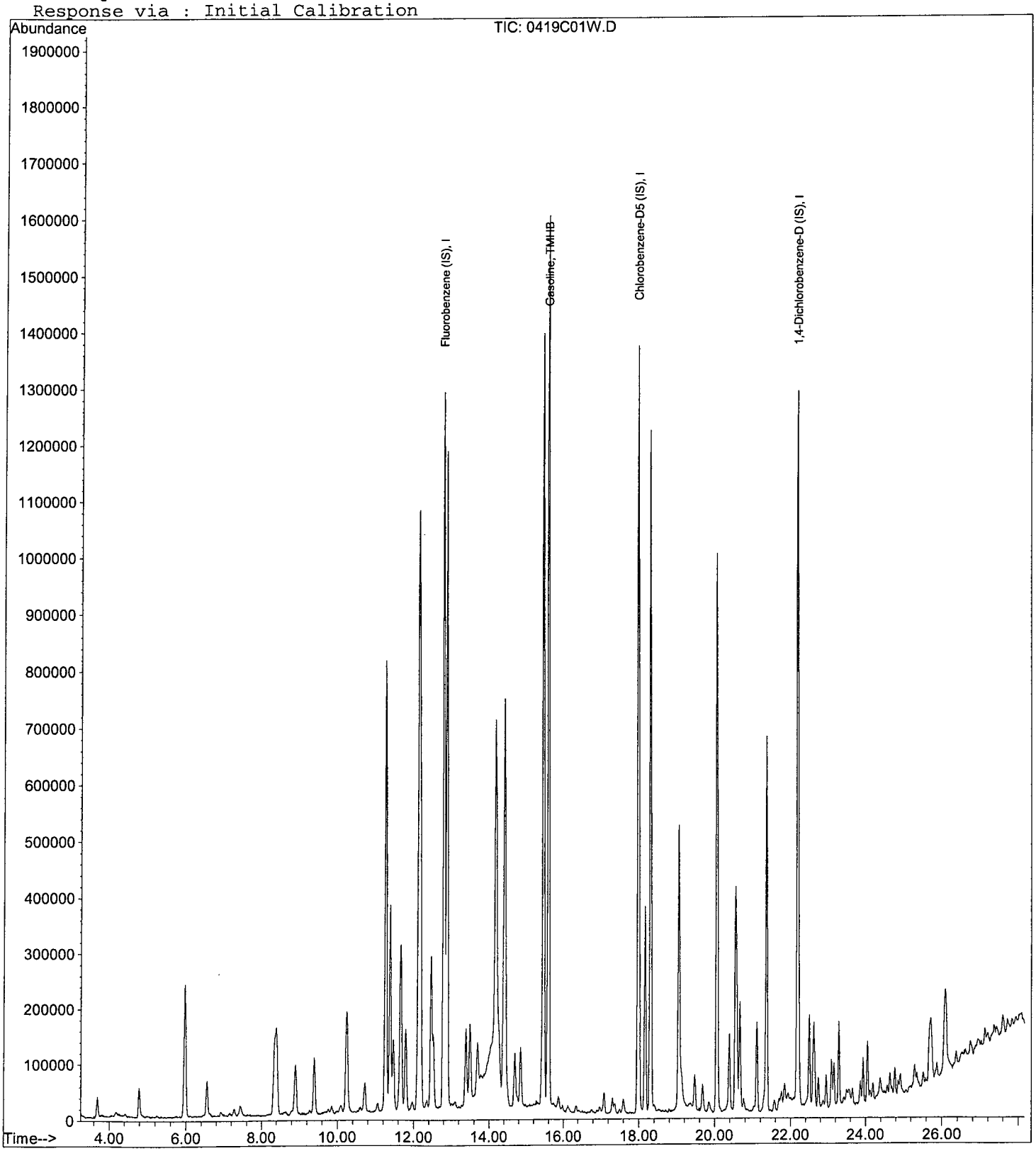
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C01W.D Vial: 1
Acq On : 19 Apr 12 6:48 Operator: SV
Sample : CCV gas 300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



EPA METHOD 8260B
Volatile Organic Compounds
Raw Data

APPL, INC.

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/19/12	04/19/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/19/12	04/19/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/19/12	04/19/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/19/12	04/19/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/19/12	04/19/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/19/12	04/19/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/19/12	04/19/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/19/12	04/19/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/19/12	04/19/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/19/12	04/19/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/19/12	04/19/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/19/12	04/19/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/19/12	04/19/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/19/12	04/19/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 3:52:48 PM
GC SC-Blank-REG MDLs

Method Blank
EPA 8260B VOCs + Gas Water

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120419W-59236 - 166110**
Batch ID: #86RHB-120419AT

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	04/19/12	04/19/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/19/12	04/19/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/19/12	04/19/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/19/12	04/19/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/19/12	04/19/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/19/12	04/19/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/19/12	04/19/12
BLANK	SURROGATE: 1,2-DICHLOROET	105	70-120			%	04/19/12	04/19/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.2	75-120			%	04/19/12	04/19/12
BLANK	SURROGATE: DIBROMOFLUOR	104	85-115			%	04/19/12	04/19/12
BLANK	SURROGATE: TOLUENE-D8 (S)	100	85-120			%	04/19/12	04/19/12

Quant Method: TALLW.M
Run #: 0419T17
Instrument: Thor
Sequence: T120411
Initials: DG

Printed: 05/01/12 3:52:48 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120411\0419T17W.D Vial: 7
Acq On : 19 Apr 12 12:32 Operator: DG,RS,HW,ARS,SV
Sample : 120419A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:30 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	474432	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	395840	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	232000	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	245593	31.04369 ppb	0.00
Spiked Amount 29.720			Recovery = 104.454%		
36) 1,2-DCA-D4(S)	6.34	65	223389	30.95777 ppb	0.00
Spiked Amount 29.608			Recovery = 104.560%		
56) Toluene-D8(S)	8.44	98	845144	32.00098 ppb	0.00
Spiked Amount 31.981			Recovery = 100.064%		
64) 4-Bromofluorobenzene(S)	11.06	95	308916	28.23855 ppb	0.00
Spiked Amount 29.353			Recovery = 96.205%		

Target Compounds Qvalue

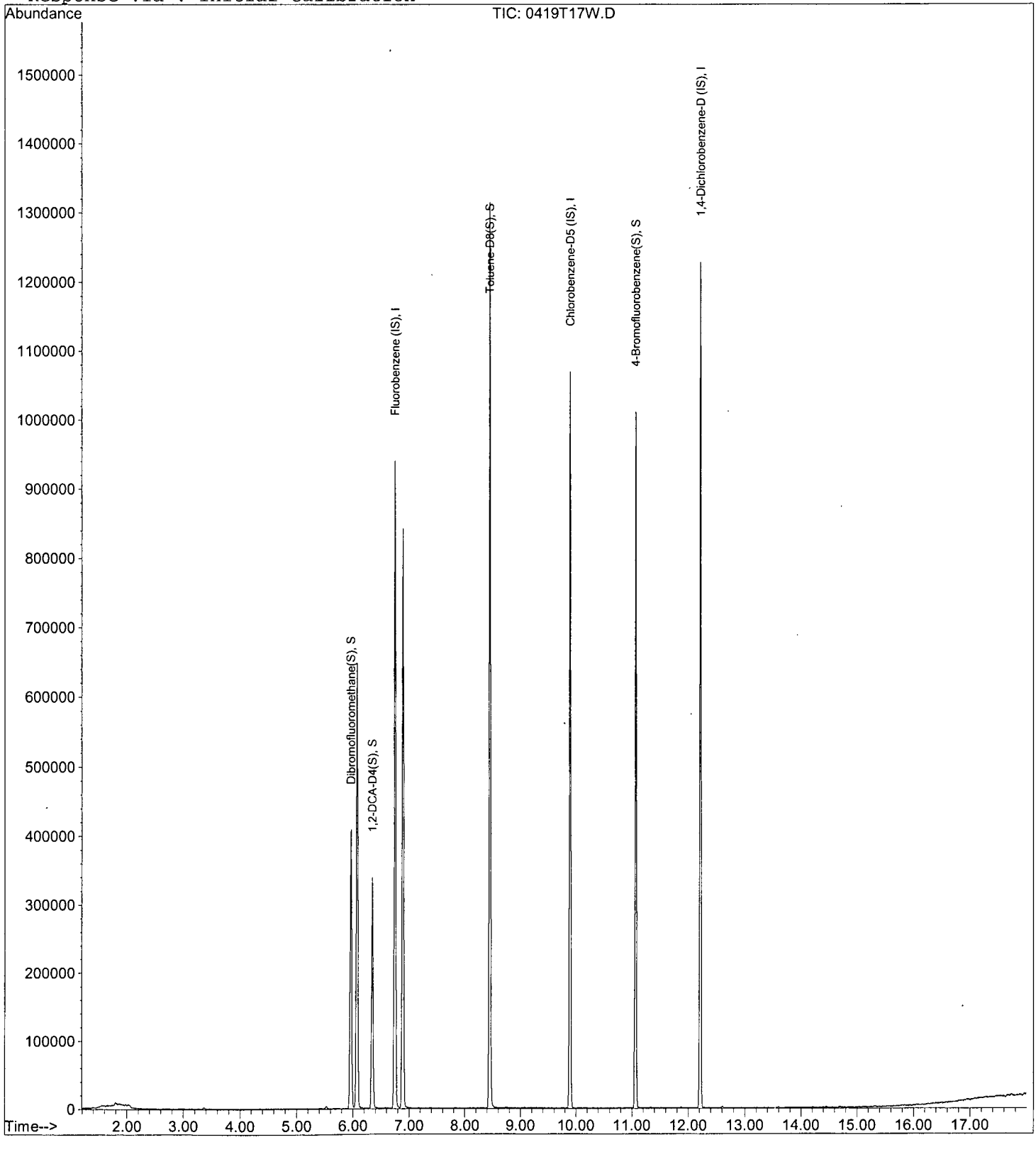
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T17W.D Vial: 7
Acq On : 19 Apr 12 12:32 Operator: DG,RS,HW,ARS,SV
Sample : 120419A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:30 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C09W.D Vial: 1
Acq On : 19 Apr 12 11:44 Operator: SV
Sample : 120419A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1323975	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	17.99	TIC	1379507	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1323331	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24653554m	22.14838	ppb ND	100

No gasoline pattern detected.
ARS 5/1/12

(#) = qualifier out of range (m) = manual integration
0419C09W.D CGAS.M Tue May 01 14:04:51 2012

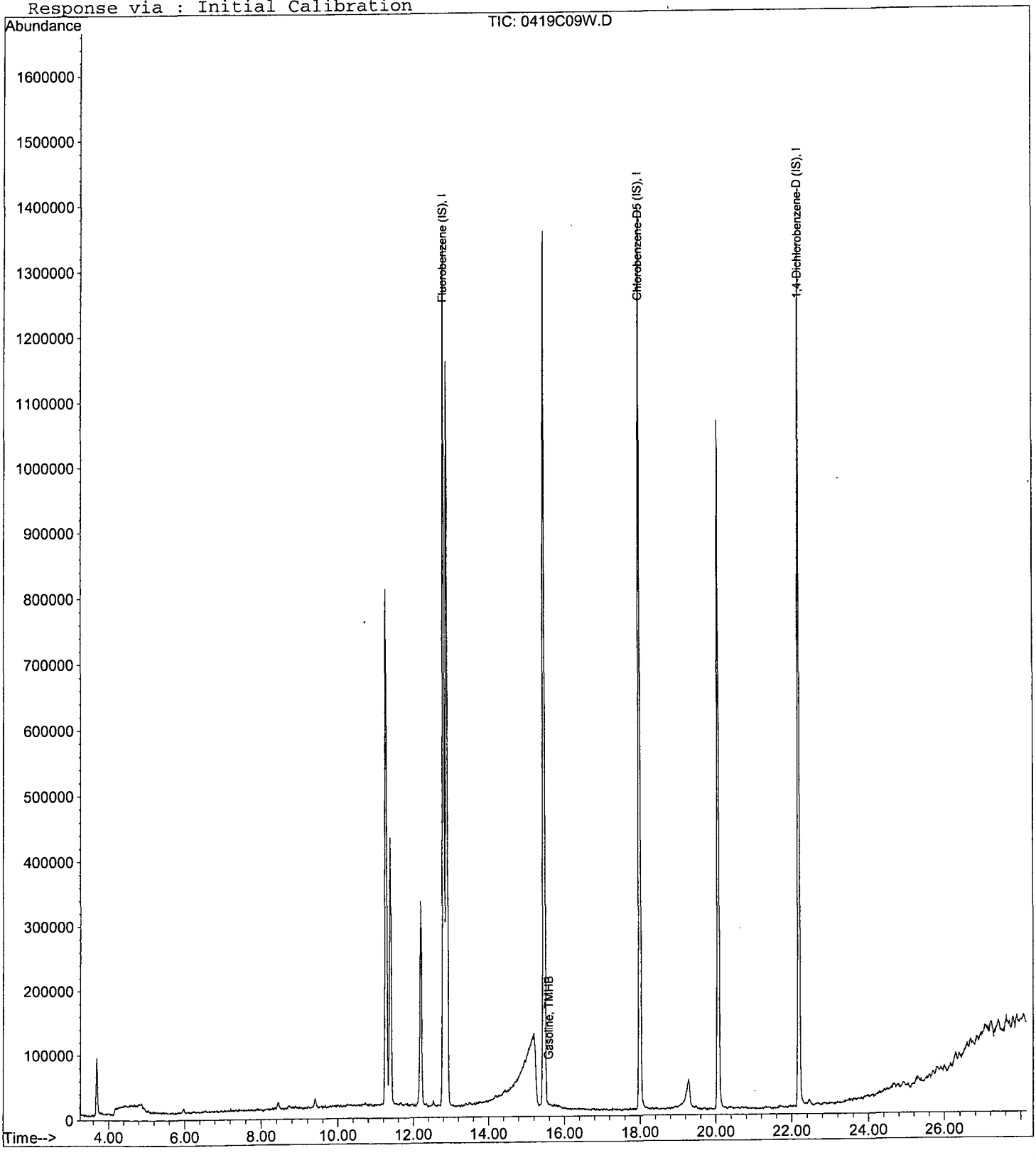
Quantitation Report

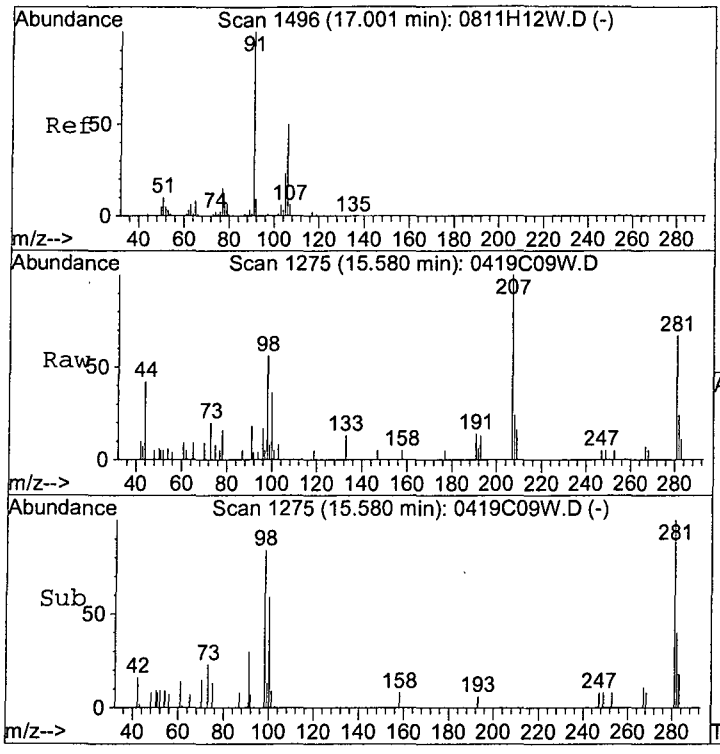
Data File : M:\CHICO\DATA\C120410\0419C09W.D
Acq On : 19 Apr 12 11:44
Sample : 120419A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

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

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

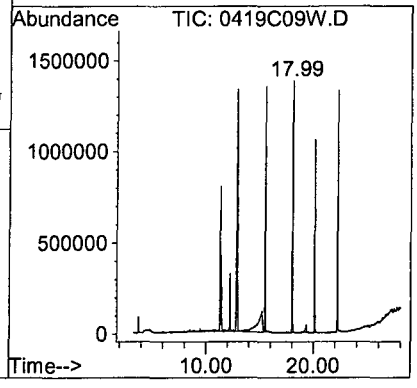
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 22.14838 ppb m
RT: 15.58 min Scan# 1275
Delta R.T. 0.00 min
Lab File: 0419C09W.D
Acq: 19 Apr 12 11:44

Tgt Ion:TIC Resp:24653554



Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

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	10.1	101	80-130
1,1,1-TRICHLOROETHANE	10.00	9.60	96.0	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.8	108	65-130
1,1,2-TRICHLOROETHANE	10.00	9.92	99.2	75-125
1,1-DICHLOROETHANE	10.00	9.14	91.4	70-135
1,1-DICHLOROETHENE	10.00	9.29	92.9	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.79	97.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.71	97.1	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	11.3	113	50-130
1,2-DIBROMOETHANE	10.00	10.3	103	70-130
1,2-DICHLOROBENZENE	10.00	9.35	93.5	70-120
1,2-DICHLOROETHANE	10.00	9.82	98.2	70-130
1,2-DICHLOROPROPANE	10.00	9.52	95.2	75-125
1,3-DICHLOROBENZENE	10.00	9.15	91.5	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	20.0	100	70-130
1,4-DICHLOROBENZENE	10.00	9.34	93.4	75-125
2-BUTANONE	10.00	10.1	101	30-150
4-METHYL-2-PENTANONE	10.00	9.58	95.8	60-135
ACETONE	10.00	9.60	96.0	40-140
BENZENE	10.00	9.34	93.4	80-120
BROMODICHLOROMETHANE	10.00	9.61	96.1	75-120
BROMOFORM	10.00	10.8	108	70-130
BROMOMETHANE	10.00	10.1	101	30-145
CARBON TETRACHLORIDE	10.00	9.67	96.7	65-140
CHLOROBENZENE	10.00	9.28	92.8	80-120
CHLORODIBROMOMETHANE	10.00	10.4	104	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	9.64	96.4	65-135
CHLOROMETHANE	10.00	9.78	97.8	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.40	94.0	70-125
ETHYLBENZENE	10.00	8.90	89.0	75-125

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Comments: _____

Printed: 05/01/12 3:52:39 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120419W-59236 LCS - 166110**
Batch ID: #86RHB-120419AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	338	113	75-125
HEXACHLOROBUTADIENE	10.00	9.29	92.9	50-140
METHYL TERT-BUTYL ETHER	10.00	9.25	92.5	65-125
METHYLENE CHLORIDE	10.00	8.48	84.8	55-140
STYRENE	10.00	9.46	94.6	65-135
TETRACHLOROETHENE	10.00	9.58	95.8	45-150
TOLUENE	10.00	9.33	93.3	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.51	95.1	60-140
TRICHLOROETHENE	10.00	8.94	89.4	70-125
VINYL CHLORIDE	10.00	10.3	103	50-145
XYLENES (TOTAL)	30.0	27.5	91.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	29.6	31.2	105	70-120
SURROGATE: 4-BROMOFLUOROBENZE	29.4	30.0	102	75-120
SURROGATE: DIBROMOFLUOROMETH	29.7	32.0	108	85-115
SURROGATE: TOLUENE-D8 (S)	32.0	31.6	98.8	85-120

Comments: _____

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	04/19/12
Analysis Date :	04/19/12
Instrument :	Thor
Run :	0419T12
Initials :	DG

Printed: 05/01/12 3:52:39 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0419T12W.D Vial: 2
Acq On : 19 Apr 12 10:13 Operator: DG,RS,HW,ARS,SV
Sample : 120419A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	439424	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	375360	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	233344	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	234443	31.99520 ppb		0.00
Spiked Amount 29.720			Recovery = 107.653%			
36) 1,2-DCA-D4(S)	6.34	65	208330	31.17094 ppb		0.00
Spiked Amount 29.608			Recovery = 105.279%			
56) Toluene-D8(S)	8.44	98	790791	31.57665 ppb		0.00
Spiked Amount 31.981			Recovery = 98.738%			
64) 4-Bromofluorobenzene(S)	11.06	95	311312	30.01024 ppb		0.00
Spiked Amount 29.353			Recovery = 102.239%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.30	85	56966	10.76508 ppb		100
3) Freon 114	1.42	85	36271	9.49815 ppb		96
4) Chloromethane	1.46	50	48860	9.78079 ppb		100
5) Vinyl chloride	1.57	62	86298	10.28461 ppb		99
6) Bromomethane	1.88	94	60602	10.05382 ppb		97
7) Chloroethane	1.98	64	48195	10.32698 ppb		95
8) Dichlorofluoromethane	2.19	67	6033	6.66903 ppb		87
9) Trichlorofluoromethane	2.25	101	24698	8.94042 ppb		88
10) Acrolein	2.70	55	35878	80.65851 ppb	#	62
11) Acetone	2.91	43	14435	9.59994 ppb		95
12) Freon-113	2.86	101	47145	10.65429 ppb		95
13) 1,1-DCE	2.83	61	68422	9.28820 ppb		97
14) t-Butanol	3.71	59	13687	118.84435 ppb		99
15) Methyl Acetate	3.36	43	42055	10.32788 ppb		98
16) Iodomethane	3.00	142	75890	9.74974 ppb		94
17) Acrylonitrile	3.83	52	13569	11.17628 ppb		90
18) Methylene chloride	3.46	84	20152	8.47878 ppb		93
19) Carbon disulfide	3.07	76	22488	8.69794 ppb		100
20) Methyl t-butyl ether (MtBE	3.93	73	74723	9.24864 ppb		97
21) Trans-1,2-DCE	3.88	96	47307	9.51363 ppb		94
22) Diisopropyl Ether	4.72	59	20092	9.33141 ppb		95
23) 1,1-DCA	4.52	63	99676	9.13956 ppb		95
24) Vinyl Acetate	4.72	87	50509	9.41709 ppb		84
25) Ethyl tert Butyl Ether	5.23	59	97609	8.76332 ppb		99
26) MEK (2-Butanone)	5.40	43	18626	10.12275 ppb		99
27) Cis-1,2-DCE	5.34	96	68005	9.39566 ppb		97
28) 2,2-Dichloropropane	5.33	77	45569	11.03619 ppb		99
29) Chloroform	5.77	83	115732	9.63676 ppb		97
30) Bromochloromethane	5.64	128	34254	9.88898 ppb		98
32) 1,1,1-TCA	5.97	97	75801	9.60000 ppb		96
33) Cyclohexane	6.04	41	25029	8.52166 ppb		91
34) 1,1-Dichloropropene	6.18	75	60279	8.67761 ppb		93
35) 2,2,4-Trimethylpentane	6.56	57	92107	10.02068 ppb		98
37) Carbon Tetrachloride	6.18	117	74701	9.67357 ppb		94
38) Tert Amyl Methyl Ether	6.60	73	113060	9.20325 ppb		99
39) 1,2-DCA	6.43	62	75306	9.82063 ppb		99
40) Benzene	6.42	78	231183	9.33882 ppb		99
41) TCE	7.16	95	62586	8.93790 ppb		97
42) 2-Pentanone	7.38	43	408121	130.31231 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120411\0419T12W.D Vial: 2
Acq On : 19 Apr 12 10:13 Operator: DG,RS,HW,ARS,SV
Sample : 120419A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	70049	9.52246	ppb		97
44)	Bromodichloromethane	7.69	83	87410	9.60878	ppb		98
45)	Methyl Cyclohexane	7.37	83	55500	9.44570	ppb		95
46)	Dibromomethane	7.51	93	38726	9.96209	ppb		94
48)	MIBK (methyl isobutyl ket	8.34	43	22808	9.58203	ppb		99
49)	1-Bromo-2-chloroethane	8.00	63	46504	9.68277	ppb		97
50)	Cis-1,3-Dichloropropene	8.17	75	94950	9.79549	ppb		96
51)	Toluene	8.51	91	270905	9.32831	ppb		99
52)	Trans-1,3-Dichloropropene	8.74	75	83061	10.22149	ppb		96
53)	1,1,2-TCA	8.91	83	51385	9.92056	ppb		99
54)	2-Hexanone	9.19	43	24503	9.18639	ppb		93
57)	1,2-EDB	9.41	107	58015	10.33657	ppb		98
58)	Tetrachloroethene	9.07	166	76445	9.57862	ppb		97
59)	1-Chlorohexane	9.92	91	73855	8.73880	ppb		95
60)	1,1,1,2-Tetrachloroethane	10.00	131	76155	10.08469	ppb		100
61)	m&p-Xylene	10.16	106	238338	18.43012	ppb		98
62)	o-Xylene	10.55	106	116140	9.03909	ppb		96
63)	Styrene	10.56	104	204283	9.46001	ppb		98
65)	1,3-Dichloropropane	9.08	76	94757	9.45944	ppb		94
66)	Dibromochloromethane	9.31	129	74848	10.43509	ppb		99
67)	Chlorobenzene	9.92	112	198784	9.27525	ppb		97
68)	Ethylbenzene	10.04	91	298054	8.89502	ppb		98
69)	Bromoform	10.73	173	51435	10.75605	ppb		96
71)	Isopropylbenzene	10.92	105	286048	8.77145	ppb		99
72)	1,1,2,2-Tetrachloroethane	11.20	83	76317	10.78829	ppb		96
73)	1,2,3-Trichloropropane	11.24	110	22000	9.79216	ppb		92
74)	t-1,4-Dichloro-2-Butene	11.26	53	13845	10.18277	ppb		87
75)	Bromobenzene	11.21	156	100146	9.54377	ppb		98
76)	n-Propylbenzene	11.33	91	356974	8.98355	ppb		97
77)	4-Ethyltoluene	11.45	105	215636	9.49936	ppb		99
78)	2-Chlorotoluene	11.41	91	254004	9.23568	ppb		99
79)	1,3,5-Trimethylbenzene	11.51	105	264731	9.15171	ppb		98
80)	4-Chlorotoluene	11.51	91	264969	9.20772	ppb		99
81)	Tert-Butylbenzene	11.83	119	226943	9.04492	ppb		97
82)	1,2,4-Trimethylbenzene	11.88	105	268510	9.17633	ppb		99
83)	Sec-Butylbenzene	12.05	105	314837	9.13230	ppb		97
84)	p-Isopropyltoluene	12.20	119	271486	9.07938	ppb		98
85)	Benzyl Chloride	12.37	91	111655	12.86251	ppb		99
86)	1,3-DCB	12.15	146	187484	9.14937	ppb		99
87)	1,4-DCB	12.23	146	191603	9.34415	ppb		99
88)	n-Butylbenzene	12.61	91	228352	8.95546	ppb		99
89)	1,2-DCB	12.60	146	177046	9.34937	ppb		97
90)	Hexachloroethane	12.87	117	49433	9.29950	ppb		97
91)	1,2-Dibromo-3-chloropropan	13.37	157	15717	11.28264	ppb	#	82
92)	1,2,4-Trichlorobenzene	14.21	180	78896	9.71159	ppb		99
93)	Hexachlorobutadiene	14.40	223	32320	9.29443	ppb		85
94)	Naphthalene	14.45	128	203963	9.60139	ppb		100
95)	1,2,3-Trichlorobenzene	14.69	180	113934	9.93382	ppb		97

1,3-dichloropropene, total 20.01698 ppb ARS 5/1/12

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

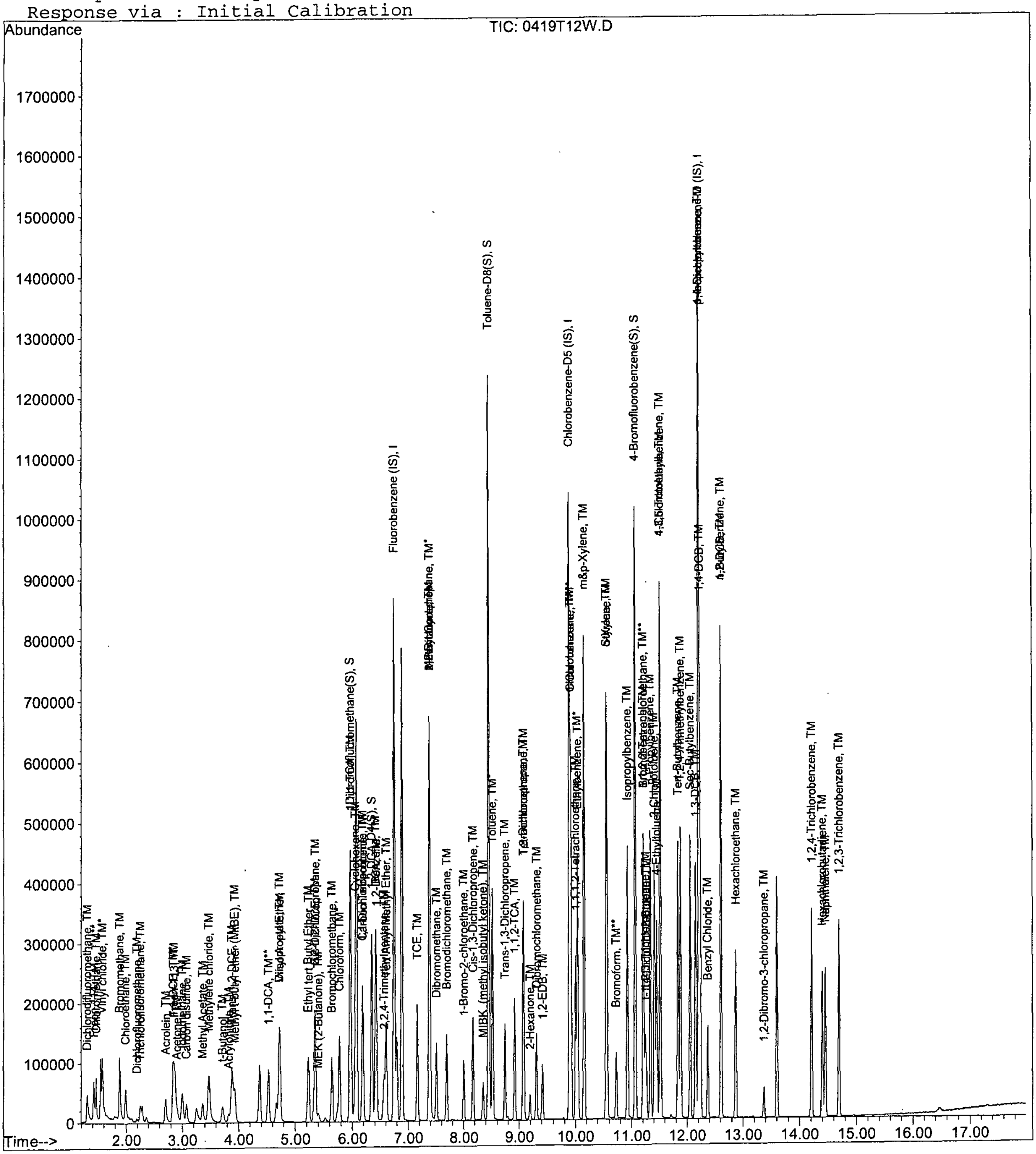
Quantitation Report

Data File : M:\THOR\DATA\T120411\0419T12W.D
Acq On : 19 Apr 12 10:13
Sample : 120419A LCS-1WT
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 2
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: Apr 20 10:06 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Thu Apr 12 08:54:39 2012
Response via : Initial Calibration



286

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120410\0419C06W.D Vial: 1
Acq On : 19 Apr 12 9:52 Operator: SV
Sample : LCS gas 300 ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	1333745	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1439521	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1368841	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	61479673m	338.29027	ppb	100

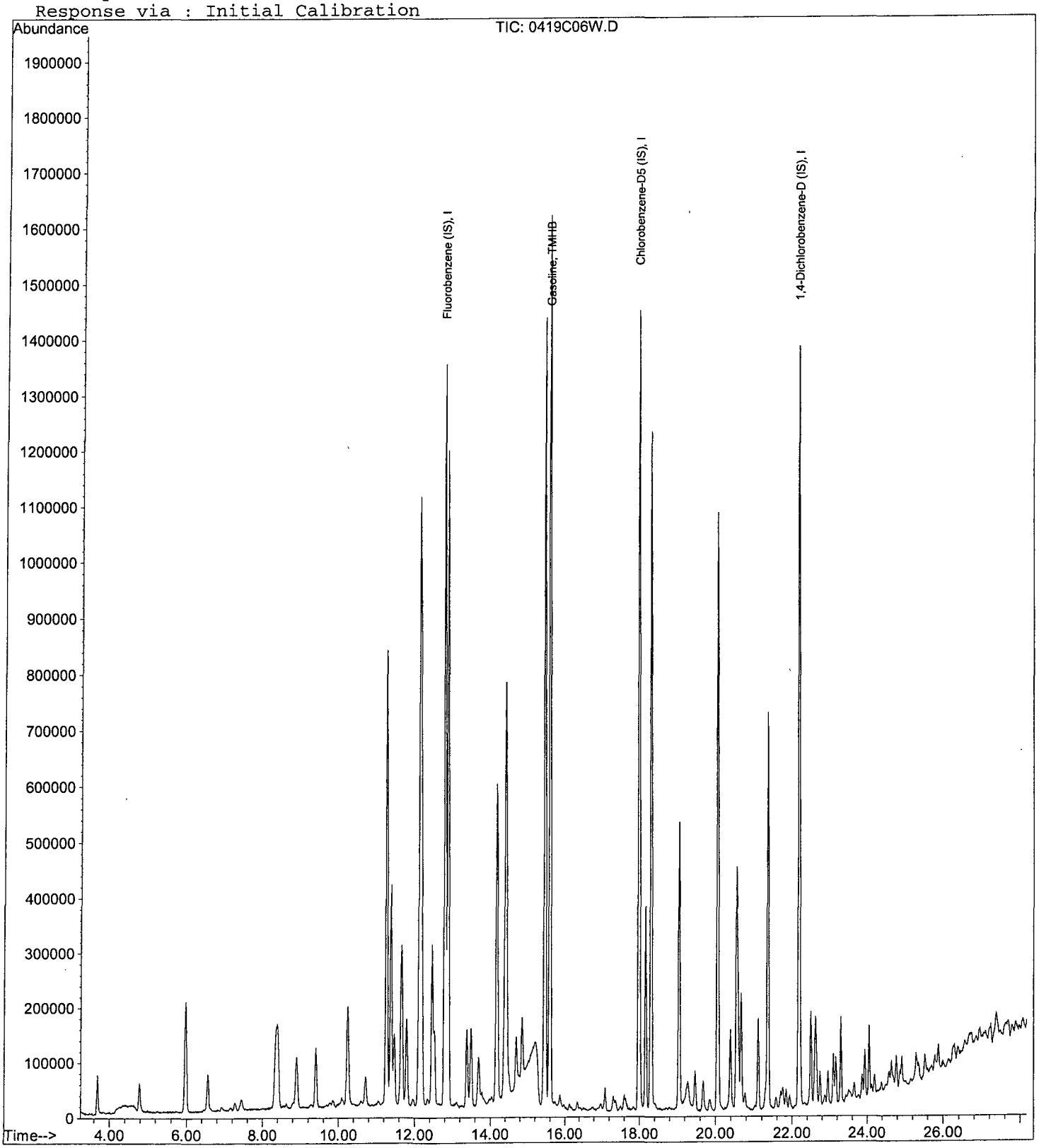
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120410\0419C06W.D Vial: 1
Acq On : 19 Apr 12 9:52 Operator: SV
Sample : LCS gas 300 ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 14:00 2012 Quant Results File: CGAS.RES

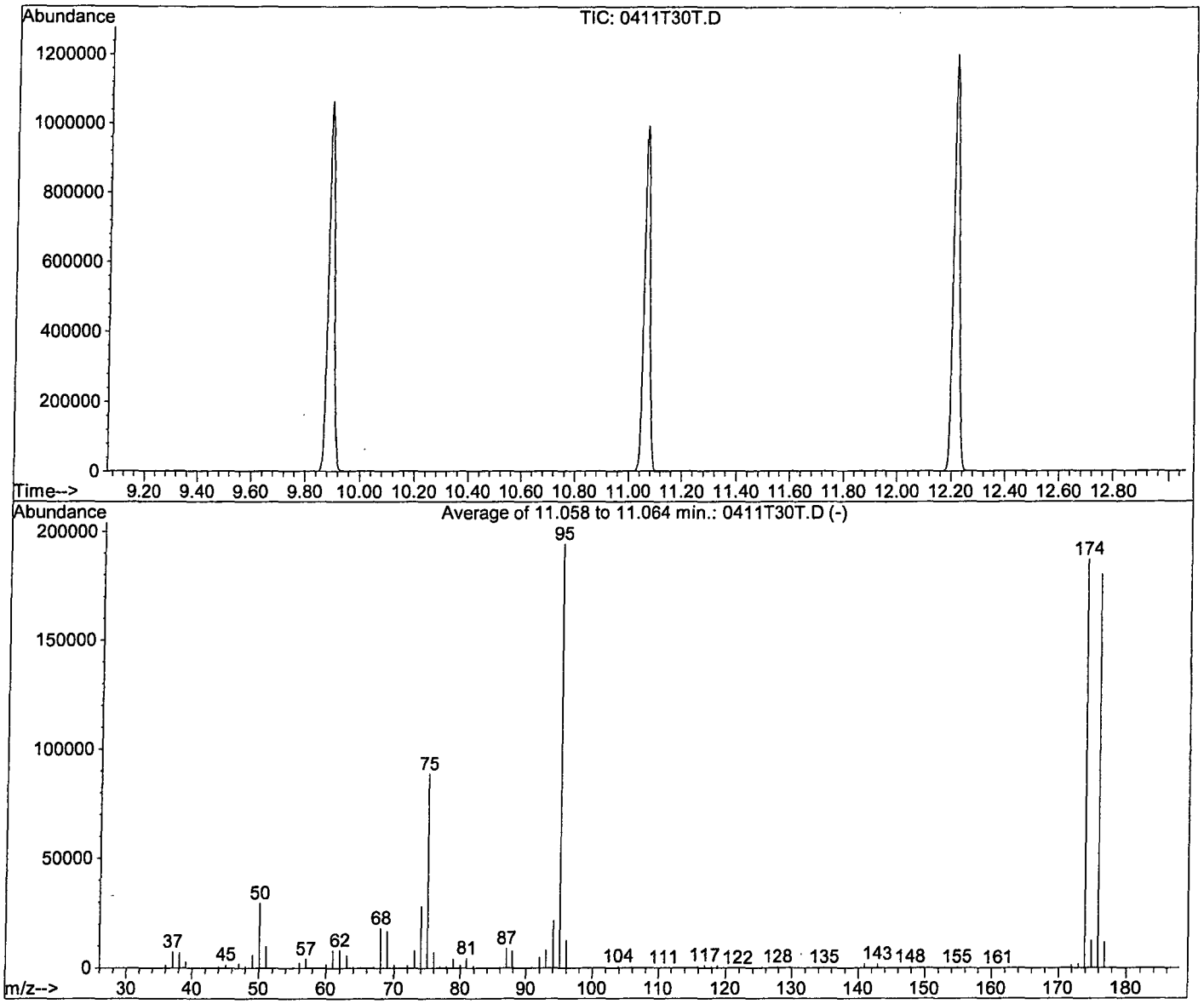
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



Data File : M:\THOR\DATA\T120411\0411T30T.D
Acq On : 11 Apr 12 22:12
Sample : 5ng BFB STD 4-10-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 30
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B



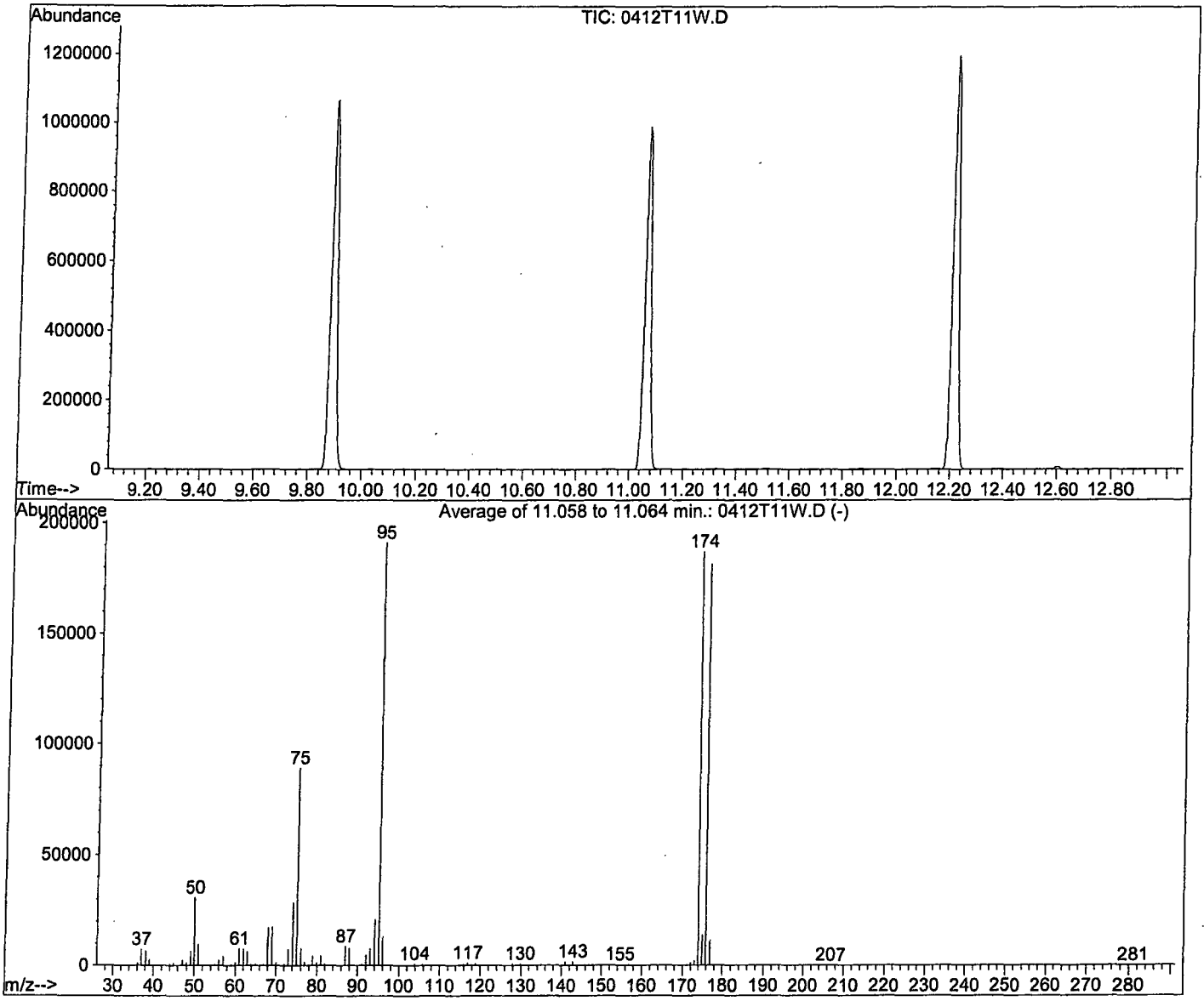
Spectrum Information: Average of 11.058 to 11.064 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	29645	PASS
75	95	30	60	45.7	88797	PASS
95	95	100	100	100.0	194411	PASS
96	95	5	9	6.6	12734	PASS
173	174	0.00	2	1.0	1853	PASS
174	95	50	100	96.3	187221	PASS
175	174	5	9	6.8	12729	PASS
176	174	95	101	96.4	180416	PASS
177	176	5	9	6.6	11857	PASS

Data File : M:\THOR\DATA\T120411\0412T11W.D
Acq On : 12 Apr 12 3:16
Sample : 5ng BFB STD 04-10-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 41
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B



AutoFind: Scans 3069, 3070, 3071; Background Corrected with Scan 3054

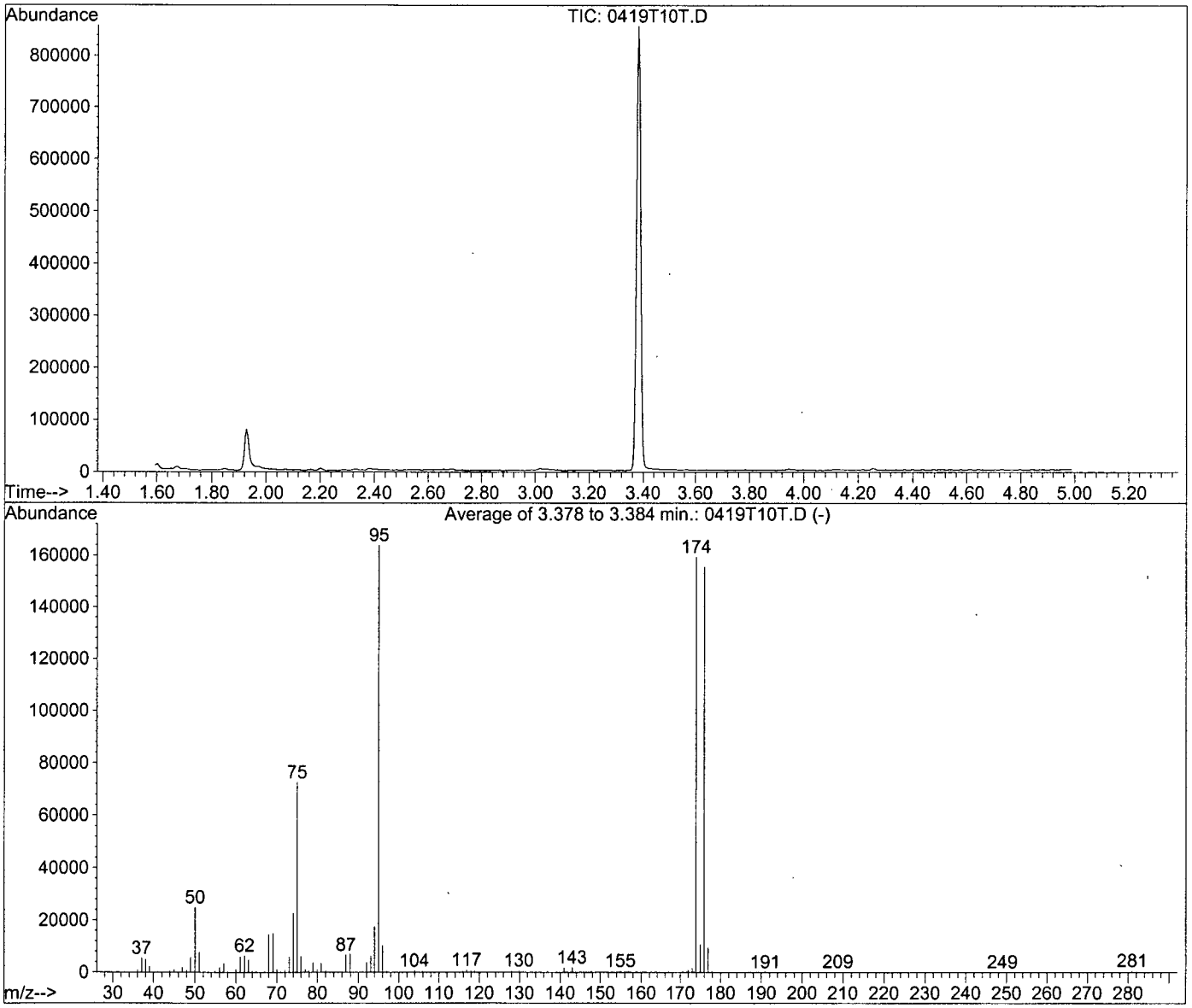
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.1	30760	PASS
75	95	30	60	46.6	89045	PASS
95	95	100	100	100.0	191189	PASS
96	95	5	9	6.9	13167	PASS
173	174	0.00	2	1.0	1953	PASS
174	95	50	100	97.8	186923	PASS
175	174	5	9	7.4	13754	PASS
176	174	95	101	97.1	181419	PASS
177	176	5	9	6.3	11409	PASS

0412T11W.D TALLW.M Thu Apr 12 08:57:16 2012

Data File : M:\THOR\DATA\T120411\0419T10T.D
Acq On : 19 Apr 12 9:23
Sample : 5ng BFB 4-10-12
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120411\TALLW.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 3.378 to 3.384 min.

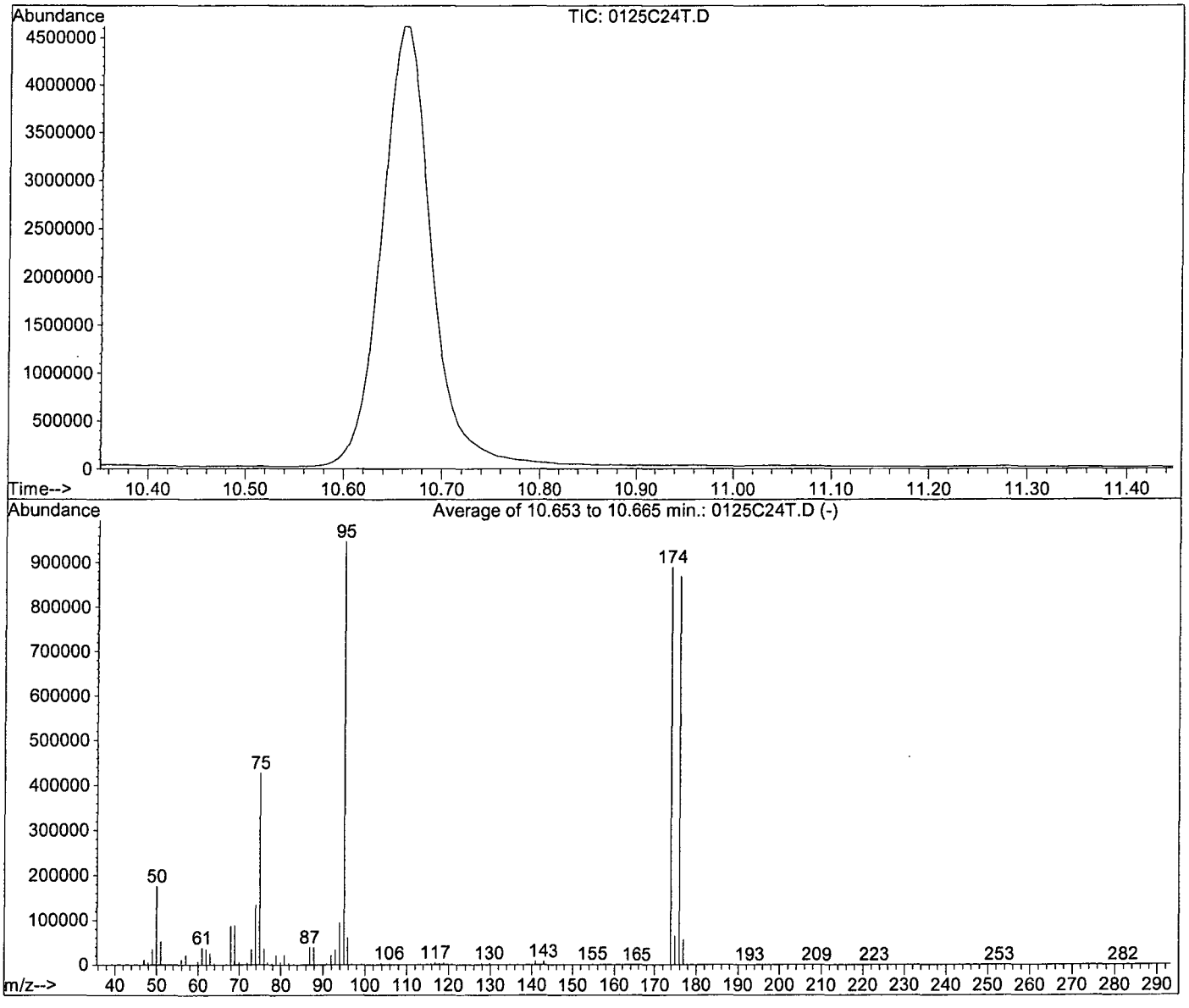
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.2	24875	PASS
75	95	30	60	44.3	72627	PASS
95	95	100	100	100.0	163861	PASS
96	95	5	9	6.3	10363	PASS
173	174	0.00	2	0.9	1450	PASS
174	95	50	100	97.3	159360	PASS
175	174	5	9	6.6	10583	PASS
176	174	95	101	97.5	155413	PASS
177	176	5	9	6.0	9394	PASS

BFB

Data File : M:\CHICO\DATA\C120125\0125C24T.D
Acq On : 26 Jan 12 16:30
Sample : 25ug/mL BFB Std. 01-12-12
Misc : 2uL

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B



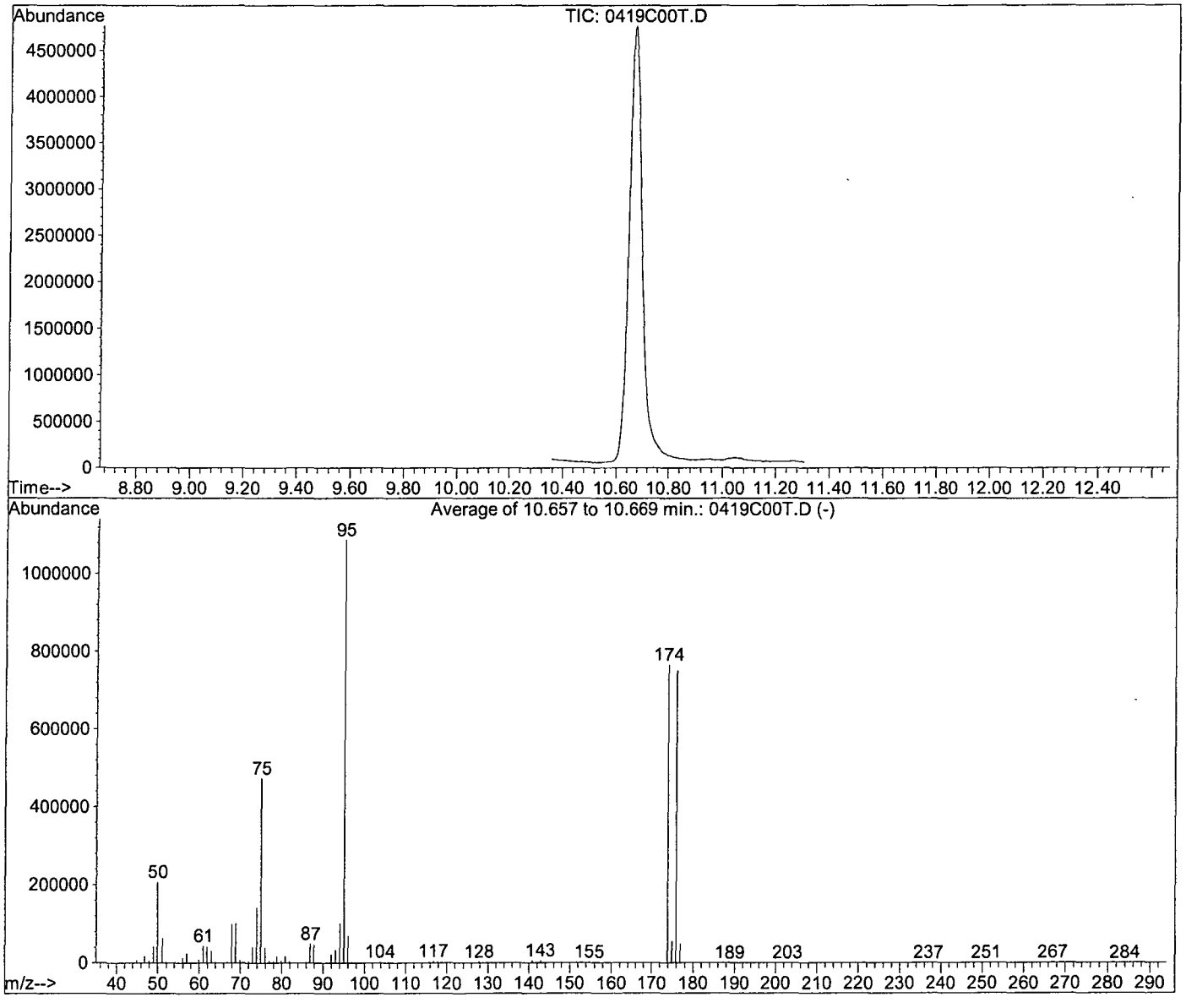
Spectrum Information: Average of 10.653 to 10.665 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	175569	PASS
75	95	30	60	45.1	426726	PASS
95	95	100	100	100.0	947029	PASS
96	95	5	9	6.5	61164	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	93.9	889685	PASS
175	174	5	9	7.3	64552	PASS
176	174	95	101	97.7	869568	PASS
177	176	5	9	6.5	56475	PASS

BFB

Data File : M:\CHICO\DATA\C120410\0419C00T.D Vial: 1
Acq On : 19 Apr 12 6:16 Operator: SV
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 10.657 to 10.669 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.0	206741	PASS
75	95	30	60	43.5	473581	PASS
95	95	100	100	100.0	1087659	PASS
96	95	5	9	6.4	70085	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.4	765781	PASS
175	174	5	9	7.2	54891	PASS
176	174	95	101	98.1	751296	PASS
177	176	5	9	6.6	49875	PASS

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # 057

NOTEBOOK INSERT LABEL

Gasoline **47516-U**
Lot: LB82077 EXP: FEB/2014 STORAGE: ROOM TEMP. 1 x 1ml

1/26/12 A- RS.

DATE RECEIVED:_____

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

RS.

STANDARD TRANSFER LABEL

Date of Preparation: **Exp. Date:**
Reference Number: **Storage:** EXP: FEB/2014
Description: ROOM TEMP.
Lot #: LB82077 - 29979
Rec: 11/11/11 MFR exp. 02/28/14
gasoline

1/26/12 B- RS.

RESTEK Catalog # 3
Unleaded gasoline composite
Lot #: A081012 - 29980
Rec: 11/14/11 MFR exp. 05/30/18

Unleaded Gasoline Composite Standard

50000 ug/mL each in P&T Methanol
Lot# A081012 Exp. Date: 05/2018 Store 0°C or colder

RS.

01/26/12C							
2000ug/ml Gasoline						APPL	
			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
Supelco	LB82077	Gasoline	20,000	LB82077-29979	01-26-12A	02/01/14	200
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	08/02/12	1800
01/26/12D							
2000ug/ml Unleaded Gasoline						APPL	
			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
Restek	30205	Unleaded Gasoline	50,000	A081012-29980	01-26-12B	02/01/14	80
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	08/02/12	1920

1/26/12 RS.

RS

Gasoline Curve Preparation for 100mL Purge (water)-CHICO			
	Expiration Date:		01/27/12
		50µg/mL Gasoline	Final Vol
Date	Conc.	01-26-12C	w/P&T H2O
Code	µg/L	Exp.01-03-12	mL
01-26-12E	20	1	100
01-26-12F	50	2.5	100
01-26-12G	100	5	100
01-26-12H	300	15	100
01-26-12I	600	30	100
01-26-12J	800	40	100
01-26-12K	1000	50	100

RS.

1/26/12 RS.

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR											
	Expiration Date.		01/27/12								
		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.	01-25-12AH	01-25-12AL	01-25-12AD	01-25-12AF	01-25-12AK	01-25-12AI	01-25-12AE	01-25-12AG	01-25-12AJ	
Code	µg/L	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp 02-01-12	
01-26-12L	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a	
01-26-12M	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a	
01-26-12N	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a	
01-26-12O	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a	
01-26-12P	50	n/a	n/a	5	5	5	n/a	5	n/a	5	
01-26-12Q	100	n/a	n/a	10	10	10	n/a	10	n/a	10	
01-26-12R	200	n/a	n/a	20	20	20	n/a	20	n/a	20	

1/26/12 RS

250µg/mL TBA	Final Vol
01-25-12AM	w/P&T H2O
Exp.02-01-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

RS

3/26/12 RS. A -

8260B Surrogate Solution, 2,000 mg/L, 5 x 1 ml
120002-01-5PAK
Lot # 178653 | Storage ≤ -10 Degrees C | Expiry 9/11/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

8260B Surrogate Solution
Lot #: 178653 - 29566
Rec: 9/22/11 MFR exp. 09/11/13

RS.

3/26/12 RS.

Thor							
03-26-12B							
50ug/ml 8260 Internal Standard			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120302-03	Internal Standard Mix	2000	166255-28857	03-23-12A	12/13/12	375
O2SI	020132-02	Fluorobenzene Standard	2000	169170-29852	03-23-12B	12/13/12	375
J.T Baker		Purge & Trap MeOH		K14E06-00611	03/26/12	08/10/12	14250
023-26-12C							
50ug/ml 8260B Surrogate-Thor			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	8260B Surr	Surrogate Standards	2000	178653-29566	03-26-12A	12/13/12	375
J.T Baker		Purge & Trap MeOH		K14E06-00611	03/26/12	08/10/12	14625

3/26/12 RS.

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-THOR										
	Expiration Date:	03/27/12								
		5μg/mL Vol Std #9	5μg/mL Surr	50μg/mL Vol Std #7	50μg/mL Vol Std #8	50μg/mL Surr	5μg/mL Vol Std #10	50μg/mL Vol Std #1	50μg/mL Vol Std #2	5μg/mL Vol Std #12
Date	Conc.	03-22-12X	03-22-12AB	03-22-12T	03-22-12V	03-22-12AA	03-22-12Y	03-22-12U	03-22-12W	03-22-12Z
Code	μg/L	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12
03-26-12B	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
03-26-12C	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
03-26-12D	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
03-26-12E	5	n/a	n/a	5	5	10	n/a	5	5	n/a
03-26-12F	10	n/a	n/a	10	10	25	n/a	10	10	n/a
03-26-12G	20	n/a	n/a	20	20	40	n/a	20	20	n/a
03-26-12H	40	n/a	n/a	40	40	80	n/a	40	40	n/a
03-26-12I	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250μg/mL TAPD	Final Vol
03-22-12AC	w/P&T H2O
Exp:03-29-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

3/26/12 RS.

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-MAX										
	Expiration Date:	03/27/12								
		5μg/mL Vol Std #9	5μg/mL Surr	50μg/mL Vol Std #7	50μg/mL Vol Std #8	50μg/mL Surr	5μg/mL Vol Std #10	50μg/mL Vol Std #1	50μg/mL Vol Std #2	5μg/mL Vol Std #12
Date	Conc.	03-22-12X	03-22-12AB	03-22-12T	03-22-12V	03-22-12AA	03-22-12Y	03-22-12U	03-22-12W	03-22-12Z
Code	μg/L	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12
03-26-12J	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
03-26-12K	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
03-26-12L	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
03-26-12M	5	n/a	n/a	5	5	10	n/a	5	5	n/a
03-26-12N	10	n/a	n/a	10	10	25	n/a	10	10	n/a
03-26-12O	20	n/a	n/a	20	20	40	n/a	20	20	n/a
03-26-12P	40	n/a	n/a	40	40	80	n/a	40	40	n/a
03-26-12Q	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250μg/mL TAPD	Final Vol
03-22-12AC	w/P&T H2O
Exp:03-29-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

4/01/12 RS A-

Method 8260 Gases, 2,000 mg/L, 2 X 0.6 ml
120016-03
Lot # 180013 | Storage ≤ -10 Degrees C | Expiry 10/17/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Method 8260 Gases
Lot #: 180013 - 29753
Rec: 10/24/11 MFR exp. 10/17/14 RS

4/01/12 RS B-

Hexachloroethane Solution, 1000 mg/L, 1 ml
020049-02
Lot # 176700 | Storage ≤ -10 Degrees C | Expiry 7/31/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Hexachloroethane
Lot #: 176700 - 29158
Rec: 8/5/11 MFR exp. 07/31/13 RS

4/01/12 RS C-

Benzyl Chloride Solution, 1000 mg/L, 1 ml
020228-02
Lot # 176701 | Storage ≤ -10 Degrees C | Expiry 7/31/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Benzyl Chloride
Lot #: 176701 - 29161
Rec: 8/5/11 MFR exp. 07/31/13 RS

4/01/12 RS D-

2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml
020145-02-02
Lot # 176770 | Storage ≤ -10 Degrees C | Expiry 7/31/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

2-Chloroethyl vinyl ether
Lot #: 176770 - 29831
Rec: 10/24/11 MFR exp. 07/31/13 RS

4/01/12 RS E-

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 178651 | Storage ≤ 6 Degrees C | Expiry 9/11/13
Solv: P/T Methanol
Made in the USA

VOC Mix 4-3, 2000mg/L
Lot #: 178651 - 30412
Rec: 2/20/12 MFR exp. 09/11/13 RS

4/05/12 RS

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

	Expiration Date:		04/06/12							
		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.	04-01-12X	04-01-12AB	04-01-12T	04-01-12V	04-01-12AA	04-01-12Y	04-01-12U	04-01-12W	04-01-12Z
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-05-12A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-05-12B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-05-12C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-05-12D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-05-12E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-05-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-05-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-01-12AC	w/P&T H2O
Exp:04-07-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

4/06/12 RS

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

	Expiration Date:		04/07/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #11
Date	Conc.	04-01-12K	04-01-12O	04-01-12G	04-01-12I	04-01-12N	04-01-12L	04-01-12H	04-01-12J	04-01-12M
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp.04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-06-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-06-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-06-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-06-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-06-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-06-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-06-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-06-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-06-12I	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-01-12P	w/P&T H2O
Exp:04-07-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50
45	50

4/06/12 RS

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

	Expiration Date:		04/07/12							
		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.	04-01-12X	04-01-12AB	04-01-12T	04-01-12V	04-01-12AA	04-01-12Y	04-01-12U	04-01-12W	04-01-12Z
Code	µg/L	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp.04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12	Exp:04-07-12
04-06-12J	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-06-12K	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-06-12L	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-06-12M	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-06-12N	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-06-12O	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-06-12P	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-01-12AC	w/P&T H2O
Exp:04-07-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

A - RS

4/09/12 RS - RS

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

120016-03

Lot #	Storage	Expiry
180013	≤ -10 Degrees C	10/17/14

Solv: P/T Methanol

Method 8260 Gases

Lot #: 180013 - 29771

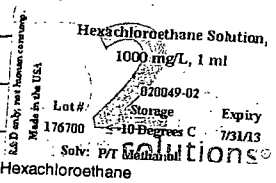
Rec: 10/24/11 MFR exp. 10/17/14

R&D only, not human consump. Made in the USA

Dermal Chloride

4/09/12 RS

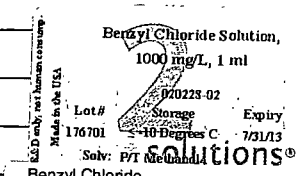
B-



Hexachloroethane
Lot #: 176700 - 29159
Rec: 8/5/11 MFR exp. 07/31/13 RS

4/09/12 RS

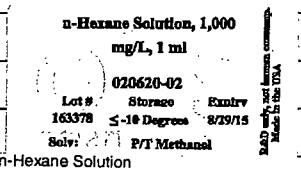
C-



Benzyl Chloride
Lot #: 176701 - 29162
Rec: 8/5/11 MFR exp. 07/31/13 RS

4/09/12 RS

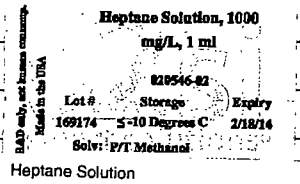
D-



n-Hexane Solution
Lot #: 163378 - 29227
Rec: 8/5/11 MFR exp. 08/29/15 RS

4/09/12 RS

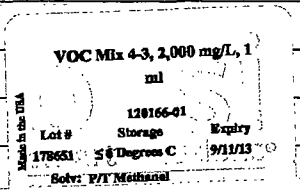
E-



Heptane Solution
Lot #: 169174 - 29253
Rec: 8/5/11 MFR exp. 02/18/14 RS

4/09/12 RS

F-



VOC Mix 4-3, 2000mg/L
Lot #: 178651 - 30411
Rec: 2/20/12 MFR exp. 09/11/13 RS

4/09/12 G - RS

Acrolein Solution, 10,000 mg/L, 2 x 0.6 ml
020229-09-02
Lot # 186936 Storage ≤ 6 Degrees C Expiry 4/23/12
Solv: Water, HPLC Grade
R&D only, not human consump. Made in the USA

Acrolein solution
Lot #: 186936 - 30514
Rec: 3/19/12 MFR exp. 04/23/12 RS

4/09/12 H - RS

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 178557 Storage ≤-10 Degrees C Expiry 9/13/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Method 8260 Gases (SS)
Lot #: 178557 - 29521
Rec: 9/20/11 MFR exp. 09/13/14 RS

4/09/12 I - RS.

Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1ml
020232-02-SS
Lot # 184399 Storage ≤-10 Degrees C Expiry 4/15/12
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Vinyl Acetate (SS)
Lot #: 184399 - 30240
Rec: 1/19/12 MFR exp. 04/15/12 RS

04-09-12J							
50ug/ml Vol Work Std #7							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29771	04-09-12A	04/16/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3500
04-09-12K							
50ug/ml Vol Work Std #1							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1950
04-09-12L							
50ug/ml Vol Work Std #8							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29200	03-22-12D	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27878	03-22-12E	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30409	03-22-12F	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3300
04-09-12M							
50ug/ml Vol Work Std #2							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29217	03-22-12H	02/08/12	100
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	06/08/12	3900

4/09/12 RS.

		04-09-12N	Exp:	04/16/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-09-12J	04/16/12	200	
		50ug/ml Vol Work Std #8		04-09-12L	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1600	
		04-09-12O	Exp:	04/16/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-09-12K	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
		04-09-12P	Exp:	04/16/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-09-12M	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
04-09-12Q							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/16/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30466	04-02-12C	04/16/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/26/12	3900
04-09-12R			Exp:	04/16/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-09-12Q	04/16/12	200	
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	1800	
04-09-12S							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-30411	04-09-12F	05/14/12	500
O2SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3400

4/09/12 RS

04-09-12T							
50ug/ml VOC Std#5							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29521	04-09-12H	04/16/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1900
04-09-12U							
50ug/ml VOC Std#6							
Exp:04/16/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	184399-30240	04-09-12I	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1550
04-09-12V							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	03-22-12S	04/23/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1700

4/09/12 RS

04-09-12W							
50ug/ml Vol Work Std #7							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29771	04-09-12A	04/16/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3500
04-09-12X							
50ug/ml Vol Work Std #1							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	1950
04-09-12Y							
50ug/ml Vol Work Std #8							
Exp:04/16/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29200	03-22-12D	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27878	03-22-12E	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30409	03-22-12F	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3300
04-09-12Z							
50ug/ml Vol Work Std #2							
Exp:04/16/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29217	03-22-12H	02/08/12	100
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	06/08/12	3900
		04-09-12AA	Exp:	04/16/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-09-12W	04/16/12	200	
		50ug/ml Vol Work Std #8		04-09-12Y	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1600	
		04-09-12AB	Exp:	04/16/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-09-12X	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
		04-09-12AC	Exp:	04/16/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-09-12Z	04/16/12	200	
		J&T Brand		04/05/12	06/08/12	1800	
04-09-12AD							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/16/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30466	04-02-12C	04/16/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/26/12	3900
04-09-12AE			Exp:	04/16/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-09-12AD	04/16/12	200	
J&T Brand		Purge & Trap MeOH		04/05/12	06/08/12	1800	
04-09-12AF							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/16/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-30411	04-09-12F	05/14/12	500
02SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00605	04/05/12	06/08/12	3400

4/09/12
RS

4/10/12 RS

CHICO							
04-10-12J							
250ug/ml 8260 Internal Standard - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120302-03	Internal Standard Mix	2000	166255-2858	04-02-12A	07/23/12	500
02SI	020132-02	Fluorobenzene Standard	2000	169170-29853	04-02-12B	07/23/12	500
J&T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	11/14/12	3000
04-10-12K							
250ug/ml 8260 Surrogate - Chico			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120002-01	Surrogate Standard	2000	164585-30466	04-02-12C	10/23/12	500
J&T Baker		Purge & Trap MeOH		K07E34-00543	08/12/11	11/14/12	3500

4/10/12 RS

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

		Expiration Date:		04/11/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-09-12N	04-09-12R	04-09-12J	04-09-12L	04-09-12Q	04-09-12O	04-09-12K	04-09-12M	04-09-12P
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-10-12L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-10-12M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-10-12N	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-10-12O	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-10-12P	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-10-12Q	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-10-12R	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-10-12S	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250µg/mL TAPD	Final Vol
04-09-12S	w/P&T H2O
Exp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

4/10/12 - BFB on pg. 120 RS.

4/11/12 RS

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

		Expiration Date:		04/12/12						
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-09-12AA	04-09-12AE	04-09-12W	04-09-12Y	04-09-12AD	04-09-12AB	04-09-12X	04-09-12Z	04-09-12AC
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-11-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-11-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-11-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-11-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-11-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-11-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-11-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-11-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250µg/mL TAPD	Final Vol
04-09-12AF	w/P&T H2O
Exp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

* Sweetpea's soil curve on 4/11/12 RS. on page 120.

4/12/12 RS

Max 524							
04-12-12A							
50ug/ml 524 Internal Standard w/ Surrogate			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27968	04-09-12AG	08/04/12	150
J.T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	12/14/12	14850

4/12/12 RS

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

	Expiration Date:		04/13/12					
		5µg/mL Vol Std #9	5µg/mL Vol Std #12	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Vol Std #2	250µg/mL TAPD	Final Vol
Date	Conc.	04-09-12N	04-09-12P	04-09-12J	04-09-12L	04-09-12M	04-09-12S	w/P&T H2O
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	mL
04-12-12B	0.2	2	2	n/a	n/a	n/a	2	50
04-12-12C	0.5	5	5	n/a	n/a	n/a	5	50
04-12-12D	1	10	10	n/a	n/a	n/a	10	50
04-12-12E	10	n/a	n/a	10	10	10	25	50
04-12-12F	20	n/a	n/a	20	20	20	30	50

Injection Log

Directory: M:\CHICO\DATA\C120125\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0125C24T.D	1	25ug/mL BFB Std. 01-12-12	2uL	26 Jan 12 16:30
2	1	0125C28W.D	1	VOC Mix Marker	Water 10mLw/ IS:12-06-11	26 Jan 12 18:55
3	1	0125C29W.D	1	Vol. Std. 01-26-12@20ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 19:32
4	1	0125C30W.D	1	Vol. Std. 01-26-12@50ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:09
5	1	0125C31W.D	1	Vol. Std. 01-26-12@100ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:46
6	1	0125C32W.D	1	Vol. Std. 01-26-12@300ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 21:24
7	1	0125C33W.D	1	Vol. Std. 01-26-12@600ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:01
8	1	0125C34W.D	1	Vol. Std. 01-26-12@800ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:38
9	1	0125C35W.D	1	Vol. Std. 01-26-12@1000ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 23:15
10	1	0125C38W.D	1	Second Source 01-26-12	Water 10mLw/ IS:12-06-11	27 Jan 12 1:06
11	1	0419C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	19 Apr 12 6:16
12	1	0419C01W.D	1	CCV gas 300ug/L	Water 10mL w/IS&S:04-10-1	19 Apr 12 6:48
13	1	0419C06W.D	1	LCS gas 300 ug/L	Water 10mL w/IS&S:04-10-1	19 Apr 12 9:52
14	1	0419C09W.D	1	120419A BLK-1WC	Water 10mL w/IS&S:04-10-1	19 Apr 12 11:44
15	1	0419C10W.D	1	AY59238W01	Water 10mL w/IS&S:04-10-1	19 Apr 12 12:21
16	1	0419C12W.D	1	AY59236W01	Water 10mL w/IS&S:04-10-1	19 Apr 12 13:35
17	1	0419C13W.D	1	AY59237W01	Water 10mL w/IS&S:04-10-1	19 Apr 12 14:11

Injection Log

Directory: M:\THOR\DATA\T120411\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	30	0411T30T.D	1	5ng BFB STD 4-10-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 22:12
2	32	0411T32W.D	1	0.5ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 23:07
3	33	0411T33W.D	1	1.0ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	11 Apr 12 23:35
4	34	0411T34W.D	1	5.0ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:03
5	35	0411T35W.D	1	10ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:31
6	36	0411T36W.D	1	20ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 00:58
7	37	0411T37W.D	1	40ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 1:26
8	38	0411T38W.D	1	100ug/L VOL STD 4-11-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 1:53
9	41	0412T11W.D	1	5ng BFB STD 04-10-12	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 3:16
10	42	0412T12W.D	1	10ug/L VOC STD 4-11-12 (SS)	10ml w/5ul of IS&S: 03-26-1:	12 Apr 12 3:44
11	1	0419T10T.D	1	5ng BFB 4-10-12	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 9:23
12	1	0419T11W.D	1	10ug/L Vol Std 04-19-12	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 9:45
13	2	0419T12W.D	1	120419A LCS-1WT	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 10:13
14	7	0419T17W.D	1	120419A BLK-1WT	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 12:32
15	9	0419T19W.D	1	AY59238W02	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 13:27
16	22	0419T32W.D	1	AY59236W02	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 19:28
17	23	0419T33W.D	1	AY59237W02	10ml w/5ul of IS&S: 03-26-1:	19 Apr 12 19:56

METALS
EPA SW846 - 6020

APPL, INC.

METALS
EPA SW846 - 6020
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	04/25/12	05/07/12	#602D-120425A-AY59236

Laboratory Control Spike Recoveries
METALS DISSOLVED

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
6020	LEAD (PB) (DISSOLVED)	50.0	49.2	49.7	98.4	99.4	1.0	20	80-120	04/25/12	05/07/12	04/25/12	05/07/12	#602D-120425A-AY59236

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **120425W-59236 MS - 166569**

Sample ID: AY59236

Client ID: ES074

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	50.0	ND	48.6	50.0	97.2	100	2.8	20	80-120	04/25/12	05/07/12	04/25/12	05/07/12	166569	AY59236

Comments: _____

METALS
EPA SW846 - 6020
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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES074

APPL ID: AY59236

Sample Collection Date: 04/17/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22U	0.5	0.22	0.11	ug/L	1	04/25/12	05/07/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\117SMPL.D\117SMPL.D#
Date Acquired: May 7 2012 01:25 am
Operator: NBS
Sample Name: AY59236W15
Misc Info: 120425A-3015
Vial Number: 4101
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	0.00	ug/l	0.00	67.63	1000	
11 B	45.87	ug/l	50.96	1.13	1000	
23 Na	38160.00	ug/l	42395.76	1.83	25000	>Cal
24 Mg	17980.00	ug/l	19975.78	1.03	50000	
27 Al	6.51	ug/l	7.23	25.57	20000	
39 K	2616.00	ug/l	2906.38	1.30	20000	
44 Ca	19940.00	ug/l	22153.34	2.07	50000	
47 Ti	0.61	ug/l	0.67	34.03	1000	
51 V	13.39	ug/l	14.88	0.66	1000	
52 Cr	2.09	ug/l	2.32	2.60	1000	
55 Mn	0.54	ug/l	0.60	8.04	1000	
56 Fe	13.43	ug/l	14.92	0.78	20000	
59 Co	0.30	ug/l	0.34	4.92	1000	
60 Ni	0.31	ug/l	0.34	10.65	1000	
63 Cu	0.19	ug/l	0.21	9.36	1000	
65 Cu	0.21	ug/l	0.23	26.05	1000	
66 Zn	7.07	ug/l	7.85	3.25	1000	
75 As	0.20	ug/l	0.22	41.88	1000	
78 Se	0.32	ug/l	0.36	7.90	1000	
78 Se	2.11	ug/l	2.34	9.34	1000	
88 Sr	157.00	ug/l	174.43	0.21	1000	
88 Sr	149.30	ug/l	165.87	0.94	1000	
95 Mo	0.44	ug/l	0.49	7.93	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.00	ug/l	0.01	53.72	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.14	ug/l	0.16	25.96	1000	
118 Sn	0.94	ug/l	1.04	8.64	#######	
118 Sn	1.02	ug/l	1.14	4.46	#######	
118 Sn	0.94	ug/l	1.05	1.66	1000	
121 Sb	1.46	ug/l	1.62	9.31	1000	
137 Ba	7.54	ug/l	8.38	2.69	1000	
205 Tl	0.04	ug/l	0.04	7.04	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.09	ug/l	-0.10	5.57	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3559850.30	1.38	5002703.50	71.2	70 - 120	
45 Sc	1019263.10	0.91	1428201.80	71.4	70 - 120	
45 Sc	135163.47	1.08	189458.30	71.3	70 - 120	
45 Sc	4461999.00	0.62	5488810.50	81.3	70 - 120	
72 Ge	236647.20	0.58	346291.34	68.3	70 - 120	IS Fai NT
72 Ge	93266.88	0.51	127768.43	73.0	70 - 120	
72 Ge	899154.63	1.18	1135874.50	79.2	70 - 120	
115 In	1857307.00	0.06	2601614.30	71.4	70 - 120	
115 In	1007109.20	1.22	1447050.60	69.6	70 - 120	IS Fai NT
115 In	6279846.00	0.86	7726454.50	81.3	70 - 120	
159 Tb	7899679.50	0.93	10002252.00	79.0	70 - 120	
165 Ho	7645913.00	0.99	9695601.00	78.9	70 - 120	

SDM 5.8.12

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

Metals Analysis

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67525

Sample ID: ES075

APPL ID: AY59237

Sample Collection Date: 04/17/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22 U	0.5	0.22	0.11	ug/L	1	04/25/12	05/07/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\126SMPL.D\126SMPL.D#
Date Acquired: May 7 2012 02:26 am
Operator: NBS
Sample Name: AY59237W08
Misc Info: 120425A-3015
Vial Number: 4106
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	0.00 ug/l	0.00	46.23	1000	
11 B	62.70 ug/l	69.66	0.90	1000	
23 Na	29930.00 ug/l	33252.23	2.56	25000	>Cal
24 Mg	9383.00 ug/l	10424.51	1.62	50000	
27 Al	6.81 ug/l	7.56	11.41	20000	
39 K	1935.00 ug/l	2149.79	0.88	20000	
44 Ca	12890.00 ug/l	14320.79	1.34	50000	
47 Ti	0.81 ug/l	0.90	31.35	1000	
51 V	0.26 ug/l	0.29	3.55	1000	
52 Cr	0.23 ug/l	0.26	9.38	1000	
55 Mn	771.60 ug/l	857.25	2.31	1000	
56 Fe	445.20 ug/l	494.62	2.37	20000	
59 Co	1.15 ug/l	1.28	5.27	1000	
60 Ni	0.82 ug/l	0.91	11.87	1000	
63 Cu	0.25 ug/l	0.28	6.05	1000	
65 Cu	0.27 ug/l	0.30	14.81	1000	
66 Zn	3.83 ug/l	4.26	4.01	1000	
75 As	0.11 ug/l	0.12	24.81	1000	
78 Se	0.11 ug/l	0.12	16.56	1000	
78 Se	2.14 ug/l	2.37	5.56	1000	
88 Sr	83.65 ug/l	92.94	1.81	1000	
88 Sr	80.11 ug/l	89.00	1.43	1000	
95 Mo	0.44 ug/l	0.49	6.44	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	0.00 ug/l	0.00	83.49	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.15 ug/l	0.17	13.08	1000	
118 Sn	0.47 ug/l	0.53	14.73	#######	
118 Sn	0.58 ug/l	0.64	2.37	#######	
118 Sn	0.57 ug/l	0.63	4.42	1000	
121 Sb	0.72 ug/l	0.80	4.30	1000	
137 Ba	9.83 ug/l	10.92	1.64	1000	
205 Tl	0.02 ug/l	0.03	4.67	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	-0.08 ug/l	-0.09	3.49	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3487089.00	0.54	5002703.50	69.7	70 - 120	IS Fai NT
45 Sc	1009642.10	1.04	1428201.80	70.7	70 - 120	
45 Sc	132647.69	1.88	189458.30	70.0	70 - 120	
45 Sc	4341895.00	0.71	5488810.50	79.1	70 - 120	
72 Ge	236392.08	1.20	346291.34	68.3	70 - 120	IS Fai NT SDH 5.8.12
72 Ge	92264.81	3.10	127768.43	72.2	70 - 120	
72 Ge	901514.69	1.20	1135874.50	79.4	70 - 120	
115 In	1843334.10	1.27	2601614.30	70.9	70 - 120	
115 In	992963.06	0.49	1447050.60	68.6	70 - 120	IS Fai NT
115 In	6141030.00	0.16	7726454.50	79.5	70 - 120	
159 Tb	7824918.50	1.09	10002252.00	78.2	70 - 120	
165 Ho	7528078.50	1.77	9695601.00	77.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
3 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

METALS
EPA SW846 - 6020
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: 67525 SDG: 67525
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 05/06/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:23	%R(1)	True CCV1	Found 14:04	%R(1)	True CCV1	Found 15:04	%R(1)	
Lead (Pb)	100	102.3	102	50	49.77	99.5	50	49.51	99.0	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.
ARF No: 67525 SDG: 67525
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 05/06/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:23	%R(1)	True CCV1	Found 0:25	%R(1)	True CCV1	Found 1:59	%R(1)	
Lead (Pb)	100	102.3	102	50	47.52	95.0	50	47.5	95.0	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 67525 SDG: 67525

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 05/06/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 13:23	%R(1)	True CCV1	Found 3:13	%R(1)	True	Found	%R(1)	
Lead (Pb)	100	102.3	102	50	47.14	94.3				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.: 67525 SDG: 67525

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 05/06/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	13:57		14:11		15:18		00:38		01:05				
Lead (Pb)	.50	U	.50	U	.50	U	.50	U	.50	U	P		

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67525 SDG: 67525

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 05/06/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	13:57		02:13		03:27				01:05		
Lead (Pb)	.50	U	.50	U	.50	U			.50	U	P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name:	A.P.P.L. INC.	Contract:	Environet, Inc.
ARF No.:	67525	SDG:	67525
ICP ID Number:	Optimus	ICS Source:	Environmental Express

Analysis Date: 05/06/12 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 14:30	Sol AB 14:37	%R(1)
Lead (Pb)		500	0.2959	509.7	102

(1) Control Limits: Metals 80-120

A.P.P.L. INC.
9
ICP SERIAL DILUTION

CLIENT SAMPLE NO.
ES074

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67525 SDG: 67525

Matrix: water

Analysis Date: 05/07/12 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Lead (Pb)	ND		ND		NA		

Comments:

05/07/12 01:25 AY59236W15

05/07/12 02:19 AY59236W15-1/5

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\125SMPL.D\125SMPL.D#
Date Acquired: May 7 2012 02:19 am
Operator: NBS
Sample Name: AY59236W15-1/5
Misc Info: 120425A-3015
Vial Number: 4105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	0.00 ug/l	0.01	353.75	1000	
11 B	12.57 ug/l	69.84	1.37	1000	
23 Na	8111.00 ug/l	45064.72	1.33	25000	
24 Mg	3763.00 ug/l	20907.23	0.52	50000	
27 Al	2.21 ug/l	12.26	38.33	20000	
39 K	559.70 ug/l	3109.69	0.56	20000	
44 Ca	3925.00 ug/l	21807.30	0.72	50000	
47 Ti	0.12 ug/l	0.68	18.73	1000	
51 V	2.89 ug/l	16.04	2.70	1000	
52 Cr	0.47 ug/l	2.63	2.23	1000	
55 Mn	-0.10 ug/l	-0.54	50.12	1000	
56 Fe	4.54 ug/l	25.20	2.38	20000	
59 Co	0.04 ug/l	0.23	23.39	1000	
60 Ni	0.07 ug/l	0.40	25.11	1000	
63 Cu	0.06 ug/l	0.35	11.96	1000	
65 Cu	0.09 ug/l	0.48	18.88	1000	
66 Zn	1.91 ug/l	10.60	7.90	1000	
75 As	0.22 ug/l	1.23	8.02	1000	
78 Se	0.10 ug/l	0.55	6.50	1000	
78 Se	1.39 ug/l	7.71	5.79	1000	
88 Sr	30.35 ug/l	168.62	1.05	1000	
88 Sr	30.75 ug/l	170.85	1.27	1000	
95 Mo	0.13 ug/l	0.70	9.60	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	0.03 ug/l	0.15	22.12	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.05 ug/l	0.28	37.40	1000	
118 Sn	1.31 ug/l	7.29	8.50	#######	
118 Sn	1.66 ug/l	9.20	6.70	#######	
118 Sn	1.44 ug/l	7.99	0.79	1000	
121 Sb	1.92 ug/l	10.66	3.11	1000	
137 Ba	1.55 ug/l	8.62	0.17	1000	
205 Tl	0.01 ug/l	0.08	9.04	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	-0.16 ug/l	-0.91	1.25	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4098817.30	0.97	5002703.50	81.9	70 - 120	
45 Sc	1122244.00	1.03	1428201.80	78.6	70 - 120	
45 Sc	140591.77	0.15	189458.30	74.2	70 - 120	
45 Sc	4512308.00	0.62	5488810.50	82.2	70 - 120	
72 Ge	264400.19	1.16	346291.34	76.4	70 - 120	
72 Ge	99520.74	2.26	127768.43	77.9	70 - 120	
72 Ge	946386.13	0.51	1135874.50	83.3	70 - 120	
115 In	2064423.10	0.59	2601614.30	79.4	70 - 120	
115 In	1082982.60	1.25	1447050.60	74.8	70 - 120	
115 In	6391700.50	0.93	7726454.50	82.7	70 - 120	
159 Tb	8127752.50	1.75	10002252.00	81.3	70 - 120	
165 Ho	7875537.50	1.58	9695601.00	81.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

ES074

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67525 SDG: 67525

Analysis Date: 05/07/12 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	248.196		ND		277.500	89.4		

Comments:

05/07/12 01:25 AY59236W15

05/07/12 01:46 AY59236W15-A

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\120SMPL.D\120SMPL.D#
Date Acquired: May 7 2012 01:46 am
Operator: NBS
Sample Name: AY59236W15-A
Misc Info: 120425A-3015
Vial Number: 4104
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	40.82	ug/l	45.35	0.97	1000	
11 B	262.30	ug/l	291.42	0.51	1000	
23 Na	56740.00	ug/l	63038.14	3.05	25000	>Cal
24 Mg	38060.00	ug/l	42284.66	2.45	50000	
27 Al	1834.00	ug/l	2037.57	4.08	20000	
39 K	7125.00	ug/l	7915.88	2.68	20000	
44 Ca	41740.00	ug/l	46373.14	2.28	50000	
47 Ti	232.20	ug/l	257.97	4.04	1000	
51 V	245.70	ug/l	272.97	3.44	1000	
52 Cr	231.10	ug/l	256.75	2.76	1000	
55 Mn	231.60	ug/l	257.31	2.28	1000	
56 Fe	906.00	ug/l	1006.57	2.98	20000	
59 Co	218.60	ug/l	242.86	3.16	1000	
60 Ni	217.60	ug/l	241.75	2.12	1000	
63 Cu	213.30	ug/l	236.98	2.53	1000	
65 Cu	212.70	ug/l	236.31	2.54	1000	
66 Zn	407.40	ug/l	452.62	0.70	1000	
75 As	214.00	ug/l	237.75	0.91	1000	
78 Se	183.10	ug/l	203.42	1.59	1000	
78 Se	182.20	ug/l	202.42	1.97	1000	
88 Sr	399.50	ug/l	443.84	0.56	1000	
88 Sr	376.60	ug/l	418.40	1.22	1000	
95 Mo	239.50	ug/l	266.08	0.44	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	73.57	ug/l	81.74	8.30	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	42.34	ug/l	47.04	0.49	1000	
118 Sn	261.80	ug/l	290.86	1.91	#######	
118 Sn	260.70	ug/l	289.64	1.32	#######	
118 Sn	250.70	ug/l	278.53	0.60	1000	
121 Sb	249.90	ug/l	277.64	0.31	1000	
137 Ba	244.70	ug/l	271.86	1.02	1000	
205 Tl	223.00	ug/l	247.75	0.53	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	223.60	ug/l	248.42	0.27	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3412141.30	0.14	5002703.50	68.2	70 - 120	IS Fai
45 Sc	1016975.50	1.23	1428201.80	71.2	70 - 120	
45 Sc	135261.36	2.36	189458.30	71.4	70 - 120	
45 Sc	4332606.00	1.49	5488810.50	78.9	70 - 120	
72 Ge	238401.05	2.58	346291.34	68.8	70 - 120	IS Fai
72 Ge	91890.38	0.17	127768.43	71.9	70 - 120	
72 Ge	873439.69	0.75	1135874.50	76.9	70 - 120	
115 In	1838817.10	1.56	2601614.30	70.7	70 - 120	
115 In	991565.75	0.54	1447050.60	68.5	70 - 120	IS Fai
115 In	6033482.00	0.35	7726454.50	78.1	70 - 120	
159 Tb	7810792.50	1.45	10002252.00	78.1	70 - 120	
165 Ho	7483336.00	0.87	9695601.00	77.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
3 :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\12E06m00.B\005CAL
Date Acquired: May 6 2012 12:48 pm
Operator: NBS
Sample Name: Calibration Blank
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 12:45 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	4365905.00	A	22210.00	0.51
7	(Li)	275064.50	P	3258.00	1.18
9	Be	25.56	P	13.47	52.71
11	B	14323.93	P	185.20	1.29
23	Na	57357.56	P	849.50	1.48
24	Mg	114.45	P	18.95	16.56
27	Al	21.11	P	5.09	24.12
39	K	19722.64	P	689.40	3.50
44	Ca	253.53	P	24.78	9.77
45	Sc	1387378.00	A	22800.00	1.64
45	Sc	178485.80	A	970.60	0.54
45	Sc	5341512.00	A	52470.00	0.98
47	Ti	33.81	P	58.56	173.19
51	V	25.78	P	5.39	20.91
52	Cr	133.78	P	21.60	16.15
55	Mn	256.01	P	23.44	9.16
56	Fe	1477.13	P	143.00	9.68
59	Co	38.67	P	8.74	22.61
60	Ni	110.22	P	2.78	2.52
63	Cu	103.56	P	14.26	13.77
65	Cu	44.89	P	12.10	26.96
66	Zn	102.22	P	6.71	6.57
72	Ge	328299.91	A	6602.00	2.01
72	Ge	120925.80	A	2612.00	2.16
72	Ge	1098502.00	A	13940.00	1.27
75	As	12.22	P	2.55	20.83
78	Se	11.56	P	0.77	6.66
78	Se	80.22	P	4.83	6.03
88	Sr	135.56	P	25.46	18.78
88	Sr	1329.00	P	8.39	0.63
95	Mo	74.45	P	22.20	29.82
106	(Cd)	4.44	P	5.09	114.57
107	Ag	127.78	P	9.62	7.53
108	(Cd)	4.44	P	5.09	114.57
111	Cd	18.40	P	9.65	52.47
115	In	2460399.00	A	45570.00	1.85
115	In	1354997.00	A	1826.00	0.13
115	In	7443787.00	A	108800.00	1.46
118	Sn	202.36	P	139.80	69.09
118	Sn	55.56	P	10.18	18.32
118	Sn	275.68	P	93.23	33.82
121	Sb	196.68	P	13.33	6.78
137	Ba	1112.31	P	28.35	2.55
159	Tb	9639542.00	A	76780.00	0.80
165	Ho	9263706.00	A	106600.00	1.15
205	Tl	202.23	P	12.62	6.24
206	(Pb)	1239.00	P	116.60	9.41
207	(Pb)	1054.53	P	87.71	8.32
208	Pb	4887.20	P	255.00	5.22

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\006CALS.D\006CALS.D#
Date Acquired: May 6 2012 12:55 pm
Operator: NBS
Sample Name: 120506 Standard 1
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 12:52 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4566288.00	A	73030.00	1.60	0.0000
7 (Li)	284871.19	P	1408.00	0.49	0.0000
9 Be	400.02	P	13.33	3.33	0.0000
11 B	21297.93	P	1032.00	4.85	0.0000
23 Na	73774.75	P	757.00	1.03	0.0000
24 Mg	565.59	P	42.99	7.60	0.0000
27 Al	111.12	P	25.02	22.52	0.0000
39 K	20310.08	P	115.30	0.57	0.0000
44 Ca	298.37	P	16.67	5.59	0.0000
45 Sc	1291333.00	A	12040.00	0.93	0.0000
45 Sc	162876.70	A	4702.00	2.89	0.0000
45 Sc	5223058.00	A	36860.00	0.71	0.0000
47 Ti	7.56	P	2.04	26.96	0.0000
51 V	215.56	P	8.88	4.12	0.0000
52 Cr	263.56	P	6.01	2.28	0.0000
55 Mn	222.67	P	16.17	7.26	0.0000
56 Fe	4485.64	P	152.80	3.41	0.0000
59 Co	252.45	P	6.30	2.50	0.0000
60 Ni	79.56	P	11.65	14.64	0.0000
63 Cu	255.12	P	14.01	5.49	0.0000
65 Cu	136.45	P	20.71	15.18	0.0000
66 Zn	142.23	P	16.88	11.87	0.0000
72 Ge	305619.31	A	4376.00	1.43	0.0000
72 Ge	111463.90	A	991.30	0.89	0.0000
72 Ge	1086787.00	A	8802.00	0.81	0.0000
75 As	32.56	P	1.50	4.62	0.0000
78 Se	19.67	P	1.76	8.97	0.0000
78 Se	88.45	P	5.59	6.32	0.0000
88 Sr	257.79	P	28.74	11.15	0.0000
88 Sr	2857.06	P	90.76	3.18	0.0000
95 Mo	388.91	P	21.17	5.44	0.0000
106 (Cd)	31.11	P	13.88	44.61	0.0000
107 Ag	604.48	P	30.25	5.00	0.0000
108 (Cd)	22.22	P	5.09	22.91	0.0000
111 Cd	231.65	P	10.72	4.63	0.0000
115 In	2424190.00	A	12150.00	0.50	0.0000
115 In	1250161.00	A	19740.00	1.58	0.0000
115 In	7307136.00	A	22150.00	0.30	0.0000
118 Sn	430.02	P	24.04	5.59	0.0000
118 Sn	245.57	P	19.53	7.95	0.0000
118 Sn	1295.66	P	56.41	4.35	0.0000
121 Sb	1821.29	P	76.49	4.20	0.0000
137 Ba	350.02	P	66.59	19.03	0.0000
159 Tb	9320361.00	A	92000.00	0.99	0.0000
165 Ho	9039696.00	A	95070.00	1.05	0.0000
205 Tl	1929.10	P	47.18	2.45	0.0000
206 (Pb)	857.83	P	32.38	3.77	0.0000
207 (Pb)	744.49	P	45.50	6.11	0.0000
208 Pb	3339.17	P	62.05	1.86	0.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4566288.00	1.60	4365905.50	104.6	70 -	120	
45 Sc	1291333.00	0.93	1387378.10	93.1	70 -	120	
45 Sc	162876.72	2.89	178485.84	91.3	70 -	120	
45 Sc	5223058.00	0.71	5341512.00	97.8	70 -	120	
72 Ge	305619.28	1.43	328299.91	93.1	70 -	120	
72 Ge	111463.94	0.89	120925.76	92.2	70 -	120	
72 Ge	1086787.40	0.81	1098501.80	98.9	70 -	120	
115 In	2424190.00	0.50	2460398.80	98.5	70 -	120	
115 In	1250161.40	1.58	1354997.10	92.3	70 -	120	
115 In	7307136.50	0.30	7443787.00	98.2	70 -	120	
159 Tb	9320361.00	0.99	9639542.00	96.7	70 -	120	
165 Ho	9039696.00	1.05	9263706.00	97.6	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\007CALS.D\007CALS.D#
Date Acquired: May 6 2012 01:03 pm
Operator: NBS
Sample Name: 120506 Standard 2
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:01 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4576075.00	A	42510.00	0.93	0.0000
7 (Li)	282661.00	P	1057.00	0.37	1.0000
9 Be	3589.45	P	64.33	1.79	1.0000
11 B	23853.95	P	1015.00	4.26	1.0000
23 Na	77102.23	P	575.10	0.75	1.0000
24 Mg	4680.89	P	128.10	2.74	1.0000
27 Al	784.49	P	42.35	5.40	1.0000
39 K	21853.30	P	663.30	3.04	1.0000
44 Ca	572.24	P	41.64	7.28	1.0000
45 Sc	1298005.00	A	8778.00	0.68	0.0000
45 Sc	162606.20	A	1470.00	0.90	0.0000
45 Sc	5235066.00	A	45560.00	0.87	0.0000
47 Ti	44.89	P	12.39	27.60	-1.0000
51 V	1136.50	P	38.70	3.41	1.0000
52 Cr	1406.76	P	31.75	2.26	1.0000
55 Mn	1007.16	P	37.84	3.76	-1.0000
56 Fe	27589.09	P	3436.00	12.45	1.0000
59 Co	1961.05	P	47.27	2.41	1.0000
60 Ni	508.46	P	16.29	3.20	-1.0000
63 Cu	1499.65	P	44.33	2.96	1.0000
65 Cu	692.03	P	11.62	1.68	1.0000
66 Zn	384.01	P	25.75	6.71	1.0000
72 Ge	300871.91	A	5617.00	1.87	0.0000
72 Ge	110901.30	A	957.00	0.86	0.0000
72 Ge	1075543.00	A	2736.00	0.25	0.0000
75 As	188.67	P	6.64	3.52	1.0000
78 Se	132.90	P	28.54	21.48	1.0000
78 Se	108.56	P	3.60	3.31	1.0000
88 Sr	1704.61	P	46.72	2.74	1.0000
88 Sr	19904.49	P	205.50	1.03	1.0000
95 Mo	3390.52	P	173.50	5.12	1.0000
106 (Cd)	180.01	P	8.82	4.90	1.0000
107 Ag	4688.71	P	148.80	3.17	1.0000
108 (Cd)	154.45	P	13.47	8.72	1.0000
111 Cd	2008.22	P	35.25	1.76	1.0000
115 In	2385158.00	A	17310.00	0.73	0.0000
115 In	1239147.00	A	10190.00	0.82	0.0000
115 In	7176865.00	A	25550.00	0.36	0.0000
118 Sn	1759.06	P	100.80	5.73	1.0000
118 Sn	1006.74	P	91.35	9.07	1.0000
118 Sn	5646.89	P	88.37	1.56	1.0000
121 Sb	6619.56	P	191.60	2.89	1.0000
137 Ba	2838.17	P	134.20	4.73	-1.0000
159 Tb	9290087.00	A	113200.00	1.22	0.0000
165 Ho	8969833.00	A	39200.00	0.44	0.0000
205 Tl	16497.47	P	352.60	2.14	1.0000
206 (Pb)	5944.89	P	102.20	1.72	-1.0000
207 (Pb)	5082.29	P	65.55	1.29	-1.0000
208 Pb	23448.96	P	88.41	0.38	-1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4576075.00	0.93	4365905.50	104.8	70 -	120	
45 Sc	1298005.30	0.68	1387378.10	93.6	70 -	120	
45 Sc	162606.25	0.90	178485.84	91.1	70 -	120	
45 Sc	5235066.00	0.87	5341512.00	98.0	70 -	120	
72 Ge	300871.91	1.87	328299.91	91.6	70 -	120	
72 Ge	110901.30	0.86	120925.76	91.7	70 -	120	
72 Ge	1075542.80	0.25	1098501.80	97.9	70 -	120	
115 In	2385158.00	0.73	2460398.80	96.9	70 -	120	
115 In	1239146.80	0.82	1354997.10	91.5	70 -	120	
115 In	7176865.50	0.36	7443787.00	96.4	70 -	120	
159 Tb	9290087.00	1.22	9639542.00	96.4	70 -	120	
165 Ho	8969833.00	0.44	9263706.00	96.8	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\008CALS.D\008CALS.D#
Date Acquired: May 6 2012 01:10 pm
Operator: NBS
Sample Name: 120506 Standard 3
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:07 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4554557.00	A	24000.00	0.53	0.0000
7 (Li)	280282.00	P	1938.00	0.69	0.3876
9 Be	174831.91	P	1818.00	1.04	1.0000
11 B	137155.59	P	401.70	0.29	0.7593
23 Na	305384.91	P	3121.00	1.02	0.6751
24 Mg	236038.09	P	3027.00	1.28	1.0000
27 Al	36682.74	P	359.50	0.98	0.9998
39 K	136246.91	P	1116.00	0.82	0.8555
44 Ca	14799.65	P	235.70	1.59	0.9955
45 Sc	1262012.00	A	7483.00	0.59	0.0000
45 Sc	163893.41	A	2058.00	1.26	0.0000
45 Sc	5121448.00	A	44680.00	0.87	0.0000
47 Ti	1884.15	P	77.62	4.12	0.7318
51 V	53356.68	P	219.50	0.41	0.9975
52 Cr	64427.48	P	231.30	0.36	1.0000
55 Mn	44280.24	P	354.20	0.80	0.9947
56 Fe	1133046.00	A	2555.00	0.23	0.9998
59 Co	93277.75	P	590.80	0.63	0.9999
60 Ni	23547.15	P	38.32	0.16	0.9910
63 Cu	65608.41	P	272.70	0.42	0.9999
65 Cu	32081.72	P	141.20	0.44	0.9990
66 Zn	13372.07	P	141.50	1.06	0.9980
72 Ge	297930.69	A	3695.00	1.24	0.0000
72 Ge	111803.50	A	1867.00	1.67	0.0000
72 Ge	1071627.00	A	17650.00	1.65	0.0000
75 As	9032.95	P	40.67	0.45	0.9998
78 Se	5155.15	P	29.33	0.57	0.9995
78 Se	1272.73	P	25.84	2.03	0.9470
88 Sr	82194.24	P	379.50	0.46	0.9999
88 Sr	931248.63	A	6492.00	0.70	0.9999
95 Mo	164069.09	P	2680.00	1.63	1.0000
106 (Cd)	8660.72	P	240.10	2.77	0.9987
107 Ag	222875.41	P	1161.00	0.52	1.0000
108 (Cd)	6692.93	P	50.06	0.75	0.9998
111 Cd	96486.23	P	320.80	0.33	1.0000
115 In	2382651.00	A	31580.00	1.33	0.0000
115 In	1243403.00	A	17330.00	1.39	0.0000
115 In	7238932.00	A	75760.00	1.05	0.0000
118 Sn	76126.20	P	298.30	0.39	0.9991
118 Sn	44445.93	P	463.00	1.04	0.9949
118 Sn	250350.70	P	848.40	0.34	0.9963
121 Sb	279910.50	P	2530.00	0.90	0.9887
137 Ba	137867.41	P	1133.00	0.82	0.9291
159 Tb	9339868.00	A	75800.00	0.81	0.0000
165 Ho	8996681.00	A	56260.00	0.63	0.0000
205 Tl	809873.50	P	1415.00	0.17	1.0000
206 (Pb)	278317.81	P	618.50	0.22	0.9875
207 (Pb)	235224.00	P	1016.00	0.43	0.9880
208 Pb	1102132.00	P	5457.00	0.50	0.9884

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4554557.50	0.53	4365905.50	104.3	70 -	120	
45 Sc	1262012.30	0.59	1387378.10	91.0	70 -	120	
45 Sc	163893.36	1.26	178485.84	91.8	70 -	120	
45 Sc	5121448.00	0.87	5341512.00	95.9	70 -	120	
72 Ge	297930.72	1.24	328299.91	90.7	70 -	120	
72 Ge	111803.46	1.67	120925.76	92.5	70 -	120	
72 Ge	1071626.60	1.65	1098501.80	97.6	70 -	120	
115 In	2382651.30	1.33	2460398.80	96.8	70 -	120	
115 In	1243403.00	1.39	1354997.10	91.8	70 -	120	
115 In	7238932.50	1.05	7443787.00	97.2	70 -	120	
159 Tb	9339869.00	0.81	9639542.00	96.9	70 -	120	
165 Ho	8996681.00	0.63	9263706.00	97.1	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\009CALS.D\009CALS.D#
Date Acquired: May 6 2012 01:17 pm
Operator: NBS
Sample Name: 120506 Standard 4
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:14 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	4548555.00	A	41120.00	0.90	0.0000
7 (Li)	281723.00	P	625.50	0.22	-0.0623
9 Be	355888.00	P	2065.00	0.58	1.0000
11 B	266311.50	P	2021.00	0.76	0.9984
23 Na	536680.81	P	3933.00	0.73	0.9966
24 Mg	469457.69	P	3401.00	0.72	1.0000
27 Al	73150.01	P	618.10	0.84	1.0000
39 K	251291.09	P	2182.00	0.87	0.9999
44 Ca	30017.63	P	329.30	1.10	1.0000
45 Sc	1303325.00	A	13950.00	1.07	0.0000
45 Sc	160170.30	A	3180.00	1.99	0.0000
45 Sc	5160895.00	A	5248.00	0.10	0.0000
47 Ti	3870.96	P	198.20	5.12	0.9999
51 V	106389.20	P	485.50	0.46	1.0000
52 Cr	127116.30	P	847.70	0.67	1.0000
55 Mn	88197.47	P	825.70	0.94	1.0000
56 Fe	2225099.00	A	43110.00	1.94	1.0000
59 Co	187582.30	P	940.80	0.50	1.0000
60 Ni	47222.51	P	207.20	0.44	1.0000
63 Cu	130250.20	P	1863.00	1.43	1.0000
65 Cu	63681.88	P	694.70	1.09	1.0000
66 Zn	26117.38	P	137.10	0.52	1.0000
72 Ge	304949.00	A	4909.00	1.61	0.0000
72 Ge	110460.90	A	1256.00	1.14	0.0000
72 Ge	1072004.00	A	7617.00	0.71	0.0000
75 As	17999.39	P	183.10	1.02	1.0000
78 Se	10343.49	P	85.11	0.82	1.0000
78 Se	2484.11	P	23.37	0.94	1.0000
88 Sr	165495.09	P	1252.00	0.76	1.0000
88 Sr	1871947.00	A	4204.00	0.22	1.0000
95 Mo	331278.00	P	791.70	0.24	1.0000
106 (Cd)	17599.31	P	234.70	1.33	1.0000
107 Ag	449017.09	P	1660.00	0.37	1.0000
108 (Cd)	13445.73	P	312.90	2.33	1.0000
111 Cd	191715.20	P	2350.00	1.23	1.0000
115 In	2441419.00	A	40070.00	1.64	0.0000
115 In	1245256.00	A	9868.00	0.79	0.0000
115 In	7196137.00	A	64600.00	0.90	0.0000
118 Sn	154292.30	P	2166.00	1.40	1.0000
118 Sn	90766.01	P	1050.00	1.16	1.0000
118 Sn	510110.81	P	4297.00	0.84	1.0000
121 Sb	574499.19	P	5817.00	1.01	1.0000
137 Ba	276043.59	P	2427.00	0.88	1.0000
159 Tb	9335886.00	A	44010.00	0.47	0.0000
165 Ho	9144357.00	A	60830.00	0.67	0.0000
205 Tl	1610670.00	A	5783.00	0.36	1.0000
206 (Pb)	554043.50	P	2332.00	0.42	1.0000
207 (Pb)	472408.09	P	1134.00	0.24	1.0000
208 Pb	2188474.00	A	10630.00	0.49	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4548555.00	0.90	4365905.50	104.2	70 -	120	
45 Sc	1303324.50	1.07	1387378.10	93.9	70 -	120	
45 Sc	160170.31	1.99	178485.84	89.7	70 -	120	
45 Sc	5160895.50	0.10	5341512.00	96.6	70 -	120	
72 Ge	304949.03	1.61	328299.91	92.9	70 -	120	
72 Ge	110460.91	1.14	120925.76	91.3	70 -	120	
72 Ge	1072004.00	0.71	1098501.80	97.6	70 -	120	
115 In	2441419.00	1.64	2460398.80	99.2	70 -	120	
115 In	1245255.60	0.79	1354997.10	91.9	70 -	120	
115 In	7196137.00	0.90	7443787.00	96.7	70 -	120	
159 Tb	9335886.00	0.47	9639542.00	96.8	70 -	120	
165 Ho	9144357.00	0.67	9263706.00	98.7	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\010_QCS.D\010_QCS.D#
Date Acquired: May 6 2012 01:23 pm
Operator: NBS
Sample Name: ICV 120506
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 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	100.90	ug/l	0.80	100.00	90 -	110	
11 B	104.60	ug/l	0.72	100.00	90 -	110	
23 Na	2452.00	ug/l	1.18	2500.00	90 -	110	
24 Mg	2475.00	ug/l	0.86	2500.00	90 -	110	
27 Al	2494.00	ug/l	1.26	2500.00	90 -	110	
39 K	2456.00	ug/l	0.98	2500.00	90 -	110	
44 Ca	2479.00	ug/l	1.30	2500.00	90 -	110	
47 Ti	96.62	ug/l	3.05	100.00	90 -	110	
51 V	102.60	ug/l	0.27	100.00	90 -	110	
52 Cr	103.10	ug/l	0.41	100.00	90 -	110	
55 Mn	102.30	ug/l	0.38	100.00	90 -	110	
56 Fe	2425.00	ug/l	1.39	2500.00	90 -	110	
59 Co	100.40	ug/l	1.06	100.00	90 -	110	
60 Ni	102.50	ug/l	0.80	100.00	90 -	110	
63 Cu	100.90	ug/l	0.27	100.00	90 -	110	
65 Cu	100.20	ug/l	0.76	100.00	90 -	110	
66 Zn	101.60	ug/l	0.81	100.00	90 -	110	
75 As	100.70	ug/l	0.58	100.00	90 -	110	
78 Se	105.40	ug/l	0.71	100.00	90 -	110	
78 Se	102.70	ug/l	0.42	100.00	90 -	110	
88 Sr	100.20	ug/l	0.30	100.00	90 -	110	
88 Sr	97.80	ug/l	1.49	100.00	90 -	110	
95 Mo	99.93	ug/l	1.36	100.00	90 -	110	
106 (Cd)	--------	ug/l	--------	100.00	90 -	110	
107 Ag	50.27	ug/l	1.79	50.00	90 -	110	
108 (Cd)	--------	ug/l	--------	100.00	90 -	110	
111 Cd	100.50	ug/l	2.12	100.00	90 -	110	
118 Sn	60.59	ug/l	2.60	50.00	90 -	110	Fail
118 Sn	50.23	ug/l	9.19	50.00	90 -	110	
118 Sn	49.48	ug/l	1.37	50.00	90 -	110	
121 Sb	120.60	ug/l	1.04	100.00	90 -	110	Fail
137 Ba	98.38	ug/l	1.39	100.00	90 -	110	
205 Tl	100.90	ug/l	0.94	100.00	90 -	110	
206 (Pb)	--------	ug/l	--------	100.00	90 -	110	
207 (Pb)	--------	ug/l	--------	100.00	90 -	110	
208 Pb	102.30	ug/l	0.30	100.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	4569029.50	1.83	4365905.50	104.7	70 -	120	
45 Sc	1298295.60	0.51	1387378.10	93.6	70 -	120	
45 Sc	162394.17	0.48	178485.84	91.0	70 -	120	
45 Sc	5172767.00	0.19	5341512.00	96.8	70 -	120	
72 Ge	299287.84	1.43	328299.91	91.2	70 -	120	
72 Ge	111745.26	1.82	120925.76	92.4	70 -	120	
72 Ge	1065647.10	0.56	1098501.80	97.0	70 -	120	
115 In	2391467.80	0.94	2460398.80	97.2	70 -	120	
115 In	1250055.60	0.69	1354997.10	92.3	70 -	120	
115 In	7278412.00	1.39	7443787.00	97.8	70 -	120	
159 Tb	9390171.00	0.25	9639542.00	97.4	70 -	120	
165 Ho	9088226.00	0.36	9263706.00	98.1	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\015_CCB.D\015_CCB.D#
Date Acquired: May 6 2012 01:57 pm
Operator: NBS
Sample Name: ICB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	61.64	0.12	
11 B	0.16	ug/l	85.36	15.00	
23 Na	-19.52	ug/l	28.54	77.10	
24 Mg	0.03	ug/l	83.22	7.50	
27 Al	-0.07	ug/l	347.20	3.96	
39 K	-13.93	ug/l	4.25	19.20	
44 Ca	-2.31	ug/l	192.21	90.00	
47 Ti	-0.76	ug/l	3.98	0.78	
51 V	0.01	ug/l	121.68	0.21	
52 Cr	0.00	ug/l	234.48	0.12	
55 Mn	-0.07	ug/l	17.80	0.18	
56 Fe	0.08	ug/l	35.78	40.80	
59 Co	0.00	ug/l	296.66	0.09	
60 Ni	0.08	ug/l	77.37	0.48	
63 Cu	0.01	ug/l	23.34	0.39	
65 Cu	0.03	ug/l	89.51	0.39	
66 Zn	0.09	ug/l	16.62	6.90	
75 As	0.01	ug/l	66.61	0.27	
78 Se	-0.03	ug/l	21.08	0.30	
78 Se	0.00	ug/l	37583.00	0.30	
88 Sr	-0.02	ug/l	45.90	0.03	
88 Sr	0.00	ug/l	899.71	0.03	
95 Mo	0.04	ug/l	10.20	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.00	ug/l	317.32	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	843.57	0.06	
116 Sn	-0.04	ug/l	81.30	#######	
118 Sn	0.03	ug/l	3.62	#######	
118 Sn	0.65	ug/l	169.37	0.30	Fail
121 Sb	0.05	ug/l	13.38	0.03	Fail
137 Ba	-0.03	ug/l	71.88	0.12	
205 Tl	0.01	ug/l	160.91	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.09	ug/l	5.54	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4433633.00	0.78	4365905.50	101.6	70 - 120	
45 Sc	1406959.10	1.61	1387378.10	101.4	70 - 120	
45 Sc	185245.84	0.83	178485.84	103.8	70 - 120	
45 Sc	5400796.00	0.96	5341512.00	101.1	70 - 120	
72 Ge	338700.75	1.82	328299.91	103.2	70 - 120	
72 Ge	122726.15	1.60	120925.76	101.5	70 - 120	
72 Ge	1119906.80	0.77	1098501.80	101.9	70 - 120	
115 In	2535470.00	1.20	2460398.80	103.1	70 - 120	
115 In	1400925.40	1.23	1354997.10	103.4	70 - 120	
115 In	7561984.00	0.97	7443787.00	101.6	70 - 120	
159 Tb	9706947.00	0.52	9639542.00	100.7	70 - 120	
165 Ho	9490577.00	0.27	9263706.00	102.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\016_CCV.D\016_CCV.D#
Date Acquired: May 6 2012 02:04 pm
Operator: NBS
Sample Name: CCV 120506
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 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	49.02	ug/l	1.83	50.00	90 - 110	
11 B	48.87	ug/l	0.82	50.00	90 - 110	
23 Na	1228.00	ug/l	0.91	1250.00	90 - 110	
24 Mg	2496.00	ug/l	0.48	2500.00	90 - 110	
27 Al	1005.00	ug/l	0.54	1000.00	90 - 110	
39 K	995.70	ug/l	1.36	1000.00	90 - 110	
44 Ca	2514.00	ug/l	4.20	2500.00	90 - 110	
47 Ti	47.04	ug/l	3.83	50.00	90 - 110	
51 V	48.82	ug/l	0.50	50.00	90 - 110	
52 Cr	48.75	ug/l	0.82	50.00	90 - 110	
55 Mn	48.98	ug/l	0.70	50.00	90 - 110	
56 Fe	996.30	ug/l	1.35	1000.00	90 - 110	
59 Co	48.75	ug/l	0.70	50.00	90 - 110	
60 Ni	48.72	ug/l	0.81	50.00	90 - 110	
63 Cu	48.71	ug/l	0.82	50.00	90 - 110	
65 Cu	48.74	ug/l	1.70	50.00	90 - 110	
66 Zn	49.92	ug/l	0.64	50.00	90 - 110	
75 As	49.93	ug/l	0.58	50.00	90 - 110	
78 Se	50.85	ug/l	0.72	50.00	90 - 110	
78 Se	49.66	ug/l	0.36	50.00	90 - 110	
88 Sr	50.04	ug/l	1.67	50.00	90 - 110	
88 Sr	49.31	ug/l	1.93	50.00	90 - 110	
95 Mo	48.73	ug/l	0.64	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.66	ug/l	0.64	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.54	ug/l	0.98	50.00	90 - 110	
118 Sn	50.11	ug/l	1.23	---	##### - #####	
118 Sn	48.62	ug/l	0.76	---	##### - #####	
118 Sn	48.33	ug/l	1.06	50.00	90 - 110	
121 Sb	48.60	ug/l	0.90	50.00	90 - 110	
137 Ba	48.42	ug/l	1.23	50.00	90 - 110	
205 Tl	50.01	ug/l	1.14	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	49.77	ug/l	1.58	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4525227.50	1.38	4365905.50	103.6	70 - 120	
45 Sc	1283033.40	0.19	1387378.10	92.5	70 - 120	
45 Sc	167369.95	0.82	178485.84	93.8	70 - 120	
45 Sc	5149297.50	2.11	5341512.00	96.4	70 - 120	
72 Ge	301569.41	0.62	328299.91	91.9	70 - 120	
72 Ge	113556.34	0.76	120925.76	93.9	70 - 120	
72 Ge	1062281.10	1.87	1098501.80	96.7	70 - 120	
115 In	2373715.30	0.43	2460398.80	96.5	70 - 120	
115 In	1269850.10	0.60	1354997.10	93.7	70 - 120	
115 In	7235172.50	1.53	7443787.00	97.2	70 - 120	
159 Tb	9264735.00	2.05	9639542.00	96.1	70 - 120	
165 Ho	8997807.00	1.54	9263706.00	97.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\017_CCB.D\017_CCB.D#
Date Acquired: May 6 2012 02:11 pm
Operator: NBS
Sample Name: CCB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.01	ug/l	34.00	0.12	
11 B	0.90	ug/l	36.32	15.00	
23 Na	-30.58	ug/l	9.45	77.10	
24 Mg	0.15	ug/l	107.62	7.50	
27 Al	2.74	ug/l	176.07	3.96	
39 K	-15.04	ug/l	19.22	19.20	
44 Ca	6.33	ug/l	127.74	90.00	
47 Ti	-0.77	ug/l	2.21	0.78	
51 V	0.00	ug/l	107.83	0.21	
52 Cr	0.00	ug/l	1420.80	0.12	
55 Mn	0.00	ug/l	4218.10	0.18	
56 Fe	0.57	ug/l	102.54	40.80	
59 Co	0.01	ug/l	38.38	0.09	
60 Ni	0.12	ug/l	43.66	0.48	
63 Cu	-0.01	ug/l	93.54	0.39	
65 Cu	-0.01	ug/l	151.45	0.39	
66 Zn	0.09	ug/l	78.48	6.90	
75 As	0.02	ug/l	32.55	0.27	
78 Se	0.09	ug/l	10.43	0.30	
78 Se	-0.04	ug/l	738.99	0.30	
88 Sr	0.00	ug/l	5232.70	0.03	
88 Sr	0.01	ug/l	25.23	0.03	
95 Mo	0.32	ug/l	7.22	0.21	Fail
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.01	ug/l	15.57	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.01	ug/l	62.58	0.06	
118 Sn	0.09	ug/l	58.08	#######	
118 Sn	0.12	ug/l	15.36	#######	
118 Sn	0.10	ug/l	15.91	0.30	
121 Sb	0.36	ug/l	2.72	0.03	Fail
137 Ba	0.00	ug/l	424.60	0.12	
205 Tl	0.03	ug/l	7.14	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.06	ug/l	19.63	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4219134.50	1.38	4365905.50	96.6	70 - 120	
45 Sc	1390973.10	1.40	1387378.10	100.3	70 - 120	
45 Sc	187282.52	2.33	178485.84	104.9	70 - 120	
45 Sc	5191476.00	0.20	5341512.00	97.2	70 - 120	
72 Ge	335010.69	0.35	328299.91	102.0	70 - 120	
72 Ge	123890.20	2.67	120925.76	102.5	70 - 120	
72 Ge	1087991.10	1.43	1098501.80	99.0	70 - 120	
115 In	2469277.80	0.86	2460398.80	100.4	70 - 120	
115 In	1418535.10	0.98	1354997.10	104.7	70 - 120	
115 In	7402642.50	0.27	7443787.00	99.4	70 - 120	
159 Tb	9641716.00	0.81	9639542.00	100.0	70 - 120	
165 Ho	9256100.00	0.87	9263706.00	99.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\018SMPL.D\018SMPL.D#
Date Acquired: May 6 2012 02:17 pm
Operator: NBS
Sample Name: LDR-1000ppb 120506
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 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	919.80	ug/l	919.80	0.98	1000	
11 B	964.30	ug/l	964.30	0.60	1000	
23 Na	22940.00	ug/l	22940.00	1.33	25000	
24 Mg	47340.00	ug/l	47340.00	0.39	50000	
27 Al	20330.00	ug/l	20330.00	1.49	20000	>Cal
39 K	18920.00	ug/l	18920.00	0.85	20000	
44 Ca	50150.00	ug/l	50150.00	1.42	50000	>Cal
47 Ti	998.10	ug/l	998.10	0.83	1000	
51 V	951.60	ug/l	951.60	1.14	1000	
52 Cr	941.90	ug/l	941.90	0.78	1000	
55 Mn	953.20	ug/l	953.20	1.34	1000	
56 Fe	19030.00	ug/l	19030.00	0.89	20000	
59 Co	924.10	ug/l	924.10	1.09	1000	
60 Ni	956.00	ug/l	956.00	0.79	1000	
63 Cu	919.40	ug/l	919.40	0.97	1000	
65 Cu	955.60	ug/l	955.60	0.94	1000	
66 Zn	959.80	ug/l	959.80	0.62	1000	
75 As	995.30	ug/l	995.30	0.53	1000	
78 Se	991.70	ug/l	991.70	1.64	1000	
78 Se	960.40	ug/l	960.40	1.17	1000	
88 Sr	975.50	ug/l	975.50	0.94	1000	
88 Sr	978.60	ug/l	978.60	0.16	1000	
95 Mo	985.70	ug/l	985.70	0.50	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	447.50	ug/l	447.50	5.28	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	932.50	ug/l	932.50	0.13	1000	
118 Sn	1028.00	ug/l	1028.00	1.15	#######	
118 Sn	1018.00	ug/l	1018.00	1.09	#######	
118 Sn	963.90	ug/l	963.90	0.31	1000	
121 Sb	954.60	ug/l	954.60	0.68	1000	
137 Ba	980.80	ug/l	980.80	1.44	1000	
205 Tl	953.90	ug/l	953.90	0.39	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	942.20	ug/l	942.20	0.25	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4359654.00	0.83	4365905.50	99.9	70 - 120	
45 Sc	1244120.90	0.88	1387378.10	89.7	70 - 120	
45 Sc	157924.97	1.16	178485.84	88.5	70 - 120	
45 Sc	4914877.00	1.10	5341512.00	92.0	70 - 120	
72 Ge	292694.41	0.80	328299.91	89.2	70 - 120	
72 Ge	109252.23	2.37	120925.76	90.3	70 - 120	
72 Ge	1043480.80	1.10	1098501.80	95.0	70 - 120	
115 In	2279897.30	0.74	2460398.80	92.7	70 - 120	
115 In	1184903.10	0.72	1354997.10	87.4	70 - 120	
115 In	6780718.50	0.58	7443787.00	91.1	70 - 120	
159 Tb	8985671.00	0.61	9639542.00	93.2	70 - 120	
165 Ho	8654408.00	0.69	9263706.00	93.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\020SMPL.D\020SMPL.D#
Date Acquired: May 6 2012 02:30 pm
Operator: NBS
Sample Name: ICSA 120506
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 01:21 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	0.03	ug/l	0.03	26.64	1000	
11 B	16.64	ug/l	16.64	4.58	1000	
23 Na	94530.00	ug/l	94530.00	2.02	25000	>Cal
24 Mg	96980.00	ug/l	96980.00	1.11	50000	>Cal
27 Al	97220.00	ug/l	97220.00	1.69	20000	>Cal
39 K	96580.00	ug/l	96580.00	1.83	20000	>Cal
44 Ca	102000.00	ug/l	102000.00	0.59	50000	>Cal
47 Ti	2135.00	ug/l	2135.00	1.32	1000	>Cal
51 V	0.37	ug/l	0.37	11.91	1000	
52 Cr	1.25	ug/l	1.25	1.97	1000	
55 Mn	5.61	ug/l	5.61	2.55	1000	
56 Fe	95600.00	ug/l	95600.00	1.22	20000	>Cal
59 Co	1.43	ug/l	1.43	1.23	1000	
60 Ni	1.69	ug/l	1.69	6.08	1000	
63 Cu	0.94	ug/l	0.94	3.05	1000	
65 Cu	1.01	ug/l	1.01	2.43	1000	
66 Zn	1.25	ug/l	1.25	5.76	1000	
75 As	0.47	ug/l	0.47	4.46	1000	
78 Se	0.24	ug/l	0.24	9.28	1000	
78 Se	0.69	ug/l	0.69	33.46	1000	
88 Sr	0.50	ug/l	0.50	9.50	1000	
88 Sr	0.50	ug/l	0.50	3.22	1000	
95 Mo	1941.00	ug/l	1941.00	0.55	1000	>Cal
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.16	ug/l	0.16	5.56	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.69	ug/l	0.69	5.28	1000	
118 Sn	2.39	ug/l	2.39	4.24	#######	
118 Sn	2.78	ug/l	2.78	7.13	#######	
118 Sn	2.82	ug/l	2.82	2.69	1000	
121 Sb	3.12	ug/l	3.12	2.73	1000	
137 Ba	2.06	ug/l	2.06	3.68	1000	
205 Tl	0.19	ug/l	0.19	2.50	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.30	ug/l	0.30	2.71	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4621015.50	0.55	4365905.50	105.8	70 - 120	
45 Sc	1230656.80	0.44	1387378.10	88.7	70 - 120	
45 Sc	160627.97	0.81	178485.84	90.0	70 - 120	
45 Sc	5002497.50	0.40	5341512.00	93.7	70 - 120	
72 Ge	316484.78	2.10	328299.91	96.4	70 - 120	
72 Ge	124204.50	0.81	120925.76	102.7	70 - 120	
72 Ge	1236457.50	0.39	1098501.80	112.6	70 - 120	
115 In	2366717.30	0.74	2460398.80	96.2	70 - 120	
115 In	1253572.00	0.69	1354997.10	92.5	70 - 120	
115 In	7051469.50	0.61	7443787.00	94.7	70 - 120	
159 Tb	8756634.00	0.16	9639542.00	90.8	70 - 120	
165 Ho	8343739.00	0.53	9263706.00	90.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\005CALB.D\005CALB.D#

8 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\021ICSB.D\021ICSB.D#
Date Acquired: May 6 2012 02:37 pm
Acq. Method: 62A0506A.M
Operator: NBS
Sample Name: ICSAB 120506
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal. Update: May 06 2012 01:21 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	242.40	0.08	250	97.0	80 - 120	
11 B	45	3	12.07	3.48	---		-	
23 Na	45	2	98930.00	0.69	---		-	
24 Mg	45	2	99940.00	0.48	---		-	
27 Al	45	2	99960.00	0.58	---		-	
39 K	45	2	99670.00	1.29	---		-	
44 Ca	45	2	104900.00	0.17	---		-	
47 Ti	45	2	2201.00	0.23	2000	110.1	80 - 120	
51 V	45	2	283.70	0.81	250	113.5	80 - 120	
52 Cr	45	2	272.10	0.97	250	108.8	80 - 120	
55 Mn	45	2	277.10	0.74	250	110.8	80 - 120	
56 Fe	45	2	98230.00	0.36	---		-	
59 Co	45	2	258.00	0.48	250	103.2	80 - 120	
60 Ni	45	2	512.00	0.33	500	102.4	80 - 120	
63 Cu	45	2	252.30	0.50	250	100.9	80 - 120	
65 Cu	45	2	251.10	1.34	250	100.4	80 - 120	
66 Zn	115	2	467.50	0.90	500	93.5	80 - 120	
75 As	115	2	252.20	0.69	250	100.9	80 - 120	
78 Se	115	1	243.20	1.08	250	97.3	80 - 120	
78 Se	115	2	233.40	0.68	250	93.4	80 - 120	
88 Sr	115	2	0.49	6.00	---		-	
88 Sr	115	3	0.50	4.64	---		-	
95 Mo	115	3	2246.00	0.70	2000	112.3	80 - 120	
106 (Cd)	---	3	----------	------	---		-	
107 Ag	115	3	536.70	2.32	500	107.3	80 - 120	
108 (Cd)	---	3	----------	------	---		-	
111 Cd	115	3	469.30	1.12	500	93.9	80 - 120	
118 Sn	115	1	1.01	5.22	---		-	
118 Sn	115	2	1.38	3.88	---		-	
118 Sn	115	3	1.43	2.97	---		-	
121 Sb	115	3	222.90	1.24	250	89.2	80 - 120	
137 Ba	115	3	265.20	1.03	250	106.1	80 - 120	
205 Tl	159	3	252.40	0.21	250	101.0	80 - 120	
206 (Pb)	---	3	----------	------	---		-	
207 (Pb)	---	3	----------	------	---		-	
208 Pb	159	3	509.70	0.07	500	101.9	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	4811882	1.35	4365906	110.2	70 - 120	
45 Sc	1	1253287	0.32	1387378	90.3	70 - 120	
45 Sc	2	159353	0.61	178486	89.3	70 - 120	
45 Sc	3	5105276	0.65	5341512	95.6	70 - 120	
72 Ge	1	328254	1.54	328300	100.0	70 - 120	
72 Ge	2	122527	1.60	120926	101.3	70 - 120	
72 Ge	3	1264198	1.12	1098502	115.1	70 - 120	
115 In	1	2444015	1.64	2460399	99.3	70 - 120	
115 In	2	1269212	0.75	1354997	93.7	70 - 120	
115 In	3	7126671	0.80	7443767	95.7	70 - 120	
159 Tb	3	8852310	0.31	9639542	91.8	70 - 120	
165 Ho	3	8531356	0.67	9263706	92.1	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2_hmi.u
Tune File# 2 c:\icpchem\1\7500\he_hmi.u
Tune File# 3 c:\icpchem\1\7500\ng_hmi.u

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.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\12E06m00.B\025_CCV.D\025_CCV.D#
Date Acquired: May 6 2012 03:04 pm
Operator: NBS
Sample Name: CCV 120506
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 07 2012 10:11 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	51.62	ug/l	0.66	50.00	90 - 110	
11 B	53.30	ug/l	0.69	50.00	90 - 110	
23 Na	1273.00	ug/l	1.39	1250.00	90 - 110	
24 Mg	2507.00	ug/l	0.85	2500.00	90 - 110	
27 Al	988.40	ug/l	1.25	1000.00	90 - 110	
39 K	973.70	ug/l	0.64	1000.00	90 - 110	
44 Ca	2420.00	ug/l	0.85	2500.00	90 - 110	
47 Ti	47.31	ug/l	0.90	50.00	90 - 110	
51 V	49.68	ug/l	1.89	50.00	90 - 110	
52 Cr	49.36	ug/l	1.35	50.00	90 - 110	
55 Mn	48.36	ug/l	0.90	50.00	90 - 110	
56 Fe	997.50	ug/l	1.93	1000.00	90 - 110	
59 Co	49.61	ug/l	0.75	50.00	90 - 110	
60 Ni	49.65	ug/l	1.64	50.00	90 - 110	
63 Cu	49.76	ug/l	0.36	50.00	90 - 110	
65 Cu	49.31	ug/l	2.08	50.00	90 - 110	
66 Zn	49.26	ug/l	1.78	50.00	90 - 110	
75 As	48.70	ug/l	0.73	50.00	90 - 110	
78 Se	50.24	ug/l	0.45	50.00	90 - 110	
78 Se	48.77	ug/l	1.68	50.00	90 - 110	
88 Sr	48.58	ug/l	1.87	50.00	90 - 110	
88 Sr	49.39	ug/l	1.42	50.00	90 - 110	
95 Mo	48.75	ug/l	1.82	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.73	ug/l	1.40	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.55	ug/l	0.06	50.00	90 - 110	
118 Sn	50.71	ug/l	0.47	---	##### - #####	
118 Sn	49.40	ug/l	1.86	---	##### - #####	
118 Sn	49.31	ug/l	1.32	50.00	90 - 110	
121 Sb	51.16	ug/l	2.31	50.00	90 - 110	
137 Ba	48.85	ug/l	2.03	50.00	90 - 110	
205 Tl	49.44	ug/l	1.01	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	49.51	ug/l	1.78	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5281672.50	0.53	4365905.50	121.0	70 - 120	IS Fail
45 Sc	1321143.90	1.46	1387378.10	95.2	70 - 120	
45 Sc	166759.47	0.96	178485.84	93.4	70 - 120	
45 Sc	5420571.50	0.65	5341512.00	101.5	70 - 120	
72 Ge	329304.88	8.00	328299.91	100.3	70 - 120	
72 Ge	115003.63	0.81	120925.76	95.1	70 - 120	
72 Ge	1122428.60	0.13	1098501.80	102.2	70 - 120	
115 In	2543000.00	0.67	2460398.80	103.4	70 - 120	
115 In	1311773.00	1.03	1354997.10	96.8	70 - 120	
115 In	7598278.00	1.05	7443787.00	102.1	70 - 120	
159 Tb	9951752.00	1.22	9639542.00	103.2	70 - 120	
165 Ho	9590783.00	2.18	9263706.00	103.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\005CALB.D\005CALB.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

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\027_CCB.D\027_CCB.D#
Date Acquired: May 6 2012 03:18 pm
Operator: NBS
Sample Name: CCB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 07 2012 10:11 am
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	116.13	0.12	
11 B	-0.55	ug/l	44.32	15.00	
23 Na	-19.02	ug/l	35.97	77.10	
24 Mg	-0.36	ug/l	23.35	7.50	
27 Al	-0.44	ug/l	19.72	3.96	
39 K	2.56	ug/l	99.41	19.20	
44 Ca	-1.83	ug/l	173.89	90.00	
47 Ti	-0.02	ug/l	88.45	0.78	
51 V	0.00	ug/l	104.87	0.21	
52 Cr	0.01	ug/l	321.52	0.12	
55 Mn	0.19	ug/l	3.48	0.18	Fail
56 Fe	-0.13	ug/l	7.83	40.80	
59 Co	0.00	ug/l	217.34	0.09	
60 Ni	-0.04	ug/l	116.18	0.48	
63 Cu	-0.01	ug/l	113.22	0.39	
65 Cu	0.00	ug/l	488.90	0.39	
66 Zn	-0.11	ug/l	82.05	6.90	
75 As	-0.01	ug/l	48.18	0.27	
78 Se	-0.03	ug/l	104.91	0.30	
78 Se	0.09	ug/l	220.43	0.30	
88 Sr	-0.01	ug/l	93.86	0.03	
88 Sr	0.00	ug/l	111.61	0.03	
95 Mo	-0.33	ug/l	0.82	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	-0.01	ug/l	58.38	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	44.77	0.06	
118 Sn	-0.02	ug/l	102.85	#######	
118 Sn	-0.01	ug/l	325.22	#######	
118 Sn	0.00	ug/l	79.01	0.30	
121 Sb	-0.17	ug/l	1.25	0.03	
137 Ba	-0.04	ug/l	11.18	0.12	
205 Tl	-0.01	ug/l	28.60	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	0.11	ug/l	3.34	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5310933.00	0.89	4365905.50	121.6	70 - 120	IS Fai.
45 Sc	1430058.10	0.73	1387378.10	103.1	70 - 120	
45 Sc	186255.63	1.41	178485.84	104.4	70 - 120	
45 Sc	5630586.50	0.76	5341512.00	105.4	70 - 120	
72 Ge	346755.06	1.46	328299.91	105.6	70 - 120	
72 Ge	126047.59	1.91	120925.76	104.2	70 - 120	
72 Ge	1166041.90	0.33	1098501.80	106.1	70 - 120	
115 In	2646840.30	0.33	2460398.80	107.6	70 - 120	
115 In	1465362.00	0.50	1354997.10	108.1	70 - 120	
115 In	7914889.00	1.08	7443787.00	106.3	70 - 120	
159 Tb	10183894.00	0.72	9639542.00	105.6	70 - 120	
165 Ho	9858218.00	1.17	9263706.00	106.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\005CALB.D\005CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\108_CCV.D\108_CCV.D#
Date Acquired: May 7 2012 12:25 am
Operator: NBS
Sample Name: CCV 120506
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	47.21	ug/l	0.78	50.00	90 - 110	
11 B	42.57	ug/l	0.79	50.00	90 - 110	Fail
23 Na	1181.00	ug/l	2.19	1250.00	90 - 110	
24 Mg	2384.00	ug/l	2.50	2500.00	90 - 110	
27 Al	976.90	ug/l	3.45	1000.00	90 - 110	
39 K	1000.00	ug/l	2.51	1000.00	90 - 110	
44 Ca	2433.00	ug/l	3.24	2500.00	90 - 110	
47 Ti	49.80	ug/l	2.64	50.00	90 - 110	
51 V	48.06	ug/l	2.70	50.00	90 - 110	
52 Cr	47.63	ug/l	1.79	50.00	90 - 110	
55 Mn	47.78	ug/l	2.14	50.00	90 - 110	
56 Fe	977.20	ug/l	2.15	1000.00	90 - 110	
59 Co	47.60	ug/l	2.12	50.00	90 - 110	
60 Ni	47.62	ug/l	2.22	50.00	90 - 110	
63 Cu	47.53	ug/l	3.06	50.00	90 - 110	
65 Cu	47.18	ug/l	3.16	50.00	90 - 110	
66 Zn	48.37	ug/l	1.38	50.00	90 - 110	
75 As	49.60	ug/l	1.48	50.00	90 - 110	
78 Se	50.13	ug/l	0.83	50.00	90 - 110	
78 Se	50.44	ug/l	2.16	50.00	90 - 110	
88 Sr	49.05	ug/l	1.46	50.00	90 - 110	
88 Sr	48.42	ug/l	1.69	50.00	90 - 110	
95 Mo	47.86	ug/l	1.40	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	23.99	ug/l	1.33	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	48.23	ug/l	0.51	50.00	90 - 110	
118 Sn	49.18	ug/l	1.41	---	##### - #####	
118 Sn	48.25	ug/l	1.41	---	##### - #####	
118 Sn	48.06	ug/l	0.76	50.00	90 - 110	
121 Sb	48.89	ug/l	0.36	50.00	90 - 110	
137 Ba	47.79	ug/l	0.91	50.00	90 - 110	
205 Tl	47.40	ug/l	1.46	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	47.52	ug/l	1.57	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4418294.00	1.48	5002703.50	88.3	70 - 120	
45 Sc	1222284.30	0.51	1428201.80	85.6	70 - 120	
45 Sc	158296.78	1.95	189458.30	83.6	70 - 120	
45 Sc	4982711.50	1.18	5488810.50	90.8	70 - 120	
72 Ge	289677.59	1.57	346291.34	83.7	70 - 120	
72 Ge	110111.70	1.66	127768.43	86.2	70 - 120	
72 Ge	1047001.10	1.40	1135874.50	92.2	70 - 120	
115 In	2275108.50	2.34	2601614.30	87.4	70 - 120	
115 In	1211932.90	0.96	1447050.60	83.8	70 - 120	
115 In	7013286.00	0.69	7726454.50	90.8	70 - 120	
159 Tb	8850827.00	1.59	10002252.00	88.5	70 - 120	
165 Ho	8605060.00	0.47	9695601.00	88.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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\12E06m00.B\110_CCB.D\110_CCB.D#
Date Acquired: May 7 2012 12:38 am
Operator: NBS
Sample Name: CCB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#######	
9 Be	0.00 ug/l	111.85	0.12	
11 B	-2.10 ug/l	3.16	15.00	
23 Na	0.85 ug/l	327.04	77.10	
24 Mg	0.38 ug/l	44.18	7.50	
27 Al	0.09 ug/l	158.95	3.96	
39 K	26.09 ug/l	6.77	19.20	Fail
44 Ca	13.44 ug/l	11.70	90.00	
47 Ti	0.05 ug/l	1.67	0.78	
51 V	-0.01 ug/l	15.04	0.21	
52 Cr	-0.01 ug/l	91.13	0.12	
55 Mn	-0.13 ug/l	12.44	0.18	
56 Fe	0.41 ug/l	7.45	40.80	
59 Co	0.00 ug/l	26.21	0.09	
60 Ni	0.00 ug/l	661.12	0.48	
63 Cu	-0.01 ug/l	83.65	0.39	
65 Cu	-0.02 ug/l	39.34	0.39	
66 Zn	0.08 ug/l	32.04	6.90	
75 As	0.02 ug/l	30.57	0.27	
78 Se	0.01 ug/l	190.50	0.30	
78 Se	0.77 ug/l	23.52	0.30	Fail
88 Sr	0.01 ug/l	23.48	0.03	
88 Sr	0.01 ug/l	50.57	0.03	
95 Mo	0.04 ug/l	32.44	0.21	
106 (Cd)	-------- ug/l	--------	#######	
107 Ag	0.00 ug/l	148.69	0.09	
108 (Cd)	-------- ug/l	--------	#######	
111 Cd	0.00 ug/l	176.68	0.06	
118 Sn	0.04 ug/l	21.59	#######	
118 Sn	0.04 ug/l	47.12	#######	
118 Sn	0.02 ug/l	16.31	0.30	
121 Sb	0.12 ug/l	4.95	0.03	Fail
137 Ba	0.01 ug/l	37.97	0.12	
205 Tl	0.00 ug/l	38.22	0.03	
206 (Pb)	-------- ug/l	--------	#######	
207 (Pb)	-------- ug/l	--------	#######	
208 Pb	-0.11 ug/l	2.78	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4053400.80	0.88	5002703.50	81.0	70 - 120	
45 Sc	1280684.10	2.07	1428201.80	89.7	70 - 120	
45 Sc	174710.42	1.41	189458.30	92.2	70 - 120	
45 Sc	5023384.00	0.60	5488810.50	91.5	70 - 120	
72 Ge	312364.00	1.13	346291.34	90.2	70 - 120	
72 Ge	120757.94	1.56	127768.43	94.5	70 - 120	
72 Ge	1053005.60	0.78	1135874.50	92.7	70 - 120	
115 In	2301543.00	1.14	2601614.30	88.5	70 - 120	
115 In	1304040.00	0.70	1447050.60	90.1	70 - 120	
115 In	7151688.50	1.02	7726454.50	92.6	70 - 120	
159 Tb	8941167.00	0.79	10002252.00	89.4	70 - 120	
165 Ho	8620432.00	0.82	9695601.00	88.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\122_CCV.D\122_CCV.D#
Date Acquired: May 7 2012 01:59 am
Operator: NBS
Sample Name: CCV 120506
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	46.74	ug/l	0.76	50.00	90 - 110	
11 B	48.25	ug/l	1.34	50.00	90 - 110	
23 Na	1195.00	ug/l	1.31	1250.00	90 - 110	
24 Mg	2431.00	ug/l	1.94	2500.00	90 - 110	
27 Al	996.40	ug/l	3.34	1000.00	90 - 110	
39 K	1023.00	ug/l	0.89	1000.00	90 - 110	
44 Ca	2492.00	ug/l	0.86	2500.00	90 - 110	
47 Ti	47.90	ug/l	1.87	50.00	90 - 110	
51 V	48.02	ug/l	0.73	50.00	90 - 110	
52 Cr	47.96	ug/l	0.49	50.00	90 - 110	
55 Mn	48.14	ug/l	1.01	50.00	90 - 110	
56 Fe	976.20	ug/l	0.80	1000.00	90 - 110	
59 Co	47.62	ug/l	0.88	50.00	90 - 110	
60 Ni	47.11	ug/l	0.40	50.00	90 - 110	
63 Cu	47.17	ug/l	0.89	50.00	90 - 110	
65 Cu	47.42	ug/l	0.69	50.00	90 - 110	
66 Zn	48.82	ug/l	1.09	50.00	90 - 110	
75 As	48.98	ug/l	0.09	50.00	90 - 110	
78 Se	50.19	ug/l	1.30	50.00	90 - 110	
78 Se	50.49	ug/l	1.58	50.00	90 - 110	
88 Sr	48.96	ug/l	0.67	50.00	90 - 110	
88 Sr	48.24	ug/l	2.39	50.00	90 - 110	
95 Mo	47.69	ug/l	1.96	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.06	ug/l	1.87	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	48.49	ug/l	0.71	50.00	90 - 110	
118 Sn	49.37	ug/l	0.83	---	##### - #####	
118 Sn	49.03	ug/l	0.87	---	##### - #####	
118 Sn	48.24	ug/l	1.10	50.00	90 - 110	
121 Sb	50.55	ug/l	1.40	50.00	90 - 110	
137 Ba	47.96	ug/l	1.56	50.00	90 - 110	
205 Tl	47.66	ug/l	1.33	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	47.50	ug/l	1.38	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4127576.50	0.81	5002703.50	82.5	70 - 120	
45 Sc	1165663.30	0.16	1428201.80	81.6	70 - 120	
45 Sc	149885.61	0.92	189458.30	79.1	70 - 120	
45 Sc	4707600.00	0.20	5488810.50	85.8	70 - 120	
72 Ge	275713.78	0.89	346291.34	79.6	70 - 120	
72 Ge	102305.75	1.41	127768.43	80.1	70 - 120	
72 Ge	987541.19	0.39	1135874.50	86.9	70 - 120	
115 In	2176095.50	0.81	2601614.30	83.6	70 - 120	
115 In	1158107.40	0.85	1447050.60	80.0	70 - 120	
115 In	6651868.50	1.27	7726454.50	86.1	70 - 120	
159 Tb	8499466.00	1.52	10002252.00	85.0	70 - 120	
165 Ho	8148825.00	0.20	9695601.00	84.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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\12E06m00.B\124_CCB.D\124_CCB.D#
Date Acquired: May 7 2012 02:13 am
Operator: NBS
Sample Name: CCB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	########	
9 Be	0.00	ug/l	87.51	0.12	
11 B	0.32	ug/l	60.03	15.00	
23 Na	14.04	ug/l	25.31	77.10	
24 Mg	0.43	ug/l	36.50	7.50	
27 Al	-0.04	ug/l	381.25	3.96	
39 K	31.58	ug/l	18.71	19.20	Fail
44 Ca	18.70	ug/l	19.18	90.00	
47 Ti	0.02	ug/l	140.46	0.78	
51 V	0.00	ug/l	30.04	0.21	
52 Cr	-0.01	ug/l	142.36	0.12	
55 Mn	-0.14	ug/l	23.16	0.18	
56 Fe	0.23	ug/l	6.00	40.80	
59 Co	0.00	ug/l	127.16	0.09	
60 Ni	0.00	ug/l	313.38	0.48	
63 Cu	-0.02	ug/l	43.89	0.39	
65 Cu	-0.01	ug/l	59.07	0.39	
66 Zn	0.03	ug/l	62.83	6.90	
75 As	0.03	ug/l	61.21	0.27	
78 Se	0.04	ug/l	38.05	0.30	
78 Se	0.84	ug/l	11.17	0.30	Fail
88 Sr	0.00	ug/l	631.28	0.03	
88 Sr	0.01	ug/l	19.37	0.03	
95 Mo	0.05	ug/l	14.77	0.21	
106 (Cd)	--------	ug/l	--------	########	
107 Ag	0.01	ug/l	9.99	0.09	
108 (Cd)	--------	ug/l	--------	########	
111 Cd	0.00	ug/l	252.70	0.06	
118 Sn	0.08	ug/l	8.34	########	
118 Sn	0.05	ug/l	10.43	########	
118 Sn	0.05	ug/l	51.48	0.30	
121 Sb	0.20	ug/l	11.56	0.03	Fail
137 Ba	0.01	ug/l	32.41	0.12	
205 Tl	0.01	ug/l	12.06	0.03	
206 (Pb)	--------	ug/l	--------	########	
207 (Pb)	--------	ug/l	--------	########	
208 Pb	-0.11	ug/l	0.62	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3944267.00	1.31	5002703.50	78.8	70 - 120	
45 Sc	1210340.50	1.80	1428201.80	84.7	70 - 120	
45 Sc	166165.28	0.44	189458.30	87.7	70 - 120	
45 Sc	4784901.50	0.62	5488810.50	87.2	70 - 120	
72 Ge	301373.44	0.41	346291.34	87.0	70 - 120	
72 Ge	110956.60	2.68	127768.43	86.8	70 - 120	
72 Ge	1011309.20	0.21	1135874.50	89.0	70 - 120	
115 In	2201221.00	0.57	2601614.30	84.6	70 - 120	
115 In	1269167.30	1.35	1447050.60	87.7	70 - 120	
115 In	6839988.50	0.71	7726454.50	88.5	70 - 120	
159 Tb	8751294.00	0.92	10002252.00	87.5	70 - 120	
165 Ho	8341214.00	0.76	9695601.00	86.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\133_CCV.D\133_CCV.D#
Date Acquired: May 7 2012 03:13 am
Operator: NBS
Sample Name: CCV 120506
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	46.09	ug/l	1.25	50.00	90 -	110	
11 B	45.14	ug/l	1.27	50.00	90 -	110	
23 Na	1145.00	ug/l	8.07	1250.00	90 -	110	
24 Mg	2342.00	ug/l	7.85	2500.00	90 -	110	
27 Al	959.00	ug/l	7.81	1000.00	90 -	110	
39 K	976.70	ug/l	7.73	1000.00	90 -	110	
44 Ca	2425.00	ug/l	6.30	2500.00	90 -	110	
47 Ti	45.81	ug/l	6.69	50.00	90 -	110	
51 V	46.79	ug/l	8.30	50.00	90 -	110	
52 Cr	46.80	ug/l	7.59	50.00	90 -	110	
55 Mn	46.54	ug/l	7.06	50.00	90 -	110	
56 Fe	937.30	ug/l	7.96	1000.00	90 -	110	
59 Co	46.00	ug/l	6.98	50.00	90 -	110	
60 Ni	45.82	ug/l	6.58	50.00	90 -	110	
63 Cu	45.87	ug/l	7.67	50.00	90 -	110	
65 Cu	46.57	ug/l	7.53	50.00	90 -	110	
66 Zn	47.85	ug/l	7.20	50.00	90 -	110	
75 As	47.74	ug/l	7.35	50.00	90 -	110	
78 Se	47.92	ug/l	2.17	50.00	90 -	110	
78 Se	49.30	ug/l	8.98	50.00	90 -	110	
88 Sr	47.73	ug/l	7.26	50.00	90 -	110	
88 Sr	47.45	ug/l	0.61	50.00	90 -	110	
95 Mo	46.44	ug/l	0.60	50.00	90 -	110	
106 (Cd)	--------	ug/l	--------	50.00	90 -	110	
107 Ag	23.45	ug/l	0.55	25.00	90 -	110	
108 (Cd)	--------	ug/l	--------	50.00	90 -	110	
111 Cd	47.41	ug/l	0.65	50.00	90 -	110	
118 Sn	48.13	ug/l	0.83	---	##### -	#####	
118 Sn	47.49	ug/l	7.63	---	##### -	#####	
118 Sn	47.27	ug/l	0.14	50.00	90 -	110	
121 Sb	47.87	ug/l	0.68	50.00	90 -	110	
137 Ba	47.35	ug/l	0.55	50.00	90 -	110	
205 Tl	47.24	ug/l	0.81	50.00	90 -	110	
206 (Pb)	--------	ug/l	--------	50.00	90 -	110	
207 (Pb)	--------	ug/l	--------	50.00	90 -	110	
208 Pb	47.14	ug/l	0.72	50.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	3940759.50	1.67	5002703.50	78.8	70 -	120	
45 Sc	1169249.90	0.57	1428201.80	81.9	70 -	120	
45 Sc	152341.31	6.33	189458.30	80.4	70 -	120	
45 Sc	4566200.00	0.21	5488810.50	83.2	70 -	120	
72 Ge	277499.66	0.97	346291.34	80.1	70 -	120	
72 Ge	103541.58	6.29	127768.43	81.0	70 -	120	
72 Ge	958888.06	0.46	1135874.50	84.4	70 -	120	
115 In	2197675.50	0.46	2601614.30	84.5	70 -	120	
115 In	1174148.90	6.44	1447050.60	81.1	70 -	120	
115 In	6549112.00	0.64	7726454.50	84.8	70 -	120	
159 Tb	8302611.50	0.24	10002252.00	83.0	70 -	120	
165 Ho	8009867.50	1.05	9695601.00	82.6	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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\12E06m00.B\135_CCB.D\135_CCB.D#
Date Acquired: May 7 2012 03:27 am
Operator: NBS
Sample Name: CCB 120506
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	148.00	0.12	
11 B	0.18	ug/l	44.63	15.00	
23 Na	4.75	ug/l	74.29	77.10	
24 Mg	0.55	ug/l	49.53	7.50	
27 Al	-0.06	ug/l	384.79	3.96	
39 K	29.33	ug/l	14.54	19.20	Fail
44 Ca	17.94	ug/l	5.08	90.00	
47 Ti	0.04	ug/l	146.86	0.78	
51 V	0.00	ug/l	250.11	0.21	
52 Cr	-0.01	ug/l	197.38	0.12	
55 Mn	-0.17	ug/l	8.47	0.18	
56 Fe	0.33	ug/l	7.70	40.80	
59 Co	0.00	ug/l	478.28	0.09	
60 Ni	0.01	ug/l	68.56	0.48	
63 Cu	-0.01	ug/l	27.54	0.39	
65 Cu	-0.01	ug/l	48.94	0.39	
66 Zn	0.03	ug/l	170.24	6.90	
75 As	0.02	ug/l	32.82	0.27	
78 Se	0.12	ug/l	31.03	0.30	
78 Se	0.58	ug/l	46.44	0.30	Fail
88 Sr	0.01	ug/l	104.18	0.03	
88 Sr	0.02	ug/l	35.90	0.03	
95 Mo	0.08	ug/l	28.86	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.00	ug/l	244.66	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	18266.00	0.06	
118 Sn	0.37	ug/l	27.48	#######	
118 Sn	0.05	ug/l	18.76	#######	
118 Sn	0.03	ug/l	31.30	0.30	
121 Sb	0.33	ug/l	6.51	0.03	Fail
137 Ba	0.01	ug/l	57.64	0.12	
205 Tl	0.01	ug/l	15.08	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.13	ug/l	1.22	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3719454.30	1.20	5002703.50	74.3	70 - 120	
45 Sc	1174018.00	0.56	1428201.80	82.2	70 - 120	
45 Sc	164135.48	1.26	189458.30	86.6	70 - 120	
45 Sc	4658791.00	0.67	5488810.50	84.9	70 - 120	
72 Ge	300148.25	1.01	346291.34	86.7	70 - 120	
72 Ge	114316.83	0.84	127768.43	89.5	70 - 120	
72 Ge	982015.81	1.09	1135874.50	86.5	70 - 120	
115 In	2252657.30	0.51	2601614.30	86.6	70 - 120	
115 In	1255550.50	1.35	1447050.60	86.8	70 - 120	
115 In	6682013.00	1.31	7726454.50	86.5	70 - 120	
159 Tb	8459088.00	1.42	10002252.00	84.6	70 - 120	
165 Ho	8146820.00	0.85	9695601.00	84.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

METALS
EPA SW846 - 6020
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	04/25/12	05/07/12	#602D-120425A-AY59236

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\114SMPL.D\114SMPL.D#
Date Acquired: May 7 2012 01:05 am
Operator: NBS
Sample Name: 120425A-3015-BLK
Misc Info: 120425A-3015
Vial Number: 3510
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	0.00	ug/l	-0.01	41.35	1000	
11 B	5.67	ug/l	6.29	9.58	1000	
23 Na	49.62	ug/l	55.13	8.40	25000	
24 Mg	2.33	ug/l	2.59	17.91	50000	
27 Al	3.33	ug/l	3.70	5.26	20000	
39 K	60.51	ug/l	67.23	11.75	20000	
44 Ca	41.23	ug/l	45.81	12.02	50000	
47 Ti	3.18	ug/l	3.54	11.11	1000	
51 V	0.01	ug/l	0.01	56.20	1000	
52 Cr	0.14	ug/l	0.15	5.04	1000	
55 Mn	-0.04	ug/l	-0.05	68.23	1000	
56 Fe	25.02	ug/l	27.80	10.42	20000	
59 Co	0.11	ug/l	0.12	13.92	1000	
60 Ni	0.12	ug/l	0.13	26.77	1000	
63 Cu	0.05	ug/l	0.05	5.07	1000	
65 Cu	0.06	ug/l	0.07	37.63	1000	
66 Zn	2.23	ug/l	2.48	0.20	1000	
75 As	0.25	ug/l	0.28	1.64	1000	
78 Se	0.24	ug/l	0.27	29.08	1000	
78 Se	2.24	ug/l	2.48	13.65	1000	
88 Sr	0.04	ug/l	0.04	10.79	1000	
88 Sr	0.02	ug/l	0.03	15.43	1000	
95 Mo	0.67	ug/l	0.74	5.98	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.00	ug/l	0.00	274.06	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.15	ug/l	0.17	15.42	1000	
118 Sn	2.31	ug/l	2.57	4.25	#######	
118 Sn	2.36	ug/l	2.62	5.77	#######	
118 Sn	2.02	ug/l	2.25	4.41	1000	
121 Sb	4.38	ug/l	4.87	7.12	1000	
137 Ba	0.02	ug/l	0.03	75.77	1000	
205 Tl	0.08	ug/l	0.09	2.75	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.13	ug/l	-0.14	5.65	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3515755.30	1.88	5002703.50	70.3	70 - 120	
45 Sc	1013013.00	1.27	1428201.80	70.9	70 - 120	
45 Sc	139023.03	1.21	189458.30	73.4	70 - 120	
45 Sc	4425202.50	1.04	5488810.50	80.6	70 - 120	
72 Ge	243271.64	1.02	346291.34	70.3	70 - 120	
72 Ge	95730.79	0.92	127768.43	74.9	70 - 120	
72 Ge	922989.63	0.32	1135874.50	81.3	70 - 120	
115 In	1866788.10	0.39	2601614.30	71.8	70 - 120	
115 In	1031513.50	1.32	1447050.60	71.3	70 - 120	
115 In	6281645.50	0.64	7726454.50	81.3	70 - 120	
159 Tb	7943024.50	1.56	10002252.00	79.4	70 - 120	
165 Ho	7615629.50	0.81	9695601.00	78.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

Laboratory Control Spike Recoveries

METALS DISSOLVED

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recov	DUP % Recov	RPD	RPD Max	QC Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group
6020	LEAD (PB) (DISSOLVED)	50.0	49.2	49.7	98.4	99.4	1.0	20	80-120	04/25/12	05/07/12	04/25/12	05/07/12	#602D-120425A-AY59236

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\115SMPL.D\115SMPL.D#
Date Acquired: May 7 2012 01:12 am
Operator: NBS
Sample Name: 120425A-3015-LCS
Misc Info: 120425A-3015
Vial Number: 3511
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	7.59	ug/l	8.43	0.58	1000	
11 B	42.17	ug/l	46.85	2.31	1000	
23 Na	3921.00	ug/l	4356.23	0.81	25000	
24 Mg	4146.00	ug/l	4606.21	1.89	50000	
27 Al	350.40	ug/l	389.29	2.18	20000	
39 K	919.00	ug/l	1021.01	1.88	20000	
44 Ca	4381.00	ug/l	4867.29	2.39	50000	
47 Ti	43.73	ug/l	48.58	3.79	1000	
51 V	43.69	ug/l	48.54	1.96	1000	
52 Cr	43.35	ug/l	48.16	2.28	1000	
55 Mn	44.52	ug/l	49.46	2.08	1000	
56 Fe	182.30	ug/l	202.54	1.57	20000	
59 Co	42.02	ug/l	46.68	1.94	1000	
60 Ni	42.30	ug/l	47.00	2.00	1000	
63 Cu	40.84	ug/l	45.37	2.39	1000	
65 Cu	40.82	ug/l	45.35	1.49	1000	
66 Zn	92.44	ug/l	102.70	1.26	1000	
75 As	41.29	ug/l	45.87	0.66	1000	
78 Se	37.05	ug/l	41.16	2.69	1000	
78 Se	38.71	ug/l	43.01	2.26	1000	
88 Sr	47.08	ug/l	52.31	0.09	1000	
88 Sr	45.82	ug/l	50.91	1.63	1000	
95 Mo	45.74	ug/l	50.82	1.37	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.54	ug/l	18.38	0.62	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.35	ug/l	9.28	0.76	1000	
118 Sn	51.04	ug/l	56.71	1.27	#######	
118 Sn	49.96	ug/l	55.51	1.42	#######	
118 Sn	49.61	ug/l	55.12	1.28	1000	
121 Sb	48.93	ug/l	54.36	1.18	1000	
137 Ba	44.51	ug/l	49.45	0.57	1000	
205 Tl	43.99	ug/l	48.87	0.75	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	44.32	ug/l	49.24	0.10	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3507917.00	1.49	5002703.50	70.1	70 - 120	
45 Sc	1030053.40	0.12	1428201.80	72.1	70 - 120	
45 Sc	143335.09	1.75	189458.30	75.7	70 - 120	
45 Sc	4435016.50	1.51	5488810.50	80.8	70 - 120	
72 Ge	242630.45	0.39	346291.34	70.1	70 - 120	
72 Ge	97096.62	1.42	127768.43	76.0	70 - 120	
72 Ge	922902.25	0.60	1135874.50	81.3	70 - 120	
115 In	1886989.60	1.55	2601614.30	72.5	70 - 120	
115 In	1033309.60	1.03	1447050.60	71.4	70 - 120	
115 In	6298906.50	1.23	7726454.50	81.5	70 - 120	
159 Tb	7992496.00	0.71	10002252.00	79.9	70 - 120	
165 Ho	7672455.50	1.21	9695601.00	79.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\116SMPL.D\116SMPL.D#
Date Acquired: May 7 2012 01:19 am
Operator: NBS
Sample Name: 120425A-3015-LCSD
Misc Info: 120425A-3015
Vial Number: 3512
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	7.85	ug/l	8.72	0.88	1000	
11 B	43.65	ug/l	48.50	1.44	1000	
23 Na	4090.00	ug/l	4543.99	1.96	25000	
24 Mg	4293.00	ug/l	4769.52	1.54	50000	
27 Al	361.70	ug/l	401.85	4.94	20000	
39 K	953.70	ug/l	1059.56	3.05	20000	
44 Ca	4522.00	ug/l	5023.94	1.25	50000	
47 Ti	47.52	ug/l	52.79	4.43	1000	
51 V	45.30	ug/l	50.33	1.70	1000	
52 Cr	44.81	ug/l	49.78	3.29	1000	
55 Mn	45.37	ug/l	50.41	1.85	1000	
56 Fe	185.50	ug/l	206.09	1.42	20000	
59 Co	43.38	ug/l	48.20	2.24	1000	
60 Ni	43.60	ug/l	48.44	1.91	1000	
63 Cu	42.30	ug/l	47.00	1.11	1000	
65 Cu	42.45	ug/l	47.16	2.84	1000	
66 Zn	87.37	ug/l	97.07	1.68	1000	
75 As	42.36	ug/l	47.06	1.76	1000	
78 Se	37.48	ug/l	41.64	0.90	1000	
78 Se	39.84	ug/l	44.26	2.35	1000	
88 Sr	47.41	ug/l	52.67	0.37	1000	
88 Sr	46.09	ug/l	51.21	1.42	1000	
95 Mo	46.14	ug/l	51.26	1.54	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.44	ug/l	18.26	1.21	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.22	ug/l	9.13	1.95	1000	
118 Sn	51.79	ug/l	57.54	0.50	#######	
118 Sn	51.22	ug/l	56.91	2.17	#######	
118 Sn	49.12	ug/l	54.57	1.82	1000	
121 Sb	49.23	ug/l	54.69	2.18	1000	
137 Ba	44.88	ug/l	49.86	1.88	1000	
205 Tl	44.88	ug/l	49.86	1.22	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	44.76	ug/l	49.73	0.85	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3443677.30	0.83	5002703.50	68.8	70 - 120	IS Fai NT
45 Sc	1003241.80	2.05	1428201.80	70.2	70 - 120	
45 Sc	138163.55	2.85	189458.30	72.9	70 - 120	
45 Sc	4375139.50	0.09	5488810.50	79.7	70 - 120	
72 Ge	239664.03	1.25	346291.34	69.2	70 - 120	IS Fai NT
72 Ge	95621.17	1.24	127768.43	74.8	70 - 120	
72 Ge	921213.44	1.86	1135874.50	81.1	70 - 120	
115 In	1840195.90	1.19	2601614.30	70.7	70 - 120	
115 In	1009084.20	1.69	1447050.60	69.7	70 - 120	IS Fai NT
115 In	6318881.00	1.31	7726454.50	81.8	70 - 120	
159 Tb	7982293.50	0.43	10002252.00	79.8	70 - 120	
165 Ho	7618731.50	0.94	9695601.00	78.6	70 - 120	

SNM 5.8.12

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed
3 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Fail

Matrix Spike Recoveries

METALS

APPL ID: **120425W-59236 MS - 166569**

Sample ID: AY59236

Client ID: ES074

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	50.0	ND	48.6	50.0	97.2	100	2.8	20	80-120	04/25/12	05/07/12	04/25/12	05/07/12	166569	AY59236

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E06m00.B\118SMPL.D\118SMPL.D#
Date Acquired: May 7 2012 01:32 am
Operator: NBS
Sample Name: AY59236W16 MS
Misc Info: 120425A-3015
Vial Number: 4102
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	7.78 ug/l	8.64	1.13	1000	
11 B	87.53 ug/l	97.25	0.63	1000	
23 Na	42250.00 ug/l	46939.75	1.16	25000	>Cal
24 Mg	22140.00 ug/l	24597.54	1.28	50000	
27 Al	365.90 ug/l	406.51	0.53	20000	
39 K	3502.00 ug/l	3890.72	1.34	20000	
44 Ca	24370.00 ug/l	27075.07	1.75	50000	
47 Ti	45.42 ug/l	50.46	5.76	1000	
51 V	58.27 ug/l	64.74	1.82	1000	
52 Cr	46.89 ug/l	52.09	2.35	1000	
55 Mn	45.55 ug/l	50.61	2.21	1000	
56 Fe	188.50 ug/l	209.42	1.59	20000	
59 Co	43.43 ug/l	48.25	1.23	1000	
60 Ni	43.61 ug/l	48.45	1.00	1000	
63 Cu	42.22 ug/l	46.91	1.09	1000	
65 Cu	41.83 ug/l	46.47	2.46	1000	
66 Zn	81.38 ug/l	90.41	1.03	1000	
75 As	40.93 ug/l	45.47	1.38	1000	
78 Se	35.54 ug/l	39.48	0.68	1000	
78 Se	37.76 ug/l	41.95	1.25	1000	
88 Sr	200.90 ug/l	223.20	1.18	1000	
88 Sr	195.00 ug/l	216.65	0.87	1000	
95 Mo	46.06 ug/l	51.17	1.16	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	16.59 ug/l	18.43	1.25	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	8.28 ug/l	9.20	2.38	1000	
118 Sn	50.72 ug/l	56.35	1.14	#######	
118 Sn	50.13 ug/l	55.69	1.61	#######	
118 Sn	49.83 ug/l	55.36	0.95	1000	
121 Sb	49.97 ug/l	55.52	0.30	1000	
137 Ba	52.98 ug/l	58.86	1.29	1000	
205 Tl	43.89 ug/l	48.76	0.84	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	43.82 ug/l	48.68	0.37	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3545767.00	0.59	5002703.50	70.9	70 - 120	
45 Sc	1022958.50	0.54	1428201.80	71.6	70 - 120	
45 Sc	134032.64	1.67	189458.30	70.7	70 - 120	
45 Sc	4435677.00	0.65	5488810.50	80.8	70 - 120	
72 Ge	236785.91	1.49	346291.34	68.4	70 - 120	IS Fai NT
72 Ge	91854.48	2.29	127768.43	71.9	70 - 120	
72 Ge	884910.50	0.88	1135874.50	77.9	70 - 120	
115 In	1839723.60	0.98	2601614.30	70.7	70 - 120	
115 In	1009021.10	0.47	1447050.60	69.7	70 - 120	IS Fai NT
115 In	6164115.50	0.44	7726454.50	79.8	70 - 120	
159 Tb	7955074.00	0.86	10002252.00	79.5	70 - 120	
165 Ho	7652199.00	0.98	9695601.00	78.9	70 - 120	

> SM 5.7.12

ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.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\12E06m00.B\119SMPL.D\119SMPL.D#
Date Acquired: May 7 2012 01:39 am
Operator: NBS
Sample Name: AY59236W16 MSD
Misc Info: 120425A-3015
Vial Number: 4103
Current Method: C:\ICPCHEM\1\METHODS\62A0506A.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0506A.C
Last Cal Update: May 06 2012 04:31 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	7.75	ug/l	8.61	0.40	1000	
11 B	87.59	ug/l	97.31	1.47	1000	
23 Na	41500.00	ug/l	46106.50	0.86	25000	>Cal
24 Mg	21860.00	ug/l	24286.46	0.22	50000	
27 Al	366.80	ug/l	407.51	1.28	20000	
39 K	3464.00	ug/l	3848.50	0.34	20000	
44 Ca	23960.00	ug/l	26619.56	0.46	50000	
47 Ti	44.76	ug/l	49.73	2.07	1000	
51 V	58.00	ug/l	64.44	0.42	1000	
52 Cr	46.69	ug/l	51.87	0.94	1000	
55 Mn	45.16	ug/l	50.17	0.37	1000	
56 Fe	186.20	ug/l	206.87	0.43	20000	
59 Co	42.65	ug/l	47.38	0.35	1000	
60 Ni	42.56	ug/l	47.28	0.95	1000	
63 Cu	41.44	ug/l	46.04	0.26	1000	
65 Cu	41.94	ug/l	46.60	0.84	1000	
66 Zn	82.16	ug/l	91.28	0.74	1000	
75 As	40.80	ug/l	45.33	0.33	1000	
78 Se	35.26	ug/l	39.17	1.53	1000	
78 Se	38.05	ug/l	42.27	0.73	1000	
88 Sr	204.10	ug/l	226.76	0.63	1000	
88 Sr	195.50	ug/l	217.20	1.22	1000	
95 Mo	46.29	ug/l	51.43	1.60	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.73	ug/l	18.59	2.07	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.49	ug/l	9.44	2.83	1000	
118 Sn	50.46	ug/l	56.06	1.24	#######	
118 Sn	50.65	ug/l	56.27	0.42	#######	
118 Sn	49.74	ug/l	55.26	0.25	1000	
121 Sb	50.43	ug/l	56.03	0.51	1000	
137 Ba	53.45	ug/l	59.38	2.12	1000	
205 Tl	43.78	ug/l	48.64	0.24	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	45.08	ug/l	50.08	0.55	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3482610.80	1.34	5002703.50	69.6	70 - 120	IS Fai NT
45 Sc	1027976.40	0.87	1428201.80	72.0	70 - 120	
45 Sc	135329.20	1.36	189458.30	71.4	70 - 120	
45 Sc	4419838.00	0.91	5488810.50	80.5	70 - 120	
72 Ge	235089.33	1.21	346291.34	67.9	70 - 120	IS Fai NT
72 Ge	92349.22	0.62	127768.43	72.3	70 - 120	
72 Ge	890665.75	0.39	1135874.50	78.4	70 - 120	
115 In	1857287.00	0.67	2601614.30	71.4	70 - 120	
115 In	991023.50	0.40	1447050.60	68.5	70 - 120	IS Fai NT
115 In	6121245.00	1.76	7726454.50	79.2	70 - 120	
159 Tb	7916078.50	0.12	10002252.00	79.1	70 - 120	
165 Ho	7578459.00	0.70	9695601.00	78.2	70 - 120	

SDM 5.8.12

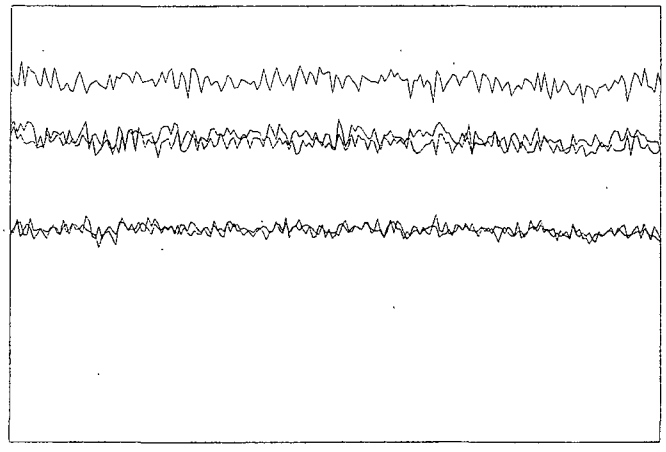
ISTD Ref File : C:\ICPCHEM\1\DATA\12E06m00.B\037CALB.D\037CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
3 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Fail

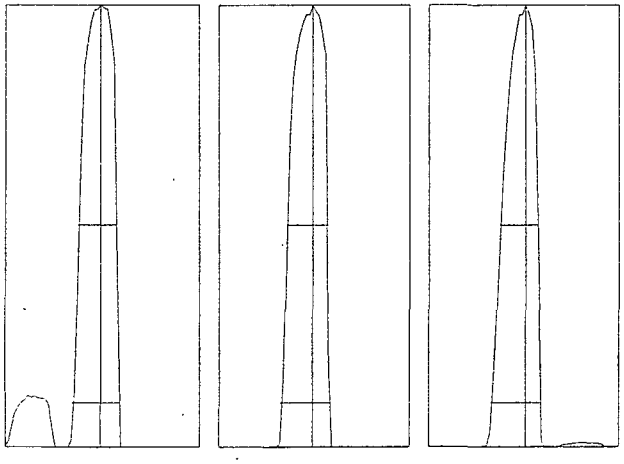
Tune Report

Tune File : NG_HMI.u
Comment : 120506



Integration Time:	0.1000 sec	
Sampling Period:	0.7200 sec	
n:	200	
Oxide:	156/140	1.159%
Doubly Charged:	70/140	1.645%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13420.0	13612.5	2.19	0.50
89	50,000	23052.0	24081.1	2.49	0.90
205	20,000	16211.0	16496.8	2.25	3.60
156/140	2	1.203%	1.160%	7.33	
70/140	5	1.749%	1.631%	6.73	
140	50,000	22870.0	24217.2	2.51	3.60
59	20,000	13232.0	13956.7	2.49	1.10



m/z:	7	89	205
Height:	13,486	24,272	16,467
Axis:	7.00	89.00	205.05
W-50%:	0.60	0.65	0.60
W-10%:	0.7500	0.800	0.800

Integration Time:	0.1000 sec
Acquisition Time:	22.7600 sec

Y axis : Linear

Generated : May 06, 2012 12:08:07
Printed : May 06, 2012 12:08:09

Tune Report

Tune File : NG_HMI.u
Comment : 120506

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.84 V	Extract 2	:	-145 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias-ce	:	-18 V	Axis Gain	:	1.0002
Torch-H	:	-0.2 mm	Omega Lens-ce	:	0.2 V	Axis Offset	:	-0.05
Torch-V	:	0 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.5 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.5 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1710 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1260 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	:	--- %

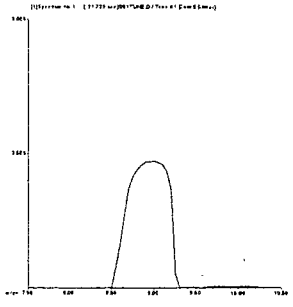
Generated : May 06, 2012 12:08:07
Printed : May 06, 2012 12:08:11

200.8 QC Tune Report

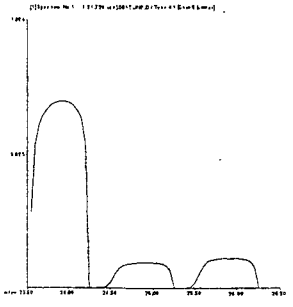
Data File: C:\ICPCHEM\1\DATA\12E06m00.B\001TUNE.D
Date Acquired: May 6 2012 12:23 pm
Acq. Method: TN200_8.M
Operator: NBS
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

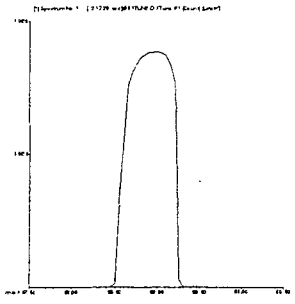
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	1346600	1319226	1353303	1352143	1353336	1354991	**1.07**	5.00	
24 Mg	4402460	4334595	4404182	4422165	4415721	4435638	**1.37**	5.00	
59 Co	5525479	5490213	5530687	5528385	5541918	5536195	**0.84**	5.00	
115 In	22552691	22335960	22523642	22590646	22697672	22615532	**0.65**	5.00	
208 Pb	3745432	3712751	3736697	3766770	3756352	3754591	**0.72**	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: 23.95
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



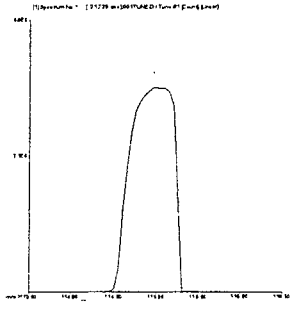
59 Co

Mass Calib.

Actual:	58.95		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



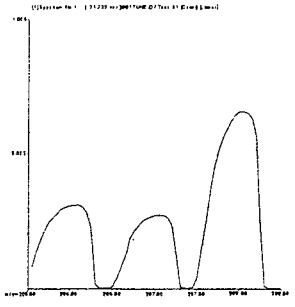
115 In

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:	208.05		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.70		
Required:	0.80		
Flag:			

Tune Result: Pass

Metals Standards Log Book # 35 Page # 001

NBS 05/06/12
6020/6020A
(A)

ICP-MS STANDARDS 6020/6020A/3015/3051A
Today's Date: 05/06/12
Expires: 05/13/12
Prep 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL Di Water
Lot #K23022
20mL HCL / 2000mL Di Water
Lot #K43032
Expires: 05/13/12

Internal Standard Mix: Prep 05/06/2012

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 05/06/12

Standard 3 05/13/12

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 05/06/12

Intermediate-Sb 05/13/12
100 uL of Sb STD (CPI 12A011-30298) in 10 mL of 1% HNO3/1.0% HCL
ICV-Sb 05/13/12
100 uL of Intermediate-Sb in 10 mL of 1% HNO3/1.0% HCL

NBS 05/06/12

Standard 2 05/13/12

Amount	STD	
500 uL	Standard 4	05/06/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 05/06/12

Standard 1 05/13/12

Amount	STD	
50 uL	Standard 4	05/06/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 05/06/12

ICP-MS ICV 05/13/12

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 05/06/12

ICSA Prep: 05/13/12

1 mL	ICSA	CPI	11C066-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 05/06/12

ICSAB Prep: 05/13/12

1mL	ICSA	CPI	11C066-28529
0.025mL	INT	O2Si	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 05/06/12

ICP-LDR 05/13/12

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 05/06/12

NBS 05/06/12

NBS 05/06/12

Internal Standard Concentration

Amt	STD	Element	Vendor	Lot#	Final Conc. in Std	Expires
500uL	1000 ug/mL	Lr	CPI	10L079-27839	5000 ug/L	06/10/12
500uL	1000 ug/mL	In	CPI	10J155-28574	5000 ug/L	09/25/12
500uL	1000 ug/mL	Ho	CPI	10A107-28576	5000 ug/L	09/25/12
500uL	1000 ug/mL	Tb	CPI	11B054-28575	5000 ug/L	09/25/12
500uL	1000 ug/mL	Sc	o2si	1024073-28527	5000 ug/L	08/18/12
500uL	1000 ug/mL	Ge	Environmental Express	1116011-29381	5000 ug/L	02/08/13

Prep:	05/06/12	NBS	Prep in -	1%HNO3/1.0%HCL:	Lot #KK23022/43032	in 100mL
Expires:	06/05/12					

Metals Digestion Worksheet

Method Name 3015 Digestion **Prep Method** M3015 **Set** 120425A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1034534-30503		
Spiked ID 2	LCSW LOT# 1034538-30505		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	04/25/12 12:30:00 PM
Witnessed By	LO	Date:	04/25/12 12:30:00 PM

Starting Temp:	20 c
Ending Temp:	170 c
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	Yes
End Date/Time	04/25/12 13:30

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	120425A Blk				45mL	50mL	04/25/12 12:30	equip: Venus
2	120425A LCS		90uL	1+2	45mL	50mL	04/25/12 12:30	equip: Venus
3	120425A LCSD		90uL	1+2	45mL	50mL	04/25/12 12:30	equip: Venus
4	AY59234	AY59234W12			45mL	50mL	04/25/12 12:30	equip: Venus Total
5	AY59234 D	AY59234W11			45mL	50mL	04/25/12 12:30	equip: Venus Dissolve
6	AY59236	AY59236W15			45mL	50mL	04/25/12 12:30	equip: Venus
7	AY59236 MS	AY59236W16	90uL		45mL	50mL	04/25/12 12:30	equip: Venus
8	AY59236 MSD	AY59236W16	90uL		45mL	50mL	04/25/12 12:30	equip: Venus
9	AY59237	AY59237W08			45mL	50mL	04/25/12 12:30	equip: Venus Total
10	AY59447	AY59447W17			45mL	50mL	04/25/12 12:30	equip: Venus Dissolve
11	AY59447 D	AY59447W16			45mL	50mL	04/25/12 12:30	equip: Venus
12	AY59674	AY59674W07			45mL	50mL	04/25/12 12:30	equip: Venus Total
13	AY59674 D	AY59674W06			45mL	50mL	04/25/12 12:30	equip: Venus Dissolve
14	AY59676	AY59676W10			45mL	50mL	04/25/12 12:30	equip: Venus Total
15	AY59676 D	AY59676W09			45mL	50mL	04/25/12 12:30	equip: Venus Dissolve
16	AY59718	AY59718W16			45mL	50mL	04/25/12 12:30	equip: Venus
17	AY59718 MS	AY59718W16	90uL	1+2	45mL	50mL	04/25/12 12:30	equip: Venus
18	AY59718 MSD	AY59718W16	90uL	1+2	45mL	50mL	04/25/12 12:30	equip: Venus

Solvent and Lot#
HNO3 J.T.B L02030 0182

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	EA
Date	4-25-12
Time	13:30
Moved to	Metals

Technician's Initials	
Scanned By	lo
Sample Preparation	nm
Digestion	nm
Bring up to volume	lo
Modified	05/04/12 11:56:41 AM

Reviewed By: NBS **Date:** 05/07/12

6020/200.8 Injection Log

Directory: K:\ICP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	06 May 2012	12:48	Calibration Blank		120506Arev	1.
2	06 May 2012	12:55	120506 Standard 1		120506Arev	1.
3	06 May 2012	13:03	120506 Standard 2		120506Arev	1.
4	06 May 2012	13:10	120506 Standard 3		120506Arev	1.
5	06 May 2012	13:17	120506 Standard 4		120506Arev	1.
6	06 May 2012	13:23	ICV 120506		120506Arev	1.
10	06 May 2012	13:57	ICB 120506		120506Arev	1.
11	06 May 2012	14:04	CCV 120506		120506Arev	1.
12	06 May 2012	14:11	CCB 120506		120506Arev	1.
13	06 May 2012	14:17	LDR-1000ppb 120506		120506Arev	1.
14	06 May 2012	14:30	ICSA 120506		120506Arev	1.
15	06 May 2012	14:37	ICSAB 120506		120506Arev	1.
16	06 May 2012	15:04	CCV 120506		120506Arev	1.
17	06 May 2012	15:18	CCB 120506		120506Arev	1.
85	07 May 2012	00:25	CCV 120506		120506Arev	1.
86	07 May 2012	00:38	CCB 120506		120506Arev	1.
90	07 May 2012	01:05	120425A-3015-BLK		120506Arev	1.
91	07 May 2012	01:12	120425A-3015-LCS		120506Arev	1.
92	07 May 2012	01:19	120425A-3015-LCSD		120506Arev	1.
93	07 May 2012	01:25	AY59236W15		120506Arev	1.
94	07 May 2012	01:32	AY59236W16 MS		120506Arev	1.
95	07 May 2012	01:39	AY59236W16 MSD		120506Arev	1.
96	07 May 2012	01:46	AY59236W15-A		120506Arev	1.
98	07 May 2012	01:59	CCV 120506		120506Arev	1.
99	07 May 2012	02:13	CCB 120506		120506Arev	1.
100	07 May 2012	02:19	AY59236W15-1/5		120506Arev	5.
101	07 May 2012	02:26	AY59237W08		120506Arev	1.
108	07 May 2012	03:13	CCV 120506		120506Arev	1.
109	07 May 2012	03:27	CCB 120506		120506Arev	1.

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

Certification Number: CA1312
NELAP Certification number: 05233CA
DoD-ELAP Certificate number: ADE-1410

Data Validatable Report

May 30, 2012

Environet, Inc.
650 Iwilei Road, #204
Honolulu, Hawaii 96817

Attn: Max Solmssen

Title: Report of Data: Case 67622

Project: LTM Red Hill/1022-024

Contract #: Prime contract # for DoD: N62742-08-D-1930, CTO HC21

Dear Mr. Solmssen:

Four water samples were received April 27, 2012, in good condition. Written results for the requested analyses are provided on this May 30, 2012.

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

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

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

Sharon Dehmlow, Laboratory Director
APPL, Inc.

SD/sdm
Enclosure
cc: File

Number of pages in this report: 473

Data Validation Package
for
LTM Red Hill / 1022-024
SDG 67622

TABLE OF CONTENTS

LABORATORY NAME: *APPL, Inc.*

SAMPLE RECEIPT INFORMATION

Sample receipt information

ARF: 67622

Project: Red Hill/1022-024

Sample Receipt Information:

The samples were received on April 27, 2012, at 3.5°C and 3.5°C. The samples were assigned Analytical Request Form (ARF) number 67622. The sample numbers and requested analyses were compared to the chain of custody and email communications. Container count discrepancies were noted and the client was notified. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES076	AY60080	WATER	04/26/12	04/27/12
ES077	AY60081	WATER	04/26/12	04/27/12
TRIP BLANK 1	AY60082	WATER	04/26/12	04/27/12
TRIP BLANK	AY60083	WATER	04/26/12	04/27/12

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

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

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

Measurement uncertainty can be reported upon request.

CASE NARRATIVE

EPA Method 8270D 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 ES077 was designated by the client for MS/MSD analysis. All spike criteria were met.

Surrogates

Surrogate recoveries are summarized on the forms 2&8. All surrogate recoveries were within the 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 8015B

Total Petroleum Hydrocarbons – Diesel

Sample Preparation:

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

Sample Analysis Information:

The samples were analyzed according to the method using an Agilent 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 ES077 was designated by the client for MS/MSD analysis. Diesel fuel recovered below the 61% lower control limit at 47% and 51.5%.

Surrogates:

The surrogate recoveries are summarized on the form 2 & 8. All surrogate recoveries were within the control limits.

Summary:

No other 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 holding times were met. The samples were received in unpreserved vials; they were analyzed within seven days of collection. Manual integrations were performed in accordance with APPL's SOP. All positive detections for gasoline were manually integrated due to the original integration not following the baseline. These positive detections were only found in the second-source, continuing calibration verification, LCS, MS/MSD, and initial calibration points. Gasoline was not detected in any other injections. 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 at or above its detection limit in the method blanks.

Spikes:

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

Sample ES077 was designated by the client for MS/MSD analysis. Gasoline recovered above the 125% upper control limit at 132% in the MS; 1,1,2,2-Tetrachloroethane recovered below the 65% lower control limit at 0% in the MS/MSD; Chloromethane recovered above the 125% upper control limit at 156% and 154%; and Trichloroethene recovered above the 125% upper control limit at 180% and 174%. All other spike recoveries were acceptable.

Surrogates:

Surrogate recoveries are summarized on the 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
Dissolved Lead

Digestion Information:

The water samples were filtered and preserved in the laboratory prior to being digested according to EPA method 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 Dilution Test (DT) were used for quality assurance. All LCS recoveries were within the acceptance limits.

Sample ES077 was designated by the client for QC analysis. All acceptance criteria were met in the MS/MSD, PDS, and DT.

Summary:

No analytical exception is noted.

Abbreviations and Flags

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

CHAIN OF CUSTODY,
ARF, CRF, AND
CLIENT COMMUNICATION

APPL - Analysis Request Form 67622

Client: **Environet, Inc.**
Address: **650 Iwilei Rd, #204**
Honolulu, HI 96817
Attn: **Max Solmssen**
Phone: **808-833-2225** Fax: **808-833-2231**
Job: **LTM Red Hill / 1022-024**
PO #: **1022-024**
Chain of Custody (Y/N): **Y** # **32754**
RAD Screen (Y/N): **Y** pH (Y/N): **Y**
Turn Around Type: **2 WEEKS**

Received by: **TBV**
Date Received: **04/27/12** Time: **10:30**
Delivered by: **FED EX**
Shuttle Custody Seals (Y/N): **N** Time Zone: **-10**
Chest Temp(s): **3.5°,3.5°C**
Color: **VOA,J-PURBLK,P-OGRN**
Samples Chilled until Placed in Refrig/Freezer: **Y**
Project Manager: **Cynthia Clark**
QC Report Type: **DVP4/ADRDOD/HI**
Due Date: **05/11/12**

Comments:
14 day TAT for Form 1s & 30 day TAT for full package.
OSDas@, MSolmssen@ & 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, DoD Forms, J flag to DL, U flag at LOD
EDD ADR A1/A3 (ADR 8.3a unchecked) to OSDas@ VDupra@ & MSolmssen@environetinc.com
metals 6020: report Lead with 0.5ug/L RL
TPH-Diesel only; VOCs: include gasoline by 8260B
Please see attached email for container count discrepancies
Metals lab filter & preserve for lead analysis

Sample Distribution:
GC: 2-$SIMHC12W, 2-$TPETD2
Extractions: 2-_SEP004S, 2-_SEP011
VOA: 4-$86RHBF
Metals: 2-$602D(Pb)
Other: 2-_M3015

Charges:

Invoice To:
same

	Client ID		APPL ID	Sampled		Analyses Requested
1.	ES076		AY60080W	04/26/12	10:30	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- Unpres.VOA
2.	ES077	MS/MSD	AY60081W	04/26/12	11:30	$602D(Pb), $86RHBF, $SIMHC12W, $TPETD2 -- Unpres.VOA
3.	TRIP BLANK 1		AY60082W	04/26/12	00:01	$86RHBF -- Unpreserved VOA
4.	TRIP BLANK		AY60083W	04/26/12	00:01	$86RHBF -- Unpreserved VOA

Note: All times, excluding sample collection times, are Pacific Time Zone unless noted otherwise. Collection times are in: -10 UTC

APPL Sample Receipt Form

ARF# **67622**

Sample	Container Type	Count	pH
AY60080	[2] PL 500mL	1	NA
	[15] VOAs - NP	4	NA
	[17] Amber Liter	4	NA
AY60081	[2] PL 500mL	1	NA
	[15] VOAs - NP	8	NA
	[17] Amber Liter	9	NA
AY60082	[15] VOAs - NP	3	NA
AY60083	[15] VOAs - NP	3	NA

Sample	Container Type	Count	pH

6 total
35

CHAIN OF CUSTODY RECORD

APPL Labs
908 North Temperance Ave.
Clovis, CA 93611

Phone: (559) 275-2175

Fax: (559) 275-4422

C.O.C. No 32754

Report to: PLEASE PRINT		Invoice to: PLEASE PRINT	
Company Name: Environet, Inc	Phone: 808-833-2225	Company Name: Environet, Inc	Phone: 808-833.2225
Address: 650 Iwilei RD, Suite 204 Honolulu, HI 96817	Fax: 808-833-2231	Address: 650 Iwilei Rd, Ste 24	Fax: 808-833-2231
Attn: Max Solmssen msolmssen@environetinc.com		Attn: A. P.	

Project Name/Number	Sampler (Print)
Red Hill/ 1022-024	Max Solmssen
Purchase Order Number	**Sampler (Signature)**
1022-024	Max K Solmssen

Analysis Requested/Method Number: VOCs (8260B), TPH-g (8260B), TPH-D (8015B), PAHs (8270C SIM), * Lead (6020A)

Date Shipped: 4/26/12
Carrier: FedEx
Waybill No.: 876412483357
Comments:
* Please filter lead Samples upon receipt. *

Sample Identification	Location	Date Collected	Time Collected	Matrix	Number of Containers	VOCs	TPH-g	TPH-D	PAHs	* Lead	Comments
ES076	Red Hill	4/26/12	10:30	water	8	X	X	X	X	X	
ES077 MS/MSD	↓	↓	11:30	↓	17	↓	↓	↓	↓	↓	Lead samples are unfiltered.
trip blank 1	↓	N/A	N/A	↓	3	↓	↓				
trip blank	↓	N/A	N/A	↓	↓	↓	↓				

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:
MS	4/26/12	12:40					
Relinquished by:	**Date**	**Time**	**Received by:**	**Relinquished by:**	**Date**	**Time**	**Received at lab by:**
					4/27/12	1030	

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

COOLER RECEIPT FORM

1) Project: RED HILL / 1022-024 Date Received: 4/27/12

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?_____ Date on seal? _____

5) Name on seal?_____

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

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

8) Shipping slip numbers: 1) MASTER 2) 8764 1243 3357 3)_____

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

YL 4/27/12 10) (YES) NO NA If cooler belongs to APPL, has it been logged into the ice chest database?

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

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

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

14) Serial number of certified NIST thermometer used: A39767 Correction factor: 0

15) Cooler temp(s): 1) 3.5°C 2) 3.5°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: AY60082W02-W03, AY60083W01-W03

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 > 12?

YL 11/29/12 37) (YES) NO NA Unpreserved VOA Vials received? _____

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

Lab notified if pH was not adequate: Metal filter and preserved QA 4-27-12

Deficiencies: COC listed 8 containers for Sample ES076 but received total of 9 containers. COC listed 17 containers for Sample ES077 but received total of 18 containers.

Signature of personnel receiving samples: _____ Second reviewer: _____

Signature of project manager notified: Renée Date and Time of notification: 4-27-12

Name of client notified:_____ Date and Time of notification:_____

Information given to client:_____

_____ by whom (Initials): _____

EPA METHOD 8270
Semivolatile Organic Compounds

APPL, INC.

EPA METHOD 8270
Semivolatile Organic Compounds
QC Summary

APPL, INC.

Method Blank
EPA 8270D SIM

Blank Name/QCG: **120430W-60081 - 166820**
Batch ID: #SIMHC-120430A

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	04/30/12	05/04/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	SURROGATE: 2-FLUORBIPHENY	57.5	50-110			%	04/30/12	05/04/12
BLANK	SURROGATE: NITROBENZENE-	68.0	40-110			%	04/30/12	05/04/12
BLANK	SURROGATE: TERPHENYL-D14 (	66.6	50-135			%	04/30/12	05/04/12

Quant Method:SIMB.M
Run #:0504L003
Instrument:Linus
Sequence:L120229
Initials:LF

Printed: 05/11/12 3:27:56 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/04/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120430A-BLK	Blank	50-110	57.5		40-110	68.0	
120430A-LCS	Lab Control Spike	50-110	57.0		40-110	50.5	
AY60080	ES076	50-110	66.4		40-110	55.7	
AY60081-MS	Matrix Spike	50-110	65.1		40-110	59.9	
AY60081-MSD	Matrix SpikeD	50-110	69.3		40-110	65.1	
AY60081	ES077	50-110	57.7		40-110	47.0	

Comments: Batch: #SIMHC-120430A

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/04/12

Matrix: WATER Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
120430A-BLK	Blank	50-135	66.6				
120430A-LCS	Lab Control Spike	50-135	63.5				
AY60080	ES076	50-135	60.2				
AY60081-MS	Matrix Spike	50-135	64.1				
AY60081-MSD	Matrix SpikeD	50-135	64.6				
AY60081	ES077	50-135	61.1				

Comments: Batch: #SIMHC-120430A

Laboratory Control Spike Recovery

EPA 8270D SIM

APPL ID: **120430W-60081 LCS - 166820**
Batch ID: #SIMHC-120430A

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	2.46	61.5	45-105
2-METHYLNAPHTHALENE	4.00	2.38	59.5	45-105
ACENAPHTHENE	4.00	2.72	68.0	45-110
ACENAPHTHYLENE	4.00	2.79	69.8	50-105
ANTHRACENE	4.00	3.22	80.5	55-110
BENZO(A)ANTHRACENE	4.00	3.64	91.0	55-110
BENZO(A)PYRENE	4.00	3.18	79.5	55-110
BENZO(B)FLUORANTHENE	4.00	3.18	79.5	45-120
BENZO(GHI)PERYLENE	4.00	3.45	86.3	40-125
BENZO(K)FLUORANTHENE	4.00	3.96	99.0	45-125
CHRYSENE	4.00	3.53	88.3	55-110
DIBENZ(A,H)ANTHRACENE	4.00	3.52	88.0	40-125
FLUORANTHENE	4.00	3.60	90.0	55-115
FLUORENE	4.00	3.11	77.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.86	96.5	45-125
NAPHTHALENE	4.00	2.12	53.0	40-100
PHENANTHRENE	4.00	3.16	79.0	50-115
PYRENE	4.00	3.59	89.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.14	57.0	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.01	50.5	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.27	63.5	50-135

Comments: _____

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/30/12
Analysis Date :	05/04/12
Instrument :	Linus
Run :	0504L004
Initials :	LF

Printed: 05/11/12 3:28:03 PM
APPL Standard LCS

Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **120430W-60081 MS - 166820**
Batch ID: #SIMHC-120430A
Sample ID: AY60081
Client ID: ES077

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	3.85	ND	2.62	3.09	68.1	80.3	45-105	16.5	25
2-METHYLNAPHTHALENE	3.85	ND	2.53	2.95	65.7	76.6	45-105	15.3	25
ACENAPHTHENE	3.85	ND	2.86	3.16	74.3	82.1	45-110	10.0	25
ACENAPHTHYLENE	3.85	ND	2.82	3.22	73.2	83.6	50-105	13.2	25
ANTHRACENE	3.85	ND	3.13	3.07	81.3	79.7	55-110	1.9	25
BENZO(A)ANTHRACENE	3.85	ND	3.58	3.68	93.0	95.6	55-110	2.8	25
BENZO(A)PYRENE	3.85	ND	3.10	3.27	80.5	84.9	55-110	5.3	25
BENZO(B)FLUORANTHENE	3.85	ND	3.25	3.45	84.4	89.6	45-120	6.0	25
BENZO(GHI)PERYLENE	3.85	ND	3.38	3.53	87.8	91.7	40-125	4.3	25
BENZO(K)FLUORANTHENE	3.85	ND	3.71	3.77	96.4	97.9	45-125	1.6	25
CHRYSENE	3.85	ND	3.34	3.20	86.8	83.1	55-110	4.3	25
DIBENZ(A,H)ANTHRACENE	3.85	ND	3.52	3.66	91.4	95.1	40-125	3.9	25
FLUORANTHENE	3.85	ND	3.60	3.75	93.5	97.4	55-115	4.1	25
FLUORENE	3.85	ND	3.17	3.42	82.3	88.8	50-110	7.6	25
INDENO(1,2,3-CD)PYRENE	3.85	ND	3.79	3.96	98.4	103	45-125	4.4	25
NAPHTHALENE	3.85	ND	2.20	2.54	57.1	66.0	40-100	14.3	25
PHENANTHRENE	3.85	ND	3.13	3.22	81.3	83.6	50-115	2.8	25
PYRENE	3.85	ND	3.50	3.59	90.9	93.2	50-130	2.5	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.92	NA	1.25	1.33	65.1	69.3	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.92	NA	1.15	1.25	59.9	65.1	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.92	NA	1.23	1.24	64.1	64.6	50-135		

Comments: _____

Primary	SPK	DUP
Quant Method :	SIMB.M	SIMB.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	05/04/12	05/04/12
Instrument :	Linus	Linus
Run :	0504L006	0504L007
Initials :	LF	

Printed: 05/11/12 3:28:07 PM
APPL MSD SCII

8270D-SIM

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/04/12

Matrix: WATER Instrument: Linus

Blank ID: 120430A-BLK Time Analyzed: 1423

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120430A-BLK	Blank	0504L003	05/04/12 1423
120430A-LCS	Lab Control Spike	0504L004	05/04/12 1449
AY60080	ES076	0504L005	05/04/12 1514
120430A-MS	Matrix Spike	0504L006	05/04/12 1539
120430A-MSD	Matrix SpikeD	0504L007	05/04/12 1604
AY60081	ES077	0504L008	05/04/12 1630

Comments: Batch: #SIMHC-120430A

Printed: 05/11/12 3:28:09 PM

Form 4, Blank Summary

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 67622
Matrix: Water
ID: SVTUNE 2-28-12

SDG No: 67622
Date Analyzed: 05/04/12
Instrument: Linus
Time Analyzed: 13:39

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	120430A BLK 1/1000	0504L003.D	05/04/12 14:23
2	Lab Control Spike	120430A LCS-1 1/1000	0504L004.D	05/04/12 14:49
3	ES076	AY60080W09 1/1040	0504L005.D	05/04/12 15:14
4	Matrix Spike	AY60081W16 MS-1 1/10	0504L006.D	05/04/12 15:39
5	Matrix Spike Dup	AY60081W18 MSD-1 1/1	0504L007.D	05/04/12 16:04
6	ES077	AY60081W12 1/1000	0504L008.D	05/04/12 16:30
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	41.2
68	0 - 2.05% of mass 69	0.0
70	0 - 2% of mass 69	0.5
127	40 - 60% of mass 198	47.5
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.3
275	10 - 30% of mass 198	28.5
365	1 - 100% of mass 198	3.2
441	0.01 - 100% of mass 443	74.6
442	40 - 150% of mass 198	81.6
443	17 - 23% of mass 442	21.1

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: SDG No.: 67622

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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	5710	6.12	2760	8.13	4470	9.86
	UPPER LIMIT	11420	6.62	5520	8.63	8940	10.36
	LOWER LIMIT	2855	5.62	1380	7.63	2235	9.36
	SAMPLE NO.						
01	120430A BLK 1/1000	5903	6.12	3125	8.12	5404	9.86
02	120430A LCS-1 1/1000	6270	6.12	3266	8.12	5533	9.86
03	AY60080W09 1/1040	6490	6.12	3251	8.12	5591	9.86
04	AY60081W16 MS-1 1/1(	6189	6.12	3424	8.12	5649	9.85
05	AY60081W18 MSD-1 1/	6499	6.12	3605	8.12	6175	9.85
06	AY60081W12 1/1000	6704	6.12	3369	8.12	5721	9.86
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

8A
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67622

Lab File ID (Standard): 0229L007.D Date Analyzed: 1 Mar 12 1:59

Instrument ID: Linus Time Analyzed: 1 Mar 12 1:59

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

		Chrysene-D12(IS)		Perylene-D12(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	6006	12.93	5058	14.54		
	UPPER LIMIT	12012	13.43	10116	15.04		
	LOWER LIMIT	3003	12.43	2529	14.04		
	SAMPLE NO.						
01	120430A BLK 1/1000	7552	12.94	6267	14.56		
02	120430A LCS-1 1/1000	7504	12.94	6549	14.56		
03	AY60080W09 1/1040	7830	12.94	6828	14.56		
04	AY60081W16 MS-1 1/1(	7730	12.94	6708	14.56		
05	AY60081W18 MSD-1 1/	8518	12.94	7297	14.56		
06	AY60081W12 1/1000	7582	12.94	6506	14.56		
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

EPA METHOD 8270
Semivolatile Organic Compounds
Sample Data

APPL, INC.

EPA 8270D SIM

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

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

Sample ID: ES076

Sample Collection Date: 04/26/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67622

APPL ID: AY60080

QCG: #SIMHC-120430A-166820

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	04/30/12	05/04/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	66.4	50-110			%	04/30/12	05/04/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	55.7	40-110			%	04/30/12	05/04/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	60.2	50-135			%	04/30/12	05/04/12

Quant Method: SIMB.M
Run #: 0504L005
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/11/12 3:28:15 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L005.D Vial: 5
Acq On : 4 May 12 15:14 Operator: LF
Sample : AY60080W09 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6490	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3251	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5591	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7830	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6828	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	710	1.07144 ppb	0.01
Spiked Amount 1.923			Recovery = 55.692%		
7) Surrogate Recovery (FBP)	7.36	172	2735	1.27638 ppb	-0.01
Spiked Amount 1.923			Recovery = 66.352%		
18) Surrogate Recovery (TPH)	11.73	244	2939	1.15666 ppb	0.00
Spiked Amount 1.923			Recovery = 60.164%		

Target Compounds Qvalue

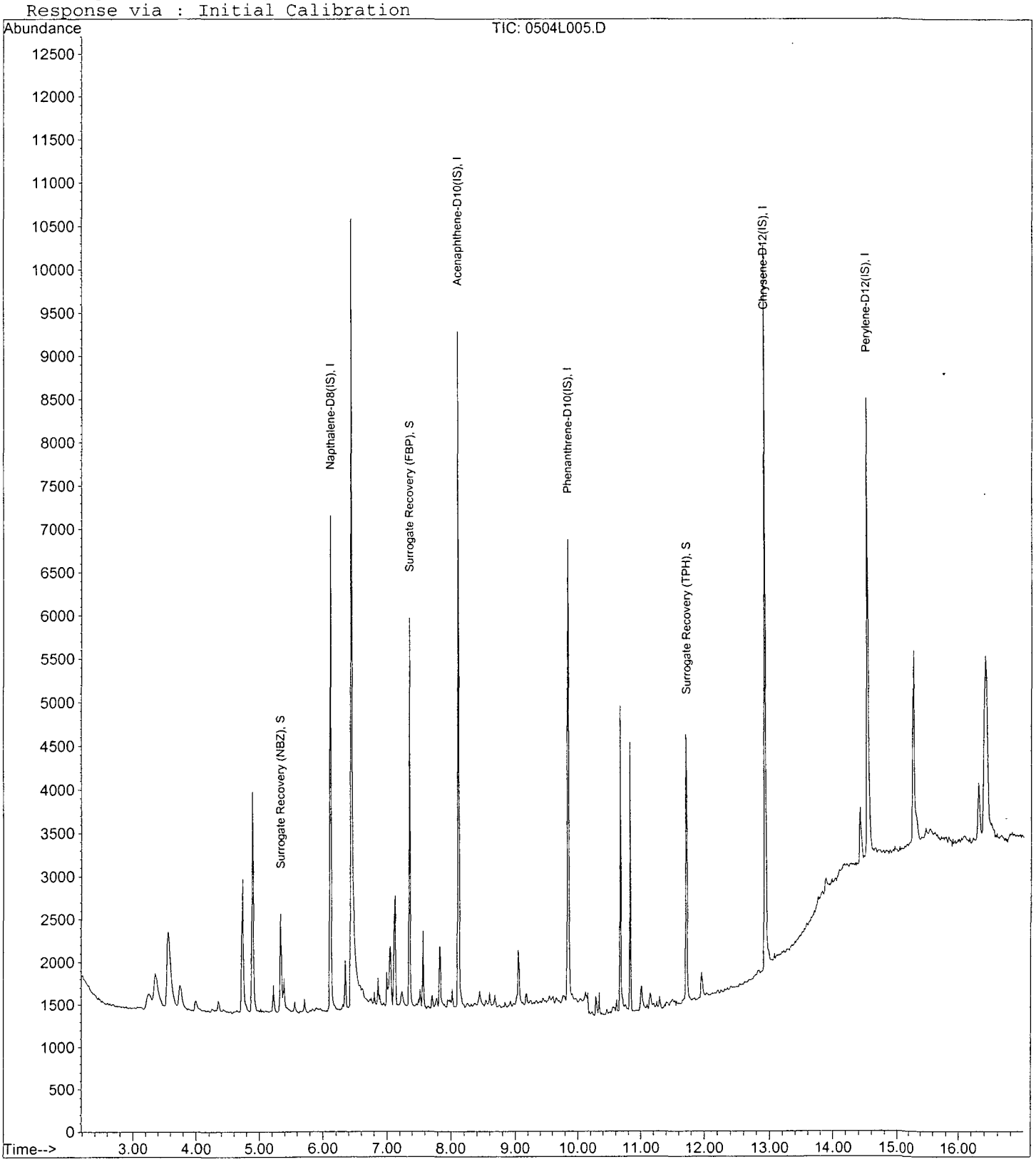
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L005.D Vial: 5
Acq On : 4 May 12 15:14 Operator: LF
Sample : AY60080W09 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
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: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES077
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60081
QCG: #SIMHC-120430A-166820

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	04/30/12	05/04/12
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	57.7	50-110			%	04/30/12	05/04/12
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	47.0	40-110			%	04/30/12	05/04/12
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	61.1	50-135			%	04/30/12	05/04/12

Quant Method: SIMB.M
Run #: 0504L008
Instrument: Linus
Sequence: L120229
Dilution Factor: 1
Initials: LF

Printed: 05/11/12 3:28:15 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L008.D Vial: 8
Acq On : 4 May 12 16:30 Operator: LF
Sample : AY60081W12 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:39 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6704	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3369	2.50000 ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5721	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7582	2.50000 ppb	0.01
22) Perylene-D12(IS)	14.56	264	6506	2.50000 ppb	0.02
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.33	82	618	0.93895 ppb	0.01
Spiked Amount 2.000			Recovery = 46.950%		
7) Surrogate Recovery (FBP)	7.36	172	2464	1.15402 ppb	-0.01
Spiked Amount 2.000			Recovery = 57.700%		
18) Surrogate Recovery (TPH)	11.72	244	2892	1.22241 ppb	-0.01
Spiked Amount 2.000			Recovery = 61.100%		

Target Compounds Qvalue

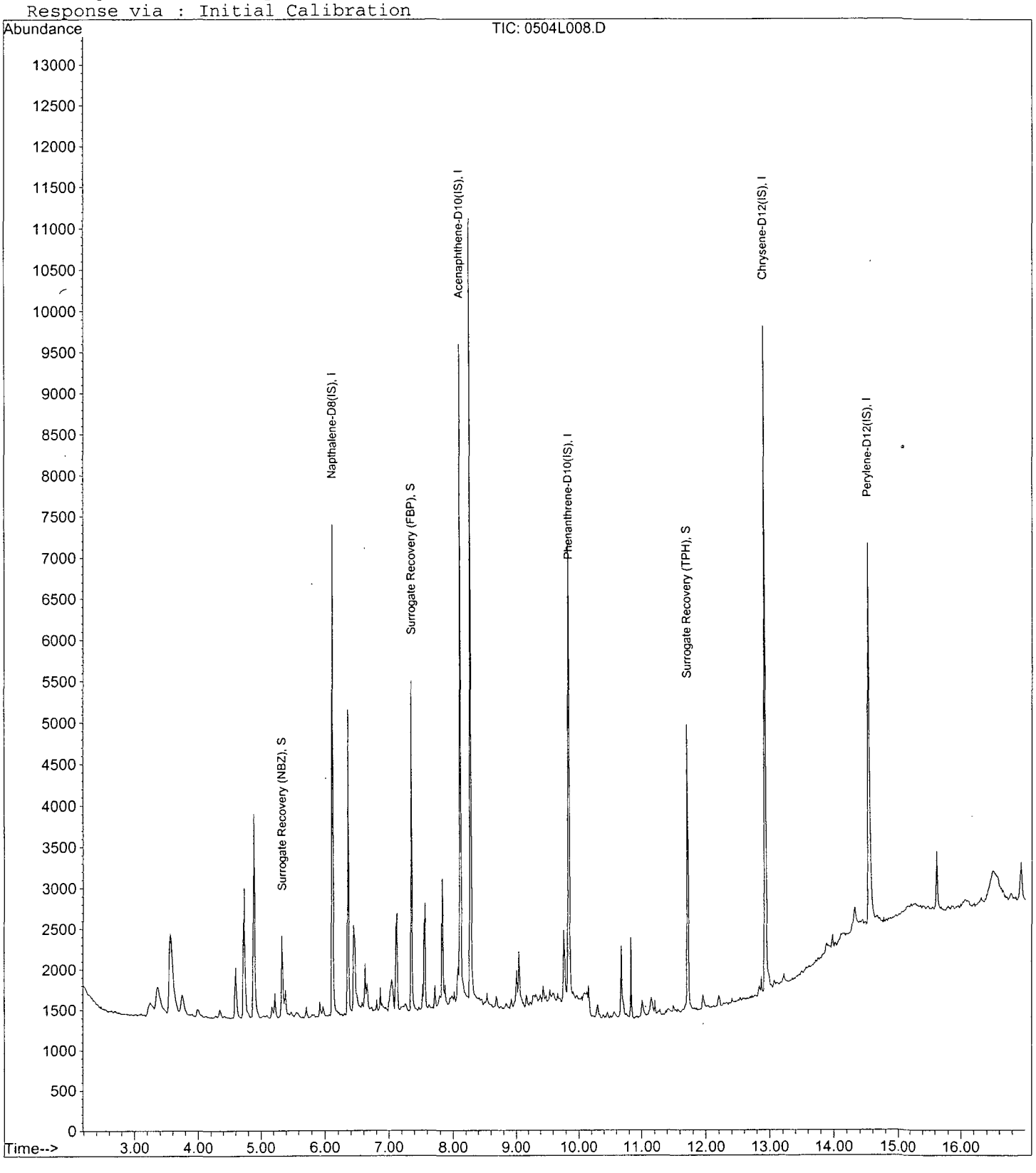
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L008.D Vial: 8
Acq On : 4 May 12 16:30 Operator: LF
Sample : AY60081W12 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:39 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



EPA METHOD 8270
Semivolatile Organic Compounds
Calibration Data

APPL, INC.

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 02/29/12
Matrix: Instrument: Linus Initials:

		Compound	0.1	0.2	0.5	1	5	10	50	100			Avg	%RSD		r
			0229L003 D	0229L004.D	0229L005 D	0229L006 D	0229L007 D	0229L008.D	0229L009 D	0229L010 D						
1	I	Napthalene-D8(IS)														
2	S	Surrogate Recovery (NBZ)	0.2482	0.2256	0.2462	0.2440	0.2171	0.2327	0.2670	0.2827			0.25	8.7	S	
3	TM	Naphthalene	1.506	1.608	1.562	1.574	1.325	1.287	1.126				1.4	13	TM	
4	TM	2-Methylnaphthalene	0.8962	0.9576	0.9479	0.9511	0.8263	0.8144	0.7431	0.7273			0.86	11	TM	
5	TM	1-Methylnaphthalene	0.8541	0.8647	0.8796	0.8802	0.7838	0.7780	0.6922	0.6698			0.80	10	TM	
6	I	Acenaphthene-D10(IS)														
7	S	Surrogate Recovery (FBP)	1.606	1.554	1 731	1.634	1.565	1.629	1.553	1.403			1.6	5.9	S	
8	TM	1,1'-Biphenyl	2.138	2.145	2.246	2.082	1.979	1.931	1.704	1.571			2.0	12	TM	
9	TM	Acenaphthylene	2.594	2.556	2.650	2.501	2.372	2.428	2.200	1.916			2.4	10	TM	
10	*TM	Acenaphthene	1.563	1.492	1.519	1.435	1.390	1.363	1.267	1.160			1.4	9.6	*TM	
11	TM	Fluorene	1.795	1.796	1.859	1.726	1.669	1.690	1.582	1.441			1.7	7.9	TM	
12	I	Phenanthrene-D10(IS)														
13	TM	Phenanthrene	1.714	1.615	1.639	1.576	1.495	1.438	1.290	1.104			1.5	14	TM	
14	TM	Anthracene	1.369	1.458	1.377	1.380	1.423	1.368	1.259	1.082			1.3	8.9	TM	
15	*TM	Fluoranthene	1.923	1.896	1.919	1.851	1.865	1.835	1.685	1.576			1.8	6.8	*TM	
16	I	Chrysene-D12(IS)														
17	TM	Pyrene	1.588	1.532	1.612	1.507	1.443	1.392	1.268	1.182			1.4	11	TM	
18	S	Surrogate Recovery (TPH)	0.8061	0.7442	0.8201	0.7874	0.8133	0.8544	0.7588	0.6563			0.78	7.8	S	
19	TM	Benz (a) anthracene	1.403	1.361	1.365	1.258	1.212	1.147	1.063	1.065			1.2	11	TM	
20	TM	Chrysene	1.320	1.398	1.410	1.346	1.276	1.241	1.056	0.9180			1.2	14	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	7.776	4.408	2.527	1.790	1.291	0.9457	0.9123	0.9049			2.6	94	TMQ	1.00
22	I	Perylene-D12(IS)														
23	TM	Benzo (b) fluoranthene	1.941	1.771	1.720	1.677	1.526	1.484	1.245	1.286			1.6	15	TM	
24	TM	Benzo (k) fluoranthene	1.461	1.239	1.438	1.321	1.364	1.390	1.356	0.9323			1.3	13	TM	
25	*TM	Benzo (a) pyrene	1.645	1.593	1.481	1.396	1.362	1.366	1.253	1.136			1.4	12	*TM	
26	TMQ	Dibenz (a,h) anthracene	2.398	1.892	1.442	1.259	1.148	1.160	1.097	1.028			1.4	34	TMQ	1.00
27	TMQ	Benzo (g,h,i) perylene	12.9	7.045	3.555	2.361	1.431	1.308	1.150	1.082			3.9	108	TMQ	1.00
28																
29																
30																
31																
32																
33																
34																
35																

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L003.D Vial: 3
Acq On : 1 Mar 12 00:20 Operator: LF
Sample : 0.1ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5942	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2911	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	5004	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6327	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.54	264	5577	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	59	0.11037	ppb		0.00
Spiked Amount 2.000			Recovery = 5.500%				
7) Surrogate Recovery (FBP)	7.37	172	187	0.10055	ppb		0.00
Spiked Amount 2.000			Recovery = 5.050%				
18) Surrogate Recovery (TPH)	11.73	244	204	0.09667	ppb		0.00
Spiked Amount 2.000			Recovery = 4.850%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	358	0.11535	ppb		98
4) 2-Methylnaphthalene	6.93	142	213	0.10924	ppb		96
5) 1-Methylnaphthalene	7.05	142	203	0.10937	ppb		99
8) 1,1'-Biphenyl	7.47	154	249	0.10939	ppb		99
9) Acenaphthylene	7.96	152	302	0.10805	ppb		98
10) Acenaphthene	8.17	154	182	0.11354	ppb		93
11) Fluorene	8.76	166	209	0.10687	ppb		91
13) Phenanthrene	9.88	178	343	0.11685	ppb		98
14) Anthracene	9.94	178	274	0.09809	ppb		96
15) Fluoranthene	11.26	202	385	0.10399	ppb		97
17) Pyrene	11.51	202	402	0.11205	ppb		94
19) Benz (a) anthracene	12.91	228	355	0.11892	ppb		98
20) Chrysene	12.96	228	334	0.10484	ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	1968	0.69525	ppb	#	96
23) Benzo (b) fluoranthene	14.09	252	433	0.12898	ppb	#	94
24) Benzo (k) fluoranthene	14.13	252	326	0.10614	ppb		98
25) Benzo (a) pyrene	14.47	252	367	0.12057	ppb		99
26) Dibenz (a,h) anthracene	16.04	278	535	0.20789	ppb		98
27) Benzo (g,h,i) perylene	16.41	276	2880	0.94271	ppb	#	91

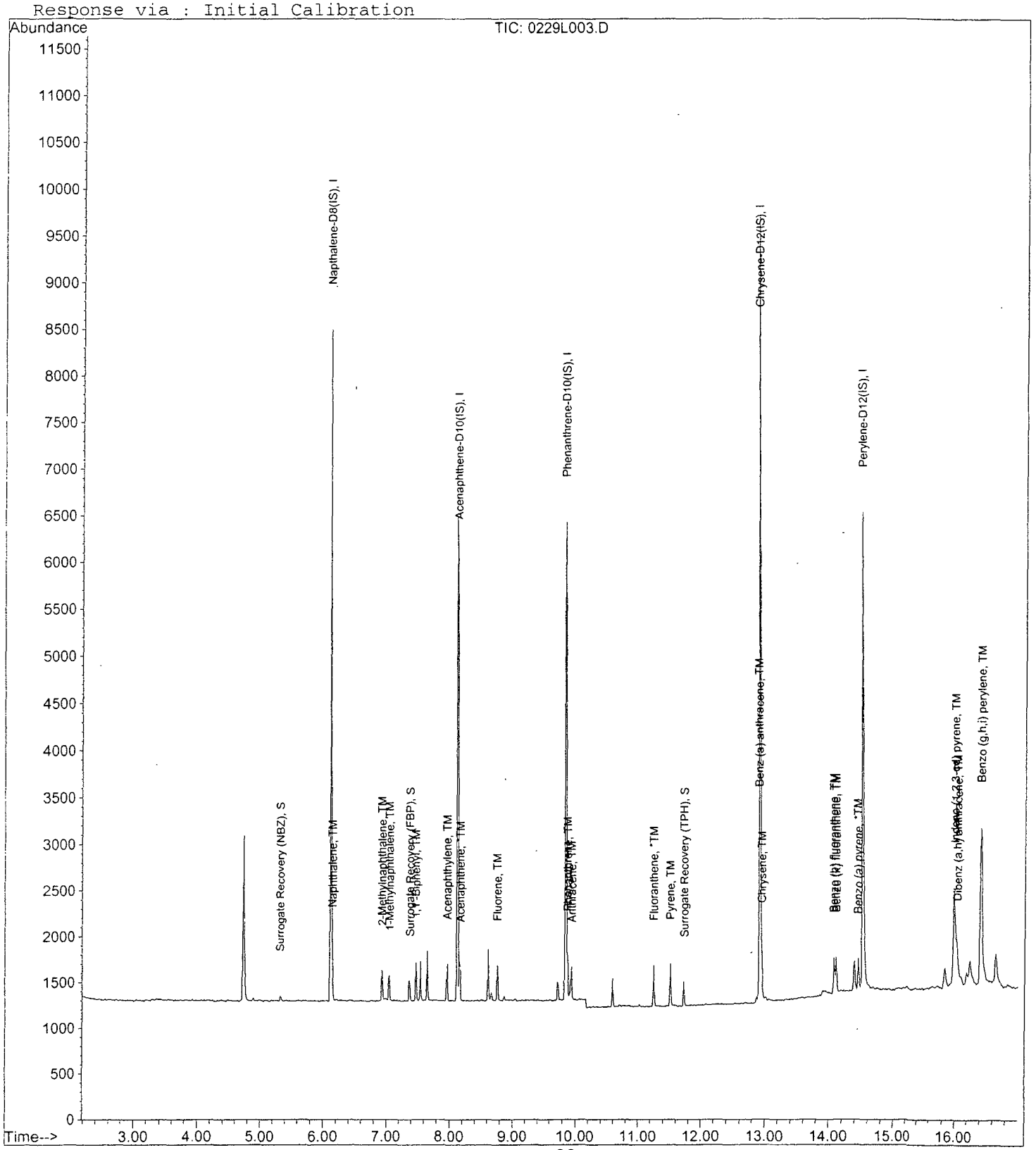
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L003.D Vial: 3
Acq On : 1 Mar 12 00:20 Operator: LF
Sample : 0.1ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L004.D Vial: 4
Acq On : 1 Mar 12 00:44 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5652	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4715	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6080	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.53	264	5399	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	102	0.20060	ppb		0.00
Spiked Amount 2.000			Recovery = 10.050%				
7) Surrogate Recovery (FBP)	7.37	172	352	0.19455	ppb		0.00
Spiked Amount 2.000			Recovery = 9.750%				
18) Surrogate Recovery (TPH)	11.73	244	362	0.17851	ppb		0.00
Spiked Amount 2.000			Recovery = 8.950%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	727	0.24627	ppb		97
4) 2-Methylnaphthalene	6.93	142	433	0.23347	ppb		94
5) 1-Methylnaphthalene	7.05	142	391	0.22147	ppb		97
8) 1,1'-Biphenyl	7.48	154	486	0.21945	ppb	#	84
9) Acenaphthylene	7.96	152	579	0.21294	ppb		100
10) Acenaphthene	8.17	154	338	0.21674	ppb		98
11) Fluorene	8.76	166	407	0.21392	ppb		95
13) Phenanthrene	9.88	178	609	0.22018	ppb		99
14) Anthracene	9.94	178	550	0.20897	ppb		97
15) Fluoranthene	11.26	202	715	0.20496	ppb		97
17) Pyrene	11.51	202	745	0.21610	ppb		97
19) Benz (a) anthracene	12.91	228	662	0.23077	ppb		98
20) Chrysene	12.96	228	680	0.22213	ppb		98
21) Indeno (1,2,3-cd) pyrene	15.99	276	2144	0.78820	ppb	#	93
23) Benzo (b) fluoranthene	14.09	252	765	0.23539	ppb		96
24) Benzo (k) fluoranthene	14.13	252	535	0.17993	ppb	#	96
25) Benzo (a) pyrene	14.46	252	688	0.23348	ppb		98
26) Dibenz (a,h) anthracene	16.03	278	817	0.32794	ppb		96
27) Benzo (g,h,i) perylene	16.41	276	3043	1.02890	ppb		95

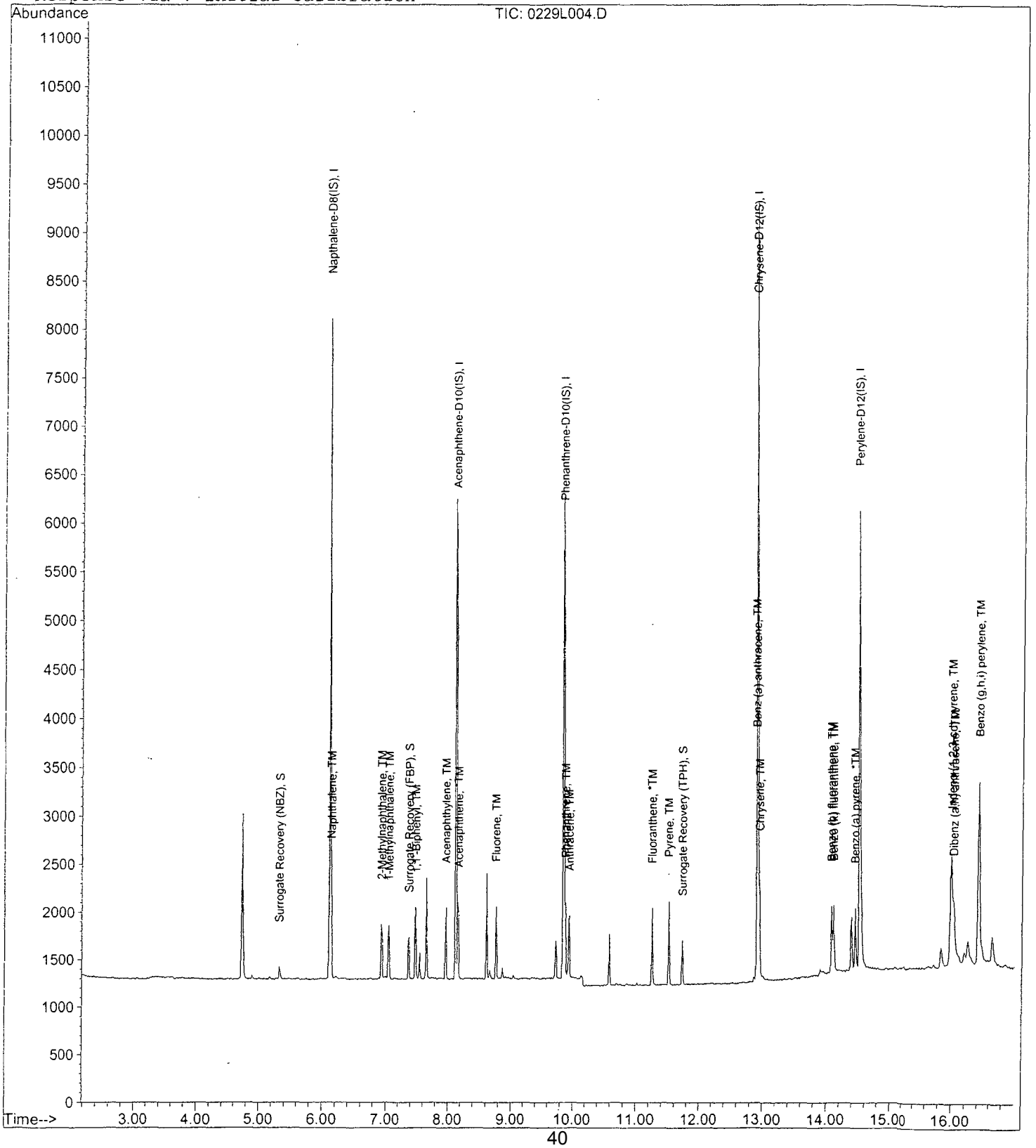
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L004.D Vial: 4
Acq On : 1 Mar 12 00:44 Operator: LF
Sample : 0.2ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L005.D Vial: 5
Acq On : 1 Mar 12 1:09 Operator: LF
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5565	2.50000 ppb	0.00
6) Acenaphthene-D10(IS)	8.13	164	2781	2.50000 ppb	0.00
12) Phenanthrene-D10(IS)	9.86	188	4739	2.50000 ppb	0.00
16) Chrysene-D12(IS)	12.92	240	5969	2.50000 ppb	0.00
22) Perylene-D12(IS)	14.54	264	5253	2.50000 ppb	0.00
System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	5.32	82	274	0.54730 ppb	0.00
Spiked Amount 2.000			Recovery	= 27.350%	
7) Surrogate Recovery (FBP)	7.37	172	963	0.54201 ppb	0.00
Spiked Amount 2.000			Recovery	= 27.100%	
18) Surrogate Recovery (TPH)	11.73	244	979	0.49173 ppb	0.00
Spiked Amount 2.000			Recovery	= 24.600%	
Target Compounds					Qvalue
3) Naphthalene	6.14	128	1738	0.59795 ppb	99
4) 2-Methylnaphthalene	6.93	142	1055	0.57775 ppb	98
5) 1-Methylnaphthalene	7.05	142	979	0.56319 ppb	97
8) 1,1'-Biphenyl	7.47	154	1249	0.57433 ppb	98
9) Acenaphthylene	7.96	152	1474	0.55203 ppb	99
10) Acenaphthene	8.16	154	845	0.55178 ppb	83
11) Fluorene	8.76	166	1034	0.55344 ppb	100
13) Phenanthrene	9.88	178	1553	0.55864 ppb	99
14) Anthracene	9.94	178	1305	0.49333 ppb	99
15) Fluoranthene	11.26	202	1819	0.51879 ppb	98
17) Pyrene	11.51	202	1925	0.56875 ppb	95
19) Benz (a) anthracene	12.91	228	1629	0.57842 ppb	99
20) Chrysene	12.96	228	1683	0.55999 ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	3017	1.12977 ppb	98
23) Benzo (b) fluoranthene	14.09	252	1807	0.57147 ppb	96
24) Benzo (k) fluoranthene	14.13	252	1511	0.52230 ppb	98
25) Benzo (a) pyrene	14.47	252	1556	0.54272 ppb	99
26) Dibenz (a,h) anthracene	16.04	278	1515	0.62501 ppb	98
27) Benzo (g,h,i) perylene	16.41	276	3735	1.29798 ppb	94

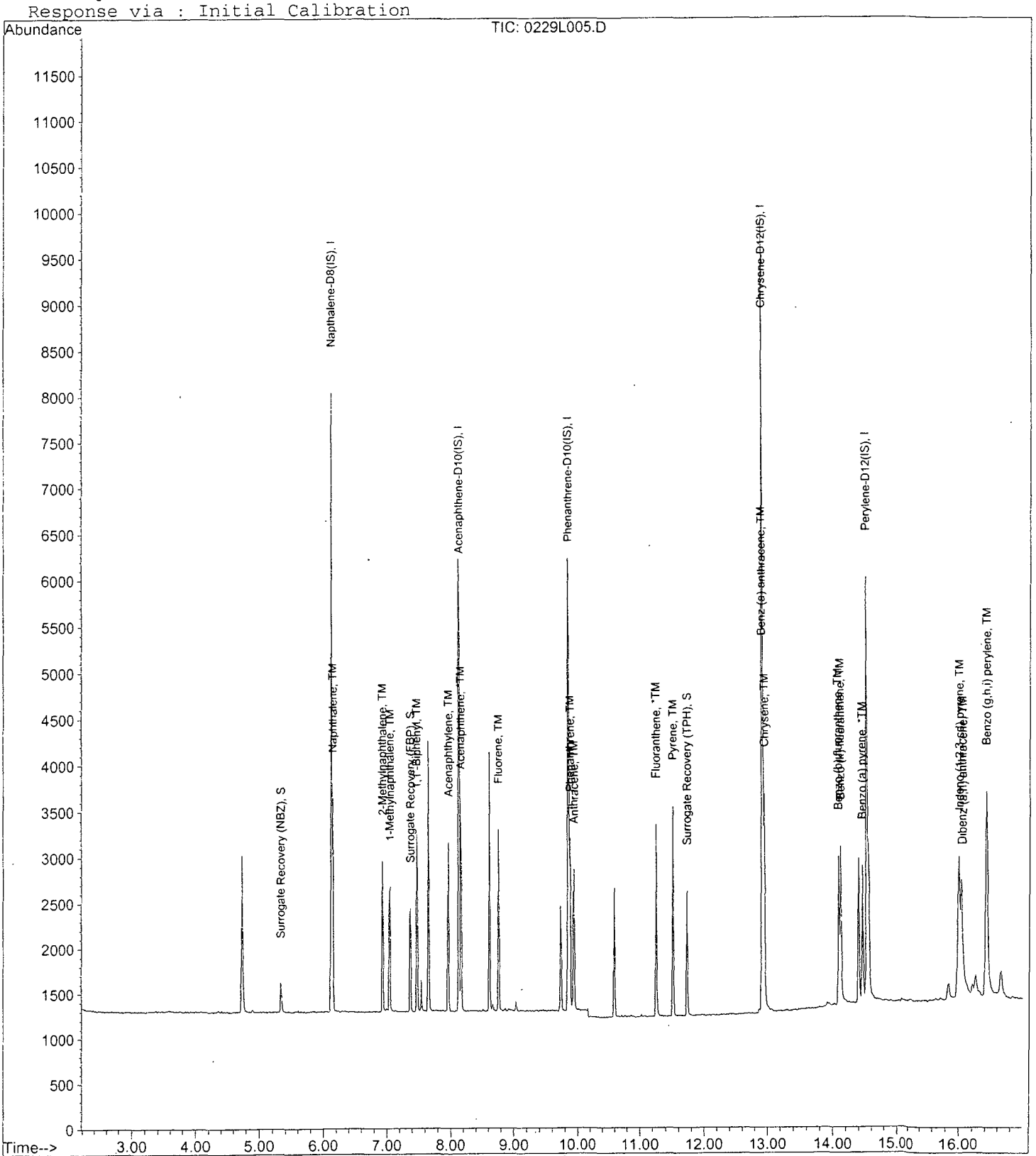
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L005.D Vial: 5
Acq On : 1 Mar 12 1:09 Operator: LF
Sample : 0.5ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L006.D Vial: 6
Acq On : 1 Mar 12 1:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5215	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2733	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4543	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	5902	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5053	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	509	1.08494 ppb		0.00
Spiked Amount 2.000			Recovery = 54.250%			
7) Surrogate Recovery (FBP)	7.37	172	1786	1.02288 ppb		0.00
Spiked Amount 2.000			Recovery = 51.150%			
18) Surrogate Recovery (TPH)	11.73	244	1859	0.94434 ppb		0.00
Spiked Amount 2.000			Recovery = 47.200%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	3283	1.20530 ppb		99
4) 2-Methylnaphthalene	6.93	142	1984	1.15942 ppb		98
5) 1-Methylnaphthalene	7.05	142	1836	1.12708 ppb		99
8) 1,1'-Biphenyl	7.48	154	2276	1.06496 ppb	#	84
9) Acenaphthylene	7.96	152	2734	1.04189 ppb		99
10) Acenaphthene	8.16	154	1569	1.04254 ppb	#	81
11) Fluorene	8.76	166	1887	1.02774 ppb		97
13) Phenanthrene	9.88	178	2864	1.07467 ppb		99
14) Anthracene	9.94	178	2508	0.98900 ppb		99
15) Fluoranthene	11.26	202	3364	1.00084 ppb		98
17) Pyrene	11.51	202	3558	1.06316 ppb		94
19) Benz (a) anthracene	12.91	228	2969	1.06618 ppb		100
20) Chrysene	12.96	228	3178	1.06942 ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	4226	1.60046 ppb	#	98
23) Benzo (b) fluoranthene	14.09	252	3390	1.11454 ppb		98
24) Benzo (k) fluoranthene	14.13	252	2669	0.95910 ppb		99
25) Benzo (a) pyrene	14.47	252	2821	1.02288 ppb		97
26) Dibenz (a,h) anthracene	16.04	278	2545	1.09150 ppb		99
27) Benzo (g,h,i) perylene	16.41	276	4772	1.72400 ppb		94

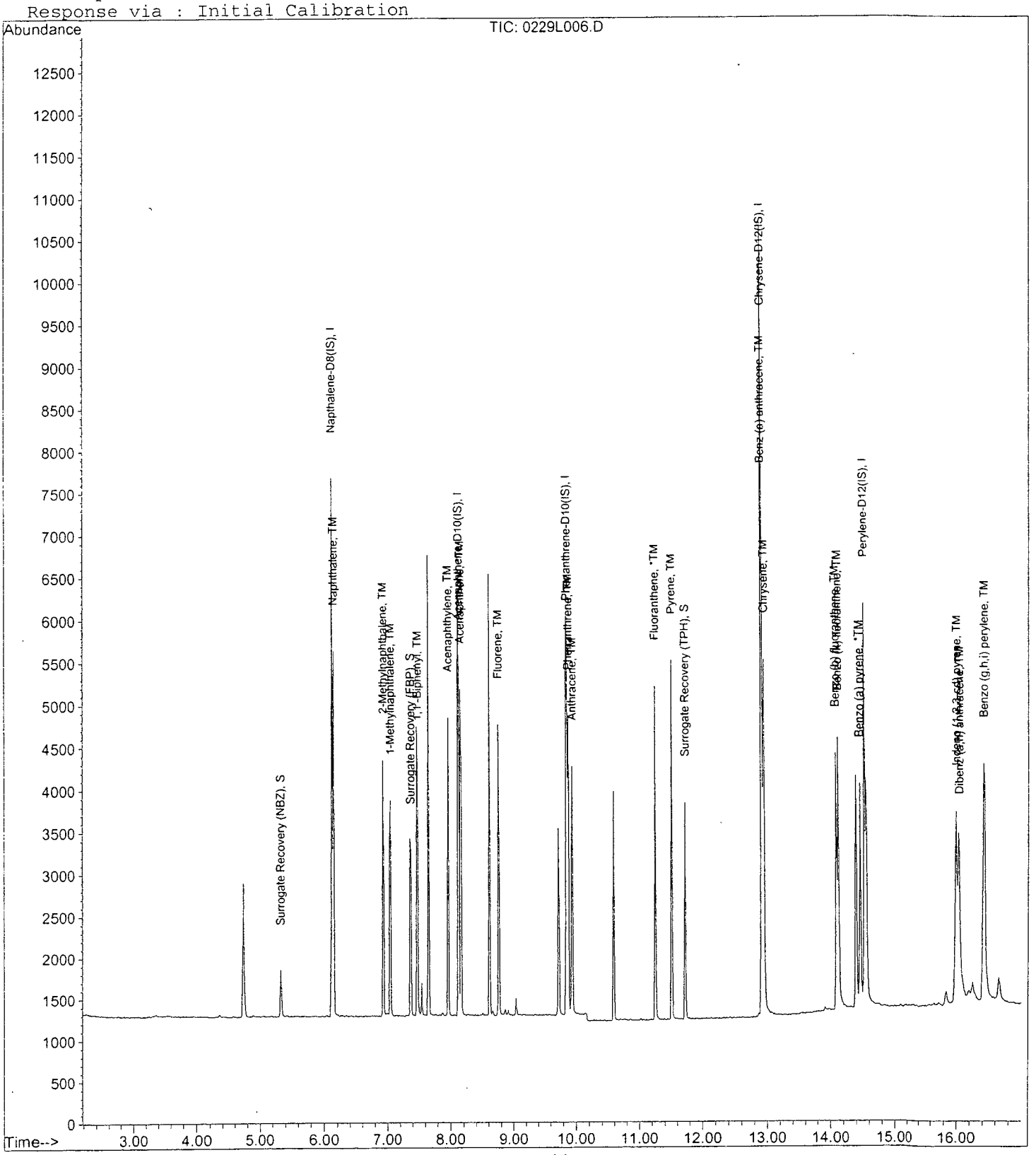
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L006.D Vial: 6
Acq On : 1 Mar 12 1:34 Operator: LF
Sample : 1.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L007.D Vial: 7
Acq On : 1 Mar 12 1:59 Operator: LF
Sample : 5.0ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5710	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2760	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4470	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.93	240	6006	2.50000 ppb		0.00
22) Perylene-D12(IS)	14.54	264	5058	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	2479	4.82594 ppb		0.00
Spiked Amount 2.000			Recovery	= 241.300%		
7) Surrogate Recovery (FBP)	7.37	172	8641	4.90046 ppb		0.00
Spiked Amount 2.000			Recovery	= 245.000%		
18) Surrogate Recovery (TPH)	11.73	244	9769	4.87655 ppb		0.00
Spiked Amount 2.000			Recovery	= 243.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15130	5.07319 ppb		100
4) 2-Methylnaphthalene	6.93	142	9436	5.03624 ppb		100
5) 1-Methylnaphthalene	7.05	142	8951	5.01847 ppb		100
8) 1,1'-Biphenyl	7.47	154	10923	5.06097 ppb		100
9) Acenaphthylene	7.96	152	13095	4.94152 ppb		100
10) Acenaphthene	8.17	154	7674	5.04922 ppb		100
11) Fluorene	8.76	166	9212	4.96816 ppb		100
13) Phenanthrene	9.88	178	13364	5.09651 ppb		100
14) Anthracene	9.94	178	12720	5.09789 ppb		100
15) Fluoranthene	11.26	202	16671	5.04085 ppb		100
17) Pyrene	11.51	202	17331	5.08899 ppb		100
19) Benz (a) anthracene	12.91	228	14556	5.13662 ppb		100
20) Chrysene	12.96	228	15329	5.06901 ppb		100
21) Indeno (1,2,3-cd) pyrene	15.99	276	15511	5.77257 ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	15432	5.06859 ppb		100
24) Benzo (k) fluoranthene	14.13	252	13796	4.95267 ppb		100
25) Benzo (a) pyrene	14.47	252	13783	4.99271 ppb		100
26) Dibenz (a,h) anthracene	16.04	278	11610	4.97436 ppb		100
27) Benzo (g,h,i) perylene	16.43	276	14480	5.22607 ppb		100

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

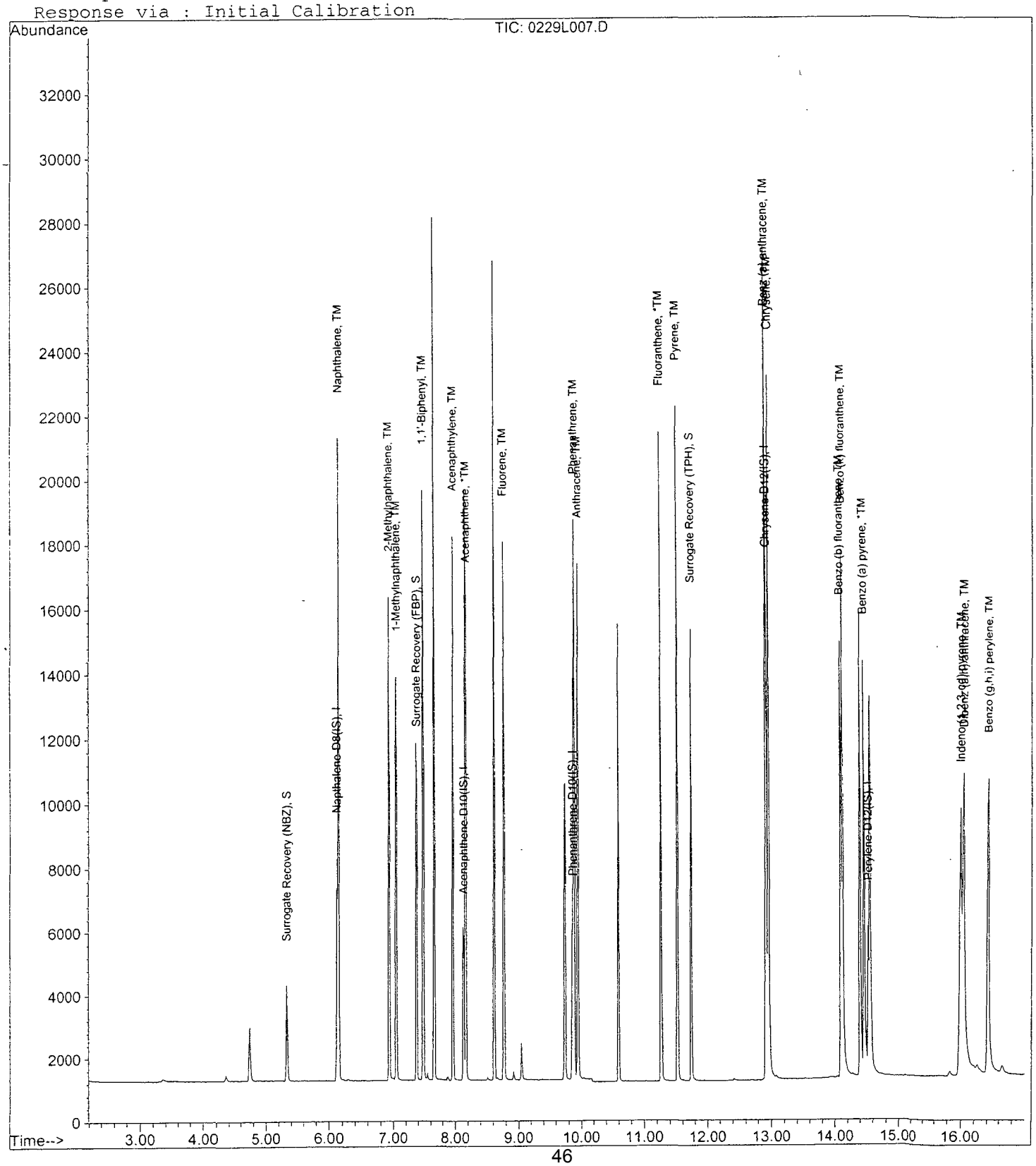
Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L007.D
Acq On : 1 Mar 12 1:59
Sample : 5.0ug/ml PAH
Misc :

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

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L008.D Vial: 8
Acq On : 1 Mar 12 2:24 Operator: LF
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5922	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2882	2.50000	ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4817	2.50000	ppb		0.00
16) Chrysene-D12(IS)	12.92	240	6477	2.50000	ppb		0.00
22) Perylene-D12(IS)	14.53	264	5338	2.50000	ppb		0.00
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.32	82	5513	10.34812	ppb		0.00
Spiked Amount 2.000			Recovery = 517.400%				
7) Surrogate Recovery (FBP)	7.37	172	18779	10.19907	ppb		0.00
Spiked Amount 2.000			Recovery = 509.950%				
18) Surrogate Recovery (TPH)	11.73	244	22137	10.24690	ppb		0.00
Spiked Amount 2.000			Recovery = 512.350%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	30478	9.85363	ppb		100
4) 2-Methylnaphthalene	6.93	142	19291	9.92752	ppb		99
5) 1-Methylnaphthalene	7.05	142	18430	9.96306	ppb		100
8) 1,1'-Biphenyl	7.48	154	22262	9.87805	ppb	#	83
9) Acenaphthylene	7.96	152	27995	10.11697	ppb		100
10) Acenaphthene	8.17	154	15714	9.90157	ppb		99
11) Fluorene	8.76	166	19485	10.06368	ppb		98
13) Phenanthrene	9.88	178	27712	9.80698	ppb		99
14) Anthracene	9.94	178	26362	9.80421	ppb		100
15) Fluoranthene	11.26	202	35348	9.91831	ppb		100
17) Pyrene	11.51	202	36073	9.82203	ppb		97
19) Benz (a) anthracene	12.91	228	29725	9.72677	ppb		99
20) Chrysene	12.96	228	32162	9.86198	ppb		99
21) Indeno (1,2,3-cd) pyrene	15.99	276	24500	8.45487	ppb	#	100
23) Benzo (b) fluoranthene	14.09	252	31691	9.86282	ppb		99
24) Benzo (k) fluoranthene	14.13	252	29676	10.09466	ppb		99
25) Benzo (a) pyrene	14.46	252	29177	10.01459	ppb		100
26) Dibenz (a,h) anthracene	16.04	278	24758	10.05127	ppb		99
27) Benzo (g,h,i) perylene	16.43	276	27919	9.54787	ppb		100

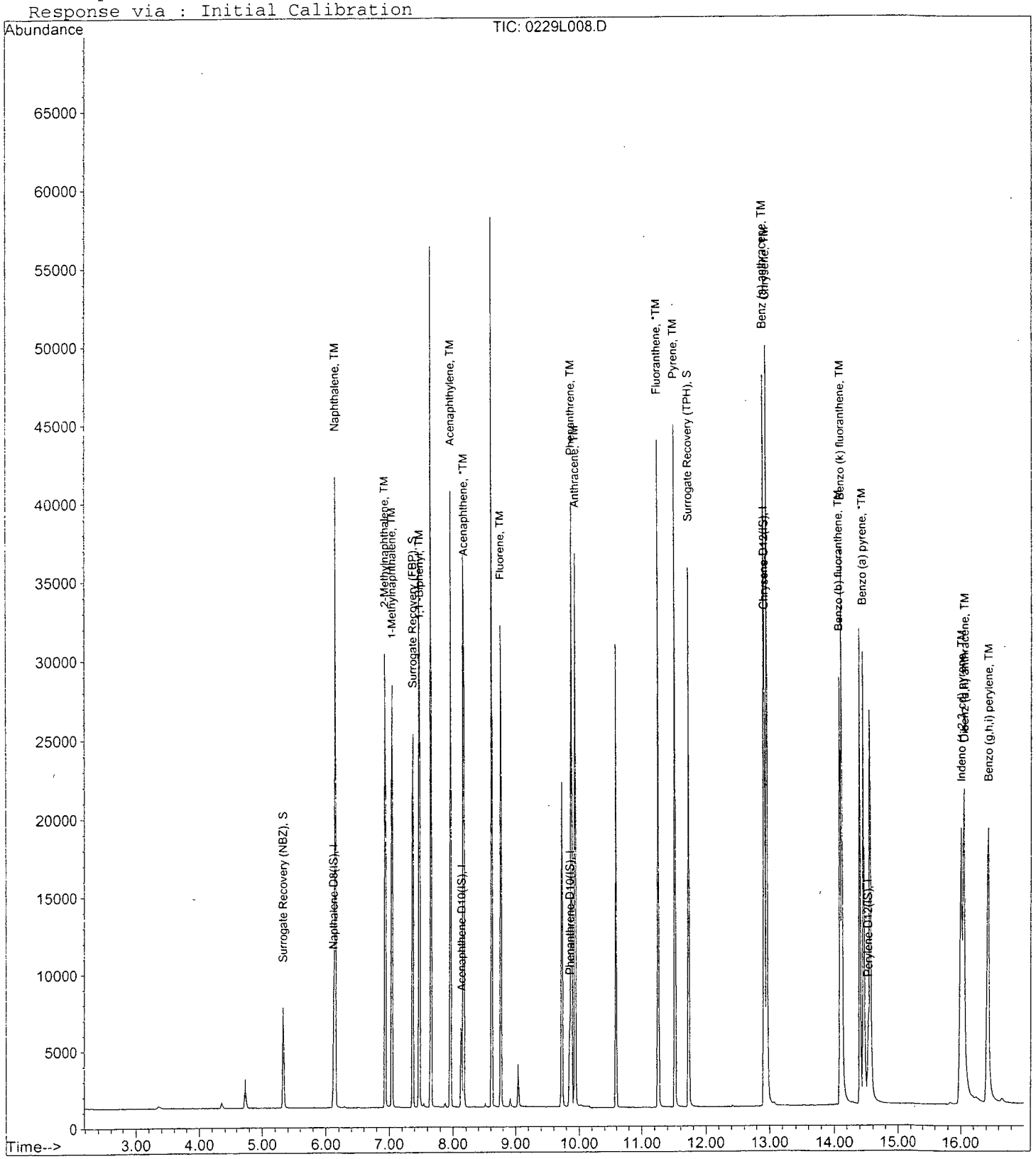
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L008.D Vial: 8
Acq On : 1 Mar 12 2:24 Operator: LF
Sample : 10ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L009.D Vial: 9
Acq On : 1 Mar 12 2:49 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5719	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2718	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4593	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6372	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.54	264	5338	2.50000 ppb		0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	30540	59.35955 ppb		0.00
Spiked Amount 2.000			Recovery	= 2968.000%		
7) Surrogate Recovery (FBP)	7.37	172	84407	48.60839 ppb		0.00
Spiked Amount 2.000			Recovery	= 2430.400%		
18) Surrogate Recovery (TPH)	11.73	244	96696	45.49676 ppb		0.00
Spiked Amount 2.000			Recovery	= 2274.850%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	128767	43.10846 ppb		99
4) 2-Methylnaphthalene	6.94	142	84994	45.29212 ppb		87
5) 1-Methylnaphthalene	7.05	142	79171	44.31818 ppb		100
8) 1,1'-Biphenyl	7.48	154	92639	43.58586 ppb	#	84
9) Acenaphthylene	7.96	152	119609	45.83300 ppb		98
10) Acenaphthene	8.17	154	68862	46.00885 ppb		98
11) Fluorene	8.77	166	86013	47.10480 ppb		90
13) Phenanthrene	9.88	178	118464	43.96772 ppb		98
14) Anthracene	9.94	178	115636	45.10324 ppb		98
15) Fluoranthene	11.26	202	154795	45.55225 ppb	#	92
17) Pyrene	11.52	202	161556	44.71366 ppb	#	81
19) Benz (a) anthracene	12.92	228	135460	45.05633 ppb		95
20) Chrysene	12.96	228	134623	41.96027 ppb	#	96
21) Indeno (1,2,3-cd) pyrene	16.01	276	116267	40.78451 ppb		95
23) Benzo (b) fluoranthene	14.10	252	132868	41.35096 ppb	#	92
24) Benzo (k) fluoranthene	14.14	252	144725	49.23001 ppb	#	96
25) Benzo (a) pyrene	14.48	252	133729	45.90057 ppb		96
26) Dibenz (a,h) anthracene	16.05	278	117167	47.56756 ppb		99
27) Benzo (g,h,i) perylene	16.44	276	122767	41.98443 ppb		94

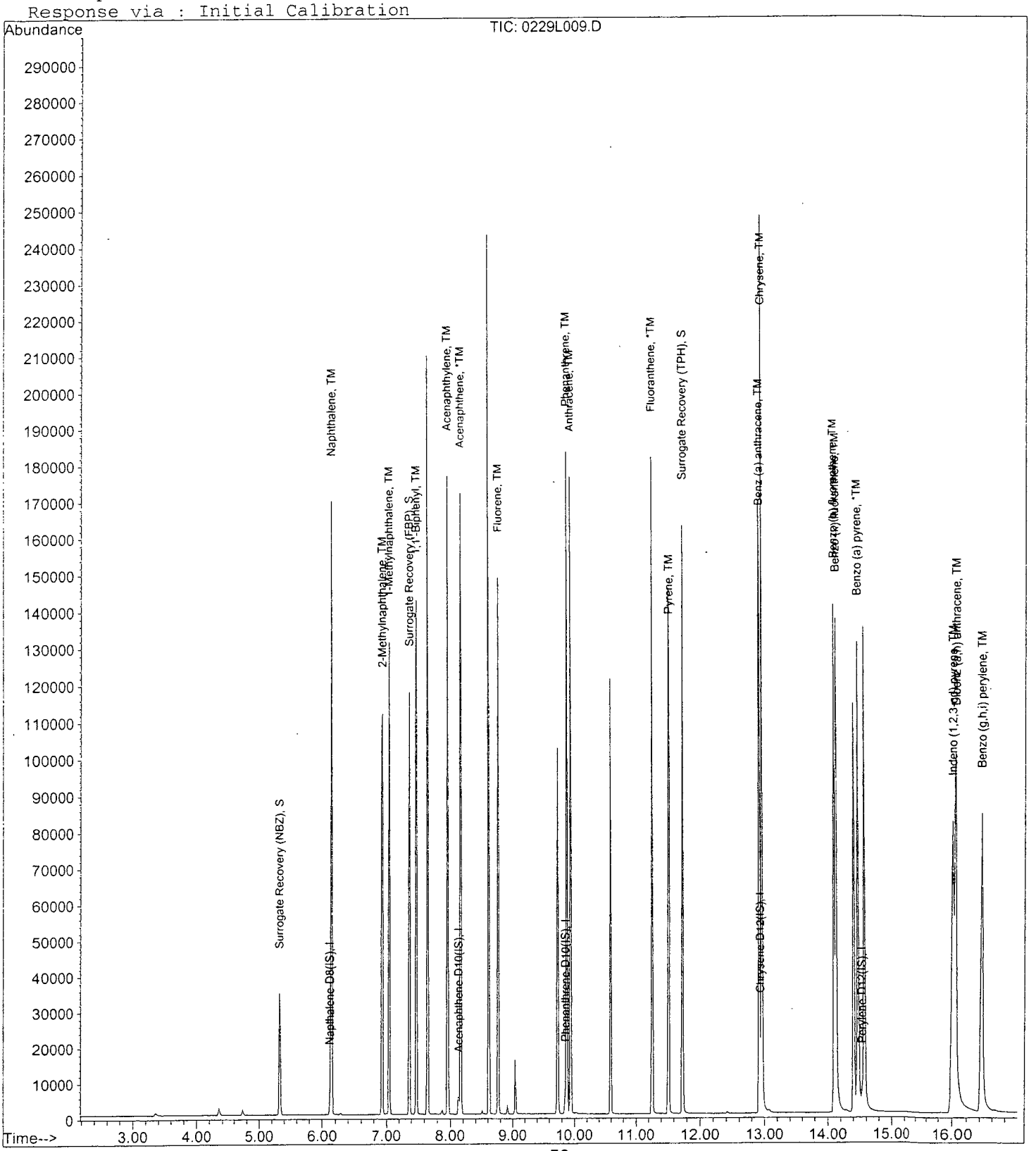
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L009.D Vial: 9
Acq On : 1 Mar 12 2:49 Operator: LF
Sample : 50ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L010.D Vial: 10
Acq On : 1 Mar 12 3:14 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:00:28 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5584	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.13	164	2832	2.50000 ppb		0.00
12) Phenanthrene-D10(IS)	9.86	188	4766	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6566	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.55	264	5654	2.50000 ppb		0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	63151	125.71194 ppb		0.01
Spiked Amount 2.000			Recovery	= 6285.600%		
7) Surrogate Recovery (FBP)	7.37	172	158975	87.86538 ppb		0.00
Spiked Amount 2.000			Recovery	= 4393.250%		
18) Surrogate Recovery (TPH)	11.73	244	172379	78.71024 ppb		0.00
Spiked Amount 2.000			Recovery	= 3935.500%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	230712	79.10479 ppb		98
4) 2-Methylnaphthalene	6.94	142	162439	88.65422 ppb		89
5) 1-Methylnaphthalene	7.05	142	149617	85.77710 ppb		98
8) 1,1'-Biphenyl	7.48	154	177959	80.35777 ppb	#	87
9) Acenaphthylene	7.96	152	217090	79.83814 ppb		97
10) Acenaphthene	8.17	154	131352	84.22765 ppb		96
11) Fluorene	8.77	166	163286	85.82351 ppb		93
13) Phenanthrene	9.88	178	210497	75.28975 ppb		97
14) Anthracene	9.94	178	206234	77.52064 ppb		97
15) Fluoranthene	11.27	202	300423	85.19782 ppb	#	88
17) Pyrene	11.52	202	310532	83.40621 ppb	#	89
19) Benz (a) anthracene	12.93	228	279782	90.31073 ppb		97
20) Chrysene	12.97	228	241095	72.92596 ppb		97
21) Indeno (1,2,3-cd) pyrene	16.02	276	237656	80.90259 ppb		92
23) Benzo (b) fluoranthene	14.10	252	290761	85.43269 ppb		97
24) Benzo (k) fluoranthene	14.14	252	210844	67.71274 ppb	#	94
25) Benzo (a) pyrene	14.48	252	256847	83.23189 ppb	#	94
26) Dibenz (a,h) anthracene	16.06	278	232404	89.07830 ppb		99
27) Benzo (g,h,i) perylene	16.46	276	244670	78.99690 ppb		96

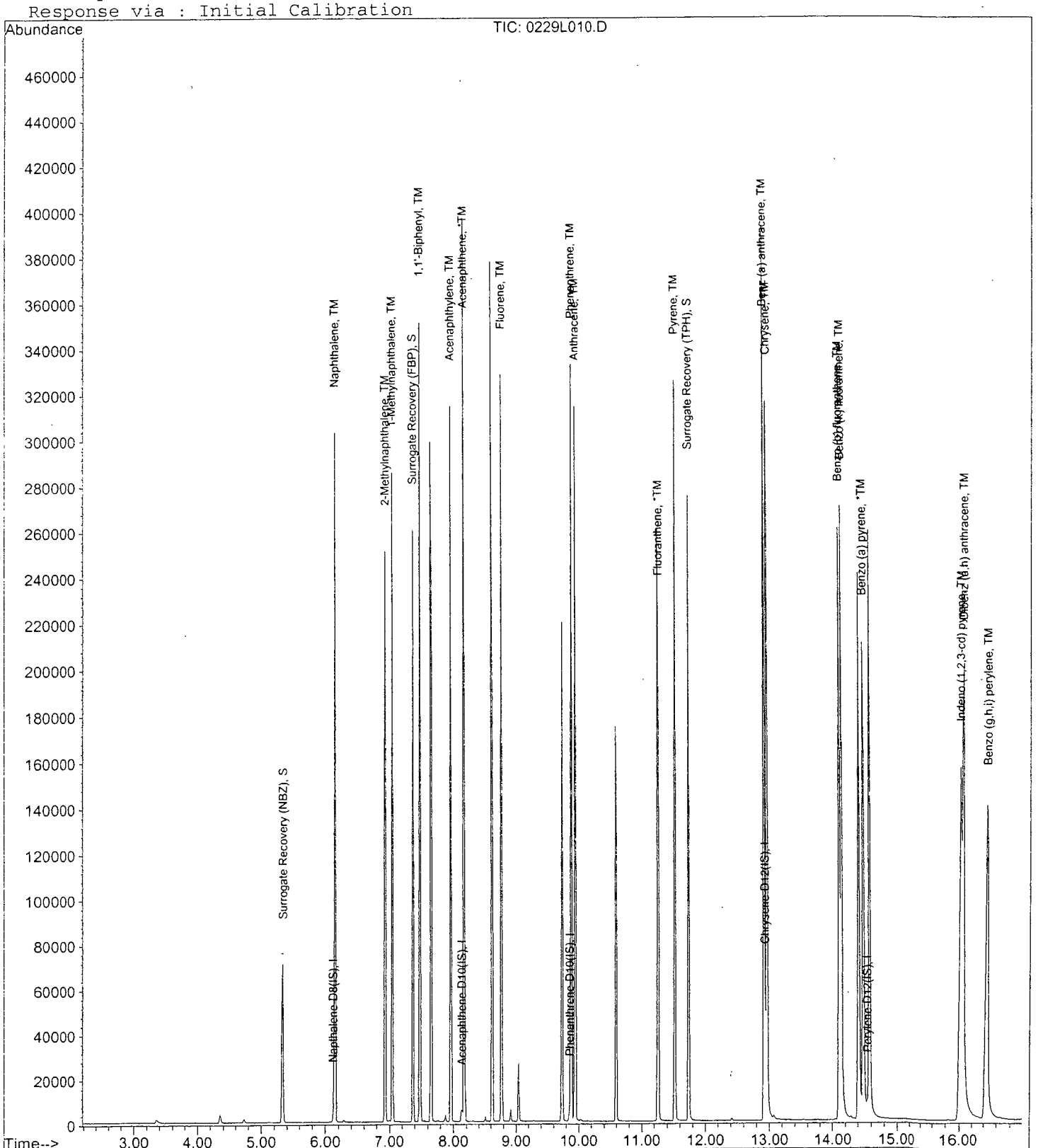
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L010.D Vial: 10
Acq On : 1 Mar 12 3:14 Operator: LF
Sample : 100ug/ml PAH Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:01 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 1 Mar 12 3:39
Instrument: Linus
Initial Cal. Date: 02/29/12
Data File: 0229L011.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	TM	Naphthalene	1.427	1.252	12	TM	
3	TM	2-Methylnaphthalene	0.8580	0.7746	9.7	TM	
4	TM	1-Methylnaphthalene	0.8003	0.7468	6.7	TM	
5	I	Acenaphthene-D10(IS)	ISTD			I	
6	TM	1,1'-Biphenyl	1.975	1.861	5.8	TM	
7	TM	Acenaphthylene	2.402	2.280	5.1	TM	
8	*TM	Acenaphthene	1.399	1.340	4.2	*TM	
9	TM	Fluorene	1.695	1.647	2.9	TM	
10	I	Phenanthrene-D10(IS)	ISTD			I	
11	TM	Phenanthrene	1.484	1.434	3.3	TM	
12	TM	Anthracene	1.339	1.306	2.5	TM	
13	*TM	Fluoranthene	1.819	1.764	3.0	*TM	
14	I	Chrysene-D12(IS)	ISTD			I	
15	TM	Pyrene	1.441	1.394	3.2	TM	
16	TM	Benz (a) anthracene	1.234	1.133	8.2	TM	
17	TM	Chrysene	1.246	1.237	0.66	TM	
18	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.086	58	TMQ	16
19	I	Perylene-D12(IS)	ISTD			I	
20	TM	Benzo (b) fluoranthene	1.581	1.584	0.20	TM	
21	TM	Benzo (k) fluoranthene	1.313	1.334	1.6	TM	
22	*TM	Benzo (a) pyrene	1.404	1.397	0.53	*TM	
23	TMQ	Dibenz (a,h) anthracene	1.428	1.298	9.1	TMQ	12
24	TMQ	Benzo (g,h,i) perylene	3.855	1.401	64	TMQ	14
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			10.6		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6095	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	2897	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	4786	2.50000	ppb	0.00
16) Chrysene-D12(IS)	12.92	240	6313	2.50000	ppb	0.00
22) Perylene-D12(IS)	14.53	264	5186	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%		
18) Surrogate Recovery (TPH)	0.00	244	0d	0.00000	ppb	
Spiked Amount 2.000			Recovery =	0.000%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15266	4.38901	ppb	100
4) 2-Methylnaphthalene	6.93	142	9442	4.51396	ppb	100
5) 1-Methylnaphthalene	7.05	142	9103	4.66547	ppb	99
8) 1,1'-Biphenyl	7.47	154	10782	4.71225	ppb	100
9) Acenaphthylene	7.96	152	13210	4.74551	ppb	100
10) Acenaphthene	8.16	154	7765	4.79105	ppb	85
11) Fluorene	8.76	166	9540	4.85727	ppb	100
13) Phenanthrene	9.88	178	13730	4.83383	ppb	100
14) Anthracene	9.94	178	12504	4.87627	ppb	100
15) Fluoranthene	11.26	202	16883	4.84901	ppb	99
17) Pyrene	11.51	202	17602	4.83859	ppb	100
19) Benz (a) anthracene	12.91	228	14301	4.58882	ppb	99
20) Chrysene	12.96	228	15624	4.96689	ppb	99
21) Indeno (1,2,3-cd) pyrene	15.99	276	13708	5.79850	ppb	99
23) Benzo (b) fluoranthene	14.09	252	16432	5.00982	ppb	99
24) Benzo (k) fluoranthene	14.13	252	13837	5.08206	ppb	99
25) Benzo (a) pyrene	14.46	252	14485	4.97343	ppb	98
26) Dibenz (a,h) anthracene	16.04	278	13464	5.59460	ppb	100
27) Benzo (g,h,i) perylene	16.43	276	14534	5.68375	ppb	99

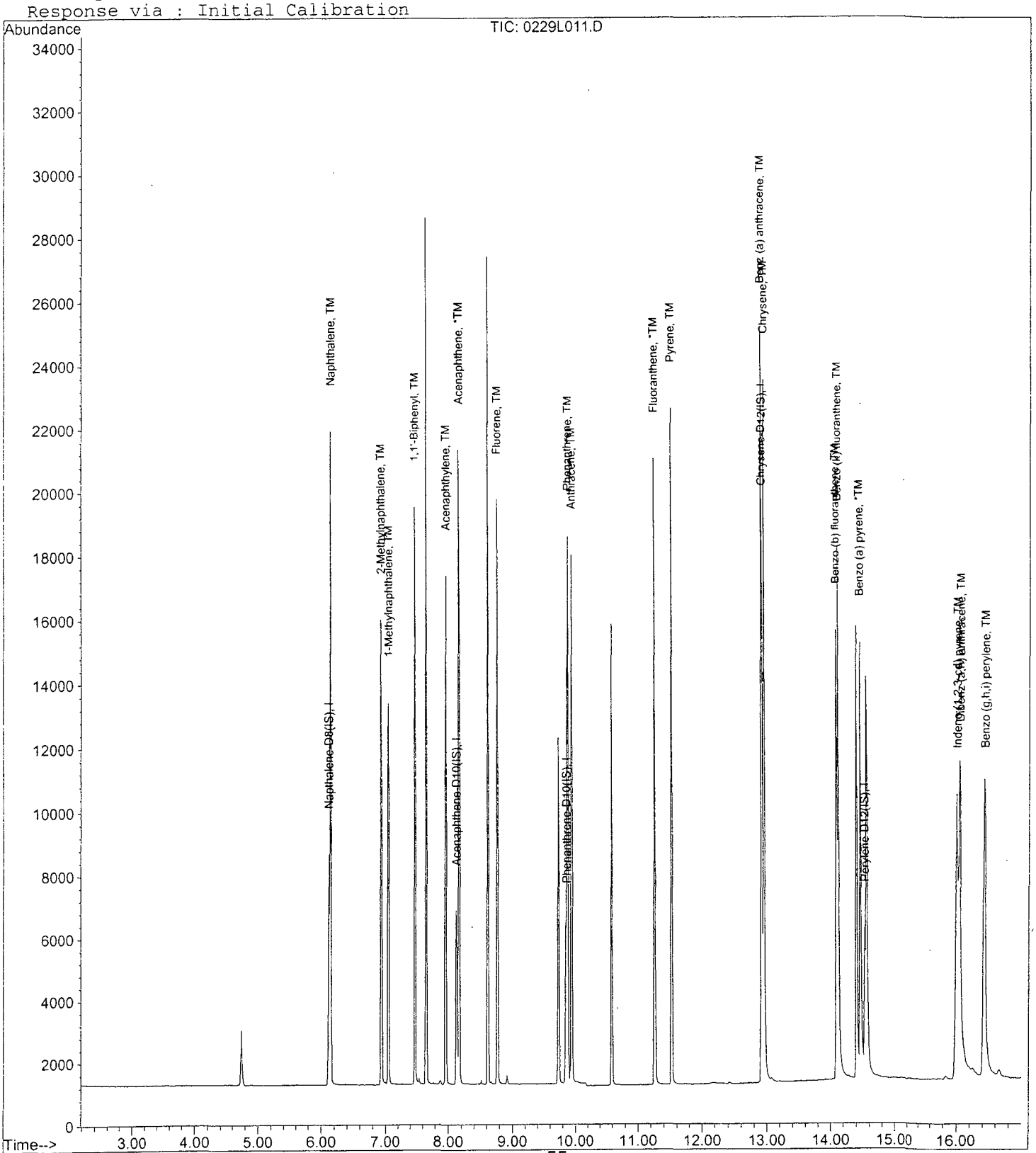
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0229L011.D Vial: 11
Acq On : 1 Mar 12 3:39 Operator: LF
Sample : 5.0ug/ml SS PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: Mar 1 8:49 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Thu Mar 01 08:48:01 2012
Response via : Initial Calibration



Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 4 May 12 13:58
Instrument: Linus
Initial Cal. Date: 02/29/12
Data File: 0504L002.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Napthalene-D8(IS)	ISTD			I	
2	S	Surrogate Recovery (NBZ)	0.2454	0.2258	8.0	S	
3	TM	Naphthalene	1.427	1.253	12	TM	
4	TM	2-Methylnaphthalene	0.8580	0.8269	3.6	TM	
5	TM	1-Methylnaphthalene	0.8003	0.7533	5.9	TM	
6	I	Acenaphthene-D10(IS)	ISTD			I	
7	S	Surrogate Recovery (FBP)	1.584	1.773	12	S	
8	TM	1,1'-Biphenyl	1.975	1.898	3.9	TM	
9	TM	Acenaphthylene	2.402	2.270	5.5	TM	
10	*TM	Acenaphthene	1.399	1.320	5.6	*TM	
11	TM	Fluorene	1.695	1.618	4.5	TM	
12	I	Phenanthrene-D10(IS)	ISTD			I	
13	TM	Phenanthrene	1.484	1.338	9.9	TM	
14	TM	Anthracene	1.339	1.333	0.45	TM	
15	*TM	Fluoranthene	1.819	1.846	1.5	*TM	
16	I	Chrysene-D12(IS)	ISTD			I	
17	TM	Pyrene	1.441	1.459	1.3	TM	
18	S	Surrogate Recovery (TPH)	0.7801	0.9225	18	S	
19	TM	Benz (a) anthracene	1.234	1.267	2.7	TM	
20	TM	Chrysene	1.246	1.189	4.6	TM	
21	TMQ	Indeno (1,2,3-cd) pyrene	2.569	1.013	61	TMQ	8.1
22	I	Perylene-D12(IS)	ISTD			I	
23	TM	Benzo (b) fluoranthene	1.581	1.334	16	TM	
24	TM	Benzo (k) fluoranthene	1.313	1.400	6.7	TM	
25	*TM	Benzo (a) pyrene	1.404	1.266	9.8	*TM	
26	TMQ	Dibenz (a,h) anthracene	1.428	1.095	23	TMQ	5.7
27	TMQ	Benzo (g,h,i) perylene	3.855	1.141	70	TMQ	7.6
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			13.0		

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L002.D Vial: 2
Acq On : 4 May 12 13:58 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:35 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5990	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	2928	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.86	188	4810	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	6455	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	5776	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	2705	4.59968 ppb		0.01
Spiked Amount 2.000			Recovery	= 230.000%		
7) Surrogate Recovery (FBP)	7.36	172	10385	5.59639 ppb		-0.01
Spiked Amount 2.000			Recovery	= 279.800%		
18) Surrogate Recovery (TPH)	11.73	244	11910	5.91312 ppb		0.00
Spiked Amount 2.000			Recovery	= 295.650%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	15010	4.39105 ppb		100
4) 2-Methylnaphthalene	6.93	142	9906	4.81880 ppb		93
5) 1-Methylnaphthalene	7.03	142	9024	4.70605 ppb		94
8) 1,1'-Biphenyl	7.47	154	11115	4.80636 ppb	#	89
9) Acenaphthylene	7.95	152	13295	4.72548 ppb		97
10) Acenaphthene	8.16	154	7729	4.71834 ppb		93
11) Fluorene	8.76	166	9477	4.77411 ppb		97
13) Phenanthrene	9.88	178	12867	4.50740 ppb		100
14) Anthracene	9.94	178	12827	4.97727 ppb		99
15) Fluoranthene	11.26	202	17754	5.07373 ppb	#	90
17) Pyrene	11.52	202	18838	5.06443 ppb	#	88
19) Benz (a) anthracene	12.93	228	16357	5.13308 ppb		99
20) Chrysene	12.97	228	15347	4.77150 ppb		99
21) Indeno (1,2,3-cd) pyrene	16.05	276	13072	5.40705 ppb		99
23) Benzo (b) fluoranthene	14.12	252	15406	4.21723 ppb	#	93
24) Benzo (k) fluoranthene	14.14	252	16178	5.33492 ppb		98
25) Benzo (a) pyrene	14.49	252	14623	4.50795 ppb		99
26) Dibenz (a,h) anthracene	16.08	278	12650	4.71442 ppb	#	94
27) Benzo (g,h,i) perylene	16.48	276	13177	4.62028 ppb		95

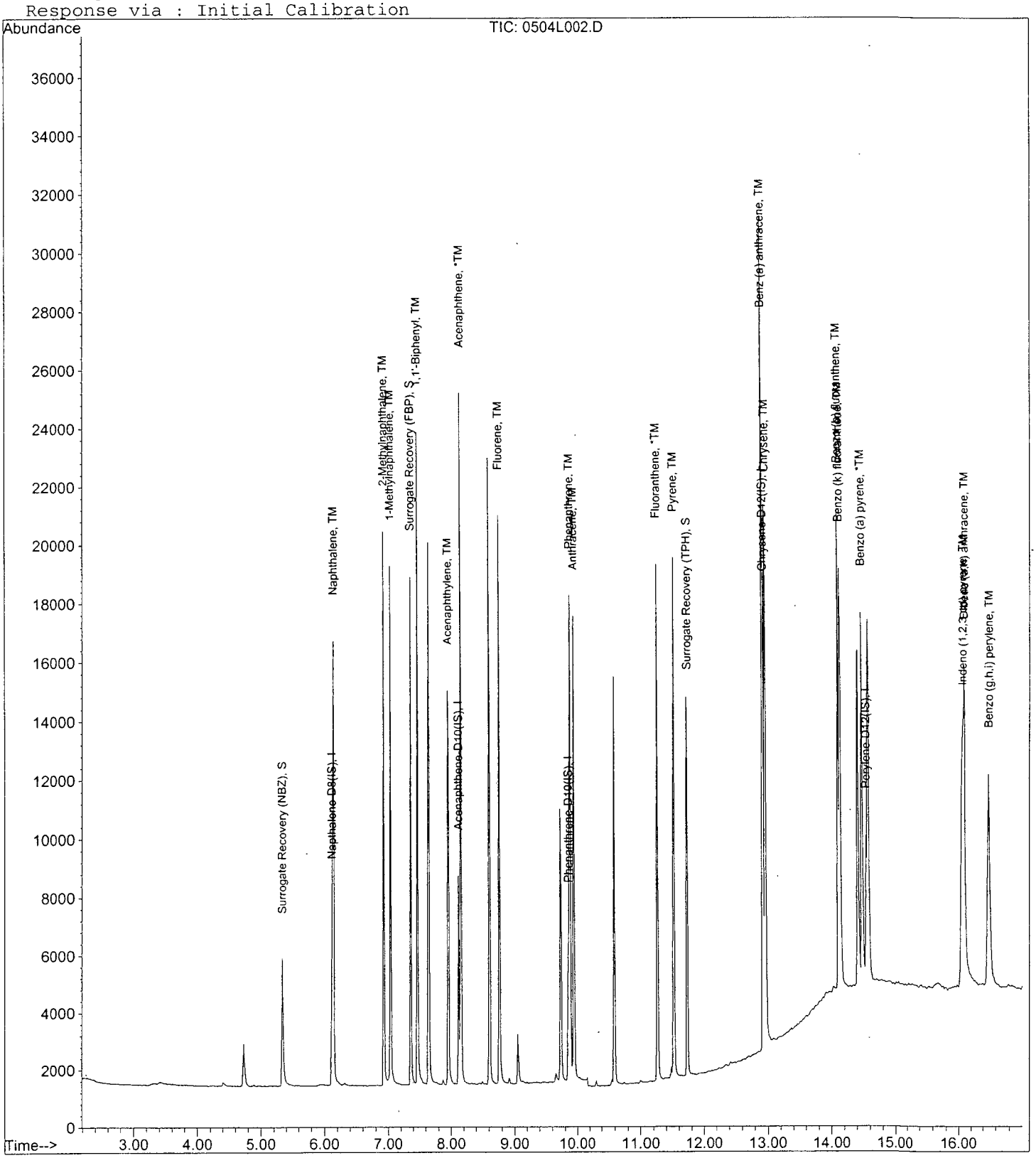
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L002.D Vial: 2
Acq On : 4 May 12 13:58 Operator: LF
Sample : 5.0ug/ml PAH 02-29-12 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:35 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



EPA METHOD 8270
Semivolatile Organic Compounds
Raw Data

APPL, INC.

Method Blank
EPA 8270D SIM

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Blank Name/QCG: **120430W-60081 - 166820**
Batch ID: #SIMHC-120430A

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	04/30/12	05/04/12
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	BENZO(A)PYRENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	04/30/12	05/04/12
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	04/30/12	05/04/12
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	04/30/12	05/04/12
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	04/30/12	05/04/12
BLANK	SURROGATE: 2-FLUORBIPHENY	57.5	50-110			%	04/30/12	05/04/12
BLANK	SURROGATE: NITROBENZENE-	68.0	40-110			%	04/30/12	05/04/12
BLANK	SURROGATE: TERPHENYL-D14 (	66.6	50-135			%	04/30/12	05/04/12

Quant Method: SIMB.M
Run #: 0504L003
Instrument: Linus
Sequence: L120229
Initials: LF

Printed: 05/11/12 3:28:18 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L003.D Vial: 3
Acq On : 4 May 12 14:23 Operator: LF
Sample : 120430A BLK 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:36 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.12	136	5903	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.12	164	3125	2.50000	ppb	-0.01
12) Phenanthrene-D10(IS)	9.86	188	5404	2.50000	ppb	0.00
16) Chrysene-D12(IS)	12.94	240	7552	2.50000	ppb	0.01
22) Perylene-D12(IS)	14.56	264	6267	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	788	1.35969	ppb	0.01
Spiked Amount 2.000			Recovery = 68.000%			
7) Surrogate Recovery (FBP)	7.36	172	2278	1.15021	ppb	-0.01
Spiked Amount 2.000			Recovery = 57.500%			
18) Surrogate Recovery (TPH)	11.73	244	3137	1.33123	ppb	0.00
Spiked Amount 2.000			Recovery = 66.550%			

Target Compounds	Qvalue

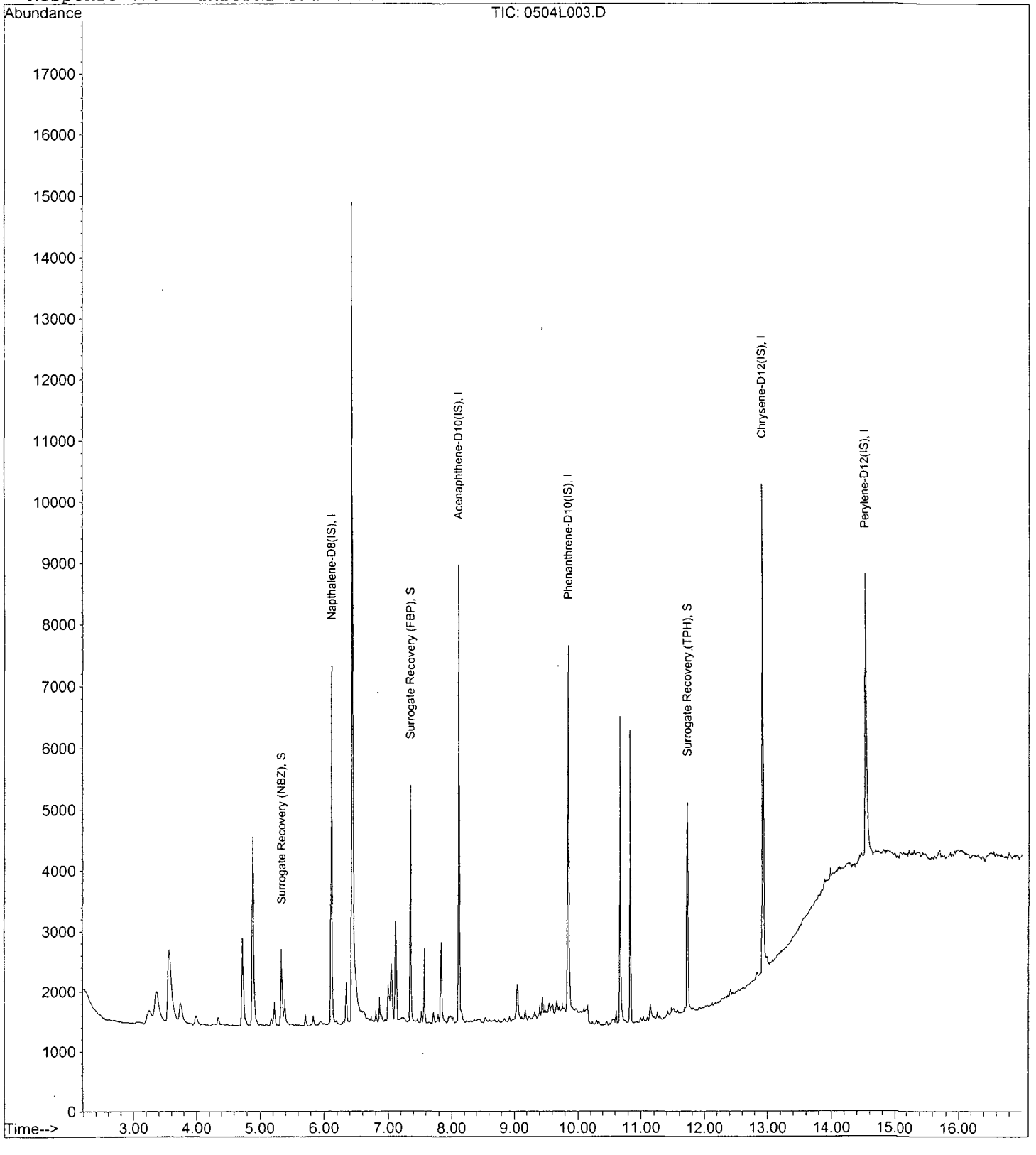
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L003.D Vial: 3
Acq On : 4 May 12 14:23 Operator: LF
Sample : 120430A BLK 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:36 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8270D SIM

APPL ID: **120430W-60081 LCS - 166820**
Batch ID: #SIMHC-120430A

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	2.46	61.5	45-105
2-METHYLNAPHTHALENE	4.00	2.38	59.5	45-105
ACENAPHTHENE	4.00	2.72	68.0	45-110
ACENAPHTHYLENE	4.00	2.79	69.8	50-105
ANTHRACENE	4.00	3.22	80.5	55-110
BENZO(A)ANTHRACENE	4.00	3.64	91.0	55-110
BENZO(A)PYRENE	4.00	3.18	79.5	55-110
BENZO(B)FLUORANTHENE	4.00	3.18	79.5	45-120
BENZO(GHI)PERYLENE	4.00	3.45	86.3	40-125
BENZO(K)FLUORANTHENE	4.00	3.96	99.0	45-125
CHRYSENE	4.00	3.53	88.3	55-110
DIBENZ(A,H)ANTHRACENE	4.00	3.52	88.0	40-125
FLUORANTHENE	4.00	3.60	90.0	55-115
FLUORENE	4.00	3.11	77.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	3.86	96.5	45-125
NAPHTHALENE	4.00	2.12	53.0	40-100
PHENANTHRENE	4.00	3.16	79.0	50-115
PYRENE	4.00	3.59	89.8	50-130
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.14	57.0	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.01	50.5	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.27	63.5	50-135

Comments: _____

Primary	SPK
Quant Method :	SIMB.M
Extraction Date :	04/30/12
Analysis Date :	05/04/12
Instrument :	Linus
Run :	0504L004
Initials :	LF

Printed: 05/11/12 3:28:20 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L004.D Vial: 4
Acq On : 4 May 12 14:49 Operator: LF
Sample : 120430A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6270	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3266	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.86	188	5533	2.50000 ppb		0.00
16) Chrysene-D12(IS)	12.94	240	7504	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	6549	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	619	1.00557 ppb		0.01
Spiked Amount 2.000			Recovery	= 50.300%		
7) Surrogate Recovery (FBP)	7.36	172	2355	1.13775 ppb		-0.01
Spiked Amount 2.000			Recovery	= 56.900%		
18) Surrogate Recovery (TPH)	11.73	244	2980	1.27270 ppb		0.00
Spiked Amount 2.000			Recovery	= 63.650%		
Target Compounds						Qvalue
3) Naphthalene	6.14	128	7577	2.11760 ppb		99
4) 2-Methylnaphthalene	6.93	142	5112	2.37570 ppb		93
5) 1-Methylnaphthalene	7.03	142	4942	2.46218 ppb		94
8) 1,1'-Biphenyl	7.47	154	6404	2.48263 ppb	#	90
9) Acenaphthylene	7.95	152	8751	2.78850 ppb		97
10) Acenaphthene	8.16	154	4978	2.72443 ppb		91
11) Fluorene	8.76	166	6876	3.10536 ppb		98
13) Phenanthrene	9.88	178	10361	3.15526 ppb		100
14) Anthracene	9.94	178	9537	3.21708 ppb		98
15) Fluoranthene	11.26	202	14503	3.60308 ppb	#	92
17) Pyrene	11.52	202	15523	3.58984 ppb	#	86
19) Benz (a) anthracene	12.92	228	13502	3.64482 ppb		99
20) Chrysene	12.96	228	13202	3.53081 ppb	#	93
21) Indeno (1,2,3-cd) pyrene	16.05	276	10861	3.86230 ppb		95
23) Benzo (b) fluoranthene	14.11	252	13157	3.17648 ppb	#	94
24) Benzo (k) fluoranthene	14.14	252	13632	3.96474 ppb		97
25) Benzo (a) pyrene	14.49	252	11703	3.18194 ppb		99
26) Dibenz (a,h) anthracene	16.08	278	10733	3.52278 ppb		96
27) Benzo (g,h,i) perylene	16.48	276	11159	3.44558 ppb	#	93

$\frac{7577 \times 2.5}{6270 \times 1.427} = 2.12$ VF 5/23/12

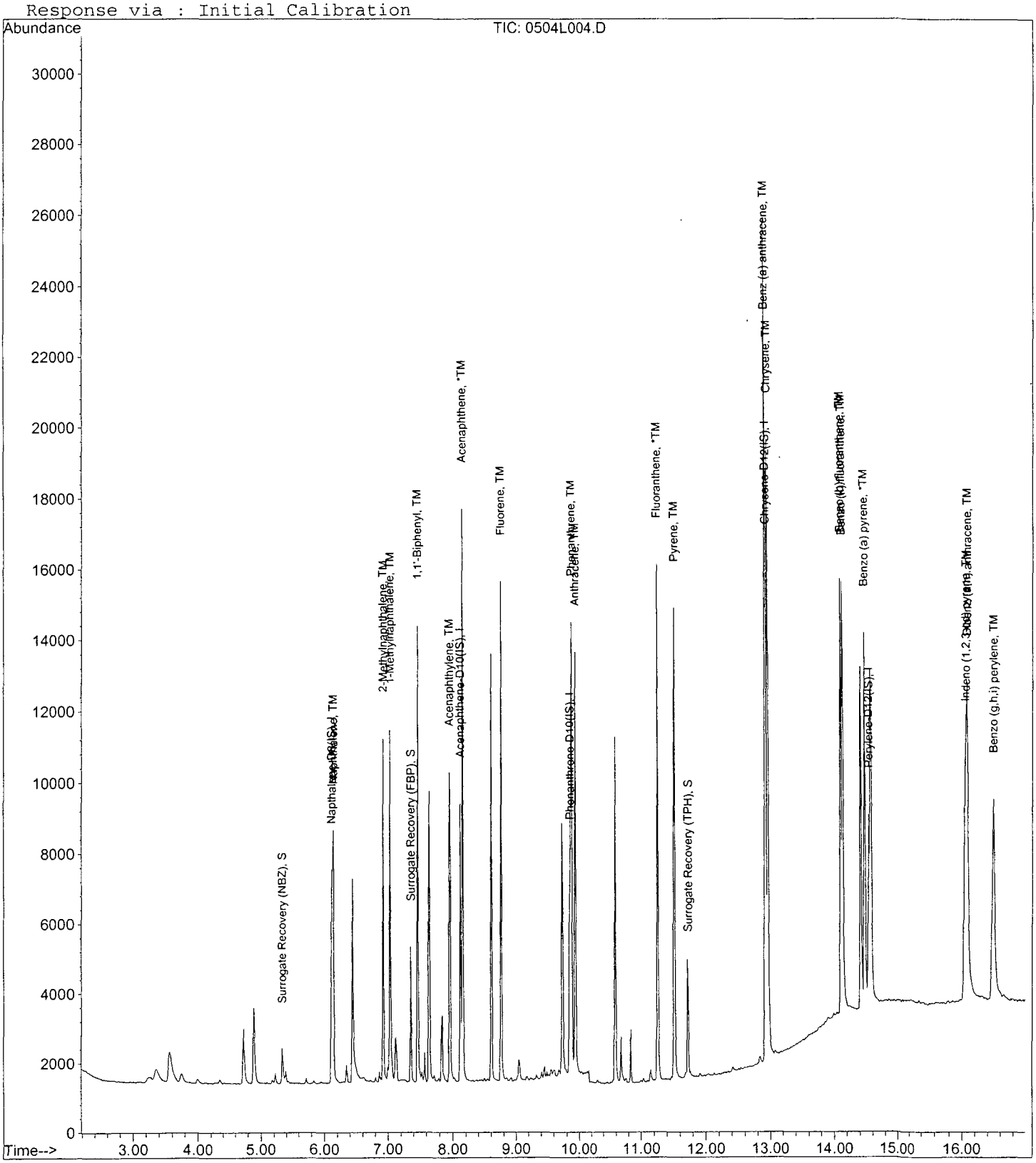
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L004.D Vial: 4
Acq On : 4 May 12 14:49 Operator: LF
Sample : 120430A LCS-1 1/1000 Inst : Linus
Misc : Multiplr: 1.00

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



Matrix Spike Recoveries

EPA 8270D SIM

APPL ID: **120430W-60081 MS - 166820**
Batch ID: #SIMHC-120430A
Sample ID: AY60081
Client ID: ES077

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	3.85	ND	2.62	3.09	68.1	80.3	45-105	16.5	25
2-METHYLNAPHTHALENE	3.85	ND	2.53	2.95	65.7	76.6	45-105	15.3	25
ACENAPHTHENE	3.85	ND	2.86	3.16	74.3	82.1	45-110	10.0	25
ACENAPHTHYLENE	3.85	ND	2.82	3.22	73.2	83.6	50-105	13.2	25
ANTHRACENE	3.85	ND	3.13	3.07	81.3	79.7	55-110	1.9	25
BENZO(A)ANTHRACENE	3.85	ND	3.58	3.68	93.0	95.6	55-110	2.8	25
BENZO(A)PYRENE	3.85	ND	3.10	3.27	80.5	84.9	55-110	5.3	25
BENZO(B)FLUORANTHENE	3.85	ND	3.25	3.45	84.4	89.6	45-120	6.0	25
BENZO(GHI)PERYLENE	3.85	ND	3.38	3.53	87.8	91.7	40-125	4.3	25
BENZO(K)FLUORANTHENE	3.85	ND	3.71	3.77	96.4	97.9	45-125	1.6	25
CHRYSENE	3.85	ND	3.34	3.20	86.8	83.1	55-110	4.3	25
DIBENZ(A,H)ANTHRACENE	3.85	ND	3.52	3.66	91.4	95.1	40-125	3.9	25
FLUORANTHENE	3.85	ND	3.60	3.75	93.5	97.4	55-115	4.1	25
FLUORENE	3.85	ND	3.17	3.42	82.3	88.8	50-110	7.6	25
INDENO(1,2,3-CD)PYRENE	3.85	ND	3.79	3.96	98.4	103	45-125	4.4	25
NAPHTHALENE	3.85	ND	2.20	2.54	57.1	66.0	40-100	14.3	25
PHENANTHRENE	3.85	ND	3.13	3.22	81.3	83.6	50-115	2.8	25
PYRENE	3.85	ND	3.50	3.59	90.9	93.2	50-130	2.5	25
SURROGATE: 2-FLUORBIPHENYL (S)	1.92	NA	1.25	1.33	65.1	69.3	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.92	NA	1.15	1.25	59.9	65.1	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.92	NA	1.23	1.24	64.1	64.6	50-135		

Comments: _____

Primary	SPK	DUP
Quant Method :	SIMB.M	SIMB.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	05/04/12	05/04/12
Instrument :	Linus	Linus
Run :	0504L006	0504L007
Initials :	LF	

Printed: 05/11/12 3:28:24 PM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L006.D Vial: 6
Acq On : 4 May 12 15:39 Operator: LF
Sample : AY60081W16 MS-1 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6189	2.50000 ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3424	2.50000 ppb		-0.01
12) Phenanthrene-D10(IS)	9.85	188	5649	2.50000 ppb		-0.01
16) Chrysene-D12(IS)	12.94	240	7730	2.50000 ppb		0.01
22) Perylene-D12(IS)	14.56	264	6708	2.50000 ppb		0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.33	82	727	1.15045 ppb		0.01
Spiked Amount 1.923			Recovery = 59.800%			
7) Surrogate Recovery (FBP)	7.36	172	2830	1.25398 ppb		-0.01
Spiked Amount 1.923			Recovery = 65.208%			
18) Surrogate Recovery (TPH)	11.72	244	3079	1.22744 ppb		-0.01
Spiked Amount 1.923			Recovery = 63.804%			
Target Compounds						Qvalue
3) Naphthalene	6.14	128	8086	2.20138 ppb		99
4) 2-Methylnaphthalene	6.93	142	5579	2.52564 ppb		93
5) 1-Methylnaphthalene	7.04	142	5398	2.61978 ppb		94
8) 1,1'-Biphenyl	7.47	154	6899	2.45300 ppb	#	87
9) Acenaphthylene	7.95	152	9664	2.82435 ppb		97
10) Acenaphthene	8.16	154	5700	2.86118 ppb		94
11) Fluorene	8.76	166	7660	3.17289 ppb		96
13) Phenanthrene	9.88	178	10902	3.12677 ppb		99
14) Anthracene	9.94	178	9859	3.13213 ppb		99
15) Fluoranthene	11.26	202	15382	3.59903 ppb		95
17) Pyrene	11.51	202	16212	3.49959 ppb	#	91
19) Benz (a) anthracene	12.93	228	14210	3.58057 ppb		97
20) Chrysene	12.96	228	13366	3.33670 ppb	#	94
21) Indeno (1,2,3-cd) pyrene	16.04	276	11417	3.78985 ppb		92
23) Benzo (b) fluoranthene	14.12	252	14343	3.25071 ppb	#	93
24) Benzo (k) fluoranthene	14.14	252	13583	3.70851 ppb	#	95
25) Benzo (a) pyrene	14.49	252	12152	3.10165 ppb		98
26) Dibenz (a,h) anthracene	16.08	278	11420	3.51926 ppb		98
27) Benzo (g,h,i) perylene	16.48	276	11665	3.38152 ppb		96

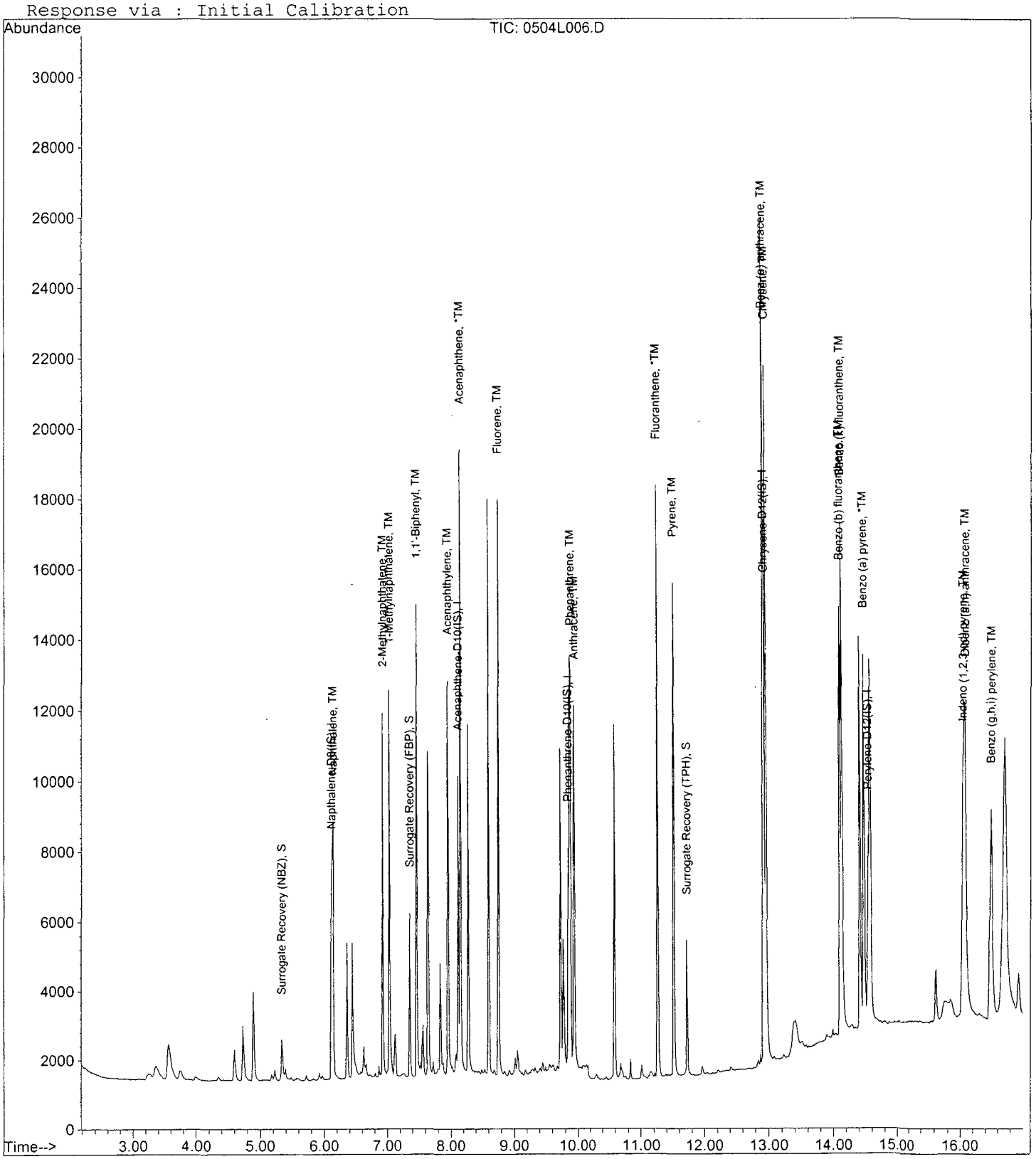
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L006.D Vial: 6
Acq On : 4 May 12 15:39 Operator: LF
Sample : AY60081W16 MS-1 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:37 2012 Quant Results File: SIMB.RES

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L120229\0504L007.D Vial: 7
Acq On : 4 May 12 16:04 Operator: LF
Sample : AY60081W18 MSD-1 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:38 2012 Quant Results File: SIMB.RES

Quant Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 08:59:15 2012
Response via : Initial Calibration
DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Napthalene-D8(IS)	6.12	136	6499	2.50000	ppb		0.00
6) Acenaphthene-D10(IS)	8.12	164	3605	2.50000	ppb		-0.01
12) Phenanthrene-D10(IS)	9.85	188	6175	2.50000	ppb		-0.01
16) Chrysene-D12(IS)	12.94	240	8518	2.50000	ppb		0.01
22) Perylene-D12(IS)	14.56	264	7297	2.50000	ppb		0.02
System Monitoring Compounds							
2) Surrogate Recovery (NBZ)	5.33	82	828	1.24778	ppb		0.01
Spiked Amount 1.923			Recovery = 64.896%				
7) Surrogate Recovery (FBP)	7.36	172	3156	1.32822	ppb		-0.01
Spiked Amount 1.923			Recovery = 69.056%				
18) Surrogate Recovery (TPH)	11.72	244	3435	1.24268	ppb		-0.01
Spiked Amount 1.923			Recovery = 64.636%				
Target Compounds							Qvalue
3) Naphthalene	6.14	128	9812	2.54386	ppb		99
4) 2-Methylnaphthalene	6.93	142	6840	2.94879	ppb		93
5) 1-Methylnaphthalene	7.04	142	6694	3.09379	ppb		94
8) 1,1'-Biphenyl	7.47	154	8336	2.81512	ppb	#	88
9) Acenaphthylene	7.95	152	11588	3.21662	ppb		97
10) Acenaphthene	8.16	154	6627	3.15949	ppb		93
11) Fluorene	8.76	166	8701	3.42313	ppb		97
13) Phenanthrene	9.88	178	12265	3.21804	ppb		100
14) Anthracene	9.94	178	10572	3.07255	ppb		100
15) Fluoranthene	11.26	202	17526	3.75137	ppb		97
17) Pyrene	11.51	202	18301	3.58506	ppb		97
19) Benz (a) anthracene	12.93	228	16093	3.67991	ppb		98
20) Chrysene	12.96	228	14112	3.19703	ppb	#	94
21) Indeno (1,2,3-cd) pyrene	16.04	276	13151	3.96185	ppb		91
23) Benzo (b) fluoranthene	14.12	252	16563	3.45085	ppb	#	92
24) Benzo (k) fluoranthene	14.14	252	15034	3.77335	ppb	#	95
25) Benzo (a) pyrene	14.49	252	13957	3.27480	ppb		97
26) Dibenz (a,h) anthracene	16.08	278	12901	3.65537	ppb		98
27) Benzo (g,h,i) perylene	16.48	276	13245	3.53033	ppb		98

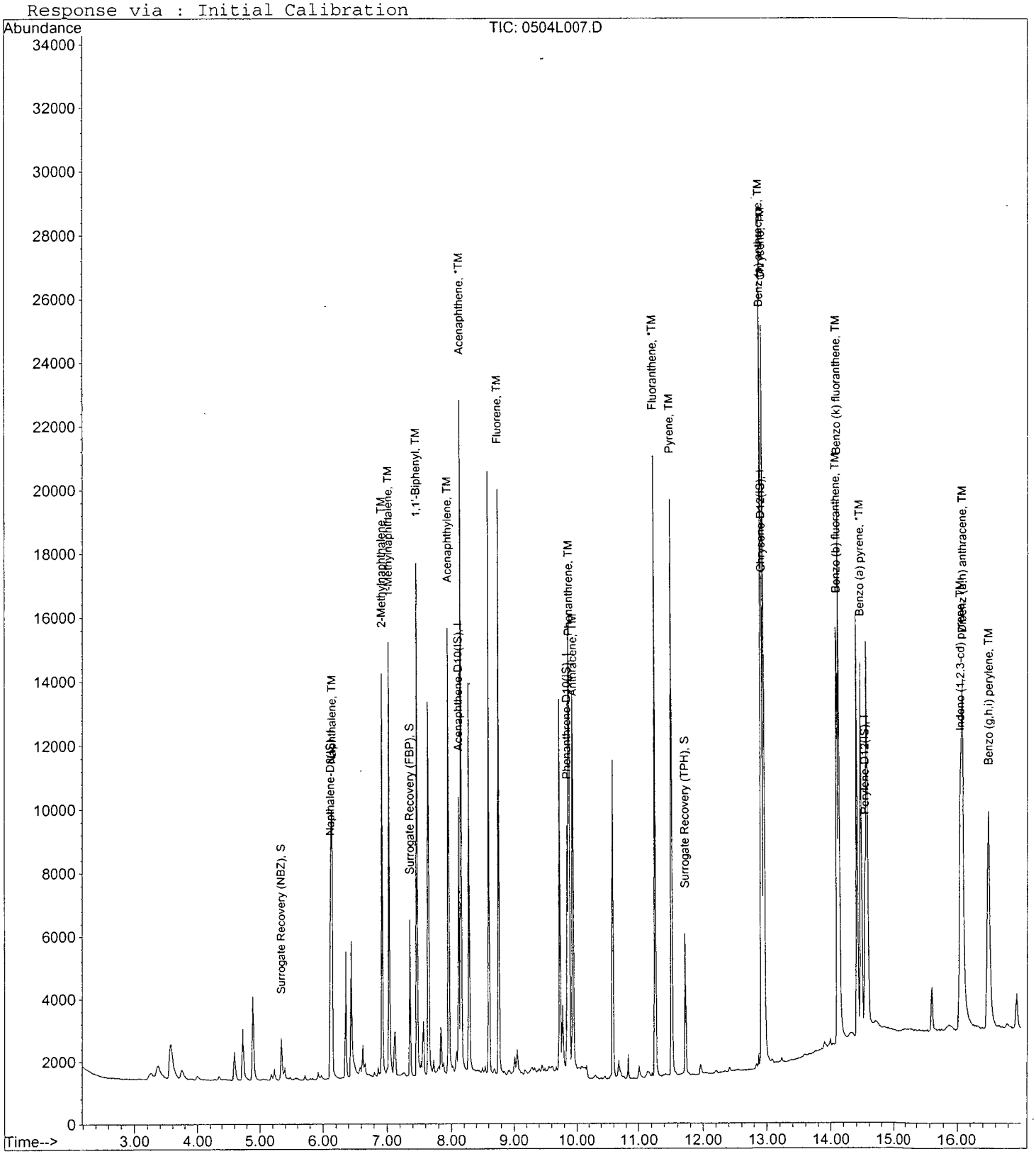
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\LINUS\DATA\L120229\0504L007.D Vial: 7
Acq On : 4 May 12 16:04 Operator: LF
Sample : AY60081W18 MSD-1 1/1040 Inst : Linus
Misc : Multiplr: 0.96

Quant Time: May 7 10:38 2012 Quant Results File: SIMB.RES

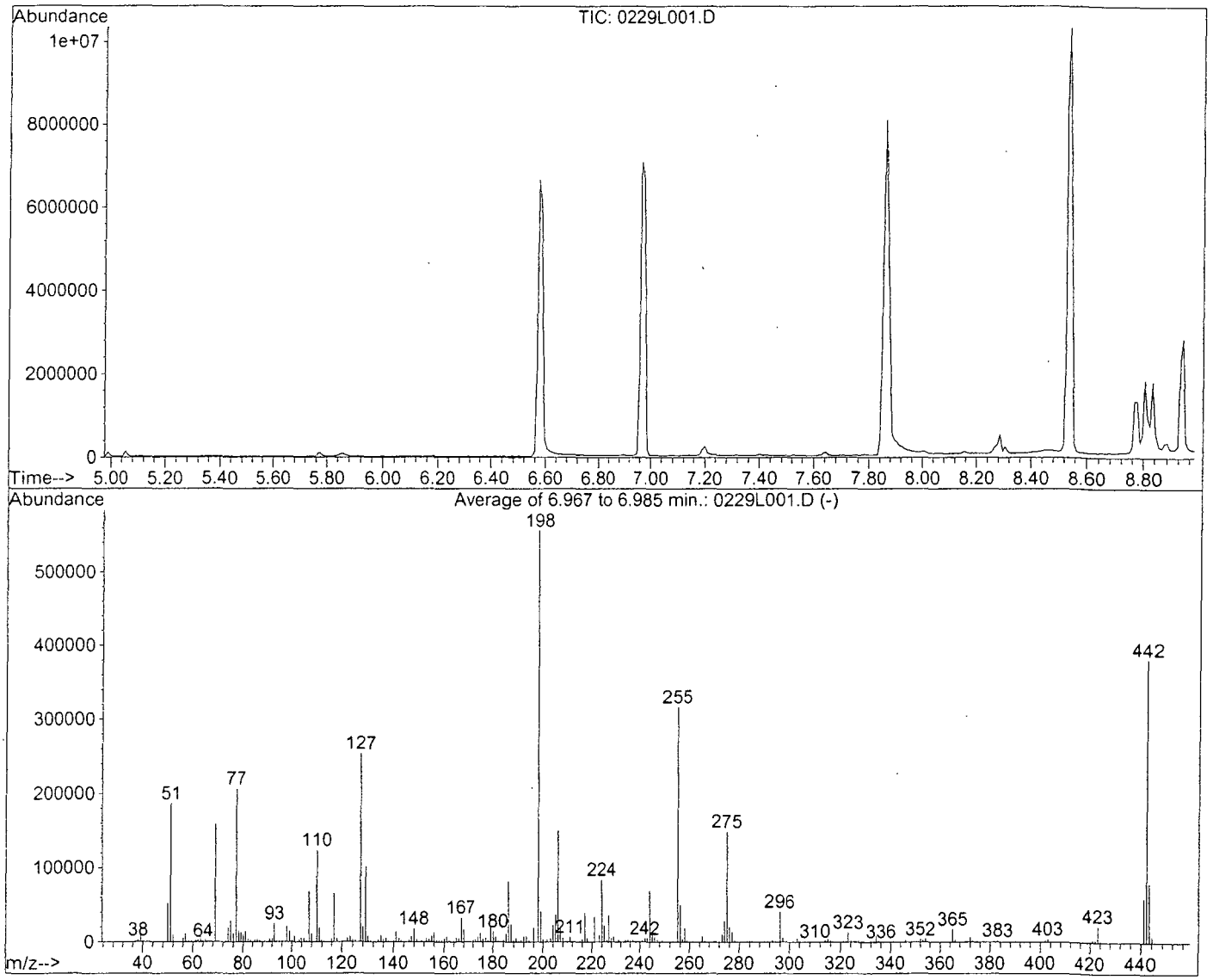
Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C
Last Update : Mon May 07 11:25:18 2012
Response via : Initial Calibration



DFTPP

Data File : M:\LINUS\DATA\L120229\0229L001.D Vial: 1
Acq On : 29 Feb 12 21:31 Operator: LF
Sample : SVTUNE 2-28-12 Inst : Linus
Misc : Multiplr: 1.00

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 6.967 to 6.985 min.

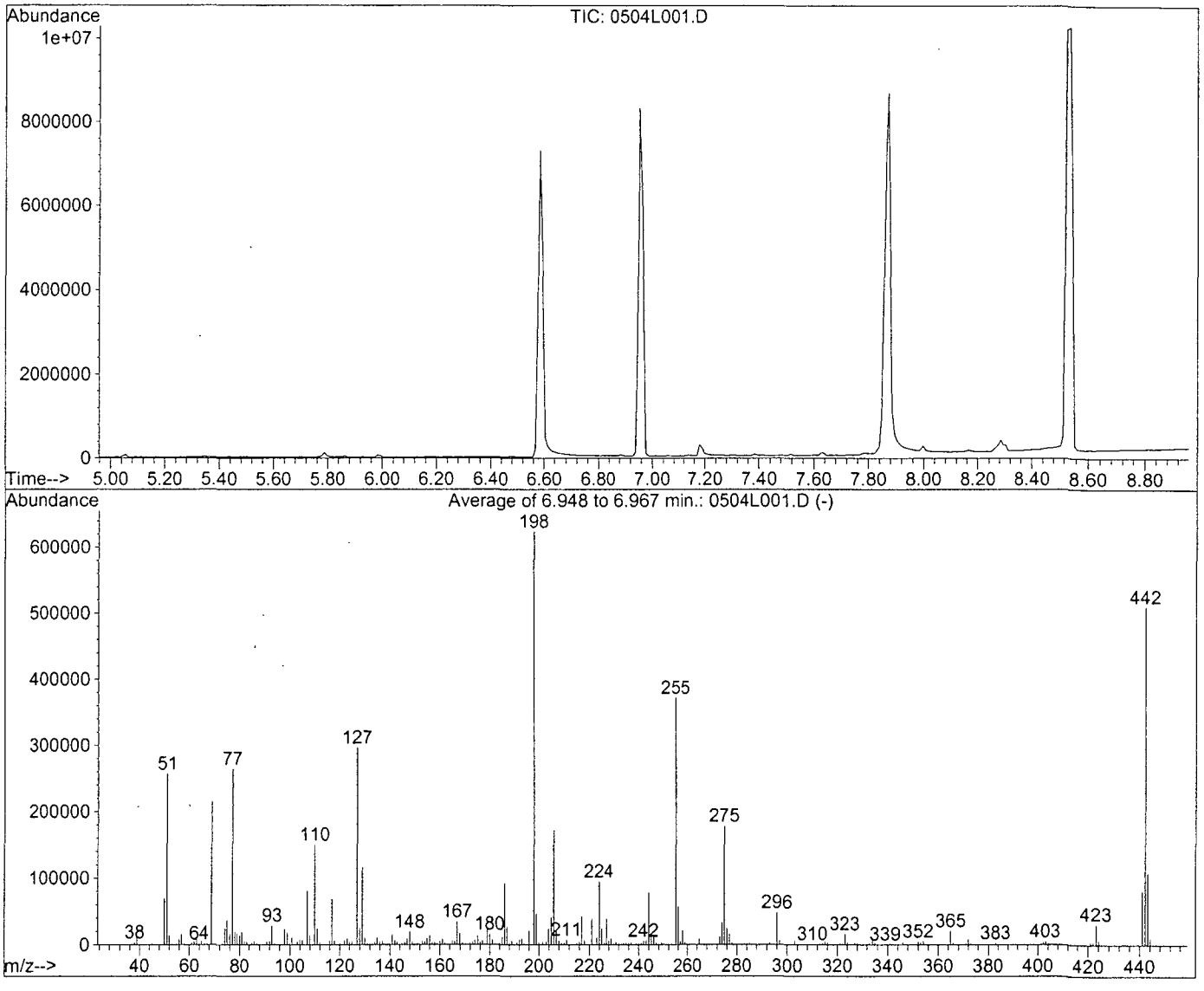
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.4	186212	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	747	PASS
127	198	40	60	45.5	253515	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	556758	PASS
199	198	5	9	7.4	41091	PASS
275	198	10	30	26.6	148178	PASS
365	198	1	100	3.0	16881	PASS
441	443	0.01	100	74.7	59029	PASS
442	198	40	150	68.4	380557	PASS
443	442	17	23	20.8	78999	PASS

DFTPP

Data File : M:\LINUS\DATA\L120229\0504L001.D
Acq On : 4 May 12 13:39
Sample : SVTUNE 2-28-12
Misc :

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

Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
Title : EPA 8270C



Spectrum Information: Average of 6.948 to 6.967 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.2	256958	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	1046	PASS
127	198	40	60	47.5	296244	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	624299	PASS
199	198	5	9	7.3	45872	PASS
275	198	10	30	28.5	177893	PASS
365	198	1	100	3.2	20201	PASS
441	443	0.01	100	74.6	80345	PASS
442	198	40	150	81.6	509445	PASS
443	442	17	23	21.1	107645	PASS

2/25/12

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

8270D PAH SIM Solution, 200 mg/L, 1 ml

110780-01

Lot #	Storage	Expiry
170253	≤ -10 Degrees C	3/3/13

Solv: Methylene Chloride

exp 2/25/13

8270D PAH SIM
Lot # 170253 - 28478
Rec 3/10/11 MFR exp 3/3/2013

2/25/12

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

8270D PAH SIM Solution, Second Source, 200 mg/L, 1 ml

110780-01-SS

Lot #	Storage	Expiry
170256	≤ -10 Degrees C	3/3/13

Solv: Methylene Chloride

exp 2/25/13

8270D PAH SIM (SS)
Lot # 170256 - 28490
Rec 3/10/11 MFR exp 3/3/2013

2/25/12

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

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

110004-17

Lot #	Storage	Expiry
167802	≤ -10 Degrees C	1/9/13

Solv: Methylene Chloride

exp 1/9/13

8270 BN:A (200 400) Surrogate Solution
Lot #: 167802 - 29314
Rec. 8/8/11 MFR exp. 01/09/13

2/25/12

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

Method 8270 Internal Standard Solution, 2,000 mg/L, 1 ml

110001-02

Lot #	Storage	Expiry
167766	≤ -10 Degrees C	4/20/13

Solv: Methylene Chloride

exp 2/25/13

8270 Internal Standard
Lot #: 167766 - 28151
Rec. 1/20/11 MFR exp 04/20/13

2/25/12

PREP DATE:	02-25-12					
SIM Semivolitile Int. Std. Mix 125 ug/ml						
Exp:	08-25-12					
		Conc.		Date	CODE:	B
Supplier	ID #	µg/mL	Lot #	Code	Exp Date	µL
O2SI	Int. Std.	2000	167766-28151	02/25/12	02-25-13	100
EM Science	MeCl2		47186			1500
						1600

2/25/12

PREP DATE:	02-25-12												
8270 SIM STANDARD CURVE													
						0.10	0.20	0.50	1.00	5.00	10.00	50.00	100
		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	µ
	8270D PAH SIM	200	170253-28478	02/25/12	02-25-13	0	0	0	0	5	5	25	5
	5 0ug/mL	5		02/25/12		0	0	10	20	0	0	0	0
	1 0ug/mL	1		02/25/12		10	20	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29314	02/25/12	01-09-13	0	0	0	0	5	5	25	5
EM Science	Methylene Chloride		47186			90	80	90	80	190	90	50	0
					Final Vol.	100	100	100	100	200	100	100	10

UF 2/27/12

PREP DATE:	02-25-12						
SIM 8270 Second Source (5µg/mL)							
Exp:	03-10-12						
				Conc.	Date	CODE:	
Supplier	ID #		Lot #	µg/mL	Code	Exp.Date	µL
	8270D PAH SIM (SS)		170256-28490	200	02/25/12	02-25-13	5
	MeCl2			Lot#47186			195
					Final Volume		200

UF 2/28/12

GCM-160-1
Lot CH-2137
Exp 07/31/2013
Semi-Volatiles GC/MS Tuning Standard
4 analyte(s) at 1000 µg/mL in dichloromethane
250 Smith St, No Kingstown, RI 02852 USA
ULTRA 1 mL
For Lab Use

UF

exp 2/28/13

UF 2/28/12

PREP DATE:	02-28-12					
SV Tune Mix 50ug/ml						
Exp:	02-28-13					
		Conc.		Date	CODE:	B
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
U. Scientific	GCM-150	1000	CH-2137	02/28/12	07-31-13	1000
EM Science	MeCl2		47080			19000
					Final Vol	20000

UF 2/29/12

UF

PREP DATE:	02-29-12												
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	170253-28478	02/25/12	02-25-13	0	0	0	0	5	5	25	50
	5 0ug/mL	5		02/29/12		0	0	10	20	0	0	0	0
	1.0ug/mL	1		02/29/12		10	20	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29314	02/25/12	01-09-13	0	0	0	0	5	5	25	50
EM Science	Methylene Chloride		47186			90	80	90	80	190	90	50	0
					Final Vol.	100	100	100	100	200	100	100	100

UF 2/29/12

UF

PREP DATE:	02-29-12					
SIM 8270 Second Source (5µg/mL)						
Exp:	03-14-12					
				Conc.	Date	CODE:
Supplier	ID #		Lot #	µg/mL	Code	Exp.Date	µL
	8270D PAH SIM (SS)		170256-28490	200	02/25/12	02-25-13	5
	MeCl2			Lot#47186			195
					Final Volume		200

UF 3/18/12

UF

PREP DATE:	03-18-12												
8270 STANDARD CURVE													
						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		02/13/12	07-31-12	5	5	10	20	25	30	40	50
	Surrogate Stock	VAR	167802-29314	02/25/12	01-09-13	5	5	10	20	25	30	40	50
EM Science	Methylene Chloride		47186			190	90	80	60	50	40	20	0
					Final Vol.	200	100	100	100	100	100	100	100

UF 3/18/12

UF

PREP DATE:	03-18-12					
8270 Second Source (SS) 50ug/mL						
						50
		Conc.		Date	CODE:	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
	8270C SS	200		10/11/11	10-11-12	25
EM Science	Methylene Chloride		47186			75
					Final Vol.	100

_SEP004S

Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	120430A	Extraction Method	SEP004S	Units	mL

Spiked ID 1	SIM Spike 170745-30370		Surrogate ID 1	8270 SIM Surrogate 177982-29476	
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:	**05/11/12 0:00**	

pH1	2	4/30/12 11:40:00 AM	Water Bath Temp Criteria	80 °C
pH2	14	04/30/12 1:00:00 PM		
pH3				

Spiked By: DL **Date** 04/30/12 **Witnessed By:** FXR **Date** 04/30/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120430A Blk				0.025	1	1000	1	2/1	04/30/12 11:35	
						equip	E-WB7				
2	120430A LCS-1		0.025	1	0.025	1	1000	1	2/1	04/30/12 11:35	
						equip	E-WB7				
3	AY60080	AY60080W09			0.025	1	1040	1	2/1	04/30/12 11:35	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
4	AY60081 MS-1	AY60081W16	0.025	1	0.025	1	1040	1	2/1	04/30/12 11:35	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
5	AY60081 MSD-1	AY60081W18	0.025	1	0.025	1	1040	1	2/1	04/30/12 11:35	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
6	AY60081	AY60081W12			0.025	1	1000	1	2/1	04/30/12 11:35	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
7	AY60110	AY60110W07			0.025	1	1030	1	2/1	04/30/12 11:35	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
8	AY60111	AY60111W05			0.025	1	1050	1	2/1	04/30/12 11:35	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
9	AY60112	AY60112W08			0.025	1	1050	1	2/1	04/30/12 11:35	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
10	AY60120	AY60120W06			0.025	1	1050	1	2/1	04/30/12 11:35	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				

DRA 5/3/12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501
10N NaOH	04/27/12
1+1 Acid	04/06/12
A. Na2SO4	04/24/12

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	VF
Date	5/4/12
Time	1200
Refrigerator	Hornak

	Technician's Initials
Scanned By	DRA
Sample Preparation	FXR
Extraction	FXR
Concentration	IC

Modified	04/30/12 10:27:59 AM

Reviewed By: DRA **Date** 05/02/12

Injection Log

Directory: M:\LINUS\DATA\L120229\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0229L001.D	1	SVTUNE 2-28-12		29 Feb 12 21:31
2	3	0229L003.D	1	0.1ug/ml PAH 02-29-12		1 Mar 12 00:20
3	4	0229L004.D	1	0.2ug/ml PAH		1 Mar 12 00:44
4	5	0229L005.D	1	0.5ug/ml PAH		1 Mar 12 1:09
5	6	0229L006.D	1	1.0ug/ml PAH		1 Mar 12 1:34
6	7	0229L007.D	1	5.0ug/ml PAH		1 Mar 12 1:59
7	8	0229L008.D	1	10ug/ml PAH		1 Mar 12 2:24
8	9	0229L009.D	1	50ug/ml PAH		1 Mar 12 2:49
9	10	0229L010.D	1	100ug/ml PAH		1 Mar 12 3:14
10	11	0229L011.D	1	5.0ug/ml SS PAH 02-29-12		1 Mar 12 3:39
11	1	0504L001.D	1	SVTUNE 2-28-12		4 May 12 13:39
12	2	0504L002.D	1	5.0ug/ml PAH 02-29-12		4 May 12 13:58
13	3	0504L003.D	1	120430A BLK 1/1000		4 May 12 14:23
14	4	0504L004.D	1	120430A LCS-1 1/1000		4 May 12 14:49
15	5	0504L005.D	0.96154	AY60080W09 1/1040		4 May 12 15:14
16	6	0504L006.D	0.96154	AY60081W16 MS-1 1/1040		4 May 12 15:39
17	7	0504L007.D	0.96154	AY60081W18 MSD-1 1/1040		4 May 12 16:04
18	8	0504L008.D	1	AY60081W12 1/1000		4 May 12 16:30

EPA 8015 Modified
Total Petroleum Hydrocarbons

EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary

Method Blank
TPH Diesel Water

Blank Name/QCG: **120430W-60081 - 166675**
Batch ID: #TPETD-120430A

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	04/30/12	05/02/12
BLANK	SURROGATE: OCTACOSANE (S)	106	28-142			%	04/30/12	05/02/12
BLANK	SURROGATE: ORTHO-TERPHEN	73.0	57-132			%	04/30/12	05/02/12

Quant Method: TPH306B.M
Run #: 502005
Instrument: Apollo
Sequence: 120502
Initials: TRL

Printed: 05/08/12 3:04:38 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/02/12

Matrix: WATER Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120430A-BLK	Blank	28-142	106		57-132	73.0	
120430A-LCS	Lab Control Spike	28-142	88.7		57-132	86.0	
AY60080	ES076	28-142	90.3		57-132	63.4	
AY60081-MS	Matrix Spike	28-142	84.7		57-132	80.7	
AY60081-MSD	Matrix SpikeD	28-142	96.7		57-132	86.0	
AY60081	ES077	28-142	98.7		57-132	67.9	

Comments: Batch: #TPETD-120430A

Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **120430W-60081 LCS - 166675**
Batch ID: #TPETD-120430A

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	1250	62.5	61-143
SURROGATE: OCTACOSANE (S)	150	94.3	62.9	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	123	82.0	57-132

Comments: _____

Primary	SPK
Quant Method :	TPH306B.M
Extraction Date :	04/30/12
Analysis Date :	05/08/12
Instrument :	Apollo
Run :	502104
Initials :	TRL

Printed: 05/08/12 6:26:51 PM
APPL Standard LCS

Matrix Spike Recoveries

TPH Diesel Water

APPL ID: **120430W-60081 MS - 166675**
Batch ID: #TPETD-120430A
Sample ID: AY60081
Client ID: ES077

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	220	1160	1250	47.0 #	51.5 #	61-143	7.5	30
SURROGATE: OCTACOSANE (S)	150	NA	127	145	84.7	96.7	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	121	129	80.7	86.0	57-132		

= Recovery is outside QC limits.

Comments: _____

Primary	SPK	DUP
Quant Method :	TPH306B.M	TPH306B.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	05/02/12	05/02/12
Instrument :	Apollo	Apollo
Run :	502008	502009
Initials :	TRL	

Printed: 05/08/12 3:04:57 PM
APPL MSD SCII

EPA 8015B-e

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/02/12

Matrix: WATER Instrument: Apollo

Blank ID: 120430A-BLK Time Analyzed: 1315

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120430A-BLK	Blank	502005	05/02/12 1315
AY60080	ES076	502007	05/02/12 1404
120430A-MS	Matrix Spike	502008	05/02/12 1428
120430A-MSD	Matrix SpikeD	502009	05/02/12 1452
AY60081	ES077	502010	05/02/12 1515
120430A-LCS	Lab Control Spike	502104	05/08/12 1750

Comments: Batch: #TPETD-120430A

Printed: 05/08/12 6:29:20 PM
Form 4, Blank Summary

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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES076

APPL ID: AY60080

Sample Collection Date: 04/26/12

QCG: #TPETD-120430A-166675

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	160 ++	150	80.8	40.4	ug/L	04/30/12	05/02/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	90.3	28-142			%	04/30/12	05/02/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	63.4	57-132			%	04/30/12	05/02/12

++(T9M) The analyst has noted that the chromatogram of this sample is mainly non-diesel hydrocarbons within the boiling point range of diesel fuel.

Quant Method: TPH306B.M
Run #: 502007
Instrument: Apollo
Sequence: 120502
Dilution Factor: 1
Initials: TRL

Printed: 05/08/12 3:05:07 PM
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\120502\502007.D Vial: 7
Acq On : 5-2-12 14:04:05 Operator: LAC
Sample : AY60080W07 5/1010 Inst : Apollo
Misc : Water Multiplr: 4.95
IntFile : events.e
Quant Time: May 8 14:31 2012 Quant Results File: TPH306B.RES

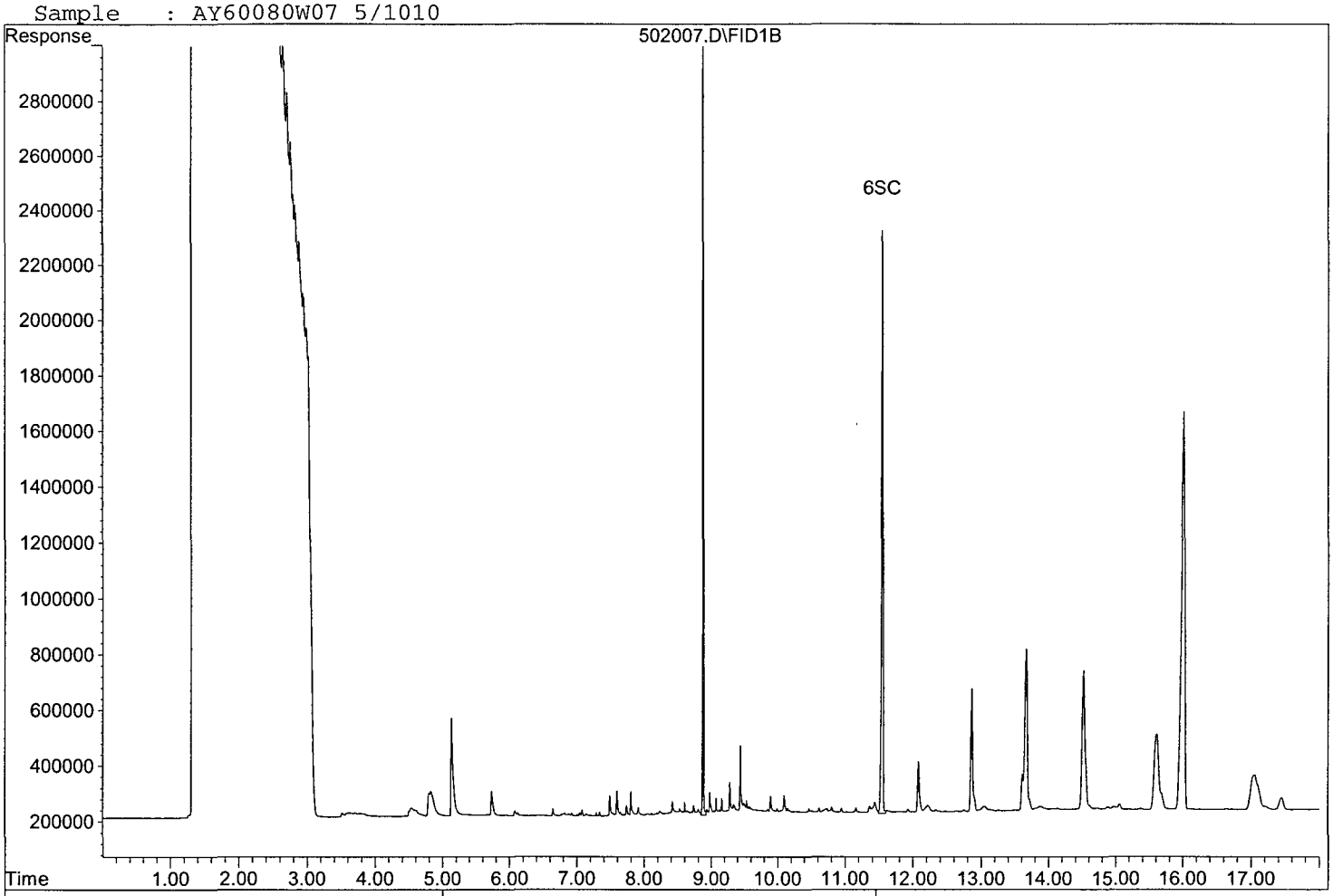
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

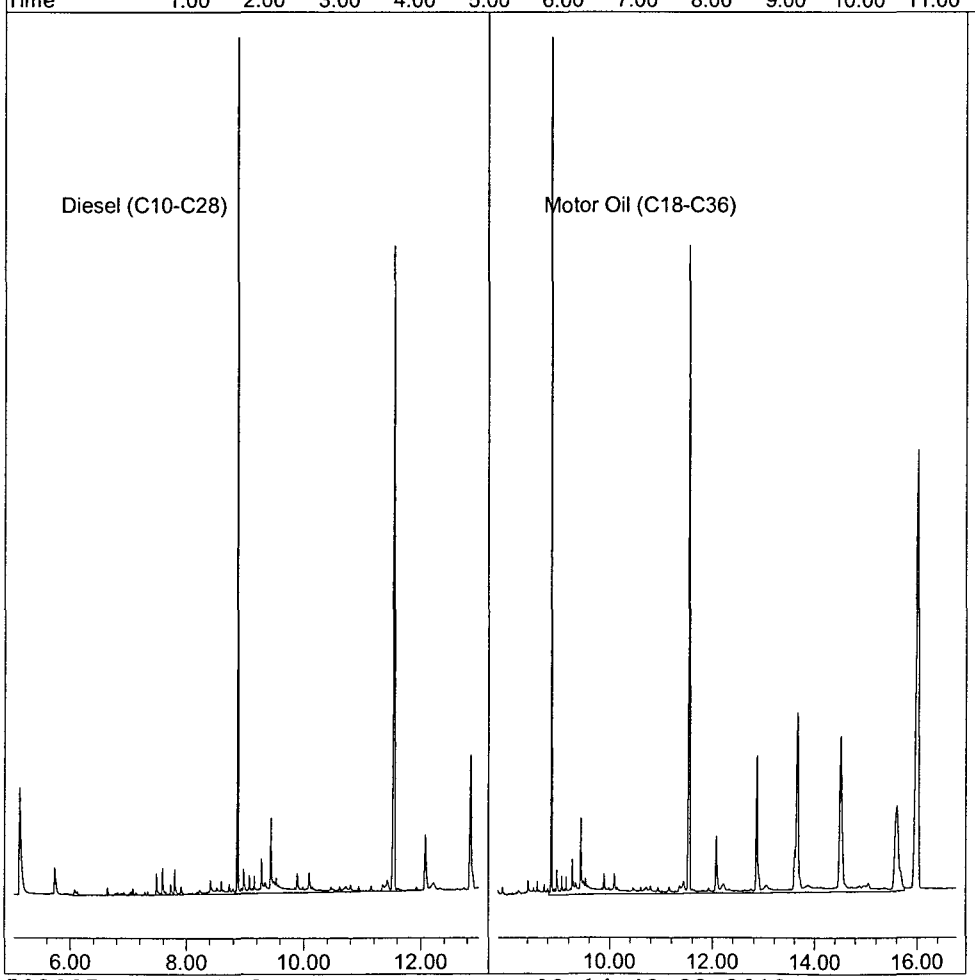
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	26296745	94.175 ppb
Surrogate Spike 148.515		Recovery =	63.41%
6) SC Octacosane(S)	11.55	31986179	134.041 ppb
Surrogate Spike 148.515		Recovery =	90.25%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	35233806	159.435 ppb
2) HBTM Motor Oil (C18-C36)	12.30	115316621	744.567 ppb

TAM 5/16/12

Data File: G:\APOLLO\DATA\120502\502007.D
Sample : AY60080W07 5/1010





TPH Diesel Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES077

APPL ID: AY60081

Sample Collection Date: 04/26/12

QCG: #TPETD-120430A-166675

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	220 ++	150	80.8	40.4	ug/L	04/30/12	05/02/12
EPA 8015B-	SURROGATE: OCTACOSANE (S)	98.7	28-142			%	04/30/12	05/02/12
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S	67.9	57-132			%	04/30/12	05/02/12

++(T4M) The analyst has noted that the chromatogram of this sample is mainly a dominant peak(s) which is not indicative of petroleum hydrocarbons.

Quant Method: TPH306B.M
Run #: 502010
Instrument: Apollo
Sequence: 120502
Dilution Factor: 1
Initials: TRL

Printed: 05/08/12 3:05:07 PM
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\120502\502010.D Vial: 10
Acq On : 5-2-12 15:15:55 Operator: LAC
Sample : AY60081W11 5/1040 Inst : Apollo
Misc : Water Multiplr: 4.81
IntFile : events.e
Quant Time: May 8 14:32 2012 Quant Results File: TPH306B.RES

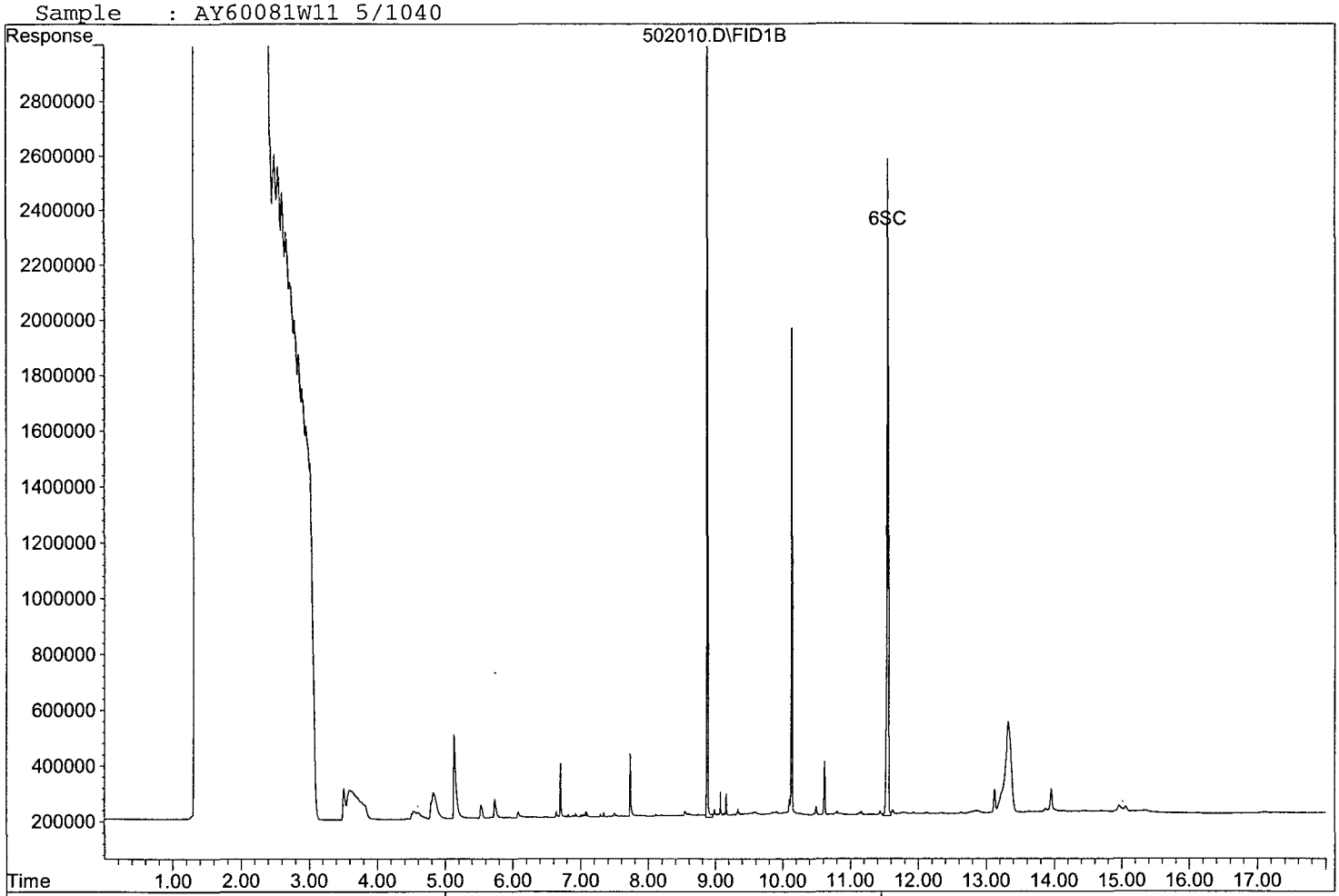
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

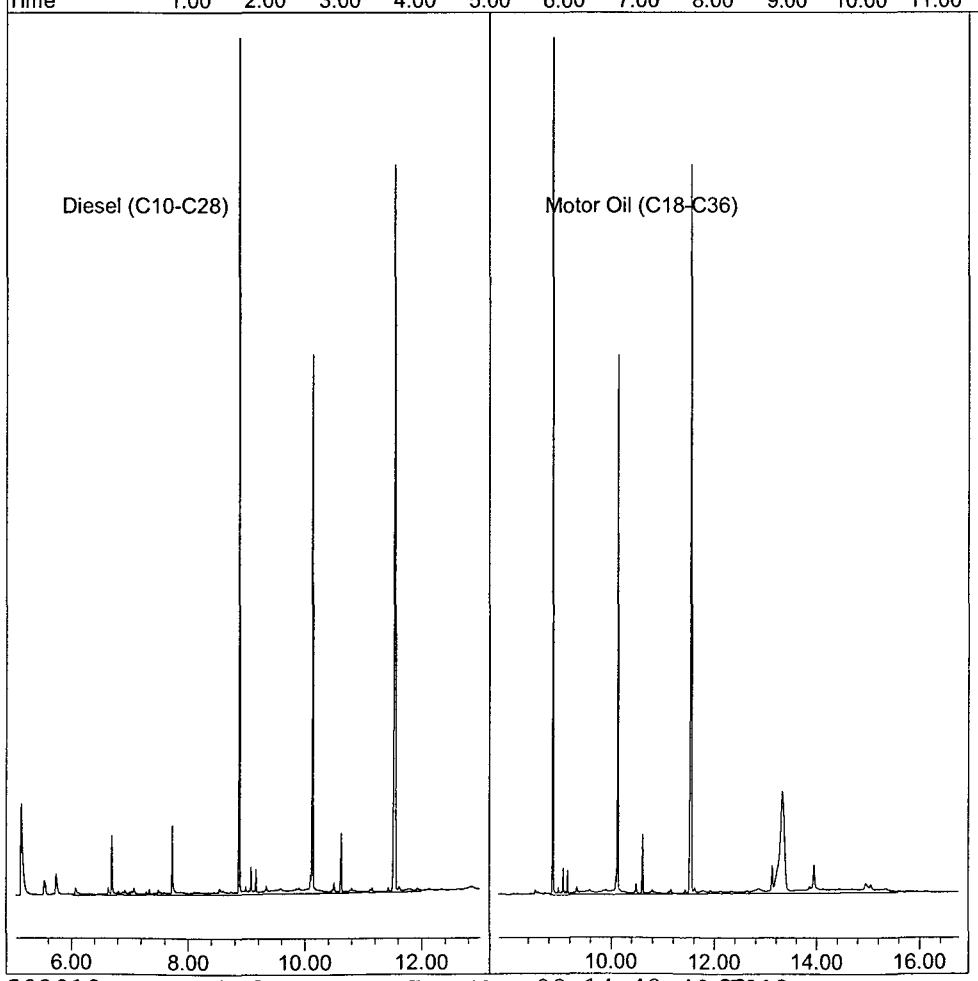
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	28160118	97.939 ppb
Surrogate Spike 144.231		Recovery =	67.90%
6) SC Octacosane(S)	11.56	34965391	142.299 ppb
Surrogate Spike 144.231		Recovery =	98.66%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	49100241	215.772 ppb
2) HBTM Motor Oil (C18-C36)	12.30	77156779	483.808 ppb

TPH 5/8/12

Data File: G:\APOLLO\DATA\120502\502010.D
Sample : AY60081W11 5/1040





EPA 8015 Modified
Total Petroleum Hydrocarbons

Calibration Data

APPL, INC.

TPH Extractables
TPH0306

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 03/06/12
Matrix: Instrument: Apollo Initials: LAC

306021.D 306022.D 306023.D 306024.D 306025.D 306026.D
306028.D 306029.D 306030.D 306031.D 306032.D 306033.D
306034.D 306035.D 306036.D 306037.D 306038.D 306039 D

		Compound	1	2	3	4	5	6			Avg	%RSD		
1	HATM	Diesel (C10-C28)	529470	572376	554327	532214	548865	544808			547010	2.9	HATM	
2	HBTM	Motor Oil (C18-C36)	330338	392850	386776	387626	385763	416808			383360	7.4	HBTM	
3	SA	Not Used(S)	818070	901397	771640	752170	778035	779206			800086	6.8	SA	
4	SC	Ortho-Terphenyl(S)		758155	695456	669026	662710	670505			691170	5.7	SC	
5	SA	Not Used2(S)	639279	629664	580197	560231	582428	580127			595321	5.3	SA	
6	SC	Octacosane(S)		649248	593354	568152	567907	574675			590667	5.8	SC	
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
32														
33														
34														
35														

0.967941

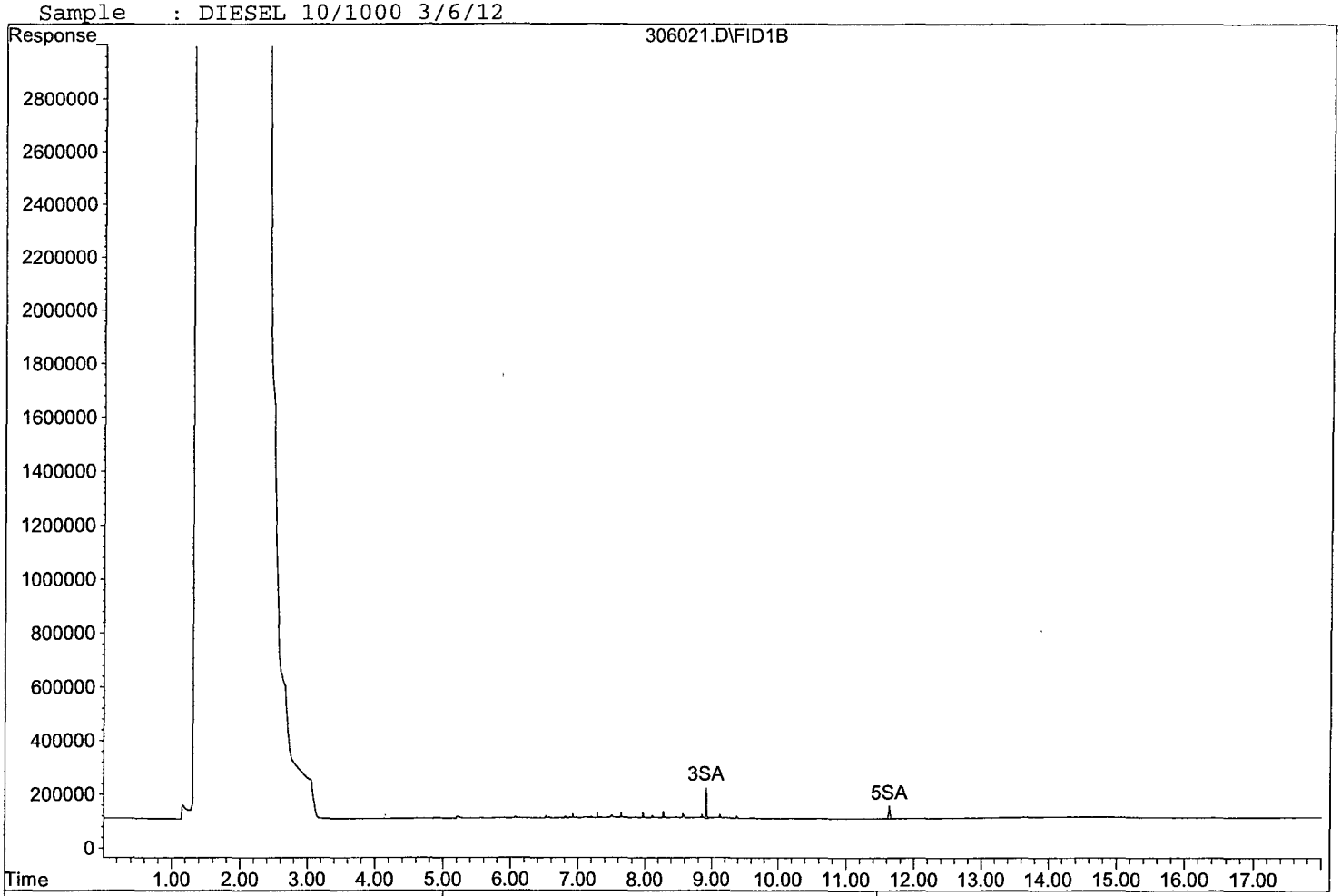
Data File : G:\APOLLO\DATA\120306\306021.D Vial: 21
Acq On : 3-6-12 17:25:38 Operator: LAC
Sample : DIESEL 10/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:48 2012 Quant Results File: TPH0306.RES

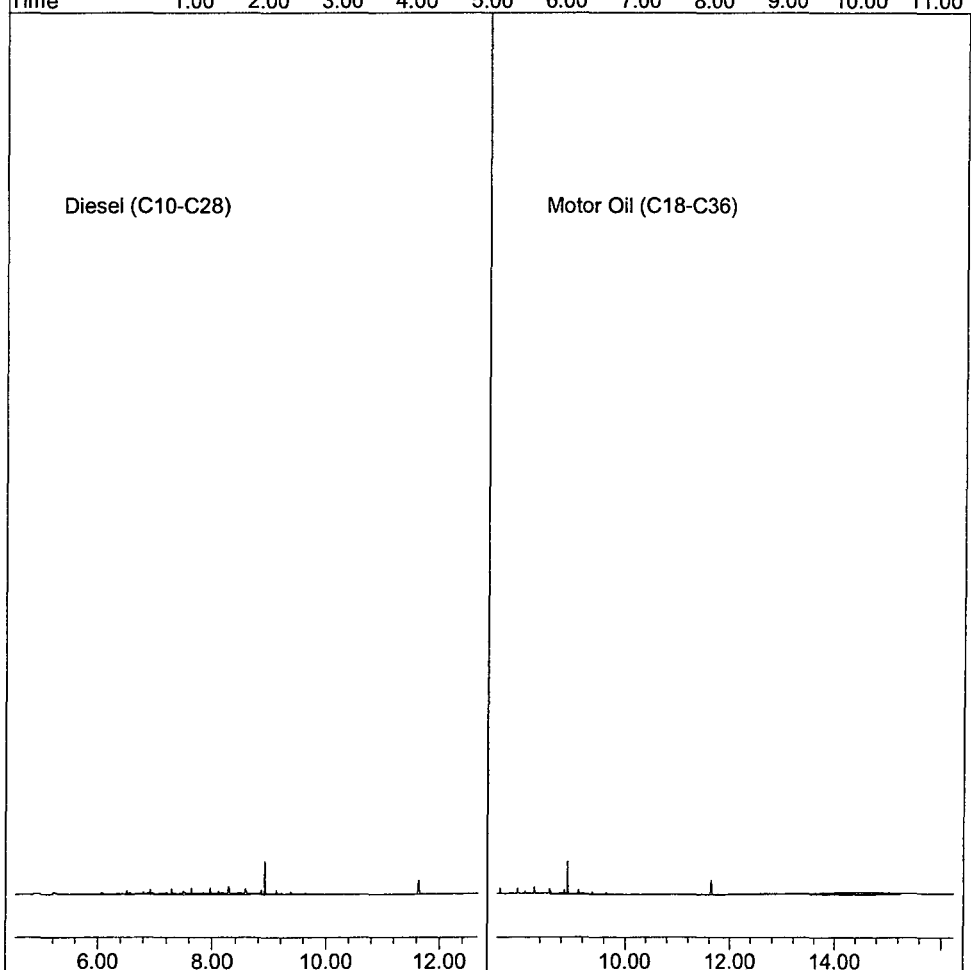
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	818070	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
5) SA Not Used2(S)	11.63	639279	0.500 ppb
Surrogate Spike 30.000	Recovery	=	1.67%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	10589402	10.000 ppb

Data File: G:\APOLLO\DATA\120306\306021.D
Sample : DIESEL 10/1000 3/6/12





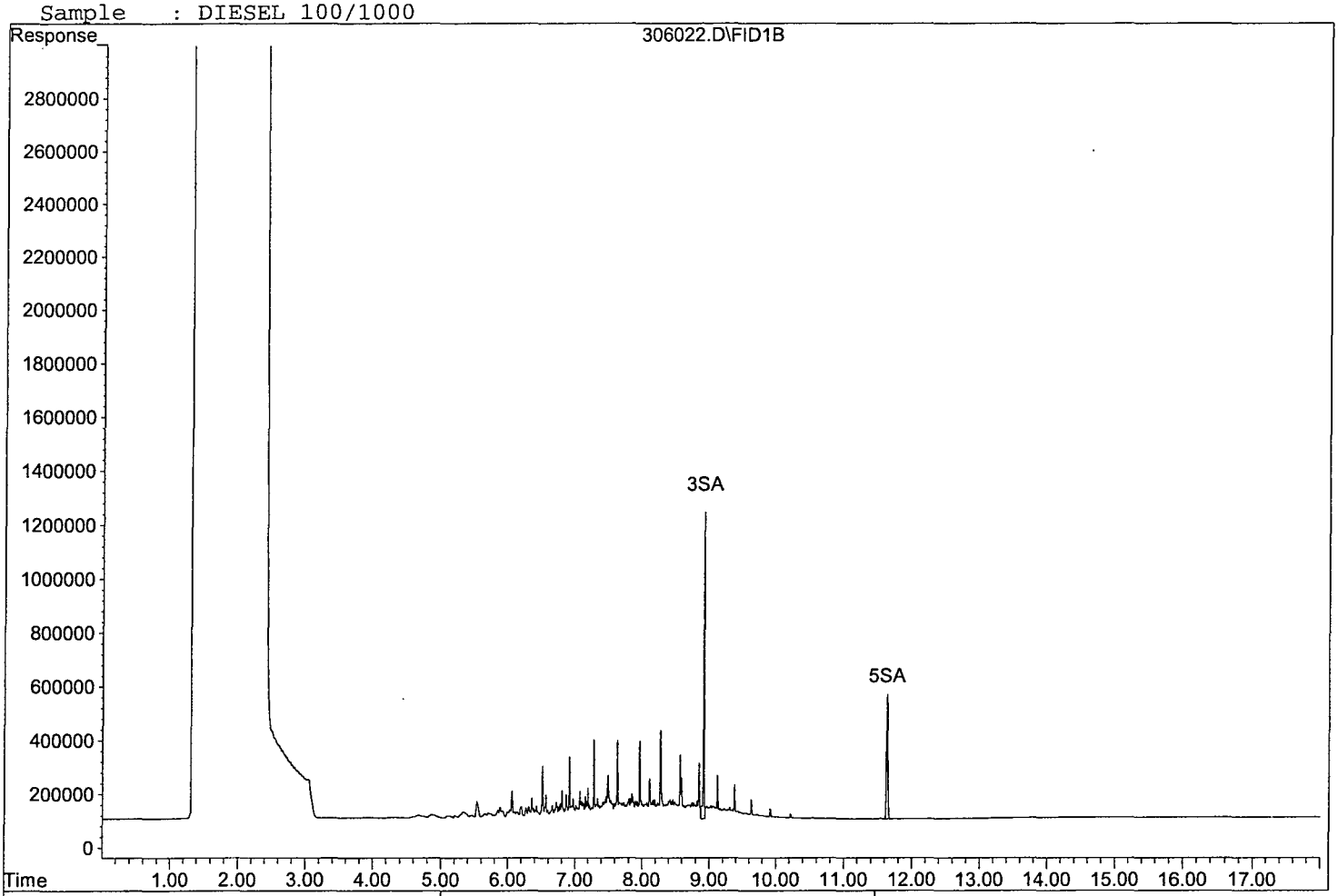
Data File : G:\APOLLO\DATA\120306\306022.D Vial: 22
Acq On : 3-6-12 17:49:21 Operator: LAC
Sample : DIESEL 100/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

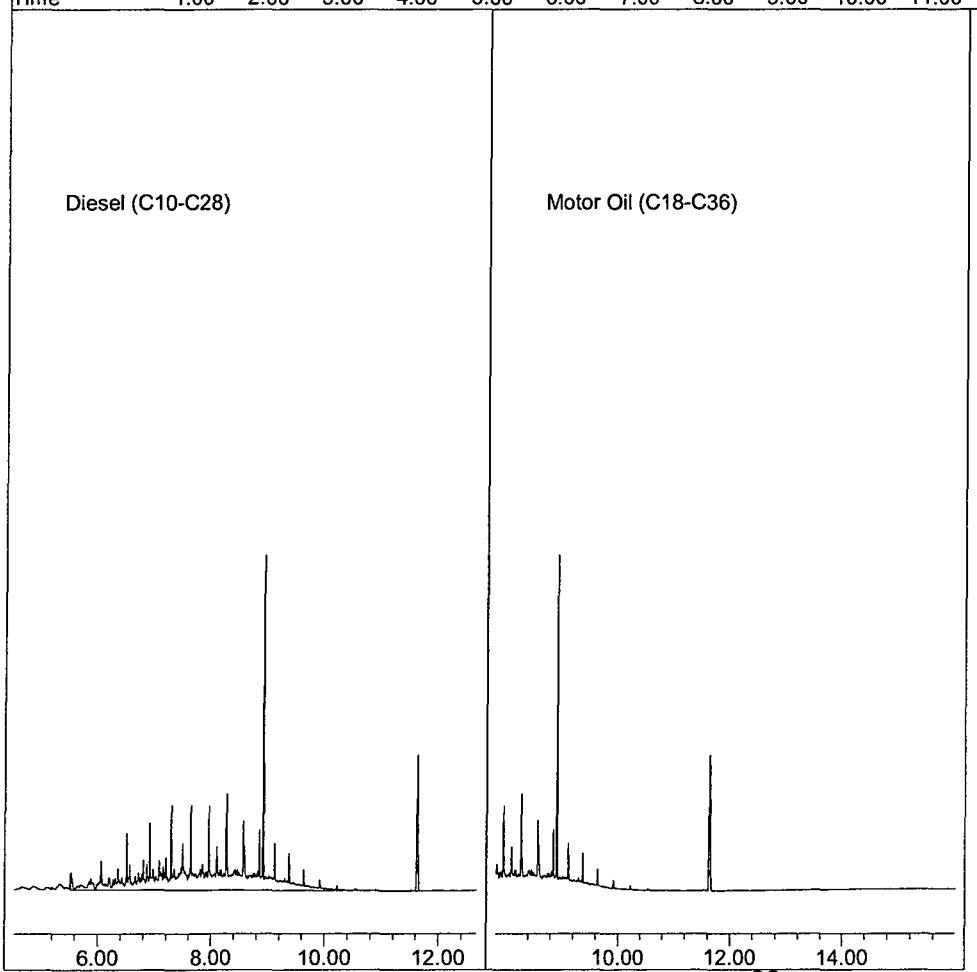
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	9013972	5.509 ppb
Surrogate Spike 30.000	Recovery =		18.36%
5) SA Not Used2(S)	11.63	6296635	4.925 ppb
Surrogate Spike 30.000	Recovery =		16.42%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	114475207	108.104 ppb

Data File: G:\APOLLO\DATA\120306\306022.D
Sample : DIESEL 100/1000





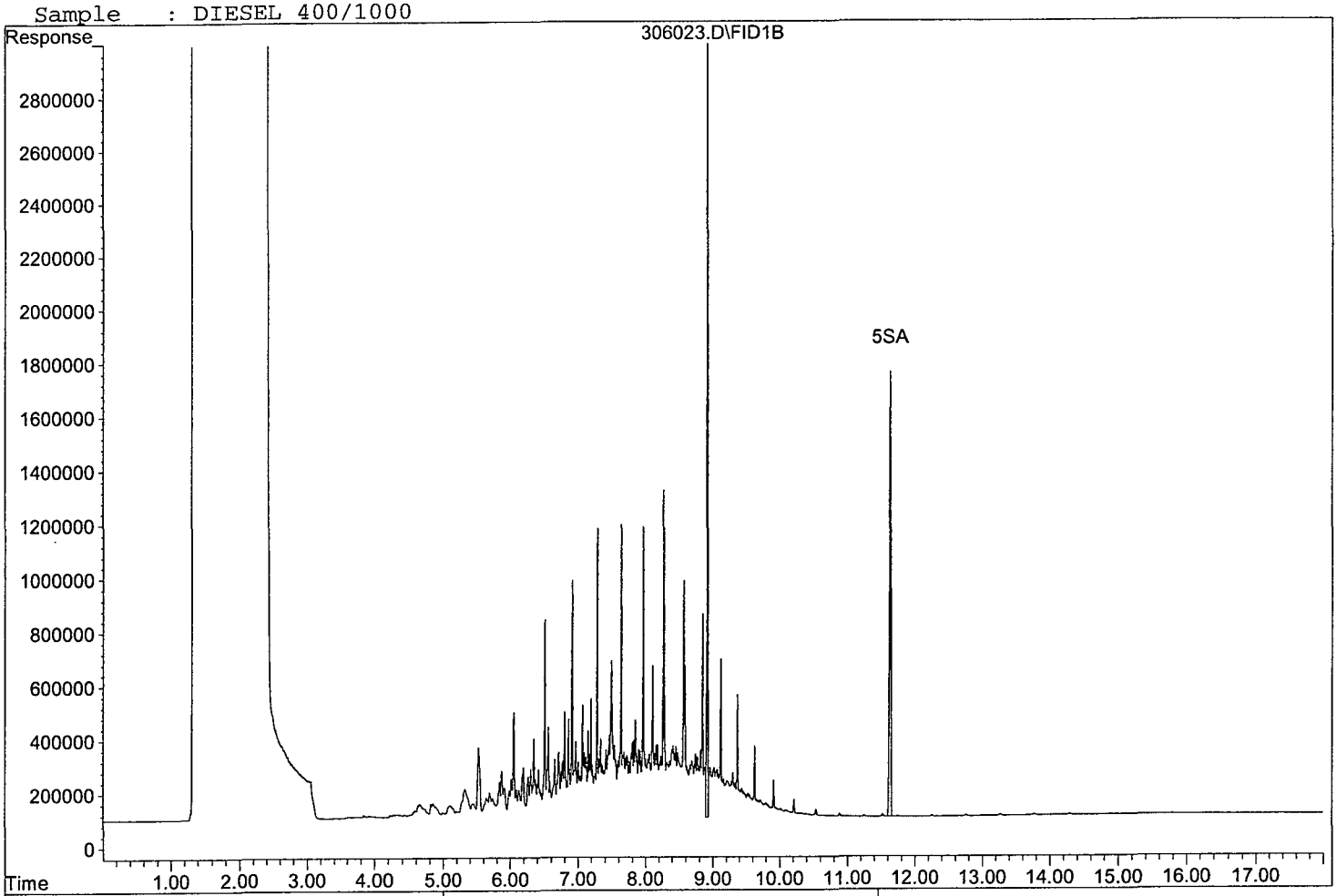
Data File : G:\APOLLO\DATA\120306\306023.D Vial: 23
Acq On : 3-6-12 18:12:55 Operator: LAC
Sample : DIESEL 400/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

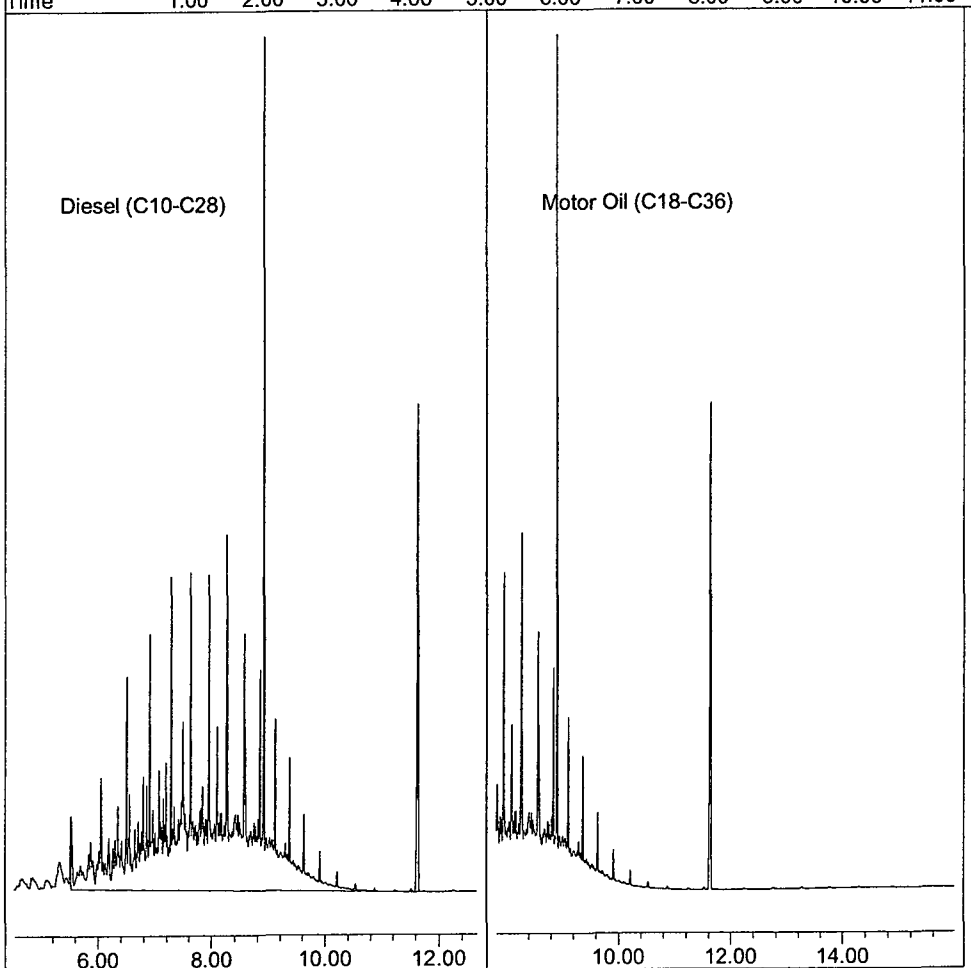
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	30865588	17.951 ppb
Surrogate Spike 30.000	Recovery =		59.84%
5) SA Not Used2(S)	11.64	23207886	18.289 ppb
Surrogate Spike 30.000	Recovery =		60.96%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	443461339	402.471 ppb

Data File: G:\APOLLO\DATA\120306\306023.D
Sample : DIESEL 400/1000





306023.D TPH0306.M Thu May 03 15:36:45 2012

Quantitation Report (Not Reviewed)

Data File : G:\APOLLO\DATA\120306\306024.D Vial: 24
Acq On : 3-6-12 18:36:31 Operator: LAC
Sample : DIESEL 600/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:49 2012 Quant Results File: TPH0306.RES

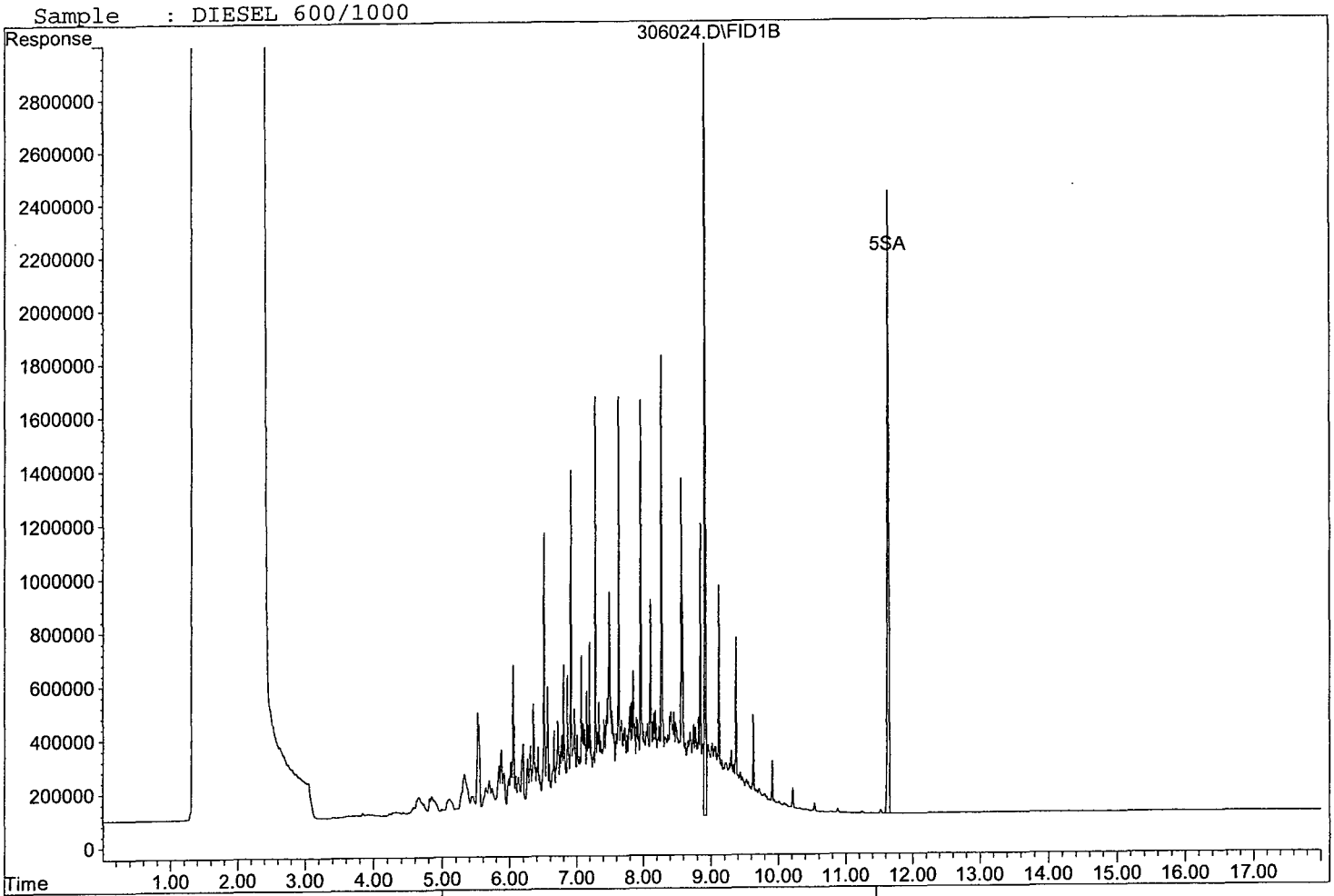
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

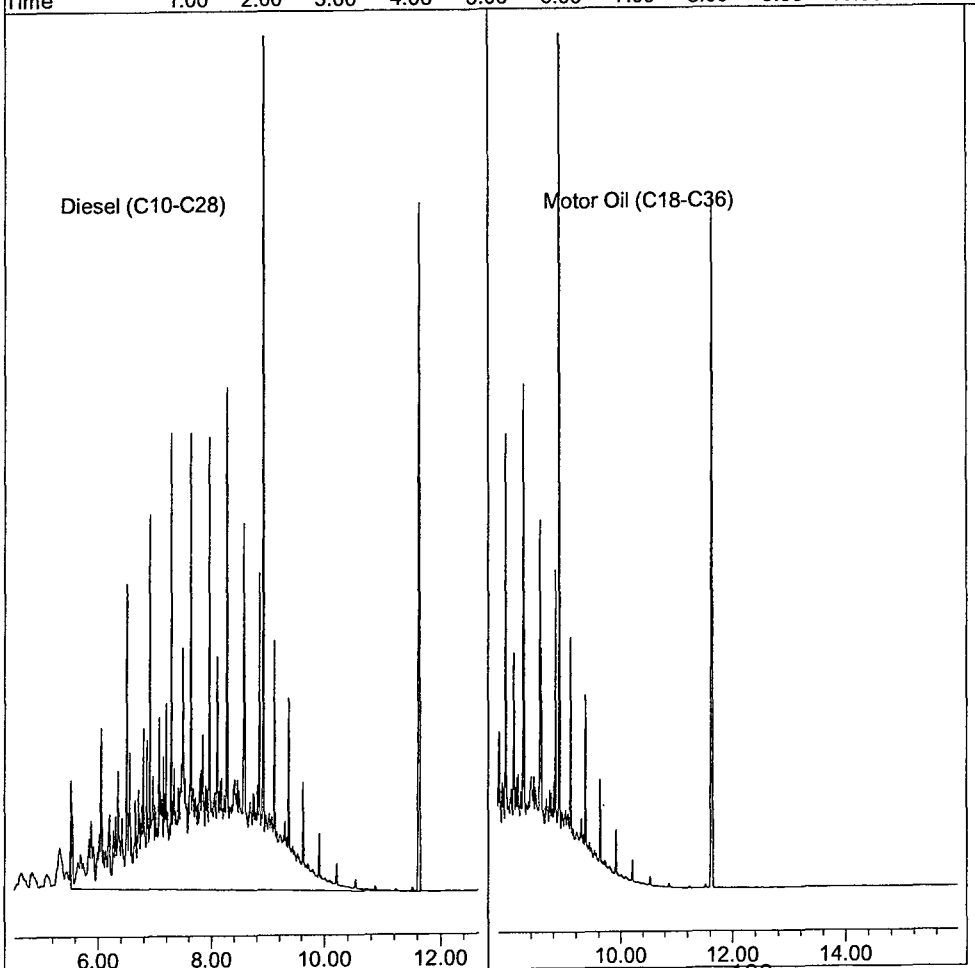
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	45130195	27.175 ppb
Surrogate Spike 30.000	Recovery =		90.58%
5) SA Not Used2(S)	11.64	33613879	27.267 ppb
Surrogate Spike 30.000	Recovery =		90.89%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	638656371	578.433 ppb

(f)=RT Delta > 1/2 Window 99 (m)=manual int.

Data File: G:\APOLLO\DATA\120306\306024.D
Sample : DIESEL 600/1000





306024.D TPH0306.M Thu May 03 15:36:51 2012

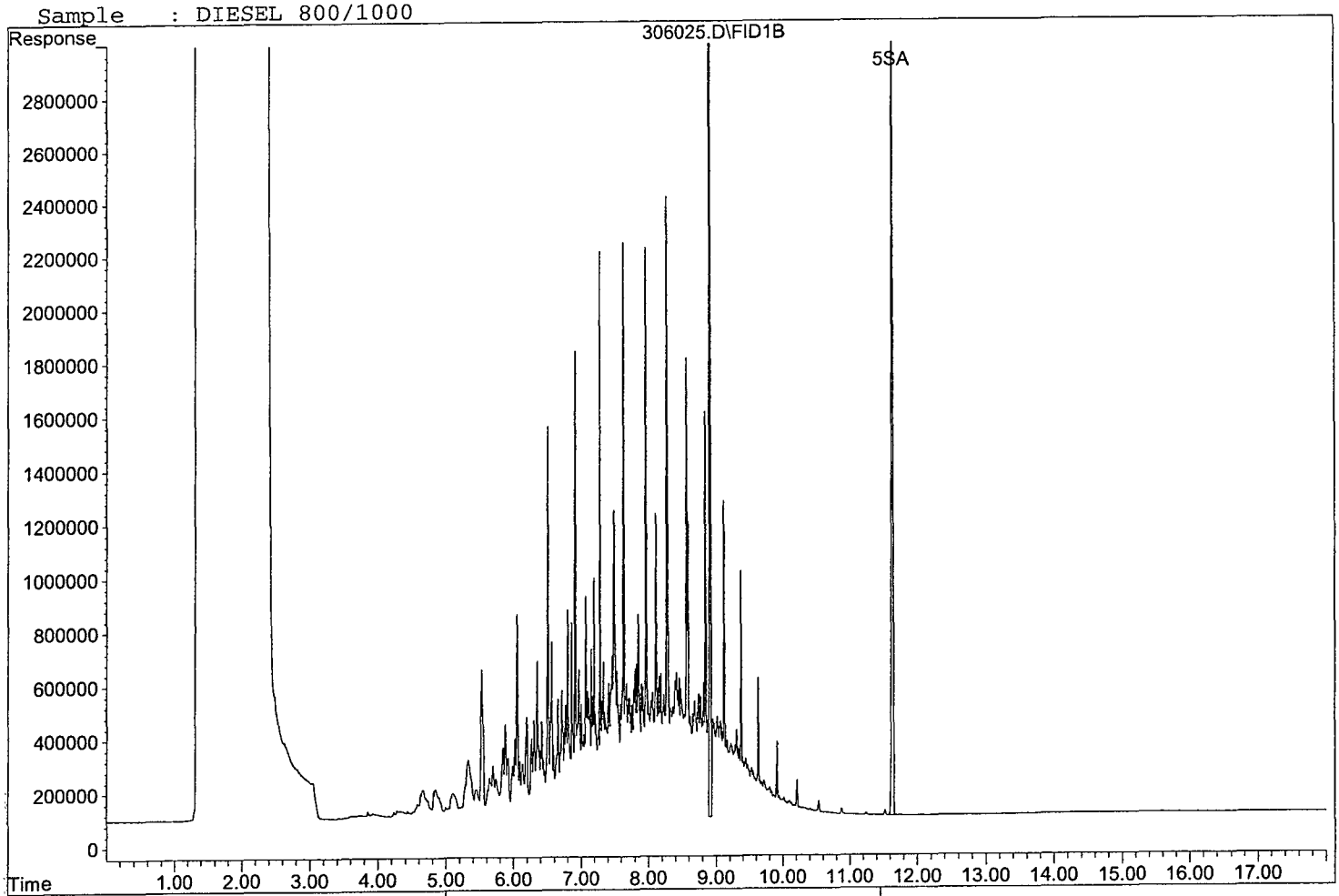
Data File : G:\APOLLO\DATA\120306\306025.D Vial: 25
Acq On : 3-6-12 19:00:08 Operator: LAC
Sample : DIESEL 800/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

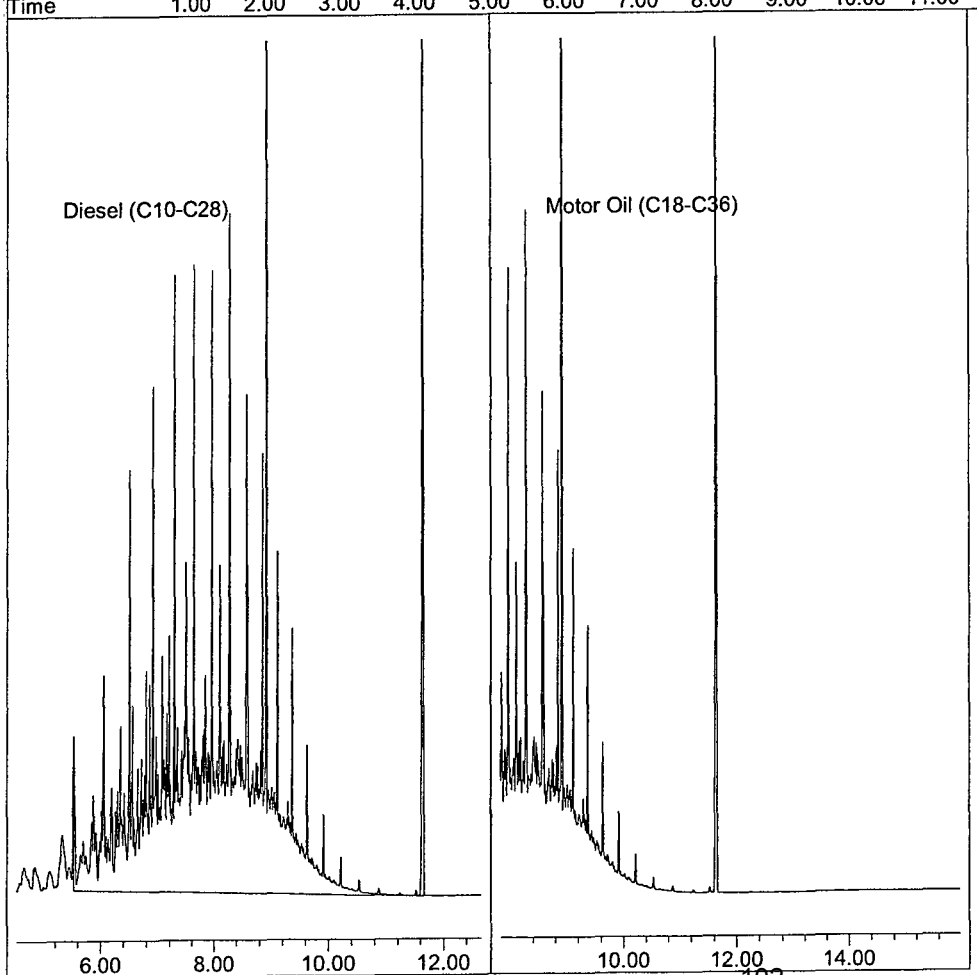
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	62242769	38.383 ppb
Surrogate Spike 30.000	Recovery =		127.94%
5) SA Not Used2(S)	11.65	46594210	38.677 ppb
Surrogate Spike 30.000	Recovery =		128.92%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	878183394	802.585 ppb

Data File: G:\APOLLO\DATA\120306\306025.D
Sample : DIESEL 800/1000





306025.D TPH0306.M Thu May 03 15:36:57 2012

Data File : G:\APOLLO\DATA\120306\306026.D Vial: 26
Acq On : 3-6-12 19:23:45 Operator: LAC
Sample : DIESEL 1000/1000 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

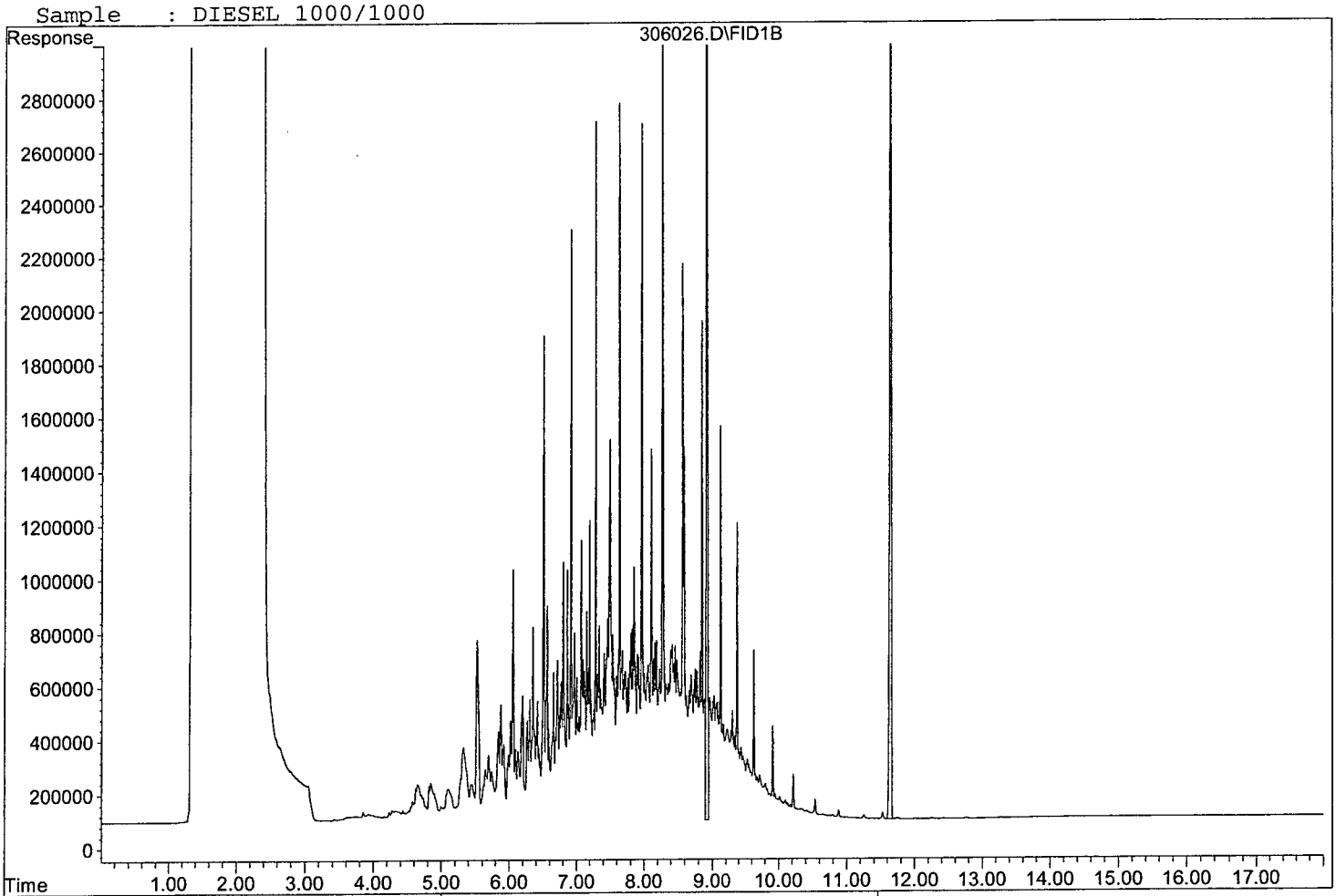
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

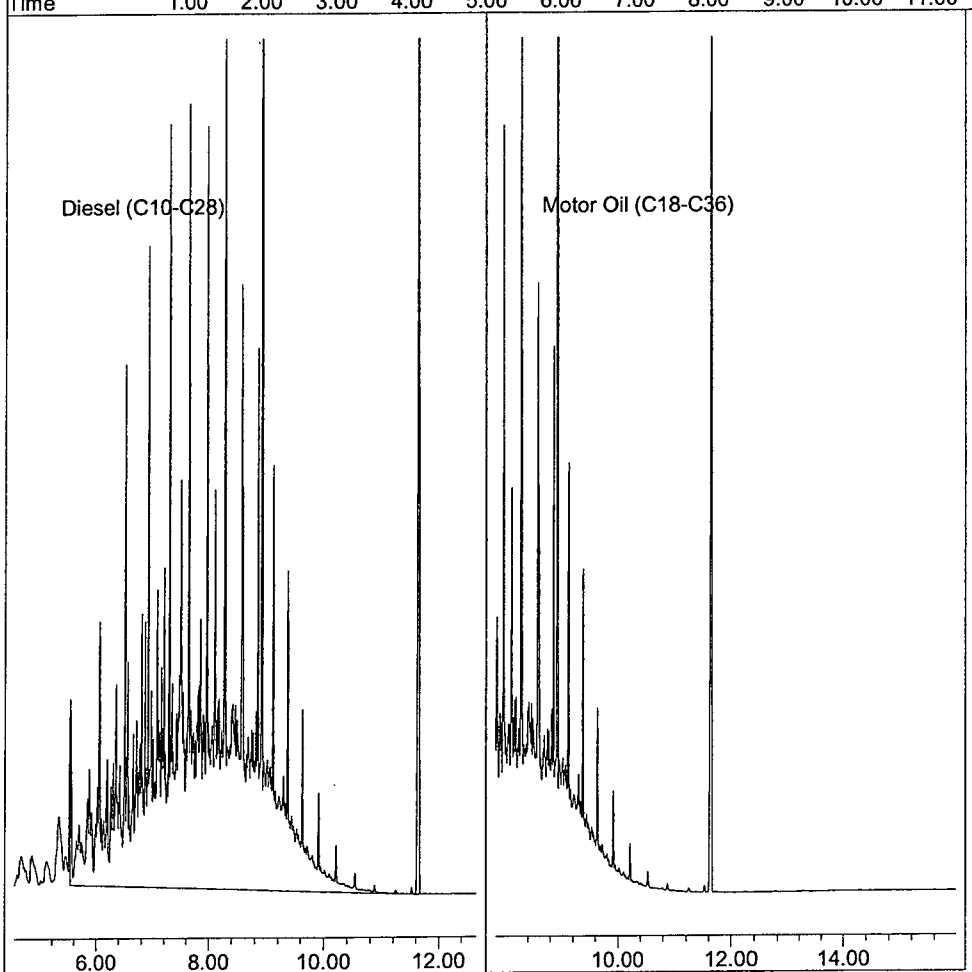
Volume Inj. : 2UL
Signal Phase : DB-5
Signal Info : FID02A

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	77920610	48.442 ppb
Surrogate Spike 30.000	Recovery =		161.47%
5) SA Not Used2(S)	11.65	58012669	48.476 ppb
Surrogate Spike 30.000	Recovery =		161.59%
Target Compounds			
1) HATM Diesel (C10-C28)	8.60	1089615924	995.174 ppb

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

Data File: G:\APOLLO\DATA\120306\306026.D
Sample : DIESEL 1000/1000





306026.D TPH0306.M Thu May 03 15:37:03 2012

TPH Extractables
TPH0306

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 03/06/12
Instrument: Apollo
Initial Cal. Date: 03/06/12
Data File: 306027.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	547335	0.06	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			0.1		

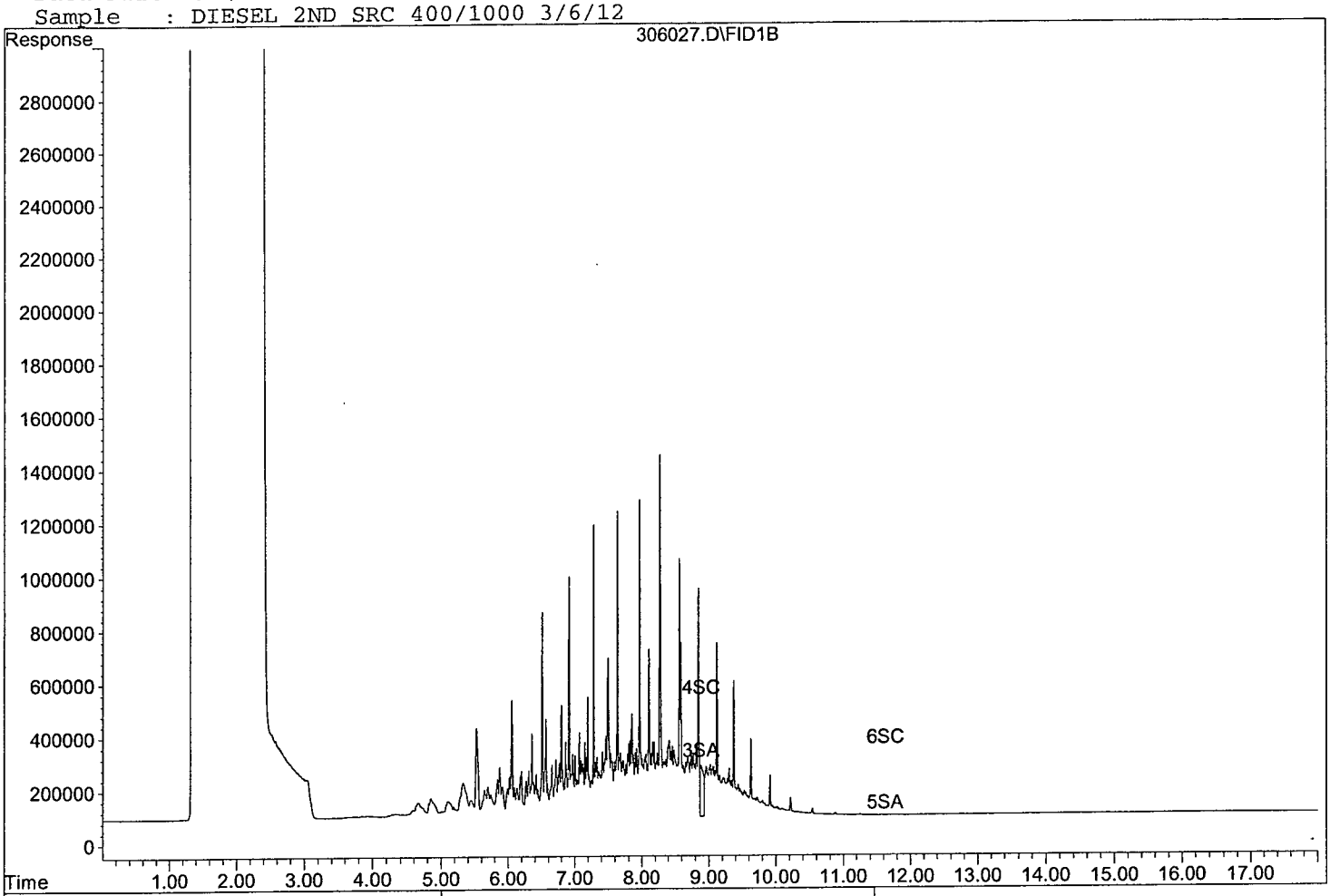
Data File : G:\APOLLO\DATA\120306\306027.D Vial: 27
Acq On : 3-6-12 19:47:20 Operator: LAC
Sample : DIESEL 2ND SRC 400/1000 3/6/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: Apr 3 12:39 2012 Quant Results File: TPH0306.RES

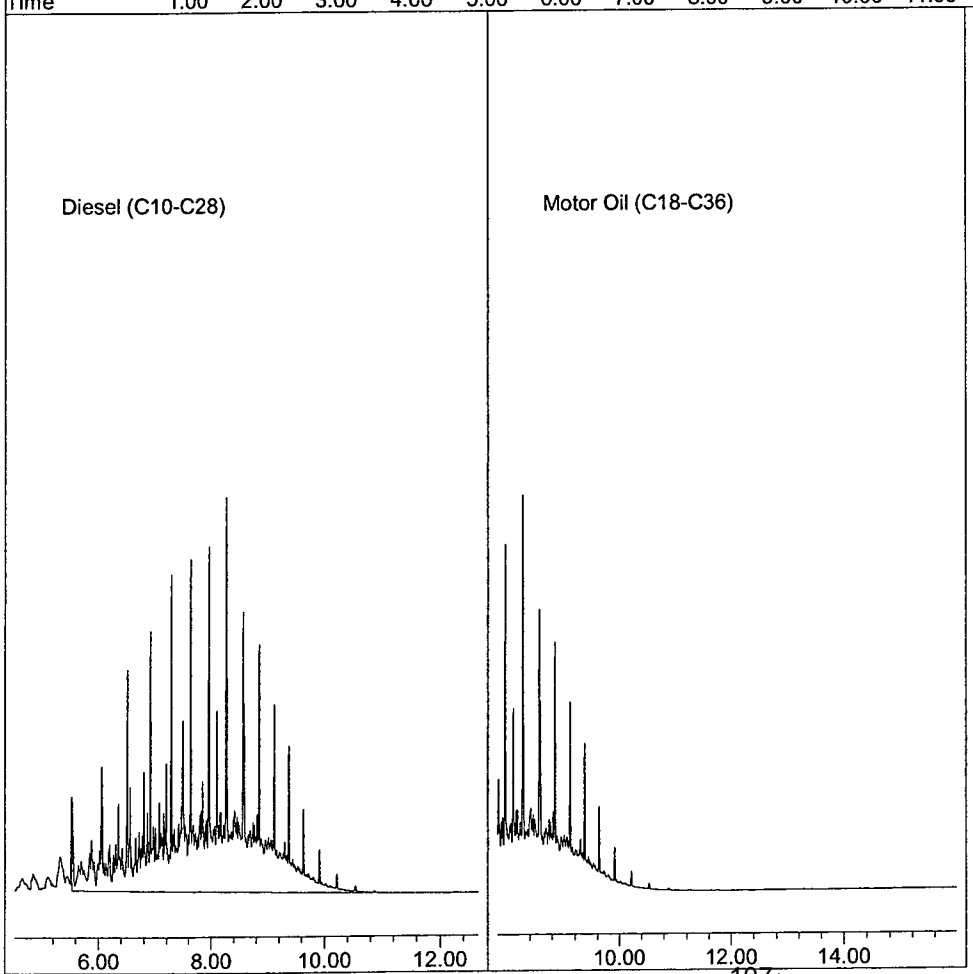
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.88	6428955	4.018	ppb
Surrogate Spike 30.000	Recovery =		13.39%	
4) SC Ortho-Terphenyl(S)	8.88	6428955	4.651	ppb
Surrogate Spike 30.000	Recovery =		15.50%	
5) SA Not Used2(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
6) SC Octacosane(S)	11.63	18476	0.016	ppb
Surrogate Spike 30.000	Recovery =		0.05%	
Target Compounds				
1) HATM Diesel (C10-C28)	8.60	437868309	400.238	ppb

Data File: G:\APOLLO\DATA\120306\306027.D
Sample : DIESEL 2ND SRC 400/1000 3/6/12





TPH Extractables
TPH306B

Form 7

Continuing Calibration

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

SDG No: 607622
Date Analyzed: 05/02/12
Instrument: Apollo
Initial Cal. Date: 05/02/12
Data File: 502003.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	530801	3.0	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			3.0		

Quantitation Report (Not Reviewed)

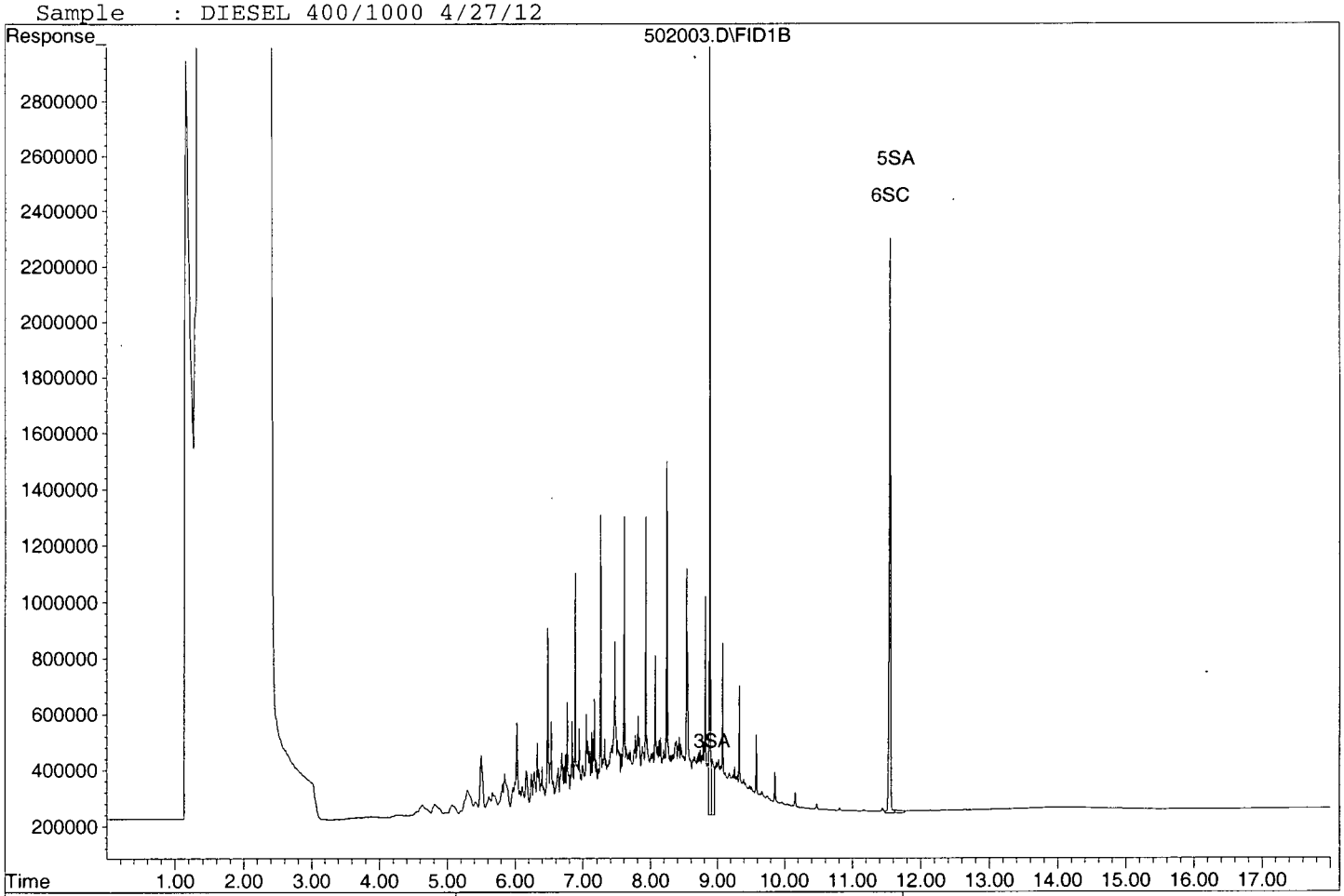
Data File : G:\APOLLO\DATA\120502\502003.D Vial: 3
Acq On : 5-2-12 12:27:46 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Water Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 11:41 2012 Quant Results File: TPH306B.RES

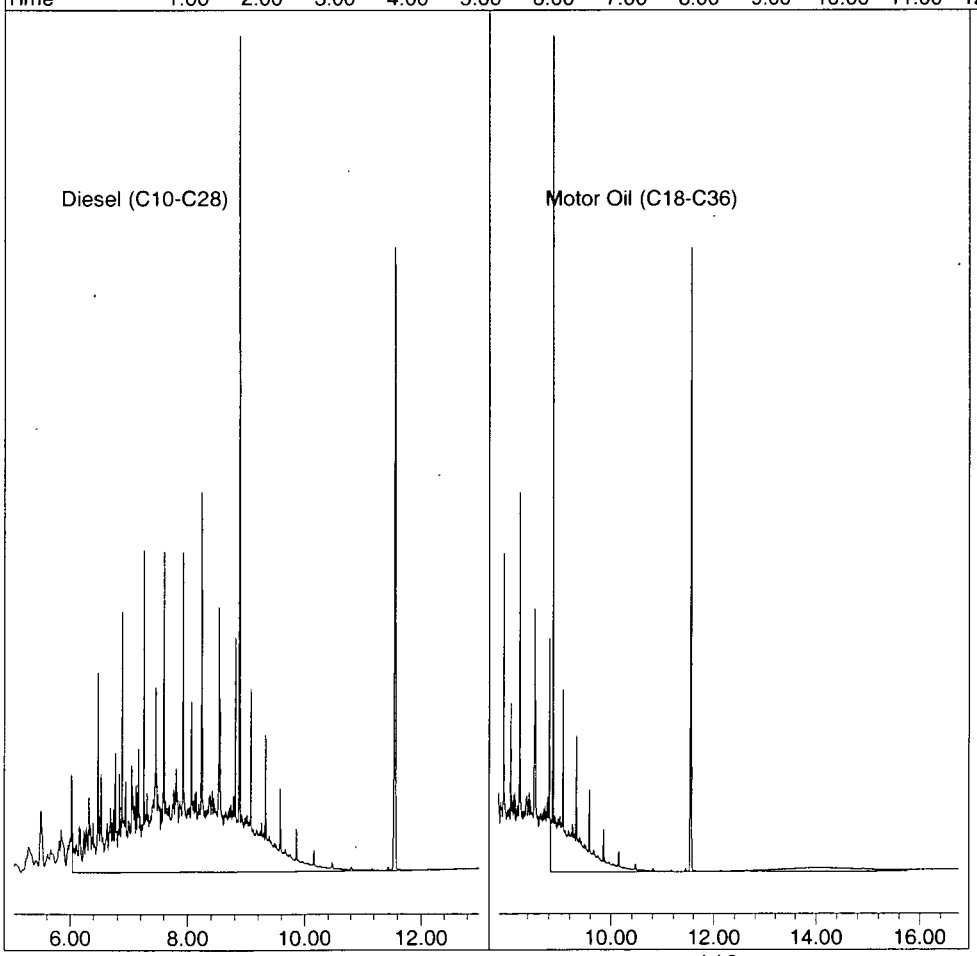
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5395414	3.372 ppb
Surrogate Spike 30.000	Recovery =		11.24%
4) SC Ortho-Terphenyl(S)	8.88	32125912	23.240 ppb
Surrogate Spike 30.000	Recovery =		77.47%
5) SA Not Used2(S)	11.64	706730	0.594 ppb
Surrogate Spike 30.000	Recovery =		1.98%
6) SC Octacosane(S)	11.55	28881455	24.448 ppb
Surrogate Spike 30.000	Recovery =		81.49%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	424640989	388.147 ppb
2) HBTM Motor Oil (C18-C36)	12.30	85698683	111.773 ppb

Data File: G:\APOLLO\DATA\120502\502003.D
Sample : DIESEL 400/1000 4/27/12





TPH Extractables
TPH306B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 05/02/12
Instrument: Apollo
Initial Cal. Date: 05/02/12
Data File: 502015.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	542198	0.88	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			0.9		

Quantitation Report (Not Reviewed)

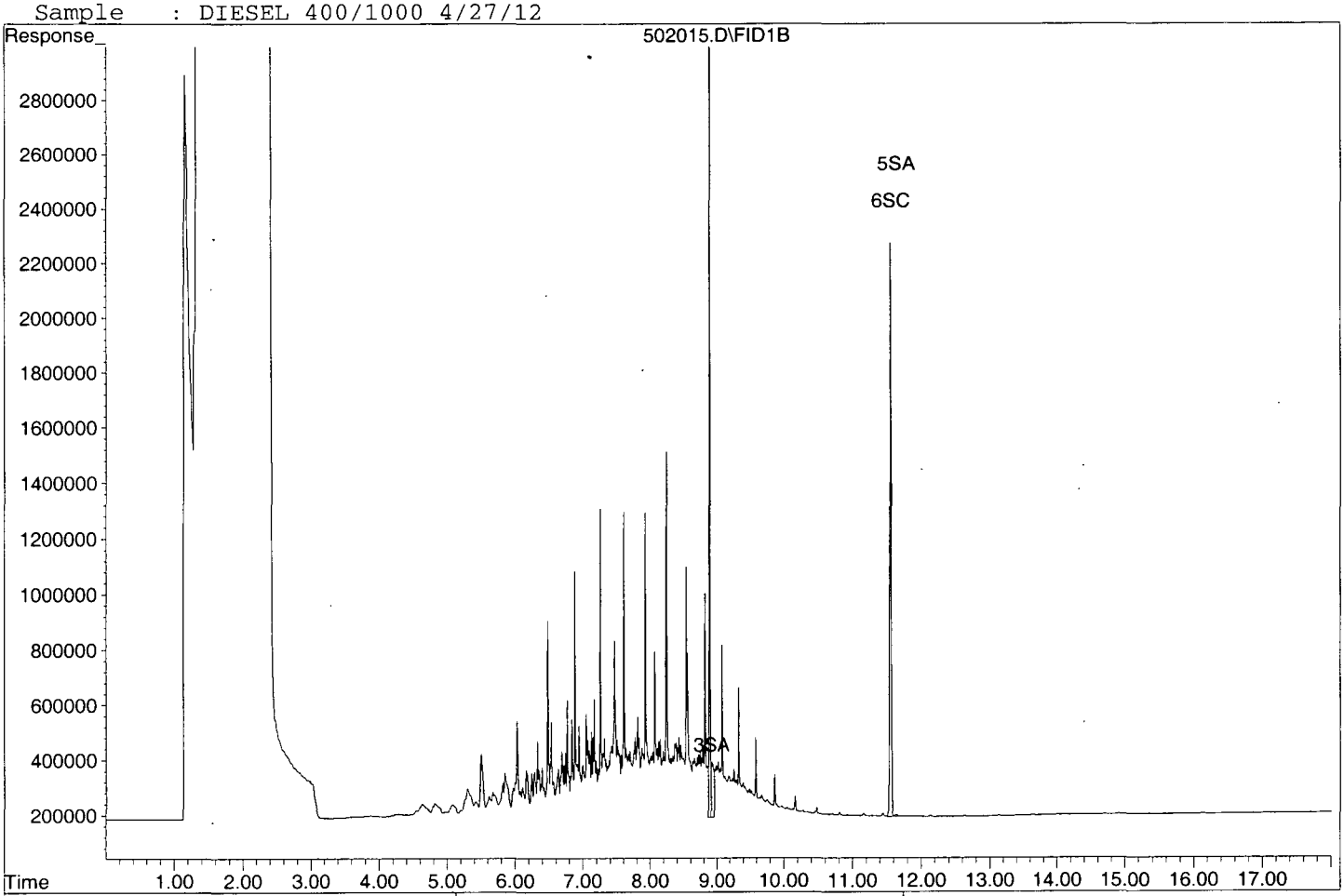
Data File : G:\APOLLO\DATA\120502\502015.D Vial: 15
Acq On : 5-2-12 17:16:41 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 4 12:14 2012 Quant Results File: TPH306B.RES

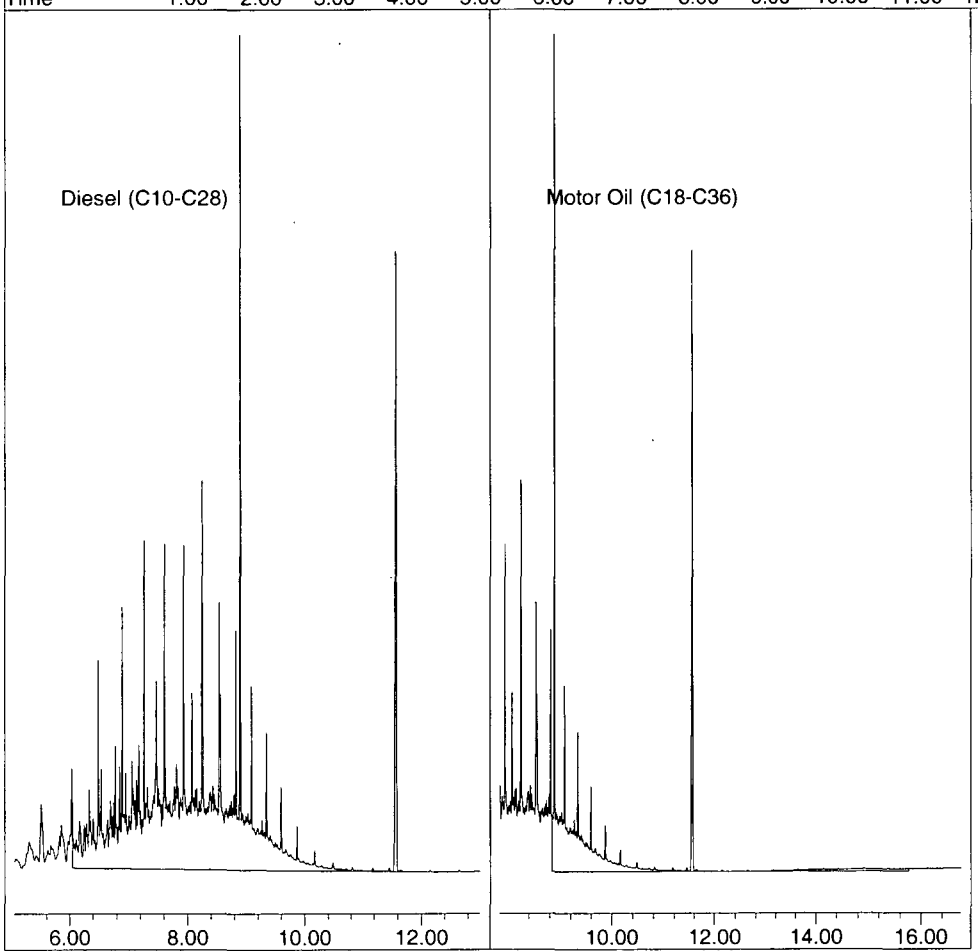
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.92	5463291	3.414 ppb
Surrogate Spike 30.000	Recovery =		11.38%
4) SC Ortho-Terphenyl(S)	8.88	32633531	23.607 ppb
Surrogate Spike 30.000	Recovery =		78.69%
5) SA Not Used2(S)	11.64	238899	0.201 ppb
Surrogate Spike 30.000	Recovery =		0.67%
6) SC Octacosane(S)	11.55	29407578	24.894 ppb
Surrogate Spike 30.000	Recovery =		82.98%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	433758641	396.482 ppb
2) HBTM Motor Oil (C18-C36)	12.30	94810096	123.657 ppb

Data File: G:\APOLLO\DATA\120502\502015.D
Sample : DIESEL 400/1000 4/27/12





TPH Extractables
TPH306B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 05/08/12
Instrument: Apollo
Initial Cal. Date: 05/02/12
Data File: 502092.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	538942	1.5	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			1.5		

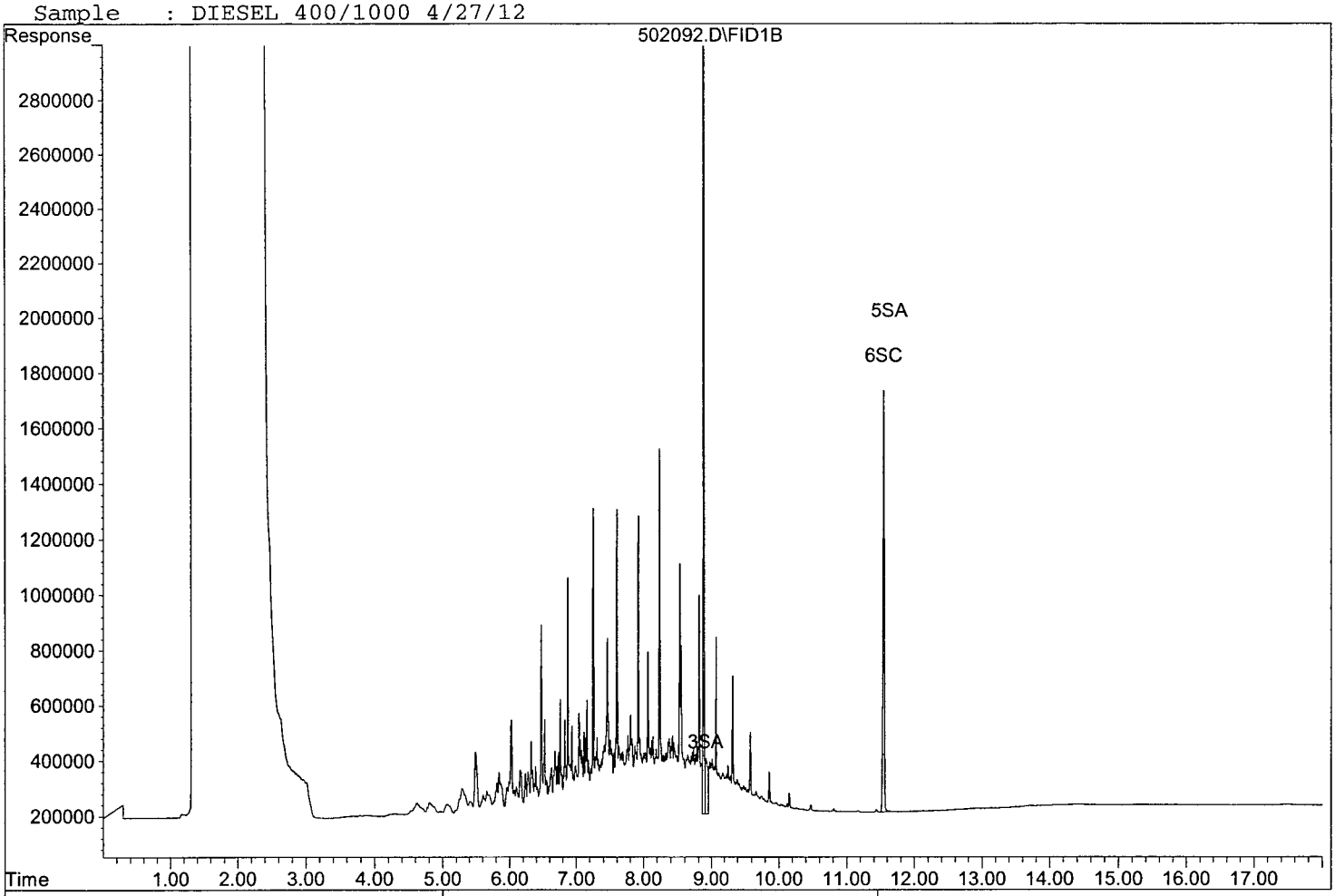
Data File : G:\APOLLO\DATA\120502\502092.D Vial: 92
Acq On : 5-8-12 13:00:59 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 8 17:01 2012 Quant Results File: TPH306B.RES

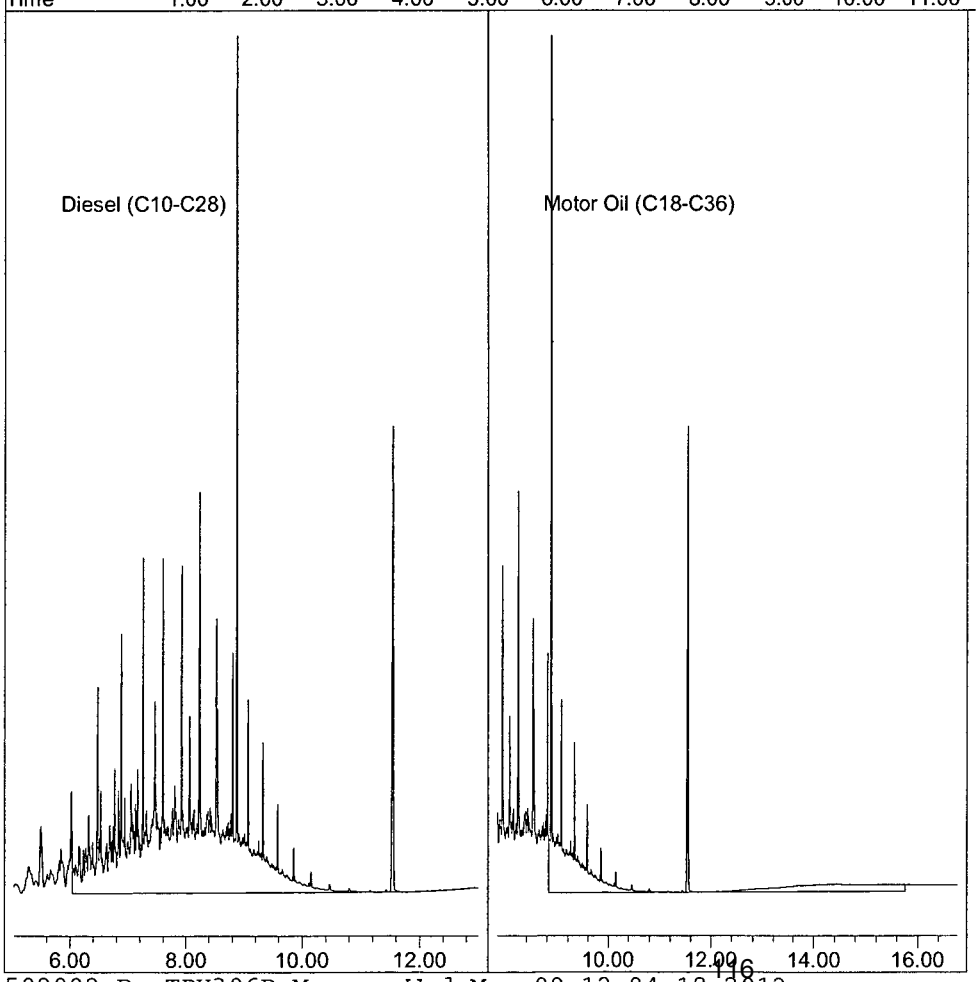
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	8.91	5336994	3.335 ppb
Surrogate Spike 30.000	Recovery =		11.12%
4) SC Ortho-Terphenyl(S)	8.88	32883726	23.788 ppb
Surrogate Spike 30.000	Recovery =		79.29%
5) SA Not Used2(S)	11.63	86861	0.073 ppb
Surrogate Spike 30.000	Recovery =		0.24%
6) SC Octacosane(S)	11.55	21683345	18.355 ppb
Surrogate Spike 30.000	Recovery =		61.18%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	431153848	394.101 ppb
2) HBTM Motor Oil (C18-C36)	12.30	109763248	143.159 ppb

Data File: G:\APOLLO\DATA\120502\502092.D
Sample : DIESEL 400/1000 4/27/12





TPH Extractables
TPH306B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 05/08/12
Instrument: Apollo
Initial Cal. Date: 05/02/12
Data File: 502107.D

		Compound	MEAN	CCRF	%D	%Drift	
1	HATM	Diesel (C10-C28)	547010	537297	1.8	HATM	
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			1.8		

Quantitation Report (Not Reviewed)

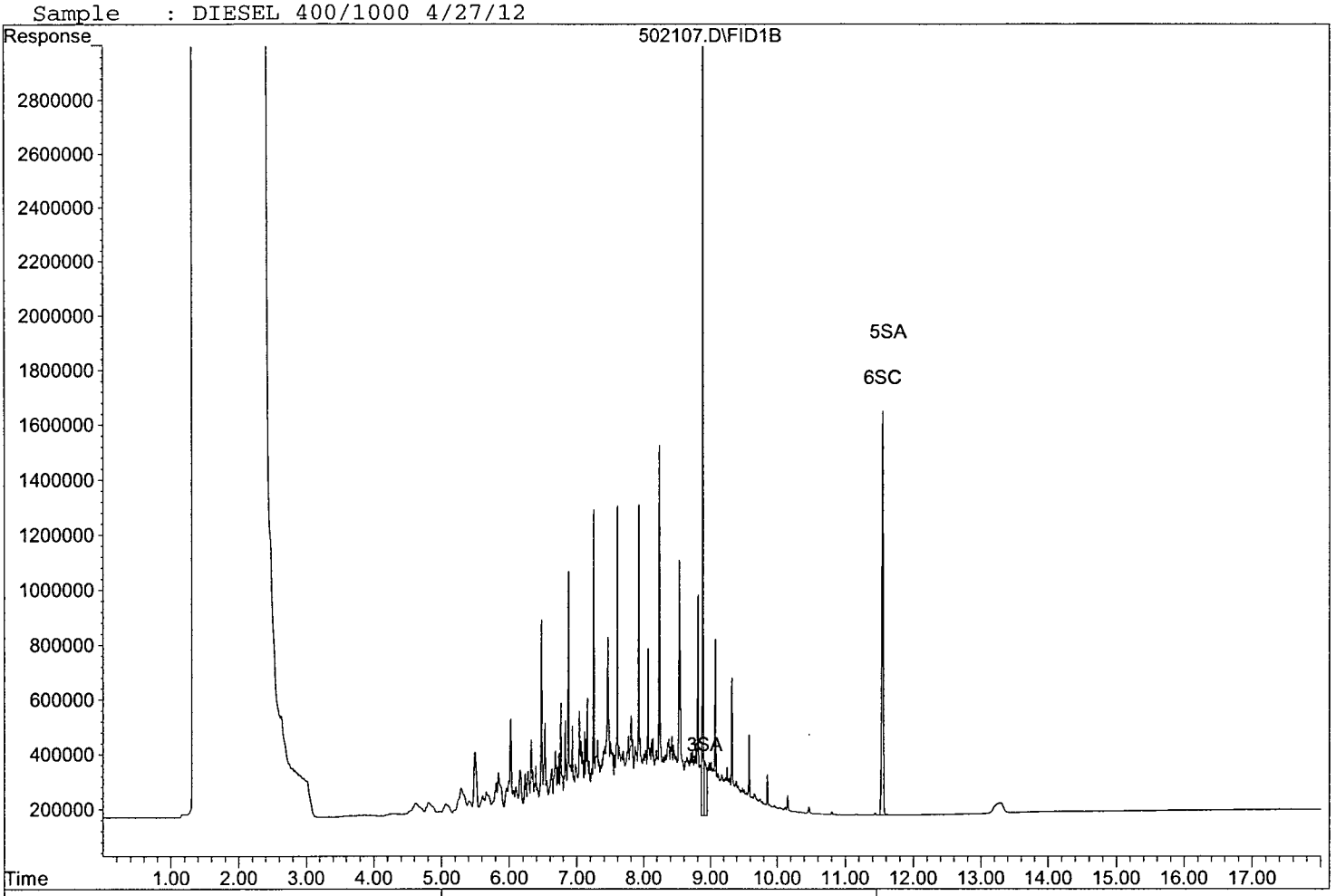
Data File : G:\APOLLO\DATA\120502\502107.D Vial: 7
Acq On : 5-8-12 19:02:35 Operator: LAC
Sample : DIESEL 400/1000 4/27/12 Inst : Apollo
Misc : Mix(A) Multiplr: 1.00
IntFile : events.e
Quant Time: May 9 12:02 2012 Quant Results File: TPH306B.RES

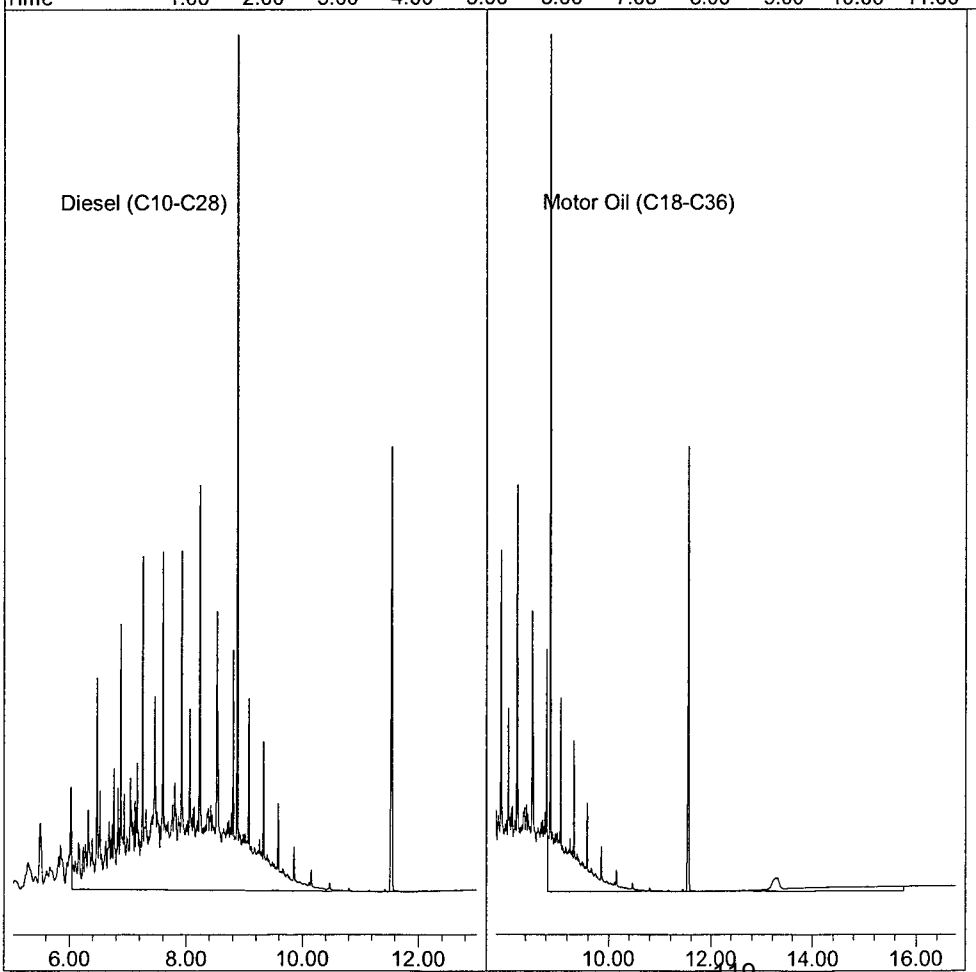
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
3) SA Not Used(S)	8.92	5300871	3.313	ppb
Surrogate Spike 30.000	Recovery =		11.04%	
4) SC Ortho-Terphenyl(S)	8.88	33267959	24.066	ppb
Surrogate Spike 30.000	Recovery =		80.22%	
5) SA Not Used2(S)	11.63	48178	0.040	ppb
Surrogate Spike 30.000	Recovery =		0.13%	
6) SC Octacosane(S)	11.55	20092687	17.008	ppb
Surrogate Spike 30.000	Recovery =		56.69%	
Target Compounds				
1) HATM Diesel (C10-C28)	9.02	429837622	392.898	ppb
2) HBTM Motor Oil (C18-C36)	12.30	100797500	131.466	ppb

Data File: G:\APOLLO\DATA\120502\502107.D
Sample : DIESEL 400/1000 4/27/12





EPA 8015 Modified
Total Petroleum Hydrocarbons
Raw Data

Method Blank
TPH Diesel Water

Blank Name/QCG: **120430W-60081 - 166675**
Batch ID: #TPETD-120430A

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	04/30/12	05/02/12
BLANK	SURROGATE: OCTACOSANE (S)	106	28-142			%	04/30/12	05/02/12
BLANK	SURROGATE: ORTHO-TERPHEN	73.0	57-132			%	04/30/12	05/02/12

Quant Method: TPH306B.M
Run #: 502005
Instrument: Apollo
Sequence: 120502
Initials: TRL

Printed: 05/08/12 3:04:37 PM
GC SC-Blank-REG MDLs

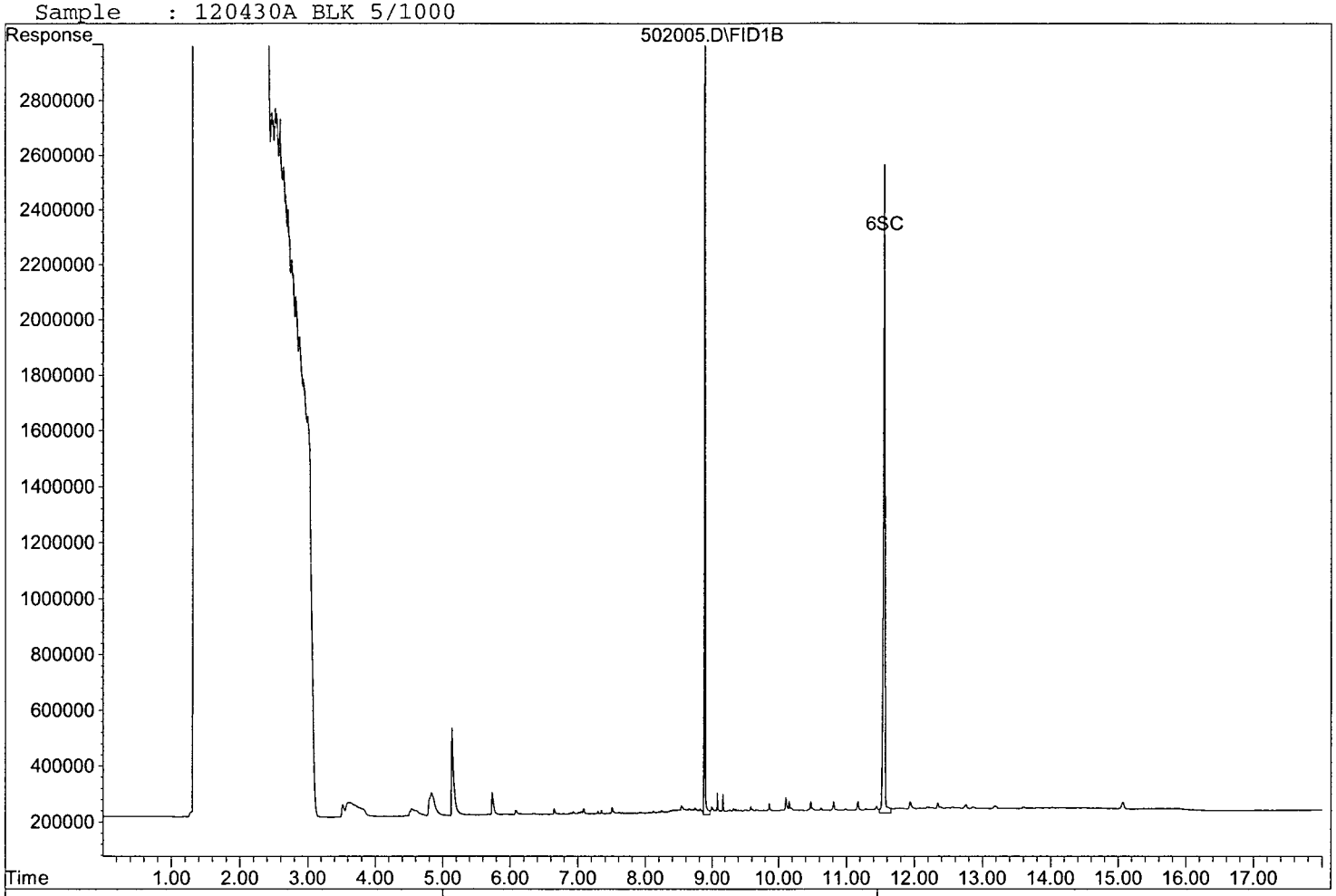
Data File : G:\APOLLO\DATA\120502\502005.D Vial: 5
Acq On : 5-2-12 13:15:54 Operator: LAC
Sample : 120430A BLK 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 8 14:29 2012 Quant Results File: TPH306B.RES

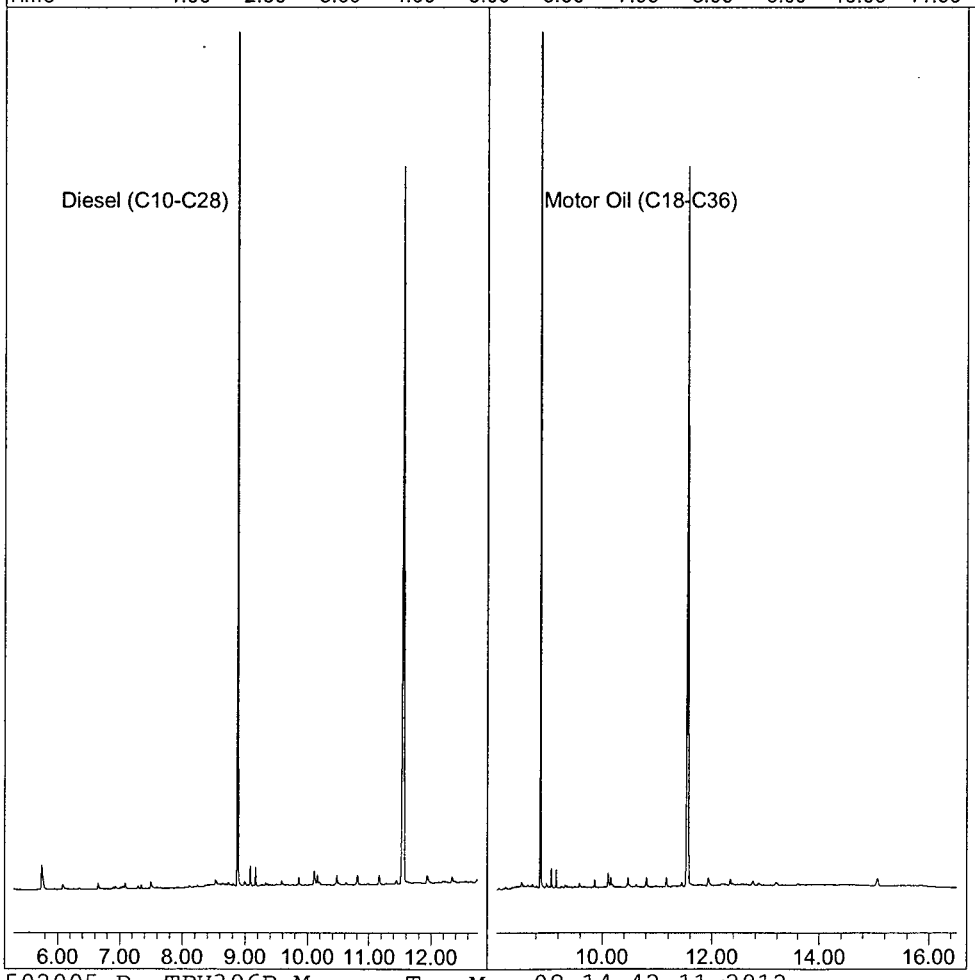
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	30286076	109.546 ppb
Surrogate Spike 150.000		Recovery =	73.03%
6) SC Octacosane(S)	11.56	37550135	158.931 ppb
Surrogate Spike 150.000		Recovery =	105.95%
Target Compounds			

Data File: G:\APOLLO\DATA\120502\502005.D
Sample : 120430A BLK 5/1000





Laboratory Control Spike Recovery
TPH Diesel Water

APPL ID: **120430W-60081 LCS - 166675**
Batch ID: #TPETD-120430A

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	1250	62.5	61-143
SURROGATE: OCTACOSANE (S)	150	94.3	62.9	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	123	82.0	57-132

Comments: _____

Primary	SPK
Quant Method :	TPH306B.M
Extraction Date :	04/30/12
Analysis Date :	05/08/12
Instrument :	Apollo
Run :	502104
Initials :	TRL

Printed: 05/08/12 6:26:53 PM
APPL Standard LCS

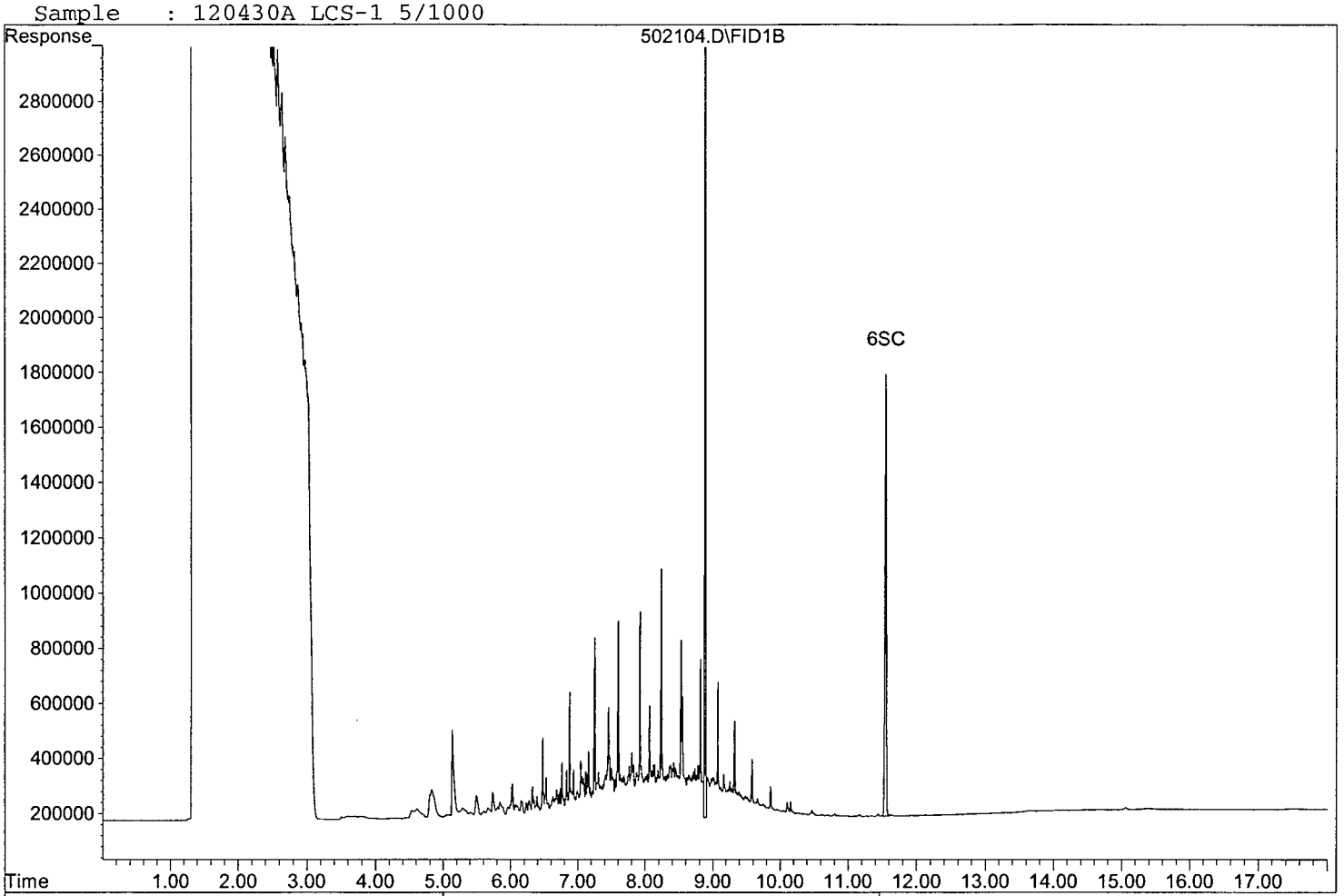
Data File : G:\APOLLO\DATA\120502\502104.D Vial: 4
Acq On : 5-8-12 17:50:27 Operator: LAC
Sample : 120430A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 8 18:24 2012 Quant Results File: TPH306B.RES

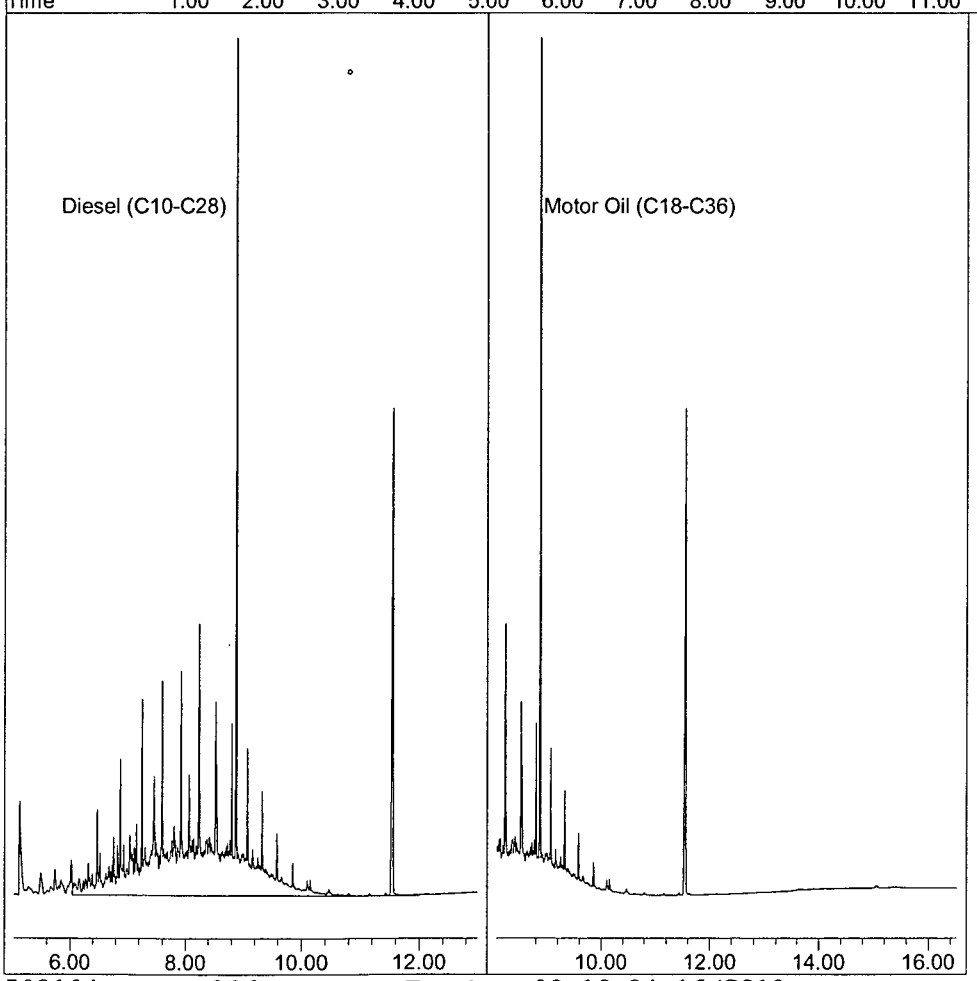
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	33879024	122.542 ppb
Surrogate Spike 150.000		Recovery =	81.69%
6) SC Octacosane(S)	11.55	22285841	94.325 ppb
Surrogate Spike 150.000		Recovery =	62.88%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	273936448	1251.972 ppb

Data File: G:\APOLLO\DATA\120502\502104.D
Sample : 120430A LCS-1 5/1000





Matrix Spike Recoveries

TPH Diesel Water

APPL ID: **120430W-60081 MS - 166675**
Batch ID: #TPETD-120430A
Sample ID: AY60081
Client ID: ES077

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	220	1160	1250	47.0 #	51.5 #	61-143	7.5	30
SURROGATE: OCTACOSANE (S)	150	NA	127	145	84.7	96.7	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	121	129	80.7	86.0	57-132		

= Recovery is outside QC limits.

Comments: _____

Primary	SPK	DUP
Quant Method :	TPH306B.M	TPH306B.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	05/02/12	05/02/12
Instrument :	Apollo	Apollo
Run :	502008	502009
Initials :	TRL	

Printed: 05/08/12 3:04:58 PM
APPL MSD SCII

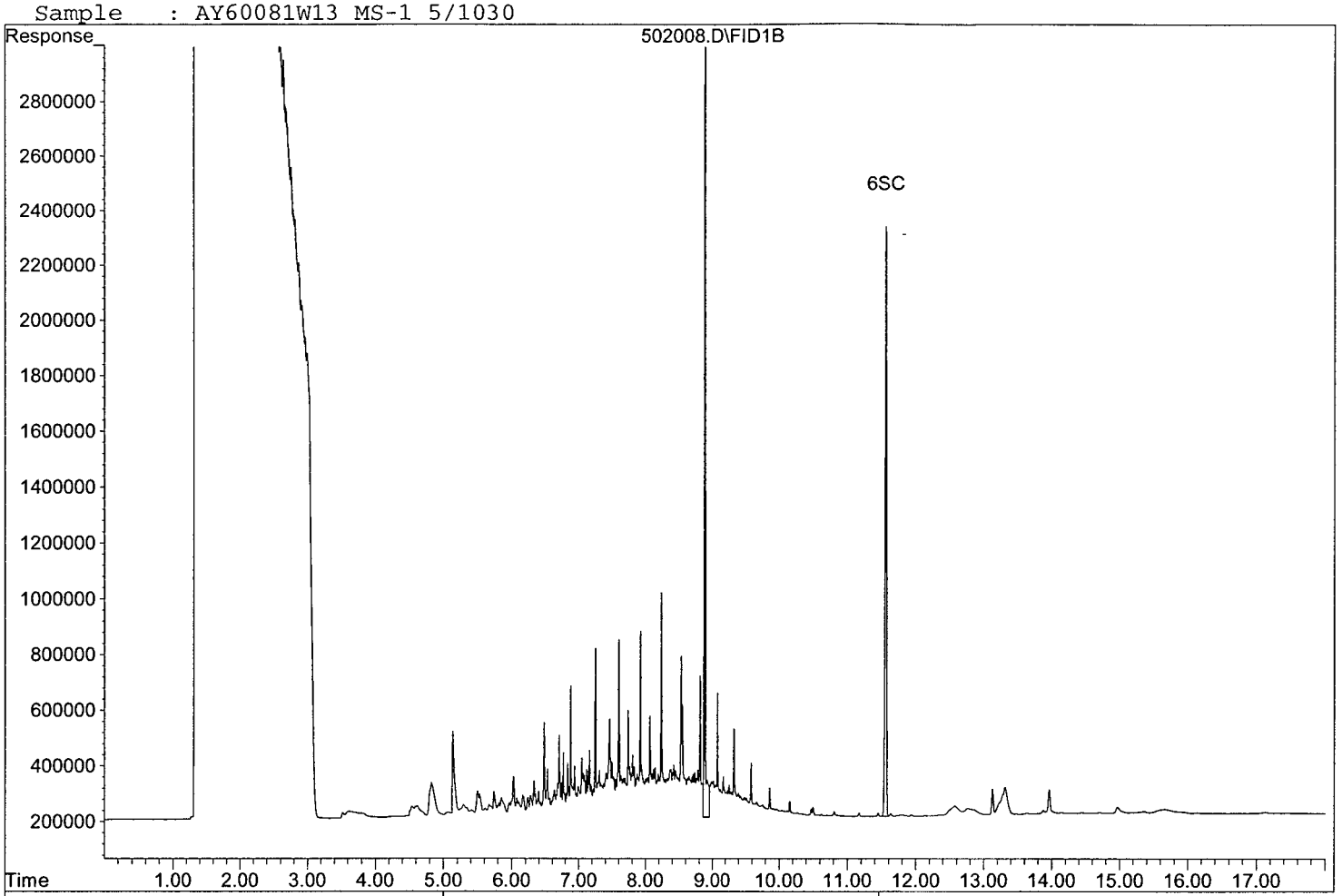
Data File : G:\APOLLO\DATA\120502\502008.D Vial: 8
Acq On : 5-2-12 14:28:01 Operator: LAC
Sample : AY60081W13 MS-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: May 8 14:32 2012 Quant Results File: TPH306B.RES

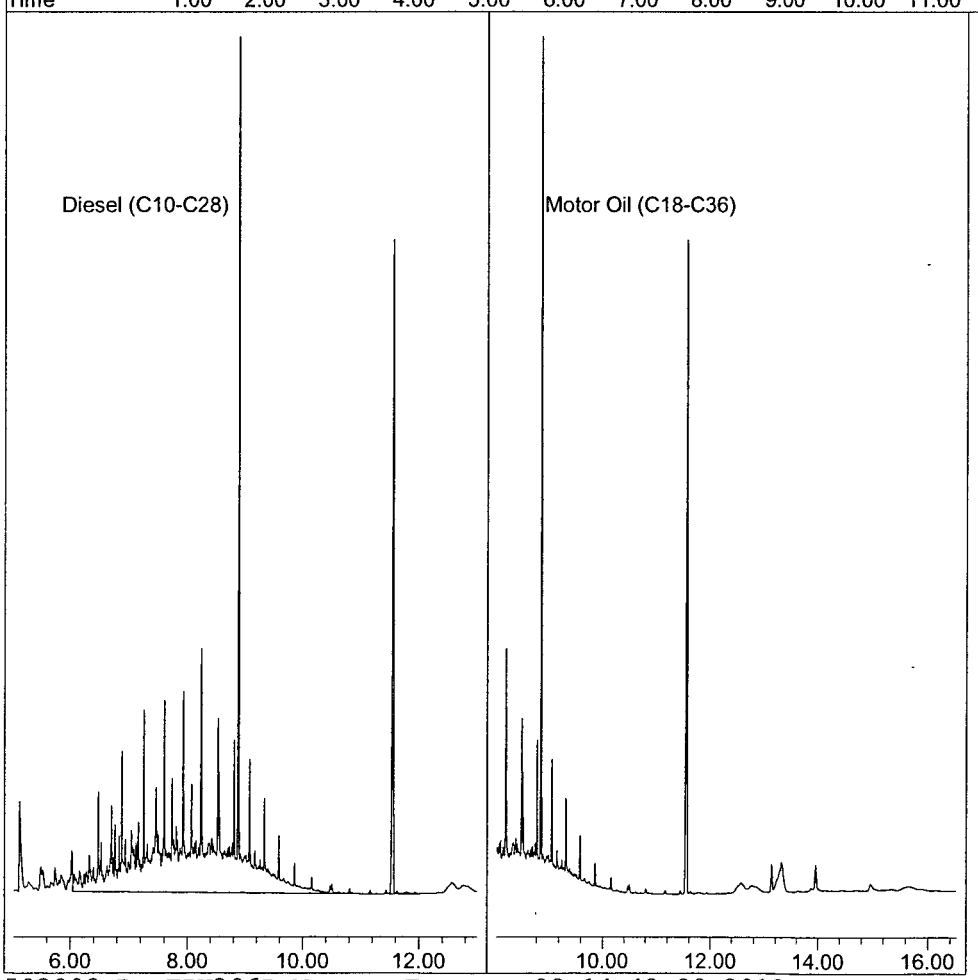
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	34489333	121.116 ppb
Surrogate Spike 145.631		Recovery =	83.17%
6) SC Octacosane(S)	11.56	30873422	126.866 ppb
Surrogate Spike 145.631		Recovery =	87.11%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	260871388	1157.535 ppb

Data File: G:\APOLLO\DATA\120502\502008.D
Sample : AY60081W13 MS-1 5/1030





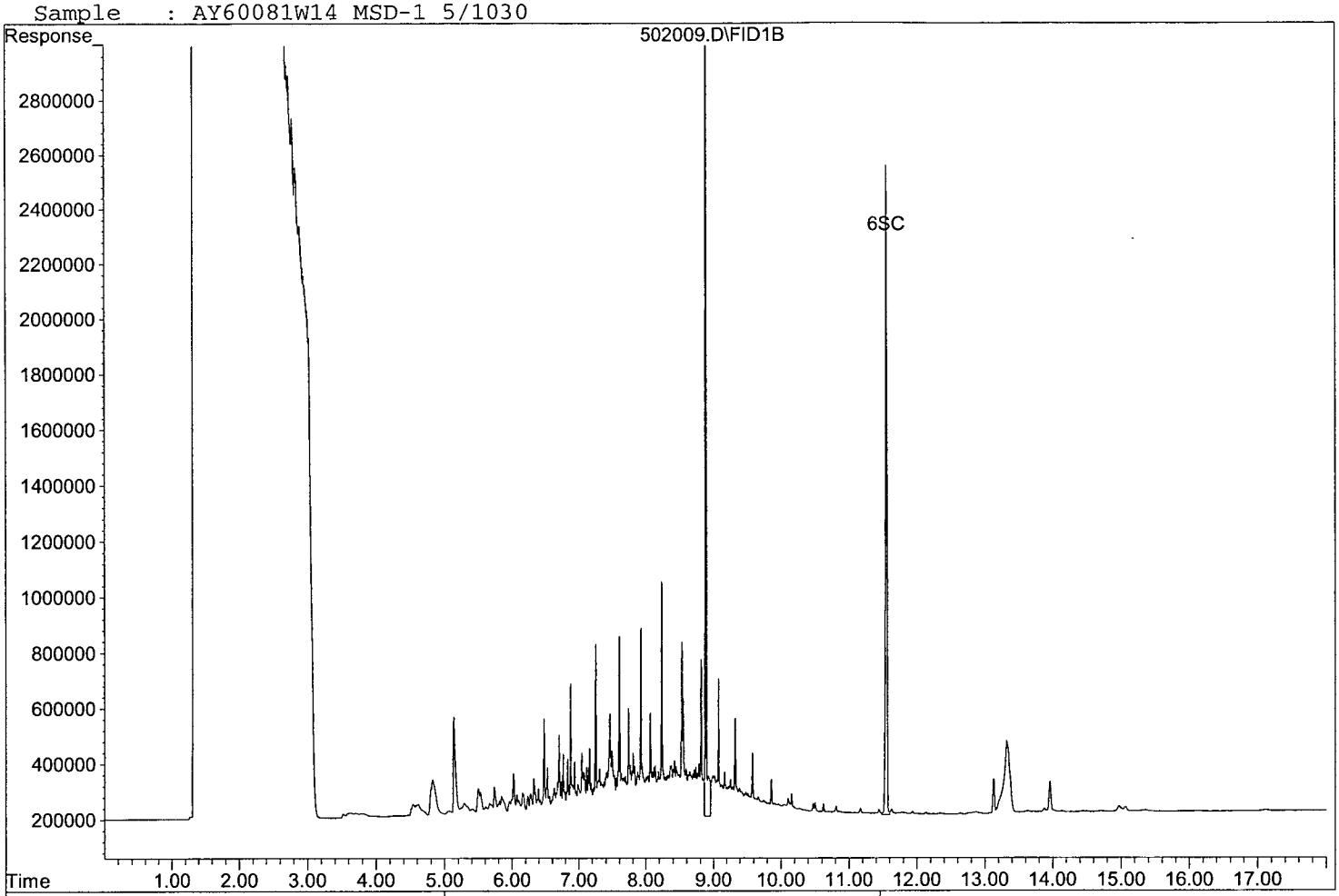
Data File : G:\APOLLO\DATA\120502\502009.D Vial: 9
Acq On : 5-2-12 14:52:00 Operator: LAC
Sample : AY60081W14 MSD-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: May 8 14:32 2012 Quant Results File: TPH306B.RES

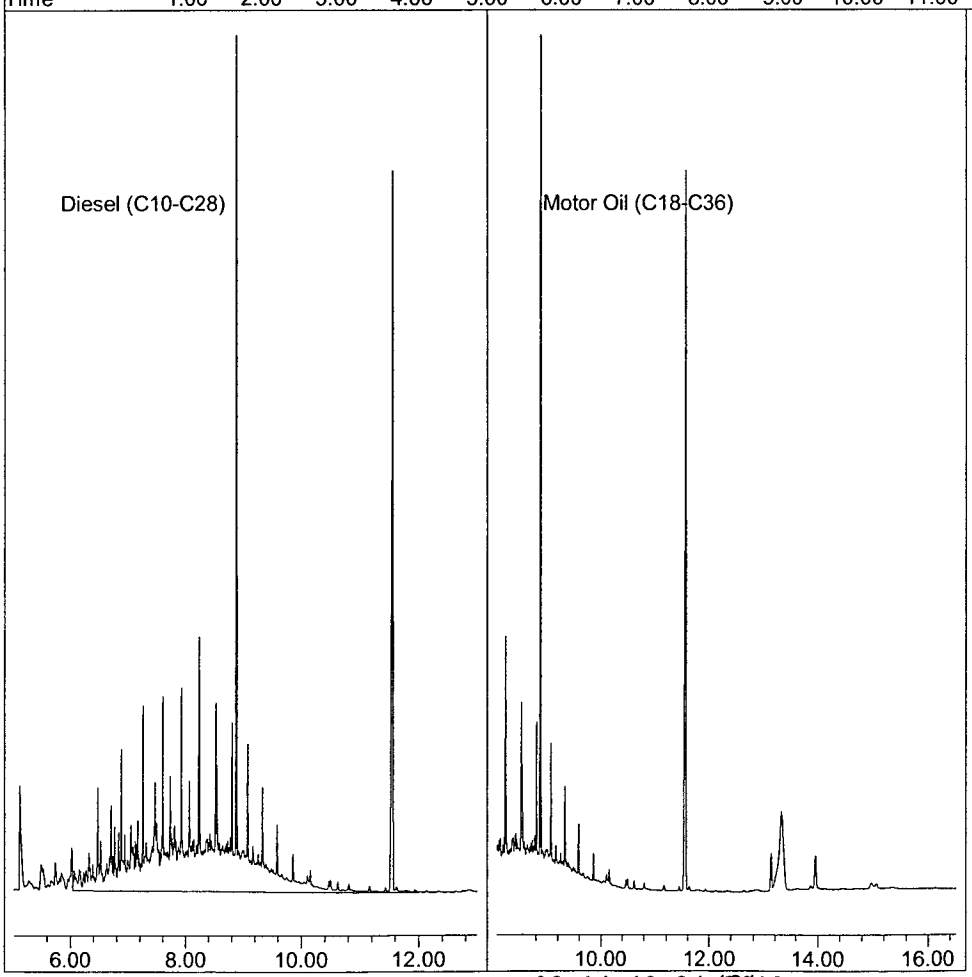
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	8.88	36670821	128.777 ppb
Surrogate Spike 145.631		Recovery =	88.43%
6) SC Octacosane(S)	11.55	35372763	145.355 ppb
Surrogate Spike 145.631		Recovery =	99.81%
Target Compounds			
1) HATM Diesel (C10-C28)	9.02	282256018	1252.423 ppb

Data File: G:\APOLLO\DATA\120502\502009.D
Sample : AY60081W14 MSD-1 5/1030





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

045

TNRCC 400/1000 mg/L CCV

TNRCC | 1000/500 mg/L | TNRCC STD | 400 mL | 1 mL | 400 mg/L | Pentane | #5 | 3/5/12 EX: 4/2/12

Prep: 3/2/12
EX: 4/2/12

DIESEL SPIKE

DIESEL FUEL #2 | 50,000 mg/L | O2SI | 2000 mL | 50 mL | 2000 mg/L | MC | #51306 | 3/6/12 EX: 6/6/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
011598-03
Lot # 179635 | Storage ≤-10 Degree C | Expiry 11/8/15
Diesel Fuel #2 Composite OP: 3/6/12
Lot #: 179635 - 30224 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

3/6/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
011598-03
Lot # 179635 | Storage ≤-10 Degree C | Expiry 11/8/15
Solv: Methylene Chloride OP:
Diesel Fuel #2 Composite 3/6/12
Lot #: 179635 - 30223 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

3/6/12

DIESEL CAL STD. 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI 179635-30225 CAT#011598-03 LOT#~~156527~~ ~~27195~~ OP:1/5/11 EXP:1/5/12	1mL	50mL	1000ug/mL	MC LOT# 51306
O-TERPHENYL OCTACOSANE	600 ug/mL	3/6/12 O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	4160 µL		50ug/mL	

3/6/12 EX: 9/6/12

MOTOR OIL CAL STD 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
MOTOR OIL	50,000 ug/mL	O2SI CAT#116390-02 LOT#171363-30230 OP:3/6/12 EXP:3/6/12	1mL	50mL	1000ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

THC SURR CAL STD 3/6/12

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT LOT#
O-TERPHENYL OCTACOSANE	600 ug/mL	O2SI CAT#110316-05 LOT#183766-30213 OP:3/5/12EXP:3/5/13	834 µL	10mL	50ug/mL	MC LOT# 51306

3/6/12 EX: 9/6/12

STANDARD 046

INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE / INITIALS

3/6/12

TCH SURROGATE CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC SURR	50		03/06/12	09/06/12	50	100	400	600	800	1000
MC		51306			950	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

3/6/12 EX: 9/6/12

TECHN CHROR

DIESEL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
DIESEL	1000		03/06/12	09/06/12	10	100	400	600	800	1000
MC		51306			990	900	600	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

MOTOR OIL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		03/06/12	09/06/12	50	100	400	600	800	1000
MC		51306			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 2ND SRC	1000µg/ml	O2SI	400µL	1 mL	400 µg/mL	MC
	Prep:	12/28/11				51306
	Exp:	06/28/12				

3/6/12 EX: 6/28/12

3/6/12

TNRCC CAL CURVE

SUPPLIER	STOCK	[µg/mL]	LOT #	DATE	EXP DATE	µL	µL	µL	µL	µL	µL
	TNRCC STD.	1000		03/02/12	04/02/12	50	100	400	600	800	1000
VWR	PENTANE		J04E19			950	900	600	400	200	–
				FINAL VOLUME		1mL	1mL	1mL	1mL	1mL	1mL

3/6/12 EX: 4/2/12

3/6/12

TNRCC 2ND SRC

STANDARD	CONC.	DATE	ALIQUOT	FINAL VOL	CONC.	/LOT#
	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	PENTANE
TNRCC 2ND SRC		02/08/12	03/08/12			J04E19

3/16/12 EX: 3/8/12

3/6/12

PREP DATE:	03/06/12											
OPF CURVE												
EXP:	07/15/12											
							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		02/29/12	07/15/12	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

3/6/12 EX: 7/15/12

3/6/12

PREP DATE:	03/06/12											
OPC CURVE												
EXP:	06/12/12											
							1	2	3	4	5	6
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	OPC STD	5		12/12/11	06/12/12	10	50	200	500	700	1000	
	Hexane		010711A			990	950	800	500	300	NA	
					Final VOL.	1000	1000	1000	1000	1000	1000	

3/6/12 EX: 6/12/12

3/16/12

OP 2ND SOURCE						
~~exPrep~~	03/06/12					
EX:	7/15/12					
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL
	OP 2ND SRC	5		02/29/12	07/15/12	500
VWR	HEXANE		010711A			500
					Final VOL.	1000

3/6/12

3/6/12 EX: 7/15/12

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

003

THC SURROGATE (* GIVEN TO EXTRACTION)

O-TERPHENYL DOTRIACONTANE	600ug/ml	O2SI CAT: 1110316-05 LOT: 176405-29679 OP: 12/28/11 EX: 12/28/12	N/A	25ML	600ug/ml	N/A	12/28/11 EX: ~~12/28/11~~ 12/28/11 12/28/12

12/28/11

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
		10/26/11	04/26/12			51204

12/28/11 EX: 4/26/12

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
		10/26/11	04/26/12			51204

12/28/11

DIESEL CAL STD.						
STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI CAT#011598-03 LOT#179635-29648 OP:12/28/11 EXP:12/28/12	500µL	25mL	1000ug/mL	MC LOT# 110510F
O-TERPHENYL OCTACOSANE	600 ug/mL	O2SI CAT#1110316-05 LOT#176405-29679 OP:12/28/11EXP:12/28/12	2080µL		50ug/mL	

12/28/11 EX: 6/28/12

12/28/11

MOTOR OIL CAL STD						
STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
MOTOR OIL	50,000 ug/mL	O2SI CAT#116390-02 LOT#171363-28618 OP:12/28/11 EXP:12/28/12	500 µL	25mL	1000ug/mL	MC LOT# 110510F

12/28/11 EX: 6/28/12

DIESEL 2ND SOURCE

DIESEL FUEL #2	50,000ug/ml	O2SI CAT: 011598-03 LOT: 1607768-29405 OP: 12/28/11 EX: 12/28/12	500ml	25ML	1000ug/ml	MC #110510F	12/28/11 EX: 6/28/12

061

THC Surrogate *GAVE TO EXTRACTION*

STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT	FINAL VOLUME	FINAL CNC	SOL'N LOT #	DATE / INITIALS
O-TERPHENYL	600 mg/mL	0251	N/A	25mL	600 mg/mL	NA		3/20/12
OCTACOSANE		CAT: 110316-05						
		LOT: 183766-30215 THRU 30219						EX: 3/20/13
		EX: 3/20/13						

Not used 3/22/12

STANDARD 088

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

(initials) 4/27/12

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
		03/06/12	09/06/12			51306

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
		03/06/12	09/06/12			51306

(initials) 4/27/12 EX, 9/6/12

(initials) 4/27/12

Aromatic 250/1000 µg/mL CCV						
Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aromatic	200/100 µg/mL	Aromatic Std	250 µL	1 mL	50/25 µg/mL	MC
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				51306

(initials) 4/27/12 EX 10/18/12

Aliphatic 200/1000 µg/mL CCV						
Standard	Init Conc.	Source Date	Aliquot	Final Vol.	Final Conc.	Solvent
Aliphatic	200/100 µg/mL	Aromatic Std	200 µL	1 mL	40/20 µg/mL	Hexane
	Prep:	04/18/12				Lot:
	Exp:	10/18/12				082911B

504/8011 Surrogate

Standard	Initial Conc	Source Date	Aliquot	Final Volume	Final Conc	Solvent Lot #	Date / Initials
1,3 DBP	10 ug/mL	1,3 DBP STOCK	35 uL	10 mL	0.35 ug/mL	Methanol	
		prep. 12-13-11				#04611A	CM 4-30
		exp. 12-13-12					exp. 5-31-11

		PAC ECO STD			
DIAZINON	5ug/ml	200ug/ml	250ul	O2SI	10ml
DISULFOTON	5	200		CAT:130169-01	HEXANE
MALATHION	5	200		LOT: 184710-30286	LOT#
MOLINATE	5	200		Op: 4/16/12	082610B
PHORATE	5	200		Exp: 7/21/12	
THIOBENCARB	5	200			
TRIBUTYL PHOSPHATE	5	200			
DEMETON	5	200			
DISCHLORVOS	5	200			
EPTC	5	200			
PARATHION	5	200			
AZINPHOS METHYL	5	200			
CHLORPYRIFOS	5	200			
DIMETHOATE	5	200			
METHIDATHION	5	200			
METHYL PARATHION	5	200			
ATRAZINE	5	200			
CYANIZINE	5	200			
TRIPHENYL PHOSPHAT	5	200			
PENDIMETHALIN	5	200			
TRIFLURALIN	5	200			
SIMAZINE	5	200			
PHOSMET	5	1000ug/ml	50ul	ABSOLUTE	
				PART:70798	
				LOT:111010-29426	
				OP: 9/19/11	
				EXP: 9/19/12	

STANDARD	INITIAL CONC	SOURCE	DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOL'N LOT #	DATE / INITIALS

AR1254/1260 MIX

1 ug/mL AR1254 — 500uL — 1mL — 0.5 ug/mL — — HA 3/29/12
µg. 3/26/12
Exp. 9/26/12
Exp 9/22/12

1 ug/mL AR1260 — 500uL — ↓ — 0.5 ug/mL —
µg. 3/22/12
Exp. 9/22/12

DIESEL SPIKE

DIESEL FUEL #2 — 50,000 mg/L — 0251 — 1000mL — 25mL — 2000 mg/L — MC #51306 — 3/26/12 Ex 6/30/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml
011598-03
Lot# 179635 Storage ≤ -10 Degrees C Expiry 11/8/15
Solv: Methylene Chloride
Made in the USA
R&D only, not human consump.
Diesel Fuel #2 Composite
Lot #: 179635 - 30220 EX: 3/30/13
Rec: 1/10/12 MFR exp. 11/08/15
3/30/12

MOTOR OIL SPIKE

MOTOR OIL — 50,000 mg/L — 0251 — 2000mL — 50mL — 2000 mg/L — MC #51306 — 3/30/12 Ex: 6/30/12

Motor Oil Composite, 50,000 mg/L, 1 ml
116390-02
Lot# 183768 Storage ≤ -10 Degrees C Expiry 1/8/15
Solv: Methylene Chloride
Made in the USA
R&D only, not human consump.
Motor oil composite
Lot #: 183768 - 30237 EX: 3/30/13
Rec: 1/10/12 MFR exp. 01/08/15
3/30/12

Motor Oil Composite, 50,000 mg/L, 1 ml
116390-02
Lot# 183768 Storage ≤ -10 Degrees C Expiry 1/8/15
Solv: Methylene Chloride
Made in the USA
R&D only, not human consump.
Motor oil composite
Lot #: 183768 - 30236 EX: 3/30/13
Rec: 1/10/12 MFR exp. 01/08/15
3/30/12

AROMATIC CURVE 3/30/12

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
AROMATIC	200/100 µg/mL		03/12/12	09/12/12	25	50	100	250	500	750	1000
MC		51306			975	950	900	750	500	250	NA
				Final Vol	1000	1000	1000	1000	1000	1000	1000

3/30/12 Ex: 9/12/12

ALIPHATIC CURVE

STANDARD	INITIAL CONC	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
ALIPHATIC	200/100 µg/mL		03/12/12	09/12/12	20	40	100	200	500	1000
Hexane		082911B			980	960	900	800	500	na
				Final Vol	1000	1000	1000	1000	1000	1000

PREP:	03/30/12										
MITC CURVE											
EXP:	07/27/12										
						1	2	3	4	5	6
SUPPLIER	ID#	ug/mL	LOT #	DATE	EXP.	µL	µL	µL	µL	µL	µL
	MITC STD	5		03/29/12	07/27/12	4	50	200	500	700	1000
VWR	ETHYL ACETATE		CB664			996	950	800	500	300	N/A
					Final Vol	1000	1000	1000	1000	1000	1000

3/30/12 Ex: 7/27/12

_SEP011

Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	120430A	Extraction Method	SEP011	Units	mL

Spiked ID 1	Diesel Spike 03/30/12 EX 06/30/12		Surrogate ID 1	THC Surrogate 183766-30216	
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:	**05/11/12 0:00**	

pH1			Water Bath Temp Criteria	80 °C
pH2				
pH3				

Spiked By: DL **Date** 04/30/12 **Witnessed By:** FXR **Date** 04/30/12

	Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	120430A Blk				0.250	1	1000	5	7	04/30/12 11:30	
						equip	E-WB7				
2	120430A LCS-1		1	1	0.250	1	1000	5	7	04/30/12 11:30	
						equip	E-WB7				
3	AY60080	AY60080W07			0.250	1	1010	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
4	AY60081 MS-1	AY60081W13	1	1	0.250	1	1030	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
5	AY60081 MSD-1	AY60081W14	1	1	0.250	1	1030	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
6	AY60081	AY60081W11			0.250	1	1040	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter -- Amber Liter
						equip	E-WB7				
7	AY60110	AY60110W06			0.250	1	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
8	AY60111	AY60111W08			0.250	1	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
9	AY60112	AY60112W06			0.250	1	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				
10	AY60120	AY60120W05			0.250	1	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
						equip	E-WB7				

DRA 5/1/12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	GA
Date	5/1
Time	16:30
Refrigerator	Hobart

	Technician's Initials
Scanned By	DL
Sample Preparation	FXR
Extraction	FXR
Concentration	IC

Modified	04/30/12 10:30:37 AM

Reviewed By: DRA **Date** 05/01/12

Injection Log

Directory: G:\APOLLO\DATA\120306\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	21	306021.D	1	DIESEL 10/1000 3/6/12	Mix(A)	3-6-12 17:25:38
2	22	306022.D	1	DIESEL 100/1000	Mix(A)	3-6-12 17:49:21
3	23	306023.D	1	DIESEL 400/1000	Mix(A)	3-6-12 18:12:55
4	24	306024.D	1	DIESEL 600/1000	Mix(A)	3-6-12 18:36:31
5	25	306025.D	1	DIESEL 800/1000	Mix(A)	3-6-12 19:00:08
6	26	306026.D	1	DIESEL 1000/1000	Mix(A)	3-6-12 19:23:45
7	27	306027.D	1	DIESEL 2ND SRC 400/1000 3/6/12	Mix(A)	3-6-12 19:47:20
1	3	502003.D	1	DIESEL 400/1000 4/27/12	Water	5-2-12 12:27:46
2	5	502005.D	5	120430A BLK 5/1000	Water	5-2-12 13:15:54
3	7	502007.D	4.9505	AY60080W07 5/1010	Water	5-2-12 14:04:05
4	8	502008.D	4.85437	AY60081W13 MS-1 5/1030	Water	5-2-12 14:28:01
5	9	502009.D	4.85437	AY60081W14 MSD-1 5/1030	Water	5-2-12 14:52:00
6	10	502010.D	4.80769	AY60081W11 5/1040	Water	5-2-12 15:15:55
7	15	502015.D	1	DIESEL 400/1000 4/27/12	Mix(A)	5-2-12 17:16:41
8	92	502092.D	1	DIESEL 400/1000 4/27/12	Mix(A)	5-8-12 13:00:59
9	4	502104.D	5	120430A LCS-1 5/1000	Water	5-8-12 17:50:27
10	7	502107.D	1	DIESEL 400/1000 4/27/12	Mix(A)	5-8-12 19:02:35

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

Blank Name/QCG: **120430W-60081 - 166814**

Batch ID: #86RHB-120430AC

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	04/30/12	04/30/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C12
Instrument: Chico
Sequence: C120420
Initials: ARS

Printed: 05/11/12 1:21:53 PM
GC SC-Blank-REG MDLs

Method Blank
EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120430W-60081 - 166814**
Batch ID: #86RHB-120430AC

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	04/30/12	04/30/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	SURROGATE: 1,2-DICHLOROET	112	70-120			%	04/30/12	04/30/12
BLANK	SURROGATE: 4-BROMOFLUORO	90.2	75-120			%	04/30/12	04/30/12
BLANK	SURROGATE: DIBROMOFLUOR	112	85-115			%	04/30/12	04/30/12
BLANK	SURROGATE: TOLUENE-D8 (S)	92.0	85-120			%	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C12
Instrument: Chico
Sequence: C120420
Initials: ARS

Printed: 05/11/12 1:21:53 PM
GC SC-Blank-REG MDLs

Method Blank
EPA 8260B VOCS + GAS WATER

Blank Name/QCG: **120501W-60080 - 166816**
Batch ID: #86RHB-120501AT

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	05/01/12	05/01/12
BLANK	SURROGATE: 1,2-DICHLOROET	97.7	70-120			%	05/01/12	05/01/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.3	75-120			%	05/01/12	05/01/12
BLANK	SURROGATE: DIBROMOFLUOR	99.2	85-115			%	05/01/12	05/01/12
BLANK	SURROGATE: TOLUENE-D8 (S)	98.6	85-120			%	05/01/12	05/01/12

Quant Method: TALLW.M
Run #: 0501T06
Instrument: Thor
Sequence: T120430
Initials: ARS

Printed: 05/11/12 1:21:53 PM
GC SC-Blank-REG MDLs

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 04/30/12

Matrix: WATER Instrument: Chico

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120430AC-LCS	Lab Control Spike	70-120	106		75-120	89.2	
120430AC-BLK	Blank	70-120	112		75-120	90.2	
AY60082	TRIP BLANK 1	70-120	111		75-120	87.1	
AY60083	TRIP BLANK	70-120	112		75-120	88.0	
AY60080	ES076	70-120	110		75-120	92.5	
AY60081	ES077	70-120	108		75-120	87.9	
AY60081-MS	Matrix Spike	70-120	104		75-120	87.0	
AY60081-MSD	Matrix SpikeD	70-120	97.9		75-120	87.4	

Comments: Batch: #86RHB-120430AC

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 04/30/12

Matrix: WATER Instrument: Chico

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120430AC-LCS	Lab Control Spike	85-115	112		85-120	91.5	
120430AC-BLK	Blank	85-115	112		85-120	92.0	
AY60082	TRIP BLANK 1	85-115	115		85-120	90.3	
AY60083	TRIP BLANK	85-115	115		85-120	90.9	
AY60080	ES076	85-115	115		85-120	94.2	
AY60081	ES077	85-115	102		85-120	91.1	
AY60081-MS	Matrix Spike	85-115	102		85-120	89.5	
AY60081-MSD	Matrix SpikeD	85-115	99.2		85-120	89.9	

Comments: Batch: #86RHB-120430AC

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/01/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: 1,2-DICHLOROETHANE-D4 (S)			SURROGATE: 4-BROMOFLUOROBENZENE (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120501AT-LCS	Lab Control Spike	70-120	93.9		75-120	104	
120501AT-BLK	Blank	70-120	97.7		75-120	96.3	
AY60080	ES076	70-120	101		75-120	93.1	

Comments: Batch: #86RHB-120501AT

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/01/12

Matrix: WATER Instrument: Thor

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
120501AT-LCS	Lab Control Spike	85-115	96.0		85-120	99.4	
120501AT-BLK	Blank	85-115	99.2		85-120	98.6	
AY60080	ES076	85-115	101		85-120	97.8	

Comments: Batch: #86RHB-120501AT

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 LCS - 166814**
Batch ID: #86RHB-120430AC

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	9.64	96.4	80-130
1,1,1-TRICHLOROETHANE	10.00	10.2	102	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.64	96.4	65-130
1,1,2-TRICHLOROETHANE	10.00	10.3	103	75-125
1,1-DICHLOROETHANE	10.00	9.85	98.5	70-135
1,1-DICHLOROETHENE	10.00	9.46	94.6	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.69	96.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.74	97.4	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	9.12	91.2	50-130
1,2-DIBROMOETHANE	10.00	9.27	92.7	70-130
1,2-DICHLOROBENZENE	10.00	9.74	97.4	70-120
1,2-DICHLOROETHANE	10.00	10.1	101	70-130
1,2-DICHLOROPROPANE	10.00	9.85	98.5	75-125
1,3-DICHLOROBENZENE	10.00	9.62	96.2	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.4	97.0	70-130
1,4-DICHLOROBENZENE	10.00	9.45	94.5	75-125
2-BUTANONE	10.00	9.71	97.1	30-150
4-METHYL-2-PENTANONE	10.00	7.94	79.4	60-135
ACETONE	10.00	9.98	99.8	40-140
BENZENE	10.00	10.0	100	80-120
BROMODICHLOROMETHANE	10.00	10.2	102	75-120
BROMOFORM	10.00	9.01	90.1	70-130
BROMOMETHANE	10.00	9.26	92.6	30-145
CARBON TETRACHLORIDE	10.00	10.2	102	65-140
CHLOROBENZENE	10.00	9.79	97.9	80-120
CHLORODIBROMOMETHANE	10.00	9.42	94.2	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	10.2	102	65-135
CHLOROMETHANE	10.00	10.3	103	40-125
CIS-1,2-DICHLOROETHENE	10.00	10.5	105	70-125
ETHYLBENZENE	10.00	9.83	98.3	75-125

Comments: _____

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/30/12
Analysis Date :	04/30/12
Instrument :	Chico
Run :	0430C07
Initials :	ARS

Printed: 05/11/12 1:21:41 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 LCS - 166814**
Batch ID: #86RHB-120430AC

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	374	125	75-125
HEXACHLOROBUTADIENE	10.00	9.48	94.8	50-140
METHYL TERT-BUTYL ETHER	10.00	10.0	100	65-125
METHYLENE CHLORIDE	10.00	10.1	101	55-140
STYRENE	10.00	10.1	101	65-135
TETRACHLOROETHENE	10.00	9.62	96.2	45-150
TOLUENE	10.00	10.3	103	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.14	91.4	60-140
TRICHLOROETHENE	10.00	10.3	103	70-125
VINYL CHLORIDE	10.00	10.9	109	50-145
XYLENES (TOTAL)	30.0	29.9	99.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	22.2	106	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.0	24.1	89.2	75-120
SURROGATE: DIBROMOFLUOROMETH	20.9	23.3	112	85-115
SURROGATE: TOLUENE-D8 (S)	25.4	23.2	91.5	85-120

Comments:

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/30/12
Analysis Date :	04/30/12
Instrument :	Chico
Run :	0430C07
Initials :	ARS

Printed: 05/11/12 1:21:41 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCS + GAS WATER

APPL ID: **120501W-60080 LCS - 166816**
Batch ID: #86RHB-120501AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
TRICHLOROETHENE	10.00	9.16	91.6	70-125
SURROGATE: 1,2-DICHLOROETHANE-D	28.0	26.3	93.9	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.7	28.8	104	75-120
SURROGATE: DIBROMOFLUOROMETH	29.3	28.1	96.0	85-115
SURROGATE: TOLUENE-D8 (S)	29.2	29.0	99.4	85-120

Comments: _____

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	05/01/12
Analysis Date :	05/01/12
Instrument :	Thor
Run :	0501T04
Initials :	ARS

Printed: 05/11/12 1:21:41 PM
APPL Standard LCS

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 MS - 166814**
Batch ID: #86RHB-120430AC
Sample ID: AY60081
Client ID: ES077

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	8.86	8.69	88.6	86.9	80-130	1.9	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.87	9.35	98.7	93.5	65-130	5.4	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	0.00	0	0.0 #	0.0 #	65-130	0.00	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.02	8.05	90.2	80.5	75-125	11.4	30
1,1-DICHLOROETHANE	10.00	ND	9.74	9.22	97.4	92.2	70-135	5.5	30
1,1-DICHLOROETHENE	10.00	ND	10.0	9.78	100	97.8	70-130	2.2	30
1,2,3-TRICHLOROPROPANE	10.00	ND	8.45	8.10	84.5	81.0	75-125	4.2	30
1,2,4-TRICHLOROBENZENE	10.00	ND	9.44	8.91	94.4	89.1	65-135	5.8	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	7.52	7.35	75.2	73.5	50-130	2.3	30
1,2-DIBROMOETHANE	10.00	ND	8.94	8.53	89.4	85.3	70-130	4.7	30
1,2-DICHLOROBENZENE	10.00	ND	9.21	9.20	92.1	92.0	70-120	0.11	30
1,2-DICHLOROETHANE	10.00	ND	9.41	8.97	94.1	89.7	70-130	4.8	30
1,2-DICHLOROPROPANE	10.00	ND	9.57	9.12	95.7	91.2	75-125	4.8	30
1,3-DICHLOROBENZENE	10.00	ND	9.05	9.05	90.5	90.5	75-125	0.0	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	18.1	17.3	90.5	86.5	70-130	4.5	30
1,4-DICHLOROBENZENE	10.00	ND	8.99	8.72	89.9	87.2	75-125	3.0	30
2-BUTANONE	10.00	ND	9.28	8.29	92.8	82.9	30-150	11.3	30
4-METHYL-2-PENTANONE	10.00	ND	8.41	8.16	84.1	81.6	60-135	3.0	30
ACETONE	10.00	2.8	12.7	12.9	99.0	101	40-140	1.6	30
BENZENE	10.00	0.71	10.3	9.93	95.9	92.2	80-120	3.7	30
BROMODICHLOROMETHANE	10.00	ND	9.44	9.11	94.4	91.1	75-120	3.6	30
BROMOFORM	10.00	ND	8.41	8.05	84.1	80.5	70-130	4.4	30
BROMOMETHANE	10.00	ND	9.29	9.38	92.9	93.8	30-145	0.96	30
CARBON TETRACHLORIDE	10.00	ND	9.74	9.18	97.4	91.8	65-140	5.9	30
CHLOROBENZENE	10.00	ND	9.16	9.04	91.6	90.4	80-120	1.3	30
CHLORODIBROMOMETHANE	10.00	ND	8.36	8.24	83.6	82.4	60-135	1.4	30
CHLOROETHANE	10.00	ND	10.4	9.27	104	92.7	60-135	11.5	30
CHLOROFORM	10.00	ND	9.77	9.13	97.7	91.3	65-135	6.8	30
CHLOROMETHANE	10.00	ND	15.6	15.4	156 #	154 #	40-125	1.3	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.74	9.25	97.4	92.5	70-125	5.2	30

= Recovery is outside QC limits.

Primary	SPK	DUP
Quant Method :	CALLW3.M	CALLW3.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	04/30/12	04/30/12
Instrument :	Chico	Chico
Run :	0430C22	0430C23
Initials :	ARS	

Comments:

Printed: 05/11/12 1:21:36 PM
APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 MS - 166814**
Batch ID: #86RHB-120430AC
Sample ID: AY60081
Client ID: ES077

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
ETHYLBENZENE	10.00	ND	9.22	9.07	92.2	90.7	75-125	1.6	30
GASOLINE	300	ND	395	370	132 #	123	75-125	6.5	30
HEXACHLOROBUTADIENE	10.00	ND	8.83	8.50	88.3	85.0	50-140	3.8	30
METHYL TERT-BUTYL ETHER	10.00	ND	9.18	9.07	91.8	90.7	65-125	1.2	30
METHYLENE CHLORIDE	10.00	ND	10.5	10.2	105	102	55-140	2.9	30
STYRENE	10.00	ND	9.32	9.30	93.2	93.0	65-135	0.21	30
TETRACHLOROETHENE	10.00	ND	9.20	9.05	92.0	90.5	45-150	1.6	30
TOLUENE	10.00	ND	10.1	9.75	101	97.5	75-120	3.5	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	8.53	8.58	85.3	85.8	60-140	0.58	30
TRICHLOROETHENE	10.00	ND	18.0	17.4	180 #	174 #	70-125	3.4	30
VINYL CHLORIDE	10.00	ND	12.5	11.3	125	113	50-145	10.1	30
XYLENES (TOTAL)	30.0	ND	27.8	27.7	92.7	92.3	80-120	0.36	30
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	NA	21.8	20.6	104	97.9	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	27.0	NA	23.5	23.6	87.0	87.4	75-120		
SURROGATE: DIBROMOFLUOROMETH	20.9	NA	21.2	20.7	102	99.2	85-115		
SURROGATE: TOLUENE-D8 (S)	25.4	NA	22.7	22.8	89.5	89.9	85-120		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	CALLW3.M	CALLW3.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	04/30/12	04/30/12
Instrument :	Chico	Chico
Run :	0430C22	0430C23
Initials :	ARS	

Printed: 05/11/12 1:21:36 PM
APPL MSD SCII

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 04/30/12

Matrix: WATER Instrument: Chico

Blank ID: 120430AC-BLK Time Analyzed: 1646

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120430AC-LCS	Lab Control Spike	0430C07	04/30/12 1340
120430AC-BLK	Blank	0430C12	04/30/12 1646
AY60082	TRIP BLANK 1	0430C13	04/30/12 1723
AY60083	TRIP BLANK	0430C14	04/30/12 1801
AY60080	ES076	0430C16	04/30/12 1915
AY60081	ES077	0430C17	04/30/12 1952
120430AC-MS	Matrix Spike	0430C22	04/30/12 2257
120430AC-MSD	Matrix SpikeD	0430C23	04/30/12 2334

Comments: Batch: #86RHB-120430AC

EPA 8260B

Form 4

Blank Summary

Lab Name: APPL, Inc. SDG No: 67622

Case No: 67622 Date Analyzed: 05/01/12

Matrix: WATER Instrument: Thor

Blank ID: 120501AT-BLK Time Analyzed: 1115

APPL ID.	Client Sample No.	File ID.	Date Analyzed
120501AT-LCS	Lab Control Spike	0501T04	05/01/12 1019
120501AT-BLK	Blank	0501T06	05/01/12 1115
AY60080	ES076	0501T22	05/01/12 1840

Comments: Batch: #86RHB-120501AT

Printed: 05/11/12 1:21:28 PM
Form 4, Blank Summary

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0430C00T.D
Matrix: Water
ID: 25ug/ml BFB STD 04-10-12

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Time Analyzed: 9:26

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		CCV gas @300ug/L	0430C02W.D	04/30/12 10:35
2	Lab Control Spike	LCS gas @300ug/L	0430C03W.D	04/30/12 11:12
3	Blank	120430A BLK-1WC	0430C12W.D	04/30/12 16:46
4	TRIP BLANK 1	AY60082W01	0430C13W.D	04/30/12 17:23
5	TRIP BLANK	AY60083W01	0430C14W.D	04/30/12 18:01
6	ES076	AY60080W01	0430C16W.D	04/30/12 19:15
7	ES077	AY60081W01	0430C17W.D	04/30/12 19:52
8		AY60081W234 GAS MS-1	0430C18W.D	04/30/12 20:29
9		AY60081W234 GAS MSD-	0430C19W.D	04/30/12 21:06
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	18.7
75	30 - 60% of mass 95	42.0
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.7
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	78.3
175	5 - 9% of mass 174	7.0
176	95 - 101% of mass 174	99.0
177	5 - 9% of mass 176	6.7

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0430C05W.D
Matrix: Water
ID: 25ug/ml BFB STD 04-10-12

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Time Analyzed: 12:26

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		10ug/L Vol Std 04-30	0430C06W.D	04/30/12 13:03
2	Lab Control Spike	120430A LCS-1WC	0430C07W.D	04/30/12 13:40
3	Blank	120430A BLK-1WC	0430C12W.D	04/30/12 16:46
4	TRIP BLANK 1	AY60082W01	0430C13W.D	04/30/12 17:23
5	TRIP BLANK	AY60083W01	0430C14W.D	04/30/12 18:01
6	ES076	AY60080W01	0430C16W.D	04/30/12 19:15
7	ES077	AY60081W01	0430C17W.D	04/30/12 19:52
8		AY60081W456 MS-1WC	0430C22W.D	04/30/12 22:57
9		AY60081W456 MSD-1WC	0430C23W.D	04/30/12 23:34
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	15 - 40% of mass 95	18.0
75	30 - 60% of mass 95	42.5
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.4
173	0 - 2% of mass 174	0.1
174	50 - 100% of mass 95	78.0
175	5 - 9% of mass 174	6.8
176	95 - 101% of mass 174	96.9
177	5 - 9% of mass 176	6.9

Form 5
Tune Summary

Lab Name: APPL Inc.
Case No: 0501T00T.D
Matrix: Water
ID: 5ng- BFB STD 04-10-12

SDG No: 67622
Date Analyzed: 05/01/12
Instrument: Thor
Time Analyzed: 8:33

	Client Sample No.	APPL ID.	File ID.	Date Analyzed
1		10ug/L Vol Std 05-01	0501T03W.D	05/01/12 9:52
2	Lab Control Spike	120501A LCS-1WT	0501T04W.D	05/01/12 10:19
3	Blank	120501A BLK-1WT	0501T06W.D	05/01/12 11:15
4	ES076	AY60080W02	0501T22W.D	05/01/12 18:40
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e		
50	14.9 - 40% of mass 95	17.0
75	30 - 60% of mass 95	46.3
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.2
173	0 - 2% of mass 174	0.8
174	50 - 100% of mass 95	84.5
175	5 - 9% of mass 174	7.4
176	95 - 101% of mass 174	98.3
177	5 - 9% of mass 176	6.9

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review

Lab Code: _____ SDG No.: 67622

Lab File ID (Standard): 0125C32W.D Date Analyzed: 01/26/12

Instrument ID: Chico Time Analyzed: 21:24

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	1085220	12.79	1323770	17.98	1382630	22.18
	UPPER LIMIT	2170440	13.29	2647540	18.48	2765260	22.68
	LOWER LIMIT	542610	12.29	661885	17.48	691315	21.68
	SAMPLE NO.						
01	CCV gas @300ug/L	1214610	12.82	1322070	18.01	1331680	22.20
02	LCS gas @300ug/L	1211620	12.83	1387090	18.01	1311380	22.21
03	120430A BLK-1WC	1228530	12.84	1342840	18.03	1302460	22.22
04	AY60082W01	1225570	12.84	1330820	18.03	1262500	22.22
05	AY60083W01	1199970	12.84	1322560	18.03	1278780	22.22
06	AY60080W01	1107050	12.84	1275720	18.02	1240160	22.22
07	AY60081W01	1137460	12.85	1302070	18.02	1233700	22.22
08	AY60081W234 GAS MS-1WC	1119440	12.84	1360010	18.02	1358050	22.22
09	AY60081W234 GAS MSD-1WC	1187660	12.84	1402300	18.02	1401300	22.22
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.: 67622

Lab File ID (Standard): 0420C08W.D Date Analyzed: 04/20/12

Instrument ID: Chico Time Analyzed: 14:15

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	645830	12.82	490240	18.00	229952	22.20
	UPPER LIMIT	1291660	13.32	980480	18.50	459904	22.70
	LOWER LIMIT	322915	12.32	245120	17.50	114976	21.70
	SAMPLE NO.						
01	10ug/L Vol Std 04-30-12	618000	12.83	508352	18.01	240000	22.21
02	120430A LCS-1WC	597247	12.84	493888	18.02	238784	22.21
03	120430A BLK-1WC	625761	12.84	495040	18.03	232512	22.23
04	AY60082W01	612863	12.84	489920	18.03	230656	22.22
05	AY60083W01	605730	12.85	493056	18.03	228608	22.22
06	AY60080W01	558979	12.84	466880	18.02	220864	22.22
07	AY60081W01	571471	12.85	478656	18.02	219904	22.22
08	AY60081W456 MS-1WC	588571	12.83	504384	18.02	235584	22.22
09	AY60081W456 MSD-1WC	622116	12.84	520064	18.02	244160	22.22
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.: 67622

Lab File ID (Standard): 0430T11W.D Date Analyzed: 04/30/12

Instrument ID: Thor Time Analyzed: 13:06

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	357888	6.75	284544	9.89	173312	12.21
	UPPER LIMIT	715776	7.25	569088	10.39	346624	12.71
	LOWER LIMIT	178944	6.25	142272	9.39	86656	11.71
	SAMPLE NO.						
01	10ug/L Vol Std 05-01-12	383680	6.75	306688	9.89	184064	12.21
02	120501A LCS-1WT	388160	6.75	307264	9.89	183168	12.21
03	120501A BLK-1WT	369408	6.75	296832	9.89	158912	12.21
04	AY60080W02	375168	6.74	307136	9.89	165376	12.21
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

Manual Integration Summary

ARF: 67622

APPL ID	Client ID	Method	Analyte	Type	Comment
AY60081	LCS	EPA 8260B	GASOLINE	LCS	(MI1) Integration does not follow baseline.
AY60081	MS	EPA 8260B	GASOLINE	MS	(MI1) Integration does not follow baseline.
AY60081	MSD	EPA 8260B	GASOLINE	MSD	(MI1) Integration does not follow baseline.

EPA METHOD 8260B
Volatile Organic Compounds
Sample Data

APPL, INC.

EPA 8260B VOCs + Gas Water

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

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES076
Sample Collection Date: 04/26/12

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

ARF: 67622
APPL ID: AY60080
QCG: #86RHB-120430AC-166814

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	04/30/12	04/30/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
EPA 8260B	BENZENE	0.20 J	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0430C16
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES076

APPL ID: AY60080

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/30/12	04/30/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	110	70-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	92.5	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	115	85-115			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	94.2	85-120			%	04/30/12	04/30/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0430C16
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C16W.D Vial: 1
Acq On : 30 Apr 12 19:15 Operator: AS
Sample : AY60080W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1107052	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.02	TIC	1275717	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1240164	25.00000	ppb	0.04

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	23576612m	52.93898	ppb	ND 100

There is no gasoline pattern.
ARS 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C16W.D CGAS.M Tue May 01 10:52:32 2012 Page 1

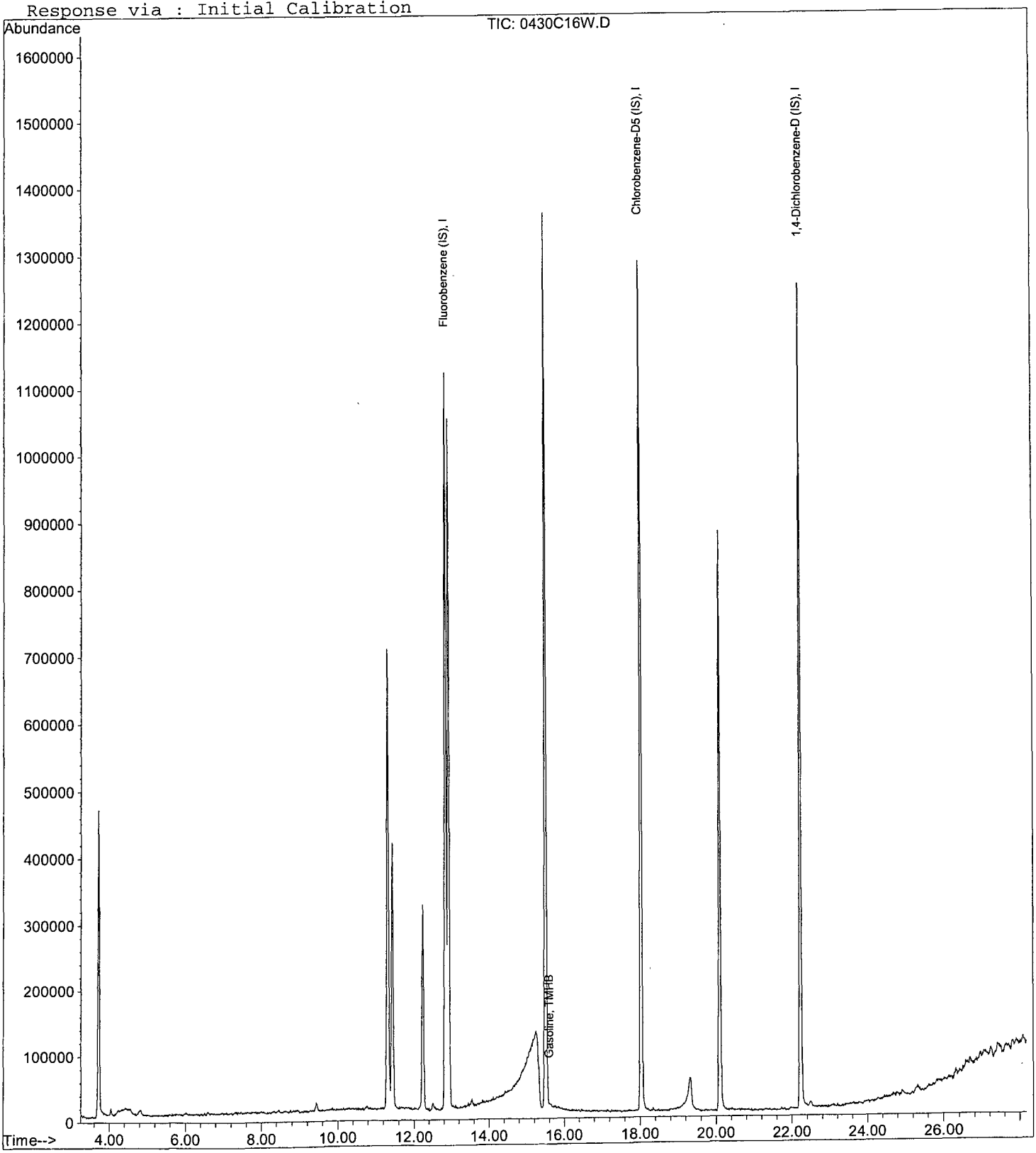
Quantitation Report

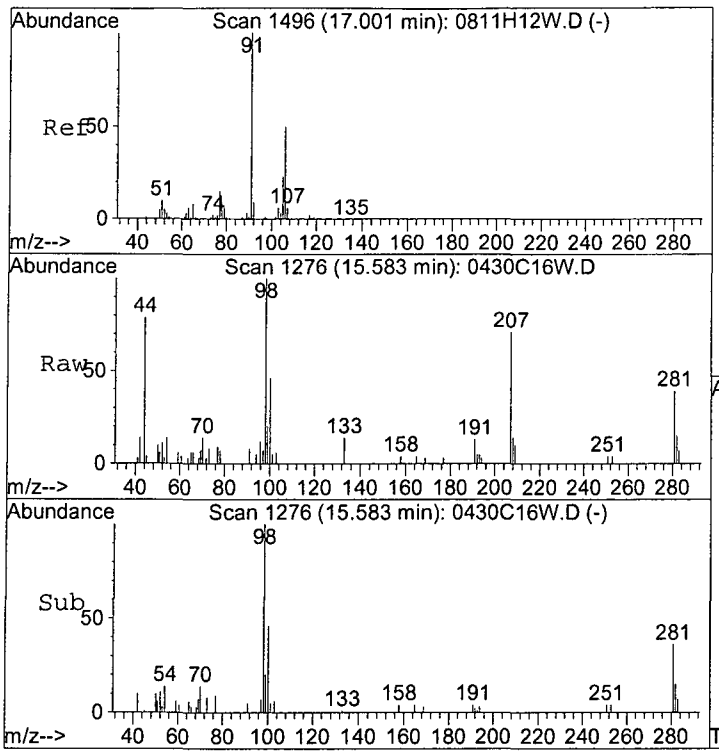
Data File : M:\CHICO\DATA\C120420\0430C16W.D
Acq On : 30 Apr 12 19:15
Sample : AY60080W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

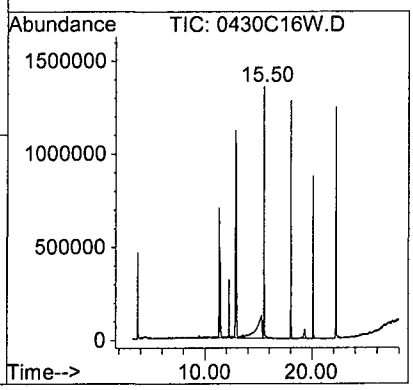
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 52.93898 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0430C16W.D
Acq: 30 Apr 12 19:15

Tgt Ion:TIC Resp:23576612



Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C16W.D Vial: 1
Acq On : 30 Apr 12 19:15 Operator: AS
Sample : AY60080W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:01 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	558979	25.00000 ppb	0.02
54) Chlorobenzene-D5 (IS)	18.02	117	466880	25.00000 ppb	0.02
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	220864	25.00000 ppb	0.02
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.42	111	417534	24.00454 ppb	0.02
Spiked Amount 20.866			Recovery	= 115.045%	
37) 1,2-DCA-D4(S)	12.23	65	325058	23.15272 ppb	0.02
Spiked Amount 21.039			Recovery	= 110.048%	
55) Toluene-D8(S)	15.50	98	1442426	23.88098 ppb	0.02
Spiked Amount 25.355			Recovery	= 94.186%	
63) 4-Bromofluorobenzene(S)	20.09	95	593900	24.97679 ppb	0.02
Spiked Amount 27.007			Recovery	= 92.483%	
Target Compounds					Qvalue
25) Vinyl Acetate	9.44	43	2521	1.35313 ppb NT	95
41) Benzene	12.50	78	15213	0.20386 ppb J	94 < ½ PQL
42) TCE	13.54	95	3875	0.21787 ppb J	87 < ½ PQL Possible C.O.

RI as OF 1 for TCE Possible C.O.
AMS 9/1/12

(#) = qualifier out of range (m) = manual integration
0430C16W.D CALLW3.M Tue May 01 10:05:49 2012 Page 1

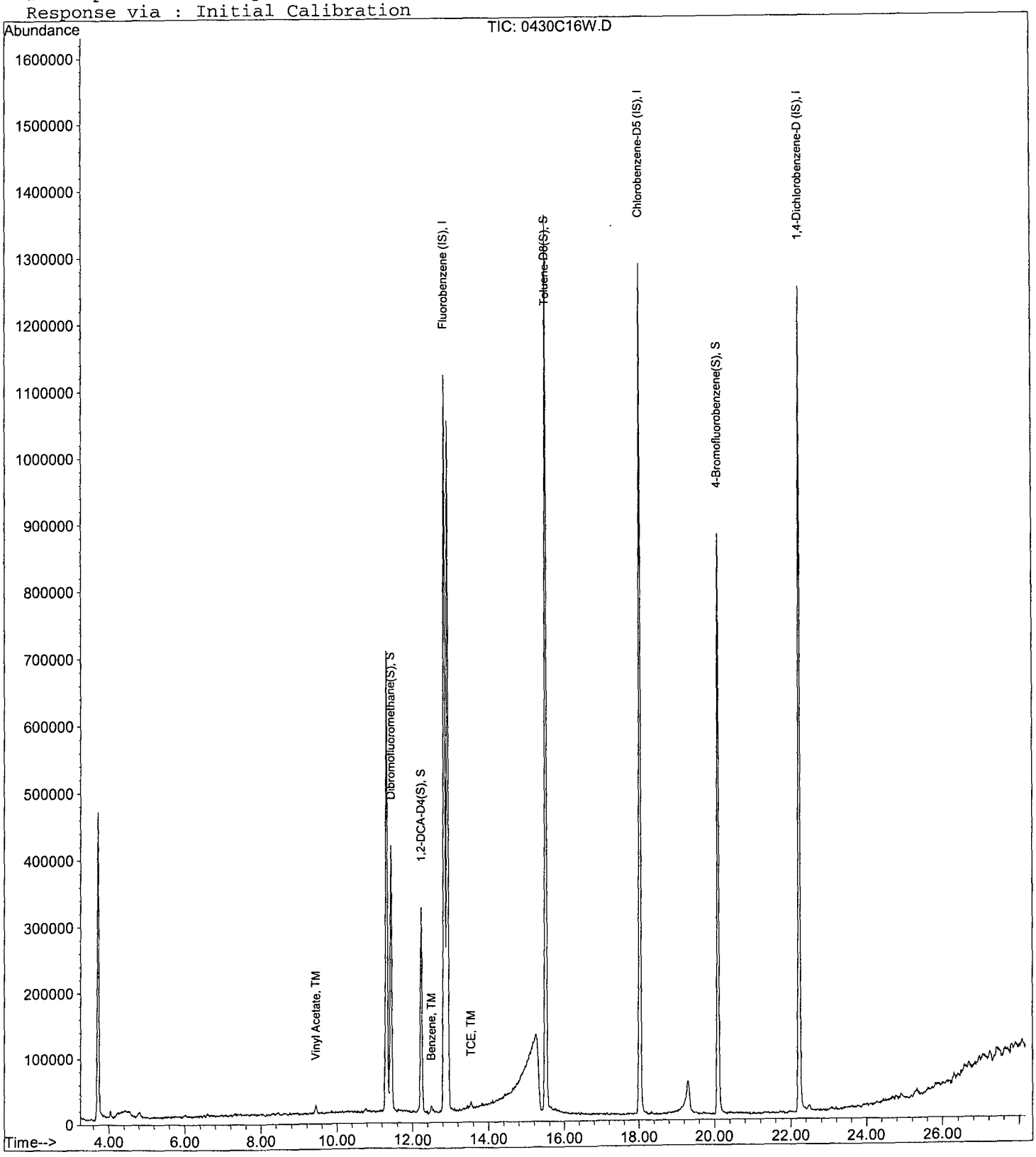
Quantitation Report

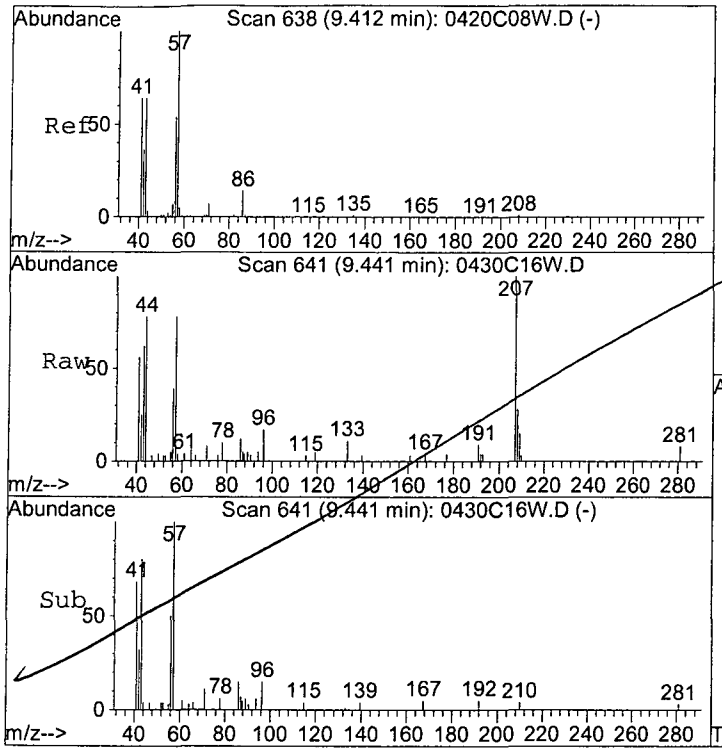
Data File : M:\CHICO\DATA\C120420\0430C16W.D
Acq On : 30 Apr 12 19:15
Sample : AY60080W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:01 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration



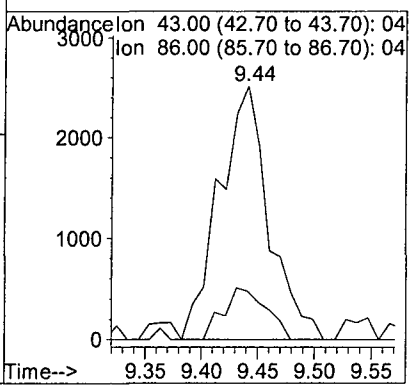


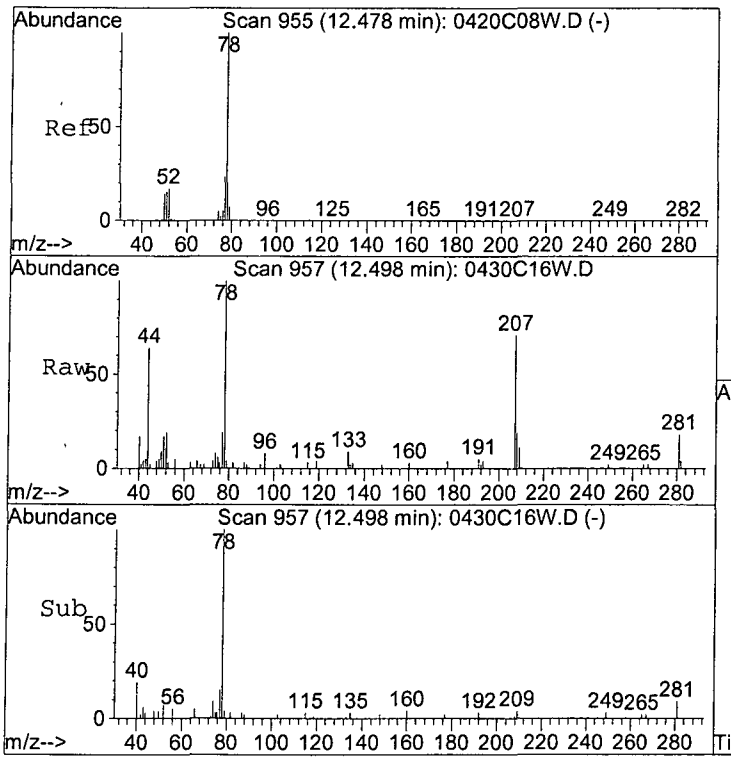
#25
Vinyl Acetate
Concen: 1.35313 ppb
RT: 9.44 min Scan# 641
Delta R.T. 0.03 min
Lab File: 0430C16W.D
Acq: 30 Apr 12 19:15

AMS 5/29/12

Tgt Ion: 43 Resp: 2521

Ion	Ratio	Lower	Upper
43	100		
86	19.1	15.0	27.8

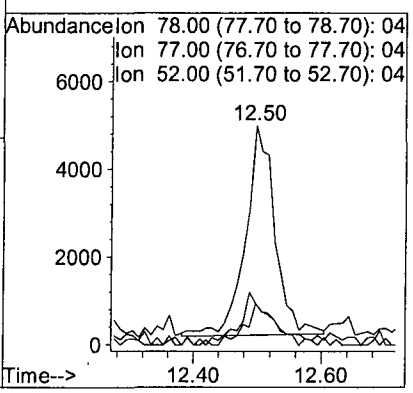




#41
Benzene
Concen: 0.20386 ppb
RT: 12.50 min Scan# 957
Delta R.T. 0.02 min
Lab File: 0430C16W.D
Acq: 30 Apr 12 19:15

Tgt Ion: 78 Resp: 15213

Ion	Ratio	Lower	Upper
78	100		
77	20.1	16.0	29.8
52	20.2	12.3	22.8



EPA 8260B VOCS + GAS WATER

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES076

APPL ID: AY60080

Sample Collection Date: 04/26/12

QCG: #86RHB-120501AT-166816

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	05/01/12	05/01/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	101	70-120			%	05/01/12	05/01/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	93.1	75-120			%	05/01/12	05/01/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	101	85-115			%	05/01/12	05/01/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	97.8	85-120			%	05/01/12	05/01/12

Quant Method: TALLW.M
Run #: 0501T22
Instrument: Thor
Sequence: T120430
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (QT Reviewed)

Data File : M:\THOR\DATA\T120430\0501T22W.D Vial: 22
Acq On : 1 May 12 18:40 Operator: DG,RS,HW,ARS,SV
Sample : AY60080W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 3 10:53 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed May 02 13:56:57 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.74	96	375168	25.00000 ppb	-0.01
55) Chlorobenzene-D5 (IS)	9.89	117	307136	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	165376	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.95	111	199774	29.48816 ppb	-0.02
Spiked Amount 29.265			Recovery = 100.761%		
36) 1,2-DCA-D4(S)	6.33	65	191528	28.27989 ppb	-0.01
Spiked Amount 27.995			Recovery = 101.017%		
56) Toluene-D8(S)	8.44	98	667599	28.54798 ppb	0.00
Spiked Amount 29.188			Recovery = 97.806%		
64) 4-Bromofluorobenzene(S)	11.06	95	231977	25.82460 ppb	0.00
Spiked Amount 27.740			Recovery = 93.098%		
Target Compounds					Qvalue
40) Benzene	6.40	78	4616	0.17415 ppb NT	95

want to check for TCE only → TCE is N.
ARS 5/29/12

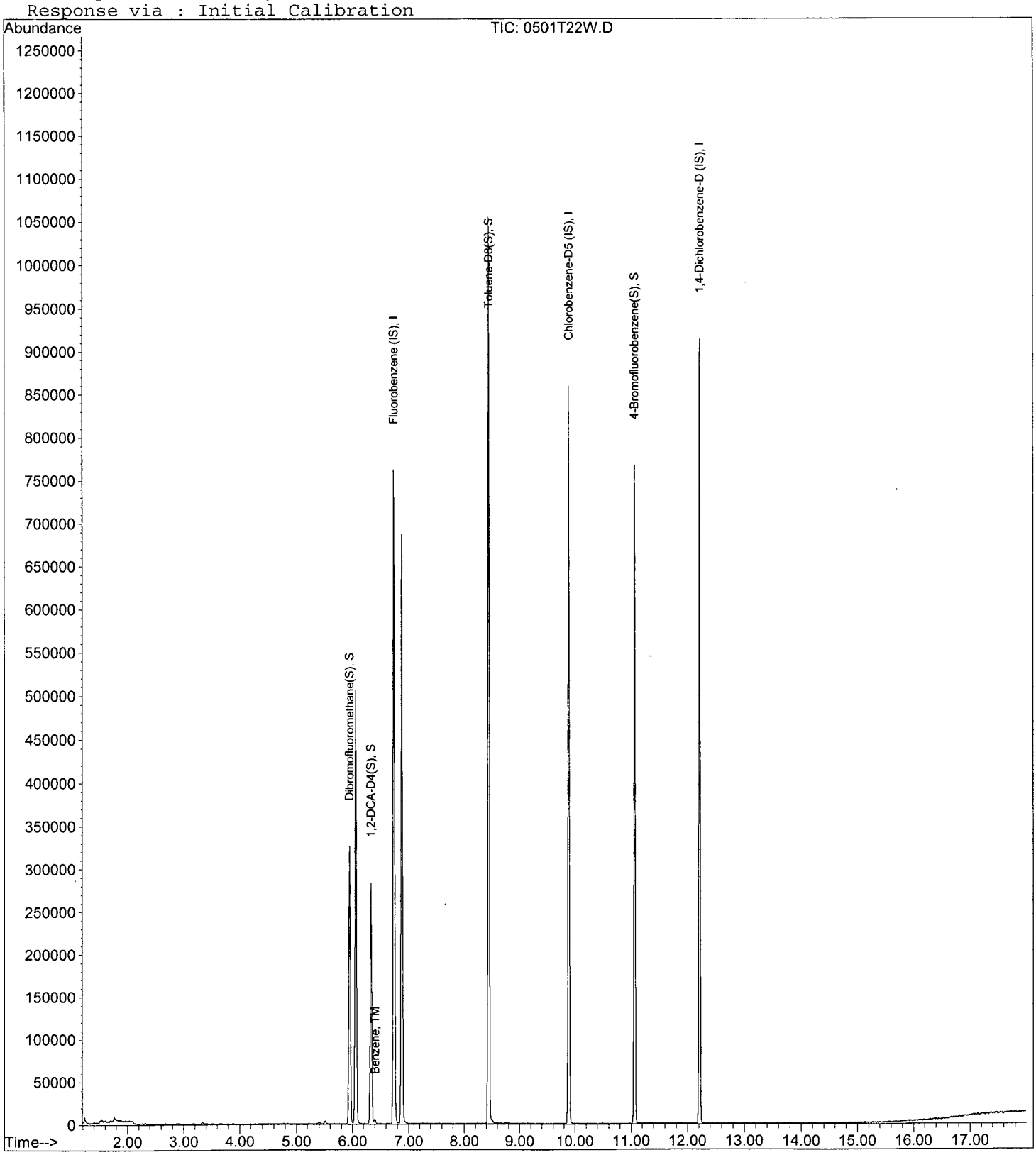
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120430\0501T22W.D Vial: 22
Acq On : 1 May 12 18:40 Operator: DG,RS,HW,ARS,SV
Sample : AY60080W02 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 3 10:53 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES077

APPL ID: AY60081

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

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	04/30/12	04/30/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
EPA 8260B	ACETONE	2.8 J	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
EPA 8260B	BENZENE	0.71 J	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0430C17
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES077

APPL ID: AY60081

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/30/12	04/30/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	108	70-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	87.9	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	102	85-115			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	91.1	85-120			%	04/30/12	04/30/12

J = Estimated value.

Quant Method: CALLW3.M
Run #: 0430C17
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C17W.D Vial: 1
Acq On : 30 Apr 12 19:52 Operator: AS
Sample : AY60081W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1137459	25.00000	ppb	0.06
3) Chlorobenzene-D5 (IS)	18.02	TIC	1302069	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1233699	25.00000	ppb	0.04

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	23637354m	47.00255	ppb	NO 100

There is no gasoline pattern.
ARS 5/1/12

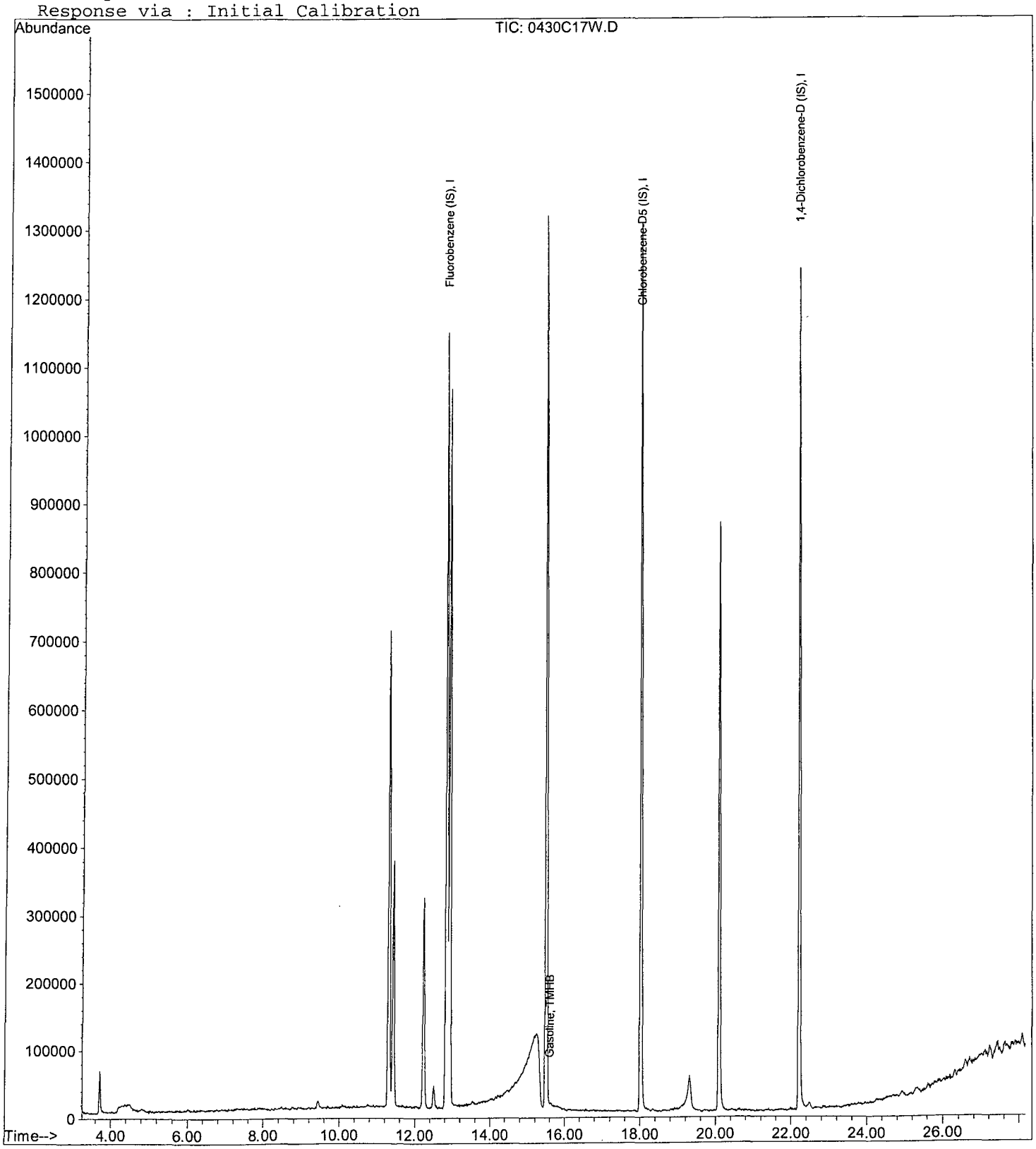
(#) = qualifier out of range (m) = manual integration
0430C17W.D CGAS.M Tue May 01 10:52:38 2012 Page 1

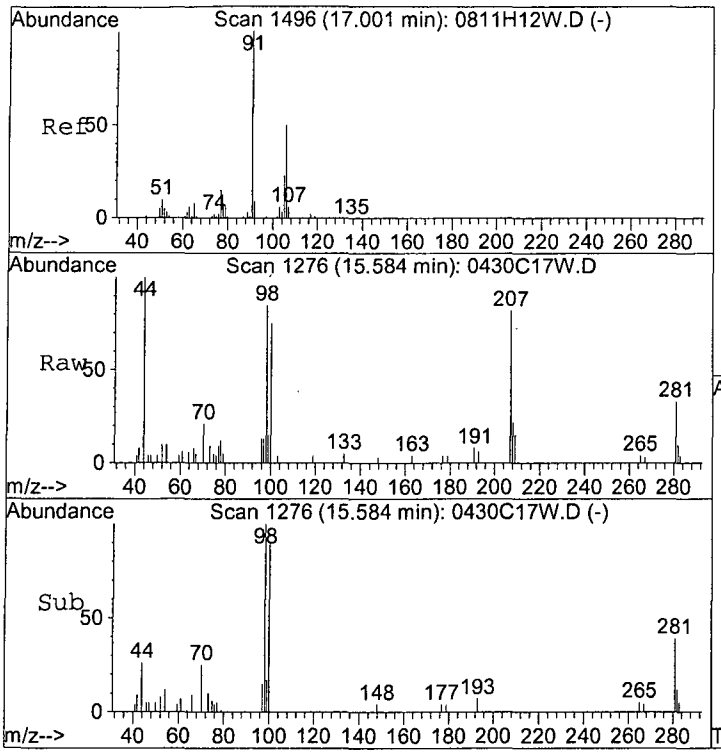
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C17W.D Vial: 1
Acq On : 30 Apr 12 19:52 Operator: AS
Sample : AY60081W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

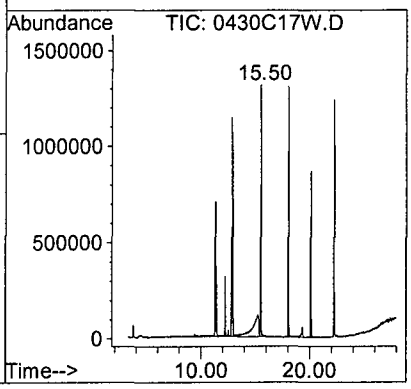
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 47.00255 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0430C17W.D
Acq: 30 Apr 12 19:52

Tgt Ion:TIC Resp:23637354



Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C17W.D Vial: 1
Acq On : 30 Apr 12 19:52 Operator: AS
Sample : AY60081W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:04 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	571471	25.00000 ppb	0.03
54) Chlorobenzene-D5 (IS)	18.02	117	478656	25.00000 ppb	0.02
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	219904	25.00000 ppb	0.02
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.43	111	378387	21.27841 ppb	0.03
Spiked Amount 20.866			Recovery	= 101.976%	
37) 1,2-DCA-D4(S)	12.23	65	324752	22.62529 ppb	0.02
Spiked Amount 21.039			Recovery	= 107.538%	
55) Toluene-D8(S)	15.50	98	1430002	23.09282 ppb	0.02
Spiked Amount 25.355			Recovery	= 91.078%	
63) 4-Bromofluorobenzene(S)	20.09	95	578671	23.73760 ppb	0.02
Spiked Amount 27.007			Recovery	= 87.895%	
Target Compounds					Qvalue
12) Acetone	7.31	43	7394	2.78731 ppbJ	99
25) Vinyl Acetate	9.42	43	2009	1.10705 ppbNT	96
41) Benzene	12.51	78	54484	0.71414 ppbJ	93

<1/2 PQL

>1/2 PQL

AMS 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C17W.D CALLW3.M Tue May 01 10:05:59 2012 Page 1

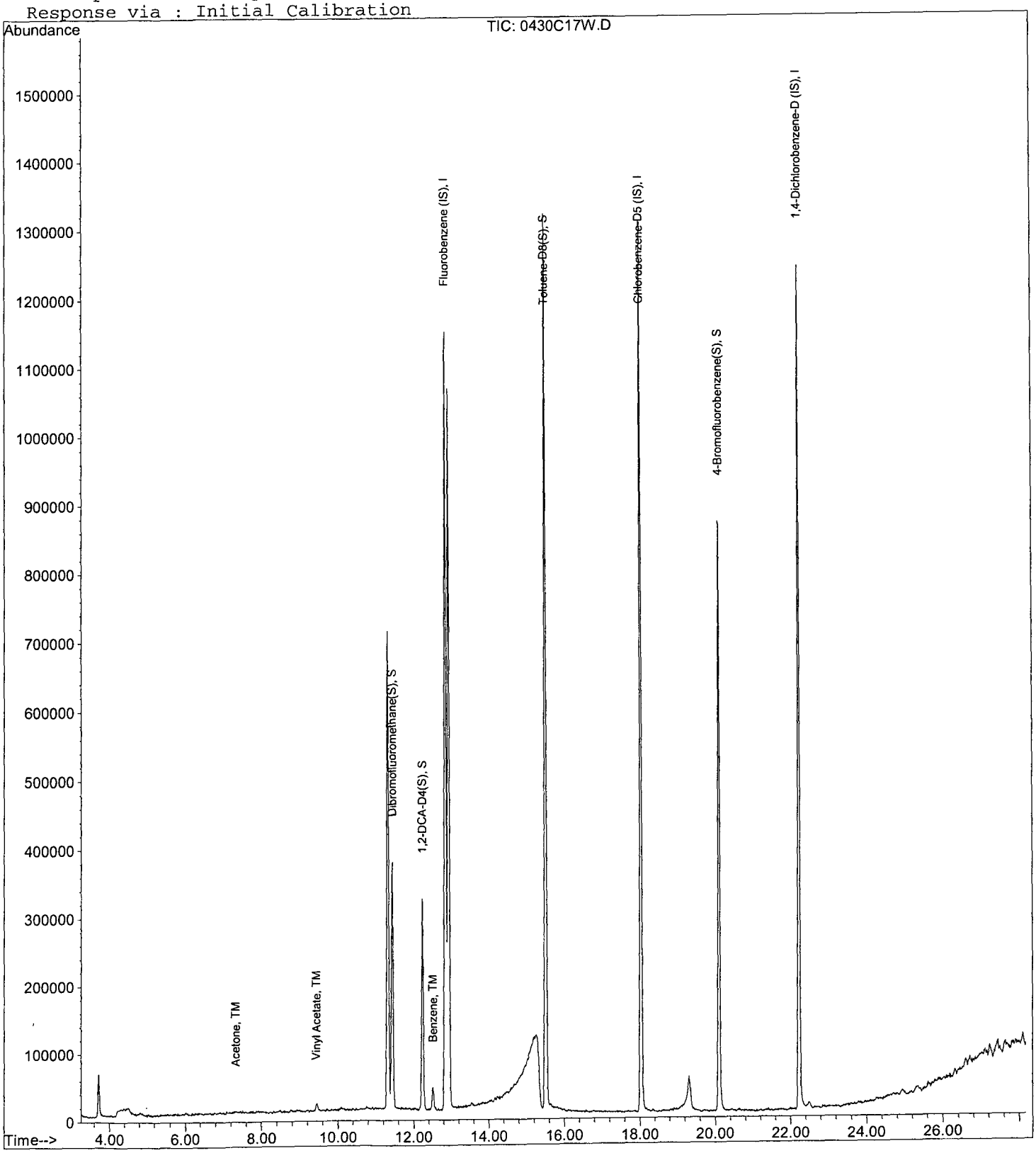
Quantitation Report

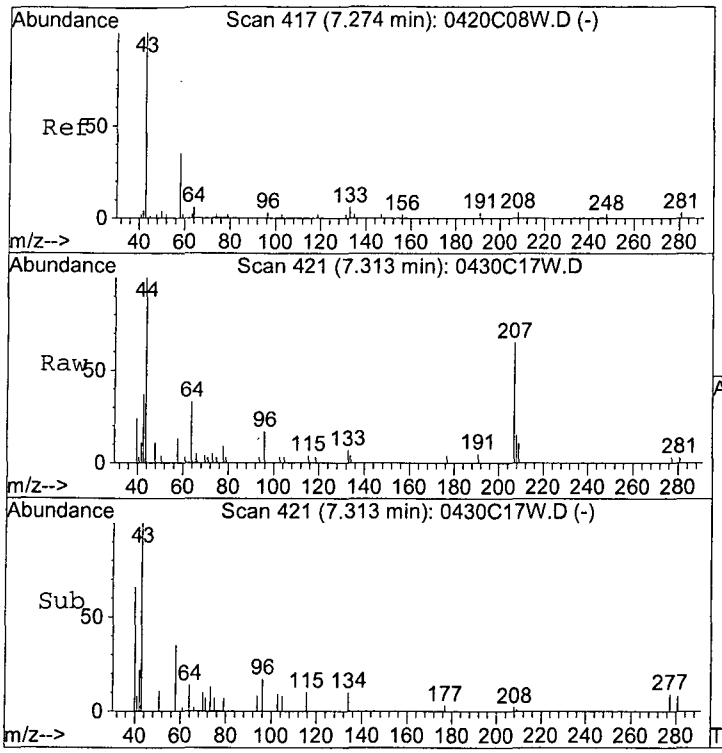
Data File : M:\CHICO\DATA\C120420\0430C17W.D
Acq On : 30 Apr 12 19:52
Sample : AY60081W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:04 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration

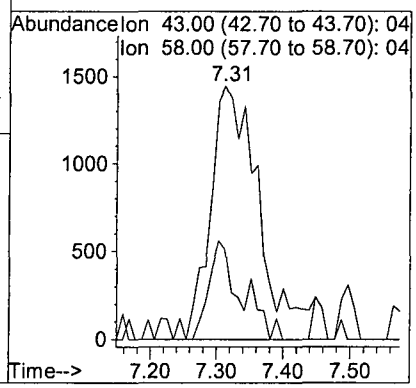


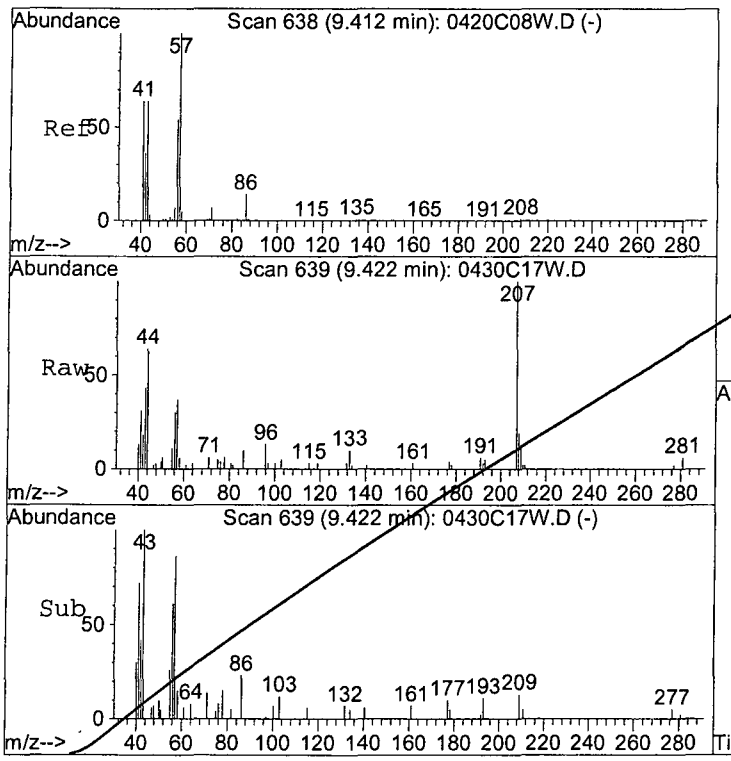


#12
Acetone
Concen: 2.78731 ppb
RT: 7.31 min Scan# 421
Delta R.T. 0.04 min
Lab File: 0430C17W.D
Acq: 30 Apr 12 19:52

Tgt Ion: 43 Resp: 7394

Ion	Ratio	Lower	Upper
43	100		
58	35.4	27.8	41.8



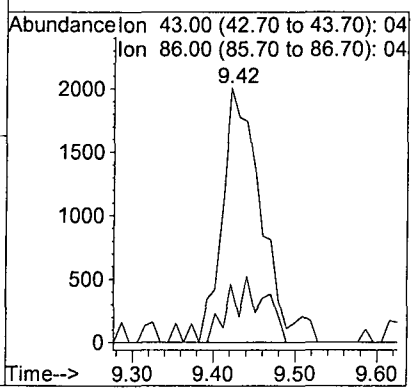


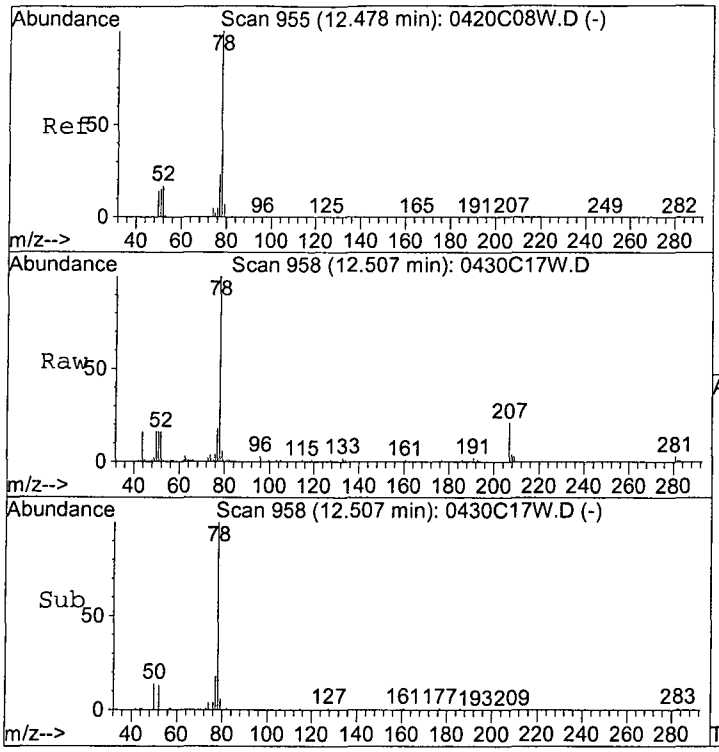
#25
Vinyl Acetate
Concen: 1.10705 ppb
RT: 9.42 min Scan# 639
Delta R.T. 0.01 min
Lab File: 0430C17W.D
Acq: 30 Apr 12 19:52

AMS 5/24/12

Tgt Ion: 43 Resp: 2009

Ion	Ratio	Lower	Upper
43	100		
86	23.1	15.0	27.8

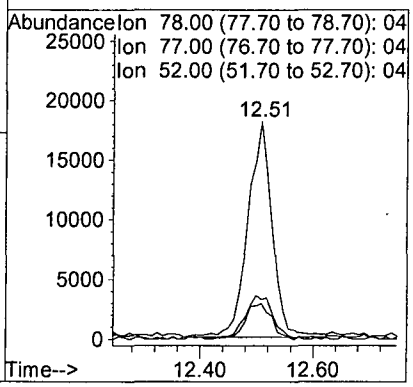




#41
Benzene
Concen: 0.71414 ppb
RT: 12.51 min Scan# 958
Delta R.T. 0.03 min
Lab File: 0430C17W.D
Acq: 30 Apr 12 19:52

Tgt Ion: 78 Resp: 54484

Ion	Ratio	Lower	Upper
78	100		
77	17.6	16.0	29.8
52	16.5	12.3	22.8



EPA 8260B VOCs + Gas Water

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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: TRIP BLANK 1
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60082
QCG: #86RHB-120430AC-166814

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	04/30/12	04/30/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C13
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: TRIP BLANK 1

APPL ID: AY60082

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/30/12	04/30/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	111	70-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	87.1	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	115	85-115			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	90.3	85-120			%	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C13
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C13W.D Vial: 1
Acq On : 30 Apr 12 17:23 Operator: AS
Sample : AY60082W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1225574	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.03	TIC	1330816	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1262499	25.00000	ppb	0.04

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24862794m	41.31610	ppb	ND 100

There is no gasoline pattern.

ARS 5/1/12

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

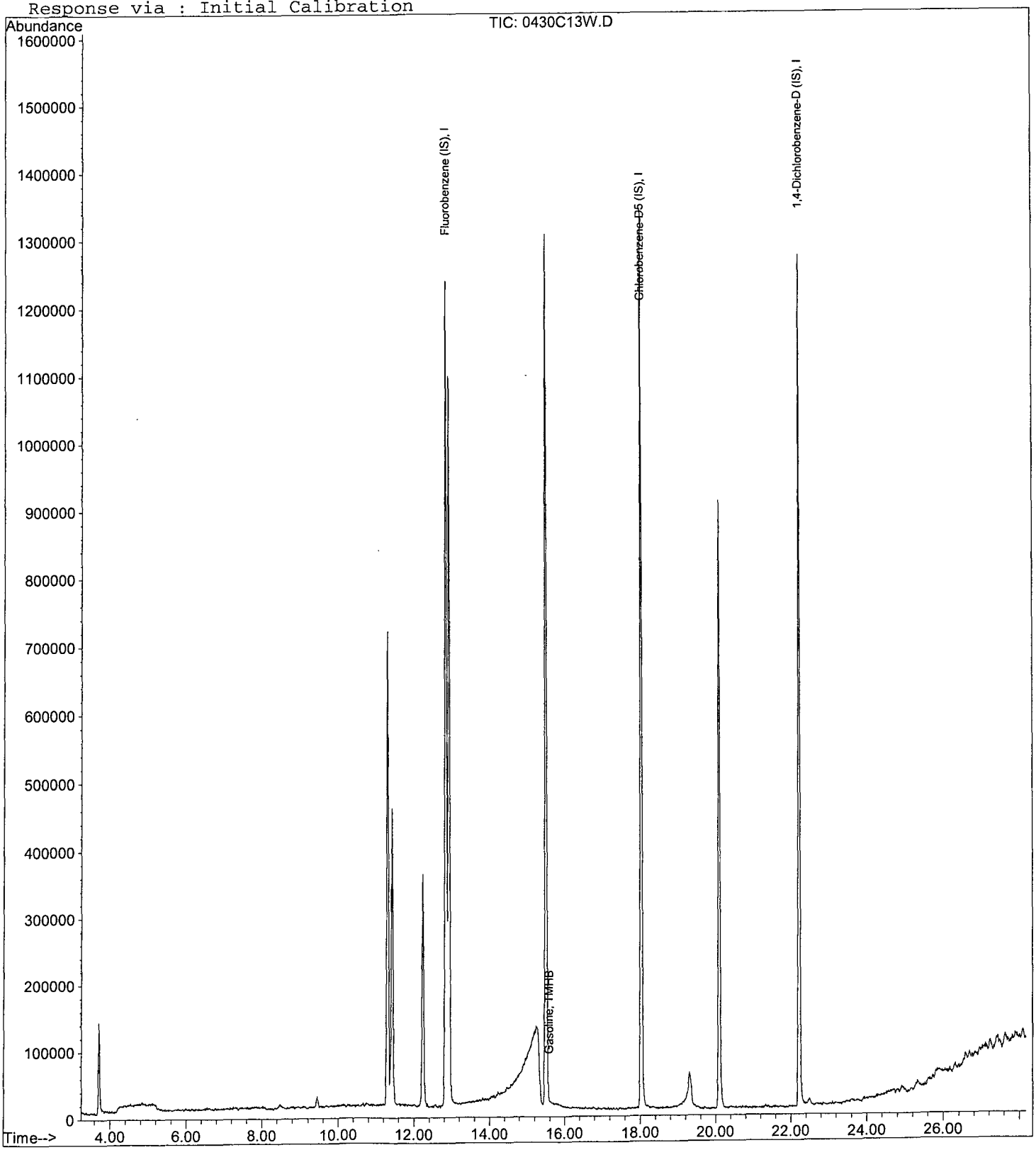
Quantitation Report

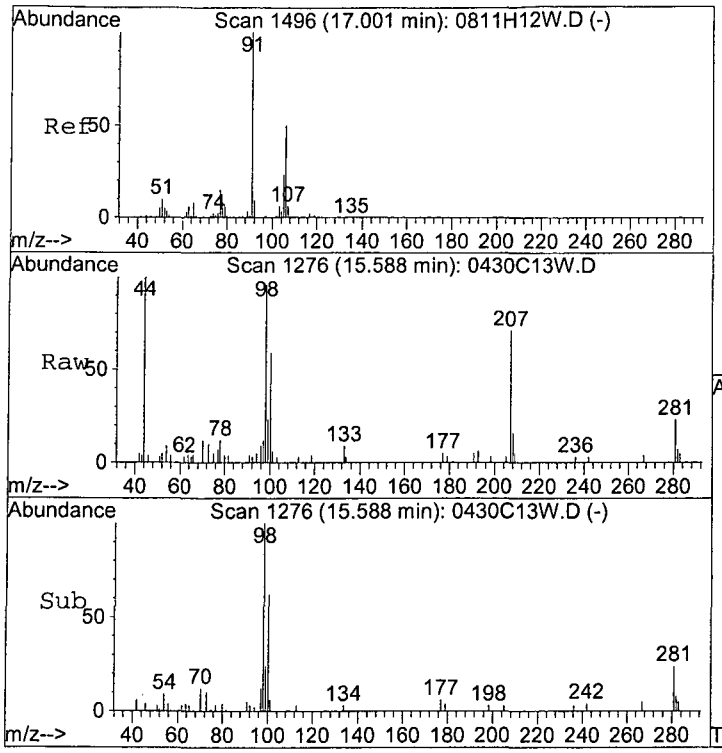
Data File : M:\CHICO\DATA\C120420\0430C13W.D
Acq On : 30 Apr 12 17:23
Sample : AY60082W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

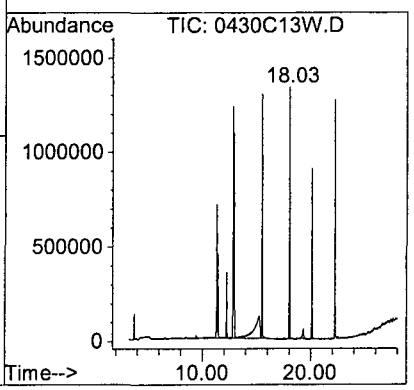
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 41.31610 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0430C13W.D
Acq: 30 Apr 12 17:23

Tgt Ion:TIC Resp:24862794



Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C13W.D Vial: 1
Acq On : 30 Apr 12 17:23 Operator: AS
Sample : AY60082W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 9:52 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	612863	25.00000 ppb	0.02
54) Chlorobenzene-D5 (IS)	18.03	117	489920	25.00000 ppb	0.02
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	230656	25.00000 ppb	0.02
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.43	111	455767	23.89883 ppb	0.02
Spiked Amount 20.866			Recovery	= 114.537%	
37) 1,2-DCA-D4(S)	12.23	65	359274	23.33990 ppb	0.02
Spiked Amount 21.039			Recovery	= 110.937%	
55) Toluene-D8(S)	15.49	98	1450350	22.88292 ppb	0.01
Spiked Amount 25.355			Recovery	= 90.250%	
63) 4-Bromofluorobenzene(S)	20.10	95	586720	23.51442 ppb	0.03
Spiked Amount 27.007			Recovery	= 87.066%	
Target Compounds					Qvalue
25) Vinyl Acetate	9.44	43	2316	1.17225 ppb NT	96

ARS 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C13W.D CALLW3.M Tue May 01 09:53:29 2012 Page 1

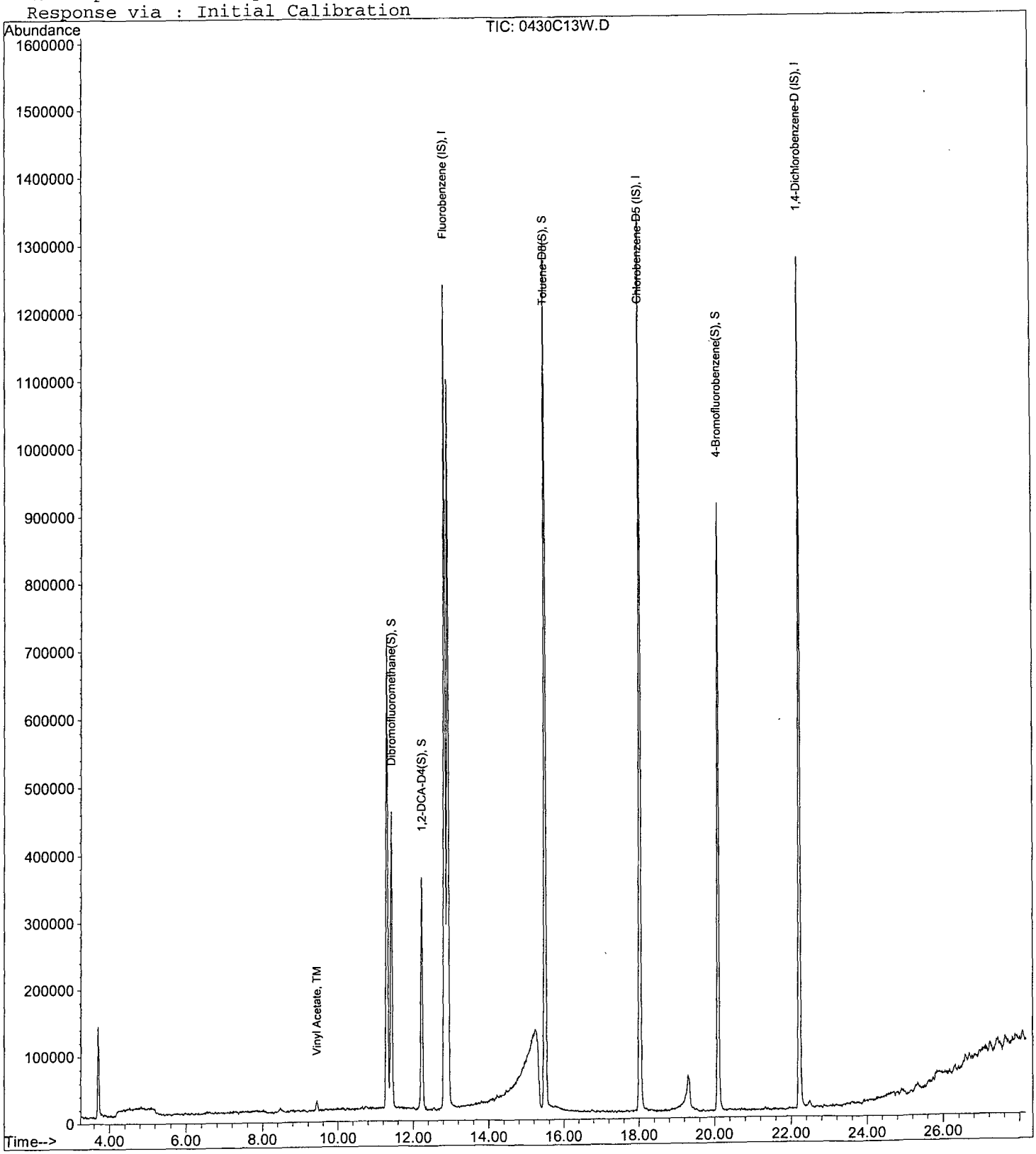
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C13W.D
Acq On : 30 Apr 12 17:23
Sample : AY60082W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 9:52 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: TRIP BLANK

APPL ID: AY60083

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

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	04/30/12	04/30/12
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C14
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: TRIP BLANK

APPL ID: AY60083

Sample Collection Date: 04/26/12

QCG: #86RHB-120430AC-166814

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	04/30/12	04/30/12
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE	112	70-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	88.0	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	115	85-115			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	90.9	85-120			%	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C14
Instrument: Chico
Sequence: C120420
Dilution Factor: 1
Initials: ARS

Printed: 05/11/12 1:22:00 PM
APPL-F1-SC-NoMC-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C14W.D Vial: 1
Acq On : 30 Apr 12 18:01 Operator: AS
Sample : AY60083W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1199967	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.03	TIC	1322557	25.00000	ppb	0.05
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1278776	25.00000	ppb	0.04

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	24674766m	44.49444	ppb	NO 100

There is no gasoline pattern.
AMS 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C14W.D CGAS.M Tue May 01 10:52:26 2012 Page 1

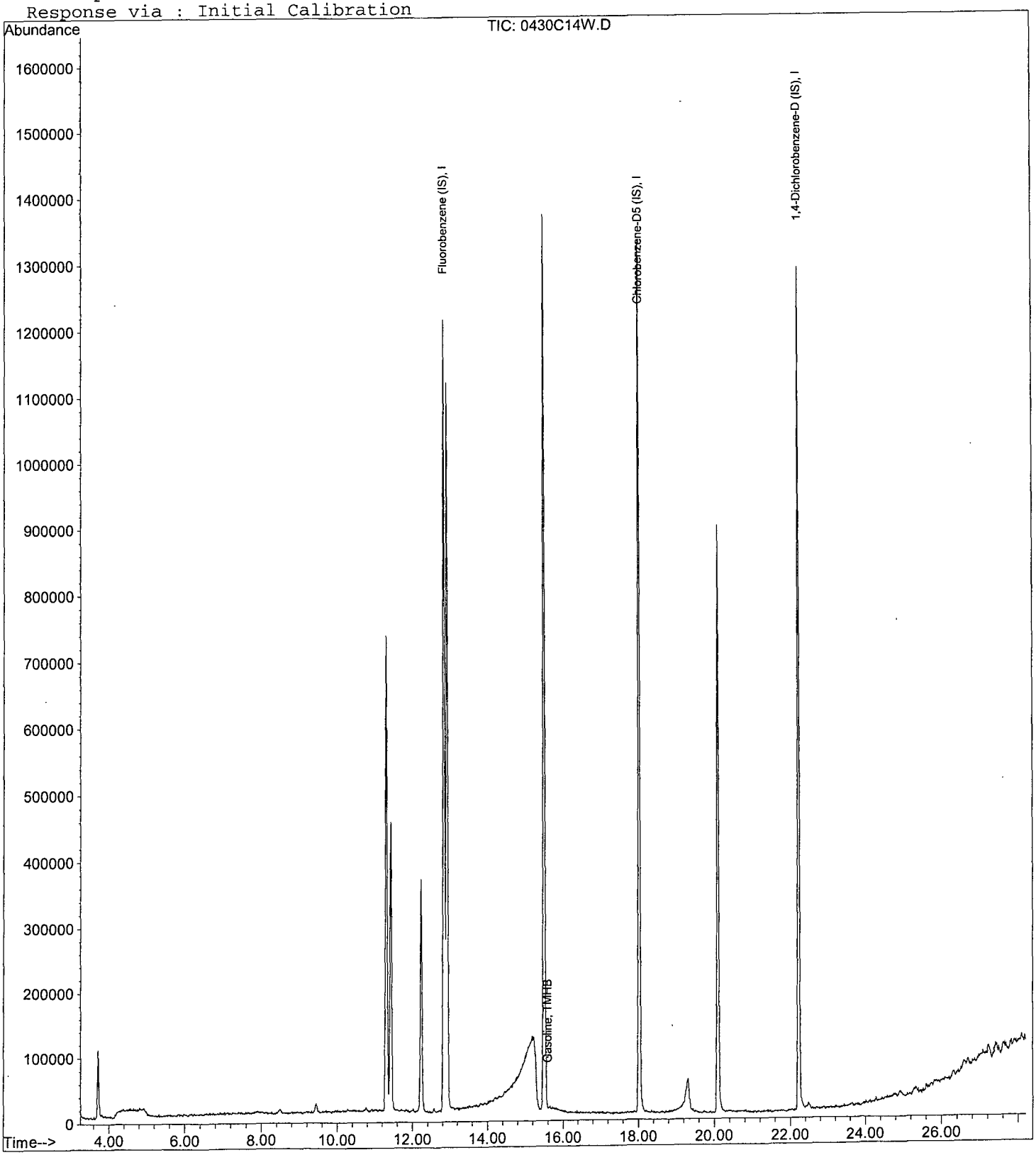
Quantitation Report

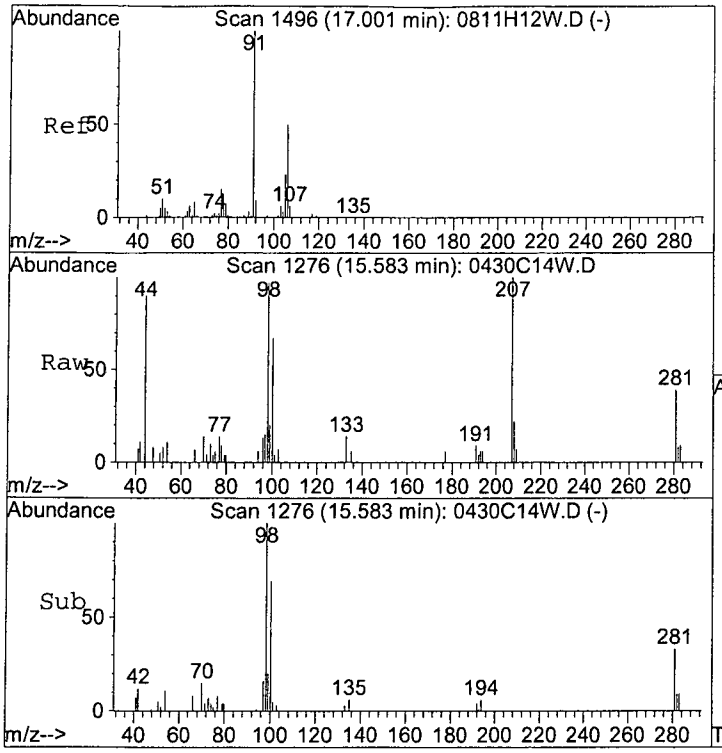
Data File : M:\CHICO\DATA\C120420\0430C14W.D
Acq On : 30 Apr 12 18:01
Sample : AY60083W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

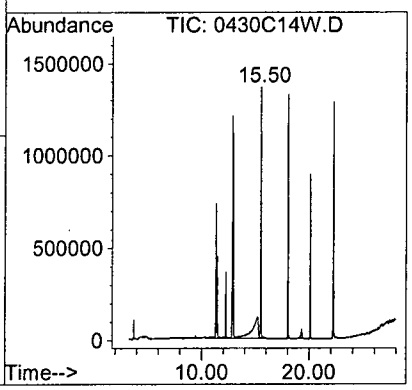
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 44.49444 ppb m
RT: 15.58 min Scan# 1276
Delta R.T. 0.00 min
Lab File: 0430C14W.D
Acq: 30 Apr 12 18:01

Tgt Ion:TIC Resp:24674766



Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C14W.D Vial: 1
Acq On : 30 Apr 12 18:01 Operator: AS
Sample : AY60083W01 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 9:47 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	605730	25.00000 ppb	0.03
54) Chlorobenzene-D5 (IS)	18.03	117	493056	25.00000 ppb	0.03
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	228608	25.00000 ppb	0.02
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.42	111	451952	23.97786 ppb	0.02
Spiked Amount 20.866			Recovery = 114.916%		
37) 1,2-DCA-D4(S)	12.23	65	359182	23.60870 ppb	0.02
Spiked Amount 21.039			Recovery = 112.215%		
55) Toluene-D8(S)	15.50	98	1469431	23.03651 ppb	0.02
Spiked Amount 25.355			Recovery = 90.857%		
63) 4-Bromofluorobenzene(S)	20.09	95	596712	23.76277 ppb	0.02
Spiked Amount 27.007			Recovery = 87.988%		
Target Compounds					Qvalue
25) Vinyl Acetate	9.43	43	2264	1.16202 ppb NT	99

ARC 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C14W.D CALLW3.M Tue May 01 09:53:37 2012 Page 1

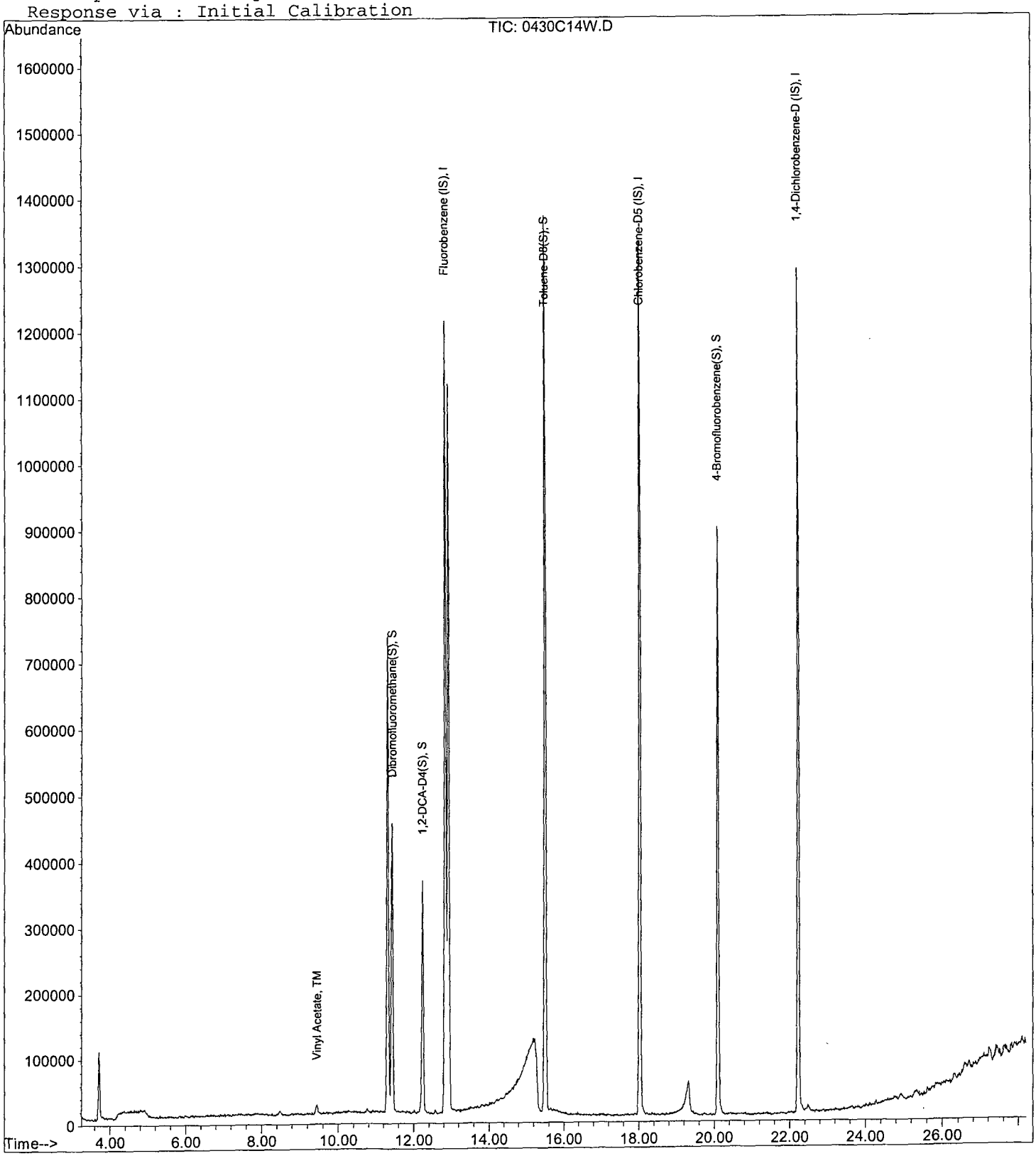
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C14W.D
Acq On : 30 Apr 12 18:01
Sample : AY60083W01
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 9:47 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration



EPA METHOD 8260B
Volatile Organic Compounds
Calibration Data

APPL, INC.

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 01/25/12
Matrix: Water Instrument: Chico Initials:

			0125C29W D	0125C30W.D	0125C31W.D	0125C32W.D	0125C33W.D	0125C34W.D	0125C35W.D							
		Compound	20	50	100	300	600	800	1000				Avg	%RSD		
1	I	Fluorobenzene (IS)														r
2	TMHBL	Gasoline	23.6	10.6	5.907	3.541	2.892	2.841	2.494				7.4	104	TMHBL	0.997
3	I	Chlorobenzene-D5 (IS)														
4	I	1,4-Dichlorobenzene-D (IS)														
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																

ARS 5/29/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.80	TIC	998565	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	2063547	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1276666	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	15.58	TIC	68624186m	598.65494	ppb	100

(#) = qualifier out of range (m) = manual integration
0125C28W.D CGAS.M Tue Feb 07 09:41:59 2012 Page 1

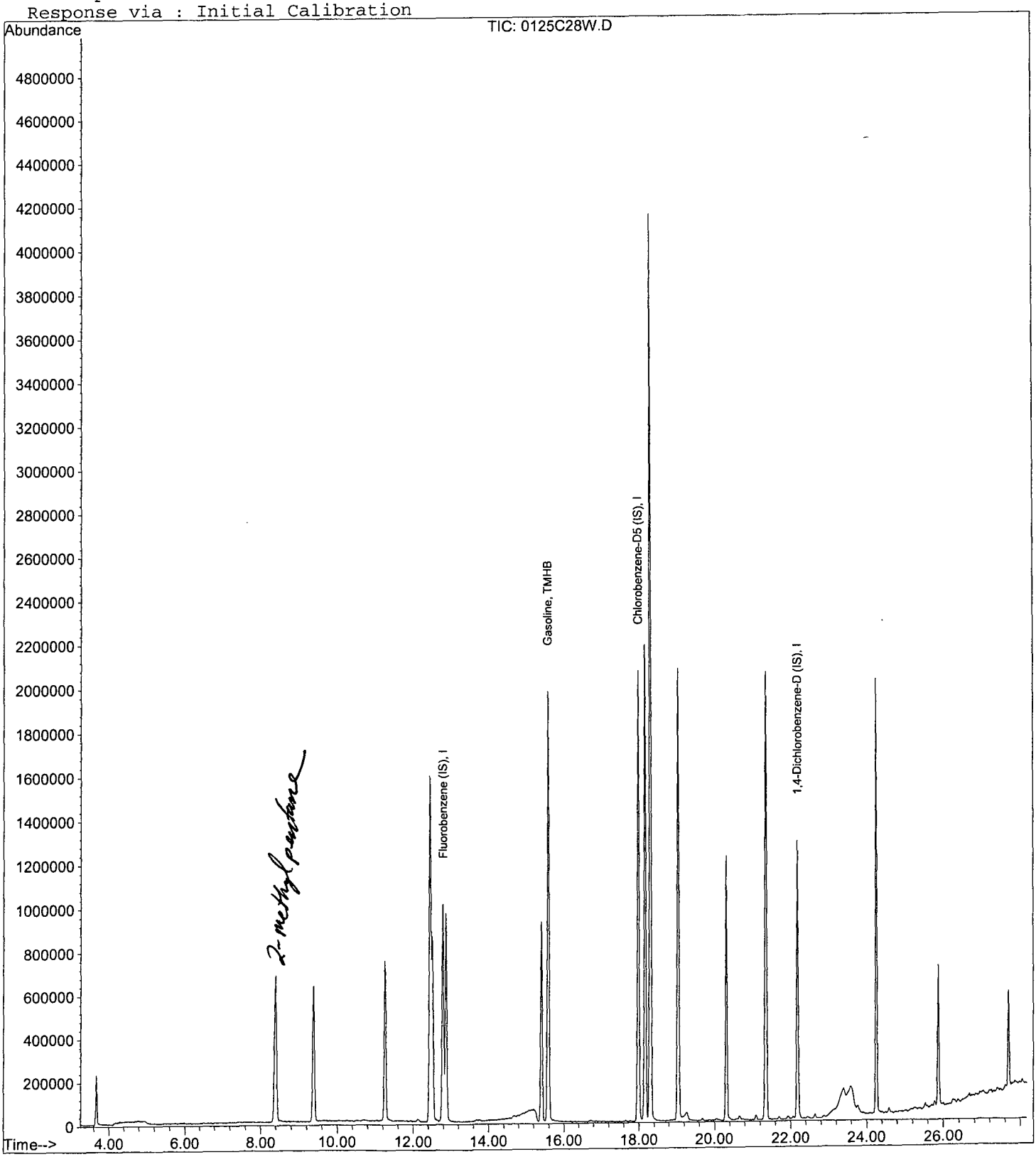
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:41 2012 Quant Results File: CGAS.RES

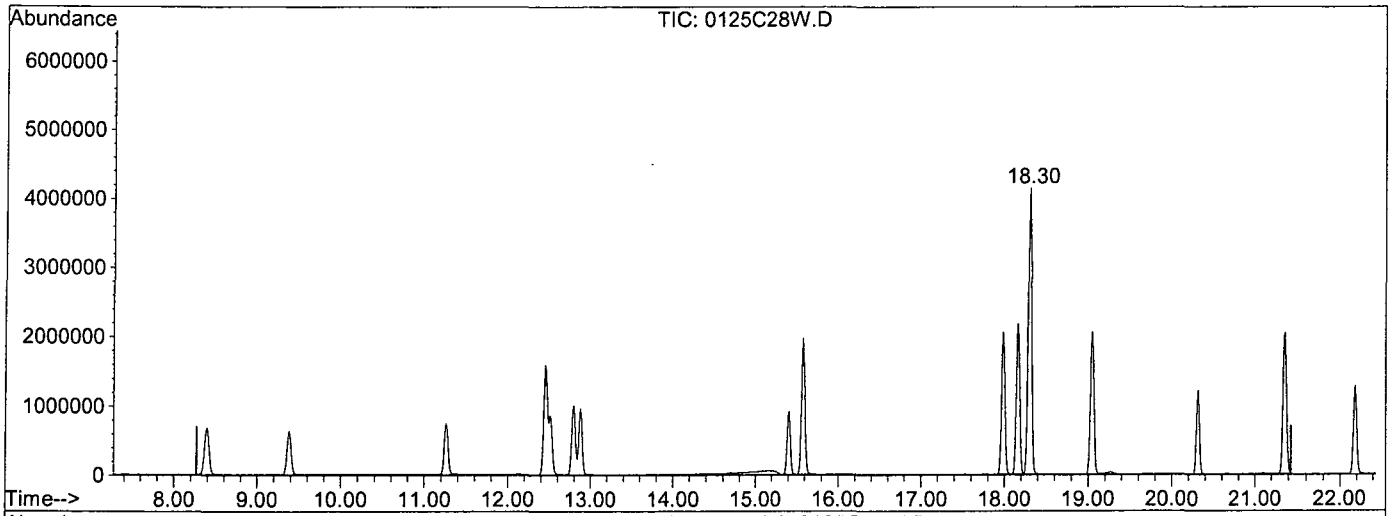
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

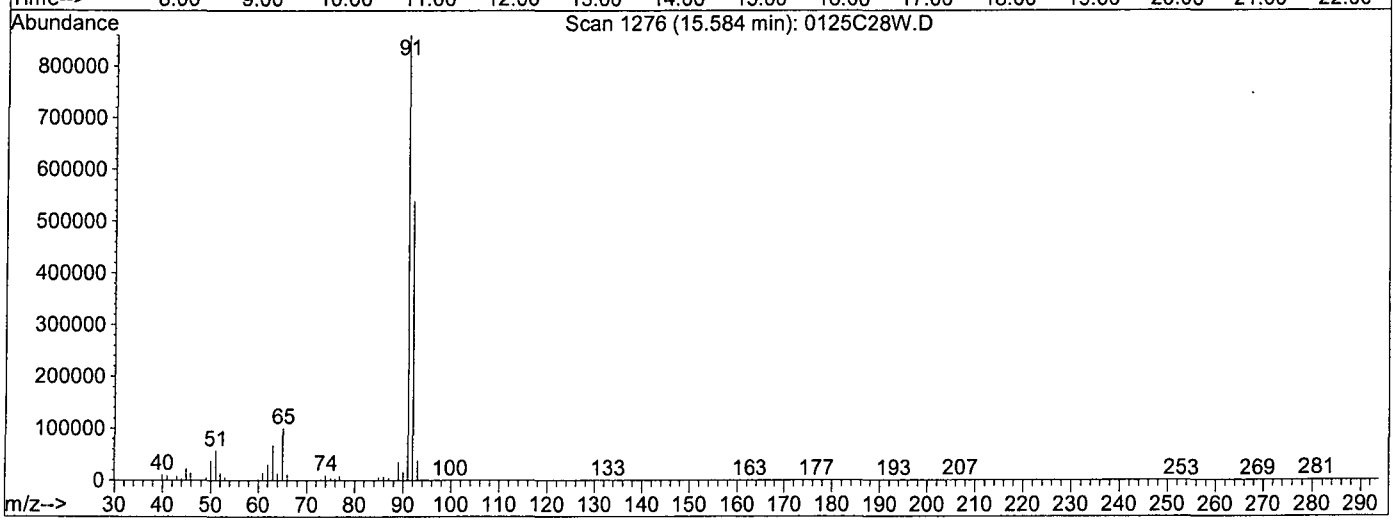


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:41 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C28W.D

(2) Gasoline (TMHB)

15.58min 598.6549ppb m

response 68624186

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.19#
0.00	0.00	0.54#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.80	96	514344	25.00000 ppb		0.03
54) Chlorobenzene-D5 (IS)	17.98	117	426880	25.00000 ppb		0.02
70) 1,4-Dichlorobenzene-D (IS)	22.18	152	243008	25.00000 ppb		0.02
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	814	0.05945 ppb		0.04
Spiked Amount 24.119			Recovery = 0.245%			
37) 1,2-DCA-D4(S)	12.18	65	952	0.09637 ppb		0.02
Spiked Amount 22.874			Recovery = 0.420%			
55) Toluene-D8(S)	15.46	98	5539	0.10268 ppb		0.03
Spiked Amount 24.755			Recovery = 0.416%			
63) 4-Bromofluorobenzene(S)	20.05	95	5181	0.27480 ppb		0.02
Spiked Amount 26.777			Recovery = 1.027%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.06	85	2596	0.82228 ppb		98
3) Freon 114	4.31	85	1957	0.24927 ppb		98
4) Chloromethane	4.53	50	497	-0.25189 ppb	#	1
5) Vinyl chloride	4.81	62	636	0.11072 ppb	#	55
6) Bromomethane	5.66	94	352	1.43494 ppb	#	48
7) Chloroethane	5.89	64	688	0.17146 ppb	#	88
9) Trichlorofluoromethane	6.48	103	598	0.15470 ppb	#	42
11) Acrolein	7.16	56	139	1.20103 ppb		81
12) Acetone	7.25	43	1756	0.17301 ppb	#	49
13) Freon-113	7.44	101	1265	0.10656 ppb		84
14) 1,1-DCE	7.63	96	2136	0.28441 ppb	#	17
15) t-Butanol	7.75	59	112	1.98451 ppb	#	80
17) Iodomethane	8.12	142	488	0.33050 ppb	#	43
18) Acrylonitrile	8.40	53	18247	12.53629 ppb	#	22
19) Methylene chloride	8.44	84	5961	-0.42807 ppb	#	1
20) Carbon disulfide	8.51	76	565	0.07522 ppb	#	75
22) Trans-1,2-DCE	9.06	96	3142	0.09631 ppb	#	9
25) Vinyl Acetate	9.38	43	108176	52.11193 ppb		98
27) MEK (2-Butanone)	10.41	43	403	0.27118 ppb	#	66
28) Cis-1,2-DCE	10.76	96	1544	0.11362 ppb	#	23
34) Cyclohexane	11.97	56	2103	0.11787 ppb		99
35) 1,1-Dichloropropene	12.09	75	2011	0.15580 ppb	#	45
36) 2,2,4-Trimethylpentane	12.13	57	18754	0.54048 ppb		99
38) Carbon Tetrachloride	12.23	117	80	0.91706 ppb	#	41
40) 1,2-DCA	12.45	62	18764	2.04942 ppb	#	75
41) Benzene	12.45	78	2517875	58.71375 ppb		98
42) TCE	13.49	95	1033	0.08724 ppb	#	57
43) 2-Pentanone	13.09	43	1444	0.49565 ppb	#	63
46) Methyl Cyclohexane	13.76	83	4236	0.25633 ppb		93
50) Cis-1,3-Dichloropropene	14.93	75	612	-0.23271 ppb		85
51) Toluene	15.58	91	2516540	49.99585 ppb		96
52) Trans-1,3-Dichloropropene	15.76	75	1112	0.10188 ppb	#	60
57) Tetrachloroethene	16.75	164	1780	0.15371 ppb	#	45
58) 1-Chlorohexane	17.66	91	4450	0.20898 ppb		89
60) m&p-Xylene	18.30	106	2213106	87.61936 ppb		97
61) o-Xylene	19.05	106	1078952	43.01267 ppb		93
62) Styrene	19.05	104	54491	1.45381 ppb	#	1
64) 2-Hexanone	16.02	43	394	0.17017 ppb	#	25
67) Chlorobenzene	18.06	112	2884	0.07867 ppb	#	48

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C28W.D Vial: 1
Acq On : 26 Jan 12 18:55 Operator: RS, ARS
Sample : VOC Mix Marker Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
68)	Ethylbenzene	18.17	91	2939246	43.94023	ppb		100
71)	MIBK (methyl isobutyl keto	14.58	43	99	-0.18362	ppb	#	31
72)	Isopropylbenzene	19.69	105	9228	0.12704	ppb		92
75)	t-1,4-Dichloro-2-Butene	20.31	53	19055	11.41330	ppb	#	8
76)	Bromobenzene	20.43	156	3594	0.20876	ppb	#	47
77)	n-Propylbenzene	20.39	91	18116	0.20048	ppb		98
78)	4-Ethyltoluene	20.59	105	8271	0.15756	ppb		90
79)	2-Chlorotoluene	20.68	91	7547	0.13199	ppb	#	77
80)	1,3,5-Trimethylbenzene	20.66	105	19818	0.33532	ppb		92
81)	4-Chlorotoluene	20.77	91	9067	0.17883	ppb		97
82)	Tert-Butylbenzene	21.36	119	276648	4.08833	ppb	#	71
83)	1,2,4-Trimethylbenzene	21.36	105	2161299	36.78081	ppb		97
84)	Sec-Butylbenzene	21.70	105	18537	0.22205	ppb	#	76
85)	p-Isopropyltoluene	21.93	119	13390	0.19972	ppb	#	89
86)	Benzyl Chloride	22.37	91	1446	0.10670	ppb	#	90
87)	1,3-DCB	22.08	146	7950	0.23447	ppb		83
88)	1,4-DCB	22.25	146	8802	0.26702	ppb	#	79
89)	Hexachloroethane	23.52	117	2736	0.90342	ppb	#	25
90)	n-Butylbenzene	22.65	91	21345	0.34686	ppb	#	94
91)	1,2-DCB	22.88	146	6887	0.24229	ppb	#	79
92)	1,2-Dibromo-3-chloropropan	24.07	155	120	0.11615	ppb	#	46
93)	1,2,4-Trichlorobenzene	25.53	180	5653	0.69548	ppb		79
94)	Hexachlorobutadiene	25.78	223	5853	0.53769	ppb	#	69
95)	Naphthalene	25.89	128	857570	35.27522	ppb		99
96)	1,2,3-Trichlorobenzene	26.24	180	4574	0.69979	ppb		85

RRS 1/27/12

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

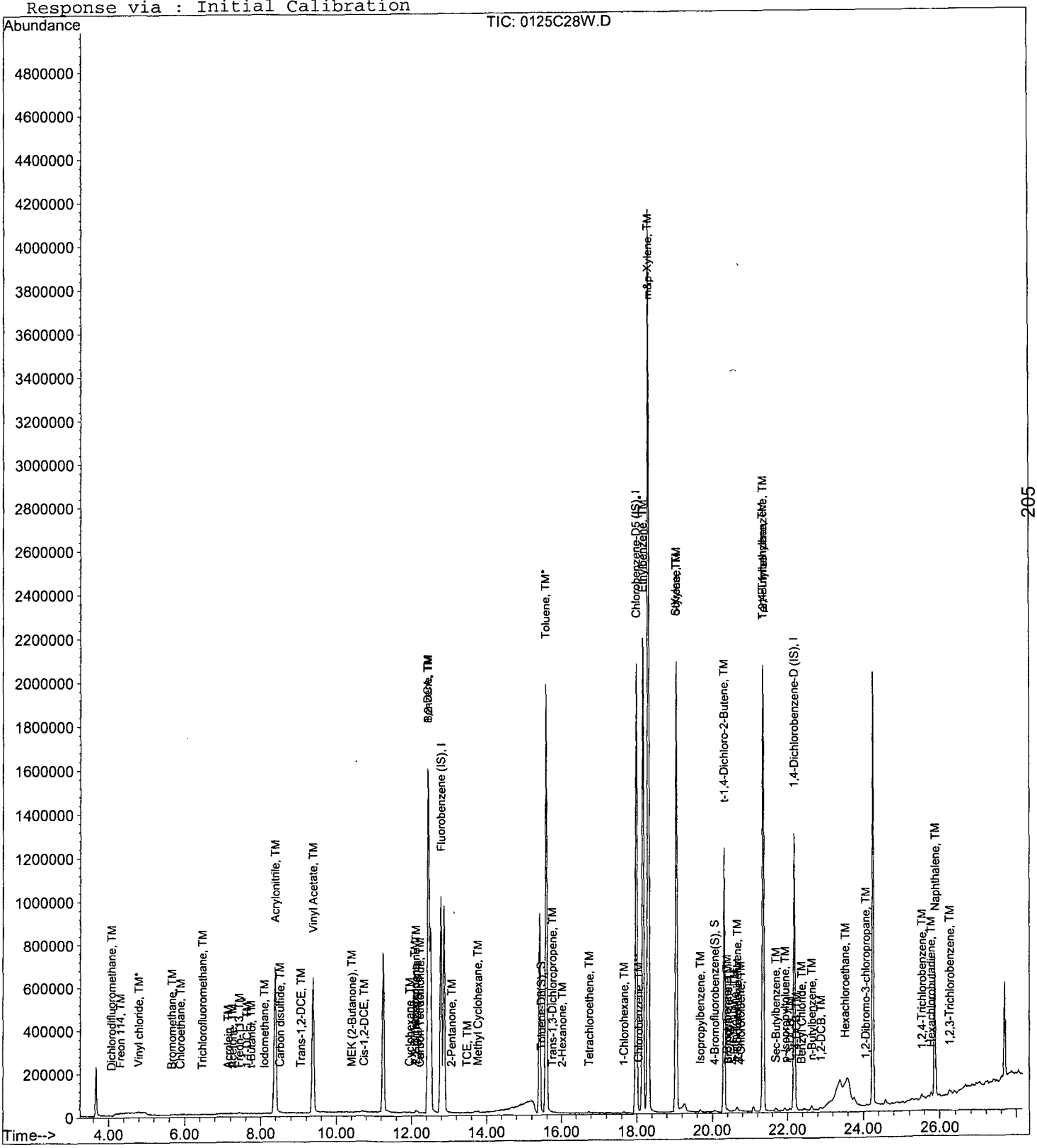
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 11:40 2012 Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C120125\CALLW.M (RTE Integrator)
Title : METHOD 8260
Last Update : Fri Jan 27 12:42:43 2012
Response via : Initial Calibration



205

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:34 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:01:13 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1053352	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1266647	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1287754	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	19858101m	31.82421	ppb	100

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

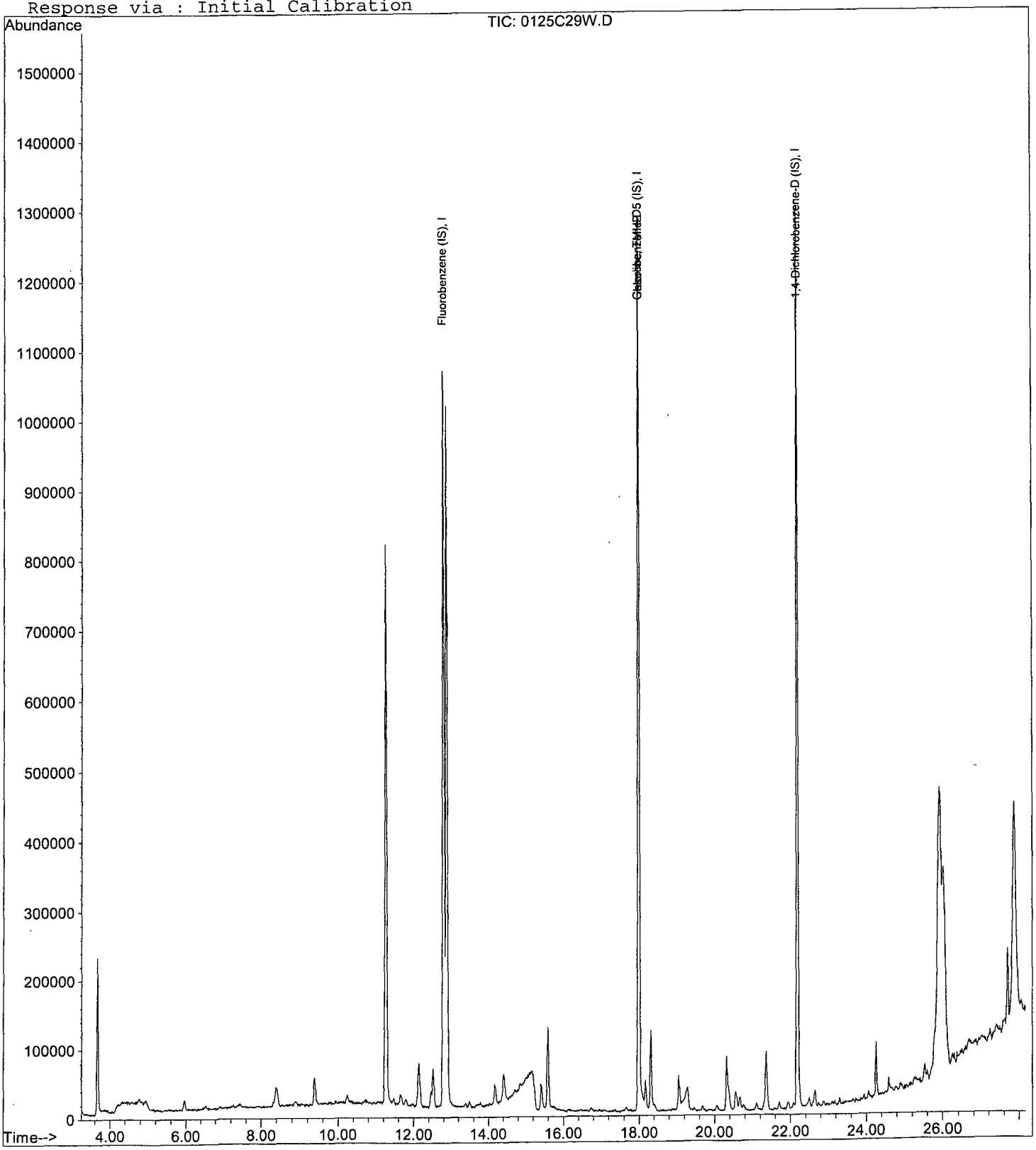
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D
Acq On : 26 Jan 12 19:32
Sample : Vol. Std. 01-26-12@20ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:34 2012 Quant Results File: CGAS.RES

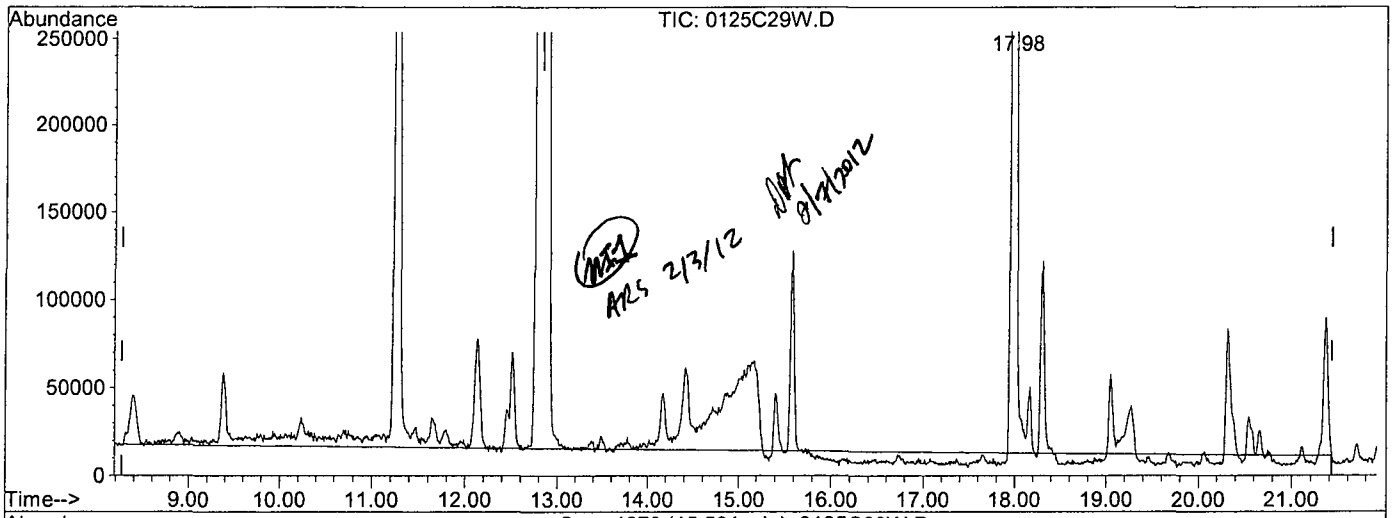
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

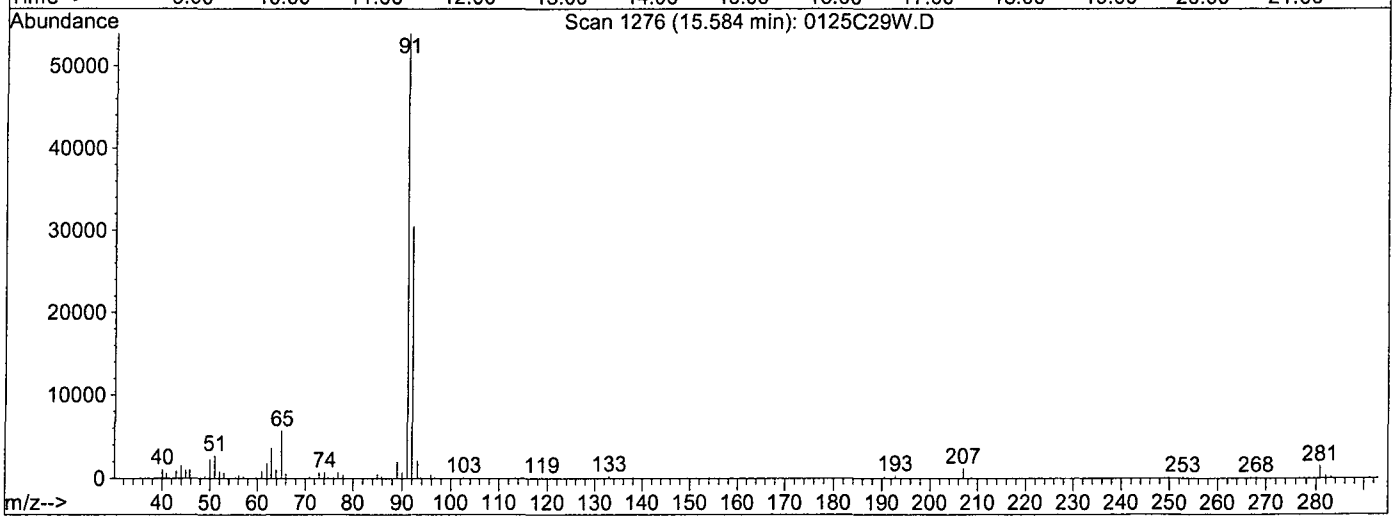


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

15.58min -8.2763ppb m

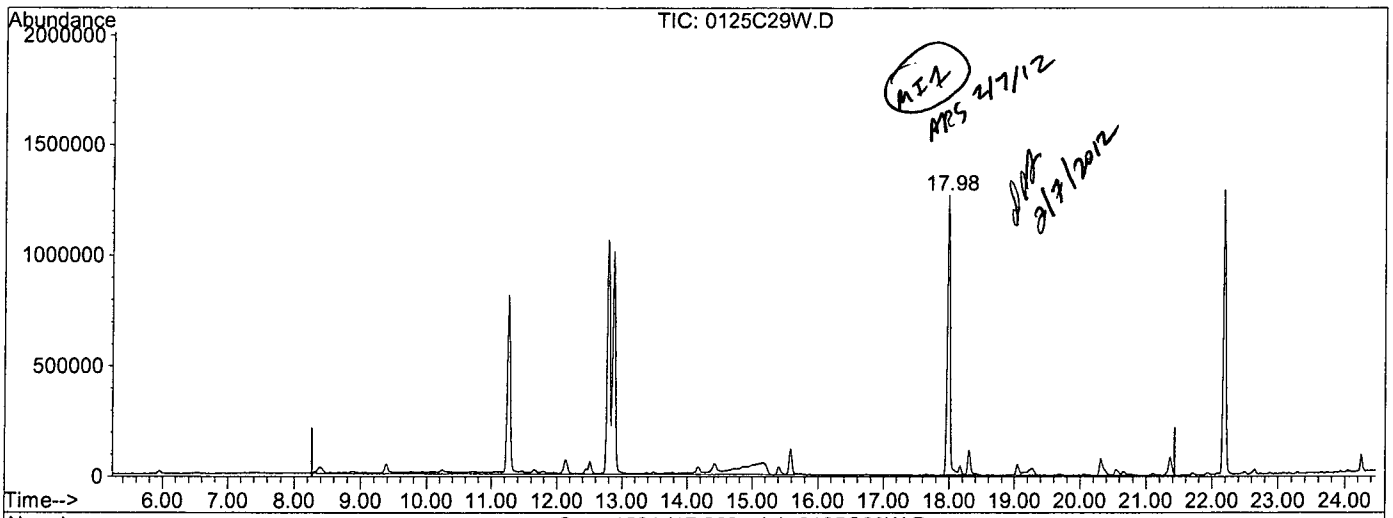
response 16152794

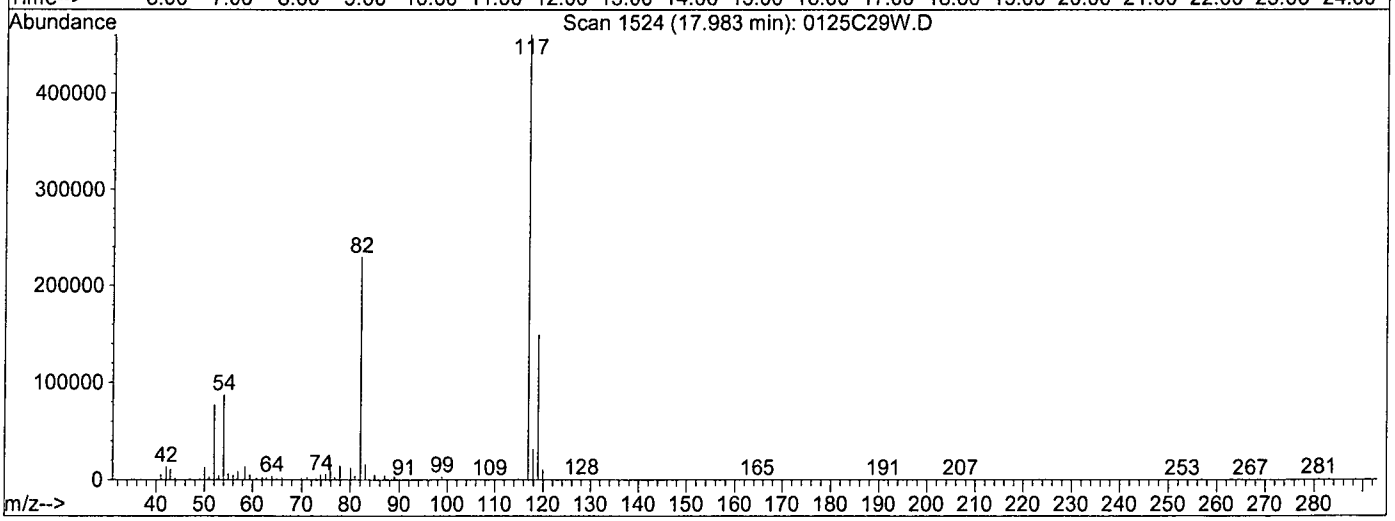
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.79#
0.00	0.00	2.40#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C29W.D Vial: 1
Acq On : 26 Jan 12 19:32 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@20ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:34 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C29W.D

(2) Gasoline (TMHB)

17.98min 31.8242ppb m

response 19858101

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.95#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1088272	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.99	TIC	1269196	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1282230	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.99	TIC	23136590m	59.27095	ppb	100

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

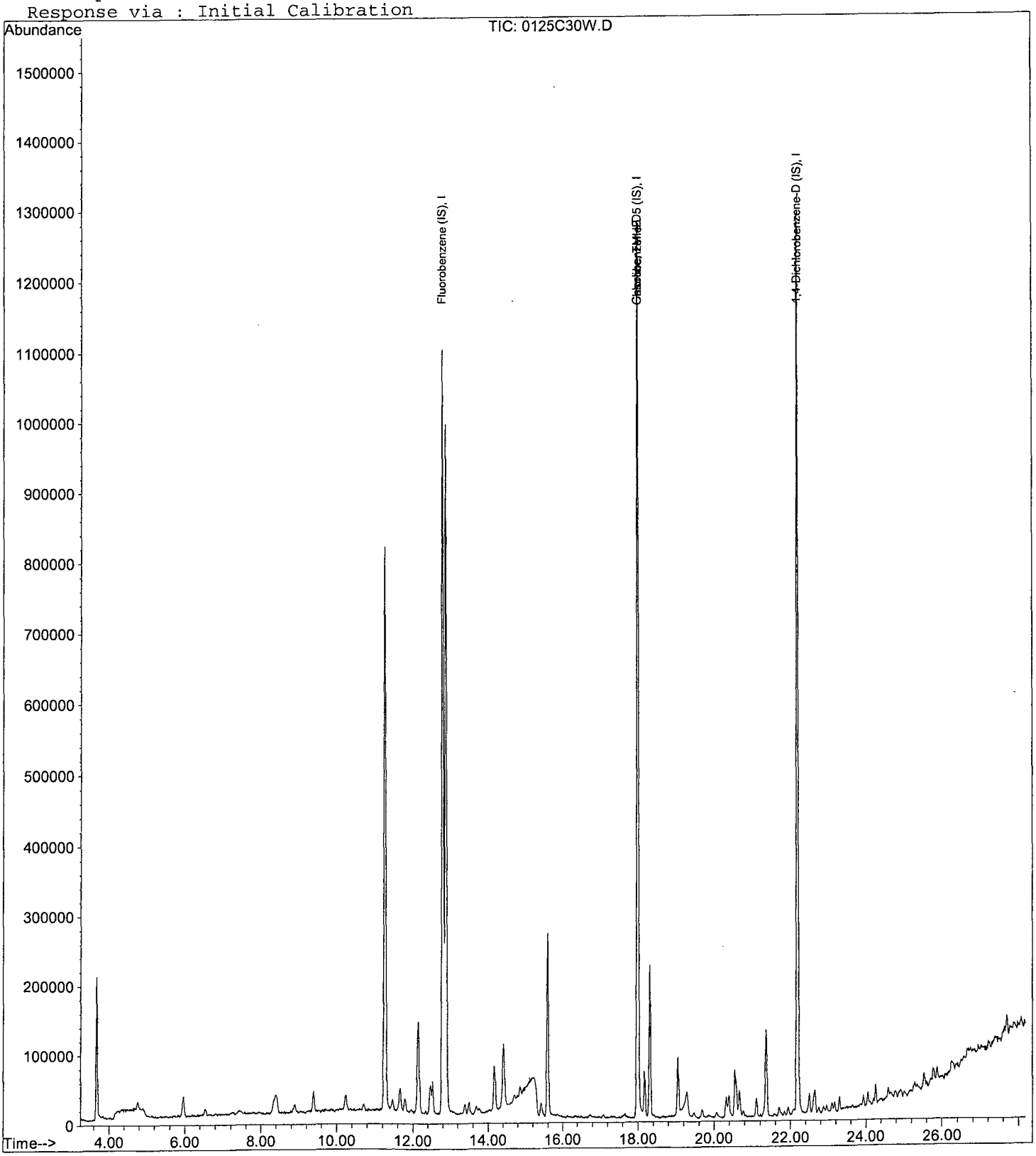
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D
Acq On : 26 Jan 12 20:09
Sample : Vol. Std. 01-26-12@50ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:35 2012 Quant Results File: CGAS.RES

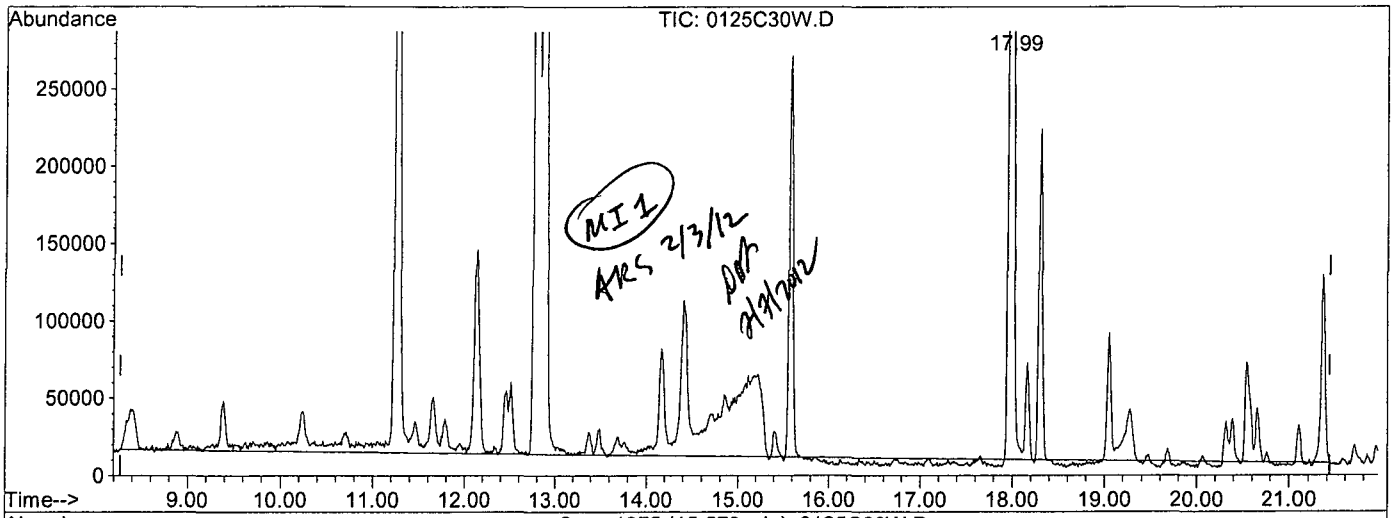
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

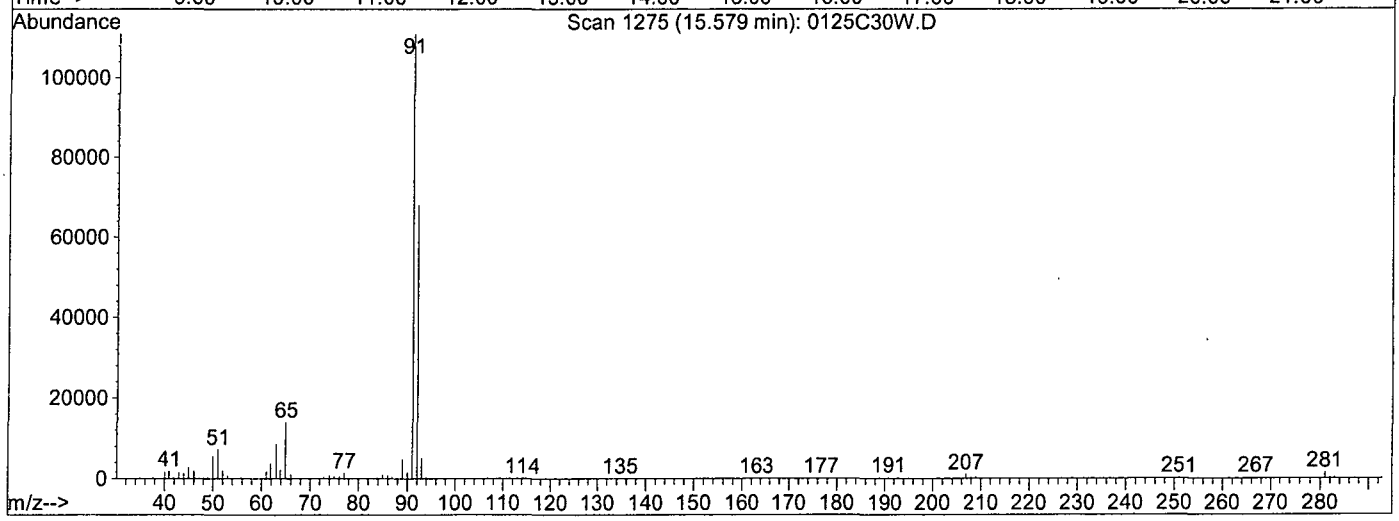


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C30W.D

(2) Gasoline (TMHB)

15.58min -0.0275ppb m

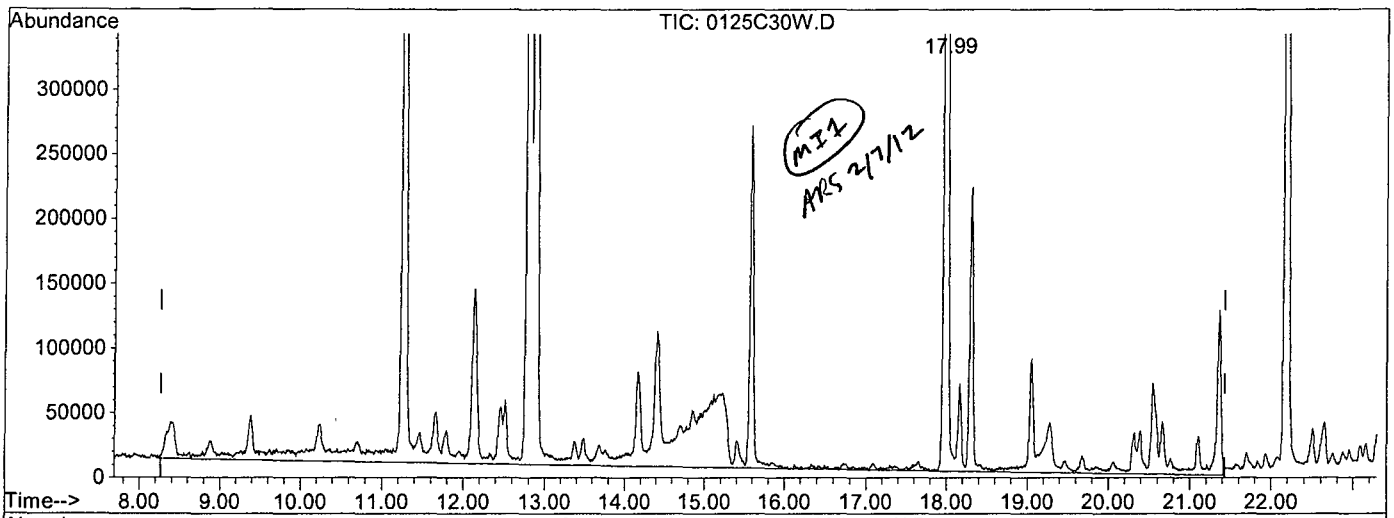
response 17475741

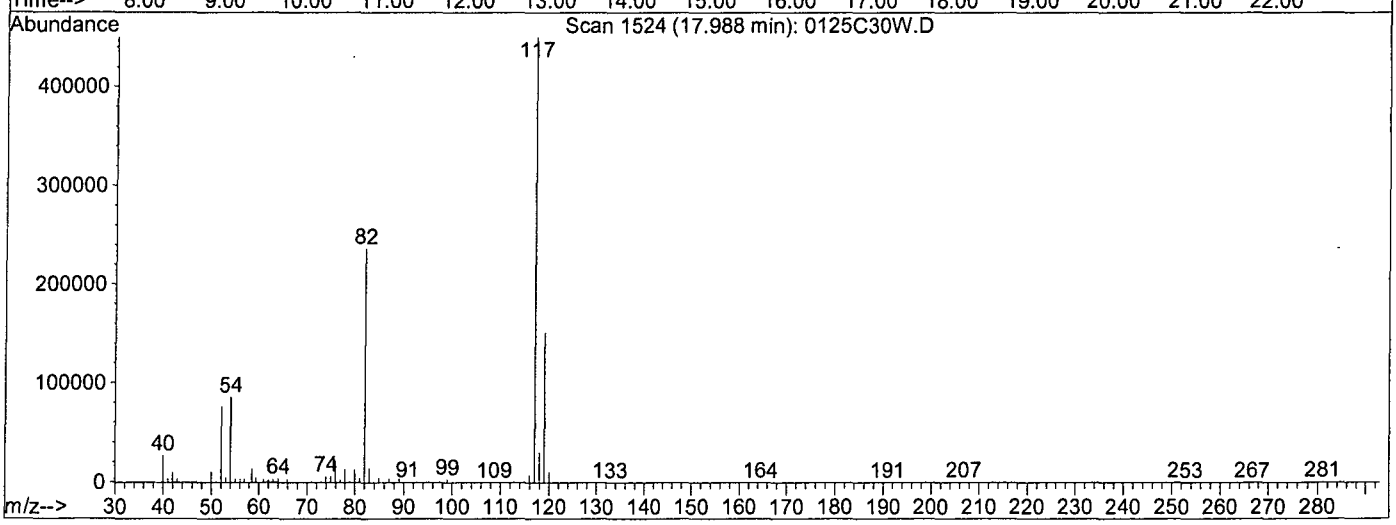
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.72#
0.00	0.00	2.18#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C30W.D Vial: 1
Acq On : 26 Jan 12 20:09 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@50ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:35 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C30W.D

(2) Gasoline (TMHB)

17.99min 59.2710ppb m

response 23136590

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.54#
0.00	0.00	1.65#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1080126	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1280154	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1288106	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	17.98	TIC	26257782m	94.04042	ppb	100

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

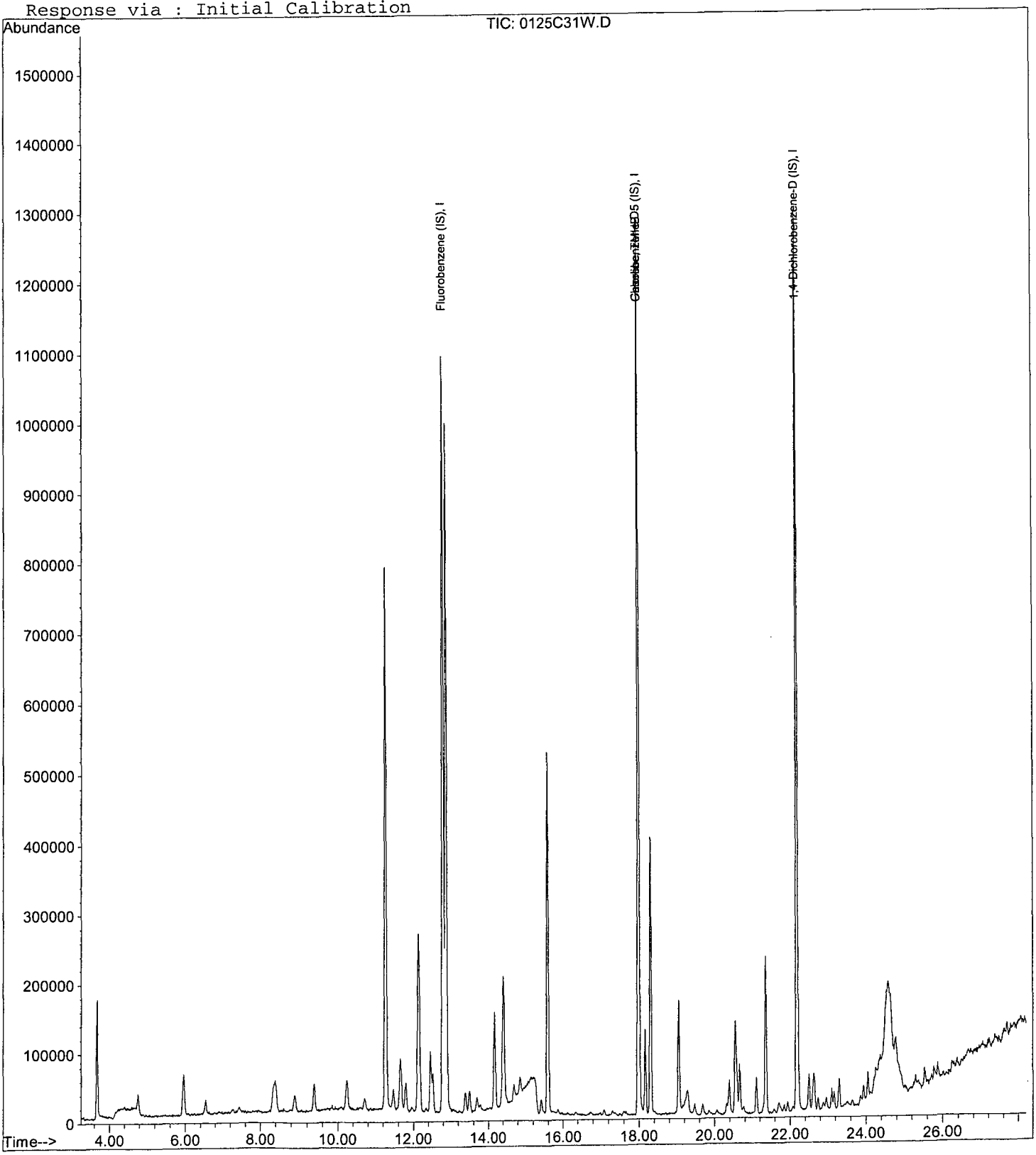
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D
Acq On : 26 Jan 12 20:46
Sample : Vol. Std. 01-26-12@100ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:13 2012 Quant Results File: CGAS.RES

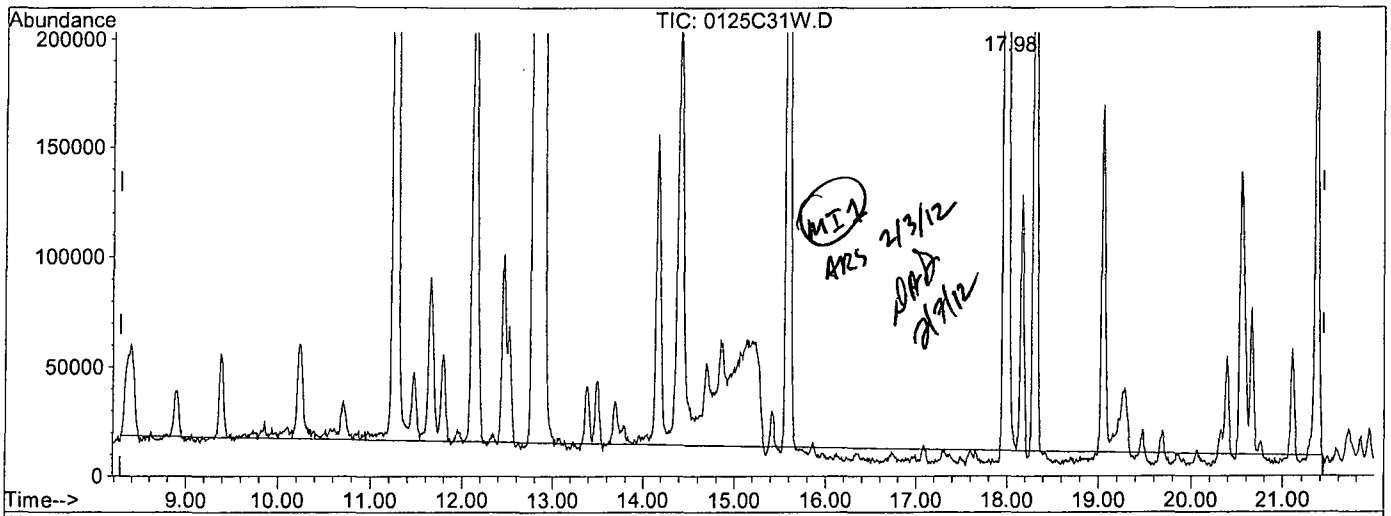
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

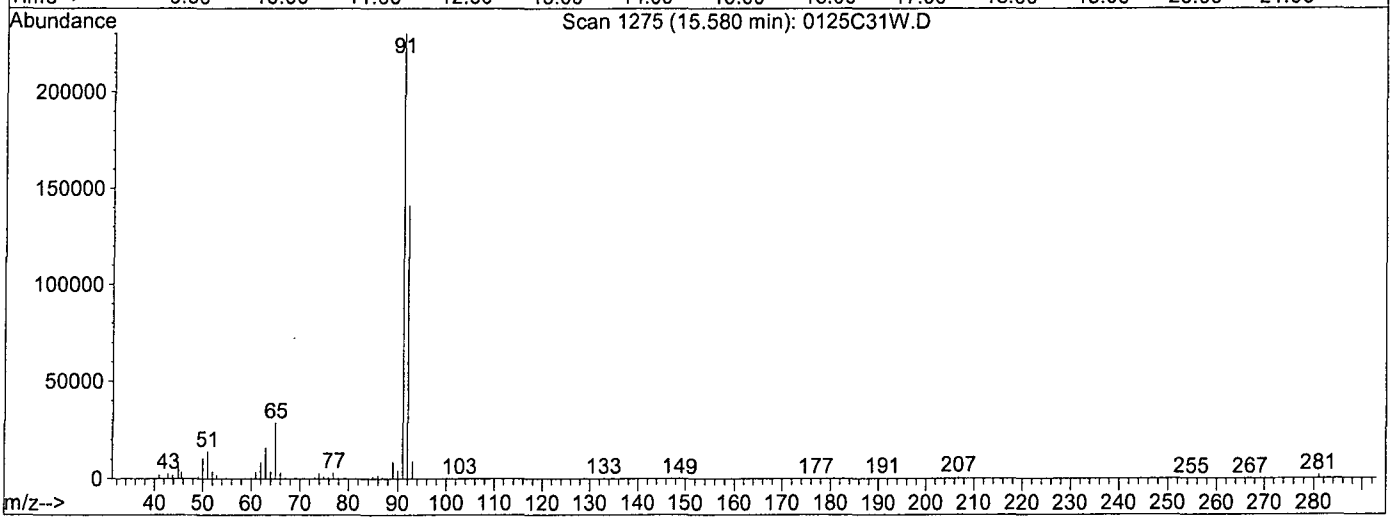


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C31W.D

(2) Gasoline (TMHB)

15.58min 27.4179ppb m

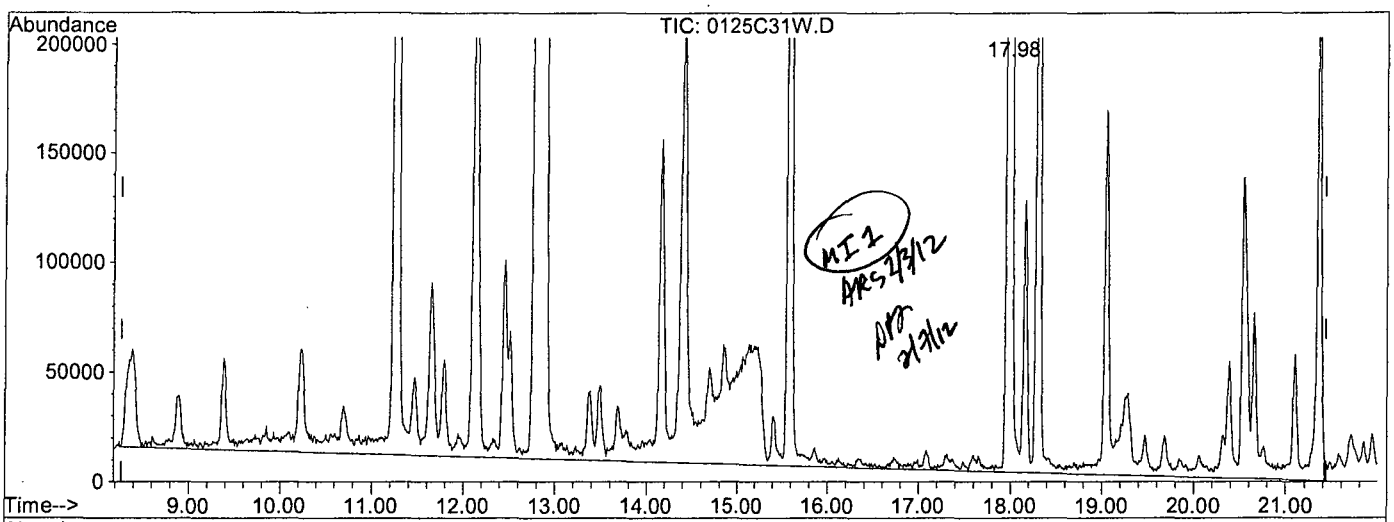
response 19945363

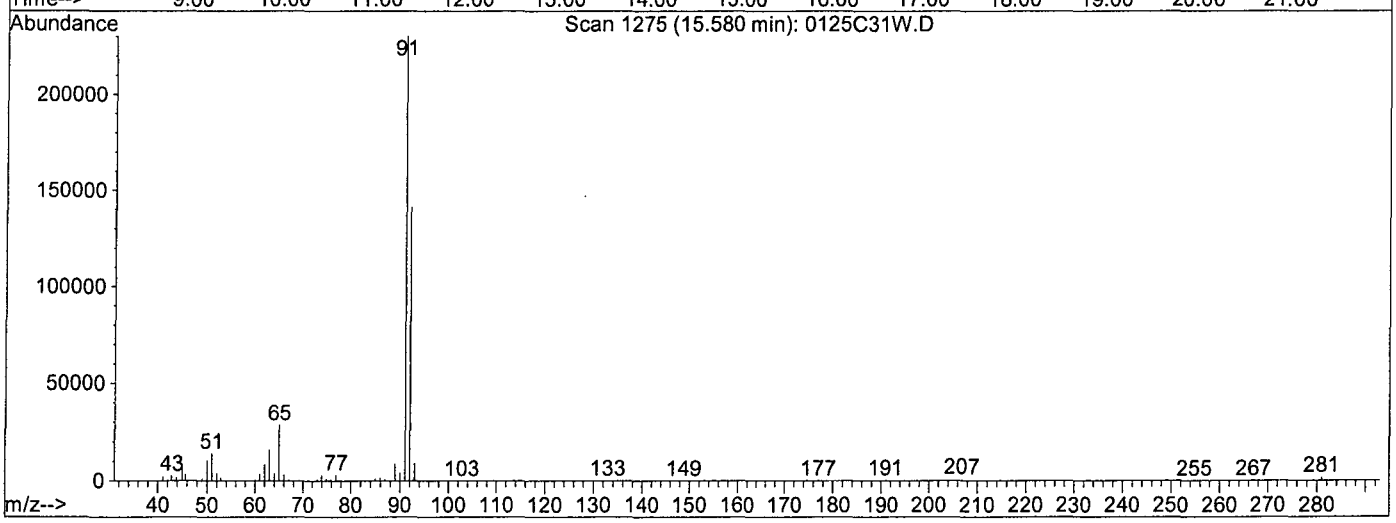
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.64#
0.00	0.00	1.85#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C31W.D Vial: 1
Acq On : 26 Jan 12 20:46 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@100ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:13 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C31W.D

(2) Gasoline (TMHB)

17.98min 94.0404ppb m

response 26257782

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.48#
0.00	0.00	1.40#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1085223	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1323772	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1382634	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	46451061m	304.86153	ppb	100

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

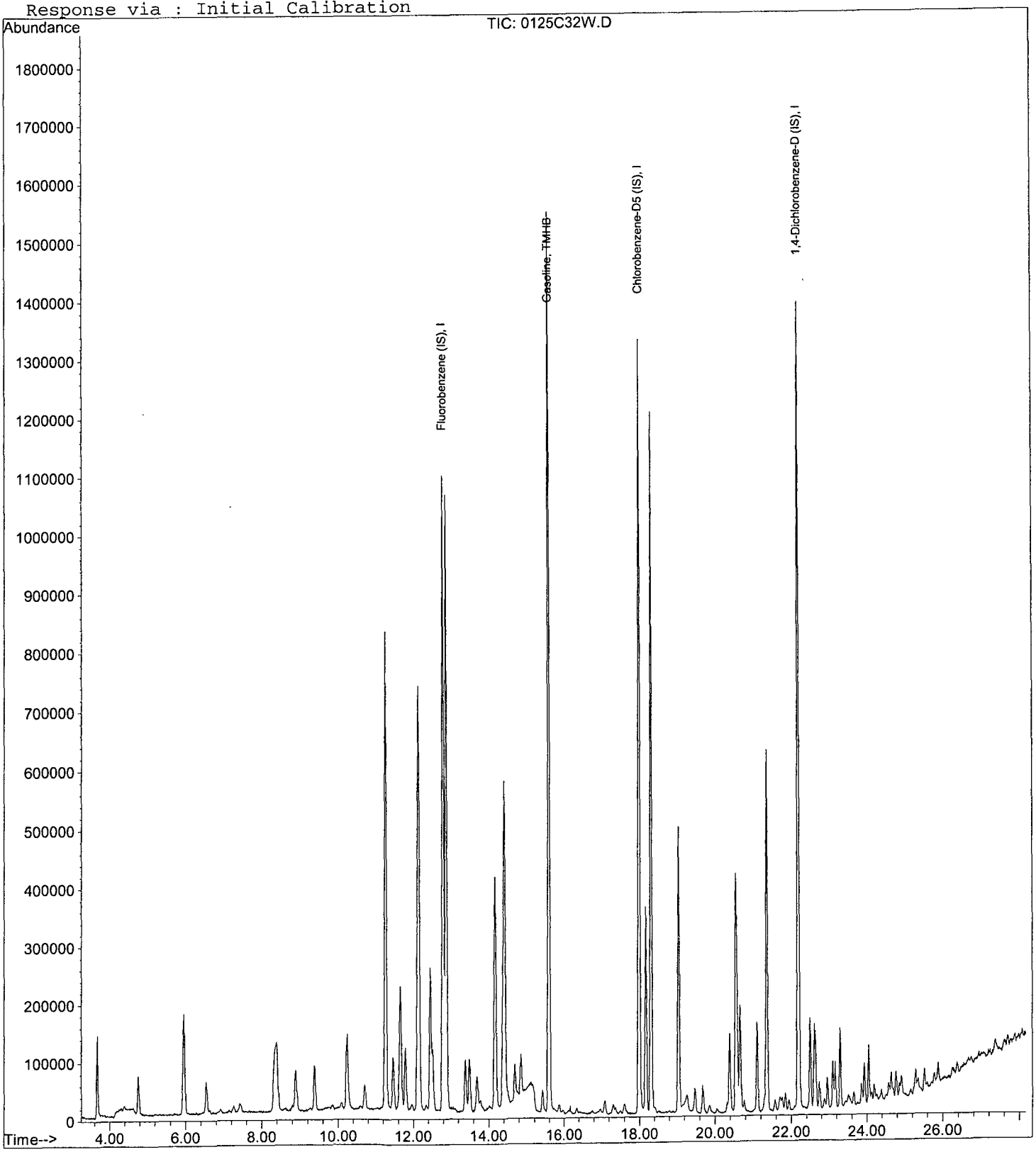
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D
Acq On : 26 Jan 12 21:24
Sample : Vol. Std. 01-26-12@300ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:09 2012 Quant Results File: CGAS.RES

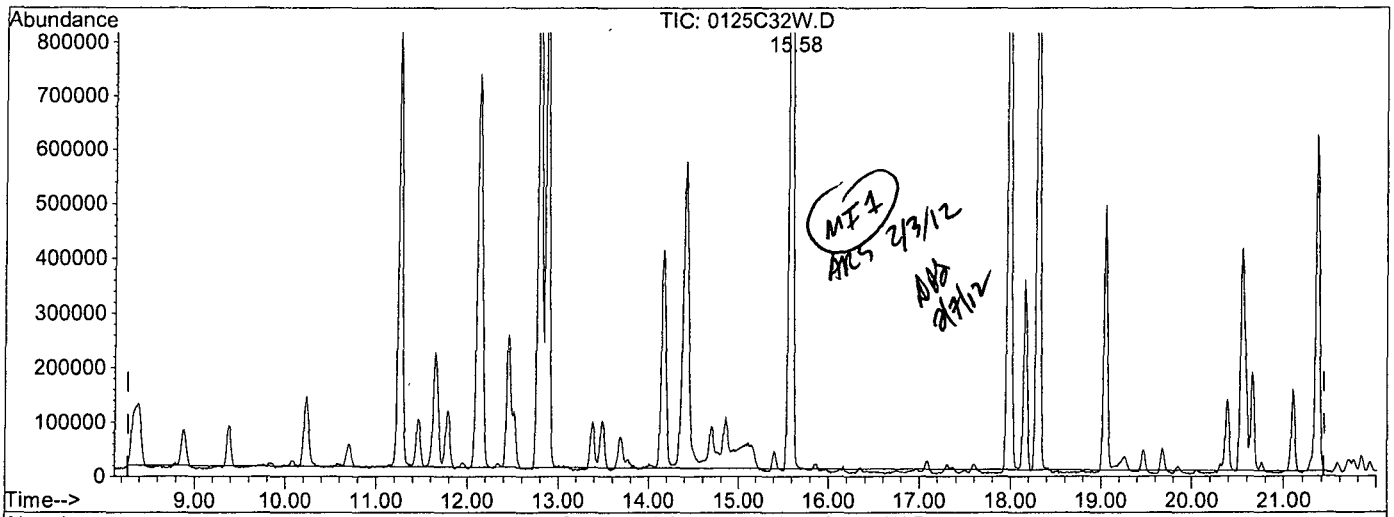
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

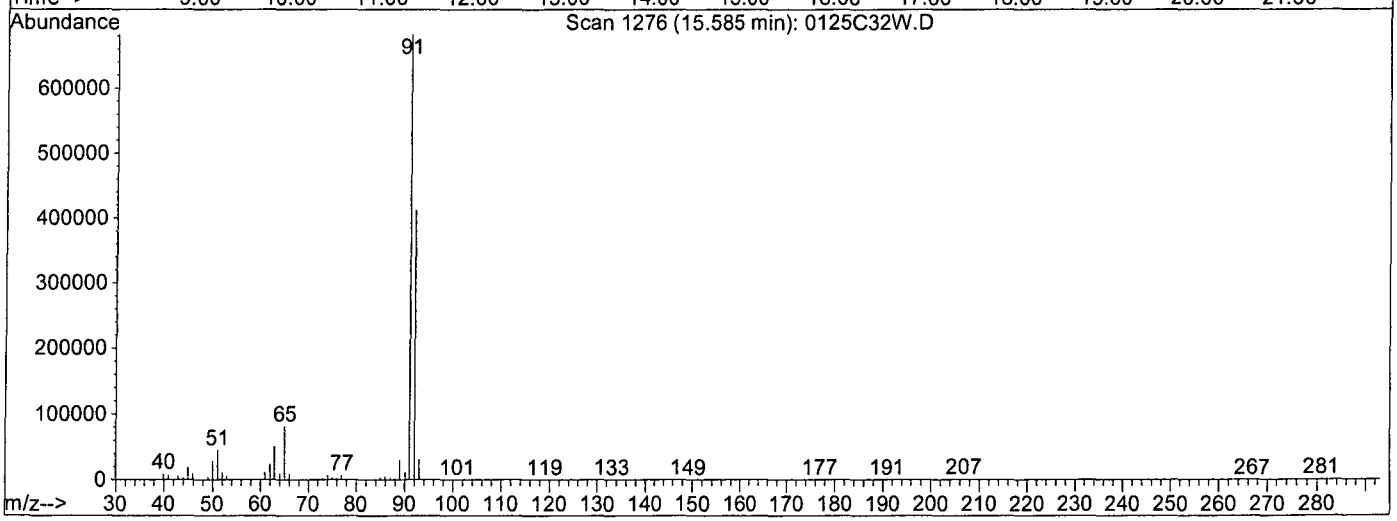


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 245.6055ppb m

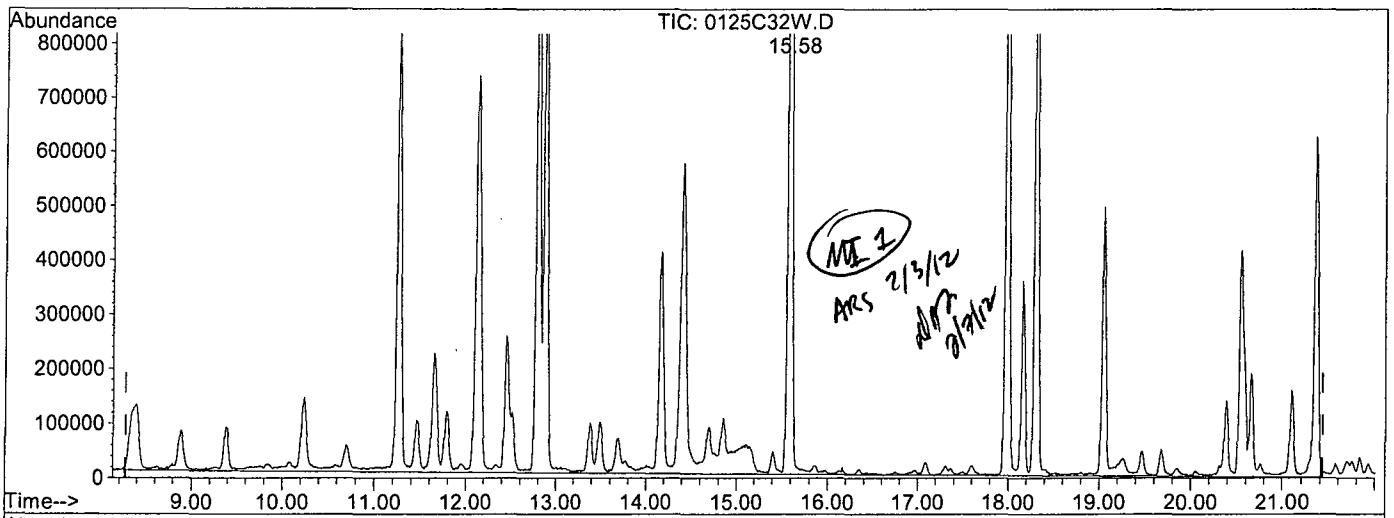
response 40810111

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.33#
0.00	0.00	0.94#
0.00	0.00	0.00

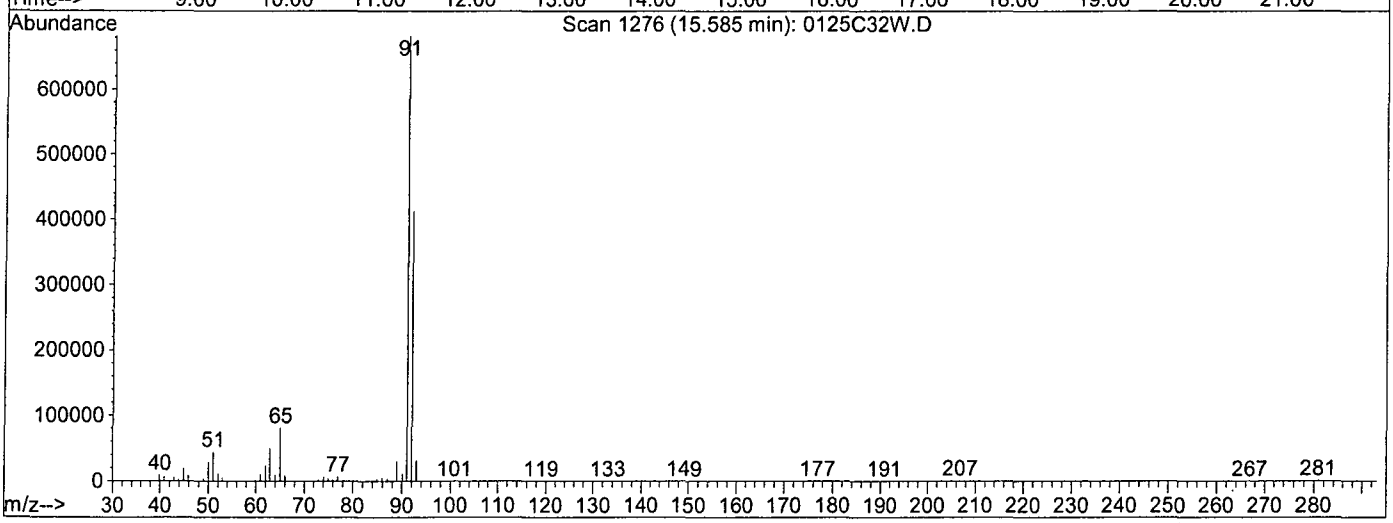
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C32W.D Vial: 1
Acq On : 26 Jan 12 21:24 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@300ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:09 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



NTL 1
ARS 2/3/12



TIC: 0125C32W.D

(2) Gasoline (TMHB)

15.58min 304.8615ppb m

response 46451061

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.29#
0.00	0.00	0.83#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:07 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1115516	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1310876	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.19	TIC	1420552	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	72391801m	556.70838	ppb	100

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

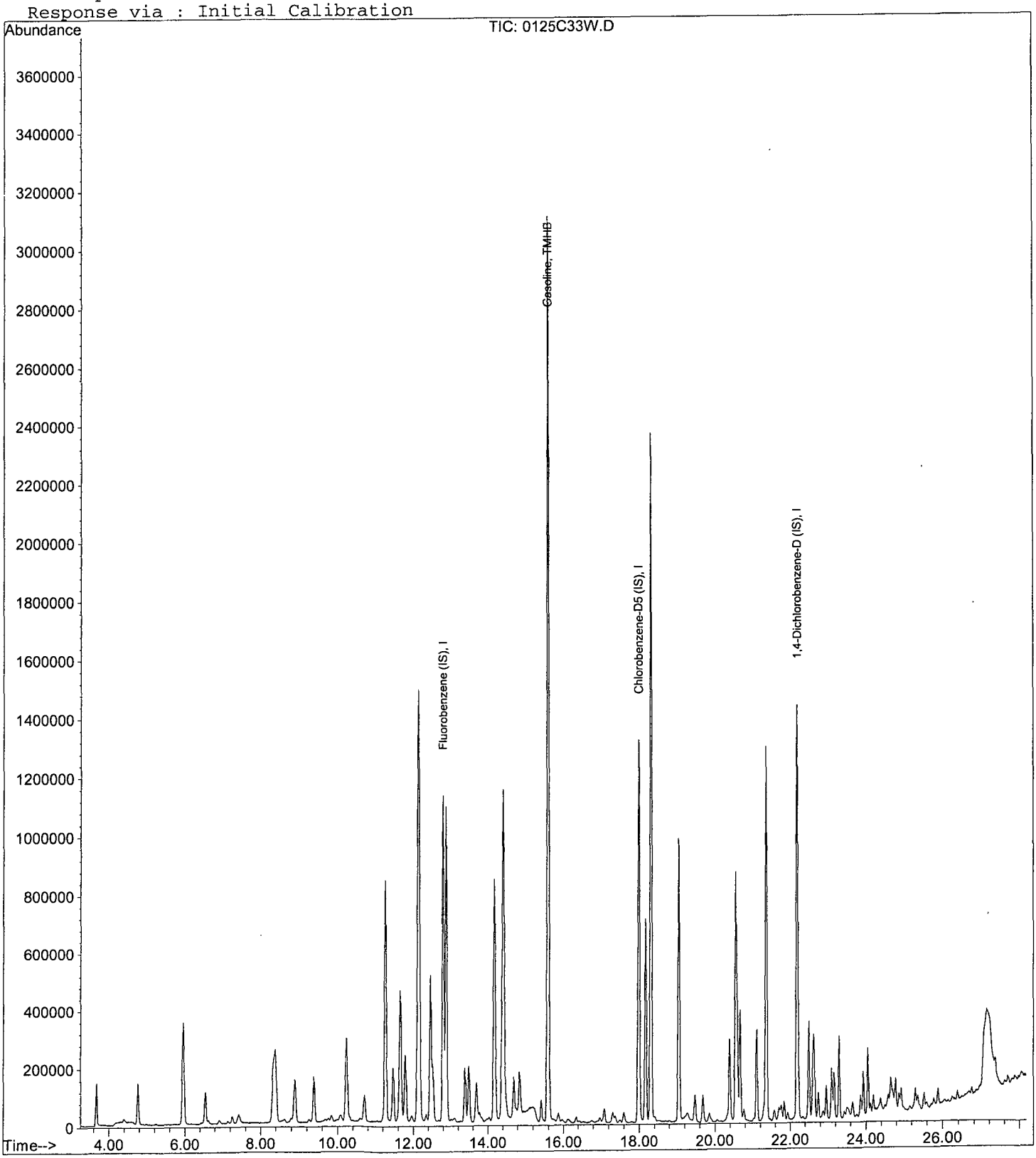
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D
Acq On : 26 Jan 12 22:01
Sample : Vol. Std. 01-26-12@600ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:07 2012 Quant Results File: CGAS.RES

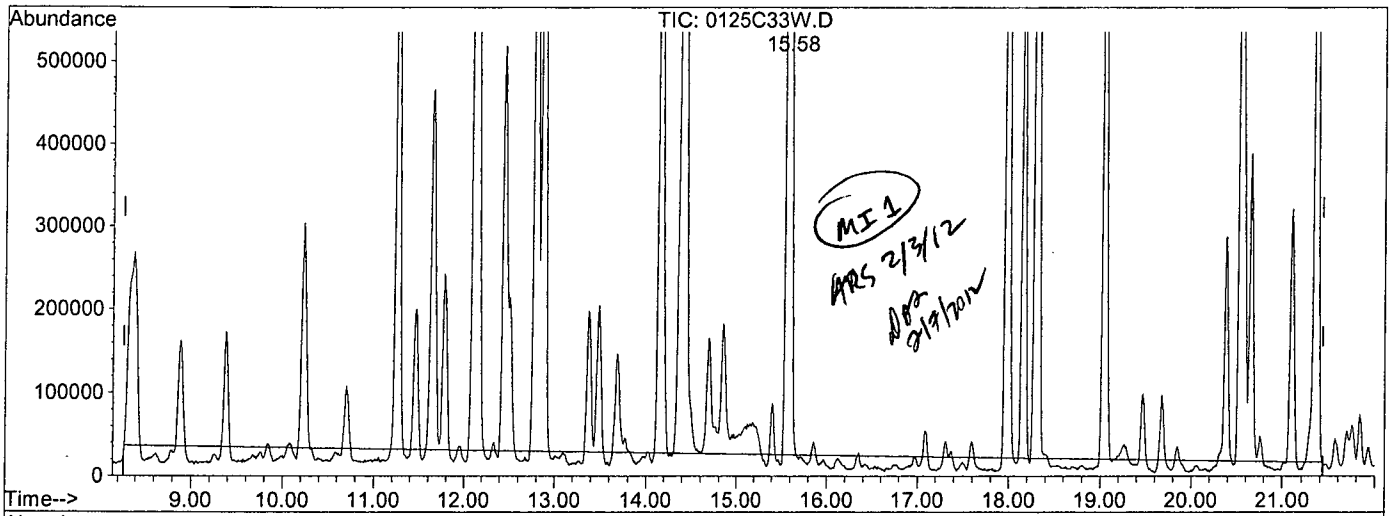
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

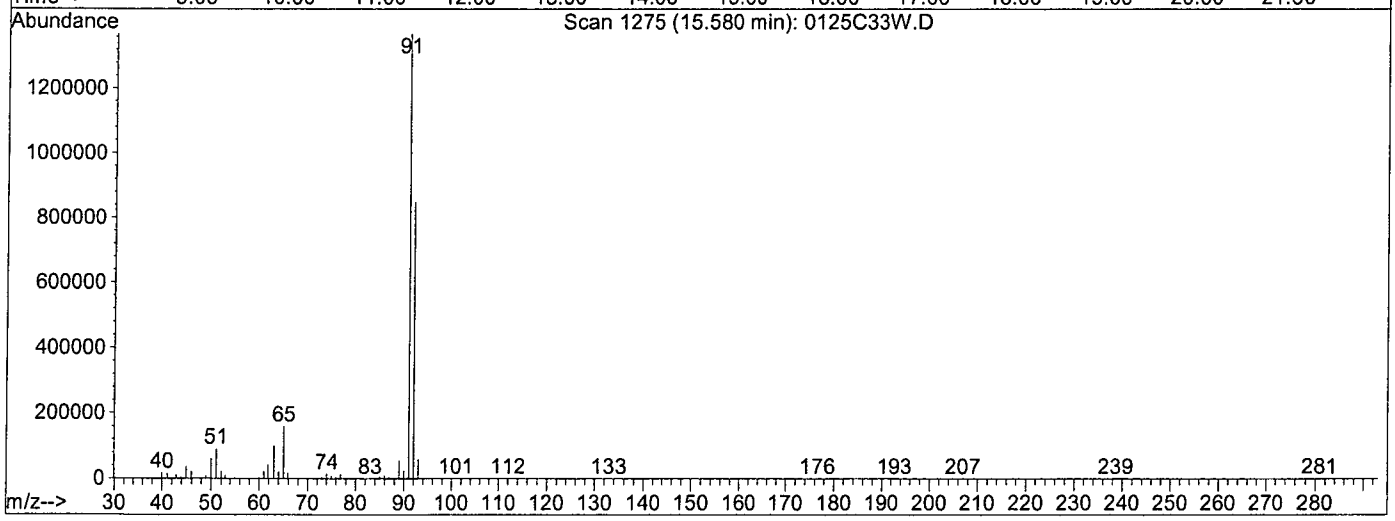


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 556.7084ppb m

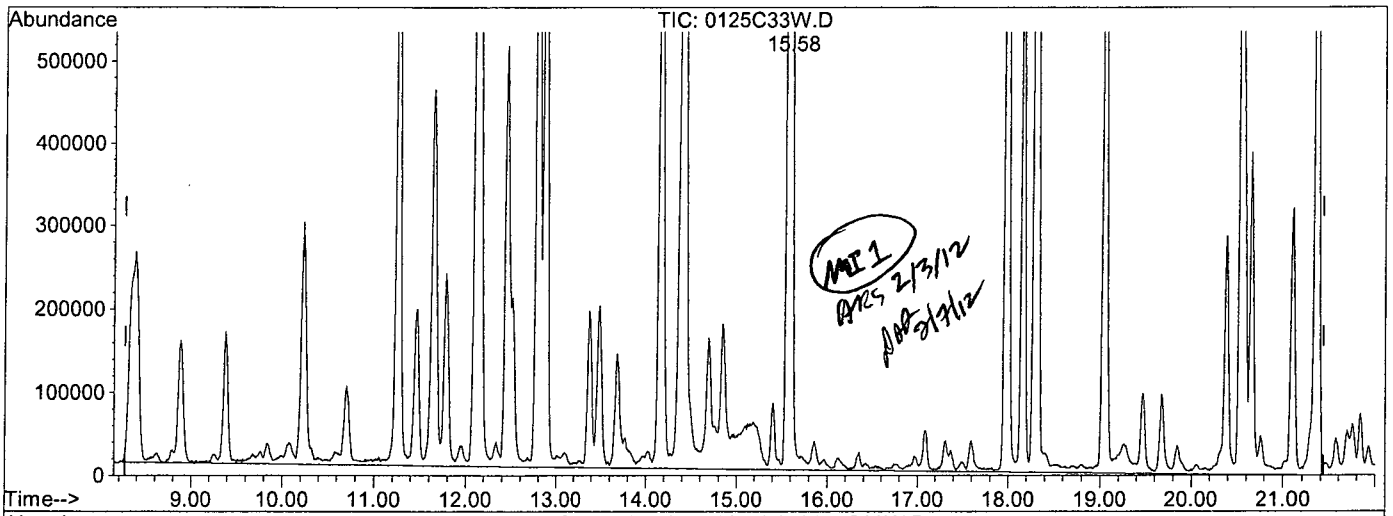
response 72391801

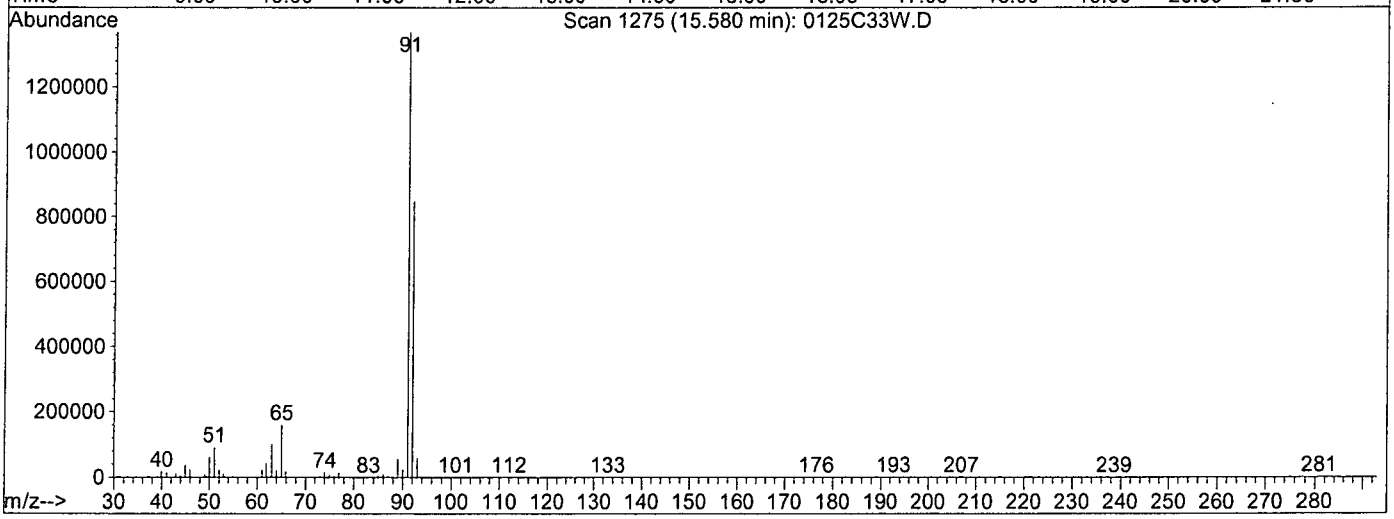
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.18#
0.00	0.00	0.53#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C33W.D Vial: 1
Acq On : 26 Jan 12 22:01 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@600ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:16 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C33W.D

(2) Gasoline (TMHB)

15.58min 621.4121ppb m

response 78723288

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.16#
0.00	0.00	0.49#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1172096	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1436710	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1528793	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	102155823m	810.48263	ppb	100

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

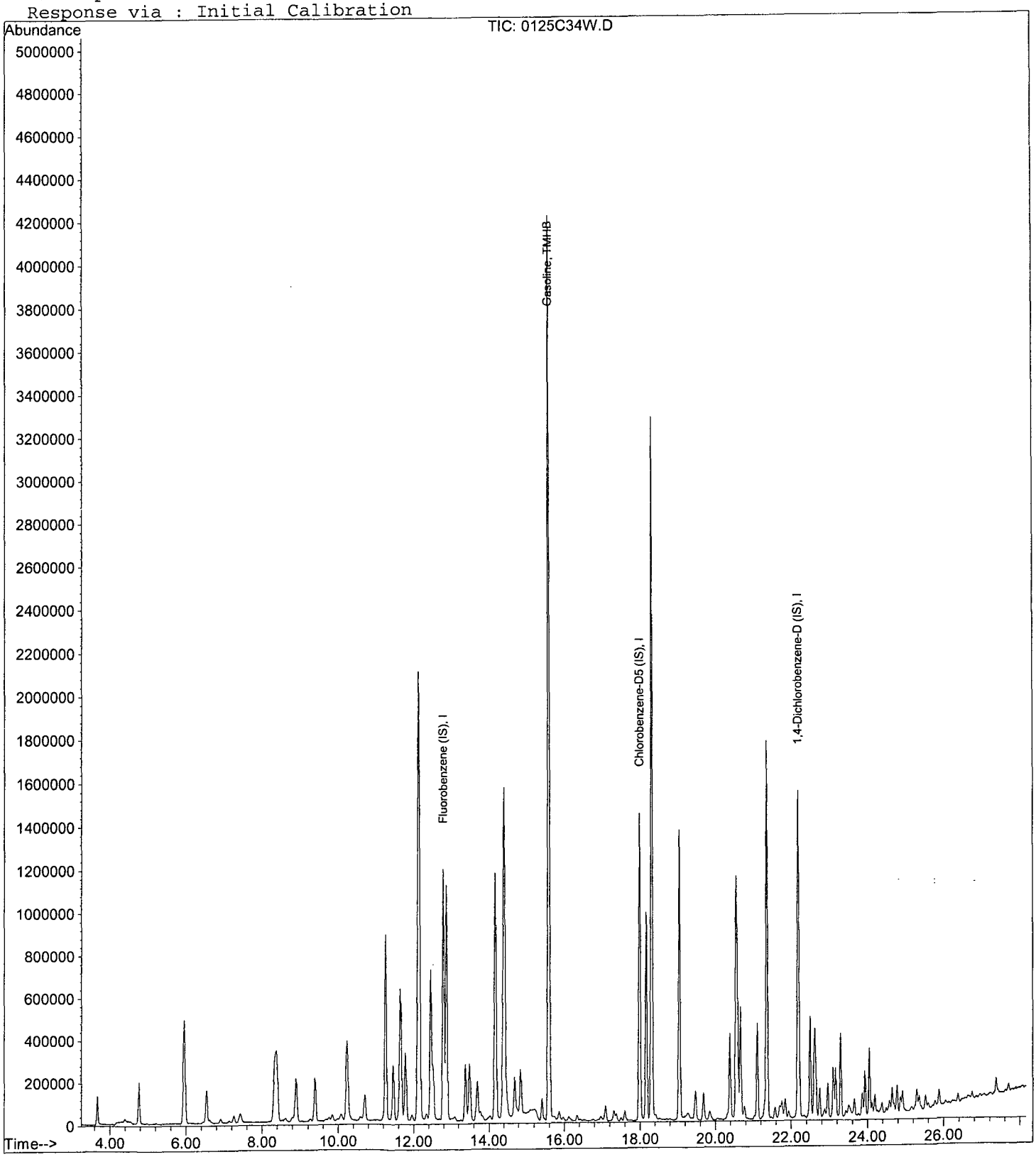
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D
Acq On : 26 Jan 12 22:38
Sample : Vol. Std. 01-26-12@800ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:17 2012 Quant Results File: CGAS.RES

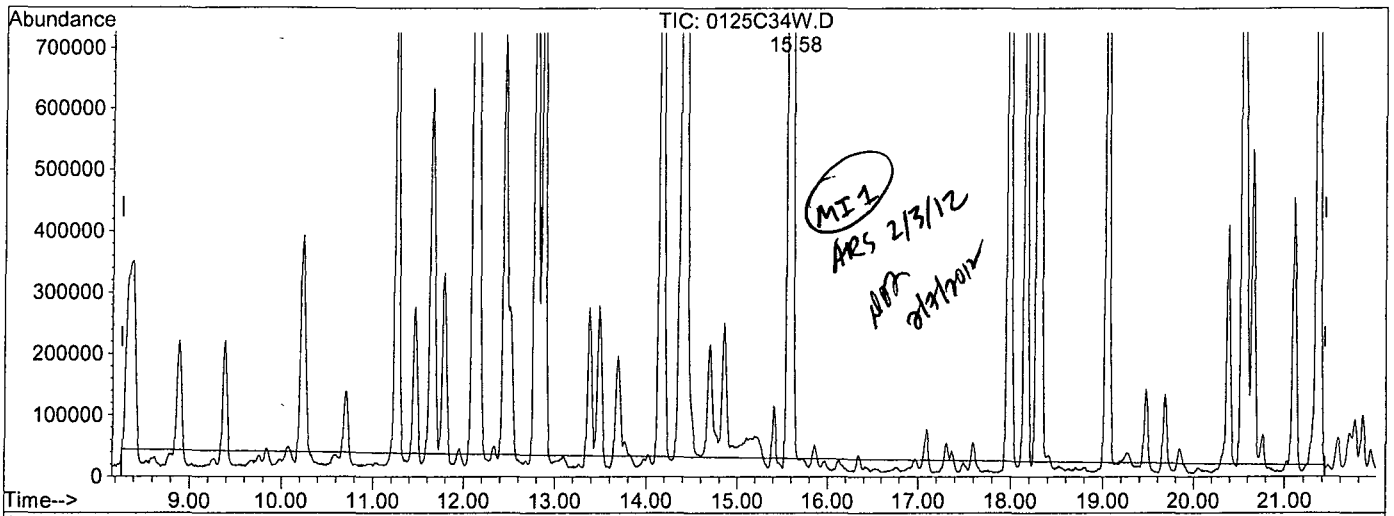
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration

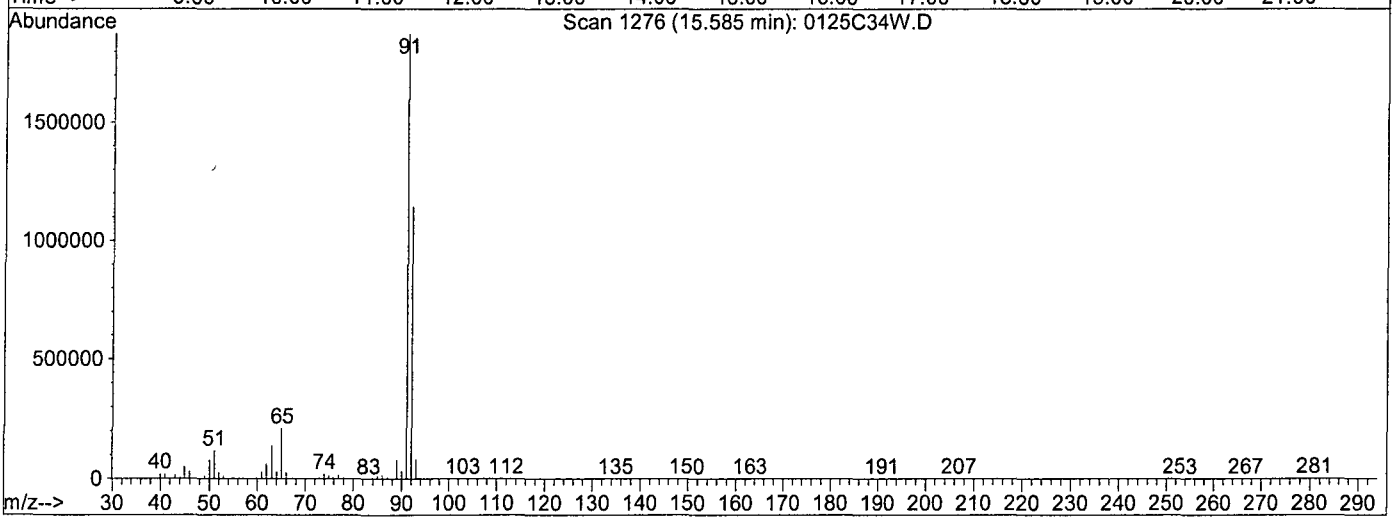


Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 730.0328ppb m

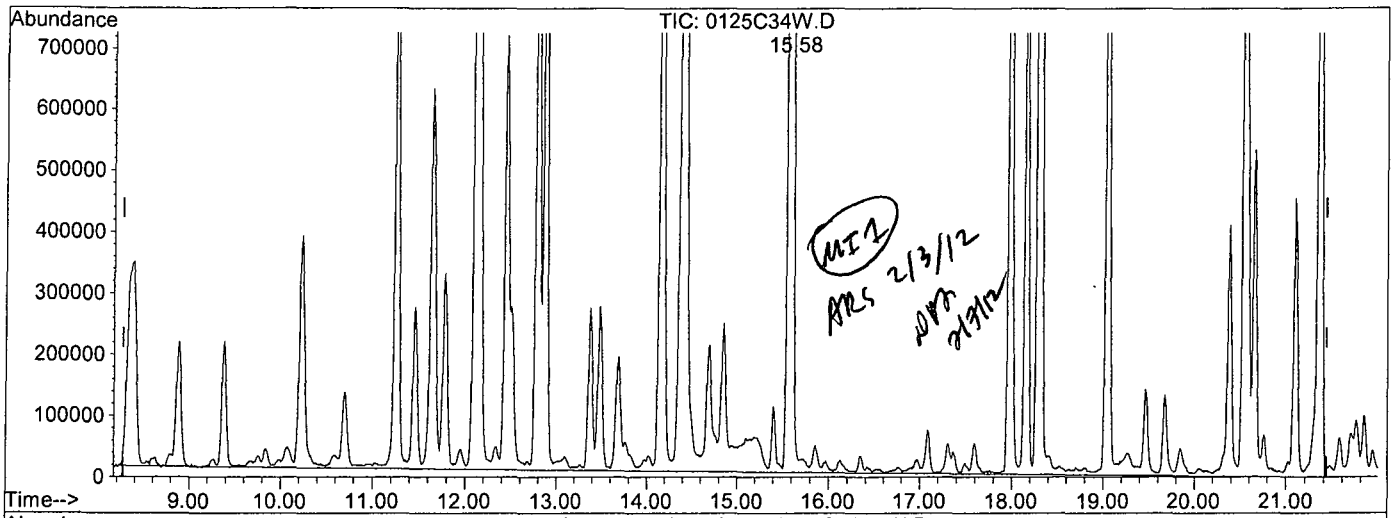
response 93884232

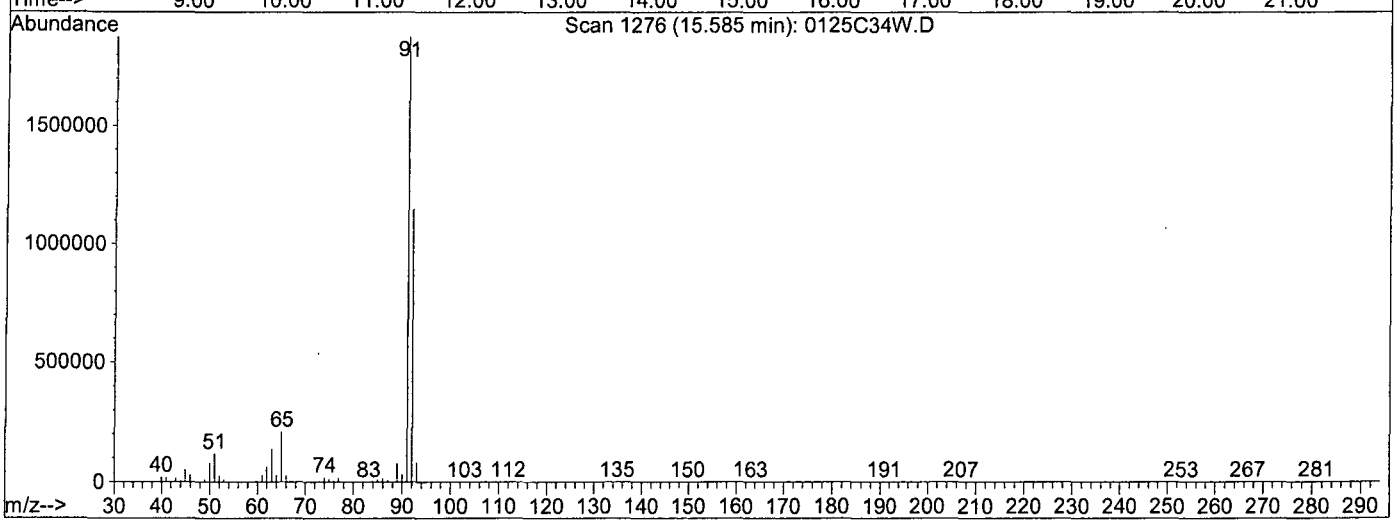
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.14#
0.00	0.00	0.44#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C34W.D Vial: 1
Acq On : 26 Jan 12 22:38 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@800ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:17 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration





TIC: 0125C34W.D

(2) Gasoline (TMHB)

15.58min 810.4826ppb m

response 102155823

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.13#
0.00	0.00	0.41#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1232092	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1442206	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1630956	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	129481006m	1014.92580	ppb	100

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

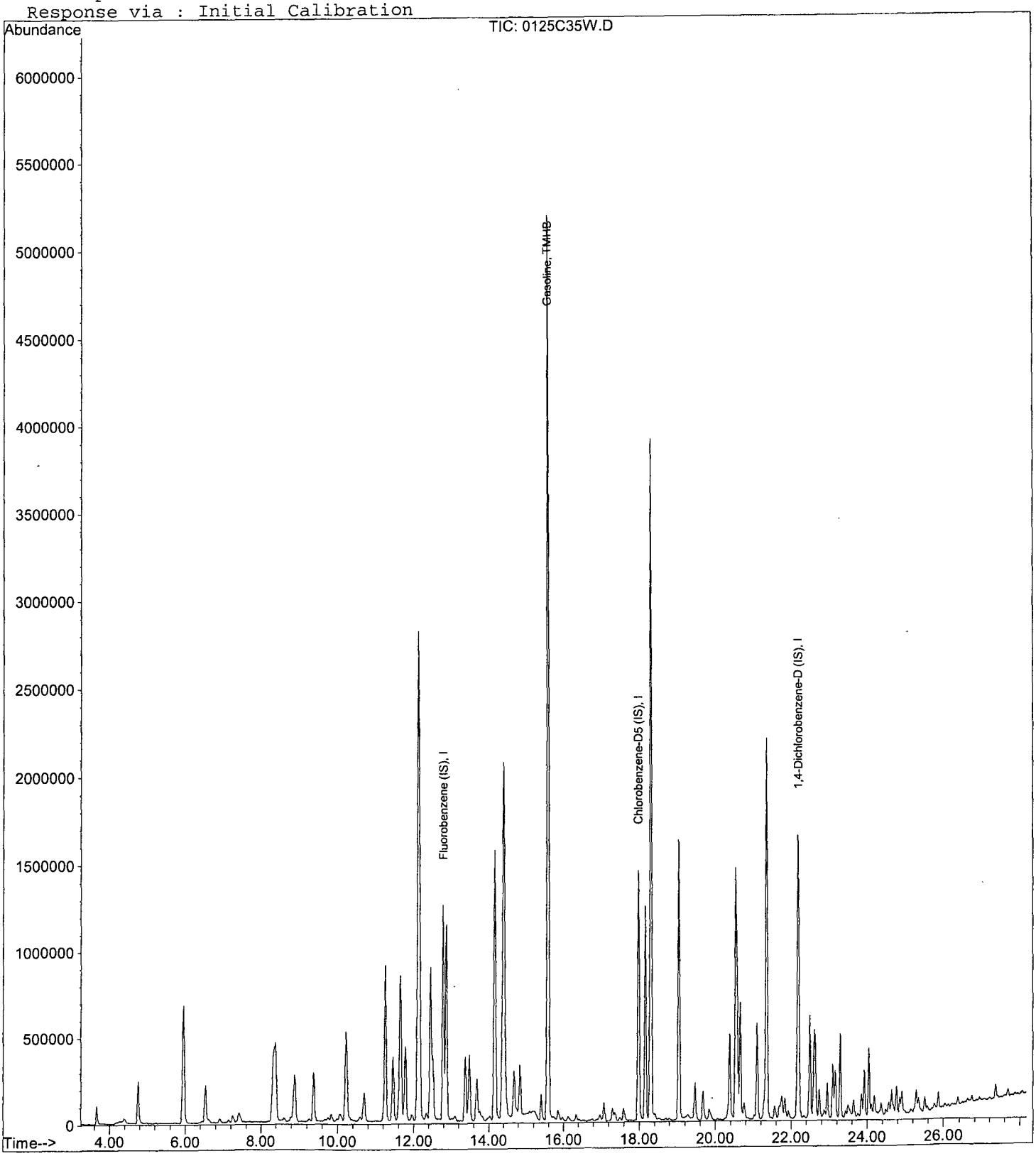
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D
Acq On : 26 Jan 12 23:15
Sample : Vol. Std. 01-26-12@1000ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:18 2012 Quant Results File: CGAS.RES

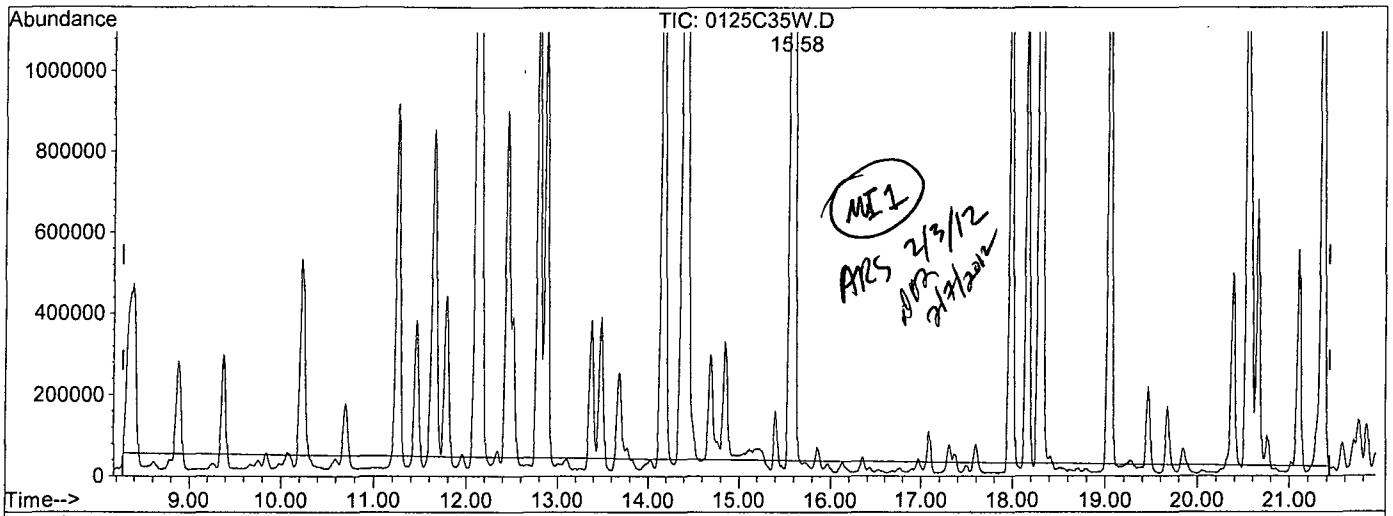
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration



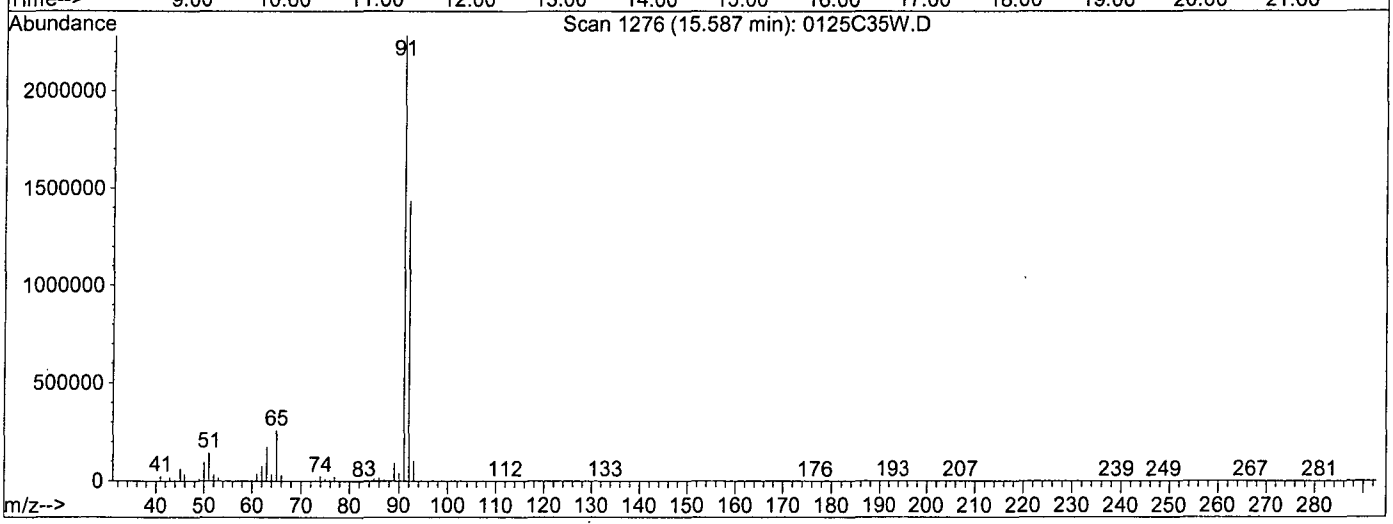
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:07 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



MI 1
ARS 2/3/12
JDS 2/3/2012



TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 923.0372ppb m

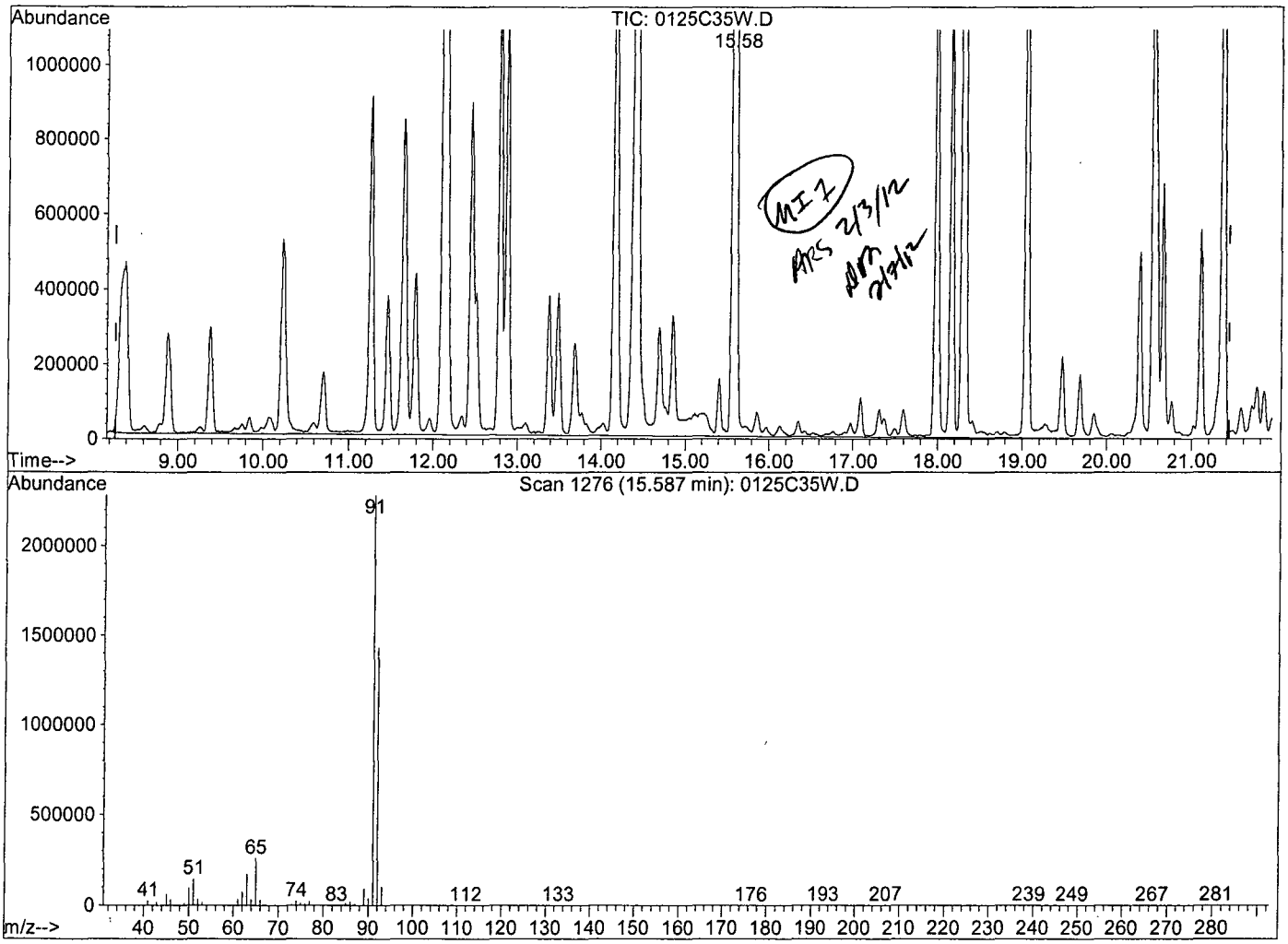
response 119549717

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.12#
0.00	0.00	0.35#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C35W.D Vial: 1
Acq On : 26 Jan 12 23:15 Operator: RS, ARS
Sample : Vol. Std. 01-26-12@1000ug/L Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 3 12:18 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Single Level Calibration



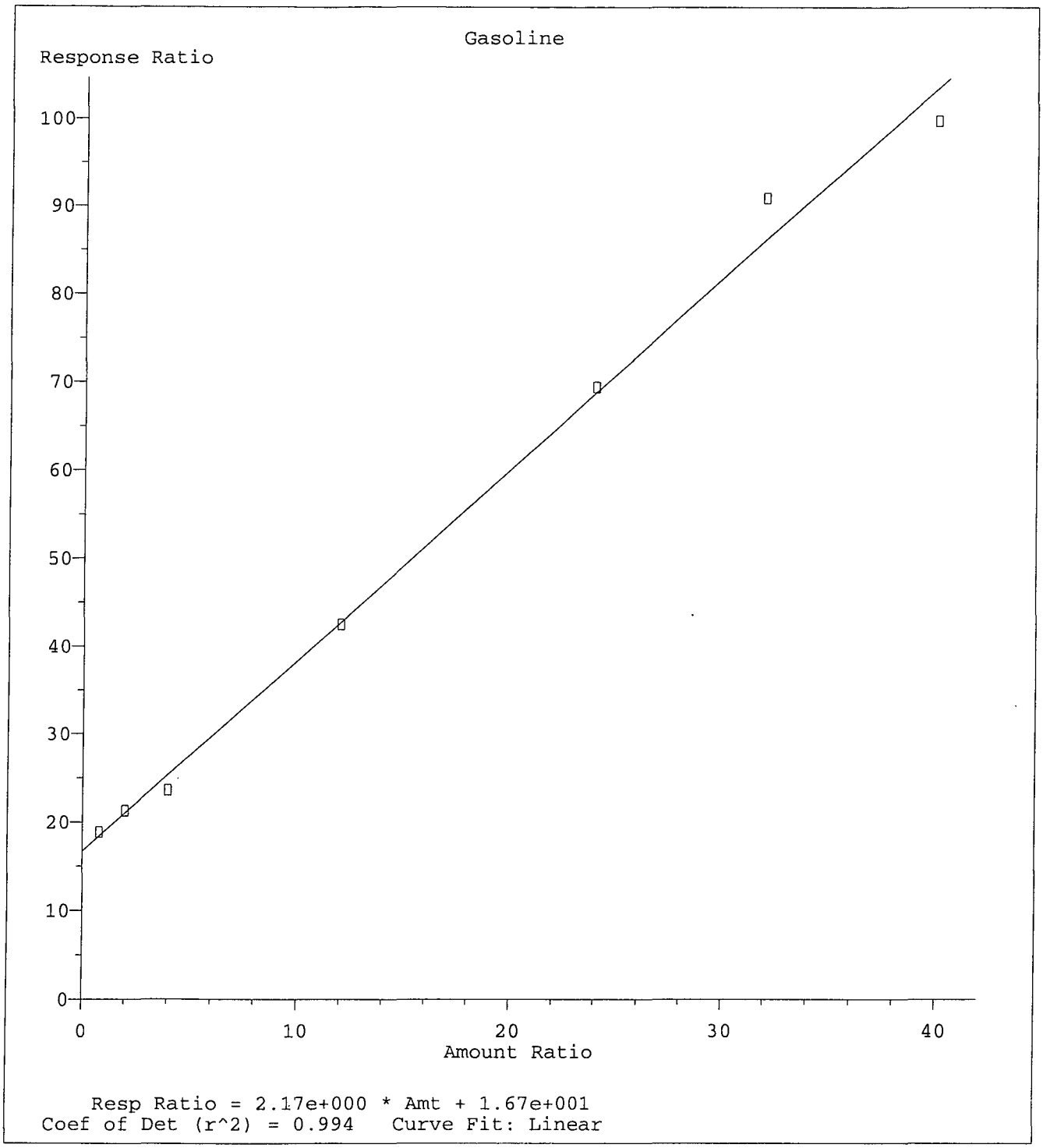
TIC: 0125C35W.D

(2) Gasoline (TMHB)

15.58min 1014.9258ppb m

response 129481006

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.11#
0.00	0.00	0.33#
0.00	0.00	0.00



Method Name: M:\CHICO\DATA\C120125\CGAS.M
Calibration Table Last Updated: Tue Feb 07 09:36:43 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 01/27/12
Instrument: Chico
Initial Cal. Date: 01/25/12
Data File: 0125C38W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.556	52	TMHBL	0.36
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			52.0		

ARS 5/29/12

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.79	TIC	1138336	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	17.98	TIC	1375303	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.18	TIC	1433410	25.00000	ppb	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	15.58	TIC	48578324m	298.92978	ppb	100

(#) = qualifier out of range (m) = manual integration
0125C38W.D CGAS.M Tue Feb 07 09:37:43 2012 Page 1

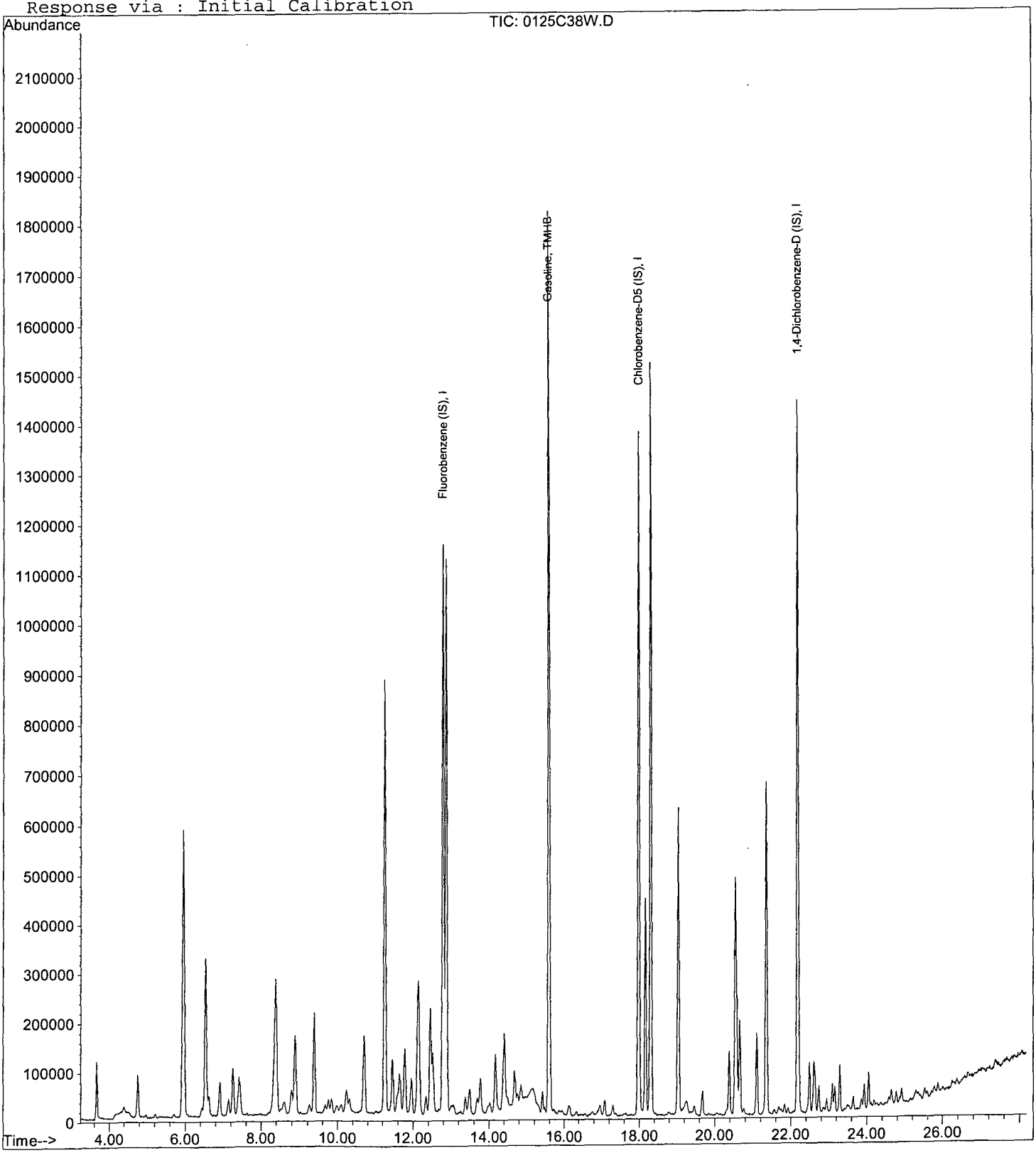
Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D
Acq On : 27 Jan 12 1:06
Sample : Second Source 01-26-12
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:37 2012 Quant Results File: CGAS.RES

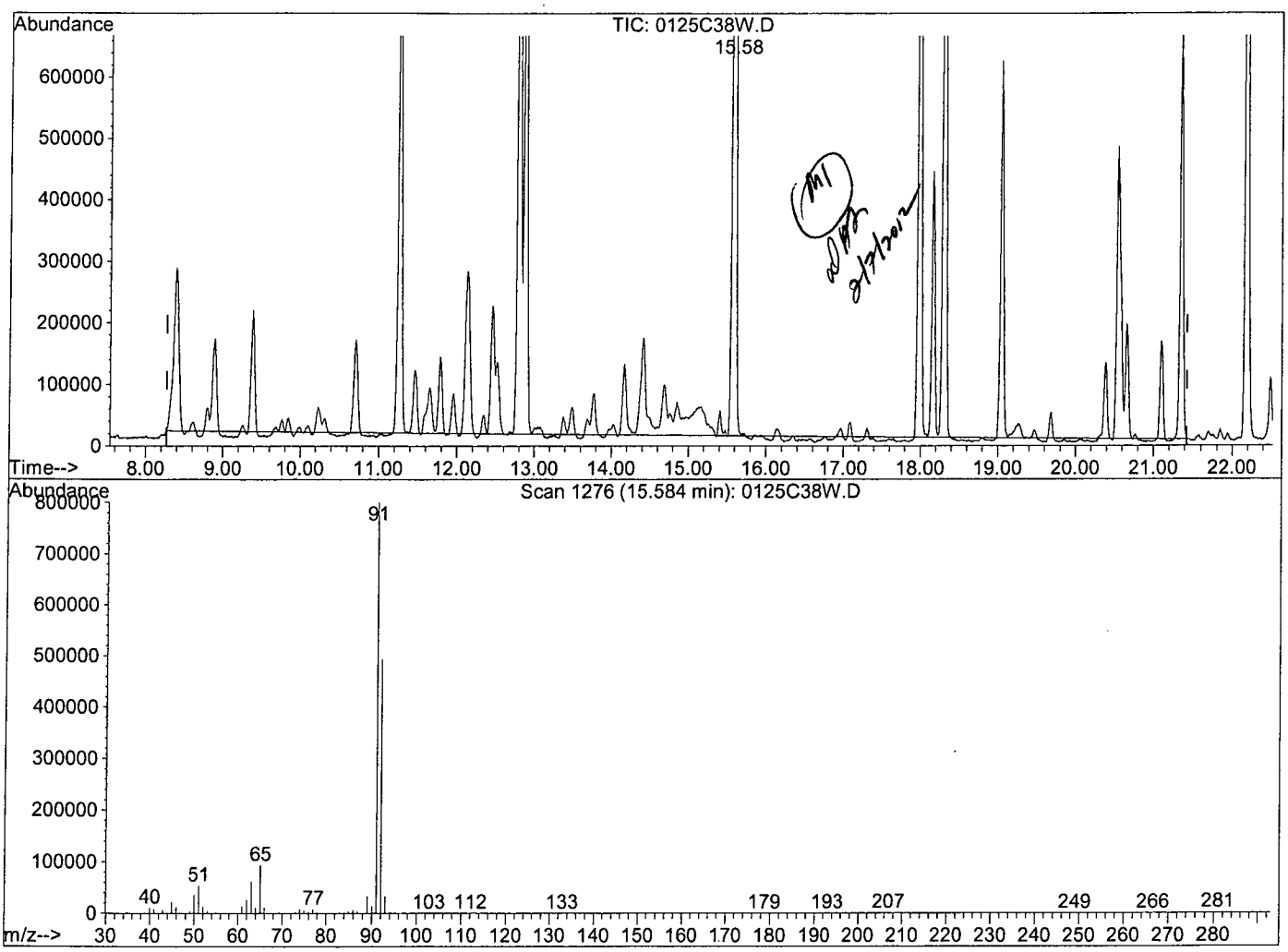
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration



TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 202.8575ppb m

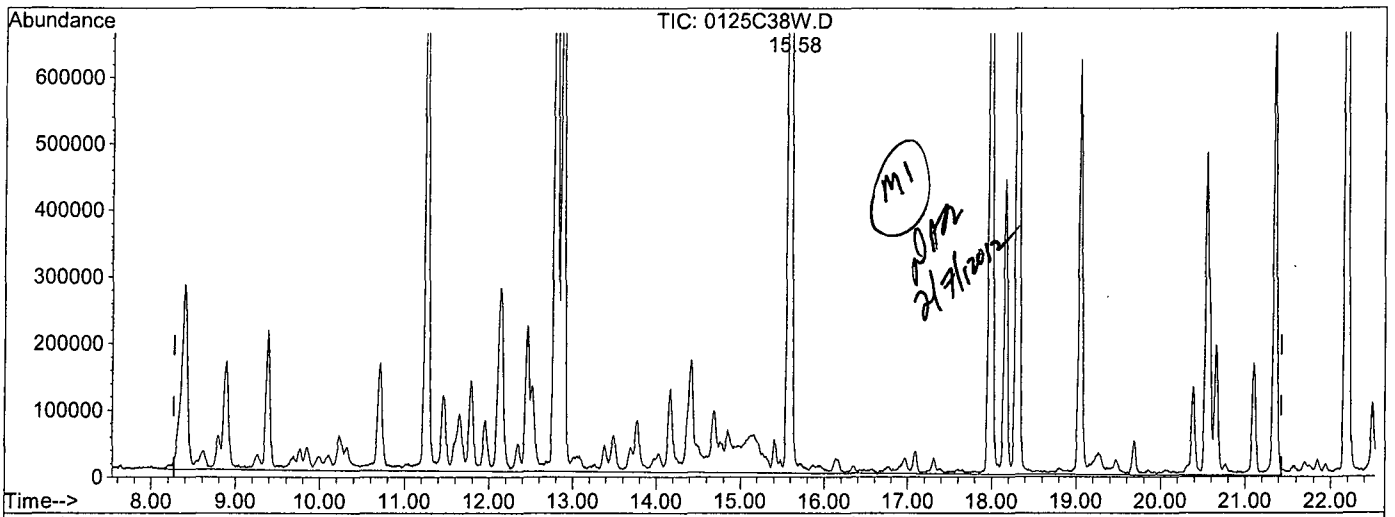
response 39074056

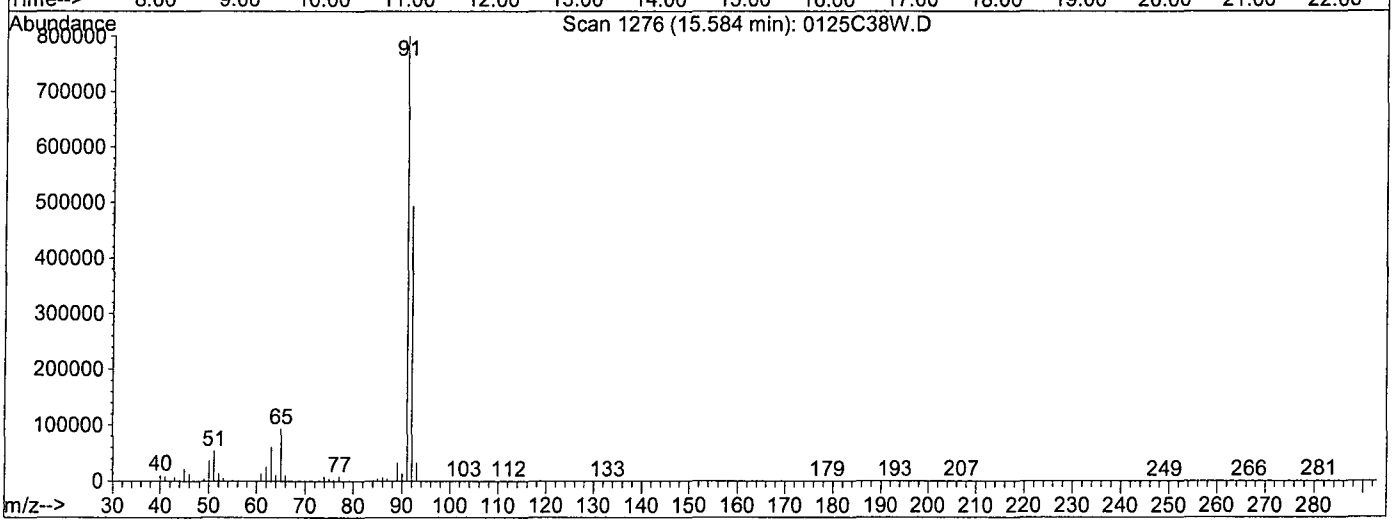
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.34#
0.00	0.00	1.04#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120125\0125C38W.D Vial: 1
Acq On : 27 Jan 12 1:06 Operator: RS, ARS
Sample : Second Source 01-26-12 Inst : Chico
Misc : Water 10mLw/ IS:12-06-11 Multiplr: 1.00
Quant Time: Feb 7 9:37 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0125C38W.D

(2) Gasoline (TMHB)

15.58min 298.9298ppb m

response 48578324

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.28#
0.00	0.00	0.84#
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Initial Cal. Date: 04/20/12
Data File: 0430C02W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TMHB	Gasoline	7.410	3.977	46	TMHBL	19
3	I	Chlorobenzene-D5 (IS)	ISTD			I	
4	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
		Average			46.0		

AMS 5/29/12

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C02W.D Vial: 1
Acq On : 30 Apr 12 10:35 Operator: AS
Sample : CCV gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 30 14:19 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	TIC	1214608	25.00000	ppb	0.03
3) Chlorobenzene-D5 (IS)	18.01	TIC	1322068	25.00000	ppb	0.03
4) 1,4-Dichlorobenzene-D (IS)	22.20	TIC	1331679	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.61	TIC	57968319m	357.05105	ppb	100

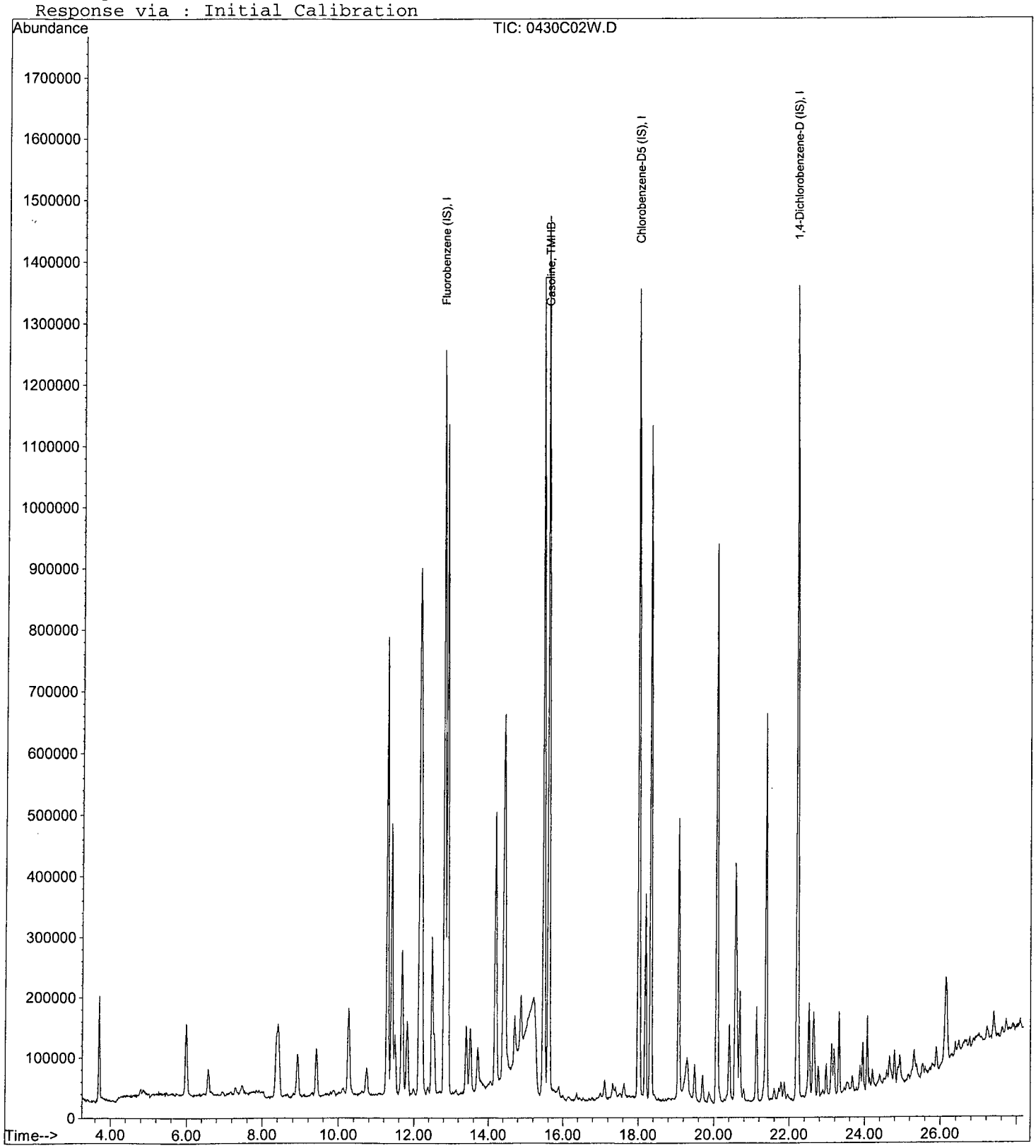
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C02W.D Vial: 1
Acq On : 30 Apr 12 10:35 Operator: AS
Sample : CCV gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 30 14:19 2012 Quant Results File: CGAS.RES

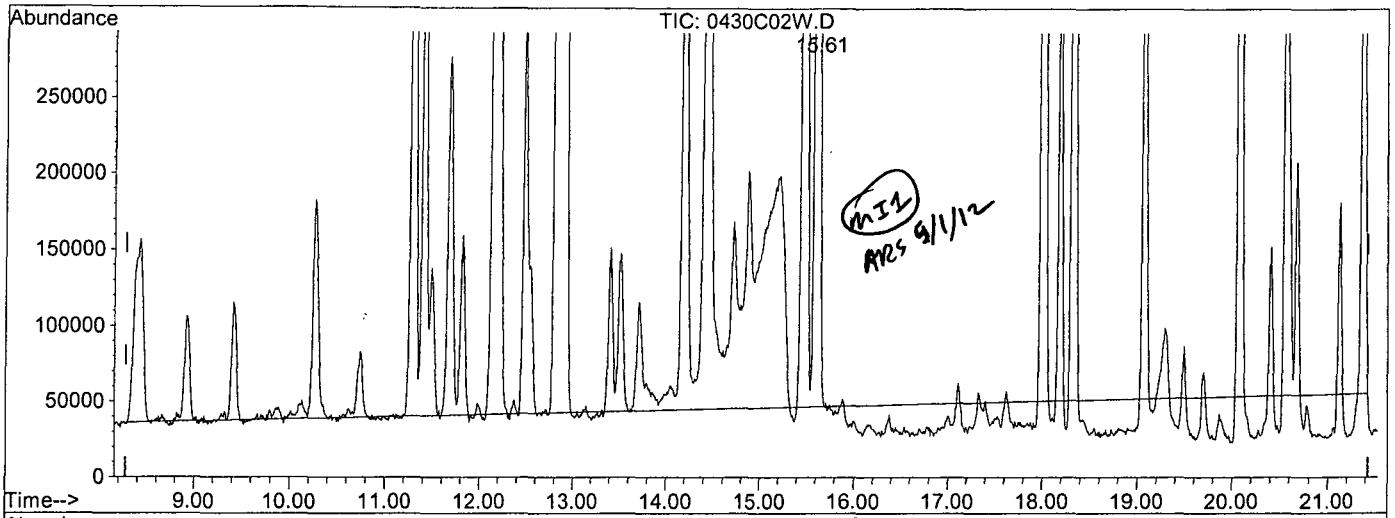
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

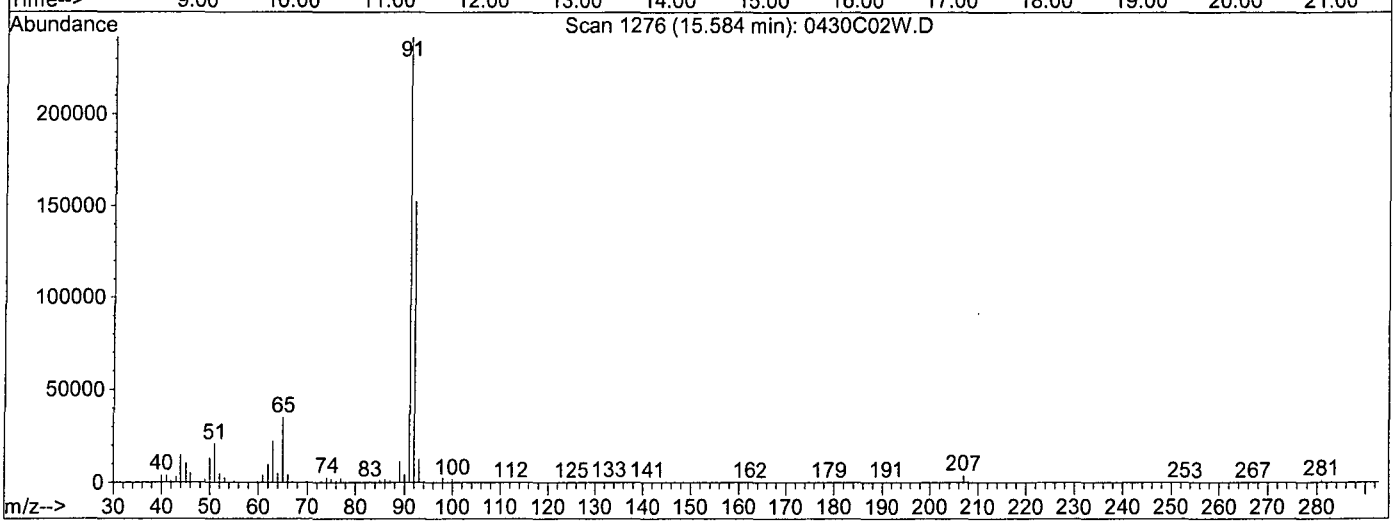


Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C02W.D Vial: 1
Acq On : 30 Apr 12 10:35 Operator: AS
Sample : CCV gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: Apr 30 14:11 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C02W.D

(2) Gasoline (TMHB)

15.58min 275.9796ppb m

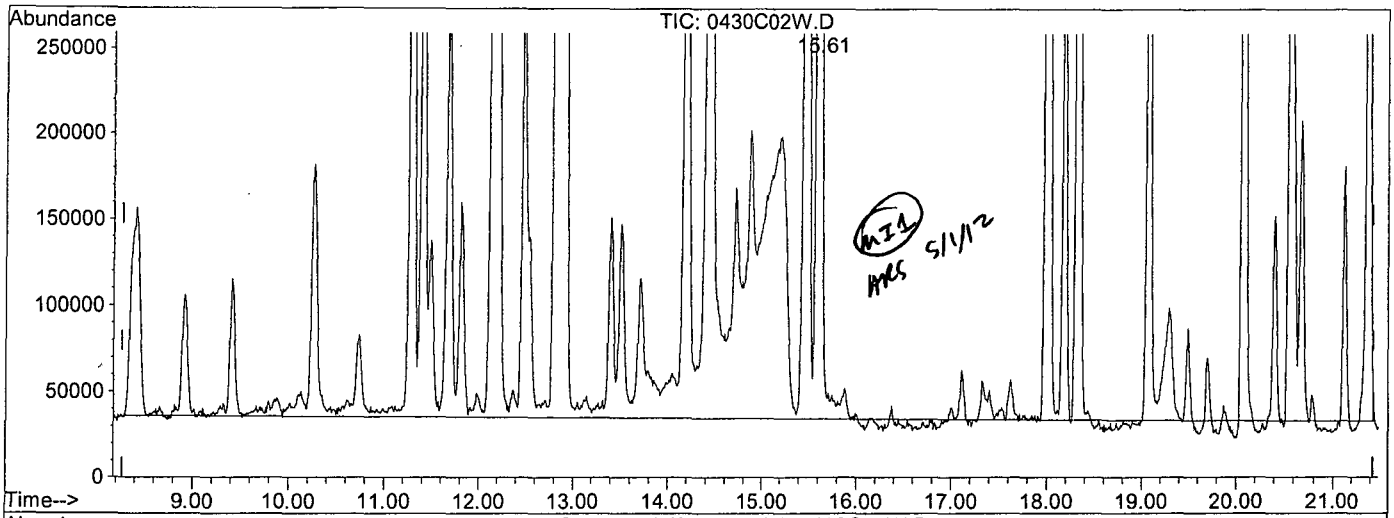
response 49410672

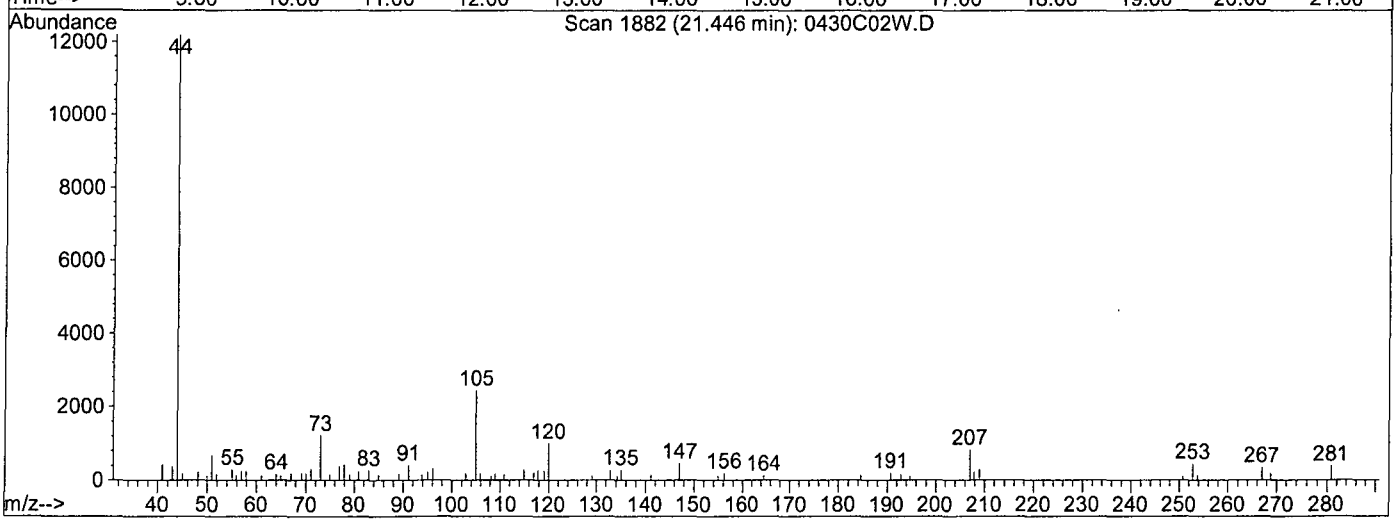
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.27#
0.00	0.00	0.73#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C02W.D Vial: 1
Acq On : 30 Apr 12 10:35 Operator: AS
Sample : CCV gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: Apr 30 14:19 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C02W.D

(2) Gasoline (TMHB)

15.61min 357.0510ppb m

response 57968319

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.23#
0.00	0.00	0.62#
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 04/20/12
Matrix: Water Instrument: Chico Initials:

		Compound	0420C04W.D 0.3	0420C05W.D 0.5	0420C06W.D 1	0420C07W.D 5	0420C08W.D 10	0420C09W.D 20	0420C10W.D 40	0420C11W.D 100			Avg	%RSD		r2
1	I	Fluorobenzene (IS)														
2	TM	Dichlorodifluoromethane	0.7500	0.8091	0.8040	0.6870	0.7390	0.7907	0.7811	0.8426			0.78	6.3	TM	
3	TM	Freon 114		0.5661	0.5284	0.5119	0.5282	0.5218	0.5265	0.5856			0.54	5.0	TM	
4	TM**L	Chloromethane		0.5635	0.4280	0.3234	0.3113	0.3085	0.3070				0.37	28	TM**L	1.000
5	TM*	Vinyl chloride		0.3382	0.2204	0.2240	0.2154	0.1993	0.2001	0.2041			0.23	22	TM*	
6	TM	Bromomethane		0.1617	0.1665	0.1677	0.1746	0.1830	0.1699	0.1844			0.17	5.0	TM	
7	TM	Chloroethane	0.2336	0.2592	0.2027	0.2033	0.1928	0.1991	0.1798	0.1849			0.21	13	TM	
8	TM	Dichlorofluoromethane		1.656	1.786	1.783	1.757	1.696	1.639	1.713			1.7	3.4	TM	
9	TM	Trichlorofluoromethane		0.1974	0.1934	0.1804	0.1771	0.1788	0.1506	0.1406			0.17	12	TM	
10		Acetonitrile	0.0483	0.0534	0.0522	0.0498	0.0444	0.0522	0.0458	0.0495			0.05	6.4		
11	TM	Acrolein	0.0186	0.0166	0.0188	0.0187	0.0193	0.0204	0.0199	0.0204			0.02	6.5	TM	
12	TML	Acetone		0.2375	0.1930	0.1211	0.1046	0.1044	0.0982	0.1035			0.14	40	TML	0.999
13	TM	Freon-113		0.6461	0.7142	0.6974	0.6922	0.6842	0.6660	0.7148			0.69	3.6	TM	
14	TM*	1,1-DCE		0.9442	0.7992	0.7358	0.7415	0.7259	0.6711	0.7277			0.76	12	TM*	
15	TM	t-Butanol	0.0230	0.0211	0.0246	0.0234	0.0230	0.0239	0.0224	0.0233			0.02	4.5	TM	
16	TML	Methyl Acetate	0.6145	0.7485	0.6734	0.4221	0.3952	0.4115	0.3814	0.3811			0.50	30	TML	1.000
17	TML	Iodomethane		0.5321	0.7765	1.056	1.089	1.168	1.175	1.257			1.0	26	TML	0.999
18	TM	Acrylonitrile		0.1536	0.1556	0.1436	0.1463	0.1458	0.1388	0.1451			0.15	3.9	TM	
19	TML	Methylene chloride		1.451	1.187	0.8538	0.8172	0.7844	0.7526	0.7733			0.95	28	TML	1.000
20	TM	Carbon disulfide		0.7066	0.7364	0.7305	0.7489	0.7046	0.6792	0.7295			0.72	3.3	TM	
21	TM	Methyl t-butyl ether (MtBE)		1.467	1.536	1.504	1.483	1.481	1.393	1.372			1.5	4.0	TM	
22	TM	Trans-1,2-DCE	0.9349	1.129	1.047	0.9014	0.8689	0.8598	0.7994	0.8403			0.92	12	TM	
23	TM	Diisopropyl Ether		3.142	3.126	3.023	2.966	2.925	2.773	2.764			3.0	5.1	TM	
24	TM**	1,1-DCA	1.810	1.656	1.682	1.671	1.611	1.574	1.493	1.542			1.6	6.0	TM**	
25	TM	Vinyl Acetate		0.4467	0.4914	0.5308	0.5396	0.5413	0.5187	0.4979			0.51	6.6	TM	
26	TM	Ethyl tert Butyl Ether	2.233	2.164	2.185	2.300	2.279	2.192	2.105	2.084			2.2	3.5	TM	
27	TM	MEK (2-Butanone)	0.0970	0.1086	0.0975	0.0944	0.0897	0.0895	0.0861	0.0821			0.09	8.8	TM	
28	TML	Cis-1,2-DCE		1.384	1.114	1.014	0.9412	0.9190	0.8599	0.8925			1.0	18	TML	1.000
29	TM	2,2-Dichloropropane	1.071	1.209	1.189	1.103	1.058	1.035	0.9872	1.027			1.1	7.2	TM	
30	TM*	Chloroform	0.8759	0.9438	0.9382	0.8883	0.8641	0.8679	0.8228	0.8462			0.88	4.8	TM*	
31	TM	Bromochloromethane	0.4026	0.3240	0.3807	0.3877	0.3988	0.3836	0.3572	0.3647			0.37	6.9	TM	
32	S	Dibromofluoromethane(S)		0.7652	0.8320	0.7261	0.7840	0.7957	0.7469	0.7957			0.78	4.5	S	
33	TM	1,1,1-TCA		1.105	1.126	1.114	1.088	1.081	1.026	1.055			1.1	3.2	TM	
34	TM	Cyclohexane		1.596	1.590	1.517	1.482	1.454	1.384	1.505			1.5	5.0	TM	
35	TM	1,1-Dichloropropene		1.231	1.073	1.114	1.064	1.049	0.9817	1.050			1.1	7.2	TM	

ARS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 04/20/12
Matrix: Water Instrument: Chico Initials:

		Compound	0.3	0.5	1	5	10	20	40	100			Avg	%RSD		r2
36	TM	2,2,4-Trimethylpentane		3.242	2.776	2.354	2.322	2.209	2.198	2.631			2.5	15	TM	
37	S	1,2-DCA-D4(S)		0.6681	0.7124	0.5807	0.6244	0.6255	0.5725	0.6118			0.63	7.8	S	
38	TM	Carbon Tetrachloride		0.9628	0.9965	0.9798	0.9851	0.9663	0.9176	0.9914			0.97	2.8	TM	
39	TM	Tert Amyl Methyl Ether		1.742	1.778	1.748	1.726	1.677	1.611	1.644			1.7	3.6	TM	
40	TM	1,2-DCA	0.6829	0.7271	0.8201	0.7510	0.7399	0.7210	0.6807	0.6866			0.73	6.4	TM	
41	TM	Benzene	3.608	3.347	3.453	3.385	3.354	3.231	3.054	3.271			3.3	4.9	TM	
42	TM	TCE	0.7916	0.8113	0.8085	0.8060	0.8163	0.7967	0.7483	0.7849			0.80	2.7	TM	
43	TM	2-Pentanone	0.2503	0.2536	0.2783	0.2793	0.2804	0.2919	0.2817	0.2908			0.28	5.7	TM	
44	TM*	1,2-Dichloropropane	1.026	0.9753	0.9666	0.9568	0.9209	0.9234	0.8512	0.8843			0.94	5.9	TM*	
45	TM	Bromodichloromethane	0.8135	0.7791	0.8157	0.8636	0.8818	0.8750	0.8570	0.8908			0.85	4.7	TM	
46	TM	Methyl Cyclohexane	1.089	1.209	1.178	1.106	1.139	1.102	1.087	1.241			1.1	5.1	TM	
47	TM	Dibromomethane		0.3470	0.3684	0.3740	0.3846	0.3828	0.3553	0.3681			0.37	3.7	TM	
48	TM	2-Chloroethyl vinyl ether	0.2789	0.2743	0.2984	0.2789	0.2928	0.3088	0.2914	0.3088			0.29	4.6	TM	
49	TM	1-Bromo-2-chloroethane	0.8862	0.7800	0.8483	0.9044	0.8884	0.8798	0.8301	0.8584			0.86	4.7	TM	
50	TM	Cis-1,3-Dichloropropene	1.196	1.536	1.309	1.183	1.161	1.182	1.104	1.168			1.2	11	TM	
51	TM*	Toluene		3.343	3.268	3.111	2.990	2.992	2.846	3.050			3.1	5.6	TM*	
52	TM	Trans-1,3-Dichloropropene	0.8816	0.8875	0.8146	0.8403	0.8776	0.8621	0.8226	0.8758			0.86	3.3	TM	
53	TM	1,1,2-TCA		0.3647	0.3992	0.4223	0.4144	0.4148	0.3932	0.4007			0.40	4.8	TM	
54	I	Chlorobenzene-D5 (IS)														
55	S	Toluene-D8(S)		3.413	3.466	3.067	3.157	3.144	3.084	3.309			3.2	5.0	S	
56	TM	1,2-EDB		0.5519	0.5574	0.6439	0.6736	0.6484	0.6507	0.6650			0.63	8.1	TM	
57	TM	Tetrachloroethene		0.8022	0.7770	0.8090	0.7622	0.7437	0.7421	0.7658			0.77	3.4	TM	
58	TM	1-Chlorohexane		1.481	1.441	1.460	1.384	1.394	1.416	1.478			1.4	2.7	TM	
59	TM	1,1,1,2-Tetrachloroethane		0.8619	0.8434	0.9930	0.9707	0.9459	0.9657	0.9977			0.94	6.6	TM	
60	TM	m&p-Xylene	1.749	1.789	1.750	1.839	1.765	1.704	1.720	1.790			1.8	2.4	TM	
61	TM	o-Xylene		1.753	1.731	1.836	1.793	1.784	1.777	1.783			1.8	1.8	TM	
62	TM	Styrene	2.625	2.746	2.726	2.865	2.871	2.834	2.863	2.869			2.8	3.3	TM	
63	S	4-Bromofluorobenzene(S)	1.230	1.533	1.329	1.170	1.225	1.236	1.210	1.252			1.3	9.0	S	
64	TML	2-Hexanone		0.0989	0.3342	0.2619	0.3242	0.3118	0.3309	0.3174			0.28	30	TML	1.000
65	TM	1,3-Dichloropropane	1.078	1.007	1.094	1.264	1.189	1.169	1.159	1.144			1.1	6.9	TM	
66	TM	Dibromochloromethane		0.6903	0.6544	0.7998	0.8257	0.8250	0.8348	0.8564			0.78	10	TM	
67	TM**	Chlorobenzene	2.811	2.781	2.719	2.890	2.722	2.733	2.761	2.779			2.8	2.0	TM**	
68	TM*	Ethylbenzene		4.417	4.329	4.511	4.296	4.259	4.234	4.391			4.3	2.2	TM*	
69	TM**L	Bromoform		0.2365	0.2791	0.3217	0.3574	0.3576	0.3858	0.4273			0.34	19	TM**L	0.998
70	I	1,4-Dichlorobenzene-D (IS)														

ARS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

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

SDG No: 67622
Initial Cal. Date: 04/20/12
Instrument: Chico

Initials:

		Compound	0.3	0.5	1	5	10	20	40	100			Avg	%RSD		r2
71	TM	MIBK (methyl isobutyl ketone)		1.456	1.364	1.148	1.117	1.087	1.068	1.083			1.2	13	TM	
72	TM	Isopropylbenzene		9.718	9.047	9.714	8.995	8.989	8.683	9.072			9.2	4.3	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.312	1.094	1.201	1.373	1.392	1.341	1.342	1.361			1.3	7.8	TM**	
74	TM	1,2,3-Trichloropropane	0.1328	0.1387	0.1258	0.1342	0.1335	0.1233	0.1248	0.1355			0.13	4.3	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.2906	0.2774	0.2304	0.3071	0.3168	0.3098	0.3175	0.3383			0.30	11	TM	
76	TML	Bromobenzene	3.207	2.623	2.197	2.216	2.126	2.081	2.036	2.125			2.3	17	TML	1.000
77	TM	n-Propylbenzene	12.2	10.8	10.9	11.3	10.7	10.5	10.2	10.7			11	5.7	TM	
78	TM	4-Ethyltoluene		10.0	9.382	10.1	9.718	9.586	9.337	9.716			9.7	3.0	TM	
79	TM	2-Chlorotoluene	8.014	7.509	7.054	7.343	6.873	6.661	6.608	6.717			7.1	6.9	TM	
80	TM	1,3,5-Trimethylbenzene		8.056	7.551	7.495	7.011	6.995	6.709	7.251			7.3	6.1	TM	
81	TM	4-Chlorotoluene		6.112	6.351	6.362	6.043	6.046	5.948	6.314			6.2	2.8	TM	
82	TM	Tert-Butylbenzene		8.847	8.005	8.529	7.877	7.852	7.735	8.207			8.2	5.0	TM	
83	TM	1,2,4-Trimethylbenzene		8.003	7.647	7.787	7.507	7.241	7.247	7.600			7.6	3.6	TM	
84	TM	Sec-Butylbenzene		11.0	9.903	10.3	9.971	9.893	9.546	10.2			10	4.6	TM	
85	TM	p-Isopropyltoluene		9.098	8.455	8.550	8.444	8.224	7.999	8.682			8.5	4.1	TM	
86	TM	Benzyl Chloride		1.905	1.655	1.939	2.091	2.127	2.109	2.316			2.0	10	TM	
87	TM	1,3-DCB		4.365	4.644	4.563	4.449	4.376	4.211	4.487			4.4	3.2	TM	
88	TM	1,4-DCB	4.883	4.389	4.157	4.355	4.231	4.171	4.134	4.281			4.3	5.6	TM	
89	TM	Hexachloroethane	1.975	1.571	1.586	1.912	1.860	1.911	1.925	2.093			1.9	9.9	TM	
90	TM	n-Butylbenzene	7.367	8.247	6.761	7.121	6.960	6.898	6.734	7.064			7.1	6.9	TM	
91	TM	1,2-DCB	4.133	3.609	3.890	4.056	3.894	3.886	3.792	3.912			3.9	4.1	TM	
92	TM	1,2-Dibromo-3-chloropropane		0.1685	0.1639	0.1834	0.1722	0.1855	0.1851	0.2042			0.18	7.5	TM	
93	TM	1,2,4-Trichlorobenzene	0.9810	0.7681	0.9123	1.015	1.047	1.046	0.9929	1.023			0.97	9.6	TM	
94	TM	Hexachlorobutadiene		1.188	1.009	0.9972	0.9846	0.9734	0.9556	1.020			1.0	7.6	TM	
95	TM	Naphthalene	5.241	5.028	4.752	4.944	4.950	4.775	4.732	4.679			4.9	3.9	TM	
96	TM	1,2,3-Trichlorobenzene	1.016	0.7873	0.7518	0.8527	0.8567	0.8815	0.8334	0.8842			0.86	9.2	TM	
97																
98																
99																
100																
101																
102																
103																
104																
105																

AMS 5/8/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C04W.D Vial: 1
Acq On : 20 Apr 12 11:47 Operator: SV
Sample : 0.3ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.81	96	628699	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.00	117	494016	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	212800	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.39	111	6845	0.34989 ppb		-0.01
Spiked Amount 20.866			Recovery = 1.677%			
37) 1,2-DCA-D4(S)	12.19	65	6653	0.42132 ppb		-0.01
Spiked Amount 21.039			Recovery = 2.001%			
55) Toluene-D8(S)	15.46	98	25767	0.40317 ppb		-0.01
Spiked Amount 25.355			Recovery = 1.589%			
63) 4-Bromofluorobenzene(S)	20.07	95	14587	0.57977 ppb		0.00
Spiked Amount 27.007			Recovery = 2.148%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.09	85	5658	0.29015 ppb		99
3) Freon 114	4.34	85	3733	0.27572 ppb		85
4) Chloromethane	4.57	52	2043	-0.08256 ppb	#	65
5) Vinyl chloride	4.83	62	2703	0.46978 ppb	#	79
6) Bromomethane	5.72	94	1182	0.27242 ppb		76
7) Chloroethane	5.91	64	1762	0.33862 ppb		93
8) Dichlorofluoromethane	6.00	67	13569	0.31395 ppb		98
9) Trichlorofluoromethane	6.52	103	1549	0.35387 ppb	#	74
10) Acetonitrile	7.65	41	18226	14.65395 ug/l		100
11) Acrolein	7.14	56	7009	14.60560 ppb		92
12) Acetone	7.30	43	2822	0.72301 ppb	#	86
13) Freon-113	7.45	101	5785	0.33443 ppb	#	86
14) 1,1-DCE	7.68	96	6760	0.35202 ppb	#	75
15) t-Butanol	7.74	59	8664	14.92114 ppb	#	75
16) Methyl Acetate	8.17	43	4636	-0.13990 ppb		90
17) Iodomethane	8.14	142	3013	1.13541 ppb	#	78
18) Acrylonitrile	8.57	53	903	0.24427 ppb		74
19) Methylene chloride	8.46	84	14673	0.37730 ppb		96
20) Carbon disulfide	8.55	76	5095	0.28163 ppb	#	83
21) Methyl t-butyl ether (MtBE	8.88	73	12272	0.33371 ppb	#	91
22) Trans-1,2-DCE	9.08	96	7053	0.30402 ppb		69
23) Diisopropyl Ether	9.74	45	24639	0.33102 ppb	#	74
24) 1,1-DCA	9.77	63	13659	0.33325 ppb	#	91
25) Vinyl Acetate	9.76	43	3172	0.24757 ppb		99
26) Ethyl tert Butyl Ether	10.43	59	16846	0.30549 ppb		93
27) MEK (2-Butanone)	10.45	43	732	0.31259 ppb	#	69
28) Cis-1,2-DCE	10.80	96	10891	0.16512 ppb	#	75
29) 2,2-Dichloropropane	10.79	77	8080	0.29611 ppb		96
30) Chloroform	11.07	85	6608	0.29829 ppb		100
31) Bromochloromethane	11.29	128	3037	0.32212 ppb	#	74
33) 1,1,1-TCA	11.81	97	9356	0.34292 ppb	#	87
34) Cyclohexane	11.97	56	12078	0.31934 ppb		94
35) 1,1-Dichloropropene	12.08	75	9736	0.35832 ppb	#	80
36) 2,2,4-Trimethylpentane	12.15	57	29443	0.46218 ppb		92
38) Carbon Tetrachloride	12.26	117	6643	0.27195 ppb		89
39) Tert Amyl Methyl Ether	12.32	73	13717	0.32013 ppb	#	92
40) 1,2-DCA	12.35	62	5152	0.28212 ppb		92
41) Benzene	12.47	78	27218	0.32428 ppb		95
42) TCE	13.51	95	5972	0.29854 ppb		86

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C04W.D Vial: 1
Acq On : 20 Apr 12 11:47 Operator: SV
Sample : 0.3ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	94426	13.61433	ppb		99
44)	1,2-Dichloropropane	13.73	63	7742	0.32818	ppb		100
45)	Bromodichloromethane	14.08	83	6137	0.28810	ppb	#	85
46)	Methyl Cyclohexane	13.78	83	8215	0.28560	ppb		81
47)	Dibromomethane	14.15	93	2471	0.26656	ppb		95
48)	2-Chloroethyl vinyl ether	14.54	63	2104	0.28698	ppb	#	77
49)	1-Bromo-2-chloroethane	14.85	63	6686	0.30934	ppb		91
50)	Cis-1,3-Dichloropropene	14.97	75	9023	0.29171	ppb		96
51)	Toluene	15.60	91	27102	0.34926	ppb		98
52)	Trans-1,3-Dichloropropene	15.77	75	6651	0.30833	ppb		86
53)	1,1,2-TCA	16.04	83	2472	0.24494	ppb	#	77
56)	1,2-EDB	17.29	107	4090	0.32997	ppb	#	97
57)	Tetrachloroethene	16.76	164	3898	0.25562	ppb		95
58)	1-Chlorohexane	17.68	91	9010	0.31745	ppb		80
59)	1,1,1,2-Tetrachloroethane	18.10	131	4452	0.23974	ppb		87
60)	m&p-Xylene	18.31	106	20736	0.59507	ppb		98
61)	o-Xylene	19.06	106	10307	0.29309	ppb		92
62)	Styrene	19.08	104	15563	0.28128	ppb		98
64)	2-Hexanone	16.05	43	447	0.17470	ppb	#	22
65)	1,3-Dichloropropane	16.46	76	6391	0.28422	ppb		99
66)	Dibromochloromethane	16.92	129	4094	0.26434	ppb		81
67)	Chlorobenzene	18.06	112	16665	0.30395	ppb		84
68)	Ethylbenzene	18.18	91	27080	0.31517	ppb		96
69)	Bromoform	19.58	173	1402	1.75119	ppb	#	77
71)	MIBK (methyl isobutyl keto	14.64	43	4109	0.40602	ppb	#	78
72)	Isopropylbenzene	19.70	105	26071	0.33386	ppb	#	89
73)	1,1,2,2-Tetrachloroethane	19.85	83	3351	0.30235	ppb		96
74)	1,2,3-Trichloropropane	20.11	110	339	0.30386	ppb		96
75)	t-1,4-Dichloro-2-Butene	20.17	53	742	0.29203	ppb	#	44
76)	Bromobenzene	20.44	156	8190	0.54603	ppb	#	79
77)	n-Propylbenzene	20.40	91	31170	0.33540	ppb		94
78)	4-Ethyltoluene	20.59	105	26091	0.31623	ppb		96
79)	2-Chlorotoluene	20.69	91	20465	0.33875	ppb		82
80)	1,3,5-Trimethylbenzene	20.66	105	23704	0.38171	ppb		89
81)	4-Chlorotoluene	20.77	91	16823	0.32043	ppb		86
82)	Tert-Butylbenzene	21.31	119	24967	0.35989	ppb		98
83)	1,2,4-Trimethylbenzene	21.36	105	22122	0.34305	ppb		94
84)	Sec-Butylbenzene	21.70	105	30751	0.35686	ppb		99
85)	p-Isopropyltoluene	21.94	119	27273	0.37725	ppb		97
86)	Benzyl Chloride	22.39	91	6115	0.35557	ppb		98
87)	1,3-DCB	22.07	146	12890	0.34090	ppb		87
88)	1,4-DCB	22.25	146	12469	0.33870	ppb		82
89)	Hexachloroethane	23.55	117	5043	0.31957	ppb		94
90)	n-Butylbenzene	22.66	91	18813	0.30937	ppb		98
91)	1,2-DCB	22.88	146	10554	0.31821	ppb		96
92)	1,2-Dibromo-3-chloropropan	24.08	155	873	0.56854	ppb	#	39
93)	1,2,4-Trichlorobenzene	25.54	180	2505	0.30239	ppb		94
94)	Hexachlorobutadiene	25.78	223	4233	0.48841	ppb		86
95)	Naphthalene	25.90	128	13384	0.32170	ppb		92
96)	1,2,3-Trichlorobenzene	26.26	180	2595	0.35533	ppb		93

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

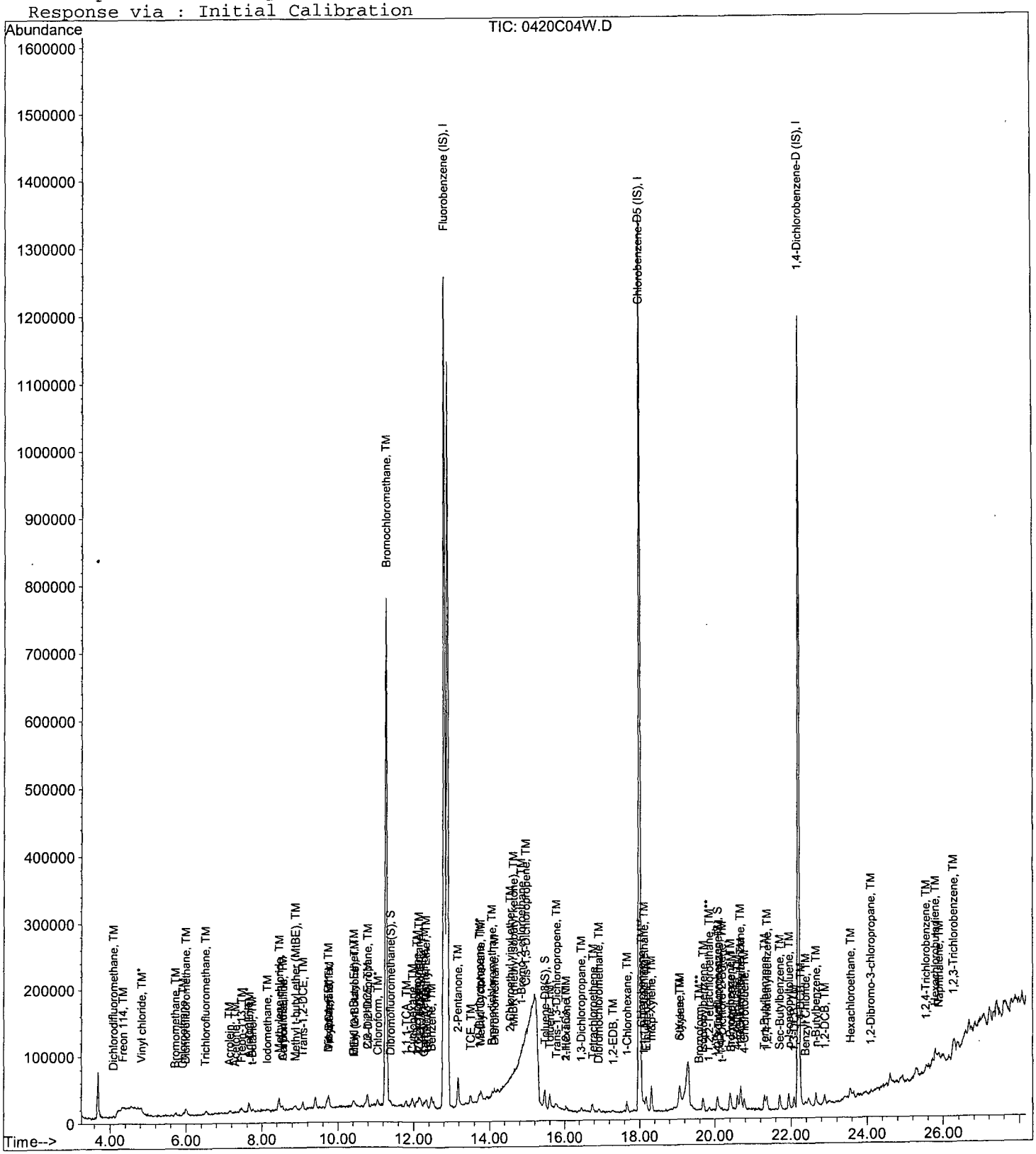
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C04W.D
Acq On : 20 Apr 12 11:47
Sample : 0.3ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C05W.D Vial: 1
Acq On : 20 Apr 12 12:24 Operator: SV
Sample : 0.5ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.81	96	637400	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.00	117	499584	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.19	152	223488	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	19510	0.98365 ppb		0.00
Spiked Amount 20.866			Recovery =	4.716%		
37) 1,2-DCA-D4(S)	12.19	65	17034	1.06400 ppb		-0.02
Spiked Amount 21.039			Recovery =	5.057%		
55) Toluene-D8(S)	15.47	98	68198	1.05518 ppb		0.00
Spiked Amount 25.355			Recovery =	4.161%		
63) 4-Bromofluorobenzene(S)	20.07	95	30642	1.20431 ppb		0.00
Spiked Amount 27.007			Recovery =	4.458%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.08	85	10314	0.52170 ppb	#	78
3) Freon 114	4.35	85	7217	0.52578 ppb	#	59
4) Chloromethane	4.58	52	6721	0.51744 ppb	#	55
5) Vinyl chloride	4.83	62	4311	0.73903 ppb		96
6) Bromomethane	5.74	94	2061	0.46853 ppb	#	68
7) Chloroethane	5.91	64	3304	0.62629 ppb		96
8) Dichlorofluoromethane	6.01	67	21105	0.48165 ppb		86
9) Trichlorofluoromethane	6.51	103	2517	0.56716 ppb		80
10) Acetonitrile	7.65	41	34016	26.97599 ug/l		100
11) Acrolein	7.15	56	10581	21.74807 ppb	#	73
12) Acetone	7.28	43	3027	0.78661 ppb		98
13) Freon-113	7.45	101	8237	0.46968 ppb		92
14) 1,1-DCE	7.65	96	12036	0.61821 ppb		87
15) t-Butanol	7.76	59	13461	22.86607 ppb		99
16) Methyl Acetate	8.19	43	9542	0.36131 ppb		92
17) Iodomethane	8.16	142	6783	1.25146 ppb		96
18) Acrylonitrile	8.57	53	1958	0.52243 ppb	#	53
19) Methylene chloride	8.46	84	18492	0.56214 ppb		93
20) Carbon disulfide	8.54	76	9008	0.49113 ppb	#	89
21) Methyl t-butyl ether (MtBE	8.88	73	18819	0.50476 ppb	#	89
22) Trans-1,2-DCE	9.09	96	14390	0.61180 ppb		93
23) Diisopropyl Ether	9.74	45	40058	0.53082 ppb	#	86
24) 1,1-DCA	9.77	63	21105	0.50789 ppb		93
25) Vinyl Acetate	9.74	43	5695	0.43841 ppb	#	94
26) Ethyl tert Butyl Ether	10.43	59	27590	0.49349 ppb		100
27) MEK (2-Butanone)	10.43	43	1384	0.58295 ppb	#	91
28) Cis-1,2-DCE	10.79	96	17639	0.45730 ppb		90
29) 2,2-Dichloropropane	10.79	77	15418	0.55732 ppb		91
30) Chloroform	11.08	85	12031	0.53568 ppb		79
31) Bromochloromethane	11.28	128	4130	0.43207 ppb	#	31
33) 1,1,1-TCA	11.81	97	14082	0.50909 ppb		87
34) Cyclohexane	11.97	56	20347	0.53063 ppb		98
35) 1,1-Dichloropropene	12.08	75	15699	0.56989 ppb		91
36) 2,2,4-Trimethylpentane	12.15	57	41323	0.63981 ppb		96
38) Carbon Tetrachloride	12.26	117	12274	0.49561 ppb	#	76
39) Tert Amyl Methyl Ether	12.33	73	22204	0.51113 ppb	#	93
40) 1,2-DCA	12.35	62	9269	0.50064 ppb	#	89
41) Benzene	12.47	78	42663	0.50136 ppb		94
42) TCE	13.51	95	10342	0.50994 ppb		93

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

Data File : M:\CHICO\DATA\C120420\0420C05W.D Vial: 1
Acq On : 20 Apr 12 12:24 Operator: SV
Sample : 0.5ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	161633	22.98612	ppb		95
44)	1,2-Dichloropropane	13.73	63	12433	0.51983	ppb		96
45)	Bromodichloromethane	14.09	83	9932	0.45990	ppb		99
46)	Methyl Cyclohexane	13.79	83	15418	0.52869	ppb		99
47)	Dibromomethane	14.15	93	4424	0.47072	ppb		90
48)	2-Chloroethyl vinyl ether	14.54	63	3497	0.47048	ppb		90
49)	1-Bromo-2-chloroethane	14.86	63	9944	0.45380	ppb	#	82
50)	Cis-1,3-Dichloropropene	14.98	75	19582	0.62443	ppb		88
51)	Toluene	15.61	91	42615	0.54168	ppb		95
52)	Trans-1,3-Dichloropropene	15.76	75	11314	0.51734	ppb		91
53)	1,1,2-TCA	16.04	83	4649	0.45436	ppb		87
56)	1,2-EDB	17.29	107	5514	0.43989	ppb	#	81
57)	Tetrachloroethene	16.77	164	8015	0.51973	ppb		75
58)	1-Chlorohexane	17.67	91	14800	0.51564	ppb		91
59)	1,1,1,2-Tetrachloroethane	18.11	131	8612	0.45858	ppb		86
60)	m&p-Xylene	18.31	106	35757	1.01469	ppb		88
61)	o-Xylene	19.07	106	17516	0.49253	ppb		95
62)	Styrene	19.08	104	27436	0.49035	ppb		96
64)	2-Hexanone	16.08	43	988	0.25866	ppb	#	64
65)	1,3-Dichloropropane	16.46	76	10057	0.44227	ppb		93
66)	Dibromochloromethane	16.93	129	6897	0.44035	ppb		96
67)	Chlorobenzene	18.06	112	27787	0.50116	ppb		89
68)	Ethylbenzene	18.17	91	44130	0.50788	ppb		97
69)	Bromoform	19.60	173	2363	1.86154	ppb		91
71)	MIBK (methyl isobutyl keto	14.67	43	6508	0.61232	ppb	#	79
72)	Isopropylbenzene	19.70	105	43435	0.52962	ppb		95
73)	1,1,2,2-Tetrachloroethane	19.85	83	4892	0.42028	ppb		87
74)	1,2,3-Trichloropropane	20.11	110	620	0.52916	ppb	#	71
75)	t-1,4-Dichloro-2-Butene	20.19	53	1240	0.46469	ppb	#	85
76)	Bromobenzene	20.43	156	11722	0.71109	ppb		82
77)	n-Propylbenzene	20.39	91	48460	0.49650	ppb		97
78)	4-Ethyltoluene	20.60	105	44907	0.51825	ppb		99
79)	2-Chlorotoluene	20.69	91	33562	0.52898	ppb		90
80)	1,3,5-Trimethylbenzene	20.67	105	36007	0.55210	ppb		98
81)	4-Chlorotoluene	20.77	91	27320	0.49548	ppb		93
82)	Tert-Butylbenzene	21.31	119	39546	0.54277	ppb		93
83)	1,2,4-Trimethylbenzene	21.37	105	35770	0.52816	ppb		97
84)	Sec-Butylbenzene	21.71	105	49302	0.54478	ppb		99
85)	p-Isopropyltoluene	21.95	119	40668	0.53564	ppb		96
86)	Benzyl Chloride	22.39	91	8517	0.47155	ppb	#	79
87)	1,3-DCB	22.09	146	19512	0.49135	ppb		95
88)	1,4-DCB	22.25	146	19617	0.50738	ppb		90
89)	Hexachloroethane	23.55	117	7021	0.42364	ppb		90
90)	n-Butylbenzene	22.67	91	36861	0.57717	ppb		90
91)	1,2-DCB	22.88	146	16131	0.46310	ppb		97
92)	1,2-Dibromo-3-chloropropan	24.10	155	753	0.46693	ppb	#	15
93)	1,2,4-Trichlorobenzene	25.54	180	3433	0.39460	ppb	#	87
94)	Hexachlorobutadiene	25.79	223	5309	0.58327	ppb		84
95)	Naphthalene	25.90	128	22473	0.51434	ppb		99
96)	1,2,3-Trichlorobenzene	26.26	180	3519	0.45880	ppb		95

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

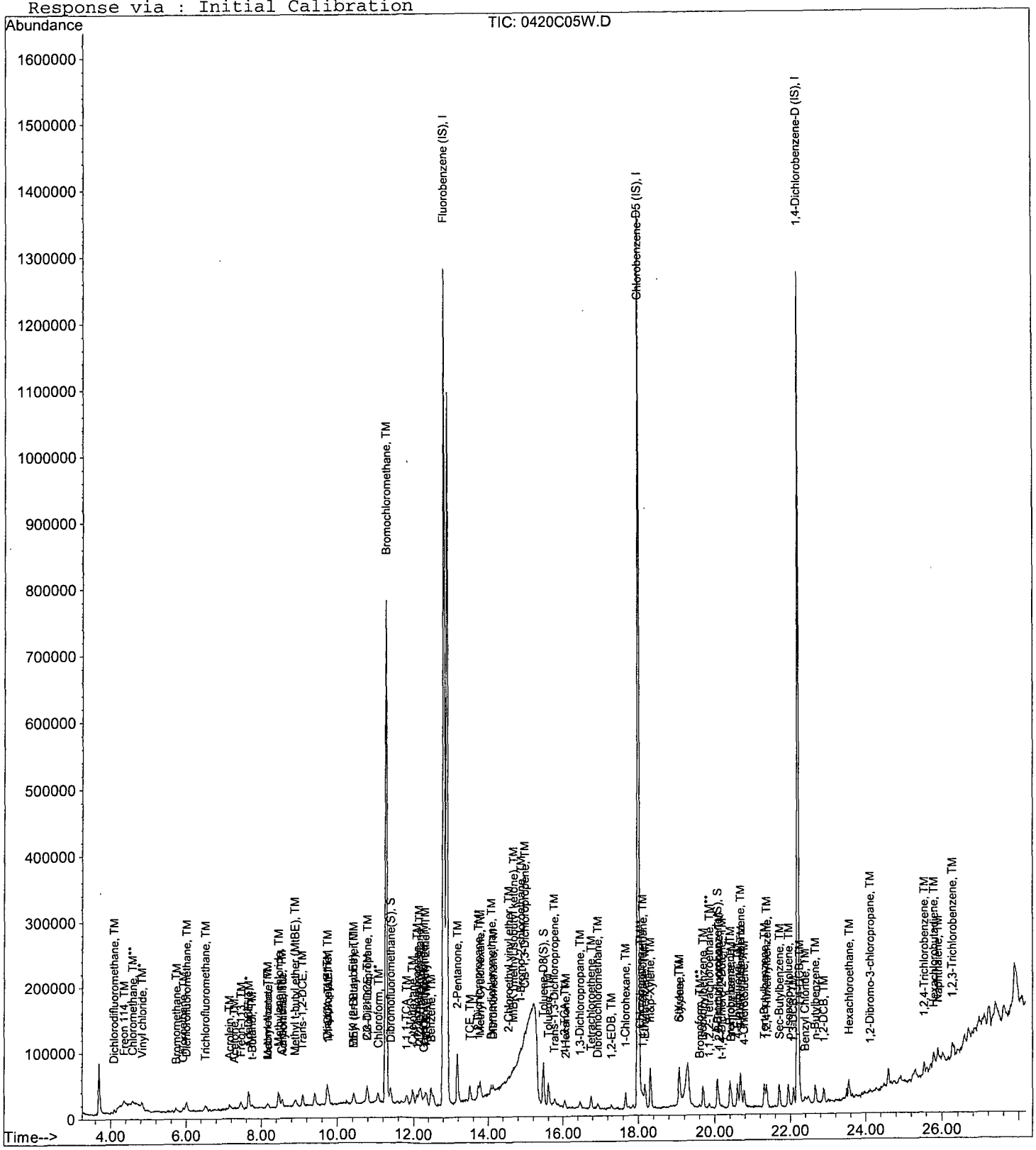
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C05W.D
Acq On : 20 Apr 12 12:24
Sample : 0.5ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C06W.D Vial: 1
Acq On : 20 Apr 12 13:01 Operator: SV
Sample : 1.0ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.81	96	630381	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.00	117	495616	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	230336	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.40	111	41956	2.13889 ppb		0.00
Spiked Amount 20.866			Recovery = 10.251%			
37) 1,2-DCA-D4(S)	12.20	65	35926	2.26904 ppb		0.00
Spiked Amount 21.039			Recovery = 10.785%			
55) Toluene-D8(S)	15.47	98	137422	2.14326 ppb		0.00
Spiked Amount 25.355			Recovery = 8.452%			
63) 4-Bromofluorobenzene(S)	20.07	95	52695	2.08763 ppb		0.00
Spiked Amount 27.007			Recovery = 7.731%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.09	85	20272	1.03681 ppb		94
3) Freon 114	4.35	85	13324	0.98150 ppb		95
4) Chloromethane	4.58	52	10914	1.07419 ppb	#	69
5) Vinyl chloride	4.81	62	5558	0.96341 ppb		97
6) Bromomethane	5.72	94	4199	0.96519 ppb		87
7) Chloroethane	5.91	64	5111	0.97960 ppb	#	87
8) Dichlorofluoromethane	6.01	67	45029	1.03907 ppb		100
9) Trichlorofluoromethane	6.51	103	4877	1.11117 ppb		91
10) Acetonitrile	7.65	41	65774	52.74209 ug/l		100
11) Acrolein	7.15	56	23730	49.31746 ppb		95
12) Acetone	7.26	43	4867	1.51260 ppb	#	57
13) Freon-113	7.45	101	18009	1.03832 ppb		90
14) 1,1-DCE	7.68	96	20153	1.04665 ppb		88
15) t-Butanol	7.76	59	31064	53.35567 ppb	#	91
16) Methyl Acetate	8.18	43	16981	1.15093 ppb		95
17) Iodomethane	8.15	142	19580	1.65655 ppb	#	93
18) Acrylonitrile	8.56	53	3924	1.05865 ppb		97
19) Methylene chloride	8.46	84	29943	1.16454 ppb		94
20) Carbon disulfide	8.55	76	18568	1.02364 ppb		97
21) Methyl t-butyl ether (MtBE	8.88	73	38728	1.05032 ppb		94
22) Trans-1,2-DCE	9.09	96	26393	1.13462 ppb		91
23) Diisopropyl Ether	9.75	45	78811	1.05597 ppb		89
24) 1,1-DCA	9.77	63	42401	1.03174 ppb		96
25) Vinyl Acetate	9.76	43	12391	0.96450 ppb		99
26) Ethyl tert Butyl Ether	10.42	59	55086	0.99628 ppb		94
27) MEK (2-Butanone)	10.43	43	2458	1.04686 ppb		99
28) Cis-1,2-DCE	10.79	96	28098	0.93438 ppb		88
29) 2,2-Dichloropropane	10.78	77	29985	1.09594 ppb		92
30) Chloroform	11.07	85	23657	1.06505 ppb		91
31) Bromochloromethane	11.29	128	9599	1.01541 ppb	#	72
33) 1,1,1-TCA	11.81	97	28390	1.03778 ppb		89
34) Cyclohexane	11.97	56	40086	1.05704 ppb		88
35) 1,1-Dichloropropene	12.08	75	27050	0.99287 ppb		94
36) 2,2,4-Trimethylpentane	12.14	57	70001	1.09590 ppb		94
38) Carbon Tetrachloride	12.27	117	25126	1.02586 ppb		95
39) Tert Amyl Methyl Ether	12.33	73	44837	1.04363 ppb		97
40) 1,2-DCA	12.36	62	20679	1.12936 ppb		93
41) Benzene	12.47	78	87063	1.03451 ppb		95
42) TCE	13.50	95	20386	1.01639 ppb		86

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C06W.D Vial: 1
Acq On : 20 Apr 12 13:01 Operator: SV
Sample : 1.0ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	350818	50.44596	ppb		99
44)	1,2-Dichloropropane	13.73	63	24374	1.03043	ppb		97
45)	Bromodichloromethane	14.08	83	20568	0.96300	ppb	#	96
46)	Methyl Cyclohexane	13.79	83	29692	1.02949	ppb		99
47)	Dibromomethane	14.15	93	9290	0.99948	ppb		94
48)	2-Chloroethyl vinyl ether	14.54	63	7525	1.02367	ppb		93
49)	1-Bromo-2-chloroethane	14.85	63	21389	0.98697	ppb	#	81
50)	Cis-1,3-Dichloropropene	14.97	75	33427	1.07779	ppb		100
51)	Toluene	15.61	91	82402	1.05908	ppb		93
52)	Trans-1,3-Dichloropropene	15.77	75	20540	0.94966	ppb		97
53)	1,1,2-TCA	16.04	83	10066	0.99474	ppb		83
56)	1,2-EDB	17.29	107	11050	0.88860	ppb	#	89
57)	Tetrachloroethene	16.76	164	15403	1.00681	ppb		86
58)	1-Chlorohexane	17.67	91	28572	1.00343	ppb		91
59)	1,1,1,2-Tetrachloroethane	18.12	131	16721	0.89751	ppb		98
60)	m&p-Xylene	18.32	106	69403	1.98525	ppb		100
61)	o-Xylene	19.06	106	34325	0.97291	ppb		96
62)	Styrene	19.09	104	54051	0.97375	ppb		92
64)	2-Hexanone	16.11	43	6626	1.15019	ppb	#	72
65)	1,3-Dichloropropane	16.46	76	21680	0.96105	ppb		99
66)	Dibromochloromethane	16.93	129	12973	0.83492	ppb		92
67)	Chlorobenzene	18.07	112	53910	0.98009	ppb		99
68)	Ethylbenzene	18.18	91	85812	0.99550	ppb		99
69)	Bromoform	19.60	173	5533	2.23681	ppb		95
71)	MIBK (methyl isobutyl keto	14.66	43	12566	1.14715	ppb		94
72)	Isopropylbenzene	19.69	105	83352	0.98613	ppb		95
73)	1,1,2,2-Tetrachloroethane	19.85	83	11069	0.92268	ppb		92
74)	1,2,3-Trichloropropane	20.12	110	1159	0.95978	ppb		92
75)	t-1,4-Dichloro-2-Butene	20.19	53	2123	0.77194	ppb	#	64
76)	Bromobenzene	20.44	156	20240	1.12978	ppb		95
77)	n-Propylbenzene	20.40	91	100019	0.99429	ppb		98
78)	4-Ethyltoluene	20.60	105	86437	0.96787	ppb		97
79)	2-Chlorotoluene	20.70	91	64996	0.99396	ppb		94
80)	1,3,5-Trimethylbenzene	20.68	105	69574	1.03508	ppb		96
81)	4-Chlorotoluene	20.77	91	58519	1.02976	ppb		100
82)	Tert-Butylbenzene	21.31	119	73750	0.98214	ppb		97
83)	1,2,4-Trimethylbenzene	21.37	105	70454	1.00936	ppb		97
84)	Sec-Butylbenzene	21.71	105	91245	0.97826	ppb		98
85)	p-Isopropyltoluene	21.94	119	77898	0.99549	ppb		96
86)	Benzyl Chloride	22.39	91	15247	0.81907	ppb		95
87)	1,3-DCB	22.09	146	42786	1.04540	ppb		96
88)	1,4-DCB	22.25	146	38299	0.96114	ppb		90
89)	Hexachloroethane	23.55	117	14615	0.85563	ppb		95
90)	n-Butylbenzene	22.66	91	62296	0.94642	ppb		93
91)	1,2-DCB	22.88	146	35844	0.99844	ppb		96
92)	1,2-Dibromo-3-chloropropan	24.10	155	1510	0.90851	ppb	#	38
93)	1,2,4-Trichlorobenzene	25.54	180	8405	0.93737	ppb		99
94)	Hexachlorobutadiene	25.79	223	9292	0.99050	ppb		85
95)	Naphthalene	25.90	128	43782	0.97224	ppb		91
96)	1,2,3-Trichlorobenzene	26.26	180	6923	0.87578	ppb		95

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

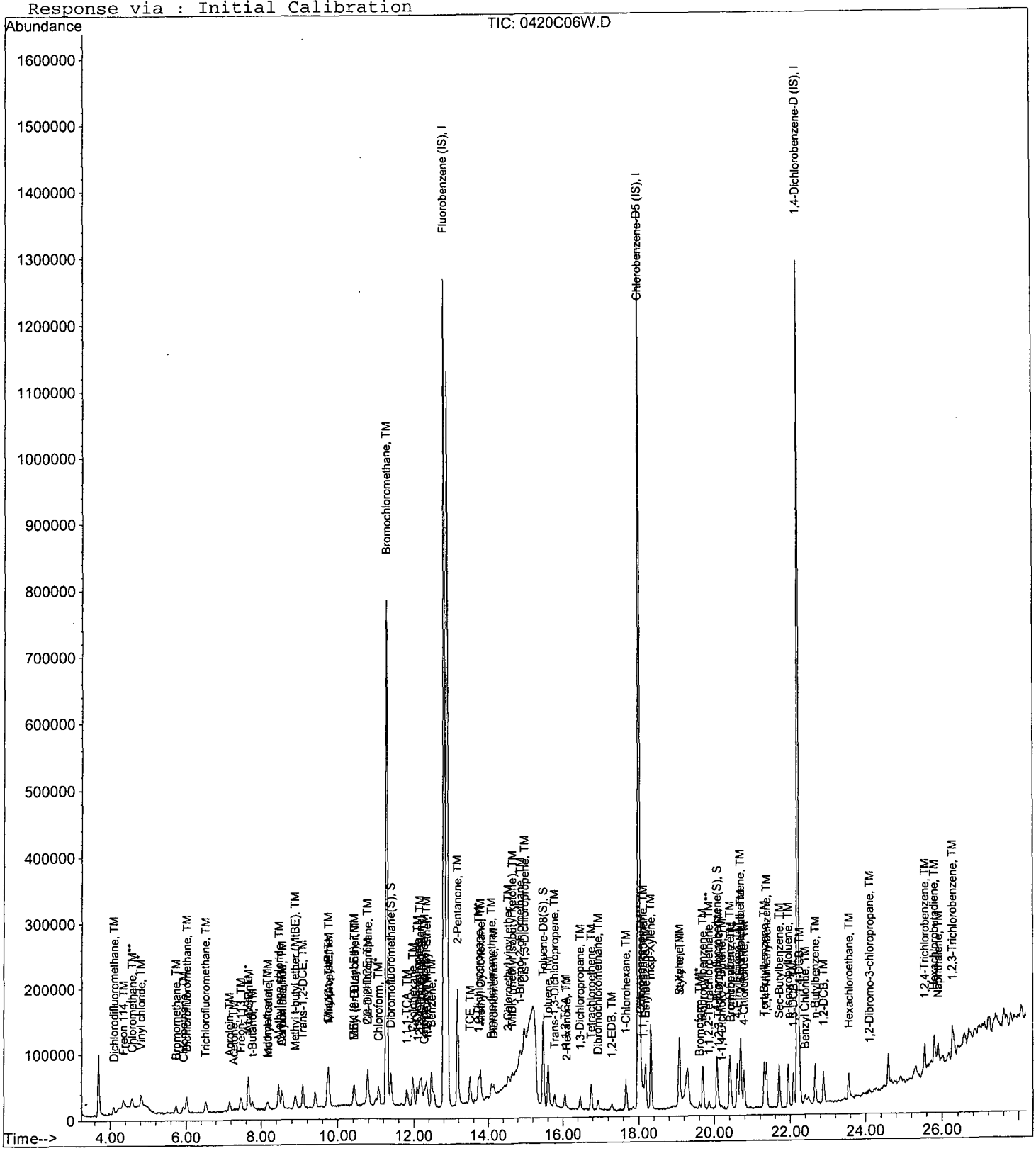
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C06W.D
Acq On : 20 Apr 12 13:01
Sample : 1.0ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C07W.D Vial: 1
Acq On : 20 Apr 12 13:38 Operator: SV
Sample : 5.0ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.82	96	661133	25.00000 ppb		0.00
54) Chlorobenzene-D5 (IS)	18.00	117	488384	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	225792	25.00000 ppb		0.00
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.39	111	192020	9.33372 ppb		0.00
Spiked Amount 20.866			Recovery = 44.734%			
37) 1,2-DCA-D4(S)	12.21	65	153576	9.24850 ppb		0.00
Spiked Amount 21.039			Recovery = 43.956%			
55) Toluene-D8(S)	15.47	98	599102	9.48207 ppb		0.00
Spiked Amount 25.355			Recovery = 37.397%			
63) 4-Bromofluorobenzene(S)	20.07	95	228566	9.18922 ppb		0.00
Spiked Amount 27.007			Recovery = 34.024%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.08	85	90835	4.42965 ppb		98
3) Freon 114	4.34	85	67571	4.74604 ppb		96
4) Chloromethane	4.57	52	43278	5.03427 ppb		95
5) Vinyl chloride	4.82	62	29624	4.89610 ppb		91
6) Bromomethane	5.73	94	22168	4.85855 ppb		95
7) Chloroethane	5.92	64	26880	4.91230 ppb		94
8) Dichlorofluoromethane	6.01	67	235813	5.18842 ppb		97
9) Trichlorofluoromethane	6.52	103	23848	5.18078 ppb		95
10) Acetonitrile	7.65	41	131816	100.78258 ug/l		100
11) Acrolein	7.16	56	49508	98.10533 ppb		98
12) Acetone	7.27	43	16014	5.54387 ppb		99
13) Freon-113	7.46	101	92221	5.06974 ppb		97
14) 1,1-DCE	7.67	96	97290	4.81773 ppb		90
15) t-Butanol	7.76	59	61751	101.13033 ppb	#	89
16) Methyl Acetate	8.18	43	55814	4.94378 ppb		99
17) Iodomethane	8.15	142	139608	5.22970 ppb		99
18) Acrylonitrile	8.56	53	18991	4.88526 ppb		87
19) Methylene chloride	8.46	84	112895	5.18075 ppb		98
20) Carbon disulfide	8.55	76	96592	5.07733 ppb		96
21) Methyl t-butyl ether (MtBE	8.89	73	198816	5.14118 ppb		95
22) Trans-1,2-DCE	9.09	96	119183	4.88528 ppb		94
23) Diisopropyl Ether	9.74	45	399770	5.10728 ppb		97
24) 1,1-DCA	9.77	63	220988	5.12716 ppb		98
25) Vinyl Acetate	9.75	43	70189	5.20932 ppb		99
26) Ethyl tert Butyl Ether	10.43	59	304176	5.24540 ppb		99
27) MEK (2-Butanone)	10.42	43	12485	5.07000 ppb		94
28) Cis-1,2-DCE	10.79	96	134070	5.40077 ppb		85
29) 2,2-Dichloropropane	10.79	77	146197	5.09489 ppb		98
30) Chloroform	11.08	85	117459	5.04209 ppb		96
31) Bromochloromethane	11.29	128	51267	5.17094 ppb		98
33) 1,1,1-TCA	11.81	97	147355	5.13592 ppb		95
34) Cyclohexane	11.98	56	200552	5.04243 ppb		94
35) 1,1-Dichloropropene	12.08	75	147342	5.15662 ppb		98
36) 2,2,4-Trimethylpentane	12.15	57	311322	4.64719 ppb		95
38) Carbon Tetrachloride	12.27	117	129555	5.04349 ppb		93
39) Tert Amyl Methyl Ether	12.32	73	231171	5.13046 ppb		99
40) 1,2-DCA	12.35	62	99299	5.17085 ppb		98
41) Benzene	12.48	78	447536	5.07044 ppb		98
42) TCE	13.51	95	106570	5.06612 ppb		95

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C07W.D Vial: 1
Acq On : 20 Apr 12 13:38 Operator: SV
Sample : 5.0ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	738706	101.28156	ppb		99
44)	1,2-Dichloropropane	13.74	63	126516	5.09979	ppb		99
45)	Bromodichloromethane	14.08	83	114190	5.09773	ppb		93
46)	Methyl Cyclohexane	13.79	83	146250	4.83498	ppb		97
47)	Dibromomethane	14.14	93	49452	5.07288	ppb		94
48)	2-Chloroethyl vinyl ether	14.55	63	36873	4.78271	ppb		94
49)	1-Bromo-2-chloroethane	14.85	63	119588	5.26156	ppb		98
50)	Cis-1,3-Dichloropropene	14.97	75	156478	4.81064	ppb		97
51)	Toluene	15.61	91	411318	5.04060	ppb		94
52)	Trans-1,3-Dichloropropene	15.77	75	111109	4.89813	ppb		99
53)	1,1,2-TCA	16.06	83	55837	5.26123	ppb		92
56)	1,2-EDB	17.30	107	62896	5.13274	ppb	#	91
57)	Tetrachloroethene	16.75	164	79022	5.24172	ppb		97
58)	1-Chlorohexane	17.67	91	142571	5.08116	ppb		92
59)	1,1,1,2-Tetrachloroethane	18.12	131	96995	5.28337	ppb		93
60)	m&p-Xylene	18.32	106	359273	10.42907	ppb		97
61)	o-Xylene	19.07	106	179339	5.15849	ppb		95
62)	Styrene	19.09	104	279839	5.11607	ppb		99
64)	2-Hexanone	16.08	43	25577	4.20252	ppb		92
65)	1,3-Dichloropropane	16.46	76	123458	5.55378	ppb		94
66)	Dibromochloromethane	16.94	129	78118	5.10201	ppb		99
67)	Chlorobenzene	18.07	112	282283	5.20794	ppb		96
68)	Ethylbenzene	18.18	91	440646	5.18759	ppb		98
69)	Bromoform	19.60	173	31423	5.33838	ppb		91
71)	MIBK (methyl isobutyl keto	14.65	43	51845	4.82816	ppb		91
72)	Isopropylbenzene	19.69	105	438686	5.29452	ppb		98
73)	1,1,2,2-Tetrachloroethane	19.86	83	62005	5.27258	ppb		94
74)	1,2,3-Trichloropropane	20.12	110	6059	5.11849	ppb		100
75)	t-1,4-Dichloro-2-Butene	20.19	53	13870	5.14472	ppb		73
76)	Bromobenzene	20.44	156	100084	5.33055	ppb		93
77)	n-Propylbenzene	20.40	91	510658	5.17862	ppb		100
78)	4-Ethyltoluene	20.59	105	454558	5.19232	ppb		100
79)	2-Chlorotoluene	20.69	91	331581	5.17277	ppb		96
80)	1,3,5-Trimethylbenzene	20.67	105	338451	5.13660	ppb		99
81)	4-Chlorotoluene	20.78	91	287278	5.15698	ppb		99
82)	Tert-Butylbenzene	21.32	119	385135	5.23209	ppb		100
83)	1,2,4-Trimethylbenzene	21.38	105	351664	5.13948	ppb		99
84)	Sec-Butylbenzene	21.72	105	466597	5.10319	ppb		100
85)	p-Isopropyltoluene	21.95	119	386112	5.03358	ppb		97
86)	Benzyl Chloride	22.38	91	87569	4.79889	ppb		99
87)	1,3-DCB	22.08	146	206045	5.13567	ppb		99
88)	1,4-DCB	22.26	146	196660	5.03462	ppb		96
89)	Hexachloroethane	23.55	117	86326	5.15564	ppb		93
90)	n-Butylbenzene	22.65	91	321354	4.98038	ppb		97
91)	1,2-DCB	22.89	146	183163	5.20473	ppb		93
92)	1,2-Dibromo-3-chloropropan	24.11	155	8283	5.08387	ppb		91
93)	1,2,4-Trichlorobenzene	25.55	180	45856	5.21702	ppb		92
94)	Hexachlorobutadiene	25.80	223	45030	4.89667	ppb		87
95)	Naphthalene	25.90	128	223244	5.05722	ppb		99
96)	1,2,3-Trichlorobenzene	26.25	180	38505	4.96900	ppb		98

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

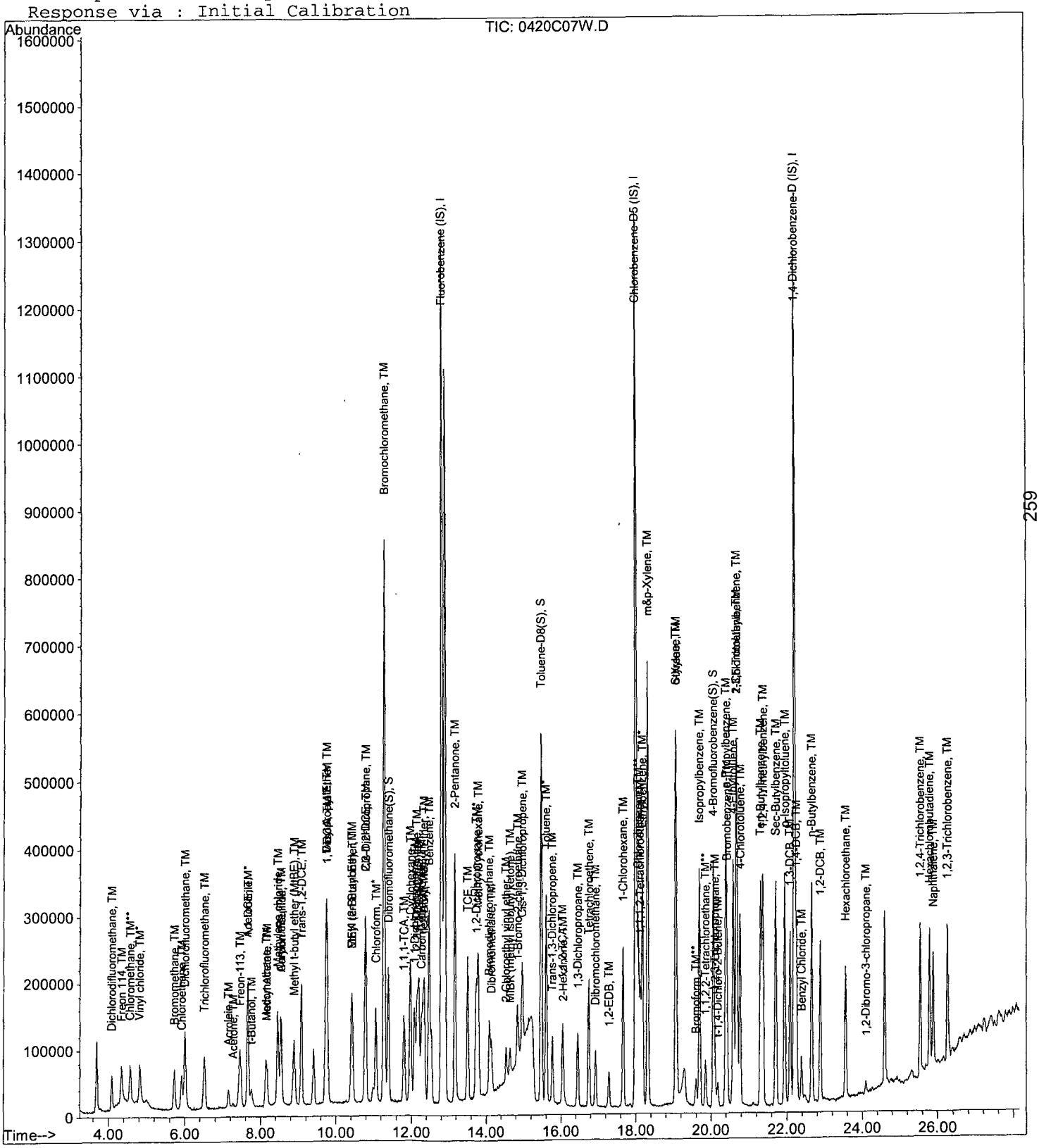
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C07W.D
Acq On : 20 Apr 12 13:38
Sample : 5.0ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C08W.D Vial: 1
Acq On : 20 Apr 12 14:15 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	2-Pentanone	13.17	43	905559	127.10017	ppb	100
44)	1,2-Dichloropropane	13.74	63	237904	9.81702	ppb	100
45)	Bromodichloromethane	14.08	83	227792	10.41016	ppb	100
46)	Methyl Cyclohexane	13.79	83	294207	9.95686	ppb	100
47)	Dibromomethane	14.14	93	99363	10.43438	ppb	100
48)	2-Chloroethyl vinyl ether	14.55	63	75642	10.04383	ppb	100
49)	1-Bromo-2-chloroethane	14.85	63	229514	10.33730	ppb	100
50)	Cis-1,3-Dichloropropene	14.97	75	299917	9.43890	ppb	100
51)	Toluene	15.60	91	772366	9.68943	ppb	100
52)	Trans-1,3-Dichloropropene	15.78	75	226716	10.23138	ppb	100
53)	1,1,2-TCA	16.05	83	107044	10.32520	ppb	100
56)	1,2-EDB	17.30	107	132088	10.73846	ppb	100
57)	Tetrachloroethene	16.76	164	149466	9.87690	ppb	100
58)	1-Chlorohexane	17.67	91	271348	9.63409	ppb	100
59)	1,1,1,2-Tetrachloroethane	18.13	131	190343	10.32883	ppb	100
60)	m&p-Xylene	18.32	106	692334	20.02117	ppb	100
61)	o-Xylene	19.07	106	351528	10.07303	ppb	100
62)	Styrene	19.09	104	562931	10.25265	ppb	100
64)	2-Hexanone	16.08	43	63577	10.25332	ppb	100
65)	1,3-Dichloropropane	16.46	76	233156	10.44885	ppb	100
66)	Dibromochloromethane	16.94	129	161919	10.53514	ppb	100
67)	Chlorobenzene	18.07	112	533784	9.81069	ppb	100
68)	Ethylbenzene	18.19	91	842503	9.88097	ppb	100
69)	Bromoform	19.60	173	70079	9.92322	ppb	100
71)	MIBK (methyl isobutyl keto	14.65	43	102755	9.39613	ppb	100
72)	Isopropylbenzene	19.69	105	827379	9.80502	ppb	100
73)	1,1,2,2-Tetrachloroethane	19.86	83	127994	10.68703	ppb	100
74)	1,2,3-Trichloropropane	20.12	110	12280	10.18616	ppb	100
75)	t-1,4-Dichloro-2-Butene	20.18	53	29141	10.61355	ppb	100
76)	Bromobenzene	20.44	156	195545	10.14279	ppb	100
77)	n-Propylbenzene	20.40	91	985441	9.81264	ppb	100
78)	4-Ethyltoluene	20.60	105	893856	10.02562	ppb	100
79)	2-Chlorotoluene	20.70	91	632153	9.68339	ppb	100
80)	1,3,5-Trimethylbenzene	20.68	105	644921	9.61077	ppb	100
81)	4-Chlorotoluene	20.78	91	555804	9.79683	ppb	100
82)	Tert-Butylbenzene	21.32	119	724493	9.66425	ppb	100
83)	1,2,4-Trimethylbenzene	21.38	105	690537	9.90946	ppb	100
84)	Sec-Butylbenzene	21.72	105	917139	9.84933	ppb	100
85)	p-Isopropyltoluene	21.95	119	776642	9.94159	ppb	100
86)	Benzyl Chloride	22.39	91	192308	10.34806	ppb	100
87)	1,3-DCB	22.09	146	409190	10.01455	ppb	100
88)	1,4-DCB	22.26	146	389195	9.78338	ppb	100
89)	Hexachloroethane	23.56	117	171059	10.03132	ppb	100
90)	n-Butylbenzene	22.65	91	640205	9.74247	ppb	100
91)	1,2-DCB	22.89	146	358155	9.99316	ppb	100
92)	1,2-Dibromo-3-chloropropan	24.10	155	15836	9.54384	ppb	100
93)	1,2,4-Trichlorobenzene	25.55	180	96272	10.75469	ppb	100
94)	Hexachlorobutadiene	25.80	223	90562	9.66978	ppb	100
95)	Naphthalene	25.90	128	455341	10.12839	ppb	100
96)	1,2,3-Trichlorobenzene	26.26	180	78796	9.98452	ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C08W.D Vial: 1
Acq On : 20 Apr 12 14:15 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	96	645830	25.00000 ppb	0.00
54) Chlorobenzene-D5 (IS)	18.00	117	490240	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	229952	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	506340	25.19539 ppb	0.00
Spiked Amount 20.866			Recovery	= 120.748%	
37) 1,2-DCA-D4(S)	12.21	65	403256	24.85989 ppb	0.00
Spiked Amount 21.039			Recovery	= 118.162%	
55) Toluene-D8(S)	15.48	98	1547887	24.40587 ppb	0.00
Spiked Amount 25.355			Recovery	= 96.257%	
63) 4-Bromofluorobenzene(S)	20.07	95	600440	24.04858 ppb	0.00
Spiked Amount 27.007			Recovery	= 89.047%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.09	85	190920	9.53100 ppb	100
3) Freon 114	4.34	85	136448	9.81090 ppb	100
4) Chloromethane	4.57	52	80414	9.89132 ppb	100
5) Vinyl chloride	4.82	62	55632	9.41242 ppb	100
6) Bromomethane	5.73	94	45093	10.11719 ppb	100
7) Chloroethane	5.92	64	49816	9.31955 ppb	100
8) Dichlorofluoromethane	6.01	67	453809	10.22141 ppb	100
9) Trichlorofluoromethane	6.52	103	45752	10.17476 ppb	100
10) Acetonitrile	7.65	41	143506	112.32024 ug/l	100
11) Acrolein	7.16	56	62172	126.11963 ppb	100
12) Acetone	7.27	43	27022	9.84811 ppb	100
13) Freon-113	7.45	101	178809	10.06273 ppb	100
14) 1,1-DCE	7.67	96	191542	9.70977 ppb	100
15) t-Butanol	7.77	59	74310	124.58201 ppb	100
16) Methyl Acetate	8.18	43	102086	9.80311 ppb	100
17) Iodomethane	8.15	142	281306	9.68180 ppb	100
18) Acrylonitrile	8.56	53	37796	9.95305 ppb	100
19) Methylene chloride	8.46	84	211108	10.26759 ppb	100
20) Carbon disulfide	8.55	76	193472	10.41078 ppb	100
21) Methyl t-butyl ether (MtBE	8.89	73	383212	10.14429 ppb	100
22) Trans-1,2-DCE	9.08	96	224470	9.41899 ppb	100
23) Diisopropyl Ether	9.74	45	766211	10.02070 ppb	100
24) 1,1-DCA	9.78	63	416271	9.88678 ppb	100
25) Vinyl Acetate	9.75	43	139385	10.59006 ppb	100
26) Ethyl tert Butyl Ether	10.43	59	588618	10.39101 ppb	100
27) MEK (2-Butanone)	10.42	43	23180	9.63614 ppb	100
28) Cis-1,2-DCE	10.79	96	243131	10.30358 ppb	100
29) 2,2-Dichloropropane	10.79	77	273343	9.75159 ppb	100
30) Chloroform	11.08	85	223224	9.80924 ppb	100
31) Bromochloromethane	11.30	128	103011	10.63617 ppb	100
33) 1,1,1-TCA	11.82	97	281051	10.02787 ppb	100
34) Cyclohexane	11.98	56	382883	9.85484 ppb	100
35) 1,1-Dichloropropene	12.08	75	274980	9.85169 ppb	100
36) 2,2,4-Trimethylpentane	12.16	57	599748	9.16474 ppb	100
38) Carbon Tetrachloride	12.28	117	254489	10.14184 ppb	100
39) Tert Amyl Methyl Ether	12.32	73	445968	10.13206 ppb	100
40) 1,2-DCA	12.35	62	191141	10.18923 ppb	100
41) Benzene	12.48	78	866395	10.04856 ppb	100
42) TCE	13.51	95	210886	10.26264 ppb	100

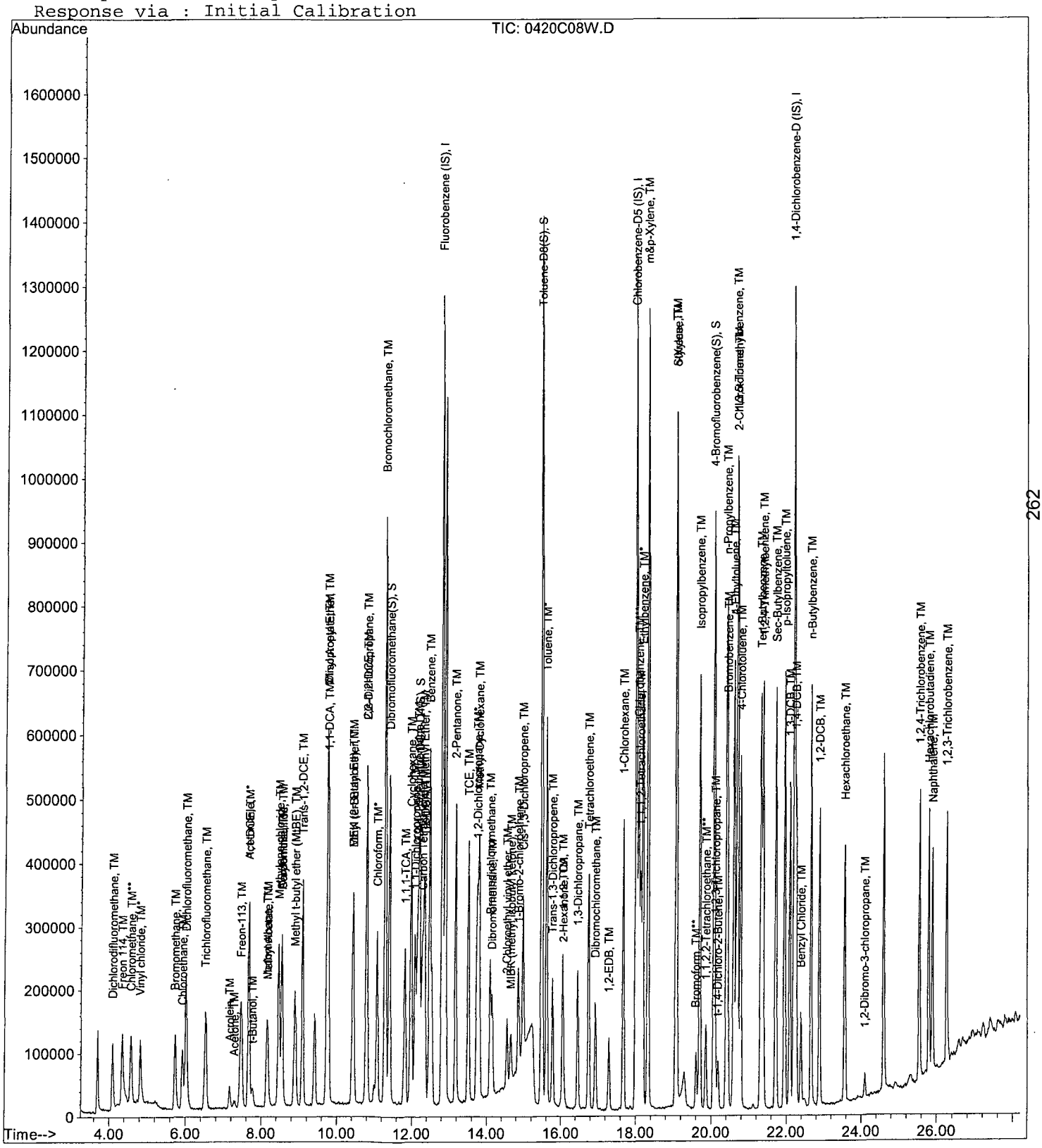
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C08W.D Vial: 1
Acq On : 20 Apr 12 14:15 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C09W.D Vial: 1
Acq On : 20 Apr 12 14:52 Operator: SV
Sample : 20ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	96	639804	25.00000 ppb	0.00
54) Chlorobenzene-D5 (IS)	18.00	117	492352	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	229952	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.40	111	814237	40.89790 ppb	0.00
Spiked Amount 20.866			Recovery	= 196.006%	
37) 1,2-DCA-D4(S)	12.21	65	640125	39.83405 ppb	0.00
Spiked Amount 21.039			Recovery	= 189.334%	
55) Toluene-D8(S)	15.48	98	2477893	38.90188 ppb	0.00
Spiked Amount 25.355			Recovery	= 153.429%	
63) 4-Bromofluorobenzene(S)	20.07	95	973991	38.84256 ppb	0.00
Spiked Amount 27.007			Recovery	= 143.825%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.09	85	404558	20.38633 ppb	97
3) Freon 114	4.34	85	266000	19.30610 ppb	97
4) Chloromethane	4.57	52	158664	20.04719 ppb	94
5) Vinyl chloride	4.81	62	102000	17.42001 ppb	96
6) Bromomethane	5.74	94	93613	21.20110 ppb	99
7) Chloroethane	5.92	64	101864	19.23614 ppb	98
8) Dichlorofluoromethane	6.02	67	867243	19.71741 ppb	99
9) Trichlorofluoromethane	6.53	103	91504	20.54118 ppb	95
10) Acetonitrile	7.65	41	200161	158.13889 ug/l	100
11) Acrolein	7.16	56	78198	160.12339 ppb	98
12) Acetone	7.27	43	53430	20.02788 ppb	98
13) Freon-113	7.45	101	350065	19.88596 ppb	98
14) 1,1-DCE	7.67	96	371445	19.00688 ppb	96
15) t-Butanol	7.77	59	91656	155.11016 ppb	98
16) Methyl Acetate	8.18	43	210568	21.08872 ppb	96
17) Iodomethane	8.15	142	595335	19.50073 ppb	97
18) Acrylonitrile	8.56	53	74625	19.83654 ppb	81
19) Methylene chloride	8.46	84	401359	20.05679 ppb	98
20) Carbon disulfide	8.55	76	360512	19.58195 ppb	99
21) Methyl t-butyl ether (MtBE	8.89	73	757382	20.23805 ppb	96
22) Trans-1,2-DCE	9.08	96	439928	18.63369 ppb	98
23) Diisopropyl Ether	9.74	45	1496245	19.75257 ppb	99
24) 1,1-DCA	9.78	63	805273	19.30604 ppb	99
25) Vinyl Acetate	9.74	43	276992	21.24324 ppb	99
26) Ethyl tert Butyl Ether	10.43	59	1121733	19.98871 ppb	99
27) MEK (2-Butanone)	10.43	43	45817	19.22595 ppb	95
28) Cis-1,2-DCE	10.79	96	470226	20.42371 ppb	98
29) 2,2-Dichloropropane	10.79	77	529826	19.07972 ppb	99
30) Chloroform	11.08	85	444077	19.69809 ppb	93
31) Bromochloromethane	11.30	128	196302	20.45963 ppb	96
33) 1,1,1-TCA	11.82	97	552866	19.91199 ppb	98
34) Cyclohexane	11.97	56	743763	19.32366 ppb	96
35) 1,1-Dichloropropene	12.08	75	536547	19.40388 ppb	98
36) 2,2,4-Trimethylpentane	12.16	57	1130427	17.43674 ppb	98
38) Carbon Tetrachloride	12.27	117	494406	19.88853 ppb	99
39) Tert Amyl Methyl Ether	12.32	73	858101	19.67902 ppb	99
40) 1,2-DCA	12.35	62	368939	19.85242 ppb	97
41) Benzene	12.48	78	1653247	19.35517 ppb	100
42) TCE	13.51	95	407671	20.02592 ppb	97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C09W.D Vial: 1
Acq On : 20 Apr 12 14:52 Operator: SV
Sample : 20ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.17	43	1120248	158.71385	ppb		99
44)	1,2-Dichloropropane	13.74	63	472493	19.68088	ppb		100
45)	Bromodichloromethane	14.09	83	447692	20.65236	ppb		93
46)	Methyl Cyclohexane	13.79	83	563738	19.25831	ppb		100
47)	Dibromomethane	14.14	93	195868	20.76235	ppb		96
48)	2-Chloroethyl vinyl ether	14.55	63	158025	21.18037	ppb		96
49)	1-Bromo-2-chloroethane	14.86	63	450163	20.46628	ppb		95
50)	Cis-1,3-Dichloropropene	14.97	75	605749	19.24351	ppb		98
51)	Toluene	15.60	91	1530897	19.38619	ppb		99
52)	Trans-1,3-Dichloropropene	15.77	75	441430	20.10875	ppb		98
53)	1,1,2-TCA	16.05	83	212252	20.66613	ppb		94
56)	1,2-EDB	17.30	107	255399	20.67431	ppb	#	94
57)	Tetrachloroethene	16.76	164	292948	19.27533	ppb		98
58)	1-Chlorohexane	17.67	91	548955	19.40680	ppb		97
59)	1,1,1,2-Tetrachloroethane	18.13	131	372561	20.13003	ppb		100
60)	m&p-Xylene	18.32	106	1342629	38.66009	ppb		98
61)	o-Xylene	19.07	106	702577	20.04598	ppb		99
62)	Styrene	19.08	104	1116199	20.24211	ppb		99
64)	2-Hexanone	16.08	43	122813	19.62565	ppb		95
65)	1,3-Dichloropropane	16.46	76	460601	20.55321	ppb		97
66)	Dibromochloromethane	16.94	129	324963	21.05278	ppb		100
67)	Chlorobenzene	18.07	112	1076448	19.69972	ppb		98
68)	Ethylbenzene	18.19	91	1677658	19.59137	ppb		99
69)	Bromoform	19.61	173	140844	18.27050	ppb		99
71)	MIBK (methyl isobutyl keto	14.64	43	200128	18.30013	ppb		98
72)	Isopropylbenzene	19.69	105	1653658	19.59701	ppb		100
73)	1,1,2,2-Tetrachloroethane	19.86	83	246624	20.59220	ppb		96
74)	1,2,3-Trichloropropane	20.12	110	22688	18.81951	ppb		89
75)	t-1,4-Dichloro-2-Butene	20.19	53	56989	20.75618	ppb		93
76)	Bromobenzene	20.44	156	382886	19.77276	ppb		98
77)	n-Propylbenzene	20.40	91	1923625	19.15472	ppb		100
78)	4-Ethyltoluene	20.60	105	1763403	19.77858	ppb		99
79)	2-Chlorotoluene	20.70	91	1225358	18.77017	ppb		99
80)	1,3,5-Trimethylbenzene	20.68	105	1286747	19.17541	ppb		96
81)	4-Chlorotoluene	20.78	91	1112209	19.60426	ppb		99
82)	Tert-Butylbenzene	21.32	119	1444429	19.26771	ppb		98
83)	1,2,4-Trimethylbenzene	21.38	105	1332113	19.11631	ppb		98
84)	Sec-Butylbenzene	21.72	105	1819966	19.54496	ppb		98
85)	p-Isopropyltoluene	21.95	119	1512884	19.36603	ppb		98
86)	Benzyl Chloride	22.39	91	391355	21.05875	ppb		97
87)	1,3-DCB	22.08	146	805024	19.70222	ppb		98
88)	1,4-DCB	22.26	146	767233	19.28630	ppb		98
89)	Hexachloroethane	23.56	117	351470	20.61106	ppb		95
90)	n-Butylbenzene	22.66	91	1269004	19.31137	ppb		98
91)	1,2-DCB	22.89	146	714852	19.94565	ppb		96
92)	1,2-Dibromo-3-chloropropan	24.11	155	34131	20.56964	ppb		92
93)	1,2,4-Trichlorobenzene	25.55	180	192453	21.49921	ppb		96
94)	Hexachlorobutadiene	25.80	223	179070	19.12024	ppb		96
95)	Naphthalene	25.90	128	878428	19.53933	ppb		99
96)	1,2,3-Trichlorobenzene	26.26	180	162165	20.54849	ppb		97

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

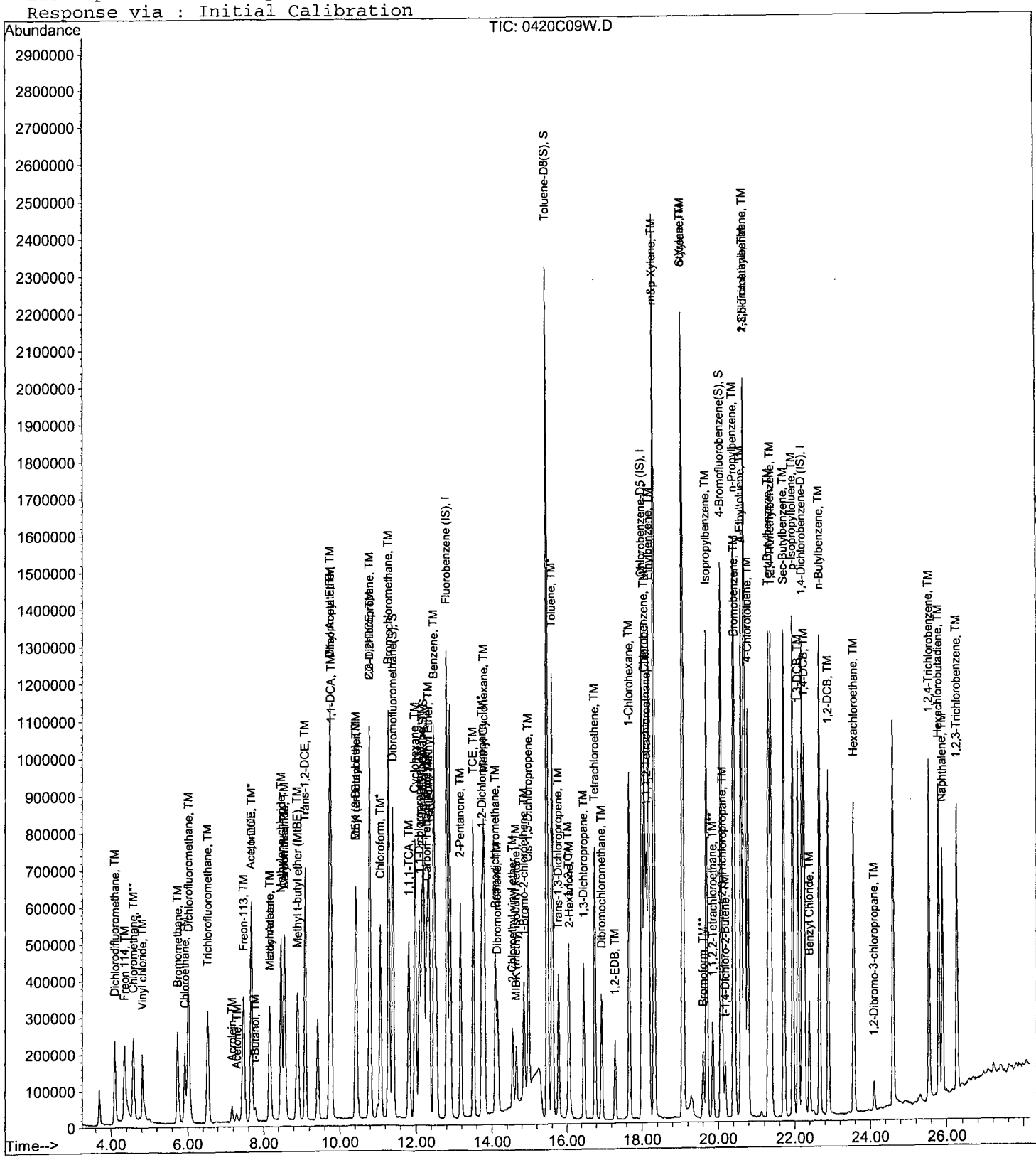
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C09W.D
Acq On : 20 Apr 12 14:52
Sample : 20ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:20 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C10W.D Vial: 1
Acq On : 20 Apr 12 15:29 Operator: SV
Sample : 40ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.82	96	658512	25.00000 ppb	0.00
54) Chlorobenzene-D5 (IS)	18.01	117	490560	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	237056	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.41	111	1573860	76.80677 ppb	0.00
Spiked Amount 20.866			Recovery	= 368.102%	
37) 1,2-DCA-D4(S)	12.21	65	1206389	72.93908 ppb	0.00
Spiked Amount 21.039			Recovery	= 346.685%	
55) Toluene-D8(S)	15.47	98	4843165	76.31342 ppb	0.00
Spiked Amount 25.355			Recovery	= 300.977%	
63) 4-Bromofluorobenzene(S)	20.08	95	1900358	76.06272 ppb	0.00
Spiked Amount 27.007			Recovery	= 281.641%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.09	85	822931	40.29071 ppb	98
3) Freon 114	4.35	85	552706	38.97539 ppb	94
4) Chloromethane	4.58	52	323482	40.05393 ppb	94
5) Vinyl chloride	4.81	62	210880	34.99184 ppb	95
6) Bromomethane	5.74	94	179034	39.39499 ppb	97
7) Chloroethane	5.92	64	189440	34.75780 ppb	100
8) Dichlorofluoromethane	6.01	67	1725455	38.11501 ppb	99
9) Trichlorofluoromethane	6.53	103	158720	34.61786 ppb	100
10) Acetonitrile	7.65	41	211186	162.10918 ug/l	100
11) Acrolein	7.16	56	91826	182.68717 ppb	98
12) Acetone	7.28	43	103435	37.99951 ppb	98
13) Freon-113	7.46	101	701710	38.72922 ppb	97
14) 1,1-DCE	7.67	96	707049	35.15192 ppb	96
15) t-Butanol	7.76	59	103179	169.65002 ppb	99
16) Methyl Acetate	8.19	43	401825	39.63514 ppb	100
17) Iodomethane	8.16	142	1238391	38.34994 ppb	96
18) Acrylonitrile	8.56	53	146291	37.78178 ppb	94
19) Methylene chloride	8.47	84	792974	38.85321 ppb	99
20) Carbon disulfide	8.55	76	715584	37.76419 ppb	100
21) Methyl t-butyl ether (MtBE	8.89	73	1467585	38.10134 ppb	98
22) Trans-1,2-DCE	9.09	96	842298	34.66301 ppb	99
23) Diisopropyl Ether	9.74	45	2921372	37.47064 ppb	97
24) 1,1-DCA	9.77	63	1572526	36.62952 ppb	99
25) Vinyl Acetate	9.74	43	546552	40.72567 ppb	100
26) Ethyl tert Butyl Ether	10.43	59	2217834	38.39792 ppb	99
27) MEK (2-Butanone)	10.42	43	90708	36.98197 ppb	96
28) Cis-1,2-DCE	10.80	96	905990	38.51512 ppb	97
29) 2,2-Dichloropropane	10.79	77	1040173	36.39381 ppb	98
30) Chloroform	11.08	85	866951	37.36316 ppb	93
31) Bromochloromethane	11.30	128	376373	38.11315 ppb	98
33) 1,1,1-TCA	11.81	97	1081191	37.83385 ppb	98
34) Cyclohexane	11.98	56	1458598	36.81915 ppb	99
35) 1,1-Dichloropropene	12.08	75	1034323	36.34296 ppb	99
36) 2,2,4-Trimethylpentane	12.16	57	2316100	34.71070 ppb	99
38) Carbon Tetrachloride	12.28	117	966766	37.78535 ppb	96
39) Tert Amyl Methyl Ether	12.33	73	1697486	37.82288 ppb	99
40) 1,2-DCA	12.36	62	717192	37.49536 ppb	96
41) Benzene	12.48	78	3217295	36.59597 ppb	99
42) TCE	13.52	95	788456	37.63079 ppb	98

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C10W.D Vial: 1
Acq On : 20 Apr 12 15:29 Operator: SV
Sample : 40ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.18	43	1298668	178.76482	ppb		99
44)	1,2-Dichloropropane	13.74	63	896797	36.29330	ppb		99
45)	Bromodichloromethane	14.09	83	902915	40.46882	ppb		95
46)	Methyl Cyclohexane	13.80	83	1145464	38.01942	ppb		98
47)	Dibromomethane	14.15	93	374391	38.55864	ppb		97
48)	2-Chloroethyl vinyl ether	14.55	63	306972	39.97512	ppb		97
49)	1-Bromo-2-chloroethane	14.85	63	874594	38.63304	ppb		98
50)	Cis-1,3-Dichloropropene	14.98	75	1163130	35.90072	ppb		97
51)	Toluene	15.61	91	2998955	36.89773	ppb		100
52)	Trans-1,3-Dichloropropene	15.77	75	866750	38.36192	ppb		96
53)	1,1,2-TCA	16.05	83	414233	39.18639	ppb		95
56)	1,2-EDB	17.30	107	510844	41.50340	ppb	#	96
57)	Tetrachloroethene	16.76	164	582475	38.46556	ppb		97
58)	1-Chlorohexane	17.68	91	1112323	39.46678	ppb		93
59)	1,1,1,2-Tetrachloroethane	18.13	131	757959	41.10327	ppb		99
60)	m&p-Xylene	18.32	106	2699907	78.02598	ppb		97
61)	o-Xylene	19.07	106	1395090	39.95022	ppb		98
62)	Styrene	19.09	104	2247259	40.90259	ppb		99
64)	2-Hexanone	16.08	43	259693	41.53423	ppb		97
65)	1,3-Dichloropropane	16.47	76	909556	40.73501	ppb		98
66)	Dibromochloromethane	16.94	129	655229	42.60418	ppb		99
67)	Chlorobenzene	18.07	112	2167044	39.80323	ppb		97
68)	Ethylbenzene	18.18	91	3323396	38.95176	ppb		99
69)	Bromoform	19.60	173	302795	37.58678	ppb		94
71)	MIBK (methyl isobutyl keto	14.65	43	405031	35.92698	ppb		96
72)	Isopropylbenzene	19.70	105	3292934	37.85414	ppb		98
73)	1,1,2,2-Tetrachloroethane	19.86	83	509173	41.24003	ppb		95
74)	1,2,3-Trichloropropane	20.11	110	47320	38.07527	ppb		89
75)	t-1,4-Dichloro-2-Butene	20.18	53	120435	42.54958	ppb		92
76)	Bromobenzene	20.44	156	772142	38.59242	ppb		98
77)	n-Propylbenzene	20.40	91	3886679	37.54225	ppb		99
78)	4-Ethyltoluene	20.61	105	3541370	38.53019	ppb		98
79)	2-Chlorotoluene	20.70	91	2506490	37.24409	ppb		98
80)	1,3,5-Trimethylbenzene	20.68	105	2544692	36.78519	ppb		97
81)	4-Chlorotoluene	20.78	91	2256012	38.57374	ppb		99
82)	Tert-Butylbenzene	21.31	119	2933853	37.96283	ppb		98
83)	1,2,4-Trimethylbenzene	21.38	105	2748536	38.26050	ppb		100
84)	Sec-Butylbenzene	21.72	105	3620692	37.71806	ppb		100
85)	p-Isopropyltoluene	21.95	119	3033973	37.67323	ppb		98
86)	Benzyl Chloride	22.39	91	799900	41.75260	ppb		97
87)	1,3-DCB	22.09	146	1597302	37.92099	ppb		98
88)	1,4-DCB	22.26	146	1567805	38.22962	ppb		98
89)	Hexachloroethane	23.56	117	730088	41.53111	ppb		96
90)	n-Butylbenzene	22.66	91	2554267	37.70531	ppb		99
91)	1,2-DCB	22.89	146	1438257	38.92734	ppb		98
92)	1,2-Dibromo-3-chloropropan	24.10	155	70219	41.05051	ppb		91
93)	1,2,4-Trichlorobenzene	25.55	180	376596	40.80936	ppb		93
94)	Hexachlorobutadiene	25.80	223	362444	37.54030	ppb		97
95)	Naphthalene	25.90	128	1795556	38.74260	ppb		97
96)	1,2,3-Trichlorobenzene	26.26	180	316118	38.85602	ppb		98

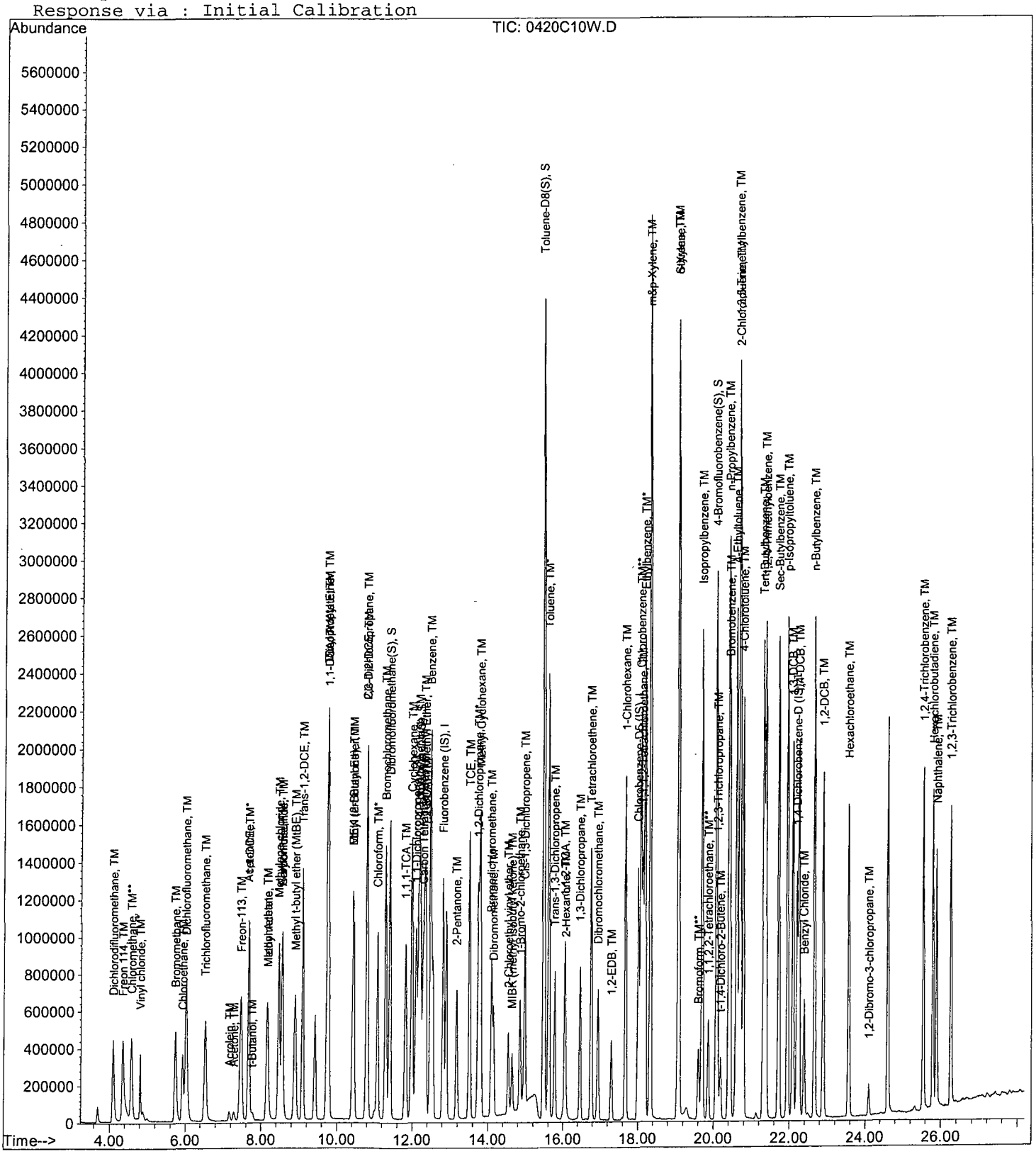
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C10W.D Vial: 1
Acq On : 20 Apr 12 15:29 Operator: SV
Sample : 40ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C11W.D , Vial: 1
Acq On : 20 Apr 12 16:06 Operator: SV
Sample : 100ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene (IS)	12.82	96	617481	25.00000	ppb		0.00
54) Chlorobenzene-D5 (IS)	18.01	117	476416	25.00000	ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	22.20	152	222208	25.00000	ppb		0.00
System Monitoring Compounds							
32) Dibromofluoromethane(S)	11.40	111	1965328	102.28420	ppb		0.00
Spiked Amount 20.866			Recovery = 490.202%				
37) 1,2-DCA-D4(S)	12.21	65	1511074	97.43135	ppb		0.00
Spiked Amount 21.039			Recovery = 463.097%				
55) Toluene-D8(S)	15.48	98	6309115	102.36368	ppb		0.00
Spiked Amount 25.355			Recovery = 403.722%				
63) 4-Bromofluorobenzene(S)	20.07	95	2386523	98.35759	ppb		0.00
Spiked Amount 27.007			Recovery = 364.193%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	4.09	85	2081204	108.66663	ppb		97
3) Freon 114	4.35	85	1437919	108.13612	ppb		96
4) Chloromethane	4.58	52	1070639	142.26177	ppb		98
5) Vinyl chloride	4.81	62	504064	89.19842	ppb		99
6) Bromomethane	5.74	94	455565	106.90449	ppb		98
7) Chloroethane	5.93	64	456704	89.36253	ppb		99
8) Dichlorofluoromethane	6.02	67	4229267	99.63171	ppb		99
9) Trichlorofluoromethane	6.54	103	347392	80.80318	ppb		97
10) Acetonitrile	7.65	41	244766	200.37045	ug/l		100
11) Acrolein	7.16	56	100697	213.64809	ppb		94
12) Acetone	7.27	43	255658	100.77472	ppb		96
13) Freon-113	7.47	101	1760948	103.64961	ppb		97
14) 1,1-DCE	7.68	96	1796821	95.26744	ppb		98
15) t-Butanol	7.77	59	115332	202.23323	ppb		98
16) Methyl Acetate	8.18	43	941242	99.94978	ppb		100
17) Iodomethane	8.16	142	3099757	100.63375	ppb		97
18) Acrylonitrile	8.56	53	358508	98.74242	ppb		99
19) Methylene chloride	8.47	84	1909587	100.38177	ppb		99
20) Carbon disulfide	8.56	76	1801728	101.40254	ppb		99
21) Methyl t-butyl ether (MtBE	8.89	73	3388799	93.82592	ppb		97
22) Trans-1,2-DCE	9.09	96	2075520	91.08933	ppb		93
23) Diisopropyl Ether	9.74	45	6826443	93.37675	ppb		99
24) 1,1-DCA	9.78	63	3806062	94.54733	ppb		99
25) Vinyl Acetate	9.75	43	1229655	97.71476	ppb		98
26) Ethyl tert Butyl Ether	10.44	59	5148150	95.05389	ppb		97
27) MEK (2-Butanone)	10.42	43	202737	88.14903	ppb	#	90
28) Cis-1,2-DCE	10.80	96	2204443	100.45832	ppb		91
29) 2,2-Dichloropropane	10.79	77	2534139	94.55673	ppb		99
30) Chloroform	11.08	85	2090129	96.06434	ppb		93
31) Bromochloromethane	11.31	128	900742	97.27401	ppb		97
33) 1,1,1-TCA	11.82	97	2605436	97.22963	ppb		97
34) Cyclohexane	11.98	56	3717467	100.07494	ppb		99
35) 1,1-Dichloropropene	12.09	75	2593351	97.17744	ppb		98
36) 2,2,4-Trimethylpentane	12.16	57	6498799	103.86741	ppb		98
38) Carbon Tetrachloride	12.28	117	2448700	102.06523	ppb		99
39) Tert Amyl Methyl Ether	12.33	73	4060900	96.49633	ppb		99
40) 1,2-DCA	12.36	62	1695851	94.55183	ppb		97
41) Benzene	12.48	78	8078080	97.99201	ppb		99
42) TCE	13.51	95	1938552	98.66962	ppb		99

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C11W.D Vial: 1
Acq On : 20 Apr 12 16:06 Operator: SV
Sample : 100ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43) 2-Pentanone	13.18	43	1436573	210.88792 ppb	98
44) 1,2-Dichloropropane	13.74	63	2184075	94.26271 ppb	100
45) Bromodichloromethane	14.09	83	2201134	105.21077 ppb	93
46) Methyl Cyclohexane	13.79	83	3064474	108.47262 ppb	95
47) Dibromomethane	14.15	93	909403	99.88327 ppb	97
48) 2-Chloroethyl vinyl ether	14.55	63	762643	105.91377 ppb	96
49) 1-Bromo-2-chloroethane	14.86	63	2120435	99.88895 ppb	97
50) Cis-1,3-Dichloropropene	14.98	75	2886591	95.01676 ppb	97
51) Toluene	15.61	91	7533952	98.85365 ppb	100
52) Trans-1,3-Dichloropropene	15.78	75	2163202	102.10421 ppb	98
53) 1,1,2-TCA	16.05	83	989787	99.85559 ppb	98
56) 1,2-EDB	17.30	107	1267714	106.05288 ppb	95
57) Tetrachloroethene	16.76	164	1459688	99.25689 ppb	97
58) 1-Chlorohexane	17.67	91	2817520	102.93749 ppb	94
59) 1,1,1,2-Tetrachloroethane	18.13	131	1901728	106.19031 ppb	98
60) m&p-Xylene	18.33	106	6822536	203.02151 ppb	95
61) o-Xylene	19.08	106	3398047	100.19641 ppb	95
62) Styrene	19.09	104	5468091	102.48003 ppb	97
64) 2-Hexanone	16.08	43	604920	99.47542 ppb	99
65) 1,3-Dichloropropane	16.46	76	2181072	100.58060 ppb	99
66) Dibromochloromethane	16.95	129	1632073	109.27088 ppb	99
67) Chlorobenzene	18.07	112	5296337	100.16870 ppb	99
68) Ethylbenzene	18.19	91	8366977	100.97627 ppb	97
69) Bromoform	19.61	173	814347	101.28277 ppb	94
71) MIBK (methyl isobutyl keto	14.64	43	962393	91.07018 ppb	98
72) Isopropylbenzene	19.70	105	8063808	98.89215 ppb	96
73) 1,1,2,2-Tetrachloroethane	19.86	83	1209528	104.51072 ppb	99
74) 1,2,3-Trichloropropane	20.12	110	120440	103.38566 ppb	90
75) t-1,4-Dichloro-2-Butene	20.19	53	300714	113.34112 ppb	94
76) Bromobenzene	20.44	156	1888970	100.57458 ppb	98
77) n-Propylbenzene	20.41	91	9491148	97.80288 ppb	97
78) 4-Ethyltoluene	20.60	105	8636266	100.24139 ppb	97
79) 2-Chlorotoluene	20.70	91	5970325	94.64129 ppb	98
80) 1,3,5-Trimethylbenzene	20.68	105	6444944	99.39126 ppb	99
81) 4-Chlorotoluene	20.78	91	5611850	102.36408 ppb	100
82) Tert-Butylbenzene	21.32	119	7294989	100.70154 ppb	99
83) 1,2,4-Trimethylbenzene	21.38	105	6755045	100.31564 ppb	99
84) Sec-Butylbenzene	21.72	105	9055783	100.64102 ppb	100
85) p-Isopropyltoluene	21.95	119	7716780	102.22298 ppb	97
86) Benzyl Chloride	22.39	91	2058873	114.64858 ppb	95
87) 1,3-DCB	22.09	146	3988522	101.01732 ppb	98
88) 1,4-DCB	22.26	146	3804821	98.97682 ppb	96
89) Hexachloroethane	23.56	117	1860014	112.87708 ppb	95
90) n-Butylbenzene	22.66	91	6278188	98.86938 ppb	97
91) 1,2-DCB	22.89	146	3476885	100.39217 ppb	96
92) 1,2-Dibromo-3-chloropropan	24.11	155	181461	113.17188 ppb	87
93) 1,2,4-Trichlorobenzene	25.55	180	909471	105.13910 ppb	95
94) Hexachlorobutadiene	25.80	223	907274	100.25050 ppb	96
95) Naphthalene	25.90	128	4160690	95.77374 ppb	99
96) 1,2,3-Trichlorobenzene	26.26	180	785929	103.05847 ppb	99

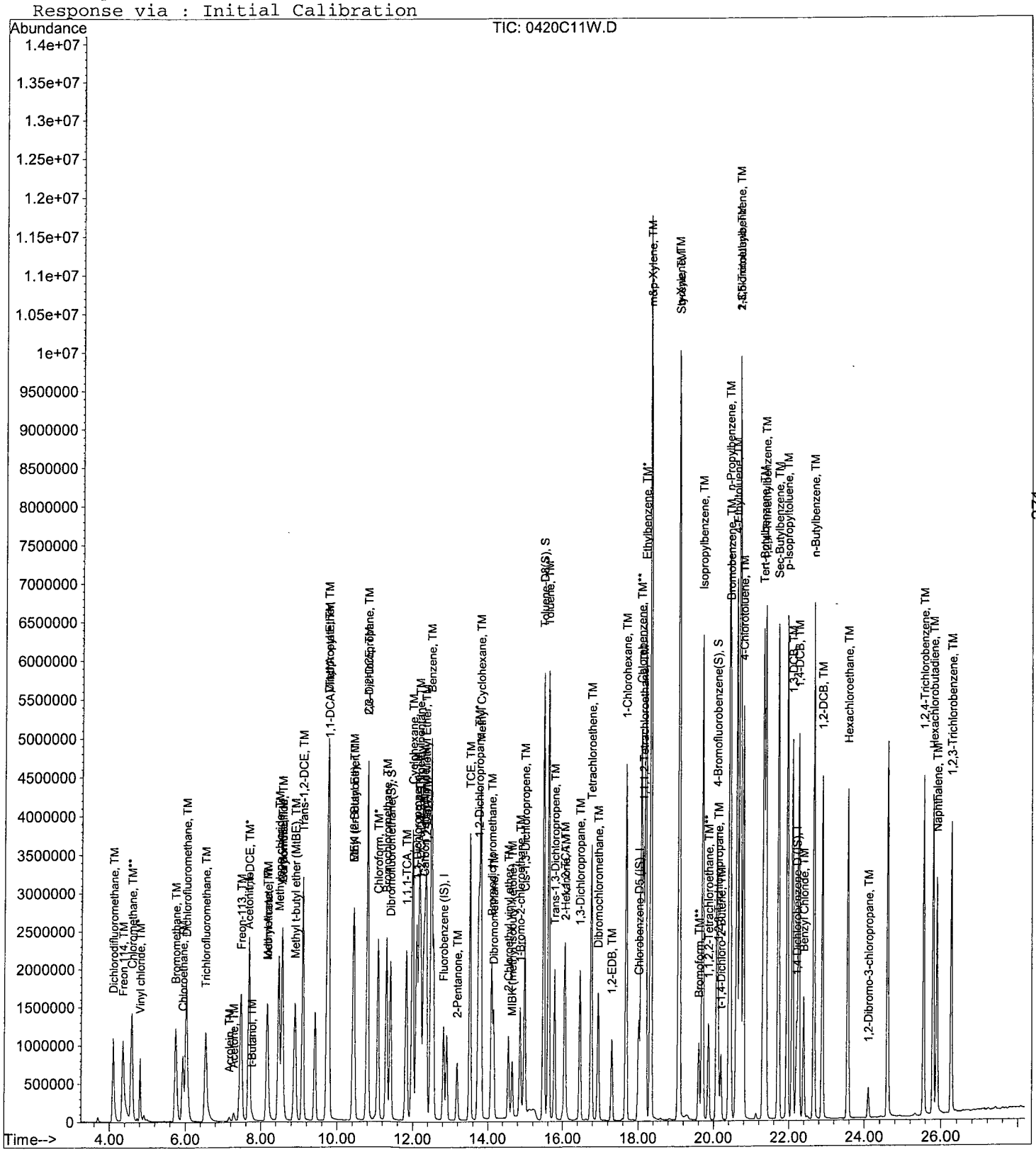
(#) = qualifier out of range (m) = manual integration

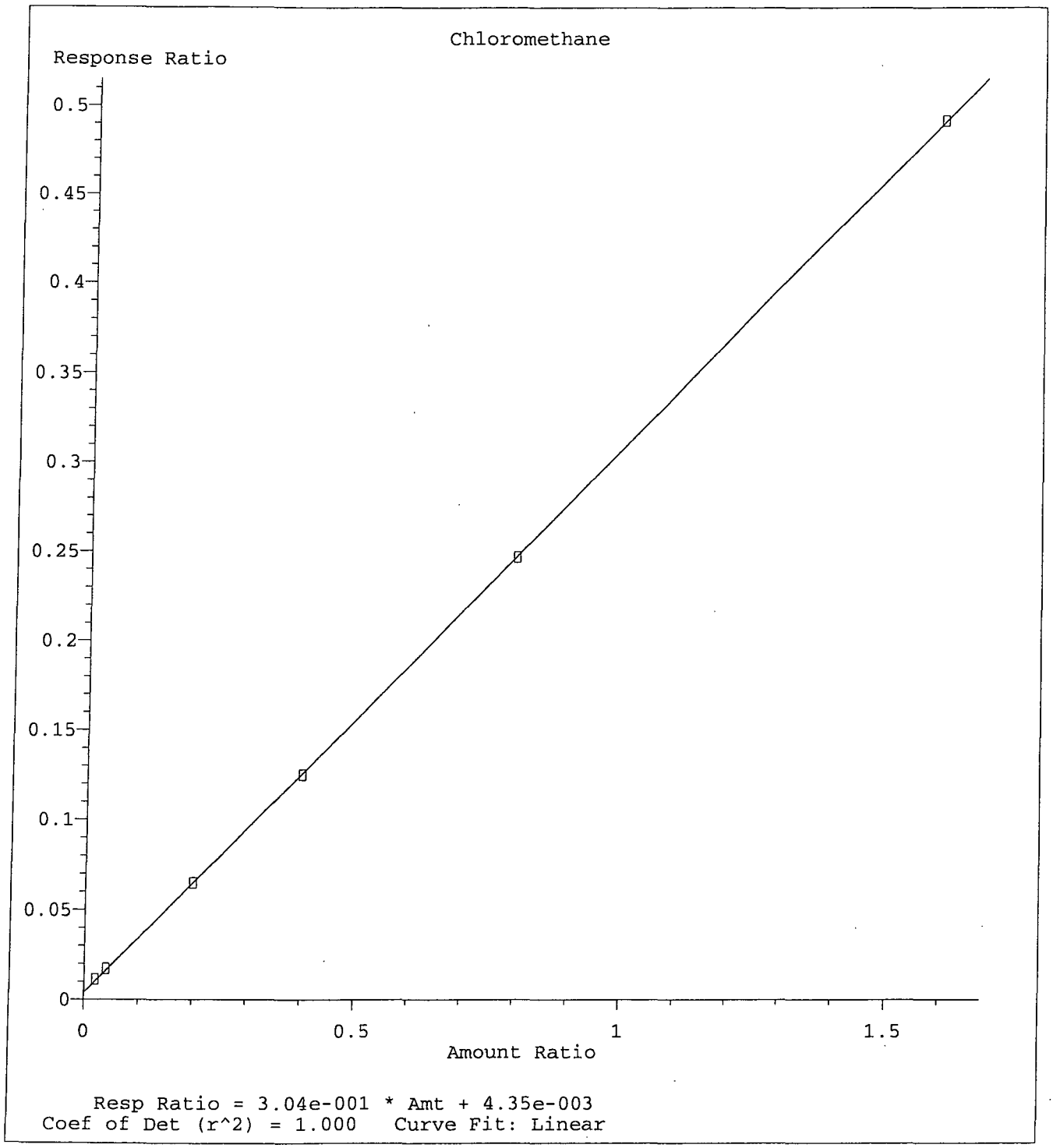
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C11W.D Vial: 1
Acq On : 20 Apr 12 16:06 Operator: SV
Sample : 100ug/L Vol Std 04-20-12 Inst : Chico
Misc : Water 10mL w/IS:04-10-12 Multiplr: 1.00

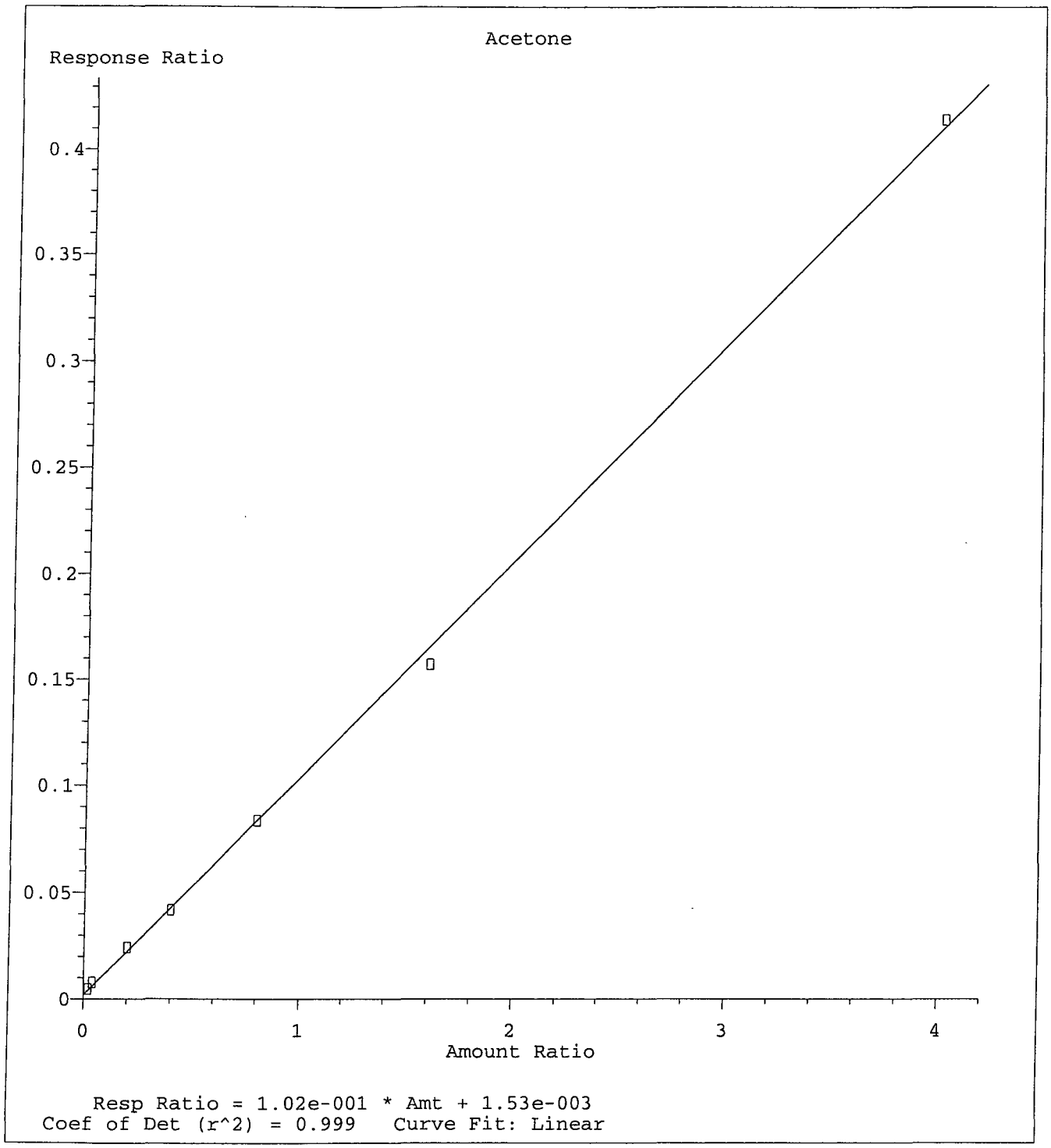
Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration

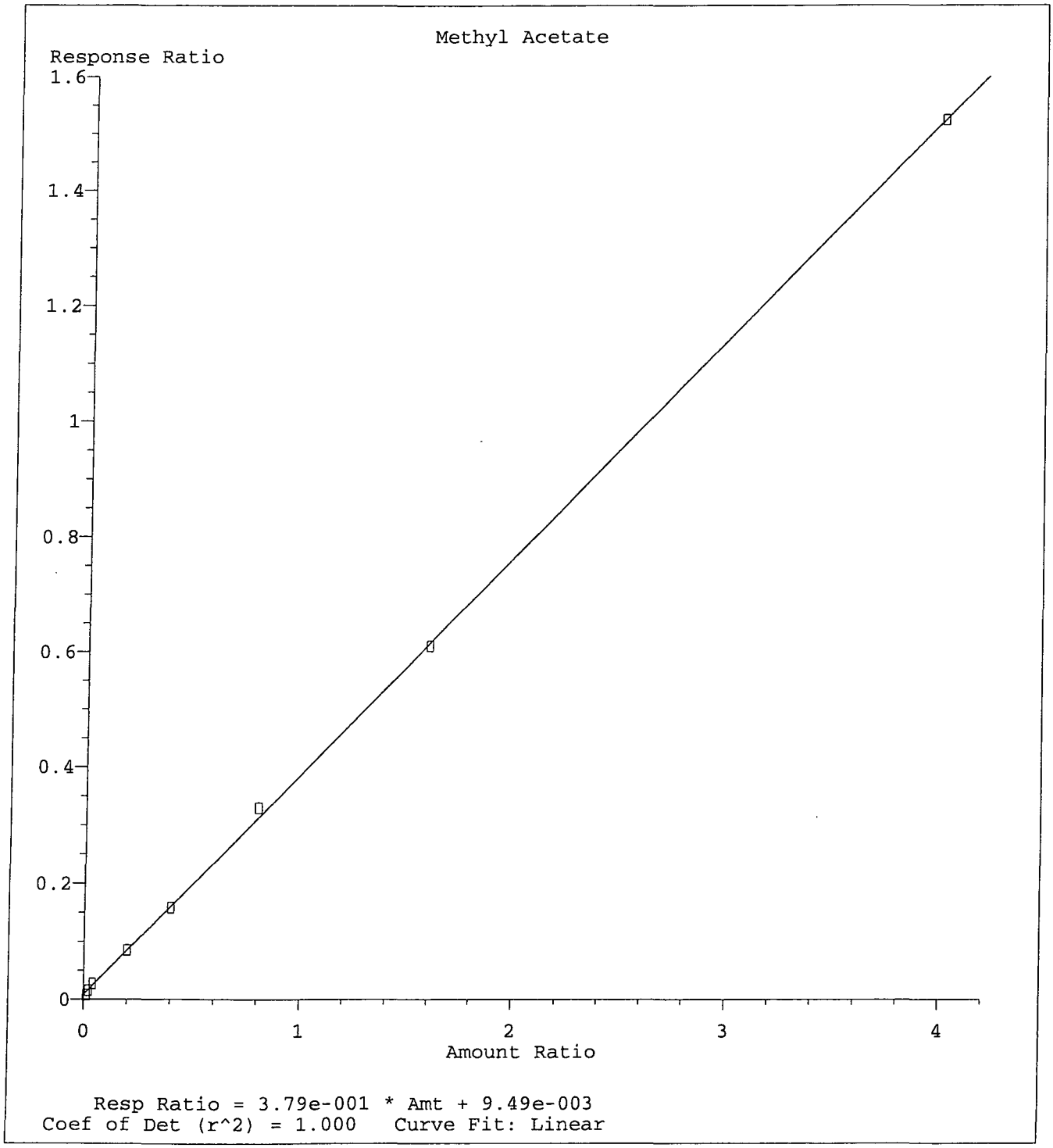




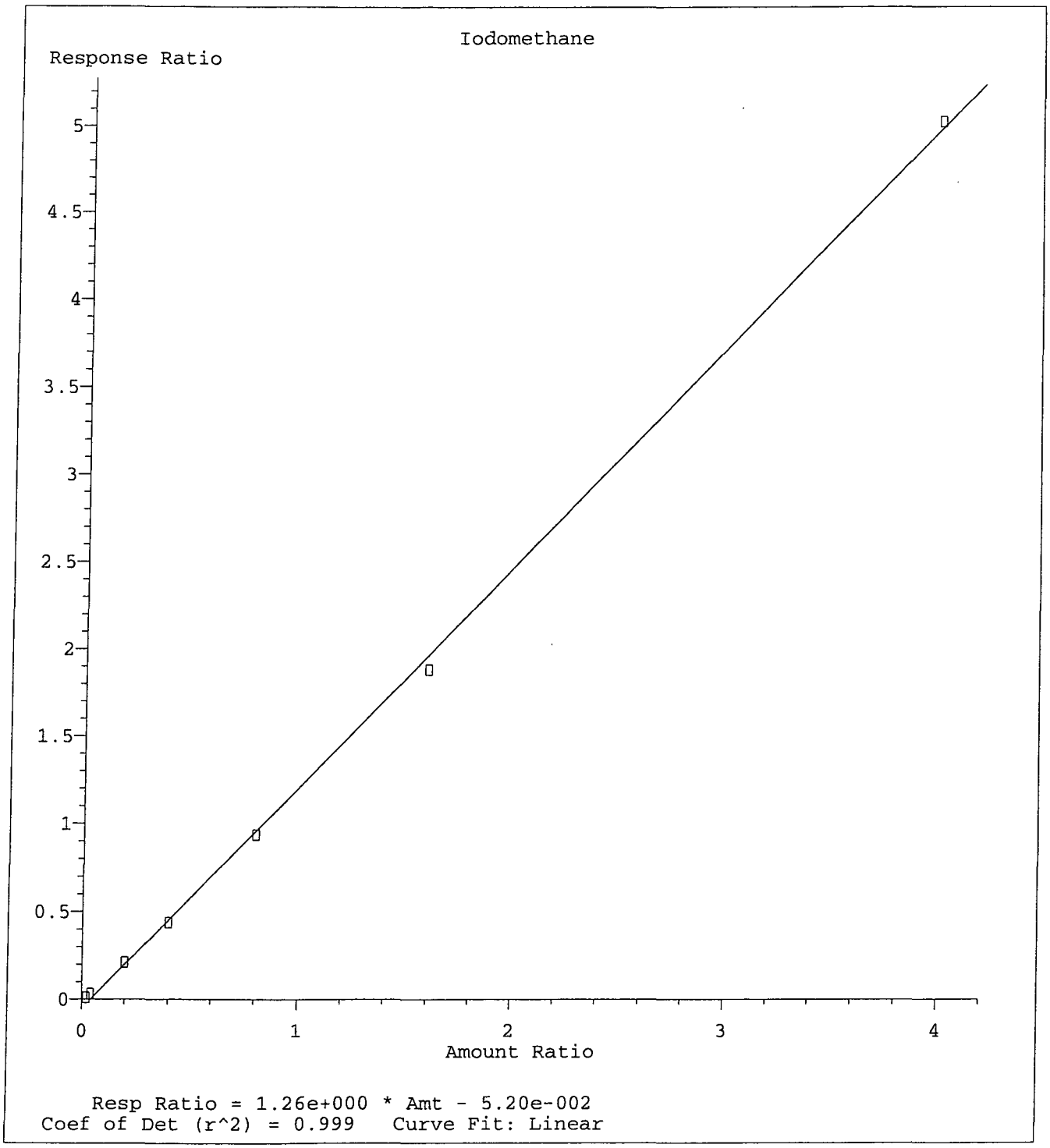
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



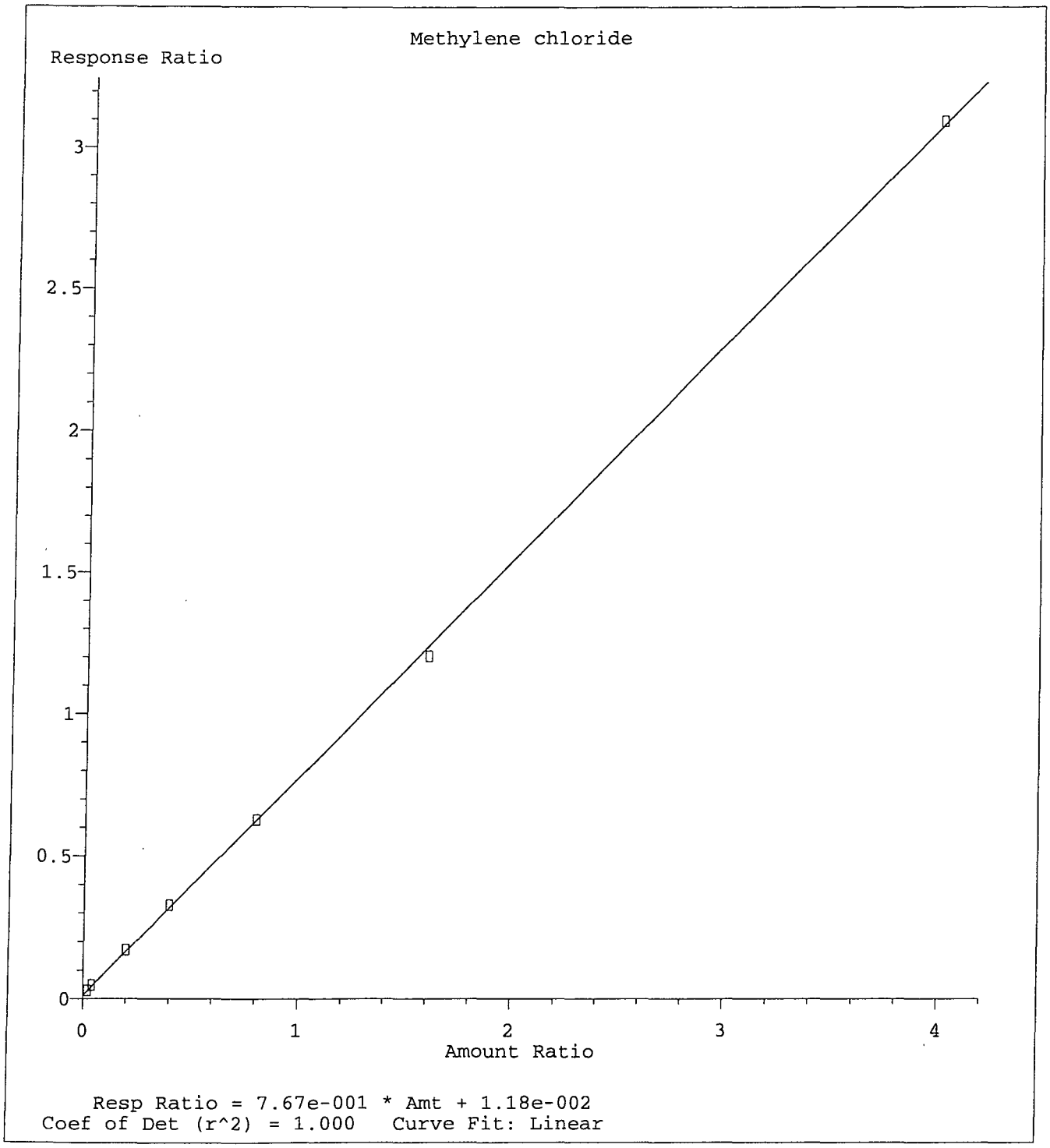
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



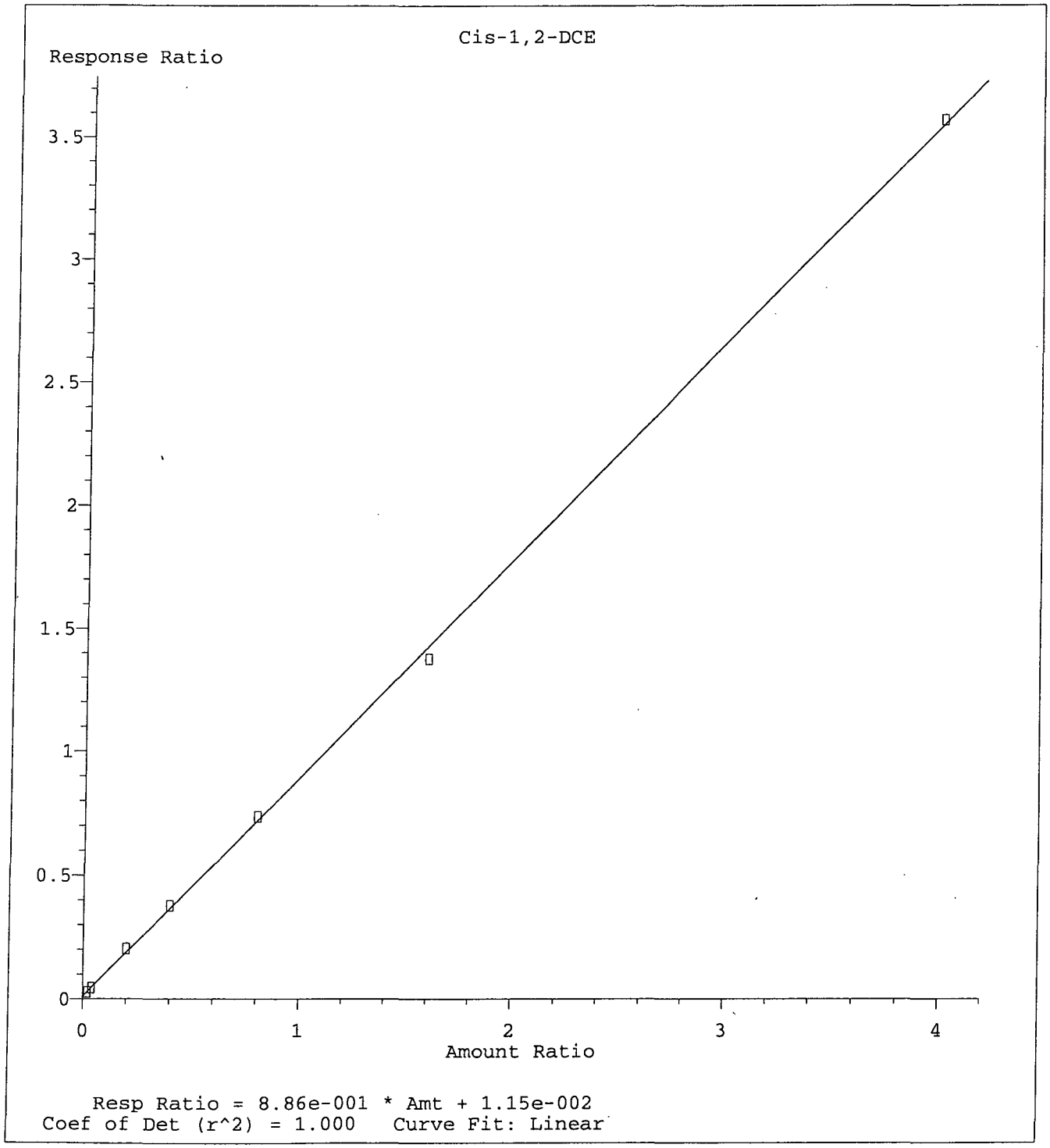
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



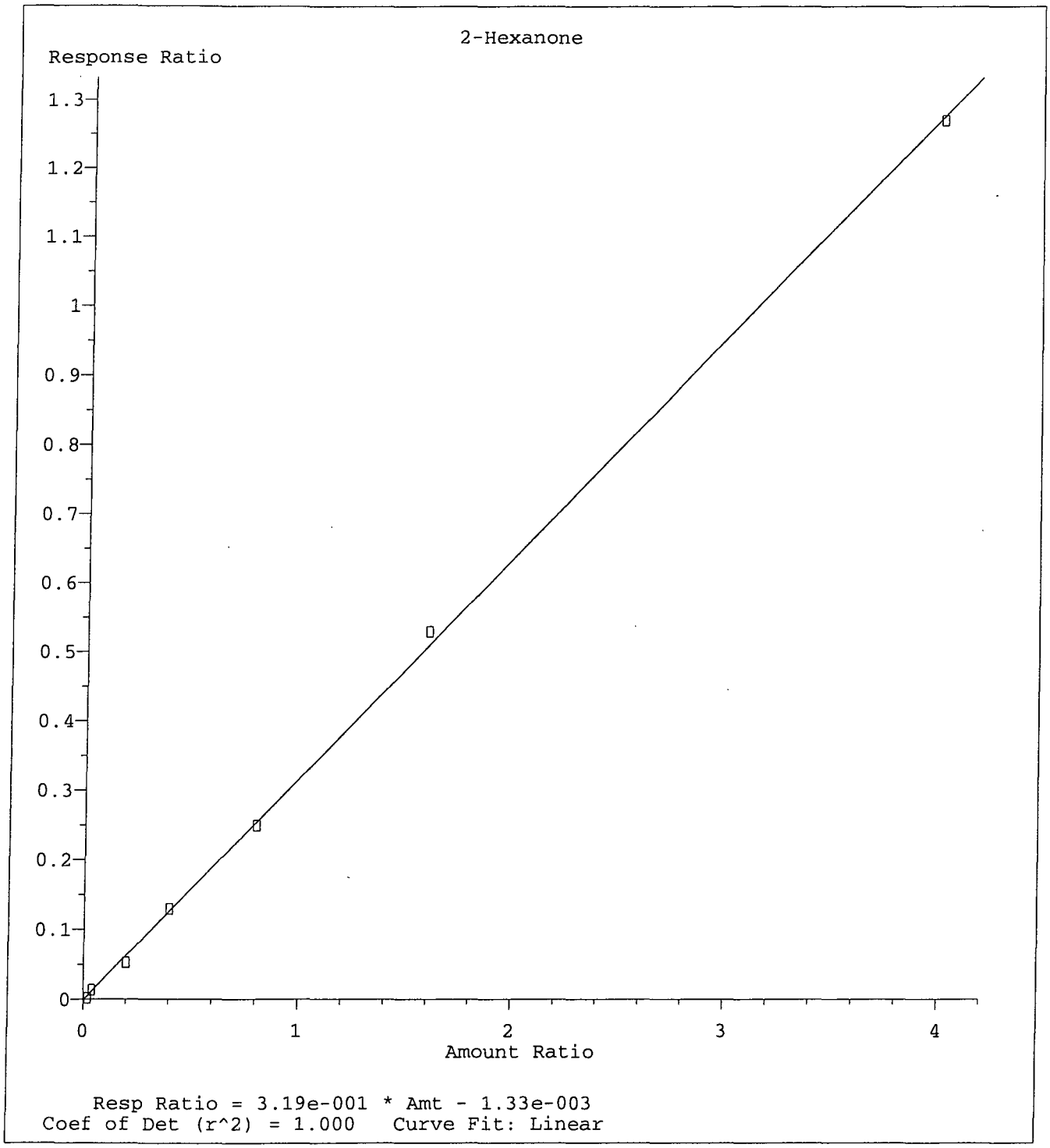
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



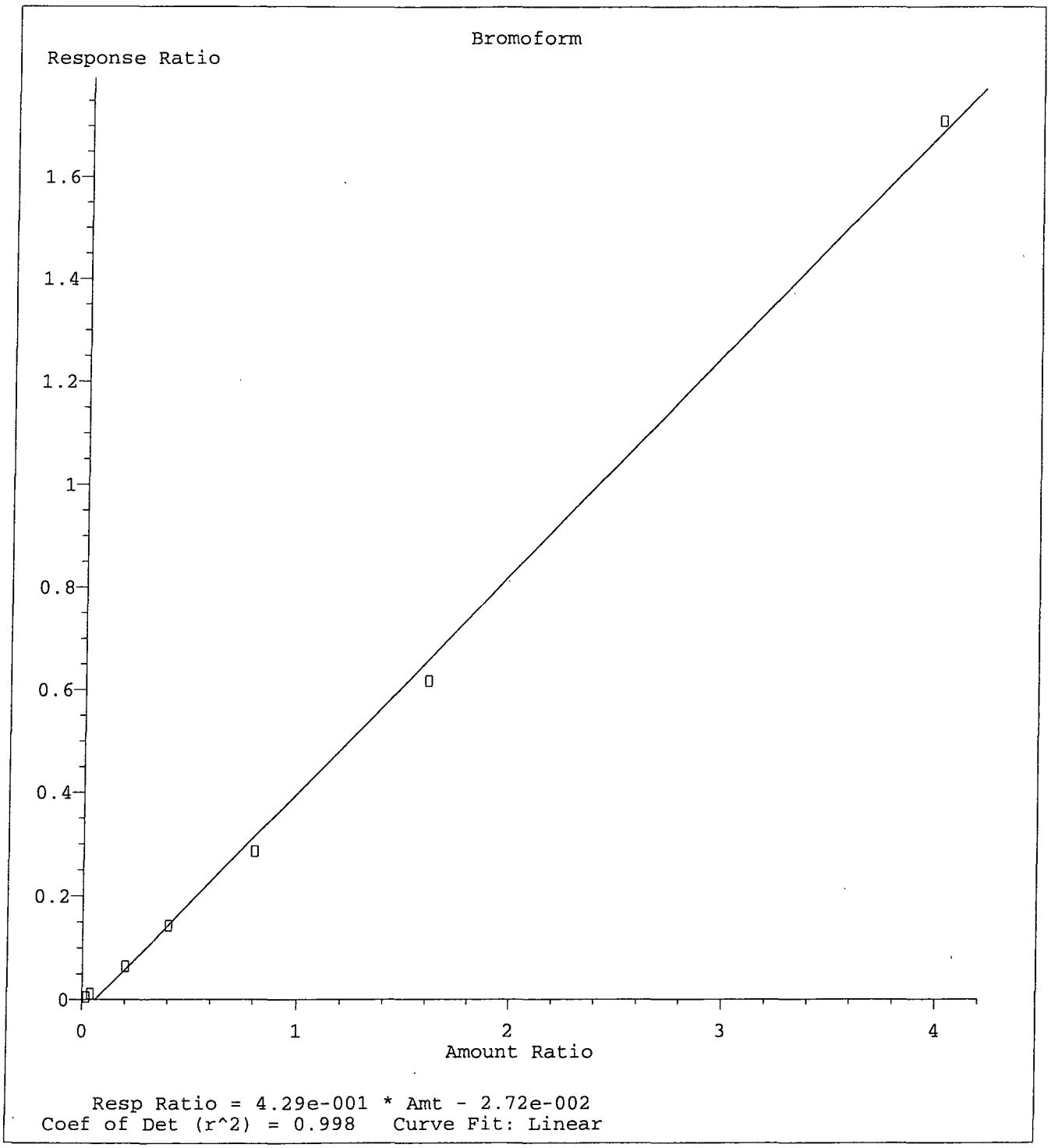
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



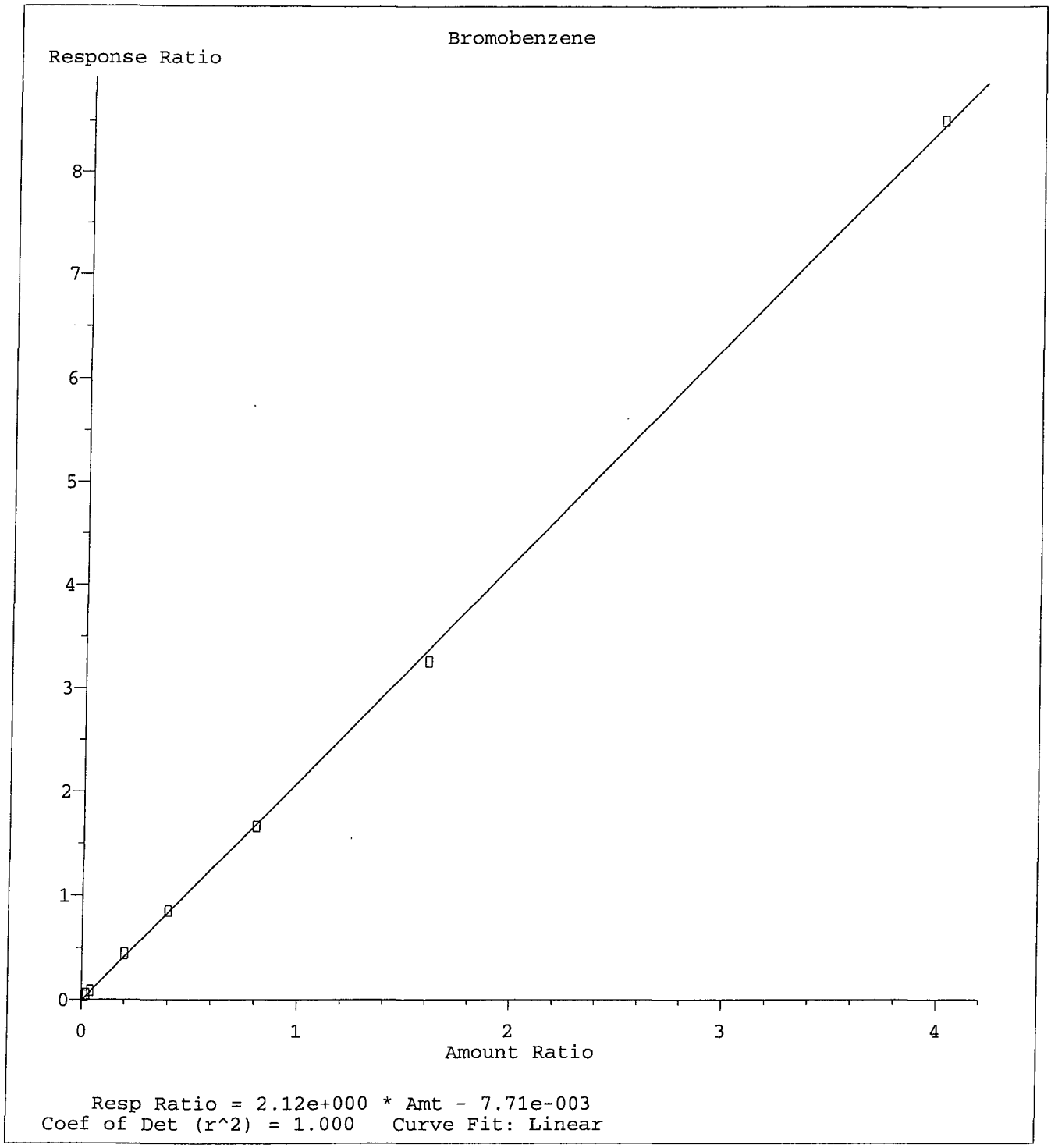
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/20/12
Instrument: Chico
Initial Cal. Date: 04/20/12
Data File: 0420C16W.D

		Compound	MEAN	CCRF	%D		%Drift
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.7754	0.7997	3.1	TM	
3	TM	Freon 114	0.5384	0.5802	7.8	TM	
4	TM**L	Chloromethane	0.3736	0.3174	15	TM**L	0.93
5	TM*	Vinyl chloride	0.2288	0.2074	9.4	TM*	
6	TM	Bromomethane	0.1725	0.1662	3.7	TM	
7	TM	Chloroethane	0.2069	0.2116	2.3	TM	
8	TM	Dichlorofluoromethane	1.719	1.827	6.3	TM	
9	TM	Trichlorofluoromethane	0.1741	0.1905	9.4	TM	
10		Acetonitrile	0.0495	0.0505	2.2		
11	TM	Acrolein	0.0191	0.0203	6.2	TM	
12	TML	Acetone	0.1375	0.1075	22	TML	1.3
13	TM	Freon-113	0.6879	0.7502	9.1	TM	
14	TM*	1,1-DCE	0.7636	0.7632	0.05	TM*	
15	TM	t-Butanol	0.0231	0.0220	4.7	TM	
16	TML	Methyl Acetate	0.5035	0.3993	21	TML	0.89
17	TML	Iodomethane	1.008	1.212	20	TML	6.6
18	TM	Acrylonitrile	0.1470	0.1437	2.2	TM	
19	TML	Methylene chloride	0.9456	0.8396	11	TML	5.6
20	TM	Carbon disulfide	0.7194	0.7327	1.8	TM	
21	TM	Methyl t-butyl ether (MtBE)	1.462	1.476	0.92	TM	
22	TM	Trans-1,2-DCE	0.9225	0.8940	3.1	TM	
23	TM	Diisopropyl Ether	2.960	3.057	3.3	TM	
24	TM**	1,1-DCA	1.630	1.664	2.1	TM**	
25	TM	Vinyl Acetate	0.5095	0.5351	5.0	TM	
26	TM	Ethyl tert Butyl Ether	2.193	2.270	3.5	TM	
27	TM	MEK (2-Butanone)	0.0931	0.0938	0.77	TM	
28	TML	Cis-1,2-DCE	1.018	0.9625	5.4	TML	5.5
29	TM	2,2-Dichloropropane	1.085	1.037	4.4	TM	
30	TM*	Chloroform	0.8809	0.9001	2.2	TM*	
31	TM	Bromochloromethane	0.3749	0.3763	0.38	TM	
32	S	Dibromofluoromethane(S)	0.7779	0.7482	3.8	S	
33	TM	1,1,1-TCA	1.085	1.115	2.8	TM	
34	TM	Cyclohexane	1.504	1.549	3.0	TM	
35	TM	1,1-Dichloropropene	1.080	1.069	1.0	TM	
36	TM	2,2,4-Trimethylpentane	2.533	2.605	2.8	TM	
37	S	1,2-DCA-D4(S)	0.6279	0.5906	5.9	S	
38	TM	Carbon Tetrachloride	0.9713	1.013	4.3	TM	
39	TM	Tert Amyl Methyl Ether	1.704	1.721	1.0	TM	
40	TM	1,2-DCA	0.7262	0.7637	5.2	TM	
		Average			5.6		

APRS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/20/12
Instrument: Chico
Cal. Date: 04/20/12
Data File: 0420C16W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Benzene	3.338	3.414	2.3	TM	
42	TM	TCE	0.7954	0.8403	5.6	TM	
43	TM	2-Pentanone	0.2758	0.2842	3.0	TM	
44	TM*	1,2-Dichloropropane	0.9381	0.9408	0.29	TM*	
45	TM	Bromodichloromethane	0.8470	0.8807	4.0	TM	
46	TM	Methyl Cyclohexane	1.144	1.236	8.0	TM	
47	TM	Dibromomethane	0.3686	0.3848	4.4	TM	
48	TM	2-Chloroethyl vinyl ether	0.2915	0.3147	7.9	TM	
49	TM	1-Bromo-2-chloroethane	0.8595	0.8943	4.1	TM	
50	TM	Cis-1,3-Dichloropropene	1.230	1.117	9.2	TM	
51	TM*	Toluene	3.086	3.070	0.51	TM*	
52	TM	Trans-1,3-Dichloropropene	0.8578	0.8388	2.2	TM	
53	TM	1,1,2-TCA	0.4013	0.4248	5.9	TM	
54	I	Chlorobenzene-D5 (IS)	ISTD			I	
55	S	Toluene-D8(S)	3.234	3.059	5.4	S	
56	TM	1,2-EDB	0.6273	0.6324	0.82	TM	
57	TM	Tetrachloroethene	0.7717	0.7578	1.8	TM	
58	TM	1-Chlorohexane	1.436	1.440	0.25	TM	
59	TM	1,1,1,2-Tetrachloroethane	0.9398	0.9446	0.52	TM	
60	TM	m&p-Xylene	1.763	1.768	0.28	TM	
61	TM	o-Xylene	1.780	1.774	0.30	TM	
62	TM	Styrene	2.800	2.817	0.62	TM	
63	S	4-Bromofluorobenzene(S)	1.273	1.217	4.5	S	
64	TML	2-Hexanone	0.2828	0.3052	7.9	TML	3.4
65	TM	1,3-Dichloropropane	1.138	1.150	1.0	TM	
66	TM	Dibromochloromethane	0.7838	0.7557	3.6	TM	
67	TM**	Chlorobenzene	2.775	2.761	0.48	TM**	
68	TM*	Ethylbenzene	4.348	4.327	0.50	TM*	
69	TM**L	Bromoform	0.3379	0.3120	7.7	TM**L	11
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	MIBK (methyl isobutyl ketone)	1.189	1.140	4.1	TM	
72	TM	Isopropylbenzene	9.174	9.521	3.8	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.302	1.341	3.0	TM**	
74	TM	1,2,3-Trichloropropane	0.1311	0.1375	4.9	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.2985	0.2980	0.15	TM	
76	TML	Bromobenzene	2.326	2.184	6.1	TML	4.2
77	TM	n-Propylbenzene	10.9	11.0	0.77	TM	
78	TM	4-Ethyltoluene	9.693	9.838	1.5	TM	
79	TM	2-Chlorotoluene	7.097	7.286	2.7	TM	
80	TM	1,3,5-Trimethylbenzene	7.295	7.767	6.5	TM	
		Average			3.3		

AMS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/20/12
Instrument: Chico
Cal. Date: 04/20/12
Data File: 0420C16W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	4-Chlorotoluene	6.168	6.356	3.0	TM	
82	TM	Tert-Butylbenzene	8.150	8.503	4.3	TM	
83	TM	1,2,4-Trimethylbenzene	7.576	7.778	2.7	TM	
84	TM	Sec-Butylbenzene	10.1	10.4	2.8	TM	
85	TM	p-Isopropyltoluene	8.493	8.760	3.1	TM	
86	TM	Benzyl Chloride	2.020	1.774	12	TM	
87	TM	1,3-DCB	4.442	4.573	3.0	TM	
88	TM	1,4-DCB	4.325	4.307	0.41	TM	
89	TM	Hexachloroethane	1.854	1.885	1.7	TM	
90	TM	n-Butylbenzene	7.144	7.299	2.2	TM	
91	TM	1,2-DCB	3.896	4.040	3.7	TM	
92	TM	1,2-Dibromo-3-chloropropane	0.1804	0.1653	8.4	TM	
93	TM	1,2,4-Trichlorobenzene	0.9732	1.039	6.8	TM	
94	TM	Hexachlorobutadiene	1.018	1.037	1.8	TM	
95	TM	Naphthalene	4.888	4.930	0.87	TM	
96	TM	1,2,3-Trichlorobenzene	0.8580	0.8941	4.2	TM	
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			3.8		

ARS 5/8/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C16W.D Vial: 1
Acq On : 20 Apr 12 19:11 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 (SS) Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.83	96	622823	25.00000 ppb	0.00
54) Chlorobenzene-D5 (IS)	18.01	117	491712	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	22.21	152	219584	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.41	111	466009	24.04511 ppb	0.00
Spiked Amount 20.866			Recovery = 115.237%		
37) 1,2-DCA-D4(S)	12.22	65	367851	23.51494 ppb	0.00
Spiked Amount 21.039			Recovery = 111.769%		
55) Toluene-D8(S)	15.48	98	1504361	23.64858 ppb	0.00
Spiked Amount 25.355			Recovery = 93.271%		
63) 4-Bromofluorobenzene(S)	20.08	95	598180	23.88634 ppb	0.00
Spiked Amount 27.007			Recovery = 88.443%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.10	85	199233	10.31340 ppb	92
3) Freon 114	4.35	85	144545	10.77701 ppb	97
4) Chloromethane	4.58	52	79074	10.09267 ppb	98
5) Vinyl chloride	4.83	62	51664	9.06397 ppb	94
6) Bromomethane	5.74	94	41408	9.63360 ppb	92
7) Chloroethane	5.93	64	52720	10.22716 ppb	94
8) Dichlorofluoromethane	6.03	67	455175	10.63089 ppb	99
9) Trichlorofluoromethane	6.53	103	47448	10.94172 ppb	93
10) Acetonitrile	7.66	41	157394	127.74082 ug/l	100
11) Acrolein	7.17	56	63080	132.68845 ppb	98
12) Acetone	7.28	43	26774	10.12842 ppb #	84
13) Freon-113	7.48	101	186903	10.90678 ppb	97
14) 1,1-DCE	7.68	96	190146	9.99507 ppb	98
15) t-Butanol	7.78	59	68539	119.15147 ppb	98
16) Methyl Acetate	8.19	43	99472	9.91145 ppb	99
17) Iodomethane	8.16	142	301974	10.65937 ppb	98
18) Acrylonitrile	8.56	53	35806	9.77732 ppb	91
19) Methylene chloride	8.47	84	209180	10.56017 ppb	95
20) Carbon disulfide	8.56	76	182528	10.18470 ppb	99
21) Methyl t-butyl ether (MtBE	8.90	73	367638	10.09152 ppb	98
22) Trans-1,2-DCE	9.09	96	222730	9.69122 ppb	96
23) Diisopropyl Ether	9.75	45	761503	10.32702 ppb	99
24) 1,1-DCA	9.78	63	414642	10.21188 ppb	99
25) Vinyl Acetate	9.75	43	133302	10.50201 ppb	98
26) Ethyl tert Butyl Ether	10.44	59	565512	10.35189 ppb	97
27) MEK (2-Butanone)	10.43	43	23378	10.07745 ppb	97
28) Cis-1,2-DCE	10.80	96	239799	10.54513 ppb	97
29) 2,2-Dichloropropane	10.80	77	258353	9.55728 ppb	100
30) Chloroform	11.08	85	224252	10.21844 ppb	91
31) Bromochloromethane	11.31	128	93750	10.03753 ppb	95
33) 1,1,1-TCA	11.82	97	277810	10.27839 ppb	97
34) Cyclohexane	11.98	56	385890	10.29913 ppb	97
35) 1,1-Dichloropropene	12.09	75	266382	9.89619 ppb	98
36) 2,2,4-Trimethylpentane	12.17	57	648938	10.28273 ppb	99
38) Carbon Tetrachloride	12.28	117	252414	10.43073 ppb	96
39) Tert Amyl Methyl Ether	12.33	73	428852	10.10311 ppb	98
40) 1,2-DCA	12.36	62	190253	10.51654 ppb	100
41) Benzene	12.49	78	850617	10.23000 ppb	99
42) TCE	13.52	95	209333	10.56337 ppb	96

Algorithm Check: $\frac{(199233)(25)}{(622823)(0.775416)}$ Cl) = 10.31340005007 ✓ ARS 5/8/12

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C16W.D Vial: 1
Acq On : 20 Apr 12 19:11 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 (SS) Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	2-Pentanone	13.18	43	884996	128.80249	ppb		98
44)	1,2-Dichloropropane	13.75	63	234374	10.02861	ppb		100
45)	Bromodichloromethane	14.09	83	219413	10.39765	ppb		94
46)	Methyl Cyclohexane	13.80	83	307848	10.80338	ppb		100
47)	Dibromomethane	14.15	93	95861	10.43848	ppb		96
48)	2-Chloroethyl vinyl ether	14.55	63	78400	10.79459	ppb		95
49)	1-Bromo-2-chloroethane	14.86	63	222796	10.40540	ppb		100
50)	Cis-1,3-Dichloropropene	14.98	75	278256	9.08068	ppb		97
51)	Toluene	15.61	91	764835	9.94939	ppb		96
52)	Trans-1,3-Dichloropropene	15.78	75	208967	9.77875	ppb		99
53)	1,1,2-TCA	16.06	83	105832	10.58538	ppb		95
56)	1,2-EDB	17.30	107	124381	10.08163	ppb	#	96
57)	Tetrachloroethene	16.76	164	149046	9.81966	ppb		99
58)	1-Chlorohexane	17.68	91	283200	10.02479	ppb		98
59)	1,1,1,2-Tetrachloroethane	18.13	131	185796	10.05191	ppb		94
60)	m&p-Xylene	18.33	106	695650	20.05684	ppb		98
61)	o-Xylene	19.08	106	348975	9.96994	ppb		97
62)	Styrene	19.09	104	554122	10.06200	ppb		99
64)	2-Hexanone	16.09	43	60031	9.65855	ppb		96
65)	1,3-Dichloropropane	16.47	76	226126	10.10346	ppb		95
66)	Dibromochloromethane	16.95	129	148633	9.64175	ppb		97
67)	Chlorobenzene	18.08	112	543076	9.95159	ppb		95
68)	Ethylbenzene	18.19	91	850964	9.95033	ppb		99
69)	Bromoform	19.61	173	61370	8.86522	ppb		90
71)	MIBK (methyl isobutyl keto	14.65	43	100152	9.59053	ppb		89
72)	Isopropylbenzene	19.70	105	836274	10.37837	ppb		97
73)	1,1,2,2-Tetrachloroethane	19.86	83	117771	10.29775	ppb		97
74)	1,2,3-Trichloropropane	20.12	110	12075	10.48904	ppb		88
75)	t-1,4-Dichloro-2-Butene	20.20	53	26178	9.98457	ppb		99
76)	Bromobenzene	20.44	156	191837	10.41779	ppb		94
77)	n-Propylbenzene	20.41	91	966328	10.07666	ppb		99
78)	4-Ethyltoluene	20.60	105	864121	10.14973	ppb		100
79)	2-Chlorotoluene	20.70	91	639981	10.26618	ppb		95
80)	1,3,5-Trimethylbenzene	20.68	105	682241	10.64697	ppb		100
81)	4-Chlorotoluene	20.79	91	558234	10.30426	ppb		98
82)	Tert-Butylbenzene	21.33	119	746810	10.43231	ppb		98
83)	1,2,4-Trimethylbenzene	21.38	105	683164	10.26655	ppb		98
84)	Sec-Butylbenzene	21.73	105	913681	10.27549	ppb		98
85)	p-Isopropyltoluene	21.96	119	769391	10.31380	ppb		99
86)	Benzyl Chloride	22.39	91	155859	8.78274	ppb		99
87)	1,3-DCB	22.09	146	401706	10.29559	ppb		99
88)	1,4-DCB	22.27	146	378327	9.95923	ppb		98
89)	Hexachloroethane	23.56	117	165547	10.16646	ppb		97
90)	n-Butylbenzene	22.66	91	641128	10.21718	ppb		98
91)	1,2-DCB	22.90	146	354842	10.36820	ppb		97
92)	1,2-Dibromo-3-chloropropan	24.11	155	14518	9.16265	ppb		91
93)	1,2,4-Trichlorobenzene	25.56	180	91274	10.67779	ppb		94
94)	Hexachlorobutadiene	25.80	223	91058	10.18182	ppb		91
95)	Naphthalene	25.90	128	433028	10.08686	ppb		98
96)	1,2,3-Trichlorobenzene	26.26	180	78532	10.42092	ppb		96

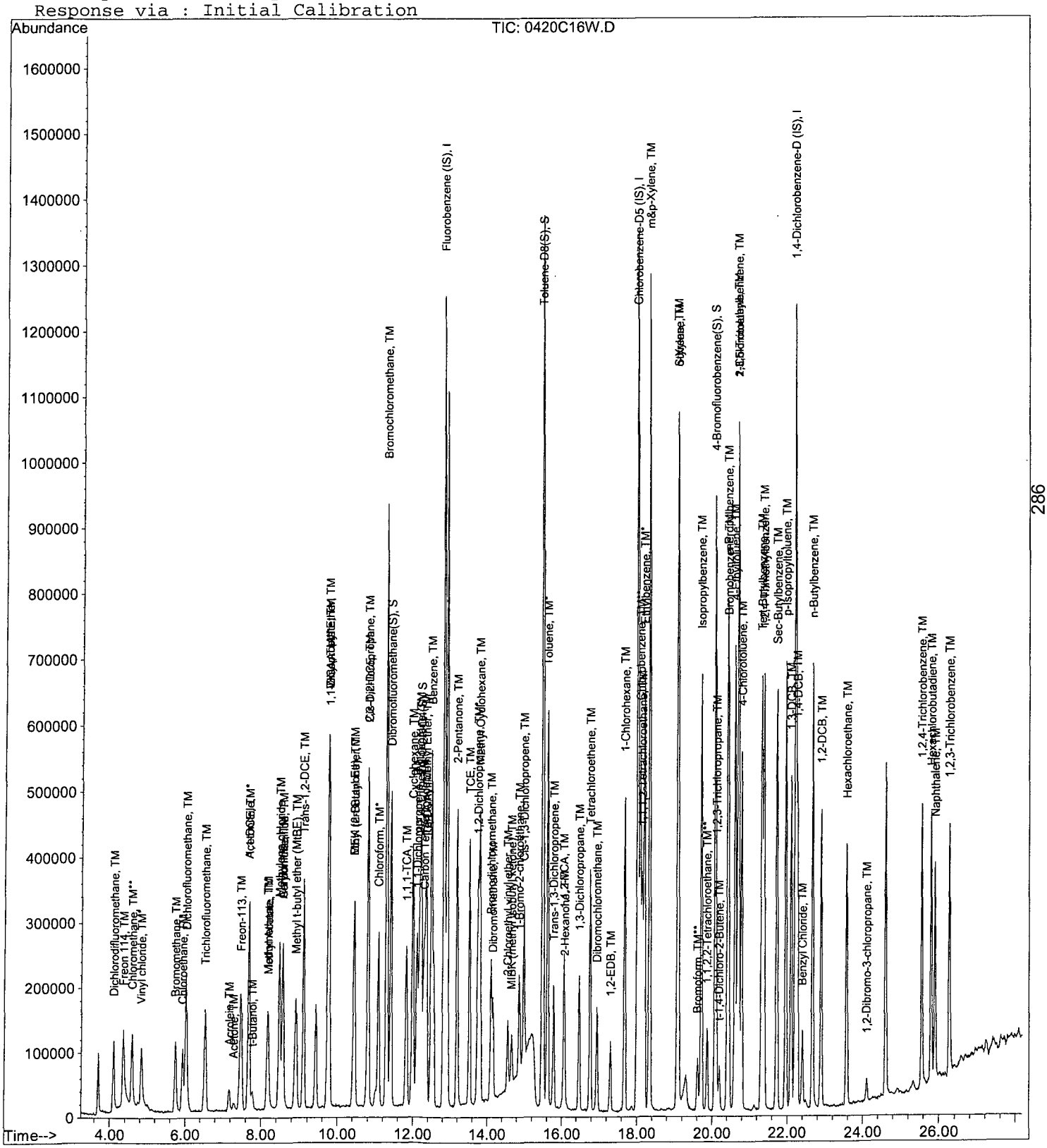
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0420C16W.D Vial: 1
Acq On : 20 Apr 12 19:11 Operator: SV
Sample : 10ug/L Vol Std 04-20-12 (SS) Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:21 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



286

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Initial Cal. Date: 04/20/12
Data File: 0430C06W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.7754	0.8176	5.4	TM		
3	TM	Freon 114	0.5384	0.4991	7.3	TM		
4	TM**L	Chloromethane	0.3736	0.3361	10	TM**L	7.1	
5	TM*	Vinyl chloride	0.2288	0.2047	11	TM*		
6	TM	Bromomethane	0.1725	0.1569	9.0	TM		
7	TM	Chloroethane	0.2069	0.2014	2.7	TM		
8	TM	Dichlorofluoromethane	1.719	1.819	5.8	TM		
9	TM	Trichlorofluoromethane	0.1741	0.1798	3.3	TM		
10		Acetonitrile	0.0495	0.0457	7.7			
11	TM	Acrolein	0.0191	0.0723	279	TM		*NT
12	TML	Acetone	0.1375	0.1100	20	TML	3.7	
13	TM	Freon-113	0.6879	0.6965	1.3	TM		
14	TM*	1,1-DCE	0.7636	0.7327	4.1	TM*		
15	TM	t-Butanol	0.0231	0.0232	0.50	TM		
16	TML	Methyl Acetate	0.5035	0.4090	19	TML	1.7	
17	TML	Iodomethane	1.008	0.9250	8.2	TML	16	
18	TM	Acrylonitrile	0.1470	0.1451	1.3	TM		
19	TML	Methylene chloride	0.9456	0.8023	15	TML	0.74	
20	TM	Carbon disulfide	0.7194	0.6718	6.6	TM		
21	TM	Methyl t-butyl ether (MtBE)	1.462	1.465	0.19	TM		
22	TM	Trans-1,2-DCE	0.9225	0.8872	3.8	TM		
23	TM	Diisopropyl Ether	2.960	2.992	1.1	TM		
24	TM**	1,1-DCA	1.630	1.669	2.4	TM**		
25	TM	Vinyl Acetate	0.5095	0.4912	3.6	TM		
26	TM	Ethyl tert Butyl Ether	2.193	2.246	2.4	TM		
27	TM	MEK (2-Butanone)	0.0931	0.0902	3.1	TM		
28	TML	Cis-1,2-DCE	1.018	0.9515	6.5	TML	4.2	
29	TM	2,2-Dichloropropane	1.085	1.126	3.8	TM		
30	TM*	Chloroform	0.8809	0.9138	3.7	TM*		
31	TM	Bromochloromethane	0.3749	0.3804	1.5	TM		
32	S	Dibromofluoromethane(S)	0.7779	0.7356	5.4	S		
33	TM	1,1,1-TCA	1.085	1.121	3.3	TM		
34	TM	Cyclohexane	1.504	1.469	2.3	TM		
35	TM	1,1-Dichloropropene	1.080	1.102	2.0	TM		
36	TM	2,2,4-Trimethylpentane	2.533	2.495	1.5	TM		
37	S	1,2-DCA-D4(S)	0.6279	0.5554	12	S		
38	TM	Carbon Tetrachloride	0.9713	1.028	5.8	TM		
39	TM	Tert Amyl Methyl Ether	1.704	1.746	2.5	TM		
40	TM	1,2-DCA	0.7262	0.7592	4.5	TM		
		Average			12.5			

ARS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Cal. Date: 04/20/12
Data File: 0430C06W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	Benzene	3.338	3.370	0.98	TM	
42	TM	TCE	0.7954	0.8477	6.6	TM	
43	TM	2-Pentanone	0.2758	0.2794	1.3	TM	
44	TM*	1,2-Dichloropropane	0.9381	0.9516	1.4	TM*	
45	TM	Bromodichloromethane	0.8470	0.9115	7.6	TM	
46	TM	Methyl Cyclohexane	1.144	1.162	1.6	TM	
47	TM	Dibromomethane	0.3686	0.3914	6.2	TM	
48	TM	2-Chloroethyl vinyl ether	0.2915	0.3145	7.9	TM	
49	TM	1-Bromo-2-chloroethane	0.8595	0.8822	2.6	TM	
50	TM	Cis-1,3-Dichloropropene	1.230	1.189	3.3	TM	
51	TM*	Toluene	3.086	3.167	2.7	TM*	
52	TM	Trans-1,3-Dichloropropene	0.8578	0.8399	2.1	TM	
53	TM	1,1,2-TCA	0.4013	0.4036	0.58	TM	
54	I	Chlorobenzene-D5 (IS)	ISTD			I	
55	S	Toluene-D8(S)	3.234	2.890	11	S	
56	TM	1,2-EDB	0.6273	0.5856	6.6	TM	
57	TM	Tetrachloroethene	0.7717	0.7386	4.3	TM	
58	TM	1-Chlorohexane	1.436	1.399	2.6	TM	
59	TM	1,1,1,2-Tetrachloroethane	0.9398	0.9263	1.4	TM	
60	TM	m&p-Xylene	1.763	1.746	0.97	TM	
61	TM	o-Xylene	1.780	1.765	0.82	TM	
62	TM	Styrene	2.800	2.796	0.15	TM	
63	S	4-Bromofluorobenzene(S)	1.273	1.191	6.5	S	
64	TML	2-Hexanone	0.2828	0.2707	4.3	TML	14
65	TM	1,3-Dichloropropane	1.138	1.111	2.3	TM	
66	TM	Dibromochloromethane	0.7838	0.7494	4.4	TM	
67	TM**	Chlorobenzene	2.775	2.718	2.0	TM**	
68	TM*	Ethylbenzene	4.348	4.327	0.49	TM*	
69	TM**L	Bromoform	0.3379	0.3210	5.0	TM**L	9.3
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	MIBK (methyl isobutyl ketone)	1.189	0.9937	16	TM	
72	TM	Isopropylbenzene	9.174	8.947	2.5	TM	
73	TM**	1,1,2,2-Tetrachloroethane	1.302	1.226	5.9	TM**	
74	TM	1,2,3-Trichloropropane	0.1311	0.1220	6.9	TM	
75	TM	t-1,4-Dichloro-2-Butene	0.2985	0.2902	2.8	TM	
76	TML	Bromobenzene	2.326	2.012	14	TML	4.0
77	TM	n-Propylbenzene	10.9	10.4	5.0	TM	
78	TM	4-Ethyltoluene	9.693	9.241	4.7	TM	
79	TM	2-Chlorotoluene	7.097	6.847	3.5	TM	
80	TM	1,3,5-Trimethylbenzene	7.295	7.302	0.09	TM	
		Average			4.2		

ARS 5/8/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Chico
Cal. Date: 04/20/12
Data File: 0430C06W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	4-Chlorotoluene	6.168	5.895	4.4	TM	
82	TM	Tert-Butylbenzene	8.150	7.919	2.8	TM	
83	TM	1,2,4-Trimethylbenzene	7.576	7.286	3.8	TM	
84	TM	Sec-Butylbenzene	10.1	9.856	2.6	TM	
85	TM	p-Isopropyltoluene	8.493	8.264	2.7	TM	
86	TM	Benzyl Chloride	2.020	2.082	3.1	TM	
87	TM	1,3-DCB	4.442	4.334	2.4	TM	
88	TM	1,4-DCB	4.325	4.112	4.9	TM	
89	TM	Hexachloroethane	1.854	1.918	3.4	TM	
90	TM	n-Butylbenzene	7.144	7.009	1.9	TM	
91	TM	1,2-DCB	3.896	3.752	3.7	TM	
92	TM	1,2-Dibromo-3-chloropropane	0.1804	0.1648	8.7	TM	
93	TM	1,2,4-Trichlorobenzene	0.9732	0.9782	0.51	TM	
94	TM	Hexachlorobutadiene	1.018	0.9411	7.6	TM	
95	TM	Naphthalene	4.888	4.566	6.6	TM	
96	TM	1,2,3-Trichlorobenzene	0.8580	0.8212	4.3	TM	
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			4.0		

ARS 5/8/12

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C06W.D Vial: 1
Acq On : 30 Apr 12 13:03 Operator: AS
Sample : 10ug/L Vol Std 04-30-12 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:29 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.83	96	618000	25.00000	ppb	0.01
54) Chlorobenzene-D5 (IS)	18.01	117	508352	25.00000	ppb	0.01
70) 1,4-Dichlorobenzene-D (IS)	22.21	152	240000	25.00000	ppb	0.01
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.42	111	454580	23.63845	ppb	0.01
Spiked Amount 20.866			Recovery = 113.286%			
37) 1,2-DCA-D4(S)	12.22	65	343255	22.11388	ppb	0.01
Spiked Amount 21.039			Recovery = 105.110%			
55) Toluene-D8(S)	15.48	98	1469173	22.33944	ppb	0.00
Spiked Amount 25.355			Recovery = 88.105%			
63) 4-Bromofluorobenzene(S)	20.09	95	605275	23.37851	ppb	0.01
Spiked Amount 27.007			Recovery = 86.566%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.09	85	202108	10.54387	ppb	91
3) Freon 114	4.36	85	123368	9.26988	ppb	97
4) Chloromethane	4.59	52	83091	10.70879	ppb	93
5) Vinyl chloride	4.84	62	50600	8.94658	ppb	93
6) Bromomethane	5.74	94	38792	9.09542	ppb	97
7) Chloroethane	5.92	64	49784	9.73297	ppb	95
8) Dichlorofluoromethane	6.02	67	449692	10.58480	ppb	98
9) Trichlorofluoromethane	6.53	103	44456	10.33176	ppb	99
10) Acetonitrile	7.66	41	141123	115.42915	ug/l	100
11) Acrolein	7.17	56	223547	473.89972	ppb	94
12) Acetone	7.29	43	27180	10.37087	ppb	94
13) Freon-113	7.47	101	172184	10.12626	ppb	94
14) 1,1-DCE	7.68	96	181121	9.59497	ppb	89
15) t-Butanol	7.77	59	71700	125.61947	ppb	99
16) Methyl Acetate	8.19	43	101103	10.16783	ppb	98
17) Iodomethane	8.17	142	228654	8.38068	ppb	97
18) Acrylonitrile	8.56	53	35878	9.87343	ppb	90
19) Methylene chloride	8.48	84	198340	10.07405	ppb	99
20) Carbon disulfide	8.56	76	166080	9.33925	ppb	99
21) Methyl t-butyl ether (MtBE	8.90	73	362156	10.01862	ppb	96
22) Trans-1,2-DCE	9.11	96	219311	9.61692	ppb	95
23) Diisopropyl Ether	9.75	45	739520	10.10716	ppb	94
24) 1,1-DCA	9.79	63	412559	10.23987	ppb	97
25) Vinyl Acetate	9.75	43	121424	9.64088	ppb	97
26) Ethyl tert Butyl Ether	10.44	59	555234	10.24306	ppb	97
27) MEK (2-Butanone)	10.43	43	22297	9.68648	ppb	97
28) Cis-1,2-DCE	10.81	96	235200	10.41988	ppb	96
29) 2,2-Dichloropropane	10.81	77	278298	10.37546	ppb	99
30) Chloroform	11.09	85	225882	10.37304	ppb	96
31) Bromochloromethane	11.31	128	94032	10.14629	ppb	99
33) 1,1,1-TCA	11.82	97	277070	10.33101	ppb	96
34) Cyclohexane	11.99	56	363192	9.76899	ppb	99
35) 1,1-Dichloropropene	12.09	75	272517	10.20312	ppb	98
36) 2,2,4-Trimethylpentane	12.17	57	616690	9.84800	ppb	98
38) Carbon Tetrachloride	12.29	117	254000	10.57818	ppb	95
39) Tert Amyl Methyl Ether	12.35	73	431710	10.24981	ppb	98
40) 1,2-DCA	12.37	62	187668	10.45460	ppb	96
41) Benzene	12.49	78	833135	10.09795	ppb	99
42) TCE	13.53	95	209548	10.65675	ppb	98

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

Data File : M:\CHICO\DATA\C120420\0430C06W.D Vial: 1
Acq On : 30 Apr 12 13:03 Operator: AS
Sample : 10ug/L Vol Std 04-30-12 Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:29 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	2-Pentanone	13.19	43	863317	126.62791	ppb	99
44)	1,2-Dichloropropane	13.75	63	235230	10.14379	ppb	98
45)	Bromodichloromethane	14.11	83	225311	10.76047	ppb	97
46)	Methyl Cyclohexane	13.81	83	287285	10.16043	ppb	98
47)	Dibromomethane	14.16	93	96765	10.61915	ppb	96
48)	2-Chloroethyl vinyl ether	14.56	63	77736	10.78670	ppb	95
49)	1-Bromo-2-chloroethane	14.86	63	218085	10.26487	ppb	96
50)	Cis-1,3-Dichloropropene	14.99	75	293961	9.66807	ppb	98
51)	Toluene	15.62	91	782997	10.26514	ppb	98
52)	Trans-1,3-Dichloropropene	15.78	75	207633	9.79215	ppb	95
53)	1,1,2-TCA	16.06	83	99777	10.05764	ppb	91
56)	1,2-EDB	17.31	107	119076	9.33571	ppb	91
57)	Tetrachloroethene	16.77	164	150178	9.57037	ppb	99
58)	1-Chlorohexane	17.69	91	284454	9.73958	ppb	93
59)	1,1,1,2-Tetrachloroethane	18.13	131	188348	9.85642	ppb	98
60)	m&p-Xylene	18.33	106	710232	19.80698	ppb	99
61)	o-Xylene	19.08	106	358888	9.91753	ppb	97
62)	Styrene	19.10	104	568490	9.98500	ppb	99
64)	2-Hexanone	16.09	43	55037	8.57696	ppb	95
65)	1,3-Dichloropropane	16.48	76	226011	9.76777	ppb	98
66)	Dibromochloromethane	16.95	129	152392	9.56200	ppb	99
67)	Chlorobenzene	18.08	112	552681	9.79609	ppb	97
68)	Ethylbenzene	18.19	91	879846	9.95129	ppb	99
69)	Bromoform	19.61	173	65264	9.07371	ppb	98
71)	MIBK (methyl isobutyl keto	14.66	43	95396	8.35800	ppb	94
72)	Isopropylbenzene	19.71	105	858946	9.75295	ppb	98
73)	1,1,2,2-Tetrachloroethane	19.87	83	117667	9.41343	ppb	97
74)	1,2,3-Trichloropropane	20.13	110	11715	9.31066	ppb	97
75)	t-1,4-Dichloro-2-Butene	20.20	53	27860	9.72217	ppb	86
76)	Bromobenzene	20.45	156	193131	9.60307	ppb	98
77)	n-Propylbenzene	20.41	91	996242	9.50487	ppb	99
78)	4-Ethyltoluene	20.61	105	887172	9.53405	ppb	99
79)	2-Chlorotoluene	20.71	91	657339	9.64763	ppb	96
80)	1,3,5-Trimethylbenzene	20.68	105	701018	10.00937	ppb	98
81)	4-Chlorotoluene	20.79	91	565939	9.55784	ppb	98
82)	Tert-Butylbenzene	21.33	119	760220	9.71626	ppb	99
83)	1,2,4-Trimethylbenzene	21.38	105	699430	9.61686	ppb	94
84)	Sec-Butylbenzene	21.73	105	946189	9.73588	ppb	98
85)	p-Isopropyltoluene	21.96	119	793307	9.72976	ppb	98
86)	Benzyl Chloride	22.40	91	199883	10.30537	ppb	96
87)	1,3-DCB	22.10	146	416067	9.75653	ppb	97
88)	1,4-DCB	22.26	146	394787	9.50847	ppb	99
89)	Hexachloroethane	23.57	117	184090	10.34352	ppb	97
90)	n-Butylbenzene	22.67	91	672872	9.81089	ppb	99
91)	1,2-DCB	22.90	146	360205	9.62959	ppb	97
92)	1,2-Dibromo-3-chloropropan	24.11	155	15818	9.13388	ppb	92
93)	1,2,4-Trichlorobenzene	25.56	180	93904	10.05097	ppb	95
94)	Hexachlorobutadiene	25.81	223	90345	9.24274	ppb	94
95)	Naphthalene	25.91	128	438359	9.34242	ppb	98
96)	1,2,3-Trichlorobenzene	26.27	180	78832	9.57087	ppb	98

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

Quantitation Report

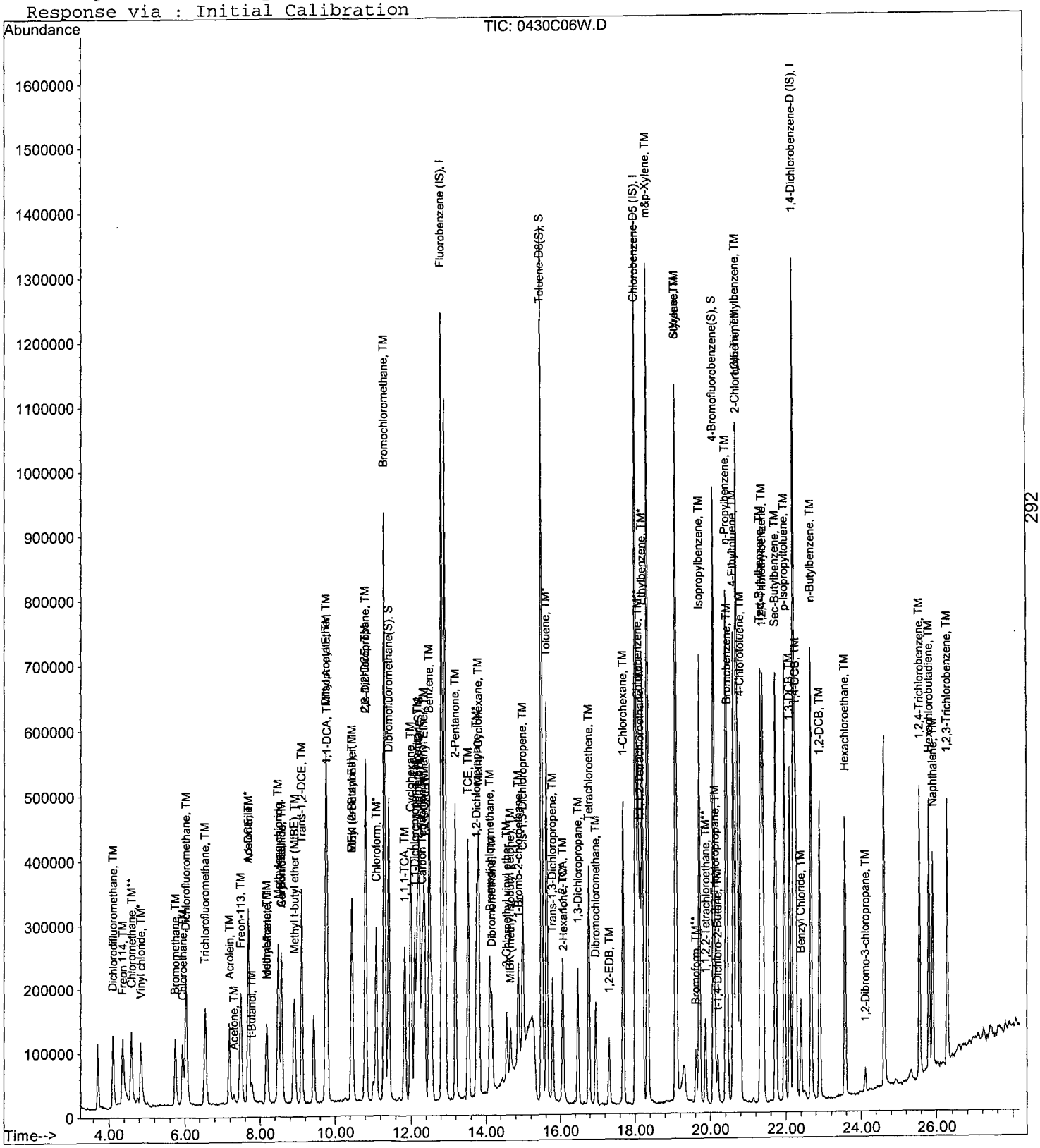
Data File : M:\CHICO\DATA\C120420\0430C06W.D
Acq On : 30 Apr 12 13:03
Sample : 10ug/L Vol Std 04-30-12
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 8 10:29 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 04/30/12
Matrix: Water Instrument: Thor Initials:

			0430T07W.D	0430T08W D	0430T09W.D	0430T10W D	0430T11W.D	0430T13W D	0430T14W D							
		Compound	0.3	0.5	1	5	10	40	100				Avg	%RSD		r
1	I	Fluorobenzene (IS)														
2	TM	Dichlorodifluoromethane		0.2679	0.3012	0.3309	0.3323	0.3424	0.3417				0.32	9.2	TM	
3	TM	Freon 114		0.3107	0.3447	0.3282	0.3674	0.3493	0.3499				0.34	5.8	TM	
4	TM**L	Chloromethane		0.3943	0.3267	0.2660	0.2475	0.3482					0.32	19	TM**L	0.997
5	TM*	Vinyl chloride	0.4609	0.4963	0.4789	0.4979	0.5237	0.5002	0.5141				0.50	4.2	TM*	
6	TM	Bromomethane		0.4317	0.3734	0.3513	0.3274	0.3370	0.3621				0.36	10	TM	
7	TML	Chloroethane		0.4493	0.3743	0.3001	0.2836	0.2868	0.2980				0.33	20	TML	1.000
8	TMQ	Dichlorofluoromethane		0.0148	0.0149	0.0320	0.0327	0.0505	0.1006				0.04	78	TMQ	1.000
9	TMQ	Trichlorofluoromethane		0.1036	0.0805	0.0999	0.1210	0.1445	0.1887				0.12	31	TMQ	1.000
10	TM	Acrolein	0.0451	0.0513	0.0459	0.0494	0.0468						0.05	5.4	TM	
11	TML	Acetone		0.4717	0.2396	0.1460	0.1289	0.1020	0.0986				0.20	73	TML	1.000
12	TM	Freon-113	0.2367	0.3409	0.3638	0.3349	0.3852	0.3428	0.3492				0.34	14	TM	
13	TM*	1,1-DCE	0.5017	0.5324	0.5739	0.6214	0.6209	0.5641	0.5817				0.57	7.7	TM*	
14	TM	t-Butanol	0.0077	0.0090	0.0069	0.0081	0.0083						0.01	9.8	TM	
15	TML	Methyl Acetate		0.7914	0.5887	0.3534	0.3349	0.3047	0.2940				0.44	45	TML	1.000
16	TM	Iodomethane	0.5949	0.5546	0.5446	0.6442	0.6220	0.5892	0.5940				0.59	5.9	TM	
17	TM	Acrylonitrile	0.0709	0.0846	0.0938	0.1084	0.1103	0.1021	0.0998				0.10	15	TM	
18	TML	Methylene chloride	0.4256	0.3166	0.2276	0.2026	0.1735	0.1456	0.1440				0.23	44	TML	1.000
19	TM	Carbon disulfide	0.3545	0.4162	0.3713	0.4016	0.3984	0.3554	0.3476				0.38	7.2	TM	
20	TM	Methyl t-butyl ether (MtBE)	0.5253	0.5911	0.4836	0.5379	0.5049	0.4728	0.4554				0.51	9.0	TM	
21	TM	Trans-1,2-DCE	0.4246	0.3329	0.3505	0.3870	0.3937	0.3664	0.3681				0.37	8.0	TM	
22	TM	Diisopropyl Ether	0.0916	0.1417	0.1406	0.1447	0.1345	0.1403	0.1369				0.13	14	TM	
23	TM**	1,1-DCA	0.7615	0.8062	0.7614	0.7935	0.7923	0.7221	0.7054				0.76	5.0	TM**	
24	TM	Vinyl Acetate	0.2471	0.2663	0.2491	0.3137	0.3082	0.3216	0.3270				0.29	12	TM	
25	TM	Ethyl tert Butyl Ether	0.6006	0.5758	0.5368	0.6156	0.6143	0.5769	0.5383				0.58	5.7	TM	
26	TML	MEK (2-Butanone)	0.3063	0.2782	0.2091	0.1554	0.1426	0.1376	0.1473				0.20	36	TML	1.000
27	TM	Cis-1,2-DCE	0.4640	0.4659	0.4157	0.4749	0.4814	0.4584	0.4567				0.46	4.6	TM	
28	TM	2,2-Dichloropropane	0.3184	0.3295	0.2974	0.2855	0.2916	0.2586	0.2433				0.29	11	TM	
29	TM*	Chloroform	0.9089	0.9051	0.8244	0.8117	0.7982	0.7466	0.7340				0.82	8.4	TM*	
30	TM	Bromochloromethane	0.2053	0.2061	0.1977	0.2461	0.2457	0.2209	0.2174				0.22	8.8	TM	
31	SL	Dibromofluoromethane(S)		0.5593	0.2793	0.4769	0.4453	0.4465	0.4580				0.44	21	SL	1.000
32	TM	1,1,1-TCA	0.5102	0.5708	0.4996	0.5397	0.5356	0.5024	0.4901				0.52	5.5	TM	
33	TM	Cyclohexane	0.1991	0.2240	0.2419	0.2784	0.2874	0.2743	0.2940				0.26	14	TM	
34	TM	1,1-Dichloropropene	0.4451	0.5282	0.4548	0.4879	0.4971	0.4828	0.4953				0.48	5.7	TM	
35	TM	2,2,4-Trimethylpentane	0.5440	0.7673	0.6724	0.7031	0.7833	0.8116	0.8364				0.73	14	TM	

ARS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 04/30/12
Matrix: Water Instrument: Thor Initials:

		Compound	0.3	0.5	1	5	10	40	100				Avg	%RSD		r
36	SL	1,2-DCA-D4(S)		0.5538	0.2849	0.4895	0.4584	0.4442	0.4526				0.45	20	SL	1.000
37	TM	Carbon Tetrachloride	0.5772	0.5390	0.5345	0.5330	0.5569	0.5112	0.5287				0.54	3.9	TM	
38	TM	Tert Amyl Methyl Ether	0.5515	0.6255	0.5784	0.6788	0.6856	0.6619	0.6212				0.63	8.1	TM	
39	TM	1,2-DCA	0.5873	0.5496	0.5601	0.5766	0.5563	0.5161	0.5094				0.55	5.3	TM	
40	TM	Benzene	1.909	1.864	1.715	1.811	1.779	1.648	1.638				1.8	5.9	TM	
41	TM	TCE	0.5424	0.5578	0.4424	0.4839	0.4618	0.4258	0.4303				0.48	11	TM	
42	TM	2-Pentanone	0.2343	0.2437	0.2324	0.2295	0.2079	0.2379	0.2553				0.23	6.2	TM	
43	TM*	1,2-Dichloropropane	0.4830	0.4892	0.5291	0.5090	0.5073	0.4643	0.4588				0.49	5.2	TM*	
44	TM	Bromodichloromethane	0.7052	0.7288	0.5944	0.6603	0.6312	0.5794	0.5781				0.64	9.5	TM	
45	TM	Methyl Cyclohexane	0.4721	0.4672	0.4377	0.4412	0.5031	0.5119	0.5493				0.48	8.4	TM	
46	TM	Dibromomethane	0.2756	0.3145	0.2814	0.2850	0.2941	0.2573	0.2529				0.28	7.6	TM	
47	TM	2-Chloroethyl vinyl ether					0.0110						0.01		TM	
48	TM	MIBK (methyl isobutyl ketone	0.2248	0.1763	0.1783	0.1600	0.1507	0.1683	0.1820				0.18	13	TM	
49	TM	1-Bromo-2-chloroethane	0.3763	0.3483	0.3180	0.3429	0.3269	0.3218	0.3154				0.34	6.5	TM	
50	TM	Cis-1,3-Dichloropropene	0.6930	0.5711	0.6517	0.6348	0.6411	0.6278	0.6515				0.64	5.7	TM	
51	TM*	Toluene	1.886	1.869	1.704	1.817	1.888	1.829	1.851				1.8	3.5	TM*	
52	TM	Trans-1,3-Dichloropropene	0.4986	0.5684	0.5086	0.5676	0.5668	0.5586	0.5834				0.55	6.0	TM	
53	TM	1,1,2-TCA	0.3636	0.3356	0.3202	0.3714	0.3595	0.3265	0.3210				0.34	6.3	TM	
54	TM	2-Hexanone	0.2274	0.1638	0.1757	0.1725	0.1782	0.1928	0.2088				0.19	12	TM	
55	I	Chlorobenzene-D5 (IS)														
56	SL	Toluene-D8(S)	2.072	1.842	0.9859	1.880	1.834	1.912	1.941				1.8	20	SL	1.000
57	TM	1,2-EDB	0.3988	0.4559	0.4659	0.5008	0.4892	0.4647	0.4532				0.46	7.1	TM	
58	TM	Tetrachloroethene	0.5327	0.5376	0.5669	0.6223	0.6037	0.5640	0.5589				0.57	5.8	TM	
59	TM	1-Chlorohexane	0.7532	0.6620	0.5554	0.5437	0.5834	0.6112	0.6522				0.62	12	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5434	0.5987	0.5150	0.6115	0.5894	0.5419	0.5397				0.56	6.5	TM	
61	TM	m&p-Xylene	0.7271	0.7443	0.7160	0.8847	0.9496	0.9788	0.9815				0.85	14	TM	
62	TML	o-Xylene		0.6506	0.6698	0.8585	0.9083	0.9468	0.9513				0.83	16	TML	1.000
63	TML	Styrene	1.171	1.128	1.080	1.468	1.594	1.687	1.718				1.4	20	TML	1.000
64	SL	4-Bromofluorobenzene(S)		0.6581	0.3663	0.6881	0.6977	0.7421	0.7629				0.65	22	SL	1.000
65	TM	1,3-Dichloropropane	0.7960	0.7732	0.7760	0.8718	0.8426	0.7808	0.7620				0.80	5.1	TM	
66	TM	Dibromochloromethane	0.6656	0.5573	0.5672	0.6059	0.5933	0.5654	0.5521				0.59	6.8	TM	
67	TM**	Chlorobenzene	1.593	1.578	1.521	1.595	1.593	1.514	1.496				1.6	2.8	TM**	
68	TM*	Ethylbenzene	1.981	2.123	2.049	2.384	2.473	2.534	2.566				2.3	11	TM*	
69	TM**	Bromoform	0.3327	0.3751	0.4044	0.4406	0.4124	0.3917	0.3900				0.39	8.5	TM**	
70	I	1,4-Dichlorobenzene-D (IS)														

ARS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 6
Initial Calibration

Lab Name: APPL, Inc. SDG No: 67622
Case No: Initial Cal. Date: 04/30/12
Matrix: Water Instrument: Thor Initials:

		Compound	0.3	0.5	1	5	10	40	100				Avg	%RSD		r
71	TM	Isopropylbenzene	3.348	3.056	3.064	3.482	3.586	3.733	3.959				3.5	9.7	TM	
72	TM**	1,1,2,2-Tetrachloroethane		1.264	1.198	1.210	1.061	0.9752	0.9707				1.1	11	TM**	
73	TM	1,2,3-Trichloropropane		0.3149	0.3247	0.3125	0.3098	0.2707	0.2700				0.30	7.9	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.1595	0.2011	0.2002	0.2315	0.2171	0.2069	0.2156				0.20	11	TM	
75	TM	Bromobenzene	1.237	1.165	1.020	1.239	1.166	1.125	1.134				1.2	6.5	TM	
76	TM	n-Propylbenzene	4.124	4.015	3.903	4.461	4.695	4.876	5.073				4.4	10	TM	
77	TM	4-Ethyltoluene		3.079	3.112	3.799	4.067	4.188	4.344				3.8	15	TM	
78	TM	2-Chlorotoluene	3.269	3.075	3.109	3.526	3.504	3.407	3.472				3.3	5.6	TM	
79	TML	1,3,5-Trimethylbenzene		2.389	2.524	3.258	3.417	3.499	3.614				3.1	17	TML	1.000
80	TM	4-Chlorotoluene	3.208	3.040	2.798	3.556	3.602	3.449	3.519				3.3	9.2	TM	
81	TM	Tert-Butylbenzene	2.200	2.046	2.639	2.662	2.712	2.827	3.023				2.6	13	TM	
82	TML	1,2,4-Trimethylbenzene		2.400	2.450	3.138	3.255	3.550	3.660				3.1	18	TML	1.000
83	TM	Sec-Butylbenzene	3.298	3.032	2.981	3.903	3.933	4.102	4.354				3.7	15	TM	
84	TML	p-Isopropyltoluene		2.279	2.436	3.117	3.299	3.498	3.736				3.1	19	TML	1.000
85	TM	Benzyl Chloride		1.583	1.626	1.505	1.429	1.456	1.578				1.5	5.1	TM	
86	TM	1,3-DCB	2.533	2.127	2.267	2.378	2.297	2.145	2.205				2.3	6.2	TM	
87	TM	1,4-DCB	2.698	2.466	2.301	2.565	2.360	2.199	2.215				2.4	7.7	TM	
88	TM	n-Butylbenzene	2.642	2.607	2.700	2.894	2.943	3.166	3.408				2.9	10	TM	
89	TM	1,2-DCB	2.405	2.404	2.108	2.260	2.175	2.036	2.085				2.2	6.8	TM	
90	TM	Hexachloroethane	0.8175	0.7873	0.7304	0.6929	0.6565	0.6579	0.6950				0.72	8.7	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.2327	0.1928	0.2379	0.2272	0.2070	0.2003	0.2083				0.22	8.1	TM	
92	TM	1,2,4-Trichlorobenzene	0.8102	1.011	0.7848	0.8643	0.7995	0.8808	0.9573				0.87	9.7	TM	
93	TM	Hexachlorobutadiene	0.5063	0.3999	0.4588	0.3957	0.3525	0.3563	0.3668				0.41	14	TM	
94	TML	Naphthalene		1.981	2.052	2.242	2.364	2.825	3.180				2.4	19	TML	0.999
95	TM	1,2,3-Trichlorobenzene	1.446	1.177	1.154	1.295	1.261	1.311	1.392				1.3	8.2	TM	
96																
97																
98																
99																
100																
101																
102																
103																
104																
105																

ARS 5/29/12

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T07W.D Vial: 4
Acq On : 30 Apr 12 11:15 Operator: DG,RS,HW,ARS,SV
Sample : 0.3ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	321088	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	257024	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.22	152	126408	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	4319	0.65502 ppb		0.00
Spiked Amount 29.265			Recovery =	2.238%		
36) 1,2-DCA-D4(S)	6.34	65	4534	0.67881 ppb		0.00
Spiked Amount 27.995			Recovery =	2.425%		
56) Toluene-D8(S)	8.44	98	12784	0.61067 ppb		0.00
Spiked Amount 29.188			Recovery =	2.093%		
64) 4-Bromofluorobenzene(S)	11.06	95	4912	0.61778 ppb		0.00
Spiked Amount 27.740			Recovery =	2.228%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.32	85	585	0.14309 ppb	#	43
3) Freon 114	1.42	85	705	407.78800 ppb	#	70
5) Vinyl chloride	1.57	62	1776	0.27828 ppb		97
6) Bromomethane	1.88	94	1951	0.42178 ppb	#	79
7) Chloroethane	1.98	64	2426	0.92140 ppb		97
9) Trichlorofluoromethane	2.24	101	234	0.41197 ppb		83
10) Acrolein	2.71	55	8693	14.18220 ppb		89
11) Acetone	2.92	43	2819	-2.91178 ppb		88
12) Freon-113	2.87	101	912	0.18652 ppb	#	87
13) 1,1-DCE	2.84	61	1933	0.23407 ppb	#	90
14) t-Butanol	3.72	59	1488	11.32432 ppb	#	80
15) Methyl Acetate	3.37	43	4146	-2.54949 ppb		94
16) Iodomethane	3.00	142	2292	0.26992 ppb		95
17) Acrylonitrile	3.84	52	273	0.19556 ppb	#	62
18) Methylene chloride	3.47	84	1640	-2.80322 ppb		87
19) Carbon disulfide	3.08	76	1366	0.25318 ppb	#	86
20) Methyl t-butyl ether (MtBE	3.93	73	2024	0.28028 ppb		90
21) Trans-1,2-DCE	3.88	96	1636	0.30458 ppb		86
22) Diisopropyl Ether	4.74	59	353	0.18276 ppb	#	41
23) 1,1-DCA	4.53	63	2934	0.27018 ppb	#	90
24) Vinyl Acetate	4.73	87	952	0.22218 ppb		83
25) Ethyl tert Butyl Ether	5.23	59	2314	0.27774 ppb	#	87
26) MEK (2-Butanone)	5.41	43	1180	-1.65747 ppb	#	47
27) Cis-1,2-DCE	5.35	96	1788	0.26978 ppb		86
28) 2,2-Dichloropropane	5.34	77	1227	0.30059 ppb		90
29) Chloroform	5.78	83	3502	0.30221 ppb		92
30) Bromochloromethane	5.64	128	791	0.24925 ppb		76
32) 1,1,1-TCA	5.97	97	1966	0.26574 ppb		82
33) Cyclohexane	6.05	41	767	0.20108 ppb	#	43
34) 1,1-Dichloropropene	6.19	75	1715	0.24502 ppb		87
35) 2,2,4-Trimethylpentane	6.56	57	2096	0.19273 ppb	#	62
37) Carbon Tetrachloride	6.18	117	2224	0.28813 ppb		94
38) Tert Amyl Methyl Ether	6.60	73	2125	0.23168 ppb	#	75
39) 1,2-DCA	6.43	62	2263	0.28904 ppb		92
40) Benzene	6.42	78	7355	0.29283 ppb		95
41) TCE	7.16	95	2090	0.31028 ppb	#	76
42) 2-Pentanone	7.38	43	45130	14.93020 ppb		97
43) 1,2-Dichloropropane	7.39	63	1861	0.26536 ppb	#	88
44) Bromodichloromethane	7.69	83	2717	0.30050 ppb	#	88

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

Data File : M:\THOR\DATA\T120430\0430T07W.D Vial: 4
Acq On : 30 Apr 12 11:15 Operator: DG,RS,HW,ARS,SV
Sample : 0.3ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:06 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

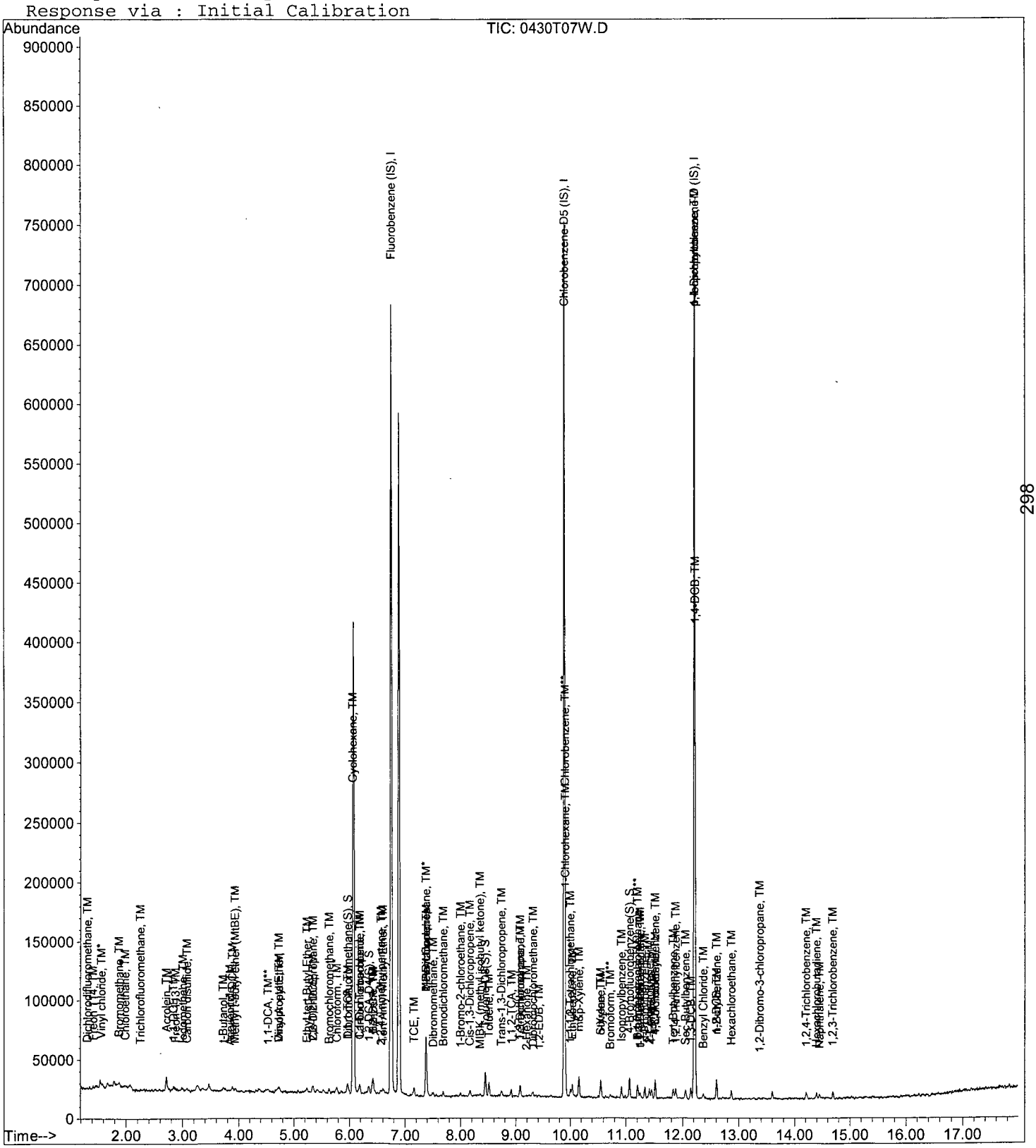
	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
45)	Methyl Cyclohexane	7.37	83	1819	0.25603 ppb		77
46)	Dibromomethane	7.50	93	1062	0.26663 ppb		90
48)	MIBK (methyl isobutyl ket	8.35	43	866	0.34207 ppb	#	84
49)	1-Bromo-2-chloroethane	8.00	63	1450	0.30361 ppb	#	77
50)	Cis-1,3-Dichloropropene	8.16	75	2670	0.29101 ppb		98
51)	Toluene	8.51	91	7267	0.27443 ppb		95
52)	Trans-1,3-Dichloropropene	8.74	75	1921	0.24126 ppb	#	48
53)	1,1,2-TCA	8.91	83	1401	0.28569 ppb		88
54)	2-Hexanone	9.19	43	876	0.32170 ppb	#	81
57)	1,2-EDB	9.41	107	1230	0.23065 ppb		95
58)	Tetrachloroethene	9.07	166	1643	0.25020 ppb		96
59)	1-Chlorohexane	9.92	91	2323	0.32329 ppb		86
60)	1,1,1,2-Tetrachloroethane	10.01	131	1676	0.25982 ppb		76
61)	m&p-Xylene	10.16	106	4485	0.44021 ppb		75
62)	o-Xylene	10.55	106	2072	0.21450 ppb		80
63)	Styrene	10.56	104	3613	0.21275 ppb	#	94
65)	1,3-Dichloropropane	9.08	76	2455	0.26743 ppb		100
66)	Dibromochloromethane	9.31	129	2053	0.30526 ppb	#	69
67)	Chlorobenzene	9.92	112	4914	0.27544 ppb		92
68)	Ethylbenzene	10.04	91	6110	0.22458 ppb		97
69)	Bromoform	10.73	173	1026	0.22695 ppb	#	28
71)	Isopropylbenzene	10.92	105	5079	0.25314 ppb	#	90
72)	1,1,2,2-Tetrachloroethane	11.21	83	2321	0.36111 ppb	#	94
73)	1,2,3-Trichloropropane	11.25	110	632	0.36047 ppb	#	67
74)	t-1,4-Dichloro-2-Butene	11.26	53	242	0.20682 ppb	#	28
75)	Bromobenzene	11.21	156	1877	0.28764 ppb		81
76)	n-Propylbenzene	11.33	91	6255	0.24190 ppb		99
77)	4-Ethyltoluene	11.45	105	4601	0.21372 ppb		92
78)	2-Chlorotoluene	11.41	91	4958	0.25983 ppb		86
79)	1,3,5-Trimethylbenzene	11.51	105	4058	0.22575 ppb		89
80)	4-Chlorotoluene	11.51	91	4866	0.25577 ppb		92
81)	Tert-Butylbenzene	11.83	119	3337	0.22220 ppb		94
82)	1,2,4-Trimethylbenzene	11.88	105	4042	0.22687 ppb		88
83)	Sec-Butylbenzene	12.05	105	5003	0.23361 ppb		92
84)	p-Isopropyltoluene	12.20	119	3752	0.21278 ppb	#	77
85)	Benzyl Chloride	12.37	91	2694	0.34261 ppb		92
86)	1,3-DCB	12.15	146	3842	0.29975 ppb		93
87)	1,4-DCB	12.23	146	4093	0.30543 ppb	#	90
88)	n-Butylbenzene	12.61	91	4007	0.23716 ppb		86
89)	1,2-DCB	12.61	146	3648	0.29484 ppb		90
90)	Hexachloroethane	12.87	117	1240	0.34307 ppb	#	86
91)	1,2-Dibromo-3-chloropropan	13.37	157	353	0.29361 ppb	#	78
92)	1,2,4-Trichlorobenzene	14.21	180	1229	0.24866 ppb		97
93)	Hexachlorobutadiene	14.40	223	768	0.34474 ppb	#	77
94)	Naphthalene	14.45	128	3344	0.23709 ppb	#	87
95)	1,2,3-Trichlorobenzene	14.69	180	2194	0.29933 ppb		96

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

Data File : M:\THOR\DATA\T120430\0430T07W.D Vial: 4
Acq On : 30 Apr 12 11:15 Operator: DG,RS,HW,ARS,SV
Sample : 0.3ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:06 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T08W.D Vial: 5
Acq On : 30 Apr 12 11:43 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.75	96	310784	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	254464	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	131776	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.96	111	6953	1.08945 ppb		0.00
Spiked Amount 29.265			Recovery =	3.721%		
36) 1,2-DCA-D4(S)	6.35	65	6885	1.06497 ppb		0.00
Spiked Amount 27.995			Recovery =	3.804%		
56) Toluene-D8(S)	8.45	98	18747	0.90452 ppb		0.00
Spiked Amount 29.188			Recovery =	3.101%		
64) 4-Bromofluorobenzene(S)	11.06	95	6698	0.85087 ppb		0.00
Spiked Amount 27.740			Recovery =	3.068%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.31	85	1665	0.42077 ppb		98
4) Chloromethane	1.46	50	2451	0.39621 ppb		98
5) Vinyl chloride	1.57	62	3085	0.49942 ppb		94
6) Bromomethane	1.88	94	2683	0.59926 ppb		97
7) Chloroethane	1.99	64	2793	1.04182 ppb	#	63
8) Dichlorofluoromethane	2.20	67	92	4.56868 ppb	#	39
9) Trichlorofluoromethane	2.25	101	644	0.69312 ppb	#	66
10) Acrolein	2.71	55	15954	26.89111 ppb		88
11) Acetone	2.91	43	2932	-2.74000 ppb		100
12) Freon-113	2.87	101	2119	0.44773 ppb		86
13) 1,1-DCE	2.84	61	3309	0.41398 ppb		96
14) t-Butanol	3.72	59	2789	21.92922 ppb		99
15) Methyl Acetate	3.37	43	4919	-2.29832 ppb		88
16) Iodomethane	3.01	142	3447	0.41940 ppb	#	88
17) Acrylonitrile	3.84	52	526	0.38928 ppb		76
18) Methylene chloride	3.47	84	1968	-2.58714 ppb		97
19) Carbon disulfide	3.08	76	2587	0.49538 ppb	#	92
20) Methyl t-butyl ether (MtBE	3.94	73	3674	0.52564 ppb	#	85
21) Trans-1,2-DCE	3.89	96	2069	0.39796 ppb		94
22) Diisopropyl Ether	4.73	59	881	0.47124 ppb	#	41
23) 1,1-DCA	4.53	63	5011	0.47674 ppb	#	86
24) Vinyl Acetate	4.74	87	1655	0.39906 ppb		73
25) Ethyl tert Butyl Ether	5.23	59	3579	0.44381 ppb		95
26) MEK (2-Butanone)	5.41	43	1729	-1.33268 ppb		95
27) Cis-1,2-DCE	5.35	96	2896	0.45145 ppb		83
28) 2,2-Dichloropropane	5.34	77	2048	0.51835 ppb		96
29) Chloroform	5.77	83	5626	0.50160 ppb		97
30) Bromochloromethane	5.65	128	1281	0.41703 ppb		97
32) 1,1,1-TCA	5.98	97	3548	0.49547 ppb		98
33) Cyclohexane	6.05	41	1392	0.37704 ppb	#	6
34) 1,1-Dichloropropene	6.18	75	3283	0.48460 ppb	#	86
35) 2,2,4-Trimethylpentane	6.56	57	4769	0.45305 ppb		93
37) Carbon Tetrachloride	6.19	117	3350	0.44840 ppb	#	94
38) Tert Amyl Methyl Ether	6.61	73	3888	0.43795 ppb	#	93
39) 1,2-DCA	6.44	62	3416	0.45077 ppb		92
40) Benzene	6.42	78	11584	0.47649 ppb		96
41) TCE	7.16	95	3467	0.53177 ppb	#	70
42) 2-Pentanone	7.38	43	75735	25.88585 ppb		100
43) 1,2-Dichloropropane	7.39	63	3041	0.44799 ppb	#	88

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T08W.D Vial: 5
Acq On : 30 Apr 12 11:43 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
44)	Bromodichloromethane	7.69	83	4530	0.51762	ppb		97
45)	Methyl Cyclohexane	7.38	83	2904	0.42231	ppb		97
46)	Dibromomethane	7.50	93	1955	0.50710	ppb		98
48)	MIBK (methyl isobutyl ket	8.35	43	1096	0.44728	ppb	#	86
49)	1-Bromo-2-chloroethane	8.00	63	2165	0.46835	ppb		95
50)	Cis-1,3-Dichloropropene	8.17	75	3550	0.39975	ppb	#	79
51)	Toluene	8.51	91	11620	0.45337	ppb		95
52)	Trans-1,3-Dichloropropene	8.74	75	3533	0.45843	ppb	#	59
53)	1,1,2-TCA	8.92	83	2086	0.43948	ppb		95
54)	2-Hexanone	9.19	43	1018	0.38625	ppb		90
57)	1,2-EDB	9.42	107	2320	0.43942	ppb		97
58)	Tetrachloroethene	9.06	166	2736	0.42083	ppb		89
59)	1-Chlorohexane	9.92	91	3369	0.47357	ppb		90
60)	1,1,1,2-Tetrachloroethane	10.00	131	3047	0.47710	ppb		87
61)	m&p-Xylene	10.16	106	7576	0.75108	ppb		91
62)	o-Xylene	10.55	106	3311	0.34621	ppb		94
63)	Styrene	10.56	104	5739	0.34133	ppb	#	94
65)	1,3-Dichloropropane	9.08	76	3935	0.43296	ppb	#	74
66)	Dibromochloromethane	9.31	129	2836	0.42592	ppb		98
67)	Chlorobenzene	9.92	112	8033	0.45480	ppb		89
68)	Ethylbenzene	10.04	91	10802	0.40104	ppb		91
69)	Bromoform	10.73	173	1909	0.42651	ppb		97
71)	Isopropylbenzene	10.93	105	8054	0.38506	ppb		94
72)	1,1,2,2-Tetrachloroethane	11.20	83	3331	0.49713	ppb		87
73)	1,2,3-Trichloropropane	11.24	110	830	0.45412	ppb		79
74)	t-1,4-Dichloro-2-Butene	11.26	53	530	0.43449	ppb		82
75)	Bromobenzene	11.21	156	3071	0.45144	ppb		85
76)	n-Propylbenzene	11.33	91	10581	0.39252	ppb		98
77)	4-Ethyltoluene	11.45	105	8116	0.36163	ppb		90
78)	2-Chlorotoluene	11.41	91	8104	0.40740	ppb		91
79)	1,3,5-Trimethylbenzene	11.51	105	6297	0.33603	ppb		99
80)	4-Chlorotoluene	11.51	91	8012	0.40398	ppb		100
81)	Tert-Butylbenzene	11.84	119	5393	0.34448	ppb		82
82)	1,2,4-Trimethylbenzene	11.88	105	6324	0.34049	ppb		97
83)	Sec-Butylbenzene	12.05	105	7992	0.35798	ppb		97
84)	p-Isopropyltoluene	12.20	119	6007	0.32678	ppb	#	91
85)	Benzyl Chloride	12.37	91	4172	0.50896	ppb	#	92
86)	1,3-DCB	12.14	146	5605	0.41949	ppb		97
87)	1,4-DCB	12.24	146	6499	0.46521	ppb		94
88)	n-Butylbenzene	12.61	91	6872	0.39016	ppb		88
89)	1,2-DCB	12.60	146	6336	0.49122	ppb		89
90)	Hexachloroethane	12.86	117	2075	0.55070	ppb		90
91)	1,2-Dibromo-3-chloropropan	13.37	157	508	0.40532	ppb	#	87
92)	1,2,4-Trichlorobenzene	14.21	180	2664	0.51705	ppb		82
93)	Hexachlorobutadiene	14.40	223	1054	0.45385	ppb		85
94)	Naphthalene	14.45	128	5221	0.35509	ppb		97
95)	1,2,3-Trichlorobenzene	14.69	180	3102	0.40597	ppb		97

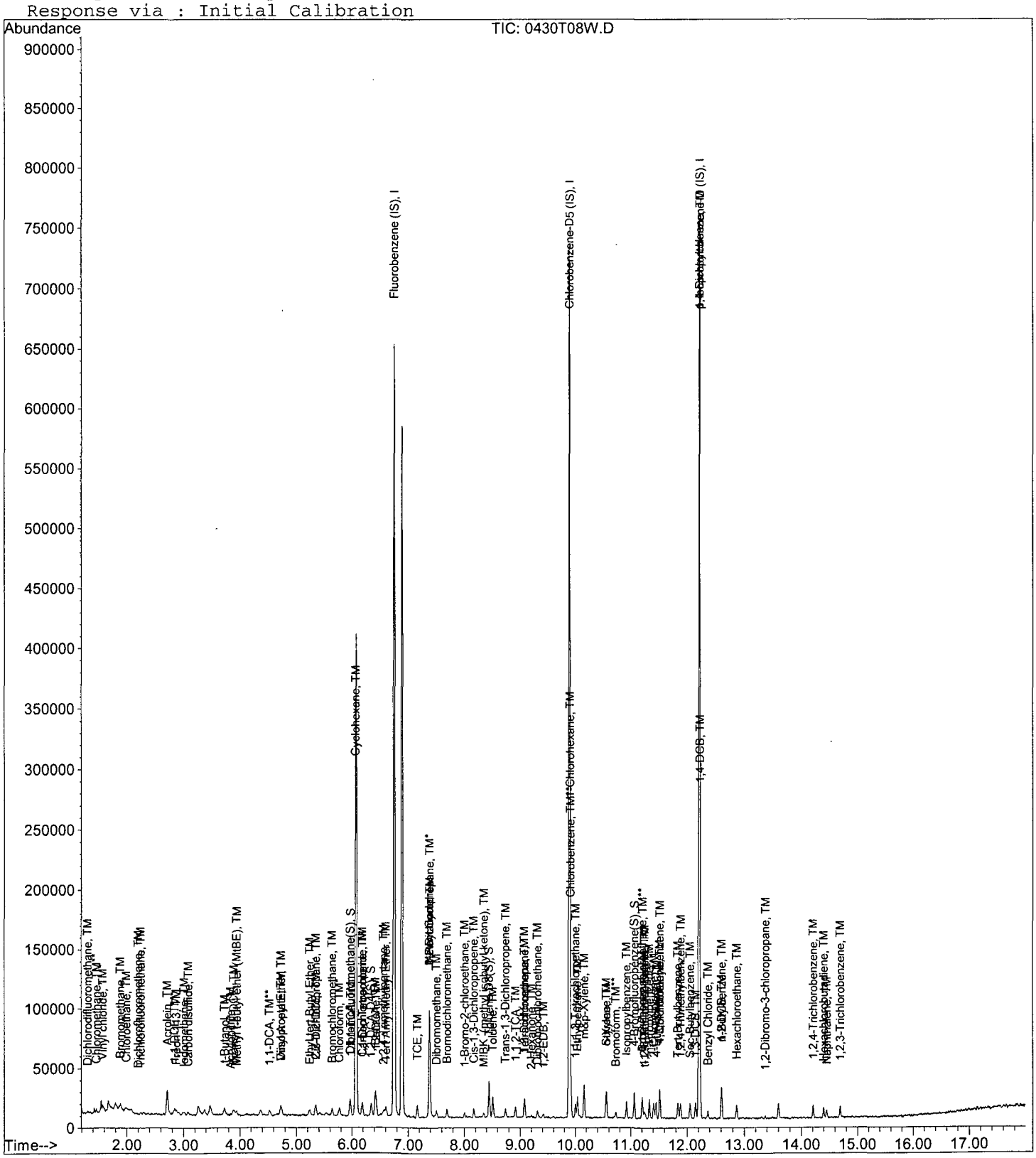
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T08W.D Vial: 5
Acq On : 30 Apr 12 11:43 Operator: DG,RS,HW,ARS,SV
Sample : 0.5ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T09W.D Vial: 6
Acq On : 30 Apr 12 12:10 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.74	96	324672	25.00000 ppb		0.00
55) Chlorobenzene-D5 (IS)	9.89	117	255360	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	134592	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.95	111	7254	1.08800 ppb		-0.01
Spiked Amount 29.265			Recovery =	3.718%		
36) 1,2-DCA-D4(S)	6.34	65	7400	1.09566 ppb		0.00
Spiked Amount 27.995			Recovery =	3.915%		
56) Toluene-D8(S)	8.44	98	20141	0.96837 ppb		0.00
Spiked Amount 29.188			Recovery =	3.316%		
64) 4-Bromofluorobenzene(S)	11.06	95	7483	0.94726 ppb		0.00
Spiked Amount 27.740			Recovery =	3.414%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.27	85	3911	0.94608 ppb		93
3) Freon 114	1.39	85	4477	0.44969 ppb		96
4) Chloromethane	1.43	50	4243	1.02096 ppb		98
5) Vinyl chloride	1.54	62	6220	0.96385 ppb		92
6) Bromomethane	1.85	94	4849	1.03672 ppb		90
7) Chloroethane	1.96	64	4861	1.54534 ppb	#	82
8) Dichlorofluoromethane	2.16	67	193	4.64367 ppb	#	39
9) Trichlorofluoromethane	2.23	101	1045	0.93232 ppb		100
10) Acrolein	2.68	55	29819	48.11119 ppb		71
11) Acetone	2.88	43	3112	-2.70042 ppb		83
12) Freon-113	2.85	101	4725	0.95566 ppb		97
13) 1,1-DCE	2.80	61	7453	0.89253 ppb		96
14) t-Butanol	3.69	59	4454	33.52268 ppb		98
15) Methyl Acetate	3.34	43	7646	-1.63302 ppb		95
16) Iodomethane	2.97	142	7072	0.82364 ppb		92
17) Acrylonitrile	3.80	52	1218	0.86285 ppb		93
18) Methylene chloride	3.44	84	2956	-2.09804 ppb		96
19) Carbon disulfide	3.05	76	4822	0.88387 ppb		98
20) Methyl t-butyl ether (MtBE	3.90	73	6280	0.86005 ppb		92
21) Trans-1,2-DCE	3.86	96	4552	0.83810 ppb		95
22) Diisopropyl Ether	4.71	59	1826	0.93493 ppb	#	41
23) 1,1-DCA	4.50	63	9888	0.90049 ppb		97
24) Vinyl Acetate	4.70	87	3235	0.74667 ppb		88
25) Ethyl tert Butyl Ether	5.22	59	6971	0.82746 ppb		95
26) MEK (2-Butanone)	5.39	43	2716	-0.85074 ppb		88
27) Cis-1,2-DCE	5.33	96	5399	0.80563 ppb		97
28) 2,2-Dichloropropane	5.32	77	3862	0.93566 ppb		97
29) Chloroform	5.76	83	10706	0.91369 ppb		95
30) Bromochloromethane	5.63	128	2567	0.79994 ppb		97
32) 1,1,1-TCA	5.96	97	6488	0.86728 ppb		89
33) Cyclohexane	6.03	41	3142	0.81464 ppb		95
34) 1,1-Dichloropropene	6.17	75	5906	0.83448 ppb		97
35) 2,2,4-Trimethylpentane	6.56	57	8732	0.79404 ppb		93
37) Carbon Tetrachloride	6.17	117	6942	0.88945 ppb		91
38) Tert Amyl Methyl Ether	6.60	73	7511	0.80986 ppb	#	87
39) 1,2-DCA	6.43	62	7274	0.91882 ppb		98
40) Benzene	6.41	78	22277	0.87714 ppb		99
41) TCE	7.15	95	5746	0.84363 ppb		92
42) 2-Pentanone	7.37	43	150905	49.37229 ppb		98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T09W.D Vial: 6
Acq On : 30 Apr 12 12:10 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.38	63	6871	0.96893	ppb		99
44)	Bromodichloromethane	7.69	83	7719	0.84429	ppb		97
45)	Methyl Cyclohexane	7.37	83	5684	0.79122	ppb	#	54
46)	Dibromomethane	7.50	93	3654	0.90726	ppb		99
47)	2-Chloroethyl vinyl ether	8.00	106	67	-4.55480	ppb		100
48)	MIBK (methyl isobutyl ket	8.35	43	2315	0.90434	ppb	#	97
49)	1-Bromo-2-chloroethane	8.00	63	4130	0.85522	ppb		91
50)	Cis-1,3-Dichloropropene	8.16	75	8464	0.91232	ppb		85
51)	Toluene	8.51	91	22129	0.82646	ppb		96
52)	Trans-1,3-Dichloropropene	8.74	75	6605	0.82037	ppb	#	76
53)	1,1,2-TCA	8.91	83	4158	0.83853	ppb		89
54)	2-Hexanone	9.19	43	2282	0.82879	ppb		93
57)	1,2-EDB	9.41	107	4759	0.89821	ppb		97
58)	Tetrachloroethene	9.07	166	5791	0.88760	ppb		98
59)	1-Chlorohexane	9.91	91	5673	0.79464	ppb		91
60)	1,1,1,2-Tetrachloroethane	10.00	131	5260	0.82072	ppb		96
61)	m&p-Xylene	10.16	106	14628	1.44513	ppb		88
62)	o-Xylene	10.55	106	6842	0.71290	ppb		89
63)	Styrene	10.56	104	11027	0.65354	ppb		92
65)	1,3-Dichloropropane	9.08	76	7926	0.86902	ppb		99
66)	Dibromochloromethane	9.31	129	5794	0.86712	ppb		81
67)	Chlorobenzene	9.92	112	15538	0.87661	ppb		92
68)	Ethylbenzene	10.04	91	20932	0.77440	ppb		97
69)	Bromoform	10.72	173	4131	0.91971	ppb		91
71)	Isopropylbenzene	10.92	105	16493	0.77203	ppb		100
72)	1,1,2,2-Tetrachloroethane	11.20	83	6447	0.94204	ppb		96
73)	1,2,3-Trichloropropane	11.24	110	1748	0.93637	ppb		89
74)	t-1,4-Dichloro-2-Butene	11.26	53	1078	0.86525	ppb	#	30
75)	Bromobenzene	11.21	156	5490	0.79015	ppb		84
76)	n-Propylbenzene	11.33	91	21015	0.76328	ppb		98
77)	4-Ethyltoluene	11.45	105	16752	0.73082	ppb		98
78)	2-Chlorotoluene	11.41	91	16740	0.82395	ppb		95
79)	1,3,5-Trimethylbenzene	11.51	105	13588	0.70994	ppb		95
80)	4-Chlorotoluene	11.51	91	15065	0.74372	ppb		91
81)	Tert-Butylbenzene	11.83	119	14208	0.88855	ppb		90
82)	1,2,4-Trimethylbenzene	11.88	105	13188	0.69521	ppb		100
83)	Sec-Butylbenzene	12.05	105	16049	0.70383	ppb		99
84)	p-Isopropyltoluene	12.20	119	13112	0.69837	ppb		100
85)	Benzyl Chloride	12.37	91	8753	1.04547	ppb		95
86)	1,3-DCB	12.15	146	12207	0.89448	ppb		93
87)	1,4-DCB	12.23	146	12388	0.86820	ppb		94
88)	n-Butylbenzene	12.60	91	14538	0.80813	ppb		86
89)	1,2-DCB	12.60	146	11350	0.86154	ppb		96
90)	Hexachloroethane	12.87	117	3932	1.02170	ppb		84
91)	1,2-Dibromo-3-chloropropan	13.37	157	1281	1.00069	ppb		83
92)	1,2,4-Trichlorobenzene	14.21	180	4225	0.80286	ppb		92
93)	Hexachlorobutadiene	14.40	223	2470	1.04131	ppb		90
94)	Naphthalene	14.45	128	11047	0.73560	ppb		99
95)	1,2,3-Trichlorobenzene	14.69	180	6214	0.79624	ppb	#	75

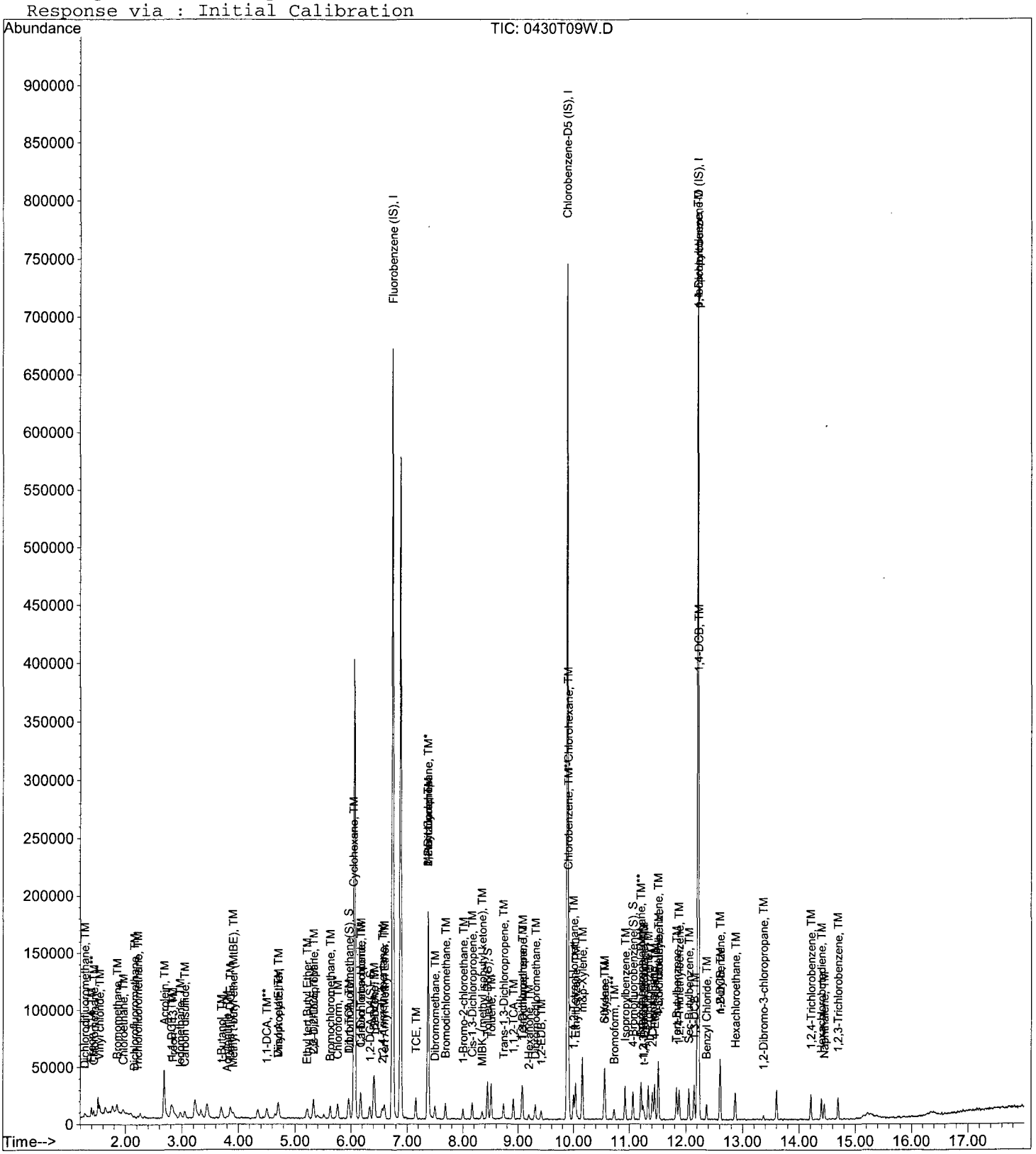
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T09W.D Vial: 6
Acq On : 30 Apr 12 12:10 Operator: DG,RS,HW,ARS,SV
Sample : 1.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T10W.D Vial: 7
Acq On : 30 Apr 12 12:38 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	336384	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	263552	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	153472	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	64169	9.28935 ppb	0.00
Spiked Amount 29.265			Recovery =	31.741%	
36) 1,2-DCA-D4(S)	6.34	65	65870	9.41331 ppb	0.00
Spiked Amount 27.995			Recovery =	33.623%	
56) Toluene-D8(S)	8.44	98	198174	9.23198 ppb	0.00
Spiked Amount 29.188			Recovery =	31.629%	
64) 4-Bromofluorobenzene(S)	11.06	95	72540	8.89729 ppb	0.00
Spiked Amount 27.740			Recovery =	32.073%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	22260	5.19726 ppb	93
3) Freon 114	1.42	85	22079	3.30265 ppb	92
4) Chloromethane	1.46	50	17895	5.47035 ppb	95
5) Vinyl chloride	1.57	62	33496	5.00983 ppb	97
6) Bromomethane	1.87	94	23633	4.87685 ppb	99
7) Chloroethane	1.98	64	20188	5.33474 ppb	99
8) Dichlorofluoromethane	2.19	67	2155	6.10411 ppb	99
9) Trichlorofluoromethane	2.25	101	6722	4.35657 ppb	82
10) Acrolein	2.71	55	66487	103.53788 ppb	87
11) Acetone	2.91	43	9822	2.44579 ppb	97
12) Freon-113	2.87	101	22532	4.39858 ppb	91
13) 1,1-DCE	2.83	61	41804	4.83192 ppb	99
14) t-Butanol	3.72	59	10901	79.18892 ppb	98
15) Methyl Acetate	3.36	43	23777	2.42776 ppb	99
16) Iodomethane	2.99	142	43337	4.87152 ppb	96
17) Acrylonitrile	3.83	52	7292	4.98589 ppb	91
18) Methylene chloride	3.47	84	13630	3.44444 ppb	99
19) Carbon disulfide	3.07	76	27016	4.77958 ppb	97
20) Methyl t-butyl ether (MtBE	3.93	73	36191	4.78383 ppb	91
21) Trans-1,2-DCE	3.88	96	26037	4.62696 ppb	91
22) Diisopropyl Ether	4.73	59	9737	4.81186 ppb	91
23) 1,1-DCA	4.52	63	53384	4.69235 ppb	99
24) Vinyl Acetate	4.72	87	21108	4.70230 ppb	95
25) Ethyl tert Butyl Ether	5.23	59	41414	4.74471 ppb	96
26) MEK (2-Butanone)	5.40	43	10458	3.05770 ppb	86
27) Cis-1,2-DCE	5.34	96	31951	4.60168 ppb	95
28) 2,2-Dichloropropane	5.34	77	19209	4.49177 ppb	97
29) Chloroform	5.77	83	54609	4.49826 ppb	95
30) Bromochloromethane	5.64	128	16554	4.97903 ppb	93
32) 1,1,1-TCA	5.98	97	36311	4.68485 ppb	95
33) Cyclohexane	6.05	41	18730	4.68714 ppb	81
34) 1,1-Dichloropropene	6.18	75	32821	4.47595 ppb	98
35) 2,2,4-Trimethylpentane	6.56	57	47299	4.15136 ppb	95
37) Carbon Tetrachloride	6.18	117	35861	4.43474 ppb	94
38) Tert Amyl Methyl Ether	6.60	73	45668	4.75264 ppb	93
39) 1,2-DCA	6.43	62	38793	4.72953 ppb	98
40) Benzene	6.41	78	121820	4.62955 ppb	98
41) TCE	7.16	95	32558	4.61374 ppb	90
42) 2-Pentanone	7.38	43	308811	97.51735 ppb	97

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T10W.D Vial: 7
Acq On : 30 Apr 12 12:38 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	34242	4.66057	ppb		97
44)	Bromodichloromethane	7.69	83	44425	4.68992	ppb		99
45)	Methyl Cyclohexane	7.37	83	29680	3.98765	ppb		73
46)	Dibromomethane	7.50	93	19176	4.59548	ppb		93
47)	2-Chloroethyl vinyl ether	8.01	106	570	-0.09799	ppb	#	100
48)	MIBK (methyl isobutyl ket	8.35	43	10763	4.05809	ppb	#	95
49)	1-Bromo-2-chloroethane	8.00	63	23072	4.61127	ppb		100
50)	Cis-1,3-Dichloropropene	8.17	75	42710	4.44334	ppb		96
51)	Toluene	8.51	91	122244	4.40656	ppb		98
52)	Trans-1,3-Dichloropropene	8.74	75	38187	4.57788	ppb		95
53)	1,1,2-TCA	8.92	83	24989	4.86401	ppb		95
54)	2-Hexanone	9.19	43	11605	4.06804	ppb		97
57)	1,2-EDB	9.41	107	26399	4.82767	ppb		99
58)	Tetrachloroethene	9.07	166	32802	4.87137	ppb		95
59)	1-Chlorohexane	9.92	91	28657	3.88935	ppb		95
60)	1,1,1,2-Tetrachloroethane	10.00	131	32233	4.87302	ppb		95
61)	m&p-Xylene	10.16	106	93270	8.92793	ppb		97
62)	o-Xylene	10.55	106	45253	4.56859	ppb		93
63)	Styrene	10.56	104	77371	4.44301	ppb		99
65)	1,3-Dichloropropane	9.08	76	45951	4.88153	ppb		100
66)	Dibromochloromethane	9.31	129	31936	4.63092	ppb		95
67)	Chlorobenzene	9.92	112	84077	4.59596	ppb		96
68)	Ethylbenzene	10.04	91	125669	4.50476	ppb		99
69)	Bromoform	10.73	173	23224	5.00977	ppb		98
71)	Isopropylbenzene	10.92	105	106892	4.38803	ppb		99
72)	1,1,2,2-Tetrachloroethane	11.20	83	37151	4.76074	ppb		99
73)	1,2,3-Trichloropropane	11.24	110	9591	4.50566	ppb		99
74)	t-1,4-Dichloro-2-Butene	11.26	53	7105	5.00123	ppb		98
75)	Bromobenzene	11.21	156	38040	4.80138	ppb		95
76)	n-Propylbenzene	11.33	91	136924	4.36140	ppb		96
77)	4-Ethyltoluene	11.45	105	116610	4.46136	ppb		99
78)	2-Chlorotoluene	11.41	91	108227	4.67163	ppb		100
79)	1,3,5-Trimethylbenzene	11.51	105	100015	4.58267	ppb		97
80)	4-Chlorotoluene	11.51	91	109137	4.72500	ppb		100
81)	Tert-Butylbenzene	11.83	119	81699	4.48081	ppb		96
82)	1,2,4-Trimethylbenzene	11.88	105	96329	4.45329	ppb		98
83)	Sec-Butylbenzene	12.05	105	119813	4.60802	ppb		99
84)	p-Isopropyltoluene	12.20	119	95688	4.46958	ppb		97
85)	Benzyl Chloride	12.37	91	46193	4.83859	ppb		100
86)	1,3-DCB	12.15	146	72977	4.68961	ppb		96
87)	1,4-DCB	12.23	146	78723	4.83852	ppb		98
88)	n-Butylbenzene	12.61	91	88839	4.33081	ppb		98
89)	1,2-DCB	12.60	146	69383	4.61876	ppb		98
90)	Hexachloroethane	12.87	117	21268	4.84650	ppb		99
91)	1,2-Dibromo-3-chloropropan	13.37	157	6975	4.77842	ppb		92
92)	1,2,4-Trichlorobenzene	14.21	180	26528	4.42086	ppb		95
93)	Hexachlorobutadiene	14.40	223	12146	4.49064	ppb		94
94)	Naphthalene	14.45	128	68822	4.01900	ppb		98
95)	1,2,3-Trichlorobenzene	14.69	180	39760	4.46793	ppb		96

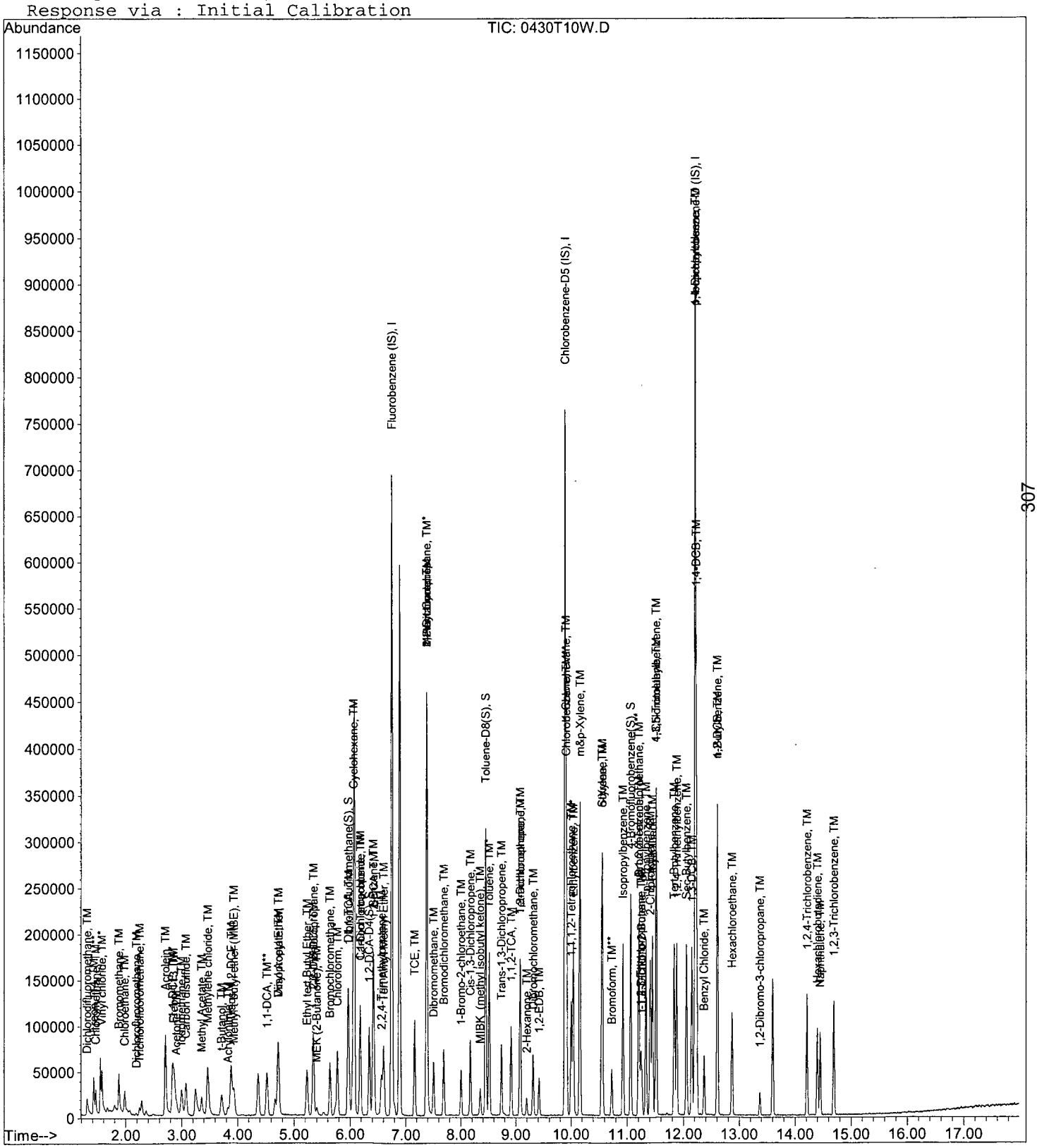
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T10W.D Vial: 7
Acq On : 30 Apr 12 12:38 Operator: DG,RS,HW,ARS,SV
Sample : 5.0ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



307

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T11W.D Vial: 8
Acq On : 30 Apr 12 13:06 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 2 13:56 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed May 02 13:55:50 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	357888	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	284544	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	173312	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	159366	24.69101 ppb	0.00
Spiked Amount 29.265			Recovery =	84.370%	
36) 1,2-DCA-D4(S)	6.34	65	164038	25.37582 ppb	0.00
Spiked Amount 27.995			Recovery =	90.643%	
56) Toluene-D8(S)	8.45	98	521828	24.16637 ppb	0.00
Spiked Amount 29.188			Recovery =	82.793%	
64) 4-Bromofluorobenzene(S)	11.06	95	198538	23.93771 ppb	0.00
Spiked Amount 27.740			Recovery =	86.296%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.31	85	47564	10.40339 ppb	100
3) Freon 114	1.42	85	52590	10.75113 ppb	100
4) Chloromethane	1.46	50	35429	7.95575 ppb	100
5) Vinyl chloride	1.57	62	74964	10.55730 ppb	100
6) Bromomethane	1.88	94	46874	9.00004 ppb	100
7) Chloroethane	1.99	64	40598	9.69859 ppb	100
8) Dichlorofluoromethane	2.19	67	4686	11.34804 ppb	100
9) Trichlorofluoromethane	2.25	101	17322	10.12073 ppb	100
10) Acrolein	2.71	55	83801	122.65914 ppb	100
11) Acetone	2.91	43	18447	11.04857 ppb	100
12) Freon-113	2.87	101	55139	11.45608 ppb	100
13) 1,1-DCE	2.84	61	88882	10.87631 ppb	100
14) t-Butanol	3.72	59	14895	130.11687 ppb	100
15) Methyl Acetate	3.36	43	47948	10.29616 ppb	100
16) Iodomethane	3.00	142	89042	10.50844 ppb	100
17) Acrylonitrile	3.83	52	15795	11.53008 ppb	100
18) Methylene chloride	3.47	84	24840	11.02250 ppb	100
19) Carbon disulfide	3.08	76	57040	10.54472 ppb	100
20) Methyl t-butyl ether (MtBE	3.93	73	72286	9.89796 ppb	100
21) Trans-1,2-DCE	3.88	96	56359	10.50565 ppb	100
22) Diisopropyl Ether	4.72	59	19254	10.11996 ppb	100
23) 1,1-DCA	4.53	63	113421	10.38124 ppb	100
24) Vinyl Acetate	4.73	87	44124	10.61242 ppb	100
25) Ethyl tert Butyl Ether	5.23	59	87937	10.59550 ppb	100
26) MEK (2-Butanone)	5.40	43	20418	9.78312 ppb	100
27) Cis-1,2-DCE	5.34	96	68908	10.47374 ppb	100
28) 2,2-Dichloropropane	5.34	77	41746	10.08369 ppb	100
29) Chloroform	5.77	83	114269	9.75320 ppb	100
30) Bromochloromethane	5.64	128	35167	11.17290 ppb	100
32) 1,1,1-TCA	5.97	97	76680	10.27656 ppb	100
33) Cyclohexane	6.05	41	41147	11.18312 ppb	100
34) 1,1-Dichloropropene	6.18	75	71163	10.26140 ppb	100
35) 2,2,4-Trimethylpentane	6.57	57	112140	10.71399 ppb	100
37) Carbon Tetrachloride	6.18	117	79728	10.31203 ppb	100
38) Tert Amyl Methyl Ether	6.60	73	98140	10.89933 ppb	100
39) 1,2-DCA	6.43	62	79637	10.10025 ppb	100
40) Benzene	6.42	78	254660	10.07171 ppb	100
41) TCE	7.16	95	66106	9.66502 ppb	100
42) 2-Pentanone	7.38	43	372082	110.87512 ppb	100

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T11W.D Vial: 8
Acq On : 30 Apr 12 13:06 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 2 13:56 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Wed May 02 13:55:50 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	72618	10.32032	ppb	100
44)	Bromodichloromethane	7.69	83	90358	9.86812	ppb	100
45)	Methyl Cyclohexane	7.38	83	72021	10.41167	ppb	100
46)	Dibromomethane	7.50	93	42102	10.49900	ppb	100
47)	2-Chloroethyl vinyl ether	7.99	106	1579	10.00000	ppb	100
48)	MIBK (methyl isobutyl ket	8.35	43	21576	8.50582	ppb	100
49)	1-Bromo-2-chloroethane	8.00	63	46800	9.73921	ppb	100
50)	Cis-1,3-Dichloropropene	8.17	75	91776	10.03711	ppb	100
51)	Toluene	8.51	91	270228	10.28778	ppb	100
52)	Trans-1,3-Dichloropropene	8.74	75	81140	10.30003	ppb	100
53)	1,1,2-TCA	8.92	83	51469	10.49589	ppb	100
54)	2-Hexanone	9.19	43	25513	9.45719	ppb	100
57)	1,2-EDB	9.41	107	55684	10.60741	ppb	100
58)	Tetrachloroethene	9.07	166	68711	10.60134	ppb	100
59)	1-Chlorohexane	9.92	91	66397	9.36380	ppb	100
60)	1,1,1,2-Tetrachloroethane	10.00	131	67084	10.47276	ppb	100
61)	m&p-Xylene	10.16	106	216164	22.22386	ppb	100
62)	o-Xylene	10.55	106	103384	9.86787	ppb	100
63)	Styrene	10.56	104	181425	9.71496	ppb	100
65)	1,3-Dichloropropane	9.08	76	95897	10.52772	ppb	100
66)	Dibromochloromethane	9.31	129	67530	10.11305	ppb	100
67)	Chlorobenzene	9.92	112	181263	10.23667	ppb	100
68)	Ethylbenzene	10.04	91	281452	10.74504	ppb	100
69)	Bromoform	10.73	173	46940	10.50943	ppb	100
71)	Isopropylbenzene	10.92	105	248624	10.36149	ppb	100
72)	1,1,2,2-Tetrachloroethane	11.20	83	73564	9.53312	ppb	100
73)	1,2,3-Trichloropropane	11.24	110	21476	10.31151	ppb	100
74)	t-1,4-Dichloro-2-Butene	11.26	53	15049	10.61218	ppb	100
75)	Bromobenzene	11.21	156	80805	10.08907	ppb	100
76)	n-Propylbenzene	11.33	91	325489	10.55166	ppb	100
77)	4-Ethyltoluene	11.45	105	281929	10.80210	ppb	100
78)	2-Chlorotoluene	11.41	91	242928	10.49962	ppb	100
79)	1,3,5-Trimethylbenzene	11.51	105	236909	9.94711	ppb	100
80)	4-Chlorotoluene	11.51	91	249684	10.88077	ppb	100
81)	Tert-Butylbenzene	11.83	119	188016	10.48361	ppb	100
82)	1,2,4-Trimethylbenzene	11.88	105	225679	9.54400	ppb	100
83)	Sec-Butylbenzene	12.05	105	272620	10.75172	ppb	100
84)	p-Isopropyltoluene	12.20	119	228686	9.70940	ppb	100
85)	Benzyl Chloride	12.37	91	99078	9.34410	ppb	100
86)	1,3-DCB	12.15	146	159222	10.07906	ppb	100
87)	1,4-DCB	12.24	146	163584	9.82980	ppb	100
88)	n-Butylbenzene	12.61	91	204010	10.11748	ppb	100
89)	1,2-DCB	12.60	146	150753	9.83801	ppb	100
90)	Hexachloroethane	12.87	117	45511	9.12261	ppb	100
91)	1,2-Dibromo-3-chloropropan	13.37	157	14353	9.62097	ppb	100
92)	1,2,4-Trichlorobenzene	14.21	180	55424	9.16300	ppb	100
93)	Hexachlorobutadiene	14.40	223	24435	8.69922	ppb	100
94)	Naphthalene	14.45	128	163915	8.99597	ppb	100
95)	1,2,3-Trichlorobenzene	14.69	180	87429	9.76893	ppb	100

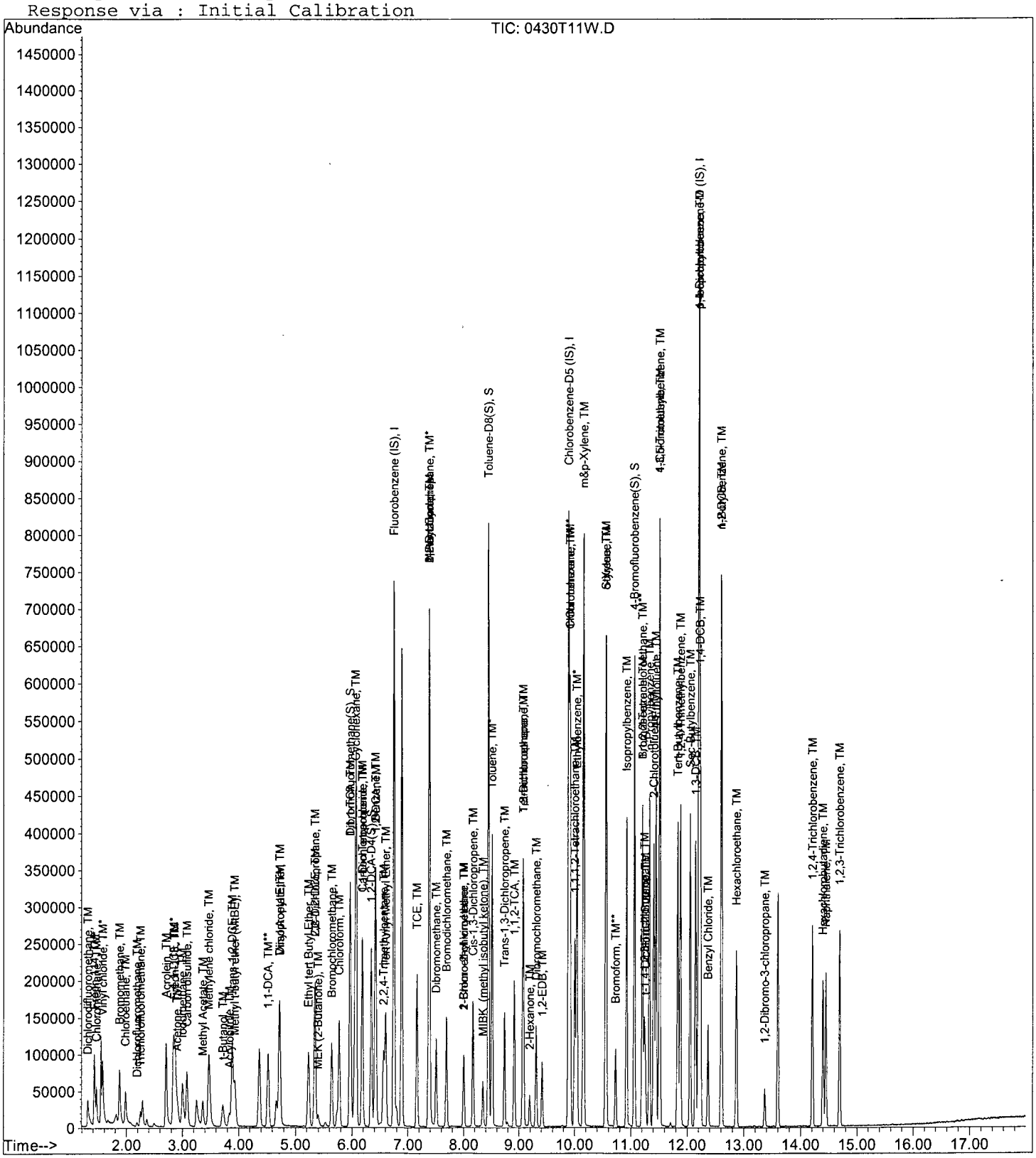
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T11W.D Vial: 8
Acq On : 30 Apr 12 13:06 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS: 03-26-12 Multiplr: 1.00

Quant Time: May 2 13:56 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T13W.D Vial: 10
Acq On : 30 Apr 12 14:02 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	390464	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	312576	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	191744	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	557897	69.57744 ppb	0.00
Spiked Amount 29.265			Recovery = 237.747%		
36) 1,2-DCA-D4(S)	6.34	65	555059	68.33581 ppb	0.00
Spiked Amount 27.995			Recovery = 244.097%		
56) Toluene-D8(S)	8.45	98	1912528	75.12191 ppb	0.00
Spiked Amount 29.188			Recovery = 257.369%		
64) 4-Bromofluorobenzene(S)	11.06	95	742282	76.76442 ppb	0.00
Spiked Amount 27.740			Recovery = 276.732%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.31	85	213931	43.03057 ppb	100
3) Freon 114	1.42	85	218220	32.80785 ppb	94
4) Chloromethane	1.47	50	217521	40.01504 ppb	98
5) Vinyl chloride	1.57	62	312527	40.26911 ppb	100
6) Bromomethane	1.87	94	210543	37.42967 ppb	99
7) Chloroethane	1.98	64	179203	38.89668 ppb	97
8) Dichlorofluoromethane	2.19	67	31551	24.79902 ppb	97
9) Trichlorofluoromethane	2.25	101	90255	39.64809 ppb	90
10) Acrolein	2.71	55	192650	258.45556 ppb	75
11) Acetone	2.91	43	63730	37.60902 ppb	98
12) Freon-113	2.87	101	214178	36.01986 ppb	92
13) 1,1-DCE	2.84	61	352387	35.08942 ppb	97
14) t-Butanol	3.73	59	32056	200.61423 ppb	99
15) Methyl Acetate	3.36	43	190358	38.33951 ppb	97
16) Iodomethane	3.00	142	368118	35.64900 ppb	100
17) Acrylonitrile	3.83	52	63762	37.55885 ppb	98
18) Methylene chloride	3.47	84	90984	37.40651 ppb	99
19) Carbon disulfide	3.08	76	222016	33.83818 ppb	99
20) Methyl t-butyl ether (MtBE	3.93	73	295398	33.63853 ppb	96
21) Trans-1,2-DCE	3.88	96	228928	35.04761 ppb	94
22) Diisopropyl Ether	4.73	59	87623	37.30440 ppb	92
23) 1,1-DCA	4.53	63	451144	34.16242 ppb	99
24) Vinyl Acetate	4.73	87	200943	38.56472 ppb	98
25) Ethyl tert Butyl Ether	5.23	59	360434	35.57479 ppb	100
26) MEK (2-Butanone)	5.40	43	85955	35.57278 ppb	99
27) Cis-1,2-DCE	5.34	96	286402	35.53552 ppb	98
28) 2,2-Dichloropropane	5.34	77	161567	32.54769 ppb	98
29) Chloroform	5.77	83	466449	33.10084 ppb	98
30) Bromochloromethane	5.64	128	138030	35.76591 ppb	96
32) 1,1,1-TCA	5.98	97	313895	34.88960 ppb	95
33) Cyclohexane	6.05	41	171379	36.94726 ppb	87
34) 1,1-Dichloropropene	6.18	75	301624	35.43670 ppb	98
35) 2,2,4-Trimethylpentane	6.57	57	507019	38.33687 ppb	94
37) Carbon Tetrachloride	6.18	117	319369	34.02462 ppb	98
38) Tert Amyl Methyl Ether	6.60	73	413526	37.07489 ppb	96
39) 1,2-DCA	6.43	62	322408	33.86294 ppb	100
40) Benzene	6.42	78	1029437	33.70342 ppb	100
41) TCE	7.16	95	266025	32.47670 ppb	98
42) 2-Pentanone	7.38	43	650126	176.86463 ppb	98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T13W.D Vial: 10
Acq On : 30 Apr 12 14:02 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

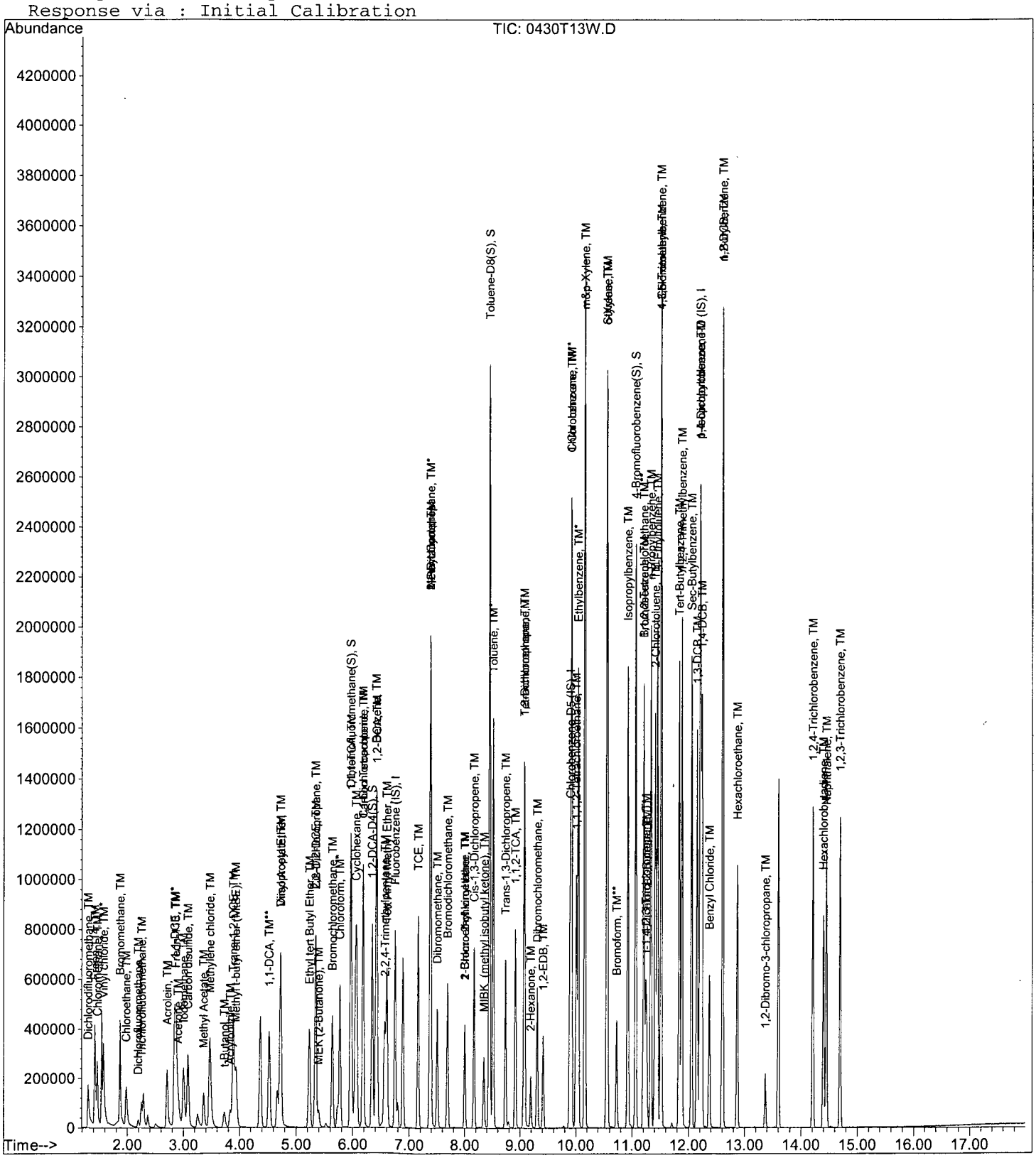
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	290089	34.01460	ppb		100
44)	Bromodichloromethane	7.69	83	361963	32.91978	ppb		97
45)	Methyl Cyclohexane	7.37	83	319828	37.01893	ppb		100
46)	Dibromomethane	7.51	93	160775	33.19291	ppb		92
47)	2-Chloroethyl vinyl ether	8.00	106	5247	35.07228	ppb	#	100
48)	MIBK (methyl isobutyl ket	8.35	43	105172	34.16193	ppb		95
49)	1-Bromo-2-chloroethane	8.00	63	201024	34.61288	ppb		99
50)	Cis-1,3-Dichloropropene	8.17	75	392187	35.15021	ppb		98
51)	Toluene	8.51	91	1142842	35.49052	ppb		100
52)	Trans-1,3-Dichloropropene	8.74	75	348984	36.04195	ppb		96
53)	1,1,2-TCA	8.92	83	203987	34.20603	ppb		99
54)	2-Hexanone	9.19	43	120445	36.37333	ppb		94
57)	1,2-EDB	9.41	107	232424	35.83787	ppb		98
58)	Tetrachloroethene	9.07	166	282077	35.32066	ppb		96
59)	1-Chlorohexane	9.92	91	305660	34.97804	ppb		92
60)	1,1,1,2-Tetrachloroethane	10.00	131	271010	34.54569	ppb		99
61)	m&p-Xylene	10.16	106	979017	79.01503	ppb		99
62)	o-Xylene	10.55	106	473527	40.30793	ppb		97
63)	Styrene	10.56	104	843606	40.84596	ppb		99
65)	1,3-Dichloropropane	9.08	76	390487	34.97669	ppb		95
66)	Dibromochloromethane	9.31	129	282778	34.57348	ppb		98
67)	Chlorobenzene	9.92	112	756937	34.88747	ppb		99
68)	Ethylbenzene	10.04	91	1267171	38.29918	ppb		99
69)	Bromoform	10.73	173	195913	35.63322	ppb		97
71)	Isopropylbenzene	10.92	105	1145209	37.62847	ppb		97
72)	1,1,2,2-Tetrachloroethane	11.20	83	299167	30.68492	ppb		97
73)	1,2,3-Trichloropropane	11.24	110	83038	31.22333	ppb		89
74)	t-1,4-Dichloro-2-Butene	11.26	53	63473	35.76096	ppb		98
75)	Bromobenzene	11.21	156	345271	34.88137	ppb		93
76)	n-Propylbenzene	11.33	91	1496018	38.14087	ppb		99
77)	4-Ethyltoluene	11.45	105	1284904	39.34677	ppb		98
78)	2-Chlorotoluene	11.41	91	1045340	36.11588	ppb		99
79)	1,3,5-Trimethylbenzene	11.51	105	1073508	39.37004	ppb		99
80)	4-Chlorotoluene	11.51	91	1058035	36.66375	ppb		99
81)	Tert-Butylbenzene	11.83	119	867184	38.06784	ppb		97
82)	1,2,4-Trimethylbenzene	11.88	105	1089099	40.29944	ppb		100
83)	Sec-Butylbenzene	12.05	105	1258354	38.73656	ppb		100
84)	p-Isopropyltoluene	12.20	119	1073076	40.11875	ppb		99
85)	Benzyl Chloride	12.37	91	446728	37.45360	ppb		98
86)	1,3-DCB	12.15	146	658041	33.84631	ppb		97
87)	1,4-DCB	12.24	146	674578	33.18566	ppb		97
88)	n-Butylbenzene	12.61	91	971150	37.89302	ppb		99
89)	1,2-DCB	12.60	146	624533	33.27627	ppb		99
90)	Hexachloroethane	12.87	117	201825	36.81155	ppb		94
91)	1,2-Dibromo-3-chloropropan	13.37	157	61465	33.70350	ppb		95
92)	1,2,4-Trichlorobenzene	14.21	180	270208	36.04190	ppb		96
93)	Hexachlorobutadiene	14.40	223	109302	32.34523	ppb		98
94)	Naphthalene	14.45	128	866835	40.51670	ppb		97
95)	1,2,3-Trichlorobenzene	14.69	180	402075	36.16386	ppb		97

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

Data File : M:\THOR\DATA\T120430\0430T13W.D Vial: 10
Acq On : 30 Apr 12 14:02 Operator: DG,RS,HW,ARS,SV
Sample : 40ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T14W.D Vial: 11
Acq On : 30 Apr 12 14:29 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	6.74	96	392768	25.00000 ppb		-0.01
55) Chlorobenzene-D5 (IS)	9.89	117	325184	25.00000 ppb		0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	194432	25.00000 ppb		0.00
System Monitoring Compounds						
31) Dibromofluoromethane(S)	5.95	111	719516	89.20717 ppb		-0.02
Spiked Amount 29.265			Recovery = 304.823%			
36) 1,2-DCA-D4(S)	6.33	65	711048	87.02680 ppb		-0.01
Spiked Amount 27.995			Recovery = 310.862%			
56) Toluene-D8(S)	8.44	98	2524561	95.31717 ppb		0.00
Spiked Amount 29.188			Recovery = 326.558%			
64) 4-Bromofluorobenzene(S)	11.06	95	992300	98.64169 ppb		0.00
Spiked Amount 27.740			Recovery = 355.601%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.27	85	536758	107.33141 ppb		99
3) Freon 114	1.38	85	549792	101.08029 ppb		95
4) Chloromethane	1.43	50	688827	85.91475 ppb		100
5) Vinyl chloride	1.53	62	807686	103.45988 ppb		98
6) Bromomethane	1.83	94	568946	100.55210 ppb		99
7) Chloroethane	1.93	64	468232	100.57883 ppb		95
8) Dichlorofluoromethane	2.15	67	157962	105.55481 ppb		97
9) Trichlorofluoromethane	2.21	101	296394	100.02009 ppb		88
10) Acrolein	2.66	55	387544	516.87173 ppb	#	22
11) Acetone	2.87	43	154866	98.23882 ppb		99
12) Freon-113	2.82	101	548543	91.71127 ppb		91
13) 1,1-DCE	2.79	61	913965	90.47545 ppb		98
14) t-Butanol	3.70	59	54688	340.24312 ppb		96
15) Methyl Acetate	3.32	43	461913	97.65877 ppb		99
16) Iodomethane	2.96	142	933146	89.83691 ppb		99
17) Acrylonitrile	3.79	52	156797	91.81908 ppb		95
18) Methylene chloride	3.43	84	226240	97.92190 ppb		99
19) Carbon disulfide	3.04	76	546176	82.75614 ppb		99
20) Methyl t-butyl ether (MtBE	3.89	73	715478	80.99732 ppb		94
21) Trans-1,2-DCE	3.84	96	578287	88.01321 ppb		97
22) Diisopropyl Ether	4.70	59	215051	91.01822 ppb	#	86
23) 1,1-DCA	4.50	63	1108270	83.43032 ppb		99
24) Vinyl Acetate	4.70	87	513762	98.02215 ppb		100
25) Ethyl tert Butyl Ether	5.21	59	845783	82.98898 ppb		100
26) MEK (2-Butanone)	5.37	43	231452	99.06471 ppb		94
27) Cis-1,2-DCE	5.32	96	717448	88.49566 ppb		98
28) 2,2-Dichloropropane	5.31	77	382224	76.54740 ppb		99
29) Chloroform	5.75	83	1153125	81.34975 ppb		97
30) Bromochloromethane	5.62	128	341517	87.97373 ppb		95
32) 1,1,1-TCA	5.96	97	770055	85.08995 ppb		96
33) Cyclohexane	6.03	41	461965	99.00988 ppb		91
34) 1,1-Dichloropropene	6.17	75	778128	90.88315 ppb		99
35) 2,2,4-Trimethylpentane	6.55	57	1314092	98.77866 ppb		91
37) Carbon Tetrachloride	6.17	117	830623	87.97301 ppb		99
38) Tert Amyl Methyl Ether	6.59	73	976005	86.99095 ppb		94
39) 1,2-DCA	6.42	62	800381	83.57194 ppb		100
40) Benzene	6.40	78	2574031	83.77856 ppb		99
41) TCE	7.15	95	676019	82.04521 ppb		97
42) 2-Pentanone	7.37	43	802222	216.96163 ppb		98

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

Data File : M:\THOR\DATA\T120430\0430T14W.D Vial: 11
Acq On : 30 Apr 12 14:29 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:06:38 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.38	63	720770	84.01865	ppb		100
44)	Bromodichloromethane	7.68	83	908311	82.12439	ppb		97
45)	Methyl Cyclohexane	7.36	83	862943	99.29661	ppb		96
46)	Dibromomethane	7.50	93	397269	81.53732	ppb		94
47)	2-Chloroethyl vinyl ether	7.99	106	13624	98.71187	ppb	#	100
48)	MIBK (methyl isobutyl ket	8.34	43	285888	92.31729	ppb		98
49)	1-Bromo-2-chloroethane	8.00	63	495552	84.82502	ppb		99
50)	Cis-1,3-Dichloropropene	8.16	75	1023628	91.20566	ppb		97
51)	Toluene	8.51	91	2907329	89.75638	ppb		100
52)	Trans-1,3-Dichloropropene	8.73	75	916629	94.11118	ppb		97
53)	1,1,2-TCA	8.91	83	504255	84.06114	ppb		97
54)	2-Hexanone	9.19	43	328014	98.47625	ppb		93
57)	1,2-EDB	9.41	107	589485	87.36961	ppb		98
58)	Tetrachloroethene	9.07	166	726970	87.49919	ppb		96
59)	1-Chlorohexane	9.92	91	848392	93.32109	ppb		89
60)	1,1,1,2-Tetrachloroethane	10.00	131	701983	86.01251	ppb		98
61)	m&p-Xylene	10.16	106	2553416	198.09225	ppb		99
62)	o-Xylene	10.55	106	1237385	101.24581	ppb		100
63)	Styrene	10.56	104	2235058	104.02188	ppb		100
65)	1,3-Dichloropropane	9.08	76	991138	85.33608	ppb		98
66)	Dibromochloromethane	9.30	129	718089	84.39219	ppb		96
67)	Chlorobenzene	9.92	112	1946280	86.22664	ppb		99
68)	Ethylbenzene	10.04	91	3337865	96.97269	ppb		98
69)	Bromoform	10.72	173	507333	88.69749	ppb		98
71)	Isopropylbenzene	10.92	105	3079234	99.77655	ppb		98
72)	1,1,2,2-Tetrachloroethane	11.20	83	754918	76.35986	ppb		98
73)	1,2,3-Trichloropropane	11.24	110	210019	77.87803	ppb		95
74)	t-1,4-Dichloro-2-Butene	11.26	53	167663	93.15613	ppb		92
75)	Bromobenzene	11.21	156	882291	87.90211	ppb		94
76)	n-Propylbenzene	11.33	91	3945794	99.20697	ppb		99
77)	4-Ethyltoluene	11.45	105	3378207	102.01846	ppb		99
78)	2-Chlorotoluene	11.41	91	2700168	91.99949	ppb		98
79)	1,3,5-Trimethylbenzene	11.51	105	2810735	101.65634	ppb		98
80)	4-Chlorotoluene	11.51	91	2736548	93.51773	ppb		99
81)	Tert-Butylbenzene	11.83	119	2351294	101.79065	ppb		96
82)	1,2,4-Trimethylbenzene	11.88	105	2846470	103.87051	ppb		99
83)	Sec-Butylbenzene	12.05	105	3385957	102.79066	ppb		100
84)	p-Isopropyltoluene	12.20	119	2905587	107.12844	ppb		99
85)	Benzyl Chloride	12.37	91	1227217	101.46723	ppb		99
86)	1,3-DCB	12.15	146	1714913	86.98704	ppb		99
87)	1,4-DCB	12.24	146	1722867	83.58417	ppb		98
88)	n-Butylbenzene	12.61	91	2650851	102.00284	ppb		99
89)	1,2-DCB	12.60	146	1621420	85.19788	ppb		100
90)	Hexachloroethane	12.87	117	540539	97.22776	ppb		96
91)	1,2-Dibromo-3-chloropropan	13.37	157	162033	87.62029	ppb		93
92)	1,2,4-Trichlorobenzene	14.21	180	744512	97.93439	ppb		94
93)	Hexachlorobutadiene	14.40	223	285242	83.24337	ppb		95
94)	Naphthalene	14.45	128	2473145	113.99906	ppb		97
95)	1,2,3-Trichlorobenzene	14.69	180	1082741	96.03872	ppb		96

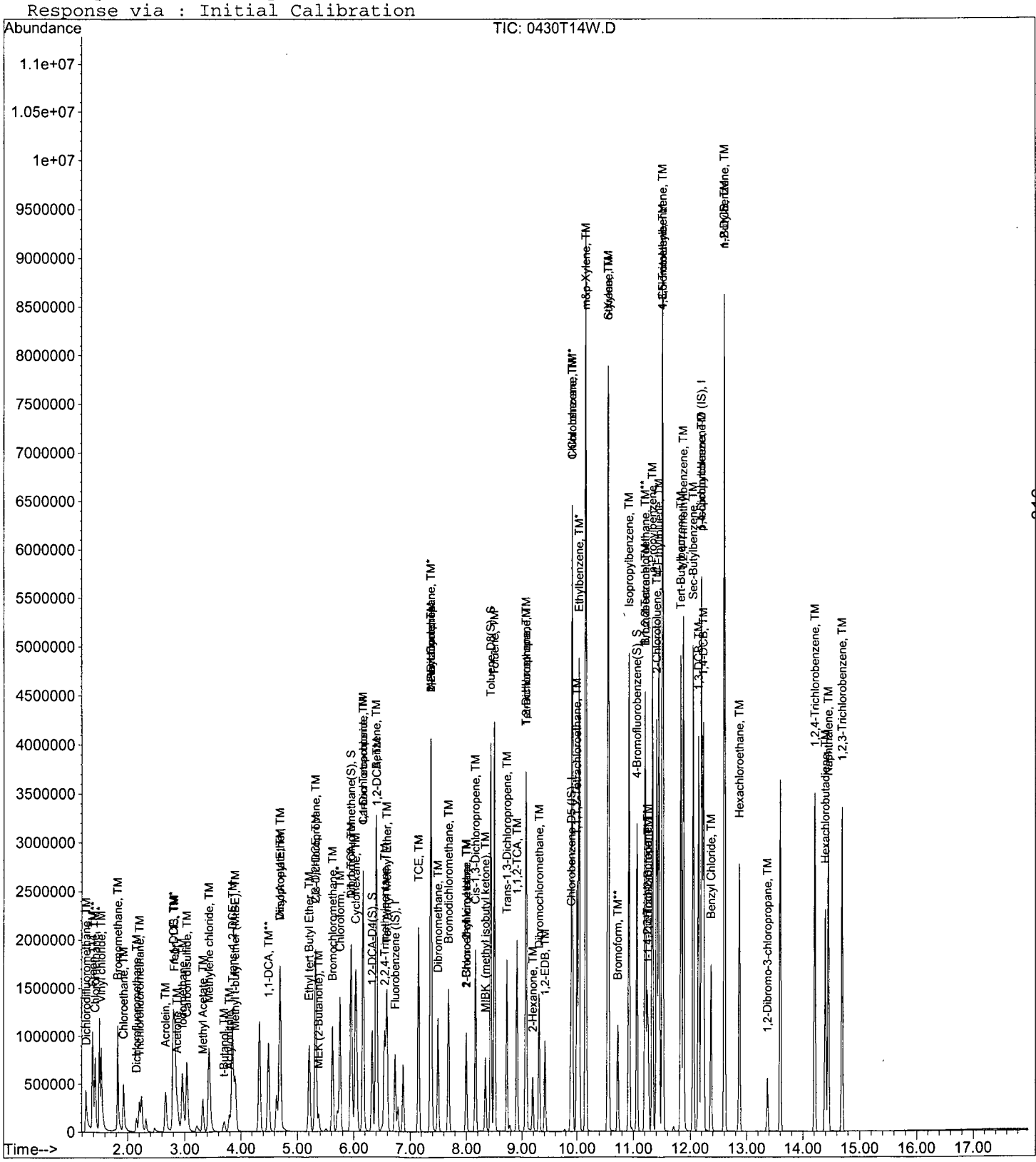
(#) = qualifier out of range (m) = manual integration

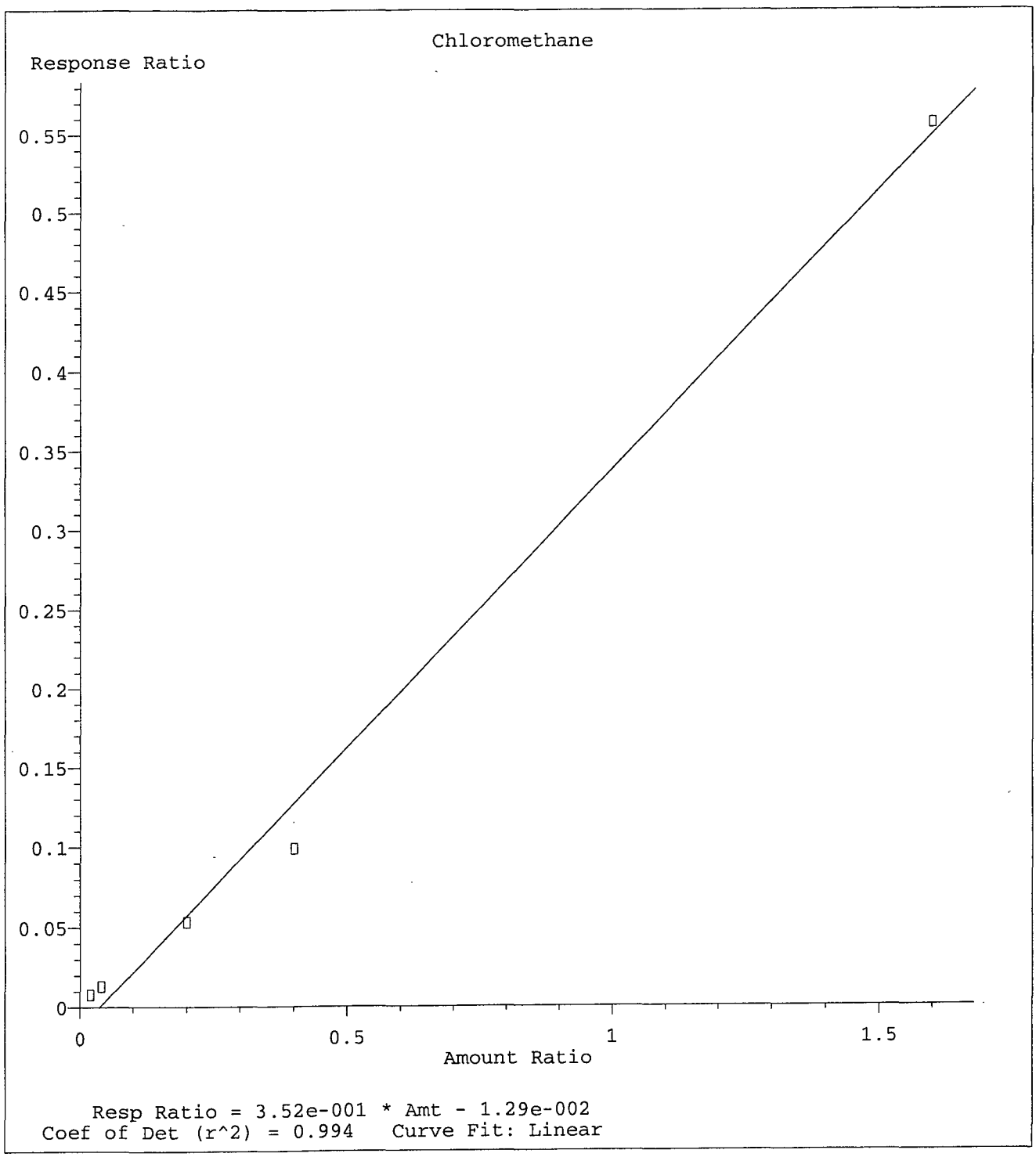
Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T14W.D Vial: 11
Acq On : 30 Apr 12 14:29 Operator: DG,RS,HW,ARS,SV
Sample : 100ug/L VOC STD 4-30-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

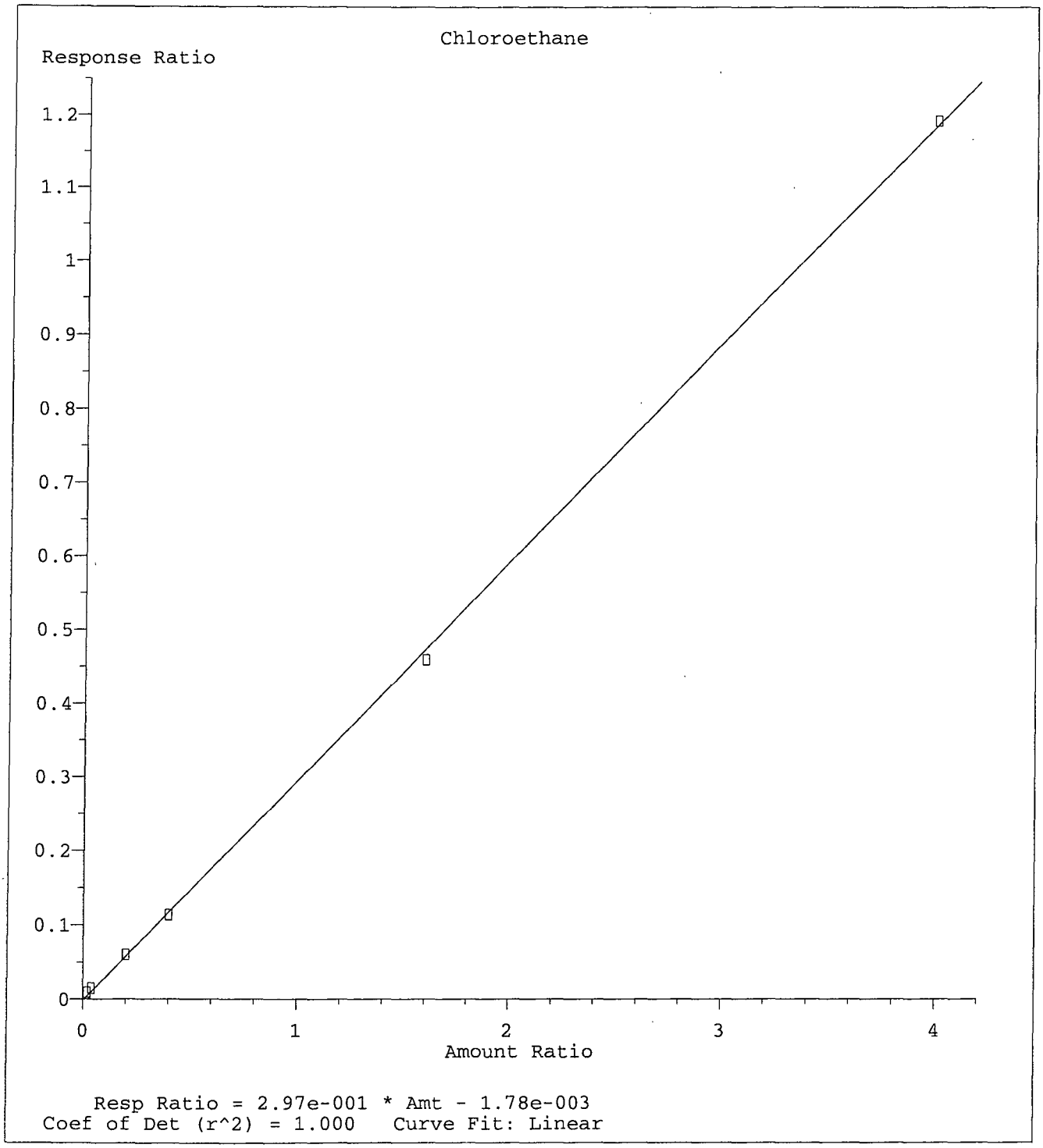
Quant Time: May 1 9:07 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration

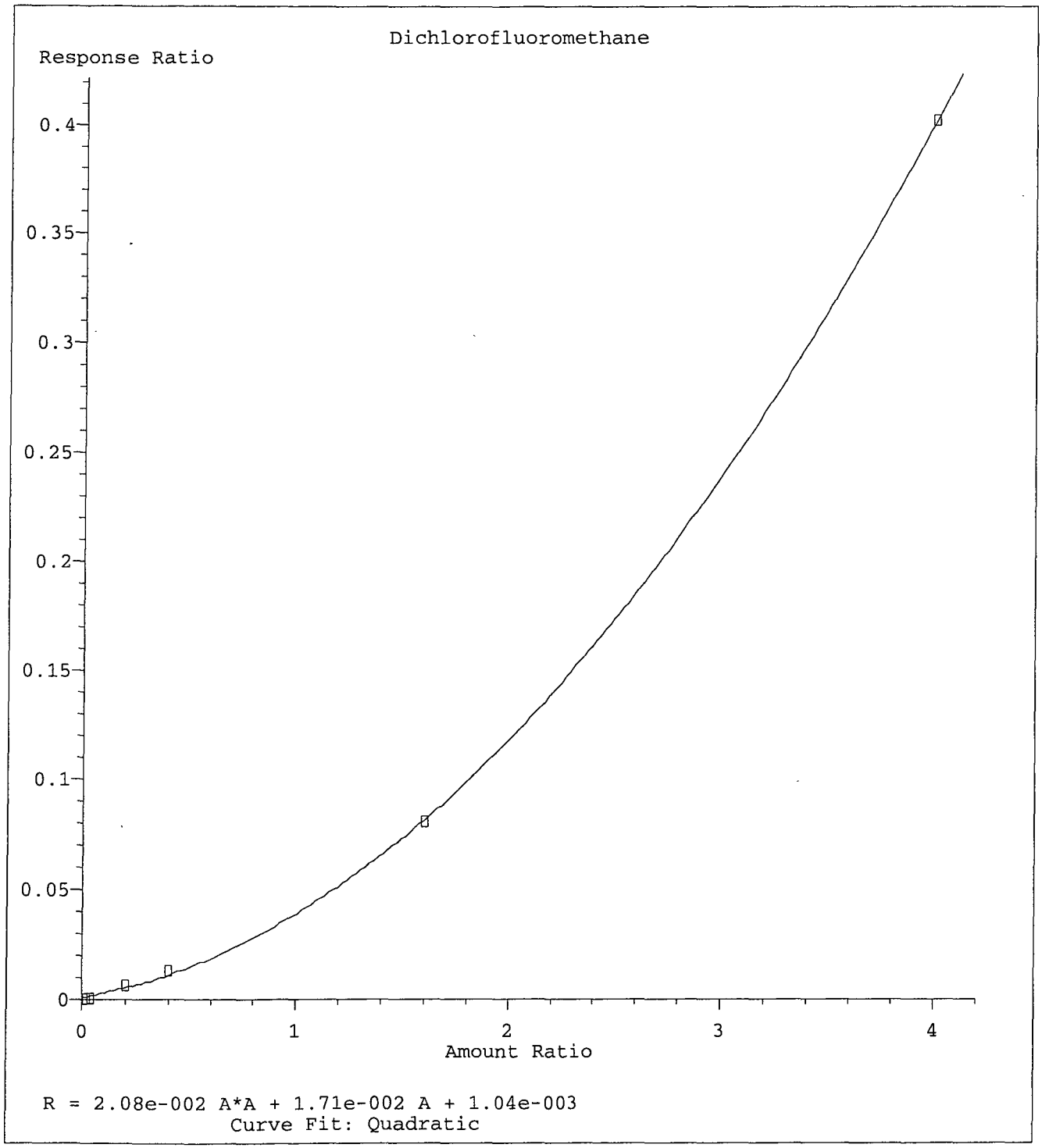




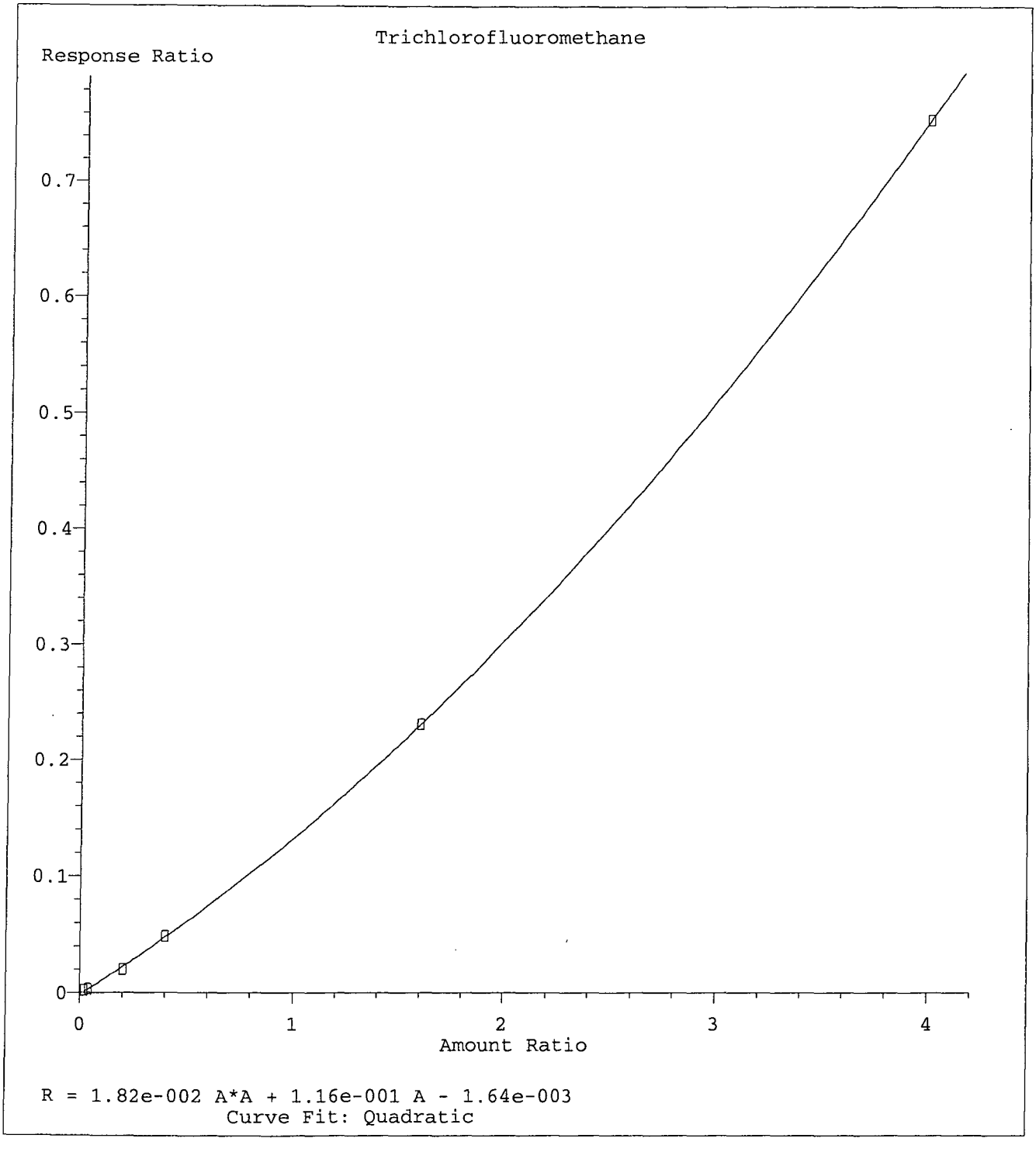
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



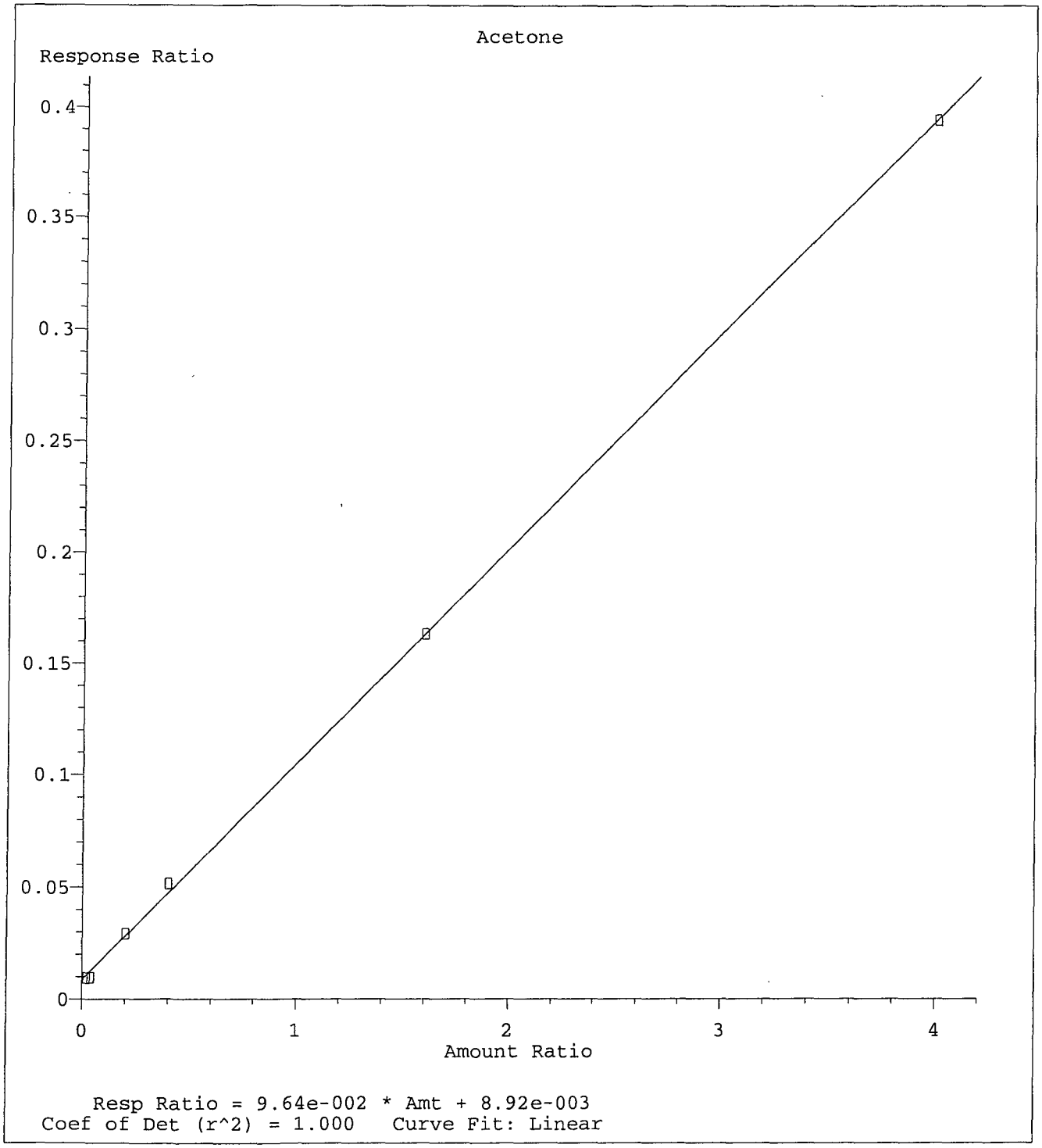
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



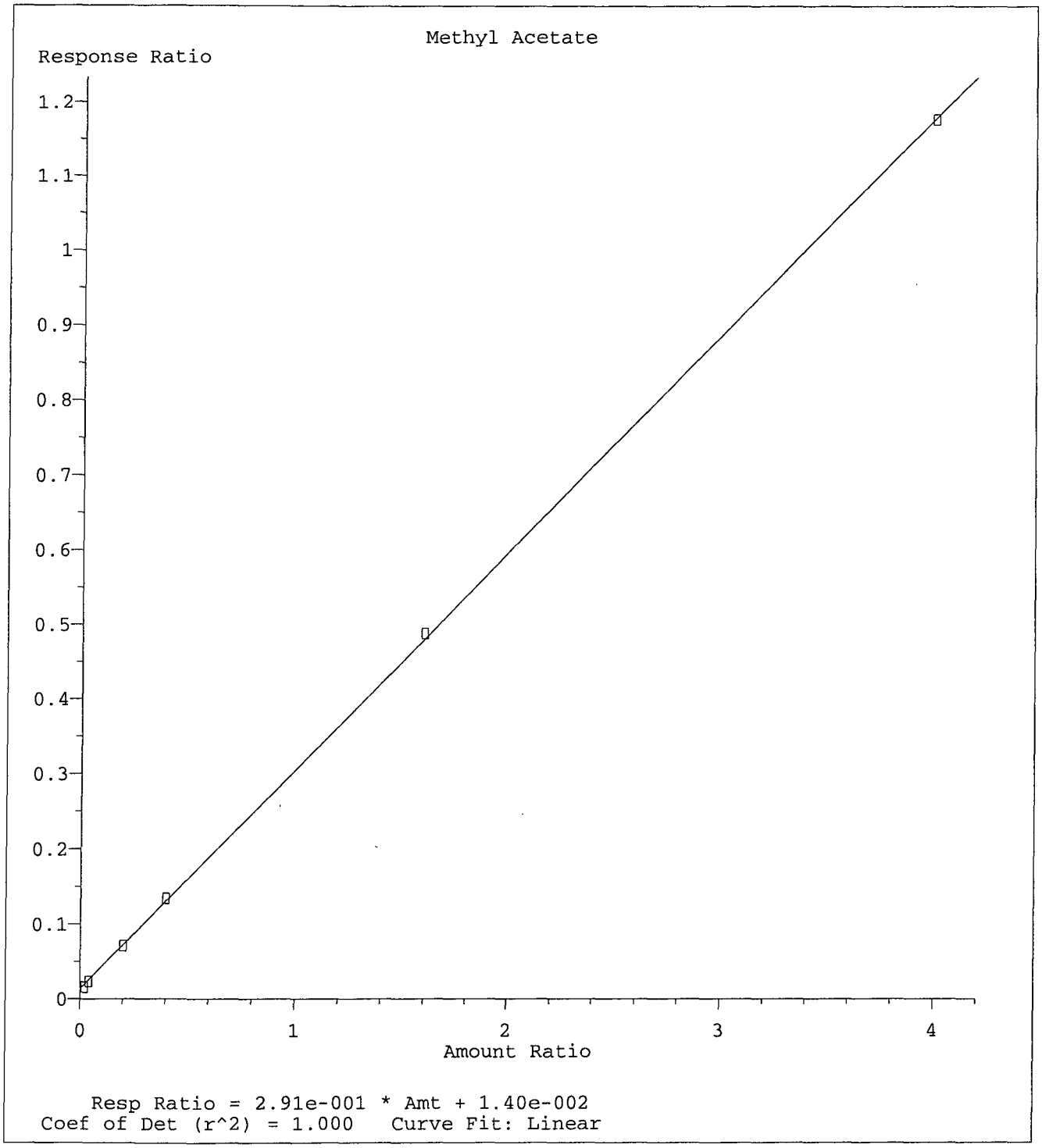
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



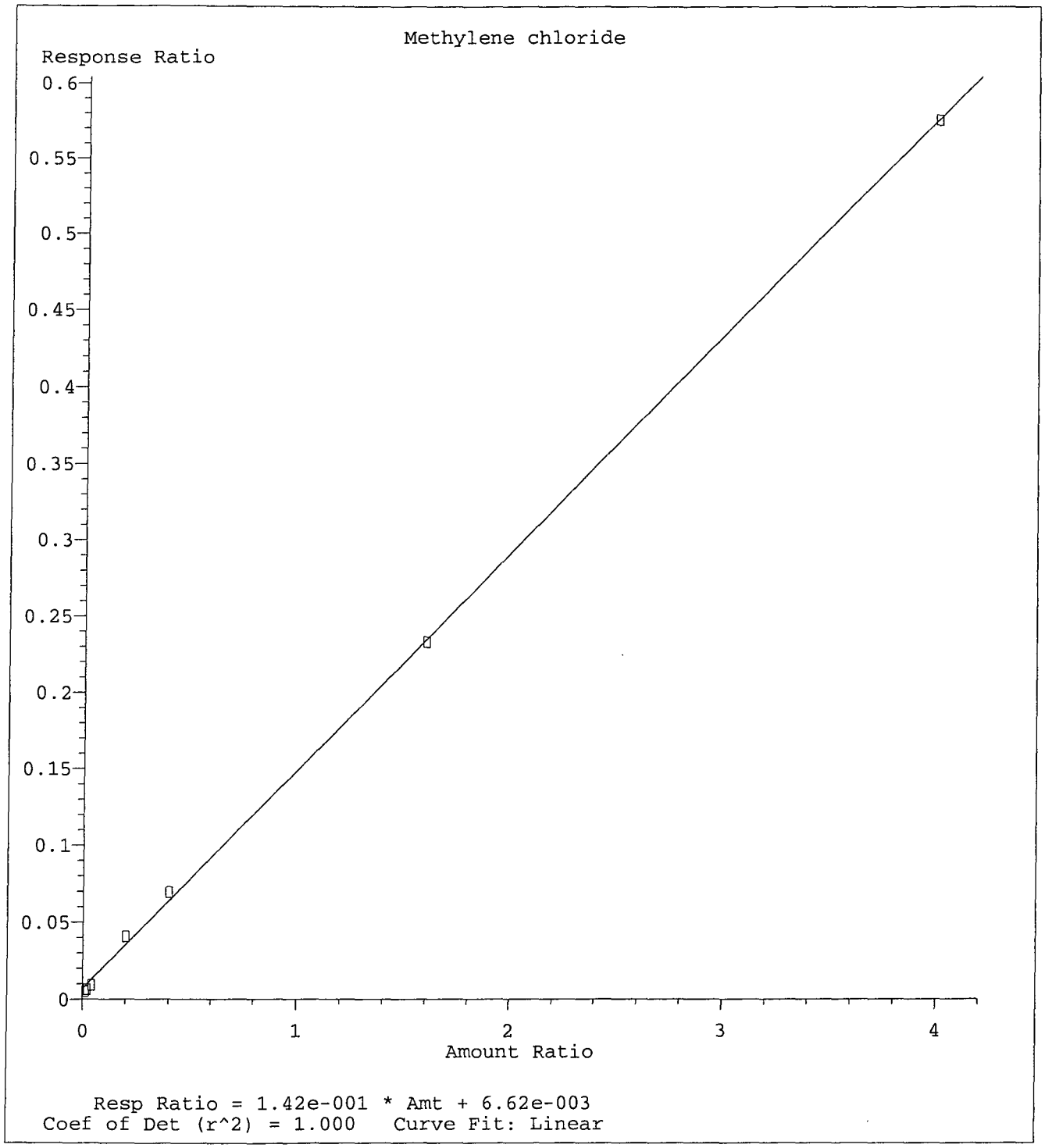
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



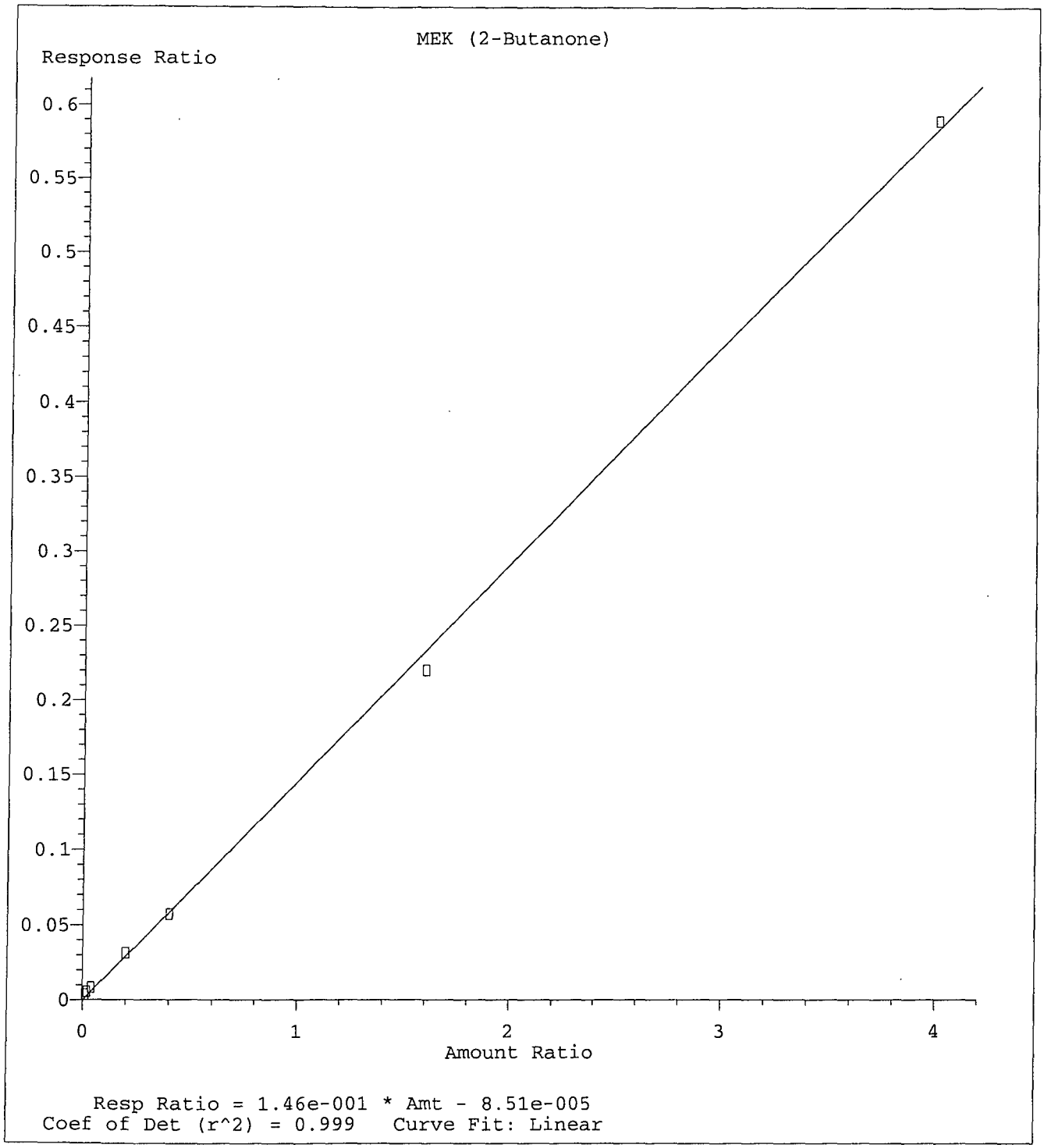
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



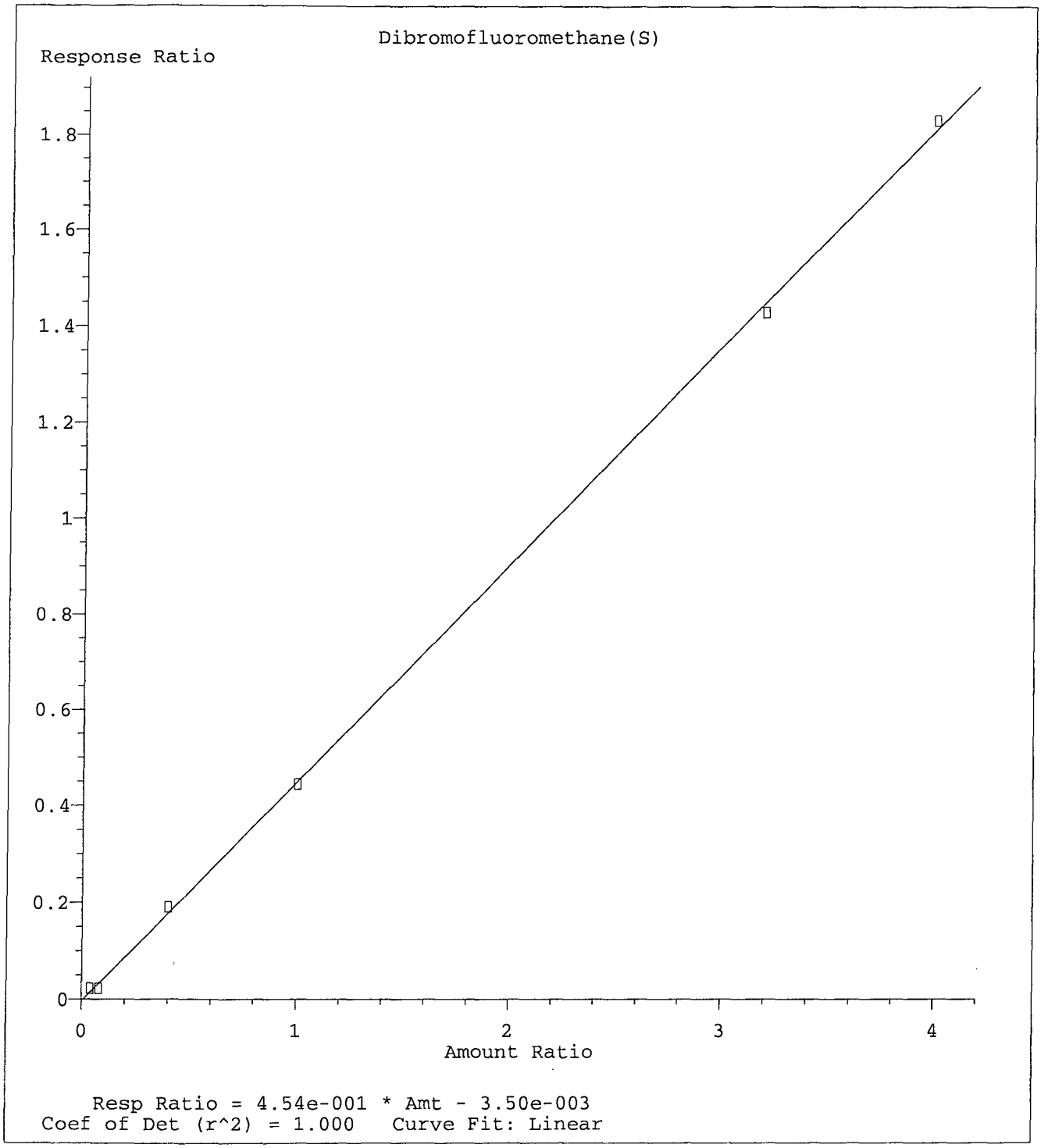
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



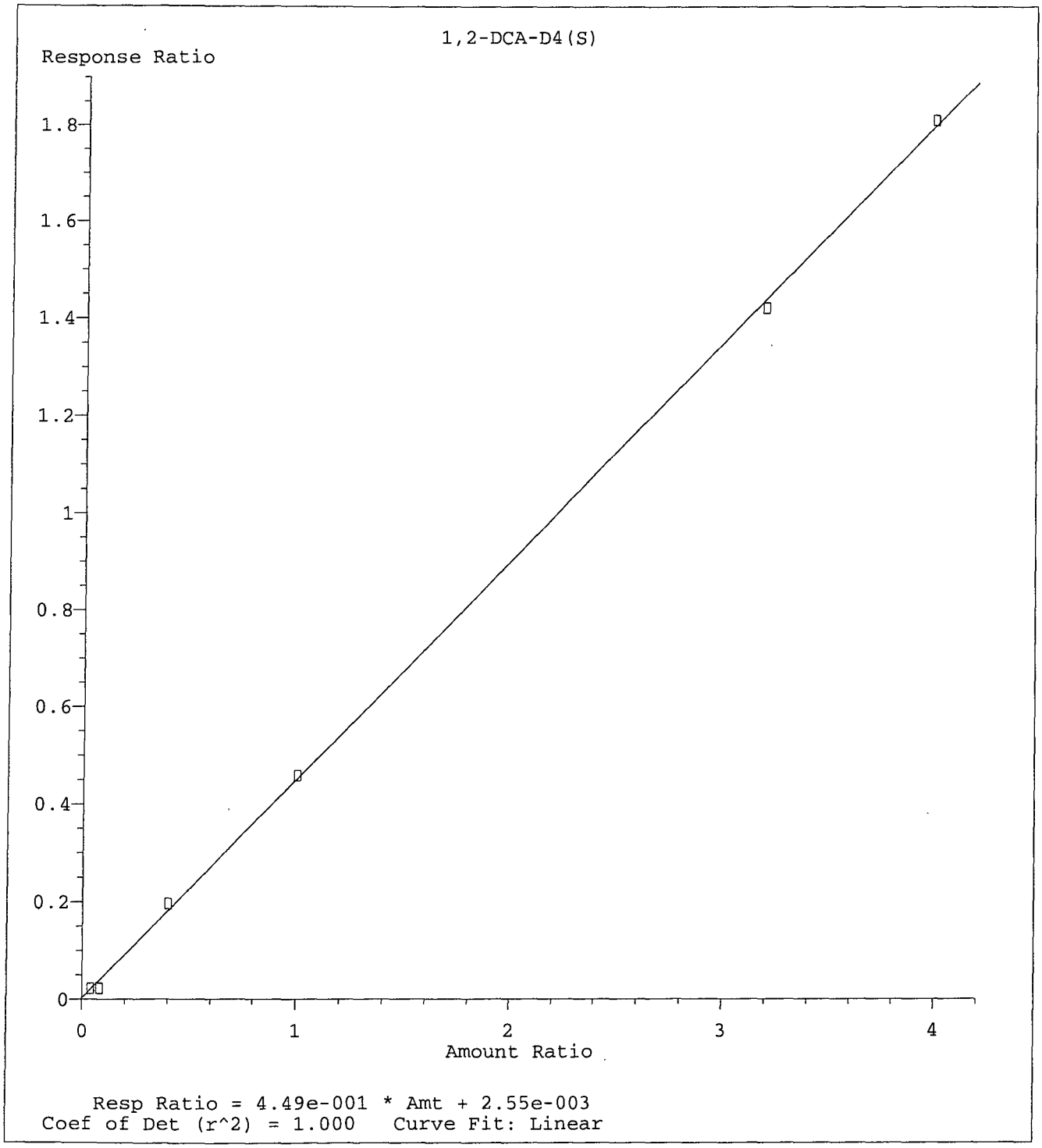
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



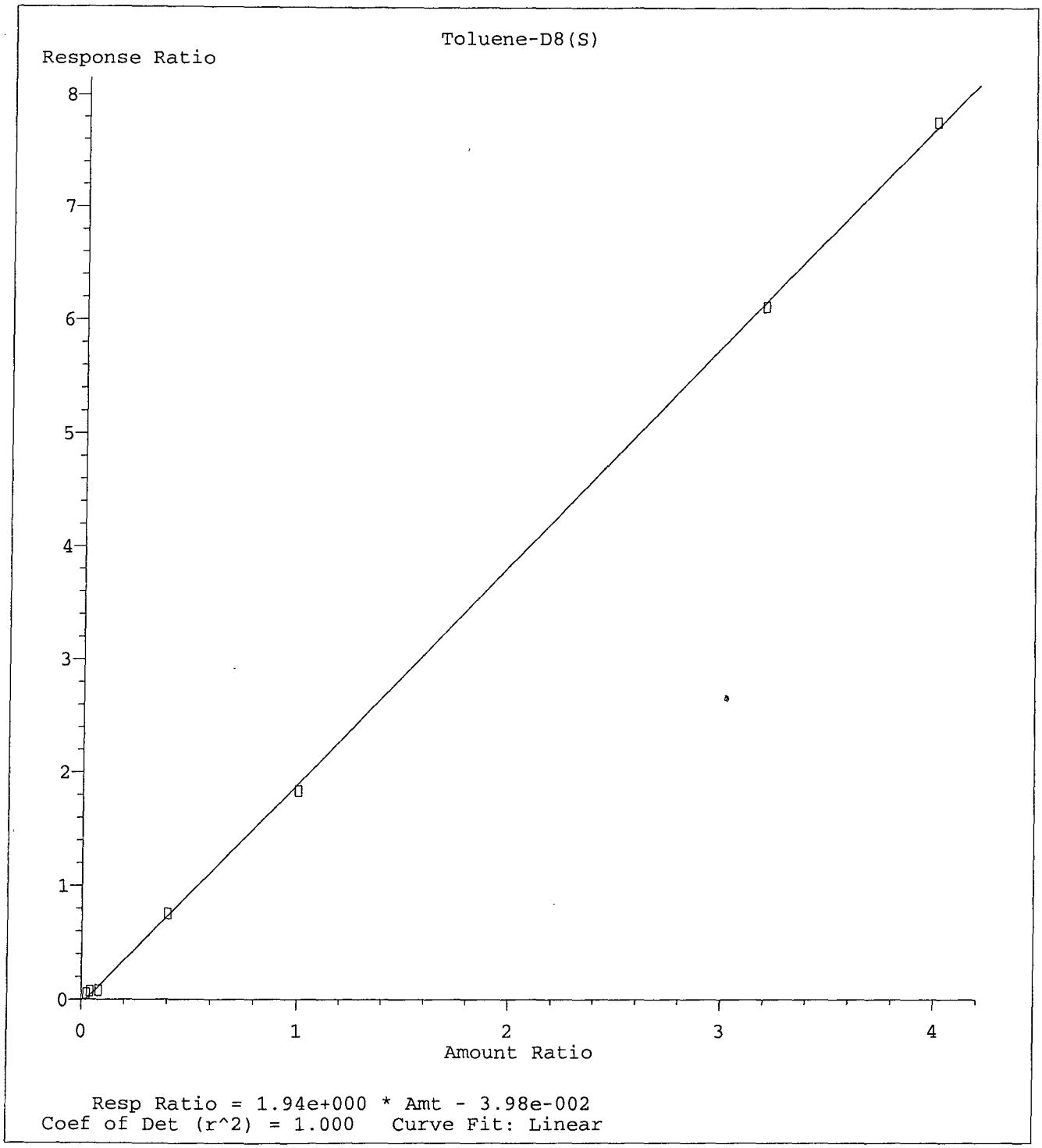
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



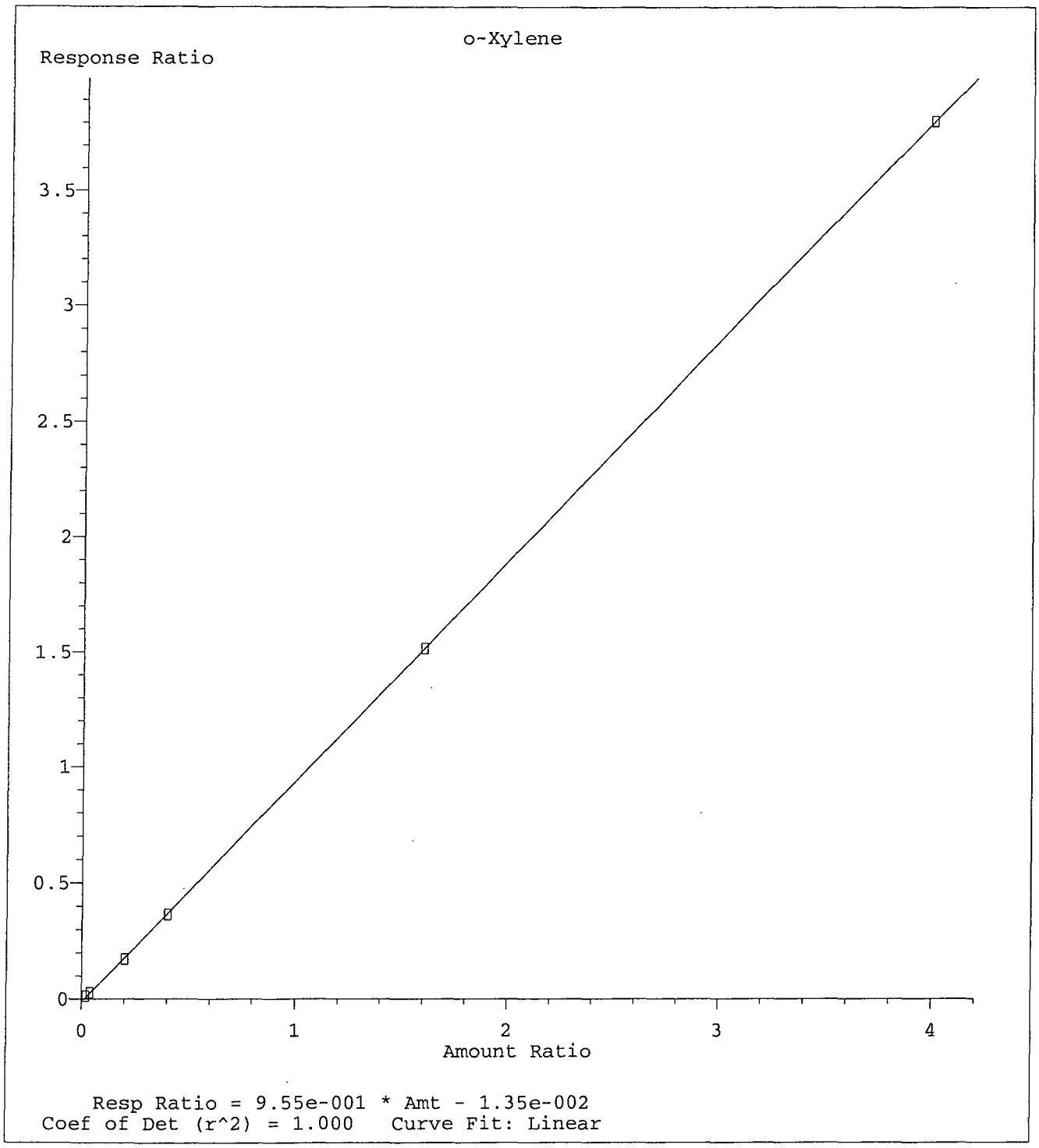
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



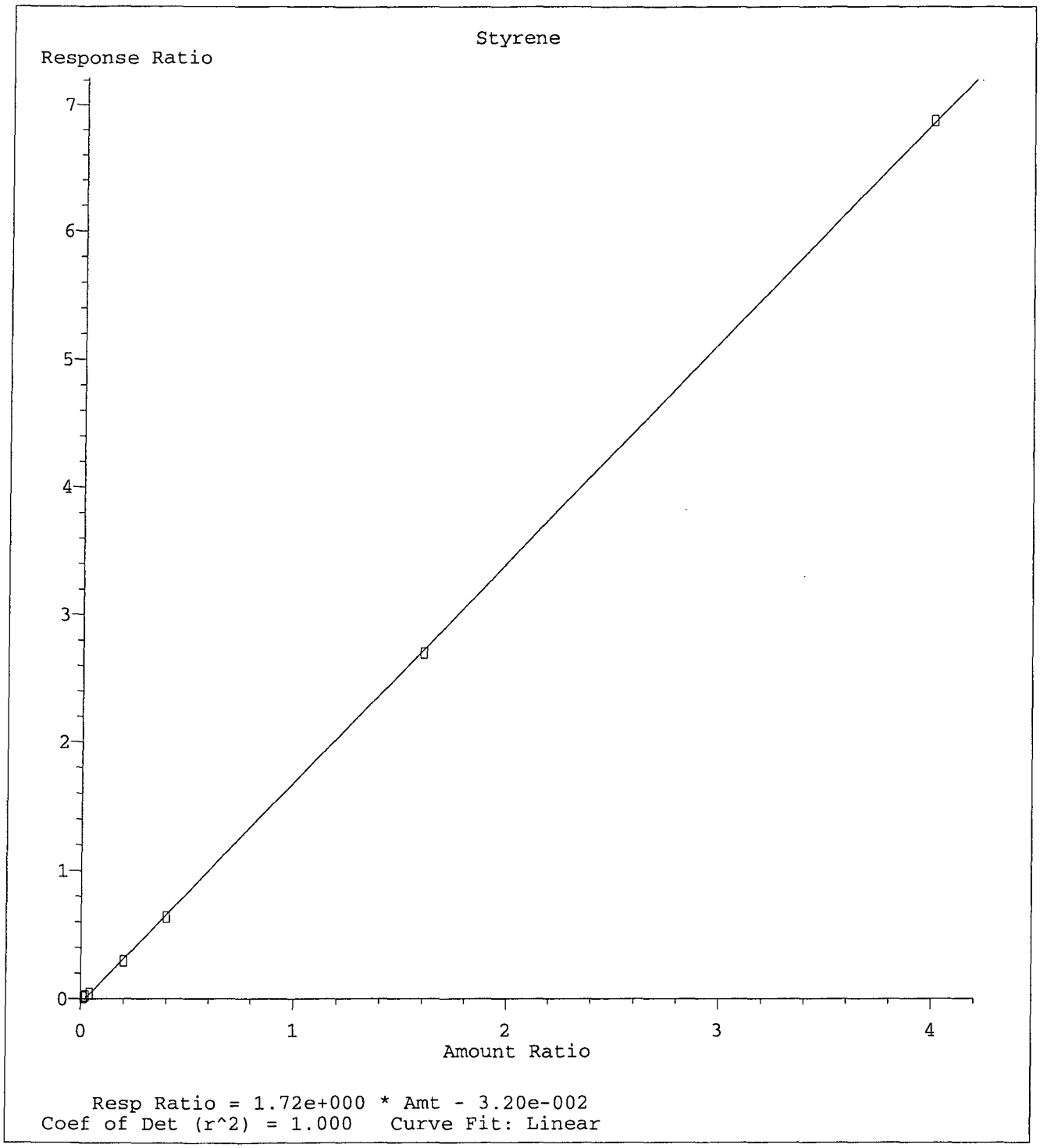
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



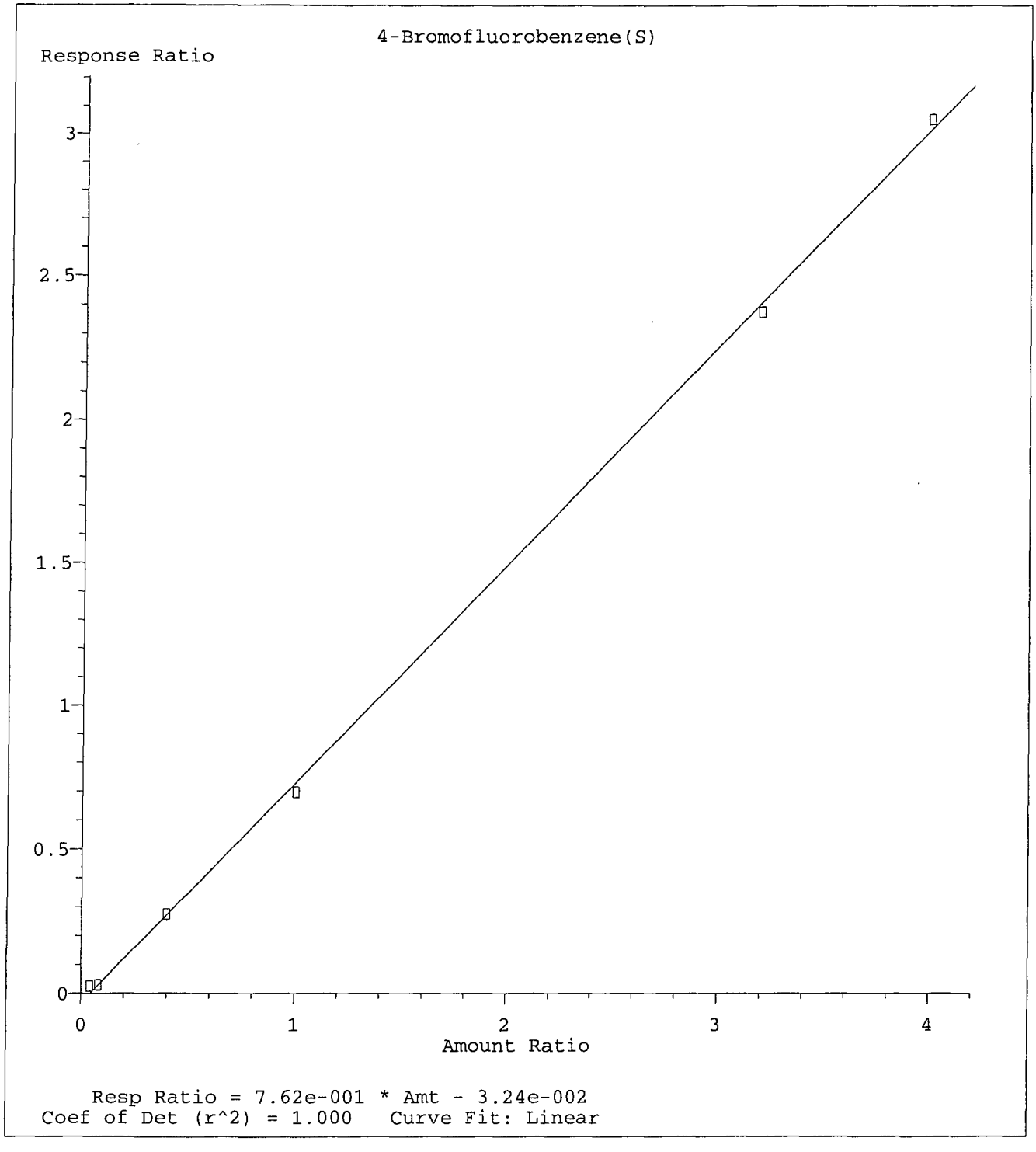
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



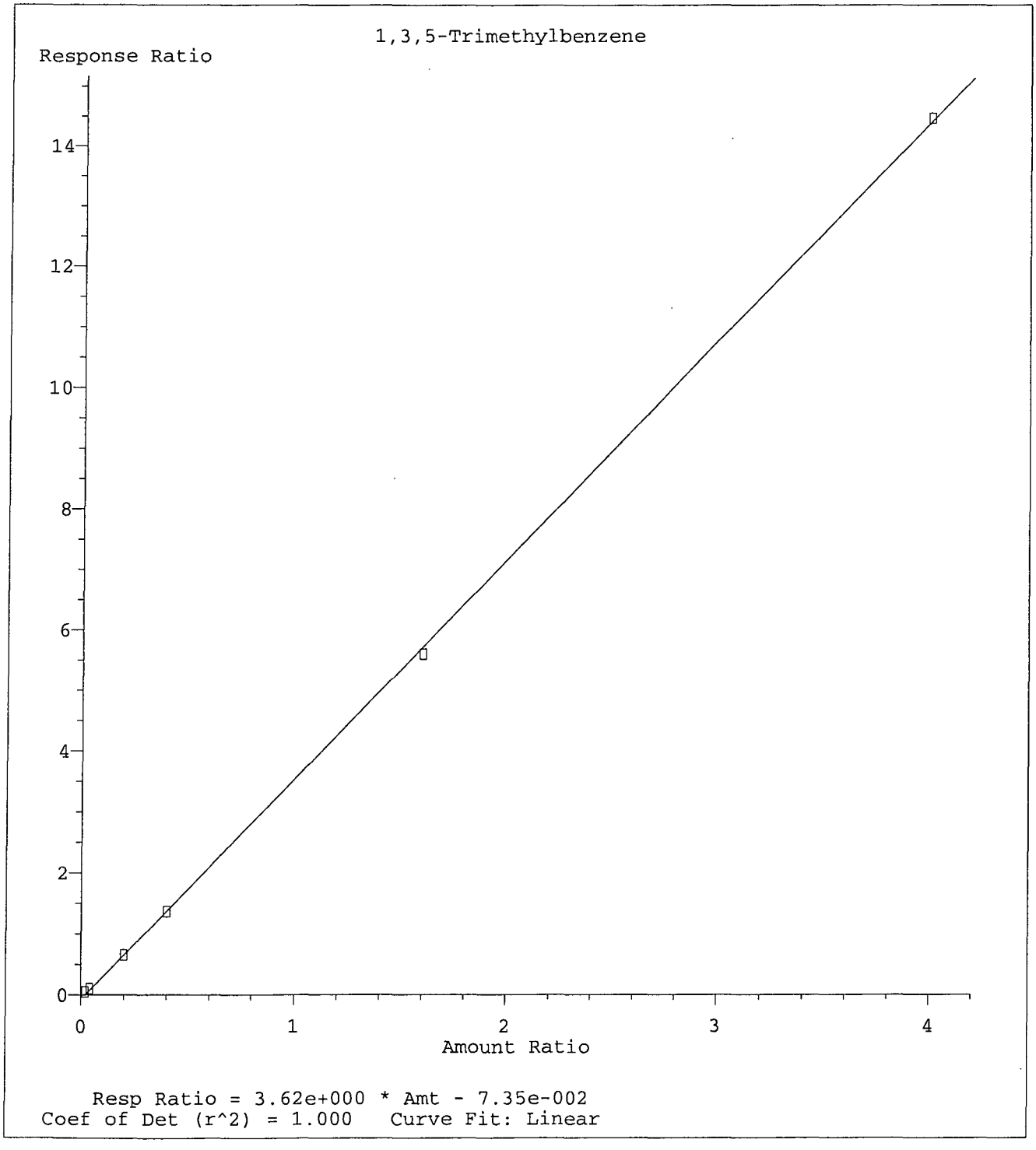
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



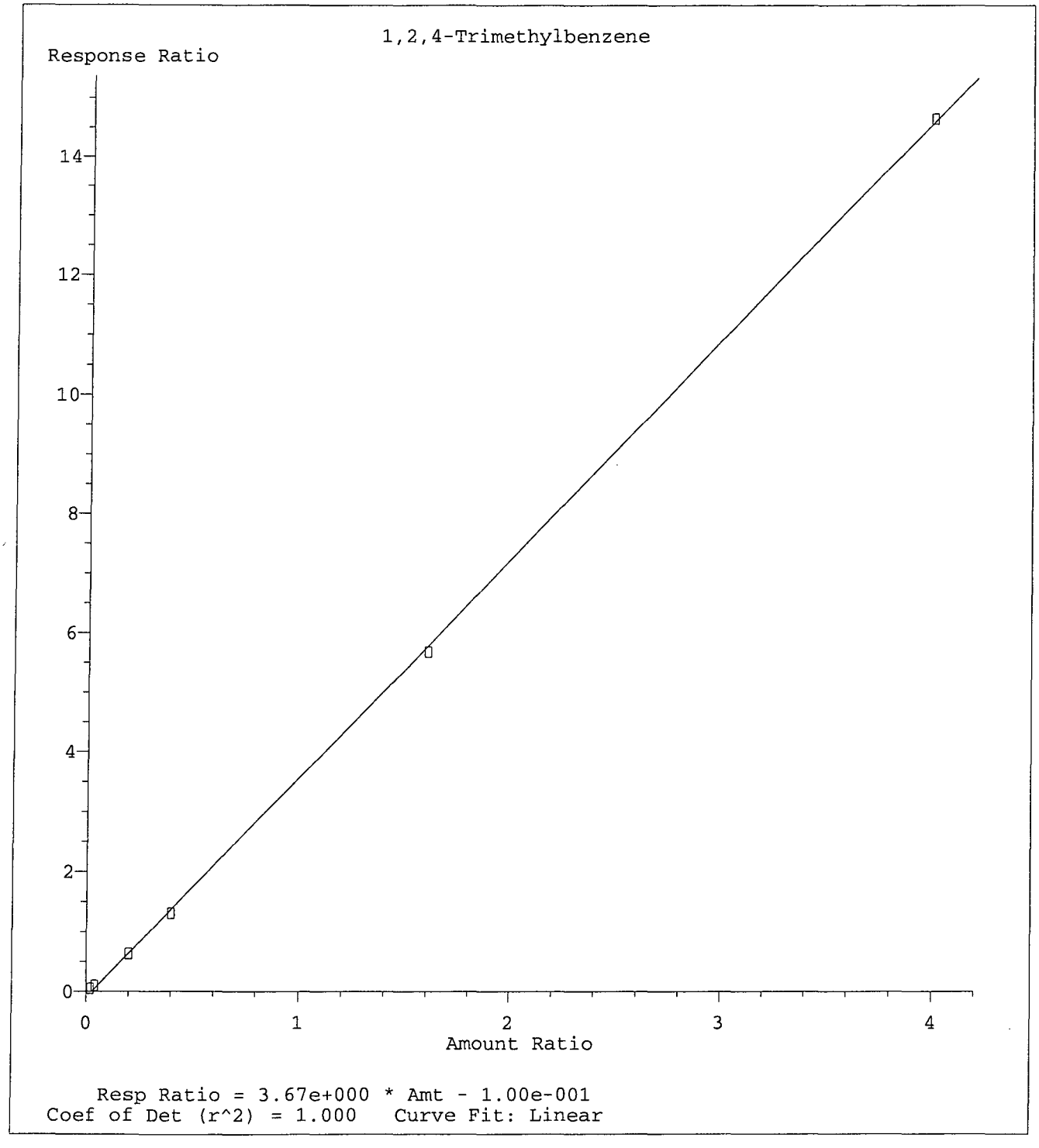
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



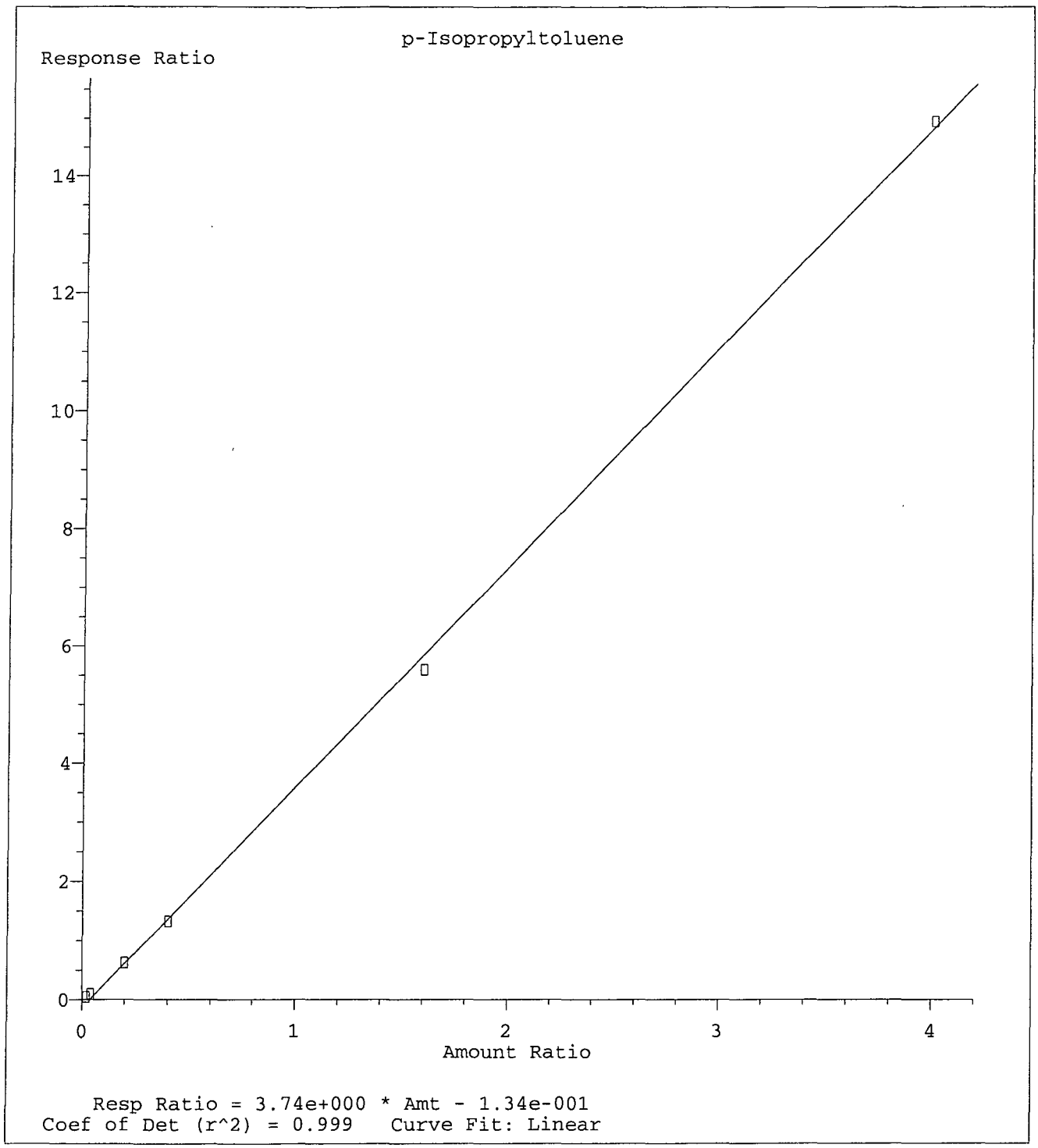
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



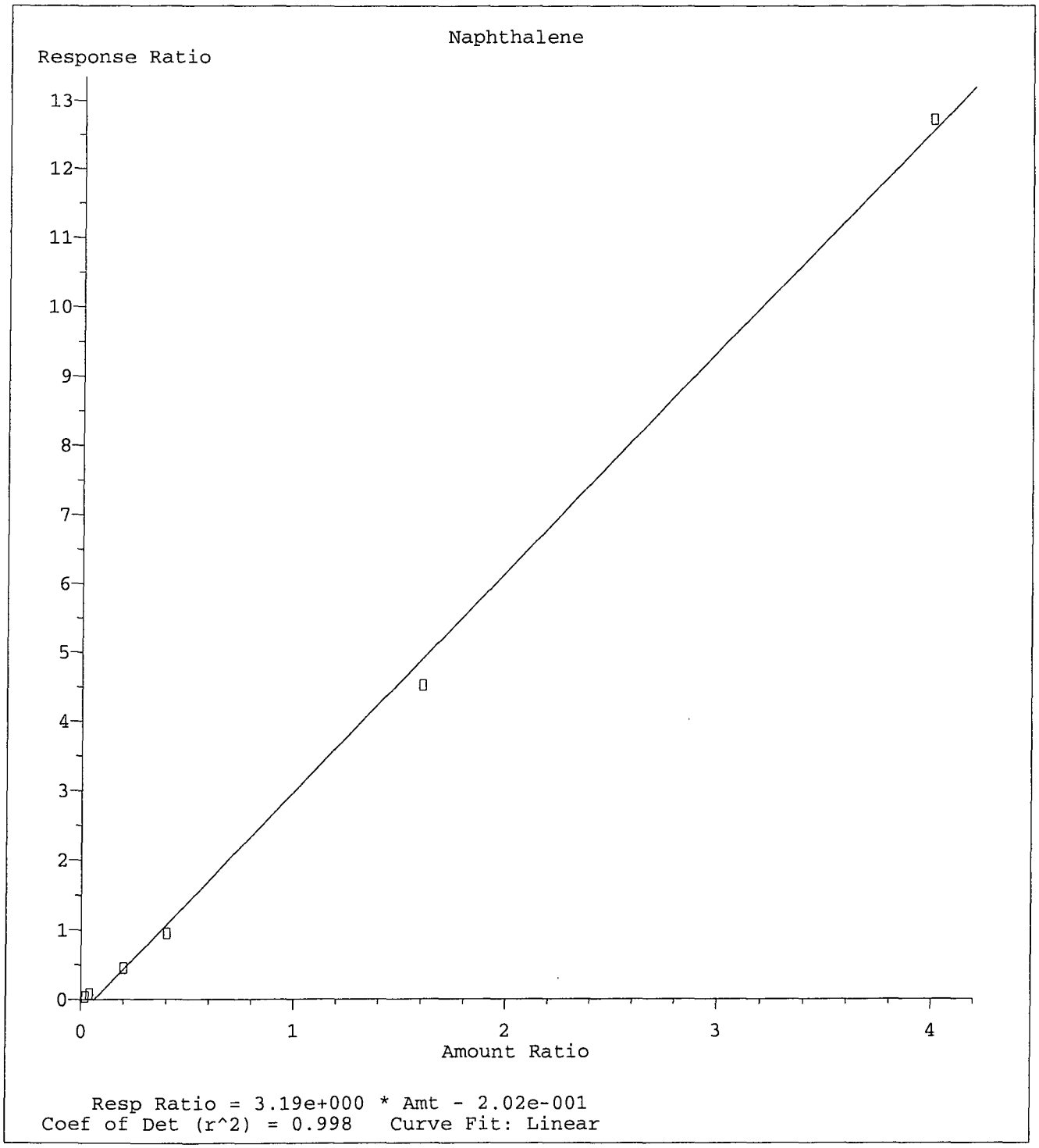
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Thor
Initial Cal. Date: 04/30/12
Data File: 0430T20W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.3194	0.3643	14	TM		
3	TM	Freon 114	0.3417	0.3837	12	TM		
4	TM**L	Chloromethane	0.3165	0.3088	2.5	TM**L	3.0	
5	TM*	Vinyl chloride	0.4960	0.5195	4.7	TM*		
6	TM	Bromomethane	0.3638	0.3153	13	TM		
7	TML	Chloroethane	0.3320	0.2891	13	TML	1.2	
8	TMQ	Dichlorofluoromethane	0.0409	0.0299	27	TMQ	5.6	
9	TMQ	Trichlorofluoromethane	0.1230	0.1133	7.9	TMQ	4.7	
10	TM	Acrolein	0.0477	0.0488	2.2	TM		
11	TML	Acetone	0.1978	0.1263	36	TML	7.9	
12	TM	Freon-113	0.3362	0.3618	7.6	TM		
13	TM*	1,1-DCE	0.5709	0.5716	0.13	TM*		
14	TM	t-Butanol	0.0080	0.0100	25	TM		*NT
15	TML	Methyl Acetate	0.4445	0.3293	26	TML	1.0	
16	TM	Iodomethane	0.5919	0.6053	2.3	TM		
17	TM	Acrylonitrile	0.0957	0.1032	7.9	TM		
18	TML	Methylene chloride	0.2337	0.1595	32	TML	0.41	
19	TM	Carbon disulfide	0.3779	0.3696	2.2	TM		
20	TM	Methyl t-butyl ether (MtBE)	0.5102	0.5006	1.9	TM		
21	TM	Trans-1,2-DCE	0.3747	0.3830	2.2	TM		
22	TM	Diisopropyl Ether	0.1329	0.1390	4.6	TM		
23	TM**	1,1-DCA	0.7632	0.7394	3.1	TM**		
24	TM	Vinyl Acetate	0.2904	0.3140	8.1	TM		
25	TM	Ethyl tert Butyl Ether	0.5798	0.6094	5.1	TM		
26	TML	MEK (2-Butanone)	0.1966	0.1468	25	TML	0.71	
27	TM	Cis-1,2-DCE	0.4596	0.4567	0.63	TM		
28	TM	2,2-Dichloropropane	0.2892	0.2472	15	TM		
29	TM*	Chloroform	0.8184	0.7513	8.2	TM*		
30	TM	Bromochloromethane	0.2199	0.2275	3.5	TM		
31	SL	Dibromofluoromethane(S)	0.4442	0.5039	13	SL	12	
32	TM	1,1,1-TCA	0.5212	0.5065	2.8	TM		
33	TM	Cyclohexane	0.2570	0.2823	9.8	TM		
34	TM	1,1-Dichloropropene	0.4844	0.4781	1.3	TM		
35	TM	2,2,4-Trimethylpentane	0.7311	0.7635	4.4	TM		
36	SL	1,2-DCA-D4(S)	0.4472	0.4818	7.7	SL	6.7	
37	TM	Carbon Tetrachloride	0.5401	0.5249	2.8	TM		
38	TM	Tert Amyl Methyl Ether	0.6290	0.6903	9.7	TM		
39	TM	1,2-DCA	0.5508	0.5266	4.4	TM		
40	TM	Benzene	1.766	1.695	4.1	TM		
		Average			9.6			

AMS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Thor
Cal. Date: 04/30/12
Data File: 0430T20W.D

		Compound	MEAN	CCRF	%D		%Drift
41	TM	TCE	0.4778	0.4529	5.2	TM	
42	TM	2-Pentanone	0.2344	0.2422	3.3	TM	
43	TM*	1,2-Dichloropropane	0.4915	0.4669	5.0	TM*	
44	TM	Bromodichloromethane	0.6396	0.5893	7.9	TM	
45	TM	Methyl Cyclohexane	0.4832	0.5037	4.2	TM	
46	TM	Dibromomethane	0.2801	0.2687	4.1	TM	
47	TM	2-Chloroethyl vinyl ether	0.0110	0.0099	10.0	TM	
48	TM	MIBK (methyl isobutyl ketone)	0.1772	0.1647	7.1	TM	
49	TM	1-Bromo-2-chloroethane	0.3357	0.3306	1.5	TM	
50	TM	Cis-1,3-Dichloropropene	0.6387	0.6030	5.6	TM	
51	TM*	Toluene	1.835	1.774	3.3	TM*	
52	TM	Trans-1,3-Dichloropropene	0.5503	0.5295	3.8	TM	
53	TM	1,1,2-TCA	0.3425	0.3328	2.8	TM	
54	TM	2-Hexanone	0.1884	0.1962	4.1	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	SL	Toluene-D8(S)	1.781	2.222	25	SL	17
57	TM	1,2-EDB	0.4612	0.4648	0.77	TM	
58	TM	Tetrachloroethene	0.5695	0.5955	4.6	TM	
59	TM	1-Chlorohexane	0.6230	0.5790	7.1	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5628	0.5542	1.5	TM	
61	TM	m&p-Xylene	0.8546	0.9221	7.9	TM	
62	TML	o-Xylene	0.8309	0.9077	9.2	TML	1.4
63	TML	Styrene	1.407	1.516	7.8	TML	7.4
64	SL	4-Bromofluorobenzene(S)	0.6525	0.8547	31	SL	16
65	TM	1,3-Dichloropropane	0.8003	0.7911	1.1	TM	
66	TM	Dibromochloromethane	0.5867	0.5605	4.5	TM	
67	TM**	Chlorobenzene	1.556	1.548	0.48	TM**	
68	TM*	Ethylbenzene	2.301	2.420	5.2	TM*	
69	TM**	Bromoform	0.3924	0.3866	1.5	TM**	
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.461	3.589	3.7	TM	
72	TM**	1,1,2,2-Tetrachloroethane	1.113	1.021	8.3	TM**	
73	TM	1,2,3-Trichloropropane	0.3004	0.2978	0.87	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.2046	0.2095	2.4	TM	
75	TM	Bromobenzene	1.155	1.138	1.5	TM	
76	TM	n-Propylbenzene	4.450	4.640	4.3	TM	
77	TM	4-Ethyltoluene	3.765	3.936	4.6	TM	
78	TM	2-Chlorotoluene	3.337	3.358	0.61	TM	
79	TML	1,3,5-Trimethylbenzene	3.117	3.339	7.1	TML	2.7
80	TM	4-Chlorotoluene	3.310	3.430	3.6	TM	
		Average			5.6		

ARS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: 67622
Date Analyzed: 04/30/12
Instrument: Thor
Cal. Date: 04/30/12
Data File: 0430T20W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Tert-Butylbenzene	2.587	2.681	3.6	TM	
82	TML	1,2,4-Trimethylbenzene	3.075	3.316	7.8	TML	2.9
83	TM	Sec-Butylbenzene	3.658	3.904	6.7	TM	
84	TML	p-Isopropyltoluene	3.061	3.267	6.7	TML	3.8
85	TM	Benzyl Chloride	1.530	1.244	19	TM	
86	TM	1,3-DCB	2.279	2.202	3.4	TM	
87	TM	1,4-DCB	2.401	2.252	6.2	TM	
88	TM	n-Butylbenzene	2.909	2.941	1.1	TM	
89	TM	1,2-DCB	2.210	2.070	6.4	TM	
90	TM	Hexachloroethane	0.7196	0.6591	8.4	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.2152	0.2001	7.0	TM	
92	TM	1,2,4-Trichlorobenzene	0.8725	0.8311	4.7	TM	
93	TM	Hexachlorobutadiene	0.4052	0.3546	12	TM	
94	TML	Naphthalene	2.441	2.489	2.0	TML	6.2
95	TM	1,2,3-Trichlorobenzene	1.291	1.256	2.7	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			6.5		

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T20W.D Vial: 17
Acq On : 30 Apr 12 17:16 Operator: DG,RS,HW,ARS,SV
Sample : 120430A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 21 10:05 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	377344	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	298688	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	179904	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	190127	27.91272 ppb	0.00
Spiked Amount 29.265			Recovery =	95.379%	
36) 1,2-DCA-D4(S)	6.34	65	181814	26.68278 ppb	0.00
Spiked Amount 27.995			Recovery =	95.312%	
56) Toluene-D8(S)	8.44	98	663578	29.16728 ppb	0.00
Spiked Amount 29.188			Recovery =	99.927%	
64) 4-Bromofluorobenzene(S)	11.06	95	255284	29.08343 ppb	0.00
Spiked Amount 27.740			Recovery =	104.843%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	54982	11.40583 ppb	97
3) Freon 114	1.42	85	57921	11.23043 ppb	97
4) Chloromethane	1.46	50	46603	9.69769 ppb	99
5) Vinyl chloride	1.57	62	78412	10.47351 ppb	99
6) Bromomethane	1.88	94	47596	8.66748 ppb	99
7) Chloroethane	1.98	64	43636	9.88396 ppb	94
8) Dichlorofluoromethane	2.19	67	4518	10.55546 ppb	88
9) Trichlorofluoromethane	2.25	101	17095	9.52763 ppb	87
10) Acrolein	2.71	55	91980	127.68910 ppb	97
11) Acetone	2.91	43	19071	10.78833 ppb	97
12) Freon-113	2.87	101	54603	10.75978 ppb	87
13) 1,1-DCE	2.83	61	86279	10.01342 ppb	97
14) t-Butanol	3.72	59	18824	155.96053 ppb	99
15) Methyl Acetate	3.36	43	49709	10.10384 ppb	97
16) Iodomethane	3.00	142	91363	10.22642 ppb	98
17) Acrylonitrile	3.83	52	15582	10.78811 ppb	94
18) Methylene chloride	3.47	84	24080	10.04064 ppb	99
19) Carbon disulfide	3.08	76	55792	9.78222 ppb	97
20) Methyl t-butyl ether (MtBE	3.93	73	75554	9.81203 ppb	95
21) Trans-1,2-DCE	3.88	96	57808	10.22015 ppb	94
22) Diisopropyl Ether	4.73	59	20987	10.46208 ppb	96
23) 1,1-DCA	4.53	63	111608	9.68859 ppb	98
24) Vinyl Acetate	4.73	87	47396	10.81163 ppb	94
25) Ethyl tert Butyl Ether	5.23	59	91977	10.51088 ppb	98
26) MEK (2-Butanone)	5.40	43	22162	10.07081 ppb	94
27) Cis-1,2-DCE	5.34	96	68928	9.93659 ppb	95
28) 2,2-Dichloropropane	5.33	77	37307	8.54682 ppb	100
29) Chloroform	5.77	83	113392	9.17933 ppb	98
30) Bromochloromethane	5.64	128	34339	10.34733 ppb	100
32) 1,1,1-TCA	5.97	97	76457	9.71835 ppb	99
33) Cyclohexane	6.05	41	42603	10.98183 ppb	87
34) 1,1-Dichloropropene	6.18	75	72165	9.86935 ppb	98
35) 2,2,4-Trimethylpentane	6.57	57	115240	10.44248 ppb	98
37) Carbon Tetrachloride	6.18	117	79230	9.71925 ppb	98
38) Tert Amyl Methyl Ether	6.60	73	104192	10.97483 ppb	99
39) 1,2-DCA	6.43	62	79484	9.56107 ppb	95
40) Benzene	6.42	78	255793	9.59491 ppb	99
41) TCE	7.16	95	68357	9.47883 ppb	95
42) 2-Pentanone	7.38	43	456982	129.15291 ppb	97

Algorithm Check: $\frac{(78412)(25)}{(377344)(0.496043)}$ (1) = 10.473508 ✓ ARS 5/29/12

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T20W.D Vial: 17
Acq On : 30 Apr 12 17:16 Operator: DG,RS,HW,ARS,SV
Sample : 120430A LCS-1WT (SS) Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 21 10:05 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
43)	1,2-Dichloropropane	7.39	63	70479	9.49989	ppb		100
44)	Bromodichloromethane	7.69	83	88952	9.21368	ppb		96
45)	Methyl Cyclohexane	7.37	83	76030	10.42452	ppb		98
46)	Dibromomethane	7.51	93	40562	9.59344	ppb		96
47)	2-Chloroethyl vinyl ether	8.00	106	1499	9.00387	ppb	#	100
48)	MIBK (methyl isobutyl ket	8.34	43	24856	9.29364	ppb		97
49)	1-Bromo-2-chloroethane	8.00	63	49904	9.84970	ppb		98
50)	Cis-1,3-Dichloropropene	8.17	75	91014	9.44056	ppb		96
51)	Toluene	8.51	91	267701	9.66609	ppb		98
52)	Trans-1,3-Dichloropropene	8.74	75	79918	9.62183	ppb		93
53)	1,1,2-TCA	8.92	83	50239	9.71682	ppb		99
54)	2-Hexanone	9.19	43	29618	10.41277	ppb		96
57)	1,2-EDB	9.41	107	55530	10.07717	ppb		97
58)	Tetrachloroethene	9.07	166	71143	10.45679	ppb		95
59)	1-Chlorohexane	9.92	91	69173	9.29334	ppb		96
60)	1,1,1,2-Tetrachloroethane	10.00	131	66211	9.84700	ppb		96
61)	m&p-Xylene	10.16	106	220343	21.58078	ppb		99
62)	o-Xylene	10.55	106	108448	9.86130	ppb		96
63)	Styrene	10.56	104	181150	9.26352	ppb		99
65)	1,3-Dichloropropane	9.08	76	94522	9.88540	ppb		96
66)	Dibromochloromethane	9.31	129	66966	9.55370	ppb		100
67)	Chlorobenzene	9.92	112	184976	9.95168	ppb		99
68)	Ethylbenzene	10.04	91	289161	10.51659	ppb		97
69)	Bromoform	10.73	173	46193	9.85244	ppb		96
71)	Isopropylbenzene	10.92	105	258292	10.36998	ppb		98
72)	1,1,2,2-Tetrachloroethane	11.20	83	73463	9.17120	ppb		94
73)	1,2,3-Trichloropropane	11.24	110	21431	9.91286	ppb		98
74)	t-1,4-Dichloro-2-Butene	11.26	53	15079	10.24371	ppb		100
75)	Bromobenzene	11.21	156	81908	9.85206	ppb		93
76)	n-Propylbenzene	11.33	91	333920	10.42833	ppb		99
77)	4-Ethyltoluene	11.45	105	283265	10.45561	ppb		99
78)	2-Chlorotoluene	11.41	91	241644	10.06143	ppb		99
79)	1,3,5-Trimethylbenzene	11.51	105	240254	9.72962	ppb		97
80)	4-Chlorotoluene	11.51	91	246796	10.36084	ppb		99
81)	Tert-Butylbenzene	11.83	119	192924	10.36311	ppb		98
82)	1,2,4-Trimethylbenzene	11.88	105	238645	9.70977	ppb		99
83)	Sec-Butylbenzene	12.05	105	280903	10.67246	ppb		99
84)	p-Isopropyltoluene	12.20	119	235090	9.62422	ppb		99
85)	Benzyl Chloride	12.37	91	89491	8.13069	ppb		96
86)	1,3-DCB	12.15	146	158476	9.66425	ppb		98
87)	1,4-DCB	12.23	146	162040	9.38024	ppb		99
88)	n-Butylbenzene	12.61	91	211627	10.11066	ppb		99
89)	1,2-DCB	12.60	146	148930	9.36292	ppb		99
90)	Hexachloroethane	12.87	117	47427	9.15833	ppb		93
91)	1,2-Dibromo-3-chloropropan	13.37	157	14400	9.29880	ppb		93
92)	1,2,4-Trichlorobenzene	14.21	180	59808	9.52548	ppb		93
93)	Hexachlorobutadiene	14.40	223	25520	8.75259	ppb		98
94)	Naphthalene	14.45	128	179079	9.38496	ppb		98
95)	1,2,3-Trichlorobenzene	14.69	180	90361	9.72658	ppb		97

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

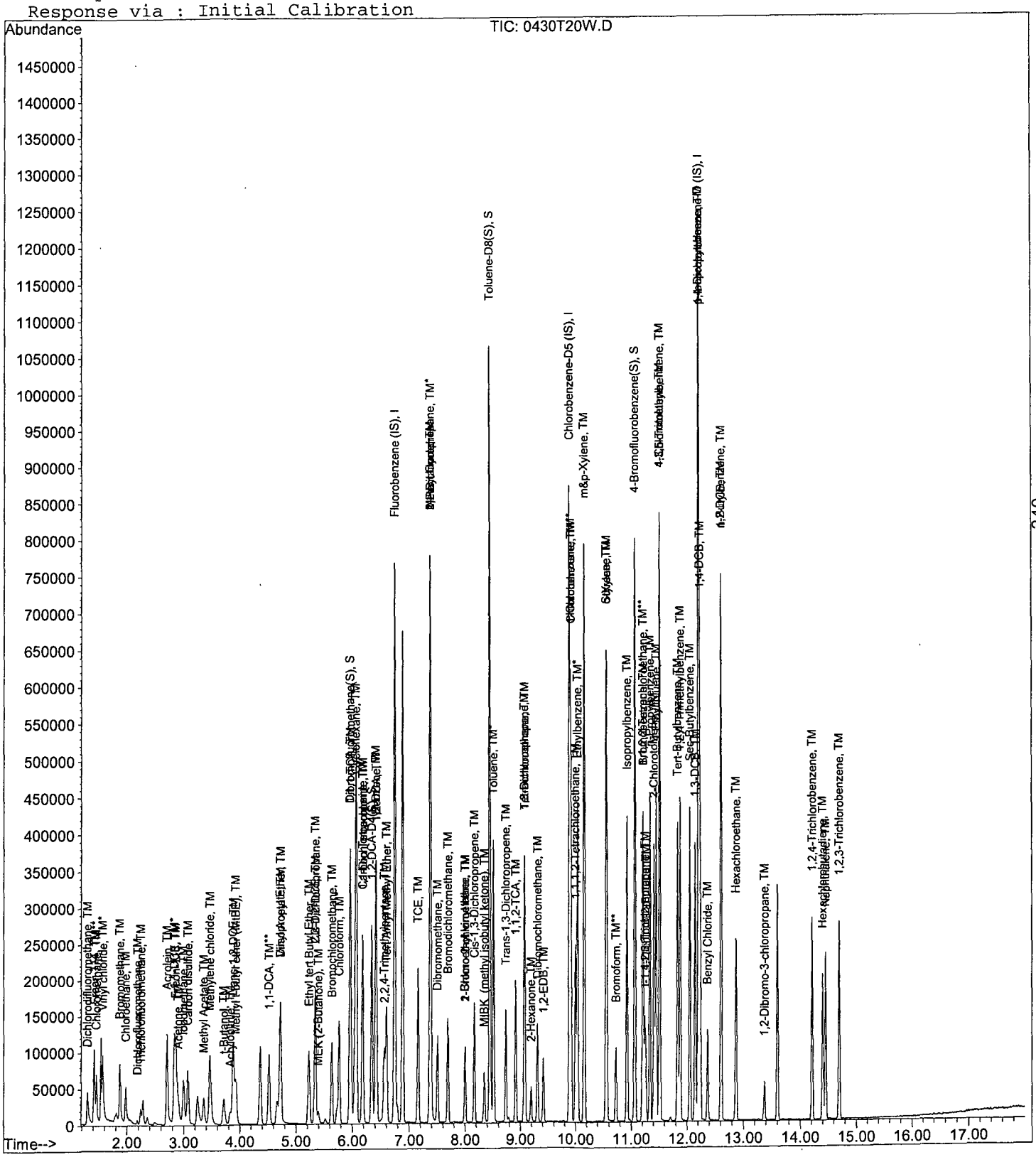
Quantitation Report

Data File : M:\THOR\DATA\T120430\0430T20W.D
Acq On : 30 Apr 12 17:16
Sample : 120430A LCS-1WT (SS)
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 17
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Quant Time: May 21 10:05 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



340

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 1 May 12 9:52
Instrument: Thor
Initial Cal. Date: 04/30/12
Data File: 0501T03W.D

		Compound	MEAN	CCRF	%D		%Drift	
1	I	Fluorobenzene (IS)	ISTD			I		
2	TM	Dichlorodifluoromethane	0.3194	0.3574	12	TM		
3	TM	Freon 114	0.3417	0.3948	16	TM		
4	TM**L	Chloromethane	0.3165	0.2792	12	TM**L	11	
5	TM*	Vinyl chloride	0.4960	0.5121	3.2	TM*		
6	TM	Bromomethane	0.3638	0.3115	14	TM		
7	TML	Chloroethane	0.3320	0.2875	13	TML	1.7	
8	TMQ	Dichlorofluoromethane	0.0409	0.0305	26	TMQ	7.1	
9	TMQ	Trichlorofluoromethane	0.1230	0.1208	1.8	TMQ	1.0	
10	TM	Acrolein	0.0477	0.0491	2.9	TM		
11	TML	Acetone	0.1978	0.1187	40	TML	0.08	
12	TM	Freon-113	0.3362	0.3797	13	TM		
13	TM*	1,1-DCE	0.5709	0.5863	2.7	TM*		
14	TM	t-Butanol	0.0080	0.0096	19	TM		
15	TML	Methyl Acetate	0.4445	0.3202	28	TML	2.1	
16	TM	Iodomethane	0.5919	0.6237	5.4	TM		
17	TM	Acrylonitrile	0.0957	0.0986	3.1	TM		
18	TML	Methylene chloride	0.2337	0.1561	33	TML	2.0	
19	TM	Carbon disulfide	0.3779	0.3762	0.44	TM		
20	TM	Methyl t-butyl ether (MtBE)	0.5102	0.4940	3.2	TM		
21	TM	Trans-1,2-DCE	0.3747	0.3817	1.9	TM		
22	TM	Diisopropyl Ether	0.1329	0.1327	0.14	TM		
23	TM**	1,1-DCA	0.7632	0.7238	5.2	TM**		
24	TM	Vinyl Acetate	0.2904	0.3006	3.5	TM		
25	TM	Ethyl tert Butyl Ether	0.5798	0.6170	6.4	TM		
26	TML	MEK (2-Butanone)	0.1966	0.1405	29	TML	3.6	
27	TM	Cis-1,2-DCE	0.4596	0.4596	0.01	TM		
28	TM	2,2-Dichloropropane	0.2892	0.2899	0.24	TM		
29	TM*	Chloroform	0.8184	0.7561	7.6	TM*		
30	TM	Bromochloromethane	0.2199	0.2274	3.4	TM		
31	SL	Dibromofluoromethane(S)	0.4442	0.5065	14	SL	12	
32	TM	1,1,1-TCA	0.5212	0.5112	1.9	TM		
33	TM	Cyclohexane	0.2570	0.2826	10.0	TM		
34	TM	1,1-Dichloropropene	0.4844	0.4718	2.6	TM		
35	TM	2,2,4-Trimethylpentane	0.7311	0.8870	21	TM		*NT
36	SL	1,2-DCA-D4(S)	0.4472	0.4894	9.4	SL	8.4	
37	TM	Carbon Tetrachloride	0.5401	0.5356	0.82	TM		
38	TM	Tert Amyl Methyl Ether	0.6290	0.7200	14	TM		
39	TM	1,2-DCA	0.5508	0.5093	7.5	TM		
40	TM	Benzene	1.766	1.670	5.5	TM		
		Average			10.1			

ARS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 1 May 12 9:52
Instrument: Thor
Cal. Date: 04/30/12
Data File: 0501T03W.D

		Compound	MEAN	CCRF	%D	%Drift	
41	TM	TCE	0.4778	0.4365	8.6	TM	
42	TM	2-Pentanone	0.2344	0.2410	2.8	TM	
43	TM*	1,2-Dichloropropane	0.4915	0.4613	6.2	TM*	✓
44	TM	Bromodichloromethane	0.6396	0.5736	10	TM	
45	TM	Methyl Cyclohexane	0.4832	0.5372	11	TM	
46	TM	Dibromomethane	0.2801	0.2576	8.0	TM	
47	TM	2-Chloroethyl vinyl ether	0.0110	0.0088	20	TM	
48	TM	MIBK (methyl isobutyl ketone)	0.1772	0.1647	7.0	TM	
49	TM	1-Bromo-2-chloroethane	0.3357	0.3087	8.0	TM	
50	TM	Cis-1,3-Dichloropropene	0.6387	0.6048	5.3	TM	
51	TM*	Toluene	1.835	1.796	2.1	TM*	✓
52	TM	Trans-1,3-Dichloropropene	0.5503	0.5299	3.7	TM	
53	TM	1,1,2-TCA	0.3425	0.3270	4.5	TM	
54	TM	2-Hexanone	0.1884	0.1891	0.34	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD			I	
56	SL	Toluene-D8(S)	1.781	2.207	24	SL	16
57	TM	1,2-EDB	0.4612	0.4698	1.9	TM	
58	TM	Tetrachloroethene	0.5695	0.6017	5.7	TM	
59	TM	1-Chlorohexane	0.6230	0.6018	3.4	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.5628	0.5487	2.5	TM	
61	TM	m&p-Xylene	0.8546	0.9168	7.3	TM	
62	TML	o-Xylene	0.8309	0.8860	6.6	TML	3.7
63	TML	Styrene	1.407	1.490	5.9	TML	8.9
64	SL	4-Bromofluorobenzene(S)	0.6525	0.8451	30	SL	15
65	TM	1,3-Dichloropropane	0.8003	0.7550	5.7	TM	
66	TM	Dibromochloromethane	0.5867	0.5517	6.0	TM	
67	TM**	Chlorobenzene	1.556	1.527	1.8	TM**	✓
68	TM*	Ethylbenzene	2.301	2.382	3.5	TM*	✓
69	TM**	Bromoform	0.3924	0.3840	2.1	TM**	✓
70	I	1,4-Dichlorobenzene-D (IS)	ISTD			I	
71	TM	Isopropylbenzene	3.461	3.556	2.7	TM	
72	TM**	1,1,2,2-Tetrachloroethane	1.113	1.036	6.9	TM**	✓
73	TM	1,2,3-Trichloropropane	0.3004	0.2926	2.6	TM	
74	TM	t-1,4-Dichloro-2-Butene	0.2046	0.1747	15	TM	
75	TM	Bromobenzene	1.155	1.140	1.3	TM	
76	TM	n-Propylbenzene	4.450	4.703	5.7	TM	
77	TM	4-Ethyltoluene	3.765	3.950	4.9	TM	
78	TM	2-Chlorotoluene	3.337	3.372	1.0	TM	
79	TML	1,3,5-Trimethylbenzene	3.117	3.412	9.5	TML	0.67
80	TM	4-Chlorotoluene	3.310	3.400	2.7	TM	
		Average			6.7		

ARS 5/29/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: 67622
Date Analyzed: 1 May 12 9:52
Instrument: Thor
Cal. Date: 04/30/12
Data File: 0501T03W.D

		Compound	MEAN	CCRF	%D		%Drift
81	TM	Tert-Butylbenzene	2.587	2.740	5.9	TM	
82	TML	1,2,4-Trimethylbenzene	3.075	3.272	6.4	TML	4.1
83	TM	Sec-Butylbenzene	3.658	4.043	11	TM	
84	TML	p-Isopropyltoluene	3.061	3.334	8.9	TML	2.0
85	TM	Benzyl Chloride	1.530	1.482	3.1	TM	
86	TM	1,3-DCB	2.279	2.267	0.50	TM	
87	TM	1,4-DCB	2.401	2.245	6.5	TM	
88	TM	n-Butylbenzene	2.909	3.045	4.7	TM	
89	TM	1,2-DCB	2.210	2.088	5.6	TM	
90	TM	Hexachloroethane	0.7196	0.6255	13	TM	
91	TM	1,2-Dibromo-3-chloropropane	0.2152	0.1926	10	TM	
92	TM	1,2,4-Trichlorobenzene	0.8725	0.8590	1.5	TM	
93	TM	Hexachlorobutadiene	0.4052	0.3918	3.3	TM	
94	TML	Naphthalene	2.441	2.480	1.6	TML	6.4
95	TM	1,2,3-Trichlorobenzene	1.291	1.260	2.4	TM	
96							
97							
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							
		Average			5.6		

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T03W.D Vial: 3
Acq On : 1 May 12 9:52 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 05-01-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 10:19 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:36:48 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	383680	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	306688	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	184064	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	194351	28.06064 ppb	0.00
Spiked Amount 29.265			Recovery =	95.885%	
36) 1,2-DCA-D4(S)	6.34	65	187777	27.10506 ppb	0.00
Spiked Amount 27.995			Recovery =	96.819%	
56) Toluene-D8(S)	8.44	98	676933	28.98148 ppb	0.00
Spiked Amount 29.188			Recovery =	99.289%	
64) 4-Bromofluorobenzene(S)	11.06	95	259193	28.77035 ppb	0.00
Spiked Amount 27.740			Recovery =	103.715%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	54849	11.19034 ppb	100
3) Freon 114	1.42	85	60595	11.55488 ppb	92
4) Chloromethane	1.45	50	42849	8.85730 ppb	94
5) Vinyl chloride	1.57	62	78594	10.32446 ppb	100
6) Bromomethane	1.87	94	47801	8.56106 ppb	97
7) Chloroethane	1.98	64	44119	9.82918 ppb	97
8) Dichlorofluoromethane	2.18	67	4675	10.70736 ppb	91
9) Trichlorofluoromethane	2.24	101	18532	10.10165 ppb	84
10) Acrolein	2.70	55	94176	128.57867 ppb	88
11) Acetone	2.90	43	18212	9.99165 ppb	95
12) Freon-113	2.86	101	58266	11.29198 ppb	86
13) 1,1-DCE	2.83	61	89975	10.26993 ppb	95
14) t-Butanol	3.71	59	18328	149.34344 ppb	98
15) Methyl Acetate	3.35	43	49148	9.79167 ppb	99
16) Iodomethane	2.99	142	95718	10.53695 ppb	97
17) Acrylonitrile	3.83	52	15139	10.30832 ppb	85
18) Methylene chloride	3.46	84	23960	9.80072 ppb	96
19) Carbon disulfide	3.07	76	57736	9.95590 ppb	99
20) Methyl t-butyl ether (MtBE	3.92	73	75815	9.68333 ppb	95
21) Trans-1,2-DCE	3.87	96	58587	10.18683 ppb	90
22) Diisopropyl Ether	4.72	59	20368	9.98583 ppb	97
23) 1,1-DCA	4.52	63	111077	9.48326 ppb	96
24) Vinyl Acetate	4.72	87	46130	10.34907 ppb	93
25) Ethyl tert Butyl Ether	5.23	59	94690	10.64222 ppb	100
26) MEK (2-Butanone)	5.40	43	21562	9.63699 ppb	91
27) Cis-1,2-DCE	5.34	96	70528	9.99935 ppb	96
28) 2,2-Dichloropropane	5.33	77	44489	10.02387 ppb	97
29) Chloroform	5.77	83	116040	9.23856 ppb	100
30) Bromochloromethane	5.64	128	34904	10.34389 ppb	94
32) 1,1,1-TCA	5.97	97	78452	9.80726 ppb	99
33) Cyclohexane	6.05	41	43374	10.99594 ppb	86
34) 1,1-Dichloropropene	6.18	75	72402	9.73825 ppb	98
35) 2,2,4-Trimethylpentane	6.56	57	136133	12.13199 ppb	96
37) Carbon Tetrachloride	6.18	117	82206	9.91779 ppb	98
38) Tert Amyl Methyl Ether	6.60	73	110502	11.44726 ppb	97
39) 1,2-DCA	6.43	62	78170	9.24773 ppb	97
40) Benzene	6.41	78	256232	9.45265 ppb	100
41) TCE	7.16	95	66993	9.13628 ppb	95
42) 2-Pentanone	7.38	43	462386	128.52218 ppb	98

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T03W.D Vial: 3
Acq On : 1 May 12 9:52 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 05-01-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 10:19 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:36:48 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

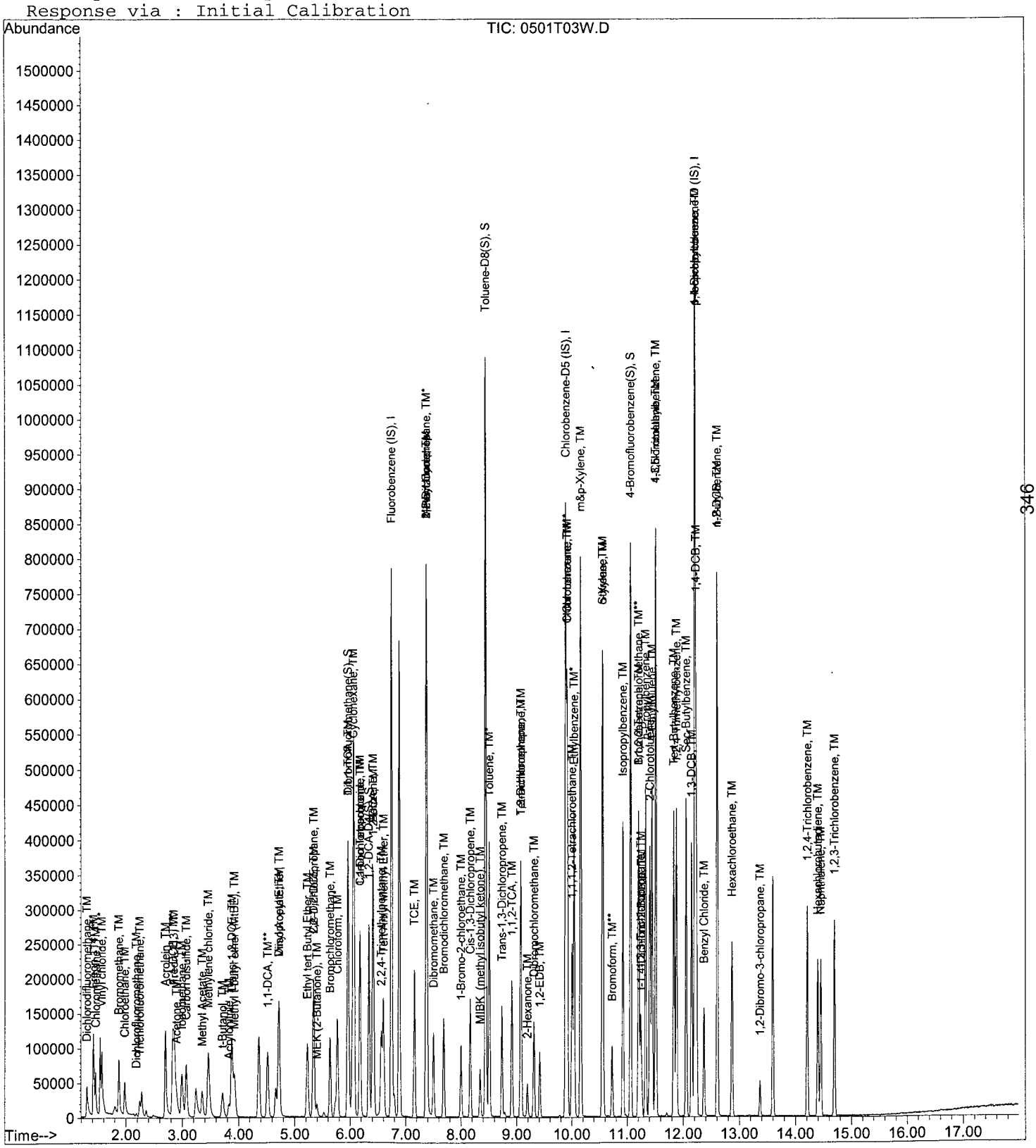
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloropropane	7.39	63	70795	9.38490	ppb	99
44)	Bromodichloromethane	7.69	83	88025	8.96709	ppb	97
45)	Methyl Cyclohexane	7.37	83	82442	11.11700	ppb	97
46)	Dibromomethane	7.50	93	39538	9.19682	ppb	94
48)	MIBK (methyl isobutyl ket	8.34	43	25280	9.29608	ppb	97
49)	1-Bromo-2-chloroethane	8.00	63	47376	9.19632	ppb	98
50)	Cis-1,3-Dichloropropene	8.17	75	92815	9.46838	ppb	96
51)	Toluene	8.51	91	275637	9.78829	ppb	99
52)	Trans-1,3-Dichloropropene	8.74	75	81321	9.62906	ppb	96
53)	1,1,2-TCA	8.92	83	50185	9.54609	ppb	97
54)	2-Hexanone	9.19	43	29020	10.03405	ppb	100
57)	1,2-EDB	9.41	107	57639	10.18704	ppb	96
58)	Tetrachloroethene	9.07	166	73816	10.56666	ppb	93
59)	1-Chlorohexane	9.92	91	73831	9.66040	ppb	94
60)	1,1,1,2-Tetrachloroethane	10.00	131	67315	9.75005	ppb	94
61)	m&p-Xylene	10.16	106	224933	21.45567	ppb	98
62)	o-Xylene	10.55	106	108689	9.63384	ppb	94
63)	Styrene	10.56	104	182799	9.11199	ppb	97
65)	1,3-Dichloropropane	9.08	76	92622	9.43401	ppb	93
66)	Dibromochloromethane	9.31	129	67678	9.40342	ppb	99
67)	Chlorobenzene	9.92	112	187326	9.81522	ppb	98
68)	Ethylbenzene	10.04	91	292246	10.35154	ppb	97
69)	Bromoform	10.72	173	47110	9.78592	ppb	96
71)	Isopropylbenzene	10.92	105	261827	10.27433	ppb	97
72)	1,1,2,2-Tetrachloroethane	11.20	83	76271	9.30655	ppb	97
73)	1,2,3-Trichloropropane	11.24	110	21540	9.73810	ppb	94
74)	t-1,4-Dichloro-2-Butene	11.26	53	12866	8.54280	ppb	97
75)	Bromobenzene	11.21	156	83957	9.87028	ppb	90
76)	n-Propylbenzene	11.33	91	346237	10.56860	ppb	99
77)	4-Ethyltoluene	11.45	105	290816	10.49172	ppb	99
78)	2-Chlorotoluene	11.41	91	248287	10.10438	ppb	98
79)	1,3,5-Trimethylbenzene	11.51	105	251240	9.93336	ppb	94
80)	4-Chlorotoluene	11.51	91	250339	10.27205	ppb	98
81)	Tert-Butylbenzene	11.83	119	201741	10.59180	ppb	95
82)	1,2,4-Trimethylbenzene	11.88	105	240900	9.58912	ppb	100
83)	Sec-Butylbenzene	12.05	105	297632	11.05248	ppb	98
84)	p-Isopropyltoluene	12.20	119	245478	9.80391	ppb	99
85)	Benzyl Chloride	12.37	91	109112	9.68931	ppb	99
86)	1,3-DCB	12.15	146	166939	9.95026	ppb	100
87)	1,4-DCB	12.23	146	165260	9.35043	ppb	98
88)	n-Butylbenzene	12.61	91	224187	10.46866	ppb	98
89)	1,2-DCB	12.60	146	153706	9.44479	ppb	98
90)	Hexachloroethane	12.87	117	46051	8.69164	ppb	93
91)	1,2-Dibromo-3-chloropropan	13.37	157	14181	8.95041	ppb	89
92)	1,2,4-Trichlorobenzene	14.21	180	63248	9.84570	ppb	96
93)	Hexachlorobutadiene	14.40	223	28844	9.66904	ppb	93
94)	Naphthalene	14.45	128	182614	9.35916	ppb	100
95)	1,2,3-Trichlorobenzene	14.69	180	92749	9.75799	ppb	95

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

Data File : M:\THOR\DATA\T120430\0501T03W.D Vial: 3
Acq On : 1 May 12 9:52 Operator: DG,RS,HW,ARS,SV
Sample : 10ug/L Vol Std 05-01-12 Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 1 10:19 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



EPA METHOD 8260B
Volatile Organic Compounds
Raw Data

APPL, INC.

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120430W-60081 - 166814**
Batch ID: #86RHB-120430AC

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	04/30/12	04/30/12
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	04/30/12	04/30/12
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	04/30/12	04/30/12
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	04/30/12	04/30/12
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	04/30/12	04/30/12
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	04/30/12	04/30/12
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	04/30/12	04/30/12
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	04/30/12	04/30/12
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	04/30/12	04/30/12
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	04/30/12	04/30/12
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	04/30/12	04/30/12
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	04/30/12	04/30/12
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	04/30/12	04/30/12
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	04/30/12	04/30/12
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	04/30/12	04/30/12
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	04/30/12	04/30/12
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C12
Instrument: Chico
Sequence: C120420
Initials: ARS

Printed: 05/11/12 1:21:50 PM
GC SC-Blank-REG MDLs

Method Blank

EPA 8260B VOCs + Gas Water

Blank Name/QCG: **120430W-60081 - 166814**

Batch ID: #86RHB-120430AC

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	04/30/12	04/30/12
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	04/30/12	04/30/12
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	04/30/12	04/30/12
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	04/30/12	04/30/12
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	04/30/12	04/30/12
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	04/30/12	04/30/12
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	04/30/12	04/30/12
BLANK	SURROGATE: 1,2-DICHLOROET	112	70-120			%	04/30/12	04/30/12
BLANK	SURROGATE: 4-BROMOFLUORO	90.2	75-120			%	04/30/12	04/30/12
BLANK	SURROGATE: DIBROMOFLUOR	112	85-115			%	04/30/12	04/30/12
BLANK	SURROGATE: TOLUENE-D8 (S)	92.0	85-120			%	04/30/12	04/30/12

Quant Method: CALLW3.M
Run #: 0430C12
Instrument: Chico
Sequence: C120420
Initials: ARS

Printed: 05/11/12 1:21:51 PM
GC SC-Blank-REG MDLs

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C12W.D Vial: 1
Acq On : 30 Apr 12 16:46 Operator: AS
Sample : 120430A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1228532	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.03	TIC	1342843	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1302457	25.00000	ppb	0.03

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.58	TIC	25112051m	43.08864	ppb ND	100

There is no gasoline pattern.
AMS 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C12W.D CGAS.M Tue May 01 10:49:31 2012 Page 1

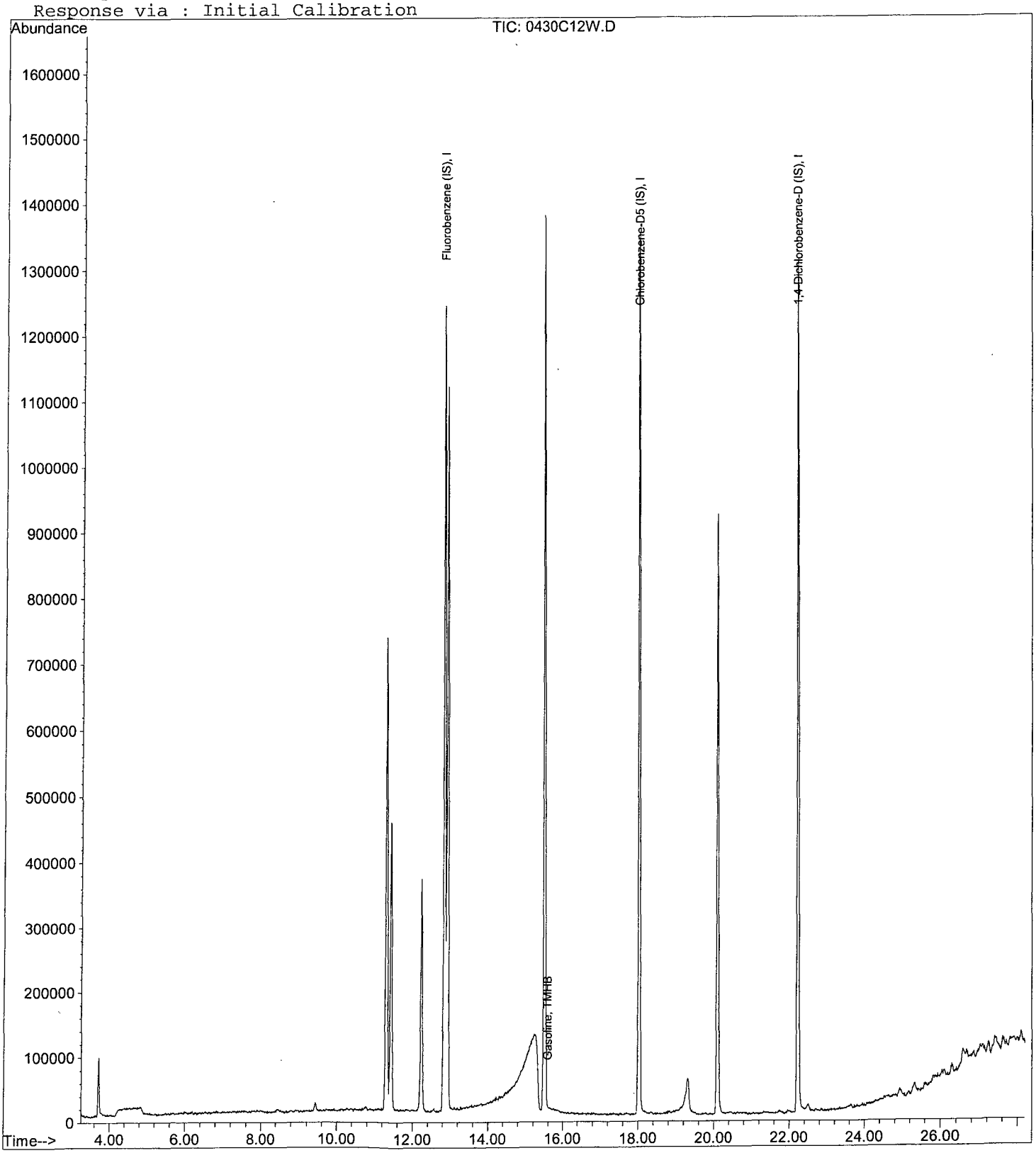
Quantitation Report

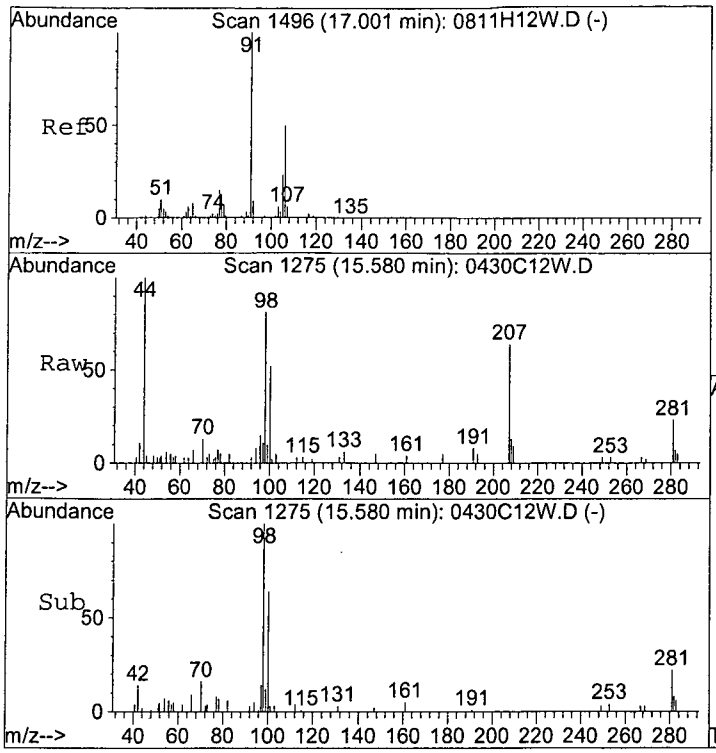
Data File : M:\CHICO\DATA\C120420\0430C12W.D
Acq On : 30 Apr 12 16:46
Sample : 120430A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:11 2012 Quant Results File: CGAS.RES

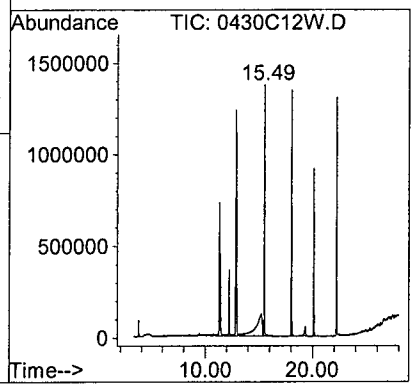
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration





#2
Gasoline
Concen: 43.08864 ppb m
RT: 15.58 min Scan# 1275
Delta R.T. 0.00 min
Lab File: 0430C12W.D
Acq: 30 Apr 12 16:46

Tgt Ion:TIC Resp:25112051



Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C12W.D Vial: 1
Acq On : 30 Apr 12 16:46 Operator: AS
Sample : 120430A BLK-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 30 17:47 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	625761	25.00000 ppb	0.03
54) Chlorobenzene-D5 (IS)	18.03	117	495040	25.00000 ppb	0.03
70) 1,4-Dichlorobenzene-D (IS)	22.23	152	232512	25.00000 ppb	0.03
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.42	111	455254	23.37989 ppb	0.02
Spiked Amount 20.866			Recovery	= 112.050%	
37) 1,2-DCA-D4(S)	12.22	65	369323	23.49819 ppb	0.02
Spiked Amount 21.039			Recovery	= 111.688%	
55) Toluene-D8(S)	15.49	98	1494672	23.33831 ppb	0.02
Spiked Amount 25.355			Recovery	= 92.045%	
63) 4-Bromofluorobenzene(S)	20.10	95	613998	24.35316 ppb	0.03
Spiked Amount 27.007			Recovery	= 90.173%	
Target Compounds					Qvalue
25) Vinyl Acetate	9.44	43	2112	1.07231 ppb NT#	76

ARC 5/1/12

(#) = qualifier out of range (m) = manual integration
0430C12W.D CALLW3.M Tue May 01 09:53:21 2012 Page 1

Quantitation Report

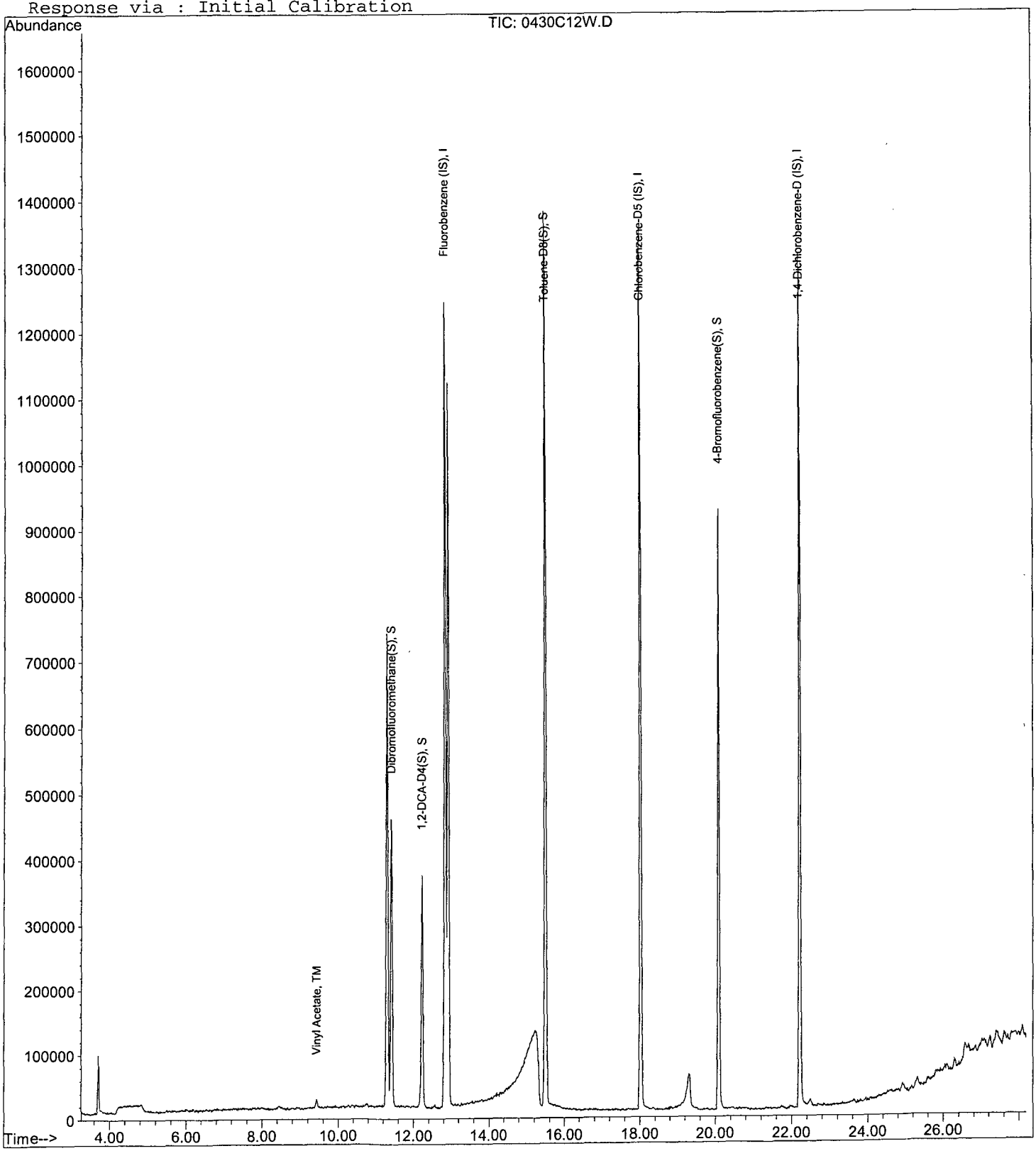
Data File : M:\CHICO\DATA\C120420\0430C12W.D
Acq On : 30 Apr 12 16:46
Sample : 120430A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: Apr 30 17:47 2012

Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Mon Apr 23 10:17:53 2012
Response via : Initial Calibration



Method Blank

EPA 8260B VOCS + GAS WATER

Blank Name/QCG: **120501W-60080 - 166816**
Batch ID: #86RHB-120501AT

APPL Inc.
908 North Temperance Avenu
Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	05/01/12	05/01/12
BLANK	SURROGATE: 1,2-DICHLOROET	97.7	70-120			%	05/01/12	05/01/12
BLANK	SURROGATE: 4-BROMOFLUORO	96.3	75-120			%	05/01/12	05/01/12
BLANK	SURROGATE: DIBROMOFLUOR	99.2	85-115			%	05/01/12	05/01/12
BLANK	SURROGATE: TOLUENE-D8 (S)	98.6	85-120			%	05/01/12	05/01/12

Quant Method: TALLW.M
Run #: 0501T06
Instrument: Thor
Sequence: T120430
Initials: ARS

Printed: 05/11/12 1:21:51 PM
GC SC-Blank-REG MDLs

Quantitation Report (QT/LSC Reviewed)

Data File : M:\THOR\DATA\T120430\0501T06W.D Vial: 6
Acq On : 1 May 12 11:15 Operator: DG,RS,HW,ARS,SV
Sample : 120501A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 3 10:28 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue May 01 09:36:48 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	369408	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	296832	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	158912	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	193619	29.02829 ppb	0.00
Spiked Amount 29.265			Recovery =	99.189%	
36) 1,2-DCA-D4(S)	6.34	65	182358	27.34105 ppb	0.00
Spiked Amount 27.995			Recovery =	97.662%	
56) Toluene-D8(S)	8.44	98	650862	28.79392 ppb	0.00
Spiked Amount 29.188			Recovery =	98.649%	
64) 4-Bromofluorobenzene(S)	11.06	95	232356	26.72610 ppb	0.00
Spiked Amount 27.740			Recovery =	96.346%	
Target Compounds					Qvalue
94) Naphthalene	14.45	128	2092	1.68695 ppb NT	92

looking for TCE only → TCE BDL
ARS 5/29/12

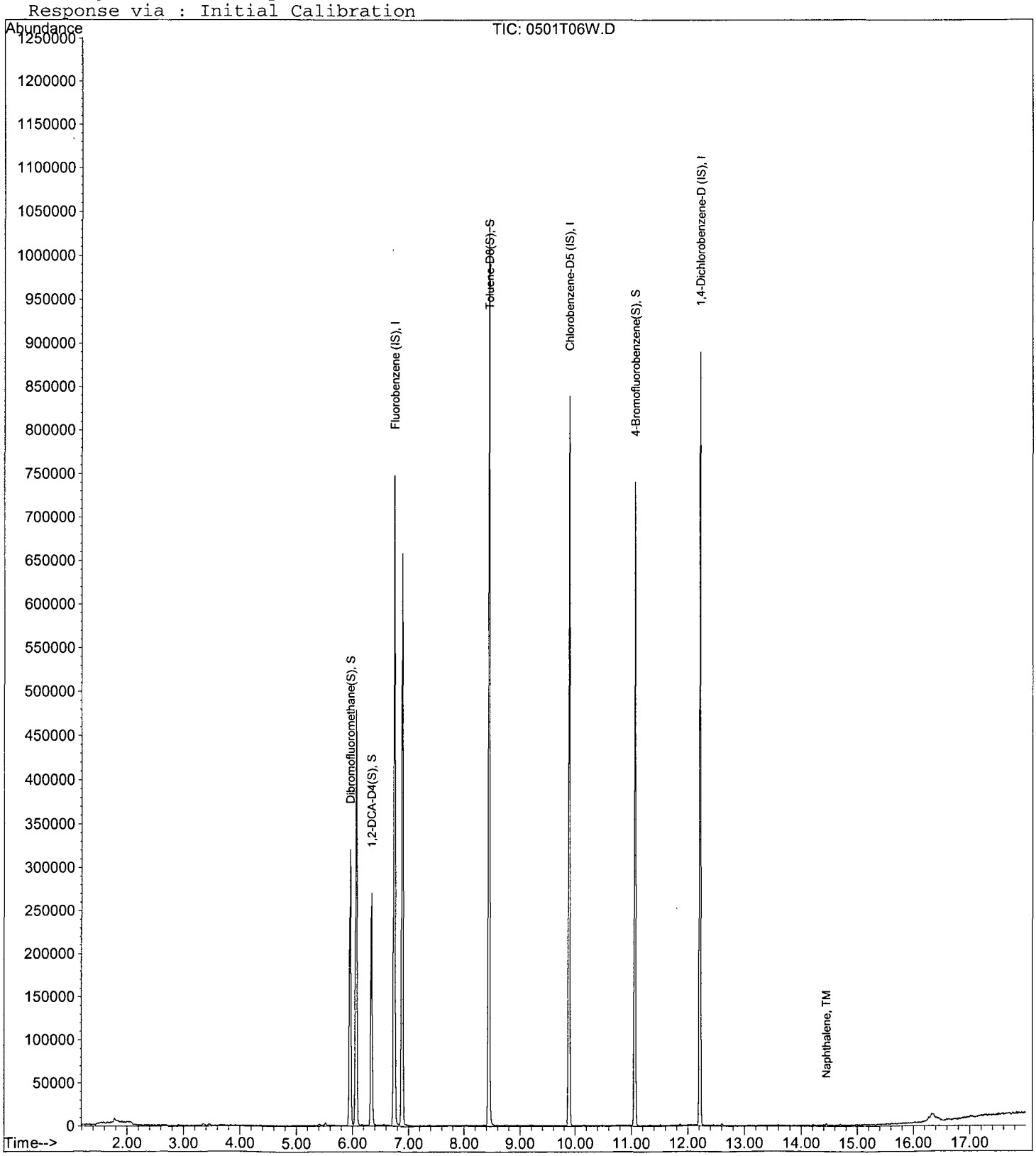
(#) = qualifier out of range (m) = manual integration
0501T06W.D TALLW.M Tue May 29 16:38:25 2012 Page 1

Quantitation Report

Data File : M:\THOR\DATA\T120430\0501T06W.D Vial: 6
Acq On : 1 May 12 11:15 Operator: DG,RS,HW,ARS,SV
Sample : 120501A BLK-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 3 10:28 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



Laboratory Control Spike Recovery

EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 LCS - 166814**
Batch ID: #86RHB-120430AC

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	9.64	96.4	80-130
1,1,1-TRICHLOROETHANE	10.00	10.2	102	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	9.64	96.4	65-130
1,1,2-TRICHLOROETHANE	10.00	10.3	103	75-125
1,1-DICHLOROETHANE	10.00	9.85	98.5	70-135
1,1-DICHLOROETHENE	10.00	9.46	94.6	70-130
1,2,3-TRICHLOROPROPANE	10.00	9.69	96.9	75-125
1,2,4-TRICHLOROBENZENE	10.00	9.74	97.4	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	9.12	91.2	50-130
1,2-DIBROMOETHANE	10.00	9.27	92.7	70-130
1,2-DICHLOROBENZENE	10.00	9.74	97.4	70-120
1,2-DICHLOROETHANE	10.00	10.1	101	70-130
1,2-DICHLOROPROPANE	10.00	9.85	98.5	75-125
1,3-DICHLOROBENZENE	10.00	9.62	96.2	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.4	97.0	70-130
1,4-DICHLOROBENZENE	10.00	9.45	94.5	75-125
2-BUTANONE	10.00	9.71	97.1	30-150
4-METHYL-2-PENTANONE	10.00	7.94	79.4	60-135
ACETONE	10.00	9.98	99.8	40-140
BENZENE	10.00	10.0	100	80-120
BROMODICHLOROMETHANE	10.00	10.2	102	75-120
BROMOFORM	10.00	9.01	90.1	70-130
BROMOMETHANE	10.00	9.26	92.6	30-145
CARBON TETRACHLORIDE	10.00	10.2	102	65-140
CHLOROBENZENE	10.00	9.79	97.9	80-120
CHLORODIBROMOMETHANE	10.00	9.42	94.2	60-135
CHLOROETHANE	10.00	10.3	103	60-135
CHLOROFORM	10.00	10.2	102	65-135
CHLOROMETHANE	10.00	10.3	103	40-125
CIS-1,2-DICHLOROETHENE	10.00	10.5	105	70-125
ETHYLBENZENE	10.00	9.83	98.3	75-125

Comments: _____

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/30/12
Analysis Date :	04/30/12
Instrument :	Chico
Run :	0430C07
Initials :	ARS

Printed: 05/11/12 1:21:42 PM
APPL Standard LCS

Laboratory Control Spike Recovery
EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 LCS - 166814**
Batch ID: #86RHB-120430AC

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
GASOLINE	300	374	125	75-125
HEXACHLOROBUTADIENE	10.00	9.48	94.8	50-140
METHYL TERT-BUTYL ETHER	10.00	10.0	100	65-125
METHYLENE CHLORIDE	10.00	10.1	101	55-140
STYRENE	10.00	10.1	101	65-135
TETRACHLOROETHENE	10.00	9.62	96.2	45-150
TOLUENE	10.00	10.3	103	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.14	91.4	60-140
TRICHLOROETHENE	10.00	10.3	103	70-125
VINYL CHLORIDE	10.00	10.9	109	50-145
XYLENES (TOTAL)	30.0	29.9	99.7	80-120
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	22.2	106	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.0	24.1	89.2	75-120
SURROGATE: DIBROMOFLUOROMETH	20.9	23.3	112	85-115
SURROGATE: TOLUENE-D8 (S)	25.4	23.2	91.5	85-120

Comments: _____

Primary	SPK
Quant Method :	CALLW3.M
Extraction Date :	04/30/12
Analysis Date :	04/30/12
Instrument :	Chico
Run :	0430C07
Initials :	ARS

Printed: 05/11/12 1:21:42 PM
APPL Standard LCS

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C03W.D Vial: 1
Acq On : 30 Apr 12 11:12 Operator: AS
Sample : LCS gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 30 14:23 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.83	TIC	1211622	25.00000	ppb	0.04
3) Chlorobenzene-D5 (IS)	18.01	TIC	1387087	25.00000	ppb	0.03
4) 1,4-Dichlorobenzene-D (IS)	22.21	TIC	1311379	25.00000	ppb	0.03

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.61	TIC	59559820m	373.51880	ppb	100

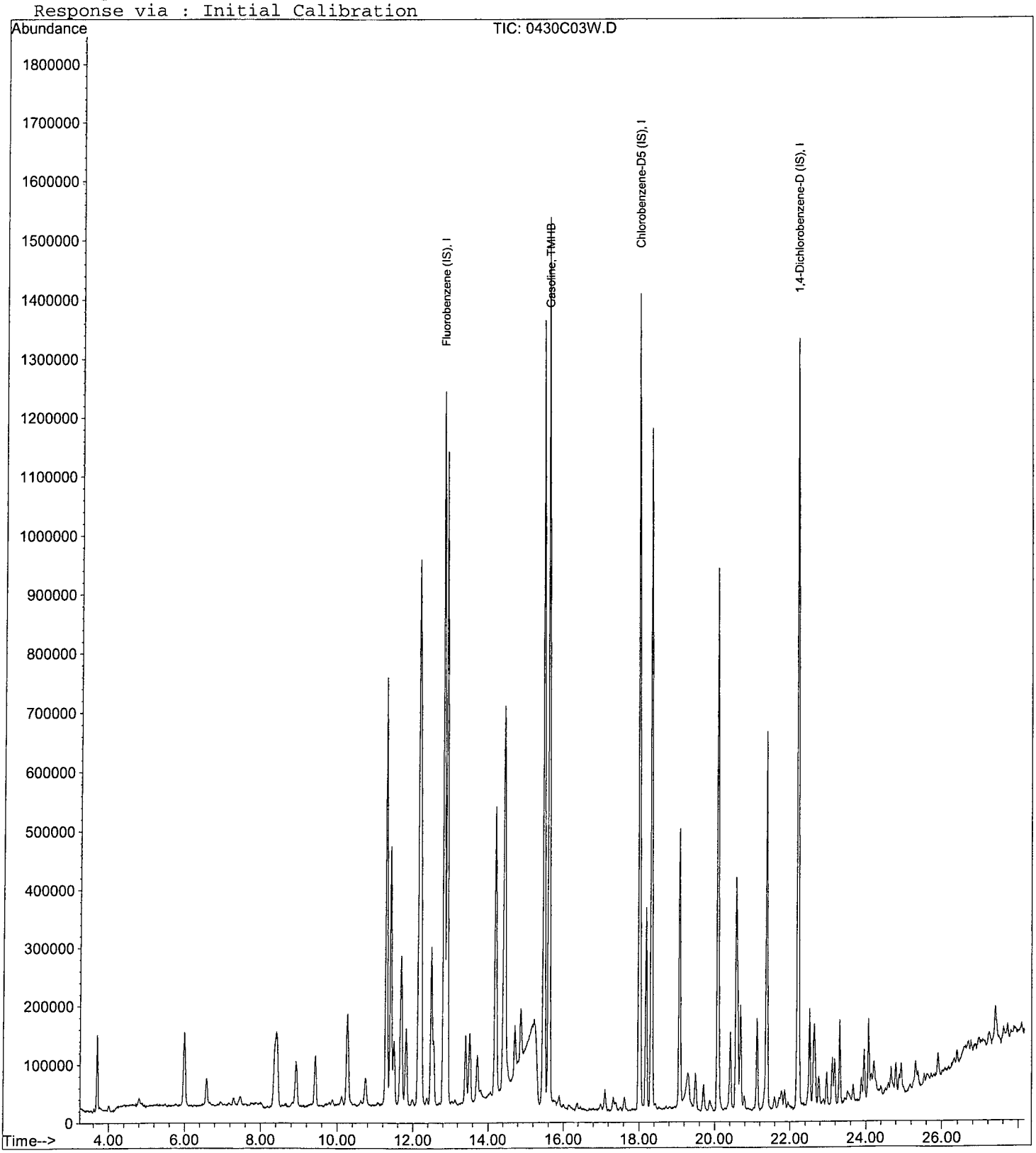
(#) = qualifier out of range (m) = manual integration
0430C03W.D CGAS.M Mon Apr 30 14:23:20 2012 Page 1

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C03W.D Vial: 1
Acq On : 30 Apr 12 11:12 Operator: AS
Sample : LCS gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: Apr 30 14:23 2012 Quant Results File: CGAS.RES

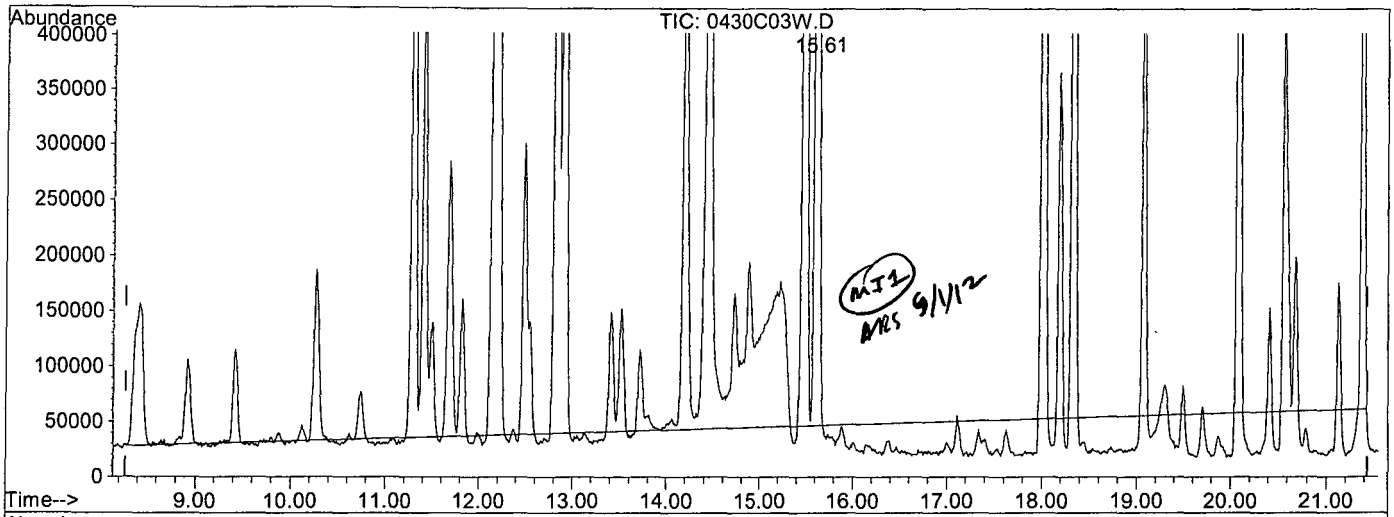
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

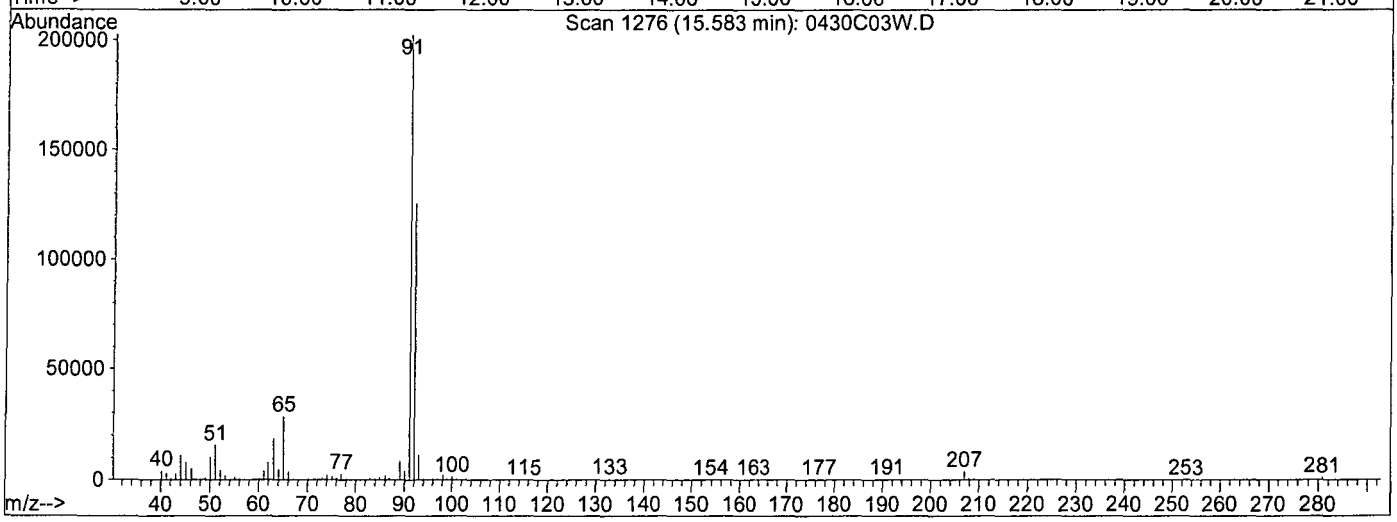


Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C03W.D Vial: 1
Acq On : 30 Apr 12 11:12 Operator: AS
Sample : LCS gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: Apr 30 12:03 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C03W.D

(2) Gasoline (TMHB)

15.58min 329.4698ppb m

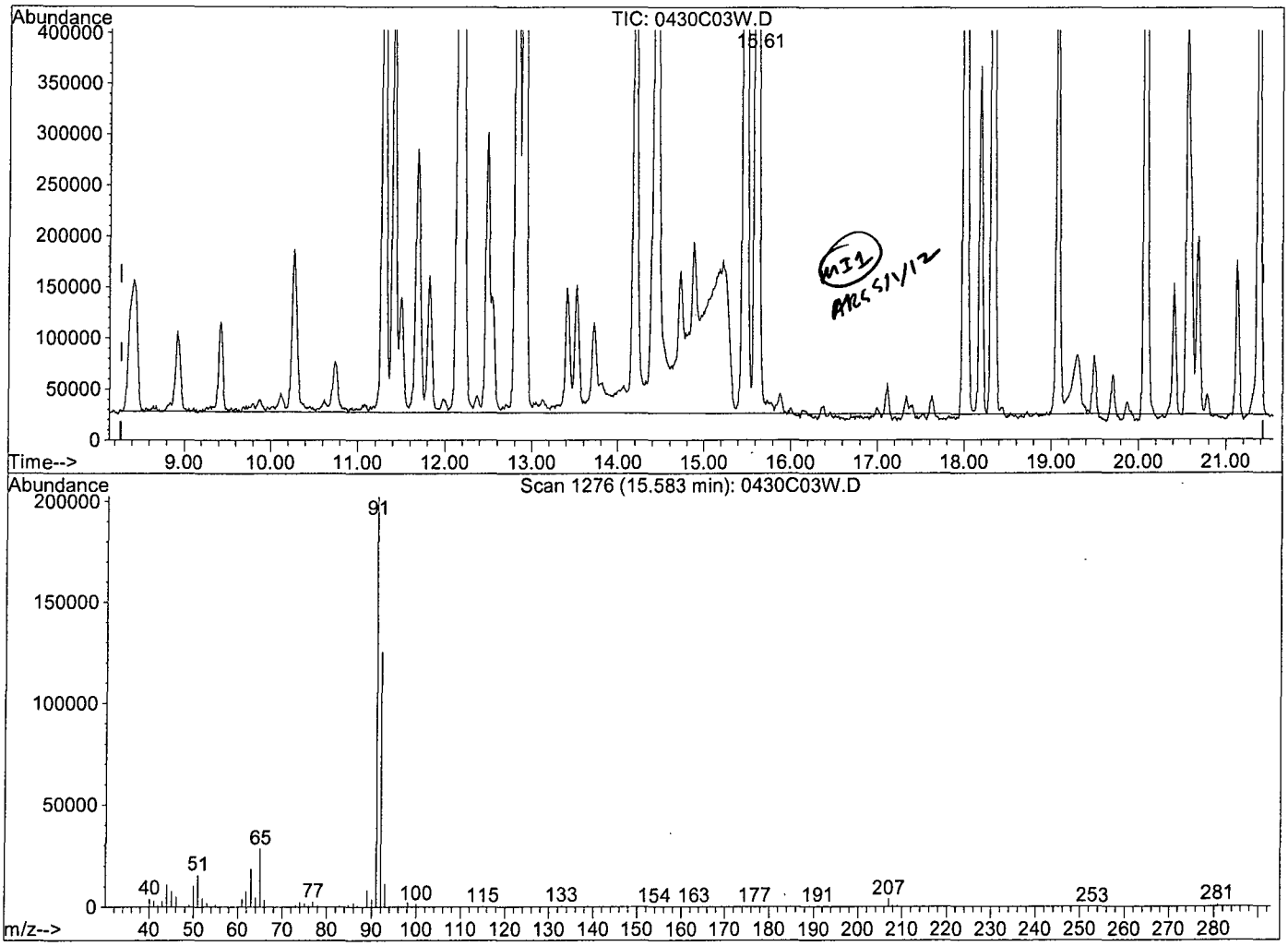
response 54921574

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.24#
0.00	0.00	0.65#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C03W.D Vial: 1
Acq On : 30 Apr 12 11:12 Operator: AS
Sample : LCS gas @300ug/L Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: Apr 30 14:23 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration



TIC: 0430C03W.D

(2) Gasoline (TMHB)

15.61min 373.5188ppb m

response 59559820

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.22#
0.00	0.00	0.60#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C07W.D Vial: 1
Acq On : 30 Apr 12 13:40 Operator: AS
Sample : 120430A LCS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:29 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	597247	25.00000 ppb	0.02
54) Chlorobenzene-D5 (IS)	18.02	117	493888	25.00000 ppb	0.02
70) 1,4-Dichlorobenzene-D (IS)	22.21	152	238784	25.00000 ppb	0.00
System Monitoring Compounds					
32) Dibromofluoromethane(S)	11.41	111	432365	23.26450 ppb	0.00
Spiked Amount 20.866			Recovery = 111.494%		
37) 1,2-DCA-D4(S)	12.22	65	332311	22.15273 ppb	0.00
Spiked Amount 21.039			Recovery = 105.295%		
55) Toluene-D8(S)	15.49	98	1481805	23.19137 ppb	0.00
Spiked Amount 25.355			Recovery = 91.465%		
63) 4-Bromofluorobenzene(S)	20.09	95	605187	24.05967 ppb	0.02
Spiked Amount 27.007			Recovery = 89.088%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.10	85	192507	10.39197 ppb	96
3) Freon 114	4.35	85	121718	9.46370 ppb	87
4) Chloromethane	4.59	52	77540	10.32859 ppb	96
5) Vinyl chloride	4.85	62	59696	10.92160 ppb	91
6) Bromomethane	5.75	94	38178	9.26250 ppb	93
7) Chloroethane	5.94	64	50727	10.26194 ppb	95
8) Dichlorofluoromethane	6.03	67	428823	10.44432 ppb	97
9) Trichlorofluoromethane	6.55	103	39224	9.43257 ppb	98
10) Acetonitrile	7.67	41	155208	131.36096 ug/l	100
11) Acrolein	7.17	56	214154	469.76244 ppb	98
12) Acetone	7.28	43	25312	9.98013 ppb	97
13) Freon-113	7.48	101	164041	9.98259 ppb	95
14) 1,1-DCE	7.69	96	172588	9.46063 ppb	95
15) t-Butanol	7.78	59	70048	126.98957 ppb	99
16) Methyl Acetate	8.19	43	98017	10.20198 ppb	99
17) Iodomethane	8.17	142	234197	8.81987 ppb	94
18) Acrylonitrile	8.57	53	35346	10.06502 ppb	85
19) Methylene chloride	8.48	84	191349	10.05601 ppb	97
20) Carbon disulfide	8.57	76	153984	8.95993 ppb	100
21) Methyl t-butyl ether (MtBE	8.90	73	350048	10.02015 ppb	97
22) Trans-1,2-DCE	9.10	96	201493	9.14261 ppb	97
23) Diisopropyl Ether	9.75	45	714703	10.10740 ppb	89
24) 1,1-DCA	9.79	63	383491	9.84914 ppb	97
25) Vinyl Acetate	9.76	43	115301	9.47283 ppb	99
26) Ethyl tert Butyl Ether	10.45	59	537476	10.26000 ppb	98
27) MEK (2-Butanone)	10.44	43	21592	9.70615 ppb	99
28) Cis-1,2-DCE	10.81	96	229670	10.53182 ppb	90
29) 2,2-Dichloropropane	10.80	77	254089	9.80206 ppb	95
30) Chloroform	11.08	85	214935	10.21330 ppb	96
31) Bromochloromethane	11.32	128	89088	9.94684 ppb	97
33) 1,1,1-TCA	11.83	97	265534	10.24491 ppb	98
34) Cyclohexane	11.99	56	338646	9.42527 ppb	98
35) 1,1-Dichloropropene	12.10	75	249843	9.67923 ppb	99
36) 2,2,4-Trimethylpentane	12.18	57	599816	9.91137 ppb	99
38) Carbon Tetrachloride	12.29	117	235543	10.15037 ppb	99
39) Tert Amyl Methyl Ether	12.34	73	415639	10.21114 ppb	99
40) 1,2-DCA	12.37	62	175781	10.13267 ppb	94
41) Benzene	12.49	78	798220	10.01094 ppb	100
42) TCE	13.52	95	195944	10.31116 ppb	97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C07W.D Vial: 1
Acq On : 30 Apr 12 13:40 Operator: AS
Sample : 120430A LCS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 10:29 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue	
43)	2-Pentanone	13.18	43	824280	125.10319	ppb	100	
44)	1,2-Dichloropropane	13.75	63	220767	9.85091	ppb	99	
45)	Bromodichloromethane	14.10	83	206418	10.20072	ppb	96	
46)	Methyl Cyclohexane	13.80	83	270226	9.88920	ppb	100	
47)	Dibromomethane	14.16	93	90889	10.32089	ppb	97	
48)	2-Chloroethyl vinyl ether	14.56	63	71884	10.32127	ppb	92	
49)	1-Bromo-2-chloroethane	14.87	63	211928	10.32168	ppb	98	
50)	Cis-1,3-Dichloropropene	14.99	75	279625	9.51613	ppb	100	1,3-dichloropropene, total
51)	Toluene	15.62	91	758896	10.29489	ppb	98	19.36706 ppb
52)	Trans-1,3-Dichloropropene	15.79	75	201865	9.85093	ppb	97	
53)	1,1,2-TCA	16.07	83	98974	10.32337	ppb	95	
56)	1,2-EDB	17.31	107	114909	9.27285	ppb	94	
57)	Tetrachloroethene	16.77	164	146727	9.62429	ppb	96	
58)	1-Chlorohexane	17.68	91	279114	9.83662	ppb	95	
59)	1,1,1,2-Tetrachloroethane	18.14	131	178970	9.63995	ppb	99	
60)	m&p-Xylene	18.34	106	689472	19.79114	ppb	97	
61)	o-Xylene	19.09	106	353939	10.06721	ppb	99	
62)	Styrene	19.09	104	557064	10.07086	ppb	99	
64)	2-Hexanone	16.10	43	55333	8.87200	ppb	89	
65)	1,3-Dichloropropane	16.47	76	216667	9.63818	ppb	99	
66)	Dibromochloromethane	16.96	129	145909	9.42334	ppb	96	
67)	Chlorobenzene	18.08	112	536632	9.79018	ppb	97	
68)	Ethylbenzene	18.20	91	844684	9.83338	ppb	96	
69)	Bromoform	19.62	173	62857	9.00875	ppb	97	
71)	MIBK (methyl isobutyl keto	14.66	43	90182	7.94142	ppb	98	
72)	Isopropylbenzene	19.71	105	839060	9.57567	ppb	93	
73)	1,1,2,2-Tetrachloroethane	19.87	83	119834	9.63562	ppb	98	
74)	1,2,3-Trichloropropane	20.13	110	12128	9.68798	ppb	99	
75)	t-1,4-Dichloro-2-Butene	20.20	53	27199	9.53984	ppb	95	
76)	Bromobenzene	20.45	156	191661	9.57874	ppb	94	
77)	n-Propylbenzene	20.42	91	985032	9.44578	ppb	99	
78)	4-Ethyltoluene	20.61	105	881200	9.51809	ppb	99	
79)	2-Chlorotoluene	20.71	91	625444	9.22626	ppb	97	
80)	1,3,5-Trimethylbenzene	20.69	105	672082	9.64508	ppb	98	
81)	4-Chlorotoluene	20.79	91	581618	9.87265	ppb	96	
82)	Tert-Butylbenzene	21.33	119	751178	9.64959	ppb	97	
83)	1,2,4-Trimethylbenzene	21.39	105	702031	9.70177	ppb	97	
84)	Sec-Butylbenzene	21.73	105	934606	9.66567	ppb	99	
85)	p-Isopropyltoluene	21.96	119	774418	9.54646	ppb	99	
86)	Benzyl Chloride	22.40	91	193877	10.04662	ppb	96	
87)	1,3-DCB	22.10	146	408288	9.62288	ppb	98	
88)	1,4-DCB	22.27	146	390298	9.44822	ppb	99	
89)	Hexachloroethane	23.57	117	173767	9.81322	ppb	96	
90)	n-Butylbenzene	22.67	91	653114	9.57130	ppb	97	
91)	1,2-DCB	22.90	146	362548	9.74158	ppb	100	
92)	1,2-Dibromo-3-chloropropan	24.12	155	15717	9.12177	ppb	89	
93)	1,2,4-Trichlorobenzene	25.56	180	90552	9.74155	ppb	93	
94)	Hexachlorobutadiene	25.81	223	92200	9.48055	ppb	89	
95)	Naphthalene	25.90	128	442682	9.48260	ppb	100	
96)	1,2,3-Trichlorobenzene	26.27	180	79200	9.66451	ppb	95	

(#) = qualifier out of range (m) = manual integration
0430C07W.D CALLW3.M Tue May 08 10:59:33 2012 Page 2

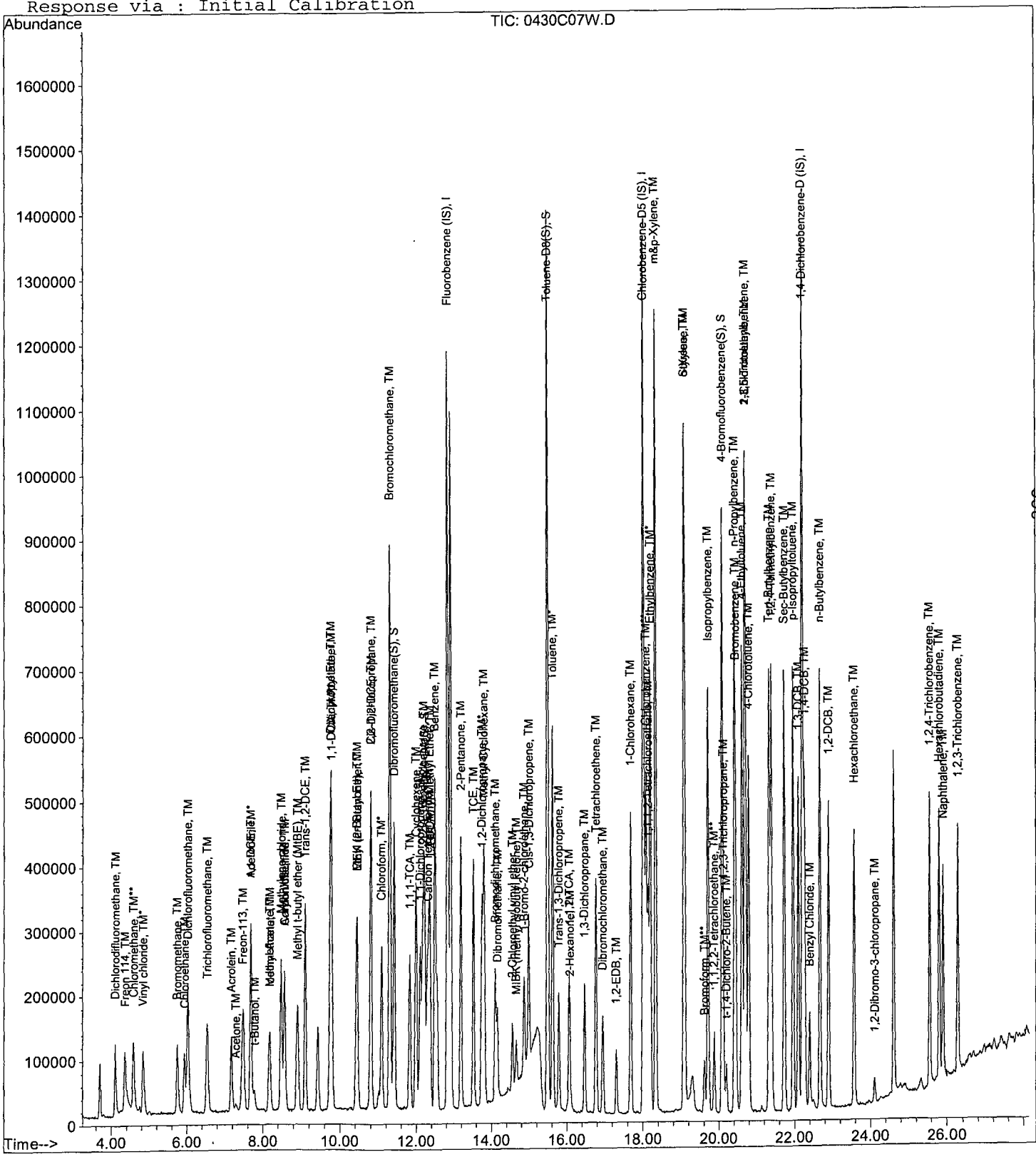
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C07W.D
Acq On : 30 Apr 12 13:40
Sample : 120430A LCS-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 8 10:29 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



366

Laboratory Control Spike Recovery
EPA 8260B VOCS + GAS WATER

APPL ID: **120501W-60080 LCS - 166816**
Batch ID: #86RHB-120501AT

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
TRICHLOROETHENE	10.00	9.16	91.6	70-125
SURROGATE: 1,2-DICHLOROETHANE-D	28.0	26.3	93.9	70-120
SURROGATE: 4-BROMOFLUOROBENZE	27.7	28.8	104	75-120
SURROGATE: DIBROMOFLUOROMETH	29.3	28.1	96.0	85-115
SURROGATE: TOLUENE-D8 (S)	29.2	29.0	99.4	85-120

Comments: _____

Primary	SPK
Quant Method :	TALLW.M
Extraction Date :	05/01/12
Analysis Date :	05/01/12
Instrument :	Thor
Run :	0501T04
Initials :	ARS

Printed: 05/11/12 1:21:42 PM
APPL Standard LCS

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T04W.D Vial: 4
Acq On : 1 May 12 10:19 Operator: DG,RS,HW,ARS,SV
Sample : 120501A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 21 10:09 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene (IS)	6.75	96	388160	25.00000 ppb	0.00
55) Chlorobenzene-D5 (IS)	9.89	117	307264	25.00000 ppb	0.00
70) 1,4-Dichlorobenzene-D (IS)	12.21	152	183168	25.00000 ppb	0.00
System Monitoring Compounds					
31) Dibromofluoromethane(S)	5.96	111	197204	28.14337 ppb	0.00
Spiked Amount 29.265			Recovery = 96.165%		
36) 1,2-DCA-D4(S)	6.34	65	184482	26.31798 ppb	0.00
Spiked Amount 27.995			Recovery = 94.008%		
56) Toluene-D8(S)	8.44	98	678023	28.97386 ppb	0.00
Spiked Amount 29.188			Recovery = 99.265%		
64) 4-Bromofluorobenzene(S)	11.06	95	259783	28.78136 ppb	0.00
Spiked Amount 27.740			Recovery = 103.755%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.30	85	53106	10.70968 ppb	98
3) Freon 114	1.41	85	59556	11.22568 ppb	99
4) Chloromethane	1.45	50	39881	8.22221 ppb	98
5) Vinyl chloride	1.56	62	77798	10.10194 ppb	99
6) Bromomethane	1.87	94	50104	8.86995 ppb	99
7) Chloroethane	1.97	64	41928	9.24232 ppb	90
8) Dichlorofluoromethane	2.18	67	4840	10.90996 ppb	91
9) Trichlorofluoromethane	2.24	101	19483	10.46223 ppb	94
10) Acrolein	2.70	55	88222	119.05948 ppb	88
11) Acetone	2.90	43	16820	8.92006 ppb	100
12) Freon-113	2.86	101	58825	11.26874 ppb	93
13) 1,1-DCE	2.83	61	89651	10.11484 ppb	97
14) t-Butanol	3.71	59	16960	136.60145 ppb	97
15) Methyl Acetate	3.35	43	48503	9.52218 ppb	99
16) Iodomethane	2.99	142	96264	10.47475 ppb	96
17) Acrylonitrile	3.82	52	14988	10.08771 ppb	98
18) Methylene chloride	3.46	84	23136	9.30151 ppb	96
19) Carbon disulfide	3.07	76	56048	9.55327 ppb	99
20) Methyl t-butyl ether (MtBE	3.92	73	74832	9.44747 ppb	94
21) Trans-1,2-DCE	3.87	96	57979	9.96476 ppb	95
22) Diisopropyl Ether	4.72	59	19983	9.68400 ppb	93
23) 1,1-DCA	4.52	63	110866	9.35600 ppb	98
24) Vinyl Acetate	4.72	87	47703	10.57844 ppb	93
25) Ethyl tert Butyl Ether	5.22	59	96461	10.71613 ppb	98
26) MEK (2-Butanone)	5.39	43	21612	9.54798 ppb	93
27) Cis-1,2-DCE	5.34	96	71316	9.99437 ppb	93
28) 2,2-Dichloropropane	5.33	77	44823	9.98256 ppb	94
29) Chloroform	5.77	83	113735	8.95054 ppb	99
30) Bromochloromethane	5.63	128	34015	9.96409 ppb	99
32) 1,1,1-TCA	5.97	97	80546	9.95281 ppb	99
33) Cyclohexane	6.05	41	43507	10.90236 ppb	85
34) 1,1-Dichloropropene	6.18	75	75263	10.00622 ppb	97
35) 2,2,4-Trimethylpentane	6.56	57	130970	11.53716 ppb	96
37) Carbon Tetrachloride	6.18	117	82024	9.78161 ppb	98
38) Tert Amyl Methyl Ether	6.60	73	107832	11.04174 ppb	98
39) 1,2-DCA	6.43	62	78408	9.16883 ppb	99
40) Benzene	6.41	78	251164	9.15875 ppb	99
41) TCE	7.16	95	67931	9.15728 ppb	95
42) 2-Pentanone	7.38	43	439060	120.63009 ppb	96

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

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T04W.D Vial: 4
Acq On : 1 May 12 10:19 Operator: DG,RS,HW,ARS,SV
Sample : 120501A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 21 10:09 2012 Quant Results File: TALLW.RES

Quant Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration
DataAcq Meth : 8260_BETA

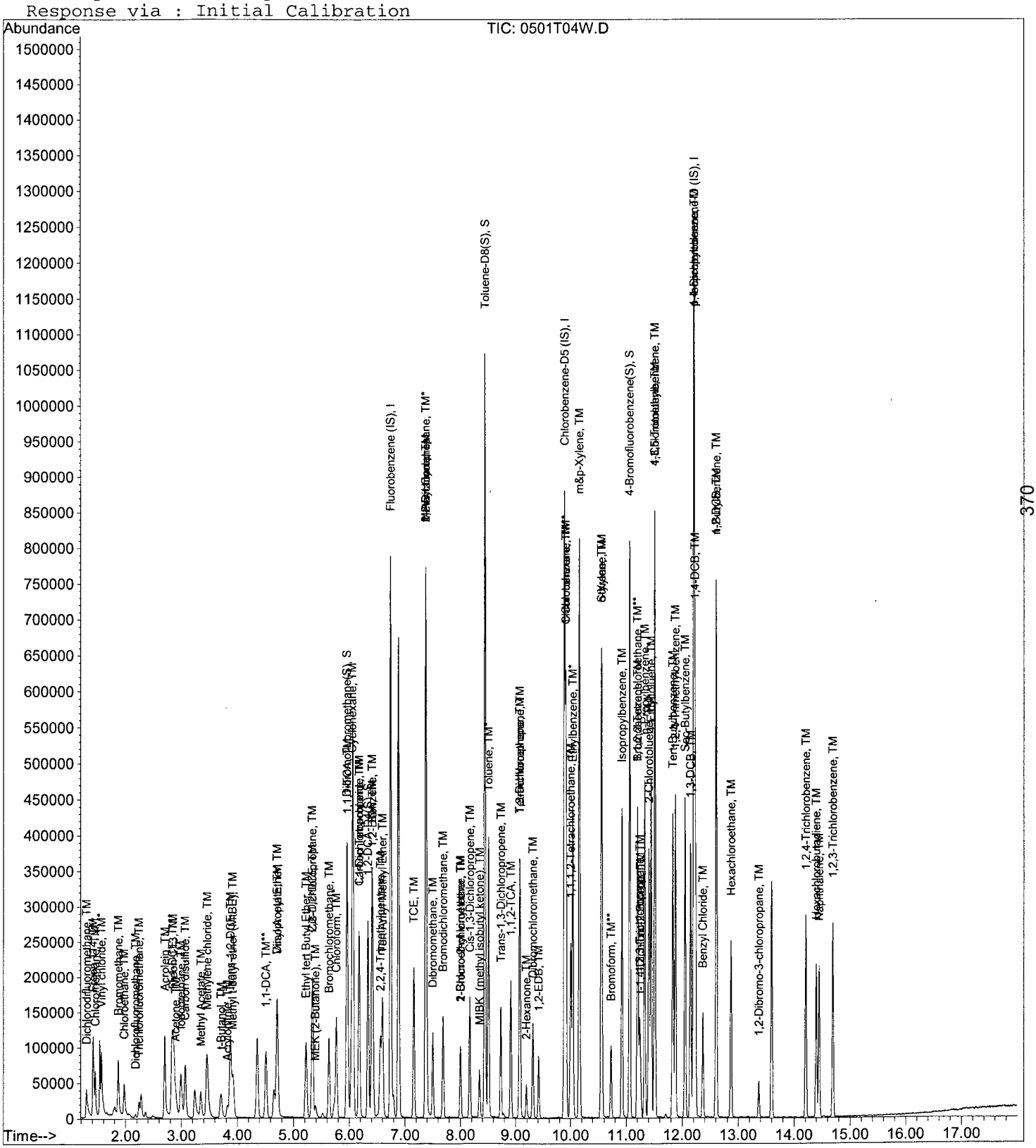
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43)	1,2-Dichloropropane	7.39	63	71021	9.30619	ppb	100
44)	Bromodichloromethane	7.69	83	88266	8.88786	ppb	99
45)	Methyl Cyclohexane	7.37	83	79952	10.65680	ppb	98
46)	Dibromomethane	7.50	93	39972	9.19046	ppb	99
47)	2-Chloroethyl vinyl ether	8.00	106	1288	7.52090	ppb	100
48)	MIBK (methyl isobutyl ket	8.34	43	24208	8.79914	ppb	97
49)	1-Bromo-2-chloroethane	8.00	63	47136	9.04413	ppb	96
50)	Cis-1,3-Dichloropropene	8.16	75	93104	9.38825	ppb	96
51)	Toluene	8.51	91	277994	9.75805	ppb	99
52)	Trans-1,3-Dichloropropene	8.74	75	78678	9.20859	ppb	94
53)	1,1,2-TCA	8.91	83	47913	9.00872	ppb	94
54)	2-Hexanone	9.19	43	27438	9.37755	ppb	93
57)	1,2-EDB	9.41	107	55328	9.76027	ppb	97
58)	Tetrachloroethene	9.07	166	72010	10.28881	ppb	95
59)	1-Chlorohexane	9.92	91	72316	9.44443	ppb	97
60)	1,1,1,2-Tetrachloroethane	10.00	131	66546	9.62059	ppb	98
61)	m&p-Xylene	10.16	106	227266	21.63757	ppb	97
62)	o-Xylene	10.55	106	108983	9.64150	ppb	94
63)	Styrene	10.56	104	185562	9.22625	ppb	98
65)	1,3-Dichloropropane	9.08	76	93345	9.48983	ppb	95
66)	Dibromochloromethane	9.31	129	66510	9.22381	ppb	97
67)	Chlorobenzene	9.92	112	184082	9.62717	ppb	98
68)	Ethylbenzene	10.04	91	297472	10.51689	ppb	99
69)	Bromoform	10.73	173	46153	9.56916	ppb	97
71)	Isopropylbenzene	10.92	105	264894	10.44553	ppb	96
72)	1,1,2,2-Tetrachloroethane	11.20	83	74439	9.12744	ppb	93
73)	1,2,3-Trichloropropane	11.24	110	20576	9.34778	ppb	99
74)	t-1,4-Dichloro-2-Butene	11.26	53	12003	8.00877	ppb	90
75)	Bromobenzene	11.21	156	84116	9.93735	ppb	94
76)	n-Propylbenzene	11.33	91	342544	10.50702	ppb	100
77)	4-Ethyltoluene	11.45	105	295449	10.71100	ppb	100
78)	2-Chlorotoluene	11.41	91	246507	10.08101	ppb	98
79)	1,3,5-Trimethylbenzene	11.51	105	247785	9.84921	ppb	98
80)	4-Chlorotoluene	11.51	91	249800	10.30008	ppb	98
81)	Tert-Butylbenzene	11.83	119	200477	10.57693	ppb	99
82)	1,2,4-Trimethylbenzene	11.88	105	242166	9.67972	ppb	97
83)	Sec-Butylbenzene	12.05	105	296341	11.05837	ppb	99
84)	p-Isopropyltoluene	12.20	119	243165	9.76314	ppb	99
85)	Benzyl Chloride	12.37	91	104655	9.33898	ppb	99
86)	1,3-DCB	12.15	146	162004	9.70335	ppb	99
87)	1,4-DCB	12.23	146	165029	9.38303	ppb	98
88)	n-Butylbenzene	12.61	91	220865	10.36398	ppb	97
89)	1,2-DCB	12.60	146	150775	9.31000	ppb	98
90)	Hexachloroethane	12.87	117	45744	8.67593	ppb	98
91)	1,2-Dibromo-3-chloropropan	13.37	157	14131	8.96248	ppb	97
92)	1,2,4-Trichlorobenzene	14.21	180	61608	9.63731	ppb	93
93)	Hexachlorobutadiene	14.40	223	26057	8.77751	ppb	92
94)	Naphthalene	14.45	128	175475	9.09174	ppb	98
95)	1,2,3-Trichlorobenzene	14.69	180	90321	9.54903	ppb	95

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

Data File : M:\THOR\DATA\T120430\0501T04W.D Vial: 4
Acq On : 1 May 12 10:19 Operator: DG,RS,HW,ARS,SV
Sample : 120501A LCS-1WT Inst : Thor
Misc : 10ml w/5ul of IS&S: 03-26-12 Multiplr: 1.00

Quant Time: May 21 10:09 2012 Quant Results File: TALLW.RES

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Mon May 21 10:05:30 2012
Response via : Initial Calibration



370

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 MS - 166814**
Batch ID: #86RHB-120430AC
Sample ID: AY60081
Client ID: ES077

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	8.86	8.69	88.6	86.9	80-130	1.9	30
1,1,1-TRICHLOROETHANE	10.00	ND	9.87	9.35	98.7	93.5	65-130	5.4	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	0.00	0	0.0 #	0.0 #	65-130	0.00	30
1,1,2-TRICHLOROETHANE	10.00	ND	9.02	8.05	90.2	80.5	75-125	11.4	30
1,1-DICHLOROETHANE	10.00	ND	9.74	9.22	97.4	92.2	70-135	5.5	30
1,1-DICHLOROETHENE	10.00	ND	10.0	9.78	100	97.8	70-130	2.2	30
1,2,3-TRICHLOROPROPANE	10.00	ND	8.45	8.10	84.5	81.0	75-125	4.2	30
1,2,4-TRICHLOROBENZENE	10.00	ND	9.44	8.91	94.4	89.1	65-135	5.8	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	7.52	7.35	75.2	73.5	50-130	2.3	30
1,2-DIBROMOETHANE	10.00	ND	8.94	8.53	89.4	85.3	70-130	4.7	30
1,2-DICHLOROBENZENE	10.00	ND	9.21	9.20	92.1	92.0	70-120	0.11	30
1,2-DICHLOROETHANE	10.00	ND	9.41	8.97	94.1	89.7	70-130	4.8	30
1,2-DICHLOROPROPANE	10.00	ND	9.57	9.12	95.7	91.2	75-125	4.8	30
1,3-DICHLOROBENZENE	10.00	ND	9.05	9.05	90.5	90.5	75-125	0.0	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	18.1	17.3	90.5	86.5	70-130	4.5	30
1,4-DICHLOROBENZENE	10.00	ND	8.99	8.72	89.9	87.2	75-125	3.0	30
2-BUTANONE	10.00	ND	9.28	8.29	92.8	82.9	30-150	11.3	30
4-METHYL-2-PENTANONE	10.00	ND	8.41	8.16	84.1	81.6	60-135	3.0	30
ACETONE	10.00	2.8	12.7	12.9	99.0	101	40-140	1.6	30
BENZENE	10.00	0.71	10.3	9.93	95.9	92.2	80-120	3.7	30
BROMODICHLOROMETHANE	10.00	ND	9.44	9.11	94.4	91.1	75-120	3.6	30
BROMOFORM	10.00	ND	8.41	8.05	84.1	80.5	70-130	4.4	30
BROMOMETHANE	10.00	ND	9.29	9.38	92.9	93.8	30-145	0.96	30
CARBON TETRACHLORIDE	10.00	ND	9.74	9.18	97.4	91.8	65-140	5.9	30
CHLOROBENZENE	10.00	ND	9.16	9.04	91.6	90.4	80-120	1.3	30
CHLORODIBROMOMETHANE	10.00	ND	8.36	8.24	83.6	82.4	60-135	1.4	30
CHLOROETHANE	10.00	ND	10.4	9.27	104	92.7	60-135	11.5	30
CHLOROFORM	10.00	ND	9.77	9.13	97.7	91.3	65-135	6.8	30
CHLOROMETHANE	10.00	ND	15.6	15.4	156 #	154 #	40-125	1.3	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.74	9.25	97.4	92.5	70-125	5.2	30

= Recovery is outside QC limits.

Primary	SPK	DUP
Quant Method :	CALLW3.M	CALLW3.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	04/30/12	04/30/12
Instrument :	Chico	Chico
Run :	0430C22	0430C23
Initials :	ARS	

Comments: _____

Printed: 05/11/12 1:21:37 PM
APPL MSD SCII

Matrix Spike Recoveries

EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 MS - 166814**
Batch ID: #86RHB-120430AC
Sample ID: AY60081
Client ID: ES077

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
ETHYLBENZENE	10.00	ND	9.22	9.07	92.2	90.7	75-125	1.6	30
GASOLINE	300	ND	395	370	132 #	123	75-125	6.5	30
HEXACHLOROBUTADIENE	10.00	ND	8.83	8.50	88.3	85.0	50-140	3.8	30
METHYL TERT-BUTYL ETHER	10.00	ND	9.18	9.07	91.8	90.7	65-125	1.2	30
METHYLENE CHLORIDE	10.00	ND	10.5	10.2	105	102	55-140	2.9	30
STYRENE	10.00	ND	9.32	9.30	93.2	93.0	65-135	0.21	30
TETRACHLOROETHENE	10.00	ND	9.20	9.05	92.0	90.5	45-150	1.6	30
TOLUENE	10.00	ND	10.1	9.75	101	97.5	75-120	3.5	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	8.53	8.58	85.3	85.8	60-140	0.58	30
TRICHLOROETHENE	10.00	ND	18.0	17.4	180 #	174 #	70-125	3.4	30
VINYL CHLORIDE	10.00	ND	12.5	11.3	125	113	50-145	10.1	30
XYLENES (TOTAL)	30.0	ND	27.8	27.7	92.7	92.3	80-120	0.36	30
SURROGATE: 1,2-DICHLOROETHANE-D	21.0	NA	21.8	20.6	104	97.9	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	27.0	NA	23.5	23.6	87.0	87.4	75-120		
SURROGATE: DIBROMOFLUOROMETH	20.9	NA	21.2	20.7	102	99.2	85-115		
SURROGATE: TOLUENE-D8 (S)	25.4	NA	22.7	22.8	89.5	89.9	85-120		

= Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	CALLW3.M	CALLW3.M
Extraction Date :	04/30/12	04/30/12
Analysis Date :	04/30/12	04/30/12
Instrument :	Chico	Chico
Run :	0430C22	0430C23
Initials :	ARS	

Printed: 05/11/12 1:21:38 PM
APPL MSD SCII

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C18W.D Vial: 1
Acq On : 30 Apr 12 20:29 Operator: AS
Sample : AY60081W234 GAS MS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 11:22 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1119443	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.02	TIC	1360009	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1358054	25.00000	ppb	0.04
System Monitoring Compounds						
Target Compounds						Qvalue
2) Gasoline	15.63	TIC	57133991m	395.16028	ppb	100

(#) = qualifier out of range (m) = manual integration
0430C18W.D CGAS.M Tue May 01 11:29:45 2012 Page 1

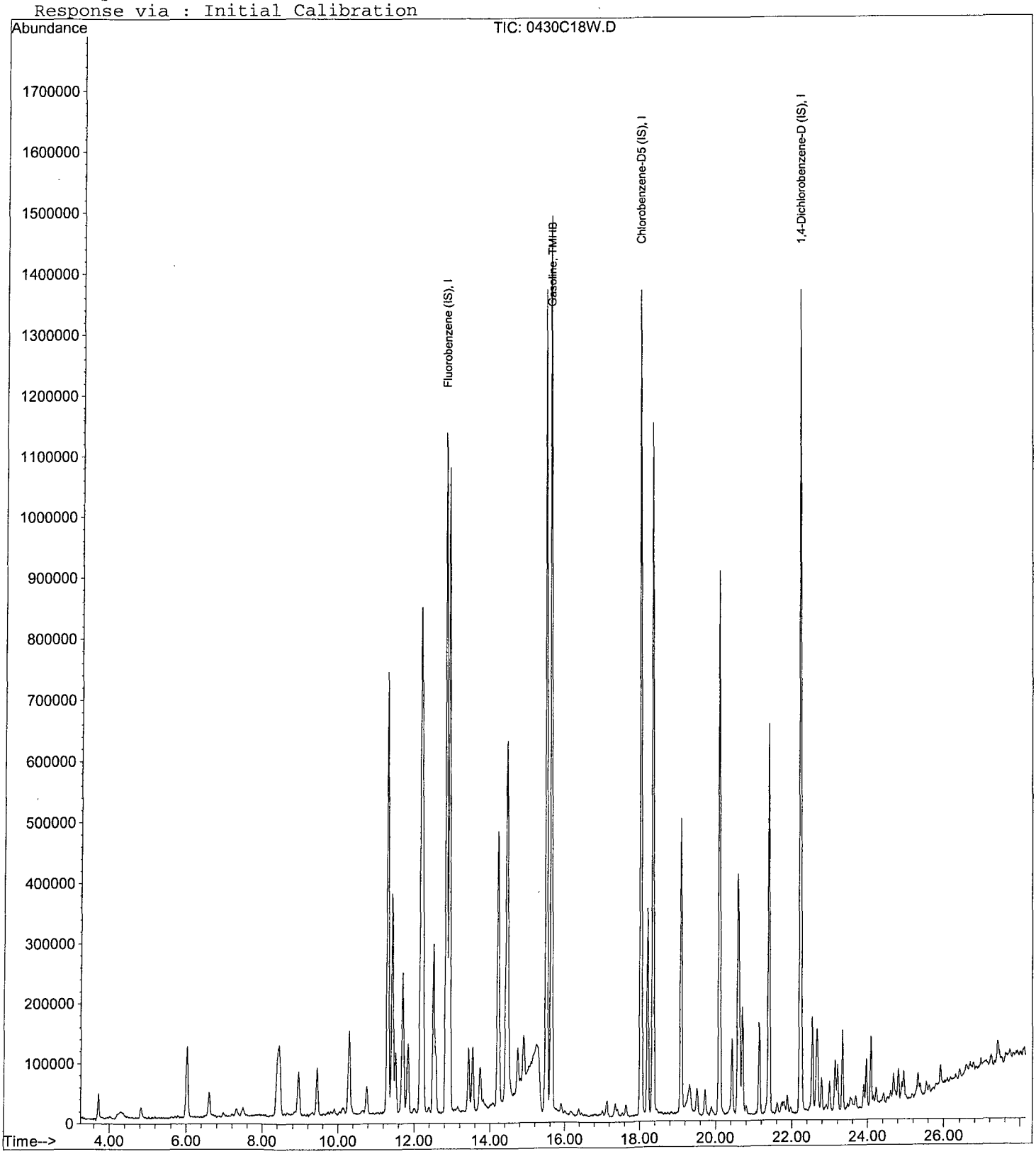
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C18W.D
Acq On : 30 Apr 12 20:29
Sample : AY60081W234 GAS MS-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 11:22 2012 Quant Results File: CGAS.RES

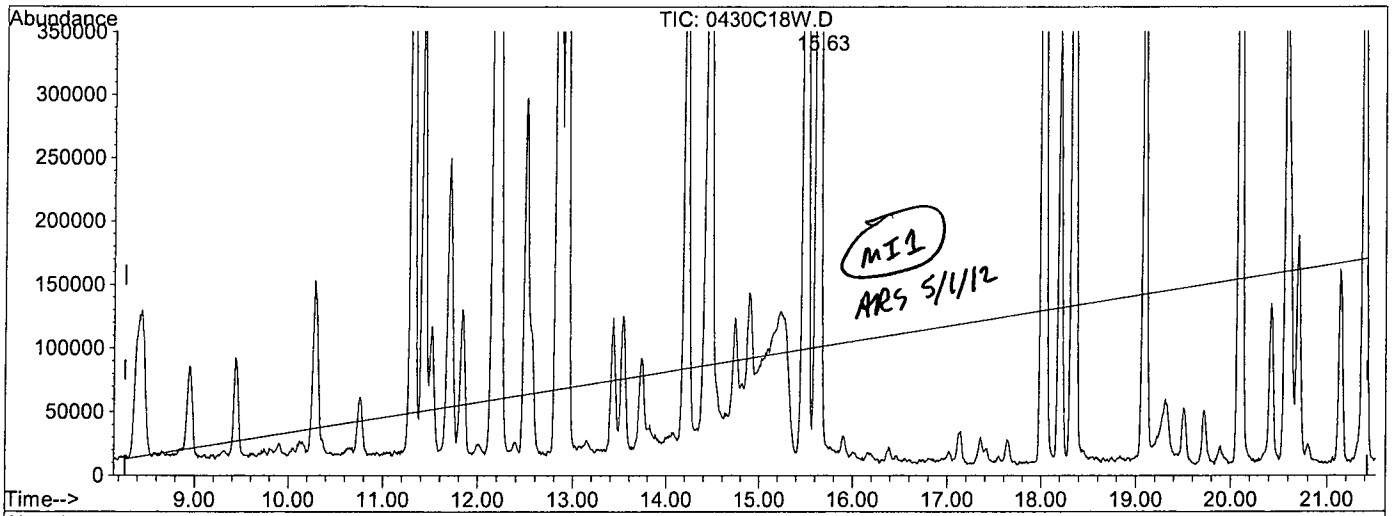
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

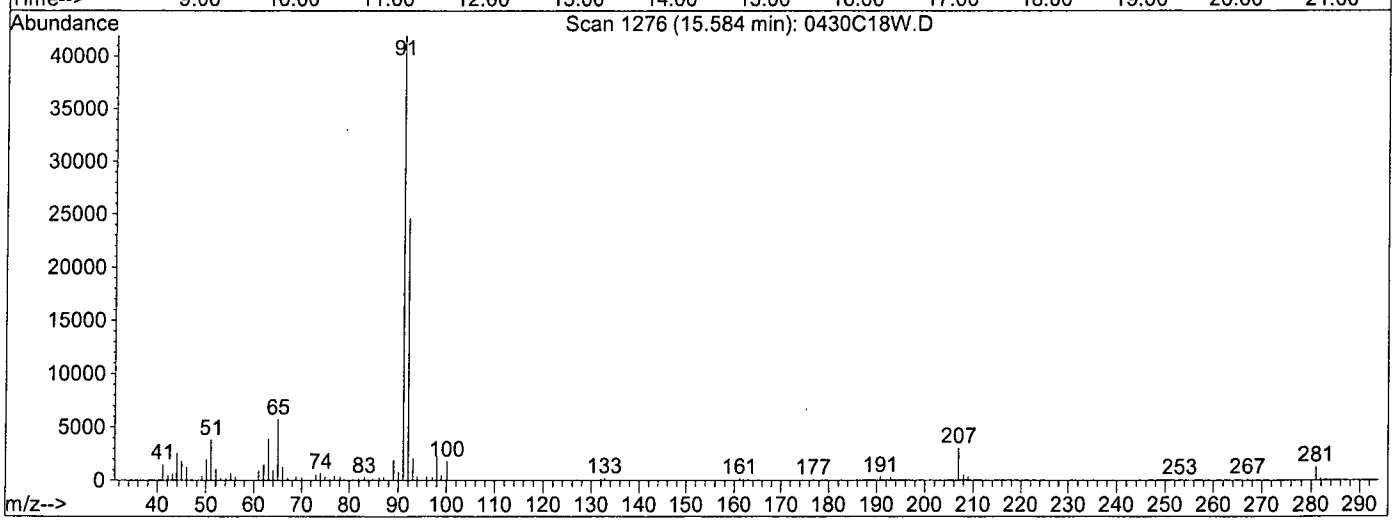


Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C18W.D Vial: 1
Acq On : 30 Apr 12 20:29 Operator: AS
Sample : AY60081W234 GAS MS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: May 1 10:11 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C18W.D

(2) Gasoline (TMHB)

15.58min 343.9403ppb m

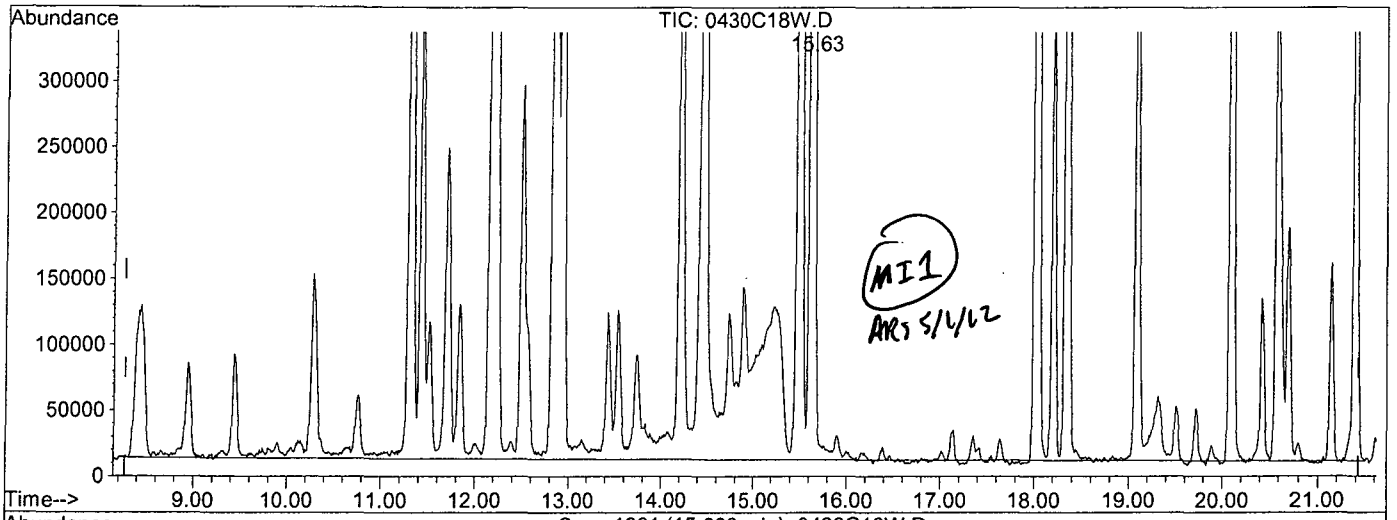
response 52150984

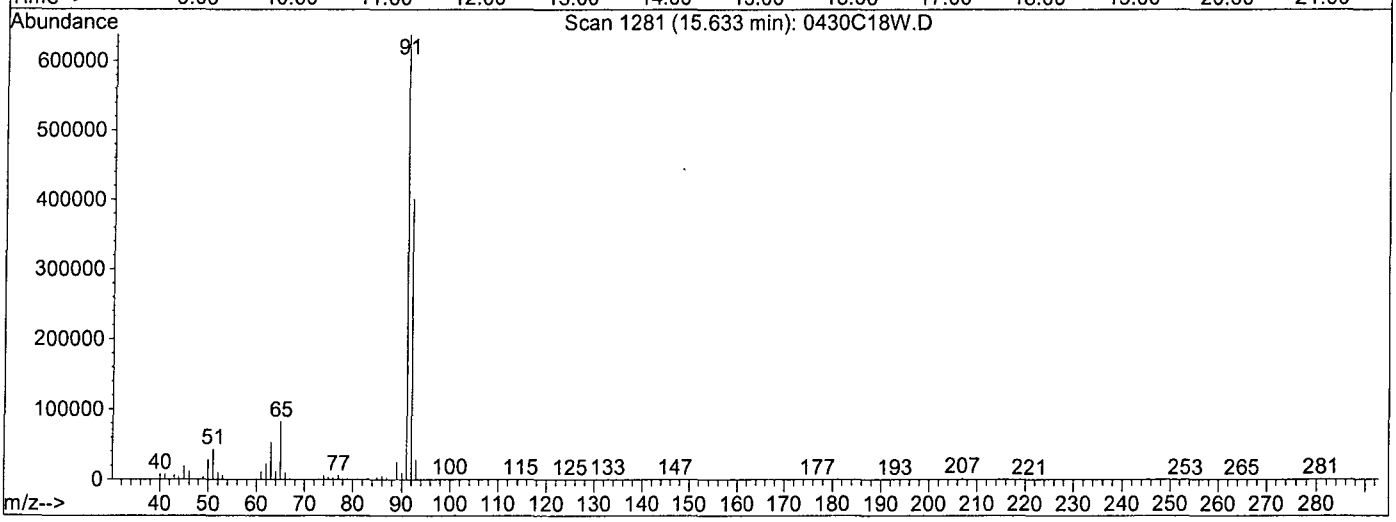
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.27#
0.00	0.00	0.70#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C18W.D Vial: 1
Acq On : 30 Apr 12 20:29 Operator: AS
Sample : AY60081W234 GAS MS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: May 1 11:22 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C18W.D

(2) Gasoline (TMHB)

15.63min 395.1603ppb m

response 57133991

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.25#
0.00	0.00	0.64#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C22W.D Vial: 1
Acq On : 30 Apr 12 22:57 Operator: AS
Sample : AY60081W456 MS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.83	96	588571	25.00000 ppb		0.02
54) Chlorobenzene-D5 (IS)	18.02	117	504384	25.00000 ppb		0.02
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	235584	25.00000 ppb		0.02
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.42	111	388177	21.19474 ppb		0.02
Spiked Amount 20.866			Recovery = 101.578%			
37) 1,2-DCA-D4(S)	12.22	65	322052	21.78531 ppb		0.02
Spiked Amount 21.039			Recovery = 103.546%			
55) Toluene-D8(S)	15.49	98	1478507	22.65822 ppb		0.02
Spiked Amount 25.355			Recovery = 89.363%			
63) 4-Bromofluorobenzene(S)	20.09	95	604633	23.53743 ppb		0.02
Spiked Amount 27.007			Recovery = 87.151%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.11	85	225564	12.35595 ppb		91
3) Freon 114	4.37	85	152844	12.05895 ppb		84
4) Chloromethane	4.60	52	113955	15.57482 ppb		99
5) Vinyl chloride	4.86	62	67576	12.54552 ppb		96
6) Bromomethane	5.76	94	37728	9.28825 ppb		99
7) Chloroethane	5.95	64	50690	10.40561 ppb		100
8) Dichlorofluoromethane	6.04	67	414635	10.24762 ppb		96
9) Trichlorofluoromethane	6.55	103	41304	10.07919 ppb		97
10) Acetonitrile	7.67	41	162351	139.43194 ug/l		100
11) Acrolein	7.17	56	16506	36.74084 ppb		96
12) Acetone	7.30	43	31543	12.71906 ppb		99
13) Freon-113	7.47	101	159604	9.85575 ppb		97
14) 1,1-DCE	7.70	96	180556	10.04330 ppb		93
15) t-Butanol	7.77	59	71001	130.61465 ppb	#	92
16) Methyl Acetate	8.20	43	1031	-0.51086 ppb	#	55
17) Iodomethane	8.18	142	225101	8.62794 ppb		99
18) Acrylonitrile	8.58	53	33574	9.70136 ppb		86
19) Methylene chloride	8.49	84	196244	10.48088 ppb		98
20) Carbon disulfide	8.59	76	139008	8.20775 ppb		97
21) Methyl t-butyl ether (MtBE	8.91	73	315896	9.17584 ppb		98
22) Trans-1,2-DCE	9.11	96	185251	8.52955 ppb		98
23) Diisopropyl Ether	9.76	45	681850	9.78493 ppb	#	73
24) 1,1-DCA	9.80	63	373903	9.74445 ppb		99
25) Vinyl Acetate	9.76	43	73392	6.11858 ppb	#	88
26) Ethyl tert Butyl Ether	10.45	59	499497	9.67557 ppb		96
27) MEK (2-Butanone)	10.44	43	20352	9.28360 ppb		96
28) Cis-1,2-DCE	10.82	96	209880	9.74264 ppb		91
29) 2,2-Dichloropropane	10.81	77	225720	8.83602 ppb		99
30) Chloroform	11.10	85	202587	9.76845 ppb		86
31) Bromochloromethane	11.32	128	83670	9.47962 ppb		98
33) 1,1,1-TCA	11.84	97	251976	9.86511 ppb		96
34) Cyclohexane	12.00	56	329311	9.30056 ppb		99
35) 1,1-Dichloropropene	12.11	75	241222	9.48300 ppb		99
36) 2,2,4-Trimethylpentane	12.17	57	553367	9.27864 ppb		98
38) Carbon Tetrachloride	12.30	117	222634	9.73550 ppb		97
39) Tert Amyl Methyl Ether	12.35	73	377138	9.40185 ppb		98
40) 1,2-DCA	12.38	62	160851	9.40872 ppb		98
41) Benzene	12.50	78	807925	10.28202 ppb		98
42) TCE	13.53	95	337949	18.04604 ppb		96

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C22W.D Vial: 1
Acq On : 30 Apr 12 22:57 Operator: AS
Sample : AY60081W456 MS-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue	
43)	2-Pentanone	13.19	43	827477	127.43968	ppb		99	
44)	1,2-Dichloropropane	13.75	63	211417	9.57276	ppb		100	
45)	Bromodichloromethane	14.11	83	188276	9.44134	ppb		92	
46)	Methyl Cyclohexane	13.81	83	261464	9.70959	ppb		100	
47)	Dibromomethane	14.17	93	82500	9.50638	ppb		98	
48)	2-Chloroethyl vinyl ether	14.56	63	72604	10.57831	ppb		94	
49)	1-Bromo-2-chloroethane	14.87	63	191868	9.48243	ppb		96	
50)	Cis-1,3-Dichloropropene	15.00	75	257473	8.89143	ppb		100	1,3-dichloropropene total 18.11686 ppb
51)	Toluene	15.63	91	735542	10.12516	ppb		99	
52)	Trans-1,3-Dichloropropene	15.79	75	186301	9.22543	ppb		98	
53)	1,1,2-TCA	16.06	83	85222	9.02001	ppb		92	
56)	1,2-EDB	17.31	107	113137	8.93986	ppb	#	100	
57)	Tetrachloroethene	16.78	164	143275	9.20229	ppb		91	
58)	1-Chlorohexane	17.69	91	266759	9.20557	ppb		94	
59)	1,1,1,2-Tetrachloroethane	18.14	131	167958	8.85854	ppb		96	
60)	m&p-Xylene	18.34	106	659386	18.53365	ppb		100	
61)	o-Xylene	19.09	106	333766	9.29587	ppb		98	
62)	Styrene	19.10	104	526396	9.31840	ppb		99	
64)	2-Hexanone	16.10	43	55663	8.74075	ppb		90	
65)	1,3-Dichloropropane	16.48	76	208551	9.08409	ppb		95	
66)	Dibromochloromethane	16.96	129	132141	8.35656	ppb		97	
67)	Chlorobenzene	18.09	112	512505	9.15545	ppb		97	
68)	Ethylbenzene	18.20	91	809196	9.22422	ppb		98	
69)	Bromoform	19.62	173	59009	8.40931	ppb		89	
71)	MIBK (methyl isobutyl keto	14.66	43	94190	8.40703	ppb		93	
72)	Isopropylbenzene	19.71	105	803383	9.29305	ppb		97	
74)	1,2,3-Trichloropropane	20.14	110	10436	8.44963	ppb		96	
75)	t-1,4-Dichloro-2-Butene	20.20	53	24569	8.73444	ppb		85	
76)	Bromobenzene	20.46	156	183332	9.28971	ppb		94	
77)	n-Propylbenzene	20.43	91	928274	9.02242	ppb		100	
78)	4-Ethyltoluene	20.62	105	840072	9.19711	ppb		99	
79)	2-Chlorotoluene	20.72	91	599424	8.96253	ppb		97	
80)	1,3,5-Trimethylbenzene	20.70	105	628708	9.14517	ppb		99	
81)	4-Chlorotoluene	20.79	91	528775	9.09759	ppb		100	
82)	Tert-Butylbenzene	21.34	119	705139	9.18121	ppb		99	
83)	1,2,4-Trimethylbenzene	21.39	105	656262	9.19246	ppb		97	
84)	Sec-Butylbenzene	21.73	105	869736	9.11697	ppb		100	
85)	p-Isopropyltoluene	21.96	119	719690	8.99232	ppb		98	
86)	Benzyl Chloride	22.41	91	174087	9.14364	ppb		96	
87)	1,3-DCB	22.11	146	378905	9.05166	ppb		99	
88)	1,4-DCB	22.27	146	366381	8.98972	ppb		97	
89)	Hexachloroethane	23.58	117	177170	10.14130	ppb		96	
90)	n-Butylbenzene	22.68	91	597072	8.86887	ppb		97	
91)	1,2-DCB	22.90	146	338105	9.20821	ppb		96	
92)	1,2-Dibromo-3-chloropropan	24.11	155	12784	7.52031	ppb		87	
93)	1,2,4-Trichlorobenzene	25.56	180	86584	9.44119	ppb		97	
94)	Hexachlorobutadiene	25.81	223	84731	8.83089	ppb		97	
95)	Naphthalene	25.91	128	370225	8.03824	ppb		99	
96)	1,2,3-Trichlorobenzene	26.28	180	68667	8.49302	ppb		98	

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

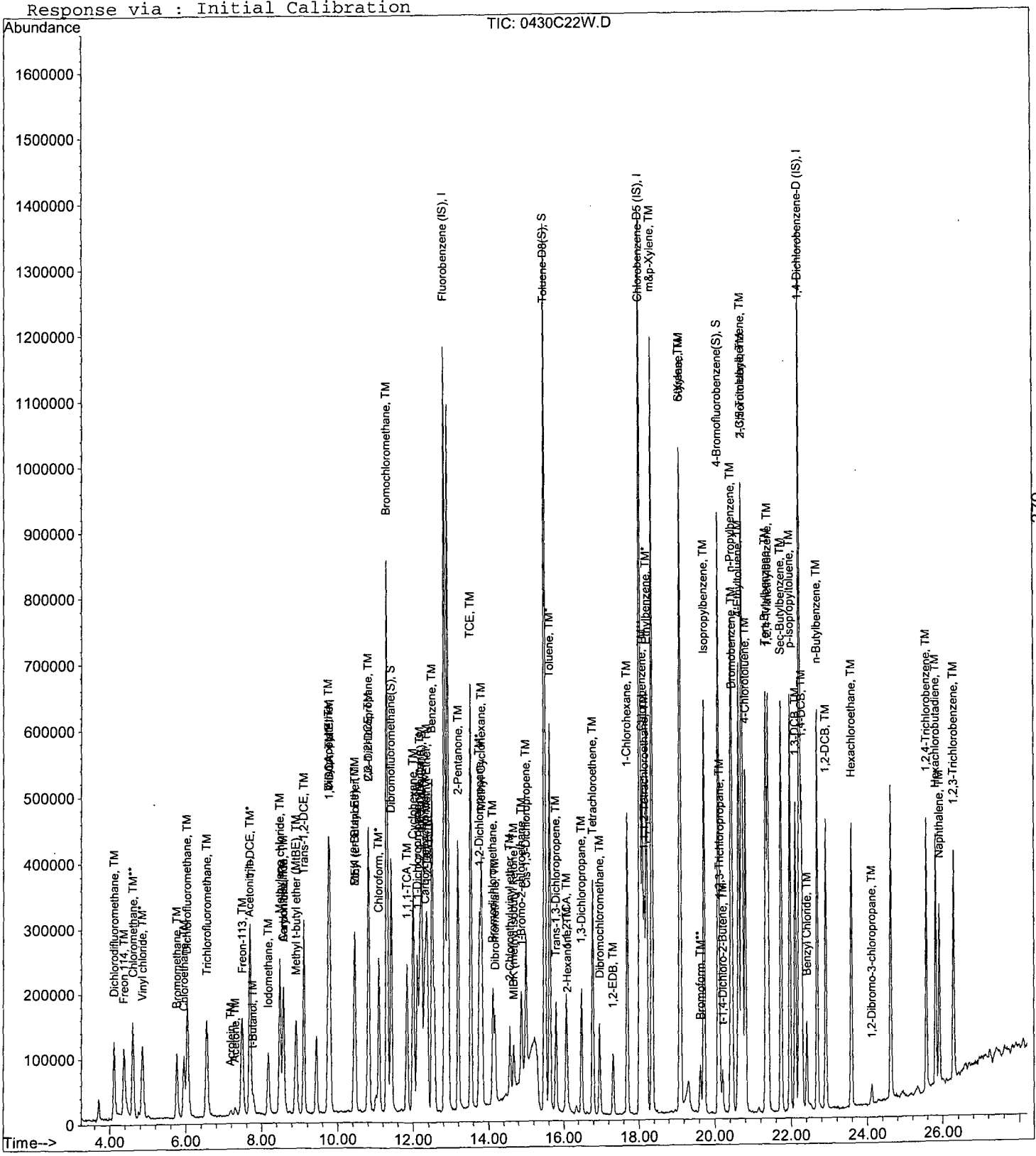
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C22W.D
Acq On : 30 Apr 12 22:57
Sample : AY60081W456 MS-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



379

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C19W.D Vial: 1
Acq On : 30 Apr 12 21:06 Operator: AS
Sample : AY60081W234 GAS MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 1 11:26 2012 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1187664	25.00000	ppb	0.05
3) Chlorobenzene-D5 (IS)	18.02	TIC	1402303	25.00000	ppb	0.04
4) 1,4-Dichlorobenzene-D (IS)	22.22	TIC	1401302	25.00000	ppb	0.04

System Monitoring Compounds

Target Compounds						Qvalue
2) Gasoline	15.63	TIC	57988065m	369.70105	ppb	100

(#) = qualifier out of range (m) = manual integration
0430C19W.D CGAS.M Tue May 01 11:29:49 2012 Page 1

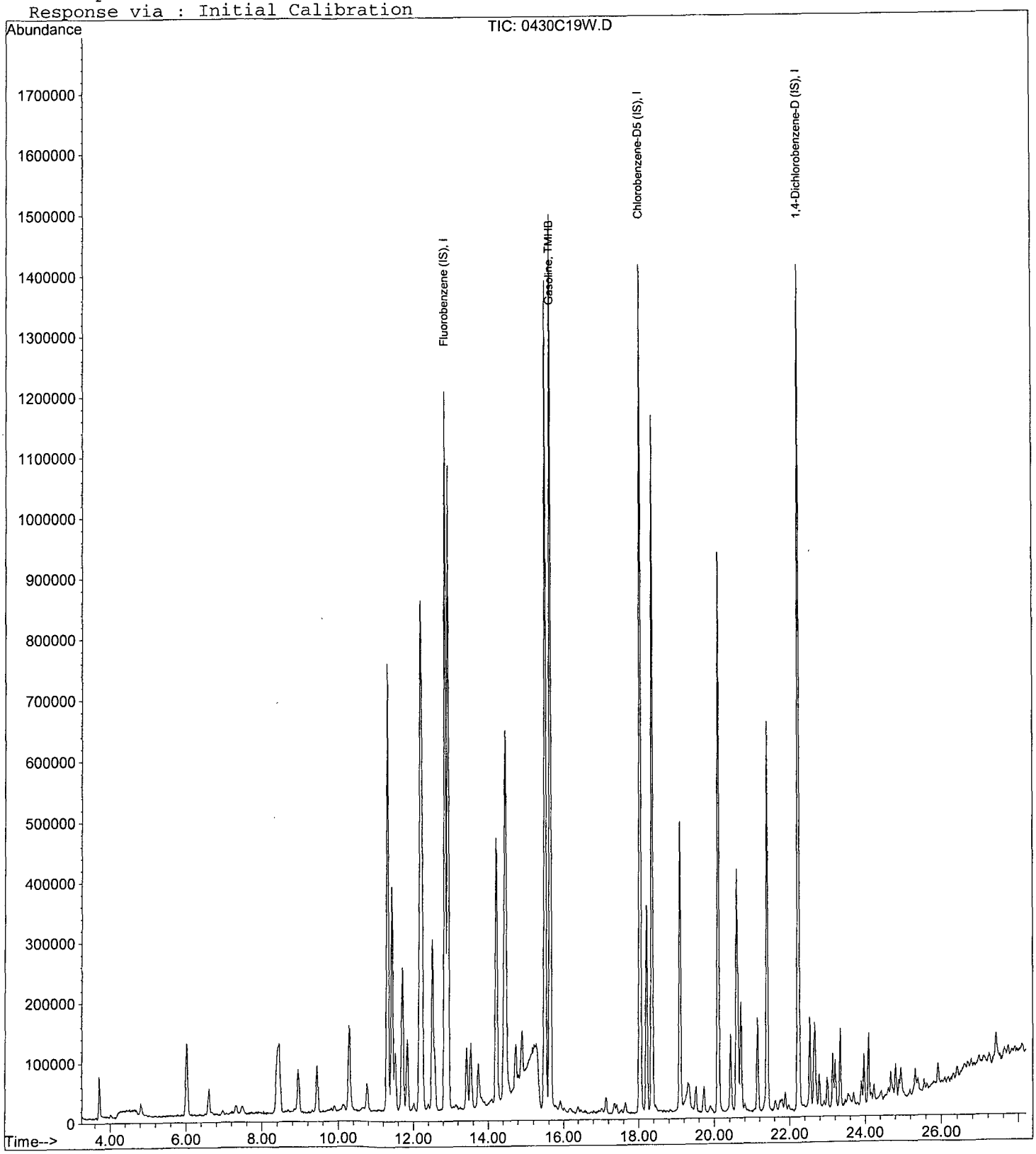
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C19W.D
Acq On : 30 Apr 12 21:06
Sample : AY60081W234 GAS MSD-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 11:26 2012 Quant Results File: CGAS.RES

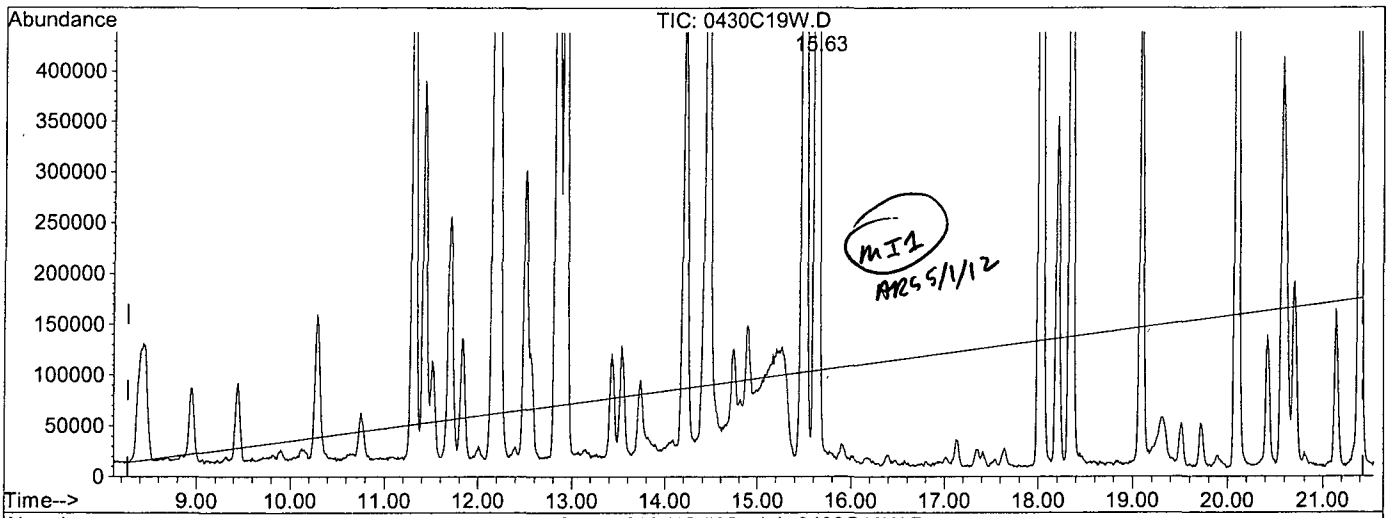
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration

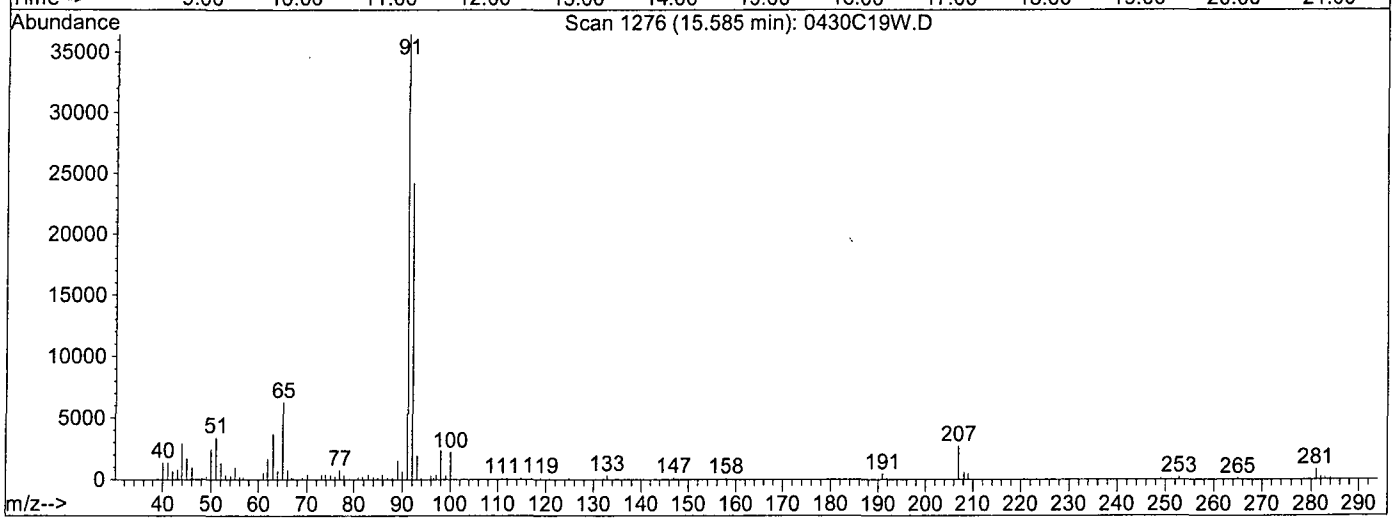


Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C19W.D Vial: 1
Acq On : 30 Apr 12 21:06 Operator: AS
Sample : AY60081W234 GAS MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: May 1 10:11 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration





TIC: 0430C19W.D

(2) Gasoline (TMHB)

15.58min 309.9778ppb m

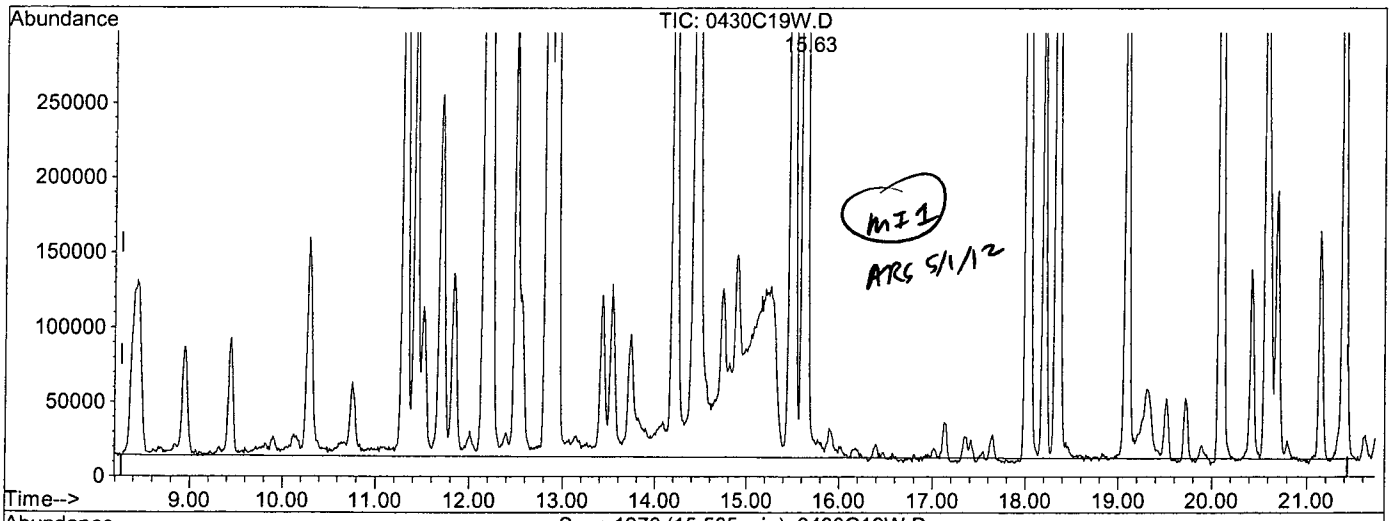
response 51823709

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.28#
0.00	0.00	0.73#
0.00	0.00	0.00

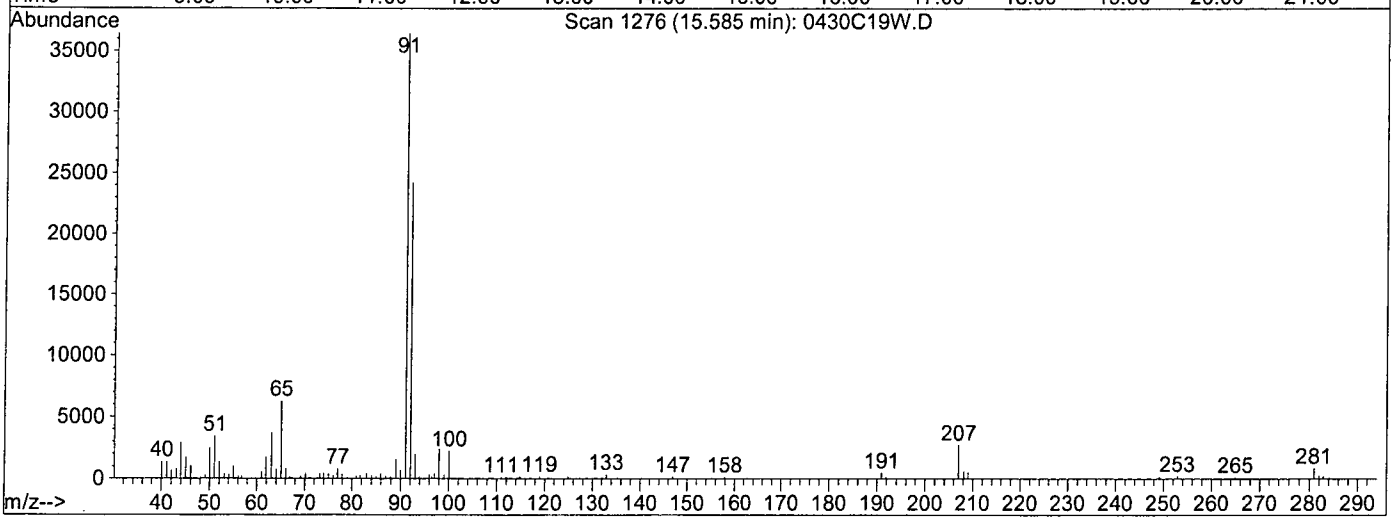
Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C19W.D Vial: 1
Acq On : 30 Apr 12 21:06 Operator: AS
Sample : AY60081W234 GAS MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00
Quant Time: May 1 11:26 2012 Quant Results File: temp.res

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Single Level Calibration



MI 1
ARS 5/1/12



TIC: 0430C19W.D

(2) Gasoline (TMHB)

15.63min 369.7011ppb m

response 57988065

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.25#
0.00	0.00	0.65#
0.00	0.00	0.00

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C23W.D Vial: 1
Acq On : 30 Apr 12 23:34 Operator: AS
Sample : AY60081W456 MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene (IS)	12.84	96	622116	25.00000 ppb		0.02
54) Chlorobenzene-D5 (IS)	18.02	117	520064	25.00000 ppb		0.02
70) 1,4-Dichlorobenzene-D (IS)	22.22	152	244160	25.00000 ppb		0.02
System Monitoring Compounds						
32) Dibromofluoromethane(S)	11.42	111	400907	20.70949 ppb		0.02
Spiked Amount 20.866			Recovery = 99.249%			
37) 1,2-DCA-D4(S)	12.23	65	322194	20.61972 ppb		0.02
Spiked Amount 21.039			Recovery = 98.008%			
55) Toluene-D8(S)	15.50	98	1535423	22.82102 ppb		0.02
Spiked Amount 25.355			Recovery = 90.006%			
63) 4-Bromofluorobenzene(S)	20.09	95	624898	23.59288 ppb		0.02
Spiked Amount 27.007			Recovery = 87.359%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.11	85	227086	11.76858 ppb		93
3) Freon 114	4.38	85	155974	11.64235 ppb		96
4) Chloromethane	4.62	52	118862	15.36490 ppb		96
5) Vinyl chloride	4.86	62	64112	11.26064 ppb		99
6) Bromomethane	5.75	94	40280	9.38182 ppb		99
7) Chloroethane	5.95	64	47737	9.27103 ppb		99
8) Dichlorofluoromethane	6.04	67	417554	9.76332 ppb		100
9) Trichlorofluoromethane	6.55	103	44032	10.16551 ppb		95
10) Acetonitrile	7.67	41	166220	135.05731 ug/l		100
11) Acrolein	7.19	56	15698	33.05819 ppb		86
12) Acetone	7.29	43	33745	12.87780 ppb		96
13) Freon-113	7.49	101	161639	9.44321 ppb		97
14) 1,1-DCE	7.70	96	185762	9.77572 ppb		88
15) t-Butanol	7.78	59	78029	135.80350 ppb		98
16) Methyl Acetate	8.22	43	1167	-0.50267 ppb	#	64
17) Iodomethane	8.18	142	245582	8.87195 ppb		99
18) Acrylonitrile	8.59	53	32952	9.00822 ppb		75
19) Methylene chloride	8.49	84	202997	10.24877 ppb		96
20) Carbon disulfide	8.58	76	136064	7.60073 ppb		99
21) Methyl t-butyl ether (MtBE	8.91	73	329981	9.06814 ppb		95
22) Trans-1,2-DCE	9.11	96	197064	8.58421 ppb		96
23) Diisopropyl Ether	9.76	45	698458	9.48281 ppb	#	72
24) 1,1-DCA	9.80	63	373936	9.21983 ppb		99
25) Vinyl Acetate	9.75	43	71808	5.66372 ppb	#	89
26) Ethyl tert Butyl Ether	10.45	59	514437	9.42764 ppb		99
27) MEK (2-Butanone)	10.44	43	19210	8.29018 ppb	#	86
28) Cis-1,2-DCE	10.81	96	210987	9.25008 ppb		94
29) 2,2-Dichloropropane	10.80	77	228826	8.47461 ppb		96
30) Chloroform	11.09	85	200098	9.12818 ppb		100
31) Bromochloromethane	11.33	128	87729	9.40355 ppb		95
33) 1,1,1-TCA	11.84	97	252476	9.35170 ppb		97
34) Cyclohexane	11.99	56	342158	9.14234 ppb		95
35) 1,1-Dichloropropene	12.11	75	245336	9.12468 ppb		97
36) 2,2,4-Trimethylpentane	12.18	57	554811	8.80123 ppb		97
38) Carbon Tetrachloride	12.30	117	221927	9.18131 ppb		97
39) Tert Amyl Methyl Ether	12.34	73	398291	9.39380 ppb		97
40) 1,2-DCA	12.38	62	162021	8.96615 ppb		98
41) Benzene	12.50	78	824566	9.92796 ppb		99
42) TCE	13.53	95	344116	17.38454 ppb		97

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

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C23W.D Vial: 1
Acq On : 30 Apr 12 23:34 Operator: AS
Sample : AY60081W456 MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Quant Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration
DataAcq Meth : V8260

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
43)	2-Pentanone	13.19	43	856049	124.73113 ppb	100
44)	1,2-Dichloropropane	13.76	63	212985	9.12376 ppb	100
45)	Bromodichloromethane	14.11	83	191944	9.10627 ppb	95
46)	Methyl Cyclohexane	13.81	83	269564	9.47062 ppb	97
47)	Dibromomethane	14.16	93	84227	9.18206 ppb	98
48)	2-Chloroethyl vinyl ether	14.57	63	77411	10.67053 ppb	96
49)	1-Bromo-2-chloroethane	14.88	63	193932	9.06764 ppb	97
50)	Cis-1,3-Dichloropropene	14.99	75	261156	8.53232 ppb	98
51)	Toluene	15.62	91	748538	9.74846 ppb	98
52)	Trans-1,3-Dichloropropene	15.79	75	186422	8.73365 ppb	99
53)	1,1,2-TCA	16.07	83	80415	8.05230 ppb	96
56)	1,2-EDB	17.31	107	111257	8.52625 ppb	94
57)	Tetrachloroethene	16.78	164	145286	9.05011 ppb	95
58)	1-Chlorohexane	17.69	91	269849	9.03144 ppb	94
59)	1,1,1,2-Tetrachloroethane	18.14	131	169981	8.69494 ppb	98
60)	m&p-Xylene	18.34	106	668730	18.22958 ppb	99
61)	o-Xylene	19.09	106	348792	9.42147 ppb	100
62)	Styrene	19.10	104	541461	9.29609 ppb	100
64)	2-Hexanone	16.10	43	56721	8.63956 ppb	100
65)	1,3-Dichloropropane	16.48	76	207134	8.75034 ppb	98
66)	Dibromochloromethane	16.96	129	134416	8.24414 ppb	96
67)	Chlorobenzene	18.09	112	521947	9.04300 ppb	98
68)	Ethylbenzene	18.20	91	820164	9.06736 ppb	99
69)	Bromoform	19.63	173	57670	8.05341 ppb	97
71)	MIBK (methyl isobutyl keto	14.66	43	94746	8.15962 ppb	99
72)	Isopropylbenzene	19.71	105	812195	9.06499 ppb	96
74)	1,2,3-Trichloropropane	20.14	110	10373	8.10362 ppb	98
75)	t-1,4-Dichloro-2-Butene	20.20	53	26371	9.04577 ppb	83
76)	Bromobenzene	20.46	156	183098	8.95528 ppb	96
77)	n-Propylbenzene	20.42	91	949698	8.90643 ppb	100
78)	4-Ethyltoluene	20.61	105	861922	9.10488 ppb	99
79)	2-Chlorotoluene	20.71	91	621036	8.95952 ppb	92
80)	1,3,5-Trimethylbenzene	20.69	105	620760	8.71240 ppb	97
81)	4-Chlorotoluene	20.80	91	539337	8.95338 ppb	98
82)	Tert-Butylbenzene	21.33	119	718714	9.02927 ppb	100
83)	1,2,4-Trimethylbenzene	21.39	105	654766	8.84936 ppb	99
84)	Sec-Butylbenzene	21.73	105	887186	8.97323 ppb	98
85)	p-Isopropyltoluene	21.97	119	740707	8.92985 ppb	99
86)	Benzyl Chloride	22.40	91	171694	8.70120 ppb	98
87)	1,3-DCB	22.10	146	392671	9.05103 ppb	100
88)	1,4-DCB	22.28	146	368319	8.71984 ppb	98
89)	Hexachloroethane	23.57	117	184325	10.18026 ppb	98
90)	n-Butylbenzene	22.67	91	625918	8.97078 ppb	99
91)	1,2-DCB	22.91	146	349923	9.19533 ppb	99
92)	1,2-Dibromo-3-chloropropan	24.12	155	12951	7.35095 ppb	89
93)	1,2,4-Trichlorobenzene	25.57	180	84680	8.90926 ppb	93
94)	Hexachlorobutadiene	25.82	223	84572	8.50472 ppb	90
95)	Naphthalene	25.91	128	373057	7.81522 ppb	98
96)	1,2,3-Trichlorobenzene	26.27	180	74079	8.84058 ppb	97

1,3-dichloropropene, total 17.26597 ppb

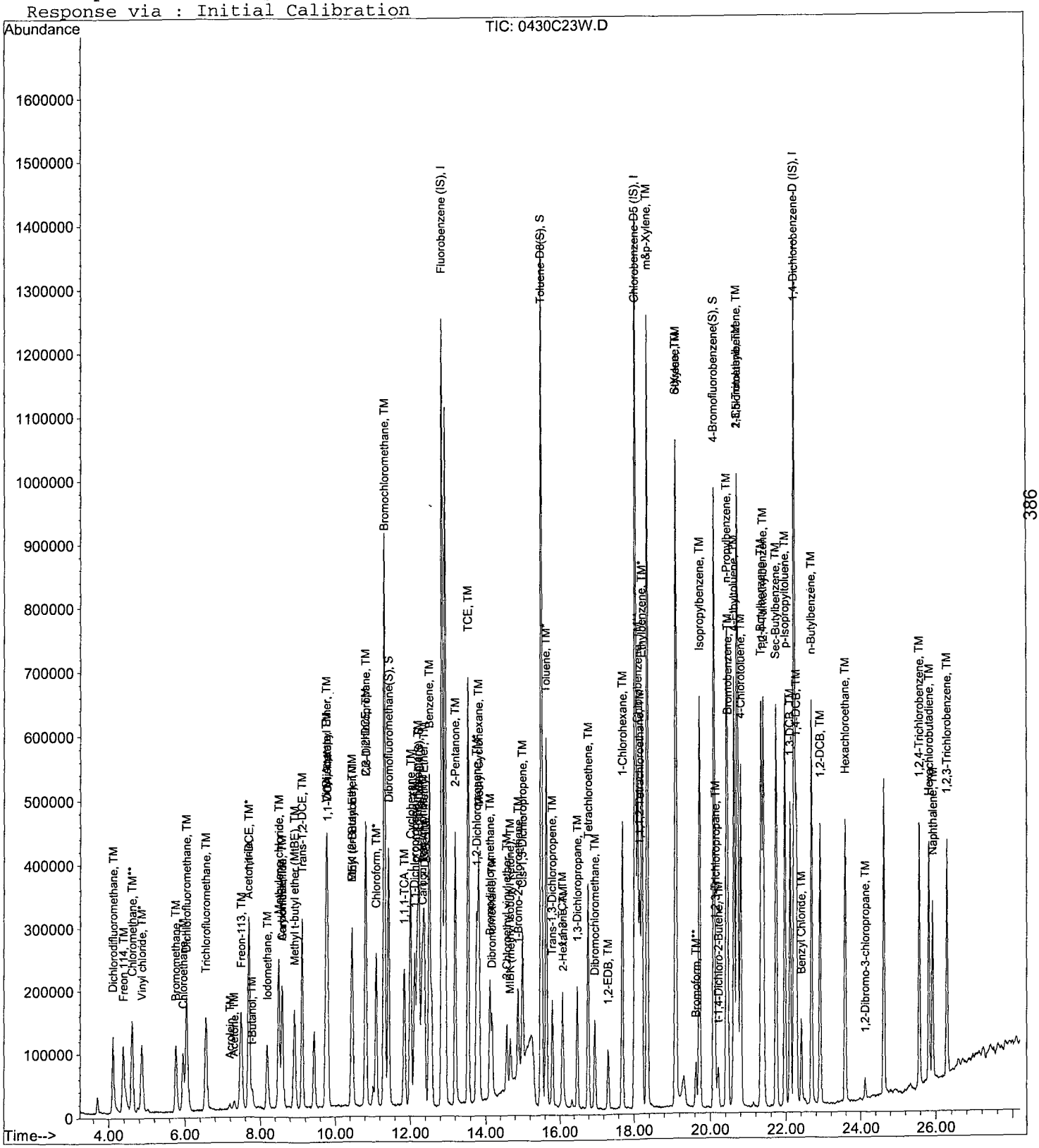
(#) = qualifier out of range (m) = manual integration
0430C23W.D CALLW3.M Tue May 08 11:34:41 2012 Page 2

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C23W.D Vial: 1
Acq On : 30 Apr 12 23:34 Operator: AS
Sample : AY60081W456 MSD-1WC Inst : Chico
Misc : Water 10mL w/IS&S:04-10-12 Multiplr: 1.00

Quant Time: May 8 11:34 2012 Quant Results File: CALLW3.RES

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260
Last Update : Tue May 08 10:20:18 2012
Response via : Initial Calibration



GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

A

01/25/12

R&D only, not human consump. Made in the USA

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS

Lot #	Storage	Expiry
178557	≤ -10 Degrees C	9/13/14

Solv: P/T Methanol

Method 8260 Gases (SS)
Lot #: 178557 - 29518
Rec: 9/20/11 MFR exp. 09/13/14

01/25/12

B

01/25/12

R&D only, not human consump. Made in the USA

2-Chloroethyl Vinyl Ether Solution (Second Source), 2,000 mg/L, 2 X 0.6 ml
020145-02-SS

Lot #	Storage	Expiry
181404	≤ -10 Degrees C	11/10/13

Solv: P/T Methanol

2-Chloroethyl vinyl ether
Lot #: 181404 - 30008
Rec: 11/16/11 MFR exp. 11/10/13

01/25/12

C

01/25/12

R&D only, not human consump. Made in the USA

8260 VOC Liquids Solution (Second Source), 2,000 mg/L, 1 ml
120023-03-SS

Lot #	Storage	Expiry
167814	≤ -10 Degrees C	1/10/13

Solv: P/T Methanol

8260 VOC Liquids (SS)
Lot #: 167814 - 28709
Rec: 4/20/11 MFR exp. 01/10/13

01/25/12

D

01/25/12

R&D only, not human consump. Made in the USA

Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1ml
020232-02-SS

Lot #	Storage	Expiry
183906	≤ -10 Degrees C	4/5/12

Solv: P/T Methanol

Vinyl Acetate (SS)
Lot #: 183906 - 30195
Rec: 1/10/12 MFR exp. 04/05/12

01/25/12

E

01/25/12

R&D only, not human consump. Made in the USA

Custom 8260 Solution, Second Source, 2,000 mg/L, 1 ml
120296-01-SS

Lot #	Storage	Expiry
166038	≤ -10 Degrees C	5/18/12

Solv: P/T Methanol

Custom 8260 Solution, 2000mg/L (SS)
Lot #: 166038 - 27766
Rec: 11/19/10 MFR exp. 05/18/12

01/25/12

J

01/25/12 F

n-Hexane Solution (Second Source), 1,000 mg/L, 1 ml

020628-02-SS

Lot #	Storage	Expiry
179199		9/21/13

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

n-Hexane (SS) 1000mg/L

Lot #: 179199 - 29612

Rec: 10/5/11 MFR exp. 09/21/13

01/25/12 G

Hexachloroethane (Second Source) Solution, 1000 mg/L, 1 ml

020049-02-SS

Lot #	Storage	Expiry
183795	≤ -10 Degrees C	1/3/14

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

Hexachloroethane (SS)

Lot #: 183795 - 30199

Rec: 1/10/12 MFR exp. 01/03/14

01/25/12 H

Acrolein Solution (Second Source), 10,000 mg/L, 2 x 0.6 ml

020329-09-02-SS

Lot #	Storage	Expiry
182703	≤ 6 Degrees C	1/21/12

Solv: Water, HPLC Grade

R&D only, not human consump. Made in the USA

Lot #: 182703 - 30108

Rec: 12/15/11 MFR exp. 01/21/12

01/25/12 I

VOC Mix 4-3 (second source), 2,000 mg/L, 1 ml

120166-01-SS

Lot #	Storage	Expiry
163778	</= 6 Degrees	9/9/12

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

VOC Mix 4-3 (SS)

Lot #: 163778 - 29835

Rec: 10/24/11 MFR exp. 09/09/12

01/25/12 J

Heptane Solution (Second Source), 1000 mg/L, 1 ml

02si 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

ion
pened: _____

Heptane Solution (SS)

Lot #: 142276 - 26578

Rec: 5/11/10 MFR exp. 01/19/12

1/25/12
1/26/12
K-
RS

2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml

n2si
2-Chloroethyl vinyl ether

Cat. No: 020145-02-02
Lot No: 160092
Lot #: 160092 - 26641
Rec: 6/4/10 MFR exp. 05/27/12

Exp: 5/27/2012
Storage: </= -10 Degrees C
Solvent: P/T Methanol
on For Research Use Only
ened: _____

RS 1/25

1/25/12
1/26/12
RS

1/25/12
1/26/12
L-
RS

n-Hexane Solution, 1,000 mg/L, 1 ml

020620-02

Lot #	Storage	Expiry
163378	≤ -10 Degrees	8/29/15

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

n-Hexane Solution
Lot #: 163378 - 29232
Rec: 8/5/11 MFR exp. 08/29/15

RS 1/25

1/25/12
1/26/12
M-
RS

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

120016-83

Lot #	Storage	Expiry
167931	≤ -10 Degrees C	1/17/14

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

Method 8260 Gases
Lot #: 167931 - 28286
Rec: 2/17/11 MFR exp. 01/17/14

RS 1/25

1/25/12
1/26/12
N-
RS

Heptane Solution, 1000 mg/L, 1 ml

020546-02

Lot #	Storage	Expiry
169174	≤ -10 Degrees C	2/18/14

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

Heptane Solution
Lot #: 169174 - 28326
Rec: 2/17/11 MFR exp. 02/18/14

RS 1/25

1/25/12
RS

1/25/12
1/26/12
O-
RS

8260B Surrogate Solution, 2,000 mg/L, 5 x 1 ml

120002-01-SPAK

Lot #	Storage	Expiry
178653	≤ -10 Degrees C	9/11/13

Solv: P/T Methanol

R&D only, not human consump. Made in the USA

8260B Surrogate Solution
Lot #: 178653 - 29570
Rec: 9/22/11 MFR exp. 09/11/13

RS. 1/25

1/25/12
1/26/12
RS

P-

VOC Mix 4-3, 2,000 mg/L, 1 ml
Made in the USA
Lot # 178651 Storage ≤6 Degrees C Expiry 9/11/13
120166-01
VOC Mix 4-3, 2000mg/L
Lot #: 178651 - 29811
Rec: 10/24/11 MFR exp. 09/11/13
2-Chloroethyl vinyl ether

RS 1/25

01-25-12Q							
50ug/ml Vol Work Std #7							
Exp:02/01/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	167931-28286	01-25-12M	01/30/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	164816-29154	01-18-12A	02/07/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29775	01-18-12B	02/07/12	200
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3500
01-25-12R							
50ug/ml Vol Work Std #1							
Exp:02/01/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	160092-26641	01-25-12K	02/07/12	50
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	1950
01-25-12S							
50ug/ml Vol Work Std #8							
Exp:02/01/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29197	01-16-12C	02/01/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27875	01-09-12D	02/14/12	100
02SI	020232-02	Vinyl Acetate	2000	182701-30110	01-18-12C	03/11/12	100
02SI	020620-02	n-Hexane	1000	163378-29232	01-25-12L	02/07/12	200
02SI	020546-02	Heptane	1000	169174-28326	01-25-12N	02/07/12	200
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3300
01-25-12T							
50ug/ml Vol Work Std #2							
Exp:02/01/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29212	01-16-12E	02/07/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3900
		01-25-12U	Exp:	02/01/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		01-25-12Q	02/01/12	200	
		50ug/ml Vol Work Std #8		01-25-12S	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1600	
		01-25-12V	Exp:	02/01/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		01-25-12R	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1800	
		01-25-12W	Exp:	02/01/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		01-25-12T	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1800	
01-25-12X							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:02/01/12			ug/ml	Lot #	Code	Date	uL
02SI	120002-01	8260B Surr Solution	2000	179059-29570	01-25-12O	02/07/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3900
01-25-12Y			Exp:	02/01/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		01-25-12X	02/01/12	200	
J&T Brand		Purge & Trap MeOH		01/23/12	06/08/12	1800	

1/25/12
RS

01-25-12Z
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P

1/25/12 RS

Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-29811	01-25-12P	02/07/12	500
02SI	020229-09	Acrolein	10000	182702-30106	01-18-12E	01/21/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3400

01-25-12AA
50ug/ml VOC Std#5

Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03-SS	8260 Gases(SS)	2000	178557-29518	01-25-12A	02/01/12	50
02SI	020145-02-02-	2-CEVE	2000	181404-30008	01-25-12B	06/14/12	50
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	1900

01-25-12AB
50ug/ml VOC Std#6

1/25/12 RS

Exp:02/01/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120023-03-SS	VOC'S 54 COMP.	2000	167814-28709	01-25-12C	06/14/12	50
02SI	120296-01	Custom 8260 Solution	2000	166038-27766	01-25-12E	05/18/12	50
02SI	020232-02-SS	Vinyl Acetate(SS)	2000	183906-30195	01-25-12D	04/05/12	50
02SI	020620-02-SS	n-HEXANE	1000	179199-29612	01-25-12F	06/14/12	100
02SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30199	01-25-12G	06/29/12	100
02SI	020546-02-SS	Heptane(SS)	1000	142276-26578	01-25-12J	01/19/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	1550

01-25-12AC
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P

Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29835	01-25-12I	06/14/12	250
02SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	182703-30108	01-25-12H	01/21/11	50
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	1700

01-25-12AD
50ug/ml Vol Work Std #7

1/24/12 RS

Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	167931-28286	01-25-12M	01/30/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	164816-29154	01-18-12A	02/07/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29775	01-18-12B	02/07/12	200
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3500

01-25-12AE
50ug/ml Vol Work Std #1

1/24/12 RS

Exp:02/01/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	160092-26641	01-25-12K	02/07/12	50
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	1950

1/25/12 RS.

01-25-12AF
50ug/ml Vol Work Std #8

Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	176771-29197	01-16-12C	02/01/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27875	01-09-12D	02/14/12	100
02SI	020232-02	Vinyl Acetate	2000	182701-30110	01-18-12C	03/11/12	100
02SI	020620-02	n-Hexane	1000	163378-29232	01-25-12L	02/07/12	200
02SI	020546-02	Heptane	1000	169174-28326	01-25-12N	02/07/12	200
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3300

1/24/12 RS

01-25-12AG
50ug/ml Vol Work Std #2

Exp:02/01/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29212	01-16-12E	02/07/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3900

Exp. Date	uL
/07/12	500
/21/12	100
/08/12	3400

Exp. Date	ul
02/01/12	50
06/14/12	50
06/08/12	1900

Date	ul
06/14/12	50
05/18/12	50
04/05/12	50
6/14/12	100
6/29/12	100
1/19/12	100
6/08/12	1550

Exp. Date	uL
6/14/12	250
1/21/11	50
6/08/12	1700

Exp. Date	ul
1/30/12	100
2/07/12	200
2/07/12	200
5/08/12	3500

Date	ul
2/07/12	50
5/08/12	1950

Exp. Date	ul
/01/12	100
/14/12	100
/11/12	100
/07/12	200
/07/12	200
/08/12	3300

		01-25-12AH	Exp:	02/01/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		01-25-12AD	02/01/12	200	
		50ug/ml Vol Work Std #8		01-25-12AF	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1600	
		01-25-12AI	Exp:	02/01/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		01-25-12AE	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1800	
		01-25-12AJ	Exp:	02/01/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		01-25-12AG	02/01/12	200	
		J&T Brand		01/23/12	06/08/12	1800	
01-25-12AK							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:02/01/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	179059-29570	01-25-12O	02/07/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3900
01-25-12AL			Exp:	02/01/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		01-25-12AK	02/01/12	200	
J&T Brand		Purge & Trap MeOH		01/23/12	06/08/12	1800	
01-25-12AM							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:02/01/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-29811	01-25-12P	02/07/12	500
O2SI	020229-09	Acrolein	10000	182702-30106	01-18-12E	01/21/12	100
J&T Brand		Purge & Trap MeOH		K07E34-00570	01/23/12	06/08/12	3400

1/25/12 RS

1/24/12 RS A-

1/24/12 RS B-

1/24/12 RS C-

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
R&D only, not human consump. Made in the USA
solutions®

Method 8260 Internal Standard
Lot #: 166255 - 29271
Rec: 8/5/11 MFR exp. 11/18/12 RS

Fluorobenzene Solution, 2,000 mg/L, 1 ml
120132-02
Lot# 169170 | Storage ≤ 6 Degrees C | Expiry 2/13/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Fluorobenzene
Lot #: 169170 - 29290
Rec: 8/5/11 MFR exp. 02/13/14 RS

8260B Surrogate Solution 2,000 mg/L, 5 x 1 ml
120002-01-5PAK
Lot# 178653 | Storage ≤ -10 Degrees C | Expiry 9/11/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

8260B Surrogate Solution
Lot #: 178653 - 29571
Rec: 9/22/11 MFR exp. 09/11/13 RS

Sweetpea							
01-24-11D							
250ug/ml 8260 Internal Standard w/ Surrogate			Conc.	Lot #	Date	Exp.	
O2SI	120302-03	Internal Standard Mix	2000	166255-29271	01-24-12A	06/09/12	500
O2SI	020132-02	Fluorobenzene Standard	2000	169170-29290	01-24-12B	06/09/12	500
O2SI	120002-01	Surrogate Standard	2000	178653-29571	01-24-12C	06/09/12	500
J.T.Baker		Purge & Trap MeOH		K07E34-00570	01/23/12	09/23/12	2500

1/24/12 RS. 1/25/12

1/26/12 RS

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

		Expiration Date:	01/25/12					
		5µg/mL Vol Std #9	5µg/mL Vol Std #12	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Vol Std #2	250µg/mL TAPD	Final Vol
Date	Conc.	01-18-12K	01-18-12M	01-18-12G	01-18-12I	01-18-12J	01-18-12P	w/P&T H2O
Code	µg/L	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	mL
01-24-12E	0.2	2	2	n/a	n/a	n/a	2	50
01-24-12F	0.5	5	5	n/a	n/a	n/a	5	50
01-24-12G	1	10	10	n/a	n/a	n/a	10	50
01-24-12H	5	n/a	n/a	5	5	40	20	50
01-24-12I	10	n/a	n/a	10	10	20	25	50
01-24-12J	40	n/a	n/a	40	40	100	35	50
01-24-12K	100	n/a	n/a	100	100	200	40	50

1/24/12 RS

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

		Expiration Date:	01/26/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	01-25-12U	01-25-12Y	01-25-12Q	01-25-12S	01-25-12X	01-25-12V	01-25-12R	01-25-12T	01-25-12W
Code	µg/L	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp.02-01-12	Exp:02-01-12
01-25-12AN	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
01-25-12AO	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
01-25-12AP	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
01-25-12AQ	5	n/a	n/a	5	5	10	n/a	5	5	n/a
01-25-12AR	10	n/a	n/a	10	10	25	n/a	10	10	n/a
01-25-12AS	40	n/a	n/a	40	40	80	n/a	40	40	n/a
01-25-12AT	100	n/a	n/a	100	100	100	n/a	100	100	n/a
01-25-12AU	200	n/a	n/a	200	200	125	n/a	200	200	n/a

1/25/12 RS

1/26/12 RS

250µg/mL TAPD	Final Vol
01-25-12Z	w/P&T H2O
Exp:02-01-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

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

		Expiration Date:	01/25/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	01-18-12K	01-18-12O	01-18-12G	01-18-12I	01-18-12N	01-18-12L	01-18-12H	01-18-12J	01-18-12J
Code	µg/L	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp.01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12	Exp:01-25-12
01-24-12L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
01-24-12M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
01-24-12N	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
01-24-12O	5	n/a	n/a	5	5	10	n/a	5	5	n/a
01-24-12P	10	n/a	n/a	10	10	25	n/a	10	10	n/a
01-24-12Q	40	n/a	n/a	40	40	80	n/a	40	40	n/a
01-24-12R	100	n/a	n/a	100	100	100	n/a	100	100	n/a

1/24/12 RS

250µg/mL TAPD	Final Vol
01-18-12P	w/P&T H2O
Exp:01-25-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50

1/26/12 RS

Volatile Standard Curv

	Expiration
Date	Conc.
Code	µg/L
01-26-12L	2
01-26-12M	5
01-26-12N	10
01-26-12O	20
01-26-12P	50
01-26-12Q	100
01-26-12R	200

1/24/12 RS

Exp.	
06/09/12	500
06/09/12	500
06/09/12	500
09/23/12	2500

1/26/12 A-
RS

Final Vol w/P&T H2O mL
50
50
50
50
50
50
50

NOTEBOOK INSERT LABEL

Gasoline **47516-U**
Lot: LB82077 EXP: FEB/2014 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED:_____

SUPELCO Analytical
595 North Harrison Road • Bellefonte, PA
16823-0048 USA • Phone 814-359-3441

RS

STANDARD TRANSFER LABEL

Date of Preparation: **Exp. Date:**
Reference Number: **Storage:** EXP: FEB/2014
ROOM TEMP.
Description: Gasoline
Lot #: LB82077 - 29979
Rec: 11/11/11 MFR exp. 02/28/14
gasoline

L Vol Std #2	5µg/mL Vol Std #12
25-12T	01-25-12W
02-01-12	Exp:02-01-12
n/a	3
n/a	5
n/a	10
5	n/a
10	n/a
40	n/a
100	n/a
200	n/a

1/26/12 B-
RS

RESTEK Catalog # 3
Unleaded gasoline composite
Lot #: A081012 - 29980
Rec: 11/14/11 MFR exp. 05/30/18
Unleaded Gasoline Composite Standard
50000 ug/mL each in P&T Methanol
Lot# A081012 Exp Date: 05/2018 Store. 0°C or colder

RS

250µg/mL TAPD 01-25-12Z Exp:02-01-12	Final Vol w/P&T H2O mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

1/26/12
RS

01/26/12C							
2000ug/ml Gasoline						APPL	
Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
Supelco	LB82077	Gasoline	20,000	LB82077-29979	01-26-12A	02/01/14	200
J&T Brand		Purge & Trap MeOH		K07E14-00570	01/23/12	08/02/12	1800
01/26/12D							
2000ug/ml Unleaded Gasoline						APPL	
Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
Restek	30205	Unleaded Gasoline	50,000	A081012-29980	01-26-12B	02/01/14	80
J&T Brand		Purge & Trap MeOH		K07E14-00570	01/23/12	08/02/12	1920

RS

/ol Std #2 -12J -25-12 a a a)) 0	5µg/mL Vol Std #12 01-18-12J Exp:01-25-12
	3
	5
	10
	n/a
	n/a
	n/a
	n/a

250µg/mL TAPD 01-18-12P Exp:01-25-12	Final Vol w/P&T H2O mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50

1/26/12
RS

Gasoline Curve Preparation for 100mL Purge (water)-CHICO			
	Expiration Date:		01/27/12
		50µg/mL Gasoline	Final Vol
Date	Conc.	01-26-12C	w/P&T H2O
Code	µg/L	Exp.01-03-12	mL
01-26-12E	20	1	100
01-26-12F	50	2.5	100
01-26-12G	100	5	100
01-26-12H	300	15	100
01-26-12I	600	30	100
01-26-12J	800	40	100
01-26-12K	1000	50	100

RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-THOR											
	Expiration Date:		01/27/12								
		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 #1
Date	Conc.	01-25-12AH	01-25-12AL	01-25-12AD	01-25-12AF	01-25-12AK	01-25-12AI	01-25-12AE	01-25-12AG	01-25-12AJ
Code	µg/L	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp:02-01-12	Exp.02-01-12	Exp.02-01-12
01-26-12L	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
01-26-12M	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
01-26-12N	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
01-26-12O	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
01-26-12P	50	n/a	n/a	5	5	5	n/a	5	n/a	5
01-26-12Q	100	n/a	n/a	10	10	10	n/a	10	n/a	10
01-26-12R	200	n/a	n/a	20	20	20	n/a	20	n/a	20

1/26/12

250µg/mL TBA 01-25-12AM Exp:02-01-12	Final Vol w/P&T H2O mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

3/14/12 RS

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

	Expiration Date		03/15/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc	03-14-12J	03-14-12N	03-14-12F	03-14-12H	03-14-12M	03-14-12K	03-14-12G	03-14-12I	03-14-12L
Code	µg/L	Exp:03-21-12	Exp:03-21-12	Exp.03-21-12	Exp 03-21-12	Exp 03-21-12	Exp:03-21-12	Exp 03-21-12	Exp 03-21-12	Exp:03-21-12
03-14-12W	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
03-14-12X	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
03-14-12Y	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
03-14-12Z	5	n/a	n/a	5	5	10	n/a	5	5	n/a
03-14-12AA	10	n/a	n/a	10	10	25	n/a	10	10	n/a
03-14-12AB	40	n/a	n/a	40	40	80	n/a	40	40	n/a
03-14-12AC	100	n/a	n/a	100	100	100	n/a	100	100	n/a
03-14-12AD	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
03-14-12O	w/P&T H2O
Exp:03-21-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

3/15/12 RS

A -

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

020135-03

Lot #	Storage	Expiry
163173	≤-10 Degrees	8/24/13

Solv: P/T Methanol

L&D safely, and lessons commonly Made in the USA

4-Bromofluorobenzene
Lot #: 163173 - 29052
Rec: 8/1/11 MFR exp. 08/24/13

RS

3/19/12 RS

03-15-12B								
25ug/ml BFB STD				Conc.		Date	EXP:	
EXP:04-15-12				ug/ml	Lot#	CODE	Date	ul
02SI	020135-03		4-Bromofluorobenzene	2500	163173-29052	03-15-12A	12/11/12	20
J&T Baker			Purge & Trap MeOH		K14E06-00600	03/05/12	09/28/12	1980
03-15-12C								
25ug/ml BFB STD				Conc.		Date	EXP:	
EXP:04-15-12				ug/ml	Lot#	CODE	Date	ul
02SI	020135-03		4-Bromofluorobenzene	2500	163173-29052	03-15-12A	12/11/12	20
J&T Baker			Purge & Trap MeOH		K14E06-00600	03/05/12	09/28/12	1980

3/15/12 RS

3/19/12 RS

3/15/12 RS

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

	Expiration Date		03/16/12							
		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.	03-14-12J	03-14-12N	03-14-12F	03-14-12H	03-14-12M	03-14-12K	03-14-12G	03-14-12I	03-14-12L
Code	µg/L	Exp:03-21-12	Exp:03-21-12	Exp:03-21-12	Exp 03-21-12	Exp.03-21-12	Exp:03-21-12	Exp.03-21-12	Exp:03-21-12	Exp:03-21-12
03-15-12D	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
03-15-12E	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
03-15-12F	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
03-15-12G	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
03-15-12H	50	n/a	n/a	5	5	5	n/a	5	n/a	5
03-15-12I	100	n/a	n/a	10	10	10	n/a	10	n/a	10
03-15-12J	200	n/a	n/a	20	20	20	n/a	20	n/a	20

3/19/12 RS

250µg/mL TBA	Final Vol
03-14-12O	w/P&T H2O
Exp:03-21-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

3/19/12 RS

03-22-12AD							
50ug/ml VOC Std#5							
Exp:03/29/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29523	03-22-12K	03/29/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00610	03/19/12	06/08/12	1900
03-22-12AE							
50ug/ml VOC Std#6							
Exp:03/29/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	178905-30196	03-22-12N	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00610	03/19/12	06/08/12	1550
03-22-12AF							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:03/29/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	03-22-12S	04/23/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00610	03/19/12	06/08/12	1700

3/22/12 RS

3/23/12 RS A

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
R&D only, not human consump. Made in the USA
Method 8260 Internal Standard
Lot #: 166255 - 28857
Rec: 5/25/11 MFR exp. 11/18/12

3/23/12 RS B

Fluorobenzene Solution, 2,000 mg/L, 1 ml
820132-02
Lot # 169170 Storage ≤ 6 Degrees C Expiry 2/13/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA
Fluorobenzene
Lot #: 169170 - 29852
Rec: 10/24/11 MFR exp. 02/13/14

3/23/12 RS C

8260B Surrogate Solution, 2,000 mg/L, 5 x 1 ml
120002-01-5PAK
Lot # 178653 Storage ≤ -10 Degrees C Expiry 9/11/13
Solv: P/T Methanol
R&D only, not human consump. Made in the USA
8260B Surrogate Solution
Lot #: 178653 - 29567
Rec: 9/22/11 MFR exp. 09/11/13

Exp. Date	uL
08/14/12	500
08/14/12	500
10/10/12	19000

3/26/12 A-
RS

8260B Surrogate Solution,
2,000 mg/L, 5 x 1 ml
120802-01-5PAK
Lot# 178653 Storage ≤ -10 Degrees C Expiry 9/11/13
Solv: P/T Methanol
R&D only, not human consump.
Made in the USA

8260B Surrogate Solution
Lot #: 178653 - 29566
Rec: 9/22/11 MFR exp. 09/11/13

RS

Exp. Date	uL
08/14/12	500
10/10/12	19500

3/26/12
RS

Thor

03-26-12B

50ug/ml 8260 Internal Standard			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120302-03	Internal Standard Mix	2000	166255-28857	03-23-12A	12/13/12	375
O2SI	020132-02	Fluorobenzene Standard	2000	169170-29852	03-23-12B	12/13/12	375
J.T Baker		Purge & Trap MeOH		K14E06-00611	03/26/12	08/10/12	14250

023-26-12C

50ug/ml 8260B Surrogate-Thor			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	8260B Surr	Surrogate Standards	2000	178653-29566	03-26-12A	12/13/12	375
J.T Baker		Purge & Trap MeOH		K14E06-00611	03/26/12	08/10/12	14625

Vol Std #2	5µg/mL Vol Std #12
-12W	03-22-12Z
-29-12	Exp:03-29-12
/a	3
/a	5
a	10
	n/a
0	n/a
0	n/a
0	n/a
0	n/a

µg/mL TAPD	Final Vol
-22-12AC	w/P&T H2O
.03-29-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

3/26/12 RS

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

	Expiration Date:		03/27/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	03-22-12X	03-22-12AB	03-22-12T	03-22-12V	03-22-12AA	03-22-12Y	03-22-12U	03-22-12W	03-22-12Z
Code	µg/L	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12
03-26-12B	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
03-26-12C	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
03-26-12D	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
03-26-12E	5	n/a	n/a	5	5	10	n/a	5	5	n/a
03-26-12F	10	n/a	n/a	10	10	25	n/a	10	10	n/a
03-26-12G	20	n/a	n/a	20	20	40	n/a	20	20	n/a
03-26-12H	40	n/a	n/a	40	40	80	n/a	40	40	n/a
03-26-12I	100	n/a	n/a	100	100	100	n/a	100	100	n/a

2	5µg/mL Vol Std #12
	03-22-12Z
	Exp:03-29-12
	3
	5
	10
	n/a
	n/a
	n/a
	n/a
	n/a

250µg/mL TAPD	Final Vol
03-22-12AC	w/P&T H2O
Exp:03-29-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

/mL TAPD	Final Vol
2-12AC	w/P&T H2O
03-29-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

3/26/12 RS

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

	Expiration Date:		03/27/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	03-22-12X	03-22-12AB	03-22-12T	03-22-12V	03-22-12AA	03-22-12Y	03-22-12U	03-22-12W	03-22-12Z
Code	µg/L	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12	Exp:03-29-12
03-26-12J	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
03-26-12K	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
03-26-12L	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
03-26-12M	5	n/a	n/a	5	5	10	n/a	5	5	n/a
03-26-12N	10	n/a	n/a	10	10	25	n/a	10	10	n/a
03-26-12O	20	n/a	n/a	20	20	40	n/a	20	20	n/a
03-26-12P	40	n/a	n/a	40	40	80	n/a	40	40	n/a
03-26-12Q	100	n/a	n/a	100	100	100	n/a	100	100	n/a

1 #2	50µg/mL Vol Std #12
	03-22-12Z
2	Exp:03-29-12
	n/a
	n/a
	n/a
	n/a
	5
	10
	20

TBA	Final Vol
C	w/P&T H2O
12	mL
	5
	5
	5
	5
	5
	5
	5

250µg/mL TAPD	Final Vol
03-22-12AC	w/P&T H2O
Exp:03-29-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

		04-01-12X	Exp:	04/07/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-01-12T	04/07/12	200	
		50ug/ml Vol Work Std #8		04-01-12V	04/07/12	200	
		J&T Brand		03/30/12	06/08/12	1600	
		04-01-12Y	Exp:	04/07/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-01-12U	04/07/12	200	
		J&T Brand		03/30/12	06/08/12	1800	
		04-01-12Z	Exp:	04/07/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-01-12W	04/07/12	200	
		J&T Brand		03/30/12	06/08/12	1800	
04-01-12AA							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/07/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	178653-29560	03-14-12B	04/16/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00615	03/30/12	06/26/12	3900
04-01-12AB			Exp:	04/07/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-01-12AA	04/07/12	200	
J&T Brand		Purge & Trap MeOH		03/30/12	06/08/12	1800	
04-01-12AC							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/07/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-30412	04-01-12E	05/14/12	500
O2SI	020229-09	Acrolein	10000	186936-30513	03-22-12J	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00615	03/30/12	06/08/12	3400

4/01/12 RS.

4/02/12 RS. A-

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
R&D only, not human consump. Made in the USA

Method 8260 Internal Standard
Lot #: 166255 - 28858
Rec: 5/25/11 MFR exp. 11/18/12

RS.

4/02/12 RS. B-

Fluorobenzene Solution, 2,000 mg/L, 1 ml
020132-02
Lot # 169170 Storage ≤ 6 Degrees C Expiry 2/13/14
Solv: P/T Methanol
R&D only, not human consump. Made in the USA

Fluorobenzene
Lot #: 169170 - 29853
Rec: 10/24/11 MFR exp. 02/13/14

RS.

4/02/12 RS. C-

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
R&D only, not human consump. Made in the USA

Method 8260B Surrogate
Lot #: 164585 - 30466
Rec: 2/20/12 MFR exp. 10/12/13

RS.

RS. 4/11/12

RS. 4/12/12

RS. 4/12/12

RS. 4/12/12

Volatile Standard
Date
Code
04-02-12D
04-02-12E
04-02-12F
04-02-12G
04-02-12H
04-02-12I
04-02-12J
04-02-12K

Volatile Standa
Date
Code
04-02-12L
04-02-12M
04-02-12N
04-02-12O
04-02-12P
04-02-12Q
04-02-12R
04-02-12S

Volatile Standar
Date
Code
04-02-12T
04-02-12U
04-02-12V
04-02-12W
04-02-12X
04-02-12Y
04-02-12Z
04-02-12AA

Volatile Standard Cl
Expirati
Date
Conc
Code
ug/L
04-04-12A 0.3
04-04-12B 0.5
04-04-12C 1
04-04-12D 2
04-04-12E 5
04-04-12F 10
04-04-12G 20
04-04-12H 40
04-04-12I 100

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

CHICO

04-10-12J

250ug/ml 8260 Internal Standard - Chico

Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
02SI	120302-03	Internal Standard Mix	2000	166255-2858	04-02-12A	07/23/12	500
02SI	020132-02	Fluorobenzene Standard	2000	169170-29853	04-02-12B	07/23/12	500
J&T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	11/14/12	30000

4/10/12 RS

04-10-12K

250ug/ml 8260 Surrogate - Chico

Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
02SI	120002-01	Surrogate Standard	2000	164585-30466	04-02-12C	10/23/12	500
J&T Baker		Purge & Trap MeOH		K07E34-00543	08/12/11	11/14/12	35000

4/10/12 RS

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

Expiration Date: 04/11/12

Date	Conc.	5µg/mL Vol Std #9 04-09-12N	5µg/mL Surr 04-09-12R	50µg/mL Vol Std #7 04-09-12J	50µg/mL Vol Std #8 04-09-12L	50µg/mL Surr 04-09-12Q	5µg/mL Vol Std #10 04-09-12O	50µg/mL Vol Std #1 04-09-12K	50µg/mL Vol Std #2 04-09-12M	5µg/mL Vol Std #12 04-09-12P
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-10-12L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-10-12M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-10-12N	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-10-12O	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-10-12P	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-10-12Q	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-10-12R	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-10-12S	100	n/a	n/a	100	100	100	n/a	100	100	n/a

250µg/mL TAPD 04-09-12S	Final Vol w/P&T H2O mL
Exp:04-16-12	
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

4/10/12 - BFB on pg. 120 RS.

4/16/12 RS

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

Expiration Date: 04/12/12

Date	Conc.	5µg/mL Vol Std #9 04-09-12AA	5µg/mL Surr 04-09-12AE	50µg/mL Vol Std #7 04-09-12W	50µg/mL Vol Std #8 04-09-12Y	50µg/mL Surr 04-09-12AD	5µg/mL Vol Std #10 04-09-12AB	50µg/mL Vol Std #1 04-09-12X	50µg/mL Vol Std #2 04-09-12Z	5µg/mL Vol Std #12 04-09-12AC
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp.04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-11-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-11-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-11-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-11-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-11-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-11-12F	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-11-12G	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-11-12H	100	n/a	n/a	100	100	100	n/a	100	100	n/a

4/11/12 RS

250µg/mL TAPD 04-09-12AF	Final Vol w/P&T H2O mL
Exp:04-16-12	
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

* Sweetpea's soil curve on 4/11/12 RS. on page 120.

4/16/12 RS

Max 524

04-12-12A

50ug/ml 524 Internal Standard w/ Surrogate

			Conc. ug/ml	Lot #	Date Code	Exp. Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27968	04-09-12AG	08/04/12	150
J.T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	12/14/12	14850

4/12/12 RS

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

Expiration Date: 04/13/12

Date	Conc.	5µg/mL Vol Std #9 04-09-12N	5µg/mL Vol Std #12 04-09-12P	50µg/mL Vol Std #7 04-09-12J	50µg/mL Vol Std #8 04-09-12L	50µg/mL Vol Std #2 04-09-12M	250µg/mL TAPD 04-09-12S	Final Vol w/P&T H2O
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp.04-16-12	Exp:04-16-12	Exp:04-16-12	mL
04-12-12B	0.2	2	2	n/a	n/a	n/a	2	50
04-12-12C	0.5	5	5	n/a	n/a	n/a	5	50
04-12-12D	1	10	10	n/a	n/a	n/a	10	50
04-12-12E	10	n/a	n/a	10	10	10	25	50
04-12-12F	20	n/a	n/a	20	20	20	30	50

4/12/12 RS

Exp.	
Date	uL
7/23/12	500
7/23/12	500
1/14/12	3000

Exp.	
Date	uL
0/23/12	500
1/14/12	3500

Std #2	5µg/mL Vol Std #12
M	04-09-12P
-12	Exp:04-16-12
	3
	5
	10
	n/a
	n/a
	n/a
	n/a
	n/a

µg/mL TAPD	Final Vol
04-09-12S	w/P&T H2O
xp:04-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

Std #2	5µg/mL Vol Std #12
Z	04-09-12AC
12	Exp:04-16-12
	3
	5
	10
	n/a
	n/a
	n/a
	n/a
	n/a

/mL TAPD	Final Vol
9-12AF	w/P&T H2O
4-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
0	50

p.	
te	uL
4/12	150
4/12	14850

/ol
H2O

GC/MS STANDARD PREPARATION BOOK # ______ PAGE # 119

4/16/12 RS — A -

Method 8260 Internal Standard Solution, 2,000 mg/L, 1 ml
120302-03
R&D only, not human consump. Made in the USA
Lot# 166255 Storage ≤-10 Degrees C Expiry 11/18/12
Solv: P/T Methanol

Method 8260 Internal Standard
Lot #: 166255 - 28859
Rec: 5/25/11 MFR exp. 11/18/12

RS.

4/16/12 RS — B -

Fluorobenzene Solution, 2,000 mg/L, 1 ml
020132-02
R&D only, not human consump. Made in the USA
Lot # 169170 Storage ≤6 Degrees C Expiry 2/13/14
Solv: P/T Methanol

Fluorobenzene
Lot #: 169170 - 29854
Rec: 10/24/11 MFR exp. 02/13/14

RS

4/16/12 RS

Sweetpea							
04-16-12C							
250ug/ml 8260 Internal Standard - Sweetpea			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120302-03	Internal Standard Mix	2000	166255-28859	04-16-12A	12/10/12	500
	020132-02	Fluorobenzene Standard	2000	169170-29854	04-16-12B	12/10/12	500
J.T.Baker		Purge & Trap MeOH		K14E06-00600	03/05/12	10/14/12	3000
04-16-12D							
250ug/ml 8260 Surrogate - Sweetpea			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	Surrogate Standards	2000	164585-30466	04-02-12C	12/10/12	500
J.T.Baker		Purge & Trap MeOH		K14E06-00600	03/05/12	10/14/12	3500

4/16/12 RS

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-SWEETPEA											
	Expiration Date:		04/17/12								
		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.	04-09-12AA	04-09-12AE	04-09-12W	04-09-12Y	04-09-12AD	04-09-12AB	04-09-12X	04-09-12Z	04-09-12AC
Code	µg/L	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-16-12E	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-16-12F	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-16-12G	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-16-12H	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-16-12I	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-16-12J	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-16-12K	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-09-12AF	w/P&T H2O
Exp:04-16-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

4/10/12 RS

04-10-12S / T RS 4/17							
25ug/ml BFB STD			Conc.		Date	EXP:	
EXP:05-15-12			ug/ml	Lot#	CODE	Date	ul
02SI	020135-03	4-Bromofluorobenzene	2500	163173-29052	04-09-12AG	12/11/12	20
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/12	09/28/12	1980
04-10-12Ø / U RS							
25ug/ml BFB STD			Conc.		Date	EXP:	
EXP:05-15-12			ug/ml	Lot#	CODE	Date	ul
02SI	020135-03	4-Bromofluorobenzene	2500	163173-29052	04-09-12AG	12/11/12	20
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/12	09/28/12	1980

RS.

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

4/11/12 RS

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

	Expiration Date:		04/12/12								
		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	04-09-12AA	04-09-12AE	04-09-12W	04-09-12Y	04-09-12AD	04-09-12AB	04-09-12X	04-09-12Z	04-09-12AC
Code	µg/L	Exp:04-16-12	Exp 04-16-12	Exp.04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12	Exp:04-16-12
04-11-12I	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-11-12J	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-11-12K	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-11-12L	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-11-12M	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-11-12N	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-11-12O	200	n/a	n/a	20	20	20	n/a	20	n/a	20

4/20/12 RS.

250µg/mL TBA	Final Vol
04-09-12AF	w/P&T H2O
Exp.04-16-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

04-10-12T								
25ug/ml BFB STD			Conc.		Date	EXP:		
EXP:05-10-12			ug/ml	Lot#	CODE	Date	ul	
02SI	020135-03	4-Bromofluorobenzene	2500	163173-29052	03-15-12A	12/11/12	20	
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/12	09/28/12	1980	
04-10-12U								
25ug/ml BFB STD			Conc.		Date	EXP:		
EXP:05-10-12			ug/ml	Lot#	CODE	Date	ul	
02SI	020135-03	4-Bromofluorobenzene	2500	163173-29052	03-15-12A	12/11/12	20	
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/12	09/28/12	1980	
04-10-12V								
25ug/ml BFB STD			Conc.		Date	EXP:		
EXP:05-10-12			ug/ml	Lot#	CODE	Date	ul	
02SI	020135-03	4-Bromofluorobenzene	2500	163173-29052	03-15-12A	12/11/12	20	
J&T Baker		Purge & Trap MeOH		K14E06-00605	04/05/12	09/28/12	1980	

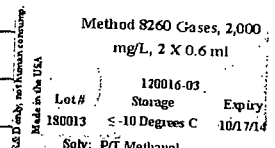
4/10/12 RS

RS

4/20/12 RS.

RS 4/20/12

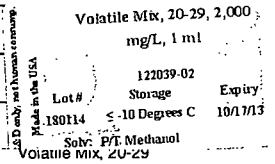
4/17/12 RS. A-



Method 8260 Gases
Lot #: 180013 - 29770
Rec: 10/24/11 MFR exp. 10/17/14

RS.

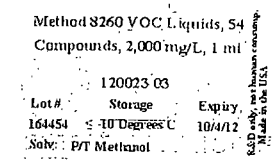
4/17/12 RS. B-



Volatile Mix, 20-29
Lot #: 180114 - 29791
Rec: 10/24/11 MFR exp. 10/17/13

RS

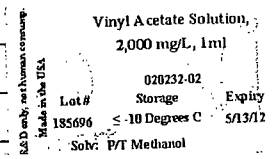
4/17/12 RS C.



8260 VOC Liquids, 54 Comp.
Lot #: 164454 - 27879
Rec: 12/15/10 MFR exp. 10/04/12

RS

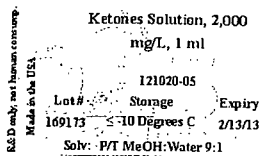
4/17/12 RS. D.



Vinyl Acetate
Lot #: 185696 - 30408
Rec: 2/20/12 MFR exp. 05/13/12

RS

4/17/12 RS E.



Ketones
Lot #: 169173 - 29218
Rec: 8/5/11 MFR exp. 02/13/13

RS

4/17/12 RS

F-

8260B Surrogate Solution, 2,000 mg/L, 5 x 1 ml
120002-01-5PAK
Lot # 178653 Storage ≤ -10 Degrees C Expiry 9/11/13
Solv: P/T Methanol
Made in the USA. R&D only, not human consump.

8260B Surrogate Solution
Lot #: 178653 - 29565
Rec: 9/22/11 MFR exp. 09/11/13

RS

4/17/12 RS.

4/17/12 RS.

D E.G

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 185760 Storage ≤ 6 Degrees C Expiry 2/14/14
Solv: P/T Methanol
Made in the USA. R&D only, not human consump.

VOC Mix 4-3, 2000mg/L
Lot #: 185760 - 30413
Rec: 2/20/12 MFR exp. 02/14/14

RS

4/17/12 RS

RS FF H.

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 178557 Storage ≤ -10 Degrees C Expiry 9/13/14
Solv: P/T Methanol
Made in the USA. R&D only, not human consump.

Method 8260 Gases (SS)
Lot #: 178557 - 29530
Rec: 9/20/11 MFR exp. 09/13/14

RS.

RS.

04-17-12I							
50ug/ml Vol Work Std #7							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29770	04-17-12A	04/24/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3500
04-17-12J							
50ug/ml Vol Work Std #1							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1950
04-17-12K							
50ug/ml Vol Work Std #8							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	180114-29791	04-17-12B	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27879	04-17-12C	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30408	04-17-12D	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3300
04-17-12L							
50ug/ml Vol Work Std #2							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12	100
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	06/08/12	3900

4/17/12 RS

4/19/12 RS

4/17/12 RS

		04-17-12M	Exp:	04/24/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-17-12I	04/24/12	200	
		50ug/ml Vol Work Std #8		04-17-12K	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1600	
		04-17-12N	Exp:	04/24/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-17-12J	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
		04-17-12O	Exp:	04/24/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-17-12L	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
04-17-12P							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/24/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30465	04-17-12F	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/26/12	3900
04-17-12Q			Exp:	04/24/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-17-12P	04/24/12	200	
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	1800	
04-17-12R							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-30413	04-17-12G	05/14/12	500
02SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3400

4/17/12 RS.

04-17-12S							
50ug/ml VOC Std#5							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29530	04-17-12H	04/16/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1900
04-17-12T							
50ug/ml VOC Std#6							
Exp:04/24/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	184399-30240	04-09-12I	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1550
04-17-12U							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	03-22-12S	04/23/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1700

RS.

4/17/12 RS

RS

xp.	
ate	ul
24/12	100
08/12	200
08/12	200
08/12	3500
ate	ul
08/12	50
08/12	1950
xp.	
ate	ul
08/12	100
08/12	100
.3/12	100
08/12	200
08/12	200
08/12	3300
8/12	100
8/12	3900

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

RB

04-17-12V							
50ug/ml Vol Work Std #7							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29770	04-17-12A	04/24/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3500
04-17-12W							
50ug/ml Vol Work Std #1							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	1950
04-17-12X							
50ug/ml Vol Work Std #8							
Exp:04/24/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	180114-29791	04-17-12B	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27879	04-17-12C	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30408	04-17-12D	05/13/12	100
02SI	020620-02	n-Hexane	1000	163378-29227	04-09-12D	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3300
04-17-12Y							
50ug/ml Vol Work Std #2							
Exp:04/24/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12	100
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	06/08/12	3900
		04-17-12Z	Exp:	04/24/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-17-12V	04/24/12	200	
		50ug/ml Vol Work Std #8		04-17-12X	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1600	
		04-17-12AA	Exp:	04/24/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-17-12W	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
		04-17-12AB	Exp:	04/24/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-17-12Y	04/24/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
04-17-12AC							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:04/24/12			ug/ml	Lot #	Code	Date	uL
02SI	120002-01	8260B Surr Solution	2000	164585-30465	04-17-12F	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/26/12	3900
04-17-12AD			Exp:	04/24/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-17-12AC	04/24/12	200	
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	1800	
04-17-12AE							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01	Volatile Mix 4-3	2000	178651-30413	04-17-12G	05/14/12	500
02SI	020229-09	Acrolein	10000	186936-30514	04-09-12G	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00608	04/13/12	06/08/12	3400

4/17/12 RB

Volatile Stand

	E
Date	
Code	
04-17-12AF	
04-17-12AG	
04-17-12AH	
04-17-12AI	
04-17-12AJ	
04-17-12AK	
04-17-12AL	

4/17/12 RB

Volatile Standard

	Exp
Date	Co
Code	µg
04-17-12AM	0
04-17-12AN	0
04-17-12AO	
04-17-12AP	5
04-17-12AQ	1
04-17-12AR	4
04-17-12AS	10
04-17-12AT	20

4/19/12 RB

Volatile Standard

	Exp
Date	Co
Code	µg
04-19-12A	0
04-19-12B	0
04-19-12C	
04-19-12D	
04-19-12E	1
04-19-12F	4
04-19-12G	1
04-19-12H	2

4/20/12 RB

Volatile Standard C

	Expirat
Date	Conc.
Code	µg/L
04-20-12A	0.3
04-20-12B	0.5
04-20-12C	1
04-20-12D	5
04-20-12E	10
04-20-12F	40
04-20-12G	100
04-20-12H	200

Exp. Date	ul
4/24/12	100
5/08/12	200
5/08/12	200
5/08/12	3500

Exp. Date	ul
5/08/12	50
5/08/12	1950

Exp. Date	ul
/08/12	100
/08/12	100
/13/12	100
/08/12	200
/08/12	200
/08/12	3300

/08/12	100
/08/12	3900

ul	
200	
200	
1600	

ul	
200	
.800	

ul	
200	
800	

Exp. Date	uL
24/12	100
26/12	3900

ul	
200	
800	

Exp. Date	uL
14/12	500
24/12	100
08/12	3400

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

4/19/12 RS

		Expiration Date:		04/18/12						
		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 #1
Date	Conc.	04-17-12Z	04-17-12AD	04-17-12V	04-17-12X	04-17-12AC	04-17-12AA	04-17-12W	04-17-12Y	04-17-12AB
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-17-12AF	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-17-12AG	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-17-12AH	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-17-12AI	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-17-12AJ	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-17-12AK	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-17-12AL	200	n/a	n/a	20	20	20	n/a	20	n/a	20

250µg/mL TBA	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

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

4/19/12 RS

		Expiration Date:		04/18/12						
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12Z	04-17-12AD	04-17-12V	04-17-12X	04-17-12AC	04-17-12AA	04-17-12W	04-17-12Y	04-17-12AB
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-17-12AM	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-17-12AN	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-17-12AO	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-17-12AP	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-17-12AQ	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-17-12AR	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-17-12AS	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-17-12AT	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

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

4/19/12 RS

		Expiration Date:		04/20/12						
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12K	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp.04-24-12	Exp:04-24-12
04-19-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-19-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-19-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-19-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-19-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-19-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-19-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-19-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

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

4/20/12 RS

		Expiration Date:		04/21/12						
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12K	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-20-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-20-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-20-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-20-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-20-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-20-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-20-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-20-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a

250µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

4/20/12 RS

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

	Expiration Date:		04/21/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12K	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp 04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-20-12I	0 3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-20-12J	0 5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-20-12K	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-20-12L	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-20-12M	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-20-12N	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-20-12O	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-20-12P	200	n/a	n/a	200	200	125	n/a	200	200	n/a

4/26/12 RS

250µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
Exp:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

4/26/12 RS

4/24/12 RS

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

	Expiration Date:		04/25/12							
		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.	04-17-12Z	04-17-12AD	04-17-12V	04-17-12X	04-17-12AC	04-17-12AA	04-17-12W	04-17-12Y	04-17-12AB
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12
04-24-12A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-24-12B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-24-12C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-24-12D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-24-12E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-24-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-24-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

4/26/12 RS

250µg/mL TBA	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Reviewed by RSW 4/27/12

Neo 524

04-25-12A

10ug/ml Neo-524 Internal Standard w/ Surrogate

			Conc.		Date	Exp.	
			ug/ml	Lot #	Code	Date	uL
02SI	122450-02	524 Fortification Sol	1000	166726-27968	04-09-12AG	09/10/12	200
J.T.Baker		Purge & Trap MeOH		K14E06-00590	04/25/12	12/12/12	19800

4/25/12 RS

4/26/12 RS

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

	Expiration Date:		04/26/12					
		5µg/mL Vol Std #9	5µg/mL Vol Std #12	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Vol Std #2	250µg/mL TAPD	Final Vol
Date	Conc.	04-17-12Z	04-17-12AB	04-17-12V	04-17-12X	04-17-12Y	04-17-12AE	w/P&T H2O
Code	µg/L	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	Exp:04-24-12	mL
04-25-12B	0.2	2	2	n/a	n/a	n/a	2	50
04-25-12C	0.5	5	5	n/a	n/a	n/a	5	50
04-25-12D	1	10	10	n/a	n/a	n/a	10	50
04-25-12E	5	n/a	n/a	5	5	5	20	50
04-25-12F	10	n/a	n/a	10	10	10	25	50
04-25-12G	20	n/a	n/a	20	20	20	30	50
04-25-12H	40	n/a	n/a	40	40	40	35	50

4/25/12 RS.

4/26/12 RS.

Method 8260B Surrogate Solution, 2,000 mg/L, 1 ml

Lot# 164585 — 120002-01 — Storage ≤ -10 Degrees C — Expiry 10/12/13

Solv: P/T Methanol

Made in the USA. R&D only, not human consump.

4/25/17 RS

Method 8260B Surrogate

Lot #: 164585 - 30465

Rec: 2/20/12 MFR exp. 10/12/13

RS

ol Std #2	5µg/mL Vol Std #12
-12L	04-17-12O
24-12	Exp:04-24-12
a	3
a	5
a	10
)	n/a
)	n/a
)	n/a
0	n/a
0	n/a

µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
p:04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

ol Std #2	50µg/mL Vol Std #12
7-12Y	04-17-12AB
-24-12	Exp:04-24-12
2	n/a
5	n/a
0	n/a
0	n/a
/a	5
/a	10
/a	20

250µg/mL TBA	Final Vol
04-17-12AE	w/P&T H2O
Exp:04-24-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Exp.	
Date	uL
9/10/12	200
2/12/12	19800

Final Vol
w/P&T H2O
mL
50
50
50
50
50
50
50

4/26/12 RS

A –

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

120016-03

Lot #	Storage	Expiry
180013	≤ -10 Degrees C	10/17/14

Solv: P/T Methanol

Made in the USA. R&D only, not human consump.

Method 8260 Gases

Lot #: 180013 - 29769

Rec: 10/24/11 MFR exp. 10/17/14 RS

4/26/12 RS

B –

2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml

020145-02-02

Lot #	Storage	Expiry
176770	≤ -10 Degrees C	7/31/13

Solv: P/T Methanol

Made in the USA. R&D only, not human consump.

2-Chloroethyl vinyl ether

Lot #: 176770 - 29830

Rec: 10/24/11 MFR exp. 07/31/13 RS

4/26/12 RS

C –

n-Hexane Solution, 1,000 mg/L, 1 ml

020620-02

Lot #	Storage	Expiry
176773	≤ -10 Degrees C	7/30/16

Solv: P/T Methanol

Made in the USA. R&D only, not human consump.

n-Hexane Solution

Lot #: 176773 - 29801

Rec: 10/24/11 MFR exp. 07/30/16 RS

4/26/12 RS

D –

VOC Mix 4-3, 2,000 mg/L, 1 ml

120166-01

Lot #	Storage	Expiry
178651	≤ 6 Degrees C	9/11/13

Solv: P/T Methanol

Made in the USA.

VOC Mix 4-3, 2000mg/L

Lot #: 178651 - 30410

Rec: 2/20/12 MFR exp. 09/11/13 RS

4/26/12 RS

E –

Acrolein Solution, 10,000 mg/L, 2 x 0.6 ml

020229-09-02

Lot #	Storage	Expiry
188973	≤ 6 Degrees C	5/30/12

Solv: Water, HPLC Grade

Made in the USA. R&D only, not human consump.

Acrolein

Lot #: 188973 - 30649

Rec: 4/24/12 MFR exp. 05/30/12 RS

4/26/12 F-
RS

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 178557 Storage 5-10 Degrees C Expiry 9/13/14
Solv: P/T Methanol
R&D only, not for human consumption. Made in the USA
Method 8260 Gases (SS)
Lot #: 178557 - 29529
Rec: 9/20/11 MFR exp. 09/13/14
RS

4/26/12 G-
RS

Acrolein Solution (Second Source), 10,000 mg/L, 2 x 0.6 ml
020229-09-02-SS
Lot # 188974 Storage ≤ 6 Degrees C Expiry 5/30/12
Solv: Water, HPLC Grade
R&D only, not for human consumption. Made in the USA
Acrolein Solution SS
Lot #: 188974 - 30651
Rec: 4/24/12 MFR exp. 05/30/12
RS

4/26/12
RS

04-26-12H							
50ug/ml Vol Work Std #7							
Exp:05/03/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	120016-03	Gas Mix	2000	180013-29769	04-26-12A	05/03/12	100
02SI	020049-02	HEXACHLOROETHANE	1000	176700-29159	04-01-12B	06/08/12	200
02SI	020228-02	Benzyl Chloride	1000	176701-29162	04-01-12C	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	3500
04-26-12I							
50ug/ml Vol Work Std #1							
Exp:05/03/12							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29830	04-26-12B	06/08/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	1950
04-26-12J							
50ug/ml Vol Work Std #8							
Exp:05/03/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
02SI	122039-02	Volatile Mix, 20-29	2000	180114-29791	04-17-12B	06/08/12	100
02SI	120023-03	VOC'S-54 COMP	2000	164454-27879	04-17-12C	06/08/12	100
02SI	020232-02	Vinyl Acetate	2000	185696-30408	04-17-12D	05/13/12	100
02SI	020620-02	n-Hexane	1000	176773-29801	04-26-12C	06/08/12	200
02SI	020546-02	Heptane	1000	169174-29253	04-09-12E	06/08/12	200
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	3300
04-26-12K							
50ug/ml Vol Work Std #2							
Exp:05/03/12							
Supplier	ID #	ID	ug/ml				
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12	100
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	06/08/12	3900

4/26/12
RS

		04-26-12L	Exp:	05/03/12			
		5ug/ml Vol Work Std #9					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #7		04-26-12H	05/03/12	200	
		50ug/ml Vol Work Std #8		04-26-12J	05/03/12	200	
		J&T Brand		04/13/12	06/08/12	1600	
		04-26-12M	Exp:	05/03/12			
		5ug/ml Vol Work Std #10					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #1		04-26-12I	05/03/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
		04-26-12N	Exp:	05/03/12			
		5ug/ml Vol Work Std #12					
		SOURCES	**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		04-26-12K	05/03/12	200	
		J&T Brand		04/13/12	06/08/12	1800	
04-26-12O							
50ug/ml 8260 Surrogate			Conc.		Date	Exp.	
Exp:05/03/12			ug/ml	Lot #	Code	Date	uL
O2SI	120002-01	8260B Surr Solution	2000	164585-30465	04-25-12I	04/24/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/26/12	3900
04-26-12P			Exp:	05/03/12			
5.0ug/ml 8260 Surrogate			**Lot**	**APPL Code**	APPL Exp Date	ul	
		50ug/ml 8260 Surrogate		04-26-12Q	05/03/12	200	
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	1800	
04-26-12Q							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:04/24/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01	Volatile Mix 4-3	2000	178651-30410	04-26-12D	05/14/12	500
O2SI	020229-09	Acrolein	10000	188973-30649	04-26-12E	05/30/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	3400

4/26/12
RS

xp.	
ate	ul
03/12	100
08/12	200
08/12	200
08/12	3500
ate	ul
08/12	50
08/12	1950
xp.	
ate	ul
08/12	100
08/12	100
13/12	100
08/12	200
08/12	200
08/12	3300
08/12	100
08/12	3900

4/26/12
RS

04-26-12R							
50ug/ml VOC Std#5							
Exp:05/03/12							
			Conc.		Date	Exp.	
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120016-03-SS	8260 Gases(SS)	2000	178557-29529	04-26-12F	05/03/12	50
O2SI	020145-02-02-	2-CEVE	2000	181404-30009	02-20-12I	05/14/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	1900
04-26-12S							
50ug/ml VOC Std#6							
Exp:05/03/12							
	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	176822-29263	03-22-12L	05/14/12	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27767	03-22-12M	05/18/12	50
O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	184399-30240	04-09-12I	04/05/12	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29614	03-22-12O	06/14/12	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	183795-30439	03-22-12P	06/14/12	100
O2SI	020546-02-SS	Heptane(SS)	1000	185762-30449	03-22-12Q	06/14/12	100
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	1550
04-26-12T							
250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp:05/03/12			Conc.		Date	Exp.	
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
O2SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	163778-29837	03-22-12R	06/14/12	250
O2SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	188974-30651	04-26-12G	05/30/12	50
J&T Brand		Purge & Trap MeOH		K14E06-00590	04/25/12	06/08/12	1700

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

	Expiration Date:		04/28/12							
		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	04-26-12L	04-26-12P	04-26-12H	04-26-12J	04-26-12O	04-26-12M	04-26-12I	04-26-12K	04-26-12N
Code	µg/L	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp.05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12
04-27-12A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a
04-27-12B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a
04-27-12C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a
04-27-12D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a
04-27-12E	50	n/a	n/a	5	5	5	n/a	5	n/a	5
04-27-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10
04-27-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20

4/27/12 RS

5/01/12 RS

250µg/mL TBA	Final Vol
04-26-12Q	w/P&T H2O
Exp:05-03-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

5/01/12 RS

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

	Expiration Date		05/01/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-26-12L	04-26-12P	04-26-12H	04-26-12J	04-26-12O	04-26-12M	04-26-12I	04-26-12K	04-26-12N
Code	µg/L	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp.05-03-12	Exp:05-03-12
04-30-12A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-30-12B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-30-12C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-30-12D	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-30-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-30-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-30-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a
04-30-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a

4/30/12 RS

250µg/mL TAPD	Final Vol
04-26-12Q	w/P&T H2O
Exp:05-03-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

5/01/12 RS

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

	Expiration Date:		05/01/12							
		5µg/mL Vol Std #9	5µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	5µg/mL Vol Std #10	50µg/mL Vol Std #1	50µg/mL Vol Std #2	5µg/mL Vol Std #12
Date	Conc.	04-26-12L	04-26-12P	04-26-12H	04-26-12J	04-26-12O	04-26-12M	04-26-12I	04-26-12K	04-26-12N
Code	µg/L	Exp:05-03-12	Exp:05-03-12	Exp 05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12	Exp:05-03-12
04-30-12I	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	3
04-30-12J	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	5
04-30-12K	1	10	20	n/a	n/a	n/a	10	n/a	n/a	10
04-30-12L	5	n/a	n/a	5	5	10	n/a	5	5	n/a
04-30-12M	10	n/a	n/a	10	10	25	n/a	10	10	n/a
04-30-12N	20	n/a	n/a	20	20	40	n/a	20	20	n/a
04-30-12O	40	n/a	n/a	40	40	80	n/a	40	40	n/a
04-30-12P	100	n/a	n/a	100	100	100	n/a	100	100	n/a

5/01/12 RS

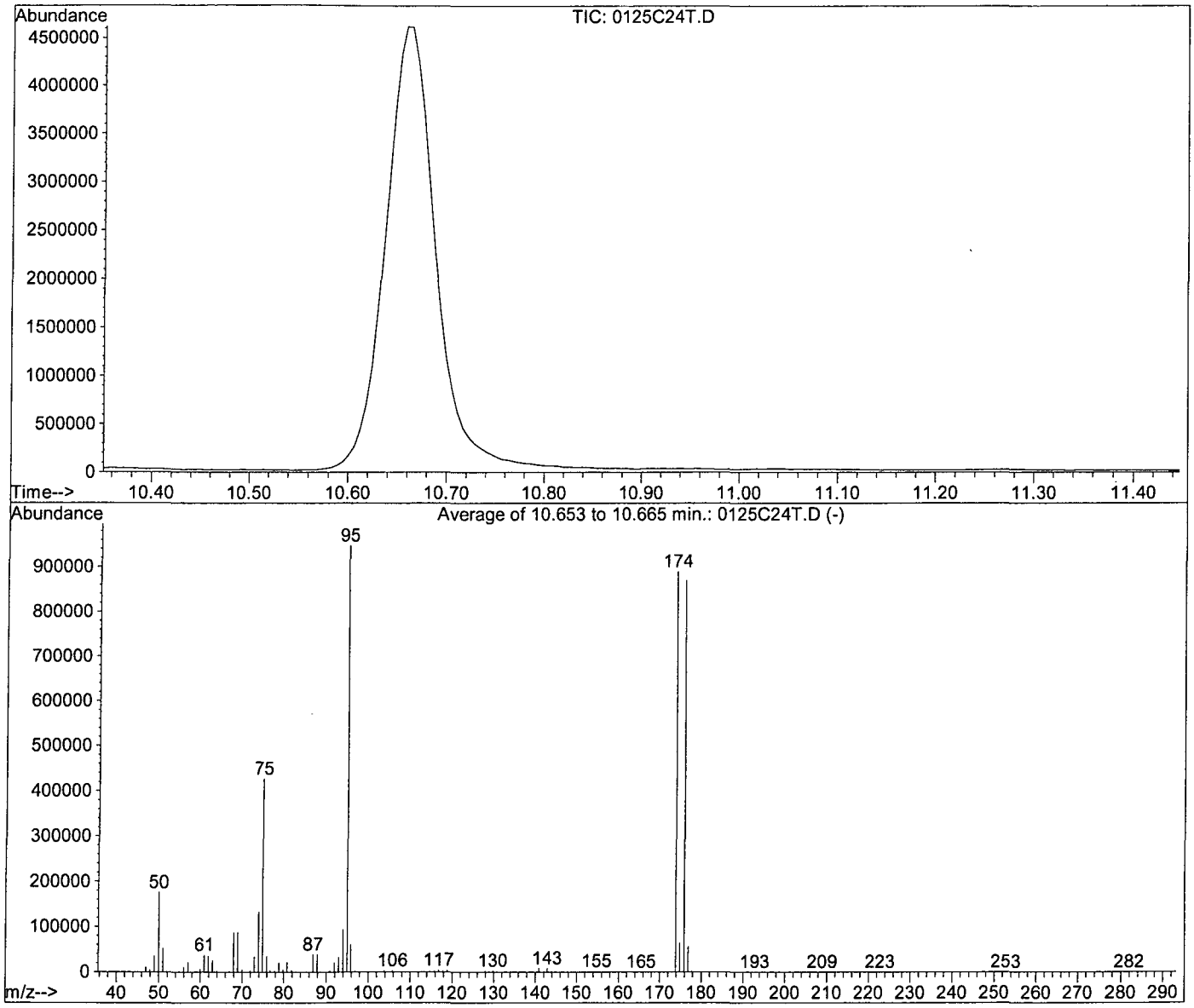
250µg/mL TAPD	Final Vol
04-26-12Q	w/P&T H2O
Exp:05-03-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

5/01/12 RS

Data File : M:\CHICO\DATA\C120125\0125C24T.D
Acq On : 26 Jan 12 16:30
Sample : 25ug/mL BFB Std. 01-12-12
Misc : 2uL

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B



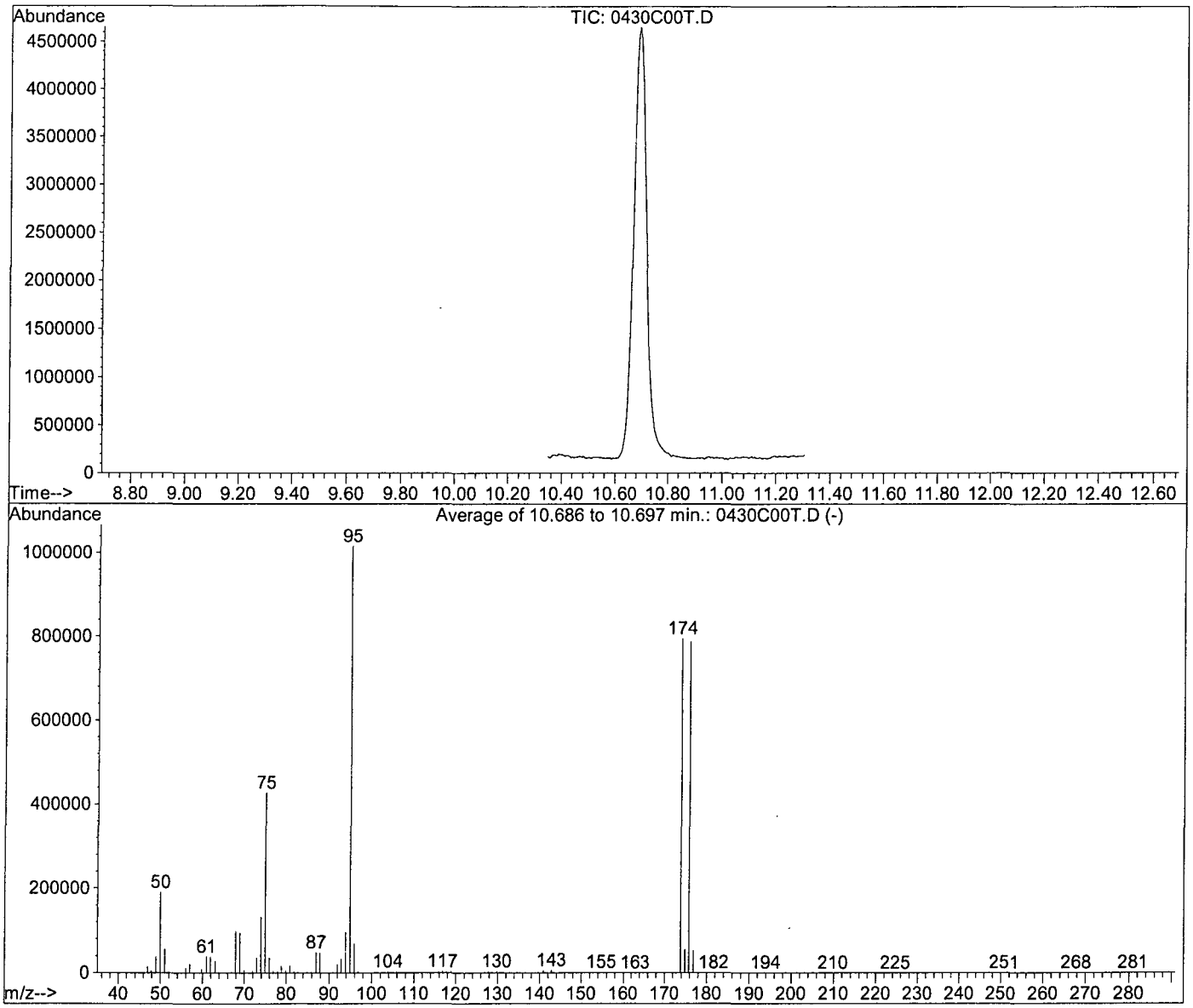
Spectrum Information: Average of 10.653 to 10.665 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	175569	PASS
75	95	30	60	45.1	426726	PASS
95	95	100	100	100.0	947029	PASS
96	95	5	9	6.5	61164	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	93.9	889685	PASS
175	174	5	9	7.3	64552	PASS
176	174	95	101	97.7	869568	PASS
177	176	5	9	6.5	56475	PASS

0125C24T.D CGAS.M Fri Feb 10 11:37:25 2012

Data File : M:\CHICO\DATA\C120420\0430C00T.D Vial: 1
Acq On : 30 Apr 12 9:26 Operator: AS
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B



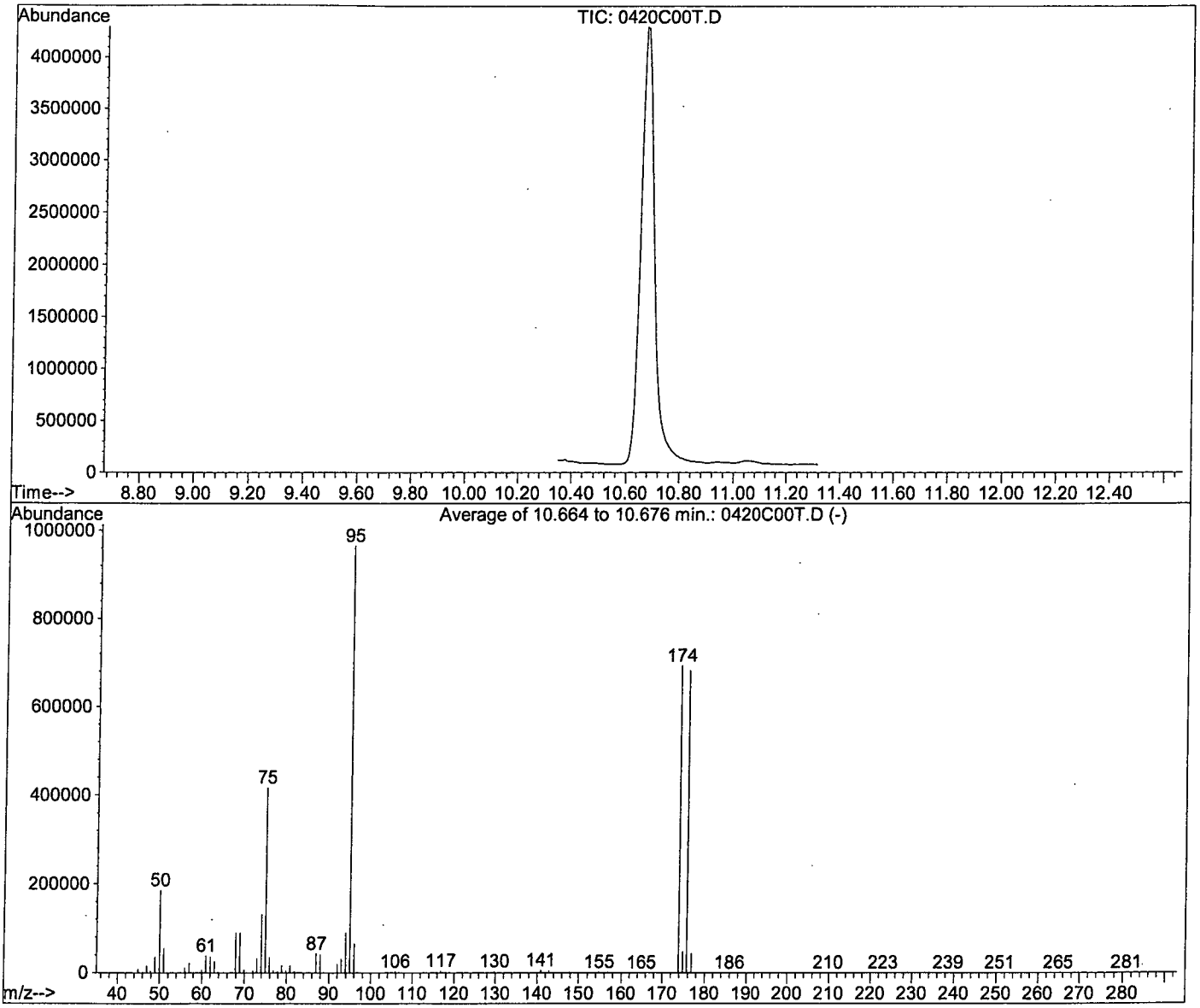
Spectrum Information: Average of 10.686 to 10.697 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	190359	PASS
75	95	30	60	42.0	426833	PASS
95	95	100	100	100.0	1015866	PASS
96	95	5	9	6.7	68317	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.3	795051	PASS
175	174	5	9	7.0	55451	PASS
176	174	95	101	99.0	787388	PASS
177	176	5	9	6.7	52544	PASS

Data File : M:\CHICO\DATA\C120420\0420C00T.D
Acq On : 20 Apr 12 9:25
Sample : 25ug/ml BFB STD 04-10-12
Misc : 2uL

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

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260

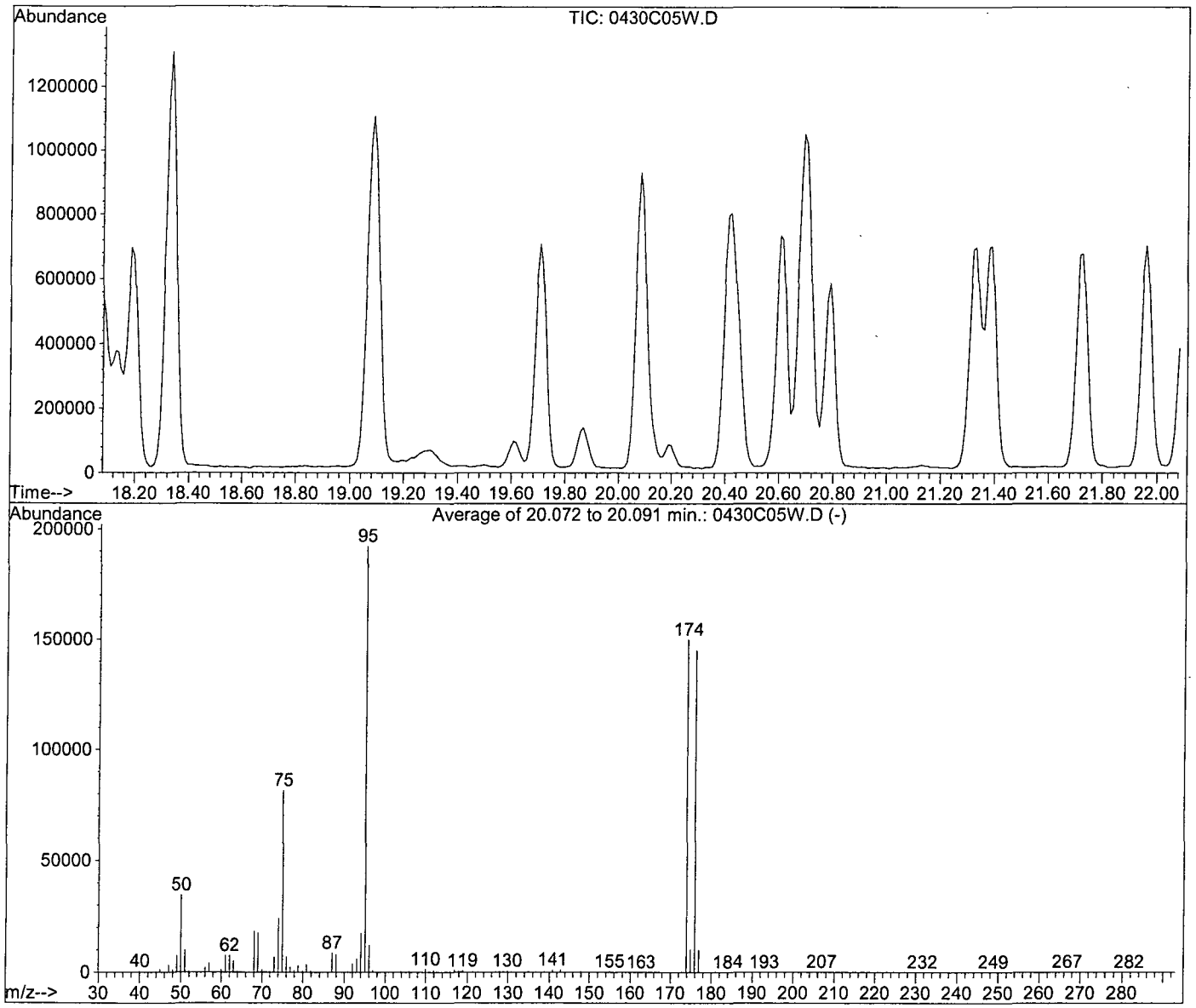


Spectrum Information: Average of 10.664 to 10.676 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	186097	PASS
75	95	30	60	43.2	416746	PASS
95	95	100	100	100.0	964779	PASS
96	95	5	9	6.8	65458	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	71.8	692672	PASS
175	174	5	9	7.1	49035	PASS
176	174	95	101	98.5	682206	PASS
177	176	5	9	6.5	44299	PASS

Data File : M:\CHICO\DATA\C120420\0430C05W.D Vial: 1
Acq On : 30 Apr 12 12:26 Operator: AS
Sample : 25ug/ml BFB STD 04-10-12 Inst : Chico
Misc : 2uL Multiplr: 1.00

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
Title : METHOD 8260



Spectrum Information: Average of 20.072 to 20.091 min.

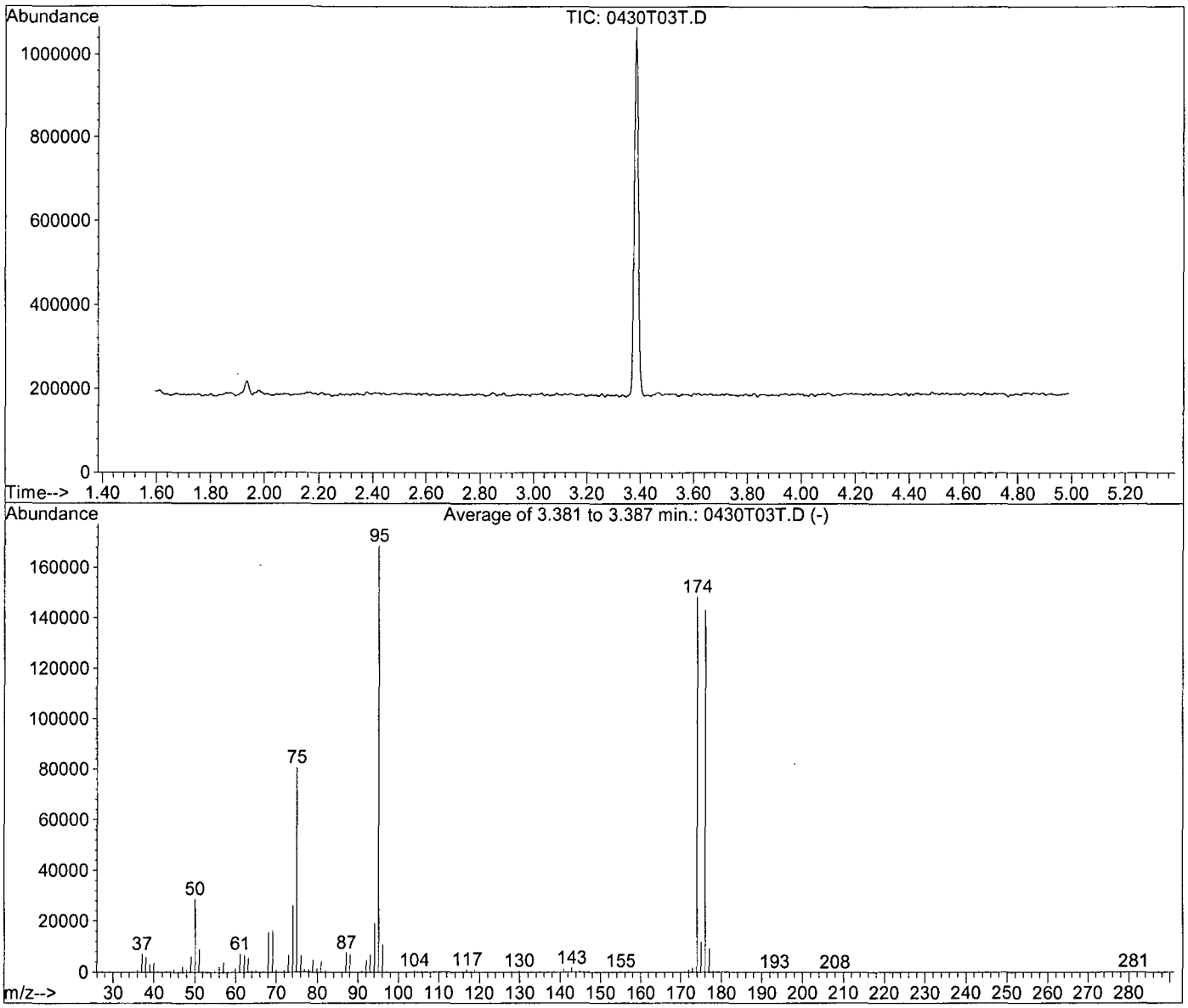
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	34699	PASS
75	95	30	60	42.5	81701	PASS
95	95	100	100	100.0	192405	PASS
96	95	5	9	6.4	12395	PASS
173	174	0.00	2	0.1	189	PASS
174	95	50	100	78.0	150144	PASS
175	174	5	9	6.8	10273	PASS
176	174	95	101	96.9	145443	PASS
177	176	5	9	6.9	10075	PASS

0430C05W.D CALLW3.M Tue May 01 10:38:44 2012

Data File : M:\THOR\DATA\T120430\0430T03T.D
Acq On : 30 Apr 12 9:29
Sample : 5ng- BFB STD 04-10-12
Misc : 2ul

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B



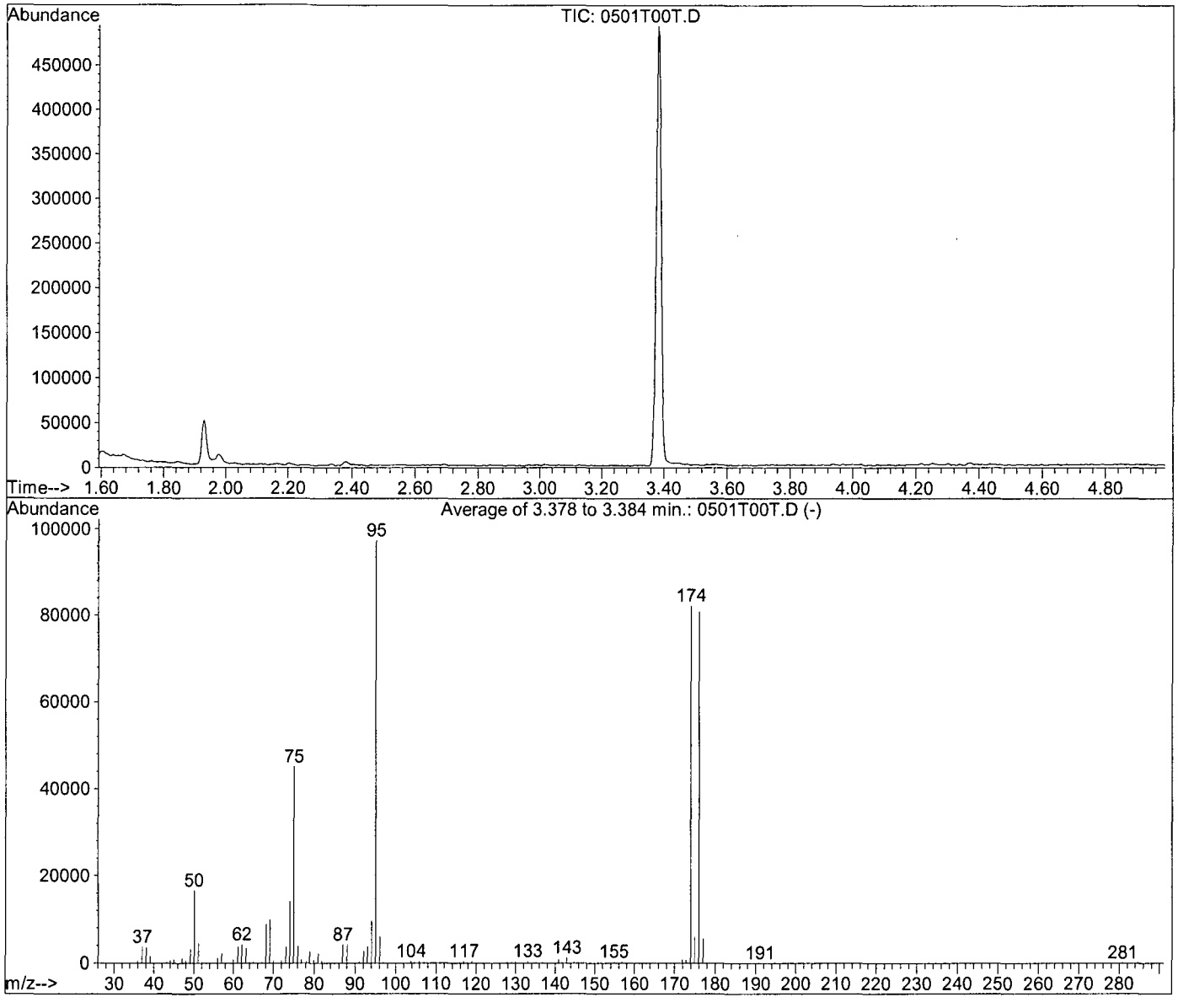
Spectrum Information: Average of 3.381 to 3.387 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	28853	PASS
75	95	30	60	47.9	80816	PASS
95	95	100	100	100.0	168725	PASS
96	95	5	9	6.4	10835	PASS
173	174	0.00	2	1.2	1716	PASS
174	95	50	100	88.1	148565	PASS
175	174	5	9	8.1	11962	PASS
176	174	95	101	96.5	143317	PASS
177	176	5	9	6.4	9209	PASS

Data File : M:\THOR\DATA\T120430\0501T00T.D
Acq On : 1 May 12 8:33
Sample : 5ng- BFB STD 04-10-12
Misc : 2ul

Vial: 1
Operator: DG,RS,HW,ARS,SV
Inst : Thor
Multiplr: 1.00

Method : M:\THOR\DATA\T120430\TALLW.M (RTE Integrator)
Title : METHOD 8260B



Spectrum Information: Average of 3.378 to 3.384 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.0	16567	PASS
75	95	30	60	46.3	45101	PASS
95	95	100	100	100.0	97360	PASS
96	95	5	9	6.2	5996	PASS
173	174	0.00	2	0.8	668	PASS
174	95	50	100	84.5	82237	PASS
175	174	5	9	7.4	6071	PASS
176	174	95	101	98.3	80824	PASS
177	176	5	9	6.9	5568	PASS

Injection Log

Directory: M:\CHICO\DATA\C120125\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0125C24T.D	1	25ug/mL BFB Std. 01-12-12	2uL	26 Jan 12 16:30
2	1	0125C28W.D	1	VOC Mix Marker	Water 10mLw/ IS:12-06-11	26 Jan 12 18:55
3	1	0125C29W.D	1	Vol. Std. 01-26-12@20ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 19:32
4	1	0125C30W.D	1	Vol. Std. 01-26-12@50ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:09
5	1	0125C31W.D	1	Vol. Std. 01-26-12@100ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 20:46
6	1	0125C32W.D	1	Vol. Std. 01-26-12@300ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 21:24
7	1	0125C33W.D	1	Vol. Std. 01-26-12@600ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:01
8	1	0125C34W.D	1	Vol. Std. 01-26-12@800ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 22:38
9	1	0125C35W.D	1	Vol. Std. 01-26-12@1000ug/L	Water 10mLw/ IS:12-06-11	26 Jan 12 23:15
10	1	0125C38W.D	1	Second Source 01-26-12	Water 10mLw/ IS:12-06-11	27 Jan 12 1:06
11	1	0430C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	30 Apr 12 9:26
12	1	0430C02W.D	1	CCV gas @300ug/L	Water 10mL w/IS&S:04-10-12	30 Apr 12 10:35
13	1	0430C03W.D	1	LCS gas @300ug/L	Water 10mL w/IS&S:04-10-12	30 Apr 12 11:12
14	1	0430C12W.D	1	120430A BLK-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 16:46
15	1	0430C13W.D	1	AY60082W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 17:23
16	1	0430C14W.D	1	AY60083W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 18:01
17	1	0430C16W.D	1	AY60080W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 19:15
18	1	0430C17W.D	1	AY60081W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 19:52
19	1	0430C18W.D	1	AY60081W234 GAS MS-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 20:29
20	1	0430C19W.D	1	AY60081W234 GAS MSD-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 21:06

Injection Log

Directory: M:\CHICO\DATA\C120420\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0420C00T.D	1	25ug/ml BFB STD 04-10-12	2uL	20 Apr 12 9:25
2	1	0420C04W.D	1	0.3ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 11:47
3	1	0420C05W.D	1	0.5ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 12:24
4	1	0420C06W.D	1	1.0ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 13:01
5	1	0420C07W.D	1	5.0ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 13:38
6	1	0420C08W.D	1	10ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 14:15
7	1	0420C09W.D	1	20ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 14:52
8	1	0420C10W.D	1	40ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 15:29
9	1	0420C11W.D	1	100ug/L Vol Std 04-20-12	Water 10mL w/IS:04-10-12	20 Apr 12 16:06
10	1	0420C16W.D	1	10ug/L Vol Std 04-20-12 (SS)	Water 10mL w/IS&S:04-10-12	20 Apr 12 19:11
11	1	0430C05W.D	1	25ug/ml BFB STD 04-10-12	2uL	30 Apr 12 12:26
12	1	0430C06W.D	1	10ug/L Vol Std 04-30-12	Water 10mL w/IS&S:04-10-12	30 Apr 12 13:03
13	1	0430C07W.D	1	120430A LCS-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 13:40
14	1	0430C12W.D	1	120430A BLK-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 16:46
15	1	0430C13W.D	1	AY60082W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 17:23
16	1	0430C14W.D	1	AY60083W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 18:01
17	1	0430C16W.D	1	AY60080W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 19:15
18	1	0430C17W.D	1	AY60081W01	Water 10mL w/IS&S:04-10-12	30 Apr 12 19:52
19	1	0430C22W.D	1	AY60081W456 MS-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 22:57
20	1	0430C23W.D	1	AY60081W456 MSD-1WC	Water 10mL w/IS&S:04-10-12	30 Apr 12 23:34

Injection Log

Directory: M:\THOR\DATA\T120430\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0430T03T.D	1	5ng- BFB STD 04-10-12	2ul	30 Apr 12 9:29
2	4	0430T07W.D	1	0.3ug/L VOC STD 4-30-12	10ml w/5ul of IS: 03-26-12	30 Apr 12 11:15
3	5	0430T08W.D	1	0.5ug/L VOC STD 4-30-12	10ml w/5ul of IS: 03-26-12	30 Apr 12 11:43
4	6	0430T09W.D	1	1.0ug/L VOC STD 4-30-12	10ml w/5ul of IS: 03-26-12	30 Apr 12 12:10
5	7	0430T10W.D	1	5.0ug/L VOC STD 4-30-12	10ml w/5ul of IS: 03-26-12	30 Apr 12 12:38
6	8	0430T11W.D	1	10ug/L VOC STD 4-30-12	10ml w/5ul of IS: 03-26-12	30 Apr 12 13:06
7	10	0430T13W.D	1	40ug/L VOC STD 4-30-12	10ml w/5ul of IS&S: 03-26-12	30 Apr 12 14:02
8	11	0430T14W.D	1	100ug/L VOC STD 4-30-12	10ml w/5ul of IS&S: 03-26-12	30 Apr 12 14:29
9	17	0430T20W.D	1	120430A LCS-1WT (SS)	10ml w/5ul of IS&S: 03-26-12	30 Apr 12 17:16
10	1	0501T00T.D	1	5ng- BFB STD 04-10-12	2ul	1 May 12 8:33
11	3	0501T03W.D	1	10ug/L Vol Std 05-01-12	10ml w/5ul of IS&S: 03-26-12	1 May 12 9:52
12	4	0501T04W.D	1	120501A LCS-1WT	10ml w/5ul of IS&S: 03-26-12	1 May 12 10:19
13	6	0501T06W.D	1	120501A BLK-1WT	10ml w/5ul of IS&S: 03-26-12	1 May 12 11:15
14	22	0501T22W.D	1	AY60080W02	10ml w/5ul of IS&S: 03-26-12	1 May 12 18:40

METALS

METALS
QC Summary

APPL, INC.

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6020	LEAD (PB) (DISSOL	0.22 U	0.5	0.22	0.11	ug/L	05/02/12	05/15/12	#602D-120502A-AY60081

Printed: 05/16/12 4:22:58 PM
Metals SC-Blank-REG MDLs

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)	50.0	49.4	98.8	80-120	05/02/12	05/15/12	#602D-120502A-AY60081

Comments: _____

Matrix Spike Recoveries

METALS

APPL ID: **120502W-60081 MS - 166945**

Sample ID: AY60081

Client ID: ES077

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	50.0	ND	44.4	45.4	88.8	90.8	2.2	20	80-120	05/02/12	05/15/12	05/02/12	05/15/12	166945	AY60081

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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES076

APPL ID: AY60080

Sample Collection Date: 04/26/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.71	0.5	0.22	0.11	ug/L	1	05/02/12	05/15/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\054SMPL.D\054SMPL.D#
Date Acquired: May 15 2012 05:55 pm
Operator: NBS
Sample Name: AY60080W08
Misc Info: 120502A-3015
Vial Number: 3205
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	0.00	ug/l	0.00	2332.40	1000	
11 B	42.26	ug/l	46.95	1.53	1000	
23 Na	51330.00	ug/l	57027.63	0.93	25000	>Cal
24 Mg	12020.00	ug/l	13354.22	0.71	50000	
27 Al	6.62	ug/l	7.35	13.81	20000	
39 K	909.20	ug/l	1010.12	1.08	20000	
44 Ca	11480.00	ug/l	12754.28	0.70	50000	
47 Ti	0.56	ug/l	0.62	23.13	1000	
51 V	0.03	ug/l	0.03	4.75	1000	
52 Cr	0.27	ug/l	0.30	3.49	1000	
55 Mn	328.30	ug/l	364.74	1.21	1000	
56 Fe	93.30	ug/l	103.66	1.05	20000	
59 Co	0.36	ug/l	0.40	2.71	1000	
60 Ni	1.14	ug/l	1.27	2.94	1000	
63 Cu	0.66	ug/l	0.74	3.13	1000	
65 Cu	0.68	ug/l	0.75	4.99	1000	
66 Zn	8.58	ug/l	9.53	1.12	1000	
75 As	0.05	ug/l	0.06	34.37	1000	
78 Se	0.05	ug/l	0.05	60.36	1000	
78 Se	1.58	ug/l	1.76	25.03	1000	
88 Sr	110.10	ug/l	122.32	0.58	1000	
88 Sr	106.10	ug/l	117.88	1.62	1000	
95 Mo	0.28	ug/l	0.31	5.38	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	-0.08	ug/l	-0.09	4.79	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.42	ug/l	0.46	5.96	1000	
118 Sn	0.22	ug/l	0.24	5.10	#######	
118 Sn	0.19	ug/l	0.21	21.45	#######	
118 Sn	0.20	ug/l	0.22	3.59	1000	
121 Sb	0.08	ug/l	0.09	6.76	1000	
137 Ba	0.94	ug/l	1.05	3.25	1000	
205 Tl	0.02	ug/l	0.03	5.49	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.64	ug/l	0.71	1.90	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4880270.50	0.59	5898844.00	82.7	70 - 120	
45 Sc	1308516.30	0.90	1645059.60	79.5	70 - 120	
45 Sc	164151.20	0.24	199813.73	82.2	70 - 120	
45 Sc	5623882.50	0.45	6393496.00	88.0	70 - 120	
72 Ge	298193.84	2.48	378142.44	78.9	70 - 120	
72 Ge	109182.09	0.34	131505.81	83.0	70 - 120	
72 Ge	1074773.40	0.80	1254348.10	85.7	70 - 120	
115 In	2277999.00	2.01	2940630.00	77.5	70 - 120	
115 In	1153489.40	1.00	1492805.00	77.3	70 - 120	
115 In	6782867.00	0.64	7962981.00	85.2	70 - 120	
159 Tb	8300647.50	0.78	9734470.00	85.3	70 - 120	
165 Ho	7975140.00	0.54	9318015.00	85.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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: Max Solmssen

Project: LTM Red Hill / 1022-024

ARF: 67622

Sample ID: ES077

APPL ID: AY60081

Sample Collection Date: 04/26/12

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22U	0.5	0.22	0.11	ug/L	1	05/02/12	05/15/12

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\055SMPL.D\055SMPL.D#
Date Acquired: May 15 2012 06:02 pm
Operator: NBS
Sample Name: AY60081W17
Misc Info: 120502A-3015
Vial Number: 3206
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	0.00	ug/l	0.00	47.59	1000	
11 B	28.55	ug/l	31.72	2.46	1000	
23 Na	304600.00	ug/l	338410.60	1.06	25000	>Cal
24 Mg	161200.00	ug/l	179093.20	1.69	50000	>Cal
27 Al	4.69	ug/l	5.22	23.86	20000	
39 K	7518.00	ug/l	8352.50	0.64	20000	
44 Ca	87650.00	ug/l	97379.15	0.53	50000	>Cal
47 Ti	0.15	ug/l	0.17	102.86	1000	
51 V	0.23	ug/l	0.26	4.81	1000	
52 Cr	11.59	ug/l	12.88	0.89	1000	
55 Mn	-0.20	ug/l	-0.22	11.94	1000	
56 Fe	4.21	ug/l	4.67	2.81	20000	
59 Co	1.97	ug/l	2.19	1.47	1000	
60 Ni	5.50	ug/l	6.11	2.78	1000	
63 Cu	0.58	ug/l	0.64	2.28	1000	
65 Cu	0.59	ug/l	0.65	5.63	1000	
66 Zn	9.78	ug/l	10.87	2.15	1000	
75 As	0.10	ug/l	0.11	13.20	1000	
78 Se	2.45	ug/l	2.72	2.04	1000	
78 Se	3.99	ug/l	4.44	4.81	1000	
88 Sr	2103.00	ug/l	2336.43	0.27	1000	>Cal
88 Sr	1868.00	ug/l	2075.35	1.78	1000	>Cal
95 Mo	1.38	ug/l	1.54	4.14	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	-0.07	ug/l	-0.08	4.32	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.18	ug/l	0.20	13.70	1000	
118 Sn	0.21	ug/l	0.24	11.13	#######	
118 Sn	0.24	ug/l	0.27	6.28	#######	
118 Sn	0.21	ug/l	0.23	5.62	1000	
121 Sb	0.19	ug/l	0.21	4.84	1000	
137 Ba	92.36	ug/l	102.61	1.68	1000	
205 Tl	0.02	ug/l	0.02	7.46	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.13	ug/l	-0.15	2.96	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4752110.00	1.56	5898844.00	80.6	70 - 120	
45 Sc	1383036.00	1.90	1645059.60	84.1	70 - 120	
45 Sc	174582.23	0.72	199813.73	87.4	70 - 120	
45 Sc	5815408.50	1.67	6393496.00	91.0	70 - 120	
72 Ge	305346.78	0.54	378142.44	80.7	70 - 120	
72 Ge	108906.43	1.11	131505.81	82.8	70 - 120	
72 Ge	1065758.00	0.20	1254348.10	85.0	70 - 120	
115 In	2255482.80	0.93	2940630.00	76.7	70 - 120	
115 In	1167135.10	0.54	1492805.00	78.2	70 - 120	
115 In	6832604.50	1.42	7962981.00	85.8	70 - 120	
159 Tb	8629629.00	1.63	9734470.00	88.7	70 - 120	
165 Ho	8275114.50	0.91	9318015.00	88.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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: 67622 SDG: 67622

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:39	%R(1)	True CCV1	Found 12:59	%R(1)	True CCV1	Found 13:45	%R(1)	
Lead (Pb)	100	103.5	104	50	47.54	95.1	50	47.12	94.2	P

(1) Control Limits: Metals 90-110

A.P.P.L. INC.
2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.
ARF No: 67622 SDG: 67622
Initial Calibration Source: CPI
Continuing Calibration Source: Environmental Express
Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:39	%R(1)	True CCV1	Found 17:08	%R(1)	True CCV1	Found 18:42	%R(1)	
Lead (Pb)	100	103.5	104	50	46.81	93.6	50	46.22	92.4	P

(1) Control Limits: Metals 90-110

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67622 SDG: 67622

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 05/15/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)								Preparation Blank		M
		C	1	C	2	C	3	C		C			
	12:52		13:06		13:59		17:21		17:35				
Lead (Pb)	.20	U	.20	U	.20	U	.20	U	.20	U			P

A.P.P.L. INC.
3
BLANKS

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67622 SDG: 67622

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 05/15/12

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
	12:52		18:55						17:35		
Lead (Pb)	.20	U	.20	U					.20	U	P

A.P.P.L. INC.
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name:	A.P.P.L. INC.	Contract:	Environet, Inc.
ARF No.:	67622	SDG:	67622
ICP ID Number:	Optimus	ICS Source:	Environmental Express

Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 13:25	Sol AB 13:32	%R(1)
Lead (Pb)		500	0.4616	534.9	107

(1) Control Limits: Metals 80-120

A.P.P.L. INC.

9

ICP SERIAL DILUTION

CLIENT SAMPLE NO.

ES077

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67622 SDG: 67622

Matrix: water

Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	%D	Q	M
Lead (Pb)	-0.146187		-1.013588		NA		

Comments:

05/15/12 18:02 AY60081W17

05/15/12 18:28 AY60081W17-1/5

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\059SMPL.D\059SMPL.D#
Date Acquired: May 15 2012 06:28 pm
Operator: NBS
Sample Name: AY60081W17-1/5
Misc Info: 120502A-3015
Vial Number: 3210
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	0.00	ug/l	0.01	61.66	1000	
11 B	14.12	ug/l	78.45	4.45	1000	
23 Na	61940.00	ug/l	344138.64	1.71	25000	>Cal
24 Mg	33300.00	ug/l	185014.80	0.93	50000	
27 Al	0.87	ug/l	4.84	23.34	20000	
39 K	1480.00	ug/l	8222.88	1.33	20000	
44 Ca	18310.00	ug/l	101730.36	0.57	50000	
47 Ti	0.04	ug/l	0.21	76.49	1000	
51 V	0.14	ug/l	0.78	6.98	1000	
52 Cr	2.43	ug/l	13.52	2.13	1000	
55 Mn	-0.26	ug/l	-1.46	1.77	1000	
56 Fe	1.26	ug/l	7.01	3.93	20000	
59 Co	0.42	ug/l	2.31	5.24	1000	
60 Ni	1.21	ug/l	6.72	4.12	1000	
63 Cu	0.10	ug/l	0.53	12.08	1000	
65 Cu	0.09	ug/l	0.48	6.99	1000	
66 Zn	2.42	ug/l	13.43	4.75	1000	
75 As	0.12	ug/l	0.64	14.34	1000	
78 Se	0.69	ug/l	3.82	6.23	1000	
78 Se	1.99	ug/l	11.03	13.20	1000	
88 Sr	399.30	ug/l	2218.51	0.33	1000	
88 Sr	371.30	ug/l	2062.94	0.37	1000	
95 Mo	0.35	ug/l	1.93	4.52	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.25	ug/l	1.41	13.00	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.04	ug/l	0.21	21.50	1000	
118 Sn	0.51	ug/l	2.85	8.26	#######	
118 Sn	0.41	ug/l	2.27	4.14	#######	
118 Sn	0.31	ug/l	1.75	3.80	1000	
121 Sb	0.33	ug/l	1.84	2.65	1000	
137 Ba	18.30	ug/l	101.67	1.13	1000	
205 Tl	0.10	ug/l	0.55	8.49	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	-0.18	ug/l	-1.01	1.01	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5760893.00	1.22	5898844.00	97.7	70 - 120	
45 Sc	1726878.00	0.41	1645059.60	105.0	70 - 120	
45 Sc	208480.67	1.49	199813.73	104.3	70 - 120	
45 Sc	7066462.00	0.94	6393496.00	110.5	70 - 120	
72 Ge	393472.09	0.57	378142.44	104.1	70 - 120	
72 Ge	134967.17	0.35	131505.81	102.6	70 - 120	
72 Ge	1373650.50	1.90	1254348.10	109.5	70 - 120	
115 In	2880035.00	0.86	2940630.00	97.9	70 - 120	
115 In	1429434.00	1.01	1492805.00	95.8	70 - 120	
115 In	8507059.00	0.52	7962981.00	106.8	70 - 120	
159 Tb	10325602.00	1.06	9734470.00	106.1	70 - 120	
165 Ho	9961358.00	0.96	9318015.00	106.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

A.P.P.L. INC.

5B

POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

ES077

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No.: 67622 SDG: 67622

Analysis Date: 05/15/12 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	255.744		-0.146187		277.500	92.2		

Comments:

05/15/12 18:02 AY60081W17

05/15/12 18:22 AY60081W17-A

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\058SMPL.D\058SMPL.D#
Date Acquired: May 15 2012 06:22 pm
Operator: NBS
Sample Name: AY60081W17-A
Misc Info: 120502A-3015
Vial Number: 3209
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 pm
Sample Type: Sample
Prep Dil Factor: 1.11
Total Dil Factor: 1.11

QC Elements

Element	Conc.		Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	#VALUE!	--------	0	
9 Be	37.73	ug/l	41.92	0.85	1000	
11 B	255.50	ug/l	283.86	1.15	1000	
23 Na	326100.00	ug/l	362297.10	1.22	25000	>Cal
24 Mg	184300.00	ug/l	204757.30	1.03	50000	>Cal
27 Al	1924.00	ug/l	2137.56	1.11	20000	
39 K	12670.00	ug/l	14076.37	1.52	20000	
44 Ca	122600.00	ug/l	136208.60	1.35	50000	>Cal
47 Ti	251.50	ug/l	279.42	1.30	1000	
51 V	245.70	ug/l	272.97	0.89	1000	
52 Cr	245.50	ug/l	272.75	0.95	1000	
55 Mn	240.40	ug/l	267.08	0.27	1000	
56 Fe	913.40	ug/l	1014.79	1.36	20000	
59 Co	220.80	ug/l	245.31	1.16	1000	
60 Ni	216.00	ug/l	239.98	1.18	1000	
63 Cu	206.80	ug/l	229.75	1.12	1000	
65 Cu	206.30	ug/l	229.20	1.73	1000	
66 Zn	410.50	ug/l	456.07	0.83	1000	
75 As	221.20	ug/l	245.75	1.19	1000	
78 Se	179.10	ug/l	198.98	0.94	1000	
78 Se	185.90	ug/l	206.53	0.88	1000	
88 Sr	2360.00	ug/l	2621.96	0.86	1000	>Cal
88 Sr	2092.00	ug/l	2324.21	0.08	1000	>Cal
95 Mo	274.40	ug/l	304.86	1.45	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	77.44	ug/l	86.04	6.14	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	41.62	ug/l	46.24	0.72	1000	
118 Sn	249.40	ug/l	277.08	0.56	#######	
118 Sn	251.80	ug/l	279.75	1.08	#######	
118 Sn	275.40	ug/l	305.97	1.25	1000	
121 Sb	253.60	ug/l	281.75	0.55	1000	
137 Ba	368.40	ug/l	409.29	0.94	1000	
205 Tl	218.20	ug/l	242.42	0.57	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	230.40	ug/l	255.97	0.75	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5233903.00	0.48	5898844.00	88.7	70 - 120	
45 Sc	1599106.10	0.74	1645059.60	97.2	70 - 120	
45 Sc	197506.98	1.50	199813.73	98.8	70 - 120	
45 Sc	6661176.50	0.87	6393496.00	104.2	70 - 120	
72 Ge	351304.50	0.58	378142.44	92.9	70 - 120	
72 Ge	125012.25	2.68	131505.81	95.1	70 - 120	
72 Ge	1204511.90	0.78	1254348.10	96.0	70 - 120	
115 In	2605641.00	0.97	2940630.00	88.6	70 - 120	
115 In	1298259.60	0.30	1492805.00	87.0	70 - 120	
115 In	7714695.00	0.12	7962981.00	96.9	70 - 120	
159 Tb	9802014.00	1.15	9734470.00	100.7	70 - 120	
165 Ho	9337237.00	0.19	9318015.00	100.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\12E15100.B\002CAL
Date Acquired:	May 15 2012 12:05 pm
Operator:	NBS
Sample Name:	Calibration Blank
Misc Info:	
Vial Number:	1102
Current Method:	C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File:	C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update:	May 15 2012 12:02 pm
Sample Type:	CalBlk
Total Dil Factor:	1.00

QC&ISTD Elements

Element		CPS Mean		SD	RSD(%)
6	Li	5898844.00	A	22500.00	0.38
7	(Li)	333658.69	P	589.50	0.18
9	Be	24.45	P	8.39	34.32
11	B	5545.92	P	206.40	3.72
23	Na	133973.09	P	4999.00	3.73
24	Mg	91.11	P	25.02	27.46
27	Al	48.89	P	11.71	23.95
39	K	21762.16	P	16.49	0.08
44	Ca	439.09	P	52.41	11.94
45	Sc	1645060.00	A	7545.00	0.46
45	Sc	199813.70	A	3668.00	1.84
45	Sc	6393496.00	A	82610.00	1.29
47	Ti	0.89	P	1.54	173.25
51	V	19.56	P	5.39	27.56
52	Cr	98.67	P	16.22	16.44
55	Mn	343.12	P	37.81	11.02
56	Fe	1590.33	P	39.34	2.47
59	Co	21.78	P	1.54	7.07
60	Ni	22.22	P	5.39	24.25
63	Cu	211.12	P	33.77	16.00
65	Cu	112.00	P	22.27	19.88
66	Zn	77.78	P	9.36	12.04
72	Ge	378142.50	A	2270.00	0.60
72	Ge	131505.80	A	945.20	0.72
72	Ge	1254348.00	A	9944.00	0.79
75	As	11.44	P	3.36	29.32
78	Se	13.67	P	4.18	30.56
78	Se	86.56	P	6.74	7.78
88	Sr	62.22	P	6.94	11.15
88	Sr	801.16	P	29.13	3.64
95	Mo	161.12	P	16.78	10.42
106	(Cd)	5.56	P	3.85	69.28
107	Ag	878.95	P	65.87	7.49
108	(Cd)	7.78	P	3.85	49.49
111	Cd	10.05	P	12.42	123.52
115	In	2940630.00	A	18500.00	0.63
115	In	1492805.00	A	23590.00	1.58
115	In	7962981.00	A	91040.00	1.14
118	Sn	102.23	P	10.18	9.96
118	Sn	64.45	P	25.46	39.51
118	Sn	305.58	P	55.82	18.27
121	Sb	521.14	P	39.77	7.63
137	Ba	61.11	P	5.09	8.33
159	Tb	9734470.00	A	23130.00	0.24
165	Ho	9318015.00	A	103100.00	1.11
205	Tl	284.46	P	42.99	15.11
206	(Pb)	1296.78	P	12.02	0.93
207	(Pb)	1155.65	P	58.73	5.08
208	Pb	5228.39	P	248.20	4.75

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\003CALS.D\003CALS.D#
Date Acquired: May 15 2012 12:12 pm
Operator: NBS
Sample Name: 120515 Standard 1
Misc Info:
Vial Number: 1103
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:09 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	6101309.00	A	26140.00	0.43	0.0000
7 (Li)	338009.19	P	1733.00	0.51	0.7171
9 Be	550.03	P	85.06	15.47	1.0000
11 B	9064.12	P	252.30	2.78	0.9996
23 Na	97556.89	P	829.00	0.85	0.9999
24 Mg	631.15	P	55.21	8.75	1.0000
27 Al	141.12	P	34.70	24.59	1.0000
39 K	22030.34	P	146.70	0.67	1.0000
44 Ca	421.98	P	21.96	5.20	1.0000
45 Sc	1506071.00	A	22010.00	1.46	0.0000
45 Sc	184273.20	A	2647.00	1.44	0.0000
45 Sc	6260917.00	A	27290.00	0.44	0.0000
47 Ti	8.00	P	2.67	33.34	1.0000
51 V	225.34	P	6.11	2.71	1.0000
52 Cr	284.01	P	8.33	2.93	1.0000
55 Mn	227.56	P	26.00	11.43	1.0000
56 Fe	4653.69	P	6.16	0.13	1.0000
59 Co	240.89	P	7.34	3.05	1.0000
60 Ni	88.45	P	6.58	7.44	1.0000
63 Cu	310.23	P	22.99	7.41	1.0000
65 Cu	150.67	P	8.74	5.80	1.0000
66 Zn	106.67	P	2.31	2.16	0.9999
72 Ge	350705.59	A	3926.00	1.12	0.0000
72 Ge	123678.30	A	2140.00	1.73	0.0000
72 Ge	1219730.00	A	9739.00	0.80	0.0000
75 As	36.11	P	1.35	3.73	1.0000
78 Se	24.33	P	1.45	5.97	1.0000
78 Se	87.22	P	4.83	5.54	0.9999
88 Sr	240.01	P	23.33	9.72	1.0000
88 Sr	2907.07	P	68.07	2.34	0.9999
95 Mo	525.58	P	36.72	6.99	1.0000
106 (Cd)	22.22	P	9.62	43.30	1.0000
107 Ag	731.16	P	66.20	9.05	0.9999
108 (Cd)	10.00	P	8.82	88.19	1.0000
111 Cd	240.66	P	31.17	12.95	1.0000
115 In	2786554.00	A	13160.00	0.47	0.0000
115 In	1387744.00	A	2110.00	0.15	0.0000
115 In	7748996.00	A	43660.00	0.56	0.0000
118 Sn	637.82	P	37.47	5.87	1.0000
118 Sn	382.24	P	19.25	5.04	1.0000
118 Sn	1772.39	P	27.76	1.57	1.0000
121 Sb	6990.88	P	305.10	4.36	0.9999
137 Ba	338.91	P	11.71	3.46	1.0000
159 Tb	9603861.00	A	47670.00	0.50	0.0000
165 Ho	9233028.00	A	19080.00	0.21	0.0000
205 Tl	1846.86	P	102.70	5.56	0.9988
206 (Pb)	902.29	P	13.47	1.49	0.9999
207 (Pb)	761.16	P	44.39	5.83	1.0000
208 Pb	3651.45	P	27.95	0.77	0.9997

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	6101309.00	0.43	5898844.00	103.4	70 -	120	
45 Sc	1506070.90	1.46	1645059.60	91.6	70 -	120	
45 Sc	184273.20	1.44	199813.73	92.2	70 -	120	
45 Sc	6260917.50	0.44	6393496.00	97.9	70 -	120	
72 Ge	350705.63	1.12	378142.44	92.7	70 -	120	
72 Ge	123678.30	1.73	131505.81	94.0	70 -	120	
72 Ge	1219730.30	0.80	1254348.10	97.2	70 -	120	
115 In	2786554.00	0.47	2940630.00	94.8	70 -	120	
115 In	1387743.50	0.15	1492805.00	93.0	70 -	120	
115 In	7748996.00	0.56	7962981.00	97.3	70 -	120	
159 Tb	9603861.00	0.50	9734470.00	98.7	70 -	120	
165 Ho	9233028.00	0.21	9318015.00	99.1	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\004CALS.D\004CALS.D#
Date Acquired: May 15 2012 12:18 pm
Operator: NBS
Sample Name: 120515 Standard 2
Misc Info:
Vial Number: 1104
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:16 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	6043304.00	A	68990.00	1.14	0.0000
7 (Li)	340148.50	P	2886.00	0.85	0.7747
9 Be	4599.74	P	153.60	3.34	1.0000
11 B	10852.06	P	93.77	0.86	0.9996
23 Na	103774.70	P	85.13	0.08	0.9992
24 Mg	5494.53	P	69.63	1.27	1.0000
27 Al	900.06	P	31.80	3.53	1.0000
39 K	24188.08	P	108.00	0.45	1.0000
44 Ca	724.59	P	21.11	2.91	1.0000
45 Sc	1507378.00	A	26910.00	1.79	0.0000
45 Sc	184608.70	A	3387.00	1.83	0.0000
45 Sc	6294976.00	A	103700.00	1.65	0.0000
47 Ti	40.00	P	3.53	8.82	1.0000
51 V	1288.52	P	42.01	3.26	1.0000
52 Cr	1526.77	P	14.85	0.97	1.0000
55 Mn	1085.39	P	67.19	6.19	1.0000
56 Fe	28210.95	P	215.30	0.76	1.0000
59 Co	2069.51	P	73.35	3.54	1.0000
60 Ni	554.68	P	14.85	2.68	1.0000
63 Cu	1633.00	P	43.09	2.64	1.0000
65 Cu	797.81	P	28.11	3.52	1.0000
66 Zn	367.57	P	28.01	7.62	0.9999
72 Ge	352597.31	A	4986.00	1.41	0.0000
72 Ge	122389.70	A	2016.00	1.65	0.0000
72 Ge	1232491.00	A	13360.00	1.08	0.0000
75 As	230.89	P	13.80	5.98	1.0000
78 Se	141.00	P	1.20	0.85	1.0000
78 Se	112.11	P	0.69	0.62	0.9999
88 Sr	1919.09	P	104.50	5.45	1.0000
88 Sr	21963.12	P	162.70	0.74	0.9999
95 Mo	3841.77	P	52.33	1.36	1.0000
106 (Cd)	192.23	P	21.43	11.15	1.0000
107 Ag	5076.64	P	28.73	0.57	0.9999
108 (Cd)	150.01	P	55.68	37.12	1.0000
111 Cd	2052.80	P	138.90	6.77	1.0000
115 In	2755161.00	A	5700.00	0.21	0.0000
115 In	1378881.00	A	17280.00	1.25	0.0000
115 In	7885306.00	A	68520.00	0.87	0.0000
118 Sn	2391.39	P	85.02	3.56	1.0000
118 Sn	1273.44	P	60.28	4.73	1.0000
118 Sn	6642.91	P	104.10	1.57	1.0000
121 Sb	12181.26	P	215.30	1.77	0.9999
137 Ba	2947.09	P	110.20	3.74	1.0000
159 Tb	9646177.00	A	33500.00	0.35	0.0000
165 Ho	9214645.00	A	26310.00	0.29	0.0000
205 Tl	15898.94	P	167.40	1.05	0.9988
206 (Pb)	5603.61	P	109.10	1.95	0.9999
207 (Pb)	4849.95	P	68.37	1.41	1.0000
208 Pb	22469.44	P	245.20	1.09	0.9997

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	6043304.00	1.14	5898844.00	102.4	70 -	120	
45 Sc	1507378.00	1.79	1645059.60	91.6	70 -	120	
45 Sc	184608.72	1.83	199813.73	92.4	70 -	120	
45 Sc	6294976.00	1.65	6393496.00	98.5	70 -	120	
72 Ge	352597.31	1.41	378142.44	93.2	70 -	120	
72 Ge	122389.74	1.65	131505.81	93.1	70 -	120	
72 Ge	1232491.50	1.08	1254348.10	98.3	70 -	120	
115 In	2755160.80	0.21	2940630.00	93.7	70 -	120	
115 In	1378881.30	1.25	1492805.00	92.4	70 -	120	
115 In	7885306.50	0.87	7962981.00	99.0	70 -	120	
159 Tb	9646177.00	0.35	9734470.00	99.1	70 -	120	
165 Ho	9214645.00	0.29	9318015.00	98.9	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\005CALS.D\005CALS.D#
Date Acquired: May 15 2012 12:25 pm
Operator: NBS
Sample Name: 120515 Standard 3
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:22 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	6108963.00	A	102200.00	1.67	0.0000
7 (Li)	339338.00	P	3342.00	0.98	0.8581
9 Be	226102.59	P	1571.00	0.69	1.0000
11 B	166131.20	P	963.00	0.58	0.9996
23 Na	366097.41	P	2149.00	0.59	0.9991
24 Mg	267062.09	P	1427.00	0.53	1.0000
27 Al	41424.05	P	326.70	0.79	1.0000
39 K	149814.00	P	815.60	0.54	1.0000
44 Ca	16590.20	P	145.30	0.88	1.0000
45 Sc	1526795.00	A	26640.00	1.74	0.0000
45 Sc	185424.59	A	2903.00	1.57	0.0000
45 Sc	6251655.00	A	23820.00	0.38	0.0000
47 Ti	2102.40	P	51.65	2.46	1.0000
51 V	58962.50	P	438.50	0.74	1.0000
52 Cr	70465.35	P	590.60	0.84	1.0000
55 Mn	47457.75	P	249.80	0.53	1.0000
56 Fe	1350280.00	A	21880.00	1.62	1.0000
59 Co	102576.50	P	143.50	0.14	1.0000
60 Ni	25848.81	P	194.70	0.75	1.0000
63 Cu	71318.63	P	534.60	0.75	1.0000
65 Cu	34901.58	P	173.10	0.50	1.0000
66 Zn	14401.51	P	261.80	1.82	0.9999
72 Ge	345276.81	A	6123.00	1.77	0.0000
72 Ge	122445.90	A	2161.00	1.76	0.0000
72 Ge	1223457.00	A	18530.00	1.51	0.0000
75 As	9949.32	P	22.35	0.22	1.0000
78 Se	6344.96	P	99.30	1.57	1.0000
78 Se	1441.74	P	29.19	2.02	0.9999
88 Sr	88085.90	P	1496.00	1.70	1.0000
88 Sr	1132356.00	A	2430.00	0.21	0.9999
95 Mo	180247.50	P	2023.00	1.12	1.0000
106 (Cd)	9334.52	P	93.41	1.00	1.0000
107 Ag	236093.50	P	1145.00	0.48	1.0000
108 (Cd)	6901.92	P	103.40	1.50	1.0000
111 Cd	100409.70	P	1493.00	1.49	1.0000
115 In	2751062.00	A	25580.00	0.93	0.0000
115 In	1391819.00	A	27440.00	1.97	0.0000
115 In	7801395.00	A	116300.00	1.49	0.0000
118 Sn	95042.38	P	1337.00	1.41	1.0000
118 Sn	52281.77	P	558.60	1.07	1.0000
118 Sn	281159.31	P	1887.00	0.67	1.0000
121 Sb	341175.81	P	4858.00	1.42	0.9999
137 Ba	138940.70	P	927.70	0.67	1.0000
159 Tb	9601994.00	A	43530.00	0.45	0.0000
165 Ho	9191847.00	A	62100.00	0.68	0.0000
205 Tl	758971.69	P	3794.00	0.50	0.9988
206 (Pb)	263077.31	P	2107.00	0.80	0.9999
207 (Pb)	221468.09	P	1147.00	0.52	1.0000
208 Pb	1038808.00	P	2015.00	0.19	0.9997

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	6108963.00	1.67	5898844.00	103.6	70 -	120	
45 Sc	1526794.80	1.74	1645059.60	92.8	70 -	120	
45 Sc	185424.64	1.57	199813.73	92.8	70 -	120	
45 Sc	6251655.50	0.38	6393496.00	97.8	70 -	120	
72 Ge	345276.78	1.77	378142.44	91.3	70 -	120	
72 Ge	122445.94	1.76	131505.81	93.1	70 -	120	
72 Ge	1223457.50	1.51	1254348.10	97.5	70 -	120	
115 In	2751061.80	0.93	2940630.00	93.6	70 -	120	
115 In	1391819.40	1.97	1492805.00	93.2	70 -	120	
115 In	7801394.50	1.49	7962981.00	98.0	70 -	120	
159 Tb	9601994.00	0.45	9734470.00	98.6	70 -	120	
165 Ho	9191847.00	0.68	9318015.00	98.6	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\006CALS.D\006CALS.D#
Date Acquired: May 15 2012 12:32 pm
Operator: NBS
Sample Name: 120515 Standard 4
Misc Info:
Vial Number: 1106
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:29 pm
Sample Type: CalStd
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean		SD	RSD(%)	Cal Coef
6 Li	6008208.00	A	89670.00	1.49	0.0000
7 (Li)	334620.19	P	4017.00	1.20	0.8658
9 Be	446011.59	P	4462.00	1.00	0.9999
11 B	335672.09	P	7416.00	2.21	0.9996
23 Na	632896.88	P	2083.00	0.33	0.9984
24 Mg	528648.13	P	3420.00	0.65	1.0000
27 Al	81685.58	P	613.10	0.75	1.0000
39 K	274444.31	P	1312.00	0.48	1.0000
44 Ca	32856.59	P	630.90	1.92	1.0000
45 Sc	1516787.00	A	5138.00	0.34	0.0000
45 Sc	184322.80	A	979.70	0.53	0.0000
45 Sc	6206968.00	A	55440.00	0.89	0.0000
47 Ti	4123.74	P	56.06	1.36	1.0000
51 V	114653.80	P	470.60	0.41	1.0000
52 Cr	137706.30	P	1159.00	0.84	1.0000
55 Mn	93217.48	P	222.70	0.24	1.0000
56 Fe	2625759.00	A	27010.00	1.03	1.0000
59 Co	201151.09	P	1257.00	0.62	1.0000
60 Ni	50939.12	P	134.50	0.26	1.0000
63 Cu	140585.70	P	925.20	0.66	1.0000
65 Cu	68499.24	P	470.70	0.69	1.0000
66 Zn	27698.54	P	213.90	0.77	1.0000
72 Ge	348911.19	A	1046.00	0.30	0.0000
72 Ge	121167.10	A	2116.00	1.75	0.0000
72 Ge	1223353.00	A	3999.00	0.33	0.0000
75 As	19373.38	P	35.64	0.18	1.0000
78 Se	12540.33	P	112.10	0.89	0.9999
78 Se	2731.38	P	33.39	1.22	0.9999
88 Sr	175432.50	P	293.20	0.17	1.0000
88 Sr	2224761.00	A	9169.00	0.41	1.0000
95 Mo	357647.09	P	1157.00	0.32	1.0000
106 (Cd)	17991.95	P	256.80	1.43	0.9999
107 Ag	463959.00	P	4441.00	0.96	1.0000
108 (Cd)	13808.29	P	195.50	1.42	0.9996
111 Cd	196712.09	P	1074.00	0.55	0.9999
115 In	2737937.00	A	14520.00	0.53	0.0000
115 In	1360832.00	A	877.60	0.06	0.0000
115 In	7654715.00	A	29110.00	0.38	0.0000
118 Sn	189264.80	P	1127.00	0.60	1.0000
118 Sn	103244.20	P	625.60	0.61	0.9999
118 Sn	550887.81	P	474.30	0.09	1.0000
121 Sb	661353.63	P	2544.00	0.38	0.9999
137 Ba	273682.81	P	3893.00	1.42	0.9999
159 Tb	9491495.00	A	47490.00	0.50	0.0000
165 Ho	9135682.00	A	129900.00	1.42	0.0000
205 Tl	1683438.00	A	7324.00	0.44	0.9984
206 (Pb)	516523.00	P	577.20	0.11	0.9998
207 (Pb)	434959.69	P	1440.00	0.33	0.9997
208 Pb	2161809.00	A	10970.00	0.51	0.9996

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	6008207.50	1.49	5898844.00	101.9	70 -	120	
45 Sc	1516787.00	0.34	1645059.60	92.2	70 -	120	
45 Sc	184322.81	0.53	199813.73	92.2	70 -	120	
45 Sc	6206968.00	0.89	6393496.00	97.1	70 -	120	
72 Ge	348911.16	0.30	378142.44	92.3	70 -	120	
72 Ge	121167.13	1.75	131505.81	92.1	70 -	120	
72 Ge	1223352.60	0.33	1254348.10	97.5	70 -	120	
115 In	2737937.00	0.53	2940630.00	93.1	70 -	120	
115 In	1360831.60	0.06	1492805.00	91.2	70 -	120	
115 In	7654714.50	0.38	7962981.00	96.1	70 -	120	
159 Tb	9491495.00	0.50	9734470.00	97.5	70 -	120	
165 Ho	9135682.00	1.42	9318015.00	98.0	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\007_QCS.D\007_QCS.D#
Date Acquired: May 15 2012 12:39 pm
Operator: NBS
Sample Name: ICV 120515
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	100.20	ug/l	1.35	100.00	90 - 110	
11 B	102.30	ug/l	2.10	100.00	90 - 110	
23 Na	2490.00	ug/l	2.03	2500.00	90 - 110	
24 Mg	2444.00	ug/l	1.10	2500.00	90 - 110	
27 Al	2432.00	ug/l	1.27	2500.00	90 - 110	
39 K	2472.00	ug/l	1.98	2500.00	90 - 110	
44 Ca	2475.00	ug/l	2.64	2500.00	90 - 110	
47 Ti	98.06	ug/l	4.42	100.00	90 - 110	
51 V	102.30	ug/l	2.81	100.00	90 - 110	
52 Cr	102.00	ug/l	2.07	100.00	90 - 110	
55 Mn	102.00	ug/l	2.09	100.00	90 - 110	
56 Fe	2438.00	ug/l	2.46	2500.00	90 - 110	
59 Co	99.04	ug/l	2.26	100.00	90 - 110	
60 Ni	101.20	ug/l	2.09	100.00	90 - 110	
63 Cu	98.74	ug/l	1.57	100.00	90 - 110	
65 Cu	100.00	ug/l	1.30	100.00	90 - 110	
66 Zn	102.50	ug/l	1.33	100.00	90 - 110	
75 As	99.90	ug/l	0.38	100.00	90 - 110	
78 Se	103.70	ug/l	0.05	100.00	90 - 110	
78 Se	102.00	ug/l	0.51	100.00	90 - 110	
88 Sr	98.64	ug/l	1.14	100.00	90 - 110	
88 Sr	99.26	ug/l	0.11	100.00	90 - 110	
95 Mo	99.39	ug/l	0.53	100.00	90 - 110	
106 (Cd)	--------	ug/l	--------	100.00	90 - 110	
107 Ag	50.41	ug/l	0.50	50.00	90 - 110	
108 (Cd)	--------	ug/l	--------	100.00	90 - 110	
111 Cd	101.20	ug/l	0.74	100.00	90 - 110	
118 Sn	48.18	ug/l	10.08	50.00	90 - 110	
118 Sn	43.11	ug/l	3.08	50.00	90 - 110	Fail
118 Sn	47.34	ug/l	8.86	50.00	90 - 110	
121 Sb	105.10	ug/l	0.48	100.00	90 - 110	
137 Ba	99.60	ug/l	0.31	100.00	90 - 110	
205 Tl	103.00	ug/l	1.24	100.00	90 - 110	
206 (Pb)	--------	ug/l	--------	100.00	90 - 110	
207 (Pb)	--------	ug/l	--------	100.00	90 - 110	
208 Pb	103.50	ug/l	0.50	100.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6011030.50	1.41	5898844.00	101.9	70 - 120	
45 Sc	1496604.50	0.60	1645059.60	91.0	70 - 120	
45 Sc	184571.73	2.14	199813.73	92.4	70 - 120	
45 Sc	6209798.00	0.87	6393496.00	97.1	70 - 120	
72 Ge	343935.25	1.40	378142.44	91.0	70 - 120	
72 Ge	122277.31	1.06	131505.81	93.0	70 - 120	
72 Ge	1223418.50	2.18	1254348.10	97.5	70 - 120	
115 In	2679962.50	0.74	2940630.00	91.1	70 - 120	
115 In	1359451.30	0.14	1492805.00	91.1	70 - 120	
115 In	7636266.00	0.41	7962981.00	95.9	70 - 120	
159 Tb	9399534.00	1.26	9734470.00	96.6	70 - 120	
165 Ho	9075525.00	0.75	9318015.00	97.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\009_CCB.D\009_CCB.D#
Date Acquired: May 15 2012 12:52 pm
Operator: NBS
Sample Name: ICB 120515
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#######	
9 Be	0.00 ug/l	89.58	0.12	
11 B	1.16 ug/l	10.91	15.00	
23 Na	427.90 ug/l	7.66	77.10	Fail
24 Mg	-0.05 ug/l	138.26	7.50	
27 Al	-0.07 ug/l	294.97	3.96	
39 K	11.83 ug/l	34.70	19.20	
44 Ca	-10.02 ug/l	43.78	90.00	
47 Ti	-0.01 ug/l	173.23	0.78	
51 V	0.00 ug/l	315.94	0.21	
52 Cr	0.01 ug/l	114.84	0.12	
55 Mn	-0.08 ug/l	48.11	0.18	
56 Fe	-0.07 ug/l	44.13	40.80	
59 Co	0.00 ug/l	29668.00	0.09	
60 Ni	0.01 ug/l	168.61	0.48	
63 Cu	-0.04 ug/l	1.06	0.39	
65 Cu	-0.04 ug/l	26.74	0.39	
66 Zn	0.06 ug/l	9.01	6.90	
75 As	0.01 ug/l	173.42	0.27	
78 Se	0.00 ug/l	224.29	0.30	
78 Se	0.11 ug/l	337.28	0.30	
88 Sr	0.01 ug/l	122.13	0.03	
88 Sr	0.00 ug/l	2224.60	0.03	
95 Mo	0.04 ug/l	8.66	0.21	
106 (Cd)	-------- ug/l	--------	#######	
107 Ag	-0.07 ug/l	6.15	0.09	
108 (Cd)	-------- ug/l	--------	#######	
111 Cd	0.01 ug/l	45.57	0.06	
118 Sn	0.03 ug/l	24.92	#######	
118 Sn	0.03 ug/l	89.84	#######	
118 Sn	0.02 ug/l	53.06	0.30	
121 Sb	0.00 ug/l	139.63	0.03	
137 Ba	-0.01 ug/l	50.12	0.12	
205 Tl	0.01 ug/l	11.43	0.03	
206 (Pb)	-------- ug/l	--------	#######	
207 (Pb)	-------- ug/l	--------	#######	
208 Pb	-0.02 ug/l	16.18	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5725820.00	0.76	5898844.00	97.1	70 - 120	
45 Sc	1623404.10	0.38	1645059.60	98.7	70 - 120	
45 Sc	203442.14	0.20	199813.73	101.8	70 - 120	
45 Sc	6359714.50	0.23	6393496.00	99.5	70 - 120	
72 Ge	373881.13	1.09	378142.44	98.9	70 - 120	
72 Ge	132098.20	1.48	131505.81	100.5	70 - 120	
72 Ge	1233844.80	0.31	1254348.10	98.4	70 - 120	
115 In	2952523.30	0.47	2940630.00	100.4	70 - 120	
115 In	1477135.30	1.56	1492805.00	99.0	70 - 120	
115 In	7896078.50	0.60	7962981.00	99.2	70 - 120	
159 Tb	9559582.00	0.39	9734470.00	98.2	70 - 120	
165 Ho	9188241.00	1.27	9318015.00	98.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\010_CCV.D\010_CCV.D#
Date Acquired: May 15 2012 12:59 pm
Operator: NBS
Sample Name: CCV 120515
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	49.56	ug/l	1.59	50.00	90 -	110	
11 B	49.73	ug/l	0.69	50.00	90 -	110	
23 Na	1140.00	ug/l	1.58	1250.00	90 -	110	
24 Mg	2485.00	ug/l	0.77	2500.00	90 -	110	
27 Al	997.50	ug/l	1.14	1000.00	90 -	110	
39 K	1009.00	ug/l	0.90	1000.00	90 -	110	
44 Ca	2519.00	ug/l	1.45	2500.00	90 -	110	
47 Ti	50.51	ug/l	2.53	50.00	90 -	110	
51 V	49.56	ug/l	0.60	50.00	90 -	110	
52 Cr	49.25	ug/l	0.54	50.00	90 -	110	
55 Mn	49.90	ug/l	0.72	50.00	90 -	110	
56 Fe	1010.00	ug/l	1.13	1000.00	90 -	110	
59 Co	49.41	ug/l	0.95	50.00	90 -	110	
60 Ni	49.20	ug/l	0.22	50.00	90 -	110	
63 Cu	49.82	ug/l	0.56	50.00	90 -	110	
65 Cu	49.74	ug/l	0.89	50.00	90 -	110	
66 Zn	50.79	ug/l	1.58	50.00	90 -	110	
75 As	50.13	ug/l	1.01	50.00	90 -	110	
78 Se	50.19	ug/l	2.93	50.00	90 -	110	
78 Se	49.26	ug/l	0.37	50.00	90 -	110	
88 Sr	50.33	ug/l	1.06	50.00	90 -	110	
88 Sr	50.27	ug/l	1.60	50.00	90 -	110	
95 Mo	50.21	ug/l	0.41	50.00	90 -	110	
106 (Cd)	--------	ug/l	--------	50.00	90 -	110	
107 Ag	24.99	ug/l	1.43	25.00	90 -	110	
108 (Cd)	--------	ug/l	--------	50.00	90 -	110	
111 Cd	50.32	ug/l	0.61	50.00	90 -	110	
118 Sn	49.41	ug/l	0.76	---	##### -	#####	
118 Sn	49.85	ug/l	0.61	---	##### -	#####	
118 Sn	49.66	ug/l	1.45	50.00	90 -	110	
121 Sb	50.23	ug/l	0.47	50.00	90 -	110	
137 Ba	49.72	ug/l	1.24	50.00	90 -	110	
205 Tl	45.66	ug/l	0.73	50.00	90 -	110	
206 (Pb)	--------	ug/l	--------	50.00	90 -	110	
207 (Pb)	--------	ug/l	--------	50.00	90 -	110	
208 Pb	47.54	ug/l	0.18	50.00	90 -	110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)		Flag
6 Li	5938637.00	1.35	5898844.00	100.7	70 -	120	
45 Sc	1525607.60	1.02	1645059.60	92.7	70 -	120	
45 Sc	188244.89	0.91	199813.73	94.2	70 -	120	
45 Sc	6258678.00	0.45	6393496.00	97.9	70 -	120	
72 Ge	348013.88	0.52	378142.44	92.0	70 -	120	
72 Ge	125028.47	0.56	131505.81	95.1	70 -	120	
72 Ge	1231979.00	1.24	1254348.10	98.2	70 -	120	
115 In	2738923.00	0.65	2940630.00	93.1	70 -	120	
115 In	1382185.60	0.72	1492805.00	92.6	70 -	120	
115 In	7740384.50	0.87	7962981.00	97.2	70 -	120	
159 Tb	9532123.00	0.34	9734470.00	97.9	70 -	120	
165 Ho	9129660.00	0.70	9318015.00	98.0	70 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\011_CCB.D\011_CCB.D#
Date Acquired:	May 15 2012 01:06 pm
Operator:	NBS
Sample Name:	CCB 120515
Misc Info:	
Vial Number:	1102
Current Method:	C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File:	C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update:	May 15 2012 12:36 pm
Sample Type:	CCB
Total Dil Factor:	1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	-------- ug/l	--------	#######	
9 Be	0.00 ug/l	74.25	0.12	
11 B	1.37 ug/l	6.50	15.00	
23 Na	198.90 ug/l	18.66	77.10	Fail
24 Mg	-0.18 ug/l	115.56	7.50	
27 Al	-0.19 ug/l	330.40	3.96	
39 K	4.24 ug/l	105.50	19.20	
44 Ca	-9.35 ug/l	36.21	90.00	
47 Ti	0.01 ug/l	300.10	0.78	
51 V	0.00 ug/l	297.63	0.21	
52 Cr	0.00 ug/l	275.57	0.12	
55 Mn	-0.09 ug/l	16.71	0.18	
56 Fe	-0.02 ug/l	102.84	40.80	
59 Co	0.01 ug/l	98.20	0.09	
60 Ni	0.00 ug/l	919.92	0.48	
63 Cu	-0.04 ug/l	35.04	0.39	
65 Cu	-0.06 ug/l	9.65	0.39	
66 Zn	0.01 ug/l	630.92	6.90	
75 As	0.01 ug/l	31.28	0.27	
78 Se	0.02 ug/l	43.74	0.30	
78 Se	-0.22 ug/l	35.59	0.30	
88 Sr	0.02 ug/l	15.38	0.03	
88 Sr	0.00 ug/l	47.95	0.03	
95 Mo	0.07 ug/l	8.68	0.21	
106 (Cd)	-------- ug/l	--------	#######	
107 Ag	-0.07 ug/l	2.94	0.09	
108 (Cd)	-------- ug/l	--------	#######	
111 Cd	0.01 ug/l	81.56	0.06	
118 Sn	0.09 ug/l	15.09	#######	
118 Sn	0.07 ug/l	24.53	#######	
118 Sn	0.06 ug/l	5.80	0.30	
121 Sb	0.13 ug/l	15.16	0.03	Fail
137 Ba	0.00 ug/l	194.53	0.12	
205 Tl	0.01 ug/l	12.42	0.03	
206 (Pb)	-------- ug/l	--------	#######	
207 (Pb)	-------- ug/l	--------	#######	
208 Pb	-0.03 ug/l	19.32	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5616480.50	1.36	5898844.00	95.2	70 - 120	
45 Sc	1637368.30	1.03	1645059.60	99.5	70 - 120	
45 Sc	205051.63	1.50	199813.73	102.6	70 - 120	
45 Sc	6386352.50	0.45	6393496.00	99.9	70 - 120	
72 Ge	370735.47	1.77	378142.44	98.0	70 - 120	
72 Ge	132628.97	1.99	131505.81	100.9	70 - 120	
72 Ge	1233275.10	0.39	1254348.10	98.3	70 - 120	
115 In	2912124.30	0.17	2940630.00	99.0	70 - 120	
115 In	1473825.30	0.88	1492805.00	98.7	70 - 120	
115 In	7754087.00	0.83	7962981.00	97.4	70 - 120	
159 Tb	9530745.00	0.43	9734470.00	97.9	70 - 120	
165 Ho	9097666.00	0.92	9318015.00	97.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\012SMPL.D\012SMPL.D#
Date Acquired: May 15 2012 01:12 pm
Operator: NBS
Sample Name: LDR-1000ppb 120515
Misc Info:
Vial Number: 2101
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	972.80	ug/l	972.80	0.56	1000	
11 B	1040.00	ug/l	1040.00	0.39	1000	>Cal
23 Na	27630.00	ug/l	27630.00	2.96	25000	>Cal
24 Mg	51590.00	ug/l	51590.00	2.76	50000	>Cal
27 Al	22530.00	ug/l	22530.00	2.67	20000	>Cal
39 K	20920.00	ug/l	20920.00	3.02	20000	>Cal
44 Ca	49300.00	ug/l	49300.00	2.24	50000	
47 Ti	1017.00	ug/l	1017.00	3.08	1000	>Cal
51 V	1049.00	ug/l	1049.00	2.88	1000	>Cal
52 Cr	1041.00	ug/l	1041.00	3.03	1000	>Cal
55 Mn	1065.00	ug/l	1065.00	3.42	1000	>Cal
56 Fe	19050.00	ug/l	19050.00	2.81	20000	
59 Co	1017.00	ug/l	1017.00	2.20	1000	>Cal
60 Ni	951.50	ug/l	951.50	2.82	1000	
63 Cu	1014.00	ug/l	1014.00	2.95	1000	>Cal
65 Cu	955.20	ug/l	955.20	1.90	1000	
66 Zn	952.60	ug/l	952.60	1.28	1000	
75 As	988.70	ug/l	988.70	0.54	1000	
78 Se	964.20	ug/l	964.20	1.15	1000	
78 Se	944.40	ug/l	944.40	0.57	1000	
88 Sr	1077.00	ug/l	1077.00	0.76	1000	>Cal
88 Sr	973.50	ug/l	973.50	1.30	1000	
95 Mo	1062.00	ug/l	1062.00	0.39	1000	>Cal
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	467.00	ug/l	467.00	2.37	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	1040.00	ug/l	1040.00	1.17	1000	>Cal
118 Sn	1071.00	ug/l	1071.00	1.99	#######	
118 Sn	1059.00	ug/l	1059.00	1.23	#######	
118 Sn	1043.00	ug/l	1043.00	0.43	1000	>Cal
121 Sb	987.00	ug/l	987.00	0.80	1000	
137 Ba	1098.00	ug/l	1098.00	0.88	1000	>Cal
205 Tl	976.90	ug/l	976.90	0.47	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	1008.00	ug/l	1008.00	0.32	1000	>Cal

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5492212.00	0.84	5898844.00	93.1	70 - 120	
45 Sc	1446570.50	0.14	1645059.60	87.9	70 - 120	
45 Sc	179369.86	1.90	199813.73	89.8	70 - 120	
45 Sc	5946299.00	0.56	6393496.00	93.0	70 - 120	
72 Ge	339061.06	1.11	378142.44	89.7	70 - 120	
72 Ge	121102.26	1.07	131505.81	92.1	70 - 120	
72 Ge	1173931.50	1.28	1254348.10	93.6	70 - 120	
115 In	2567371.30	0.78	2940630.00	87.3	70 - 120	
115 In	1304414.00	1.15	1492805.00	87.4	70 - 120	
115 In	7256199.00	0.12	7962981.00	91.1	70 - 120	
159 Tb	9025907.00	0.91	9734470.00	92.7	70 - 120	
165 Ho	8581155.00	0.82	9318015.00	92.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.D#

17 :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\12E15100.B\014SMPL.D\014SMPL.D#
Date Acquired: May 15 2012 01:25 pm
Operator: NBS
Sample Name: ICSA 120515
Misc Info:
Vial Number: 2102
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	32.85	1000	
11 B	16.48	ug/l	16.48	3.88	1000	
23 Na	114100.00	ug/l	114100.00	2.18	25000	>Cal
24 Mg	106200.00	ug/l	106200.00	2.44	50000	>Cal
27 Al	108900.00	ug/l	108900.00	2.55	20000	>Cal
39 K	108500.00	ug/l	108500.00	1.37	20000	>Cal
44 Ca	102400.00	ug/l	102400.00	1.67	50000	>Cal
47 Ti	2165.00	ug/l	2165.00	2.04	1000	>Cal
51 V	0.45	ug/l	0.45	7.36	1000	
52 Cr	1.25	ug/l	1.25	5.29	1000	
55 Mn	5.49	ug/l	5.49	2.39	1000	
56 Fe	96260.00	ug/l	96260.00	2.29	20000	>Cal
59 Co	1.43	ug/l	1.43	1.18	1000	
60 Ni	1.94	ug/l	1.94	6.57	1000	
63 Cu	0.93	ug/l	0.93	2.52	1000	
65 Cu	0.97	ug/l	0.97	8.31	1000	
66 Zn	1.39	ug/l	1.39	3.88	1000	
75 As	0.41	ug/l	0.41	5.44	1000	
78 Se	0.20	ug/l	0.20	7.27	1000	
78 Se	0.66	ug/l	0.66	66.42	1000	
88 Sr	0.54	ug/l	0.54	3.15	1000	
88 Sr	0.49	ug/l	0.49	1.95	1000	
95 Mo	2133.00	ug/l	2133.00	0.47	1000	>Cal
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	0.69	ug/l	0.69	6.21	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	0.65	ug/l	0.65	24.43	1000	
118 Sn	1.11	ug/l	1.11	7.00	#######	
118 Sn	1.00	ug/l	1.00	11.07	#######	
118 Sn	0.81	ug/l	0.81	3.54	1000	
121 Sb	2.70	ug/l	2.70	3.15	1000	
137 Ba	2.39	ug/l	2.39	1.91	1000	
205 Tl	0.16	ug/l	0.16	3.33	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	0.46	ug/l	0.46	1.44	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5044051.00	0.63	5898844.00	85.5	70 - 120	
45 Sc	1390241.40	0.78	1645059.60	84.5	70 - 120	
45 Sc	176382.34	2.36	199813.73	88.3	70 - 120	
45 Sc	5579140.50	1.31	6393496.00	87.3	70 - 120	
72 Ge	354579.91	0.93	378142.44	93.8	70 - 120	
72 Ge	132476.55	2.03	131505.81	100.7	70 - 120	
72 Ge	1366042.50	1.81	1254348.10	108.9	70 - 120	
115 In	2564805.80	1.08	2940630.00	87.2	70 - 120	
115 In	1313409.10	2.03	1492805.00	88.0	70 - 120	
115 In	7039882.00	1.16	7962981.00	88.4	70 - 120	
159 Tb	8339819.00	0.42	9734470.00	85.7	70 - 120	
165 Ho	7854268.50	0.78	9318015.00	84.3	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15l00.B\015ICSB.D\015ICSB.D#
Date Acquired: May 15 2012 01:32 pm
Acq. Method: 62A0515B.M
Operator: NBS
Sample Name: ICSAB 120515
Misc Info:
Vial Number: 2103
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal. Update: May 15 2012 12:36 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	240.80	1.31	250	96.3	80 - 120	
11 B	45	3	9.97	1.53	---		-	
23 Na	45	2	114800.00	1.24	---		-	
24 Mg	45	2	106900.00	2.21	---		-	
27 Al	45	2	108600.00	2.33	---		-	
39 K	45	2	110900.00	2.36	---		-	
44 Ca	45	2	103800.00	2.15	---		-	
47 Ti	45	2	2186.00	1.42	2000	109.3	80 - 120	
51 V	45	2	273.40	1.87	250	109.4	80 - 120	
52 Cr	45	2	259.00	1.81	250	103.6	80 - 120	
55 Mn	45	2	270.80	1.51	250	108.3	80 - 120	
56 Fe	45	2	95880.00	1.54	---		-	
59 Co	45	2	246.80	1.88	250	98.7	80 - 120	
60 Ni	45	2	487.10	1.61	500	97.4	80 - 120	
63 Cu	45	2	240.70	1.74	250	96.3	80 - 120	
65 Cu	45	2	239.50	1.57	250	95.8	80 - 120	
66 Zn	115	2	459.10	1.27	500	91.8	80 - 120	
75 As	115	2	247.50	1.41	250	99.0	80 - 120	
78 Se	115	1	229.40	0.67	250	91.8	80 - 120	
78 Se	115	2	231.50	1.30	250	92.6	80 - 120	
88 Sr	115	2	0.52	18.16	---		-	
88 Sr	115	3	0.51	1.16	---		-	
95 Mo	115	3	2341.00	0.71	2000	117.1	80 - 120	
106 (Cd)	---	3	---	---	---		-	
107 Ag	115	3	507.20	1.97	500	101.4	80 - 120	
108 (Cd)	---	3	---	---	---		-	
111 Cd	115	3	471.60	4.51	500	94.3	80 - 120	
118 Sn	115	1	0.60	4.76	---		-	
118 Sn	115	2	0.56	9.18	---		-	
118 Sn	115	3	0.55	3.24	---		-	
121 Sb	115	3	266.00	0.37	250	106.4	80 - 120	
137 Ba	115	3	254.50	1.02	250	101.8	80 - 120	
205 Tl	159	3	253.00	0.78	250	101.2	80 - 120	
206 (Pb)	---	3	---	---	---		-	
207 (Pb)	---	3	---	---	---		-	
208 Pb	159	3	534.90	1.31	500	107.0	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	5175944	0.94	5898844	87.7	70 - 120	
45 Sc	1	1430185	0.33	1645060	86.9	70 - 120	
45 Sc	2	175313	1.77	199814	87.7	70 - 120	
45 Sc	3	5735066	0.81	6393496	89.7	70 - 120	
72 Ge	1	366733	1.40	378142	97.0	70 - 120	
72 Ge	2	135262	1.04	131506	102.9	70 - 120	
72 Ge	3	1375124	0.24	1254348	109.6	70 - 120	
115 In	1	2641546	0.53	2940630	89.8	70 - 120	
115 In	2	1314233	1.01	1492805	88.0	70 - 120	
115 In	3	7227829	0.62	7962981	90.8	70 - 120	
159 Tb	3	8487430	1.04	9734470	87.2	70 - 120	
165 Ho	3	8057185	1.27	9318015	86.5	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2_hmi.u
Tune File# 2 c:\icpchem\1\7500\he_hmi.u
Tune File# 3 c:\icpchem\1\7500\ng_hmi.u

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15l00.B\002CALB.D\002CALB.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\12E15100.B\017_CCV.D\017_CCV.D#
Date Acquired: May 15 2012 01:45 pm
Operator: NBS
Sample Name: CCV 120515
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	49.08 ug/l	0.50	50.00	90 - 110	
11 B	51.97 ug/l	1.17	50.00	90 - 110	
23 Na	1170.00 ug/l	0.46	1250.00	90 - 110	
24 Mg	2505.00 ug/l	1.20	2500.00	90 - 110	
27 Al	1005.00 ug/l	0.95	1000.00	90 - 110	
39 K	1008.00 ug/l	1.44	1000.00	90 - 110	
44 Ca	2481.00 ug/l	1.86	2500.00	90 - 110	
47 Ti	49.55 ug/l	2.18	50.00	90 - 110	
51 V	49.79 ug/l	0.21	50.00	90 - 110	
52 Cr	49.59 ug/l	0.72	50.00	90 - 110	
55 Mn	49.58 ug/l	1.01	50.00	90 - 110	
56 Fe	1021.00 ug/l	0.87	1000.00	90 - 110	
59 Co	49.41 ug/l	0.92	50.00	90 - 110	
60 Ni	49.38 ug/l	0.17	50.00	90 - 110	
63 Cu	49.08 ug/l	0.79	50.00	90 - 110	
65 Cu	49.35 ug/l	0.90	50.00	90 - 110	
66 Zn	49.78 ug/l	0.43	50.00	90 - 110	
75 As	49.76 ug/l	0.51	50.00	90 - 110	
78 Se	49.82 ug/l	1.73	50.00	90 - 110	
78 Se	49.30 ug/l	0.54	50.00	90 - 110	
88 Sr	49.67 ug/l	0.48	50.00	90 - 110	
88 Sr	49.99 ug/l	0.05	50.00	90 - 110	
95 Mo	49.74 ug/l	0.15	50.00	90 - 110	
106 (Cd)	-------- ug/l	--------	50.00	90 - 110	
107 Ag	26.96 ug/l	0.69	25.00	90 - 110	
108 (Cd)	-------- ug/l	--------	50.00	90 - 110	
111 Cd	49.72 ug/l	0.26	50.00	90 - 110	
118 Sn	50.66 ug/l	0.14	---	##### - #####	
118 Sn	50.22 ug/l	1.64	---	##### - #####	
118 Sn	50.08 ug/l	0.31	50.00	90 - 110	
121 Sb	51.51 ug/l	0.39	50.00	90 - 110	
137 Ba	49.49 ug/l	1.36	50.00	90 - 110	
205 Tl	45.00 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	47.12 ug/l	0.72	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6199305.00	1.43	5898844.00	105.1	70 - 120	
45 Sc	1573190.80	0.72	1645059.60	95.6	70 - 120	
45 Sc	189563.59	1.07	199813.73	94.9	70 - 120	
45 Sc	6473585.50	0.25	6393496.00	101.3	70 - 120	
72 Ge	354904.19	1.73	378142.44	93.9	70 - 120	
72 Ge	127289.91	1.55	131505.81	96.8	70 - 120	
72 Ge	1268208.50	1.24	1254348.10	101.1	70 - 120	
115 In	2802418.50	1.68	2940630.00	95.3	70 - 120	
115 In	1401640.90	0.28	1492805.00	93.9	70 - 120	
115 In	8042012.50	0.94	7962981.00	101.0	70 - 120	
159 Tb	9816878.00	1.13	9734470.00	100.8	70 - 120	
165 Ho	9385450.00	0.41	9318015.00	100.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\019_CCB.D\019_CCB.D#
Date Acquired: May 15 2012 01:59 pm
Operator: NBS
Sample Name: CCB 120515
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.01	ug/l	58.55	0.12	
11 B	1.64	ug/l	8.12	15.00	
23 Na	-59.33	ug/l	12.53	77.10	
24 Mg	-0.17	ug/l	46.56	7.50	
27 Al	-0.04	ug/l	719.39	3.96	
39 K	0.64	ug/l	65.78	19.20	
44 Ca	-11.31	ug/l	21.02	90.00	
47 Ti	0.08	ug/l	21.19	0.78	
51 V	0.00	ug/l	42.98	0.21	
52 Cr	-0.01	ug/l	70.92	0.12	
55 Mn	-0.12	ug/l	17.36	0.18	
56 Fe	0.09	ug/l	40.59	40.80	
59 Co	0.01	ug/l	49.88	0.09	
60 Ni	0.00	ug/l	259.35	0.48	
63 Cu	-0.06	ug/l	21.08	0.39	
65 Cu	-0.04	ug/l	25.03	0.39	
66 Zn	0.06	ug/l	98.74	6.90	
75 As	0.00	ug/l	934.84	0.27	
78 Se	-0.01	ug/l	354.58	0.30	
78 Se	-0.09	ug/l	77.29	0.30	
88 Sr	0.01	ug/l	93.60	0.03	
88 Sr	0.00	ug/l	132.70	0.03	
95 Mo	0.08	ug/l	14.51	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	0.73	ug/l	1.79	0.09	Fail
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.01	ug/l	10.10	0.06	
118 Sn	0.06	ug/l	11.01	#######	
118 Sn	0.08	ug/l	7.41	#######	
118 Sn	0.05	ug/l	6.63	0.30	
121 Sb	0.11	ug/l	4.61	0.03	Fail
137 Ba	0.00	ug/l	142.79	0.12	
205 Tl	0.02	ug/l	19.43	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.07	ug/l	14.56	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6718054.00	1.07	5898844.00	113.9	70 - 120	
45 Sc	1707165.40	0.77	1645059.60	103.8	70 - 120	
45 Sc	207380.77	1.20	199813.73	103.8	70 - 120	
45 Sc	6987024.50	1.21	6393496.00	109.3	70 - 120	
72 Ge	402549.25	0.94	378142.44	106.5	70 - 120	
72 Ge	138091.28	2.22	131505.81	105.0	70 - 120	
72 Ge	1353522.30	0.92	1254348.10	107.9	70 - 120	
115 In	3157084.50	1.41	2940630.00	107.4	70 - 120	
115 In	1557712.80	0.38	1492805.00	104.3	70 - 120	
115 In	8669065.00	0.68	7962981.00	108.9	70 - 120	
159 Tb	10601445.00	0.88	9734470.00	108.9	70 - 120	
165 Ho	10236925.00	0.65	9318015.00	109.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E15l00.B\047_CCV.D\047_CCV.D#
Date Acquired: May 15 2012 05:08 pm
Operator: NBS
Sample Name: CCV 120515
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	46.79	ug/l	0.06	50.00	90 - 110	
11 B	53.67	ug/l	0.60	50.00	90 - 110	
23 Na	1240.00	ug/l	3.03	1250.00	90 - 110	
24 Mg	2474.00	ug/l	2.65	2500.00	90 - 110	
27 Al	1001.00	ug/l	1.99	1000.00	90 - 110	
39 K	1042.00	ug/l	2.24	1000.00	90 - 110	
44 Ca	2518.00	ug/l	2.13	2500.00	90 - 110	
47 Ti	49.55	ug/l	0.97	50.00	90 - 110	
51 V	48.73	ug/l	1.05	50.00	90 - 110	
52 Cr	48.35	ug/l	2.42	50.00	90 - 110	
55 Mn	49.80	ug/l	1.74	50.00	90 - 110	
56 Fe	995.50	ug/l	1.49	1000.00	90 - 110	
59 Co	47.83	ug/l	2.39	50.00	90 - 110	
60 Ni	47.24	ug/l	2.30	50.00	90 - 110	
63 Cu	47.71	ug/l	1.95	50.00	90 - 110	
65 Cu	47.26	ug/l	0.86	50.00	90 - 110	
66 Zn	51.03	ug/l	0.72	50.00	90 - 110	
75 As	50.17	ug/l	0.88	50.00	90 - 110	
78 Se	49.50	ug/l	1.99	50.00	90 - 110	
78 Se	50.38	ug/l	2.26	50.00	90 - 110	
88 Sr	50.25	ug/l	1.53	50.00	90 - 110	
88 Sr	49.91	ug/l	0.27	50.00	90 - 110	
95 Mo	48.62	ug/l	0.41	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.40	ug/l	0.32	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	49.07	ug/l	0.70	50.00	90 - 110	
118 Sn	49.42	ug/l	1.26	---	##### - #####	
118 Sn	49.14	ug/l	0.10	---	##### - #####	
118 Sn	49.26	ug/l	0.74	50.00	90 - 110	
121 Sb	50.30	ug/l	0.24	50.00	90 - 110	
137 Ba	49.83	ug/l	0.49	50.00	90 - 110	
205 Tl	49.68	ug/l	0.52	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	46.81	ug/l	0.80	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5738729.00	0.66	5898844.00	97.3	70 - 120	
45 Sc	1527542.80	0.86	1645059.60	92.9	70 - 120	
45 Sc	193802.73	2.08	199813.73	97.0	70 - 120	
45 Sc	6280617.00	0.48	6393496.00	98.2	70 - 120	
72 Ge	353844.81	0.61	378142.44	93.6	70 - 120	
72 Ge	126272.70	1.08	131505.81	96.0	70 - 120	
72 Ge	1221495.40	0.60	1254348.10	97.4	70 - 120	
115 In	2697361.00	0.99	2940630.00	91.7	70 - 120	
115 In	1387268.10	0.21	1492805.00	92.9	70 - 120	
115 In	7773954.50	0.24	7962981.00	97.6	70 - 120	
159 Tb	9495034.00	0.60	9734470.00	97.5	70 - 120	
165 Ho	9135117.00	0.69	9318015.00	98.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15l00.B\002CALB.D\002CALB.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\12E15100.B\049_CCB.D\049_CCB.D#
Date Acquired: May 15 2012 05:21 pm
Operator: NBS
Sample Name: CCB 120515
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	344.73	0.12	
11 B	3.73	ug/l	5.61	15.00	
23 Na	-190.40	ug/l	2.47	77.10	
24 Mg	0.00	ug/l	11559.00	7.50	
27 Al	-0.52	ug/l	57.12	3.96	
39 K	8.92	ug/l	41.05	19.20	
44 Ca	-14.35	ug/l	7.94	90.00	
47 Ti	0.05	ug/l	92.94	0.78	
51 V	0.00	ug/l	144.11	0.21	
52 Cr	0.00	ug/l	579.87	0.12	
55 Mn	-0.15	ug/l	8.06	0.18	
56 Fe	-0.01	ug/l	60.44	40.80	
59 Co	0.00	ug/l	158.27	0.09	
60 Ni	0.00	ug/l	426.40	0.48	
63 Cu	-0.05	ug/l	20.63	0.39	
65 Cu	-0.06	ug/l	22.84	0.39	
66 Zn	0.08	ug/l	19.88	6.90	
75 As	0.04	ug/l	68.48	0.27	
78 Se	-0.01	ug/l	277.50	0.30	
78 Se	0.50	ug/l	67.76	0.30	Fail
88 Sr	0.02	ug/l	46.64	0.03	
88 Sr	0.00	ug/l	83.01	0.03	
95 Mo	0.02	ug/l	57.79	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	-0.08	ug/l	5.56	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	218.36	0.06	
118 Sn	0.06	ug/l	5.75	#######	
118 Sn	0.05	ug/l	40.06	#######	
118 Sn	0.05	ug/l	32.10	0.30	
121 Sb	0.04	ug/l	19.37	0.03	Fail
137 Ba	0.00	ug/l	433.15	0.12	
205 Tl	0.01	ug/l	42.77	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.08	ug/l	3.73	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5996487.00	1.15	5898844.00	101.7	70 - 120	
45 Sc	1653434.80	1.87	1645059.60	100.5	70 - 120	
45 Sc	206438.41	0.63	199813.73	103.3	70 - 120	
45 Sc	6465128.00	0.50	6393496.00	101.1	70 - 120	
72 Ge	379340.22	0.95	378142.44	100.3	70 - 120	
72 Ge	131589.06	0.83	131505.81	100.1	70 - 120	
72 Ge	1265714.80	0.65	1254348.10	100.9	70 - 120	
115 In	2959086.00	2.05	2940630.00	100.6	70 - 120	
115 In	1475374.30	0.85	1492805.00	98.8	70 - 120	
115 In	7917192.50	0.73	7962981.00	99.4	70 - 120	
159 Tb	9781185.00	0.23	9734470.00	100.5	70 - 120	
165 Ho	9323472.00	0.83	9318015.00	100.1	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\061_CCV.D\061_CCV.D#
Date Acquired: May 15 2012 06:42 pm
Operator: NBS
Sample Name: CCV 120515
Misc Info:
Vial Number: 1105
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	46.45	ug/l	0.72	50.00	90 - 110	
11 B	49.81	ug/l	1.05	50.00	90 - 110	
23 Na	1310.00	ug/l	0.17	1250.00	90 - 110	
24 Mg	2509.00	ug/l	0.60	2500.00	90 - 110	
27 Al	1015.00	ug/l	0.58	1000.00	90 - 110	
39 K	1067.00	ug/l	1.47	1000.00	90 - 110	
44 Ca	2551.00	ug/l	0.61	2500.00	90 - 110	
47 Ti	49.40	ug/l	1.52	50.00	90 - 110	
51 V	49.10	ug/l	0.86	50.00	90 - 110	
52 Cr	48.47	ug/l	0.81	50.00	90 - 110	
55 Mn	49.87	ug/l	1.26	50.00	90 - 110	
56 Fe	992.80	ug/l	0.12	1000.00	90 - 110	
59 Co	48.40	ug/l	0.52	50.00	90 - 110	
60 Ni	47.85	ug/l	1.16	50.00	90 - 110	
63 Cu	47.70	ug/l	0.92	50.00	90 - 110	
65 Cu	47.33	ug/l	0.20	50.00	90 - 110	
66 Zn	51.52	ug/l	0.76	50.00	90 - 110	
75 As	50.44	ug/l	0.93	50.00	90 - 110	
78 Se	48.78	ug/l	1.34	50.00	90 - 110	
78 Se	50.99	ug/l	0.43	50.00	90 - 110	
88 Sr	50.54	ug/l	1.12	50.00	90 - 110	
88 Sr	49.55	ug/l	0.31	50.00	90 - 110	
95 Mo	48.41	ug/l	0.19	50.00	90 - 110	
106 (Cd)	--------	ug/l	--------	50.00	90 - 110	
107 Ag	24.28	ug/l	1.07	25.00	90 - 110	
108 (Cd)	--------	ug/l	--------	50.00	90 - 110	
111 Cd	48.90	ug/l	0.48	50.00	90 - 110	
118 Sn	49.10	ug/l	0.92	---	##### - #####	
118 Sn	49.30	ug/l	1.45	---	##### - #####	
118 Sn	49.13	ug/l	0.41	50.00	90 - 110	
121 Sb	49.59	ug/l	0.42	50.00	90 - 110	
137 Ba	49.73	ug/l	0.96	50.00	90 - 110	
205 Tl	49.30	ug/l	0.46	50.00	90 - 110	
206 (Pb)	--------	ug/l	--------	50.00	90 - 110	
207 (Pb)	--------	ug/l	--------	50.00	90 - 110	
208 Pb	46.22	ug/l	0.45	50.00	90 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6053213.00	1.09	5898844.00	102.6	70 - 120	
45 Sc	1550388.80	0.31	1645059.60	94.2	70 - 120	
45 Sc	191448.31	0.16	199813.73	95.8	70 - 120	
45 Sc	6603817.00	1.13	6393496.00	103.3	70 - 120	
72 Ge	349410.53	1.52	378142.44	92.4	70 - 120	
72 Ge	125015.49	1.98	131505.81	95.1	70 - 120	
72 Ge	1281715.60	0.15	1254348.10	102.2	70 - 120	
115 In	2700629.50	1.25	2940630.00	91.8	70 - 120	
115 In	1357291.60	1.39	1492805.00	90.9	70 - 120	
115 In	8090065.00	0.54	7962981.00	101.6	70 - 120	
159 Tb	9934463.00	0.62	9734470.00	102.1	70 - 120	
165 Ho	9496341.00	0.39	9318015.00	101.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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\12E15100.B\063_CCB.D\063_CCB.D#
Date Acquired: May 15 2012 06:55 pm
Operator: NBS
Sample Name: CCB 120515
Misc Info:
Vial Number: 1102
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Elements

Element	Conc.		RSD(%)	High Limit	Flag
7 (Li)	--------	ug/l	--------	#######	
9 Be	0.00	ug/l	435.29	0.12	
11 B	2.05	ug/l	4.62	15.00	
23 Na	-180.60	ug/l	3.09	77.10	
24 Mg	0.03	ug/l	594.13	7.50	
27 Al	-0.28	ug/l	174.80	3.96	
39 K	14.21	ug/l	32.60	19.20	
44 Ca	-10.64	ug/l	52.24	90.00	
47 Ti	0.03	ug/l	58.70	0.78	
51 V	0.01	ug/l	31.70	0.21	
52 Cr	0.00	ug/l	145.70	0.12	
55 Mn	-0.16	ug/l	9.69	0.18	
56 Fe	-0.03	ug/l	163.19	40.80	
59 Co	0.00	ug/l	171.21	0.09	
60 Ni	0.01	ug/l	117.58	0.48	
63 Cu	-0.06	ug/l	8.45	0.39	
65 Cu	-0.07	ug/l	11.10	0.39	
66 Zn	0.04	ug/l	195.20	6.90	
75 As	0.00	ug/l	195.16	0.27	
78 Se	-0.01	ug/l	107.39	0.30	
78 Se	0.80	ug/l	57.85	0.30	Fail
88 Sr	0.01	ug/l	32.71	0.03	
88 Sr	0.00	ug/l	41.67	0.03	
95 Mo	0.00	ug/l	119.76	0.21	
106 (Cd)	--------	ug/l	--------	#######	
107 Ag	-0.08	ug/l	2.52	0.09	
108 (Cd)	--------	ug/l	--------	#######	
111 Cd	0.00	ug/l	4676.40	0.06	
118 Sn	0.02	ug/l	32.14	#######	
118 Sn	0.01	ug/l	130.51	#######	
118 Sn	0.01	ug/l	30.79	0.30	
121 Sb	0.00	ug/l	160.18	0.03	
137 Ba	0.00	ug/l	136.21	0.12	
205 Tl	0.01	ug/l	22.71	0.03	
206 (Pb)	--------	ug/l	--------	#######	
207 (Pb)	--------	ug/l	--------	#######	
208 Pb	-0.12	ug/l	2.80	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	6056892.50	2.13	5898844.00	102.7	70 - 120	
45 Sc	1681791.90	0.96	1645059.60	102.2	70 - 120	
45 Sc	207708.50	0.97	199813.73	104.0	70 - 120	
45 Sc	6618162.00	1.24	6393496.00	103.5	70 - 120	
72 Ge	386970.97	1.97	378142.44	102.3	70 - 120	
72 Ge	135841.72	0.12	131505.81	103.3	70 - 120	
72 Ge	1290748.80	0.43	1254348.10	102.9	70 - 120	
115 In	2953540.00	1.13	2940630.00	100.4	70 - 120	
115 In	1482584.10	0.48	1492805.00	99.3	70 - 120	
115 In	8052144.00	0.76	7962981.00	101.1	70 - 120	
159 Tb	9908894.00	0.47	9734470.00	101.8	70 - 120	
165 Ho	9480696.00	0.43	9318015.00	101.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Fail
ISTD: Pass

METALS
Raw Data

APPL, INC.

METALS BLANK

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6020	LEAD (PB) (DISSOL	0.22 U	0.5	0.22	0.11	ug/L	05/02/12	05/15/12	#602D-120502A-AY60081

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\051SMPL.D\051SMPL.D#
Date Acquired: May 15 2012 05:35 pm
Operator: NBS
Sample Name: 120502A-3015-BLK
Misc Info: 120502A-3015
Vial Number: 3203
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	0.00 ug/l	0.00	111.93	1000	
11 B	8.22 ug/l	9.14	3.88	1000	
23 Na	-185.30 ug/l	-205.87	3.83	25000	
24 Mg	1.43 ug/l	1.59	6.27	50000	
27 Al	1.29 ug/l	1.43	44.50	20000	
39 K	43.35 ug/l	48.16	4.36	20000	
44 Ca	3.60 ug/l	4.00	280.32	50000	
47 Ti	0.11 ug/l	0.12	38.00	1000	
51 V	0.01 ug/l	0.01	16.34	1000	
52 Cr	0.14 ug/l	0.15	7.40	1000	
55 Mn	-0.03 ug/l	-0.03	138.72	1000	
56 Fe	0.84 ug/l	0.93	6.35	20000	
59 Co	0.44 ug/l	0.49	2.61	1000	
60 Ni	0.15 ug/l	0.16	0.56	1000	
63 Cu	0.04 ug/l	0.04	27.34	1000	
65 Cu	0.02 ug/l	0.03	129.57	1000	
66 Zn	0.14 ug/l	0.15	6.01	1000	
75 As	0.06 ug/l	0.07	30.28	1000	
78 Se	0.09 ug/l	0.10	39.21	1000	
78 Se	1.39 ug/l	1.55	26.47	1000	
88 Sr	0.02 ug/l	0.02	24.18	1000	
88 Sr	0.01 ug/l	0.01	29.27	1000	
95 Mo	0.02 ug/l	0.03	32.52	1000	
106 (Cd)	-------- ug/l	#VALUE!	--------	#######	
107 Ag	-0.08 ug/l	-0.09	2.28	500	
108 (Cd)	-------- ug/l	#VALUE!	--------	#######	
111 Cd	0.16 ug/l	0.18	9.27	1000	
118 Sn	0.33 ug/l	0.37	9.69	#######	
118 Sn	0.31 ug/l	0.34	6.68	#######	
118 Sn	0.22 ug/l	0.25	3.67	1000	
121 Sb	0.21 ug/l	0.23	8.01	1000	
137 Ba	0.02 ug/l	0.02	48.54	1000	
205 Tl	0.03 ug/l	0.04	6.31	1000	
206 (Pb)	-------- ug/l	#VALUE!	--------	#######	
207 (Pb)	-------- ug/l	#VALUE!	--------	#######	
208 Pb	-0.16 ug/l	-0.18	2.06	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5184040.50	1.07	5898844.00	87.9	70 - 120	
45 Sc	1350450.50	0.98	1645059.60	82.1	70 - 120	
45 Sc	167643.47	0.83	199813.73	83.9	70 - 120	
45 Sc	5800815.00	0.14	6393496.00	90.7	70 - 120	
72 Ge	312279.25	2.20	378142.44	82.6	70 - 120	
72 Ge	111355.97	1.05	131505.81	84.7	70 - 120	
72 Ge	1112572.90	0.35	1254348.10	88.7	70 - 120	
115 In	2383751.50	0.78	2940630.00	81.1	70 - 120	
115 In	1208925.90	1.52	1492805.00	81.0	70 - 120	
115 In	7080448.00	1.21	7962981.00	88.9	70 - 120	
159 Tb	8643221.00	1.78	9734470.00	88.8	70 - 120	
165 Ho	8277102.50	0.74	9318015.00	88.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

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)	50.0	49.4	98.8	80-120	05/02/12	05/15/12	#602D-120502A-AY60081

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\052SMPL.D\052SMPL.D#
Date Acquired: May 15 2012 05:42 pm
Operator: NBS
Sample Name: 120502A-3015-LCS
Misc Info: 120502A-3015
Vial Number: 3204
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	8.04	ug/l	8.93	1.30	1000	
11 B	48.64	ug/l	54.04	0.54	1000	
23 Na	5075.00	ug/l	5638.33	2.28	25000	
24 Mg	4539.00	ug/l	5042.83	2.00	50000	
27 Al	370.80	ug/l	411.96	3.30	20000	
39 K	987.60	ug/l	1097.22	2.61	20000	
44 Ca	4624.00	ug/l	5137.26	2.99	50000	
47 Ti	45.65	ug/l	50.72	1.87	1000	
51 V	47.04	ug/l	52.26	1.08	1000	
52 Cr	46.87	ug/l	52.07	1.26	1000	
55 Mn	47.51	ug/l	52.78	1.98	1000	
56 Fe	175.20	ug/l	194.65	1.28	20000	
59 Co	45.55	ug/l	50.61	1.74	1000	
60 Ni	45.35	ug/l	50.38	2.24	1000	
63 Cu	43.78	ug/l	48.64	2.14	1000	
65 Cu	43.53	ug/l	48.36	1.73	1000	
66 Zn	82.32	ug/l	91.46	0.84	1000	
75 As	41.44	ug/l	46.04	1.39	1000	
78 Se	34.61	ug/l	38.45	0.54	1000	
78 Se	36.16	ug/l	40.17	0.76	1000	
88 Sr	48.59	ug/l	53.98	1.00	1000	
88 Sr	47.38	ug/l	52.64	0.78	1000	
95 Mo	46.00	ug/l	51.11	0.61	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	18.36	ug/l	20.40	1.26	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.30	ug/l	9.22	2.67	1000	
118 Sn	48.36	ug/l	53.73	1.11	#######	
118 Sn	48.44	ug/l	53.82	0.48	#######	
118 Sn	47.98	ug/l	53.31	1.64	1000	
121 Sb	43.77	ug/l	48.63	1.16	1000	
137 Ba	45.97	ug/l	51.07	1.68	1000	
205 Tl	42.43	ug/l	47.14	1.64	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	44.49	ug/l	49.43	1.57	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	5135238.50	0.68	5898844.00	87.1	70 - 120	
45 Sc	1372065.40	0.98	1645059.60	83.4	70 - 120	
45 Sc	171353.55	1.32	199813.73	85.8	70 - 120	
45 Sc	5770827.00	0.78	6393496.00	90.3	70 - 120	
72 Ge	311463.13	1.99	378142.44	82.4	70 - 120	
72 Ge	114804.35	0.44	131505.81	87.3	70 - 120	
72 Ge	1096366.40	0.99	1254348.10	87.4	70 - 120	
115 In	2418127.30	1.33	2940630.00	82.2	70 - 120	
115 In	1203975.50	0.49	1492805.00	80.7	70 - 120	
115 In	7037182.00	1.65	7962981.00	88.4	70 - 120	
159 Tb	8565771.00	1.47	9734470.00	88.0	70 - 120	
165 Ho	8248724.50	0.84	9318015.00	88.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

Matrix Spike Recoveries

METALS

APPL ID: **120502W-60081 MS - 166945**

Sample ID: AY60081

Client ID: ES077

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	50.0	ND	44.4	45.4	88.8	90.8	2.2	20	80-120	05/02/12	05/15/12	05/02/12	05/15/12	166945	AY60081

Comments: _____

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\056SMPL.D\056SMPL.D#
Date Acquired: May 15 2012 06:08 pm
Operator: NBS
Sample Name: AY60081W17 MS
Misc Info: 120502A-3015
Vial Number: 3207
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	7.22	ug/l	8.02	0.14	1000	
11 B	64.79	ug/l	71.98	2.67	1000	
23 Na	309800.00	ug/l	344187.80	0.70	25000	>Cal
24 Mg	166300.00	ug/l	184759.30	1.17	50000	>Cal
27 Al	364.30	ug/l	404.74	1.08	20000	
39 K	8525.00	ug/l	9471.28	1.29	20000	
44 Ca	93230.00	ug/l	103578.53	1.69	50000	>Cal
47 Ti	47.61	ug/l	52.89	1.32	1000	
51 V	45.82	ug/l	50.91	1.49	1000	
52 Cr	55.97	ug/l	62.18	1.28	1000	
55 Mn	45.12	ug/l	50.13	2.08	1000	
56 Fe	165.80	ug/l	184.20	0.97	20000	
59 Co	43.40	ug/l	48.22	0.98	1000	
60 Ni	45.81	ug/l	50.89	1.19	1000	
63 Cu	39.63	ug/l	44.03	2.05	1000	
65 Cu	39.61	ug/l	44.01	2.07	1000	
66 Zn	85.50	ug/l	94.99	0.45	1000	
75 As	41.63	ug/l	46.25	0.58	1000	
78 Se	35.57	ug/l	39.52	0.88	1000	
78 Se	39.01	ug/l	43.34	0.46	1000	
88 Sr	2190.00	ug/l	2433.09	1.30	1000	>Cal
88 Sr	1905.00	ug/l	2116.46	0.71	1000	>Cal
95 Mo	47.52	ug/l	52.79	1.19	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	16.60	ug/l	18.44	1.31	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	7.94	ug/l	8.82	0.93	1000	
118 Sn	46.04	ug/l	51.15	0.60	#######	
118 Sn	46.30	ug/l	51.44	1.11	#######	
118 Sn	45.71	ug/l	50.78	1.54	1000	
121 Sb	43.15	ug/l	47.94	1.43	1000	
137 Ba	136.80	ug/l	151.98	1.43	1000	
205 Tl	38.00	ug/l	42.22	0.99	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	39.98	ug/l	44.42	0.16	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4918276.50	1.61	5898844.00	83.4	70 - 120	
45 Sc	1486322.50	0.84	1645059.60	90.4	70 - 120	
45 Sc	185657.06	0.83	199813.73	92.9	70 - 120	
45 Sc	6177083.00	1.98	6393496.00	96.6	70 - 120	
72 Ge	324435.16	1.36	378142.44	85.8	70 - 120	
72 Ge	114975.16	1.53	131505.81	87.4	70 - 120	
72 Ge	1129066.80	1.36	1254348.10	90.0	70 - 120	
115 In	2427731.80	1.08	2940630.00	82.6	70 - 120	
115 In	1220089.10	0.23	1492805.00	81.7	70 - 120	
115 In	7170993.50	1.66	7962981.00	90.1	70 - 120	
159 Tb	8961077.00	0.31	9734470.00	92.1	70 - 120	
165 Ho	8668326.00	0.78	9318015.00	93.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\12E15100.B\057SMPL.D\057SMPL.D#
Date Acquired: May 15 2012 06:15 pm
Operator: NBS
Sample Name: AY60081W17 MSD
Misc Info: 120502A-3015
Vial Number: 3208
Current Method: C:\ICPCHEM\1\METHODS\62A0515B.M
Calibration File: C:\ICPCHEM\1\CALIB\62A0515B.C
Last Cal Update: May 15 2012 12:36 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	7.32	ug/l	8.14	0.33	1000	
11 B	65.19	ug/l	72.43	0.37	1000	
23 Na	309500.00	ug/l	343854.50	1.21	25000	>Cal
24 Mg	165600.00	ug/l	183981.60	0.38	50000	>Cal
27 Al	380.40	ug/l	422.62	1.29	20000	
39 K	8572.00	ug/l	9523.49	1.70	20000	
44 Ca	93480.00	ug/l	103856.28	1.37	50000	>Cal
47 Ti	49.20	ug/l	54.66	1.52	1000	
51 V	47.45	ug/l	52.72	0.64	1000	
52 Cr	57.00	ug/l	63.33	1.29	1000	
55 Mn	46.71	ug/l	51.89	0.95	1000	
56 Fe	175.60	ug/l	195.09	1.03	20000	
59 Co	44.83	ug/l	49.81	1.95	1000	
60 Ni	47.01	ug/l	52.23	1.28	1000	
63 Cu	40.89	ug/l	45.43	1.51	1000	
65 Cu	40.85	ug/l	45.38	1.96	1000	
66 Zn	86.68	ug/l	96.30	3.22	1000	
75 As	42.58	ug/l	47.31	1.87	1000	
78 Se	36.59	ug/l	40.65	0.98	1000	
78 Se	39.82	ug/l	44.24	1.69	1000	
88 Sr	2181.00	ug/l	2423.09	0.59	1000	>Cal
88 Sr	1915.00	ug/l	2127.57	0.91	1000	>Cal
95 Mo	49.26	ug/l	54.73	0.68	1000	
106 (Cd)	--------	ug/l	#VALUE!	--------	#######	
107 Ag	17.00	ug/l	18.89	1.36	500	
108 (Cd)	--------	ug/l	#VALUE!	--------	#######	
111 Cd	8.18	ug/l	9.09	3.08	1000	
118 Sn	48.26	ug/l	53.62	1.12	#######	
118 Sn	47.85	ug/l	53.16	2.39	#######	
118 Sn	47.26	ug/l	52.51	0.36	1000	
121 Sb	44.43	ug/l	49.36	1.61	1000	
137 Ba	137.50	ug/l	152.76	2.54	1000	
205 Tl	39.17	ug/l	43.52	1.20	1000	
206 (Pb)	--------	ug/l	#VALUE!	--------	#######	
207 (Pb)	--------	ug/l	#VALUE!	--------	#######	
208 Pb	40.90	ug/l	45.44	1.34	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	4985362.00	2.77	5898844.00	84.5	70 - 120	
45 Sc	1500553.00	1.33	1645059.60	91.2	70 - 120	
45 Sc	186362.14	1.18	199813.73	93.3	70 - 120	
45 Sc	6271233.00	1.33	6393496.00	98.1	70 - 120	
72 Ge	326160.41	1.45	378142.44	86.3	70 - 120	
72 Ge	116585.85	1.84	131505.81	88.7	70 - 120	
72 Ge	1147811.30	1.01	1254348.10	91.5	70 - 120	
115 In	2442437.80	0.28	2940630.00	83.1	70 - 120	
115 In	1232169.00	1.74	1492805.00	82.5	70 - 120	
115 In	7274955.50	1.53	7962981.00	91.4	70 - 120	
159 Tb	9103730.00	0.58	9734470.00	93.5	70 - 120	
165 Ho	8867026.00	1.93	9318015.00	95.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\12E15100.B\002CALB.D\002CALB.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

NBS 6020/6020A
05/15/12
(A)

NBS 05/15/12

ICP-MS STANDARDS 6020/6020A/3015/3051A
Today's Date: 05/15/12
Expires: 05/22/12
Prep 1% HNO3/1.0%HCL
20 mL HNO3 / 2000 mL Di Water
Lot #K23022
20mL HCL / 2000mL Di Water
Lot #K43032
Expires: 05/22/12

Internal Standard Mix: Prep 05/15/2012

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 05/15/12

Standard 3 05/22/12

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 05/15/12

Intermediate-Sb 05/22/12
100 uL of Sb STD (CPI 12A011-30298) in 10 mL of 1% HNO3/1.0% HCL
ICV-Sb 05/22/12
100 uL of Intermediate-Sb in 10 mL of 1% HNO3/1.0% HCL

NBS 05/15/12

Standard 2 05/22/12

Amount	STD	
500 uL	Standard 4	05/15/12

Prepared in 50 mL of 1% HNO3/1.0% HCL 05/15/12

Standard 1 05/22/12

Amount	STD	
50 uL	Standard 4	05/15/12

Prepared in 50 mL of 1% HNO3/1 0% HCL 05/15/12

ICP-MS ICV 05/22/12

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 05/15/12

ICSA Prep: 05/22/12

1 mL	ICSA	CPI	11C066-28529

Prepared in 5 mL of 1% HNO3/1.0% HCL 05/15/12

ICSAB Prep: 05/22/12

1mL	ICSA	CPI	11C066-28529
0.025mL	INT	O2Si	1023805-28210

Prepared in 5 mL of 1% HNO3/1.0% HCL 05/15/12

ICP-LDR 05/22/12

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 05/15/12

NBS 05/15/12

Internal Standard Concentration

Amt	STD	Element	Vendor	Lot#	Final Conc. in Std	Expires
500uL	1000 ug/mL	Li	CPI	10L079-27839	5000 ug/L	06/10/12
500uL	1000 ug/mL	In	CPI	10J155-28574	5000 ug/L	09/25/12
500uL	1000 ug/mL	Ho	CPI	10A107-28576	5000 ug/L	09/25/12
500uL	1000 ug/mL	Tb	CPI	11B054-28575	5000 ug/L	09/25/12
500uL	1000 ug/mL	Sc	o2si	1024073-28527	5000 ug/L	08/18/12
500uL	1000 ug/mL	Ge	Environmental Express	1116011-29381	5000 ug/L	02/08/13

Prep:	05/15/12	NBS	Prep in -	1%HNO3/1.0%HCL:	Lot #KK23022/43032	in 100mL
Expires:	06/14/12					

RDS 5/15/12

Book Edit for 5/14/12

RDS 5/15/12

Hg WORKING STANDARD

1ml X 10ug/ml Hg STOCK STD. (04/17/12RJS)/200ml 1% HNO3 Lot#L02030
1ml X 10ug/ml Hg STOCK ICV (04/17/12RJS)/200ml 1% HNO3 Lot#L02030
Final concentration is 50 ug/L. Expires.....5/14/12.....

RDS 5/15/12

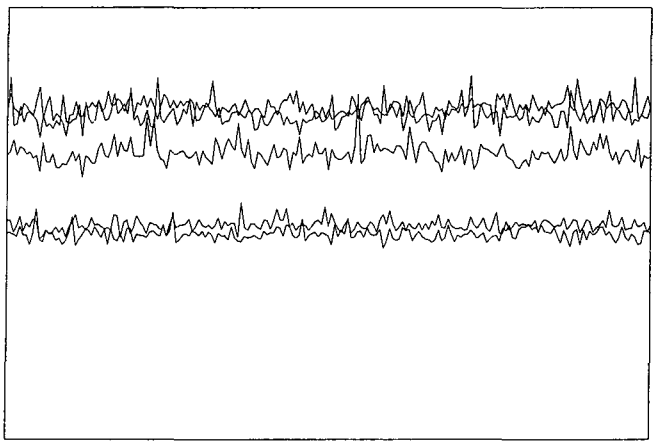
RDS 5/15/12

Hg WORKING STANDARD

1ml X 10ug/ml Hg STOCK STD. (04/17/12RJS)/200ml 1% HNO3 Lot#L02030
1ml X 10ug/ml Hg STOCK ICV (04/17/12RJS)/200ml 1% HNO3 Lot#L02030
Final concentration is 50 ug/L. Expires.....5/15/12.....

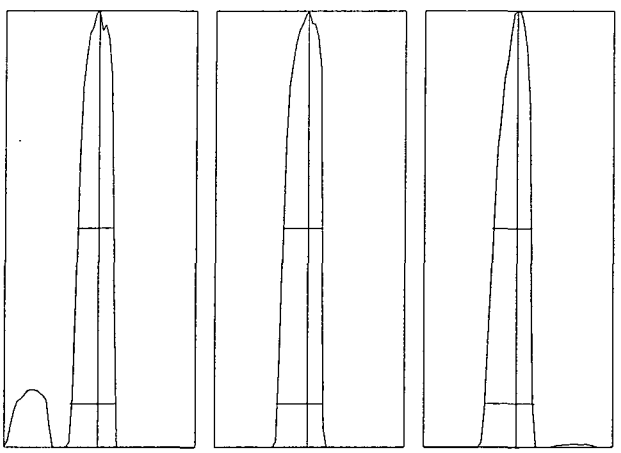
Tune Report

Tune File : NG_HMI.u
Comment : 120515



Integration Time:	0.1000 sec	
Sampling Period:	0.7200 sec	
n:	200	
Oxide:	156/140	1.415%
Doubly Charged:	70/140	1.974%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	13058.0	13199.2	3.70	0.80
89	50,000	24621.0	24660.2	2.75	0.70
205	20,000	15074.0	15357.3	2.60	5.80
156/140	2	1.355%	1.395%	6.58	
70/140	5	1.992%	2.105%	87.74	
140	50,000	23695.0	23570.0	2.98	3.60
59	20,000	15523.0	14969.0	3.25	1.40



m/z:	7	89	205
Height:	13,188	25,016	15,527
Axis:	7.00	89.00	205.00
W-50%:	0.60	0.65	0.65
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Generated : May 15, 2012 09:52:30
Printed : May 15, 2012 09:52:32

Tune Report

Tune File : NG_HMI.u
Comment : 120515

Tuning Parameters

===Plasma Condition===			===Ion Lenses===			===Q-Pole Parameters===		
RF Power	:	1600 W	Extract 1	:	0 V	AMU Gain	:	126
RF Matching	:	1.84 V	Extract 2	:	-160 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias-ce	:	-18 V	Axis Gain	:	1.0002
Torch-H	:	-0.2 mm	Omega Lens-ce	:	0.2 V	Axis Offset	:	-0.05
Torch-V	:	0 mm	Cell Entrance	:	-30 V	QP Bias	:	-3 V
Carrier Gas	:	0.5 L/min	QP Focus	:	5 V			
Makeup Gas	:	0.5 L/min	Cell Exit	:	-30 V	===Detector Parameters===		
Optional Gas	:	--- %				Discriminator	:	8 mV
Nebulizer Pump	:	0.1 rps	===Octopole Parameters===			Analog HV	:	1690 V
Sample Pump	:	--- rps	OctP RF	:	180 V	Pulse HV	:	1270 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	:	--- %

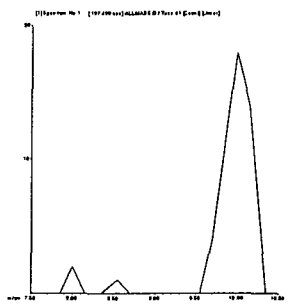
Generated : May 15, 2012 09:52:30
Printed : May 15, 2012 09:52:34

200.8 QC Tune Report

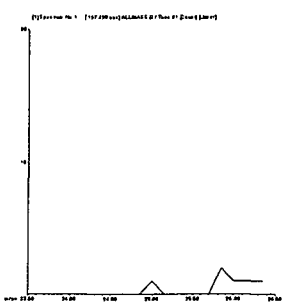
Data File: C:\ICPCHEM\1\DATA\12E15k00.B\001TUNE.D
Date Acquired: May 15 2012 10:12 am
Acq. Method: TN200_8.M
Operator: NBS
Sample Name: 100ppb Tune sol
Misc Info:
Vial Number: 1303
Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

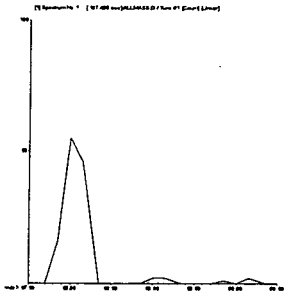
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	1964623	1950495	1971749	1963894	1963348	1973629	**0.76**	5.00	
24 Mg	6543082	6639218	6509236	6526714	6496096	6544144	**0.98**	5.00	
59 Co	7436122	7477401	7469856	7418669	7403612	7411072	**0.74**	5.00	
115 In	23624206	23458632	23524476	23738852	23699112	23699956	**0.68**	5.00	
208 Pb	3495914	3465582	3526400	3510096	3486106	3491385	**0.71**	5.00	



9 Be
Mass Calib.
Actual: 8.95
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



24 Mg
Mass Calib.
Actual: 23.95
Required: 23.90 - 24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



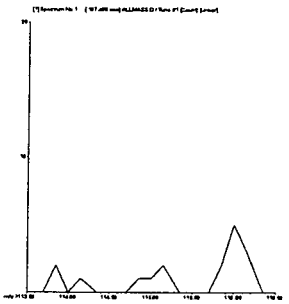
59 Co

Mass Calib.

Actual:	58.95		
Required:	58.90	-	59.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.90		
Flag:			



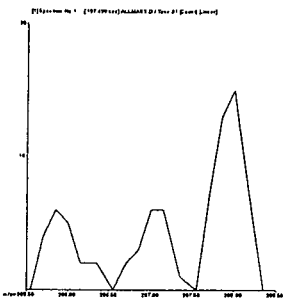
115 In

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:	208.00		
Required:	207.90	-	208.10
Flag:			

Peak Width

Actual:	0.65		
Required:	0.80		
Flag:			

Tune Result: Pass

Metals Digestion Worksheet

Method Name 3015 Digestion **Prep Method** M3015 **Set** 120502A **Units** mL

Spikes			
Spiked ID 1	LCSW LOT# 1034534-30502		
Spiked ID 2	LCSW LOT# 1034538-30504		
Spiked ID 3			
Spiked ID 4			
Spiked By	NM	Date:	05/02/12 10:30:00 AM
Witnessed By	NBS	Date:	05/02/12 10:30:00 AM

Starting Temp:	20 c
Ending Temp:	170 c
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	Yes
End Date/Time	05/02/12 11:30

	Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1	120502A Blk				45mL	50mL	05/02/12 10:30	equip: Venus
2	120502A LCS		90uL	1+2	45mL	50mL	05/02/12 10:30	equip: Venus
3	AY60080	AY60080W08			45mL	50mL	05/02/12 10:30	equip: Venus
4	AY60081	AY60081W17			45mL	50mL	05/02/12 10:30	equip: Venus
5	AY60081 MS	AY60081W17	90uL	1+2	45mL	50mL	05/02/12 10:30	equip: Venus
6	AY60081 MSD	AY60081W17	90uL	1+2	45mL	50mL	05/02/12 10:30	equip: Venus
7	AY60139	AY60139W04			45mL	50mL	05/02/12 10:30	equip: Venus
8	AY60140	AY60140W03			45mL	50mL	05/02/12 10:30	equip: Venus
9	AY60157	AY60157W04			45mL	50mL	05/02/12 10:30	equip: Venus
10	AY60263	AY60263W03			45mL	50mL	05/02/12 10:30	equip: Venus
11	AY60263 MS	AY60263W03	90uL	1+2	45mL	50mL	05/02/12 10:30	equip: Venus
12	AY60263 MSD	AY60263W03	90uL	1+2	45mL	50mL	05/02/12 10:30	equip: Venus

Solvent and Lot#
HNO3 J.T.B L02030 0185

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	EA
Date	5-2-12
Time	11:30
Moved to	Metals

Technician's Initials	
Scanned By	lo
Sample Preparation	nm
Digestion	nm
Bring up to volume	lo
Modified	05/02/12 10:34:45 AM

Reviewed By: EA **Date:** 5-2-12

6020/200.8 Injection Log

Directory: K:\ICP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	15 May 2012	12:05	Calibration Blank		120515Arev	1.
2	15 May 2012	12:12	120515 Standard 1		120515Arev	1.
3	15 May 2012	12:18	120515 Standard 2		120515Arev	1.
4	15 May 2012	12:25	120515 Standard 3		120515Arev	1.
5	15 May 2012	12:32	120515 Standard 4		120515Arev	1.
6	15 May 2012	12:39	ICV 120515		120515Arev	1.
8	15 May 2012	12:52	ICB 120515		120515Arev	1.
9	15 May 2012	12:59	CCV 120515		120515Arev	1.
10	15 May 2012	13:06	CCB 120515		120515Arev	1.
11	15 May 2012	13:12	LDR-1000ppb 120515		120515Arev	1.
12	15 May 2012	13:25	ICSA 120515		120515Arev	1.
13	15 May 2012	13:32	ICSAB 120515		120515Arev	1.
14	15 May 2012	13:45	CCV 120515		120515Arev	1.
15	15 May 2012	13:59	CCB 120515		120515Arev	1.
40	15 May 2012	17:08	CCV 120515		120515Arev	1.
41	15 May 2012	17:21	CCB 120515		120515Arev	1.
43	15 May 2012	17:35	120502A-3015-BLK		120515Arev	1.
44	15 May 2012	17:42	120502A-3015-LCS		120515Arev	1.
46	15 May 2012	17:55	AY60080W08		120515Arev	1.
47	15 May 2012	18:02	AY60081W17		120515Arev	1.
48	15 May 2012	18:08	AY60081W17 MS		120515Arev	1.
49	15 May 2012	18:15	AY60081W17 MSD		120515Arev	1.
50	15 May 2012	18:22	AY60081W17-A		120515Arev	1.
51	15 May 2012	18:28	AY60081W17-1/5		120515Arev	5.
53	15 May 2012	18:42	CCV 120515		120515Arev	1.
54	15 May 2012	18:55	CCB 120515		120515Arev	1.