



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

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

## Data Validatable Report

December 12, 2011

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

Attn: Stacey Fineran

Title: Report of Data: Case 66102

Project: 1022-024 LTM Red Hill Bulk Fuel Storage Facility

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

Dear Ms. Fineran:

Samples were received October 26, 2011, in good condition. Written results for the requested analyses are provided on this December 12, 2011.

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

The MADEP-EPH and VPH analyses were subcontracted to Gulf coast Analytical Laboratories, Inc.

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

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

Sharon Dehmlow, Laboratory Director  
APPL, Inc.

SD/rp  
Enclosure  
cc: File

Number of pages in this report: \_\_\_\_



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A handwritten signature in black ink, appearing to read 'Sharon Dehmlow', written in a cursive style.

Sharon Dehmlow, Laboratory Director  
APPL, Inc.

SD/rp  
Enclosure  
cc: File

Number of pages in this report: 483

Data Validation Package  
for  
LTM Red Hill Bulk Fuel Storage Facility  
SDG 66102

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## **SAMPLE RECEIPT INFORMATION**



# Sample receipt information

ARF: 66102

Project: LTM Red Hill Bulk Fuel Storage Facility

## Sample Receipt Information:

The samples were received on October 26, 2011, at 2.5°C, 3.0°C, and 3.0°C. The samples were assigned Analytical Request Form (ARF) number 66102. The sample numbers and requested analyses were compared to the chains of custody and email communications. Four bottles arrived broken for sample ES047; the client was notified. No other exception was encountered.

Sample Table

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES046	AY49333	WATER	10/24/2011	10/26/2011
ES047	AY49334	WATER	10/24/2011	10/26/2011
ES048	AY49335	WATER	10/24/2011	10/26/2011
ES049	AY49336	WATER	10/24/2011	10/26/2011

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.

The MADEP-EPH and VPH analyses were subcontracted to Gulf coast Analytical Laboratories, Inc. Their report is included.

# **CASE NARRATIVE**

# **EPA Method 8015B**

## **Total Petroleum Hydrocarbons – Diesel**

### **Sample Preparation:**

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

### **Sample Analysis Information:**

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

### **Quality Control/Assurance**

#### **Calibrations:**

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

#### **Blanks:**

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

#### **Spikes:**

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

Sample ES047 was designated by the client for MS/MSD analysis. Diesel fuel recovers below the 61% lower recovery limit in the MS at 33.5% and in the MSD at 30.0%.

#### **Surrogates:**

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

### **Summary:**

No other problem was encountered

# **EPA Method 8270D SIM**

## **Polynuclear Aromatic Hydrocarbons**

### **Sample Preparation:**

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

### **Sample Analysis Information:**

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

### **Quality Control/Assurance**

#### **Calibrations:**

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

#### **Blanks:**

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

#### **Spikes:**

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

Sample ES047 was designated by the client for MS/MSD analysis. For the MSD, Acenaphthene recovered below the 45% lower control limit at 42.0%, Acenaphthylene below the 50% lower control limit at 45.6%, and Anthracene below the 55% lower control limit at 50.5%. The RPD for Naphthalene exceeded the 25% limit at 36.4%. All other recoveries met acceptance criteria.

#### **Surrogates**

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

#### **Tuning:**

The instrument was tuned using DFTPP. All method criteria were met.

#### **Internal Standards**

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8270. All method criteria were met.

### **Summary:**

No other problem was encountered.

# **EPA Method 8260B**

## **Volatile Organic Analysis**

### **Sample Preparation:**

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

### **Sample Analysis Information:**

The samples were analyzed according to the method using a Hewlett Packard Gas Chromatograph with a mass spectrometer detector. All samples were listed as non-preserved; they were injected within the seven day holding time. All holding times were met. Manual integrations were performed in accordance to APPL's SOP. All points of the gasoline curve, the gasoline second-source, and the gasoline LCS required manual integrations because the integration did not follow the baseline. Chromatograms of prior to and after manual integrations are enclosed.

### **Quality Control/Assurance:**

#### **Calibrations:**

Initial and continuing calibrations were performed according to the method. All system performance check compounds and calibration check compounds met DoD acceptance criteria. All calibration criteria were met except for acetone in continuing calibration 1030C27W.D; acetone recovered above the 20% Drift limit at 28% Drift. Acetone recovered within the control limits of the following LCS and was not detected in any sample.

#### **Blanks:**

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

#### **Spikes:**

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

Sample ES047 was designated by the client for MS/MSD analysis. All spike criteria were met except for gasoline, which recovered above the 125% upper control limit at 126% in the MSD.

#### **Surrogates:**

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

#### **Tuning:**

The instrument was tuned using BFB. All method criteria were met.

#### **Internal Standards:**

The internal standard area counts were compared to the mid-point of the initial calibration according to method 8260. All method criteria were met.

### **Summary:**

No other problem was encountered. The data generated are acceptable.

# **EPA Method 6020**

## **Dissolved Lead**

### **Digestion Information:**

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

### **Analysis Information:**

#### **Samples:**

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

#### **Calibrations:**

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

#### **Blanks:**

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

#### **Spikes:**

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

Sample ES047 was designated by the client for MS/MSD 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
M1	Manual integration: integration does not follow baseline
M2	Manual integration: non-target peak interference
M3	Manual integration: to split a peak that was integrated as one peak by the computer
M4	Manual integration: to integrate a split peak
M5	Manual integration: the whole peak or part of the peak was not integrated
M6	Manual integration: computer integrated wrong peak
M7	Manual integration: other - explain
MDL	Method detection limit
ND	Not detected
NT	Non-target
Q	Acceptance criteria not met
T1 I	Includes wide range of hydrocarbons not indicative of diesel
T1 M	Is mainly wide range of hydrocarbons not necessarily indicative of diesel
T2 I	Includes lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T2 M	Is mainly lower boiling hydrocarbons, i.e. mineral spirits, kerosene, stoddard solvent, white gas
T3 I	Includes higher boiling hydrocarbons, i.e. asphaltene, waste oil, motor oil, or weathered diesel fuel
T3 M	Is mainly higher boiling hydrocarbons, i.e. asphaltene, waste 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

**66102**



Client: Environet, Inc.  
 Address: 650 Iwilei Rd, #204  
Honolulu, HI 96817  
 Attn: Stacy Fineran  
 Phone: 808-833-2225 Fax: 808-833-2231  
 Job: RED HILL/1022-024  
 PO #: 1022-015  
 Chain of Custody (Y/N): Y # 35457  
 RAD Screen (Y/N): Y pH (Y/N): Y  
 Turn Around Type: 2 WEEKS

Received by: TBV  
 Date Received: 10/26/11 Time: 10:00  
 Delivered by: FED EX  
 Shuttle Custody Seals (Y/N): N Time Zone: HAST  
 Chest Temp(s): SEE CRF 2.5-3.0°C  
 Color: VOA,M-PURPINK,Q-ORYE  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Cynthia Clark  
 QC Report Type: DVP4/ADRDOD/HI *JK*  
 Due Date: 11/09/11

**Comments:**

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

<u>Sample Distribution:</u>	<u>Charges:</u>	<u>Invoice To:</u>
<b>GC: 3-\$SIMHC12W, 3-\$TPETD2</b>		
<b>Extractions: 3- SEP004S, 3- SEP011</b>		<b>same</b>
<b>VOA: 4-\$86RHBF</b>		
<b>Metals: 3-\$602D(Pb)</b>		
<b>Other: 3- M3015, 3-SUB</b>		

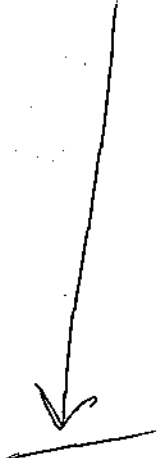
Client ID	APPL ID	Sampled	Analyses Requested
1. ES046	AY49333W 	10/24/11 09:55	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2, SUB -- UN-PRESERVED VOA VIALS
2. ES047	MS/MSO,LTDVOL AY49334W 	10/24/11 08:30	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2, SUB -- UN-PRESERVED VOA VIALS,LTD VOL on amber
3. ES048	AY49335W 	10/24/11 07:00	\$86RHBF -- UN-PRESERVED VOA VIALS
4. ES049	AY49336W 	10/24/11 14:35	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2, SUB -- UN-PRESERVED VOA VIALS

# APPL Sample Receipt Form

ARF# 66102

Sample	Container Type	Count	pH
AY49333	6 PL 500mL - HNO3	1	1.7
	13 VOAs - HCL	3	na
	15 VOAs - NP	4	na
	17 Amber Liter	3	na
	26 Other	2	1.7
AY49334	6 PL 500mL - HNO3	4	1.7
	13 VOAs - HCL	12	na
	15 VOAs - NP	16	na
	17 Amber Liter	9	na
	26 Other	7	1.7
AY49335	15 VOAs - NP	1	na
AY49336	6 PL 500mL - HNO3	1	1.7
	13 VOAs - HCL	3	na
	15 VOAs - NP	4	na
	17 Amber Liter	3	na
	26 Other	2	1.7

Sample    Container Type    Count    pH  
*Other - 1 Liter amber*  
HCL





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

CHAIN OF CUSTODY RECORD

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

C.O.C. 35457

Report to: <b>PLEASE PRINT</b> Company Name: <u>Environet</u> Phone: <u>808 433-2225</u> Address: <u>650 Iwilei Rd. #204</u> <u>Honolulu, HI</u> Attn: <u>Stacey Fineran</u>	Invoice to: <b>PLEASE PRINT</b> Company Name: <u>Environet</u> Phone: <u>808-833-2225</u> Address: <u>650 Iwilei Rd. #204</u> <u>Honolulu, HI</u> Attn: <u>A.P. Trisha Yosuda</u>
--	---

Project Name/Number	Sampler (Print)	Analysis Requested/Method Number				Date Shipped:
		Matrix				
Purchase Order Number	Sampler (Signature)	No. of Containers	Aq	Sed.	Soil	Carrier:
Sample Identification	Location					
Red Hill 1022-024	Stacey Fineran					10/25/2011
ES046	RHSF	13	X			*HCl was not rinsed out of VOA's
ES047 MSMSD		52	X			
ES048		1	X			
ES049	RHSF	13	X			

Shuttle Temperature:	<input checked="" type="checkbox"/> Standard (2-3 week) <input type="checkbox"/> One week <input type="checkbox"/> 24-48 hour	Turnaround Requested: <b>MUST CHECK ONE</b> <input checked="" type="checkbox"/> Standard (2-3 week) <input type="checkbox"/> One week <input type="checkbox"/> 24-48 hour	Sample Disposal: <input type="checkbox"/> Return to client <input checked="" type="checkbox"/> Disposal by Lab (30-day retention)
Relinquished by sampler:	Date: <u>10/25</u> Time: <u>1400</u>	Received by: <u>Fed Ex</u>	Relinquished by: _____ Date: _____ Time: _____
Relinquished by:	Date: _____ Time: _____	Received by: _____	Relinquished by: _____ Date: <u>10/26/11</u> Time: <u>1000</u>

White: Return to client with report      Yellow: Laboratory Copy      Pink: Sampler  
 See reverse side for Container Preservative and Sampling Information

COOLER RECEIPT FORM

1) Project: RED HILL / 1022-024 Date Received: 10/26/11

2) Coolers: Number of Coolers: 3

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

4)  YES  NO Were custody seals on outside of cooler? How many? \_\_\_\_\_ 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) 8768 4695 9176 2) \_\_\_\_\_ 3) \_\_\_\_\_

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

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

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

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

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

14) Serial number of certified NIST thermometer used: A37267 Correction factor: 0

15) Cooler temp(s): 1) 2.5°C 2) 3.0°C 3) 3.0°C 4) \_\_\_\_\_ 5) \_\_\_\_\_ 6) \_\_\_\_\_ 7) \_\_\_\_\_ 8) \_\_\_\_\_

Chain of custody:

16)  YES  NO Was a chain of custody received?

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

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

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

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

Sample Labels:

21)  YES  NO Were container labels in good condition?

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

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

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

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

Sample Containers:

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

27)  YES  NO Did all containers arrive unbroken?

28)  YES  NO Was there any leakage from samples?

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

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

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

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

Larger than a pea: \_\_\_\_\_

Smaller than a pea: AY49333W03 AY49334W00 AY49334W26-W29 AY49335W01

Preservation & Hold time:

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

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

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

36)  YES  NO  NA Was the pH of acid preserved non-VOA samples < 2 & sodium hydroxide preserved samples > 12?

37)  YES  NO  NA Unpreserved VOA Vials received? \_\_\_\_\_

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

Lab notified if pH was not adequate: \_\_\_\_\_

Deficiencies: Received 4 Amber liter broken, 9 left for Sample E5049 imp/und

Signature of personnel receiving samples: Yang Second reviewer: \_\_\_\_\_

Signature of project manager notified: Renee Date and Time of notification: 10-26-11

Name of client notified: \_\_\_\_\_ Date and Time of notification: \_\_\_\_\_

Information given to client: \_\_\_\_\_ by whom (Initials): \_\_\_\_\_

**EPA 8015 Modified  
Total Petroleum Hydrocarbons**

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

**Method Blank**  
**TPH Diesel Water**

Blank Name/QCG: **111031W-49334 - 160886**  
Batch ID: #TPETD-111031A

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	10/31/11	11/06/11
BLANK	SURROGATE: OCTACOSANE (S)	71.2	28-142			%	10/31/11	11/06/11
BLANK	SURROGATE: ORTHO-TERPHEN	60.5	57-132			%	10/31/11	11/06/11

Quant Method: TPH1028.M  
Run #: 1106005  
Instrument: Apollo  
Sequence: 111106  
Initials: LA

GC SC-Blank-REG MDLs  
Printed: 11/30/11 11:27:27 AM

**Surrogate Recovery**

Lab Name: APPL, Inc.  
 Case No: 66102  
 Matrix: WATER

SDG No: 66102  
 Date Analyzed: 11/06/11  
 Instrument: Apollo

APPL ID.	Client Sample No.	SURROGATE: OCTACOSANE (S)			SURROGATE: ORTHO-TERPHENYL (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
111031A-BLK	Blank	28-142	71.2		57-132	60.5	
AY49333	ES046	28-142	97.0		57-132	69.1	
AY49334-MS	Matrix Spike	28-142	87.3		57-132	72.0	
AY49334-MSD	Matrix SpikeD	28-142	83.3		57-132	59.5	
AY49334	ES047	28-142	107		57-132	72.2	
AY49336	ES049	28-142	106		57-132	63.4	
111031A-LCS	Lab Control Spike	28-142	83.3		57-132	98.0	

Comments: Batch: #TPETD-111031A



## Laboratory Control Spike Recovery

### TPH Diesel Water

APPL ID: 111031W-49334 LCS - 160886  
 Batch ID: #TPETD-111031A

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	1520	76.0	61-143
SURROGATE: OCTACOSANE (S)	150	125	83.3	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	147	98.0	57-132

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>
Quant Method :	TPH8S15.M
Extraction Date :	10/31/11
Analysis Date :	11/29/11
Instrument :	Apollo
Run :	1129017
Initials :	LA

Printed: 11/30/11 11:27:20 AM

APPL Standard LCS

## Matrix Spike Recoveries

### TPH Diesel Water

APPL ID: 111031W-49334 MS - 160886

Batch ID: #TPETD-111031A

Sample ID: AY49334

Client ID: ES047

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL FUEL	2000	730	1400	1330	33.5 #	30.0 #	61-143	5.1	30
SURROGATE: OCTACOSANE (S)	150	NA	131	125	87.3	83.3	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	108	89.3	72.0	59.5	57-132		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	TPH1028.M	TPH1028.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	11/06/11	11/06/11
Instrument :	Apollo	Apollo
Run :	1106014	1106015
Initials :	LA	

Printed: 11/30/11 11:27:17 AM

APPL MSD SCI

# EPA 8015B-e

Form 4

## Blank Summary

Lab Name: APPL, Inc.  
Case No: 66102  
Matrix: WATER  
Blank ID: 111031A-BLK

SDG No: 66102  
Date Analyzed: 11/06/11  
Instrument: Apollo  
Time Analyzed: 1722

APPL ID.	Client Sample No.	File ID.	Date Analyzed
111031A-BLK	Blank	1106005	11/06/11 1722
AY49333	ES046	1106013	11/06/11 2030
111031A-MS	Matrix Spike	1106014	11/06/11 2053
111031A-MSD	Matrix SpikeD	1106015	11/06/11 2117
AY49334	ES047	1106016	11/06/11 2140
AY49336	ES049	1106019	11/06/11 2250
111031A-LCS	Lab Control Spike	1129017	11/29/11 1845

Comments: Batch: #TPETD-111031A

**EPA 8015 Modified  
Total Petroleum Hydrocarbons  
Sample Data**

## TPH Diesel Water

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

Attn: Stacy Fineran  
Project: RED HILL/1022-024  
Sample ID: ES046  
Sample Collection Date: 10/24/11

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102  
APPL ID: AY49333  
QCG: #TPETD-111031A-160886

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	750 ++	150	80.8	40.4	ug/L	10/31/11	11/06/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	97.0	28-142			%	10/31/11	11/06/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S)	69.1	57-132			%	10/31/11	11/06/11

++(T7) The analyst has noted that the chromatogram of this sample closely resembles the boiling point hydrocarbon profile consistent with diesel fuel.

Quant Method: TPH1028.M
Run #: 1106013
Instrument: Apollo
Sequence: 111106
Dilution Factor: 1
Initials: LA

Printed: 11/30/11 11:27:24 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\111106\1106013.D Vial: 13  
 Acq On : 11-6-11 20:30:17 Operator: LAC  
 Sample : AY49333W09 5/1030 Inst : Apollo  
 Misc : Water Multiplr: 4.85  
 IntFile : events.e  
 Quant Time: Nov 7 9:50 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

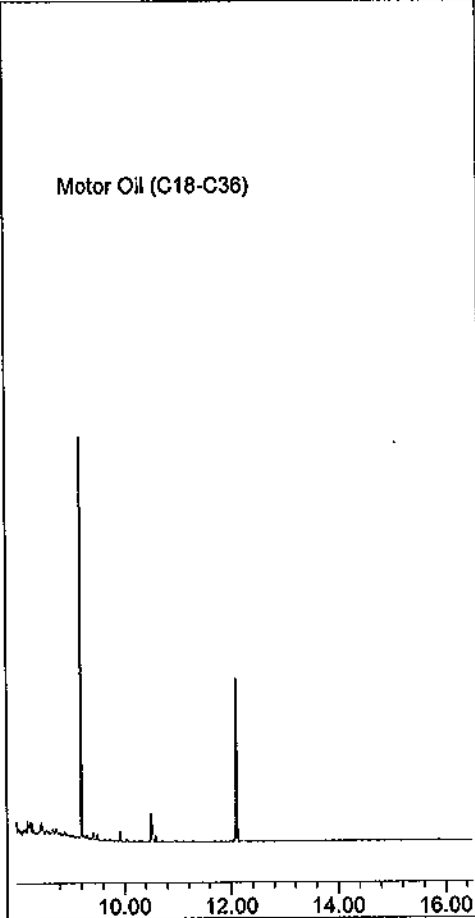
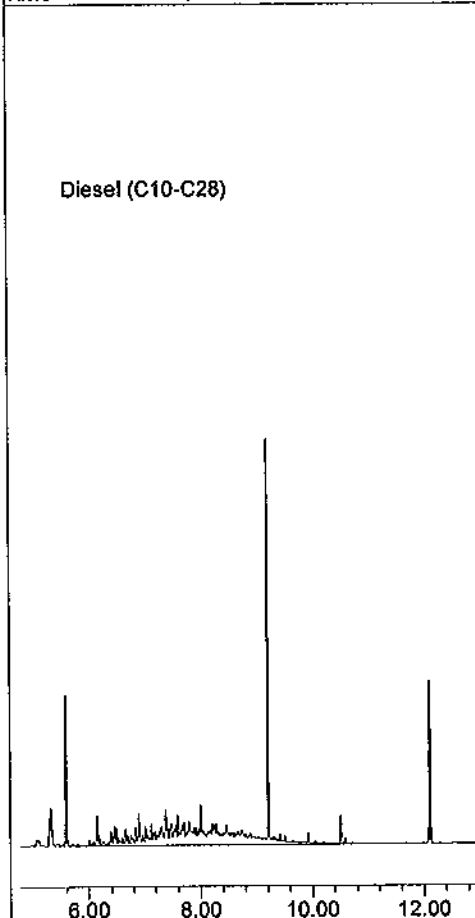
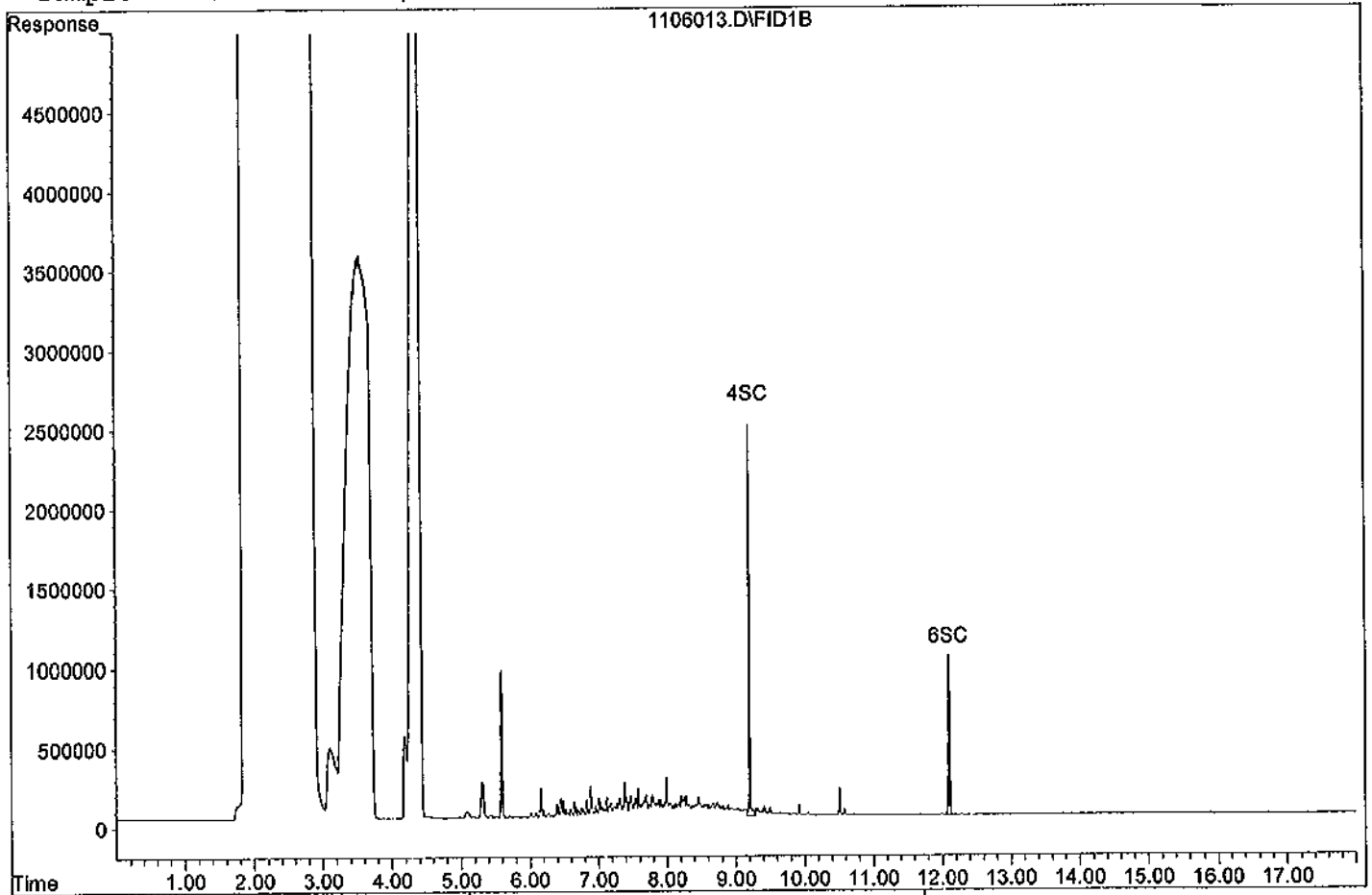
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
<b>System Monitoring Compounds</b>			
4) SC Ortho-Terphenyl(S)	9.21	18082118	100.664 ppb
Surrogate Spike 145.631		Recovery =	69.12%
6) SC Octacosane(S)	12.10	13534363	141.185 ppb
Surrogate Spike 145.631		Recovery =	96.95%
<b>Target Compounds</b>			
1) HATM Diesel (C10-C28)	8.86	130505484	752.499 ppb T7 LAC 11/30/11

Quantitation Report

Data File: G:\APOLLO\DATA\111106\1106013.D

Sample : AY49333W09 5/1030



# TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran  
Project: RED HILL/1022-024

ARF: 66102

**Sample ID: ES047**

**APPL ID: AY49334**

Sample Collection Date: 10/24/11

QCG: #TPETD-111031A-160886

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	730 ++	150	80.8	40.4	ug/L	10/31/11	11/06/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	107	28-142			%	10/31/11	11/06/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S)	72.2	57-132			%	10/31/11	11/06/11

++(T7) The analyst has noted that the chromatogram of this sample closely resembles the boiling point hydrocarbon profile consistent with diesel fuel.

Quant Method: TPH1028.M  
Run #: 1108016  
Instrument: Apollo  
Sequence: 111106  
Dilution Factor: 1  
Initials: LA

Printed: 11/30/11 11:27:24 AM  
APPL-F1-SC-NoMC-REG MDLs



Data File : G:\APOLLO\DATA\111106\1106016.D Vial: 16  
 Acq On : 11-6-11 21:40:27 Operator: LAC  
 Sample : AY49334W32 5/1030 Inst : Apollo  
 Misc : Water Multiplr: 4.85  
 IntFile : events.e  
 Quant Time: Nov 7 9:50 2011 Quant Results File: TPH1028.RES

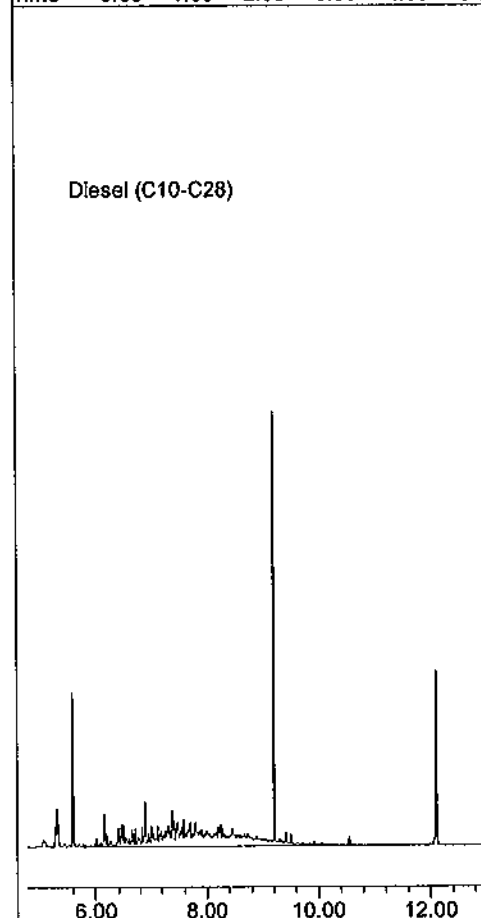
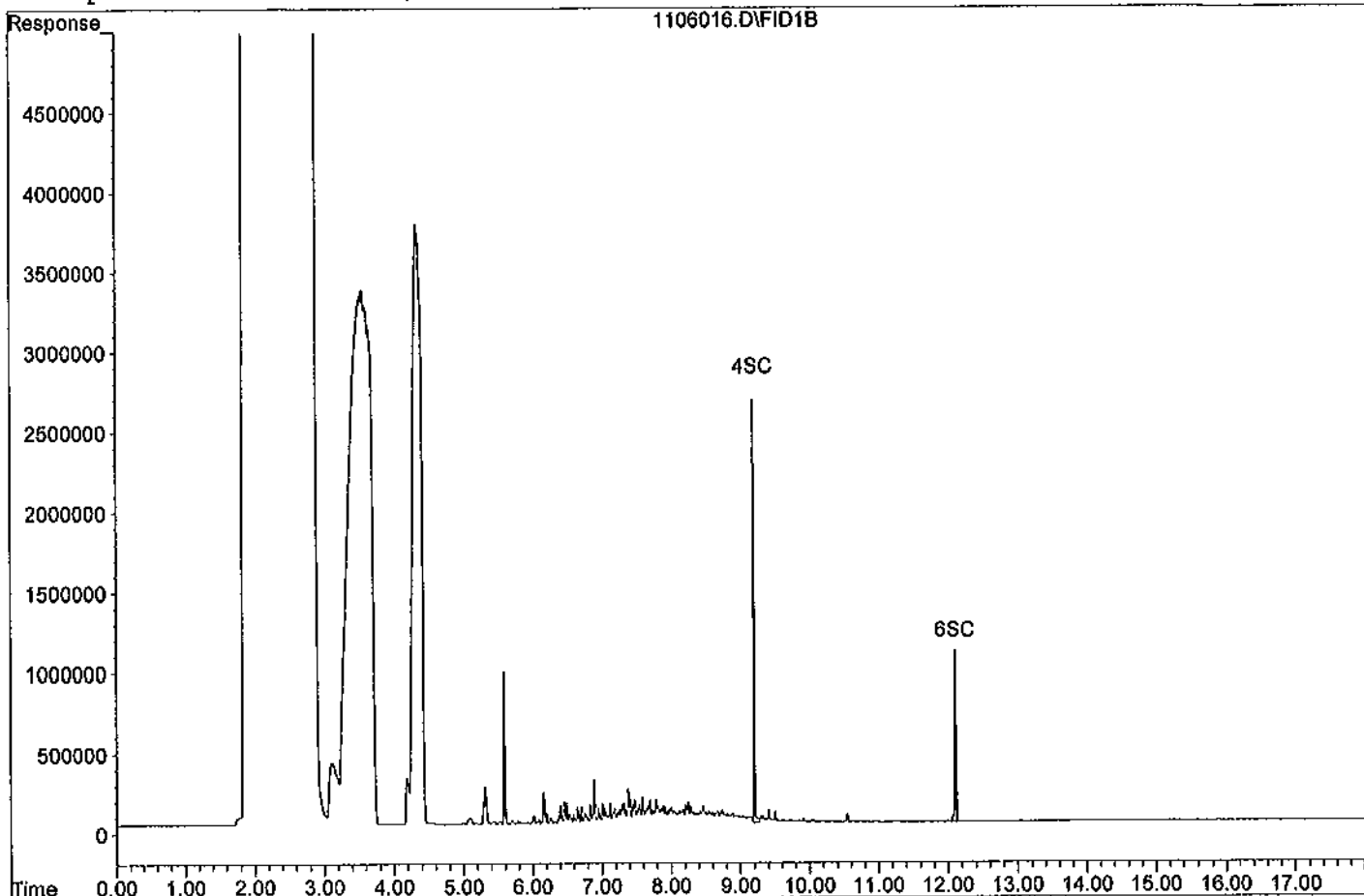
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	18885119	105.134 ppb
Surrogate Spike 145.631		Recovery =	72.19%
6) SC Octacosane(S)	12.10	14910092	155.536 ppb
Surrogate Spike 145.631		Recovery =	106.80%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	125913483	726.021 ppb T7 etc 11/30/11

Quantitation Report

Data File: G:\APOLLO\DATA\111106\1106016.D  
Sample : AY49334W32 5/1030



# TPH Diesel Water

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

Attn: Stacy Fineran  
Project: RED HILL/1022-024

**Sample ID: ES049**  
Sample Collection Date: 10/24/11

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102  
**APPL ID: AY49336**  
QCG: #TPETD-111031A-160886

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8015B-	DIESEL FUEL	80.8 U	150	80.8	40.4	ug/L	10/31/11	11/06/11
EPA 8015B-	SURROGATE: OCTACOSANE (S)	106	28-142			%	10/31/11	11/06/11
EPA 8015B-	SURROGATE: ORTHO-TERPHENYL (S)	63.4	57-132			%	10/31/11	11/06/11

Quant Method: TPH1028.M  
Run #: 1106019  
Instrument: Apollo  
Sequence: 111106  
Dilution Factor: 1  
Initials: LA

Printed: 11/30/11 11:27:24 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\111106\1106019.D Vial: 19  
 Acq On : 11-6-11 22:50:22 Operator: LAC  
 Sample : AY49336W09 5/1050 Inst : Apollo  
 Misc : Water Multiplr: 4.76  
 IntFile : events.e  
 Quant Time: Nov 7 10:06 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

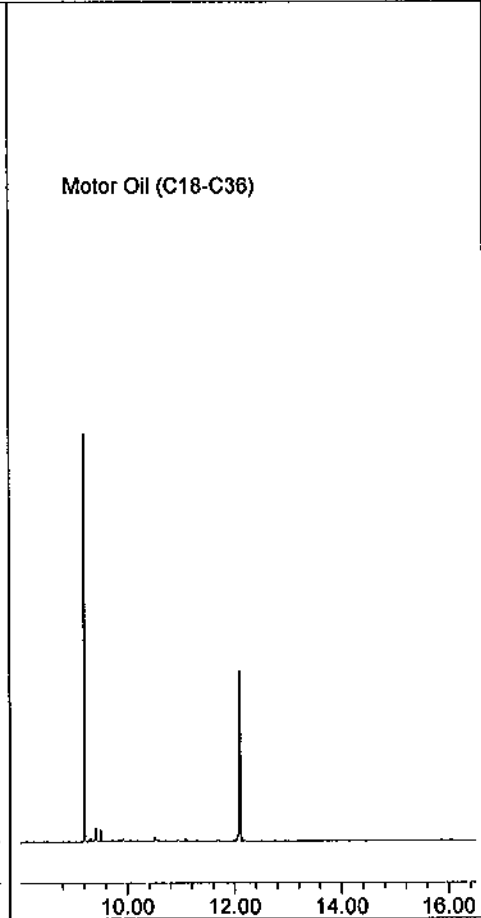
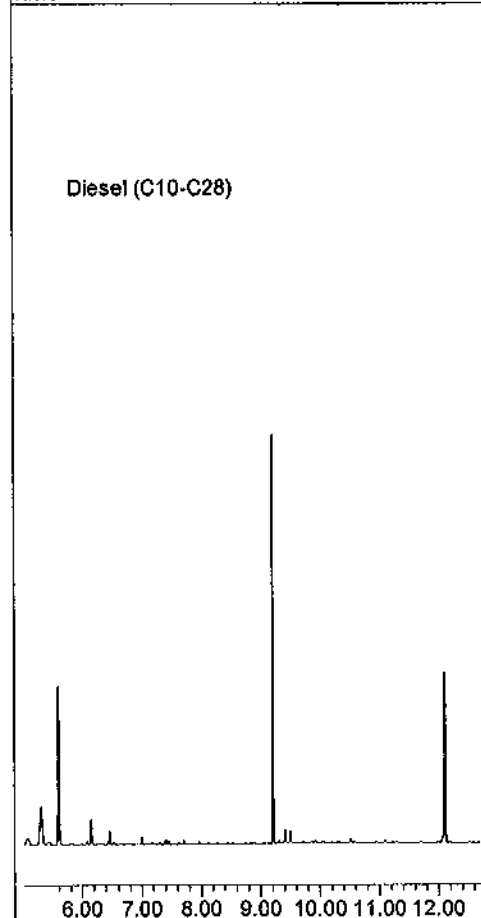
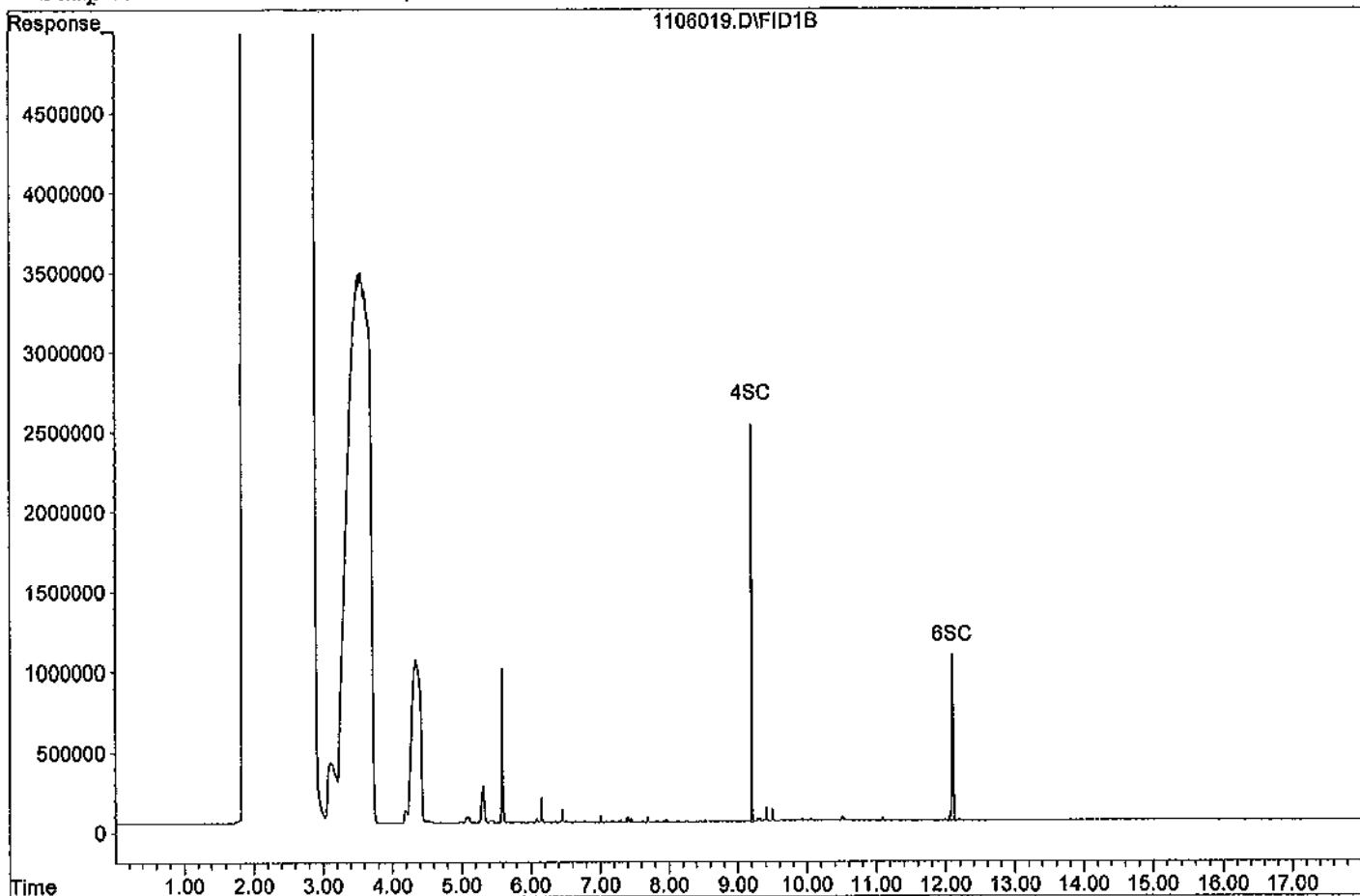
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.20	16586813	90.580 ppb
Surrogate Spike 142.857		Recovery =	63.41%
6) SC Octacosane(S)	12.10	14736715	150.799 ppb
Surrogate Spike 142.857		Recovery =	105.56%

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\111106\1106019.D  
Sample : AY49336W09 5/1050



**EPA 8015 Modified  
Total Petroleum Hydrocarbons  
Calibration Data**

TPH Extractables  
TPH1028

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: 66102

Case No: \_\_\_\_\_

Initial Cal. Date: 10/28/11

Matrix: \_\_\_\_\_

Instrument: Apollo

Initials: LAC

1028016.D    1028017.D    1028018.D    1028019.D    1028020.D    1028021.D

	Compound	1	2	3	4	5	6					Avg	%RSD	
1	HATM Diesel (C10-C28)	442719	420460	472596	423976	425504	340418					420946	10	HATM
2	HBTM Motor Oil (C18-C36)	178423	183716	183814	180648	189866	171166					181272	3.5	HBTM
3	SA Not Used(S)	492314	497998	549709	499503	505363	680489					537563	14	SA
4	SC Ortho-Terphenyl(S)		432362	446201	461765	440594	399046					435993	5.3	SC
5	SA Not Used2(S)	246114	255075	272188	252864	246503	213571					247719	7.8	SA
6	SC Octacosane(S)		229602	230817	244618	233443	224899					232676	3.2	SC
7														
8														
9														
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1.2501454

Data File : G:\APOLLO\DATA\111028\1028003.D Vial: 3  
 Acq On : 10-28-11 9:47:18 Operator: LAC  
 Sample : DIESEL 10/1000 10/28/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

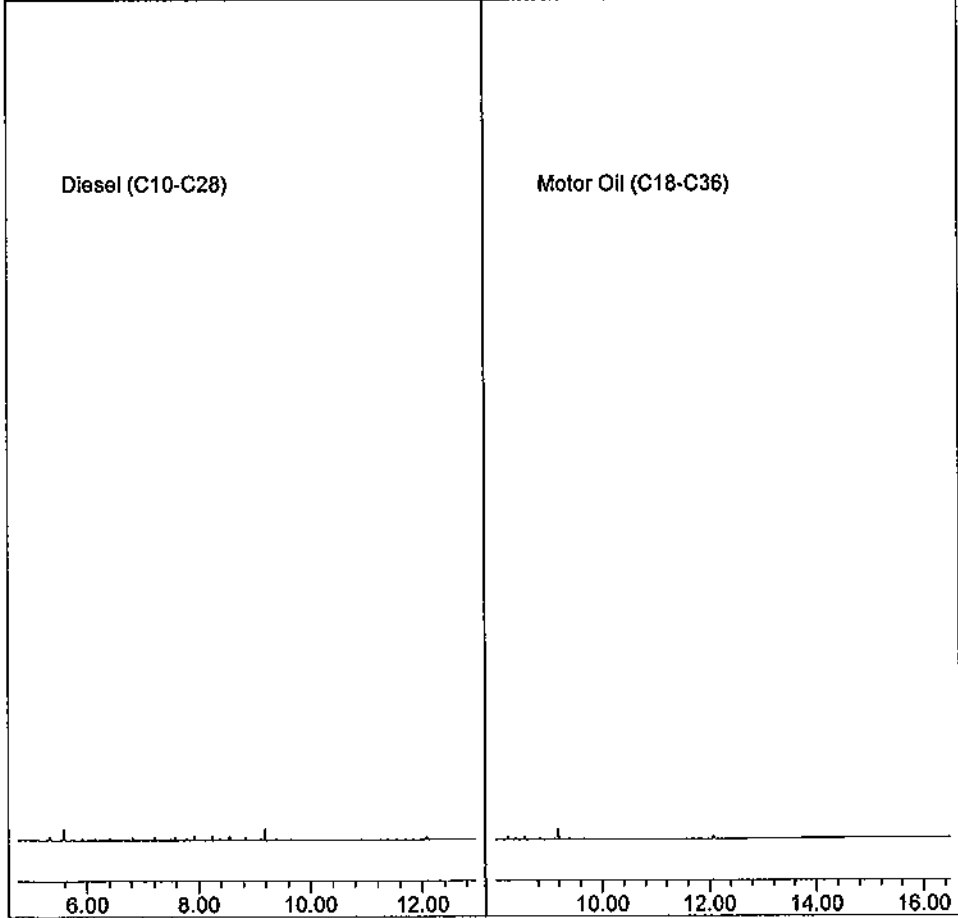
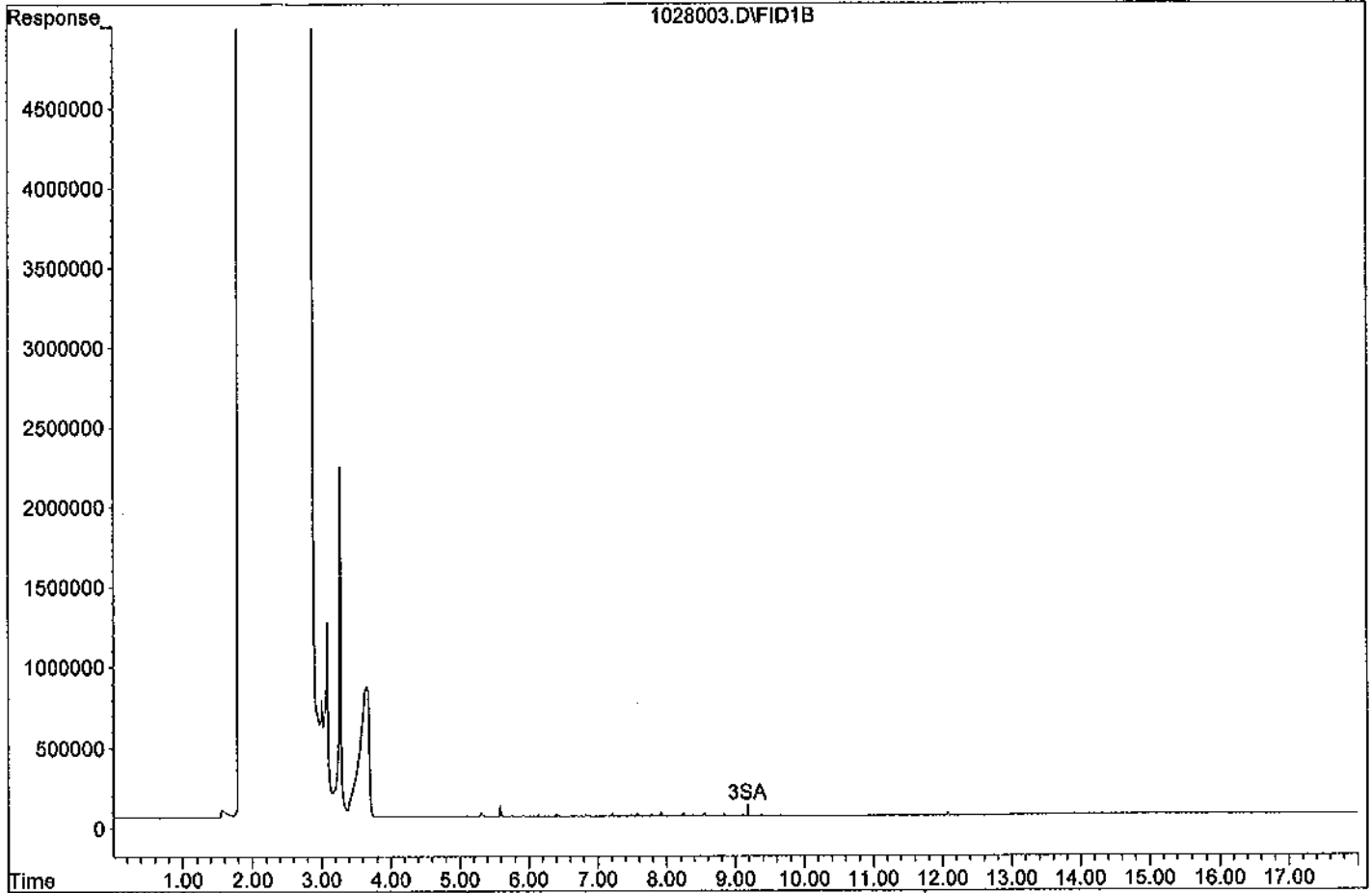
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.18	492314	0.777 ppb
Surrogate Spike 30.000	Recovery	=	2.59%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	8854372	10.215 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028003.D  
Sample : DIESEL 10/1000 10/28/11



Data File : G:\APOLLO\DATA\111028\1028004.D Vial: 4  
 Acq On : 10-28-11 10:11:19 Operator: LAC  
 Sample : DIESEL 100/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

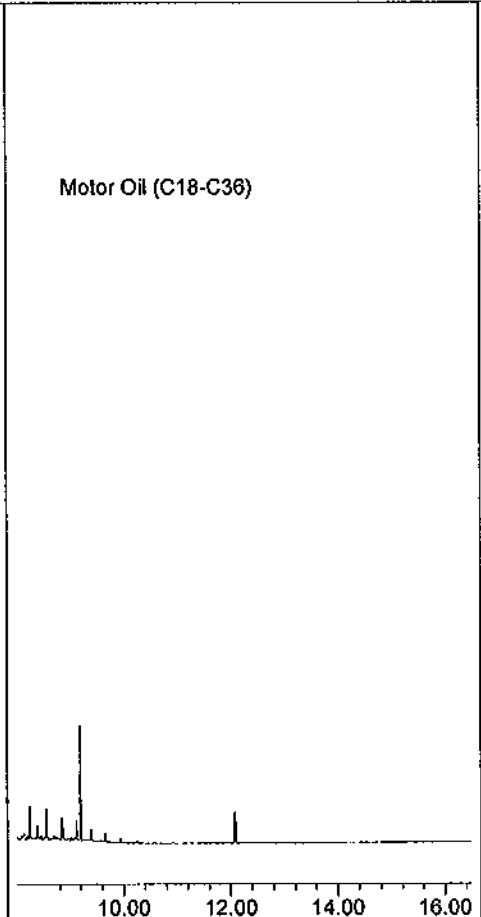
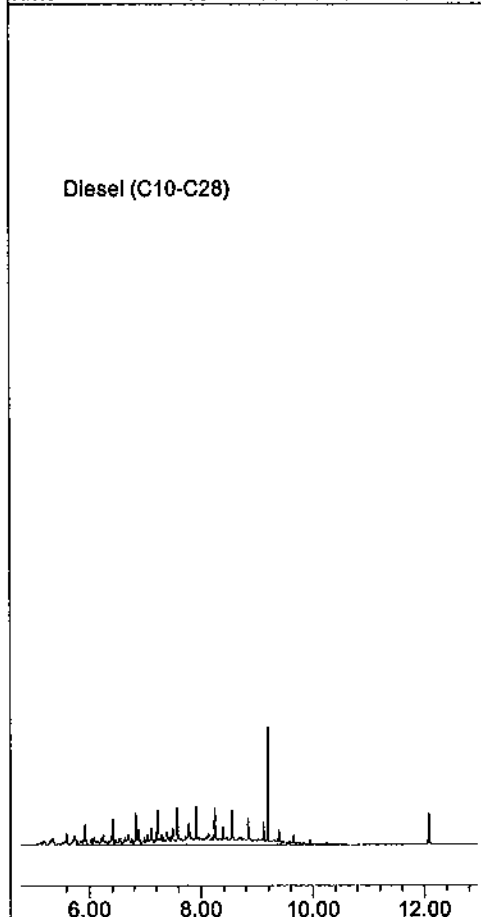
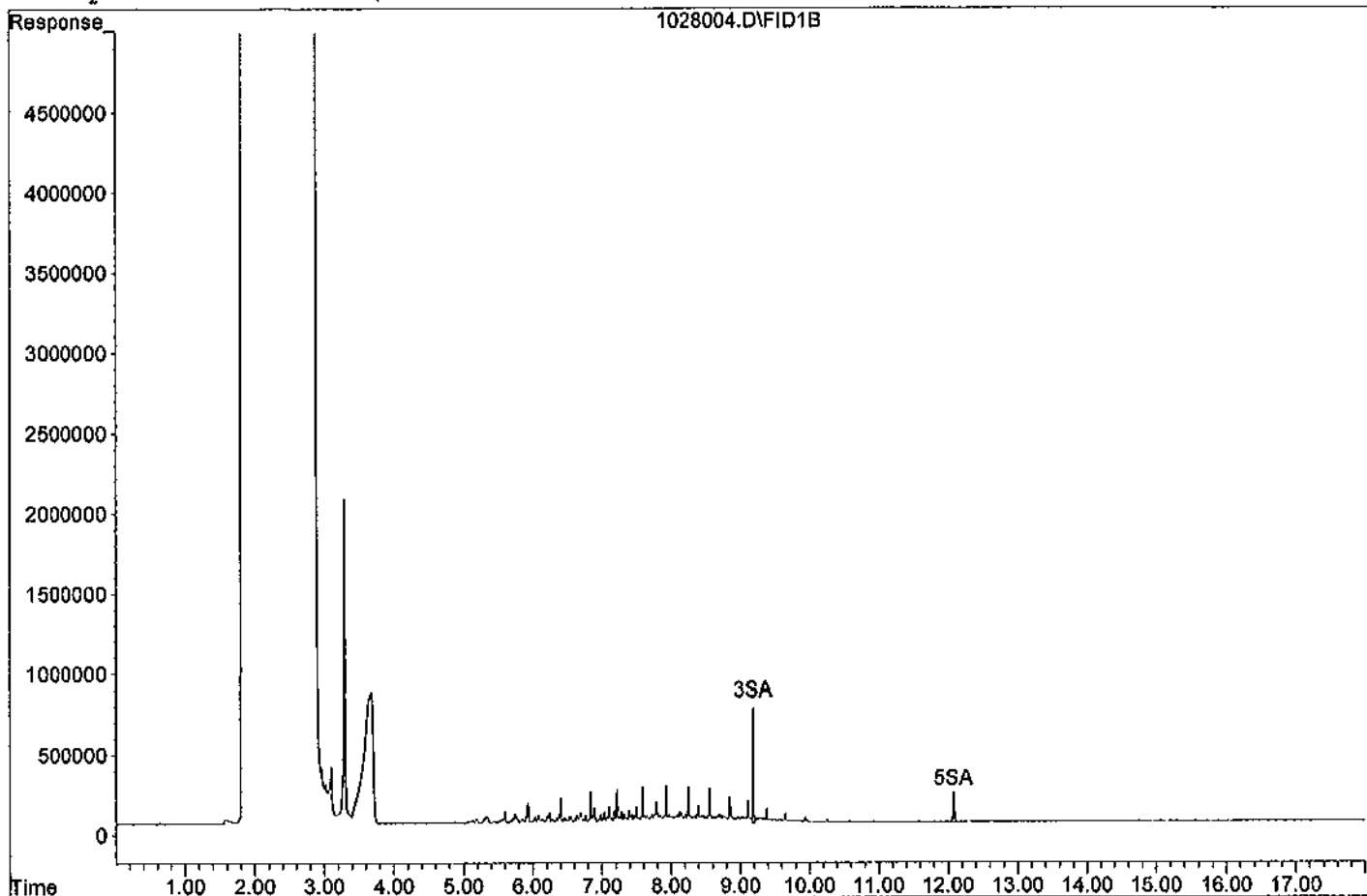
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.19	4979981	7.855 ppb
Surrogate Spike 30.000		Recovery =	26.18%
5) SA Not Used2(S)	12.08	2550752	9.065 ppb
Surrogate Spike 30.000		Recovery =	30.22%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	84092037	97.013 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028004.D

Sample : DIESEL 100/1000



Data File : G:\APOLLO\DATA\111028\1028005.D Vial: 5  
 Acq On : 10-28-11 10:35:26 Operator: LAC  
 Sample : DIESEL 400/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

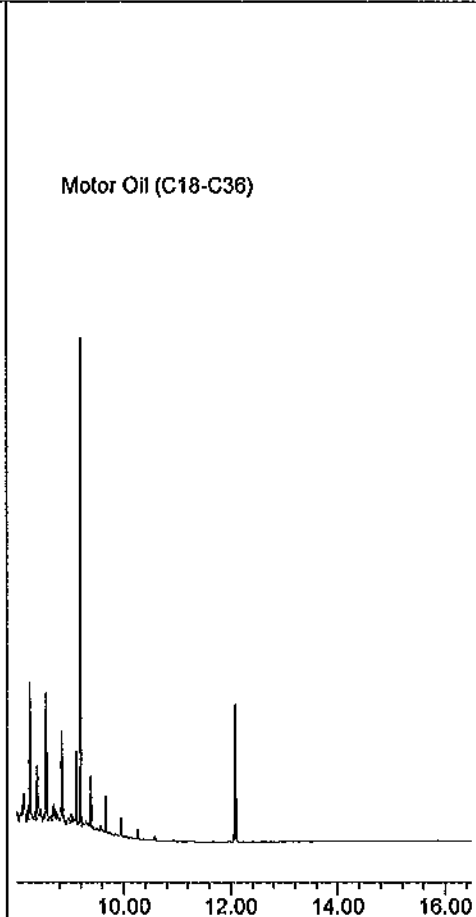
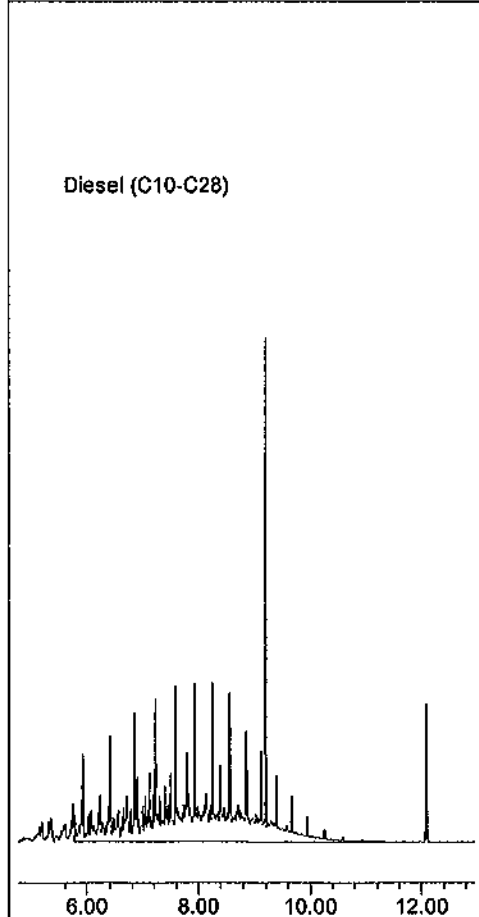
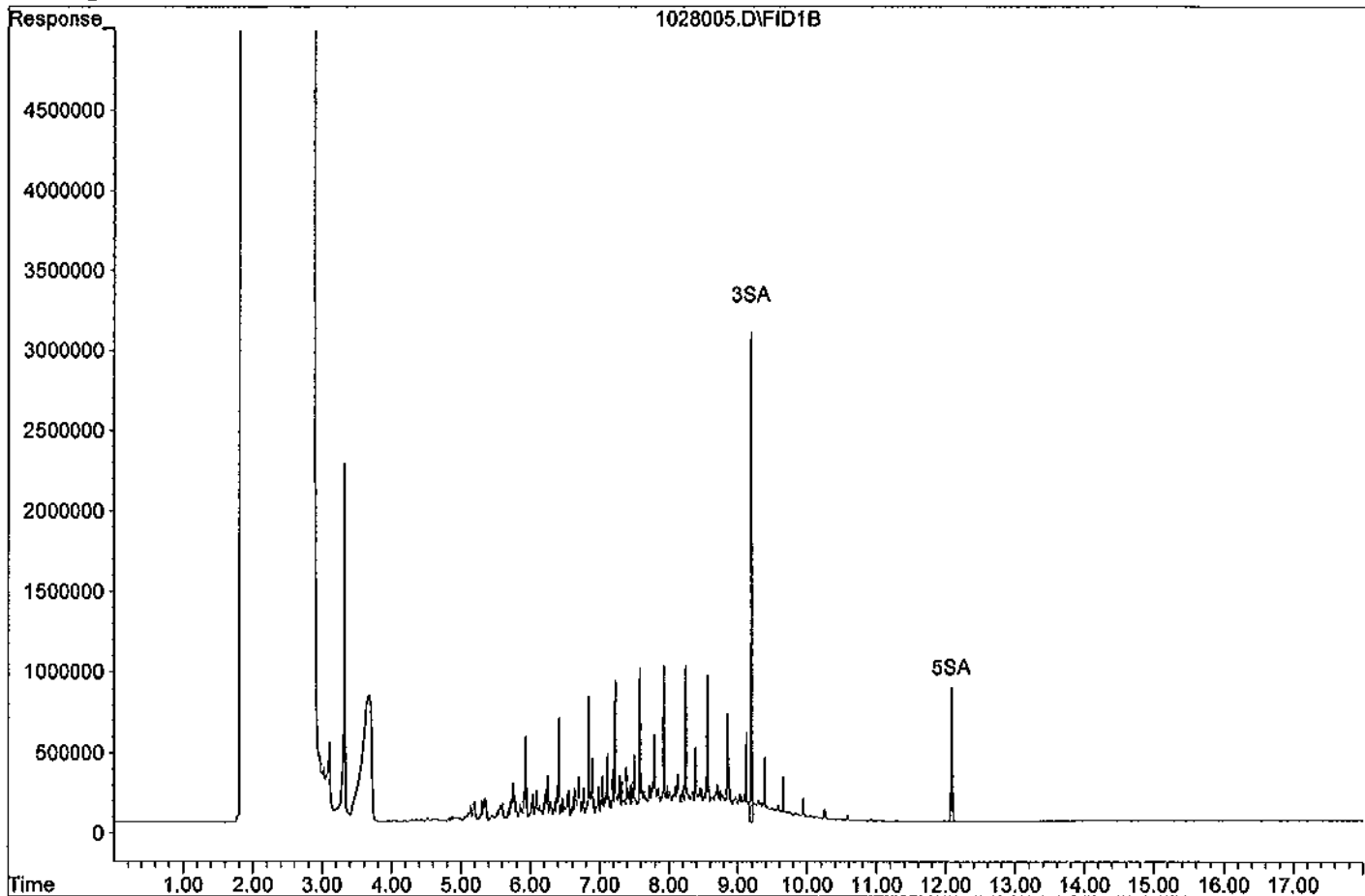
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.19	21988346	34.683 ppb
Surrogate Spike 30.000		Recovery =	115.61%
5) SA Not Used2(S)	12.09	10887525	43.308 ppb
Surrogate Spike 30.000		Recovery =	144.36%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	378076624	436.171 ppb

Data File: G:\APOLLO\DATA\111028\1028005.D

Sample : DIESEL 400/1000



Data File : G:\APOLLO\DATA\111028\1028006.D Vial: 6  
 Acq On : 10-28-11 10:59:35 Operator: LAC  
 Sample : DIESEL 600/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

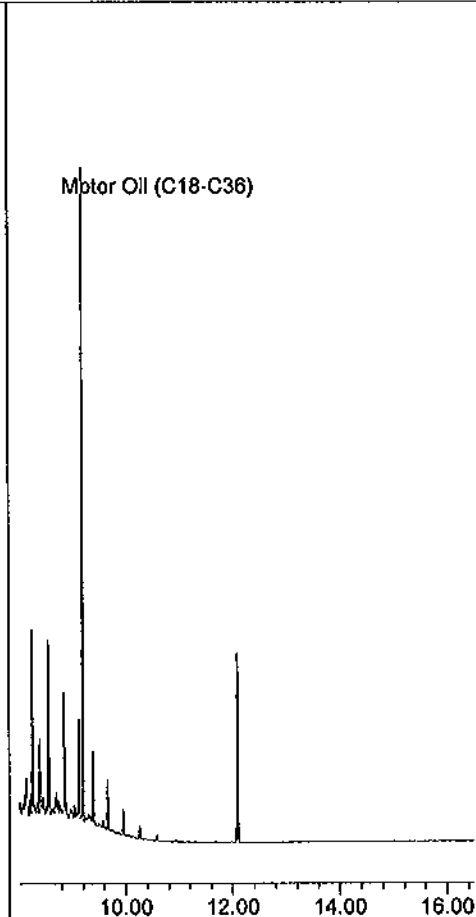
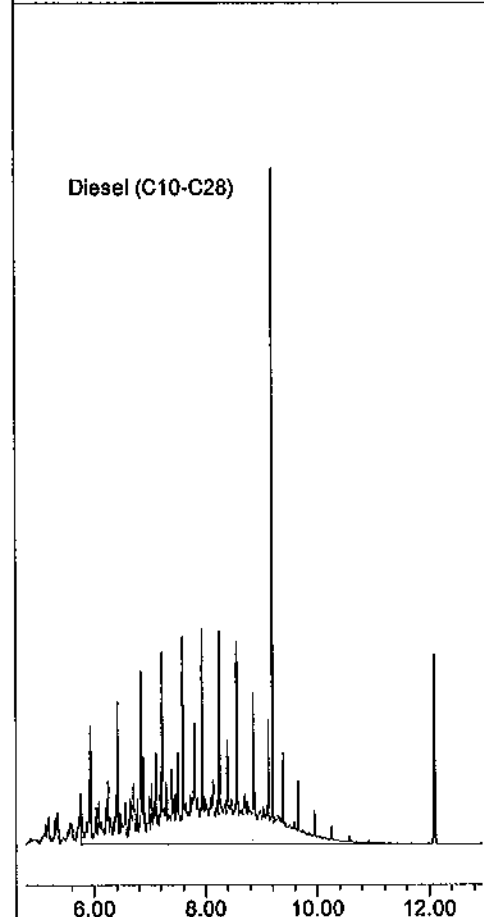
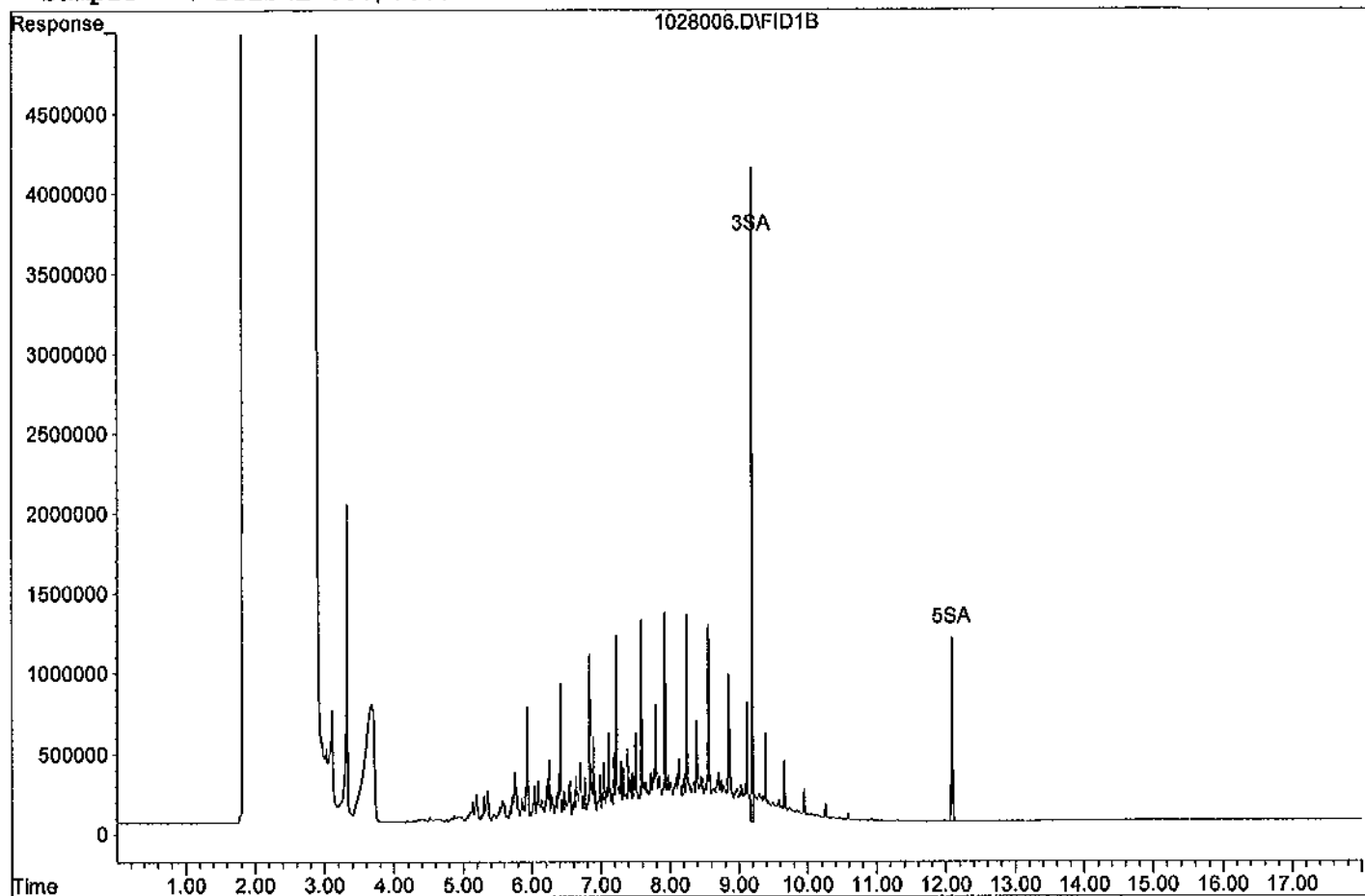
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	29970170	47.273 ppb
Surrogate Spike 30.000		Recovery =	157.58%
5) SA Not Used2(S)	12.09	15171855	60.906 ppb
Surrogate Spike 30.000		Recovery =	203.02%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	508771749	586.949 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028006.D

Sample : DIESEL 600/1000



Data File : G:\APOLLO\DATA\111028\1028007.D Vial: 7  
 Acq On : 10-28-11 11:23:49 Operator: LAC  
 Sample : DIESEL 800/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

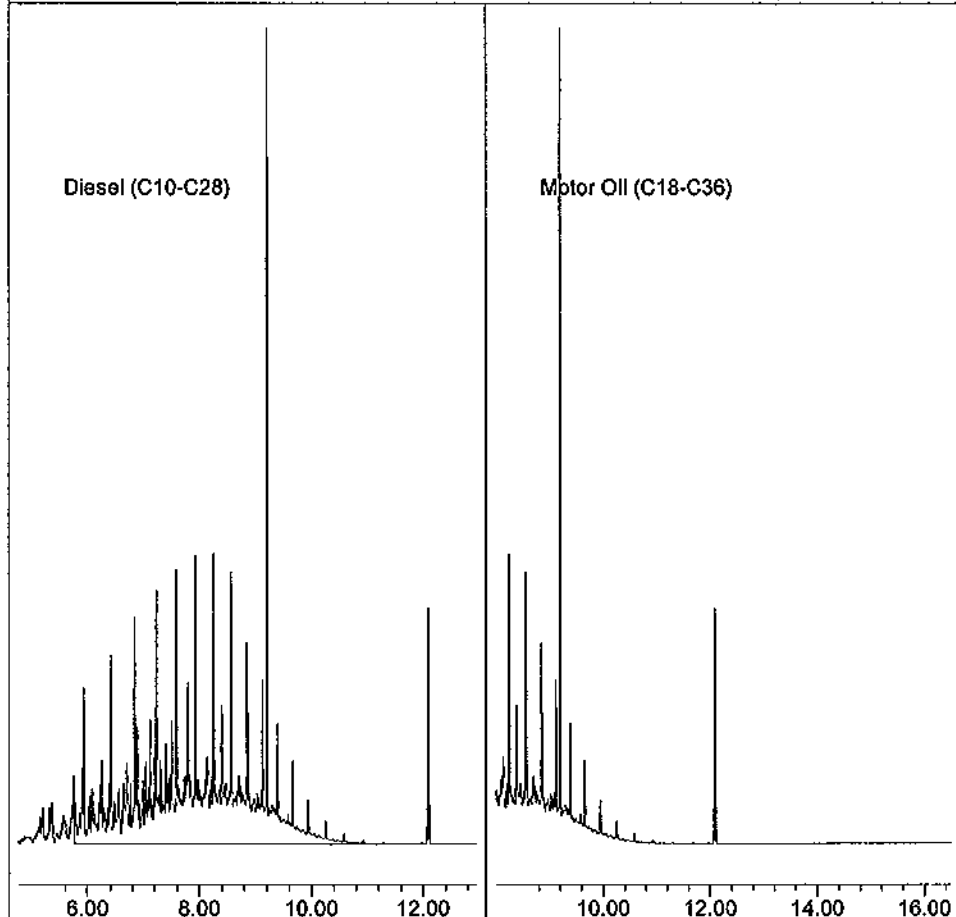
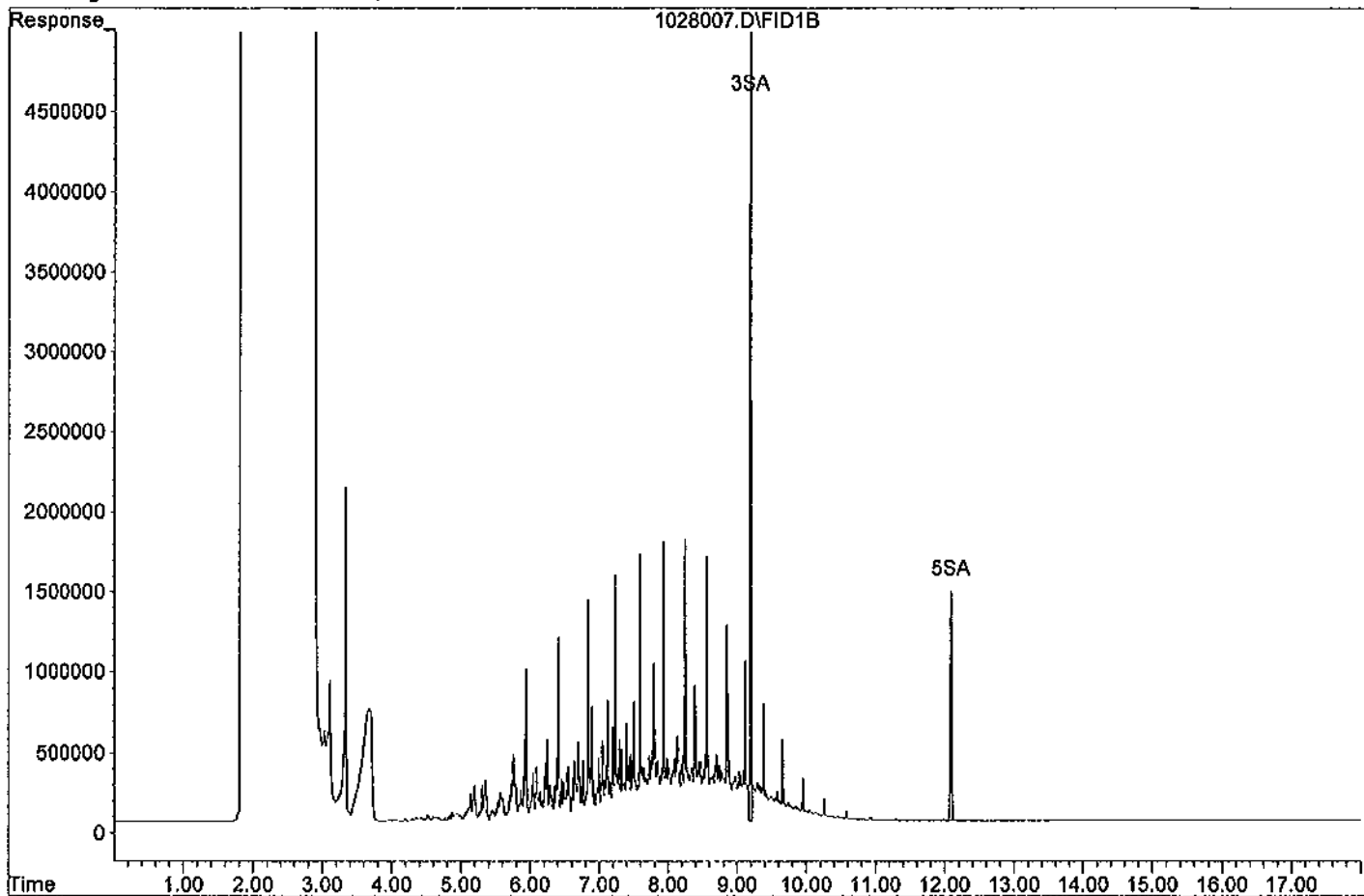
Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	40429014	63.770 ppb
Surrogate Spike 30.000		Recovery =	212.57%
5) SA Not Used2(S)	12.10	19720236	79.588 ppb
Surrogate Spike 30.000		Recovery =	265.29%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	680806039	785.417 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028007.D

Sample : DIESEL 800/1000



Data File : G:\APOLLO\DATA\111028\1028008.D Vial: 8  
 Acq On : 10-28-11 11:48:05 Operator: LAC  
 Sample : DIESEL 1000/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

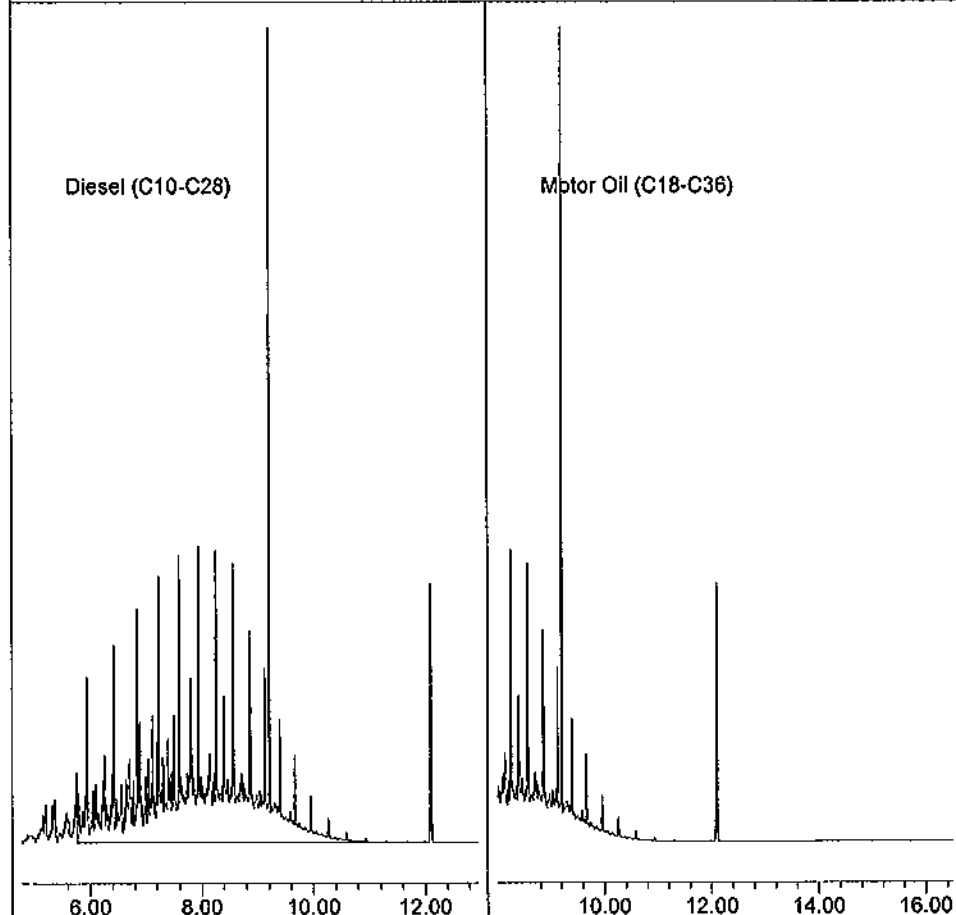
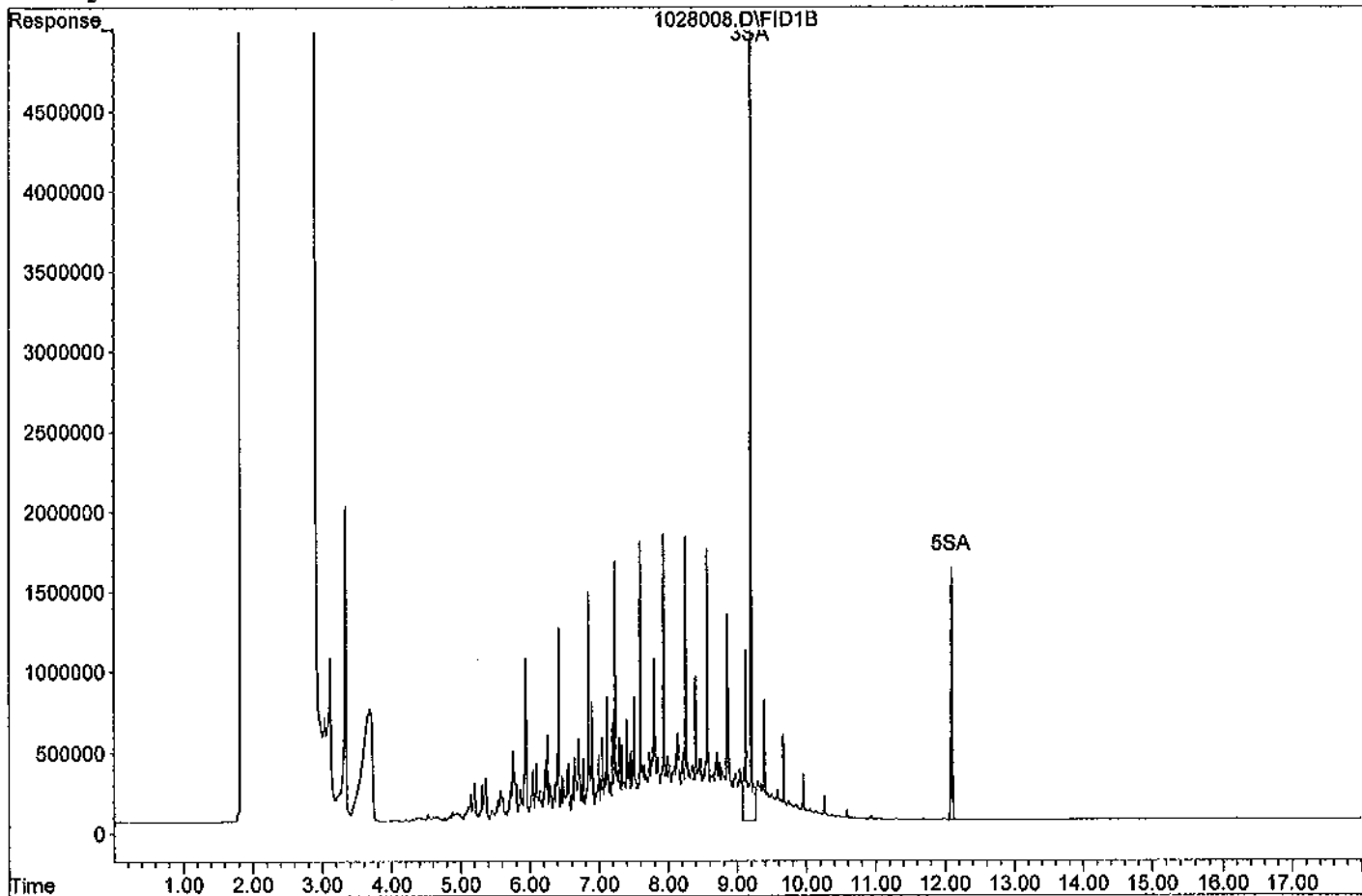
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	68048921	107.335 ppb
Surrogate Spike 30.000		Recovery =	357.78%
5) SA Not Used2(S)	12.10	21357059	86.311 ppb
Surrogate Spike 30.000		Recovery =	287.70%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	680836698	785.453 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028008.D

Sample : DIESEL 1000/1000



Data File : G:\APOLLO\DATA\111028\1028009.D Vial: 9  
 Acq On : 10-28-11 12:12:27 Operator: LAC  
 Sample : MOTOR OIL 50/1000 10/28/11 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

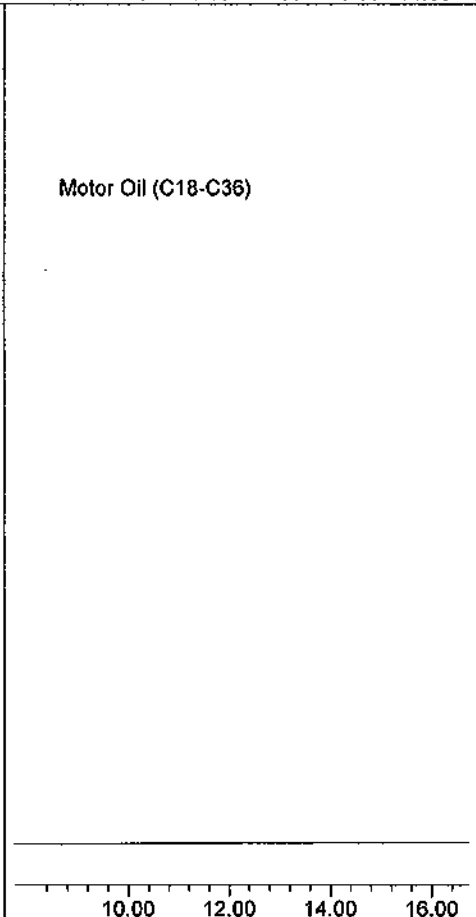
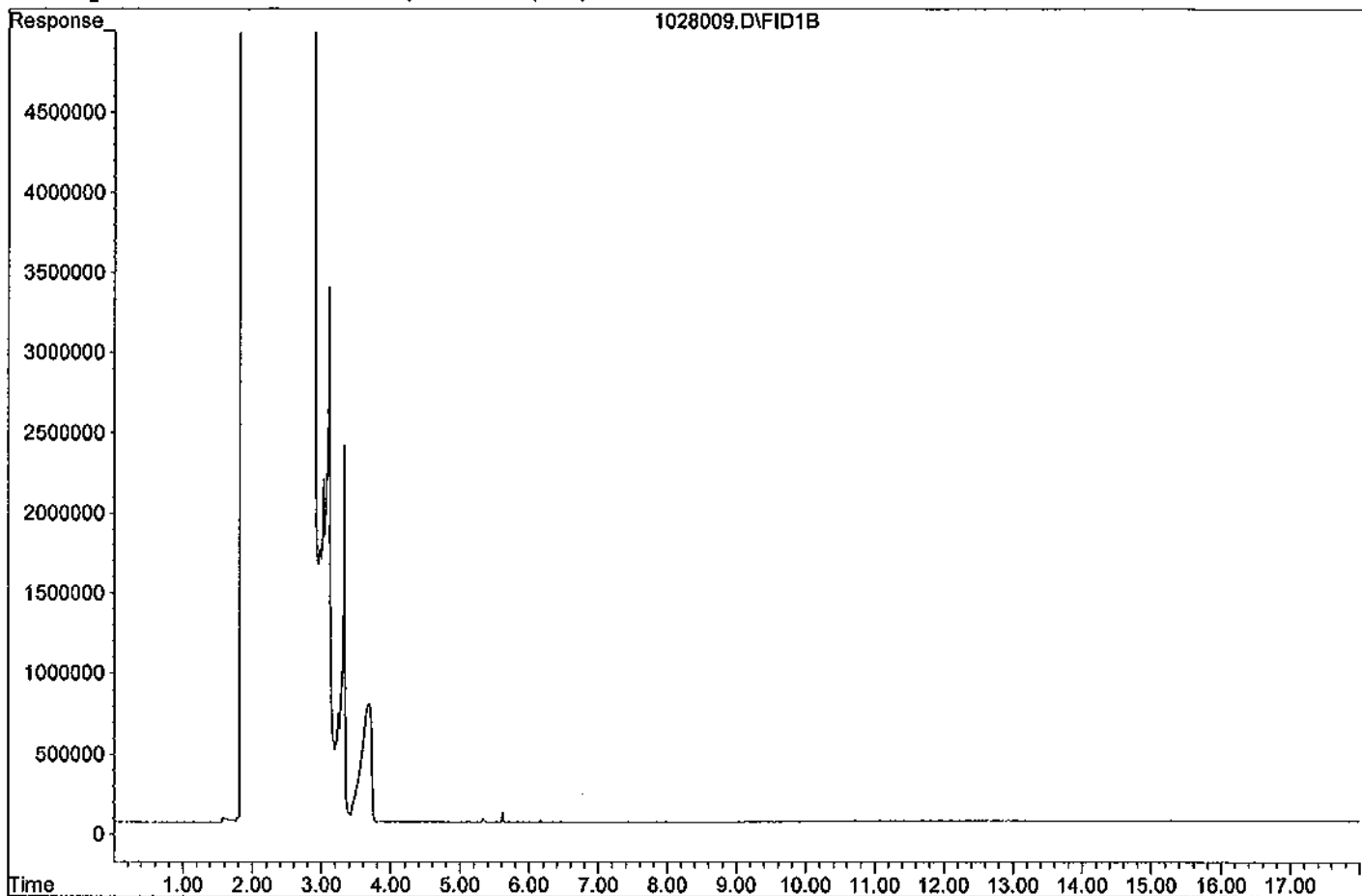
Target Compounds

2) HBTM Motor Oil (C18-C36)	12.25	17842259	49.322 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028009.D

Sample : MOTOR OIL 50/1000 10/28/11



Data File : G:\APOLLO\DATA\111028\1028010.D Vial: 10  
 Acq On : 10-28-11 12:36:20 Operator: LAC  
 Sample : MOTOR OIL 100/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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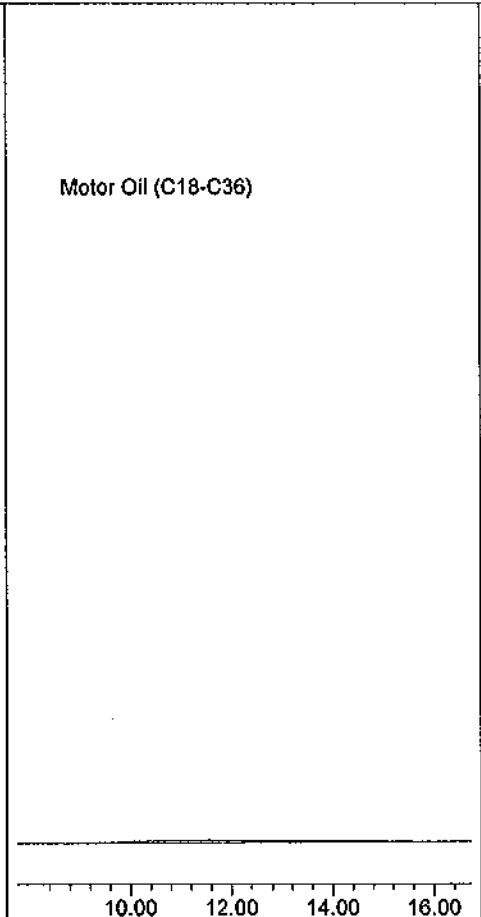
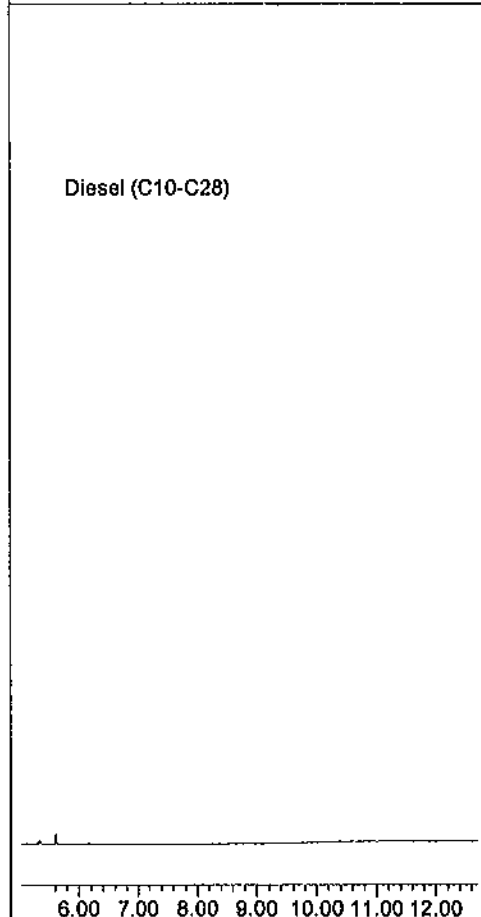
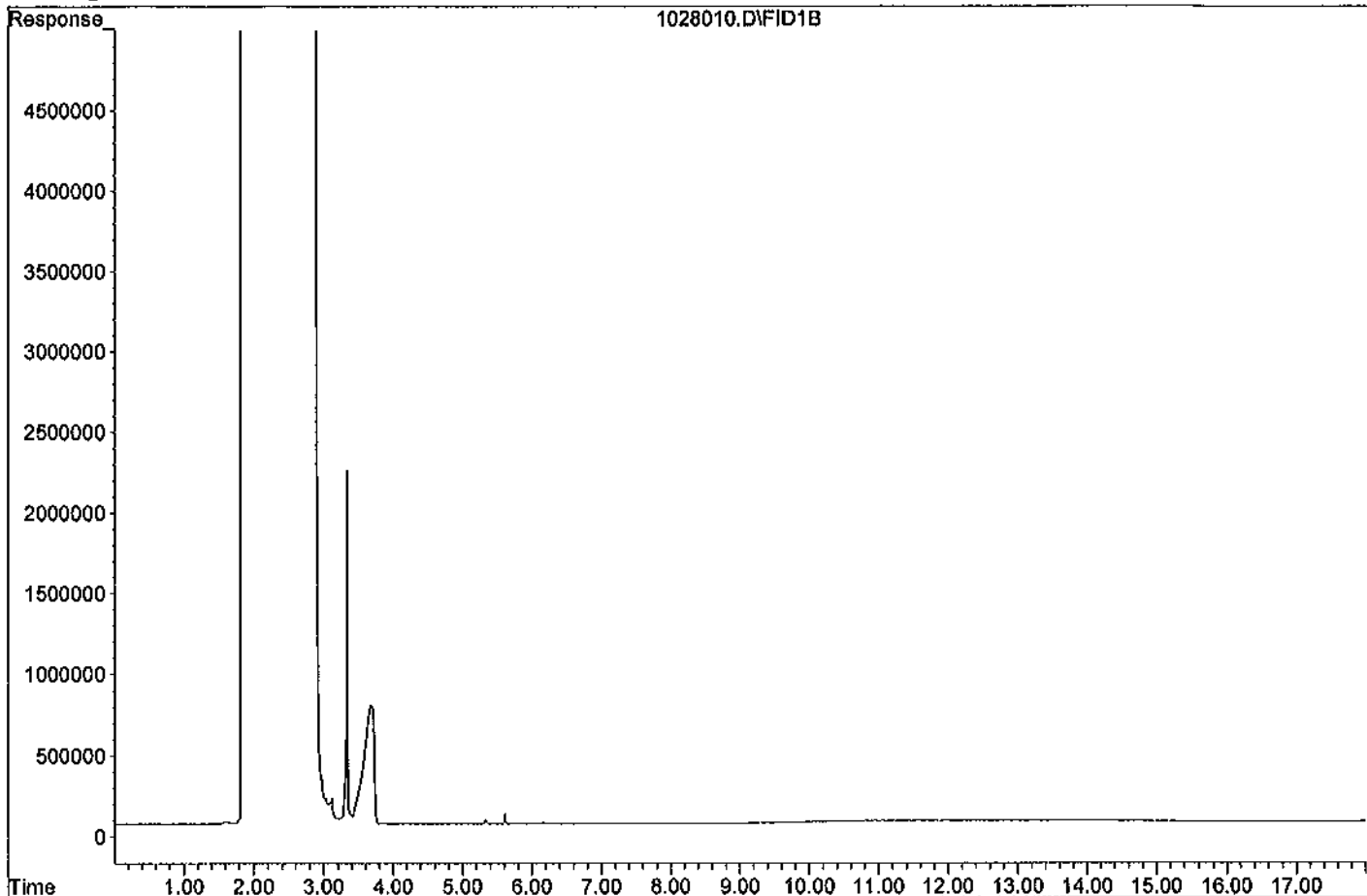
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.25	36743279	101.570 ppb
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Data File: G:\APOLLO\DATA\111028\1028010.D

Sample : MOTOR OIL 100/1000



Data File : G:\APOLLO\DATA\111028\1028011.D Vial: 11  
 Acq On : 10-28-11 13:00:16 Operator: LAC  
 Sample : MOTOR OIL 400/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

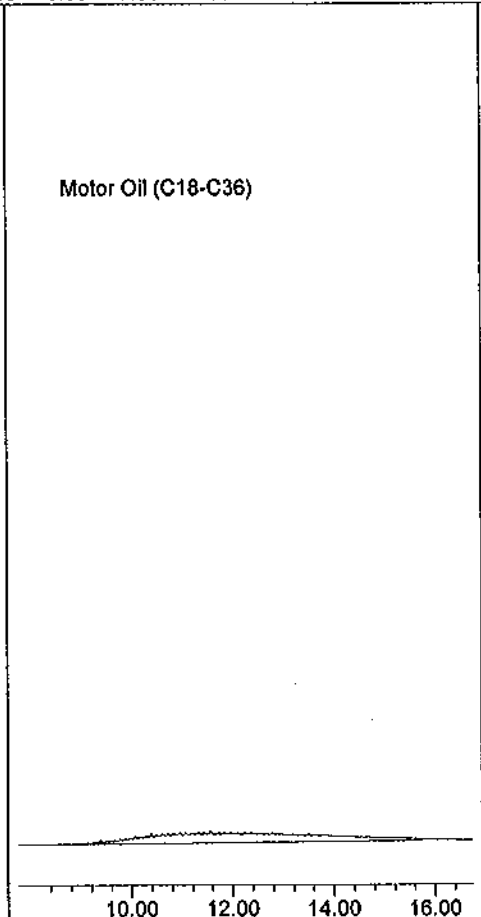
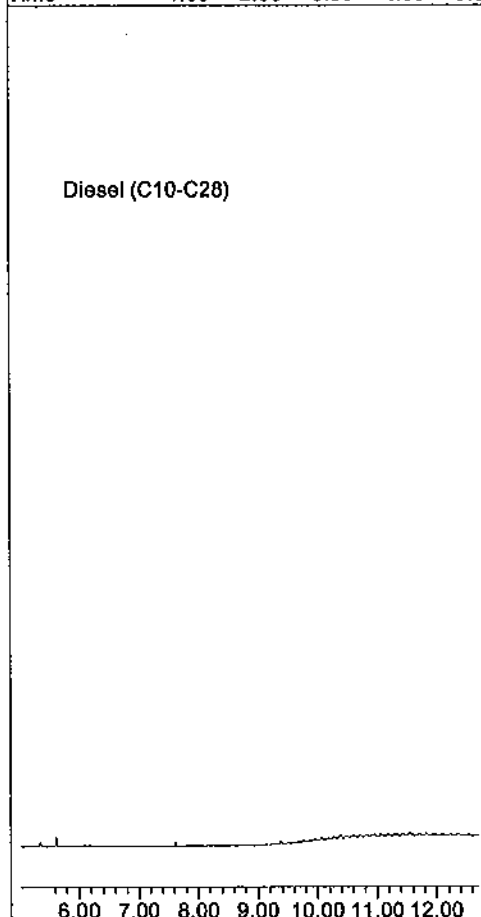
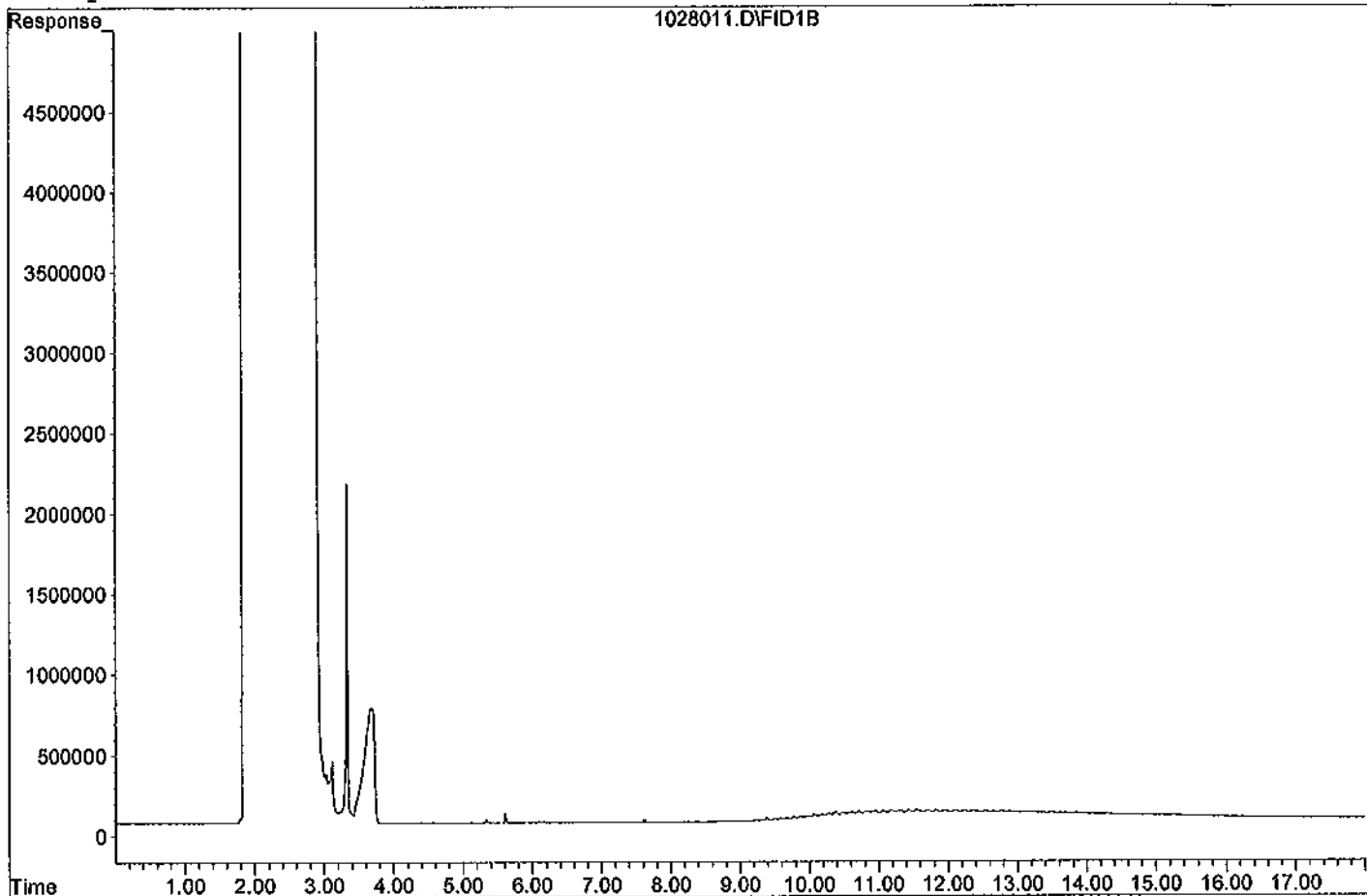
2) HBTM Motor Oil (C18-C36)	12.25	147050915	406.495 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028011.D

Sample : MOTOR OIL 400/1000



Data File : G:\APOLLO\DATA\111028\1028012.D Vial: 12  
 Acq On : 10-28-11 13:24:39 Operator: LAC  
 Sample : MOTOR OIL 600/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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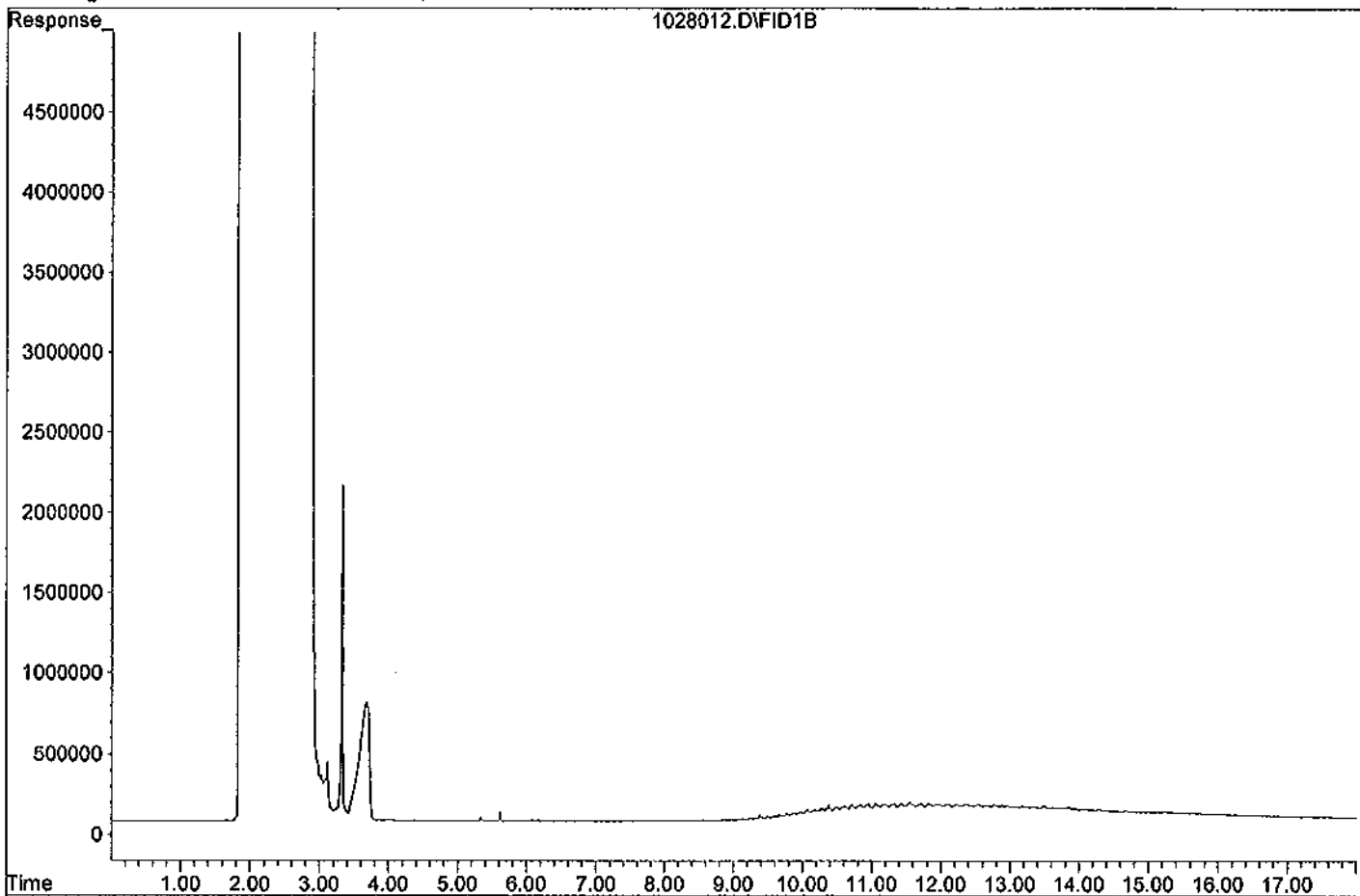
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.25	216778154	599.242 ppb
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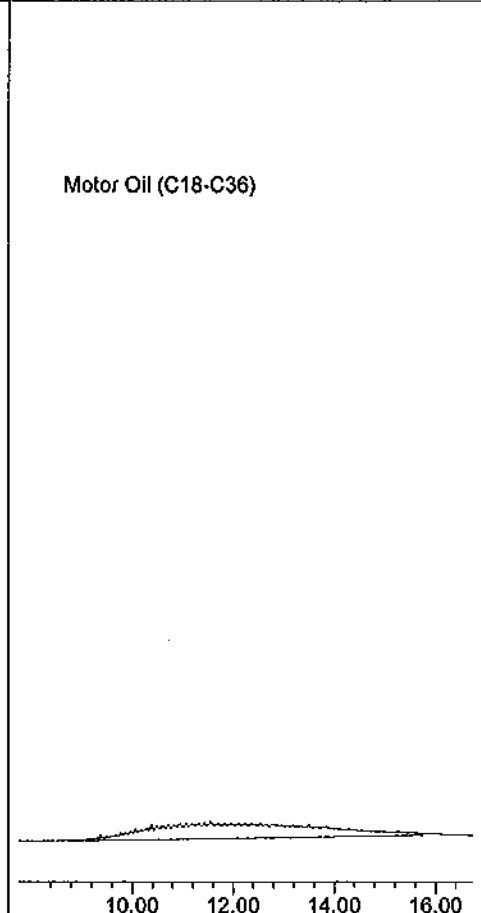
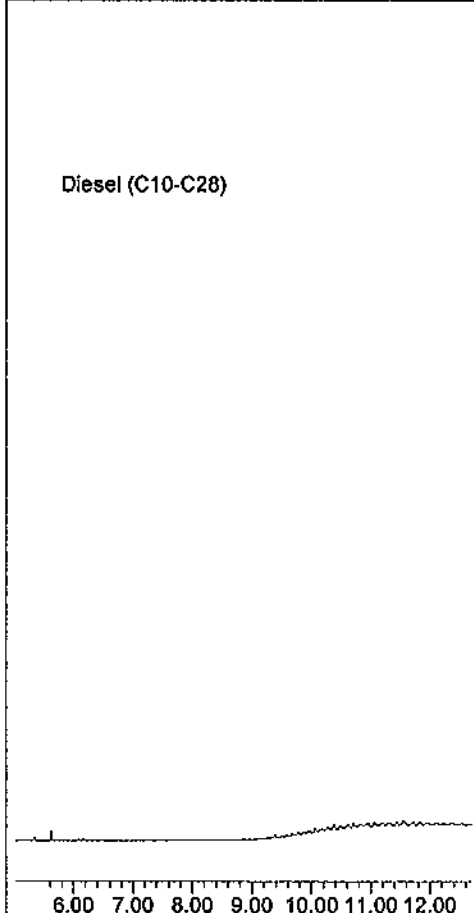
Data File: G:\APOLLO\DATA\111028\1028012.D

Sample : MOTOR OIL 600/1000



Diesel (C10-C28)

Motor Oil (C18-C36)



Data File : G:\APOLLO\DATA\111028\1028013.D Vial: 13  
 Acq On : 10-28-11 13:48:43 Operator: LAC  
 Sample : MOTOR OIL 800/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

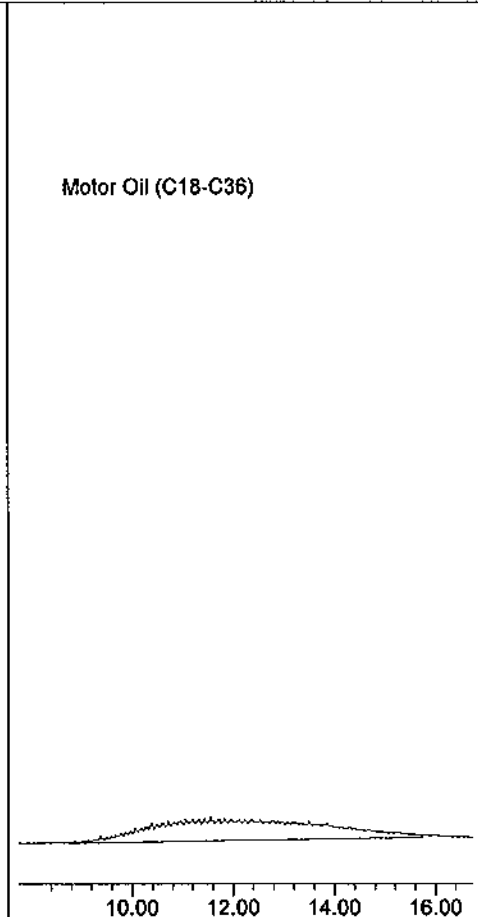
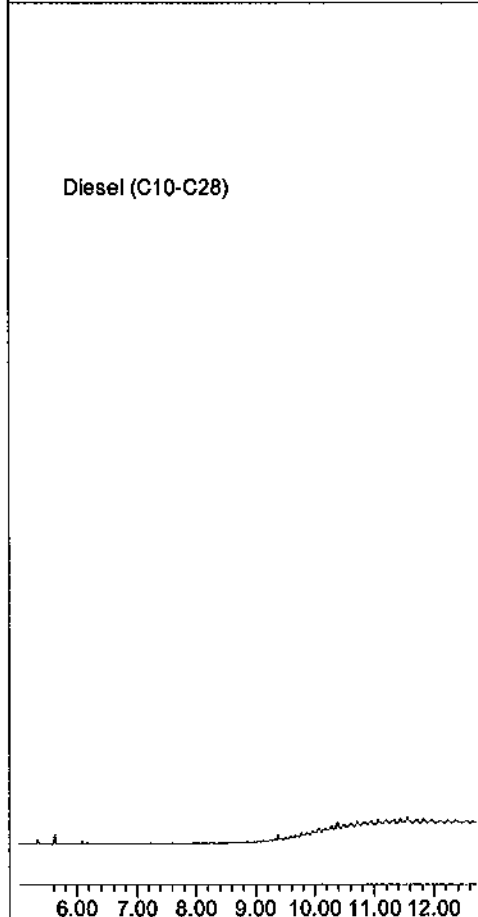
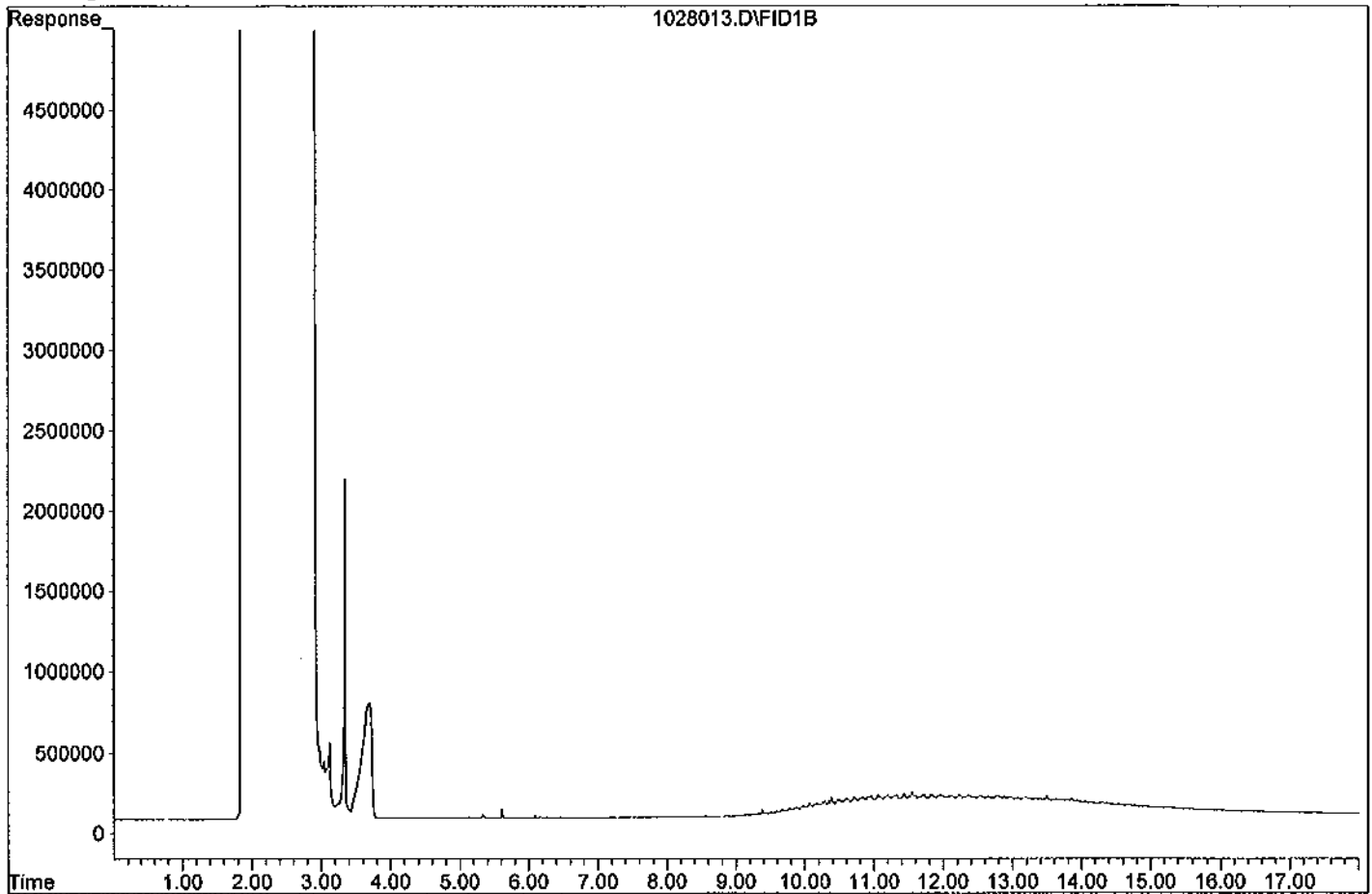
Target Compounds

2) HBTM Motor Oil (C18-C36)	12.25	303785051	839.757 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028013.D

Sample : MOTOR OIL 800/1000



Data File : G:\APOLLO\DATA\111028\1028014.D Vial: 14  
 Acq On : 10-28-11 14:13:14 Operator: LAC  
 Sample : MOTOR OIL 1000/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 13:43 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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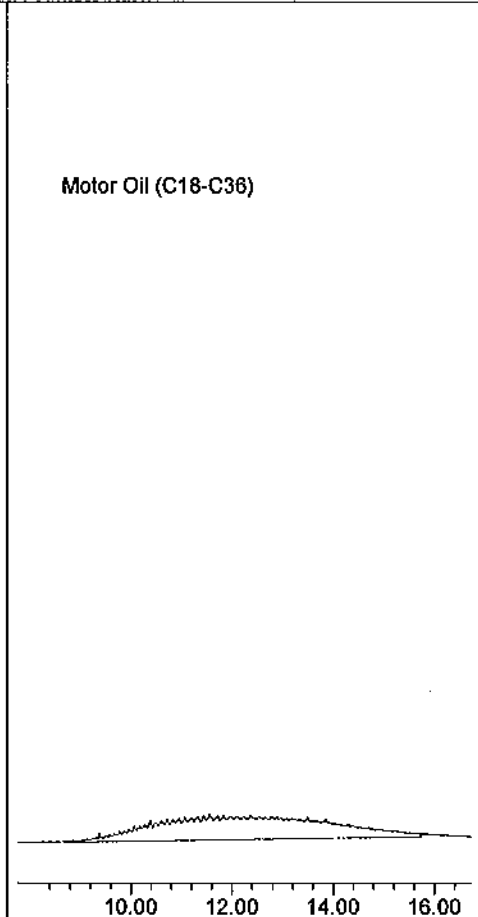
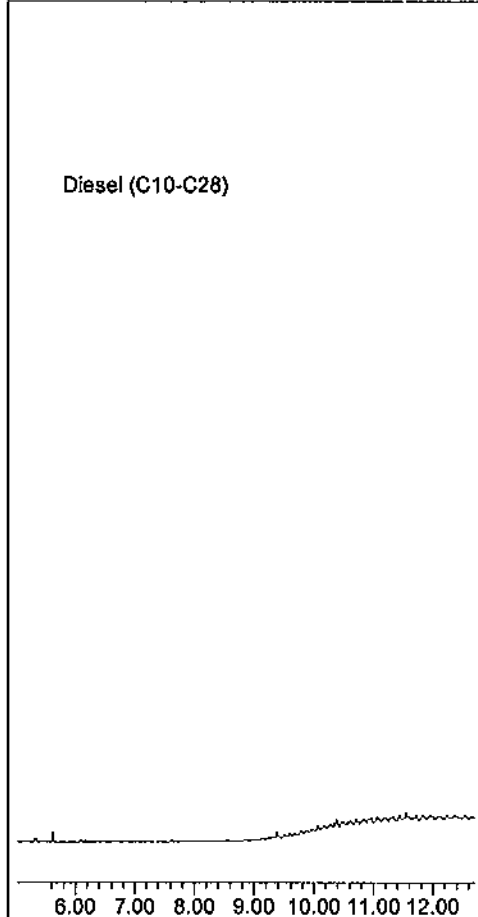
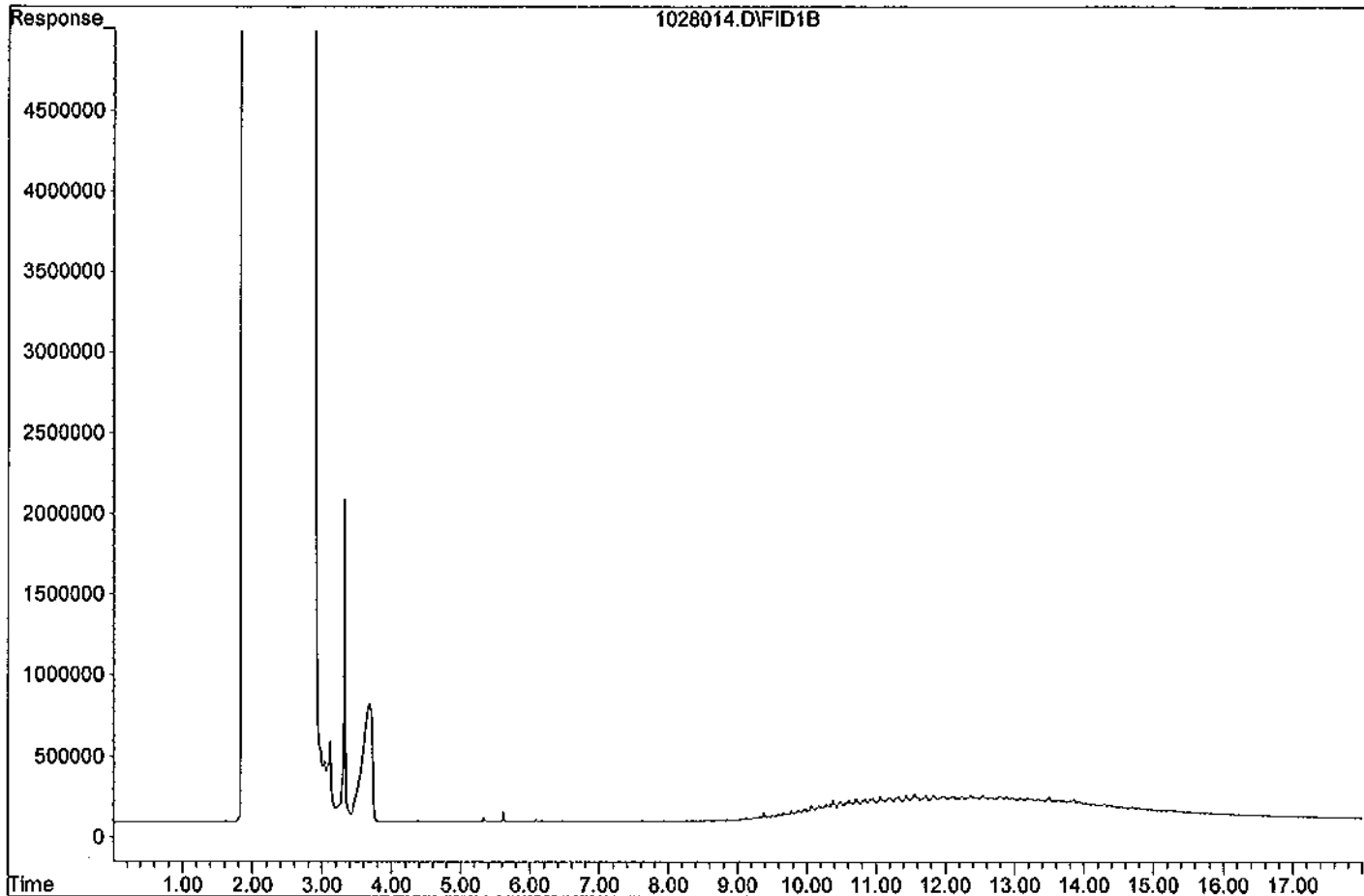
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.25	342332944	946.315 ppb
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Data File: G:\APOLLO\DATA\111028\1028014.D

Sample : MOTOR OIL 1000/1000



Data File : G:\APOLLO\DATA\111028\1028016.D Vial: 16  
 Acq On : 10-28-11 15:01:44 Operator: LAC  
 Sample : THC SURR 10/1000 10/28/11 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:01 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

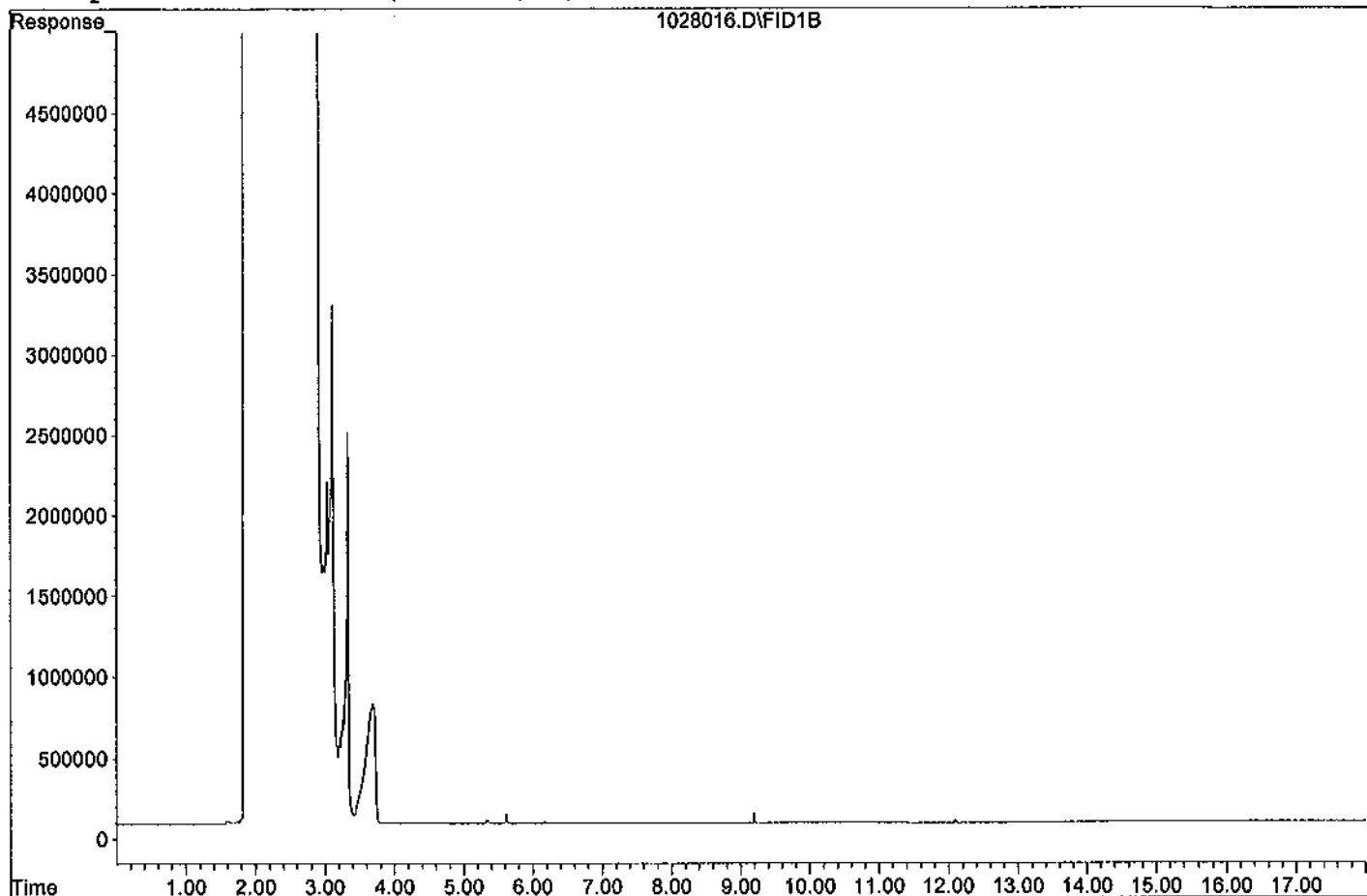
Target Compounds



Quantitation Report

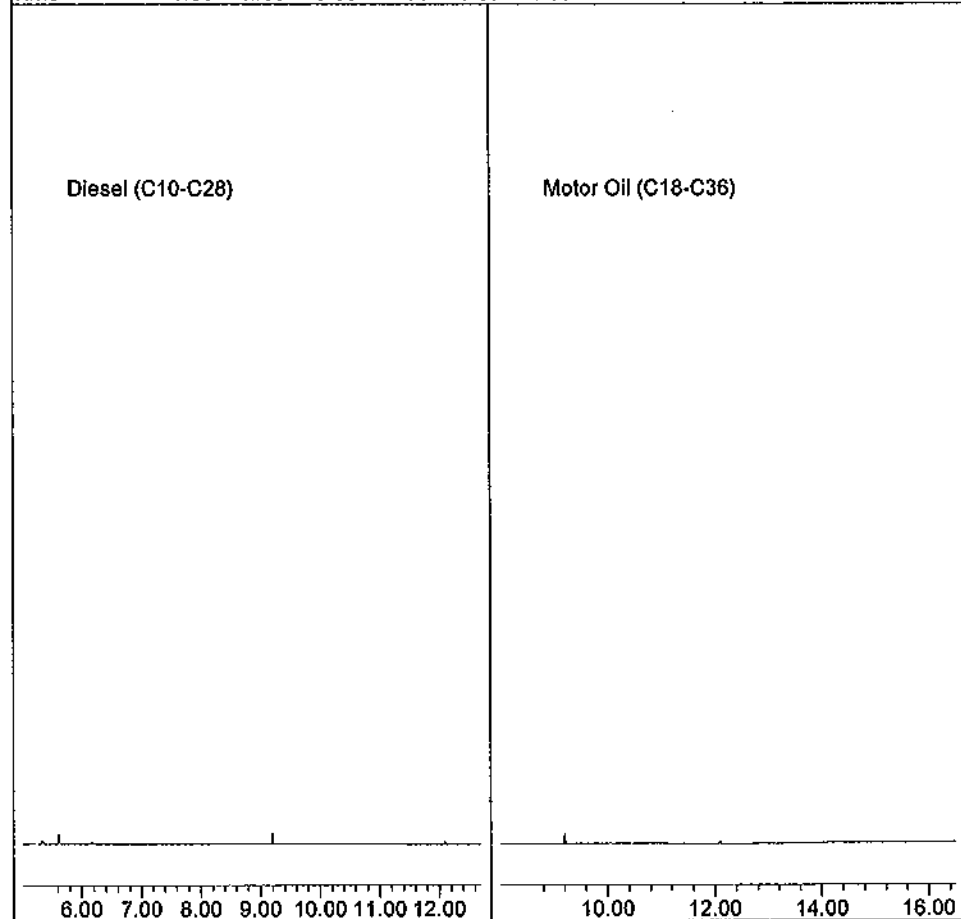
Data File: G:\APOLLO\DATA\111028\1028016.D

Sample : THC SURR 10/1000 10/28/11



Diesel (C10-C28)

Motor Oil (C18-C36)



Data File : G:\APOLLO\DATA\111028\1028017.D Vial: 17  
 Acq On : 10-28-11 15:25:58 Operator: LAC  
 Sample : THC SURR 100/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:01 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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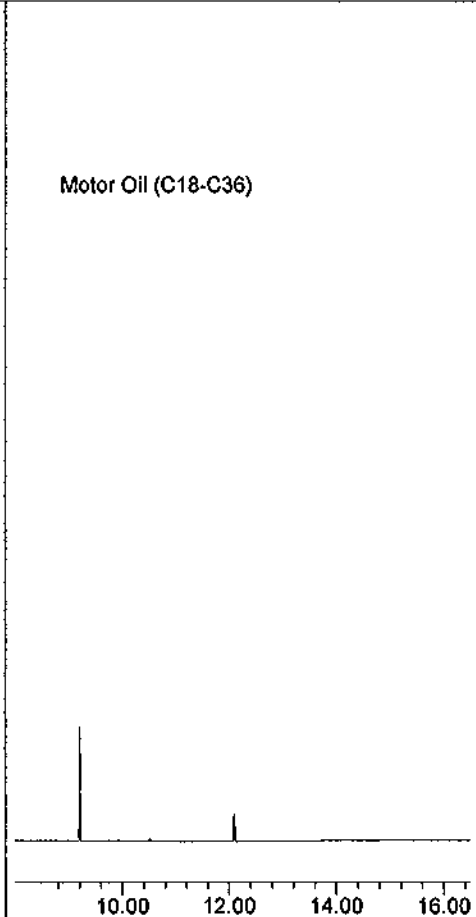
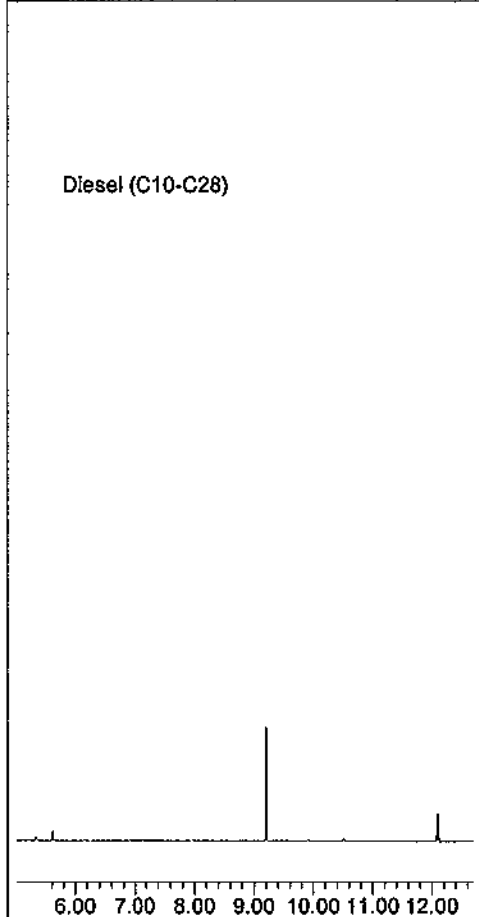
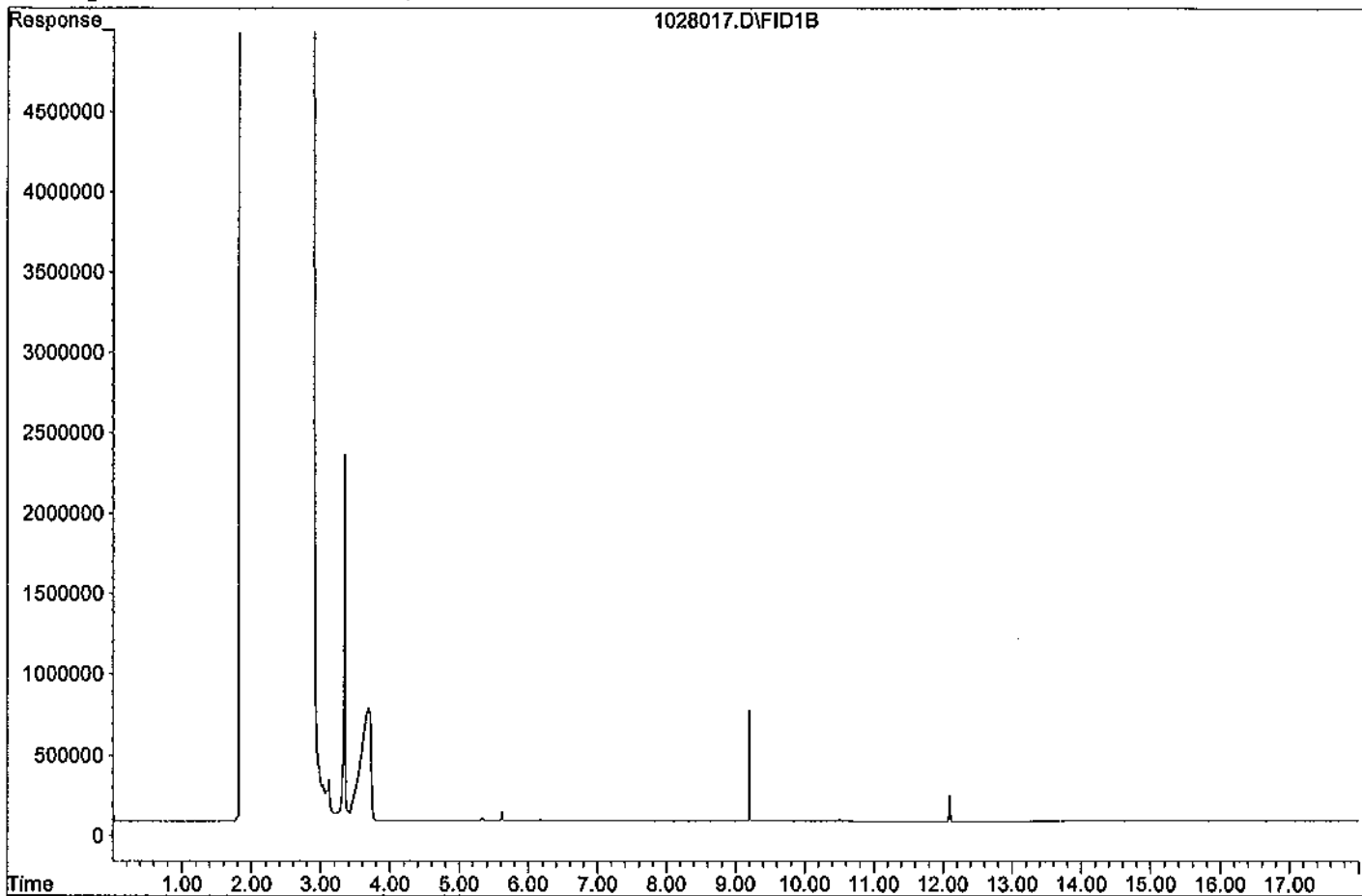
System Monitoring Compounds

Target Compounds

Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028017.D

Sample : THC SURR 100/1000



Data File : G:\APOLLO\DATA\111028\1028018.D Vial: 18  
 Acq On : 10-28-11 15:50:20 Operator: LAC  
 Sample : THC SURR 400/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:01 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

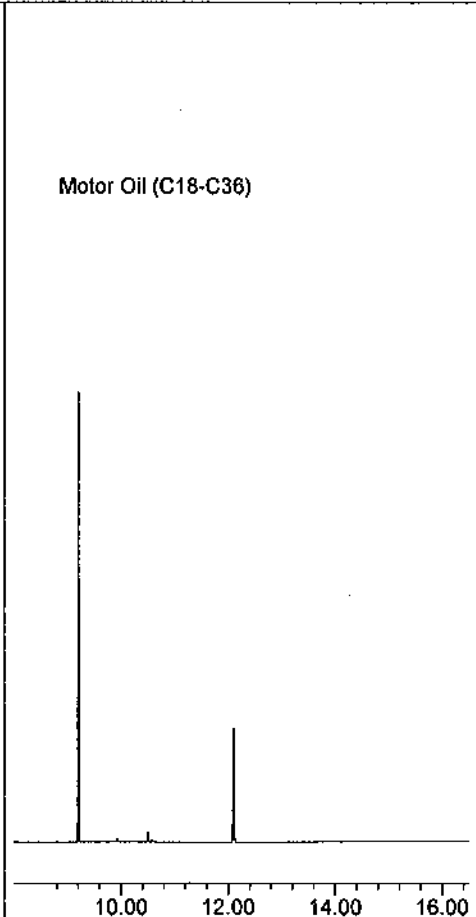
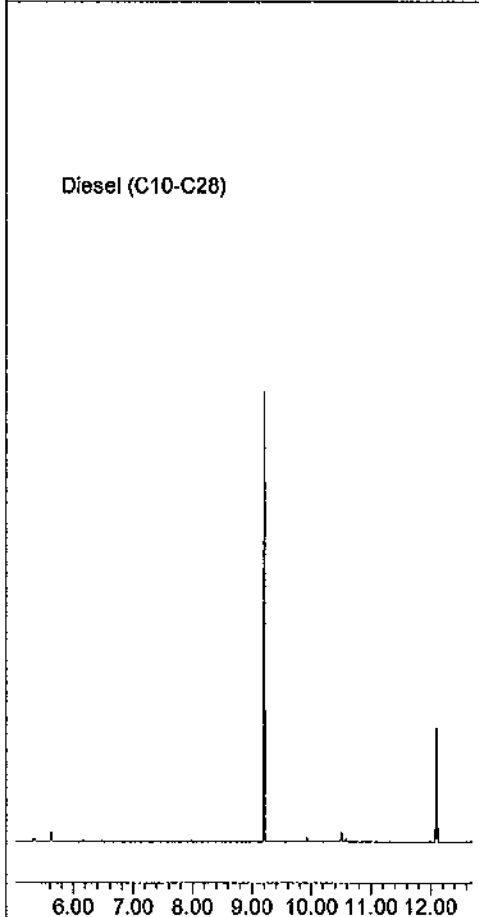
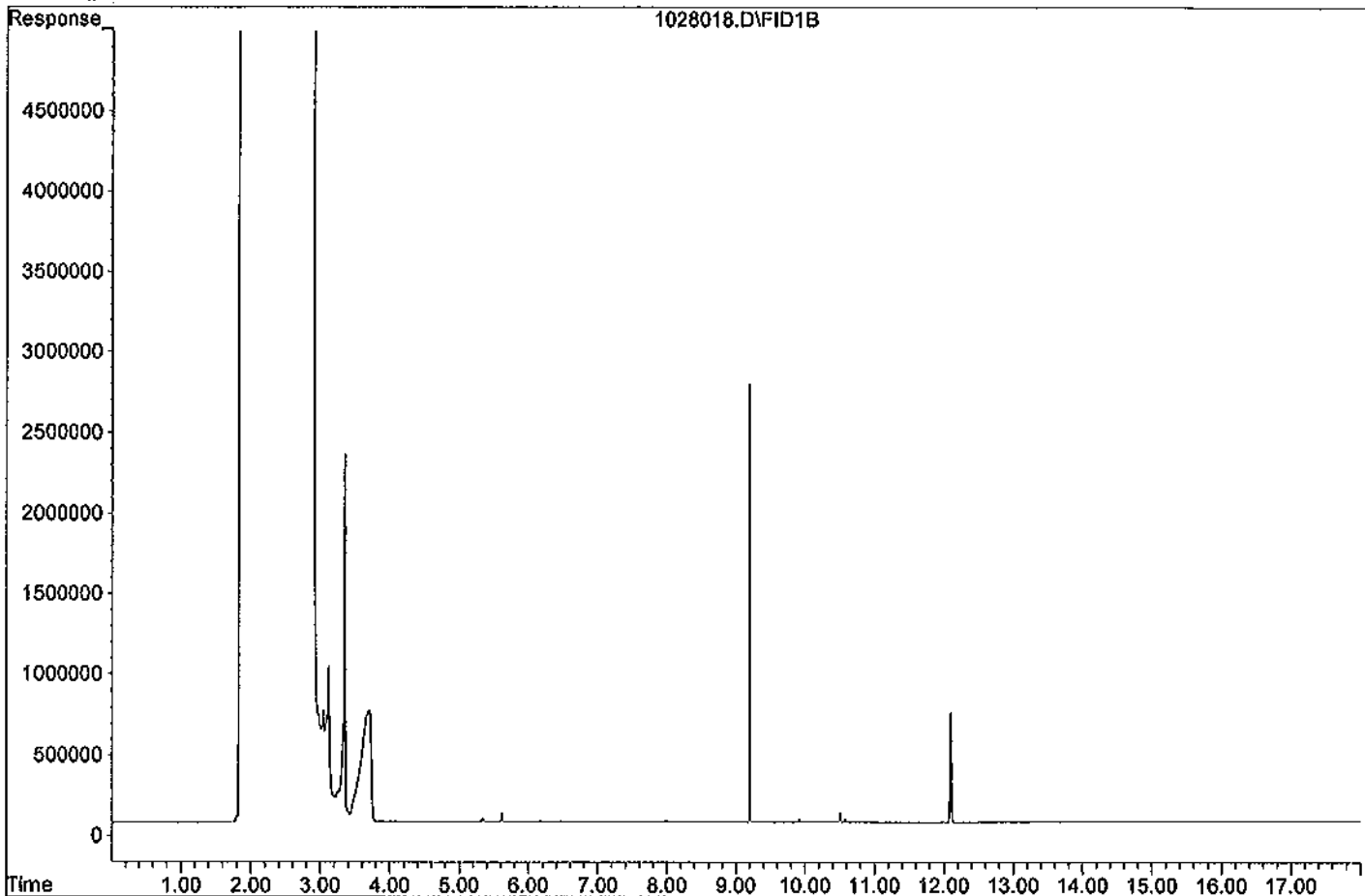
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

Data File: G:\APOLLO\DATA\111028\1028018.D

Sample : THC SURR 400/1000



Data File : G:\APOLLO\DATA\111028\1028019.D Vial: 19  
 Acq On : 10-28-11 16:14:52 Operator: LAC  
 Sample : THC SURR 600/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:01 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

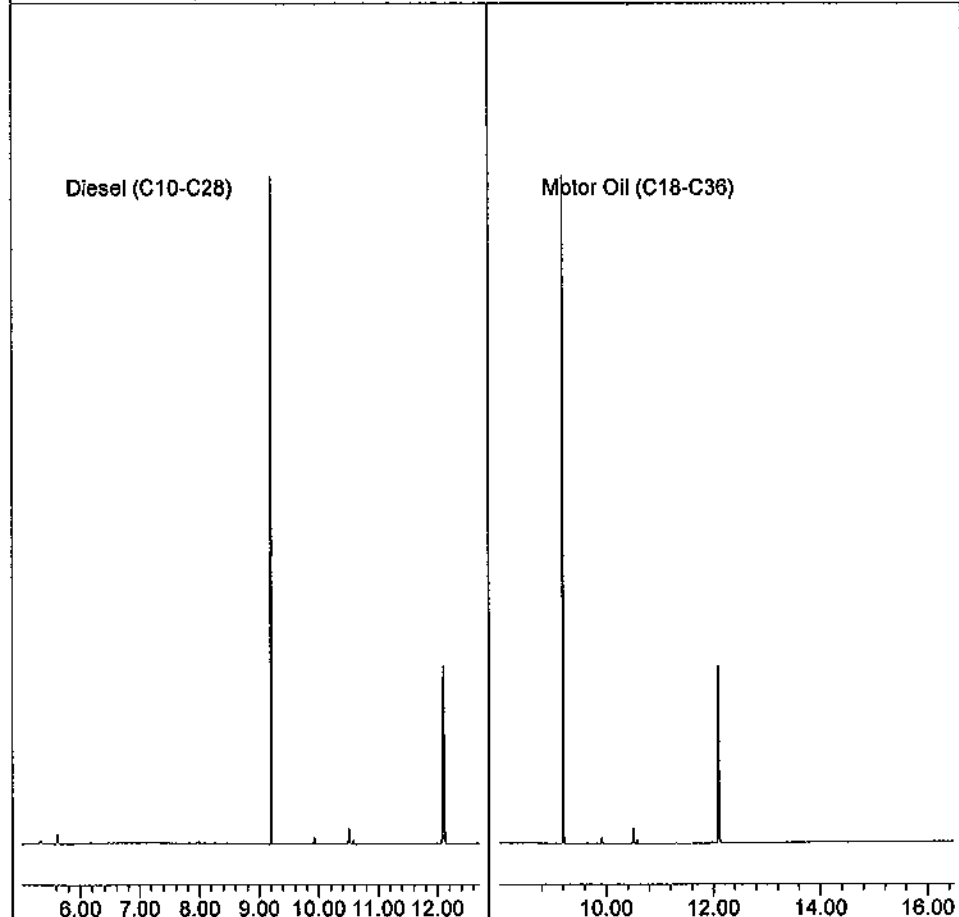
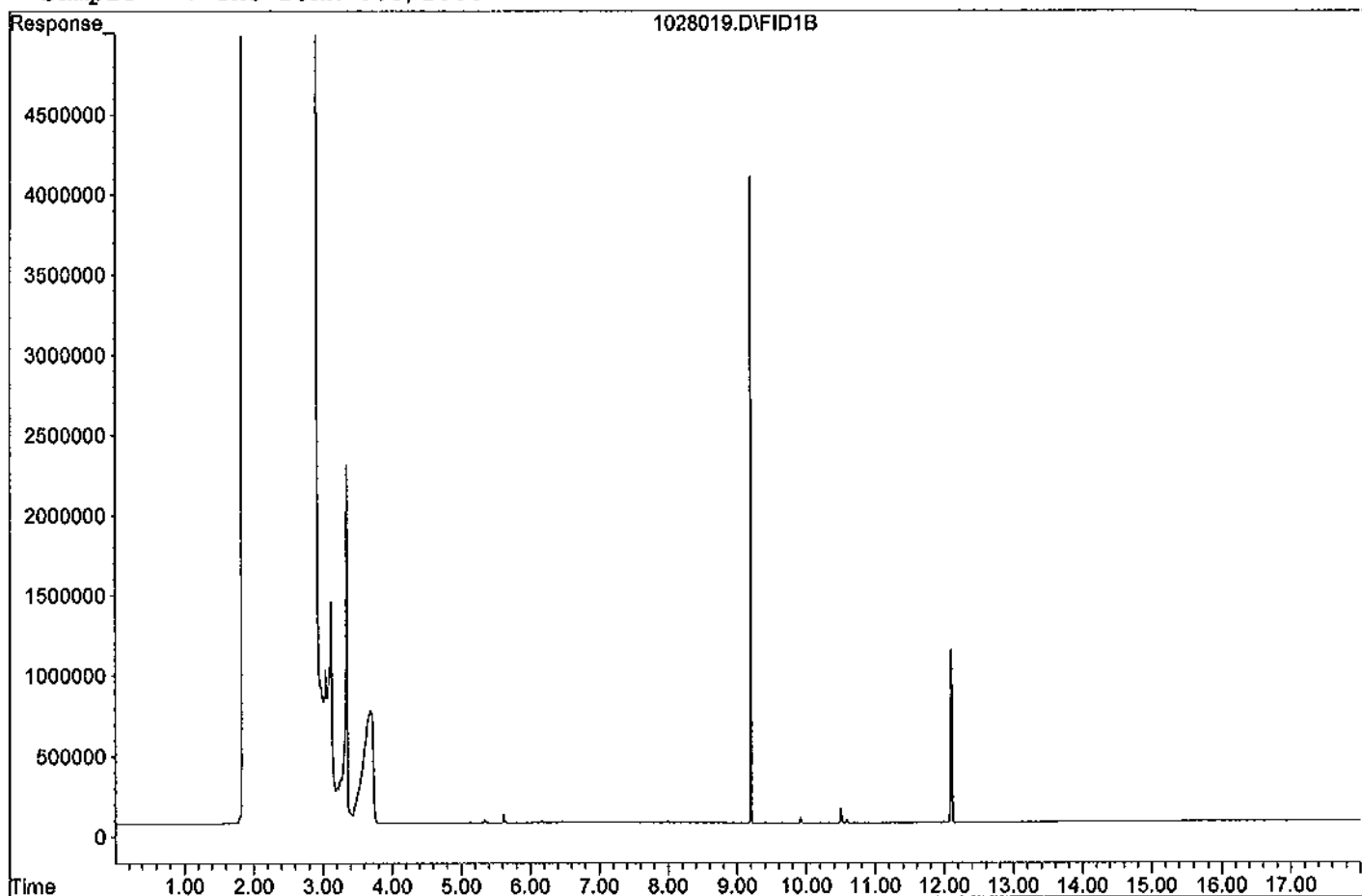
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

Data File: G:\APOLLO\DATA\111028\1028019.D

Sample : THC SURR 600/1000



Data File : G:\APOLLO\DATA\111028\1028020.D Vial: 20  
 Acq On : 10-28-11 16:38:57 Operator: LAC  
 Sample : THC SURR 800/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:01 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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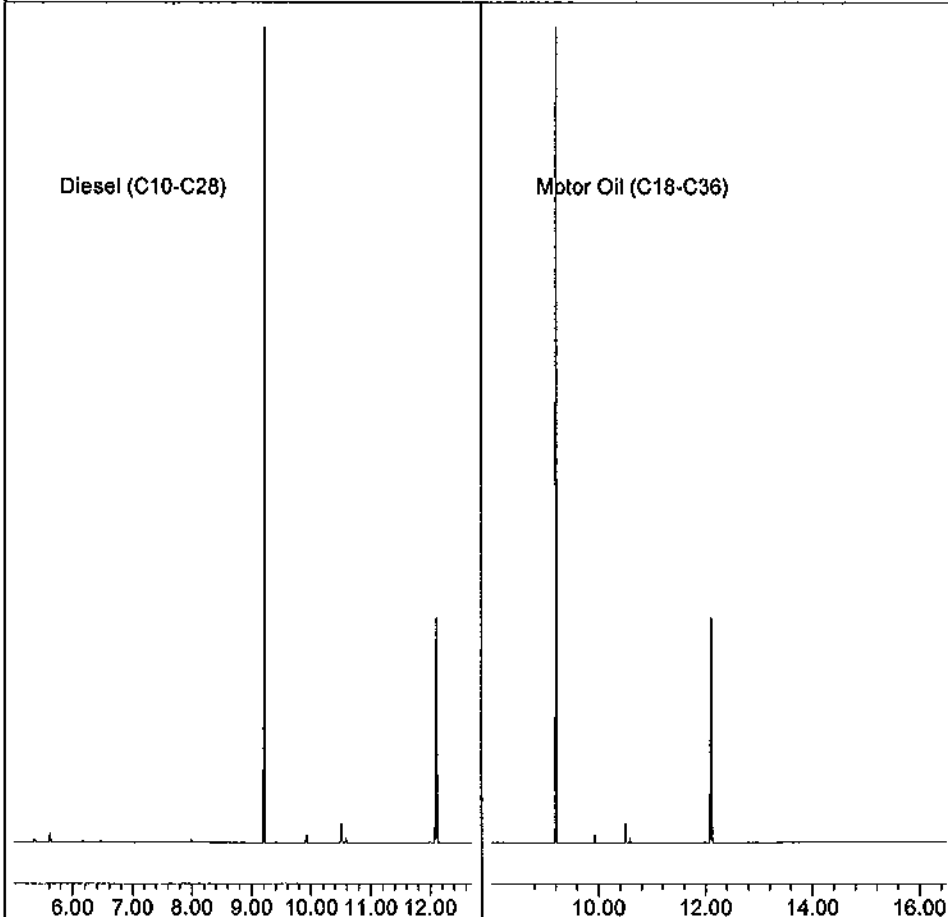
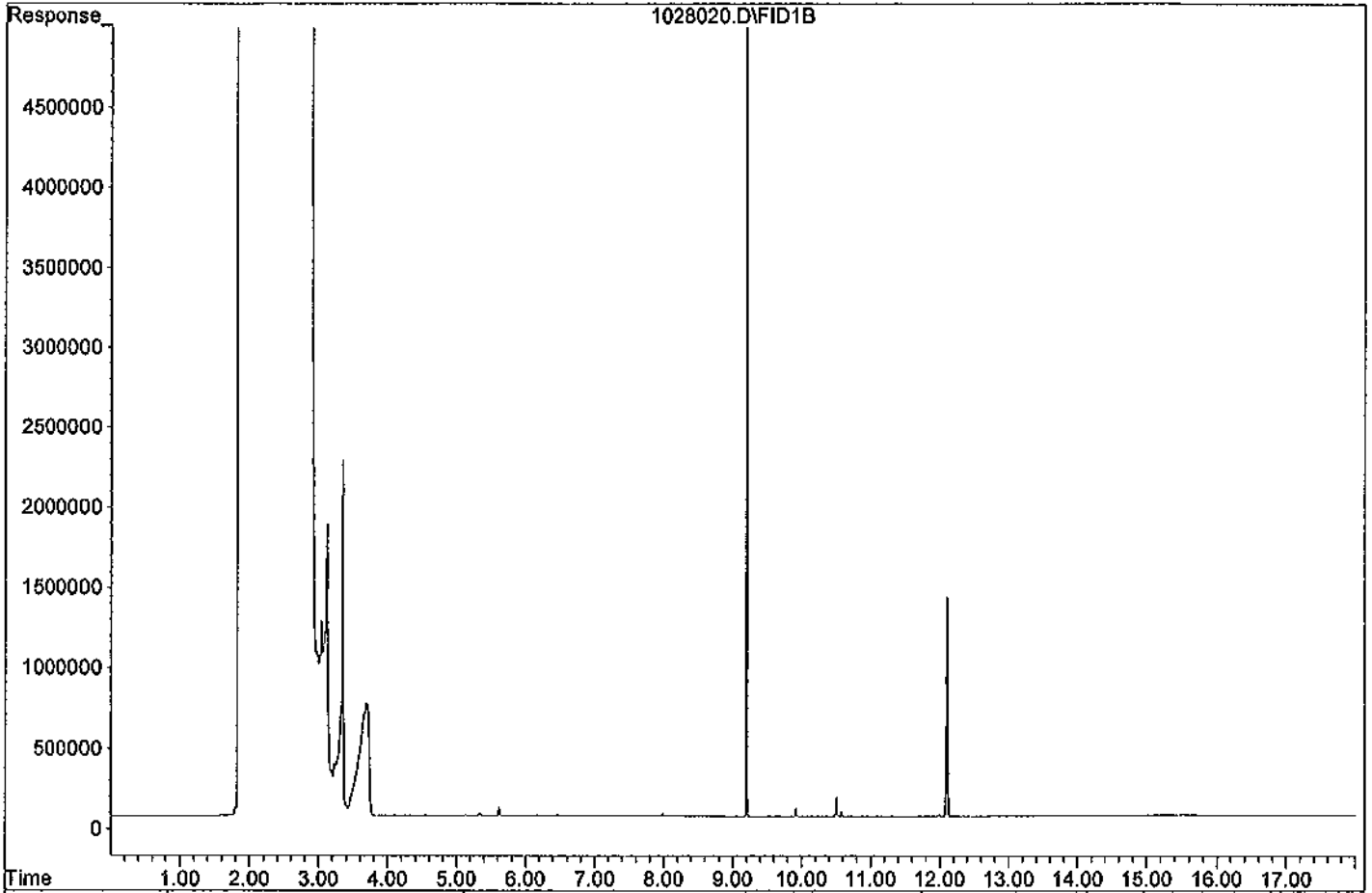
System Monitoring Compounds

Target Compounds



Quantitation Report

Data File: G:\APOLLO\DATA\111028\1028020.D  
Sample : THC SURR 800/1000



Data File : G:\APOLLO\DATA\111028\1028021.D Vial: 21  
 Acq On : 10-28-11 17:03:06 Operator: LAC  
 Sample : THC SURR 1000/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 31 9:00 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

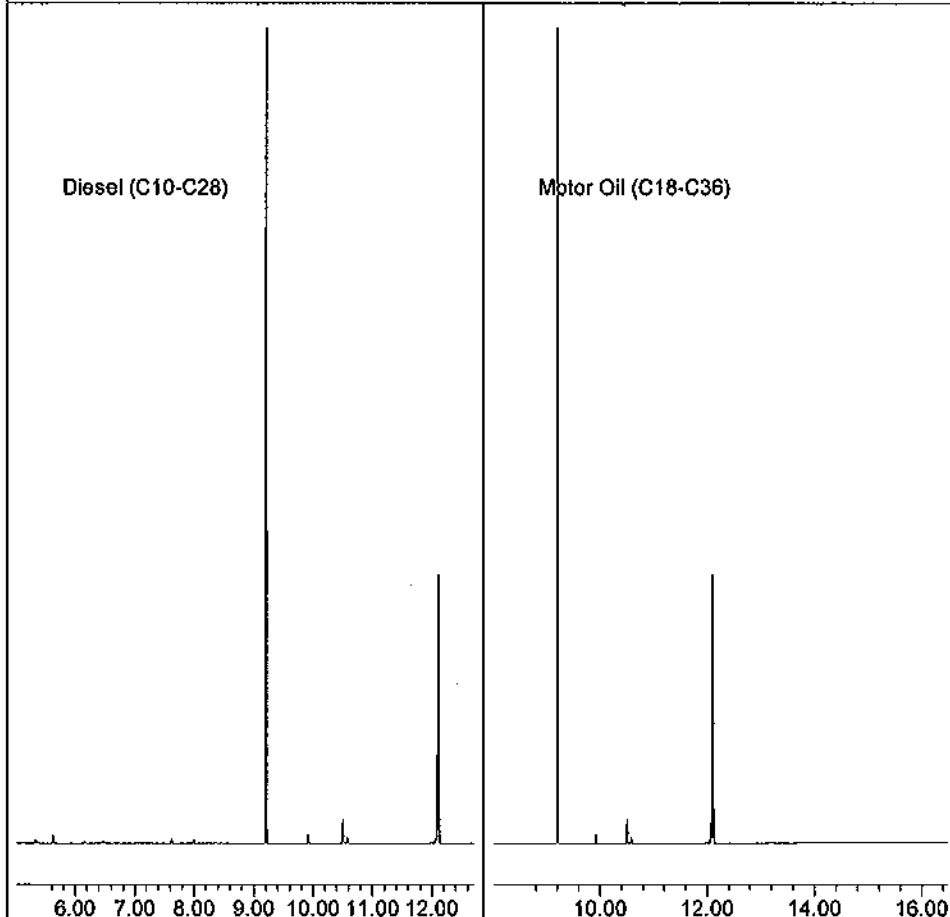
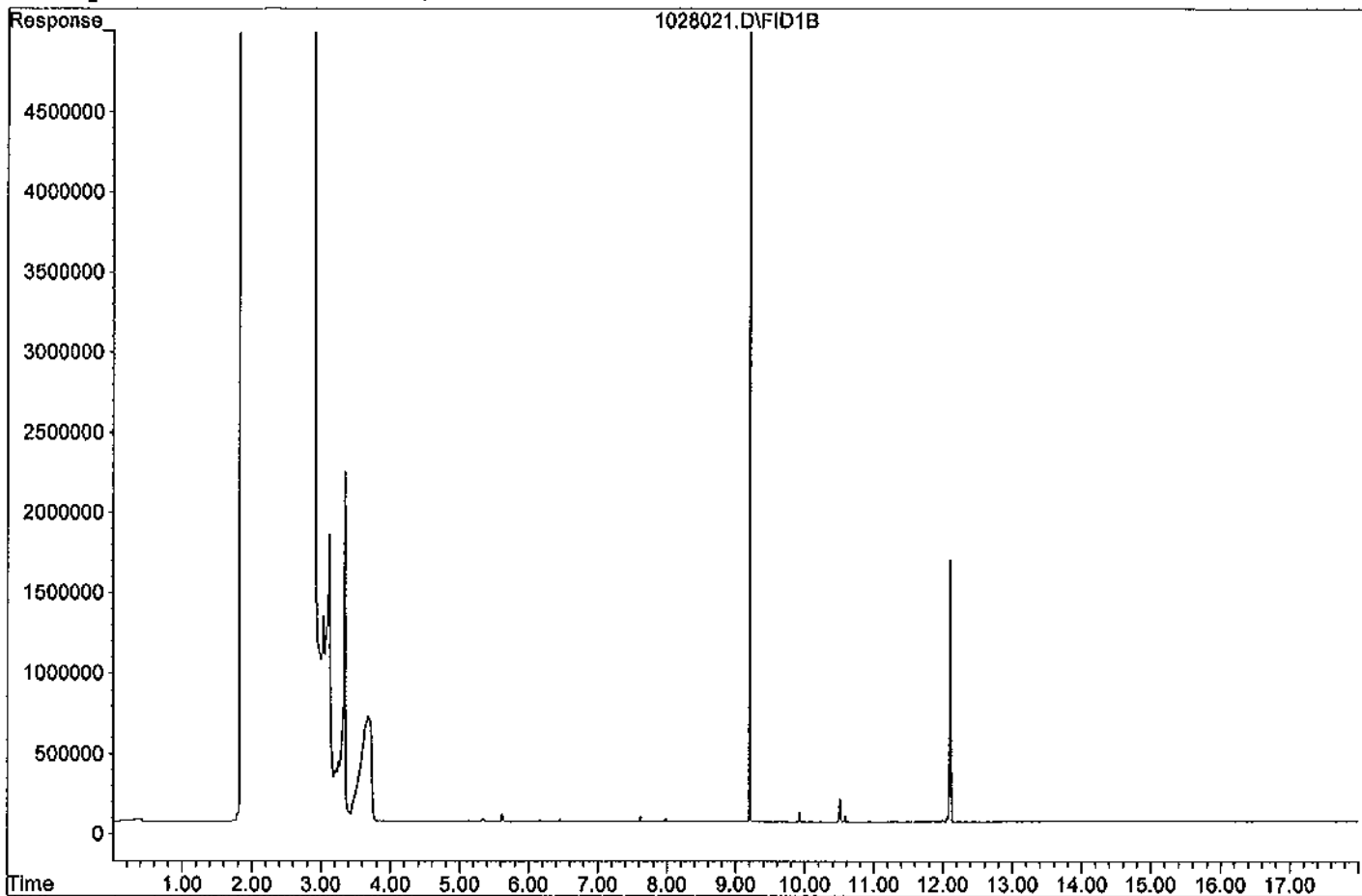
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

Data File: G:\APOLLO\DATA\111028\1028021.D

Sample : THC SURR 1000/1000



TPH Extractables  
TPH1028

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: 66102

Case No: \_\_\_\_\_

Date Analyzed: 10/28/11

Matrix: \_\_\_\_\_

Instrument: Apollo

Initial Cal. Date: 10/28/11

Data File: 1028015.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C28)	420946	437681	4.0	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

4.0

Data File : G:\APOLLO\DATA\111028\1028015.D Vial: 15  
 Acq On : 10-28-11 14:37:14 Operator: LAC  
 Sample : DIESEL 2ND SRC 10/28/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Oct 28 14:00 2011 Quant Results File: TPH1028.RES

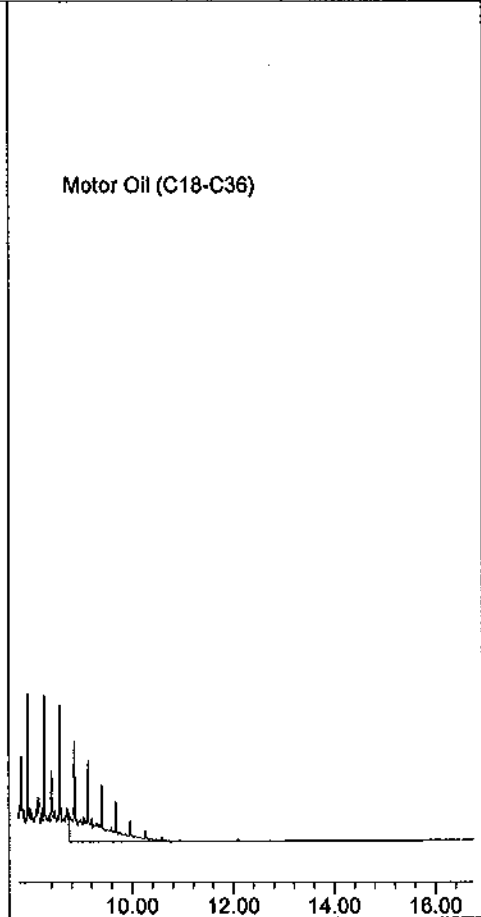
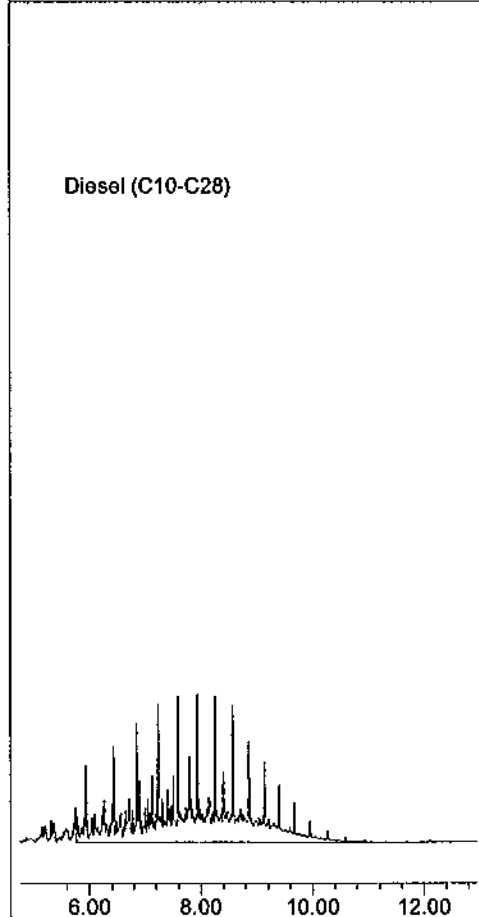
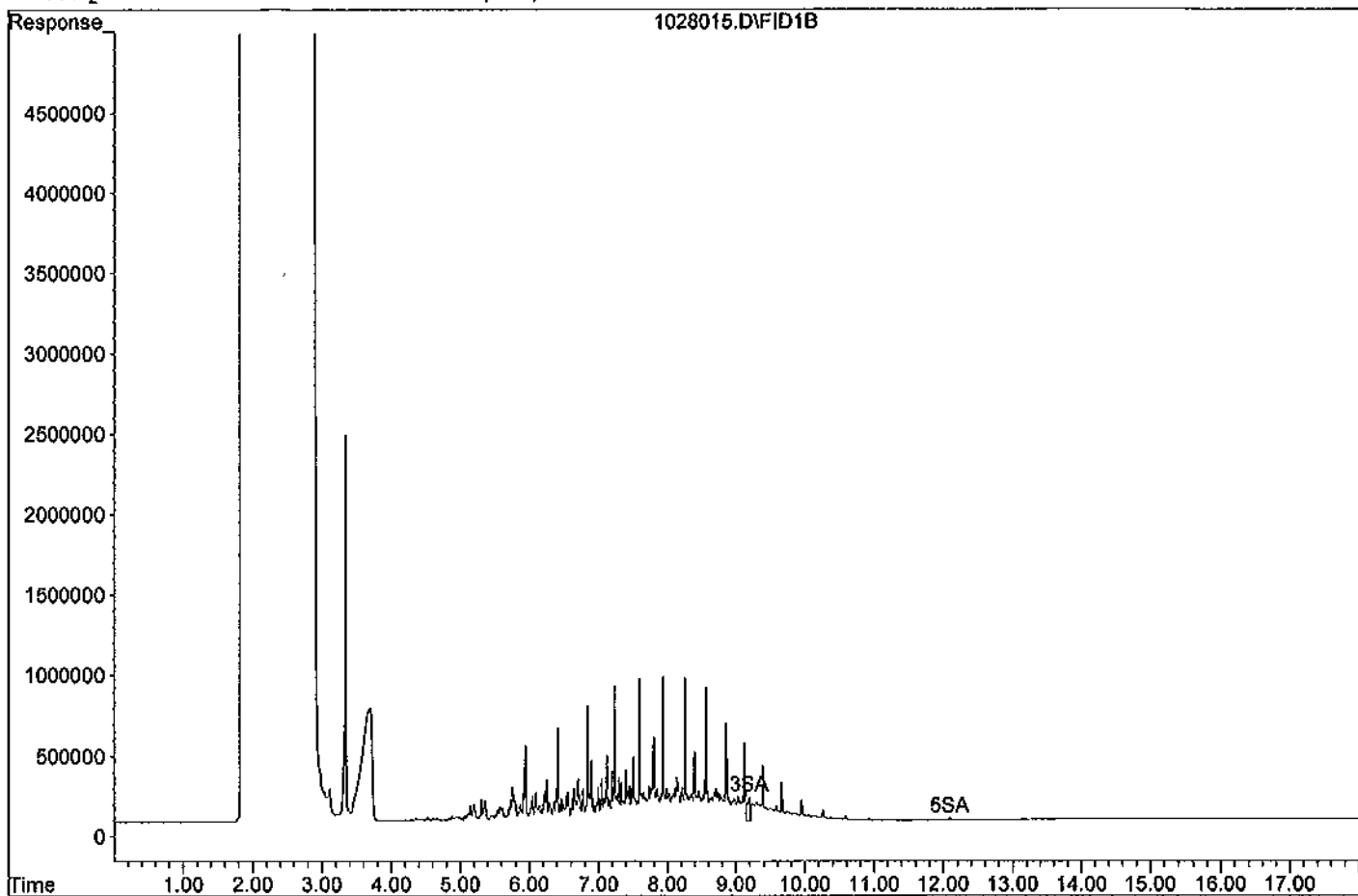
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	4372560	4.067 ppb
Surrogate Spike 30.000		Recovery =	13.56%
5) SA Not Used2(S)	12.09	211361	0.427 ppb
Surrogate Spike 30.000		Recovery =	1.42%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	350144889	415.903 ppb
2) HBTM Motor Oil (C18-C36)	12.25	92370482	254.784 ppb

Data File: G:\APOLLO\DATA\111028\1028015.D

Sample : DIESEL 2ND SRC 10/28/11



TPH Extractables  
TPH1028

Form 7  
Continuing Calibration

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

SDG No: 66102  
Date Analyzed: 11/06/11  
Instrument: Apollo  
Initial Cal. Date: 10/28/11  
Data File: 1106003.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	420946	359274	15	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			15.0	

Data File : G:\APOLLO\DATA\111106\1106003.D Vial: 3  
 Acq On : 11-6-11 16:34:49 Operator: LAC  
 Sample : DIESEL 400/1000 10/28/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 7 9:16 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

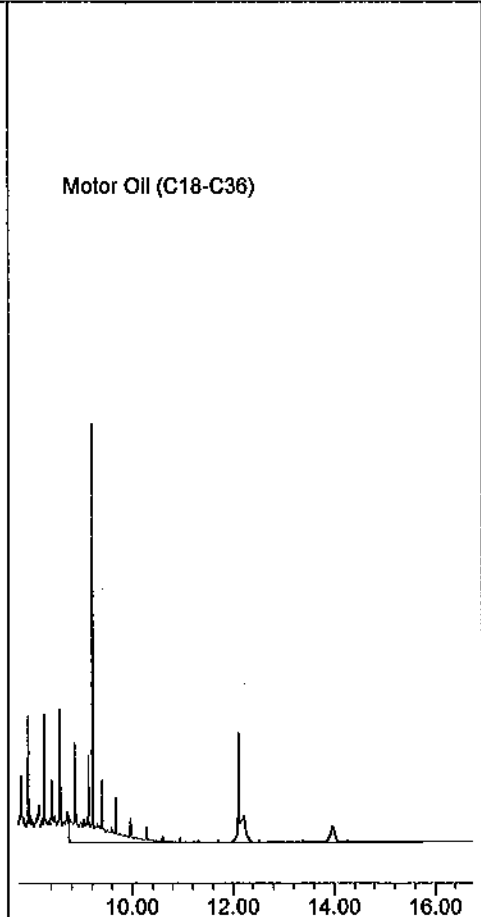
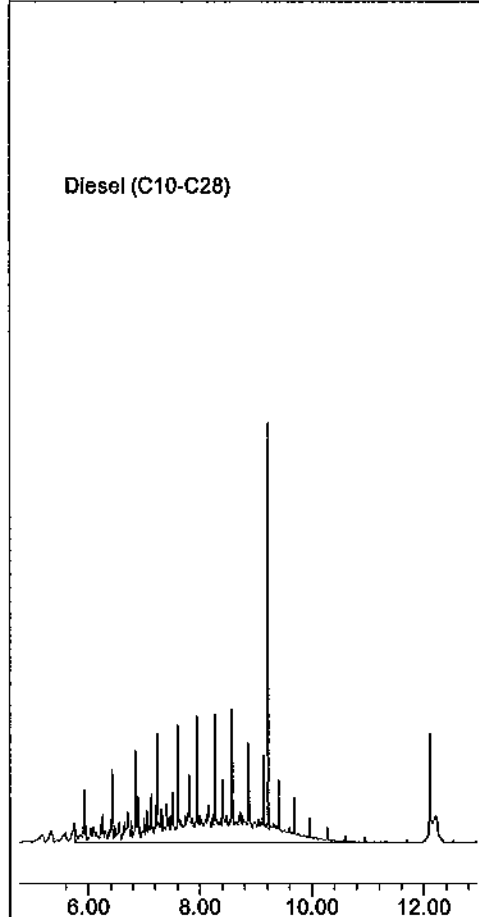
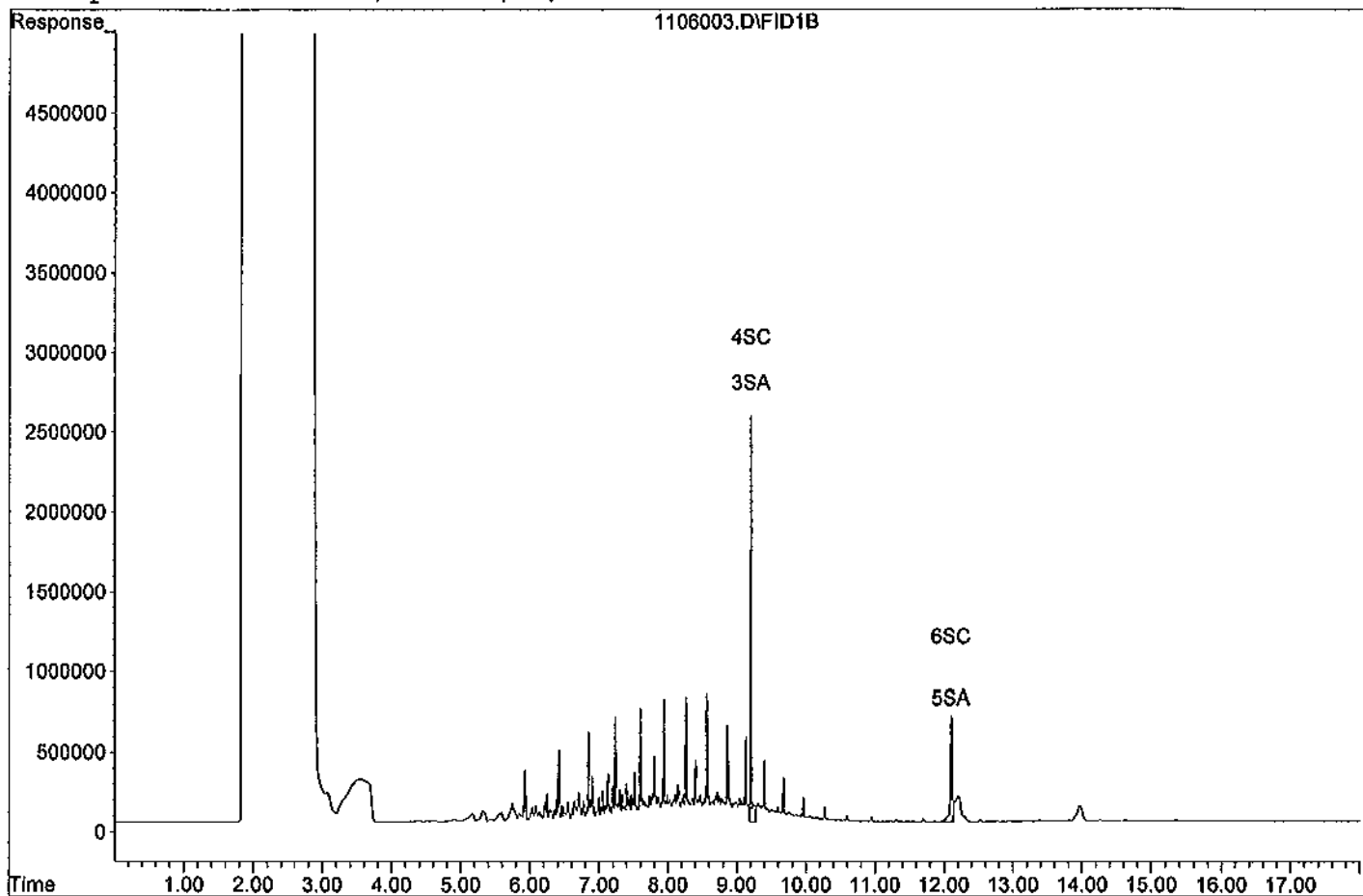
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.21	21346070	19.854 ppb
Surrogate Spike 30.000		Recovery =	66.18%
4) SC Ortho-Terphenyl(S)	9.21	21346070	24.480 ppb
Surrogate Spike 30.000		Recovery =	81.60%
5) SA Not Used2(S)	12.11	11940260	24.100 ppb
Surrogate Spike 30.000		Recovery =	80.33%
6) SC Octacosane(S)	12.11	11940260	25.659 ppb
Surrogate Spike 30.000		Recovery =	85.53%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	287418867	341.397 ppb
2) HBTM Motor Oil (C18-C36)	12.25	102192727	281.876 ppb



Data File: G:\APOLLO\DATA\111106\1106003.D

Sample : DIESEL 400/1000 10/28/11



TPH Extractables  
TPH1028

Form 7

Continuing Calibration

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

SDG No: 66102  
Date Analyzed: 11/06/11  
Instrument: Apollo  
Initial Cal. Date: 10/28/11  
Data File: 1106017.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	420946	369827	12	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			12.0	

Data File : G:\APOLLO\DATA\111106\1106017.D Vial: 17  
 Acq On : 11-6-11 22:03:47 Operator: LAC  
 Sample : DIESEL 400/1000 11/2/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 7 9:17 2011 Quant Results File: TPH1028.RES

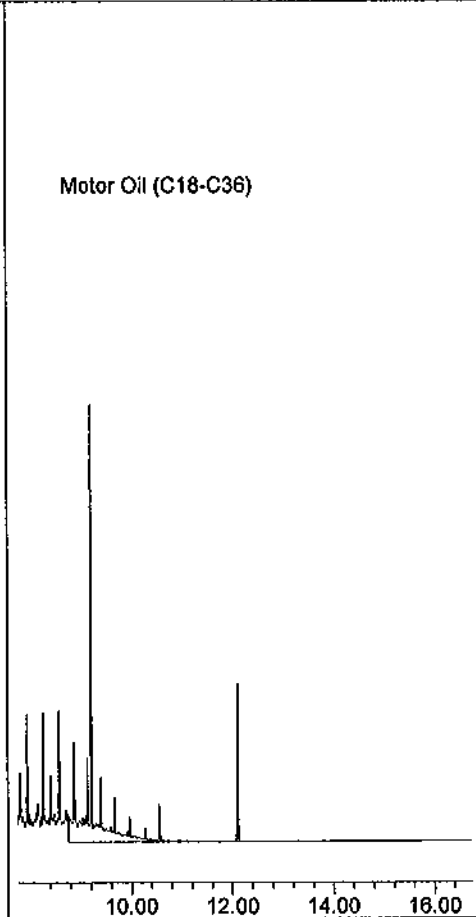
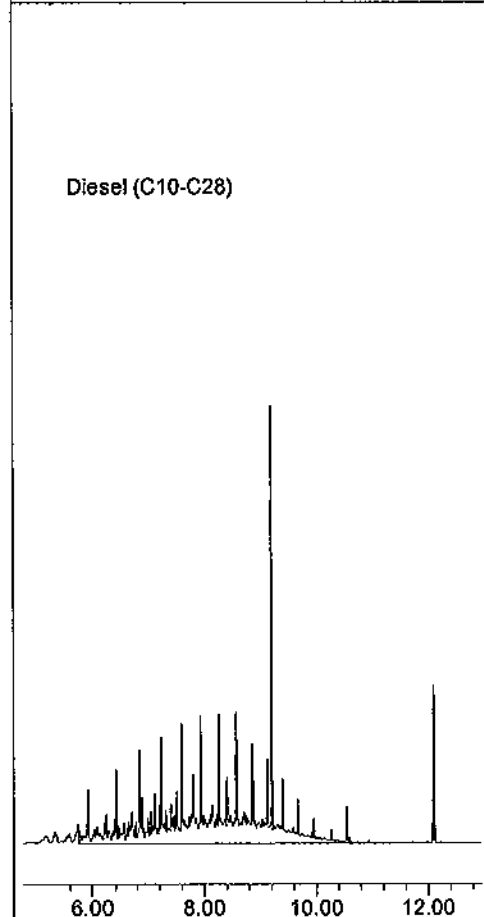
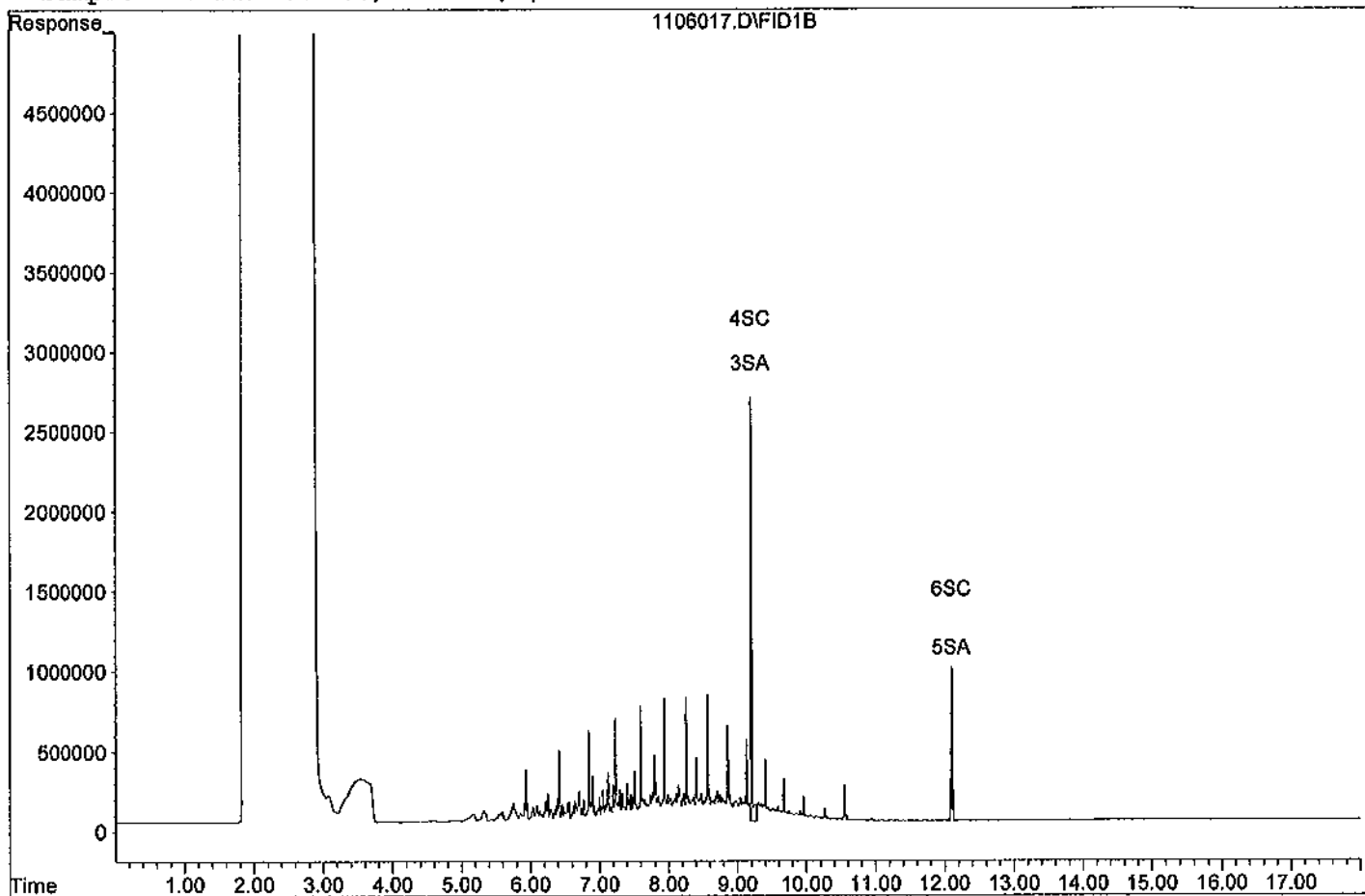
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.21	22135697	20.589 ppb
Surrogate Spike 30.000		Recovery =	68.63%
4) SC Ortho-Terphenyl(S)	9.21	22135697	25.385 ppb
Surrogate Spike 30.000		Recovery =	84.62%
5) SA Not Used2(S)	12.10	13104105	26.450 ppb
Surrogate Spike 30.000		Recovery =	88.17%
6) SC Octacosane(S)	12.10	13104105	28.160 ppb
Surrogate Spike 30.000		Recovery =	93.87%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	295861444	351.425 ppb
2) HBTM Motor Oil (C18-C36)	12.25	88714324	244.699 ppb

Data File: G:\APOLLO\DATA\111106\1106017.D

Sample : DIESEL 400/1000 11/2/11



TPH Extractables  
TPH1028

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: 66102

Case No: \_\_\_\_\_

Date Analyzed: 11/07/11

Matrix: \_\_\_\_\_

Instrument: Apollo

Initial Cal. Date: 10/28/11

Data File: 1106027.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	420946	339247	19	HATM
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
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25					
26					
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28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			19.0	

Data File : G:\APOLLO\DATA\111106\1106027.D Vial: 27  
 Acq On : 11-7-11 1:56:08 Operator: LAC  
 Sample : DIESEL 400/1000 11/2/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 7 9:17 2011 Quant Results File: TPH1028.RES

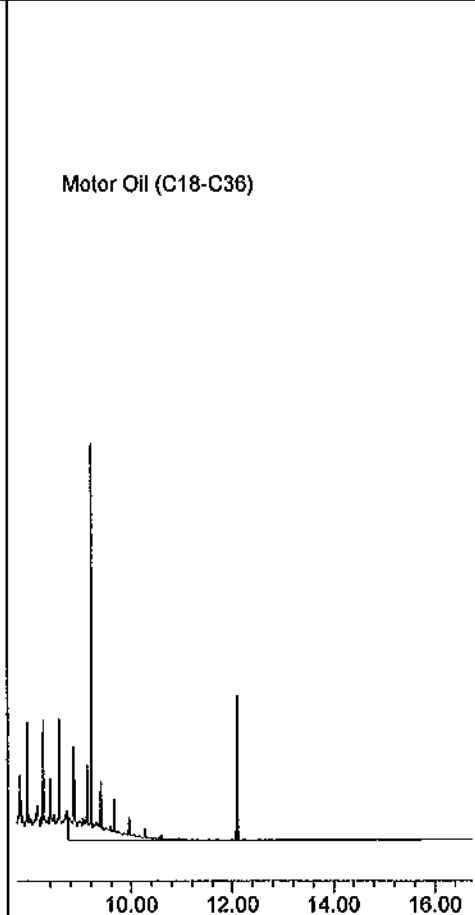
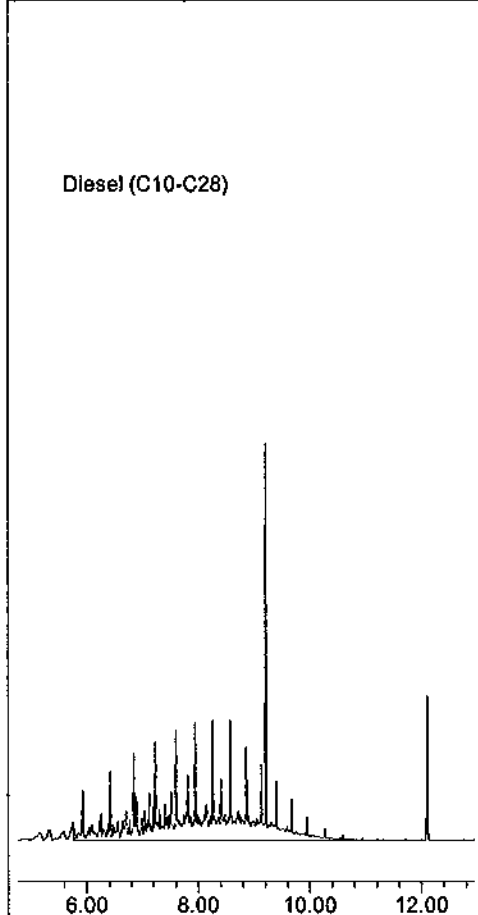
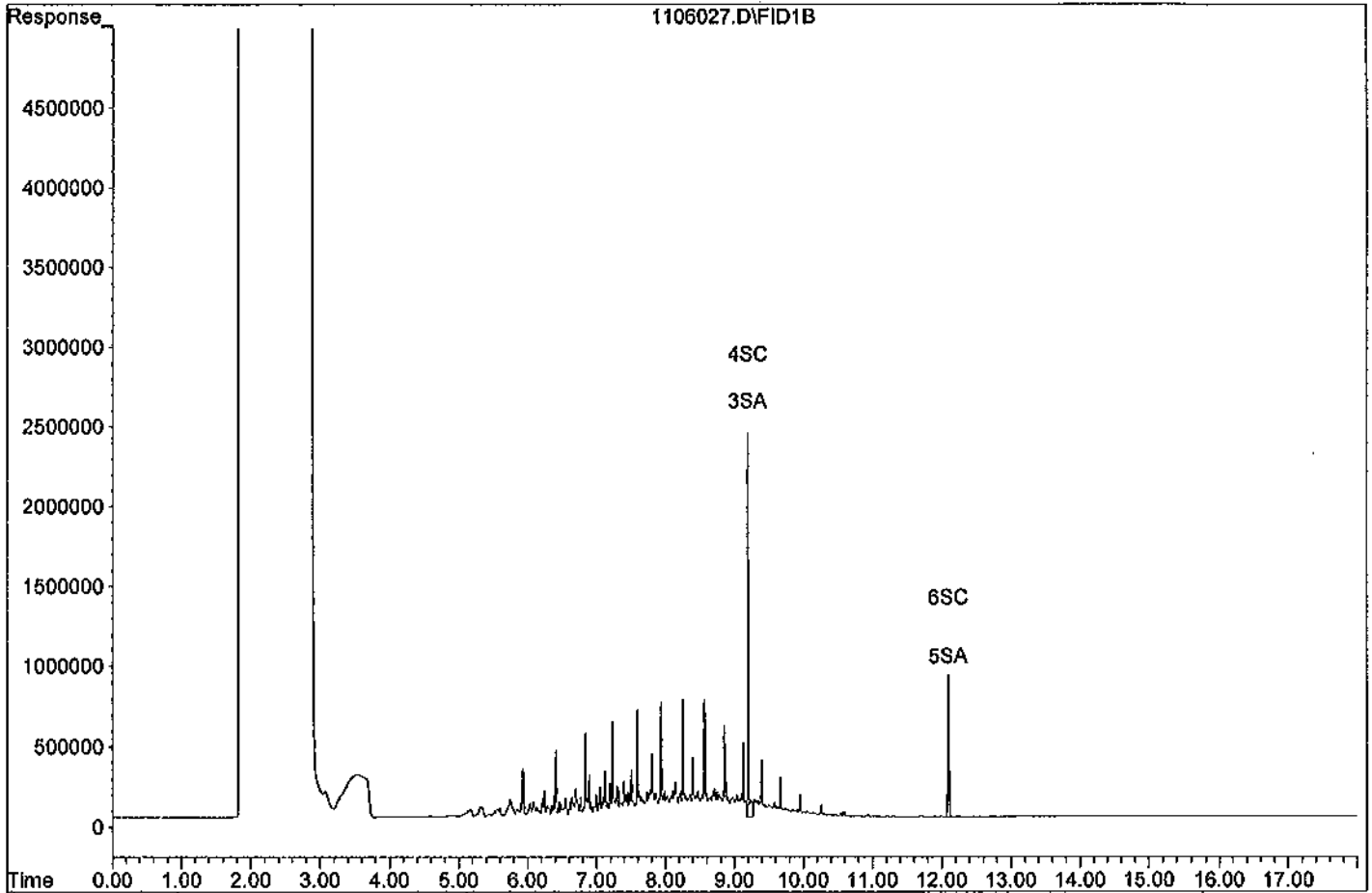
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<b>System Monitoring Compounds</b>			
3) SA Not Used(S)	9.21	20565649	19.129 ppb
Surrogate Spike 30.000		Recovery =	63.76%
4) SC Ortho-Terphenyl(S)	9.21	20565649	23.585 ppb
Surrogate Spike 30.000		Recovery =	78.62%
5) SA Not Used2(S)	12.10	11836262	23.890 ppb
Surrogate Spike 30.000		Recovery =	79.63%
6) SC Octacosane(S)	12.10	11836262	25.435 ppb
Surrogate Spike 30.000		Recovery =	84.78%
<b>Target Compounds</b>			
1) HATM Diesel (C10-C28)	8.86	271397500	322.367 ppb
2) HBTM Motor Oil (C18-C36)	12.25	79648905	219.694 ppb

Data File: G:\APOLLO\DATA\111106\1106027.D

Sample : DIESEL, 400/1000 11/2/11



TPH Extractables  
TPH8S15

Form 6  
Initial Calibration

Lab Name: APPL, Inc. \_\_\_\_\_

SDG No: 66102 \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 11/08/11 \_\_\_\_\_

Matrix: \_\_\_\_\_

Instrument: Apollo \_\_\_\_\_

Initials: LAC \_\_\_\_\_

1115021.D    1115022.D    1115023.D    1115024.D    1115025.D    1115026.D

	Compound	1	2	3	4	5	6					Avg	%RSD		
1	HATML Diesel (C10-C28)	613132	243101	243681	243678	244044	245201					305473	49	HATML	1.000
2	HBTM Motor Oil (C18-C36)	140437	99632	104190	111186	115800	125373					116103	13	HBTM	
3	SA Not Used(S)	302444	320737	318016	323983	383528	387566					339379	11	SA	
4	SC Ortho-Terphenyl(S)	356915	320797	300581	304073	324333	307361					319010	6.5	SC	
5	SA Not Used2(S)		81698	75651	78041	78921	79877					78538	2.8	SA	
6	SC Octacosane(S)		121445	115156	113245	126484	120297					119325	4.4	SC	
7															
8															
9															
10															
11															
12															
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33															
34															
35															

2.4787102



Data File : G:\APOLLO\DATA\111108\1108005.D Vial: 5  
 Acq On : 11-8-11 15:50:59 Operator: LAC  
 Sample : DIESEL 100/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

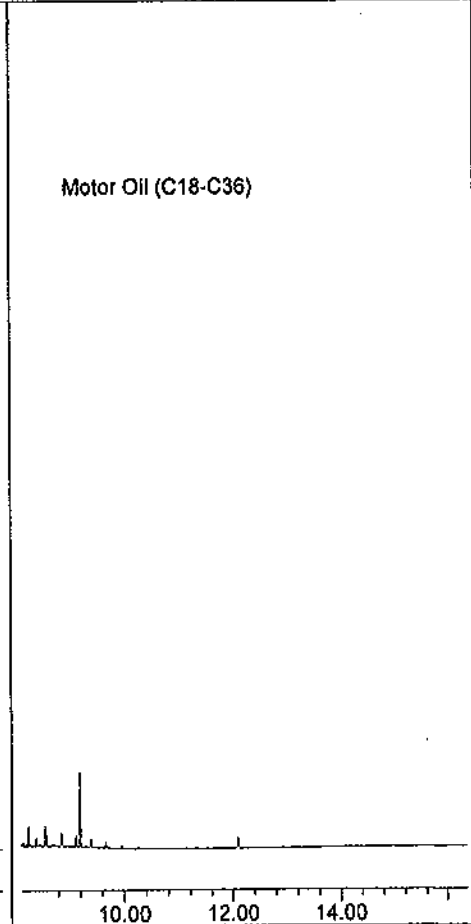
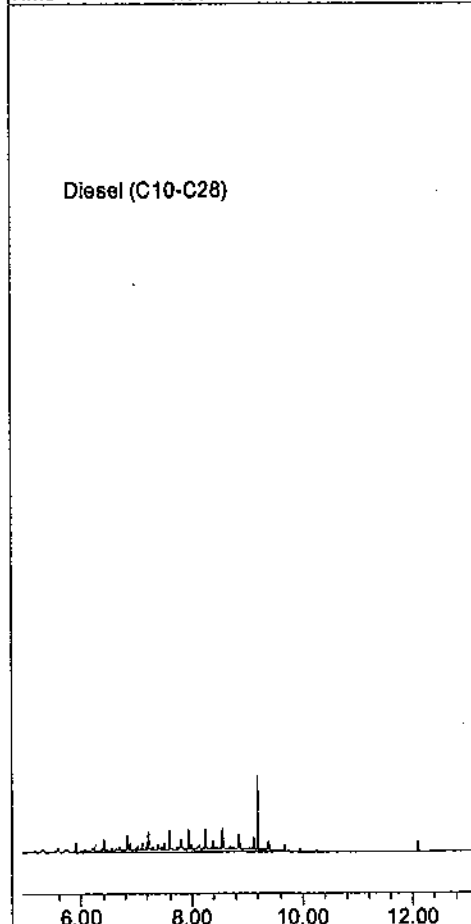
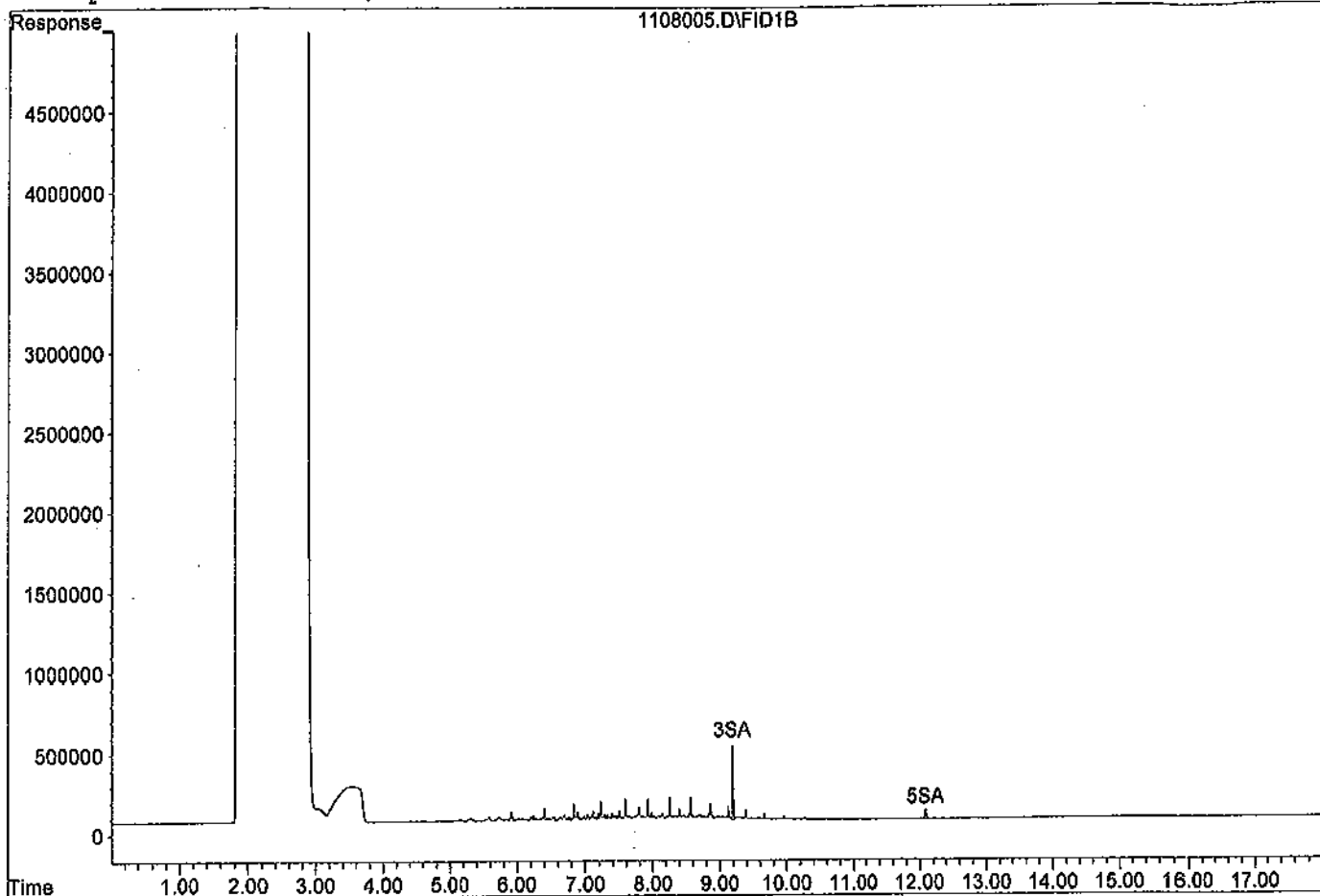
Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	3207373	3.154 ppb
Surrogate Spike 30.000		Recovery =	10.51%
5) SA Not Used2(S)	12.09	816983	2.773 ppb
Surrogate Spike 30.000		Recovery =	9.24%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	48620150	767.290 ppb

Data File: G:\APOLLO\DATA\111108\1108005.D

Sample : DIESEL 100/1000



Data File : G:\APOLLO\DATA\111108\1108006.D Vial: 6  
 Acq On : 11-8-11 16:14:36 Operator: LAC  
 Sample : DIESEL 400/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 30 11:52 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111108\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Wed Nov 30 11:52:46 2011  
 Response via : Multiple Level Calibration

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

Compound R.T. Response Conc Units

-----  
 System Monitoring Compounds

3) SA Not Used(S)	9.20	12720627	18.741 ppb
Surrogate Spike 30.000		Recovery =	62.47%
4) SC Ortho-Terphenyl(S)	9.20	12720627	19.938 ppb
Surrogate Spike 30.000		Recovery =	66.46%
5) SA Not Used2(S)	12.09	3026041	19.192 ppb
Surrogate Spike 30.000		Recovery =	63.97%
6) SC Octacosane(S)	12.09	3026041	12.960 ppb
Surrogate Spike 30.000		Recovery =	43.20%

Target Compounds

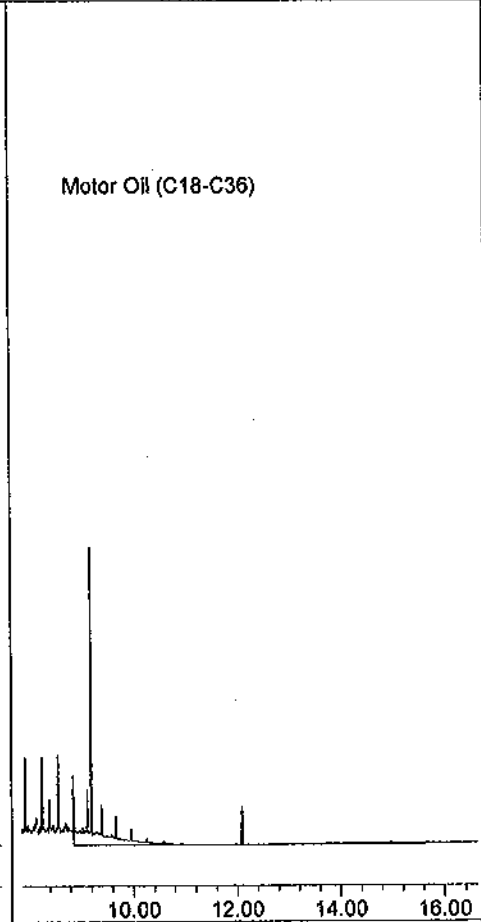
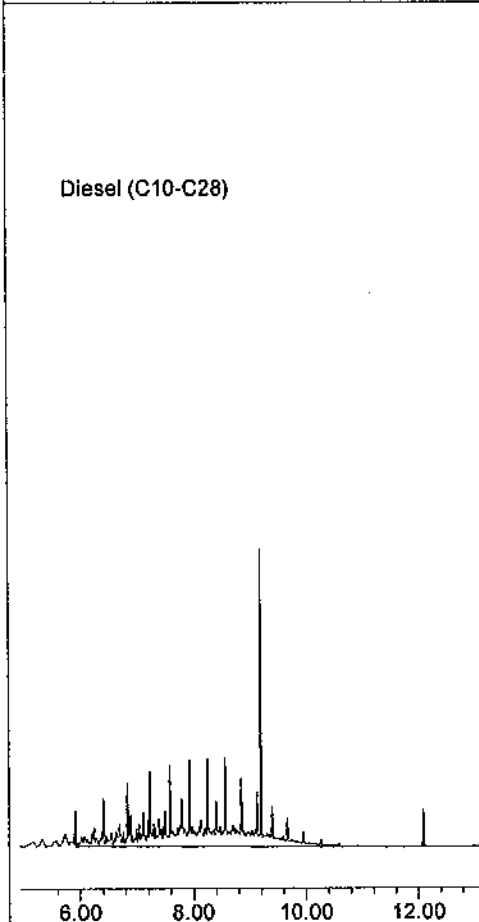
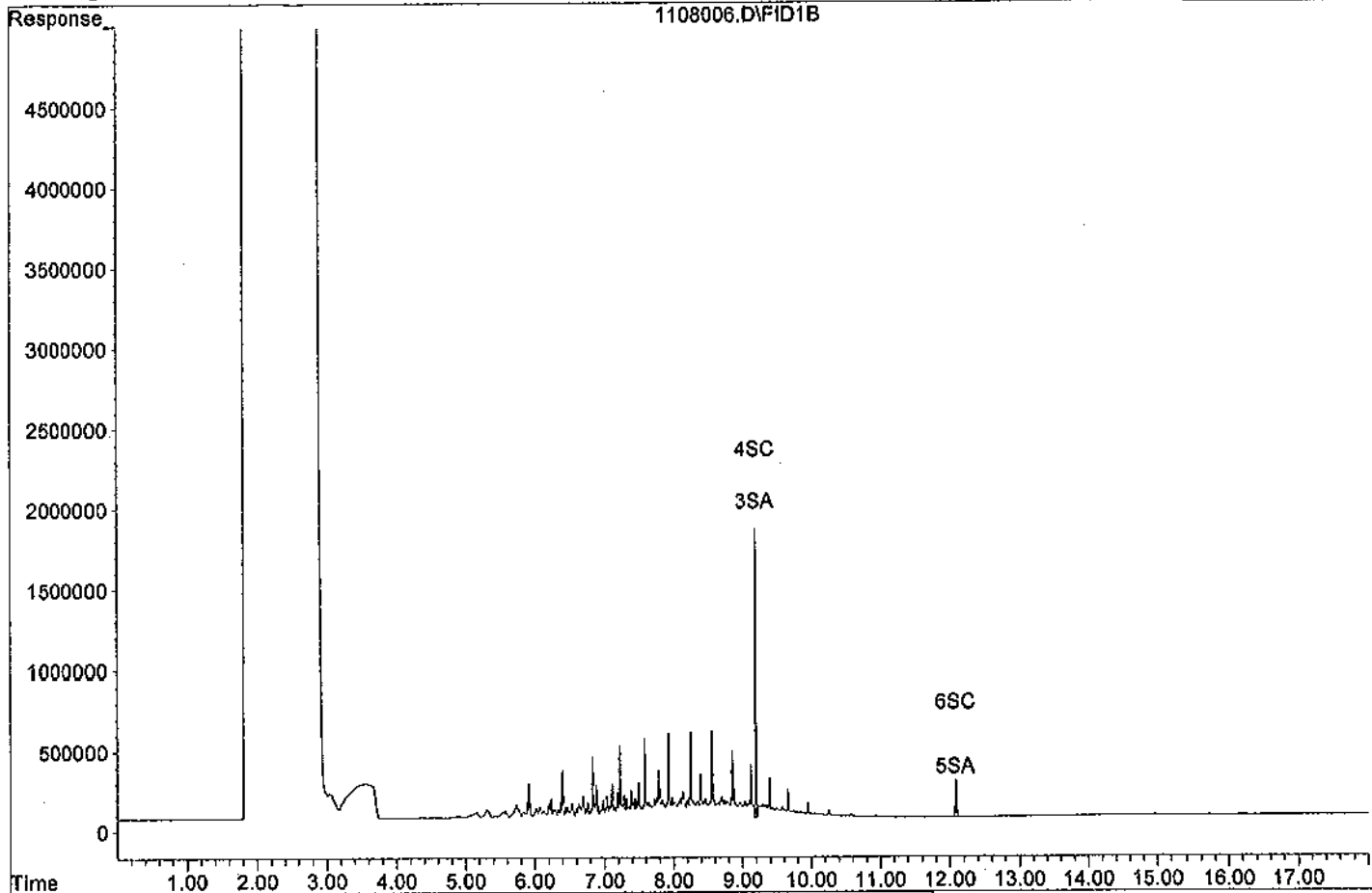
1) HATM Diesel (C10-C28)	9.01	194945056	395.862 ppb
2) HBTM Motor Oil (C18-C36)	12.24	62241854	268.046 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111108\1108006.D

Sample : DIESEL 400/1000

1108006.D\FID1B



Data File : G:\APOLLO\DATA\111108\1108007.D Vial: 7  
 Acq On : 11-8-11 16:38:14 Operator: LAC  
 Sample : DIESEL 600/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 30 11:53 2011 Quant Results File: TPH8S15.RES

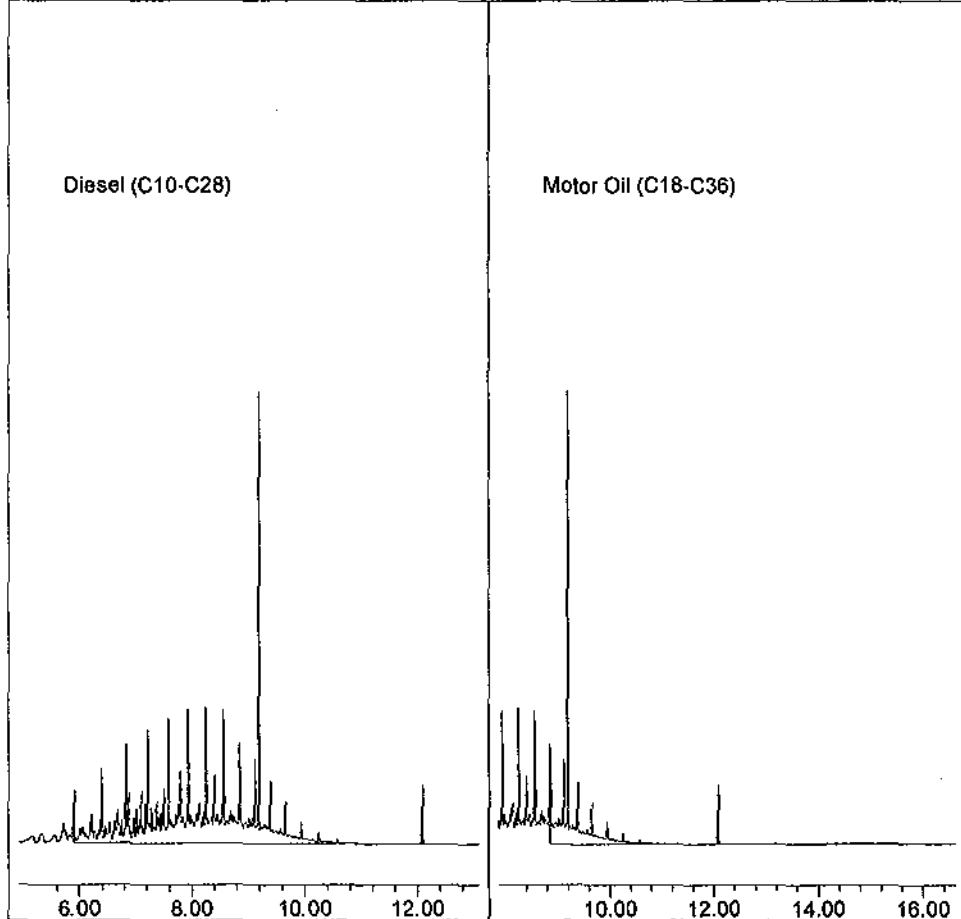
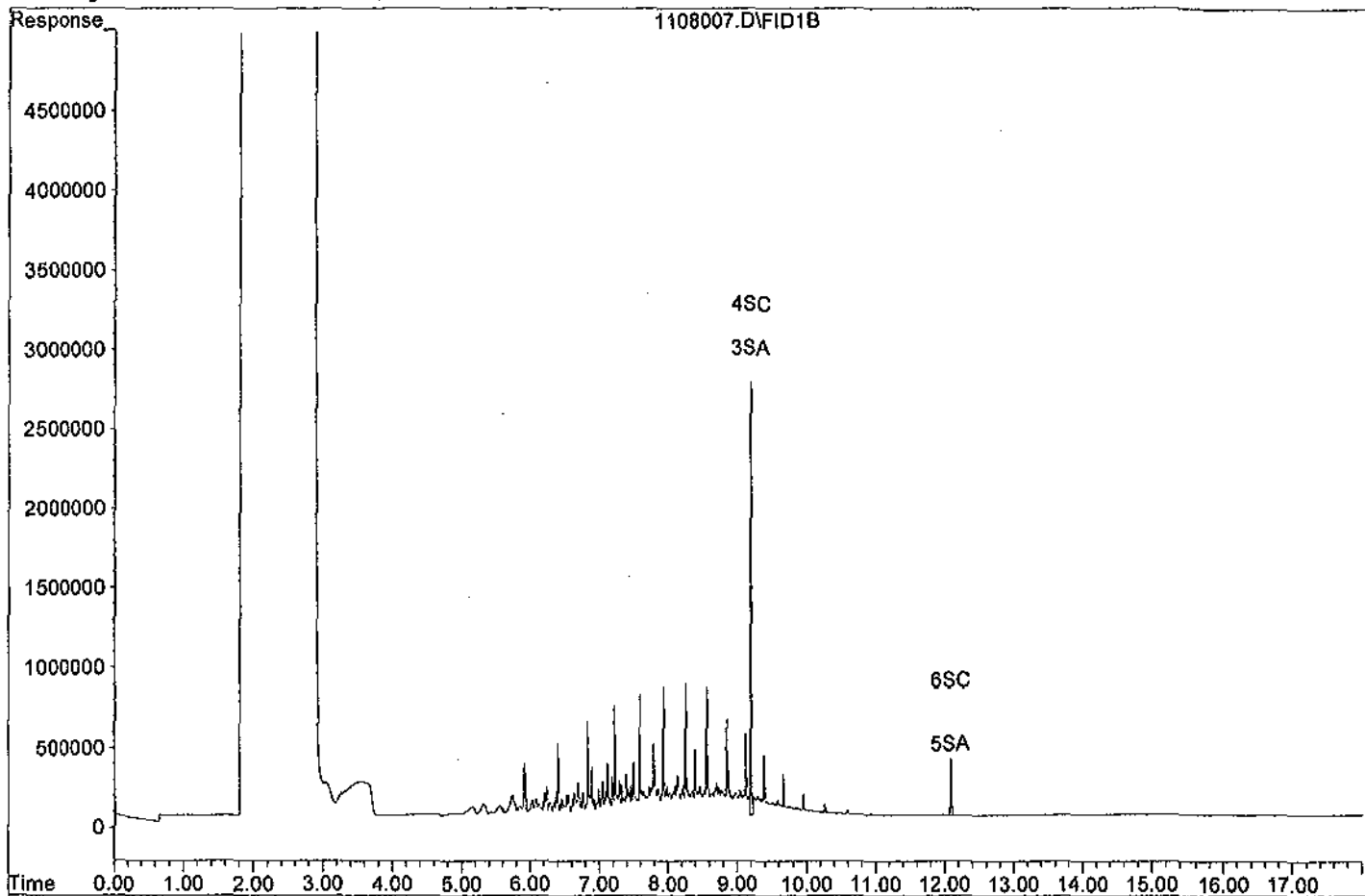
Method : G:\APOLLO\DATA\111108\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Wed Nov 30 11:52:46 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	19438997	28.639 ppb
Surrogate Spike 30.000		Recovery =	95.46%
4) SC Ortho-Terphenyl(S)	9.20	19438997	30.468 ppb
Surrogate Spike 30.000		Recovery =	101.56%
5) SA Not Used2(S)	12.09	4682445	29.697 ppb
Surrogate Spike 30.000		Recovery =	98.99%
6) SC Octacosane(S)	12.09	4682445	20.054 ppb
Surrogate Spike 30.000		Recovery =	66.85%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	292413883	596.788 ppb
2) HBTM Motor Oil (C18-C36)	12.24	77206924	332.493 ppb

Data File: G:\APOLLO\DATA\111108\1108007.D

Sample : DIESEL 600/1000



Data File : G:\APOLLO\DATA\111108\1108008.D Vial: 8  
 Acq On : 11-8-11 17:01:53 Operator: LAC  
 Sample : DIESEL 800/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 30 11:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111108\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Wed Nov 30 11:52:46 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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 System Monitoring Compounds

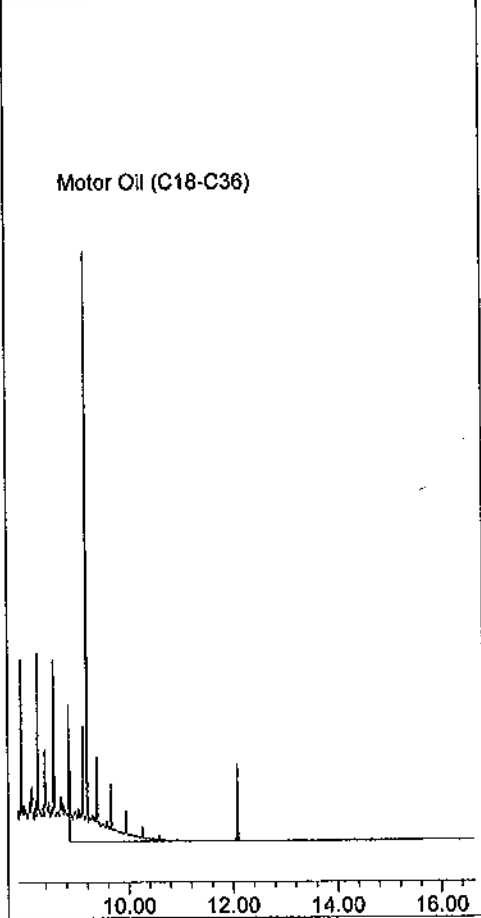
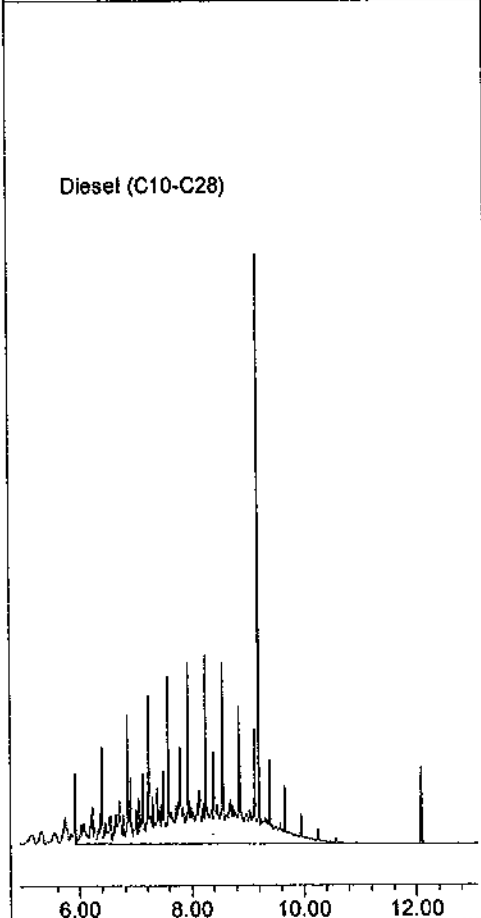
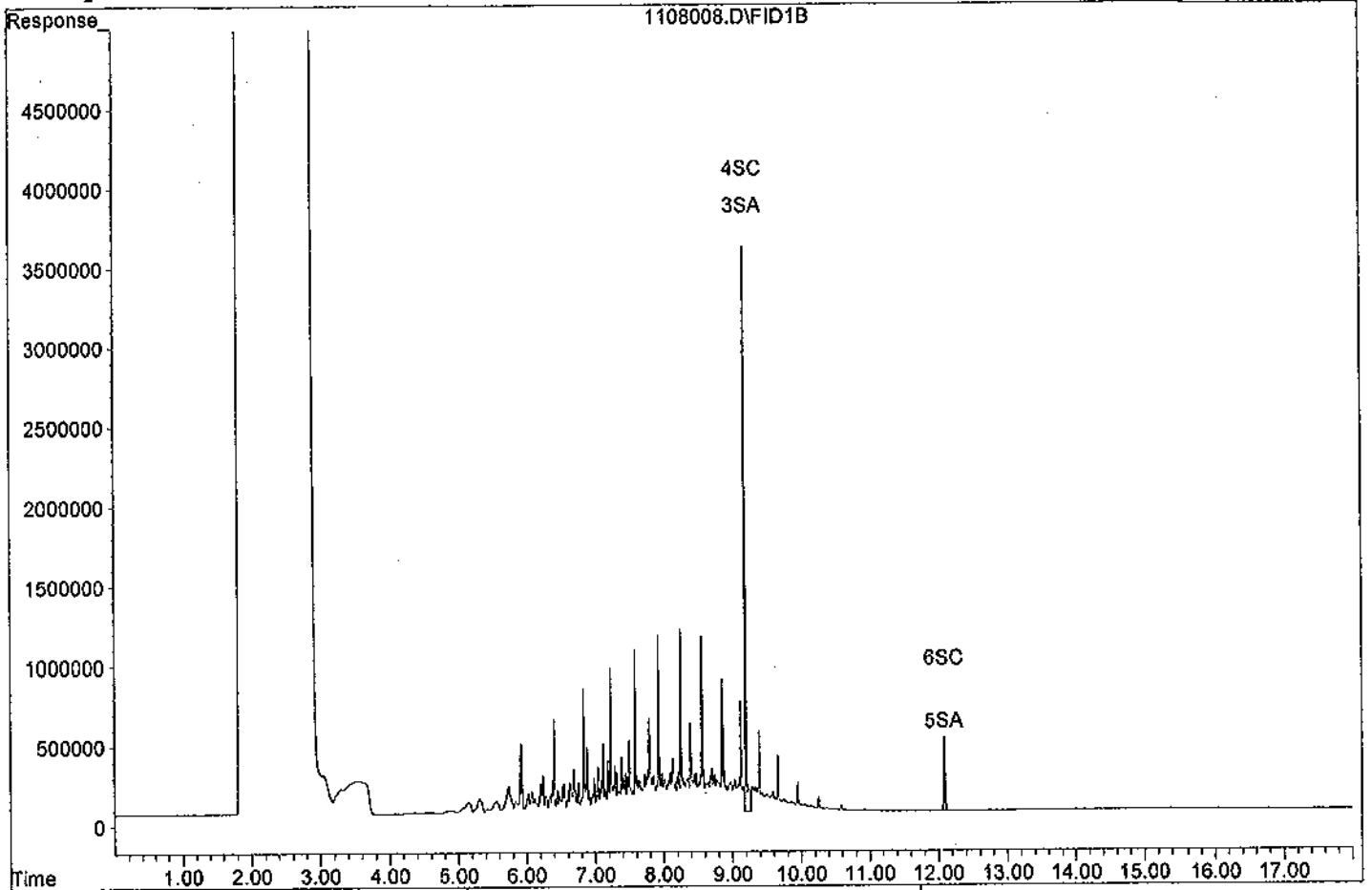
3) SA Not Used(S)	9.20	30682231	45.203 ppb
Surrogate Spike 30.000		Recovery =	150.68%
4) SC Ortho-Terphenyl(S)	9.20	30682231	48.090 ppb
Surrogate Spike 30.000		Recovery =	160.30%
5) SA Not Used2(S)	12.09	6313667	40.042 ppb
Surrogate Spike 30.000		Recovery =	133.47%
6) SC Octacosane(S)	12.09	6313667	27.041 ppb
Surrogate Spike 30.000		Recovery =	90.14%

Target Compounds

1) HATM Diesel (C10-C28)	9.01	390470225	798.924 ppb
2) HBTM Motor Oil (C18-C36)	12.24	99027136	426.462 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111108\1108008.D  
Sample : DIESEL 800/1000





Data File : G:\APOLLO\DATA\111108\1108009.D Vial: 9  
 Acq On : 11-8-11 17:25:32 Operator: LAC  
 Sample : DIESEL 1000/1000 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 30 11:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111108\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Wed Nov 30 11:52:46 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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 System Monitoring Compounds

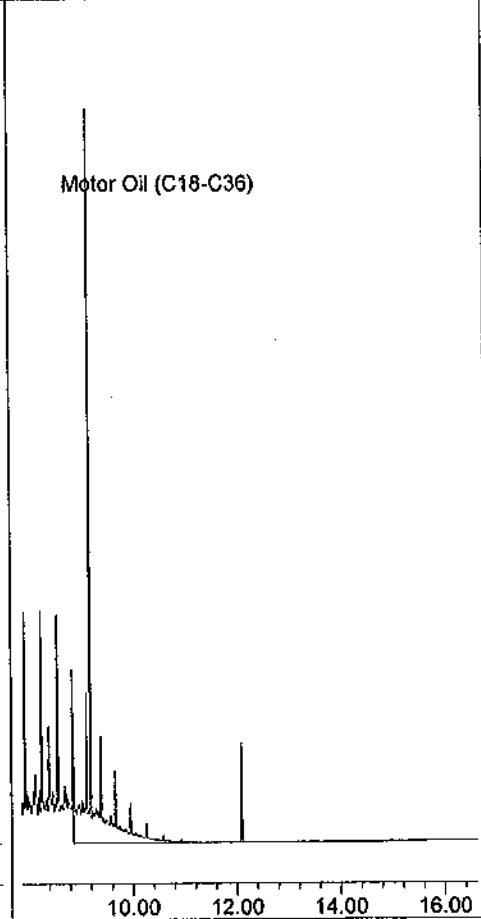
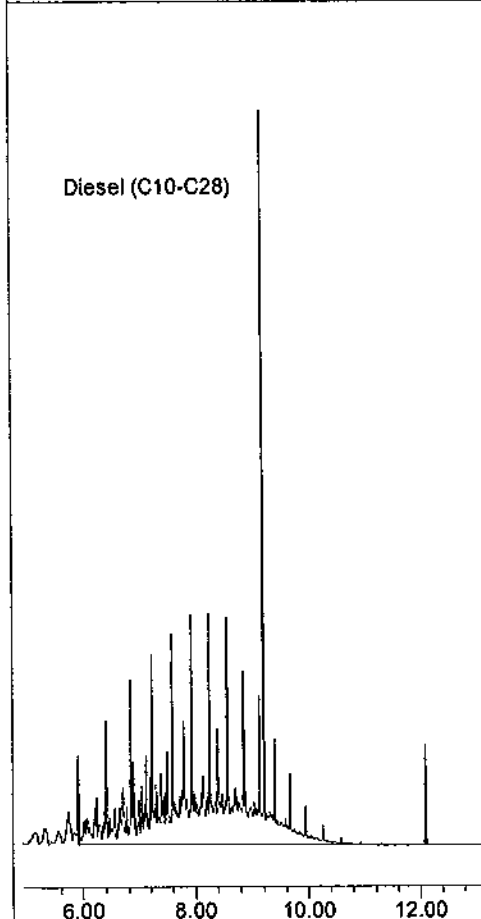
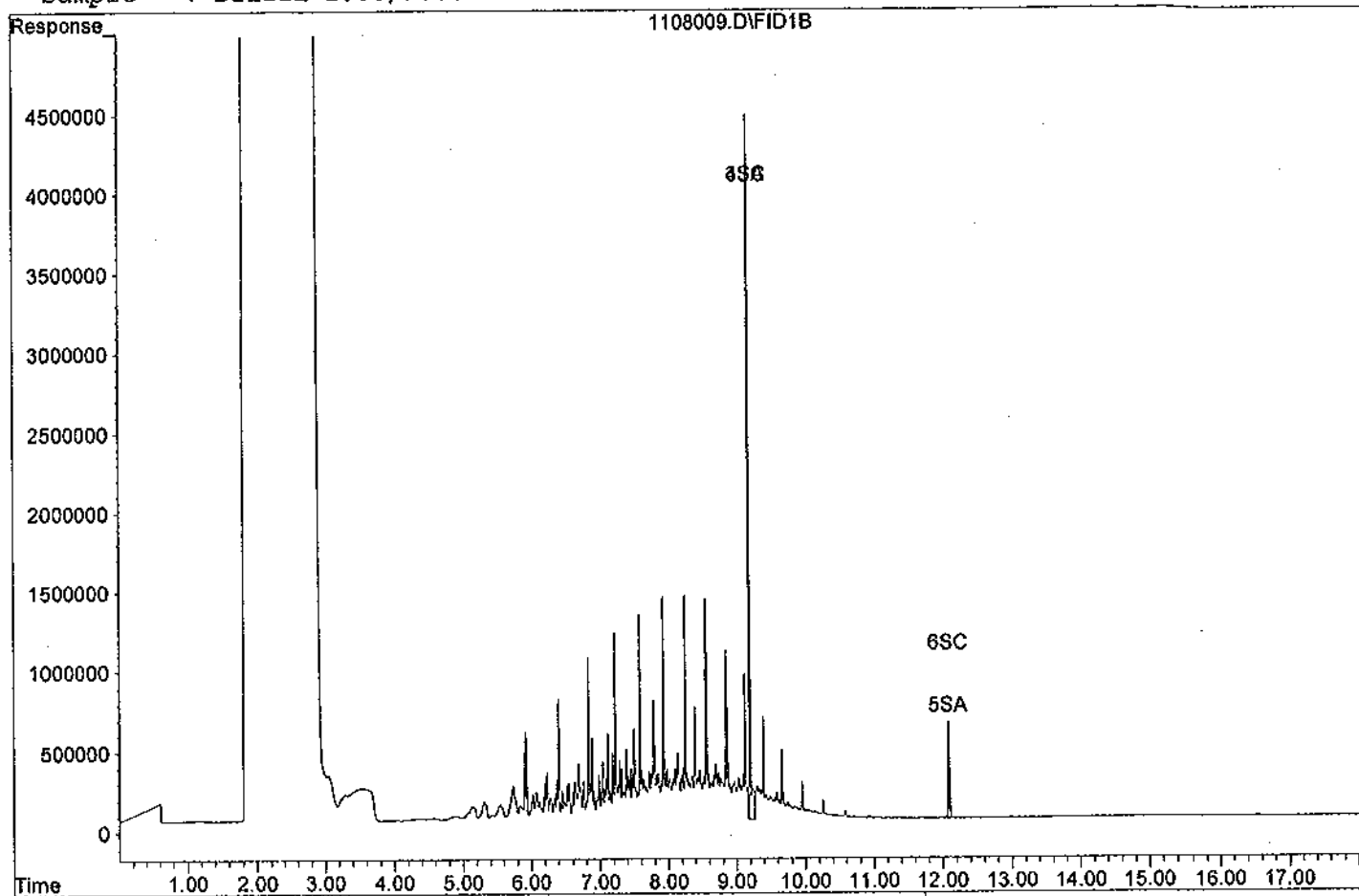
3) SA Not Used(S)	9.20	38756601	57.099 ppb
Surrogate Spike 30.000		Recovery =	190.33%
4) SC Ortho-Terphenyl(S)	9.20	38756601	60.745 ppb
Surrogate Spike 30.000		Recovery =	202.48%
5) SA Not Used2(S)	12.09	7987688	50.659 ppb
Surrogate Spike 30.000		Recovery =	168.86%
6) SC Octacosane(S)	12.09	7987688	34.210 ppb
Surrogate Spike 30.000		Recovery =	114.03%

Target Compounds

1) HATM Diesel (C10-C28)	9.01	490402243	1004.928 ppb
2) HBTM Motor Oil (C18-C36)	12.24	123592393	532.253 ppb

Data File: G:\APOLLO\DATA\111108\1108009.D

Sample : DIESEL 1000/1000



Data File : G:\APOLLO\DATA\111108\1108011.D Vial: 11  
 Acq On : 11-8-11 18:12:45 Operator: LAC  
 Sample : MOTOR OIL 50/1000 11/8/11 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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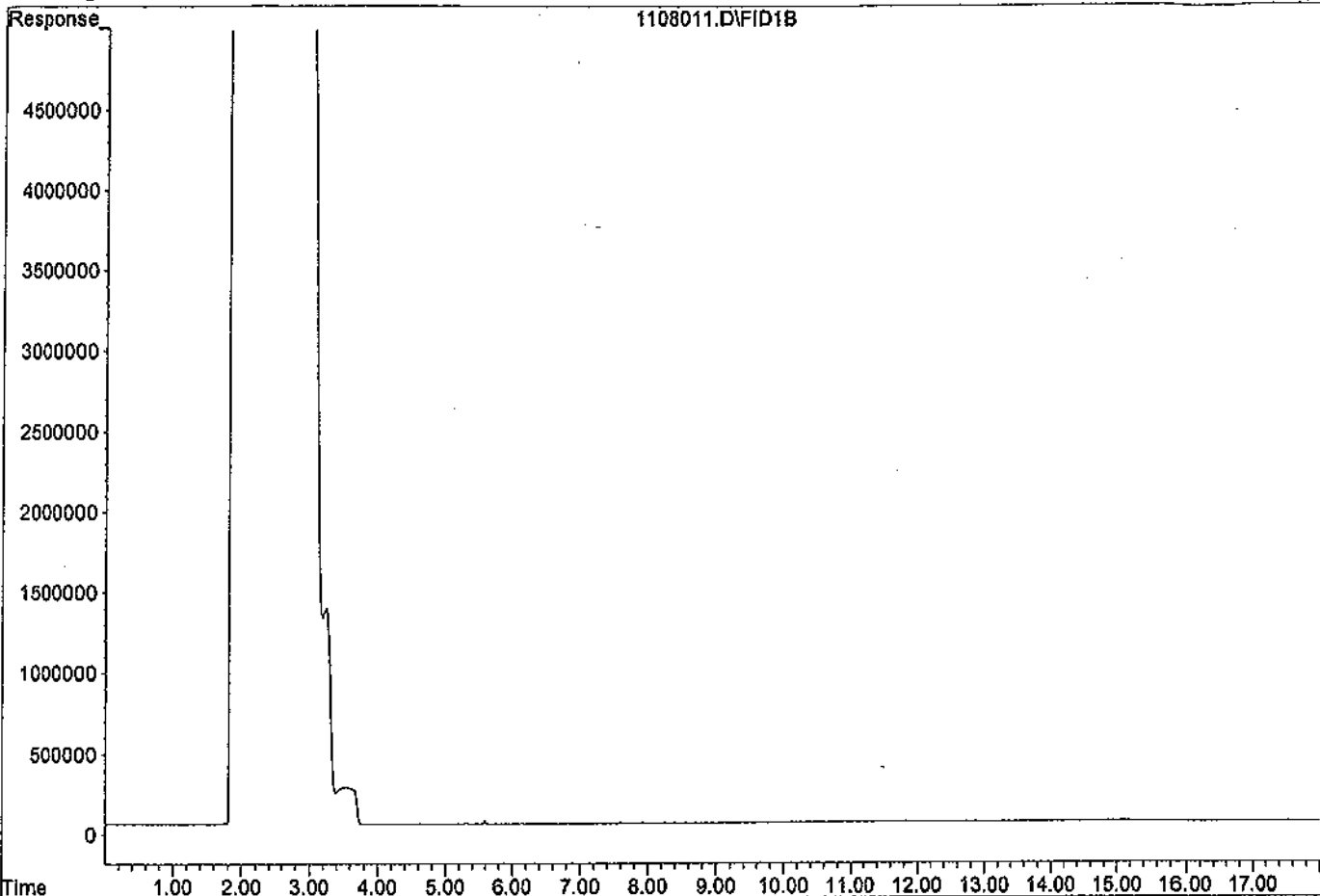
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.24	14043686	169.078 ppb
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Data File: G:\APOLLO\DATA\111108\1108011.D

Sample : MOTOR OIL 50/1000 11/8/11



Diesel (C10-C28)

Motor Oil (C18-C36)

6.00 7.00 8.00 9.00 10.00 11.00 12.00

10.00 12.00 14.00 16.00

Data File : G:\APOLLO\DATA\111108\1108012.D Vial: 12  
 Acq On : 11-8-11 18:36:14 Operator: LAC  
 Sample : MOTOR OIL 100/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

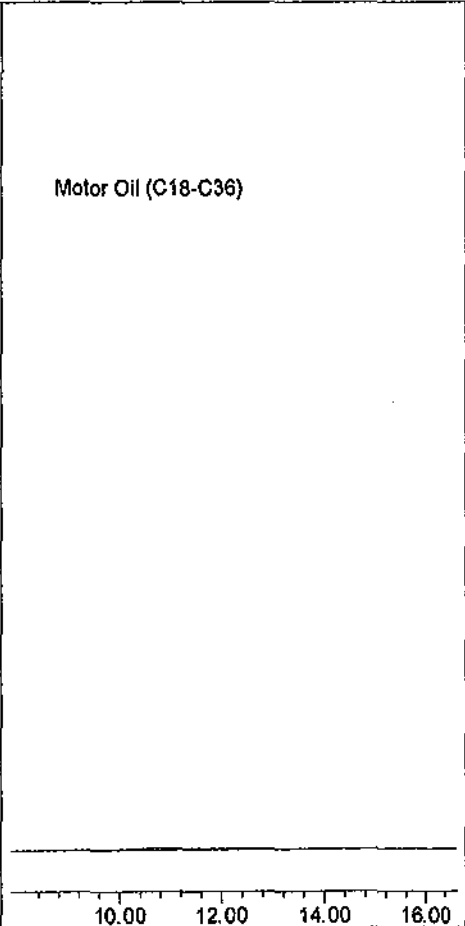
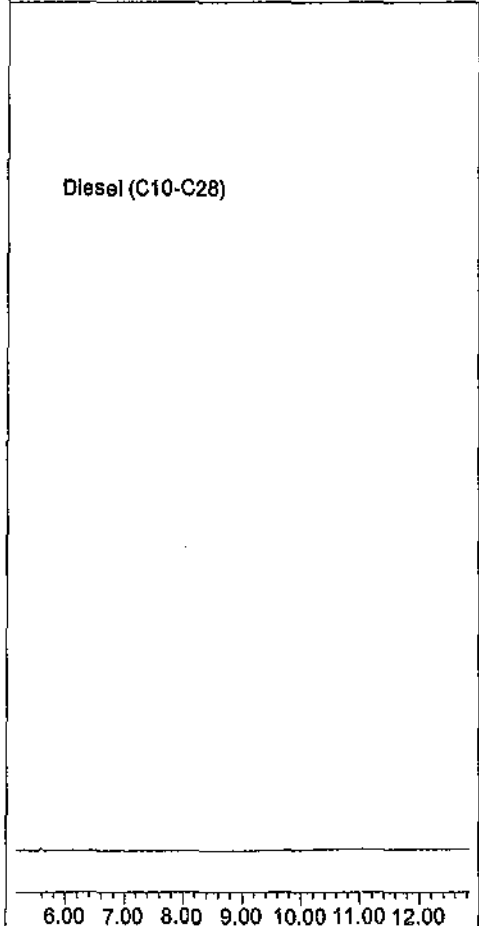
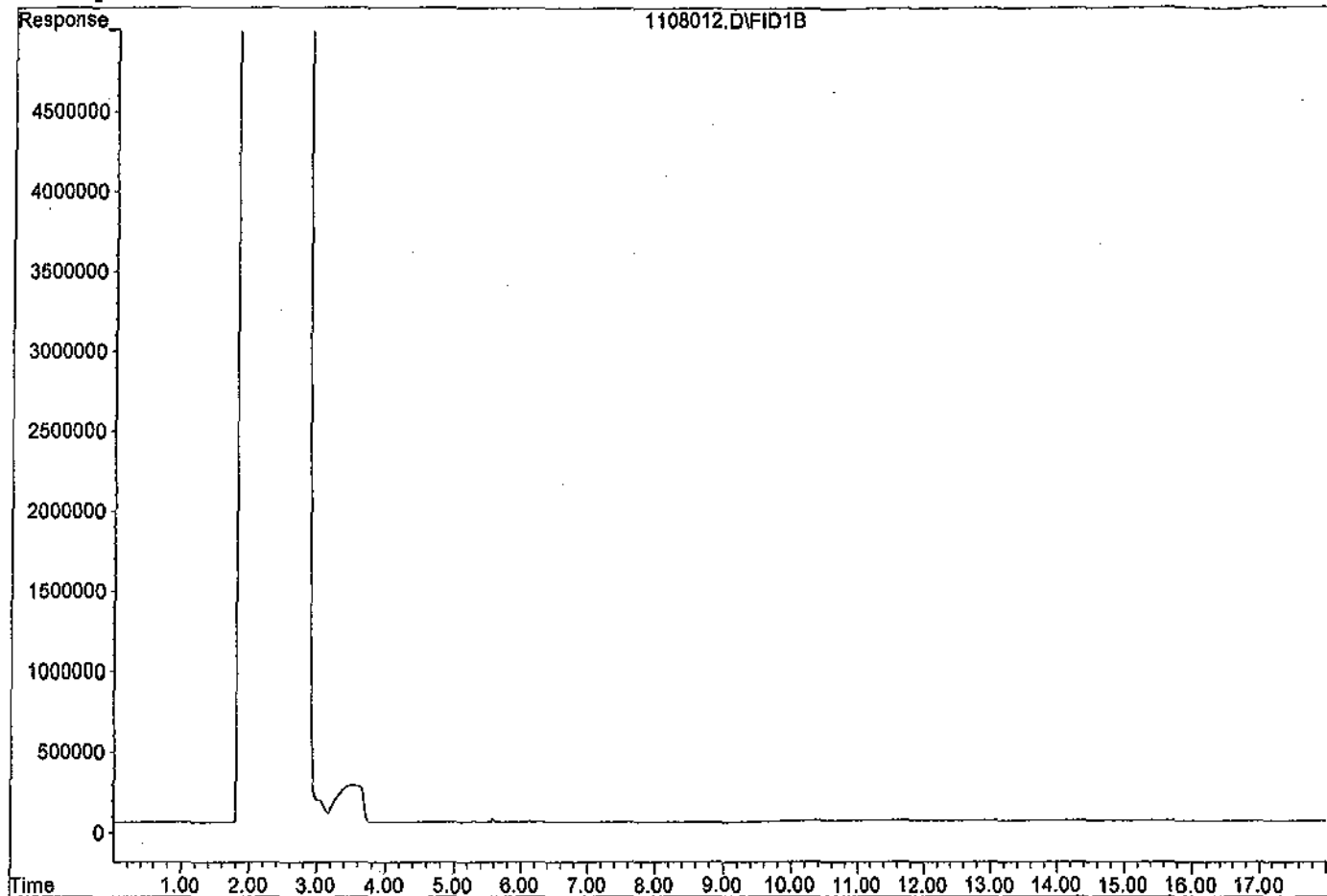
2) HBTM Motor Oil (C18-C36)	12.24	19926419	239.903 ppb
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Quantitation Report

Data File: G:\APOLLO\DATA\111108\1108012.D

Sample : MOTOR OIL 100/1000

1108012.D\FID1B



Data File : G:\APOLLO\DATA\111108\1108013.D Vial: 13  
 Acq On : 11-8-11 18:59:47 Operator: LAC  
 Sample : MOTOR OIL 400/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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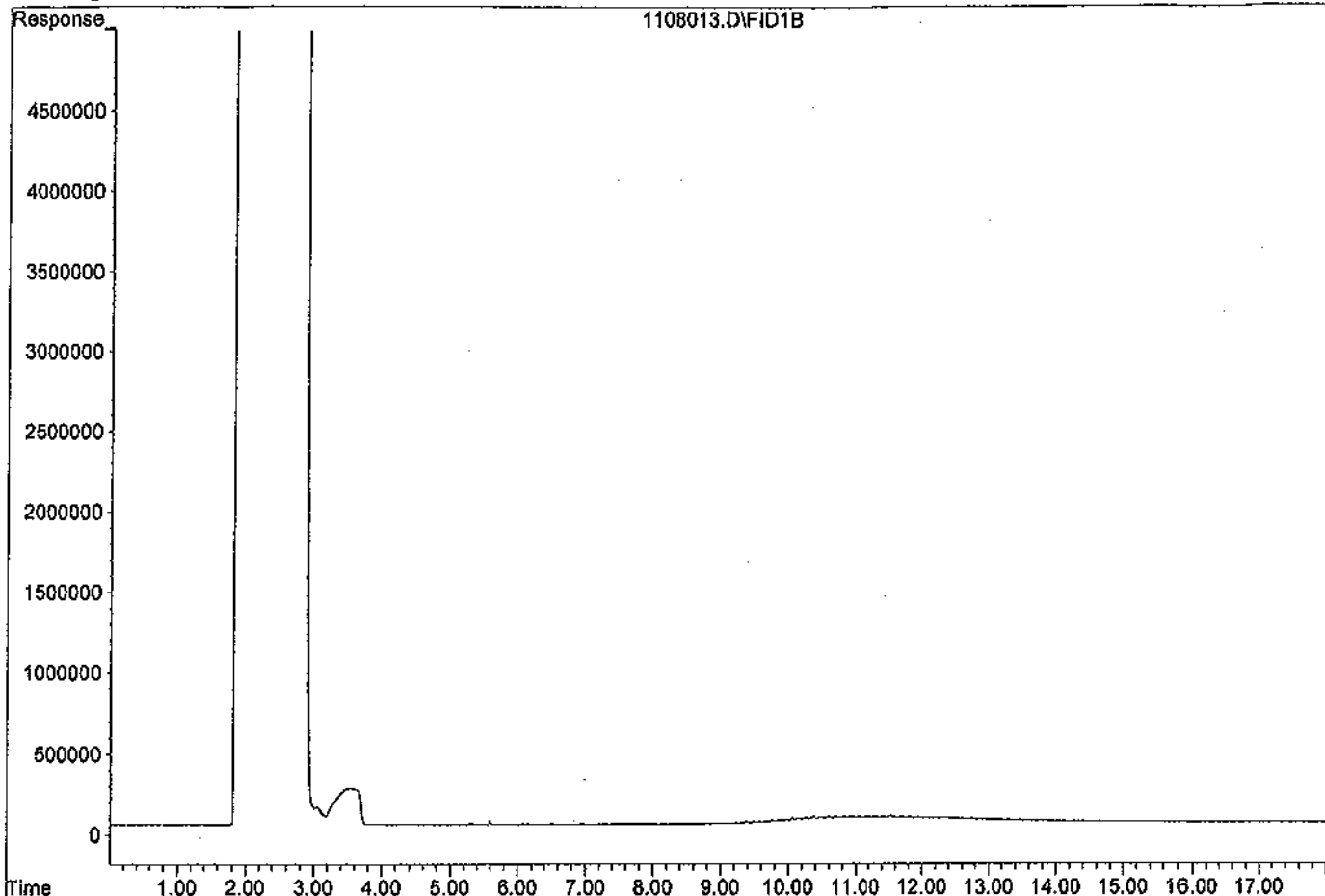
System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.24	83351892	1003.512 ppb
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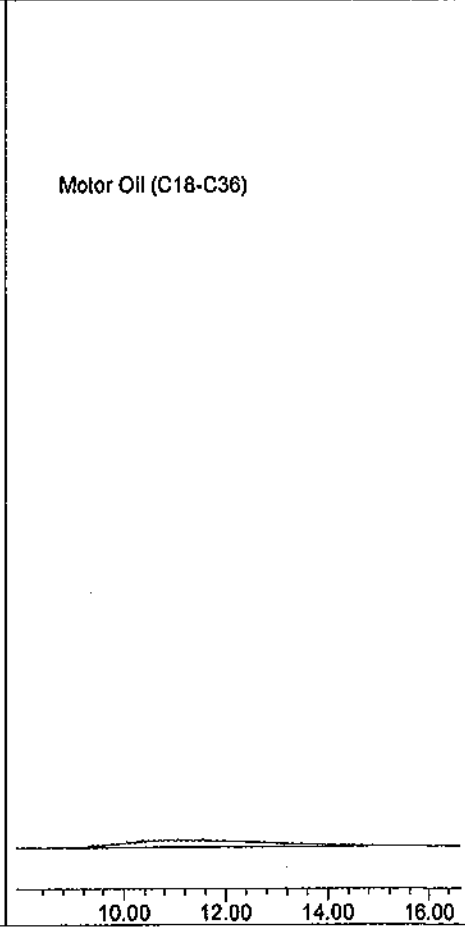
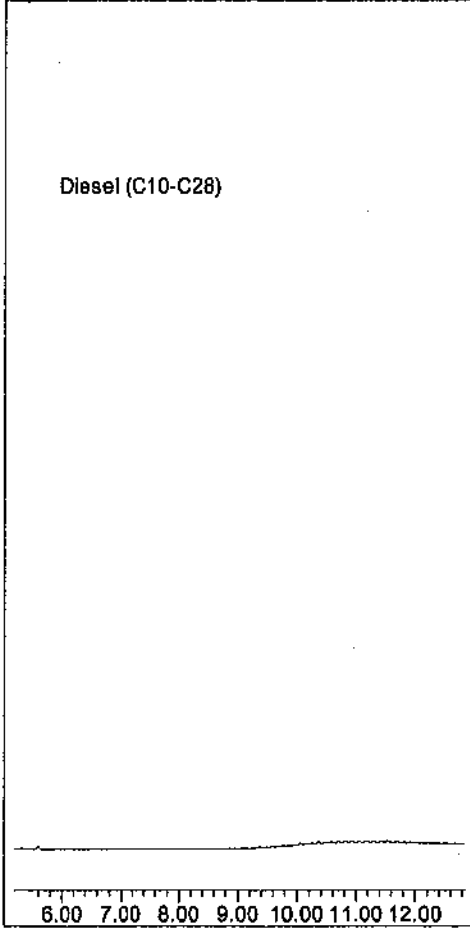
Data File: G:\APOLLO\DATA\111108\1108013.D

Sample : MOTOR OIL 400/1000



Diesel (C10-C28)

Motor Oil (C18-C36)





Data File : G:\APOLLO\DATA\111108\1108014.D Vial: 14  
Acq On : 11-8-11 19:23:20 Operator: LAC  
Sample : MOTOR OIL 600/1000 Inst : Apollo  
Misc : Mix(B) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Nov 16 9:54 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 17 09:41:49 2011  
Response via : Multiple Level Calibration

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

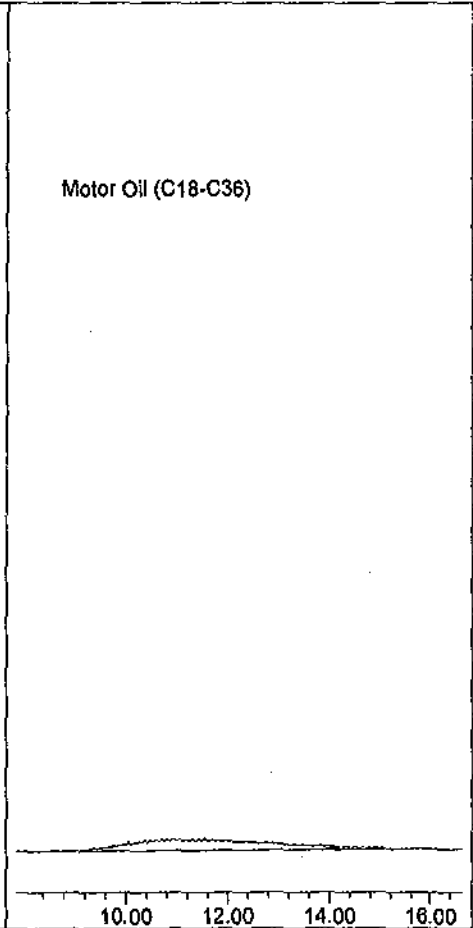
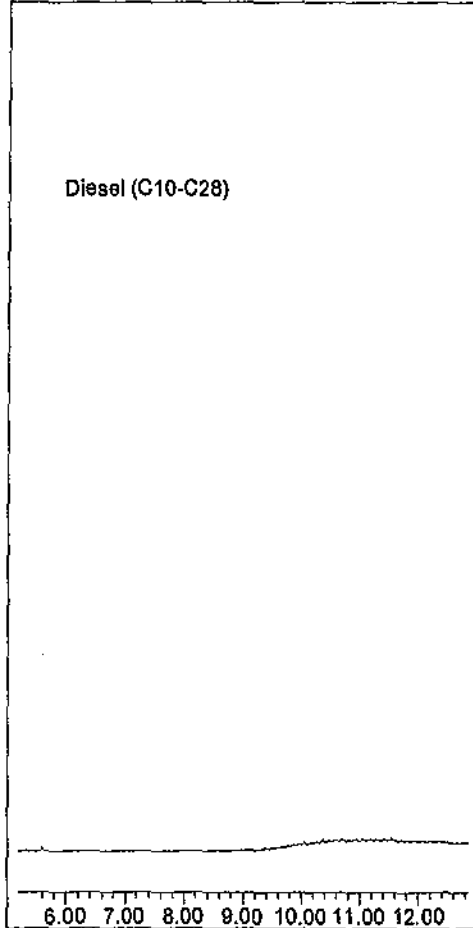
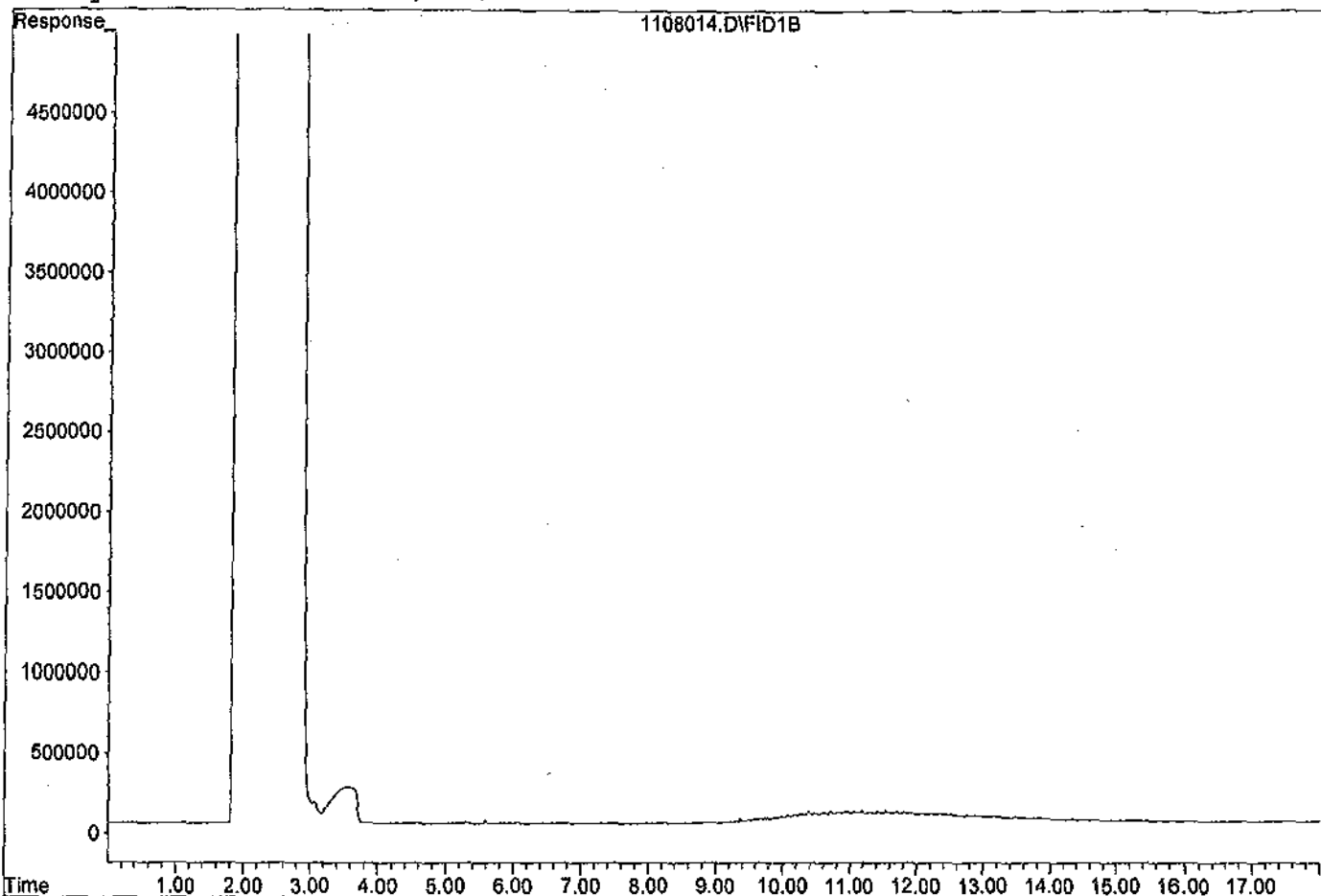
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.24	133423372	1606.346 ppb
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Data File: G:\APOLLO\DATA\111108\1108014.D  
Sample : MOTOR OIL 600/1000



Data File : G:\APOLLO\DATA\111108\1108015.D Vial: 15  
 Acq On : 11-8-11 19:46:53 Operator: LAC  
 Sample : MOTOR OIL 800/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:54 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

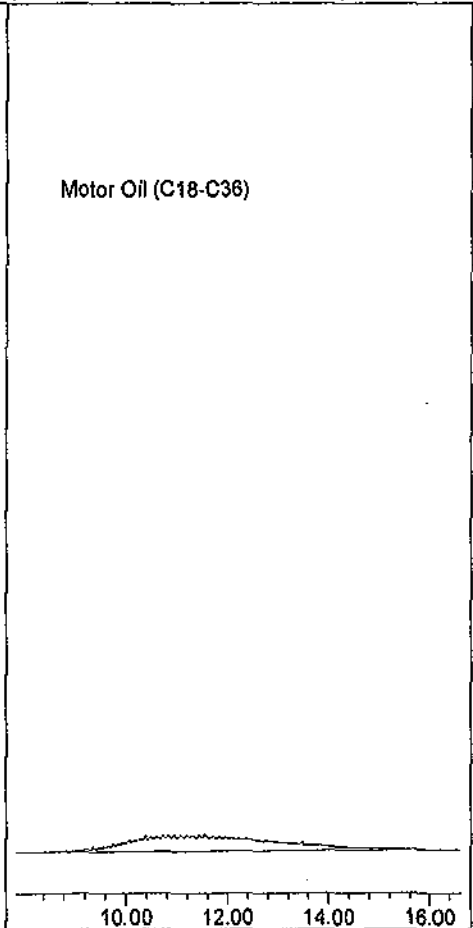
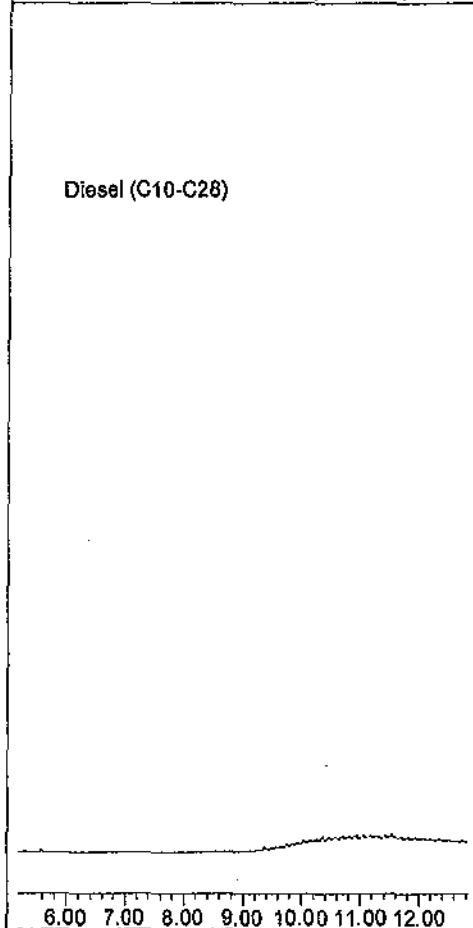
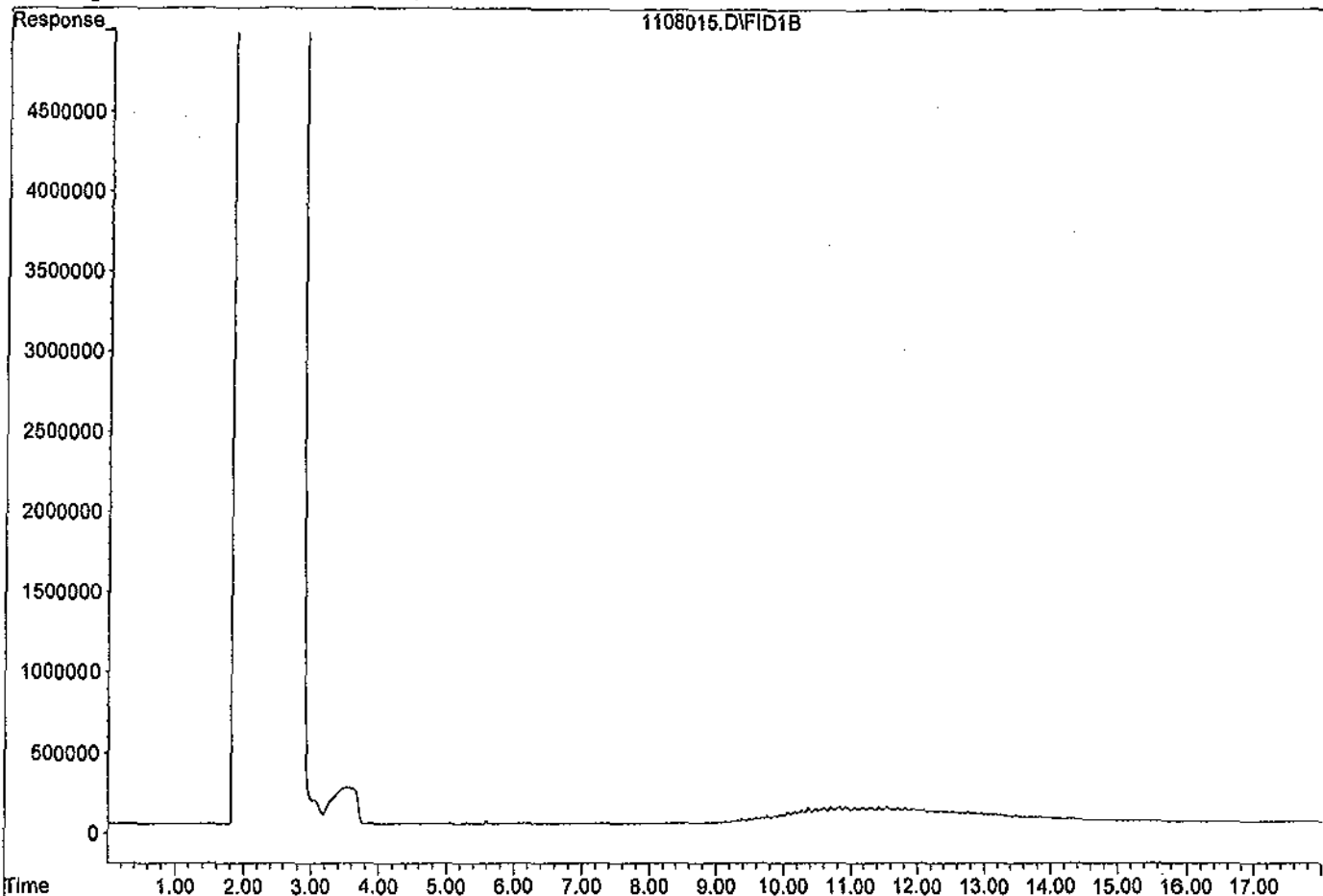
Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

Target Compounds

2) HBTM Motor Oil (C18-C36)	12.24	185280557	2230.679 ppb
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Data File: G:\APOLLO\DATA\111108\1108015.D  
Sample : MOTOR OIL 800/1000



Data File : G:\APOLLO\DATA\111108\1108016.D Vial: 16  
 Acq On : 11-8-11 20:10:21 Operator: LAC  
 Sample : MOTOR OIL 1000/1000 Inst : Apollo  
 Misc : Mix(B) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:54 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds

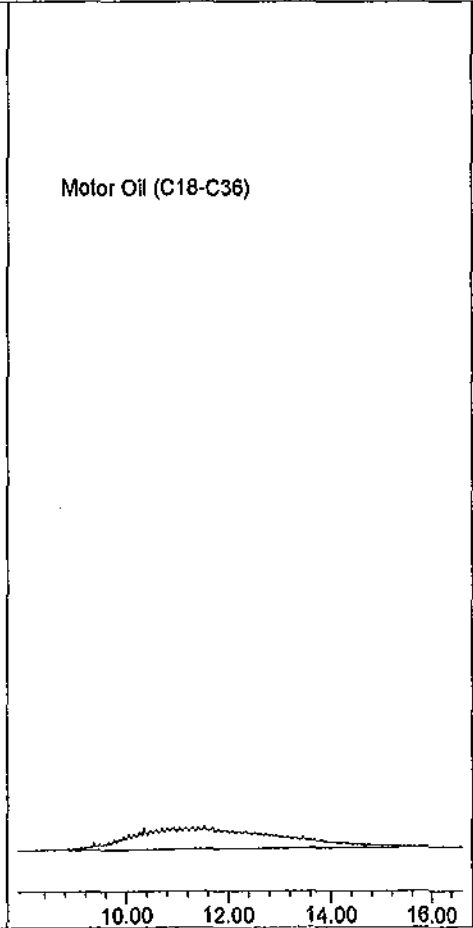
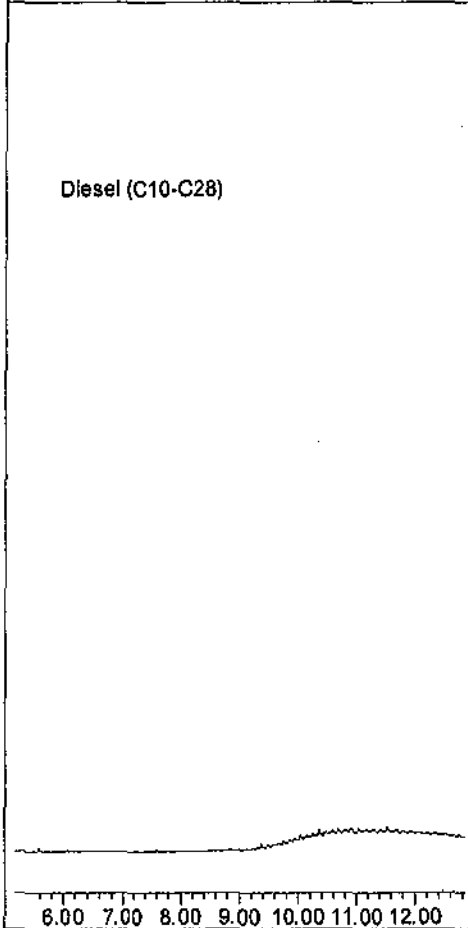
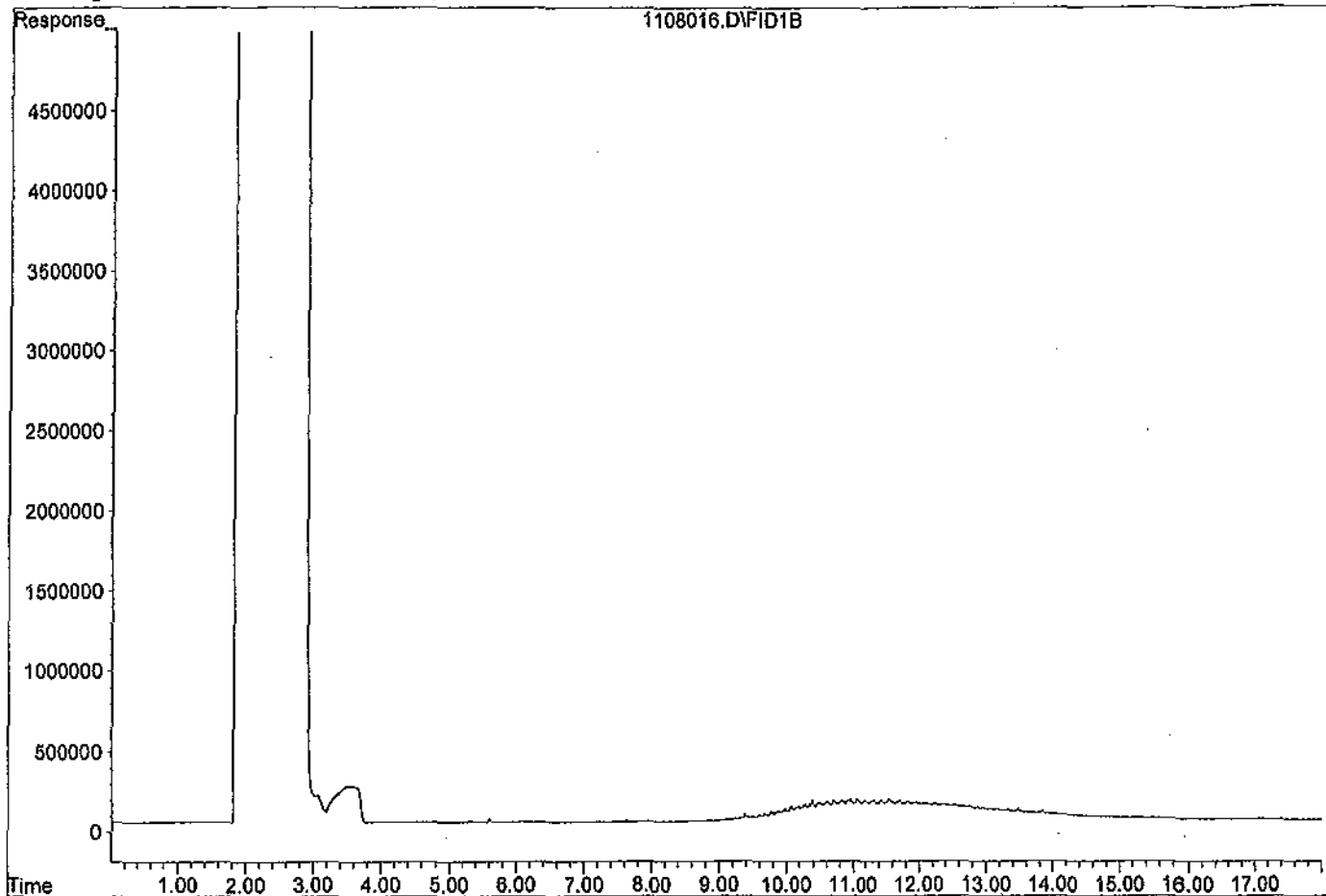
Target Compounds

2) HBTM Motor Oil (C18-C36)	12.24	250746792	3018.857 ppb
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Data File: G:\APOLLO\DATA\111108\1108016.D

Sample : MOTOR OIL 1000/1000

1108016.D\FID1B



Data File : G:\APOLLO\DATA\111108\1108069.D Vial: 69  
 Acq On : 11-9-11 17:18:58 Operator: LAC  
 Sample : DIESEL 10/1000 11/8/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

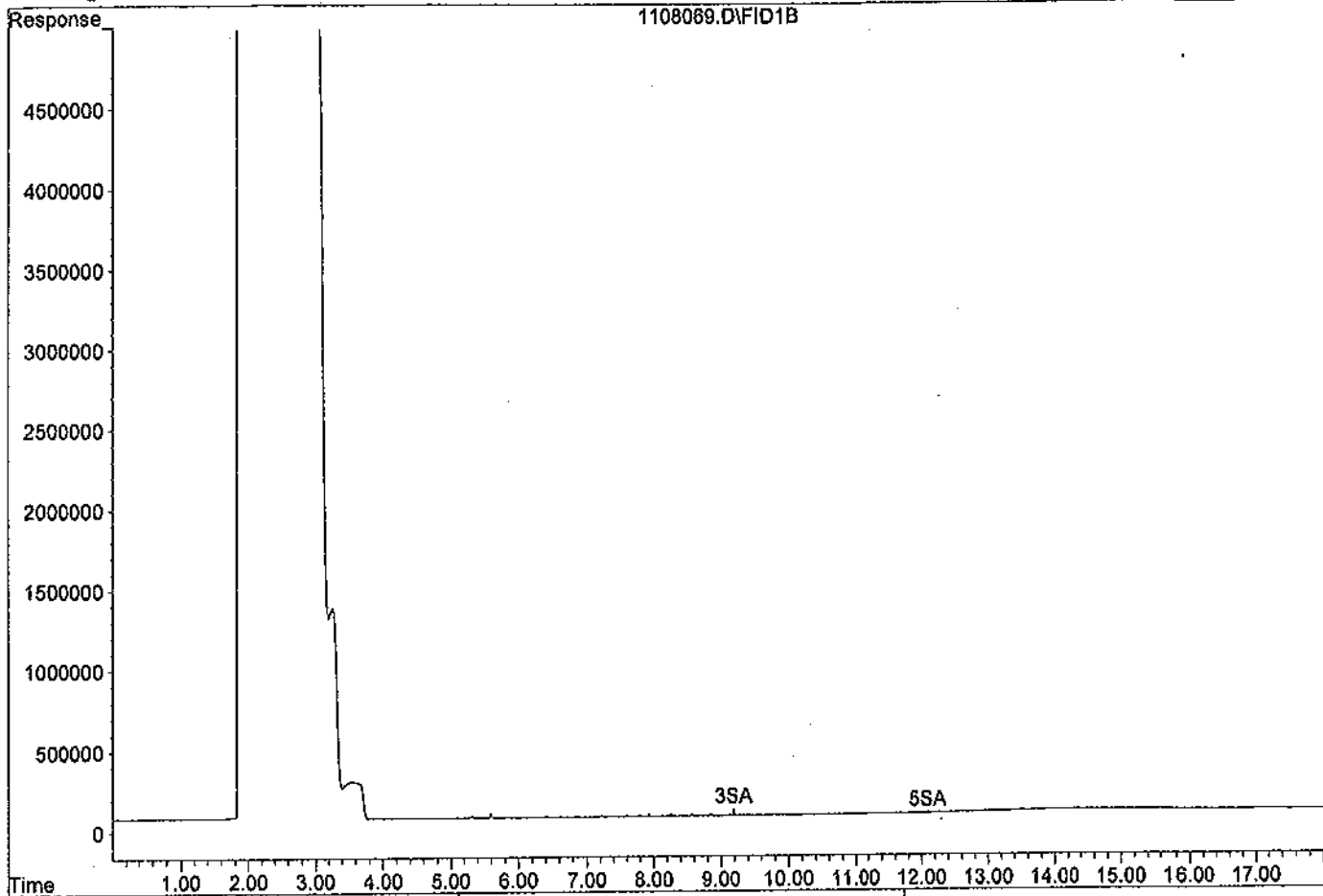
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	302444	0.297 ppb
Surrogate Spike 30.000	Recovery	=	0.99%
5) SA Not Used2(S)	12.10	625179	2.122 ppb
Surrogate Spike 30.000	Recovery	=	7.07%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	12262633	1055.198 ppb

Data File: G:\APOLLO\DATA\111108\1108069.D

Sample : DIESEL 10/1000 11/8/11

1108069.D\FID1B



Diesel (C10-C28)

Motor Oil (C18-C36)

6.00 8.00 10.00 12.00

10.00 12.00 14.00



Data File : G:\APOLLO\DATA\111115\1115021.D Vial: 21  
 Acq On : 11-15-11 18:21:35 Operator: LAC  
 Sample : THC SURR 10/1000 11/15/11 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

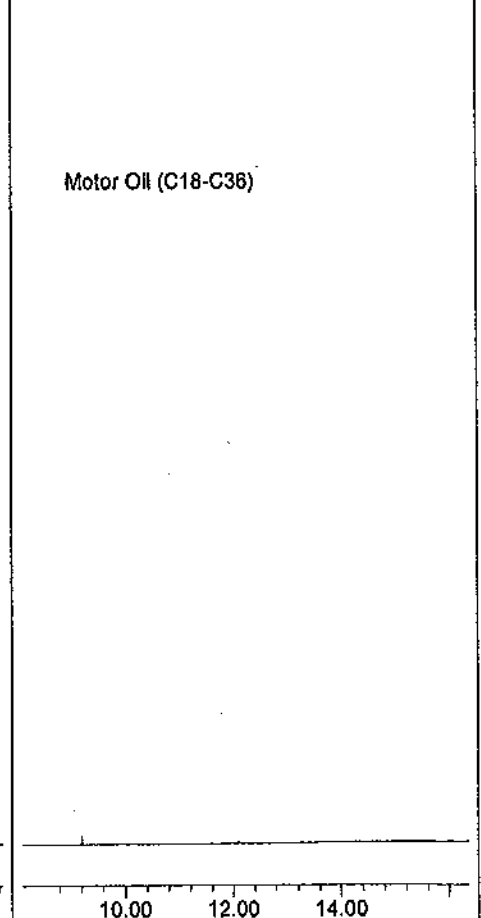
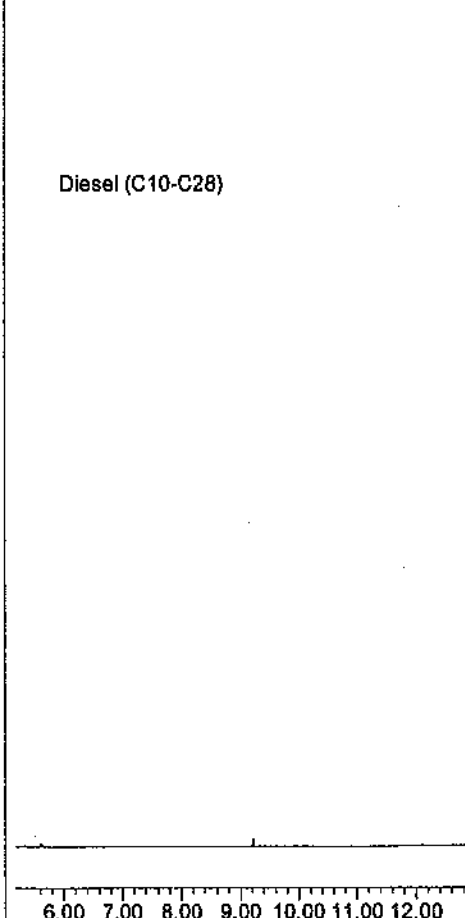
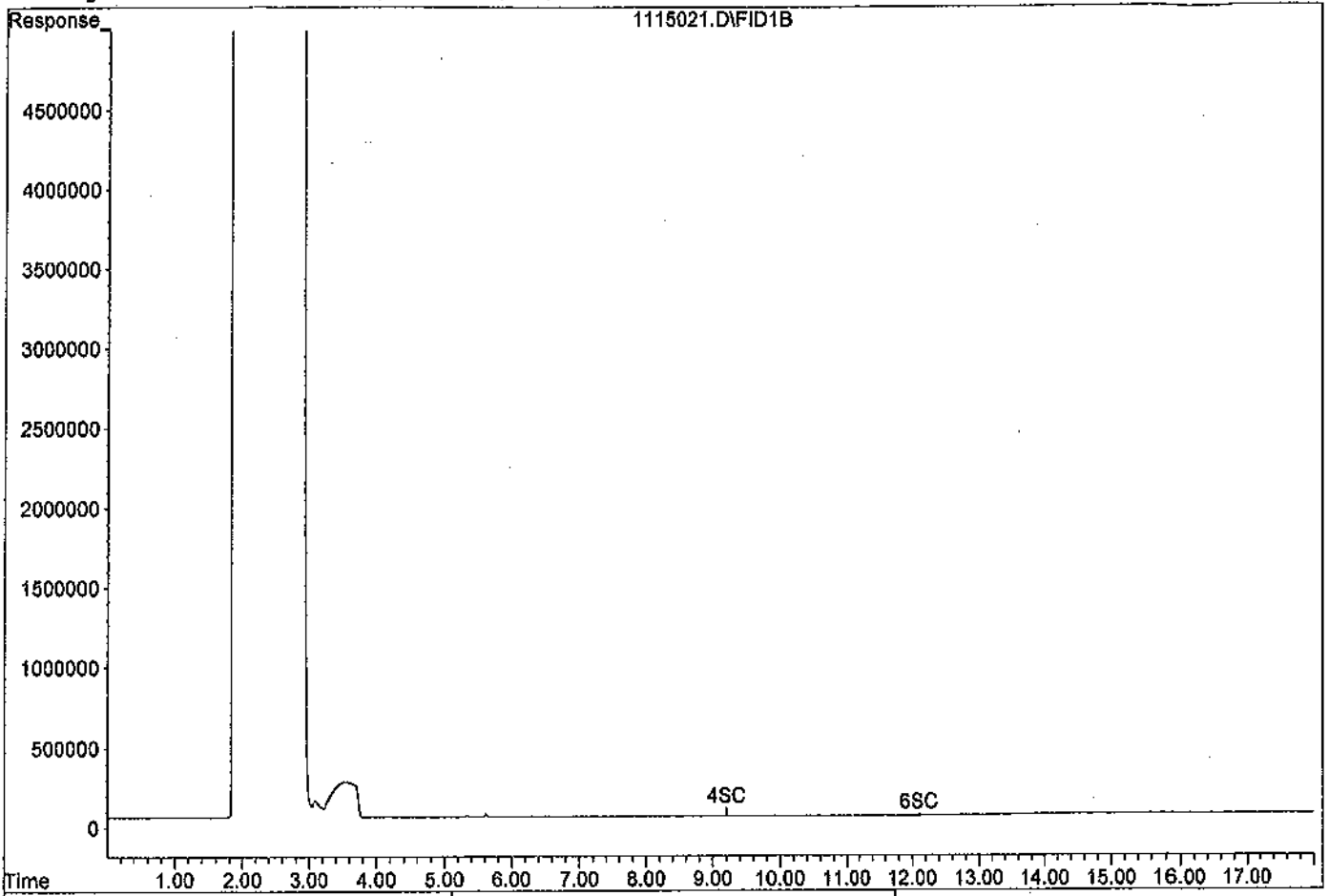
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	356915	0.559 ppb
Surrogate Spike 30.000		Recovery =	1.86%
6) SC Octacosane(S)	12.10	279297	1.196 ppb
Surrogate Spike 30.000		Recovery =	3.99%

Target Compounds

Data File: G:\APOLLO\DATA\111115\1115021.D

Sample : THC SURR 10/1000 11/15/11



Data File : G:\APOLLO\DATA\111115\1115022.D Vial: 22  
 Acq On : 11-15-11 18:45:31 Operator: LAC  
 Sample : THC SURR 100/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

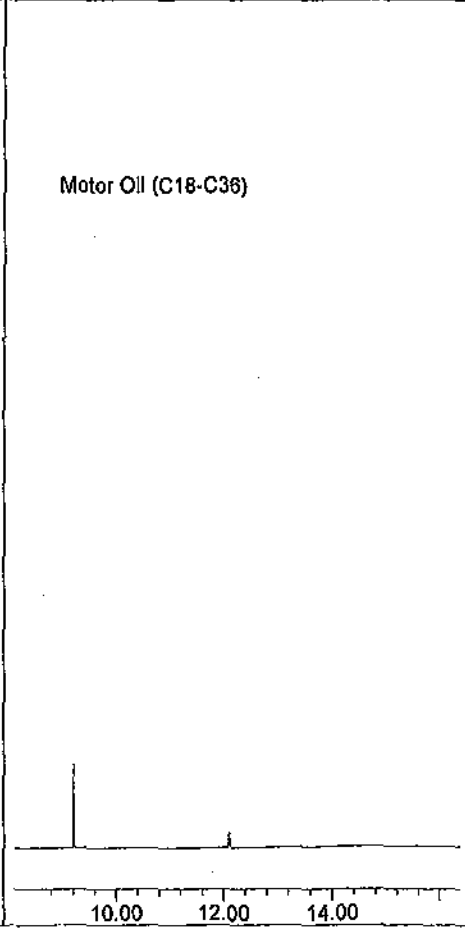
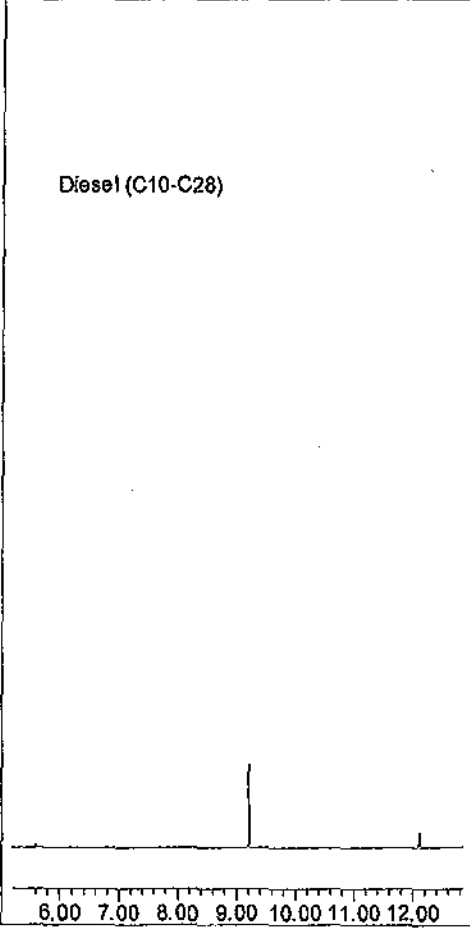
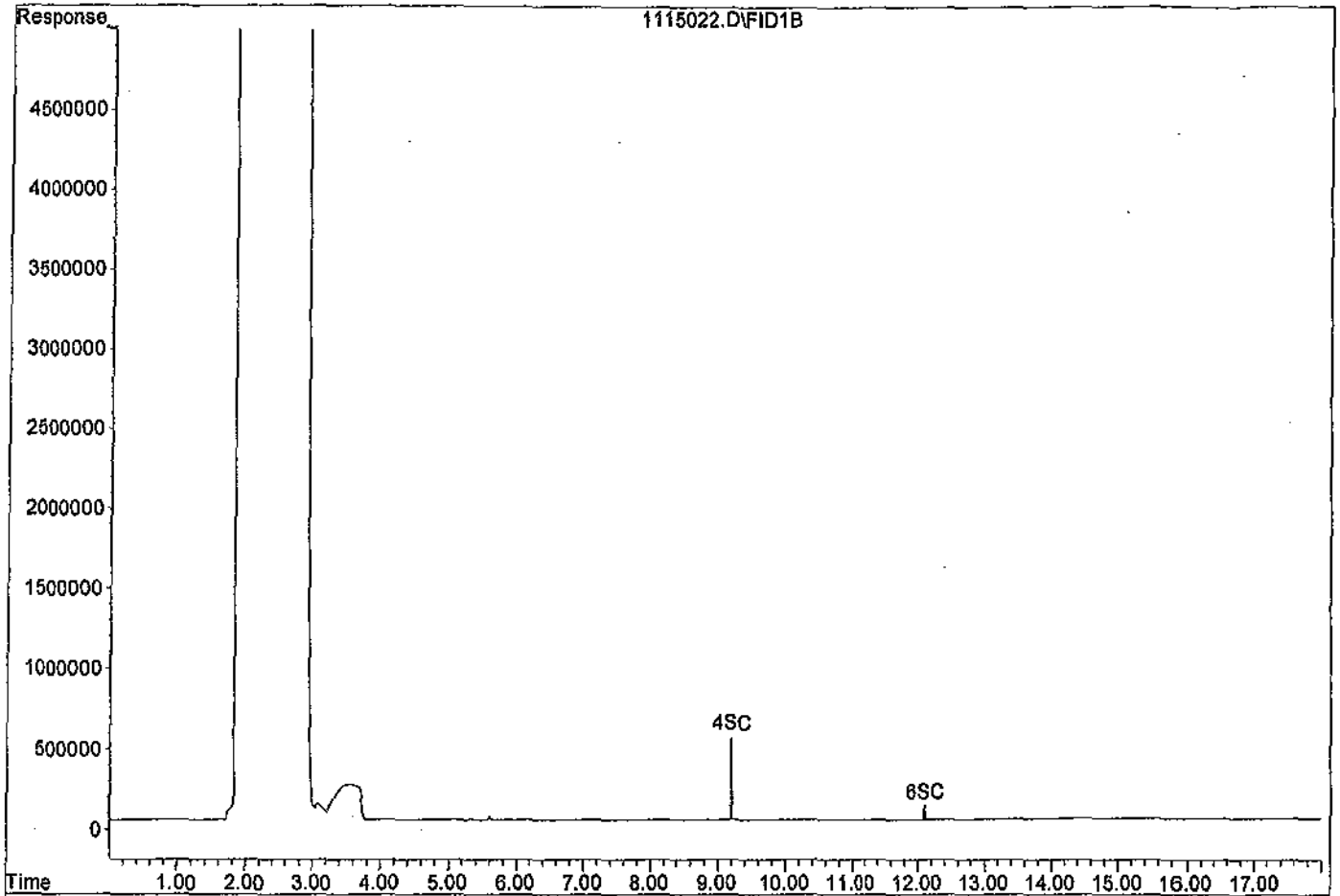
Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	3207972	5.028 ppb
Surrogate Spike 30.000		Recovery =	16.76%
6) SC Octacosane(S)	12.11	1214451	5.201 ppb
Surrogate Spike 30.000		Recovery =	17.34%

Target Compounds

Data File: G:\APOLLO\DATA\111115\1115022.D  
Sample : THC SURR 100/1000



Data File : G:\APOLLO\DATA\111115\1115023.D Vial: 23  
 Acq On : 11-15-11 19:09:25 Operator: LAC  
 Sample : THC SURR 400/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

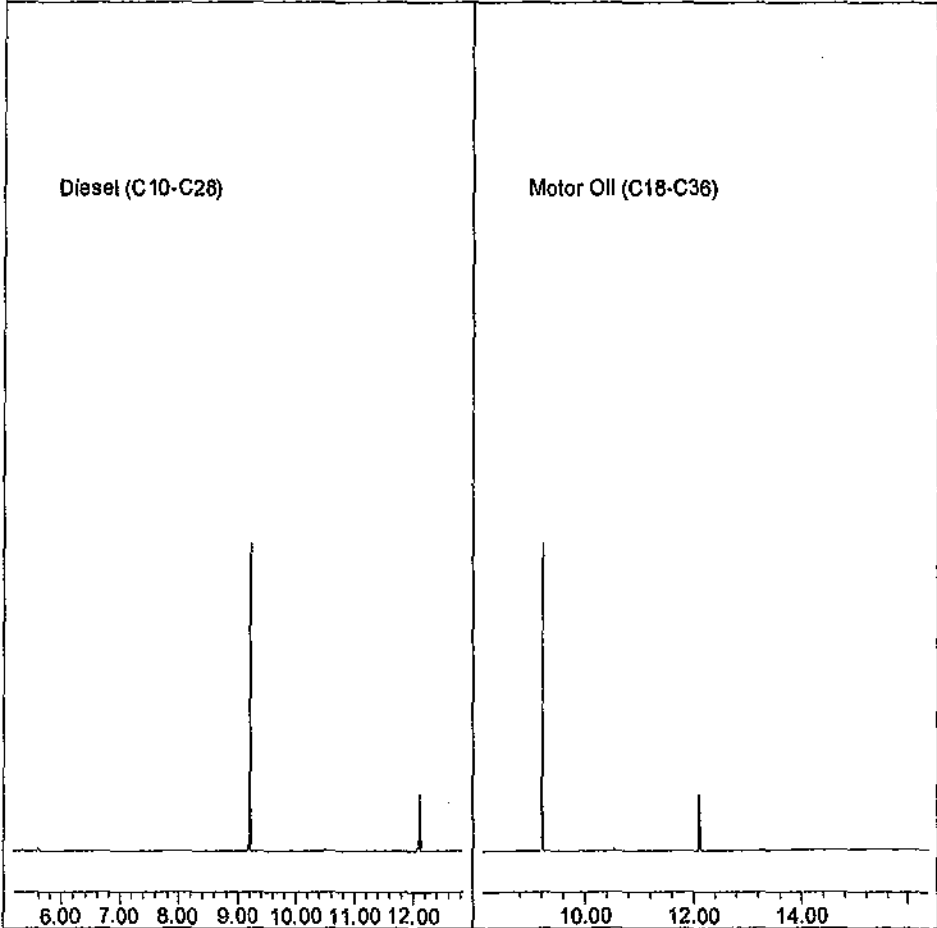
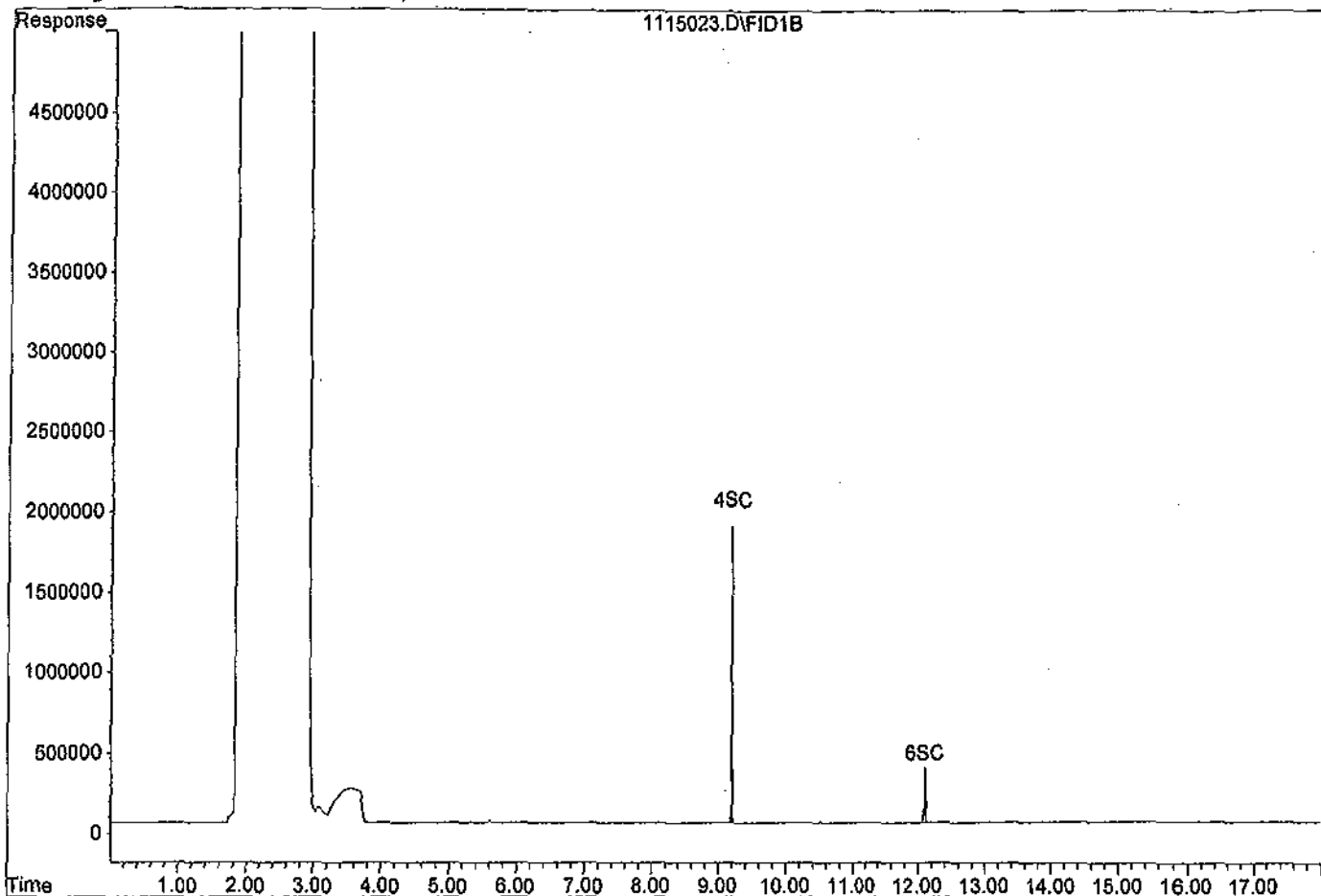
Compound	R.T.	Response	Conc Units
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System Monitoring Compounds

4) SC Ortho-Terphenyl(S)	9.21	12023229	18.845 ppb
Surrogate Spike 30.000		Recovery =	62.82%
6) SC Octacosane(S)	12.11	4606231	19.728 ppb
Surrogate Spike 30.000		Recovery =	65.76%

Target Compounds

Data File: G:\APOLLO\DATA\111115\1115023.D  
Sample : THC SURR 400/1000



Data File : G:\APOLLO\DATA\111115\1115024.D Vial: 24  
 Acq On : 11-15-11 19:33:17 Operator: LAC  
 Sample : THC SURR 600/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

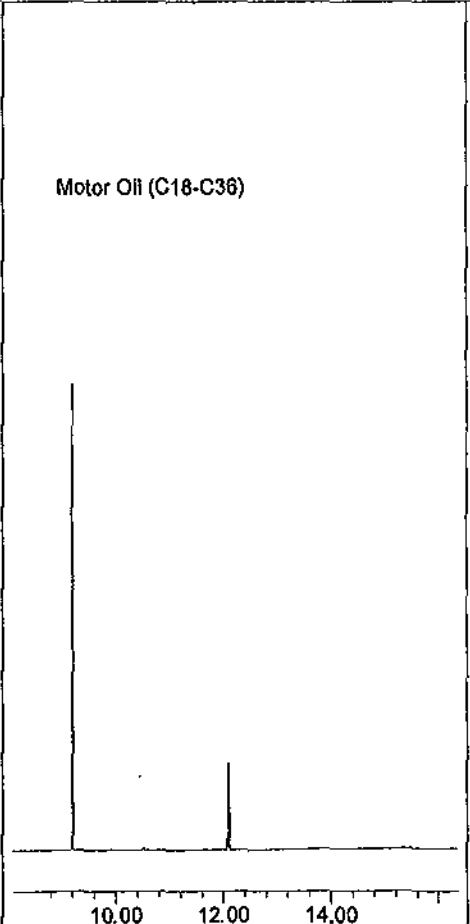
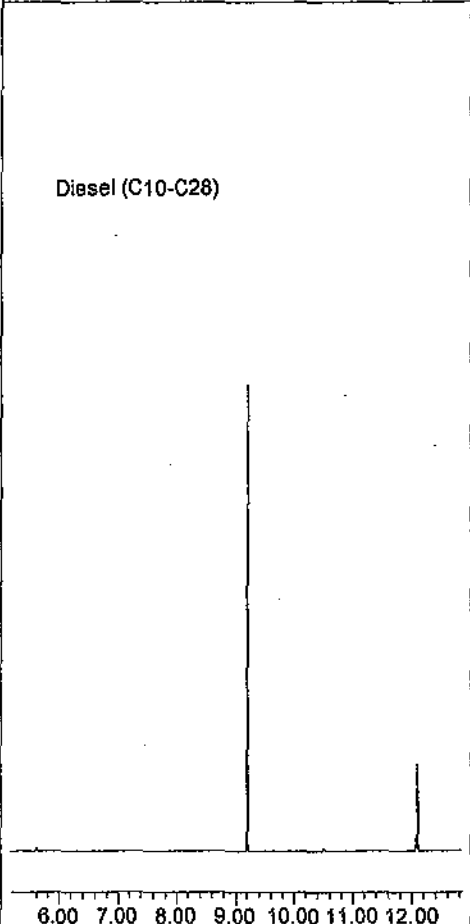
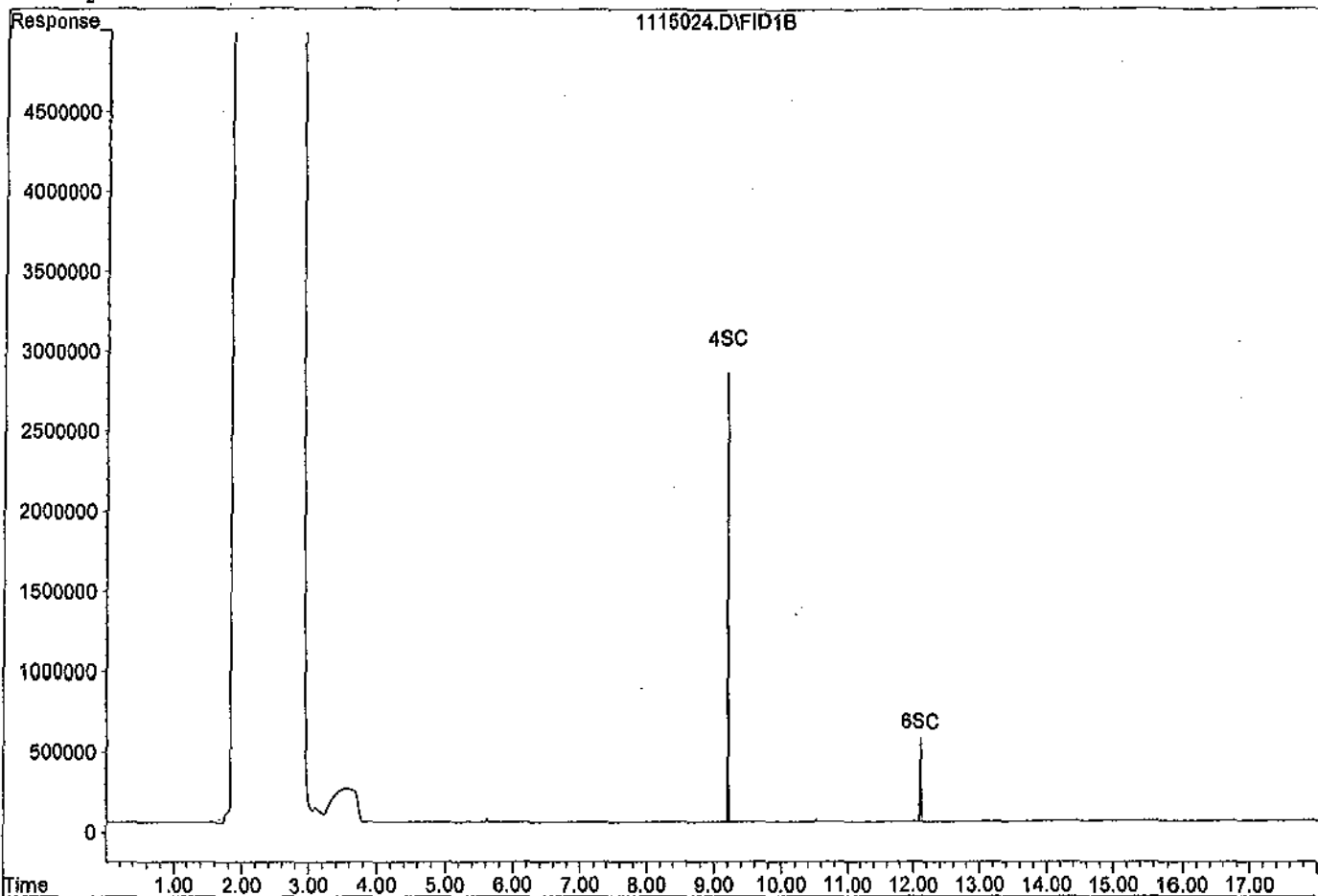
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	18244401	28.595 ppb
Surrogate Spike 30.000		Recovery =	95.32%
6) SC Octacosane(S)	12.11	6794679	29.101 ppb
Surrogate Spike 30.000		Recovery =	97.00%

Target Compounds

Data File: G:\APOLLO\DATA\111115\1115024.D

Sample : THC SURR 600/1000





Data File : G:\APOLLO\DATA\111115\1115025.D Vial: 25  
 Acq On : 11-15-11 19:57:06 Operator: LAC  
 Sample : THC SURR 800/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

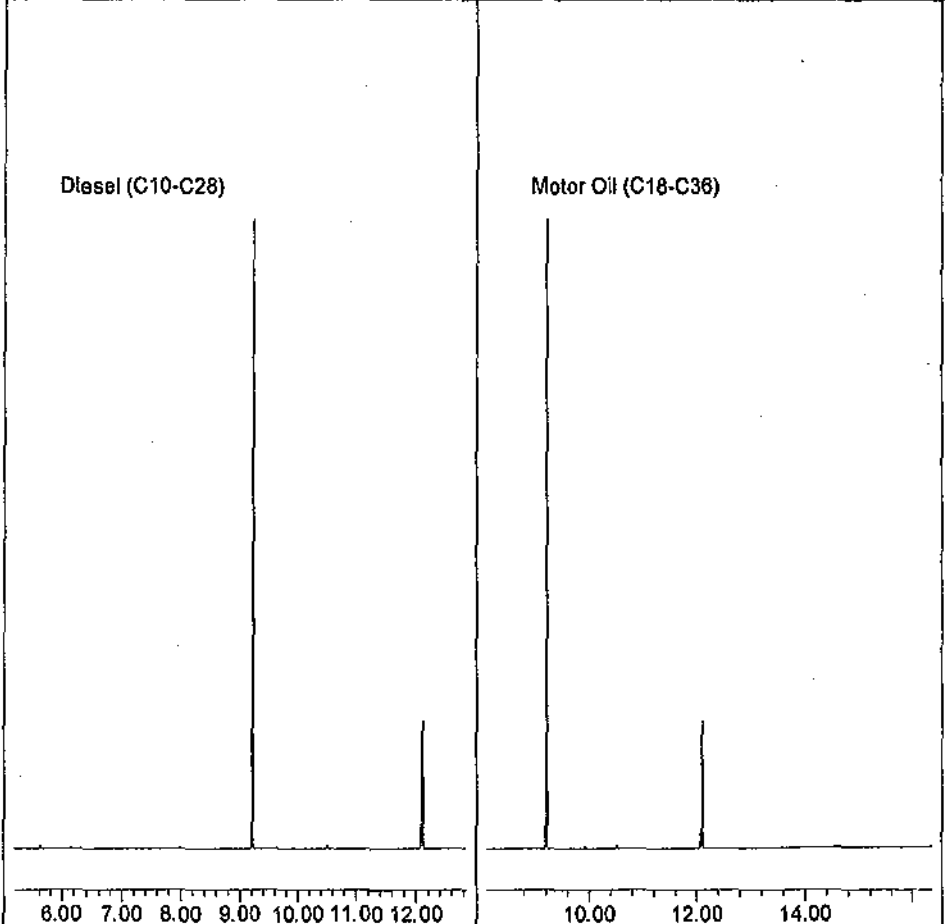
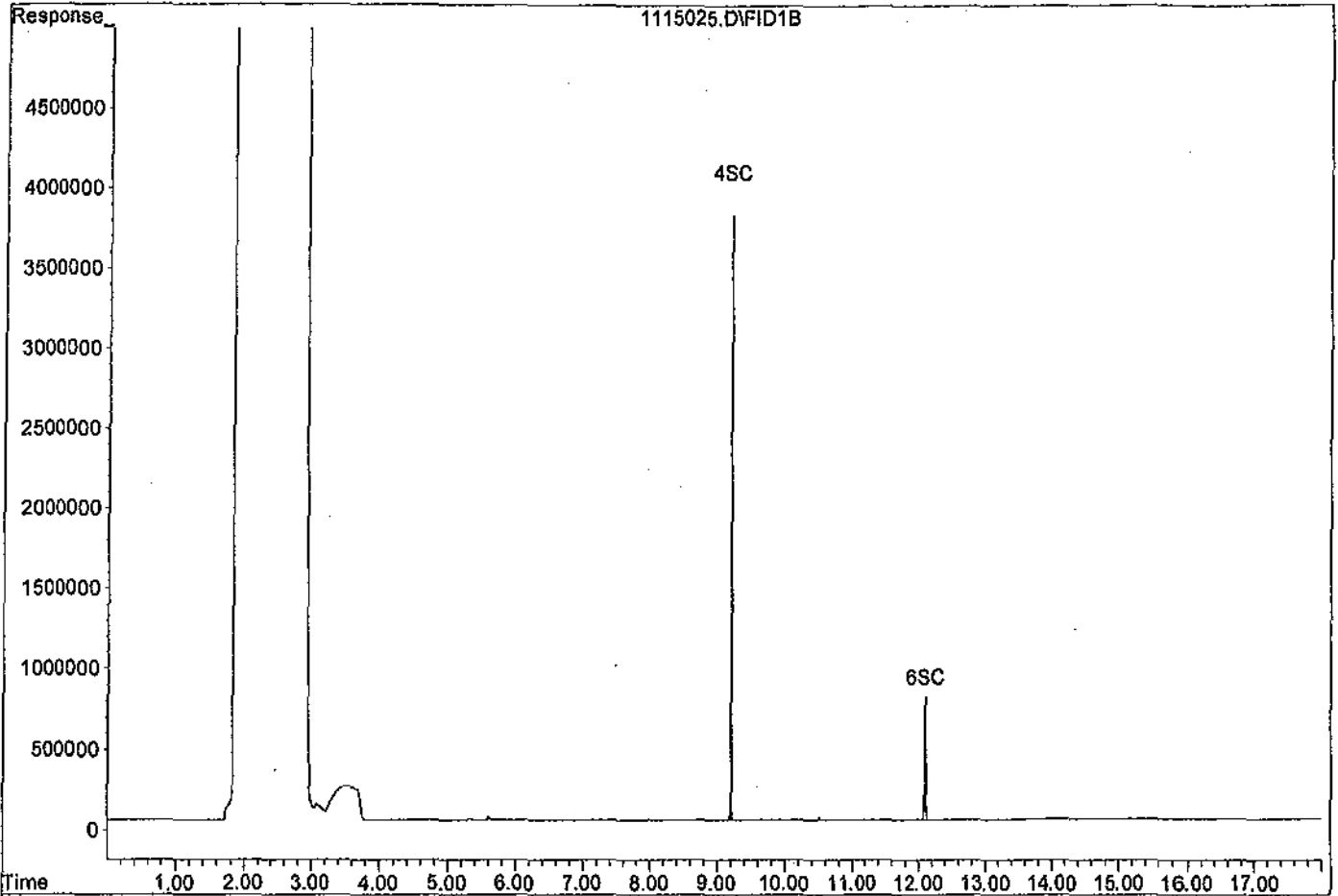
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	25946623	40.667 ppb
Surrogate Spike 30.000		Recovery =	135.56%
6) SC Octacosane(S)	12.11	10118734	43.337 ppb
Surrogate Spike 30.000		Recovery =	144.46%

Target Compounds

Data File: G:\APOLLO\DATA\111115\1115025.D

Sample : THC SURR 800/1000



Data File : G:\APOLLO\DATA\111115\1115026.D Vial: 26  
 Acq On : 11-15-11 20:20:52 Operator: LAC  
 Sample : THC SURR 1000/1000 Inst : Apollo  
 Misc : Mix(C) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 14:58 2011 Quant Results File: TPH8S15.RES

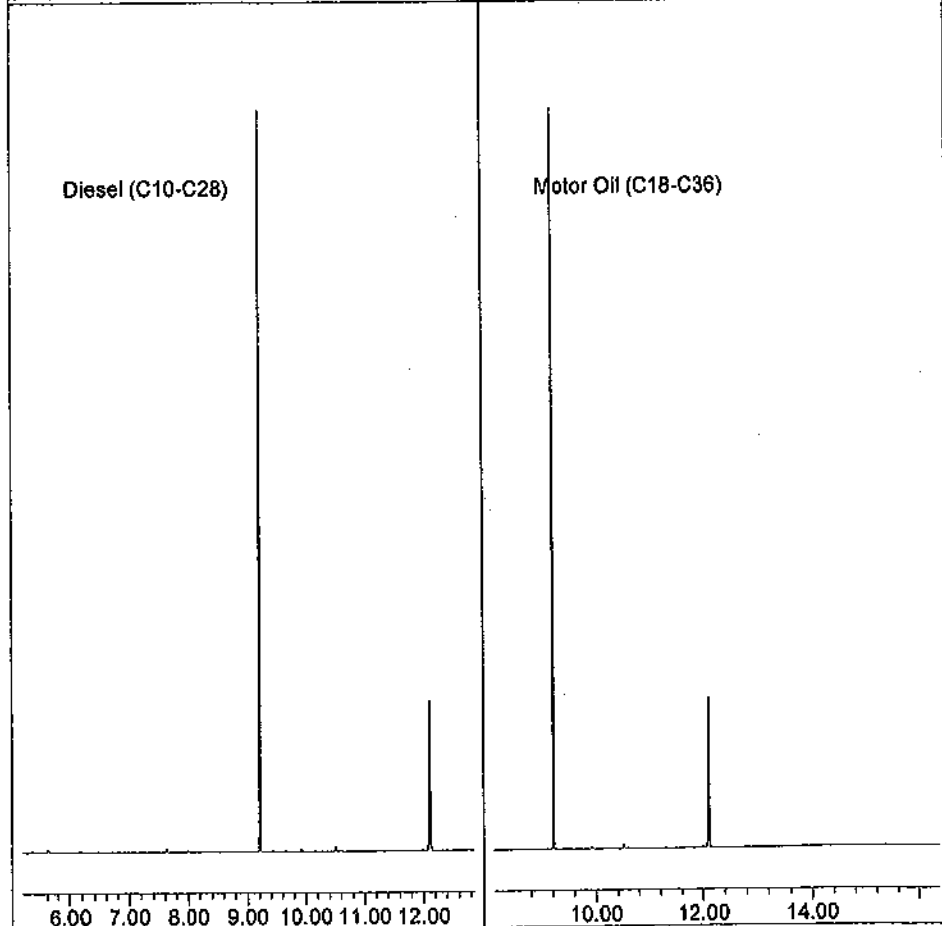
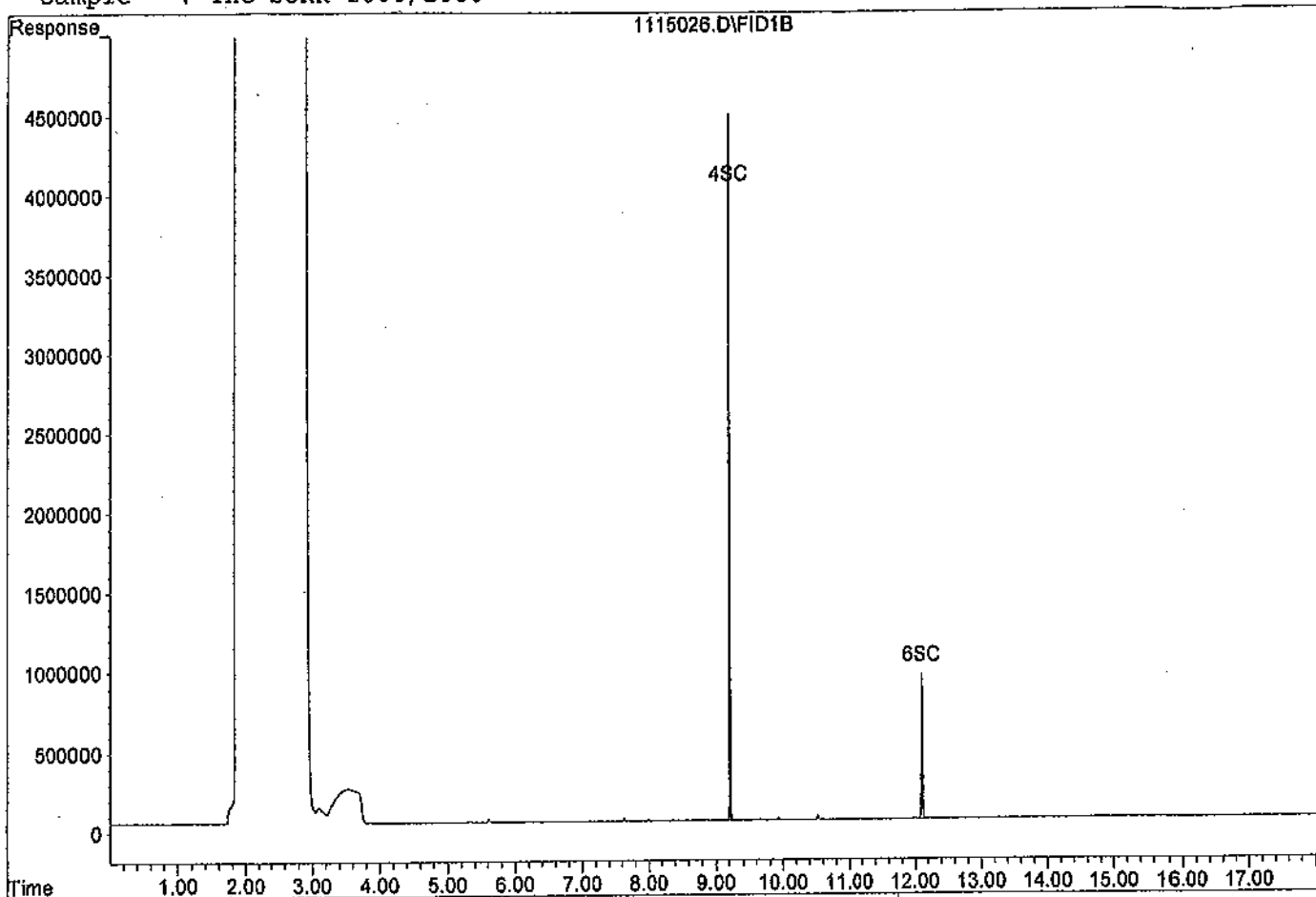
Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	30736073	48.174 ppb
Surrogate Spike 30.000		Recovery =	160.58%
6) SC Octacosane(S)	12.11	12029686	51.522 ppb
Surrogate Spike 30.000		Recovery =	171.74%
Target Compounds			

Data File: G:\APOLLO\DATA\111115\1115026.D

Sample : THC SURR 1000/1000



Data File : G:\APOLLO\DATA\111108\1108069.D Vial: 69  
 Acq On : 11-9-11 17:18:58 Operator: LAC  
 Sample : DIESEL 10/1000 11/8/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:53 2011 Quant Results File: TPH8S15.RES

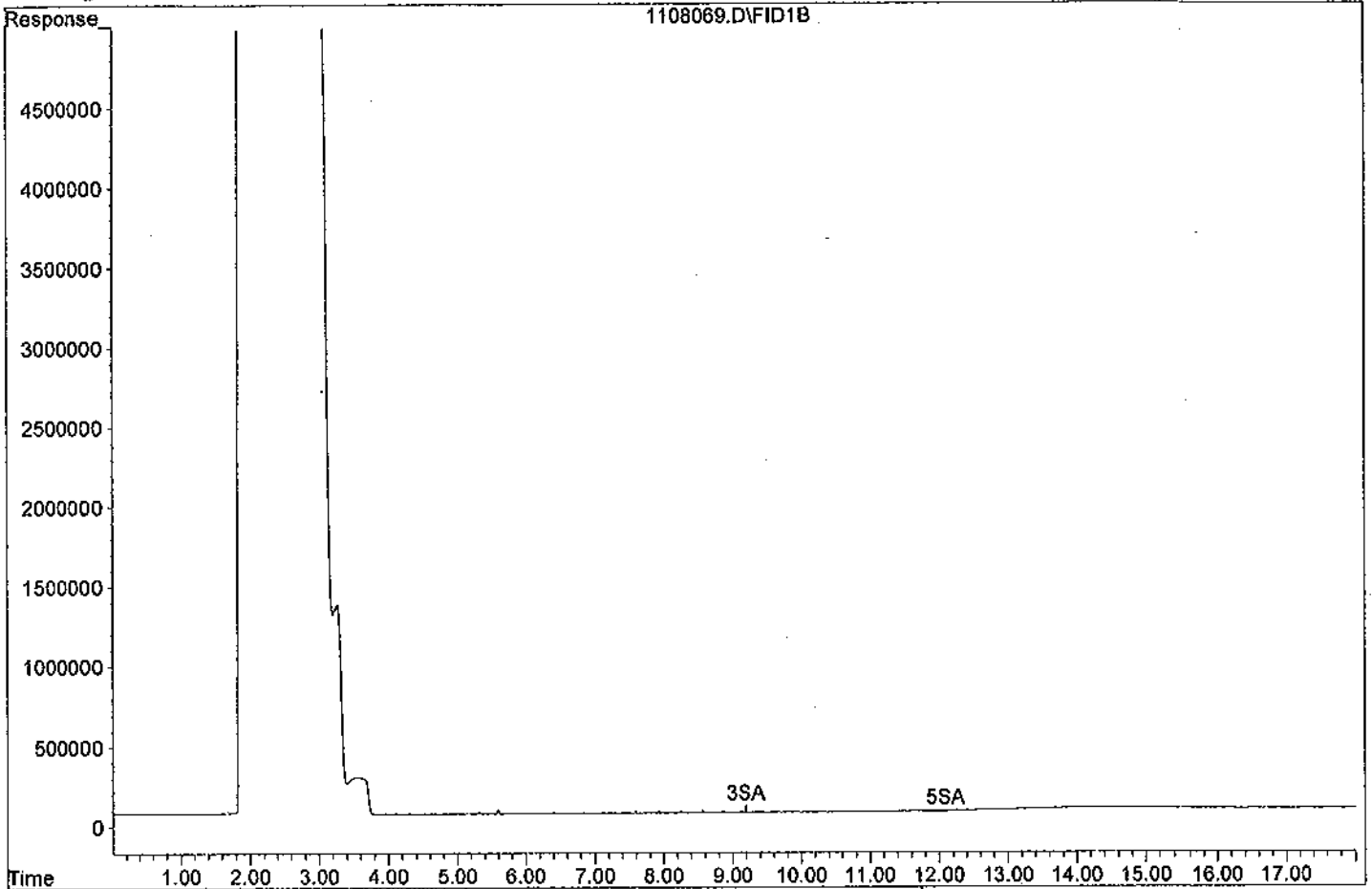
Method : G:\APOLLO\DATA\111108\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Wed Nov 16 09:55:03 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.20	302444	0.297 ppb
Surrogate Spike 30.000		Recovery =	0.99%
5) SA Not Used2(S)	12.10	625179	2.122 ppb
Surrogate Spike 30.000		Recovery =	7.07%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	12262633	1055.198 ppb

Data File: G:\APOLLO\DATA\111108\1108069.D

Sample : DIESEL 10/1000 11/8/11



Diesel (C10-C28)

Motor Oil (C18-C36)

6.00 8.00 10.00 12.00

10.00 12.00 14.00

TPH Extractables  
TPH8S15

Form 7

Second Source Calibration

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

SDG No: 66102  
Date Analyzed: 11/09/11  
Instrument: Apollo  
Initial Cal. Date: 11/08/11  
Data File: 1108070.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	305473	234327	23	HATML 4.9
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			23.0	

Data File : G:\APOLLO\DATA\111108\1108070.D Vial: 70  
 Acq On : 11-9-11 17:42:38 Operator: LAC  
 Sample : DIESEL 400 2ND SRC 11/8/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 16 9:52 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111115\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 17 09:41:49 2011  
 Response via : Multiple Level Calibration

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

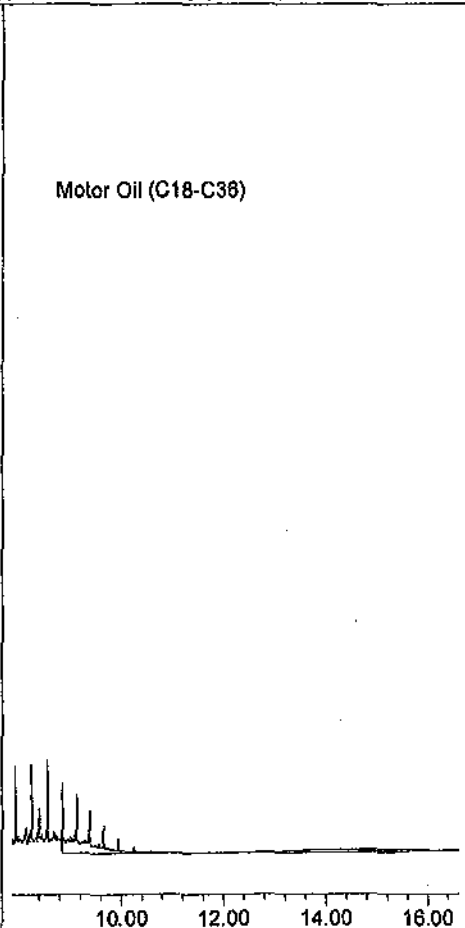
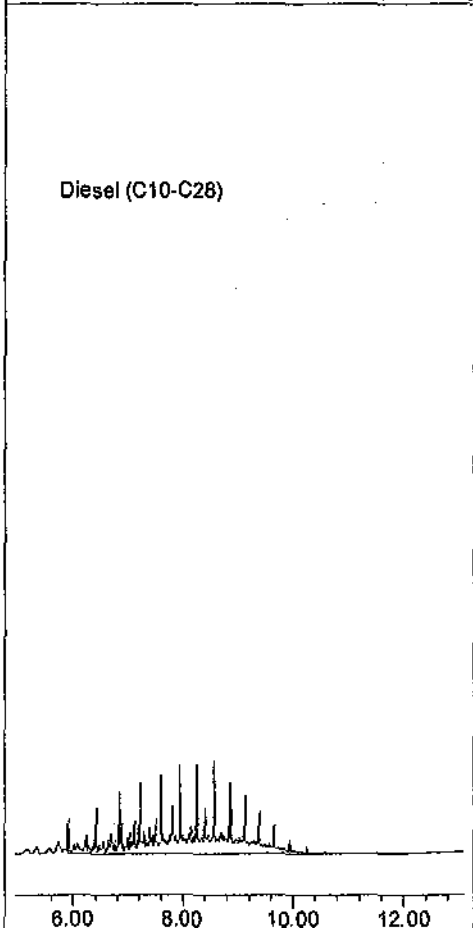
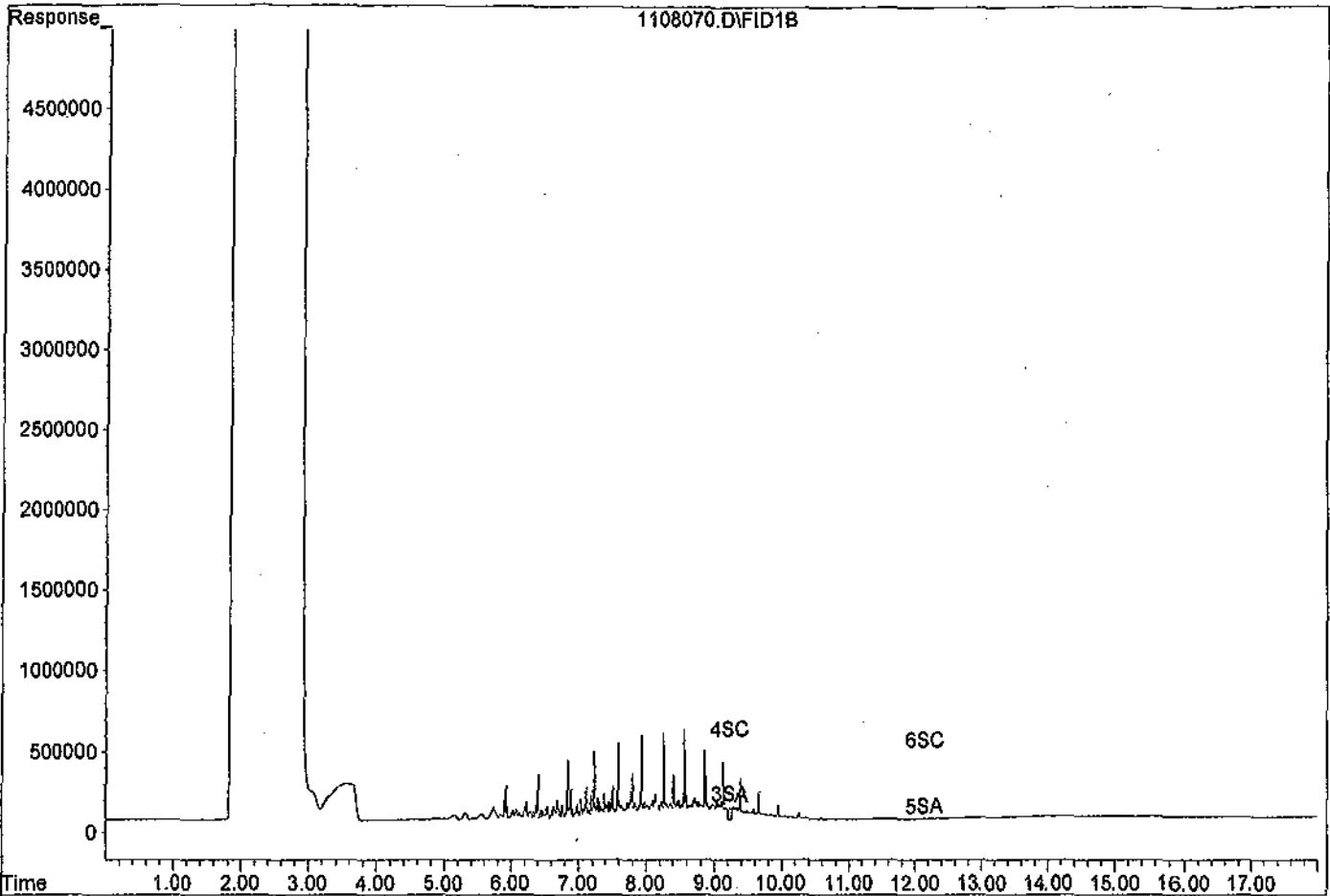
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
3) SA Not Used(S)	9.24	2204277	2.168 ppb
Surrogate Spike 30.000		Recovery =	7.23%
4) SC Ortho-Terphenyl(S)	9.24	2204277	3.455 ppb
Surrogate Spike 30.000		Recovery =	11.52%
5) SA Not Used2(S)	12.16	136311	0.463 ppb
Surrogate Spike 30.000		Recovery =	1.54%
6) SC Octacosane(S)	12.16	136311	0.584 ppb
Surrogate Spike 30.000		Recovery =	1.95%
Target Compounds			
2) HBTM Motor Oil (C18-C36)	12.24	65481078	788.357 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\111108\1108070.D

Sample : DIESEL 400 2ND SRC 11/8/11



TPH Extractables  
TPH8S15

Form 7

Continuing Calibration

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

SDG No: 66102  
Date Analyzed: 11/29/11  
Instrument: Apollo  
Initial Cal. Date: 11/08/11  
Data File: 1129012.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	305473	265441	13	HATML 7.9
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
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26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Average

13.0

Data File : G:\APOLLO\DATA\111129\1129012.D Vial: 12  
 Acq On : 11-29-11 13:06:20 Operator: LAC  
 Sample : DIESEL 400/1000 11/29/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 29 16:12 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111123\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Nov 28 16:45:51 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
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-----  
 System Monitoring Compounds

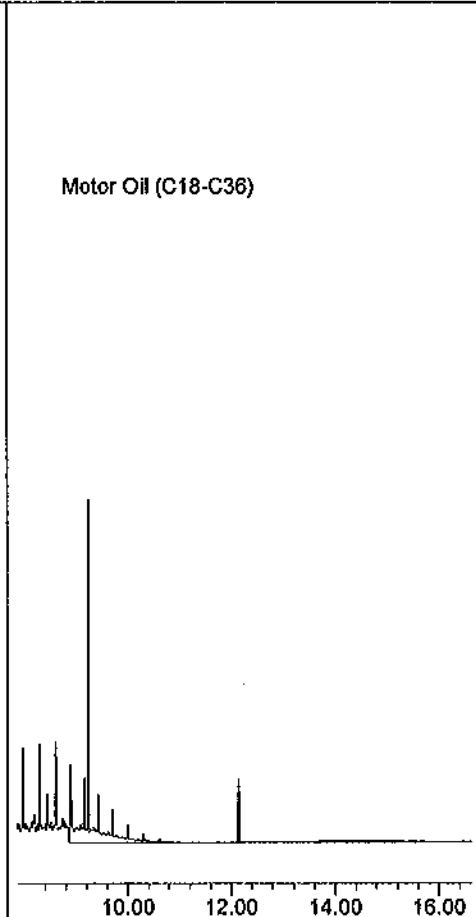
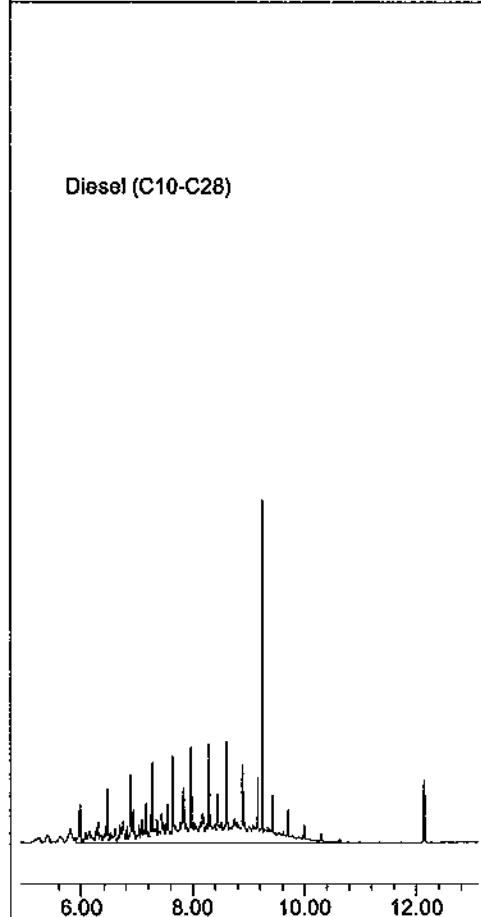
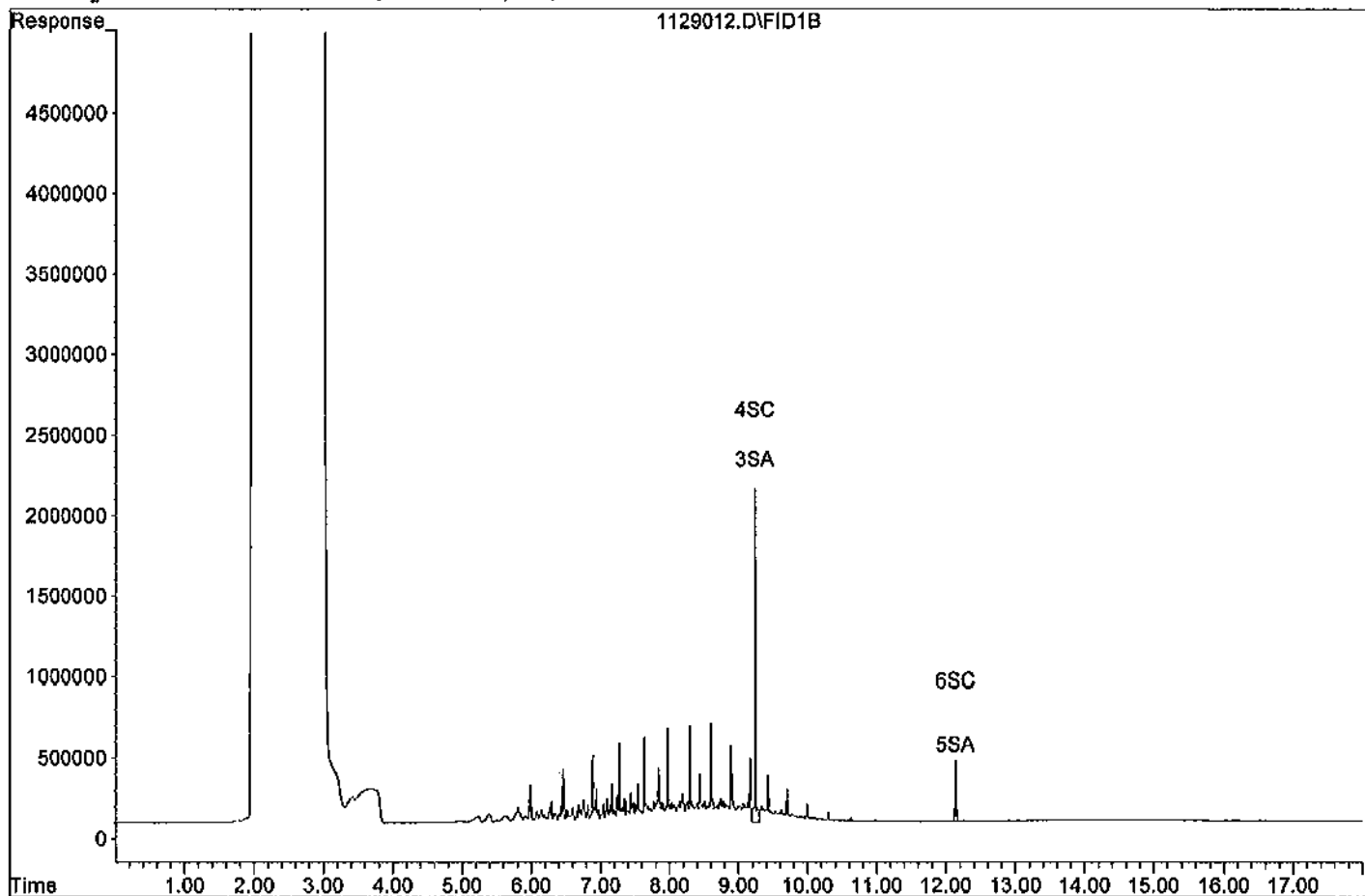
3) SA Not Used(S)	9.24	18448540	27.180 ppb
Surrogate Spike 30.000		Recovery =	90.60%
4) SC Ortho-Terphenyl(S)	9.24	18448540	28.915 ppb
Surrogate Spike 30.000		Recovery =	96.38%
5) SA Not Used2(S)	12.14	5020781	31.843 ppb
Surrogate Spike 30.000		Recovery =	106.14%
6) SC Octacosane(S)	12.14	5020781	21.038 ppb
Surrogate Spike 30.000		Recovery =	70.13%

Target Compounds

1) HATM Diesel (C10-C28)	9.01	212352743	431.747 ppb
2) HBTM Motor Oil (C18-C36)	12.24	65096224	280.338 ppb

Data File: G:\APOLLO\DATA\111129\1129012.D

Sample : DIESEL 400/1000 11/29/11



TPH Extractables  
TPH8S15

Form 7

Continuing Calibration

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

SDG No: 66102  
Date Analyzed: 11/29/11  
Instrument: Apollo  
Initial Cal. Date: 11/08/11  
Data File: 1129024.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	305473	278570	8.8	HATML 13
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			8.8	

Data File : G:\APOLLO\DATA\111129\1129024.D Vial: 24  
 Acq On : 11-29-11 21:29:15 Operator: LAC  
 Sample : DIESEL 400/1000 11/29/11 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 30 8:35 2011 Quant Results File: TPH8S15.RES

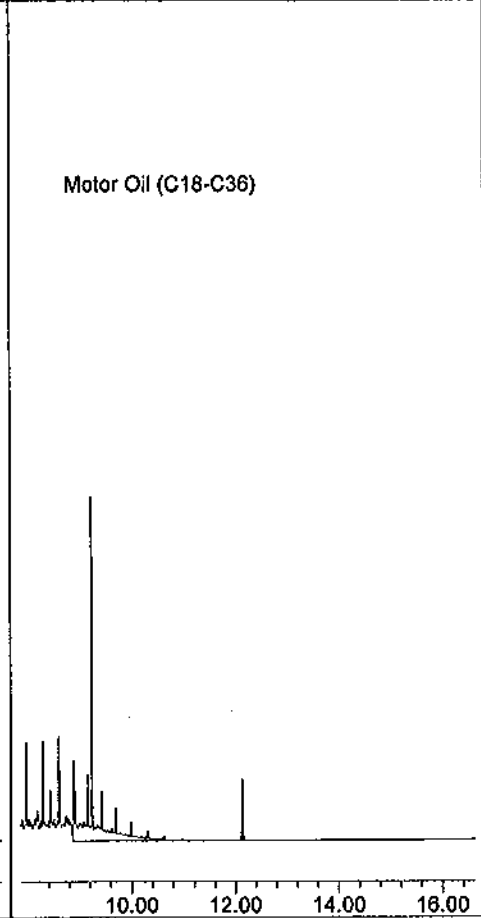
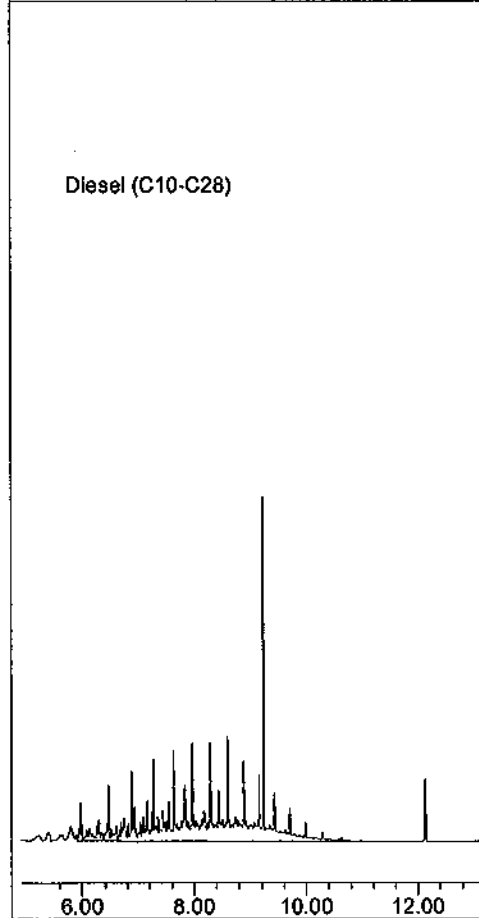
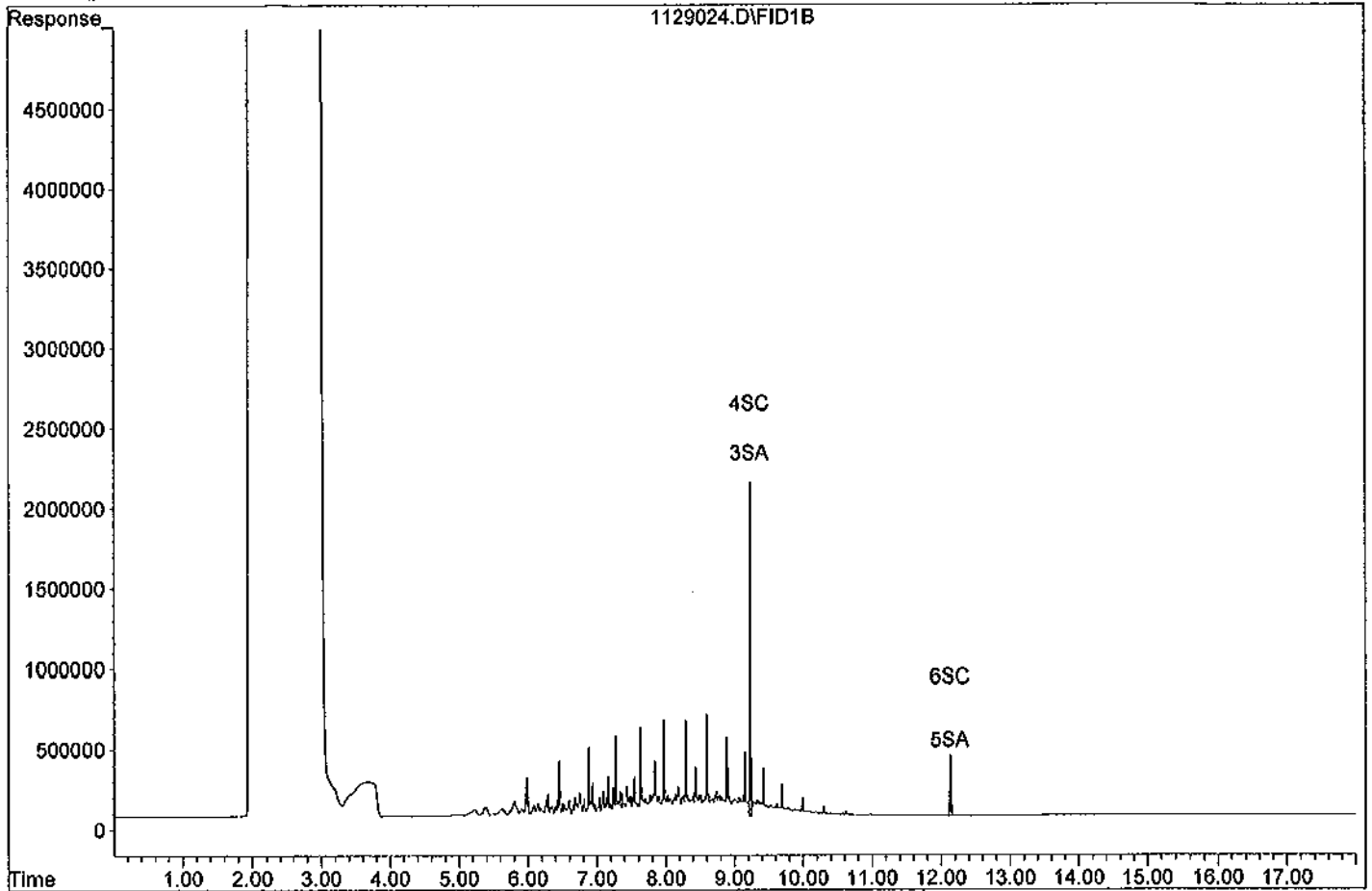
Method : G:\APOLLO\DATA\111123\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Nov 28 16:45:51 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Not Used(S)	9.24	15158305	22.332 ppb
Surrogate Spike 30.000		Recovery =	74.44%
4) SC Ortho-Terphenyl(S)	9.24	15158305	23.758 ppb
Surrogate Spike 30.000		Recovery =	79.19%
5) SA Not Used2(S)	12.13	4847180	30.742 ppb
Surrogate Spike 30.000		Recovery =	102.47%
6) SC Octacosane(S)	12.13	4847180	20.311 ppb
Surrogate Spike 30.000		Recovery =	67.70%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	222856237	453.399 ppb
2) HBTM Motor Oil (C18-C36)	12.24	69450604	299.090 ppb

Quantitation Report

Data File: G:\APOLLO\DATA\111129\1129024.D  
Sample : DIESEL 400/1000 11/29/11



**EPA 8015 Modified  
Total Petroleum Hydrocarbons  
Raw Data**



**Method Blank**  
**TPH Diesel Water**

Blank Name/QCG: 111031W-49334 - 160886  
Batch ID: #TPETD-111031A

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	10/31/11	11/06/11
BLANK	SURROGATE: OCTACOSANE (S)	71.2	28-142			%	10/31/11	11/06/11
BLANK	SURROGATE: ORTHO-TERPHEN	60.5	57-132			%	10/31/11	11/06/11

Quant Method: TPH1028.M  
Run #: 1106005  
Instrument: Apollo  
Sequence: 111106  
Initials: LA

GC SC-Blank-REG MDLs  
Printed: 11/30/11 11:27:27 AM

Data File : G:\APOLLO\DATA\111106\1106005.D Vial: 5  
 Acq On : 11-6-11 17:22:09 Operator: LAC  
 Sample : 111031A BLK 5/1000 Inst : Apollo  
 Misc : Water Multiplr: 5.00  
 IntFile : events.e  
 Quant Time: Nov 7 9:44 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

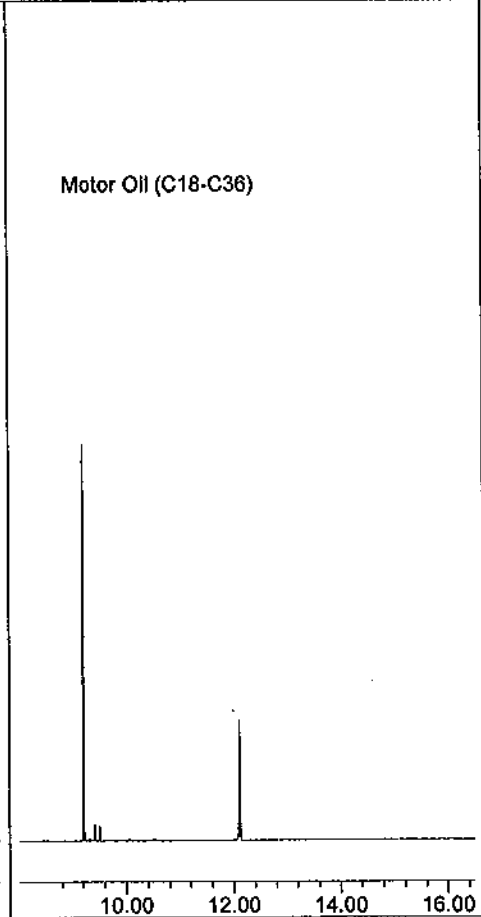
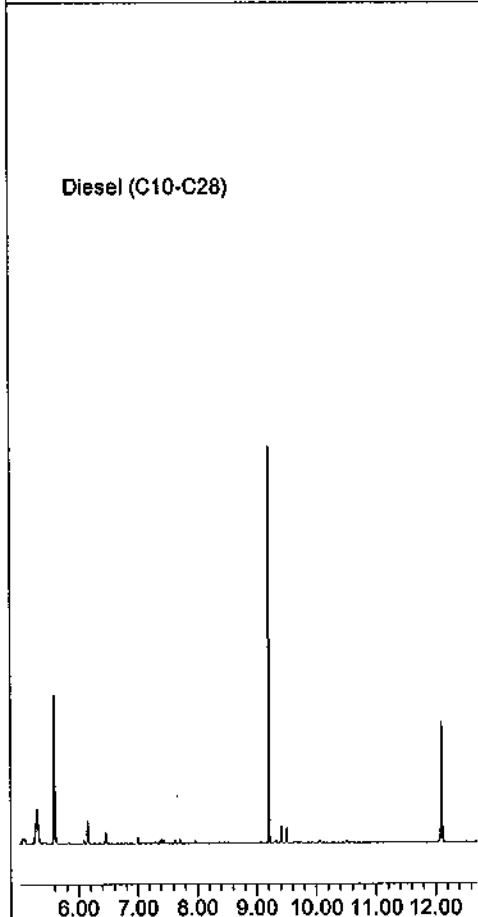
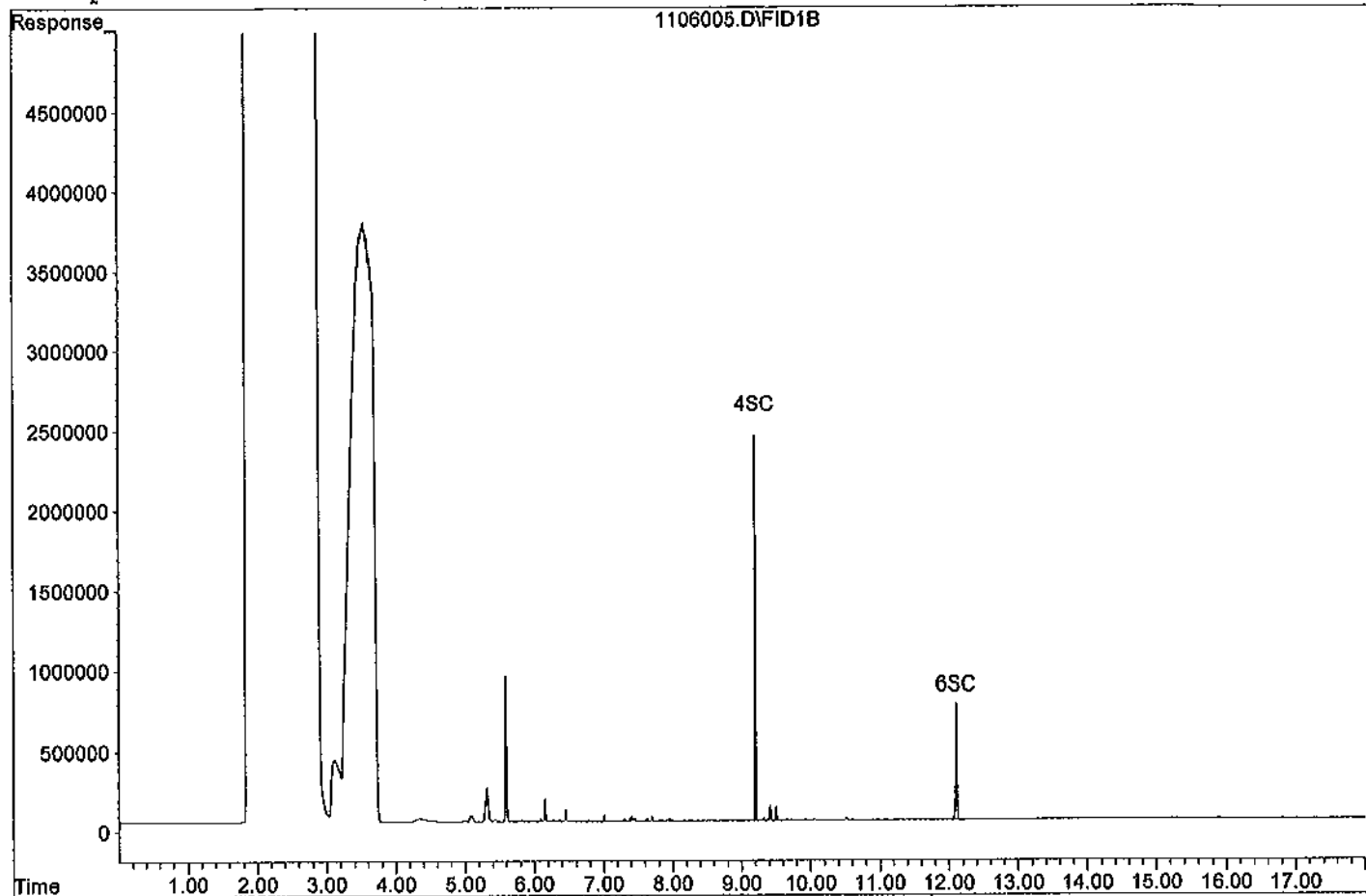
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	15818444	90.703 ppb
Surrogate Spike 150.000		Recovery =	60.47%
6) SC Octacosane(S)	12.11	9943034	106.834 ppb
Surrogate Spike 150.000		Recovery =	71.22%

Target Compounds

Data File: G:\APOLLO\DATA\111106\1106005.D

Sample : 111031A BLK 5/1000



**Laboratory Control Spike Recovery**  
**TPH Diesel Water**

APPL ID: 111031W-49334 LCS - 160886  
 Batch ID: #TPETD-111031A

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	1520	76.0	61-143
SURROGATE: OCTACOSANE (S)	150	125	83.3	28-142
SURROGATE: ORTHO-TERPHENYL (S)	150	147	98.0	57-132

Comments:

<u>Primary</u>	<u>SPK</u>
Quant Method :	TPH8S15.M
Extraction Date :	10/31/11
Analysis Date :	11/29/11
Instrument :	Apollo
Run :	1129017
Initials :	LA

Printed: 11/30/11 11:27:21 AM

APPL Standard LCS

Data File : G:\APOLLO\DATA\111129\1129017.D Vial: 17  
 Acq On : 11-29-11 18:45:15 Operator: LAC  
 Sample : 111031A LCS-1 5/1000 Inst : Apollo  
 Misc : Water Multiplr: 5.00  
 IntFile : events.e  
 Quant Time: Nov 30 10:29 2011 Quant Results File: TPH8S15.RES

Method : G:\APOLLO\DATA\111123\TPH8S15.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Nov 28 16:45:51 2011  
 Response via : Multiple Level Calibration

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

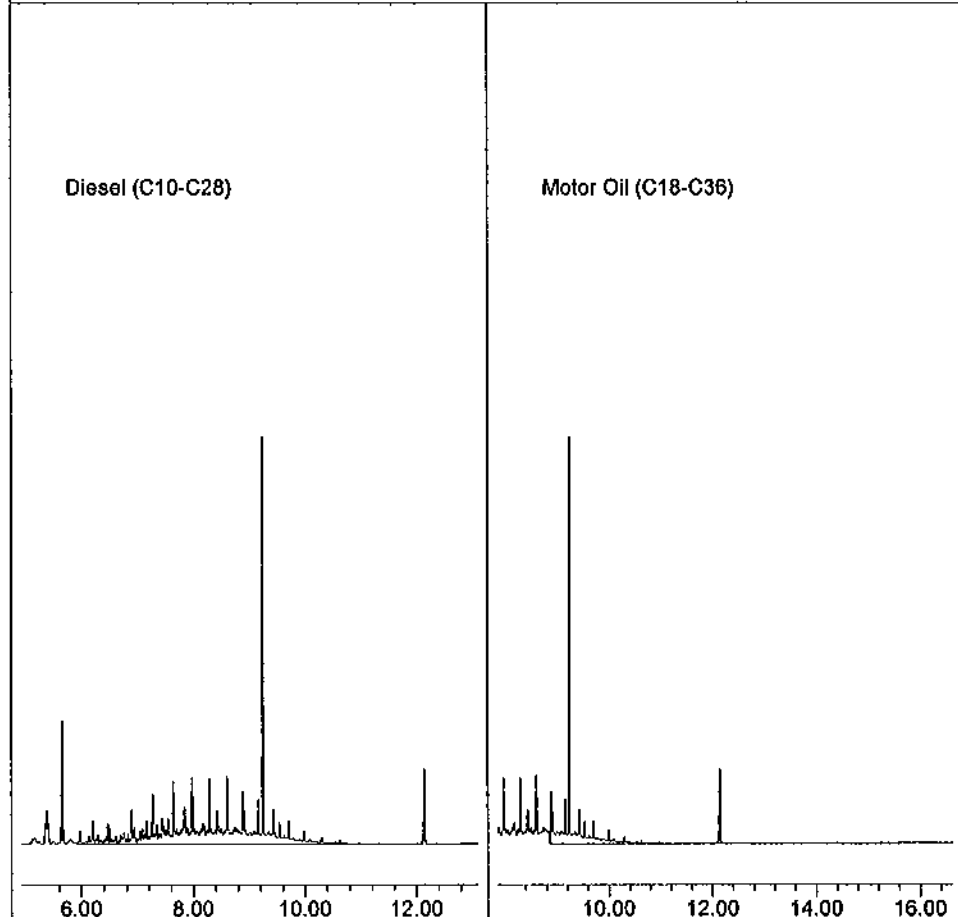
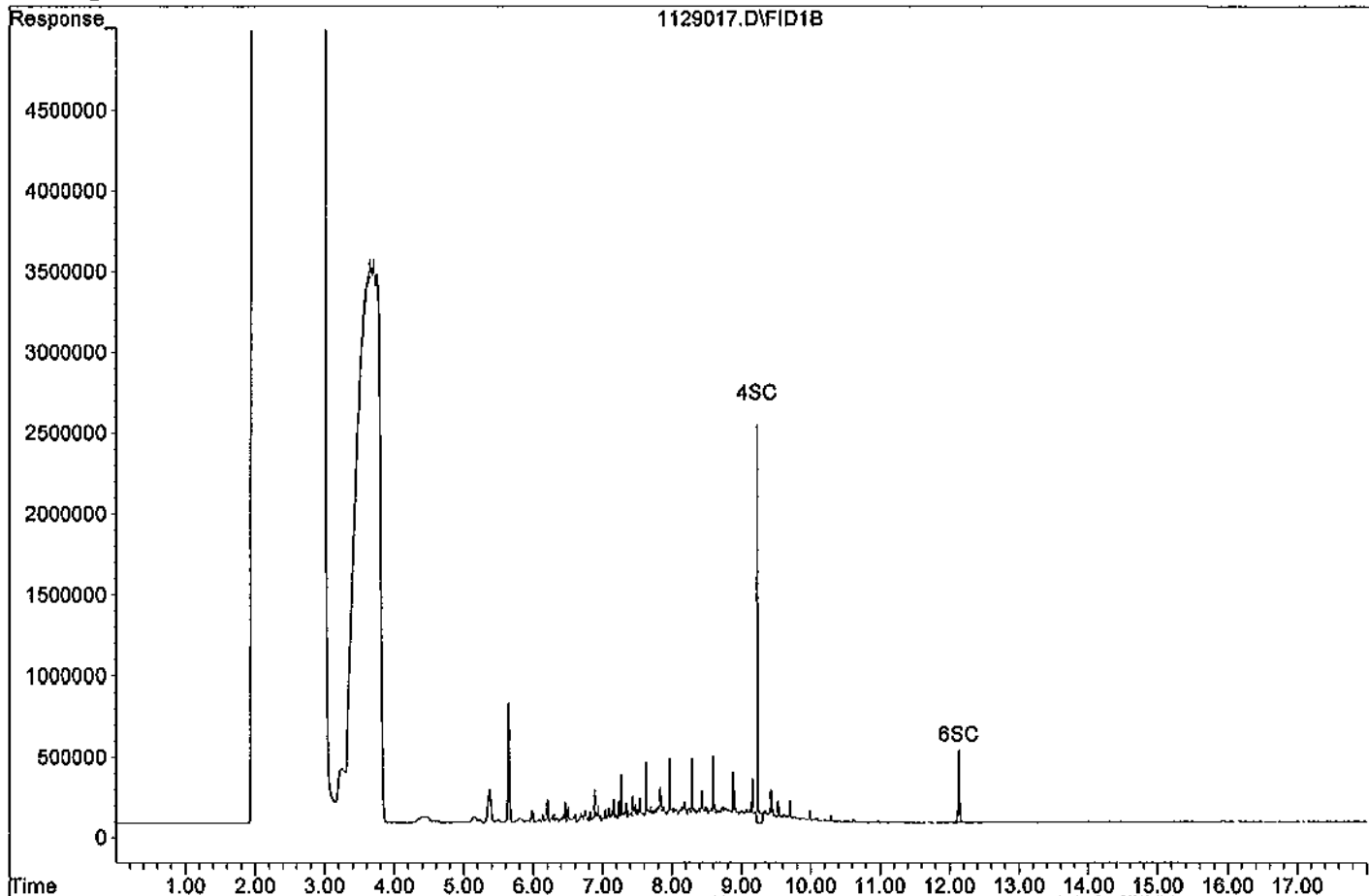
Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.24	18706073	146.595 ppb
Surrogate Spike 150.000		Recovery =	97.73%
6) SC Octacosane(S)	12.14	5944718	124.549 ppb
Surrogate Spike 150.000		Recovery =	83.03%
Target Compounds			
1) HATM Diesel (C10-C28)	9.01	150395375	1520.130 ppb
2) HBTM Motor Oil (C18-C36)	12.24	50801855	1093.895 ppb

Algorithm Check: 
$$\frac{(18706073)(5)}{(319010)(2)} = 146.59457227$$
 UAC 11/30/11  
 UAC 11/30/11

Data File: G:\APOLLO\DATA\111129\1129017.D

Sample : 111031A LCS-1 5/1000



## Matrix Spike Recoveries

### TPH Diesel Water

APPL ID: 111031W-49334 MS - 160886

Batch ID: #TPETD-111031A

Sample ID: AY49334

Client ID: ES047

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
DIESEL FUEL	2000	730	1400	1330	33.5 #	30.0 #	61-143	5.1	30
SURROGATE: OCTACOSANE (S)	150	NA	131	125	87.3	83.3	28-142		
SURROGATE: ORTHO-TERPHENYL (S)	150	NA	108	89.3	72.0	59.5	57-132		

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	TPH1028.M	TPH1028.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	11/06/11	11/06/11
Instrument :	Apollo	Apollo
Run :	1106014	1106015
Initials :	LA	

Printed: 11/30/11 11:27:18 AM  
APPL MSD SCII

Data File : G:\APOLLO\DATA\111106\1106014.D Vial: 14  
 Acq On : 11-6-11 20:53:41 Operator: LAC  
 Sample : AY49334W35 MS-1 5/1030 Inst : Apollo  
 Misc : Water Multiplr: 4.85  
 IntFile : events.e  
 Quant Time: Nov 7 9:50 2011 Quant Results File: TPH1028.RES

Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

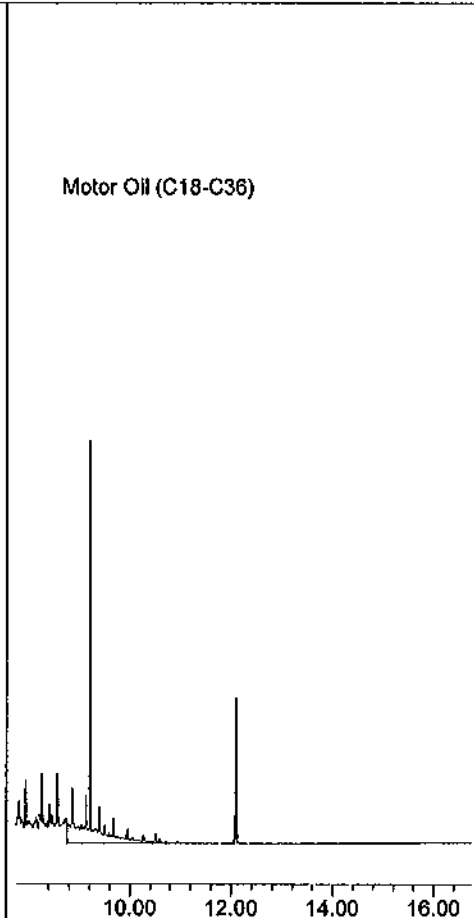
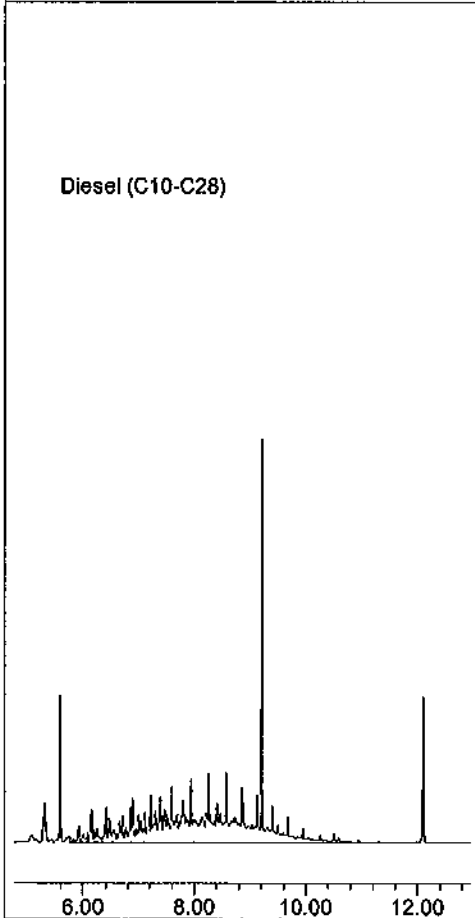
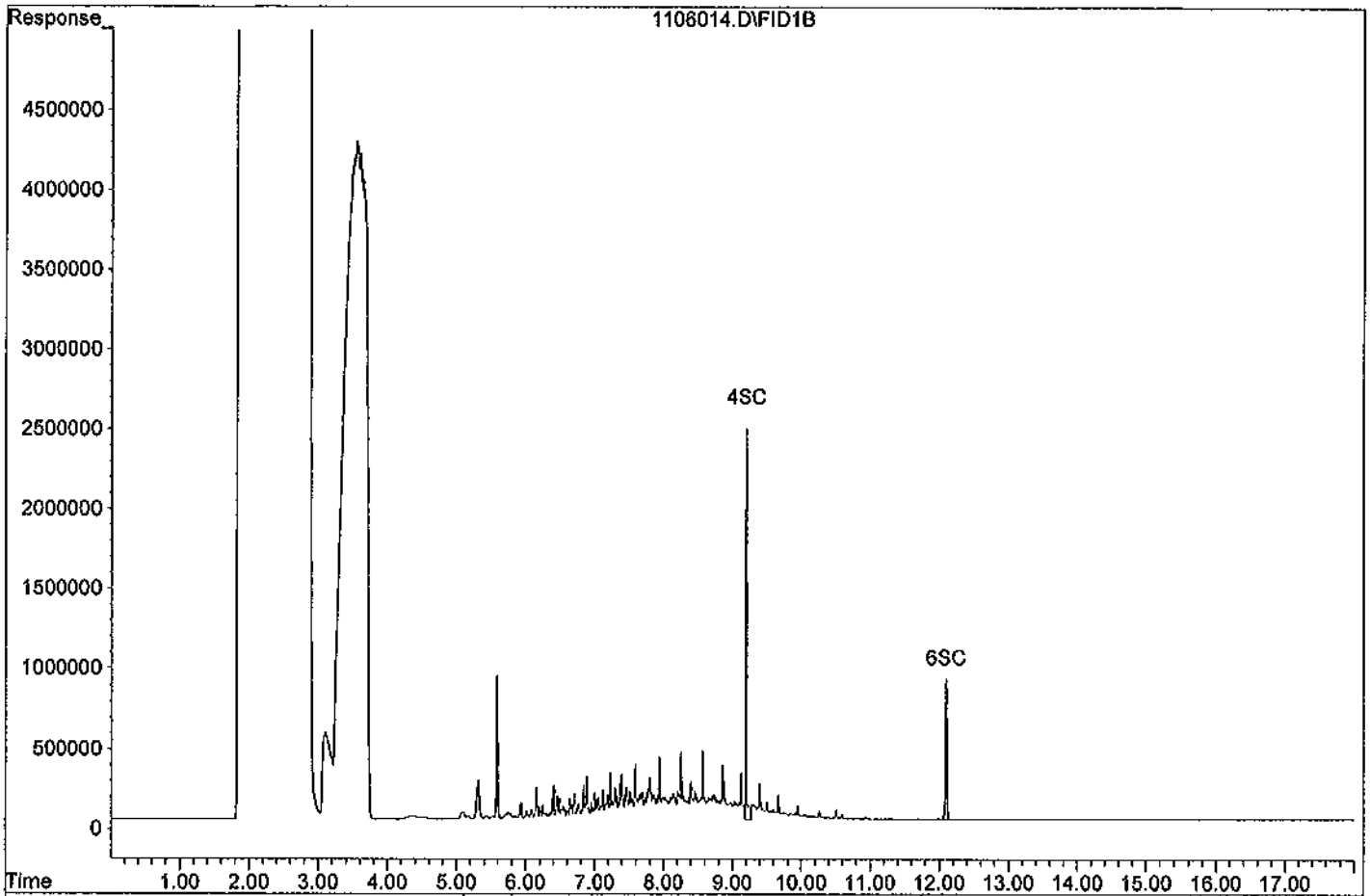
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	19333669	107.631 ppb
Surrogate Spike 145.631		Recovery =	73.91%
6) SC Octacosane(S)	12.10	12570361	131.129 ppb
Surrogate Spike 145.631		Recovery =	90.04%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	243258357	1402.635 ppb
2) HBTM Motor Oil (C18-C36)	12.25	67181515	899.542 ppb



Quantitation Report

Data File: G:\APOLLO\DATA\111106\1106014.D  
Sample : AY49334W35 MS-1 5/1030



Data File : G:\APOLLO\DATA\111106\1106015.D Vial: 15  
 Acq On : 11-6-11 21:17:05 Operator: LAC  
 Sample : AY49334W36 MSD-1 5/1030 Inst : Apollo  
 Misc : Water Multiplr: 4.85  
 IntFile : events.e  
 Quant Time: Nov 7 9:50 2011 Quant Results File: TPH1028.RES

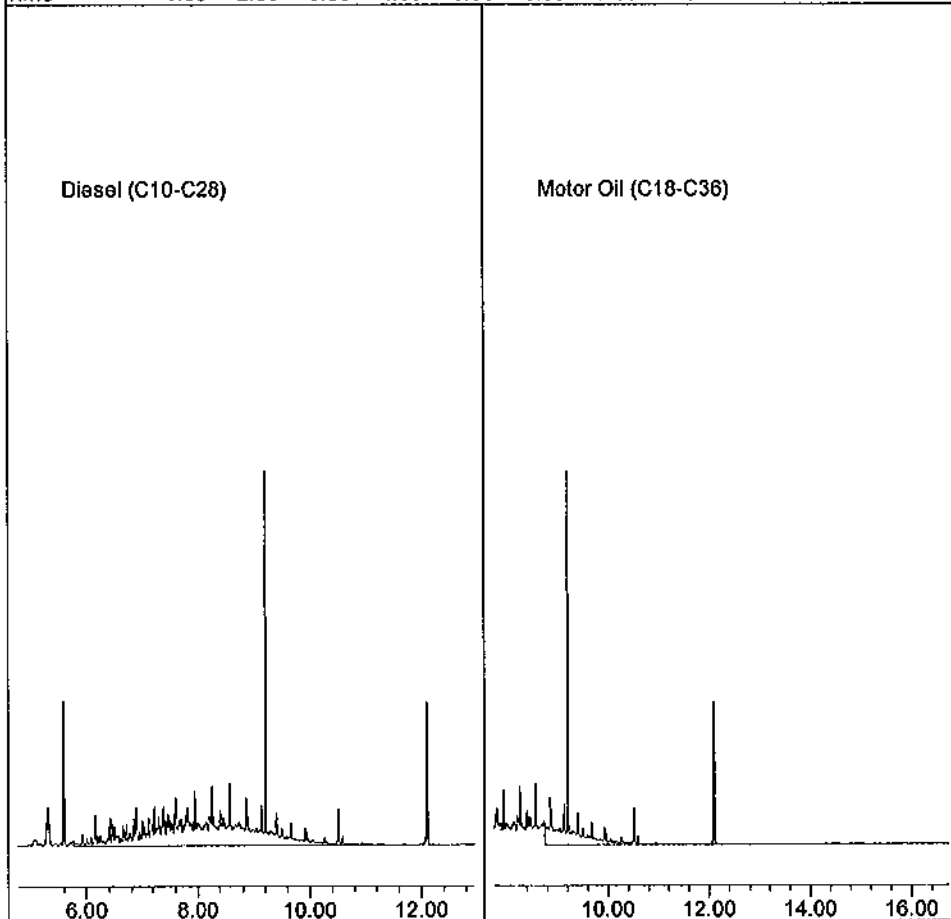
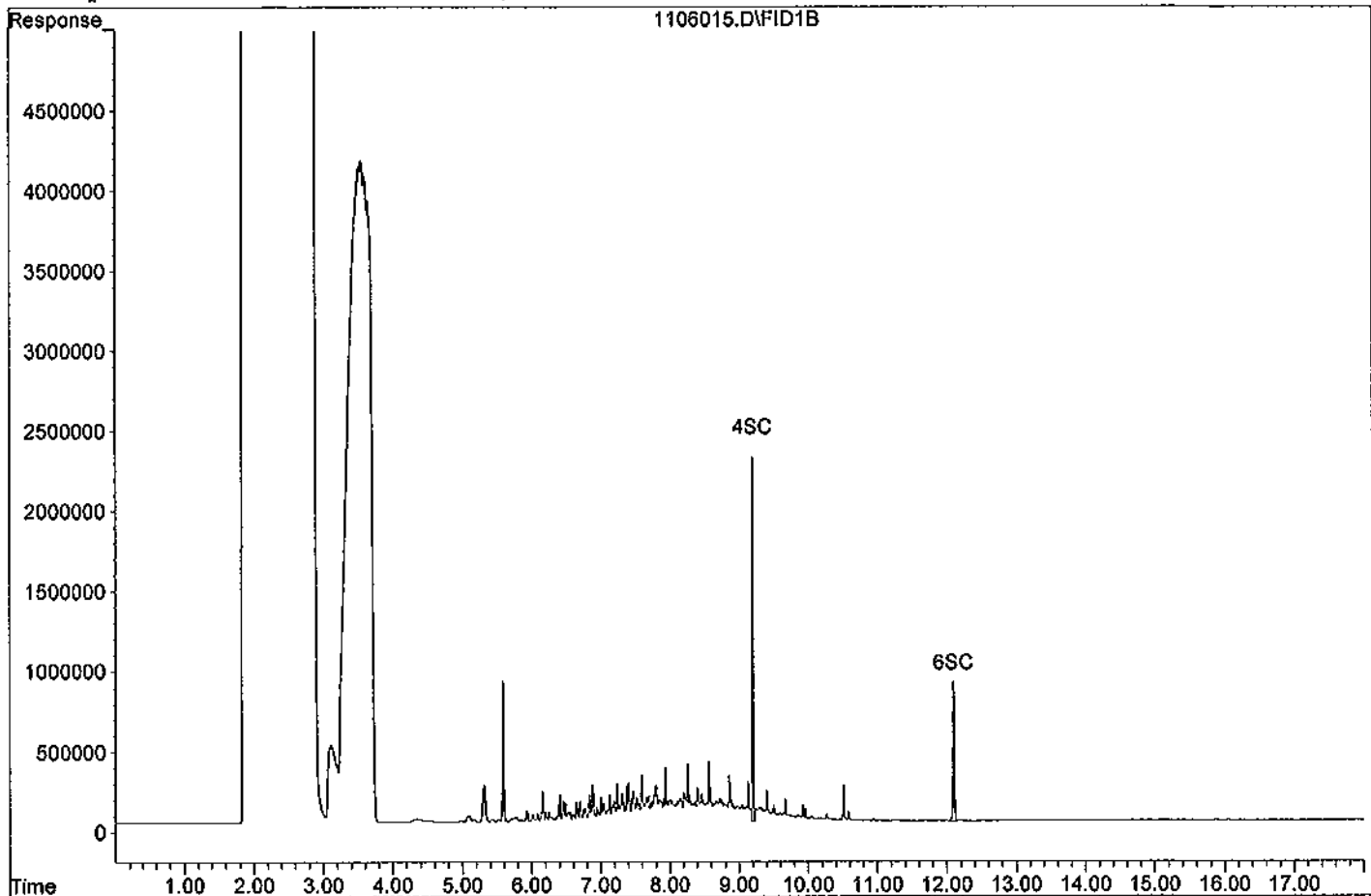
Method : G:\APOLLO\DATA\111028\TPH1028.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Mon Oct 31 10:02:11 2011  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
4) SC Ortho-Terphenyl(S)	9.21	16036435	89.275 ppb
Surrogate Spike 145.631		Recovery =	61.30%
6) SC Octacosane(S)	12.10	11966186	124.827 ppb
Surrogate Spike 145.631		Recovery =	85.71%
Target Compounds			
1) HATM Diesel (C10-C28)	8.86	230106893	1326.804 ppb
2) HBTM Motor Oil (C18-C36)	12.25	67186331	899.607 ppb

Data File: G:\APOLLO\DATA\111106\1106015.D

Sample : AY49334W36 MSD-1 5/1030



STANDARD

INITIAL CONC SOURCE DATE ALIQUOT VOLUME FINAL VOLUME FINAL CONC SOLVENT LOT # 029

MOTOR OIL SPIKE

MOTOR OIL 5000mg/ml 02S1 200ml 50ml 2000mg/ml MC #0701118 8/5/11

**02si** smart solutions  
Motor Oil Composite, 50,000 mg/L, 1 ml  
116390-02 Storage: <= -10 Degrees C  
Made in USA Lot No: 161898 Solvent: Methylene Chloride  
Exp: 7/23/2013  
Date Op: MOTOR OIL COMPOSITE  
Lot #: 161898 - 28613  
Rec: 4/14/11 MFR exp. 07/23/13

**02si** smart solutions  
Motor Oil Composite, 50,000 mg/L, 1 ml  
116390-02 Storage: <= -10 Degrees C  
Made in USA Lot No: 161898 Solvent: Methylene Chloride  
Exp: 7/23/2013  
Date Op: MOTOR OIL COMPOSITE  
Lot #: 161898 - 28614  
Rec: 4/14/11 MFR exp. 07/23/13

EX:  
11/5/14

OCL/OP WATER SURROGATE

DAC 5000mg/ml 0281 30ml 100ml 1.5mg/ml ACETONE #011011C 8/5/11

**02si** smart solutions  
Pesticide Surrogate Solution, 5,000 mg/L, 1 ml  
Cat. No: 130070-02 Exp: 12/19/2012  
Lot No: 154164 Storage: <= Ambient  
-27593 Solvent: Tol.:Hex. 1:1  
Not for Human Consumption For Research Use Only  
Made in USA Date Opened: 8/5/11 EX: 8/5/12

DECA  
TBP 1000mg/ml 02S1 500ml 5mg/ml

**02si** smart solutions  
Tributyl- and Triphenylphosphate Solution, 1,000 mg/L, 1 ml  
Cat. No: 130161-02 Exp: 7/12/2012  
Lot No: 148444 Storage: <= -10 Degrees C  
-27667 Solvent: Acetone  
Phone: (843) 763-4884 Not for Human Consumption For Research Use Only  
Fax: (843) 766-9182 Made in USA Date Opened: 8/5/11 EX: 8/5/12

DAC 5000mg/ml 0281 400ml 100ml 20mg/ml ACETONE #011011C 8/5/11

CAT: 130070-02  
LOT: 154164-27593  
OP: 8/5/11 EX: 8/5/12

DECA  
TBP 1000mg/ml 02S1 500ml 5mg/ml

CAT: 130161-02  
LOT: 148444-27667  
OP: 8/5/11  
EX: 7/12/12

STANDARD INITIAL CONC SOURCE DATE ALIQUOT VOLUME FINAL CONC FINAL CONC SOLVENT LOT# 033

THC SURROGATE (\* GAVE TO EXTRACTION)

OTERAPENYL 600µg/ml 02S1 N/A 25ml 600µg/ml N/A 8/8/11  
 OCTACANE CAT: 110316-05  
 LOT: 170258-29333  
 OP: 8/8/11  
 EX: 8/8/12

THC SURROGATE

OTERAPENYL 600µg/ml 02S1 N/A 25ml 600µg/ml N/A 8/8/11  
 OCTACANE CAT: 110316-05  
 LOT: 176405-29334  
 THRU  
 176405-29337  
 OP: 8/8/11  
 EX: 8/8/12

OCL Degradation Check

DDT 100µg/ml 02S1 250ml 50ml 0.5µg/ml Hexane #082610B 8/11/11  
 DDD CAT: 130109-01  
 DDE OC Pesticide Degradation Check  
 LOT: Lot #: 176400-29311  
 Rec: 8/8/11 MFR exp. 07/29/14  
 ENDREN OP: 8/11/12  
 FENDIN KETONE EX: 8/11/12  
 MORINE ALDEHYDE

OCL STOCK

VARIOUS 100µg/ml 02S1 100µl 10µl 10µg/ml Hexane #082610B 8/11/11  
 ANALYTES  
 Organochlorine Pesticide Solution 20, 100 mg/L, 1ml  
 Lot #: 176673-29347  
 Rec: 8/9/11 MFR exp. 08/02/14  
 OP: 8/11/11  
 EX: 8/11/12

STANDARD  
052

INITIAL  
CONC

SOURCE  
DATE

ALIQUOT

FINAL  
VOLUME

FINAL  
CONC

SOLVENT  
LOT #

DATE /  
INITIALS

DIESEL STANDARD

DIESEL  
FUEL #2

50.000ml

0251

1000ml

50ML

1000ml

MC

Ⓟ

Diesel Fuel #2 Composite,  
50,000 mg/L, 1 ml

111598-83

Lot # Storage Expiry  
167768 -5-10 Degree C 2/15/15

Soln: Methylene Chloride

Diesel Fuel #2 Composite OP: 9/1/11

Lot #: 167768 - 28178 EX: 9/1/12

Rec: 1/20/11 MFR exp. 02/15/15

# 051711B

9/1/11  
EX:  
3/1/12

DITRACOSANE  
D-TERPENTENE

1000ml

0251

4170ml

500ml

CAT: 110316-05

LOT: 176405-29337

OP: 9/1/11

EX: 9/1/12

MOTOR OIL STANDARD

MOTOR OIL

50.000ml

0251

1000ml

50ML

1000ml

MC

Ⓟ

Motor Oil Composite, 50,000 mg/L, 1 ml

0251 116390-02

Storage: -5-10 Degree C

Solvent: Methylene Chloride

Lot No: 161898

Exp: 7/23/13

Motor oil composite

Lot #: 161898 - 28615

Rec: 4/14/11 MFR exp. 07/23/13

OP: 9/1/11  
EX: 9/1/12

# 051711B

9/1/11  
EX:  
3/1/12

DIESEL 2ND SOURCE

DIESEL  
FUEL #2

50.000ml

0251

1000ml

50ML

1000ml

MC

Ⓟ

Diesel Fuel #2 Composite,  
50,000 mg/L, 1 ml

111598-83

Lot # Storage Expiry  
167769 -5-10 Degree C 2/15/15

Soln: Methylene Chloride

Diesel Fuel #2 Composite OP: 9/1/11

Lot #: 167769 - 28397 EX: 9/1/12

Rec: 8/28/11 MFR exp. 02/15/15

# 051711B

9/1/11  
EX:  
3/1/12

STANDARD

INITIAL CONC

SOURCE DATE

ALIQUOT

FINAL VOLUME

FINAL CONC

SOLVENT / LOT#

DATE

KEROSENE/JP5 STD

STD	INITIAL CONC	SOURCE DATE	ALIQUOT	FINAL VOL.	FINAL CONC	SOLVENT / LOT#
JP5/ KEROSENE	50,000 µg/ml	O2SI CAT #010597-S50 LOT# 159381 OP: 4/18/11 EX: 4/18/12	600 µL	25 mL	1000 µg/ml	MC LOT# 032811C

LAC  
10/18/11  
EX:  
4/18/12

KEROSENE/JP5 CURVE

STANDARD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
Kerosene	1000		10/18/2011	4/18/2012	50	100	400	600	800	1000
JP5	MC	032811C			950	900	600	400	200	NA
					Final VOL.	1000	1000	1000	1000	1000

LAC  
10/18/11  
EX:  
4/18/12

DIESEL GCV 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
		9/1/2011	3/1/2012			051711B

LAC  
10/18/11  
EX:  
3/1/12

MOTOR OIL GCV 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
		9/1/2011	3/1/2012			051711B

PRODIAMINE STANDARD

diamine 1000µg/ml O2SI 10ml 10ml 1µg/ml ACETONE  
 CAT: 031919-02 # 01101C  
 LOT: 161445-26939  
 OP: 10/19/11  
 EX: 7/1/12

LAC  
10/19/11  
EX:  
4/19/12

Prodlamine Curve

PREP DATE:	10/19/2011										
EXP:	4/19/2012										
SUPPLIER	ID#	µg/mL	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
Prodlamine		1		10/19/2011	4/19/2012	5	50	100	150	200	250
HEXANE			082610B			995	950	900	850	800	750
						Final VOL.	3000	1000	1000	1000	1000

LAC  
10/19/11  
EX:  
4/19/12

STANDARD  
082

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

DIESEL SPIKE

DIESEL FUEL #2	50000µL	02SI	200µL	50ML	2000µg/L	MC	
	OP: 10/21/11	Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml	OP: 10/21/11	Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml		# 51204	10/21/11
	Lot # 179835	Storage: 5-30 Degrees C	Lot # 179835	Storage: 5-30 Degrees C			EX: 1/21/12
	Lot # 011593-03	Expiry: 11/8/15	Lot # 011593-03	Expiry: 11/8/15			
	Lot #: 179835 - 29841	Rec: 10/13/11 MFR exp. 11/08/15	Lot #: 179835 - 29842	Rec: 10/13/11 MFR exp. 11/08/15			

508 AMPULE

VARIOUS ANALYTES	100/2000µL	02SI	N/A	1ml	100/2000µg/L	N/A	
		OCC Pesticide Standard, 100/2000 mg/L, 1 ml					10/21/11
	02si	Cat. No: 130200-02	Exp: 2/21/2013				EX: 10/21/12
		Lot No: 156275	Storage: <- 6 Degrees C				
		OCC Pesticide 100/2000mg/L	Solvent Tel. Hex. 1:1				
		Lot #: 156276 - 28160	For Research Use Only				
		Rec: 2/23/10 MFR exp: 02/21/13	ened: 10/21/11	EX: 10/21/12			

508 CALIBRATION CURVE

Compound	Conc. In Mix	Conc. Of Stock	Aliquot	stock source	Final Vol.	Solvent Lot#
alachlor	(1) 0.005/0.1	5/100ug/ml	10ul	508 stock	10 mL	Hexane
benfluralin	(2) 0.03/0.6	5/100ug/ml	80ul	prep: 4/8/11	10 mL	# 082610B
captan	(3) 0.05/1.0	5/100ug/ml	250ul	Exp: 1/25/12	25 mL	
carbofenthothon	(4) 0.1/2.0	5/100ug/ml	200ul		10 mL	
chlorothalonil	(5) 0.15/3.0	5/100ug/ml	300ul		10 mL	
chlorothal(dacihal)	(6) 0.2/4.0	5/100ug/ml	400ul		10 mL	
2,6 dichlorobenzonitrile(dicofol)						
kellthane						
nitrofen						
oxadiazon						
oxyfluorfen						
propachlor						
op DDD						
op DDE						
op DDT						
bis(2-ethylhexyl)phthalate						

508 2ND SRC

Compound	Init. Conc.	Stock Src	Aliquot	Final Vol	Final Conc.	Solvent Lot#
See Above	5/100 ug/ml	508 2nd Src Stock	250 uL	25 mL	0.05/1 ug/ml	Hexane
		Prep: 10/21/11				082610B
		Exp: 4/8/12				



STANDARD  
088

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

*LAC 10/28/11*

TCH SURROGATE CURVE										
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC SURR	50	176405	10/17/2011	4/17/2012	50	100	400	600	800	1000
MC		51204			950	900	800	400	200	NA
					Final VOL.	1000	1000	1,000	1000	1000

*LAC*  
*10/28/11*  
*EX: 4/17/12*

DIESEL CURVE										
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
DIESEL	1000		10/28/2011	4/28/2012	10	100	400	600	800	1000
MC		51204			950	900	800	400	200	NA
					Final VOL.	1000	1000	1,000	1000	1000

*LAC*  
*10/28/11*  
*EX: 4/28/12*

MOTOR OIL CURVE										
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		10/26/2011	4/26/2012	50	100	400	600	800	1000
MC		51204			950	900	800	400	200	NA
					Final VOL.	1000	1000	1,000	1000	1000

*LAC*  
*10/28/11*  
*EX: 3/1/12*

DIESEL 2ND SOURCE						
STD	Init. Conc	Source	Aliquot	Final Vol.	Final Conc.	Solvent
DIESEL 2ND SRC	1000 µg/ml	O28I	400 µL	1 mL	400 µg/mL	MC
		Prep:	9/1/2011			51204
		Exp:	3/1/2012			

*LAC 10/28/11*

KEROSENE/JP6 CURVE										
STANDARD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
Kerosene	1000		10/18/2011	4/18/2012	50	100	400	600	800	1000
JP6		51204			950	900	800	400	200	NA
					Final VOL.	1000	1000	1000	1000	1000

*LAC*  
*10/28/11*  
*EX: 4/18/12*

*11/1/11*

PREP DATE:	11/1/2011					
OP 2ND SOURCE						
EXP:	4/19/2012					
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL
	OP 2ND SRC	5		10/19/2011	4/19/2012	500
VWR	HEXANE		0826108			500
					Final VOL.	1000

*11/1/11*  
*EX: 4/19/12*

PREP DATE:	11/1/2011										
OPF CURVE											
EXP:	4/13/2012										
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
	OPF STD	5		10/19/2011	4/13/2012	2	10	50	100	500	1000
	Hexane		0826108			950	950	950	800	500	300
					Final VOL.	1000	1000	1000	1000	1000	1000

*11/1/11*  
*EX: 4/13/12*

PREP DATE:	11/1/2011									
OPC CURVE										
EXP:	3/15/2012									
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL
	OPC STD	5		9/15/2011	3/15/2012	10	50	200	500	1000
	Hexane		0826108			950	950	800	300	NA
					Final VOL.	1000	1000	1000	1000	1000

*11/1/11*  
*EX: 3/15/12*

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

DIESEL STANDARD

DIESEL FUEL #2 50,000mg/L 02SI 1000ml 50ml 1000mg/L MC # 51204 10/26/11  
 ex: 4/26/12

Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml  
 01199-83  
 Lot# Storage Expiry  
 167768 2-30 Degrees C 2/15/15  
 Sol: Methylene Chloride  
 Diesel Fuel #2 Composite OP: 10/26/11  
 Lot #: 167768 - 29408 EX: 10/26/12  
 Rec: 8/28/11 MFR exp. 02/15/15

TRIPHENYL NIOSANE 1000mg/L 02SI 4170ml 50mg/L # 51204 10/26/11  
 ex: 10/10/12

CAT: 1102316-05  
 LOT: 176405-29338  
 OP: 10/10/11  
 EX: 10/10/12

MOTOR OIL STANDARD

MOTOR OIL 50000mg/L 02SI 1000ml 50ml 1000mg/L MC # 51204 10/26/11  
 ex: 4/26/12

Motor Oil Composite, 50,000 mg/L, 1 ml  
 02SI 116390-02  
 Storage: 4-10 Degrees C  
 Lot No: 161898 Solvent: Methylene Chloride  
 Exp: 7/23/2013  
 Motor oil composite  
 Lot #: 161898 - 28616  
 Rec: 4/14/11 MFR exp. 07/23/13

PAC ECO 2ND SOURCE					
DIAZINON	5ug/ml	200ug/ml	250ul	02SI	10ml
DISULFOTON		200	CAT:	130168-01	HEXANE
MALATHION		200	LOT:	178204-28481	LOT#
MOLINATE		200	OP:	10/26/2011	082610B
PHORATE		200	EXP:	3/11/2012	
THIOBENCARB		200			
TRIBUTYL PHOSPHATE		200			
DEMETON		200			
DISCHLORVOS		200			
EPTC		200			
PARATHION		200			
AZINPHOS METHYL		200			
CHLORPYRIFOS		200			
DIMETHOATE		200			
METHIDATHION		200			
METHYL PARATHION		200			
ATRAZINE		200			
CYANIZINE		200			
TRIPHENYL PHOSPHATE		200			
PENDIMETHALIN (PROWL)		200		150	
TRIFLURALIN		200			
SIMAZINE		200			

10/26/11  
 ex:  
 3/11/12

10/26/11

STANDARD

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

11/21/11

PREP:	11/7/2011											
PAC ECO CURVE												
EXP:	2/25/2012											
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	PAC ECO CAL STD	5		10/26/2011	2/25/2012	2	10	50	200	500	700	1000
VAR	HEXANE		010711A			998	990	950	800	500	300	N/A
					Final VOL.	1000	1000	1000	1000	1000	1000	1000
PAC ECO 2ND SRC												
Prep:	11/7/11	Exp:	12/17/11	5	010711A	10/28/2011	12/17/2011	500/1000				

11/21/11  
ex: 2/25/12  
11/21/11  
ex: 12/17/11

TCH SURROGATE CURVE												
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL	µL
THC SURR	50	178405	10/17/2011	4/17/2012	50	100	400	600	800	1000		
MC		51204			950	800	600	400	200	NA		
					Final VOL.	1000	1000	1,000	1000	1000	1000	1000

11/8/11  
ex: 4/17/12

DIESEL CURVE												
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL	µL
DIESEL	1000		10/26/2011	4/28/2012	10	100	400	600	800	1000		
MC		51204			990	800	600	400	200	NA		
					Final VOL.	1000	1000	1,000	1000	1000	1000	1000

11/8/11  
ex: 4/28/12

MOTOR OIL CURVE												
STD	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		10/26/2011	4/28/2012	50	100	400	600	800	1000		
MC		51204			950	800	600	400	200	NA		
					Final VOL.	1000	1000	1,000	1000	1000	1000	1000

11/8/11  
ex: 4/28/12

DIESEL 2ND SOURCE						
STD	Init. Conc	Source	Aliquot	Final Vol.	Final Conc.	Solvent
DIESEL 2ND SRC	1000ug/ml	O2S1	400µL	1 mL	400 µg/mL	MC
	Prep:	9/1/2011				51204
	Exp:	3/1/2012				

11/8/11  
ex: 3/1/12

PREP DATE:	11/9/2011											
TERBACIL CURVE												
EXP:	3/13/2012											
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	TERBACIL STD	5		9/13/2011	3/13/2012	10	50	200	500	700	1000	
VAR	HEXANE		082610B			950	920	900	800	500	300	
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

11/9/11  
ex: 3/13/12

PREP DATE:	11/9/2011											
OP 2ND SOURCE												
EXP:	4/19/2012											
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL						
	OP 2ND SRC	5		10/19/2011	4/19/2012	500						
VAR	HEXANE		082610B			500						
					Final VOL.	1000						

11/9/11  
ex: 4/19/12

PREP DATE:	11/9/2011											
OPF CURVE												
EXP:	2/7/2012											
SUPPLIER	ID#	[ug/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL	µL
	OPF STD	5		11/3/2011	2/7/2012	2	10	50	200	500	700	1000
	Hexane		082610B			998	990	950	800	500	300	NA
					Final VOL.	1000	1000	1000	1000	1000	1000	1000

11/9/11  
ex: 2/7/12

STANDARD

INITIAL  
CONCSOURCE  
DATE

ALIQUOT

FINAL  
VOLUMEFINAL  
CONCSOLVENT,  
LOT#DATE/  
INITIALSPCB SOIL SPIKE

AR 1260

1000µg/ml

0251

1250ml

25ml

50µg/ml

ACETONE

11/10/11

AR 1016

CAT: 130011-03

#

EX: 2/10/12

LOT: 162607-27215

OP: 11/10/11

EX: 11/10/12

AND

LOT: 152374-27210

OP: 3/2/11

EX: 3/2/12

PCB WATER SPIKE

AR 1016

1000µg/ml

0251

125ml

25ml

5µg/ml

ACETONE

11/10/11

AR 1260

CAT: 130011-03

#

EX: 2/10/12

LOT: 162607-27214

OP: 8/2/11

EX: 8/2/12

HERB 100/1000 (LYL 3) CCV

VARIOUS

VARIOUS

HERB STD.

100µl

1ml

100µg/ml

MTBE

11/10/11

SEE PL 075

PREP: 10/11/11

#

EX: 4/11/12

EX: 4/11/12

THC SURROGATE CAL. STD.

D-TETRAHAIL

1000µg/ml

0251

834ml

10ml

50µg/ml

MC

11/15/11

DETARUSANE

CAT: 110316-05

#

EX: 5/15/12

LOT: 176405-29342

OP: 10/10/11

EX: 10/10/12

LAG 11/15/11

ZAC

11/15/11

EX: 5/15/12

## THC SURROGATE CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
THC SURR	50	176405	11/15/2011	5/15/2012	50	100	400	800	800	1000
MC		51204			950	900	800	400	200	NA
				Final VOL.	1000	1000	1,000	1000	1000	1000

STANDARD

INITIAL  
CONC

SOURCE  
DATE

ALIQOT

FINAL  
VOLUME

FINAL  
CONC

SOLVENT  
LOT #

DATE  
105IALS

*are 4/2012*

*lac  
4/24/11  
exp  
4/24/11*

DIESEL CCV 400ug/ml

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
DIESEL STD.	1000UG/ML	O2SI	400µL	1mL	400 µg/ml	MC
		10/26/11	04/26/12			51204

MOTOR OIL CCV 400UG/ML

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQOT	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

STANDARD

INITIAL CONC

SOURCE DATE

ALIQUOT

FINAL VOLUME

FINAL CONC

SOLVENT / LOT #

DATE / INITIALS

OIL/OP WATER SURROGATE

DECA 5000 µg/ml O2S1 30ml 100ML 1.5 µg/ml ACETONE  
 TCMX CAT: 130070-02 # 01101C 11/2/11  
 DPC LOT: 154164-29416 EX: 2/2/12  
 OP: 11/2/11  
 EX: 11/2/12

TBP 1000 µg/ml O2S1 500ml 5 µg/ml  
 TPP

TriButyl- and Triphenylphosphate Solution,  
 1,000 mg/L, 1 ml  
 Lot# 130161-02  
 Lot# 164817 Storage Expiry  
 5-10 Degree C 10/19/13  
 Behr Acetone  
 Tributyl and triphenyl phosphate  
 Lot # 164817 - 27660  
 Rec: 10/20/10 MFR exp. 10/19/13

OIL/OP WATER SURROGATE

DECA 5000 µg/ml O2S1 30ml 100ML 1.5 µg/ml ACETONE  
 TCMX CAT: 130070-02 # 01101C 11/3/11  
 DPC LOT: 154164-29416 EX: 2/3/12  
 OP: 11/2/11  
 EX: 11/2/12

TBP 1000 µg/ml O2S1 500ml 5 µg/ml  
 TPP CAT: 130161-02

LOT: 164817-27660  
 OP: 11/2/11  
 EX: 11/2/12

\* WAS NOT RECORDED ON 11/2/11

DIESEL CCV 400 µg/ml

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
DIESEL STD.	1000UG/ML	O2S1	400 µL	1mL	400 µg/ml	MC
		10/26/2011	4/26/2012			51204

MOTOR OIL CCV 400UG/ML

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
MOTOR OIL STD	1000UG/ML	O2S1	400 µL	1mL	400 µg/ml	MC
		10/26/2011	4/26/2012			51204

KEROSENE CCV 400 UG/ML

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT /LOT#
KEROSENE NP5 STD	1000UG/ML	O2S1	400 µL	1mL	400 UG/ML	MC
		10/18/2011	4/18/2012			010611B

11/2/11  
 EX: 4/26/12  
 11/2/11  
 EX: 4/18/12

# Organic Extraction Worksheet

<b>Method</b>	THC Separatory Funnel Extraction 3510C	<b>Extraction Set</b>	111031A	<b>Extraction Method</b>	SBP011	<b>Units</b>	mL
<b>Spiked ID 1</b>	Diesel Spike 10/21/11 EX 1/21/12	<b>Surrogate ID 1</b>	THC Surrogate 176405-29339				
<b>Spiked ID 2</b>	Motor Oil Spike 8/5/11 EX 11/5/11	<b>Surrogate ID 2</b>					
<b>Spiked ID 3</b>		<b>Surrogate ID 3</b>					
<b>Spiked ID 4</b>		<b>Surrogate ID 4</b>					
<b>Spiked ID 5</b>		<b>Surrogate ID 5</b>					
<b>Spiked ID 6</b>		<b>Sufficient Vol for Matrix QC:</b>		YES			
<b>Spiked ID 7</b>		<b>Ext. Start Time:</b>					
<b>Spiked ID 8</b>		<b>Ext. End Time:</b>					
		<b>GC Requires Extract By:</b>		11/02/11 0:00			
		<b>pH1</b>		<b>Water Bath Temp Criteria</b>		80 °C	
		<b>pH2</b>					
		<b>pH3</b>					

**Spiked By:** HW

**Date:** 10/31/2011

**Witnessed By:** DL

**Date:** 10/31/2011

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 111031A BIK		1		0.250	1	1000	5	7	10/31/11 15:00	
					equip	E-WB5				
2 111031A LCS-1		1	1	0.250	1	1000	5	7	10/31/11 15:00	
					equip	E-WB5				
3 111031A LCS-2		1	2	0.250	1	1000	5	7	10/31/11 15:00	
					equip	E-WB5				
4 AY49327	AY49327W05			0.250	1	1040	5	7	10/31/11 15:00	66103-1 WBEK RUSH -- Amber Liter
					equip	E-WB5				
5 AY49328	AY49328W05			0.250	1	1000	5	7	10/31/11 15:00	66103-1 WBEK RUSH -- Amber Liter
					equip	E-WB5				
6 AY49329	AY49329W05			0.250	1	1010	5	7	10/31/11 15:00	66103-1 WBEK RUSH -- Amber Liter
					equip	E-WB5				
7 AY49330	AY49330W04			0.250	1	1040	5	7	10/31/11 15:00	66103-1 WBEK RUSH -- Amber Liter
					equip	E-WB5				
8 AY49331	AY49331W04			0.250	1	1030	5	7	10/31/11 15:00	66103-1 WBEK RUSH -- Amber Liter
					equip	E-WB5				
9 AY49333	AY49333W09			0.250	1	1030	5	7	10/31/11 15:00	66102-2 WBEK RUSH -- Amber Liter
					equip	E-WB5				
10 AY49334 MS-1	AY49334W35	1	1	0.250	1	1030	5	7	10/31/11 15:00	66102-2 WBEK RUSH -- Amber Liter
					equip	E-WB6				
11 AY49334 MSD-1	AY49334W36	1	1	0.250	1	1030	5	7	10/31/11 15:00	66102-2 WBEK RUSH -- Amber Liter
					equip	E-WB6				
12 AY49334	AY49334W32			0.250	1	1030	5	7	10/31/11 15:00	66102-2 WBEK RUSH -- Amber Liter
					equip	E-WB5				
13 AY49336	AY49336W09			0.250	1	1050	5	7	10/31/11 15:00	66102-2 WBEK RUSH -- Amber Liter
					equip	E-WB6				

<b>Solvent and Lot#</b>	
MC	BMD 51204
Na2SO4	3581C501

<b>Extraction COC Transfer</b>	
<b>Extraction lab employee Initials</b>	HW
<b>GC analyst's initials</b>	<i>[Signature]</i>
<b>Date</b>	11/2/11
<b>Time</b>	11:00
<b>Refrigerator</b>	HWB MCA

<b>Technician's Initials</b>	
<b>Scanned By</b>	HW
<b>Sample Preparation</b>	HW
<b>Extraction Concentration</b>	HW/CC/DL
<b>Modified</b>	10/31/2011 2:12:11 PM

**Reviewed By:** HW      155      **Date:** 11/1/2011

# Organic Extraction Worksheet

<b>Method</b>	THC Separatory Funnel Extraction 3510C	<b>Extraction Set</b>	111031A	<b>Extraction Method</b>	SBP011	<b>Units</b>	mL
<b>Spiked ID 1</b>	Diesel Spike 10/21/11 EX 1/21/12	<b>Surrogate ID 1</b>	THC Surrogate 176405-29339				
<b>Spiked ID 2</b>	Motor Oil Spike 8/5/11 EX 11/5/11	<b>Surrogate ID 2</b>					
<b>Spiked ID 3</b>		<b>Surrogate ID 3</b>					
<b>Spiked ID 4</b>		<b>Surrogate ID 4</b>					
<b>Spiked ID 5</b>		<b>Surrogate ID 5</b>					
<b>Spiked ID 6</b>		<b>Sufficient Vol for Matrix QC:</b>		YES			
<b>Spiked ID 7</b>		<b>Ext. Start Time:</b>					
<b>Spiked ID 8</b>		<b>Ext. End Time:</b>					
		<b>GC Requires Extract By:</b>		11/02/11 0:00			
		<b>pH1</b>		<b>Water Bath Temp Criteria</b>		80 °C	
		<b>pH2</b>					
		<b>pH3</b>					

Spiked By: HW

Date 10/31/2011

Witnessed By: DL

Date 10/31/2011

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
14 AY49481	AY49481W10			0.250	1	1040	5	7	10/31/11 15:00	66116-2 WEEK RUSH -- Amber Liter
						equip	E-WB6			
15 AY49482	AY49482W10			0.250	1	1040	5	7	10/31/11 15:00	66116-2 WEEK RUSH -- Amber Liter
						equip	E-WB6			

HW 11/1/11

Solvent and Lot#	
MC	BMD 51204
Na2SO4	3581C501

Extraction COC Transfer	
<b>Extraction lab employee Initials</b>	HW
<b>GC analyst's initials</b>	<i>[Signature]</i>
<b>Date</b>	11/2/11
<b>Time</b>	11:20
<b>Refrigerator</b>	<i>[Signature]</i>

Technician's Initials	
<b>Scanned By</b>	HW
<b>Sample Preparation</b>	HW
<b>Extraction</b>	HW/CC/DL
<b>Concentration</b>	<i>[Signature]</i>
<b>Modified</b>	10/31/2011 2:12:11 PM

Reviewed By: HW 156 Date 11/1/2011



## Injection Log

Directory: G:\APOLLO\DATA\111028\111106\111108\111115\111129

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	3	1028003.D	1	DIESEL 10/1000 10/28/11	Mix(A)	10-28-11 9:47:18
2	4	1028004.D	1	DIESEL 100/1000	Mix(A)	10-28-11 10:11:19
3	5	1028005.D	1	DIESEL 400/1000	Mix(A)	10-28-11 10:35:26
4	6	1028006.D	1	DIESEL 600/1000	Mix(A)	10-28-11 10:59:35
5	7	1028007.D	1	DIESEL 800/1000	Mix(A)	10-28-11 11:23:49
6	8	1028008.D	1	DIESEL 1000/1000	Mix(A)	10-28-11 11:48:05
7	9	1028009.D	1	MOTOR OIL 50/1000 10/28/11	Mix(B)	10-28-11 12:12:27
8	10	1028010.D	1	MOTOR OIL 100/1000	Mix(B)	10-28-11 12:36:20
9	11	1028011.D	1	MOTOR OIL 400/1000	Mix(B)	10-28-11 13:00:16
10	12	1028012.D	1	MOTOR OIL 600/1000	Mix(B)	10-28-11 13:24:39
11	13	1028013.D	1	MOTOR OIL 800/1000	Mix(B)	10-28-11 13:48:43
12	14	1028014.D	1	MOTOR OIL 1000/1000	Mix(B)	10-28-11 14:13:14
13	15	1028015.D	1	DIESEL 2ND SRC 10/28/11	Mix(A)	10-28-11 14:37:14
14	16	1028016.D	1	THC SURR 10/1000 10/28/11	Mix(C)	10-28-11 15:01:44
15	17	1028017.D	1	THC SURR 100/1000	Mix(C)	10-28-11 15:25:58
16	18	1028018.D	1	THC SURR 400/1000	Mix(C)	10-28-11 15:50:20
17	19	1028019.D	1	THC SURR 600/1000	Mix(C)	10-28-11 16:14:52
18	20	1028020.D	1	THC SURR 800/1000	Mix(C)	10-28-11 16:38:57
19	21	1028021.D	1	THC SURR 1000/1000	Mix(C)	10-28-11 17:03:06
20	3	1106003.D	1	DIESEL 400/1000 10/28/11	Mix(A)	11-6-11 16:34:49
21	5	1106005.D	5	111031A BLK 5/1000	Water	11-6-11 17:22:09
22	13	1106013.D	4.85437	AY49333W09 5/1030	Water	11-6-11 20:30:17
23	14	1106014.D	4.85437	AY49334W35 MS-1 5/1030	Water	11-6-11 20:53:41
24	15	1106015.D	4.85437	AY49334W36 MSD-1 5/1030	Water	11-6-11 21:17:05
25	16	1106016.D	4.85437	AY49334W32 5/1030	Water	11-6-11 21:40:27
26	17	1106017.D	1	DIESEL 400/1000 11/2/11	Mix(A)	11-6-11 22:03:47
27	19	1106019.D	4.7619	AY49336W09 5/1050	Water	11-6-11 22:50:22
28	27	1106027.D	1	DIESEL 400/1000 11/2/11	Mix(A)	11-7-11 1:56:08
29	5	1108005.D	1	DIESEL 100/1000	Mix(A)	11-8-11 15:50:59
30	6	1108006.D	1	DIESEL 400/1000	Mix(A)	11-8-11 16:14:36
31	7	1108007.D	1	DIESEL 600/1000	Mix(A)	11-8-11 16:38:14
32	8	1108008.D	1	DIESEL 800/1000	Mix(A)	11-8-11 17:01:53
33	9	1108009.D	1	DIESEL 1000/1000	Mix(A)	11-8-11 17:25:32
34	11	1108011.D	1	MOTOR OIL 50/1000 11/8/11	Mix(B)	11-8-11 18:12:45
35	12	1108012.D	1	MOTOR OIL 100/1000	Mix(B)	11-8-11 18:36:14
36	13	1108013.D	1	MOTOR OIL 400/1000	Mix(B)	11-8-11 18:59:47
37	14	1108014.D	1	MOTOR OIL 600/1000	Mix(B)	11-8-11 19:23:20
38	15	1108015.D	1	MOTOR OIL 800/1000	Mix(B)	11-8-11 19:46:53
39	16	1108016.D	1	MOTOR OIL 1000/1000	Mix(B)	11-8-11 20:10:21
40	69	1108069.D	1	DIESEL 10/1000 11/8/11	Mix(A)	11-9-11 17:18:58
41	70	1108070.D	1	DIESEL 400 2ND SRC 11/8/11	Mix(A)	11-9-11 17:42:38
42	21	1115021.D	1	THC SURR 10/1000 11/15/11	Mix(C)	11-15-11 18:21:35
43	22	1115022.D	1	THC SURR 100/1000	Mix(C)	11-15-11 18:45:31
44	23	1115023.D	1	THC SURR 400/1000	Mix(C)	11-15-11 19:09:25
45	24	1115024.D	1	THC SURR 600/1000	Mix(C)	11-15-11 19:33:17
46	25	1115025.D	1	THC SURR 800/1000	Mix(C)	11-15-11 19:57:06
47	26	1115026.D	1	THC SURR 1000/1000	Mix(C)	11-15-11 20:20:52
48	12	1129012.D	1	DIESEL 400/1000 11/29/11	Mix(A)	11-29-11 13:08:20
49	17	1129017.D	5	111031A LCS-1 5/1000	Water	11-29-11 18:45:15
50	24	1129024.D	1	DIESEL 400/1000 11/29/11	Mix(A)	11-29-11 21:29:15

**EPA METHOD 8270**  
**Polynuclear Aromatic Hydrocarbons**

**EPA METHOD 8270**  
**Polynuclear Aromatic Hydrocarbons**  
**QC Summary**

**Method Blank**  
**EPA 8270D SIM**

Blank Name/QCG: 111031W-49334 - 161019  
Batch ID: #SIMHC-111031A

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	10/31/11	11/05/11
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	SURROGATE: 2-FLUORBIPHENY	51.7	50-110			%	10/31/11	11/05/11
BLANK	SURROGATE: NITROBENZENE-	66.3	40-110			%	10/31/11	11/05/11
BLANK	SURROGATE: TERPHENYL-D14 (	54.5	50-135			%	10/31/11	11/05/11

Quant Method: SIM2.M  
Run #: 1105L028  
Instrument: Linus  
Sequence: L111027  
Initials: LF

GC SC-Blank-REG MDLs  
Printed: 11/09/11 3:58:52 PM

**Surrogate Recovery**

Lab Name: APPL, Inc.  
 Case No: 66102  
 Matrix: WATER

SDG No: 66102  
 Date Analyzed: 11/05/11  
 Instrument: Linus

APPL ID.	Client Sample No.	SURROGATE: 2-FLUORBIPHENYL (S)			SURROGATE: NITROBENZENE-D5 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
111031A-BLK	Blank	50-110	51.7		40-110	66.3	
111031A-LCS	Lab Control Spike	50-110	55.5		40-110	57.0	
AY49333	ES046	50-110	54.0		40-110	61.9	
AY49334-MS	Matrix Spike	50-110	53.6		40-110	59.3	
AY49334-MSD	Matrix SplkeD	50-110	55.7		40-110	53.1	
AY49334	ES047	50-110	53.4		40-110	65.4	
AY49336	ES049	50-110	65.0		40-110	64.4	

Comments: Batch: #SIMHC-111031A

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 66102

Case No: 66102

Date Analyzed: 11/05/11

Matrix: WATER

Instrument: Linus

---

APPL ID.	Client Sample No.	SURROGATE: TERPHENYL-D14 (S)					
		Limits	Result	Qualifier	Limits	Result	Qualifier
111031A-BLK	Blank	50-135	54.5				
111031A-LCS	Lab Control Spike	50-135	53.0				
AY49333	ES046	50-135	50.3				
AY49334-MS	Matrix Spike	50-135	50.7				
AY49334-MSD	Matrix SpikeD	50-135	61.9				
AY49334	ES047	50-135	61.4				
AY49336	ES049	50-135	51.9				

Comments: Batch: #SIMHC-111031A

# Laboratory Control Spike Recovery

## EPA 8270D SIM

APPL ID: 111031W-49334 LCS - 161019

Batch ID: #SIMHC-111031A

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1-METHYLNAPHTHALENE	4.00	2.25	56.3	45-105
2-METHYLNAPHTHALENE	4.00	2.26	56.5	45-105
ACENAPHTHENE	4.00	2.55	63.7	45-110
ACENAPHTHYLENE	4.00	2.39	59.8	50-105
ANTHRACENE	4.00	2.47	61.8	55-110
BENZO(A)ANTHRACENE	4.00	2.74	68.5	55-110
BENZO(A)PYRENE	4.00	2.48	62.0	55-110
BENZO(B)FLUORANTHENE	4.00	2.43	60.8	45-120
BENZO(GHI)PERYLENE	4.00	2.80	70.0	40-125
BENZO(K)FLUORANTHENE	4.00	3.23	80.8	45-125
CHRYSENE	4.00	2.86	71.5	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.89	72.3	40-125
FLUORANTHENE	4.00	2.86	71.5	55-115
FLUORENE	4.00	2.59	64.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	2.95	73.8	45-125
NAPHTHALENE	4.00	2.30	57.5	40-100
PHENANTHRENE	4.00	2.43	60.8	50-115
PYRENE	4.00	2.57	64.3	50-130
-----				
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.11	55.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.14	57.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.06	53.0	50-135
-----				

Comments:

<u>Primary</u>	<u>SPK</u>
Quant Method :	SIM2.M
Extraction Date :	10/31/11
Analysis Date :	11/05/11
Instrument :	Linus
Run :	1105L029
Initials :	LF

Printed: 11/09/11 3:59:06 PM

APPL Standard LCS

# Matrix Spike Recoveries

## EPA 8270D SIM

APPL ID: 111031W-49334 MS - 161019

Batch ID: #SIMHC-111031A

Sample ID: AY49334

Client ID: ES047

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	3.88	0.62	2.88	2.71	58.2	53.9	45-105	6.1	25
2-METHYLNAPHTHALENE	3.88	0.20	2.26	1.98	53.1	45.9	45-105	13.2	25
ACENAPHTHENE	3.88	0.16	2.17	1.79	51.8	42.0 #	45-110	19.2	25
ACENAPHTHYLENE	3.88	ND	2.14	1.77	55.2	45.6 #	50-105	18.9	25
ANTHRACENE	3.88	ND	2.14	1.96	55.2	50.5 #	55-110	8.8	25
BENZO(A)ANTHRACENE	3.88	ND	3.04	2.84	78.4	73.2	55-110	6.8	25
BENZO(A)PYRENE	3.88	ND	2.62	2.30	67.5	59.3	55-110	13.0	25
BENZO(B)FLUORANTHENE	3.88	ND	2.72	2.34	70.1	60.3	45-120	15.0	25
BENZO(GHI)PERYLENE	3.88	ND	2.84	2.54	73.2	65.5	40-125	11.2	25
BENZO(K)FLUORANTHENE	3.88	ND	3.07	2.84	79.1	73.2	45-125	7.8	25
CHRYSENE	3.88	ND	2.75	2.56	70.9	66.0	55-110	7.2	25
DIBENZ(A,H)ANTHRACENE	3.88	ND	2.90	2.51	74.7	64.7	40-125	14.4	25
FLUORANTHENE	3.88	ND	2.84	2.59	73.2	66.8	55-115	9.2	25
FLUORENE	3.88	0.083	2.42	2.08	60.2	51.5	50-110	15.1	25
INDENO(1,2,3-CD)PYRENE	3.88	ND	2.93	2.71	75.5	69.8	45-125	7.8	25
NAPHTHALENE	3.88	1.0	3.70	2.56	69.6	40.2	40-100	36.4 #	25
PHENANTHRENE	3.88	ND	2.38	2.20	61.3	56.7	50-115	7.9	25
PYRENE	3.88	ND	2.63	2.45	67.8	63.1	50-130	7.1	25
-----									
SURROGATE: 2-FLUORBIPHENYL (S)	1.94	NA	1.04	1.08	53.6	55.7	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.94	NA	1.15	1.03	59.3	53.1	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.94	NA	0.984	1.20	50.7	61.9	50-135		
-----									

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	SIM2.M	SIM2.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	11/05/11	11/06/11
Instrument :	Linus	Linus
Run :	1105L036	1105L037
Initials :	LF	

Printed: 11/09/11 4:01:33 PM

APPL MSD SCII



# 8270D-SIM

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 66102

Case No: 66102

Date Analyzed: 11/05/11

Matrix: WATER

Instrument: Linus

Blank ID: 111031A-BLK

Time Analyzed: 2015

APPL ID.	Client Sample No.	File ID.	Date Analyzed
111031A-BLK	Blank	1105L028	11/05/11 2015
111031A-LCS	Lab Control Spike	1105L029	11/05/11 2041
AY49333	ES046	1105L035	11/05/11 2311
111031A-MS	Matrix Spike	1105L036	11/05/11 2336
111031A-MSD	Matrix SpikeD	1105L037	11/06/11 0001
AY49334	ES047	1105L038	11/06/11 0026
AY49336	ES049	1105L039	11/06/11 0051

Comments: Batch: #SIMHC-111031A

Printed: 11/09/11 3:59:11 PM  
Form 4, Blank Summary

Form 5  
Tune Summary

Lab Name: APPL Inc.  
 Case No: 66102  
 Matrix: Water  
 ID: SVTUNE 10-27-11

SDG No: 66102  
 Date Analyzed: 11/05/11  
 Instrument: Linus  
 Time Analyzed: 16:36

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	111031A BLK 1/1000	1105L028.D
2	Lab Control Spike	111031A LCS-1 1/1000	1105L029.D
3	ES046	AY49333W10 1/1050	1105L035.D
4	Matrix Spike	AY49334W30 MS-1 1/10	1105L036.D
5	Matrix Spike Dup	AY49334W34 MSD-1 1/1	1105L037.D
6	ES047	AY49334W29 1/1050	1105L038.D
7	ES049	AY49336W10 1/1030	1105L039.D
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51 29.95 - 60% of mass 198	59.0
68 0 - 2.05% of mass 69	0.0
70 0 - 2% of mass 69	0.6
127 40 - 60% of mass 198	55.1
197 0 - 1% of mass 198	0.5
198 100 - 100% of mass 198	100.0
199 5 - 9% of mass 198	7.1
275 10 - 30% of mass 198	23.2
365 1 - 100% of mass 198	1.9
441 0.01 - 100% of mass 443	73.0
442 40 - 150% of mass 198	58.8
443 17 - 23% of mass 442	19.7

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 66102  
 Lab File ID (Standard): 1028L007.D Date Analyzed: 10/28/11  
 Instrument ID: Linus Time Analyzed: 11:58  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Napthalene-D8(IS)		Acenaphthene-D10(IS)		Phenanthrene-D10(IS)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	2479	6.12	1083	8.11	1851	9.85
UPPER LIMIT	4958	6.62	2166	8.61	3702	10.35
LOWER LIMIT	1240	5.62	542	7.61	926	9.35
SAMPLE NO.						
01 111031A BLK 1/1000	2305	6.12	1068	8.11	2122	9.86
02 111031A LCS-1 1/1000	2079	6.12	961	8.11	1713	9.85
03 AY49333W10 1/1050	2476	6.11	1226	8.11	1995	9.83
04 AY49334W30 MS-1 1/10	2236	6.11	1033	8.11	1791	9.84
05 AY49334W34 MSD-1 1/	2287	6.11	1131	8.11	1879	9.83
06 AY49334W29 1/1050	2328	6.11	1134	8.11	1938	9.84
07 AY49336W10 1/1030	2268	6.12	1052	8.11	1894	9.86
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 66102  
 Lab File ID (Standard): 1028L007.D Date Analyzed: 10/28/11  
 Instrument ID: Linus Time Analyzed: 11:58  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

	Chrysene-D12(IS)		Perylene-D12(IS)		AREA #	RT #
	AREA #	RT #	AREA #	RT #		
12 HOUR STD	2378	12.93	1871	14.56		
UPPER LIMIT	4756	13.43	3742	15.06		
LOWER LIMIT	1189	12.43	936	14.06		
SAMPLE NO.						
01 111031A BLK 1/1000	2454	12.94	2143	14.57		
02 111031A LCS-1 1/1000	2367	12.93	2017	14.56		
03 AY49333W10 1/1050	2680	12.94	2235	14.57		
04 AY49334W30 MS-1 1/10	2429	12.93	2046	14.56		
05 AY49334W34 MSD-1 1/	2428	12.93	2160	14.56		
06 AY49334W29 1/1050	2444	12.94	2139	14.57		
07 AY49336W10 1/1030	2526	12.94	2131	14.57		
08						
09						
10						
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17						
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22						

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

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

**EPA METHOD 8270**  
**Polynuclear Aromatic Hydrocarbons**  
**Sample Data**

# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran  
Project: RED HILL/1022-024

ARF: 66102

Sample ID: ES046

APPL ID: AY49333

Sample Collection Date: 10/24/11

QCG: #SIMHC-111031A-161019

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.53	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	2-METHYLNAPHTHALENE	0.15 J	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	ACENAPHTHENE	0.17 J	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
8270D-SIM	FLUORENE	0.082 J	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
8270D-SIM	NAPHTHALENE	0.80	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	54.0	50-110			%	10/31/11	11/05/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	61.9	40-110			%	10/31/11	11/05/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	50.3	50-135			%	10/31/11	11/05/11

J = Estimated value.

Quant Method: SIM2.M  
Run #: 1105L035  
Instrument: Linus  
Sequence: L111027  
Dilution Factor: 1  
Initials: LF

Printed: 11/09/11 3:59:14 PM

APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L111027\1105L035.D  
 Acq On : 5 Nov 11 23:11  
 Sample : AY49333W10 1/1050  
 Misc :

Vial: 35  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.95

Quant Time: Nov 9 9:17 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87S1MAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.11	136	2476	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	1226	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.83	188	1995	2.50000	ppb	-0.01
15) Chrysene-D12 (IS)	12.94	240	2680	2.50000	ppb	0.01
21) Perylene-D12 (IS)	14.57	264	2235	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.41	82	549	1.17909	ppb	-0.04
Spiked Amount	1.905		Recovery	=	61.898%	
7) Surrogate Recovery (FBP)	7.35	172	1180	1.02825	ppb	0.00
Spiked Amount	1.905		Recovery	=	53.970%	
17) Surrogate Recovery (TPH)	11.70	244	1161	0.95815	ppb	-0.01
Spiked Amount	1.905		Recovery	=	50.295%	
Target Compounds						
3) Naphthalene	6.13	128	1456	0.80384	ppb	Qvalue # 38
4) 2-Methylnaphthalene	6.93	142	142	0.15289	ppb	99
5) 1-Methylnaphthalene	7.02	142	568	0.52981	ppb	94
9) Acenaphthene	8.15	154	168	0.17136	ppb	92
10) Fluorene	8.75	166	88	0.08203	ppb	92

Quantitation Report

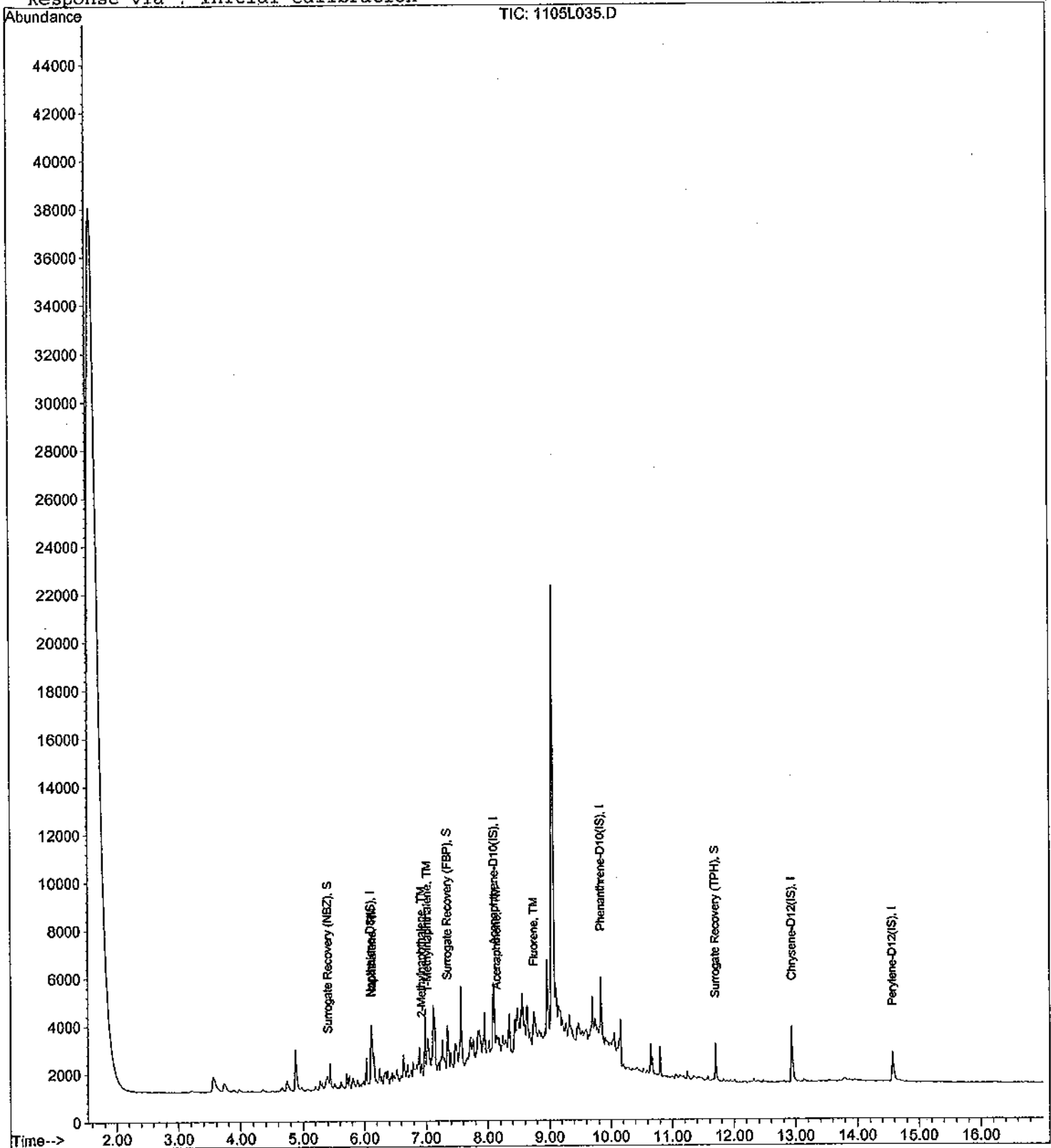
Data File : M:\LINUS\DATA\L111027\1105L035.D  
 Acq On : 5 Nov 11 23:11  
 Sample : AY49333W10 1/1050  
 Misc :

Vial: 35  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.95

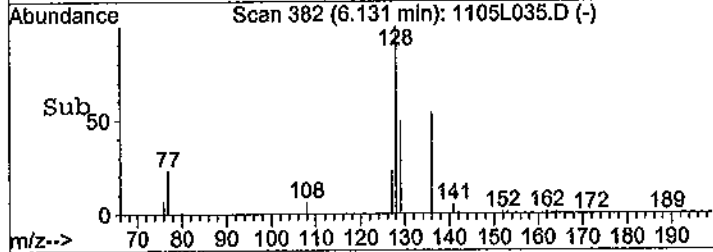
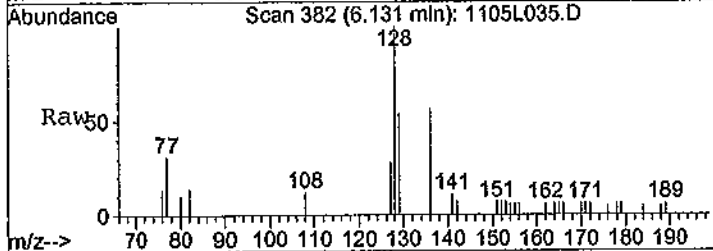
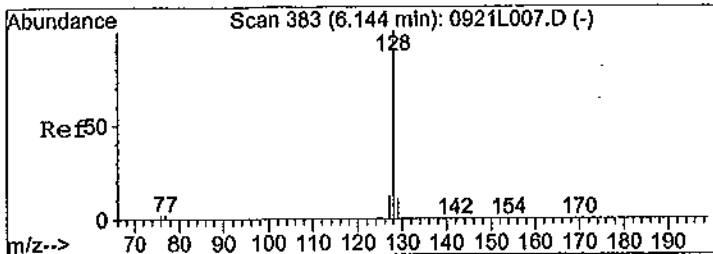
Quant Time: Nov 9 9:17 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 08 16:22:04 2011  
 Response via : Initial Calibration

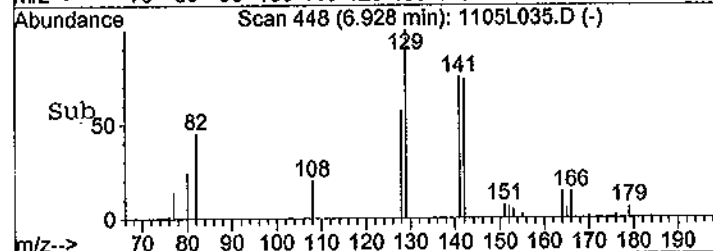
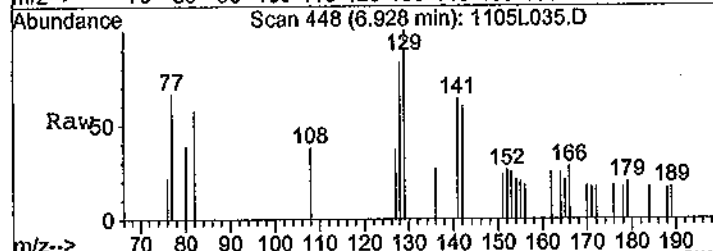
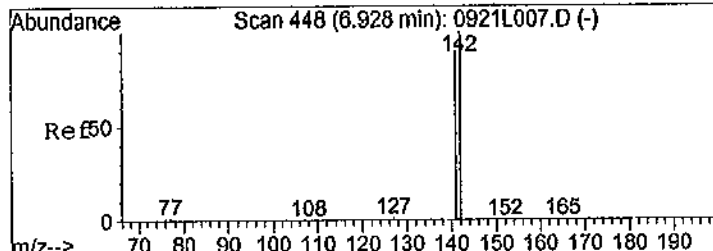
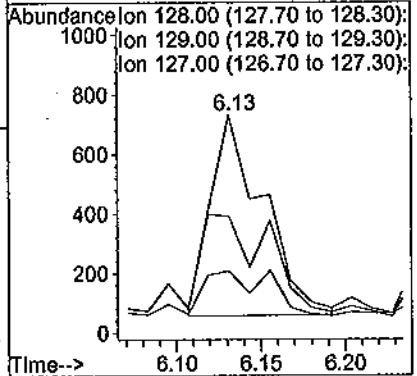






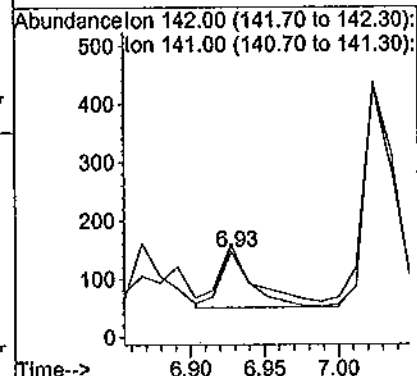
#3  
 Naphthalene  
 Concen: 0.80384 ppb  
 RT: 6.13 min Scan# 382  
 Delta R.T. -0.01 min  
 Lab File: 1105L035.D  
 Acq: 5 Nov 11 23:11

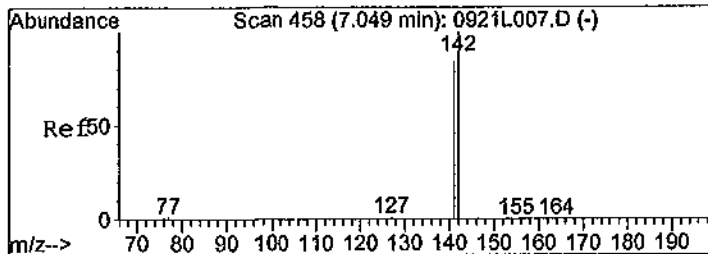
Tgt Ion	Resp	Lower	Upper
128	1456	100	
129	49.4	7.7	14.3#
127	23.0	8.6	16.0#



#4  
 2-Methylnaphthalene  
 Concen: 0.15289 ppb  
 RT: 6.93 min Scan# 448  
 Delta R.T. -0.04 min  
 Lab File: 1105L035.D  
 Acq: 5 Nov 11 23:11

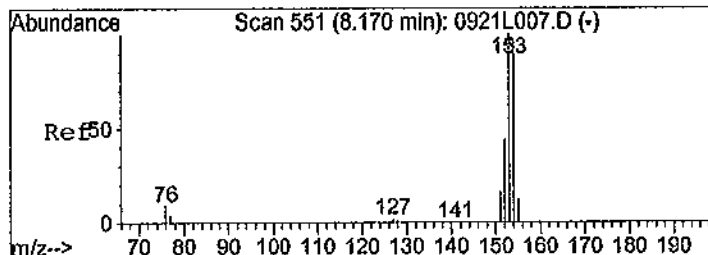
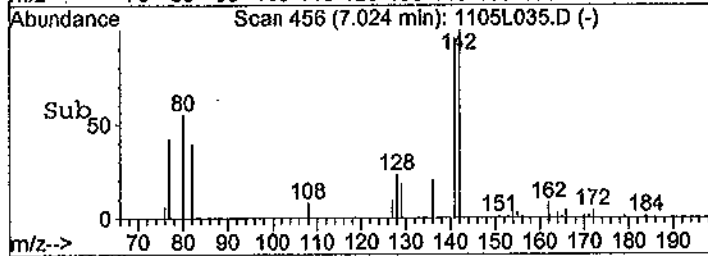
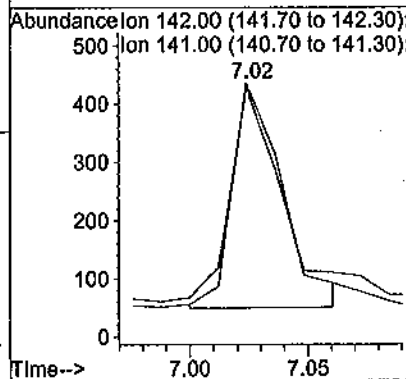
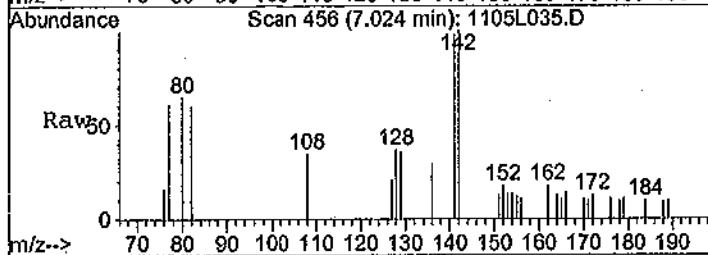
Tgt Ion	Resp	Lower	Upper
142	142	100	
141	98.9	68.9	127.9





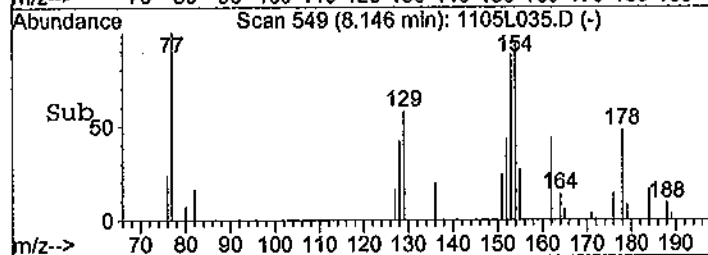
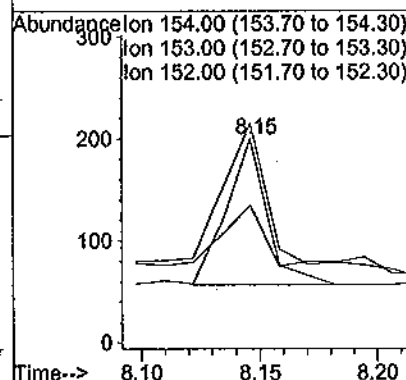
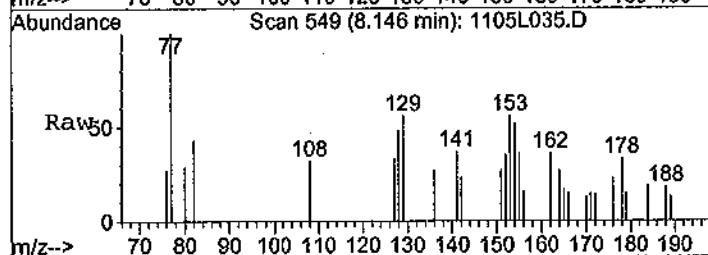
#5  
 1-Methylnaphthalene  
 Concen: 0.52981 ppb  
 RT: 7.02 min Scan# 456  
 Delta R.T. -0.02 min  
 Lab File: 1105L035.D  
 Acq: 5 Nov 11 23:11

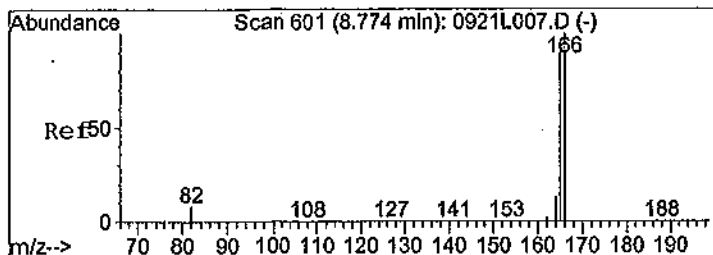
Tgt Ion: 142	Resp: 568
Ion Ratio	Lower Upper
142	100
141	94.5 70.0 130.0



#9  
 Acenaphthene  
 Concen: 0.17136 ppb  
 RT: 8.15 min Scan# 549  
 Delta R.T. -0.00 min  
 Lab File: 1105L035.D  
 Acq: 5 Nov 11 23:11

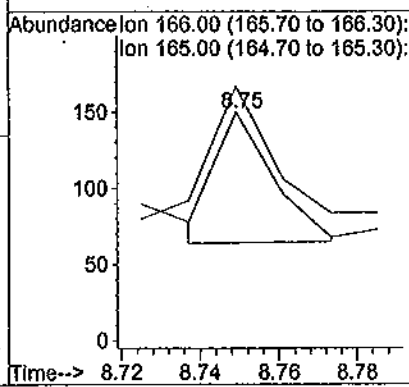
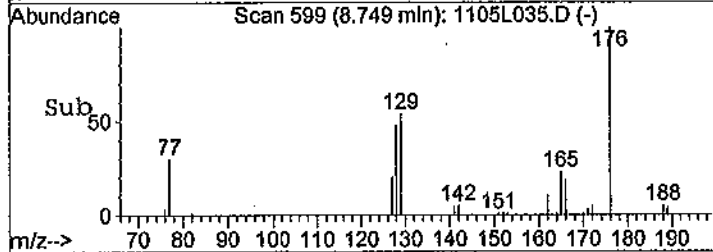
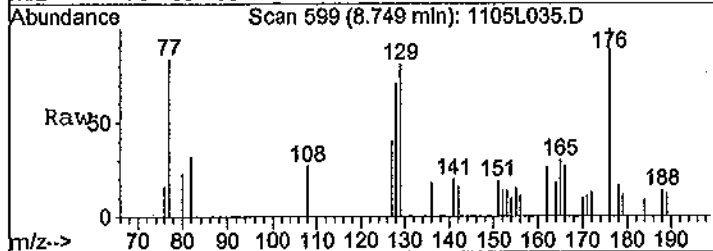
Tgt Ion: 154	Resp: 168
Ion Ratio	Lower Upper
154	100
153	95.1 72.0 133.8
152	39.2 32.1 59.5





#10  
 Fluorene  
 Concen: 0.08203 ppb  
 RT: 8.75 min Scan# 599  
 Delta R.T. -0.01 min  
 Lab File: 1105L035.D  
 Acq: 5 Nov 11 23:11

Tgt Ion	Resp	Lower	Upper
166	100		
165	101.2	65.6	121.8



# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES047

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49334

QCG: #SIMHC-111031A-161019

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
8270D-SIM	1-METHYLNAPHTHALENE	0.62	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	2-METHYLNAPHTHALENE	0.20	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ACENAPHTHENE	0.16 J	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	FLUORENE	0.083 J	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	NAPHTHALENE	1.0	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	53.4	50-110			%	10/31/11	11/06/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	65.4	40-110			%	10/31/11	11/06/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	61.4	50-135			%	10/31/11	11/06/11

J = Estimated value.

Quant Method: SIM2.M  
Run #: 1105L038  
Instrument: Linus  
Sequence: L111027  
Dilution Factor: 1  
Initials: LF

Printed: 11/09/11 3:59:14 PM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L111027\1105L038.D  
 Acq On : 6 Nov 11 00:26  
 Sample : AY49334W29 1/1050  
 Misc :

Vial: 38  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.95

Quant Time: Nov 9 9:19 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.11	136	2328	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	1134	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.84	188	1938	2.50000	ppb	-0.01
15) Chrysene-D12 (IS)	12.94	240	2444	2.50000	ppb	0.01
21) Perylene-D12 (IS)	14.57	264	2139	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.41	82	545	1.24491	ppb	-0.04
Spiked Amount	1.905		Recovery	=	65.363%	
7) Surrogate Recovery (FBP)	7.35	172	1080	1.01746	ppb	0.00
Spiked Amount	1.905		Recovery	=	53.393%	
17) Surrogate Recovery (TPH)	11.70	244	1293	1.17013	ppb	-0.01
Spiked Amount	1.905		Recovery	=	61.425%	
Target Compounds						
3) Napthalene	6.13	128	1754	1.02993	ppb	Qvalue # 54
4) 2-Methylnaphthalene	6.93	142	176	0.20154	ppb	94
5) 1-Methylnaphthalene	7.02	142	620	0.61508	ppb	93
9) Acenaphthene	8.15	154	143	0.15769	ppb	95
10) Fluorene	8.75	166	82	0.08264	ppb	92

Quantitation Report

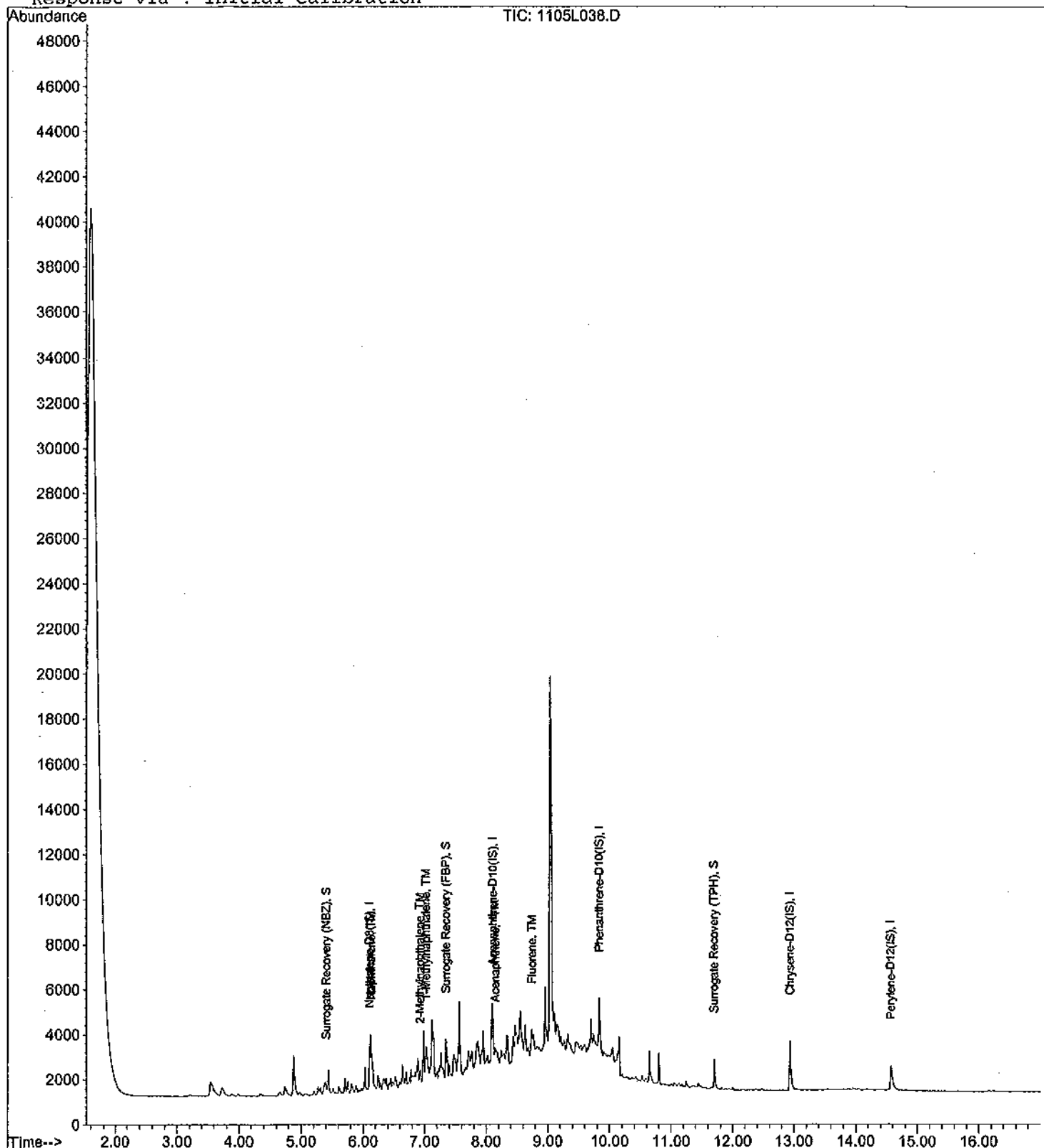
Data File : M:\LINUS\DATA\L111027\1105L038.D  
Acq On : 6 Nov 11 00:26  
Sample : AY49334W29 1/1050  
Misc :

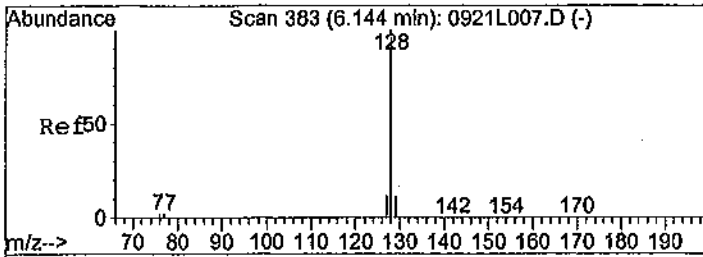
Vial: 38  
Operator: LF  
Inst : Linus  
Multiplr: 0.95

Quant Time: Nov 9 9:19 2011

Quant Results File: SIM2.RES

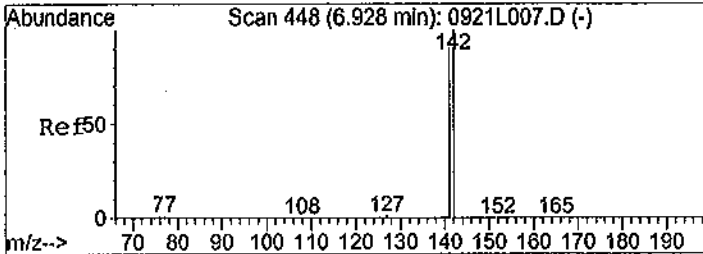
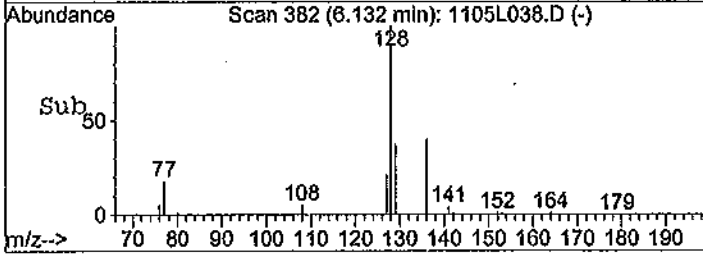
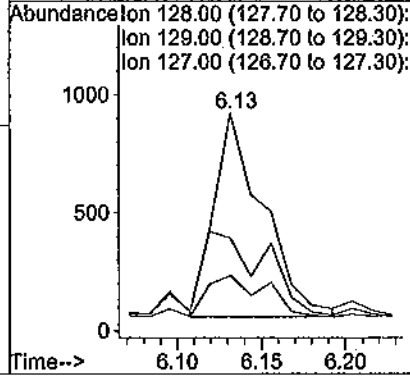
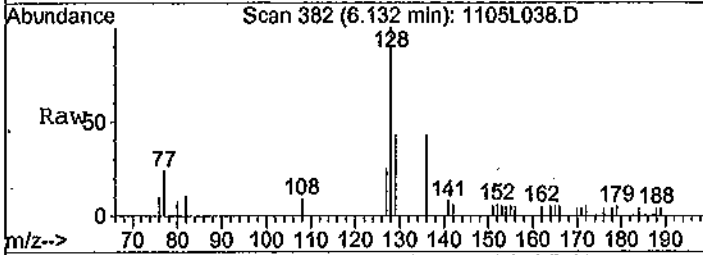
Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration





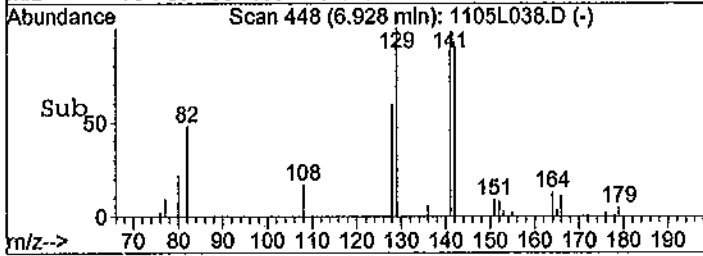
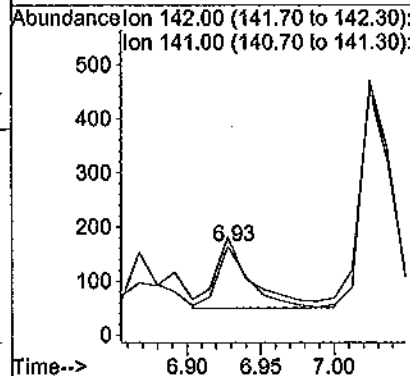
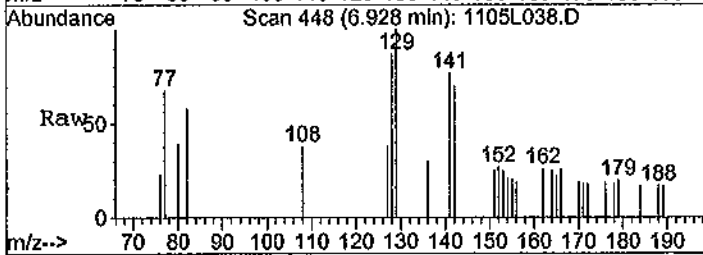
#3  
 Naphthalene  
 Concen: 1.02993 ppb  
 RT: 6.13 min Scan# 382  
 Delta R.T. -0.01 min  
 Lab File: 1105L038.D  
 Acq: 6 Nov 11 00:26

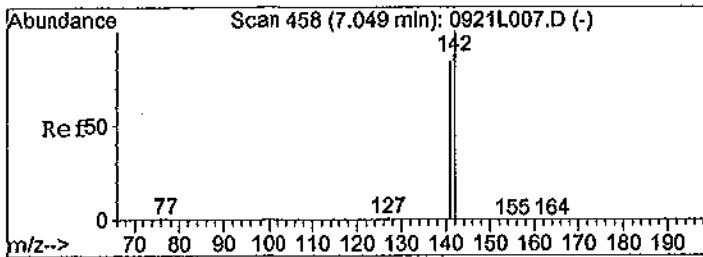
Tgt Ion	Resp	Lower	Upper
128	1754	100	
129	39.0	7.7	14.3#
127	20.8	8.6	16.0#



#4  
 2-Methylnaphthalene  
 Concen: 0.20154 ppb  
 RT: 6.93 min Scan# 448  
 Delta R.T. -0.04 min  
 Lab File: 1105L038.D  
 Acq: 6 Nov 11 00:26

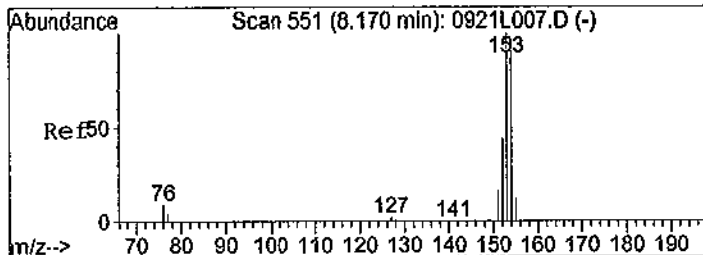
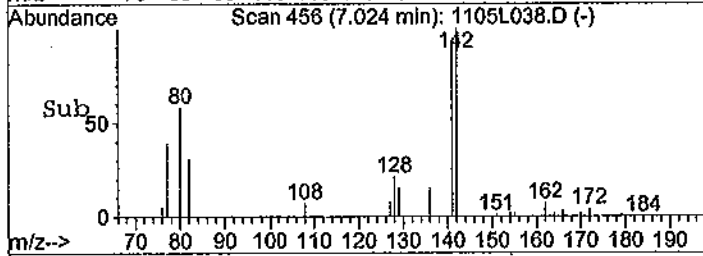
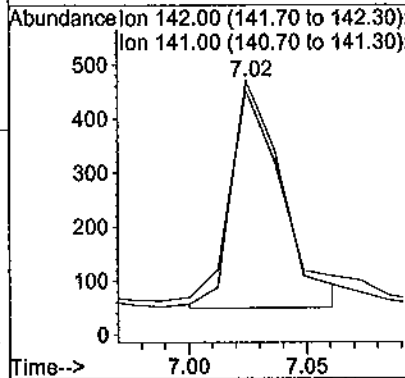
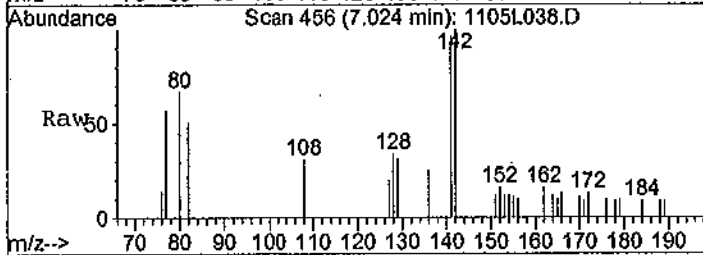
Tgt Ion	Resp	Lower	Upper
142	176	100	
141	104.5	68.9	127.9





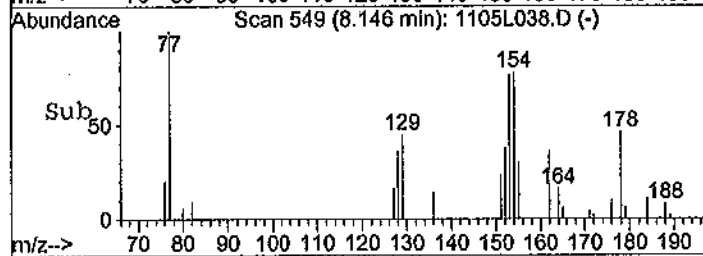
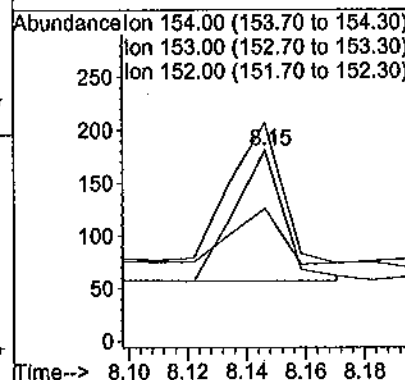
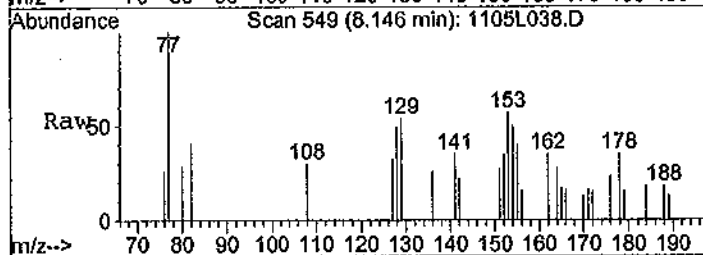
#5  
 1-Methylnaphthalene  
 Concen: 0.61508 ppb  
 RT: 7.02 min Scan# 456  
 Delta R.T. -0.02 min  
 Lab File: 1105L038.D  
 Acq: 6 Nov 11 00:26

Tgt Ion: 142 Resp: 620  
 Ion Ratio Lower Upper  
 142 100  
 141 93.0 70.0 130.0

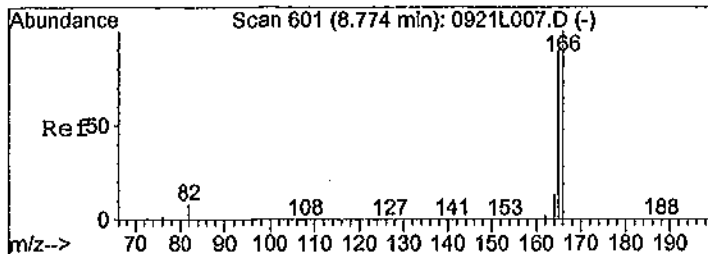


#9  
 Acenaphthene  
 Concen: 0.15769 ppb  
 RT: 8.15 min Scan# 549  
 Delta R.T. 0.00 min  
 Lab File: 1105L038.D  
 Acq: 6 Nov 11 00:26

Tgt Ion: 154 Resp: 143  
 Ion Ratio Lower Upper  
 154 100  
 153 107.3 72.0 133.8  
 152 41.9 32.1 59.5

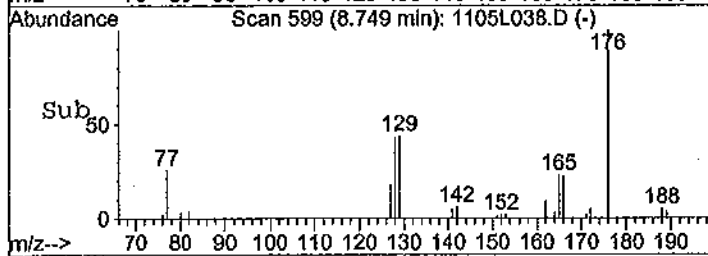
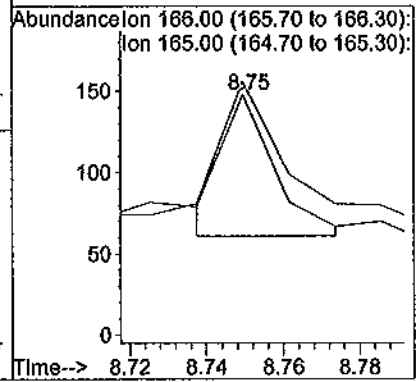
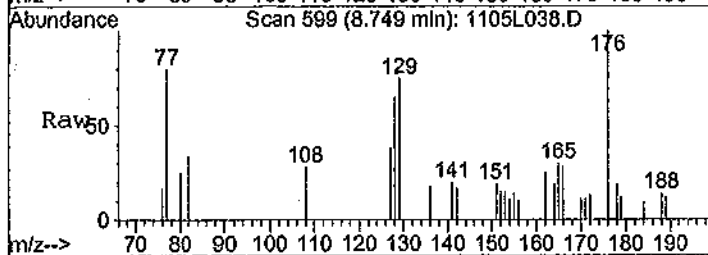






#10  
 Fluorene  
 Concen: 0.08264 ppb  
 RT: 8.75 min Scan# 599  
 Delta R.T. -0.01 min  
 Lab File: 1105L038.D  
 Acq: 6 Nov 11 00:26

Tgt Ion:166 Resp: 82  
 Ion Ratio Lower Upper  
 166 100  
 165 105.4 65.6 121.8



# EPA 8270D SIM

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

Attn: Stacy Fineran  
Project: RED HILL/1022-024

Sample ID: ES049  
Sample Collection Date: 10/24/11

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102  
APPL ID: AY49336  
QCG: #SIMHC-111031A-161019

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	10/31/11	11/06/11
8270D-SIM	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/06/11
8270D-SIM	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/06/11
8270D-SIM	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/06/11
8270D-SIM	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/06/11
8270D-SIM	SURROGATE: 2-FLUORBIPHENYL (S)	65.0	50-110			%	10/31/11	11/06/11
8270D-SIM	SURROGATE: NITROBENZENE-D5 (S)	64.4	40-110			%	10/31/11	11/06/11
8270D-SIM	SURROGATE: TERPHENYL-D14 (S)	51.9	50-135			%	10/31/11	11/06/11

Quant Method: SIM2.M  
Run #: 1105L039  
Instrument: Linus  
Sequence: L111027  
Dilution Factor: 1  
Initials: LF

Printed: 11/09/11 3:59:14 PM

APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L111027\1105L039.D Vial: 39  
 Acq On : 6 Nov 11 00:51 Operator: LF  
 Sample : AY49336W10 1/1030 Inst : Linus  
 Misc : Multiplr: 0.97

Quant Time: Nov 9 9:20 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.12	136	2268	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.11	164	1052	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.86	188	1894	2.50000	ppb	0.01
15) Chrysene-D12 (IS)	12.94	240	2526	2.50000	ppb	0.01
21) Perylene-D12 (IS)	14.57	264	2131	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.46	82	523	1.25007	ppb	0.01
Spiked Amount	1.942		Recovery	=	64.375%	
7) Surrogate Recovery (FBP)	7.36	172	1220	1.26300	ppb	0.01
Spiked Amount	1.942		Recovery	=	65.045%	
17) Surrogate Recovery (TPH)	11.71	244	1129	1.00774	ppb	0.00
Spiked Amount	1.942		Recovery	=	51.912%	

Target Compounds Qvalue

Quantitation Report

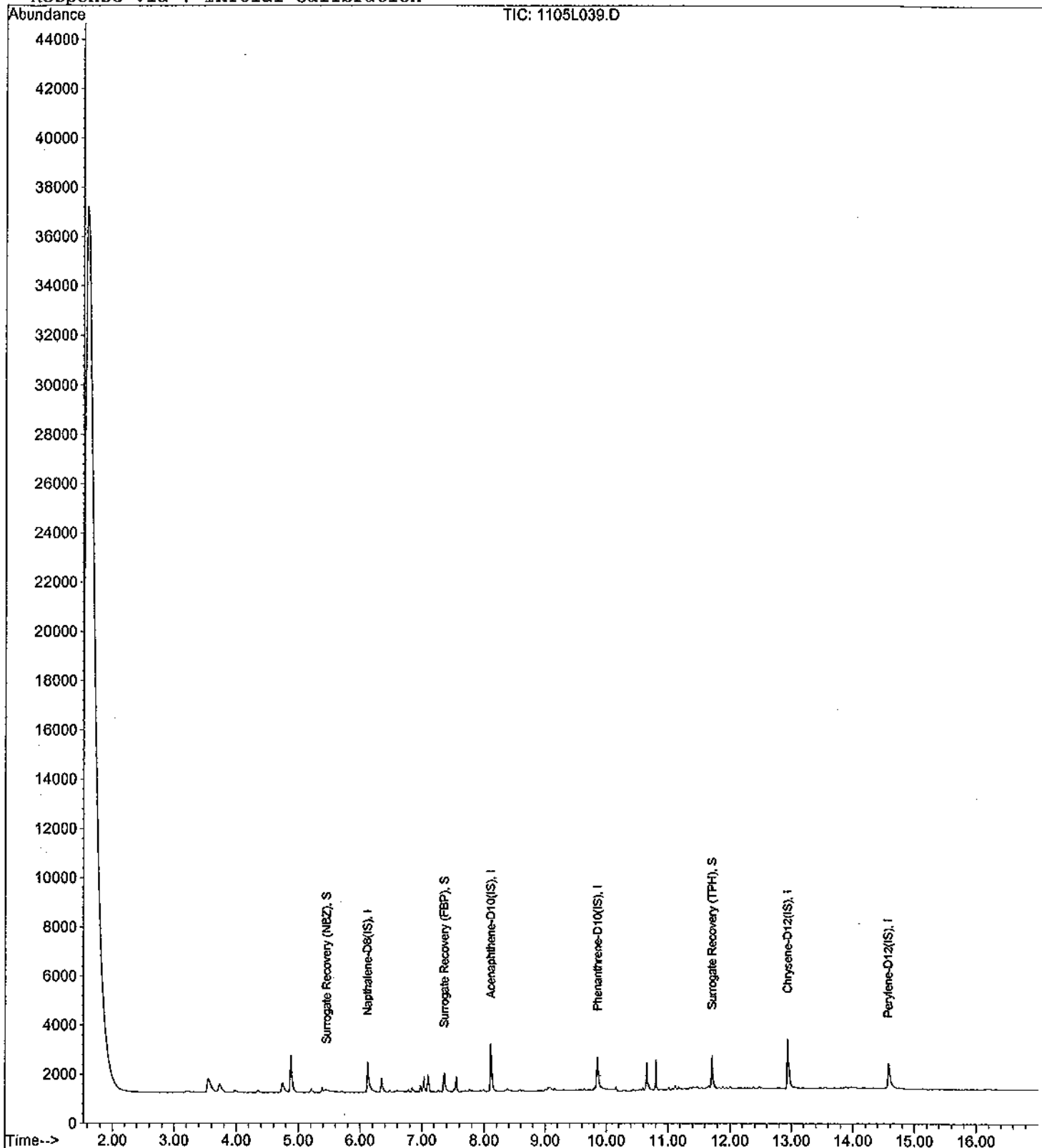
Data File : M:\LINUS\DATA\L111027\1105L039.D  
Acq On : 6 Nov 11 00:51  
Sample : AY49336W10 1/1030  
Misc :

Vial: 39  
Operator: LF  
Inst : Linus  
Multiplr: 0.97

Quant Time: Nov 9 9:20 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration



**EPA METHOD 8270**  
**Polynuclear Aromatic Hydrocarbons**  
**Calibration Data**



Data File : M:\LINUS\DATA\L111027\1027L003.D  
 Acq On : 27 Oct 11 19:12  
 Sample : 0.1ug/ml PAH 10-27-11  
 Misc :

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

Quant Time: Oct 30 11:15 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)

Title : EPA 8270C

Last Update : Sun Oct 30 10:57:42 2011

Response via : Initial Calibration

DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.14	136	2908	2.50000	ppb	0.02
6) Acenaphthene-D10 (IS)	8.12	164	1434	2.50000	ppb	0.01
11) Phenanthrene-D10 (IS)	9.87	188	2391	2.50000	ppb	0.02
15) Chrysene-D12 (IS)	12.95	240	2986	2.50000	ppb	0.02
21) Perylene-D12 (IS)	14.58	264	2411	2.50000	ppb	0.02
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.61	82	48	0.74306	ppb	0.19
Spiked Amount	2.000		Recovery	=	37.150%	
7) Surrogate Recovery (FBP)	7.40	172	130	0.09815	ppb	0.05
Spiked Amount	2.000		Recovery	=	4.900%	
17) Surrogate Recovery (TPH)	11.74	244	137	0.09107	ppb	0.02
Spiked Amount	2.000		Recovery	=	4.550%	
<b>Target Compounds</b>						
3) Napthalene	6.17	128	215	0.10425	ppb	93
4) 2-Methylnaphthalene	7.01	142	97	0.09198	ppb	99
5) 1-Methylnaphthalene	7.08	142	117	0.09071	ppb	97
8) Acenaphthylene	7.99	152	204	0.10524	ppb	99
9) Acenaphthene	8.16	154	126	0.11351	ppb	94
10) Fluorene	8.81	166	125	0.10297	ppb	98
12) Phenanthrene	9.90	178	177	0.11216	ppb	95
13) Anthracene	9.99	178	166	0.10145	ppb	95
14) Fluoranthene	11.30	202	298	0.10883	ppb	# 90
16) Pyrene	11.56	202	303	0.11040	ppb	99
18) Benz (a) anthracene	12.95	228	211	0.11702	ppb	96
19) Chrysene	12.98	228	255	0.09385	ppb	98
20) Indeno (1,2,3-cd) pyrene	16.19	276	218	0.11665	ppb	# 93
22) Benzo (b) fluoranthene	14.15	252	165	0.09422	ppb	# 95
23) Benzo (k) fluoranthene	14.19	252	206	0.11693	ppb	65
24) Benzo (a) pyrene	14.54	252	193	0.11081	ppb	95
25) Dibenz (a,h) anthracene	16.17	278	171	0.11827	ppb	92
26) Benzo (g,h,i) perylene	16.64	276	136	0.08955	ppb	# 89

Quantitation Report

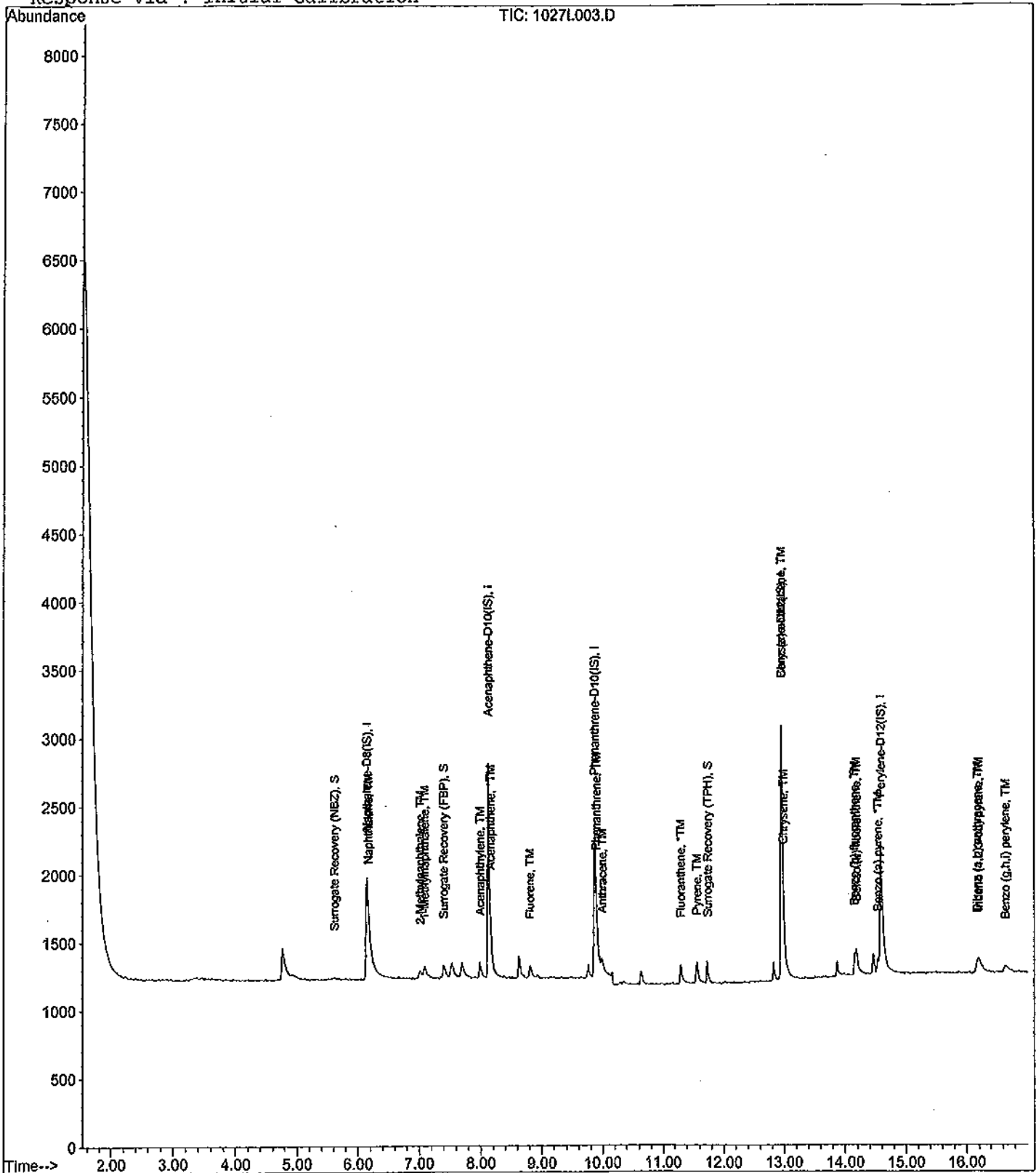
Data File : M:\LINUS\DATA\L111027\1027L003.D  
 Acq On : 27 Oct 11 19:12  
 Sample : 0.1ug/ml PAH 10-27-11  
 Misc :

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

Quant Time: Oct 30 11:15 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration





Data File : M:\LINUS\DATA\L111027\1027L004.D  
 Acq On : 27 Oct 11 19:38  
 Sample : 0.2ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:13 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 10:57:42 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.14	136	2862	2.50000	ppb	0.02
6) Acenaphthene-D10 (IS)	8.12	164	1317	2.50000	ppb	0.01
11) Phenanthrene-D10 (IS)	9.87	188	2305	2.50000	ppb	0.02
15) Chrysene-D12 (IS)	12.95	240	2814	2.50000	ppb	0.02
21) Perylene-D12 (IS)	14.58	264	2323	2.50000	ppb	0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.60	82	107	0.84083	ppb	0.18
Spiked Amount	2.000		Recovery	=	42.050%	
7) Surrogate Recovery (FBP)	7.40	172	250	0.20995	ppb	0.05
Spiked Amount	2.000		Recovery	=	10.500%	
17) Surrogate Recovery (TPH)	11.72	244	260	0.18421	ppb	0.01
Spiked Amount	2.000		Recovery	=	9.200%	
Target Compounds						
3) Naphthalene	6.17	128	470	0.23025	ppb	94
4) 2-Methylnaphthalene	7.00	142	193	0.18513	ppb	92
5) 1-Methylnaphthalene	7.07	142	261	0.20451	ppb	98
8) Acenaphthylene	7.99	152	366	0.20677	ppb	98
9) Acenaphthene	8.16	154	211	0.20826	ppb	87
10) Fluorene	8.81	166	232	0.20927	ppb	99
12) Phenanthrene	9.90	178	308	0.20239	ppb	96
13) Anthracene	9.99	178	310	0.19992	ppb	95
14) Fluoranthene	11.29	202	554	0.20981	ppb	95
16) Pyrene	11.55	202	542	0.21034	ppb	# 91
18) Benz (a) anthracene	12.95	228	323	0.19084	ppb	97
19) Chrysene	12.98	228	465	0.18296	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.17	276	342	0.19494	ppb	# 96
22) Benzo (b) fluoranthene	14.15	252	307	0.18266	ppb	97
23) Benzo (k) fluoranthene	14.19	252	334	0.18857	ppb	64
24) Benzo (a) pyrene	14.54	252	353	0.21468	ppb	96
25) Dibenz (a,h) anthracene	16.16	278	293	0.21252	ppb	92
26) Benzo (g,h,i) perylene	16.64	276	326	0.22362	ppb	88

Quantitation Report

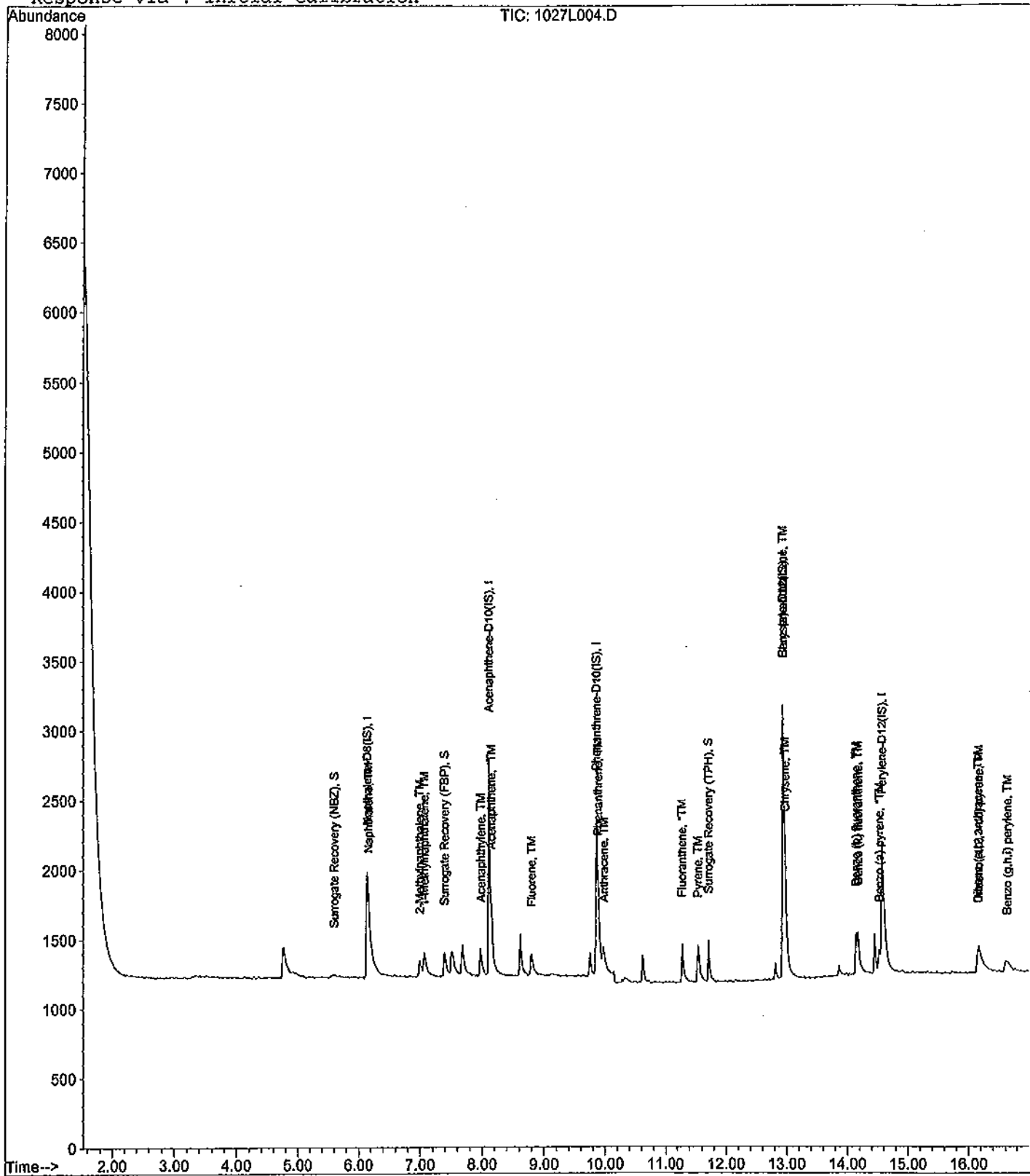
Data File : M:\LINUS\DATA\L111027\1027L004.D  
 Acq On : 27 Oct 11 19:38  
 Sample : 0.2ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:13 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1028L005.D  
 Acq On : 28 Oct 11 11:07  
 Sample : 0.5ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:12 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Sep 29 11:47:40 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.14	136	2409	2.50000	ppb	0.02
6) Acenaphthene-D10 (IS)	8.12	164	1104	2.50000	ppb	-0.01
11) Phenanthrene-D10 (IS)	9.87	188	1819	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.95	240	2477	2.50000	ppb	-0.01
21) Perylene-D12 (IS)	14.57	264	2043	2.50000	ppb	-0.02
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.60	82	240	1.15802	ppb	0.25
Spiked Amount	2.000		Recovery	=	57.900%	
7) Surrogate Recovery (FBP)	7.39	172	547	0.79241	ppb	0.01
Spiked Amount	2.000		Recovery	=	39.600%	
17) Surrogate Recovery (TPH)	11.74	244	530	0.66674	ppb	-0.02
Spiked Amount	2.000		Recovery	=	33.350%	
Target Compounds						
3) Naphthalene	6.17	128	914	0.46769	ppb	98
4) 2-Methylnaphthalene	6.99	142	390	0.33945	ppb	96
5) 1-Methylnaphthalene	7.06	142	543	0.44086	ppb	95
8) Acenaphthylene	7.98	152	766	0.43771	ppb	99
9) Acenaphthene	8.16	154	445	0.43164	ppb	89
10) Fluorene	8.80	166	496	0.42124	ppb	99
12) Phenanthrene	9.90	178	642	0.38630	ppb	97
13) Anthracene	9.98	178	680	0.37229	ppb	95
14) Fluoranthene	11.29	202	1109	0.36672	ppb	96
16) Pyrene	11.55	202	1135	0.35574	ppb	97
18) Benz (a) anthracene	12.95	228	616	0.34309	ppb	98
19) Chrysene	12.98	228	1009	0.43128	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.15	276	636	0.45186	ppb	# 96
22) Benzo (b) fluoranthene	14.14	252	746	0.48527	ppb	98
23) Benzo (k) fluoranthene	14.17	252	769	0.37285	ppb	98
24) Benzo (a) pyrene	14.52	252	674	0.41516	ppb	94
25) Dibenz (a,h) anthracene	16.14	278	480	0.46345	ppb	95
26) Benzo (g,h,i) perylene	16.59	276	614	0.46797	ppb	92

Quantitation Report

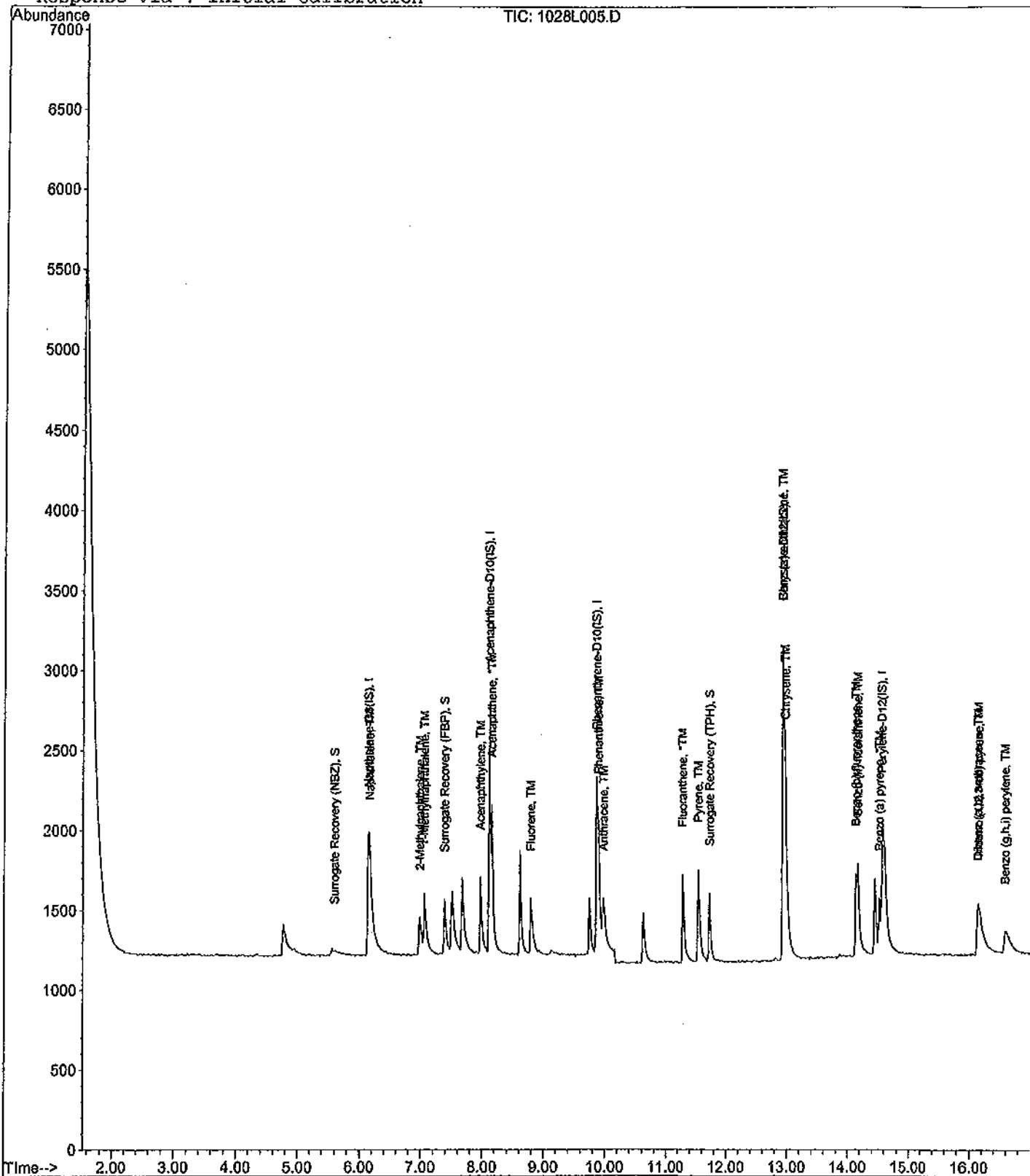
Data File : M:\LINUS\DATA\L111027\1028L005.D  
 Acq On : 28 Oct 11 11:07  
 Sample : 0.5ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:12 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1028L006.D  
 Acq On : 28 Oct 11 11:32  
 Sample : 1.0ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:10 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 10:38:04 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.13	136	2381	2.50000	ppb	0.01
6) Acenaphthene-D10 (IS)	8.12	164	1089	2.50000	ppb	-0.01
11) Phenanthrene-D10 (IS)	9.86	188	1865	2.50000	ppb	-0.01
15) Chrysene-D12 (IS)	12.95	240	2449	2.50000	ppb	-0.01
21) Perylene-D12 (IS)	14.57	264	2032	2.50000	ppb	-0.02
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.54	82	437	1.90266	ppb	0.00
Spiked Amount	2.000		Recovery	=	95.150%	
7) Surrogate Recovery (FBP)	7.37	172	1135	1.66686	ppb	0.00
Spiked Amount	2.000		Recovery	=	83.350%	
17) Surrogate Recovery (TPH)	11.72	244	1210	1.53959	ppb	-0.04
Spiked Amount	2.000		Recovery	=	77.000%	
<b>Target Compounds</b>						
3) Naphthalene	6.16	128	1881	0.97382	ppb	98
4) 2-Methylnaphthalene	6.96	142	916	0.80665	ppb	94
5) 1-Methylnaphthalene	7.05	142	1202	0.98738	ppb	89
8) Acenaphthylene	7.96	152	1632	0.94540	ppb	98
9) Acenaphthene	8.16	154	938	0.92237	ppb	91
10) Fluorene	8.79	166	1027	0.88422	ppb	98
12) Phenanthrene	9.90	178	1324	0.77703	ppb	99
13) Anthracene	9.97	178	1377	0.73529	ppb	98
14) Fluoranthene	11.28	202	2277	0.73437	ppb	# 94
16) Pyrene	11.54	202	2363	0.74909	ppb	97
18) Benz (a) anthracene	12.94	228	1529	0.86133	ppb	99
19) Chrysene	12.97	228	2071	0.89534	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.12	276	1501	1.07861	ppb	# 92
22) Benzo (b) fluoranthene	14.13	252	1509	0.98690	ppb	# 96
23) Benzo (k) fluoranthene	14.16	252	1507	0.73463	ppb	96
24) Benzo (a) pyrene	14.51	252	1370	0.84844	ppb	98
25) Dibenz (a,h) anthracene	16.12	278	1169	1.13481	ppb	97
26) Benzo (g,h,i) perylene	16.58	276	1332	1.02070	ppb	98

Quantitation Report

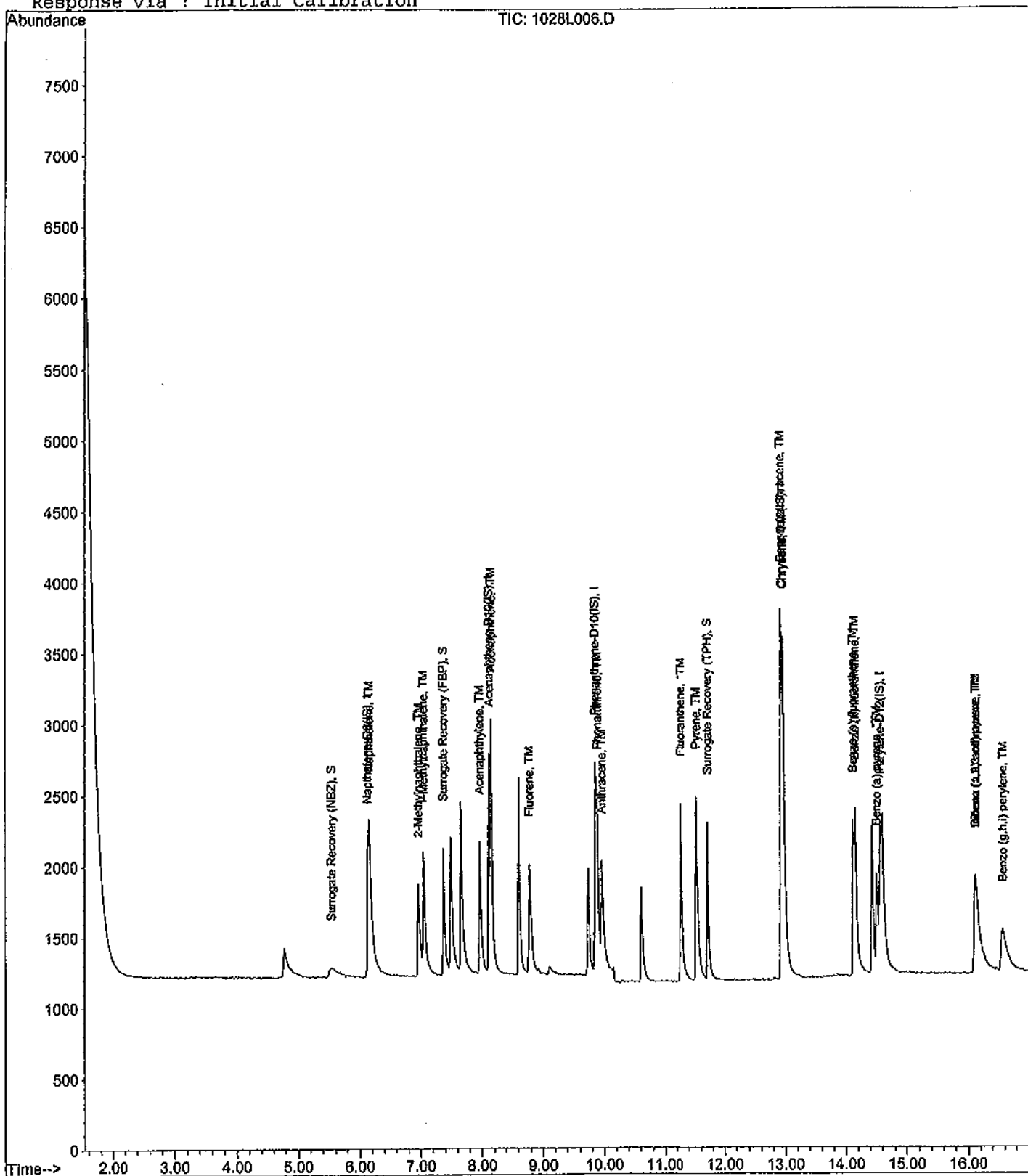
Data File : M:\LINUS\DATA\L111027\1028L006.D  
 Acq On : 28 Oct 11 11:32  
 Sample : 1.0ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 11:10 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1028L007.D  
 Acq On : 28 Oct 11 11:58  
 Sample : 5.0ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:40 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 10:38:04 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.12	136	2479	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.11	164	1083	2.50000	ppb	-0.02
11) Phenanthrene-D10 (IS)	9.85	188	1851	2.50000	ppb	-0.02
15) Chrysene-D12 (IS)	12.93	240	2378	2.50000	ppb	-0.04
21) Perylene-D12 (IS)	14.56	264	1871	2.50000	ppb	-0.04
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.42	82	1947	7.24379	ppb	-0.12
Spiked Amount	2.000		Recovery	=	362.200%	
7) Surrogate Recovery (FBP)	7.35	172	4731	6.98644	ppb	-0.02
Spiked Amount	2.000		Recovery	=	349.300%	
17) Surrogate Recovery (TPH)	11.71	244	5216	6.83493	ppb	-0.05
Spiked Amount	2.000		Recovery	=	341.750%	
Target Compounds						
3) Naphthalene	6.14	128	7358	3.65875	ppb	99
4) 2-Methylnaphthalene	6.93	142	4331	3.66320	ppb	98
5) 1-Methylnaphthalene	7.04	142	4683	3.69477	ppb	97
8) Acenaphthylene	7.95	152	6597	3.84274	ppb	100
9) Acenaphthene	8.15	154	3814	3.77124	ppb	92
10) Fluorene	8.76	166	4219	3.65257	ppb	99
12) Phenanthrene	9.87	178	5443	3.21854	ppb	98
13) Anthracene	9.94	178	5527	2.97363	ppb	99
14) Fluoranthene	11.26	202	9367	3.04387	ppb	98
16) Pyrene	11.51	202	9724	3.17462	ppb	97
18) Benz (a) anthracene	12.91	228	6027	3.49657	ppb	98
19) Chrysene	12.96	228	9422	4.19498	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.06	276	6554	4.85029	ppb	95
22) Benzo (b) fluoranthene	14.10	252	6693	4.75397	ppb	# 96
23) Benzo (k) fluoranthene	14.14	252	6995	3.70332	ppb	99
24) Benzo (a) pyrene	14.49	252	6259	4.20974	ppb	98
25) Dibenz (a,h) anthracene	16.08	278	5075	5.35048	ppb	97
26) Benzo (g,h,i) perylene	16.51	276	5423	4.51321	ppb	98

Quantitation Report

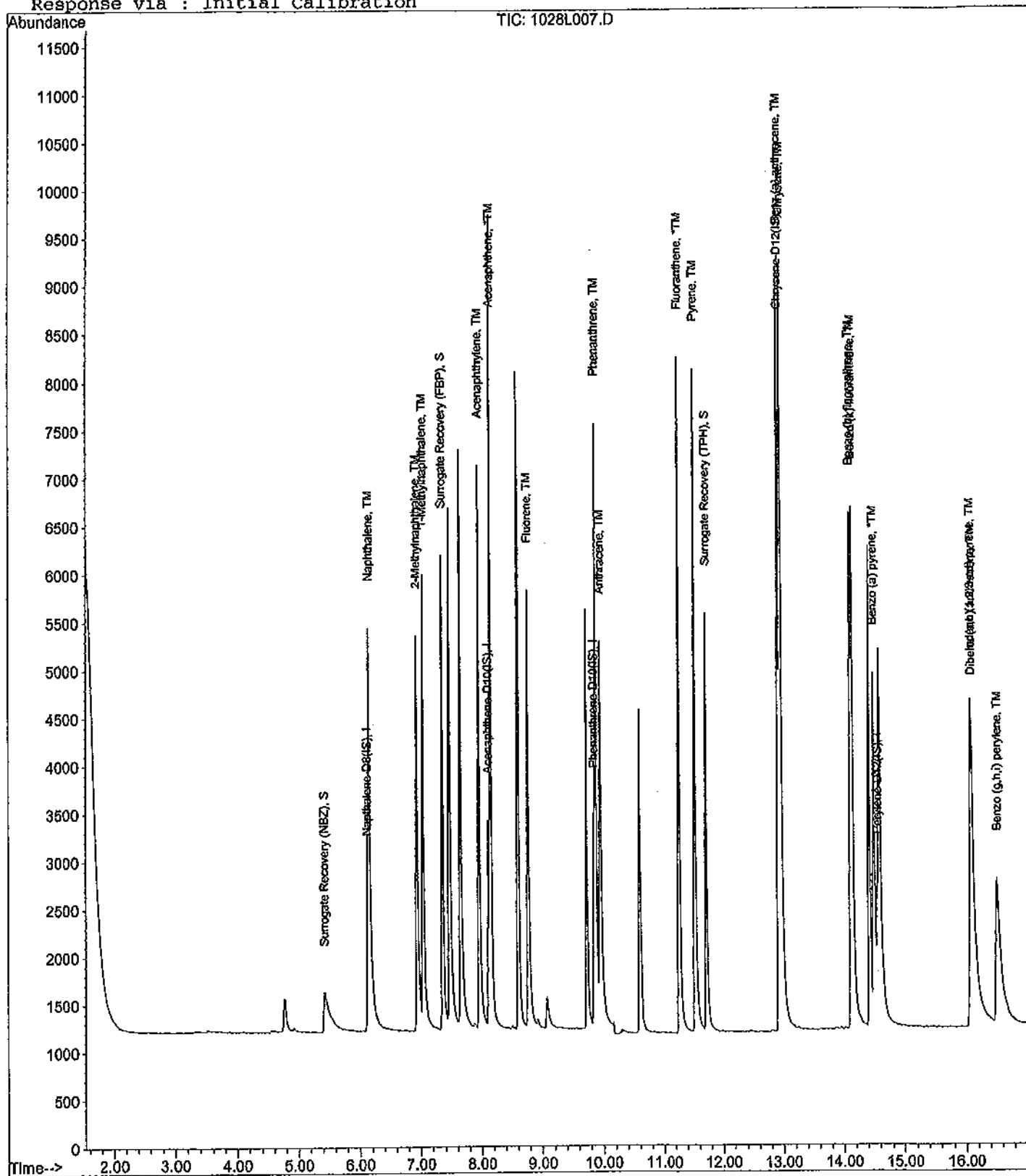
Data File : M:\LINUS\DATA\L111027\1028L007.D  
 Acq On : 28 Oct 11 11:58  
 Sample : 5.0ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:40 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration





Data File : M:\LINUS\DATA\L111027\1028L008.D Vial: 8  
 Acq On : 28 Oct 11 12:23 Operator: LF  
 Sample : 10ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 30 10:41 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 10:38:04 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.12	136	2419	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.11	164	1154	2.50000	ppb	-0.02
11) Phenanthrene-D10 (IS)	9.85	188	1800	2.50000	ppb	-0.02
15) Chrysene-D12 (IS)	12.91	240	2580	2.50000	ppb	-0.05
21) Perylene-D12 (IS)	14.55	264	2113	2.50000	ppb	-0.05

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	5.38	82	3973	14.84926	ppb	-0.16
Spiked Amount	2.000		Recovery	= 742.450%		
7) Surrogate Recovery (FBP)	7.35	172	9747	13.50818	ppb	-0.02
Spiked Amount	2.000		Recovery	= 675.400%		
17) Surrogate Recovery (TPH)	11.70	244	11014	13.30251	ppb	-0.06
Spiked Amount	2.000		Recovery	= 665.150%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.13	128	16688	8.50390	ppb	99
4) 2-Methylnaphthalene	6.92	142	9930	8.60721	ppb	100
5) 1-Methylnaphthalene	7.02	142	10317	8.34175	ppb	92
8) Acenaphthylene	7.95	152	15071	8.23870	ppb	99
9) Acenaphthene	8.15	154	8403	7.79759	ppb	97
10) Fluorene	8.75	166	9496	7.71528	ppb	98
12) Phenanthrene	9.87	178	12375	7.52487	ppb	99
13) Anthracene	9.93	178	12631	6.98825	ppb	99
14) Fluoranthene	11.25	202	21698	7.25069	ppb	# 93
16) Pyrene	11.50	202	22373	6.73230	ppb	# 85
18) Benz (a) anthracene	12.91	228	14154	7.56854	ppb	100
19) Chrysene	12.95	228	21503	8.82425	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.03	276	15698	10.70773	ppb	# 96
22) Benzo (b) fluoranthene	14.09	252	15772	9.91966	ppb	96
23) Benzo (k) fluoranthene	14.13	252	16351	7.66517	ppb	98
24) Benzo (a) pyrene	14.48	252	14853	8.84584	ppb	98
25) Dibenz (a,h) anthracene	16.05	278	12481	11.65147	ppb	96
26) Benzo (g,h,i) perylene	16.47	276	13167	9.70302	ppb	97

Quantitation Report

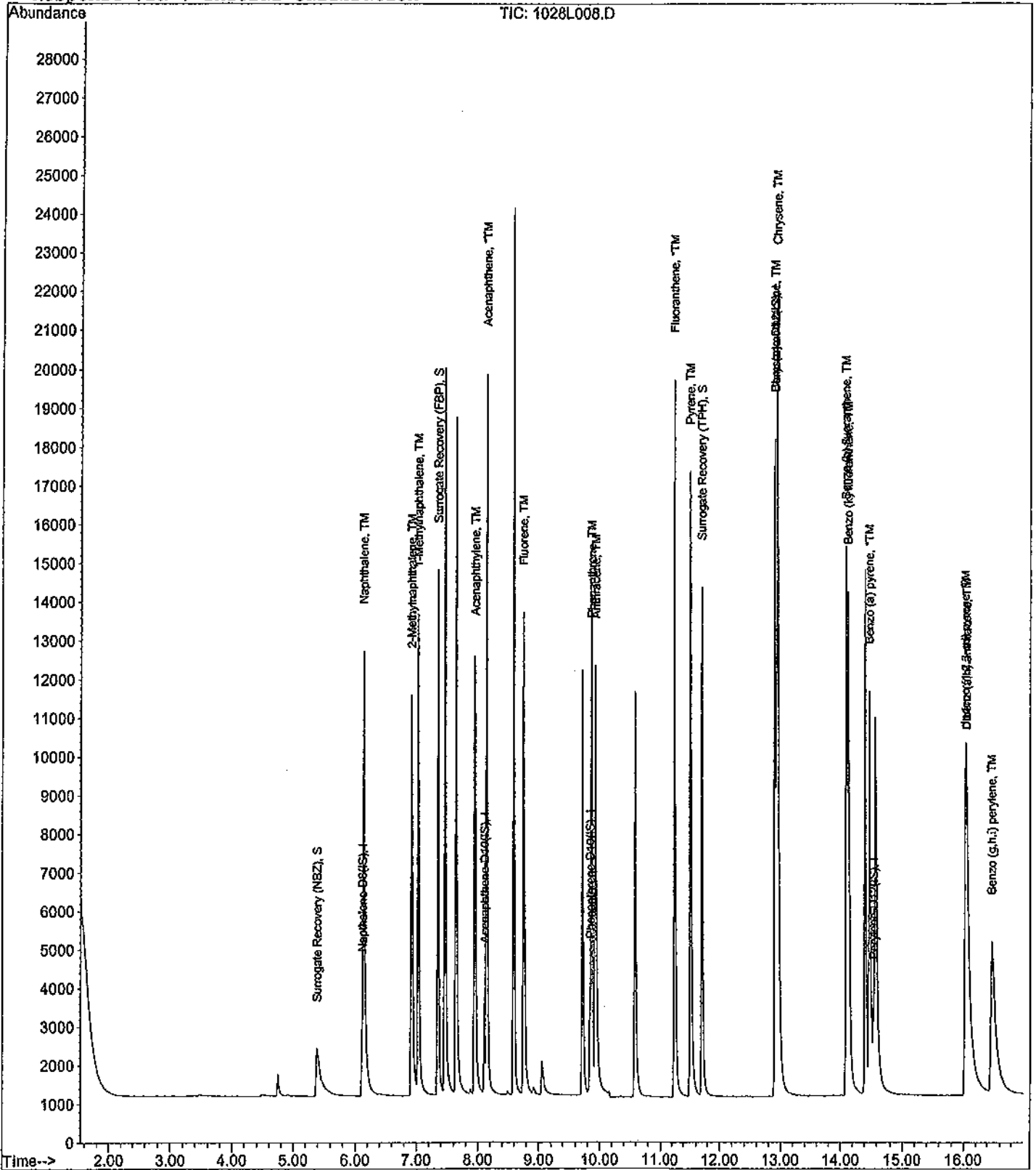
Data File : M:\LINUS\DATA\L111027\1028L008.D  
 Acq On : 28 Oct 11 12:23  
 Sample : 10ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:41 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1028L009.D  
 Acq On : 28 Oct 11 12:49  
 Sample : 50ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:41 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)

Title : EPA 8270C  
 Last Update : Sun Oct 30 10:41:31 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.11	136	2170	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	955	2.50000	ppb	-0.02
11) Phenanthrene-D10 (IS)	9.84	188	1764	2.50000	ppb	-0.04
15) Chrysene-D12 (IS)	12.91	240	2325	2.50000	ppb	-0.05
21) Perylene-D12 (IS)	14.54	264	1951	2.50000	ppb	-0.06
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.34	82	19569	80.30257	ppb	0.00
Spiked Amount	2.000		Recovery	= 4015.150%		
7) Surrogate Recovery (FBP)	7.34	172	37203	62.30259	ppb	-0.04
Spiked Amount	2.000		Recovery	= 3115.150%		
17) Surrogate Recovery (TPH)	11.70	244	43552	58.37048	ppb	-0.06
Spiked Amount	2.000		Recovery	= 2918.500%		
Target Compounds						
3) Naphthalene	6.12	128	64981	36.91273	ppb	98
4) 2-Methylnaphthalene	6.92	142	39285	37.95912	ppb	91
5) 1-Methylnaphthalene	7.02	142	37731	34.00777	ppb	98
8) Acenaphthylene	7.94	152	59152	39.07406	ppb	100
9) Acenaphthene	8.13	154	32228	36.13782	ppb	90
10) Fluorene	8.75	166	36584	35.91740	ppb	95
12) Phenanthrene	9.86	178	48574	30.13920	ppb	99
13) Anthracene	9.92	178	49934	28.19038	ppb	99
14) Fluoranthene	11.23	202	84927	28.95874	ppb	# 86
16) Pyrene	11.50	202	87985	29.37950	ppb	93
18) Benz (a) anthracene	12.90	228	63776	37.84310	ppb	99
19) Chrysene	12.94	228	76944	35.03889	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.01	276	67886	51.38427	ppb	97
22) Benzo (b) fluoranthene	14.09	252	68863	46.90706	ppb	# 96
23) Benzo (k) fluoranthene	14.12	252	60905	30.92236	ppb	100
24) Benzo (a) pyrene	14.45	252	61841	39.88811	ppb	# 94
25) Dibenz (a,h) anthracene	16.02	278	54590	55.19334	ppb	99
26) Benzo (g,h,i) perylene	16.44	276	56362	44.98303	ppb	98

Quantitation Report

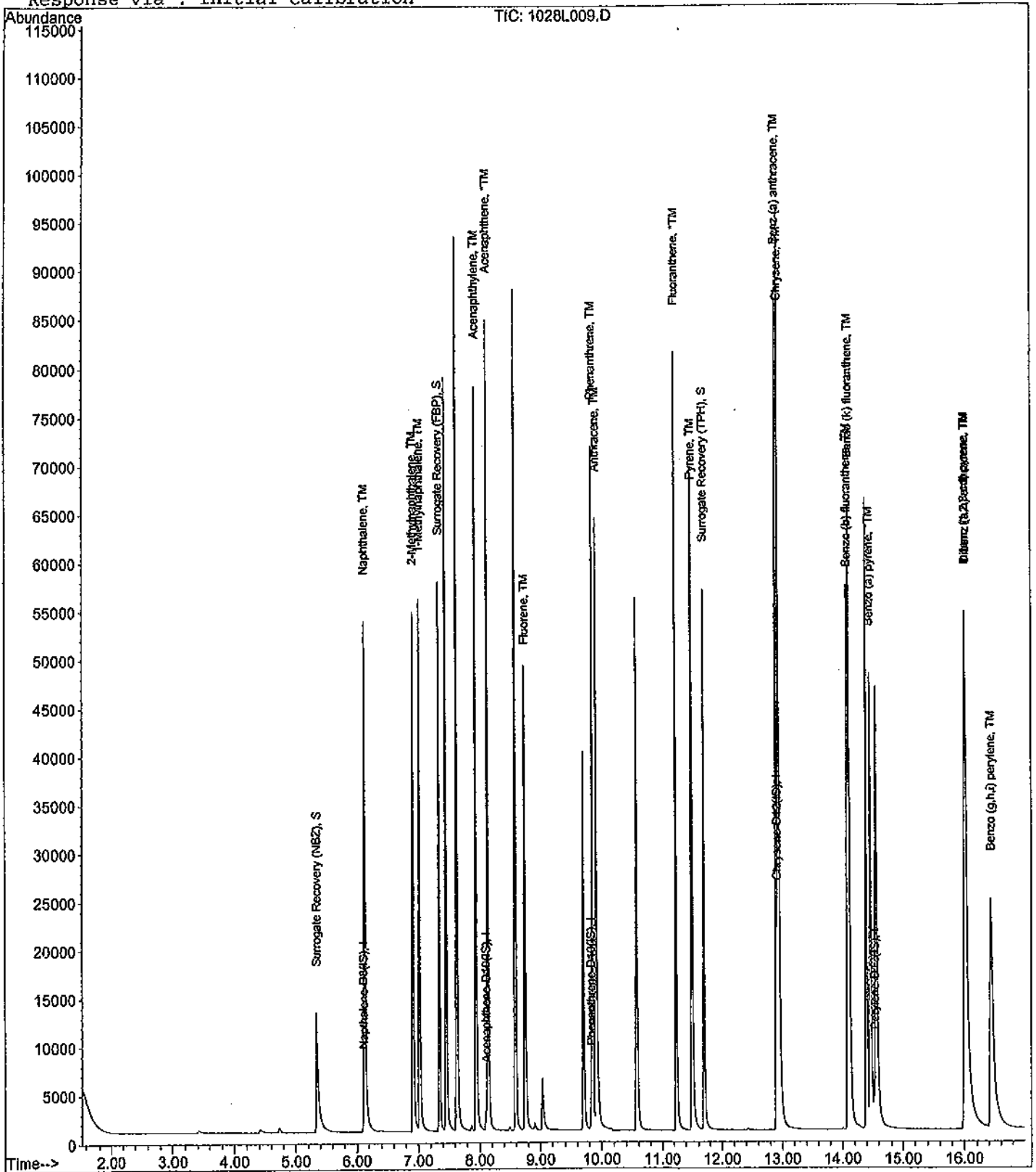
Data File : M:\LINUS\DATA\L111027\1028L009.D  
 Acq On : 28 Oct 11 12:49  
 Sample : 50ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:41 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1028L010.D Vial: 10  
 Acq On : 28 Oct 11 13:14 Operator: LF  
 Sample : 100ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 30 10:42 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111028\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 10:41:31 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.11	136	2028	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	919	2.50000	ppb	-0.02
11) Phenanthrene-D10 (IS)	9.84	188	1786	2.50000	ppb	-0.04
15) Chrysene-D12 (IS)	12.91	240	2218	2.50000	ppb	-0.05
21) Perylene-D12 (IS)	14.54	264	1949	2.50000	ppb	-0.06
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.32	82	39811	174.48341	ppb	-0.01
Spiked Amount	2.000		Recovery	= 8724.150%		
7) Surrogate Recovery (FBP)	7.34	172	68503	119.21355	ppb	-0.04
Spiked Amount	2.000		Recovery	= 5960.700%		
17) Surrogate Recovery (TPH)	11.70	244	80239	112.72808	ppb	-0.06
Spiked Amount	2.000		Recovery	= 5636.400%		
Target Compounds						
3) Napthalene	6.12	128	118023	71.73782	ppb	98
4) 2-Methylnaphthalene	6.92	142	72350	74.80311	ppb	91
5) 1-Methylnaphthalene	7.02	142	67525	65.12327	ppb	99
8) Acenaphthylene	7.94	152	108807	74.69023	ppb	99
9) Acenaphthene	8.13	154	58631	68.31936	ppb	89
10) Fluorene	8.75	166	64716	66.02573	ppb	95
12) Phenanthrene	9.86	178	89156	54.63809	ppb	98
13) Anthracene	9.92	178	91266	50.88980	ppb	98
14) Fluoranthene	11.23	202	154470	52.02296	ppb #	84
16) Pyrene	11.50	202	164055	57.42311	ppb #	90
18) Benz (a) anthracene	12.90	228	140011	87.08694	ppb	99
19) Chrysene	12.94	228	127613	60.91607	ppb #	95
20) Indeno (1,2,3-cd) pyrene	16.02	276	133093	105.60065	ppb #	87
22) Benzo (b) fluoranthene	14.09	252	126697	86.39011	ppb	96
23) Benzo (k) fluoranthene	14.12	252	120651	61.31914	ppb #	94
24) Benzo (a) pyrene	14.47	252	119503	77.15982	ppb	95
25) Dibenz (a,h) anthracene	16.03	278	107509	108.80876	ppb	91
26) Benzo (g,h,i) perylene	16.44	276	112699	90.03841	ppb	99

Quantitation Report

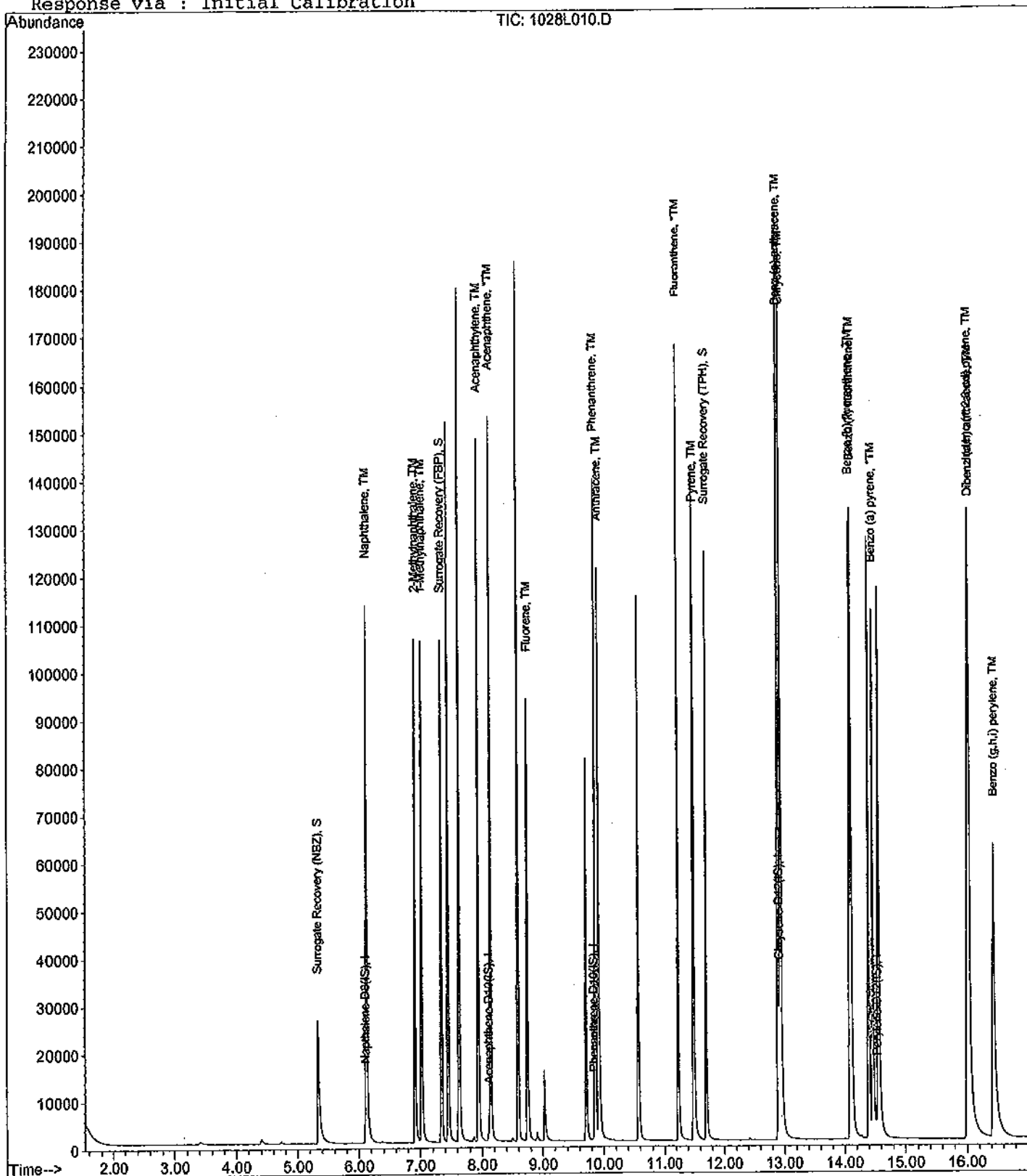
Data File : M:\LINUS\DATA\L111027\1028L010.D  
 Acq On : 28 Oct 11 13:14  
 Sample : 100ug/ml PAH  
 Misc :

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

Quant Time: Oct 30 10:42 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



Form 7

## Second Source Calibration

Lab Name: APPL, Inc.SDG No: 0660

Case No: \_\_\_\_\_

Date Analyzed: 10/28/11

Matrix: \_\_\_\_\_

Instrument: LinusInitial Cal. Date: 10/27/11Data File: 1028L011.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Naphthalene-D8(IS)	ISTD			I
2	TM	Naphthalene	1.742	1.546	11	TM
3	TM	2-Methylnaphthalene	0.8931	0.8782	1.7	TM
4	TM	1-Methylnaphthalene	1.031	1.007	2.4	TM
5	I	Acenaphthene-D10(IS)	ISTD			I
6	TM	Acenaphthylene	3.327	3.132	5.8	TM
7	*TM	Acenaphthene	1.904	1.812	4.8	*TM
8	TM	Fluorene	2.083	1.993	4.3	TM
9	I	Phenanthrene-D10(IS)	ISTD			I
10	TM	Phenanthrene	1.609	1.555	3.4	TM
11	TM	Anthracene	1.634	1.624	0.64	TM
12	*TM	Fluoranthene	2.792	2.916	4.4	*TM
13	I	Chrysene-D12(IS)	ISTD			I
14	TM	Pyrene	2.200	2.429	10	TM
15	TM	Benz (a) anthracene	1.449	1.392	3.9	TM
16	TM	Chrysene	1.939	2.190	13	TM
17	TM	Indeno (1,2,3-cd) pyrene	1.502	1.468	2.3	TM
18	I	Perylene-D12(IS)	ISTD			I
19	TM	Benzo (b) fluoranthene	1.761	1.686	4.3	TM
20	TM	Benzo (k) fluoranthene	1.823	2.176	19	TM
21	*TM	Benzo (a) pyrene	1.723	1.689	1.9	*TM
22	TM	Dibenz (a,h) anthracene	1.447	1.354	6.4	TM
23	TM	Benzo (g,h,i) perylene	1.525	1.483	2.8	TM
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

5.7

Data File : M:\LINUS\DATA\L111027\1028L011.D Vial: 11  
 Acq On : 28 Oct 11 13:40 Operator: LF  
 Sample : 5.0ug/ml SS PAH 10-27-11 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Oct 30 11:17 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTÉ Integrator)  
 Title : EPA 8270C  
 Last Update : Sun Oct 30 11:15:17 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.13	136	2295	2.50000	ppb	0.01
6) Acenaphthene-D10 (IS)	8.11	164	1033	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.85	188	1773	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.93	240	2205	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.56	264	1840	2.50000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000	ppb	
Spiked Amount	2.000		Recovery	=	0.000%	
7) Surrogate Recovery (FBP)	0.00	172	0d	0.00000	ppb	
Spiked Amount	2.000		Recovery	=	0.000%	
17) Surrogate Recovery (TPH)	0.00	244	0d	0.00000	ppb	
Spiked Amount	2.000		Recovery	=	0.000%	
<b>Target Compounds</b>						
3) Naphthalene	6.14	128	7095	4.43732	ppb	99
4) 2-Methylnaphthalene	6.93	142	4031	4.91655	ppb	99
5) 1-Methylnaphthalene	7.04	142	4620	4.88168	ppb	94
8) Acenaphthylene	7.95	152	6471	4.70758	ppb	99
9) Acenaphthene	8.15	154	3744	4.75904	ppb	91
10) Fluorene	8.76	166	4117	4.78272	ppb	99
12) Phenanthrene	9.87	178	5514	4.83130	ppb	99
13) Anthracene	9.94	178	5757	4.96794	ppb	98
14) Fluoranthene	11.26	202	10339	5.22192	ppb	93
16) Pyrene	11.51	202	10711	5.51952	ppb	# 91
18) Benz (a) anthracene	12.93	228	6140	4.80346	ppb	99
19) Chrysene	12.96	228	9659	5.64891	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.06	276	6475	4.88617	ppb	# 91
22) Benzo (b) fluoranthene	14.12	252	6204	4.78607	ppb	99
23) Benzo (k) fluoranthene	14.14	252	8006	5.96784	ppb	# 65
24) Benzo (a) pyrene	14.49	252	6217	4.90268	ppb	97
25) Dibenz (a,h) anthracene	16.08	278	4984	4.68078	ppb	96
26) Benzo (g,h,i) perylene	16.52	276	5458	4.86160	ppb	99



Quantitation Report

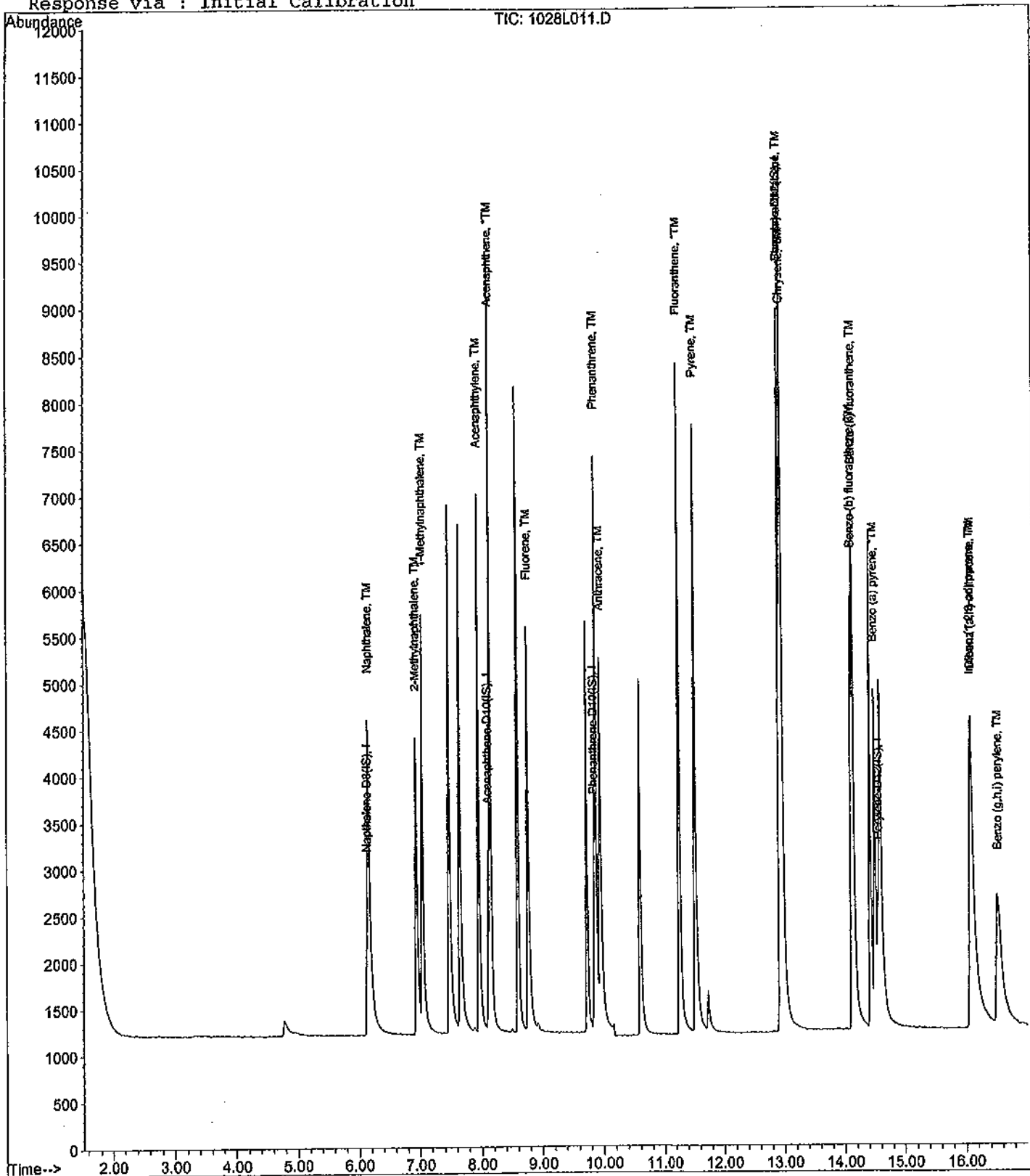
Data File : M:\LINUS\DATA\L111027\1028L011.D  
 Acq On : 28 Oct 11 13:40  
 Sample : 5.0ug/ml SS PAH 10-27-11  
 Misc :

Vial: 11  
 Operator: LF  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Oct 30 11:17 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 01 17:14:29 2011  
 Response via : Initial Calibration



EPA 8270C SIM

Form 7

Continuing Calibration

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

SDG No: 6660  
 Date Analyzed: 5 Nov 11 16:54  
 Instrument: Linus  
 Initial Cal. Date: 10/27/11  
 Data File: 1105L020.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Naphthalene-D8(IS)	ISTD			I
2	S Surrogate Recovery (NBZ)	0.4477	0.4479	0.03	S
3	TM Naphthalene	1.742	1.518	13	TM
4	TM 2-Methylnaphthalene	0.8931	0.9102	1.9	TM
5	TM 1-Methylnaphthalene	1.031	0.9456	8.3	TM
6	I Acenaphthene-D10(IS)	ISTD			I
7	S Surrogate Recovery (FBP)	2.229	2.036	8.6	S
8	TM Acenaphthylene	3.327	3.080	7.4	TM
9	*TM Acenaphthene	1.904	1.695	11	*TM
10	TM Fluorene	2.083	1.961	5.9	TM
11	I Phenanthrene-D10(IS)	ISTD			I
12	TM Phenanthrene	1.609	1.494	7.2	TM
13	TM Anthracene	1.634	1.588	2.8	TM
14	*TM Fluoranthene	2.792	2.868	2.7	*TM
15	I Chrysene-D12(IS)	ISTD			I
16	TM Pyrene	2.200	2.193	0.31	TM
17	S Surrogate Recovery (TPH)	1.077	1.106	2.7	S
18	TM Benz (a) anthracene	1.449	1.737	20	TM
19	TM Chrysene	1.939	1.906	1.7	TM
20	TM Indeno (1,2,3-cd) pyrene	1.502	1.682	12	TM
21	I Perylene-D12(IS)	ISTD			I
22	TM Benzo (b) fluoranthene	1.761	1.921	9.1	TM
23	TM Benzo (k) fluoranthene	1.823	1.713	6.0	TM
24	*TM Benzo (a) pyrene	1.723	1.698	1.4	*TM
25	TM Dibenz (a,h) anthracene	1.447	1.482	2.5	TM
26	TM Benzo (g,h,i) perylene	1.525	1.535	0.66	TM
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Average

6.0

Data File : M:\LINUS\DATA\L111027\1105L020.D  
 Acq On : 5 Nov 11 16:54  
 Sample : 5.0ug/ml PAH 10-27-11  
 Misc :

Vial: 20  
 Operator: LF  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Nov 8 9:47 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.11	136	1948	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	877	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.85	188	1506	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.93	240	2029	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.56	264	1837	2.50000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	5.38	82	1745	5.00173	ppb	-0.06
Spiked Amount 2.000			Recovery = 250.100%			
7) Surrogate Recovery (FBP)	7.35	172	3572	4.56887	ppb	0.00
Spiked Amount 2.000			Recovery = 228.450%			
17) Surrogate Recovery (TPH)	11.70	244	4488	5.13686	ppb	-0.01
Spiked Amount 2.000			Recovery = 256.850%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.13	128	5914	4.35756	ppb	99
4) 2-Methylnaphthalene	6.92	142	3546	5.09542	ppb	94
5) 1-Methylnaphthalene	7.02	142	3684	4.58607	ppb	92
8) Acenaphthylene	7.95	152	5403	4.62980	ppb	99
9) Acenaphthene	8.15	154	2973	4.45122	ppb	95
10) Fluorene	8.75	166	3440	4.70710	ppb	96
12) Phenanthrene	9.87	178	4499	4.64084	ppb	100
13) Anthracene	9.93	178	4783	4.85919	ppb	97
14) Fluoranthene	11.26	202	8637	5.13568	ppb	98
16) Pyrene	11.51	202	8901	4.98467	ppb	97
18) Benz (a) anthracene	12.91	228	7049	5.99294	ppb	98
19) Chrysene	12.96	228	7735	4.91608	ppb	98
20) Indeno (1,2,3-cd) pyrene	16.06	276	6825	5.59703	ppb	# 91
22) Benzo (b) fluoranthene	14.10	252	7058	5.45378	ppb	97
23) Benzo (k) fluoranthene	14.14	252	6292	4.69785	ppb	95
24) Benzo (a) pyrene	14.49	252	6239	4.92807	ppb	99
25) Dibenz (a,h) anthracene	16.06	278	5446	5.12302	ppb	99
26) Benzo (g,h,i) perylene	16.51	276	5641	5.03281	ppb	96

Quantitation Report

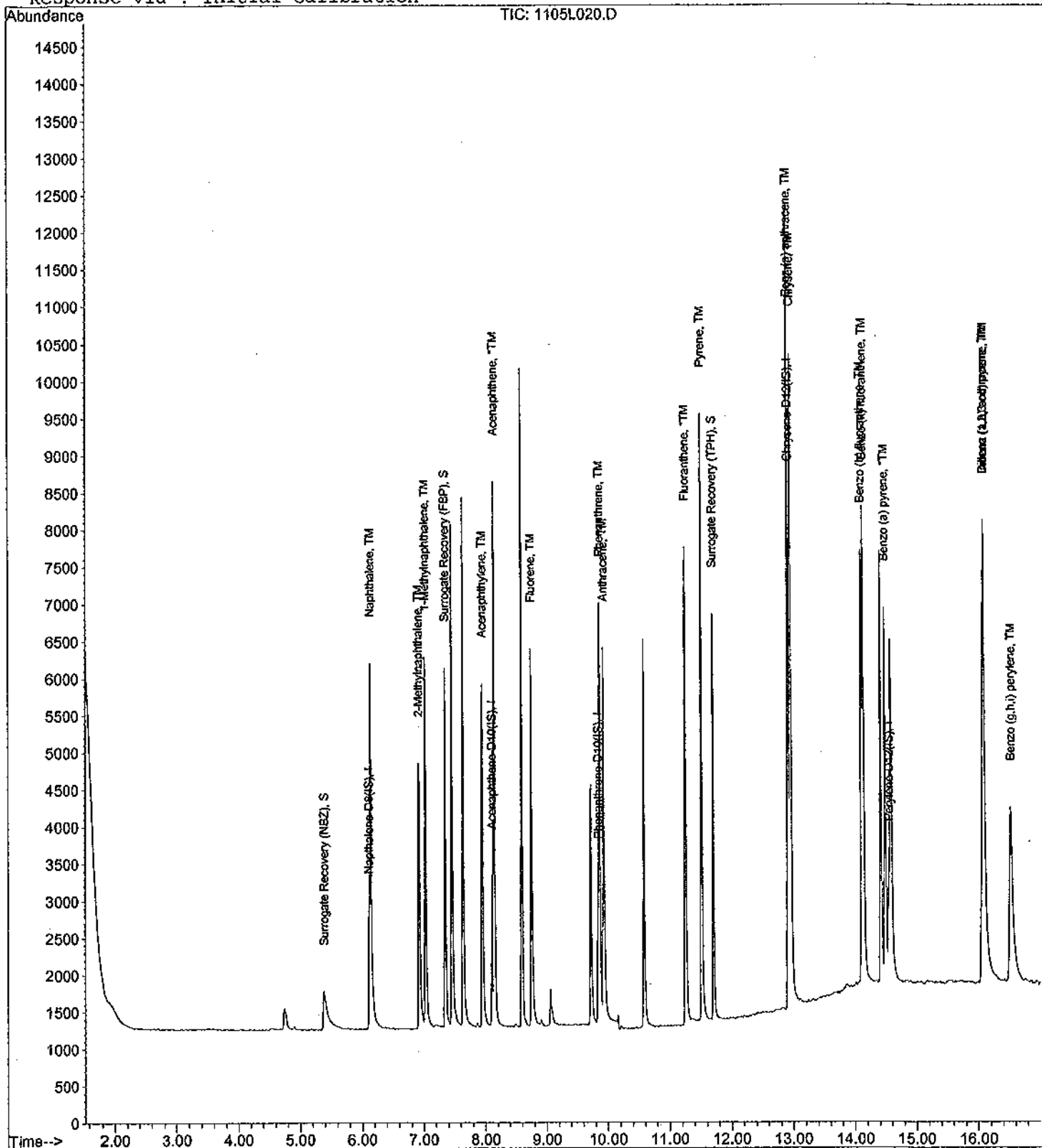
Data File : M:\LINUS\DATA\L111027\1105L020.D  
Acq On : 5 Nov 11 16:54  
Sample : 5.0ug/ml PAH 10-27-11  
Misc :

Vial: 20  
Operator: LF  
Inst : Linus  
Multiplr: 1.00

Quant Time: Nov 8 9:47 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration



**EPA METHOD 8270**  
**Polynuclear Aromatic Hydrocarbons**  
**Raw Data**

**Method Blank**  
**EPA 8270D SIM**

Blank Name/QCG: 111031W-49334 - 161019  
Batch ID: #SIMHC-111031A

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	10/31/11	11/05/11
BLANK	2-METHYLNAPHTHALENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ACENAPHTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ACENAPHTHYLENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	BENZO(A)ANTHRACENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	BENZO(A)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	BENZO(B)FLUORANTHENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	BENZO(GHI)PERYLENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	BENZO(K)FLUORANTHENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	CHRYSENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	DIBENZ(A,H)ANTHRACENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	FLUORANTHENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	FLUORENE	0.12 U	0.2	0.12	0.06	ug/L	10/31/11	11/05/11
BLANK	INDENO(1,2,3-CD)PYRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	NAPHTHALENE	0.10 U	0.2	0.10	0.05	ug/L	10/31/11	11/05/11
BLANK	PHENANTHRENE	0.14 U	0.2	0.14	0.07	ug/L	10/31/11	11/05/11
BLANK	PYRENE	0.16 U	0.2	0.16	0.08	ug/L	10/31/11	11/05/11
BLANK	SURROGATE: 2-FLUORBIPHENY	51.7	50-110			%	10/31/11	11/05/11
BLANK	SURROGATE: NITROBENZENE-	66.3	40-110			%	10/31/11	11/05/11
BLANK	SURROGATE: TERPHENYL-D14 (	54.5	50-135			%	10/31/11	11/05/11

Quant Method: SIM2.M  
Run #: 1105L028  
Instrument: Linus  
Sequence: L111027  
Initials: LF

GC SC-Blank-REG MDLs  
Printed: 11/09/11 3:59:20 PM

Data File : M:\LINUS\DATA\L111027\1105L028.D  
 Acq On : 5 Nov 11 20:15  
 Sample : 111031A BLK 1/1000  
 Misc :

Vial: 28  
 Operator: LF  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Nov 9 8:48 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.12	136	2305	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.11	164	1068	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.86	188	2122	2.50000	ppb	0.01
15) Chrysene-D12 (IS)	12.94	240	2454	2.50000	ppb	0.01
21) Perylene-D12 (IS)	14.57	264	2143	2.50000	ppb	0.01
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.42	82	547	1.32504	ppb	-0.02
Spiked Amount	2.000		Recovery	=	66.250%	
7) Surrogate Recovery (FBP)	7.36	172	984	1.03352	ppb	0.01
Spiked Amount	2.000		Recovery	=	51.700%	
17) Surrogate Recovery (TPH)	11.71	244	1151	1.08925	ppb	0.00
Spiked Amount	2.000		Recovery	=	54.450%	

Target Compounds

Qvalue

Quantitation Report

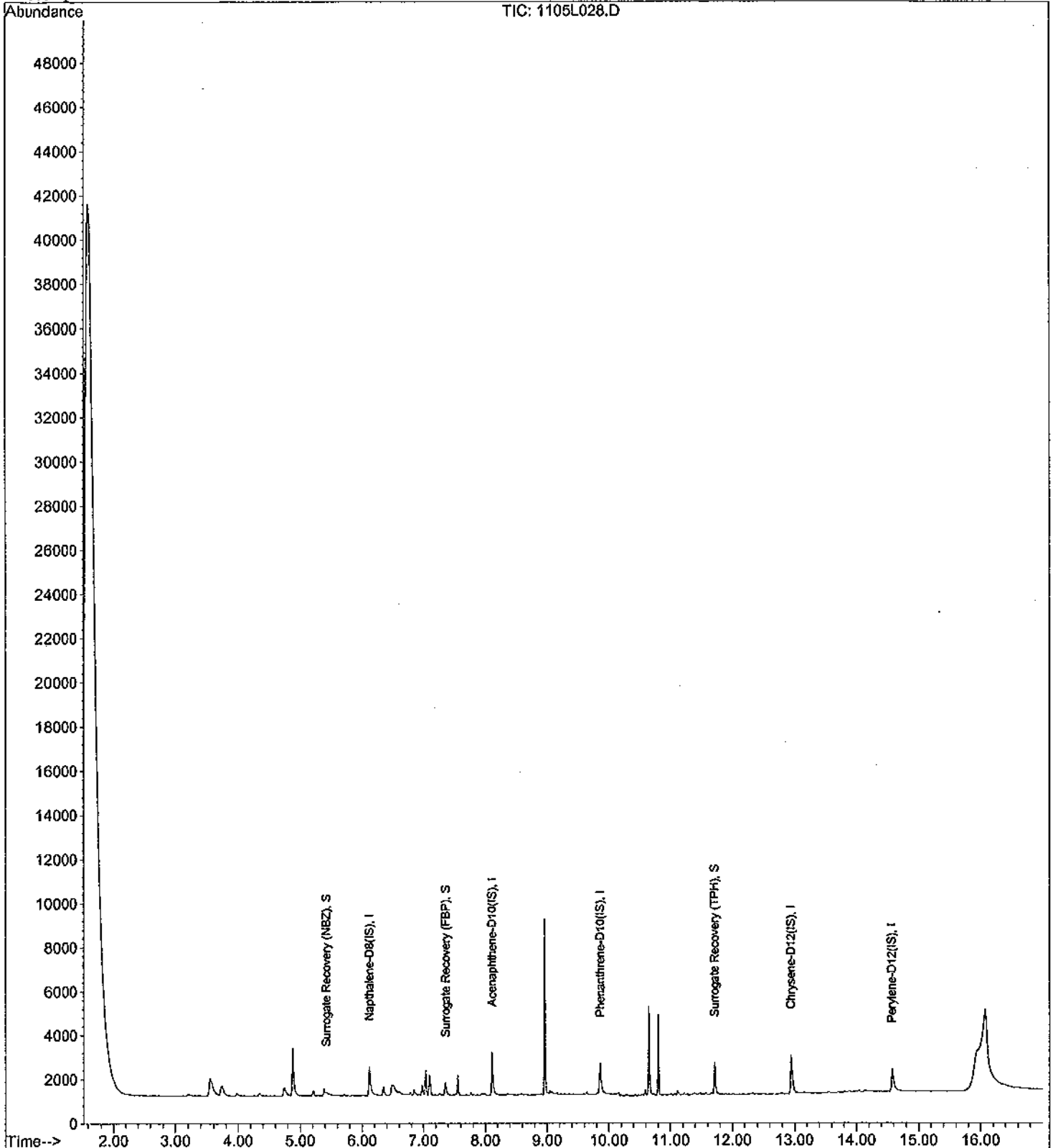
Data File : M:\LINUS\DATA\L111027\1105L028.D  
Acq On : 5 Nov 11 20:15  
Sample : 111031A BLK 1/1000  
Misc :

Vial: 28  
Operator: LF  
Inst : Linus  
Multiplr: 1.00

Quant Time: Nov 9 8:48 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration





**Laboratory Control Spike Recovery**  
**EPA 8270D SIM**

APPL ID: 111031W-49334 LCS - 161019  
Batch ID: #SIMHC-111031A

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
1-METHYLNAPHTHALENE	4.00	2.25	56.3	45-105
2-METHYLNAPHTHALENE	4.00	2.26	56.5	45-105
ACENAPHTHENE	4.00	2.55	63.7	45-110
ACENAPHTHYLENE	4.00	2.39	59.8	50-105
ANTHRACENE	4.00	2.47	61.8	55-110
BENZO(A)ANTHRACENE	4.00	2.74	68.5	55-110
BENZO(A)PYRENE	4.00	2.48	62.0	55-110
BENZO(B)FLUORANTHENE	4.00	2.43	60.8	45-120
BENZO(GHI)PERYLENE	4.00	2.80	70.0	40-125
BENZO(K)FLUORANTHENE	4.00	3.23	80.8	45-125
CHRYSENE	4.00	2.86	71.5	55-110
DIBENZ(A,H)ANTHRACENE	4.00	2.89	72.3	40-125
FLUORANTHENE	4.00	2.86	71.5	55-115
FLUORENE	4.00	2.59	64.8	50-110
INDENO(1,2,3-CD)PYRENE	4.00	2.95	73.8	45-125
NAPHTHALENE	4.00	2.30	57.5	40-100
PHENANTHRENE	4.00	2.43	60.8	50-115
PYRENE	4.00	2.57	64.3	50-130
-----				
SURROGATE: 2-FLUORBIPHENYL (S)	2.00	1.11	55.5	50-110
SURROGATE: NITROBENZENE-D5 (S)	2.00	1.14	57.0	40-110
SURROGATE: TERPHENYL-D14 (S)	2.00	1.06	53.0	50-135
-----				

Comments:

<b>Primary</b>	<b>SPK</b>
Quant Method :	SIM2.M
Extraction Date :	10/31/11
Analysis Date :	11/05/11
Instrument :	Linus
Run :	1105L029
Initials :	LF

Printed: 11/09/11 3:59:21 PM

APPL Standard LCS

Data File : M:\LINUS\DATA\L111027\1105L029.D Vial: 29  
 Acq On : 5 Nov 11 20:41 Operator: LF  
 Sample : 111031A LCS-1 1/1000 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Nov 9 8:50 2011 Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.12	136	2079	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.11	164	961	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.85	188	1713	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.93	240	2367	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.56	264	2017	2.50000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.43	82	426	1.14411	ppb	-0.01
Spiked Amount	2.000		Recovery	=	57.200%	
7) Surrogate Recovery (FBP)	7.36	172	951	1.11008	ppb	0.01
Spiked Amount	2.000		Recovery	=	55.500%	
17) Surrogate Recovery (TPH)	11.71	244	1078	1.05766	ppb	0.00
Spiked Amount	2.000		Recovery	=	52.900%	
<b>Target Compounds</b>						
						Qvalue
3) Naphthalene	6.14	128	3335	2.30246	ppb	99
4) 2-Methylnaphthalene	6.93	142	1681	2.26331	ppb	89
5) 1-Methylnaphthalene	7.04	142	1929	2.25003	ppb	88
8) Acenaphthylene	7.95	152	3060	2.39290	ppb	99
9) Acenaphthene	8.15	154	1866	2.54960	ppb	93
10) Fluorene	8.76	166	2077	2.59363	ppb	97
12) Phenanthrene	9.87	178	2685	2.43497	ppb	98
13) Anthracene	9.94	178	2766	2.47049	ppb	99
14) Fluoranthene	11.26	202	5473	2.86107	ppb	94
16) Pyrene	11.51	202	5362	2.57400	ppb	# 87
18) Benz (a) anthracene	12.93	228	3766	2.74459	ppb	98
19) Chrysene	12.96	228	5250	2.86024	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.09	276	4203	2.95460	ppb	# 95
22) Benzo (b) fluoranthene	14.12	252	3457	2.43287	ppb	# 91
23) Benzo (k) fluoranthene	14.15	252	4746	3.22732	ppb	95
24) Benzo (a) pyrene	14.50	252	3444	2.47758	ppb	98
25) Dibenz (a,h) anthracene	16.09	278	3371	2.88809	ppb	95
26) Benzo (g,h,i) perylene	16.53	276	3449	2.80253	ppb	98

$\frac{3335 \times 2.5}{2079 \times 1.742} = 2.30$   
 WF 10/11/11

Quantitation Report

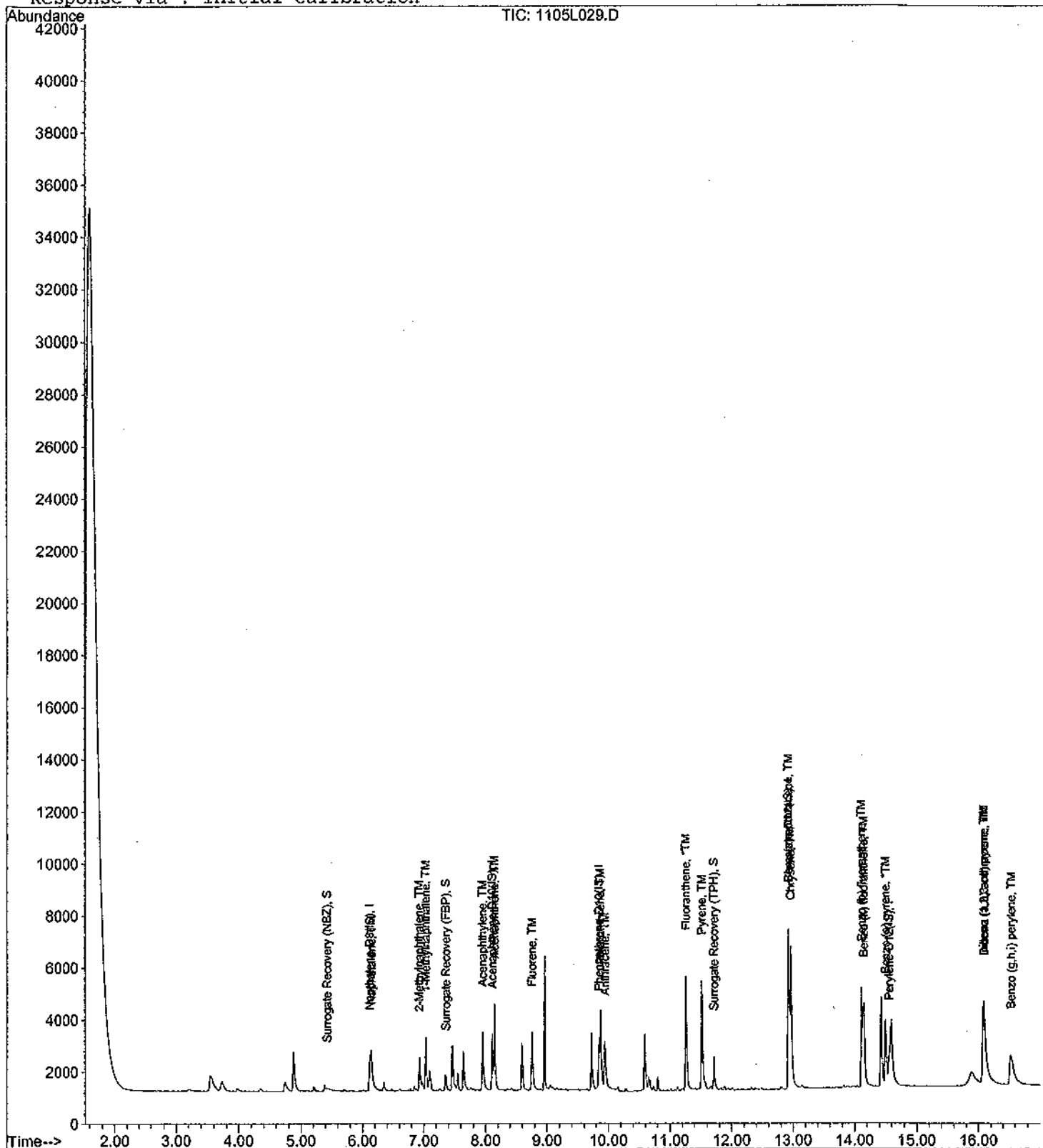
Data File : M:\LINUS\DATA\L111027\1105L029.D  
 Acq On : 5 Nov 11 20:41  
 Sample : 111031A LCS-1 1/1000  
 Misc :

Vial: 29  
 Operator: LF  
 Inst : Linus  
 Multiplr: 1.00

Quant Time: Nov 9 8:50 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Tue Nov 08 16:22:04 2011  
 Response via : Initial Calibration



**Matrix Spike Recoveries**  
**EPA 8270D SIM**

APPL ID: 111031W-49334 MS - 161019  
Batch ID: #SIMHC-111031A  
Sample ID: AY49334  
Client ID: ES047

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1-METHYLNAPHTHALENE	3.88	0.62	2.88	2.71	58.2	53.9	45-105	6.1	25
2-METHYLNAPHTHALENE	3.88	0.20	2.26	1.98	53.1	45.9	45-105	13.2	25
ACENAPHTHENE	3.88	0.16	2.17	1.79	51.8	42.0 #	45-110	19.2	25
ACENAPHTHYLENE	3.88	ND	2.14	1.77	55.2	45.6 #	50-105	18.9	25
ANTHRACENE	3.88	ND	2.14	1.96	55.2	50.5 #	55-110	8.8	25
BENZO(A)ANTHRACENE	3.88	ND	3.04	2.84	78.4	73.2	55-110	6.8	25
BENZO(A)PYRENE	3.88	ND	2.62	2.30	67.5	59.3	55-110	13.0	25
BENZO(B)FLUORANTHENE	3.88	ND	2.72	2.34	70.1	60.3	45-120	15.0	25
BENZO(GHI)PERYLENE	3.88	ND	2.84	2.54	73.2	65.5	40-125	11.2	25
BENZO(K)FLUORANTHENE	3.88	ND	3.07	2.84	79.1	73.2	45-125	7.8	25
CHRYSENE	3.88	ND	2.75	2.56	70.9	66.0	55-110	7.2	25
DIBENZ(A,H)ANTHRACENE	3.88	ND	2.90	2.51	74.7	64.7	40-125	14.4	25
FLUORANTHENE	3.88	ND	2.84	2.59	73.2	66.8	55-115	9.2	25
FLUORENE	3.88	0.083	2.42	2.08	60.2	51.5	50-110	15.1	25
INDENO(1,2,3-CD)PYRENE	3.88	ND	2.93	2.71	75.5	69.8	45-125	7.8	25
NAPHTHALENE	3.88	1.0	3.70	2.56	69.6	40.2	40-100	36.4 #	25
PHENANTHRENE	3.88	ND	2.38	2.20	61.3	56.7	50-115	7.9	25
PYRENE	3.88	ND	2.63	2.45	67.8	63.1	50-130	7.1	25
-----									
SURROGATE: 2-FLUORBIPHENYL (S)	1.94	NA	1.04	1.08	53.6	55.7	50-110		
SURROGATE: NITROBENZENE-D5 (S)	1.94	NA	1.15	1.03	59.3	53.1	40-110		
SURROGATE: TERPHENYL-D14 (S)	1.94	NA	0.984	1.20	50.7	61.9	50-135		
-----									

# = Recovery is outside QC limits.

Comments:

<u>Primary</u>	<u>SPK</u>	<u>DUP</u>
Quant Method :	SIM2.M	SIM2.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	11/05/11	11/06/11
Instrument :	Linus	Linus
Run :	1105L036	1105L037
Initials :	LF	

Printed: 11/09/11 4:01:35 PM  
APPL MSD SCII

Data File : M:\LINUS\DATA\L111027\1105L036.D  
 Acq On : 5 Nov 11 23:36  
 Sample : AY49334W30 MS-1 1/1030  
 Misc :

Vial: 36  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.97

Quant Time: Nov 9 9:18 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.11	136	2236	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	1033	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.84	188	1791	2.50000	ppb	-0.01
15) Chrysene-D12 (IS)	12.93	240	2429	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.56	264	2046	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.41	82	474	1.14916	ppb	-0.04
Spiked Amount	1.942		Recovery	=	59.174%	
7) Surrogate Recovery (FBP)	7.35	172	984	1.03741	ppb	0.00
Spiked Amount	1.942		Recovery	=	53.406%	
17) Surrogate Recovery (TPH)	11.70	244	1060	0.98394	ppb	-0.01
Spiked Amount	1.942		Recovery	=	50.676%	
Target Compounds						
3) Naphthalene	6.13	128	5940	3.70192	ppb	# 90
4) 2-Methylnaphthalene	6.92	142	1859	2.25943	ppb	91
5) 1-Methylnaphthalene	7.02	142	2737	2.88187	ppb	92
8) Acenaphthylene	7.94	152	3027	2.13796	ppb	95
9) Acenaphthene	8.15	154	1758	2.16952	ppb	99
10) Fluorene	8.75	166	2145	2.41926	ppb	98
12) Phenanthrene	9.86	178	2830	2.38319	ppb	96
13) Anthracene	9.93	178	2585	2.14395	ppb	99
14) Fluoranthene	11.25	202	5849	2.83927	ppb	# 80
16) Pyrene	11.51	202	5786	2.62780	ppb	95
18) Benz (a) anthracene	12.91	228	4407	3.03859	ppb	97
19) Chrysene	12.96	228	5335	2.74985	ppb	98
20) Indeno (1,2,3-cd) pyrene	16.08	276	4399	2.92567	ppb	# 93
22) Benzo (b) fluoranthene	14.12	252	4037	2.71919	ppb	# 91
23) Benzo (k) fluoranthene	14.14	252	4718	3.07067	ppb	96
24) Benzo (a) pyrene	14.50	252	3802	2.61781	ppb	97
25) Dibenz (a,h) anthracene	16.08	278	3537	2.90034	ppb	98
26) Benzo (g,h,i) perylene	16.53	276	3653	2.84098	ppb	99

Quantitation Report

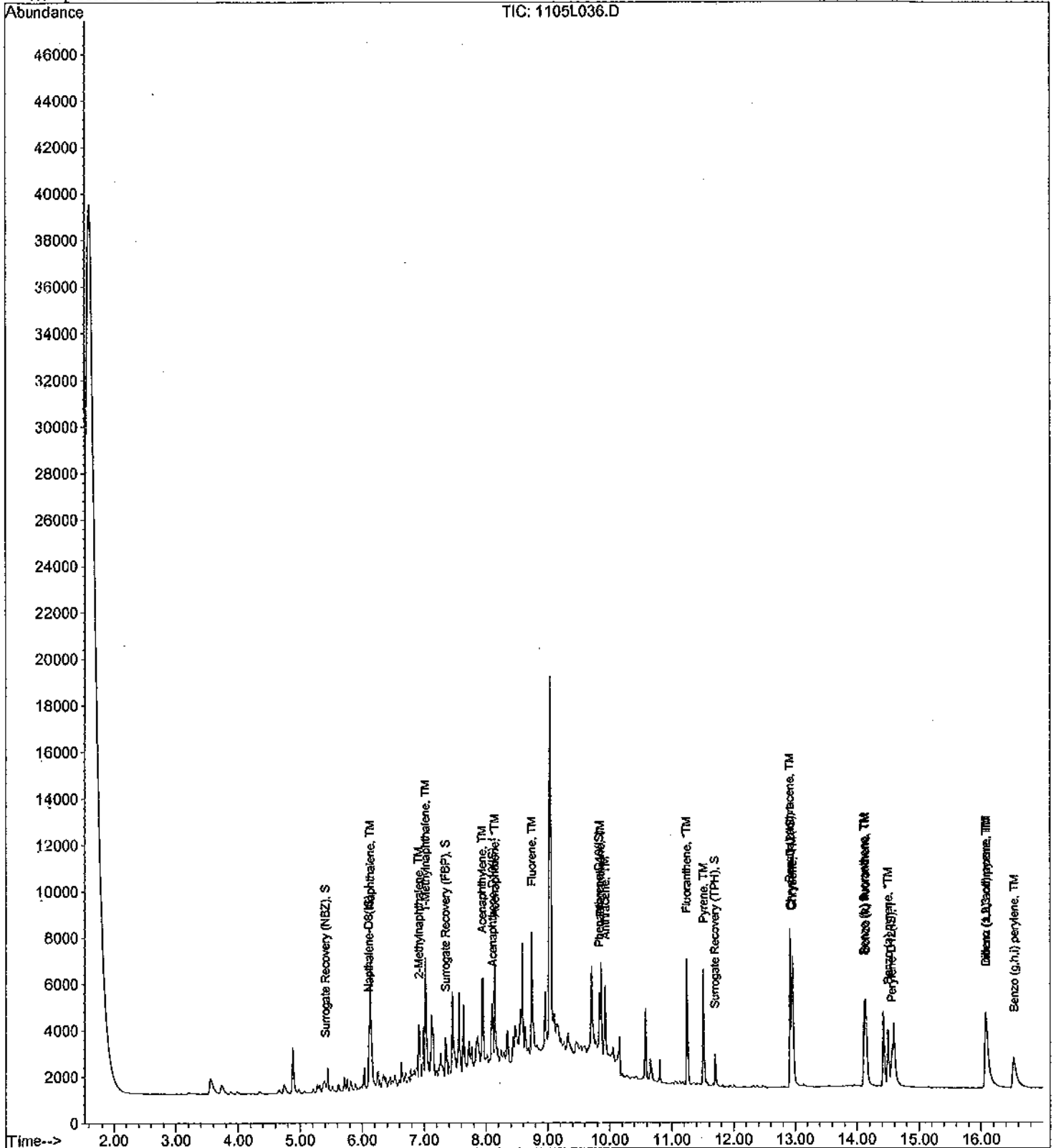
Data File : M:\LINUS\DATA\L111027\1105L036.D  
Acq On : 5 Nov 11 23:36  
Sample : AY49334W30 MS-1 1/1030  
Misc :

Vial: 36  
Operator: LF  
Inst : Linus  
Multiplr: 0.97

Quant Time: Nov 9 9:18 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration



Data File : M:\LINUS\DATA\L111027\1105L037.D Vial: 37  
 Acq On : 6 Nov 11 00:01 Operator: LF  
 Sample : AY49334W34 MSD-1 1/1030 Inst : Linus  
 Misc : Multiplr: 0.97

Quant Time: Nov 9 9:19 2011

Quant Results File: SIM2.RES

Quant Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Nov 02 15:56:51 2011  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.11	136	2287	2.50000	ppb	-0.01
6) Acenaphthene-D10 (IS)	8.11	164	1131	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.83	188	1879	2.50000	ppb	-0.01
15) Chrysene-D12 (IS)	12.93	240	2428	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.56	264	2160	2.50000	ppb	0.00
System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.41	82	433	1.02635	ppb	-0.04
Spiked Amount	1.942		Recovery	=	52.839%	
7) Surrogate Recovery (FBP)	7.35	172	1118	1.07656	ppb	0.00
Spiked Amount	1.942		Recovery	=	55.466%	
17) Surrogate Recovery (TPH)	11.70	244	1293	1.20071	ppb	-0.01
Spiked Amount	1.942		Recovery	=	61.852%	
Target Compounds						
3) Naphthalene	6.13	128	4199	2.55854	ppb	# 85
4) 2-Methylnaphthalene	6.92	142	1664	1.97733	ppb	92
5) 1-Methylnaphthalene	7.02	142	2628	2.70539	ppb	91
8) Acenaphthylene	7.94	152	2746	1.77144	ppb	94
9) Acenaphthene	8.15	154	1590	1.79217	ppb	99
10) Fluorene	8.75	166	2022	2.08293	ppb	98
12) Phenanthrene	9.86	178	2744	2.20254	ppb	96
13) Anthracene	9.93	178	2473	1.95500	ppb	99
14) Fluoranthene	11.25	202	5590	2.58646	ppb	# 83
16) Pyrene	11.51	202	5394	2.45077	ppb	94
18) Benz (a) anthracene	12.91	228	4123	2.84394	ppb	98
19) Chrysene	12.96	228	4973	2.56432	ppb	99
20) Indeno (1,2,3-cd) pyrene	16.08	276	4079	2.71396	ppb	# 90
22) Benzo (b) fluoranthene	14.12	252	3669	2.34088	ppb	# 90
23) Benzo (k) fluoranthene	14.14	252	4610	2.84203	ppb	96
24) Benzo (a) pyrene	14.50	252	3531	2.30290	ppb	98
25) Dibenz (a,h) anthracene	16.08	278	3235	2.51269	ppb	99
26) Benzo (g,h,i) perylene	16.53	276	3447	2.53929	ppb	97

Quantitation Report

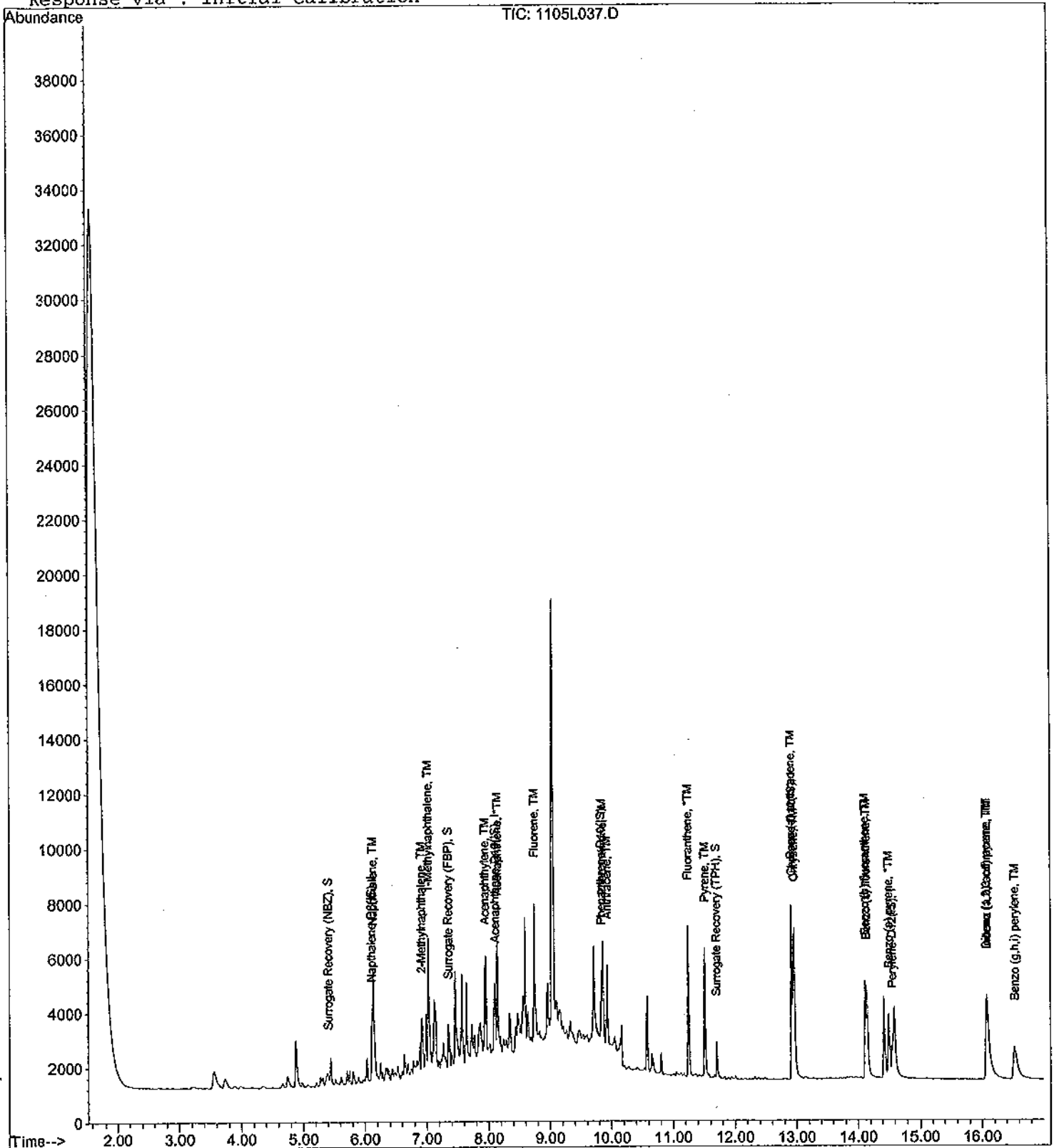
Data File : M:\LINUS\DATA\L111027\1105L037.D  
Acq On : 6 Nov 11 00:01  
Sample : AY49334W34 MSD-1 1/1030  
Misc :

Vial: 37  
Operator: LF  
Inst : Linus  
Multiplr: 0.97

Quant Time: Nov 9 9:19 2011

Quant Results File: SIM2.RES

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Tue Nov 08 16:22:04 2011  
Response via : Initial Calibration

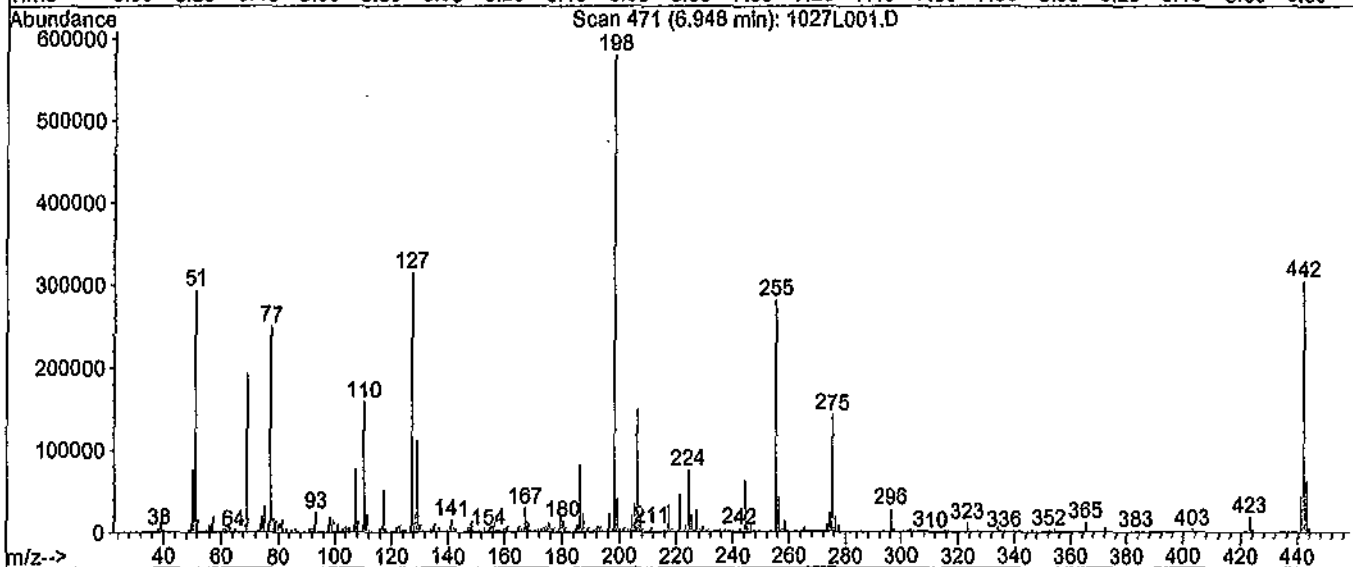
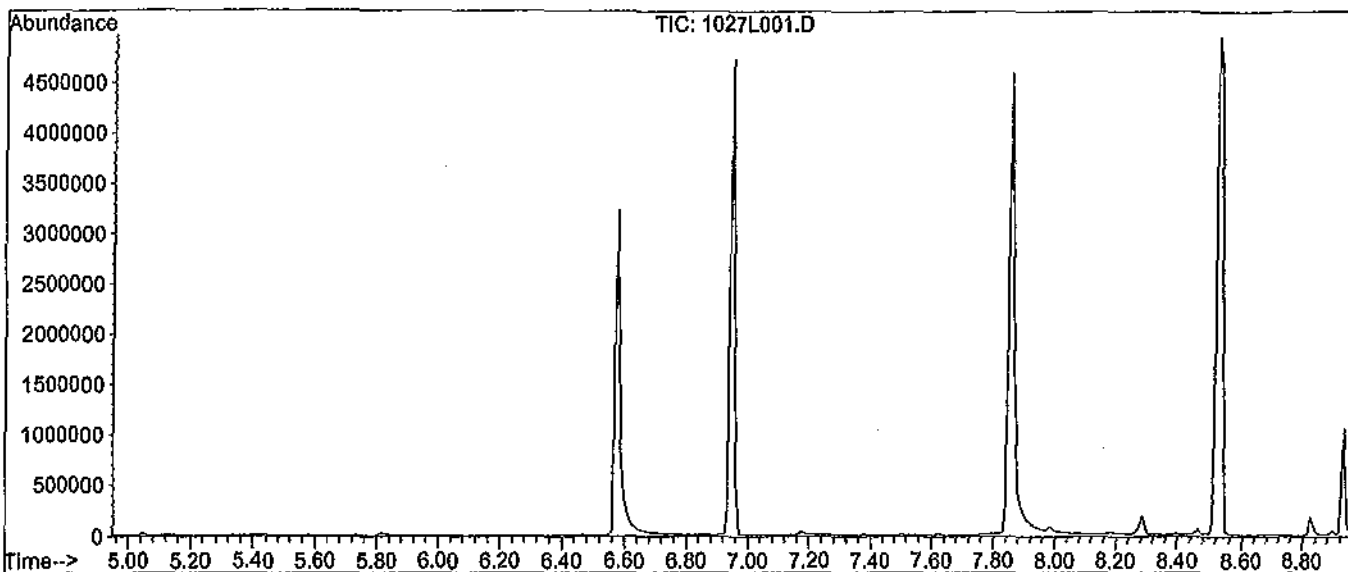




Data File : M:\LINUS\DATA\L111027\1027L001.D  
 Acq On : 27 Oct 11 18:29  
 Sample : SVTUNE 10-27-11  
 Misc :

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

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C



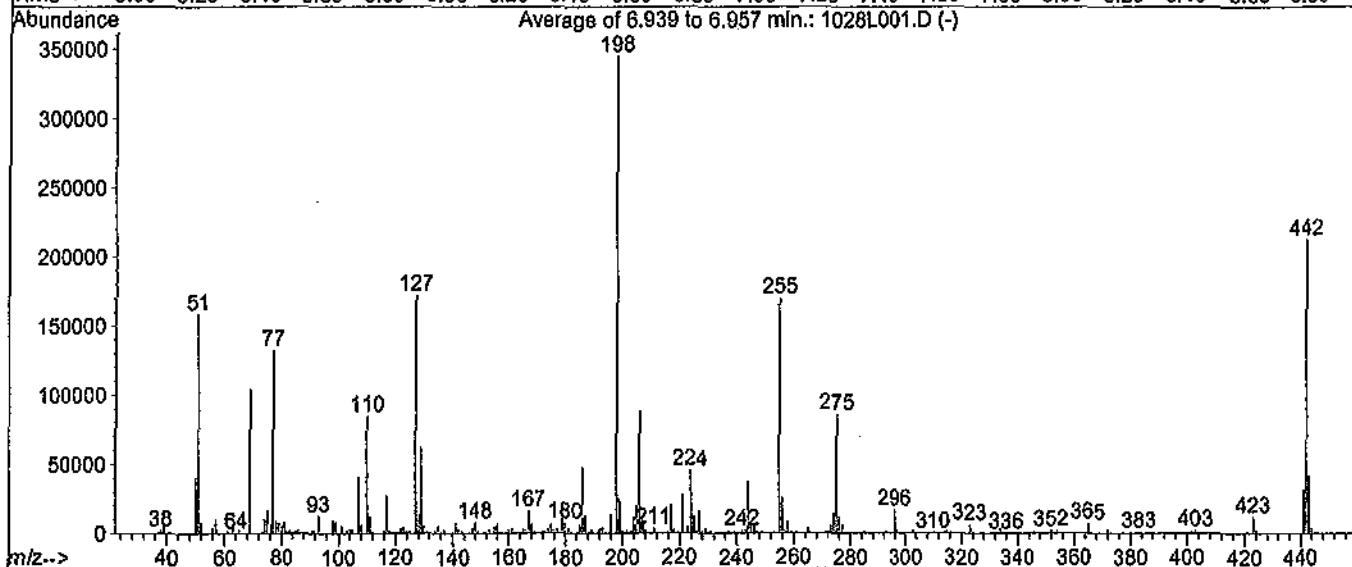
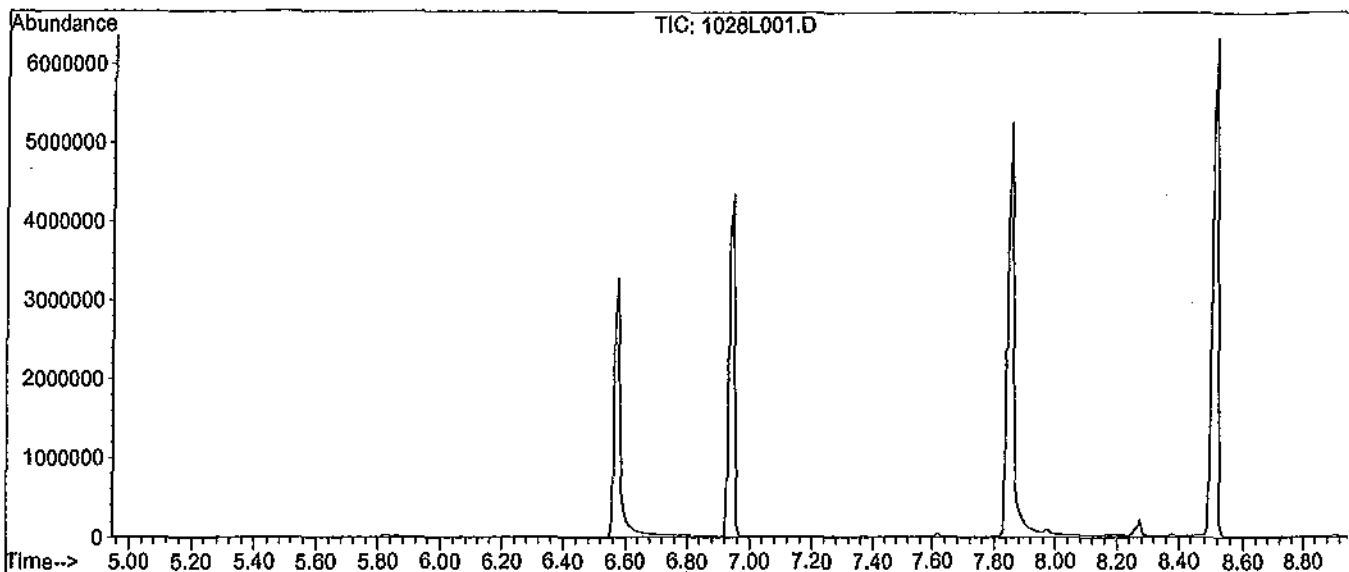
Spectrum Information: Scan 471

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.7	294016	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	1188	PASS
127	198	40	60	54.3	314624	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	579520	PASS
199	198	5	9	7.0	40304	PASS
275	198	10	30	24.5	141888	PASS
365	198	1	100	2.0	11470	PASS
441	443	0.01	100	70.8	44728	PASS
442	198	40	150	52.6	304768	PASS
443	442	17	23	20.7	63176	PASS

Data File : M:\LINUS\DATA\L111027\1028L001.D  
 Acq On : 28 Oct 11 9:32  
 Sample : SVTUNE 10-27-11  
 Misc :

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

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C



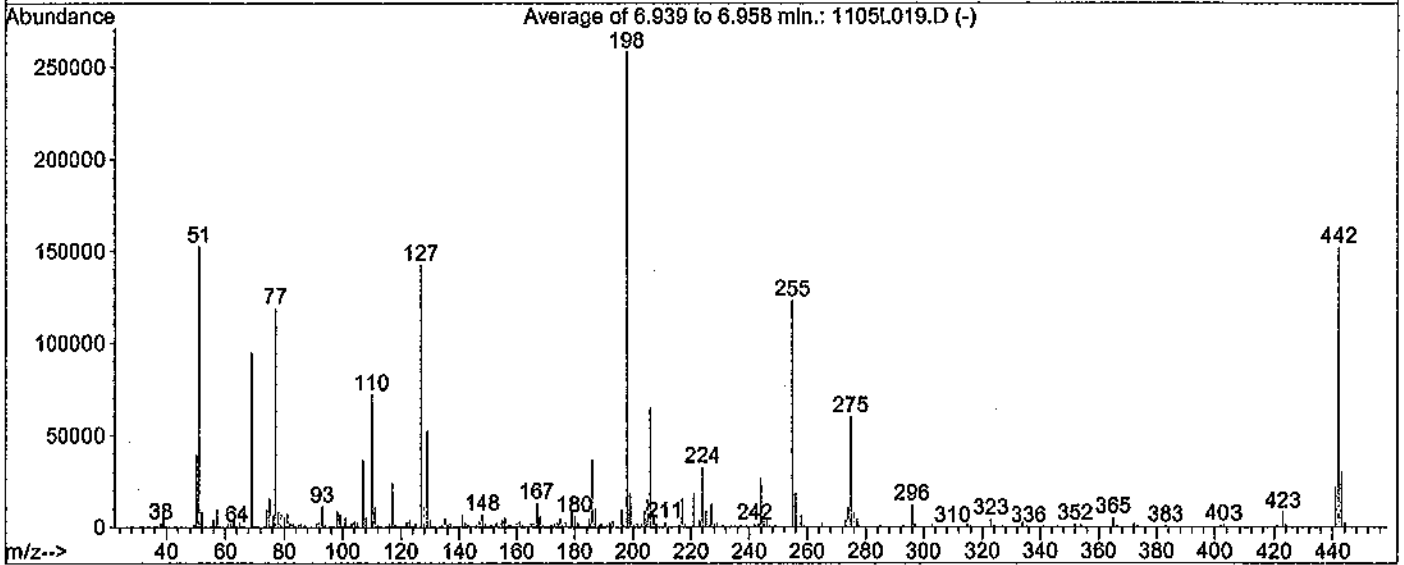
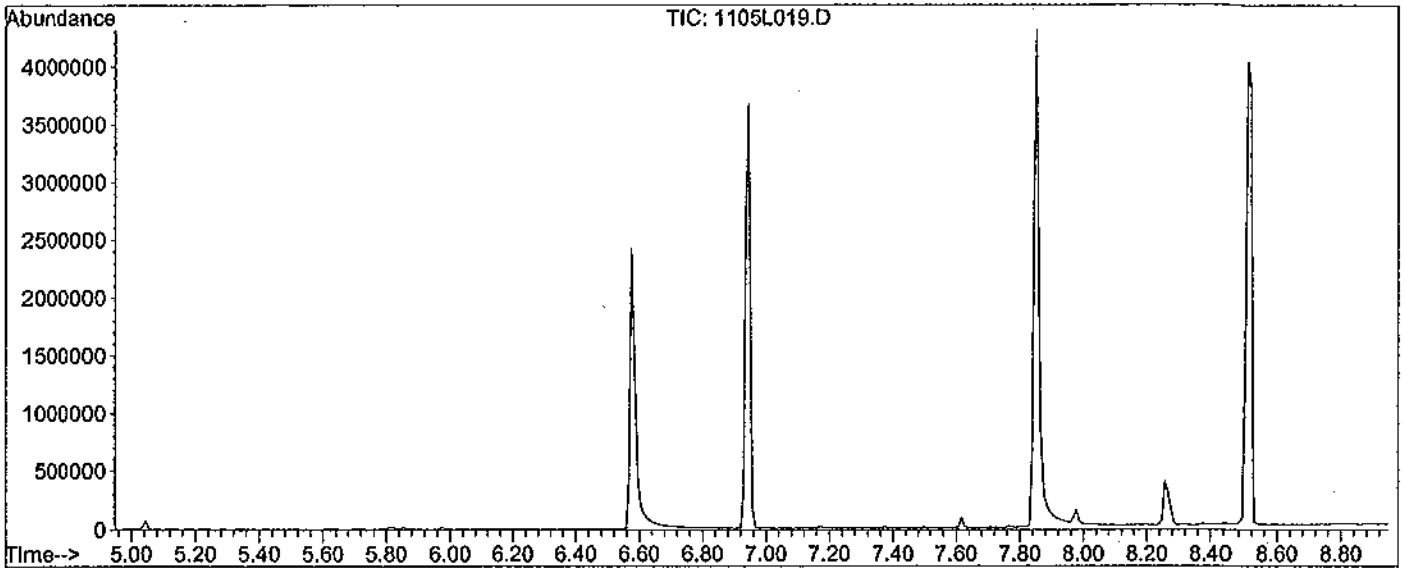
Spectrum Information: Average of 6.939 to 6.957 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.8	158326	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.5	519	PASS
127	198	40	60	49.8	171922	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	345360	PASS
199	198	5	9	7.1	24580	PASS
275	198	10	30	24.8	85541	PASS
365	198	1	100	2.0	6987	PASS
441	443	0.01	100	74.7	31248	PASS
442	198	40	150	61.5	212309	PASS
443	442	17	23	19.7	41843	PASS

Data File : M:\LINUS\DATA\L111027\1105L019.D  
 Acq On : 5 Nov 11 16:36  
 Sample : SVTUNE 10-27-11  
 Misc :

Vial: 19  
 Operator: LF  
 Inst : Linus  
 Multiplr: 1.00

Method : M:\LINUS\DATA\L111027\SIM2.M (RTE Integrator)  
 Title : EPA 8270C



Spectrum Information: Average of 6.939 to 6.958 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	59.0	152381	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	557	PASS
127	198	40	60	55.1	142318	PASS
197	198	0.00	1	0.5	1197	PASS
198	198	100	100	100.0	258253	PASS
199	198	5	9	7.1	18230	PASS
275	198	10	30	23.2	59874	PASS
365	198	1	100	1.9	4901	PASS
441	443	0.01	100	73.0	21870	PASS
442	198	40	150	58.8	151760	PASS
443	442	17	23	19.7	29958	PASS

VF 11/7/11

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

VF 4/25/11

PREP DATE: 01-25-11		8270T STANDARD CURVE															
Exp: 02-24-11		Conc.	Date		0.1	0.2	1	5	10	20	40	50	60	80	100		
Supplier	ID #	µg/mL	Lot #	Code	Exp. Date		µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
8270T Stock	200		12/17/10	05-29-11	0	0	0	5	5	10	20	25	30	40	50		
5.0ug/mL			01/25/11		0	0	20	0	0	0	0	0	0	0	0		
1.0ug/mL			01/25/11		10	20	0	0	0	0	0	0	0	0	0		
Surrogate Stock	VAR	160518-27570	11/11/10	11-11-11	0	0	0	5	5	10	20	25	30	40	50		
EM Science	Methylene Chloride	47080			90	80	80	190	90	80	60	50	40	20	0		
Final Vol.							100	200	100	100	100	100	100	100	100		

VF 1/25/11

PREP DATE: 01-25-11		8270 Second Source (82) 50ug/mL					
Exp:		Conc.	Date	CODE:	50		
Supplier	ID #	µg/mL	Lot #	Code	Exp. Date	µL	
8270C SS	200		10/06/10	10-06-11	25		
EM Science	Methylene Chloride	47080			75		
Final Vol.						100	

VF 1/20/11

Method 8270 Internal Standard Solution, 2000 mg/L, 1 ml  
 110001-41  
 Lot #: 167766 Storage: 5-10 Degree C Expiry: 4/20/13  
 Solv: Methylene Chloride  
 8270 Internal Standard  
 Lot #: 167766 - 28148  
 Rec: 1/20/11 MFR exp. 04/20/13


exp 1/25/12

VF 1/25/11

Method 8270 Internal Standard Solution, 2000 mg/L, 1 ml  
 110001-41  
 Lot #: 167766 Storage: 5-10 Degree C Expiry: 4/20/13  
 Solv: Methylene Chloride  
 8270 Internal Standard  
 Lot #: 167766 - 28147  
 Rec: 1/20/11 MFR exp. 04/20/13


exp 1/25/12

1/3/23/11

Part #: 94552 Laboratory Use Only-See MSDS  
 Lot #: 052908 Exp: 052911 1 mL  
 Semi-Volatile Standard  
 11 components Varied ug/mL in  
**ABSOLUTE STANDARDS**  
 Lot #: 052908 - 28001  
 Rec: 12/16/10 MFR exp. 05/29/11


exp 5/29/11

1/3/23/11

Part #: 94552 Laboratory Use Only-See MSDS  
 Lot #: 052908 Exp: 052911 1 mL  
 Semi-Volatile Standard  
 11 components Varied ug/mL in  
**ABSOLUTE STANDARDS**  
 Lot #: 052908 - 28002  
 Rec: 12/16/10 MFR exp. 05/29/11


exp 5/29/11

1/3/23/11

Part #: 82705 Laboratory Use Only - See MSDS  
 Lot #: 121010 Exp: 121013 Storage 4 °C  
 EPA Method 8270A EPA Method 8270A-Mix#11  
 4 components Lot #: 121010 - 27996  
 2000 ug/mL in ace Rec: 12/16/10 MFR exp. 12/10/13  
**ABSOLUTE STANDARDS, INC.**

exp 5/29/11

1/3/23/11

Part #: 82705 Laboratory Use Only - See MSDS  
 Lot #: 121010 Exp: 121013 Storage 4 °C  
 EPA Method 8270A - Mix #11  
 4 components / EPA Method 8270A-Mix#11  
 2000 ug/mL in ace Lot #: 121010 - 27997  
**ABSOLUTE STANDARDS** Rec: 12/16/10 MFR exp. 12/10/13

exp 5/29/11

1/3/23/11

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

1/3/23/11

91M IS exp 1/25/12  
 1500µl EA Science MC Lot # 4708825  
 100µl 8270 IS opened 1/25/11 exp 1/25/12

GC/MS STANDARD PREPARATION BOOK # 5 PAGE # 90

WF 3/28/11  
WF 3/28/11

**o2si** 8270 BNA (200:400) Surrogate Solution, 1 ml  
 110004-17 Storage: <-10 Degrees C  
 Made in USA Lot No: 160538 Solvent: Methylene Chloride  
 Rec: 01/12/11  
 Date Opened: 8270 BNA (200:400) Surrogate Solution  
 Lot #: 160538 - 27574  
 Rec: 10/18/10 MFR exp. 08/10/12

WF op 3/28/12

PREP DATE: 03-28-11

8270 STANDARD CURVE

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

WF 3/28/11  
WF 4/18/11

PREP DATE: 03-28-11

8270 Second Source (88) 50ug/mL

Supplier	ID #	Conc.	Lot #	Date	Code	Exp. Date	µL
	8270C SS	200		10/06/10		10-06-11	25
EM Science	Methylene Chloride		47080				75
					Final Vol.		100

GCM-160-1  
 Lot: CF-2995  
 Exp: 08/31/2011  
 Semi-Volatiles GC/MS Tuning Standard  
 Standard  
 4 analyte(s) at 1000 µg/mL in dichloromethane  
 250 Smith St, W. Kingstown, RI 02882 USA



WF exp 8/31/11

WF 4/13/11

PREP DATE: 04-23-11

SV Tune Mix 50ug/ml

Supplier	ID #	Conc.	Lot #	Date	Code	Exp. Date	µL
U. Scientific	GCM-150	1000	CF-2995-26131	04/13/11		08-31-11	1000
EM Science	MeCl2		47080				19000
					Final Vol		20000

WF exp 8/31/11

WF 4/20/11

8270D PAH SIM Solution,  
 200 mg/L, 1 ml  
 110780-01  
 Lot # Storage Expiry  
 170253 -5-10 Degree C 3/3/13  
 Solv: Methylene Chloride

WF exp 4/20/12

8270D PAH SIM  
 Lot #: 170253 - 28485  
 Rec: 3/10/11 MFR exp. 3/3/2013

WF 4/20/11

8270D PAH SIM Solution,  
 Second Source, 200 mg/L, 1 ml  
 110780-01-SS  
 Lot # Storage Expiry  
 170256 -5-10 Degree C 3/3/13  
 Solv: Methylene Chloride

exp 4/20/12

8270D PAH SIM (SS)  
 Lot #: 170256 - 28487  
 Rec: 3/10/11 MFR exp. 3/3/2013

1/8/11/11

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

F

1/8/11/11

8270 BNA (200:400)  
Surrogate Solution, 1 ml  
11804-17  
Lot # 167802 Storage 5-10 Degrees C Expiry 12/13  
Sol: Methylene Chloride  
8270 BNA (200:400) Surrogate Solution  
Lot #: 167802-29313  
Rec: 8/8/11 MFR exp: 01/09/13

IF

exp 8/23/12

1/8/11/11

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

IF

1/8/11/11

PREP DATE:	08-22-11													
8270 Second Source (80) 50ug/mL														
												50		
Supplier	ID #	Conc. ug/mL	Lot #	Date Code	Exp. Date	µL								
	8270C SS	200		10/06/10	10-06-11	25								
EM Science	Methylene Chloride		47186			75								
					Final Vol.	100								

IF

1/8/11/11

PREP DATE:	09-21-11													
8270 SIM STANDARD CURVE														
							0.10	0.20	0.50	1.00	5.00	10.00	50.00	100.00
Supplier	ID #	Conc. ug/mL	Lot #	Date Code	Exp. Date	µL	A	A	C	D	E	F	G	H
	8270D PAH SIM	200	170253-28485	04/20/11	04-20-12	0	0	0	0	0	5	5	25	50
	5.0ug/mL	5		09/21/11		0	0	10	20	0	0	0	0	0
	1.0ug/mL	1		09/21/11		10	20	0	0	0	0	0	0	0
	Surrogate Stock	VAR	167802-29313	08/22/11	08-23-11	0	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	

10/18/11

Method 8270 Internal  
Standard Solution, 2,000  
µg/L, 1 ml  
110001-02  
Lot# 167766 Storage 5-10 Degree C Expiry 4/20/13  
Solv: Methylene Chloride  
8270 Internal Standard  
Lot #: 167766 - 28149  
Rec: 1/20/11 MFR exp. 04/20/13

Method 8270 Internal  
Standard Solution, 2,000  
µg/L, 1 ml  
110001-02  
Lot# 167766 Storage 5-10 Degree C Expiry 4/20/13  
Solv: Methylene Chloride  
8270 Internal Standard  
Lot #: 167766 - 28150  
Rec: 1/20/11 MFR exp. 04/20/13

exp 10/18/12

10/27/11

GCM-160-1  
Lot: CH-2137  
Exp: 07/31/2013  
Semi-Volatiles GC/MS Tuning  
Standard  
4 analyte(s) at 1000 µg/ml in  
dichloromethane  
250 Smith St, No Kingstown, RI 02882 USA  
For Lab Use Only

exp 10/27/12

50µg/ml SV Tune Mix 1ml of GCM-160-1 lot # CH2137 into  
1µml of Gen Science MC lot # 42780.

10/27/11

PREP DATE: 10-27-11														
8270 SIM STANDARD CURVE														
					0.10	0.20	0.50	1.00	5.00	10.00	50.00	100.00		
					A	A	C	D	E	F	G	H		
Supplier	ID #	Conc.	Lot #	Date	CODE:	µL	µL	µL	µL	µL	µL	µL	µL	µL
8270D PAH SIM	200	170253-28485	04/20/11	04-20-12		0	0	0	0	5	5	25	50	
5.00g/ml	5		10/27/11			0	0	10	20	0	0	0	0	
1.00g/ml	1		10/27/11			10	20	0	0	0	0	0	0	
Surrogate Stock	VAR	167802-29313	08/22/11	08-22-12		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	

10/27/11

PREP DATE: 10-27-11														
SIM 8270 Second Source (5µg/mL)														
Exp:		11-10-11												
					Conc.	Date	CODE:							
Supplier	ID #	Lot #	µg/mL	Code	Exp. Date	µL								
8270D PAH SIM (SS)		170256-28487	200	04/20/11	04-20-12	5								
MeCl2												195		
Final Volume						200								

11/8/11

PREP DATE: 11-08-11														
8270 STANDARD CURVE														
Exp:		11-15-11												
					Conc.	Date	CODE:							
Supplier	ID #	Lot #	µg/mL	Code	Exp. Date	µL	µL	µL	µL	µL	µL	µL	µL	µL
8270T Stock	200		10/18/11	04-18-12		5	5	10	20	25	30	40	50	
Surrogate Stock	VAR	167802-29313	08/22/11	08-22-12		5	5	10	20	25	30	40	50	
EM Science	Methylene Chloride	47186				190	90	80	60	50	40	20	0	
Final Vol.						200	100	100	100	100	100	100	100	

11/8/11

PREP DATE: 11-08-11														
8270 Second Source (SS) 50µg/mL														
					Conc.	Date	CODE:							
Supplier	ID #	Lot #	µg/mL	Code	Exp. Date	µL								
8270C SS	200		10/11/11	04-12-12		25								
EM Science	Methylene Chloride	47186				75								
Final Vol.						100								



# Organic Extraction Worksheet

<b>Method</b> SIM Separatory Funnel Extra 3510C	<b>Extraction Set</b> 111031A	<b>Extraction Method</b> SEP004S	<b>Units</b> mL
<b>Spiked ID 1</b> SIM Spike 178987-29587	<b>Surrogate ID 1</b> 8270 SIM Surrogate 172835-28827		
<b>Spiked ID 2</b>	<b>Surrogate ID 2</b>		
<b>Spiked ID 3</b>	<b>Surrogate ID 3</b>		
<b>Spiked ID 4</b>	<b>Surrogate ID 4</b>		
<b>Spiked ID 5</b>	<b>Surrogate ID 5</b>		
<b>Spiked ID 6</b>	<b>Sufficient Vol for Matrix QC:</b> YES		
<b>Spiked ID 7</b>	<b>Ext. Start Time:</b>		
<b>Spiked ID 8</b>	<b>Ext. End Time:</b>		
<b>GC Requires Extract By:</b> 11/02/11 0:00			
<b>pH1</b>	2	11/2011 11:25:00 AM	<b>Water Bath Temp Criteria</b> 80 °C
<b>pH2</b>	14	11/2011 4:00:00 PM	
<b>pH3</b>			

Spiked By: HW

Date 10/31/2011

Witnessed By: DL

Date 10/31/2011

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1	111031A Bik			0.025	1	1000	1	2/1	10/31/11 11:20	
					equip	E-WB5				
2	111031A LCS-1	0.025	1	0.025	1	1000	1	2/1	10/31/11 11:20	
					equip	E-WB5				
3	AY49327 AY49327W08			0.025	1	1040	1	2/1	10/31/11 11:20	66103-1 WEEK RUSH -- Amber Liter
					equip	E-WB5				
4	AY49328 AY49328W04			0.025	1	1040	1	2/1	10/31/11 11:20	66103-1 WEEK RUSH -- Amber Liter
					equip	E-WB5				
5	AY49329 AY49329W04			0.025	1	1030	1	2/1	10/31/11 11:20	66103-1 WEEK RUSH -- Amber Liter
					equip	E-WB5				
6	AY49330 AY49330W07			0.025	1	1040	1	2/1	10/31/11 11:20	66103-1 WEEK RUSH -- Amber Liter
					equip	E-WB5				
7	AY49331 AY49331W07			0.025	1	1030	1	2/1	10/31/11 11:20	66103-1 WEEK RUSH -- Amber Liter
					equip	E-WB5				
8	AY49333 AY49333W10			0.025	1	1050	1	2/1	10/31/11 11:20	66102-2 WEEK RUSH -- Amber Liter
					equip	E-WB5				
9	AY49334 MS-1 AY49334W30	0.025	1	0.025	1	1030	1	2/1	10/31/11 11:20	66102-2 WEEK RUSH -- Amber Liter
					equip	E-WB5				
10	AY49334 MSD-1 AY49334W34	0.025	1	0.025	1	1030	1	2/1	10/31/11 11:20	66102-2 WEEK RUSH -- Amber Liter
					equip	E-WB5				
11	AY49334 AY49334W29			0.025	1	1050	1	2/1	10/31/11 11:20	66102-2 WEEK RUSH -- Amber Liter
					equip	E-WB6				
12	AY49336 AY49336W10			0.025	1	1030	1	2/1	10/31/11 11:20	66102-2 WEEK RUSH -- Amber Liter
					equip	E-WB6				
13	AY49481 AY49481W08			0.025	1	1050	1	2/1	10/31/11 11:20	66116-2 WEEK RUSH -- Amber Liter
					equip	E-WB6				

Solvent and Lot#	
MC	BMD 51204
Na2SO4	3581C501
10N NaOH	10/31/11
1+1 Acid	09/15/11
A. Na2SO4	10/31/11

Extraction COC Transfer	
Extraction lab employee Initials	HW
GC analyst's initials	LF
Date	11/5/11
Time	8:02
Refrigerator	Holman

Technician's Initials	
Scanned By	HW
Sample Preparation	CC
Extraction	HW/DL/JL
Concentration	JL
Modified	10/31/2011 10:48:43 AM

Reviewed By: HW 229 Date 11/1/2011

# Organic Extraction Worksheet

<b>Method</b>	SIM Separatory Funnel Extra 3510C	<b>Extraction Set</b>	111031A	<b>Extraction Method</b>	SEP004S	<b>Units</b>	mL
Spiked ID 1	SIM Spike 178987-29587	Surrogate ID 1	8270 SIM Surrogate 172835-28827				
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:					
			<b>GC Requires Extract By:</b>		11/02/11 0:00		
pH1		2	11/2/2011 11:25:00 AM		Water Bath Temp Criteria 80 °C		
pH2		14	11/3/2011 4:00:00 PM				
pH3							

Spiked By: HW

Date 10/31/2011

Witnessed By: DL

Date 10/31/2011

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
14 AY49482	AY49482W08			0.025	1	1030	1	2/1	10/31/11 11:20	66116-2 WEEK RUSH -- Amber Liter
						equip	E-WB6			

HW 11/1/11

Solvent and Lot#	
MC	EMD 51204
Na2SO4	3581C501
10N NaOH	10/31/11
1+1 Acid	09/15/11
A. Na2SO4	10/31/11

Extraction COC Transfer	
Extraction lab employee Initials	HW
GC analyst's initials	HW
Date	11/5/11
Time	8:00
Refrigerator	Wood

Technician's Initials	
Scanned By	HW
Sample Preparation	CC
Extraction	HW/DL/JL
Concentration	JL
Modified	10/31/2011 10:48:43 AM

Reviewed By: HW 230 Date 11/1/2011

## Injection Log

Directory: M:\LINUS\DATA\111027\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1027L001.D	1	SVTUNE 10-27-11		27 Oct 11 18:29
2	3	1027L003.D	1	0.1ug/ml PAH 10-27-11		27 Oct 11 19:12
3	4	1027L004.D	1	0.2ug/ml PAH		27 Oct 11 19:38
4	1	1028L001.D	1	SVTUNE 10-27-11		28 Oct 11 9:32
5	5	1028L005.D	1	0.5ug/ml PAH		28 Oct 11 11:07
6	6	1028L006.D	1	1.0ug/ml PAH		28 Oct 11 11:32
7	7	1028L007.D	1	5.0ug/ml PAH		28 Oct 11 11:58
8	8	1028L008.D	1	10ug/ml PAH		28 Oct 11 12:23
9	9	1028L009.D	1	50ug/ml PAH		28 Oct 11 12:49
10	10	1028L010.D	1	100ug/ml PAH		28 Oct 11 13:14
11	11	1028L011.D	1	5.0ug/ml SS PAH 10-27-11		28 Oct 11 13:40
12	19	1105L019.D	1	SVTUNE 10-27-11		5 Nov 11 16:36
13	20	1105L020.D	1	5.0ug/ml PAH 10-27-11		5 Nov 11 16:54
14	28	1105L028.D	1	111031A BLK 1/1000		5 Nov 11 20:15
15	29	1105L029.D	1	111031A LCS-1 1/1000		5 Nov 11 20:41
16	35	1105L035.D	0.95238	AY49333W10 1/1050		5 Nov 11 23:11
17	36	1105L036.D	0.97087	AY49334W30 MS-1 1/1030		5 Nov 11 23:36
18	37	1105L037.D	0.97087	AY49334W34 MSD-1 1/1030		6 Nov 11 00:01
19	38	1105L038.D	0.95238	AY49334W29 1/1050		6 Nov 11 00:26
20	39	1105L039.D	0.97087	AY49336W10 1/1030		6 Nov 11 00:51

**EPA METHOD 8260B**  
**Volatile Organic Compounds**

**EPA METHOD 8260B  
Volatile Organic Compounds  
QC Summary**

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 111030W-49334 - 161029

Batch ID: #86RHB-111030AC

APPL Inc.

908 North Temperance Avenue

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	10/31/11	10/31/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11

Quant Method: CALLW.M  
Run #: 1030C34  
Instrument: Chlco  
Sequence: C111030  
Initials: ARS

GC SC-Blank-REG MDLs  
Printed: 12/06/11 3:06:05 PM

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 111030W-49334 - 161029  
Batch ID: #86RHB-111030AC

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	10/31/11	10/31/11
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	SURROGATE: 1,2-DICHLOROET	109	70-120			%	10/31/11	10/31/11
BLANK	SURROGATE: 4-BROMOFLUORO	102	75-120			%	10/31/11	10/31/11
BLANK	SURROGATE: DIBROMOFLUOR	105	85-115			%	10/31/11	10/31/11
BLANK	SURROGATE: TOLUENE-D8 (S)	102	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M  
Run #: 1030C34  
Instrument: Chlco  
Sequence: C111030  
Initials: ARS

GC SC-Blank-REG MDLs  
Printed: 12/06/11 3:08:05 PM

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 66102

Case No: 66102

Date Analyzed: 10/31/11

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
111030AC-LCS	Lab Control Spike	70-120	101		75-120	109	
111030AC-BLK	Blank	70-120	109		75-120	102	
AY49335	ES048	70-120	108		75-120	102	
AY49333	ES046	70-120	114		75-120	103	
AY49334	ES047	70-120	104		75-120	98.9	
AY49336	ES049	70-120	98.1		75-120	102	
AY49334-MS	Matrix Spike	70-120	93.7		75-120	101	
AY49334-MSD	Matrix Spiked	70-120	92.1		75-120	105	

Comments: Batch: #86RHB-111030AC



**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 66102

Case No: 66102

Date Analyzed: 10/31/11

Matrix: WATER

Instrument: Chico

APPL ID.	Client Sample No.	SURROGATE: DIBROMOFLUOROMETHANE (S)			SURROGATE: TOLUENE-D8 (S)		
		Limits	Result	Qualifier	Limits	Result	Qualifier
111030AC-LCS	Lab Control Spike	85-115	100		85-120	104	
111030AC-BLK	Blank	85-115	105		85-120	102	
AY49335	ES048	85-115	105		85-120	99.0	
AY49333	ES046	85-115	105		85-120	98.9	
AY49334	ES047	85-115	102		85-120	97.6	
AY49336	ES049	85-115	100		85-120	101	
AY49334-MS	Matrix Spike	85-115	98.4		85-120	102	
AY49334-MSD	Matrix SpikeD	85-115	99.6		85-120	104	

Comments: Batch: #86RHB-111030AC

# Laboratory Control Spike Recovery

## EPA 8260B VOCs + Gas Water

APPL ID: 111031W-49334 LCS - 161029

Batch ID: #86RHB-111030AC

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	11.0	110	80-130
1,1,1-TRICHLOROETHANE	10.00	9.55	95.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.3	103	65-130
1,1,2-TRICHLOROETHANE	10.00	9.91	99.1	75-125
1,1-DICHLOROETHANE	10.00	9.98	99.8	70-135
1,1-DICHLOROETHENE	10.00	8.83	88.3	70-130
1,2,3-TRICHLOROPROPANE	10.00	11.8	118	75-125
1,2,4-TRICHLOROETHANE	10.00	10.2	102	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	10.2	102	50-130
1,2-DIBROMOETHANE	10.00	10.7	107	70-130
1,2-DICHLOROBENZENE	10.00	10.1	101	70-120
1,2-DICHLOROETHANE	10.00	9.61	96.1	70-130
1,2-DICHLOROPROPANE	10.00	10.1	101	75-125
1,3-DICHLOROBENZENE	10.00	9.67	96.7	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.7	98.5	70-130
1,4-DICHLOROBENZENE	10.00	9.94	99.4	75-125
2-BUTANONE	10.00	10.5	105	30-150
4-METHYL-2-PENTANONE	10.00	9.78	97.8	60-135
ACETONE	10.00	13.0	130	40-140
BENZENE	10.00	9.48	94.8	80-120
BROMODICHLOROMETHANE	10.00	10.0	100	75-120
BROMOFORM	10.00	9.32	93.2	70-130
BROMOMETHANE	10.00	8.95	89.5	30-145
CARBON TETRACHLORIDE	10.00	9.77	97.7	65-140
CHLOROBENZENE	10.00	10.3	103	80-120
CHLORODIBROMOMETHANE	10.00	11.0	110	60-135

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>
Quant Method :	CALLW.M
Extraction Date :	10/31/11
Analysis Date :	10/31/11
Instrument :	Chico
Run :	1030C28
Initials :	ARS

Printed: 12/06/11 3:06:11 PM

APPL Standard LCS

**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 111031W-49334 LCS - 161029  
 Batch ID: #86RHB-111030AC

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROETHANE	10.00	8.89	88.9	60-135
CHLOROFORM	10.00	9.79	97.9	65-135
CHLOROMETHANE	10.00	9.42	94.2	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.18	91.8	70-125
ETHYLBENZENE	10.00	10.1	101	75-125
GASOLINE	300	370	123	75-125
HEXACHLOROBUTADIENE	10.00	10.5	105	50-140
METHYL TERT-BUTYL ETHER	10.00	9.69	96.9	65-125
METHYLENE CHLORIDE	10.00	9.05	90.5	55-140
STYRENE	10.00	10.6	106	65-135
TETRACHLOROETHENE	10.00	10.1	101	45-150
TOLUENE	10.00	9.40	94.0	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.05	90.5	60-140
TRICHLOROETHENE	10.00	9.64	96.4	70-125
VINYL CHLORIDE	10.00	10.2	102	50-145
XYLENES (TOTAL)	30.0	30.3	101	80-120
-----				
SURROGATE: 1,2-DICHLOROETHANE-D	24.2	24.4	101	70-120
SURROGATE: 4-BROMOFLUOROBENZE	25.5	27.7	109	75-120
SURROGATE: DIBROMOFLUOROMETH	25.1	25.2	100	85-115
SURROGATE: TOLUENE-D8 (S)	25.8	26.9	104	85-120
-----				

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>
Quant Method :	CALLW.M
Extraction Date :	10/31/11
Analysis Date :	10/31/11
Instrument :	Chlco
Run :	1030C28
Initials :	ARS

Printed: 12/06/11 3:06:11 PM

APPL Standard LCS

# Matrix Spike Recoveries

## EPA 8260B VOCs + Gas Water

APPL ID: 111031W-49334 MS - 161029  
 Batch ID: #86RHB-111030AC  
 Sample ID: AY49334  
 Client ID: ES047

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,1,1,2-TETRACHLOROETHANE	10.00	ND	10.9	11.2	109	112	80-130	2.7	30
1,1,1-TRICHLOROETHANE	10.00	ND	8.95	9.51	89.5	95.1	65-130	6.1	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	12.7	12.6	127	126	65-130	0.79	30
1,1,2-TRICHLOROETHANE	10.00	ND	10.6	10.6	106	106	75-125	0.0	30
1,1-DICHLOROETHANE	10.00	ND	9.46	9.94	94.6	99.4	70-135	4.9	30
1,1-DICHLOROETHENE	10.00	ND	8.96	9.50	89.6	95.0	70-130	5.9	30
1,2,3-TRICHLOROPROPANE	10.00	ND	11.6	11.4	116	114	75-125	1.7	30
1,2,4-TRICHLOROENZENE	10.00	ND	9.55	10.1	95.5	101	65-135	5.6	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	11.2	12.2	112	122	50-130	8.5	30
1,2-DIBROMOETHANE	10.00	ND	10.9	10.8	109	108	70-130	0.92	30
1,2-DICHLOROENZENE	10.00	ND	9.85	10.2	98.5	102	70-120	3.5	30
1,2-DICHLOROETHANE	10.00	ND	8.97	9.48	89.7	94.8	70-130	5.5	30
1,2-DICHLOROPROPANE	10.00	ND	9.62	10.5	96.2	105	75-125	8.7	30
1,3-DICHLOROENZENE	10.00	ND	9.68	10.1	96.8	101	75-125	4.2	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	20.4	20.9	102	105	70-130	2.4	30
1,4-DICHLOROENZENE	10.00	ND	9.80	10.2	98.0	102	75-125	4.0	30
2-BUTANONE	10.00	ND	10.5	10.2	105	102	30-150	2.9	30
4-METHYL-2-PENTANONE	10.00	ND	11.0	11.0	110	110	60-135	0.0	30
ACETONE	10.00	ND	11.9	13.6	119	136	40-140	13.3	30
BENZENE	10.00	ND	9.56	10.2	95.6	102	80-120	6.5	30
BROMODICHLOROMETHANE	10.00	ND	9.85	10.3	98.5	103	75-120	4.5	30
BROMOFORM	10.00	ND	9.59	10.1	95.9	101	70-130	5.2	30
BROMOMETHANE	10.00	ND	9.35	9.85	93.5	98.5	30-145	5.2	30
CARBON TETRACHLORIDE	10.00	ND	9.77	9.93	97.7	99.3	65-140	1.6	30
CHLOROENZENE	10.00	ND	9.68	10.1	96.8	101	80-120	4.2	30

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	CALLW.M	CALLW.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	10/31/11	10/31/11
Instrument :	Chico	Chico
Run :	1030C39	1030C40
Initials :	ARS	

Printed: 12/06/11 3:06:12 PM  
 APPL MSD SCII

# Matrix Spike Recoveries

## EPA 8260B VOCs + Gas Water

APPL ID: 111031W-49334 MS - 161029  
 Batch ID: #86RHB-111030AC  
 Sample ID: AY49334  
 Client ID: ES047

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
CHLORODIBROMOMETHANE	10.00	ND	10.8	11.4	108	114	60-135	5.4	30
CHLOROETHANE	10.00	ND	8.88	9.26	88.8	92.6	60-135	4.2	30
CHLOROFORM	10.00	ND	9.21	9.65	92.1	96.5	65-135	4.7	30
CHLOROMETHANE	10.00	ND	8.69	9.03	86.9	90.3	40-125	3.8	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.19	9.57	91.9	95.7	70-125	4.1	30
ETHYLBENZENE	10.00	ND	9.73	10.3	97.3	103	75-125	5.7	30
GASOLINE	300	ND	374	377	125	126 #	75-125	0.80	30
HEXACHLOROBUTADIENE	10.00	ND	9.04	9.78	90.4	97.8	50-140	7.9	30
METHYL TERT-BUTYL ETHER	10.00	ND	10.1	10.2	101	102	65-125	0.99	30
METHYLENE CHLORIDE	10.00	ND	9.83	9.84	98.3	98.4	55-140	0.10	30
STYRENE	10.00	ND	10.2	10.6	102	106	65-135	3.8	30
TETRACHLOROETHENE	10.00	ND	9.48	10.3	94.8	103	45-150	8.3	30
TOLUENE	10.00	ND	9.46	10.4	94.6	104	75-120	9.5	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	9.17	9.47	91.7	94.7	60-140	3.2	30
TRICHLOROETHENE	10.00	ND	9.00	9.38	90.0	93.8	70-125	4.1	30
VINYL CHLORIDE	10.00	ND	9.90	9.78	99.0	97.8	50-145	1.2	30
XYLENES (TOTAL)	30.0	ND	29.1	30.7	97.0	102	80-120	5.4	30
-----									
SURROGATE: 1,2-DICHLOROETHANE-D	24.2	NA	22.7	22.3	93.7	92.1	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	25.5	NA	25.8	26.7	101	105	75-120		
SURROGATE: DIBROMOFLUOROMETH	25.1	NA	24.7	25.0	98.4	99.6	85-115		
SURROGATE: TOLUENE-D8 (S)	25.8	NA	26.3	26.9	102	104	85-120		

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	CALLW.M	CALLW.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	10/31/11	10/31/11
Instrument :	Chlco	Chico
Run :	1030C39	1030C40
Initials :	ARS	

Printed: 12/06/11 3:06:12 PM  
 APPL MSD SCII

# EPA 8260B

Form 4

## Blank Summary

Lab Name: APPL, Inc.

SDG No: 66102

Case No: 66102

Date Analyzed: 10/31/11

Matrix: WATER

Instrument: Chico

Blank ID: 111030AC-BLK

Time Analyzed: 1302

<u>APPL ID.</u>	<u>Client Sample No.</u>	<u>File ID.</u>	<u>Date Analyzed</u>
111030AC-LCS	Lab Control Spike	1030C28	10/31/11 0848
111030AC-BLK	Blank	1030C34	10/31/11 1302
AY49335	ES048	1030C35	10/31/11 1339
AY49333	ES046	1030C36	10/31/11 1416
AY49334	ES047	1030C37	10/31/11 1453
AY49336	ES049	1030C38	10/31/11 1531
111030AC-MS	Matrix Spike	1030C39	10/31/11 1608
111030AC-MSD	Matrix Spiked	1030C40	10/31/11 1645

Comments: Batch: #86RHB-111030AC

Printed: 12/06/11 3:06:15 PM  
Form 4, Blank Summary

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 66102  
Matrix: Water  
ID: 20ug/mL BFB STD 10-19-11

SDG No: 66102  
Date Analyzed: 10/31/11  
Instrument: Chico  
Time Analyzed: 7:21

Client Sample No.	APPL ID.	File ID.	Date Analyzed	
1	Lab Control Spike	111030A LCS-1WC (SS)	1030C28W.D	10/31/11 8:48
2	Lab Control Spike	GAS 300ug/L LCS-1WC	1030C31W.D	10/31/11 10:57
3	Blank	111030A BLK-1WC	1030C34W.D	10/31/11 13:02
4	ES048	AY49335W01	1030C35W.D	10/31/11 13:39
5	ES046	AY49333W04	1030C36W.D	10/31/11 14:16
6	ES047	AY49334W13	1030C37W.D	10/31/11 14:53
7	ES049	AY49336W04	1030C38W.D	10/31/11 15:31
8	Matrix Spike	AY49334W141516 MS-1W	1030C39W.D	10/31/11 16:08
9	Matrix Spike Dup	AY49334W141516 MSD-1	1030C40W.D	10/31/11 16:45
10	Matrix Spike	AY49334W161718 MS-1W	1030C41W.D	10/31/11 17:22
11	Matrix Spike Dup	AY49334W161718 MSD-1	1030C42W.D	10/31/11 17:59
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

m/e

50	15 - 40% of mass 95	20.6
75	30 - 60% of mass 95	49.7
95	100 - 100% of mass 95	100.0
96	5 - 9% of mass 95	6.6
173	0 - 2% of mass 174	0.0
174	50 - 100% of mass 95	91.6
175	5 - 9% of mass 174	6.9
176	95 - 101% of mass 174	97.7
177	5 - 9% of mass 176	6.7

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc. Contract: Review  
 Lab Code: \_\_\_\_\_ SDG No.: 66102  
 Lab File ID (Standard): 1030C20W.D Date Analyzed: 10/31/11  
 Instrument ID: Chico Time Analyzed: 3:03  
 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	566544	12.84	375296	18.04	203520	22.24	
UPPER LIMIT	1113088	13.34	750592	18.54	407040	22.74	
LOWER LIMIT	278272	12.34	187648	17.54	101760	21.74	
SAMPLE NO.							
01	111030A LCS-1WC (SS)	600576	12.84	389760	18.04	212800	22.24
02	111030A BLk-1WC	564158	12.85	392640	18.05	207424	22.26
03	AY49335W01	576569	12.85	396544	18.05	214592	22.25
04	AY49333W04	558622	12.85	391168	18.05	206336	22.26
05	AY49334W13	617536	12.85	437056	18.05	232960	22.26
06	AY49336W04	662144	12.85	450969	18.05	251840	22.26
07	AY49334W141516 MS-	673315	12.85	444608	18.05	234048	22.26
08	AY49334W141516 MSD	673885	12.85	449984	18.05	240256	22.26
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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



**EPA METHOD 8260B  
Volatile Organic Compounds  
Sample Data**

## EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran

Project: RED HILL/1022-024

ARF: 66102

Sample ID: ES046

APPL ID: AY49333

Sample Collection Date: 10/24/11

QCG: #86RHB-111030AC-161029

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	10/31/11	10/31/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C36
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 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: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES046

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49333

QCG: #86RHB-111030AC-161029

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	114	70-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	103	75-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	98.9	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M  
Run #: 1030C36  
Instrument: Chico  
Sequence: C111030  
Dilution Factor: 1  
Initials: ARS

Printed: 12/06/11 3:06:18 PM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\CHICO\DATA\C111030\1030C36W.D Vial: 1  
 Acq On : 31 Oct 11 14:16 Operator: STC  
 Sample : AY49333W04 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 11:55 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Wed Nov 02 14:33:25 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.85	96	558622	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	391168	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	206336	25.00000	ppb	0.02
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.43	111	393930	26.47220	ppb	0.00
Spiked Amount	25.097					Recovery = 105.478%
38) 1,2-DCA-D4 (S)	12.23	65	365380	27.58295	ppb	0.00
Spiked Amount	24.225					Recovery = 113.860%
56) Toluene-D8 (S)	15.51	98	1404152	25.51187	ppb	0.02
Spiked Amount	25.808					Recovery = 98.852%
64) 4-Bromofluorobenzene(S)	20.12	95	515677	26.14866	ppb	0.00
Spiked Amount	25.459					Recovery = 102.708%
Target Compounds						
73) Isopropylbenzene	19.75	105	376343	5.03244	ppb	Qvalue 100
78) n-Propylbenzene	20.46	91	491031	5.50399	ppb	99
83) Tert-Butylbenzene	21.38	119	58606	0.89124	ppb	96
85) Sec-Butylbenzene	21.76	105	425161	5.39136	ppb	96
91) n-Butylbenzene	22.71	91	175843	2.98472	ppb	# 87
96) Naphthalene	25.94	128	360908	14.38582	ppb	95

Quantitation Report

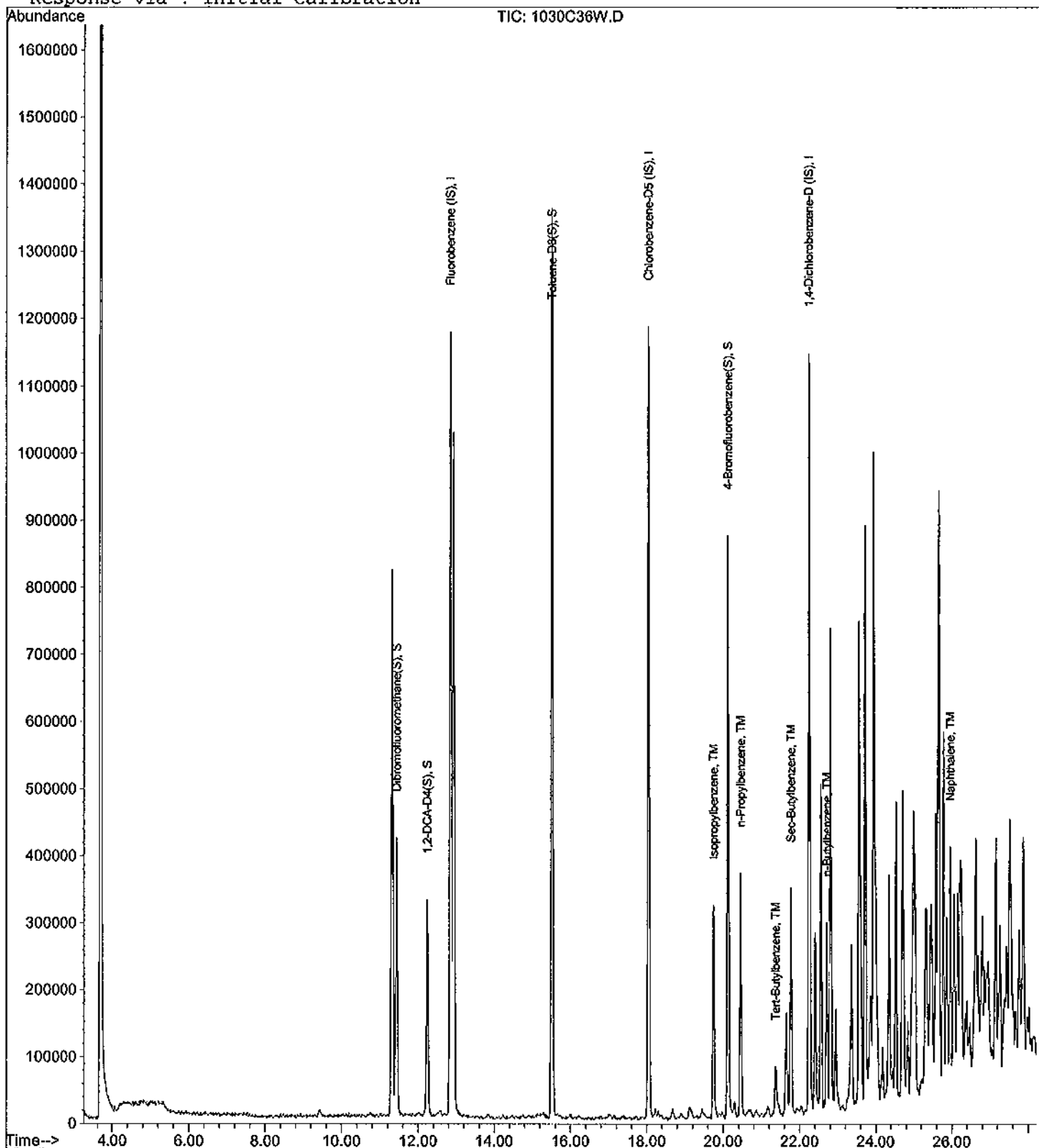
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Acq On : 31 Oct 11 14:16  
Sample : AY49333W04  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

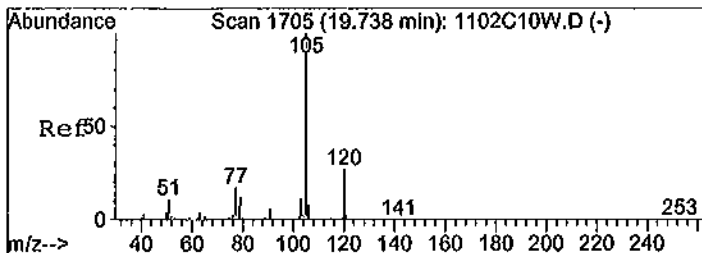
Vial: 1  
Operator: STC  
Inst : Chico  
Multiplr: 1.00

Quant Time: Nov 3 11:55 2011

Quant Results File: CALLW.RES

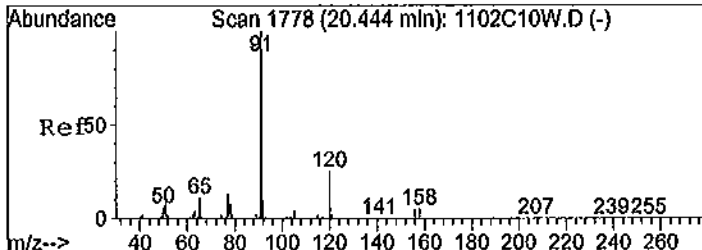
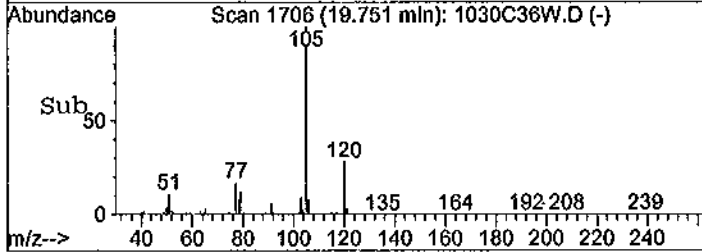
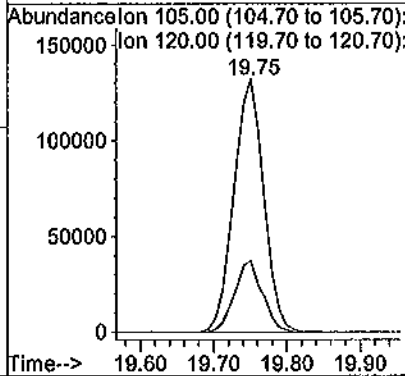
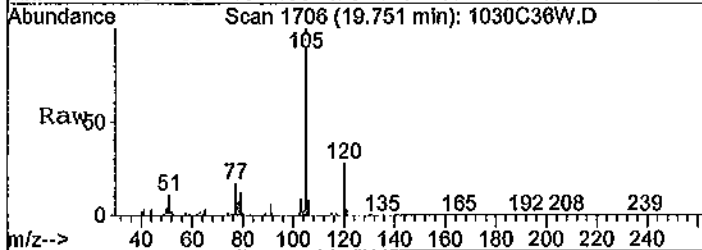
Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Thu Nov 03 10:27:07 2011  
Response via : Initial Calibration





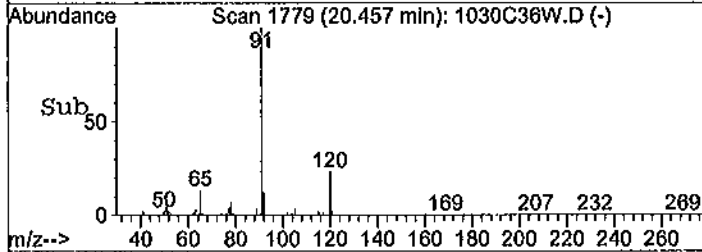
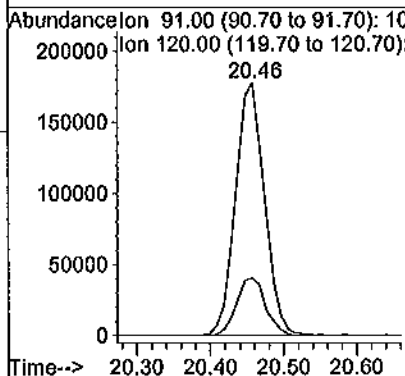
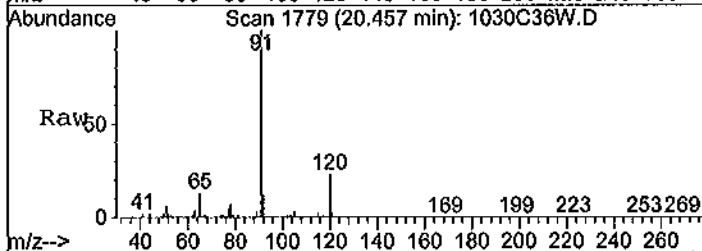
#73  
 Isopropylbenzene  
 Concen: 5.03244 ppb  
 RT: 19.75 min Scan# 1706  
 Delta R.T. 0.02 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

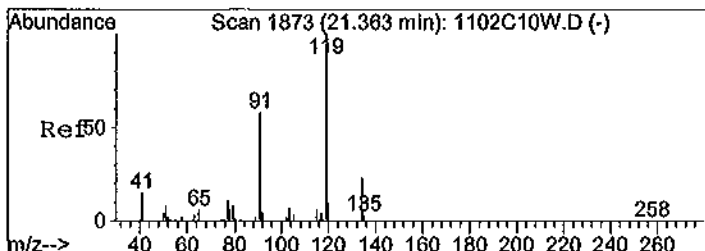
Tgt Ion: 105 Resp: 376343  
 Ion Ratio Lower Upper  
 105 100  
 120 28.1 22.6 33.8



#78  
 n-Propylbenzene  
 Concen: 5.50399 ppb  
 RT: 20.46 min Scan# 1779  
 Delta R.T. 0.02 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

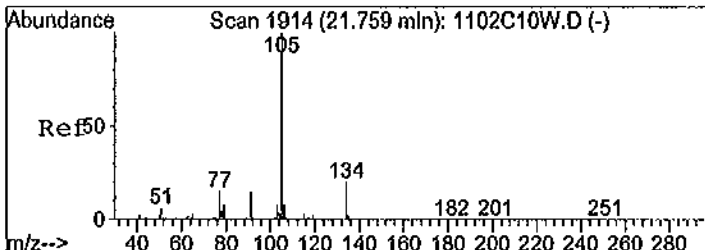
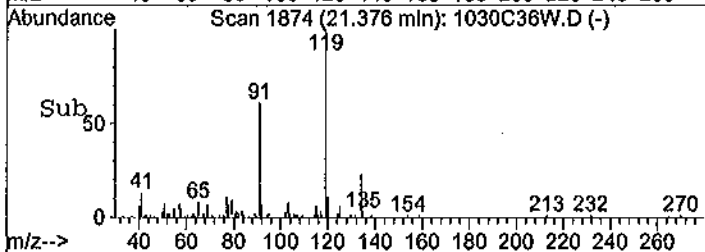
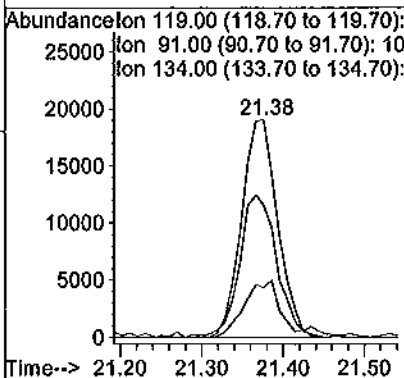
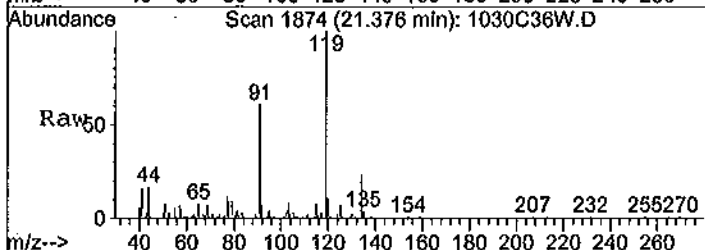
Tgt Ion: 91 Resp: 491031  
 Ion Ratio Lower Upper  
 91 100  
 120 22.8 15.7 29.1





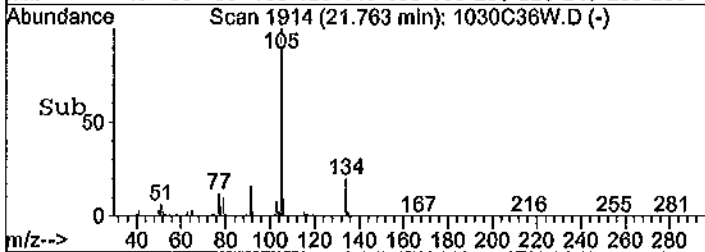
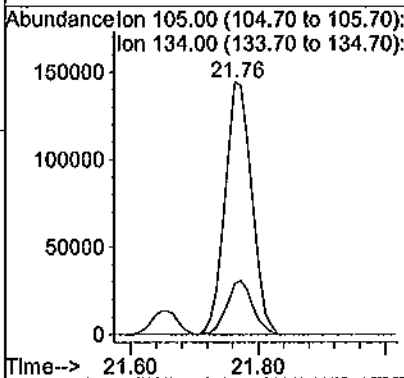
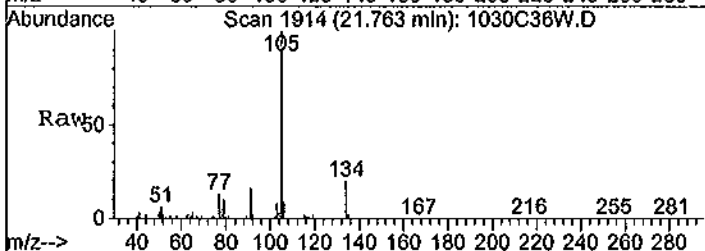
#83  
 Tert-Butylbenzene  
 Concen: 0.89124 ppb  
 RT: 21.38 min Scan# 1874  
 Delta R.T. 0.02 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

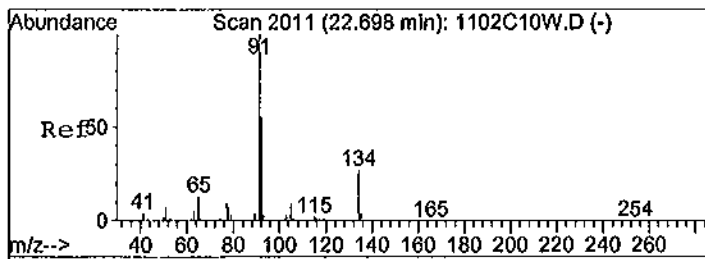
Tgt Ion	Resp	Lower	Upper
119	58606		
91	60.7	43.5	80.7
134	22.8	18.8	34.8



#85  
 Sec-Butylbenzene  
 Concen: 5.39136 ppb  
 RT: 21.76 min Scan# 1914  
 Delta R.T. 0.01 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

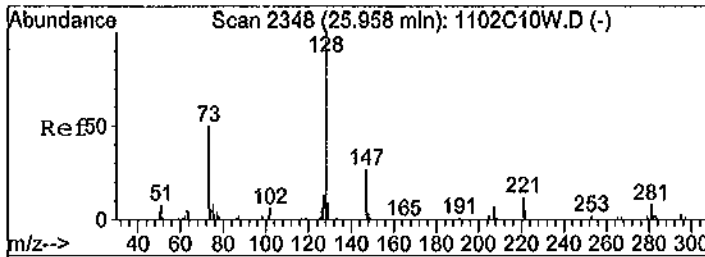
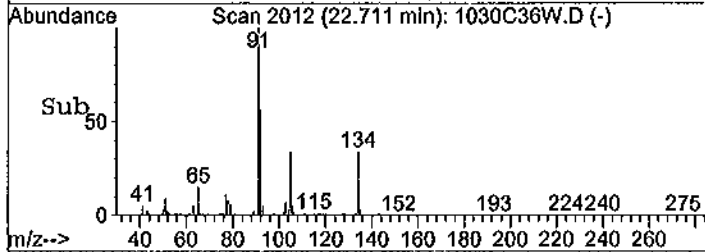
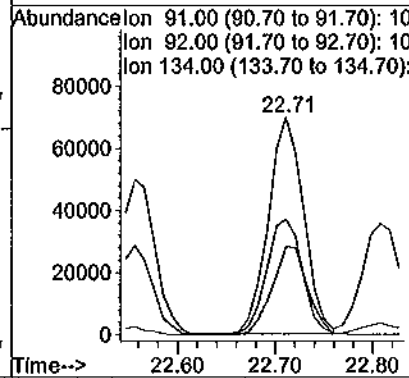
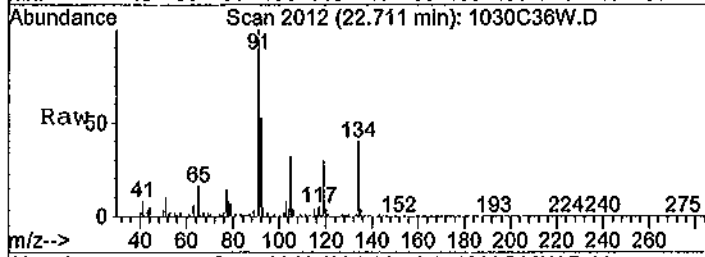
Tgt Ion	Resp	Lower	Upper
105	425161		
134	20.2	15.3	28.5





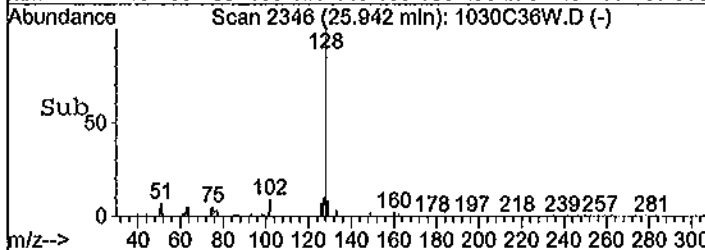
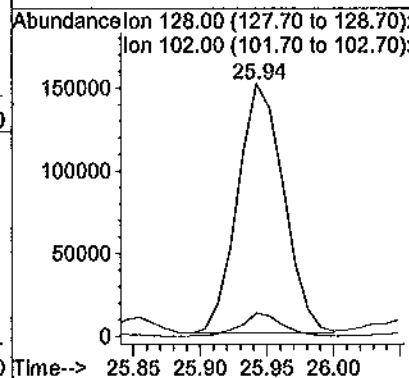
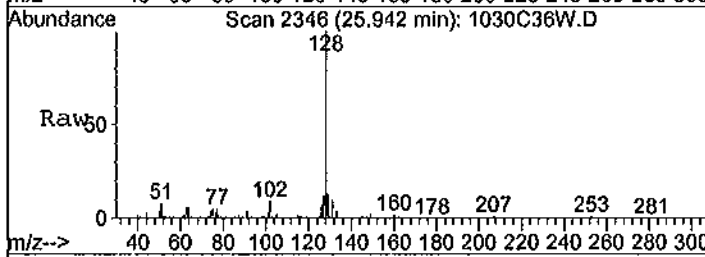
#91  
 n-Butylbenzene  
 Concen: 2.98472 ppb  
 RT: 22.71 min Scan# 2012  
 Delta R.T. 0.02 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

Tgt Ion	Resp	Lower	Upper
91	100		
92	53.2	41.4	77.0
134	40.1	19.8	36.8#



#96  
 Naphthalene  
 Concen: 14.38582 ppb  
 RT: 25.94 min Scan# 2346  
 Delta R.T. 0.01 min  
 Lab File: 1030C36W.D  
 Acq: 31 Oct 11 14:16

Tgt Ion	Resp	Lower	Upper
128	100		
102	9.2	5.1	9.5





Data File : M:\CHICO\DATA\C111030\1030C36W.D Vial: 1  
 Acq On : 31 Oct 11 14:16 Operator: STC  
 Sample : AY49333W04 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:23 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1167658	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.05	TIC	1180896	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1128483	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

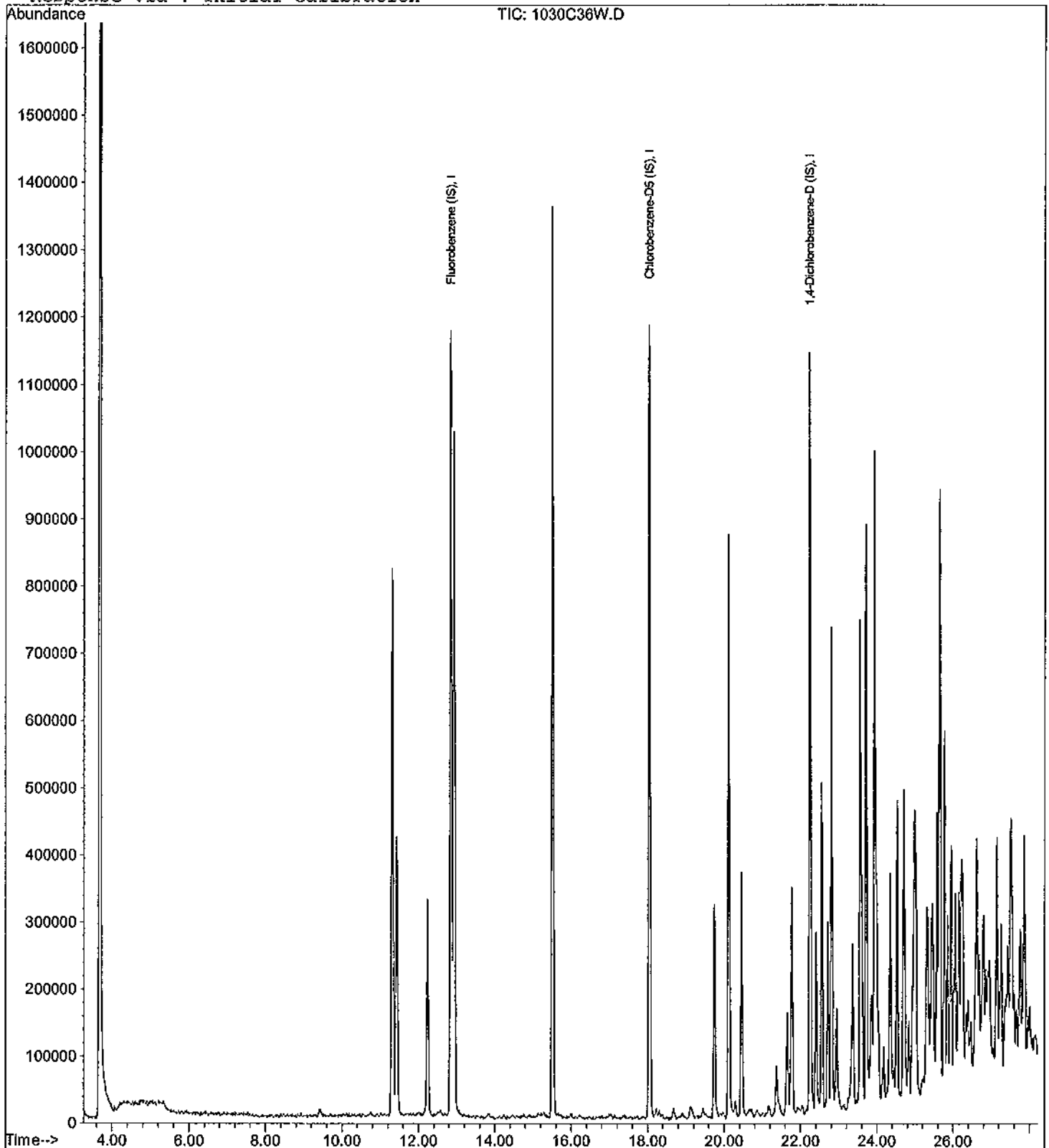
Data File : M:\CHICO\DATA\C111030\1030C36W.D  
Acq On : 31 Oct 11 14:16  
Sample : AY49333W04  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:23 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



## EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran

Project: RED HILL/1022-024

ARF: 66102

Sample ID: ES047

APPL ID: AY49334

Sample Collection Date: 10/24/11

QCG: #86RHB-111030AC-161029

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	10/31/11	10/31/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C37
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 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: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES047

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49334

QCG: #86RHB-111030AC-161029

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	104	70-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	98.9	75-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	102	85-115			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	97.6	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C37
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 PM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\CHICO\DATA\C111030\1030C37W.D Vial: 1  
 Acq On : 31 Oct 11 14:53 Operator: STC  
 Sample : AY49334W13 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 12:00 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Wed Nov 02 14:33:25 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	617536	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	437056	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	232960	25.00000	ppb	0.02
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.43	111	420841	25.58260	ppb	0.00
Spiked Amount	25.097				Recovery = 101.935%	
38) 1,2-DCA-D4(S)	12.23	65	368967	25.19644	ppb	0.00
Spiked Amount	24.225				Recovery = 104.007%	
56) Toluene-D8(S)	15.51	98	1549428	25.19567	ppb	0.02
Spiked Amount	25.808				Recovery = 97.628%	
64) 4-Bromofluorobenzene(S)	20.13	95	554811	25.17926	ppb	0.02
Spiked Amount	25.459				Recovery = 98.898%	
Target Compounds						Qvalue
73) Isopropylbenzene	19.75	105	388062	4.59610	ppb	99
78) n-Propylbenzene	20.46	91	482750	4.79275	ppb	100
83) Tert-Butylbenzene	21.37	119	65995	0.88891	ppb	94
85) Sec-Butylbenzene	21.77	105	453460	5.09305	ppb	97
96) Naphthalene	25.94	128	258129	9.11315	ppb	95

Quantitation Report

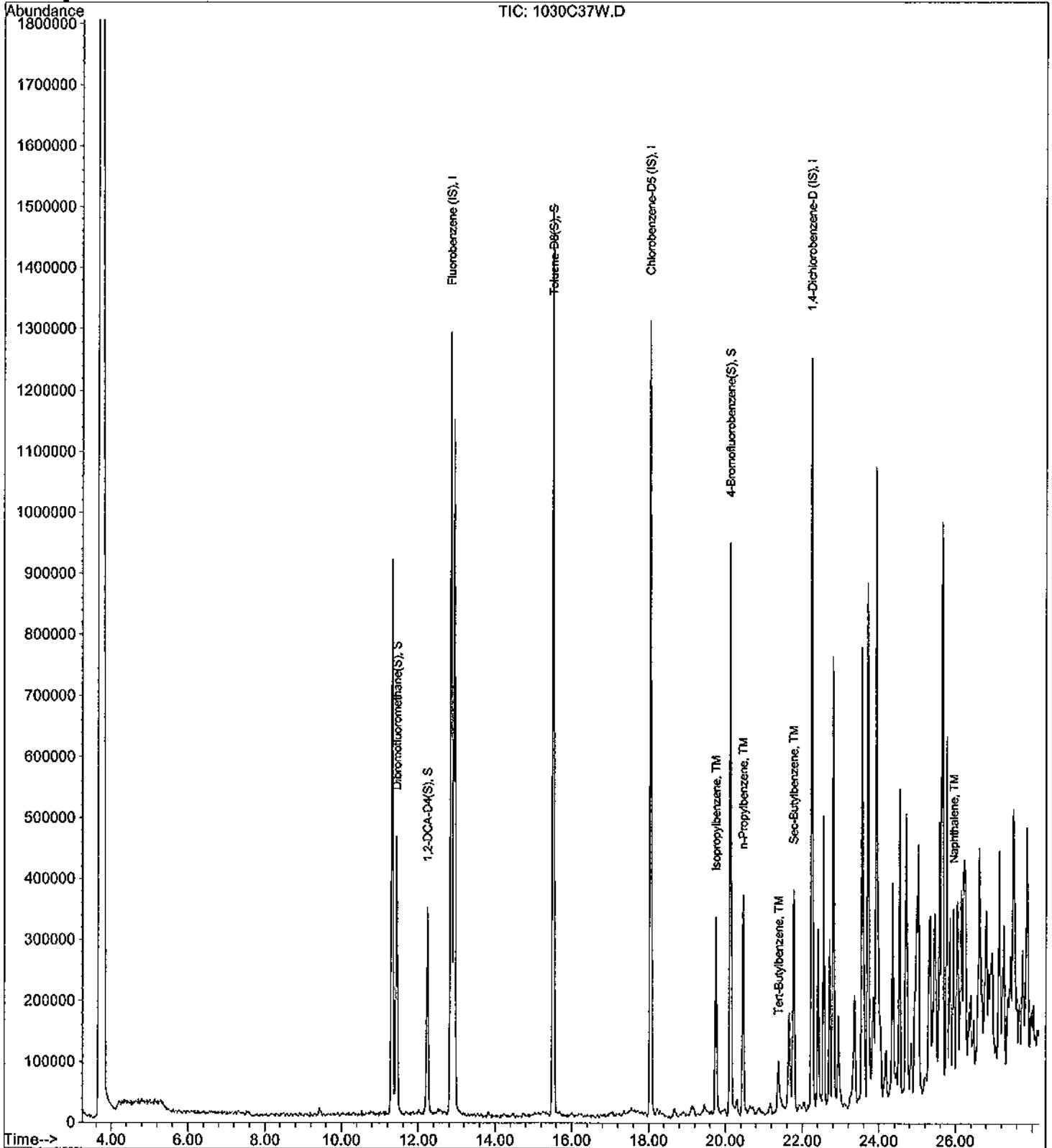
Data File : M:\CHICO\DATA\C111030\1030C37W.D  
Acq On : 31 Oct 11 14:53  
Sample : AY49334W13  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

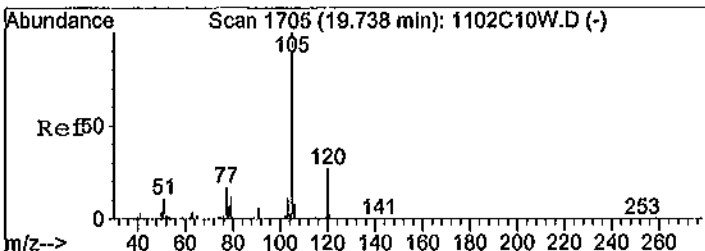
Vial: 1  
Operator: STC  
Inst : Chico  
Multiplr: 1.00

Quant Time: Nov 3 12:00 2011

Quant Results File: CALLW.RES

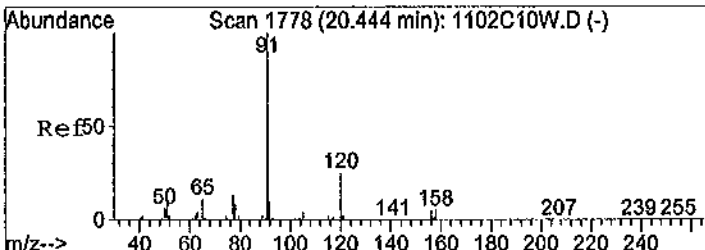
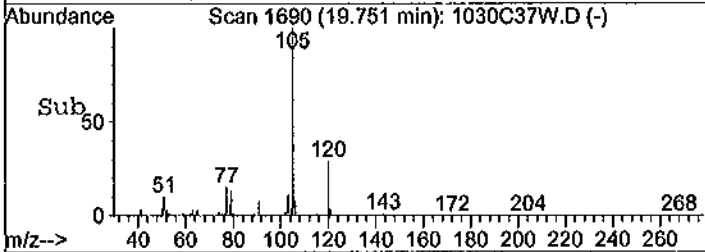
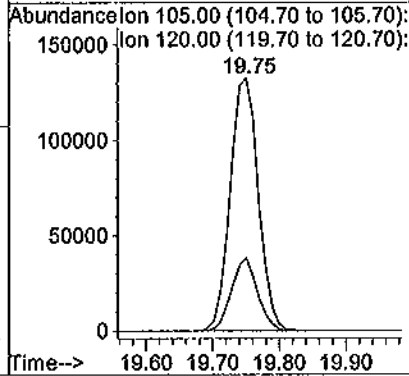
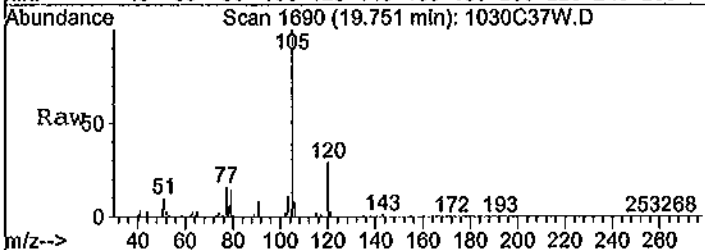
Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Thu Nov 03 10:27:07 2011  
Response via : Initial Calibration





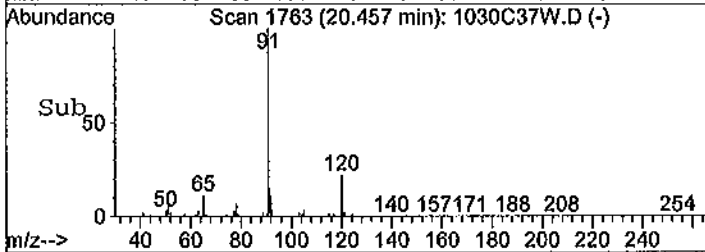
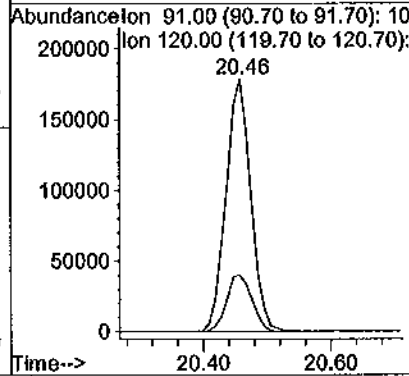
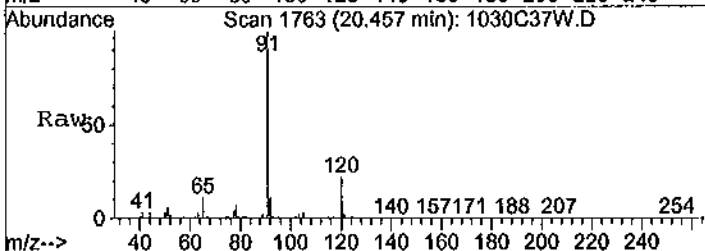
#73  
 Isopropylbenzene  
 Concen: 4.59610 ppb  
 RT: 19.75 min Scan# 1690  
 Delta R.T. 0.02 min  
 Lab File: 1030C37W.D  
 Acq: 31 Oct 11 14:53

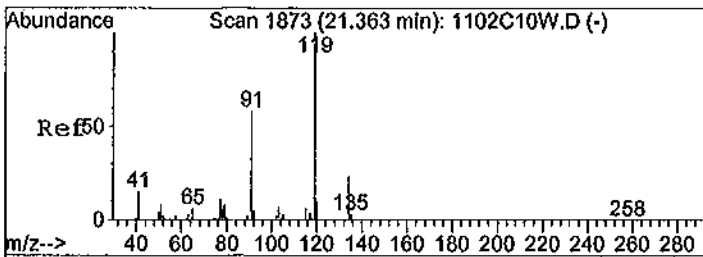
Tgt Ion: 105 Resp: 388062  
 Ion Ratio Lower Upper  
 105 100  
 120 28.8 22.6 33.8



#78  
 n-Propylbenzene  
 Concen: 4.79275 ppb  
 RT: 20.46 min Scan# 1763  
 Delta R.T. 0.02 min  
 Lab File: 1030C37W.D  
 Acq: 31 Oct 11 14:53

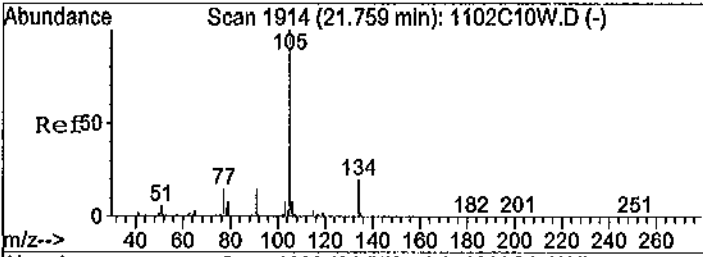
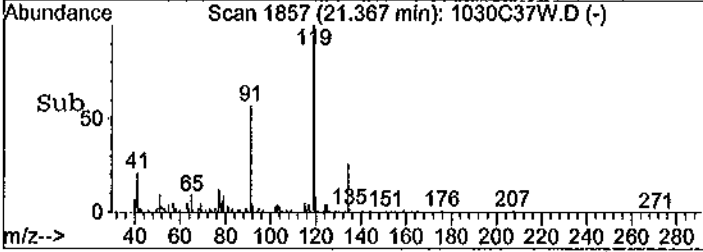
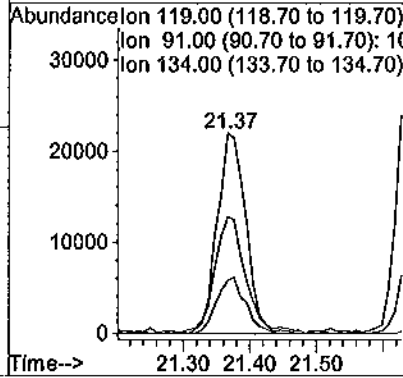
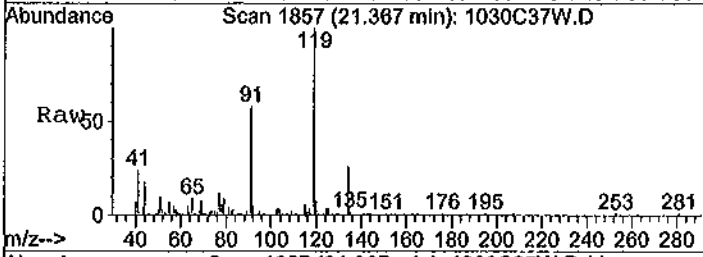
Tgt Ion: 91 Resp: 482750  
 Ion Ratio Lower Upper  
 91 100  
 120 22.3 15.7 29.1





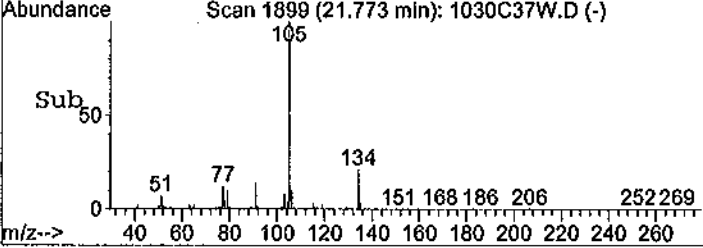
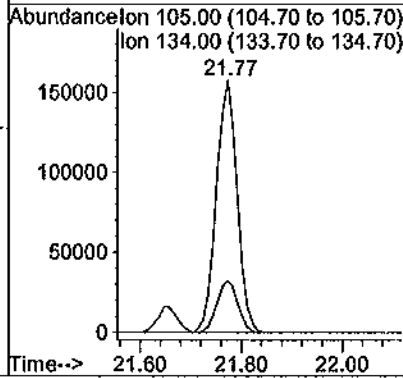
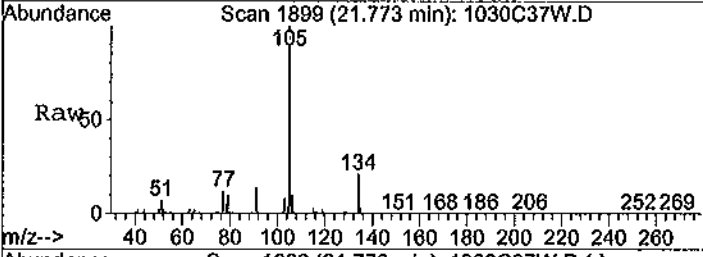
#83  
 Tert-Butylbenzene  
 Concen: 0.88891 ppb  
 RT: 21.37 min Scan# 1857  
 Delta R.T. 0.01 min  
 Lab File: 1030C37W.D  
 Acq: 31 Oct 11 14:53

Tgt Ion	Resp	Lower	Upper
119	65995		
91	56.1	43.5	80.7
134	26.3	18.8	34.8

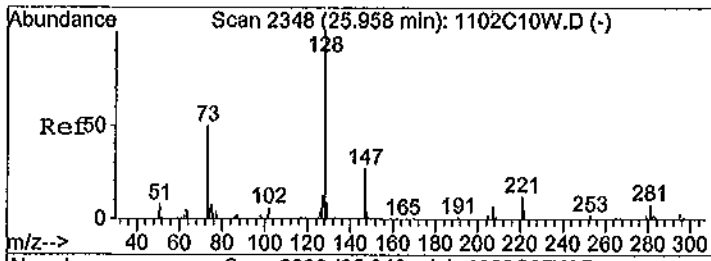


#85  
 Sec-Butylbenzene  
 Concen: 5.09305 ppb  
 RT: 21.77 min Scan# 1899  
 Delta R.T. 0.02 min  
 Lab File: 1030C37W.D  
 Acq: 31 Oct 11 14:53

Tgt Ion	Resp	Lower	Upper
105	453460		
134	20.6	15.3	28.5

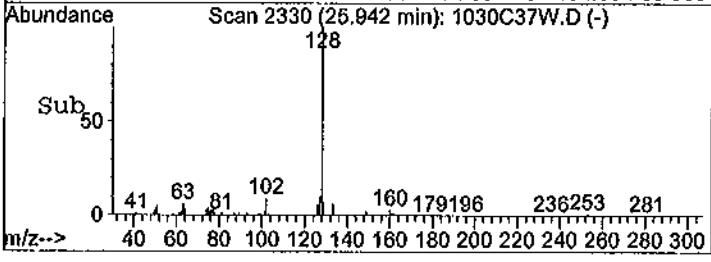
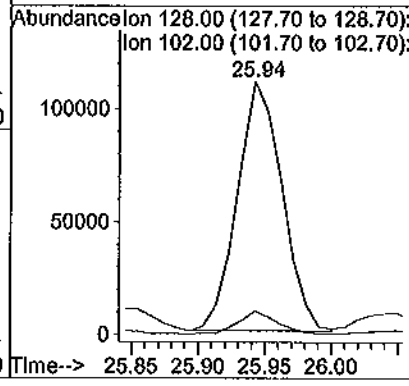
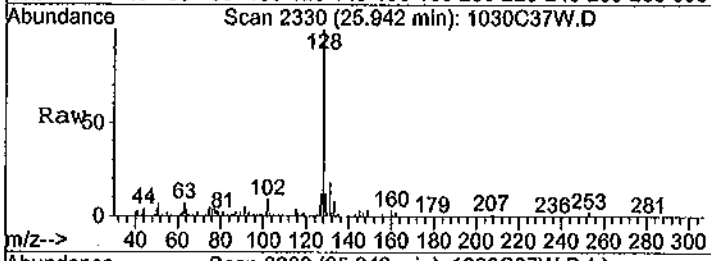






#96  
 Naphthalene  
 Concen: 9.11315 ppb  
 RT: 25.94 min Scan# 2330  
 Delta R.T. 0.01 min  
 Lab File: 1030C37W.D  
 Acq: 31 Oct 11 14:53

Tgt Ion:128 Resp: 258129  
 Ion Ratio Lower Upper  
 128 100  
 102 9.2 5.1 9.5



Data File : M:\CHICO\DATA\C111030\1030C37W.D Vial: 1  
 Acq On : 31 Oct 11 14:53 Operator: STC  
 Sample : AY49334W13 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:23 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1282349	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.05	TIC	1302320	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.26	TIC	1229710	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

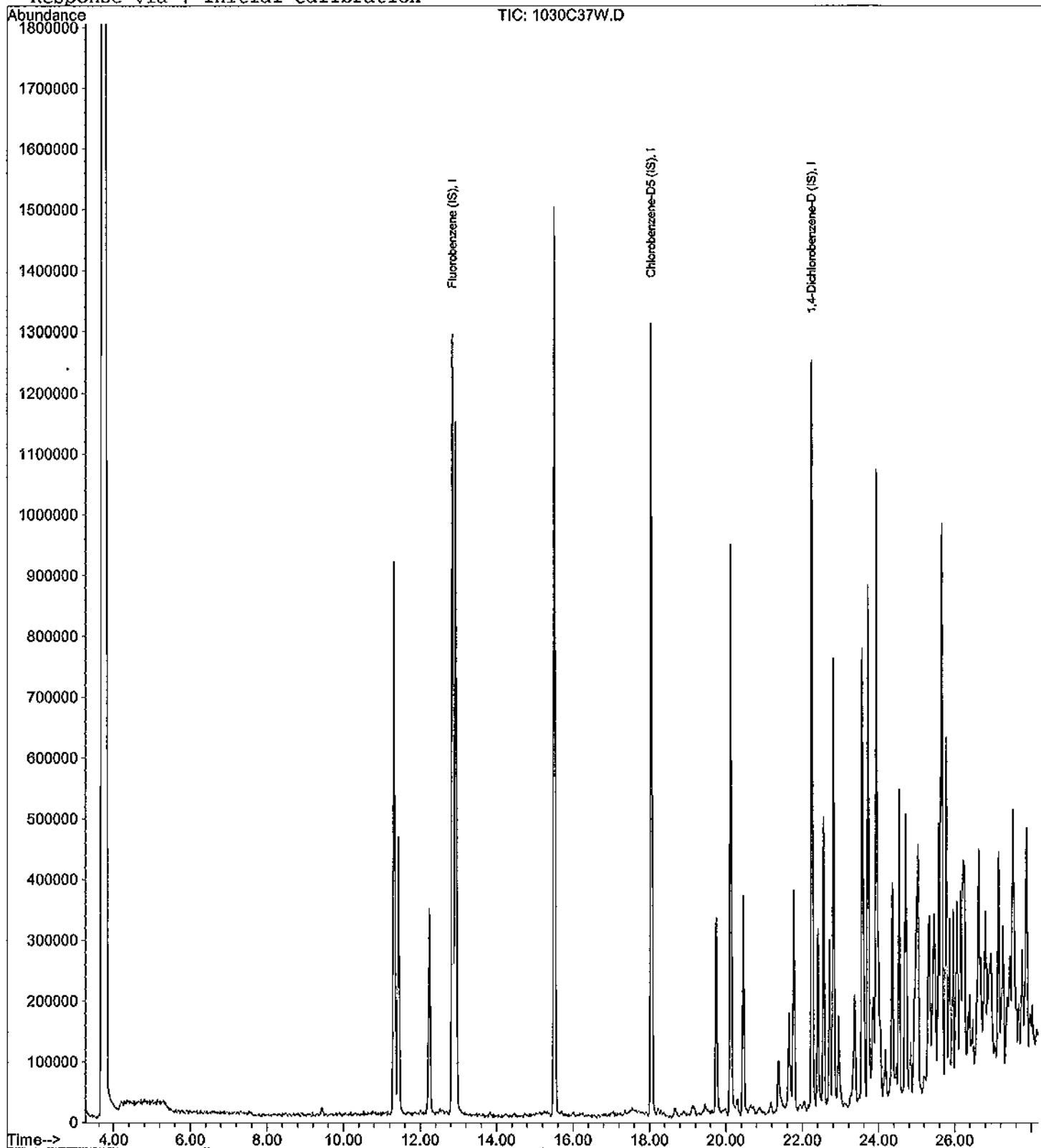
Data File : M:\CHICO\DATA\C111030\1030C37W.D  
Acq On : 31 Oct 11 14:53  
Sample : AY49334W13  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:23 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



## EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES048

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49335

QCG: #86RHB-111030AC-161029

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	10/31/11	10/31/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C35
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 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: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES048

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49335

QCG: #86RHB-111030AC-161029

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	108	70-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	102	75-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	105	85-115			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	99.0	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C35
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 PM

APPL-F1-SC-NoMC-REG MDLs

Data File : M:\CHICO\DATA\C111030\1030C35W.D Vial: 1  
 Acq On : 31 Oct 11 13:39 Operator: STC  
 Sample : AY49335W01 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 11:52 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Wed Nov 02 14:33:25 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	576569	25.00000	ppb	0.01
55) Chlorobenzene-D5 (IS)	18.05	117	396544	25.00000	ppb	0.01
71) 1,4-Dichlorobenzene-D (IS)	22.25	152	214592	25.00000	ppb	0.01
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.43	111	402959	26.23605	ppb	0.00
Spiked Amount				25.097		
					Recovery =	104.537%
38) 1,2-DCA-D4(S)	12.23	65	357575	26.15350	ppb	0.00
Spiked Amount				24.225		
					Recovery =	107.958%
56) Toluene-D8(S)	15.51	98	1425024	25.54008	ppb	0.01
Spiked Amount				25.808		
					Recovery =	98.960%
64) 4-Bromofluorobenzene(S)	20.12	95	520964	26.05861	ppb	0.01
Spiked Amount				25.459		
					Recovery =	102.355%

Target Compounds Qvalue

Quantitation Report

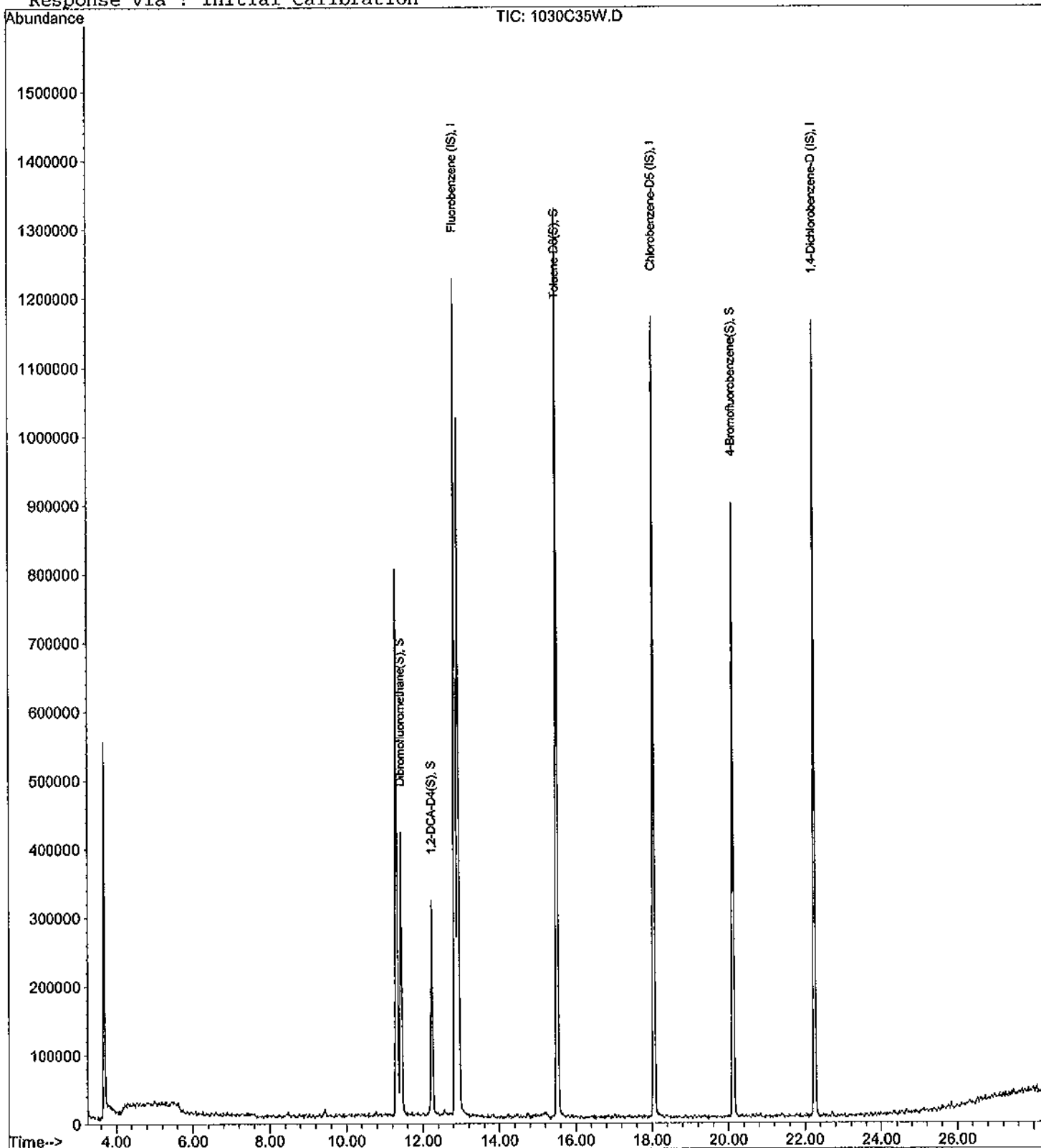
Data File : M:\CHICO\DATA\C111030\1030C35W.D  
Acq On : 31 Oct 11 13:39  
Sample : AY49335W01  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 11:52 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Thu Nov 03 10:27:07 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C35W.D Vial: 1  
 Acq On : 31 Oct 11 13:39 Operator: STC  
 Sample : AY49335W01 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:23 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1215846	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.05	TIC	1162609	25.00000	ppb	0.02
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1158136	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue



Quantitation Report

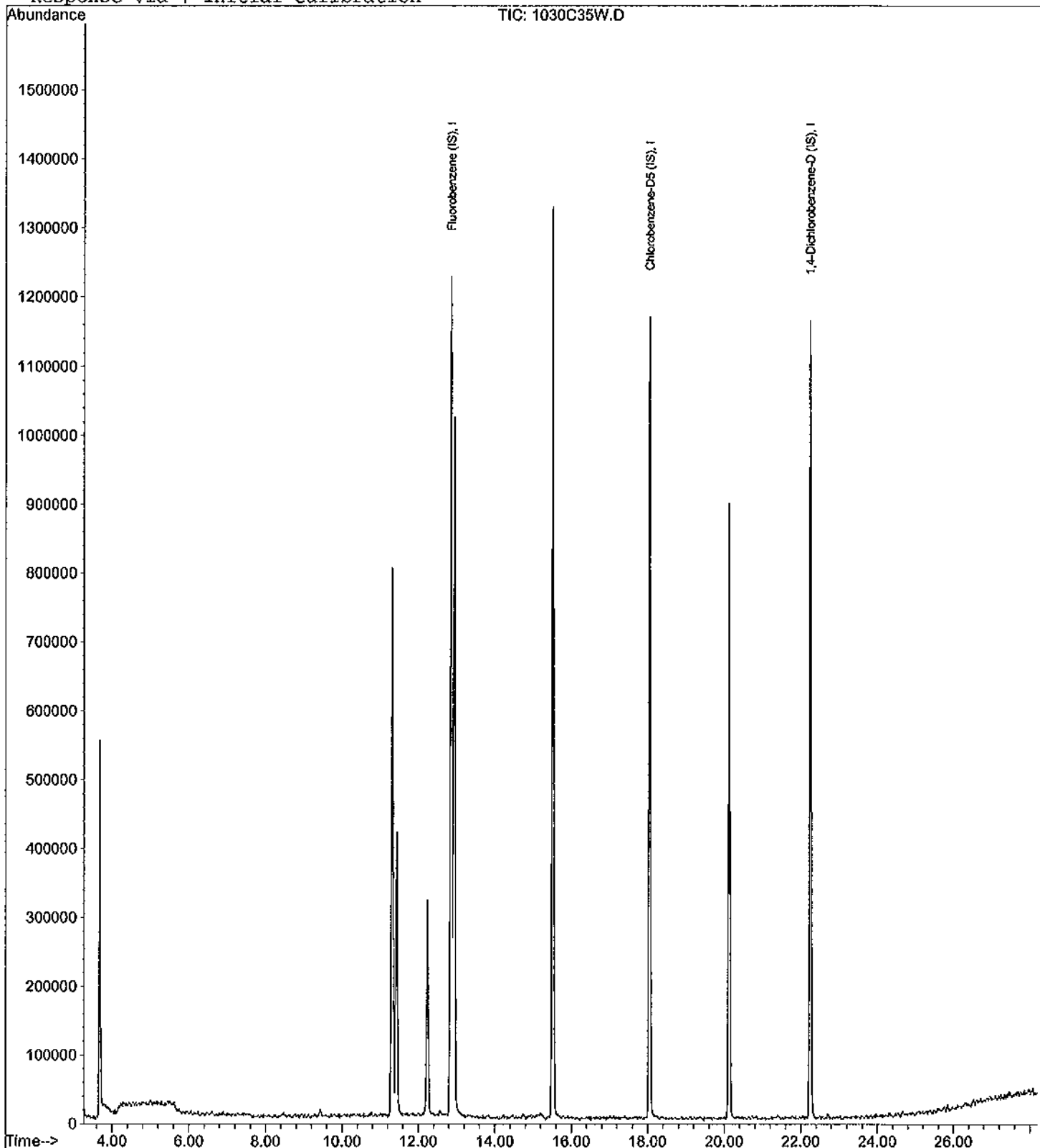
Data File : M:\CHICO\DATA\C111030\1030C35W.D  
Acq On : 31 Oct 11 13:39  
Sample : AY49335W01  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:23 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



## EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES049

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49336

QCG: #86RHB-111030AC-161029

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	10/31/11	10/31/11
EPA 8260B	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
EPA 8260B	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMO-3-CHLOROPROPANE	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
EPA 8260B	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
EPA 8260B	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
EPA 8260B	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
EPA 8260B	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
EPA 8260B	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
EPA 8260B	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
EPA 8260B	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
EPA 8260B	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
EPA 8260B	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11
EPA 8260B	METHYLENE CHLORIDE	0.70 U	5.0	0.70	0.35	ug/L	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C38
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 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: Stacy Fineran

Project: RED HILL/1022-024

Sample ID: ES049

Sample Collection Date: 10/24/11

ARF: 66102

APPL ID: AY49336

QCG: #86RHB-111030AC-161029

Method	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
EPA 8260B	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
EPA 8260B	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
EPA 8260B	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
EPA 8260B	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
EPA 8260B	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
EPA 8260B	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
EPA 8260B	SURROGATE: 1,2-DICHLOROETHANE-	98.1	70-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: 4-BROMOFLUOROBEN	102	75-120			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: DIBROMOFLUOROMET	100	85-115			%	10/31/11	10/31/11
EPA 8260B	SURROGATE: TOLUENE-D8 (S)	101	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M
Run #: 1030C38
Instrument: Chico
Sequence: C111030
Dilution Factor: 1
Initials: ARS

Printed: 12/06/11 3:06:18 PM

APPL-F1-SC-NoMC-REG MDLs

Data File : M:\CHICO\DATA\C111030\1030C38W.D Vial: 1  
 Acq On : 31 Oct 11 15:31 Operator: STC  
 Sample : AY49336W04 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 12:04 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Wed Nov 02 14:33:25 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.85	96	662144	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	450969	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	251840	25.00000	ppb	0.02
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.43	111	443039	25.11762	ppb	0.00
Spiked Amount	25.097		Recovery	=	100.083%	
38) 1,2-DCA-D4(S)	12.24	65	373247	23.77157	ppb	0.02
Spiked Amount	24.225		Recovery	=	98.129%	
56) Toluene-D8(S)	15.51	98	1662069	26.19352	ppb	0.02
Spiked Amount	25.808		Recovery	=	101.494%	
64) 4-Bromofluorobenzene(S)	20.13	95	588080	25.86573	ppb	0.02
Spiked Amount	25.459		Recovery	=	101.597%	
Target Compounds						
96) Naphthalene	25.95	128	17340	0.56629	ppb	Qvalue # 89 <i>NT</i>

Quantitation Report

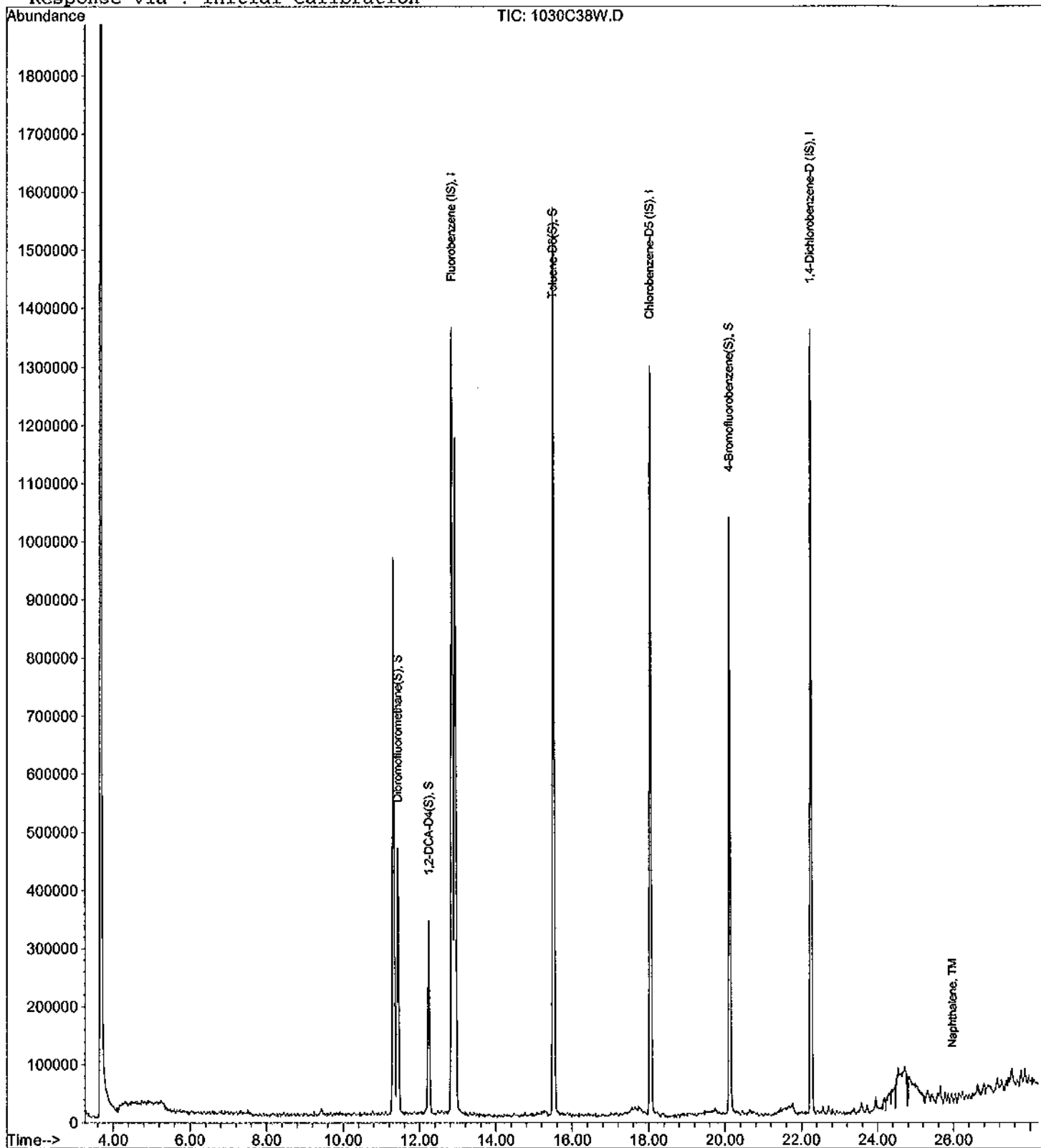
Data File : M:\CHICO\DATA\C111030\1030C38W.D  
Acq On : 31 Oct 11 15:31  
Sample : AY49336W04  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

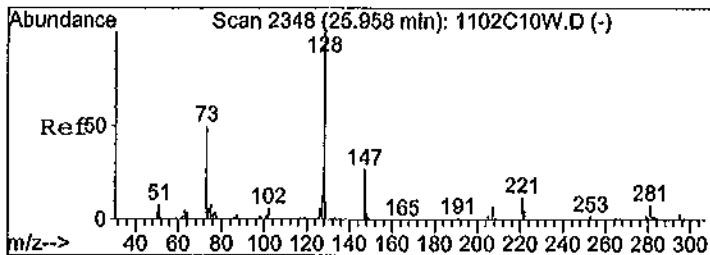
Vial: 1  
Operator: STC  
Inst : Chico  
Multiplr: 1.00

Quant Time: Nov 3 12:04 2011

Quant Results File: CALLW.RES

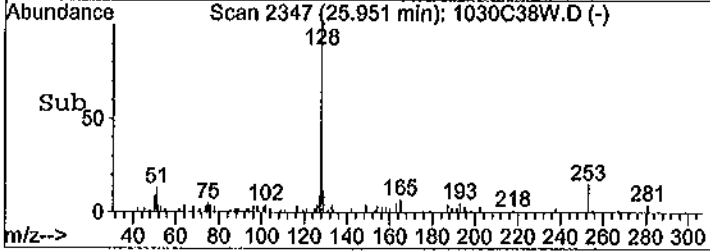
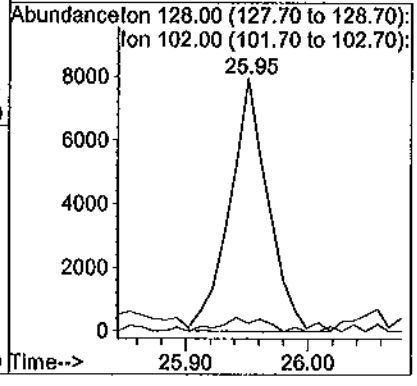
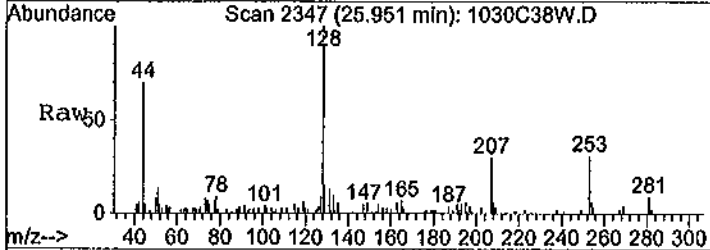
Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Thu Nov 03 10:27:07 2011  
Response via : Initial Calibration





#96  
 Naphthalene  
 Concen: 0.56629 ppb  
 RT: 25.95 min Scan# 2347  
 Delta R.T. 0.02 min  
 Lab File: 1030C38W.D  
 Acq: 31 Oct 11 15:31

Tgt Ion	Resp	Lower	Upper
128	17340	100	
102	3.4	5.1	9.5#



Data File : M:\CHICO\DATA\C111030\1030C38W.D Vial: 1  
 Acq On : 31 Oct 11 15:31 Operator: STC  
 Sample : AY49336W04 Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:23 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1349909	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.05	TIC	1288292	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.26	TIC	1348071	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

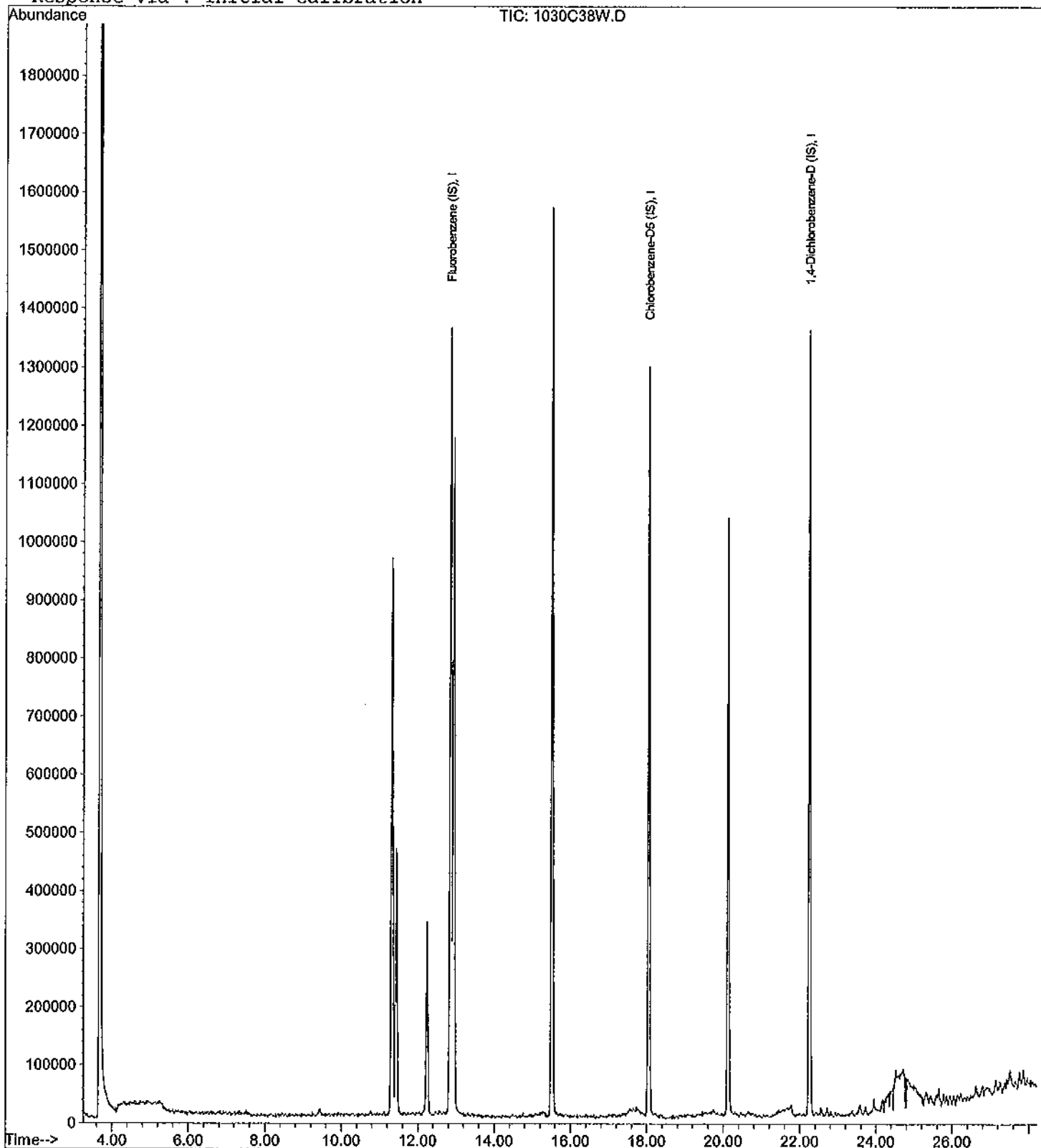
Data File : M:\CHICO\DATA\C111030\1030C38W.D  
Acq On : 31 Oct 11 15:31  
Sample : AY49336W04  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:23 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration





**EPA METHOD 8260B  
Volatile Organic Compounds  
Calibration Data**

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 10/30/11

Matrix: \_\_\_\_\_

Instrument: Chico

Initials: \_\_\_\_\_

1030C15W.D    1030C16W.D    1030C17W.D    1030C18W.D    1030C19W.D    1030C20W.D    1030C21W.D    1030C22W.D    1030C23W.D

	Compound	0.3	0.5	1	2	5	10	20	40	100		Avg	%RSD		r	
1	I	Fluorobenzene (IS)	ISTD													
2	TM	Dichlorodifluoromethane	0.9991	0.9593	0.9680	0.8471	0.8830	0.9152	0.9504	0.9592	0.8084	0.92	6.8	TM		
3	TM	Freon 114	0.5029	0.5470	0.6167	0.5799	0.5567	0.6260	0.6223	0.6040	0.5364	0.58	7.6	TM		
4	TM**	Chloromethane	1.389	1.171	1.239	1.184	1.061	1.077	1.079	1.076	0.9963	1.1	10	TM**		
5	TM*	Vinyl chloride		0.8227	0.9389	0.7274	0.8810	0.7956	0.7782	0.6322	0.5319	0.76	17	TM*		
6	TML	1,3-Butadiene												TML		
7	TM	Bromomethane	0.5647	0.5370	0.4933	0.6483	0.5131	0.5331	0.5691	0.5732	0.5561	0.55	8.0	TM		
8	TM	Chloroethane		0.7481	0.7782	0.6360	0.6082	0.5955	0.5730	0.5758	0.5302	0.63	14	TM		
9	TM	Dichlorofluoromethane	1.806	1.879	1.897	1.843	1.787	1.725	1.664	1.589	1.493	1.7	7.8	TM		
10	TM	Trichlorofluoromethane	1.219	0.9410	1.059	1.063	1.038	1.037	1.027	1.027	0.9025	1.0	8.5	TM		
11		Acetonitrile	0.0248	0.0305	0.0278	0.0270	0.0288	0.0267	0.0258	0.0269	0.0283	0.03	6.1			
12	TM	Acrolein	0.0160	0.0133	0.0127	0.0117	0.0124	0.0118	0.0112	0.0121	0.0115	0.01	12	TM		
13	TML	Acetone	0.2927	0.4962	0.2742	0.1724	0.1160	0.0970	0.0807	0.0738	0.0705	0.19	77	TML	1.000	
14	TML	Freon-113		0.2687	0.6640	0.6219	0.6334	0.6298	0.6085	0.6058	0.5403	0.57	22	TML	0.999	
15	TM*	1,1-DCE	0.8684	0.8302	0.7551	0.7075	0.7021	0.6844	0.6445	0.6344	0.5970	0.71	13	TM*		
16	TM	t-Butanol	0.0032	0.0028	0.0031	0.0037	0.0033	0.0035	0.0031	0.0036	0.0043	0.00	13	TM		
17	TML	Methyl Acetate		0.5858	0.4123	0.3223	0.1877	0.2224	0.2002	0.2076	0.2032	0.29	48	TML	1.000	
18	TML	Iodomethane			0.1817	0.2265	0.2408	0.2984	0.3981	0.4959	0.6090	0.35	45	TML	0.997	
19	TML	Acrylonitrile		0.0466	0.0701	0.0979	0.0824	0.0851	0.0770	0.0761	0.0758	0.08	19	TML	1.000	
20	TM	Methylene chloride		0.8304	0.7142	0.7211	0.6635	0.6652	0.6531	0.6094	0.5892	0.68	11	TM		
21	TM	Carbon disulfide	0.8377	0.7169	0.7402	0.7186	0.6675	0.6811	0.6507	0.6311	0.5977	0.69	10	TM		
22	TM	Methyl t-butyl ether (MtBE)	1.160	1.072	1.146	1.130	1.059	1.101	1.037	1.041	0.9630	1.1	5.8	TM		
23	TM	Trans-1,2-DCE	0.9275	0.9146	0.8717	0.8807	0.8240	0.8200	0.7565	0.7483	0.7085	0.83	9.3	TM		
24	TM	Diisopropyl Ether	2.775	2.360	2.465	2.461	2.400	2.425	2.261	2.245	2.073	2.4	8.1	TM		
25	TM**	1,1-DCA	1.448	1.345	1.449	1.466	1.510	1.465	1.402	1.378	1.267	1.4	5.3	TM**		
26	TML	Vinyl Acetate		1.048	0.7027	0.5800	0.5004	0.4421	0.4155	0.4257	0.3841	0.56	40	TML	0.999	
27	TM	Ethyl tert Butyl Ether	1.698	1.549	1.596	1.761	1.670	1.751	1.601	1.569	1.460	1.6	6.1	TM		
28	TML	MEK (2-Butanone)		0.5665	0.4588	0.3602	0.2874	0.2964	0.2742	0.2705		0.36	32	TML	1.000	
29	TM	Cis-1,2-DCE	1.025	0.9874	0.8510	0.8618	0.8314	0.8432	0.7892	0.7602	0.7089	0.85	12	TM		
30	TM	2,2-Dichloropropane	1.246	1.113	0.9950	1.048	1.020	0.9872	0.9664	0.9254	0.8189	1.0	12	TM		
31	TM*	Chloroform	1.473	1.359	1.352	1.398	1.420	1.399	1.327	1.309	1.208	1.4	5.6	TM*		
32	TM	Bromochloromethane	0.2100	0.2283	0.2743	0.2327	0.2615	0.2451	0.2386	0.2267	0.2148	0.24	8.8	TM		
33	S	Dibromofluoromethane(S)	0.6664	0.6677	0.6754	0.6906	0.6830	0.6822	0.6563	0.6514	0.6207	0.67	3.2	S		
34	TM	1,1,1-TCA	1.307	1.226	1.269	1.241	1.235	1.281	1.263	1.210	1.104	1.2	4.7	TM		
35	TM	Cyclohexane	1.116	1.365	1.215	1.216	1.106	1.144	1.092	1.114	1.000	1.2	8.9	TM		

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 6  
Initial Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Initial Cal. Date: 10/30/11

Matrix: \_\_\_\_\_

Instrument: Chico

Initials: \_\_\_\_\_

		Compound	0.3	0.5	1	2	5	10	20	40	100		Avg	%RSD		r
36	TM	1,1-Dichloropropene	1.089	1.043	1.238	1.061	1.080	1.064	1.039	0.9929	0.9342		1.1	7.8	TM	
37	TML	2,2,4-Trimethylpentane		4.510	2.958	2.198	1.929	1.816	1.761	1.722	1.632		2.3	42	TML	1.000
38	S	1,2-DCA-D4(S)	0.5562	0.6935	0.6364	0.6275	0.6073	0.5850	0.5554	0.5514	0.5227		0.59	9.0	S	
39	TM	Carbon Tetrachloride	0.7745	0.7961	0.7551	0.8397	0.8717	0.9031	0.9401	0.9166	0.8718		0.85	7.6	TM	
40	TM	Tert Amyl Methyl Ether	1.206	1.355	1.238	1.270	1.190	1.245	1.179	1.154	1.119		1.2	5.7	TM	
41	TM	1,2-DCA	0.8312	0.6440	0.6792	0.7198	0.7101	0.7316	0.6883	0.6614	0.6203		0.70	8.8	TM	
42	TM	Benzene	3.278	3.031	3.234	3.139	3.058	3.078	2.926	2.893	2.778		3.0	5.3	TM	
43	TM	TCE	0.7582	0.8575	0.9261	0.9155	0.8745	0.8692	0.8308	0.8139	0.7474		0.84	7.4	TM	
44	TM	2-Pentanone	0.1621	0.1829	0.1696	0.1839	0.1797	0.1849	0.1709	0.1792	0.1751		0.18	4.4	TM	
45	TM*	1,2-Dichloropropane	0.6688	0.7192	0.7502	0.6580	0.7308	0.7195	0.6791	0.6772	0.6288		0.69	5.7	TM*	
46	TM	Bromodichloromethane	0.7189	0.7057	0.8148	0.7719	0.8069	0.8660	0.8196	0.8390	0.7766		0.79	6.7	TM	
47	TM	Methyl Cyclohexane	1.113	1.125	0.9652	0.9330	0.9573	1.003	0.9550	0.9420	0.8802		0.99	8.3	TM	
48	TM	Dibromomethane	0.2413	0.2669	0.2816	0.2846	0.2915	0.3053	0.2877	0.2711	0.2623		0.28	6.8	TM	
49	TM	2-Chloroethyl vinyl ether	0.1532	0.1448	0.1599	0.1939	0.1910	0.1855	0.1751	0.1885	0.1924		0.18	11	TM	
50	TM	1-Bromo-2-chloroethane	0.6355	0.5704	0.5860	0.6008	0.6129	0.6029	0.5729	0.5868	0.5488		0.59	4.3	TM	
51	TM	Cis-1,3-Dichloropropene	0.7822	0.6621	0.7733	0.7420	0.7627	0.7998	0.7723	0.7726	0.7216		0.75	5.5	TM	
52	TM*	Toluene	3.411	3.085	2.935	3.035	3.024	3.066	2.913	2.874	2.698		3.0	6.5	TM*	
53	TM	Trans-1,3-Dichloropropene	0.5191	0.5428	0.4995	0.5430	0.5365	0.5848	0.5511	0.5622	0.5483		0.54	4.5	TM	
54	TM	1,1,2-TCA	0.3181	0.2834	0.2608	0.3010	0.2945	0.3288	0.2891	0.2919	0.2665		0.29	7.5	TM	
55	I	Chlorobenzene-D5 (IS)	ISTD													
56	S	Toluene-D8(S)	3.825	3.742	3.592	3.490	3.642	3.496	3.501	3.233	3.138		3.5	6.3	S	
57	TM	1,2-EDB	0.5186	0.3944	0.4412	0.4259	0.5017	0.5094	0.5156	0.5003	0.4752		0.48	9.4	TM	
58	TM	Tetrachloroethene	1.569	1.513	1.319	1.276	1.308	1.257	1.237	1.102	0.9877		1.3	14	TM	
59	TM	1-Chlorohexane	1.590	1.521	1.436	1.470	1.527	1.492	1.526	1.416	1.343		1.5	5.0	TM	
60	TM	1,1,1,2-Tetrachloroethane	0.6133	0.6996	0.7082	0.7484	0.8608	0.9066	0.9437	0.9002	0.8611		0.80	14	TM	
61	TM	m&p-Xylene	2.262	1.857	1.843	1.755	1.899	1.909	1.977	1.824	1.763		1.9	8.1	TM	
62	TM	o-Xylene	1.911	1.844	1.639	1.684	1.946	1.920	1.973	1.805	1.714		1.8	6.7	TM	
63	TM	Styrene	2.668	2.626	2.667	2.614	2.923	2.903	3.005	2.787	2.612		2.8	5.5	TM	
64	S	4-Bromofluorobenzene(S)	1.386	1.298	1.312	1.224	1.272	1.281	1.253	1.176	1.141		1.3	5.8	S	
65	TM	2-Hexanone		0.2681	0.1979	0.2383	0.2161	0.2363	0.2325	0.2267	0.2142		0.23	9.1	TM	
66	TM	1,3-Dichloropropane	0.9515	0.9439	0.8870	0.9272	0.9571	1.037	0.9690	0.9322	0.8392		0.94	5.8	TM	
67	TM	Dibromochloromethane		0.4957	0.5504	0.5206	0.6049	0.6702	0.6987	0.6794	0.6801		0.61	13	TM	
68	TM**	Chlorobenzene	3.339	2.652	2.608	2.538	2.763	2.780	2.740	2.590	2.437		2.7	9.5	TM**	
69	TM*	Ethylbenzene	5.842	4.934	5.056	4.770	5.229	5.219	5.128	4.773	4.573		5.1	7.3	TM*	
70	TM**L	Bromoform		0.1505	0.1690	0.2072	0.2509	0.2961	0.3266	0.3337	0.3518		0.26	30	TM**L	1.000



Data File : M:\CHICO\DATA\C111030\1030C15W.D  
 Acq On : 30 Oct 11 23:28  
 Sample : Voc Std 10-30-11@0.3ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.83	96	559104	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	374592	25.00000	ppb	-0.01
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	198336	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.41	111	8942	0.60039	ppb	-0.01
Spiked Amount	25.097		Recovery	=	2.391%	
38) 1,2-DCA-D4(S)	12.23	65	7464	0.56298	ppb	0.00
Spiked Amount	24.225		Recovery	=	2.324%	
56) Toluene-D8(S)	15.50	98	34391	0.65250	ppb	0.00
Spiked Amount	25.808		Recovery	=	2.526%	
64) 4-Bromofluorobenzene(S)	20.11	95	12464	0.65998	ppb	0.00
Spiked Amount	25.459		Recovery	=	2.592%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.07	85	6703	0.32540	ppb #	80
3) Freon 114	4.33	85	3374	0.26153	ppb #	70
4) Chloromethane	4.55	50	9320	0.36511	ppb #	94
5) Vinyl chloride	4.83	62	6233	0.36505	ppb #	76
6) 1,3-Butadiene	4.86	54	426	8.92736	ppb #	41
7) Bromomethane	5.72	94	3789	0.30570	ppb #	70
8) Chloroethane	5.92	64	6243	0.44265	ppb #	55
9) Dichlorofluoromethane	6.01	67	12120	0.31081	ppb #	86
10) Trichlorofluoromethane	6.51	101	8177	0.35336	ppb #	78
11) Acetonitrile	7.67	41	8307	13.56274	ug/l	100
12) Acrolein	7.18	56	5382	19.20236	ppb #	71
13) Acetone	7.26	43	1964	1.22606	ppb #	75
14) Freon-113	7.48	101	3974	-0.83183	ppb #	68
15) 1,1-DCE	7.68	96	5826	0.36499	ppb #	38
16) t-Butanol	7.78	59	1058	13.95861	ppb #	96
17) Methyl Acetate	8.17	43	2286	-0.18237	ppb #	87
18) Iodomethane	8.17	142	479	3.85678	ppb #	37
19) Acrylonitrile	8.56	53	560	-0.04894	ppb #	5
20) Methylene chloride	8.46	84	7036	0.46214	ppb #	60
21) Carbon disulfide	8.57	76	5620	0.36236	ppb #	97
22) Methyl t-butyl ether (MtBE)	8.91	73	7781	0.32251	ppb #	64
23) Trans-1,2-DCE	9.09	96	6223	0.38166	ppb #	92
24) Diisopropyl Ether	9.75	45	18616	0.34902	ppb #	73
25) 1,1-DCA	9.78	63	9717	0.30719	ppb #	95
26) Vinyl Acetate	9.43	43	9166	-0.47709	ppb #	81
27) Ethyl tert Butyl Ether	10.45	59	11390	0.31279	ppb #	93
28) MEK (2-Butanone)	10.45	43	4667	0.10206	ppb #	76
29) Cis-1,2-DCE	10.80	96	6876	0.36134	ppb #	67
30) 2,2-Dichloropropane	10.79	77	8357	0.36882	ppb #	95
31) Chloroform	11.08	83	9885	0.32484	ppb #	86
32) Bromochloromethane	11.31	128	1409	0.26596	ppb #	1
34) 1,1,1-TCA	11.83	97	8769	0.31687	ppb #	72
35) Cyclohexane	11.98	56	7488	0.29062	ppb #	74
36) 1,1-Dichloropropene	12.10	75	7308	0.30819	ppb #	86
37) 2,2,4-Trimethylpentane	12.17	57	48085	0.17131	ppb #	87
39) Carbon Tetrachloride	12.31	117	5196	0.27267	ppb #	87

(#) = qualifier out of range (m) = manual integration  
 1030C15W.D CALLW.M Fri Dec 02 11:20:38 2011

Data File : M:\CHICO\DATA\C111030\1030C15W.D  
 Acq On : 30 Oct 11 23:28  
 Sample : Voc Std 10-30-11@0.3ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
40) Tert Amyl Methyl Ether	12.35	73	8093	0.29724	ppb	#	82
41) 1,2-DCA	12.36	62	5577	0.35705	ppb	#	79
42) Benzene	12.50	78	21995	0.32285	ppb		99
43) TCE	13.53	95	5087	0.26961	ppb		88
44) 2-Pentanone	13.19	43	54377	13.77755	ppb		91
45) 1,2-Dichloropropane	13.76	63	4487	0.28977	ppb	#	81
46) Bromodichloromethane	14.11	83	4823	0.27263	ppb	#	84
47) Methyl Cyclohexane	13.81	83	7465	0.33857	ppb		81
48) Dibromomethane	14.15	93	1619	0.26143	ppb	#	56
49) 2-Chloroethyl vinyl ether	14.57	63	1028	0.26114	ppb	#	71
50) 1-Bromo-2-chloroethane	14.89	63	4264	0.32272	ppb	#	76
51) Cis-1,3-Dichloropropene	15.00	75	5248	0.31110	ppb		96
52) Toluene	15.64	91	22887	0.34061	ppb		88
53) Trans-1,3-Dichloropropene	15.80	75	3483	0.28679	ppb	#	72
54) 1,1,2-TCA	16.08	83	2134	0.32602	ppb		86
57) 1,2-EDB	17.33	107	2331	0.32696	ppb	#	72
58) Tetrachloroethene	16.79	164	7051	0.36612	ppb	#	74
59) 1-Chlorohexane	17.71	91	7147	0.32226	ppb	#	70
60) 1,1,1,2-Tetrachloroethane	18.16	131	2757	0.22867	ppb		83
61) m&p-Xylene	18.35	106	20335	0.71474	ppb		85
62) o-Xylene	19.11	106	8588	0.31386	ppb		68
63) Styrene	19.12	104	11993	0.29039	ppb		98
65) 2-Hexanone	16.12	43	2535	0.73958	ppb	#	73
66) 1,3-Dichloropropane	16.49	76	4277	0.30423	ppb		96
67) Dibromochloromethane	16.98	129	1907	0.20779	ppb	#	39
68) Chlorobenzene	18.10	112	15008	0.36875	ppb	#	68
69) Ethylbenzene	18.21	91	26259	0.34648	ppb		89
70) Bromoform	19.63	173	532	1.23415	ppb	#	37
72) MIBK (methyl isobutyl keto)	14.68	43	7070	1.25392	ppb		81
73) Isopropylbenzene	19.72	105	23083	0.32111	ppb	#	81
74) 1,1,2,2-Tetrachloroethane	19.88	83	1704	0.28318	ppb	#	79
75) 1,2,3-Trichloropropane	20.14	110	346	0.59881	ppb	#	25
76) t-1,4-Dichloro-2-Butene	20.24	53	170	0.12459	ppb	#	62
77) Bromobenzene	20.49	156	5215	0.31451	ppb	#	54
78) n-Propylbenzene	20.44	91	25363	0.29576	ppb		97
79) 4-Ethyltoluene	20.63	105	21128	0.35603	ppb		93
80) 2-Chlorotoluene	20.74	91	16704	0.29411	ppb		87
81) 1,3,5-Trimethylbenzene	20.72	105	18391	0.31501	ppb		98
82) 4-Chlorotoluene	20.81	91	16002	0.32720	ppb	#	74
83) Tert-Butylbenzene	21.36	119	18557	0.29358	ppb		92
84) 1,2,4-Trimethylbenzene	21.41	105	21930	0.35965	ppb		91
85) Sec-Butylbenzene	21.75	105	22099	0.29154	ppb		86
86) p-Isopropyltoluene	21.99	119	19428	0.29923	ppb		97
87) Benzyl Chloride	22.41	91	3043	0.35307	ppb	#	69
88) 1,3-DCB	22.12	146	11266	0.33224	ppb		92
89) 1,4-DCB	22.29	146	10573	0.33594	ppb		95
90) Hexachloroethane	23.59	117	857	2.03197	ppb	#	50
91) n-Butylbenzene	22.70	91	19217	0.33934	ppb		91
92) 1,2-DCB	22.92	146	8586	0.31833	ppb	#	78
93) 1,2-Dibromo-3-chloropropan	24.14	155	141	1.41683	ppb	#	27
94) 1,2,4-Trichlorobenzene	25.58	180	5945	0.30417	ppb	#	86

(#) = qualifier out of range (m) = manual integration  
 1030C15W.D CALLW.M Fri Dec 02 11:20:39 2011

Data File : M:\CHICO\DATA\C111030\1030C15W.D Vial: 1  
 Acq On : 30 Oct 11 23:28 Operator: STC  
 Sample : Voc Std 10-30-11@0.3ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.83	223	1530	0.43087	ppb #	68
96) Naphthalene	25.92	128	7576	0.31416	ppb #	79
97) 1,2,3-Trichlorobenzene	26.29	180	4008	0.27110	ppb	85

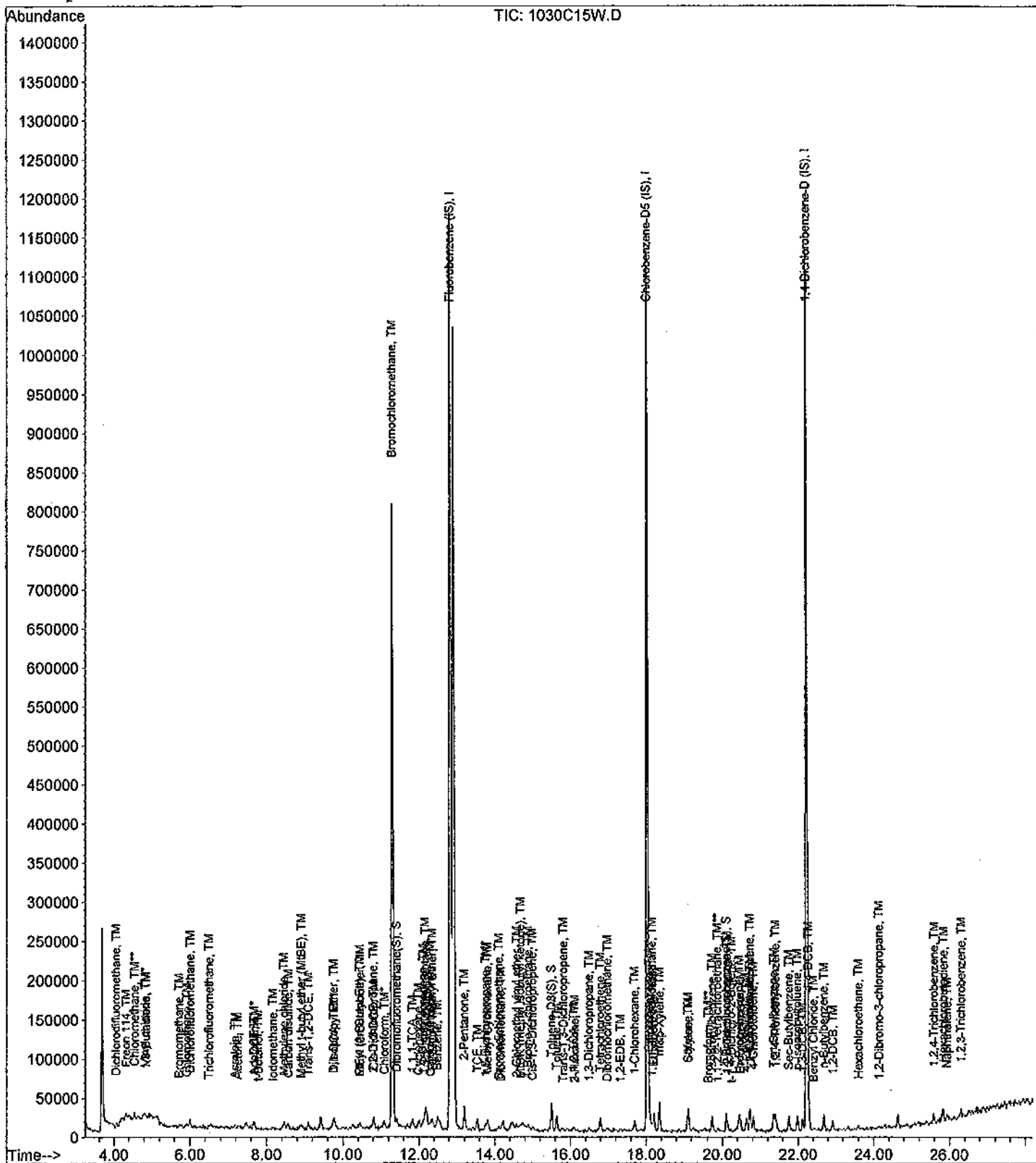
Data File : M:\CHICO\DATA\C111030\1030C15W.D  
Acq On : 30 Oct 11 23:28  
Sample : Voc Std 10-30-11@0.3ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration





Data File : M:\CHICO\DATA\C111030\1030C16W.D Vial: 1  
 Acq On : 31 Oct 11 00:11 Operator: STC  
 Sample : Voc Std 10-30-11@0.5ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.84	96	564160	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	384000	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	199104	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane (S)	11.43	111	15067	1.00257	ppb	0.00
Spiked Amount	25.097		Recovery	=	3.996%	
38) 1,2-DCA-D4 (S)	12.23	65	15649	1.16976	ppb	0.00
Spiked Amount	24.225		Recovery	=	4.830%	
56) Toluene-D8 (S)	15.51	98	57480	1.06384	ppb	0.01
Spiked Amount	25.808		Recovery	=	4.123%	
64) 4-Bromofluorobenzene (S)	20.10	95	19938	1.02988	ppb	0.00
Spiked Amount	25.459		Recovery	=	4.046%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.07	85	10824	0.52075	ppb	95
3) Freon 114	4.33	85	6172	0.47412	ppb	98
4) Chloromethane	4.55	50	13218	0.51317	ppb #	72
5) Vinyl chloride	4.81	62	9283	0.53880	ppb #	69
6) 1,3-Butadiene	4.79	54	547	11.36033	ppb	97
7) Bromomethane	5.73	94	6059	0.48447	ppb	87
8) Chloroethane	5.91	64	8441	0.59313	ppb #	74
9) Dichlorofluoromethane	6.02	67	21197	0.53871	ppb #	80
10) Trichlorofluoromethane	6.51	101	10617	0.45468	ppb	86
11) Acetonitrile	7.65	41	17187	27.80953	ug/l	100
12) Acrolein	7.15	56	7488	26.47690	ppb	95
13) Acetone	7.29	43	5599	3.46393	ppb	93
14) Freon-113	7.43	101	3032	-0.91166	ppb #	70
15) 1,1-DCE	7.68	96	9367	0.58157	ppb	86
16) t-Butanol	7.75	59	1553	20.30572	ppb	100
17) Methyl Acetate	8.18	43	6610	0.76232	ppb #	81
18) Iodomethane	8.16	142	1888	3.95744	ppb #	59
19) Acrylonitrile	8.56	53	526	-0.07185	ppb #	71
20) Methylene chloride	8.48	84	9369	0.60986	ppb	86
21) Carbon disulfide	8.56	76	8089	0.51688	ppb	94
22) Methyl t-butyl ether (MtBE)	8.89	73	12097	0.49691	ppb	93
23) Trans-1,2-DCE	9.08	96	10320	0.62725	ppb	75
24) Diisopropyl Ether	9.74	45	26624	0.49469	ppb #	77
25) 1,1-DCA	9.79	63	15171	0.47532	ppb #	86
26) Vinyl Acetate	9.43	43	11823	-0.17906	ppb #	82
27) Ethyl tert Butyl Ether	10.44	59	17474	0.47557	ppb	99
28) MEK (2-Butanone)	10.44	43	6392	0.38220	ppb #	76
29) Cis-1,2-DCE	10.81	96	11141	0.58022	ppb #	62
30) 2,2-Dichloropropane	10.83	77	12554	0.54909	ppb	96
31) Chloroform	11.09	83	15337	0.49949	ppb	92
32) Bromochloromethane	11.30	128	2576	0.48189	ppb #	33
34) 1,1,1-TCA	11.83	97	13833	0.49538	ppb #	82
35) Cyclohexane	11.99	56	15403	0.59245	ppb	78
36) 1,1-Dichloropropene	12.10	75	11774	0.49209	ppb #	84
37) 2,2,4-Trimethylpentane	12.18	57	50886	0.23590	ppb	93
39) Carbon Tetrachloride	12.29	117	8982	0.46713	ppb	86

(#) = qualifier out of range (m) = manual integration  
 1030C16W.D CALLW.M Fri Dec 02 11:20:44 2011

Data File : M:\CHICO\DATA\C111030\1030C16W.D  
 Acq On : 31 Oct 11 00:11  
 Sample : Voc Std 10-30-11@0.5ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
40) Tert Amyl Methyl Ether	12.34	73	15291	0.55657	ppb	#	82
41) 1,2-DCA	12.36	62	7266	0.46101	ppb		99
42) Benzene	12.50	78	34203	0.49755	ppb	#	86
43) TCE	13.53	95	9675	0.50818	ppb	#	76
44) 2-Pentanone	13.21	43	103205	25.91480	ppb		91
45) 1,2-Dichloropropane	13.77	63	8115	0.51936	ppb		98
46) Bromodichloromethane	14.11	83	7962	0.44603	ppb	#	98
47) Methyl Cyclohexane	13.81	83	12697	0.57069	ppb		99
48) Dibromomethane	14.16	93	3011	0.48185	ppb	#	68
49) 2-Chloroethyl vinyl ether	14.58	63	1634	0.41135	ppb	#	59
50) 1-Bromo-2-chloroethane	14.88	63	6436	0.48274	ppb	#	66
51) Cis-1,3-Dichloropropene	15.00	75	7471	0.43891	ppb	#	75
52) Toluene	15.63	91	34808	0.51338	ppb		87
53) Trans-1,3-Dichloropropene	15.80	75	6124	0.49974	ppb	#	83
54) 1,1,2-TCA	16.08	83	3198	0.48419	ppb	#	78
57) 1,2-EDB	17.33	107	3029	0.41446	ppb	#	80
58) Tetrachloroethene	16.78	164	11617	0.58843	ppb		81
59) 1-Chlorohexane	17.70	91	11679	0.51371	ppb		93
60) 1,1,1,2-Tetrachloroethane	18.16	131	5373	0.43472	ppb		80
61) m&p-Xylene	18.36	106	28523	0.97798	ppb		92
62) o-Xylene	19.10	106	14161	0.50486	ppb		88
63) Styrene	19.13	104	20171	0.47643	ppb		89
65) 2-Hexanone	16.11	43	2059	0.58599	ppb	#	78
66) 1,3-Dichloropropane	16.50	76	7249	0.50300	ppb		84
67) Dibromochloromethane	16.95	129	3807	0.40465	ppb		74
68) Chlorobenzene	18.11	112	20370	0.48823	ppb	#	81
69) Ethylbenzene	18.21	91	37896	0.48777	ppb		98
70) Bromoform	19.62	173	1156	1.34654	ppb	#	37
72) MIBK (methyl isobutyl keto)	14.67	43	3016	0.53285	ppb	#	51
73) Isopropylbenzene	19.73	105	35995	0.49881	ppb		90
74) 1,1,2,2-Tetrachloroethane	19.89	83	2684	0.44432	ppb	#	86
75) 1,2,3-Trichloropropane	20.15	110	430	0.71972	ppb	#	57
76) t-1,4-Dichloro-2-Butene	20.21	53	1066	0.77827	ppb	#	42
77) Bromobenzene	20.47	156	9129	0.54844	ppb	#	86
78) n-Propylbenzene	20.44	91	42985	0.49932	ppb		89
79) 4-Ethyltoluene	20.63	105	29592	0.49673	ppb		84
80) 2-Chlorotoluene	20.73	91	31711	0.55619	ppb	#	79
81) 1,3,5-Trimethylbenzene	20.71	105	29710	0.50692	ppb		88
82) 4-Chlorotoluene	20.82	91	23555	0.47979	ppb		86
83) Tert-Butylbenzene	21.36	119	33054	0.52092	ppb		95
84) 1,2,4-Trimethylbenzene	21.41	105	32321	0.52802	ppb	#	68
85) Sec-Butylbenzene	21.76	105	36729	0.48267	ppb		87
86) p-Isopropyltoluene	22.00	119	32111	0.49266	ppb		93
87) Benzyl Chloride	22.43	91	4589	0.53039	ppb		91
88) 1,3-DCB	22.11	146	17221	0.50589	ppb	#	84
89) 1,4-DCB	22.29	146	15280	0.48363	ppb		95
90) Hexachloroethane	23.59	117	1692	2.09850	ppb	#	60
91) n-Butylbenzene	22.70	91	30355	0.53395	ppb		90
92) 1,2-DCB	22.92	146	13282	0.49053	ppb		92
93) 1,2-Dibromo-3-chloropropan	24.16	155	468	1.71132	ppb	#	1
94) 1,2,4-Trichlorobenzene	25.58	180	11120	0.56675	ppb		82

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

Data File : M:\CHICO\DATA\C111030\1030C16W.D Vial: 1  
 Acq On : 31 Oct 11 00:11 Operator: STC  
 Sample : Voc Std 10-30-11@0.5ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.83	223	2317	0.64998	ppb #	59
96) Naphthalene	25.93	128	13003	0.53713	ppb #	92
97) 1,2,3-Trichlorobenzene	26.30	180	7873	0.53048	ppb #	70

(#) = qualifier out of range (m) = manual integration  
 1030C16W.D CALLW.M Fri Dec 02 11:20:46 2011

Quantitation Report

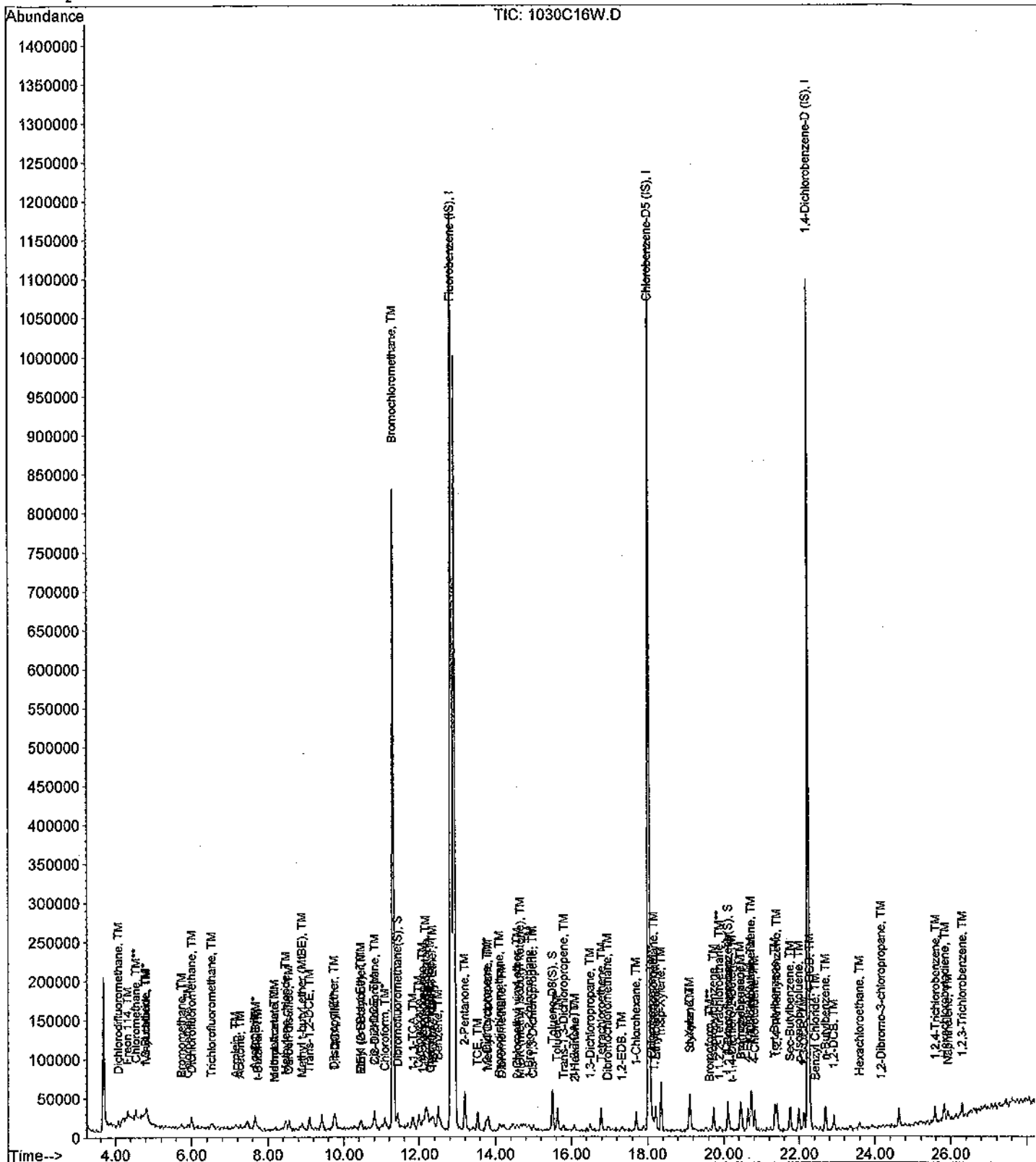
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Acq On : 31 Oct 11 00:11  
Sample : Voc Std 10-30-11@0.5ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C17W.D Vial: 1  
 Acq On : 31 Oct 11 00:54 Operator: STC  
 Sample : Voc Std 10-30-11@1.0ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.84	96	539200	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	383872	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	197760	25.00000	ppb	0.00
System Monitoring Compounds						
33) Dibromofluoromethane (S)	11.42	111	29134	2.02833	ppb	0.00
Spiked Amount	25.097		Recovery	=	8.081%	
38) 1,2-DCA-D4 (S)	12.22	65	27452	2.14703	ppb	0.00
Spiked Amount	24.225		Recovery	=	8.863%	
56) Toluene-D8 (S)	15.50	98	110307	2.04225	ppb	0.00
Spiked Amount	25.808		Recovery	=	7.912%	
64) 4-Bromofluorobenzene (S)	20.11	95	40278	2.08121	ppb	0.00
Spiked Amount	25.459		Recovery	=	8.174%	
Target Compounds						
2) Dichlorodifluoromethane	4.07	85	20878	1.05095	ppb	# 77
3) Freon 114	4.34	85	13301	1.06904	ppb	79
4) Chloromethane	4.55	50	26727	1.08568	ppb	96
5) Vinyl chloride	4.82	62	20250	1.22976	ppb	92
6) 1,3-Butadiene	4.82	54	298	6.47548	ppb	# 63
7) Bromomethane	5.73	94	10639	0.89005	ppb	88
8) Chloroethane	5.91	64	16785	1.23404	ppb	95
9) Dichlorofluoromethane	6.01	67	40917	1.08801	ppb	99
10) Trichlorofluoromethane	6.54	101	22833	1.02311	ppb	# 73
11) Acetonitrile	7.65	41	29961	50.72269	ug/l	100
12) Acrolein	7.16	56	13727	50.78428	ppb	87
13) Acetone	7.28	43	5913	3.82754	ppb	# 80
14) Freon-113	7.47	101	14321	0.06398	ppb	# 85
15) 1,1-DCE	7.68	96	16287	1.05802	ppb	# 61
16) t-Butanol	7.76	59	3312	45.30953	ppb	93
17) Methyl Acetate	8.19	43	8892	1.35363	ppb	91
18) Iodomethane	8.17	142	3919	4.11599	ppb	# 77
19) Acrylonitrile	8.55	53	1511	0.54689	ppb	# 42
20) Methylene chloride	8.47	84	15404	1.04912	ppb	# 71
21) Carbon disulfide	8.56	76	15964	1.06731	ppb	97
22) Methyl t-butyl ether (MtBE)	8.89	73	24721	1.06247	ppb	# 90
23) Trans-1,2-DCE	9.10	96	18800	1.19557	ppb	# 91
24) Diisopropyl Ether	9.75	45	53157	1.03341	ppb	96
25) 1,1-DCA	9.78	63	31252	1.02448	ppb	# 91
26) Vinyl Acetate	9.41	43	15155	0.28793	ppb	# 78
27) Ethyl tert Butyl Ether	10.44	59	34422	0.98019	ppb	99
28) MEK (2-Butanone)	10.44	43	9896	1.04178	ppb	# 90
29) Cis-1,2-DCE	10.81	96	18355	1.00018	ppb	79
30) 2,2-Dichloropropane	10.81	77	21461	0.98211	ppb	96
31) Chloroform	11.09	83	29160	0.99364	ppb	95
32) Bromochloromethane	11.32	128	5916	1.15793	ppb	90
34) 1,1,1-TCA	11.83	97	27369	1.02550	ppb	88
35) Cyclohexane	12.00	56	26209	1.05474	ppb	95
36) 1,1-Dichloropropene	12.09	75	26709	1.16796	ppb	# 85
37) 2,2,4-Trimethylpentane	12.17	57	63801	0.66906	ppb	93
39) Carbon Tetrachloride	12.29	117	16287	0.88625	ppb	97

(#) = qualifier out of range (m) = manual integration  
 1030C17W.D CALLW.M Fri Dec 02 11:20:50 2011

Data File : M:\CHICO\DATA\C111030\1030C17W.D  
 Acq On : 31 Oct 11 00:54  
 Sample : Voc Std 10-30-11@1.0ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
40) Tert Amyl Methyl Ether	12.35	73	26700	1.01682	ppb		98
41) 1,2-DCA	12.38	62	14649	0.97246	ppb	#	86
42) Benzene	12.49	78	69760	1.06177	ppb	#	93
43) TCE	13.53	95	19974	1.09770	ppb		87
44) 2-Pentanone	13.20	43	182845	48.03774	ppb		99
45) 1,2-Dichloropropane	13.77	63	16180	1.08346	ppb		97
46) Bromodichloromethane	14.12	83	17574	1.03007	ppb	#	98
47) Methyl Cyclohexane	13.82	83	20818	0.97903	ppb		89
48) Dibromomethane	14.16	93	6074	1.01701	ppb	#	71
49) 2-Chloroethyl vinyl ether	14.58	63	3448	0.90821	ppb		94
50) 1-Bromo-2-chloroethane	14.88	63	12639	0.99189	ppb	#	62
51) Cis-1,3-Dichloropropene	15.01	75	16679	1.02522	ppb		86
52) Toluene	15.63	91	63296	0.97675	ppb		83
53) Trans-1,3-Dichloropropene	15.81	75	10774	0.91989	ppb		92
54) 1,1,2-TCA	16.09	83	5625	0.89108	ppb		89
57) 1,2-EDB	17.32	107	6774	0.92719	ppb	#	92
58) Tetrachloroethene	16.79	164	20256	1.02636	ppb		96
59) 1-Chlorohexane	17.70	91	22047	0.97009	ppb		95
60) 1,1,1,2-Tetrachloroethane	18.16	131	10874	0.88009	ppb		87
61) m&p-Xylene	18.35	106	56585	1.94079	ppb		87
62) o-Xylene	19.10	106	25167	0.89753	ppb		93
63) Styrene	19.12	104	40956	0.96769	ppb		88
65) 2-Hexanone	16.10	43	3038	0.86490	ppb	#	70
66) 1,3-Dichloropropane	16.49	76	13620	0.94539	ppb		85
67) Dibromochloromethane	16.98	129	8452	0.89867	ppb	#	59
68) Chlorobenzene	18.10	112	40045	0.96012	ppb		92
69) Ethylbenzene	18.22	91	77629	0.99952	ppb		96
70) Bromoform	19.64	173	2595	1.61154	ppb	#	81
72) MIBK (methyl isobutyl keto)	14.66	43	6936	1.23373	ppb	#	66
73) Isopropylbenzene	19.74	105	73566	1.02638	ppb	#	82
74) 1,1,2,2-Tetrachloroethane	19.90	83	5631	0.93852	ppb		82
75) 1,2,3-Trichloropropane	20.15	110	1160	1.79904	ppb	#	72
76) t-1,4-Dichloro-2-Butene	20.24	53	1095	0.80488	ppb	#	13
77) Bromobenzene	20.48	156	16894	1.02183	ppb		83
78) n-Propylbenzene	20.44	91	88461	1.03456	ppb		99
79) 4-Ethyltoluene	20.64	105	60450	1.02161	ppb		93
80) 2-Chlorotoluene	20.73	91	57667	1.01832	ppb		95
81) 1,3,5-Trimethylbenzene	20.71	105	59903	1.02902	ppb		95
82) 4-Chlorotoluene	20.81	91	52108	1.06859	ppb		96
83) Tert-Butylbenzene	21.35	119	63199	1.00276	ppb		94
84) 1,2,4-Trimethylbenzene	21.42	105	63077	1.03747	ppb		94
85) Sec-Butylbenzene	21.76	105	75467	0.99848	ppb		94
86) p-Isopropyltoluene	21.99	119	62593	0.96686	ppb		95
87) Benzyl Chloride	22.43	91	7387	0.85958	ppb	#	79
88) 1,3-DCB	22.14	146	33327	0.98569	ppb		96
89) 1,4-DCB	22.30	146	31510	1.00410	ppb		98
90) Hexachloroethane	23.60	117	5631	2.41666	ppb	#	75
91) n-Butylbenzene	22.70	91	57562	1.01941	ppb		93
92) 1,2-DCB	22.92	146	25391	0.94412	ppb	#	84
93) 1,2-Dibromo-3-chloropropan	24.15	155	691	1.91673	ppb	#	73
94) 1,2,4-Trichlorobenzene	25.59	180	19884	1.02031	ppb		78

(#) = qualifier out of range (m) = manual integration  
 1030C17W.D CALLW.M Fri Dec 02 11:20:51 2011

Data File : M:\CHICO\DATA\C111030\1030C17W.D Vial: 1  
 Acq On : 31 Oct 11 00:54 Operator: STC  
 Sample : Voc Std 10-30-11@1.0ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	3387	0.95661	ppb	84
96) Naphthalene	25.94	128	24301	1.01065	ppb	97
97) 1,2,3-Trichlorobenzene	26.29	180	13947	0.94613	ppb	97

Quantitation Report

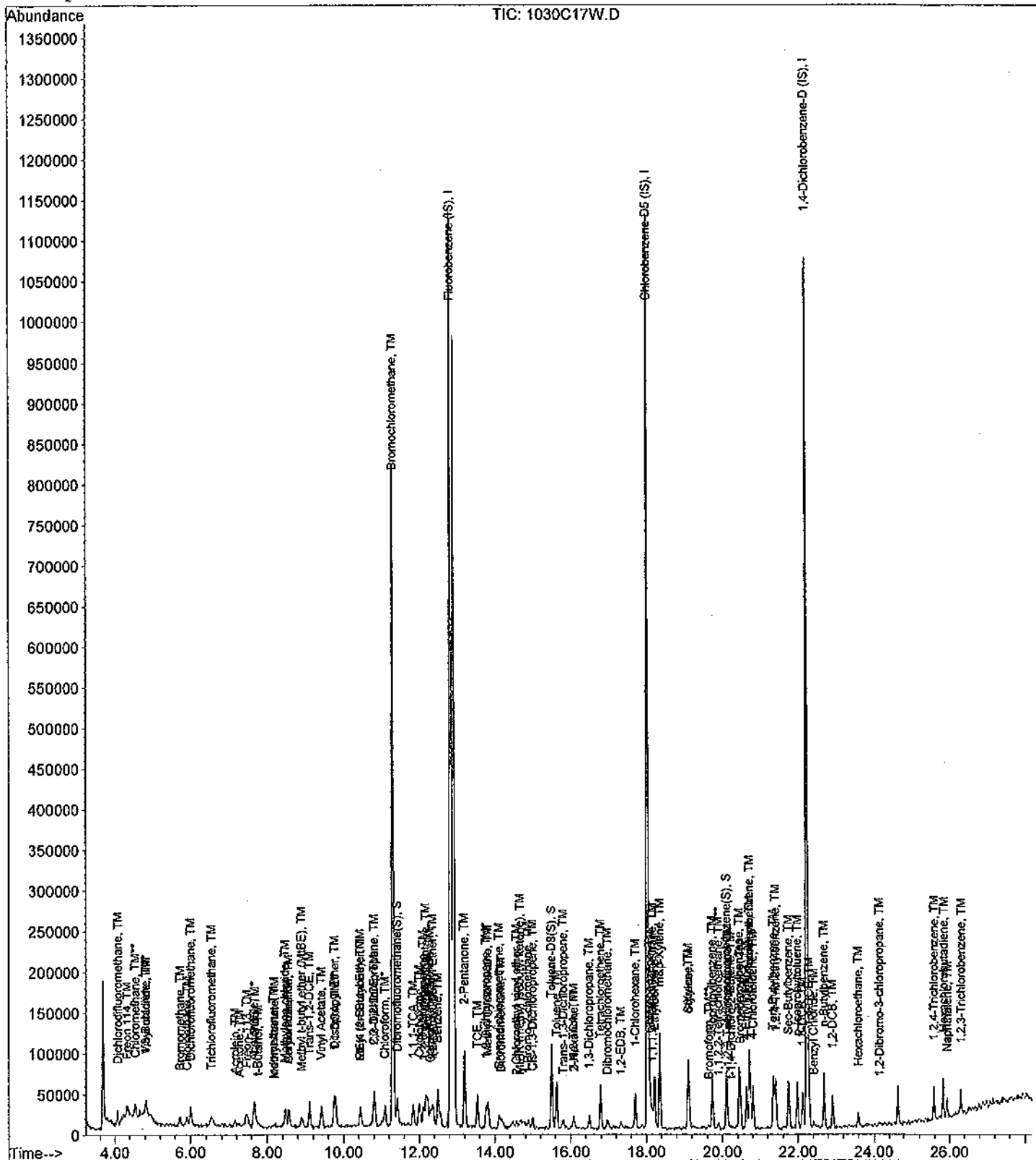
Data File : M:\CHICO\DATA\C111030\1030C17W.D  
Acq On : 31 Oct 11 00:54  
Sample : Voc Std 10-30-11@1.0ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration





Data File : M:\CHICO\DATA\C111030\1030C18W.D  
 Acq On : 31 Oct 11 1:37  
 Sample : Voc Std 10-30-11@2.0ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.83	96	543693	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.04	117	392832	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	191296	25.00000	ppb	0.00
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.42	111	60078	4.14811	ppb	0.00
Spiked Amount	25.097		Recovery	=	16.528%	
38) 1,2-DCA-D4(S)	12.22	65	54589	4.23414	ppb	0.00
Spiked Amount	24.225		Recovery	=	17.478%	
56) Toluene-D8(S)	15.50	98	219343	3.96834	ppb	0.00
Spiked Amount	25.808		Recovery	=	15.375%	
64) 4-Bromofluorobenzene(S)	20.11	95	76951	3.88546	ppb	0.00
Spiked Amount	25.459		Recovery	=	15.260%	
Target Compounds						
2) Dichlorodifluoromethane	4.07	85	36846	1.83942	ppb	95
3) Freon 114	4.32	85	25225	2.01066	ppb	95
4) Chloromethane	4.55	50	51493	2.07441	ppb	100
5) Vinyl chloride	4.81	62	31638	1.90546	ppb	92
6) 1,3-Butadiene	4.84	54	317	6.83143	ppb	# 82
7) Bromomethane	5.71	94	28199	2.33962	ppb	74
8) Chloroethane	5.92	64	27665	2.01714	ppb	90
9) Dichlorofluoromethane	6.00	67	80153	2.11371	ppb	99
10) Trichlorofluoromethane	6.54	101	46217	2.05380	ppb	88
11) Acetonitrile	7.66	41	44013	73.89637	ug/l	100
12) Acrolein	7.16	56	19054	69.90947	ppb	98
13) Acetone	7.27	43	7499	4.81405	ppb	# 42
14) Freon-113	7.46	101	27051	1.13214	ppb	88
15) 1,1-DCE	7.68	96	30774	1.98259	ppb	95
16) t-Butanol	7.77	59	6037	81.90616	ppb	# 90
17) Methyl Acetate	8.19	43	14018	2.50439	ppb	92
18) Iodomethane	8.16	142	9850	4.55459	ppb	# 90
19) Acrylonitrile	8.55	53	4257	2.21042	ppb	# 19
20) Methylene chloride	8.48	84	31366	2.11859	ppb	85
21) Carbon disulfide	8.57	76	31256	2.07243	ppb	98
22) Methyl t-butyl ether (MtBE)	8.91	73	49153	2.09506	ppb	96
23) Trans-1,2-DCE	9.10	96	38306	2.41590	ppb	94
24) Diisopropyl Ether	9.76	45	107058	2.06409	ppb	95
25) 1,1-DCA	9.80	63	63745	2.07237	ppb	98
26) Vinyl Acetate	9.41	43	25227	1.48278	ppb	94
27) Ethyl tert Butyl Ether	10.45	59	76607	2.16342	ppb	92
28) MEK (2-Butanone)	10.43	43	15669	2.02476	ppb	99
29) Cis-1,2-DCE	10.80	96	37483	2.02559	ppb	88
30) 2,2-Dichloropropane	10.81	77	45572	2.06826	ppb	95
31) Chloroform	11.08	83	60802	2.05473	ppb	96
32) Bromochloromethane	11.31	128	10121	1.96459	ppb	82
34) 1,1,1-TCA	11.83	97	53989	2.00623	ppb	93
35) Cyclohexane	12.00	56	52880	2.11050	ppb	95
36) 1,1-Dichloropropene	12.11	75	46149	2.00137	ppb	96
37) 2,2,4-Trimethylpentane	12.19	57	95598	1.55463	ppb	92
39) Carbon Tetrachloride	12.30	117	36525	1.97107	ppb	97

(#) = qualifier out of range (m) = manual integration  
 1030C18W.D CALLW.M Fri Dec 02 11:20:57 2011

Data File : M:\CHICO\DATA\C111030\1030C18W.D Vial: 1  
 Acq On : 31 Oct 11 1:37 Operator: STC  
 Sample : Voc Std 10-30-11@2.0ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue	
40) Tert Amyl Methyl Ether	12.36	73	55233	2.08607	ppb	#	90
41) 1,2-DCA	12.38	62	31308	2.06118	ppb	#	89
42) Benzene	12.50	78	136536	2.06095	ppb		98
43) TCE	13.53	95	39821	2.17034	ppb		94
44) 2-Pentanone	13.20	43	299963	78.15618	ppb		98
45) 1,2-Dichloropropane	13.76	63	28619	1.90057	ppb		96
46) Bromodichloromethane	14.11	83	33573	1.95155	ppb		94
47) Methyl Cyclohexane	13.82	83	40581	1.89267	ppb		83
48) Dibromomethane	14.18	93	12379	2.05557	ppb		85
49) 2-Chloroethyl vinyl ether	14.57	63	8433	2.20290	ppb	#	78
50) 1-Bromo-2-chloroethane	14.88	63	26134	2.03401	ppb	#	77
51) Cis-1,3-Dichloropropene	15.00	75	32272	1.96729	ppb		92
52) Toluene	15.64	91	132018	2.02040	ppb		99
53) Trans-1,3-Dichloropropene	15.80	75	23617	1.99976	ppb		93
54) 1,1,2-TCA	16.07	83	13091	2.05665	ppb		90
57) 1,2-EDB	17.33	107	13384	1.79015	ppb	#	92
58) Tetrachloroethene	16.79	164	40109	1.98595	ppb		92
59) 1-Chlorohexane	17.70	91	46192	1.98613	ppb		96
60) 1,1,1,2-Tetrachloroethane	18.15	131	23520	1.86019	ppb		89
61) m&p-Xylene	18.36	106	110324	3.69766	ppb		95
62) o-Xylene	19.09	106	52936	1.84480	ppb		88
63) Styrene	19.12	104	82149	1.89672	ppb		97
65) 2-Hexanone	16.12	43	7490	2.08373	ppb		85
66) 1,3-Dichloropropane	16.50	76	29140	1.97652	ppb		91
67) Dibromochloromethane	16.96	129	16360	1.69982	ppb		100
68) Chlorobenzene	18.11	112	79768	1.86890	ppb		98
69) Ethylbenzene	18.21	91	149915	1.88621	ppb		93
70) Bromoform	19.64	173	6510	2.30500	ppb	#	44
72) MIBK (methyl isobutyl keto	14.67	43	12611	2.31897	ppb	#	76
73) Isopropylbenzene	19.73	105	142568	2.05630	ppb		95
74) 1,1,2,2-Tetrachloroethane	19.90	83	12016	2.07037	ppb	#	84
75) 1,2,3-Trichloropropane	20.16	110	1264	2.01509	ppb	#	74
76) t-1,4-Dichloro-2-Butene	20.21	53	2422	1.84044	ppb	#	55
77) Bromobenzene	20.48	156	33262	2.07982	ppb		93
78) n-Propylbenzene	20.45	91	180141	2.17796	ppb		94
79) 4-Ethyltoluene	20.64	105	114833	2.00627	ppb		95
80) 2-Chlorotoluene	20.74	91	114105	2.08302	ppb		94
81) 1,3,5-Trimethylbenzene	20.72	105	116458	2.06813	ppb		96
82) 4-Chlorotoluene	20.81	91	100754	2.13600	ppb		94
83) Tert-Butylbenzene	21.36	119	127189	2.08627	ppb		98
84) 1,2,4-Trimethylbenzene	21.41	105	117571	1.99911	ppb		93
85) Sec-Butylbenzene	21.75	105	153012	2.09286	ppb		92
86) p-Isopropyltoluene	21.99	119	133490	2.13166	ppb		95
87) Benzyl Chloride	22.42	91	15798	1.90043	ppb	#	85
88) 1,3-DCB	22.13	146	68550	2.09596	ppb		97
89) 1,4-DCB	22.29	146	62433	2.05672	ppb		94
90) Hexachloroethane	23.60	117	11613	2.93003	ppb		93
91) n-Butylbenzene	22.70	91	110023	2.01433	ppb		97
92) 1,2-DCB	22.93	146	54129	2.08070	ppb		92
93) 1,2-Dibromo-3-chloropropan	24.14	155	1335	2.54260	ppb		84
94) 1,2,4-Trichlorobenzene	25.58	180	37932	2.01219	ppb		89

(#) = qualifier out of range (m) = manual integration  
 1030C18W.D CALLW.M Fri Dec 02 11:20:58 2011

Data File : M:\CHICO\DATA\C111030\1030C18W.D Vial: 1  
 Acq On : 31 Oct 11 1:37 Operator: STC  
 Sample : Voc Std 10-30-11@2.0ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	6417	1.87363	ppb #	88
96) Naphthalene	25.93	128	46421	1.99582	ppb	98
97) 1,2,3-Trichlorobenzene	26.30	180	33171	2.32627	ppb	93

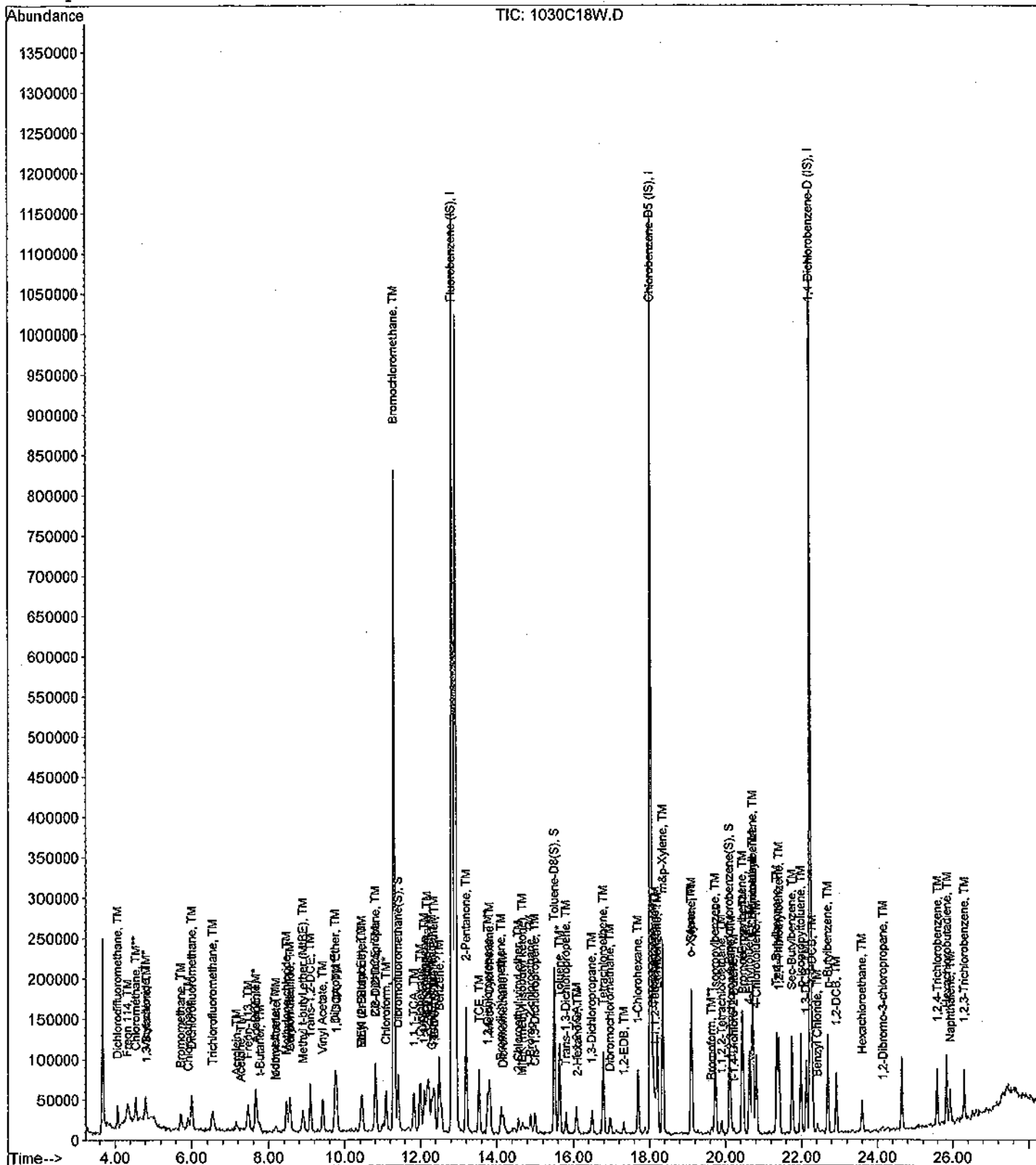
Data File : M:\CHICO\DATA\C111030\1030C18W.D  
Acq On : 31 Oct 11 1:37  
Sample : Voc Std 10-30-11@2.0ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C19W.D Vial: 1  
 Acq On : 31 Oct 11 2:20 Operator: STC  
 Sample : Voc Std 10-30-11@5.0ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.84	96	541888	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	369024	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	201600	25.00000	ppb	0.00
System Monitoring Compounds						
33) Dibromofluoromethane (S)	11.43	111	148052	10.25637	ppb	0.00
Spiked Amount	25.097		Recovery	=	40.865%	
38) 1,2-DCA-D4 (S)	12.23	65	131632	10.24391	ppb	0.00
Spiked Amount	24.225		Recovery	=	42.286%	
56) Toluene-D8 (S)	15.50	98	537545	10.35266	ppb	0.00
Spiked Amount	25.808		Recovery	=	40.115%	
64) 4-Bromofluorobenzene (S)	20.11	95	187725	10.09026	ppb	0.00
Spiked Amount	25.459		Recovery	=	39.632%	
Target Compounds						
2) Dichlorodifluoromethane	4.07	85	95693	4.79307	ppb	98
3) Freon 114	4.35	85	60331	4.82494	ppb	99
4) Chloromethane	4.55	50	115016	4.64888	ppb	98
5) Vinyl chloride	4.82	62	95476	5.76939	ppb	92
6) 1,3-Butadiene	4.78	54	267	5.77308	ppb	# 1
7) Bromomethane	5.73	94	55608	4.62906	ppb	89
8) Chloroethane	5.91	64	65920	4.82244	ppb	93
9) Dichlorofluoromethane	6.01	67	193619	5.12293	ppb	100
10) Trichlorofluoromethane	6.52	101	112493	5.01564	ppb	99
11) Acetonitrile	7.65	41	62470	105.23443	ug/l	100
12) Acrolein	7.15	56	26911	99.06583	ppb	94
13) Acetone	7.29	43	12573	8.09824	ppb	97
14) Freon-113	7.46	101	68643	4.67447	ppb	88
15) 1,1-DCE	7.67	96	76091	4.91843	ppb	89
16) t-Butanol	7.76	59	7217	98.24180	ppb	93
17) Methyl Acetate	8.19	43	20340	3.95990	ppb	95
18) Iodomethane	8.17	142	26092	5.76882	ppb	90
19) Acrylonitrile	8.56	53	8927	5.07063	ppb	92
20) Methylene chloride	8.48	84	71913	4.87349	ppb	94
21) Carbon disulfide	8.56	76	72344	4.81275	ppb	99
22) Methyl t-butyl ether (MtBE)	8.90	73	114808	4.90979	ppb	# 90
23) Trans-1,2-DCE	9.10	96	89303	5.65097	ppb	95
24) Diisopropyl Ether	9.75	45	260084	5.03115	ppb	91
25) 1,1-DCA	9.79	63	163680	5.33900	ppb	96
26) Vinyl Acetate	9.42	43	54231	4.98892	ppb	# 79
27) Ethyl tert Butyl Ether	10.44	59	180946	5.12702	ppb	98
28) MEK (2-Butanone)	10.43	43	31144	4.71582	ppb	# 87
29) Cis-1,2-DCE	10.82	96	90101	4.88531	ppb	94
30) 2,2-Dichloropropane	10.82	77	110498	5.03159	ppb	99
31) Chloroform	11.10	83	153864	5.21698	ppb	100
32) Bromochloromethane	11.31	128	28344	5.52019	ppb	86
34) 1,1,1-TCA	11.84	97	133883	4.99165	ppb	96
35) Cyclohexane	12.00	56	119918	4.80199	ppb	98
36) 1,1-Dichloropropene	12.10	75	117037	5.09252	ppb	98
37) 2,2,4-Trimethylpentane	12.18	57	209064	4.78823	ppb	95
39) Carbon Tetrachloride	12.30	117	94473	5.11522	ppb	93

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

Data File : M:\CHICO\DATA\C111030\1030C19W.D  
 Acq On : 31 Oct 11 2:20  
 Sample : Voc Std 10-30-11@5.0ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)

Title : METHOD 8260

Last Update : Fri Dec 02 11:18:49 2011

Response via : Initial Calibration

DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Tert Amyl Methyl Ether	12.36	73	128972	4.88731	ppb	98
41) 1,2-DCA	12.38	62	76954	5.08320	ppb	98
42) Benzene	12.50	78	331433	5.01951	ppb	100
43) TCE	13.54	95	94771	5.18246	ppb	92
44) 2-Pentanone	13.20	43	389562	101.83954	ppb	98
45) 1,2-Dichloropropane	13.77	63	79197	5.27695	ppb	96
46) Bromodichloromethane	14.12	83	87445	5.09999	ppb	96
47) Methyl Cyclohexane	13.82	83	103751	4.85498	ppb	94
48) Dibromomethane	14.16	93	31588	5.26275	ppb	82
49) 2-Chloroethyl vinyl ether	14.58	63	20703	5.42613	ppb	# 92
50) 1-Bromo-2-chloroethane	14.88	63	66427	5.18724	ppb	82
51) Cis-1,3-Dichloropropene	15.01	75	82661	5.05577	ppb	98
52) Toluene	15.63	91	327752	5.03263	ppb	100
53) Trans-1,3-Dichloropropene	15.80	75	58149	4.94014	ppb	92
54) 1,1,2-TCA	16.08	83	31919	5.03132	ppb	92
57) 1,2-EDB	17.32	107	37026	5.27183	ppb	# 70
58) Tetrachloroethene	16.79	164	96522	5.08752	ppb	93
59) 1-Chlorohexane	17.70	91	112708	5.15879	ppb	93
60) 1,1,1,2-Tetrachloroethane	18.16	131	63531	5.34881	ppb	97
61) m&p-Xylene	18.36	106	280238	9.99854	ppb	95
62) o-Xylene	19.11	106	143606	5.32749	ppb	99
63) Styrene	19.12	104	215758	5.30297	ppb	96
65) 2-Hexanone	16.11	43	15947	4.72270	ppb	87
66) 1,3-Dichloropropane	16.50	76	70642	5.10067	ppb	92
67) Dibromochloromethane	16.97	129	44643	4.93770	ppb	89
68) Chlorobenzene	18.10	112	203928	5.08611	ppb	100
69) Ethylbenzene	18.22	91	385898	5.16857	ppb	100
70) Bromoform	19.63	173	18516	4.67993	ppb	89
72) MIBK (methyl isobutyl keto	14.68	43	24562	4.28572	ppb	100
73) Isopropylbenzene	19.74	105	367532	5.03008	ppb	99
74) 1,1,2,2-Tetrachloroethane	19.90	83	28865	4.71928	ppb	# 80
75) 1,2,3-Trichloropropane	20.15	110	3527	5.18588	ppb	# 55
76) t-1,4-Dichloro-2-Butene	20.22	53	6664	4.80505	ppb	# 82
77) Bromobenzene	20.48	156	83579	4.95894	ppb	96
78) n-Propylbenzene	20.44	91	444891	5.10396	ppb	99
79) 4-Ethyltoluene	20.64	105	295868	4.90496	ppb	95
80) 2-Chlorotoluene	20.73	91	295014	5.11030	ppb	95
81) 1,3,5-Trimethylbenzene	20.71	105	303247	5.11000	ppb	98
82) 4-Chlorotoluene	20.82	91	244634	4.92119	ppb	94
83) Tert-Butylbenzene	21.36	119	322939	5.02640	ppb	96
84) 1,2,4-Trimethylbenzene	21.42	105	306527	4.94563	ppb	98
85) Sec-Butylbenzene	21.76	105	387689	5.03168	ppb	98
86) p-Isopropyltoluene	21.99	119	333281	5.05005	ppb	97
87) Benzyl Chloride	22.43	91	41624	4.75127	ppb	92
88) 1,3-DCB	22.14	146	173843	5.04369	ppb	91
89) 1,4-DCB	22.30	146	155968	4.87542	ppb	94
90) Hexachloroethane	23.60	117	36490	4.84597	ppb	81
91) n-Butylbenzene	22.70	91	281770	4.89505	ppb	94
92) 1,2-DCB	22.93	146	134998	4.92405	ppb	97
93) 1,2-Dibromo-3-chloropropan	24.14	155	4220	5.04887	ppb	94
94) 1,2,4-Trichlorobenzene	25.59	180	99085	4.98753	ppb	96

(#) = qualifier out of range (m) = manual integration  
 1030C19W.D CALLW.M Fri Dec 02 11:21:04 2011

Data File : M:\CHICO\DATA\C111030\1030C19W.D Vial: 1  
Acq On : 31 Oct 11 2:20 Operator: STC  
Sample : Voc Std 10-30-11@5.0ug/L Inst : Chico  
Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration  
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	15832	4.38634	ppb	86
96) Naphthalene	25.94	128	114277	4.66210	ppb	98
97) 1,2,3-Trichlorobenzene	26.29	180	73429	4.88636	ppb	92

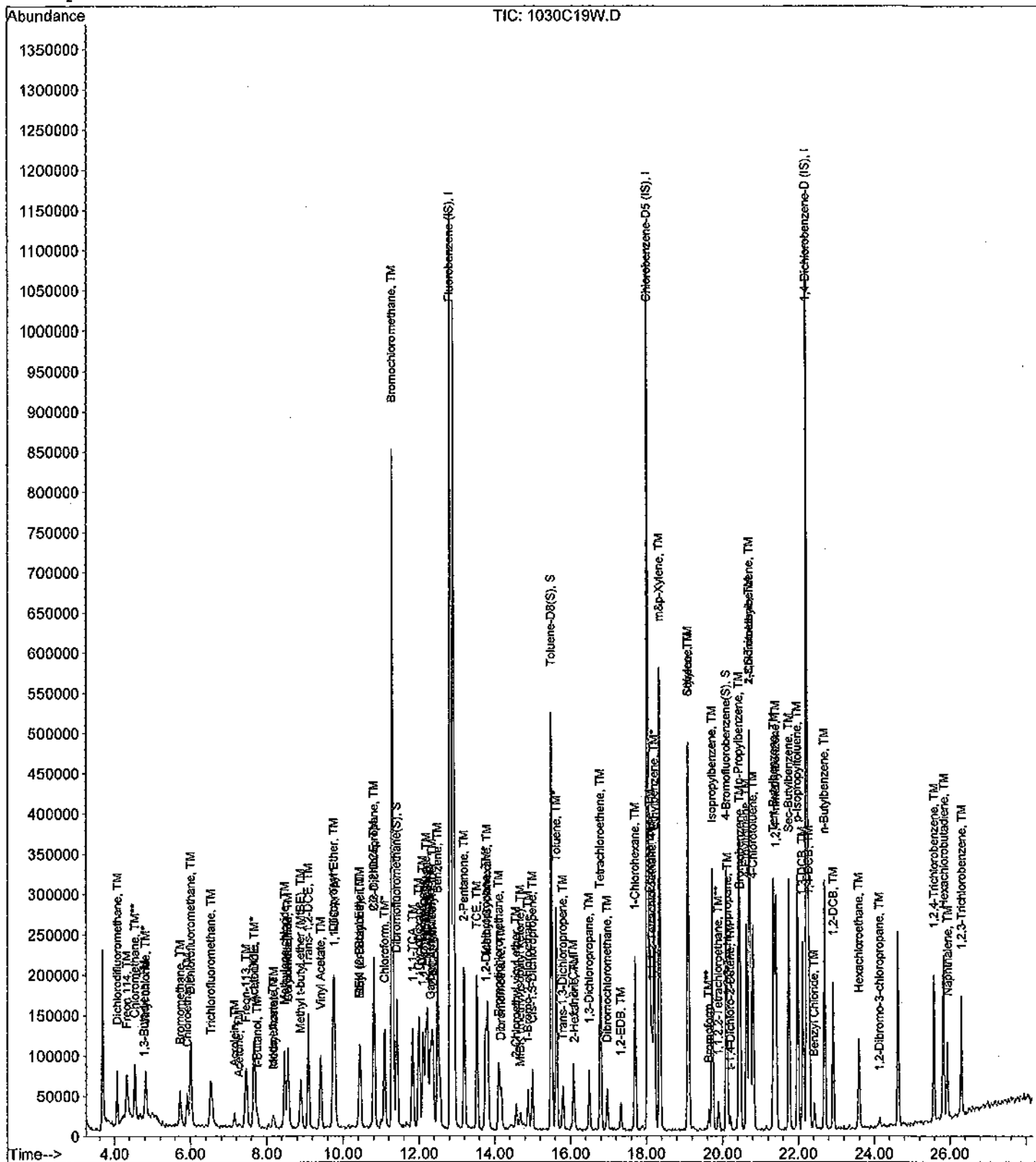
Data File : M:\CHICO\DATA\C111030\1030C19W.D  
Acq On : 31 Oct 11 2:20  
Sample : Voc Std 10-30-11@5.0ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration





Data File : M:\CHICO\DATA\C111030\1030C20W.D  
 Acq On : 31 Oct 11 3:03  
 Sample : Voc Std 10-30-11@10ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	556544	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.04	117	375296	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	203520	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.43	111	379665	25.60885	ppb	0.00
Spiked Amount	25.097		Recovery	=	102.039%	
38) 1,2-DCA-D4 (S)	12.23	65	325575	24.66979	ppb	0.00
Spiked Amount	24.225		Recovery	=	101.836%	
56) Toluene-D8 (S)	15.50	98	1312175	24.84903	ppb	0.00
Spiked Amount	25.808		Recovery	=	96.283%	
64) 4-Bromofluorobenzene(S)	20.11	95	480879	25.41539	ppb	0.00
Spiked Amount	25.459		Recovery	=	99.825%	
<b>Target Compounds</b>						<b>Qvalue</b>
2) Dichlorodifluoromethane	4.07	85	203737	9.93605	ppb	100
3) Freon 114	4.33	85	139352	10.85112	ppb	100
4) Chloromethane	4.55	50	239697	9.43328	ppb	100
5) Vinyl chloride	4.82	62	177123	10.42127	ppb	100
6) 1,3-Butadiene	4.83	54	475	10.00000	ppb	100
7) Bromomethane	5.73	94	118673	9.61873	ppb	100
8) Chloroethane	5.91	64	132559	9.44211	ppb	100
9) Dichlorofluoromethane	6.01	67	384006	9.89278	ppb	100
10) Trichlorofluoromethane	6.53	101	230965	10.02667	ppb	100
11) Acetonitrile	7.65	41	74340	121.93234	ug/l	100
12) Acrolein	7.16	56	32973	118.18505	ppb	100
13) Acetone	7.28	43	21604	13.54865	ppb	100
14) Freon-113	7.47	101	140200	10.44199	ppb	100
15) 1,1-DCE	7.68	96	152367	9.58945	ppb	100
16) t-Butanol	7.77	59	9738	129.06824	ppb	100
17) Methyl Acetate	8.19	43	49512	10.32908	ppb	100
18) Iodomethane	8.16	142	66421	8.64718	ppb	100
19) Acrylonitrile	8.56	53	18948	10.88495	ppb	100
20) Methylene chloride	8.47	84	148076	9.77073	ppb	100
21) Carbon disulfide	8.56	76	151616	9.82077	ppb	100
22) Methyl t-butyl ether (MtBE)	8.89	73	244998	10.20148	ppb	100
23) Trans-1,2-DCE	9.10	96	182548	11.24718	ppb	100
24) Diisopropyl Ether	9.76	45	539900	10.16896	ppb	100
25) 1,1-DCA	9.79	63	326209	10.36025	ppb	100
26) Vinyl Acetate	9.42	43	98410	10.00173	ppb	100
27) Ethyl tert Butyl Ether	10.45	59	389708	10.75141	ppb	100
28) MEK (2-Butanone)	10.44	43	65986	10.45330	ppb	100
29) Cis-1,2-DCE	10.82	96	187720	9.91021	ppb	100
30) 2,2-Dichloropropane	10.81	77	219771	9.74386	ppb	100
31) Chloroform	11.09	83	311468	10.28266	ppb	100
32) Bromochloromethane	11.32	128	54568	10.34763	ppb	100
34) 1,1,1-TCA	11.84	97	285282	10.35627	ppb	100
35) Cyclohexane	12.00	56	254779	9.93369	ppb	100
36) 1,1-Dichloropropene	12.11	75	236871	10.03533	ppb	100
37) 2,2,4-Trimethylpentane	12.18	57	404324	10.03470	ppb	100
39) Carbon Tetrachloride	12.31	117	201043	10.59877	ppb	100

(#) = qualifier out of range (m) = manual integration  
 1030C20W.D CALLW.M Fri Dec 02 11:21:09 2011

Data File : M:\CHICO\DATA\C111030\1030C20W.D  
 Acq On : 31 Oct 11 3:03  
 Sample : Voc Std 10-30-11@10ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)

Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Tert Amyl Methyl Ether	12.34	73	277234	10.22896	ppb	100
41) 1,2-DCA	12.38	62	162875	10.47539	ppb	100
42) Benzene	12.50	78	685232	10.10446	ppb	100
43) TCE	13.53	95	193489	10.30213	ppb	100
44) 2-Pentanone	13.20	43	514551	130.97195	ppb	100
45) 1,2-Dichloropropane	13.77	63	160165	10.39087	ppb	100
46) Bromodichloromethane	14.11	83	192788	10.94774	ppb	100
47) Methyl Cyclohexane	13.81	83	223185	10.16882	ppb	100
48) Dibromomethane	14.17	93	67961	11.02453	ppb	100
49) 2-Chloroethyl vinyl ether	14.58	63	41287	10.53611	ppb	100
50) 1-Bromo-2-chloroethane	14.89	63	134227	10.20568	ppb	100
51) Cis-1,3-Dichloropropene	15.00	75	178053	10.60342	ppb	100
52) Toluene	15.63	91	682617	10.20555	ppb	100
53) Trans-1,3-Dichloropropene	15.80	75	130192	10.76940	ppb	100
54) 1,1,2-TCA	16.08	83	73187	11.23251	ppb	100
57) 1,2-EDB	17.33	107	76477	10.70696	ppb	100
58) Tetrachloroethene	16.79	164	188693	9.77949	ppb	100
59) 1-Chlorohexane	17.70	91	223919	10.07778	ppb	100
60) 1,1,1,2-Tetrachloroethane	18.16	131	136098	11.26688	ppb	100
61) m&p-Xylene	18.36	106	573288	20.11236	ppb	100
62) o-Xylene	19.11	106	288268	10.51543	ppb	100
63) Styrene	19.13	104	435830	10.53295	ppb	100
65) 2-Hexanone	16.11	43	35479	10.33151	ppb	100
66) 1,3-Dichloropropane	16.49	76	155699	11.05429	ppb	100
67) Dibromochloromethane	16.98	129	100610	10.94190	ppb	100
68) Chlorobenzene	18.11	112	417306	10.23397	ppb	100
69) Ethylbenzene	18.22	91	783451	10.31788	ppb	100
70) Bromoform	19.64	173	44444	9.50336	ppb	100
72) MIBK (methyl isobutyl keto)	14.68	43	56876	9.83043	ppb	100
73) Isopropylbenzene	19.73	105	751023	10.18160	ppb	100
74) 1,1,2,2-Tetrachloroethane	19.90	83	68052	11.02118	ppb	100
75) 1,2,3-Trichloropropane	20.16	110	8339	12.02369	ppb	100
76) t-1,4-Dichloro-2-Butene	20.24	53	14863	10.61580	ppb	100
77) Bromobenzene	20.48	156	169233	9.94627	ppb	100
78) n-Propylbenzene	20.44	91	904419	10.27795	ppb	100
79) 4-Ethyltoluene	20.63	105	616295	10.12067	ppb	100
80) 2-Chlorotoluene	20.74	91	594233	10.19632	ppb	100
81) 1,3,5-Trimethylbenzene	20.72	105	587753	9.81075	ppb	100
82) 4-Chlorotoluene	20.82	91	501553	9.99433	ppb	100
83) Tert-Butylbenzene	21.36	119	667298	10.28820	ppb	100
84) 1,2,4-Trimethylbenzene	21.42	105	611300	9.76991	ppb	100
85) Sec-Butylbenzene	21.76	105	815062	10.47861	ppb	100
86) p-Isopropyltoluene	21.99	119	683802	10.26358	ppb	100
87) Benzyl Chloride	22.42	91	84140	9.51375	ppb	100
88) 1,3-DCB	22.12	146	342186	9.83414	ppb	100
89) 1,4-DCB	22.30	146	328879	10.18349	ppb	100
90) Hexachloroethane	23.60	117	91222	9.10196	ppb	100
91) n-Butylbenzene	22.69	91	572922	9.85919	ppb	100
92) 1,2-DCB	22.93	146	290055	10.47995	ppb	100
93) 1,2-Dibromo-3-chloropropan	24.15	155	11552	11.48408	ppb	100
94) 1,2,4-Trichlorobenzene	25.59	180	201946	10.06924	ppb	100

(#) = qualifier out of range (m) = manual integration  
 1030C20W.D CALLW.M Fri Dec 02 11:21:10 2011

Data File : M:\CHICO\DATA\C111030\1030C20W.D Vial: 1  
Acq On : 31 Oct 11 3:03 Operator: STC  
Sample : Voc Std 10-30-11@10ug/L Inst : Chico  
Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration  
DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	37504	10.29265	ppb	100
96) Naphthalene	25.94	128	255426	10.32217	ppb	100
97) 1,2,3-Trichlorobenzene	26.29	180	158877	10.47278	ppb	100

Quantitation Report

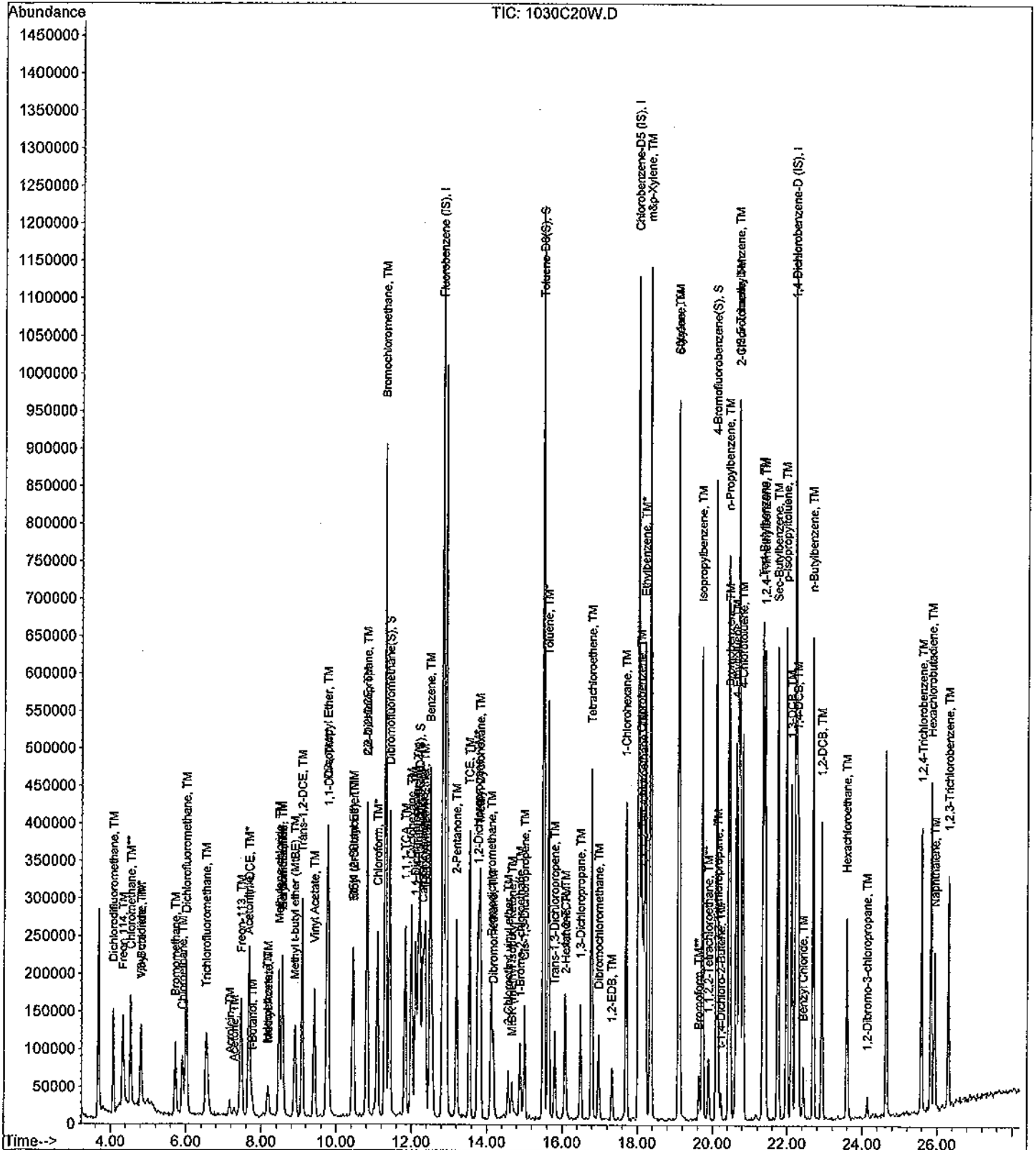
Data File : M:\CHICO\DATA\C111030\1030C20W.D  
Acq On : 31 Oct 11 3:03  
Sample : Voc Std 10-30-11@10ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C21W.D  
 Acq On : 31 Oct 11 3:46  
 Sample : Voc Std 10-30-11@20ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.84	96	566784	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	371200	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	208640	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane (S)	11.42	111	595137	39.41743	ppb	0.00
Spiked Amount	25.097		Recovery	=	157.057%	
38) 1,2-DCA-D4 (S)	12.23	65	503677	37.47559	ppb	0.00
Spiked Amount	24.225		Recovery	=	154.698%	
56) Toluene-D8 (S)	15.50	98	2079192	39.80872	ppb	0.00
Spiked Amount	25.808		Recovery	=	154.249%	
64) 4-Bromofluorobenzene (S)	20.11	95	744294	39.77146	ppb	0.00
Spiked Amount	25.459		Recovery	=	156.213%	
<b>Target Compounds</b>						<b>Qvalue</b>
2) Dichlorodifluoromethane	4.07	85	430955	20.63753	ppb	98
3) Freon 114	4.34	85	282152	21.57379	ppb	99
4) Chloromethane	4.55	50	489131	18.90198	ppb	99
5) Vinyl chloride	4.81	62	352842	20.38487	ppb	100
6) 1,3-Butadiene	4.83	54	344	7.11126	ppb	# 70
7) Bromomethane	5.73	94	258043	20.53713	ppb	86
8) Chloroethane	5.91	64	259811	18.17186	ppb	97
9) Dichlorofluoromethane	6.01	67	754464	19.08539	ppb	99
10) Trichlorofluoromethane	6.53	101	465717	19.85247	ppb	94
11) Acetonitrile	7.65	41	87890	141.55257	ug/l	100
12) Acrolein	7.16	56	38144	134.24936	ppb	98
13) Acetone	7.28	43	36583	22.52802	ppb	# 68
14) Freon-113	7.46	101	275908	21.25897	ppb	94
15) 1,1-DCE	7.68	96	292224	18.05929	ppb	95
16) t-Butanol	7.77	59	10632	138.37146	ppb	91
17) Methyl Acetate	8.19	43	90758	19.14260	ppb	98
18) Iodomethane	8.16	142	180521	16.69886	ppb	# 89
19) Acrylonitrile	8.56	53	34895	19.99122	ppb	97
20) Methylene chloride	8.48	84	296145	19.18795	ppb	91
21) Carbon disulfide	8.56	76	295040	18.76564	ppb	100
22) Methyl t-butyl ether (MtBE)	8.90	73	470382	19.23240	ppb	96
23) Trans-1,2-DCE	9.11	96	343023	20.75257	ppb	92
24) Diisopropyl Ether	9.75	45	1025315	18.96280	ppb	99
25) 1,1-DCA	9.79	63	635624	19.82242	ppb	97
26) Vinyl Acetate	9.42	43	188410	20.16485	ppb	92
27) Ethyl tert Butyl Ether	10.44	59	725972	19.66653	ppb	95
28) MEK (2-Butanone)	10.44	43	124340	19.92151	ppb	98
29) Cis-1,2-DCE	10.82	96	357838	18.54986	ppb	94
30) 2,2-Dichloropropane	10.81	77	438187	19.07664	ppb	93
31) Chloroform	11.09	83	601855	19.51038	ppb	94
32) Bromochloromethane	11.32	128	108166	20.14075	ppb	85
34) 1,1,1-TCA	11.83	97	572722	20.41525	ppb	94
35) Cyclohexane	12.00	56	494926	18.94826	ppb	96
36) 1,1-Dichloropropene	12.10	75	471318	19.60721	ppb	97
37) 2,2,4-Trimethylpentane	12.18	57	798347	20.53839	ppb	93
39) Carbon Tetrachloride	12.30	117	426253	22.06560	ppb	97

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

Data File : M:\CHICO\DATA\C111030\1030C21W.D  
 Acq On : 31 Oct 11 3:46  
 Sample : Voc Std 10-30-11@20ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Tert Amyl Methyl Ether	12.35	73	534720	19.37283	ppb	97
41) 1,2-DCA	12.37	62	312083	19.70915	ppb	98
42) Benzene	12.50	78	1326677	19.20979	ppb	99
43) TCE	13.54	95	376706	19.69496	ppb	91
44) 2-Pentanone	13.20	43	581100	145.23880	ppb	100
45) 1,2-Dichloropropane	13.76	63	307944	19.61725	ppb	95
46) Bromodichloromethane	14.12	83	371635	20.72255	ppb #	93
47) Methyl Cyclohexane	13.82	83	433011	19.37253	ppb	97
48) Dibromomethane	14.16	93	130449	20.77893	ppb	97
49) 2-Chloroethyl vinyl ether	14.58	63	79377	19.89041	ppb	95
50) 1-Bromo-2-chloroethane	14.88	63	259762	19.39365	ppb	89
51) Cis-1,3-Dichloropropene	15.01	75	350200	20.47835	ppb	91
52) Toluene	15.63	91	1320740	19.38915	ppb	97
53) Trans-1,3-Dichloropropene	15.80	75	249890	20.29730	ppb	96
54) 1,1,2-TCA	16.08	83	131106	19.75819	ppb	93
57) 1,2-EDB	17.33	107	153122	21.67400	ppb	94
58) Tetrachloroethene	16.79	164	367302	19.24640	ppb	91
59) 1-Chlorohexane	17.70	91	453290	20.62604	ppb	98
60) 1,1,1,2-Tetrachloroethane	18.16	131	280249	23.45643	ppb	92
61) m&p-Xylene	18.35	106	1173944	41.63932	ppb	100
62) o-Xylene	19.11	106	585791	21.60426	ppb	95
63) Styrene	19.12	104	892450	21.80633	ppb	99
65) 2-Hexanone	16.10	43	69030	20.32340	ppb	93
66) 1,3-Dichloropropane	16.50	76	287745	20.65470	ppb	99
67) Dibromochloromethane	16.97	129	207497	22.81547	ppb	93
68) Chlorobenzene	18.10	112	813528	20.17102	ppb	97
69) Ethylbenzene	18.22	91	1522721	20.27519	ppb	95
70) Bromoform	19.64	173	97001	19.60233	ppb	84
72) MIBK (methyl isobutyl keto)	14.68	43	106674	17.98505	ppb	92
73) Isopropylbenzene	19.74	105	1516275	20.05166	ppb	98
74) 1,1,1,2-Tetrachloroethane	19.89	83	136632	21.58486	ppb	90
75) 1,2,3-Trichloropropane	20.15	110	13641	19.13172	ppb #	42
76) t-1,4-Dichloro-2-Butene	20.22	53	30320	21.12442	ppb #	79
77) Bromobenzene	20.48	156	337635	19.35675	ppb	93
78) n-Propylbenzene	20.44	91	1817556	20.14810	ppb	97
79) 4-Ethyltoluene	20.64	105	1209221	19.37027	ppb	92
80) 2-Chlorotoluene	20.73	91	1199768	20.08139	ppb	99
81) 1,3,5-Trimethylbenzene	20.71	105	1237433	20.14832	ppb	99
82) 4-Chlorotoluene	20.82	91	1006043	19.55523	ppb	96
83) Tert-Butylbenzene	21.36	119	1363292	20.50304	ppb	98
84) 1,2,4-Trimethylbenzene	21.42	105	1240098	19.33311	ppb	98
85) Sec-Butylbenzene	21.76	105	1672276	20.97154	ppb	99
86) p-Isopropyltoluene	21.99	119	1410527	20.65186	ppb	98
87) Benzyl Chloride	22.43	91	179615	19.81078	ppb	96
88) 1,3-DCB	22.13	146	714268	20.02373	ppb	99
89) 1,4-DCB	22.30	146	661023	19.96579	ppb	96
90) Hexachloroethane	23.60	117	220554	18.79960	ppb	91
91) n-Butylbenzene	22.70	91	1175074	19.72516	ppb	100
92) 1,2-DCB	22.93	146	582656	20.53528	ppb	96
93) 1,2-Dibromo-3-chloropropan	24.14	155	19304	17.90735	ppb #	68
94) 1,2,4-Trichlorobenzene	25.59	180	403670	19.63348	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1030C21W.D CALLW.M Fri Dec 02 11:21:16 2011

Data File : M:\CHICO\DATA\C111030\1030C21W.D Vial: 1  
 Acq On : 31 Oct 11 3:46 Operator: STC  
 Sample : Voc Std 10-30-11@20ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	78688	21.06531	ppb	92
96) Naphthalene	25.94	128	505600	19.93070	ppb	99
97) 1,2,3-Trichlorobenzene	26.30	180	309459	19.89820	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1030C21W.D CALLW.M Fri Dec 02 11:21:17 2011

Quantitation Report

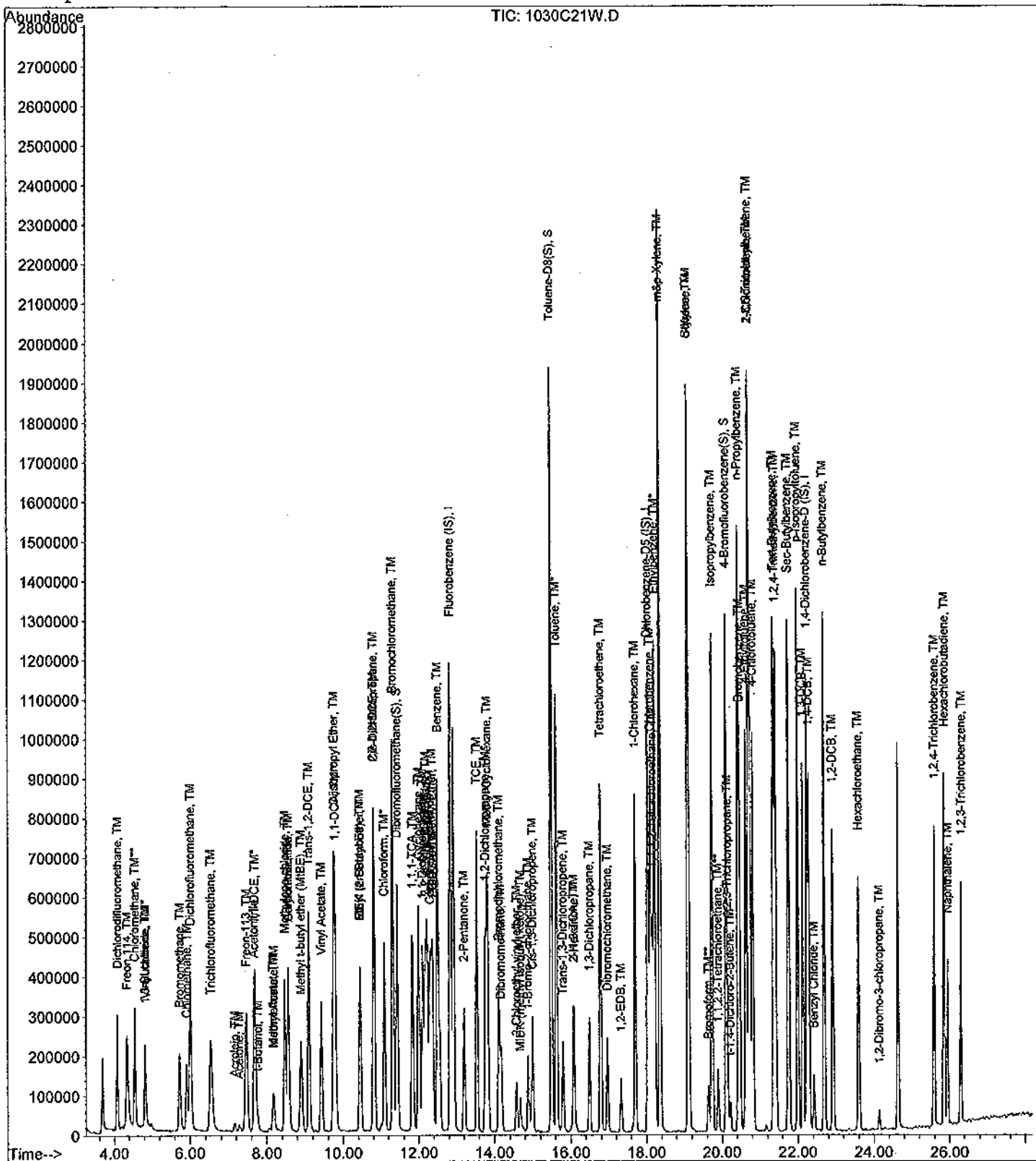
Data File : M:\CHICO\DATA\C111030\1030C21W.D  
Acq On : 31 Oct 11 3:46  
Sample : Voc Std 10-30-11@20ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration





Data File : M:\CHICO\DATA\C111030\1030C22W.D  
 Acq On : 31 Oct 11 4:29  
 Sample : Voc Std 10-30-11@40ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)

Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	576384	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	400384	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	224000	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.43	111	1201490	78.25231	ppb	0.00
Spiked Amount	25.097		Recovery	=	311.795%	
38) 1,2-DCA-D4(S)	12.23	65	1017043	74.41171	ppb	0.00
Spiked Amount	24.225		Recovery	=	307.167%	
56) Toluene-D8(S)	15.50	98	4141980	73.52293	ppb	0.00
Spiked Amount	25.808		Recovery	=	284.881%	
64) 4-Bromofluorobenzene(S)	20.11	95	1506838	74.64914	ppb	0.00
Spiked Amount	25.459		Recovery	=	293.207%	
<b>Target Compounds</b>						<b>Qvalue</b>
2) Dichlorodifluoromethane	4.07	85	884588	41.65551	ppb	100
3) Freon 114	4.33	85	557051	41.88358	ppb	95
4) Chloromethane	4.55	50	992312	37.70822	ppb	99
5) Vinyl chloride	4.81	62	582991	33.12037	ppb	100
6) 1,3-Butadiene	4.80	54	564	11.46497	ppb	93
7) Bromomethane	5.73	94	528649	41.37336	ppb	93
8) Chloroethane	5.91	64	531050	36.52439	ppb	99
9) Dichlorofluoromethane	6.01	67	1474925	36.68918	ppb	98
10) Trichlorofluoromethane	6.53	101	946797	39.68761	ppb	99
11) Acetonitrile	7.66	41	108364	171.62043	ug/l	100
12) Acrolein	7.16	56	48720	168.61606	ppb	96
13) Acetone	7.28	43	68038	41.20035	ppb	# 70
14) Freon-113	7.47	101	558655	43.47676	ppb	95
15) 1,1-DCE	7.68	96	585091	35.55608	ppb	97
16) t-Butanol	7.76	59	14424	184.59628	ppb	98
17) Methyl Acetate	8.19	43	191479	40.45406	ppb	95
18) Iodomethane	8.17	142	457316	35.89956	ppb	95
19) Acrylonitrile	8.56	53	70209	39.92472	ppb	91
20) Methylene chloride	8.48	84	561985	35.80590	ppb	98
21) Carbon disulfide	8.56	76	582016	36.40182	ppb	99
22) Methyl t-butyl ether (MtBE)	8.89	73	959832	38.59078	ppb	96
23) Trans-1,2-DCE	9.10	96	690130	41.05681	ppb	94
24) Diisopropyl Ether	9.75	45	2070362	37.65279	ppb	97
25) 1,1-DCA	9.79	63	1270640	38.96588	ppb	96
26) Vinyl Acetate	9.42	43	392586	42.94098	ppb	95
27) Ethyl tert Butyl Ether	10.45	59	1446892	38.54337	ppb	98
28) MEK (2-Butanone)	10.44	43	249429	39.96063	ppb	# 93
29) Cis-1,2-DCE	10.82	96	701038	35.73563	ppb	95
30) 2,2-Dichloropropane	10.81	77	853458	36.53678	ppb	99
31) Chloroform	11.10	83	1207454	38.49020	ppb	99
32) Bromochloromethane	11.32	128	209048	38.27688	ppb	92
34) 1,1,1-TCA	11.83	97	1115691	39.10753	ppb	98
35) Cyclohexane	12.00	56	1027386	38.67839	ppb	97
36) 1,1-Dichloropropene	12.10	75	915628	37.45644	ppb	98
37) 2,2,4-Trimethylpentane	12.18	57	1588067	41.27686	ppb	96
39) Carbon Tetrachloride	12.30	117	845279	43.02829	ppb	95

(#) = qualifier out of range (m) = manual integration  
 1030C22W.D CALLW.M Fri Dec 02 11:21:22 2011

Data File : M:\CHICO\DATA\C111030\1030C22W.D  
 Acq On : 31 Oct 11 4:29  
 Sample : Voc Std 10-30-11@40ug/L  
 Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Tert Amyl Methyl Ether	12.34	73	1064298	37.91715	ppb	95
41) 1,2-DCA	12.37	62	609966	37.87992	ppb	96
42) Benzene	12.50	78	2667822	37.98569	ppb	98
43) TCE	13.53	95	750591	38.58882	ppb	94
44) 2-Pentanone	13.20	43	723061	177.71021	ppb	99
45) 1,2-Dichloropropane	13.77	63	624547	39.12345	ppb	95
46) Bromodichloromethane	14.12	83	773755	42.42635	ppb	95
47) Methyl Cyclohexane	13.82	83	868699	38.21751	ppb	98
48) Dibromomethane	14.17	93	250020	39.16182	ppb	86
49) 2-Chloroethyl vinyl ether	14.57	63	173802	42.82620	ppb	95
50) 1-Bromo-2-chloroethane	14.89	63	541199	39.73256	ppb	83
51) Cis-1,3-Dichloropropene	15.00	75	712500	40.97032	ppb	95
52) Toluene	15.63	91	2650413	38.26138	ppb	99
53) Trans-1,3-Dichloropropene	15.80	75	518508	41.41431	ppb	91
54) 1,1,2-TCA	16.08	83	269238	39.89943	ppb	93
57) 1,2-EDB	17.33	107	320516	42.06127	ppb	96
58) Tetrachloroethene	16.79	164	705793	34.28742	ppb	95
59) 1-Chlorohexane	17.70	91	907243	38.27319	ppb	95
60) 1,1,1,2-Tetrachloroethane	18.16	131	576678	44.74892	ppb	93
61) m&p-Xylene	18.35	106	2337444	76.86502	ppb	99
62) o-Xylene	19.11	106	1156368	39.53885	ppb	94
63) Styrene	19.13	104	1785628	40.45023	ppb	97
65) 2-Hexanone	16.10	43	145250	39.64659	ppb	96
66) 1,3-Dichloropropane	16.49	76	597192	39.74260	ppb	95
67) Dibromochloromethane	16.97	129	435261	44.37095	ppb	90
68) Chlorobenzene	18.10	112	1658874	38.13292	ppb	97
69) Ethylbenzene	18.22	91	3057452	37.74292	ppb	98
70) Bromoform	19.64	173	213787	38.87093	ppb	# 77
72) MIBK (methyl isobutyl keto)	14.67	43	228387	35.86526	ppb	86
73) Isopropylbenzene	19.74	105	2989202	36.81944	ppb	100
74) 1,1,2,2-Tetrachloroethane	19.90	83	276570	40.69597	ppb	85
75) 1,2,3-Trichloropropane	20.15	110	27712	36.12043	ppb	# 64
76) t-1,4-Dichloro-2-Butene	20.23	53	63970	41.51275	ppb	# 73
77) Bromobenzene	20.47	156	676448	36.12176	ppb	94
78) n-Propylbenzene	20.44	91	3526664	36.41330	ppb	96
79) 4-Ethyltoluene	20.64	105	2418588	36.08622	ppb	96
80) 2-Chlorotoluene	20.74	91	2324947	36.24591	ppb	98
81) 1,3,5-Trimethylbenzene	20.71	105	2435760	36.94036	ppb	97
82) 4-Chlorotoluene	20.82	91	1999529	36.20126	ppb	95
83) Tert-Butylbenzene	21.36	119	2659556	37.25529	ppb	98
84) 1,2,4-Trimethylbenzene	21.42	105	2416954	35.09648	ppb	97
85) Sec-Butylbenzene	21.76	105	3268087	38.17382	ppb	99
86) p-Isopropyltoluene	21.99	119	2796609	38.13811	ppb	99
87) Benzyl Chloride	22.42	91	391533	40.22322	ppb	98
88) 1,3-DCB	22.12	146	1411201	36.84871	ppb	99
89) 1,4-DCB	22.30	146	1322903	37.21752	ppb	96
90) Hexachloroethane	23.60	117	488322	36.68408	ppb	93
91) n-Butylbenzene	22.70	91	2299832	35.95845	ppb	98
92) 1,2-DCB	22.93	146	1152377	37.82968	ppb	95
93) 1,2-Dibromo-3-chloropropan	24.14	155	45893	38.08788	ppb	96
94) 1,2,4-Trichlorobenzene	25.59	180	808556	36.62946	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1030C22W.D CALLW.M Fri Dec 02 11:21:23 2011

Data File : M:\CHICO\DATA\C111030\1030C22W.D Vial: 1  
 Acq On : 31 Oct 11 4:29 Operator: STC  
 Sample : Voc Std 10-30-11@40ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.84	223	149142	37.18851	ppb	98
96) Naphthalene	25.94	128	1030307	37.82960	ppb	97
97) 1,2,3-Trichlorobenzene	26.29	180	633099	37.91681	ppb	96

Quantitation Report

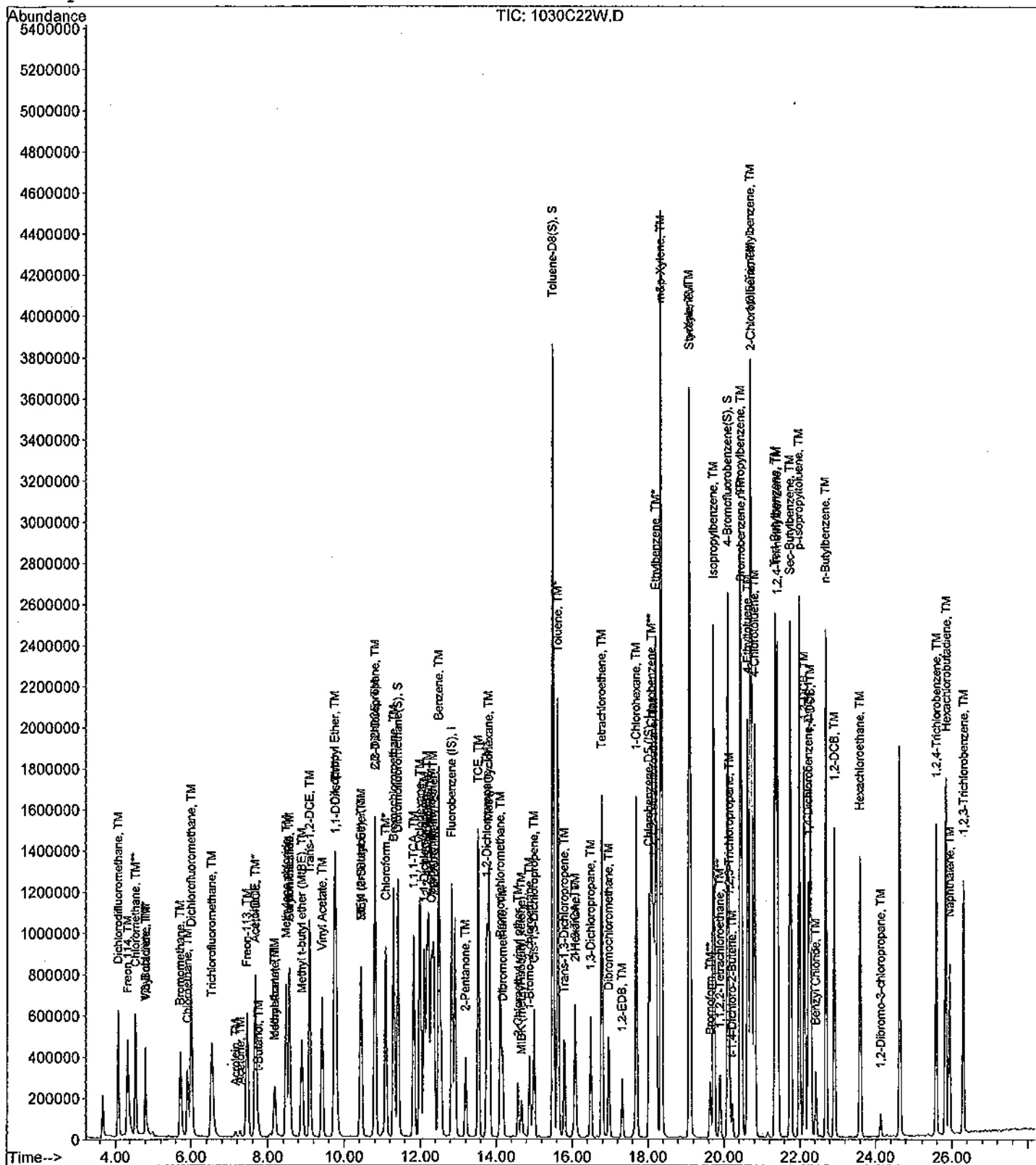
Data File : M:\CHICO\DATA\C111030\1030C22W.D  
 Acq On : 31 Oct 11 4:29  
 Sample : Voc Std 10-30-11@40ug/L  
 Misc : Water 10mL/ IS:10-30-11

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

Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C23W.D Vial: 1  
 Acq On : 31 Oct 11 5:12 Operator: STC  
 Sample : Voc Std 10-30-11@100ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.83	96	629184	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.04	117	438080	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.25	152	225856	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.42	111	1562107	93.20132	ppb	0.00
Spiked Amount	25.097		Recovery	=	371.359%	
38) 1,2-DCA-D4(S)	12.22	65	1315432	88.16671	ppb	0.00
Spiked Amount	24.225		Recovery	=	363.946%	
56) Toluene-D8(S)	15.50	98	5498133	89.19764	ppb	0.00
Spiked Amount	25.808		Recovery	=	345.617%	
64) 4-Bromofluorobenzene(S)	20.11	95	1999086	90.51343	ppb	0.00
Spiked Amount	25.459		Recovery	=	355.518%	
<b>Target Compounds</b>						Qvalue
2) Dichlorodifluoromethane	4.07	85	2034576	87.76868	ppb	100
3) Freon 114	4.33	85	1349868	92.97677	ppb	99
4) Chloromethane	4.55	50	2507323	87.28354	ppb	98
5) Vinyl chloride	4.80	62	1338572	69.66414	ppb	97
6) 1,3-Butadiene	4.78	54	294	5.47489	ppb #	41
7) Bromomethane	5.72	94	1399435	100.33221	ppb	96
8) Chloroethane	5.92	64	1334347	84.07184	ppb	99
9) Dichlorofluoromethane	6.00	67	3757858	85.63331	ppb	99
10) Trichlorofluoromethane	6.53	101	2271251	87.21626	ppb	100
11) Acetonitrile	7.65	41	142197	206.30447	ug/l	100
12) Acrolein	7.15	56	57928	183.65994	ppb	89
13) Acetone	7.27	43	177387	98.40233	ppb #	80
14) Freon-113	7.46	101	1359710	98.36336	ppb	98
15) 1,1-DCE	7.69	96	1502451	83.64213	ppb	95
16) t-Butanol	7.69	59	21608	253.32966	ppb #	70
17) Methyl Acetate	8.19	43	511503	99.99402	ppb	97
18) Iodomethane	8.16	142	1532807	102.31499	ppb	90
19) Acrylonitrile	8.57	53	190766	99.94302	ppb	88
20) Methylene chloride	8.47	84	1482941	86.55417	ppb	98
21) Carbon disulfide	8.56	76	1504256	86.18747	ppb	99
22) Methyl t-butyl ether (MtBE)	8.90	73	2423605	89.26566	ppb	93
23) Trans-1,2-DCE	9.10	96	1783146	97.17967	ppb	95
24) Diisopropyl Ether	9.75	45	5216937	86.91619	ppb	95
25) 1,1-DCA	9.80	63	3188094	89.56273	ppb	96
26) Vinyl Acetate	9.42	43	966738	98.81188	ppb	94
27) Ethyl tert Butyl Ether	10.44	59	3675155	89.68576	ppb	98
28) MEK (2-Butanone)	10.42	43	621214	92.04576	ppb #	87
29) Cis-1,2-DCE	10.82	96	1784148	83.31536	ppb	92
30) 2,2-Dichloropropane	10.81	77	2060873	80.82274	ppb	96
31) Chloroform	11.09	83	3040045	88.77564	ppb	96
32) Bromochloromethane	11.32	128	540554	90.67004	ppb	82
34) 1,1,1-TCA	11.84	97	2777762	89.19608	ppb	98
35) Cyclohexane	12.00	56	2517542	86.82519	ppb	98
36) 1,1-Dichloropropene	12.11	75	2351054	88.10577	ppb	97
37) 2,2,4-Trimethylpentane	12.18	57	4108345	99.40223	ppb	96
39) Carbon Tetrachloride	12.30	117	2194045	102.31369	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1030C23W.D CALLW.M Fri Dec 02 11:21:28 2011

Data File : M:\CHICO\DATA\C111030\1030C23W.D Vial: 1  
 Acq On : 31 Oct 11 5:12 Operator: STC  
 Sample : Voc Std 10-30-11@100ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
40) Tert Amyl Methyl Ether	12.35	73	2816735	91.92902	ppb	99
41) 1,2-DCA	12.38	62	1561150	88.81419	ppb	98
42) Benzene	12.49	78	6991851	91.19889	ppb	98
43) TCE	13.54	95	1880975	88.58811	ppb	90
44) 2-Pentanone	13.20	43	881325	198.43021	ppb	99
45) 1,2-Dichloropropane	13.76	63	1582643	90.82163	ppb	96
46) Bromodichloromethane	14.11	83	1954559	98.17824	ppb #	91
47) Methyl Cyclohexane	13.82	83	2215169	89.27589	ppb	99
48) Dibromomethane	14.17	93	660037	94.70886	ppb	92
49) 2-Chloroethyl vinyl ether	14.57	63	484281	109.31668	ppb	95
50) 1-Bromo-2-chloroethane	14.88	63	1381119	92.88701	ppb	92
51) Cis-1,3-Dichloropropene	15.00	75	1816087	95.66550	ppb	93
52) Toluene	15.64	91	6789315	89.78572	ppb	99
53) Trans-1,3-Dichloropropene	15.80	75	1379809	100.95973	ppb	94
54) 1,1,2-TCA	16.08	83	670730	91.05678	ppb	90
57) 1,2-EDB	17.32	107	832657	99.86703	ppb	98
58) Tetrachloroethene	16.79	164	1730703	76.84281	ppb	95
59) 1-Chlorohexane	17.71	91	2353794	90.75337	ppb	91
60) 1,1,1,2-Tetrachloroethane	18.16	131	1508942	107.01509	ppb	94
61) m&p-Xylene	18.36	106	6180125	185.74112	ppb	97
62) o-Xylene	19.10	106	3002956	93.84264	ppb	92
63) Styrene	19.12	104	4577224	94.76663	ppb	100
65) 2-Hexanone	16.10	43	375289	93.62219	ppb	94
66) 1,3-Dichloropropane	16.49	76	1470502	89.43988	ppb	98
67) Dibromochloromethane	16.97	129	1191759	111.03520	ppb	92
68) Chlorobenzene	18.11	112	4271113	89.73276	ppb	97
69) Ethylbenzene	18.22	91	8013287	90.40861	ppb	94
70) Bromoform	19.64	173	616423	100.58038	ppb #	81
72) MIBK (methyl isobutyl keto)	14.67	43	581084	90.50195	ppb	93
73) Isopropylbenzene	19.74	105	7614687	93.02299	ppb	99
74) 1,1,1,2-Tetrachloroethane	19.90	83	720253	105.11090	ppb	88
75) 1,2,3-Trichloropropane	20.16	110	78648	101.50443	ppb #	68
76) t-1,4-Dichloro-2-Butene	20.22	53	179966	115.82759	ppb #	75
77) Bromobenzene	20.48	156	1766849	93.57294	ppb	97
78) n-Propylbenzene	20.45	91	9038917	92.56114	ppb	95
79) 4-Ethyltoluene	20.64	105	6293560	93.13058	ppb	93
80) 2-Chlorotoluene	20.74	91	5791730	89.55104	ppb	98
81) 1,3,5-Trimethylbenzene	20.72	105	6243237	93.90589	ppb	96
82) 4-Chlorotoluene	20.81	91	5272321	94.67040	ppb	97
83) Tert-Butylbenzene	21.36	119	6787695	94.30127	ppb	99
84) 1,2,4-Trimethylbenzene	21.41	105	6234859	89.79211	ppb	97
85) Sec-Butylbenzene	21.76	105	8294079	96.08521	ppb	99
86) p-Isopropyltoluene	21.99	119	7113742	96.21480	ppb	98
87) Benzyl Chloride	22.43	91	1035237	105.47867	ppb	97
88) 1,3-DCB	22.13	146	3600903	93.25266	ppb	96
89) 1,4-DCB	22.29	146	3434577	95.83166	ppb	96
90) Hexachloroethane	23.60	117	1413252	101.62319	ppb	97
91) n-Butylbenzene	22.70	91	5960168	92.42293	ppb	99
92) 1,2-DCB	22.92	146	2973338	96.80520	ppb	95
93) 1,2-Dibromo-3-chloropropan	24.14	155	125399	101.01251	ppb	95
94) 1,2,4-Trichlorobenzene	25.58	180	2057289	92.43409	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1030C23W.D CALLW.M Fri Dec 02 11:21:29 2011

Data File : M:\CHICO\DATA\C111030\1030C23W.D Vial: 1  
 Acq On : 31 Oct 11 5:12 Operator: STC  
 Sample : Voc Std 10-30-11@100ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Dec 2 11:19 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:18:49 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
95) Hexachlorobutadiene	25.83	223	370844	91.70996	ppb	98
96) Naphthalene	25.93	128	2644717	96.30764	ppb	98
97) 1,2,3-Trichlorobenzene	26.30	180	1614041	95.87185	ppb	100

Quantitation Report

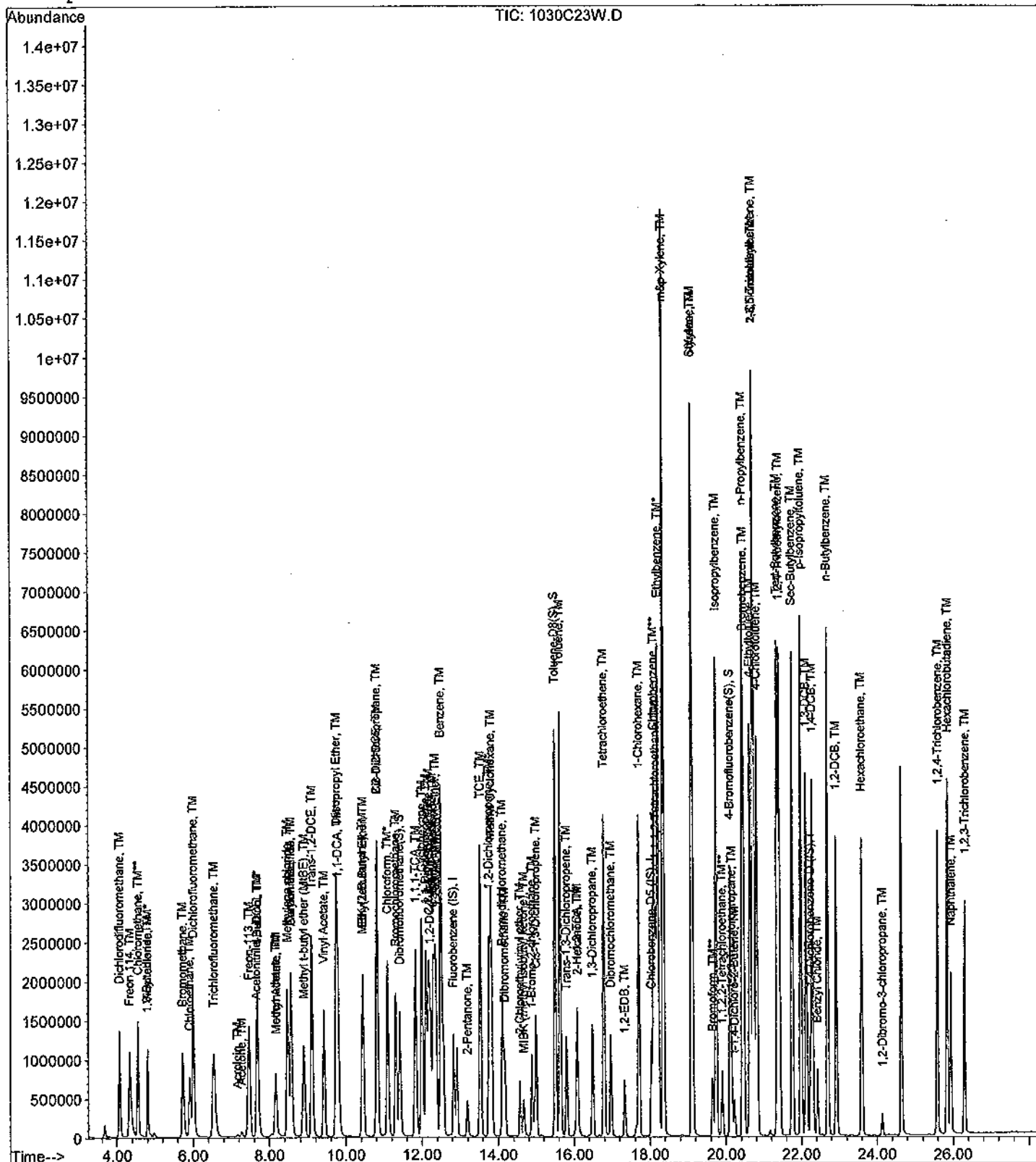
Data File : M:\CHICO\DATA\C111030\1030C23W.D  
Acq On : 31 Oct 11 5:12  
Sample : Voc Std 10-30-11@100ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

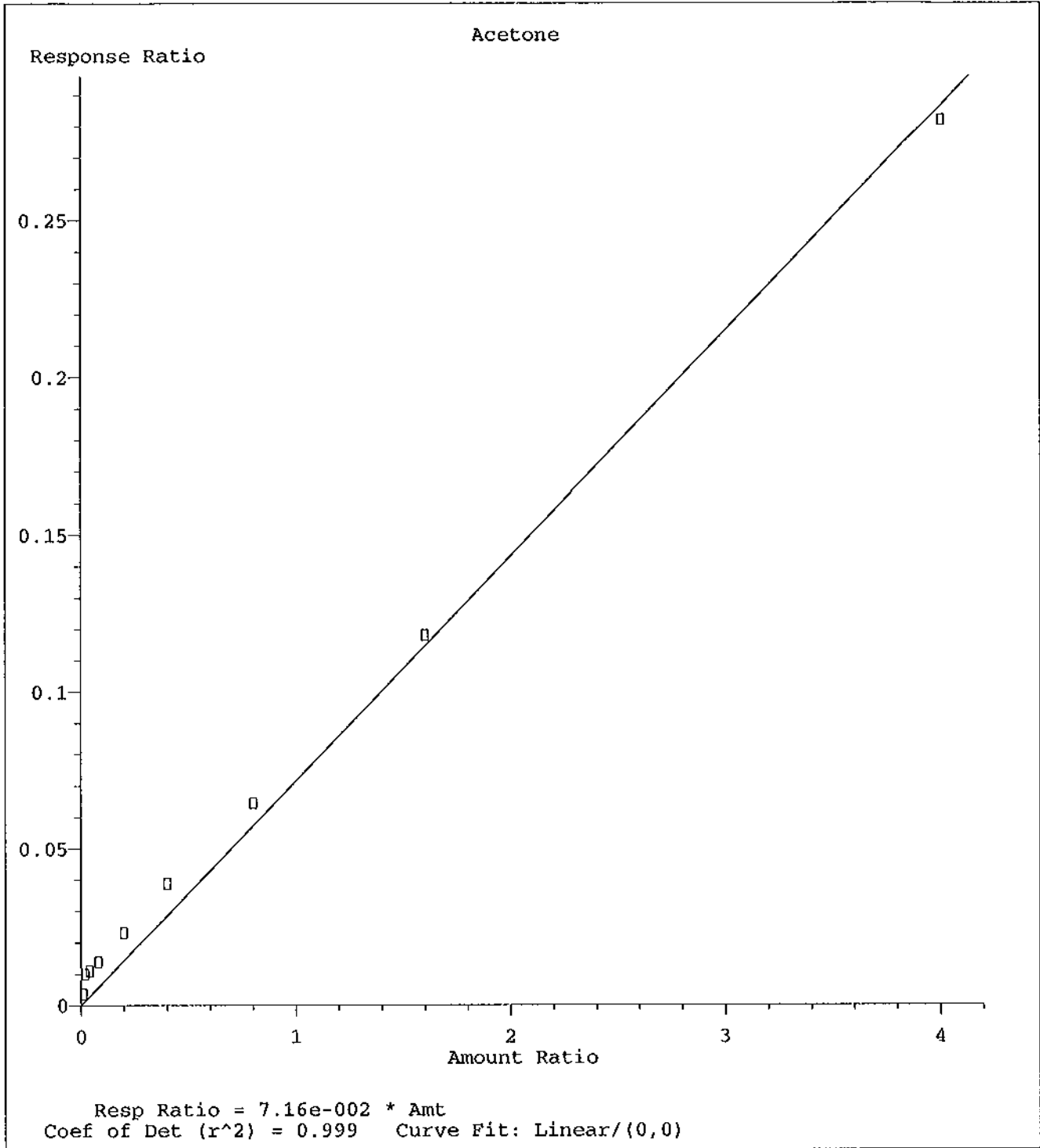
Quant Time: Dec 2 11:19 2011

Quant Results File: CALLW.RES

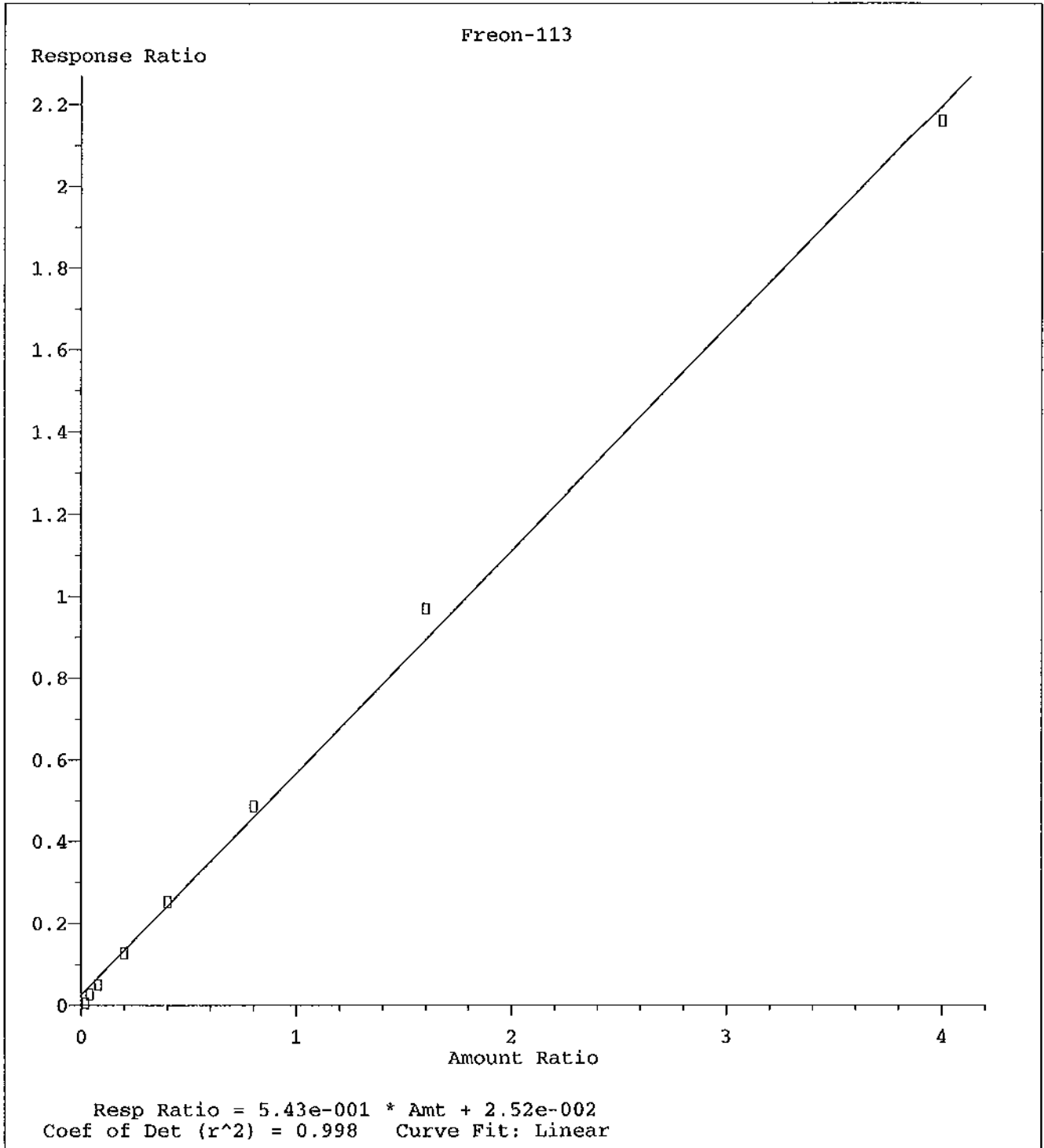
Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:18:49 2011  
Response via : Initial Calibration







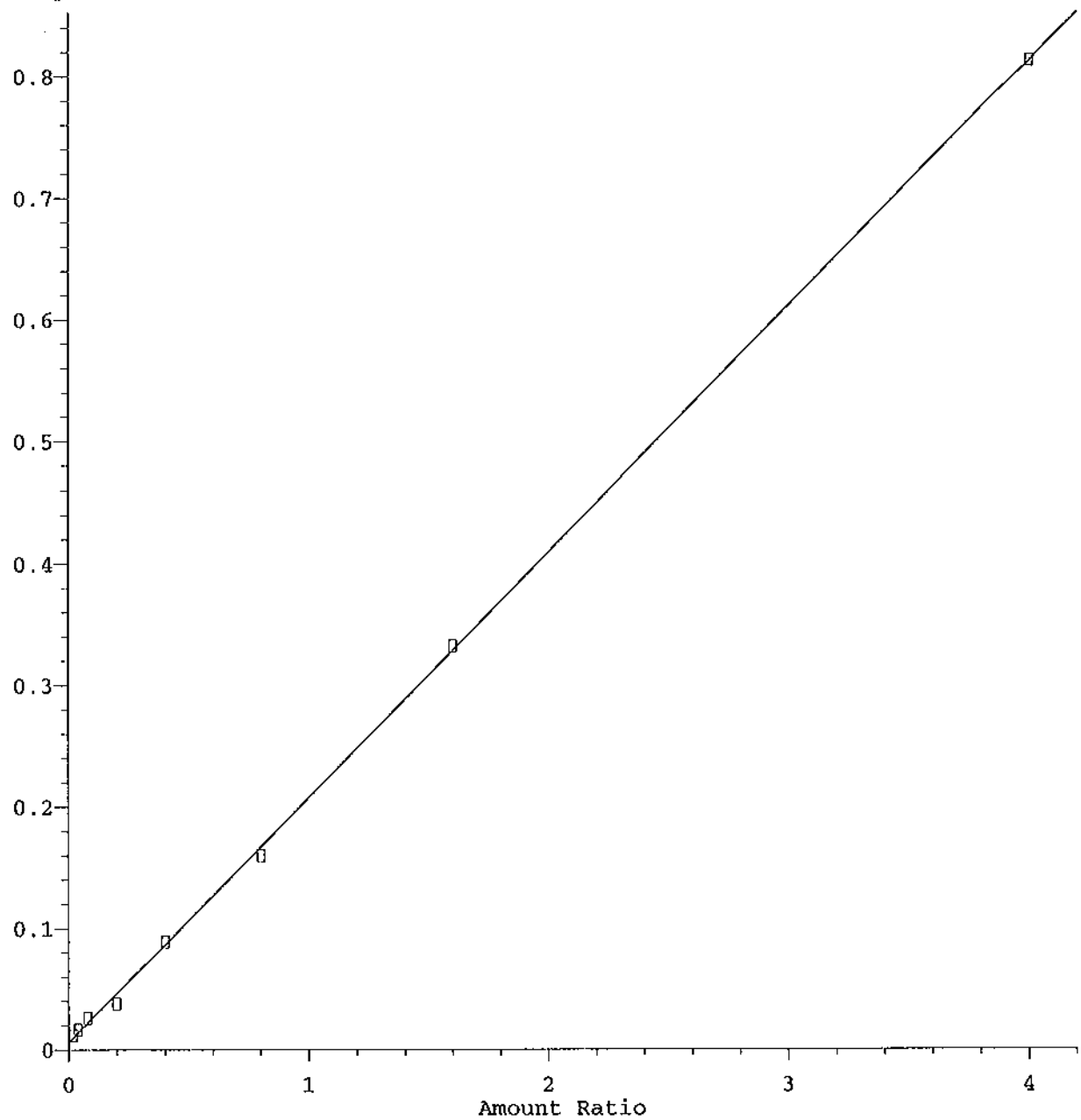
Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011

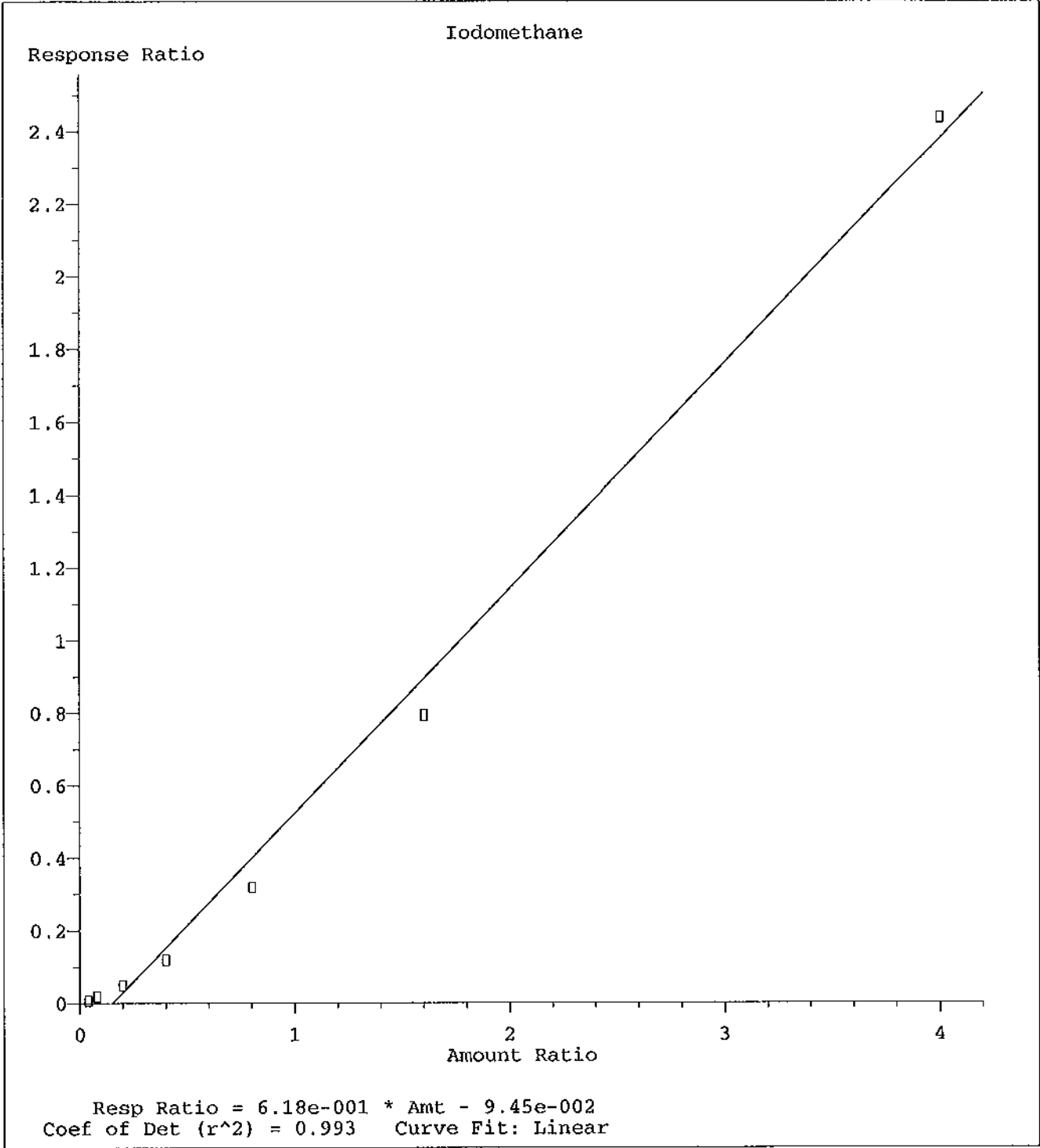
Methyl Acetate

Response Ratio

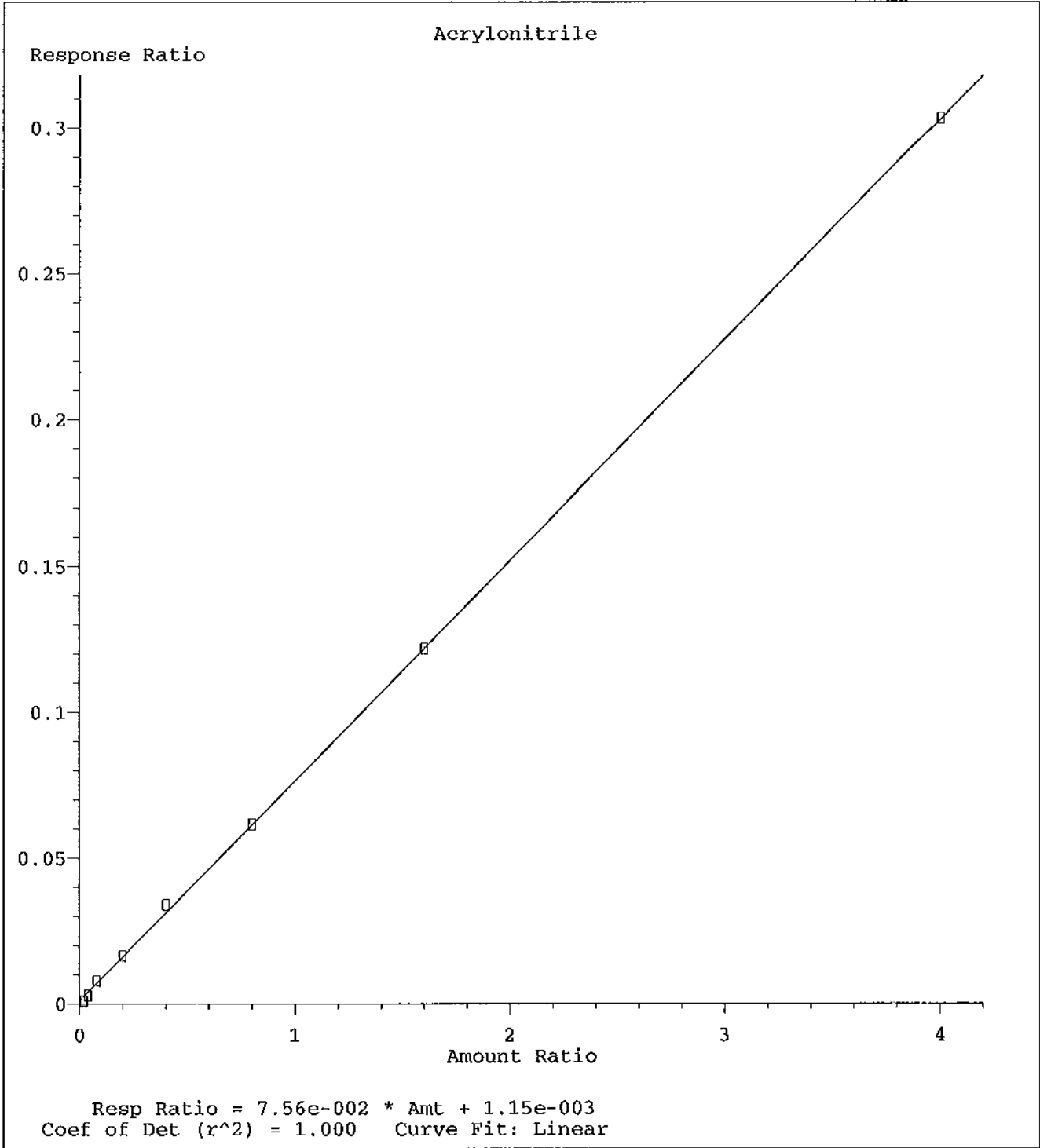


Resp Ratio = 2.02e-001 \* Amt + 5.56e-003  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

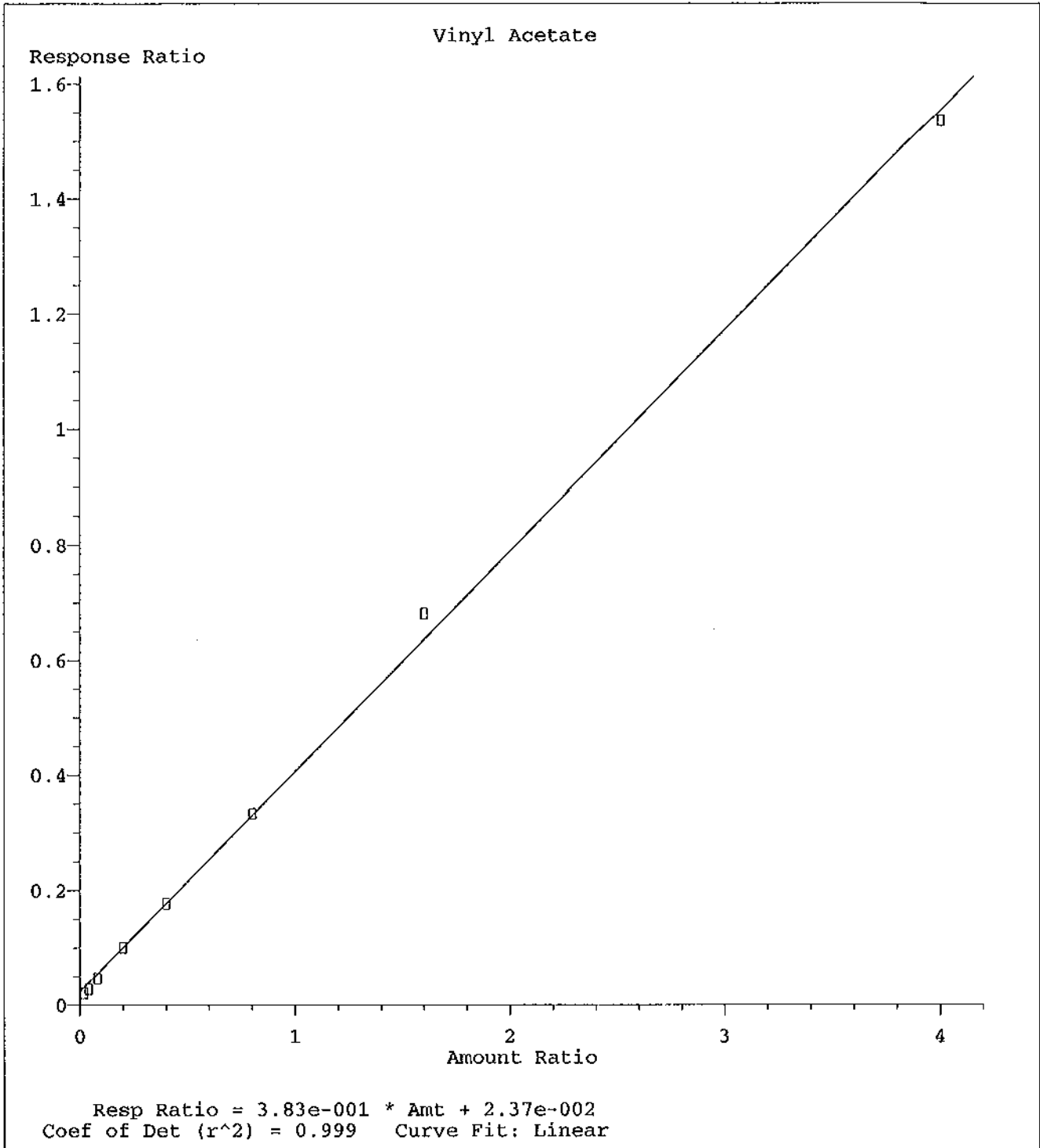
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Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



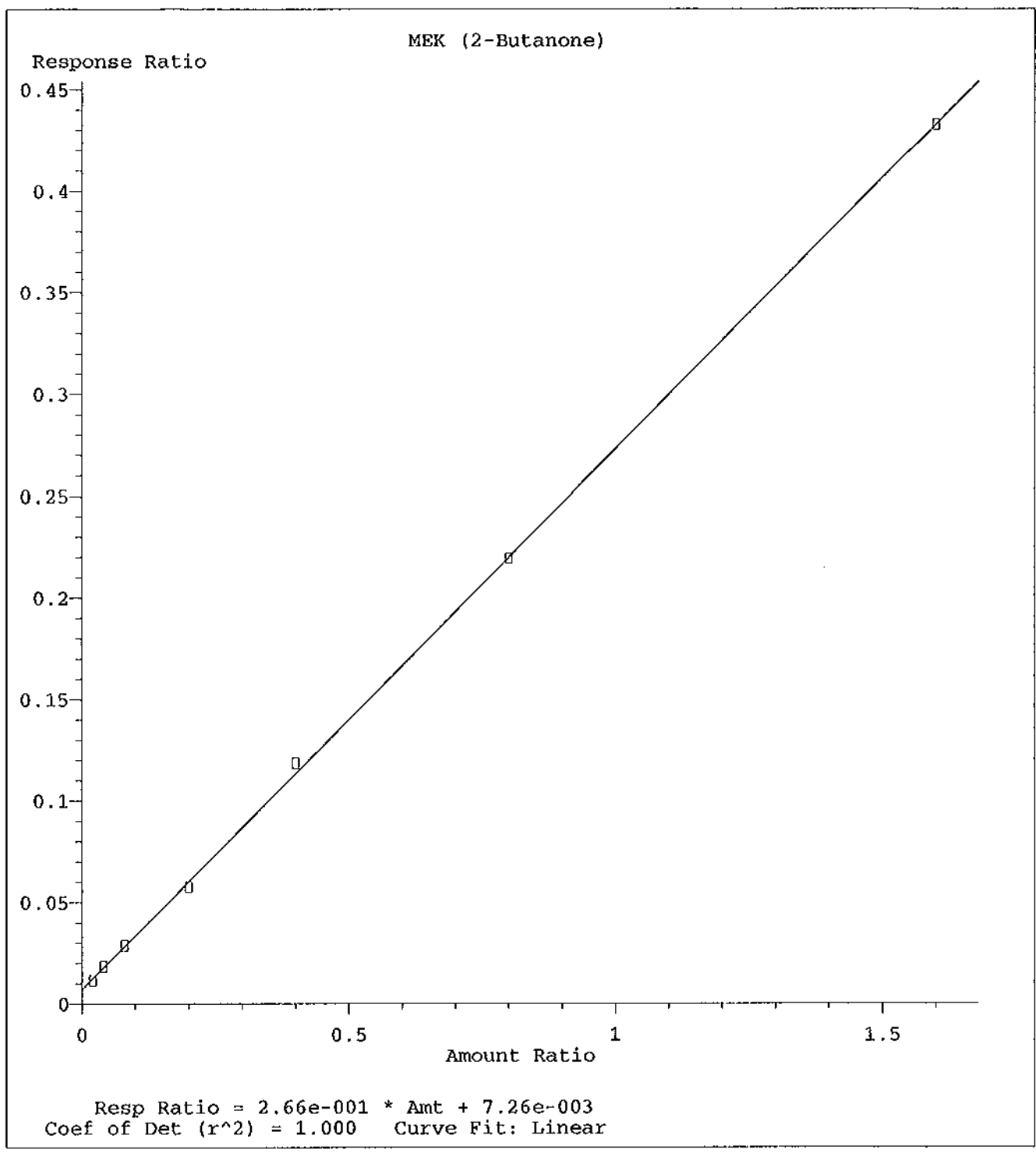
Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



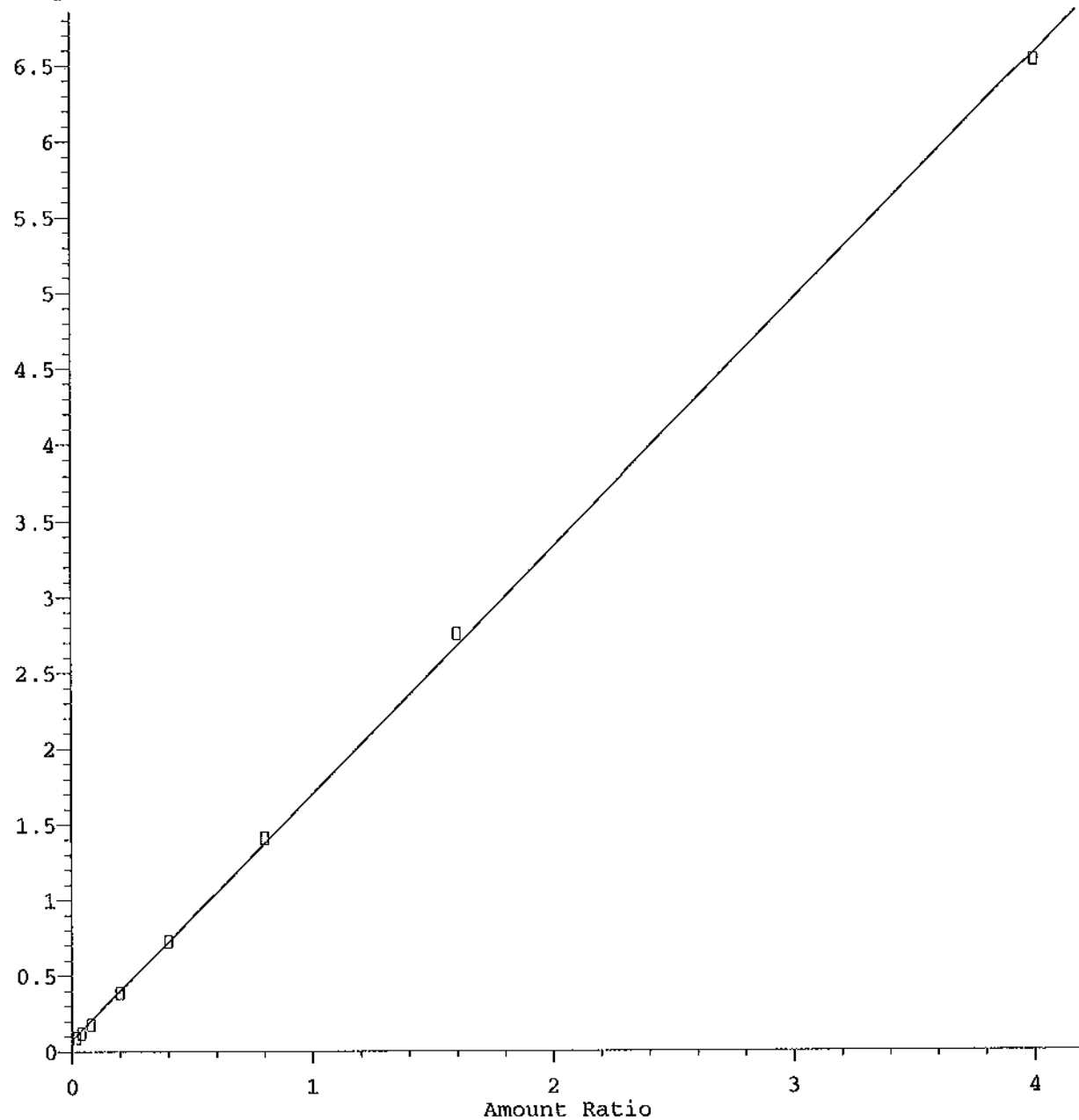
Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011

2,2,4-Trimethylpentane

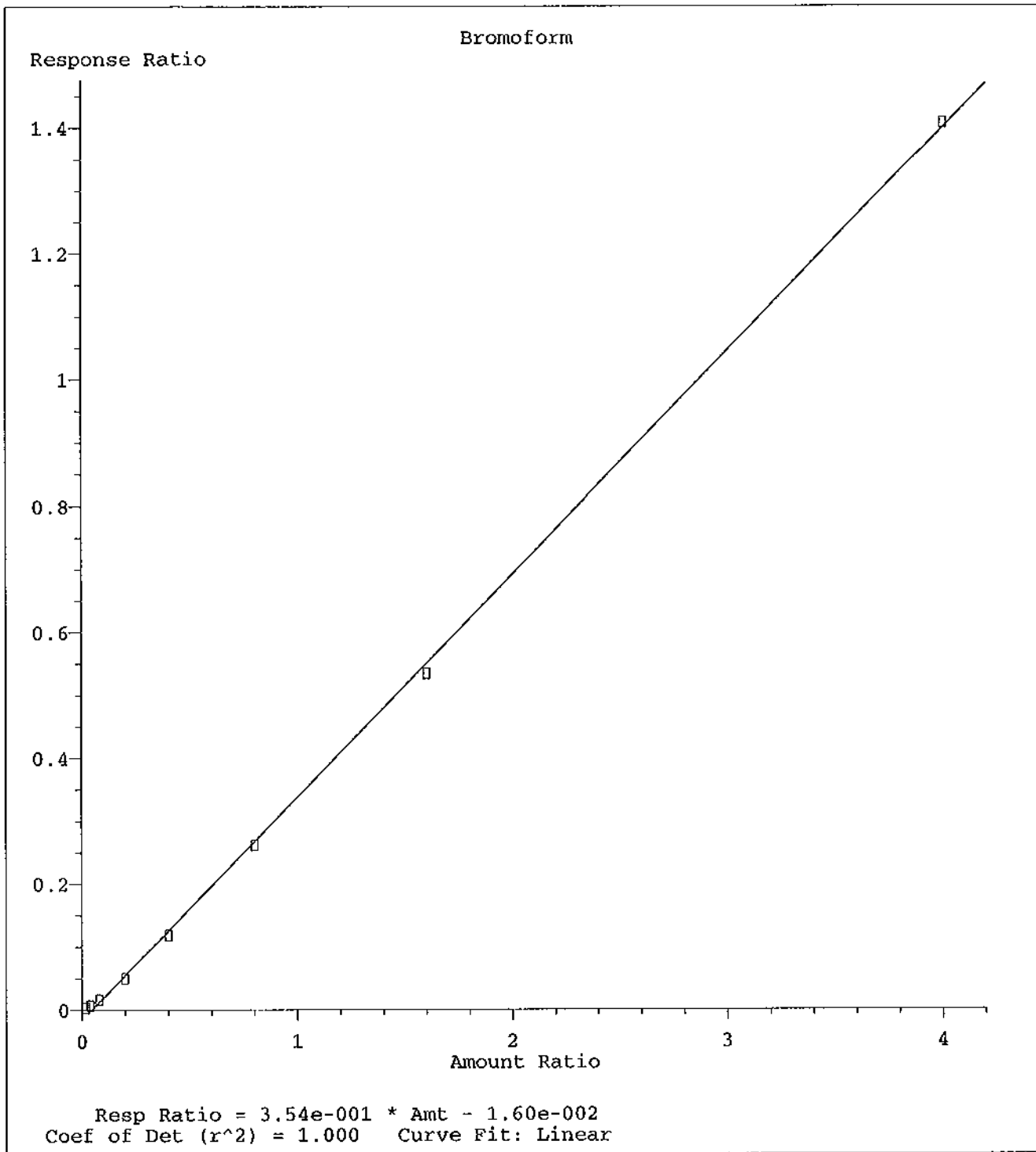
Response Ratio



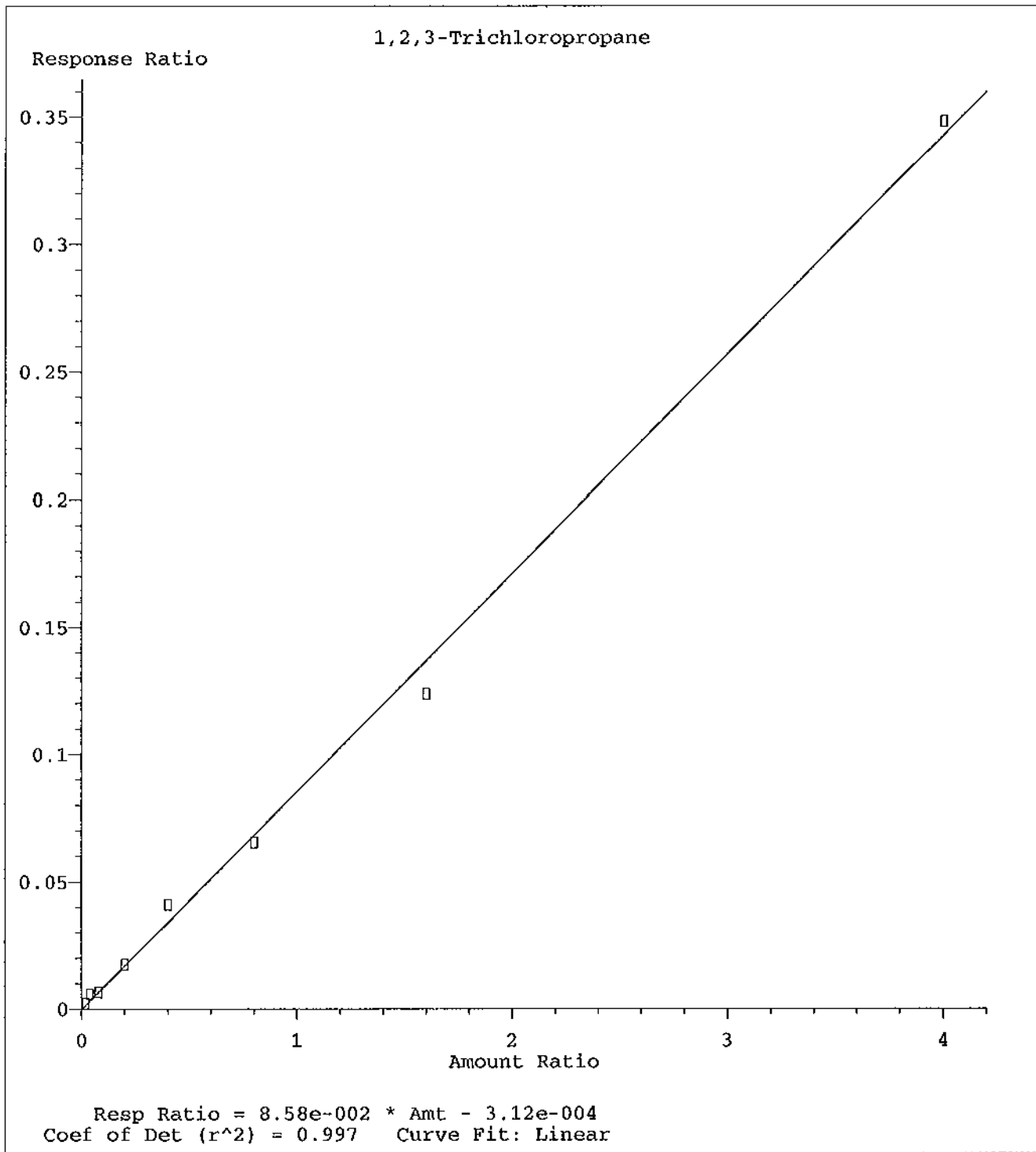
Resp Ratio = 1.62e+000 \* Amt + 7.49e-002  
Coef of Det (r^2) = 1.000 Curve Fit: Linear

Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011

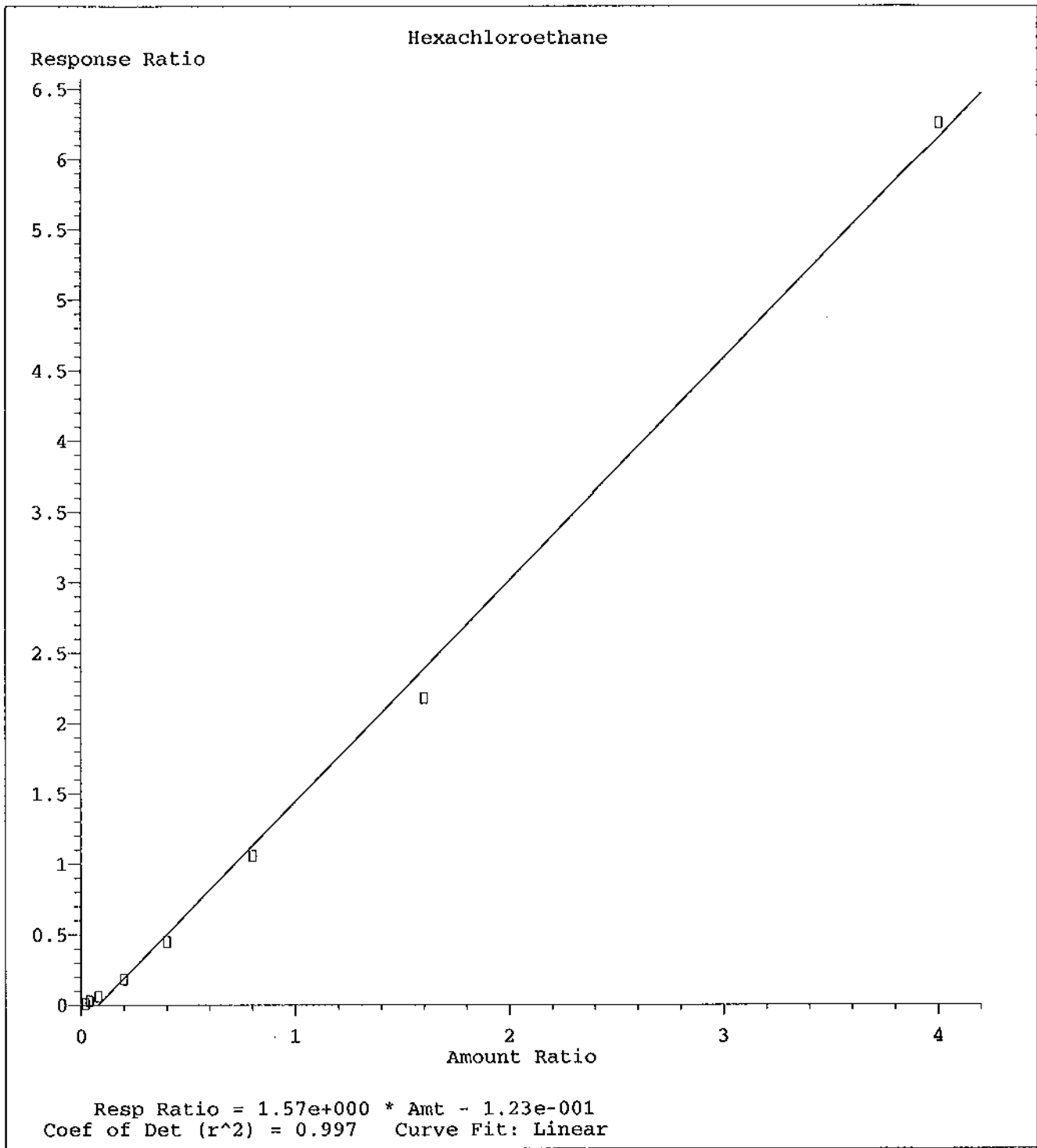




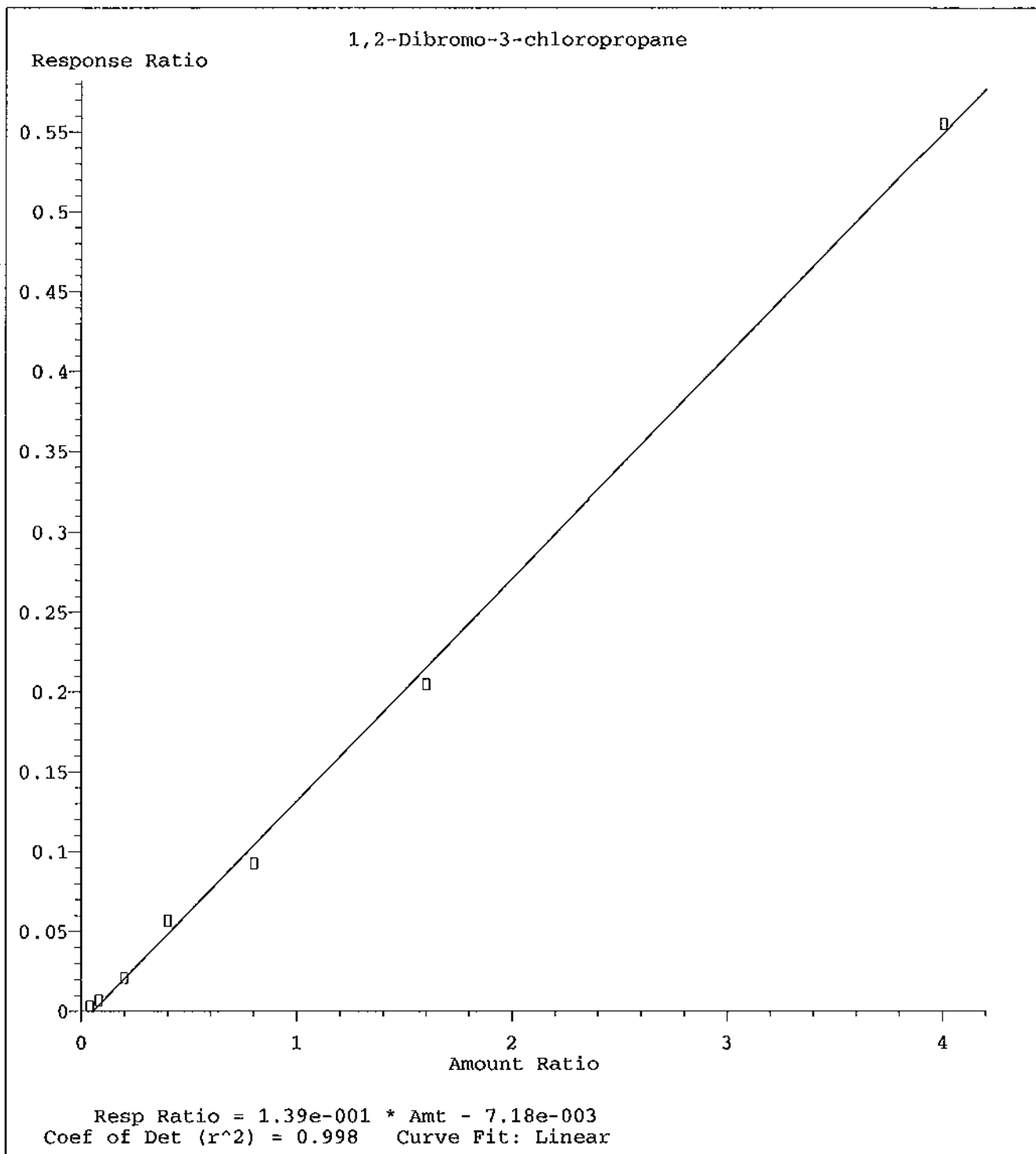
Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011



Method Name: M:\CHICO\DATA\C111030\CALLW.M  
Calibration Table Last Updated: Fri Dec 02 11:32:50 2011

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 10/31/11

Matrix: \_\_\_\_\_

Instrument: Chico

Initial Cal. Date: 10/30/11

Data File: 1030C28W.D

	Compound	MEAN	CCRF	%D	%Drift
1	I Fluorobenzene (IS)	ISTD			I
2	TM Dichlorodifluoromethane	0.9211	0.9249	0.42	TM
3	TM Freon 114	0.5769	0.6094	5.6	TM
4	TM** Chloromethane	1.141	1.076	5.8	TM**
5	TM* Vinyl chloride	0.7635	0.7773	1.8	TM*
6	TML 1,3-Butadiene	0.0000	0.0015	0.00	TML
7	TM Bromomethane	0.5542	0.4961	10	TM
8	TM Chloroethane	0.6306	0.5609	11	TM
9	TM Dichlorofluoromethane	1.744	1.607	7.8	TM
10	TM Trichlorofluoromethane	1.035	1.006	2.8	TM
11	Acetonitrile	0.0274	0.0263	4.1	
12	TM Acrolein	0.0125	0.0115	8.4	TM
13	TML Acetone	0.1859	0.0931	50	TML 30*
14	TML Freon-113	0.5715	0.5758	0.75	TML 5.5
15	TM* 1,1-DCE	0.7137	0.6303	12	TM*
16	TM t-Butanol	0.0034	0.0035	3.5	TM
17	TML Methyl Acetate	0.2927	0.2030	31	TML 6.3
18	TML Iodomethane	0.3500	0.4253	21	TML 7.0
19	TML Acrylonitrile	0.0764	0.0746	2.3	TML 5.1
20	TM Methylene chloride	0.6808	0.6159	9.5	TM
21	TM Carbon disulfide	0.6935	0.6450	7.0	TM
22	TM Methyl t-butyl ether (MtBE)	1.079	1.046	3.1	TM
23	TM Trans-1,2-DCE	0.8280	0.7496	9.5	TM
24	TM Diisopropyl Ether	2.385	2.306	3.3	TM
25	TM** 1,1-DCA	1.414	1.411	0.23	TM**
26	TML Vinyl Acetate	0.5623	0.4364	22	TML 1.5
27	TM Ethyl tert Butyl Ether	1.628	1.646	1.1	TM
28	TML MEK (2-Butanone)	0.3591	0.2972	17	TML 4.8
29	TM Cis-1,2-DCE	0.8509	0.7812	8.2	TM
30	TM 2,2-Dichloropropane	1.013	0.8669	14	TM
31	TM* Chloroform	1.361	1.332	2.1	TM*
32	TM Bromochloromethane	0.2369	0.2434	2.8	TM
33	S Dibromofluoromethane(S)	0.6660	0.6700	0.60	S
34	TM 1,1,1-TCA	1.237	1.182	4.5	TM
35	TM Cyclohexane	1.152	1.120	2.8	TM
36	TM 1,1-Dichloropropene	1.060	0.9998	5.7	TM
37	TML 2,2,4-Trimethylpentane	2.316	1.725	26	TML 5.3
38	S 1,2-DCA-D4(S)	0.5928	0.5784	2.4	S
39	TM Carbon Tetrachloride	0.8521	0.8321	2.3	TM
40	TM Tert Amyl Methyl Ether	1.217	1.216	0.15	TM

Average

8.3

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 10/31/11

Matrix: 0

Instrument: Chico

Cal. Date: 10/30/11

Data File: 1030C28W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	1,2-DCA	0.6984	0.6709	3.9	TM
42	TM	Benzene	3.046	2.887	5.2	TM
43	TM	TCE	0.8437	0.8134	3.6	TM
44	TM	2-Pentanone	0.1765	0.1769	0.25	TM
45	TM*	1,2-Dichloropropane	0.6924	0.6963	0.57	TM*
46	TM	Bromodichloromethane	0.7910	0.7910	0.01	TM
47	TM	Methyl Cyclohexane	0.9859	0.9347	5.2	TM
48	TM	Dibromomethane	0.2769	0.2811	1.5	TM
49	TM	2-Chloroethyl vinyl ether	0.1760	0.1764	0.23	TM
50	TM	1-Bromo-2-chloroethane	0.5908	0.6129	3.7	TM
51	TM	Cis-1,3-Dichloropropene	0.7543	0.7571	0.37	TM
52	TM*	Toluene	3.005	2.824	6.0	TM*
53	TM	Trans-1,3-Dichloropropene	0.5430	0.5270	3.0	TM
54	TM	1,1,2-TCA	0.2927	0.2901	0.90	TM
55	I	Chlorobenzene-D5 (IS)	ISTD			I
56	S	Toluene-D8(S)	3.518	3.782	7.5	S
57	TM	1,2-EDB	0.4758	0.5074	6.6	TM
58	TM	Tetrachloroethene	1.285	1.296	0.81	TM
59	TM	1-Chlorohexane	1.480	1.493	0.86	TM
60	TM	1,1,1,2-Tetrachloroethane	0.8047	0.8891	10	TM
61	TM	m&p-Xylene	1.899	1.889	0.49	TM
62	TM	o-Xylene	1.826	1.894	3.7	TM
63	TM	Styrene	2.756	2.935	6.5	TM
64	S	4-Bromofluorobenzene(S)	1.260	1.394	11	S
65	TM	2-Hexanone	0.2288	0.2487	8.7	TM
66	TM	1,3-Dichloropropane	0.9383	0.9463	0.86	TM
67	TM	Dibromochloromethane	0.6125	0.6760	10	TM
68	TM**	Chlorobenzene	2.716	2.809	3.4	TM**
69	TM*	Ethylbenzene	5.058	5.094	0.71	TM*
70	TM**L	Bromoform	0.2607	0.2895	11	TM**L 6.8
71	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
72	TM	MIBK (methyl isobutyl ketone)	0.7107	0.6949	2.2	TM
73	TM	Isopropylbenzene	9.061	8.888	1.9	TM
74	TM**	1,1,2,2-Tetrachloroethane	0.7585	0.7787	2.7	TM**
75	TML	1,2,3-Trichloropropane	0.0967	0.1006	4.1	TML 18
76	TM	t-1,4-Dichloro-2-Butene	0.1720	0.1758	2.2	TM
77	TM	Bromobenzene	2.090	2.104	0.64	TM
78	TM	n-Propylbenzene	10.8	10.6	2.1	TM
79	TM	4-Ethyltoluene	7.480	6.973	6.8	TM
80	TM	2-Chlorotoluene	7.159	7.027	1.8	TM

Average

3.7

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Second Source Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 10/31/11  
Instrument: Chico  
Cal. Date: 10/30/11  
Data File: 1030C28W.D

		Compound	MEAN	CCRF	%D	%Drift	
81	TM	1,3,5-Trimethylbenzene	7.359	7.258	1.4	TM	
82	TM	4-Chlorotoluene	6.164	5.899	4.3	TM	
83	TM	Tert-Butylbenzene	7.967	7.897	0.88	TM	
84	TM	1,2,4-Trimethylbenzene	7.686	7.097	7.7	TM	
85	TM	Sec-Butylbenzene	9.555	9.679	1.3	TM	
86	TM	p-Isopropyltoluene	8.184	8.031	1.9	TM	
87	TM	Benzyl Chloride	1.086	0.9559	12	TM	
88	TM	1,3-DCB	4.274	4.133	3.3	TM	
89	TM	1,4-DCB	3.967	3.945	0.56	TM	
90	TML	Hexachloroethane	1.021	1.085	6.2	TML	11
91	TM	n-Butylbenzene	7.138	6.849	4.1	TM	
92	TM	1,2-DCB	3.400	3.438	1.1	TM	
93	TML	1,2-Dibromo-3-chloropropane	0.1148	0.1240	8.0	TML	2.0
94	TM	1,2,4-Trichlorobenzene	2.464	2.504	1.7	TM	
95	TM	Hexachlorobutadiene	0.4476	0.4720	5.5	TM	
96	TM	Naphthalene	3.040	3.207	5.5	TM	
97	TM	1,2,3-Trichlorobenzene	1.864	2.025	8.7	TM	
98							
99							
100							
101							
102							
103							
104							
105							
106							
107							
108							
109							
110							
111							
112							
113							
114							
115							
116							
117							
118							
119							
120							

Average

4.4

Quantitation Report (Not Reviewed)

Data File : M:\CHICO\DATA\C111030\1030C28W.D Vial: 1  
 Acq On : 31 Oct 11 8:48 Operator: STC  
 Sample : 111030A LCS-1WC (SS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	600576	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.04	117	389760	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	212800	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.42	111	402364	25.15012	ppb	0.00
Spiked Amount	25.097		Recovery	=	100.210%	
38) 1,2-DCA-D4(S)	12.23	65	347346	24.38980	ppb	0.00
Spiked Amount	24.225		Recovery	=	100.680%	
56) Toluene-D8(S)	15.50	98	1474138	26.88019	ppb	0.00
Spiked Amount	25.808		Recovery	=	104.153%	
64) 4-Bromofluorobenzene(S)	20.11	95	543410	27.65447	ppb	0.00
Spiked Amount	25.459		Recovery	=	108.620%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.07	85	222193	10.04166	ppb	100
3) Freon 114	4.33	85	146402	10.56428	ppb	93
4) Chloromethane	4.55	50	258385	9.42321	ppb	99
5) Vinyl chloride	4.82	62	186738	10.18146	ppb	96
7) Bromomethane	5.72	94	119189	8.95228	ppb	94
8) Chloroethane	5.91	64	134747	8.89428	ppb	97
9) Dichlorofluoromethane	6.01	67	386134	9.21828	ppb	97
10) Trichlorofluoromethane	6.52	101	241622	9.72027	ppb	99
11) Acetonitrile	7.64	41	78885	119.90087	ug/l	100
12) Acrolein	7.16	56	34469	114.48914	ppb	96
13) Acetone	7.27	43	22365	12.99757	ppb	# 84
14) Freon-113	7.46	101	138327	9.44782	ppb	97
15) 1,1-DCE	7.67	96	151407	8.83040	ppb	96
16) t-Butanol	7.76	59	10529	129.32077	ppb	93
17) Methyl Acetate	8.18	43	48755	9.36519	ppb	96
18) Iodomethane	8.16	142	102169	10.69989	ppb	90
19) Acrylonitrile	8.56	53	17916	9.49044	ppb	79
20) Methylene chloride	8.47	84	147951	9.04673	ppb	99
21) Carbon disulfide	8.56	76	154944	9.30051	ppb	100
22) Methyl t-butyl ether (MtBE)	8.89	73	251165	9.69151	ppb	96
23) Trans-1,2-DCE	9.10	96	180083	9.05360	ppb	88
24) Diisopropyl Ether	9.75	45	553904	9.66784	ppb	94
25) 1,1-DCA	9.79	63	339012	9.97748	ppb	99
26) Vinyl Acetate	9.42	43	104836	9.85383	ppb	# 83
27) Ethyl tert Butyl Ether	10.45	59	395408	10.10888	ppb	99
28) MEK (2-Butanone)	10.44	43	71405	10.48433	ppb	99
29) Cis-1,2-DCE	10.82	96	187663	9.18084	ppb	97
30) 2,2-Dichloropropane	10.82	77	208247	8.55600	ppb	97
31) Chloroform	11.10	83	320091	9.79258	ppb	99
32) Bromochloromethane	11.32	128	58472	10.27501	ppb	98
34) 1,1,1-TCA	11.84	97	283983	9.55329	ppb	96
35) Cyclohexane	12.00	56	268948	9.71733	ppb	94
36) 1,1-Dichloropropene	12.10	75	240188	9.42981	ppb	99
37) 2,2,4-Trimethylpentane	12.18	57	414455	9.47423	ppb	98
39) Carbon Tetrachloride	12.30	117	199898	9.76577	ppb	98
40) Tert Amyl Methyl Ether	12.34	73	292021	9.98459	ppb	99
41) 1,2-DCA	12.38	62	161160	9.60516	ppb	100
42) Benzene	12.50	78	693647	9.47863	ppb	96
43) TCE	13.53	95	195399	9.64105	ppb	91

*Algorithm Check: (222193)(25) / (600576)(0.92077) = 10.04166347 ✓  
 MS 12/7/11*



Data File : M:\CHICO\DATA\C111030\1030C28W.D  
 Acq On : 31 Oct 11 8:48  
 Sample : 111030A LCS-1WC (SS)  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) 2-Pentanone	13.20	43	531259	125.31057	ppb	97
45) 1,2-Dichloropropane	13.76	63	167281	10.05687	ppb #	94
46) Bromodichloromethane	14.11	83	190021	9.99949	ppb #	91
47) Methyl Cyclohexane	13.82	83	224538	9.48040	ppb	99
48) Dibromomethane	14.16	93	67527	10.15102	ppb	95
49) 2-Chloroethyl vinyl ether	14.57	63	42382	10.02259	ppb	95
50) 1-Bromo-2-chloroethane	14.88	63	147231	10.37368	ppb #	79
51) Cis-1,3-Dichloropropene	15.00	75	181879	10.03716	ppb	100
52) Toluene	15.63	91	678338	9.39804	ppb	99
53) Trans-1,3-Dichloropropene	15.80	75	126600	9.70449	ppb	98
54) 1,1,2-TCA	16.08	83	69681	9.91034	ppb	93
57) 1,2-EDB	17.33	107	79107	10.66417	ppb	94
58) Tetrachloroethene	16.78	164	202010	10.08114	ppb	94
59) 1-Chlorohexane	17.70	91	232734	10.08580	ppb	97
60) 1,1,1,2-Tetrachloroethane	18.16	131	138607	11.04877	ppb	99
61) m&p-Xylene	18.35	106	589147	19.90172	ppb	97
62) o-Xylene	19.11	106	295217	10.36928	ppb	98
63) Styrene	19.13	104	457607	10.64883	ppb	93
65) 2-Hexanone	16.11	43	38770	10.87089	ppb	95
66) 1,3-Dichloropropane	16.49	76	147530	10.08561	ppb	98
67) Dibromochloromethane	16.97	129	105397	11.03714	ppb	82
68) Chlorobenzene	18.10	112	437982	10.34243	ppb	97
69) Ethylbenzene	18.22	91	794180	10.07104	ppb	100
70) Bromoform	19.65	173	45131	9.31734	ppb	91
72) MIBK (methyl isobutyl keto	14.68	43	59150	9.77763	ppb	87
73) Isopropylbenzene	19.73	105	756513	9.80877	ppb	98
74) 1,1,2,2-Tetrachloroethane	19.90	83	66287	10.26718	ppb #	74
75) 1,2,3-Trichloropropane	20.16	110	8565	11.81260	ppb	82
76) t-1,4-Dichloro-2-Butene	20.23	53	14963	10.22116	ppb #	92
77) Bromobenzene	20.48	156	179052	10.06445	ppb	89
78) n-Propylbenzene	20.44	91	900774	9.79012	ppb	100
79) 4-Ethyltoluene	20.63	105	593563	9.32229	ppb	97
80) 2-Chlorotoluene	20.74	91	598129	9.81561	ppb	98
81) 1,3,5-Trimethylbenzene	20.72	105	617840	9.86323	ppb	99
82) 4-Chlorotoluene	20.82	91	502123	9.56935	ppb	98
83) Tert-Butylbenzene	21.36	119	672218	9.91209	ppb	97
84) 1,2,4-Trimethylbenzene	21.42	105	604092	9.23368	ppb	96
85) Sec-Butylbenzene	21.76	105	823845	10.12964	ppb	96
86) p-Isopropyltoluene	21.99	119	683604	9.81315	ppb	98
87) Benzyl Chloride	22.42	91	81362	8.79846	ppb	94
88) 1,3-DCB	22.12	146	351790	9.66926	ppb	95
89) 1,4-DCB	22.30	146	335795	9.94420	ppb	96
90) Hexachloroethane	23.59	117	92345	8.87470	ppb	87
91) n-Butylbenzene	22.69	91	582962	9.59448	ppb	98
92) 1,2-DCB	22.93	146	292666	10.11316	ppb	97
93) 1,2-Dibromo-3-chloropropan	24.14	155	10559	10.20135	ppb	92
94) 1,2,4-Trichlorobenzene	25.59	180	213173	10.16551	ppb	98
95) Hexachlorobutadiene	25.84	223	40176	10.54513	ppb	97
96) Naphthalene	25.94	128	272964	10.54986	ppb	99
97) 1,2,3-Trichlorobenzene	26.29	180	172357	10.86589	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1030C28W.D CALLW.M Tue Dec 06 18:23:45 2011

Quantitation Report

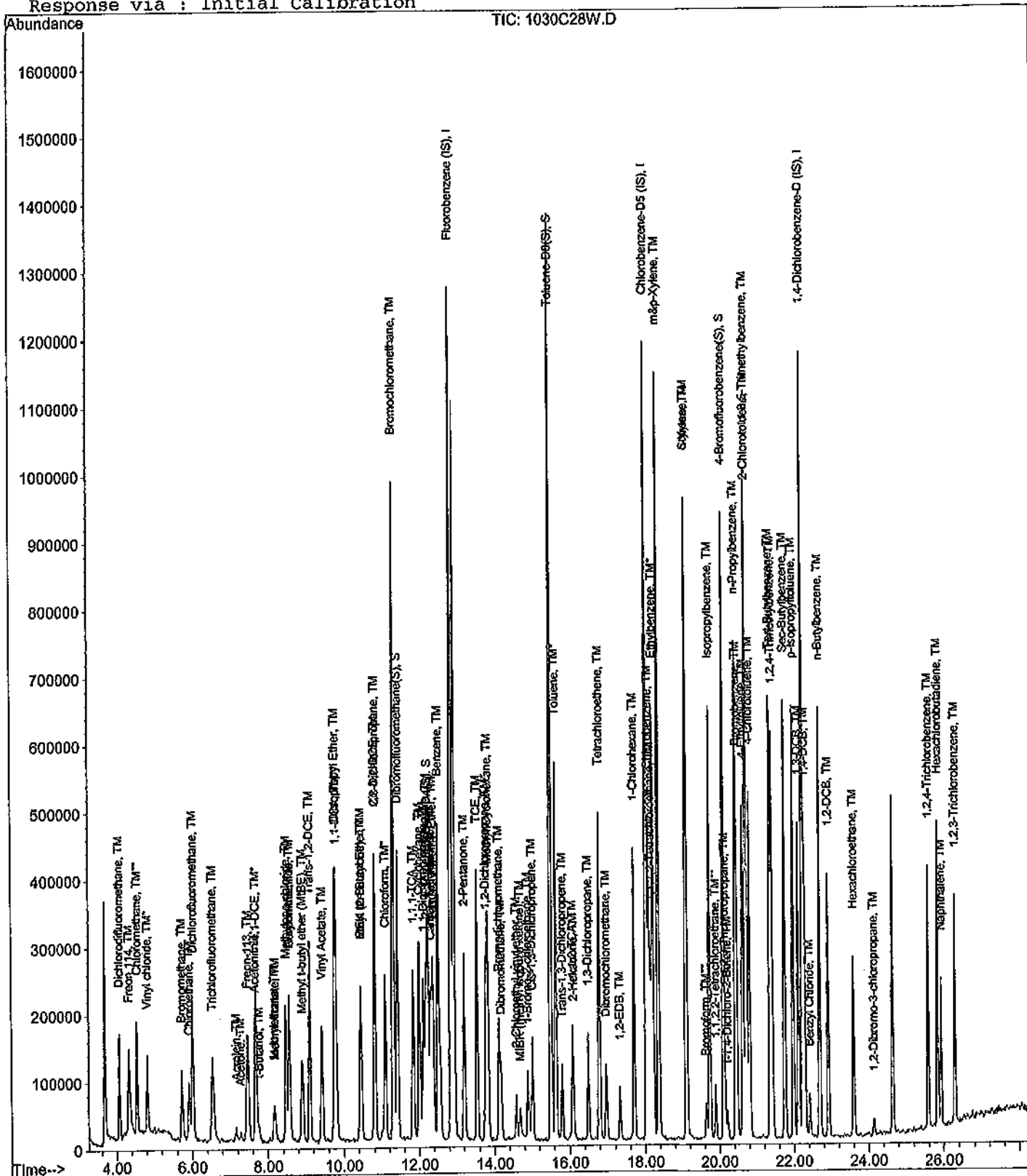
Data File : M:\CHICO\DATA\C111030\1030C28W.D  
Acq On : 31 Oct 11 8:48  
Sample : 111030A LCS-1WC (SS)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:32:50 2011  
Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: \_\_\_\_\_  
Date Analyzed: 10/31/2011  
Instrument: Chico  
Initial Cal. Date: 10/30/2011  
Data File: 1030C27W.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TM	Dichlorodifluoromethane	0.9211	0.9607	4.3	TM
3	TM	Freon 114	0.5769	0.6267	8.6	TM
4	TM**	Chloromethane	1.141	1.117	2.2	TM**
5	TM*	Vinyl chloride	0.7635	0.8485	11	TM*
6	TML	1,3-Butadiene	0.0000	0.0009	0.00	TML
7	TM	Bromomethane	0.5542	0.5584	0.75	TM
8	TM	Chloroethane	0.6306	0.6136	2.7	TM
9	TM	Dichlorofluoromethane	1.744	1.741	0.17	TM
10	TM	Trichlorofluoromethane	1.035	1.087	5.1	TM
11		Acetonitrile	0.0274	0.0255	6.7	
12	TM	Acrolein	0.0125	0.0117	6.4	TM
13	TML	Acetone	0.1859	0.0914	51	TML 28*
14	TML	Freon-113	0.5715	0.6270	9.7	TML 3.9
15	TM*	1,1-DCE	0.7137	0.6880	3.6	TM*
16	TM	t-Butanol	0.0034	0.0034	1.1	TM
17	TML	Methyl Acetate	0.2927	0.2052	30	TML 5.2
18	TML	Iodomethane	0.3500	0.4294	23	TML 7.7
19	TML	Acrylonitrile	0.0764	0.0791	3.5	TML 0.85
20	TM	Methylene chloride	0.6808	0.6482	4.8	TM
21	TM	Carbon disulfide	0.6935	0.6961	0.37	TM
22	TM	Methyl t-butyl ether (MtBE)	1.079	1.106	2.6	TM
23	TM	Trans-1,2-DCE	0.8280	0.7771	6.1	TM
24	TM	Diisopropyl Ether	2.385	2.416	1.3	TM
25	TM**	1,1-DCA	1.414	1.481	4.7	TM**
26	TML	Vinyl Acetate	0.5623	0.4689	17	TML 7.0
27	TM	Ethyl tert Butyl Ether	1.628	1.743	7.1	TM
28	TML	MEK (2-Butanone)	0.3591	0.2865	20	TML 0.79
29	TM	Cis-1,2-DCE	0.8509	0.8285	2.6	TM
30	TM	2,2-Dichloropropane	1.013	0.9291	8.3	TM
31	TM*	Chloroform	1.361	1.374	1.0	TM*
32	TM	Bromochloromethane	0.2369	0.2573	8.6	TM
33	S	Dibromofluoromethane(S)	0.6660	0.6943	4.3	S
34	TM	1,1,1-TCA	1.237	1.277	3.2	TM
35	TM	Cyclohexane	1.152	1.162	0.83	TM
36	TM	1,1-Dichloropropene	1.060	1.091	2.9	TM
37	TML	2,2,4-Trimethylpentane	2.316	1.777	23	TML 2.1
38	S	1,2-DCA-D4(S)	0.6928	0.5850	1.3	S
39	TM	Carbon Tetrachloride	0.8521	0.9156	7.5	TM
40	TM	Tert Amyl Methyl Ether	1.217	1.268	4.1	TM

Average

7.7

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: \_\_\_\_\_  
Date Analyzed: 10/31/2011  
Instrument: Chico  
Cal. Date: 10/30/2011  
Data File: 1030C27W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	1,2-DCA	0.6984	0.7162	2.5	TM
42	TM	Benzene	3.046	3.004	1.4	TM
43	TM	TCE	0.8437	0.8976	6.4	TM
44	TM	2-Pentanone	0.1765	0.1801	2.0	TM
45	TM*	1,2-Dichloropropane	0.6924	0.7108	2.7	TM*
46	TM	Bromodichloromethane	0.7910	0.8325	5.2	TM
47	TM	Methyl Cyclohexane	0.9859	0.9762	0.98	TM
48	TM	Dibromomethane	0.2769	0.3053	10	TM
49	TM	2-Chloroethyl vinyl ether	0.1760	0.1791	1.8	TM
50	TM	1-Bromo-2-chloroethane	0.5908	0.6158	4.2	TM
51	TM	Cis-1,3-Dichloropropene	0.7543	0.7871	4.4	TM
52	TM*	Toluene	3.005	3.021	0.56	TM*
53	TM	Trans-1,3-Dichloropropene	0.5430	0.5626	3.6	TM
54	TM	1,1,2-TCA	0.2927	0.3204	9.5	TM
55	I	Chlorobenzene-D5 (IS)	ISTD			I
56	S	Toluene-D8(S)	3.518	3.735	6.2	S
57	TM	1,2-EDB	0.4758	0.5192	9.1	TM
58	TM	Tetrachloroethene	1.285	1.322	2.9	TM
59	TM	1-Chlorohexane	1.480	1.498	1.2	TM
60	TM	1,1,1,2-Tetrachloroethane	0.8047	0.9010	12	TM
61	TM	m&p-Xylene	1.899	1.872	1.4	TM
62	TM	o-Xylene	1.826	1.841	0.81	TM
63	TM	Styrene	2.756	2.893	5.0	TM
64	S	4-Bromofluorobenzene(S)	1.260	1.340	6.3	S
65	TM	2-Hexanone	0.2288	0.2478	8.3	TM
66	TM	1,3-Dichloropropane	0.9383	0.9771	4.1	TM
67	TM	Dibromochloromethane	0.6125	0.6543	6.8	TM
68	TM**	Chlorobenzene	2.716	2.717	0.01	TM**
69	TM*	Ethylbenzene	5.058	5.085	0.53	TM*
70	TM**L	Bromoform	0.2607	0.2986	15	TM**L 4.2
71	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
72	TM	MIBK (methyl isobutyl ketone)	0.7107	0.6949	2.2	TM
73	TM	Isopropylbenzene	9.061	9.158	1.1	TM
74	TM**	1,1,2,2-Tetrachloroethane	0.7585	0.7768	2.4	TM**
75	TML	1,2,3-Trichloropropane	0.0967	0.1005	4.0	TML 18
76	TM	t-1,4-Dichloro-2-Butene	0.1720	0.1640	4.7	TM
77	TM	Bromobenzene	2.090	2.096	0.30	TM
78	TM	n-Propylbenzene	10.8	11.1	2.9	TM
79	TM	4-Ethyltoluene	7.480	7.378	1.4	TM
80	TM	2-Chlorotoluene	7.159	7.296	1.9	TM

Average

4.1

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Continuing Calibration

Lab Name: APPL, Inc.

SDG No: \_\_\_\_\_

Case No: \_\_\_\_\_

Date Analyzed: 10/31/2011

Matrix: 0

Instrument: Chico

Cal. Date: 10/30/2011

Data File: 1030C27W.D

		Compound	MEAN	CCRF	%D	%Drift
81	TM	1,3,5-Trimethylbenzene	7.359	7.417	0.79	TM
82	TM	4-Chlorotoluene	6.164	6.076	1.4	TM
83	TM	Tert-Butylbenzene	7.967	8.229	3.3	TM
84	TM	1,2,4-Trimethylbenzene	7.686	7.406	3.6	TM
85	TM	Sec-Butylbenzene	9.555	9.767	2.2	TM
86	TM	p-Isopropyltoluene	8.184	8.300	1.4	TM
87	TM	Benzyl Chloride	1.086	0.9882	9.0	TM
88	TM	1,3-DCB	4.274	4.305	0.72	TM
89	TM	1,4-DCB	3.967	4.065	2.5	TM
90	TML	Hexachloroethane	1.021	1.118	9.5	TML 9.2
91	TM	n-Butylbenzene	7.138	6.965	2.4	TM
92	TM	1,2-DCB	3.400	3.527	3.7	TM
93	TML	1,2-Dibromo-3-chloropropane	0.1148	0.1161	1.2	TML 3.7
94	TM	1,2,4-Trichlorobenzene	2.464	2.540	3.1	TM
95	TM	Hexachlorobutadiene	0.4476	0.4532	1.2	TM
96	TM	Naphthalene	3.040	3.215	5.8	TM
97	TM	1,2,3-Trichlorobenzene	1.864	1.911	2.5	TM
98						
99						
100						
101						
102						
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107						
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113						
114						
115						
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117						
118						
119						
120						

Average

3.2

Data File : M:\CHICO\DATA\C111030\1030C27W.D Vial: 1  
 Acq On : 31 Oct 11 8:05 Operator: STC  
 Sample : Voc Std 10-30-11@10ug/L Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.84	96	583168	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.03	117	397504	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	209984	25.00000	ppb	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
33) Dibromofluoromethane (S)	11.43	111	404916	26.06515	ppb	0.00
Spiked Amount 25.097			Recovery = 103.856%			
38) 1,2-DCA-D4 (S)	12.23	65	341171	24.67132	ppb	0.00
Spiked Amount 24.225			Recovery = 101.840%			
56) Toluene-D8 (S)	15.50	98	1484769	26.54660	ppb	0.00
Spiked Amount 25.808			Recovery = 102.862%			
64) 4-Bromofluorobenzene (S)	20.11	95	532764	26.58449	ppb	0.00
Spiked Amount 25.459			Recovery = 104.417%			

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.06	85	224089	10.42966	ppb	97
3) Freon 114	4.33	85	146183	10.86336	ppb	98
4) Chloromethane	4.55	50	260469	9.78278	ppb	98
5) Vinyl chloride	4.82	62	197919	11.11320	ppb	95
7) Bromomethane	5.72	94	130249	10.07502	ppb	89
8) Chloroethane	5.91	64	143140	9.73031	ppb	99
9) Dichlorofluoromethane	6.00	67	406047	9.98304	ppb	100
10) Trichlorofluoromethane	6.52	101	253658	10.50908	ppb	97
11) Acetonitrile	7.65	41	74497	116.61139	ug/l	100
12) Acrolein	7.15	56	34193	116.96262	ppb	94
13) Acetone	7.29	43	21316	12.75773	ppb	77
14) Freon-113	7.46	101	146261	10.39098	ppb	94
15) 1,1-DCE	7.68	96	160490	9.63955	ppb	97
16) t-Butanol	7.76	59	9773	123.61847	ppb	100
17) Methyl Acetate	8.19	43	47860	9.47524	ppb	98
18) Iodomethane	8.17	142	100159	10.76585	ppb	# 89
19) Acrylonitrile	8.55	53	18444	10.08467	ppb	84
20) Methylene chloride	8.48	84	151205	9.52169	ppb	86
21) Carbon disulfide	8.55	76	162368	10.03707	ppb	98
22) Methyl t-butyl ether (MtBE)	8.90	73	258098	10.25631	ppb	95
23) Trans-1,2-DCE	9.09	96	181275	9.38557	ppb	90
24) Diisopropyl Ether	9.75	45	563558	10.12996	ppb	96
25) 1,1-DCA	9.79	63	345459	10.47072	ppb	97
26) Vinyl Acetate	9.42	43	109376	10.70268	ppb	# 83
27) Ethyl tert Butyl Ether	10.45	59	406696	10.70784	ppb	94
28) MEK (2-Butanone)	10.43	43	66821	10.07941	ppb	96
29) Cis-1,2-DCE	10.81	96	193255	9.73664	ppb	97
30) 2,2-Dichloropropane	10.81	77	216729	9.17030	ppb	95
31) Chloroform	11.09	83	320623	10.10165	ppb	99
32) Bromochloromethane	11.31	128	60012	10.86042	ppb	81
34) 1,1,1-TCA	11.83	97	297856	10.31908	ppb	97
35) Cyclohexane	12.01	56	270975	10.08282	ppb	92
36) 1,1-Dichloropropene	12.10	75	254512	10.29044	ppb	100
37) 2,2,4-Trimethylpentane	12.18	57	414560	9.79424	ppb	98
39) Carbon Tetrachloride	12.30	117	213577	10.74550	ppb	94
40) Tert Amyl Methyl Ether	12.34	73	295693	10.41194	ppb	98

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

1030C27W.D CALLW.M Fri Dec 02 11:35:08 2011

Data File : M:\CHICO\DATA\C111030\1030C27W.D  
 Acq On : 31 Oct 11 8:05  
 Sample : Voc Std 10-30-11@10ug/L  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 1,2-DCA	12.37	62	167070	10.25463	ppb	96
42) Benzene	12.50	78	700767	9.86177	ppb	97
43) TCE	13.53	95	209384	10.63947	ppb	91
44) 2-Pentanone	13.20	43	525053	127.54364	ppb	98
45) 1,2-Dichloropropane	13.76	63	165813	10.26618	ppb	# 93
46) Bromodichloromethane	14.12	83	194189	10.52386	ppb	# 92
47) Methyl Cyclohexane	13.82	83	227722	9.90185	ppb	99
48) Dibromomethane	14.17	93	71228	11.02699	ppb	99
49) 2-Chloroethyl vinyl ether	14.57	63	41783	10.17589	ppb	97
50) 1-Bromo-2-chloroethane	14.88	63	143648	10.42335	ppb	87
51) Cis-1,3-Dichloropropene	15.01	75	183608	10.43504	ppb	97
52) Toluene	15.63	91	704784	10.05591	ppb	96
53) Trans-1,3-Dichloropropene	15.80	75	131238	10.36031	ppb	91
54) 1,1,2-TCA	16.09	83	74743	10.94760	ppb	93
57) 1,2-EDB	17.33	107	82556	10.91231	ppb	91
58) Tetrachloroethene	16.79	164	210273	10.28907	ppb	91
59) 1-Chlorohexane	17.70	91	238146	10.11928	ppb	96
60) 1,1,1,2-Tetrachloroethane	18.16	131	143265	11.19759	ppb	93
61) m&p-Xylene	18.35	106	595342	19.71920	ppb	97
62) o-Xylene	19.11	106	292710	10.08093	ppb	98
63) Styrene	19.12	104	460015	10.49632	ppb	97
65) 2-Hexanone	16.10	43	39396	10.83121	ppb	# 75
66) 1,3-Dichloropropane	16.49	76	155367	10.41445	ppb	95
67) Dibromochloromethane	16.97	129	104038	10.68258	ppb	89
68) Chlorobenzene	18.10	112	431948	10.00123	ppb	95
69) Ethylbenzene	18.22	91	808497	10.05286	ppb	95
70) Bromoform	19.64	173	47481	9.57573	ppb	# 74
72) MIBK (methyl isobutyl keto)	14.68	43	58368	9.77776	ppb	91
73) Isopropylbenzene	19.74	105	769191	10.10690	ppb	99
74) 1,1,2,2-Tetrachloroethane	19.90	83	65243	10.24099	ppb	86
75) 1,2,3-Trichloropropane	20.15	110	8442	11.79921	ppb	79
76) t-1,4-Dichloro-2-Butene	20.23	53	13773	9.53445	ppb	# 90
77) Bromobenzene	20.48	156	176075	10.02984	ppb	93
78) n-Propylbenzene	20.44	91	934437	10.29219	ppb	100
79) 4-Ethyltoluene	20.64	105	619715	9.86355	ppb	96
80) 2-Chlorotoluene	20.73	91	612789	10.19105	ppb	97
81) 1,3,5-Trimethylbenzene	20.71	105	623010	10.07914	ppb	97
82) 4-Chlorotoluene	20.82	91	510371	9.85698	ppb	98
83) Tert-Butylbenzene	21.36	119	691172	10.32825	ppb	98
84) 1,2,4-Trimethylbenzene	21.42	105	622056	9.63577	ppb	97
85) Sec-Butylbenzene	21.76	105	820355	10.22199	ppb	99
86) p-Isopropyltoluene	21.99	119	697110	10.14123	ppb	99
87) Benzyl Chloride	22.42	91	83004	9.09640	ppb	99
88) 1,3-DCB	22.13	146	361602	10.07224	ppb	95
89) 1,4-DCB	22.30	146	341438	10.24691	ppb	96
90) Hexachloroethane	23.60	117	93885	9.08419	ppb	96
91) n-Butylbenzene	22.70	91	585015	9.75739	ppb	98
92) 1,2-DCB	22.93	146	296267	10.37488	ppb	95
93) 1,2-Dibromo-3-chloropropan	24.14	155	9755	9.63316	ppb	88
94) 1,2,4-Trichlorobenzene	25.59	180	213308	10.30836	ppb	97
95) Hexachlorobutadiene	25.84	223	38064	10.12477	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1030C27W.D CALLW.M Fri Dec 02 11:35:09 2011

Data File : M:\CHICO\DATA\C111030\1030C27W.D Vial: 1  
 Acq On : 31 Oct 11 8:05 Operator: STC  
 Sample : Voc Std 10-30-11@10ug/L Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) Naphthalene	25.94	128	270062	10.57768	ppb	99
97) 1,2,3-Trichlorobenzene	26.29	180	160478	10.25268	ppb	93



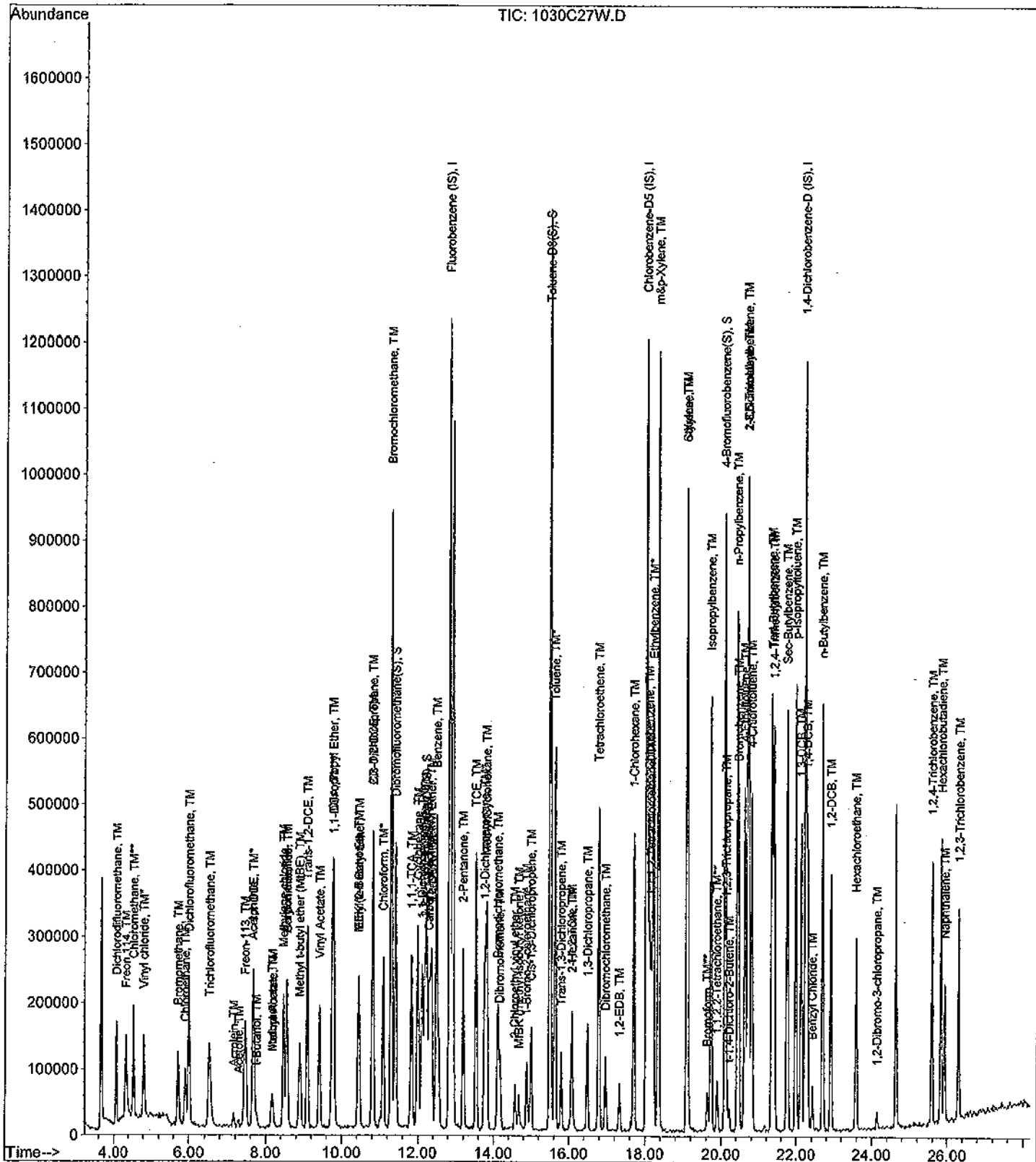
Data File : M:\CHICO\DATA\C111030\1030C27W.D  
Acq On : 31 Oct 11 8:05  
Sample : Voc Std 10-30-11@10ug/L  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:32:50 2011  
Response via : Initial Calibration





Data File : M:\CHICO\DATA\C111030\1030C05W.D Vial: 1  
 Acq On : 30 Oct 11 16:17 Operator: STC  
 Sample : Vol Std 10-30-11@20ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:29 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.86	TIC	1064868	25.00000	ppb	0.02
3) Chlorobenzene-D5 (IS)	18.05	TIC	1075283	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.26	TIC	1031464	25.00000	ppb	0.02

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	18.05	TIC	15186538m	62.79631	ppb	100

Quantitation Report

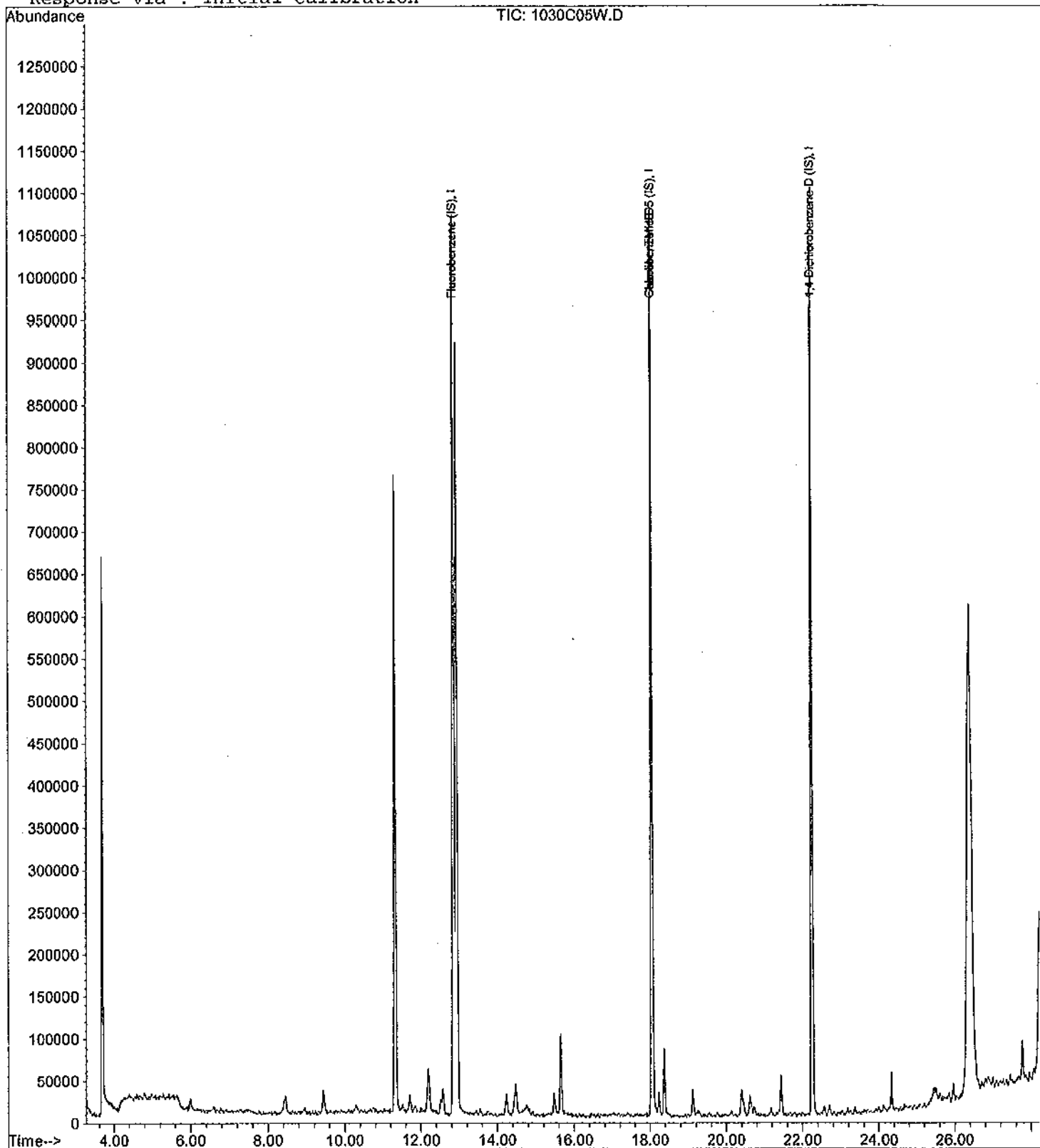
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Acq On : 30 Oct 11 16:17  
Sample : Vol Std 10-30-11@20ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:29 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration

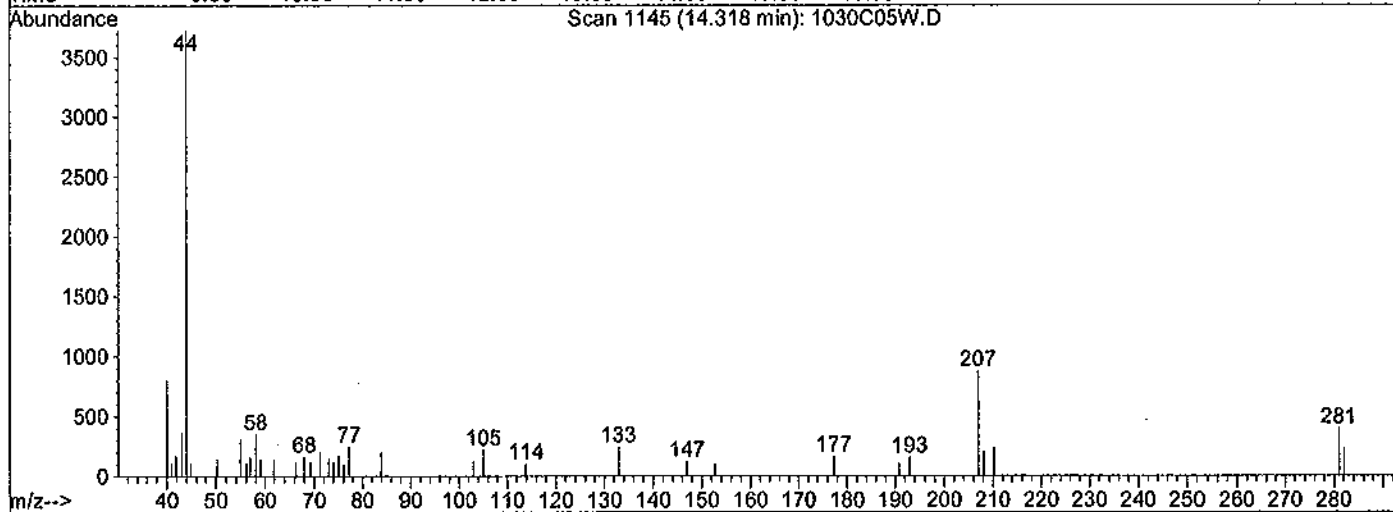
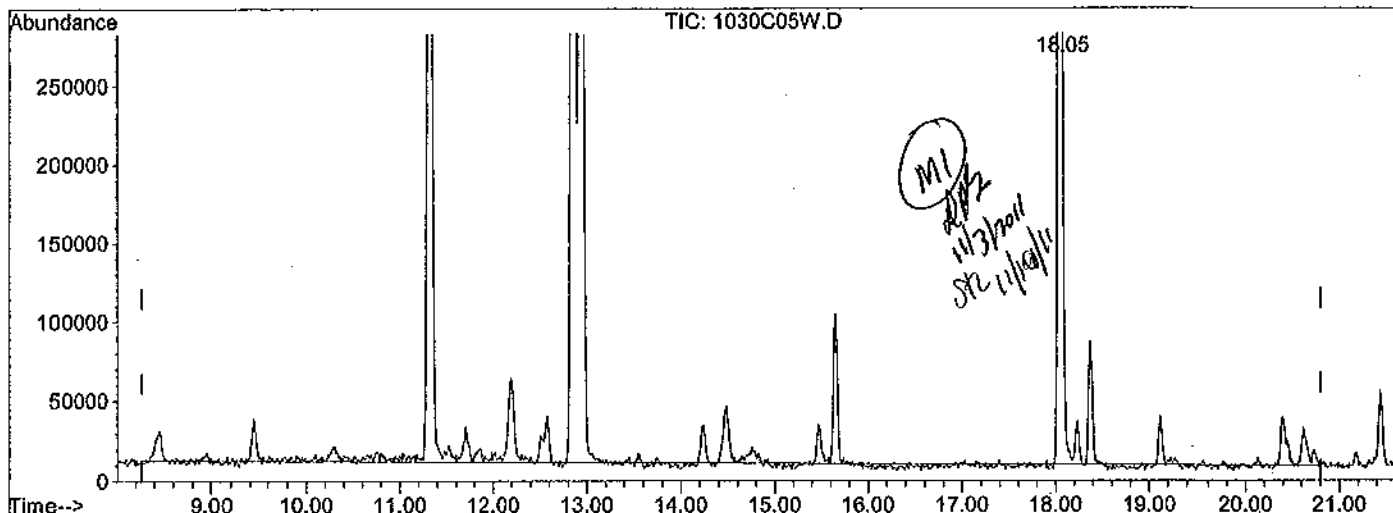


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C05W.D  
 Acq On : 30 Oct 11 16:17  
 Sample : Vol Std 10-30-11@20ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C05W.D

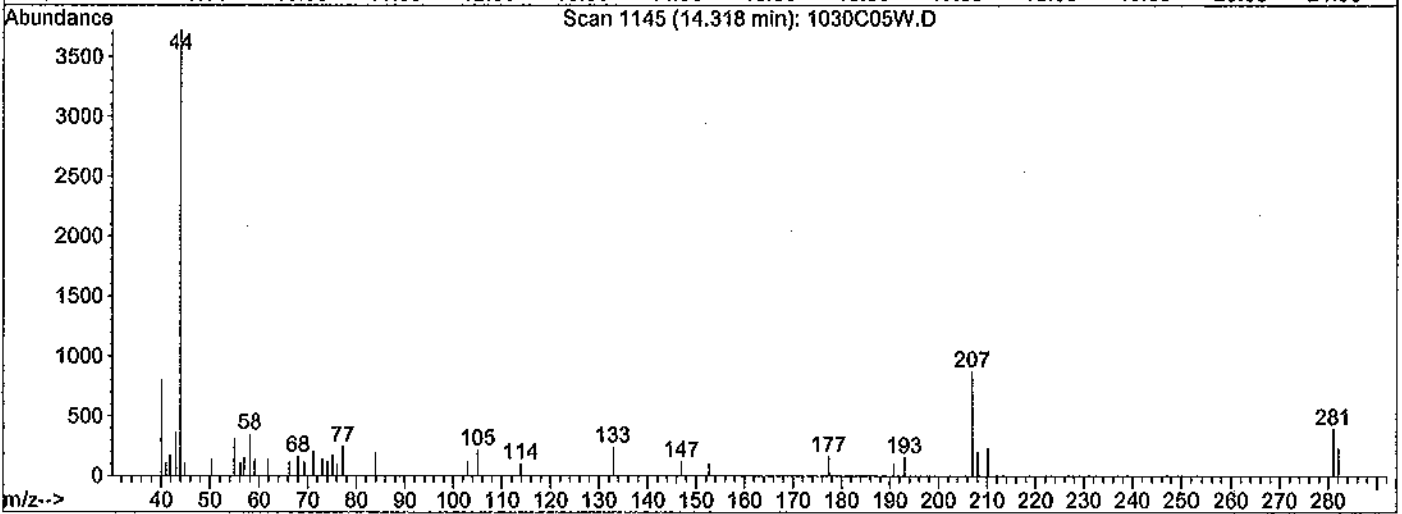
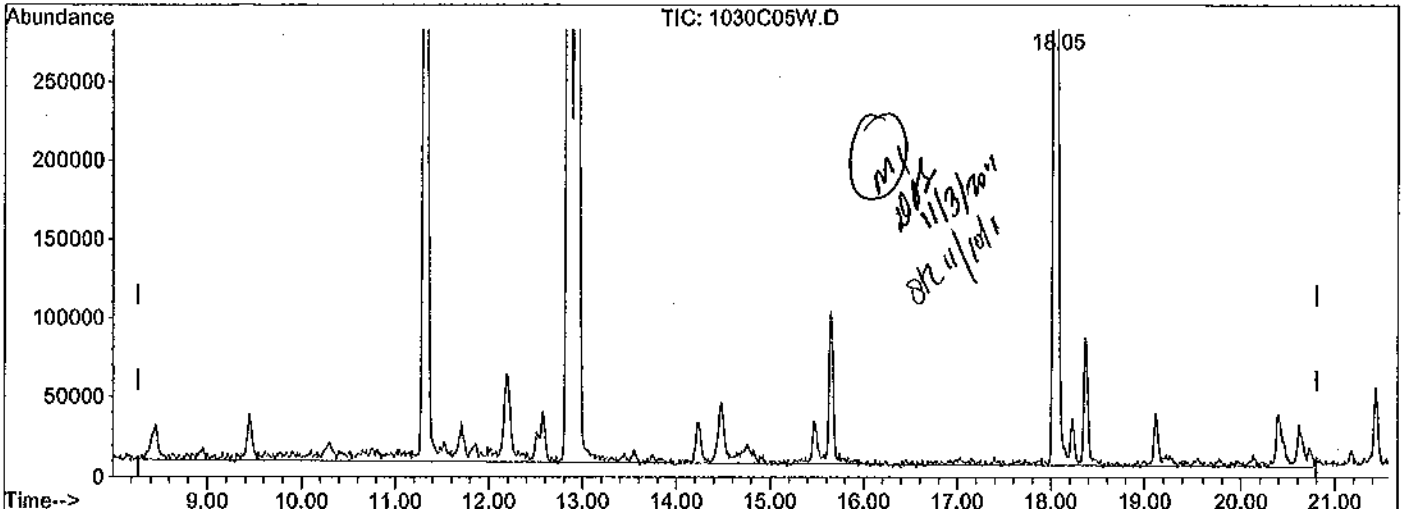
(2) Gasoline (TMHB)		
14.31min	48.1330ppb m	
response	11640400	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.82#
0.00	0.00	2.44#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C05W.D  
 Acq On : 30 Oct 11 16:17  
 Sample : Vol Std 10-30-11@20ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:29 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C05W.D

(2) Gasoline (TMHB)

18.05min 62.7963ppb m

response 15186538

Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.63#
0.00	0.00	1.87#
0.00	0.00	0.00

Data File : M:\CHICO\DATA\C111030\1030C06W.D Vial: 1  
 Acq On : 30 Oct 11 17:00 Operator: STC  
 Sample : Vol Std 10-30-11@50ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:30 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1074535	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.04	TIC	1105653	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1049854	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	18.04	TIC	17501250m	71.71659	ppb	100

Quantitation Report

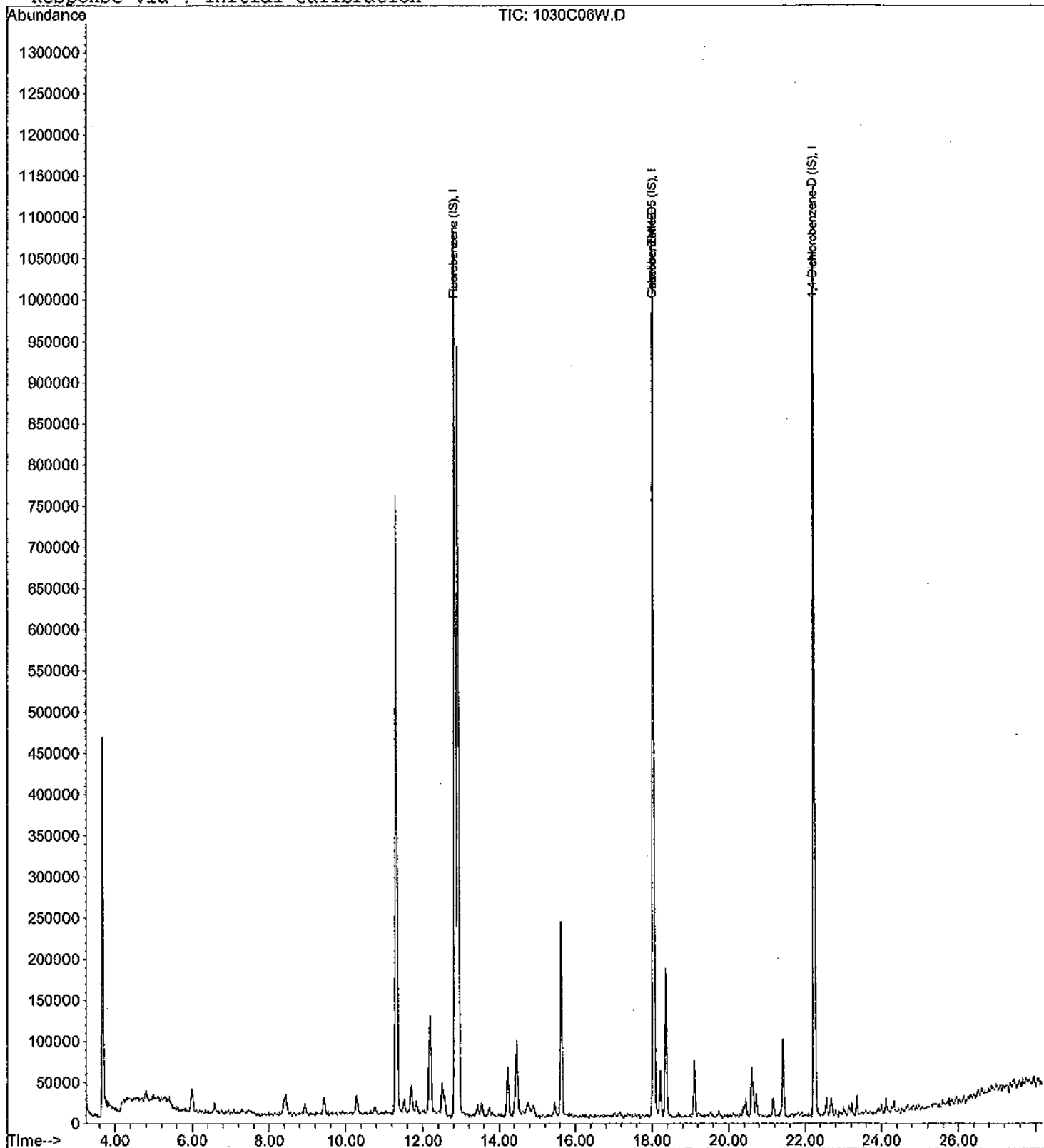
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Acq On : 30 Oct 11 17:00  
Sample : Vol Std 10-30-11@50ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:30 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



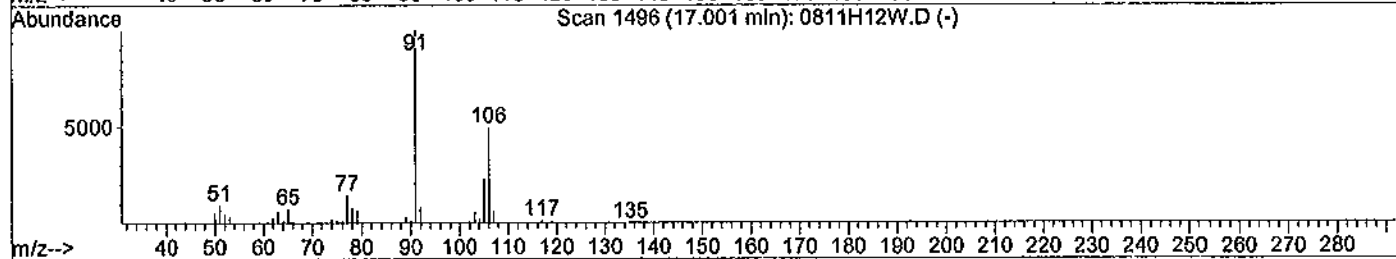
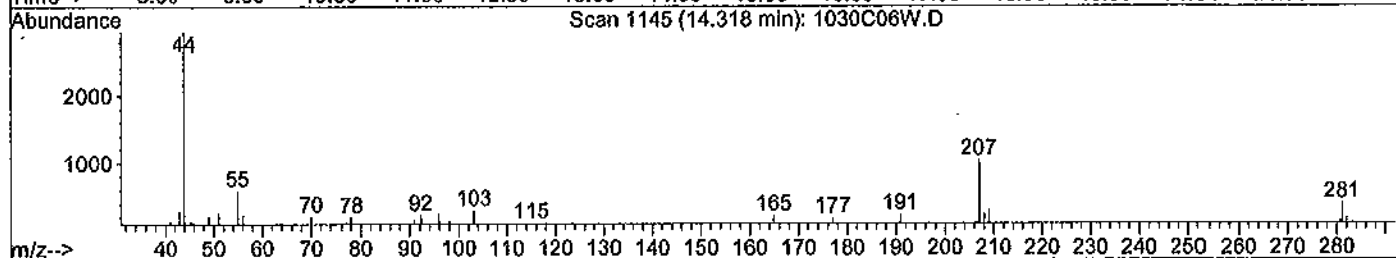
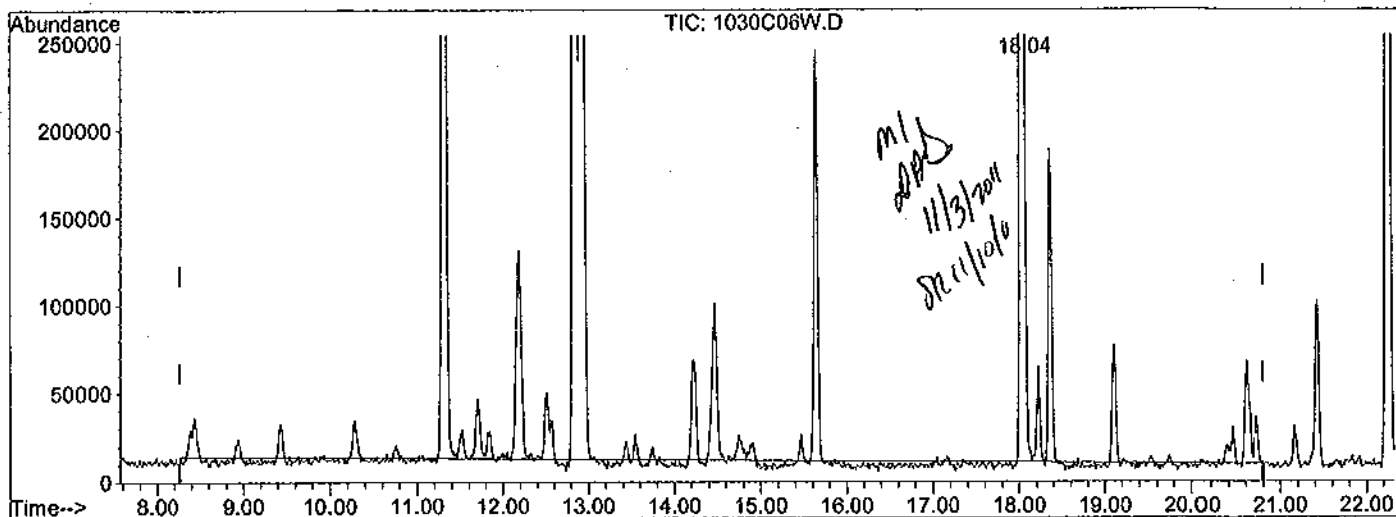


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C06W.D  
 Acq On : 30 Oct 11 17:00  
 Sample : Vol Std 10-30-11@50ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C06W.D

(2) Gasoline (TMHB)

14.31min 58.1426ppb m

response 14188741

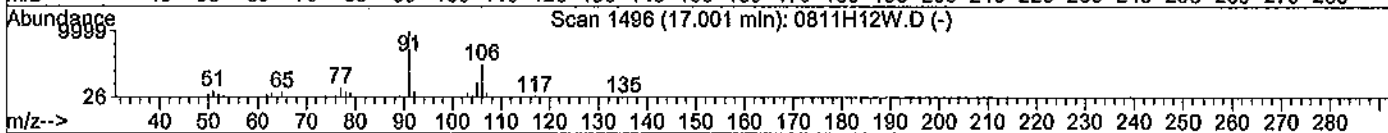
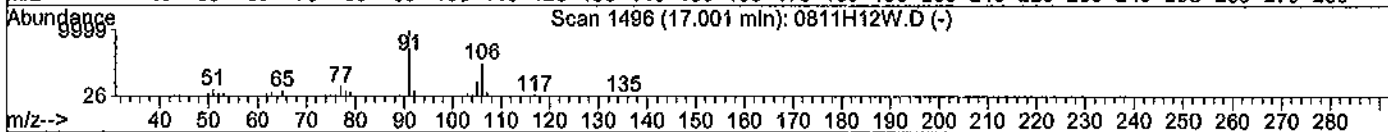
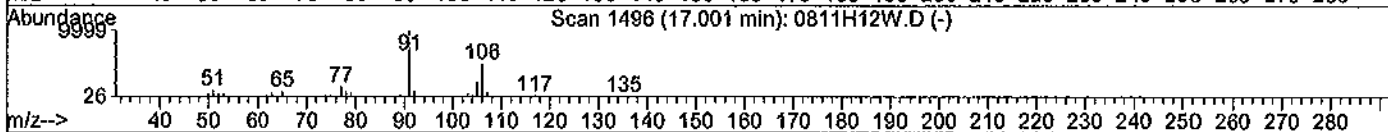
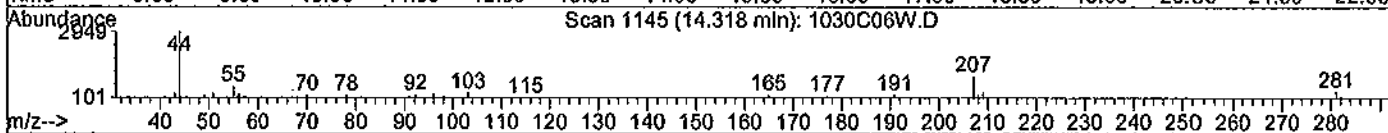
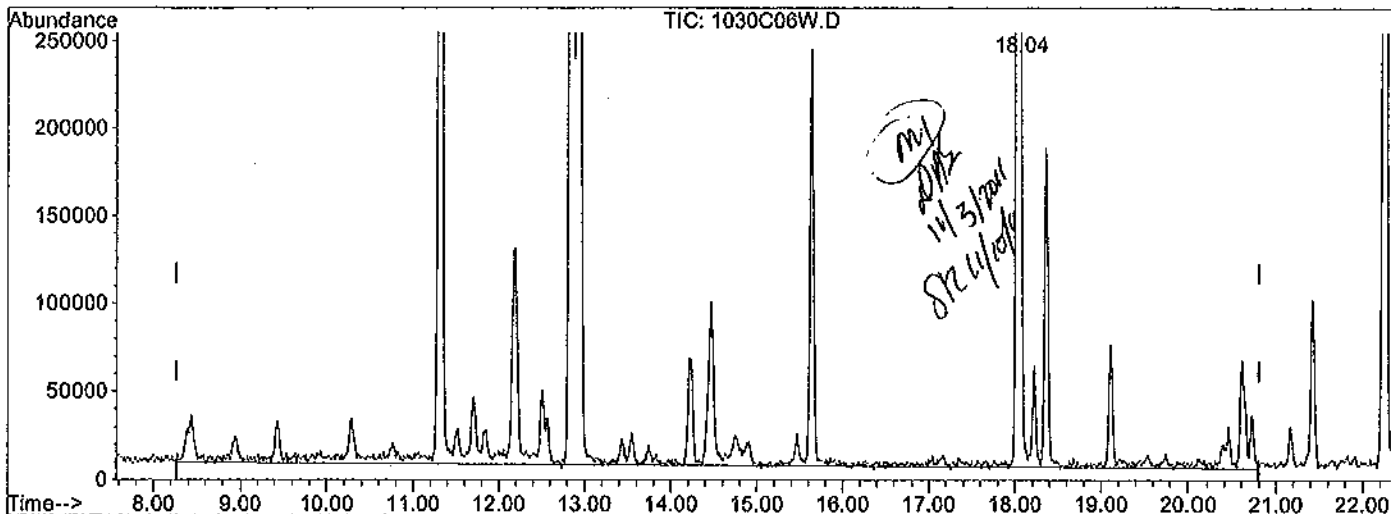
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.68#
0.00	0.00	2.00#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C06W.D  
 Acq On : 30 Oct 11 17:00  
 Sample : Vol Std 10-30-11@50ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:30 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C06W.D

(2) Gasoline (TMHB)		
18.04min	71.7166ppb m	
response	17501250	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.55#
0.00	0.00	1.62#
0.00	0.00	0.00

Data File : M:\CHICO\DATA\C111030\1030C07W.D Vial: 1  
 Acq On : 30 Oct 11 17:43 Operator: STC  
 Sample : Vol Std 10-30-11@100ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:38 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1049972	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.04	TIC	1057194	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1054110	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	18.04	TIC	21647604m	90.78273	ppb	100

Quantitation Report

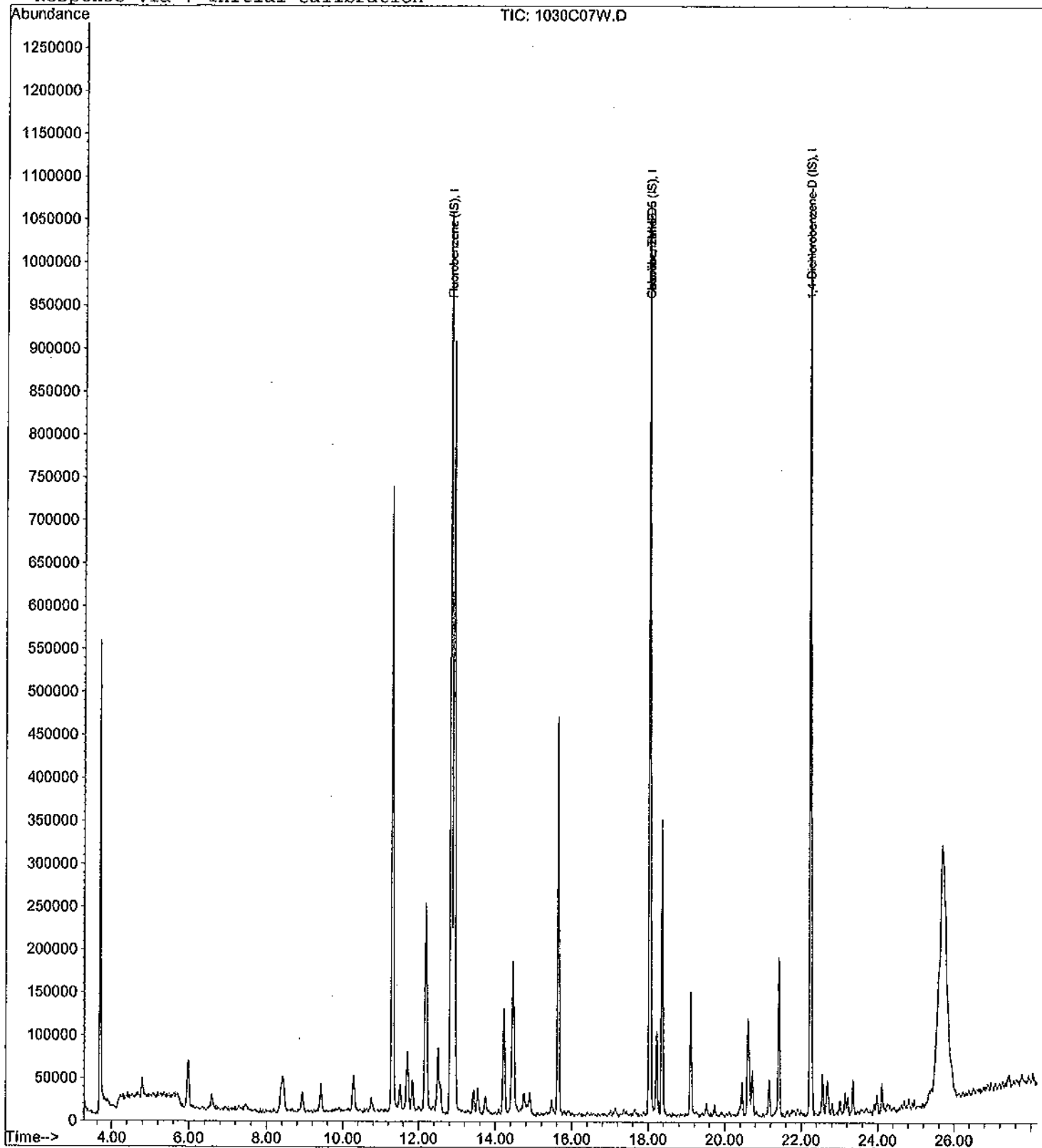
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Acq On : 30 Oct 11 17:43  
Sample : Vol Std 10-30-11@100ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:38 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration

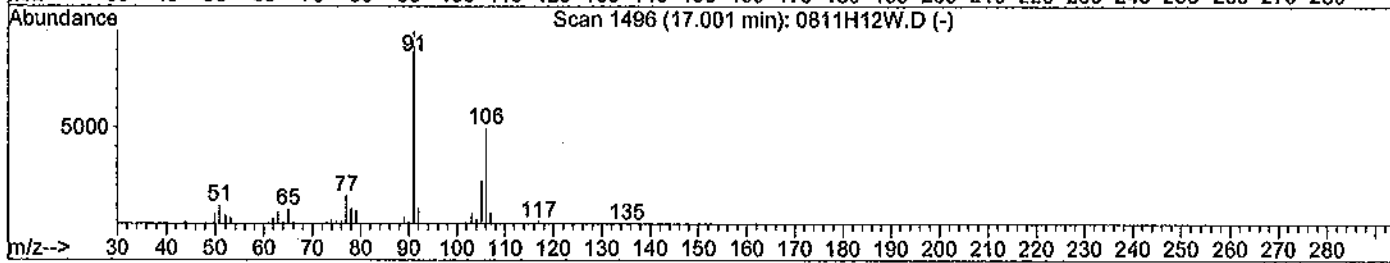
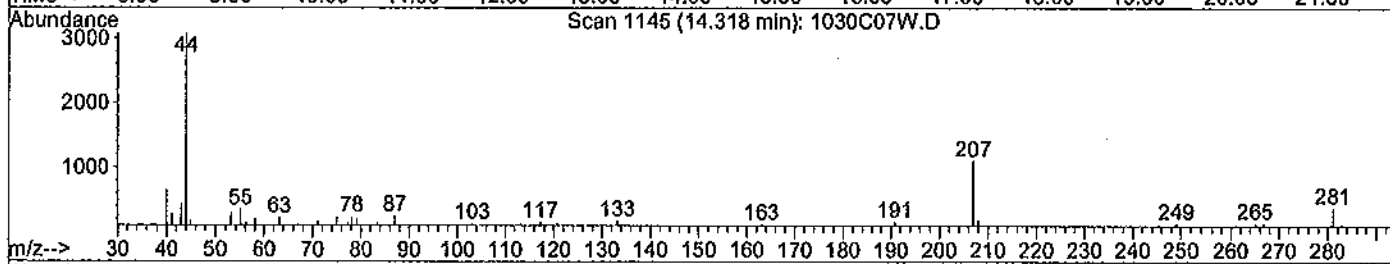
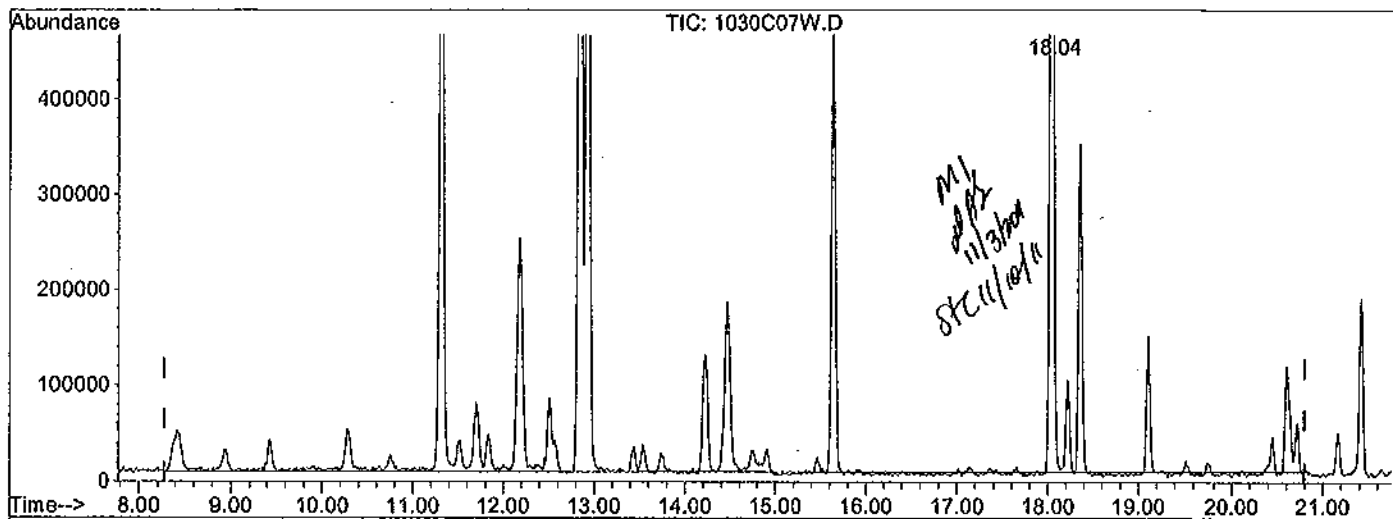


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C07W.D  
 Acq On : 30 Oct 11 17:43  
 Sample : Vol Std 10-30-11@100ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C07W.D

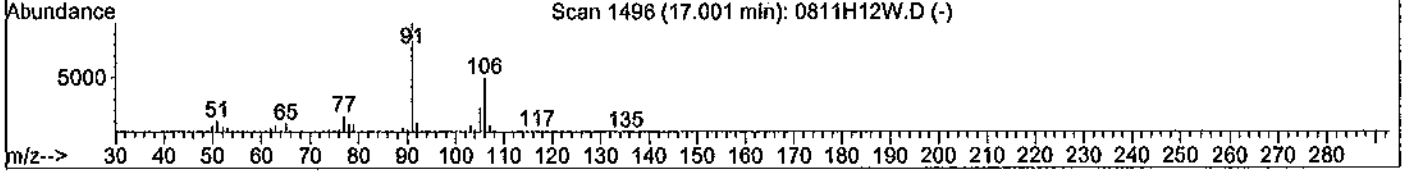
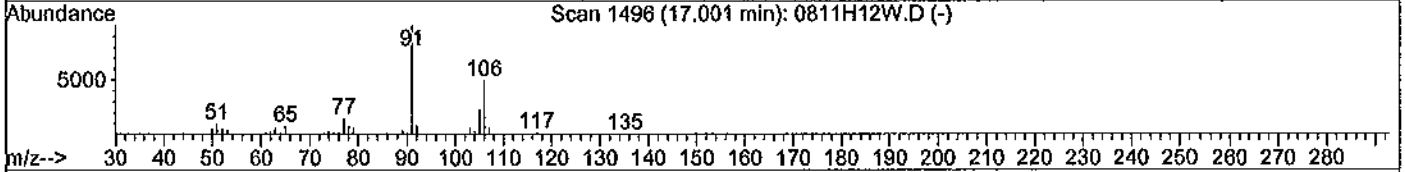
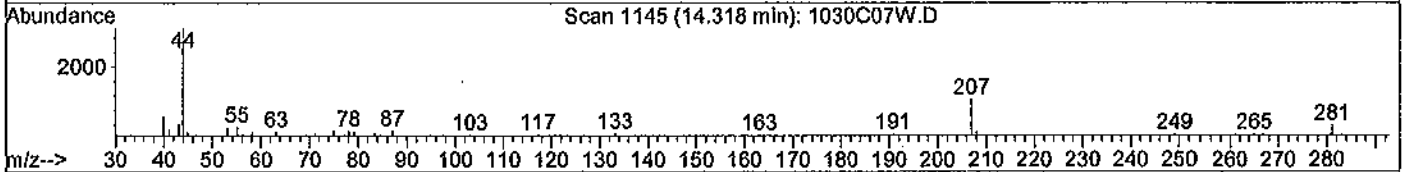
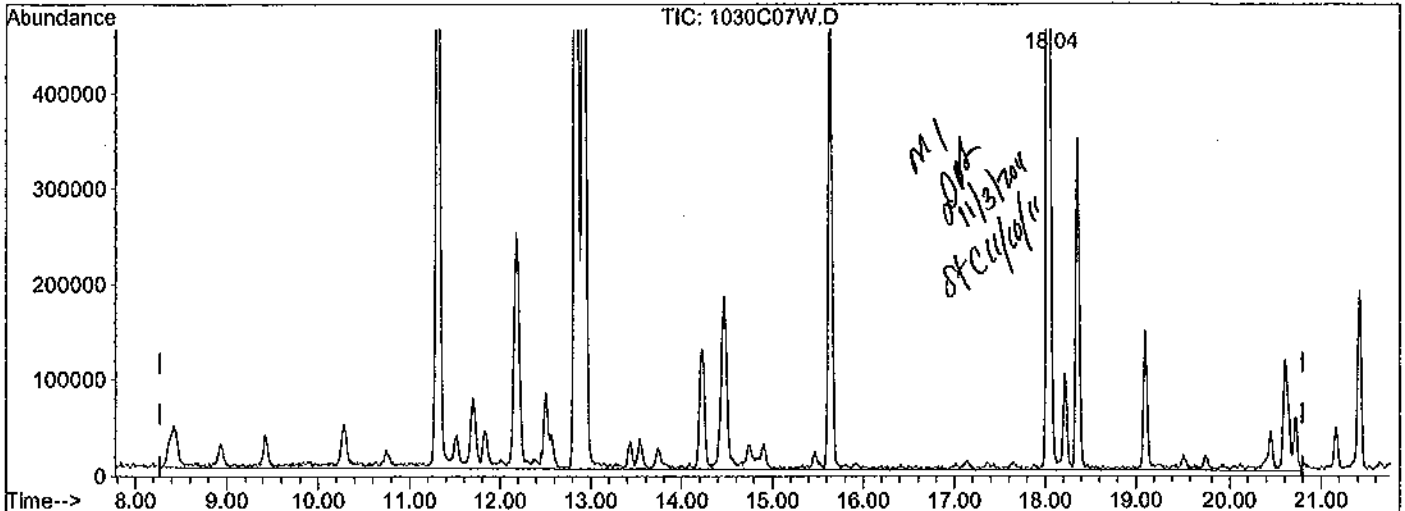
(2) Gasoline (TMHB)		
14.31min	75.4746ppb m	
response	17997299	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.55#
0.00	0.00	1.56#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C07W.D  
 Acq On : 30 Oct 11 17:43  
 Sample : Vol Std 10-30-11@100ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:38 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C07W.D

(2) Gasoline (TMHB)		
18.04min	90.7827ppb m	
response	21647604	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.45#
0.00	0.00	1.30#
0.00	0.00	0.00

Data File : M:\CHICO\DATA\C111030\1030C08W.D Vial: 1  
 Acq On : 30 Oct 11 18:26 Operator: STC  
 Sample : Vol Std 10-30-11@300ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:40 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1085666	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.04	TIC	1080398	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1118273	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	39740510m	161.17894	ppb	100

Quantitation Report

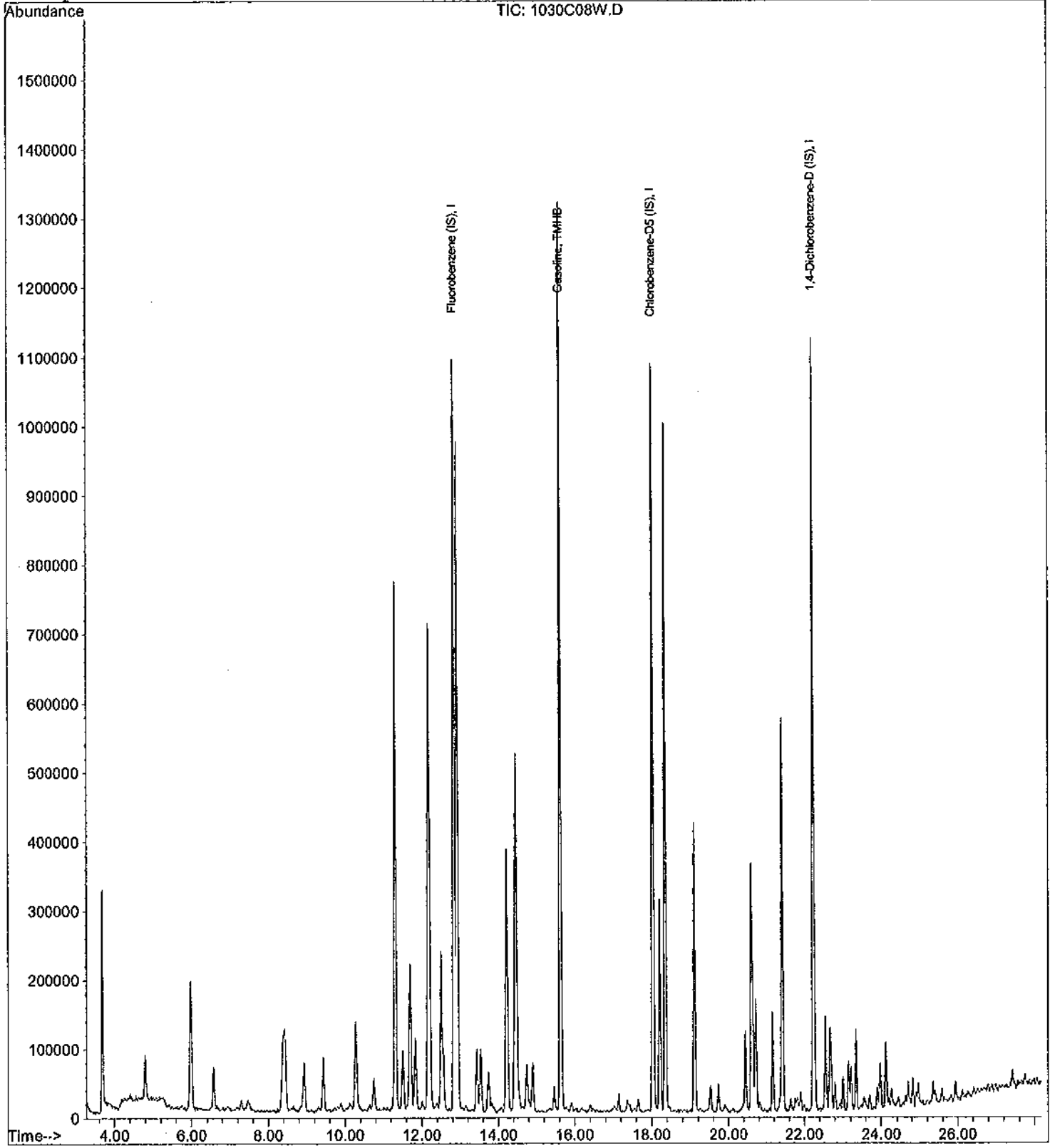
Data File : M:\CHICO\DATA\C111030\1030C08W.D  
Acq On : 30 Oct 11 18:26  
Sample : Vol Std 10-30-11@300ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:40 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration





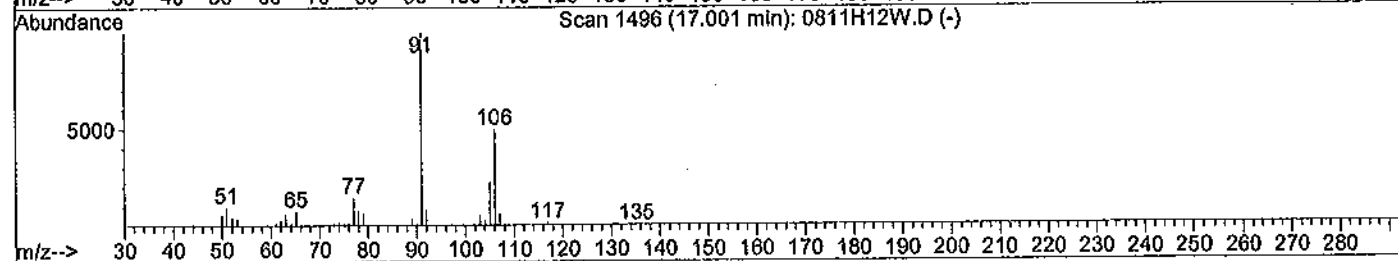
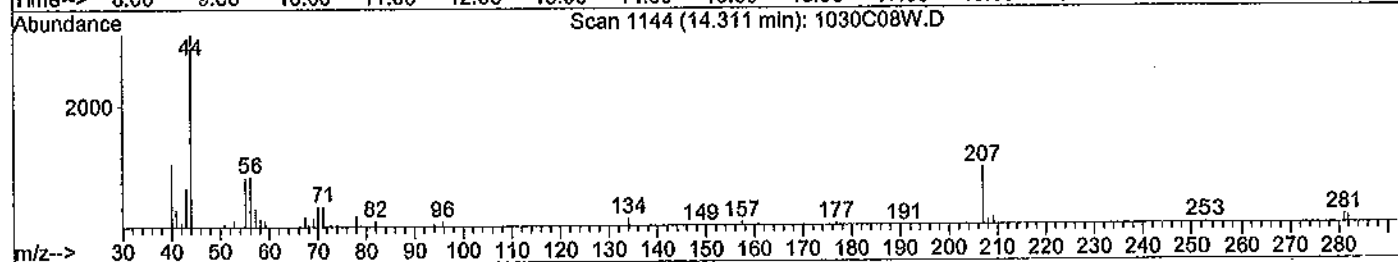
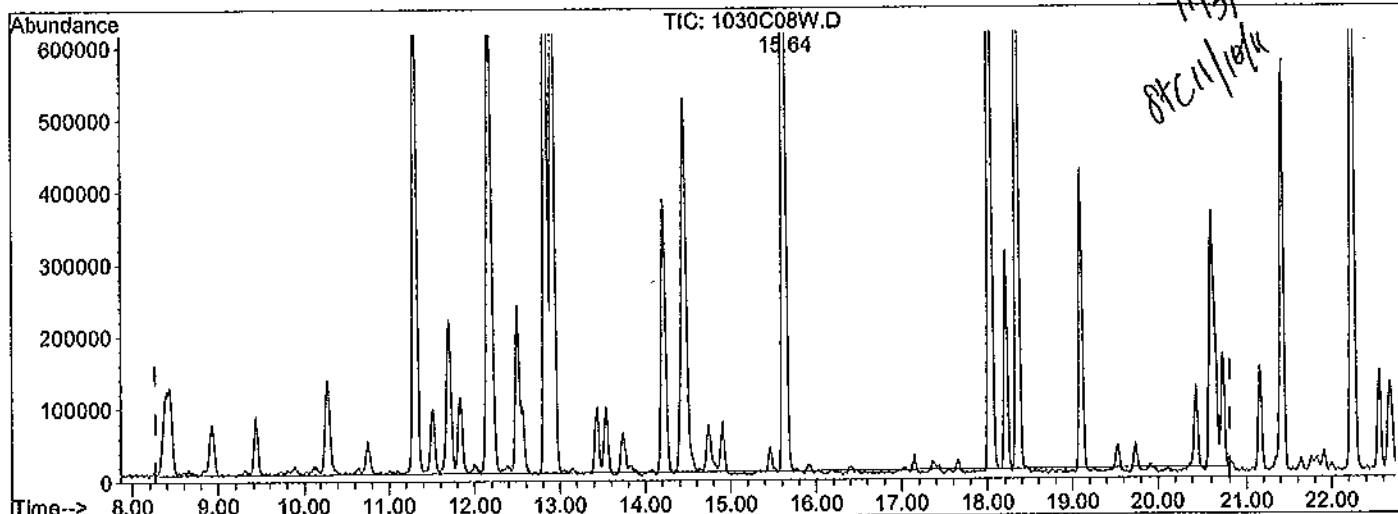
Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C08W.D  
 Acq On : 30 Oct 11 18:26  
 Sample : Vol Std 10-30-11@300ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration

*M1*  
*11/3/2011*  
*STC 11/10/11*



TIC: 1030C08W.D

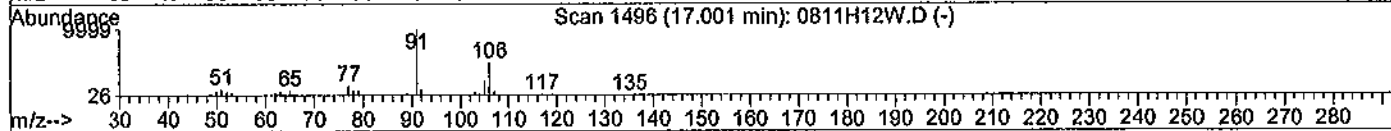
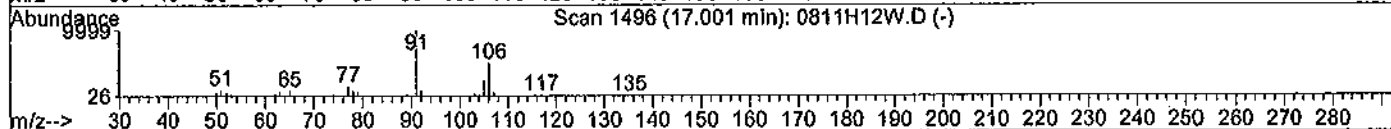
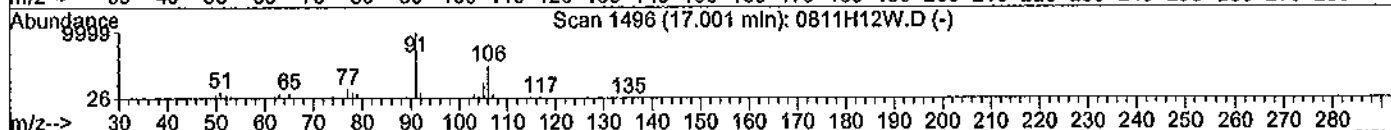
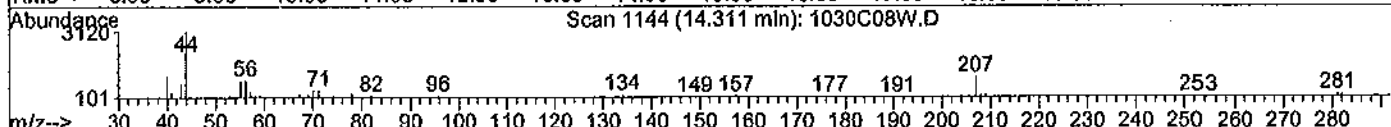
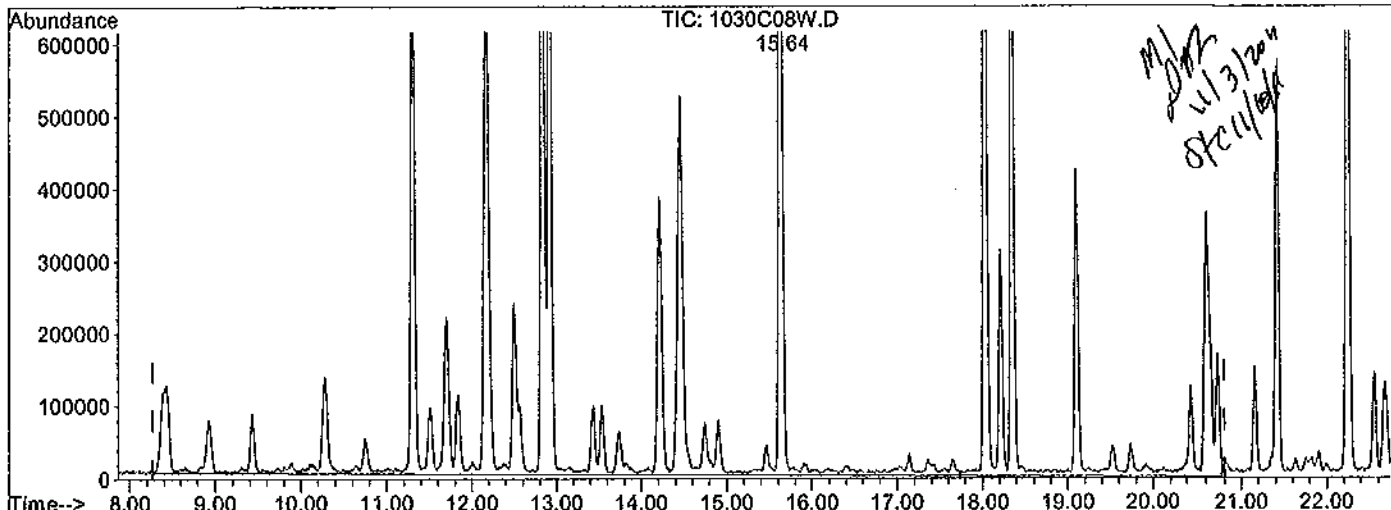
(2) Gasoline (TMHB)		
14.31min	137.6327ppb m	
response	33934923	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.30#
0.00	0.00	0.88#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C08W.D  
 Acq On : 30 Oct 11 18:26  
 Sample : Vol Std 10-30-11@300ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:40 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C08W.D

(2) Gasoline (TMHB)		
15.64min	161.1789ppb	m
response	39740510	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.25#
0.00	0.00	0.75#
0.00	0.00	0.00

Data File : M:\CHICO\DATA\C111030\1030C09W.D Vial: 1  
 Acq On : 30 Oct 11 19:09 Operator: STC  
 Sample : Vol Std 10-30-11@600ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:41 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1104080	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.04	TIC	1114811	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1175050	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	65808275m	262.45271	ppb	100

Quantitation Report

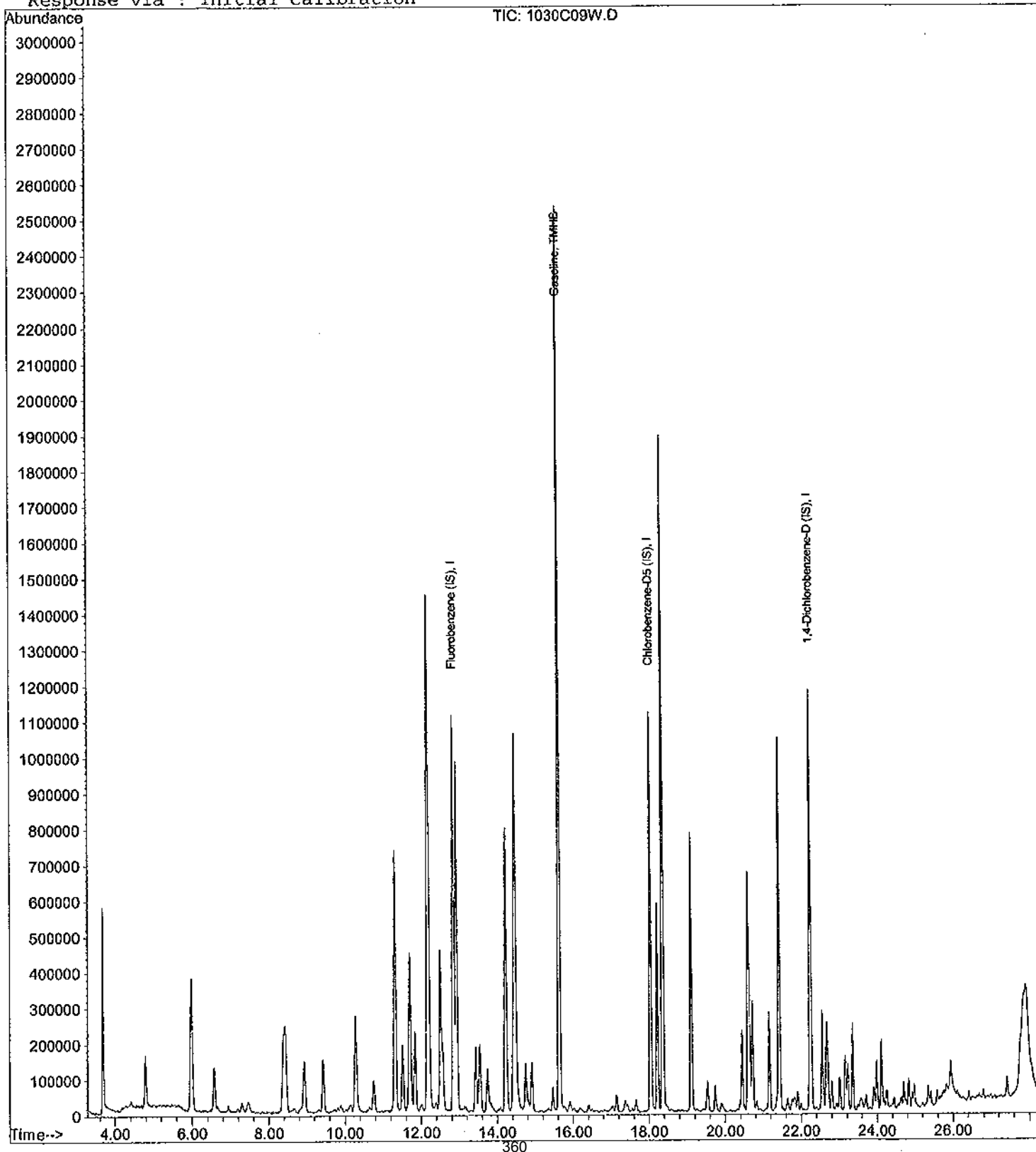
Data File : M:\CHICO\DATA\C111030\1030C09W.D  
Acq On : 30 Oct 11 19:09  
Sample : Vol Std 10-30-11@600ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:41 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260E  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration

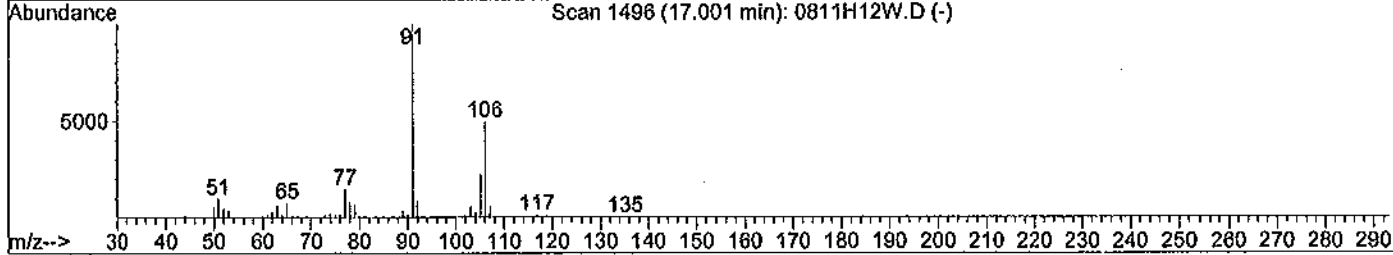
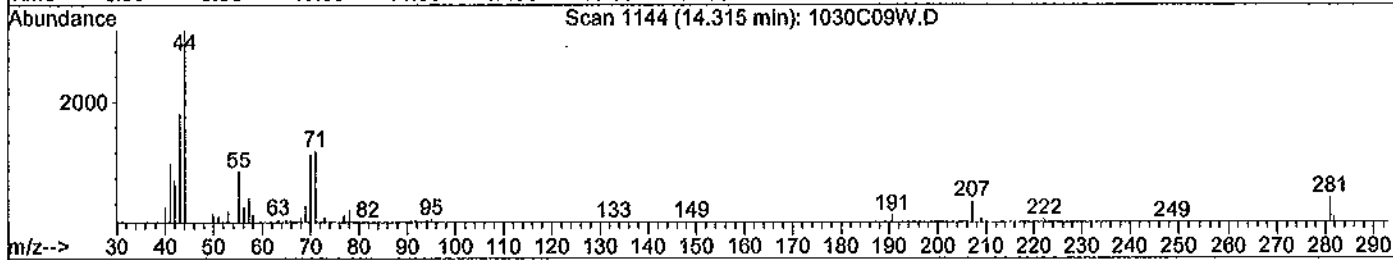
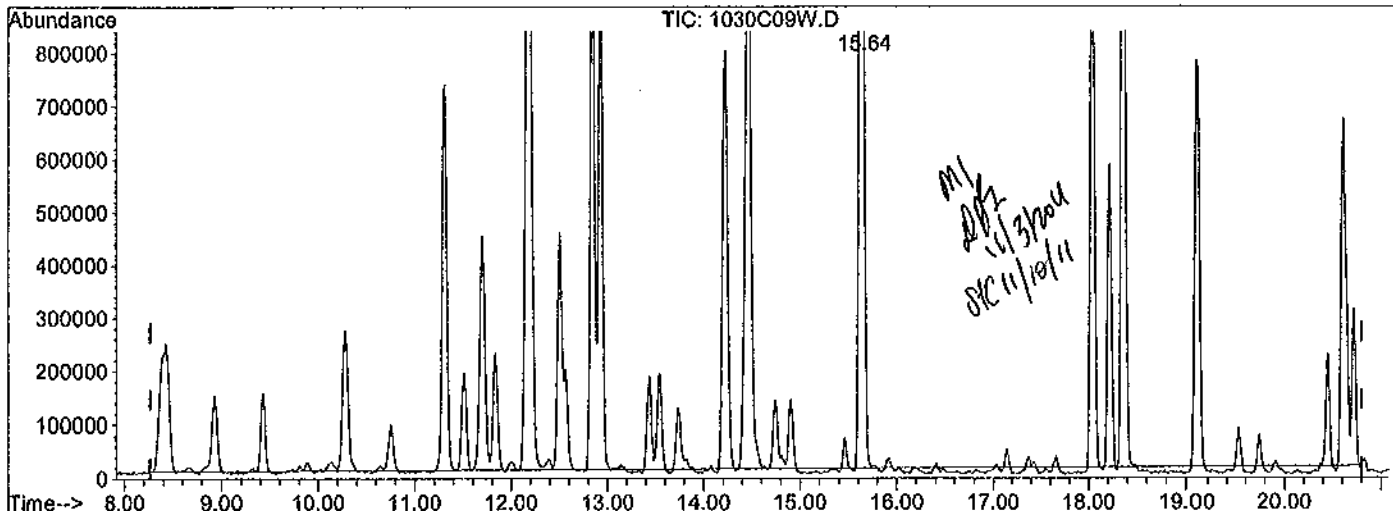


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C09W.D  
 Acq On : 30 Oct 11 19:09  
 Sample : Vol Std 10-30-11@600ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C09W.D

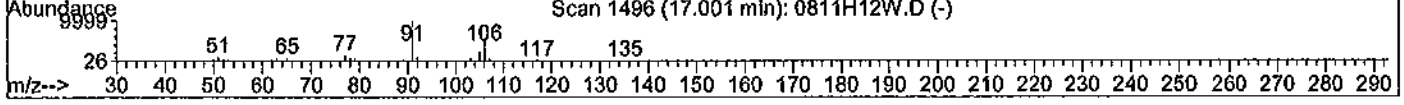
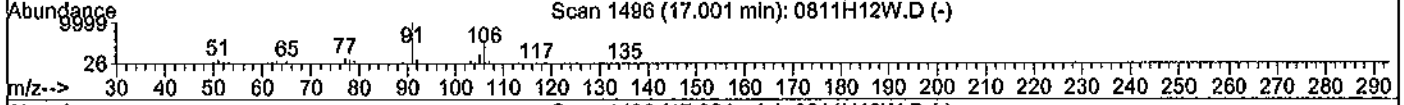
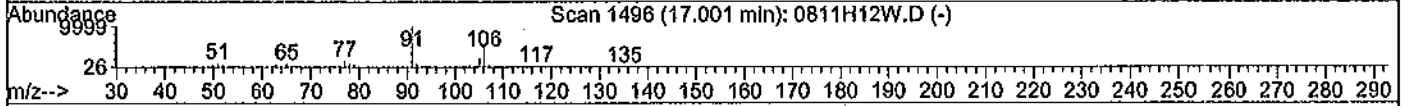
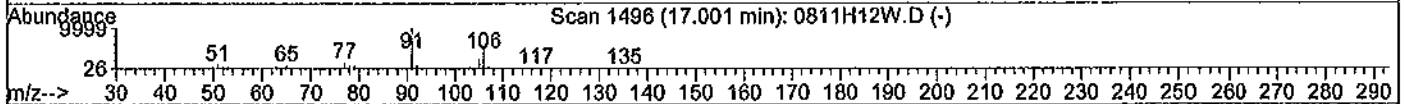
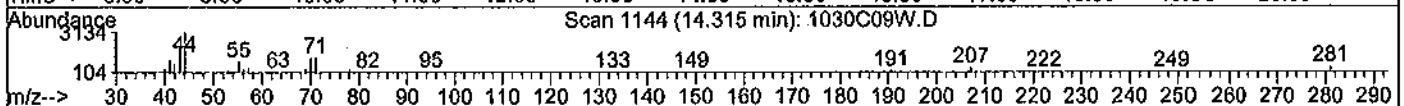
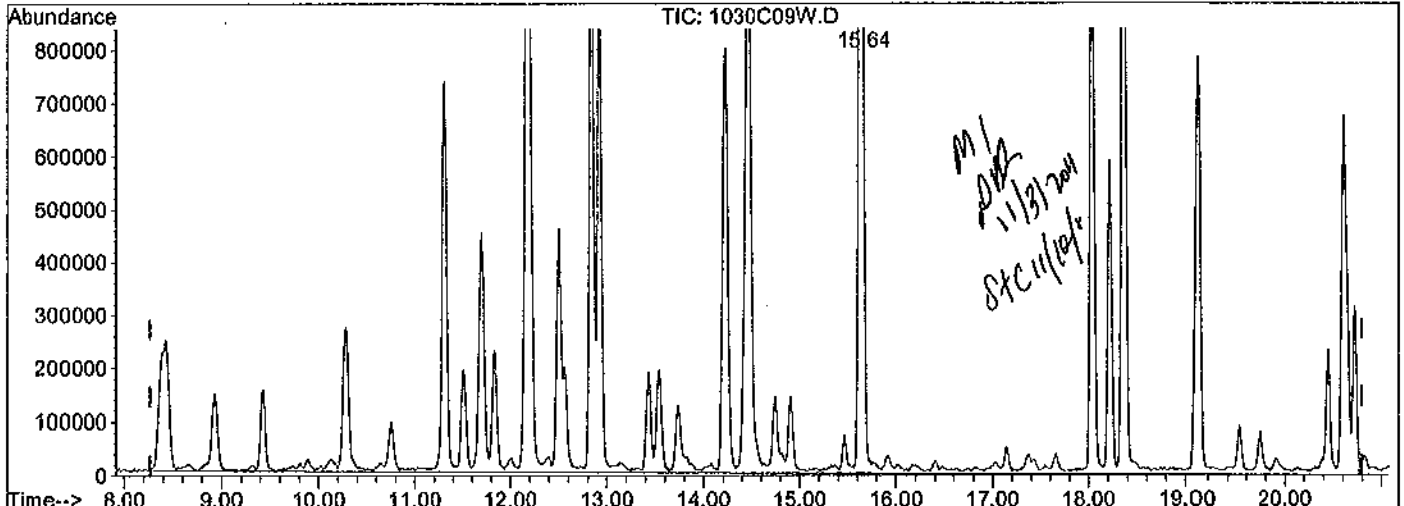
(2) Gasoline (TMHB)		
14.31min	231.1564ppb m	
response	57980938	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.18#
0.00	0.00	0.51#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C09W.D  
 Acq On : 30 Oct 11 19:09  
 Sample : Vol Std 10-30-11@600ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:41 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C09W.D

(2) Gasoline (TMHB)		
15.64min	262.4527ppb	m
response	65808275	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.16#
0.00	0.00	0.45#
0.00	0.00	0.00

Data File : M:\CHICO\DATA\C111030\1030C10W.D Vial: 1  
 Acq On : 30 Oct 11 19:52 Operator: STC  
 Sample : Vol Std 10-30-11@800ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:42 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1129347	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.03	TIC	1159453	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1268278	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.63	TIC	84666447m	330.10723	ppb	100

Quantitation Report

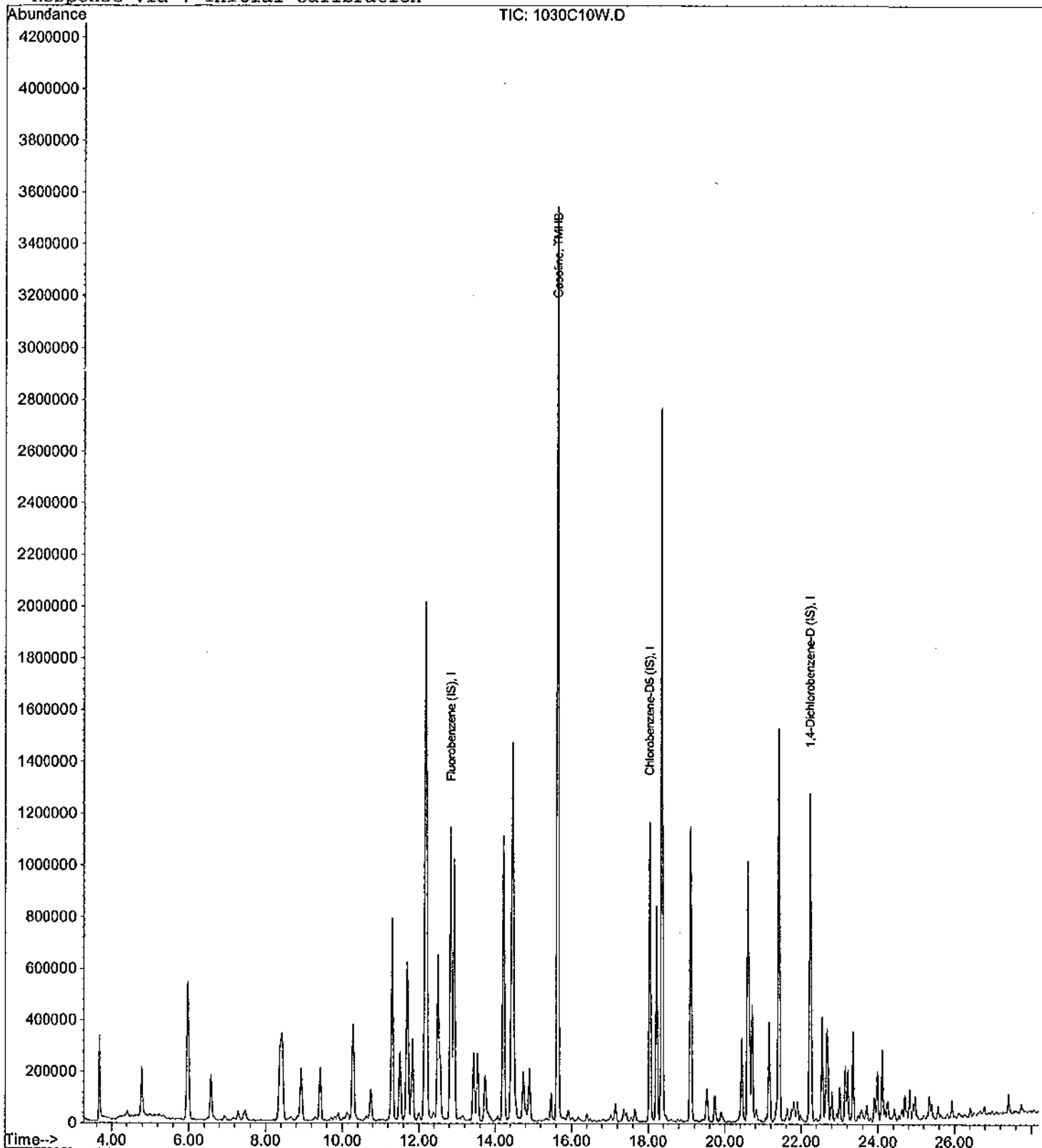
Data File : M:\CHICO\DATA\C111030\1030C10W.D  
Acq On : 30 Oct 11 19:52  
Sample : Vol Std 10-30-11@800ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:42 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



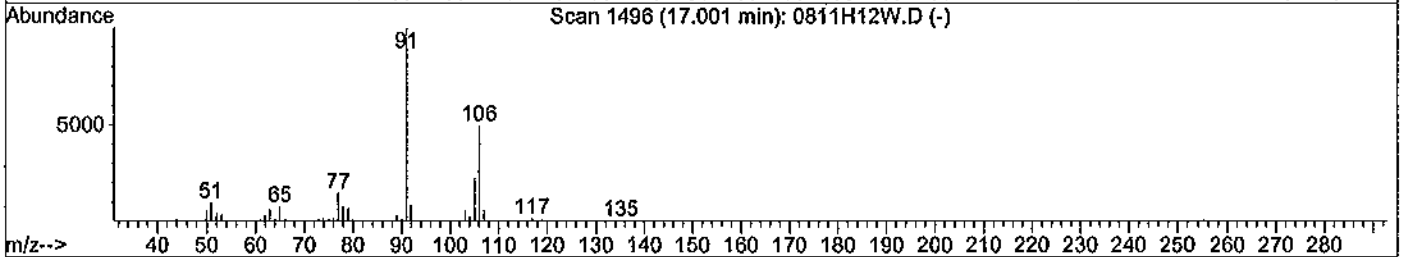
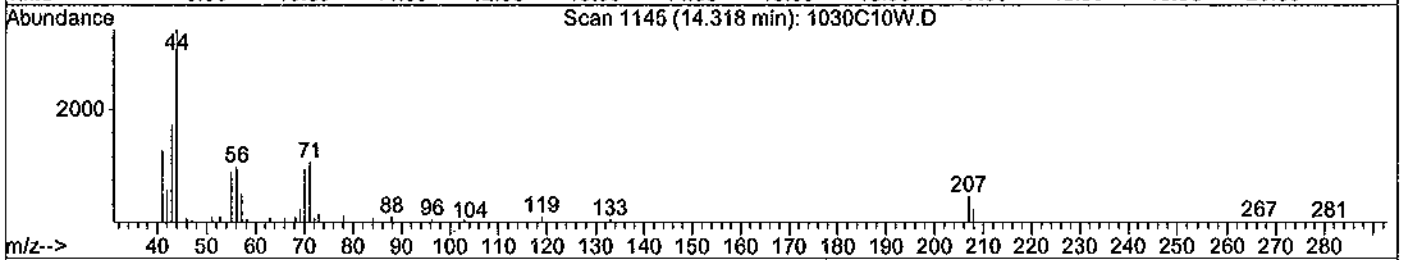
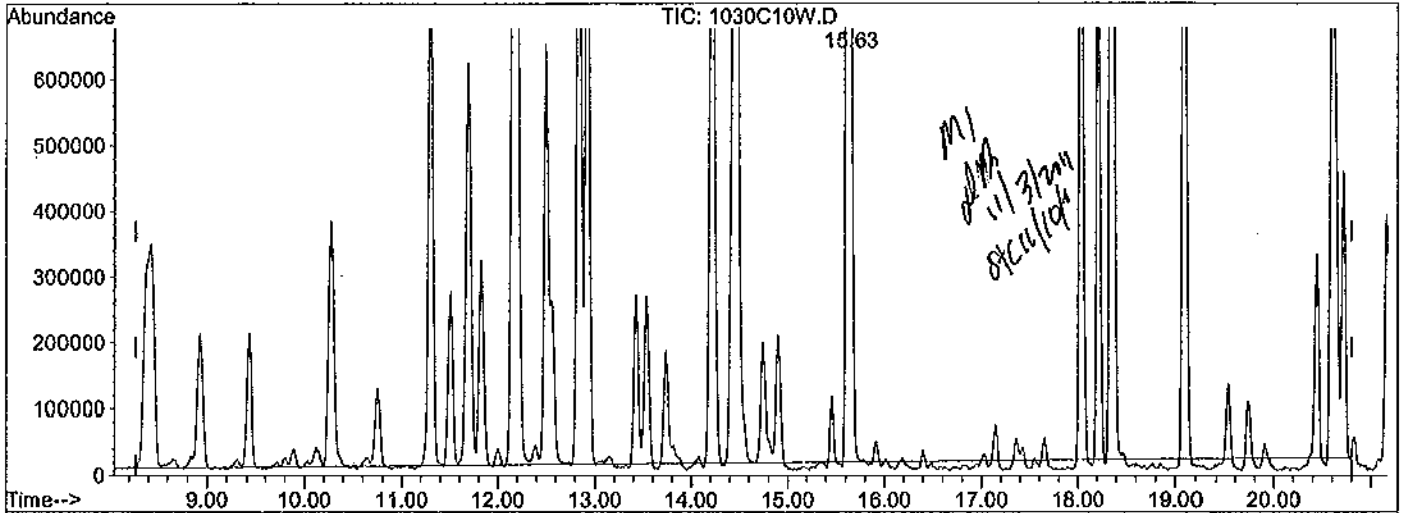


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C10W.D  
 Acq On : 30 Oct 11 19:52  
 Sample : Vol Std 10-30-11@800ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Oct 31 9:32 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C10W.D

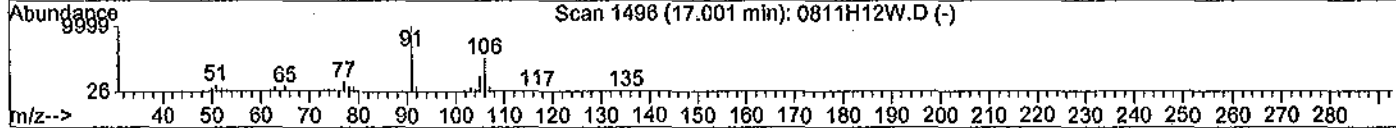
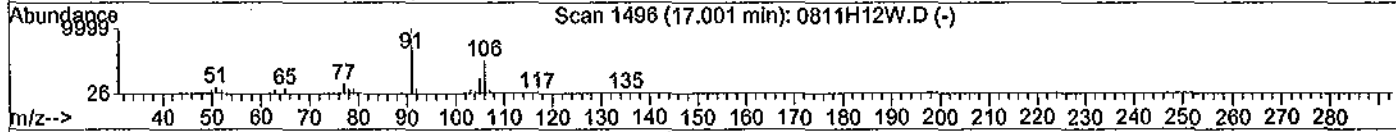
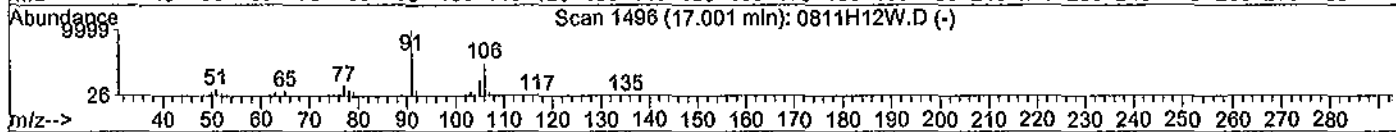
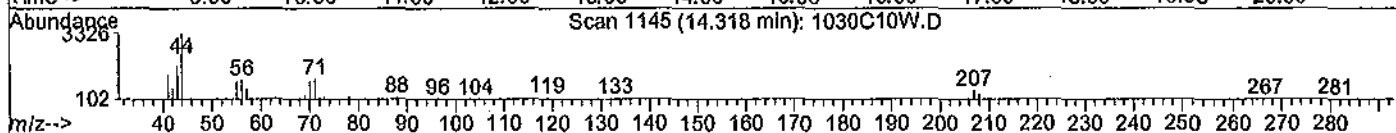
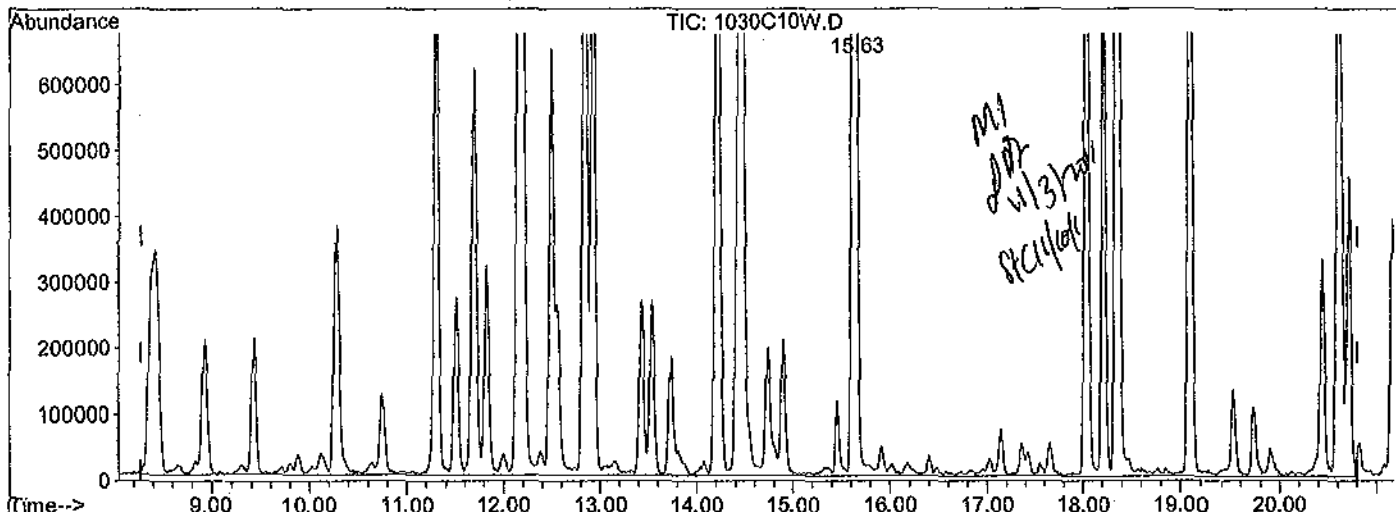
(2) Gasoline (TMHB)		
14.31min	303.9125ppb m	
response	77947975	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.13#
0.00	0.00	0.41#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C10W.D  
 Acq On : 30 Oct 11 19:52  
 Sample : Vol Std 10-30-11@800ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:42 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C10W.D

(2) Gasoline (TMHB)		
15.63min	330.1072ppb m	
response	84666447	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.12#
0.00	0.00	0.38#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : M:\CHICO\DATA\C111030\1030C11W.D Vial: 1  
 Acq On : 30 Oct 11 20:35 Operator: STC  
 Sample : Vol Std 10-30-11@1000ug/L Inst : Chico  
 Misc : Water 10mLw/ IS:10-30-11 Multiplr: 1.00

Quant Time: Nov 3 10:43 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:32:18 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1162372	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.03	TIC	1207961	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1354742	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.63	TIC	105748641m	400.59060	ppb	100

Quantitation Report

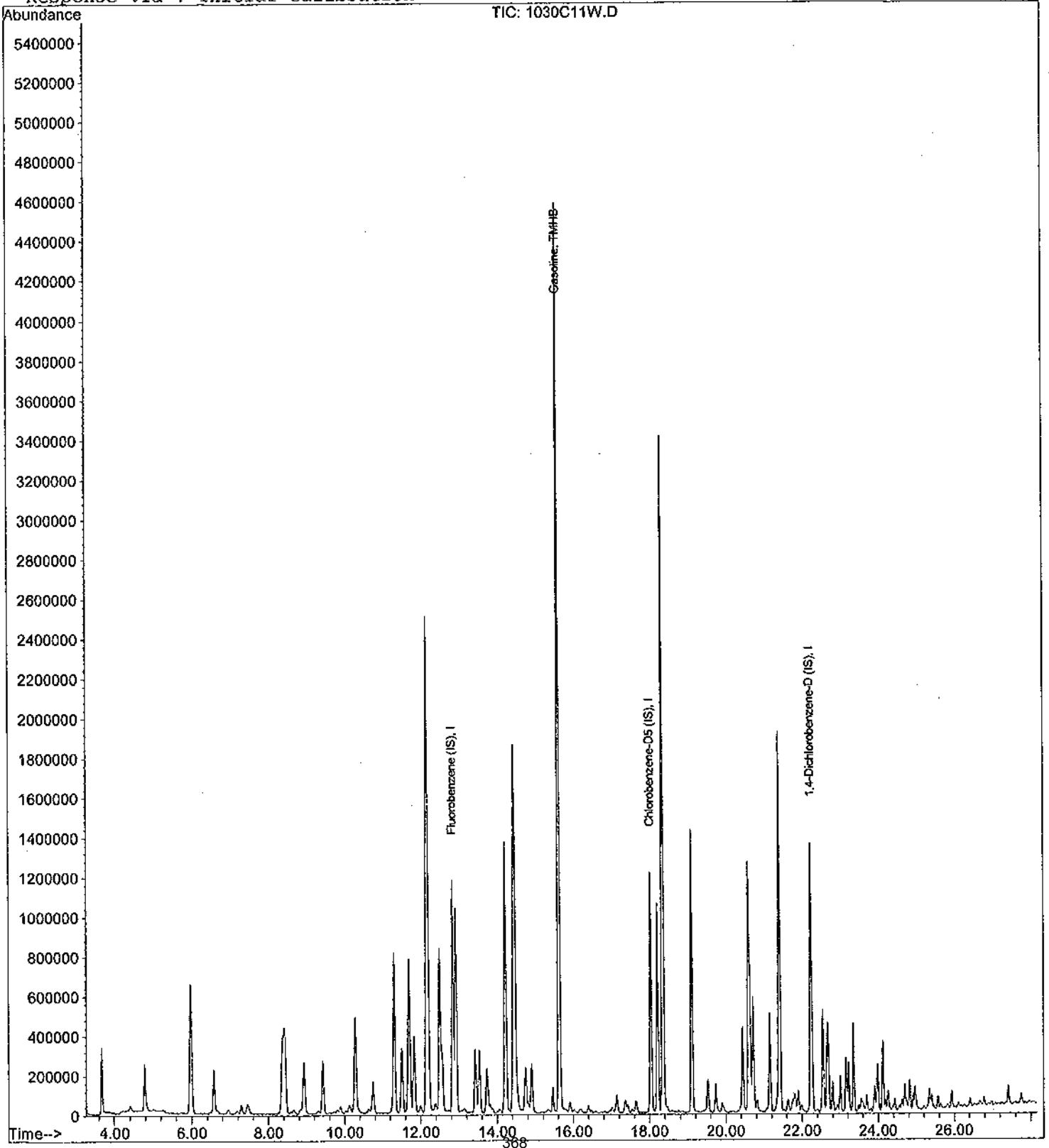
Data File : M:\CHICO\DATA\C111030\1030C11W.D  
Acq On : 30 Oct 11 20:35  
Sample : Vol Std 10-30-11@1000ug/L  
Misc : Water 10mLw/ IS:10-30-11

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

Quant Time: Nov 3 10:43 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration

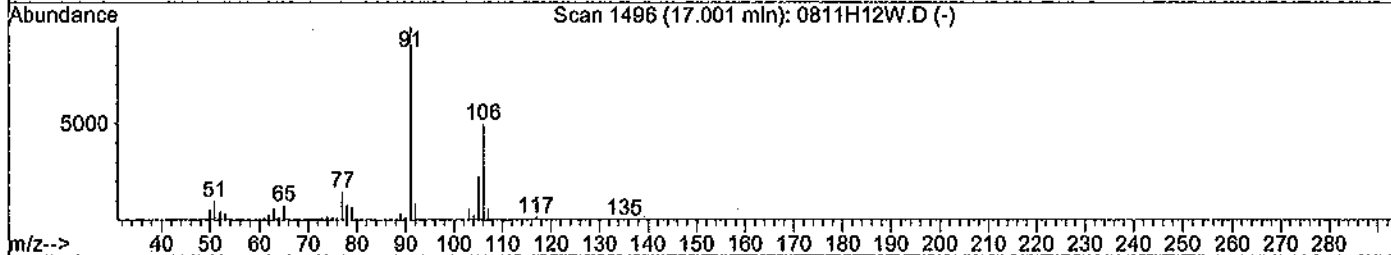
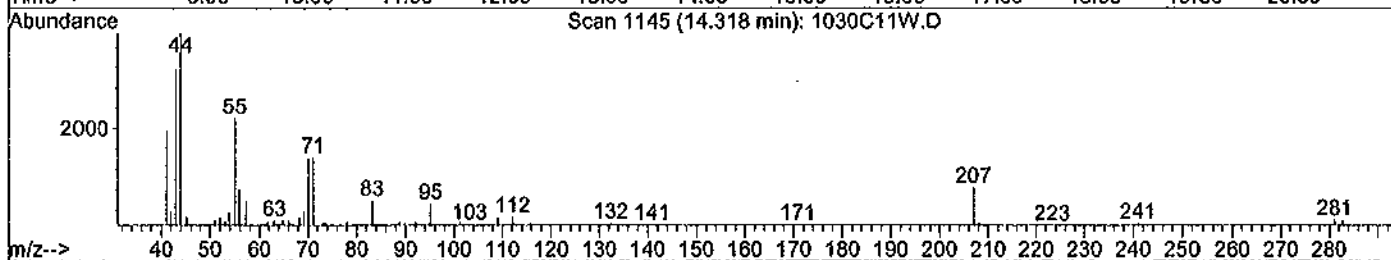
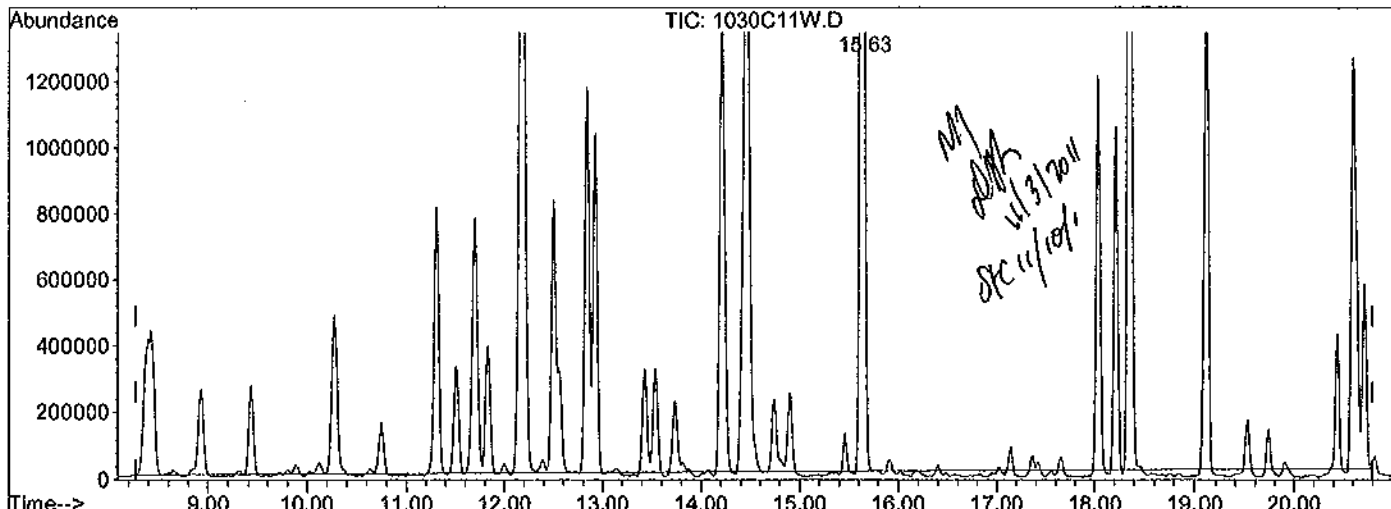


Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C11W.D  
 Acq On : 30 Oct 11 20:35  
 Sample : Vol Std 10-30-11@1000ug/L  
 Misc : Water 10mL/ IS:10-30-11  
 Quant Time: Oct 31 9:33 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C11W.D

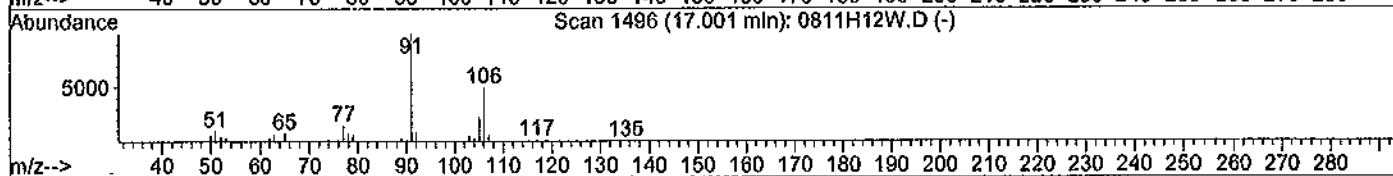
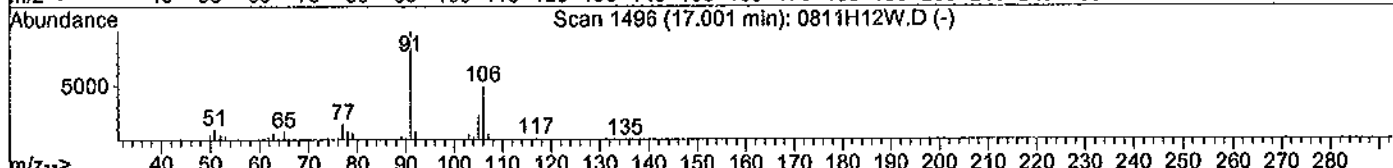
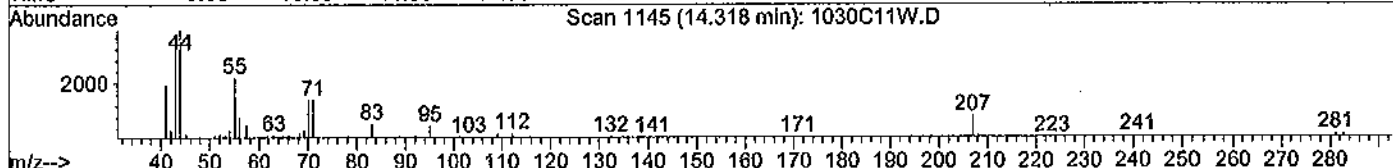
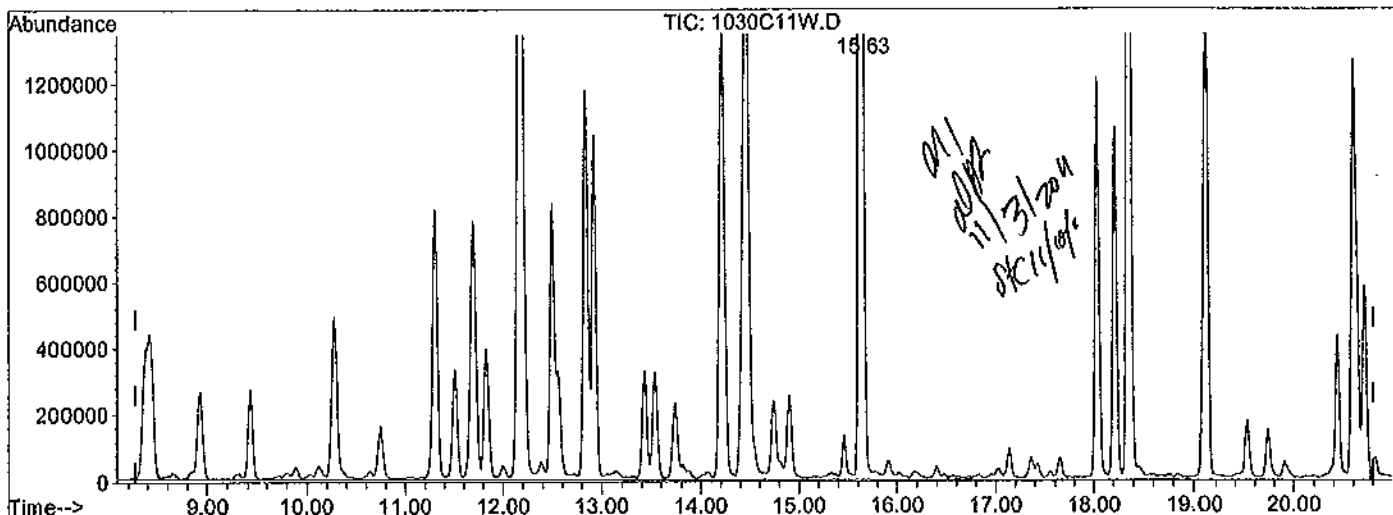
(2) Gasoline (TMHB)		
14.31min	368.6230ppb m	
response	97309775	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.11#
0.00	0.00	0.34#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C11W.D  
 Acq On : 30 Oct 11 20:35  
 Sample : Vol Std 10-30-11@1000ug/L  
 Misc : Water 10mLw/ IS:10-30-11  
 Quant Time: Nov 3 10:43 2011

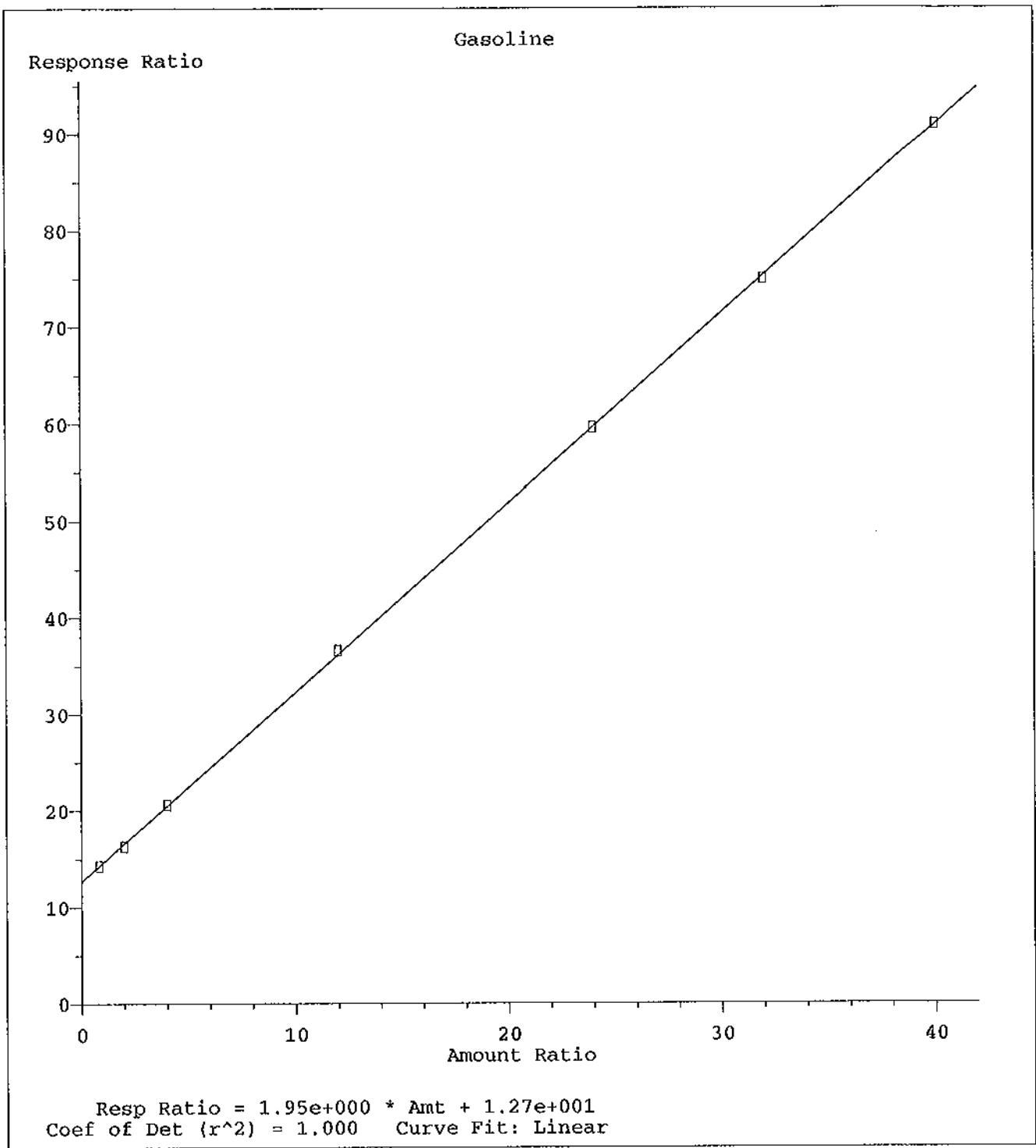
Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Oct 31 09:35:31 2011  
 Response via : Multiple Level Calibration



TIC: 1030C11W.D

(2) Gasoline (TMHB)		
15.63min	400.5906ppb m	
response	105748641	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.10#
0.00	0.00	0.31#
0.00	0.00	0.00



Method Name: M:\CHICO\DATA\C111030\CGAS.M  
Calibration Table Last Updated: Thu Nov 03 10:47:02 2011

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Second Source Calibration

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

SDG No: \_\_\_\_\_  
Date Analyzed: 10/31/2011  
Instrument: Chico  
Initial Cal. Date: 10/30/2011  
Data File: 1030C29W.D

	Compound	MEAN	CCRF	%D	%Drift	
1	Fluorobenzene (IS)	ISTD				
2	TMHB Gasoline	5.897	3.226	45	TMHBL	11
3	Chlorobenzene-D5 (IS)	ISTD				
4	1,4-Dichlorobenzene-D (IS)	ISTD				
5						
6						
7						
8						
9						
10						
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37						
38						
39						
40	Average			45.0		



Data File : M:\CHICO\DATA\C111030\1030C29W.D Vial: 1  
 Acq On : 31 Oct 11 9:31 Operator: STC  
 Sample : GAS 300ug/L (SS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 10:51 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1211423	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.03	TIC	1191079	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1217266	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.63	TIC	46900368m	332.66187	ppb	100

Quantitation Report

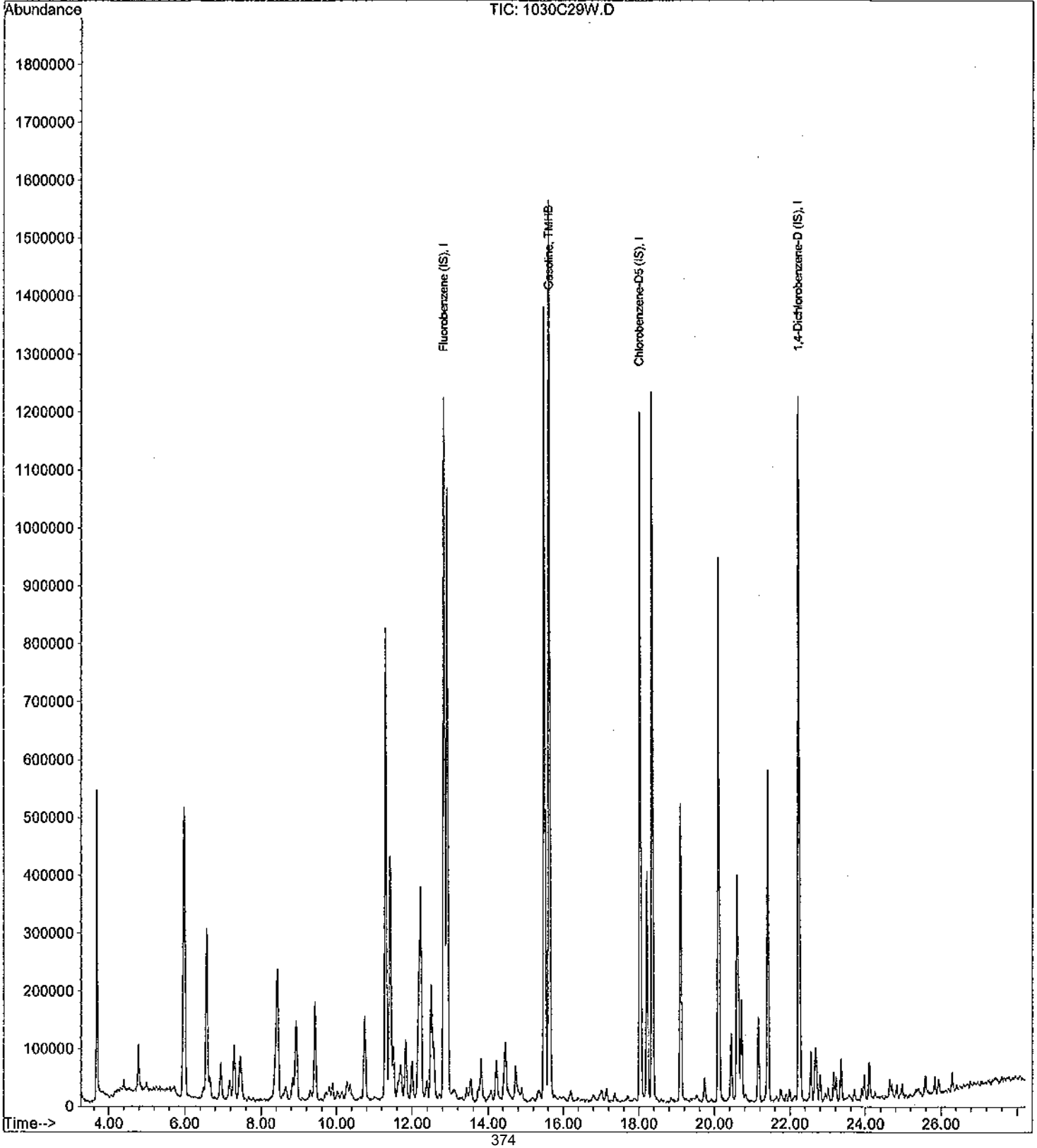
Data File : M:\CHICO\DATA\C111030\1030C29W.D  
Acq On : 31 Oct 11 9:31  
Sample : GAS 300ug/L (SS)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 10:51 2011

Quant Results File: CGAS.RES

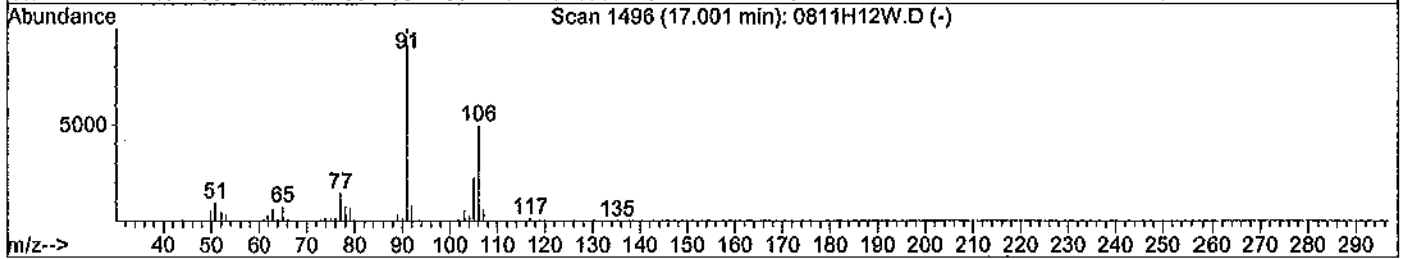
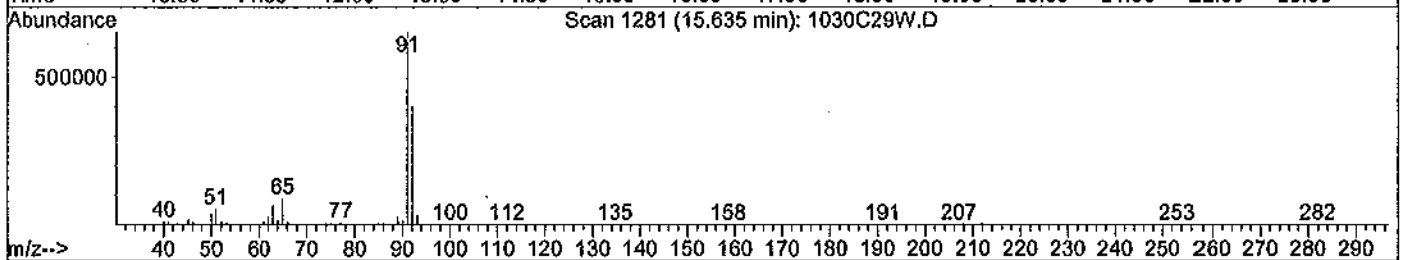
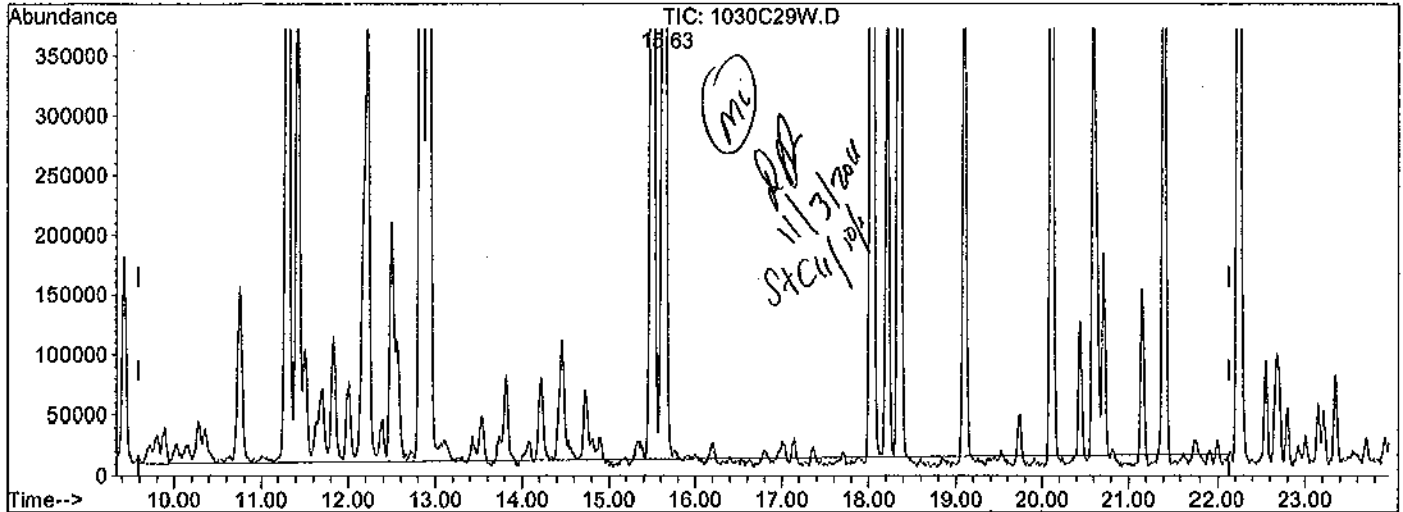
Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C29W.D Vial: 1  
 Acq On : 31 Oct 11 9:31 Operator: STC  
 Sample : GAS 300ug/L (SS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00  
 Quant Time: Nov 3 10:47 2011 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Multiple Level Calibration



TIC: 1030C29W.D

(2) Gasoline (TMHB)

15.64min 275.5469ppb m

response 41492142

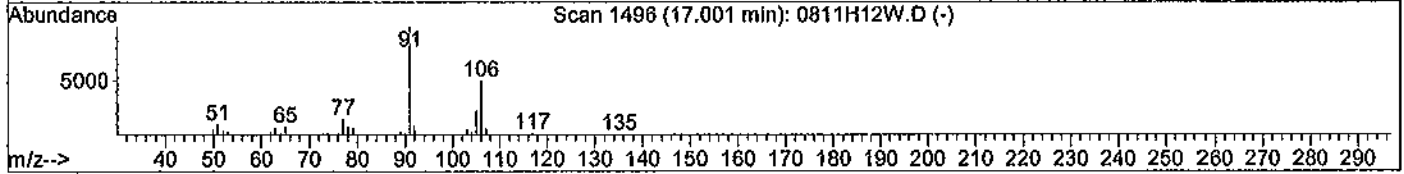
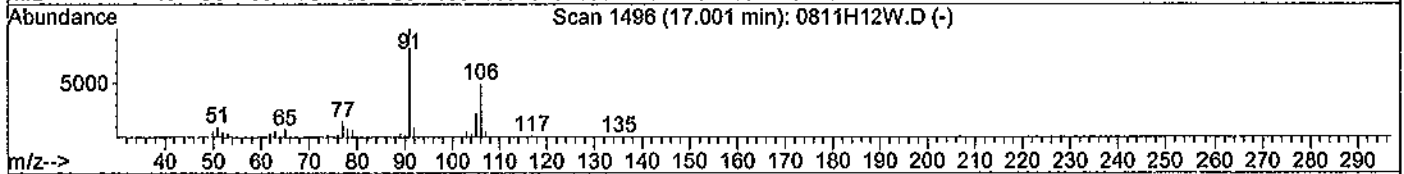
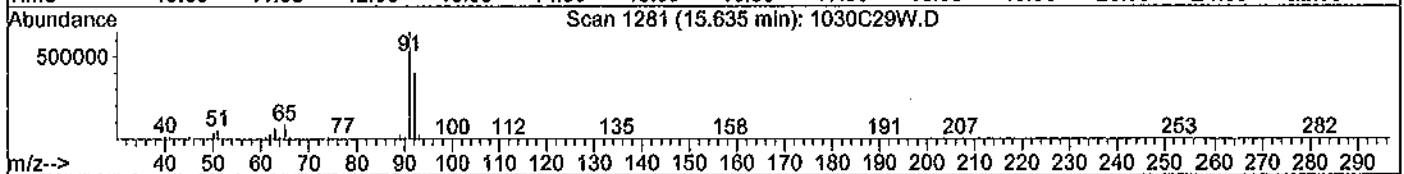
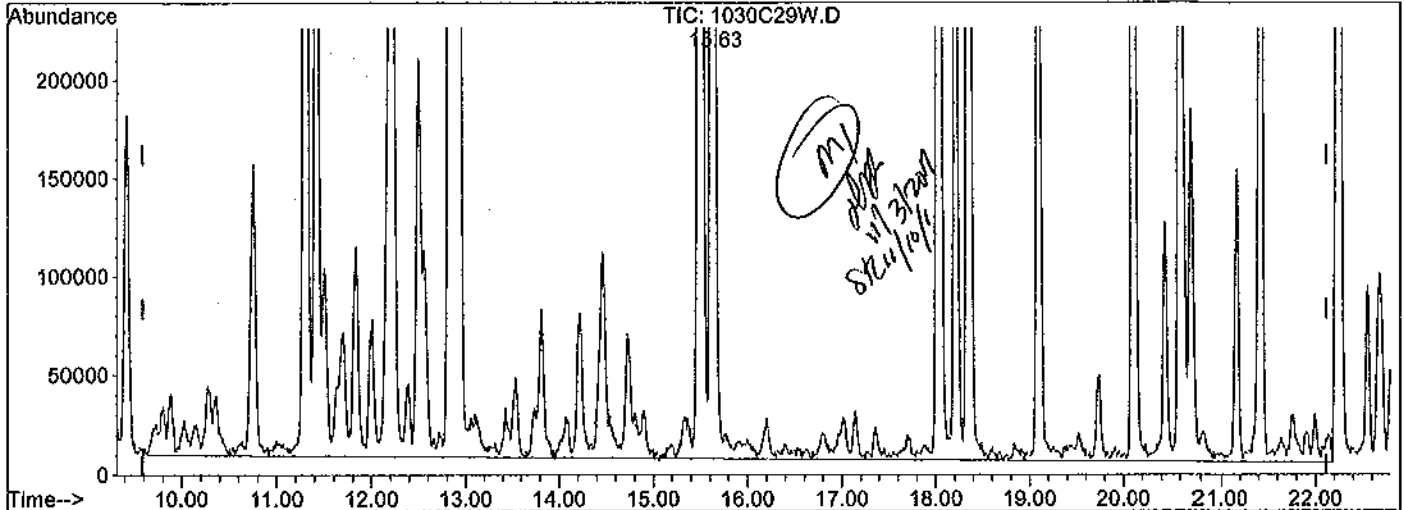
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.26#
0.00	0.00	0.78#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C29W.D  
 Acq On : 31 Oct 11 9:31  
 Sample : GAS 300ug/L (SS)  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11  
 Quant Time: Nov 3 10:51 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Multiple Level Calibration



TIC: 1030C29W.D

(2) Gasoline (TMHB)		
15.63min	332.6619ppb m	
response	46900368	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.23#
0.00	0.00	0.69#
0.00	0.00	0.00

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Continuing Calibration

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

SDG No: \_\_\_\_\_  
Date Analyzed: 10/31/2011  
Instrument: Chico  
Initial Cal. Date: 10/30/2011  
Data File: 1030C30W.D

	Compound	MEAN	CCRF	%D	%Drift
1	Fluorobenzene (IS)	ISTD			
2	TMHB Gasoline	5.897	3.225	45	TMHBL 11
3	Chlorobenzene-D5 (IS)	ISTD			
4	1,4-Dichlorobenzene-D (IS)	ISTD			
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
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18					
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28					
29					
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31					
32					
33					
34					
35					
36					
37					
38					
39					
40	Average			45.0	

Data File : M:\CHICO\DATA\C111030\1030C30W.D Vial: 1  
 Acq On : 31 Oct 11 10:14 Operator: STC  
 Sample : GAS 300ug/L CCV-1WC Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 10:51 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1207524	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.03	TIC	1180683	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.24	TIC	1196096	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	46736698m	332.52710	ppb	100

Quantitation Report

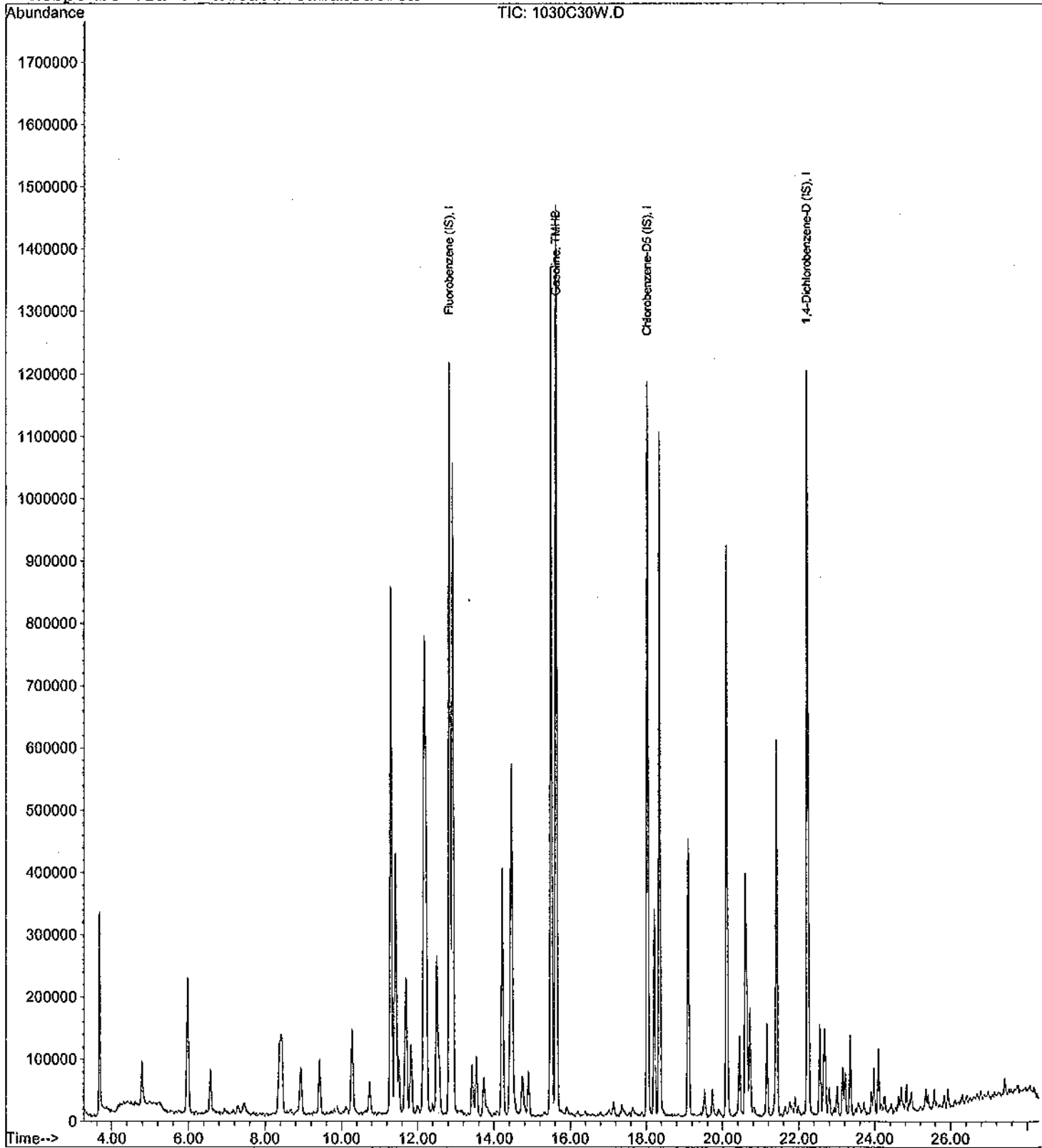
Data File : M:\CHICO\DATA\C111030\1030C30W.D  
Acq On : 31 Oct 11 10:14  
Sample : GAS 300ug/L CCV-1WC  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 10:51 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



**EPA METHOD 8260B**  
**Volatile Organic Compounds**  
**Raw Data**



**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 111030W-49334 - 161029  
Batch ID: #86RHB-111030AC

APPL Inc.  
908 North Temperance Avenue  
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	10/31/11	10/31/11
BLANK	1,1,1-TRICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	1,1,2,2-TETRACHLOROETHANE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
BLANK	1,1,2-TRICHLOROETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
BLANK	1,1-DICHLOROETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	1,1-DICHLOROETHENE	0.60 U	1.0	0.60	0.30	ug/L	10/31/11	10/31/11
BLANK	1,2,3-TRICHLOROPROPANE	0.78 U	2.0	0.78	0.39	ug/L	10/31/11	10/31/11
BLANK	1,2,4-TRICHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	1,2-DIBROMO-3-CHLOROPROPA	1.52 U	2.0	1.52	0.76	ug/L	10/31/11	10/31/11
BLANK	1,2-DIBROMOETHANE	0.40 U	1.0	0.40	0.20	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROBENZENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	1,2-DICHLOROPROPANE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	1,3-DICHLOROBENZENE	0.22 U	1.0	0.22	0.11	ug/L	10/31/11	10/31/11
BLANK	1,3-DICHLOROPROPENE, TOTAL	0.36 U	1.0	0.36	0.18	ug/L	10/31/11	10/31/11
BLANK	1,4-DICHLOROBENZENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	2-BUTANONE	1.20 U	10.0	1.20	0.60	ug/L	10/31/11	10/31/11
BLANK	4-METHYL-2-PENTANONE	3.80 U	10.0	3.80	1.90	ug/L	10/31/11	10/31/11
BLANK	ACETONE	1.90 U	10.0	1.90	0.95	ug/L	10/31/11	10/31/11
BLANK	BENZENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	BROMODICHLOROMETHANE	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	BROMOFORM	0.28 U	1.0	0.28	0.14	ug/L	10/31/11	10/31/11
BLANK	BROMOMETHANE	0.48 U	2.0	0.48	0.24	ug/L	10/31/11	10/31/11
BLANK	CARBON TETRACHLORIDE	0.20 U	1.0	0.20	0.10	ug/L	10/31/11	10/31/11
BLANK	CHLOROBENZENE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	CHLORODIBROMOMETHANE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	CHLOROETHANE	0.42 U	1.0	0.42	0.21	ug/L	10/31/11	10/31/11
BLANK	CHLOROFORM	0.14 U	1.0	0.14	0.07	ug/L	10/31/11	10/31/11
BLANK	CHLOROMETHANE	0.84 U	1.0	0.84	0.42	ug/L	10/31/11	10/31/11
BLANK	CIS-1,2-DICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	ETHYLBENZENE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
BLANK	GASOLINE	12.12 U	20.0	12.12	6.06	ug/L	10/31/11	10/31/11
BLANK	HEXACHLOROBUTADIENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	METHYL TERT-BUTYL ETHER	0.52 U	1.0	0.52	0.26	ug/L	10/31/11	10/31/11

Quant Method:CALLW.M  
Run #:1030C34  
Instrument:Chico  
Sequence:C111030  
Initials:ARS

GC SC-Blank-REG MDLs  
Printed: 12/06/11 3:06:21 PM

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 111030W-49334 - 161029  
 Batch ID: #86RHB-111030AC

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	10/31/11	10/31/11
BLANK	STYRENE	0.50 U	1.0	0.50	0.25	ug/L	10/31/11	10/31/11
BLANK	TETRACHLOROETHENE	0.48 U	1.0	0.48	0.24	ug/L	10/31/11	10/31/11
BLANK	TOLUENE	0.34 U	1.0	0.34	0.17	ug/L	10/31/11	10/31/11
BLANK	TRANS-1,2-DICHLOROETHENE	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	TRICHLOROETHENE	0.32 U	1.0	0.32	0.16	ug/L	10/31/11	10/31/11
BLANK	VINYL CHLORIDE	0.46 U	1.0	0.46	0.23	ug/L	10/31/11	10/31/11
BLANK	XYLENES (TOTAL)	0.38 U	1.0	0.38	0.19	ug/L	10/31/11	10/31/11
BLANK	SURROGATE: 1,2-DICHLOROET	109	70-120			%	10/31/11	10/31/11
BLANK	SURROGATE: 4-BROMOFLUORO	102	75-120			%	10/31/11	10/31/11
BLANK	SURROGATE: DIBROMOFLUOR	105	85-115			%	10/31/11	10/31/11
BLANK	SURROGATE: TOLUENE-D8 (S)	102	85-120			%	10/31/11	10/31/11

Quant Method: CALLW.M  
 Run #: 1030C34  
 Instrument: Chico  
 Sequence: C111030  
 Initials: ARS

GC SC-Blank-REG MDLs  
 Printed: 12/06/11 3:06:21 PM

Data File : M:\CHICO\DATA\C111030\1030C34W.D Vial: 1  
 Acq On : 31 Oct 11 13:02 Operator: STC  
 Sample : 111030A BLk-1WC Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 11:50 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Wed Nov 02 14:33:25 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	564158	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	392640	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	207424	25.00000	ppb	0.02
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane(S)	11.43	111	396364	26.37439	ppb	0.00
Spiked Amount	25.097		Recovery	=	105.087%	
38) 1,2-DCA-D4(S)	12.23	65	352223	26.32879	ppb	0.00
Spiked Amount	24.225		Recovery	=	108.684%	
56) Toluene-D8(S)	15.51	98	1448391	26.21699	ppb	0.02
Spiked Amount	25.808		Recovery	=	101.584%	
64) 4-Bromofluorobenzene(S)	20.12	95	516404	26.08735	ppb	0.00
Spiked Amount	25.459		Recovery	=	102.465%	

Target Compounds Qvalue

Quantitation Report

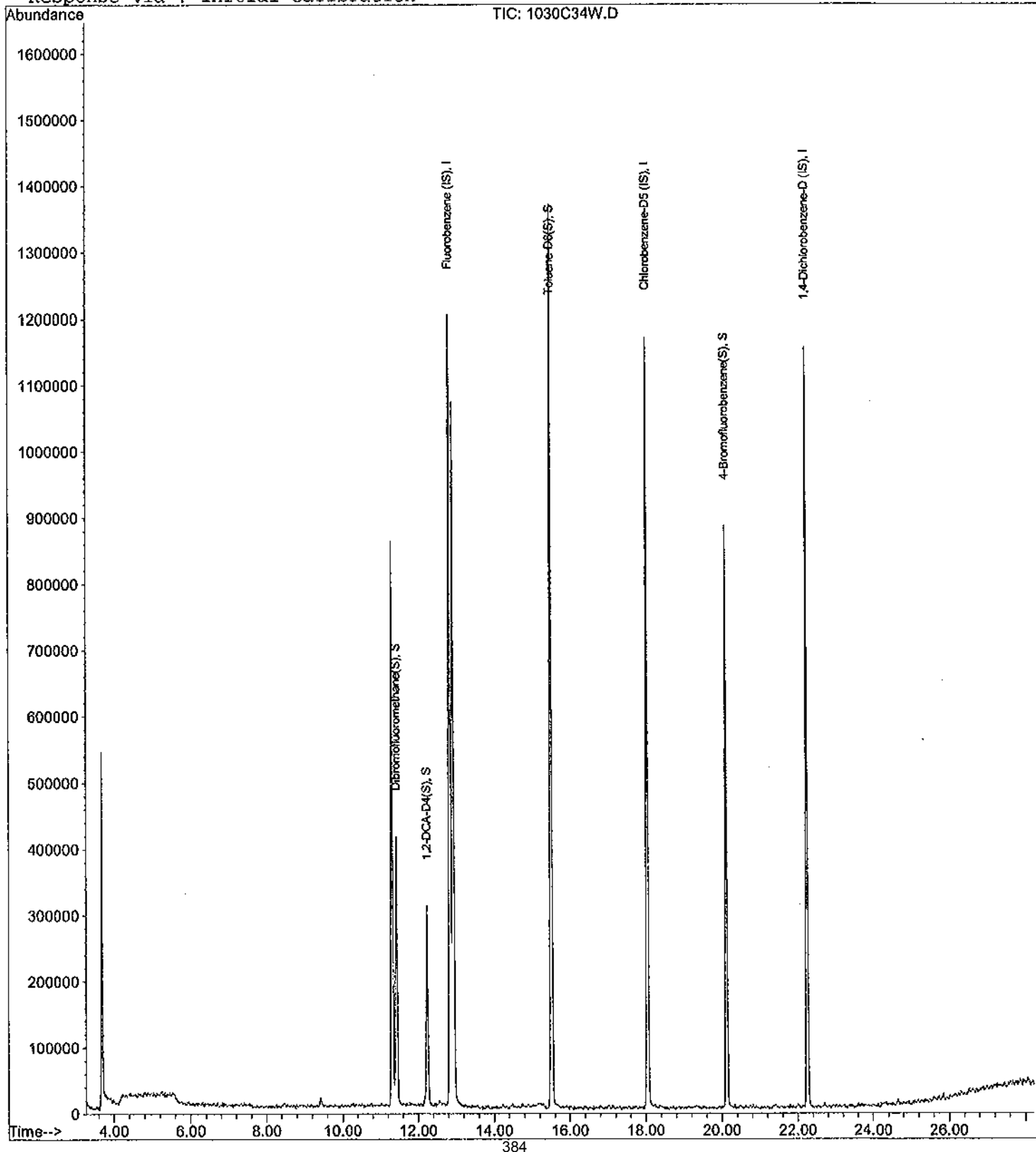
Data File : M:\CHICO\DATA\C111030\1030C34W.D  
Acq On : 31 Oct 11 13:02  
Sample : 111030A BLk-1WC  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 11:50 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Thu Nov 03 10:27:07 2011  
Response via : Initial Calibration



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Data File : M:\CHICO\DATA\C111030\1030C34W.D Vial: 1  
 Acq On : 31 Oct 11 13:02 Operator: STC  
 Sample : 111030A BLk-1WC Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:22 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1192714	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.05	TIC	1166397	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1149644	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds Qvalue

Quantitation Report

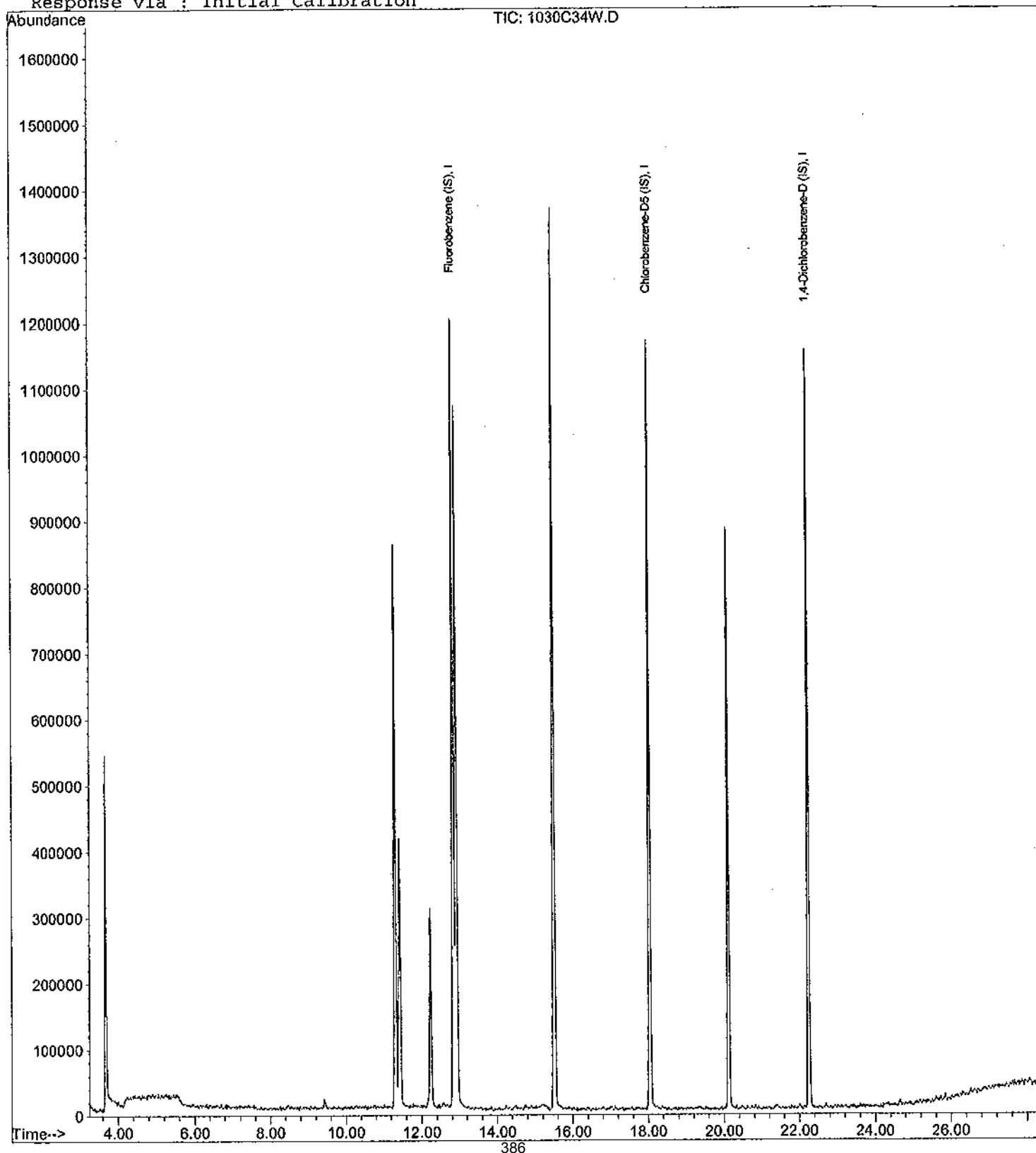
Data File : M:\CHICO\DATA\C111030\1030C34W.D  
Acq On : 31 Oct 11 13:02  
Sample : 111030A BLk-1WC  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:22 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 111031W-49334 LCS - 161029  
 Batch ID: #86RHB-111030AC

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	11.0	110	80-130
1,1,1-TRICHLOROETHANE	10.00	9.55	95.5	65-130
1,1,2,2-TETRACHLOROETHANE	10.00	10.3	103	65-130
1,1,2-TRICHLOROETHANE	10.00	9.91	99.1	75-125
1,1-DICHLOROETHANE	10.00	9.98	99.8	70-135
1,1-DICHLOROETHENE	10.00	8.83	88.3	70-130
1,2,3-TRICHLOROPROPANE	10.00	11.8	118	75-125
1,2,4-TRICHLOROBENZENE	10.00	10.2	102	65-135
1,2-DIBROMO-3-CHLOROPROPANE	10.00	10.2	102	50-130
1,2-DIBROMOETHANE	10.00	10.7	107	70-130
1,2-DICHLOROBENZENE	10.00	10.1	101	70-120
1,2-DICHLOROETHANE	10.00	9.61	96.1	70-130
1,2-DICHLOROPROPANE	10.00	10.1	101	75-125
1,3-DICHLOROBENZENE	10.00	9.67	96.7	75-125
1,3-DICHLOROPROPENE, TOTAL	20.0	19.7	98.5	70-130
1,4-DICHLOROBENZENE	10.00	9.94	99.4	75-125
2-BUTANONE	10.00	10.5	105	30-150
4-METHYL-2-PENTANONE	10.00	9.78	97.8	60-135
ACETONE	10.00	13.0	130	40-140
BENZENE	10.00	9.48	94.8	80-120
BROMODICHLOROMETHANE	10.00	10.0	100	75-120
BROMOFORM	10.00	9.32	93.2	70-130
BROMOMETHANE	10.00	8.95	89.5	30-145
CARBON TETRACHLORIDE	10.00	9.77	97.7	65-140
CHLOROBENZENE	10.00	10.3	103	80-120
CHLORODIBROMOMETHANE	10.00	11.0	110	60-135

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>
Quant Method :	CALLW.M
Extraction Date :	10/31/11
Analysis Date :	10/31/11
Instrument :	Chlco
Run :	1030C28
Initials :	ARS

Printed: 12/06/11 3:06:22 PM

APPL Standard LCS

**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 111031W-49334 LCS - 161029  
 Batch ID: #86RHB-111030AC

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits
CHLOROETHANE	10.00	8.89	88.9	60-135
CHLOROFORM	10.00	9.79	97.9	65-135
CHLOROMETHANE	10.00	9.42	94.2	40-125
CIS-1,2-DICHLOROETHENE	10.00	9.18	91.8	70-125
ETHYLBENZENE	10.00	10.1	101	75-125
GASOLINE	300	370	123	75-125
HEXACHLOROBUTADIENE	10.00	10.5	105	50-140
METHYL TERT-BUTYL ETHER	10.00	9.69	96.9	65-125
METHYLENE CHLORIDE	10.00	9.05	90.5	55-140
STYRENE	10.00	10.6	106	65-135
TETRACHLOROETHENE	10.00	10.1	101	45-150
TOLUENE	10.00	9.40	94.0	75-120
TRANS-1,2-DICHLOROETHENE	10.00	9.05	90.5	60-140
TRICHLOROETHENE	10.00	9.64	96.4	70-125
VINYL CHLORIDE	10.00	10.2	102	50-145
XYLENES (TOTAL)	30.0	30.3	101	80-120
-----				
SURROGATE: 1,2-DICHLOROETHANE-D	24.2	24.4	101	70-120
SURROGATE: 4-BROMOFLUOROBENZE	25.5	27.7	109	75-120
SURROGATE: DIBROMOFLUOROMETH	25.1	25.2	100	85-115
SURROGATE: TOLUENE-D8 (S)	25.8	26.9	104	85-120
-----				

Comments: \_\_\_\_\_

<u>Primary</u>	<u>SPK</u>
Quant Method :	CALLW.M
Extraction Date :	10/31/11
Analysis Date :	10/31/11
Instrument :	Chlco
Run :	1030C28
Initials :	ARS

Printed: 12/06/11 3:06:22 PM

APPL Standard LCS



Data File : M:\CHICO\DATA\C111030\1030C28W.D Vial: 1  
 Acq On : 31 Oct 11 8:48 Operator: STC  
 Sample : 111030A LCS-1WC (SS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	96	600576	25.00000	ppb	0.00
55) Chlorobenzene-D5 (IS)	18.04	117	389760	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.24	152	212800	25.00000	ppb	0.00
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.42	111	402364	25.15012	ppb	0.00
Spiked Amount	25.097					Recovery = 100.210%
38) 1,2-DCA-D4(S)	12.23	65	347346	24.38980	ppb	0.00
Spiked Amount	24.225					Recovery = 100.680%
56) Toluene-D8(S)	15.50	98	1474138	26.88019	ppb	0.00
Spiked Amount	25.808					Recovery = 104.153%
64) 4-Bromofluorobenzene(S)	20.11	95	543410	27.65447	ppb	0.00
Spiked Amount	25.459					Recovery = 108.620%
Target Compounds						
2) Dichlorodifluoromethane	4.07	85	222193	10.04166	ppb	Qvalue 100
3) Freon 114	4.33	85	146402	10.56428	ppb	93
4) Chloromethane	4.55	50	258385	9.42321	ppb	99
5) Vinyl chloride	4.82	62	186738	10.18146	ppb	96
7) Bromomethane	5.72	94	119189	8.95228	ppb	94
8) Chloroethane	5.91	64	134747	8.89428	ppb	97
9) Dichlorofluoromethane	6.01	67	386134	9.21828	ppb	97
10) Trichlorofluoromethane	6.52	101	241622	9.72027	ppb	99
11) Acetonitrile	7.64	41	78885	119.90087	ug/l	100
12) Acrolein	7.16	56	34469	114.48914	ppb	96
13) Acetone	7.27	43	22365	12.99757	ppb	# 84
14) Freon-113	7.46	101	138327	9.44782	ppb	97
15) 1,1-DCE	7.67	96	151407	8.83040	ppb	96
16) t-Butanol	7.76	59	10529	129.32077	ppb	93
17) Methyl Acetate	8.18	43	48755	9.36519	ppb	96
18) Iodomethane	8.16	142	102169	10.69989	ppb	90
19) Acrylonitrile	8.56	53	17916	9.49044	ppb	79
20) Methylene chloride	8.47	84	147951	9.04673	ppb	99
21) Carbon disulfide	8.56	76	154944	9.30051	ppb	100
22) Methyl t-butyl ether (MtBE)	8.89	73	251165	9.69151	ppb	96
23) Trans-1,2-DCE	9.10	96	180083	9.05360	ppb	88
24) Diisopropyl Ether	9.75	45	553904	9.66784	ppb	94
25) 1,1-DCA	9.79	63	339012	9.97748	ppb	99
26) Vinyl Acetate	9.42	43	104836	9.85383	ppb	# 83
27) Ethyl tert Butyl Ether	10.45	59	395408	10.10888	ppb	99
28) MEK (2-Butanone)	10.44	43	71405	10.48433	ppb	99
29) Cis-1,2-DCE	10.82	96	187663	9.18084	ppb	97
30) 2,2-Dichloropropane	10.82	77	208247	8.55600	ppb	97
31) Chloroform	11.10	83	320091	9.79258	ppb	99
32) Bromochloromethane	11.32	128	58472	10.27501	ppb	98
34) 1,1,1-TCA	11.84	97	283983	9.55329	ppb	96
35) Cyclohexane	12.00	56	268948	9.71733	ppb	94
36) 1,1-Dichloropropene	12.10	75	240188	9.42981	ppb	99
37) 2,2,4-Trimethylpentane	12.18	57	414455	9.47423	ppb	98
39) Carbon Tetrachloride	12.30	117	199898	9.76577	ppb	98
40) Tert Amyl Methyl Ether	12.34	73	292021	9.98459	ppb	99

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

1030C28W.D CALLW.M Fri Dec 02 11:35:18 2011

Data File : M:\CHICO\DATA\C111030\1030C28W.D  
 Acq On : 31 Oct 11 8:48  
 Sample : 111030A LCS-1WC (SS)  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)

Title : METHOD 8260

Last Update : Fri Dec 02 11:32:50 2011

Response via : Initial Calibration

DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) 1,2-DCA	12.38	62	161160	9.60516 ppb	100
42) Benzene	12.50	78	693647	9.47863 ppb	96
43) TCE	13.53	95	195399	9.64105 ppb	91
44) 2-Pentanone	13.20	43	531259	125.31057 ppb	97
45) 1,2-Dichloropropane	13.76	63	167281	10.05687 ppb	# 94
46) Bromodichloromethane	14.11	83	190021	9.99949 ppb	# 91
47) Methyl Cyclohexane	13.82	83	224538	9.48040 ppb	99
48) Dibromomethane	14.16	93	67527	10.15102 ppb	95
49) 2-Chloroethyl vinyl ether	14.57	63	42382	10.02259 ppb	95
50) 1-Bromo-2-chloroethane	14.88	63	147231	10.37368 ppb	# 79
51) Cis-1,3-Dichloropropene	15.00	75	181879	10.03716 ppb	100
52) Toluene	15.63	91	678338	9.39804 ppb	99
53) Trans-1,3-Dichloropropene	15.80	75	126600	9.70449 ppb	98
54) 1,1,2-TCA	16.08	83	69681	9.91034 ppb	93
57) 1,2-EDB	17.33	107	79107	10.66417 ppb	94
58) Tetrachloroethene	16.78	164	202010	10.08114 ppb	94
59) 1-Chlorohexane	17.70	91	232734	10.08580 ppb	97
60) 1,1,1,2-Tetrachloroethane	18.16	131	138607	11.04877 ppb	99
61) m&p-Xylene	18.35	106	589147	19.90172 ppb	97
62) o-Xylene	19.11	106	295217	10.36928 ppb	98
63) Styrene	19.13	104	457607	10.64883 ppb	93
65) 2-Hexanone	16.11	43	38770	10.87089 ppb	95
66) 1,3-Dichloropropane	16.49	76	147530	10.08561 ppb	98
67) Dibromochloromethane	16.97	129	105397	11.03714 ppb	82
68) Chlorobenzene	18.10	112	437982	10.34243 ppb	97
69) Ethylbenzene	18.22	91	794180	10.07104 ppb	100
70) Bromoform	19.65	173	45131	9.31734 ppb	91
72) MIBK (methyl isobutyl keto)	14.68	43	59150	9.77763 ppb	87
73) Isopropylbenzene	19.73	105	756513	9.80877 ppb	98
74) 1,1,2,2-Tetrachloroethane	19.90	83	66287	10.26718 ppb	# 74
75) 1,2,3-Trichloropropane	20.16	110	8565	11.81260 ppb	82
76) t-1,4-Dichloro-2-Butene	20.23	53	14963	10.22116 ppb	# 92
77) Bromobenzene	20.48	156	179052	10.06445 ppb	89
78) n-Propylbenzene	20.44	91	900774	9.79012 ppb	100
79) 4-Ethyltoluene	20.63	105	593563	9.32229 ppb	97
80) 2-Chlorotoluene	20.74	91	598129	9.81561 ppb	98
81) 1,3,5-Trimethylbenzene	20.72	105	617840	9.86323 ppb	99
82) 4-Chlorotoluene	20.82	91	502123	9.56935 ppb	98
83) Tert-Butylbenzene	21.36	119	672218	9.91209 ppb	97
84) 1,2,4-Trimethylbenzene	21.42	105	604092	9.23368 ppb	96
85) Sec-Butylbenzene	21.76	105	823845	10.12964 ppb	96
86) p-Isopropyltoluene	21.99	119	683604	9.81315 ppb	98
87) Benzyl Chloride	22.42	91	81362	8.79846 ppb	94
88) 1,3-DCB	22.12	146	351790	9.66926 ppb	95
89) 1,4-DCB	22.30	146	335795	9.94420 ppb	96
90) Hexachloroethane	23.59	117	92345	8.87470 ppb	87
91) n-Butylbenzene	22.69	91	582962	9.59448 ppb	98
92) 1,2-DCB	22.93	146	292666	10.11316 ppb	97
93) 1,2-Dibromo-3-chloropropan	24.14	155	10559	10.20135 ppb	92
94) 1,2,4-Trichlorobenzene	25.59	180	213173	10.16551 ppb	98
95) Hexachlorobutadiene	25.84	223	40176	10.54513 ppb	97

(#) = qualifier out of range (m) = manual integration  
 1030C28W.D CALLW.M Fri Dec 02 11:35:19 2011

Data File : M:\CHICO\DATA\C111030\1030C28W.D Vial: 1  
 Acq On : 31 Oct 11 8:48 Operator: STC  
 Sample : 111030A LCS-1WC (SS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) Naphthalene	25.94	128	272964	10.54986	ppb	99
97) 1,2,3-Trichlorobenzene	26.29	180	172357	10.86589	ppb	99

Quantitation Report

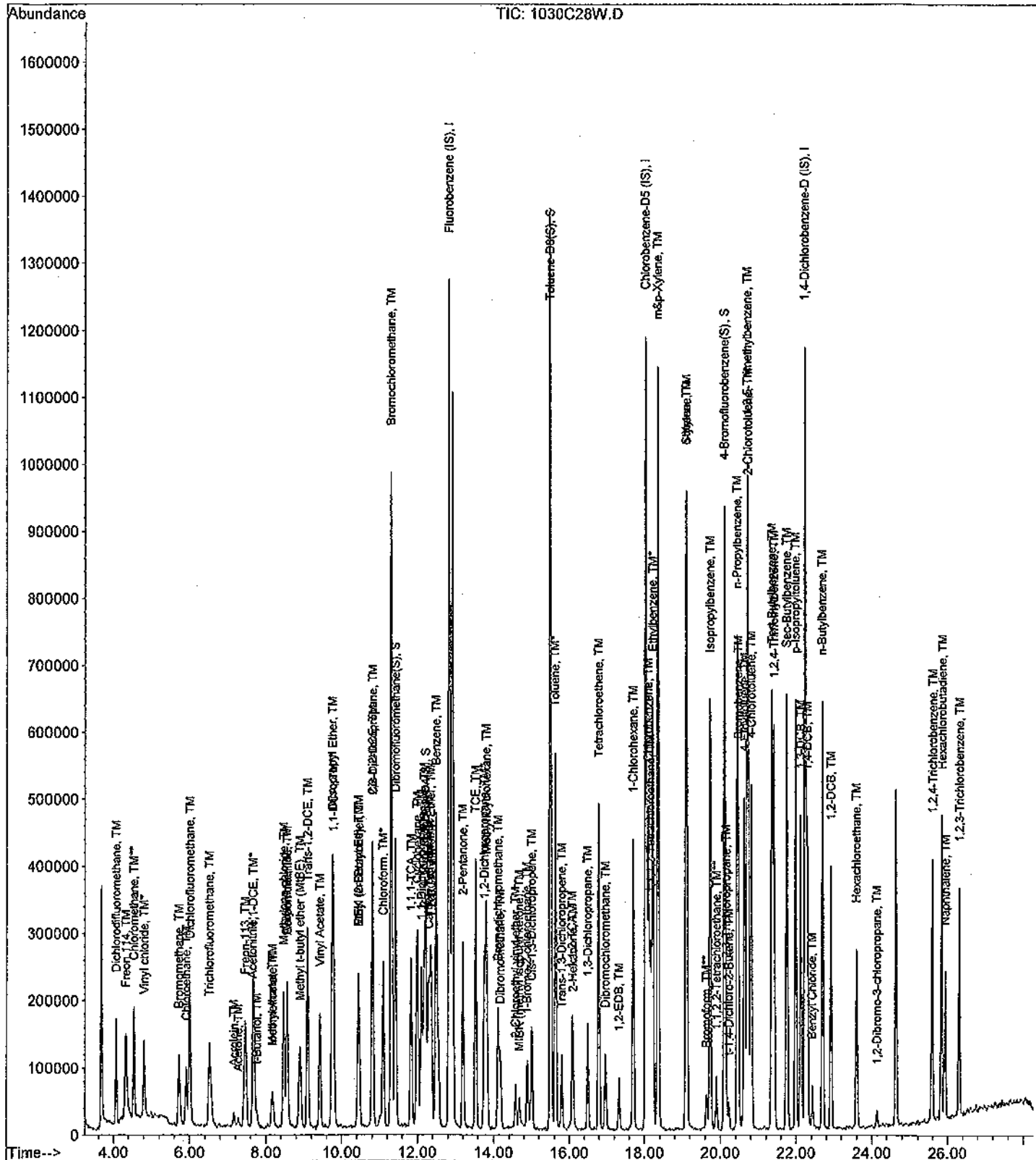
Data File : M:\CHICO\DATA\C111030\1030C28W.D  
Acq On : 31 Oct 11 8:48  
Sample : 111030A LCS-1WC (SS)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:32:50 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C31W.D Vial: 1  
 Acq On : 31 Oct 11 10:57 Operator: STC  
 Sample : GAS 300ug/L LCS-1WC Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 10:53 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.84	TIC	1238145	25.00000	ppb	0.00
3) Chlorobenzene-D5 (IS)	18.04	TIC	1217687	25.00000	ppb	0.00
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1183942	25.00000	ppb	0.00

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	51531735m	369.82724	ppb	100

Quantitation Report

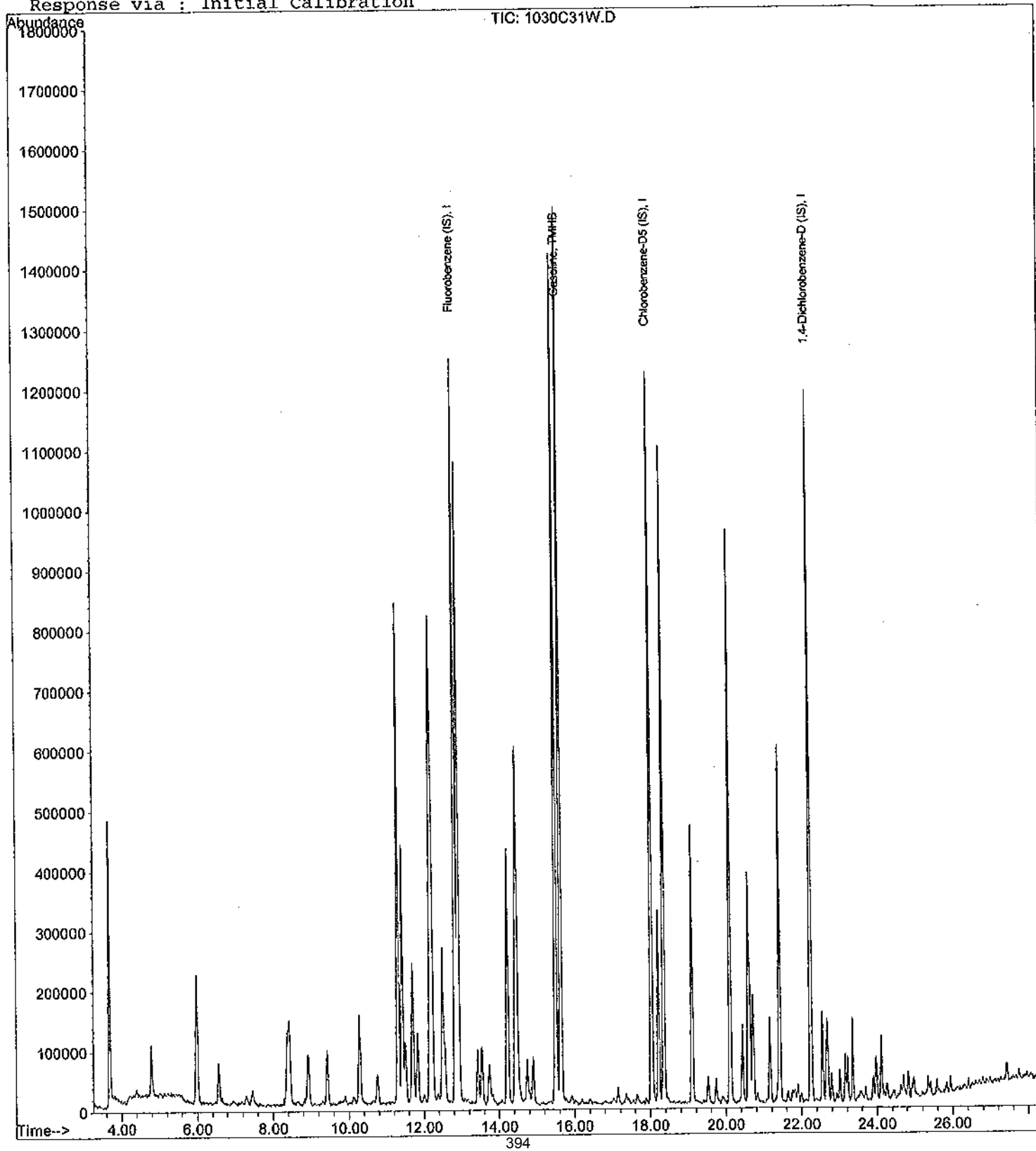
Data File : M:\CHICO\DATA\C111030\1030C31W.D  
Acq On : 31 Oct 11 10:57  
Sample : GAS 300ug/L LCS-1WC  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 10:53 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration

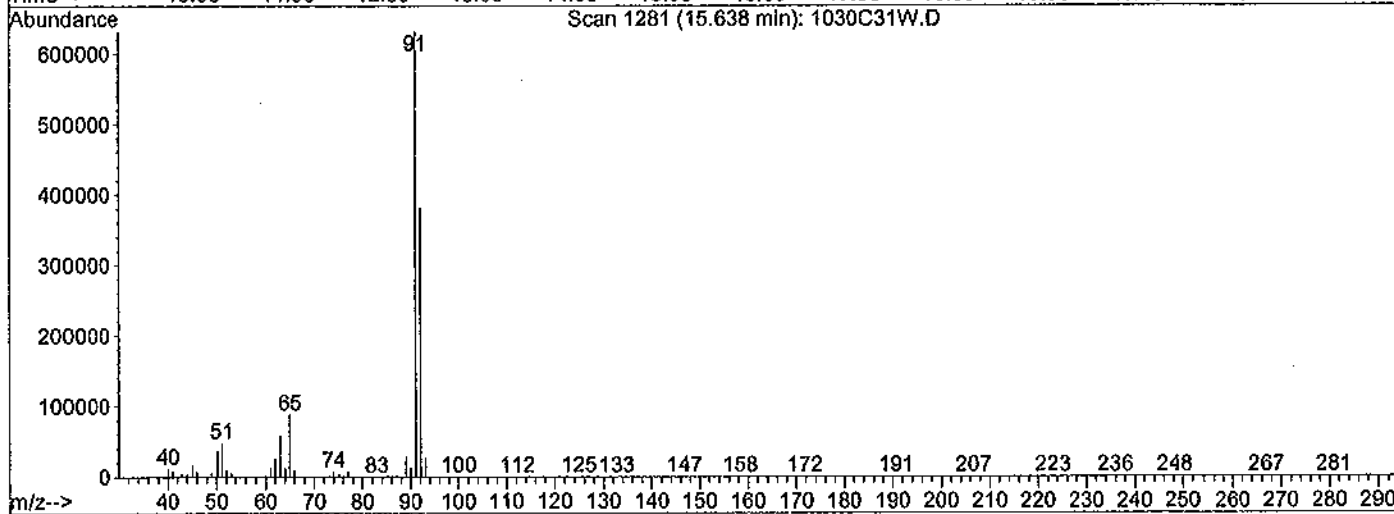
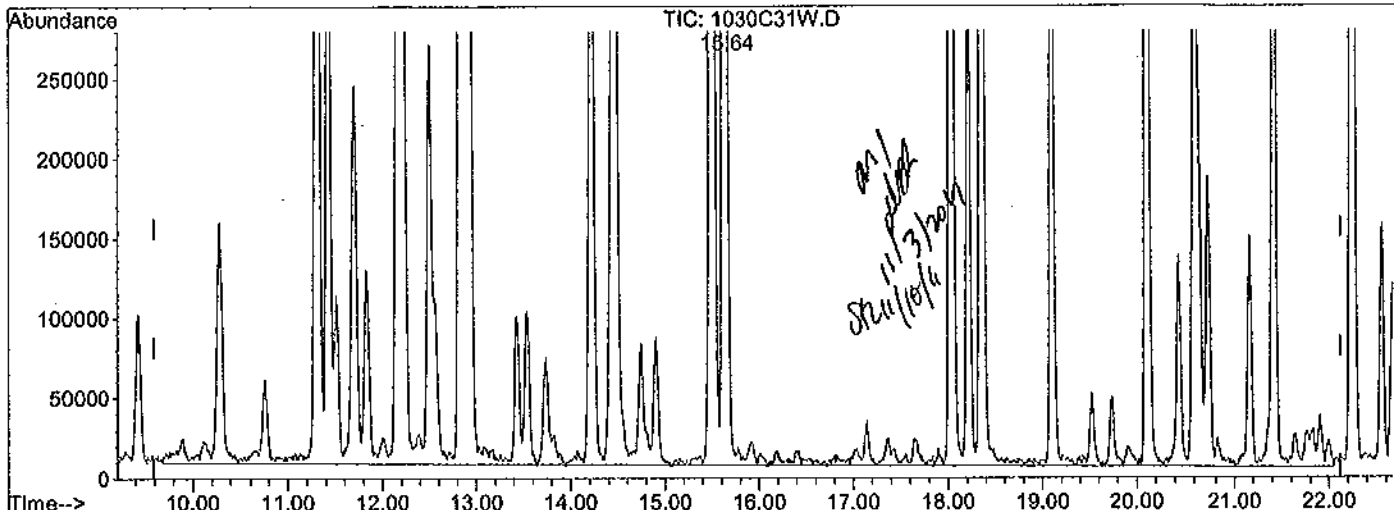


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Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C31W.D Vial: 1  
 Acq On : 31 Oct 11 10:57 Operator: STC  
 Sample : GAA 300ug/L LCS-1WC Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00  
 Quant Time: Nov 3 10:52 2011 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Multiple Level Calibration



TIC: 1030C31W.D

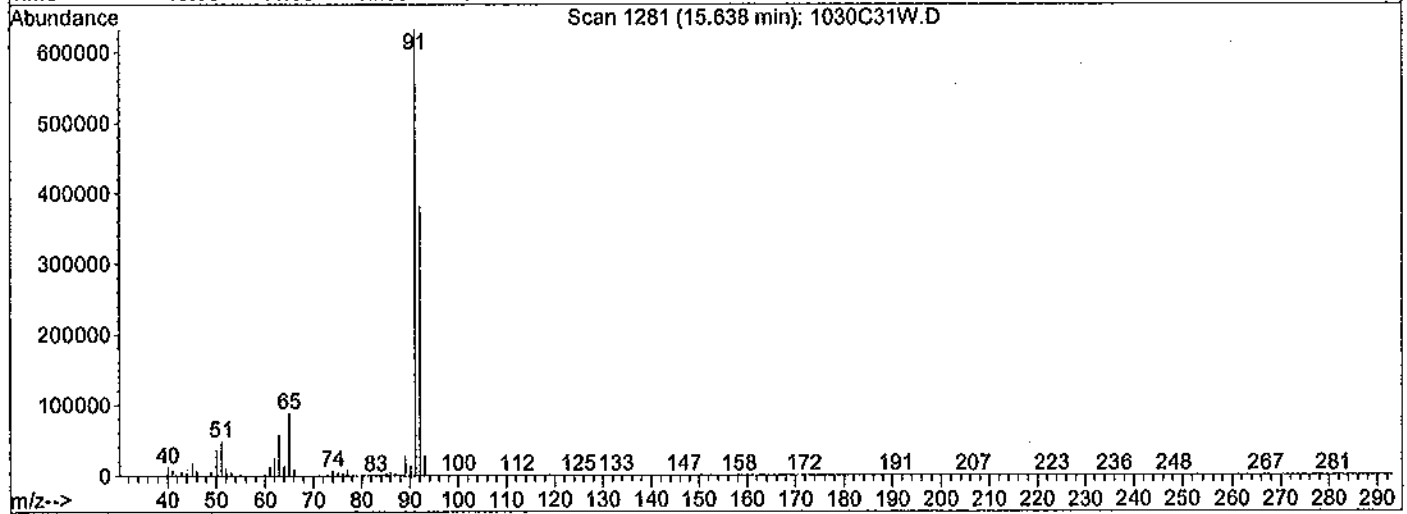
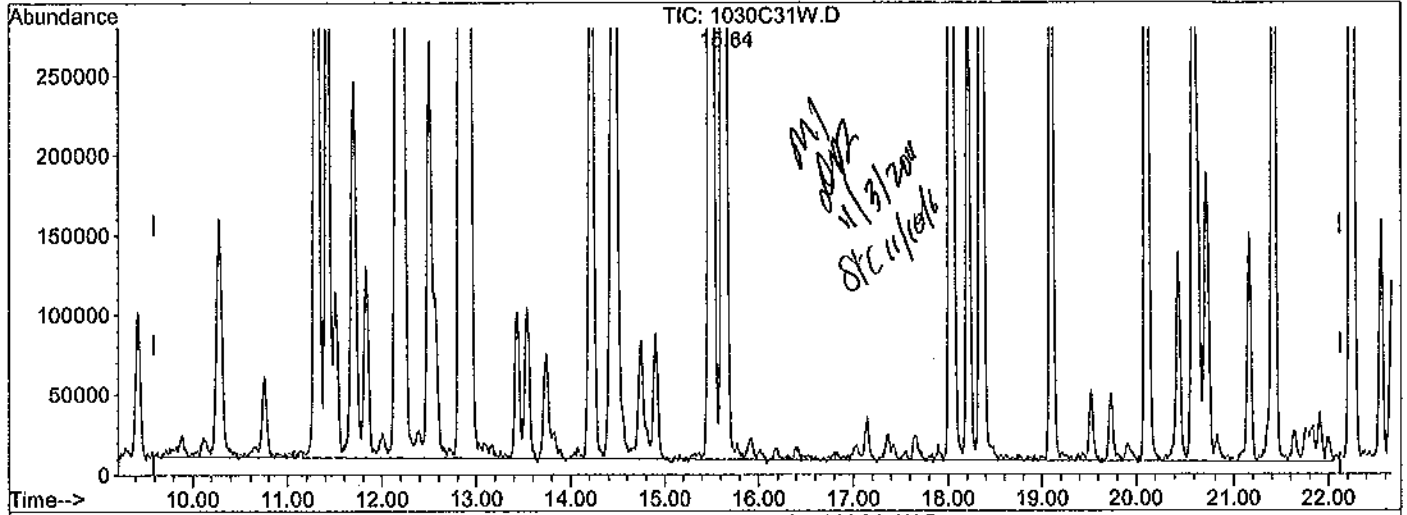
(2) Gasoline (TMHB)		
15.64min	380.8950ppb m	
response	52602858	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.21#
0.00	0.00	0.59#
0.00	0.00	0.00

Quantitation Report

Data File : M:\CHICO\DATA\C111030\1030C31W.D  
 Acq On : 31 Oct 11 10:57  
 Sample : GAA 300ug/L LCS-1WC  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11  
 Quant Time: Nov 3 10:53 2011

Vial: 1  
 Operator: STC  
 Inst : Chico  
 Multiplr: 1.00  
 Quant Results File: temp.res

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Multiple Level Calibration



TIC: 1030C31W.D

(2) Gasoline (TMHB)		
15.64min	369.8272ppb m	
response	51531735	
Ion	Exp%	Act%
TIC	100	100
0.00	0.00	0.21#
0.00	0.00	0.60#
0.00	0.00	0.00



# Matrix Spike Recoveries

## EPA 8260B VOCs + Gas Water

APPL ID: 111031W-49334 MS - 161029

Batch ID: #86RHB-111030AC

Sample ID: AY49334

Client ID: ES047

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
1,1,1,2-TETRACHLOROETHANE	10.00	ND	10.9	11.2	109	112	80-130	2.7	30
1,1,1-TRICHLOROETHANE	10.00	ND	8.95	9.51	89.5	95.1	65-130	6.1	30
1,1,2,2-TETRACHLOROETHANE	10.00	ND	12.7	12.6	127	126	65-130	0.79	30
1,1,2-TRICHLOROETHANE	10.00	ND	10.6	10.6	106	106	75-125	0.0	30
1,1-DICHLOROETHANE	10.00	ND	9.46	9.94	94.6	99.4	70-135	4.9	30
1,1-DICHLOROETHENE	10.00	ND	8.96	9.50	89.6	95.0	70-130	5.9	30
1,2,3-TRICHLOROPROPANE	10.00	ND	11.6	11.4	116	114	75-125	1.7	30
1,2,4-TRICHLOROBENZENE	10.00	ND	9.55	10.1	95.5	101	65-135	5.6	30
1,2-DIBROMO-3-CHLOROPROPANE	10.00	ND	11.2	12.2	112	122	50-130	8.5	30
1,2-DIBROMOETHANE	10.00	ND	10.9	10.8	109	108	70-130	0.92	30
1,2-DICHLOROBENZENE	10.00	ND	9.85	10.2	98.5	102	70-120	3.5	30
1,2-DICHLOROETHANE	10.00	ND	8.97	9.48	89.7	94.8	70-130	5.5	30
1,2-DICHLOROPROPANE	10.00	ND	9.62	10.5	96.2	105	75-125	8.7	30
1,3-DICHLOROBENZENE	10.00	ND	9.68	10.1	96.8	101	75-125	4.2	30
1,3-DICHLOROPROPENE, TOTAL	20.0	ND	20.4	20.9	102	105	70-130	2.4	30
1,4-DICHLOROBENZENE	10.00	ND	9.80	10.2	98.0	102	75-125	4.0	30
2-BUTANONE	10.00	ND	10.5	10.2	105	102	30-150	2.9	30
4-METHYL-2-PENTANONE	10.00	ND	11.0	11.0	110	110	60-135	0.0	30
ACETONE	10.00	ND	11.9	13.6	119	136	40-140	13.3	30
BENZENE	10.00	ND	9.56	10.2	95.6	102	80-120	6.5	30
BROMODICHLOROMETHANE	10.00	ND	9.85	10.3	98.5	103	75-120	4.5	30
BROMOFORM	10.00	ND	9.59	10.1	95.9	101	70-130	5.2	30
BROMOMETHANE	10.00	ND	9.35	9.85	93.5	98.5	30-145	5.2	30
CARBON TETRACHLORIDE	10.00	ND	9.77	9.93	97.7	99.3	65-140	1.6	30
CHLOROBENZENE	10.00	ND	9.68	10.1	96.8	101	80-120	4.2	30

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	CALLW.M	CALLW.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	10/31/11	10/31/11
Instrument :	Chico	Chico
Run :	1030C39	1030C40
Initials :	ARS	

Printed: 12/06/11 3:06:24 PM

APPL MSD SCII

**Matrix Spike Recoveries**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 111031W-49334 MS - 181029  
 Batch ID: #86RHB-111030AC  
 Sample ID: AY49334  
 Client ID: ES047

APPL Inc.  
 908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
CHLORODIBROMOMETHANE	10.00	ND	10.8	11.4	108	114	60-135	5.4	30
CHLOROETHANE	10.00	ND	8.88	9.26	88.8	92.6	60-135	4.2	30
CHLOROFORM	10.00	ND	9.21	9.65	92.1	96.5	65-135	4.7	30
CHLOROMETHANE	10.00	ND	8.69	9.03	86.9	90.3	40-125	3.8	30
CIS-1,2-DICHLOROETHENE	10.00	ND	9.19	9.57	91.9	95.7	70-125	4.1	30
ETHYLBENZENE	10.00	ND	9.73	10.3	97.3	103	75-125	5.7	30
GASOLINE	300	ND	374	377	125	126 #	75-125	0.80	30
HEXACHLOROBUTADIENE	10.00	ND	9.04	9.78	90.4	97.8	50-140	7.9	30
METHYL TERT-BUTYL ETHER	10.00	ND	10.1	10.2	101	102	65-125	0.99	30
METHYLENE CHLORIDE	10.00	ND	9.83	9.84	98.3	98.4	55-140	0.10	30
STYRENE	10.00	ND	10.2	10.6	102	106	65-135	3.8	30
TETRACHLOROETHENE	10.00	ND	9.48	10.3	94.8	103	45-150	8.3	30
TOLUENE	10.00	ND	9.46	10.4	94.6	104	75-120	9.5	30
TRANS-1,2-DICHLOROETHENE	10.00	ND	9.17	9.47	91.7	94.7	60-140	3.2	30
TRICHLOROETHENE	10.00	ND	9.00	9.38	90.0	93.8	70-125	4.1	30
VINYL CHLORIDE	10.00	ND	9.90	9.78	99.0	97.8	50-145	1.2	30
XYLENES (TOTAL)	30.0	ND	29.1	30.7	97.0	102	80-120	5.4	30
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SURROGATE: 1,2-DICHLOROETHANE-D	24.2	NA	22.7	22.3	93.7	92.1	70-120		
SURROGATE: 4-BROMOFLUOROBENZE	25.5	NA	25.8	26.7	101	105	75-120		
SURROGATE: DIBROMOFLUOROMETH	25.1	NA	24.7	25.0	98.4	99.6	85-115		
SURROGATE: TOLUENE-D8 (S)	25.8	NA	26.3	26.9	102	104	85-120		
-----									

# = Recovery is outside QC limits.

Comments: \_\_\_\_\_

Primary	SPK	DUP
Quant Method :	CALLW.M	CALLW.M
Extraction Date :	10/31/11	10/31/11
Analysis Date :	10/31/11	10/31/11
Instrument :	Chico	Chico
Run :	1030C39	1030C40
Initials :	ARS	

Printed: 12/06/11 3:06:24 PM  
 APPL MSD SCII

Data File : M:\CHICO\DATA\C111030\1030C39W.D Vial: 1  
 Acq On : 31 Oct 11 16:08 Operator: STC  
 Sample : AY49334W141516 MS-1WC (VOC) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	96	673315	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	444608	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	234048	25.00000	ppb	0.02
System Monitoring Compounds						
33) Dibromofluoromethane(S)	11.43	111	443656	24.73529	ppb	0.00
Spiked Amount	25.097		Recovery	=	98.557%	
38) 1,2-DCA-D4(S)	12.23	65	361670	22.65208	ppb	0.00
Spiked Amount	24.225		Recovery	=	93.506%	
56) Toluene-D8(S)	15.51	98	1644192	26.28251	ppb	0.02
Spiked Amount	25.808		Recovery	=	101.839%	
64) 4-Bromofluorobenzene(S)	20.12	95	578226	25.79618	ppb	0.00
Spiked Amount	25.459		Recovery	=	101.322%	
Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.08	85	233739	9.42228	ppb	96
3) Freon 114	4.34	85	156235	10.05590	ppb	100
4) Chloromethane	4.56	50	267000	8.68546	ppb	98
5) Vinyl chloride	4.82	62	203545	9.89891	ppb	95
7) Bromomethane	5.73	94	139543	9.34878	ppb	90
8) Chloroethane	5.92	64	150908	8.88492	ppb	95
9) Dichlorofluoromethane	6.01	67	417786	8.89643	ppb	98
10) Trichlorofluoromethane	6.55	101	259316	9.30510	ppb	97
11) Acetonitrile	7.67	41	102299	138.69122	ug/l	100
12) Acrolein	7.18	56	41239	122.17811	ppb	98
13) Acetone	7.30	43	23028	11.93711	ppb	# 67
14) Freon-113	7.48	101	166680	10.24118	ppb	91
15) 1,1-DCE	7.69	96	172282	8.96239	ppb	93
16) t-Butanol	7.78	59	13291	145.60910	ppb	93
17) Methyl Acetate	8.21	43	57808	9.94422	ppb	98
18) Iodomethane	8.17	142	85074	8.93041	ppb	91
19) Acrylonitrile	8.59	53	23274	11.05716	ppb	92
20) Methylene chloride	8.48	84	180285	9.83293	ppb	97
21) Carbon disulfide	8.57	76	184128	9.85829	ppb	99
22) Methyl t-butyl ether (MtBE)	8.92	73	294046	10.12039	ppb	91
23) Trans-1,2-DCE	9.11	96	204403	9.16612	ppb	91
24) Diisopropyl Ether	9.77	45	657158	10.23091	ppb	91
25) 1,1-DCA	9.80	63	360267	9.45758	ppb	96
26) Vinyl Acetate	9.43	43	123424	10.42529	ppb	85
27) Ethyl tert Butyl Ether	10.46	59	458722	10.46060	ppb	99
28) MEK (2-Butanone)	10.44	43	79943	10.46895	ppb	94
29) Cis-1,2-DCE	10.83	96	210715	9.19494	ppb	93
30) 2,2-Dichloropropane	10.82	77	272392	9.98243	ppb	100
31) Chloroform	11.10	83	337366	9.20607	ppb	100
32) Bromochloromethane	11.33	128	66189	10.37457	ppb	# 71
34) 1,1,1-TCA	11.85	97	298219	8.94840	ppb	96
35) Cyclohexane	12.01	56	300163	9.67354	ppb	99
36) 1,1-Dichloropropene	12.12	75	263597	9.23085	ppb	96
37) 2,2,4-Trimethylpentane	12.19	57	501585	10.31895	ppb	95
39) Carbon Tetrachloride	12.31	117	224210	9.77018	ppb	100
40) Tert Amyl Methyl Ether	12.36	73	337649	10.29749	ppb	# 95

(#) = qualifier out of range (m) = manual integration  
 1030C39W.D CALLW.M Fri Dec 02 11:35:28 2011

Data File : M:\CHICO\DATA\C111030\1030C39W.D  
 Acq On : 31 Oct 11 16:08  
 Sample : AY49334W141516 MS-1WC (VOC)  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 1,2-DCA	12.39	62	168650	8.96568	ppb	99
42) Benzene	12.52	78	784311	9.55972	ppb	98
43) TCE	13.55	95	204442	8.99750	ppb	90
44) 2-Pentanone	13.21	43	641372	134.94011	ppb	98
45) 1,2-Dichloropropane	13.77	63	179306	9.61525	ppb	# 92
46) Bromodichloromethane	14.13	83	209814	9.84828	ppb	85
47) Methyl Cyclohexane	13.83	83	264020	9.94314	ppb	99
48) Dibromomethane	14.18	93	75188	10.08162	ppb	96
49) 2-Chloroethyl vinyl ether	14.59	63	44799	9.44967	ppb	97
50) 1-Bromo-2-chloroethane	14.89	63	159282	10.01037	ppb	91
51) Cis-1,3-Dichloropropene	15.02	75	212722	10.47106	ppb	97
52) Toluene	15.65	91	765314	9.45759	ppb	97
53) Trans-1,3-Dichloropropene	15.81	75	145848	9.97216	ppb	99
54) 1,1,2-TCA	16.09	83	83942	10.64886	ppb	94
57) 1,2-EDB	17.34	107	92334	10.91173	ppb	92
58) Tetrachloroethene	16.80	164	216714	9.48077	ppb	97
59) 1-Chlorohexane	17.72	91	263885	10.02502	ppb	88
60) 1,1,1,2-Tetrachloroethane	18.17	131	156166	10.91277	ppb	96
61) m&p-Xylene	18.37	106	646753	19.15250	ppb	99
62) o-Xylene	19.11	106	322766	9.93837	ppb	99
63) Styrene	19.13	104	500812	10.21655	ppb	96
65) 2-Hexanone	16.11	43	49009	12.04661	ppb	98
66) 1,3-Dichloropropane	16.51	76	172305	10.32618	ppb	99
67) Dibromochloromethane	16.98	129	117679	10.80307	ppb	87
68) Chlorobenzene	18.12	112	467466	9.67690	ppb	98
69) Ethylbenzene	18.23	91	875108	9.72830	ppb	98
70) Bromoform	19.65	173	53217	9.59314	ppb	95
72) MIBK (methyl isobutyl keto)	14.68	43	73055	10.97983	ppb	80
73) Isopropylbenzene	19.75	105	1154759	13.61308	ppb	99
74) 1,1,2,2-Tetrachloroethane	19.92	83	90087	12.68678	ppb	# 76
75) 1,2,3-Trichloropropane	20.17	110	9227	11.57218	ppb	78
76) t-1,4-Dichloro-2-Butene	20.23	53	20628	12.81166	ppb	# 78
77) Bromobenzene	20.49	156	193805	9.90473	ppb	92
78) n-Propylbenzene	20.46	91	1397086	13.80582	ppb	98
79) 4-Ethyltoluene	20.65	105	653523	9.33219	ppb	98
80) 2-Chlorotoluene	20.75	91	606805	9.05395	ppb	100
81) 1,3,5-Trimethylbenzene	20.73	105	642904	9.33159	ppb	98
82) 4-Chlorotoluene	20.82	91	563219	9.75925	ppb	98
83) Tert-Butylbenzene	21.37	119	771335	10.34106	ppb	98
84) 1,2,4-Trimethylbenzene	21.43	105	651620	9.05592	ppb	97
85) Sec-Butylbenzene	21.77	105	1244018	13.90727	ppb	100
86) p-Isopropyltoluene	22.00	119	725182	9.46493	ppb	99
87) Benzyl Chloride	22.44	91	197410	19.40978	ppb	97
88) 1,3-DCB	22.14	146	387323	9.67943	ppb	96
89) 1,4-DCB	22.31	146	363787	9.79512	ppb	92
90) Hexachloroethane	23.56	117	533859	38.29226	ppb	# 12
91) n-Butylbenzene	22.71	91	769919	11.52107	ppb	98
92) 1,2-DCB	22.93	146	313462	9.84841	ppb	98
93) 1,2-Dibromo-3-chloropropan	24.14	155	12899	11.18801	ppb	82
94) 1,2,4-Trichlorobenzene	25.59	180	220157	9.54544	ppb	98
95) Hexachlorobutadiene	25.86	223	37896	9.04368	ppb	97

(#) = qualifier out of range (m) = manual integration  
 1030C39W.D CALLW.M Fri Dec 02 11:35:29 2011

Data File : M:\CHICO\DATA\C111030\1030C39W.D Vial: 1  
 Acq On : 31 Oct 11 16:08 Operator: STC  
 Sample : AY49334W141516 MS-1WC (VOC) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) Naphthalene	25.94	128	595126	20.91304	ppb	100
97) 1,2,3-Trichlorobenzene	26.31	180	169004	9.68724	ppb	98

Quantitation Report

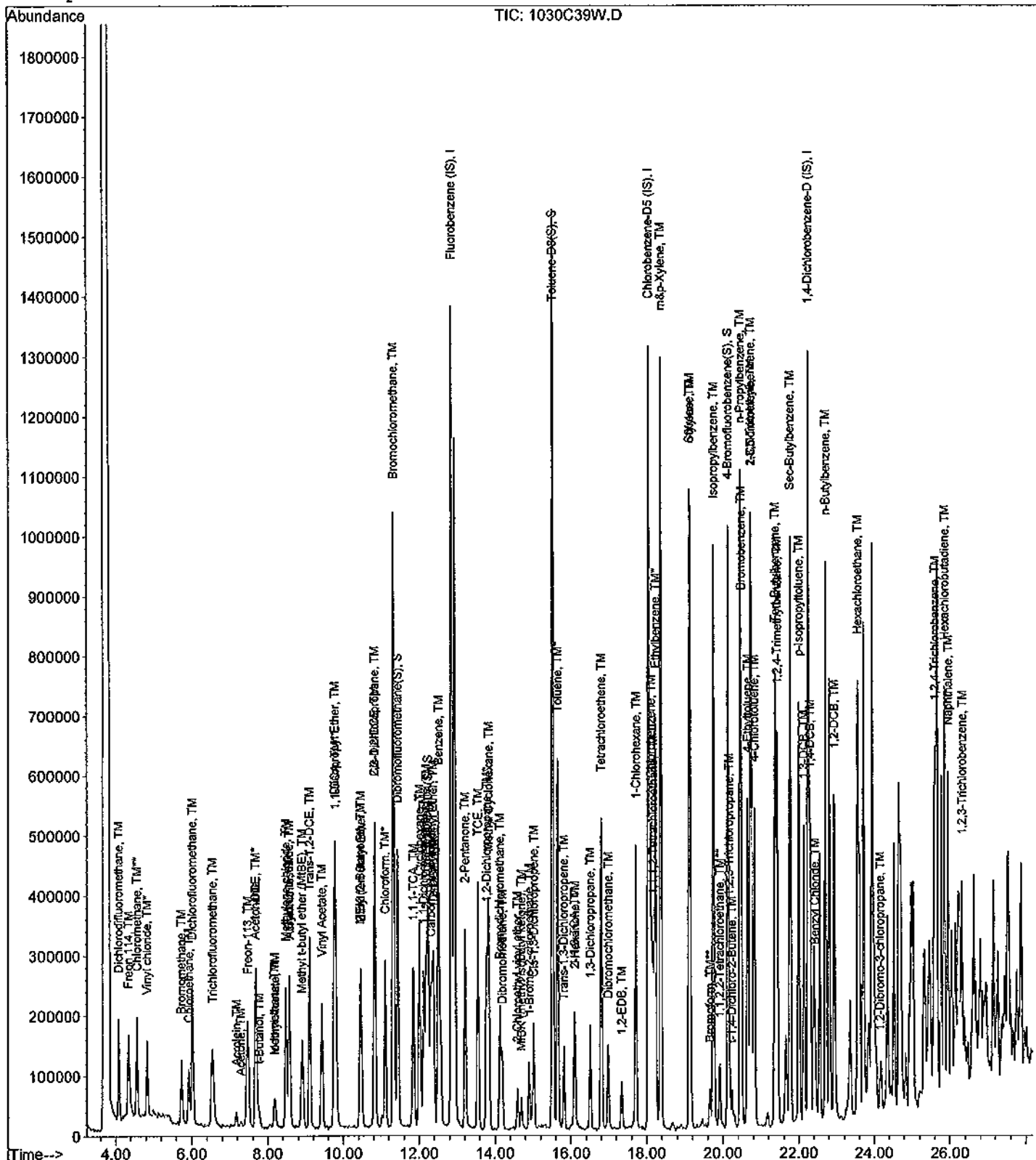
Data File : M:\CHICO\DATA\C111030\1030C39W.D  
Acq On : 31 Oct 11 16:08  
Sample : AY49334W141516 MS-1WC (VOC)  
Misc : Water 10mL/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:32:50 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C40W.D Vial: 1  
 Acq On : 31 Oct 11 16:45 Operator: STC  
 Sample : AY49334W141516 MSD-1WC (VOC) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.85	96	673885	25.00000	ppb	0.02
55) Chlorobenzene-D5 (IS)	18.05	117	449984	25.00000	ppb	0.00
71) 1,4-Dichlorobenzene-D (IS)	22.26	152	240256	25.00000	ppb	0.02
<b>System Monitoring Compounds</b>						
33) Dibromofluoromethane (S)	11.43	111	449233	25.02504	ppb	0.00
Spiked Amount	25.097		Recovery	=	99.712%	
38) 1,2-DCA-D4 (S)	12.23	65	356030	22.27998	ppb	0.00
Spiked Amount	24.225		Recovery	=	91.970%	
56) Toluene-D8 (S)	15.51	98	1704225	26.91667	ppb	0.02
Spiked Amount	25.808		Recovery	=	104.296%	
64) 4-Bromofluorobenzene (S)	20.13	95	605686	26.69841	ppb	0.02
Spiked Amount	25.459		Recovery	=	104.865%	
<b>Target Compounds</b>						<b>Qvalue</b>
2) Dichlorodifluoromethane	4.08	85	220598	8.88503	ppb	94
3) Freon 114	4.34	85	150416	9.67318	ppb	95
4) Chloromethane	4.56	50	277770	9.02816	ppb	93
5) Vinyl chloride	4.82	62	201338	9.78330	ppb	96
7) Bromomethane	5.74	94	147121	9.84814	ppb	97
8) Chloroethane	5.93	64	157372	9.25766	ppb	99
9) Dichlorofluoromethane	6.01	67	450238	9.57936	ppb	98
10) Trichlorofluoromethane	6.54	101	257325	9.22585	ppb	95
11) Acetonitrile	7.66	41	109689	148.58438	ug/l	100
12) Acrolein	7.18	56	40703	120.48812	ppb	94
13) Acetone	7.29	43	26277	13.60978	ppb	# 76
14) Freon-113	7.48	101	164332	10.07108	ppb	98
15) 1,1-DCE	7.70	96	182764	9.49964	ppb	92
16) t-Butanol	7.78	59	14747	161.42360	ppb	98
17) Methyl Acetate	8.20	43	62200	10.74239	ppb	99
18) Iodomethane	8.18	142	105131	10.12939	ppb	89
19) Acrylonitrile	8.58	53	23406	11.11230	ppb	88
20) Methylene chloride	8.48	84	180541	9.83857	ppb	95
21) Carbon disulfide	8.58	76	183104	9.79517	ppb	100
22) Methyl t-butyl ether (MtBE)	8.92	73	297031	10.21448	ppb	94
23) Trans-1,2-DCE	9.11	96	211447	9.47397	ppb	98
24) Diisopropyl Ether	9.77	45	672476	10.46053	ppb	91
25) 1,1-DCA	9.80	63	378977	9.94033	ppb	97
26) Vinyl Acetate	9.44	43	132519	11.29670	ppb	98
27) Ethyl tert Butyl Ether	10.45	59	467350	10.64834	ppb	99
28) MEK (2-Butanone)	10.44	43	78228	10.22050	ppb	95
29) Cis-1,2-DCE	10.82	96	219402	9.56592	ppb	95
30) 2,2-Dichloropropane	10.82	77	284485	10.41678	ppb	99
31) Chloroform	11.10	83	353899	9.64906	ppb	100
32) Bromochloromethane	11.33	128	69588	10.89810	ppb	79
34) 1,1,1-TCA	11.85	97	317360	9.51469	ppb	95
35) Cyclohexane	12.01	56	307089	9.88838	ppb	94
36) 1,1-Dichloropropene	12.12	75	277564	9.71173	ppb	94
37) 2,2,4-Trimethylpentane	12.20	57	511508	10.53601	ppb	91
39) Carbon Tetrachloride	12.31	117	228003	9.92706	ppb	94
40) Tert Amyl Methyl Ether	12.36	73	345658	10.53283	ppb	97

(#) = qualifier out of range (m) = manual integration  
 1030C40W.D CALLW.M Fri Dec 02 11:35:37 2011

Data File : M:\CHICO\DATA\C111030\1030C40W.D Vial: 1  
 Acq On : 31 Oct 11 16:45 Operator: STC  
 Sample : AY49334W141516 MSD-1WC (VOC) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)

Title : METHOD 8260

Last Update : Fri Dec 02 11:32:50 2011

Response via : Initial Calibration

DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) 1,2-DCA	12.39	62	178492	9.48087	ppb	94
42) Benzene	12.52	78	833883	10.15534	ppb	99
43) TCE	13.55	95	213329	9.38068	ppb	92
44) 2-Pentanone	13.21	43	670030	140.85032	ppb	94
45) 1,2-Dichloropropane	13.77	63	195266	10.46224	ppb	95
46) Bromodichloromethane	14.13	83	219583	10.29810	ppb	94
47) Methyl Cyclohexane	13.83	83	263113	9.90060	ppb	97
48) Dibromomethane	14.19	93	77194	10.34184	ppb	90
49) 2-Chloroethyl vinyl ether	14.59	63	43646	9.19868	ppb	# 93
50) 1-Bromo-2-chloroethane	14.89	63	166408	10.44937	ppb	90
51) Cis-1,3-Dichloropropene	15.02	75	211155	10.38513	ppb	96
52) Toluene	15.65	91	840102	10.37302	ppb	98
53) Trans-1,3-Dichloropropene	15.81	75	154386	10.54700	ppb	98
54) 1,1,2-TCA	16.09	83	83579	10.59385	ppb	# 88
57) 1,2-EDB	17.34	107	92512	10.80216	ppb	95
58) Tetrachloroethene	16.80	164	239347	10.34582	ppb	93
59) 1-Chlorohexane	17.72	91	280271	10.52032	ppb	94
60) 1,1,1,2-Tetrachloroethane	18.17	131	161501	11.15075	ppb	87
61) m&p-Xylene	18.37	106	683414	19.99636	ppb	98
62) o-Xylene	19.11	106	353111	10.74283	ppb	99
63) Styrene	19.13	104	527765	10.63776	ppb	99
65) 2-Hexanone	16.12	43	51343	12.46954	ppb	89
66) 1,3-Dichloropropane	16.51	76	177186	10.49183	ppb	100
67) Dibromochloromethane	16.98	129	125506	11.38395	ppb	93
68) Chlorobenzene	18.12	112	491969	10.06246	ppb	98
69) Ethylbenzene	18.23	91	936335	10.28458	ppb	100
70) Bromoform	19.64	173	56899	10.07037	ppb	90
72) MIBK (methyl isobutyl keto)	14.69	43	75276	11.02130	ppb	# 77
73) Isopropylbenzene	19.75	105	1237307	14.20931	ppb	99
74) 1,1,2,2-Tetrachloroethane	19.91	83	91721	12.58313	ppb	# 89
75) 1,2,3-Trichloropropane	20.17	110	9365	11.44279	ppb	# 75
76) t-1,4-Dichloro-2-Butene	20.23	53	22200	13.43173	ppb	93
77) Bromobenzene	20.49	156	206516	10.28163	ppb	100
78) n-Propylbenzene	20.46	91	1530297	14.73145	ppb	98
79) 4-Ethyltoluene	20.65	105	706238	9.82436	ppb	95
80) 2-Chlorotoluene	20.75	91	653382	9.49701	ppb	97
81) 1,3,5-Trimethylbenzene	20.73	105	702310	9.93046	ppb	99
82) 4-Chlorotoluene	20.82	91	605738	10.22479	ppb	99
83) Tert-Butylbenzene	21.38	119	820988	10.72234	ppb	97
84) 1,2,4-Trimethylbenzene	21.43	105	691895	9.36719	ppb	99
85) Sec-Butylbenzene	21.77	105	1352492	14.72924	ppb	98
86) p-Isopropyltoluene	22.00	119	794796	10.10548	ppb	99
87) Benzyl Chloride	22.44	91	198774	19.03890	ppb	98
88) 1,3-DCB	22.14	146	415514	10.11563	ppb	95
89) 1,4-DCB	22.30	146	389740	10.22276	ppb	98
90) Hexachloroethane	23.56	117	551389	38.51564	ppb	# 12
91) n-Butylbenzene	22.71	91	850928	12.40428	ppb	97
92) 1,2-DCB	22.93	146	334523	10.23853	ppb	97
93) 1,2-Dibromo-3-chloropropan	24.14	155	14637	12.23153	ppb	89
94) 1,2,4-Trichlorobenzene	25.59	180	240070	10.13986	ppb	96
95) Hexachlorobutadiene	25.85	223	42056	9.77711	ppb	96

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

1030C40W.D CALLW.M Fri Dec 02 11:35:38 2011



Data File : M:\CHICO\DATA\C111030\1030C40W.D Vial: 1  
 Acq On : 31 Oct 11 16:45 Operator: STC  
 Sample : AY49334W141516 MSD-1WC (VOC) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Dec 2 11:35 2011 Quant Results File: CALLW.RES

Quant Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260  
 Last Update : Fri Dec 02 11:32:50 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
96) Naphthalene	25.94	128	619605	21.21064	ppb	99
97) 1,2,3-Trichlorobenzene	26.31	180	193601	10.81039	ppb	92

Quantitation Report

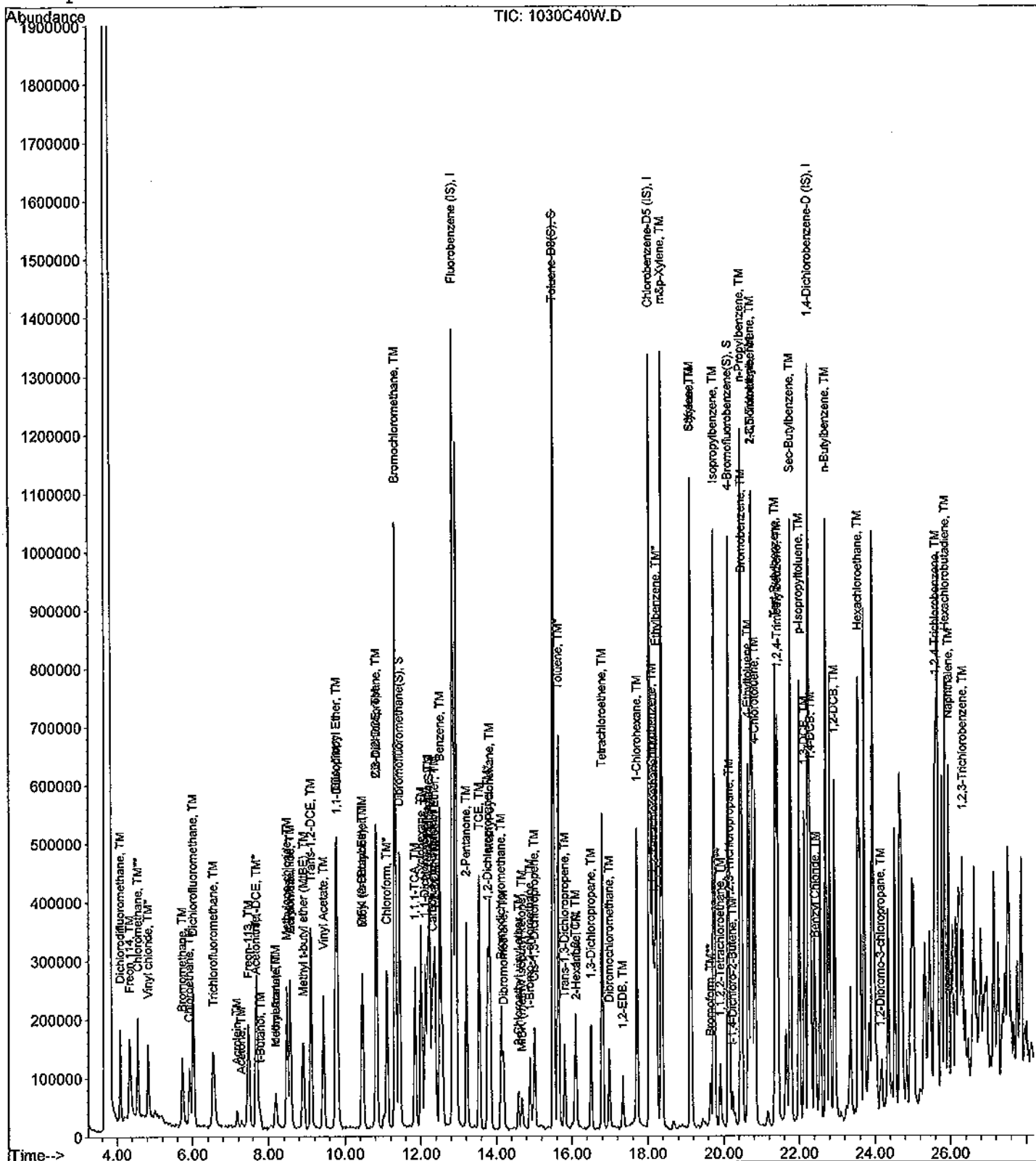
Data File : M:\CHICO\DATA\C111030\1030C40W.D  
Acq On : 31 Oct 11 16:45  
Sample : AY49334W141516 MSD-1WC (VOC)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Dec 2 11:35 2011

Quant Results File: CALLW.RES

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260  
Last Update : Fri Dec 02 11:32:50 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C41W.D Vial: 1  
 Acq On : 31 Oct 11 17:22 Operator: STC  
 Sample : AY49334W161718 MS-1WC (GAS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 10 10:25 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	12.85	TIC	1408321	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.05	TIC	1375208	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.25	TIC	1432024	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	59067164m	373.93954	ppb	100

Quantitation Report

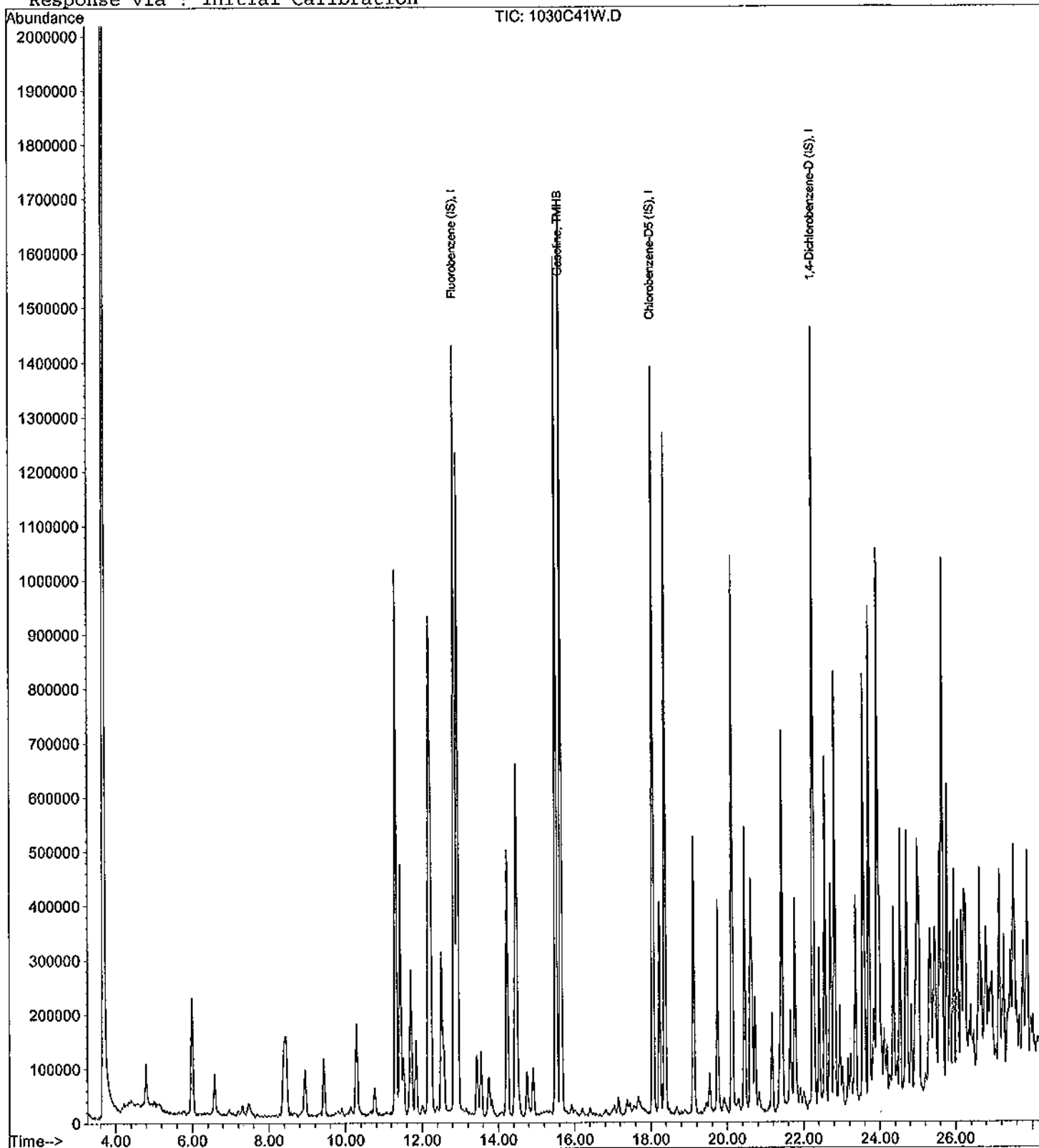
Data File : M:\CHICO\DATA\C111030\1030C41W.D  
Acq On : 31 Oct 11 17:22  
Sample : AY49334W161718 MS-1WC (GAS)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 10 10:25 2011

Quant Results File: CGAS.RES

Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C42W.D Vial: 1  
 Acq On : 31 Oct 11 17:59 Operator: STC  
 Sample : AY49334W161718 MSD-1WC (GAS) Inst : Chico  
 Misc : Water 10mLw/ IS&S:10-30/10-26-11 Multiplr: 1.00

Quant Time: Nov 3 10:23 2011 Quant Results File: CGAS.RES

Quant Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 03 10:47:02 2011  
 Response via : Initial Calibration  
 DataAcq Meth : V8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	12.85	TIC	1418194	25.00000	ppb	0.01
3) Chlorobenzene-D5 (IS)	18.05	TIC	1424242	25.00000	ppb	0.01
4) 1,4-Dichlorobenzene-D (IS)	22.26	TIC	1438638	25.00000	ppb	0.01

System Monitoring Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	15.64	TIC	59788348m	376.70985	ppb	100

Quantitation Report

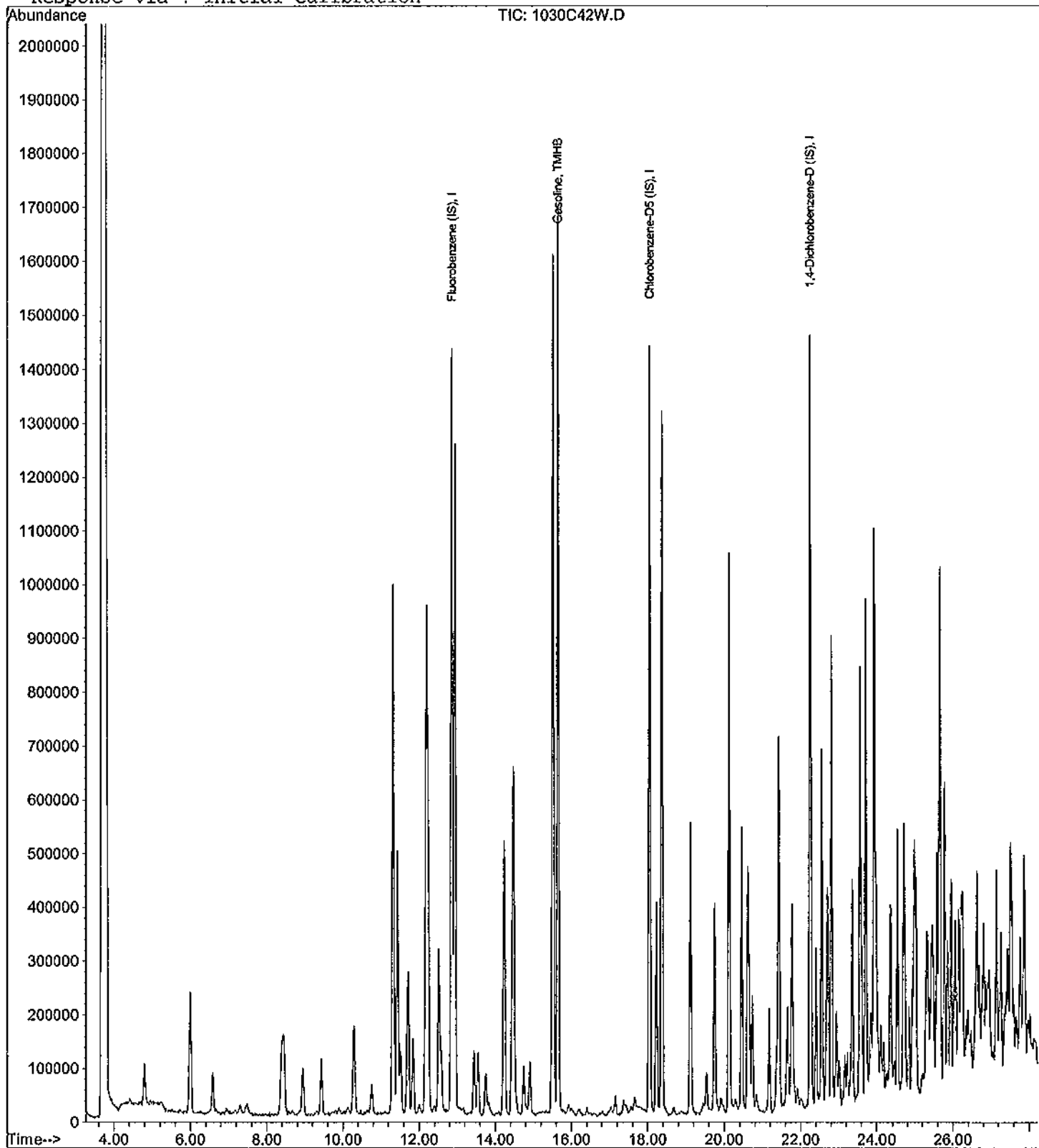
Data File : M:\CHICO\DATA\C111030\1030C42W.D  
Acq On : 31 Oct 11 17:59  
Sample : AY49334W161718 MSD-1WC (GAS)  
Misc : Water 10mLw/ IS&S:10-30/10-26-11

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

Quant Time: Nov 3 10:23 2011

Quant Results File: CGAS.RES

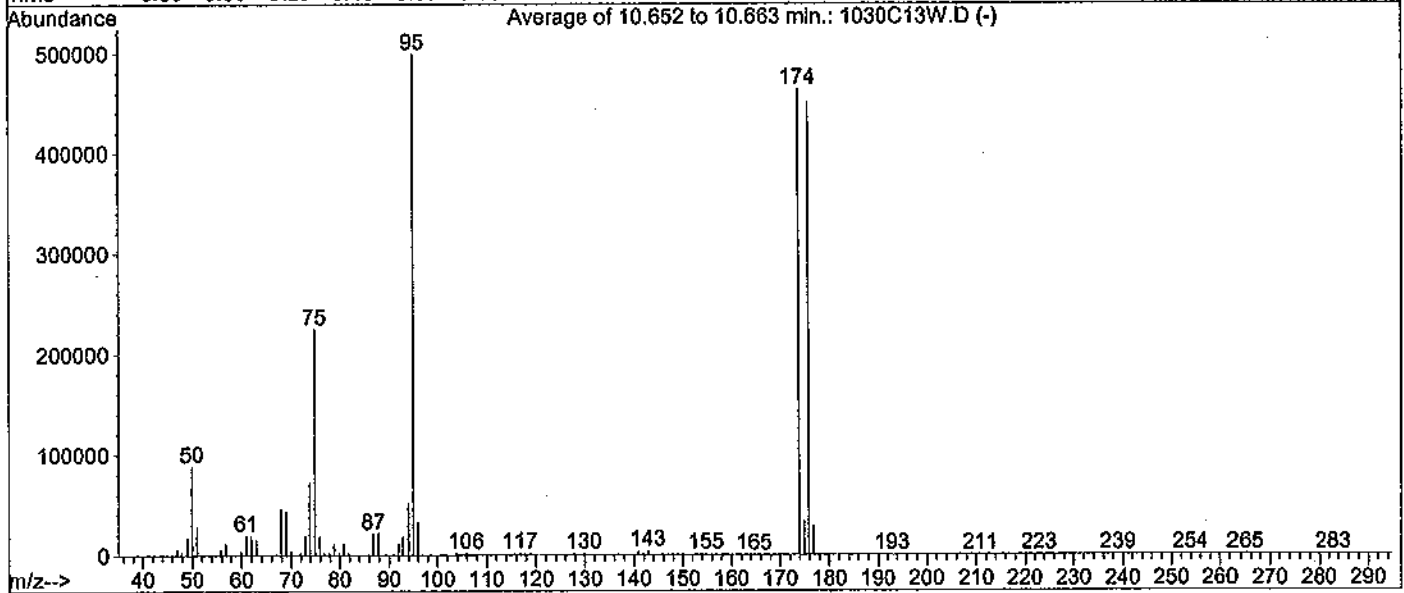
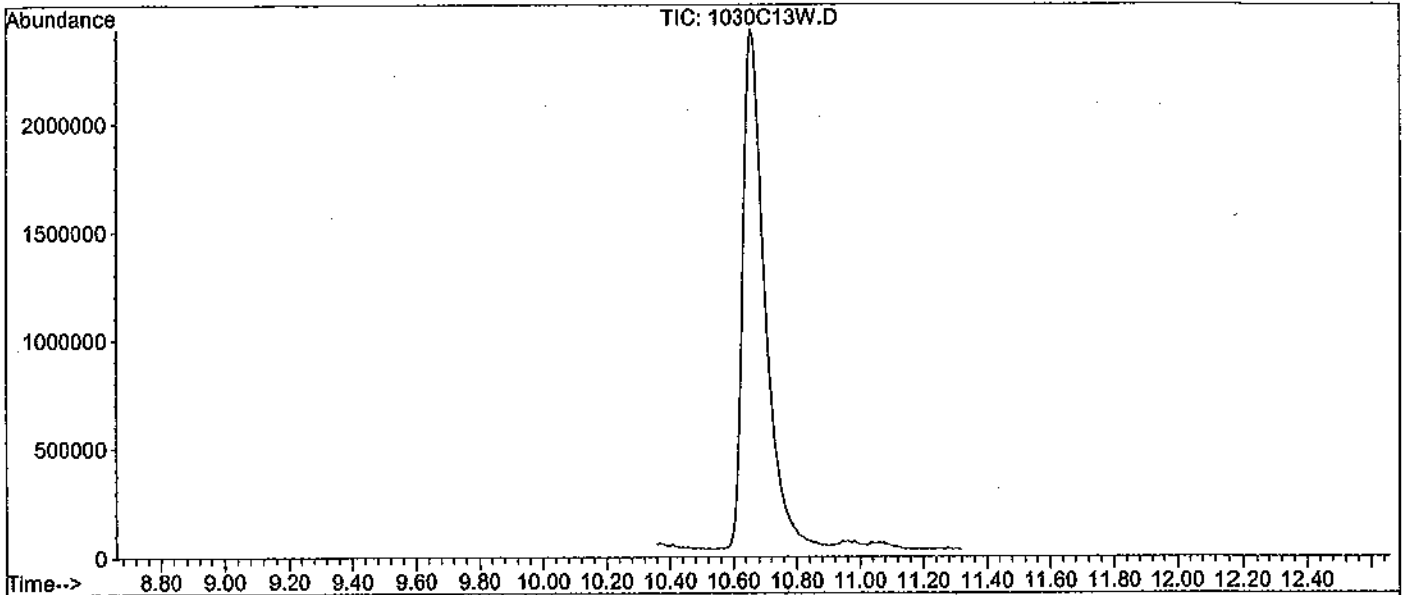
Method : M:\CHICO\DATA\C111030\CGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 03 10:47:02 2011  
Response via : Initial Calibration



Data File : M:\CHICO\DATA\C111030\1030C13W.D  
 Acq On : 30 Oct 11 22:01  
 Sample : 20ug/ml BFB Std 10-19-11  
 Misc : Water 2uL

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

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
 Title : METHOD 8260



AutoFind: Scans 52, 53, 54; Background Corrected with Scan 36

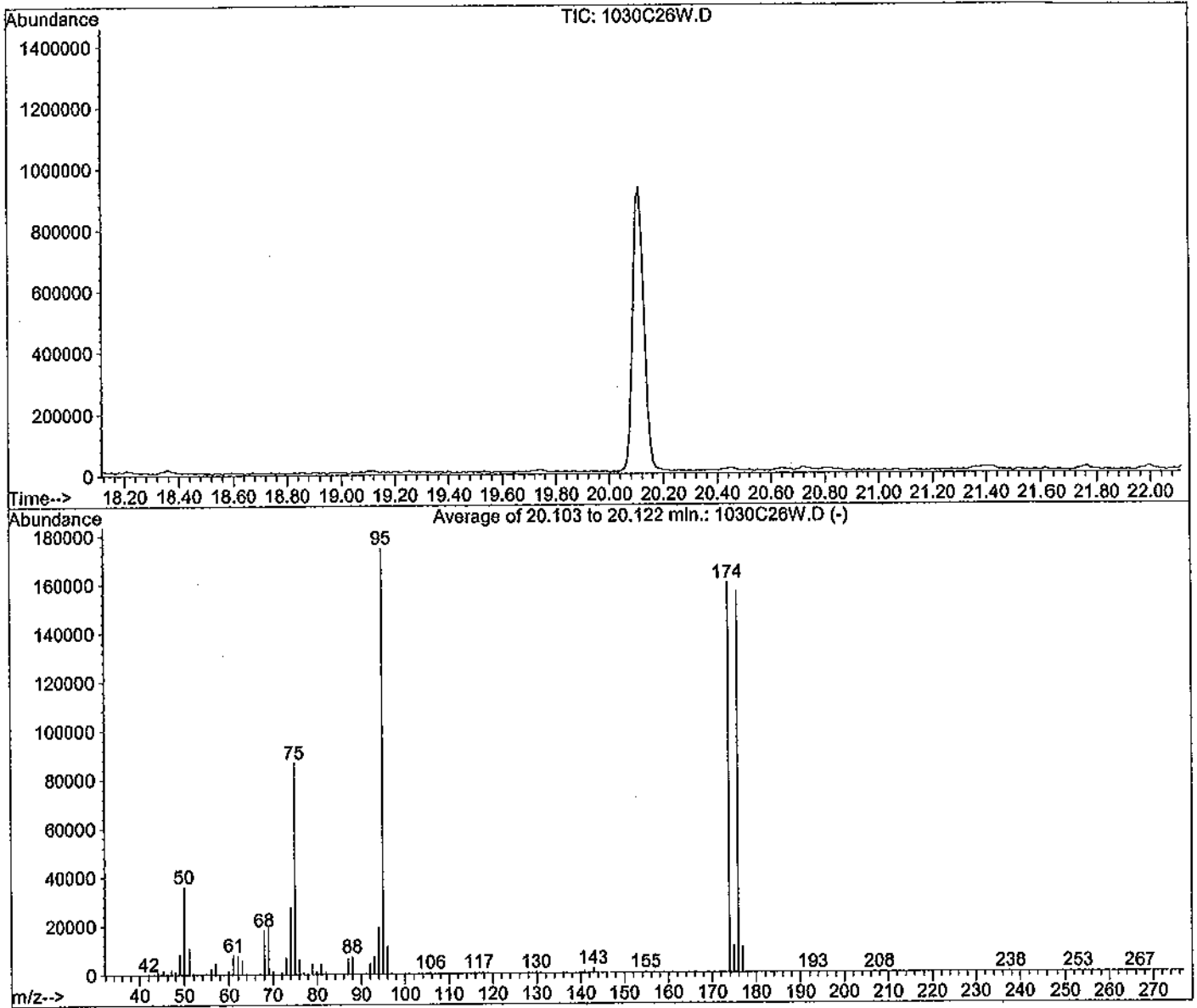
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	88217	PASS
75	95	30	60	45.1	224883	PASS
95	95	100	100	100.0	499051	PASS
96	95	5	9	6.5	32634	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	92.8	463189	PASS
175	174	5	9	7.2	33219	PASS
176	174	95	101	97.1	449771	PASS
177	176	5	9	6.4	28567	PASS

BFB

Data File : M:\CHICO\DATA\C111030\1030C26W.D  
Acq On : 31 Oct 11 7:21  
Sample : 20ug/mL BFB STD 10-19-11  
Misc : Water 2ul

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

Method : M:\CHICO\DATA\C111030\CALLW.M (RTE Integrator)  
Title : METHOD 8260



Spectrum Information: Average of 20.103 to 20.122 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	35941	PASS
75	95	30	60	49.7	86725	PASS
95	95	100	100	100.0	174635	PASS
96	95	5	9	6.6	11458	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	91.6	159913	PASS
175	174	5	9	6.9	11031	PASS
176	174	95	101	97.7	156203	PASS
177	176	5	9	6.7	10398	PASS



Volatile Standard Curve Preparation for 5mL Purge (8250 soln)-THOR

Expiration Date:		08/15/11									
Date	Conc.	50µg/mL Vol Std #9	50µg/mL Surrogate	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surrogate	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/mL Vol Std #2	50µg/mL Vol Std #12	
Code	µg/L	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	
08-15-11A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a	
08-15-11B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a	
08-15-11C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a	
08-15-11D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a	
08-15-11E	50	n/a	n/a	5	5	5	n/a	5	n/a	5	
08-15-11F	100	n/a	n/a	10	10	10	n/a	10	n/a	10	
08-15-11G	200	n/a	n/a	20	20	20	n/a	20	n/a	20	

250µg/mL TBA	Final Vol
08-10-11W	w/P&T H <sub>2</sub> O
Exp:08-17-11	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Volatile Standard Curve Preparation for 5mL Purge (8280 soln)-THOR

Expiration Date:		08/17/11									
Date	Conc.	50µg/mL Vol Std #9	50µg/mL Surrogate	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surrogate	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/mL Vol Std #2	50µg/mL Vol Std #12	
Code	µg/L	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	Exp:08-17-11	
08-16-11A	2	2	2	n/a	n/a	n/a	2	n/a	2	n/a	
08-16-11B	5	5	5	n/a	n/a	n/a	5	n/a	5	n/a	
08-16-11C	10	10	10	n/a	n/a	n/a	10	n/a	10	n/a	
08-16-11D	20	20	20	n/a	n/a	n/a	20	n/a	20	n/a	
08-16-11E	50	n/a	n/a	5	5	5	n/a	5	n/a	5	
08-16-11F	100	n/a	n/a	10	10	10	n/a	10	n/a	10	
08-16-11G	200	n/a	n/a	20	20	20	n/a	20	n/a	20	

250µg/mL TBA	Final Vol
08-10-11W	w/P&T H <sub>2</sub> O
Exp:08-17-11	mL
1	5
2	5
3	5
4	5
5	5
6	5
7	5

Method 8260 Gases, 2,000 mg/L, 3 X 0.6 ml

120016-03

Lot# Storage Expiry  
17002 5-19 Degree C 3/11/14  
Soln: P/T Methanol

Method 8260 Gases

Lot #: 170302 - 28666

Rec: 4/20/11 MFR exp. 03/11/14

Method 8260B Surrogate  
Sektillon, 2,000 mg/L, 1 ml

120002-01

Lot# Storage Expiry  
164585 10 Degree C 10/12/13  
Soln: P/T Methanol

Method 8260B Surrogate

Lot #: 164585 - 28720

Rec: 4/20/11 MFR exp. 10/12/13

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

110166-01

Lot# Storage Expiry  
171714 5-6 Degree C 4/11/13  
Soln: P/T Methanol

VOC Mix 4-3, 2000mg/L

Lot #: 171714 - 29243

Rec: 8/5/11 MFR exp. 04/11/13

RS-11  
RS

8/16/11  
RS

8/17/11  
RS

8/17/11  
RS

8/17/11  
RS

Vol Std #2	50µg/mL Vol Std #9	50µg/mL Surrogate	50µg/mL Vol Std #7	50µg/mL Vol Std #8	50µg/mL Surrogate	50µg/mL Vol Std #10	50µg/mL Vol Std #11	50µg/mL Vol Std #2	50µg/mL Vol Std #12
1	2	2	n/a	n/a	n/a	2	n/a	2	n/a
2	5	5	n/a	n/a	n/a	5	n/a	5	n/a
3	10	10	n/a	n/a	n/a	10	n/a	10	n/a
4	20	20	n/a	n/a	n/a	20	n/a	20	n/a
5	50	n/a	n/a	5	5	n/a	5	n/a	5
6	100	n/a	n/a	10	10	n/a	10	n/a	10
7	200	n/a	n/a	20	20	n/a	20	n/a	20

030

GC/MS STANDARD PREPARATION BOOK # 98 PAGE #

08-17-11V		Exp: 08/24/11					
50ug/ml Vol Work Std #9		Lot		APPL Code		APPL Exp Date	
SOURCE		08-17-11R		09/02/11		200	
50ug/ml Vol Work Std #2		08-17-11T		09/02/11		200	
50ug/ml Vol Work Std #8		08/12/12		06/08/12		1600	
J&T Brand							
08-17-11W		Exp: 08/24/11					
50ug/ml Vol Work Std #10		Lot		APPL Code		APPL Exp Date	
SOURCE		08-17-11S		09/02/11		200	
50ug/ml Vol Work Std #1		08/12/12		06/08/12		1800	
J&T Brand							
08-17-11X		Exp: 08/24/11					
50ug/ml Vol Work Std #12		Lot		APPL Code		APPL Exp Date	
SOURCE		08-17-11U		09/02/11		200	
50ug/ml Vol Work Std #2		08/12/12		06/08/12		1800	
J&T Brand							
08-17-11Y		Exp: 08/24/11					
50ug/ml 8260 Surrogate		Conc.		Date		Exp.	
Exp: 08/24/11		ug/ml		Lot #		Code	
02SI		120002-01		8260B Surr Solution		164585-28720	
J&T Brand		Purge & Trap MeOH		K07834-00543		08-17-11B	
						09/14/11	
						10/14/11	
						3900	
08-17-11Z		Exp: 08/24/11					
5.0ug/ml 8260 Surrogate		Lot		APPL Code		APPL Exp Date	
SOURCE		08-17-11V		09/02/11		200	
50ug/ml 8260 Surrogate		08/06/12		06/08/12		1600	
J&T Brand							
Purge & Trap MeOH							
08-17-11AA		Exp: 08/24/11					
250ug/ml TBA/TBA/Acetone/Hexane/Cyclohexanone/Acroleln/2-P		Conc.		Date		Exp.	
Exp: 08/24/11		ug/ml		Lot #		Code	
Supplier		ID #		Code		Date	
02SI		120166-01		Volatile Mix 4-1		08-17-11C	
02SI		020229-09		Acroleln		12/17/11	
J&T Brand		Purge & Trap MeOH		K07834-00543		08-04-11J	
						08/22/11	
						10/14/11	
						3400	

8-17-11  
RS

8-17-11  
RS

8-17-11  
RS

8-17-11  
RS

8-17-11  
RS

8-17-11  
RS

8-18-11  
RS

<b>CHICO</b>							
08-17-11AB		250ug/ml 8260 Internal Standard - Chico		Conc.		Date	
Supplier		ID #		ug/ml		Lot #	
02SI		120302-03		Internal Standard Mix		166255-27947	
02SI		020132-02		Fluorobenzene Standard		08-09-11A	
J&T Baker		Purge & Trap MeOH		K07834-00543		08-09-11B	
						10/23/11	
						300	
						300	
						300	
08-17-11AC		250ug/ml 8260 Surrogate - Chico		Conc.		Date	
Supplier		ID #		ug/ml		Lot #	
02SI		120002-01		Surrogate Standard		164585-28727	
J&T Baker		Purge & Trap MeOH		K07834-00543		08-09-11C	
						10/23/11	
						300	
						300	

08-17-11AD		50ug/ml 8260B Surrogate- Nao		Conc.		Date	
Supplier		ID #		ug/ml		Lot #	
02SI		8260B Surr		Surrogate Standards		164585-28720	
J.T Baker		Purge & Trap MeOH		K07834-00543		08-17-11B	
						12/13/11	
						300	
						300	

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

Expiration Date		09/22/11									
Date	Conc.	50ug/mL Vol Std #9	50ug/mL Vol Std #9	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Vol Std #8	50ug/mL Vol Std #10	50ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #11	50ug/mL Vol Std #12
Code	µg/L	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11
09-21-11B	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a	3
09-21-11C	0.6	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a	5
09-21-11D	1	10	20	n/a	n/a	n/a	10	n/a	n/a	n/a	10
09-21-11E	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a	20
09-21-11F	5	n/a	n/a	5	10	n/a	5	10	n/a	5	n/a
09-21-11G	10	n/a	n/a	10	20	n/a	10	20	n/a	10	n/a
09-21-11H	20	n/a	n/a	20	40	n/a	20	40	n/a	20	n/a
09-21-11I	40	n/a	n/a	40	80	n/a	40	80	n/a	40	n/a
09-21-11J	100	n/a	n/a	100	100	n/a	100	100	n/a	100	n/a

Volatiles Standard Curve Preparation for 10mL Purge (824 water)-NEO

Expiration Date		09/22/11			Final Vol w/P&T H2O	
Date	Conc.	50ug/mL Vol Std #9	50ug/mL Vol Std #7	50ug/mL Vol Std #8	250ug/mL TAPD	Final Vol w/P&T H2O
Code	µg/L	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	Exp: 09-26-11	ml
09-21-11K	0.2	2	n/a	n/a	2	50
09-21-11L	0.5	5	n/a	n/a	5	50
09-21-11M	1	10	n/a	n/a	10	50
09-21-11N	2	20	n/a	n/a	15	50
09-21-11O	5	n/a	5	10	20	50
09-21-11P	10	n/a	10	20	25	50
09-21-11Q	40	n/a	40	40	35	50
09-21-11R	100	n/a	100	100	40	50

250ug/mL TAPD	Final Vol w/P&T H2O
Exp: 09-26-11	ml
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50



AY44799401

26

65441  
AY44799 W01  
VOA\_Frig

VOLATILES 38083 - 062910

Part #: 38083 Laboratory Use Only - See MSDS  
 Lot #: 062910 Exp: 062913 Storage 0 °C  
 CWA Volatiles in Non-Potable Water  
 Varied in methanol 2 mL  
 ABSOLUTE STANDARDS, INC. • 800-368-1131

Sweetpea		250ug/mL 8260 Internal Standard - Sweetpea		Conc.	Date	Exp.
Supplier	ID #	ug/ml	Lot #	Code	Date	µL
02SI	120302-03	2000	166255-28349	09-14-11A	10/10/11	500
	020132-02	2000	169170-28739	09-14-11B	10/10/11	500
J.T.Baker			Purge & Trap MeOH	K07E34-00547	09/12/11	10/14/12 3000

Method 8260 Internal Standard Solution, 2000 mg/L, 1 ml  
 Lot# Storage Expiry  
 166255 5 ± 10 Degrees C 11/3/12  
 Solv: PT Methanol  
 Method 8260 Internal Standard  
 Lot #: 166255 - 28350  
 Rec: 2/17/11 MFR exp. 11/18/12

Fluorobenzene Solution, 2,000 mg/L, 1 ml  
 Lot# Storage Expiry  
 169170 5 ± 10 Degrees C 2/13/14  
 Solv: 77% Methanol  
 Fluorobenzene  
 Lot #: 169170 - 28738  
 Rec: 4/20/11 MFR exp. 02/13/14

CHICO						
09-23-11D						
250ug/ml 8260 Internal Standard - Chico						
			Conc.	Date		
Supplier	ID #		ug/ml	Lot #	Code	
02SI	120302-03	Internal Standard Mix	2000	166255-28350	09-23-11B	12/23/08
02SI	020132-02	Fluorobenzene Standard	2000	169170-28738	09-23-11C	12/23/08
J&T Baker		Purge & Trap MeOH		K07E34-00547	09/12/11	11/13/08

9-23-11  
RS.

9-24-11  
RS.

Volatile Standard Curve Preparation for 10ml. Purge (8260 water)-SWEETPEA										
Expiration Date:		09/24/11								
Date	Conc.	50ug/ml Vol Std #9	50ug/ml Surr	50ug/ml Vol Std #7	50ug/ml Vol Std #8	50ug/ml Surr	50ug/ml Vol Std #9	50ug/ml Surr	50ug/ml Vol Std #10	50ug/ml Surr
Code	ug/L	Exp:09-28-11	Exp:09-26-11	Exp:09-25-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11
09-23-11E	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a
09-23-11F	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a
09-23-11G	1	10	20	n/a	n/a	n/a	10	n/a	n/a	n/a
09-23-11H	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a
09-23-11I	5	n/a	n/a	5	6	10	n/a	5	n/a	n/a
09-23-11J	10	n/a	n/a	10	10	25	n/a	10	n/a	n/a
09-23-11K	20	n/a	n/a	20	20	40	n/a	20	n/a	n/a
09-23-11L	40	n/a	n/a	40	40	80	n/a	40	n/a	n/a
09-23-11M	100	n/a	n/a	100	100	n/a	n/a	100	n/a	n/a

9-23-11  
RS.

9-24-11  
RS.

Volatile Standard Curve Preparation for 10ml. Purge (8260 water)-CHICO										
Expiration Date:		09/24/11								
Date	Conc.	50ug/ml Vol Std #9	50ug/ml Surr	50ug/ml Vol Std #7	50ug/ml Vol Std #8	50ug/ml Surr	50ug/ml Vol Std #9	50ug/ml Surr	50ug/ml Vol Std #10	50ug/ml Surr
Code	ug/L	Exp:09-28-11	Exp:09-26-11	Exp:09-25-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11	Exp:09-26-11
09-23-11N	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a
09-23-11O	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a
09-23-11P	1	10	20	n/a	n/a	n/a	10	n/a	n/a	n/a
09-23-11Q	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a
09-23-11R	5	n/a	n/a	5	5	10	n/a	5	n/a	n/a
09-23-11S	10	n/a	n/a	10	10	25	n/a	10	n/a	n/a
09-23-11T	20	n/a	n/a	20	20	40	n/a	20	n/a	n/a
09-23-11U	40	n/a	n/a	40	40	80	n/a	40	n/a	n/a
09-23-11V	100	n/a	n/a	100	100	n/a	n/a	100	n/a	n/a

9-23-11  
RS.

9-24-11  
RS.

Method 8260 Gases, 2,000  
mg/L, 3 X 0.6 ml

120016-03

Lot # Storage Expiry  
170302 5-18 Degree C 3/11/14

Solvt P/T Method

Method 8260 Gases

Lot #: 170302 - 28677

Rec: 4/20/11 MFR exp. 03/11/14

9-24-11  
RS.

RS.

n-Hexane Solution, 1,000  
mg/L, 1 ml

020610-02

Lot # Storage Expiry  
163378 5-18 Degree 8/29/15

Solvt P/T Method

n-Hexane Solution

Lot #: 163378 - 29230

Rec: 8/5/11 MFR exp. 08/29/15

9-24-11  
RS.

RS.

9-24-11  
RS.

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

Date	Code	Exp. 10-05-11		Exp. 10-05-11		Exp. 10-05-11		Exp. 10-05-11		Exp. 10-05-11		Exp. 10-05-11	
		500µg/mL	200µg/mL	100µg/mL	50µg/mL	25µg/mL	10µg/mL	5µg/mL	2.5µg/mL	1.25µg/mL	0.625µg/mL	0.3125µg/mL	0.15625µg/mL
09-29-11H	0.5	3	5	10	20	40	80	100	n/a	n/a	n/a	n/a	n/a
09-29-11I	1	5	10	20	40	80	100	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11J	2	10	20	40	80	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11K	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11L	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11M	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11N	40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
09-29-11V	100	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

9-29-11  
RS

10-02-11  
RS

4-Bromofluorobenzene  
Solution, 2500 mg/L, 1 ml

Lot # 176675-29375  
Exp. 08/02/14  
MFR exp. 08/02/14

9-30-11 A-  
RS

RS

EXP: 10-30-11	Q251	020135-03	4-Bromofluorobenzene	2500	176675-29375	10-01-11A	12/10/11	10/01/11	09/29/11
J&T Baker			Purge & Trap MeOH		K14806-00551				

9-30-11  
RS

10-02-11  
RS

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

Date	Code	Exp. 10-05-11		Exp. 10-05-11		Exp. 10-05-11		Final Vol w/P&T H2O
		500µg/mL	200µg/mL	100µg/mL	50µg/mL	25µg/mL	10µg/mL	
10-01-11A	0.2	2	5	10	20	40	50	50
10-01-11B	0.5	5	10	20	40	80	50	50
10-01-11C	1	10	20	40	80	100	50	50
10-01-11D	2	20	40	80	100	n/a	50	50
10-01-11E	5	n/a	n/a	n/a	n/a	n/a	50	50
10-01-11F	10	n/a	n/a	n/a	n/a	n/a	50	50
10-01-11G	40	n/a	n/a	n/a	n/a	n/a	50	50
10-01-11H	100	n/a	n/a	n/a	n/a	n/a	50	50

10-01-11  
RS

RS

10-02-11  
RS

10-02-11  
RS

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

Expiration Date:		10/28/2011									
Date	Conc.	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	
10-27-11J	0.3	3	10	10	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11K	0.5	5	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11L	1	10	40	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11M	2	20	80	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11N	5	n/a	n/a	5	5	10	10	20	20	20	
10-27-11O	10	n/a	n/a	10	10	20	20	40	40	40	
10-27-11P	20	n/a	n/a	20	20	40	40	80	80	80	
10-27-11Q	40	n/a	n/a	40	40	80	80	160	160	160	
10-27-11R	100	n/a	n/a	100	100	200	200	400	400	400	

10-27-11  
RS

250µg/mL TAPD	Final Vol / wP&T H2O
10-28-11O	ml
Exp:11-01-11	
3	50
5	50
10	50
20	50
25	50
30	50
35	50
40	50

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

Expiration Date:		10/28/2011									
Date	Conc.	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	
10-27-11S	2	2	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11T	5	5	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11U	10	10	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11V	20	20	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11W	50	n/a	n/a	5	5	5	5	10	10	10	
10-27-11X	100	n/a	n/a	10	10	10	10	20	20	20	
10-27-11Y	200	n/a	n/a	20	20	20	20	40	40	40	

10-27-11  
RS

250µg/mL TBA	Final Vol / wP&T H2O
10-28-11O	ml
Exp:11-01-11	
2	5
3	5
4	5
5	5
6	5
7	5

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

Expiration Date:		10/28/2011									
Date	Conc.	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	
10-27-11Z	2	2	2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11AA	5	5	5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11AB	10	10	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11AC	20	20	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
10-27-11AD	50	n/a	n/a	5	5	5	5	10	10	10	
10-27-11AE	100	n/a	n/a	10	10	10	10	20	20	20	
10-27-11AF	200	n/a	n/a	20	20	20	20	40	40	40	

10/27/11  
RS

250µg/mL TBA	Final Vol / wP&T H2O
10-28-11O	ml
Exp:11-01-11	
1	5
2	5
3	5
4	5
5	5
6	5
7	5

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

120016-03

Lot# Storage Expiry  
169238 5-10 Degrees C 2/9/14

Sol: P/T Methanol

Method 8260 Gases

Lot #: 169238 - 26582

Rec: 4/20/11 MFR exp. 02/19/14

10-28-11 A-  
RS

RS



10-28-11  
RS

B-

HexachloroEtane Solution,  
1000 mg/L, 1 ml

010049-02

Lot #	Storage	Expiry
161816	5-10 Degree C	10/4/12

Solv: pvt Methanol

Hexachloroethane

Lot #: 164816 - 28687

Rec: 4/20/11 MFR exp. 10/14/12

RS

10-28-11  
RS

B

10-28-11  
RS

C-

Benzyl Chloride Solution, 1000  
mg/L, 1 ml

020728-02

Lot #	Storage	Expiry
163373	5-18 Degree	8/29/12

Solv: E/T Methanol

Benzyl Chloride

Lot #: 163373 - 29166

Rec: 8/5/11 MFR exp. 08/29/12

RS

10-28-11  
RS

C

10-28-11  
RS

D-

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

122039-02

Lot #	Storage	Expiry
163374	5-18 Degree	8/29/12

Solv: E/T Methanol

Volatile Mix, 20-29

Lot #: 163374 - 28300

Rec: 2/17/11 MFR exp. 08/29/12

RS

10-28-11  
RS

D

10-28-11  
RS

E-

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

120023-03

Lot #	Storage	Expiry
164451	5-10 Degree C	10/4/12

Solv: pvt Methanol

8260 VOC Liquids, 54 Comp.

Lot #: 164454 - 27872

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

RS

10-28-11  
RS

E

10-28-11  
RS

F-

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

018832-01

Lot #	Storage	Expiry
178902	5-10 Degree C	12/15/11

Solv: pvt Methanol

Vinyl Acetate

Lot #: 178902 - 29562

Rec: 9/22/11 MFR exp. 12/15/11

RS

10-28-11  
RS

F

10-28-11 B-  
RS.

Heptane Solution, 1000  
mg/L, 1 ml  
120546-82  
Lot# Storage Expiry  
169174 5-10 Degree C 2/18/14  
Soln: P/T Methanol  
Heptane Solution  
Lot #: 169174 - 29248  
Rec: 8/5/11 MFR exp. 02/18/14

RS

10-28-11 H-  
RS.

8260B Surrogate Solution,  
2,000 mg/L, 5 x 1 ml  
110002-01-8PAK  
Lot# Storage Expiry  
173249 5-10 Degree C 5/17/13  
Soln: P/T Methanol  
8260B Surrogate Solution  
Lot #: 173249 - 28847  
Rec: 5/25/11 MFR exp. 05/17/13

RS

10-28-11 I-  
RS.

VOC Mix 4-3, 2,000 mg/L, 1  
ml  
128166-01  
Lot# Storage Expiry  
178651 5-10 Degree C 9/11/13  
Soln: P/T Methanol  
VOC Mix 4-3, 2000mg/L  
Lot #: 178651 - 28510  
Rec: 9/20/11 MFR exp. 09/11/13

RS

10-28-11 J-  
RS.

Method 8260 Gases (Second  
Source), 2,000 mg/L, 2 X 0.6  
ml  
120016-03-SS  
Lot# Storage Expiry  
169038 5-10 Degree C 1/21/14  
Soln: P/T Methanol  
8260 Gases (SS)  
Lot #: 169038 - 28743  
Rec: 4/20/11 MFR exp. 01/21/14

RS



10-28-11K							
50ug/ml Vol Work Std #7							
Exp: 11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	EXP. Date	ul
Q2SI	120016-03	Gas Mix	2000	159238-28682	10-28-11A	11/30/2011	100
Q2SI	020049-02	HEXACHLOROETHANE	1000	164815-28687	10-28-11B	12/14/2011	200
Q2SI	020228-02	Benzyl Chloride	1000	163373-29166	10-28-11C	12/14/2011	200
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3500
10-28-11L							
50ug/ml Vol Work Std #1							
Exp: 11/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
Q2SI	020145-02-02	2-CBVE	2000	160092-26537	10-06-11B	12/1/2011	50
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3500
10-28-11M							
50ug/ml Vol Work Std #8							
Exp: 11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	EXP. Date	ul
Q2SI	122039-02	Volatile Mix, 20-29	2000	163374-28100	10-28-11D	2/14/2012	100
Q2SI	120023-03	VOC'S-54 COMP	2000	164456-27872	10-28-11E	2/14/2012	100
Q2SI	020232-02	Vinyl Acetate	2000	178982-29552	10-28-11F	11/15/2011	100
Q2SI	020620-02	n-Hexane	1000	163378-27889	10-28-11G	11/14/2011	200
Q2SI	020546-02	Heptane	1000	169174-29248	10-28-11G	11/14/2011	200
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3500
10-28-11N							
50ug/ml Vol Work Std #2							
Exp: 11/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Date Code	EXP. Date	ul
Q2SI	121020-05	HSL'S-Ketone Solution	2000	169173-28307	10-12-11B	11/14/2011	100
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	10/14/2012	3500
10-28-11O							
Exp: 11/4/2011							
5ug/ml Vol Work Std #9							
SOURCES							
			Lot	APPL Code	APPL Exp Date		ul
				10-28-11K	10/31/2011		200
				10-28-11M	10/31/2011		200
				10/6/2011	6/8/2012		1600
10-28-11P							
Exp: 11/4/2011							
5ug/ml Vol Work Std #10							
SOURCES							
			Lot	APPL Code	APPL Exp Date		ul
				10-28-11L	10/31/2011		200
				10/27/2011	6/8/2012		1800
10-28-11Q							
Exp: 11/4/2011							
5ug/ml Vol Work Std #12							
SOURCES							
			Lot	APPL Code	APPL Exp Date		ul
				10-28-11M	10/31/2011		200
				10/27/2011	6/8/2012		1600
10-28-11R							
50ug/ml #260 Surrogate							
Exp: 11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	EXP. Date	ul
Q2SI	120002-01	#260B SURF Solution	2000	173249-28847	10-28-11H	11/14/2011	100
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3500
10-28-11S							
Exp: 11/4/2011							
5.0ug/ml #260 Surrogate							
SOURCES							
			Lot	APPL Code	APPL Exp Date		ul
				10-28-11R	10/31/2011		200
				K14806-00556	10/27/2011		1800
10-28-11T							
250ug/ml TSA/IBA/Acetonitrile/Cyclohexanone/Acroleln/2-P							
Exp: 11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	EXP. Date	ul
Q2SI	120166-01	Volatile Mix 4-3	2000	178691-29510	10-28-11I	12/17/2011	500
Q2SI	020228-09	Acroleln	10000	179941-29661	10-19-11H	11/21/2011	100
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3500

10/28/11  
RS.

10/28/11  
RS.

10/28/11  
RS.

10-28-11U 50ug/ml VOC Std#5 Exp:11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
O2SI	120016-01-SS	8260 Gases (SS)	2000	168038-28741	10-28-11J	11/10/2011	50
O2SI	020145-02-02	2-CBVG	2000	152530-27271	10-19-11J	11/3/2011	50
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	1900
10-28-11V 50ug/ml VOC Std#6 Exp:11/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	120023-03-SS	VOC'S 54 COMP.	2000	163271-27771	09-12-11P	11/14/2011	50
O2SI	120296-01	Custom 8260 Solution	2000	166038-27763	09-12-11Q	11/14/2011	50
O2SI	020232-02-SS	Vinyl Acetate (SS)	2000	176774-29257	09-12-11R	11/30/2011	50
O2SI	020620-02-SS	n-HEXANE	1000	179199-29515	10-12-11P	12/14/2011	100
O2SI	020049-02-SS	HEXACHLOROETHANE	1000	154535-25913	09-13-11B	12/29/2011	100
O2SI	020546-02-SS	Heptane (SS)	1000	142276-23593	09-13-11C	12/19/2011	100
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	1550
10-28-11W 250ug/ml TRA/IBA/Acetonitrile/Cyclohexanone/Acroleln/2-P Exp:11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
O2SI	120166-01-SS	VOC MIX 4-3 (SS)	2000	152531-25468	10-02-11G	11/3/2011	250
O2SI	020229-03-SS	Acroleln SOLUTION (SS)	10000	178607-29549	10-02-11H	11/21/2011	50
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	1700

10/28/11  
RS

RS

10-28-11X 30ug/ml Vol Work Std #7 Exp:11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
O2SI	120016-03	Gas MIX	2000	169238-28682	10-28-11A	11/30/2011	100
O2SI	020049-02	HEXACHLOROETHANE	1000	164816-28687	10-28-11B	12/14/2011	200
O2SI	020228-02	Benzyl Chloride	1000	163371-29166	10-28-11C	12/14/2011	200
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	2500
10-28-11Y 50ug/ml Vol Work Std #1 Exp:11/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	ul
O2SI	020145-02-02	2-CBVG	2000	160092-26637	10-06-11B	12/7/2011	50
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	1950
10-28-11Z 50ug/ml Vol Work Std #8 Exp:11/04/11							
Supplier	ID #	ID	Conc. ug/ml	Lot #	Date Code	Exp. Date	ul
O2SI	122039-02	Volatile Mix, 20-29	2000	163374-28300	10-28-11D	2/14/2012	100
O2SI	120023-03	VOC'S-54 COMP	2000	164454-27872	10-28-11E	2/14/2012	100
O2SI	020232-02	Vinyl Acetate	2000	178902-29552	10-28-11F	11/15/2011	100
O2SI	020520-02	n-Hexane	1000	163378-27889	10-28-11B	11/14/2011	200
O2SI	020546-02	Heptane	1000	169174-29248	10-28-11G	11/14/2011	200
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	6/8/2012	3300
10-28-11AA 50ug/ml Vol Work Std #2 Exp:11/04/11							
Supplier	ID #	ID	ug/ml	Lot #	Date Code	Exp. Date	ul
O2SI	121020-05	HSL'S Ketone Solution	2000	169173-28307	10-12-11B	11/14/2011	100
J&T Brand		Purge & Trap MeOH		K14806-00556	10/27/2011	10/14/2012	3900
10-28-11AB Exp: 11/4/2011							
SOURCE	Lot	APPL Code	APPL Exp Date	ul			
50ug/ml Vol Work Std #3		10-28-11X	10/31/2011	200			
50ug/ml Vol Work Std #7		10-28-11X	10/31/2011	200			
50ug/ml Vol Work Std #8		10-28-11Z	10/31/2011	200			
J&T Brand		10/6/2011	6/8/2012	1600			
10-28-11AC Exp: 11/4/2011							
SOURCE	Lot	APPL Code	APPL Exp Date	ul			
50ug/ml Vol Work Std #10		10-28-11Y	10/31/2011	200			
50ug/ml Vol Work Std #1		10-28-11Y	10/31/2011	200			
J&T Brand		10/27/2011	6/8/2012	1800			

10/28/11  
RS

RS

		10-28-11AD	Exp: 11/4/2011				
		50ug/ml Vol Work Std #12					
		602RCSB	Lot	APPL Code	APPL Exp Date	ul	
		50ug/ml Vol Work Std #2		10-28-11AA	10/31/2011	200	
		J&T Brand		10/27/2011	6/8/2012	1800	
10-28-11AB							
50ug/ml 8250 Surrogate			Conc.		Date	Exp.	
Exp: 11/04/11			ug/ml	Lot #	Code	Date	ul
0281 120002-01		8260B Surx Solution	2000	173249-28847	10-28-11H	11/14/2011	100
J&T Brand		Purge & Trap MeOH		X14805-00556	10/27/2011	6/8/2012	1800
10-28-11AP							
5.0ug/ml 8250 Surrogate			Conc.		Date	Exp.	
J&T Brand		50ug/ml 8250 SURROGATE	ug/ml	Lot #	Code	Date	ul
		Purge & Trap MeOH		X14805-00556	10/27/2011	6/8/2012	1800
10-28-11AG							
250ug/ml TSM/1BA/Acetonitrile/Cyclohexanone/Acrolein/2-P							
Exp: 11/04/11			Conc.		Date	Exp.	
Supplier ID #			ug/ml	Lot #	Code	Date	ul
0281 120166-01		Volatile Mix 4-3	2000	178851-29510	10-28-11F	12/17/2011	800
0281 020229-09		Acrolein	10000	173941-29661	10-19-11H	11/21/2011	100
J&T Brand		Purge & Trap MeOH		X14805-00556	10/27/2011	6/8/2012	1800

10/28/11  
RS

10/30/11  
RS

10/30/11  
RS

NOTEBOOK INSERT LABEL

Gasoline 47616-U  
 Lot: LB82077 EXP: FEB/2014 STORAGE: ROOM TEMP. 1 x ml  
 DATE RECEIVED: \_\_\_\_\_  
**SUPELCO**  
 595 North Harrison Road • Bellefonte, PA  
 16823-0048 USA • Phone 814-369-3441

10/30/11 A-  
RS

10/30/11  
RS

STANDARD TRANSFER LABEL

Date of Preparation: \_\_\_\_\_ Exp. Date: \_\_\_\_\_  
 Reference Number: \_\_\_\_\_ Storage: EXP: FEB/2014  
 Description: Gasoline ROOM TEMP.  
 Lot #: LB82077 - 29133  
 Rec: 8/4/11 MFR exp. 02/28/14

10/30/11 B-  
RS

**REST!**  
 Calif 30205  
 Unleaded Gasoline Composite Standard  
 Lot #: A076842 - 29141  
 Rec: 8/4/11 MFR exp. 10/31/17  
 50000 ug/ml each in PAT Methanol  
 Lot# A076842 Exp. Date: 10/2017 Store: Freezer  
 Restek Corporation - 110 Berner Circle - Bellefonte, PA 16823

RS

10/31/11  
RS

10/30/11C						APPL	
2000ug/ml Gasoline			Conc.		Date	Exp.	
Supplier ID #			ug/ml	Lot #	Code	Date	ul
Supelco LB82077		Gasoline	20,000	LB82077-29133	10-30-11A	11/9/2012	200
J&T Brand		Purge & Trap MeOH		X14805-00556	10/27/2011	3/2/2012	1800
10/30/11D							
2000ug/ml Unleaded Gasoline			Conc.		Date	Exp.	
Supplier ID #			ug/ml	Lot #	Code	Date	ul
Supelco 30205		Unleaded Gasoline	50,000	A076842-29141	10-30-11B	11/30/2012	200
J&T Brand		Purge & Trap MeOH		X14805-00556	10/27/2011	3/2/2012	1800

10/30/11  
RS

OCMS STANDARD PREPARATION BOOK # \_\_\_\_\_ PAGE # \_\_\_\_\_

097

Custom VOC Mix, 16-4, 100  
mg/L, 4 x 1 ml  
132725-03-4PAK  
Lot # Storage Expiry  
162917 - 1612degrees 8/11/12  
Bohrer P/E/Methanol  
Custom VOC Mix 16-4  
Lot #: 162917 - 27029  
Rec: 8/13/10 MFR exp. 08/11/12

10/30/11  
RS

E

RS

CHICO RS 12/07/11

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

Expiration Date:		10/31/2011	
Date	Conc.	10-30-11C	Final Vol
Code	ug/L	Exp: 12-27-12	w/PT H2O
10-30-11F	20	1	100
10-30-11G	60	2.5	100
10-30-11H	100	5	100
10-30-11I	300	15	100
10-30-11J	600	30	100
10-30-11K	600	40	100
10-30-11L	1000	50	100

10/30/11  
RS

RS

Volatile Standard Curve Preparation for 10mL Purge (2260 water)-CHICO

Expiration Date:		10/31/2011									
Date	Conc.	50ug/ml Vol Std #9	50ug/ml Surrogate	50ug/ml Vol Std #7	50ug/ml Vol Std #8	50ug/ml Surrogate	50ug/ml Vol Std #10	50ug/ml Vol Std #11	50ug/ml Vol Std #12	50ug/ml Vol Std #13	50ug/ml Vol Std #14
Code	ug/L	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11
10-30-11L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a	3
10-30-11M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a	5
10-30-11N	1	10	20	n/a	n/a	n/a	10	n/a	n/a	n/a	10
10-30-11O	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a	20
10-30-11P	5	n/a	n/a	5	5	10	n/a	5	6	n/a	6
10-30-11Q	10	n/a	n/a	10	10	25	n/a	10	20	n/a	20
10-30-11R	20	n/a	n/a	20	20	40	n/a	20	20	n/a	20
10-30-11S	40	n/a	n/a	40	40	80	n/a	40	40	n/a	40
10-30-11T	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a	100

10/30/11  
RS

250ug/ml TAPD	Final Vol
10-28-11T	w/PT H2O
Exp: 11-04-11	ml
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

Volatile Standard Curve Preparation for 10mL Purge (2260 water)-MAX

Expiration Date:		11/1/2011									
Date	Conc.	50ug/ml Vol Std #9	50ug/ml Surrogate	50ug/ml Vol Std #7	50ug/ml Vol Std #8	50ug/ml Surrogate	50ug/ml Vol Std #10	50ug/ml Vol Std #11	50ug/ml Vol Std #12	50ug/ml Vol Std #13	50ug/ml Vol Std #14
Code	ug/L	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11	Exp: 11-04-11
10-31-11A	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a	3
10-31-11B	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a	5
10-31-11C	1	10	20	n/a	n/a	n/a	10	n/a	n/a	n/a	10
10-31-11D	2	20	40	n/a	n/a	n/a	20	n/a	n/a	n/a	20
10-31-11E	5	n/a	n/a	5	5	10	n/a	5	6	n/a	6
10-31-11F	10	n/a	n/a	10	10	25	n/a	10	20	n/a	20
10-31-11G	20	n/a	n/a	20	20	40	n/a	20	20	n/a	20
10-31-11H	40	n/a	n/a	40	40	80	n/a	40	40	n/a	40
10-31-11I	100	n/a	n/a	100	100	n/a	n/a	100	100	n/a	100

10/31/11  
RS

250ug/ml TAPD	Final Vol
10-28-11T	w/PT H2O
Exp: 11-04-11	ml
3	50
5	50
10	50
15	50
20	50
25	50
30	50
35	50
40	50

## Injection Log

Directory: M:\CHICO\DATA\111030\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1030C13W.I 1		20ug/mL BFB STD 10-19-11	Water 2ul	30 Oct 11 22:01
2	1	1030C15W.I 1		Voc Std 10-30-11@0.3ug/L	Water 10mLw/ IS:10-30-11	30 Oct 11 23:28
3	1	1030C16W.I 1		Voc Std 10-30-11@0.5ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 00:11
4	1	1030C17W.I 1		Voc Std 10-30-11@1.0ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 00:54
5	1	1030C18W.I 1		Voc Std 10-30-11@2.0ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 1:37
6	1	1030C19W.I 1		Voc Std 10-30-11@5.0ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 2:20
7	1	1030C20W.I 1		Voc Std 10-30-11@10ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 3:03
8	1	1030C21W.I 1		Voc Std 10-30-11@20ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 3:46
9	1	1030C22W.I 1		Voc Std 10-30-11@40ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 4:29
10	1	1030C23W.I 1		Voc Std 10-30-11@100ug/L	Water 10mLw/ IS:10-30-11	31 Oct 11 5:12
11	1	1030C26W.I 1		20ug/mL BFB STD 10-19-11	Water 2ul	31 Oct 11 7:21
12	1	1030C27W.I 1		Voc Std 10-30-11@10ug/L	Water 10mLw/ IS&S:10-30/1	31 Oct 11 8:05
13	1	1030C28W.I 1		111030A LCS-1WC (SS)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 8:48
14	1	1030C29W.I 1		GAS 300ug/L (SS)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 9:31
15	1	1030C30W.I 1		GAS 300ug/L CCV-1WC	Water 10mLw/ IS&S:10-30/1	31 Oct 11 10:14
16	1	1030C31W.I 1		GAS 300ug/L LCS-1WC	Water 10mLw/ IS&S:10-30/1	31 Oct 11 10:57
17	1	1030C34W.I 1		111030A BLk-1WC	Water 10mLw/ IS&S:10-30/1	31 Oct 11 13:02
18	1	1030C35W.I 1		AY49335W01	Water 10mLw/ IS&S:10-30/1	31 Oct 11 13:39
19	1	1030C36W.I 1		AY49333W04	Water 10mLw/ IS&S:10-30/1	31 Oct 11 14:16
20	1	1030C37W.I 1		AY49334W13	Water 10mLw/ IS&S:10-30/1	31 Oct 11 14:53
21	1	1030C38W.I 1		AY49336W04	Water 10mLw/ IS&S:10-30/1	31 Oct 11 15:31
22	1	1030C39W.I 1		AY49334W141516 MS-1WC (VOC)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 16:08
23	1	1030C40W.I 1		AY49334W141516 MSD-1WC (VOC)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 16:45
24	1	1030C41W.I 1		AY49334W161718 MS-1WC (GAS)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 17:22
25	1	1030C42W.I 1		AY49334W161718 MSD-1WC (GAS)	Water 10mLw/ IS&S:10-30/1	31 Oct 11 17:59



# METALS

**APPL, INC.**

**METALS**  
**QC Summary**

**APPL, INC.**

# METALS BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6020	LEAD (PB) (DISSOL	0.19 J	0.5	0.22	0.11	ug/L	11/10/11	11/11/11	#602D-111110A-AY49334

J = Estimated value.



**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	50.0	100	80-120	11/10/2011	1/11/2011	#602D-111110A-AY49334

429

Comments:

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# Matrix Spike Recoveries

## METALS

APPL ID: 111110W-49334 MS - 161255

APPL Inc.

908 North Temperance Avenue

Sample ID: AY49334

Clovis, CA 93611

Client ID: ES047

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Recovery Max	RPD Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
6020	LEAD (PB) (DISSOLVE	50.0	ND	49.5	48.8	99.0	97.6	1.4	20	80-120	1/10/2011	1/11/2011	1/10/2011	1/11/2011	161255	AY49334

430

Comments:

**METALS**  
**Sample Data**



## Metals Analysis

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

Attn: Stacy Fineran  
Project: RED HILL/1022-024

**Sample ID: ES046**

Sample Collection Date: 10/24/2011

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102

**APPL ID: AY49333**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22 U	0.5	0.22	0.11	ug/L	1	11/10/2011	11/11/2011

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\041SMPL.D\041SMPL.D#  
 Date Acquired: Nov 11 2011 04:00 pm  
 Operator: NBS  
 Sample Name: AY49333W13  
 Misc Info: 11110A-3015  
 Vial Number: 3202  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	-0.01 ug/l	-0.01	5.25	1000	
11 B	74.87 ug/l	83.18	0.56	1000	
23 Na	63250.00 ug/l	70270.75	0.40	25000	>Cal
24 Mg	23790.00 ug/l	26430.69	0.63	50000	
27 Al	35.06 ug/l	38.95	3.68	20000	
39 K	2658.00 ug/l	2953.04	0.91	20000	
44 Ca	12970.00 ug/l	14409.67	0.32	50000	
47 Ti	1.59 ug/l	1.77	2.95	1000	
51 V	1.07 ug/l	1.18	4.80	1000	
52 Cr	0.15 ug/l	0.16	6.59	1000	
55 Mn	1421.00 ug/l	1578.73	0.18	1000	>Cal
56 Fe	849.00 ug/l	943.24	0.37	20000	
59 Co	0.20 ug/l	0.22	4.00	1000	
60 Ni	1.09 ug/l	1.21	7.81	1000	
63 Cu	-0.35 ug/l	-0.39	4.23	1000	
65 Cu	-0.35 ug/l	-0.38	7.78	1000	
66 Zn	1.22 ug/l	1.36	1.97	1000	
75 As	0.07 ug/l	0.08	32.39	1000	
78 Se	0.04 ug/l	0.04	27.66	1000	
78 Se	0.16 ug/l	0.18	40.54	1000	
88 Sr	115.00 ug/l	127.77	1.27	1000	
88 Sr	117.90 ug/l	130.99	0.51	1000	
95 Mo	0.48 ug/l	0.54	2.21	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.00 ug/l	0.00	108.51	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.01 ug/l	0.02	47.56	1000	
118 Sn	0.11 ug/l	0.13	17.45	1000	
121 Sb	0.07 ug/l	0.08	13.55	1000	
137 Ba	23.17 ug/l	25.74	1.06	1000	
205 Tl	0.01 ug/l	0.01	19.54	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	-0.16 ug/l	-0.18	5.22	1000	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	3155449.80	0.29	2775704.50	113.7	70 - 120		
45 Sc	684547.81	0.76	500780.41	136.7	70 - 120	IS Fai	
45 Sc	107493.14	1.57	95494.08	112.6	70 - 120		
45 Sc	2252708.50	1.98	1460980.80	154.2	70 - 120	IS Fai	
72 Ge	105205.95	0.22	96219.04	109.3	70 - 120		
72 Ge	48357.57	0.66	43611.78	110.9	70 - 120		
72 Ge	228774.88	0.47	213204.63	107.3	70 - 120		
115 In	1463890.90	0.38	1381264.00	106.0	70 - 120		
159 Tb	2015104.00	0.80	1843940.90	109.3	70 - 120		
165 Ho	2022052.00	0.63	1844184.90	109.6	70 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail  
 ISTD: Fail

## Metals Analysis

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

Attn: Stacy Fineran

Project: RED HILL/1022-024

**Sample ID: ES047**

Sample Collection Date: 10/24/2011

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102

**APPL ID: AY49334**

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	11/10/2011	11/11/2011

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\042SMPL.D\042SMPL.D#  
 Date Acquired: Nov 11 2011 04:06 pm  
 Operator: NBS  
 Sample Name: AY49334W51  
 Misc Info: 111110A-3015  
 Vial Number: 3203  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	-0.01 ug/l	-0.01	2.99	1000	
11 B	77.21 ug/l	85.78	0.37	1000	
23 Na	62580.00 ug/l	69526.38	1.20	25000	>Cal
24 Mg	23840.00 ug/l	26486.24	0.85	50000	
27 Al	10.66 ug/l	11.84	1.02	20000	
39 K	2644.00 ug/l	2937.48	0.98	20000	
44 Ca	12880.00 ug/l	14309.68	1.08	50000	
47 Ti	1.96 ug/l	2.17	54.12	1000	
51 V	1.12 ug/l	1.24	3.35	1000	
52 Cr	0.18 ug/l	0.20	5.89	1000	
55 Mn	1422.00 ug/l	1579.84	0.97	1000	>Cal
56 Fe	862.60 ug/l	958.35	1.25	20000	
59 Co	0.26 ug/l	0.29	3.17	1000	
60 Ni	1.23 ug/l	1.37	2.27	1000	
63 Cu	-0.28 ug/l	-0.31	4.35	1000	
65 Cu	-0.29 ug/l	-0.32	5.75	1000	
66 Zn	5.31 ug/l	5.90	2.33	1000	
75 As	0.09 ug/l	0.10	35.61	1000	
78 Se	0.04 ug/l	0.04	18.02	1000	
78 Se	0.13 ug/l	0.15	43.74	1000	
88 Sr	114.00 ug/l	126.65	0.20	1000	
88 Sr	116.30 ug/l	129.21	0.82	1000	
95 Mo	0.49 ug/l	0.54	2.47	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.00 ug/l	0.00	9066.00	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.00 ug/l	0.00	326.50	1000	
118 Sn	0.09 ug/l	0.11	17.30	1000	
121 Sb	0.05 ug/l	0.05	7.46	1000	
137 Ba	24.70 ug/l	27.44	0.69	1000	
205 Tl	0.01 ug/l	0.01	3.49	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	-0.05 ug/l	-0.06	14.15	1000	

ISTD Elements

Element	CFS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3186521.00	0.78	2775704.50	114.8	70 - 120		
45 Sc	672635.13	1.27	500780.41	134.3	70 - 120	IS Fai	
45 Sc	107878.18	1.34	95494.08	113.0	70 - 120		
45 Sc	2212596.80	1.01	1460980.80	151.4	70 - 120	IS Fai	
72 Ge	106314.52	1.16	96219.04	110.5	70 - 120		
72 Ge	48500.91	1.75	43611.78	111.2	70 - 120		
72 Ge	231305.58	0.13	213204.63	108.5	70 - 120		
115 In	1470644.80	1.61	1381264.00	106.5	70 - 120		
159 Tb	2036736.10	0.19	1843940.90	110.5	70 - 120		
165 Ho	2036137.40	0.55	1844184.90	110.4	70 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail  
 ISTD: Fail

## Metals Analysis

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

Attn: Stacy Fineran  
Project: RED HILL/1022-024

**Sample ID: ES049**

Sample Collection Date: 10/24/2011

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 66102

**APPL ID: AY49336**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	LEAD (PB) (DISSOLVED)	0.22J	0.5	0.22	0.11	ug/L	1	11/10/2011	11/11/2011

J = Estimated value.

Printed: 11/15/2011 12:57:19 PM

APPL-F1-SC-NoMC-REG MDLs



## Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\052SMPL.D\052SMPL.D#  
 Date Acquired: Nov 11 2011 05:06 pm  
 Operator: NBS  
 Sample Name: AY49336W13  
 Misc Info: 111110A-3015  
 Vial Number: 3208  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	-0.01 ug/l	-0.01	2.49	1000	
11 B	119.20 ug/l	132.43	0.84	1000	
23 Na	79710.00 ug/l	88557.81	0.80	25000	>Cal
24 Mg	26180.00 ug/l	29085.98	1.28	50000	
27 Al	28.51 ug/l	31.67	0.66	20000	
39 K	3332.00 ug/l	3701.85	0.44	20000	
44 Ca	22270.00 ug/l	24741.97	1.18	50000	
47 Ti	0.71 ug/l	0.79	6.25	1000	
51 V	15.17 ug/l	16.85	0.80	1000	
52 Cr	0.80 ug/l	0.89	2.21	1000	
55 Mn	106.10 ug/l	117.88	0.65	1000	
56 Fe	83.80 ug/l	93.10	0.12	20000	
59 Co	1.02 ug/l	1.13	0.83	1000	
60 Ni	3.41 ug/l	3.79	1.43	1000	
63 Cu	0.33 ug/l	0.36	4.20	1000	
65 Cu	0.33 ug/l	0.37	5.05	1000	
66 Zn	4.07 ug/l	4.52	2.37	1000	
75 As	0.30 ug/l	0.34	16.47	1000	
78 Se	0.13 ug/l	0.14	5.92	1000	
78 Se	0.15 ug/l	0.16	65.10	1000	
88 Sr	150.20 ug/l	166.87	1.25	1000	
88 Sr	151.90 ug/l	168.76	0.26	1000	
95 Mo	19.64 ug/l	21.82	0.46	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.06 ug/l	0.06	16.30	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.01 ug/l	0.01	93.49	1000	
118 Sn	0.18 ug/l	0.20	15.54	1000	
121 Sb	0.74 ug/l	0.83	4.50	1000	
137 Ba	12.11 ug/l	13.45	0.77	1000	
205 Tl	0.02 ug/l	0.02	13.88	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.20 ug/l	0.22	6.86	1000	

## ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec (%)	QC Range(%)	Flag
6 Li	3041975.00	0.97	2775704.50	109.6	70 - 120	
45 Sc	642764.69	0.96	500780.41	128.4	70 - 120	IS Fai
45 Sc	102731.88	1.25	95494.08	107.6	70 - 120	
45 Sc	2133139.30	1.51	1460980.80	146.0	70 - 120	IS Fai
72 Ge	102652.80	0.93	96219.04	106.7	70 - 120	
72 Ge	46837.37	1.69	43611.78	107.4	70 - 120	
72 Ge	210432.05	0.56	213204.63	108.1	70 - 120	
115 In	1482746.90	1.89	1381264.00	107.3	70 - 120	
159 Tb	2029492.10	1.13	1843940.90	110.1	70 - 120	
165 Ho	2027253.00	1.23	1844184.90	109.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Fail  
 ISTD: Fail

**METALS**  
**Calibration Data**

**APPL, INC.**

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 66102 SDG: 66102

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 11/11/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:39	%R(1)	True CCVI	Found 13:03	%R(1)	True CCVI	Found 13:33	%R(1)	
Lead (Pb)	100	106.3	106	50	50.31	101	50	50.34	101	P

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 66102 SDG: 66102

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 11/11/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:39	%R(1)	True CCV1	Found 15:05	%R(1)	True CCV1	Found 16:30	%R(1)	
Lead (Pb)	100	106.3	106	50	49.96	99.9	50	50.41	101	P

A.P.P.L. INC.  
2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 66102 SDG: 66102

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 11/11/2011 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						M
	True	Found 12:39	%R(1)	True CCV1	Found 18:04	%R(1)	True	Found	%R(1)	
Lead (Pb)	100	106.3	106	50	48.04	96.1				P

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: Environet, Inc.

ARF No.: 66102

SDG: 66102

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 11/11/2011

Analyte	Initial Calibration Blank (ug/L) C 12:57	Continuing Calibration Blank (ug/L)						Preparation Blank C 14:16	M
		1 C 13:09	2 C 13:46	3 C 15:17					
Lead (Pb)	.50 U	.50 U	.50 U	.50 U	.50 U	.50 U	.19 J	P	

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: Environet, Inc.

ARF No.: 66102

SDG: 66102

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 11/11/2011

Analyte	Initial Calibration Blank (ug/L) C 12:57	Continuing Calibration Blank (ug/L)						Preparation Blank C 14:16	M P
		1 16:42	C	2 18:16	C	3	C		
Lead (Pb)	.50 U	.50 U		.50 U				.19 J	P

## ICP INTERFERENCE CHECK SAMPLE

Lab Name:	<u>A.P.P.L. INC.</u>	Contract:	<u>Environet, Inc.</u>
ARF No.:	<u>66102</u>	SDG:	<u>66102</u>
ICP ID Number:	<u>Optimus</u>	ICS Source:	<u>Environmental Express</u>

Analysis Date: 11/11/2011

Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 13:15	Sol AB 13:21	%R(1)
Lead (Pb)		500	3.499	502	100

(1) Control Limits: Metals 80-120



A.P.P.L. INC.  
 5B  
 POST DIGEST SPIKE SAMPLE RECOVERY

CLIENT SAMPLE NO.

ES047

Lab Name: A.P.P.L. INC.

Contract: Environet, Inc.

ARF No.: 66102

SDG: 66102

Analysis Date: 11/11/2011

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Lead (Pb)	75-125	259.629	-0.0610389	277.500	93.6		

Comments:

11/11/201116:06 AY49334W51

11/11/201116:54 AY49334W51-A

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\_\_\_\_\_

## Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\050SMPL.D\050SMPL.D#  
 Date Acquired: Nov 11 2011 04:54 pm  
 Operator: NBS  
 Sample Name: AY49334W51-A  
 Misc Info: 111110A-3015  
 Vial Number: 3206  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	27.12 ug/l	30.13	1.56	1000	
11 B	219.90 ug/l	244.31	1.71	1000	
23 Na	81860.00 ug/l	90946.46	1.33	25000	>Cal
24 Mg	43910.00 ug/l	48784.01	1.40	50000	
27 Al	1865.00 ug/l	2072.02	1.45	20000	
39 K	7013.00 ug/l	7791.44	0.83	20000	
44 Ca	35340.00 ug/l	39262.74	0.74	50000	
47 Ti	223.10 ug/l	247.86	0.84	1000	
51 V	240.60 ug/l	267.31	0.69	1000	
52 Cr	236.20 ug/l	262.42	1.19	1000	
55 Mn	1601.00 ug/l	1778.71	1.31	1000	>Cal
56 Fe	1722.00 ug/l	1913.14	1.16	20000	
59 Co	239.30 ug/l	265.86	1.18	1000	
60 Ni	220.50 ug/l	244.98	0.57	1000	
63 Cu	217.50 ug/l	241.64	0.86	1000	
65 Cu	218.50 ug/l	242.75	0.57	1000	
66 Zn	414.80 ug/l	460.84	0.80	1000	
75 As	221.10 ug/l	245.64	0.31	1000	
78 Se	198.20 ug/l	220.20	2.61	1000	
78 Se	205.70 ug/l	228.53	1.47	1000	
88 Sr	383.00 ug/l	425.51	0.35	1000	
88 Sr	358.90 ug/l	398.74	1.23	1000	
95 Mo	242.00 ug/l	268.86	1.21	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	68.49 ug/l	76.09	4.03	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	44.30 ug/l	49.22	1.31	1000	
118 Sn	271.00 ug/l	301.08	1.25	1000	
121 Sb	243.60 ug/l	270.64	0.29	1000	
137 Ba	267.20 ug/l	296.86	0.54	1000	
205 Tl	227.70 ug/l	252.97	0.11	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	233.90 ug/l	259.86	1.71	1000	

## ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2876337.50	0.73	2775704.50	103.6	70 - 120		
45 Sc	648562.19	0.34	500780.41	129.5	70 - 120	IS Fai	
45 Sc	102181.34	0.75	95494.08	107.0	70 - 120		
45 Sc	2157529.50	1.05	1460980.80	147.7	70 - 120	IS Fai	
72 Ge	102359.33	0.69	96219.04	106.4	70 - 120		
72 Ge	46173.78	0.92	43611.78	105.9	70 - 120		
72 Ge	223471.42	0.75	213204.63	104.8	70 - 120		
115 In	1440331.40	0.34	1381264.00	104.3	70 - 120		
159 Tb	1995111.90	0.82	1843940.90	108.2	70 - 120		
165 Ho	1988682.90	0.53	1844184.90	107.8	70 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Fail  
 ISTD: Fail

A.P.P.L. INC.  
 9  
 ICP SERIAL DILUTION

CLIENT SAMPLE NO.

ES047

Lab Name: A.P.P.L. INC.  
 ARF No.: 66102  
 Matrix: water

Contract: Environet, Inc.  
 SDG: 66102

Analysis Date: 11/11/2011

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	Serial Dilution Result (S)	%D	Q	M
	C	C			
Lead (Pb)	-0.0610389	-1.23988	NA		

Comments:

11/11/2011 16:06 AY49334W51

11/11/2011 17:00 AY49334W51-1/5

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\051SMPL.D\051SMPL.D#  
 Date Acquired: Nov 11 2011 05:00 pm  
 Operator: NBS  
 Sample Name: AY49334W51-1/5  
 Misc Info: 111110A-3015  
 Vial Number: 3207  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	-0.01 ug/l	-0.07	3.30	1000	
11 B	17.93 ug/l	99.62	0.55	1000	
23 Na	13240.00 ug/l	73561.44	1.12	25000	
24 Mg	5084.00 ug/l	28246.70	1.02	50000	
27 Al	1.95 ug/l	10.81	25.75	20000	
39 K	473.00 ug/l	2627.99	1.52	20000	
44 Ca	2644.00 ug/l	14690.06	1.59	50000	
47 Ti	0.34 ug/l	1.89	8.30	1000	
51 V	3.79 ug/l	21.04	2.49	1000	
52 Cr	0.14 ug/l	0.80	4.27	1000	
55 Mn	287.90 ug/l	1599.57	0.52	1000	
56 Fe	175.80 ug/l	976.74	0.50	20000	
59 Co	-0.18 ug/l	-1.02	3.42	1000	
60 Ni	0.22 ug/l	1.23	6.12	1000	
63 Cu	-0.54 ug/l	-3.02	2.33	1000	
65 Cu	-0.54 ug/l	-3.00	2.74	1000	
66 Zn	1.00 ug/l	5.58	4.28	1000	
75 As	0.92 ug/l	5.11	1.72	1000	
78 Se	0.16 ug/l	0.87	1.85	1000	
78 Se	0.30 ug/l	1.65	38.09	1000	
88 Sr	22.51 ug/l	125.07	1.55	1000	
88 Sr	20.24 ug/l	112.45	0.28	1000	
95 Mo	0.18 ug/l	1.01	8.72	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.83 ug/l	4.59	0.55	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.01 ug/l	0.07	56.81	1000	
118 Sn	0.30 ug/l	1.65	5.07	1000	
121 Sb	1.56 ug/l	8.68	3.00	1000	
137 Ba	4.97 ug/l	27.59	0.72	1000	
205 Tl	0.01 ug/l	0.06	8.19	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	-0.22 ug/l	-1.24	2.31	1000	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3013682.80	1.03	2775704.50	108.6	70 - 120	
45 Sc	545314.75	0.37	500780.41	108.9	70 - 120	
45 Sc	95160.34	0.89	95494.08	99.7	70 - 120	
45 Sc	1580825.90	0.15	1460980.80	108.2	70 - 120	
72 Ge	104611.55	0.65	96219.04	108.7	70 - 120	
72 Ge	45792.49	0.44	43611.78	105.0	70 - 120	
72 Ge	227516.67	0.25	213204.63	106.7	70 - 120	
115 In	1384767.60	0.50	1381264.00	100.3	70 - 120	
159 Tb	1892859.60	0.65	1843940.90	102.7	70 - 120	
165 Ho	1897757.40	0.79	1844184.90	102.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass  
 ISTD: Pass

## Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\004CAL  
 Date Acquired: Nov 11 2011 12:08 pm  
 Operator: NBS  
 Sample Name: Calibration Blank  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:06 pm  
 Sample Type: CalBlk  
 Total Dil Factor: 1.00

## QC&amp;ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	2775705.00 A	31080.00	1.12
7 (Li)	152897.91 P	508.10	0.33
9 Be	164.45 P	15.75	9.58
11 B	9503.37 P	213.80	2.25
23 Na	81958.40 P	248.30	0.30
24 Mg	134.45 P	6.94	5.16
27 Al	111.12 P	16.78	15.10
39 K	60334.78 P	2276.00	3.77
44 Ca	384.84 P	48.59	12.63
45 Sc	500780.41 P	2032.00	0.41
45 Sc	95494.08 P	252.60	0.26
45 Sc	1460981.00 A	25510.00	1.75
47 Tl	4.89 P	0.77	15.75
51 V	3955.25 P	110.20	2.79
52 Cr	547.13 P	20.02	3.66
55 Mn	165.78 P	8.57	5.17
56 Fe	5746.57 P	137.00	2.38
59 Co	1492.99 P	62.44	4.18
60 Ni	69.78 P	22.72	32.56
63 Cu	2222.87 P	55.11	2.48
65 Cu	1076.95 P	27.98	2.60
66 Zn	207.12 P	12.10	5.84
72 Ge	96219.04 P	484.10	0.50
72 Ge	43611.78 P	490.40	1.12
72 Ge	213204.59 P	1657.00	0.78
75 As	266.34 P	7.21	2.71
78 Se	4.67 P	1.53	32.74
78 Se	30.00 P	1.16	3.85
88 Sr	48.89 P	8.39	17.16
88 Sr	188.90 P	11.71	6.20
95 Mo	111.12 P	22.69	20.42
106 (Cd)	31.11 P	10.18	32.72
107 Ag	35.56 P	13.47	37.88
108 (Cd)	27.78 P	5.09	18.33
111 Cd	0.12 P	4.33	3513.10
115 In	1381264.00 A	15790.00	1.14
118 Sn	495.58 P	60.50	12.21
121 Sb	323.35 P	35.28	10.91
137 Ba	91.12 P	13.47	14.78
159 Tb	1843941.00 A	33820.00	1.83
165 Ho	1844185.00 A	22050.00	1.20
205 Tl	78.89 P	5.09	6.45
206 (Pb)	1670.17 P	51.97	3.11
207 (Pb)	1455.69 P	79.06	5.43
208 Pb	6738.71 P	70.43	1.05

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\005CAL.S.D\005CAL.S.D#  
 Date Acquired: Nov 11 2011 12:14 pm  
 Operator: NBS  
 Sample Name: 111111 Standard 1  
 Misc Info:  
 Vial Number: 1103  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:12 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)	Cal Coef
6 Li	2934478.00 A	12100.00	0.41	0.0000
7 {Li}	160812.41 P	1266.00	0.79	0.0000
9 Be	1031.18 P	27.15	2.63	0.0000
11 B	10014.79 P	224.60	2.24	0.0000
23 Na	101764.30 P	5296.00	5.20	0.0000
24 Mg	2435.84 P	56.81	2.33	0.0000
27 Al	465.58 P	50.04	10.75	0.0000
39 K	63455.74 P	1758.80	2.77	0.0000
44 Ca	441.03 P	5.03	1.14	0.0000
45 Sc	483714.81 P	17820.00	3.68	0.0000
45 Sc	96706.18 P	602.60	0.62	0.0000
45 Sc	1494561.00 A	14240.00	0.95	0.0000
47 Ti	16.89 P	3.36	19.87	0.0000
51 V	4556.33 P	51.66	1.13	0.0000
52 Cr	876.48 P	32.73	3.73	0.0000
55 Mn	7451.77 P	52.30	0.70	0.0000
56 Fe	12699.44 P	213.90	1.68	0.0000
59 Co	1820.58 P	82.65	4.54	0.0000
60 Ni	166.23 P	12.10	7.28	0.0000
63 Cu	3334.65 P	61.70	1.85	0.0000
65 Cu	1647.67 P	94.43	5.73	0.0000
66 Zn	231.56 P	11.34	4.90	0.0000
72 Ge	93081.49 P	2181.00	2.34	0.0000
72 Ge	43620.24 P	387.20	0.89	0.0000
72 Ge	210910.70 P	1414.00	0.67	0.0000
75 As	300.78 P	7.07	2.35	0.0000
78 Se	21.00 P	2.60	12.40	0.0000
78 Se	30.33 P	6.33	20.88	0.0000
88 Sr	303.35 P	25.17	8.30	0.0000
88 Sr	1913.54 P	79.67	4.16	0.0000
95 Mo	385.58 P	18.36	4.76	0.0000
106 {Cd}	51.11 P	6.94	13.58	0.0000
107 Ag	447.80 P	37.47	8.37	0.0000
108 {Cd}	28.89 P	17.10	59.19	0.0000
111 Cd	182.07 P	18.49	10.16	0.0000
115 In	1383497.00 A	12980.00	0.94	0.0000
118 Sn	901.17 P	20.10	2.23	0.0000
121 Sb	988.96 P	26.95	2.73	0.0000
137 Ba	304.46 P	49.48	16.25	0.0000
159 Tb	1838841.00 A	19950.00	1.08	0.0000
165 Ho	1842078.00 A	20850.00	1.13	0.0000
205 Tl	1497.92 P	40.19	2.68	0.0000
206 {Pb}	2154.70 P	105.60	4.90	0.0000
207 {Pb}	1842.42 P	104.10	5.65	0.0000
208 Pb	8565.85 P	320.10	3.74	0.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	2934478.30	0.41	2775704.50	105.7	70 -	120
45 Sc	483714.78	3.68	500780.41	96.6	70 -	120
45 Sc	96706.18	0.62	95494.08	101.3	70 -	120
45 Sc	1494561.00	0.95	1460980.80	102.3	70 -	120
72 Ge	93081.49	2.34	96219.04	96.7	70 -	120
72 Ge	43620.24	0.89	43611.78	100.0	70 -	120
72 Ge	210910.72	0.67	213204.63	98.9	70 -	120
115 In	1383496.90	0.94	1381264.00	100.2	70 -	120
159 Tb	1838841.50	1.08	1843940.90	99.7	70 -	120
165 Ho	1842078.10	1.13	1844184.90	99.9	70 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass  
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\006CAL5.D\006CAL5.D#  
 Date Acquired: Nov 11 2011 12:20 pm  
 Operator: NBS  
 Sample Name: 111111 Standard 2  
 Misc Info:  
 Vial Number: 1104  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:18 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)	Cal Coef
6 Li	3013436.00 A	14250.00	0.47	0.0000
7 (Li)	162843.41 P	655.10	0.40	1.0000
9 Be	10180.43 P	411.30	4.04	1.0000
11 B	16379.42 P	483.40	2.95	1.0000
23 Na	196689.50 P	7056.00	3.59	1.0000
24 Mg	23141.91 P	43.26	0.19	1.0000
27 Al	4021.80 P	226.90	5.64	1.0000
39 K	76357.12 P	2463.00	3.23	1.0000
44 Ca	1793.11 P	71.50	3.99	1.0000
45 Sc	510541.00 P	4569.00	0.89	0.0000
45 Sc	97262.66 P	635.50	0.65	0.0000
45 Sc	1465690.00 A	21530.00	1.47	0.0000
47 Ti	156.45 P	19.06	12.18	1.0000
51 V	8092.54 P	134.80	1.67	1.0000
52 Cr	4117.09 P	42.23	1.03	1.0000
55 Mn	61442.06 P	651.50	1.05	1.0000
56 Fe	82436.35 P	925.30	1.12	1.0000
59 Co	6109.79 P	52.36	0.86	1.0000
60 Ni	1383.64 P	28.30	2.05	1.0000
63 Cu	15516.40 P	233.60	1.51	1.0000
65 Cu	7559.83 P	73.09	0.97	1.0000
66 Zn	1430.31 P	74.87	5.23	1.0000
72 Ge	96818.69 P	1004.00	1.04	0.0000
72 Ge	44609.64 P	326.50	0.73	0.0000
72 Ge	203708.30 P	1751.00	0.86	0.0000
75 As	639.35 P	17.53	2.74	1.0000
78 Se	175.22 P	7.34	4.19	1.0000
78 Se	81.11 P	6.83	8.43	1.0000
80 Sr	3138.24 P	234.10	7.46	1.0000
80 Sr	17034.09 P	556.30	3.27	1.0000
95 Mo	3096.01 P	35.02	1.13	1.0000
106 (Cd)	180.01 P	18.56	10.31	1.0000
107 Ag	4028.49 P	77.05	1.91	1.0000
108 (Cd)	138.89 P	13.47	9.70	1.0000
111 Cd	1685.97 P	41.67	2.47	1.0000
115 In	1324038.00 A	6932.00	0.52	0.0000
118 Sn	5423.48 P	180.10	3.32	1.0000
121 Sb	6328.31 P	130.20	2.06	1.0000
137 Ba	2328.06 P	139.60	6.00	1.0000
159 Tb	1820559.00 A	17780.00	0.98	0.0000
165 Ho	1818461.00 A	19460.00	1.07	0.0000
205 Tl	15160.28 P	220.10	1.45	1.0000
206 (Pb)	7664.74 P	91.74	1.20	1.0000
207 (Pb)	7014.34 P	72.68	1.04	1.0000
208 Pb	31156.53 P	401.40	1.29	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3013436.30	0.47	2775704.50	108.6	70 -	120
45 Sc	510541.06	0.89	500780.41	101.9	70 -	120
45 Sc	97262.66	0.65	95494.08	101.9	70 -	120
45 Sc	1465690.00	1.47	1460980.80	100.3	70 -	120
72 Ge	96818.70	1.04	96219.04	100.6	70 -	120
72 Ge	44609.64	0.73	43611.78	102.3	70 -	120
72 Ge	203708.33	0.86	213204.63	95.5	70 -	120
115 In	1324038.00	0.52	1381264.00	95.9	70 -	120
159 Tb	1820559.10	0.98	1843940.90	98.7	70 -	120
165 Ho	1818460.60	1.07	1844184.90	98.6	70 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\006CAL5.D\006CAL5.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\11K11100.B\007CALB.D\007CALB.D#  
 Date Acquired: Nov 11 2011 12:27 pm  
 Operator: NBS  
 Sample Name: 111111 Standard 3  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:24 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

QCISTD Elements

Element	CPS Mean	SD	RSD(%)	Cal Coef
6 Li	3129745.00 A	45260.00	1.45	0.0000
7 (Li)	169858.91 P	576.50	0.34	0.7236
9 Be	529811.50 P	2404.00	0.45	0.9999
11 B	352525.41 P	4097.00	1.16	0.9985
23 Na	1470286.00 A	17010.00	1.16	0.9979
24 Mg	1292682.00 A	17130.00	1.33	1.0000
27 Al	182025.00 P	2356.00	1.29	1.0000
39 K	502725.09 P	1262.00	0.25	0.9983
44 Ca	52265.13 P	789.60	1.51	0.9983
45 Sc	522323.31 P	4813.00	0.92	0.0000
45 Sc	98761.96 P	1402.00	1.42	0.0000
45 Sc	1523925.00 A	17440.00	1.14	0.0000
47 Ti	6316.10 P	62.52	0.99	0.9998
51 V	161320.00 P	2272.00	1.41	0.9994
52 Cr	179336.20 P	1262.00	0.70	1.0000
55 Mn	136966.41 P	806.40	0.59	0.9998
56 Fe	3466730.00 A	34680.00	1.00	1.0000
59 Co	284063.59 P	2599.00	1.02	0.9995
60 Ni	64869.85 P	659.40	1.02	0.9997
63 Cu	172209.41 P	983.40	0.57	0.9999
65 Cu	82567.48 P	346.90	0.42	1.0000
66 Zn	30294.80 P	353.70	1.17	0.9973
72 Ge	98255.19 P	550.50	0.56	0.0000
72 Ge	46262.58 P	34.38	0.07	0.0000
72 Ge	211131.20 P	2095.00	0.99	0.0000
75 As	20258.79 P	48.21	0.24	1.0000
78 Se	8196.34 P	137.70	1.68	1.0000
78 Se	2352.20 P	19.65	0.84	0.9963
88 Sr	152226.41 P	2676.00	1.76	0.9999
88 Sr	853159.19 P	3826.00	0.45	1.0000
95 Mo	152546.09 P	1308.00	0.86	0.9999
106 (Cd)	7779.08 P	43.36	0.56	0.9995
107 Ag	203275.00 P	1362.00	0.67	1.0000
108 (Cd)	5850.30 P	115.70	1.98	0.9966
111 Cd	85595.10 P	417.50	0.49	1.0000
115 In	1359449.00 A	15030.00	1.11	0.0000
118 Sn	233787.30 P	2145.00	0.92	0.9998
121 Sb	303264.81 P	1162.00	0.38	1.0000
137 Ba	112289.00 P	1153.00	1.03	1.0000
159 Tb	1852128.10 A	3859.00	0.21	0.0000
165 Ho	1866389.00 A	18420.00	0.99	0.0000
205 Tl	767163.63 P	3647.00	0.48	1.0000
206 (Pb)	267422.81 P	439.20	0.16	0.9998
207 (Pb)	229702.30 P	967.40	0.42	0.9996
208 Pb	1066559.00 P	3421.00	0.32	0.9997

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3129745.00	1.45	2775704.50	112.8	70 -	120
45 Sc	522323.34	0.92	500780.41	104.3	70 -	120
45 Sc	98761.96	1.42	95494.08	103.4	70 -	120
45 Sc	1523925.00	1.14	1460980.80	104.3	70 -	120
72 Ge	98255.19	0.56	96219.04	102.1	70 -	120
72 Ge	46262.59	0.07	43611.78	106.1	70 -	120
72 Ge	211131.19	0.99	213204.63	99.0	70 -	120
115 In	1359449.00	1.11	1381264.00	98.4	70 -	120
159 Tb	1852128.10	0.21	1843940.90	100.4	70 -	120
165 Ho	1866389.00	0.99	1844184.90	101.2	70 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass  
 ISTD: Pass



Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\11K1100.B\009CALB.D\009CALB.D#  
 Date Acquired: Nov 11 2011 12:33 pm  
 Operator: NBS  
 Sample Name: 11111 Standard 4  
 Misc Info:  
 Vial Number: 1106  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:30 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

QC&STD Elements

Element	CPS Mean	SD	RSD(%)	Cal Coef
6 Li	3091825.00 A	34660.00	1.12	0.0000
7 [Li]	169207.09 P	2476.00	1.46	0.7966
9 Be	1184909.00 A	5168.00	0.44	1.0000
11 B	825041.63 A	8516.00	1.03	1.0000
23 Na	2686206.00 A	10730.00	0.40	0.9984
24 Mg	2535966.00 A	10300.00	0.41	1.0000
27 Al	366543.31 P	3283.00	0.90	1.0000
39 K	1039409.00 A	8793.00	0.85	0.9999
44 Ca	104136.20 P	1221.00	1.17	1.0000
45 Sc	526807.38 P	1501.00	0.28	0.0000
45 Sc	100637.20 P	272.50	0.27	0.0000
45 Sc	1546820.00 A	41280.00	2.67	0.0000
47 Ti	12883.09 P	335.40	2.60	1.0000
51 V	324487.59 P	1452.00	0.45	1.0000
52 Cr	360663.69 P	2389.00	0.66	1.0000
55 Mn	247566.30 P	2862.00	1.16	0.9063
56 Fe	6831163.00 A	89870.00	1.32	1.0000
59 Co	505973.59 P	1092.00	0.22	1.0000
60 Ni	128756.60 P	486.80	0.38	1.0000
63 Cu	331294.91 P	1236.00	0.37	0.9984
65 Cu	158678.41 P	595.70	0.38	0.9983
66 Zn	58476.31 P	247.90	0.42	0.9998
72 Ge	100101.50 P	582.20	0.58	0.0000
72 Ge	46752.66 P	94.61	0.20	0.0000
72 Ge	215920.09 P	4942.00	2.29	0.0000
75 As	41314.20 P	335.50	0.81	1.0000
78 Se	16782.86 P	111.00	0.66	1.0000
78 Se	4841.04 P	45.62	0.94	1.0000
88 Sr	308415.19 P	2179.00	0.71	1.0000
88 Sr	1836004.00 A	12020.00	0.66	1.0000
95 Mo	308376.41 P	620.60	0.20	1.0000
106 (Cd)	15606.90 P	85.03	0.54	1.0000
107 Ag	402429.69 P	2133.00	0.53	1.0000
108 (Cd)	11351.61 P	175.20	1.54	1.0000
111 Cd	169137.09 P	1111.00	0.66	1.0000
115 In	1356694.00 A	39030.00	2.88	0.0000
118 Sn	461432.81 P	1252.00	0.27	1.0000
121 Sb	616792.50 P	2811.00	0.46	1.0000
137 Ba	224905.80 P	424.60	0.19	1.0000
159 Tb	1896056.00 A	51090.00	2.69	0.0000
165 Ho	1892444.00 A	47210.00	2.49	0.0000
205 Tl	1621888.00 A	15450.00	0.95	1.0000
206 (Pb)	524239.50 P	2392.00	0.46	1.0000
207 (Pb)	454785.81 P	2844.00	0.63	1.0000
208 Pb	2164409.00 A	4337.00	0.20	1.0000

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3091824.50	1.12	2775704.50	111.4	70 -	120
45 Sc	526807.44	0.28	500780.41	105.2	70 -	120
45 Sc	100637.22	0.27	95494.08	105.4	70 -	120
45 Sc	1546819.60	2.67	1460980.80	105.9	70 -	120
72 Ge	100101.52	0.58	96219.04	104.0	70 -	120
72 Ge	46752.66	0.20	43611.78	107.2	70 -	120
72 Ge	215920.11	2.29	213204.63	101.3	70 -	120
115 In	1356693.50	2.88	1381264.00	98.2	70 -	120
159 Tb	1896055.90	2.69	1843940.90	102.8	70 -	120
165 Ho	1892443.90	2.49	1844184.90	102.6	70 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\11K1100.B\009CALB.D\009CALB.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\11K1100.B\009\_QCS.D\009\_QCS.D#  
 Date Acquired: Nov 11 2011 12:39 pm  
 Operator: NBS  
 Sample Name: ICV 111111  
 Misc Info:  
 Vial Number: 1107  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: QCS  
 Total Dil Factor: 1.00

QC Elements	Conc.	RSD(%)	Expected QC	Range(%)	Flag
7 (Li)	----- ug/l	-----	100.00	90 - 110	
9 Be	107.60 ug/l	0.95	100.00	90 - 110	
11 B	105.70 ug/l	0.67	100.00	90 - 110	
23 Na	2518.00 ug/l	0.81	2500.00	90 - 110	
24 Mg	2533.00 ug/l	0.67	2500.00	90 - 110	
27 Al	2547.00 ug/l	1.32	2500.00	90 - 110	
39 K	2615.00 ug/l	0.71	2500.00	90 - 110	
44 Ca	2519.00 ug/l	0.47	2500.00	90 - 110	
47 Ti	97.29 ug/l	0.90	100.00	90 - 110	
51 V	103.40 ug/l	0.55	100.00	90 - 110	
52 Cr	106.50 ug/l	0.63	100.00	90 - 110	
55 Mn	106.70 ug/l	0.21	100.00	90 - 110	
56 Fe	2516.00 ug/l	1.06	2500.00	90 - 110	
59 Co	104.60 ug/l	0.25	100.00	90 - 110	
60 Ni	104.70 ug/l	0.28	100.00	90 - 110	
63 Cu	102.50 ug/l	1.70	100.00	90 - 110	
65 Cu	102.20 ug/l	1.45	100.00	90 - 110	
66 Zn	104.10 ug/l	1.10	100.00	90 - 110	
75 As	98.86 ug/l	1.38	100.00	90 - 110	
78 Se	103.60 ug/l	1.81	100.00	90 - 110	
78 Se	104.10 ug/l	2.03	100.00	90 - 110	
88 Sr	101.20 ug/l	1.63	100.00	90 - 110	
88 Sr	104.30 ug/l	0.60	100.00	90 - 110	
95 Mo	96.15 ug/l	1.35	100.00	90 - 110	
106 (Cd)	----- ug/l	-----	100.00	90 - 110	
107 Ag	46.26 ug/l	0.71	50.00	90 - 110	
108 (Cd)	----- ug/l	-----	100.00	90 - 110	
111 Cd	103.60 ug/l	0.47	100.00	90 - 110	
118 Sn	43.82 ug/l	0.17	50.00	90 - 110	Fail
121 Sb	102.70 ug/l	0.18	100.00	90 - 110	
137 Ba	99.56 ug/l	0.34	100.00	90 - 110	
205 Tl	106.40 ug/l	1.20	100.00	90 - 110	
206 (Pb)	----- ug/l	-----	100.00	90 - 110	
207 (Pb)	----- ug/l	-----	100.00	90 - 110	
208 Pb	106.30 ug/l	0.89	100.00	90 - 110	

ISTD Elements	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3157481.00	0.39	2775704.50	113.8	70 - 120	
45 Sc	523431.13	0.16	500780.41	104.5	70 - 120	
45 Sc	100384.52	0.40	95494.08	105.1	70 - 120	
45 Sc	1532510.60	0.50	1460980.80	104.9	70 - 120	
72 Ge	99727.78	0.25	96219.04	103.6	70 - 120	
72 Ge	46938.75	0.91	43611.78	107.6	70 - 120	
72 Ge	212917.78	0.32	213204.63	99.9	70 - 120	
115 In	1371120.50	0.09	1381264.00	99.3	70 - 120	
159 Tb	1873353.00	0.83	1843940.90	101.6	70 - 120	
165 Ho	1868336.50	1.05	1844184.90	101.3	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K1100.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\012\_CCB.D\012\_CCB.D#  
 Date Acquired: Nov 11 2011 12:57 pm  
 Operator: NBS  
 Sample Name: ICB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements	Element	Conc.	RSD(%)	High Limit	Flag
	7 (Li)	----- ug/l	-----	#VALUE!	
	9 Be	0.00 ug/l	64.25	0.12	
	11 B	0.03 ug/l	45.15	15.00	
	23 Na	7.71 ug/l	8.18	77.10	
	24 Mg	0.10 ug/l	55.44	7.50	
	27 Al	0.09 ug/l	51.89	3.96	
	39 K	-16.07 ug/l	31.35	19.20	
	44 Ca	2.26 ug/l	102.26	90.00	
	47 Ti	0.02 ug/l	221.48	0.78	
	51 V	0.57 ug/l	2.59	0.21	Fail
	52 Cr	0.01 ug/l	92.18	0.12	
	55 Mn	0.00 ug/l	249.24	0.18	
	56 Fe	0.25 ug/l	4.89	40.80	
	59 Co	-0.25 ug/l	1.58	0.09	
	60 Ni	0.00 ug/l	280.61	0.48	
	63 Cu	-0.13 ug/l	3.22	0.39	
	65 Cu	-0.13 ug/l	16.74	0.39	
	66 Zn	-0.01 ug/l	406.21	6.90	
	75 As	-0.09 ug/l	15.13	0.27	
	78 Se	0.01 ug/l	58.10	0.30	
	78 Se	0.05 ug/l	139.53	0.30	
	88 Sr	0.00 ug/l	1034.40	0.03	
	88 Sr	0.00 ug/l	24.09	0.03	
	95 Mo	0.03 ug/l	16.72	0.21	
	106 (Cd)	----- ug/l	-----	#VALUE!	
	107 Ag	0.00 ug/l	50.39	0.09	
	108 (Cd)	----- ug/l	-----	#VALUE!	
	111 Cd	0.01 ug/l	58.78	0.06	
	118 Sn	0.03 ug/l	55.51	0.30	
	121 Sb	0.13 ug/l	5.57	0.03	Fail
	137 Ba	0.01 ug/l	116.79	0.12	
	205 Tl	0.01 ug/l	38.28	0.03	
	206 (Pb)	----- ug/l	-----	#VALUE!	
	207 (Pb)	----- ug/l	-----	#VALUE!	
	208 Pb	-0.20 ug/l	0.78	0.33	

ISTD Elements	Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
	6 Li	3073279.00	0.84	2775704.50	110.7	70 - 120	
	45 Sc	545909.38	3.12	500780.41	109.0	70 - 120	
	45 Sc	100165.70	0.44	95494.08	104.9	70 - 120	
	45 Sc	1499557.30	0.22	1460980.80	102.6	70 - 120	
	72 Ge	101795.60	2.62	96219.04	105.8	70 - 120	
	72 Ge	46734.16	0.18	43611.78	107.2	70 - 120	
	72 Ge	210654.83	0.54	213204.63	98.8	70 - 120	
	115 In	1336860.30	0.89	1381264.00	96.8	70 - 120	
	159 Tb	1857728.00	1.11	1843940.90	100.7	70 - 120	
	165 Ho	1856236.60	1.27	1844184.90	100.7	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass

## CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\013\_CCV.D\013\_CCV.D#  
 Date Acquired: Nov 11 2011 01:03 pm  
 Operator: NBS  
 Sample Name: CCV 111111  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	45.86 ug/l	1.99	50.00	90 - 110	
11 B	43.69 ug/l	2.15	50.00	90 - 110	Fail
23 Na	1276.00 ug/l	1.53	1250.00	90 - 110	
24 Mg	2559.00 ug/l	1.05	2500.00	90 - 110	
27 Al	1001.00 ug/l	1.70	1000.00	90 - 110	
39 K	917.90 ug/l	1.26	1000.00	90 - 110	
44 Ca	2498.00 ug/l	1.41	2500.00	90 - 110	
47 Ti	49.40 ug/l	0.95	50.00	90 - 110	
51 V	50.61 ug/l	1.18	50.00	90 - 110	
52 Cr	50.27 ug/l	1.38	50.00	90 - 110	
55 Mn	54.78 ug/l	1.56	50.00	90 - 110	
56 Fe	1027.00 ug/l	1.77	1000.00	90 - 110	
59 Co	50.74 ug/l	0.93	50.00	90 - 110	
60 Ni	50.88 ug/l	1.81	50.00	90 - 110	
63 Cu	50.81 ug/l	0.58	50.00	90 - 110	
65 Cu	50.69 ug/l	0.50	50.00	90 - 110	
66 Zn	51.32 ug/l	0.03	50.00	90 - 110	
75 As	49.12 ug/l	0.62	50.00	90 - 110	
78 Se	50.32 ug/l	1.71	50.00	90 - 110	
78 Se	49.06 ug/l	1.10	50.00	90 - 110	
88 Sr	49.93 ug/l	0.31	50.00	90 - 110	
88 Sr	47.83 ug/l	0.44	50.00	90 - 110	
95 Mo	50.08 ug/l	0.70	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.63 ug/l	0.57	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	50.07 ug/l	1.49	50.00	90 - 110	
118 Sn	50.35 ug/l	0.28	50.00	90 - 110	
121 Sb	49.48 ug/l	0.77	50.00	90 - 110	
137 Ba	49.18 ug/l	0.66	50.00	90 - 110	
205 Tl	48.89 ug/l	0.40	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.31 ug/l	0.14	50.00	90 - 110	

## ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3009330.80	0.85	2775704.50	108.4	70 - 120	
45 Sc	502422.56	3.92	500780.41	100.3	70 - 120	
45 Sc	98428.88	1.42	95494.08	103.1	70 - 120	
45 Sc	1480640.80	1.02	1460980.80	101.3	70 - 120	
72 Ge	97237.93	2.52	96219.04	101.1	70 - 120	
72 Ge	46537.16	0.17	43611.78	106.7	70 - 120	
72 Ge	206334.70	0.20	213204.63	96.8	70 - 120	
115 In	1333758.10	0.36	1381264.00	96.6	70 - 120	
159 Tb	1832635.60	0.51	1843940.90	99.4	70 - 120	
165 Ho	1824652.90	0.58	1844184.90	98.9	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Fail  
 ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\014\_CCB.D\014\_CCB.D#  
 Date Acquired: Nov 11 2011 01:09 pm  
 Operator: NBS  
 Sample Name: CCB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements	Element	Conc.	RSD(%)	High Limit	Flag
	7 (Li)	----- ug/l	-----	#VALUE!	
	9 Be	0.00 ug/l	75.05	0.12	
	11 B	0.19 ug/l	2.24	15.00	
	23 Na	3.09 ug/l	28.12	77.10	
	24 Mg	0.17 ug/l	59.53	7.50	
	27 Al	0.11 ug/l	49.92	3.96	
	39 K	-13.77 ug/l	41.47	19.20	
	44 Ca	1.49 ug/l	82.56	90.00	
	47 Ti	0.00 ug/l	584.34	0.78	
	51 V	0.76 ug/l	2.01	0.21	Fail
	52 Cr	0.02 ug/l	22.00	0.12	
	55 Mn	0.01 ug/l	26.62	0.18	
	56 Fe	0.44 ug/l	10.30	40.80	
	59 Co	-0.27 ug/l	0.49	0.09	
	60 Ni	0.00 ug/l	169.21	0.48	
	63 Cu	-0.16 ug/l	12.22	0.39	
	65 Cu	-0.16 ug/l	4.20	0.39	
	66 Zn	0.03 ug/l	67.54	6.90	
	75 As	-0.03 ug/l	60.04	0.27	
	78 Se	0.10 ug/l	23.77	0.30	
	78 Se	0.02 ug/l	138.81	0.30	
	88 Sr	0.00 ug/l	574.89	0.03	
	88 Sr	0.00 ug/l	33.45	0.03	
	95 Mo	0.10 ug/l	2.35	0.21	
	106 (Cd)	----- ug/l	-----	#VALUE!	
	107 Ag	0.00 ug/l	6.78	0.09	
	108 (Cd)	----- ug/l	-----	#VALUE!	
	111 Cd	0.01 ug/l	137.32	0.06	
	118 Sn	0.06 ug/l	31.67	0.30	
	121 Sb	0.69 ug/l	6.56	0.03	Fail
	137 Ba	0.01 ug/l	127.23	0.12	
	205 Tl	0.02 ug/l	7.09	0.03	
	206 (Pb)	----- ug/l	-----	#VALUE!	
	207 (Pb)	----- ug/l	-----	#VALUE!	
	208 Pb	-0.21 ug/l	0.72	0.33	

ISTD Elements	Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
	6 Li	2980962.00	0.72	2775704.50	107.4	70 - 120	
	45 Sc	505025.28	3.19	500780.41	100.8	70 - 120	
	45 Sc	97675.82	0.75	95494.08	102.3	70 - 120	
	45 Sc	1485366.30	0.36	1460980.80	101.7	70 - 120	
	72 Ge	97202.46	2.05	96219.04	101.0	70 - 120	
	72 Ge	45665.85	0.21	43611.78	104.7	70 - 120	
	72 Ge	205716.23	0.30	213204.63	96.5	70 - 120	
	115 In	1321174.40	0.50	1381264.00	95.6	70 - 120	
	159 Tb	1807747.90	0.40	1843940.90	98.0	70 - 120	
	165 Ho	1813776.00	0.73	1844184.90	98.4	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\11K1100.B\015ICSA.D\015ICSA.D#  
 Date Acquired: Nov 11 2011 01:15 pm  
 Acq. Method: 62A1111A.M  
 Operator: NBS  
 Sample Name: ICSA 111111  
 Misc Info:  
 Vial Number: 2102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal. Update: Nov 11 2011 12:36 pm  
 Sample Type: ICSA  
 Dilution Factor: 1.00

Data Results:  
 Analytes: Pass  
 ISTD: Pass

QC Elements						
Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
7 (Li)	---	3	----- ug/l	-----		
9 Be	45	3	0.83 ug/l	2.55		
11 B	45	3	1.56 ug/l	2.76		
23 Na	45	2	93250.00 ug/l	0.74		
24 Mg	45	2	91170.00 ug/l	1.03		
27 Al	45	2	104800.00 ug/l	1.31		
39 K	45	2	95010.00 ug/l	0.86		
44 Ca	45	2	101900.00 ug/l	1.03		
47 Ti	45	2	1961.00 ug/l	0.73		
51 V	45	2	2.53 ug/l	1.39		
52 Cr	45	2	2.35 ug/l	1.68		
55 Mn	45	2	7.50 ug/l	0.84		
56 Fe	45	2	92610.00 ug/l	0.44		
59 Co	45	2	20.49 ug/l	0.58		
60 Ni	45	2	3.86 ug/l	0.68		
63 Cu	72	2	1.60 ug/l	2.77		
65 Cu	72	2	1.70 ug/l	4.01		
66 Zn	72	2	5.11 ug/l	1.25		
75 As	72	2	1.55 ug/l	3.09		
78 Se	72	1	1.07 ug/l	5.94		
78 Se	72	2	1.16 ug/l	9.00		
88 Sr	72	2	1.41 ug/l	4.62		
89 Sr	72	3	1.37 ug/l	1.32		
95 Mo	72	3	1834.00 ug/l	1.74		
106 (Cd)	---	3	----- ug/l	-----		
107 Ag	115	3	1.97 ug/l	1.05		
108 (Cd)	---	3	----- ug/l	-----		
111 Cd	115	3	2.42 ug/l	3.67		
118 Sn	115	3	1.18 ug/l	1.50		
121 Sb	115	3	1.93 ug/l	2.34		
137 Ba	115	3	3.88 ug/l	2.04		
205 Tl	159	3	1.62 ug/l	1.90		
206 (Pb)	---	3	----- ug/l	-----		
207 (Pb)	---	3	----- ug/l	-----		
208 Pb	159	3	3.50 ug/l	0.41		

ISTD Elements							
Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2777926	0.73	2775705	100.1	70 - 120	
45 Sc	1	527513	3.31	500780	105.3	70 - 120	
45 Sc	2	94664	0.69	95494	99.1	70 - 120	
45 Sc	3	1465735	0.50	1460981	100.3	70 - 120	
72 Ge	1	98457	2.56	95219	102.3	70 - 120	
72 Ge	2	46798	1.22	43612	107.3	70 - 120	
72 Ge	3	216093	0.53	213205	101.4	70 - 120	
115 In	3	1235992	0.56	1381264	89.5	70 - 120	
159 Tb	3	1778881	0.42	1843941	96.5	70 - 120	
165 Ho	3	1783575	1.04	1844185	96.7	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u  
 Tune File# 2 c:\icpchem\1\7500\he.u  
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\11K1100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\016ICSB.D\016ICSB.D#  
 Date Acquired: Nov 11 2011 01:21 pm  
 Acq. Method: 62A1111A.M  
 Operator: NBS  
 Sample Name: ICSAB 111111  
 Misc Info:  
 Vial Number: 2103  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal. Update: Nov 11 2011 12:36 pm  
 Sample Type: ICSAB  
 Dilution Factor: 1.00

Data Results:  
 Analytes: Pass  
 ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	%Recovery	QC Range(%)	Flag
7 {Li}	---	3	---	---	---	---	---	---
9 Be	45	3	246.60	1.11	250	98.6	80 - 120	
11 B	45	3	1.63	0.34	---	---	---	
23 Na	45	2	96100.00	0.19	---	---	---	
24 Mg	45	2	93890.00	0.39	---	---	---	
27 Al	45	2	107500.00	1.06	---	---	---	
39 K	45	2	97710.00	0.66	---	---	---	
44 Ca	45	2	105500.00	1.05	---	---	---	
47 Ti	45	2	2014.00	0.31	2000	100.7	80 - 120	
51 V	45	2	267.30	0.98	250	106.9	80 - 120	
52 Cr	45	2	270.40	2.94	250	108.2	80 - 120	
55 Mn	45	2	264.30	0.56	250	105.7	80 - 120	
56 Fe	45	2	94360.00	0.20	---	---	---	
59 Co	45	2	282.40	0.78	250	113.0	80 - 120	
60 Ni	45	2	481.90	0.90	500	96.4	80 - 120	
63 Cu	72	2	218.20	1.17	250	87.3	80 - 120	
65 Cu	72	2	218.60	0.91	250	87.4	80 - 120	
66 Zn	72	2	513.60	0.37	500	102.7	80 - 120	
75 As	72	2	239.20	0.52	250	95.7	80 - 120	
78 Se	72	1	251.50	0.86	250	100.6	80 - 120	
78 Se	72	2	233.50	0.80	250	93.4	80 - 120	
88 Sr	72	2	1.62	0.60	---	---	---	
88 Sr	72	3	1.51	0.87	---	---	---	
95 Mo	72	3	2131.00	0.52	2000	106.6	80 - 120	
106 {Cd}	---	3	---	---	---	---	---	
107 Ag	115	3	535.90	1.10	500	107.2	80 - 120	
108 {Cd}	---	3	---	---	---	---	---	
111 Cd	115	3	495.00	0.98	500	99.0	80 - 120	
118 Sn	115	3	1.45	2.79	---	---	---	
121 Sb	115	3	274.60	0.82	250	109.8	80 - 120	
137 Ba	115	3	271.00	0.98	250	108.4	80 - 120	
205 Tl	159	3	252.50	0.03	250	101.0	80 - 120	
206 {Pb}	---	3	---	---	---	---	---	
207 {Pb}	---	3	---	---	---	---	---	
208 Pb	159	3	502.00	0.13	500	100.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	2732517	0.30	2775705	98.4	70 - 120	
45 Sc	1	511020	0.99	500780	102.0	70 - 120	
45 Sc	2	93932	0.16	95494	98.4	70 - 120	
45 Sc	3	1418244	0.91	1460981	97.1	70 - 120	
72 Ge	1	96432	0.78	96219	100.2	70 - 120	
72 Ge	2	46185	0.98	43613	105.9	70 - 120	
72 Ge	3	209601	0.65	213205	98.3	70 - 120	
115 In	3	1203221	0.93	1381264	87.1	70 - 120	
159 Tb	3	1775149	0.42	1843941	96.3	70 - 120	
165 Ho	3	1779108	0.39	1844185	96.5	70 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u  
 Tune File# 2 c:\icpchem\1\7500\he.u  
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

0 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\018\_CCV.D\018\_CCV.D#  
 Date Acquired: Nov 11 2011 01:33 pm  
 Operator: NBS  
 Sample Name: CCV 111111  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCV  
 Total Dil Factor: 1.00

QC Elements	Conc.	RSD(%)	Expected QC	Range(%)	Flag
Element					
7 (Li)	----- ug/l	-----	50.00	90 - 110	
9 Be	45.54 ug/l	0.43	50.00	90 - 110	
11 B	42.52 ug/l	0.69	50.00	90 - 110	Fail
23 Na	1232.00 ug/l	0.90	1250.00	90 - 110	
24 Mg	2553.00 ug/l	1.13	2500.00	90 - 110	
27 Al	1002.00 ug/l	1.24	1000.00	90 - 110	
39 K	910.10 ug/l	0.77	1000.00	90 - 110	
44 Ca	2506.00 ug/l	0.99	2500.00	90 - 110	
47 Ti	49.11 ug/l	2.38	50.00	90 - 110	
51 V	50.62 ug/l	1.42	50.00	90 - 110	
52 Cr	49.48 ug/l	1.20	50.00	90 - 110	
55 Mn	54.25 ug/l	1.47	50.00	90 - 110	
56 Fe	1014.00 ug/l	0.73	1000.00	90 - 110	
59 Co	50.51 ug/l	0.59	50.00	90 - 110	
60 Ni	50.70 ug/l	1.36	50.00	90 - 110	
63 Cu	49.70 ug/l	0.40	50.00	90 - 110	
65 Cu	49.73 ug/l	0.19	50.00	90 - 110	
66 Zn	49.96 ug/l	0.97	50.00	90 - 110	
75 As	48.64 ug/l	0.06	50.00	90 - 110	
78 Se	48.54 ug/l	0.17	50.00	90 - 110	
78 Se	48.82 ug/l	0.30	50.00	90 - 110	
88 Sr	49.77 ug/l	0.41	50.00	90 - 110	
88 Sr	48.29 ug/l	0.56	50.00	90 - 110	
95 Mo	51.00 ug/l	1.55	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	25.03 ug/l	0.97	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	49.94 ug/l	1.03	50.00	90 - 110	
118 Sn	51.03 ug/l	1.26	50.00	90 - 110	
121 Sb	50.47 ug/l	0.55	50.00	90 - 110	
137 Ba	50.01 ug/l	0.80	50.00	90 - 110	
205 Tl	48.64 ug/l	0.31	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.34 ug/l	1.15	50.00	90 - 110	

ISTD Elements	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3132762.00	0.73	2775704.50	112.9	70 - 120	
45 Sc	534639.31	0.21	500780.41	106.8	70 - 120	
45 Sc	99077.84	0.49	95494.08	103.8	70 - 120	
45 Sc	1513729.60	0.46	1460980.80	103.6	70 - 120	
72 Ge	102211.11	0.47	96219.04	106.2	70 - 120	
72 Ge	47244.57	0.27	43611.78	108.3	70 - 120	
72 Ge	214737.86	0.60	213204.63	100.7	70 - 120	
115 In	1389034.00	1.09	1381264.00	100.6	70 - 120	
159 Tb	1908915.90	0.41	1843940.90	103.5	70 - 120	
165 Ho	1921136.40	0.48	1844184.90	104.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass



**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\11K11100.B\020\_CCB.D\020\_CCB.D#  
 Date Acquired: Nov 11 2011 01:46 pm  
 Operator: NBS  
 Sample Name: CCB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements	Conc.	RSD(%)	High Limit	Flag
Element			#VALUE!	
7 (Li)	0.00 ug/l	342.89	0.12	
9 Be	-0.21 ug/l	27.87	15.00	
11 B	-22.95 ug/l	2.00	77.10	
23 Na	0.32 ug/l	24.61	7.50	
24 Mg	0.31 ug/l	30.94	3.96	
27 Al	-13.04 ug/l	28.54	19.20	
39 K	-2.47 ug/l	54.66	90.00	
44 Ca	0.02 ug/l	115.52	0.78	
47 Ti	1.17 ug/l	4.59	0.21	Fail
51 V	0.01 ug/l	119.76	0.12	
52 Cr	0.00 ug/l	605.19	0.18	
55 Mn	0.83 ug/l	6.77	40.80	
56 Fe	-0.30 ug/l	0.59	0.09	
59 Co	0.00 ug/l	211.25	0.48	
60 Ni	-0.31 ug/l	1.69	0.39	
63 Cu	-0.31 ug/l	4.87	0.39	
65 Cu	0.00 ug/l	866.90	6.90	
66 Zn	-0.07 ug/l	27.14	0.27	
75 As	0.03 ug/l	41.10	0.30	
78 Se	0.07 ug/l	100.62	0.30	
78 Se	0.00 ug/l	114.02	0.03	
88 Sr	0.00 ug/l	18.44	0.03	
88 Sr	0.09 ug/l	4.01	0.21	
95 Mo	----- ug/l	-----	#VALUE!	
106 (Cd)	0.01 ug/l	12.14	0.09	
107 Ag	----- ug/l	-----	#VALUE!	
108 (Cd)	0.00 ug/l	1077.10	0.06	
111 Cd	0.03 ug/l	30.18	0.30	
118 Sn	0.29 ug/l	4.29	0.03	Fail
121 Sb	0.01 ug/l	115.49	0.12	
137 Ba	0.03 ug/l	19.13	0.03	
205 Tl	----- ug/l	-----	#VALUE!	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.21 ug/l	1.63	0.33	

ISTD Elements	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3042523.00	0.11	2775704.50	109.6	70 - 120	
45 Sc	529492.56	0.66	500780.41	105.7	70 - 120	
45 Sc	97690.27	0.93	95494.08	102.3	70 - 120	
45 Sc	1482243.40	0.75	1460980.80	101.5	70 - 120	
72 Ge	101254.01	0.60	96219.04	105.2	70 - 120	
72 Ge	46065.66	0.31	43611.78	105.6	70 - 120	
72 Ge	210454.86	0.84	213204.63	98.7	70 - 120	
115 In	1353362.30	0.71	1381264.00	98.0	70 - 120	
159 Tb	1859786.10	0.52	1843940.90	100.9	70 - 120	
165 Ho	1863063.90	0.81	1844184.90	101.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass

## CCV QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\032\_CCV.D\032\_CCV.D#  
 Date Acquired: Nov 11 2011 03:05 pm  
 Operator: NBS  
 Sample Name: CCV 111111  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	45.98 ug/l	0.90	50.00	90 - 110	
11 B	43.38 ug/l	1.83	50.00	90 - 110	Fail
23 Na	1250.00 ug/l	2.32	1250.00	90 - 110	
24 Mg	2541.00 ug/l	1.13	2500.00	90 - 110	
27 Al	992.10 ug/l	1.33	1000.00	90 - 110	
39 K	905.50 ug/l	1.76	1000.00	90 - 110	
44 Ca	2473.00 ug/l	1.61	2500.00	90 - 110	
47 Ti	49.01 ug/l	0.71	50.00	90 - 110	
51 V	50.64 ug/l	0.61	50.00	90 - 110	
52 Cr	49.61 ug/l	0.94	50.00	90 - 110	
55 Mn	54.01 ug/l	0.87	50.00	90 - 110	
56 Fe	1013.00 ug/l	1.52	1000.00	90 - 110	
59 Co	50.36 ug/l	0.94	50.00	90 - 110	
60 Ni	51.02 ug/l	1.41	50.00	90 - 110	
63 Cu	49.96 ug/l	0.98	50.00	90 - 110	
65 Cu	49.87 ug/l	0.48	50.00	90 - 110	
66 Zn	50.14 ug/l	1.34	50.00	90 - 110	
75 As	48.56 ug/l	0.79	50.00	90 - 110	
78 Se	47.94 ug/l	1.13	50.00	90 - 110	
78 Se	48.27 ug/l	2.37	50.00	90 - 110	
88 Sr	50.07 ug/l	0.24	50.00	90 - 110	
88 Sr	46.85 ug/l	0.80	50.00	90 - 110	
95 Mo	48.88 ug/l	0.75	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.26 ug/l	1.57	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	49.33 ug/l	0.71	50.00	90 - 110	
118 Sn	50.24 ug/l	1.40	50.00	90 - 110	
121 Sb	49.54 ug/l	1.18	50.00	90 - 110	
137 Ba	49.63 ug/l	2.49	50.00	90 - 110	
205 Tl	48.65 ug/l	0.58	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	49.96 ug/l	0.90	50.00	90 - 110	

## ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3188763.30	1.52	2775704.50	114.9	70 - 120	
45 Sc	530164.38	0.11	500780.41	105.9	70 - 120	
45 Sc	96337.35	1.21	95494.08	100.9	70 - 120	
45 Sc	1476239.00	1.18	1460980.80	101.0	70 - 120	
72 Ge	102958.30	0.45	96219.04	107.0	70 - 120	
72 Ge	45995.51	1.09	43611.70	105.5	70 - 120	
72 Ge	211979.86	0.56	213204.63	99.4	70 - 120	
115 In	1355180.90	1.54	1381264.00	98.1	70 - 120	
159 Tb	1863114.30	0.80	1843940.90	101.0	70 - 120	
165 Ho	1880561.90	0.45	1844184.90	102.0	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Fail  
 ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\034\_CCB.D\034\_CCB.D#  
 Date Acquired: Nov 11 2011 03:17 pm  
 Operator: NBS  
 Sample Name: CCB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements	Element	Conc.	RSD(%)	High Limit	Flag
	7 (Li)	----- ug/l	-----	#VALUE!	
	9 Be	0.00 ug/l	69.30	0.12	
	11 B	-0.21 ug/l	1.18	15.00	
	23 Na	-12.29 ug/l	7.14	77.10	
	24 Mg	0.25 ug/l	17.30	7.50	
	27 Al	0.17 ug/l	52.39	3.96	
	39 K	-13.38 ug/l	34.73	19.20	
	44 Ca	-0.64 ug/l	345.23	90.00	
	47 Ti	0.01 ug/l	249.07	0.78	
	51 V	1.42 ug/l	3.15	0.21	Fail
	52 Cr	0.03 ug/l	9.62	0.12	
	55 Mn	0.01 ug/l	149.75	0.18	
	56 Fe	0.83 ug/l	6.84	40.80	
	59 Co	-0.29 ug/l	0.85	0.09	
	60 Ni	-0.01 ug/l	222.72	0.48	
	63 Cu	-0.38 ug/l	4.80	0.39	
	65 Cu	-0.41 ug/l	3.73	0.39	
	66 Zn	0.00 ug/l	2628.40	6.90	
	75 As	0.07 ug/l	32.28	0.27	
	78 Se	0.02 ug/l	97.30	0.30	
	78 Se	0.10 ug/l	82.67	0.30	
	88 Sr	0.00 ug/l	540.84	0.03	
	88 Sr	0.00 ug/l	24.02	0.03	
	95 Mo	0.03 ug/l	20.10	0.21	
	106 (Cd)	----- ug/l	-----	#VALUE!	
	107 Ag	0.00 ug/l	72.34	0.09	
	108 (Cd)	----- ug/l	-----	#VALUE!	
	111 Cd	0.00 ug/l	426.65	0.06	
	118 Sn	0.05 ug/l	13.48	0.30	
	121 Sb	0.29 ug/l	11.14	0.03	Fail
	137 Ba	0.02 ug/l	76.66	0.12	
	205 Tl	0.01 ug/l	1.73	0.03	
	206 (Pb)	----- ug/l	-----	#VALUE!	
	207 (Pb)	----- ug/l	-----	#VALUE!	
	208 Pb	-0.25 ug/l	1.69	0.33	

ISTD Elements	Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
	6 Li	3085838.80	0.28	2775704.50	111.2	70 - 120	
	45 Sc	543008.13	0.74	500780.41	108.4	70 - 120	
	45 Sc	96730.10	0.69	95494.08	101.3	70 - 120	
	45 Sc	1456388.00	1.14	1460980.80	99.7	70 - 120	
	72 Ge	104225.84	0.21	96219.04	108.3	70 - 120	
	72 Ge	45874.70	1.25	43611.78	105.2	70 - 120	
	72 Ge	211968.23	0.39	213204.63	99.4	70 - 120	
	115 In	1335750.50	0.67	1381264.00	96.7	70 - 120	
	159 Tb	1825624.90	0.43	1843940.90	99.0	70 - 120	
	165 Ho	1821355.50	0.60	1844184.90	98.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\11K11100.B\046\_CCV.D\046\_CCV.D#  
 Date Acquired: Nov 11 2011 04:30 pm  
 Operator: NBS  
 Sample Name: CCV 111111  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	45.70 ug/l	1.26	50.00	90 - 110	
11 B	42.89 ug/l	1.19	50.00	90 - 110	Fail
23 Na	1254.00 ug/l	0.41	1250.00	90 - 110	
24 Mg	2547.00 ug/l	0.59	2500.00	90 - 110	
27 Al	995.00 ug/l	1.68	1000.00	90 - 110	
39 K	893.20 ug/l	1.01	1000.00	90 - 110	Fail
44 Ca	2454.00 ug/l	1.15	2500.00	90 - 110	
47 Ti	49.64 ug/l	0.77	50.00	90 - 110	
51 V	51.07 ug/l	0.56	50.00	90 - 110	
52 Cr	49.58 ug/l	1.32	50.00	90 - 110	
55 Mn	53.75 ug/l	1.23	50.00	90 - 110	
56 Fe	1008.00 ug/l	1.04	1000.00	90 - 110	
59 Co	50.27 ug/l	0.38	50.00	90 - 110	
60 Ni	50.83 ug/l	0.09	50.00	90 - 110	
63 Cu	49.08 ug/l	0.21	50.00	90 - 110	
65 Cu	49.49 ug/l	0.52	50.00	90 - 110	
66 Zn	49.79 ug/l	0.97	50.00	90 - 110	
75 As	48.81 ug/l	0.50	50.00	90 - 110	
78 Se	46.71 ug/l	1.36	50.00	90 - 110	
78 Se	47.88 ug/l	0.76	50.00	90 - 110	
88 Sr	50.09 ug/l	1.50	50.00	90 - 110	
88 Sr	46.19 ug/l	0.77	50.00	90 - 110	
95 Mo	48.00 ug/l	1.20	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.50 ug/l	0.88	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	49.59 ug/l	0.88	50.00	90 - 110	
118 Sn	50.70 ug/l	0.24	50.00	90 - 110	
121 Sb	50.92 ug/l	1.07	50.00	90 - 110	
137 Ba	50.15 ug/l	0.91	50.00	90 - 110	
205 Tl	48.73 ug/l	1.15	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.41 ug/l	1.38	50.00	90 - 110	

ISTD Elements					
Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)
6 Li	3087745.80	0.94	2775704.50	111.2	70 - 120
45 Sc	518583.69	0.47	500780.41	103.6	70 - 120
45 Sc	93007.50	0.55	95494.08	97.4	70 - 120
45 Sc	1424009.10	1.38	1460980.80	97.5	70 - 120
72 Ge	100723.93	0.27	96219.04	104.7	70 - 120
72 Ge	44570.69	0.32	43611.78	102.2	70 - 120
72 Ge	210088.66	0.52	213204.63	98.5	70 - 120
115 In	1313527.60	0.88	1381264.00	95.1	70 - 120
159 Tb	1801651.50	1.57	1843940.90	97.7	70 - 120
165 Ho	1809552.10	1.53	1844184.90	98.1	70 - 120

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Pass

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\048\_CCB.D\048\_CCB.D#  
 Date Acquired: Nov 11 2011 04:42 pm  
 Operator: NBS  
 Sample Name: CCB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	----- ug/l	-----	#VALUE!	
9 Be	0.00 ug/l	42.29	0.12	
11 B	-0.13 ug/l	71.11	15.00	
23 Na	-8.31 ug/l	8.06	77.10	
24 Mg	0.36 ug/l	29.70	7.50	
27 Al	0.19 ug/l	47.04	3.96	
39 K	-21.23 ug/l	17.60	19.20	
44 Ca	-3.80 ug/l	61.16	90.00	
47 Ti	0.11 ug/l	173.80	0.78	
51 V	2.15 ug/l	1.51	0.21	Fail
52 Cr	0.08 ug/l	5.21	0.12	
55 Mn	0.54 ug/l	4.21	0.18	Fail
56 Fe	1.18 ug/l	2.51	40.80	
59 Co	-0.29 ug/l	0.62	0.09	
60 Ni	-0.01 ug/l	26.89	0.48	
63 Cu	-0.51 ug/l	3.25	0.39	
65 Cu	-0.52 ug/l	1.59	0.39	
66 Zn	0.03 ug/l	92.54	6.90	
75 As	0.35 ug/l	13.98	0.27	Fail
78 Se	0.04 ug/l	38.02	0.30	
78 Se	0.10 ug/l	95.97	0.30	
88 Sr	0.00 ug/l	152.47	0.03	
88 Sr	0.01 ug/l	57.39	0.03	
95 Mo	0.04 ug/l	33.06	0.21	
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	0.00 ug/l	67.11	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.00 ug/l	1389.00	0.06	
118 Sn	0.07 ug/l	25.68	0.30	
121 Sb	0.41 ug/l	2.24	0.03	Fail
137 Ba	0.01 ug/l	46.25	0.12	
205 Tl	0.01 ug/l	17.61	0.03	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.24 ug/l	0.75	0.33	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3066933.50	0.82	2775704.50	110.5	70 - 120	
45 Sc	480667.06	6.48	500780.41	96.0	70 - 120	
45 Sc	92147.45	0.95	95494.08	96.5	70 - 120	
45 Sc	1424222.60	0.94	1460980.80	97.5	70 - 120	
72 Ge	96248.01	5.46	96219.04	100.0	70 - 120	
72 Ge	44554.26	0.07	43611.78	102.2	70 - 120	
72 Ge	211003.38	0.55	213204.63	99.0	70 - 120	
115 In	1322454.80	0.90	1381264.00	95.7	70 - 120	
159 Tb	1796985.40	1.28	1843940.90	97.5	70 - 120	
165 Ho	1818211.10	0.91	1844184.90	98.6	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\11K1100.B\060\_CCV.D\060\_CCV.D#  
 Date Acquired: Nov 11 2011 06:04 pm  
 Operator: NBS  
 Sample Name: CCV 111111  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	43.59 ug/l	0.52	50.00 90 - 110	Fail
11 B	39.89 ug/l	0.37	50.00 90 - 110	Fail
23 Na	1206.00 ug/l	0.25	1250.00 90 - 110	
24 Mg	2492.00 ug/l	1.14	2500.00 90 - 110	
27 Al	988.60 ug/l	0.65	1000.00 90 - 110	
39 K	883.40 ug/l	0.62	1000.00 90 - 110	Fail
44 Ca	2445.00 ug/l	1.17	2500.00 90 - 110	
47 Ti	49.55 ug/l	0.70	50.00 90 - 110	
51 V	52.18 ug/l	0.86	50.00 90 - 110	
52 Cr	49.10 ug/l	0.91	50.00 90 - 110	
55 Mn	53.67 ug/l	0.37	50.00 90 - 110	
56 Fe	999.40 ug/l	0.75	1000.00 90 - 110	
59 Co	49.93 ug/l	0.37	50.00 90 - 110	
60 Ni	50.18 ug/l	0.47	50.00 90 - 110	
63 Cu	48.01 ug/l	1.08	50.00 90 - 110	
65 Cu	47.95 ug/l	1.23	50.00 90 - 110	
66 Zn	48.48 ug/l	0.85	50.00 90 - 110	
75 As	48.40 ug/l	0.84	50.00 90 - 110	
78 Se	44.75 ug/l	1.93	50.00 90 - 110	Fail
78 Se	46.76 ug/l	2.40	50.00 90 - 110	
88 Sr	49.65 ug/l	0.75	50.00 90 - 110	
88 Sr	43.83 ug/l	0.41	50.00 90 - 110	Fail
95 Mo	45.84 ug/l	0.72	50.00 90 - 110	
106 (Cd)	----- ug/l	-----	50.00 90 - 110	
107 Ag	24.47 ug/l	1.71	25.00 90 - 110	
108 (Cd)	----- ug/l	-----	50.00 90 - 110	
111 Cd	48.94 ug/l	2.42	50.00 90 - 110	
118 Sn	49.84 ug/l	1.46	50.00 90 - 110	
121 Sb	50.04 ug/l	0.62	50.00 90 - 110	
137 Ba	50.55 ug/l	2.58	50.00 90 - 110	
205 Tl	46.49 ug/l	1.08	50.00 90 - 110	
206 (Pb)	----- ug/l	-----	50.00 90 - 110	
207 (Pb)	----- ug/l	-----	50.00 90 - 110	
208 Pb	48.04 ug/l	0.60	50.00 90 - 110	

ISTD Elements						
Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3120885.30	0.68	2775704.50	112.4	70 - 120	
45 Sc	528291.50	1.60	500780.41	105.5	70 - 120	
45 Sc	94943.62	0.72	95494.08	99.4	70 - 120	
45 Sc	1497531.60	0.60	1460980.80	102.5	70 - 120	
72 Ge	107482.91	1.52	96219.04	111.7	70 - 120	
72 Ge	46381.07	0.48	43611.78	106.3	70 - 120	
72 Ge	233866.19	0.20	213204.63	109.7	70 - 120	
115 In	1403864.60	1.34	1381264.00	101.6	70 - 120	
159 Tb	1927869.00	0.42	1843940.90	104.6	70 - 120	
165 Ho	1902582.90	0.32	1844184.90	103.2	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K1100.B\004CALB.D\004CALB.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

CCB QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\062\_CCB.D\062\_CCB.D#  
 Date Acquired: Nov 11 2011 06:16 pm  
 Operator: NBS  
 Sample Name: CCB 111111  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 12:36 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

QC Elements	Element	Conc.	RSD(%)	High Limit	Flag
	7 (Li)	----- ug/l	-----	#VALUE!	
	9 Be	0.00 ug/l	45.82	0.12	
	11 B	-0.52 ug/l	3.32	15.00	
	23 Na	-14.13 ug/l	1.97	77.10	
	24 Mg	0.40 ug/l	18.80	7.50	
	27 Al	0.37 ug/l	36.41	3.96	
	39 K	-25.01 ug/l	22.10	19.20	
	44 Ca	-5.06 ug/l	39.41	90.00	
	47 Ti	-0.01 ug/l	153.32	0.78	
	51 V	3.23 ug/l	1.14	0.21	Fail
	52 Cr	0.11 ug/l	18.29	0.12	
	55 Mn	0.56 ug/l	2.13	0.18	Fail
	56 Fe	0.91 ug/l	1.90	40.80	
	59 Co	-0.29 ug/l	0.95	0.09	
	60 Ni	-0.01 ug/l	26.61	0.48	
	63 Cu	-0.57 ug/l	1.33	0.39	
	65 Cu	-0.57 ug/l	1.17	0.39	
	66 Zn	0.10 ug/l	36.98	6.90	
	75 As	0.63 ug/l	2.54	0.27	Fail
	78 Se	0.03 ug/l	36.72	0.30	
	78 Se	0.20 ug/l	17.06	0.30	
	88 Sr	0.01 ug/l	140.22	0.03	
	88 Sr	0.00 ug/l	12.28	0.03	
	95 Mo	0.01 ug/l	62.46	0.21	
	106 (Cd)	----- ug/l	-----	#VALUE!	
	107 Ag	0.00 ug/l	55.01	0.09	
	108 (Cd)	----- ug/l	-----	#VALUE!	
	111 Cd	0.01 ug/l	225.87	0.06	
	118 Sn	0.05 ug/l	34.43	0.30	
	121 Sb	0.19 ug/l	1.47	0.03	Fail
	137 Ba	0.00 ug/l	114.50	0.12	
	205 Tl	0.01 ug/l	8.77	0.03	
	206 (Pb)	----- ug/l	-----	#VALUE!	
	207 (Pb)	----- ug/l	-----	#VALUE!	
	208 Pb	-0.25 ug/l	1.47	0.33	

ISTD Elements	Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
	6 Li	3025901.00	0.96	2775704.50	109.0	70 - 120		
	45 Sc	540897.69	0.43	500780.41	108.0	70 - 120		
	45 Sc	95060.94	0.12	95494.08	99.5	70 - 120		
	45 Sc	1475771.40	0.55	1460980.80	101.0	70 - 120		
	72 Ge	108235.30	0.84	96219.04	112.5	70 - 120		
	72 Ge	46007.31	1.05	43611.78	105.5	70 - 120		
	72 Ge	232509.75	0.78	213204.63	109.1	70 - 120		
	115 In	1409864.80	1.11	1381264.00	102.1	70 - 120		
	159 Tb	1904300.90	0.32	1843940.90	103.3	70 - 120		
	165 Ho	1879356.80	0.14	1844184.90	101.9	70 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Fail  
 ISTD: Pass

**METALS**  
**Raw Data**

**APPL, INC.**



# METALS BLANK

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Analyte	Result	LOQ	LOD	DL	Units	Prep Date	Analysis Date	QC Group
6020	LEAD (PB) (DISSOL	0.19 J	0.5	0.22	0.11	ug/L	11/10/11	11/11/11	#602D-111110A-AY49334

J = Estimated value.

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\024SMPL.D\024SMPL.D#  
 Date Acquired: Nov 11 2011 02:16 pm  
 Operator: NBS  
 Sample Name: 111110A-3015-BLK  
 Misc Info: 111110A-3015  
 Vial Number: 3101  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	-0.01 ug/l	-0.01	2.73	1000	
11	B	0.02 ug/l	0.02	15.56	1000	
23	Na	35.01 ug/l	38.90	12.71	25000	
24	Mg	5.25 ug/l	5.83	2.15	50000	
27	Al	6.63 ug/l	7.37	3.21	20000	
39	K	-19.19 ug/l	-21.32	24.75	20000	
44	Ca	187.10 ug/l	207.87	2.16	50000	
47	Ti	0.09 ug/l	0.10	43.80	1000	
51	V	-0.78 ug/l	-0.86	1.87	1000	
52	Cr	-0.04 ug/l	-0.04	28.95	1000	
55	Mn	0.23 ug/l	0.26	6.88	1000	
56	Fe	2.70 ug/l	3.00	5.14	20000	
59	Co	-0.27 ug/l	-0.30	0.86	1000	
60	Ni	0.12 ug/l	0.14	23.87	1000	
63	Cu	-0.44 ug/l	-0.49	2.50	1000	
65	Cu	-0.44 ug/l	-0.49	2.58	1000	
66	Zn	7.48 ug/l	8.31	3.75	1000	
75	As	-0.53 ug/l	-0.59	2.55	1000	
78	Se	-0.01 ug/l	-0.01	26.71	1000	
78	Se	-0.01 ug/l	-0.02	520.99	1000	
88	Sr	0.14 ug/l	0.16	12.74	1000	
88	Sr	0.14 ug/l	0.16	3.88	1000	
95	Mo	0.02 ug/l	0.02	6.80	1000	
106	(Cd)	----- ug/l	#VALUE!	-----	#####	
107	Ag	0.00 ug/l	0.00	212.49	500	
108	(Cd)	----- ug/l	#VALUE!	-----	#####	
111	Cd	0.02 ug/l	0.02	26.66	1000	
118	Sn	0.12 ug/l	0.13	6.01	1000	
121	Sb	0.07 ug/l	0.08	7.73	1000	
137	Ba	0.04 ug/l	0.04	9.41	1000	
205	Tl	0.01 ug/l	0.01	22.33	1000	
206	(Pb)	----- ug/l	#VALUE!	-----	#####	
207	(Pb)	----- ug/l	#VALUE!	-----	#####	
208	Pb	0.17 ug/l	0.19	1.81	1000	

ISTD Elements	Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3205542.30	0.83	2775704.50	115.5	70 - 120	
45	Sc	579022.81	0.89	500780.41	115.6	70 - 120	
45	Sc	106222.45	0.45	95494.08	111.2	70 - 120	
45	Sc	1635333.40	0.66	1460980.80	111.9	70 - 120	
72	Ge	108091.34	0.67	96219.04	112.3	70 - 120	
72	Ge	49642.59	1.23	43611.78	113.8	70 - 120	
72	Ge	228973.69	0.34	213204.63	107.4	70 - 120	
115	In	1505106.90	0.63	1381264.00	109.0	70 - 120	
159	Tb	2069441.80	1.02	1843940.90	112.2	70 - 120	
165	Ho	2056674.30	0.60	1844184.90	111.5	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures        0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes:      Pass  
 ISTD:           Pass

# 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	50.0	100	80-120	11/10/2011	1/11/2011	#602D-111110A-AY49334

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Comments:

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\025SMPL.D\025SMPL.D#  
 Date Acquired: Nov 11 2011 02:22 pm  
 Operator: NBS  
 Sample Name: 111110A-3015-LCS  
 Misc Info: 111110A-3015  
 Vial Number: 3102  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	7.09 ug/l	7.88	0.95	1000	
11 B	34.46 ug/l	38.29	0.83	1000	
23 Na	4313.00 ug/l	4791.74	0.33	25000	
24 Mg	4287.00 ug/l	4762.86	0.50	50000	
27 Al	378.80 ug/l	420.85	1.07	20000	
39 K	819.80 ug/l	910.80	1.14	20000	
44 Ca	4772.00 ug/l	5301.69	0.81	50000	
47 Ti	43.16 ug/l	47.95	0.73	1000	
51 V	44.89 ug/l	49.87	0.68	1000	
52 Cr	46.85 ug/l	52.05	0.52	1000	
55 Mn	48.25 ug/l	53.61	0.34	1000	
56 Fe	188.60 ug/l	209.53	0.62	20000	
59 Co	45.14 ug/l	50.15	0.81	1000	
60 Ni	45.24 ug/l	50.26	0.75	1000	
63 Cu	42.57 ug/l	47.30	0.51	1000	
65 Cu	42.70 ug/l	47.44	0.10	1000	
66 Zn	94.53 ug/l	105.02	0.68	1000	
75 As	39.81 ug/l	44.23	0.66	1000	
78 Se	36.57 ug/l	40.63	2.90	1000	
78 Se	37.79 ug/l	41.98	1.41	1000	
88 Sr	47.19 ug/l	52.43	0.39	1000	
88 Sr	45.26 ug/l	50.28	0.18	1000	
95 Mo	45.43 ug/l	50.47	0.63	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	16.57 ug/l	18.41	1.13	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	8.34 ug/l	9.26	2.50	1000	
118 Sn	48.01 ug/l	53.34	0.41	1000	
121 Sb	42.84 ug/l	47.60	0.50	1000	
137 Ba	44.60 ug/l	49.55	0.91	1000	
205 Tl	43.45 ug/l	48.27	0.08	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	45.08 ug/l	50.08	0.48	1000	

ISTD Elements						
Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3106113.00	0.94	2775704.50	111.9	70 - 120	
45 Sc	583837.94	0.76	500780.41	116.6	70 - 120	
45 Sc	104815.63	0.97	95494.08	109.8	70 - 120	
45 Sc	1623628.90	0.72	1460980.80	111.1	70 - 120	
72 Ge	109519.99	0.75	96219.04	113.8	70 - 120	
72 Ge	48705.67	0.97	43611.78	111.7	70 - 120	
72 Ge	226177.02	0.48	213204.63	106.1	70 - 120	
115 In	1499201.30	0.50	1381264.00	108.5	70 - 120	
159 Tb	2052386.10	0.41	1843940.90	111.3	70 - 120	
165 Ho	2061841.80	0.62	1844184.90	111.8	70 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures        0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes:      Pass  
 ISTD:           Pass

# Matrix Spike Recoveries

## METALS

APPL ID: 111110W-49334 MS - 161255

APPL Inc.

Sample ID: AY49334

908 North Temperance Avenue

Client ID: ES047

Clovis, CA 93611

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD	RPD Max	RPD Limits	RPD Recovery	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample
6020	LEAD (PB) (DISSOLVE	50.0	ND	49.5	48.8	99.0	97.6	1.4	20	80-120	1/10/2011	1/11/2011	1/10/2011	1/11/2011	161255	AY49334	

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Comments:

## Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\043SMPL.D\043SMPL.D#  
 Date Acquired: Nov 11 2011 04:12 pm  
 Operator: NBS  
 Sample Name: AY49334W52 MS  
 Misc Info: 111110A-3015  
 Vial Number: 3204  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	5.49 ug/l	6.10	1.06	1000	
11 B	106.30 ug/l	118.10	0.86	1000	
23 Na	67250.00 ug/l	74714.75	0.69	25000	>Cal
24 Mg	27980.00 ug/l	31085.78	0.94	50000	
27 Al	425.20 ug/l	472.40	1.20	20000	
39 K	3527.00 ug/l	3918.50	0.62	20000	
44 Ca	17630.00 ug/l	19586.93	1.01	50000	
47 Ti	46.43 ug/l	51.58	0.68	1000	
51 V	47.50 ug/l	52.77	0.75	1000	
52 Cr	46.44 ug/l	51.59	0.93	1000	
55 Mn	1471.00 ug/l	1634.28	0.54	1000	>Cal
56 Fe	1106.00 ug/l	1228.77	0.88	20000	
59 Co	44.68 ug/l	49.64	1.20	1000	
60 Ni	44.83 ug/l	49.81	0.65	1000	
63 Cu	43.23 ug/l	48.03	0.77	1000	
65 Cu	43.18 ug/l	47.97	0.92	1000	
66 Zn	91.21 ug/l	101.33	0.62	1000	
75 As	42.58 ug/l	47.31	0.67	1000	
78 Se	38.49 ug/l	42.76	2.21	1000	
78 Se	39.09 ug/l	43.43	0.75	1000	
88 Sr	163.00 ug/l	181.09	0.38	1000	
88 Sr	163.50 ug/l	181.65	1.22	1000	
95 Mo	47.02 ug/l	52.24	1.05	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	17.43 ug/l	19.36	0.62	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	8.85 ug/l	9.83	1.40	1000	
118 Sn	49.73 ug/l	55.25	0.73	1000	
121 Sb	43.10 ug/l	47.88	0.46	1000	
137 Ba	71.28 ug/l	79.19	1.16	1000	
205 Tl	43.09 ug/l	47.87	0.35	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	44.63 ug/l	49.58	1.25	1000	

## ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3108599.50	0.69	2775704.50	112.0	70 - 120		
45 Sc	657553.31	0.13	500780.41	131.3	70 - 120	IS Fai	
45 Sc	107348.46	1.08	95494.08	112.4	70 - 120		
45 Sc	2219467.30	0.83	1460980.80	151.9	70 - 120	IS Fai	
72 Ge	104662.85	0.47	96219.04	108.8	70 - 120		
72 Ge	48176.50	1.42	43611.78	110.5	70 - 120		
72 Ge	232443.67	0.24	213204.63	109.0	70 - 120		
115 In	1472805.40	0.82	1381264.00	106.6	70 - 120		
159 Tb	2035764.30	0.83	1843940.90	110.4	70 - 120		
165 Ho	2055214.00	0.90	1844184.90	111.4	70 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Fail  
 ISTD: Fail

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\049SMPL.D\049SMPL.D#  
 Date Acquired: Nov 11 2011 04:48 pm  
 Operator: NBS  
 Sample Name: AY49334WS2 MSD  
 Misc Info: 111110A-3015  
 Vial Number: 3205  
 Current Method: C:\ICPCHEM\1\METHODS\62A1111A.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62A1111A.C  
 Last Cal Update: Nov 11 2011 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	5.56 ug/l	6.17	0.61	1000	
	11 B	105.40 ug/l	117.10	0.69	1000	
	23 Na	67550.00 ug/l	75048.05	0.54	25000	>Cal
	24 Mg	27890.00 ug/l	30985.79	0.29	50000	
	27 Al	375.40 ug/l	417.07	1.44	20000	
	39 K	3571.00 ug/l	3967.38	0.91	20000	
	44 Ca	17520.00 ug/l	19464.72	1.41	50000	
	47 Ti	46.01 ug/l	51.12	3.10	1000	
	51 V	48.57 ug/l	53.96	1.00	1000	
	52 Cr	47.16 ug/l	52.39	1.21	1000	
	55 Mn	1476.00 ug/l	1639.84	0.85	1000	>Cal
	56 Fe	1047.00 ug/l	1163.22	0.58	20000	
	59 Co	45.69 ug/l	50.76	0.38	1000	
	60 Ni	45.51 ug/l	50.56	0.70	1000	
	63 Cu	43.37 ug/l	48.18	0.83	1000	
	65 Cu	43.50 ug/l	48.33	1.42	1000	
	66 Zn	81.55 ug/l	90.60	0.72	1000	
	75 As	43.24 ug/l	48.04	0.69	1000	
	78 Se	39.39 ug/l	43.76	2.26	1000	
	78 Se	40.07 ug/l	44.52	0.71	1000	
	88 Sr	163.50 ug/l	181.65	0.57	1000	
	88 Sr	165.60 ug/l	183.98	0.32	1000	
	95 Mo	48.36 ug/l	53.73	0.93	1000	
	106 (Cd)	----- ug/l	#VALUE!	-----	#####	
	107 Ag	17.97 ug/l	19.96	1.57	500	
	108 (Cd)	----- ug/l	#VALUE!	-----	#####	
	111 Cd	8.84 ug/l	9.82	0.94	1000	
	118 Sn	50.45 ug/l	56.05	1.04	1000	
	121 Sb	46.12 ug/l	51.24	0.92	1000	
	137 Ba	70.84 ug/l	78.70	1.10	1000	
	205 Tl	42.97 ug/l	47.74	0.67	1000	
	206 (Pb)	----- ug/l	#VALUE!	-----	#####	
	207 (Pb)	----- ug/l	#VALUE!	-----	#####	
	208 Pb	43.94 ug/l	48.82	1.12	1000	

ISTD Elements	Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
	6 Li	3085573.50	1.49	2775704.50	111.2	70 - 120	
	45 Sc	659528.88	0.85	500780.41	131.7	70 - 120	IS Fai
	45 Sc	103045.15	1.13	95494.08	107.9	70 - 120	
	45 Sc	2177886.80	0.53	1460980.80	149.1	70 - 120	IS Fai
	72 Ge	102879.23	0.86	96219.04	106.9	70 - 120	
	72 Ge	46907.60	1.75	43611.78	107.6	70 - 120	
	72 Ge	224264.44	0.97	213204.63	105.2	70 - 120	
	115 In	1453996.00	1.44	1381264.00	105.3	70 - 120	
	159 Tb	2021027.00	0.98	1843940.90	109.6	70 - 120	
	165 Ho	2010739.50	0.60	1844184.90	109.0	70 - 120	

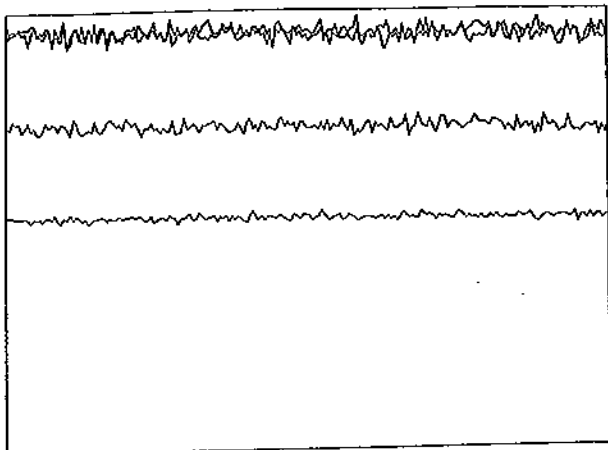
ISTD Ref File : C:\ICPCHEM\1\DATA\11K11100.B\004CALB.D\004CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:  
 Analytes: Fail  
 ISTD: Fail

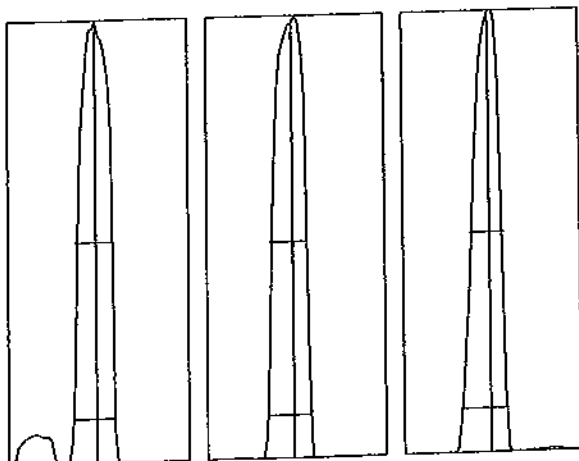
Tune Report

Tune File : nogas.u  
 Comment : 111111



Integration Time: 0.1000 sec  
 Sampling Period: 0.6200 sec  
 n: 200  
 Oxide: 156/140 1.410%  
 Doubly Charged: 70/140 1.051%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	26283.0	26440.3	1.09	0.40
89	20,000	19274.0	18861.9	1.39	2.20
205	20,000	14914.0	14722.1	1.50	5.80
156/140	2	1.520%	1.398%	6.48	
70/140	2	1.065%	1.038%	8.17	
140	20,000	18882.0	19064.3	1.33	4.10



m/z:	7	89	205
Height:	26,611	18,699	14,936
Axis:	7.00	89.00	205.00
W-50%:	0.65	0.65	0.60
W-10%:	0.700	0.7500	0.800

Integration Time: 0.1000 sec  
 Acquisition Time: 22.7600 sec

Y axis : Linear



Tune Report

Tune File : nogas.u  
Comment : 111111

Tuning Parameters

```
===Plasma Condition===
  RF Power : 1600 W
  RF Matching : 1.66 V
  Smp1 Depth : 9.6 mm
  Torch-H : -0.1 mm
  Torch-V : 0.1 mm
  Carrier Gas : 1.02 L/min
  Makeup Gas : 0.1 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 : -130 V
  Omega Bias-ce : -22 V
  Omega Lens-ce : -1.2 V
  Cell Entrance : -30 V
  QP Focus : 5 V
  Cell Exit : -30 V

===Q-Pole Parameters===
  AMU Gain : 128
  AMU Offset : 127
  Axis Gain : 1
  Axis Offset : -0.02
  QP Bias : -3 V

===Detector Parameters===
  Discriminator : 8 mV
  Analog HV : 1660 V
  Pulse HV : 1460 V

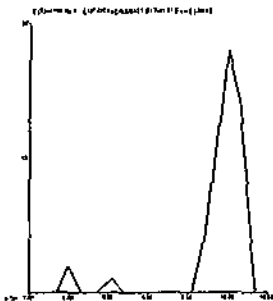
===Octopole Parameters===
  OctP RF : 180 V
  OctP Bias : -6 V

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

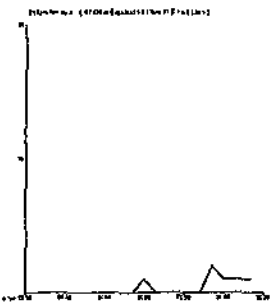
# 200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\11K11100.B\001TUNE.D  
 Date Acquired: Nov 11 2011 11:48 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

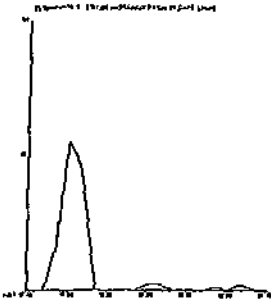
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	65891175	64840372	65630536	65890148	66486284	66608536	1.01	5.00	
24 Mg	120432836	#####	#####	#####	#####	#####	1.16	5.00	
59 Co	111175066	#####	#####	#####	#####	#####	0.73	5.00	
115 In	122240964	#####	#####	#####	#####	#####	0.81	5.00	
208 Pb	63959189	64419004	64182972	63372424	64206080	63615464	1.13	5.00	



**9 Be**  
**Mass Calib.**  
 Actual: 9.00  
 Required: 8.90 - 9.10  
 Flag:  
**Peak Width**  
 Actual: 0.60  
 Required: 0.90  
 Flag:



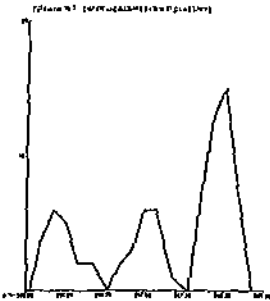
**24 Mg**  
**Mass Calib.**  
 Actual: 23.95  
 Required: 23.90 - 24.10  
 Flag:  
**Peak Width**  
 Actual: 0.65  
 Required: 0.80  
 Flag:



**59 Co**  
**Mass Calib.**  
Actual: 59.00  
Required: 58.90 - 59.10  
Flag:  
**Peak Width**  
Actual: 0.60  
Required: 0.90  
Flag:



**115 In**  
**Mass Calib.**  
Actual: 115.05  
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 Standards Log Book # 34 Page #001

NBS 4/11/11

NBS 4/11/11  
6020/6020A  
(A)

<b>ICP-MS STANDARDS 6020/6020A/3018/3051A</b> Today's Date: 11/11/2011 Expires: 11/18/2011 Prep Date 1% HNO3/1.0% HCL 20 mL HNO3 / 2000 mL DI Water Lot # K19023 20mL HCL / 2000mL DI Water Lot #4110110 Expires: 11/18/2011				<b>Standard 2</b> 11/18/2011 Amount STD 500 uL Standard 4 11/11/2011 Prepared in 50 mL of 1% HNO3/1.0% HCL 11/11/2011			
<b>Standard 4</b> 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				<b>Standard 1</b> 11/18/2011 Amount STD 50 uL Standard 4 11/11/2011 Prepared in 50 mL of 1% HNO3/1.0% HCL 11/11/2011			
Prepared in 100 mL of 1% HNO3/1.0% HCL 11/11/2011				<b>ICP-MS ICV</b> 11/18/2011 Amount STD 50 uL QCS ICV A CPI 11C174-28548 50 uL QCS ICV B CPI 11C174-28549 Prepared in 50 mL of 1% HNO3/1.0% HCL 11/11/2011			
<b>Standard 3</b> 11/18/2011 Amount STD Manufacturer Lot# 25 uL CCV-A Env. Express 1036407-28139 25 uL CCV-B Env. Express 1036410-28140 25 uL CCV-C Env. Express 1100309-28141 Prepared in 100 mL of 1% HNO3/1.0% HCL 11/11/2011				<b>ICSA Prep:</b> 11/18/2011 1 mL ICSA CPI 11C088-28528 Prepared in 5 mL of 1% HNO3/1.0% HCL 11/11/2011			
				<b>ICSAB Prep:</b> 11/18/2011 1mL ICSA CPI 11C088-28528 0.025mL INT O2SI 1023805-28210 Prepared in 5 mL of 1% HNO3/1.0% HCL 11/11/2011			
				<b>ICP-LDR</b> 11/18/2011 Amount STD 50 uL CCV-A Env. Express 1036407-28139 50 uL CCV-B Env. Express 1036410-28140 50 uL CCV-C Env. Express 1100309-28141 Prepared in 10 mL of 1% HNO3/1.0% HCL 11/11/2011			

SAM 11/11/11  
200.7  
Exp (A)

2% HNO3 / 2% HCl BLK					200.7 ICV				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
40 mL	HCL	BDH	4110110	10/14/2011	0.5mL	QCS ICV A	CPI	11C174-28548	9/17/2012
40 mL	HNO3	JT BAKBR	K19023	10/14/2011	0.5mL	QCS ICV B	CPI	11C174-28549	9/17/2012
Prepared in 2000 ml DI Water					Prepared in 50ml 2% HNO3/2% HCl				
<b>STD 1 / LDL 200.7</b>					<b>200.7 ICVA</b>				
0.250 mL	200.7 LDL	O2SI	1028857-28687	11/11/2012	0.5mL	Al	CPI	10E012-27685	4/20/2012
Prepared in 50 ml 2% HNO3/2% HCl					Prepared in 50 ml 2% HNO3/2% HCl				
<b>STD 3 / HDL 200.7</b>					<b>200.7 ICVA B</b>				
0.5 mL	CCV-A	ABSOLUTE	091409-25208	9/14/2012	0.5mL	Ca	CPI	11A008-28528	9/15/2012
0.5 mL	CCV-B	ABSOLUTE	081109-25208	9/14/2012	0.5mL	Mg	CPI	10H213-2786	4/20/2012
0.5 mL	CCV-C	ABSOLUTE	091009-25207	9/10/2012	0.5mL	Fe	O2SI	1022245-27699	4/22/2012
<b>STD 1 / CCV1 200.7</b>					<b>200.7 ICVA B</b>				
25mL	STD 3		11/4/2011	11/11/2011	0.5mL	Al	CPI	10E012-27685	4/20/2012
25mL	2% HNO3/2% HCl		11/4/2011	11/11/2011	0.5mL	Ca	CPI	11A008-28528	9/15/2012
<b>CCV2 200.7</b>					<b>200.7 ICVA B</b>				
15mL	STD 3		11/4/2011	11/11/2011	0.5mL	Mg	CPI	10H213-2786	4/20/2012
25mL	2% HNO3/2% HCl		11/4/2011	11/11/2011	0.5mL	Fe	O2SI	1022245-27699	4/22/2012
					Prepared in 50 ml 2% HNO3/2% HCl				

SAM 11/11/11  
6010B/6010C  
(A)

1% HNO3 / 5% HCl BLK					6010B/6010C ICVA				
AMOUNT	REAGENT	MANUFACTURER	LOT	OPEN DATE	AMOUNT	STD	MANUFACTURER	LOT	EXP DATE
100 mL	HCL	BDH	4110110	10/14/2011	1mL	Al	CPI	10E012-27685	4/20/2012
20 mL	HNO3	JT BAKBR	K19023	10/14/2011	1mL	Ca	CPI	11A008-28528	9/15/2012
Prepared in 2000 ml DI Water					Prepared in 50 ml 1% HNO3/5% HCl				
<b>STD 1 / LDL 6010B/6010C</b>					<b>6010B/6010C ICVA</b>				
0.5 mL	6010 LDL	ABSOLUTE	091409-25208	9/14/2012	1mL	Mg	CPI	10H213-2786	4/20/2012
Prepared in 50 ml 1% HNO3/5% HCl					Prepared in 50 ml 1% HNO3/5% HCl				
<b>STD 3 / HDL 6010B/6010C</b>					<b>6010B/6010C ICVA</b>				
1mL	CCV-A	ABSOLUTE	091409-25208	9/14/2012	1mL	Fe	O2SI	1022245-27699	4/22/2012
1mL	CCV-B	ABSOLUTE	081109-25208	9/14/2012	0.5mL	INT SPECIAL MIX	O2SI	160485-01-01	3/1/2012
1mL	CCV-C	ABSOLUTE	081009-25207	9/10/2012	Prepared in 50 ml 1% HNO3/5% HCl				
Prepared in 100 ml 1% HNO3 / 5% HCl					Prepared in 50 ml 1% HNO3/5% HCl				
<b>STD 1 / CCV1 6010B/6010C</b>					<b>6010B/6010C ICV</b>				
25mL	STD 3		11/11/2011	11/18/2011	0.5mL	QCS ICV A	CPI	11C174-28548	9/17/2012
25mL	1% HNO3/5% HCl		11/11/2011	11/18/2011	0.5mL	QCS ICV B	CPI	11C174-28549	9/17/2012
<b>CCV2 6010B/6010C</b>					Prepared in 50ml 1% HNO3/5% HCl				
15mL	STD 3		11/11/2011	11/18/2011	480				
25mL	1% HNO3/5% HCl		11/11/2011	11/18/2011	SAM 11/14/11				

# Metals Digestion Worksheet

Method Name 3015 Digestion

Prep Method M3015

Set 111110A

Units mL

Spikes	
Spiked ID 1	LCSW LOT# 1028408-29435
Spiked ID 2	LCSW LOT# 1028416-29433
Spiked ID 3	
Spiked ID 4	
Spiked By	NM Date: 11/10/11 10:40:00 AM
Witnessed By	KWS Date: 11/10/11 10:40:00 AM

Starting Temp:	25 C
Ending Temp:	170 C
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	YES
End Date/Time	11/10/11 12:00

Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
1 111110A Bk				45mL	50mL	11/10/11 10:40	equip: Venus
2 111110A LCS		90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
3 AY48273	AY48273W01			45mL	50mL	11/10/11 10:40	equip: Venus
4 AY48273 DUP	AY48273W01			45mL	50mL	11/10/11 10:40	equip: Venus
5 AY48273 MS	AY48273W01	90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
6 AY48639	AY48639W05			45mL	50mL	11/10/11 10:40	equip: Venus
7 AY48640	AY48640W05			45mL	50mL	11/10/11 10:40	equip: Venus
8 AY48641	AY48641W05			45mL	50mL	11/10/11 10:40	equip: Venus
9 AY48642	AY48642W05			45mL	50mL	11/10/11 10:40	equip: Venus
10 AY48643	AY48643W05			45mL	50mL	11/10/11 10:40	equip: Venus
11 AY48644	AY48644W02			45mL	50mL	11/10/11 10:40	equip: Venus
12 AY49333	AY49333W13			45mL	50mL	11/10/11 10:40	equip: Venus
13 AY49334	AY49334W51			45mL	50mL	11/10/11 10:40	equip: Venus
14 AY49334 MS	AY49334W52	90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
15 AY49334 MSD	AY49334W52	90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
16 AY49336	AY49336W13			45mL	50mL	11/10/11 10:40	equip: Venus
17 AY49481	AY49481W13			45mL	50mL	11/10/11 10:40	equip: Venus
18 AY49482	AY49482W13			45mL	50mL	11/10/11 10:40	equip: Venus
19 AY49559	AY49559W31			45mL	50mL	11/10/11 10:40	equip: Venus
20 AY49559 MS	AY49559W31	90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
21 AY49559 MSD	AY49559W31	90uL	1+2	45mL	50mL	11/10/11 10:40	equip: Venus
22 AY49561	AY49561W08			45mL	50mL	11/10/11 10:40	equip: Venus
23 AY49562	AY49562W08			45mL	50mL	11/10/11 10:40	equip: Venus

Solvent and Lot#
HNO3 J.T.B k19023 0095

Sample COC Transfer	
Sample prep employee Initials	nm
Analyst's initials	NBS
Date	11-10-11
Time	1:30
Moved to	MGTALS

Technician's Initials	
Scanned By	nm
Sample Preparation	lo
Digestion	lo
Bring up to volume	nm
Modified	11/10/11 10:19:53 AM

Reviewed By: *EA* Date: 11-10-11

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# Metals Digestion Worksheet

Method Name 3015 Digestion

Prep Method M3015

Set 111110A

Units mL

Spikes	
Spiked ID 1	LCSW LOT# 1028408-29435
Spiked ID 2	LCSW LOT# 1028416-29433
Spiked ID 3	
Spiked ID 4	
Spiked By	NM Date: 11/10/11 10:40:00 AM
Witnessed By	KWS Date: 11/10/11 10:40:00 AM

Starting Temp:	25 C
Ending Temp:	170 C
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	YES
End Date/Time	11/10/11 12:00

Sample	Sample Container	Spike Amount	Spike ID	Digested Amount	Final Volume	Start Date/Time	Comments
24 AYS0005	AYS0005W08			45mL	50mL	11/10/11 10:40	equip: Venus

Solvent and Lot#
HNO3 J.T.B k19023 0095

Sample COC Transfer
Sample prep employee Initials nm
Analyst's Initials NBS
Date 11-10-11
Time 13:00
Moved to MSTAACS

Technician's Initials
Scanned By nm
Sample Preparation lo
Digestion lo
Bring up to volume nm
Modified 11/10/11 10:19:53 AM

Reviewed By: SA

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Date: 11-10-11

## 6020/200.8 Injection Log

Directory: K:\MCP-MS Optimus\raw data output csv\

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	11 Nov 2011	12:08	Calibration Blank		111111A	1.
2	11 Nov 2011	12:14	111111 Standard 1		111111A	1.
3	11 Nov 2011	12:20	111111 Standard 2		111111A	1.
4	11 Nov 2011	12:27	111111 Standard 3		111111A	1.
5	11 Nov 2011	12:33	111111 Standard 4		111111A	1.
6	11 Nov 2011	12:39	ICV 111111		111111A	1.
8	11 Nov 2011	12:57	ICB 111111		111111A	1.
9	11 Nov 2011	13:03	CCV 111111		111111A	1.
10	11 Nov 2011	13:09	CCB 111111		111111A	1.
11	11 Nov 2011	13:15	ICSA 111111		111111A	1.
12	11 Nov 2011	13:21	ICSAB 111111		111111A	1.
13	11 Nov 2011	13:33	CCV 111111		111111A	1.
14	11 Nov 2011	13:46	CCB 111111		111111A	1.
15	11 Nov 2011	14:16	111110A-3015-BLK		111111A	1.
16	11 Nov 2011	14:22	111110A-3015-LCS		111111A	1.
23	11 Nov 2011	15:05	CCV 111111		111111A	1.
24	11 Nov 2011	15:17	CCB 111111		111111A	1.
31	11 Nov 2011	16:00	AY49333W13		111111A	1.
32	11 Nov 2011	16:06	AY49334W51		111111A	1.
33	11 Nov 2011	16:12	AY49334W52 MS		111111A	1.
36	11 Nov 2011	16:30	CCV 111111		111111A	1.
37	11 Nov 2011	16:42	CCB 111111		111111A	1.
38	11 Nov 2011	16:48	AY49334W52 MSD		111111A	1.
39	11 Nov 2011	16:54	AY49334W51-A		111111A	1.
40	11 Nov 2011	17:00	AY49334W51-1/5		111111A	5.
49	11 Nov 2011	18:04	CCV 111111		111111A	1.
50	11 Nov 2011	18:16	CCB 111111		111111A	1.