

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	<u>4</u>
Case Narrative	<u>6</u>
Chain of Custody and ARF	<u>12</u>
Method 8270D SIM	<u>17</u>
QC Summary	<u>18</u>
Sample Data	<u>28</u>
Calibration Data	<u>35</u>
Raw Data	<u>59</u>
Method 8015B TPH-Diesel	<u>77</u>
QC Summary	<u>78</u>
Sample Data	<u>84</u>
Calibration Data	<u>91</u>
Raw Data	<u>120</u>
Method 8260B	<u>140</u>
QC Summary	<u>141</u>
Sample Data	<u>163</u>
Calibration Data	<u>198</u>
Raw Data	<u>347</u>

Method 6020	<u>421</u>
QC Summary	<u>422</u>
Sample Data	<u>426</u>
Calibration Data	<u>431</u>
Raw Data	<u>459</u>

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/Accuracy:

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/Accuracy:

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/Accuracy:

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 Trichloroethylene 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/ADR DOD/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:Charges:Invoice To:

GC: 2-\$SIMHC12W, 2-\$TPETD2

Extractions: 2- SEP004S, 2- SEP011

VOA: 4-\$86RHBF

Metals: 2-\$602D(Pb)

Other: 2- M3015

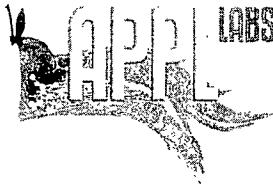
same

Client ID	APPL ID	Sampled	Analyses Requested
1. ES076	AY60080W 	04/26/12 10:30	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2 -- Unpres.VOA
2. ES077	AY60081W MS/MSD 	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

APPL Sample Receipt Form

ARF# 67622

Sample	Container Type	Count	pH	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				



APPL Labs
908 North Temperance Ave.
Clovis, CA 93611

Phone: (559) 275-2175

b7c
CHAIN OF CUSTODY RECORD

35

Fax: (559) 275-4422

C.O.C. NE 32754

Report to: PLEASE PRINT
Company Name: Environet, Inc
Address: 650 Iwilei Rd, Suite 204
Honolulu, HI 96817
Attn: Max Salmassen msalmassen@environetinc.com

Invoice to: PLEASE PRINT
Company Name: Environet, Inc
Address: 650 Iwilei Rd, Ste 24
Attn: A. P.

Phone: 808-833-2225
Fax: 808-833-2231

Project Name/Number Red Hill 1022-024	Sampler (Print) Max Salmassen					Analysis Requested/Method Number					Date Shipped: 4/26/12
Purchase Order Number 1022-024	Sampler (Signature) <i>Max K Johnson</i>					VOCs (S26eB)	TPH-C (S26eB)	TPH-O (S26eB)	PAN (S270.5)	* Lead (S220)	Carrier: FedEx
Sample Identification	Location	Date Collected 4/26/12	Time Collected 10:30	Matrix water	Number of Containers 8	X	X	X	X	X	Waybill No.: 876412433857
ES076	Red Hill	4/26/12	10:30	water	8	X	X	X	X	X	Comments: * Please filter liquid samples upon receipt.
ES077 MS/MSD		↓	11:30	↓	17	↓	↓	↓	↓	↓	Lead samples are unfiltered.
trip blank			N/A	N/A	3						
trip blank			N/A	N/A	↓	↓	↓	↓			
Shuttle Temperature:	Turnaround Requested: MUST CHECK ONE					Sample Disposal:					
	<input checked="" type="checkbox"/> Standard (2-3 week) <input type="checkbox"/> One week <input type="checkbox"/> 24-48 hour					<input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)					
Relinquished by sampler: MS	Date 4/26/12	Time 12:40	Received by:		Relinquished by:			Date	Time	Received by:	
Relinquished by:	Date	Time	Received by:		Relinquished by:			Date 4/27/12	Time 1030	Received at lab by: <i>[Signature]</i>	

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) S764124333573
 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, 2 ipoc
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?
 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. SA 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: Janyon Second reviewer: S
 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 Avenue
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

Printed: 05/11/12 3:27:59 PM

Form 2 & 8, Surrogate Recovery Summary

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

Printed: 05/11/12 3:27:59 PM

Form 2 & 8, Surrogate Recovery Summary

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	SPK Result	SPK % Recovery	Recovery
	ug/L	ug/L	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: _____

<u>Primary</u>	<u>SPK</u>
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

APPL Inc.

Batch ID: #SIMHC-120430A

908 North Temperance Avenue

Sample ID: AY60081

Clovis, CA 93611

Client ID: ES077

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	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.
Case No: 67622
Matrix: WATER
Blank ID: 120430A-BLK

SDG No: 67622
Date Analyzed: 05/04/12
Instrument: Linus
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

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	0504L003.D	05/04/12 14:23
2	Lab Control Spike	0504L004.D	05/04/12 14:49
3	ES076	0504L005.D	05/04/12 15:14
4	Matrix Spike	0504L006.D	05/04/12 15:39
5	Matrix Spike Dup	0504L007.D	05/04/12 16:04
6	ES077	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) _____

		Naphthalene-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 1/10	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 1/10	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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES076
Sample Collection Date: 04/26/12

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) Naphthalene-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

Quantitation Report

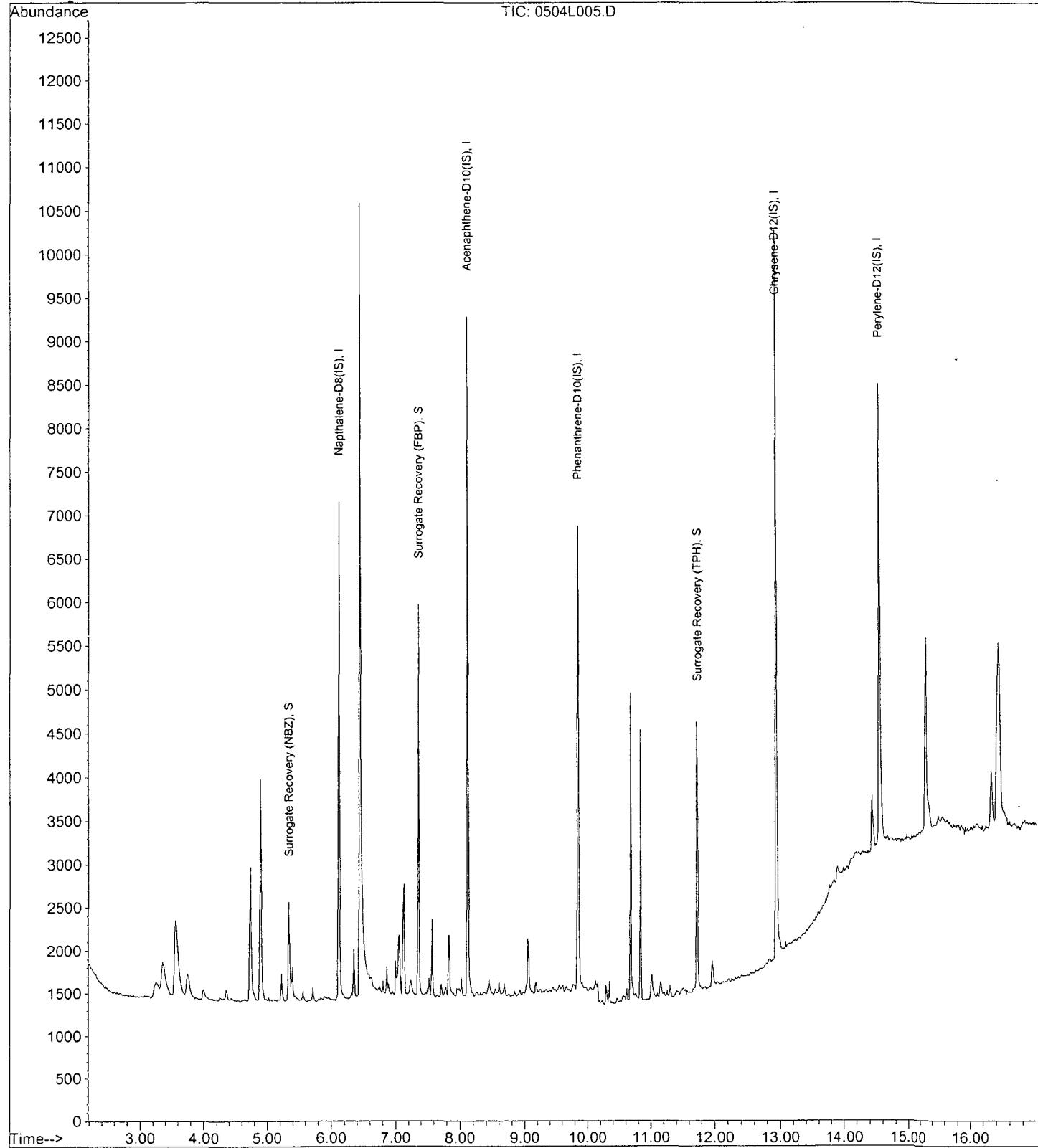
Data File : M:\LINUS\DATA\L120229\0504L005.D
 Acq On : 4 May 12 15:14
 Sample : AY60080W09 1/1040
 Misc :

Vial: 5
 Operator: LF
 Inst : Linus
 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 :

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
------------------	--	--	--	--	--	--------

Quantitation Report

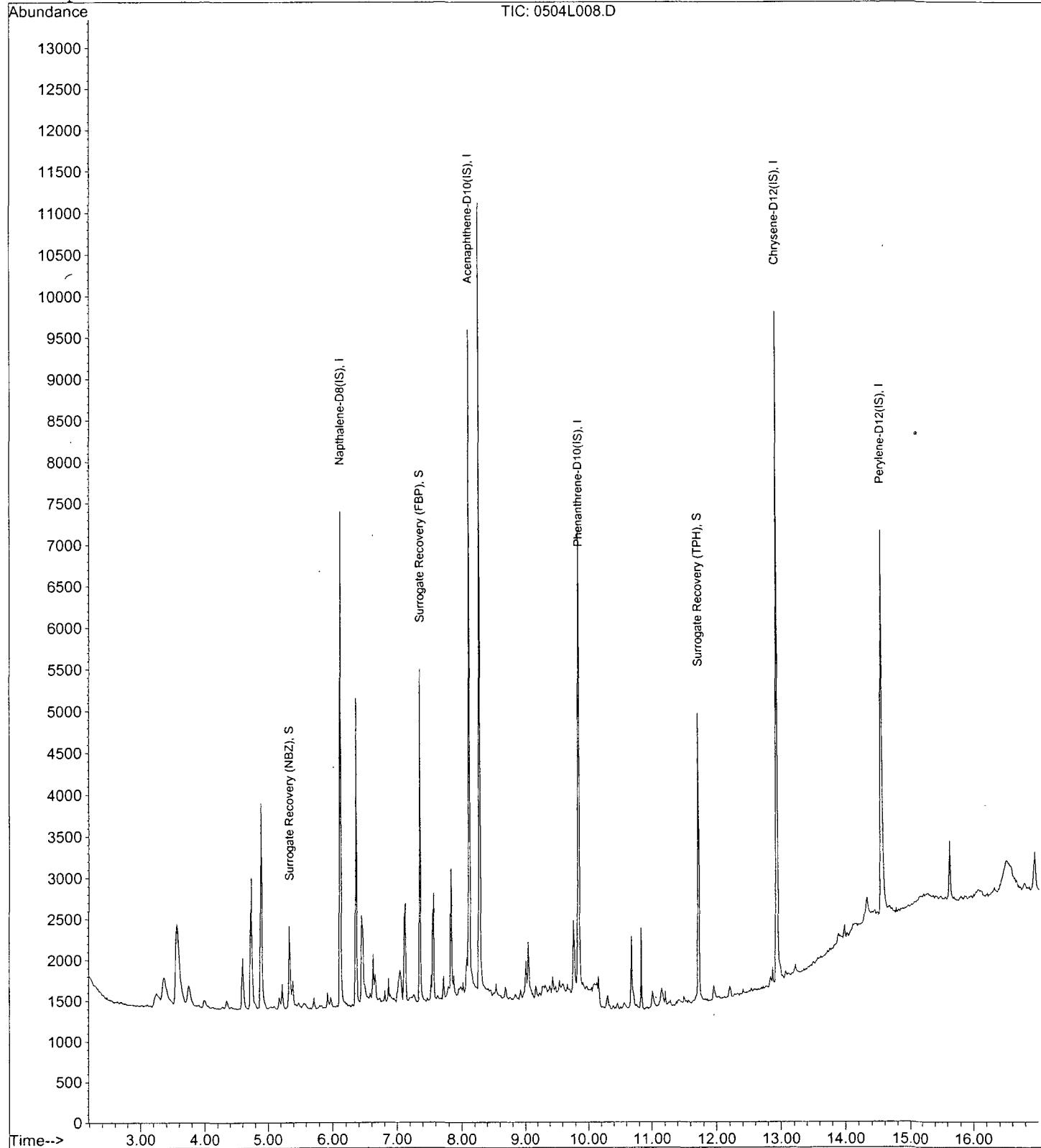
Data File : M:\LINUS\DATA\L120229\0504L008.D
Acq On : 4 May 12 16:30
Sample : AY60081W12 1/1000
Misc :

Vial: 8
Operator: LF
Inst : Linus
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.
Case No: _____
Matrix: _____

SDG No: **67622**
Initial Cal. Date: 02/29/12
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 Naphthalene-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
 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

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) Naphthalene-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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

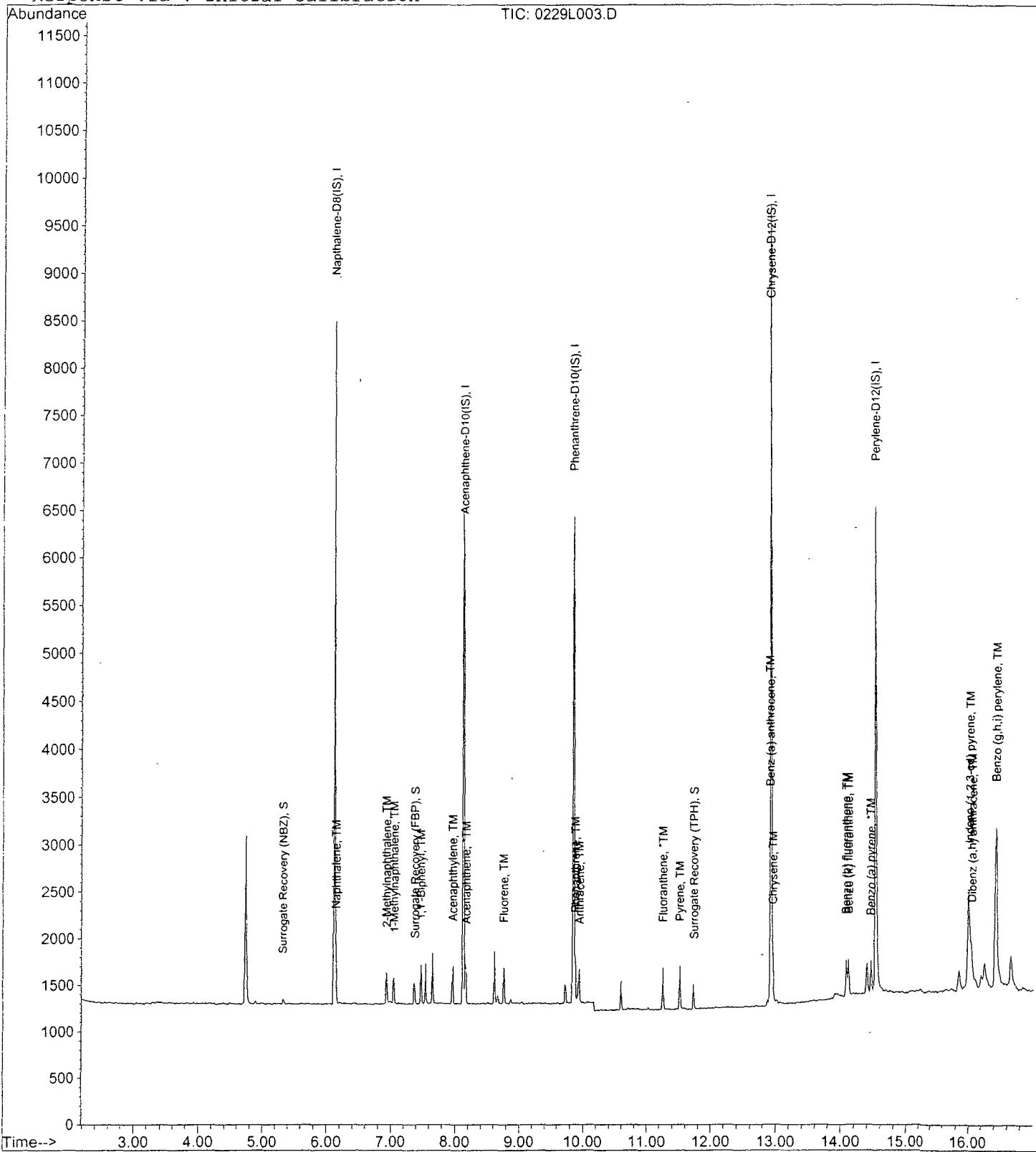
Data File : M:\LINUS\DATA\L120229\0229L003.D
 Acq On : 1 Mar 12 00:20
 Sample : 0.1ug/ml PAH 02-29-12
 Misc :

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 :

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) Naphthalene-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
4) 2-Methylnaphthalene	6.93	142	433	0.23347	ppb
5) 1-Methylnaphthalene	7.05	142	391	0.22147	ppb
8) 1,1'-Biphenyl	7.48	154	486	0.21945	ppb
9) Acenaphthylene	7.96	152	579	0.21294	ppb
10) Acenaphthene	8.17	154	338	0.21674	ppb
11) Fluorene	8.76	166	407	0.21392	ppb
13) Phenanthrene	9.88	178	609	0.22018	ppb
14) Anthracene	9.94	178	550	0.20897	ppb
15) Fluoranthene	11.26	202	715	0.20496	ppb
17) Pyrene	11.51	202	745	0.21610	ppb
19) Benz (a) anthracene	12.91	228	662	0.23077	ppb
20) Chrysene	12.96	228	680	0.22213	ppb
21) Indeno (1,2,3-cd) pyrene	15.99	276	2144	0.78820	ppb
23) Benzo (b) fluoranthene	14.09	252	765	0.23539	ppb
24) Benzo (k) fluoranthene	14.13	252	535	0.17993	ppb
25) Benzo (a) pyrene	14.46	252	688	0.23348	ppb
26) Dibenz (a,h) anthracene	16.03	278	817	0.32794	ppb
27) Benzo (g,h,i) perylene	16.41	276	3043	1.02890	ppb

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

0229L004.D SIMB.M Thu Mar 01 10:58:56 2012

Quantitation Report

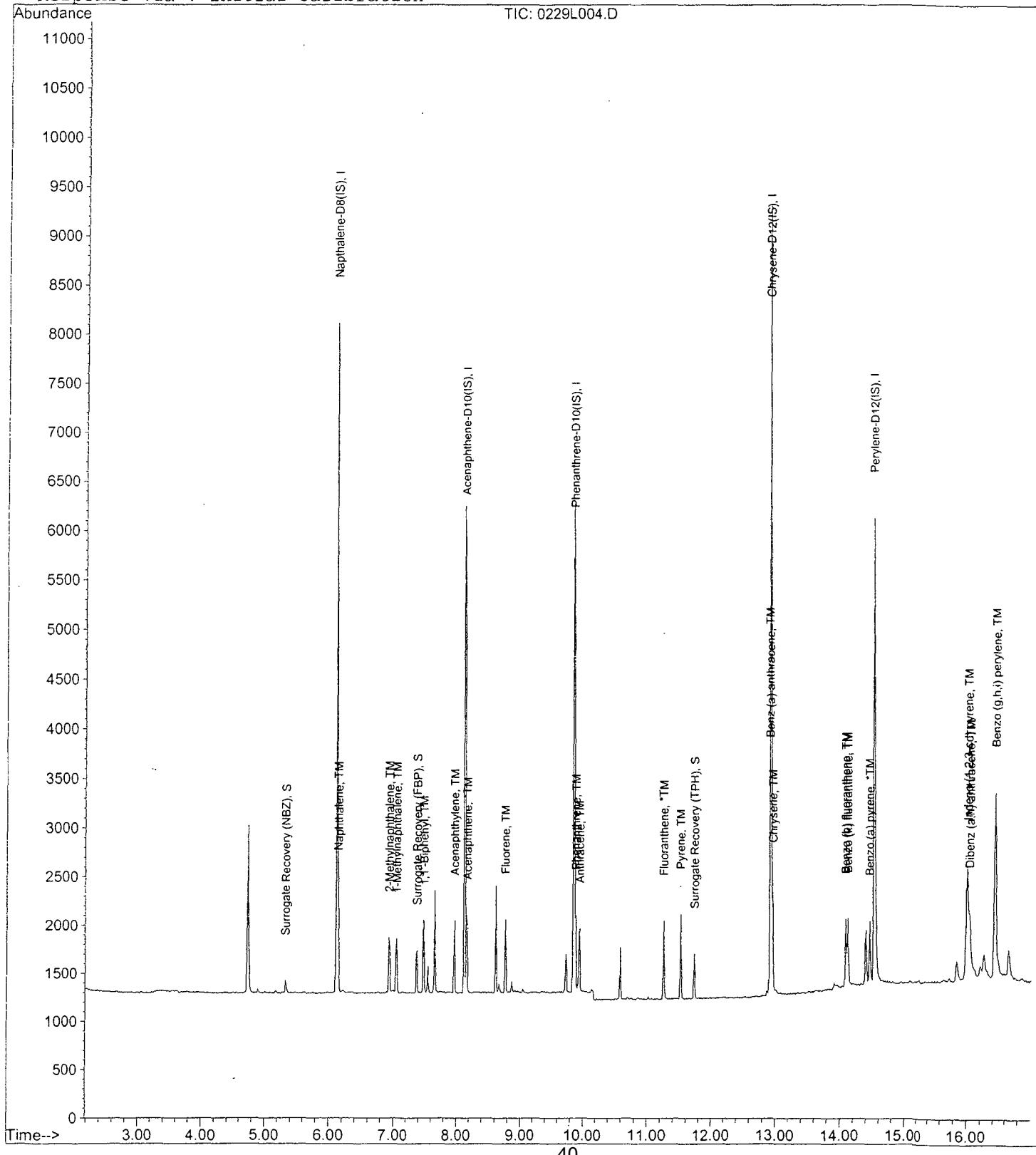
Data File : M:\LINUS\DATA\L120229\0229L004.D
 Acq On : 1 Mar 12 00:44
 Sample : 0.2ug/ml PAH
 Misc :

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
 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

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) Naphthalene-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
4) 2-Methylnaphthalene	6.93	142	1055	0.57775	ppb
5) 1-Methylnaphthalene	7.05	142	979	0.56319	ppb
8) 1,1'-Biphenyl	7.47	154	1249	0.57433	ppb
9) Acenaphthylene	7.96	152	1474	0.55203	ppb
10) Acenaphthene	8.16	154	845	0.55178	ppb
11) Fluorene	8.76	166	1034	0.55344	ppb
13) Phenanthrene	9.88	178	1553	0.55864	ppb
14) Anthracene	9.94	178	1305	0.49333	ppb
15) Fluoranthene	11.26	202	1819	0.51879	ppb
17) Pyrene	11.51	202	1925	0.56875	ppb
19) Benz (a) anthracene	12.91	228	1629	0.57842	ppb
20) Chrysene	12.96	228	1683	0.55999	ppb
21) Indeno (1,2,3-cd) pyrene	15.99	276	3017	1.12977	ppb
23) Benzo (b) fluoranthene	14.09	252	1807	0.57147	ppb
24) Benzo (k) fluoranthene	14.13	252	1511	0.52230	ppb
25) Benzo (a) pyrene	14.47	252	1556	0.54272	ppb
26) Dibenz (a,h) anthracene	16.04	278	1515	0.62501	ppb
27) Benzo (g,h,i) perylene	16.41	276	3735	1.29798	ppb

Quantitation Report

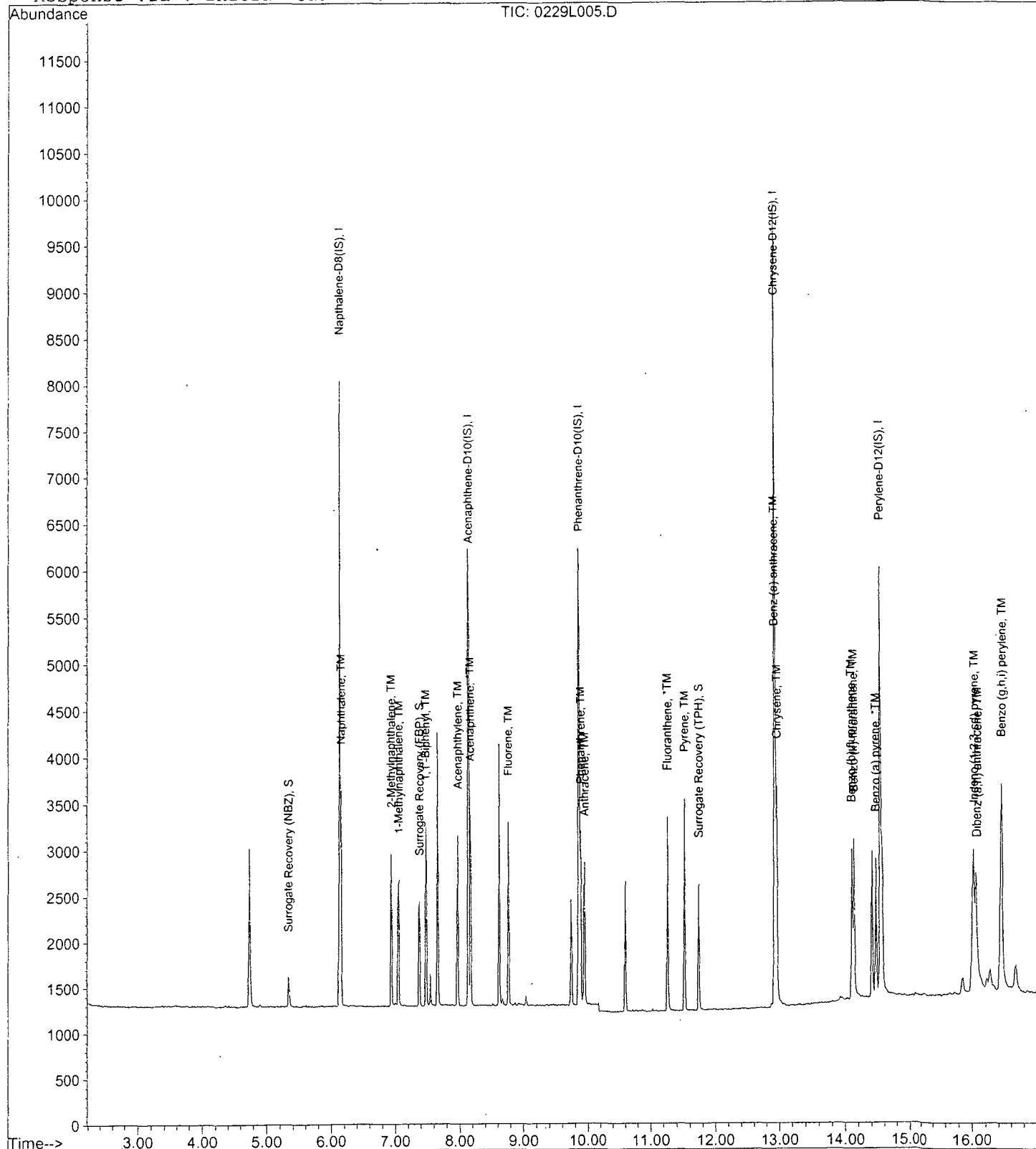
Data File : M:\LINUS\DATA\L120229\0229L005.D
 Acq On : 1 Mar 12 1:09
 Sample : 0.5ug/ml PAH
 Misc :

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 :

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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

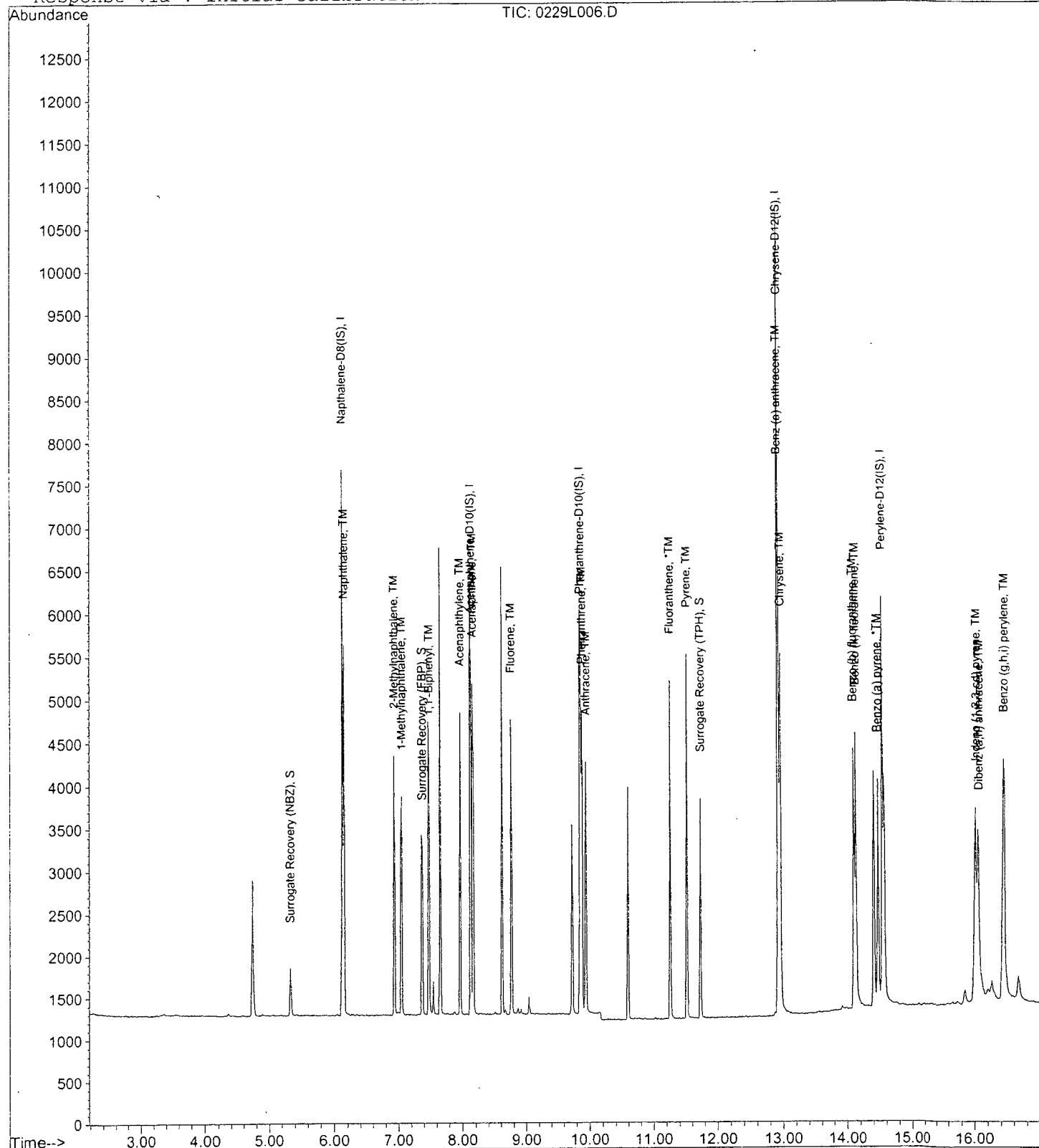
Data File : M:\LINUS\DATA\L120229\0229L006.D
 Acq On : 1 Mar 12 1:34
 Sample : 1.0ug/ml PAH
 Misc :

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 :

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) Naphthalene-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	R.T.	QIon	Response	Conc	Units	Dev (Min)
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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

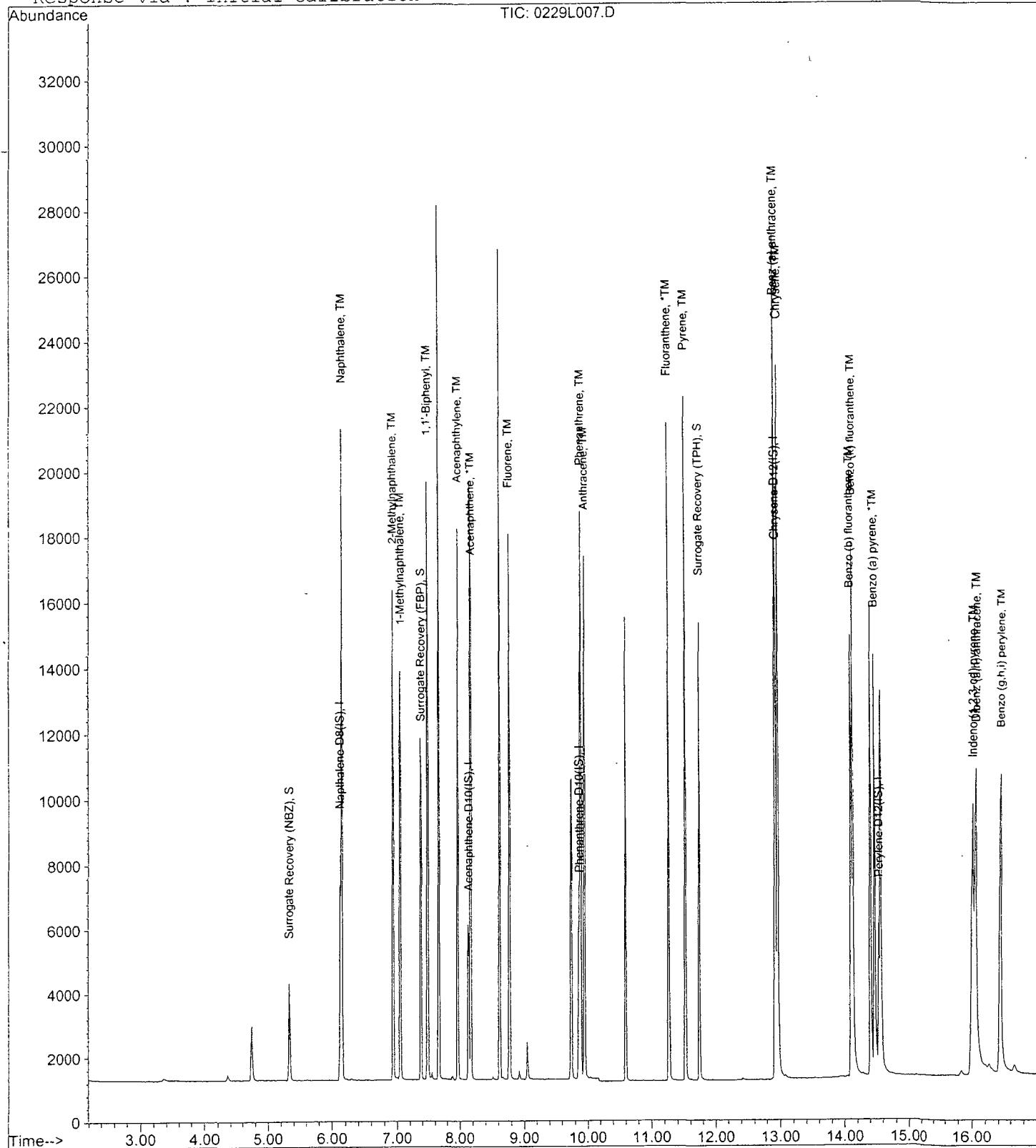
Data File : M:\LINUS\DATA\L120229\0229L007.D
 Acq On : 1 Mar 12 1:59
 Sample : 5.0ug/ml PAH
 Misc :

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 :

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) Naphthalene-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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

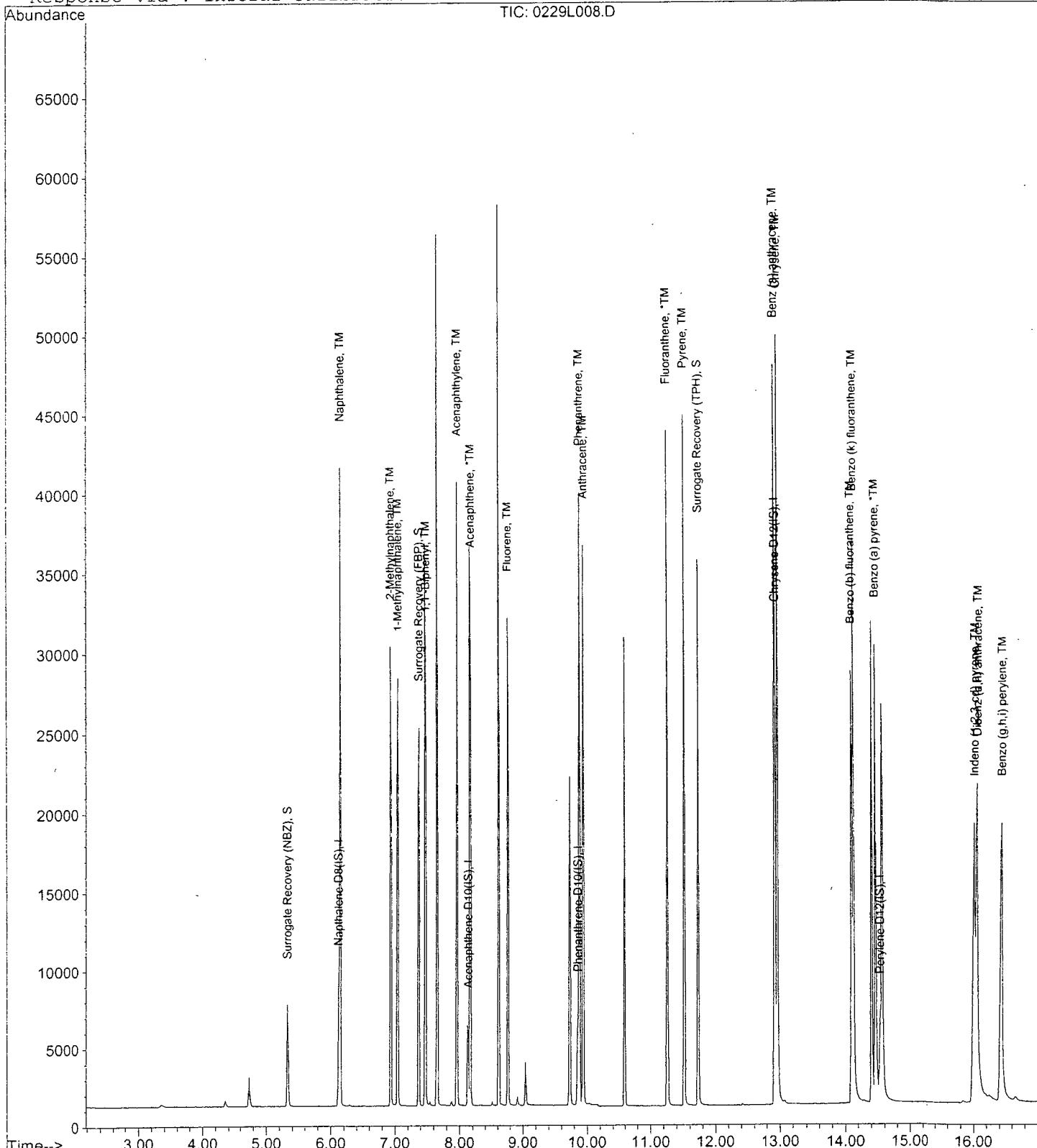
Data File : M:\LINUS\DATA\L120229\0229L008.D
 Acq On : 1 Mar 12 2:24
 Sample : 10ug/ml PAH
 Misc :

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
 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

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) Naphthalene-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
4) 2-Methylnaphthalene	6.94	142	84994	45.29212	ppb
5) 1-Methylnaphthalene	7.05	142	79171	44.31818	ppb
8) 1,1'-Biphenyl	7.48	154	92639	43.58586	ppb
9) Acenaphthylene	7.96	152	119609	45.83300	ppb
10) Acenaphthene	8.17	154	68862	46.00885	ppb
11) Fluorene	8.77	166	86013	47.10480	ppb
13) Phenanthrene	9.88	178	118464	43.96772	ppb
14) Anthracene	9.94	178	115636	45.10324	ppb
15) Fluoranthene	11.26	202	154795	45.55225	ppb
17) Pyrene	11.52	202	161556	44.71366	ppb
19) Benz (a) anthracene	12.92	228	135460	45.05633	ppb
20) Chrysene	12.96	228	134623	41.96027	ppb
21) Indeno (1,2,3-cd) pyrene	16.01	276	116267	40.78451	ppb
23) Benzo (b) fluoranthene	14.10	252	132868	41.35096	ppb
24) Benzo (k) fluoranthene	14.14	252	144725	49.23001	ppb
25) Benzo (a) pyrene	14.48	252	133729	45.90057	ppb
26) Dibenz (a,h) anthracene	16.05	278	117167	47.56756	ppb
27) Benzo (g,h,i) perylene	16.44	276	122767	41.98443	ppb

Quantitation Report

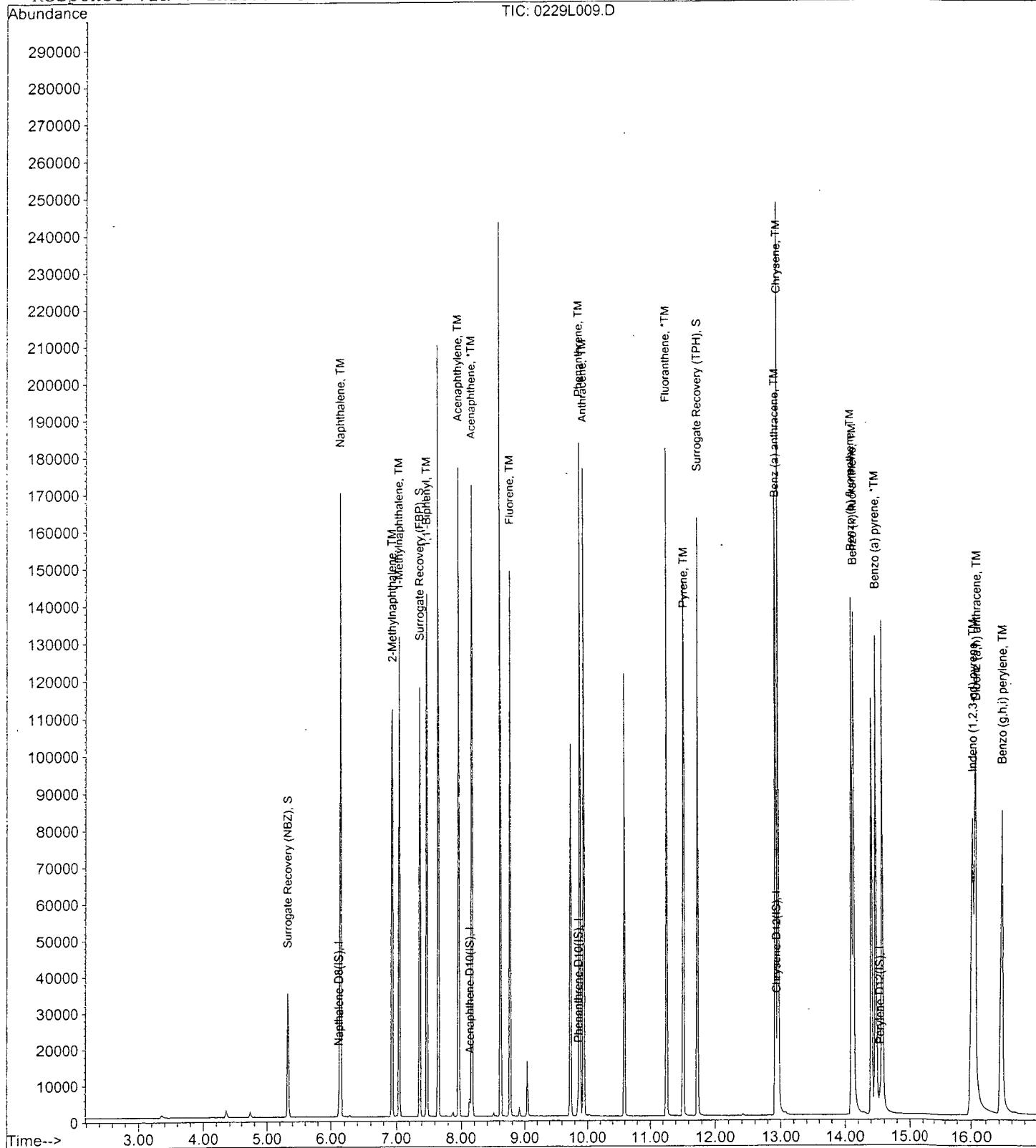
Data File : M:\LINUS\DATA\L120229\0229L009.D
 Acq On : 1 Mar 12 2:49
 Sample : 50ug/ml PAH
 Misc :

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) Naphthalene-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	R.T.	QIon	Response	Conc	Units	Dev(Min)
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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

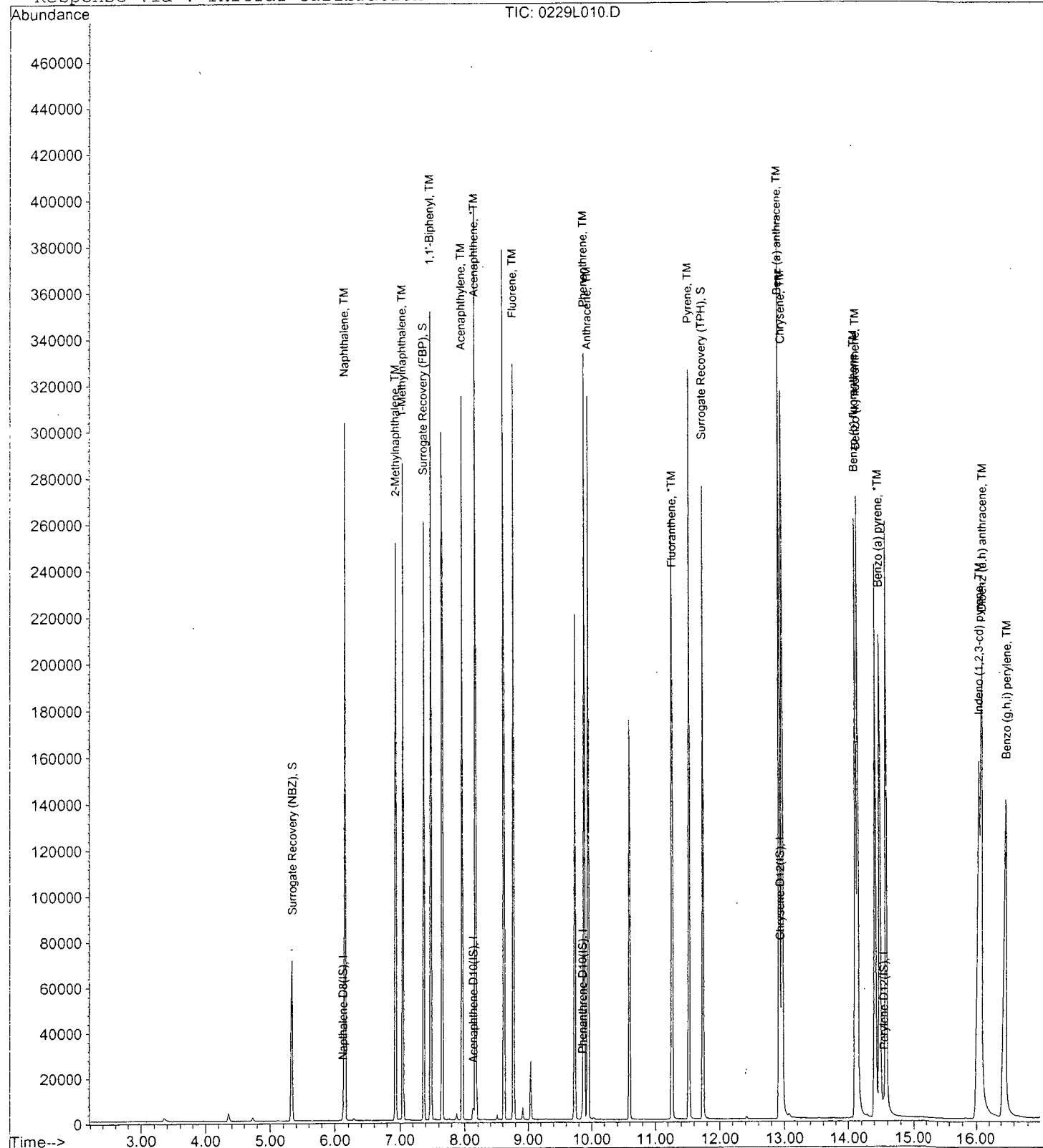
Data File : M:\LINUS\DATA\L120229\0229L010.D
 Acq On : 1 Mar 12 3:14
 Sample : 100ug/ml PAH
 Misc :

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



EPA 8270C SIM

Form 7

Second Source Calibration

Lab Name: APPL, Inc.SDG No: 67622

Case No:

Date Analyzed: 1 Mar 12 3:39

Matrix:

Instrument: LinusInitial Cal. Date: 02/29/12Data File: 0229L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Naphthalene-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
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
24	TMQ	Benzo (g,h,i) perylene	3.855	1.401	64	TMQ
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 :

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) Naphthalene-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

Quantitation Report

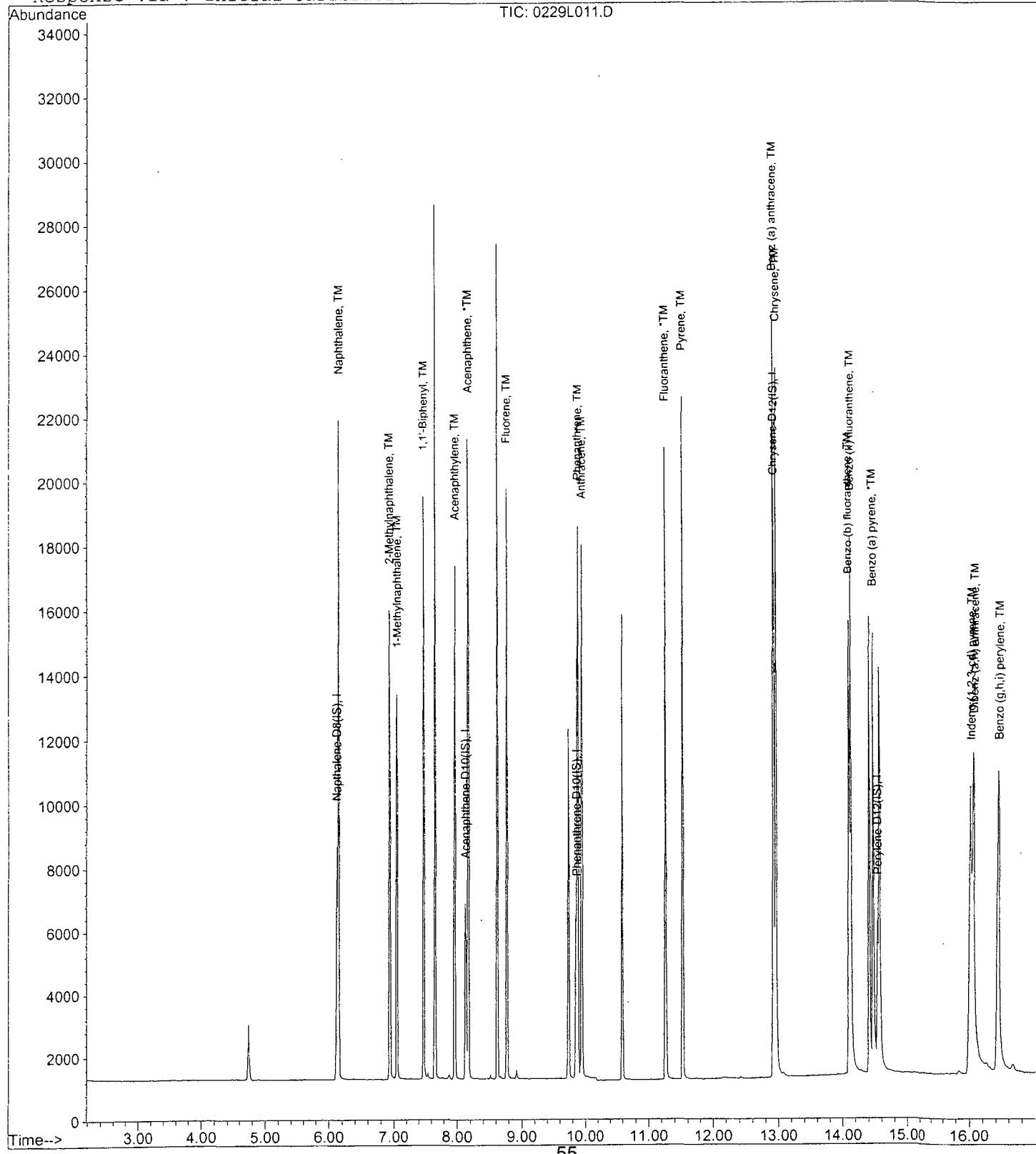
Data File : M:\LINUS\DATA\L120229\0229L011.D
 Acq On : 1 Mar 12 3:39
 Sample : 5.0ug/ml SS PAH 02-29-12
 Misc :

Vial: 11
 Operator: LF
 Inst : Linus
 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



EPA 8270C SIM

Form 7
Continuing CalibrationLab Name: APPL, Inc.SDG No: 67622

Case No: _____

Date Analyzed: 4 May 12 13:58

Matrix: _____

Instrument: Linus

Initial Cal. Date: 02/29/12Data File: 0504L002.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Naphthalene-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
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
27	TMQ	Benzo (g,h,i) perylene	3.855	1.141	70	TMQ
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) Naphthalene-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
 0504L002.D SIMB.M Mon May 07 11:27:47 2012

Quantitation Report

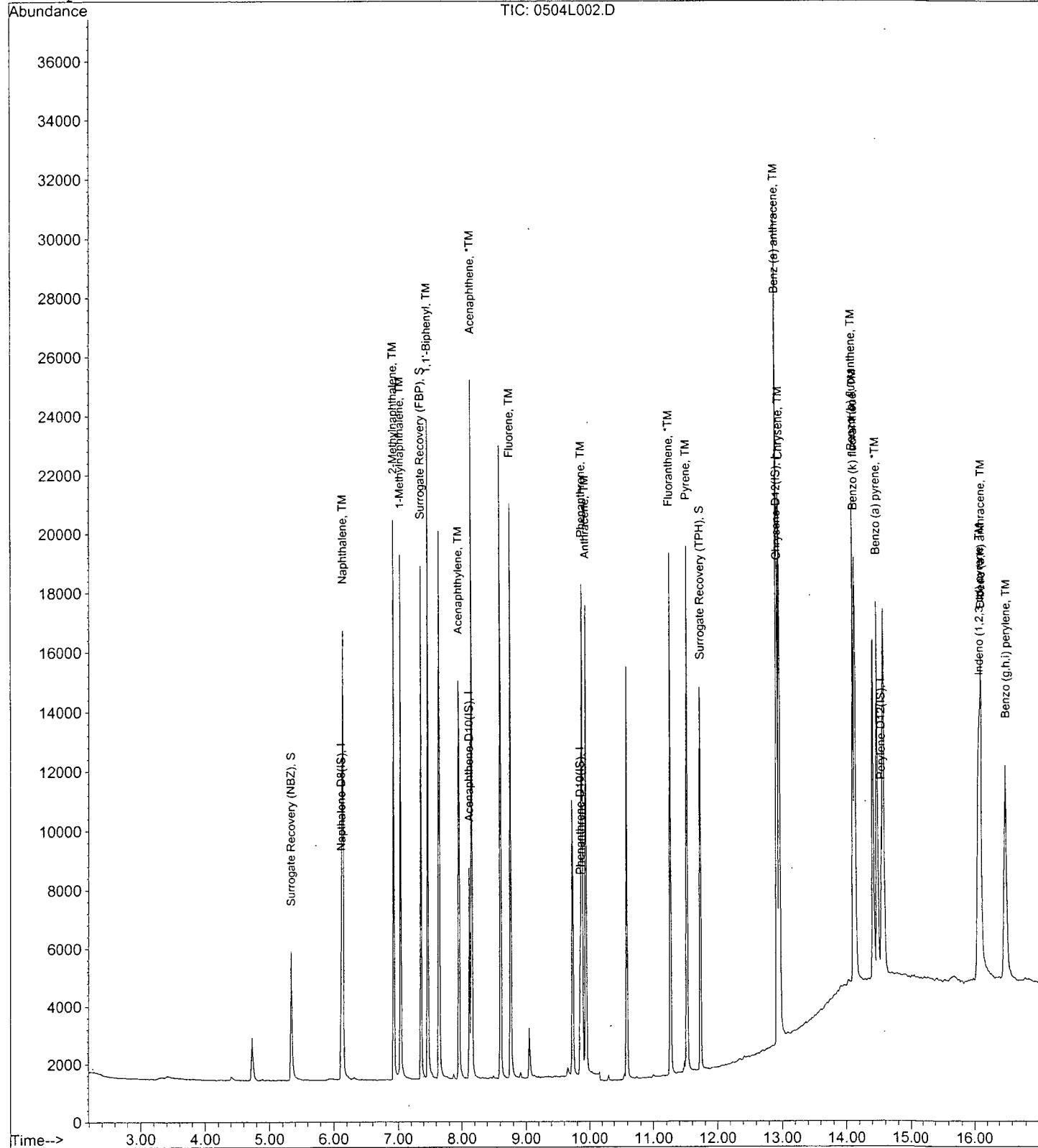
Data File : M:\LINUS\DATA\L120229\0504L002.D
 Acq On : 4 May 12 13:58
 Sample : 5.0ug/ml PAH 02-29-12
 Misc :

Vial: 2
 Operator: LF
 Inst : Linus
 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

Blank Name/QCG: 120430W-60081 - 166820
 Batch ID: #SIMHC-120430A

APPL Inc.
 908 North Temperance Avenue
 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 3:28:18 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) Naphthalene-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
------------------	--------

Quantitation Report

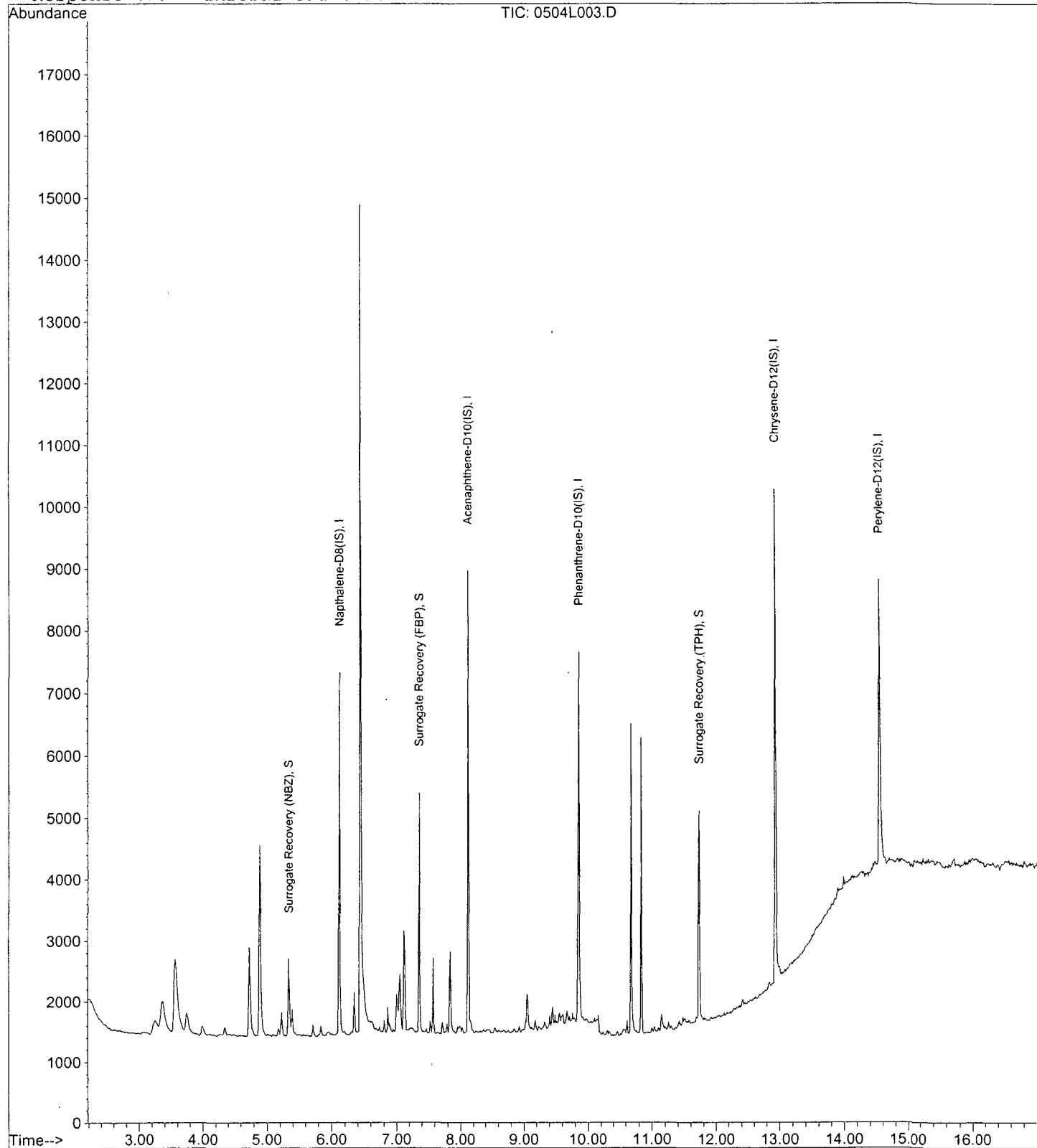
Data File : M:\LINUS\DATA\L120229\0504L003.D
Acq On : 4 May 12 14:23
Sample : 120430A BLK 1/1000
Misc :

Vial: 3
Operator: LF
Inst : Linus
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	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L	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: _____

<u>Primary</u>	<u>SPK</u>
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) Naphthalene-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
4) 2-Methylnaphthalene	6.93	142	5112	2.37570	ppb
5) 1-Methylnaphthalene	7.03	142	4942	2.46218	ppb
8) 1,1'-Biphenyl	7.47	154	6404	2.48263	ppb
9) Acenaphthylene	7.95	152	8751	2.78850	ppb
10) Acenaphthene	8.16	154	4978	2.72443	ppb
11) Fluorene	8.76	166	6876	3.10536	ppb
13) Phenanthrene	9.88	178	10361	3.15526	ppb
14) Anthracene	9.94	178	9537	3.21708	ppb
15) Fluoranthene	11.26	202	14503	3.60308	ppb
17) Pyrene	11.52	202	15523	3.58984	ppb
19) Benz (a) anthracene	12.92	228	13502	3.64482	ppb
20) Chrysene	12.96	228	13202	3.53081	ppb
21) Indeno (1,2,3-cd) pyrene	16.05	276	10861	3.86230	ppb
23) Benzo (b) fluoranthene	14.11	252	13157	3.17648	ppb
24) Benzo (k) fluoranthene	14.14	252	13632	3.96474	ppb
25) Benzo (a) pyrene	14.49	252	11703	3.18194	ppb
26) Dibenz (a,h) anthracene	16.08	278	10733	3.52278	ppb
27) Benzo (g,h,i) perylene	16.48	276	11159	3.44558	ppb

*7577 + 2.5
6270 + 1.427 = 2.12
4F 5/23/12*

Quantitation Report

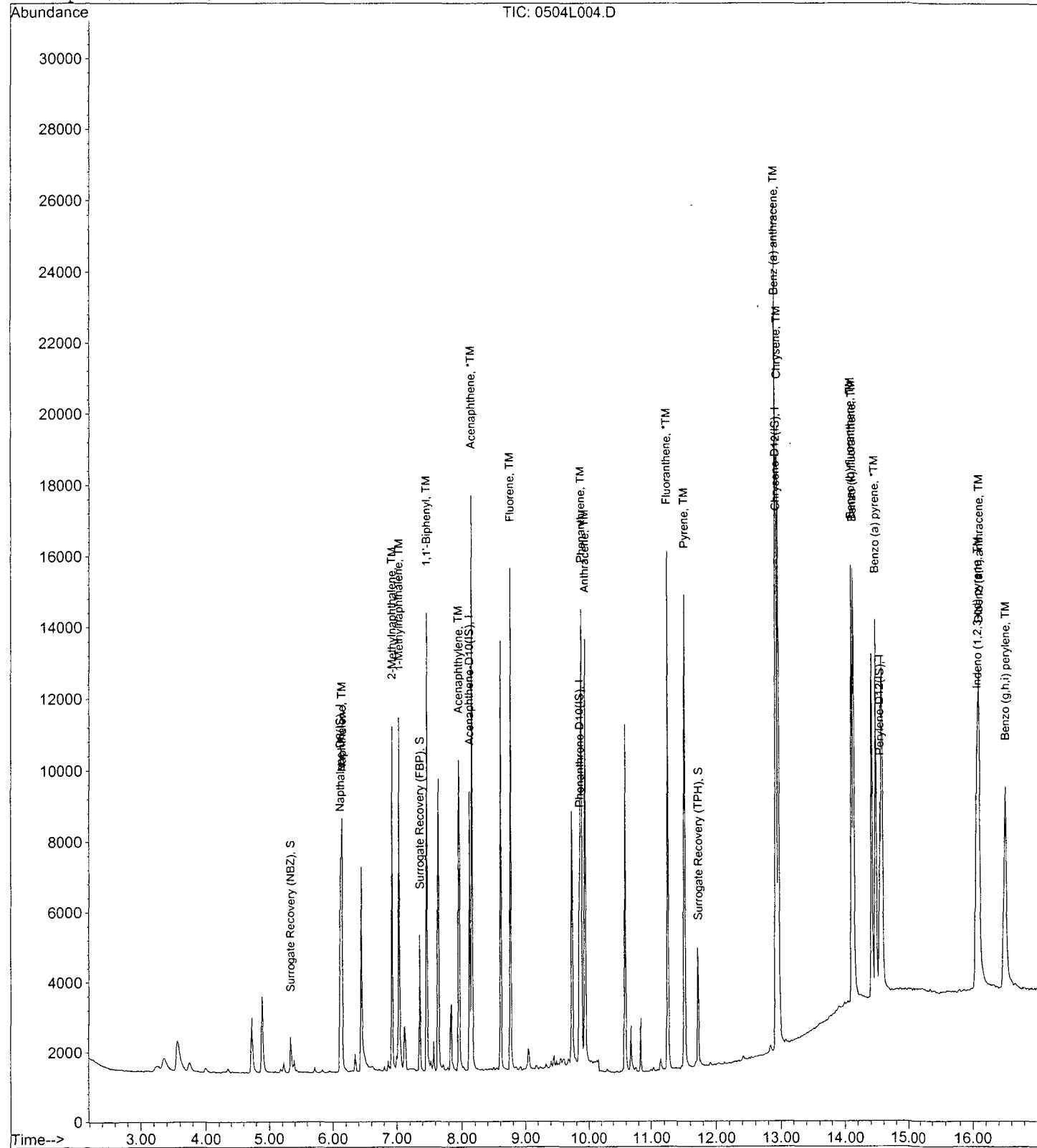
Data File : M:\LINUS\DATA\L120229\0504L004.D
 Acq On : 4 May 12 14:49
 Sample : 120430A LCS-1 1/1000
 Misc :

Vial: 4
 Operator: LF
 Inst : Linus
 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

APPL Inc.

Batch ID: #SIMHC-120430A

908 North Temperance Avenue

Sample ID: AY60081

Clovis, CA 93611

Client ID: ES077

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	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 : Multipllr: 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) Naphthalene-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

Target Compounds	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

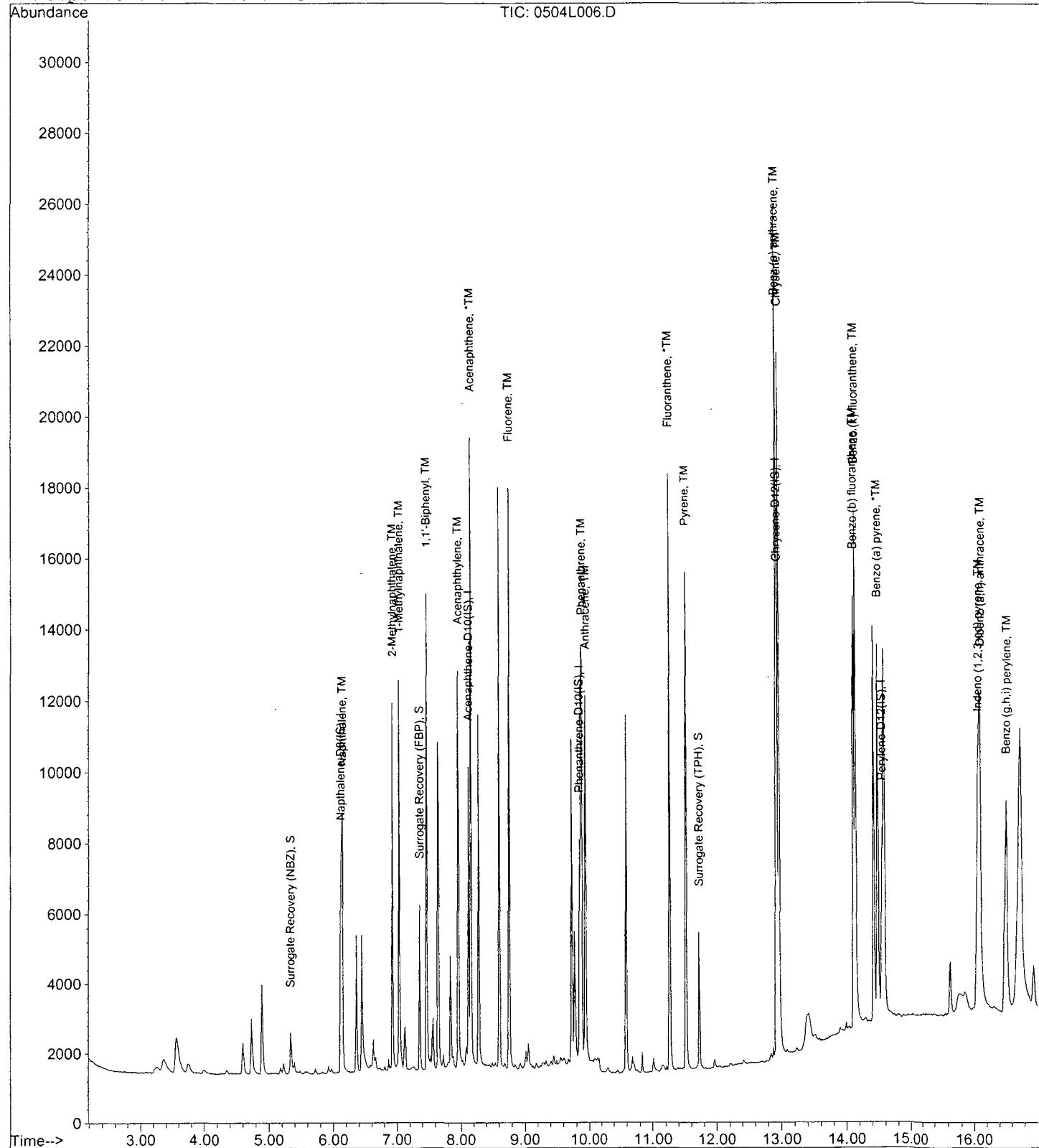
Data File : M:\LINUS\DATA\L120229\0504L006.D
 Acq On : 4 May 12 15:39
 Sample : AY60081W16 MS-1 1/1040
 Misc :

Vial: 6
 Operator: LF
 Inst : Linus
 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) Naphthalene-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
4) 2-Methylnaphthalene	6.93	142	6840	2.94879	ppb
5) 1-Methylnaphthalene	7.04	142	6694	3.09379	ppb
8) 1,1'-Biphenyl	7.47	154	8336	2.81512	ppb
9) Acenaphthylene	7.95	152	11588	3.21662	ppb
10) Acenaphthene	8.16	154	6627	3.15949	ppb
11) Fluorene	8.76	166	8701	3.42313	ppb
13) Phenanthrene	9.88	178	12265	3.21804	ppb
14) Anthracene	9.94	178	10572	3.07255	ppb
15) Fluoranthene	11.26	202	17526	3.75137	ppb
17) Pyrene	11.51	202	18301	3.58506	ppb
19) Benz (a) anthracene	12.93	228	16093	3.67991	ppb
20) Chrysene	12.96	228	14112	3.19703	ppb
21) Indeno (1,2,3-cd) pyrene	16.04	276	13151	3.96185	ppb
23) Benzo (b) fluoranthene	14.12	252	16563	3.45085	ppb
24) Benzo (k) fluoranthene	14.14	252	15034	3.77335	ppb
25) Benzo (a) pyrene	14.49	252	13957	3.27480	ppb
26) Dibenz (a,h) anthracene	16.08	278	12901	3.65537	ppb
27) Benzo (g,h,i) perylene	16.48	276	13245	3.53033	ppb

Quantitation Report

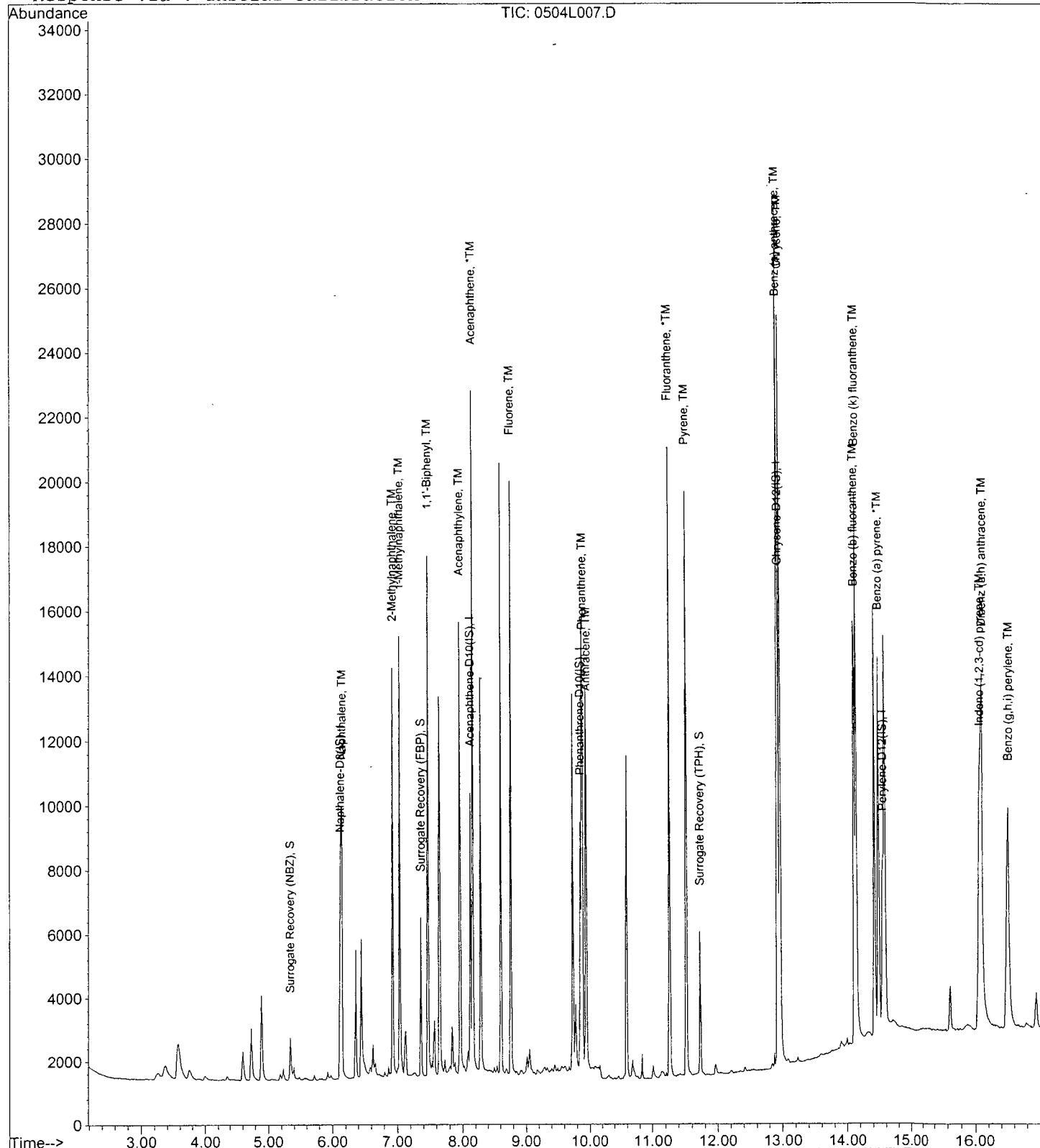
Data File : M:\LINUS\DATA\L120229\0504L007.D
 Acq On : 4 May 12 16:04
 Sample : AY60081W18 MSD-1 1/1040
 Misc :

Vial: 7
 Operator: LF
 Inst : Linus
 Multiplr: 0.96

Quant Time: May 7 10:38 2012

Quant Results File: SIMB.RES

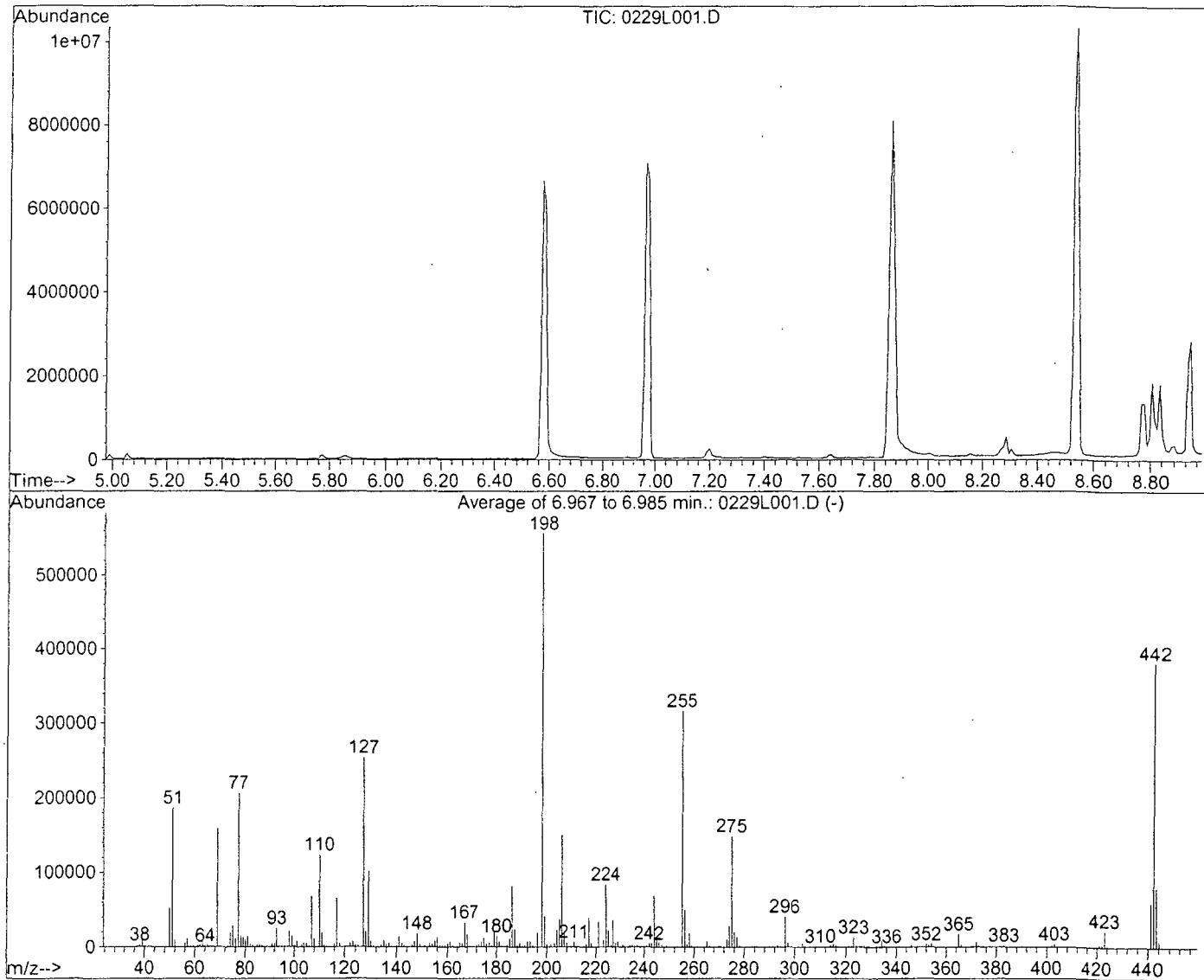
Method : M:\LINUS\DATA\L120229\SIMB.M (RTE Integrator)
 Title : EPA 8270C
 Last Update : Mon May 07 11:25:18 2012
 Response via : Initial Calibration



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.

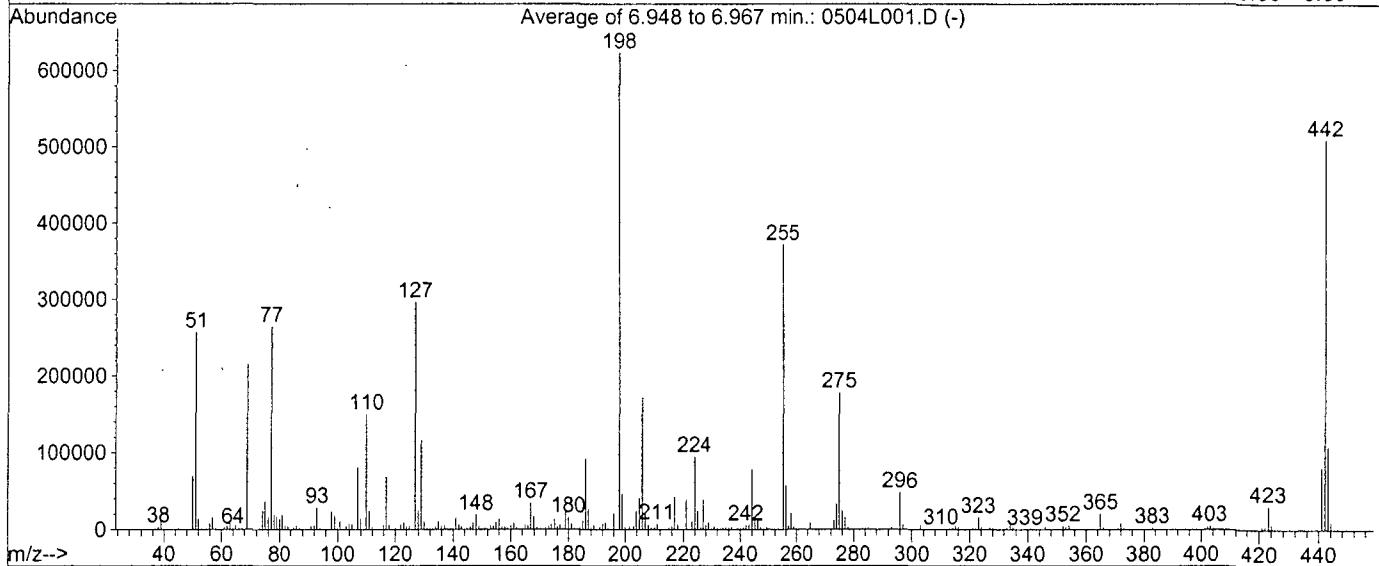
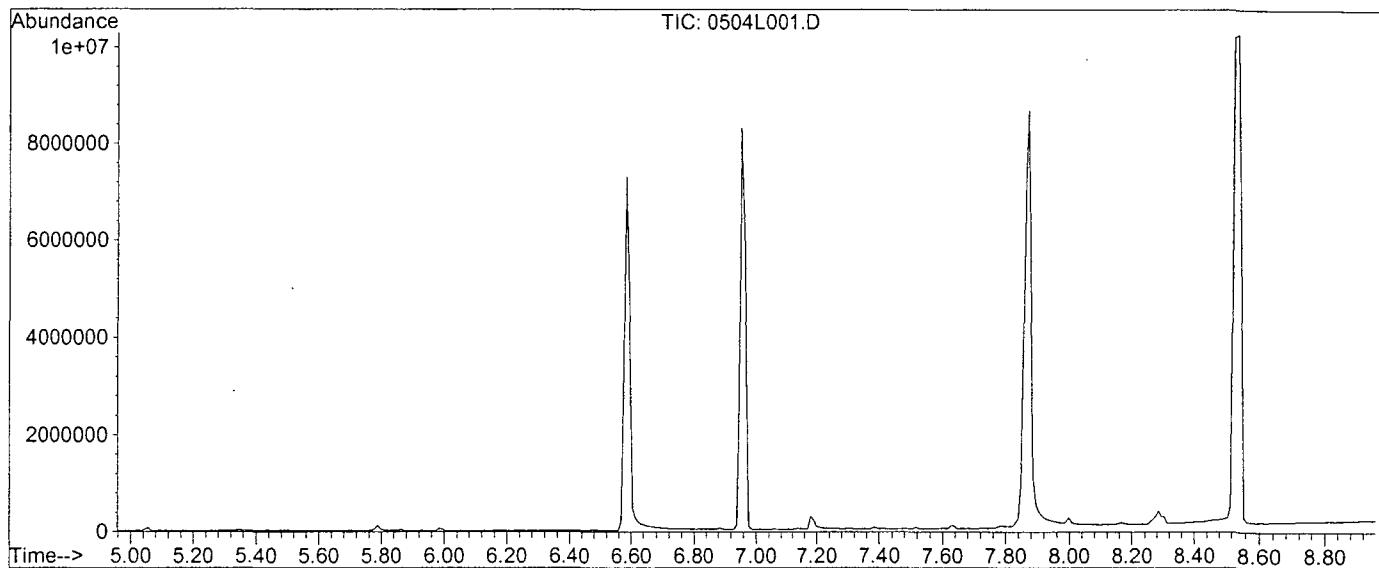
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.4	186212	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	747	PASS
127	198	40	60	45.5	253515	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	556758	PASS
199	198	5	9	7.4	41091	PASS
275	198	10	30	26.6	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

GC, MC STANDARD PREPARATION BOOK # 5 PAGE # 112

For 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

3270D PAH SIM

Lot # 170253 - 28478
Rec 3/10/11 MFR exp 3/3/2013

exp 2/25/13

For 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

8270D PAH SIM (SS)

Lot #: 110256 - 28490
Rec 3/10/11 MFR exp 3/3/2013

exp 2/25/13

For 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

8270 BN:A (200:400) Surrogate Solution

Lot #: 167802 - 29314

Rec. 8/8/11 MFR exp. 01/09/13

exp 2/25/13

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

**Method 8270 Internal
Standard Solution, 1,000**

mg/L, 1 ml

110001-42

Lot # Storage Expiry
167766 ≤ -10 Degrees C 4/20/13

Solv: Methylene Chloride

8270 Internal Standard

Lot #: 167766 - 28151

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

exp 2/25/13

PREP DATE:	02-25-12						
SIM Semivolatile Int. Std. Mix 125 ug/ml							
Exp:	08-25-12						
		Conc.		Date	CODE:	B	
Supplier	ID #	ug/mL	Lot #	Code	Exp Date	μL	
O2S1	Int. Std.	2000	167766-28151	02/25/12	02-25-13	100	
EM Science	MeCl2		47186			1500	
						1600	

PREP DATE: 02-25-12																					
8270 SIM STANDARD CURVE																					
Supplier	ID #	Conc.	ug/mL	Date	Lot #	Code	Exp. Date	0.10		0.20		0.50		1.00		5.00		10.00		50.00	
								μL	μL	μL	μL	μL	μL	μL	μL	μL	μL	μL	μL	μL	μL
	8270D PAH SIM	200	170253-28478	02/25/12	02-25-13	0	0	0	0	0	0	0	0	0	0	5	5	25	5		
	5 Ug/mL	5		02/25/12		0	0	0	0	10	20	0	0	0	0	0	0	0	0	0	C
	1 Ug/mL	1		02/25/12		10	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29314	02/25/12	01-09-13	0	0	0	0	0	0	0	0	0	0	5	5	25	5		
	EM Science	Methylene Chloride	47186					Final Vol.	100	100	100	100	100	100	100	100	100	100	100	100	100

GC/MS STANDARD PREPARATION BOOK # J PAGE # 13

UF 2/28/12

PREP DATE:	02-25-12	Conc.	Date	CODE:
SIM 8270 Second Source (5 μ g/mL)		μ g/mL	Code	Exp. Date
Exp:	03-10-12			
Supplier	ID #	Lot #		
8270D PAH SIM (SS)	170256-28490	200	02/25/12	02-25-13
MeCl2		Lot#47186		195
			Final Volume	200

GCM-150-1
Lot CH-2137
Exp 07/31/2013
Semi-Volatiles GC/MS Tuning
Standard
4 analyte(s) at 1000 μ g/mL in
dichloromethane
For Lab Use
250 Smith St, Middletown, RI 02852 USA

Off 2/28/13

UF 2/28/12

PREP DATE:	02-28-12	Conc.	Date	CODE:	B
SV Tune Mix	50 μ g/ml	μ g/mL	Code	Exp. Date	μ L
Exp:	02-28-13				
Supplier	ID #	Lot #			
U. Scientific	GCM-150	1000	CH-2137	02/28/12	07-31-13
EM Science	MeCl2		47080		19000
			Final Vol.	20000	

UF 2/28/12

PREP DATE:	02-29-12	Conc.	Date	CODE:	A	A	C	D	E	F	G	H	
8270 SIM STANDARD CURVE		μ g/mL	Lot #	Code	Exp.Date	μ L							
Supplier	ID #												
8270D PAH SIM	200	170253-28478	02/25/12	02-25-13	0	0	0	0	5	5	25	50	
5.0 μ g/mL	5		02/29/12		0	0	10	20	0	0	0	0	
1.0 μ g/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 2/28/12

PREP DATE:	02-29-12	Conc.	Date	CODE:
SIM 8270 Second Source (5 μ g/mL)		μ g/mL	Code	Exp. Date
Exp:	03-14-12			
Supplier	ID #	Lot #		
8270D PAH SIM (SS)	170256-28490	200	02/25/12	02-25-13
MeCl2		Lot#47186		195
			Final Volume	200

UF 3/18/12

PREP DATE:	03-18-12	Conc.	Date	CODE:	5	10	20	50	60	80	100
8270 STANDARD CURVE		μ g/mL	Lot #	Code	μ L						
Supplier	ID #										
8270T Stock	200		02/13/12	07-31-12	5	5	10	20	25	30	40
Surrogate Stock	VAR	167802-29314	02/25/12	01-09-13	5	5	10	20	25	30	40
EM Science	Methylene Chloride		47186			190	90	80	60	50	40
				Final Vol.	200	100	100	100	100	100	100

UF 3/18/12

PREP DATE:	03-18-12	Conc.	Date	CODE:	50
8270 Second Source (SS)	50 μ g/mL				
Supplier	ID #				
8270C SS	200		10/11/11	10/11/12	25
EM Science	Methylene Chloride		47186		75
				Final Vol.	100

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
				pH2	14	04/30/12 1:00:00 PM	80 °C
				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	MF
Date	5/1/12
Time	12:00
Refrigerator	Minuteman

Technician's Initials	
Scanned By	DRA
Sample Preparation	FXR
Extraction	FXR
Concentration	IC
Modified	04/30/12 10:27:59 AM

Reviewed By: DRA 75 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**

APPPL, INC.

**EPA 8015 Modified
Total Petroleum Hydrocarbons
QC Summary**

APPL, INC.

Method Blank
TPH Diesel Water

Blank Name/QCG: **120430W-60081 - 166675**
Batch ID: #TPETD-120430A

APPL Inc.
908 North Temperance Avenue
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

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

Printed: 05/08/12 3:04:41 PM

Form 2 & 8, Surrogate Recovery Summary

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	Matrix Result	SPK Result	DUP Result	SPK %	DUP %	Recovery	RPD	RPD
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	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-eForm 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

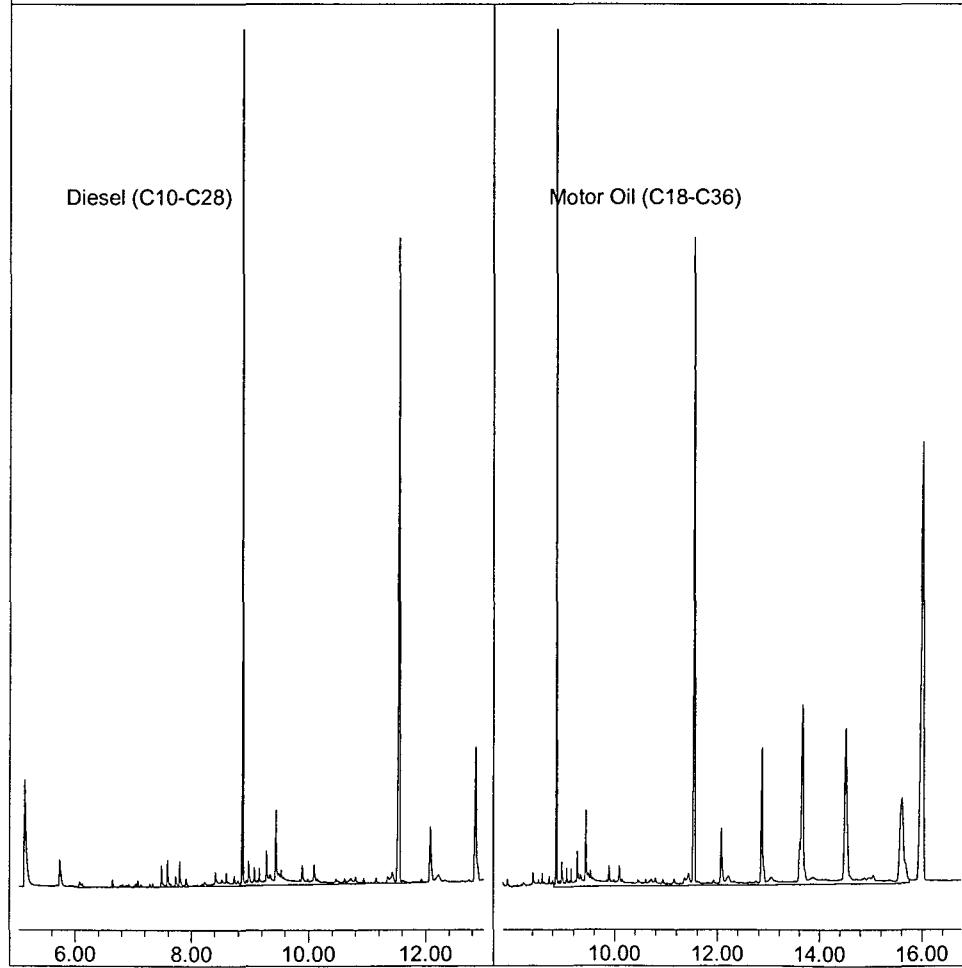
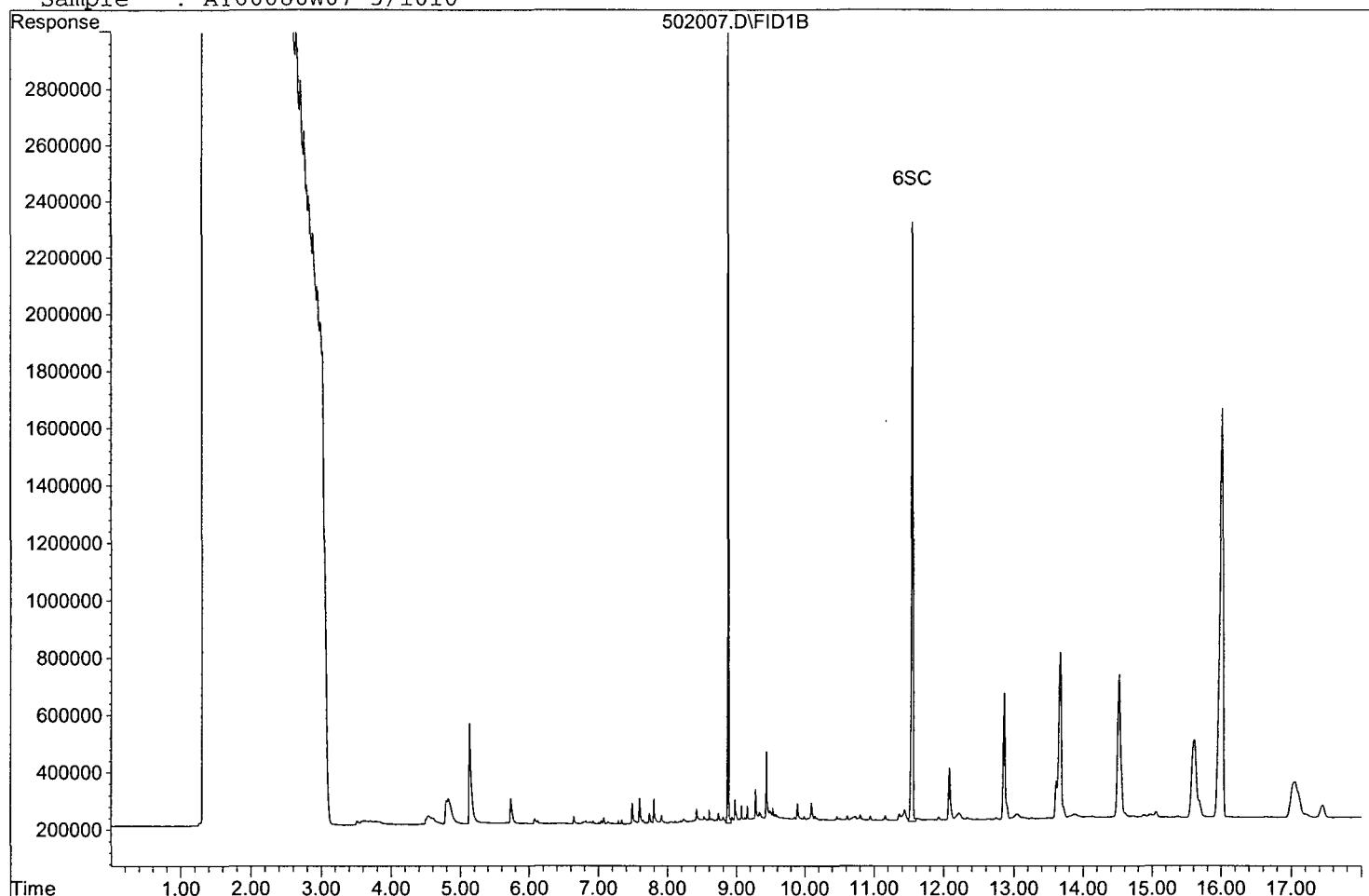
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
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%
<hr/>				
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

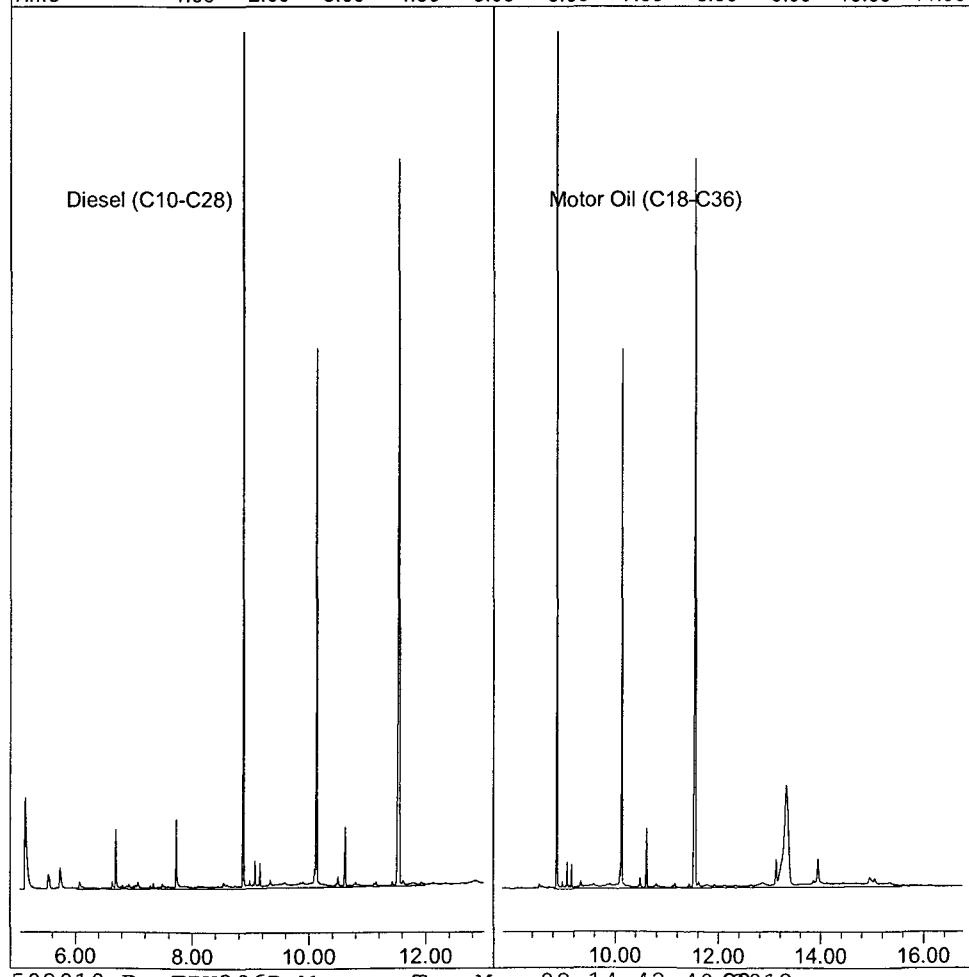
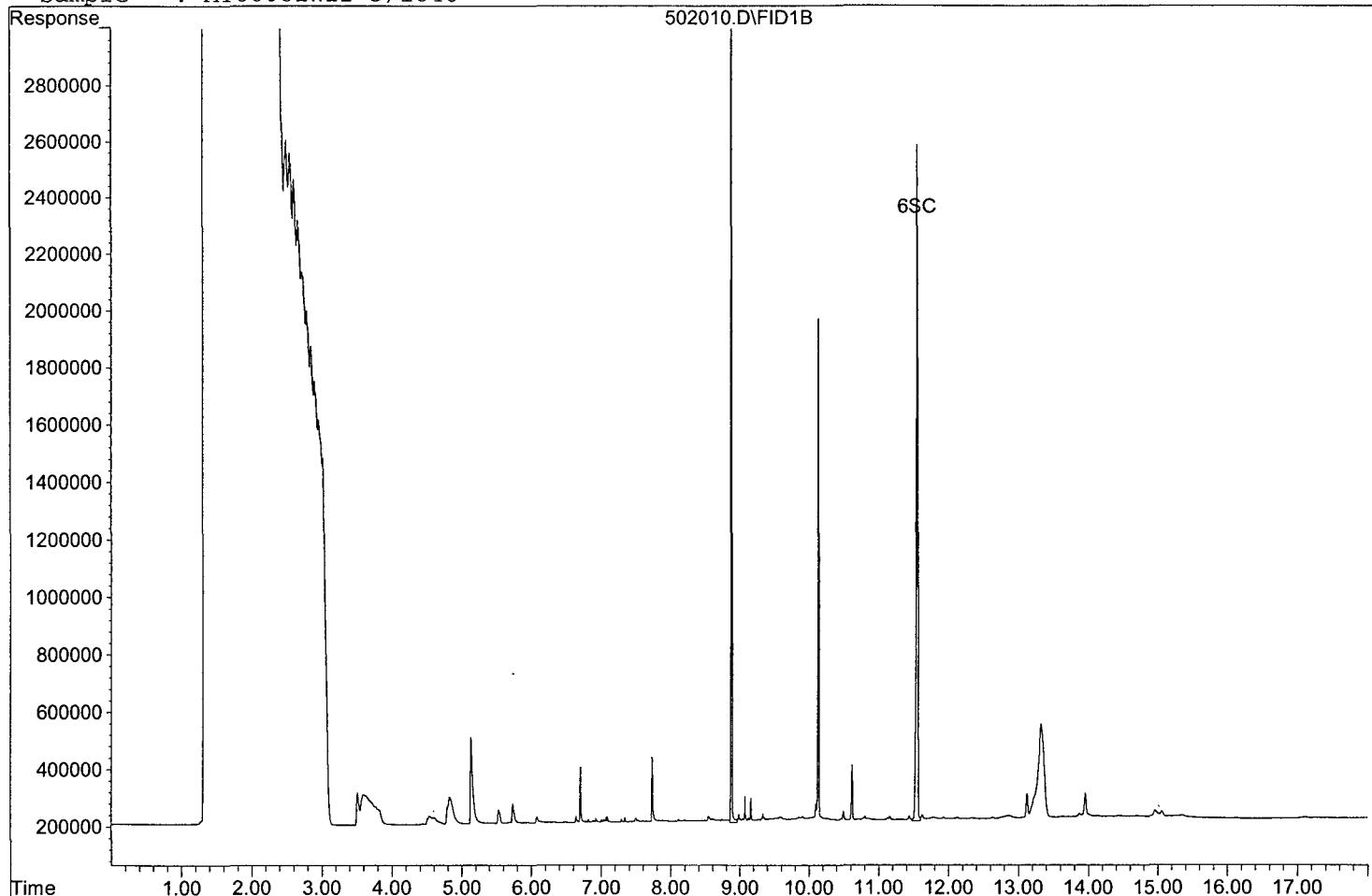
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
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%
<hr/>				
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

74m
5/18/12

Data File: G:\APOLLO\DATA\120502\502010.D
Sample : AY60081W11 5/1040



**EPA 8015 Modified
Total Petroleum Hydrocarbons**

Calibration Data

TPH Extractables
TPH0306

Form 6
Initial Calibration

Lab Name: APPL, Inc.

Case No:

Matrix:

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

SDG No: 67622

Initial Cal. Date: 03/06/12

Instrument: Apollo

Initials: LAC

	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
----------	------	----------	------------

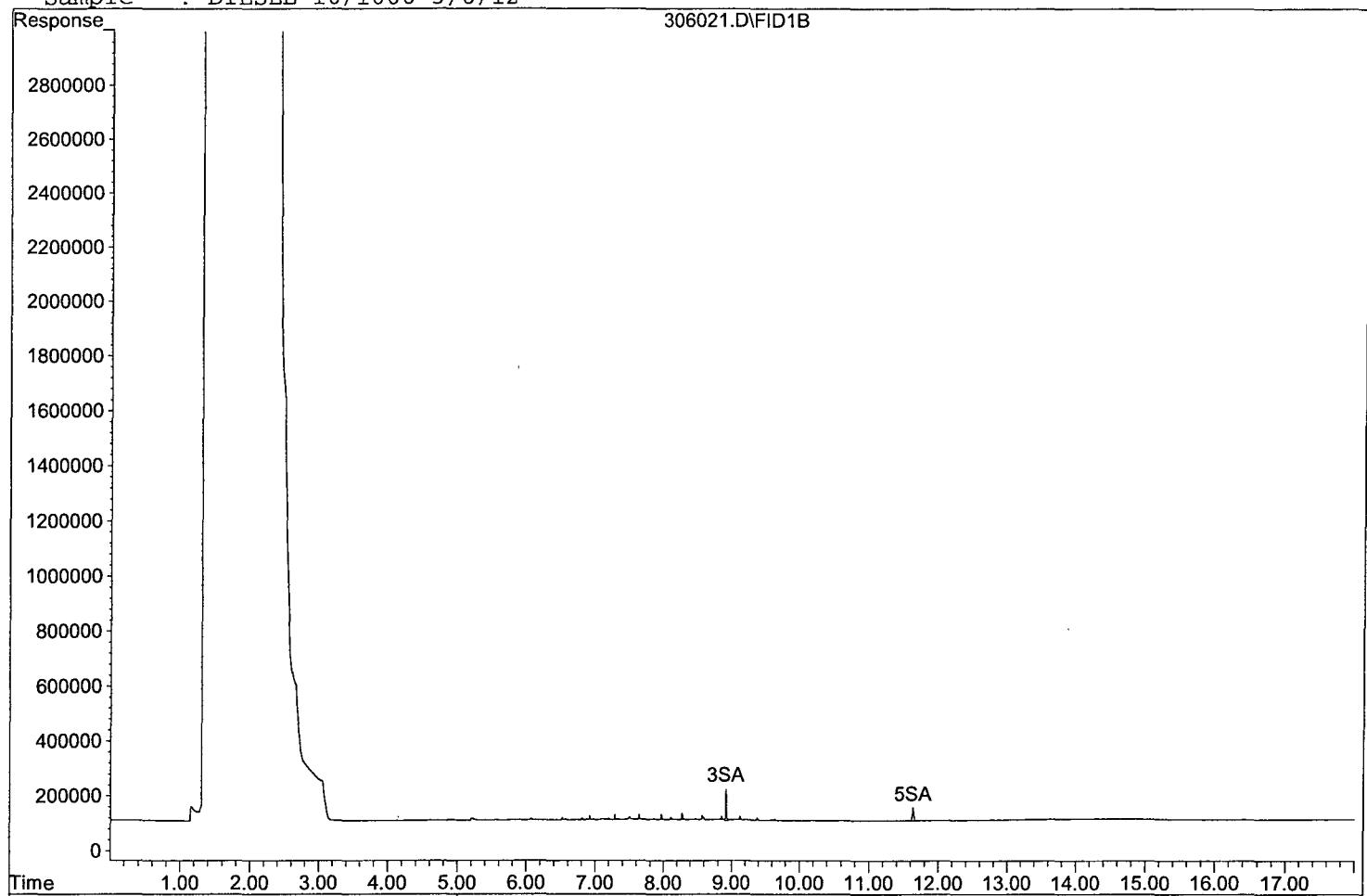
System Monitoring Compounds

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



Diesel (C10-C28)

Motor Oil (C18-C36)

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

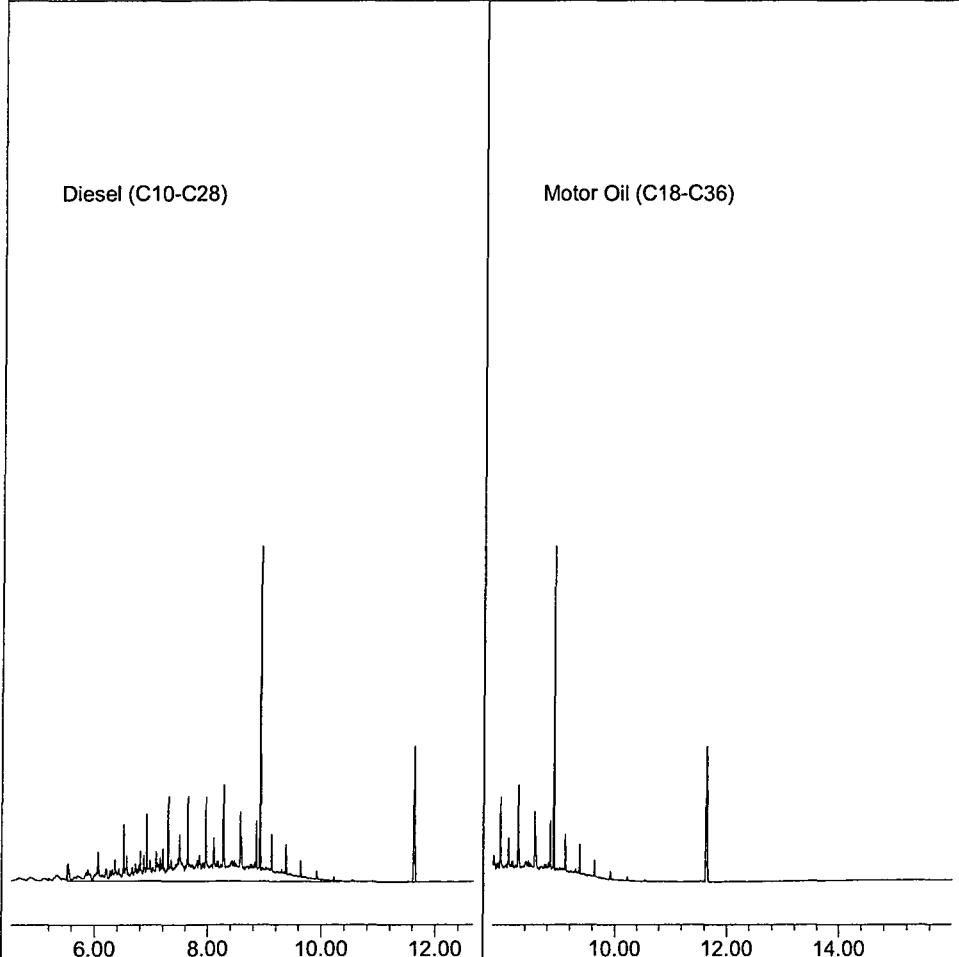
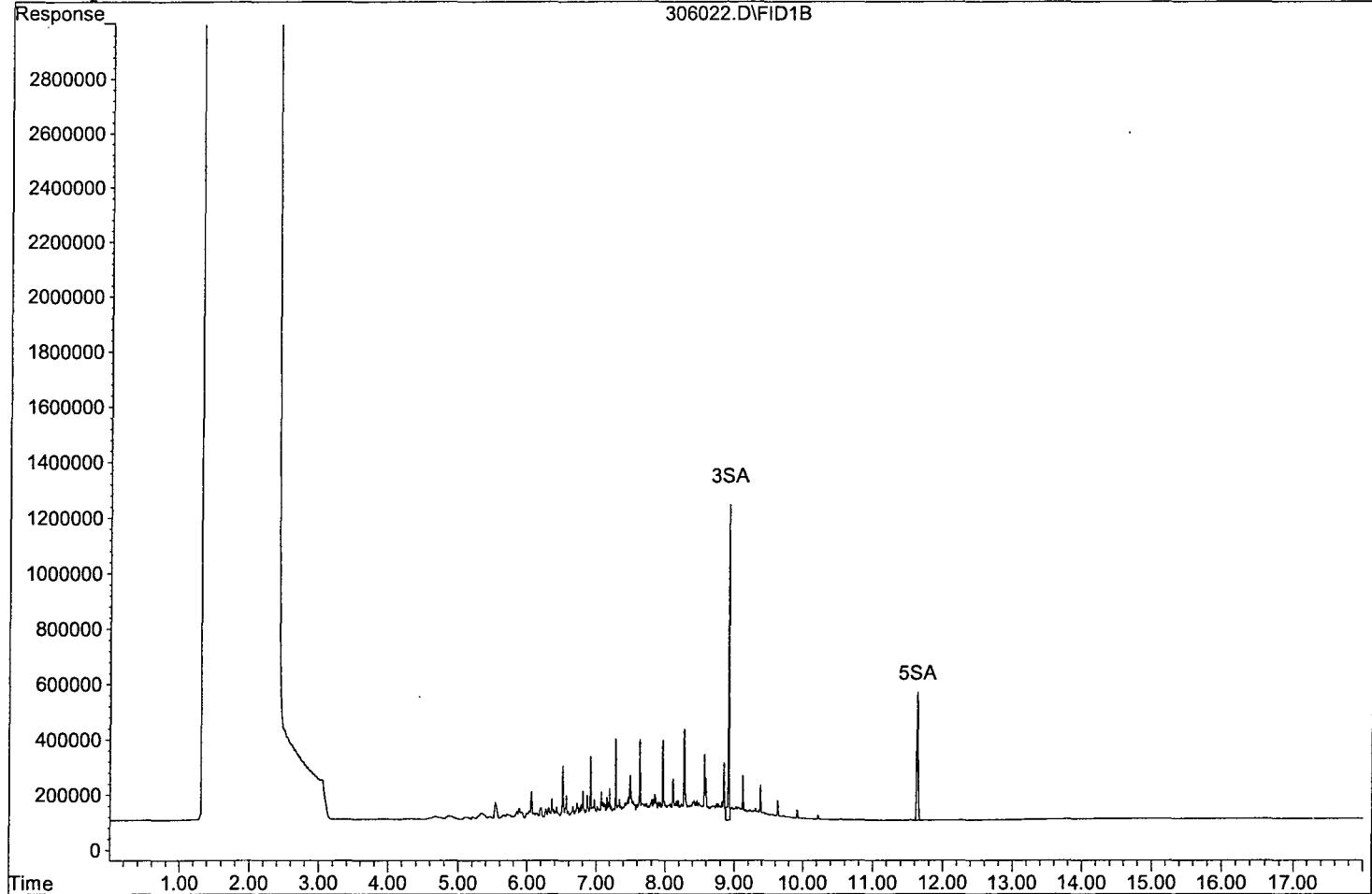
3) SA Not Used(S)	8.91	9013972	5.509 ppb
Surrogate Spike 30.000		Recovery	= 18.36%
5) SA Not Used2(S)	11.63	6296635	4.925 ppb
Surrogate Spike 30.000		Recovery	= 16.42%

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

306022.D\FID1B



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
----------	------	----------	------	-------

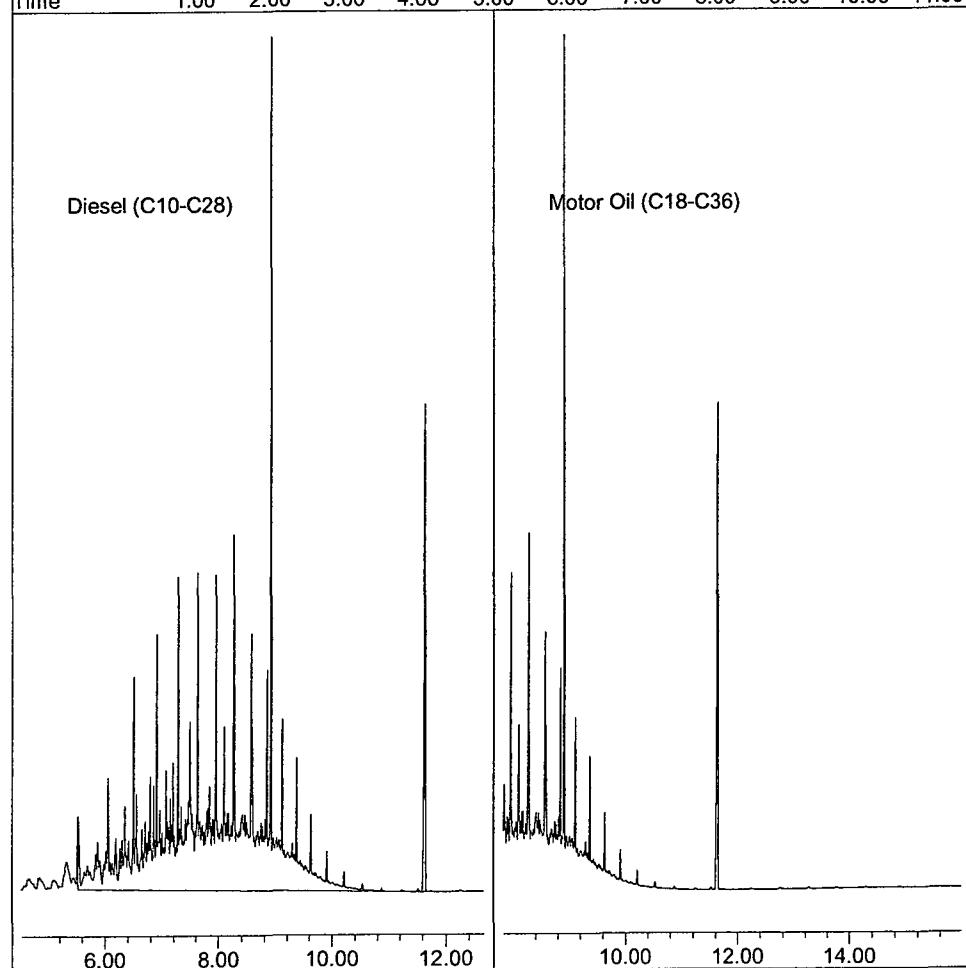
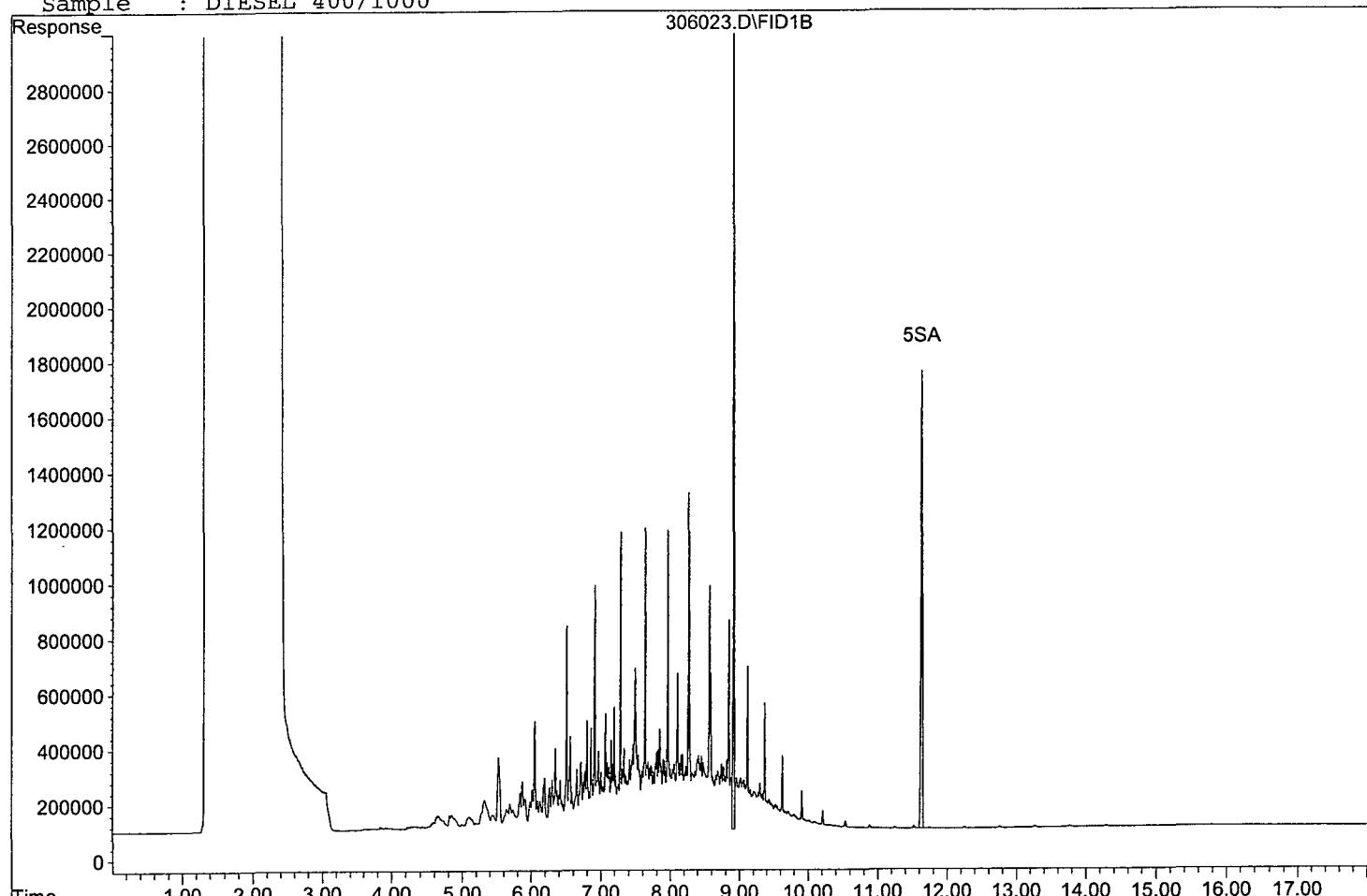
System Monitoring Compounds

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

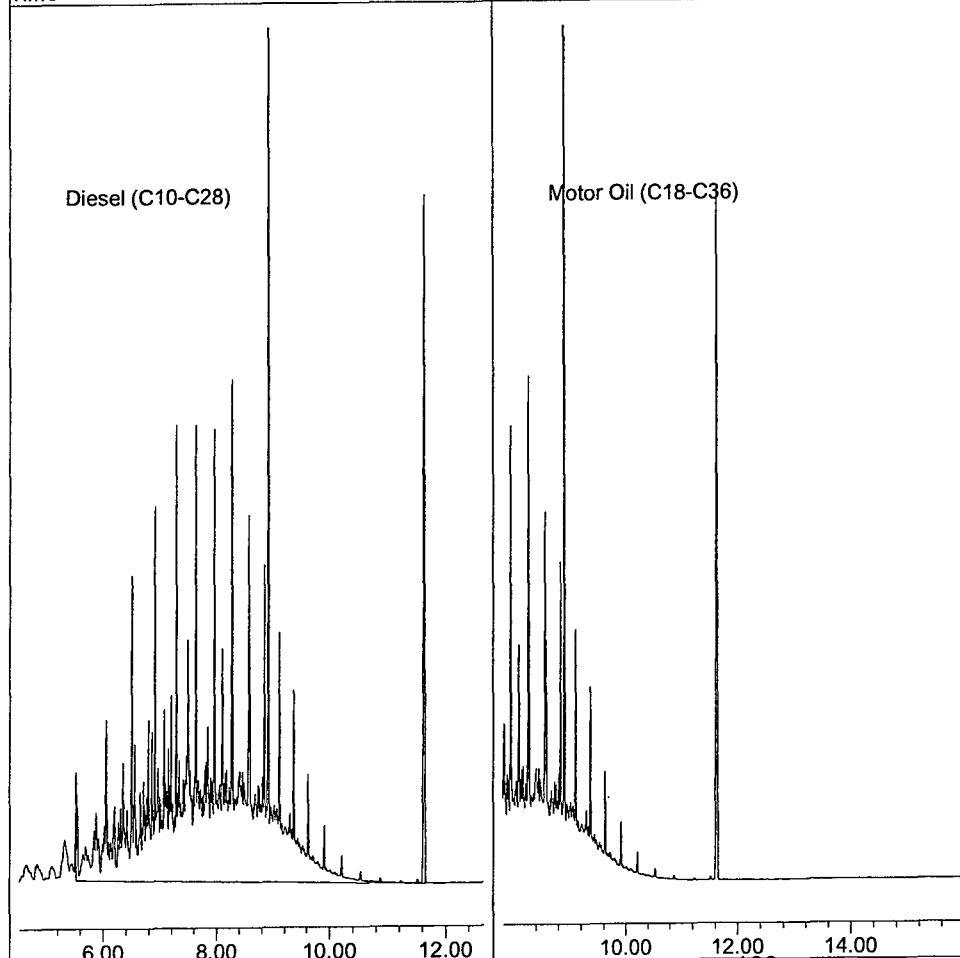
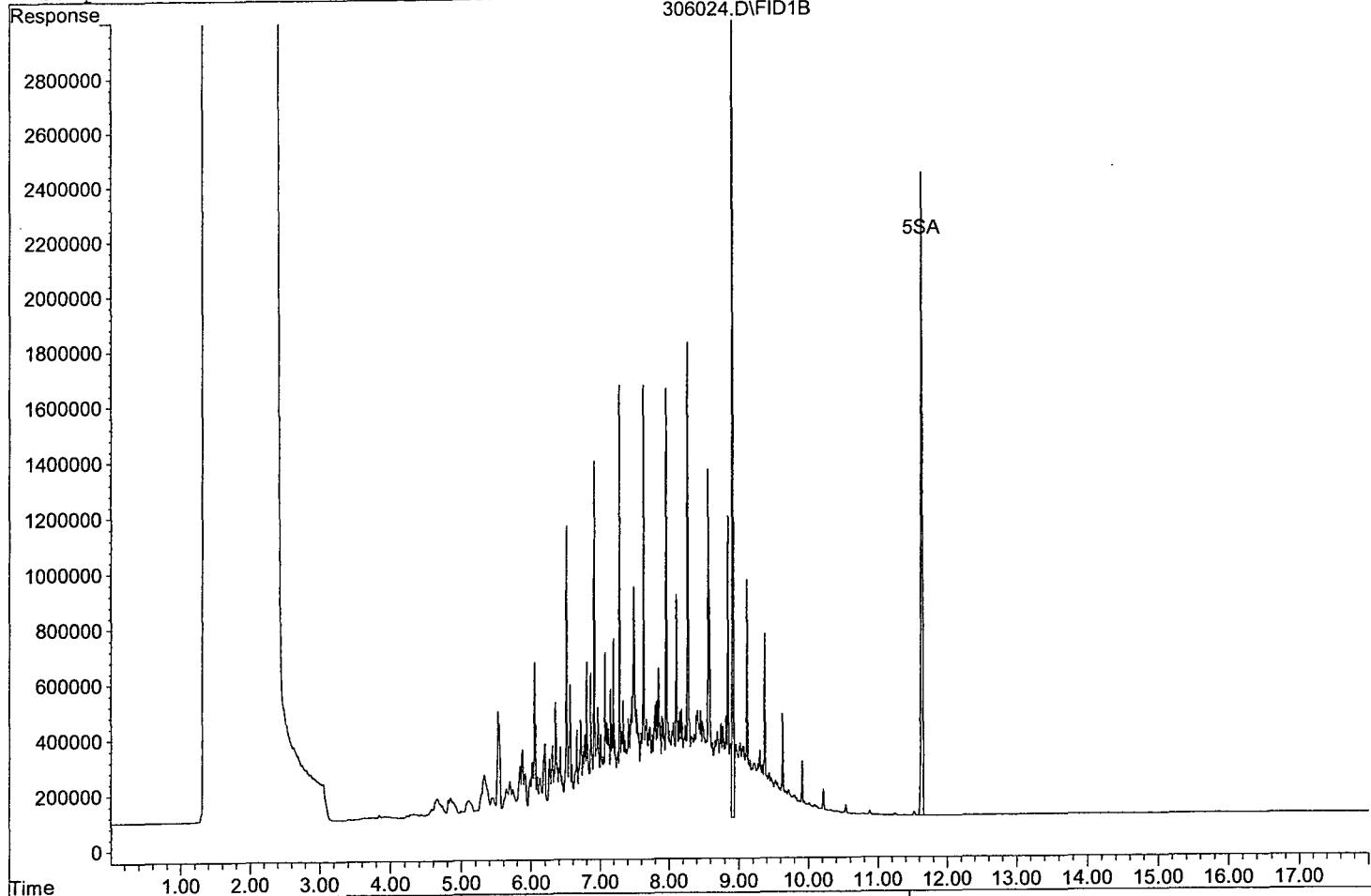
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
Title : Diesel
Last Update : Wed Mar 07 08:57:04 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
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%
<hr/>			
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

306024.D\FID1B



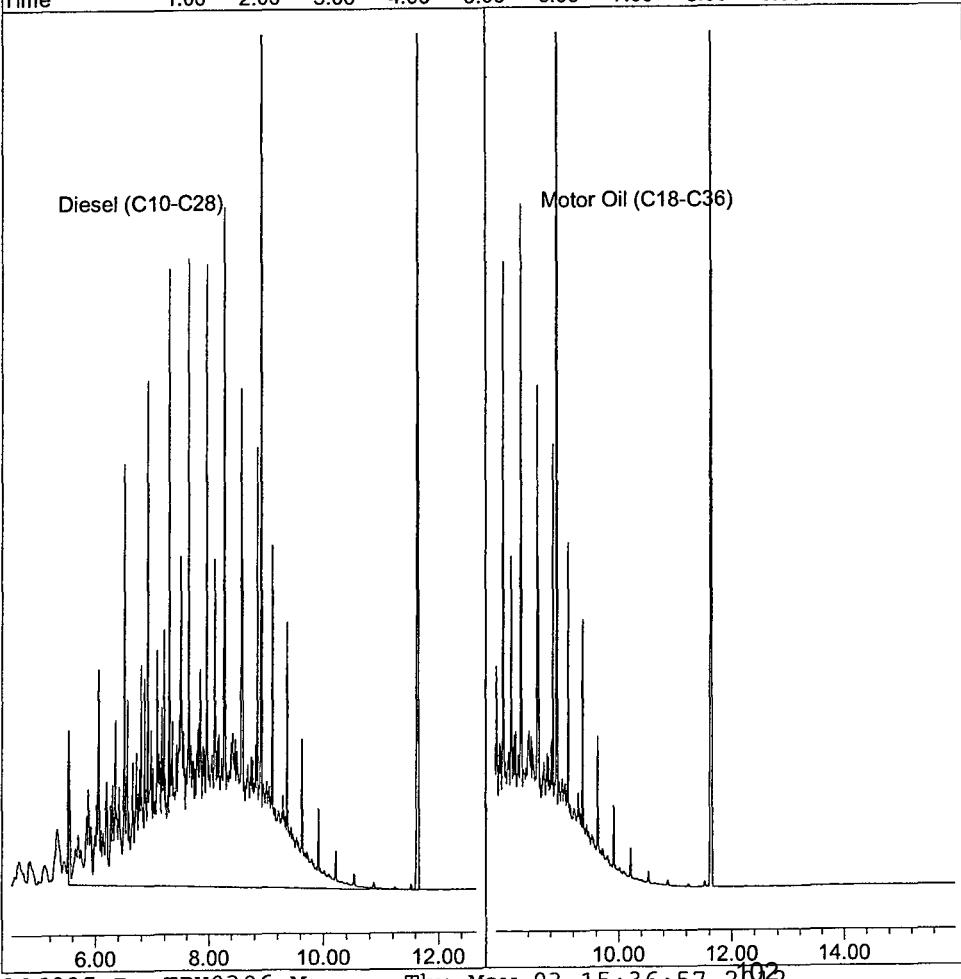
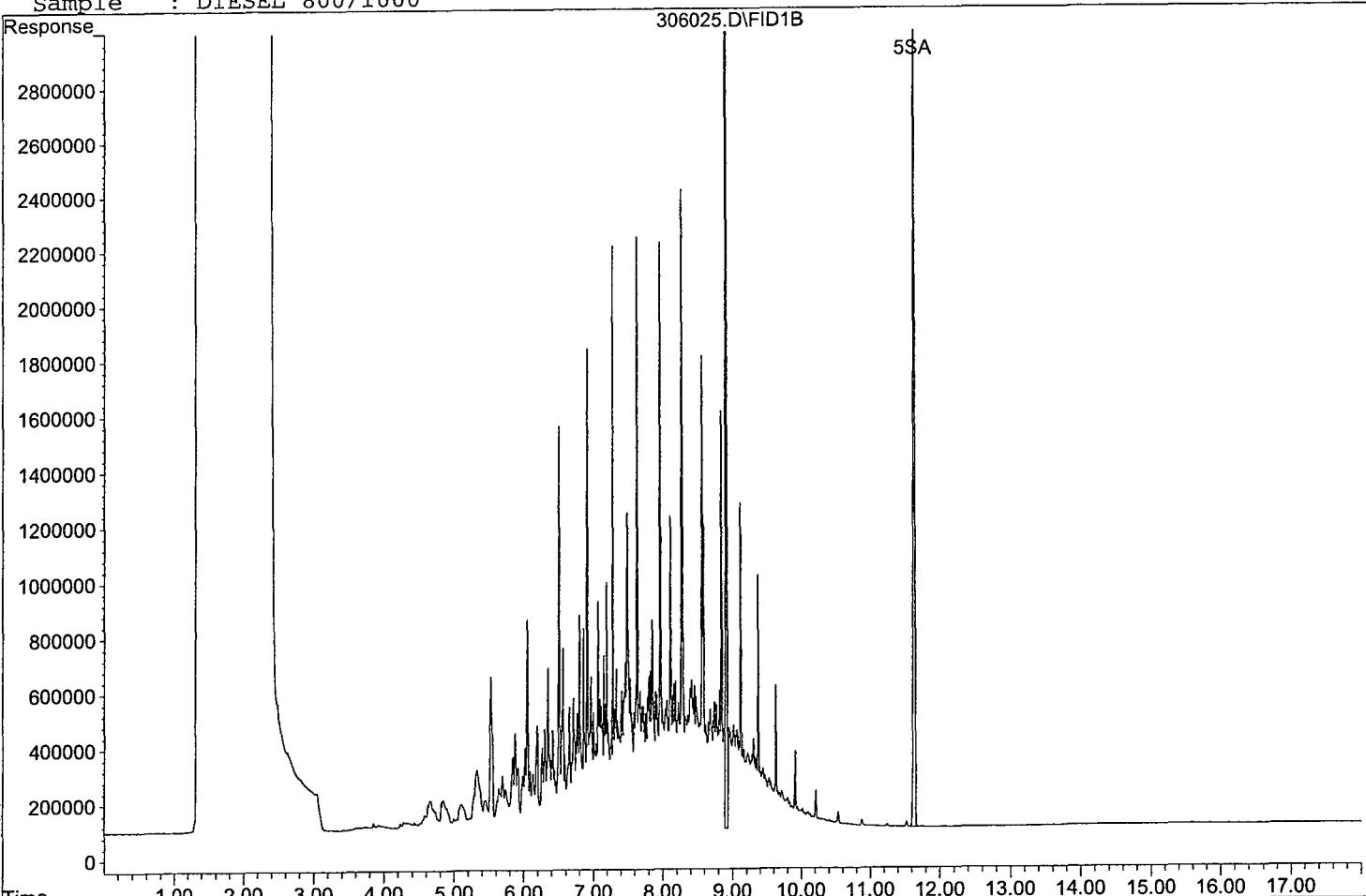
Data File : G:\APOLLO\DATA\120306\306025.D Vial: 25
 Acq On : 3-6-12 19:00:08 Operator: LAC
 Sample : DIESEL 800/1000 Inst : Apollo
 Misc : Mix(A) Multiplr: 1.00
 IntFile : events.e
 Quant Time: Mar 7 9:50 2012 Quant Results File: TPH0306.RES

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
<hr/>				
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%
<hr/>				
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
----------	------	----------	------------

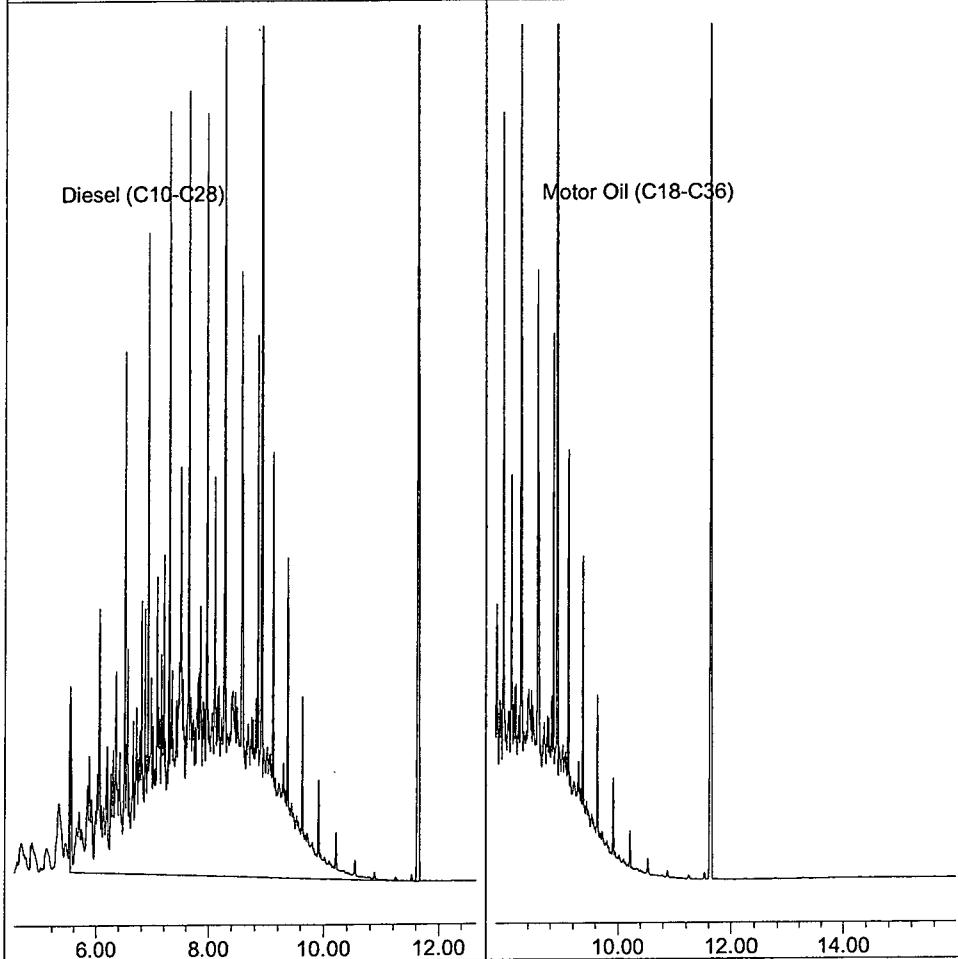
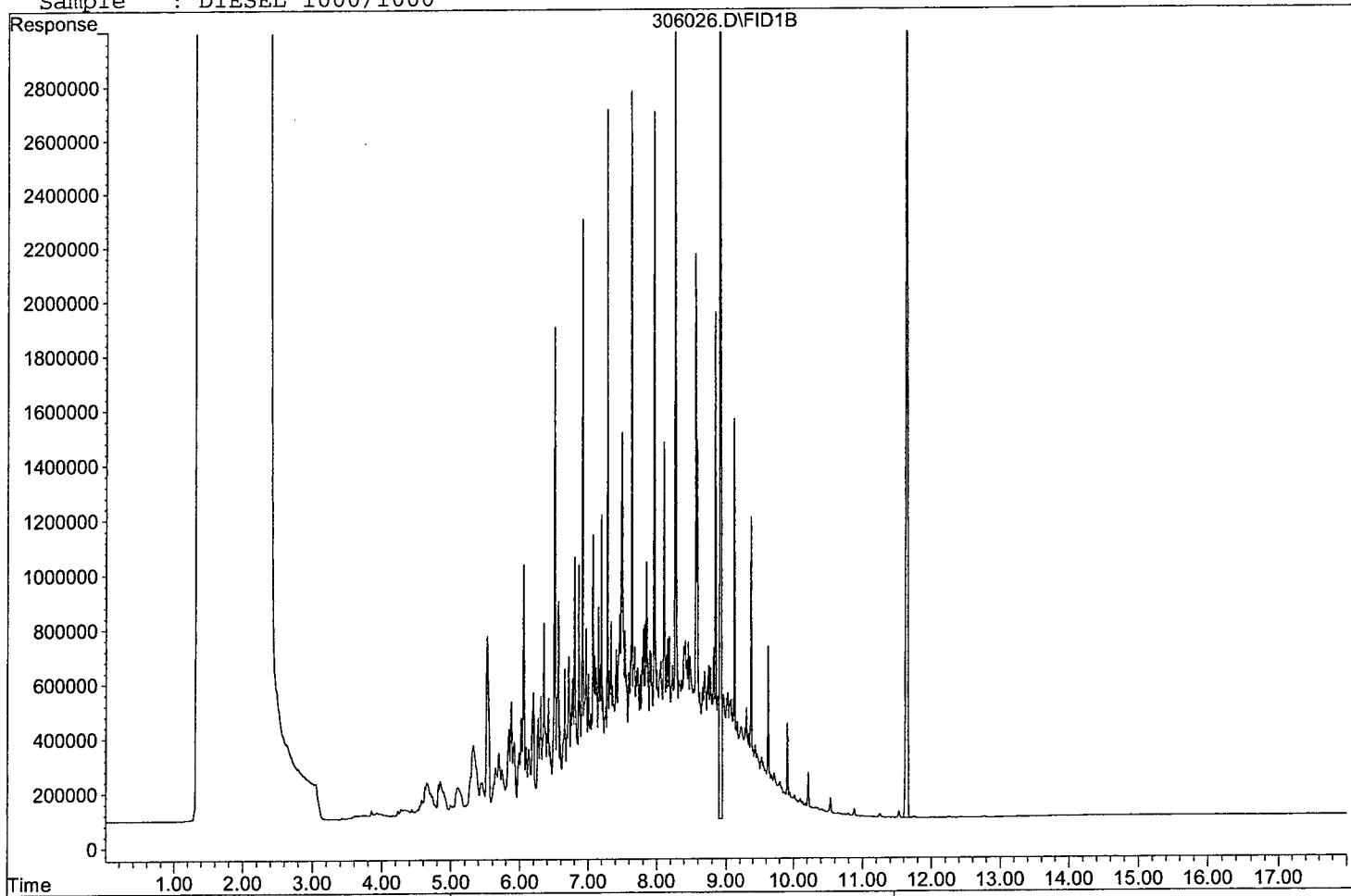
System Monitoring Compounds

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.

SDG No: 67622

Case No:

Date Analyzed: 03/06/12

Matrix:

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

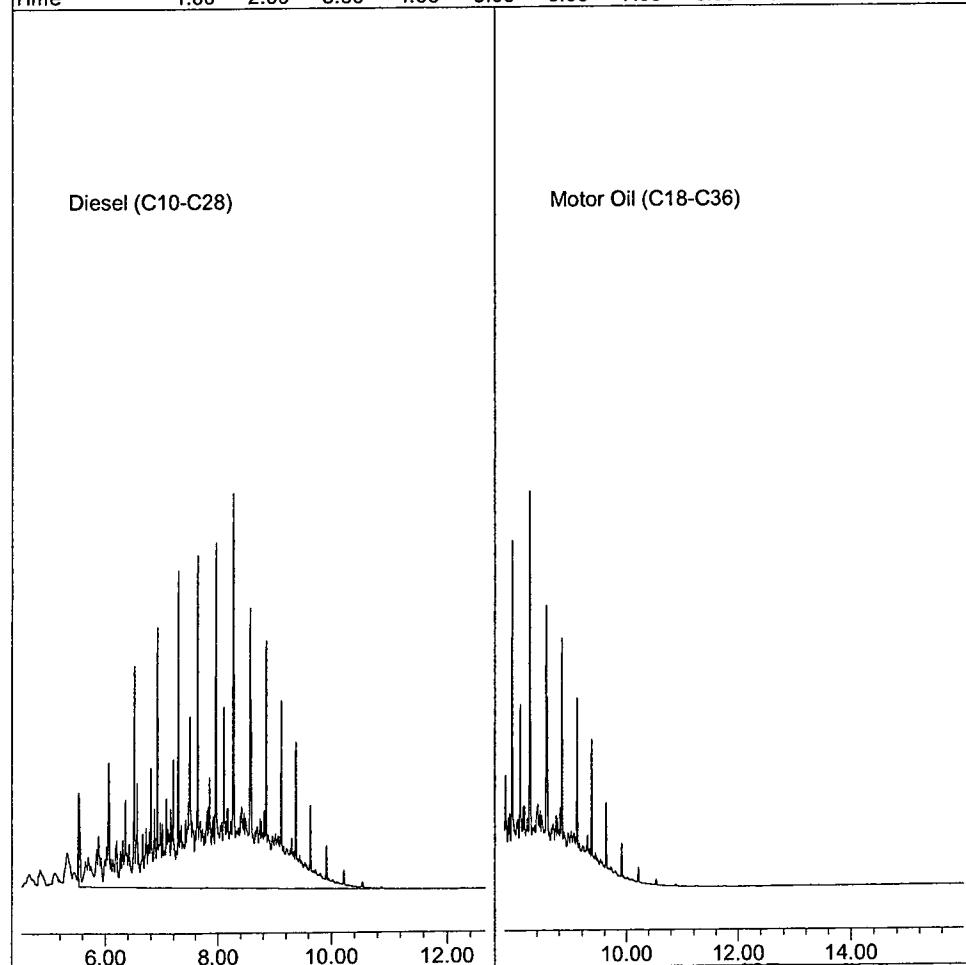
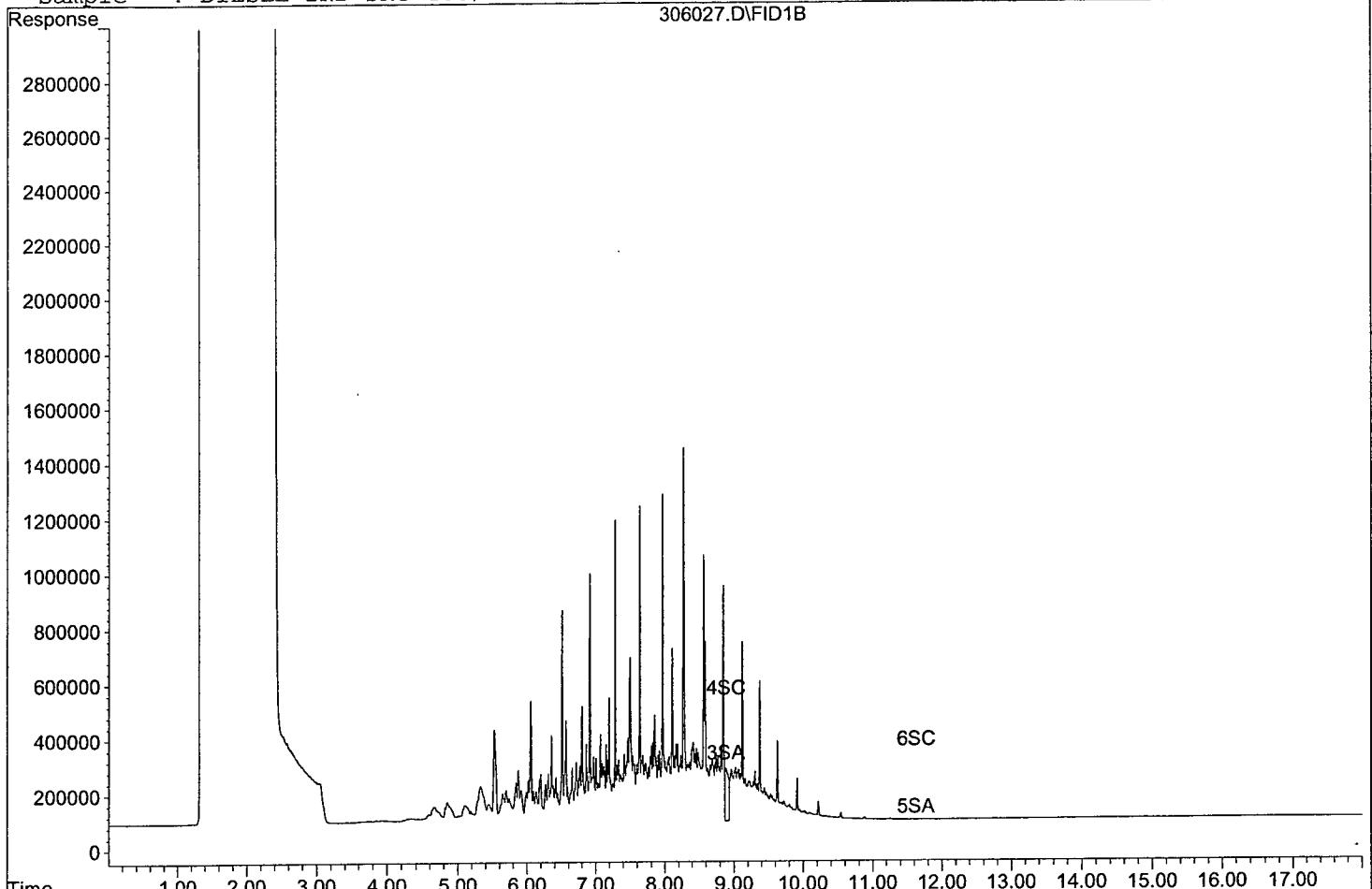
Method : G:\APOLLO\DATA\120306\TPH0306.M (Chemstation Integrator)
 Title : Diesel
 Last Update : Wed Mar 07 08:57:04 2012
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
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%
<hr/>			
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\FID1B



TPH Extractables
TPH306B

Form 7
Continuing Calibration

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

SDG No: 107622
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
<hr/>				
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%	
<hr/>				
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

-----109-----

(f)=RT Delta > 1/2 Window

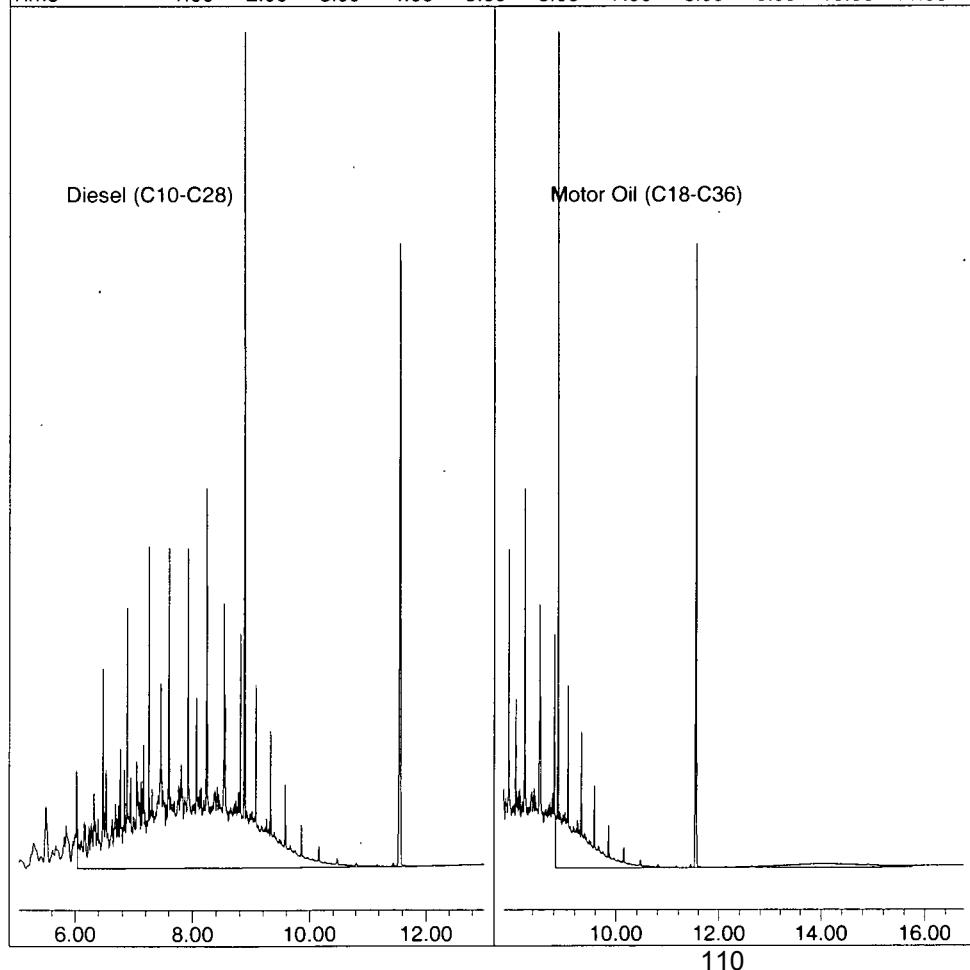
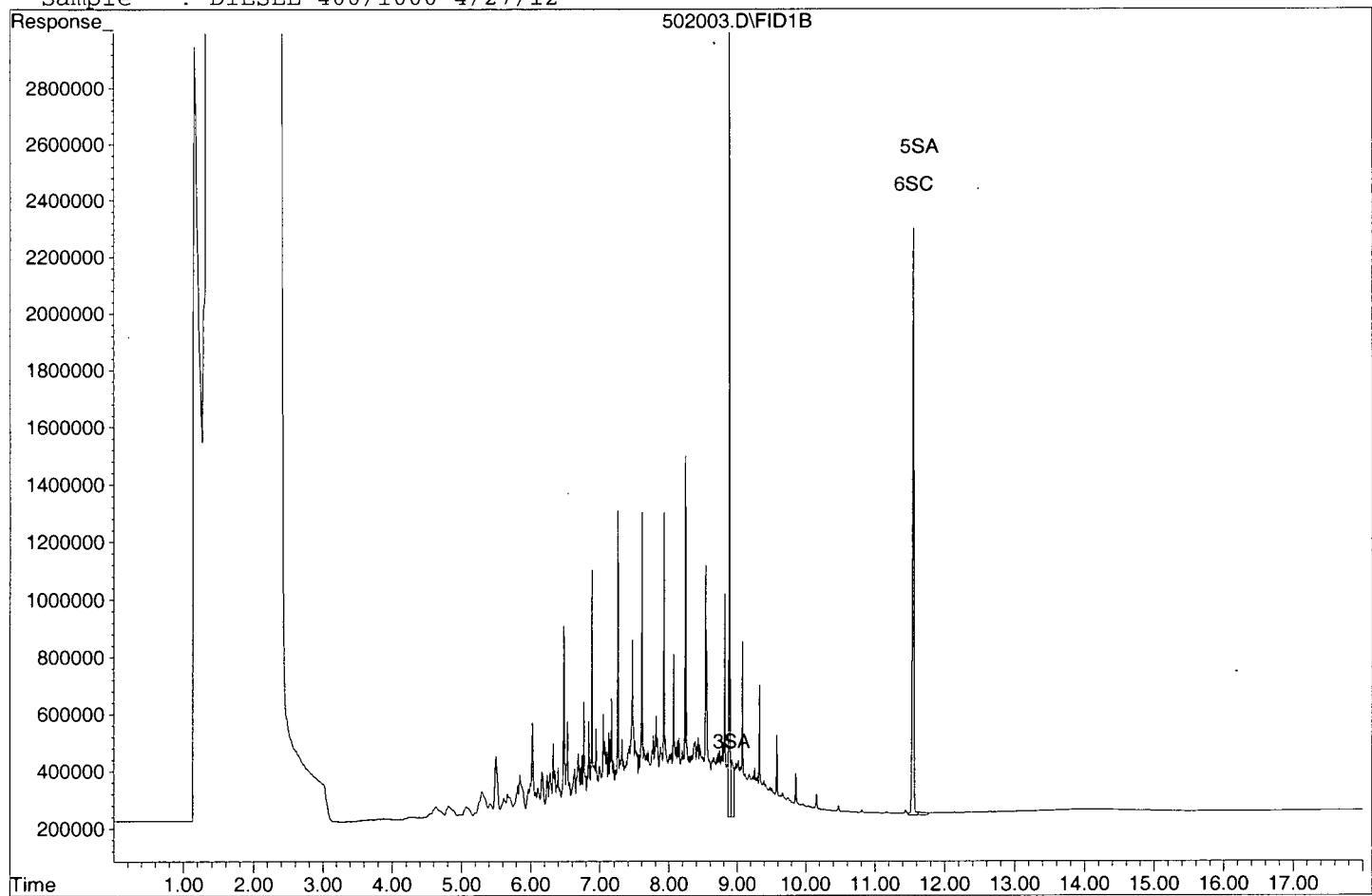
(m)=manual int.

502003.D TPH306B.M Thu May 17 13:36:09 2012

Page 1

Quantitation Report

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

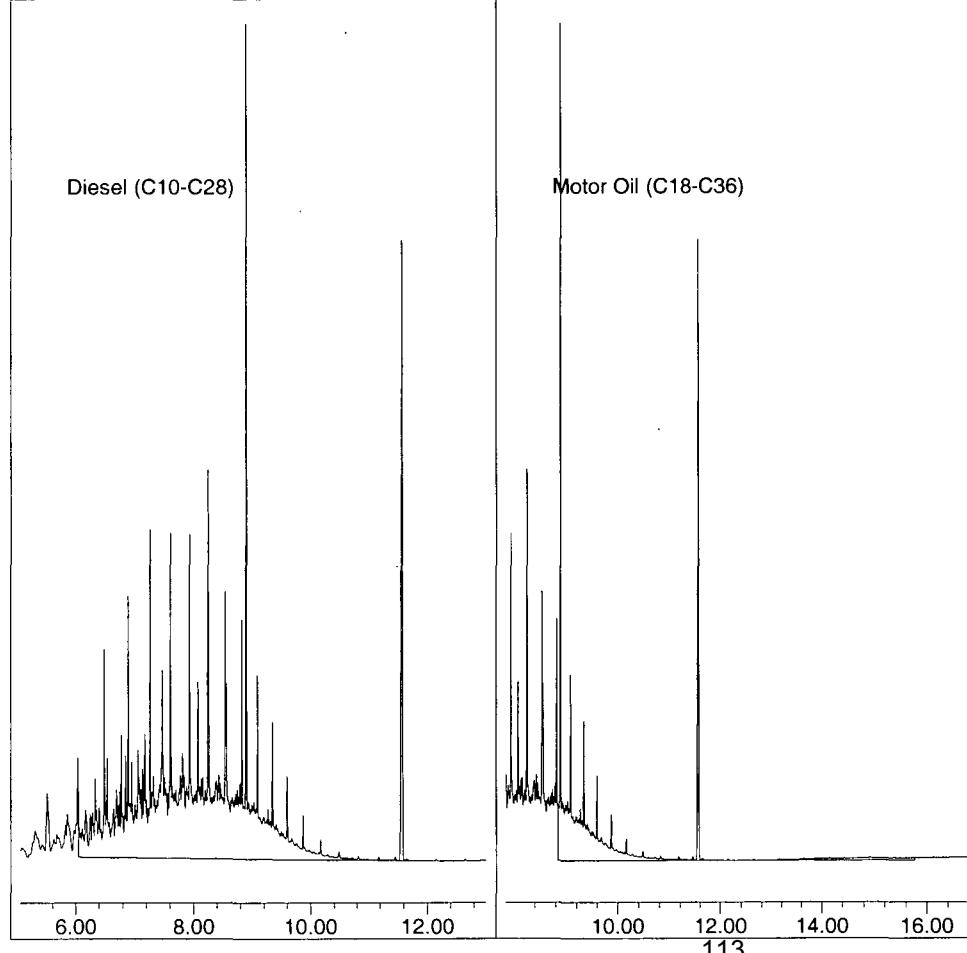
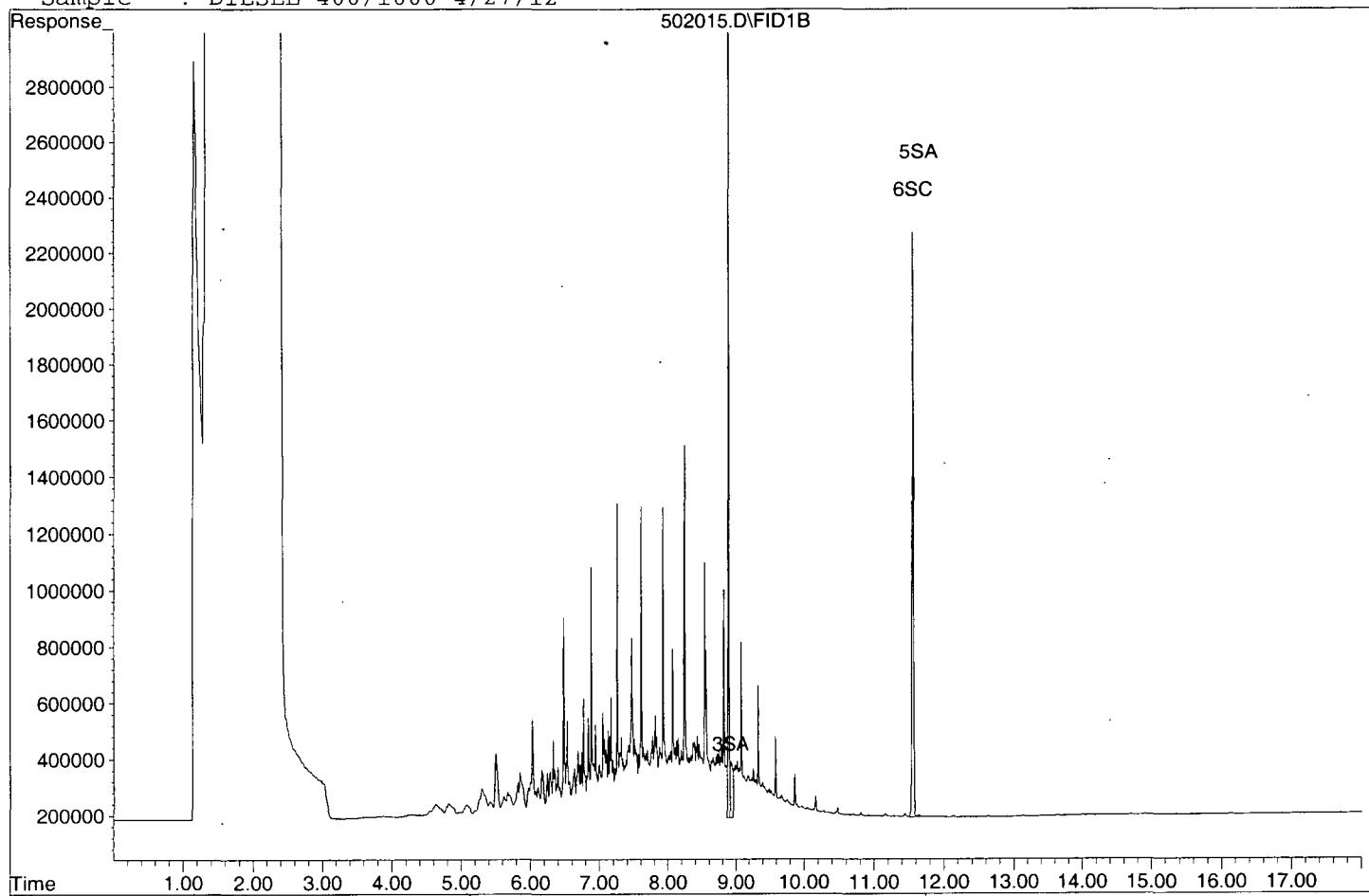
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
 Title : Diesel
 Last Update : Tue May 08 08:30:13 2012
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
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%	
<hr/>				
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

Quantitation Report

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

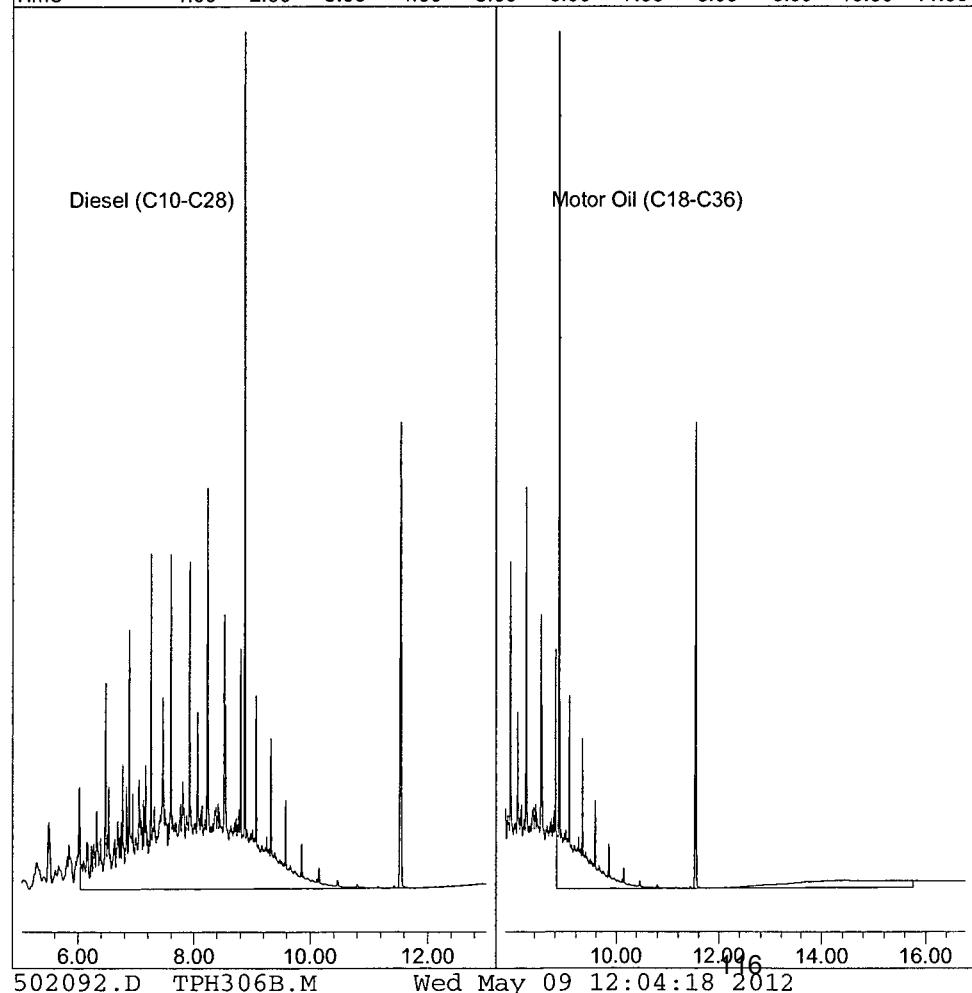
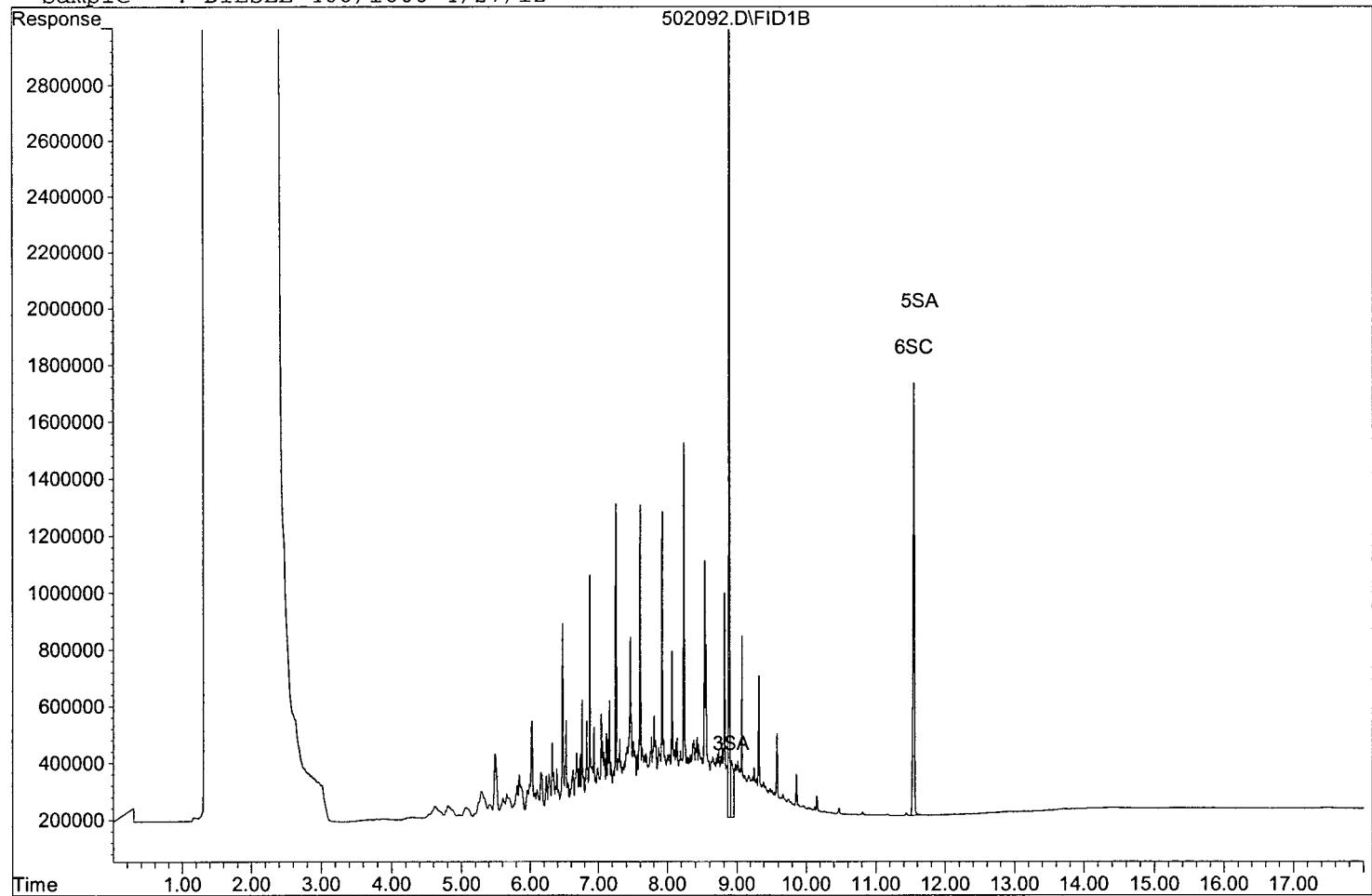
Volume Inj. : 2UL
 Signal Phase : DB-5
 Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
<hr/>				
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%
<hr/>				
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

Quantitation Report

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.

SDG No: 67622

Case No:

Date Analyzed: 05/08/12

Matrix:

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

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

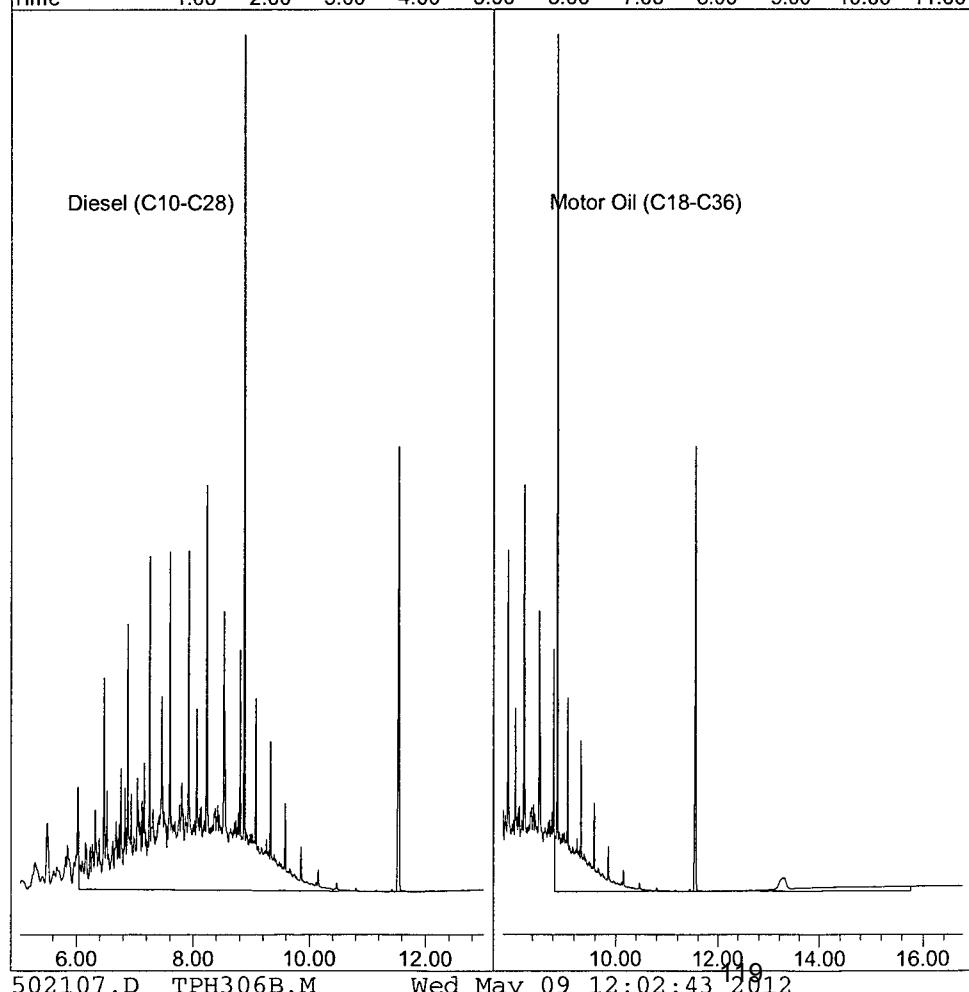
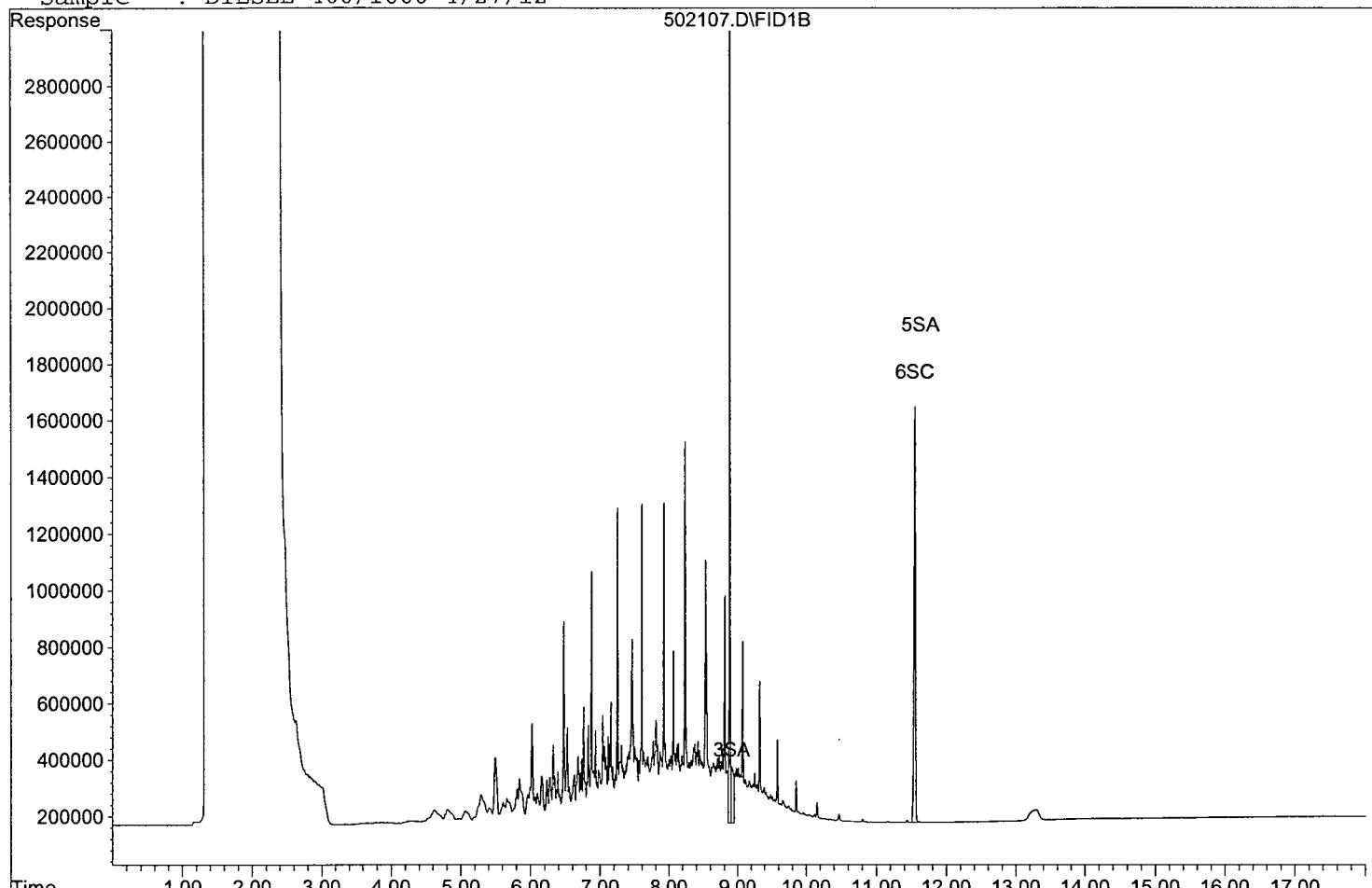
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
 Title : Diesel
 Last Update : Tue May 08 08:30:13 2012
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
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%
<hr/>			
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**

APPPL, INC.

Method Blank
TPH Diesel Water

APPL Inc.

Blank Name/QCG: 120430W-60081 - 166675

908 North Temperance Avenue
Clovis, CA 93611

Batch ID: #TPETD-120430A

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

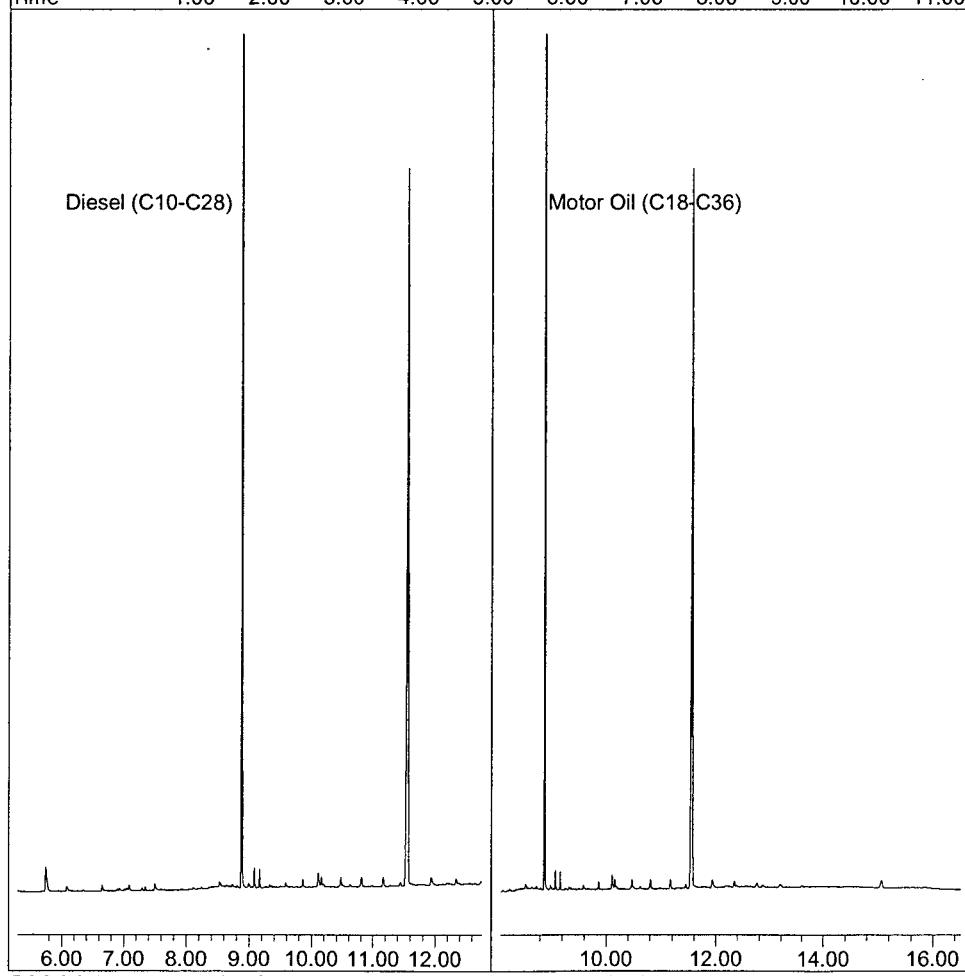
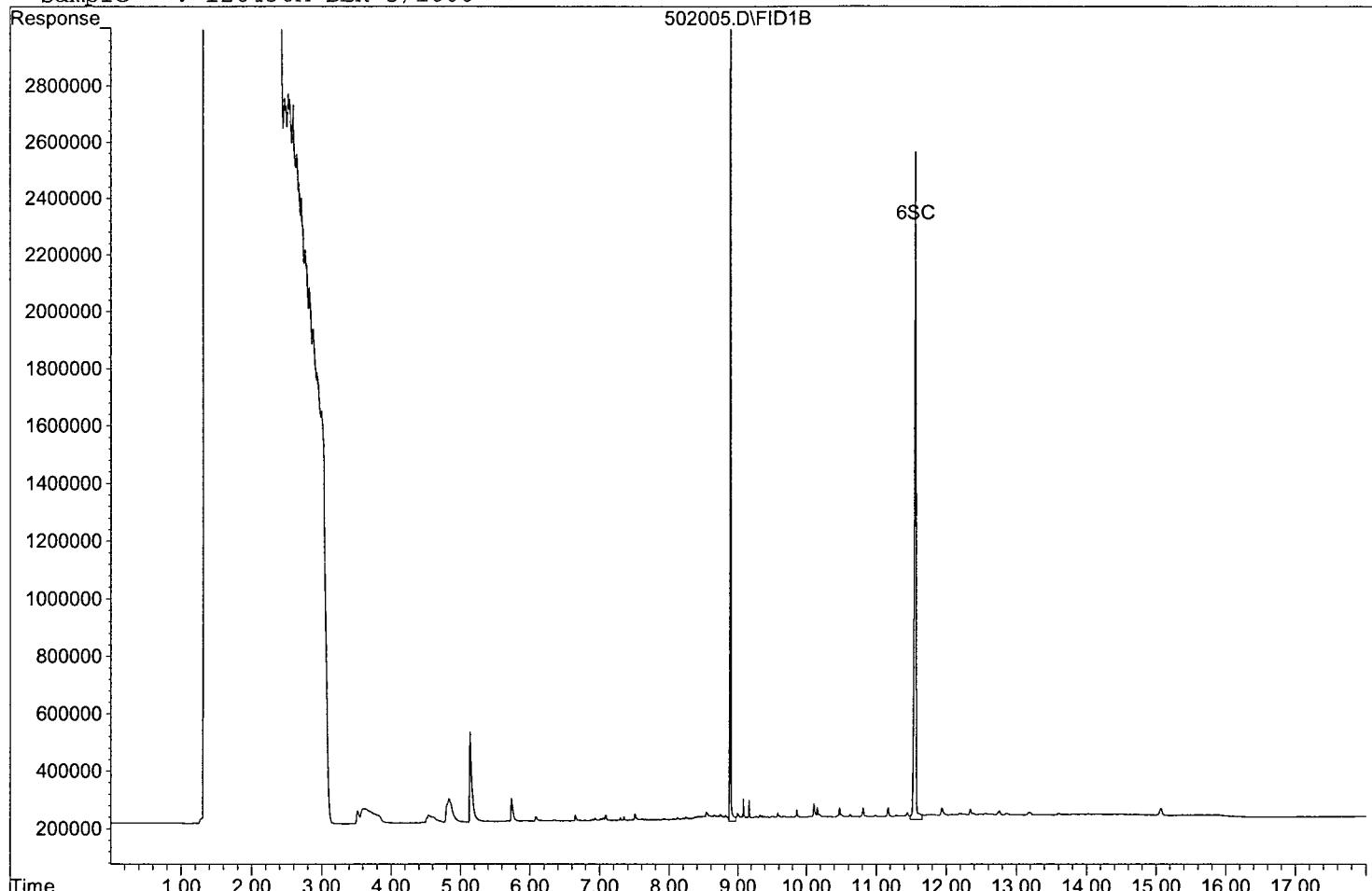
Method : G:\APOLLO\DATA\120502\TPH306B.M (Chemstation Integrator)
Title : Diesel
Last Update : Tue May 08 08:30:13 2012
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
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



502005.D TPH306B.M Tue May 08 14:42:11 12012

Page 2

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

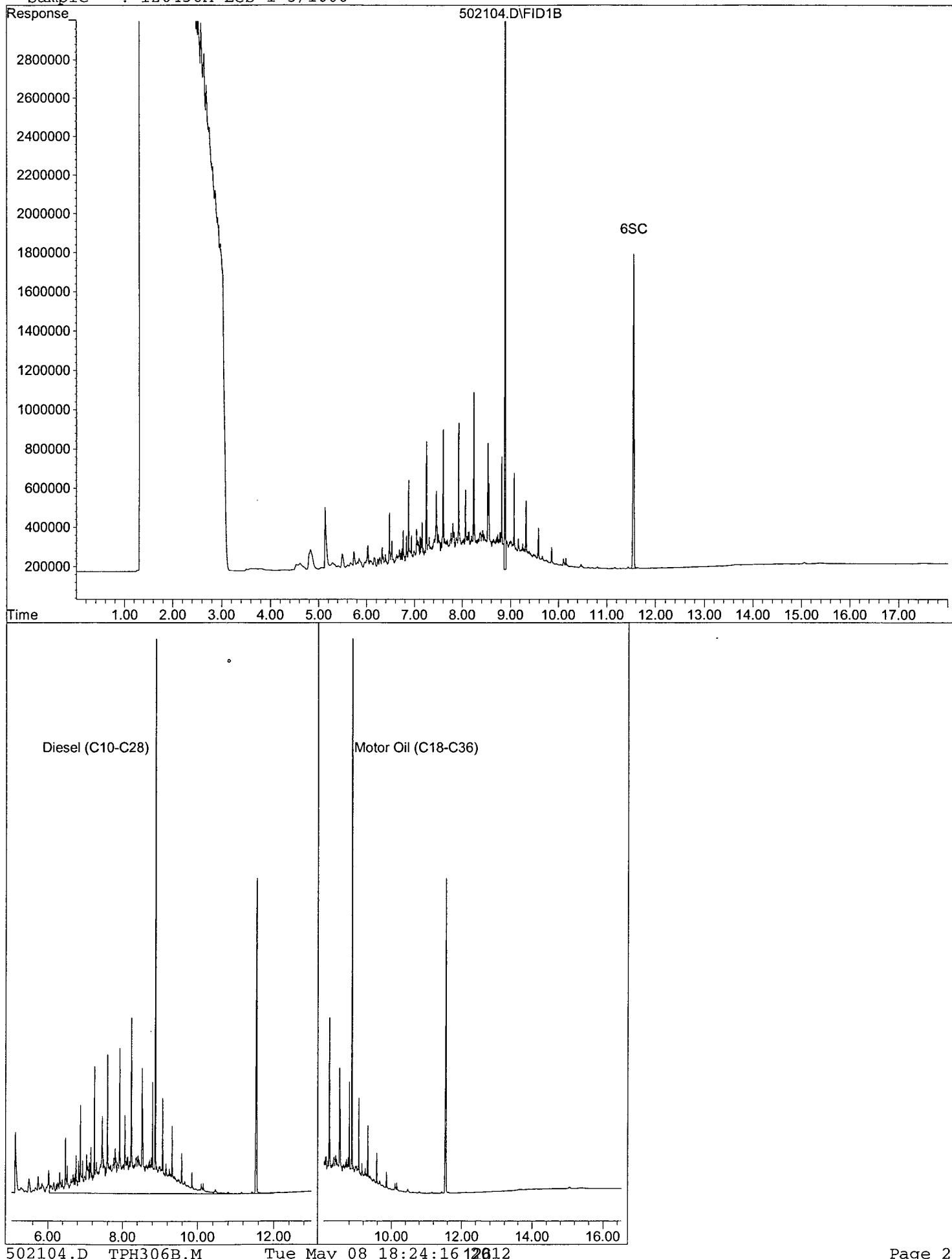
Data File : G:\APOLLO\DATA\120502\502104.D Vial: 4
Acq On : 5-8-12 17:50:27 Operator: LAC
Sample : 120430A LCS-1 5/1000 Inst : Apollo
Misc : Water Multiplr: 5.00
IntFile : events.e
Quant Time: May 8 18:24 2012 Quant Results File: TPH306B.RES

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
<hr/>				
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%
<hr/>				
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

APPL Inc.

Batch ID: #TPETD-120430A

908 North Temperance Avenue

Sample ID: AY60081

Clovis, CA 93611

Client ID: ES077

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

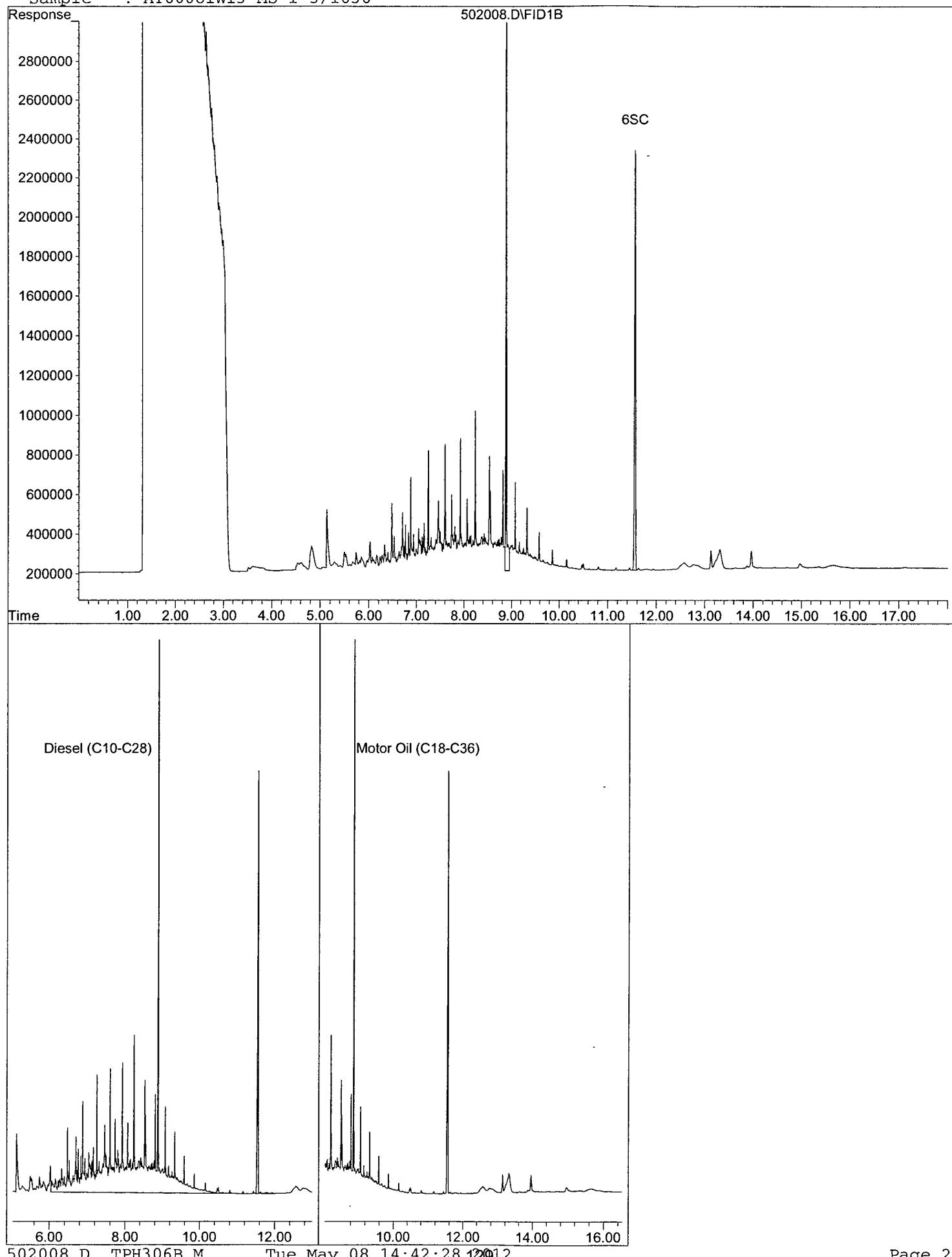
Data File : G:\APOLLO\DATA\120502\502008.D Vial: 8
Acq On : 5-2-12 14:28:01 Operator: LAC
Sample : AY60081W13 MS-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: May 8 14:32 2012 Quant Results File: TPH306B.RES

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
<hr/>				
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%
<hr/>				
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



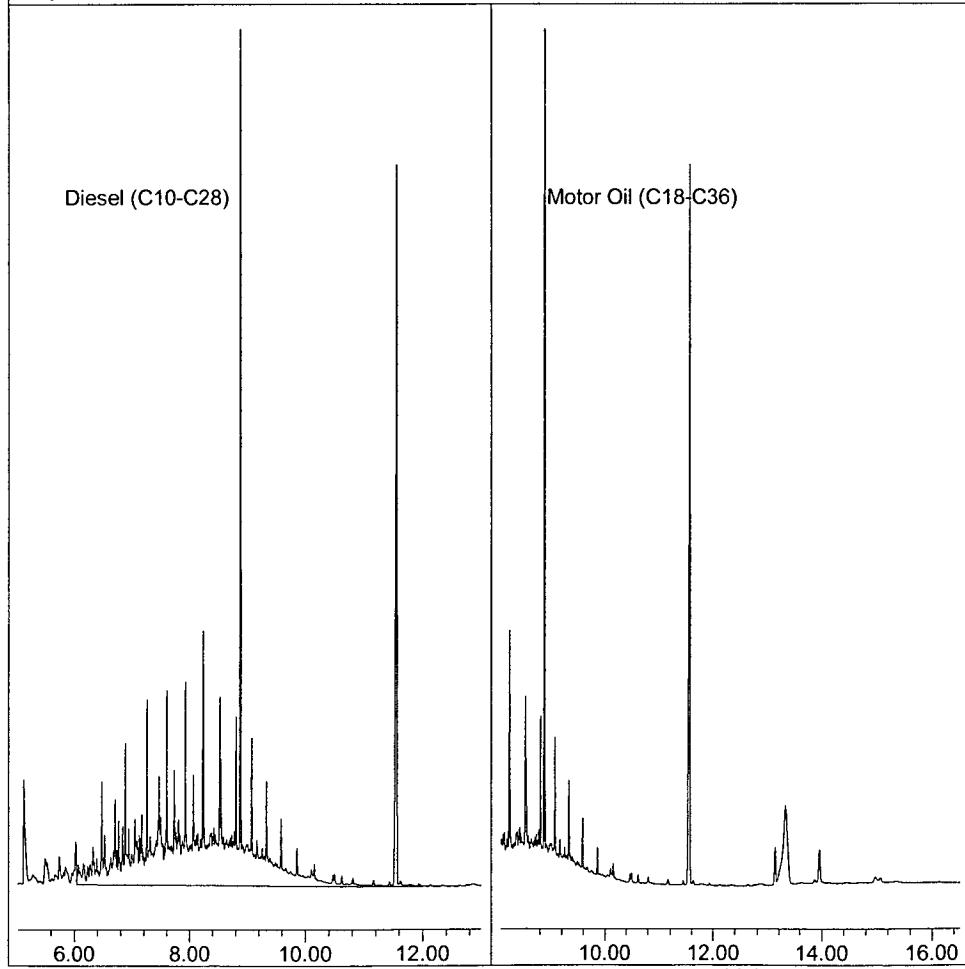
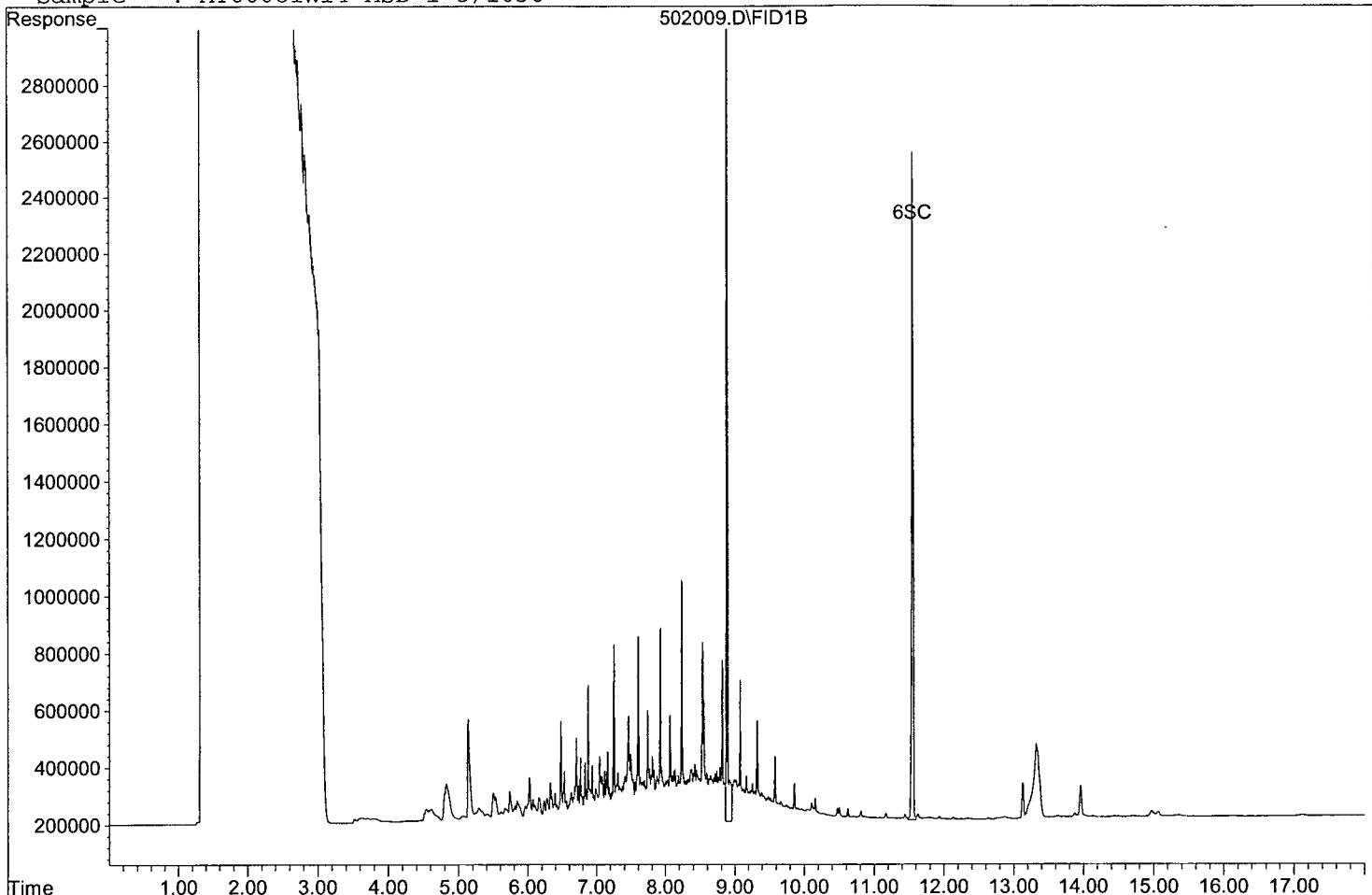
Data File : G:\APOLLO\DATA\120502\502009.D Vial: 9
Acq On : 5-2-12 14:52:00 Operator: LAC
Sample : AY60081W14 MSD-1 5/1030 Inst : Apollo
Misc : Water Multiplr: 4.85
IntFile : events.e
Quant Time: May 8 14:32 2012 Quant Results File: TPH306B.RES

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
<hr/>				
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%
<hr/>				
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	FINAL ALIQUOT	FINAL VOLUME	SOLVENT CONC.	DATE / LOT #	INITIALS
							045

TNRCC 400/1000 ug/ml CCV

TNRCC	1000/500 ug/ml	TNRCC STD	400ml	1mL	400ug/ml Rextane	#5	3/5/12
		Prep: 3/2/12					EX: 4/2/12
		EX: 4/2/12					

DIESEL SPIKEDIESEL
FUEL #2

50,000 ug/ml D2S1 2000ml 50mL 200ug/ml MC

Diesel Fuel #2 Composite,
50,000 mg/L, 1 mL
#11598-43
Lot # Storage Expiry
179635 ≤40 Degrees C 11/8/15
Diesel Fuel #2 Composite
Lot #: 179635 - 30224 P-3/6/12
Rec: 1/10/12 MFR exp. 11/08/15

Diesel Fuel #2 Composite,
50,000 mg/L, 1 mL
#11598-43
Lot # Storage Expiry
179635 ≤40 Degrees C 11/8/15
Solv: Methylene Chloride 8P
Diesel Fuel #2 Composite 3/6/12
Lot #: 179635 - 30223 EX: 3/6/13
Rec: 1/10/12 MFR exp. 11/08/15

51306 3/6/12

EX: 6/6/12

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- 27193 OP:1/5/11 EXP:1/5/12 3/6/12	1mL		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	50mL	50ug/mL	

3/6/12
EX:
9/6/12MOTOR 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:
9/6/12THC 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
046INITIAL
CONCSOURCE
DATEFINAL
ALIQUOTFINAL
VOLUMEFINAL
CONCSOLVENT
LOT #DATE /
INITIALS

RTAN

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

3/6/12
EX:
9/6/12TERPENES
Chloro

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

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

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

3/6/12
EX: 6/28/12

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				

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

3/6/12
EX:
4/2/12

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

3/6/12
EX: 3/18/12

PREP DATE:	03/06/12									
OPF CURVE										
EXP:	07/15/12									
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL
OPF STD	5		02/29/12	07/15/12	2	10	50	200	500	700
Hexane		010711A			998	990	950	800	500	300
				Final VOL.	1000	1000	1000	1000	1000	1000

3/6/12
EX:
7/15/12

PREP DATE:	03/06/12									
OPC CURVE										
EXP:	06/12/12									
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	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

OP 2ND SOURCE						
EXP	03/06/12					
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

STANDARD

INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLVENT /LOT#	DATE /	INITIALS
							003

THC SURROGATE (* GIVENTO EXTRACTION)

O-TERPHENYL Godrophel O2SI N/A 25mL 600ug/ml N/A

OCTACOSANE

CAT: 110316-05

LOT: 176405-29679

OP: 12/28/11

EX: 12/28/12

12/28/11

EX: 12/28/11

12/28/12

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
		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
EX:
6/28/12

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:12/28/11 EXP:12/28/12	2080µL		50ug/mL	

12/28/11
EX:
6/28/12

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#171363-28618 OP:12/28/11 EXP:12/28/12	500 µL	25mL	1000ug/mL	MC LOT# 110510F

DIESEL 2ND SOURCE

DIESEL 50,000ug/ml O2SI 500µl 25mL 100ug/ml MC

FUEL #2

CAT: 011598-03

LOT: 167768-29405

OP: 12/28/11

EX: 12/28/12

#110510F

12/28/11
EX: 6/28/12

STANDARD

INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOLUME	FINAL CONC	SOLvent	DATE
					LOT #	INITIALS 061

		<u>TTC Surrogate</u>		* GAVE TD EXTRACTION CT	
D-TERPHENYL (60) mg/ml	0.25L	W/A	25mL	(60) mg/ml NA	R
DLTHIOTHANE	CAT: 110316-25				3/20 hz
	LOT: 183766-				Ex: 3/20/13
	30215 THRU 30219				
	Ex: 3/20/13				

$\pi r^2 / 2$

STANDARD
088INITIAL SOURCE FINAL FINAL
CONC DATE ALIQUOT VOLUME CONC SCL FIN JAFERI
INT'LALS

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
Ex
10/18/12

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

4/27/12
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 μg/ml 1.3 DBP STOCK 35mL 10mL 0.35 μg/ml McKinni

grsp. 12-13-11

exp. 12-13-12

#041611A CM
4-30

exp. 5-31-11

		PAC ECO STD			
DIAZINON	5ug/ml	200ug/ml	250μl	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	50μl	ABSOLUTE	
				PART:70798	
				LOT:111010-29426	
				OP: 9/19/11	
				EXP: 9/19/12	

STANDARD

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

069

AP 1254/1260 MIX

1 μg/mL AP 1254 μp. 3/26/12 Exp. 9/26/12	500 μL	1 mL	0.5 μg mL	—	HA 3/29/12 Exp. 9/26/12
1 μg/mL AP 1260 μp. 3/22/12 Exp. 9/22/12	500 μL	↓	0.5 μg/mL	—	

DIESEL SPIKE

DIESEL

50,000 mg/L

0251

1000 mL

25 mL

200 mg/mL

MC

3/30/12

FUEL #2

Diesel Fuel #2 Composite,
50,000 mg/L, 1 mL
011598-03
Lot # 179635 Storage Expiry 07/30/12
Solv: Methylene Chloride
Diesel Fuel #2 Composite 07/30/12
Lot #: 179635 - 30220 Ex: 07/30/13
Rec: 1/10/12 MFR exp. 11/08/15

#51306

Ex:
6/30/12MOTOR OIL SPIKE

MOTOR OIL

50,000 mg/L

0251

2000 mL

50 mL

2000 mg/mL

MC

3/30/12

Motor Oil Composite,
50,000 mg/L, 1 mL
116390-02
Lot # 183768 Storage Expiry 07/30/12
Solv: Methylene Chloride
Motor oil composite 07/30/12
Lot #: 183768 - 30237 Ex: 07/30/13
Rec: 1/10/12 MFR exp. 01/08/15

Motor Oil Composite,

50,000 mg/L, 1 mL

116390-02

Lot # 183768 Storage Expiry 07/30/12

Solv: Methylene Chloride

Motor oil composite 07/30/12

Lot #: 183768 - 30236 Ex: 07/30/13

Rec: 1/10/12 MFR exp. 01/08/15

#51306

Ex:
6/30/12AROMATIC CURVE

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

3/30/12

Ex:
9/12/12ALIPHATIC 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

3/30/12

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

3/30/12

Ex:
7/27/12

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 equip	1000	5	7	04/30/12 11:30	
2 120430A LCS-1		1	1	0.250	1 equip	1000	5	7	04/30/12 11:30	
3 AY60080	AY60080W07			0.250	1 equip	1010	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
4 AY60081 MS-1	AY60081W13	1	1	0.250	1 equip	1030	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
5 AY60081 MSD-1	AY60081W14	1	1	0.250	1 equip	1030	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter
6 AY60081	AY60081W11			0.250	1 equip	1040	5	7	04/30/12 11:30	67622-2 WEEK RUSH -- Amber Liter -- Amber Liter
7 AY60110	AY60110W06			0.250	1 equip	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
8 AY60111	AY60111W08			0.250	1 equip	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
9 AY60112	AY60112W06			0.250	1 equip	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter
10 AY60120	AY60120W05			0.250	1 equip	1040	5	7	04/30/12 11:30	67625-2 WEEK RUSH -- Amber Liter

DRA 5/1/12

Solvent and Lot#	
MC	EMD51306
Na2SO4	3851C501

Extraction COC Transfer	
Extraction lab employee Initials	DRA
GC analyst's initials	GAT
Date	5/1
Time	10:30
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

138

Ext_ID

35839

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



**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

Printed: 05/11/12 1:21:32 PM

Form 2 & 8, Surrogate Recovery Summary

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

Printed: 05/11/12 1:21:32 PM

Form 2 & 8, Surrogate Recovery Summary

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

Printed: 05/11/12 1:21:32 PM

Form 2 & 8, Surrogate Recovery Summary

Form 2 & 8

Surrogate Recovery

Lab Name: APPL, Inc.
Case No: 67622
Matrix: WATER

SDG No: 67622
Date Analyzed: 05/01/12
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

Printed: 05/11/12 1:21:32 PM
Form 2 & 8, Surrogate Recovery Summary

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: _____

<u>Primary</u>	<u>SPK</u>
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
XYLEMES (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: _____

<u>Primary</u>	<u>SPK</u>
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: _____

<u>Primary</u>	<u>SPK</u>
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.

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

Matrix Spike Recoveries
EPA 8260B VOCs + Gas Water

APPL ID: **120430W-60081 MS - 166814**

APPL Inc.

Batch ID: #86RHB-120430AC

908 North Temperance Avenue

Sample ID: AY60081

Clovis, CA 93611

Client ID: ES077

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
XYLEMES (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

Printed: 05/11/12 1:21:28 PM
Form 4, Blank Summary

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

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	0430C03W.D	04/30/12 11:12
3	Blank	0430C12W.D	04/30/12 16:46
4	TRIP BLANK 1	0430C13W.D	04/30/12 17:23
5	TRIP BLANK	0430C14W.D	04/30/12 18:01
6	ES076	0430C16W.D	04/30/12 19:15
7	ES077	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	04/30/12 13:40
3	Blank	120430A BLK-1WC	04/30/12 16:46
4	TRIP BLANK 1	AY60082W01	04/30/12 17:23
5	TRIP BLANK	AY60083W01	04/30/12 18:01
6	ES076	AY60080W01	04/30/12 19:15
7	ES077	AY60081W01	04/30/12 19:52
8		AY60081W456 MS-1WC	04/30/12 22:57
9		AY60081W456 MSD-1WC	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	0501T04W.D	05/01/12 10:19
3	Blank	0501T06W.D	05/01/12 11:15
4	ES076	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

8A
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

APPL Inc.
908 North Temperance Avenue
Clovis, CA 93611

Attn: Max Solmssen
Project: LTM Red Hill / 1022-024
Sample ID: ES076
Sample Collection Date: 04/26/12

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
Sample ID: ES076
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60080
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	100

There is no gasoline pattern.

ARS 5/1/12

Quantitation Report

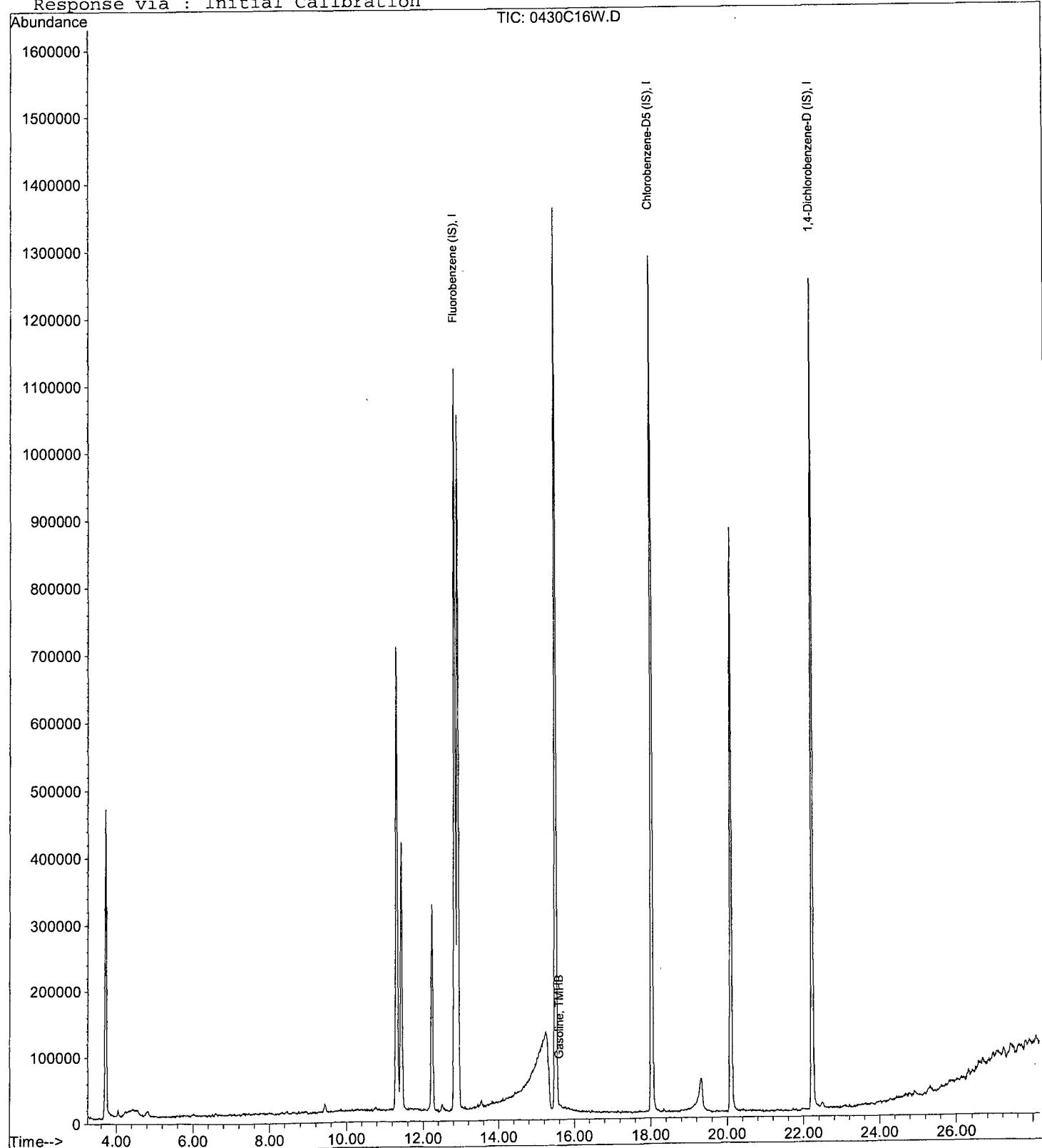
Data File : M:\CHICO\DATA\C120420\0430C16W.D
Acq On : 30 Apr 12 19:15
Sample : AY60080W01
Misc : Water 10mL w/IS&S:04-10-12

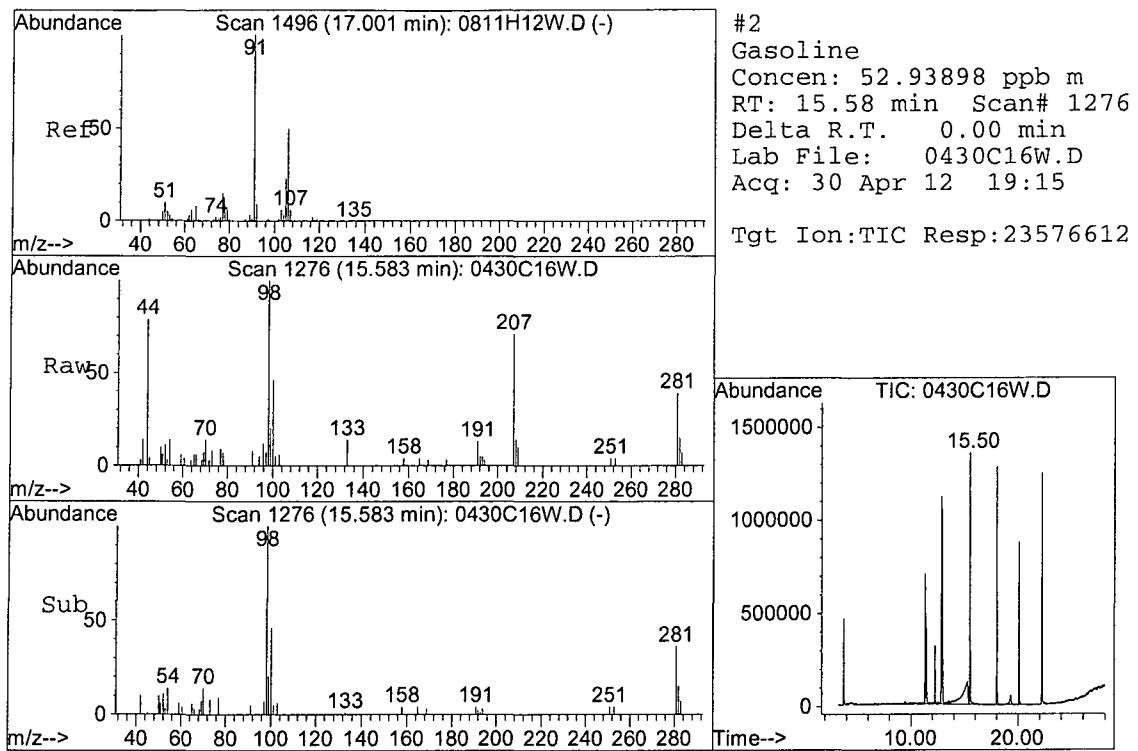
Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

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





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

25) Vinyl Acetate	9.44	43	2521	1.35313	ppb	<i>NT</i>	95
41) Benzene	12.50	78	15213	0.20386	ppb	<i>J</i>	94 < Y ₂ PQL
42) TCE	13.54	95	3875	0.21787	ppb	<i>J</i>	87 < Y ₂ PQL Possible C.O.

*RI ag DF1 for TCE Possible C.O.
ARS 9/1/12*

Quantitation Report

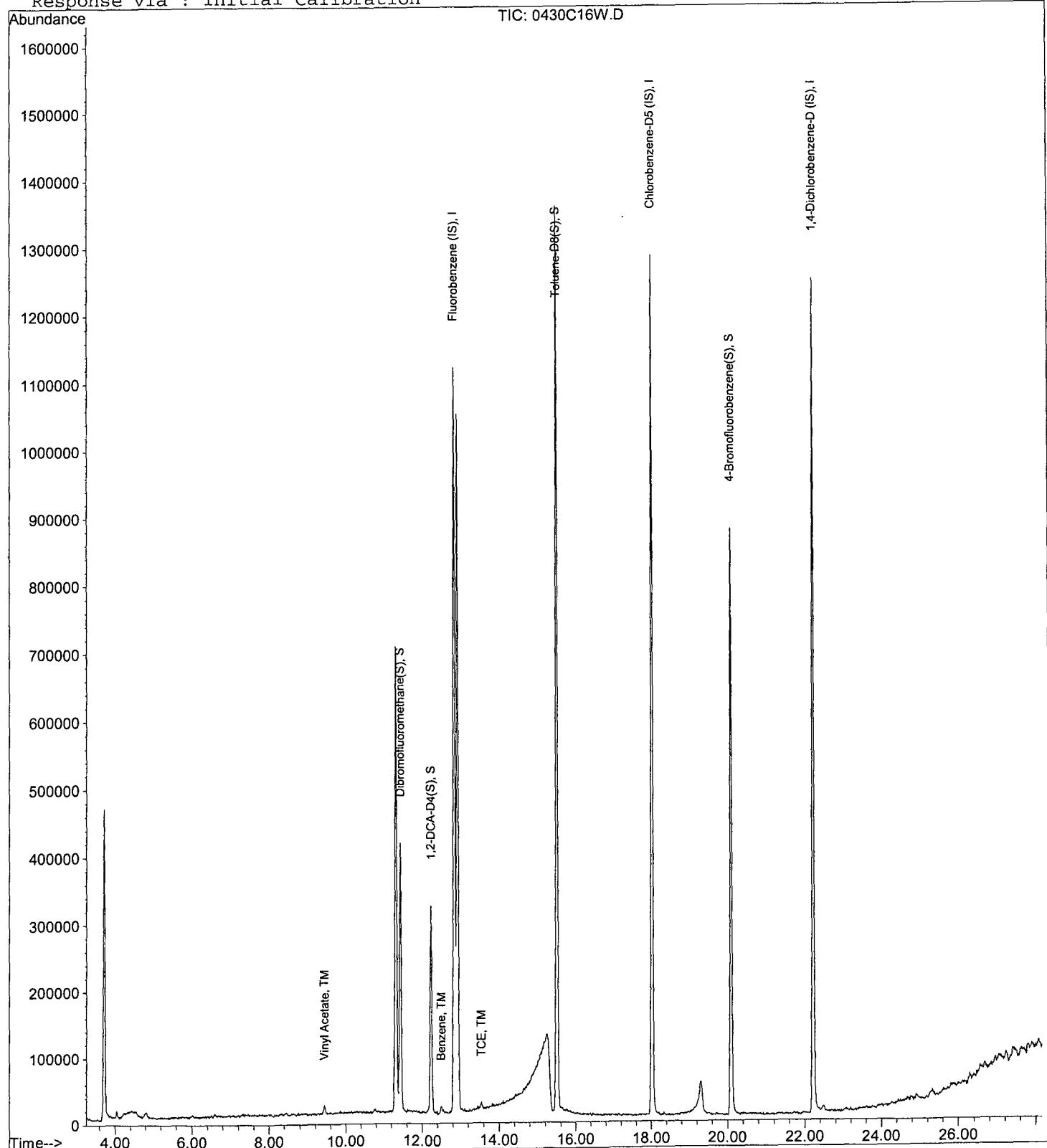
Data File : M:\CHICO\DATA\C120420\0430C16W.D
 Acq On : 30 Apr 12 19:15
 Sample : AY60080W01
 Misc : Water 10mL w/IS&S:04-10-12

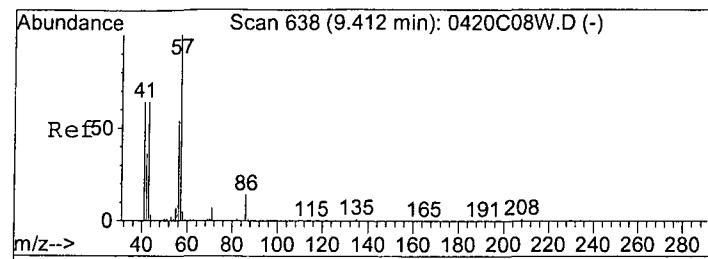
Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00

Quant Time: May 1 10:01 2012

Quant Results File: CALLW3.RES

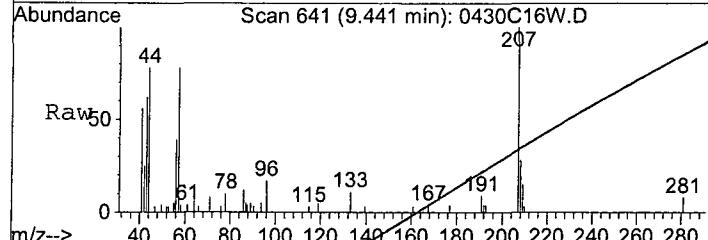
Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
 Title : METHOD 8260
 Last Update : Mon Apr 23 10:17:53 2012
 Response via : Initial Calibration



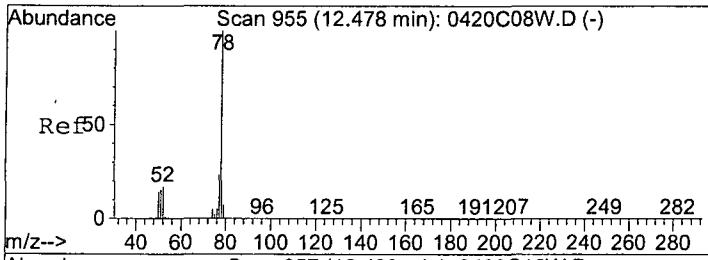
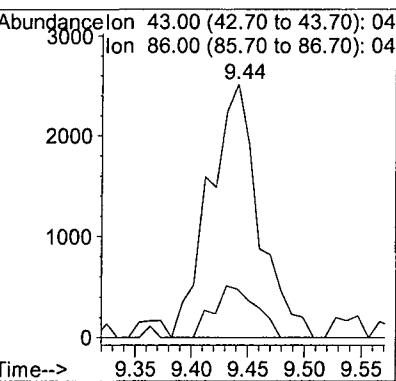
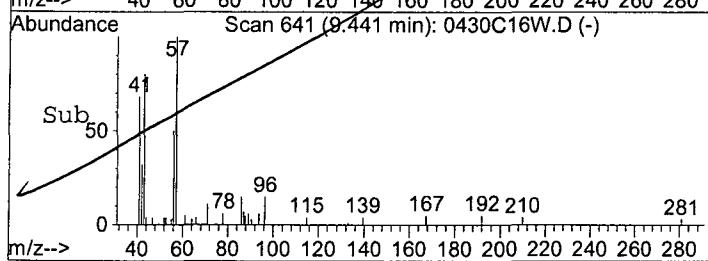


#25
 Vinyl Acetate
 Concen: 1.35313 ppb
 RT: 9.44 min Scan# 641
 Delta R.T. 0.03 min
 Lab File: 0430C16W.D
 Acq: 30 Apr 12 19:15

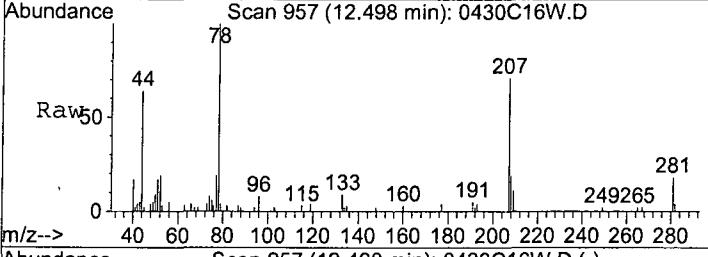
ANALYSIS 5/29/12



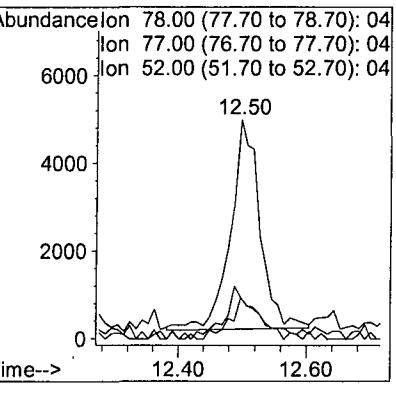
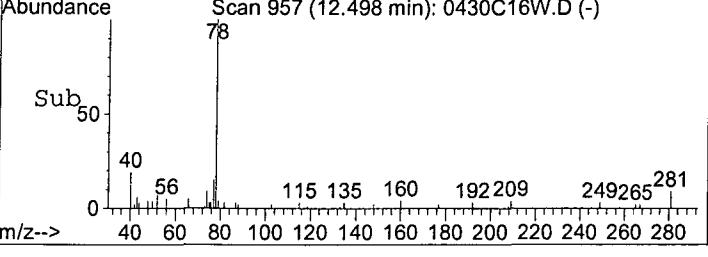
Tgt Ion: 43 Resp: 2521
 Ion Ratio Lower Upper
 43 100
 86 19.1 15.0 27.8



#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
Sample ID: ES076
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60080
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-BROMOFLUOROBENZENE	93.1	75-120			%	05/01/12	05/01/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMETANE	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

40) Benzene	6.40	78	4616	0.17415	ppb	Qvalue NT 95
-------------	------	----	------	---------	-----	--------------

want to check for TCE only → TCE is n/a

ARS 5/29/12

Quantitation Report

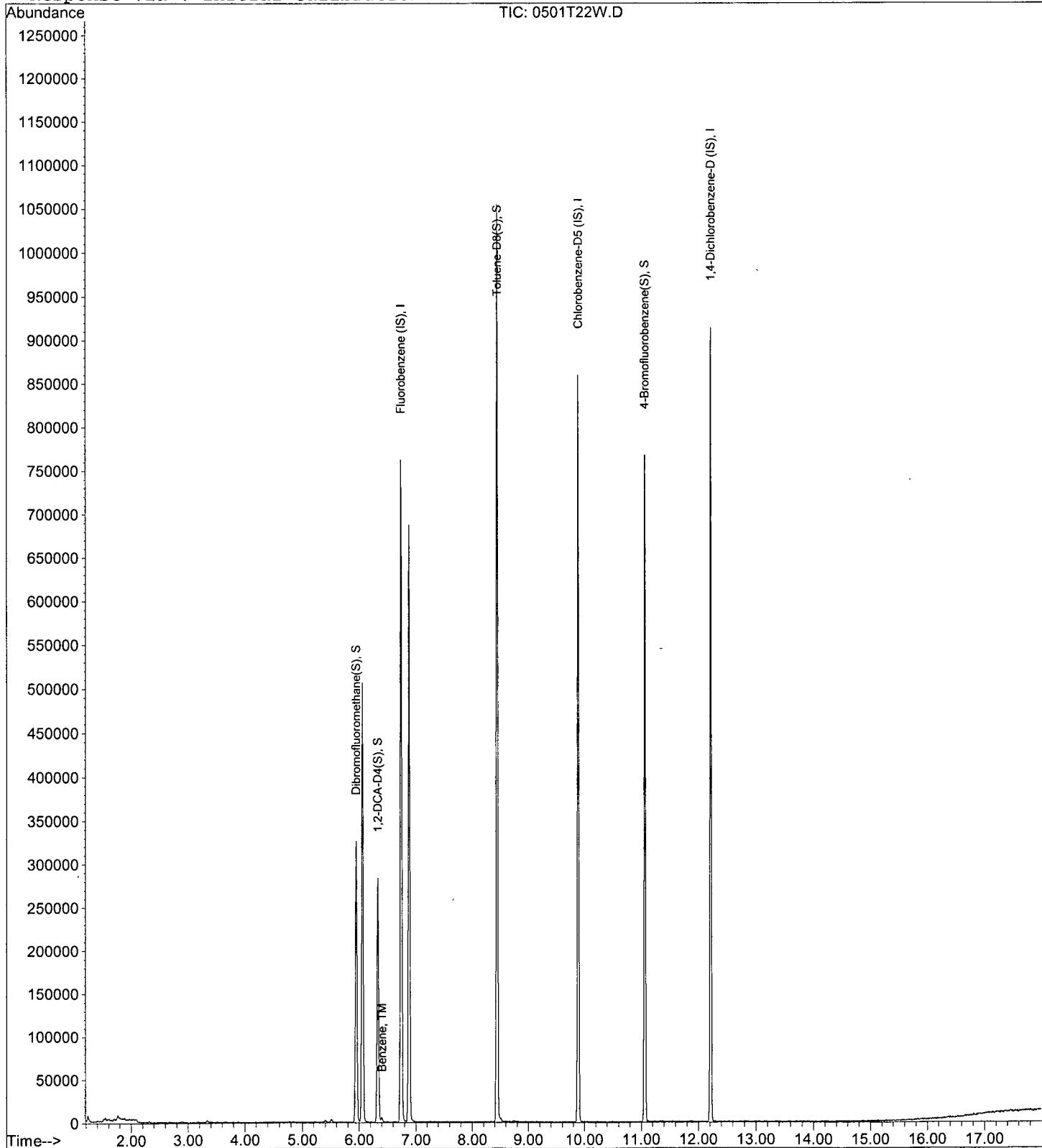
Data File : M:\THOR\DATA\T120430\0501T22W.D
 Acq On : 1 May 12 18:40
 Sample : AY60080W02
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 22
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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
Sample ID: ES077
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60081
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
Sample ID: ES077
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60081
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-BROMOFLUOROBENZENE	87.9	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMETANE	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
 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 10:11 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	100

*There is no gasoline pattern.**ARS 5/1/12*

Quantitation Report

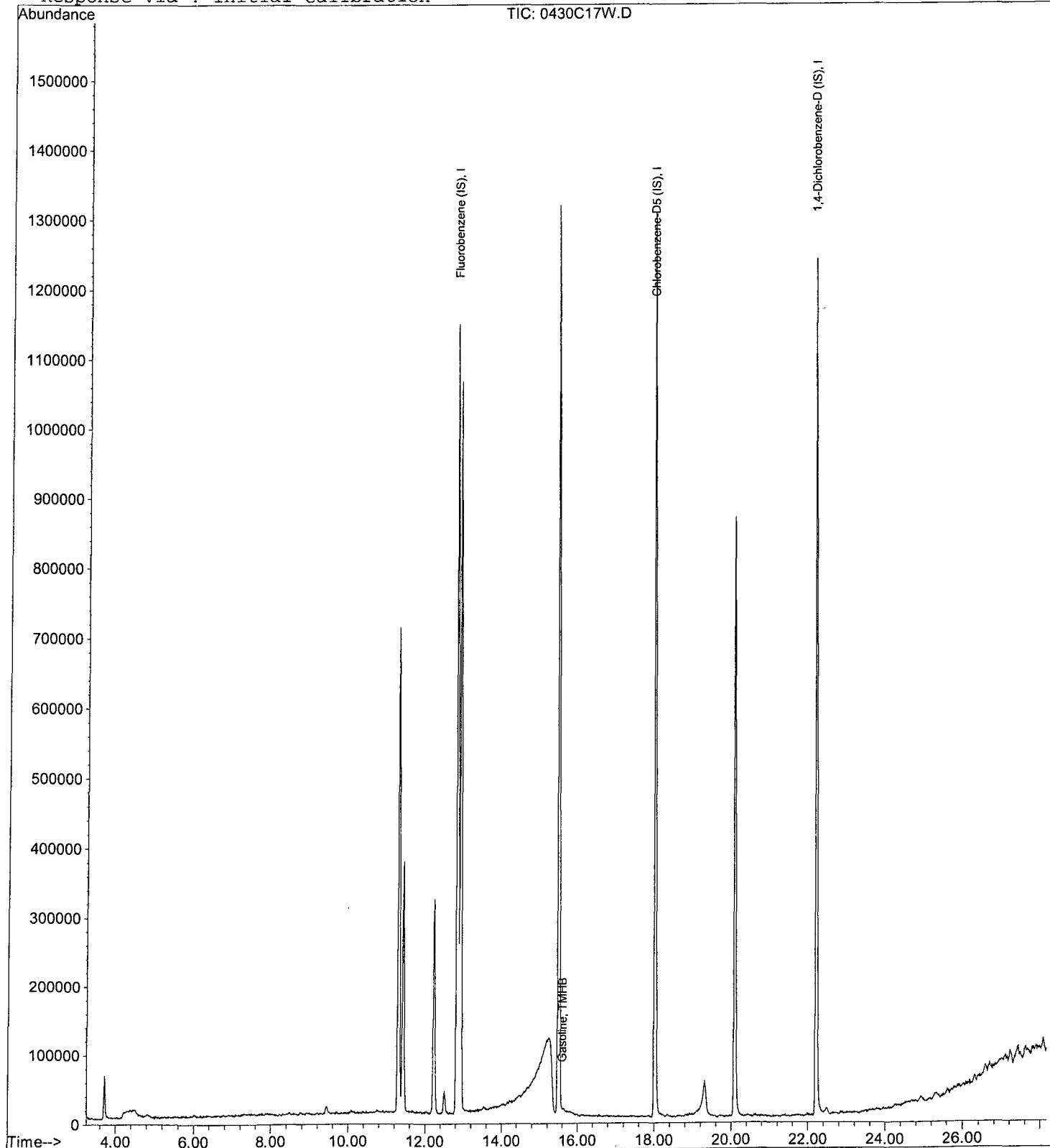
Data File : M:\CHICO\DATA\C120420\0430C17W.D
Acq On : 30 Apr 12 19:52
Sample : AY60081W01
Misc : Water 10mL w/IS&S:04-10-12

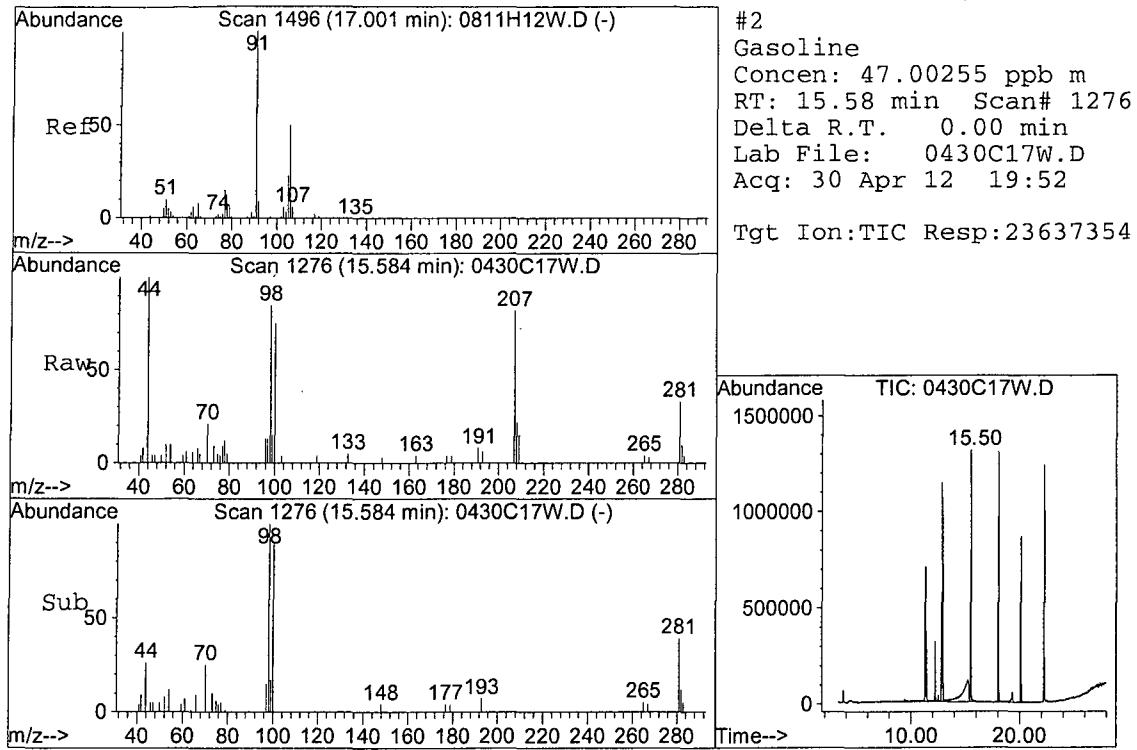
Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 10:11 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





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	ppb ^T 99 <1/2 PQL
25) Vinyl Acetate	9.42	43	2009	1.10705	ppb ^{NT} 96
41) Benzene	12.51	78	54484	0.71414	ppb ^T 93 >1/2 PQL

ARS 5/1/12

(#) = qualifier out of range (m) = manual integration
 0430C17W.D CALLW3.M Tue May 01 10:05:59 2012

Quantitation Report

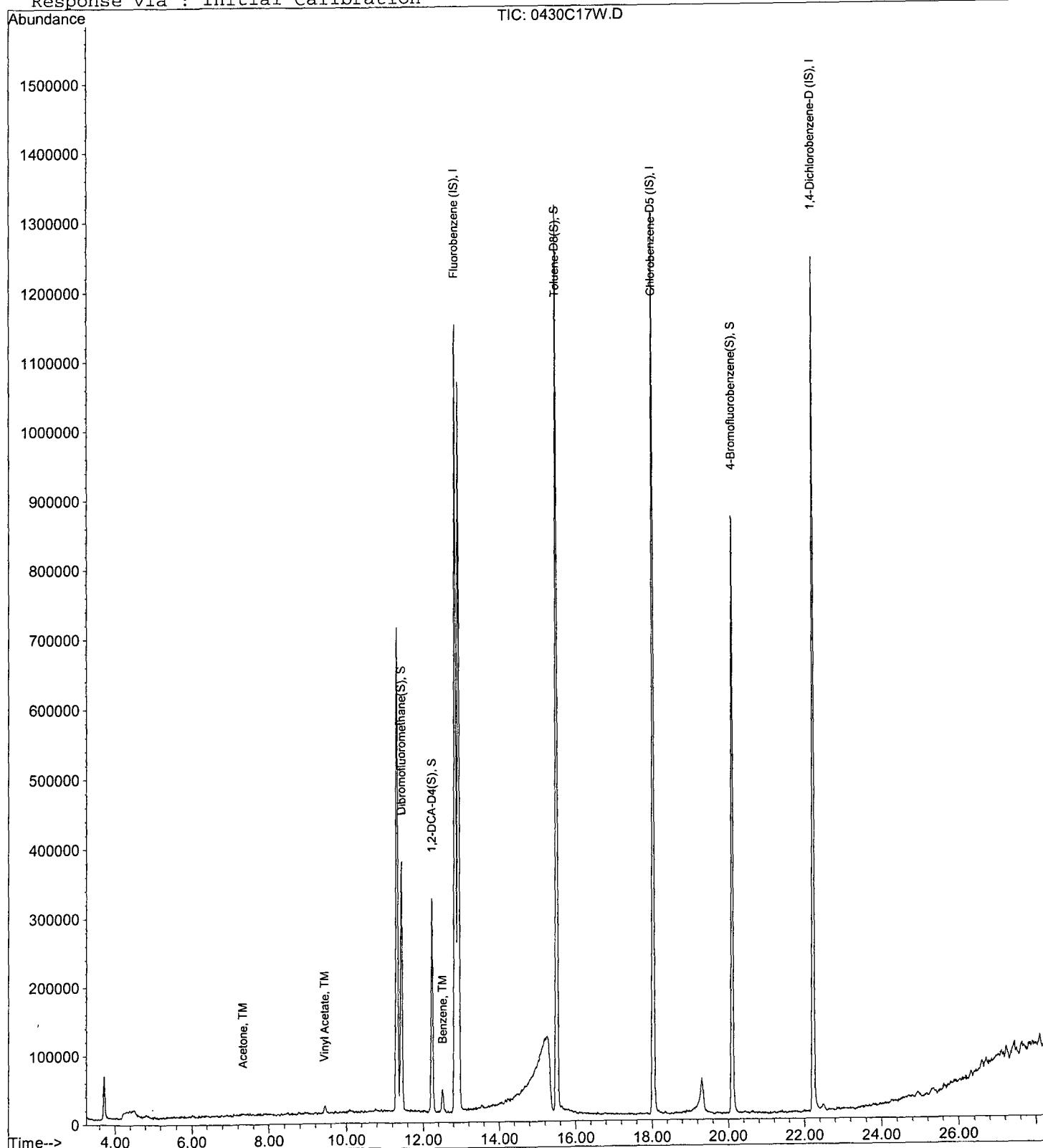
Data File : M:\CHICO\DATA\C120420\0430C17W.D
 Acq On : 30 Apr 12 19:52
 Sample : AY60081W01
 Misc : Water 10mL w/IS&S:04-10-12

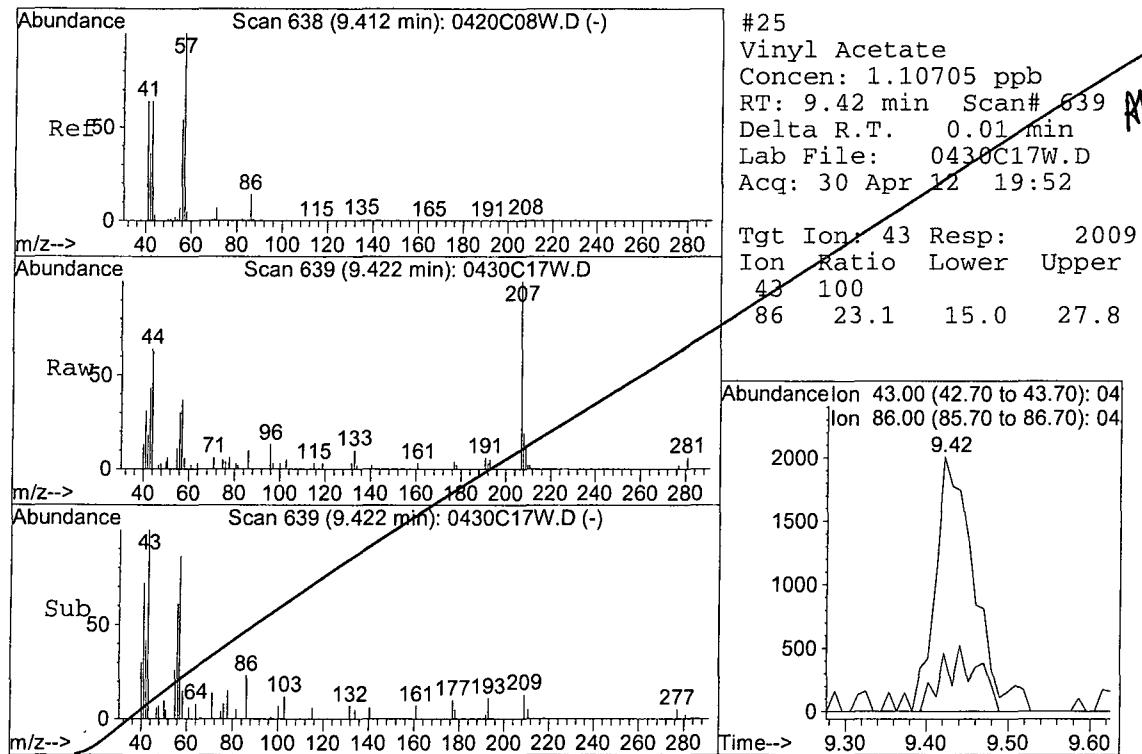
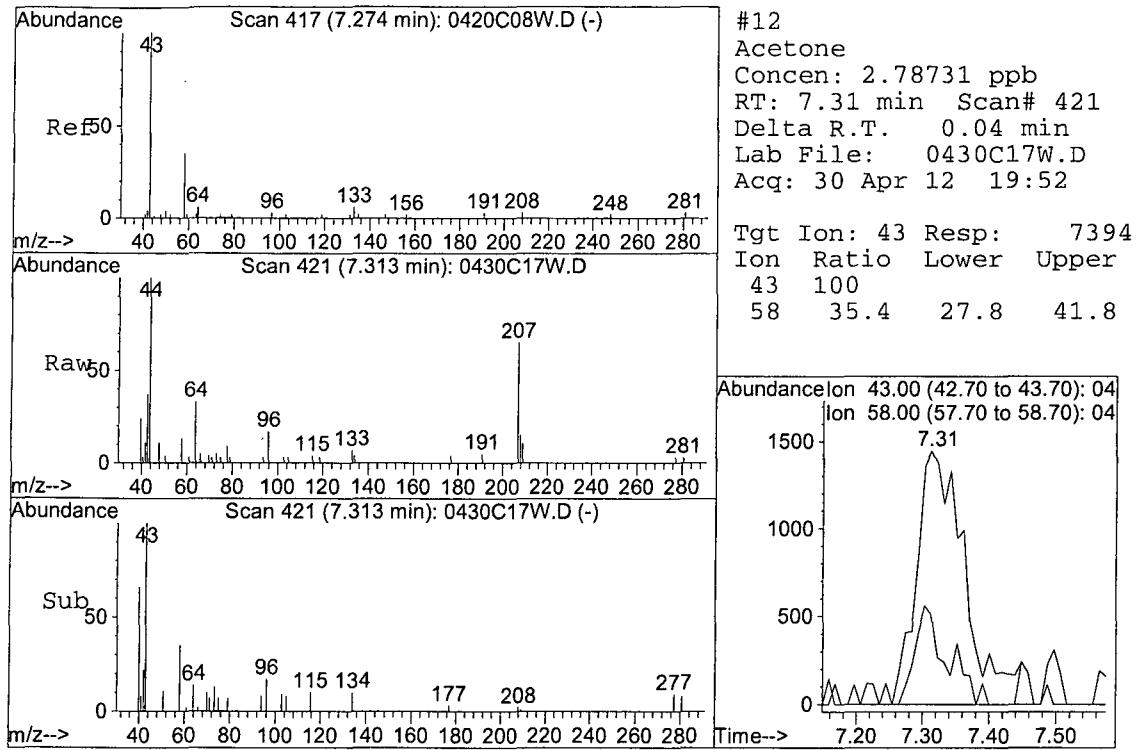
Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00

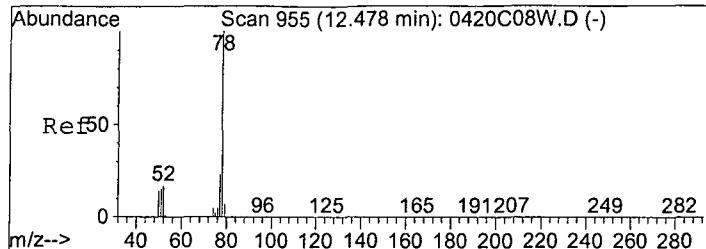
Quant Time: May 1 10:04 2012

Quant Results File: CALLW3.RES

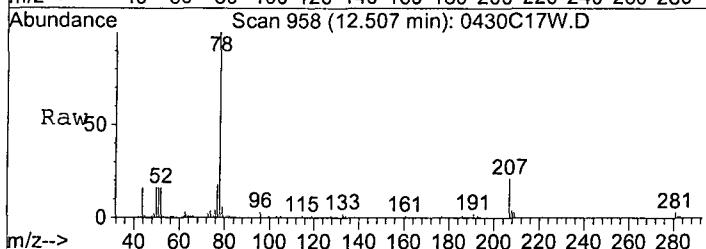
Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)
 Title : METHOD 8260
 Last Update : Mon Apr 23 10:17:53 2012
 Response via : Initial Calibration



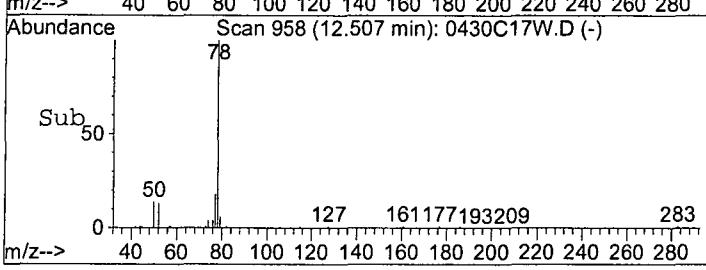




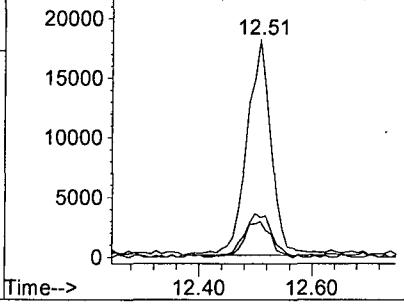
#41
Benzene
Concen: 0.71414 ppb
RT: 12.51 min Scan# 958
Delta R.T. 0.03 min
Lab File: 0430C17W.D
Acq: 30 Apr 12 19:52



Tgt Ion:	78	Resp:	54484
Ion Ratio:	100		
78	100		
77	17.6	Lower	16.0
52	16.5	Upper	29.8
			22.8



Abundance
celon 78.00 (77.70 to 78.70): 04
25000
ion 77.00 (76.70 to 77.70): 04
ion 52.00 (51.70 to 52.70): 04



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
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	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-BROMOFLUOROBENZENE	87.1	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMETANE	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.

ARCS 5/1/12

Quantitation Report

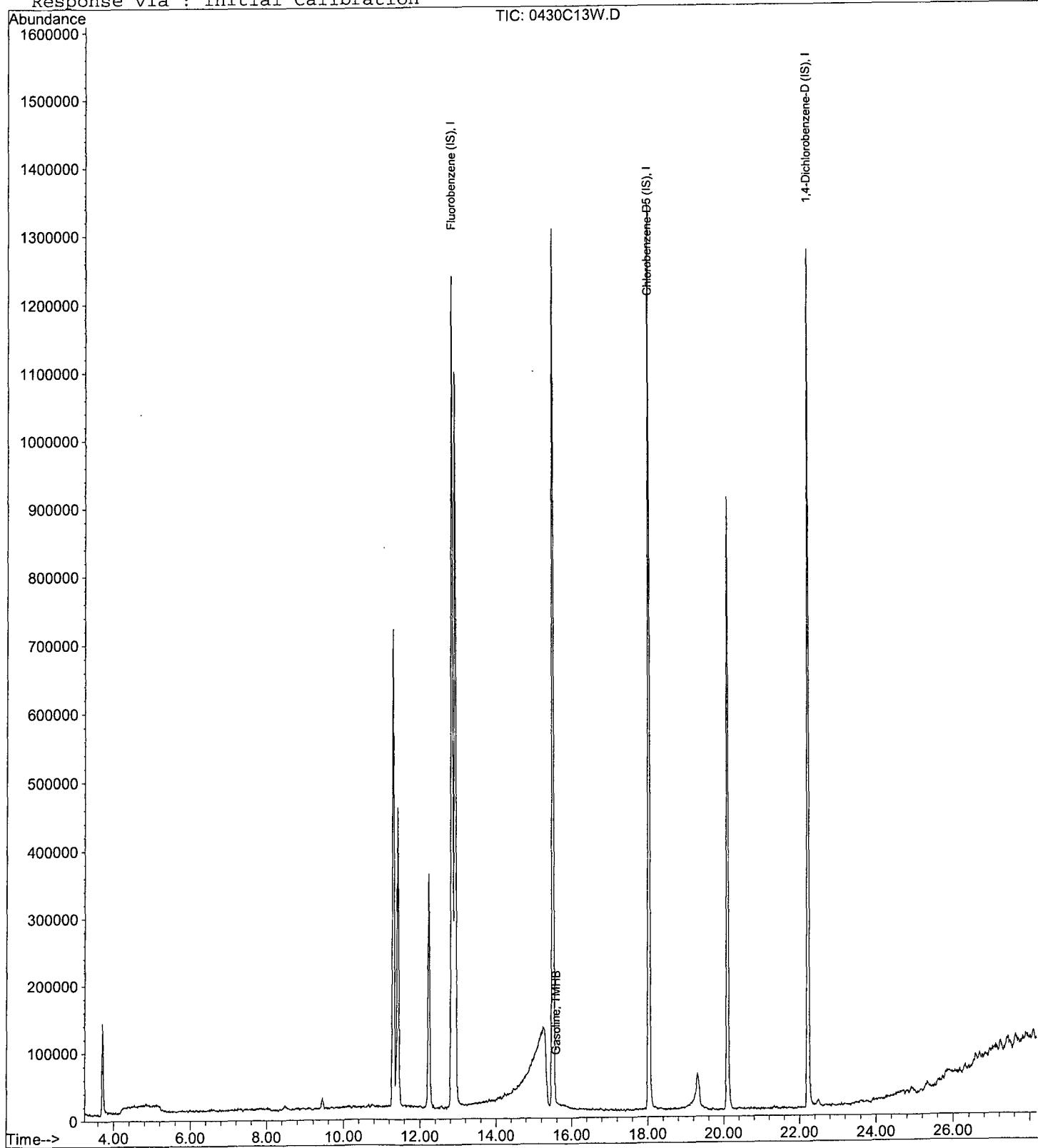
Data File : M:\CHICO\DATA\C120420\0430C13W.D
Acq On : 30 Apr 12 17:23
Sample : AY60082W01
Misc : Water 10mL w/IS&S:04-10-12

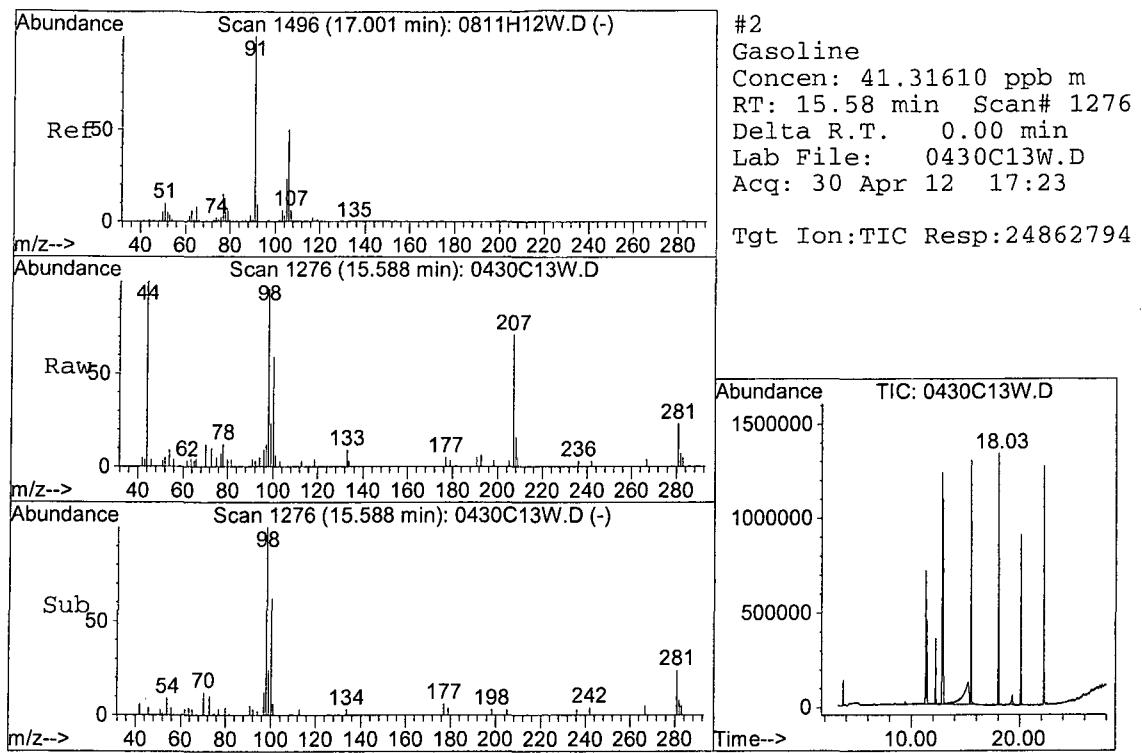
Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

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





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

25) Vinyl Acetate	9.44	43	2316	1.17225	ppb NT	96
-------------------	------	----	------	---------	--------	----

ARS 5/1/12

Quantitation Report

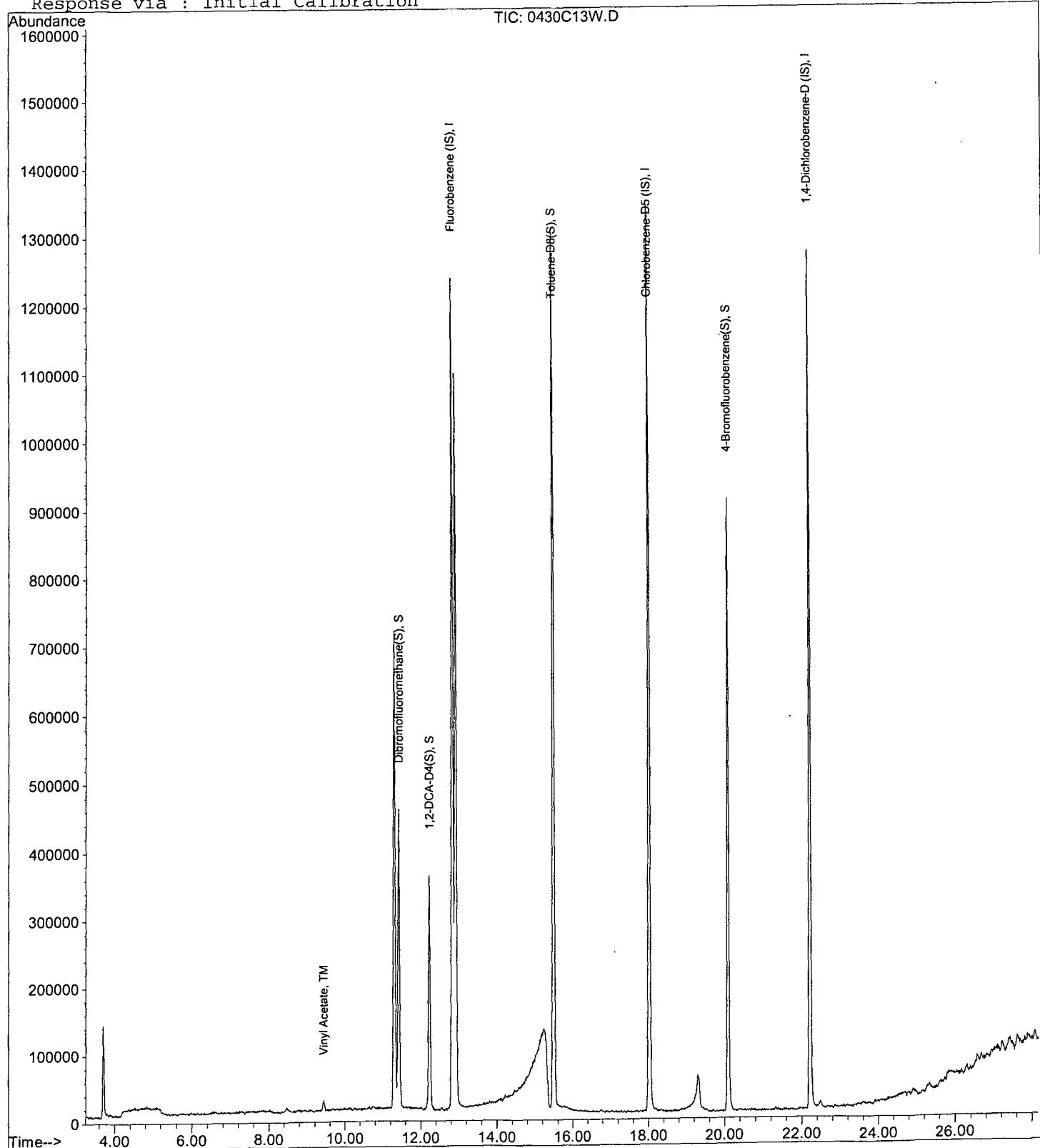
Data File : M:\CHICO\DATA\C120420\0430C13W.D
 Acq On : 30 Apr 12 17:23
 Sample : AY60082W01
 Misc : Water 10mL w/IS&S:04-10-12

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
Sample ID: TRIP BLANK
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60083
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
Sample ID: TRIP BLANK
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60083
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-BROMOFLUOROBENZENE	88.0	75-120			%	04/30/12	04/30/12
EPA 8260B	SURROGATE: DIBROMOFLUOROMETANE	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 <i>ND</i> 100

There is no gasoline pattern.

ANES 5/1/12

Quantitation Report

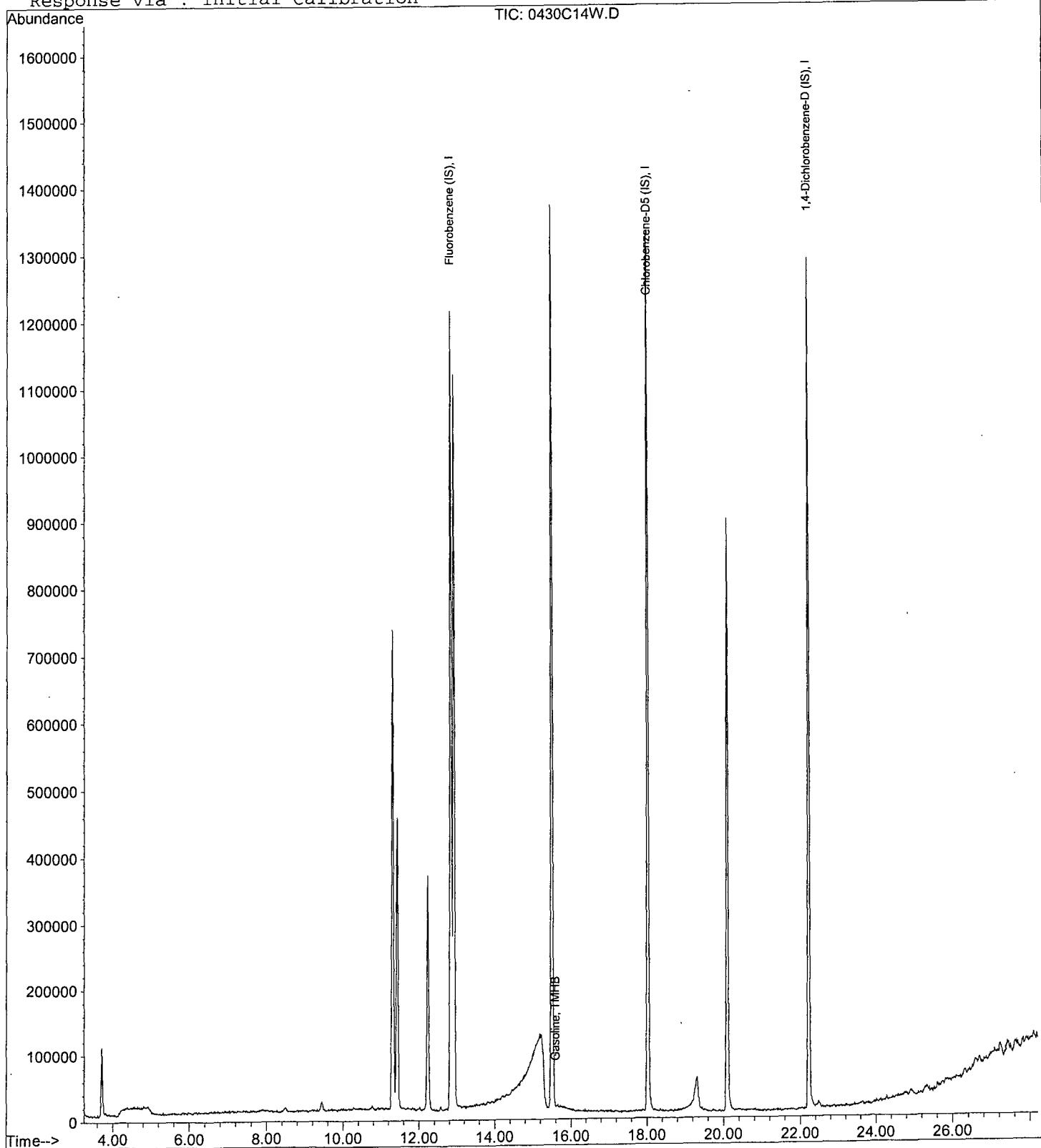
Data File : M:\CHICO\DATA\C120420\0430C14W.D
Acq On : 30 Apr 12 18:01
Sample : AY60083W01
Misc : Water 10mL w/IS&S:04-10-12

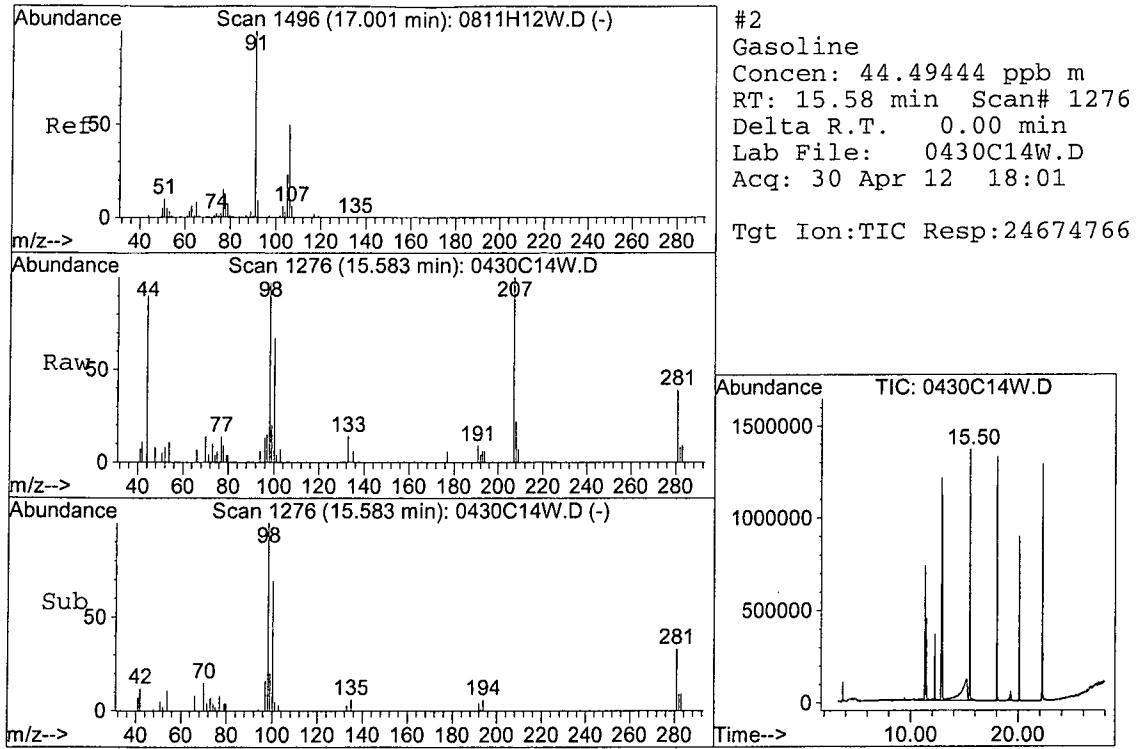
Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

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





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						
25) Vinyl Acetate	9.43	43	2264	1.16202	ppb NT	99
<i>APC 5/1/12</i>						

Quantitation Report

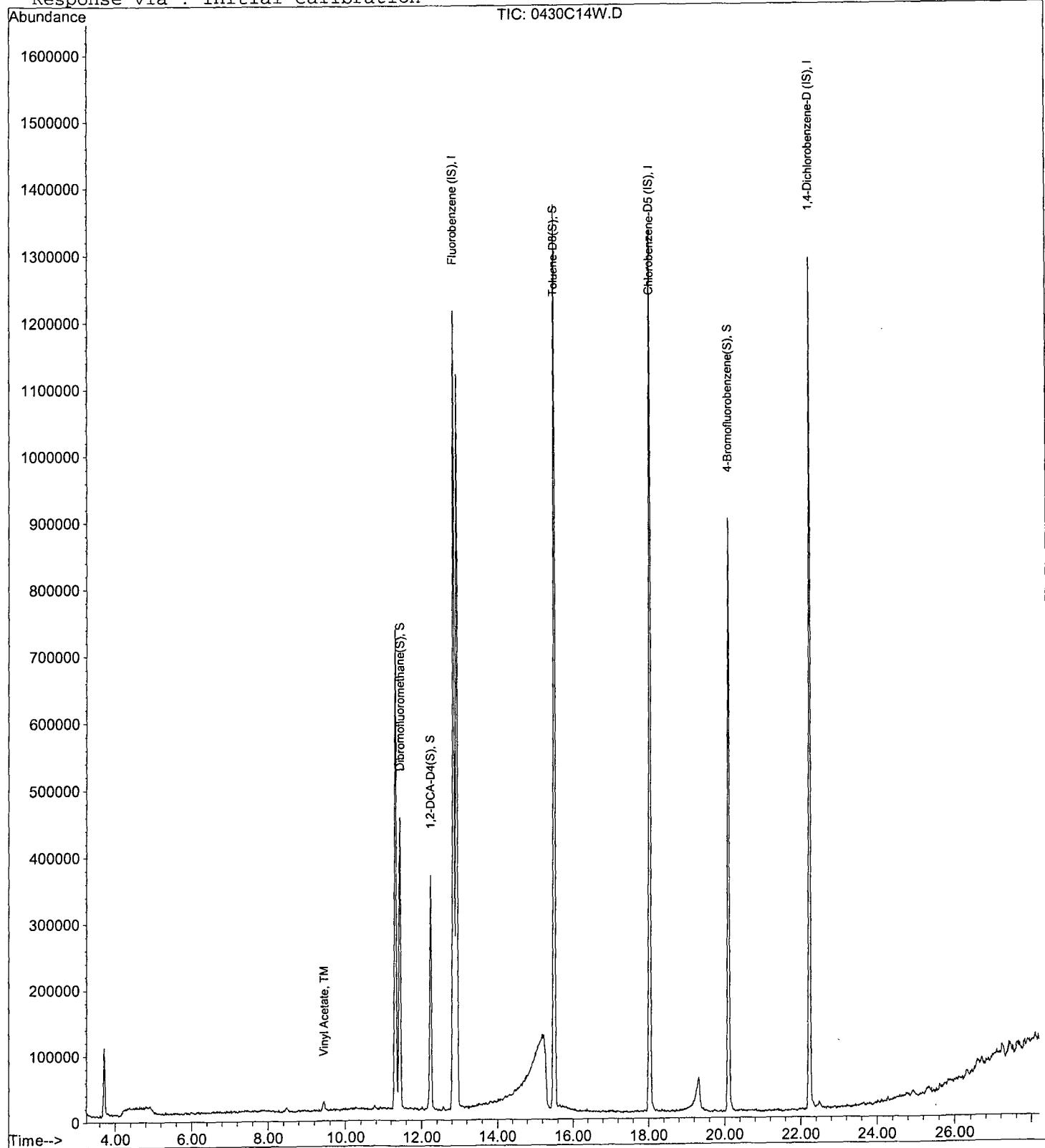
Data File : M:\CHICO\DATA\C120420\0430C14W.D
Acq On : 30 Apr 12 18:01
Sample : AY60083W01
Misc : Water 10mL w/IS&S:04-10-12

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.

Case No:

Matrix: Water

SDG No: 67622

Initial Cal. Date: 01/25/12

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															

ARCS 5/29/12

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
Multipllr: 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	100

Quantitation Report

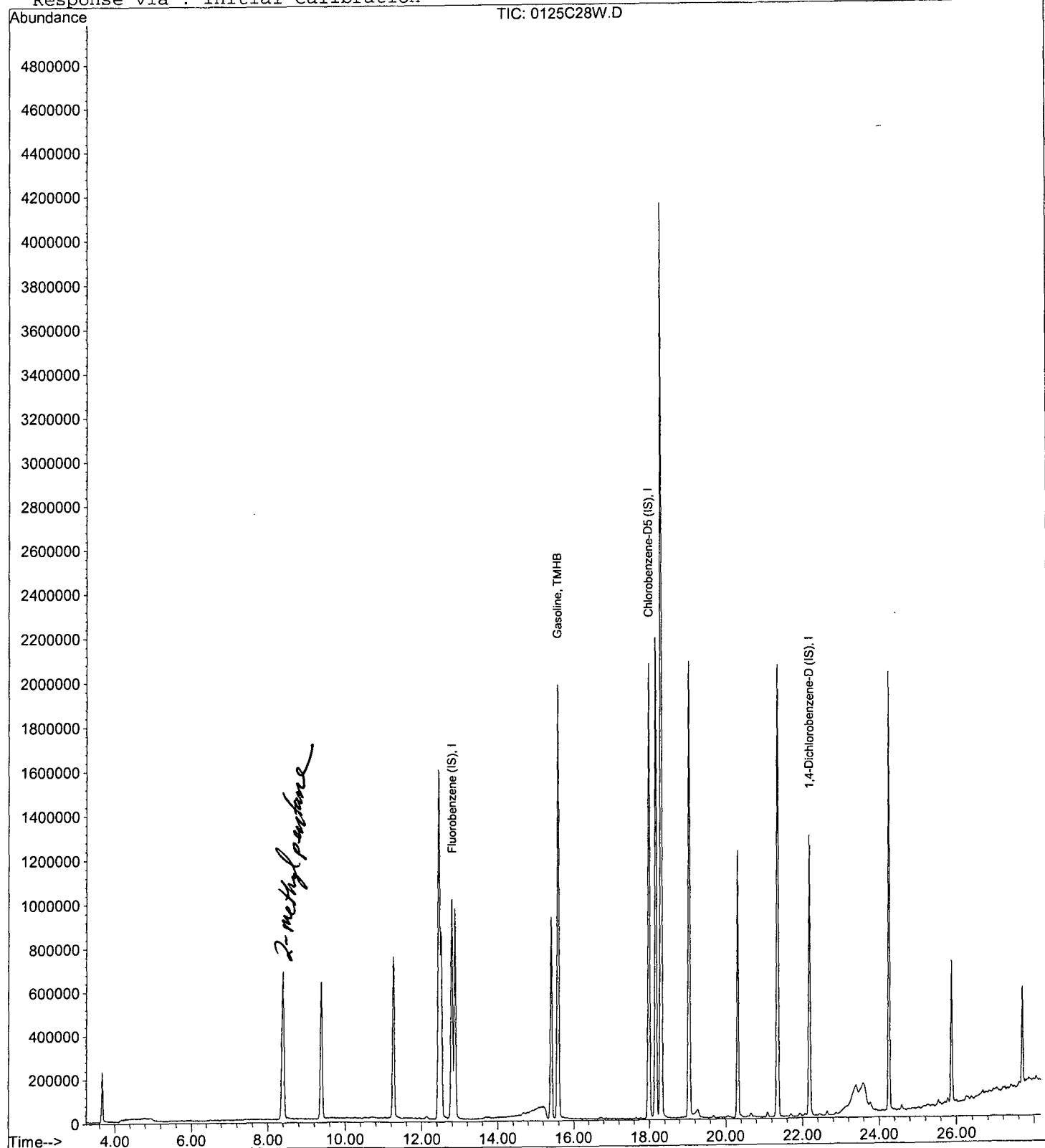
Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:41 2012

Quant Results File: CGAS.RES

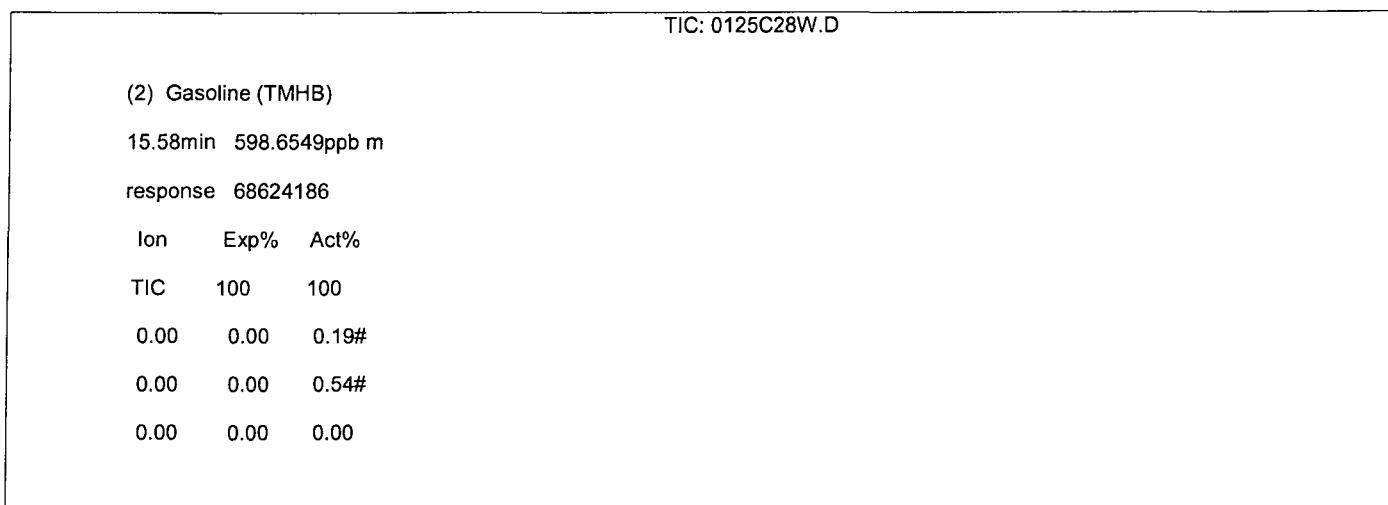
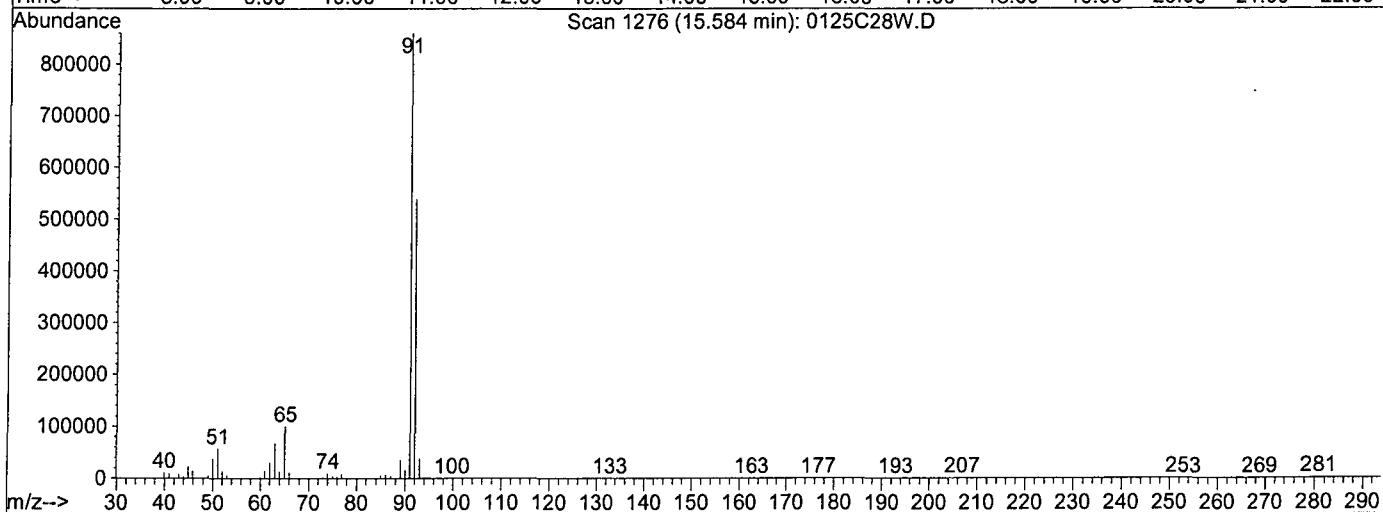
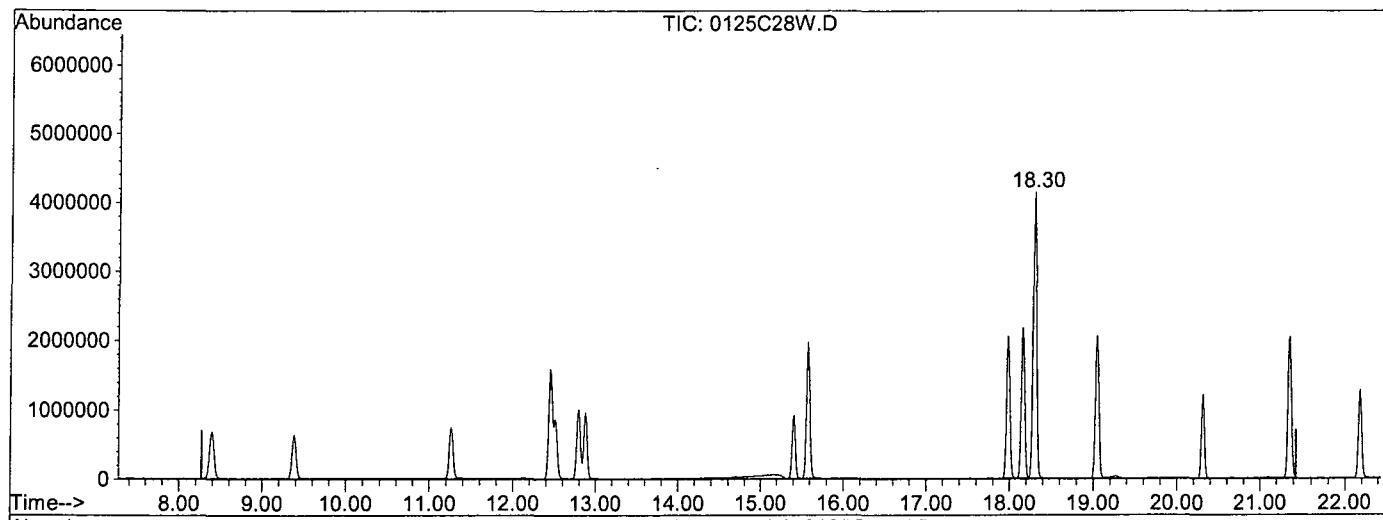
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



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



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						
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

0125C28W.D CALLW.M Fri Feb 03 12:58:27 2012

Quantitation Report (Not Reviewed)

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

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

APBS 4/27/12

Quantitation Report

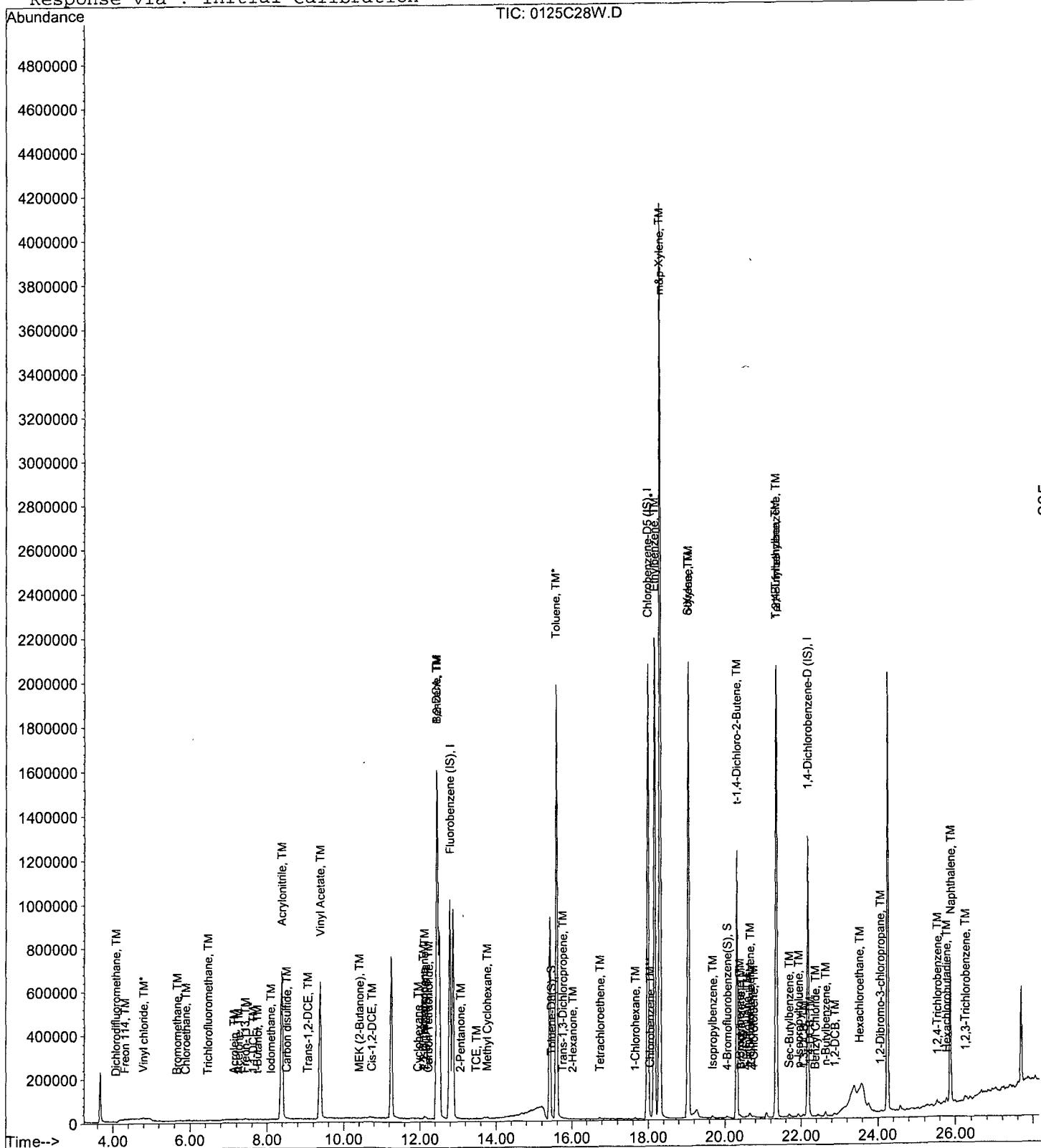
Data File : M:\CHICO\DATA\C120125\0125C28W.D
Acq On : 26 Jan 12 18:55
Sample : VOC Mix Marker
Misc : Water 10mLw/ IS:12-06-11

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



Quantitation Report (QT Reviewed)

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

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

Quantitation Report

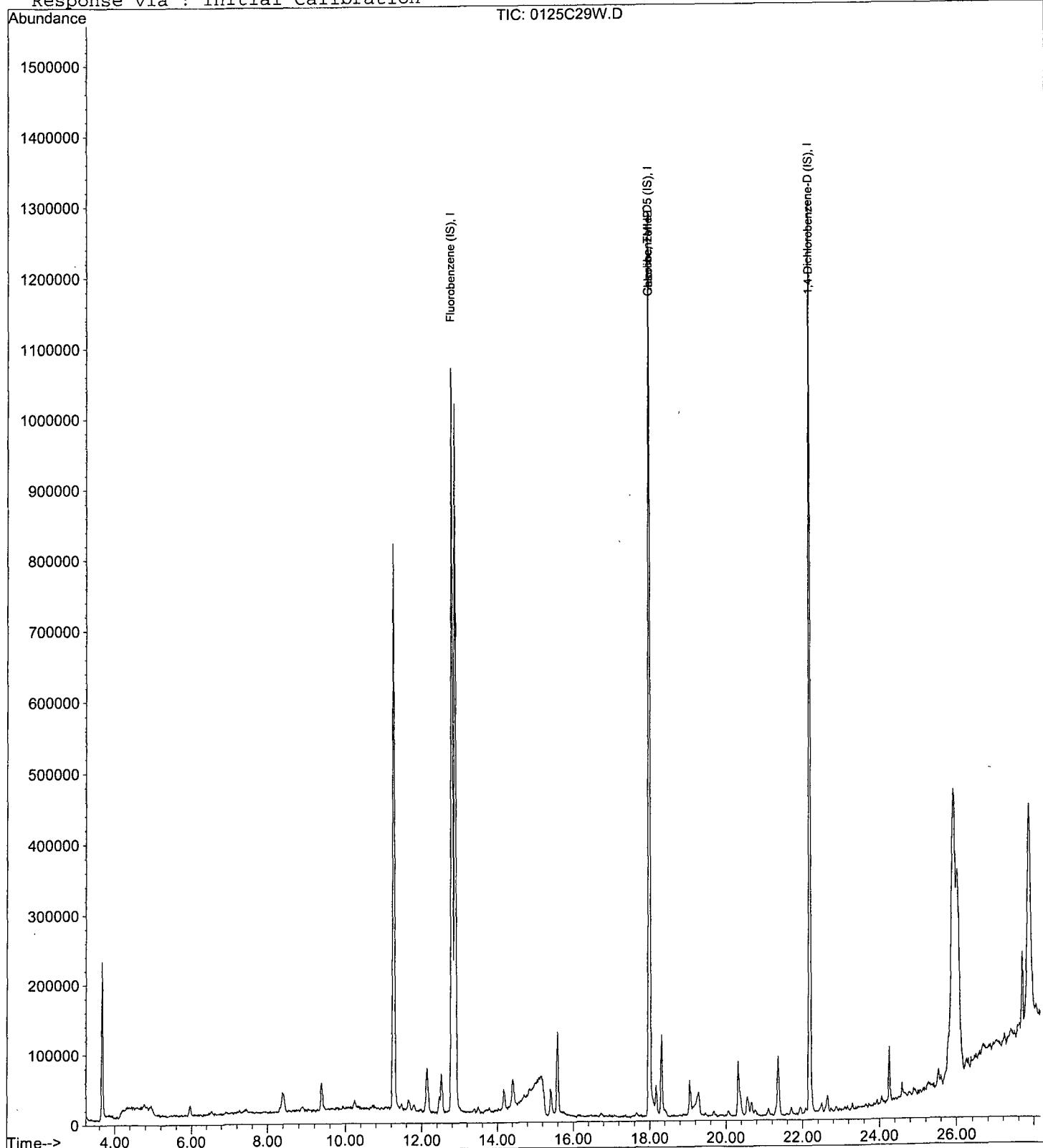
Data File : M:\CHICO\DATA\C120125\0125C29W.D
Acq On : 26 Jan 12 19:32
Sample : Vol. Std. 01-26-12@20ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:34 2012

Quant Results File: CGAS.RES

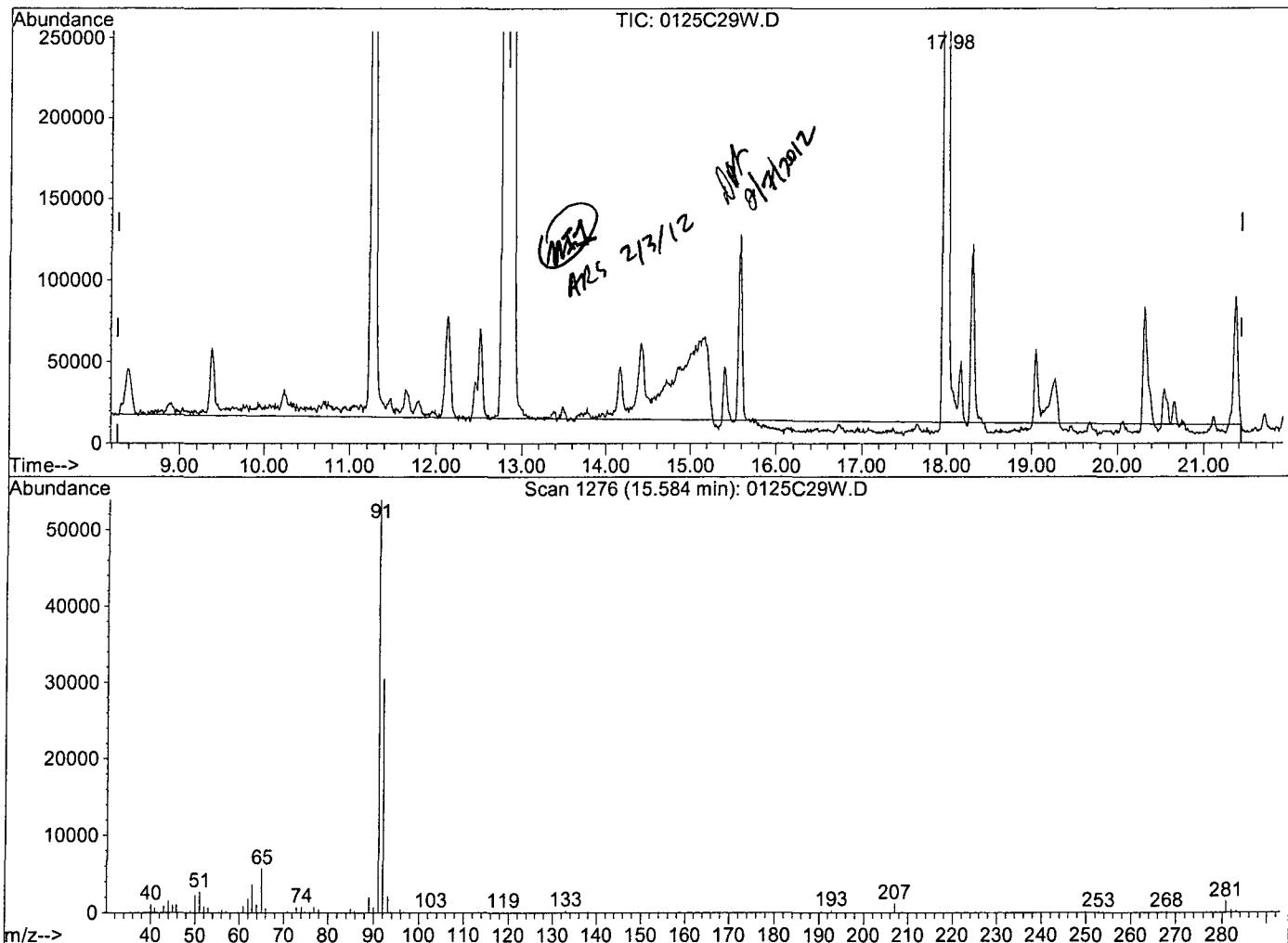
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



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



(2) Gasoline (TMHB)

15.58min -8.2763ppb m

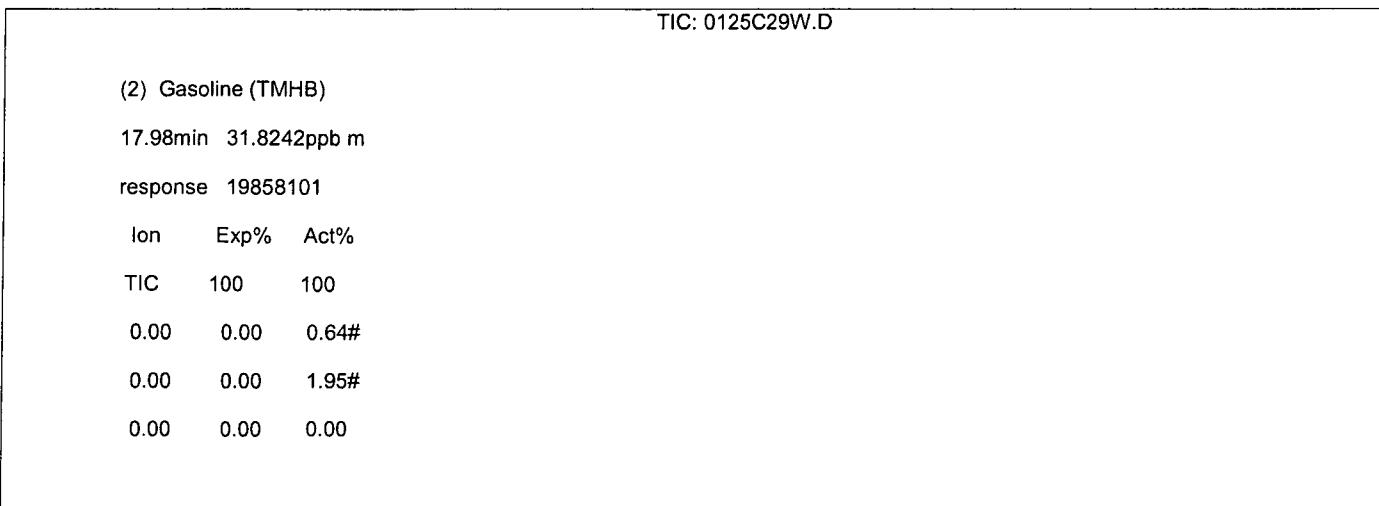
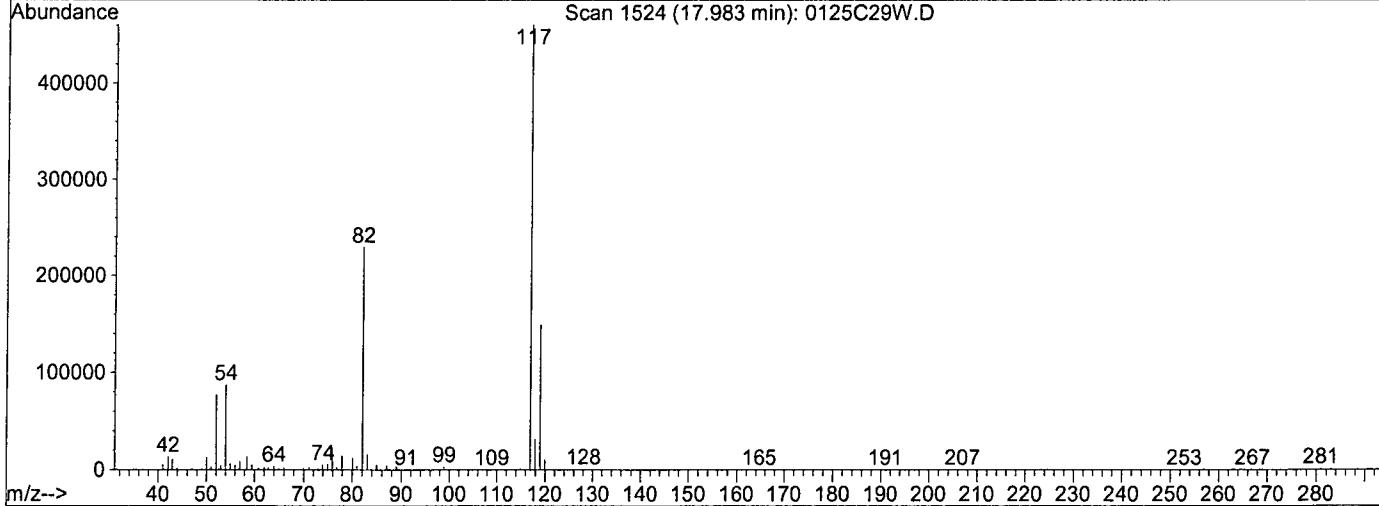
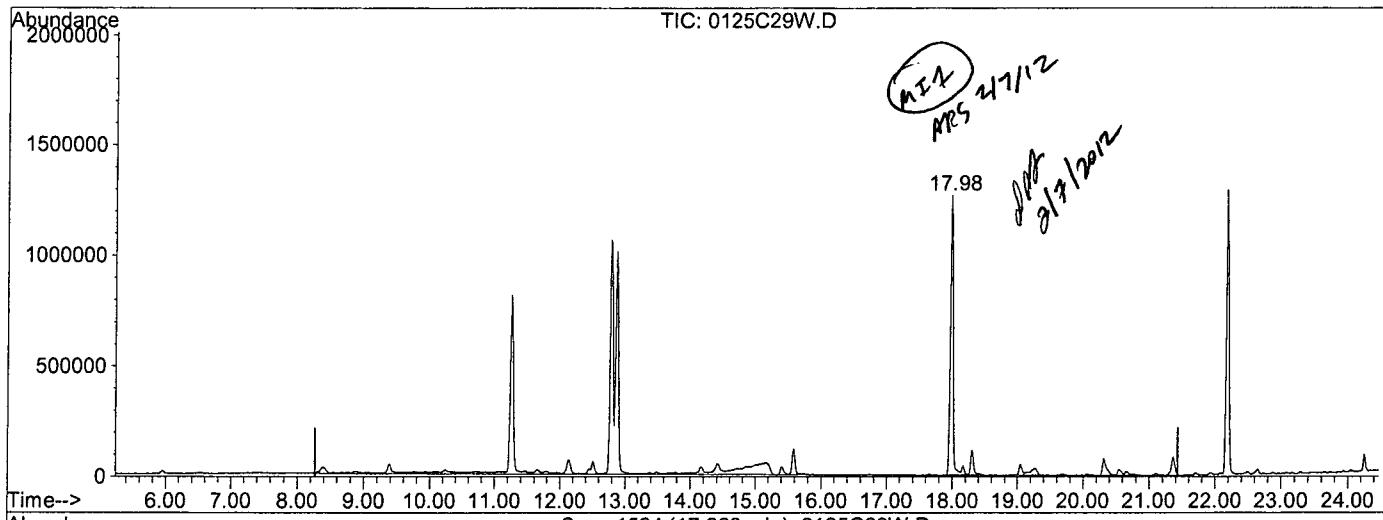
response 16152794

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



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

Quantitation Report

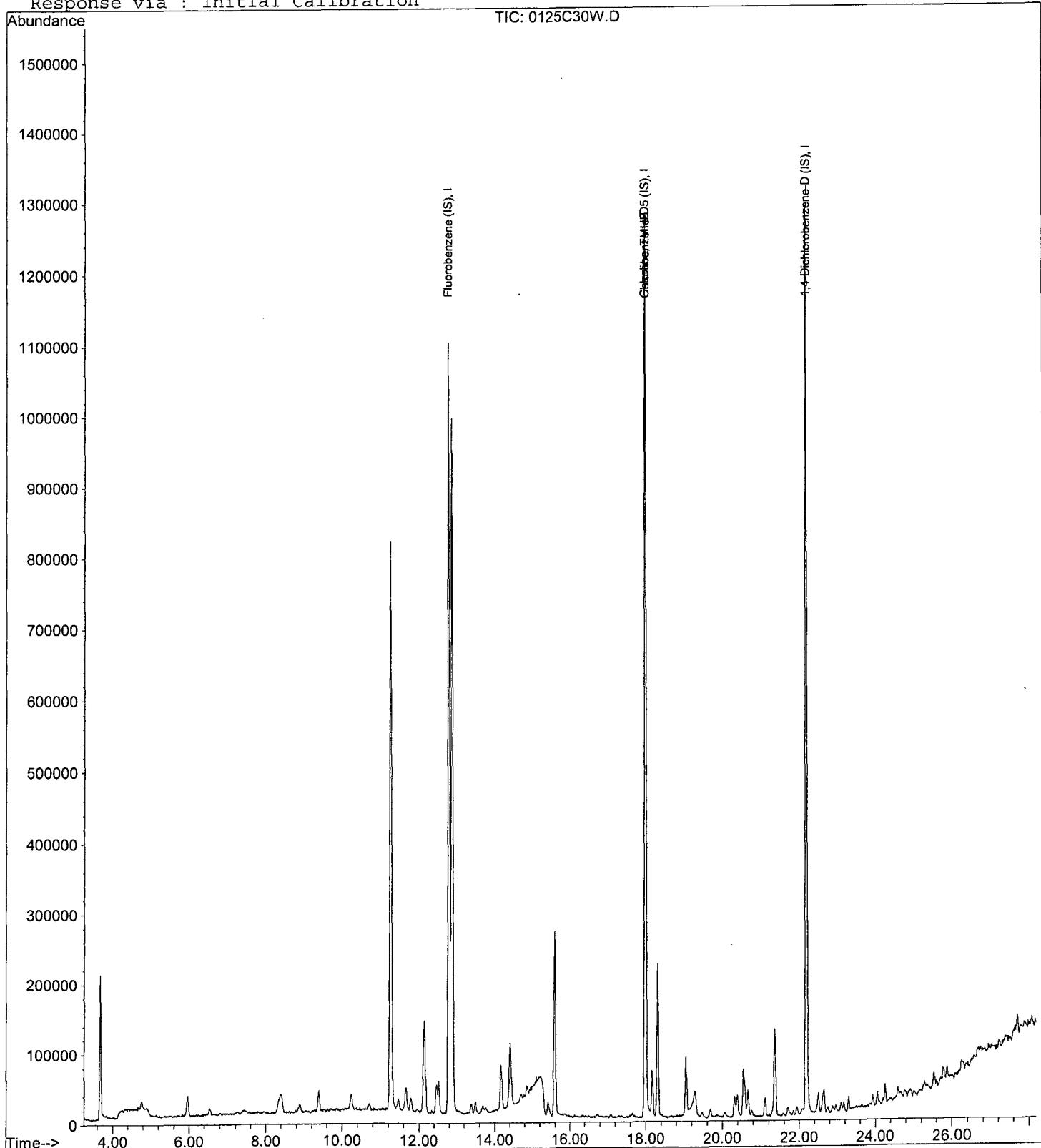
Data File : M:\CHICO\DATA\C120125\0125C30W.D
Acq On : 26 Jan 12 20:09
Sample : Vol. Std. 01-26-12@50ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 7 9:35 2012

Quant Results File: CGAS.RES

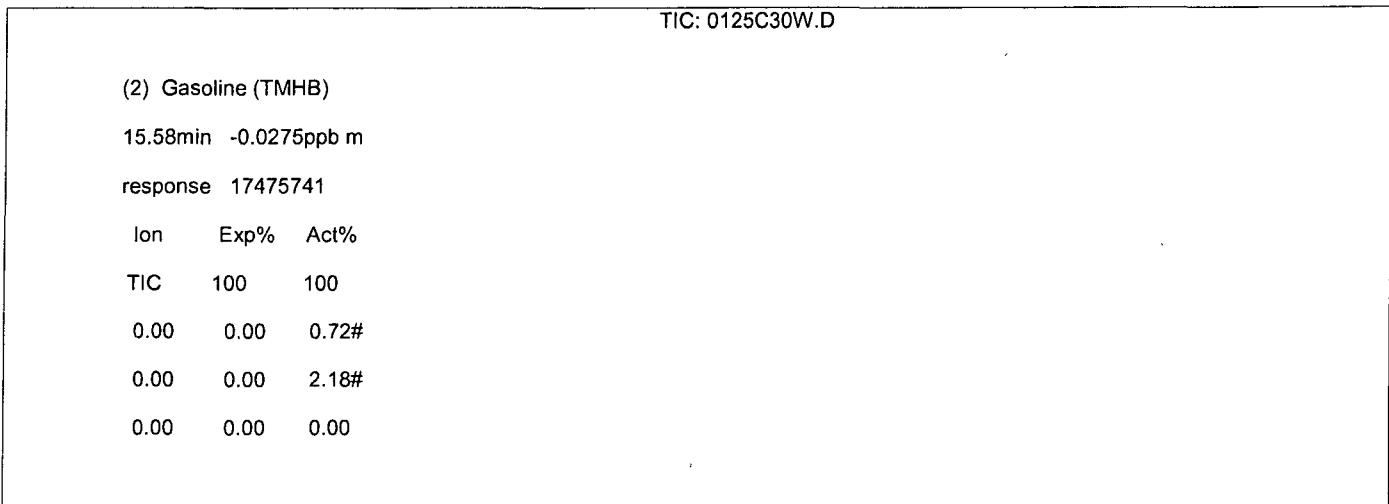
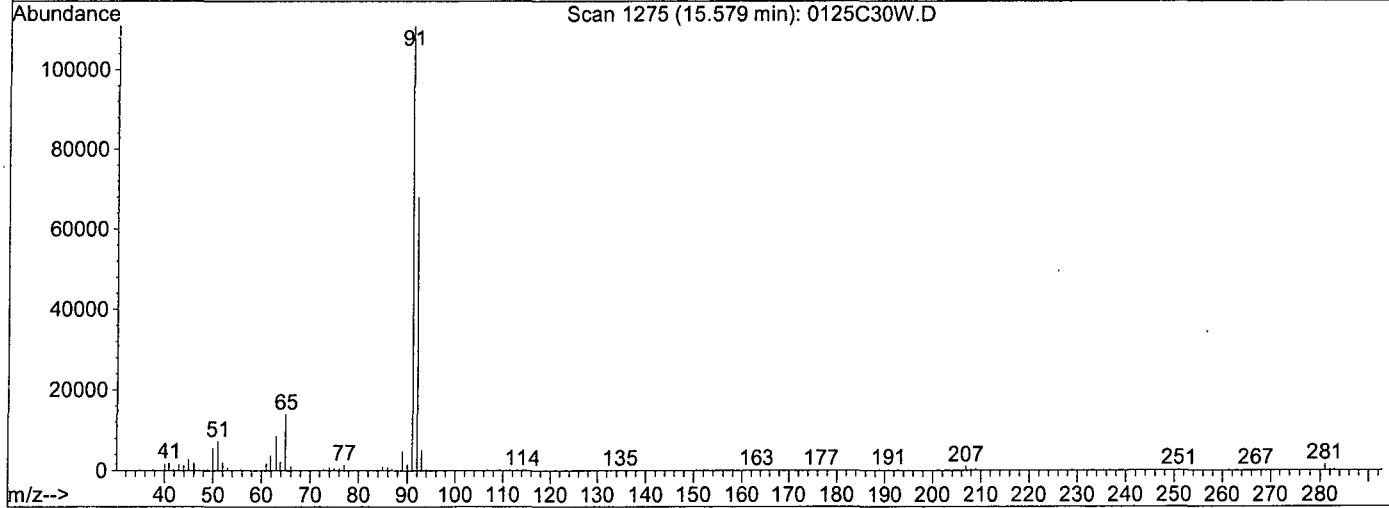
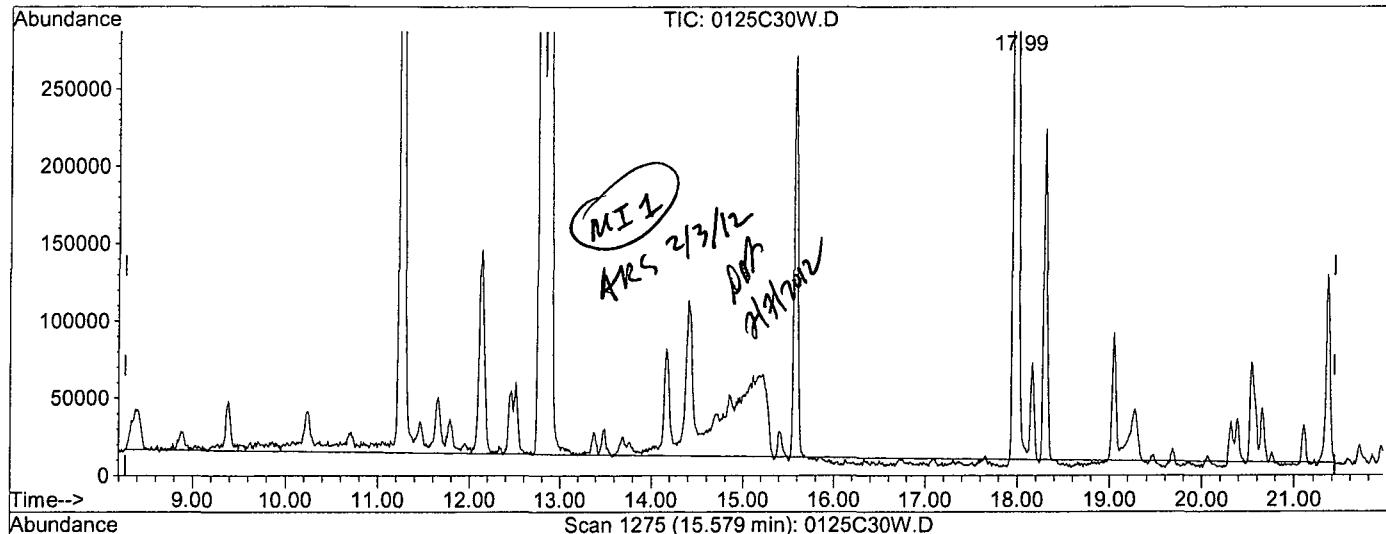
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



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

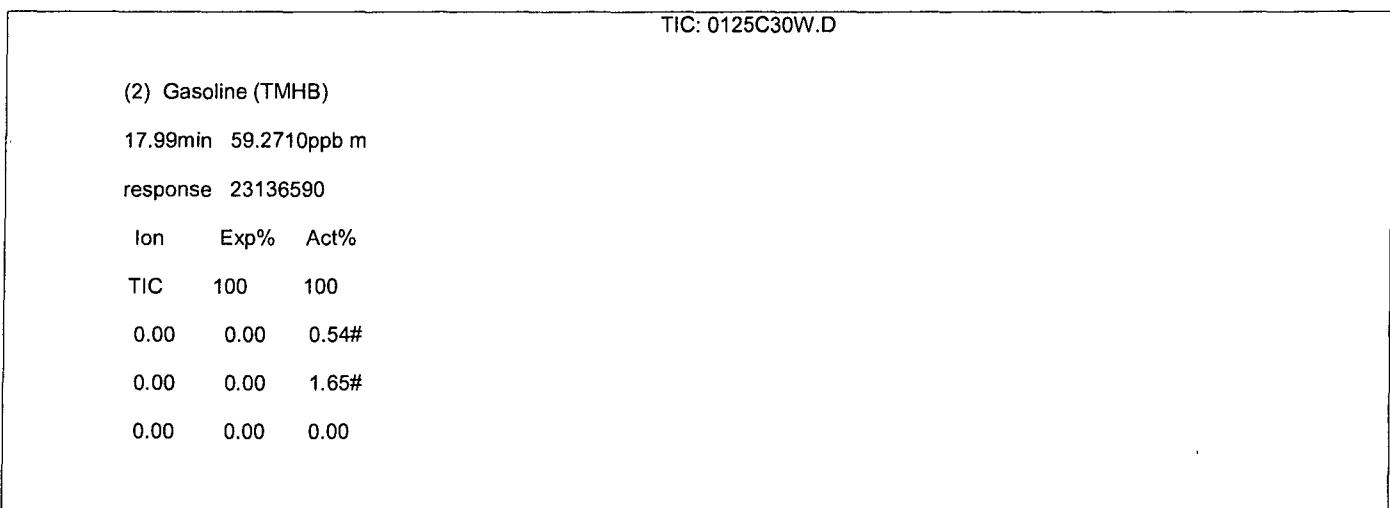
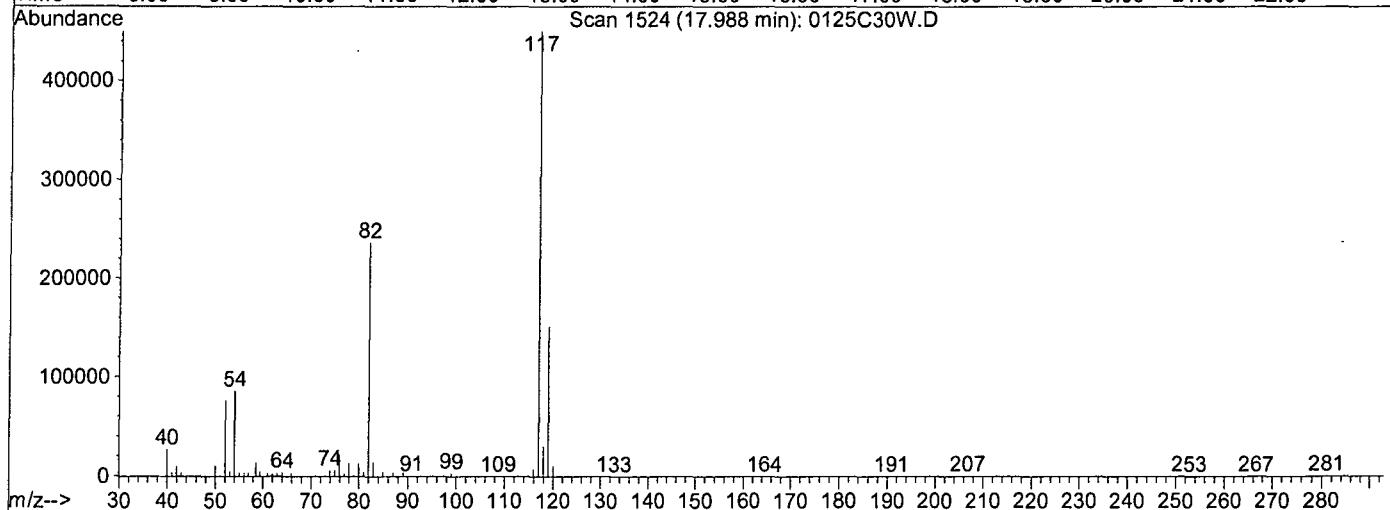
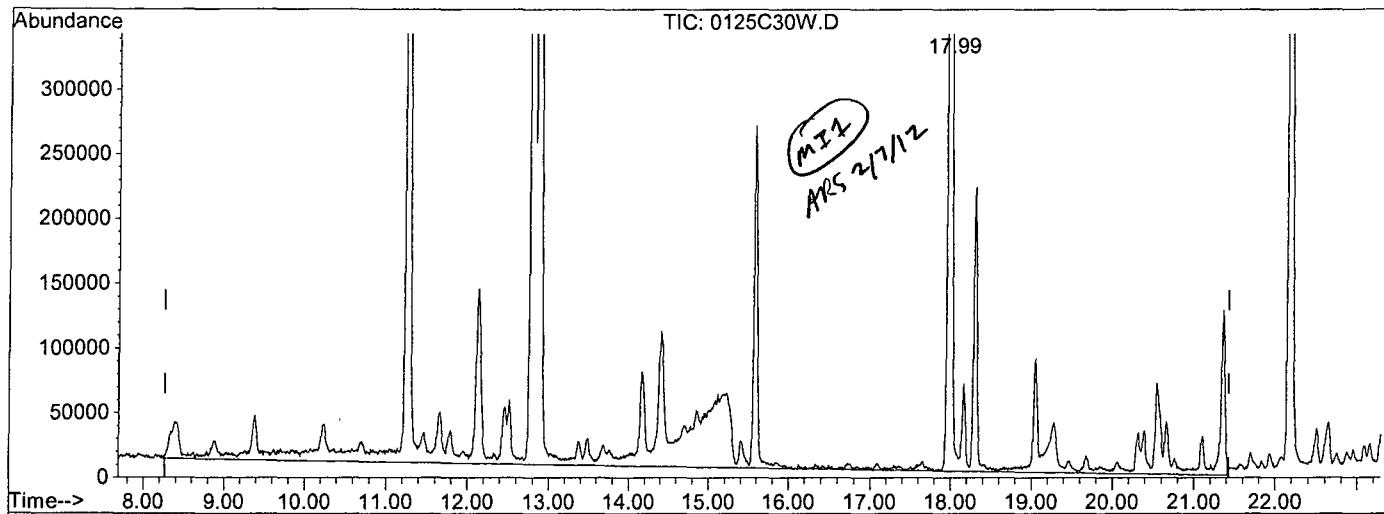
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Single Level Calibration



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



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\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

Quantitation Report

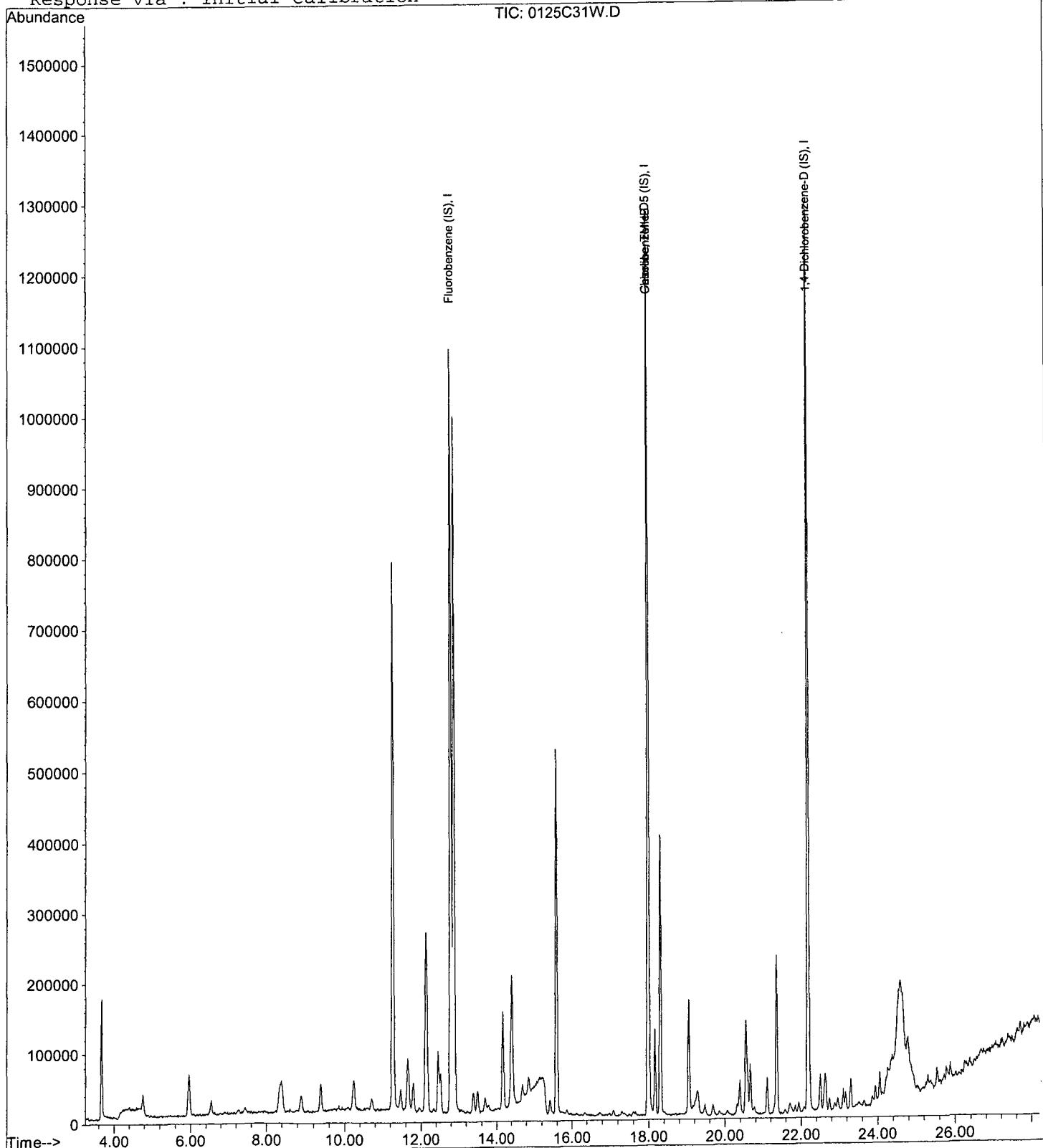
Data File : M:\CHICO\DATA\C120125\0125C31W.D
Acq On : 26 Jan 12 20:46
Sample : Vol. Std. 01-26-12@100ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:13 2012

Quant Results File: CGAS.RES

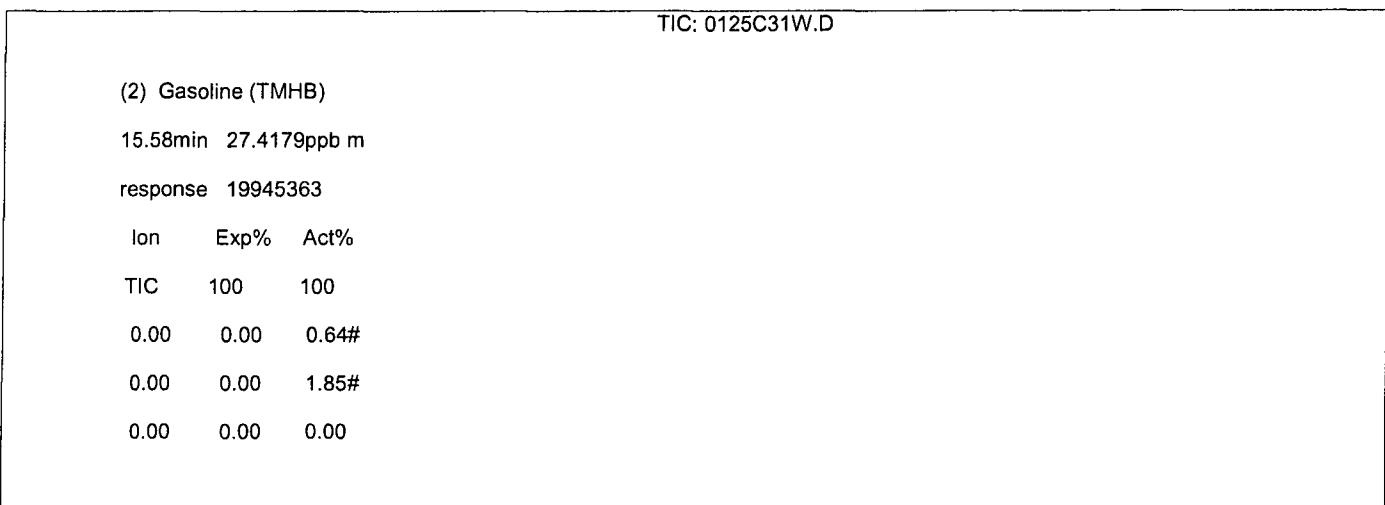
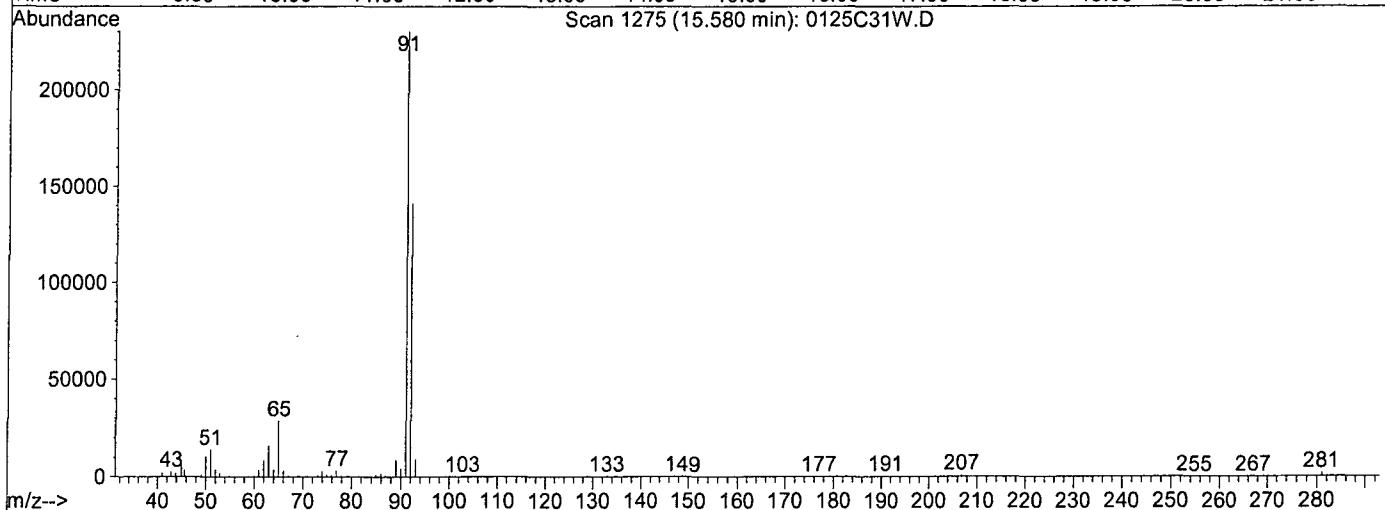
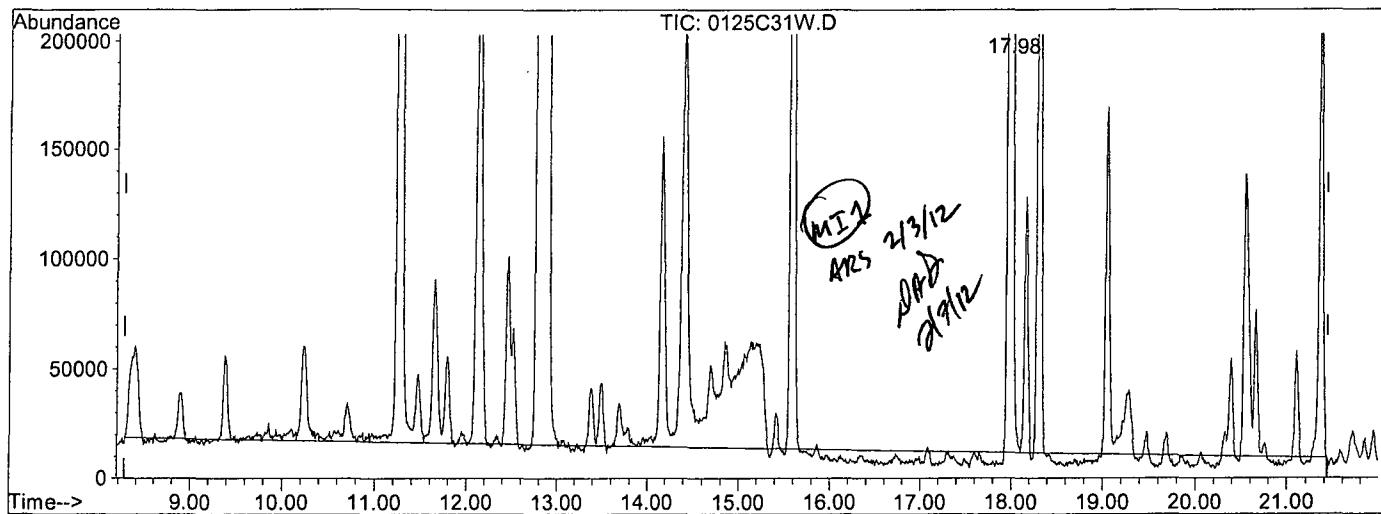
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration



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

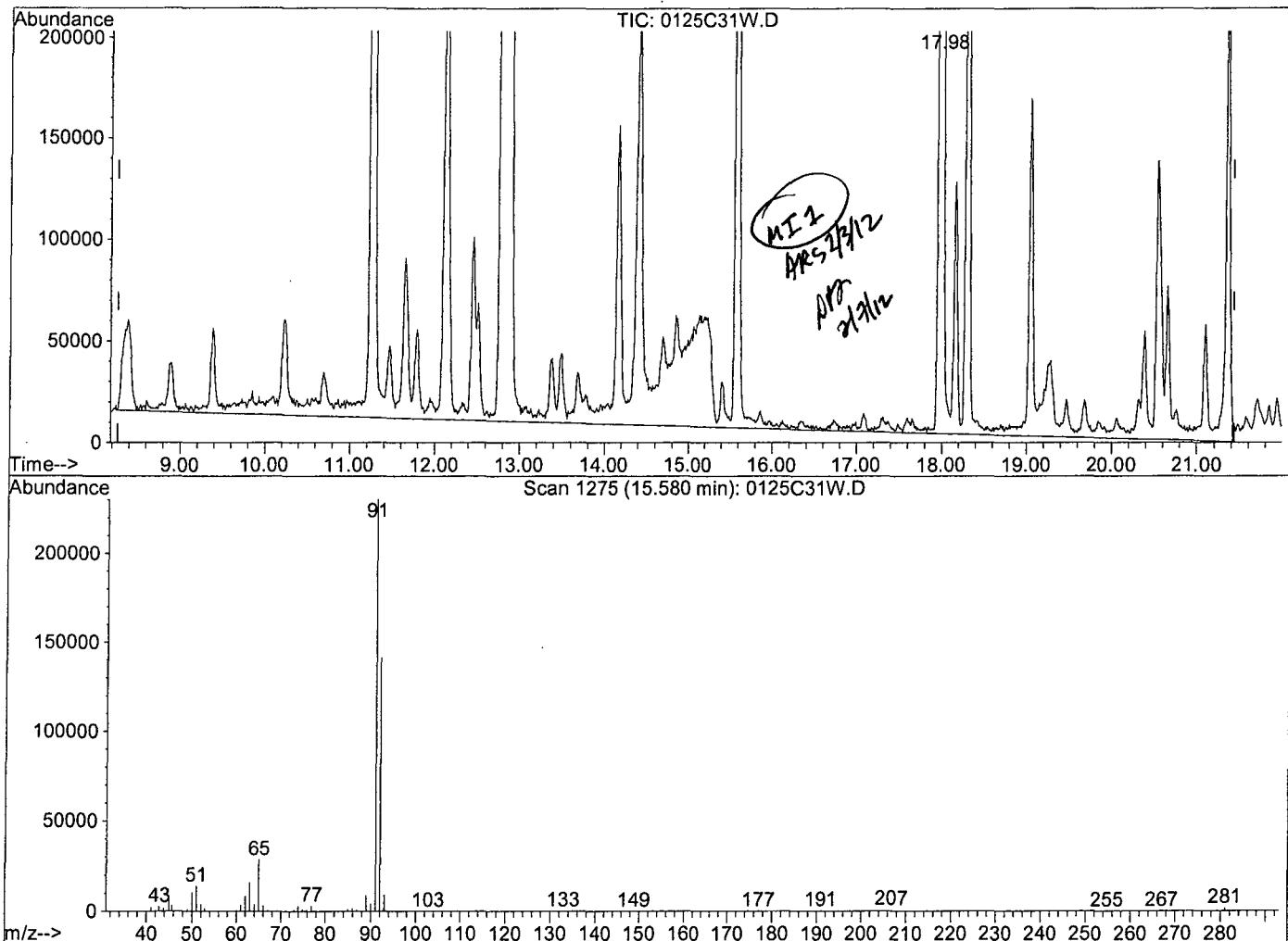
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Single Level Calibration



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	100

Quantitation Report

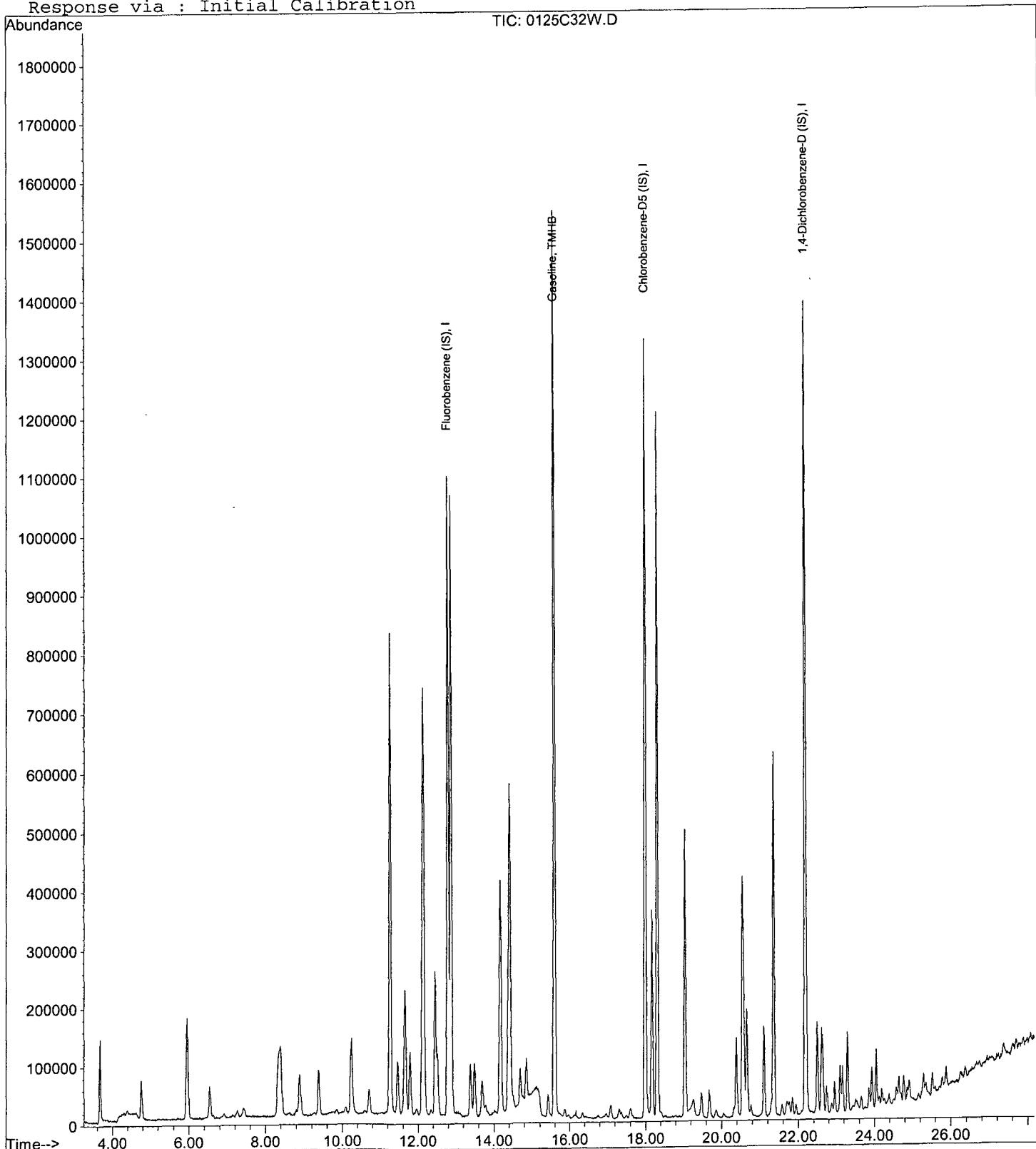
Data File : M:\CHICO\DATA\C120125\0125C32W.D
Acq On : 26 Jan 12 21:24
Sample : Vol. Std. 01-26-12@300ug/L
Misc : Water 10mLw/ IS:12-06-11

Vial: 1
Operator: RS, ARS
Inst : Chico
Multiplr: 1.00

Quant Time: Feb 3 12:09 2012

Quant Results File: CGAS.RES

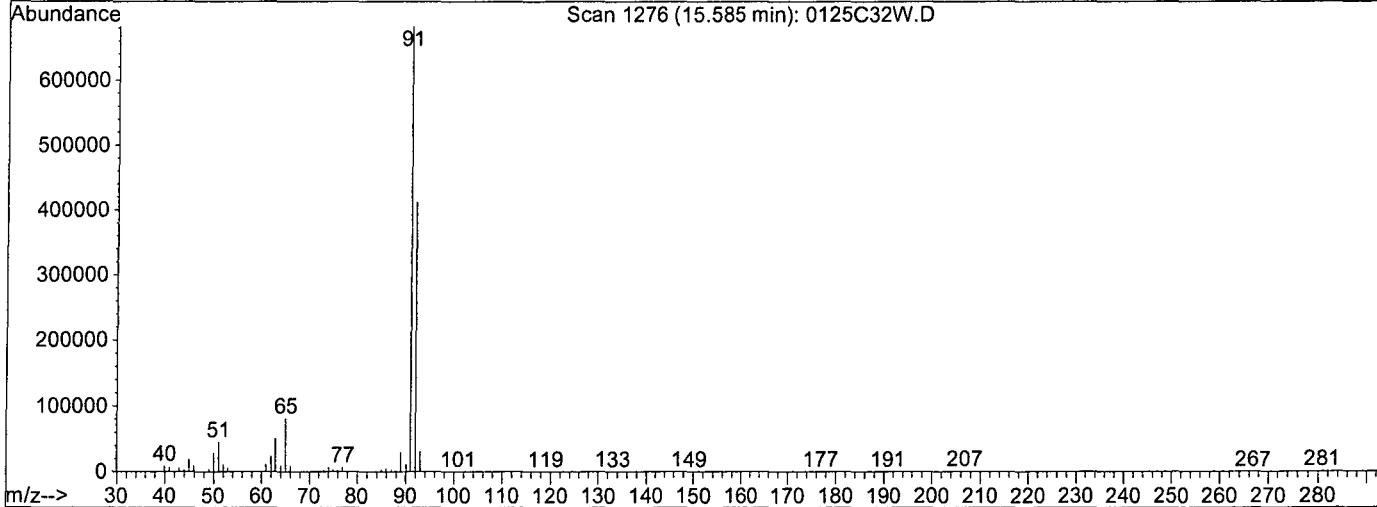
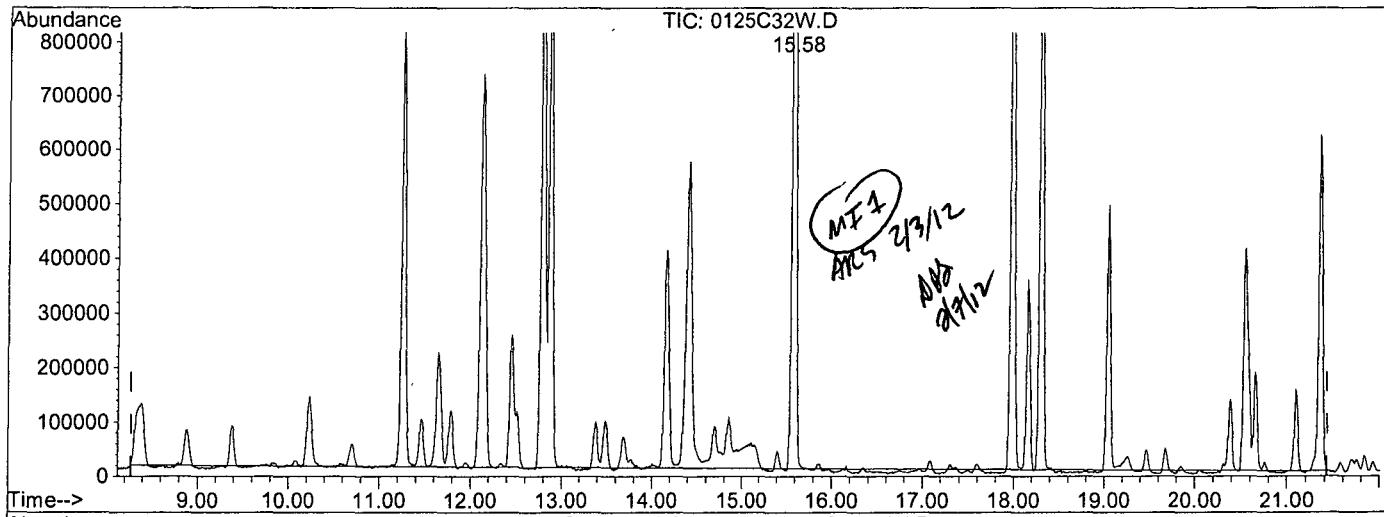
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Fri Feb 03 12:07:16 2012
Response via : Initial Calibration



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

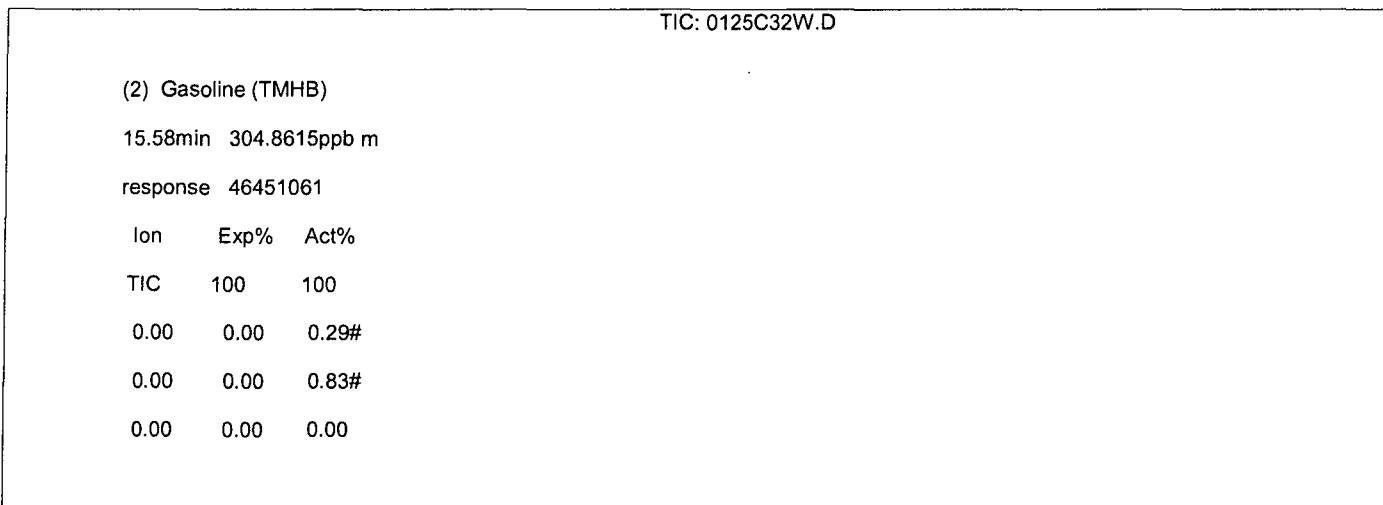
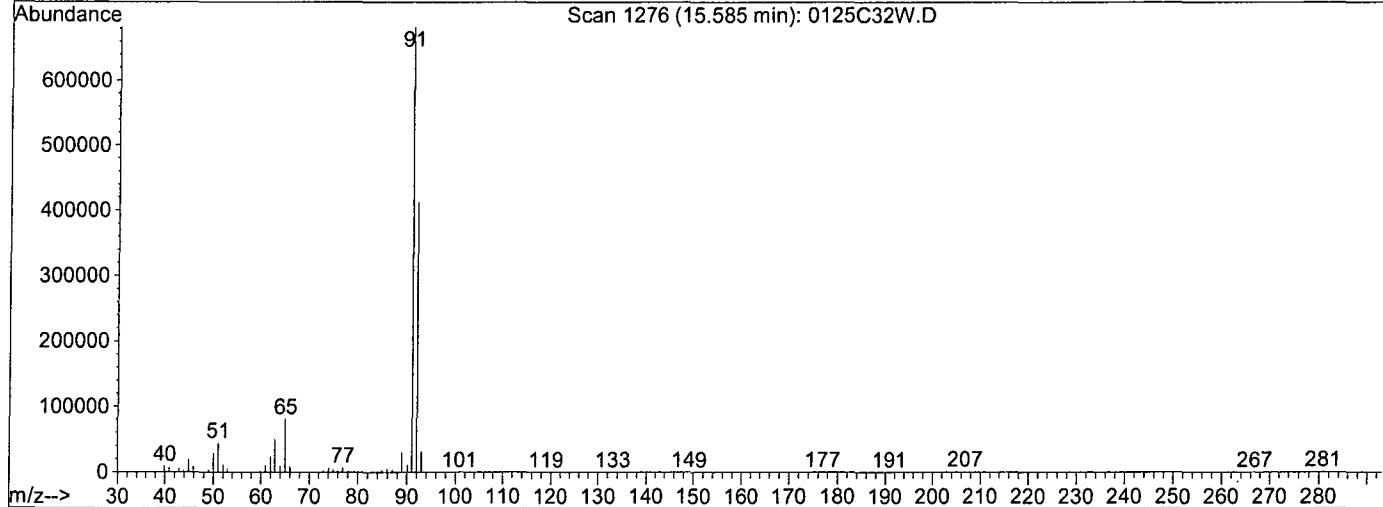
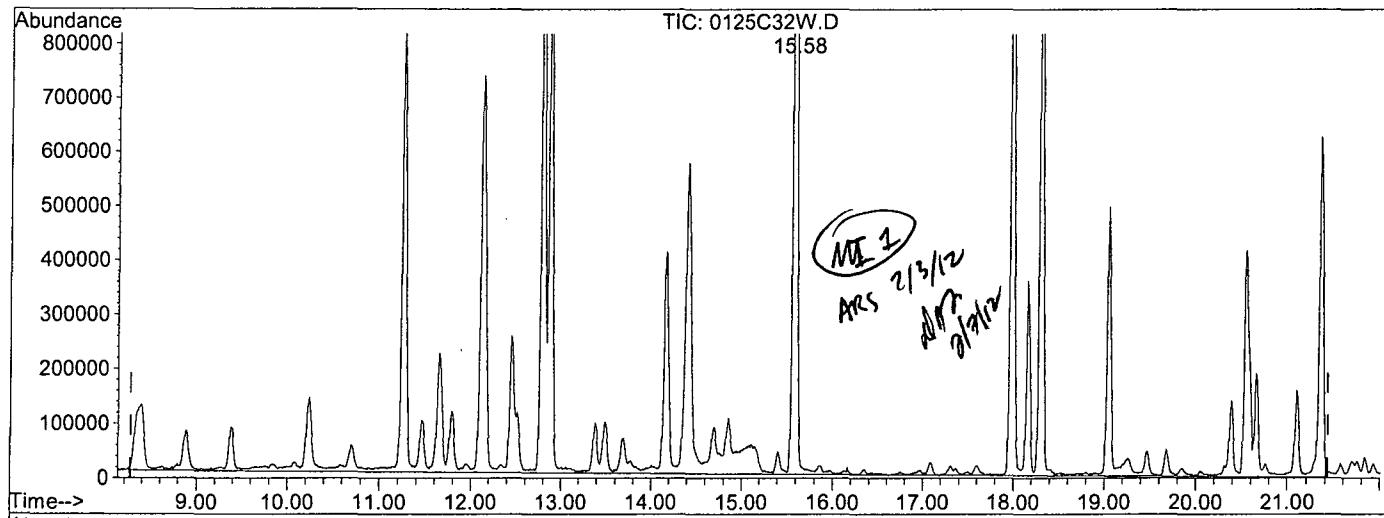
response 40810111

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



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	100

Quantitation Report

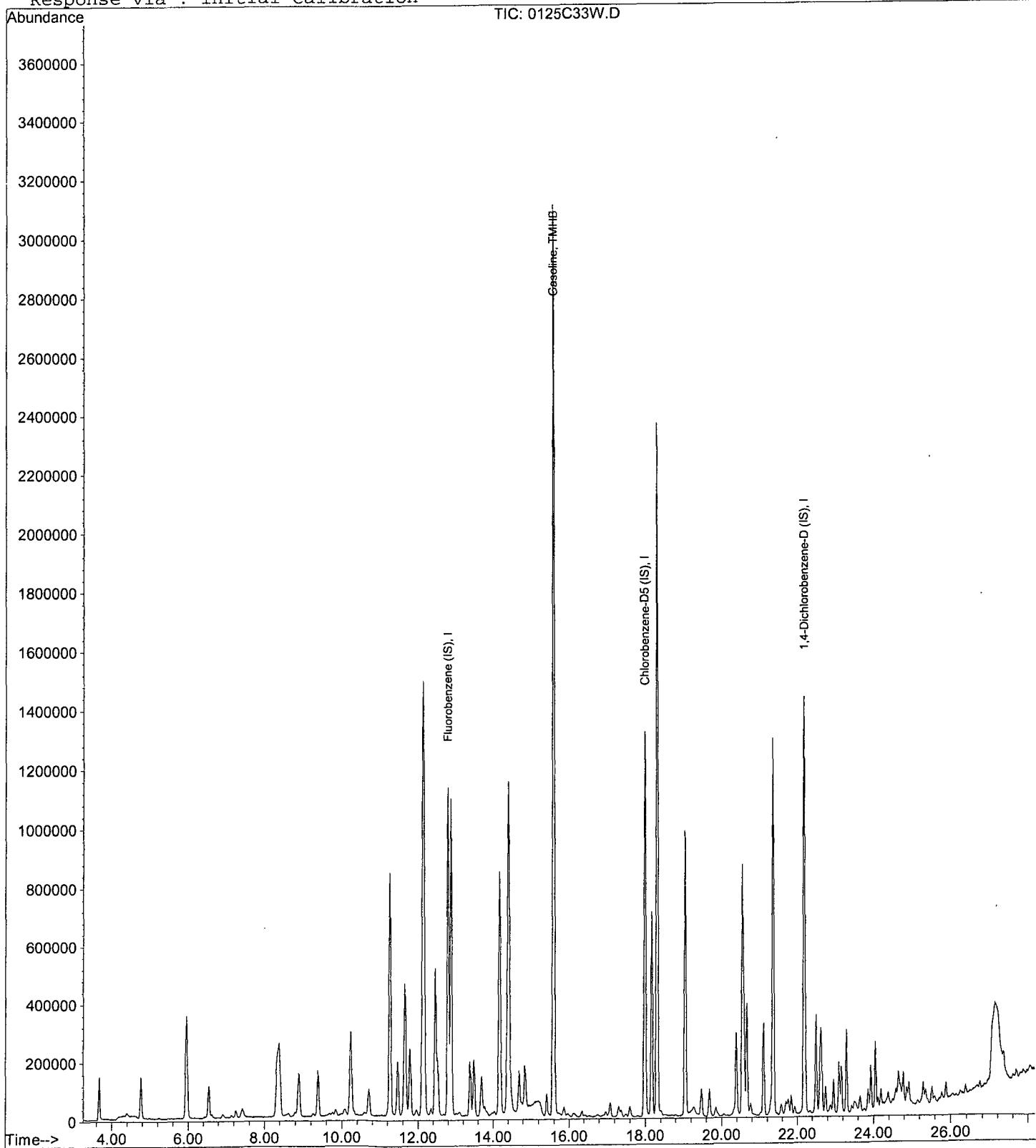
Data File : M:\CHICO\DATA\C120125\0125C33W.D
 Acq On : 26 Jan 12 22:01
 Sample : Vol. Std. 01-26-12@600ug/L
 Misc : Water 10mLw/ IS:12-06-11

Vial: 1
 Operator: RS, ARS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Feb 3 12:07 2012

Quant Results File: CGAS.RES

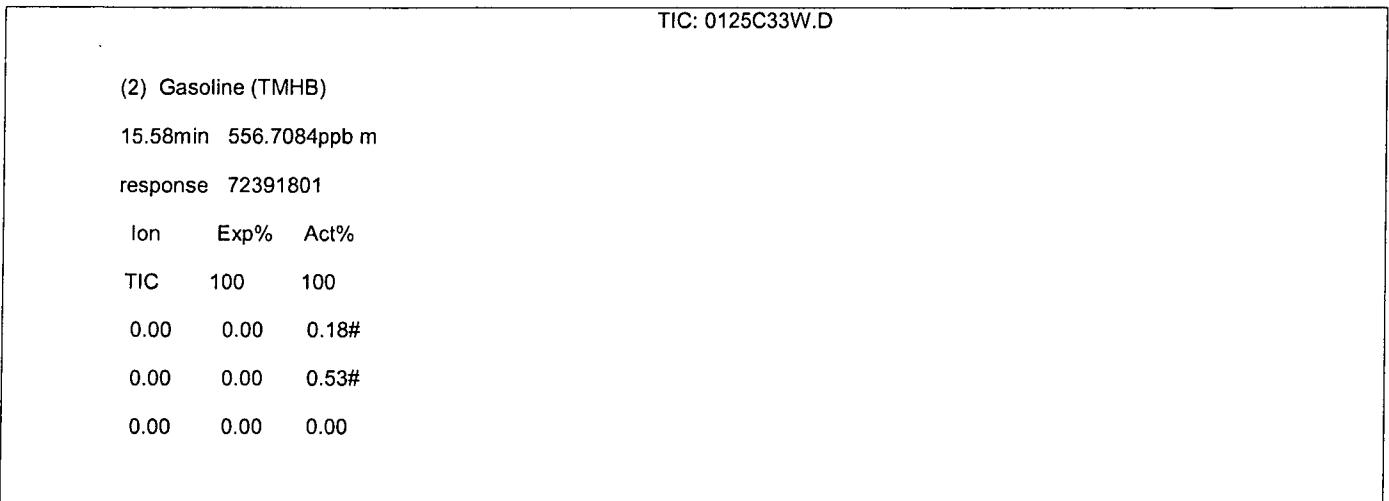
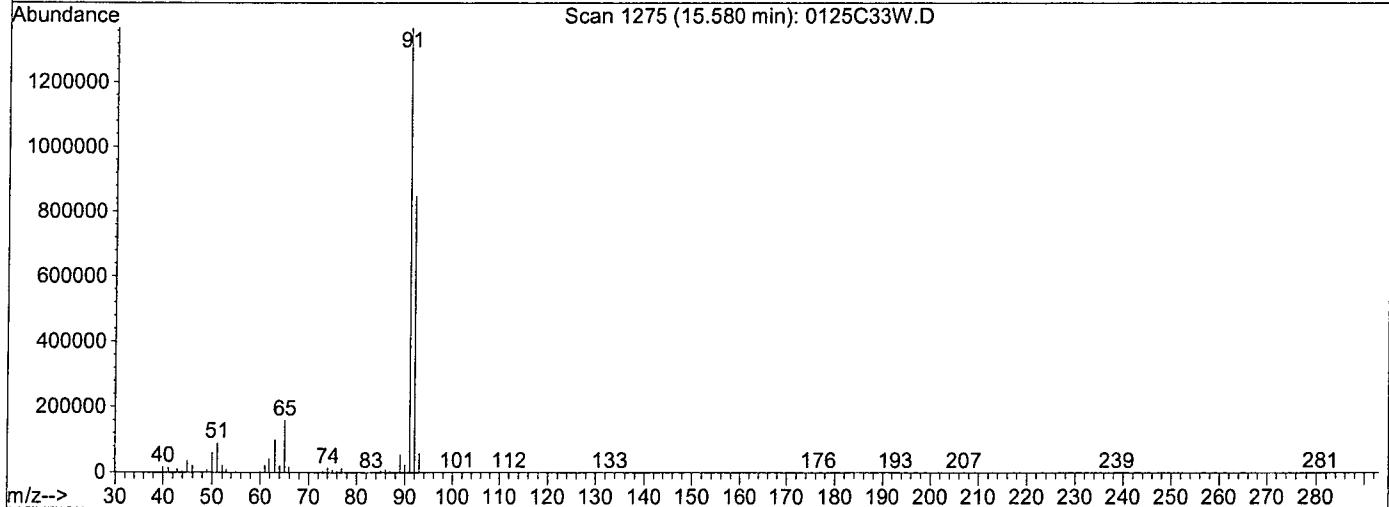
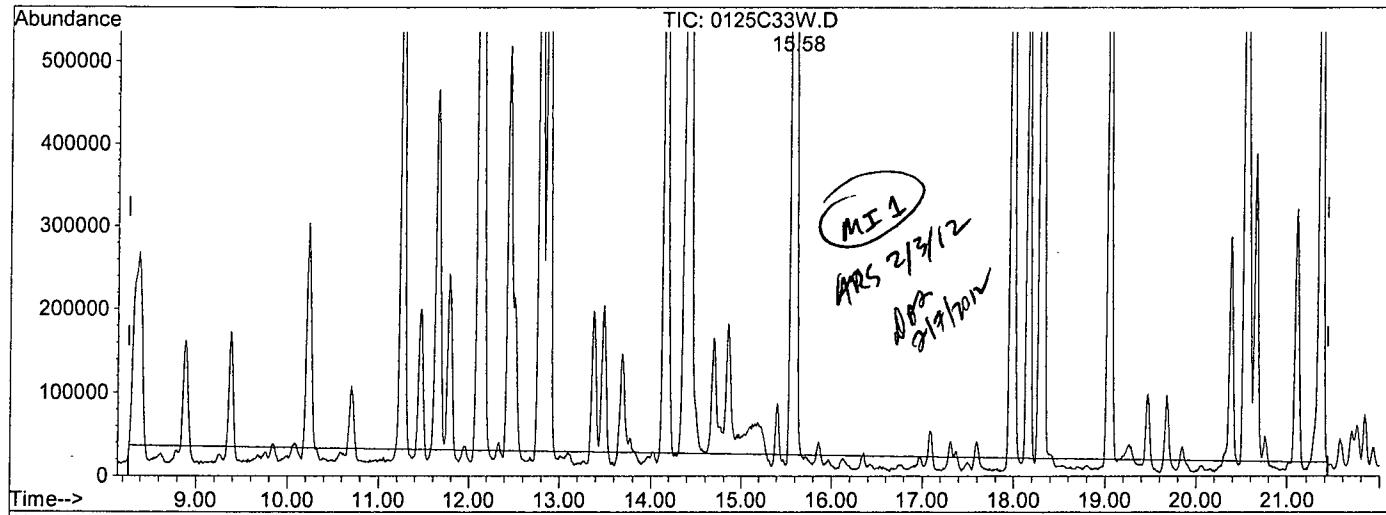
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Initial Calibration



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

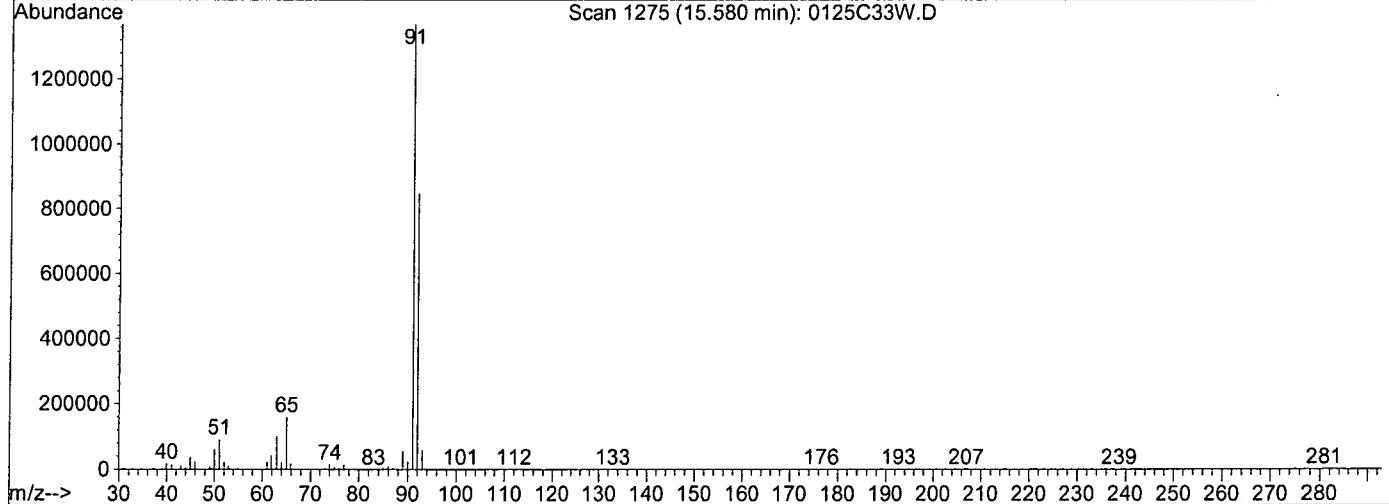
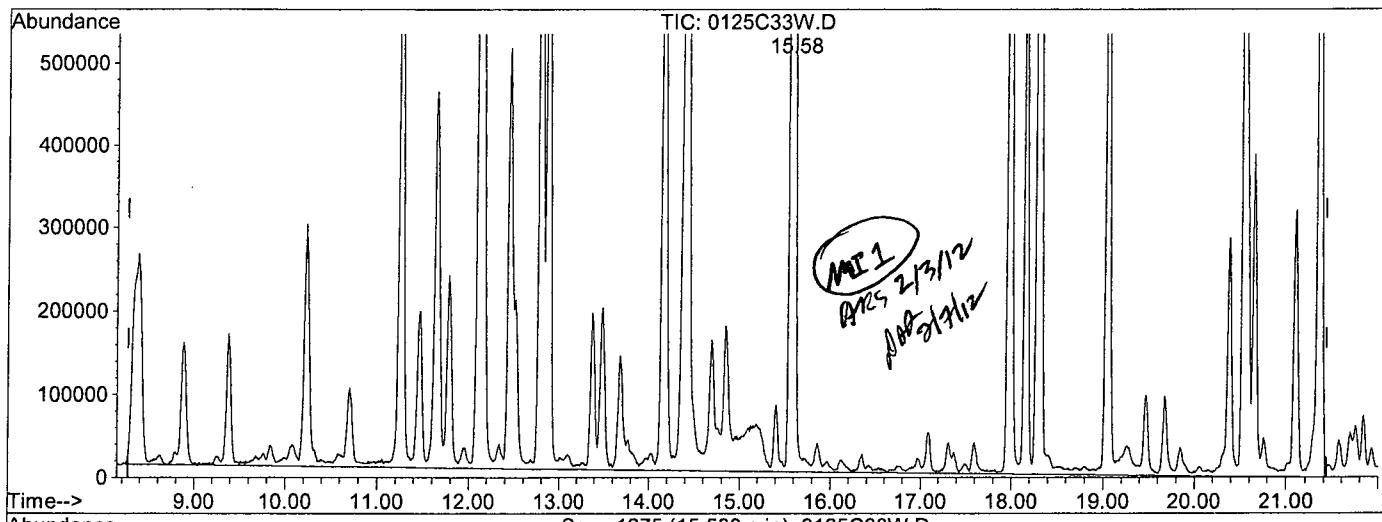
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Single Level Calibration



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\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	100

Quantitation Report

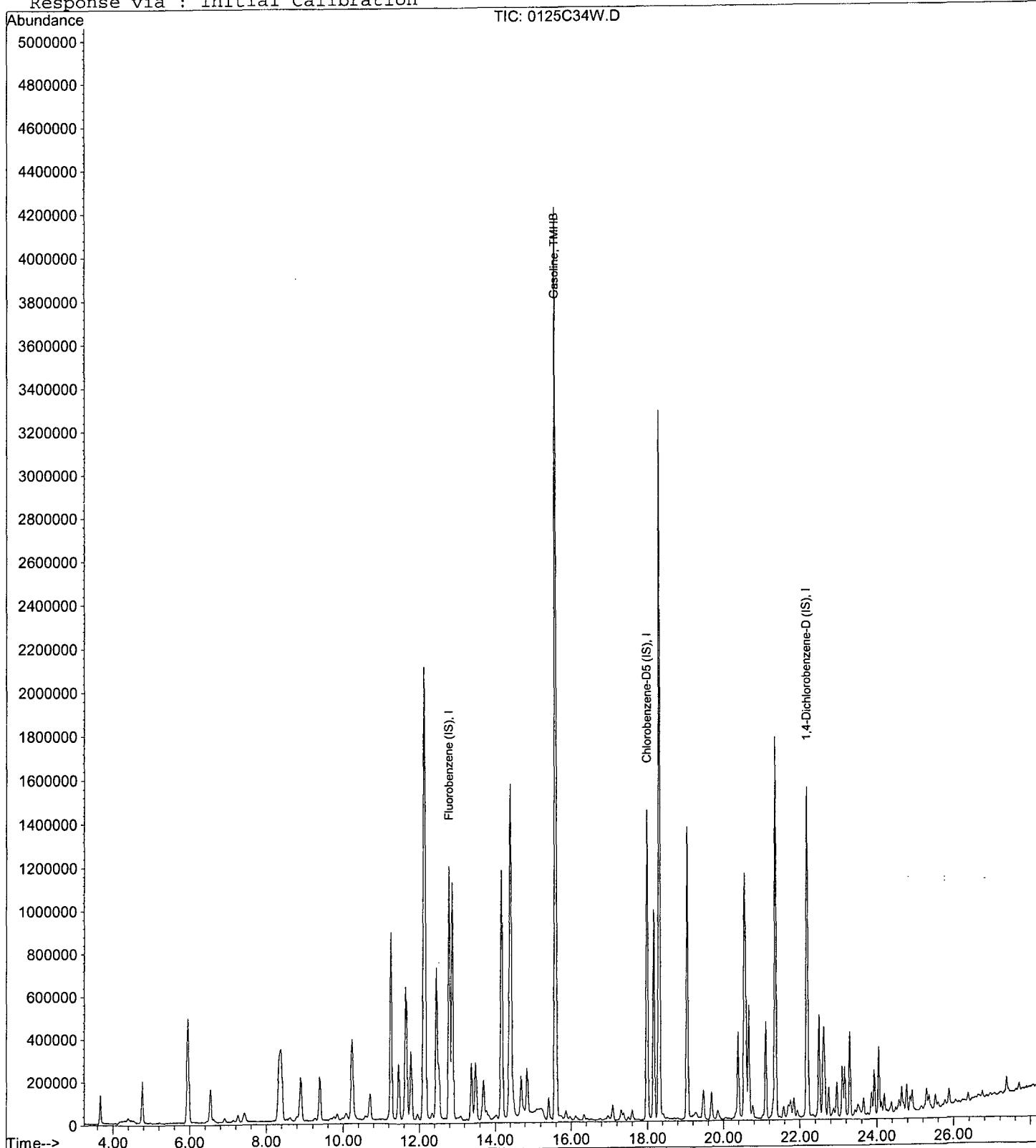
Data File : M:\CHICO\DATA\C120125\0125C34W.D
 Acq On : 26 Jan 12 22:38
 Sample : Vol. Std. 01-26-12@800ug/L
 Misc : Water 10mLw/ IS:12-06-11

Vial: 1
 Operator: RS, ARS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Feb 3 12:17 2012

Quant Results File: CGAS.RES

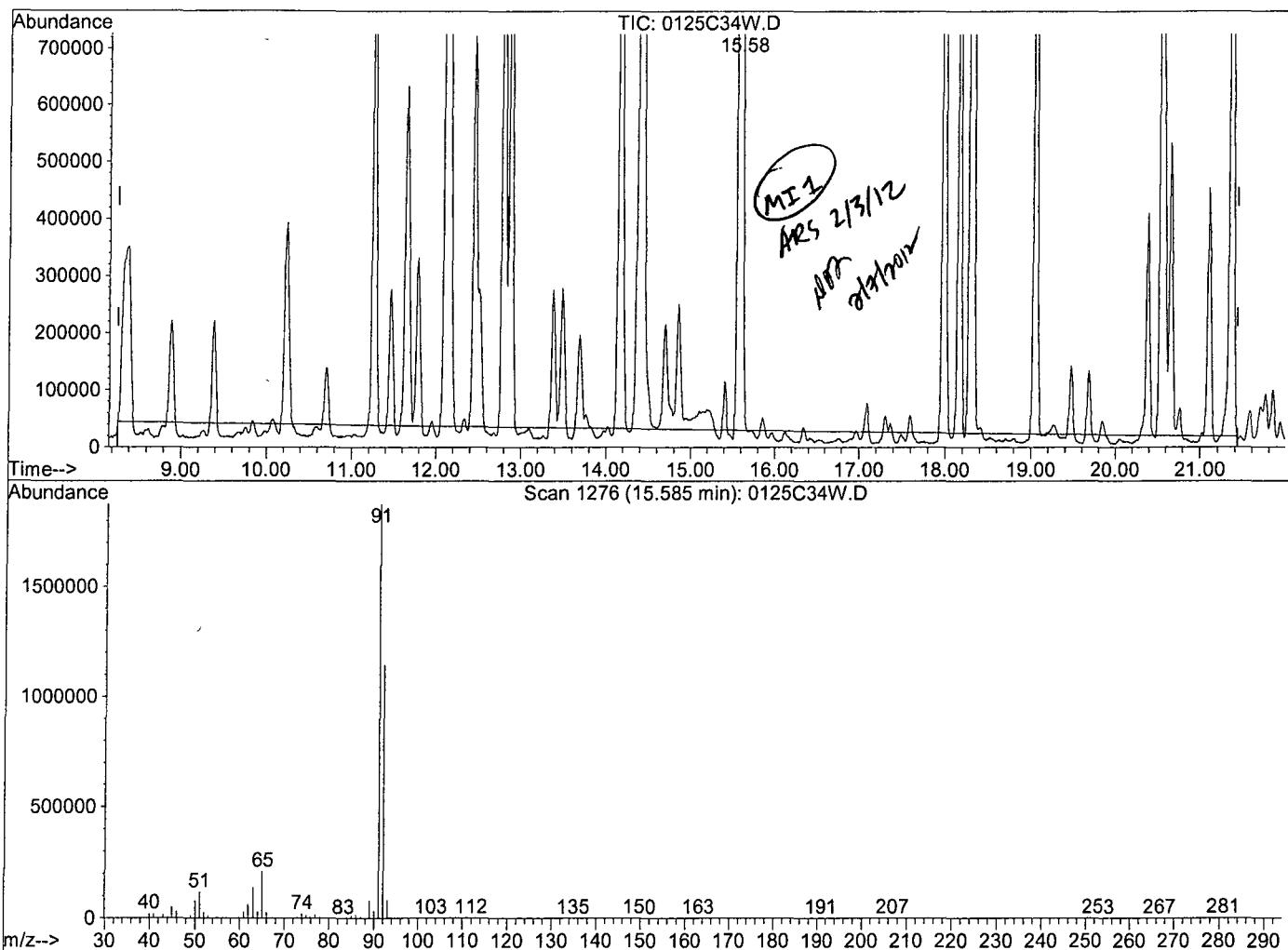
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Initial Calibration



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

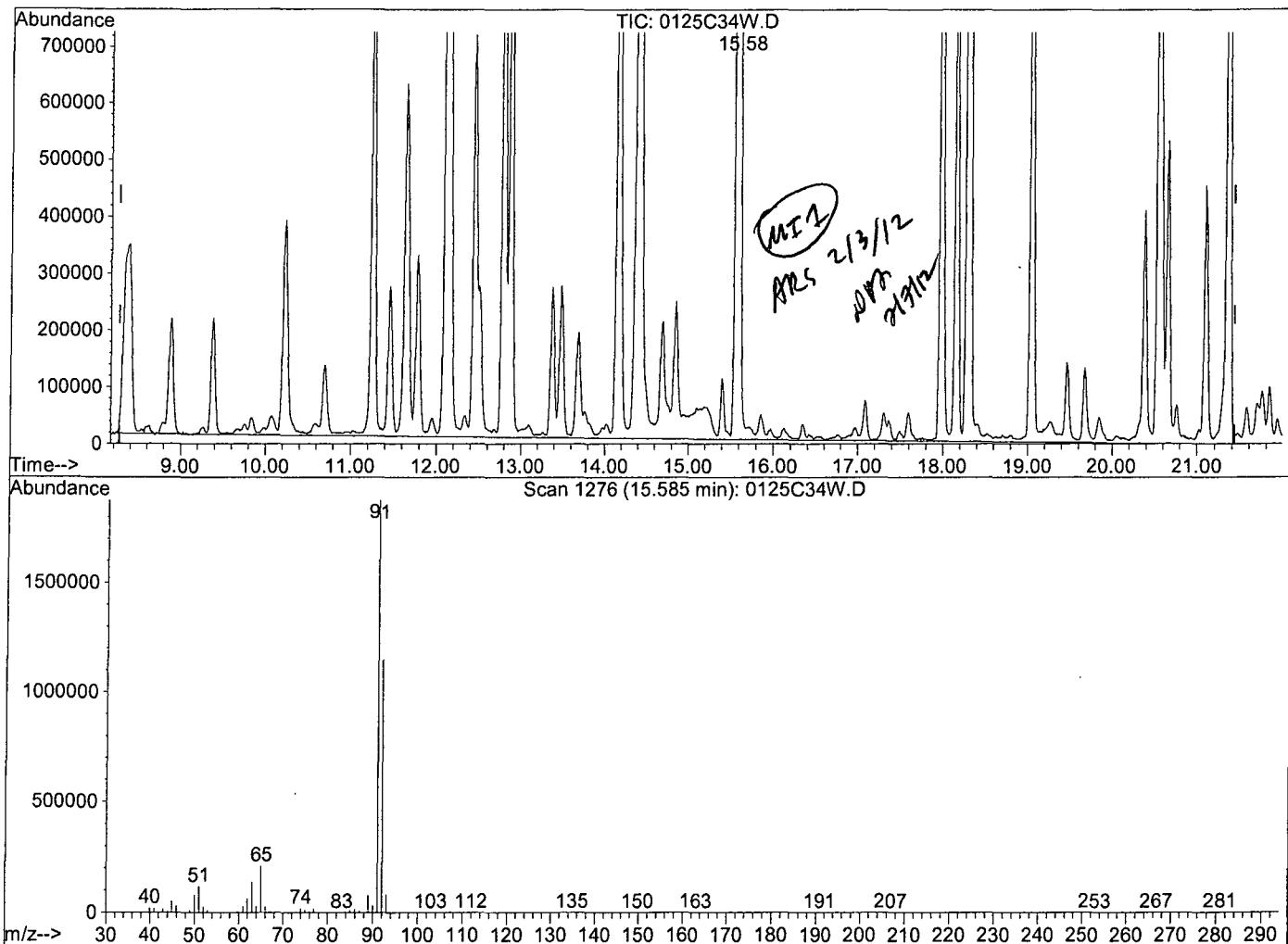
response 93884232

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

Quantitation Report

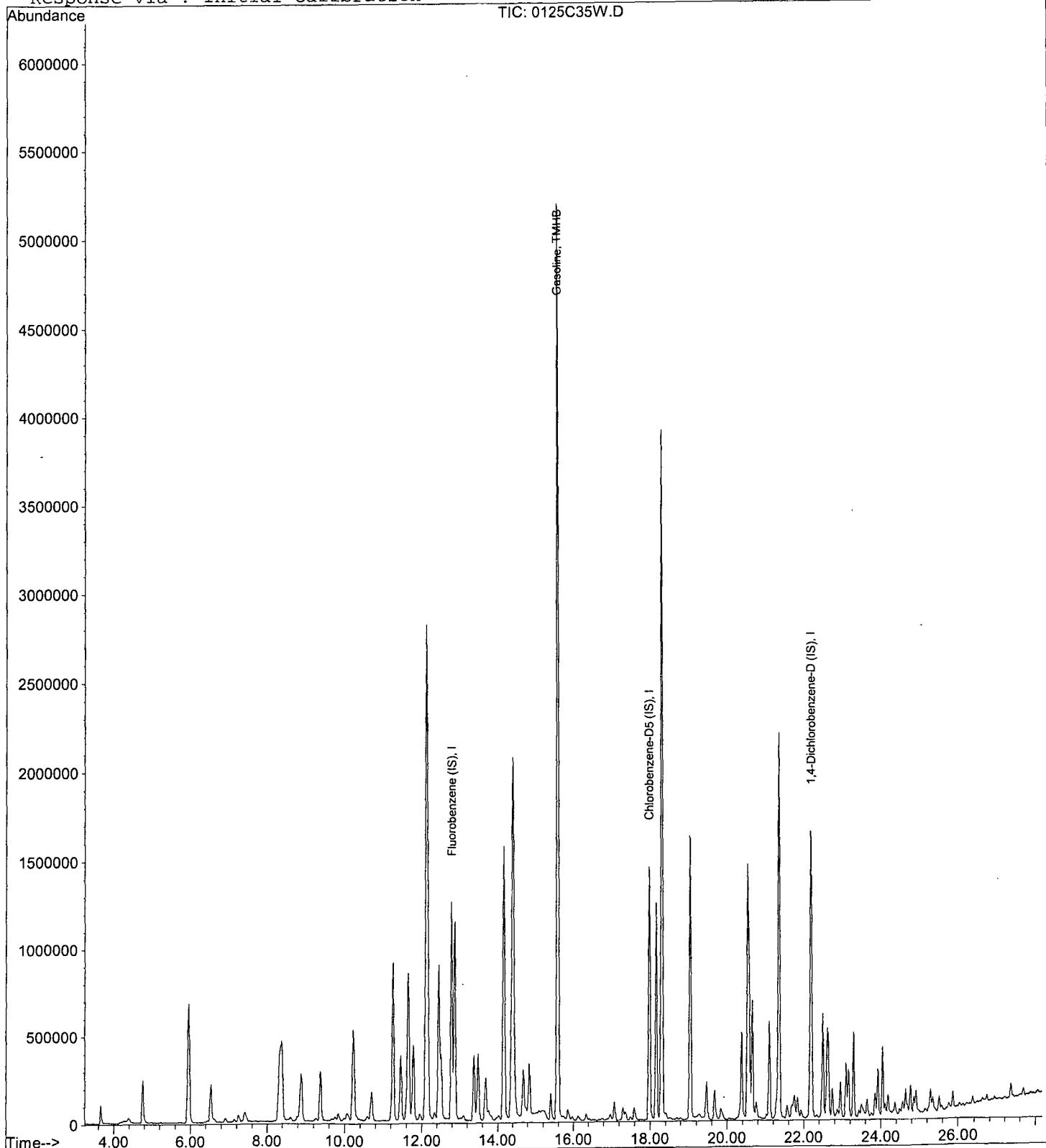
Data File : M:\CHICO\DATA\C120125\0125C35W.D
 Acq On : 26 Jan 12 23:15
 Sample : Vol. Std. 01-26-12@1000ug/L
 Misc : Water 10mLw/ IS:12-06-11

Vial: 1
 Operator: RS, ARS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Feb 3 12:18 2012

Quant Results File: CGAS.RES

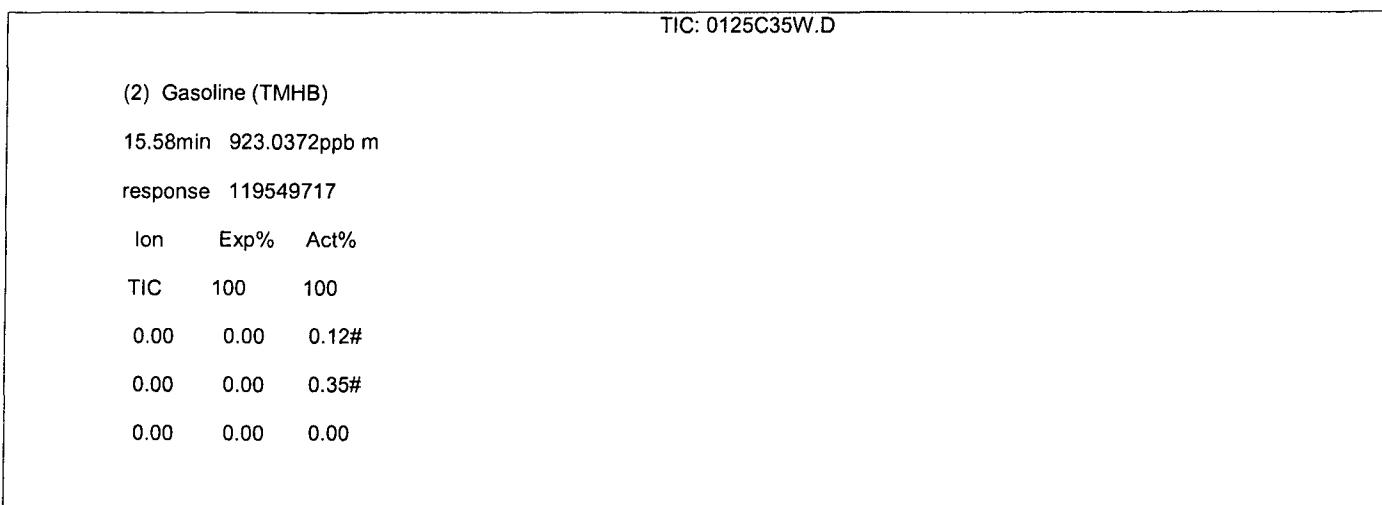
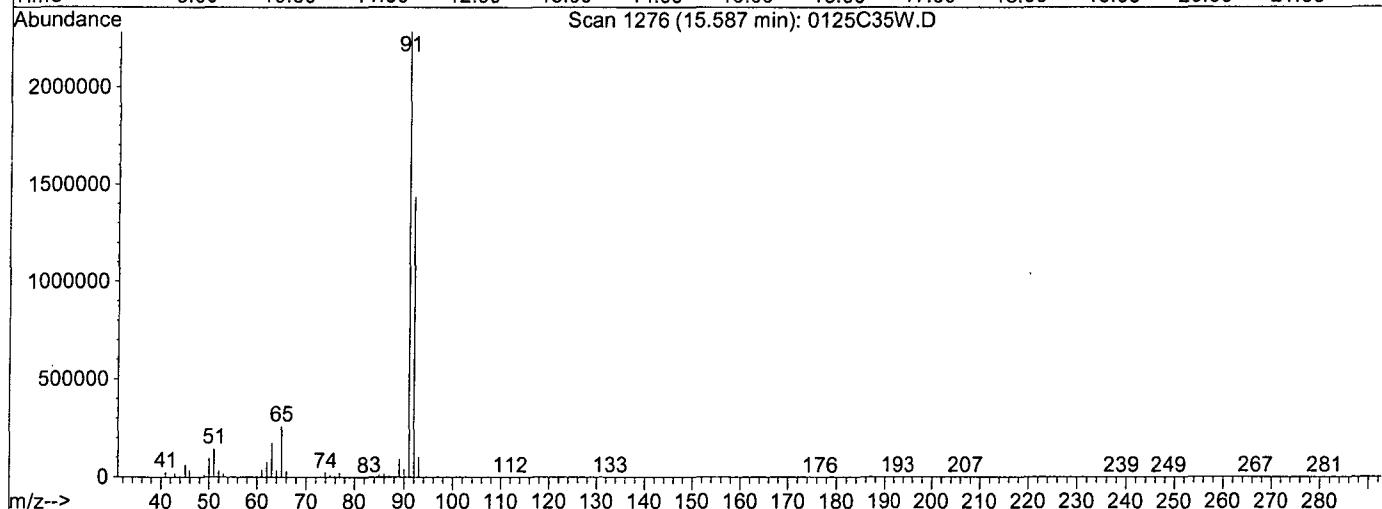
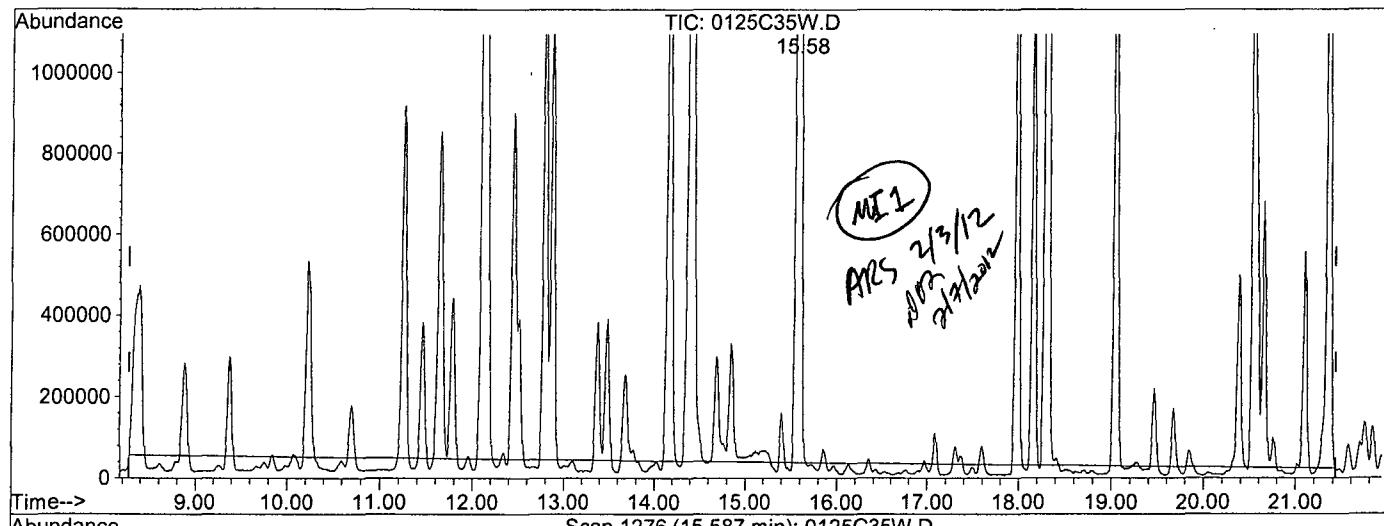
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Initial Calibration



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

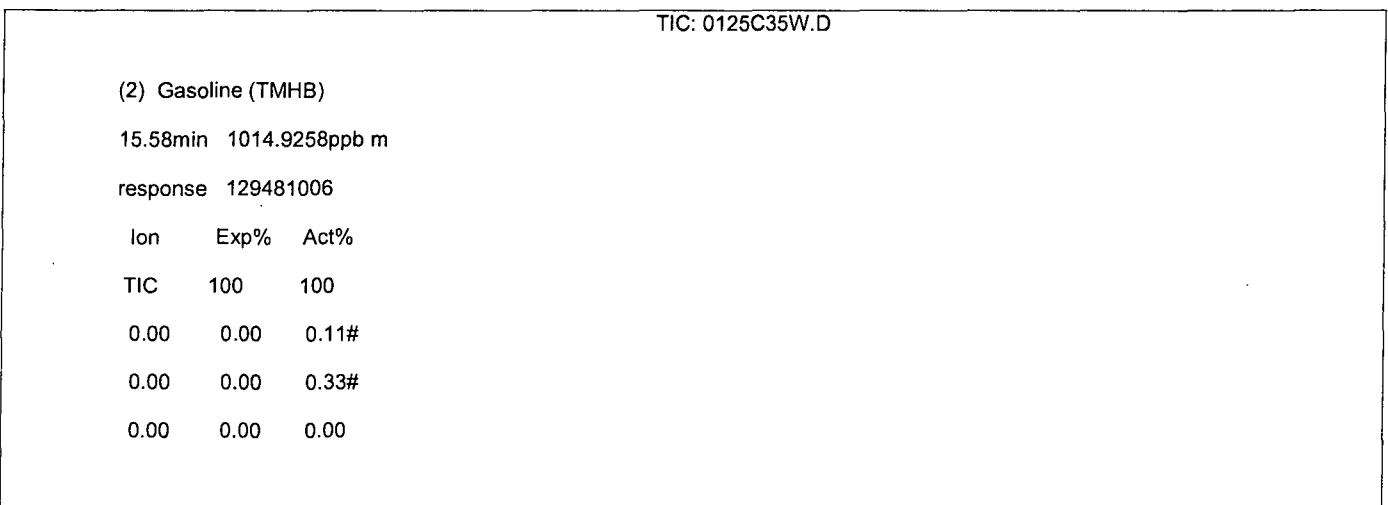
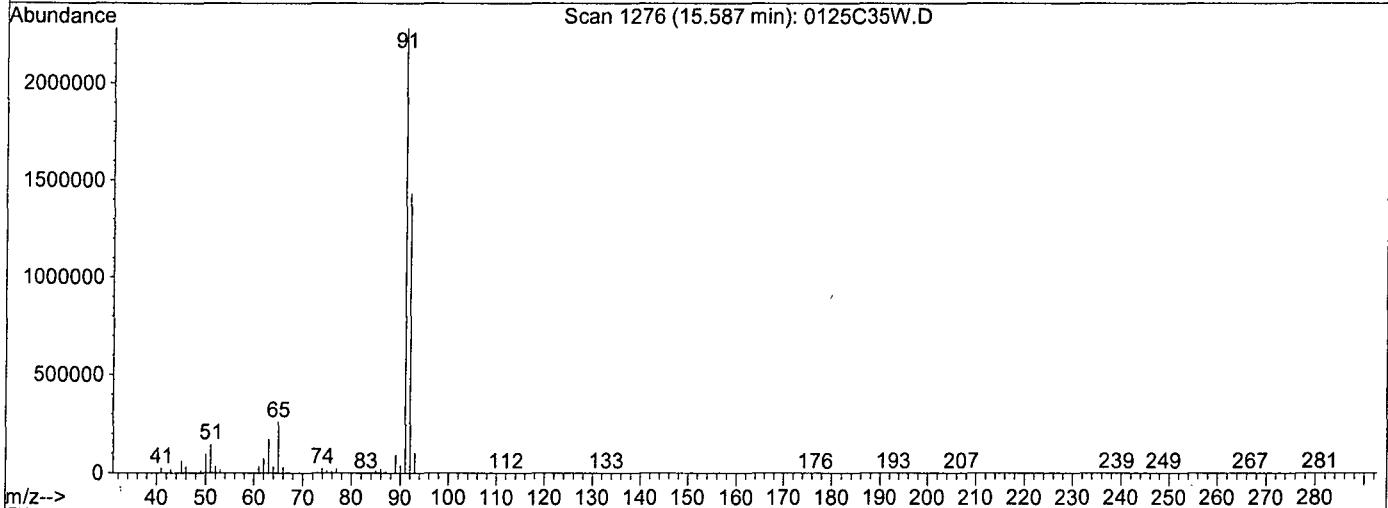
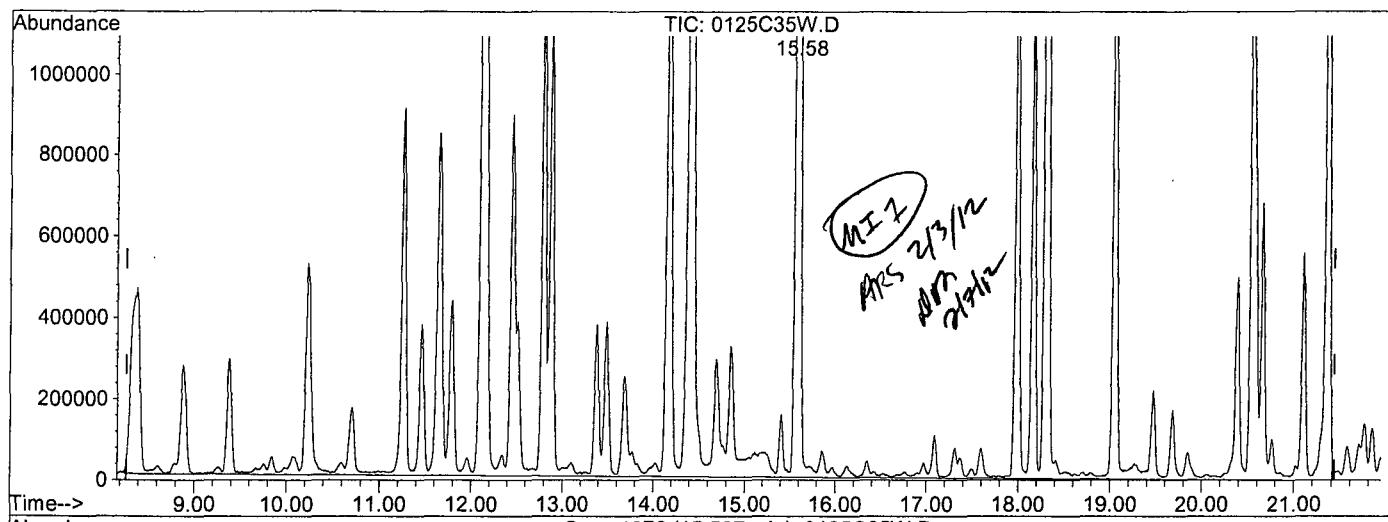
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Fri Feb 03 12:07:16 2012
 Response via : Single Level Calibration

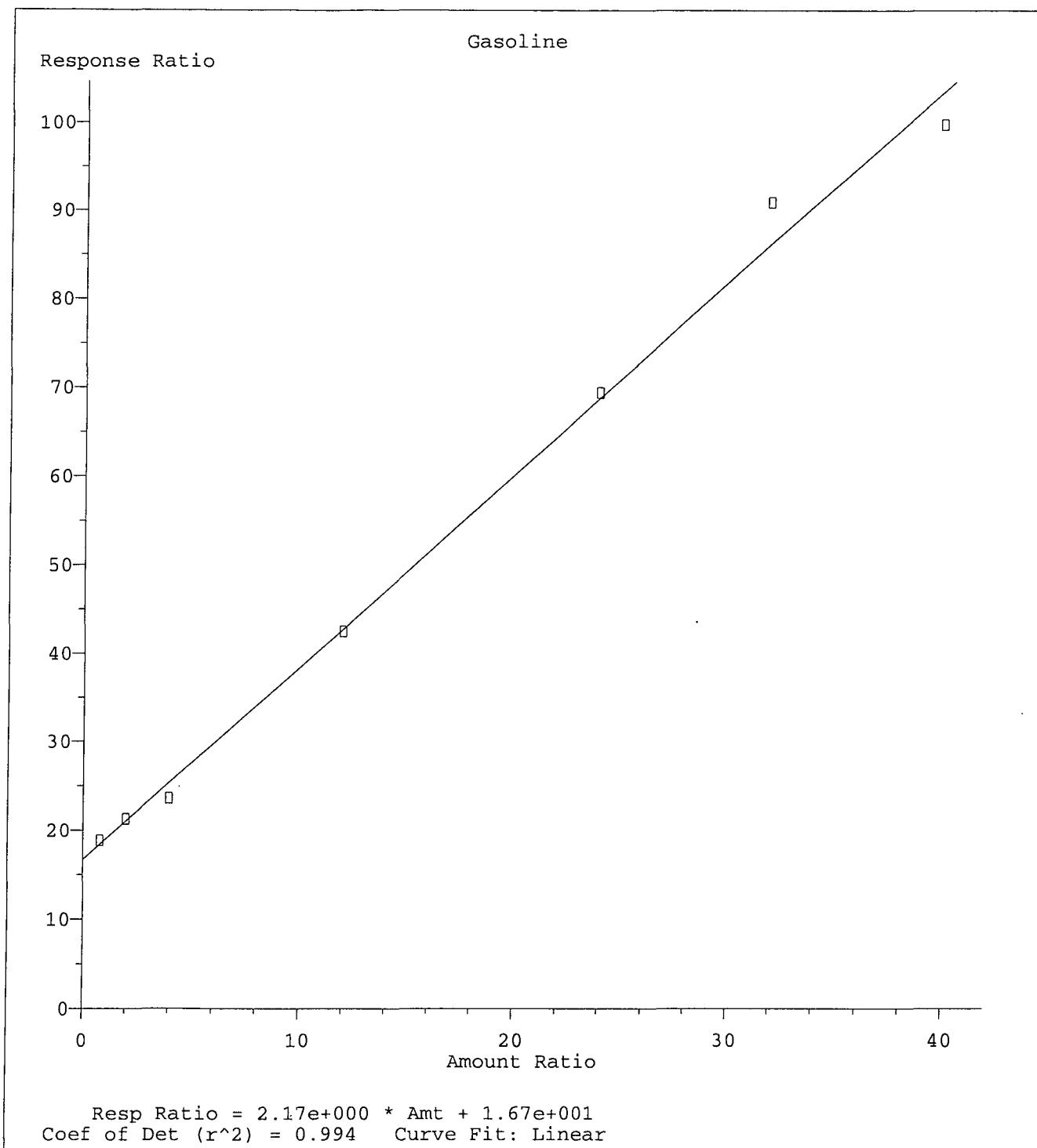


Quantitation Report

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 Multipllr: 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





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

AKS 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 Ovalue
2) Gasoline 15.58 TIC 48578324m 298.92978 ppb 100

Quantitation Report

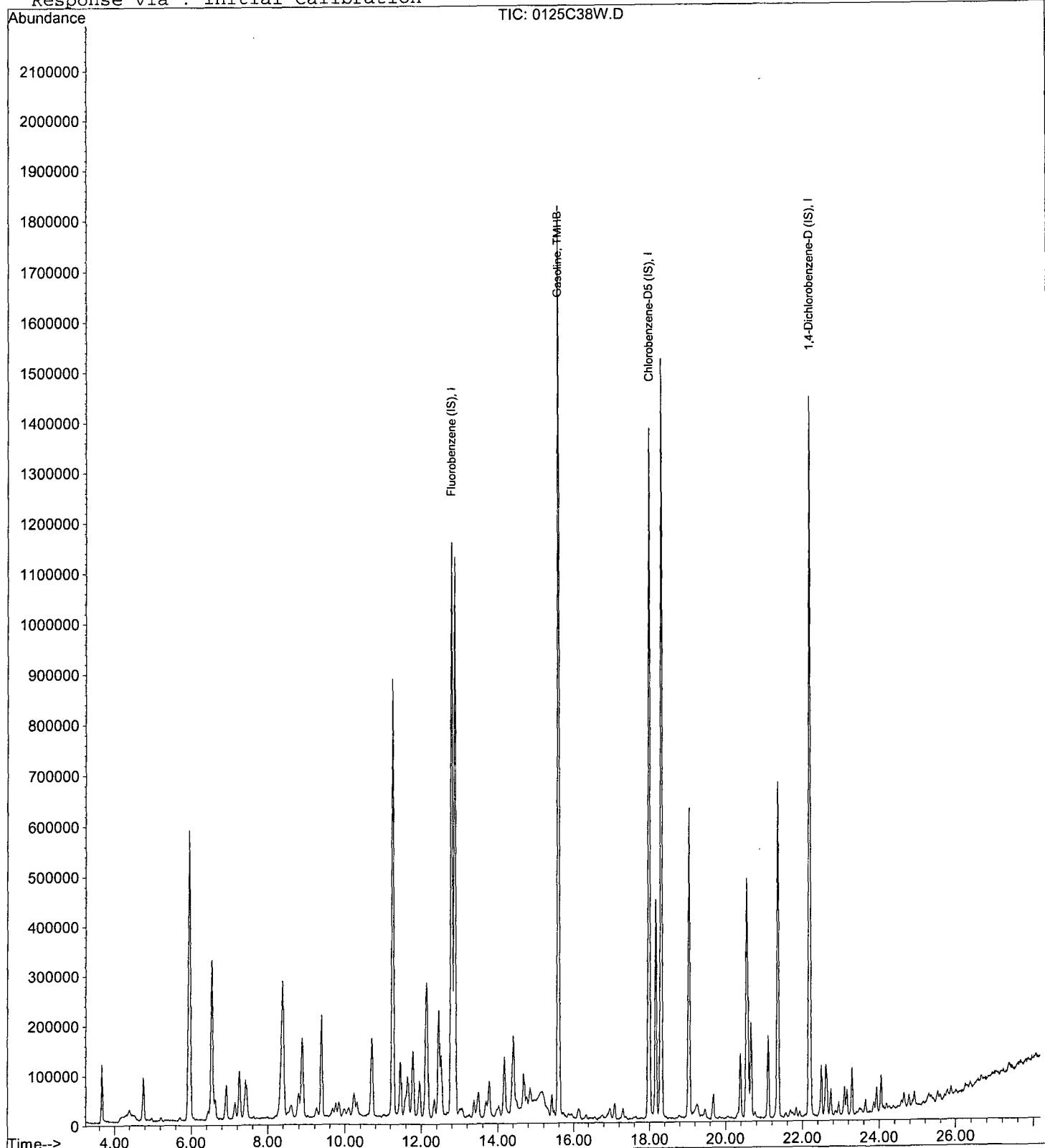
Data File : M:\CHICO\DATA\C120125\0125C38W.D
 Acq On : 27 Jan 12 1:06
 Sample : Second Source 01-26-12
 Misc : Water 10mLw/ IS:12-06-11

Vial: 1
 Operator: RS, ARS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Feb 7 9:37 2012

Quant Results File: CGAS.RES

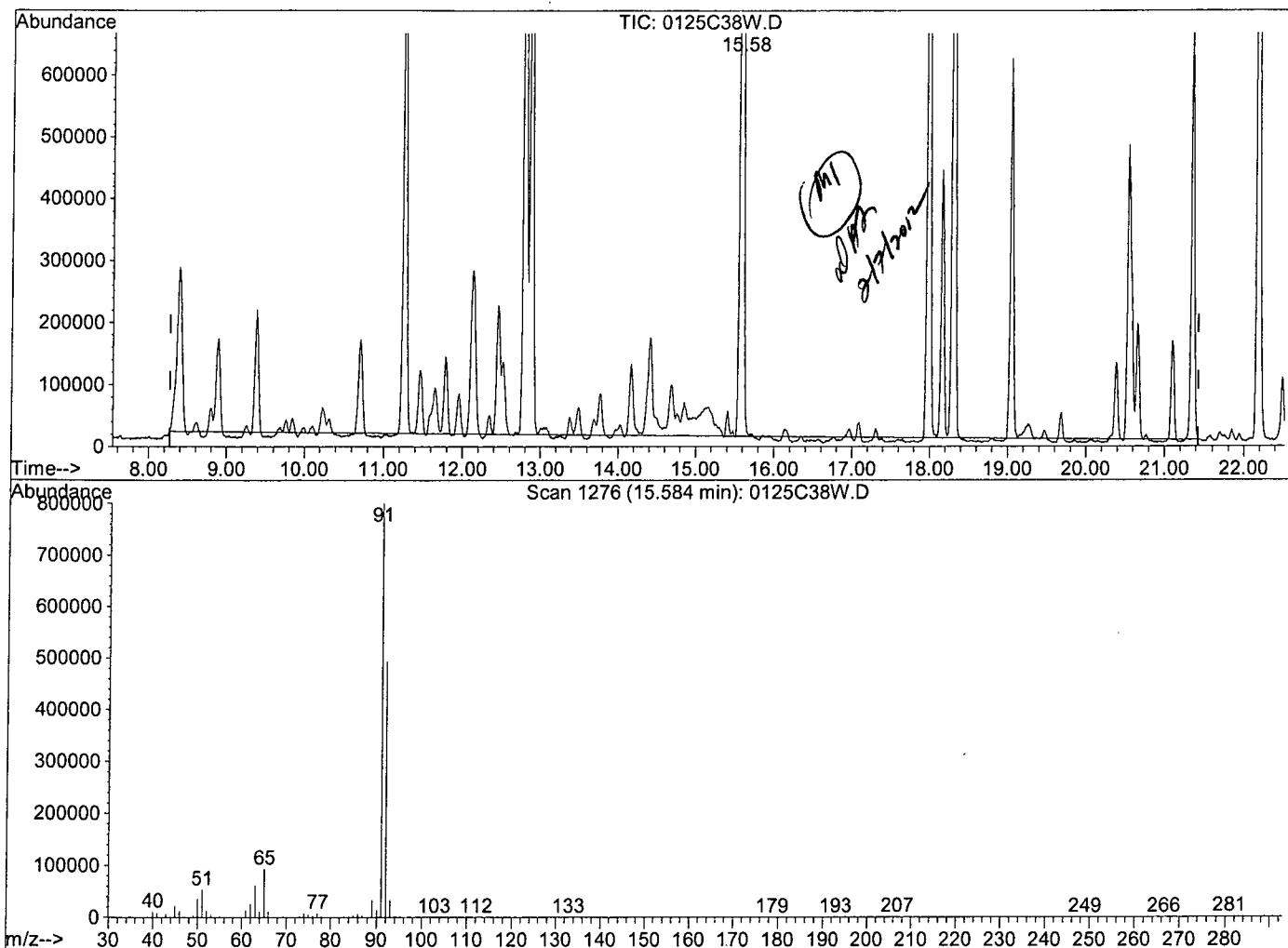
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Tue Feb 07 09:36:43 2012
 Response via : Initial Calibration



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 Multipllr: 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

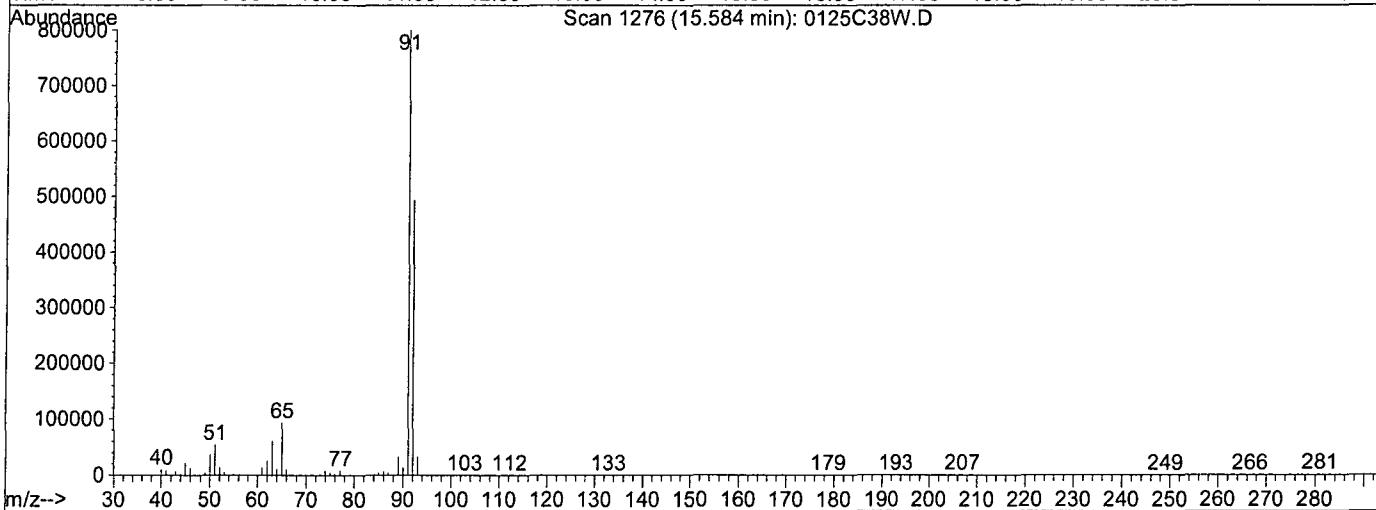
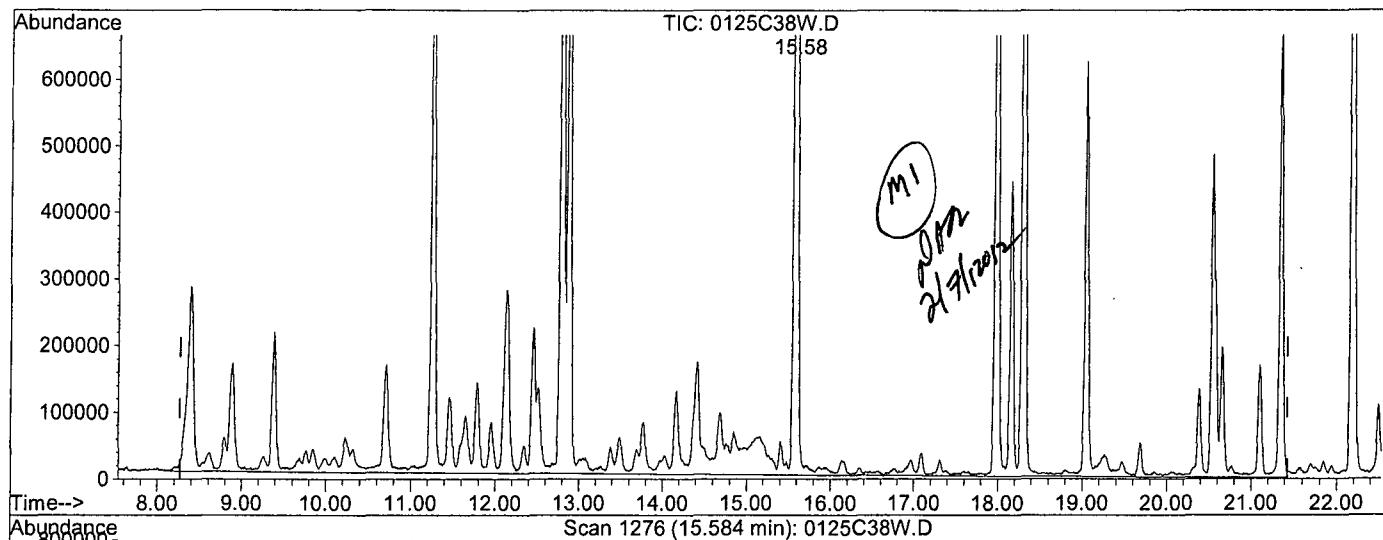


TIC: 0125C38W.D		
(2) Gasoline (TMHB)		
15.58min 202.8575ppb m		
response 39074056		
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.34#
0.00	0.00	1.04#
0.00	0.00	0.00

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: 6762Z
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

ARS 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

Quantitation Report

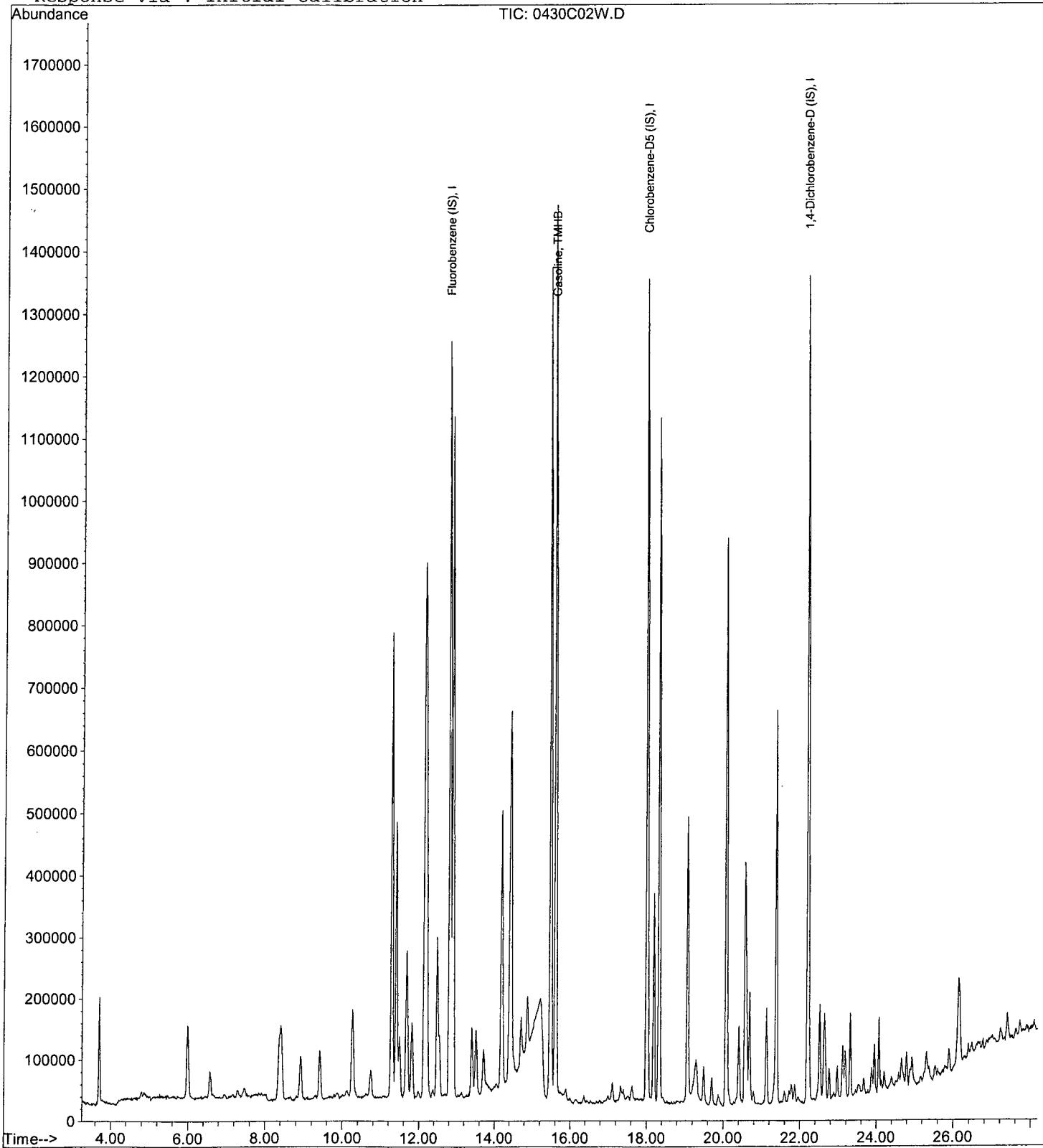
Data File : M:\CHICO\DATA\C120420\0430C02W.D
 Acq On : 30 Apr 12 10:35
 Sample : CCV gas @300ug/L
 Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Apr 30 14:19 2012

Quant Results File: CGAS.RES

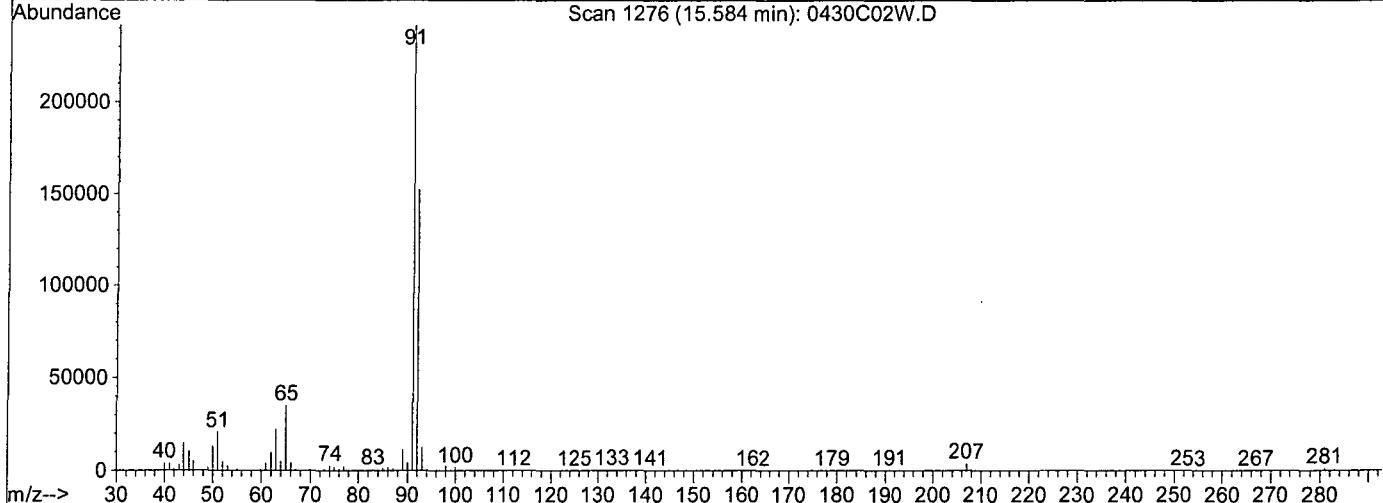
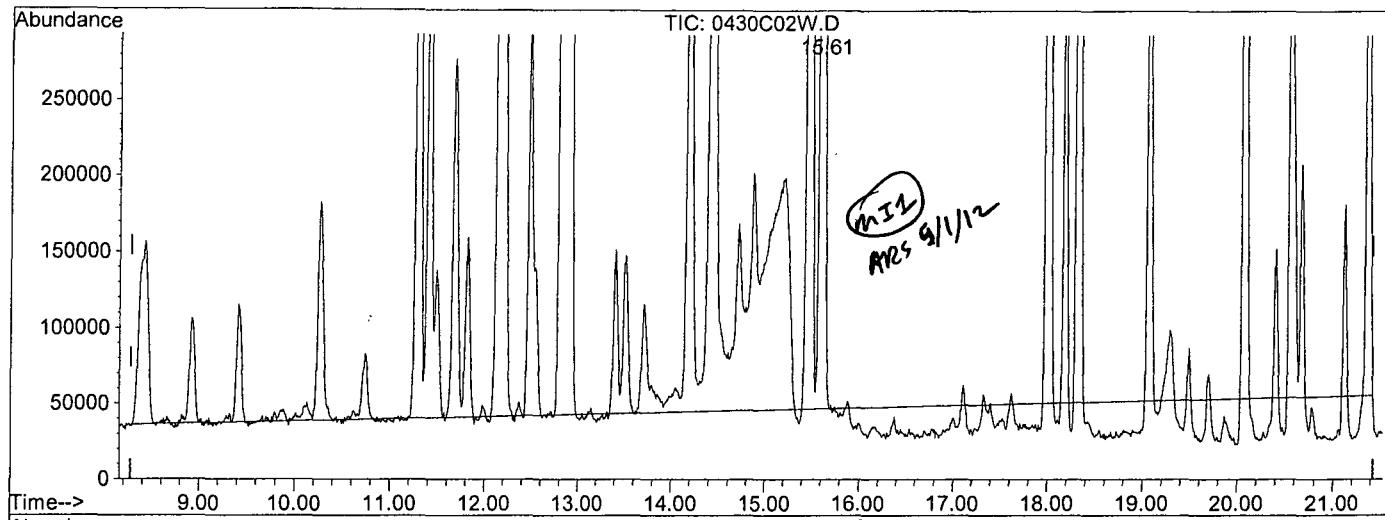
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Tue Feb 07 09:36:43 2012
 Response via : Initial Calibration



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 Multipllr: 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

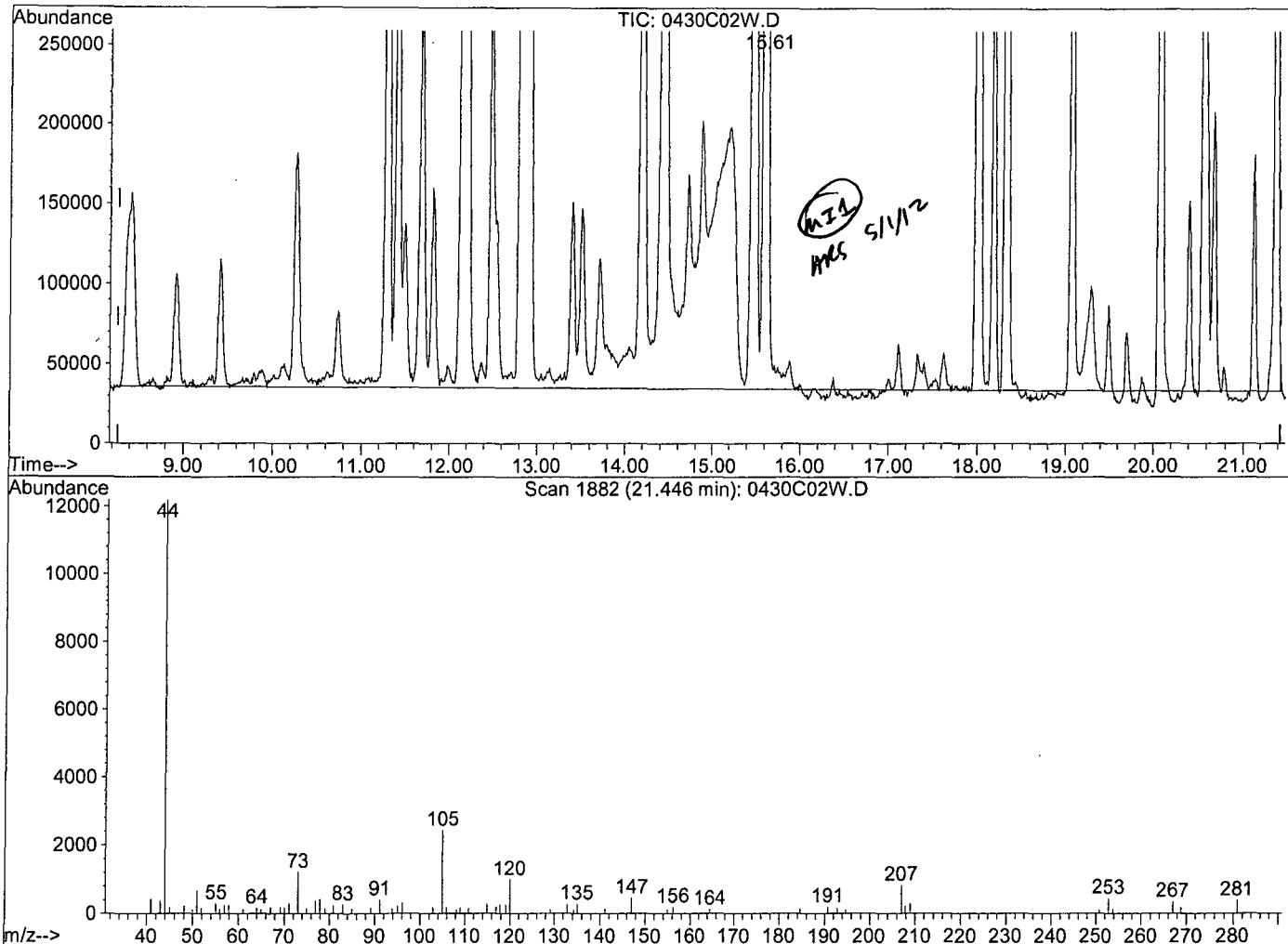
response 49410672

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.

Case No:

Matrix: Water

SDG No: 6762Z

Initial Cal. Date: 04/20/12

Instrument: Chico

Initials: _____

0420C04W.D 0420C05W.D 0420C06W.D 0420C07W.D 0420C08W.D 0420C09W.D 0420C10W.D 0420C11W.D

	Compound	0.3	0.5	1	5	10	20	40	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 Dibromoefluoromethane(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	

MRS 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	
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																

MRSS 5/8/12

Quantitation Report (Not Reviewed)

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

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						
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

0420C04W.D CALLW3.M Tue May 08 10:23:02 2012

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

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
 0420C04W.D CALLW3.M Tue May 08 10:23:03 2012

Quantitation Report

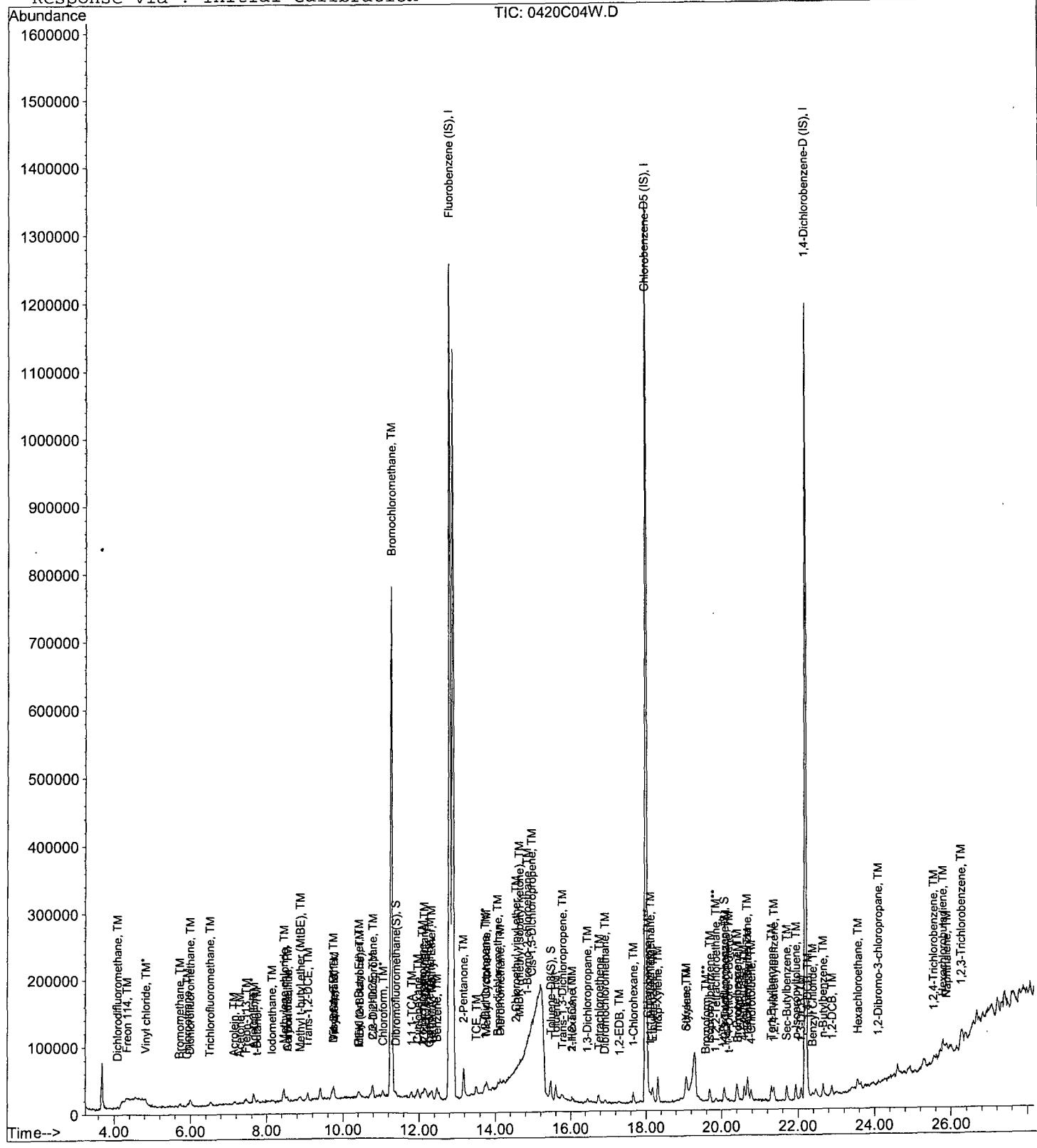
Data File : M:\CHICO\DATA\C120420\0420C04W.D
 Acq On : 20 Apr 12 11:47
 Sample : 0.3ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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 10:20:20 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						
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

0420C05W.D CALLW3.M Tue May 08 10:23:10 2012

Page 1

Quantitation Report (Not Reviewed)

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

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
 0420C05W.D CALLW3.M Tue May 08 10:23:11 2012

Quantitation Report

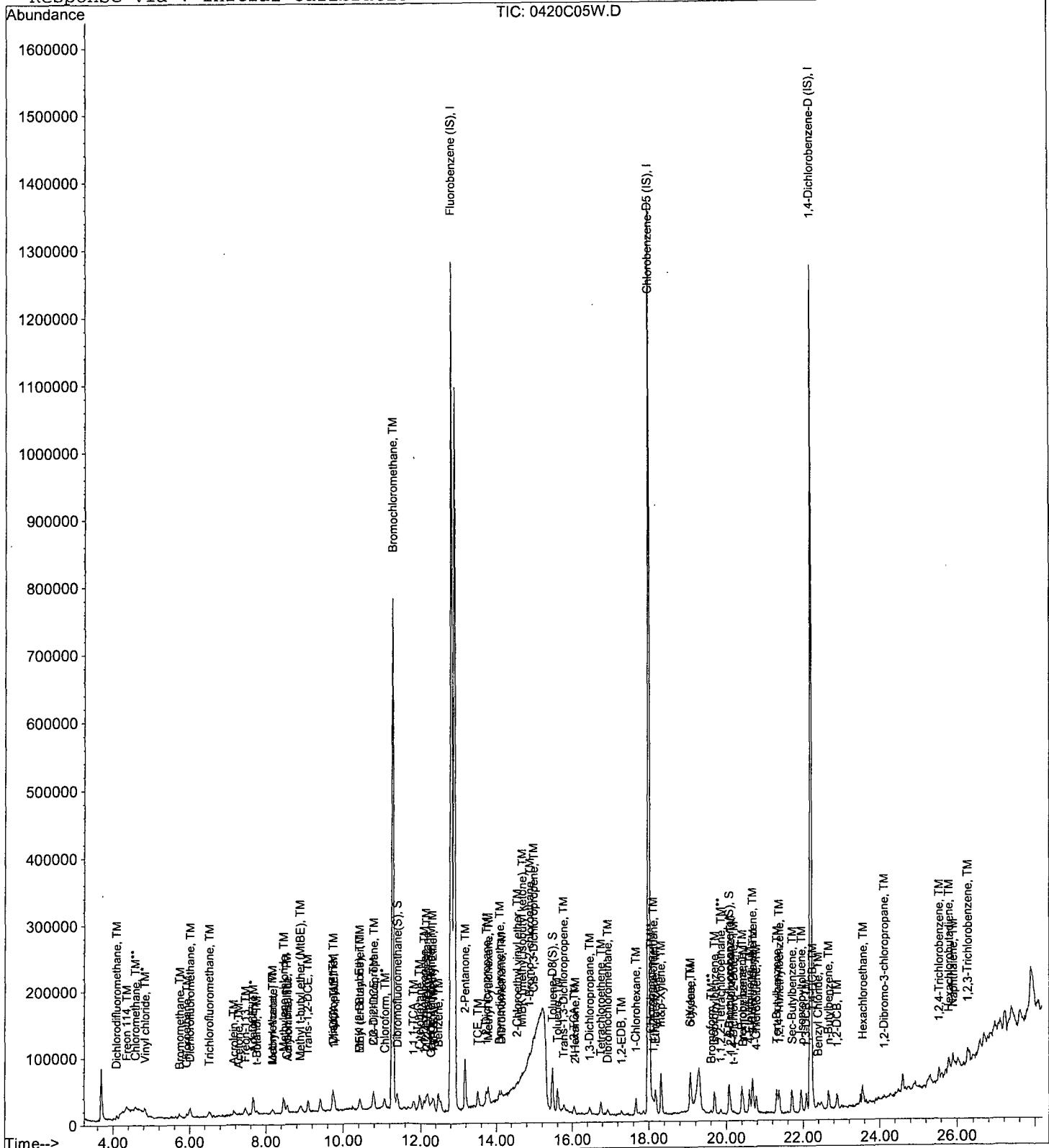
Data File : M:\CHICO\DATA\C120420\0420C05W.D
Acq On : 20 Apr 12 12:24
Sample : 0.5ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

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
 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

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						
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

0420C06W.D CALLW3.M Tue May 08 10:23:18 2012

Page 1

Quantitation Report (Not Reviewed)

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

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
 0420C06W.D CALLW3.M Tue May 08 10:23:19 2012

Quantitation Report

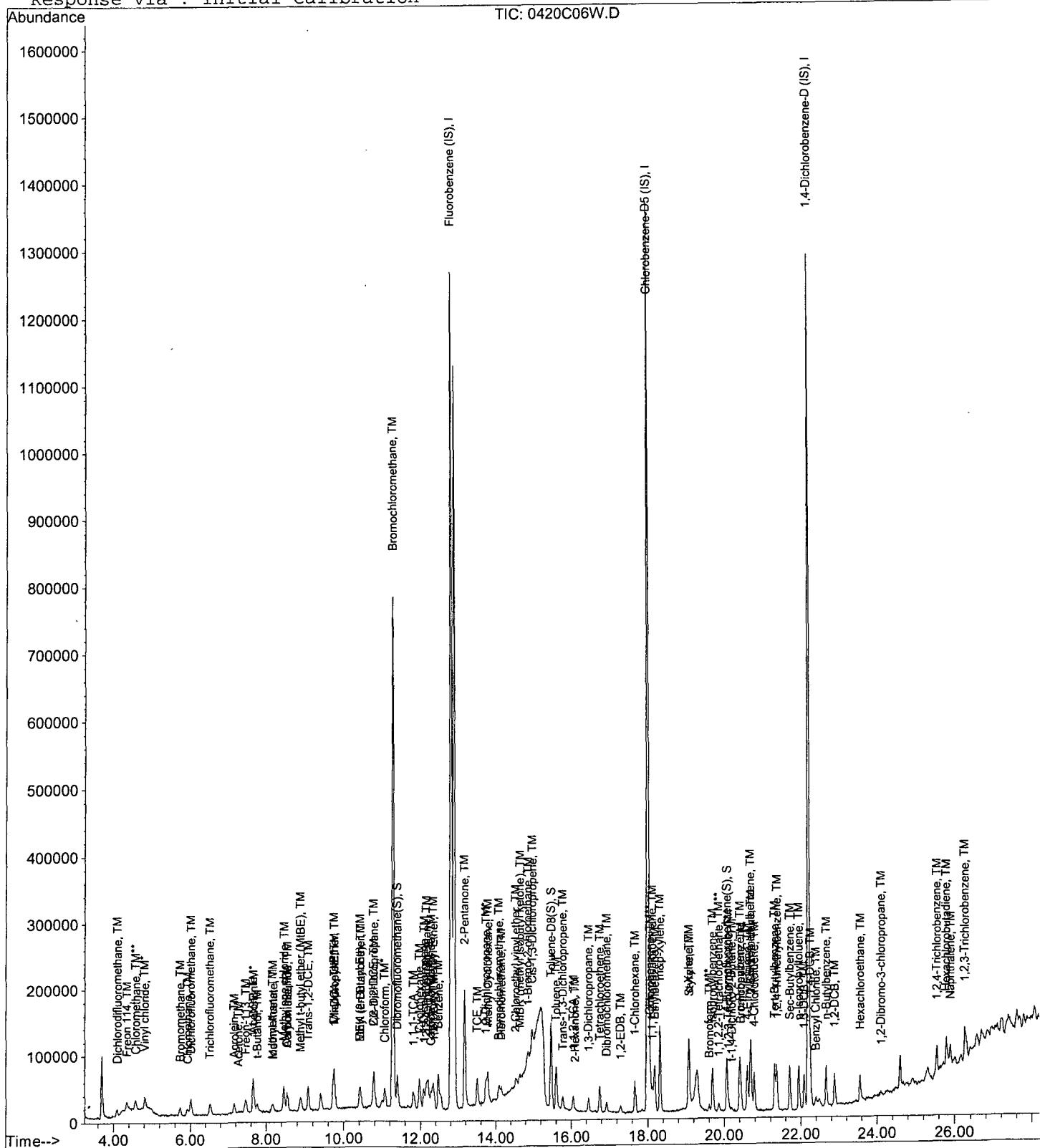
Data File : M:\CHICO\DATA\C120420\0420C06W.D
 Acq On : 20 Apr 12 13:01
 Sample : 1.0ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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						
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	#
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

0420C07W.D CALLW3.M Tue May 08 10:23:26 2012

Page 1

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	#
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
 0420C07W.D CALLW3.M Tue May 08 10:23:27 2012

Quantitation Report

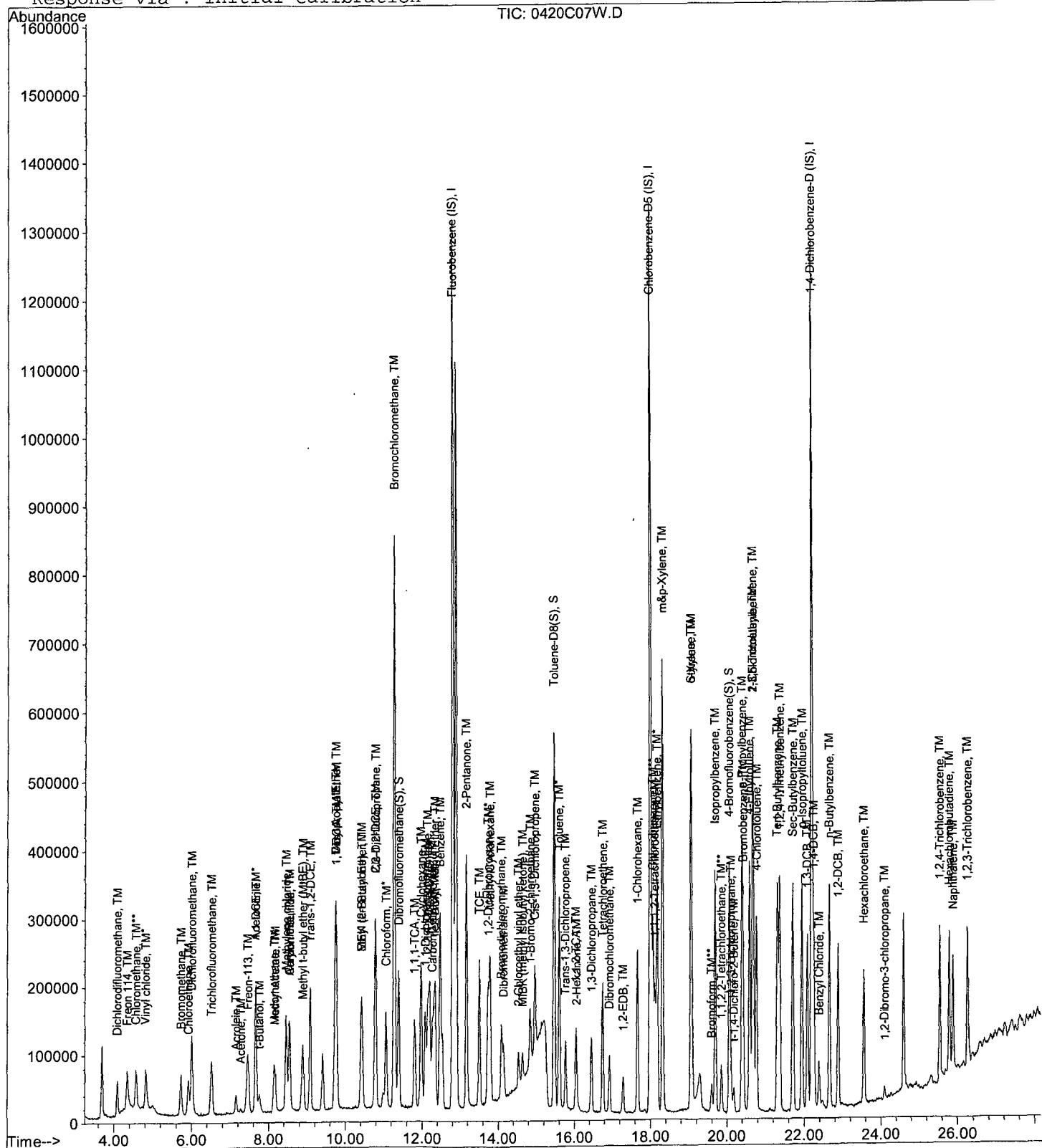
Data File : M:\CHICO\DATA\C120420\0420C07W.D
 Acq On : 20 Apr 12 13:38
 Sample : 5.0ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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
 Acq On : 20 Apr 12 14:15
 Sample : 10ug/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

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
 0420C08W.D CALLW3.M Tue May 08 10:23:35 2012

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						
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
 0420C08W.D CALLW3.M Tue May 08 10:23:34 2012

Quantitation Report

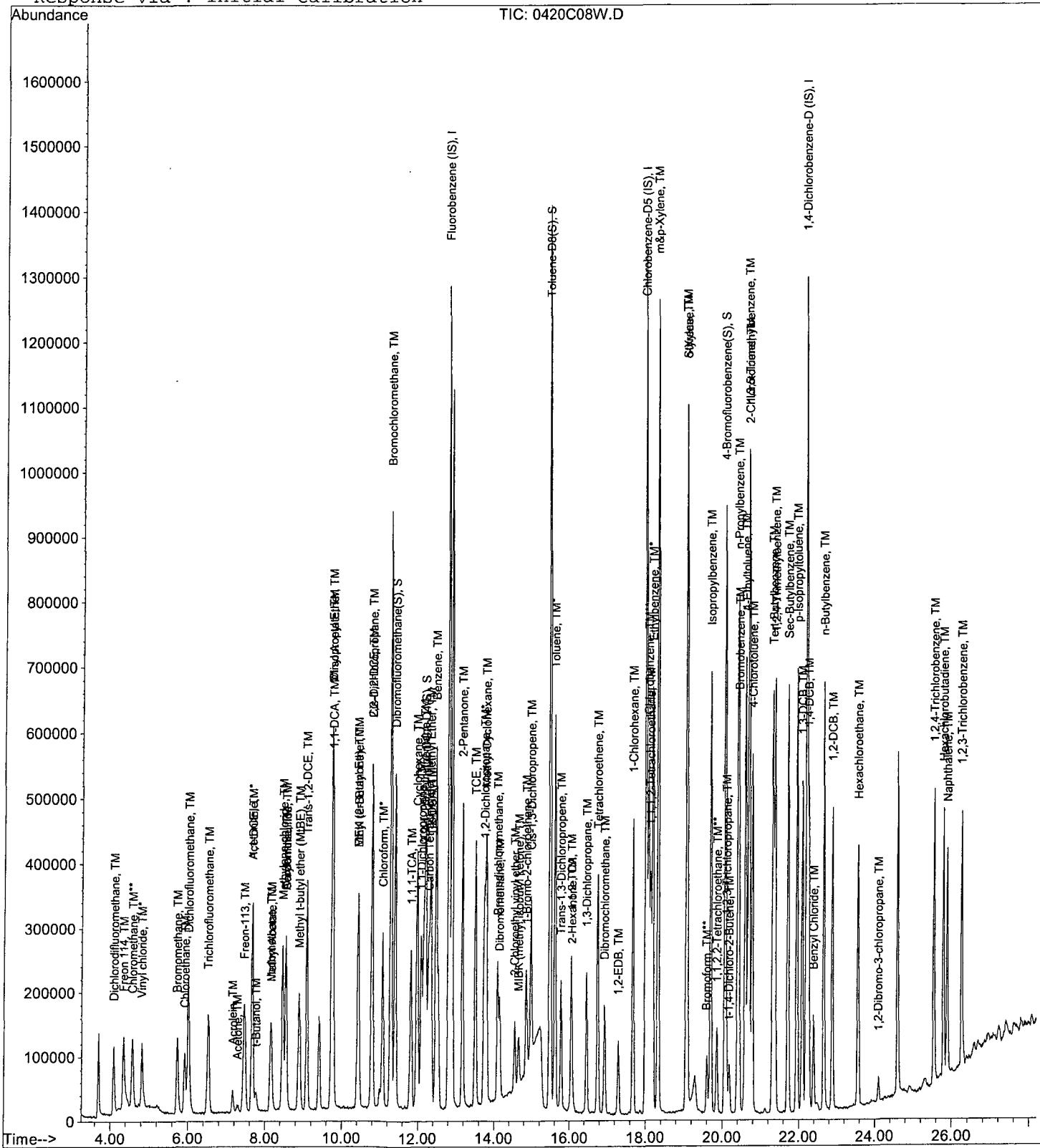
Data File : M:\CHICO\DATA\C120420\0420C08W.D
 Acq On : 20 Apr 12 14:15
 Sample : 10ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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\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						
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
 0420C09W.D CALLW3.M Tue May 08 10:23:41 2012

Quantitation Report (Not Reviewed)

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

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
 DataAccq 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	#
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
 0420C09W.D CALLW3.M Tue May 08 10:23:43 2012

Quantitation Report

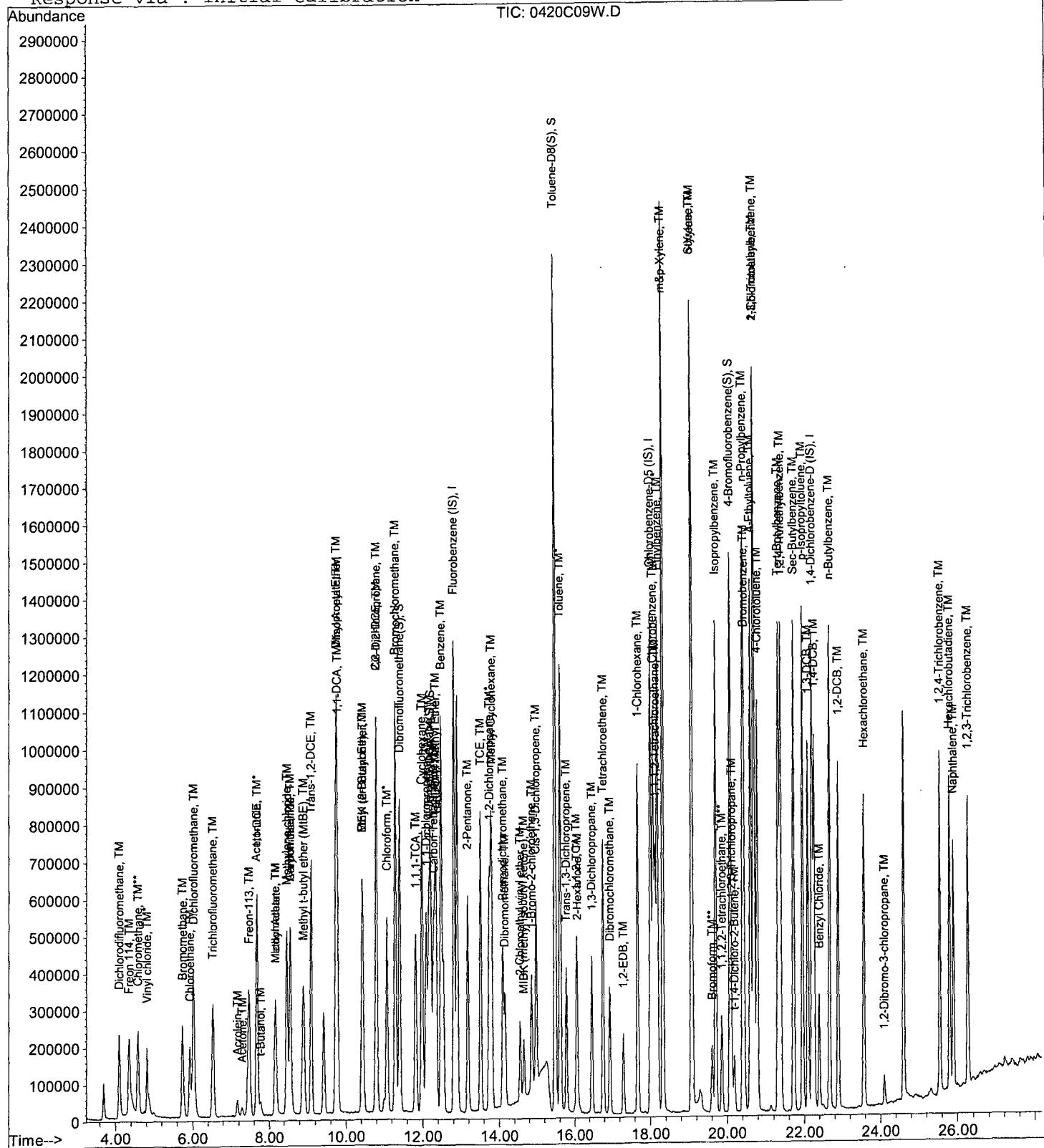
Data File : M:\CHICO\DATA\C120420\0420C09W.D
 Acq On : 20 Apr 12 14:52
 Sample : 20ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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

Target Compounds	R.T.	QIon	Response	Conc	Units	Value
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
 0420C10W.D CALLW3.M Tue May 08 10:23:49 2012

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C10W.D
 Acq On : 20 Apr 12 15:29
 Sample : 40ug/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 10:21 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	#
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
 0420C10W.D CALLW3.M Tue May 08 10:23:51 2012

Quantitation Report

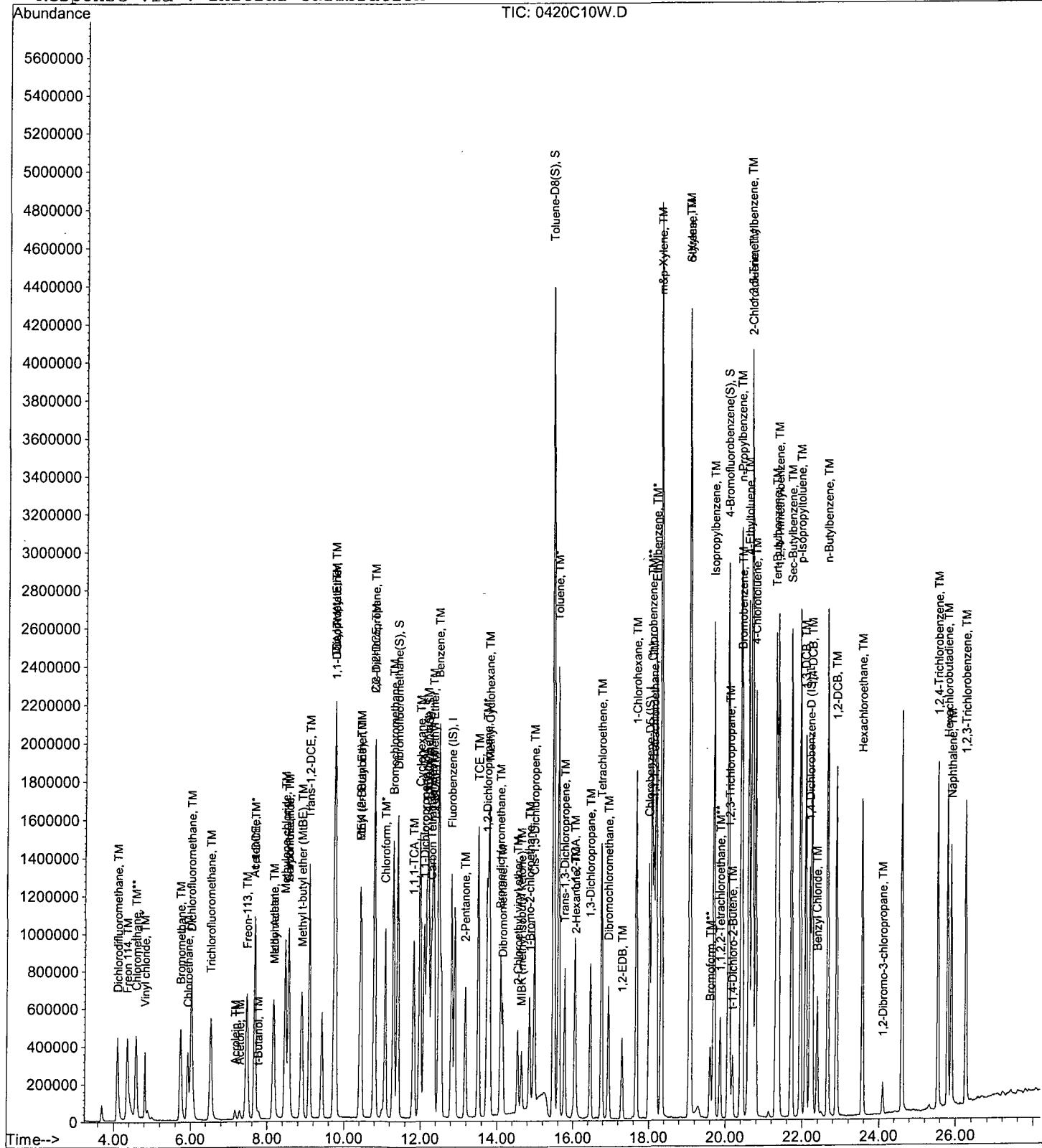
Data File : M:\CHICO\DATA\C120420\0420C10W.D
 Acq On : 20 Apr 12 15:29
 Sample : 40ug/L Vol Std 04-20-12
 Misc : Water 10mL w/IS:04-10-12

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

Quant Time: May 8 10:21 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						
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

0420C11W.D CALLW3.M Tue May 08 10:23:57 2012

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
 0420C11W.D CALLW3.M Tue May 08 10:23:58 2012

Quantitation Report

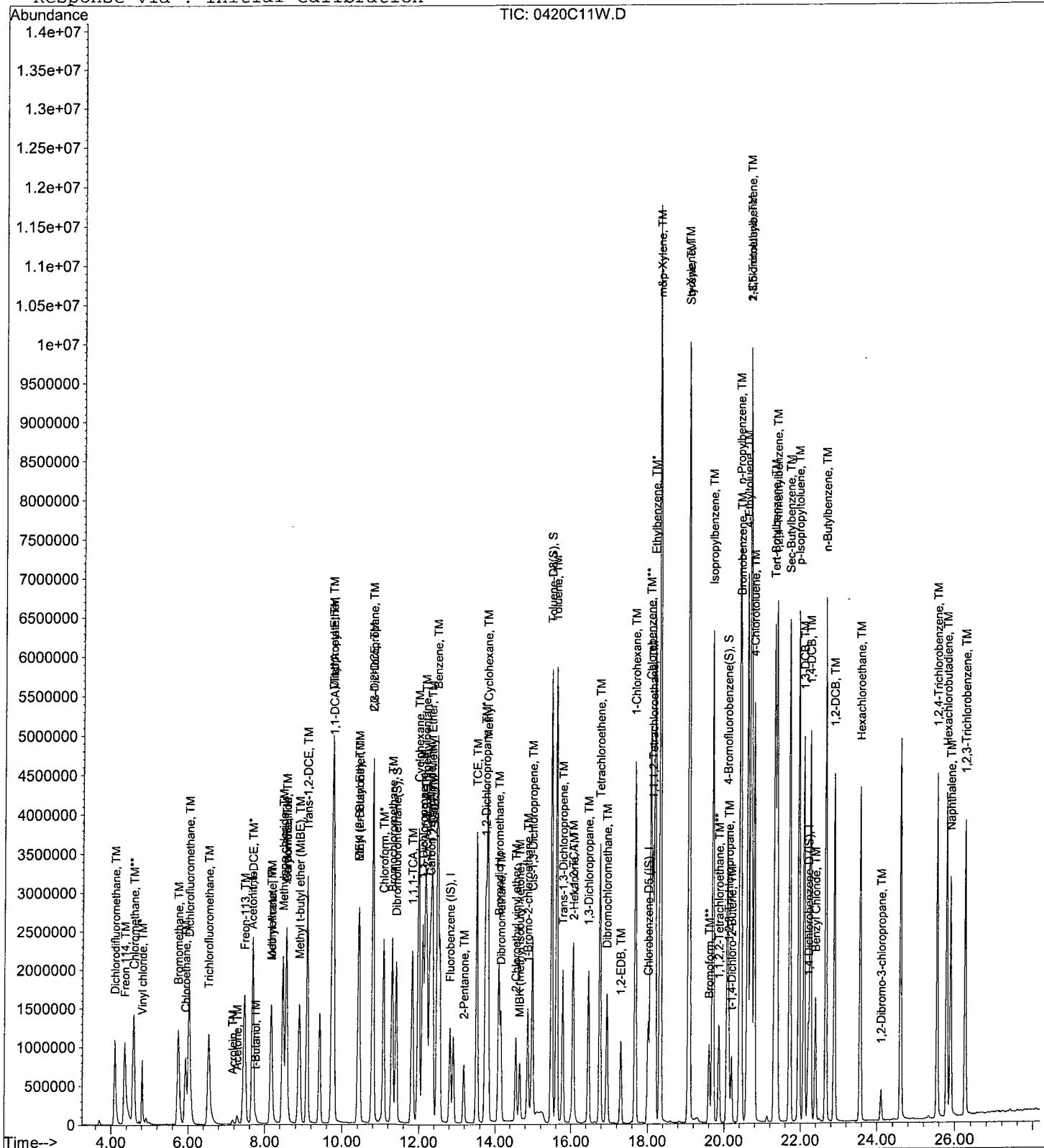
Data File : M:\CHICO\DATA\C120420\0420C11W.D
Acq On : 20 Apr 12 16:06
Sample : 100ug/L Vol Std 04-20-12
Misc : Water 10mL w/IS:04-10-12

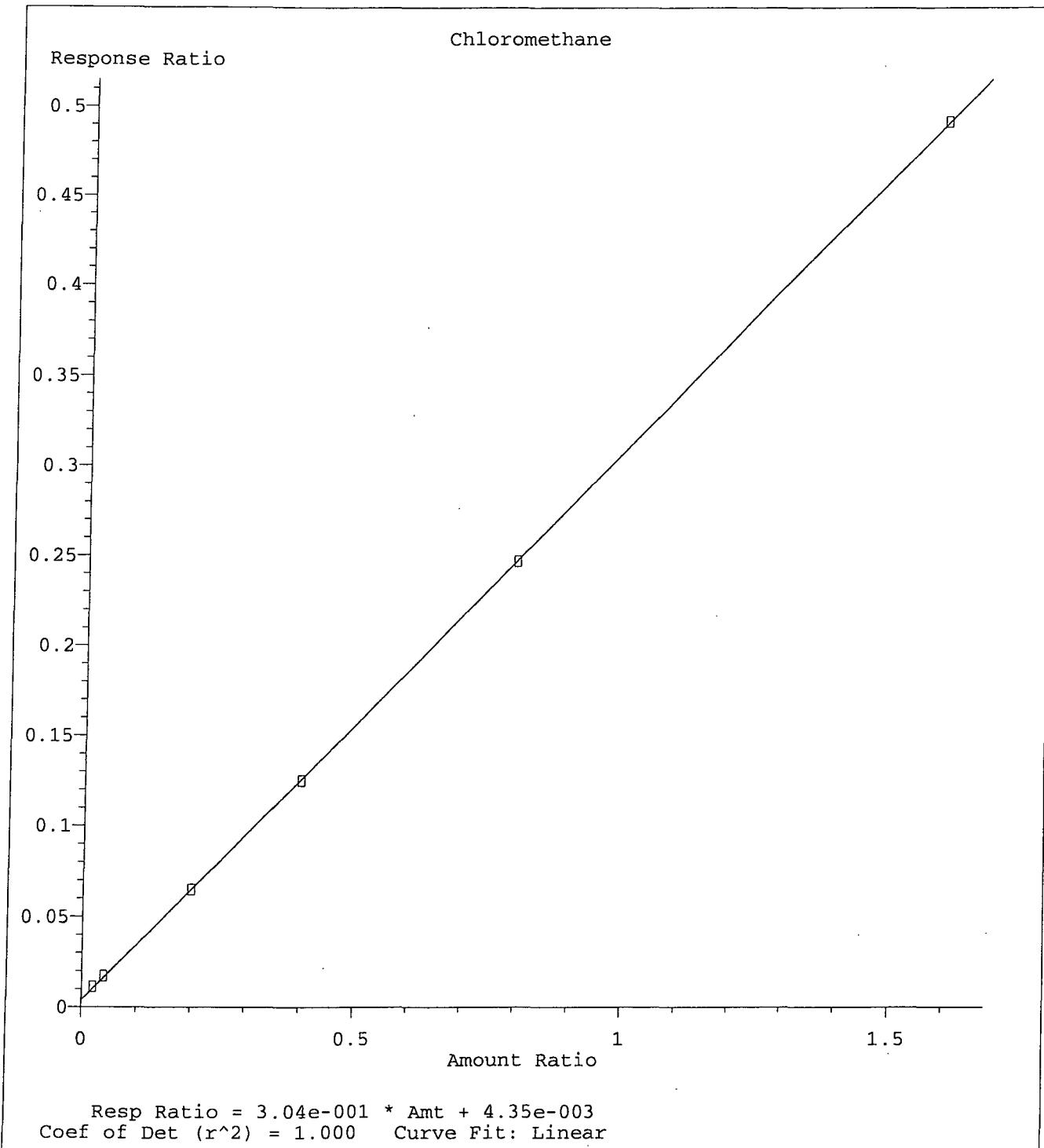
Vial: 1
Operator: SV
Inst : Chico
Multiplr: 1.00

Quant Time: May 8 10:21 2012

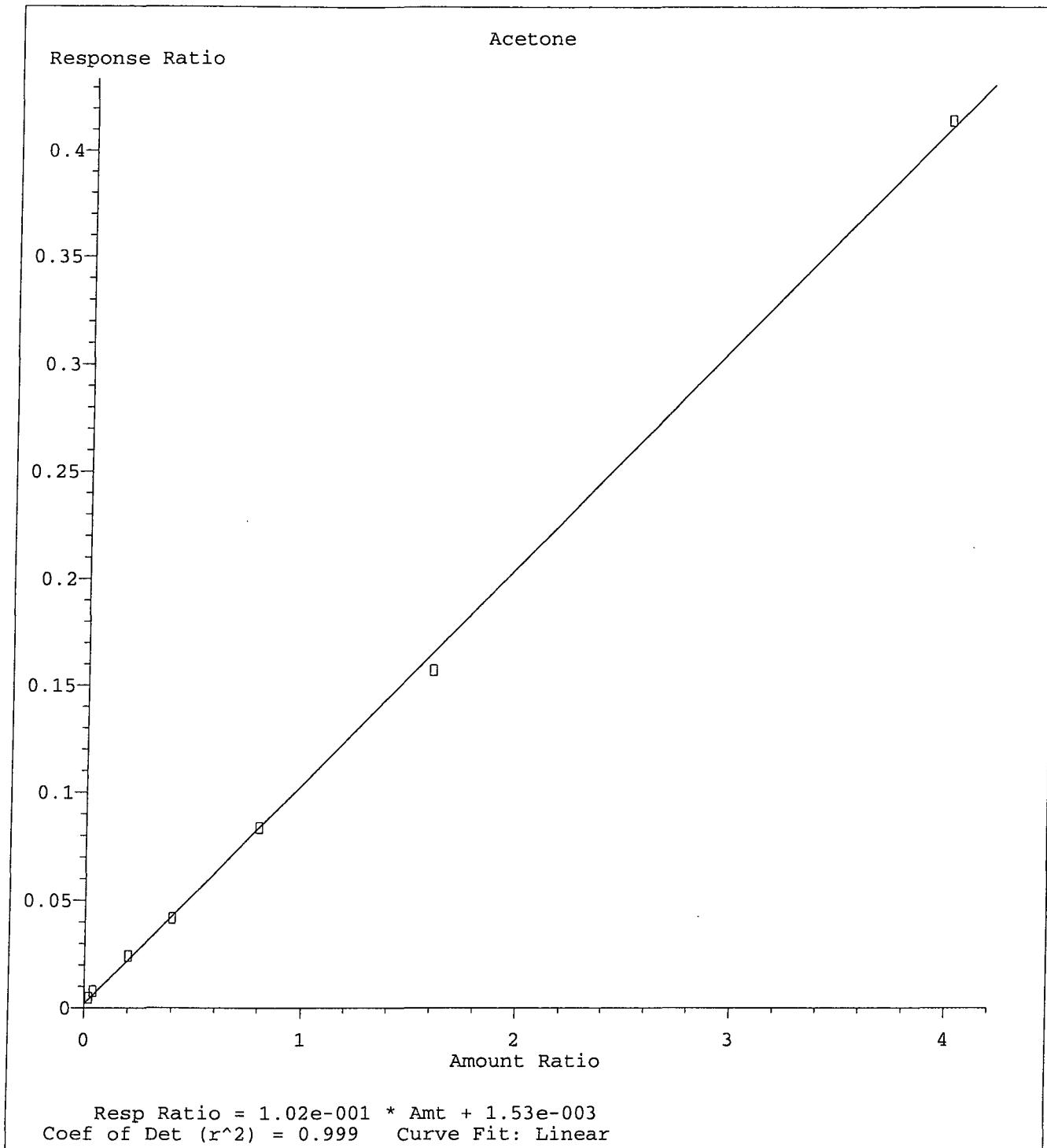
Quant Results File: CALLW3.RES

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

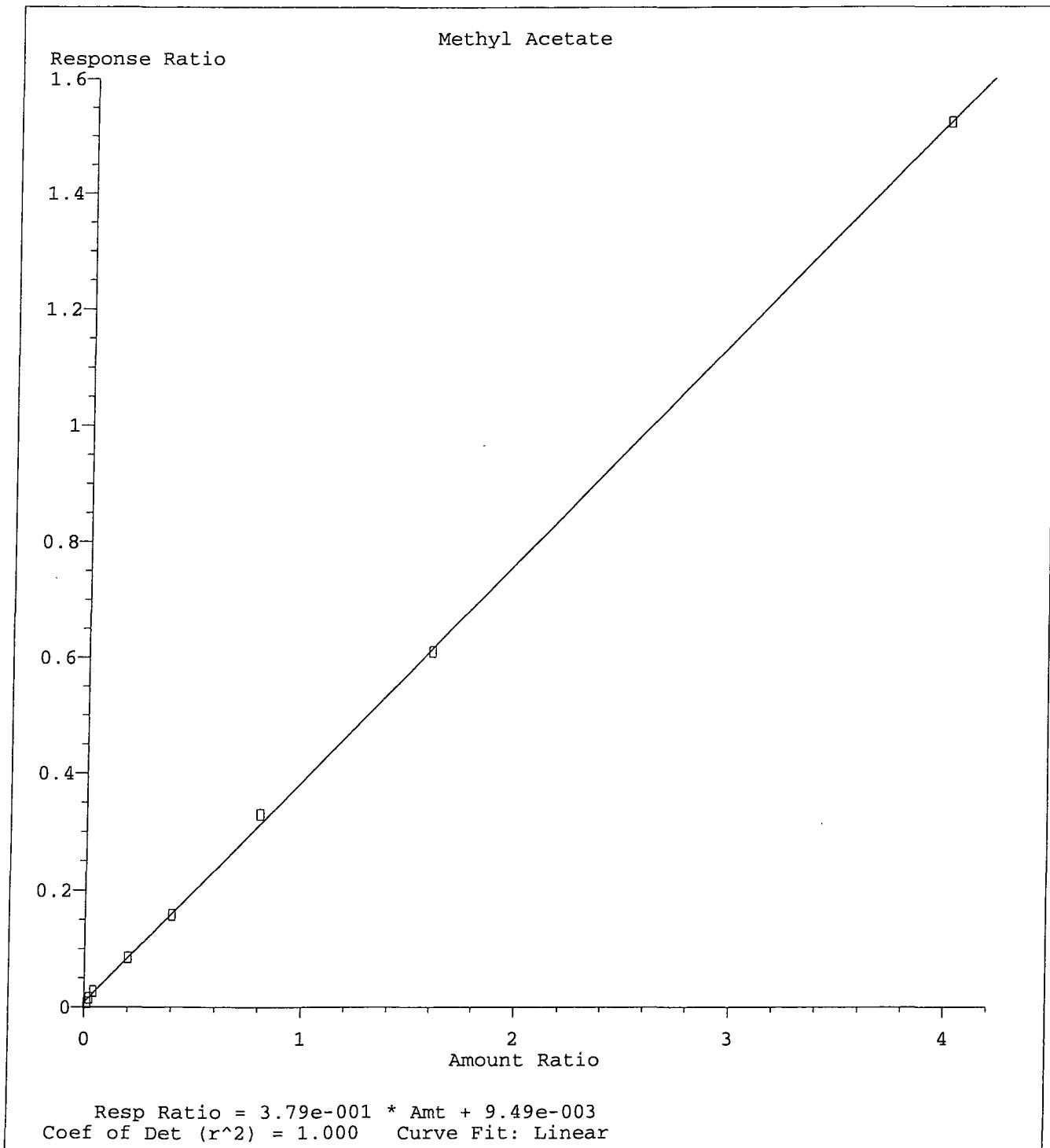




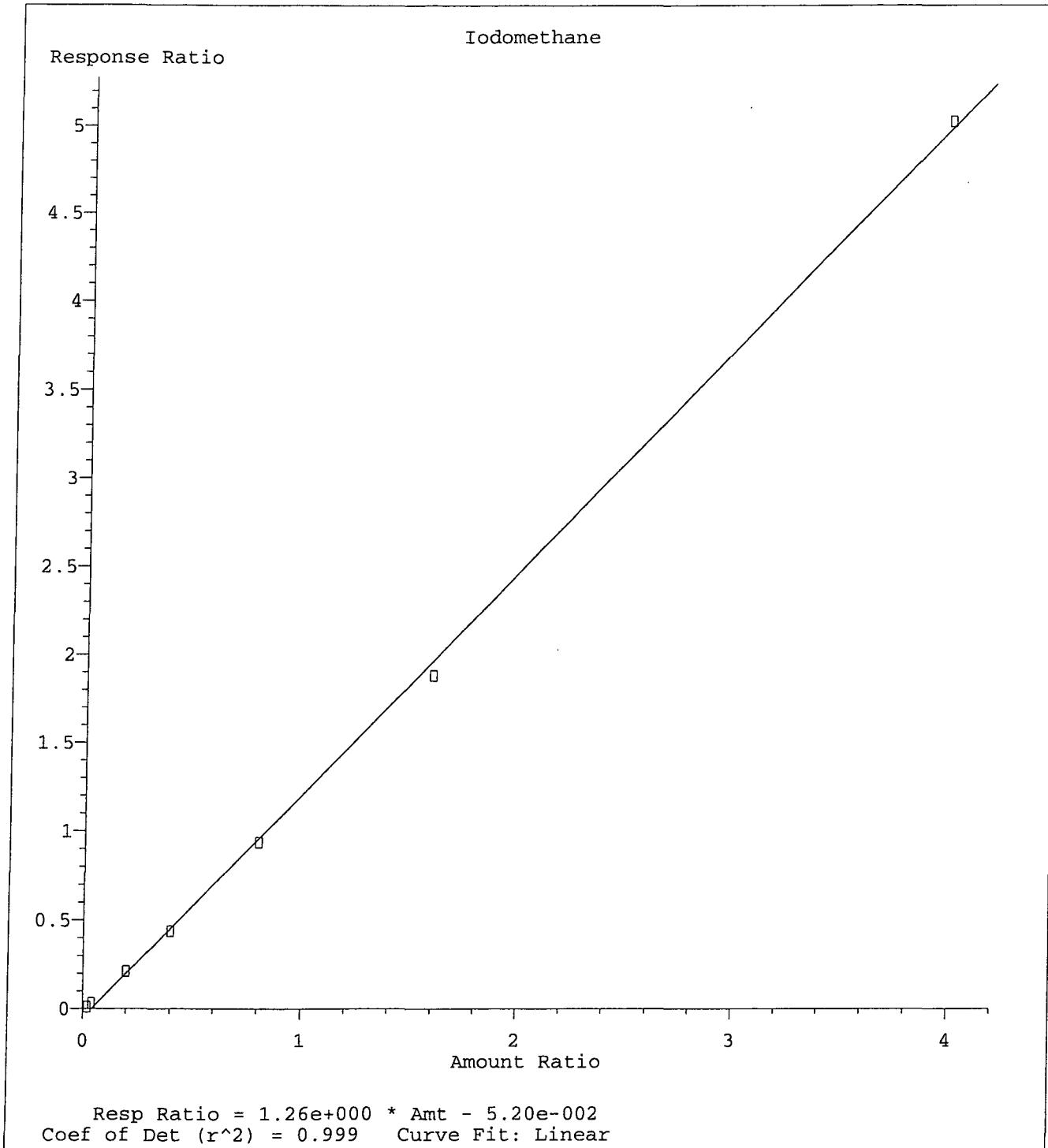
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



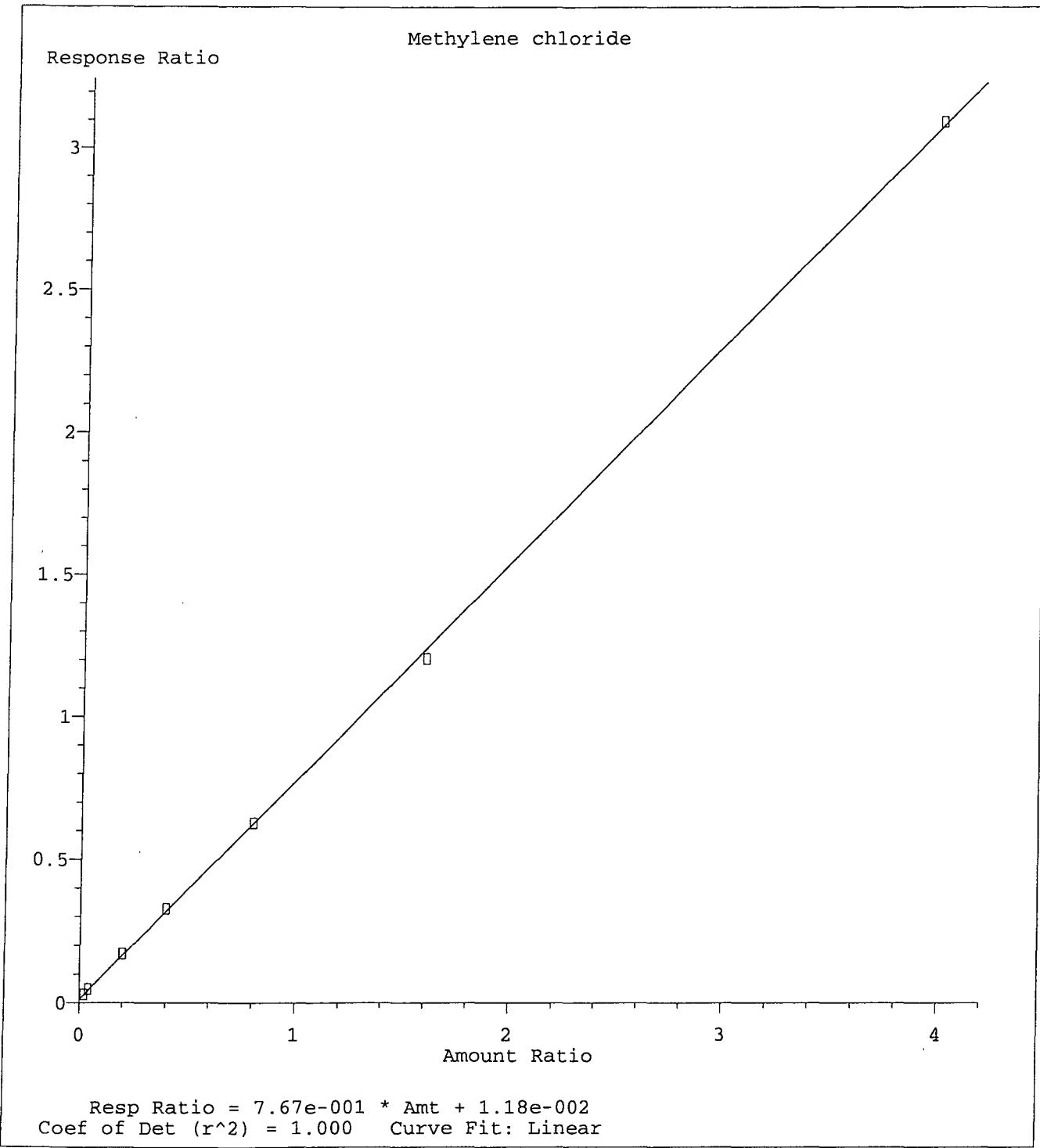
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



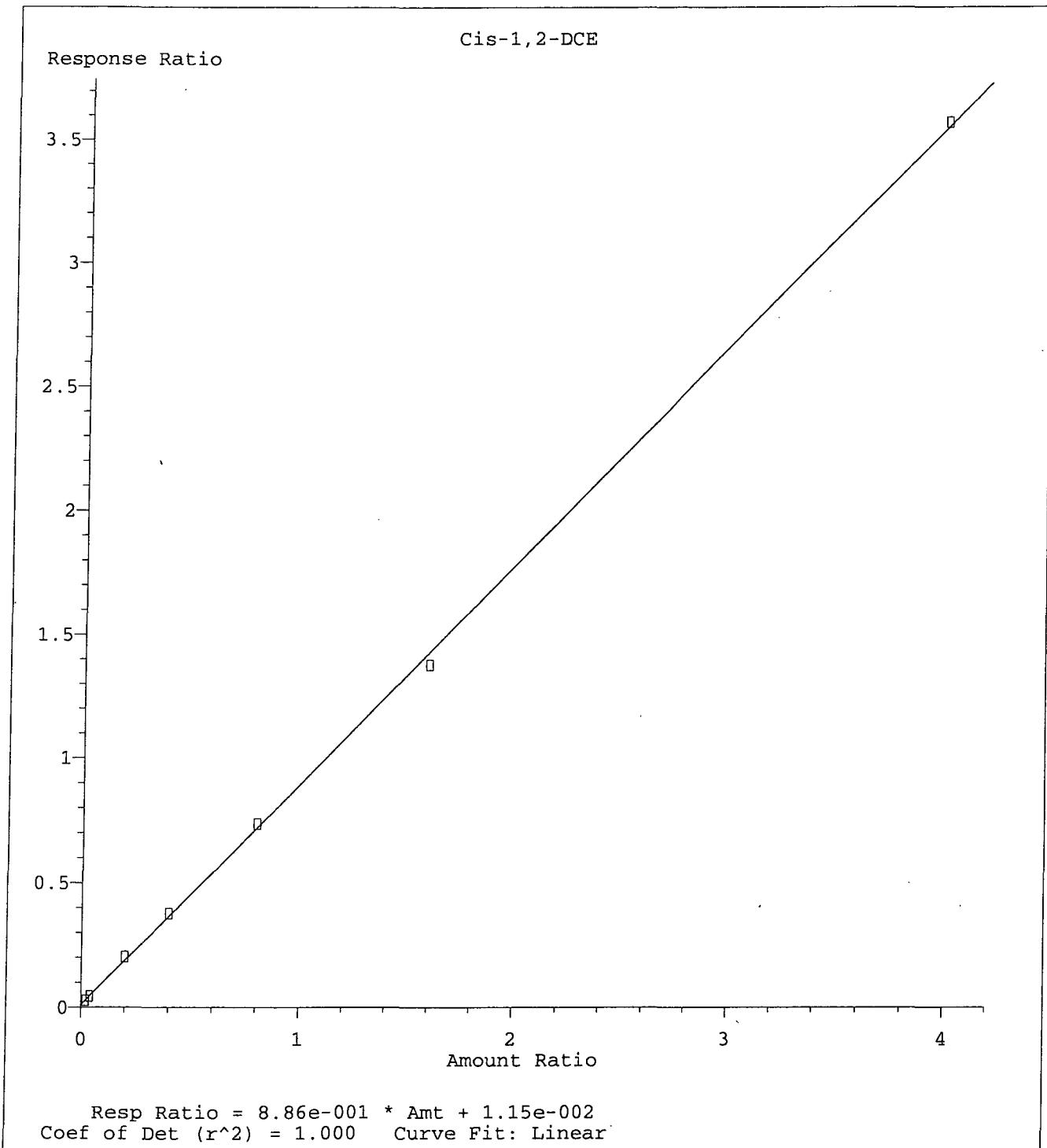
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



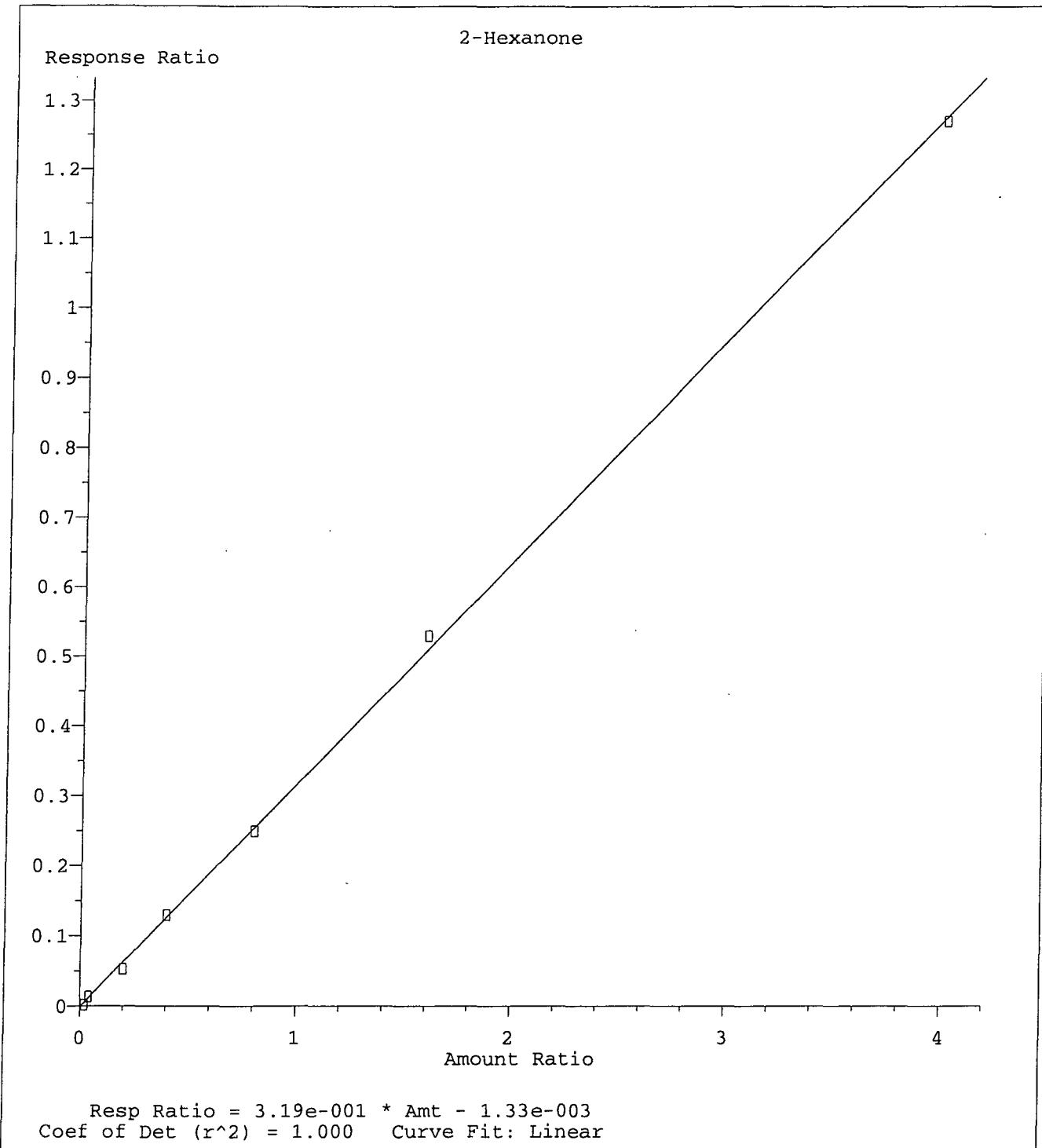
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



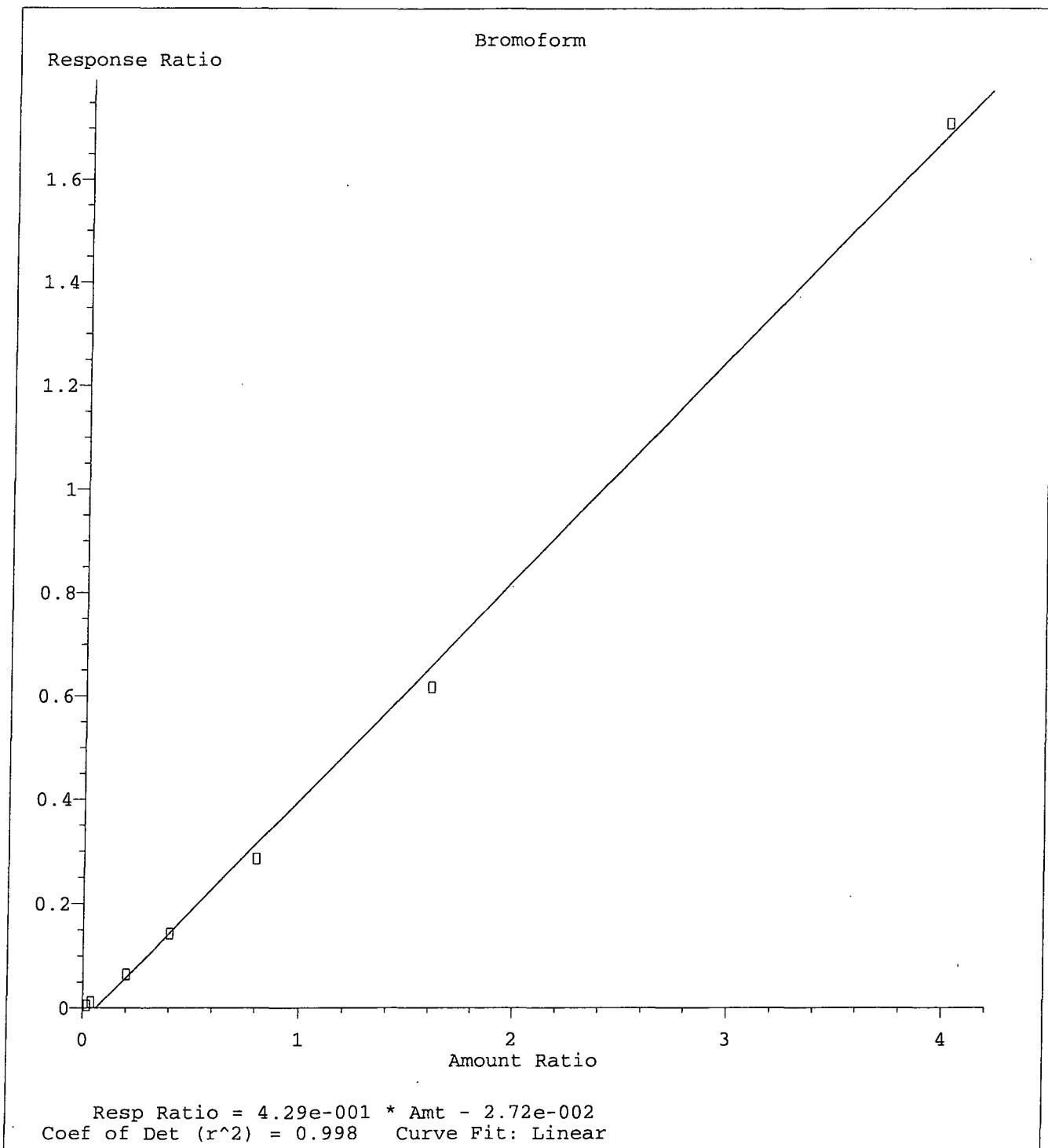
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



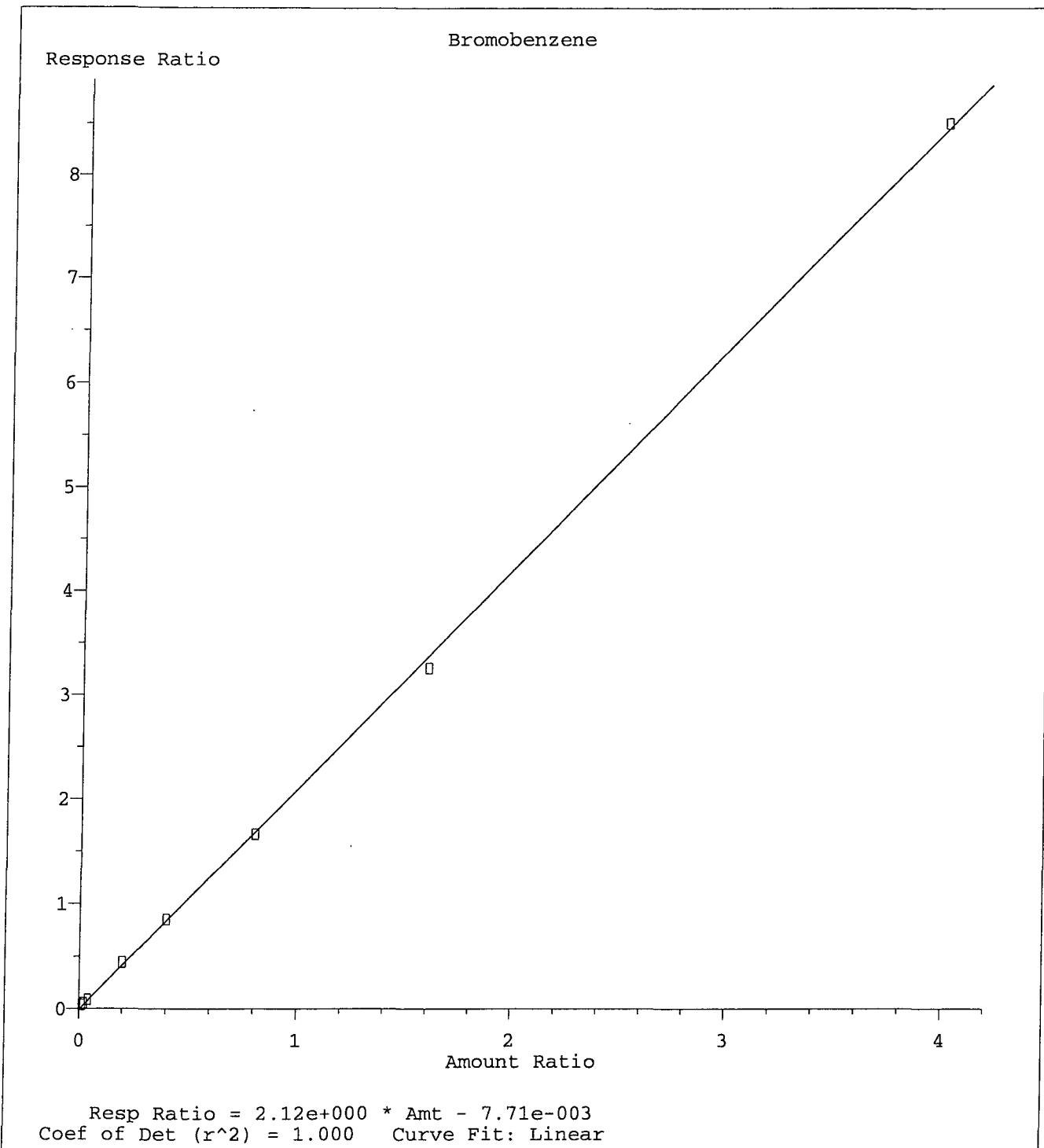
Method Name: M:\CHICO\DATA\C120420\CALLW3.M
Calibration Table Last Updated: Mon Apr 23 10:17:53 2012



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

APL 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
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
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
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

APR 5/18/12

VOLATILE ORGANIC ANALYSIS BY
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: 6762Z

Case No: _____

Date Analyzed: 04/20/12

Matrix: Water

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

Algorithm Check: $\frac{(199233)(25)}{(622823)(0.775416)}$ Value ~~APB 5/8/12~~

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

(#) = qualifier out of range (m) = manual integration
 0420C16W.D CALLW3.M Tue May 08 10:24:05 2012

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0420C16W.D
 Acq On : 20 Apr 12 19:11
 Sample : 10ug/L Vol Std 04-20-12 (SS)
 Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
 Operator: SV
 Inst : Chico
 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	#
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
 0420C16W.D CALLW3.M Tue May 08 10:24:06 2012

Quantitation Report

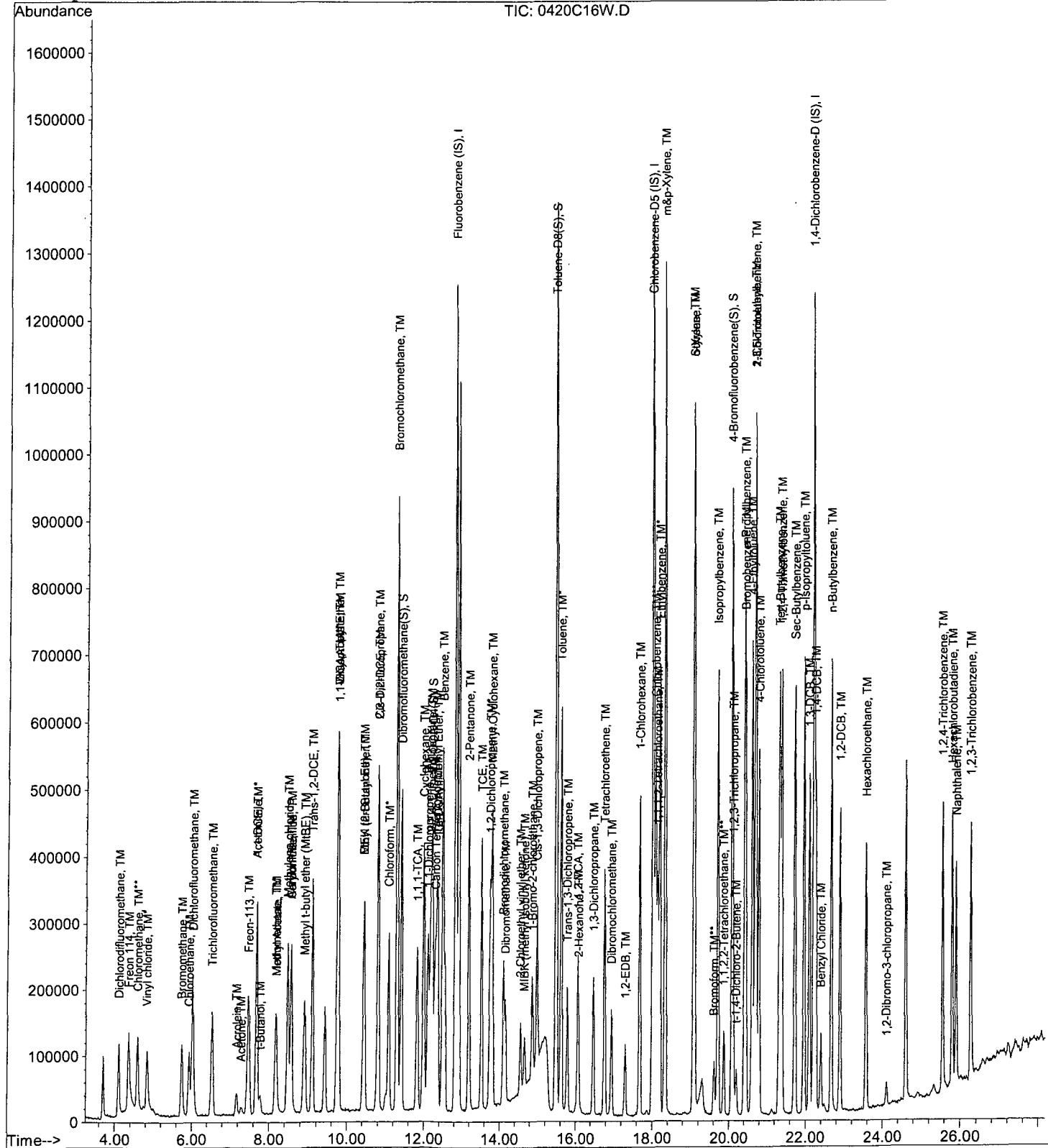
Data File : M:\CHICO\DATA\C120420\0420C16W.D
 Acq On : 20 Apr 12 19:11
 Sample : 10ug/L Vol Std 04-20-12 (SS)
 Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
 Operator: SV
 Inst : Chico
 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



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
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
12 TML	Acetone	0.1375	0.1100	20	TML
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
17 TML	Iodomethane	1.008	0.9250	8.2	TML
18 TM	Acrylonitrile	0.1470	0.1451	1.3	TM
19 TML	Methylene chloride	0.9456	0.8023	15	TML
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
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
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
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
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

ARSS/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						
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
 0430C06W.D CALLW3.M Tue May 08 10:59:24 2012

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

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
 0430C06W.D CALLW3.M Tue May 08 10:59:25 2012

Quantitation Report

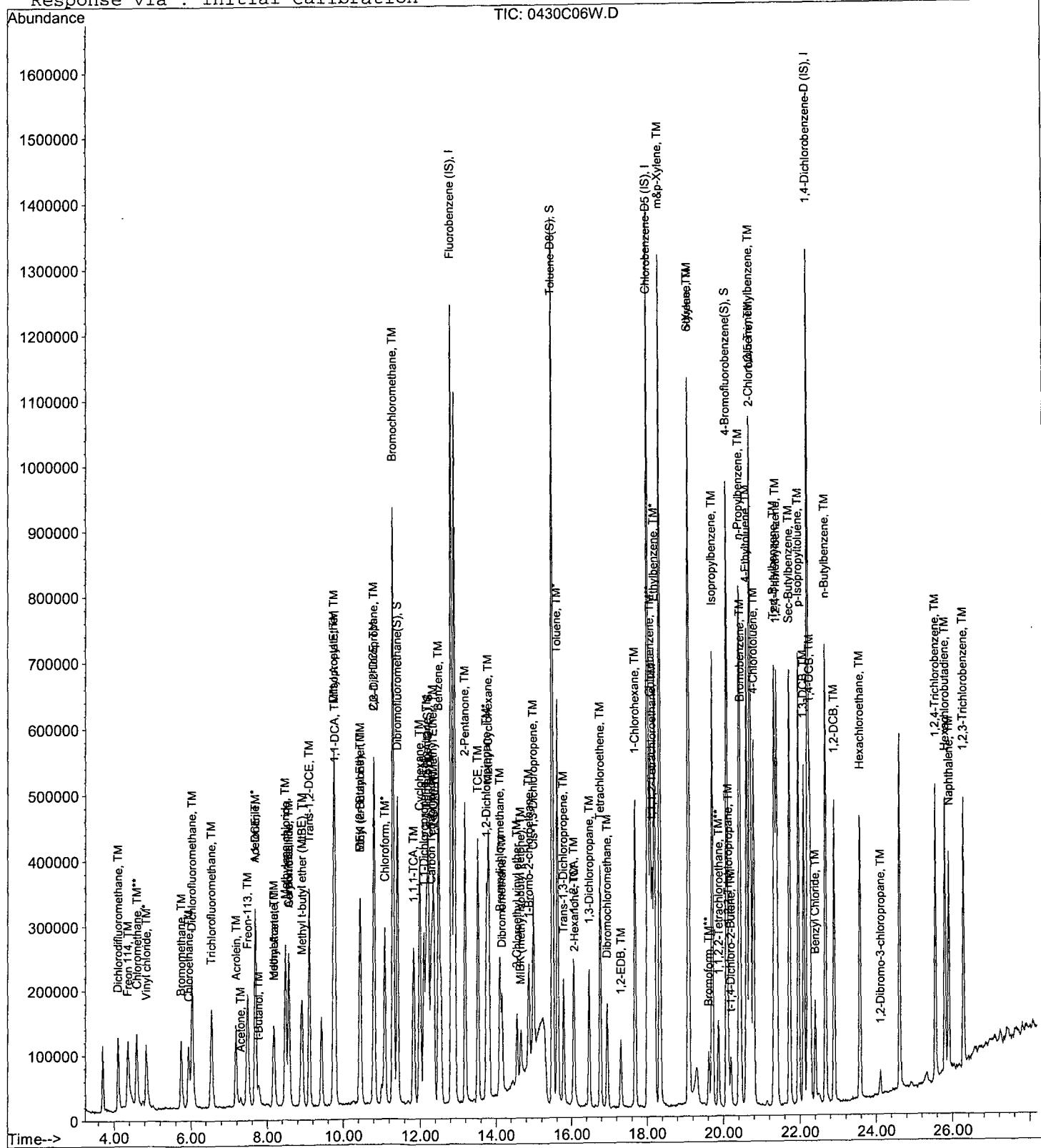
Data File : M:\CHICO\DATA\C120420\0430C06W.D
 Acq On : 30 Apr 12 13:03
 Sample : 10ug/L Vol Std 04-30-12
 Misc : Water 10mL w/IS&S:04-10-12

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
0430T07W.D 0430T08W.D 0430T09W.D 0430T10W.D 0430T11W.D 0430T13W.D 0430T14W.D	

Initials: _____

	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	TML 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	

MRS 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)												

MRS 5/29/12

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: 04/30/12

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															

AMS 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						
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

0430T07W.D TALLW.M Tue May 29 16:40:03 2012

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

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
 0430T07W.D TALLW.M Tue May 29 16:40:05 2012

Quantitation Report

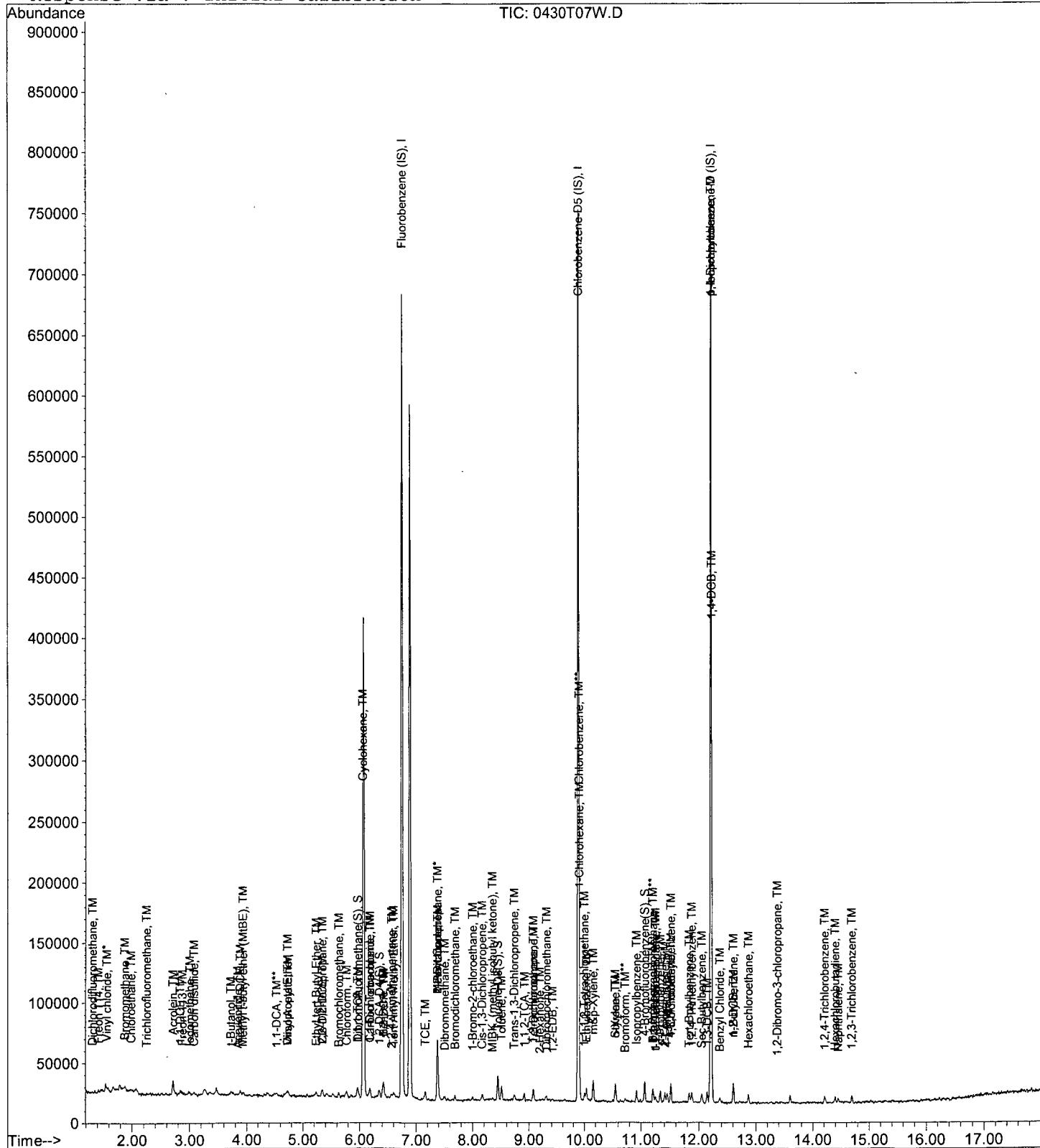
Data File : M:\THOR\DATA\T120430\0430T07W.D
 Acq On : 30 Apr 12 11:15
 Sample : 0.3ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 4
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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						
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

0430T08W.D TALLW.M Tue May 29 16:40:11 2012

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T08W.D
 Acq On : 30 Apr 12 11:43
 Sample : 0.5ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 5
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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
 0430T08W.D TALLW.M Tue May 29 16:40:13 2012

Quantitation Report

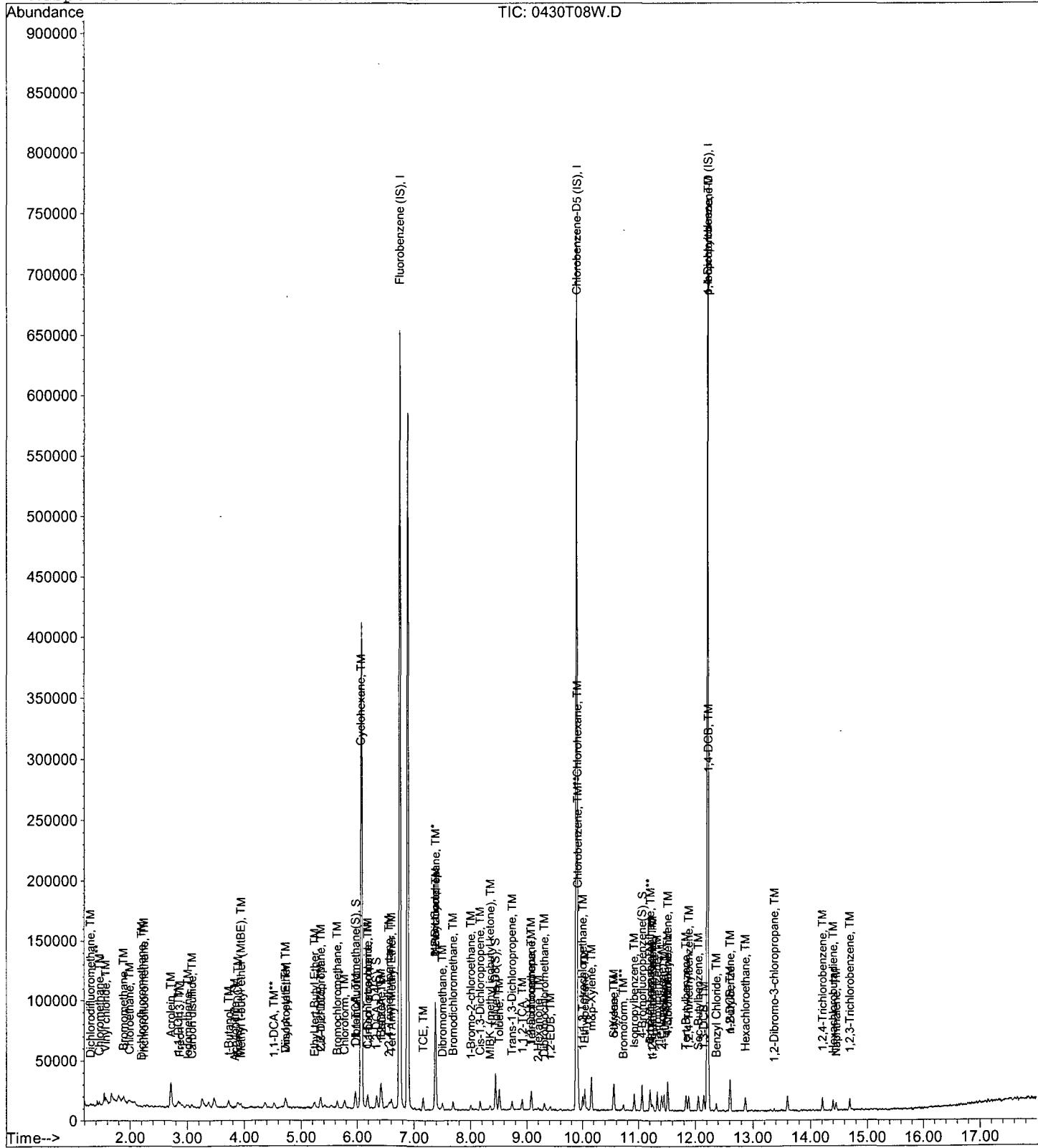
Data File : M:\THOR\DATA\T120430\0430T08W.D
 Acq On : 30 Apr 12 11:43
 Sample : 0.5ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 5
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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						
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

0430T09W.D TALLW.M Tue May 29 16:40:19 2012

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T09W.D
 Acq On : 30 Apr 12 12:10
 Sample : 1.0ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 6
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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-Trichloropropene	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
 0430T09W.D TALLW.M Tue May 29 16:40:21 2012

Quantitation Report

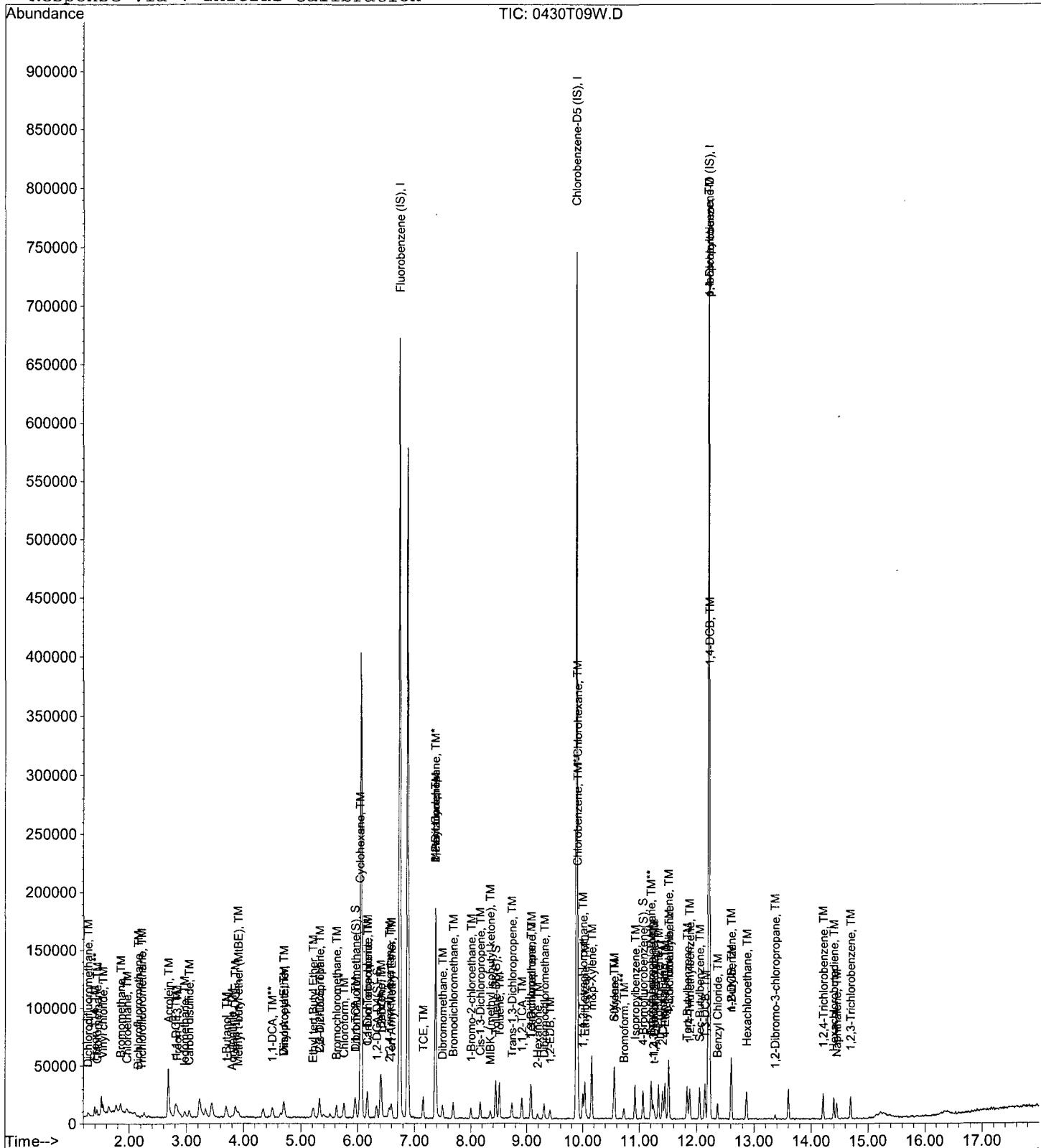
Data File : M:\THOR\DATA\T120430\0430T09W.D
 Acq On : 30 Apr 12 12:10
 Sample : 1.0ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 6
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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					
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

0430T10W.D TALLW.M Tue May 29 16:40:27 2012

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
 0430T10W.D TALLW.M Tue May 29 16:40:29 2012

Quantitation Report

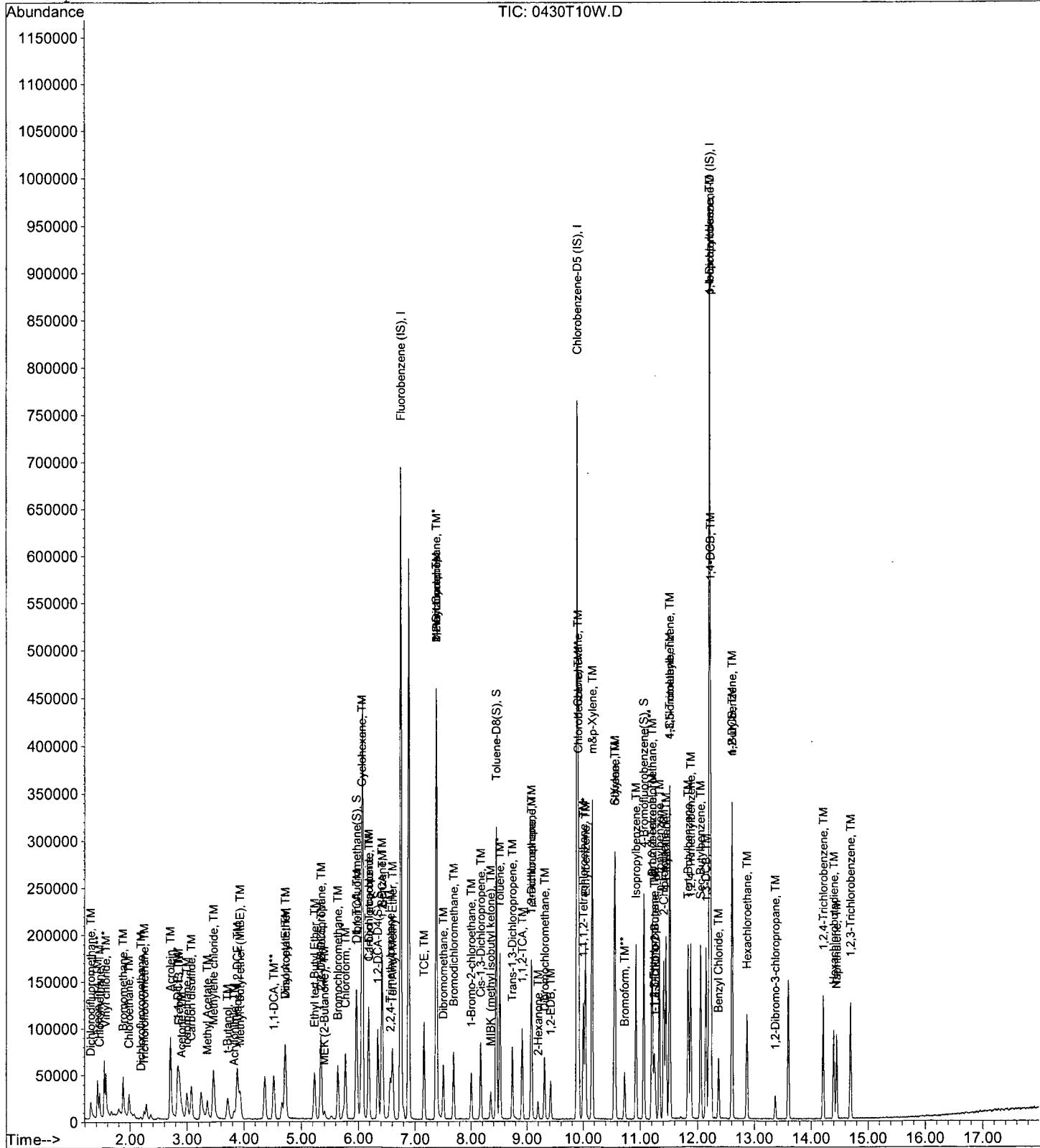
Data File : M:\THOR\DATA\T120430\0430T10W.D
 Acq On : 30 Apr 12 12:38
 Sample : 5.0ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 7
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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\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
 0430T11W.D TALLW.M Tue May 29 16:40:35 2012

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0430T11W.D
 Acq On : 30 Apr 12 13:06
 Sample : 10ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 8
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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

Quantitation Report

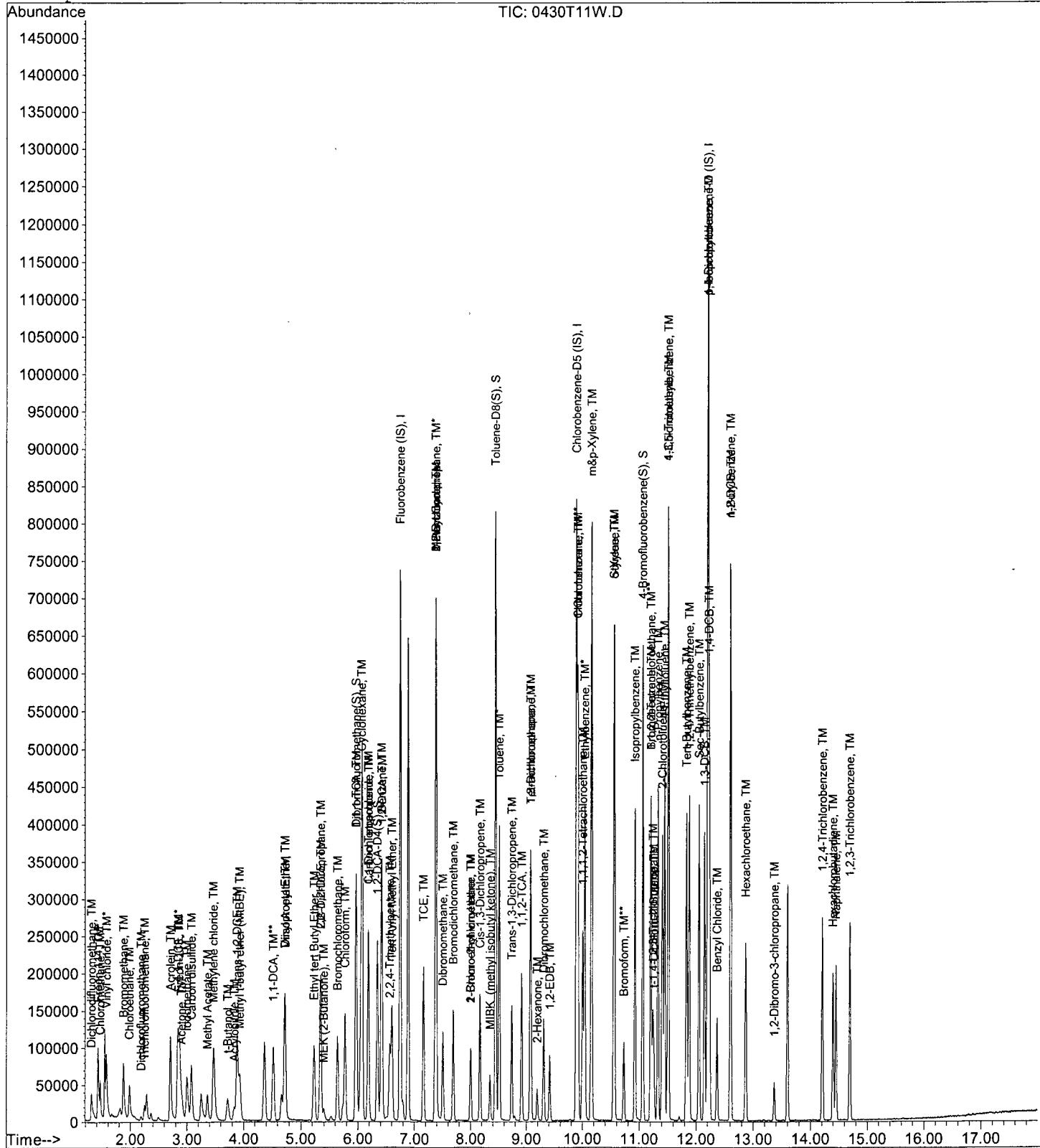
Data File : M:\THOR\DATA\T120430\0430T11W.D
 Acq On : 30 Apr 12 13:06
 Sample : 10ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS: 03-26-12

Vial: 8
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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
 0430T13W.D TALLW.M Tue May 29 16:40:43 2012

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
 0430T13W.D TALLW.M Tue May 29 16:40:45 2012

Quantitation Report

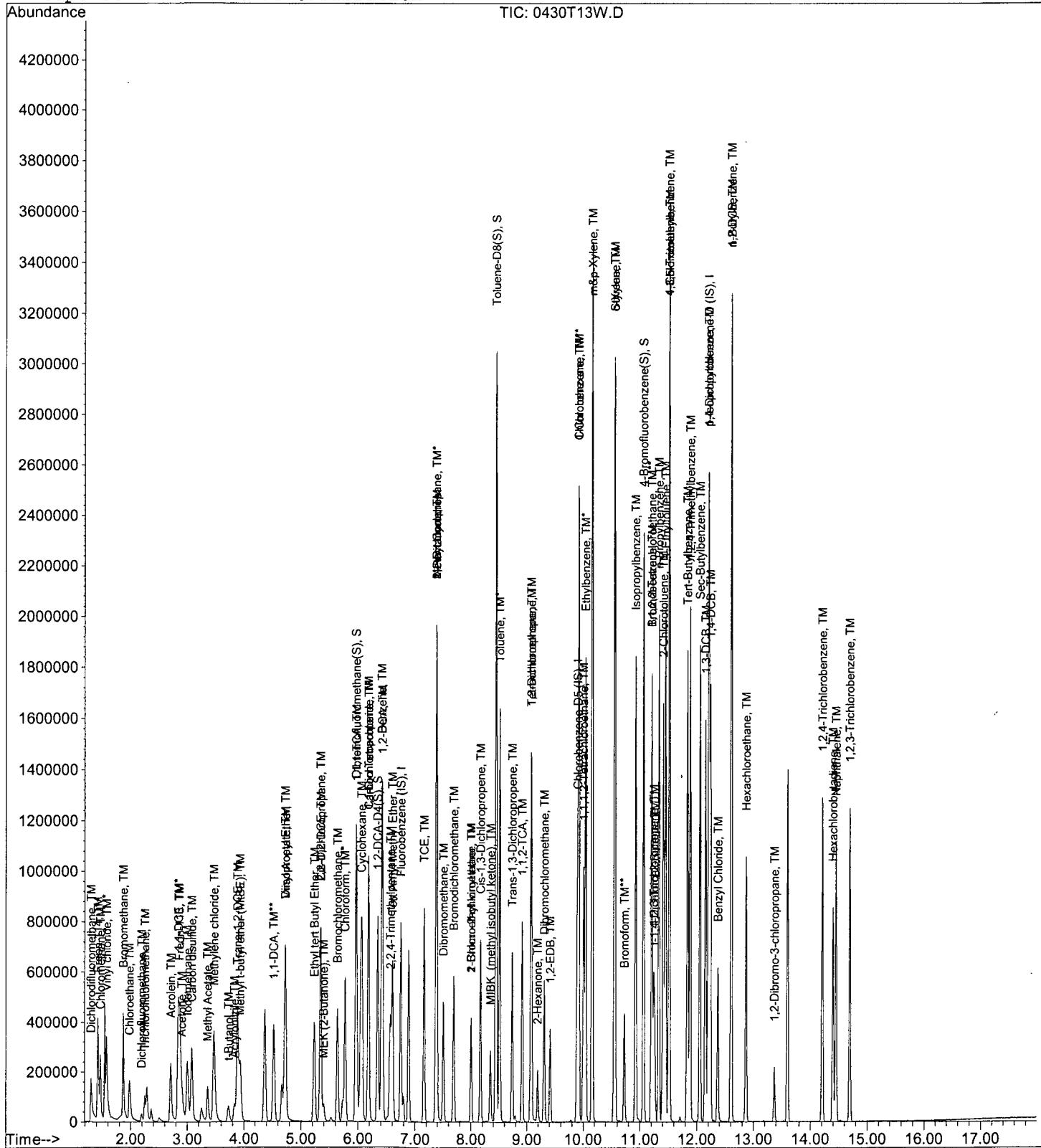
Data File : M:\THOR\DATA\T120430\0430T13W.D
 Acq On : 30 Apr 12 14:02
 Sample : 40ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 10
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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

0430T14W.D TALLW.M Tue May 29 16:40:51 2012

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

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
 0430T14W.D TALLW.M Tue May 29 16:40:53 2012

Quantitation Report

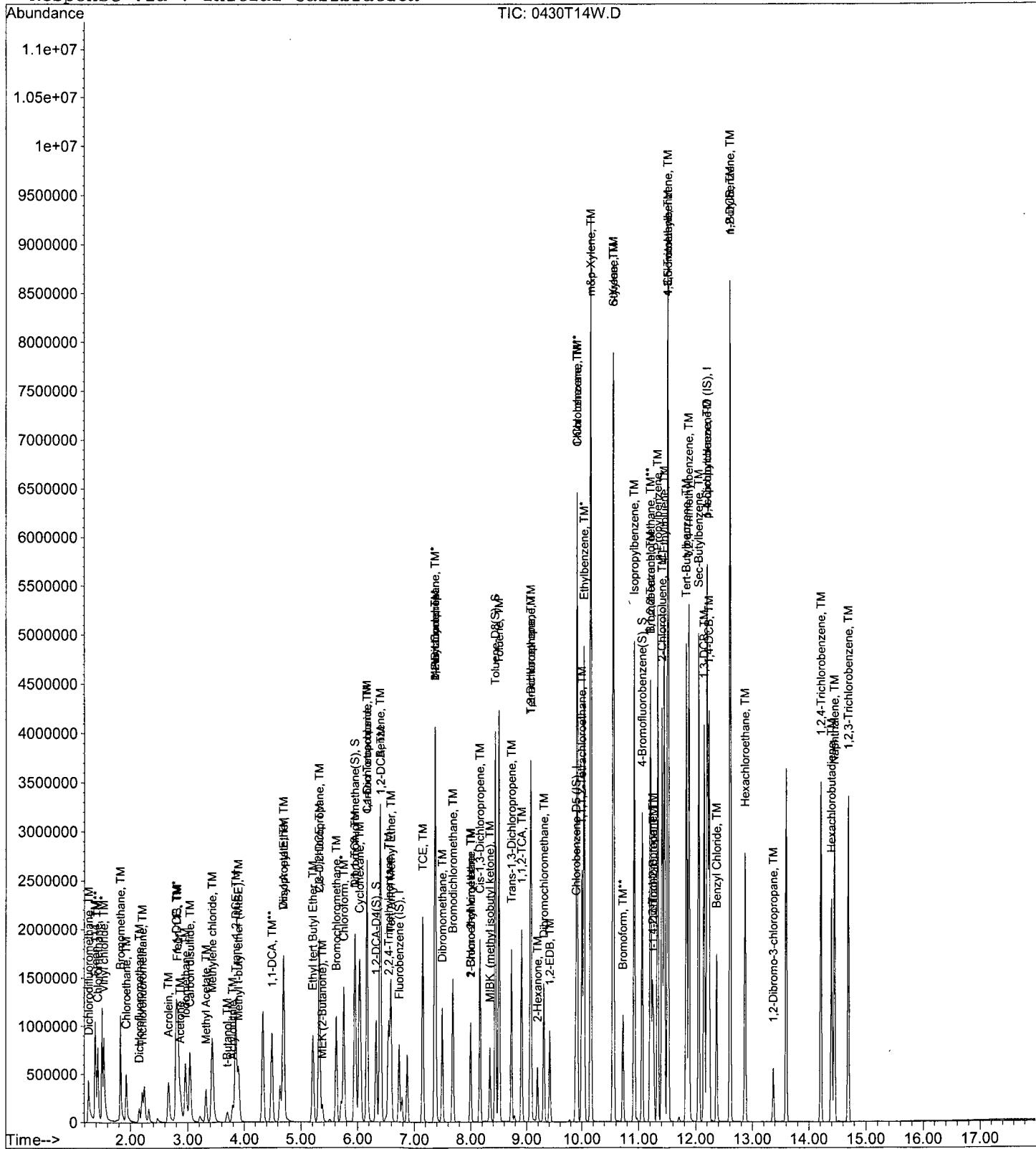
Data File : M:\THOR\DATA\T120430\0430T14W.D
 Acq On : 30 Apr 12 14:29
 Sample : 100ug/L VOC STD 4-30-12
 Misc : 10ml w/5ul of IS&S: 03-26-12

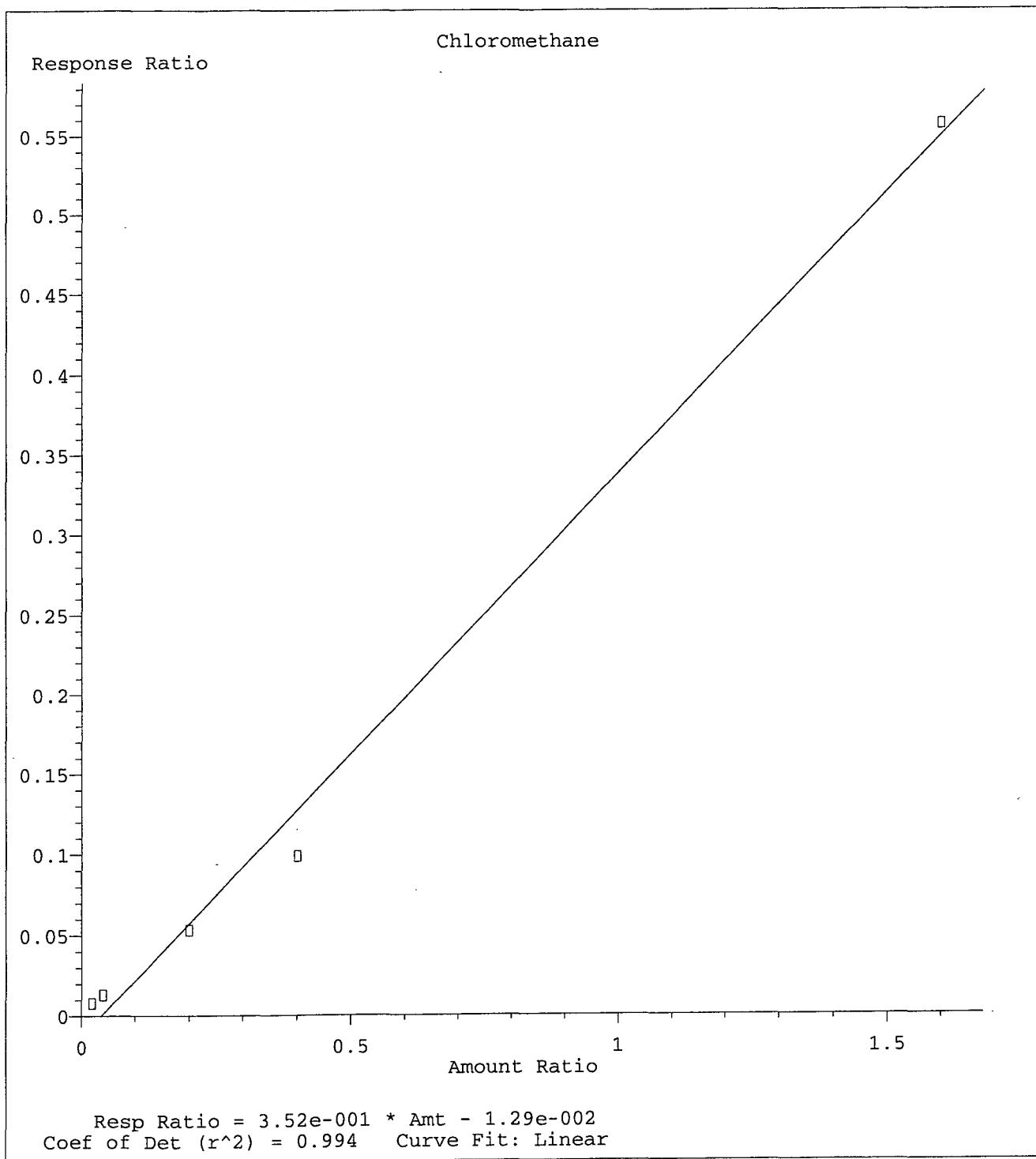
Vial: 11
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 Multiplr: 1.00

Quant Time: May 1 9:07 2012

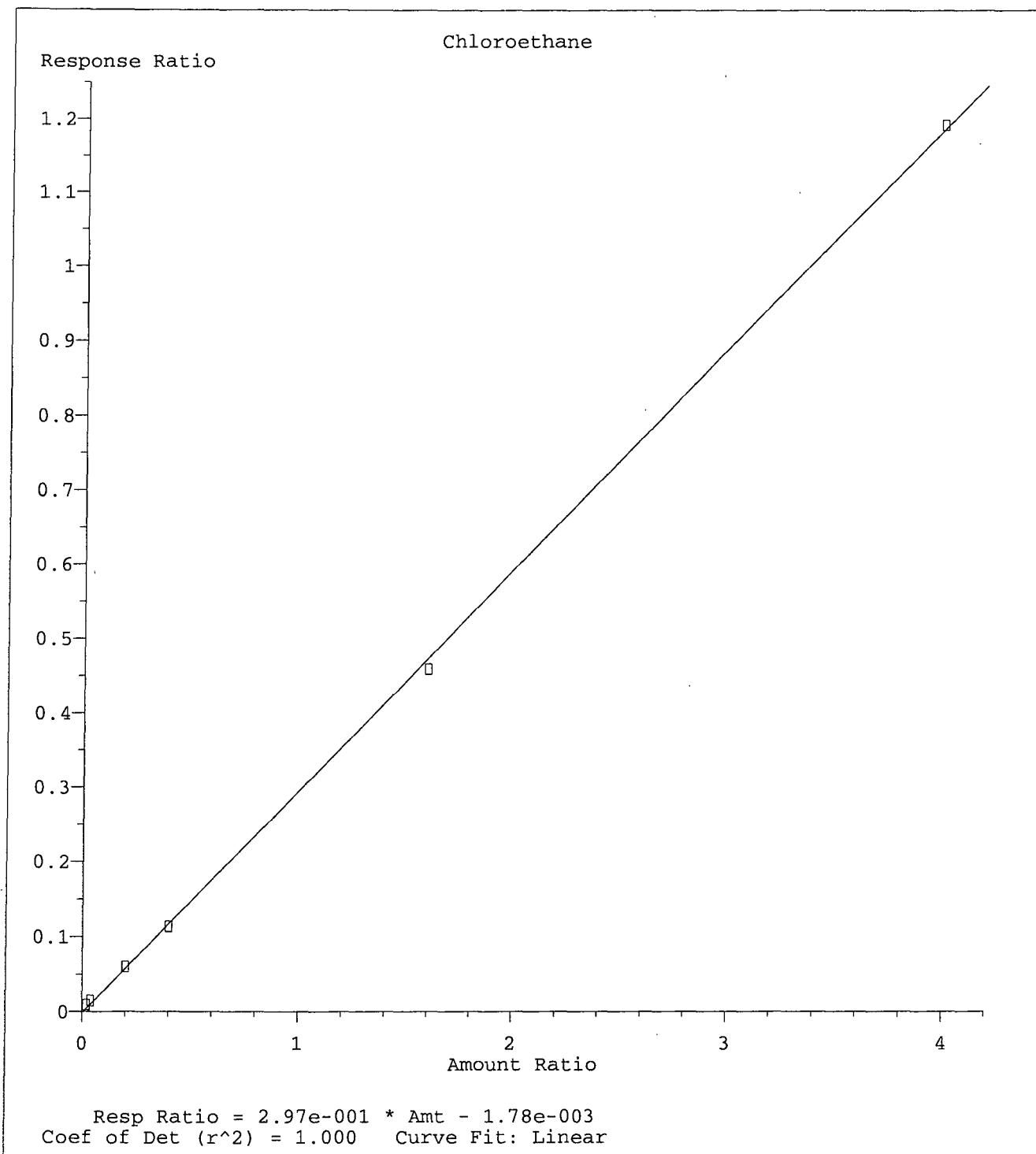
Quant Results File: TALLW.RES

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

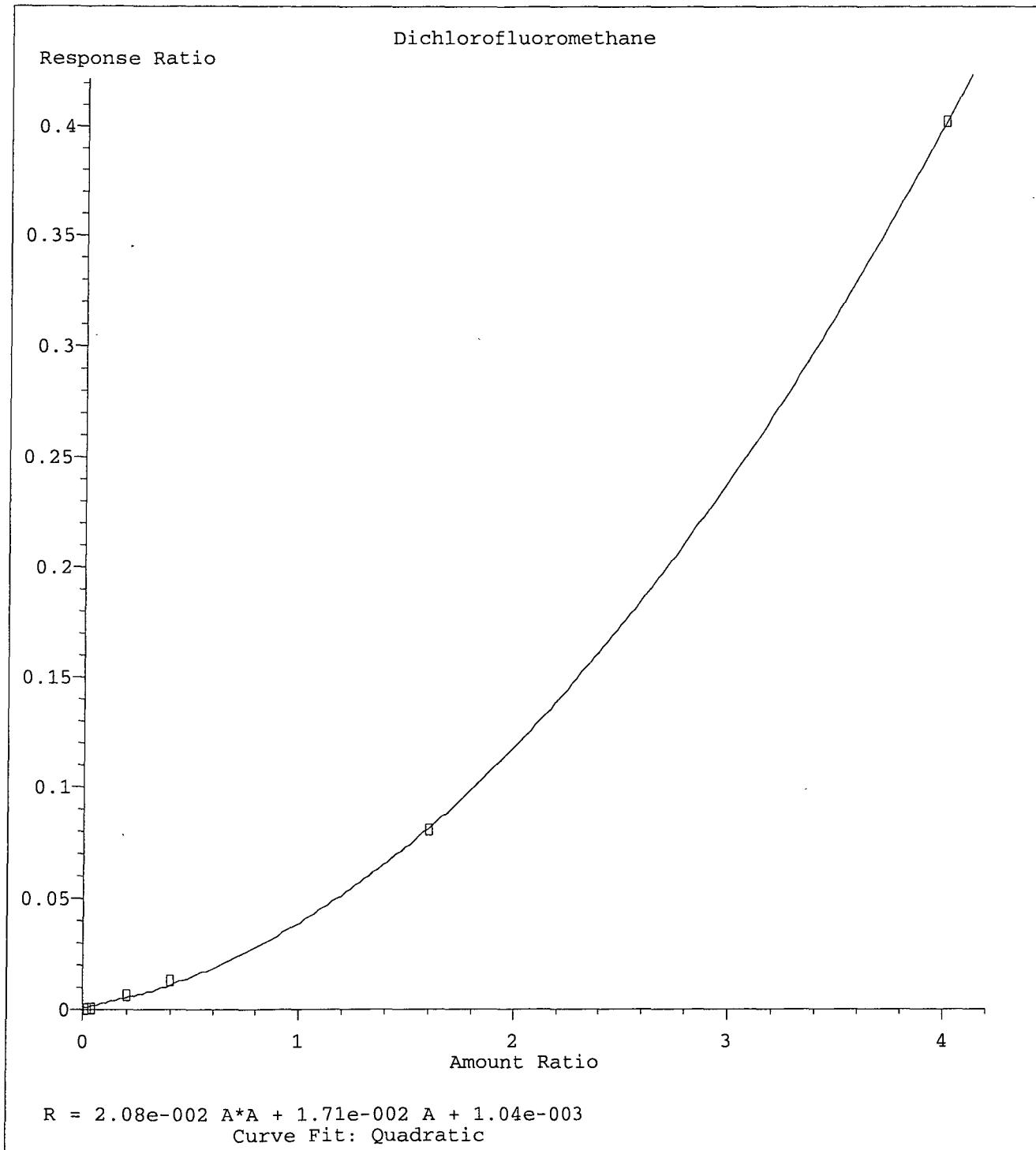




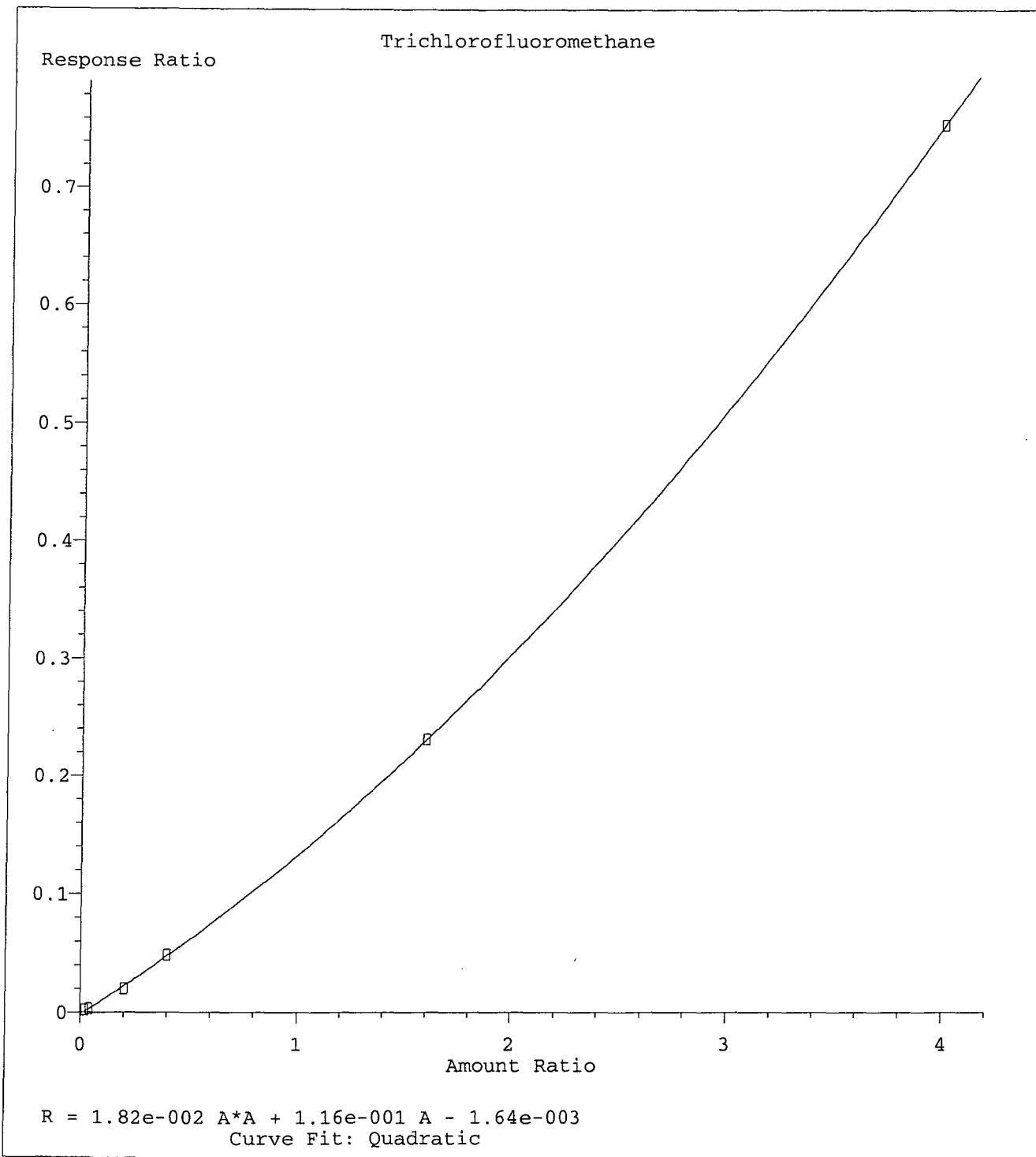
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



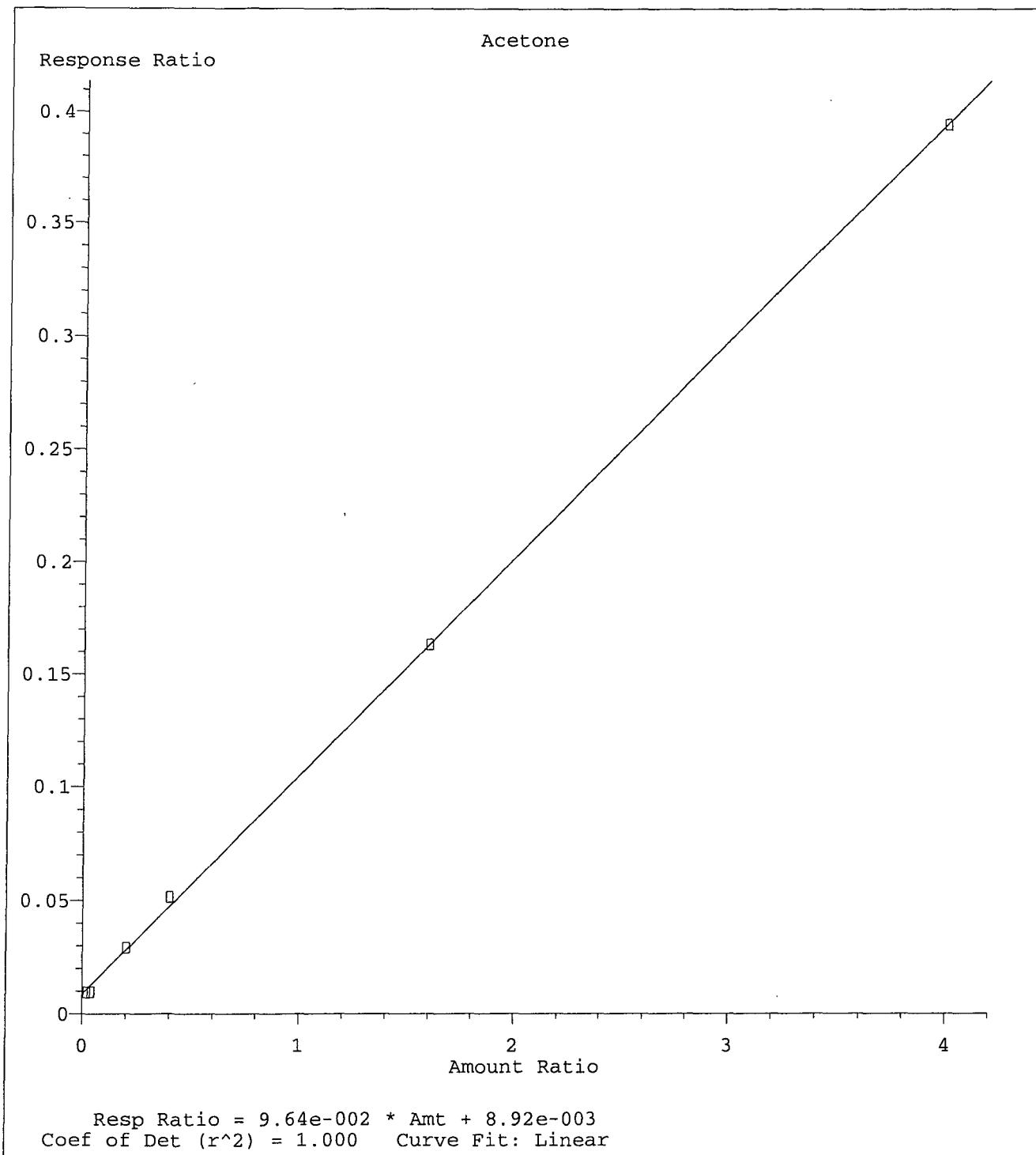
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



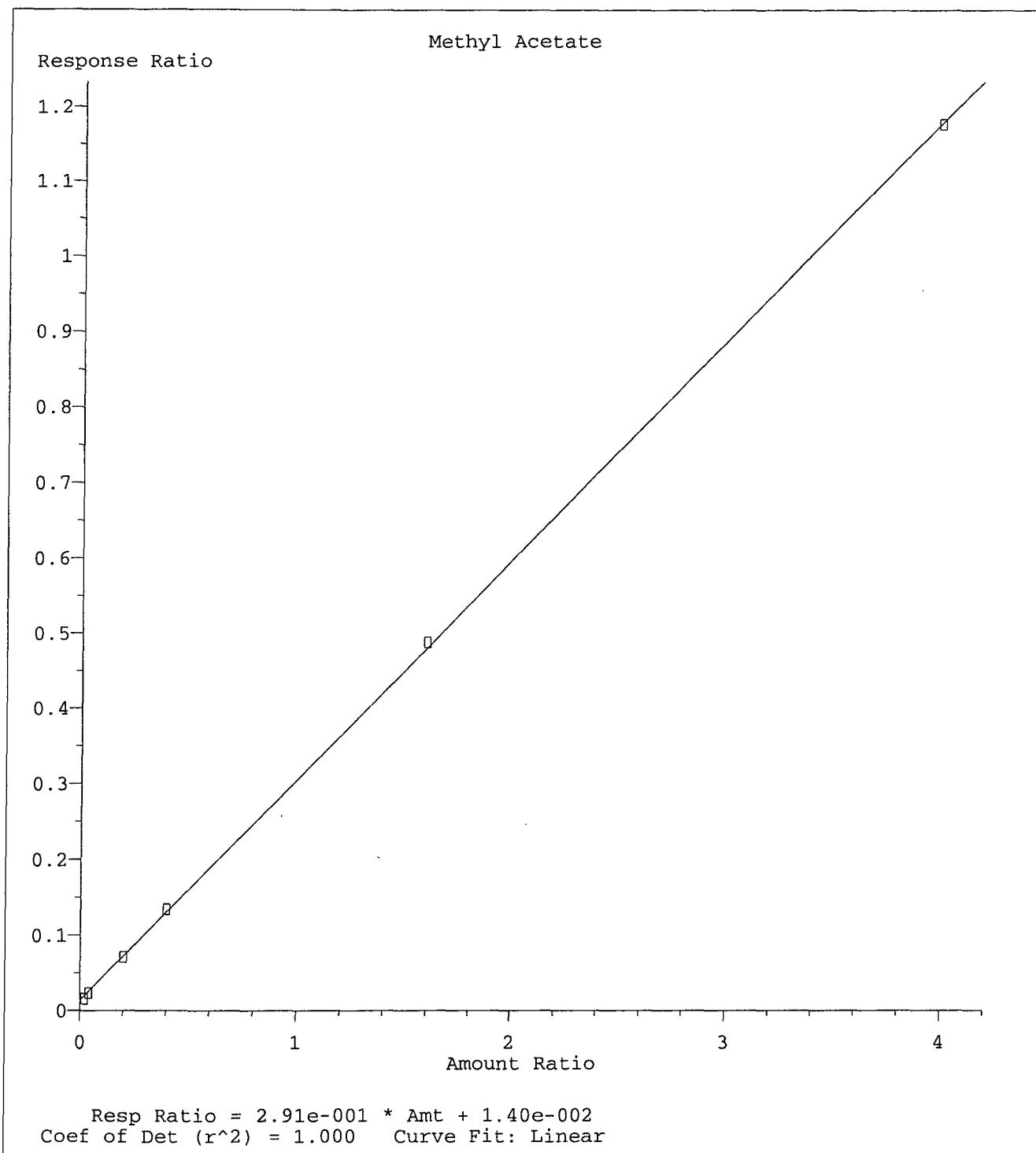
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



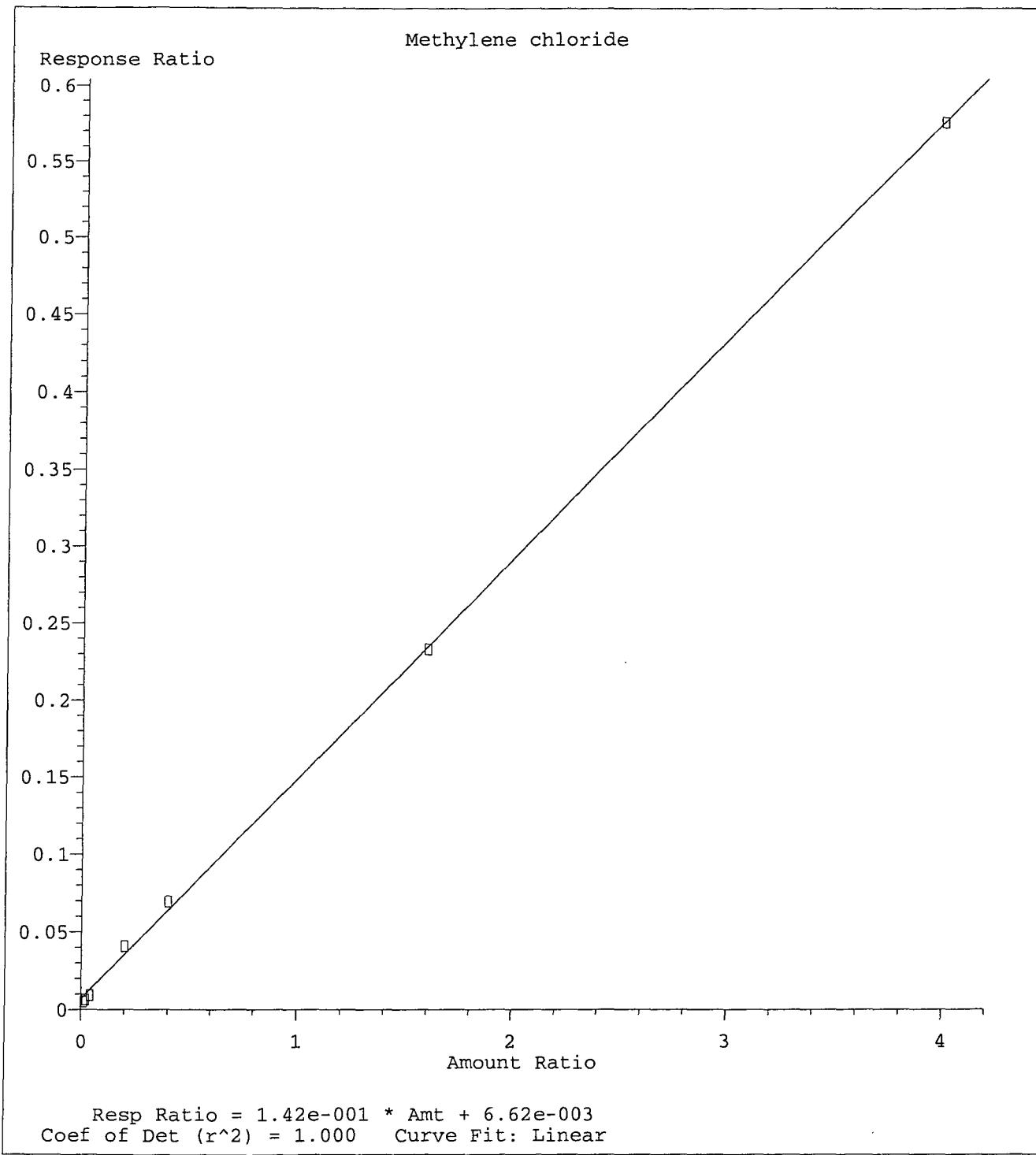
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



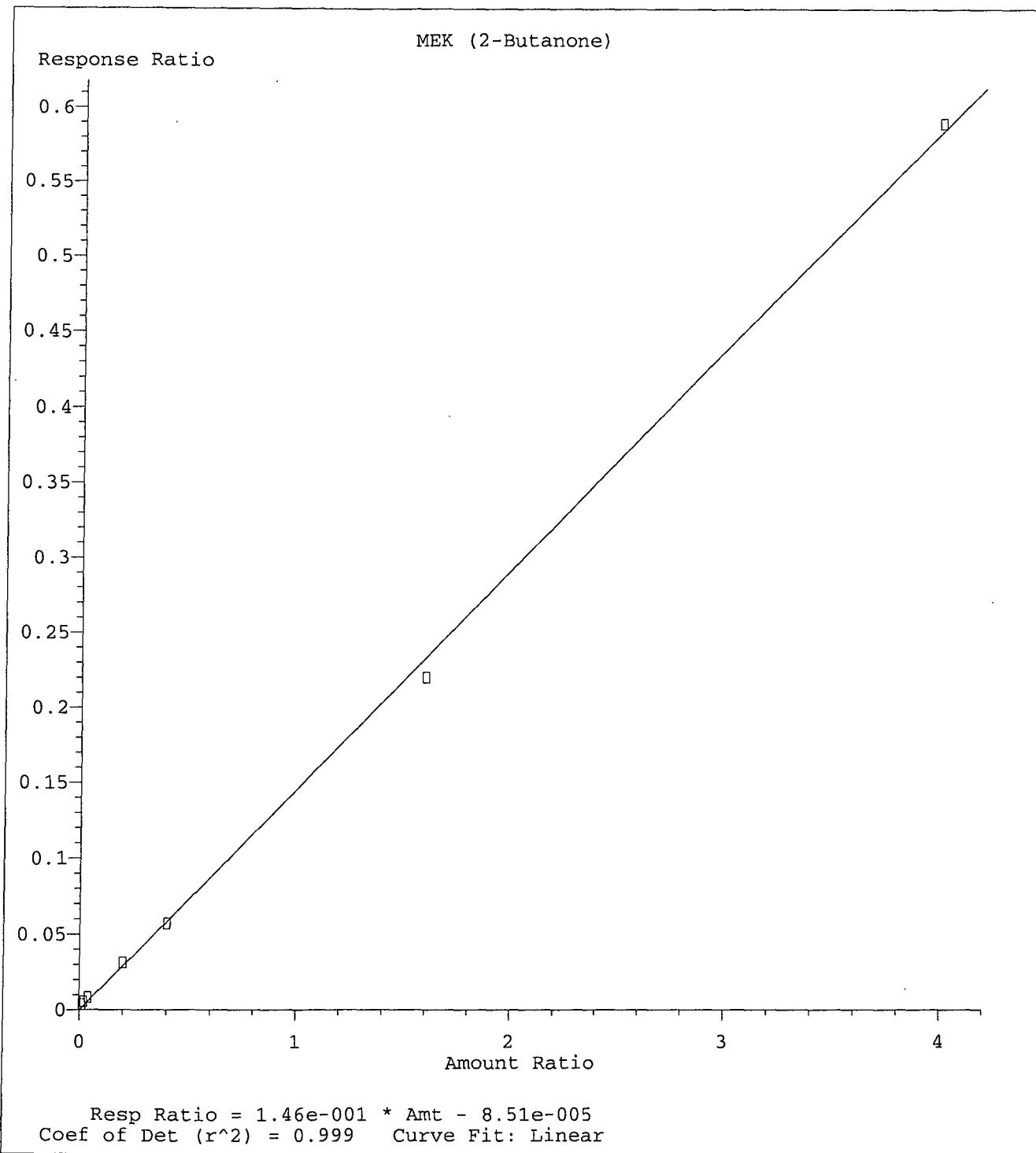
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



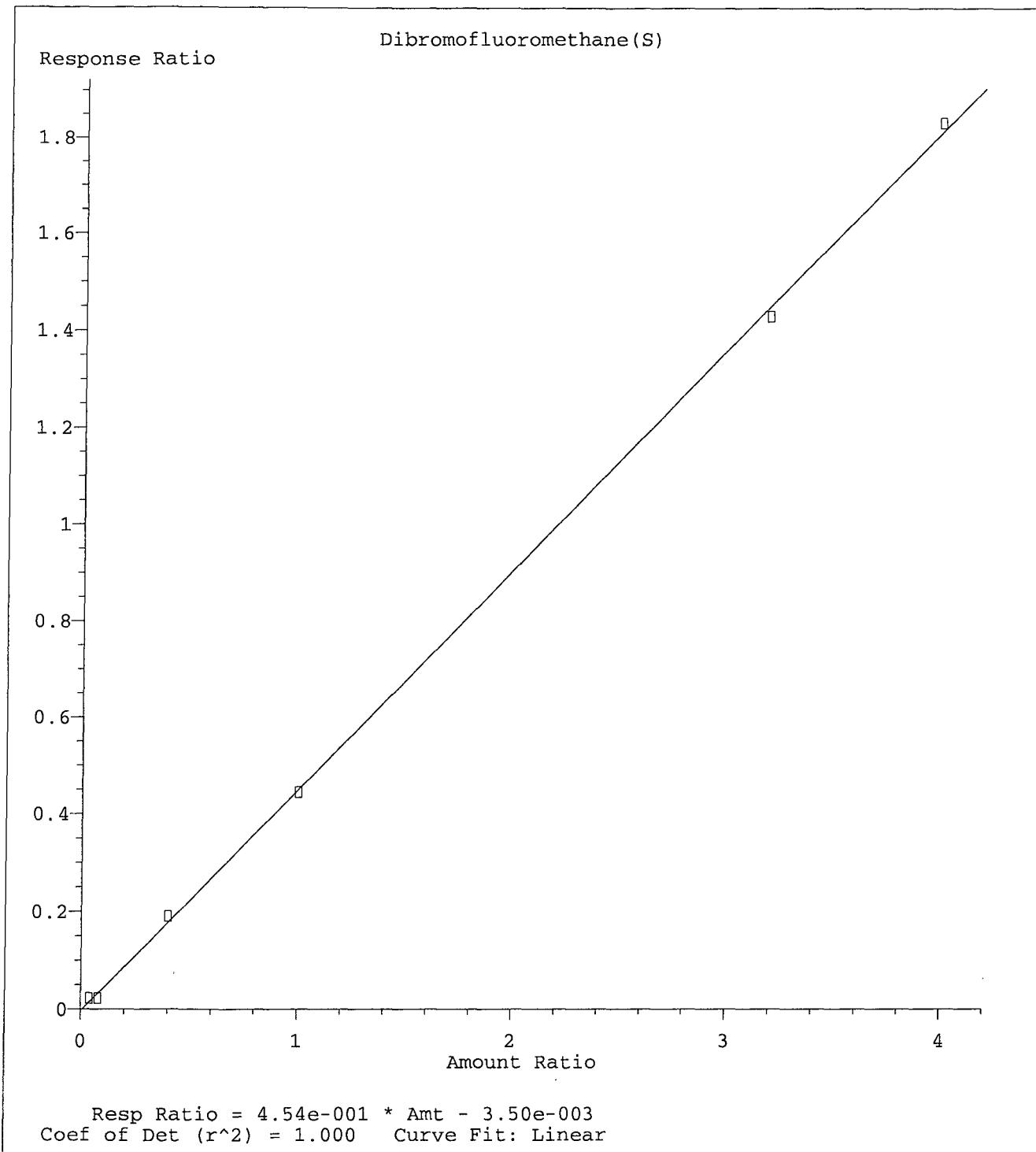
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



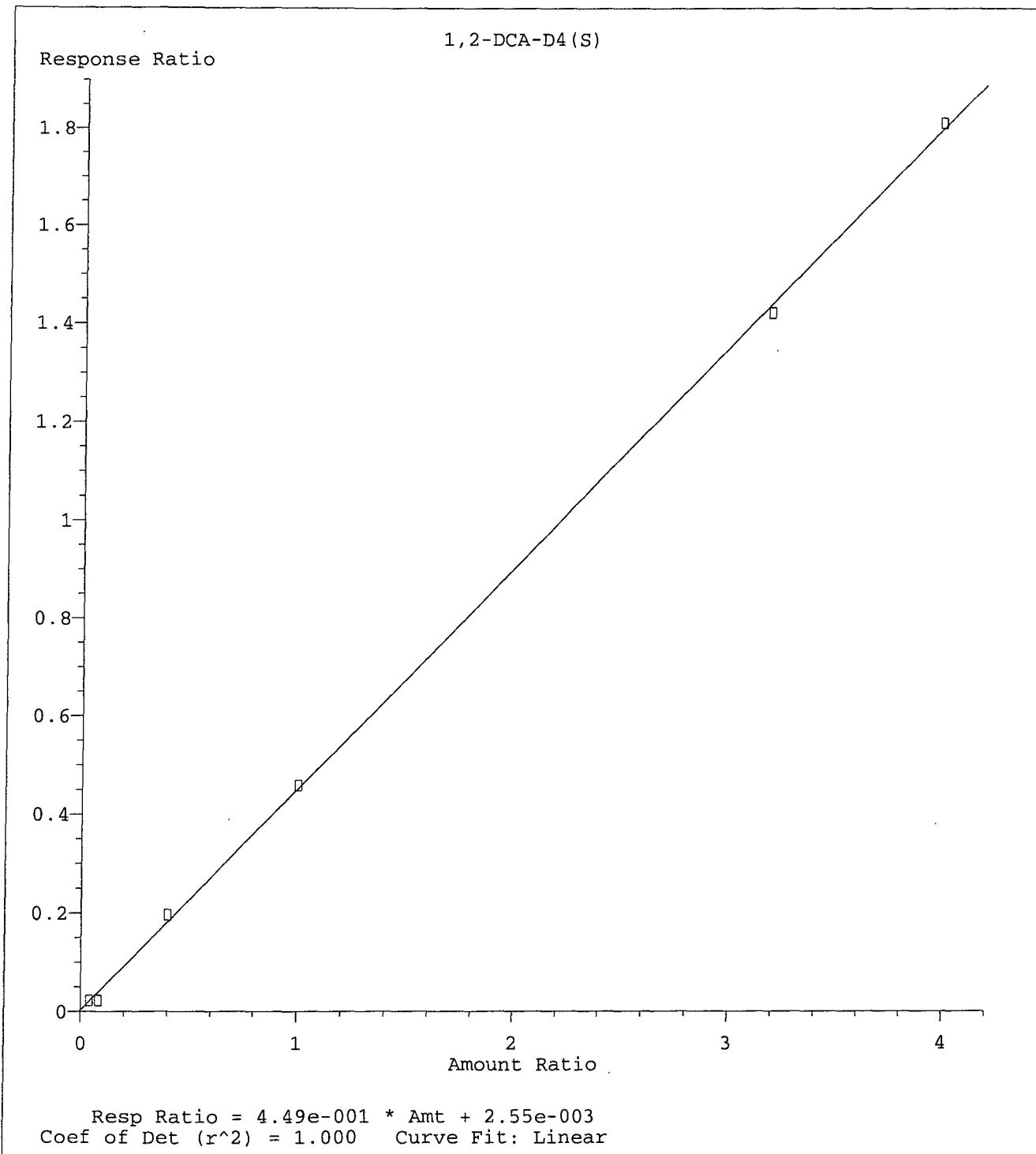
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



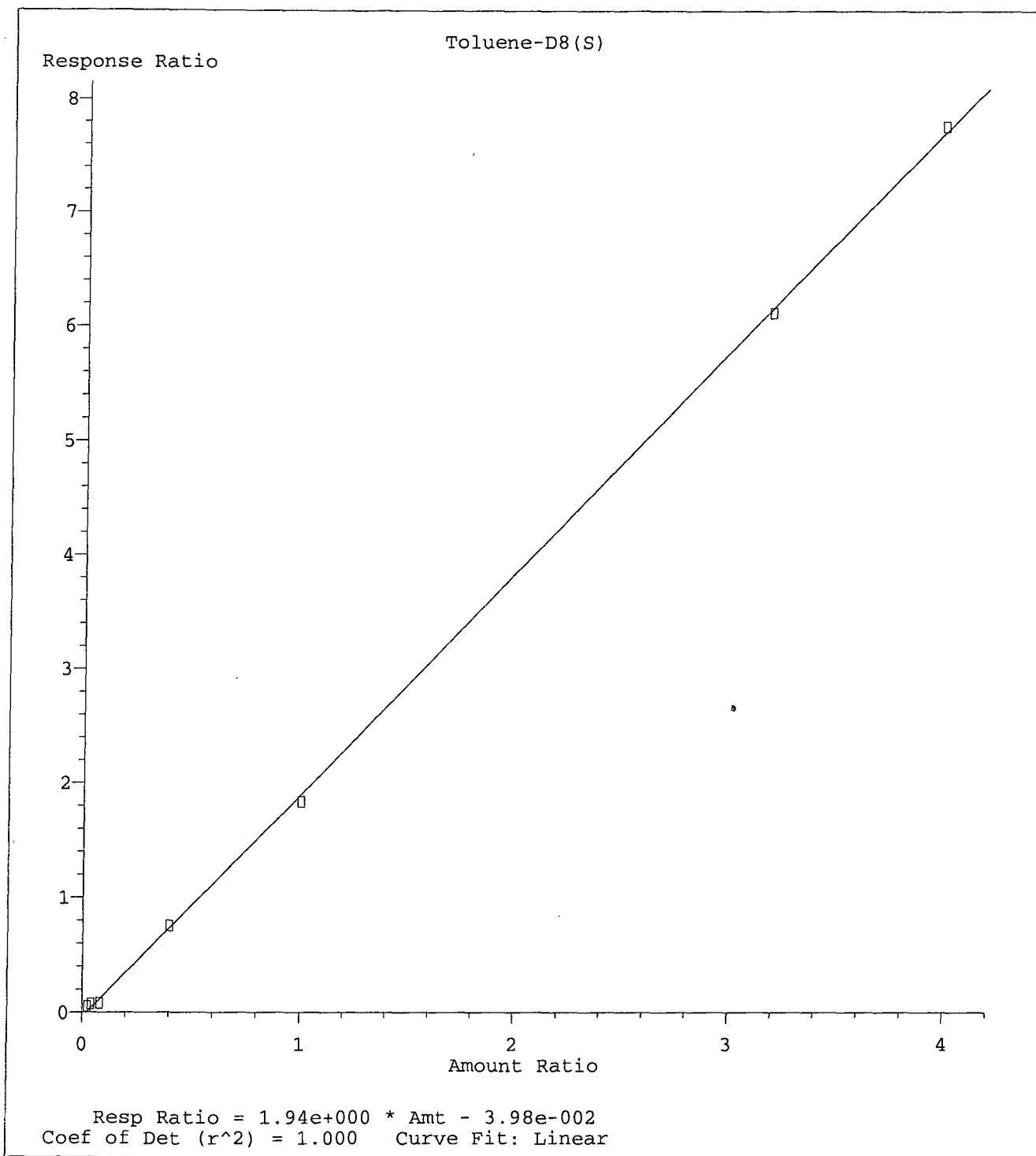
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



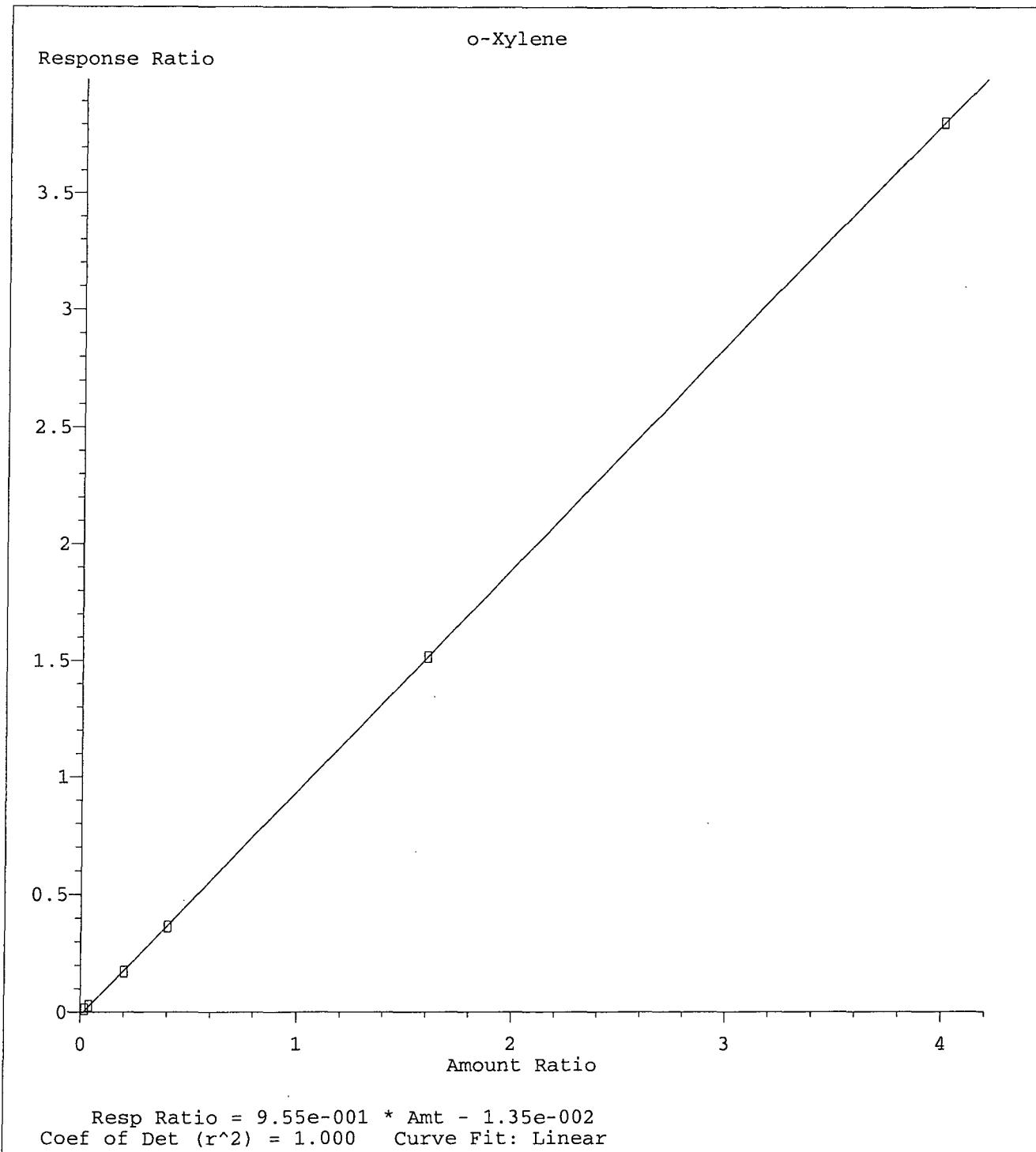
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



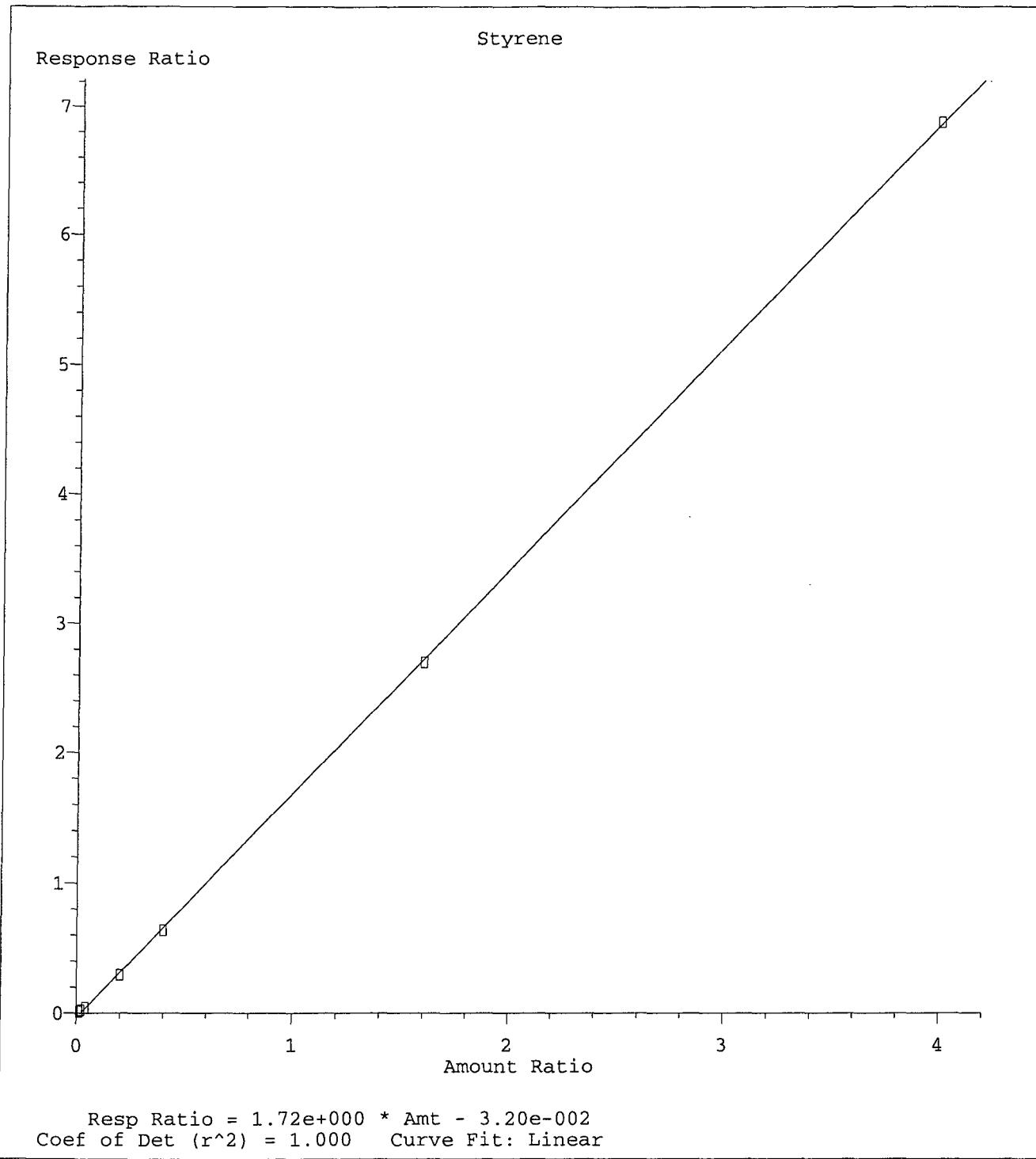
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



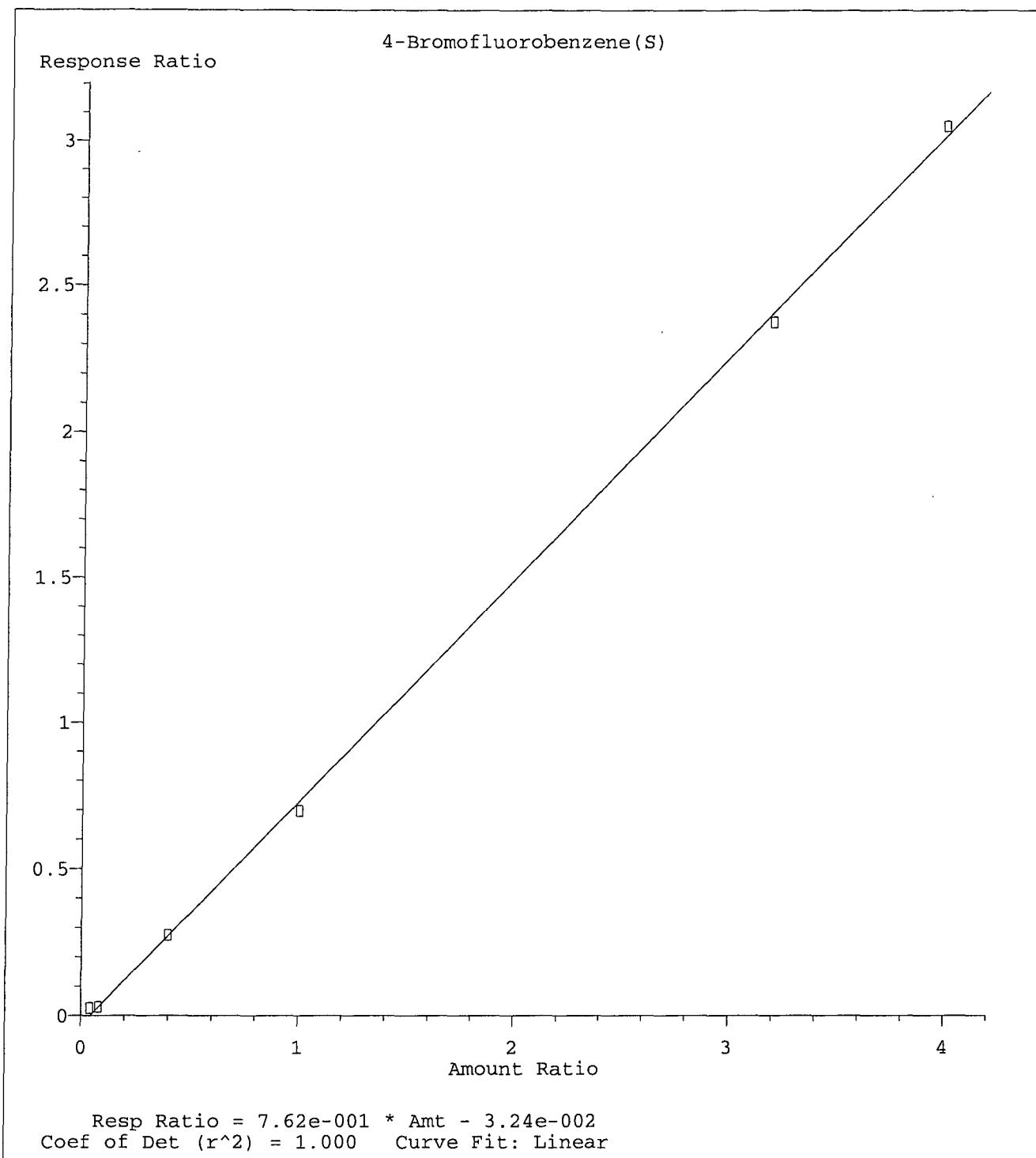
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



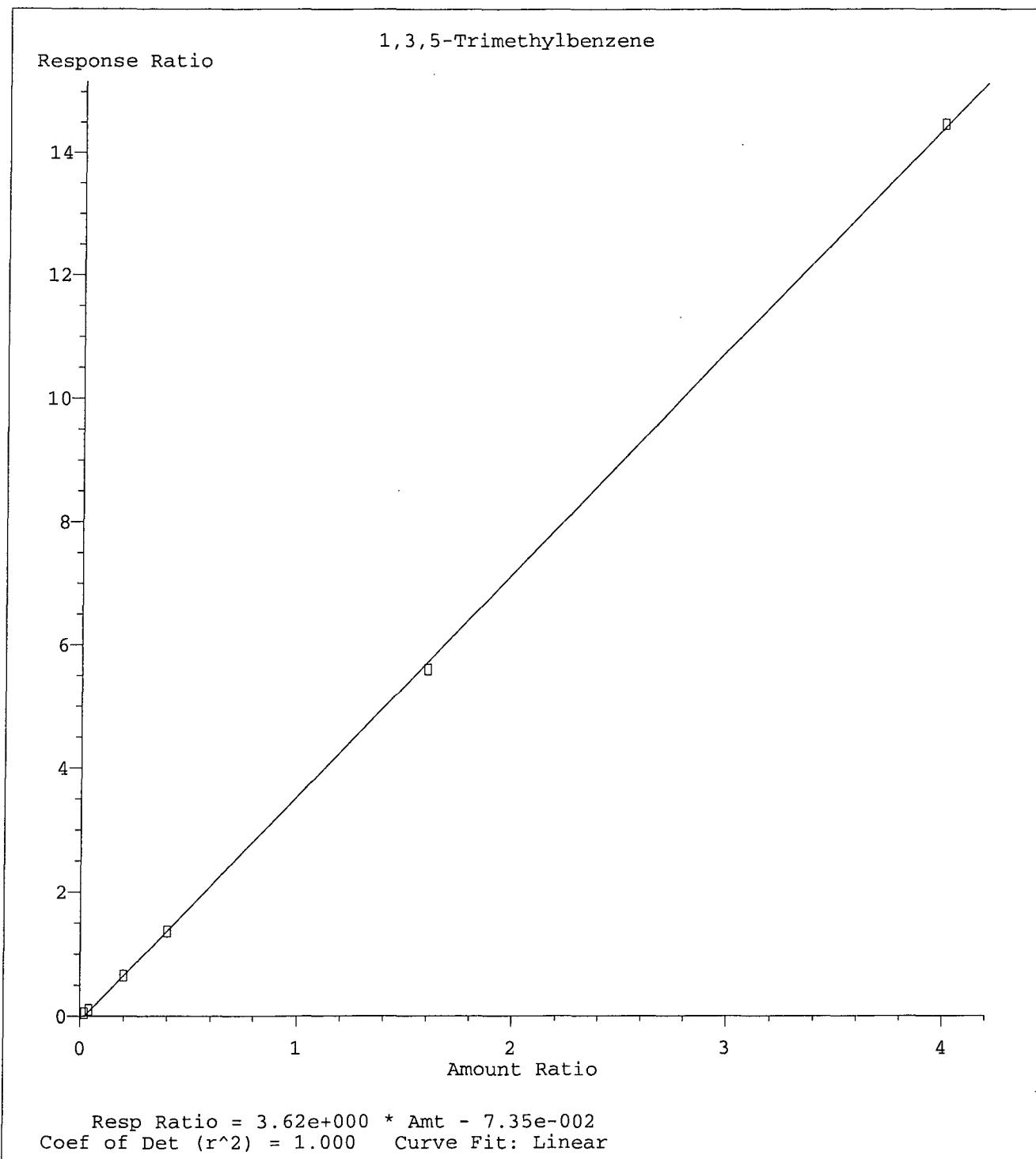
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



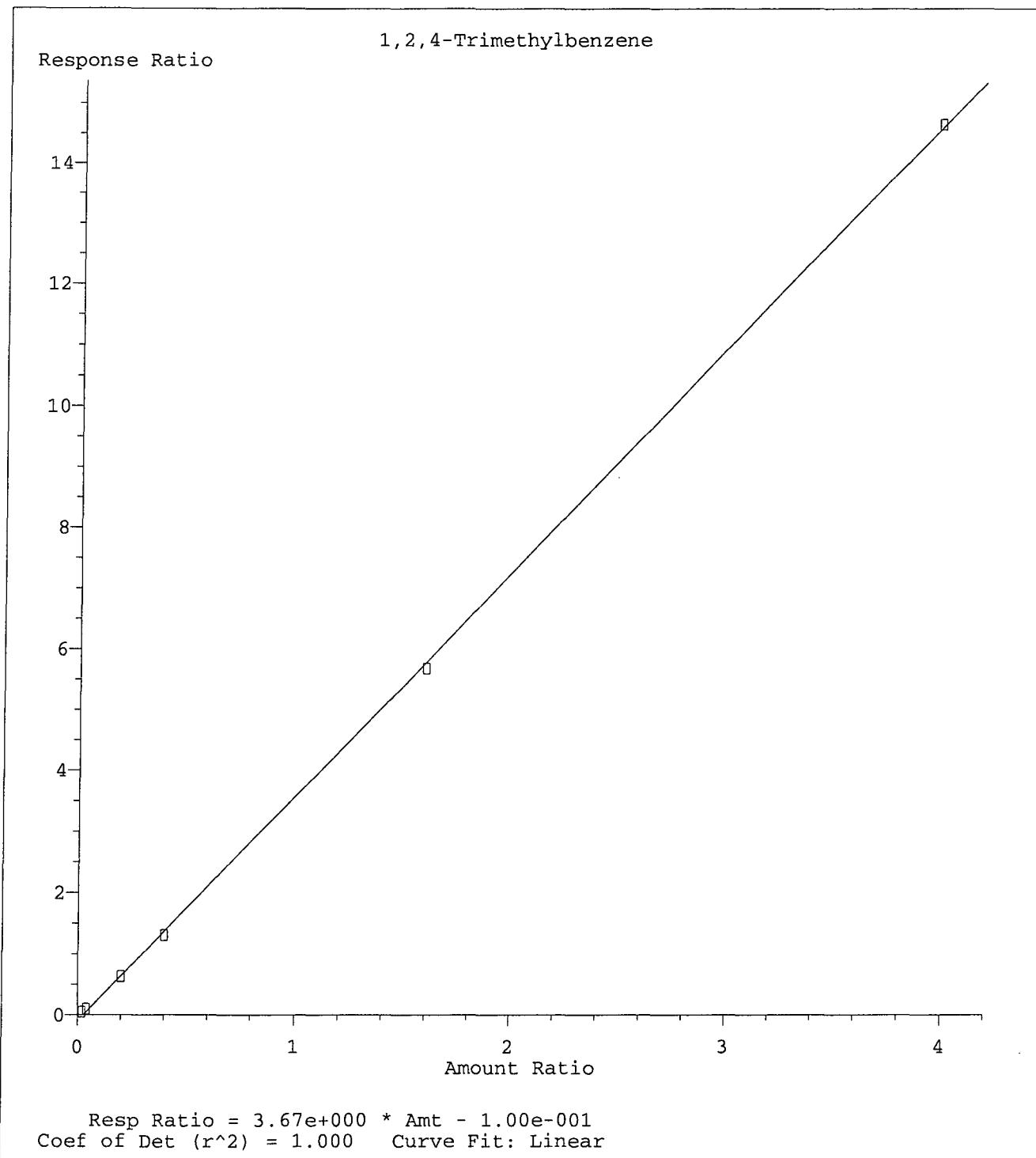
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



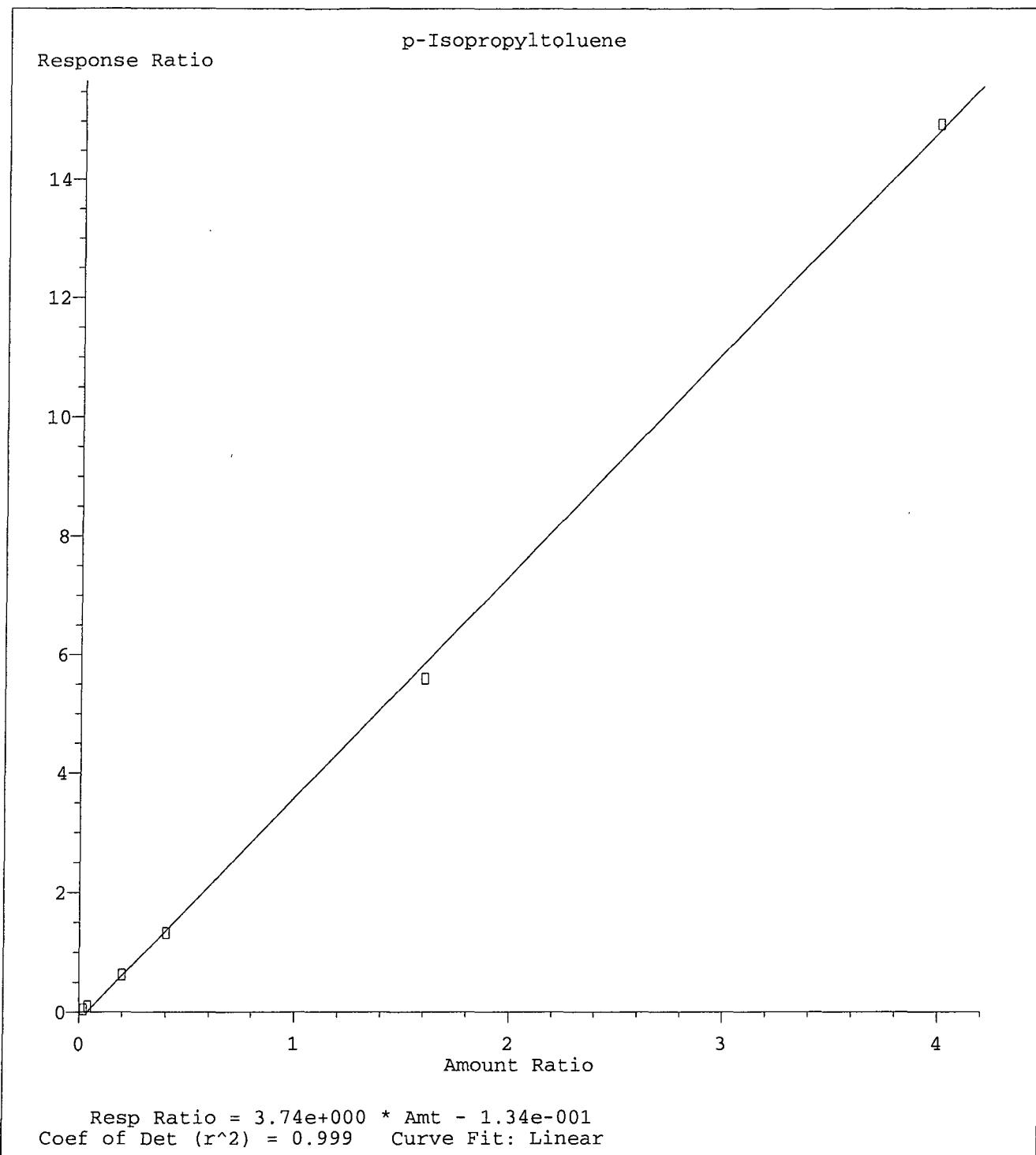
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



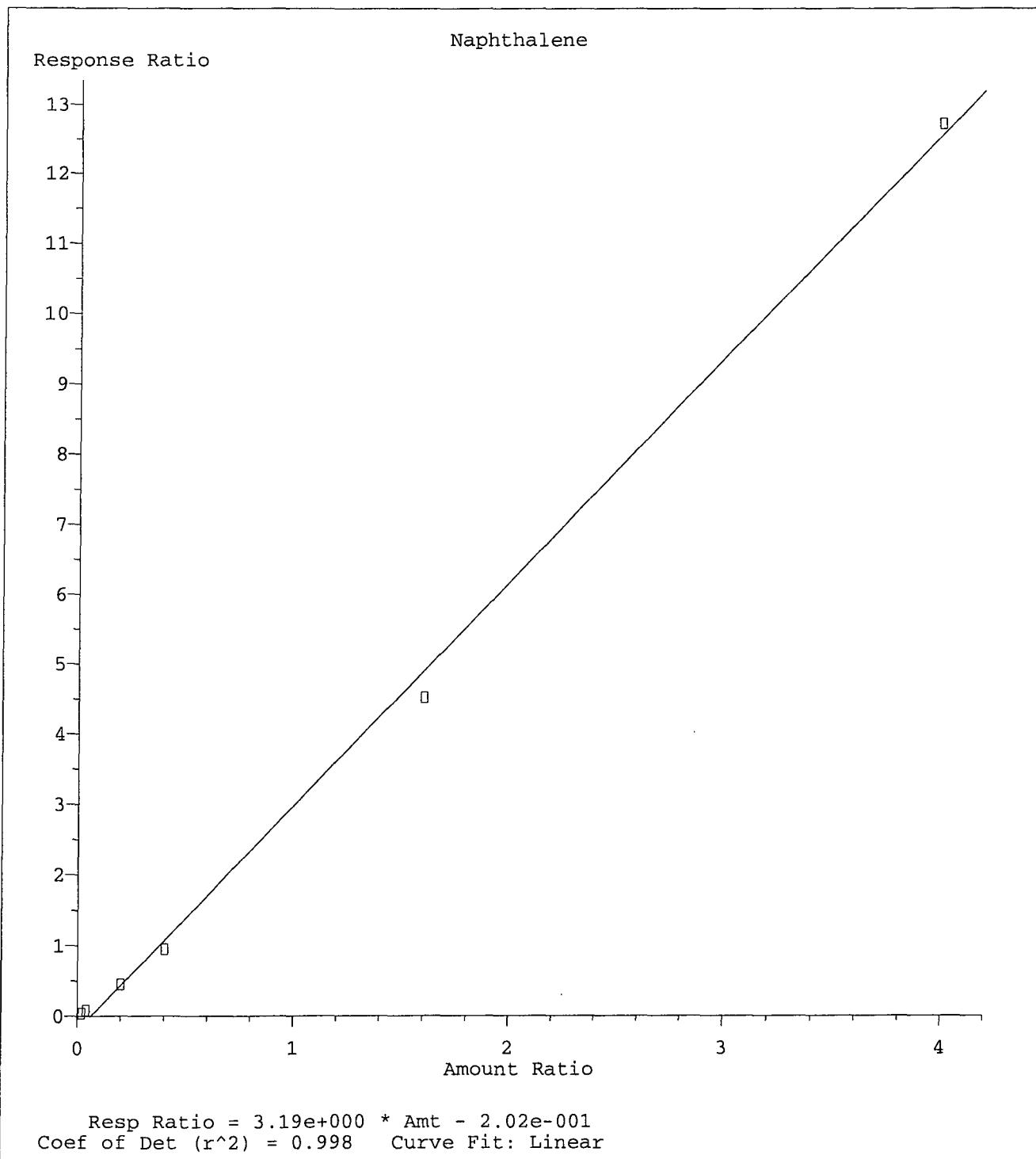
Method Name: M:\THOR\DATA\T120430\TALLW.M
Calibration Table Last Updated: Mon May 21 10:05:30 2012



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
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
8	TMQ	Dichlorofluoromethane	0.0409	0.0299	27	TMQ
9	TMQ	Trichlorofluoromethane	0.1230	0.1133	7.9	TMQ
10	TM	Acrolein	0.0477	0.0488	2.2	TM
11	TML	Acetone	0.1978	0.1263	36	TML
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
15	TML	Methyl Acetate	0.4445	0.3293	26	TML
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
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
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
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
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

ARCS 5/28/12

**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

MR 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
83	TM	Sec-Butylbenzene	3.658	3.904	6.7	TM
84	TML	p-Isopropyltoluene	3.061	3.267	6.7	TML
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
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	<u>377344</u>	<u>25.00000 ppb</u>	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

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	<u>78412</u>	<u>10.47351 ppb</u>	99
6) Bromomethane	1.88	94	47596	<u>8.66748 ppb</u>	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: $\frac{(78412)(25)}{(377344)(0.49603)}$ (1) = 10.473508 ✓
 Value ARS 5/29/12

(#) = qualifier out of range (m) = manual integration
 0430T20W.D TALLW.M Tue May 29 16:40:59 2012

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
 0430T20W.D TALLW.M Tue May 29 16:41:01 2012

Quantitation Report

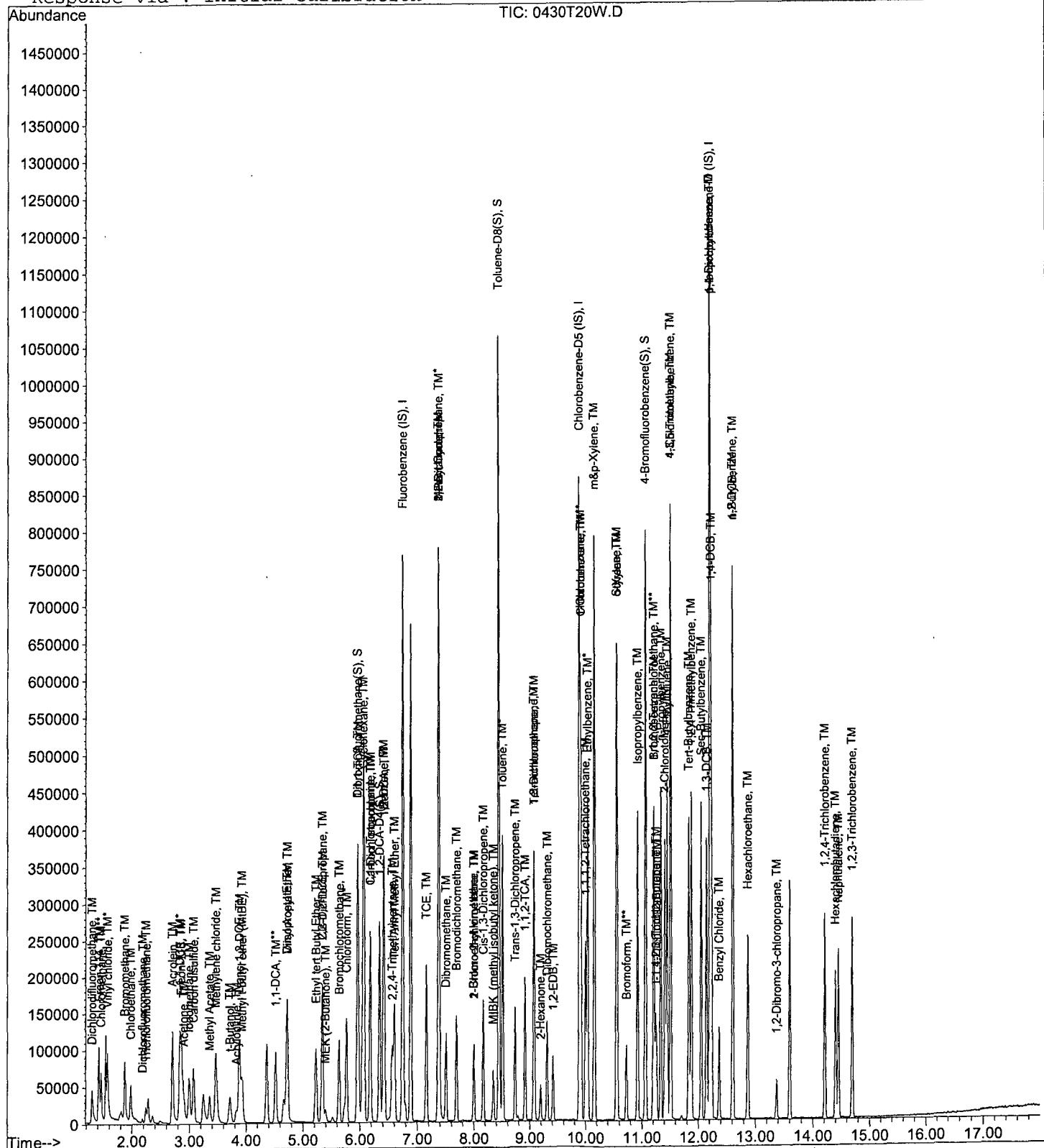
Data File : M:\THOR\DATA\T120430\0430T20W.D
 Acq On : 30 Apr 12 17:16
 Sample : 120430A LCS-1WT (SS)
 Misc : 10ml w/5ul of IS&S: 03-26-12

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



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			
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
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
8	TMQ	Dichlorofluoromethane	0.0409	0.0305	26	TMQ
9	TMQ	Trichlorofluoromethane	0.1230	0.1208	1.8	TMQ
10	TM	Acrolein	0.0477	0.0491	2.9	TM
11	TML	Acetone	0.1978	0.1187	40	TML
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
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
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
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
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
36	SL	1,2-DCA-D4(S)	0.4472	0.4894	9.4	SL
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

APL 5/29/12

*NT

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

ARSS/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
83	TM	Sec-Butylbenzene	3.658	4.043	11	TM
84	TML	p-Isopropyltoluene	3.061	3.334	8.9	TML
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
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						
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

0501T03W.D TALLW.M Tue May 29 16:38:09 2012 344

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T03W.D
 Acq On : 1 May 12 9:52
 Sample : 10ug/L Vol Std 05-01-12
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 3
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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
 0501T03W.D TALLW.M Tue May 29 16:38:10 2012

Quantitation Report

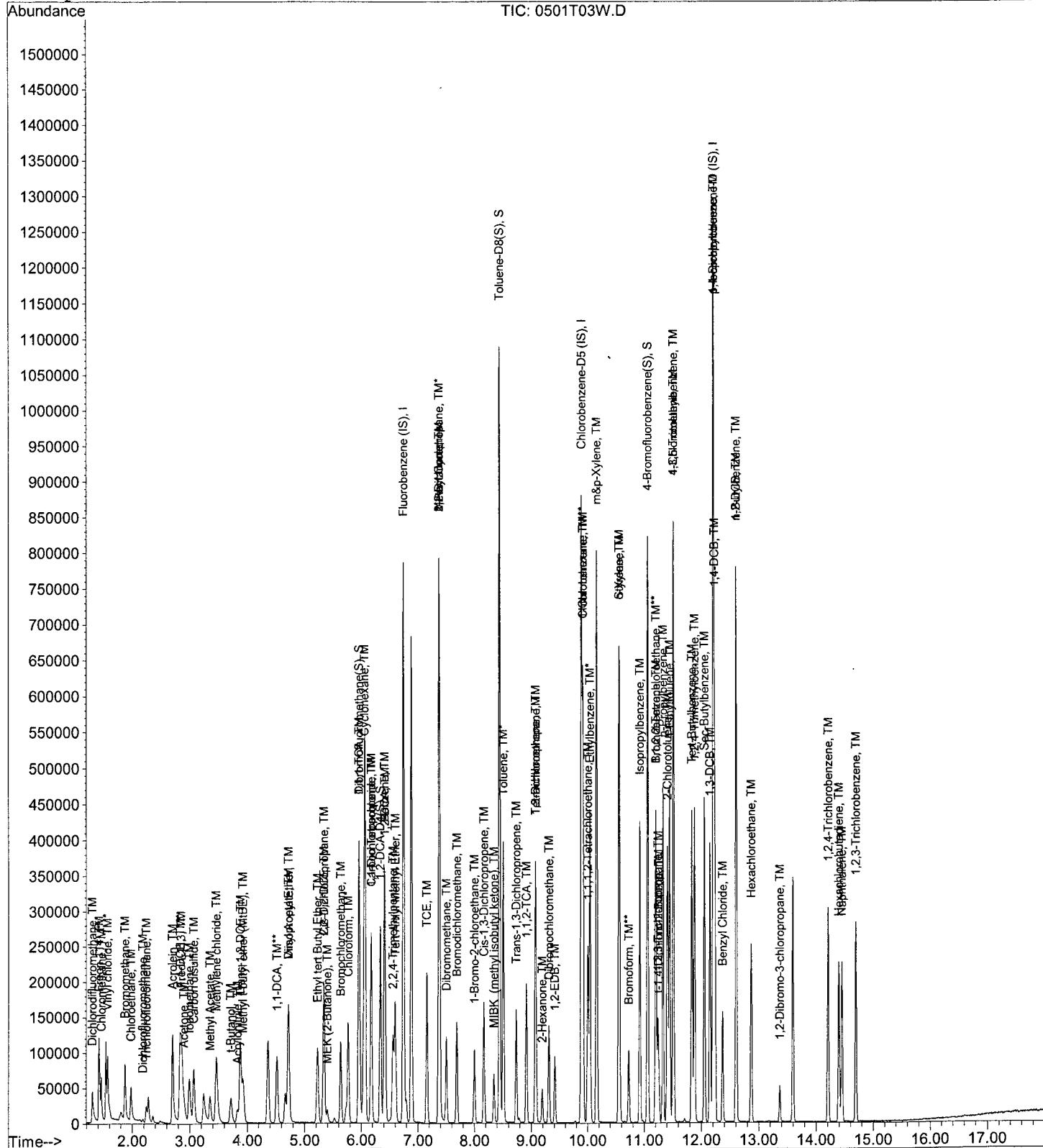
Data File : M:\THOR\DATA\T120430\0501T03W.D
 Acq On : 1 May 12 9:52
 Sample : 10ug/L Vol Std 05-01-12
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 3
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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 Avenue
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
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
Multipllr: 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.

Mrs 5/1/12

Quantitation Report

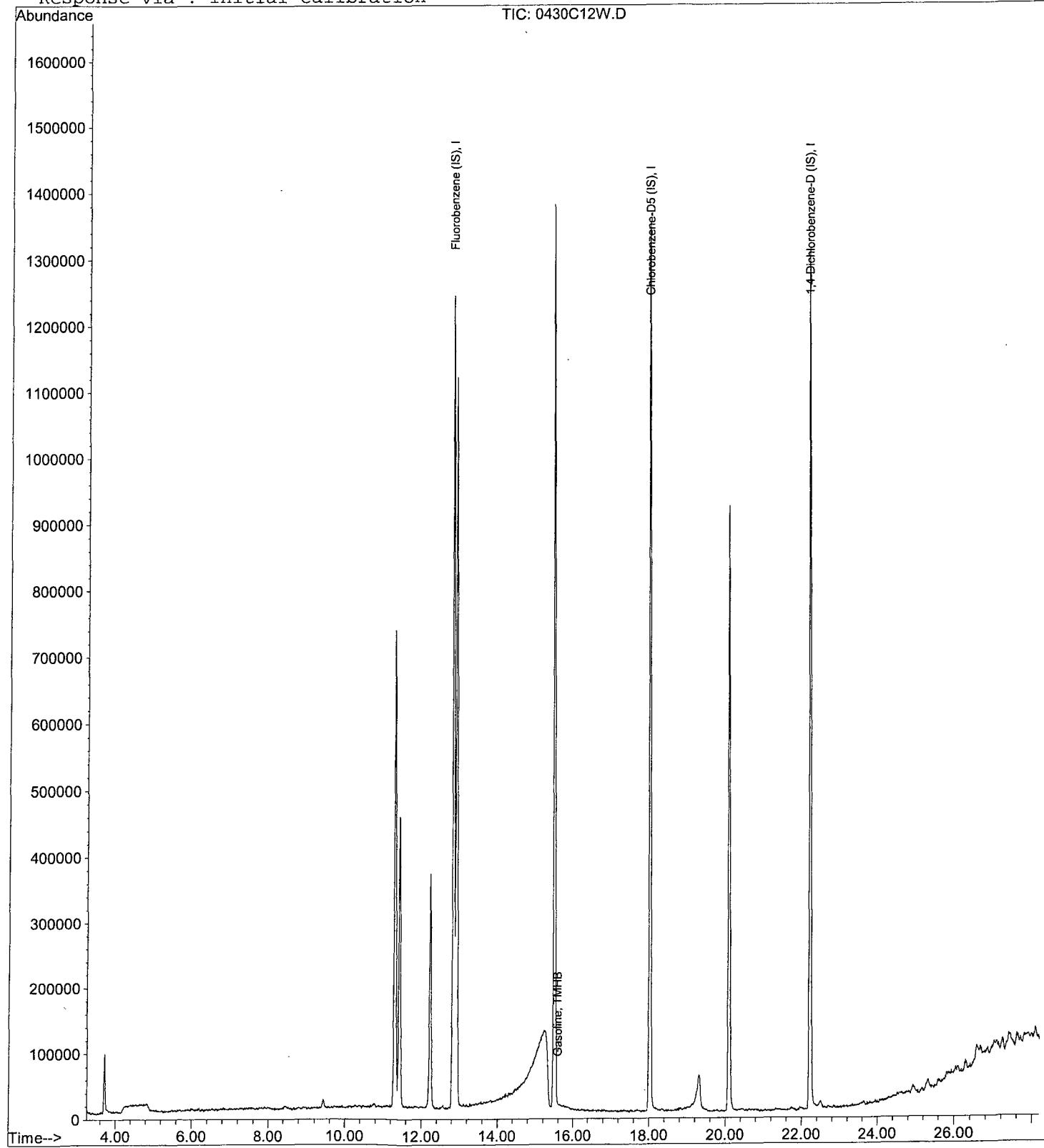
Data File : M:\CHICO\DATA\C120420\0430C12W.D
Acq On : 30 Apr 12 16:46
Sample : 120430A BLK-1WC
Misc : Water 10mL w/IS&S:04-10-12

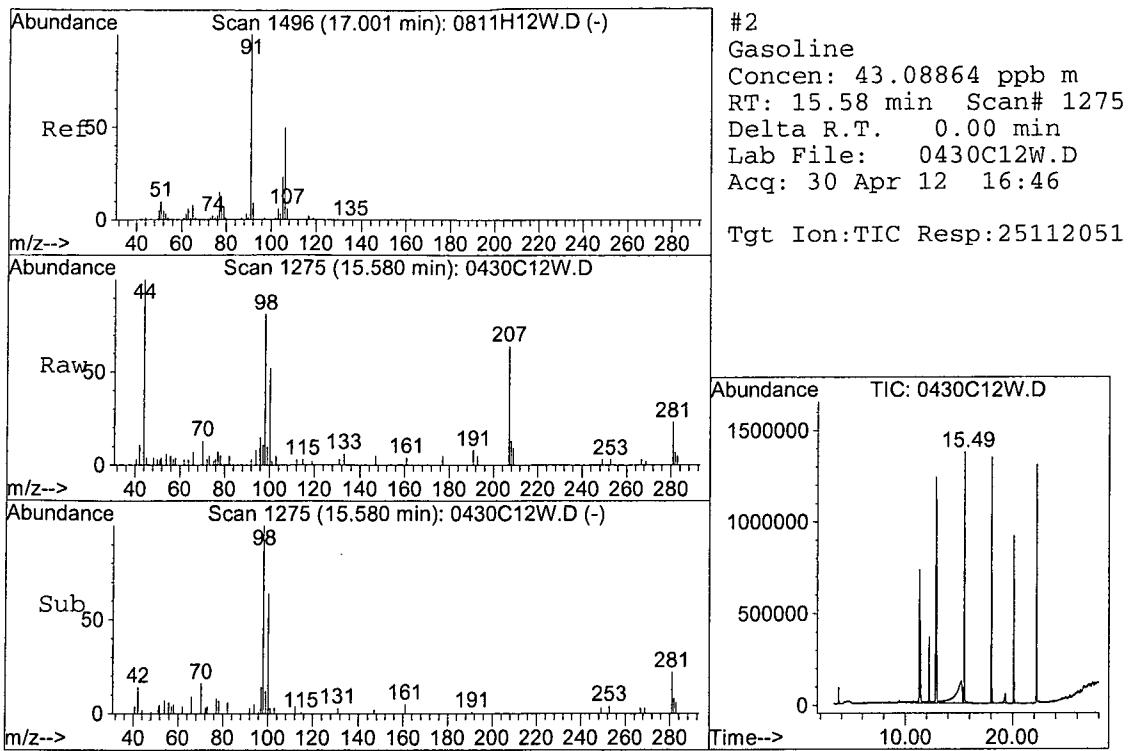
Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

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





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						
25) Vinyl Acetate	9.44	43	2112	1.07231	ppb	76

APR 5/1/12

Quantitation Report

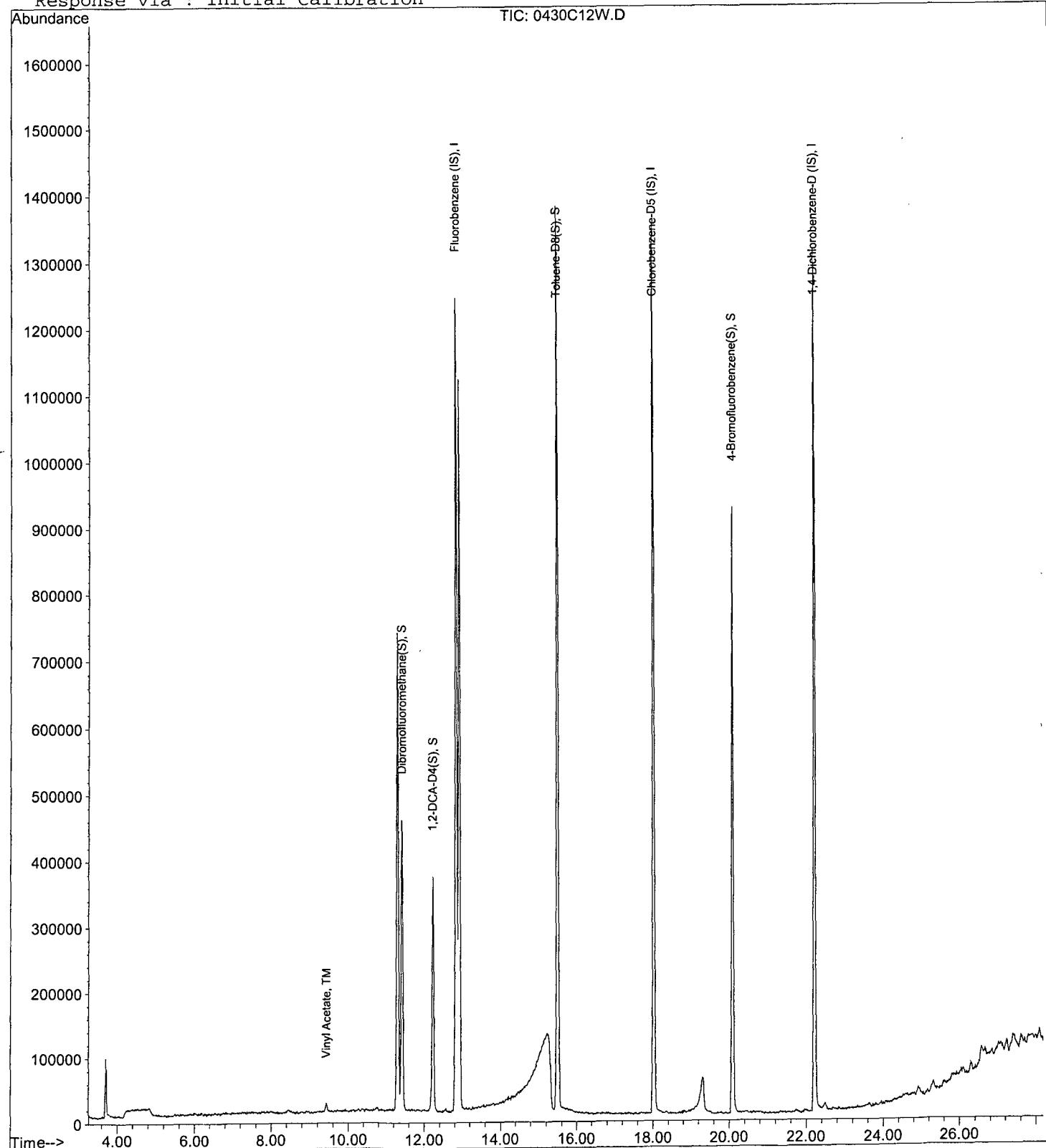
Data File : M:\CHICO\DATA\C120420\0430C12W.D
 Acq On : 30 Apr 12 16:46
 Sample : 120430A BLK-1WC
 Misc : Water 10mL w/IS&S:04-10-12

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						
94) Naphthalene	14.45	128	2092	1.68695	ppb	Qvalue NT 92

looking for TCE only → TCE & NO
 ARS 5/29/12

Quantitation Report

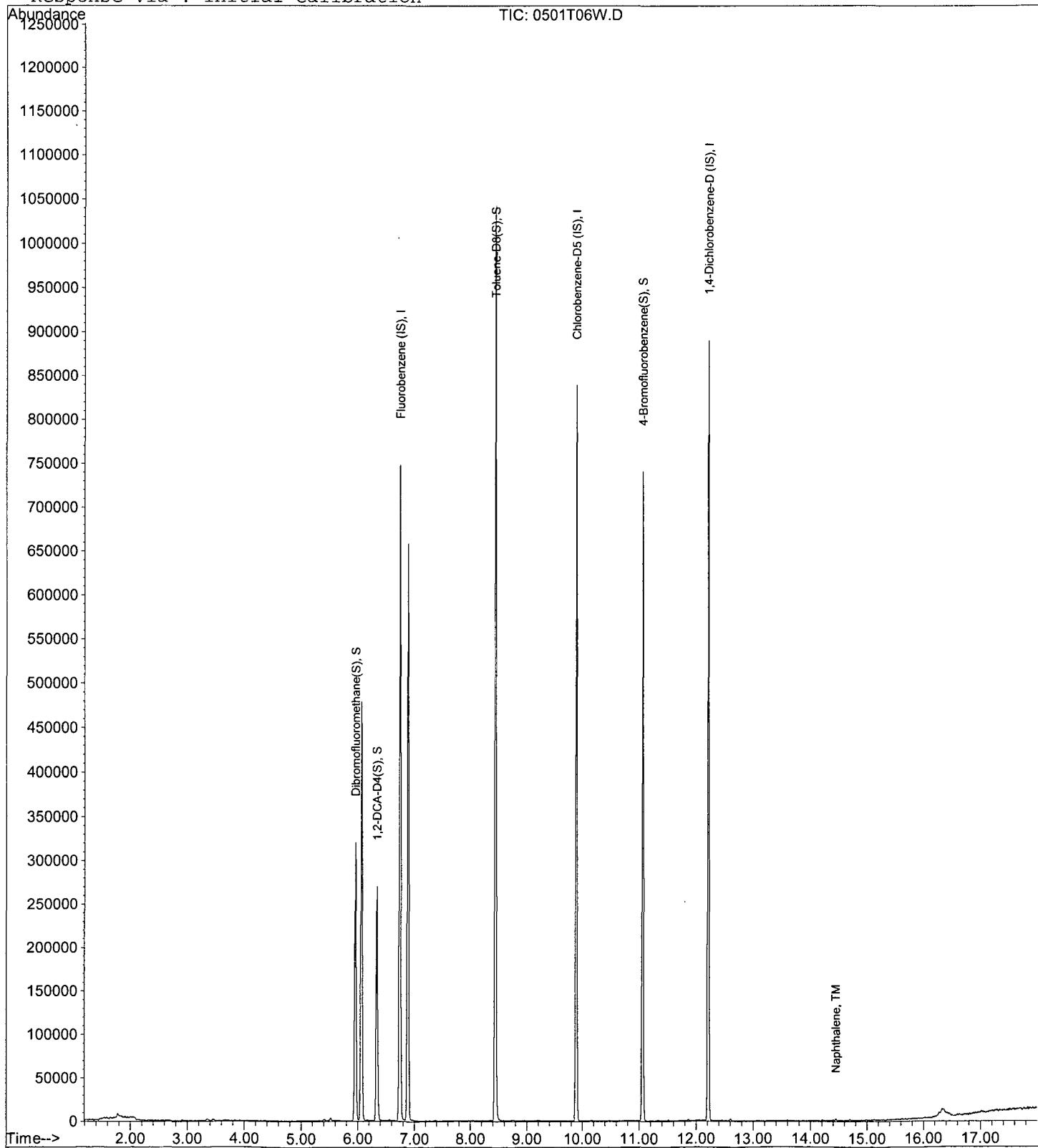
Data File : M:\THOR\DATA\T120430\0501T06W.D
 Acq On : 1 May 12 11:15
 Sample : 120501A BLK-1WT
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 6
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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: _____

<u>Primary</u>	<u>SPK</u>
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: _____

<u>Primary</u>	<u>SPK</u>
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	100

Quantitation Report

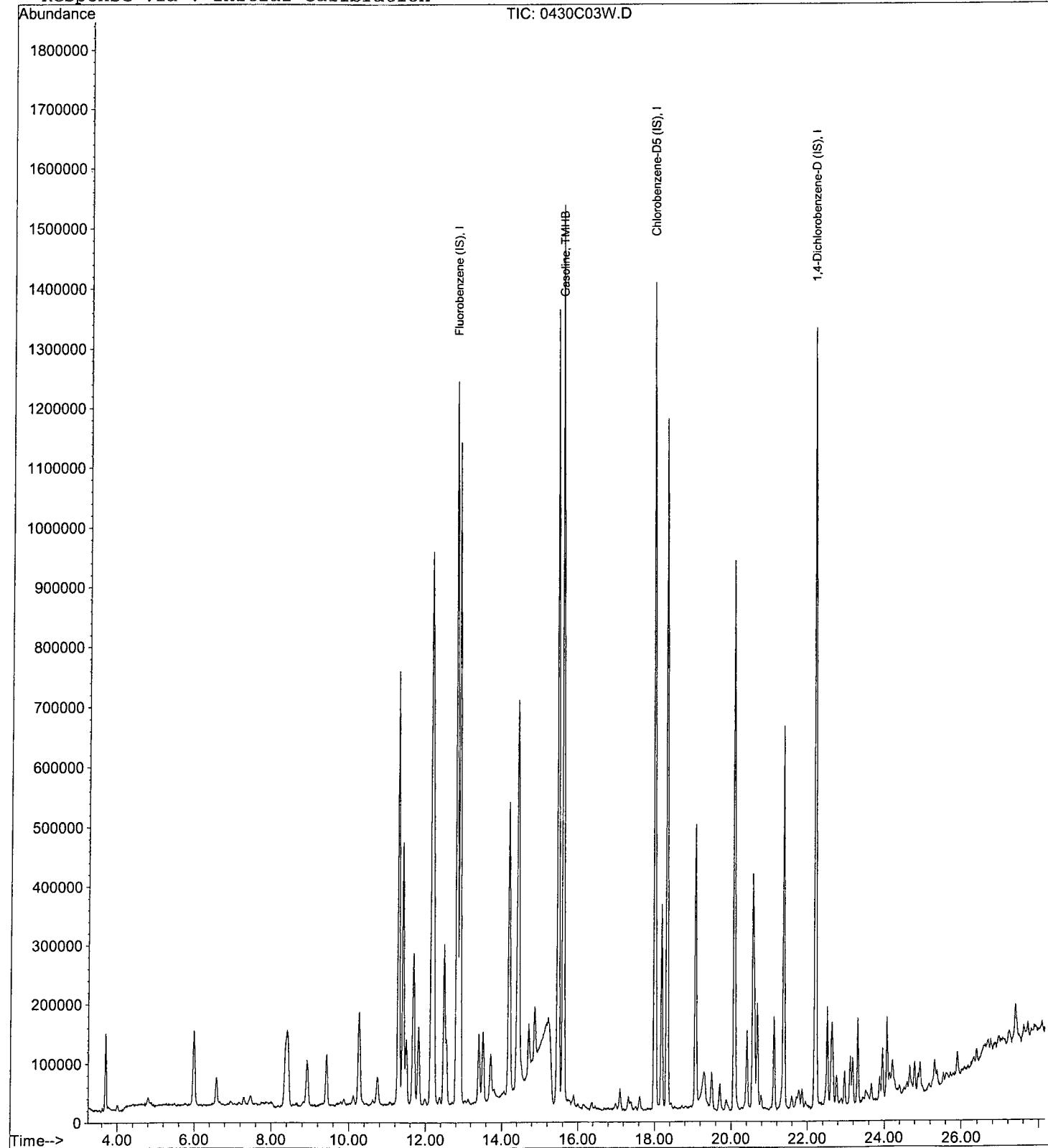
Data File : M:\CHICO\DATA\C120420\0430C03W.D
 Acq On : 30 Apr 12 11:12
 Sample : LCS gas @300ug/L
 Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00

Quant Time: Apr 30 14:23 2012

Quant Results File: CGAS.RES

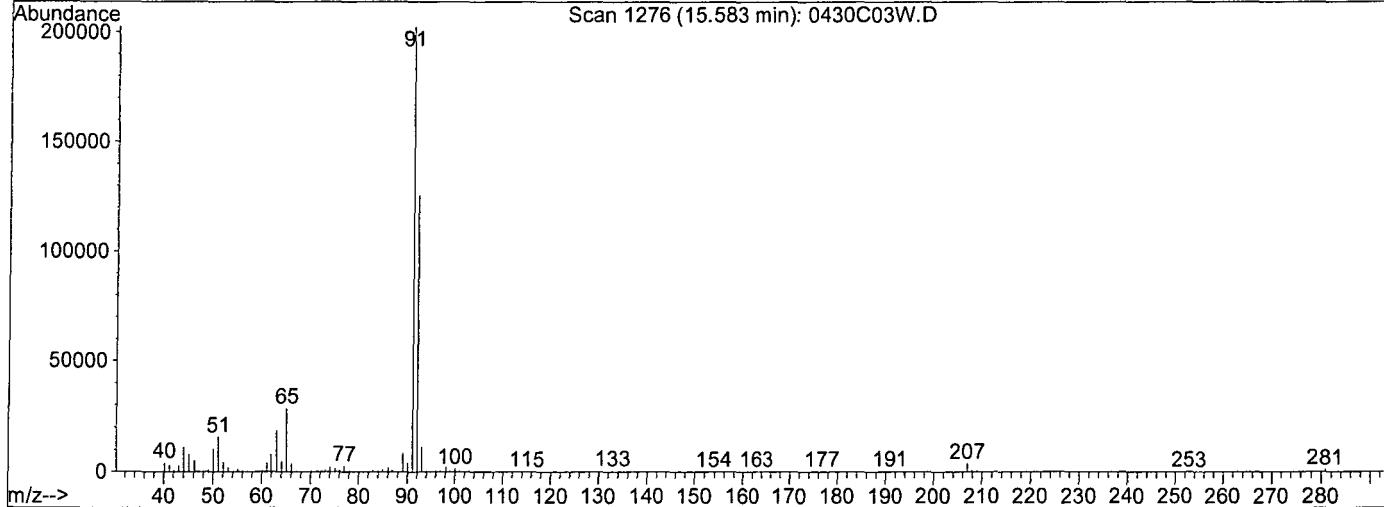
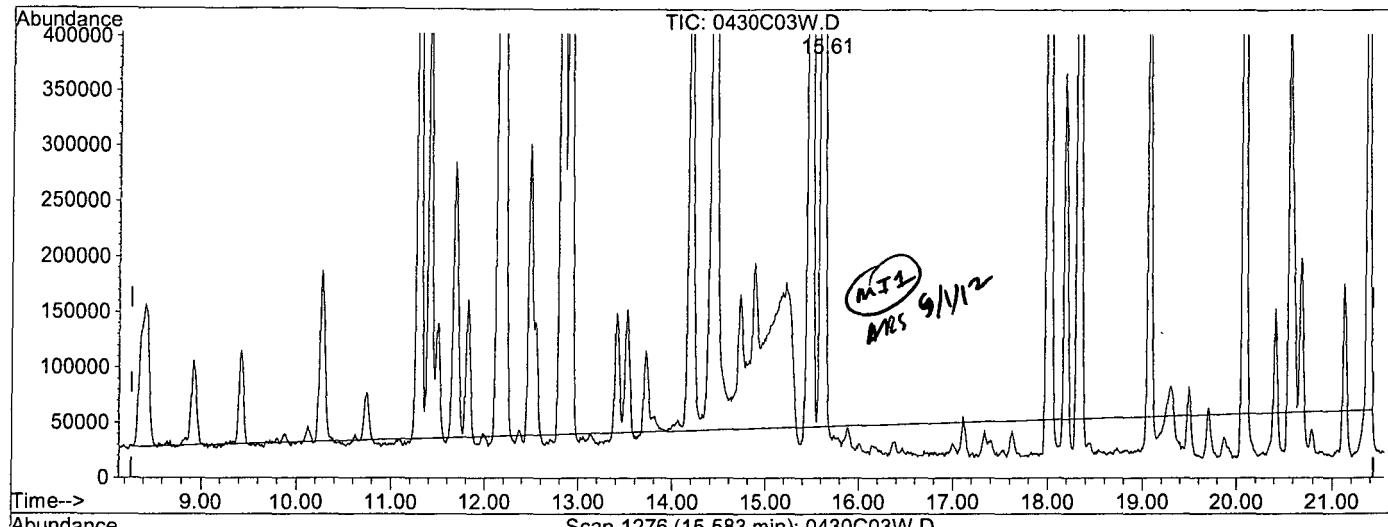
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
 Title : METHOD 8260B
 Last Update : Tue Feb 07 09:36:43 2012
 Response via : Initial Calibration



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

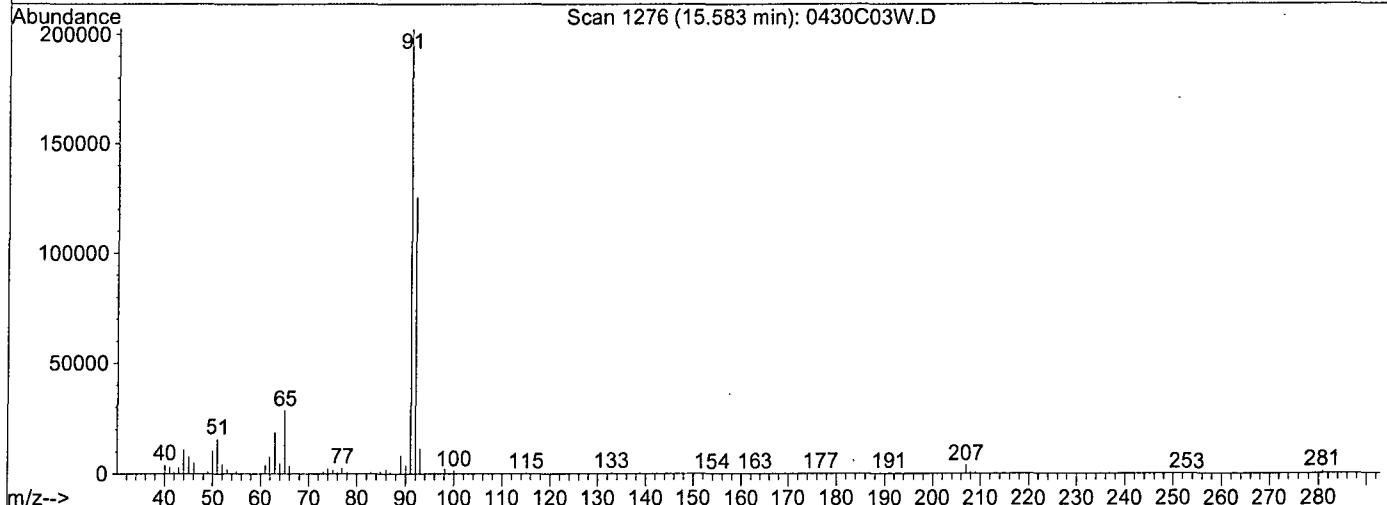
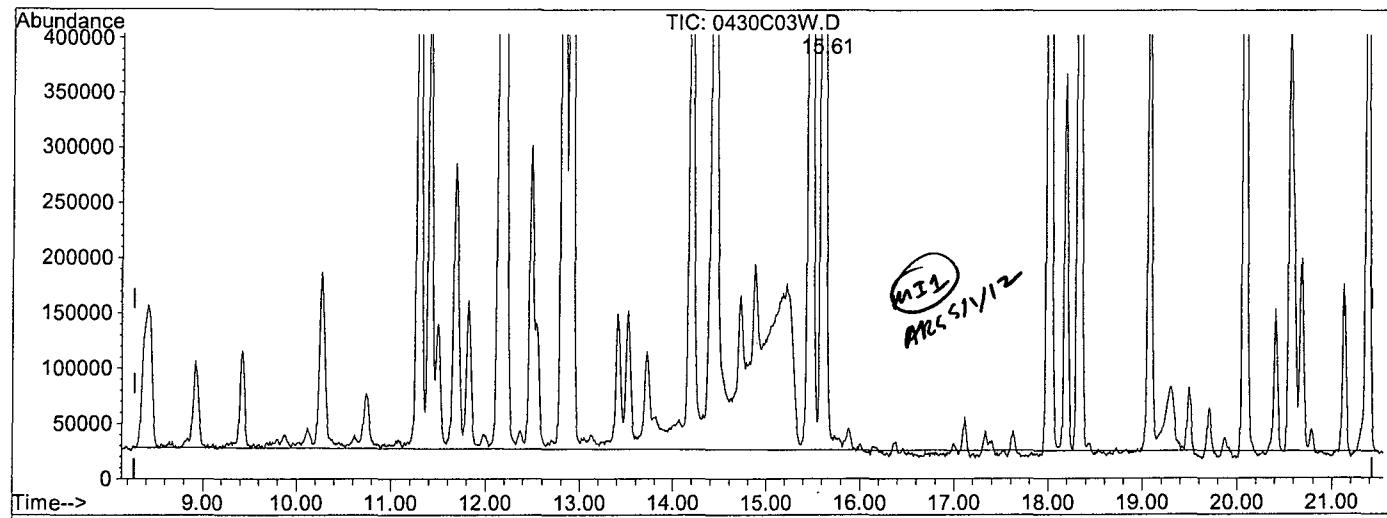
response 54921574

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
3) Freon 114	4.35	85	121718	9.46370	ppb
4) Chloromethane	4.59	52	77540	10.32859	ppb
5) Vinyl chloride	4.85	62	59696	10.92160	ppb
6) Bromomethane	5.75	94	38178	9.26250	ppb
7) Chloroethane	5.94	64	50727	10.26194	ppb
8) Dichlorofluoromethane	6.03	67	428823	10.44432	ppb
9) Trichlorofluoromethane	6.55	103	39224	9.43257	ppb
10) Acetonitrile	7.67	41	155208	131.36096	ug/l
11) Acrolein	7.17	56	214154	469.76244	ppb
12) Acetone	7.28	43	25312	9.98013	ppb
13) Freon-113	7.48	101	164041	9.98259	ppb
14) 1,1-DCE	7.69	96	172588	9.46063	ppb
15) t-Butanol	7.78	59	70048	126.98957	ppb
16) Methyl Acetate	8.19	43	98017	10.20198	ppb
17) Iodomethane	8.17	142	234197	8.81987	ppb
18) Acrylonitrile	8.57	53	35346	10.06502	ppb
19) Methylene chloride	8.48	84	191349	10.05601	ppb
20) Carbon disulfide	8.57	76	153984	8.95993	ppb
21) Methyl t-butyl ether (MtBE)	8.90	73	350048	10.02015	ppb
22) Trans-1,2-DCE	9.10	96	201493	9.14261	ppb
23) Diisopropyl Ether	9.75	45	714703	10.10740	ppb
24) 1,1-DCA	9.79	63	383491	9.84914	ppb
25) Vinyl Acetate	9.76	43	115301	9.47283	ppb
26) Ethyl tert Butyl Ether	10.45	59	537476	10.26000	ppb
27) MEK (2-Butanone)	10.44	43	21592	9.70615	ppb
28) Cis-1,2-DCE	10.81	96	229670	10.53182	ppb
29) 2,2-Dichloropropane	10.80	77	254089	9.80206	ppb
30) Chloroform	11.08	85	214935	10.21330	ppb
31) Bromochloromethane	11.32	128	89088	9.94684	ppb
33) 1,1,1-TCA	11.83	97	265534	10.24491	ppb
34) Cyclohexane	11.99	56	338646	9.42527	ppb
35) 1,1-Dichloropropene	12.10	75	249843	9.67923	ppb
36) 2,2,4-Trimethylpentane	12.18	57	599816	9.91137	ppb
38) Carbon Tetrachloride	12.29	117	235543	10.15037	ppb
39) Tert Amyl Methyl Ether	12.34	73	415639	10.21114	ppb
40) 1,2-DCA	12.37	62	175781	10.13267	ppb
41) Benzene	12.49	78	798220	10.01094	ppb
42) TCE	13.52	95	195944	10.31116	ppb

(#) = qualifier out of range (m) = manual integration
 0430C07W.D CALLW3.M Tue May 08 10:59:31 2012

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

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) <u>Cis-1,3-Dichloropropene</u>	14.99	75	279625	9.51613	ppb	100
51) Toluene	15.62	91	758896	10.29489	ppb	98
52) <u>Trans-1,3-Dichloropropene</u>	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

Quantitation Report

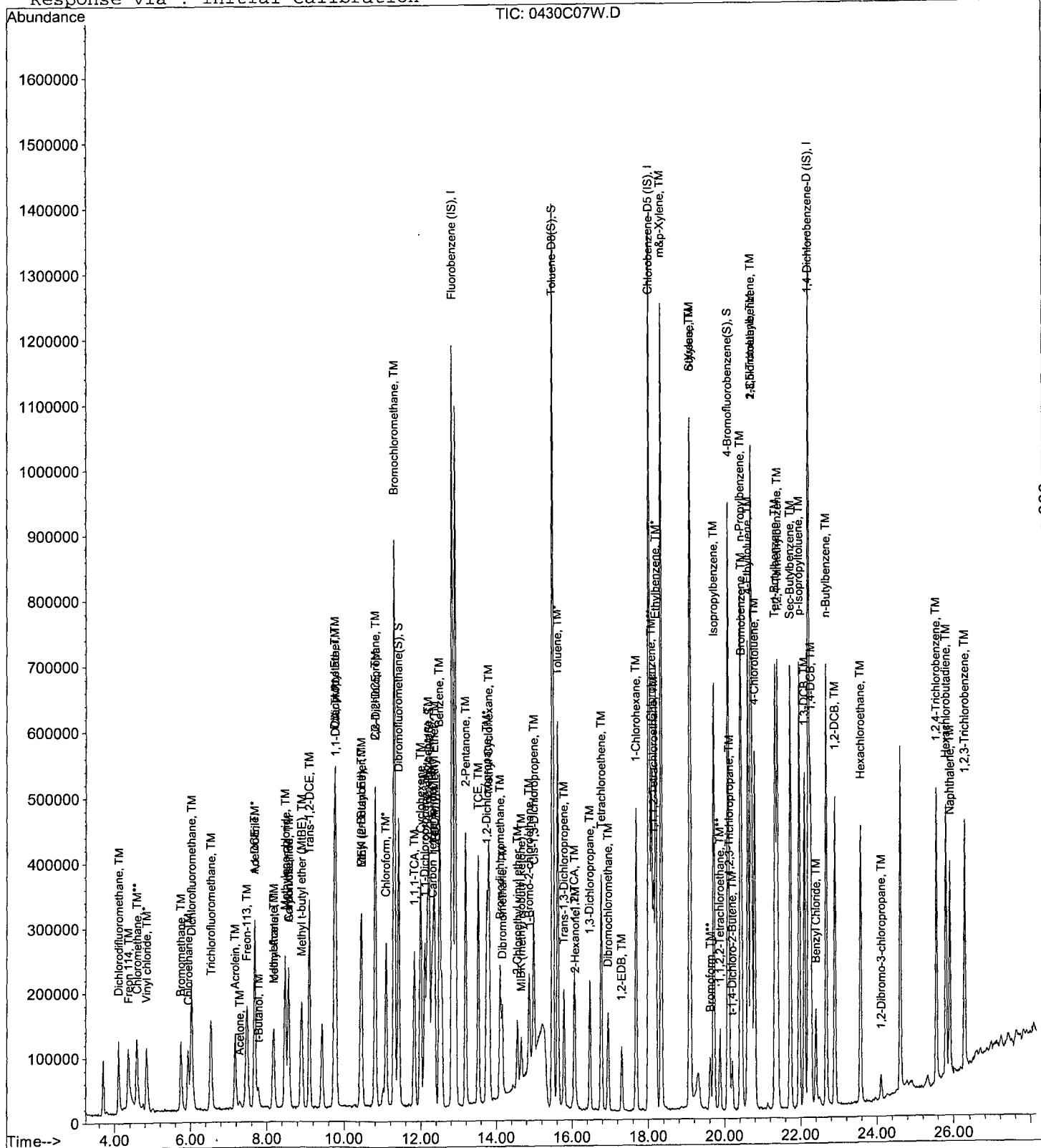
Data File : M:\CHICO\DATA\C120420\0430C07W.D
 Acq On : 30 Apr 12 13:40
 Sample : 120430A LCS-1WC
 Misc : Water 10mL w/IS&S:04-10-12

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



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: _____

<u>Primary</u>	<u>SPK</u>
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						
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
 0501T04W.D TALLW.M Tue May 29 16:38:17 2012

Quantitation Report (Not Reviewed)

Data File : M:\THOR\DATA\T120430\0501T04W.D
 Acq On : 1 May 12 10:19
 Sample : 120501A LCS-1WT
 Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 4
 Operator: DG, RS, HW, ARS, SV
 Inst : Thor
 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
 0501T04W.D TALLW.M Tue May 29 16:38:18 2012

Quantitation Report

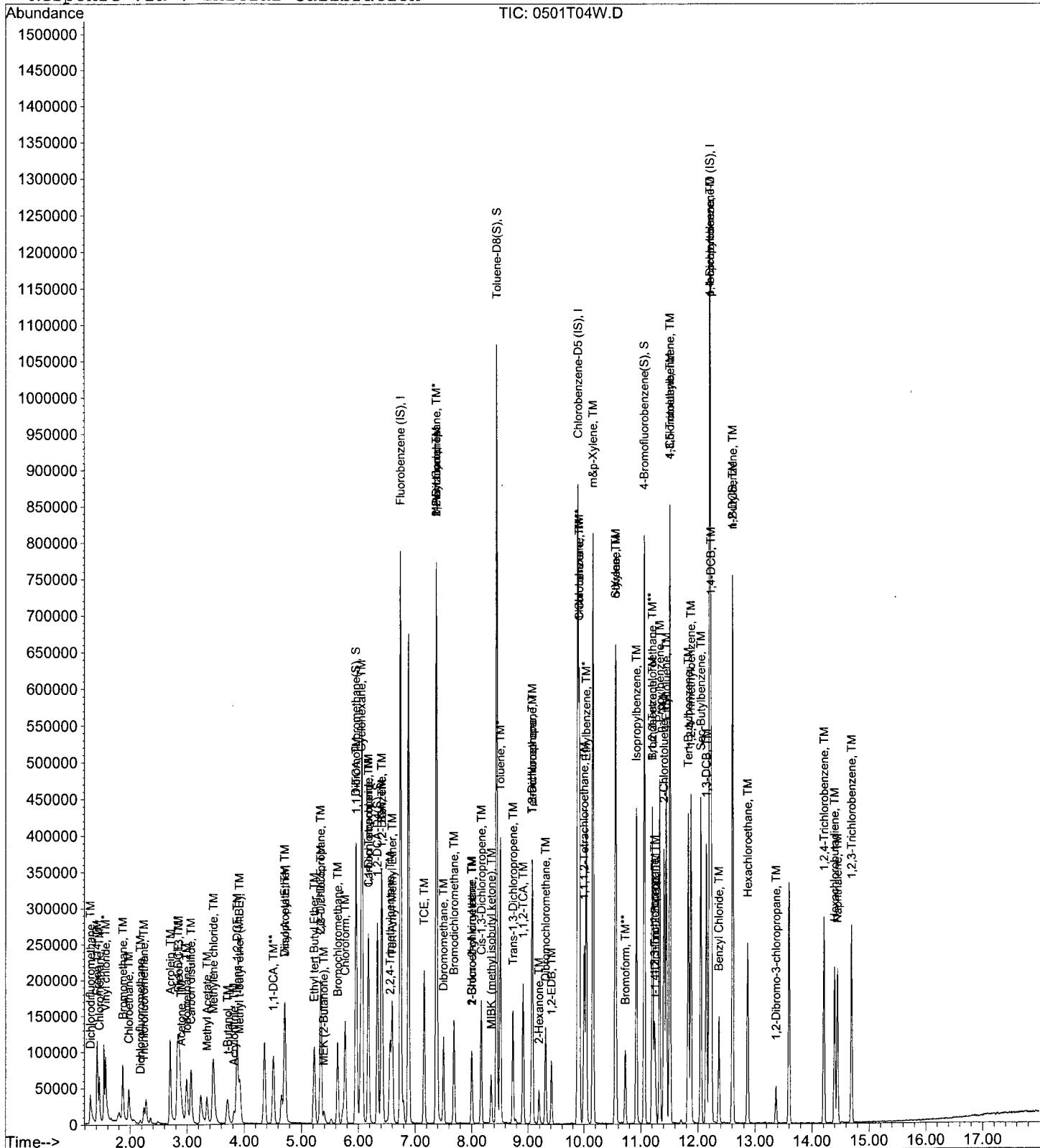
Data File : M:\THOR\DATA\T120430\0501T04
Acq On : 1 May 12 10:19
Sample : 120501A LCS-1WT
Misc : 10ml w/5ul of IS&S: 03-26-12

Vial: 4
Operator: DG,RS,HW,ARS,SV
Inst : Thor
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



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	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	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.

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 1:21:37 PM
 APPL MSD SCII

Matrix Spike Recoveries
EPA 8260B VOCs + Gas Water

APPL ID: 120430W-60081 MS - 166814

APPL Inc.

Batch ID: #86RHB-120430AC

908 North Temperance Avenue

Sample ID: AY60081

Clovis, CA 93611

Client ID: ES077

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	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
XYLEMES (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	100

Quantitation Report

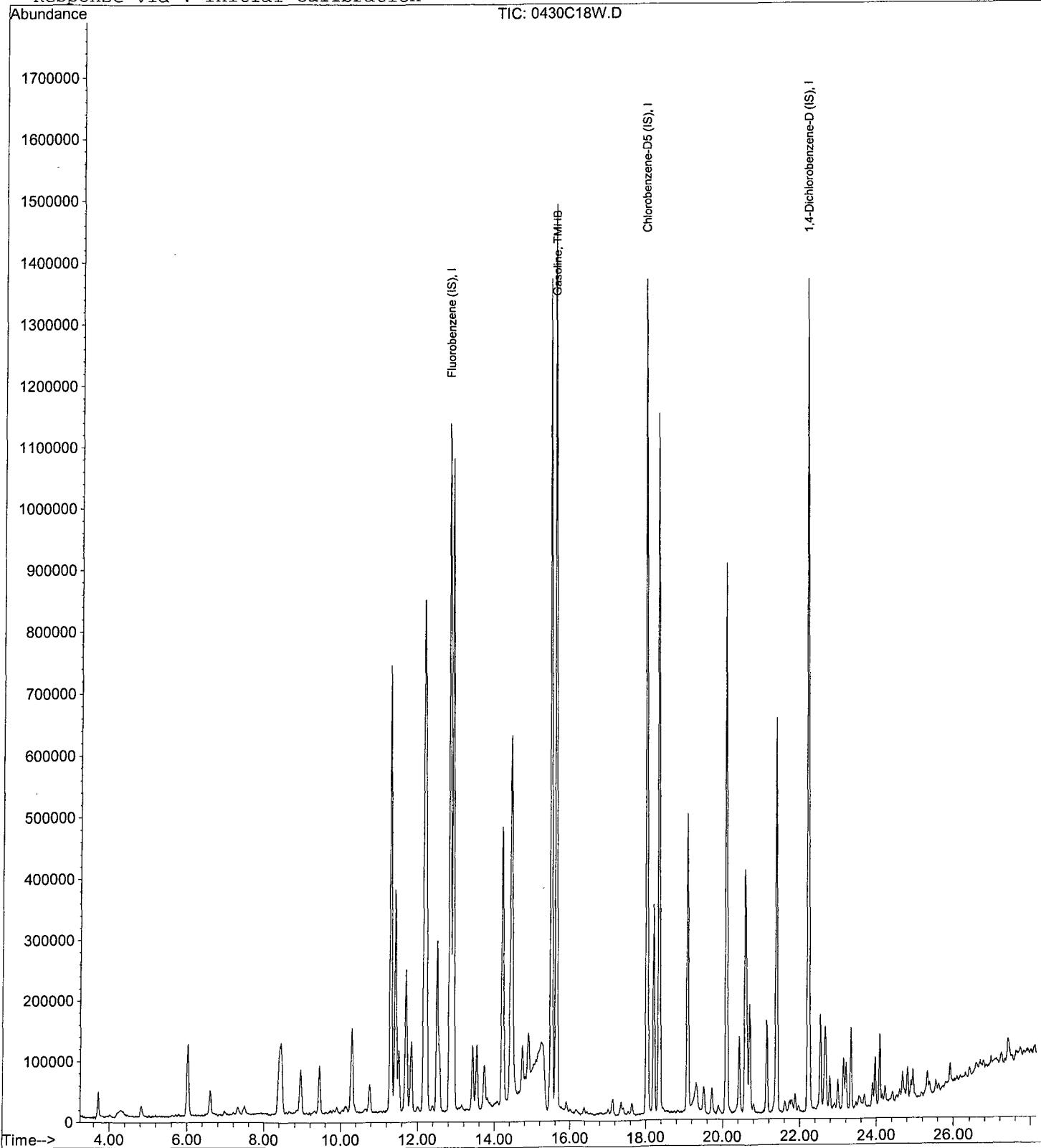
Data File : M:\CHICO\DATA\C120420\0430C18W.D
Acq On : 30 Apr 12 20:29
Sample : AY60081W234 GAS MS-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 11:22 2012

Quant Results File: CGAS.RES

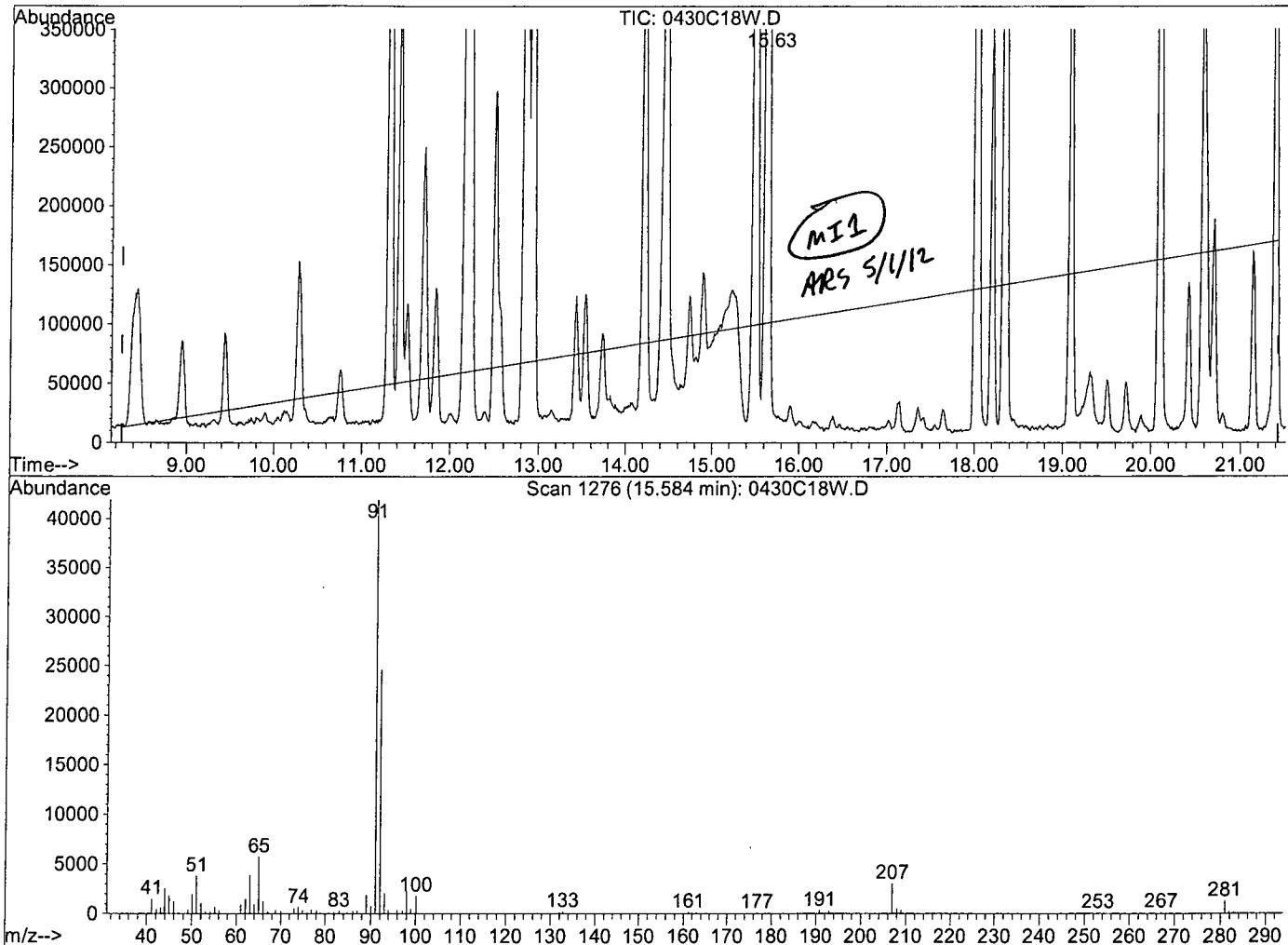
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



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

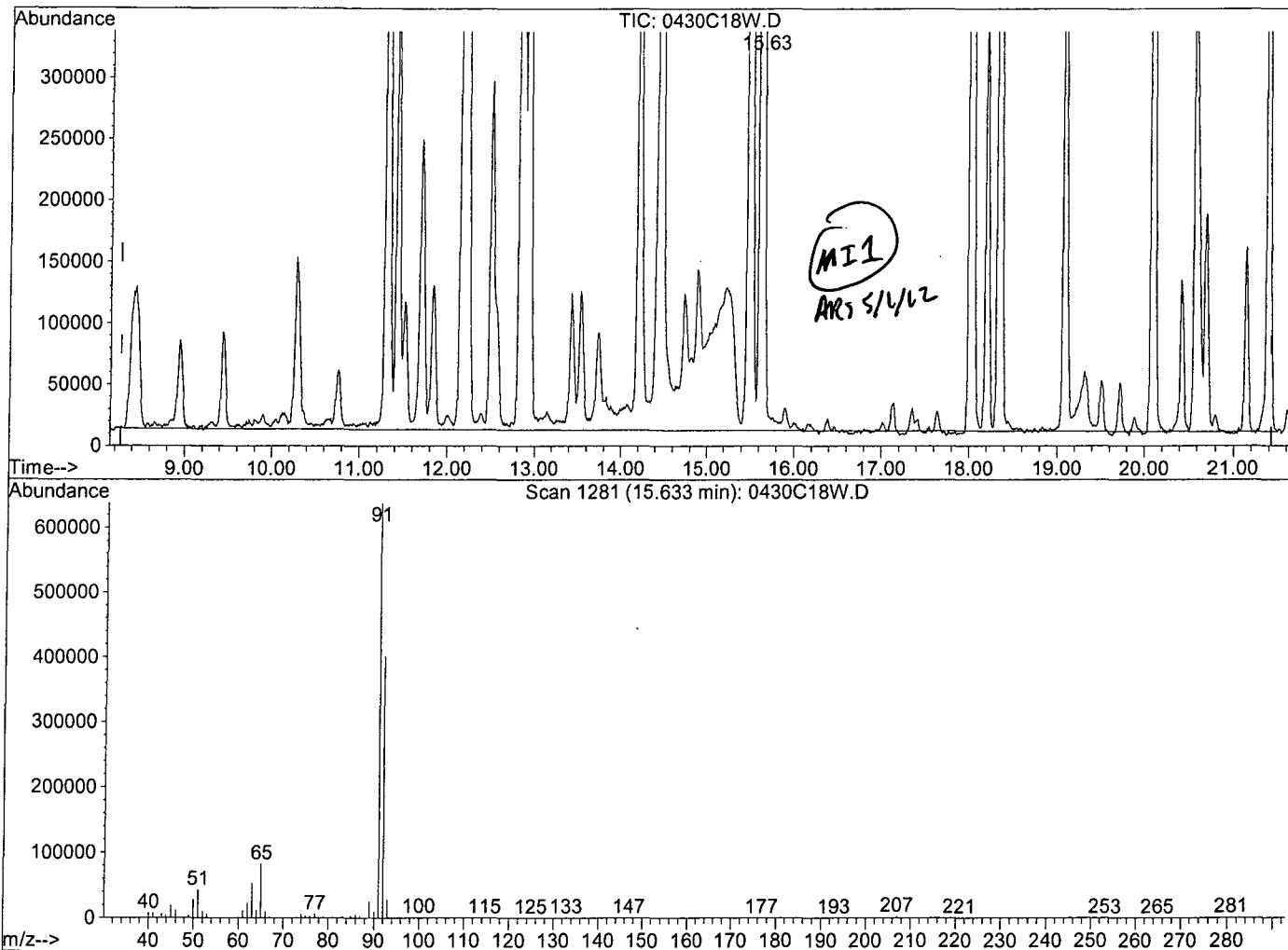


TIC: 0430C18W.D		
(2) Gasoline (TMHB)		
15.58min 343.9403ppb m		
response 52150984		
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.27#
0.00	0.00	0.70#
0.00	0.00	0.00

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						
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
 0430C22W.D CALLW3.M Tue May 08 11:34:32 2012

Quantitation Report (Not Reviewed)

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

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) <u>Cis-1,3-Dichloropropene</u>	15.00	75	257473	8.89143	ppb	100
51) Toluene	15.63	91	735542	10.12516	ppb	99
52) <u>Trans-1,3-Dichloropropene</u>	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
 0430C22W.D CALLW3.M Tue May 08 11:34:34 2012

Quantitation Report

Data File : M:\CHICO\DATA\C120420\0430C22W.D
 Acq On : 30 Apr 12 22:57
 Title : METHOD 8260
 Sample : AY60081W456 MS-1WC
 Misc : Water 10mL w/IS&S:04-10-12

Quant Time: May 8 11:34 2012

Method : M:\CHICO\DATA\C120420\CALLW3.M (RTE Integrator)

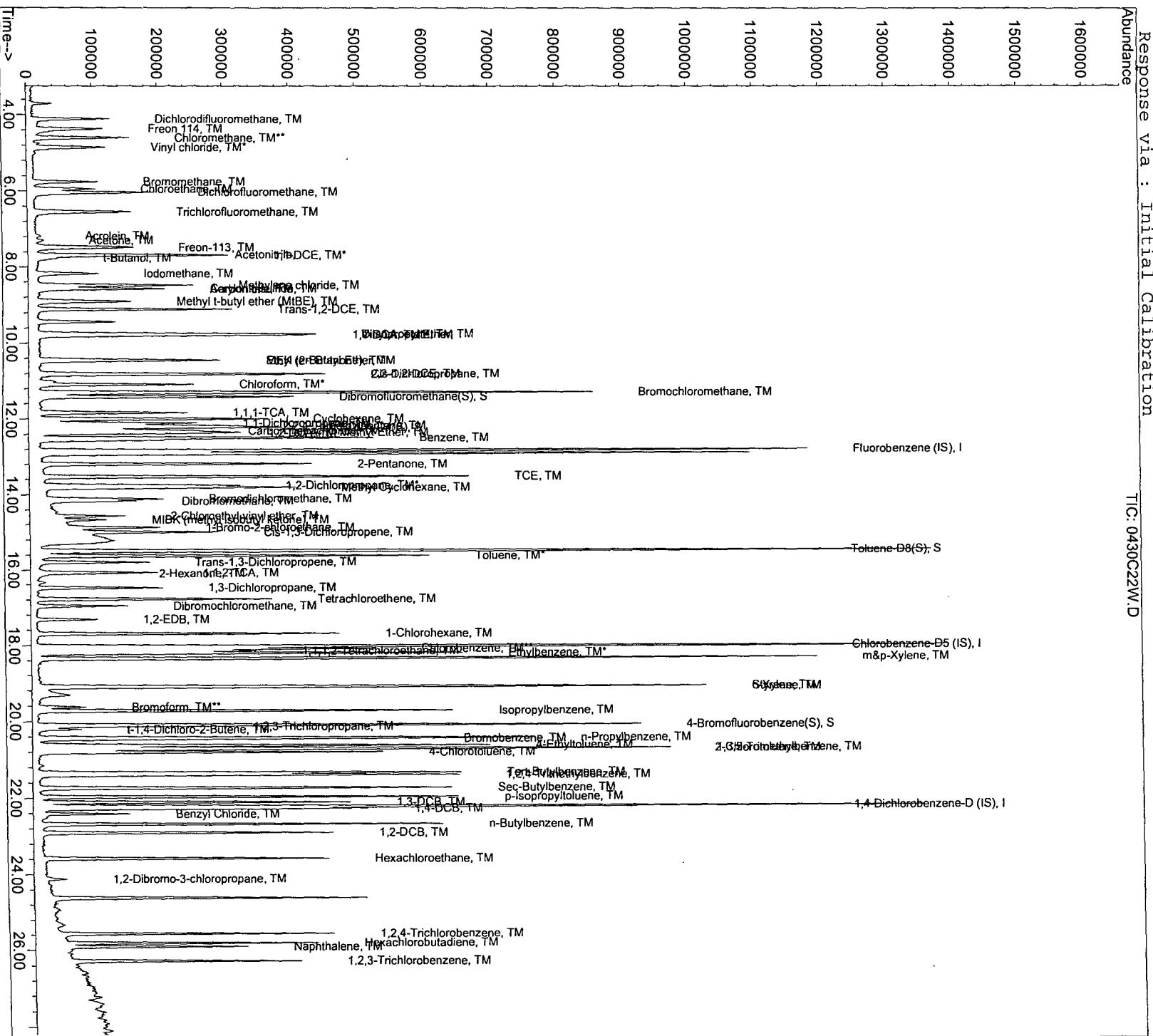
Last Update : Tue May 08 10:20:18 2012

Response via : Initial Calibration

TIC: 0430C22W.D

Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00

Quant Results File: CALLW3.RES



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	100

Quantitation Report

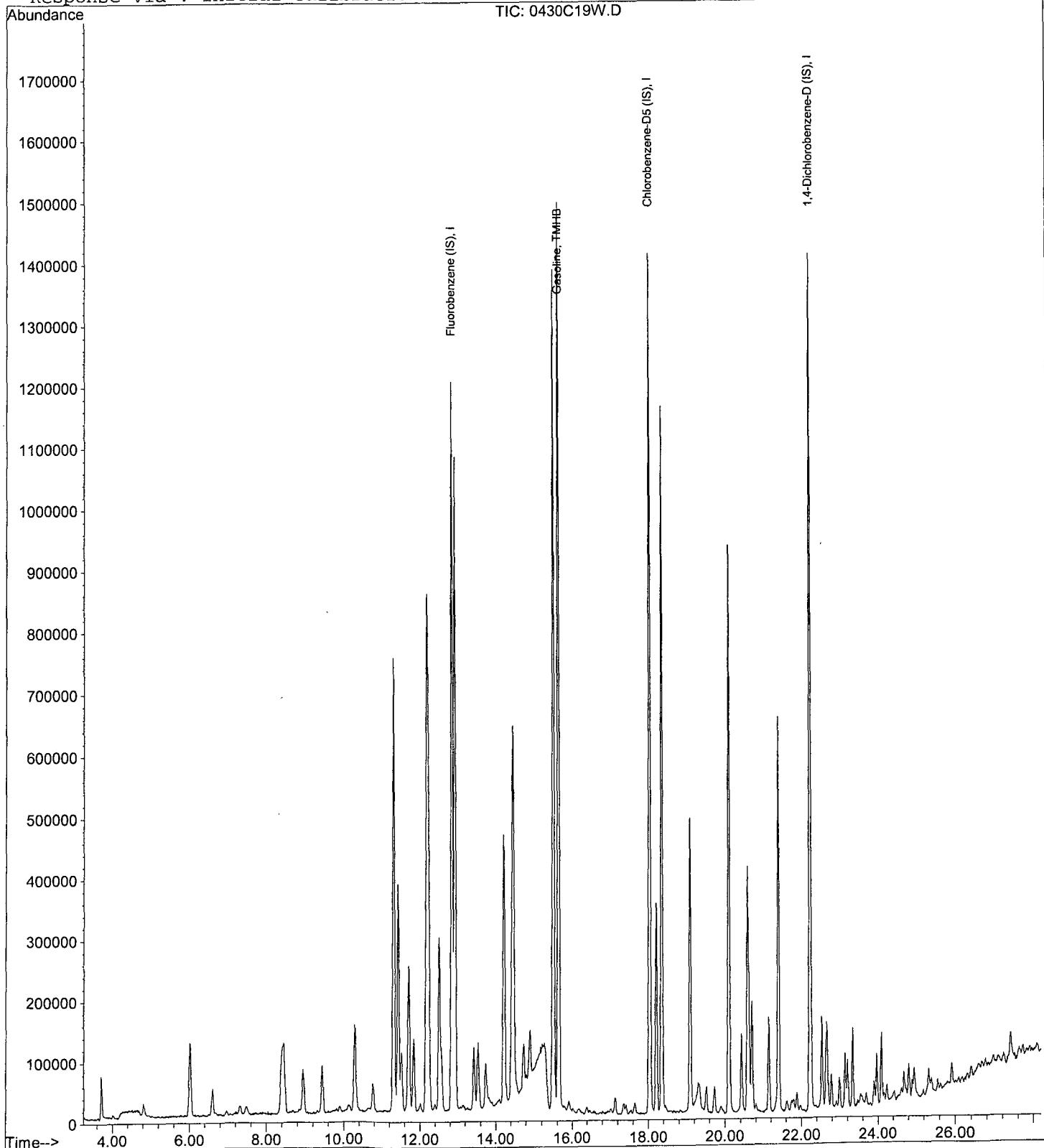
Data File : M:\CHICO\DATA\C120420\0430C19W.D
Acq On : 30 Apr 12 21:06
Sample : AY60081W234 GAS MSD-1WC
Misc : Water 10mL w/IS&S:04-10-12

Vial: 1
Operator: AS
Inst : Chico
Multiplr: 1.00

Quant Time: May 1 11:26 2012

Quant Results File: CGAS.RES

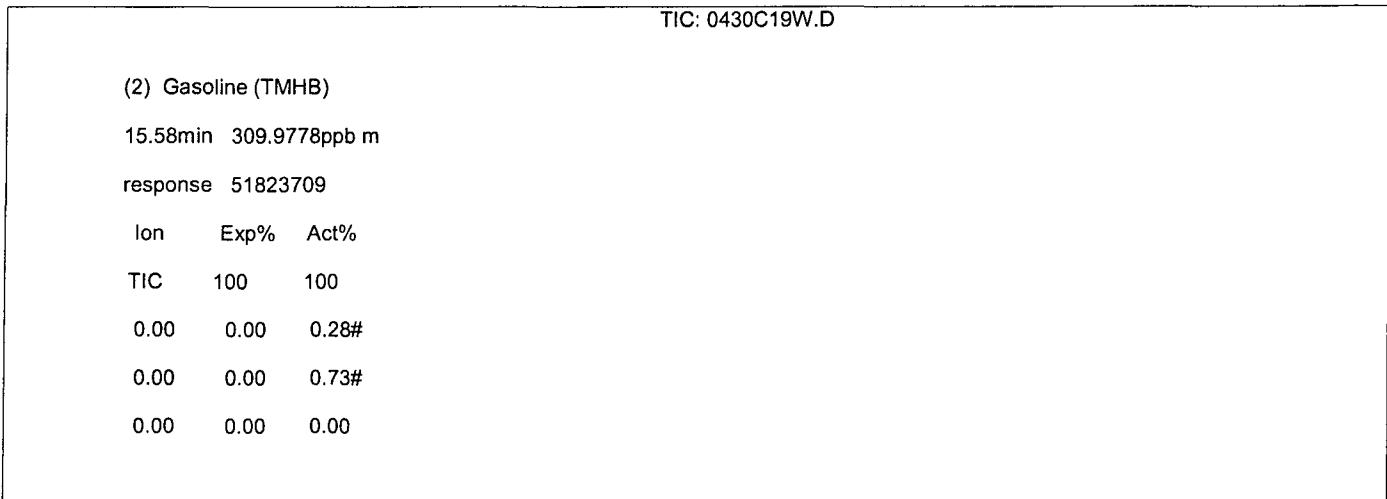
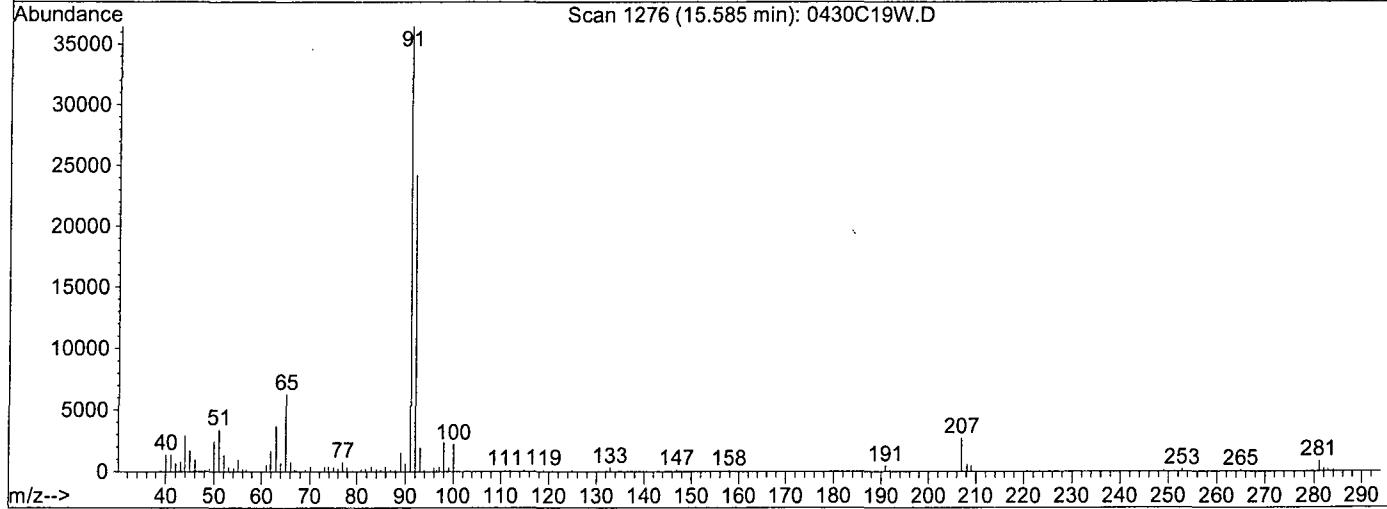
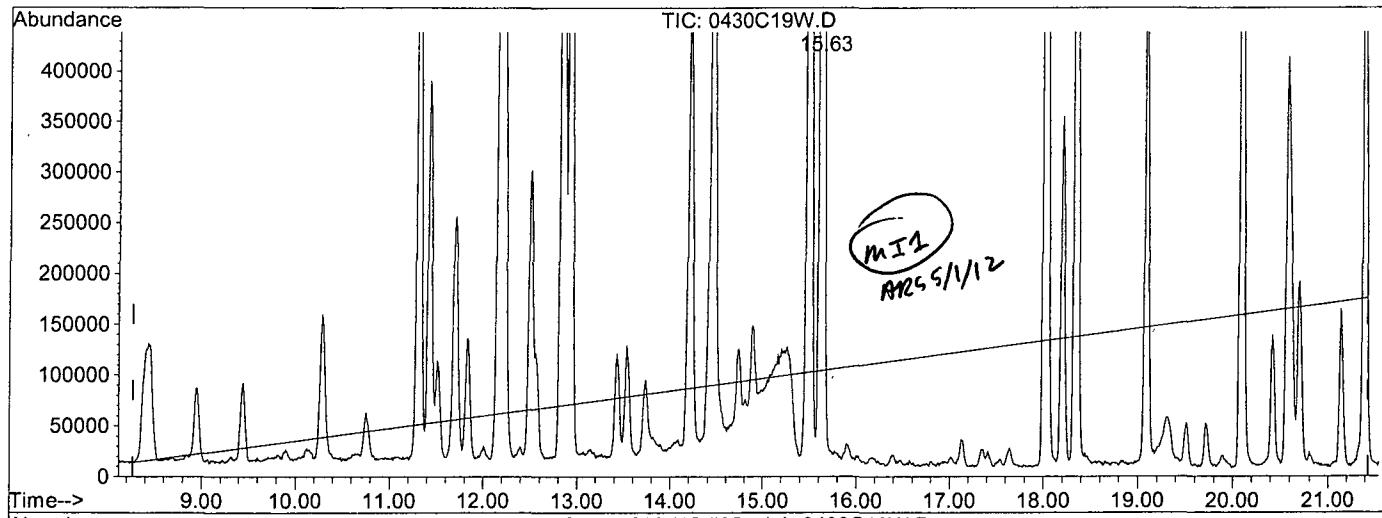
Method : M:\CHICO\DATA\C120125\CGAS.M (RTE Integrator)
Title : METHOD 8260B
Last Update : Tue Feb 07 09:36:43 2012
Response via : Initial Calibration



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 Multipllr: 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

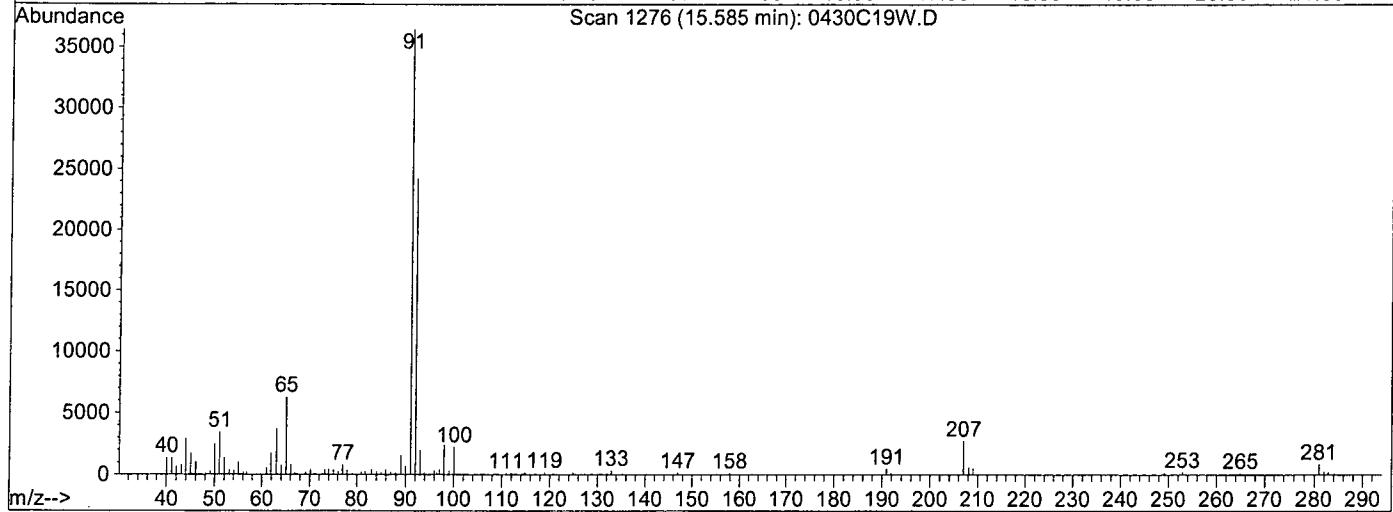
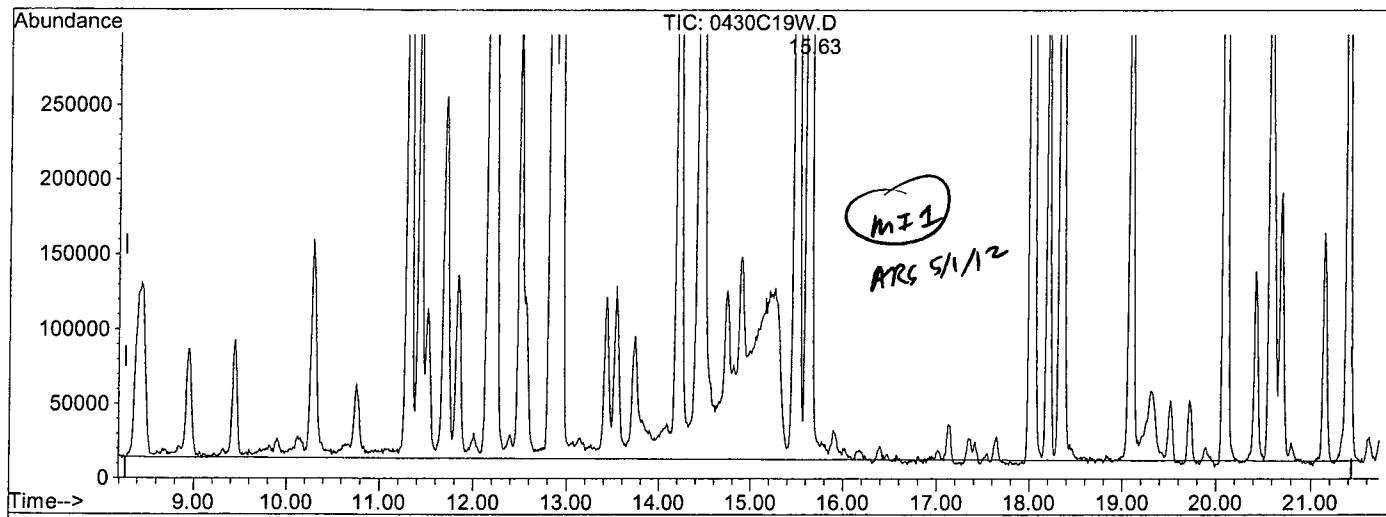


Quantitation Report

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
 Quant Time: May 1 11:26 2012

Vial: 1
 Operator: AS
 Inst : Chico
 Multiplr: 1.00
 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)

15.63min 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	R.T.	QIon	Response	Conc	Units	Dev (Min)
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	R.T.	QIon	Response	Conc	Units	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
 0430C23W.D CALLW3.M Tue May 08 11:34:40 2012

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C120420\0430C23W.D
 Acq On : 30 Apr 12 23:34
 Sample : AY60081W456 MSD-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

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) <u>Cis-1,3-Dichloropropene</u>	14.99	75	261156	<u>8.53232</u>	<u>ppb</u>	98
51) Toluene	15.62	91	748538	9.74846	ppb	98
52) <u>Trans-1,3-Dichloropropene</u>	15.79	75	186422	<u>8.73365</u>	<u>ppb</u>	99
53) 1,1,2-TCA	16.07	83	80415	<u>8.05230</u>	<u>ppb</u>	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

(#) = qualifier out of range (m) = manual integration
 0430C23W.D CALLW3.M Tue May 08 11:34:41 2012

Quantitation Report

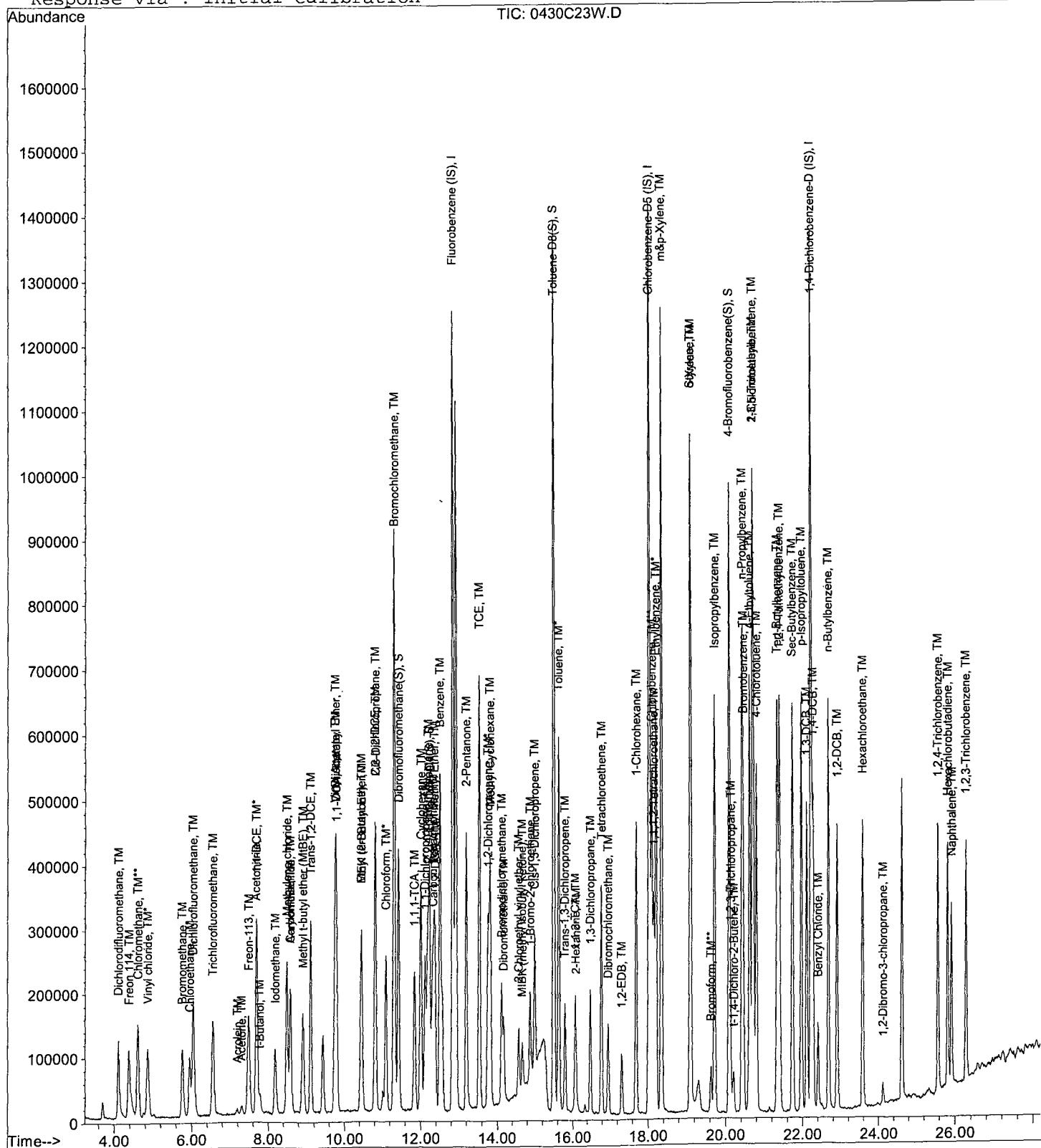
Data File : M:\CHICO\DATA\C120420\0430C23W.D
 Acq On : 30 Apr 12 23:34
 Sample : AY60081W456 MSD-1WC
 Misc : Water 10mL w/IS&S:04-10-12

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



050

C/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

A

01/25/12

S/H

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
Made in the USA
Lot # 120016-03-SS
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

S/H

01/25/12

S/H

2-Chloroethyl Vinyl Ether Solution (Second Source), 2,000 mg/L, 2 X 0.6 ml
Made in the USA
Lot # 020145-02-02-SS
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

S/H

01/25/12

S/H

8260 VOC Liquids Solution (Second Source), 2,000 mg/L, 1 ml
Made in the USA
Lot # 120023-03-SS
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

S/H

01/25/12

S/H

Vinyl Acetate Solution (Second Source), 2,000 mg/L, 1 ml
Made in the USA
Lot # 020232-02-SS
Storage Expiry
183906 ≤ -10 Degrees C 4/3/12
Solv: P/T Methanol
Vinyl Acetate (SS)
Lot #: 183906 - 30195
Rec: 1/10/12 MFR exp. 04/05/12

01/25/12

S/H

01/25/12

S/H

Custom 8260 Solution, Second Source, 2,000 mg/L, 1 ml
Made in the USA
Lot # 120296-01-SS
Storage Expiry
166038 ≤ -10 Degrees C 5/13/12
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

S/H

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____ 051

01/25/12

F

*MFD only, not human comp.
n-Hexane Solution (Second Source), 1,000 mg/L, 1 ml
020428-02-SS
Lot # 179199 Storage Expiry 9/21/13
Solv: P/T Methanol
n-Hexane (SS) 1000mg/L
Lot #: 179199 - 29612
Rec: 10/5/11 MFR exp. 09/21/13

S/H

01/25/12

G

*MFD only, not human comp.
Hexachloroethane (Second Source) Solution, 1000 mg/L, 1 ml
020049-02-SS
Lot # 183795 Storage Expiry ≤ -10 Degrees C 1/3/14
Solv: P/T Methanol
Hexachloroethane (SS)
Lot #: 183795 - 30199
Rec: 1/10/12 MFR exp. 01/03/14

S/H

01/25/12

H

*MFD only, not human comp.
Acrolein Solution (Second Source), 10,000 mg/L, 2 x 0.6 ml
020239-09-02-SS
Lot # 182703 Storage Expiry ≤ 6 Degrees C 1/21/12
Solv: Water, HPLC Grade
Lot #: 182703 - 30108
Rec: 12/15/11 MFR exp. 01/21/12

S/H

01/25/12

I

*MFD only, not human comp.
VOC Mix 4-3 (second source), 2,000 mg/L, 1 ml
120166-01-SS
Lot # 163778 Storage Expiry </= 6 Degrees C 9/9/12
Solv: P/T Methanol
VOC Mix 4-3 (SS)
Lot #: 163778 - 29835
Rec: 10/24/11 MFR exp. 09/09/12

S/H

01/25/12

J

02si Cat. No: 020546-02-SS
Heptane Solution (SS) Lot No: 142276
Lot #: 142276 - 26578
Rec: 5/11/10 MFR exp. 01/19/12

Heptane Solution (Second Source), 1000 mg/L, 1 ml

Exp: 1/19/2012
Storage: </= -10 Degrees C
Solvent: P/T Methanol
ion For Research Use Only
pened: _____

02si

052

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

1/25/12

1/26/12

K-

RS



2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml
 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
 opened:

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

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

120016-03
 Lot # Storage Expiry
 167931 ≤ -10 Degrees C 1/17/14
 Solv: P/T Methanol

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

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

120002-01-5PAK
 Lot# Storage Expiry
 178653 ≤ -10 Degrees C 9/11/13
 Solv: P/T Methanol

8260B Surrogate Solution
 Lot #: 178653 - 29570
 Rec: 9/22/11 MFR exp. 09/11/13

RS 1/25

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

053

11/25/12

P-

2612

七

VOC Mix 4-3, 2,000 mg/L, 1'
 ml
 120166-01
 Storage Expiry
 Lot # 178651 54 Degrees C 9/11/13
 VOC Mix 4-3, 2,000 mg/L
 Lot #: 178651 - 29811
 Rec: 10/24/11 MFR exp. 09/11/13
 2-Chloroethanol

JS . 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/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Supplier	ID #		Conc. ug/ml	Lot #	Date Code	Exp. 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

1/25/12 RS.	01-25-12AA						
50ug/ml VOC Std#5							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. 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							
Supplier	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

1/25/12 RS.	01-25-12AC						
250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Supplier	ID #		Conc. ug/ml		Date Code	Exp. 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

1/25/12 RS.	01-25-12AD						
50ug/ml Vol Work Std #7							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. 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							

1/25/12 RS.	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
01-25-12AF							

1/25/12 RS.	50ug/ml Vol Work Std #8						
Exp: 02/01/12							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. 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
01-25-12AG							

1/25/12 RS.	50ug/ml Vol Work Std #2						
Exp: 02/01/12							
Supplier	ID #	ID	ug/ml	Lot #	Date Code	Exp. Date	uL
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

GC/MS STANDARD PREPARATION BOOK #

PAGE #

055

056

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

Sweetpea								
01-24-11D								
250ug/ml 8260 Internal Standard w/ Surrogate		Conc.		Lot #		Date		Exp.
02SI	120302-03	Internal Standard Mix	2000	166255-29271	01-24-12A	06/09/12	500	
02SI	020132-02	Fluorobenzene Standard	2000	169170-29290	01-24-12B	06/09/12	500	
02SI	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
1/25/121/26/12
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				
Date	Conc.	01-18-12K	01-18-12M	01-18-12G	01-18-12I	01-18-12J	01-18-12P			
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	w/P&T H ₂ O		
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		

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	3	n/a	n/a	3	
01-25-12AO	0.5	5	10	n/a	n/a	5	n/a	n/a	5	
01-25-12AP	1	10	20	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	
01-25-12AR	10	n/a	n/a	10	10	25	n/a	10	10	
01-25-12AS	40	n/a	n/a	40	40	80	n/a	40	40	
01-25-12AT	100	n/a	n/a	100	100	100	n/a	100	100	
01-25-12AU	200	n/a	n/a	200	200	125	n/a	200	200	

1/25/12
RS1/26/12
RS

250µg/mL TAPD	Final Vol:
01-25-12Z	w/P&T H ₂ O
Exp:02-01-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

1/26/12
RS

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	01-18-12M
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	3	n/a	n/a	3	
01-24-12M	0.5	5	10	n/a	n/a	5	n/a	n/a	5	
01-24-12N	1	10	20	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	
01-24-12P	10	n/a	n/a	10	10	25	n/a	10	10	
01-24-12Q	40	n/a	n/a	40	40	80	n/a	40	40	
01-24-12R	100	n/a	n/a	100	100	100	n/a	100	100	

250µg/mL TAPD	Final Vol:
01-18-12P	w/P&T H ₂ O
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 Curve Preparation Book	
Date:	Conc.
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

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

057

NOTEBOOK INSERT LABEL

Gasoline

Lot: LB82077

47516-U
EXP: FEB/2014 STORAGE: ROOM TEMP. 1 x 1ml

DATE RECEIVED: _____

 **SUPELCO**
Analytical
595 North Harrison Road • Bellfonte, PA
16823-0048 USA • Phone 814-359-3441

STANDARD TRANSFER LABEL

Date of Preparation:

Exp. Date:

Reference Number:

Storage: EXP: FEB/2014

Description: Gasoline

ROOM TEMP.

Lot #: LB82077 - 29979

Rec: 11/11/11 MFR exp. 02/28/14

gasoline

RESTE
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

01/26/12C							APPL
2000ug/ml Gasoline							
Supplier	ID #		Conc.		Date	Exp.	
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							APPL
2000ug/ml Unleaded Gasoline							
Supplier	ID #		Conc.		Date	Exp.	
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

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

Expiration Date:	01/27/12						
Date	Conc.	50ug/mL Gasoline	Final Vol	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				

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

	Expiration Date:	01/27/12									
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #1	5ug/mL Vol Std #2	50ug/mL Vol Std #12	
Code	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	n/a	5	n/a	5	n/a	
01-26-12Q	100	n/a	n/a	10	10	n/a	10	n/a	10	n/a	
01-26-12R	200	n/a	n/a	20	20	n/a	20	n/a	20	n/a	

250ug/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

094

ACAS STANDARD PREPARATION BOOK # PAGE

3/14/12 PS.

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	03-14-12O
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	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
PS.

A -

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

020135-03

Lot # Storage Envry
163173 ≤-10 Degrees 8/24/13

Solvent P/T Methanol

4-Bromofluorobenzene

Lot #: 163173 - 29052

Rec: 8/1/11 MFR exp. 08/24/13

3/15/12
PS.

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	03-14-12O
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	

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

Volatile Standard	Ex
03-14-12A	1
03-14-12B	2
03-17-12C	3
03-17-12D	4
03-17-12E	5
03-17-12F	6
03-17-12G	7

3/19/12
PS.3/19/12
PS.3/19/12
PS.3/19/12
PS.

GCMS STANDARD PREPARATION BOOK # PAGE

	03-22-12AD							
	50ug/ml VOC std#5							
Exp.	03/29/12			Conc.		Date	Exp.	
Date	uL			ug/ml	Lot #	Code	Date	uL
29/12	100			2000	178557-29523	03-22-12K	03/29/12	50
08/12	200			2000	181404-30009	02-20-12I	05/14/12	50
08/12	200		J&T Brand	Purge & Trap MeOH	K14E06-00610	03/19/12	06/08/12	1900
08/12	3500							
			03-22-12AB					
			50ug/ml VOC Std#6					
			Exp: 03/29/12					
			ID #	ID	ug/ml	Lot #	Code	Date
			02SI	120016-03-SS	8260 Gases (SS)	2000	176822-29263	03-22-12L
			02SI	020145-02-02-	2-CEVE	2000	166038-27767	03-22-12M
			J&T Brand		Purge & Trap MeOH			05/18/12
								50
			03-22-12AE					
			50ug/ml VOC Std#6					
			Exp: 03/29/12					
			ID #	ID	ug/ml	Lot #	Code	Date
			02SI	120023-03-SS	VOC'S 54 COMP.	2000	179199-29614	03-22-12O
			02SI	120296-01	Custom 8260 Solution	2000	183795-30439	03-22-12P
			02SI	020232-02-SS	Vinyl Acetate(SS)	2000	185762-30449	03-22-12Q
			02SI	020620-02-SS	n-HEXANE	1000	186938-30515	03/23/12
			02SI	020049-02-SS	HEXACHLOROETHANE	1000	163778-29837	06/14/12
			02SI	020546-02-SS	Heptane(SS)	1000	166255-28857	250
			J&T Brand		Purge & Trap MeOH			50
			03-22-12AF					
			250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P					
			Exp: 03/29/12		Conc.		Date	Exp.
			Supplier	ID #	ug/ml	Lot #	Code	Date
			02SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	186938-30515	04/23/12
			02SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	186938-30515	06/14/12
			J&T Brand		Purge & Trap MeOH			1700

Method 8260 Internal
Standard Solution, 2,000

mg/L, 1 ml

120302-03

Lot # Storage Expiry

166255 -10 Degrees C 11/13/12

Solv: P/T Methanol

Method 8260 Internal Standard

Lot #: 166255 - 28857

Rec: 5/25/11 MFR exp. 11/18/12

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

820132-02

Lot # Storage Expiry

169170 -55 Degrees C 2/13/14

Solv: P/T Methanol

Fluorobenzene

Lot #: 169170 - 29852

Rec: 10/24/11 MFR exp. 02/13/14

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

8260B Surrogate Solution

Lot #: 178653 - 29567

Rec: 9/22/11 MFR exp. 09/11/13

GC/MS STANDARD PREPARATION BOOK # 105 **PAGE #** 105

Exp.	Date	uL
08/14/12	500	
08/14/12	500	
10/10/12	19000	

Exp.	Date	uL
08/14/12	500	
10/10/12	19500	

Vol Std #	5µg/mL Vol Std #2	5µg/mL Vol Std #12	5µg/mL Vol Std #10	5µg/mL Vol Std #1	5µg/mL 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					
10	n/a					
0	n/a					

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-22-12AC	mL	
2	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-22-12AC	mL	
2	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

µg/mL TAPD	Final Vol	w/P&T H2O
03-29-12	mL	
3	50	

3/20/12 A	
RS	
8260B Surrogate Solution 2,000 mg/L, 5 x 1 mL	
120002-01-5PAK	
Lot #: 178653 Storage -10 Degrees C 9/1/13	
Solv: MeOH	
Made in the USA	
8260B Surrogate Solution Lot #: 178653 - 29566 Rec: 9/22/11 MFR exp. 09/11/13	

3/20/12 B	
RS	
50ug/ml 8260 Internal Standard	
Supplier ID #	
02SI 120302-03 Internal Standard Mix	
2000 166255-28857 03-23-12A 12/13/12 375	
02SI 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	
Supplier ID #	
02SI 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 14250	

3/20/12 C	
RS	
Volatile Standard Curve Preparation for 10mL Purge (8260 water)-THOR	
Expiration Date: 03/27/12	
Supplier ID #	
50µg/mL Vol Std #9 50µg/mL Surr 50µg/mL Vol Std #7	
03-22-12V 03-22-12A 03-22-12T 03-22-12Y 03-22-12U 03-22-12W 03-22-12Z	
Date Conc. 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	
Code # g/mL 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	
03-26-12X 0.3 3 6 n/a n/a n/a 3	
03-26-12Y 1 10 20 n/a n/a n/a n/a	
03-26-12Z 5 n/a n/a 5 5 10 n/a	
03-26-12M 10 n/a n/a 10 10 25 n/a	
03-26-12N 20 n/a n/a 20 20 40 n/a	
03-26-12P 40 n/a n/a 40 40 80 n/a	
03-26-12Q 100 n/a n/a 100 100 100 n/a	

3/20/12 D	
RS	
Volatile Standard Curve Preparation for 10mL Purge (8260 water)-MAX	
Expiration Date: 03/27/12	
Supplier ID #	
50µg/mL Vol Std #9 50µg/mL Surr 50µg/mL Vol Std #7	
03-22-12A 03-22-12Y 03-22-12U 03-22-12W 03-22-12Z	
Date Conc. 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	
Code # g/mL 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	
03-26-12K 0.5 5 10 n/a n/a n/a 5	
03-26-12L 1 10 20 n/a n/a n/a 10	
03-26-12M 5 n/a n/a 5 5 10 n/a	
03-26-12N 10 n/a n/a 10 10 25 n/a	
03-26-12O 20 n/a n/a 20 20 40 n/a	
03-26-12P 40 n/a n/a 40 40 80 n/a	
03-26-12Q 100 n/a n/a 100 100 100 n/a	

3/20/12 E	
RS	
TBA Final Vol	
C w/P&T H2O	
12 mL	
5 5 5 5 5 5 5 5	

		04-01-12X	Exp:	04/07/12					
		Sug/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					
		Sug/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					
		Sug/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	
		02SI	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		
		J&T Brand		50ug/ml 8260 Surrogate		04-01-12AA	04/07/12	200	
				Purge & Trap MeOH		03/30/12	06/08/12	1800	
		04-01-12AC							
		250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P		Conc.		Date	Exp.		
		Exp: 04/07/12		ug/ml	Lot #	Code	Date	uL	
		Supplier	ID #						
		02SI	120166-01	Volatile Mix 4-3	2000	178651-30412	04-01-12E	05/14/12	500
		02SI	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

Method 8260 Internal
Standard Solution, 2,000
mg/L, 1 ml
120302-03
Lot # Storage Expiry
166255, ≤ -10 Degrees C 11/18/12
Solv: P/T Methanol
Method 8260 Internal Standard
Lot #: 166255 - 28858
Rec: 5/25/11 MFR exp. 11/18/12

Fluorobenzene Solution,
2,000 mg/L, 1 ml
120132-02
Lot # Storage Expiry
169170, ≤ 6 Degrees C 2/13/14
Solv: P/T Methanol
Fluorobenzene
Lot #: 169170 - 29853
Rec: 10/24/11 MFR exp. 02/13/14

Method 8260B Surrogate
Solution, 2,000 mg/L, 1 ml
120002-01
Lot # Storage Expiry
164585, ≤ -10 Degrees C 10/12/13
Solv: P/T Methanol
Method 8260B Surrogate
Lot #: 164585 - 30466
Rec: 2/20/12 MFR exp. 10/12/13

GC/MS STANDARD PREPARATION BOOK

PAGE #

CHICO			Conc.	Date	Exp.		
04-10-12J							
250ug/ml 8260 Internal Standard - Chico							
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

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 #6	50µg/mL Surr	5µg/mL Vol Std #10
Date	Conc.	04-09-12N	04-09-12R	04-09-12J	04-09-12L	04-09-12Q	04-09-12O
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
04-10-12L	0.3	3	6	n/a	n/a	3	n/a
04-10-12M	0.5	5	10	n/a	n/a	5	n/a
04-10-12N	1	10	20	n/a	n/a	10	n/a
04-10-12O	5	n/a	n/a	5	5	n/a	5
04-10-12P	10	n/a	n/a	10	10	n/a	n/a
04-10-12Q	20	n/a	n/a	20	20	n/a	20
04-10-12R	40	n/a	n/a	40	40	n/a	40
04-10-12S	100	n/a	n/a	100	100	n/a	100

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.

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
Date	Conc.	04-09-12AA	04-09-12AE	04-09-12W	04-09-12Y	04-09-12AD	04-09-12AB
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
04-11-12A	0.3	3	6	n/a	n/a	3	n/a
04-11-12B	0.5	5	10	n/a	n/a	5	n/a
04-11-12C	1	10	20	n/a	n/a	10	n/a
04-11-12D	5	n/a	n/a	5	5	n/a	5
04-11-12E	10	n/a	n/a	10	10	25	n/a
04-11-12F	20	n/a	n/a	20	20	40	n/a
04-11-12G	40	n/a	n/a	40	40	80	n/a
04-11-12H	100	n/a	n/a	100	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.

Max 524							
04-12-12A							
50ug/ml 524 Internal Standard w/ Surrogate				Conc.	Date	Exp.	
02SI	122450-02	524 Fortification Sol		ug/ml	Lot #	Code	Date
J.T Baker		Purge & Trap MeOH		K14E06-00613	04/09/12	12/14/12	14850

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	mL
04-12-12B	0.2	2	2	n/a	n/a	2	50
04-12-12C	0.5	5	5	n/a	n/a	5	50
04-12-12D	1	10	10	n/a	n/a	10	50
04-12-12E	10	n/a	n/a	10	10	10	50
04-12-12F	20	n/a	n/a	20	20	20	50

04-10-12J	250ug/ml 524
02SI	EXP:05/15
J.T. Baker	
04-16-12E	
04-16-12F	
04-16-12G	
04-16-12H	
04-16-12I	
04-16-12J	
04-16-12K	

04-10-12J	250ug/ml 524
02SI	EXP:05/15
J.T. Baker	
04-10-12K	
04-10-12L	
04-10-12M	
04-10-12N	
04-10-12O	
04-10-12P	
04-10-12Q	
04-10-12R	
04-10-12S	
04-10-12T	
04-10-12U	
04-10-12V	
04-10-12W	
04-10-12X	
04-10-12Y	
04-10-12Z	

GC/MS STANDARD PREPARATION BOOK #

PAGE # — 119

Exp.	
Date	uL
7/23/12	500
7/23/12	500
1/14/12	3000

4/16/12

A -

Method 8260 Internal
Standard Solution, 2,000
mg/L, 1 ml
120302-03
Lot # Storage Expiry
166255 -10 Degrees C 11/18/12
Solv: P/T Methanol
Method 8260 Internal Standard
Lot #: 166255 - 28859
Rec: 5/25/11 MFR exp. 11/18/12

RS

Std #2	5µg/mL Vol Std #12
M	04-09-12P
-12	Exp:04-16-12
3	n/a
5	n/a
10	n/a
n/a	n/a
n/a	n/a
n/a	n/a

Dug/mL TAPD	Final Vol:
04-09-12S	w/P&T H2O
xp:04-16-12	mL
3	50mL
5	50mL
10	50mL
20	50mL
25	50mL
30	50mL
35	50mL
40	50mL

Std #2	5µg/mL Vol Std #12
Z	04-09-12AC
-12	Exp:04-16-12
3	n/a
5	n/a
10	n/a
n/a	n/a

mL TAPD	Final Vol
9-12AF	w/P&T H2O
14-16-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50
40-16-12K	50

te	uL
4/12	150
4/12	14850

/ol	
120	

4/16/12

B -

Fluorobenzene Solution,
2,000 mg/L, 1 ml
120132-02
Lot # Storage Expiry
169170 -56 Degrees C 2/13/14
Solv: P/T Methanol
Fluorobenzene
Lot #: 169170 - 29854
Rec: 10/24/11 MFR exp. 02/13/14

RS

Sweetpea

04-16-12C

250ug/ml 8260 Internal Standard - Sweetpea

Supplier ID #

O2SI 120302-03 Internal Standard Mix

020132-02 Fluorobenzene Standard

J.T.Baker Purge & Trap MeOH

Conc.

ug/ml

Lot #

Code

Date

Exp.

uL

Conc.

ug/ml

Lot #

Code

Date

Exp.

uL

Conc.

ug/ml

Lot #

Code

Date

Exp.

uL

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 #8

50µg/mL Vol Std #10

50µg/mL Vol Std #1

5µg/mL Vol Std #2

50µg/mL Vol Std #12

5µg/mL Vol Std #12AC

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

04-09-12C

04-09-12AC

Date Exp:04-16-12

120

GCMS 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	
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	2	n/a	2	2	n/a	
04-11-12J	5	5	5	n/a	n/a	5	n/a	5	5	n/a	
04-11-12K	10	10	10	n/a	n/a	10	n/a	10	10	n/a	
04-11-12L	20	20	20	n/a	n/a	20	n/a	20	20	n/a	
04-11-12M	50	n/a	n/a	5	5	n/a	5	n/a	5	n/a	
04-11-12N	100	n/a	n/a	10	10	n/a	10	n/a	10	n/a	
04-11-12O	200	n/a	n/a	20	20	n/a	20	n/a	20	n/a	

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.

04-10-12T											
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	

R8
4/26/12

GEMS STANDARD PREPARATION BOOK # _____ PAGE # _____

001

4/17/12

A-

RS.

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

120016-03

Storage

Expiry

Lot # 180013 ≤ 10 Degrees C 10/17/14

Solv: P/T Methanol
Method 8260 GasesLot #: 180013 - 29770
Rec: 10/24/11 MFR exp. 10/17/14

RS.

4/17/12

B-

RS.

Volatile Mix, 20-29, 2,000
mg/L, 1 ml

122039-02

Storage

Expiry

Lot # 180114 ≤ 10 Degrees C 10/17/13

Solv: P/T Methanol
Volatile Mix, 20-29Lot #: 180114 - 29791
Rec: 10/24/11 MFR exp. 10/17/13

RS

4/17/12

C.

RS.

Method 8260 VOC Liquids, 54
Compounds, 2,000 mg/L, 1 ml

120023-03

Storage

Expiry

Lot # 164454 ≤ 10 Degrees C 10/4/12

Solv: P/T Methanol

8260 VOC Liquids, 54 Comp.

Lot #: 164454 - 27879

Rec: 12/15/10 MFR exp. 10/04/12

RS

4/17/12

D.

RS.

Vinyl Acetate Solution,
2,000 mg/L, 1 ml

020232-02

Storage

Expiry

Lot # 185696 ≤ 10 Degrees C 5/13/12

Solv: P/T Methanol

Vinyl Acetate

Lot #: 185696 - 30408

Rec: 2/20/12 MFR exp. 05/13/12

RS

4/17/12

E.

RS.

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

121020-05

Storage

Expiry

Lot # 169173 ≤ 10 Degrees C 2/13/13

Solv: P/T MeOH:Water 9:1

Ketones

Lot #: 169173 - 29218

Rec: 8/5/11 MFR exp. 02/13/13

RS

002

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

4/17/12
RS

E-

8260B Surrogate Solution
2,000 mg/L, 5 x 1 ml
120002-01-SPAK
Lot # 178653 Storage Expiry
Made in the USA
≤ 10 Degrees C 9/11/13
Solv: P/T Methanol

8260B Surrogate Solution
Lot #: 178653 - 29565
Rec: 9/22/11 MFR exp. 09/11/13

RS

4/17/12
RS.P
E.G

VOC Mix 4-3, 2,000 mg/L, 1 ml
120166-01
Lot # 185760 Storage Expiry
Made in the USA
≤ 6 Degrees C 2/14/14
Solv: P/T Methanol

VOC Mix 4-3, 2000mg/L
Lot #: 185760 - 30413
Rec: 2/20/12 MFR exp. 02/14/14

RS

4/17/12
RSP
H.

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml
120016-03-SS
Lot # 178557 Storage Expiry
Made in the USA
≤ 10 Degrees C 9/13/14
Solv: P/T Methanol

Method 8260 Gases (SS)
Lot #: 178557 - 29530
Rec: 9/20/11 MFR exp. 09/13/14

RS

4/17/12
RS.

04-17-12I						
50ug/ml Vol Work Std #7						
Exp: 04/24/12						
Supplier	ID #	ID	Conc.	Lot #	Date	Exp.
02SI	120016-03	Gas Mix	ug/ml	Code	Date	ul
02SI	020049-02	HEXACHLOROETHANE	2000	180013-29770	04-17-12A	04/24/12
02SI	020228-02	Benzyl Chloride	1000	176700-29159	04-01-12B	06/08/12
J&T Brand		Purge & Trap MeOH	1000	176701-29162	04-01-12C	06/08/12
			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 #	Date	ul
02SI	020145-02-02	2-CEVE	2000	176770-29831	04-01-12D	06/08/12
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						
Supplier	ID #	ID	Conc.	Lot #	Date	Exp.
02SI	122039-02	Volatile Mix, 20-29	ug/ml	Code	Date	ul
02SI	120023-03	VOC'S-54 COMP	2000	180114-29791	04-17-12B	06/08/12
02SI	020232-02	Vinyl Acetate	2000	164454-27879	04-17-12C	06/08/12
02SI	020620-02	n-Hexane	1000	185696-30408	04-17-12D	05/13/12
02SI	020546-02	Heptane	1000	163378-29227	04-09-12D	06/08/12
J&T Brand		Purge & Trap MeOH	1000	169174-29253	04-09-12E	06/08/12
			K14E06-00608	04/13/12	06/08/12	200
04-17-12L						
50ug/ml Vol Work Std #2						
Exp: 04/24/12						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	121020-05	HSL'S-Ketone Solution	2000	169173-29218	04-17-12E	08/08/12
J&T Brand		Purge & Trap MeOH		04/13/12	06/08/12	3900

GC/MS STANDARD PREPARATION BOOK

PAGE # 003

		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	Conc.		Date	Exp.			
	Exp: 04/24/12	ug/ml	Lot #	Code	Date	uL		
	Supplier	ID #	:					
	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

	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		Conc.		Date	Exp.		
	Supplier	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	Conc.		Date	Exp.			
	Exp: 04/24/12	ug/ml	Lot #	Code	Date	uL		
	Supplier	ID #	:					
	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

xp.
ate ul
24/12 100
08/12 200
08/12 200
08/12 3500

ate ul
08/12 50
08/12 1950

Phi.
ite ul
08/12 100
08/12 100
08/12 200
08/12 200
08/12 3300

8/12 100
8/12 3900

004

GC/MS STANDARD PREPARATION BOOK # PAGE # 18

04-17-12V				Conc.	Date	Exp.	
50ug/ml Vol Work Std #7							
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	02049-02	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							
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
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				Conc.	Date	Exp.	
Exp:04/24/12				ug/ml	Lot #	Code	Date
Supplier	ID #	ID	ug/ml				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

Volatile Stand:	IE
Date	Code
04-17-12AF	
04-17-12AG	
04-17-12AH	
04-17-12AI	
04-17-12AJ	
04-17-12AK	
04-17-12AL	

Volatile Standard	Exp
Date	Co
Code	ug
04-17-12AM	0
04-17-12AN	0
04-17-12AO	
04-17-12AP	
04-17-12AR	
04-17-12AS	
04-17-12AT	20

Volatile Standard	Exp
Date	Co
Code	ug
04-19-12A	0
04-19-12B	0
04-19-12C	
04-19-12D	
04-19-12E	
04-19-12F	4
04-19-12G	10
04-19-12H	20

Volatile Standard	Exp
Date	Conc
Code	ug/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

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	
Exp.	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
		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	2	n/a	2	n/a	n/a
	04-17-12AG	5	5	5	n/a	n/a	5	n/a	5	n/a	n/a
	04-17-12AH	10	10	10	n/a	n/a	10	n/a	10	n/a	n/a
	04-17-12AI	20	20	20	n/a	n/a	20	n/a	20	n/a	n/a
	04-17-12AJ	50	n/a	n/a	5	n/a	5	n/a	5	n/a	5
	04-17-12AK	100	n/a	n/a	10	n/a	10	n/a	10	n/a	10
	04-17-12AL	200	n/a	n/a	20	n/a	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

		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	50µg/mL Vol Std #12	
Exp.	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
		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	3	n/a	n/a	n/a	3
	04-17-12AN	0.5	5	10	n/a	n/a	5	n/a	n/a	n/a	5
	04-17-12AO	1	10	20	n/a	n/a	10	n/a	n/a	n/a	10
	04-17-12AP	5	n/a	n/a	5	n/a	10	n/a	5	n/a	n/a
	04-17-12AQ	10	n/a	n/a	10	n/a	25	n/a	10	n/a	n/a
	04-17-12AR	40	n/a	n/a	40	n/a	80	n/a	40	n/a	n/a
	04-17-12AS	100	n/a	n/a	100	n/a	100	n/a	100	n/a	n/a
	04-17-12AT	200	n/a	n/a	200	n/a	125	n/a	200	n/a	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

		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	50µg/mL Vol Std #12	
Exp.	Date	Conc.	04-17-12M	04-17-12Q	04-17-12I	04-17-12P	04-17-12N	04-17-12J	04-17-12L	04-17-12O	
		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	
	04-19-12A	0.3	3	6	n/a	n/a	3	n/a	n/a	n/a	3
	04-19-12B	0.5	5	10	n/a	n/a	5	n/a	n/a	n/a	5
	04-19-12C	1	10	20	n/a	n/a	10	n/a	n/a	n/a	10
	04-19-12D	5	n/a	n/a	5	n/a	10	n/a	5	n/a	n/a
	04-19-12E	10	n/a	n/a	10	n/a	25	n/a	10	n/a	n/a
	04-19-12F	40	n/a	n/a	40	n/a	80	n/a	40	n/a	n/a
	04-19-12G	100	n/a	n/a	100	n/a	100	n/a	100	n/a	n/a
	04-19-12H	200	n/a	n/a	200	n/a	125	n/a	200	n/a	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

		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	50µg/mL Vol Std #12	
Exp.	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
		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	3	n/a	n/a	n/a	3
	04-20-12B	0.5	5	10	n/a	n/a	5	n/a	n/a	n/a	5
	04-20-12C	1	10	20	n/a	n/a	10	n/a	n/a	n/a	10
	04-20-12D	5	n/a	n/a	5	n/a	10	n/a	5	n/a	n/a
	04-20-12E	10	n/a	n/a	10	n/a	25	n/a	10	n/a	n/a
	04-20-12F	40	n/a	n/a	40	n/a	80	n/a	40	n/a	n/a
	04-20-12G	100	n/a	n/a	100	n/a	100	n/a	100	n/a	n/a
	04-20-12H	200	n/a	n/a	200	n/a	125	n/a	200	n/a	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

006

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # _____

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	n/a	3	n/a	n/a	3
04-20-12J	0.5	5	10	n/a	n/a	n/a	n/a	5	n/a	n/a	5
04-20-12K	1	10	20	n/a	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	n/a
04-20-12M	10	n/a	n/a	10	10	25	n/a	10	10	n/a	n/a
04-20-12N	40	n/a	n/a	40	40	80	n/a	40	40	n/a	n/a
04-20-12O	100	n/a	n/a	100	100	100	n/a	100	100	n/a	n/a
04-20-12P	200	n/a	n/a	200	200	125	n/a	200	200	n/a	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 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	50µg/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	04-17-12Z	
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	n/a	2	n/a	2	n/a
04-24-12B	5	5	5	n/a	n/a	n/a	n/a	5	n/a	5	n/a
04-24-12C	10	10	10	n/a	n/a	n/a	n/a	10	n/a	10	n/a
04-24-12D	20	20	20	n/a	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	50
04-24-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10	n/a
04-24-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20	n/a

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 JABW 4/27/12

Neo 524											
04-25-12A											
10ug/ml Neo-524 Internal Standard w/ Surrogate											
	Conc.										
	ug/ml										
02SI	122450-02	524 Fortification Sol									
J.T.Baker		Purge & Trap MeOH									
			K14E06-00590		04-09-12AG	09/10/12	200				
					04/25/12	12/12/12	19800				

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	04-17-12Z	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	Exp:04-24-12	Exp:04-24-12	ml.	
04-25-12B	0.2	2	2	n/a	n/a	n/a	n/a	2	50		
04-25-12C	0.5	5	5	n/a	n/a	n/a	n/a	5	50		
04-25-12D	1	10	10	n/a	n/a	n/a	n/a	10	50		
04-25-12E	5	n/a	n/a	5	5	5	5	20	50		
04-25-12F	10	n/a	n/a	10	10	10	10	25	50		
04-25-12G	20	n/a	n/a	20	20	20	20	30	50		
04-25-12H	40	n/a	n/a	40	40	40	40	35	50		

Method 8260B Surrogate
 Solution, 2,000 mg/L, 1 ml
 Lot #: 120002-01
 Storage: ≤ -10 Degrees C
 Expiry: 10/12/13
 Solv.: P/T Methanol
 Method 8260B Surrogate
 Lot #: 164585 - 30465
 Rec: 2/20/12 MFR exp. 10/12/13

ACMS STANDARD PREPARATION BOOK

PAGE #

col Std #2	5µg/mL Vol Std #12
-12L	04-17-12O
24-12	Exp:04-24-12
3	n/a
5	n/a
10	n/a
n/a	n/a
0	n/a
0	n/a

4/26/12
RS

A -

Method 8260 Gases, 2,000
mg/L, 2 X 0.6 mlLot #: 120016-03
Storage: 180013 ≤ -10 Degrees C Expiry: 10/17/14Solv: P/T Methanol
Method 8260 Gases

Lot #: 180013 - 29769

Rec: 10/24/11 MFR exp. 10/17/14

RS

µg/mL TAPD	Final Vol
04-17-12R	w/P&T H2O
04-24-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

4/26/12
RS

B -

2-Chloroethyl Vinyl Ether
Solution, 2,000 mg/L, 2 X0.6 ml
Lot #: 020145-02-02Storage: 176770 ≤ -10 Degrees C Expiry: 7/31/13
Solv: P/T Methanol
2-Chloroethyl vinyl ether

Lot #: 176770 - 29830

Rec: 10/24/11 MFR exp. 07/31/13

RS

col 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
/a	n/a
/a	5
/a	10
/a	20

4/26/12
RS

C -

n-Hexane Solution, 1,000
mg/L, 1 mlLot #: 020620-02
Storage: 176773 ≤ -10 Degrees C Expiry: 7/30/16Solv: P/T Methanol
n-Hexane Solution

Lot #: 176773 - 29801

Rec: 10/24/11 MFR exp. 07/30/16

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

4/26/12
RS

D -

VOC Mix 4-3, 2,000 mg/L, 1

ml
Lot #: 120166-01

Storage: 178651 ≤ 56 Degrees C Expiry: 9/11/13

Solv: P/T Methanol

VOC Mix 4-3, 2000mg/L

Lot #: 178651 - 30410

Rec: 2/20/12 MFR exp. 09/11/13

RS

Final Vol	
w/P&T H2O	
mL	
50	
50	
50	
50	
50	
50	

4/26/12
RS

E -

Acrolein Solution, 10,000
mg/L, 2 x 0.6 ml

Lot #: 020229-09-02

Storage: 188973 ≤ 6 Degrees C Expiry: 5/30/12

Solv: Water, HPLC Grade

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

≤-10 Degrees C

Expiry

9/13/14

Solv: P/T Methanol

Method 8260 Gases (SS)

Lot #: 178557 - 29529

Rec: 9/20/11 MFR exp. 09/13/14

PS

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

Acrolein Solution SS

Lot #: 188974 - 30651

Rec: 4/24/12 MFR exp. 05/30/12

PS

4/26/12

RS

04-26-12H								
50ug/ml Vol Work Std #7								
Exp: 05/03/12								
Supplier	ID #	ID	Conc.		Date		Exp.	
02SI	120016-03	Gas Mix	ug/ml	Lot #	Code	Date	ul	
02SI	020049-02	HEXACHLOROETHANE	2000	180013-29769	04-26-12A	05/03/12	100	
02SI	020228-02	Benzyl Chloride	1000	176700-29159	04-01-12B	06/08/12	200	
J&T Brand		Purge & Trap MeOH	1000	176701-29162	04-01-12C	06/08/12	200	
04-26-12I			K14E06-00590		04/25/12	06/08/12	3500	
50ug/ml Vol Work Std #1								
Supplier	ID #	ID	Conc.		Date		Exp.	
02SI	020145-02-02	2-CEVE	ug/ml	Lot #	Code	Date	ul	
J&T Brand		Purge & Trap MeOH	2000	176770-29830	04-26-12B	06/08/12	50	
04-26-12J			K14E06-00590		04/25/12	06/08/12	1950	
50ug/ml Vol Work Std #8								
Supplier	ID #	ID	Conc.		Date		Exp.	
02SI	122039-02	Volatile Mix, 20-29	ug/ml	Lot #	Code	Date	ul	
02SI	120023-03	VOC'S-54 COMP	2000	180114-29791	04-17-12B	06/08/12	100	
02SI	020232-02	Vinyl Acetate	2000	164454-27879	04-17-12C	06/08/12	100	
02SI	020620-02	n-Hexane	1000	185696-30408	04-17-12D	05/13/12	100	
02SI	020546-02	Heptane	1000	176773-29801	04-26-12C	06/08/12	200	
J&T Brand		Purge & Trap MeOH	1000	169174-29253	04-09-12E	06/08/12	200	
04-26-12K			K14E06-00590		04/25/12	06/08/12	3300	
50ug/ml Vol Work Std #2								
Supplier	ID #	ID	Conc.		Date		Exp.	
02SI	121020-05	HSL'S-Ketone Solution	ug/ml	Lot #	Code	Date	ul	
J&T Brand		Purge & Trap MeOH	2000	169173-29218	04-17-12E	08/08/12	100	
			04/13/12		06/08/12	06/08/12	3900	

4/26/12

RS

GC/MS STANDARD PREPARATION BOOK # _____ PAGE # 009

		04-26-12L	Exp:	05/03/12					
		50ug/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					
		50ug/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					
		50ug/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		
		J&T Brand		50ug/ml 8260 Surrogate		04-26-12Q	05/03/12	200	
				Purge & Trap MeOH		04/13/12	06/08/12	1800	
		04-26-12Q							
		250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P		Conc.		Date	Exp.		
		Exp: 04/24/12		ug/ml	Lot #	Code	Date	uL	
		Supplier	ID #	:					
		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

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

	04-26-12R								
	50ug/ml VOC Std#5								
	Exp: 05/03/12								
	Supplier	ID #	ID	Conc.		Date	Exp.		
	O2SI	120016-03-SS	8260 Gases(SS)	ug/ml	Lot #	Code	Date	uL	
	O2SI	020145-02-02-2-CEVE		2000	178557-29529	04-26-12F	05/03/12	50	
	J&T Brand		Purge & Trap MeOH		2000	181404-30009	02-20-12I	05/14/12	50
	04-26-12S					K14E06-00590	04/25/12	06/08/12	1900
	50ug/ml VOC Std#6								
	Exp: 05/03/12								
	Supplier	ID #	ID	Conc.		Date	Exp.		
	O2SI	120023-03-SS	VOC'S 54 COMP.	ug/ml	Lot #	Code	Date	uL	
	O2SI	120296-01	Custom 8260 Solution	2000	176822-29263	03-22-12L	05/14/12	50	
	O2SI	020232-02-SS	Vinyl Acetate(SS)	2000	166038-27767	03-22-12M	05/18/12	50	
	O2SI	020620-02-SS	n-HEXANE	1000	184399-30240	04-09-12I	04/05/12	50	
	O2SI	020049-02-SS	HEXACHLOROETHANE	1000	179199-29614	03-22-12O	06/14/12	100	
	O2SI	020546-02-SS	Heptane(SS)	1000	183795-30439	03-22-12P	06/14/12	100	
	J&T Brand		Purge & Trap MeOH		1000	185762-30449	03-22-12Q	06/14/12	100
	04-26-12T					K14E06-00590	04/25/12	06/08/12	1550
	250ug/ml TBA/IBA/Acetonitrile/Cyclohexanone/Acrolein/2-P								
	Exp: 05/03/12								
	Supplier	ID #		Conc.		Date	Exp.		
	O2SI	120166-01-SS	VOC Mix 4-3 (SS)	ug/ml	Lot #	Code	Date	uL	
	O2SI	020229-09-SS	Acrolein SOLUTION (SS)	2000	163778-29837	03-22-12R	06/14/12	250	
	J&T Brand		Purge & Trap MeOH		10000	188974-30651	04-26-12G	05/30/12	50

4/26/12
RS

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

010

GC/MS STANDARD PREPARATION BOOK

PAGE #

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

	Expiration Date	04/28/12		50µg/mL Vol Std #9	50µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/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	04-26-12L	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	Exp.05-03-12	
04-27-12A	2	2	2	n/a	n/a	n/a	n/a	2	n/a	2	n/a	
04-27-12B	5	5	5	n/a	n/a	n/a	n/a	5	n/a	5	n/a	
04-27-12C	10	10	10	n/a	n/a	n/a	n/a	10	n/a	10	n/a	
04-27-12D	20	20	20	n/a	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	n/a	
04-27-12F	100	n/a	n/a	10	10	10	n/a	10	n/a	10	n/a	
04-27-12G	200	n/a	n/a	20	20	20	n/a	20	n/a	20	n/a	

250µg/mL TBA	Final Vol:
04-26-12Q	w/P&T H ₂ O
Exp.05-03-12	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

5/1/12
RS

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

	Expiration Date	05/01/12		50µg/mL Vol Std #9	50µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/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	04-26-12L	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	Exp.05-03-12	
04-30-12A	0.3	3	6	n/a	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	n/a	5	n/a	n/a	5	
04-30-12C	1	10	20	n/a	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	n/a	
04-30-12E	10	n/a	n/a	10	10	25	n/a	10	10	n/a	n/a	
04-30-12F	40	n/a	n/a	40	40	80	n/a	40	40	n/a	n/a	
04-30-12G	100	n/a	n/a	100	100	100	n/a	100	100	n/a	n/a	
04-30-12H	200	n/a	n/a	200	200	125	n/a	200	200	n/a	n/a	

250µg/mL TAPD	Final Vol
04-26-12Q	w/P&T H ₂ O
Exp.05-03-12	mL
3	50
5	50
10	50
20	50
25	50
35	50
40	50
45	50

5/1/12
RS

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

	Expiration Date	05/01/12		50µg/mL Vol Std #9	50µg/mL Surr	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surr	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/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	04-26-12L	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	Exp.05-03-12	
04-30-12I	0.3	3	6	n/a	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	n/a	5	n/a	n/a	5	
04-30-12K	1	10	20	n/a	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	n/a	
04-30-12M	10	n/a	n/a	10	10	25	n/a	10	10	n/a	n/a	
04-30-12N	20	n/a	n/a	20	20	40	n/a	20	20	n/a	n/a	
04-30-12O	40	n/a	n/a	40	40	80	n/a	40	40	n/a	n/a	
04-30-12P	100	n/a	n/a	100	100	100	n/a	100	100	n/a	n/a	

250µg/mL TAPD	Final Vol
04-26-12Q	w/P&T H ₂ O
Exp.05-03-12	mL
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

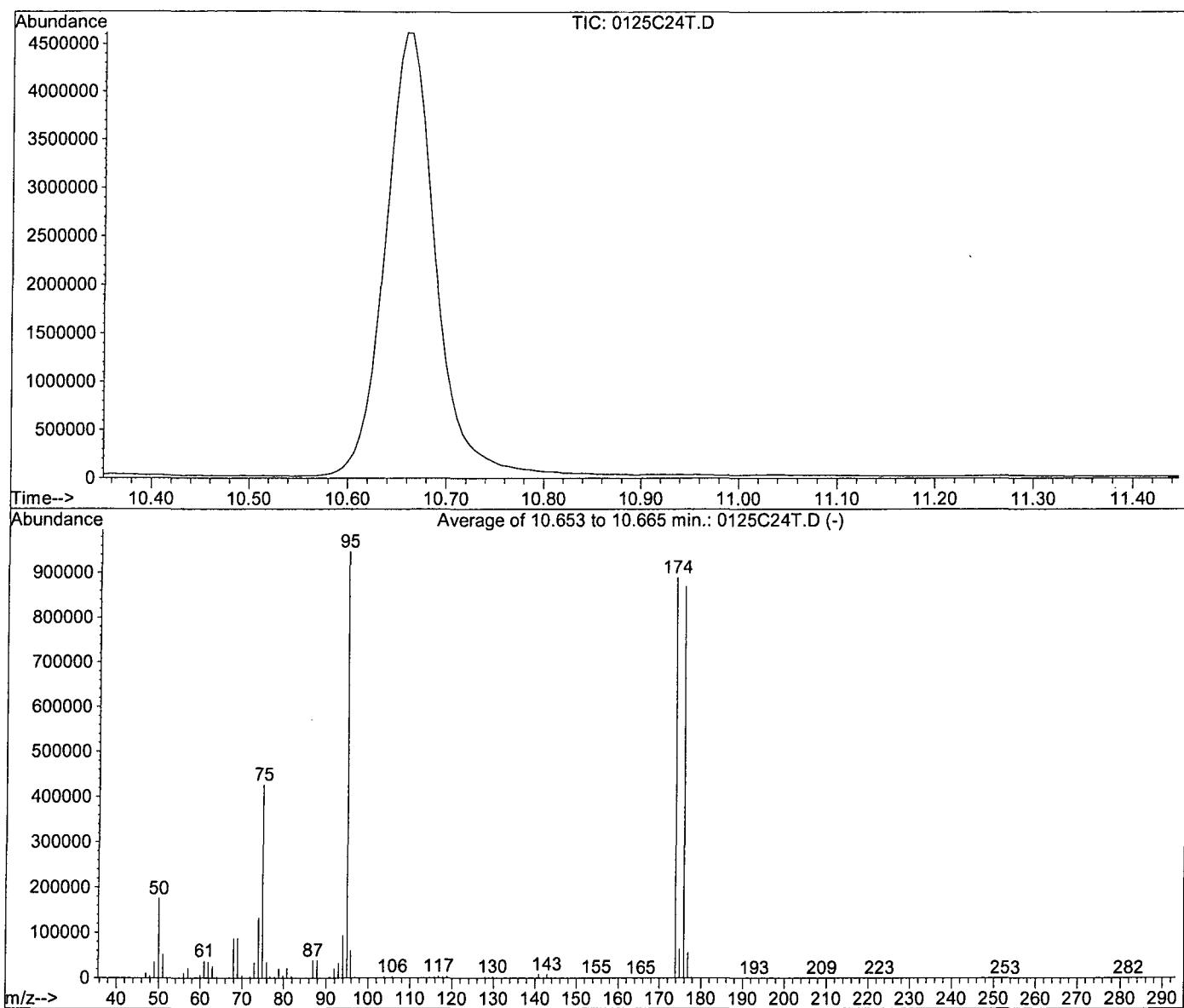
5/01/12
RS

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.

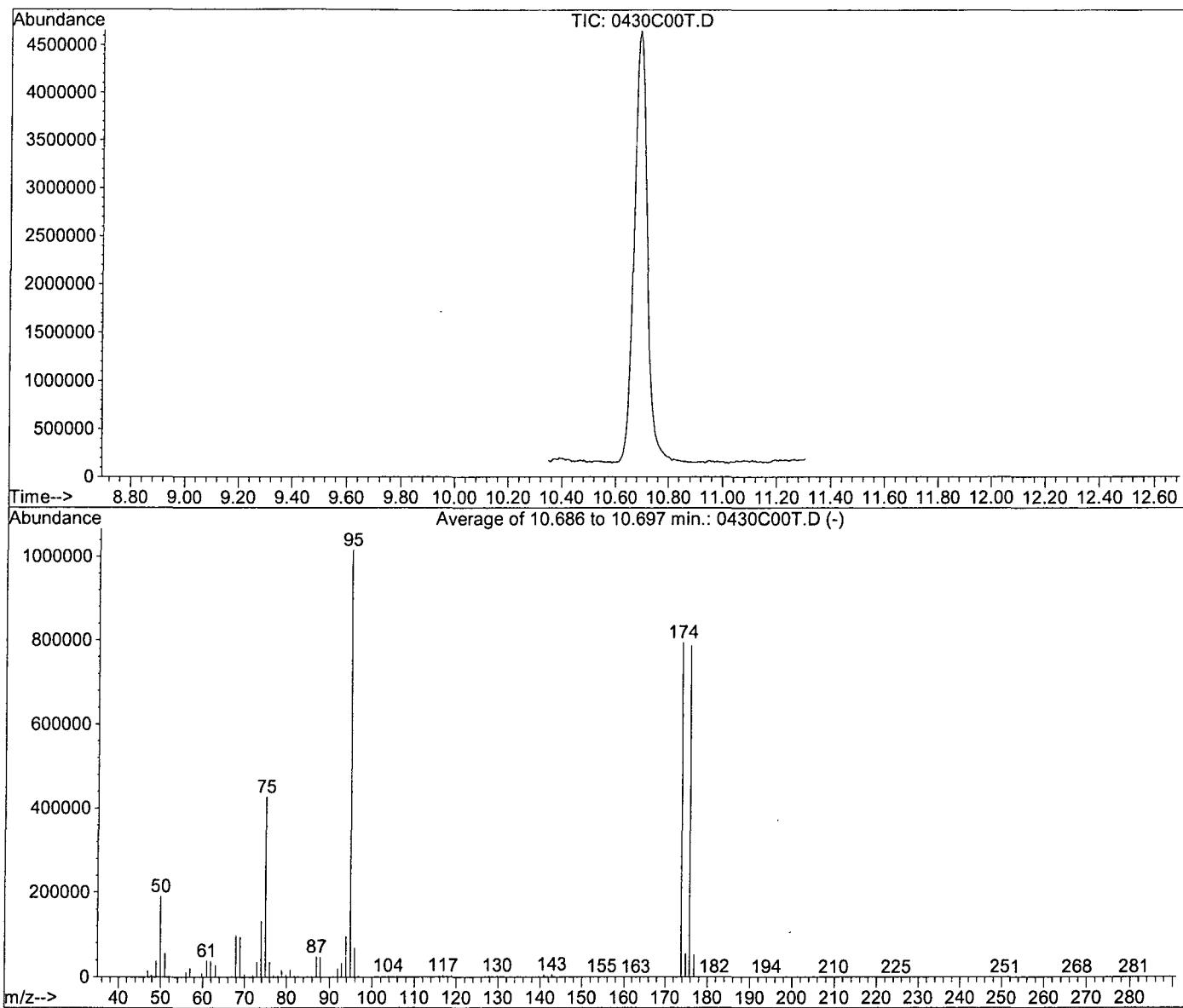
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.5	175569	PASS
75	95	30	60	45.1	426726	PASS
95	95	100	100	100.0	947029	PASS
96	95	5	9	6.5	61164	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	93.9	889685	PASS
175	174	5	9	7.3	64552	PASS
176	174	95	101	97.7	869568	PASS
177	176	5	9	6.5	56475	PASS

BFB

Data File : M:\CHICO\DATA\C120420\0430C00T.D
 Acq On : 30 Apr 12 9:26
 Sample : 25ug/ml BFB STD 04-10-12
 Misc : 2uL

Vial: 1
 Operator: AS
 Inst : Chico
 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.

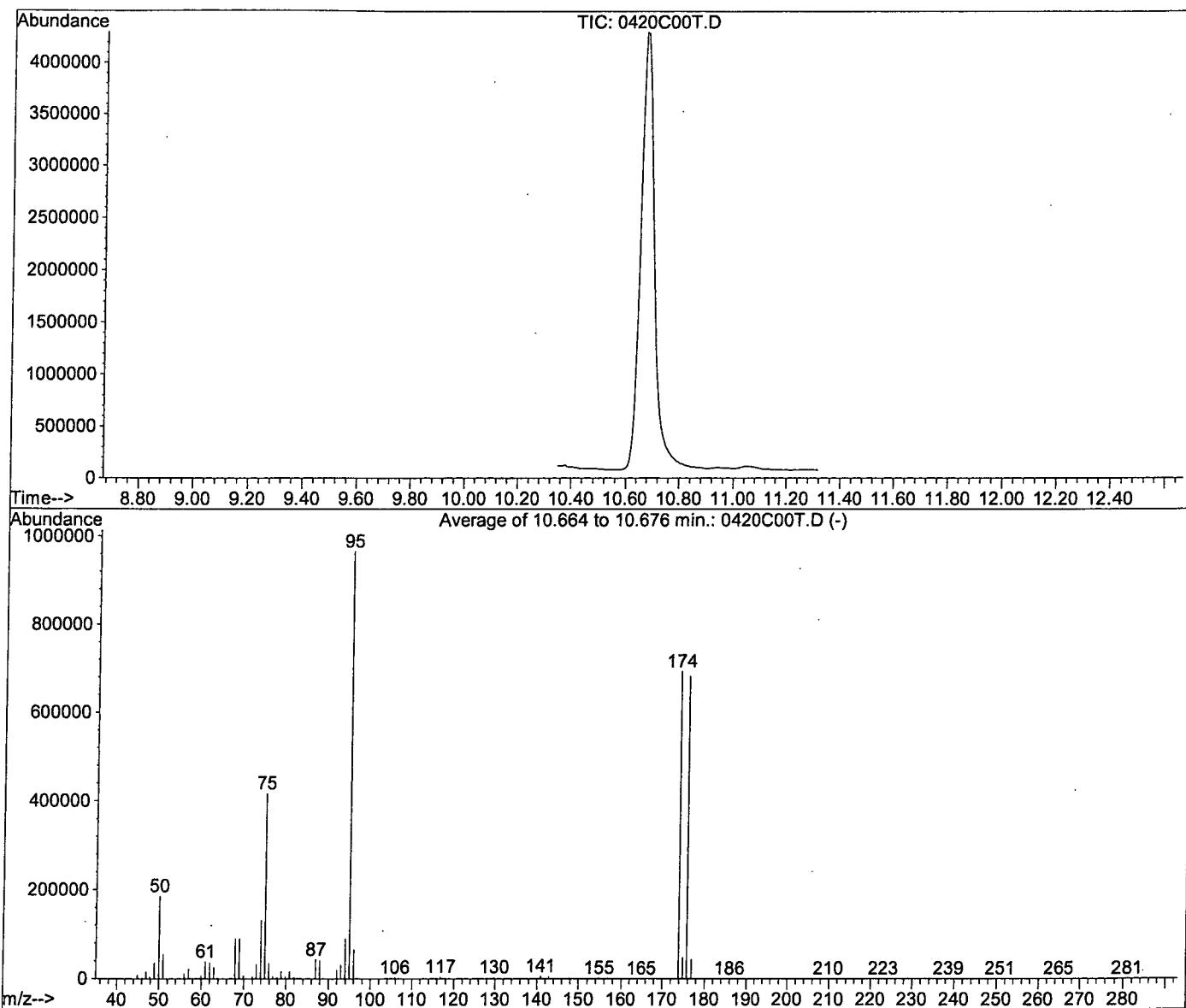
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.7	190359	PASS
75	95	30	60	42.0	426833	PASS
95	95	100	100	100.0	1015866	PASS
96	95	5	9	6.7	68317	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.3	795051	PASS
175	174	5	9	7.0	55451	PASS
176	174	95	101	99.0	787388	PASS
177	176	5	9	6.7	52544	PASS

BFB

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



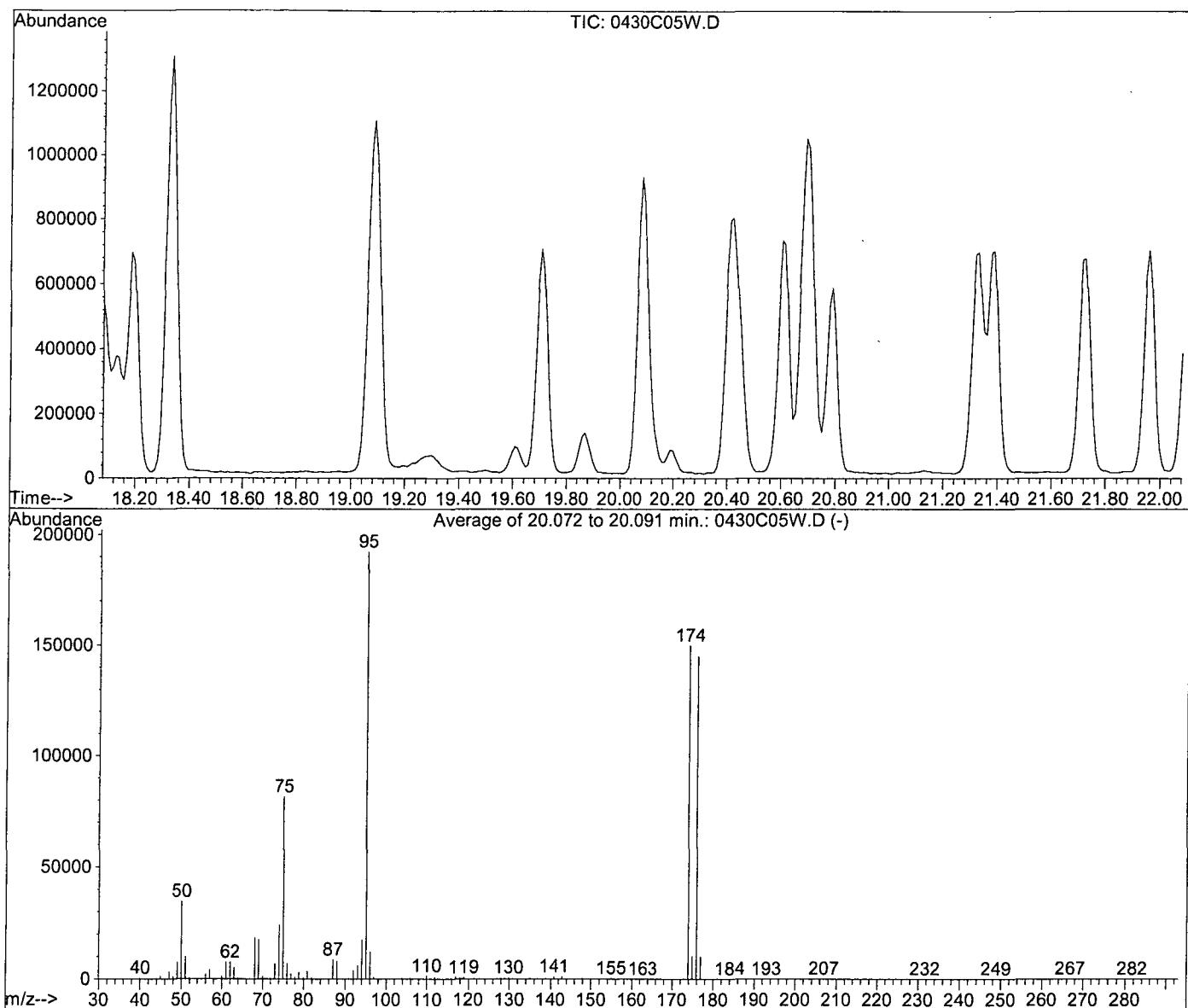
Spectrum Information: Average of 10.664 to 10.676 min.

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
 Acq On : 30 Apr 12 12:26
 Sample : 25ug/ml BFB STD 04-10-12
 Misc : 2uL

Vial: 1
 Operator: AS
 Inst : Chico
 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.

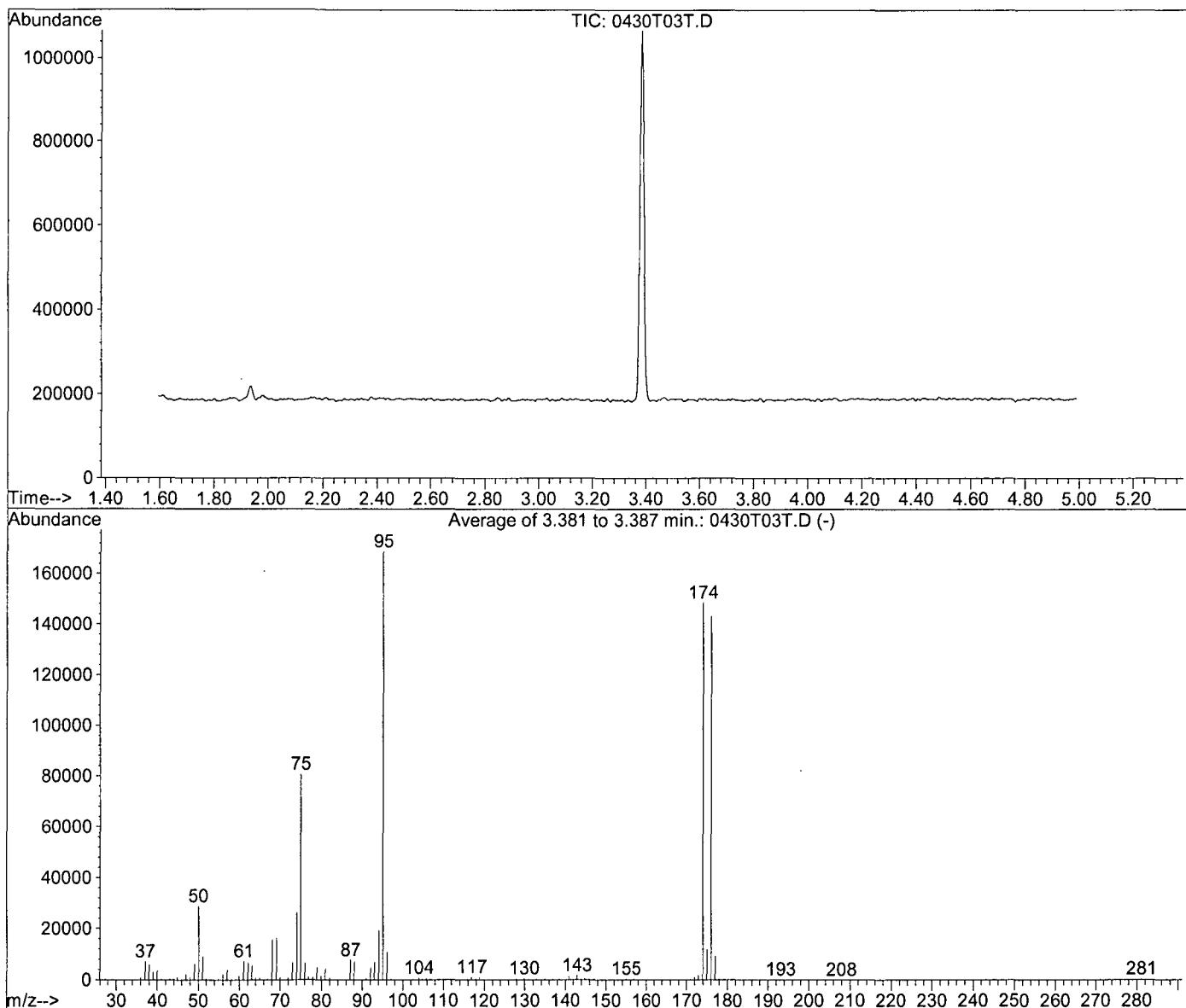
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	34699	PASS
75	95	30	60	42.5	81701	PASS
95	95	100	100	100.0	192405	PASS
96	95	5	9	6.4	12395	PASS
173	174	0.00	2	0.1	189	PASS
174	95	50	100	78.0	150144	PASS
175	174	5	9	6.8	10273	PASS
176	174	95	101	96.9	145443	PASS
177	176	5	9	6.9	10075	PASS

BFB

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.

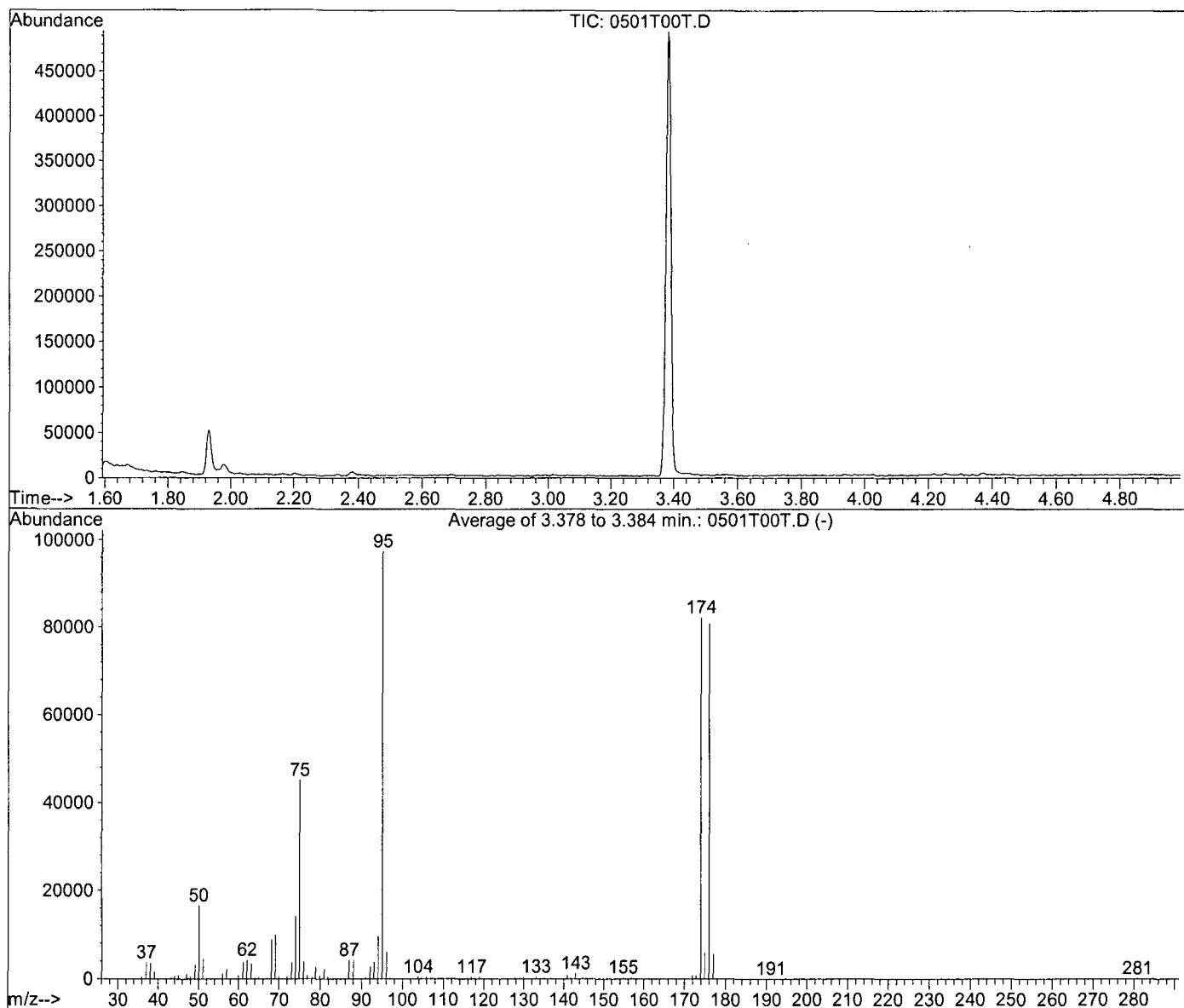
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.1	28853	PASS
75	95	30	60	47.9	80816	PASS
95	95	100	100	100.0	168725	PASS
96	95	5	9	6.4	10835	PASS
173	174	0.00	2	1.2	1716	PASS
174	95	50	100	88.1	148565	PASS
175	174	5	9	8.1	11962	PASS
176	174	95	101	96.5	143317	PASS
177	176	5	9	6.4	9209	PASS

BFB

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



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

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

APPL Inc.

Sample ID: AY60081

908 North Temperance Avenue

Clovis, CA 93611

Client ID: ES077

Method	Compound Name	Spike Lvl	Matrix Res	SPK Res	DUP Res	SPK %	DUP %	RPD	RPD Recovery	Extract	Analysis	Extract	Analysis	QC	QC	
		ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Max	Limits	Date-Spk	Date-Spk	Date-Dup	Date-Dup	Group	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



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
Sample ID: ES076
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60080

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
Sample ID: ES077
Sample Collection Date: 04/26/12

ARF: 67622
APPL ID: AY60081

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



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

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: 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	
Lead (Pb)	100	103.5	104	50	46.81	93.6	50	46.22	92.4

(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.: 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		
Lead (Pb)	.20 U	12:52	13:06		13:59		17:21		17:35	

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		
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.
ARF No.: 67622
ICP ID Number: Optimus

Contract: Environet, Inc.
SDG: 67622
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

60081_602D_Opti_120515Arev

FORM V - IN

ILM02.0

A.P.P.L. INC.

9

ICP SERIAL DILUTION

CLIENT SAMPLE NO.

ES077

Lab Name: A.P.P.L. INC.
 ARF No.: 67622
 Matrix: water

Contract: Environet, Inc.
 SDG: 67622

Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	Initial Sample Result (I)	Serial Dilution Result (S)		%D	Q	M
		C	C			
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.
ARF No.: 67622

Contract: Environet, Inc.
SDG: 67622

Analysis Date: 05/15/12 Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)		Sample Result (SR)		Spike Added (SA)	%R	Q	M
		C	C	C	C				
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	26140.00	0.43	0.0000
7 (Li)	338009.19	1733.00	0.51	0.7171
9 Be	550.03	85.06	15.47	1.0000
11 B	9064.12	252.30	2.78	0.9996
23 Na	97556.89	829.00	0.85	0.9999
24 Mg	631.15	55.21	8.75	1.0000
27 Al	141.12	34.70	24.59	1.0000
39 K	22030.34	146.70	0.67	1.0000
44 Ca	421.98	21.96	5.20	1.0000
45 Sc	1506071.00	22010.00	1.46	0.0000
45 Sc	184273.20	2647.00	1.44	0.0000
45 Sc	6260917.00	27290.00	0.44	0.0000
47 Ti	8.00	2.67	33.34	1.0000
51 V	225.34	6.11	2.71	1.0000
52 Cr	284.01	8.33	2.93	1.0000
55 Mn	227.56	26.00	11.43	1.0000
56 Fe	4653.69	6.16	0.13	1.0000
59 Co	240.89	7.34	3.05	1.0000
60 Ni	88.45	6.58	7.44	1.0000
63 Cu	310.23	22.99	7.41	1.0000
65 Cu	150.67	8.74	5.80	1.0000
66 Zn	106.67	2.31	2.16	0.9999
72 Ge	350705.59	3926.00	1.12	0.0000
72 Ge	123678.30	2140.00	1.73	0.0000
72 Ge	1219730.00	9739.00	0.80	0.0000
75 As	36.11	1.35	3.73	1.0000
78 Se	24.33	1.45	5.97	1.0000
78 Se	87.22	4.83	5.54	0.9999
88 Sr	240.01	23.33	9.72	1.0000
88 Sr	2907.07	68.07	2.34	0.9999
95 Mo	525.58	36.72	6.99	1.0000
106 (Cd)	22.22	9.62	43.30	1.0000
107 Ag	731.16	66.20	9.05	0.9999
108 (Cd)	10.00	8.82	88.19	1.0000
111 Cd	240.66	31.17	12.95	1.0000
115 In	2786554.00	13160.00	0.47	0.0000
115 In	1387744.00	2110.00	0.15	0.0000
115 In	7748996.00	43660.00	0.56	0.0000
118 Sn	637.82	37.47	5.87	1.0000
118 Sn	382.24	19.25	5.04	1.0000
118 Sn	1772.39	27.76	1.57	1.0000
121 Sb	6990.88	305.10	4.36	0.9999
137 Ba	338.91	11.71	3.46	1.0000
159 Tb	9603861.00	47670.00	0.50	0.0000
165 Ho	9233028.00	19080.00	0.21	0.0000
205 Tl	1846.86	102.70	5.56	0.9988
206 (Pb)	902.29	13.47	1.49	0.9999
207 (Pb)	761.16	44.39	5.83	1.0000
208 Pb	3651.45	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\006CALB.D\006CALB.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\12E15100.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	-----	-----	-----	-----	-----	-	120
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:\icpcchem\1\7500\h2_hmi.u
 Tune File# 2 c:\icpcchem\1\7500\he_hmi.u
 Tune File# 3 c:\icpcchem\1\7500\ng_hmi.u

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

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\12E15100.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\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\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	9908994.00	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



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

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample ID: AY60081

Client ID: ES077

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD Max	RPD Limits	Recovery Date-Spk	Extract Date-Spk	Analysis Date-Dup	Extract Date-Dup	Analysis Date-Dup Group	QC	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

008 Metals Standards Log Book # 35 Page # 008

NBS 05/15/12

NBS 6020/6020A

05/15/12

(A)

ICP-MS STANDARDS 6020/6020A/3015/301A						
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						
ICSA Prep:	05/22/12					
1 mL	ICSA	CPI				
Prepared in 5 mL of 1% HNO3/1.0% HCL						
ICSAB Prep:	05/22/12					
1mL	ICSA	CPI				
0.025mL	INT	O2Si				
Prepared in 5 mL of 1% HNO3/1.0% HCL						
ICP-LDR	05/22/12					
Amount	STD					
50 uL	CCV-A	Env. Express				
50 uL	CCV-B	Env. Express				
50 uL	CCV-C	Env. Express				
Prepared in 10 mL of 1% HNO3/1.0% HCL						

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					

RJS 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.....S/14/12.....

RJS 5/15/12

Hg WORKING STANDARD

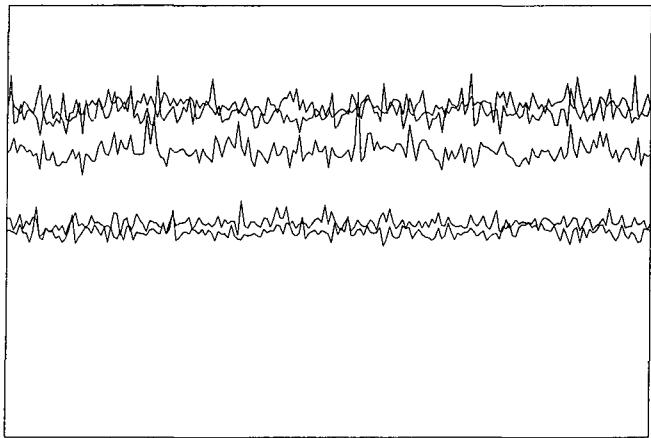
1ml X 10ug/ml Hg STOCK STD. (04/17/12RJS)/200ml 1% HNO3 Lot#L02030

1ml X 10ug/ml Hg STOCK ICV (04/17/12RJS)/200ml 1% HNO3 Lot#L02030

Final concentration is 50 ug/L. Expires.....S/15/12.....

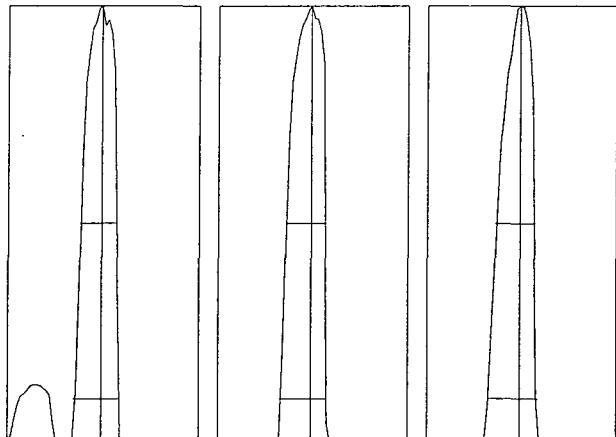
Tune Report

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

Tune Report

Tune File : NG_HMI.u
Comment : 120515

Tuning Parameters

==Plasma Condition==

RF Power : 1600 W
RF Matching : 1.84 V
Smpl Depth : 8 mm
Torch-H : -0.2 mm
Torch-V : 0 mm
Carrier Gas : 0.5 L/min
Makeup Gas : 0.5 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : --- rps
S/C Temp : 2 degC

==Ion Lenses==

Extract 1 : 0 V
Extract 2 : -160 V
Omega Bias-ce : -18 V
Omega Lens-ce : 0.2 V
Cell Entrance : -30 V
QP Focus : 5 V
Cell Exit : -30 V

==Q-Pole Parameters==

AMU Gain : 126
AMU Offset : 127
Axis Gain : 1.0002
Axis Offset : -0.05
QP Bias : -3 V

==Detector Parameters==

Discriminator : 8 mV
Analog HV : 1690 V
Pulse HV : 1270 V

==Reaction Cell==

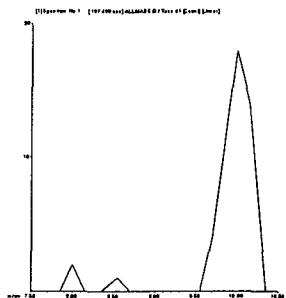
Reaction Mode : OFF
H2 Gas : 0 mL/min He Gas : 0 mL/min Optional Gas : --- %

200.8 QC Tune Report

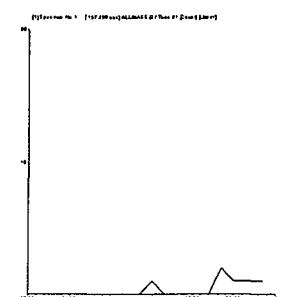
Data File: C:\ICPCHEM\1\DATA\12E15k00.B\001TUNE.D
 Date Acquired: May 15 2012 10:12 am
 Acq. Method: TN200_8.M
 Operator: NBS
 Sample Name: 100ppb Tune sol
 Misc Info:
 Vial Number: 1303
 Current Method: C:\ICPCHEM\1\METHODS\TN200_8.M

RSD (%)

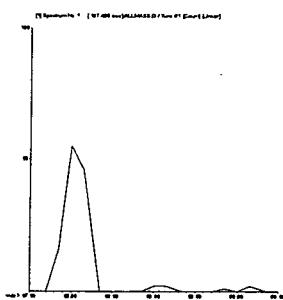
Element	CPS	Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	1964623	1950495	1971749	1963894	1963348	1973629	0.76	5.00		
24 Mg	6543082	6639218	6509236	6526714	6496096	6544144	0.98	5.00		
59 Co	7436122	7477401	7469856	7418669	7403612	7411072	0.74	5.00		
115 In	23624206	23458632	23524476	23738852	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:



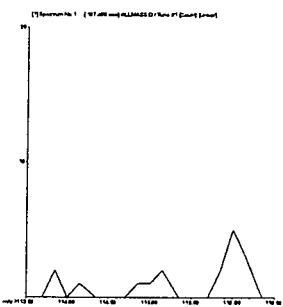
59 Co

Mass Calib.

Actual: 58.95
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



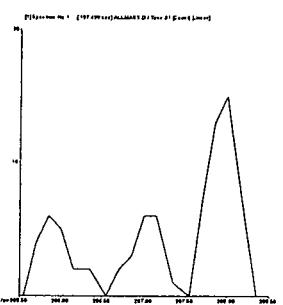
115 In

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	SA
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: SA

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.