

# **Laboratory Report**

**Environet**

**LTM Red Hill Bulk Fuel Storage Facility**

**ARF 62931**

**Samples collected: October 19 - 21, 2010**

**APPL, Inc.**

Data Validation Package  
for  
LTM Red Hill Bulk Fuel Storage Facility  
ARF 62931

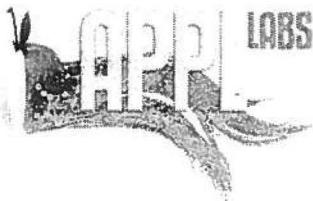
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## **CASE NARRATIVE**



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

## Case Narrative

ARF: 62931

Project: LTM Red Hill Bulk Fuel Storage Facility

State Certification Number: CA1312 (DW & WW)

NELAP Certification number: 05233CA (HW)

DoD-ELAP Certificate number: ADE-1410

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

### Sample Receipt Information:

The sample group was received on October 22, 2010, at 3.0°C, and 3.0°C. The sample group was assigned Analytical Request Form (ARF) number 62931. The sample numbers and requested analyses were compared to the chains of custody. The client was notified of breakage and bottle count discrepancies. No other exception was encountered.

**Sample Table**

CLIENT ID	APPL ID	Matrix	Date Sampled	Date Received
ES004	AY25113	WATER	10/19/10	10/22/10
TRIP BLANK	AY25114	WATER	10/19/10	10/22/10
ES005	AY25115	WATER	10/20/10	10/22/10
ES006	AY25116	WATER	10/21/10	10/22/10
ES007	AY25117	WATER	10/21/10	10/22/10
ES008	AY25118	WATER	10/21/10	10/22/10

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

# **EPA Method 8015B**

## **Total Petroleum Hydrocarbons – Diesel**

### **Sample Preparation:**

The water samples were extracted according to EPA method 3510C. All 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 ES007 was designated by the client for MS/MSD analysis. All acceptance criteria were met.

#### **Surrogates:**

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

### **Summary:**

No problem was encountered.

# **EPA Method 8270D-SIM**

## **Polynuclear Aromatic Hydrocarbons**

### **Sample Preparation:**

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

### **Sample Analysis Information:**

The samples were analyzed according to EPA method 8270D-SIM using a Hewlett Packard Gas Chromatograph with a mass spectrometer 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 limits in the method blanks.

#### **Spikes:**

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

Sample ES007 was designated by the client for MS/MSD analysis. For the MS/MSD, Benzo(ghi)perylene had a 31.5% RPD and Chrysene recovered below the 55% lower control limit at 54.4% in the MSD. All other acceptance criteria were met.

#### **Surrogates**

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

#### **Tuning:**

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

#### **Internal Standards**

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

### **Summary:**

No 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.

### **Quality Control/Accuracy**

#### **Calibrations:**

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

#### **Blanks:**

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

#### **Spikes:**

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

Sample ES007 was designated by the client for MS/MSD analysis. Hexachlorobutadiene recovered below 50% the lower control limit at 48.5% in MS. All other spike recoveries were within the acceptance limits.

#### **Surrogates**

Surrogate recoveries are summarized on the form 2&8. All surrogate recoveries met acceptance criteria.

#### **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 metals were detected at or above one-half the reporting limits in the method blank.

#### **Spikes:**

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

Sample ES007 was designated by the client for MS/MSD analysis. All MS/MSD acceptance criteria were met. Sample ES002 (ARF 62893) was selected for PDS and serial dilution test analysis. All acceptance criteria were met.

### **Summary:**

No analytical exception is noted.

## CERTIFICATION

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



Leonard Fong, Ph.D., Laboratory Director / Date  
11/18/10

**CHAIN OF CUSTODY  
AND ARF**

## APPL - Analysis Request Form

62931

Client: Environet, Inc.  
 Address: 650 Iwilei Rd, #204  
Honolulu, HI 96817  
 Attn: Vilma Dupra  
 Phone: 808-833-2225 Fax: 808-833-2231  
 Job: LTM Red Hill Bulk Fuel Storage Facility  
 PO #: 1022-015  
 Chain of Custody (Y/N): Y # 33044  
 RAD Screen (Y/N): Y pH (Y/N): Y  
 Turn Around Type: 2 WEEKS

Received by: TBV   
 Date Received: 10/22/10 Time: 11:15  
 Delivered by: FED EX  
 Shuttle Custody Seals (Y/N): Y  
 Chest Temp(s): 3.0,3.0°C  
 Color: VOA,F-PINK,O-ORGRN  
 Samples Chilled until Placed in Refrig/Freezer: Y  
 Project Manager: Cynthia Clark  
 QC Report Type: DVP4/ADR DOD/HI   
 Due Date: 11/05/10

Comments:

*14 day TAT for Form 1s & 30 day TAT for full package. VDupra@environetinc.com*

*1 hard copy to Environet, 1 hard copy to LDC* 

*Guidance: DOD QSM, EDD: Exce & ADR*

*DoD Forms, J flag to DL, U flag at LOD* 

*metals 6020: report Lead with 0.5ug/L RL*

*TPH-Diesel only*

*VOCs: include gasoline by 8260B - run MDL study first and update MDL database*

*Breakage: See CRF*

Sample Distribution:Charges:Invoice To:

**GC: 5-\$SIMHC12W, 5-\$TPETD2**

**Extractions: 5- SEP004S, 5- SEP011**

**VOA: 6-\$86RHBF**

**same**

**Metals: 5-\$602D(Pb)**

**Other: 5- M3015**

Client ID	APPL ID	Sampled	Analyses Requested
1. ES004	AY25113W 	10/19/10 10:10	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2
2. TRIP BLANK	AY25114W 	10/19/10 08:00	\$86RHBF
3. ES005	AY25115W 	10/20/10 10:25	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2
4. ES006	AY25116W 	10/21/10 10:55	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2
5. ES007	AY25117W 	10/21/10 12:08	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2
6. ES008	AY25118W 	10/21/10 13:30	\$602D(Pb), \$86RHBF, \$SIMHC12W, \$TPETD2

Initials \_\_\_\_\_ Date \_\_\_\_\_

**APPL Sample Receipt Form**ARF# **62931**

Sample	Container Type	Count	pH
AY25113	<sup>6</sup> PL 500mL - HNO3	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	4	NA
AY25114	<sup>13</sup> VOAs - HCL	2	NA
AY25115	<sup>6</sup> PL 500mL - HNO3	1	NA
	<sup>13</sup> VOAs - HCL	3	NA
	<sup>17</sup> Amber Liter	4	NA
AY25116	<sup>6</sup> PL 500mL - HNO3	1	1.7
	<sup>13</sup> VOAs - HCL	4	NA
	<sup>17</sup> Amber Liter	3	NA
AY25117	<sup>6</sup> PL 500mL - HNO3	3	1.7
	<sup>13</sup> VOAs - HCL	10	NA
	<sup>17</sup> Amber Liter	9	NA
AY25118	<sup>6</sup> PL 500mL - HNO3	1	NA
	<sup>13</sup> VOAs - HCL	2	NA
	<sup>17</sup> Amber Liter	2	NA

Sample	Container Type	Count	pH
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APPL, Inc.  
908 N Temperance Ave  
Clovis, CA 93611

# CHAIN OF CUSTODY RECORD

3.0  
3.0  
6/29/31

Phone: (559) 275-2175

Fax: (559) 275-4422

C.O.C. 33044

Report to:

PLEASE PRINT

Company Name: Environet Inc.

Phone: (808) 833-2225 X1022

Address: 650 Iwilei Road #204  
Honolulu, HI 96817

Fax: (808) 833-2231

Attn: Stacey Fineran

Invoice to:

PLEASE PRINT

Company Name: Environet Inc.

Phone: (808) 833-2225

X1014

Address: 650 Iwilei Rd. Suite 204  
Honolulu, HI 96817

Fax: (808) 833-2231

Attn: Cecilia Adams

Project Name/Number 1022-015

Sampler (Print)

RHSF LTMM

Stacey Fineran

Purchase Order Number

Sampler (Signature)

Stacey Adams

Sample Identification

Location

Date Collected

Time Collected

No. of Containers

Matrix

VOCS (gas)

PAHs (gas)

PCPs (gas)

TPH-GRO (gas)

TPH-DRC (gas)

Lead Dispersed (gas)

Date Shipped:

Carrier:

Waybill No.:

Comments:

LS004

RHSF

10-19

1010

9

X

X

X

X

X

X

X

Trip Blank

RHSF

10-19

0800

3

X

X

Temp Blank

RHSF

10-19

0800

1

X

ES005

RHSF

10-20

1025

9

X

X

X

X

X

X

ES006

RHSF

10-21

1055

9

X

X

X

X

X

ES007/MS MSD

RHSF

10-21

1208

22

X

X

X

X

X

ES008

RHSF

10-21

1330

7

X

X

X

X

X

Shuttle Temperature:

Turnaround Requested: MUST CHECK ONE

Standard (2-3 week)  One week  24-48 hour

Sample Disposal:

Return to client  Disposal by Lab (30-day retention)

Relinquished by sampler:

Date

10/21/10

Time

1345

Received by:

Relinquished by:

Date

Time

Received by:

Relinquished by:

Date

Time

Received by:

Relinquished by:

Date

10/22/10

Time

1115

Received at lab by:

**COOLER RECEIPT FORM**

- 1) Project: LTM Red Hill Bulk Fuel Storage Facility Date Received: 10/22/10

2) Coolers: Number of Coolers: 2

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

4) YES NO Were custody seals on outside of cooler? How many? 2 Date on seal? 10/22/10

5) Name on seal? See label below

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: FedEx

8) Shipping slip numbers: 1) 870493075358 2) \_\_\_\_\_ 3) \_\_\_\_\_

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

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

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

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

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

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

15) Cooler temp(s): 1) 3.5°C 2) 3.0°C 3) 4) 5) 6) 7) 7) 8) 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 NG 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:  
*2/21/90*

Larger than a pea:

**Smaller than a pea:** *Ay 25113 w02-w04; Ay 25114 w01-w02; Ay 25116 w04; Ay 25117 w02-w10*

#### **Preservation & Hold time:**

- 33) YES NO NA Was a sufficient amount of holding time remaining to analyze the samples?  
34) YES NO NA Do the sample containers contain the same preservative as what is stated on the COC?  
35) YES NO NA Was the pH taken of all non-VOA preserved samples and written on the sample container?  
36) YES NO NA Was the pH of acid preserved non-VOA samples < 2 & sodium hydroxide preserved samples > 10?

I lab notified if pH was not adequate:

Deficiencies: Samples "ES008, ES005, and Trip Blank" arrived with one Broke vial. For sample ES008 one of the amber liters arrived with a cracked lid, bottle half full. Sample "ES006" CCR list 9 containers, we found 8.

Signature of personnel receiving samples: 

Second reviewer:  Received: 

Signature of project manager notified: *Renee*

Date and Time of notification: 10-22-10

Name of client notified:

**Date and Time of notification:**

#### Information given to client:

by whom (Initials):

**EPA 8015-Extractables  
Total Petroleum Hydrocarbons  
DRO/RRO**

**APPL, INC.**

EPA 8015 - Extractables  
Total Petroleum Hydrocarbons  
DRO/RRO

**QC Summary**

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

Blank Name/QCG: **101026W-25117 - 148639**  
Batch ID: #TPETD-101026A

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	10/26/10	11/03/10
BLANK	Surrogate: Octacosane (S)	90.3	28-142			%	10/26/10	11/03/10
BLANK	Surrogate: Ortho-Terphenyl (S)	90.7	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101125  
Instrument: Apollo  
Sequence: 101101  
Initials: STC

GC SC-Blank-REG MDLs  
Printed: 11/04/10 10:59:53 AM

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.  
Case No: 62931  
Matrix: WATER

SDG No: 62931  
Date Analyzed: 11/03/10  
Instrument: Apollo

APPL ID.	Client Sample No.	Surrogate: Octacosane (S)	Surrogate: Ortho-Terphenyl (S)
101026A-BLK	Blank	90.3	90.7
101026A-LCS	Lab Control Spike	90.7	87.3
AY25113	ES004	88.5	84.5
AY25115	ES005	89.7	85.0
AY25116	ES006	90.2	80.8
AY25117-MS	Matrix Spike	87.3	84.7
AY25117-MSD	Matrix SpikeD	86.7	83.3
AY25117	ES007	84.9	81.8
AY25118	ES008	90.1	84.2

Comments: Batch: #TPETD-101026A

Printed: 11/04/10 10:59:58 AM  
Form 2 & 8, Surrogate Recovery Summary

# Laboratory Control Spike Recovery

## TPH Diesel Water

APPL ID: 101026W-25117 LCS - 148639

Batch ID: #TPETD-101026A

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	1720	86.0	61-143
Surrogate: Octacosane (S)	150	136	90.7	28-142
Surrogate: Ortho-Terphenyl (S)	150	131	87.3	57-132

### Comments:

Primary	SPK
Quant Method :	TPHD1101.M
Extraction Date :	10/26/10
Analysis Date :	11/03/10
Instrument :	Apollo
Run :	1101126
Initials :	STC

Printed: 11/04/10 11:00:02 AM

APPL Standard LCS

# Matrix Spike Recoveries

## TPH Diesel Water

APPL ID: **101026W-25117 MS - 148639**

Batch ID: #TPETD-101026A

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
Diesel Fuel	2000	ND	2060	1740	103	87.0	61-143	16.8	30
Surrogate: Octacosane (S)	150	NA	131	130	87.3	86.7	28-142		
Surrogate: Ortho-Terphenyl (S)	150	NA	127	125	84.7	83.3	57-132		

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

Primary	SPK	DUP
Quant Method :	TPHD1101.M	TPHD1101.M
Extraction Date :	10/26/10	10/26/10
Analysis Date :	11/03/10	11/03/10
Instrument :	Apollo	Apollo
Run :	1101130	1101131
Initials :	STC	

Printed: 11/04/10 11:00:06 AM

APPL MSD SCII

**EPA 8015B-e**Form 4**Blank Summary**

Lab Name: APPL, Inc.  
 Case No: 62931  
 Matrix: WATER  
 Blank ID: 101026A-BLK

SDG No: 62931  
 Date Analyzed: 11/03/10  
 Instrument: Apollo  
 Time Analyzed: 1725

APPL ID.	Client Sample No.	File ID.	Date Analyzed
101026A-BLK	Blank	1101125	11/03/10 1725
101026A-LCS	Lab Control Spike	1101126	11/03/10 1749
AY25113	ES004	1101127	11/03/10 1813
AY25115	ES005	1101128	11/03/10 1838
AY25116	ES006	1101129	11/03/10 1902
101026A-MS	Matrix Spike	1101130	11/03/10 1926
101026A-MSD	Matrix SpikeD	1101131	11/03/10 1950
AY25117	ES007	1101132	11/03/10 2015
AY25118	ES008	1101133	11/03/10 2039

Comments: Batch: #TPETD-101026A

Printed: 11/04/10 11:00:09 AM  
 Form 4, Blank Summary

**EPA 8015 - Extractables  
Total Petroleum Hydrocarbons  
DRO/RRO**

**Sample Data**

## TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 62931

**Sample ID: ES004**

**APPL ID: AY25113**

Sample Collection Date: 10/19/10

QCG: #TPETD-101026A-148639

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	10/26/10	11/03/10
EPA 8015B- Surrogate: Octacosane (S)		88.5	28-142			%	10/26/10	11/03/10
EPA 8015B- Surrogate: Ortho-Terphenyl (S)		84.5	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101127  
Instrument: Apollo  
Sequence: 101101  
Dilution Factor: 1  
Initials: STC

Printed: 11/04/10 11:00:11 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\101101\1101127.D Vial: 27  
Acq On : 11-3-10 18:13:47 Operator: STC  
Sample : AY25113W08 5/1000 Inst : Apollo  
Misc : Water Multiplr: 5.00  
IntFile : events.e  
Quant Time: Nov 4 10:31 2010 Quant Results File: TPHD1101.RES

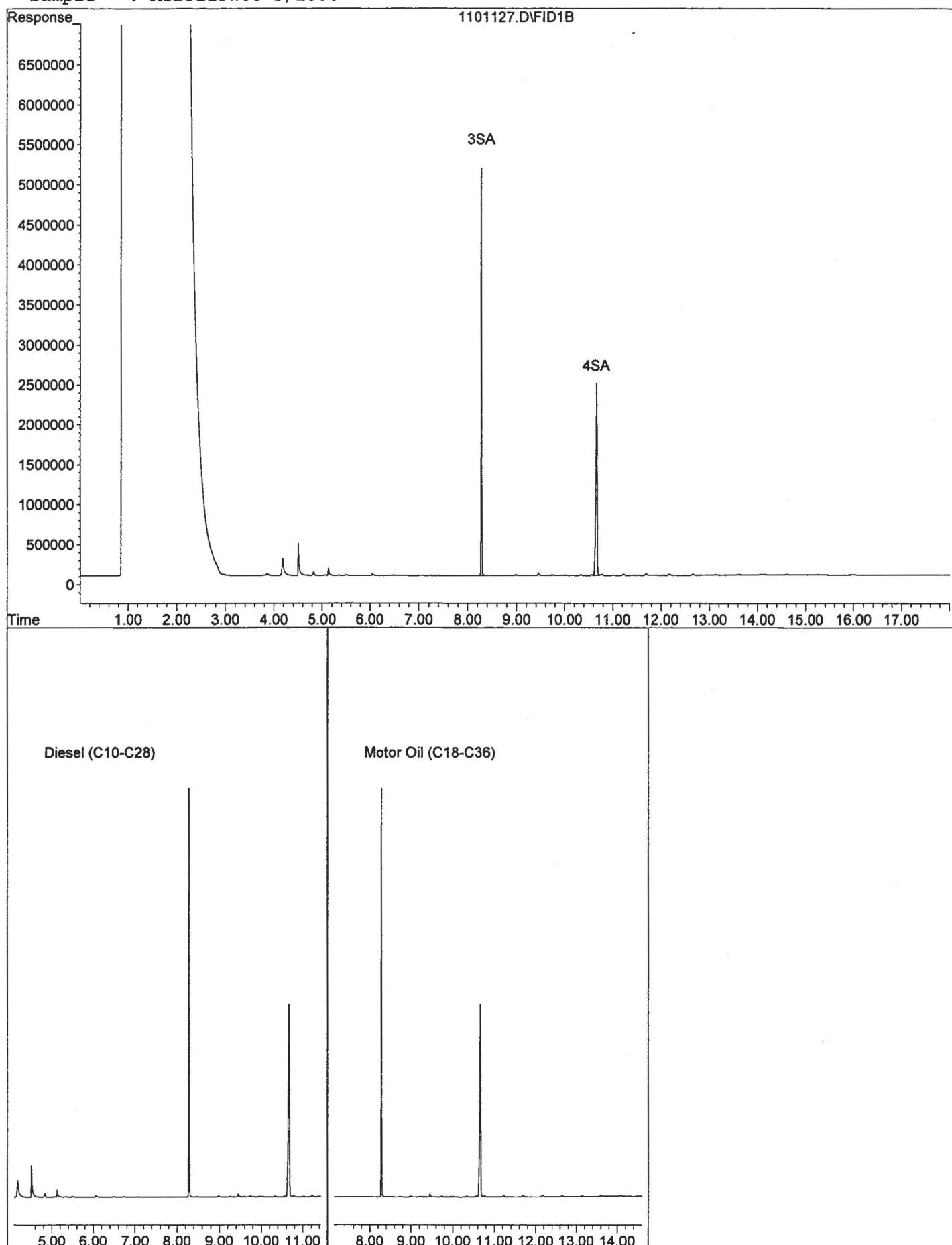
Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.28	5104009	126.687	ppb
Surrogate Spike 150.000		Recovery	=	84.46%
4) SA Octacosane(S)	10.66	2401014	132.817	ppb
Surrogate Spike 150.000		Recovery	=	88.54%

Target Compounds

Data File: G:\APOLLO\DATA\101101\1101127.D  
Sample : AY25113W08 5/1000



## TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES005**  
Sample Collection Date: 10/20/10

ARF: 62931  
**APPL ID: AY25115**  
QCG: #TPETD-101026A-148639

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	10/26/10	11/03/10
EPA 8015B- Surrogate: Octacosane (S)		89.7	28-142			%	10/26/10	11/03/10
EPA 8015B- Surrogate: Ortho-Terphenyl (S)		85.0	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101128  
Instrument: Apollo  
Sequence: 101101  
Dilution Factor: 1  
Initials: STC

Printed: 11/04/10 11:00:11 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\101101\1101128.D Vial: 28  
Acq On : 11-3-10 18:38:01 Operator: STC  
Sample : AY25115W04 5/1010 Inst : Apollo  
Misc : Water Multipllr: 4.95  
IntFile : events.e  
Quant Time: Nov 4 10:31 2010 Quant Results File: TPHD1101.RES

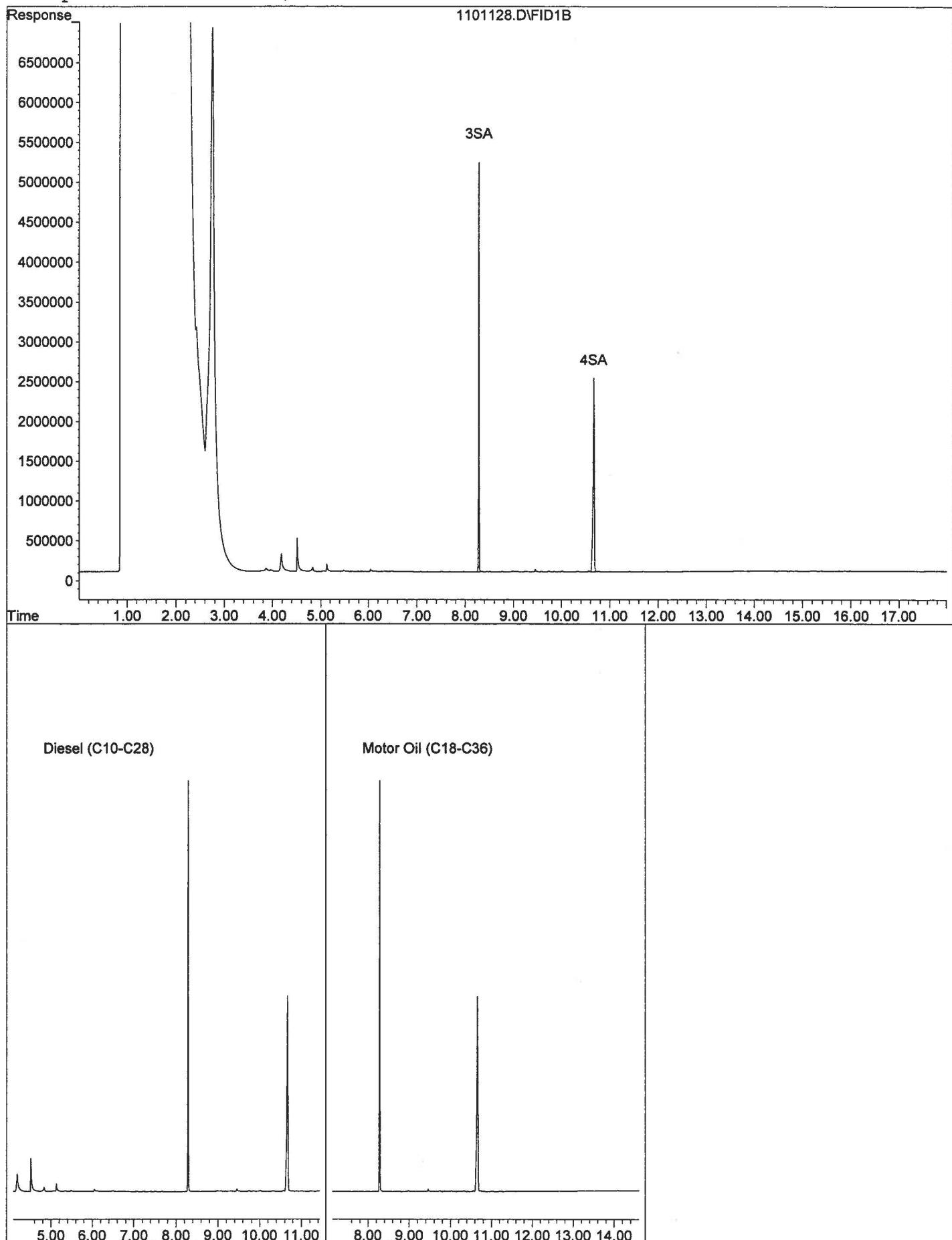
Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.28	5135748	126.213 ppb
Surrogate Spike 148.515		Recovery	= 84.98%
4) SA Octacosane(S)	10.67	2431543	133.174 ppb
Surrogate Spike 148.515		Recovery	= 89.67%

Target Compounds

Data File: G:\APOLLO\DATA\101101\1101128.D  
Sample : AY25115W04 5/1010



## TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES006**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25116**  
QCG: #TPETD-101026A-148639

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	10/26/10	11/03/10
EPA 8015B- Surrogate: Octacosane (S)		90.2	28-142			%	10/26/10	11/03/10
EPA 8015B- Surrogate: Ortho-Terphenyl (S)		80.8	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101129  
Instrument: Apollo  
Sequence: 101101  
Dilution Factor: 1  
Initials: STC

Printed: 11/04/10 11:00:11 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : G:\APOLLO\DATA\101101\1101129.D Vial: 29  
Acq On : 11-3-10 19:02:13 Operator: STC  
Sample : AY25116W06 5/990 Inst : Apollo  
Misc : Water Multiplr: 5.05  
IntFile : events.e  
Quant Time: Nov 4 10:31 2010 Quant Results File: TPHD1101.RES

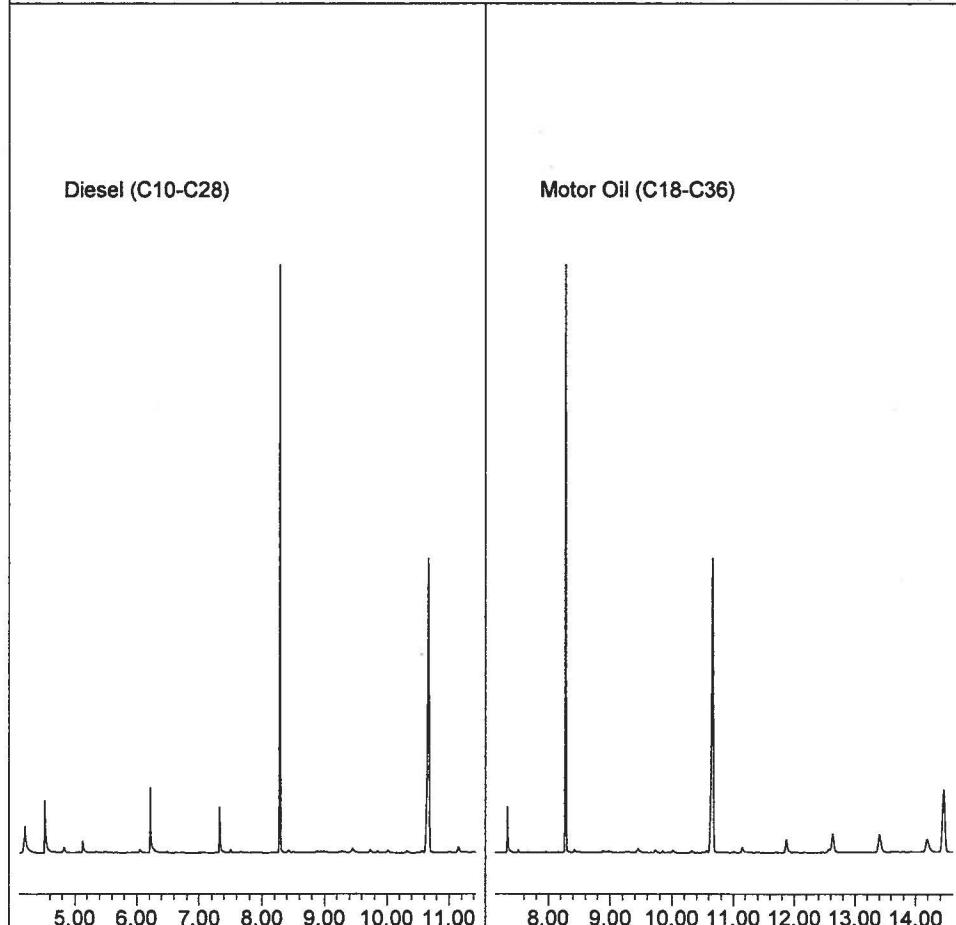
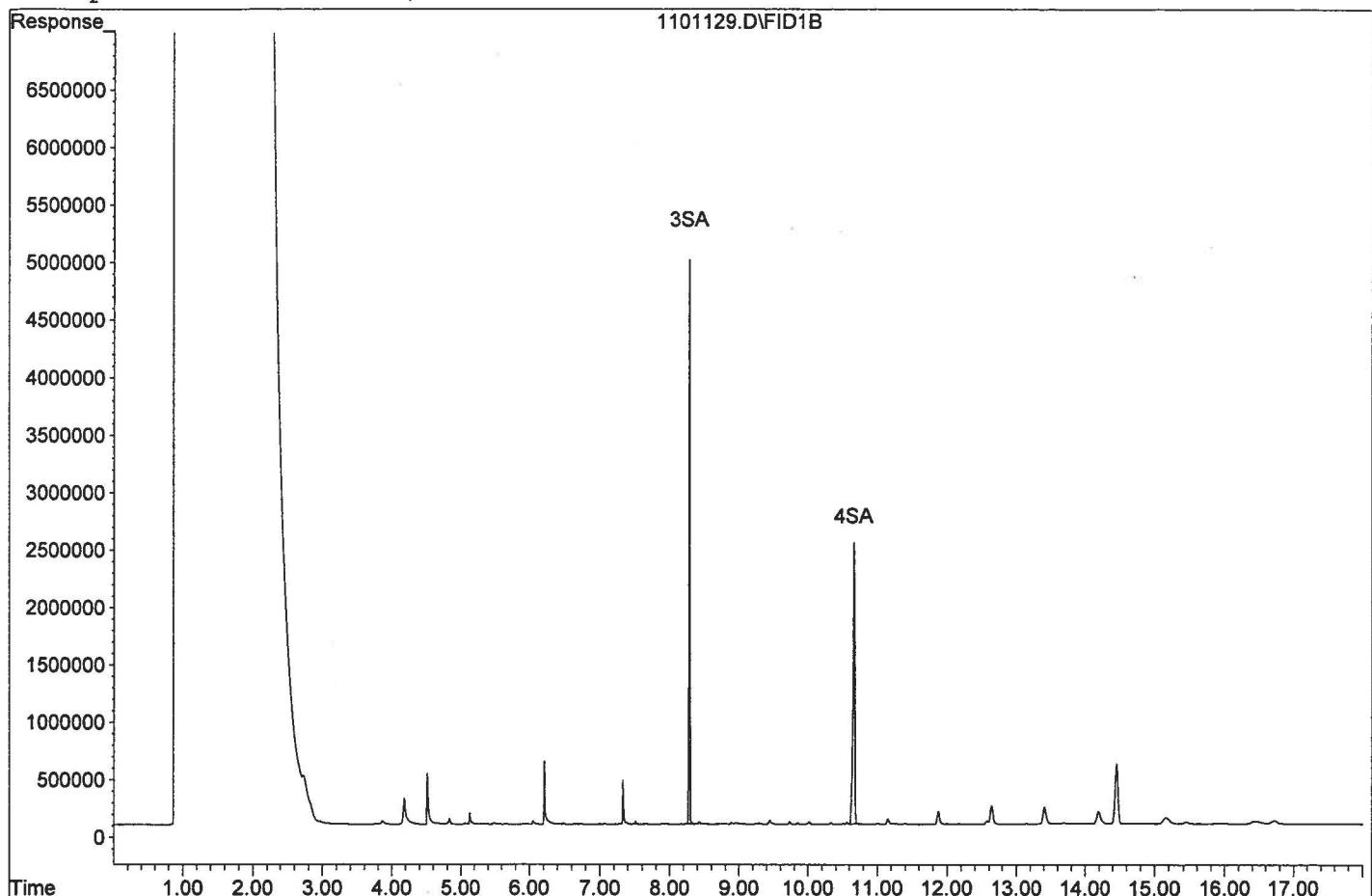
Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.29	4883206	122.431 ppb
Surrogate Spike 151.515		Recovery	= 80.80%
4) SA Octacosane(S)	10.67	2445954	136.670 ppb
Surrogate Spike 151.515		Recovery	= 90.20%

Target Compounds

Data File: G:\APOLLO\DATA\101101\1101129.D  
Sample : AY25116W06 5/990



## TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 62931

**Sample ID: ES007**

**APPL ID: AY25117**

Sample Collection Date: 10/21/10

QCG: #TPETD-101026A-148639

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	10/26/10	11/03/10
EPA 8015B- Surrogate: Octacosane (S)		84.9	28-142			%	10/26/10	11/03/10
EPA 8015B- Surrogate: Ortho-Terphenyl (S)		81.8	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101132  
Instrument: Apollo  
Sequence: 101101  
Dilution Factor: 1  
Initials: STC

Printed: 11/04/10 11:00:11 AM  
APPL-F1-SC-NoMC-REG MDLs

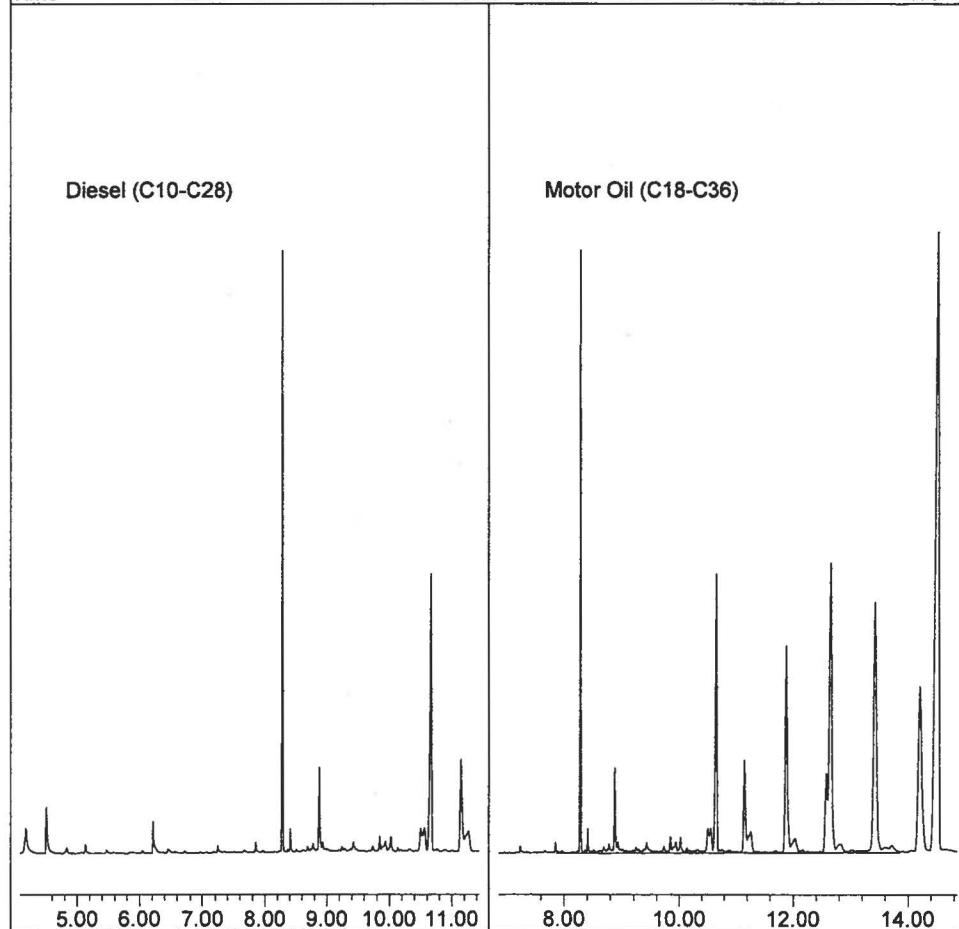
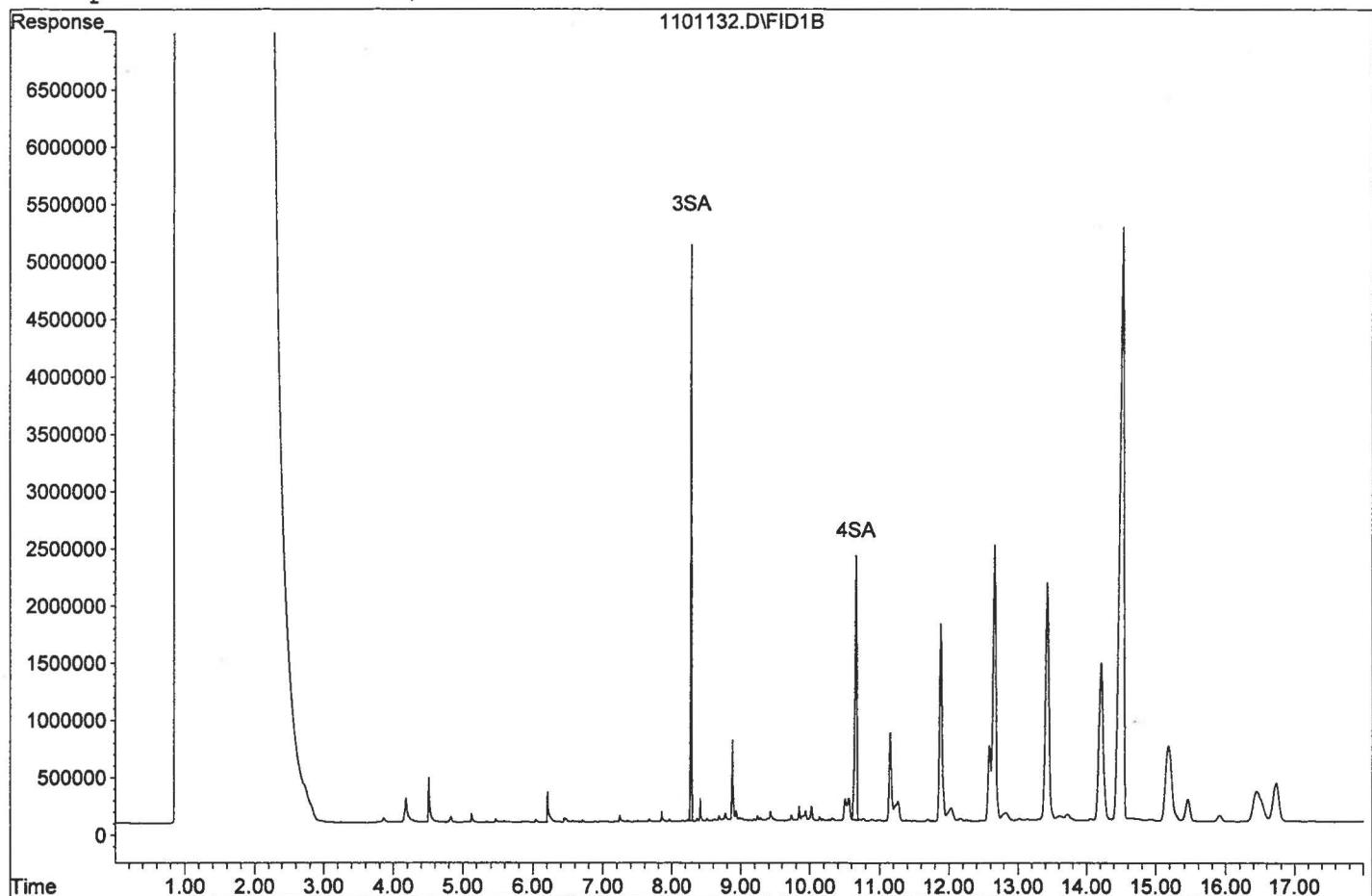
Data File : G:\APOLLO\DATA\101101\1101132.D Vial: 32  
 Acq On : 11-3-10 20:15:07 Operator: STC  
 Sample : AY25117W13 5/1030 Inst : Apollo  
 Misc : Water Multiplr: 4.85  
 IntFile : events.e  
 Quant Time: Nov 4 10:34 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 04 10:27:12 2010  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.28	4946037	119.190	ppb
Surrogate Spike 145.631		Recovery	=	81.84%
4) SA Octacosane(S)	10.66	2302602	123.663	ppb
Surrogate Spike 145.631		Recovery	=	84.92%
<hr/>				
Target Compounds				
2) HBTM Motor Oil (C18-C36)	10.86	396074151	2126.458	ppb

Data File: G:\APOLLO\DATA\101101\1101132.D  
Sample : AY25117W13 5/1030



## TPH Diesel Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES008**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25118**  
QCG: #TPETD-101026A-148639

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	10/26/10	11/03/10
EPA 8015B- Surrogate: Octacosane (S)		90.1	28-142			%	10/26/10	11/03/10
EPA 8015B- Surrogate: Ortho-Terphenyl (S)		84.2	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101133  
Instrument: Apollo  
Sequence: 101101  
Dilution Factor: 1  
Initials: STC

Printed: 11/04/10 11:00:11 AM  
APPL-F1-SC-NoMC-REG MDLs

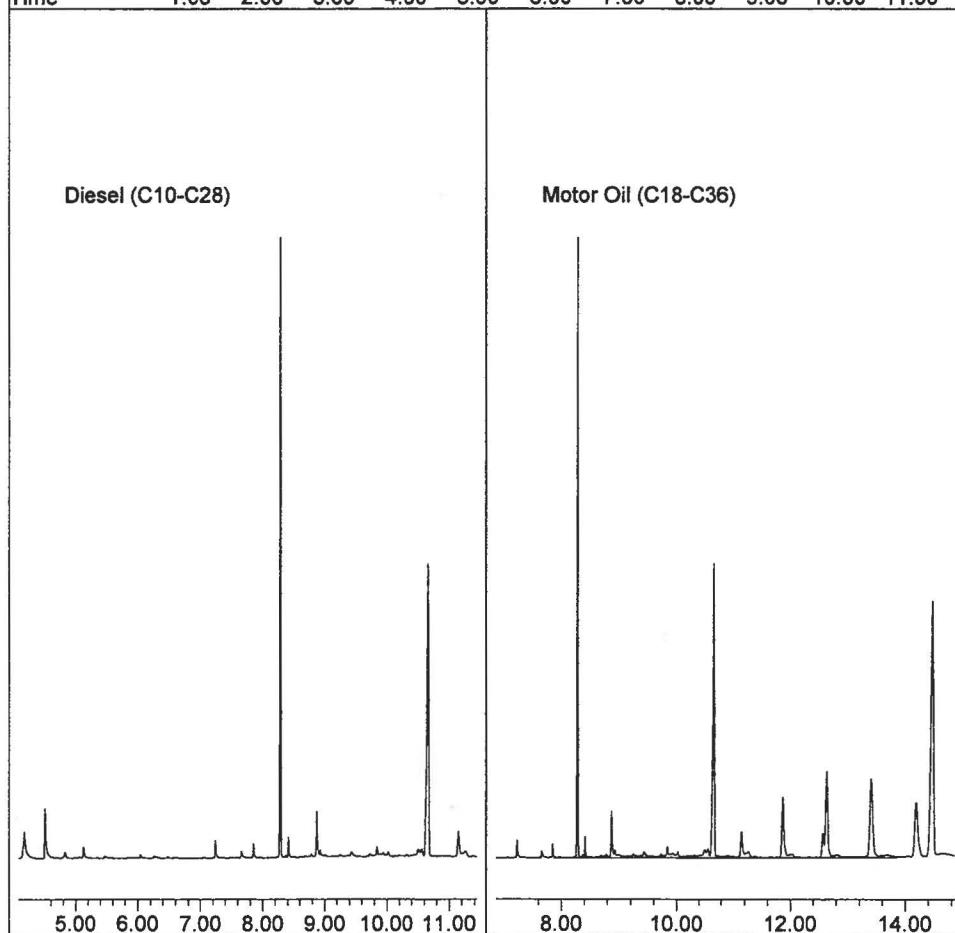
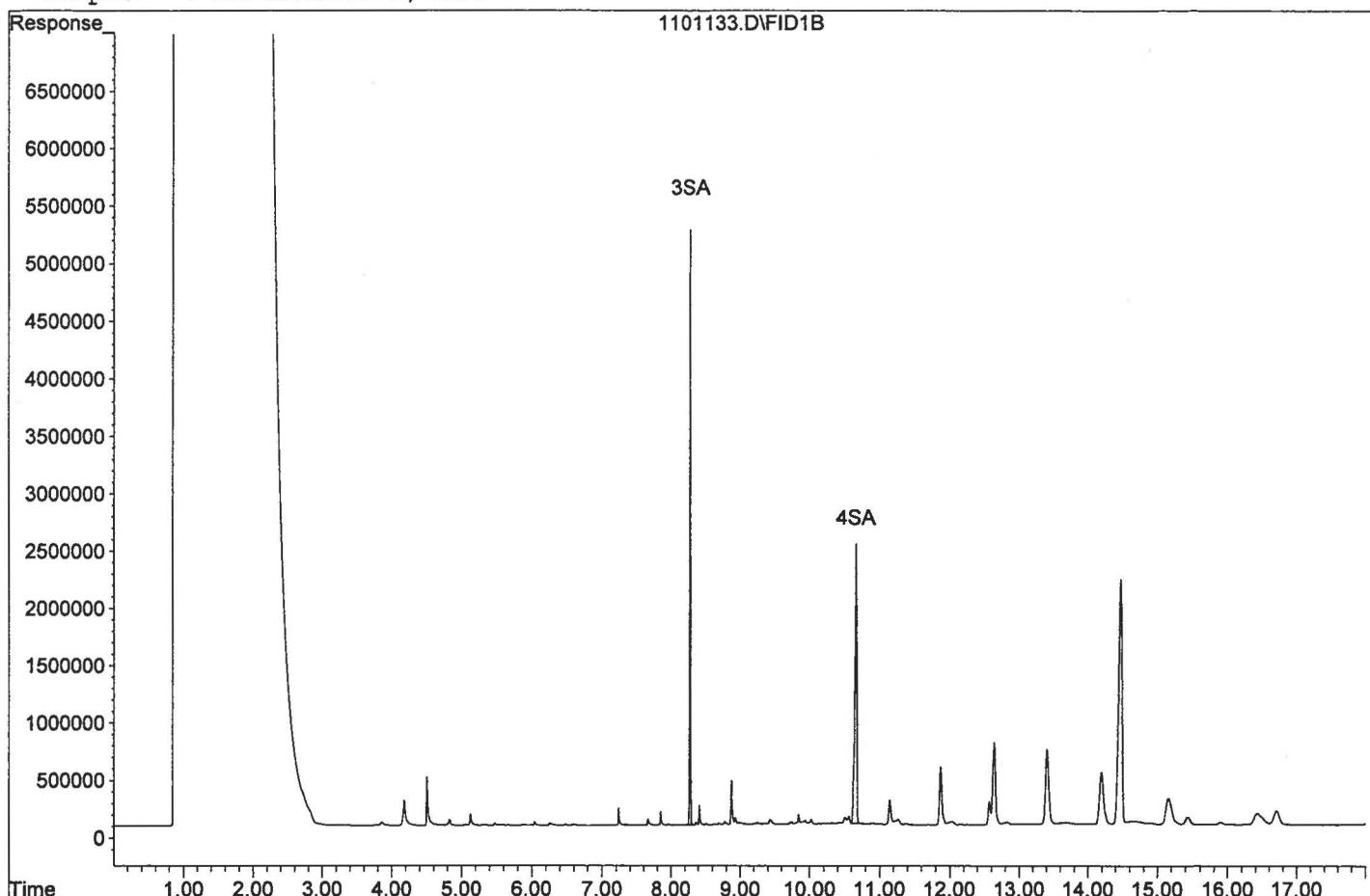
Data File : G:\APOLLO\DATA\101101\1101133.D Vial: 33  
Acq On : 11-3-10 20:39:22 Operator: STC  
Sample : AY25118W04 5/1030 Inst : Apollo  
Misc : Water Multiplir: 4.85  
IntFile : events.e  
Quant Time: Nov 4 10:35 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.28	5088557	122.625 ppb
Surrogate Spike 145.631		Recovery	= 84.20%
4) SA Octacosane(S)	10.66	2442281	131.165 ppb
Surrogate Spike 145.631		Recovery	= 90.07%
<hr/>			
Target Compounds			
2) HBTM Motor Oil (C18-C36)	10.86	198377942	1065.059 ppb

Data File: G:\APOLLO\DATA\101101\1101133.D  
Sample : AY25118W04 5/1030



**EPA 8015 - Extractables  
Total Petroleum Hydrocarbons  
DRO/RRO**

**Calibration Data**

**APPL, INC.**

TPH Extractables  
TPHD 1101

**Form 6**  
**Initial Calibration**

Lab Name: APPL, Inc.

Case No:

Matrix:

SDG No: 62931

Initial Cal. Date: 11/01/10

Instrument: Apollo

Initials: STC

1101003.D 1101004.D 1101005.D 1101006.D 1101007.D 1101008.D

		Compound	1	2	3	4	5	6				Avg	%RSD		
1	HATM	Diesel (C10-C28)	790156	838749	798698	735916	757944	763321				780797	4.7	HATM	
2	SA	Ortho-Terphenyl(S)	88216	119144	108453	99842	94853	93816				100721	11	SA	
3	SA	Octacosane(S)	44958	52581	46636	43013	42647	41329				45194	9.0	SA	
4															
5															
6															
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0.7319061

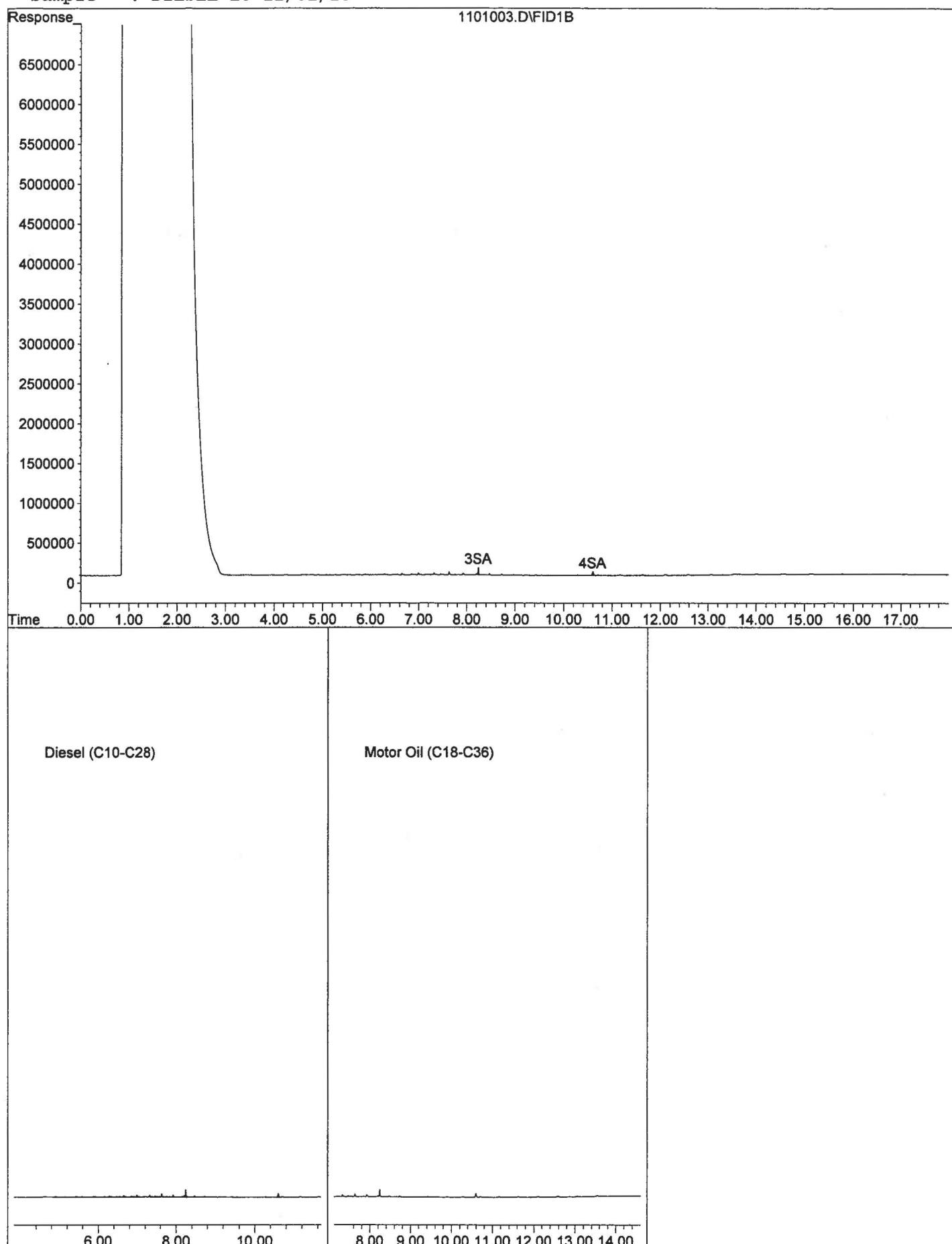
Data File : G:\APOLLO\DATA\101101\1101003.D Vial: 3  
Acq On : 11-1-10 12:37:39 Operator: STC  
Sample : DIESEL 10 11/01/10 Inst : Apollo  
Misc : Mix(A) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
-----			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.24	88216	0.544 ppb
Surrogate Spike 30.000	Recovery	=	1.81%
4) SA Octacosane(S)	10.60	44958	0.981 ppb
Surrogate Spike 30.000	Recovery	=	3.27%
-----			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	15803113	10.096 ppb

Data File: G:\APOLLO\DATA\101101\1101003.D  
Sample : DIESEL 10 11/01/10



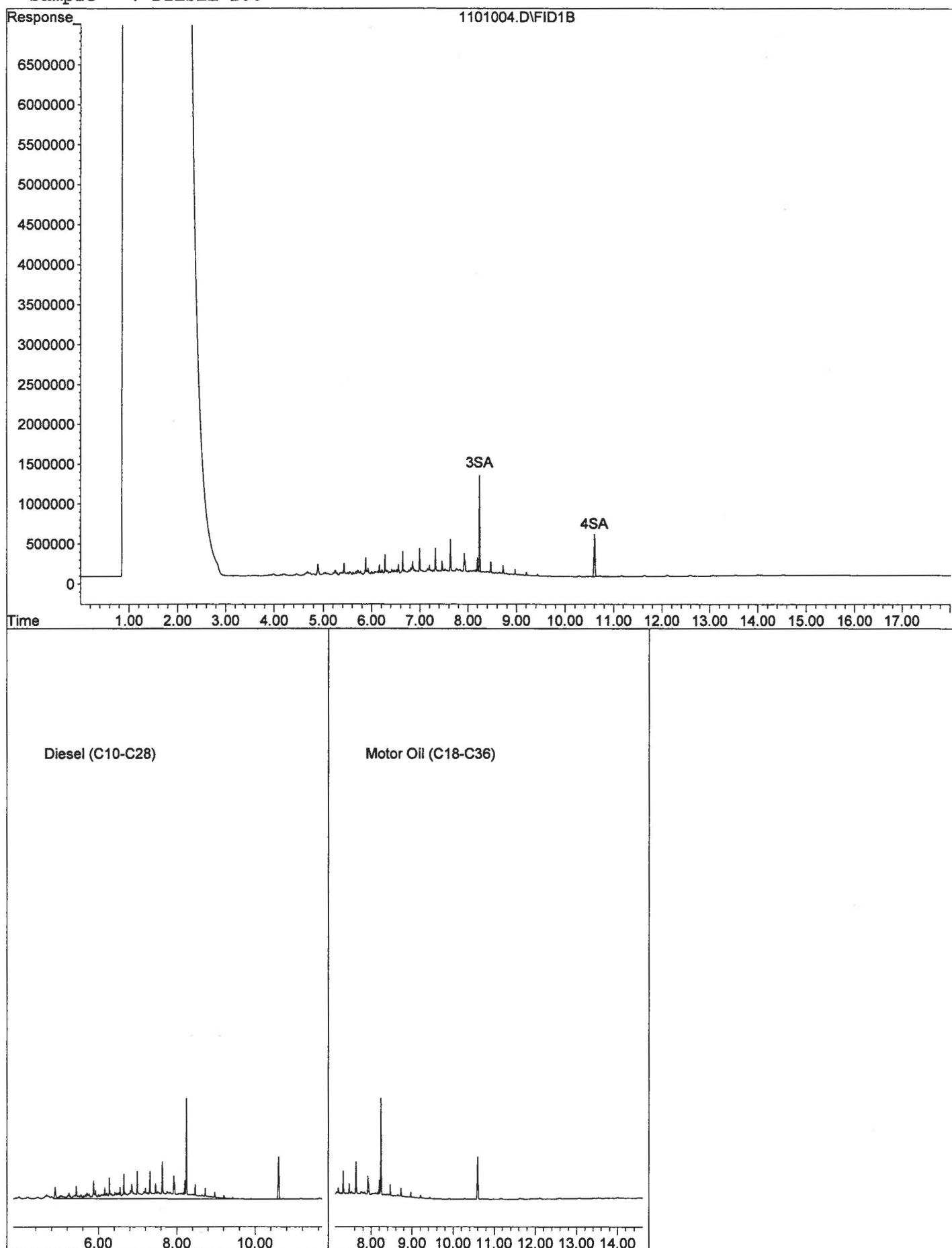
Data File : G:\APOLLO\DATA\101101\1101004.D Vial: 4  
Acq On : 11-1-10 13:01:53 Operator: STC  
Sample : DIESEL 100 Inst : Apollo  
Misc : Mix(A) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.24	1191444	7.351 ppb
Surrogate Spike 30.000		Recovery	= 24.50%
4) SA Octacosane(S)	10.60	525814	11.478 ppb
Surrogate Spike 30.000		Recovery	= 38.26%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	167749815	107.170 ppb

Data File: G:\APOLLO\DATA\101101\1101004.D  
Sample : DIESEL 100



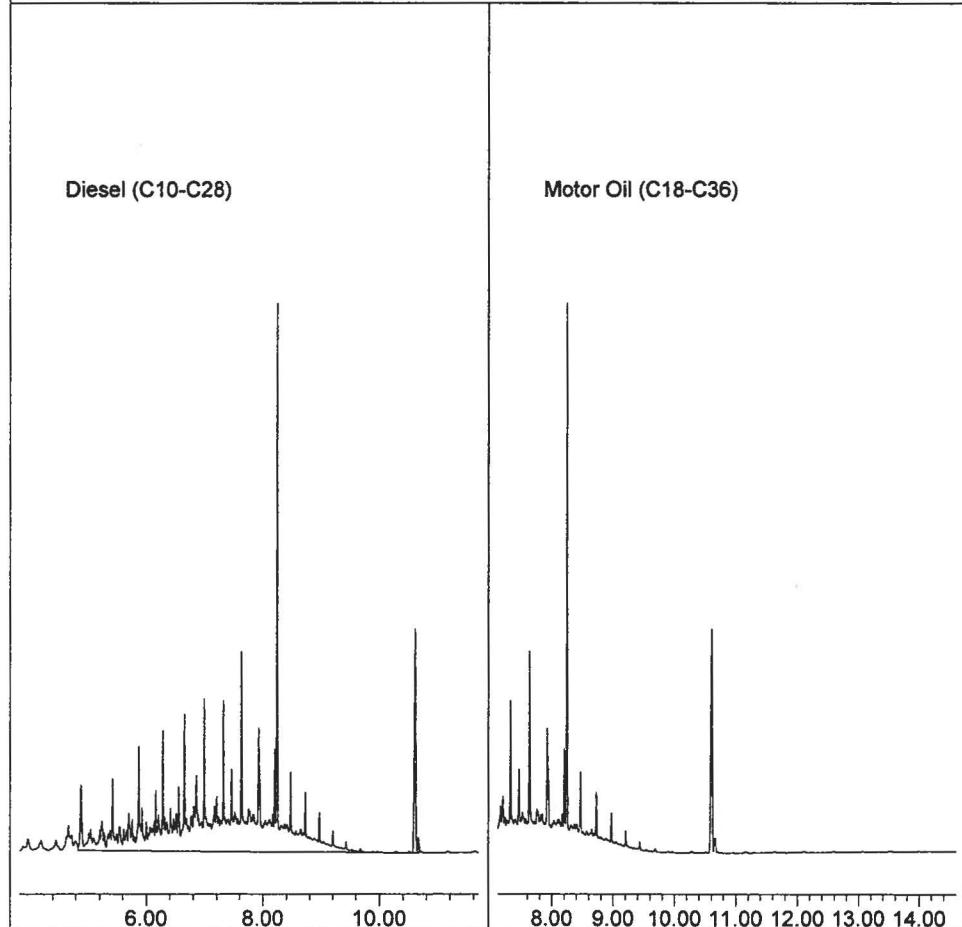
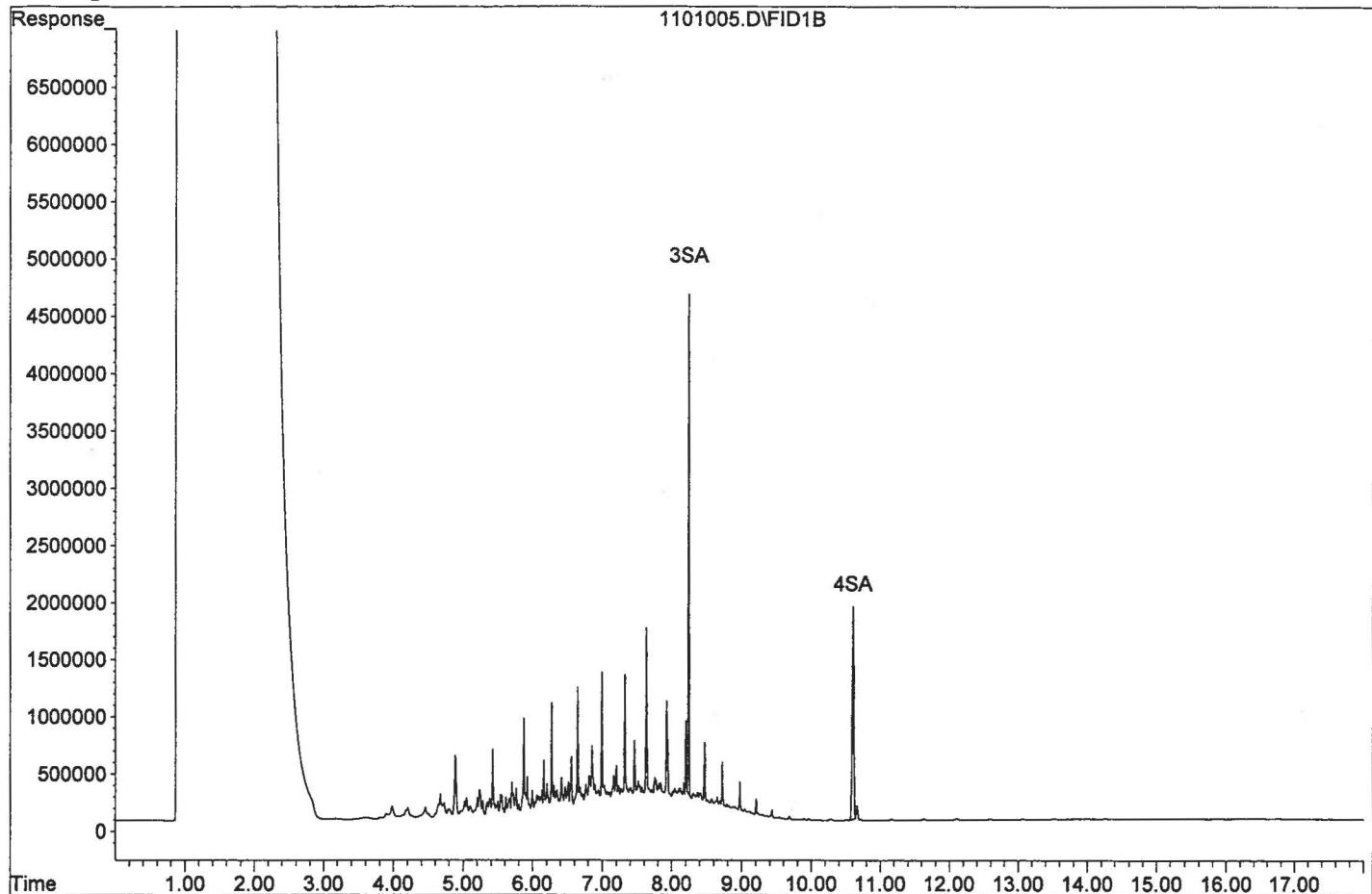
Data File : G:\APOLLO\DATA\101101\1101005.D Vial: 5  
Acq On : 11-1-10 13:26:05 Operator: STC  
Sample : DIESEL 400 Inst : Apollo  
Misc : Mix(A) Multipllr: 1.00  
IntFile : events.e  
Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.24	4338134	26.765 ppb
Surrogate Spike 30.000		Recovery	= 89.22%
4) SA Octacosane(S)	10.60	1865435	40.721 ppb
Surrogate Spike 30.000		Recovery	= 135.74%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	638958245	408.210 ppb

Data File: G:\APOLLO\DATA\101101\1101005.D  
Sample : DIESEL 400



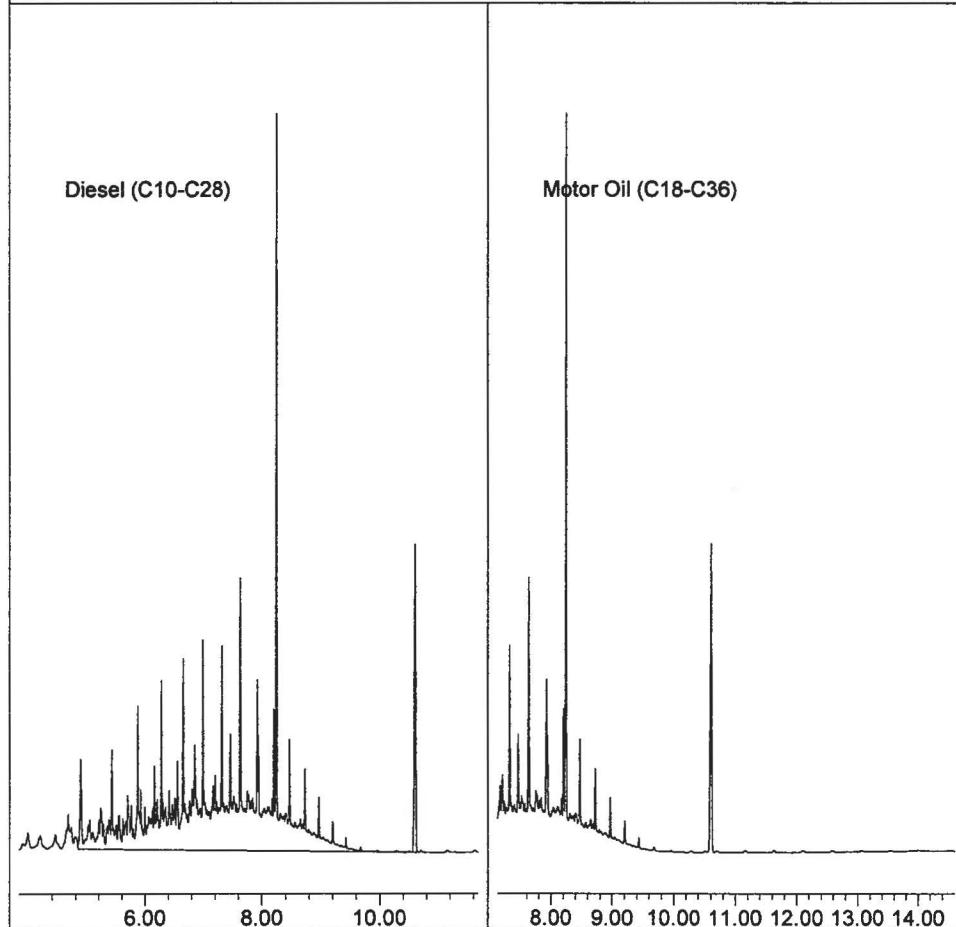
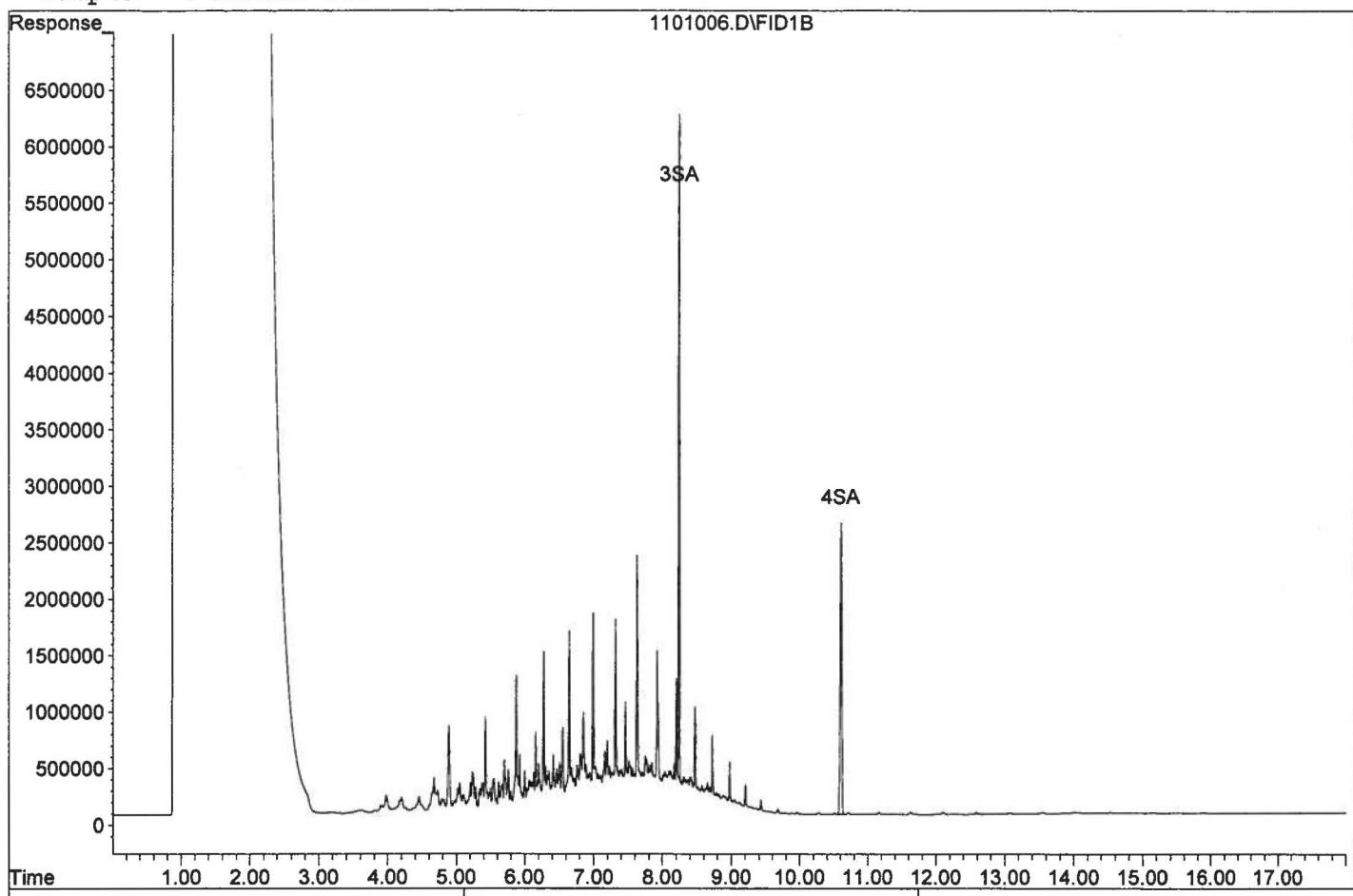
Data File : G:\APOLLO\DATA\101101\1101006.D Vial: 6  
Acq On : 11-1-10 13:50:20 Operator: STC  
Sample : DIESEL 600 Inst : Apollo  
Misc : Mix(A) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.25	5990494	36.960 ppb
Surrogate Spike 30.000		Recovery	= 123.20%
4) SA Octacosane(S)	10.61	2580754	56.335 ppb
Surrogate Spike 30.000		Recovery	= 187.78%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	883098978	564.183 ppb

Data File: G:\APOLLO\DATA\101101\1101006.D  
Sample : DIESEL 600



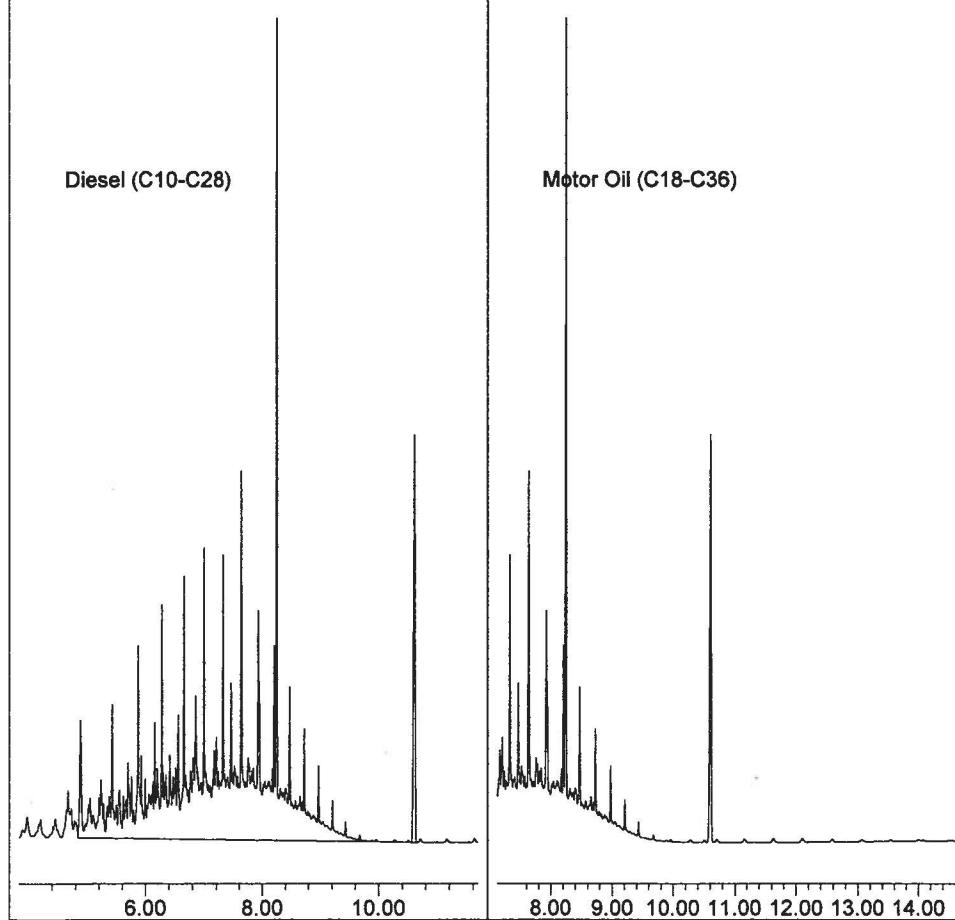
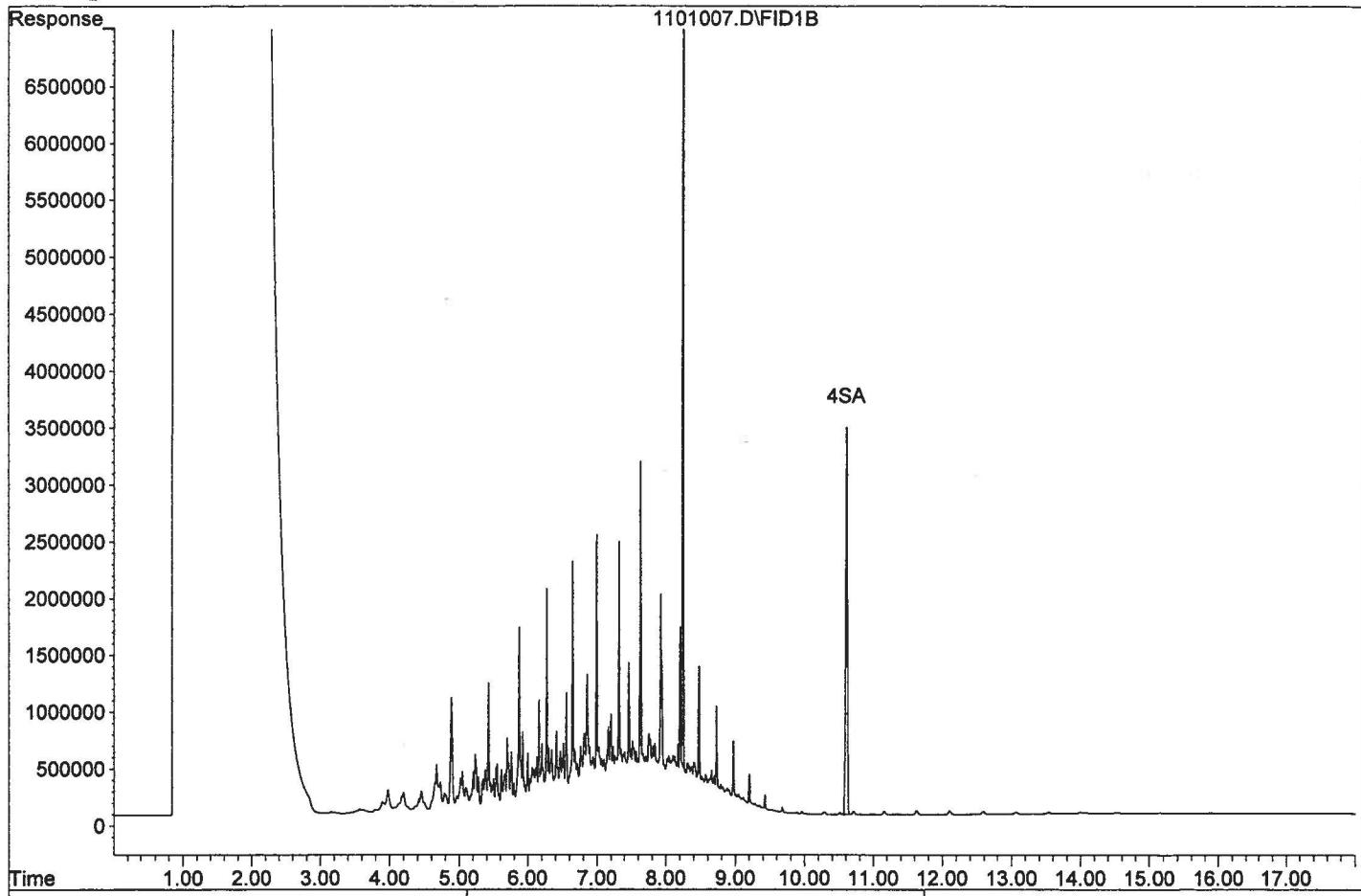
Data File : G:\APOLLO\DATA\101101\1101007.D Vial: 7  
 Acq On : 11-1-10 14:14:40 Operator: STC  
 Sample : DIESEL 800 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 04 10:27:12 2010  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.25	7588204	46.818 ppb
Surrogate Spike 30.000		Recovery	= 156.06%
4) SA Octacosane(S)	10.61	3411769	74.476 ppb
Surrogate Spike 30.000		Recovery	= 248.25%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	1212710410	774.761 ppb

Data File: G:\APOLLO\DATA\101101\1101007.D  
Sample : DIESEL 800



Data File : G:\APOLLO\DATA\101101\1101008.D  
Acq On : 11-1-10 14:38:56  
Sample : DIESEL 1000  
Misc : Mix(A)  
IntFile : events.e  
Quant Time: Nov 1 15:47 2010 Quant Results File: TPHD1101.RES

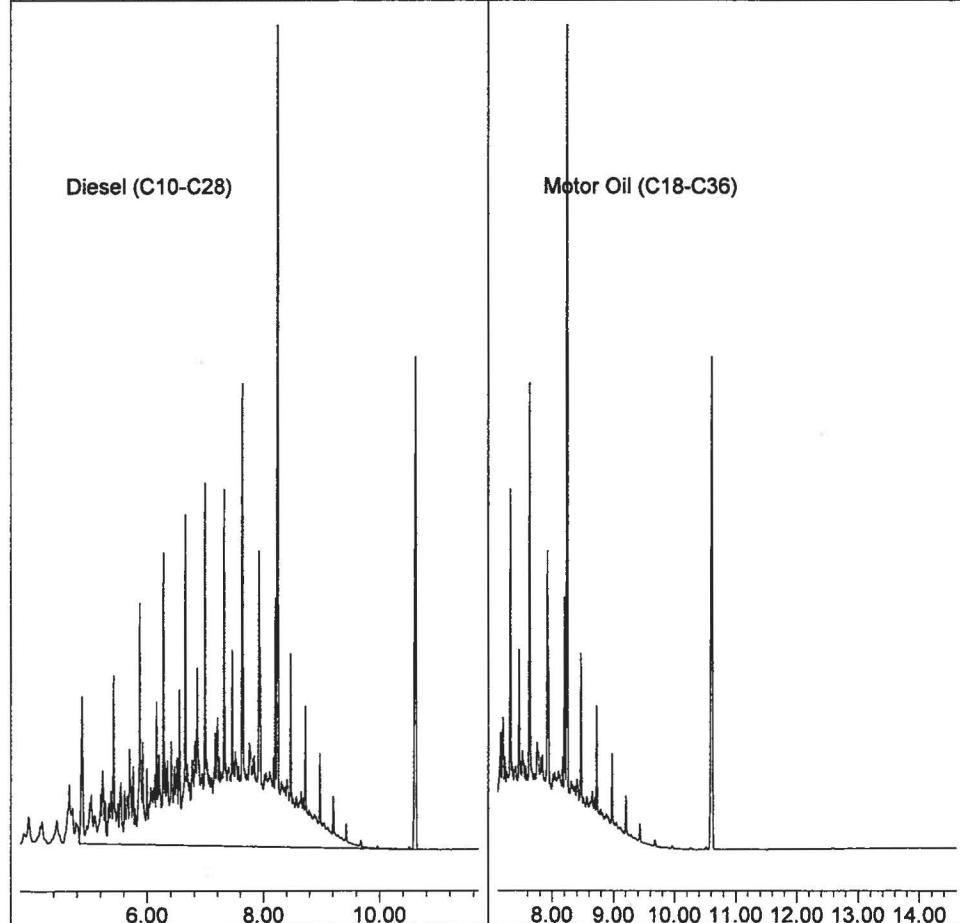
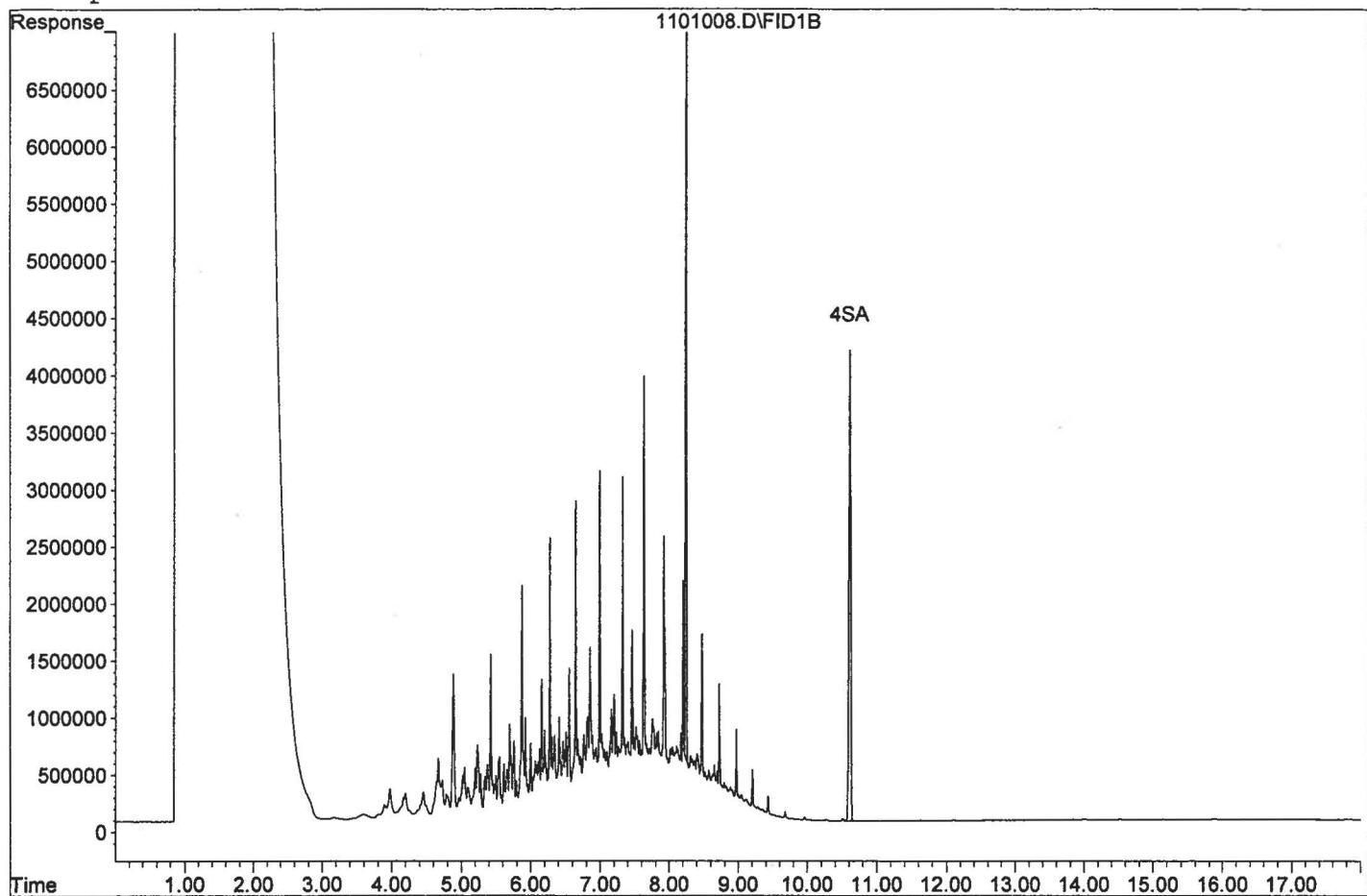
Vial: 8  
Operator: STC  
Inst : Apollo  
Multiplr: 1.00

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.25	9381597	57.882	ppb
Surrogate Spike 30.000		Recovery	=	192.94%
4) SA Octacosane(S)	10.61	4132891	90.217	ppb
Surrogate Spike 30.000		Recovery	=	300.72%
<hr/>				
Target Compounds				
1) HATM Diesel (C10-C28)	7.76	1526641853	975.322	ppb

Data File: G:\APOLLO\DATA\101101\1101008.D  
Sample : DIESEL 1000



TPH Extractables  
TPHD 1101

Form 7  
Second Source

Lab Name: APPL, Inc.

SDG No: 62931

Case No:

Date Analyzed: 11/01/10

Matrix:

Instrument: Apollo

Initial Cal. Date: 11/01/10

Data File: 1101015.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	780797	854795	9.5	HATM
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
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22					
23					
24					
25					
26					
27					
28					
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30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Average

9.5

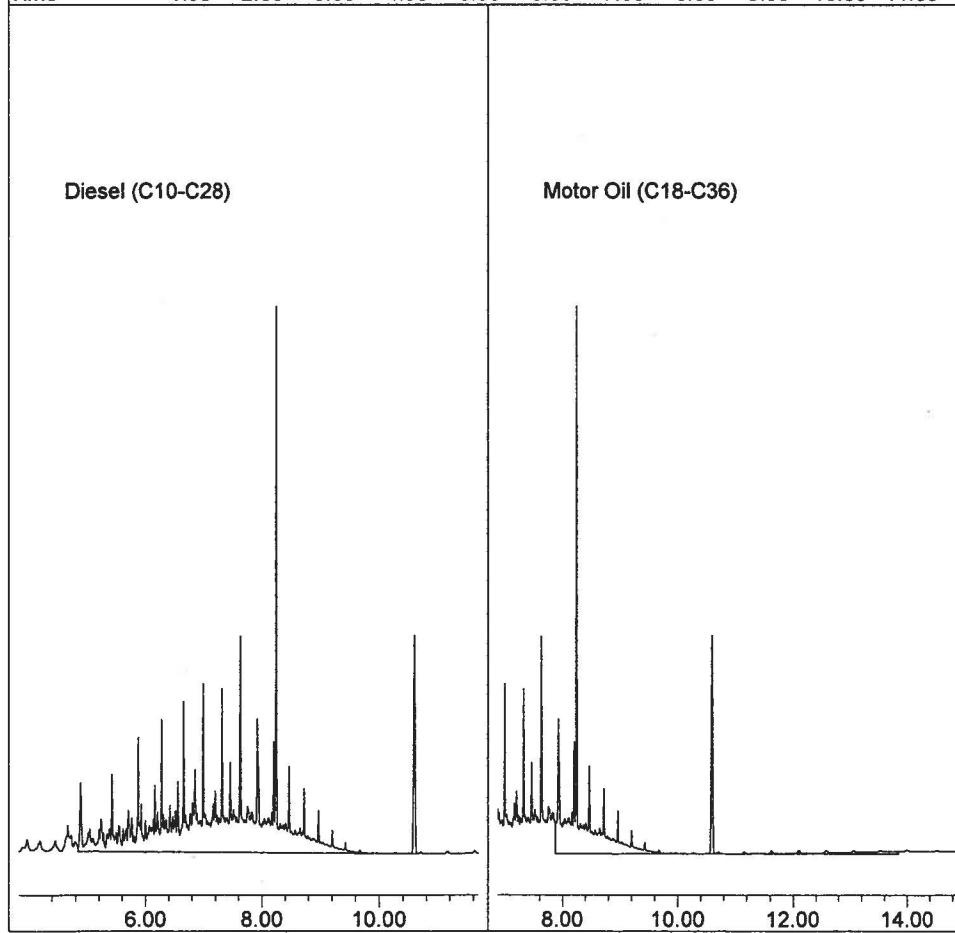
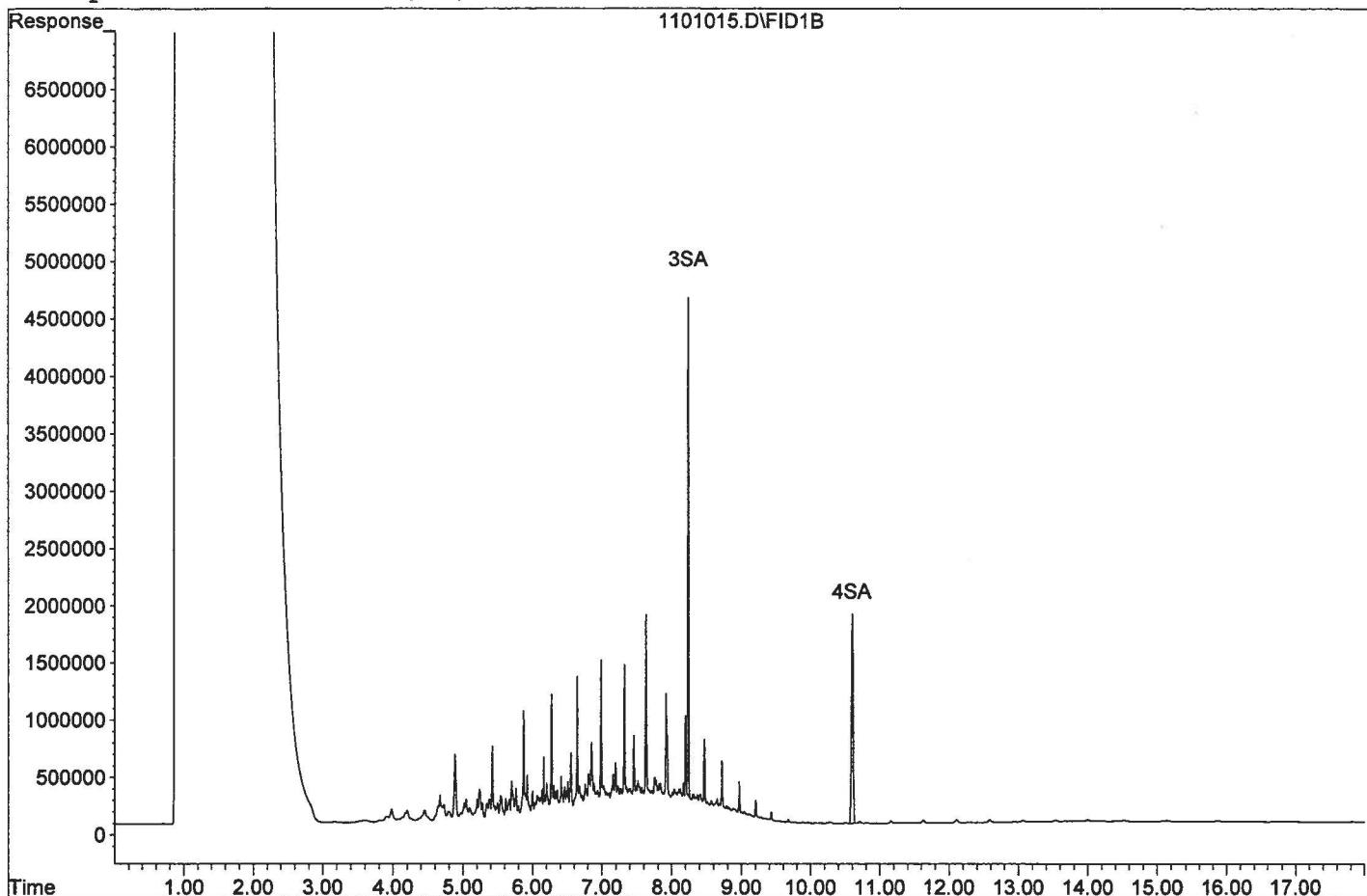
Data File : G:\APOLLO\DATA\101101\1101015.D Vial: 15  
 Acq On : 11-1-10 17:29:30 Operator: STC  
 Sample : DIESEL SS 09/24/10 Inst : Apollo  
 Misc : Mix(A) Multiplr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 2 8:35 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 04 10:27:12 2010  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.24	4402969	21.857	ppb
Surrogate Spike 30.000		Recovery =	72.86%	
4) SA Octacosane(S)	10.60	1829382	20.239	ppb
Surrogate Spike 30.000		Recovery =	67.46%	
<hr/>				
Target Compounds				
1) HATM Diesel (C10-C28)	7.76	683835839	437.909	ppb
2) HBTM Motor Oil (C18-C36)	10.86	260558510	288.173	ppb

Data File: G:\APOLLO\DATA\101101\1101015.D  
Sample : DIESEL SS 09/24/10



TPH Extractables  
TPHD 1101

Form 7  
Continuing Calibration

Lab Name: APPL, Inc.

SDG No: 62931

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

Date Analyzed: 11/03/10

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

Instrument: Apollo

Initial Cal. Date: 11/01/10

Data File: 1101123.D

		Compound	MEAN	CCRF	%D	%Drift
1	HATM	Diesel (C10-C28)	780797	777916	0.37	HATM
2						
3						
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15						
16						
17						
18						
19						
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21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						

Average

0.4

Data File : G:\APOLLO\DATA\101101\1101123.D Vial: 23  
Acq On : 11-3-10 16:36:48 Operator: STC  
Sample : DIESEL 400 11/1/10 Inst : Apollo  
Misc : Mix(A) Multiplr: 1.00  
IntFile : events.e  
Quant Time: Nov 4 10:27 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

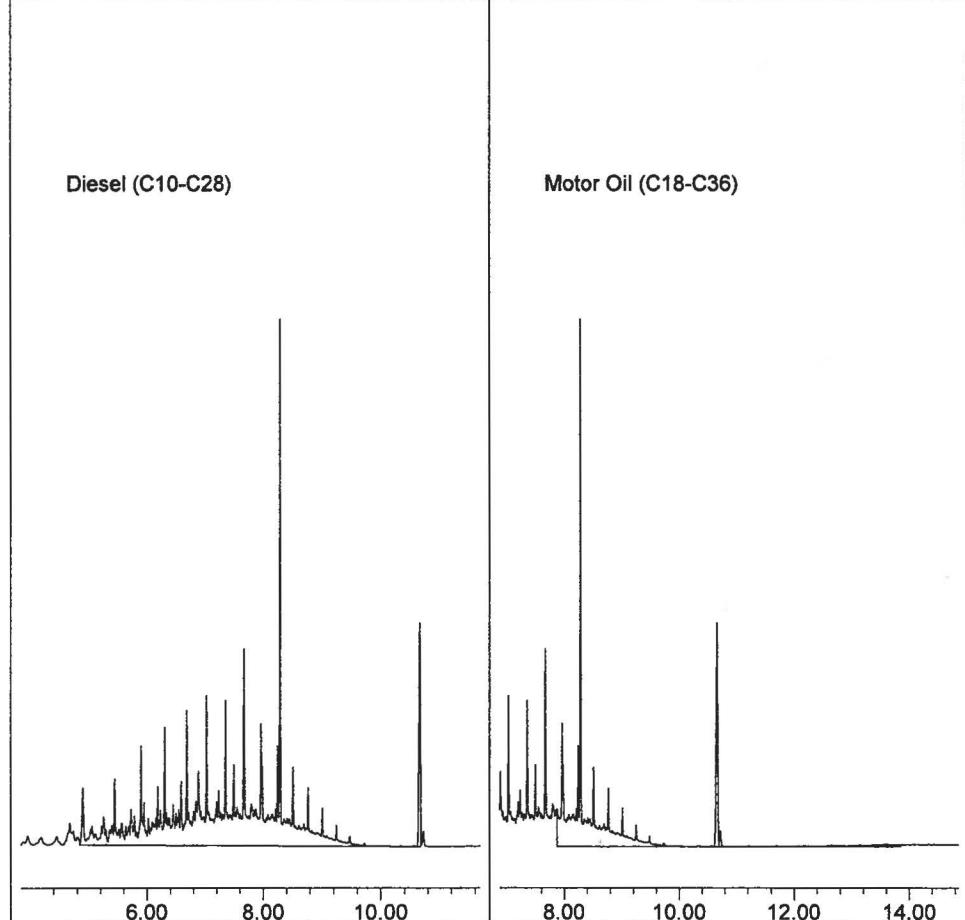
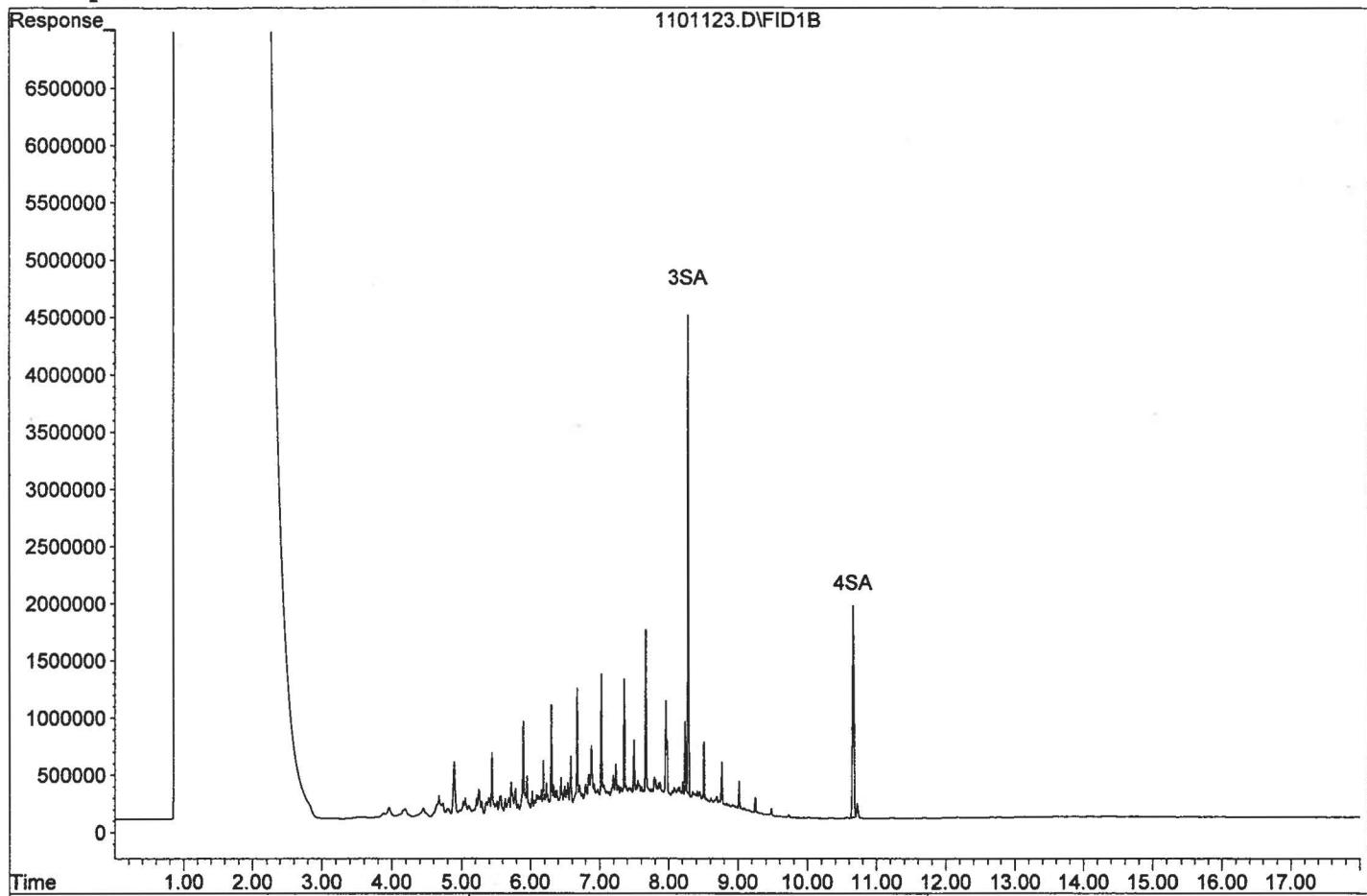
Compound	R.T.	Response	Conc Units
----------	------	----------	------------

System Monitoring Compounds  
3) SA Ortho-Terphenyl(S) 8.28 4232434 21.011 ppb  
Surrogate Spike 30.000 Recovery = 70.04%  
4) SA Octacosane(S) 10.66 1848258 20.448 ppb  
Surrogate Spike 30.000 Recovery = 68.16%

Target Compounds

1) HATM Diesel (C10-C28)	7.76	622333024	398.524 ppb
2) HBTM Motor Oil (C18-C36)	10.86	247980928	274.262 ppb

Data File: G:\APOLLO\DATA\101101\1101123.D  
Sample : DIESEL 400 11/1/10



TPH Extractables  
TPHD 1101

Form 7  
Continuing Calibration

Lab Name: APPL, Inc.

SDG No: 62931

Case No:

Date Analyzed: 11/03/10

Matrix:

Instrument: Apollo

Initial Cal. Date: 11/01/10

Data File: 1101135.D

	Compound	MEAN	CCRF	%D	%Drift
1	HATM Diesel (C10-C28)	780797	780165	0.08	HATM
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					

Average

0.1

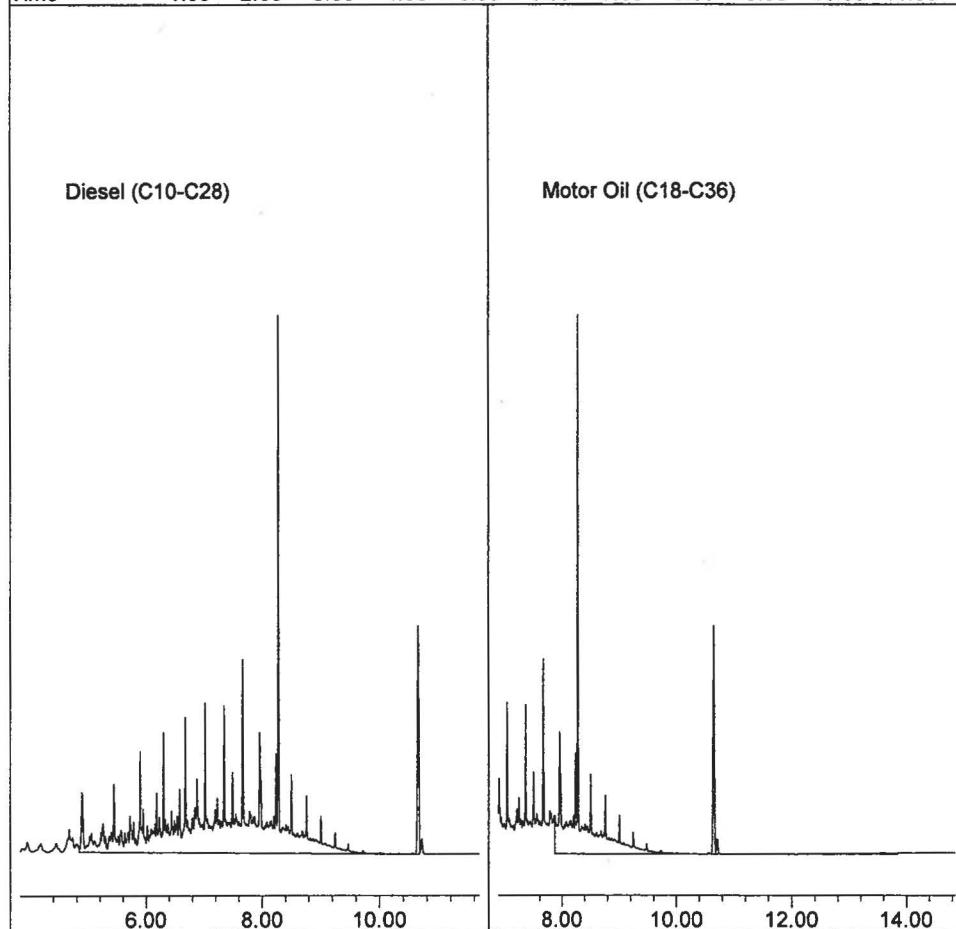
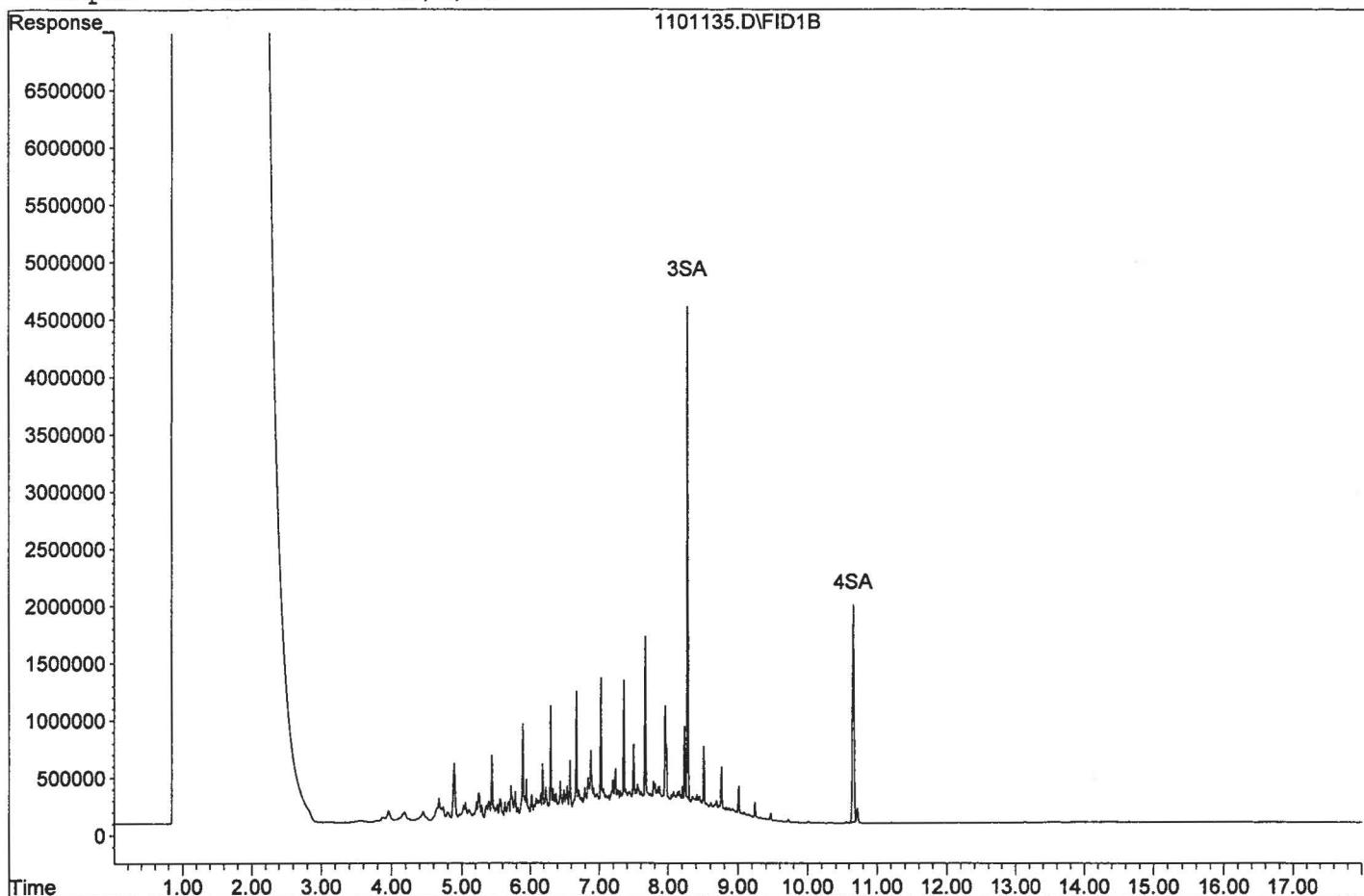
Data File : G:\APOLLO\DATA\101101\1101135.D Vial: 35  
 Acq On : 11-3-10 21:26:47 Operator: STC  
 Sample : DIESEL 400 11/1/10 Inst : Apollo  
 Misc : Mix(A) Multipllr: 1.00  
 IntFile : events.e  
 Quant Time: Nov 4 10:35 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 04 10:27:12 2010  
 Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.28	4301837	21.355 ppb
Surrogate Spike 30.000		Recovery =	71.18%
4) SA Octacosane(S)	10.66	1898088	20.999 ppb
Surrogate Spike 30.000		Recovery =	70.00%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	624132226	399.676 ppb
2) HBTM Motor Oil (C18-C36)	10.86	243526506	269.335 ppb

Data File: G:\APOLLO\DATA\101101\1101135.D  
Sample : DIESEL 400 11/1/10



**EPA 8015 - Extractables  
Total Petroleum Hydrocarbons  
DRO/RRO**

**Raw Data**

**APPL, INC.**

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

APPL Inc.

Blank Name/QCG: **101026W-25117 - 148639**

Batch ID: #TPETD-101026A

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	10/26/10	11/03/10
BLANK	Surrogate: Octacosane (S)	90.3	28-142			%	10/26/10	11/03/10
BLANK	Surrogate: Ortho-Terphenyl (S)	90.7	57-132			%	10/26/10	11/03/10

Quant Method: TPHD1101.M  
Run #: 1101125  
Instrument: Apollo  
Sequence: 101101  
Initials: STC

GC SC-Blank-REG MDLs  
Printed: 11/04/10 10:59:53 AM

Quantification Report  
Version 1.0

Data File : G:\APOLLO\DATA\101101\1101125.D Vial: 25  
Acq On : 11-3-10 17:25:08 Operator: STC  
Sample : 101026A BLK 5/1000 Inst : Apollo  
Misc : Water Multiplr: 5.00  
IntFile : events.e  
Quant Time: Nov 4 10:30 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

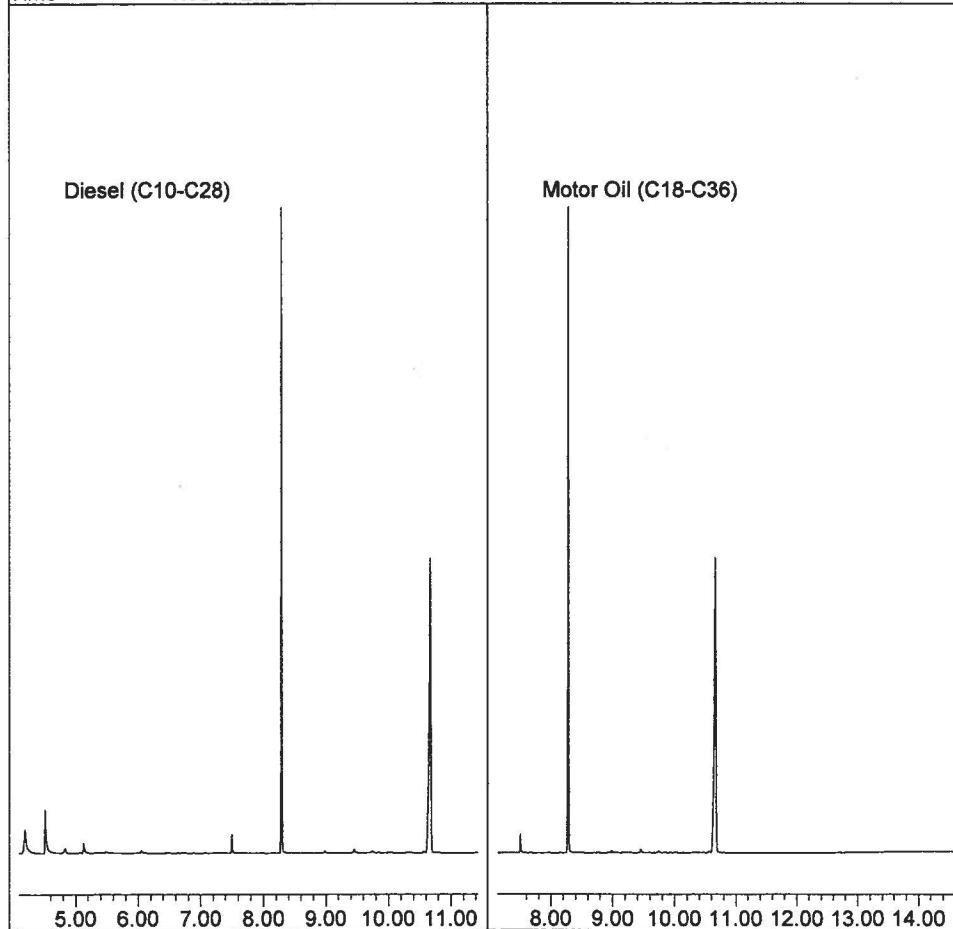
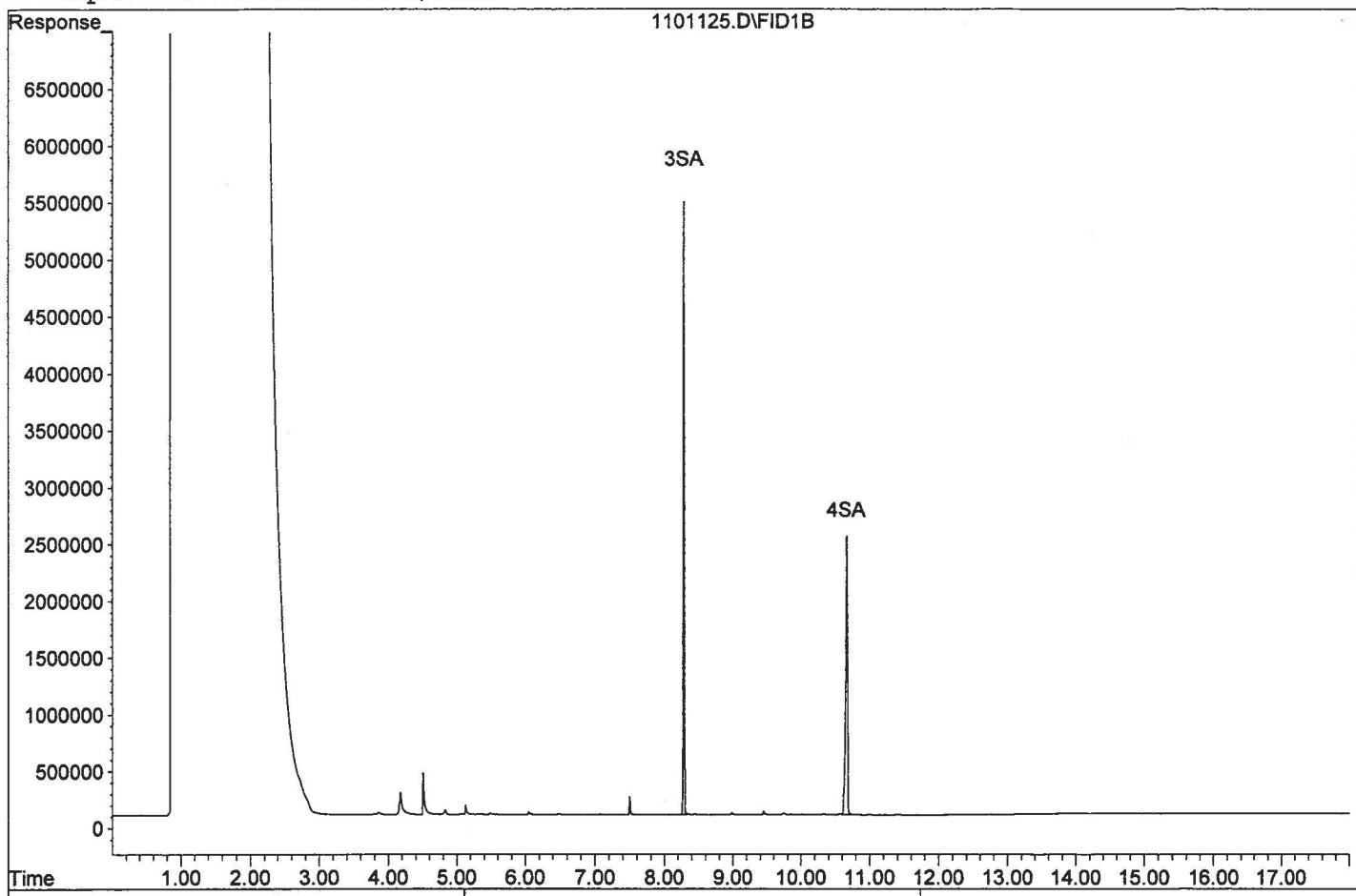
Volume Inj. : 2UL  
Signal Phase : DB-5  
Signal Info : FID02A

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

System Monitoring Compounds  
3) SA Ortho-Terphenyl(S) 8.28 5481568 136.059 ppb  
Surrogate Spike 150.000 Recovery = 90.71%  
4) SA Octacosane(S) 10.66 2448894 135.465 ppb  
Surrogate Spike 150.000 Recovery = 90.31%

Target Compounds

Data File: G:\APOLLO\DATA\101101\1101125.D  
Sample : 101026A BLK 5/1000



# Laboratory Control Spike Recovery

## TPH Diesel Water

APPL ID: **101026W-25117 LCS - 148639**

Batch ID: #TPETD-101026A

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	1720	86.0	61-143
Surrogate: Octacosane (S)	150	136	90.7	28-142
Surrogate: Ortho-Terphenyl (S)	150	131	87.3	57-132

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

<u>Primary</u>	<u>SPK</u>
Quant Method :	TPHD1101.M
Extraction Date :	10/26/10
Analysis Date :	11/03/10
Instrument :	Apollo
Run :	1101126
Initials :	STC

Printed: 11/04/10 11:00:02 AM

APPL Standard LCS

Data File : G:\APOLLO\DATA\101101\1101126.D Vial: 26  
 Acq On : 11-3-10 17:49:28 Operator: STC  
 Sample : 101026A LCS-1 5/1000 Inst : Apollo  
 Misc : Water Multipllr: 5.00  
 IntFile : events.e  
 Quant Time: Nov 4 10:30 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
 Title : Diesel  
 Last Update : Thu Nov 04 10:27:12 2010  
 Response via : Multiple Level Calibration

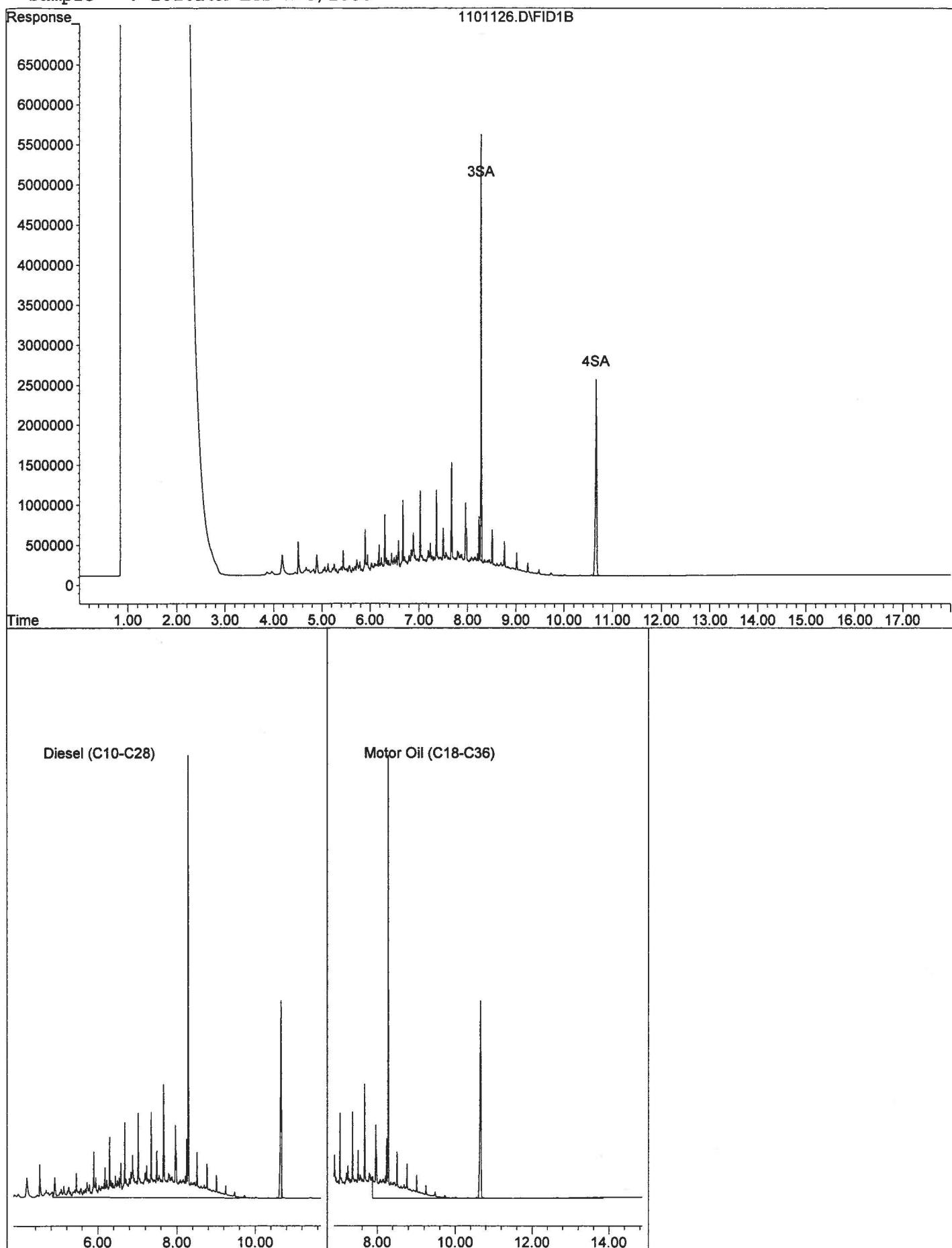
Volume Inj. : 2UL  
 Signal Phase : DB-5  
 Signal Info : FID02A

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.28	5283032	131.131	ppb
Surrogate Spike 150.000		Recovery	=	87.42%
4) SA Octacosane(S)	10.66	2460218	136.092	ppb
Surrogate Spike 150.000		Recovery	=	90.73%
<hr/>				
Target Compounds				
1) HATM Diesel (C10-C28)	7.76	536346567	1717.304	ppb
2) HBTM Motor Oil (C18-C36)	10.86	240570626	1330.332	ppb

Algorithm Check:  $\frac{(536346567)(5)}{(7807017)(2)} = 1717.30477 \text{ ppb} \checkmark$

SJR 11/4/10

Data File: G:\APOLLO\DATA\101101\1101126.D  
Sample : 101026A LCS-1 5/1000



# Matrix Spike Recoveries

## TPH Diesel Water

APPL ID: **101026W-25117 MS - 148639**

Batch ID: #TPETD-101026A

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl ug/L	Matrix Result ug/L	SPK Result ug/L	DUP Result ug/L	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
Diesel Fuel	2000	ND	2060	1740	103	87.0	61-143	16.8	30
Surrogate: Octacosane (S)	150	NA	131	130	87.3	86.7	28-142		
Surrogate: Ortho-Terphenyl (S)	150	NA	127	125	84.7	83.3	57-132		

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

Primary	SPK	DUP
Quant Method :	TPHD1101.M	TPHD1101.M
Extraction Date :	10/26/10	10/26/10
Analysis Date :	11/03/10	11/03/10
Instrument :	Apollo	Apollo
Run :	1101130	1101131
Initials :	STC	

Printed: 11/04/10 11:00:05 AM  
APPL MSD SCII

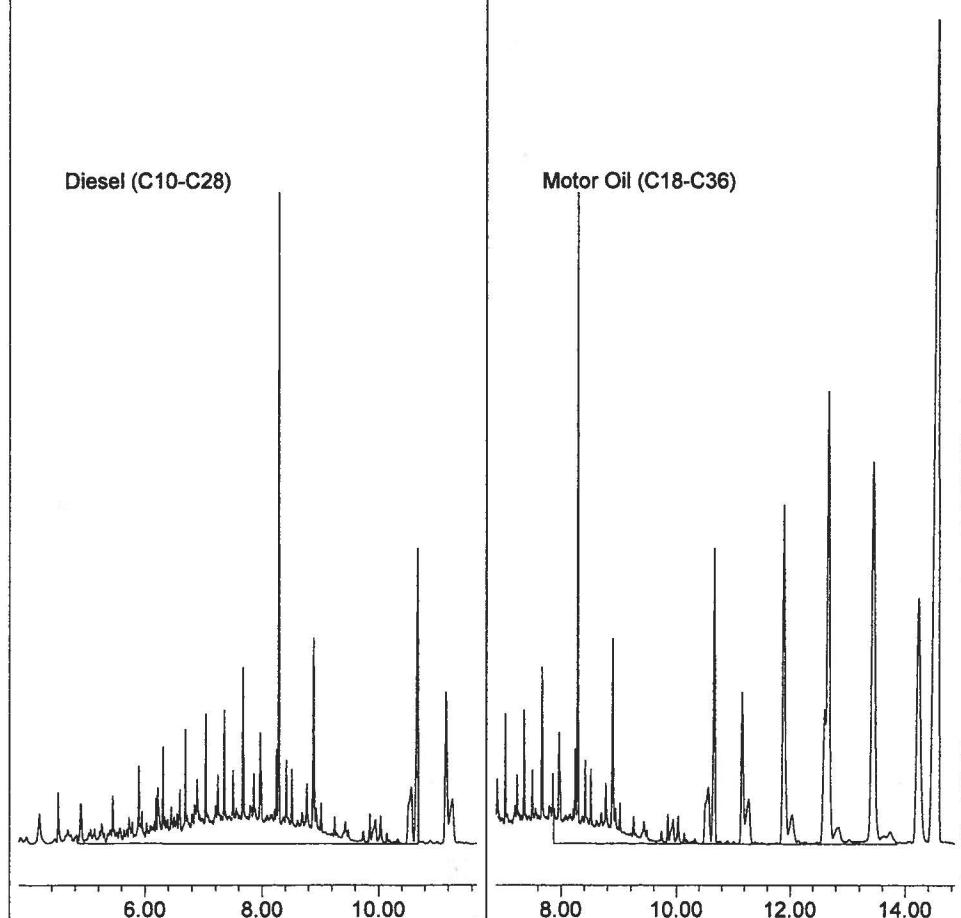
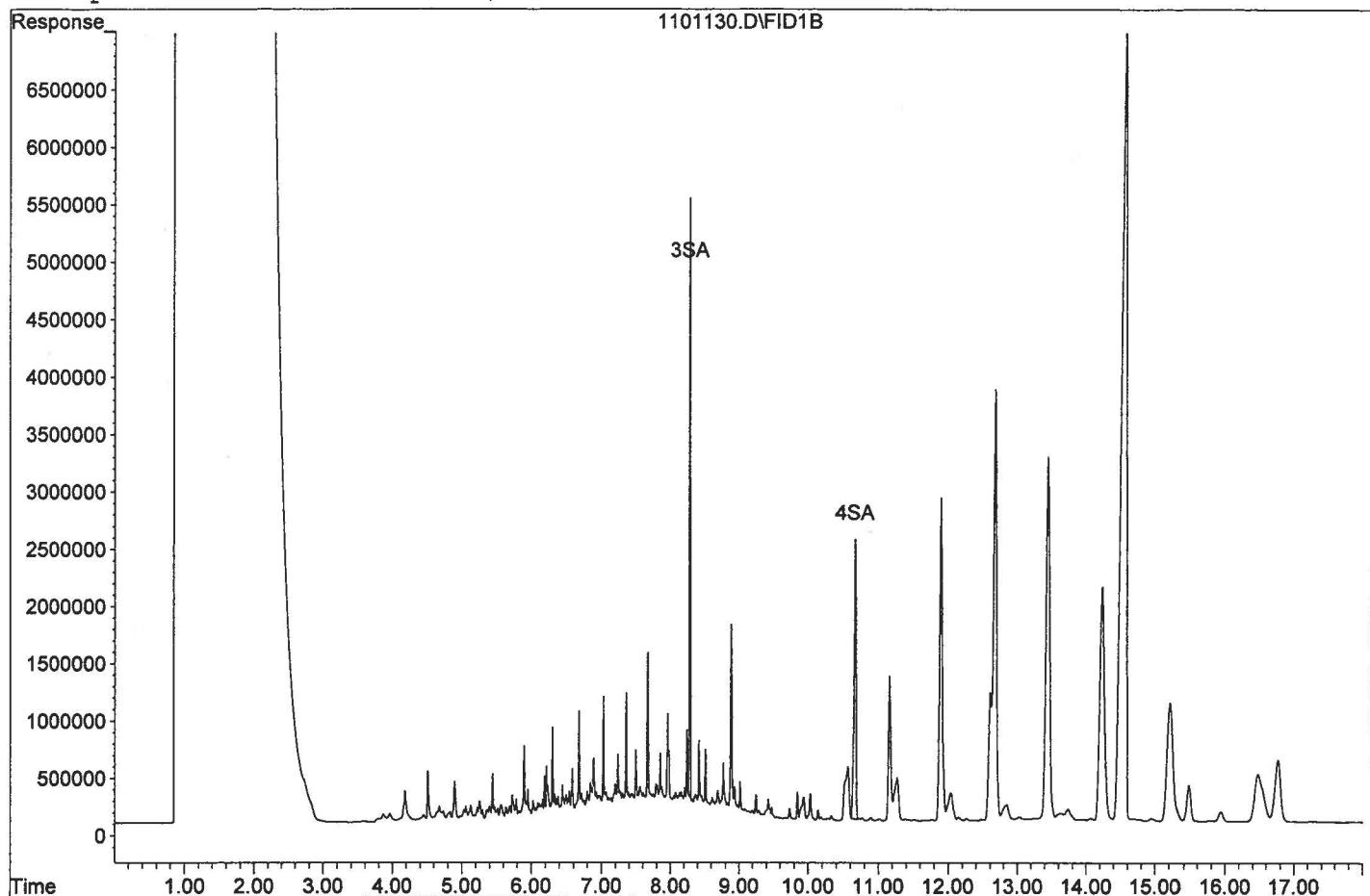
Data File : G:\APOLLO\DATA\101101\1101130.D Vial: 30  
Acq On : 11-3-10 19:26:26 Operator: STC  
Sample : AY25117W15 MS-1 5/1030 Inst : Apollo  
Misc : Water Multipllr: 4.85  
IntFile : events.e  
Quant Time: Nov 4 10:33 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc Units
<hr/>			
System Monitoring Compounds			
3) SA Ortho-Terphenyl(S)	8.29	5285479	127.370 ppb
Surrogate Spike 145.631		Recovery	= 87.46%
4) SA Octacosane(S)	10.67	2433022	130.668 ppb
Surrogate Spike 145.631		Recovery	= 89.73%
<hr/>			
Target Compounds			
1) HATM Diesel (C10-C28)	7.76	663306002	2061.952 ppb
2) HBTM Motor Oil (C18-C36)	10.86	763817066	4100.809 ppb

Data File: G:\APOLLO\DATA\101101\1101130.D  
Sample : AY25117W15 MS-1 5/1030



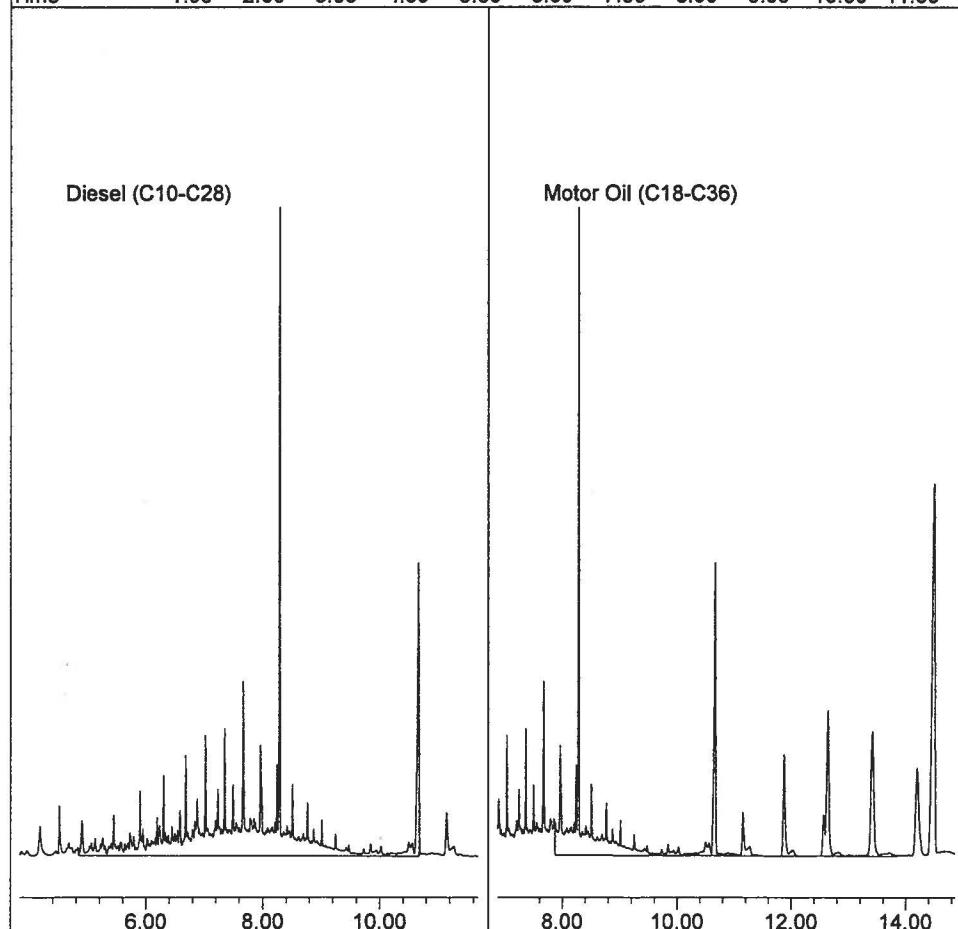
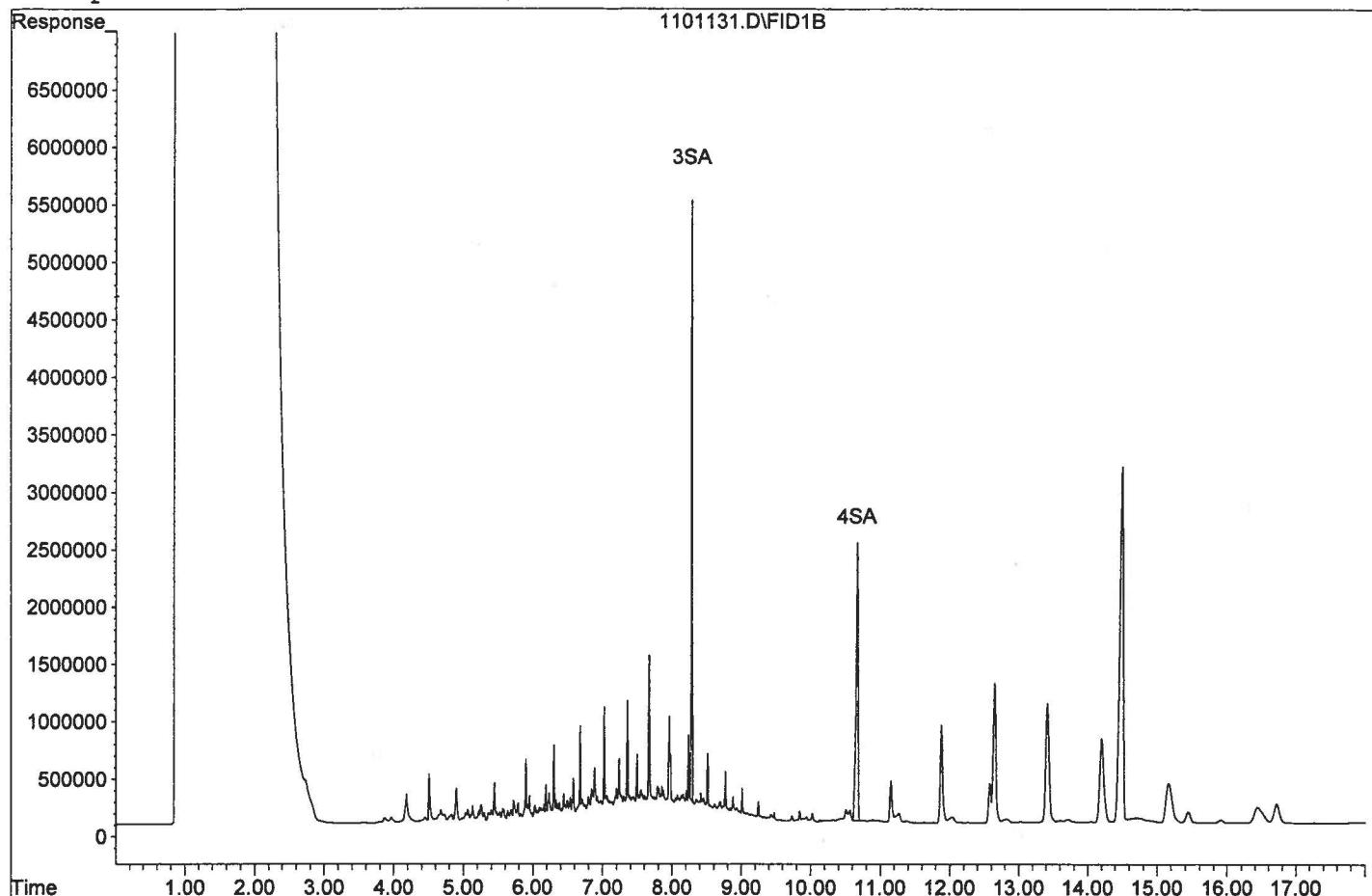
Data File : G:\APOLLO\DATA\101101\1101131.D Vial: 31  
Acq On : 11-3-10 19:50:48 Operator: STC  
Sample : AY25117W12 MSD-1 5/1030 Inst : Apollo  
Misc : Water Multipllr: 4.85  
IntFile : events.e  
Quant Time: Nov 4 10:34 2010 Quant Results File: TPHD1101.RES

Method : G:\APOLLO\DATA\101101\TPHD1101.M (Chemstation Integrator)  
Title : Diesel  
Last Update : Thu Nov 04 10:27:12 2010  
Response via : Multiple Level Calibration

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

Compound	R.T.	Response	Conc	Units
<hr/>				
System Monitoring Compounds				
3) SA Ortho-Terphenyl(S)	8.29	5194416	125.176	ppb
Surrogate Spike 145.631		Recovery	=	85.95%
4) SA Octacosane(S)	10.66	2428089	130.403	ppb
Surrogate Spike 145.631		Recovery	=	89.54%
<hr/>				
Target Compounds				
1) HATM Diesel (C10-C28)	7.76	560841904	1743.432	ppb
2) HBTM Motor Oil (C18-C36)	10.86	374028769	2008.100	ppb

Data File: G:\APOLLO\DATA\101101\1101131.D  
Sample : AY25117W12 MSD-1 5/1030



STANDARD	INITIAL CONC.	SOURCE DATE	FINAL ALIQUOT VOLUME	FINAL CONC.	SOLVENT / DATE / CONC.	LOT #	INITIALS
						061	

Pac Eco Cal Curve \*Not Recorded on 9/21

PREP:	9/21/2010										
PAC ECO CURVE											
EXP:	12/25/2010										
ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL						
PAC ECO CAL STD	5		9/13/2010	12/25/2010	2	10	50	200	500	700	1000
VWR	Hexane		052110A			998	990	950	800	500	300 N/A
				Final VOL.	1000	1000	1000	1000	1000	1000	1000

9/23/10

ATC 9/24/10

DIESEL CAL STD.

STD.	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI CAT#116300-01 LOT#146946-24150 OP:9/24/10 EXP:9/24/11	1mL	50mL	1000ug/mL	MC LOT# 061510B
O-TERPHENYL OCTACOSANE	5000 ug/mL	O2SI CAT#110316-02 LOT#152373-25329 OP:9/24/10 EXP:9/24/10	0.5mL		50ug/mL	

ATC 9/24/10

EXP 3/04/11

**O2Si**  
Smart Calibration  
Diesel Fuel #2 Composite, 50,000 mg/L, 1 ml  
Cat. No: 011598-03      Exp: 9/13/2013  
Lot No: 149530      Storage: <= -10 Degrees C  
                         Solvent: Methylene Chloride  
                         Lot #: 149530 - 25265  
                         Rec: 10/8/09 MFR exp. 09/13/13  
                         Red: 01/24/10 Exp: 9/24/11

ATC 9/24/10

ATC 9/24/10

ATC 9/24/10

DIESEL SECOND SOURCE

STANDARD	INITIAL CONC.	SOURCE DATE	ALIQUOT	FINAL VOL	FINAL CONC.	SOLVENT / LOT#
DIESEL FUEL #2	50,000 ug/mL	O2SI CAT#011598-03 LOT#156524-26178 OP:4/5/10 EXP:4/5/11	0.2mL	25mL	400ug/mL	MC LOT# 061510B
O-TERPHENYL OCTACOSANE	5000 ug/mL	O2SI CAT#110316-02 LOT#152373-25329 OP:9/24/10 EXP:9/24/10	0.1mL		20ug/mL	

ATC 9/24/10

ATC 9/24/10

ATC 9/24/10

ATC 9/24/10

ATC 9/24/10

PXD 3/24/11

**O2Si**  
Smart Calibration  
o-Terphenyl/Octacosane Solution, 5,000 mg/L, 1 ml  
Cat. No: 110316-02      Exp: 11/1/2012  
Lot No: 152373      Storage: <= -10 Degrees C  
                         Solvent: Methylene Chloride  
                         Option: For Research Use Only  
                         Opened: 01/24/10 Exp: 9/24/11  
                         Rec: 11/4/09 MFR exp. 11/01/12

ATC 9/24/10

STANDARD

088

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

PREP DATE:	10/29/10										
OPC CURVE											
EXP:	04/19/11										
SUPPLIER	ID#	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
OPC STD	5			10/19/10	04/19/11	10	50	200	500	700	1000
Hexane		071210D				990	950	800	500	300	NA
				Final VOL.	1000	1000	1000	1000	1000	1000	

CAC

10/29/10

ET

4/19/11

STC 11/9/10

## DIESEL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
DIESEL	1000		09/24/10	03/24/10	10	100	4000	600	800	1000
MC		030810A			990	900	6000	400	200	NA
			Final VOL.	1000	1000	10,000	1000	1000	1000	

STL

11/9/10 11/1/10

Exp 3/24/11

STL

11/9/10 11/1/10

Exp 3/24/11

## MOTOR OIL CURVE

STD	[µg/mL]	LOT #	DATE	EXP. DATE	µL	µL	µL	µL	µL	µL
MOTOR OIL	1000		09/24/10	11/26/10	50	100	4000	600	800	1000
MC		061510B	11/11/10	3/24/11	950	900	6000	400	200	NA
			Final VOL.	1000	1000	10,000	1000	1000	1000	



STANDARD

INITIAL CONC	SOURCE DATE	FINAL ALIQUOT VOLUME	FINAL CONC	SOLVENT / LOT #	DATE / INITIALS
					083

THE SURROGATE (GAVE TO EXTRACTION)

0-TERPHENYL	600mg/ml	02SI	N/A	25ML	600mg/ml	N/A	<u>SL</u>
OCTACOSANE		CAT:	110316-05				10/22/10
		LOT:	164819-27676				EX:
		OP:	10/22/10				10/22/11
		EX:	10/22/11				

OCL WATER SPIKE

VARIOUS	100mg/ml	02SI	375ml	25ML	1.5mg/ml	Acetone	<u>SL</u>
							#052710B 10/22/10
							Ex: 1/22/11

Organochlorine Pesticide Solution 20, 100 mg/L, 1ml

**02Si**  
smart solutions®  
866.772.0932 www.02si.com

Cat. No: 130015-09      Exp: 2/13/2013  
 Lot No: 155997      Storage: <= 6 Degrees C  
 -26079      Solvent: Tol.:Hex. 1:1  
 Not for Human Consumption      For Research Use Only  
 Made in USA      Date Opened: 10/22/10      Ex: 10/22/11

TOX WATER SPIKE

Toxaphene	1000mg/ml	02SI	125ml	25ML	5mg/ml	Acetone	<u>SL</u>
							#052710B 10/22/10
							Ex: 1/22/11

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

**02Si**  
smart solutions®  
866.772.0932 www.02si.com

Cat. No: 030279-06      Exp: 2/13/2013  
 Lot No: 155996      Storage: <= 6 Degrees C  
 -26079      Solvent: Hexane  
 Not for Human Consumption      For Research Use Only  
 Made in USA      Date Opened: 10/22/10      Ex: 10/22/11

TOX SOIL SPIKE

Toxaphene	1000mg/ml	02SI	1250ML	25ML	50mg/ml	Acetone	<u>SL</u>
							#052710B 10/22/10
							Ex: 1/22/11

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

**02Si**  
smart solutions®  
866.772.0932 www.02si.com

Cat. No: 030279-06      Exp: 2/13/2013  
 Lot No: 155996      Storage: <= 6 Degrees C  
 -26078      Solvent: Hexane  
 Not for Human Consumption      For Research Use Only  
 Made in USA      Date Opened: 10/22/10      Ex: 10/22/11

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

**02Si**  
Toxaphene  
Lot #: 155996 - 26079  
Rec: 2/12/10 MFR exp. 02/13/13

Exp: 2/13/2013  
 Storage: <= 6 Degrees C  
 Solvent: Hexane  
 For Research Use Only  
 Opened: 10/22/10 Ex: 10/22/11

## Organic Extraction Worksheet

Method	THC Separatory Funnel Extraction 3510C	Extraction Set	101026A	Extraction Method	SEP011	Units	mL
Spiked ID 1	Diesel Spike 10/5/10 QC 10/5/10		Surrogate ID 1	THC Surrogate 164819-27676			
Spiked ID 2			Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:	YES			
Spiked ID 7			Ext. Start Time:				
Spiked ID 8			Ext. End Time:				
			GC Requires Extract By:	11/05/10 0:00			
		pH1					W Bath Temp 80 °C
		pH2					
		pH3					

Spiked By: SH

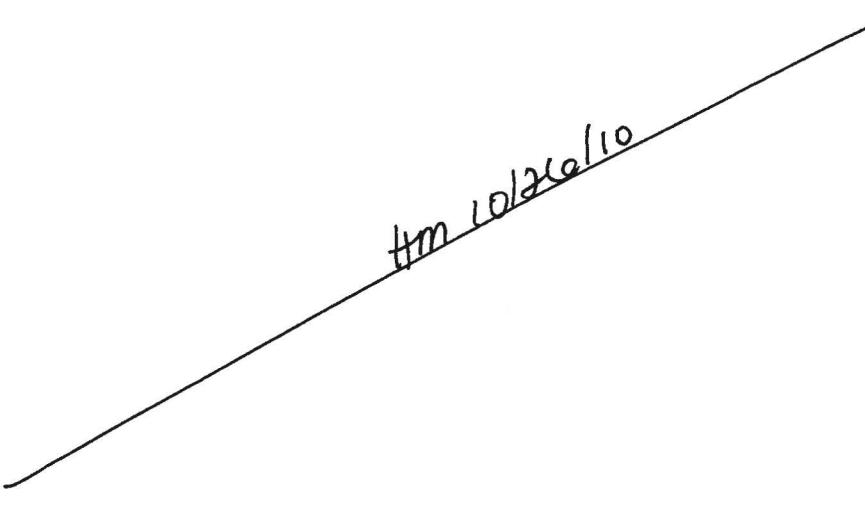
Date 10/26/10

Witnessed By: GH

Date 10/26/10

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 101026A Blk				0.250	1	1000	5	7	10/26/10 9:40	
2 101026A LCS-1		1	1	0.250	1	1000	5	7	10/26/10 9:40	
3 AY25113	AY25113W08			0.250	1	1000	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
4 AY25115	AY25115W04			0.250	1	1010	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
5 AY25116	AY25116W06			0.250	1	990	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
6 AY25117 MS-1	AY25117W15	1	1	0.250	1	1030	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
7 AY25117 MSD-1	AY25117W12	1	1	0.250	1	1030	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
8 AY25117	AY25117W13			0.250	1	1030	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter
9 AY25118	AY25118W04			0.250	1	1030	5	7	10/26/10 9:40	62931-2 WEEK RUSH -- Amber Liter

HM 10/26/10



Solvent and Lot#	
MC	VWR 091310C
Na2SO4	1750C276

Extraction COC Transfer	
Extraction lab employee Initials	HM
GC analyst's initials	STL
Date	10/26/10
Time	16:00
Refrigerator	Holzert

Technician's Initials	
Scanned By	HM
Sample Preparation	SH/GH
Extraction	SH/HM/GH
Concentration	DL
Modified	10/26/10 8:22:35 AM

Reviewed By: HM

Date 10/26/10

## Injection Log

Directory: G:\APOLLO\DATA\101101\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	3	1101003.D	1	DIESEL 10 11/01/10	Mix(A)	11-1-10 12:37:39
2	4	1101004.D	1	DIESEL 100	Mix(A)	11-1-10 13:01:53
3	5	1101005.D	1	DIESEL 400	Mix(A)	11-1-10 13:26:05
4	6	1101006.D	1	DIESEL 600	Mix(A)	11-1-10 13:50:20
5	7	1101007.D	1	DIESEL 800	Mix(A)	11-1-10 14:14:40
6	8	1101008.D	1	DIESEL 1000	Mix(A)	11-1-10 14:38:56
7	15	1101015.D	1	DIESEL SS 09/24/10	Mix(A)	11-1-10 17:29:30
8	23	1101123.D	1	DIESEL 400 11/1/10	Mix(A)	11-3-10 16:36:48
9	25	1101125.D	5	101026A BLK 5/1000	Water	11-3-10 17:25:08
10	26	1101126.D	5	101026A LCS-1 5/1000	Water	11-3-10 17:49:28
11	27	1101127.D	5	AY25113W08 5/1000	Water	11-3-10 18:13:47
12	28	1101128.D	4.9505	AY25115W04 5/1010	Water	11-3-10 18:38:01
13	29	1101129.D	5.05051	AY25116W06 5/990	Water	11-3-10 19:02:13
14	30	1101130.D	4.85437	AY25117W15 MS-1 5/1030	Water	11-3-10 19:26:26
15	31	1101131.D	4.85437	AY25117W12 MSD-1 5/1030	Water	11-3-10 19:50:48
16	32	1101132.D	4.85437	AY25117W13 5/1030	Water	11-3-10 20:15:07
17	33	1101133.D	4.85437	AY25118W04 5/1030	Water	11-3-10 20:39:22
18	35	1101135.D	1	DIESEL 400 11/1/10	Mix(A)	11-3-10 21:26:47

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

**APPL, INC.**

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

**APPL, INC.**

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

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Blank Name/QCG: 101026W-25117 - 149081

Batch ID: #SIMHC-101026A

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	10/26/10	10/27/10
BLANK	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Surrogate: 2-Fluorobiphenyl (S)	58.0	50-110			%	10/26/10	10/27/10
BLANK	Surrogate: Nitrobenzene-D5 (S)	77.8	40-110			%	10/26/10	10/27/10
BLANK	Surrogate: Terphenyl-d14 (S)	67.4	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M
Run #: 1027L003
Instrument: Linus
Sequence: L100707
Initials: LF

GC SC-Blank-REG MDLs  
 Printed: 11/16/10 9:45:02 AM

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 62931

Case No: 62931

Date Analyzed: 10/27/10

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	Surrogate: 2-Fluorobiphenyl (S)	Surrogate: Nitrobenzene-D5 (S)
101026A-BLK	Blank	58.0	77.8
101026A-LCS	Lab Control Spike	52.5	88.5
AY25113	ES004	55.2	75.6
AY25115	ES005	54.8	88.5
AY25116	ES006	54.7	77.6
AY25117-MS	Matrix Spike	53.1	83.5
AY25117-MSD	Matrix SpikeD	61.3	86.1
AY25117	ES007	53.6	78.5
AY25118	ES008	53.8	78.9

Comments: Batch: #SIMHC-101026A

Printed: 11/16/10 9:45:05 AM

Form 2 & 8, Surrogate Recovery Summary

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 62931

Case No: 62931

Date Analyzed: 10/27/10

Matrix: WATER

Instrument: Linus

APPL ID.	Client Sample No.	Surrogate: Terphenyl-d14 (S)
101026A-BLK	Blank	67.4
101026A-LCS	Lab Control Spike	77.0
AY25113	ES004	68.8
AY25115	ES005	71.8
AY25116	ES006	74.4
AY25117-MS	Matrix Spike	71.1
AY25117-MSD	Matrix SpikeD	76.8
AY25117	ES007	69.7
AY25118	ES008	71.7

Comments: Batch: #SIMHC-101026A

Printed: 11/16/10 9:45:05 AM

Form 2 & 8, Surrogate Recovery Summary

# Laboratory Control Spike Recovery

## EPA 8270D SIM

APPL ID: 101026W-25117 LCS - 149081

Batch ID: #SIMHC-101026A

APPL Inc.

908 North Temperance Avenue  
Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L	Recovery	Limits
1-methylnaphthalene	4.00	2.20	55.0	45-105
2-Methylnaphthalene	4.00	2.03	50.7	45-105
Acenaphthene	4.00	2.31	57.8	45-110
Acenaphthylene	4.00	2.53	63.2	50-105
Anthracene	4.00	2.65	66.3	55-110
Benzo(a)anthracene	4.00	3.07	76.8	55-110
Benzo(a)pyrene	4.00	2.75	68.8	55-110
Benzo(b)fluoranthene	4.00	3.52	88.0	45-120
Benzo(ghi)perylene	4.00	2.67	66.8	40-125
Benzo(k)fluoranthene	4.00	2.18	54.5	45-125
Chrysene	4.00	2.44	61.0	55-110
Dibenz(a,h)anthracene	4.00	3.33	83.3	40-125
Fluoranthene	4.00	2.65	66.3	55-115
Fluorene	4.00	2.78	69.5	50-110
Indeno(1,2,3-cd)pyrene	4.00	3.15	78.8	45-125
Naphthalene	4.00	2.03	50.7	40-100
Phenanthrene	4.00	2.65	66.3	50-115
Pyrene	4.00	2.76	69.0	50-130
Surrogate: 2-Fluorobiphenyl (S)	2.00	1.05	52.5	50-110
Surrogate: Nitrobenzene-D5 (S)	2.00	1.77	88.5	40-110
Surrogate: Terphenyl-d14 (S)	2.00	1.54	77.0	50-135

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

Primary	SPK
Quant Method :	SIM.M
Extraction Date :	10/26/10
Analysis Date :	10/27/10
Instrument :	Linus
Run :	1027L004
Initials :	LF

Printed: 11/16/10 9:45:11 AM

APPL Standard LCS

# Matrix Spike Recoveries

## EPA 8270D SIM

APPL ID: 101026W-25117 MS - 149081

APPL Inc.

Batch ID: #SIMHC-101026A

908 North Temperance Avenue

Sample ID: AY25117

Clovis, CA 93611

Client ID: ES007

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	Limits
1-methylnaphthalene	3.88	ND	2.10	2.58	54.1	66.5	45-105	20.5	25
2-Methylnaphthalene	3.88	ND	2.05	2.41	52.8	62.1	45-105	16.1	25
Acenaphthene	3.88	ND	2.04	2.47	52.6	63.7	45-110	19.1	25
Acenaphthylene	3.88	ND	2.08	2.44	53.6	62.9	50-105	15.9	25
Anthracene	3.88	ND	2.28	2.48	58.8	63.9	55-110	8.4	25
Benzo(a)anthracene	3.88	ND	2.72	3.23	70.1	83.2	55-110	17.1	25
Benzo(a)pyrene	3.88	ND	2.22	2.58	57.2	66.5	55-110	15.0	25
Benzo(b)fluoranthene	3.88	ND	3.34	3.67	86.1	94.6	45-120	9.4	25
Benzo(ghi)perylene	3.88	ND	2.33	3.20	60.1	82.5	40-125	31.5 #	25
Benzo(k)fluoranthene	3.88	ND	2.38	2.48	61.3	63.9	45-125	4.1	25
Chrysene	3.88	ND	2.11	2.47	54.4 #	63.7	55-110	15.7	25
Dibenz(a,h)anthracene	3.88	ND	2.92	3.44	75.3	88.7	40-125	16.4	25
Fluoranthene	3.88	ND	2.30	2.52	59.3	64.9	55-115	9.1	25
Fluorene	3.88	ND	2.32	2.71	59.8	69.8	50-110	15.5	25
Indeno(1,2,3-cd)pyrene	3.88	ND	2.73	3.08	70.4	79.4	45-125	12.0	25
Naphthalene	3.88	ND	2.05	2.14	52.8	55.2	40-100	4.3	25
Phenanthrene	3.88	ND	2.30	2.47	59.3	63.7	50-115	7.1	25
Pyrene	3.88	ND	2.40	2.66	61.9	68.6	50-130	10.3	25
Surrogate: 2-Fluorobiphenyl (S)	1.94	NA	1.03	1.19	53.1	61.3	50-110		
Surrogate: Nitrobenzene-D5 (S)	1.94	NA	1.62	1.67	83.5	86.1	40-110		
Surrogate: Terphenyl-d14 (S)	1.94	NA	1.38	1.49	71.1	76.8	50-135		

# = Recovery is outside QC limits.

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

Primary	SPK	DUP
Quant Method :	SIM.M	SIM.M
Extraction Date :	10/26/10	10/26/10
Analysis Date :	10/27/10	10/27/10
Instrument :	Linus	Linus
Run :	1027L010	1027L011
Initials :	LF	

Printed: 11/16/10 9:45:26 AM

APPL MSD SCII

**8270D-SIM****Form 4****Blank Summary**

Lab Name: APPL, Inc.  
 Case No: 62931  
 Matrix: WATER  
 Blank ID: 101026A-BLK

SDG No: 62931  
 Date Analyzed: 10/27/10  
 Instrument: Linus  
 Time Analyzed: 1900

<b>APPL ID.</b>	<b>Client Sample No.</b>	<b>File ID.</b>	<b>Date Analyzed</b>
101026A-BLK	Blank	1027L003	10/27/10 1900
101026A-LCS	Lab Control Spike	1027L004	10/27/10 1926
AY25113	ES004	1027L007	10/27/10 2042
AY25115	ES005	1027L008	10/27/10 2107
AY25116	ES006	1027L009	10/27/10 2132
101026A-MS	Matrix Spike	1027L010	10/27/10 2158
101026A-MSD	Matrix SpikeD	1027L011	10/27/10 2223
AY25117	ES007	1027L012	10/27/10 2248
AY25118	ES008	1027L013	10/27/10 2313

Comments: Batch: #SIMHC-101026A

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 62931  
Matrix: Water  
ID: SVTUNE 04-12-10

SDG No: 62931  
Date Analyzed: 10/27/10  
Instrument: Linus  
Time Analyzed: 18:17

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Blank	101026A BLK 1/1000	1027L003.D 10/27/10 19:00
2	Lab Control Spike	101026A LCS-1 1/1000	1027L004.D 10/27/10 19:26
3	ES004	AY25113W06 1/1020	1027L007.D 10/27/10 20:42
4	ES005	AY25115W07 1/1000	1027L008.D 10/27/10 21:07
5	ES006	AY25116W05 1/1000	1027L009.D 10/27/10 21:32
6	Matrix Spike	AY25117W17 MS-1 1/10	1027L010.D 10/27/10 21:58
7	Matrix Spike Dup	AY25117W19 MSD-1 1/1	1027L011.D 10/27/10 22:23
8	ES007	AY25117W14 1/1030	1027L012.D 10/27/10 22:48
9	ES008	AY25118W03 1/1040	1027L013.D 10/27/10 23:13
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

51	29.95 - 60% of mass 198	46.5
68	0 - 2.05% of mass 69	0.9
70	0 - 2% of mass 69	0.6
127	40 - 60% of mass 198	50.9
197	0 - 1% of mass 198	0.0
198	100 - 100% of mass 198	100.0
199	5 - 9% of mass 198	7.1
275	10 - 30% of mass 198	27.7
365	1 - 100% of mass 198	4.4
441	0.01 - 100% of mass 443	75.3
442	40 - 150% of mass 198	52.0
443	17 - 23% of mass 442	19.6

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc.

Contract: Review

Lab Code: \_\_\_\_\_

SDG No.: 62931

Lab File ID (Standard): 0707L006.D

Date Analyzed: 7 Jul 10 13:15

Instrument ID: Linus

Time Analyzed: 7 Jul 10 13:15

GC Column: \_\_\_\_\_

ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

		Naphthalene-D8(IS)	Acenaphthene-D10(IS)	Phenanthrene-D10(IS)			
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD		1579	6.01	783	8.01	1309	9.74
UPPER LIMIT		3158	6.51	1566	8.51	2618	10.24
LOWER LIMIT		790	5.51	392	7.51	655	9.24
SAMPLE							
NO.							
01	101026A BLK 1/1000	1637	5.99	832	8.00	1598	9.73
02	101026A LCS-1 1/1000	1501	5.99	771	8.00	1524	9.73
03	AY25113W06 1/1020	1570	5.99	754	8.00	1512	9.73
04	AY25115W07 1/1000	1459	5.99	738	8.00	1469	9.73
05	AY25116W05 1/1000	1491	5.99	770	8.00	1521	9.73
06	AY25117W17 MS-1 1/1	1644	5.99	921	7.99	1671	9.73
07	AY25117W19 MSD-1 1/	1668	5.99	894	8.00	1686	9.73
08	AY25117W14 1/1030	1744	5.99	917	8.00	1686	9.73
09	AY25118W03 1/1040	1805	5.99	953	8.00	1724	9.73
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.: 62931

Lab File ID (Standard): 0707L006.D

Date Analyzed: 7 Jul 10 13:15

Instrument ID: Linus

Time Analyzed: 7 Jul 10 13:15

GC Column: \_\_\_\_\_

ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

Chrysene-D12(IS)		Perylene-D12(IS)					
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12 HOUR STD	2313	12.80	1919	14.38			
UPPER LIMIT	4626	13.30	3838	14.88			
LOWER LIMIT	1157	12.30	960	13.88			
SAMPLE NO.							
01 101026A BLK 1/1000	2732	12.81	2366	14.42			
02 101026A LCS-1 1/1000	2642	12.81	2298	14.41			
03 AY25113W06 1/1020	2606	12.81	2202	14.41			
04 AY25115W07 1/1000	2598	12.81	2242	14.41			
05 AY25116W05 1/1000	2595	12.81	2213	14.41			
06 AY25117W17 MS-1 1/1	2832	12.81	2484	14.41			
07 AY25117W19 MSD-1 1/	2782	12.81	2339	14.41			
08 AY25117W14 1/1030	2877	12.81	2573	14.41			
09 AY25118W03 1/1040	2948	12.81	2720	14.41			
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

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

**APPL, INC.**

# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES004**  
Sample Collection Date: 10/19/10

ARF: 62931  
**APPL ID: AY25113**  
QCG: #SIMHC-101026A-149081

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	10/26/10	10/27/10
8270D-SIM	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Surrogate: 2-Fluorobiphenyl (S)	55.2	50-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Nitrobenzene-D5 (S)	75.6	40-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Terphenyl-d14 (S)	68.8	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M  
Run #: 1027L007  
Instrument: Linus  
Sequence: L100707  
Dilution Factor: 1  
Initials: LF

Printed: 11/16/10 9:45:35 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L100707\1027L007.D  
 Acq On : 27 Oct 10 20:42  
 Sample : AY25113W06 1/1020  
 Misc :

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

Quant Time: Nov 16 8:47 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	5.99	136	1570	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.00	164	754	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.73	188	1512	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.81	240	2606	2.50000	ppb	0.00
21) Perylene-D12(IS)	14.41	264	2202	2.50000	ppb	0.00

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	424	1.51190	ppb	0.00
Spiked Amount	2.000		Recovery	=	75.600%	
7) Surrogate Recovery (FBP)	7.23	172	698	1.10304	ppb	0.00
Spiked Amount	2.000		Recovery	=	55.150%	
17) Surrogate Recovery (TPH)	11.61	244	1247	1.37454	ppb	0.00
Spiked Amount	2.000		Recovery	=	68.750%	

## Target Compounds

## Qvalue

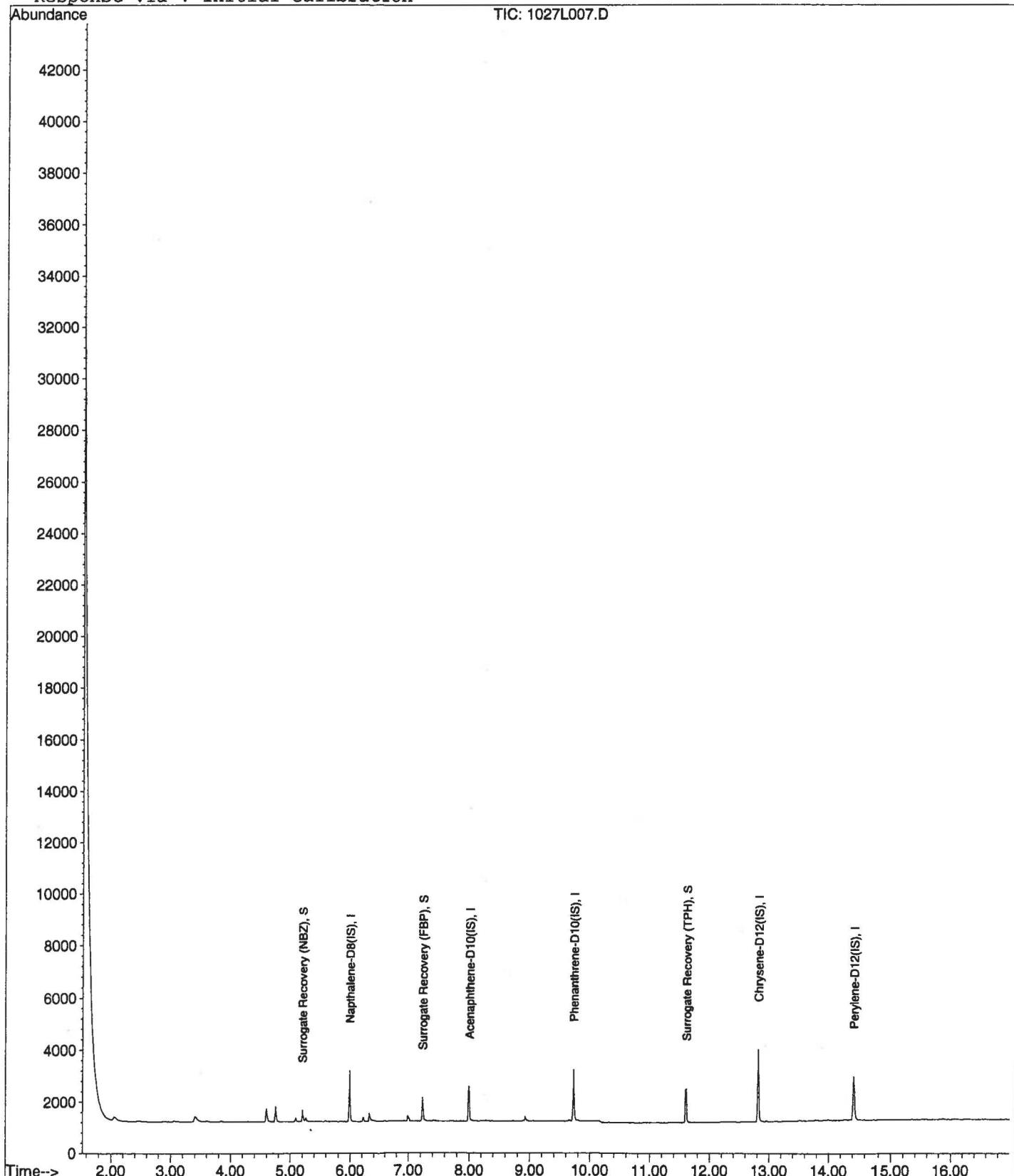
## Quantitation Report

Data File : M:\LINUS\DATA\L100707\1027L007.D Vial: 7  
Acq On : 27 Oct 10 20:42 Operator: LF  
Sample : AY25113W06 1/1020 Inst : Linus  
Misc :

Quant Time: Nov 16 8:47 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Nov 01 09:51:01 2010  
Response via : Initial Calibration



# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES005**  
Sample Collection Date: 10/20/10

ARF: 62931  
**APPL ID: AY25115**  
QCG: #SIMHC-101026A-149081

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	10/26/10	10/27/10
8270D-SIM	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Surrogate: 2-Fluorobiphenyl (S)	54.8	50-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Nitrobenzene-D5 (S)	88.5	40-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Terphenyl-d14 (S)	71.8	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M  
Run #: 1027L008  
Instrument: Linus  
Sequence: L100707  
Dilution Factor: 1  
Initials: LF

Printed: 11/16/10 9:45:35 AM

APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L100707\1027L008.D                          Vial: 8  
 Acq On : 27 Oct 10 21:07                                  Operator: LF  
 Sample : AY25115W07 1/1000                                  Inst : Linus  
 Misc :    Multiplr: 1.00

Quant Time: Nov 16 8:47 2010                                  Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Napthalene-D8 (IS)	5.99	136	1459	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	738	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1469	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2598	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2242	2.50000	ppb	0.00

System Monitoring Compounds						
2) Surrogate Recovery (NBZ)	5.20	82	461	1.76889	ppb	0.00
Spiked Amount	2.000		Recovery	=	88.450%	
7) Surrogate Recovery (FBP)	7.23	172	678	1.09467	ppb	0.00
Spiked Amount	2.000		Recovery	=	54.750%	
17) Surrogate Recovery (TPH)	11.61	244	1299	1.43627	ppb	0.00
Spiked Amount	2.000		Recovery	=	71.800%	

Target Compounds		Qvalue
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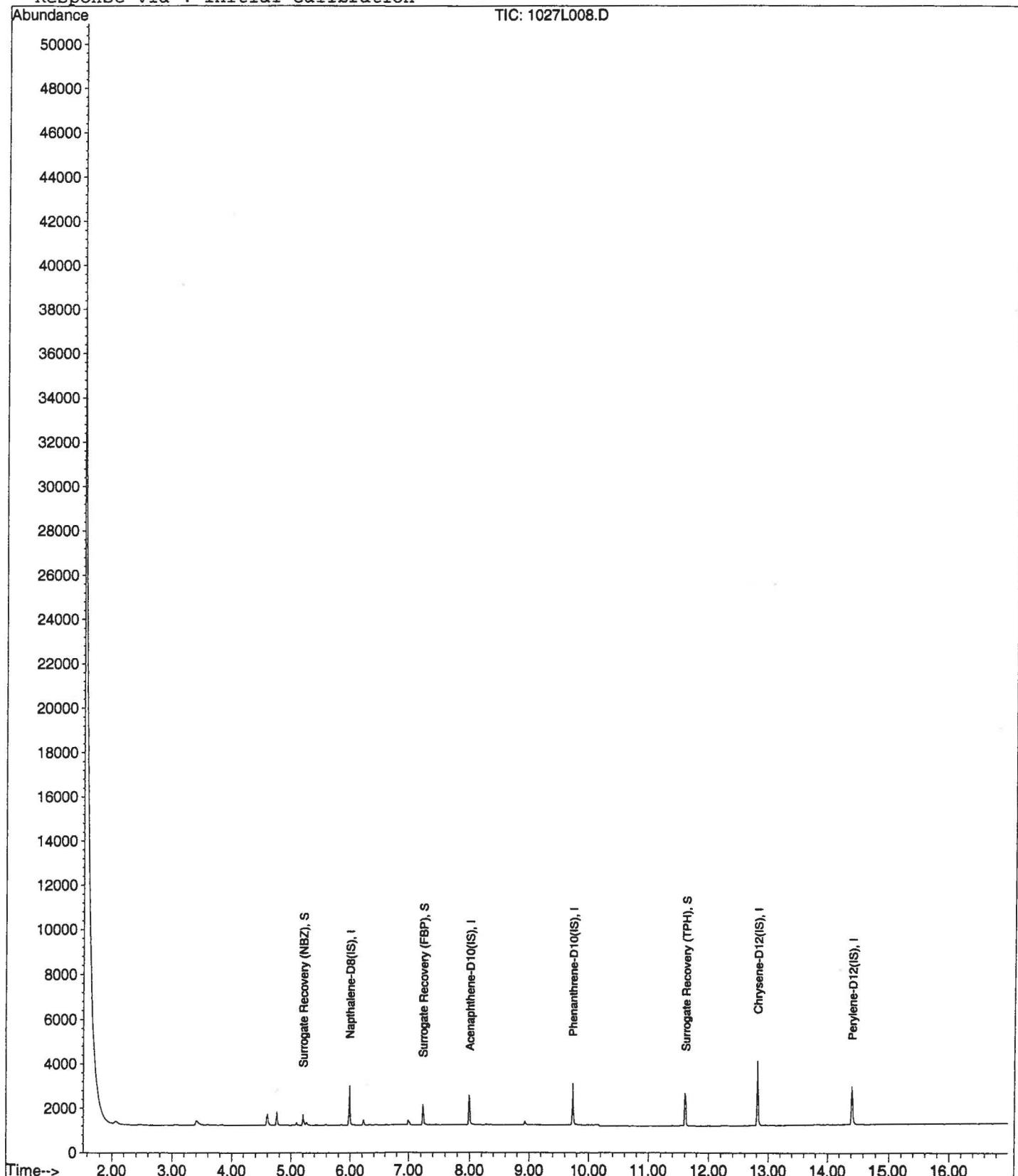
## Quantitation Report

Data File : M:\LINUS\DATA\L100707\1027L008.D Vial: 8  
Acq On : 27 Oct 10 21:07 Operator: LF  
Sample : AY25115W07 1/1000 Inst : Linus  
Misc :

Quant Time: Nov 16 8:47 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Nov 01 09:51:01 2010  
Response via : Initial Calibration



# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES006**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25116**  
QCG: #SIMHC-101026A-149081

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	10/26/10	10/27/10
8270D-SIM	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Surrogate: 2-Fluorobiphenyl (S)	54.7	50-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Nitrobenzene-D5 (S)	77.6	40-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Terphenyl-d14 (S)	74.4	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M  
Run #: 1027L009  
Instrument: Linus  
Sequence: L100707  
Dilution Factor: 1  
Initials: LF

Printed: 11/16/10 9:45:35 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L100707\1027L009.D Vial: 9  
 Acq On : 27 Oct 10 21:32 Operator: LF  
 Sample : AY25116W05 1/1000 Inst : Linus  
 Misc :

Quant Time: Nov 16 8:47 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	5.99	136	1491	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	770	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1521	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2595	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2213	2.50000	ppb	0.00

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	413	1.55070	ppb	0.00
Spiked Amount	2.000		Recovery	=	77.550%	
7) Surrogate Recovery (FBP)	7.23	172	706	1.09250	ppb	0.00
Spiked Amount	2.000		Recovery	=	54.650%	
17) Surrogate Recovery (TPH)	11.60	244	1343	1.48664	ppb	-0.01
Spiked Amount	2.000		Recovery	=	74.350%	

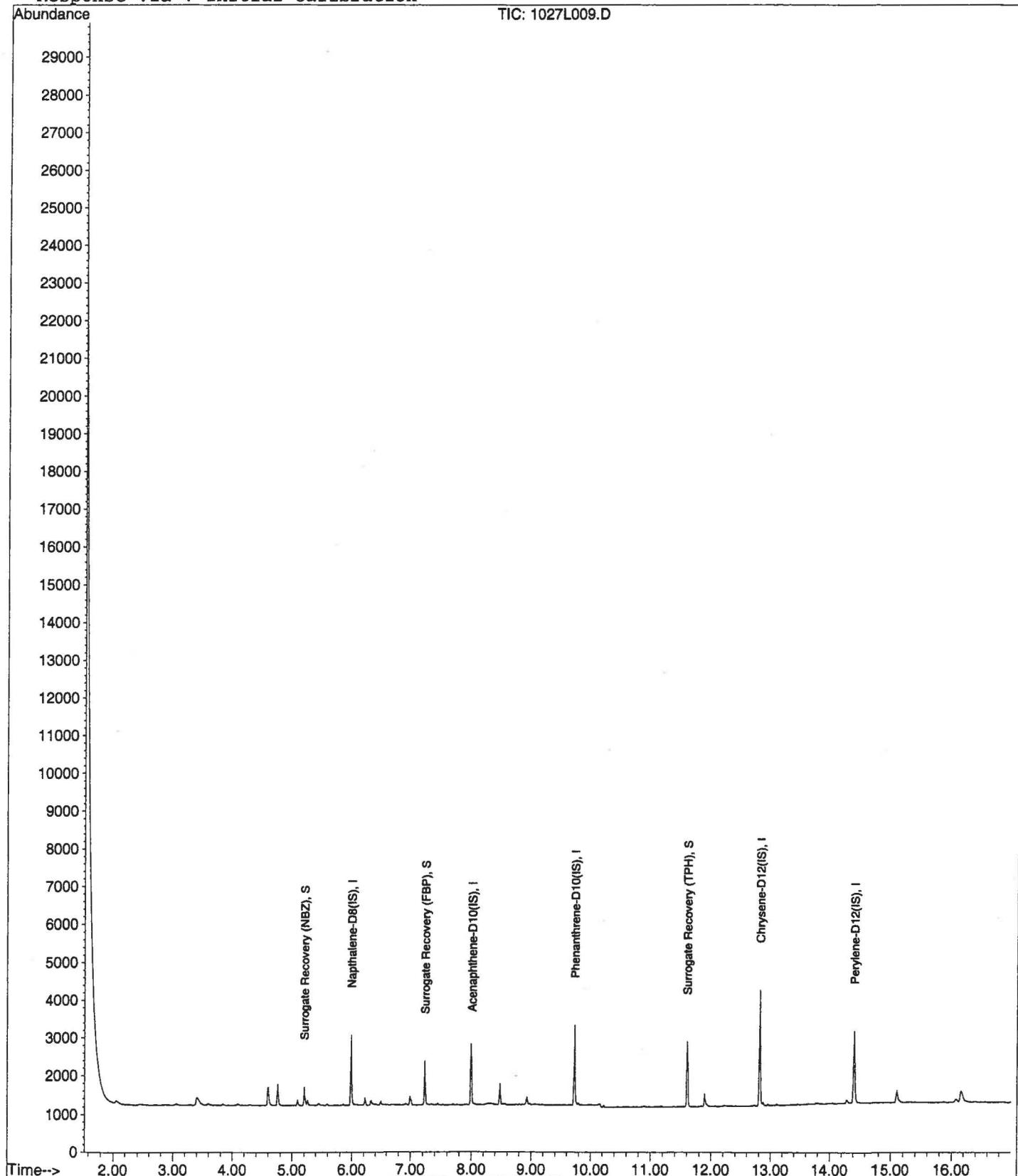
Target Compounds	Qvalue
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## QUANTIFICATION REPORT

Data File : M:\LINUS\DATA\L100707\1027L009.D Vial: 9  
Acq On : 27 Oct 10 21:32 Operator: LF  
Sample : AY25116W05 1/1000 Inst : Linus  
Misc :

Quant Time: Nov 16 8:47 2010 Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Nov 01 09:51:01 2010  
Response via : Initial Calibration



# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 62931

**Sample ID: ES007**

**APPL ID: AY25117**

Sample Collection Date: 10/21/10

QCG: #SIMHC-101026A-149081

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	10/26/10	10/27/10
8270D-SIM	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Surrogate: 2-Fluorobiphenyl (S)	53.6	50-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Nitrobenzene-D5 (S)	78.5	40-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Terphenyl-d14 (S)	69.7	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M  
Run #: 1027L012  
Instrument: Linus  
Sequence: L100707  
Dilution Factor: 1  
Initials: LF

Printed: 11/16/10 9:45:35 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L100707\1027L012.D Vial: 12  
 Acq On : 27 Oct 10 22:48 Operator: LF  
 Sample : AY25117W14 1/1030 Inst : Linus  
 Misc : Multiplr: 0.97

Quant Time: Nov 16 8:52 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	5.99	136	1744	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	917	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1686	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2877	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2573	2.50000	ppb	0.00

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	489	1.52398	ppb	0.00
Spiked Amount	1.942		Recovery	=	78.486%	
7) Surrogate Recovery (FBP)	7.23	172	824	1.03951	ppb	0.00
Spiked Amount	1.942		Recovery	=	53.560%	
17) Surrogate Recovery (TPH)	11.61	244	1397	1.35420	ppb	0.00
Spiked Amount	1.942		Recovery	=	69.731%	

## Target Compounds

## Qvalue

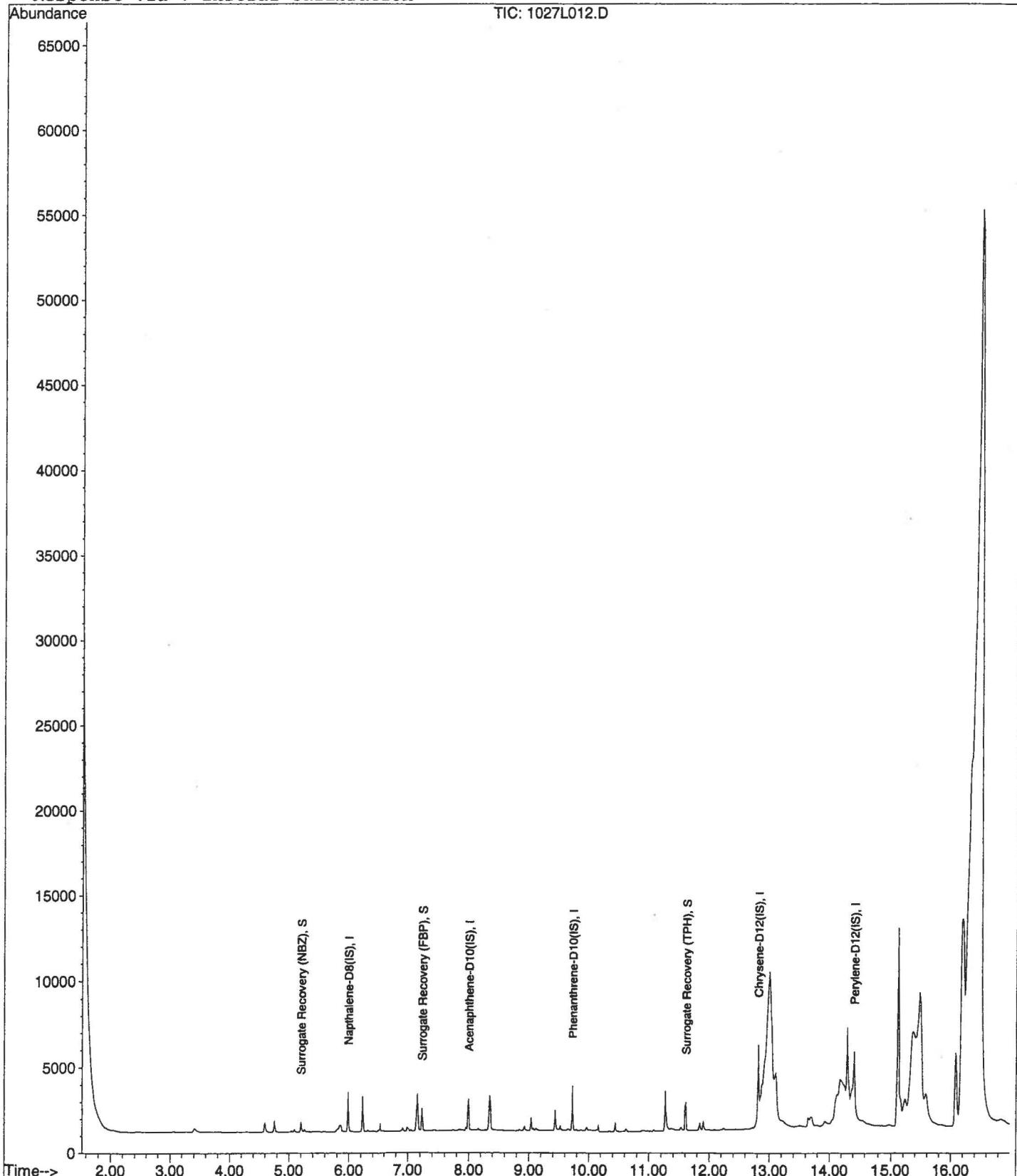
## Quantitation Report

Data File : M:\LINUS\DATA\L100707\1027L012.D Vial: 12  
Acq On : 27 Oct 10 22:48 Operator: LF  
Sample : AY25117W14 1/1030 Inst : Linus  
Misc : Multiplr: 0.97

Quant Time: Nov 16 8:52 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Nov 01 09:51:01 2010  
Response via : Initial Calibration



# EPA 8270D SIM

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES008**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25118**  
QCG: #SIMHC-101026A-149081

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	10/26/10	10/27/10
8270D-SIM	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
8270D-SIM	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
8270D-SIM	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
8270D-SIM	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
8270D-SIM	Surrogate: 2-Fluorobiphenyl (S)	53.8	50-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Nitrobenzene-D5 (S)	78.9	40-110			%	10/26/10	10/27/10
8270D-SIM	Surrogate: Terphenyl-d14 (S)	71.7	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M  
Run #: 1027L013  
Instrument: Linus  
Sequence: L100707  
Dilution Factor: 1  
Initials: LF

Printed: 11/16/10 9:45:35 AM  
APPL-F1-SC-NoMC-REG MDLs

Data File : M:\LINUS\DATA\L100707\1027L013.D Vial: 13  
 Acq On : 27 Oct 10 23:13 Operator: LF  
 Sample : AY25118W03 1/1040 Inst : Linus  
 Misc :

Quant Time: Nov 16 8:53 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	5.99	136	1805	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	953	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1724	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2948	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2720	2.50000	ppb	0.00

System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	509	1.51797	ppb	0.00
Spiked Amount	1.923		Recovery	=	78.936%	
7) Surrogate Recovery (FBP)	7.23	172	861	1.03511	ppb	0.00
Spiked Amount	1.923		Recovery	=	53.820%	
17) Surrogate Recovery (TPH)	11.61	244	1471	1.37822	ppb	0.00
Spiked Amount	1.923		Recovery	=	71.656%	

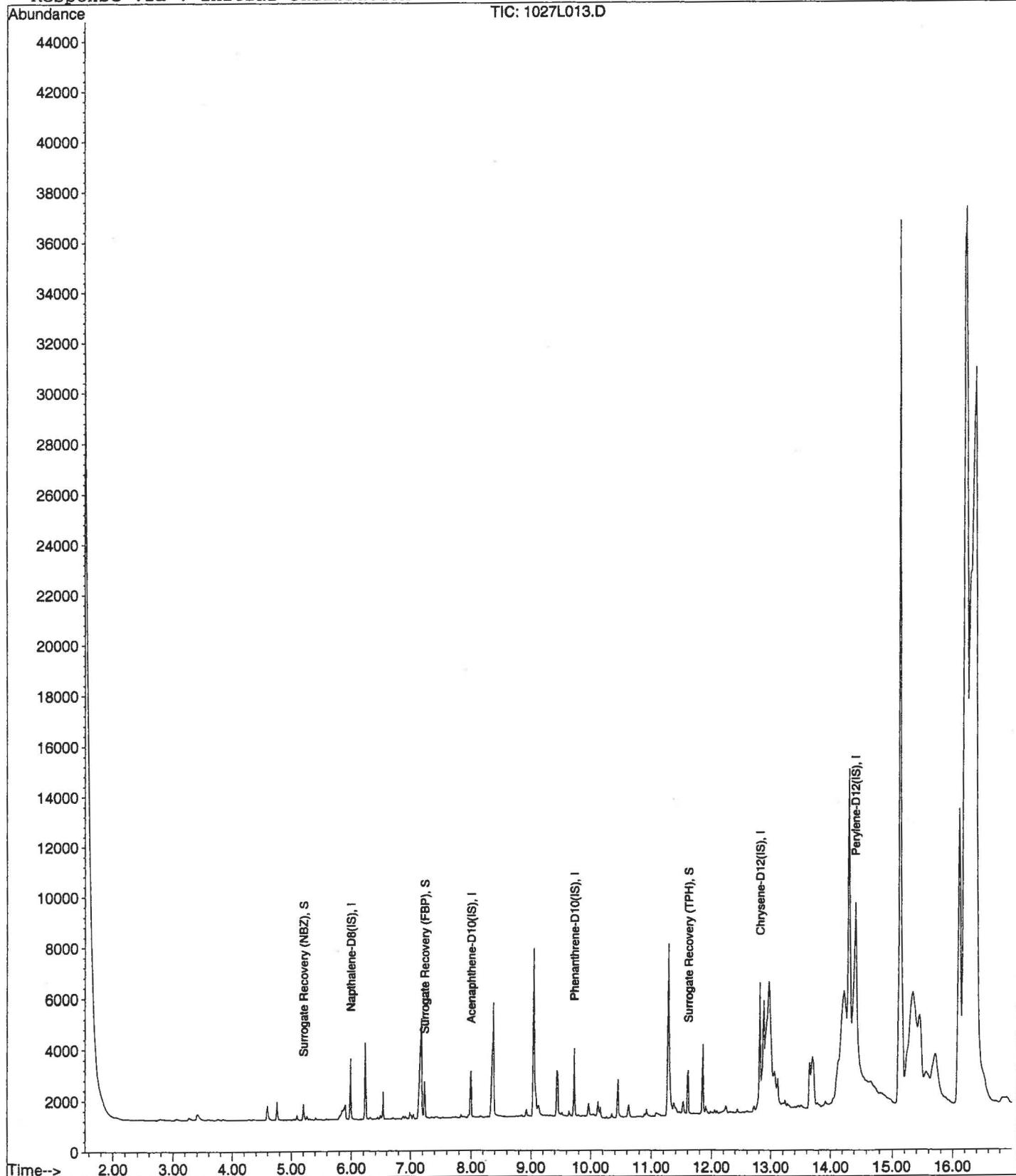
Target Compounds	Qvalue
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Data File : M:\LINUS\DATA\L100707\1027L013.D Vial: 13  
 Acq On : 27 Oct 10 23:13 Operator: LF  
 Sample : AY25118W03 1/1040 Inst : Linus  
 Misc :

Quant Time: Nov 16 8:53 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration



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

**APPL, INC.**

EPA 8270C SIM

## **Form 6**

### **Initial Calibration**

Lab Name: APPL, Inc.

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

**Matrix:**

SDG No: 0293

Initial Cal. Date: 07/07/10

## **Instrument: Linus**

**Initials:**

## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L002.D Vial: 2  
 Acq On : 7 Jul 10 11:33 Operator: LF  
 Sample : 0.1ug/ml PAH 7-07-10 Inst : Linus  
 Misc :

Quant Time: Jul 7 16:35 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 16:33:56 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.01	136	1605	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.01	164	782	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.74	188	1375	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2175	2.50000	ppb	0.01
21) Perylene-D12 (IS)	14.38	264	1748	2.50000	ppb	0.00

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	45	0.14653	ppb	0.00
Spiked Amount	2.000		Recovery	=	7.350%	
7) Surrogate Recovery (FBP)	7.27	172	91	0.12773	ppb	0.00
Spiked Amount	2.000		Recovery	=	6.400%	
17) Surrogate Recovery (TPH)	11.62	244	105	0.12829	ppb	0.00
Spiked Amount	2.000		Recovery	=	6.400%	

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.03	128	112	0.11468	ppb	100
4) 2-Methylnaphthalene	6.83	142	75	0.12315	ppb	97
5) 1-Methylnaphthalene	6.94	142	53	0.09039	ppb	97
8) Acenaphthylene	7.86	152	122	0.12975	ppb	98
9) Acenaphthene	8.05	154	64	0.11993	ppb	# 86
10) Fluorene	8.65	166	76	0.11993	ppb	94
12) Phenanthrene	9.76	178	100	0.10523	ppb	99
13) Anthracene	9.82	178	103	0.11906	ppb	98
14) Fluoranthene	11.14	202	167	0.11702	ppb	97
16) Pyrene	11.40	202	155	0.11486	ppb	96
18) Benz (a) anthracene	12.80	228	134	0.12200	ppb	99
19) Chrysene	12.83	228	134	0.10365	ppb	98
20) Indeno (1,2,3-cd) pyrene	15.77	276	109	0.10852	ppb	# 98
22) Benzo (b) fluoranthene	13.96	252	108	0.10926	ppb	96
23) Benzo (k) fluoranthene	13.99	252	148	0.12528	ppb	# 91
24) Benzo (a) pyrene	14.31	252	121	0.11777	ppb	97
25) Dibenz (a,h) anthracene	15.81	278	69	0.09436	ppb	94
26) Benzo (g,h,i) perylene	16.17	276	97	0.10984	ppb	94

## Quantitation Report

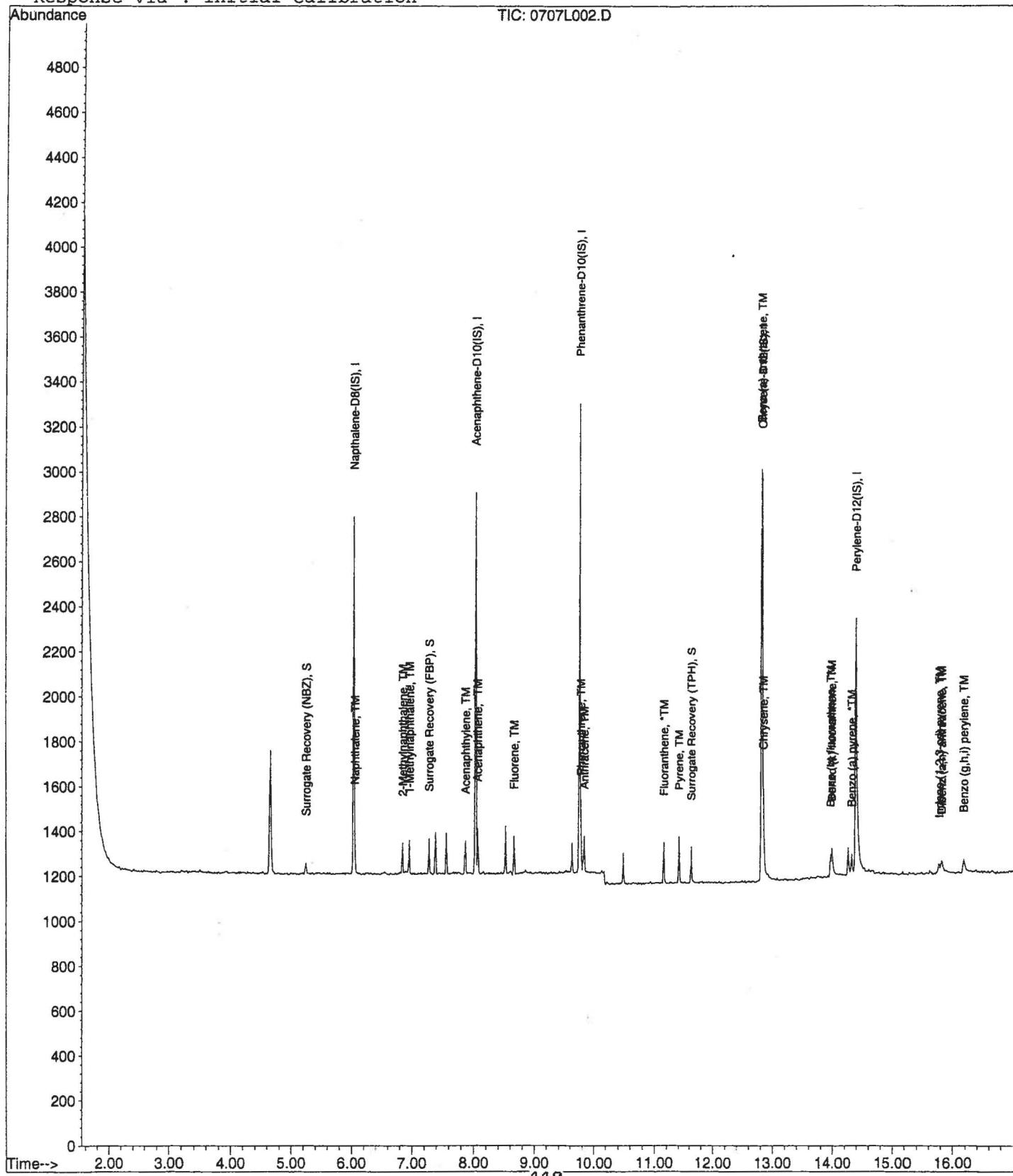
Data File : M:\LINUS\DATA\L100707\0707L002.D  
 Acq On : 7 Jul 10 11:33  
 Sample : 0.1ug/ml PAH 7-07-10  
 Misc :

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

Quant Time: Jul 7 16:35 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L003.D Vial: 3  
 Acq On : 7 Jul 10 11:59 Operator: LF  
 Sample : 0.2ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jul 7 13:07 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc Units	Dev (Min)
1) Napthalene-D8 (IS)	6.01	136	1608	2.50000 ppb	0.00
6) Acenaphthene-D10 (IS)	8.01	164	762	2.50000 ppb	0.00
11) Phenanthrene-D10 (IS)	9.74	188	1348	2.50000 ppb	0.00
15) Chrysene-D12 (IS)	12.80	240	2209	2.50000 ppb	0.00
21) Perylene-D12 (IS)	14.38	264	1791	2.50000 ppb	0.00
<b>System Monitoring Compounds</b>					
2) Surrogate Recovery (NBZ)	5.23	82	69	0.20850 ppb	0.00
Spiked Amount 2.000			Recovery = 10.450%		
7) Surrogate Recovery (FBP)	7.27	172	166	0.21434 ppb	0.00
Spiked Amount 2.000			Recovery = 10.700%		
17) Surrogate Recovery (TPH)	11.62	244	195	0.21060 ppb	0.00
Spiked Amount 2.000			Recovery = 10.550%		
<b>Target Compounds</b>					
3) Naphthalene	6.04	128	238	0.21070 ppb	99
4) 2-Methylnaphthalene	6.83	142	139	0.20788 ppb	97
5) 1-Methylnaphthalene	6.94	142	135	0.20906 ppb	99
8) Acenaphthylene	7.86	152	208	0.21285 ppb	99
9) Acenaphthene	8.05	154	124	0.21650 ppb	83
10) Fluorene	8.65	166	140	0.20492 ppb	96
12) Phenanthrene	9.76	178	219	0.21287 ppb	99
13) Anthracene	9.82	178	196	0.21385 ppb	99
14) Fluoranthene	11.14	202	316	0.21233 ppb	# 93
16) Pyrene	11.40	202	321	0.21105 ppb	# 90
18) Benz (a) anthracene	12.80	228	248	0.20903 ppb	98
19) Chrysene	12.83	228	321	0.20903 ppb	95
20) Indeno (1,2,3-cd) pyrene	15.77	276	188	0.19891 ppb	# 99
22) Benzo (b) fluoranthene	13.96	252	213	0.20907 ppb	97
23) Benzo (k) fluoranthene	13.99	252	255	0.20565 ppb	# 95
24) Benzo (a) pyrene	14.31	252	226	0.20964 ppb	97
25) Dibenz (a,h) anthracene	15.81	278	132	0.19845 ppb	98
26) Benzo (g,h,i) perylene	16.17	276	184	0.21761 ppb	91

Quantitation Report

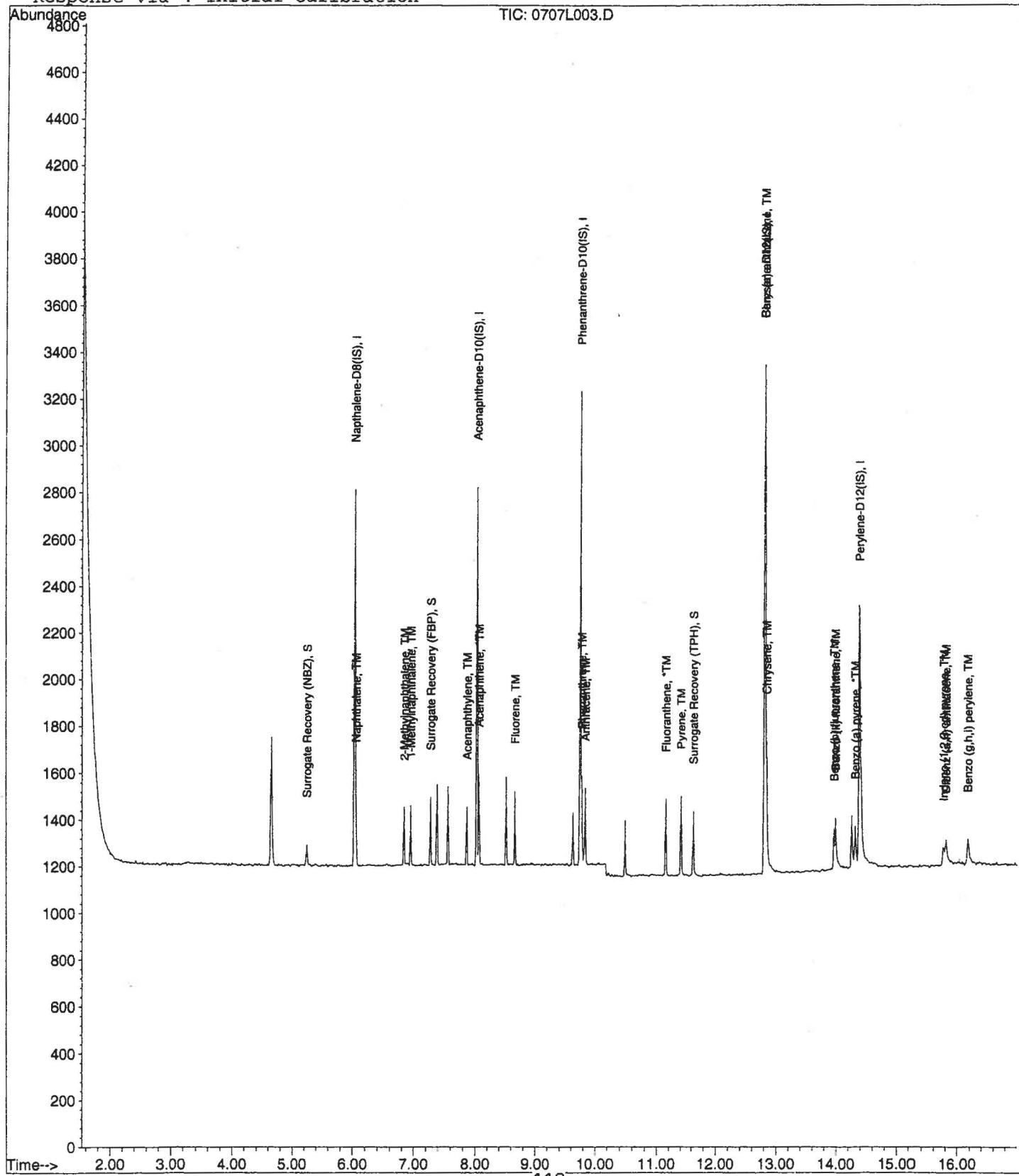
Data File : M:\LINUS\DATA\L100707\0707L003.D  
 Acq On : 7 Jul 10 11:59  
 Sample : 0.2ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 13:07 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L004.D  
 Acq On : 7 Jul 10 12:24  
 Sample : 0.5ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 13:07 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	6.01	136	1492	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.01	164	725	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.74	188	1280	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.80	240	2106	2.50000	ppb	-0.01
21) Perylene-D12 (IS)	14.38	264	1742	2.50000	ppb	0.00

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	147	0.42715	ppb	0.00
Spiked Amount	2.000		Recovery	=	21.350%	
7) Surrogate Recovery (FBP)	7.27	172	342	0.44274	ppb	0.00
Spiked Amount	2.000		Recovery	=	22.150%	
17) Surrogate Recovery (TPH)	11.62	244	418	0.45155	ppb	0.00
Spiked Amount	2.000		Recovery	=	22.600%	

## Target Compounds

				Qvalue
3) Naphthalene	6.03	128	496	0.45540 ppb 100
4) 2-Methylnaphthalene	6.83	142	298	0.46129 ppb 95
5) 1-Methylnaphthalene	6.94	142	286	0.45265 ppb 96
8) Acenaphthylene	7.86	152	435	0.43637 ppb 99
9) Acenaphthene	8.05	154	250	0.44557 ppb 83
10) Fluorene	8.65	166	317	0.45953 ppb 94
12) Phenanthrene	9.76	178	457	0.44172 ppb 99
13) Anthracene	9.82	178	405	0.44940 ppb 98
14) Fluoranthene	11.14	202	663	0.45331 ppb # 93
16) Pyrene	11.40	202	685	0.44998 ppb 94
18) Benz (a) anthracene	12.80	228	540	0.45593 ppb 98
19) Chrysene	12.83	228	699	0.45830 ppb 96
20) Indeno (1,2,3-cd) pyrene	15.77	276	453	0.47646 ppb # 99
22) Benzo (b) fluoranthene	13.96	252	473	0.46401 ppb # 97
23) Benzo (k) fluoranthene	13.99	252	579	0.44687 ppb # 95
24) Benzo (a) pyrene	14.31	252	499	0.45323 ppb 99
25) Dibenz (a,h) anthracene	15.81	278	326	0.49355 ppb 95
26) Benzo (g,h,i) perylene	16.17	276	375	0.43079 ppb 94

Quantitation Report

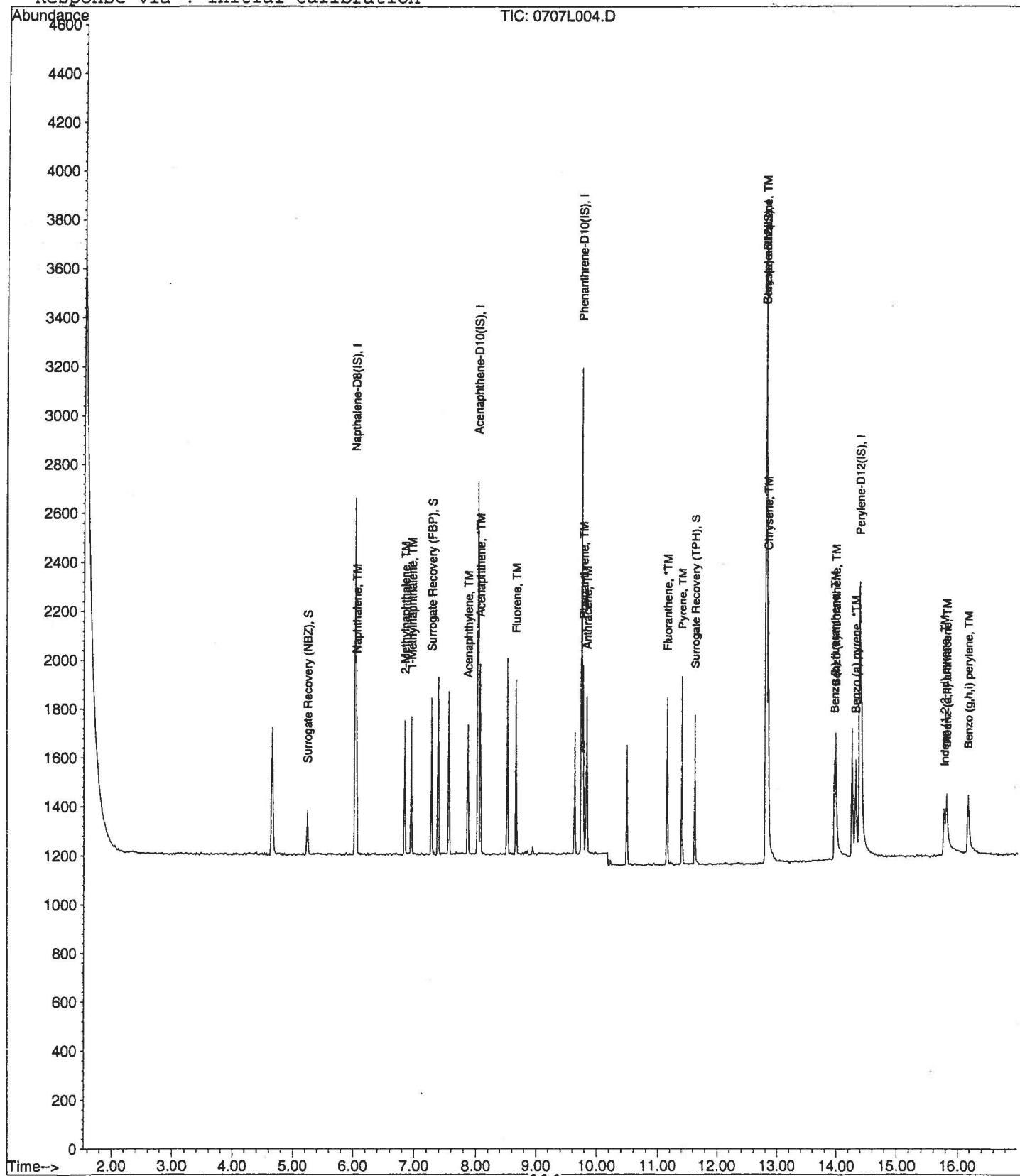
Data File : M:\LINUS\DATA\L100707\0707L004.D  
 Acq On : 7 Jul 10 12:24  
 Sample : 0.5ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 13:07 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L005.D  
 Acq On : 7 Jul 10 12:49  
 Sample : 1.0ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 13:30 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Napthalene-D8(IS)	6.01	136	1568	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.01	164	754	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.74	188	1315	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.80	240	2165	2.50000	ppb	-0.01
21) Perylene-D12(IS)	14.37	264	1770	2.50000	ppb	-0.01

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	281	0.77694	ppb	0.00
Spiked Amount 2.000			Recovery	=	38.850%	
7) Surrogate Recovery (FBP)	7.27	172	727	0.90496	ppb	0.00
Spiked Amount 2.000			Recovery	=	45.250%	
17) Surrogate Recovery (TPH)	11.62	244	854	0.89740	ppb	0.00
Spiked Amount 2.000			Recovery	=	44.850%	

## Target Compounds

				Qvalue	
3) Naphthalene	6.04	128	1011	0.88326	ppb
4) 2-Methylnaphthalene	6.83	142	594	0.87491	ppb
5) 1-Methylnaphthalene	6.94	142	583	0.87799	ppb
8) Acenaphthylene	7.86	152	911	0.87872	ppb
9) Acenaphthene	8.05	154	533	0.91341	ppb
10) Fluorene	8.65	166	627	0.87395	ppb
12) Phenanthrene	9.76	178	930	0.87497	ppb
13) Anthracene	9.82	178	831	0.89756	ppb
14) Fluoranthene	11.14	202	1355	0.90179	ppb
16) Pyrene	11.40	202	1411	0.90164	ppb
18) Benz (a) anthracene	12.80	228	1086	0.89195	ppb
19) Chrysene	12.83	228	1353	0.86293	ppb
20) Indeno (1,2,3-cd) pyrene	15.76	276	973	0.99550	ppb
22) Benzo (b) fluoranthene	13.96	252	1010	0.97512	ppb
23) Benzo (k) fluoranthene	13.99	252	1168	0.88720	ppb
24) Benzo (a) pyrene	14.31	252	1075	0.96096	ppb
25) Dibenz (a,h) anthracene	15.81	278	716	1.06684	ppb
26) Benzo (g,h,i) perylene	16.17	276	910	1.02884	ppb

## Quantitation Report

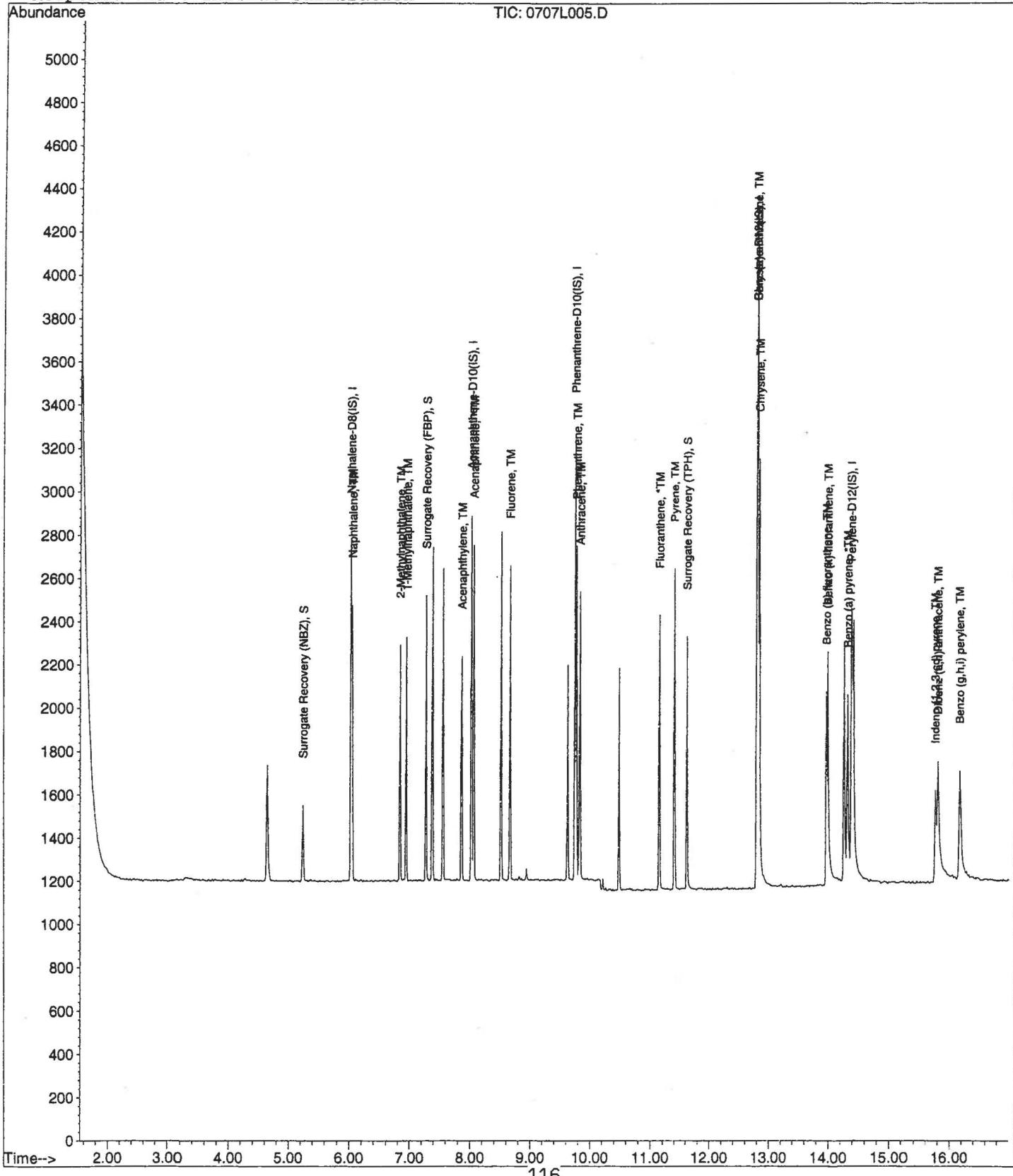
Data File : M:\LINUS\DATA\L100707\0707L005.D  
 Acq On : 7 Jul 10 12:49  
 Sample : 1.0ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 13:30 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L006.D Vial: 6  
 Acq On : 7 Jul 10 13:15 Operator: LF  
 Sample : 5.0ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jul 7 15:19 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8 (IS)	6.01	136	1579	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.01	164	783	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.74	188	1309	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.80	240	2313	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.38	264	1919	2.50000	ppb	0.01

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	1323	3.84704	ppb	0.00
Spiked Amount	2.000		Recovery	= 192.350%		
7) Surrogate Recovery (FBP)	7.27	172	3234	3.97088	ppb	0.00
Spiked Amount	2.000		Recovery	= 198.550%		
17) Surrogate Recovery (TPH)	11.62	244	4127	4.16610	ppb	0.00
Spiked Amount	2.000		Recovery	= 208.300%		

## Target Compounds

				Qvalue	
3) Naphthalene	6.04	128	4532	4.04999	ppb
4) 2-Methylnaphthalene	6.83	142	2899	4.37711	ppb
5) 1-Methylnaphthalene	6.94	142	2719	4.19417	ppb
8) Acenaphthylene	7.86	152	4369	4.18501	ppb
9) Acenaphthene	8.05	154	2531	4.26920	ppb
10) Fluorene	8.65	166	2996	4.15219	ppb
12) Phenanthrene	9.76	178	4299	4.19427	ppb
13) Anthracene	9.82	178	4010	4.46540	ppb
14) Fluoranthene	11.14	202	6707	4.59702	ppb
16) Pyrene	11.40	202	6819	4.18139	ppb
18) Benz (a) anthracene	12.79	228	5496	4.34241	ppb
19) Chrysene	12.83	228	6565	4.05822	ppb
20) Indeno (1,2,3-cd) pyrene	15.77	276	5432	5.20787	ppb
22) Benzo (b) fluoranthene	13.96	252	5082	4.55386	ppb
23) Benzo (k) fluoranthene	13.99	252	6157	4.43883	ppb
24) Benzo (a) pyrene	14.31	252	5504	4.58282	ppb
25) Dibenz (a,h) anthracene	15.81	278	4233	5.72183	ppb
26) Benzo (g,h,i) perylene	16.17	276	5013	5.19018	ppb

## Quantitation Report

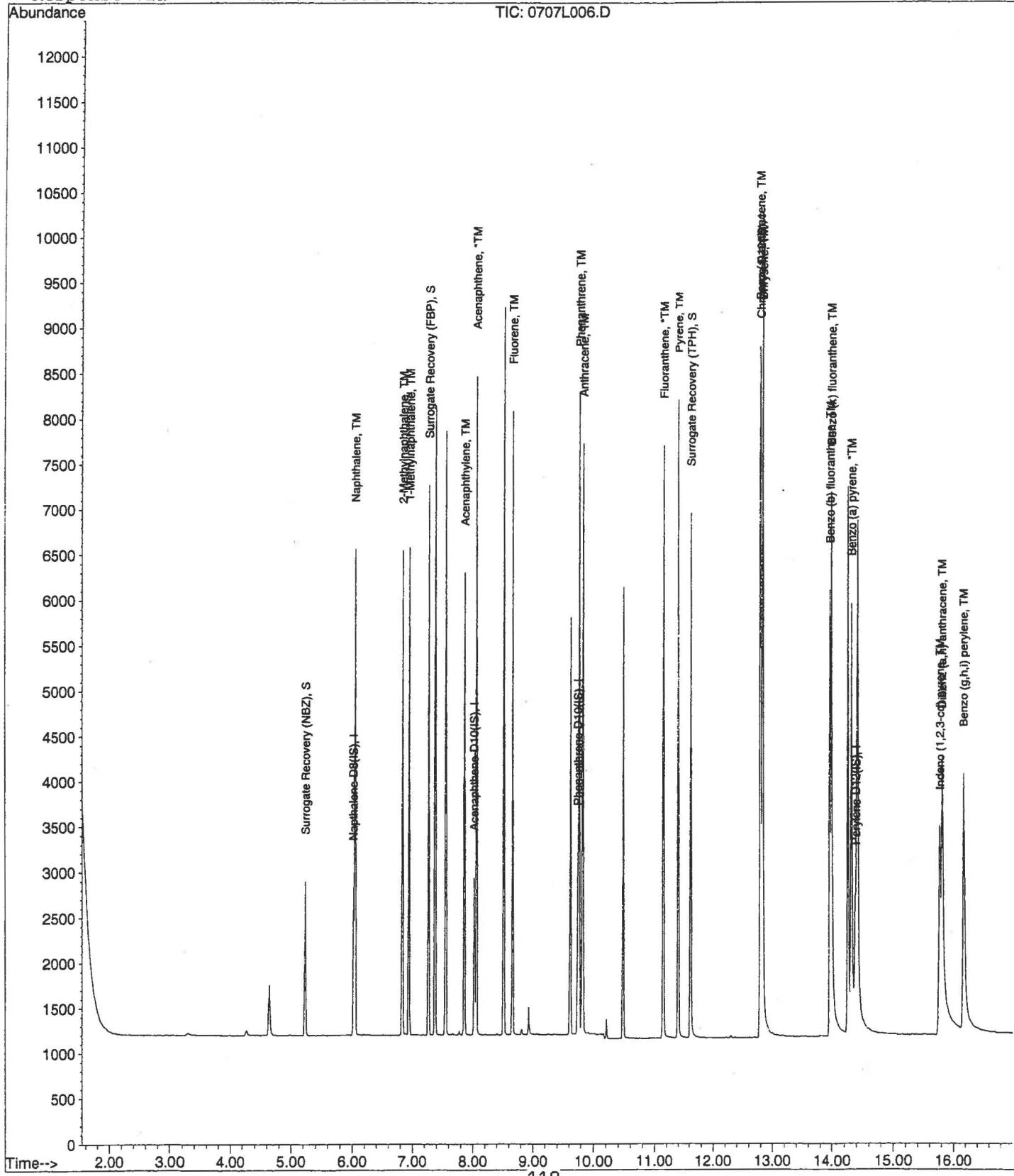
Data File : M:\LINUS\DATA\L100707\0707L006.D  
 Acq On : 7 Jul 10 13:15  
 Sample : 5.0ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 15:19 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L007.D  
 Acq On : 7 Jul 10 13:40  
 Sample : 10ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 16:27 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.01	136	1464	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.01	164	724	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.74	188	1226	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.80	240	2244	2.50000	ppb	0.00
21) Perylene-D12(IS)	14.38	264	1858	2.50000	ppb	0.01

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	2445	7.66808	ppb	0.00
Spiked Amount	2.000		Recovery	= 383.400%		
7) Surrogate Recovery (FBP)	7.27	172	6197	8.22908	ppb	0.00
Spiked Amount	2.000		Recovery	= 411.450%		
17) Surrogate Recovery (TPH)	11.62	244	7941	8.26273	ppb	0.00
Spiked Amount	2.000		Recovery	= 413.150%		

## Target Compounds

				Qvalue	
3) Naphthalene	6.04	128	8121	7.82734	ppb
4) 2-Methylnaphthalene	6.83	142	5069	8.25472	ppb
5) 1-Methylnaphthalene	6.94	142	4865	8.09396	ppb
8) Acenaphthylene	7.86	152	7835	8.11664	ppb
9) Acenaphthene	8.05	154	4470	8.15427	ppb
10) Fluorene	8.65	166	5436	8.14776	ppb
12) Phenanthrene	9.76	178	7727	8.04914	ppb
13) Anthracene	9.82	178	7378	8.77210	ppb
14) Fluoranthene	11.14	202	12301	9.00197	ppb
16) Pyrene	11.40	202	12793	8.08585	ppb
18) Benz (a) anthracene	12.80	228	10191	8.29954	ppb
19) Chrysene	12.83	228	13212	8.41827	ppb
20) Indeno (1,2,3-cd) pyrene	15.77	276	10438	10.31503	ppb
22) Benzo (b) fluoranthene	13.96	252	9607	8.89123	ppb
23) Benzo (k) fluoranthene	13.99	252	12614	9.39250	ppb
24) Benzo (a) pyrene	14.31	252	10664	9.17073	ppb
25) Dibenz (a,h) anthracene	15.81	278	8219	11.47454	ppb
26) Benzo (g,h,i) perylene	16.18	276	9335	9.98224	ppb

## Quantitation Report

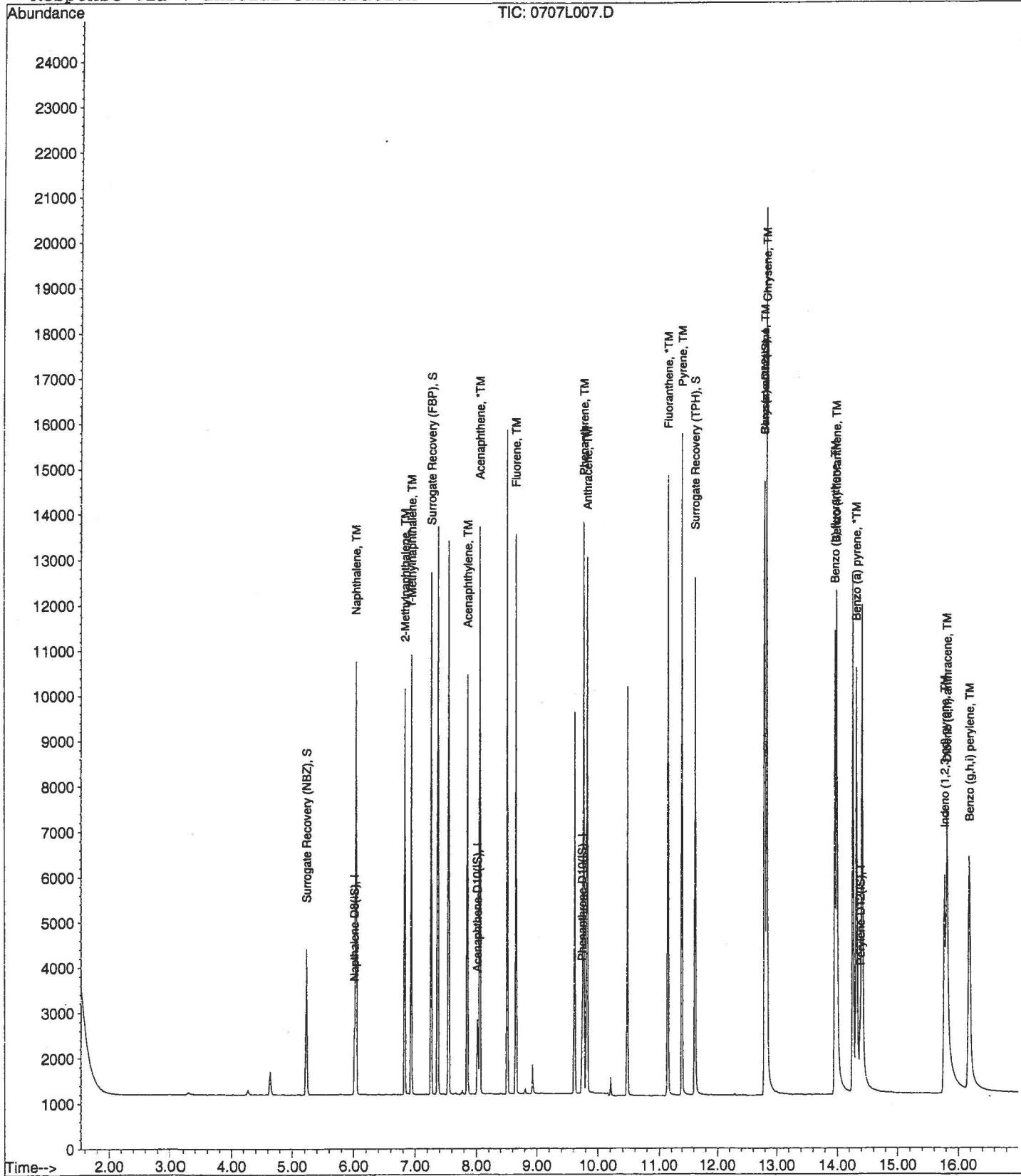
Data File : M:\LINUS\DATA\L100707\0707L007.D  
 Acq On : 7 Jul 10 13:40  
 Sample : 10ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 16:27 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L008.D Vial: 8  
 Acq On : 7 Jul 10 14:06 Operator: LF  
 Sample : 50ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jul 7 16:26 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	6.01	136	1382	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.03	164	675	2.50000	ppb	0.01
11) Phenanthrene-D10(IS)	9.74	188	1196	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.81	240	2195	2.50000	ppb	0.01
21) Perylene-D12(IS)	14.38	264	1840	2.50000	ppb	0.01

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
2) Surrogate Recovery (NBZ)	5.23	82	11392	37.84783	ppb	0.00
Spiked Amount 2.000			Recovery	= 1892.400%		
7) Surrogate Recovery (FBP)	7.27	172	25765	36.69733	ppb	0.00
Spiked Amount 2.000			Recovery	= 1834.850%		
17) Surrogate Recovery (TPH)	11.62	244	34144	36.32044	ppb	0.00
Spiked Amount 2.000			Recovery	= 1816.000%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Naphthalene	6.04	128	35413	36.15767	ppb	99
4) 2-Methylnaphthalene	6.83	142	23120	39.88422	ppb	96
5) 1-Methylnaphthalene	6.94	142	21764	38.35748	ppb	99
8) Acenaphthylene	7.86	152	36080	40.09023	ppb	99
9) Acenaphthene	8.06	154	19924	38.98421	ppb	100
10) Fluorene	8.65	166	22990	36.96003	ppb	99
12) Phenanthrene	9.76	178	32370	34.56531	ppb	100
13) Anthracene	9.82	178	31268	38.10873	ppb	99
14) Fluoranthene	11.14	202	55553	41.67389	ppb	99
16) Pyrene	11.40	202	56186	36.30525	ppb	96
18) Benz (a) anthracene	12.80	228	53763	44.76196	ppb	98
19) Chrysene	12.83	228	55208	35.96205	ppb	98
20) Indeno (1,2,3-cd) pyrene	15.78	276	52213	52.74972	ppb	100
22) Benzo (b) fluoranthene	13.96	252	56655	52.94684	ppb	99
23) Benzo (k) fluoranthene	14.00	252	59896	45.03541	ppb	100
24) Benzo (a) pyrene	14.33	252	50093	43.49995	ppb	# 96
25) Dibenz (a,h) anthracene	15.82	278	41864	59.01806	ppb	98
26) Benzo (g,h,i) perylene	16.19	276	45835	49.49244	ppb	# 92

Quantitation Report

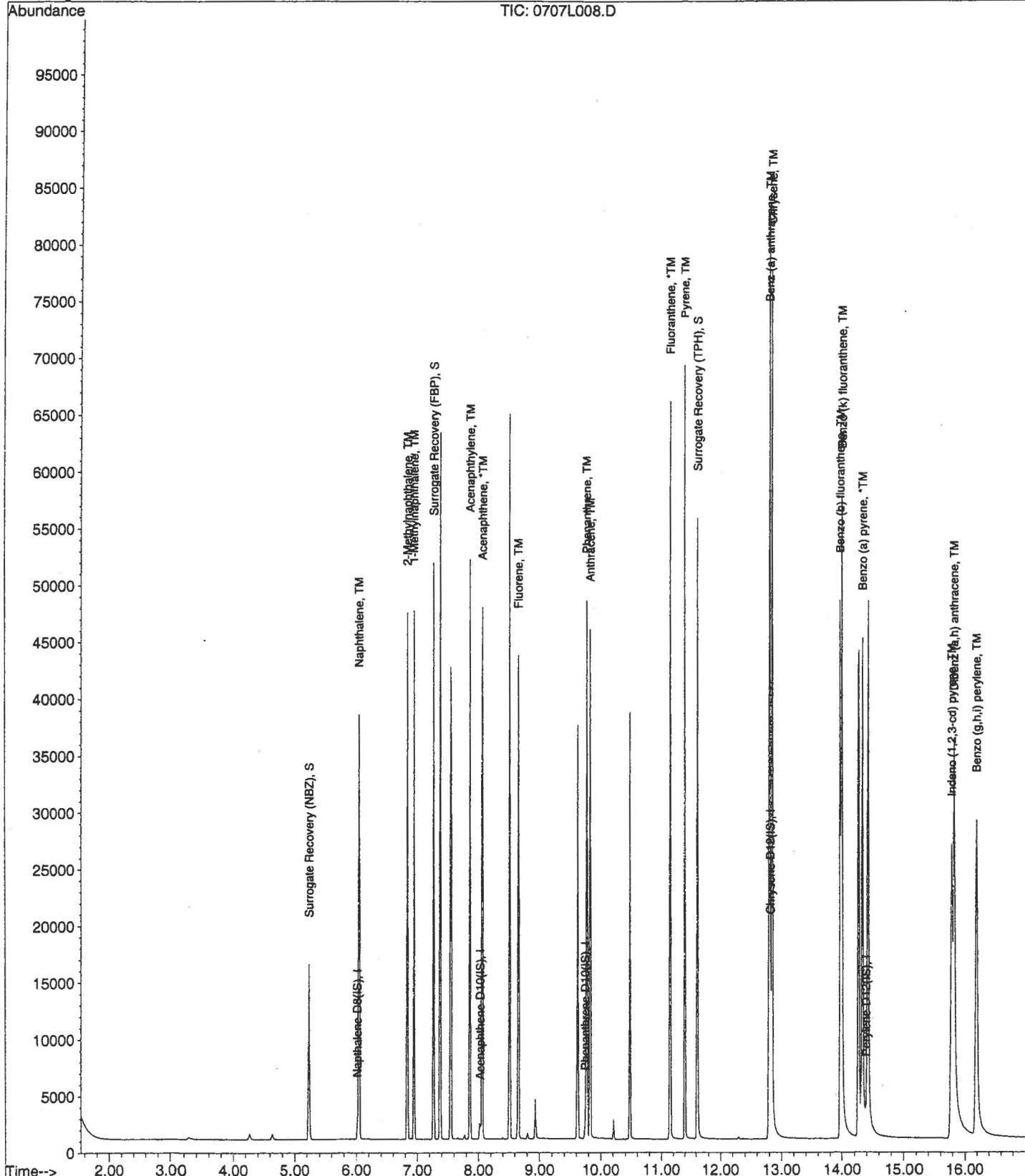
Data File : M:\LINUS\DATA\L100707\0707L008.D  
 Acq On : 7 Jul 10 14:06  
 Sample : 50ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 16:26 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L009.D Vial: 9  
 Acq On : 7 Jul 10 14:31 Operator: LF  
 Sample : 100ug/ml PAH Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Jul 7 16:24 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 13:06:44 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8(IS)	6.01	136	1379	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.03	164	659	2.50000	ppb	0.01
11) Phenanthrene-D10(IS)	9.74	188	1155	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.81	240	2233	2.50000	ppb	0.01
21) Perylene-D12(IS)	14.38	264	1840	2.50000	ppb	0.01

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.23	82	22081	73.51966	ppb	0.00
Spiked Amount	2.000		Recovery	= 3676.000%		
7) Surrogate Recovery (FBP)	7.27	172	44974	65.61214	ppb	0.00
Spiked Amount	2.000		Recovery	= 3280.600%		
17) Surrogate Recovery (TPH)	11.62	244	61516	64.32364	ppb	0.00
Spiked Amount	2.000		Recovery	= 3216.200%		

## Target Compounds

				Qvalue	
3) Naphthalene	6.04	128	66083	67.61940	ppb
4) 2-Methylnaphthalene	6.83	142	42712	73.84260	ppb
5) 1-Methylnaphthalene	6.94	142	38078	67.25572	ppb
8) Acenaphthylene	7.86	152	67157	76.43314	ppb
9) Acenaphthene	8.06	154	37976	76.10967	ppb
10) Fluorene	8.66	166	45404	74.76629	ppb
12) Phenanthrene	9.77	178	65696	72.64167	ppb
13) Anthracene	9.84	178	63747	80.45134	ppb
14) Fluoranthene	11.14	202	102534	79.64776	ppb
16) Pyrene	11.40	202	105357	66.91917	ppb
18) Benz (a) anthracene	12.80	228	96453	78.93818	ppb
19) Chrysene	12.84	228	104395	66.84484	ppb
20) Indeno (1,2,3-cd) pyrene	15.80	276	107174	106.43311	ppb
22) Benzo (b) fluoranthene	13.98	252	98454	92.01003	ppb
23) Benzo (k) fluoranthene	14.00	252	101545	76.35102	ppb
24) Benzo (a) pyrene	14.33	252	93243	80.97070	ppb
25) Dibenz (a,h) anthracene	15.83	278	85774	120.92048	ppb
26) Benzo (g,h,i) perylene	16.20	276	92981	100.40048	ppb

## Quantitation Report

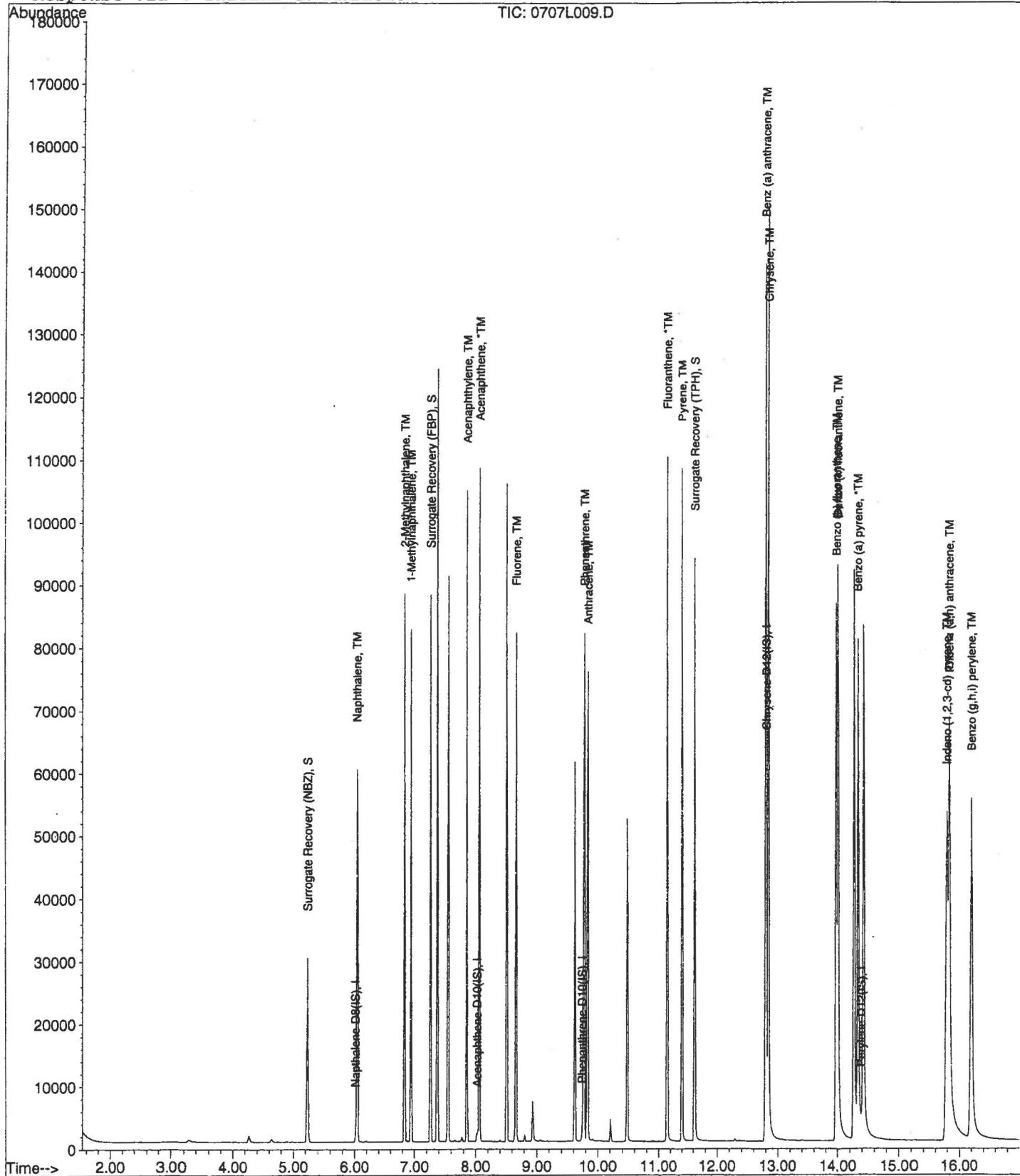
Data File : M:\LINUS\DATA\L100707\0707L009.D  
 Acq On : 7 Jul 10 14:31  
 Sample : 100ug/ml PAH  
 Misc :

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

Quant Time: Jul 7 16:24 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



## EPA 8270C SIM

Form 7

## Second Source Calibration

Lab Name: APPL, Inc.

SDG No: 62931

Case No:

Date Analyzed: 7 Jul 10 14:57

Matrix:

Instrument: Linus

Initial Cal. Date: 07/07/10

Data File: 0707L010.D

	Compound	MEAN	CCRF	%D	%Drift
1 I	Naphthalene-D8(IS)	ISTD			I
2 TM	Naphthalene	1.521	1.398	8.1	TM
3 TM	2-Methylnaphthalene	0.9486	0.8611	9.2	TM
4 TM	1-Methylnaphthalene	0.8666	0.8412	2.9	TM
5 I	Acenaphthene-D10(IS)	ISTD			I
6 TM	Acenaphthylene	3.006	2.768	7.9	TM
7 *TM	Acenaphthene	1.706	1.593	6.6	*TM
8 TM	Fluorene	2.026	1.918	5.3	TM
9 I	Phenanthrene-D10(IS)	ISTD			I
10 TM	Phenanthrene	1.674	1.599	4.5	TM
11 TM	Anthracene	1.572	1.539	2.1	TM
12 *TM	Fluoranthene	2.593	2.599	0.23	*TM
13 I	Chrysene-D12(IS)	ISTD			I
14 TM	Pyrene	1.527	1.550	1.5	TM
15 TM	Benz (a) anthracene	1.263	1.289	2.0	TM
16 TM	Chrysene	1.487	1.507	1.3	TM
17 TM	Indeno (1,2,3-cd) pyrene	1.155	1.205	4.3	TM
18 I	Perylene-D12(IS)	ISTD			I
19 TM	Benzo (b) fluoranthene	1.414	1.451	2.6	TM
20 TM	Benzo (k) fluoranthene	1.690	1.560	7.7	TM
21 *TM	Benzo (a) pyrene	1.469	1.487	1.2	*TM
22 TM	Dibenz (a,h) anthracene	1.046	1.141	9.1	TM
23 TM	Benzo (g,h,i) perylene	1.263	1.295	2.5	TM
24					
25					
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40					

Average

4.4

## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\0707L010.D Vial: 10  
 Acq On : 7 Jul 10 14:57 Operator: LF  
 Sample : 5.0ug/ml PAH SS 7-07-10 Inst : Linus  
 Misc :

Quant Time: Jul 7 16:38 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Wed Jul 07 16:37:14 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	6.01	136	1458	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.01	164	706	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.74	188	1237	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.80	240	2161	2.50000	ppb	0.00
21) Perylene-D12(IS)	14.37	264	1780	2.50000	ppb	-0.01

System Monitoring Compounds					
2) Surrogate Recovery (NBZ)	0.00	82	0d	0.00000	ppb
Spiked Amount	2.000		Recovery	=	0.000%
7) Surrogate Recovery (FBP)	0.00	172	0d	0.00000	ppb
Spiked Amount	2.000		Recovery	=	0.000%
17) Surrogate Recovery (TPH)	0.00	244	0d	0.00000	ppb
Spiked Amount	2.000		Recovery	=	0.000%

Target Compounds					Qvalue
3) Naphthalene	6.04	128	4078	4.59655	ppb 100
4) 2-Methylnaphthalene	6.83	142	2511	4.53881	ppb 99
5) 1-Methylnaphthalene	6.94	142	2453	4.85382	ppb 98
8) Acenaphthylene	7.86	152	3908	4.60353	ppb 99
9) Acenaphthene	8.05	154	2249	4.66823	ppb 87
10) Fluorene	8.65	166	2708	4.73337	ppb 95
12) Phenanthrene	9.76	178	3955	4.77373	ppb 99
13) Anthracene	9.82	178	3808	4.89597	ppb 99
14) Fluoranthene	11.14	202	6430	5.01149	ppb # 93
16) Pyrene	11.40	202	6700	5.07749	ppb # 91
18) Benz (a) anthracene	12.79	228	5570	5.10013	ppb 93
19) Chrysene	12.83	228	6512	5.06627	ppb 97
20) Indeno (1,2,3-cd) pyrene	15.76	276	5210	5.21725	ppb # 84
22) Benzo (b) fluoranthene	13.96	252	5165	5.13145	ppb # 96
23) Benzo (k) fluoranthene	13.99	252	5554	4.61681	ppb # 97
24) Benzo (a) pyrene	14.31	252	5293	5.05904	ppb 98
25) Dibenz (a,h) anthracene	15.81	278	4062	5.45485	ppb 97
26) Benzo (g,h,i) perylene	16.17	276	4610	5.12635	ppb 96

## Quantitation Report

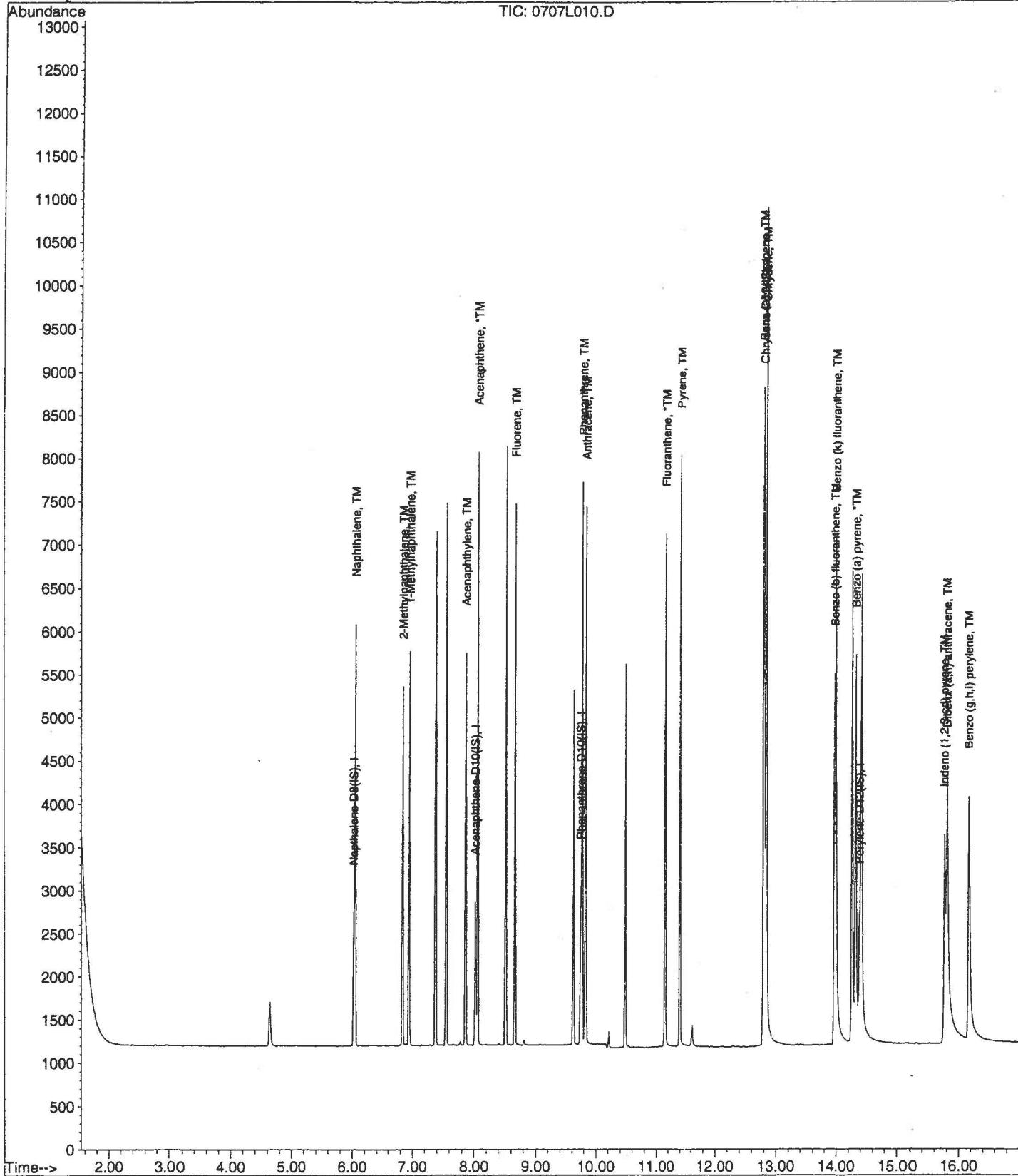
Data File : M:\LINUS\DATA\L100707\0707L010.D  
 Acq On : 7 Jul 10 14:57  
 Sample : 5.0ug/ml PAH SS 7-07-10  
 Misc :

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

Quant Time: Jul 7 16:38 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Thu Jul 08 09:23:19 2010  
 Response via : Initial Calibration



Form 7  
Continuing Calibration

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

SDG No: 62931  
 Date Analyzed: 10/27/10  
 Instrument: Linus  
 Initial Cal. Date: 07/07/10  
 Data File: 1027L002.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Naphthalene-D8(IS)	ISTD			I
2	S	Surrogate Recovery (NBZ)	0.4466	0.4485	0.43	S
3	TM	Naphthalene	1.521	1.318	13	TM
4	TM	2-Methylnaphthalene	0.9486	0.8384	12	TM
5	TM	1-Methylnaphthalene	0.8666	0.7780	10	TM
6	I	Acenaphthene-D10(IS)	ISTD			I
7	S	Surrogate Recovery (FBP)	2.098	1.860	11	S
8	TM	Acenaphthylene	3.006	2.715	9.7	TM
9	*TM	Acenaphthene	1.706	1.476	13	*TM
10	TM	Fluorene	2.026	1.942	4.1	TM
11	I	Phenanthrene-D10(IS)	ISTD			I
12	TM	Phenanthrene	1.674	1.400	16	TM
13	TM	Anthracene	1.572	1.366	13	TM
14	*TM	Fluoranthene	2.593	2.109	19	*TM
15	I	Chrysene-D12(IS)	ISTD			I
16	TM	Pyrene	1.527	1.331	13	TM
17	S	Surrogate Recovery (TPH)	0.8703	0.7119	18	S
18	TM	Benz (a) anthracene	1.263	1.180	6.6	TM
19	TM	Chrysene	1.487	1.284	14	TM
20	TM	Indeno (1,2,3-cd) pyrene	1.155	1.120	3.0	TM
21	I	Perylene-D12(IS)	ISTD			I
22	TM	Benzo (b) fluoranthene	1.414	1.474	4.3	TM
23	TM	Benzo (k) fluoranthene	1.690	1.412	16	TM
24	*TM	Benzo (a) pyrene	1.469	1.284	13	*TM
25	TM	Dibenz (a,h) anthracene	1.046	1.090	4.2	TM
26	TM	Benzo (g,h,i) perylene	1.263	1.065	16	TM
27						
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Average

10.9

## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\1027L002.D Vial: 2  
 Acq On : 27 Oct 10 18:34 Operator: LF  
 Sample : 5.0ug/mL PAH 8-13-10 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Nov 10 11:41 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	5.99	136	1689	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	792	2.50000	ppb	0.01
11) Phenanthrene-D10 (IS)	9.73	188	1487	2.50000	ppb	0.01
15) Chrysene-D12 (IS)	12.81	240	2496	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2122	2.50000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.20	82	1515	5.02156	ppb	0.00
Spiked Amount 2.000			Recovery	= 251.100%		
7) Surrogate Recovery (FBP)	7.23	172	2947	4.43367	ppb	0.00
Spiked Amount 2.000			Recovery	= 221.700%		
17) Surrogate Recovery (TPH)	11.61	244	3554	4.09015	ppb	0.01
Spiked Amount 2.000			Recovery	= 204.500%		
<b>Target Compounds</b>						
3) Naphthalene	6.01	128	4452	4.33180	ppb	98
4) 2-Methylnaphthalene	6.81	142	2832	4.41892	ppb	93
5) 1-Methylnaphthalene	6.92	142	2628	4.48889	ppb	95
8) Acenaphthylene	7.83	152	4300	4.51528	ppb	96
9) Acenaphthene	8.04	154	2338	4.32601	ppb	97
10) Fluorene	8.64	166	3076	4.79278	ppb	97
12) Phenanthrene	9.75	178	4163	4.18000	ppb	97
13) Anthracene	9.81	178	4063	4.34558	ppb	98
14) Fluoranthene	11.14	202	6272	4.06650	ppb	95
16) Pyrene	11.40	202	6645	4.35993	ppb	91
18) Benz (a) anthracene	12.80	228	5891	4.67009	ppb	95
19) Chrysene	12.84	228	6409	4.31693	ppb	96
20) Indeno (1,2,3-cd) pyrene	15.85	276	5593	4.84907	ppb	97
22) Benzo (b) fluoranthene	13.99	252	6255	5.21281	ppb	98
23) Benzo (k) fluoranthene	14.01	252	5994	4.17953	ppb	98
24) Benzo (a) pyrene	14.35	252	5448	4.36795	ppb	97
25) Dibenz (a,h) anthracene	15.88	278	4626	5.21102	ppb	98
26) Benzo (g,h,i) perylene	16.27	276	4522	4.21806	ppb	99

## Quantitation Report

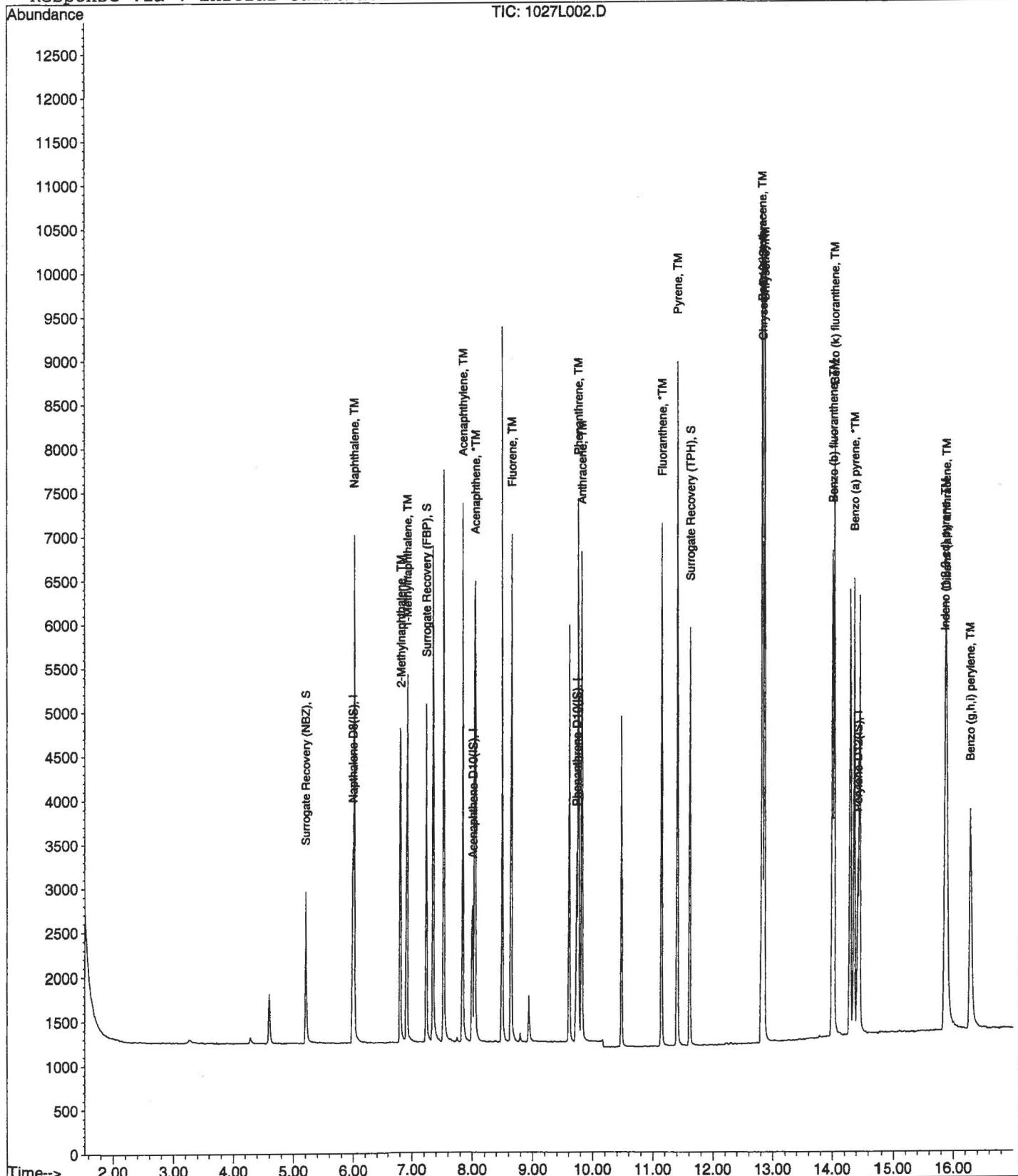
Data File : M:\LINUS\DATA\L100707\1027L002.D  
 Acq On : 27 Oct 10 18:34  
 Sample : 5.0ug/mL PAH 8-13-10  
 Misc :

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

Quant Time: Nov 10 11:41 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration



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

**APPL, INC.**

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

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Blank Name/QCG: **101026W-25117 - 149081**  
 Batch ID: #SIMHC-101026A

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	10/26/10	10/27/10
BLANK	2-Methylnaphthalene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Acenaphthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Acenaphthylene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Benzo(a)anthracene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Benzo(a)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Benzo(b)fluoranthene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Benzo(ghi)perylene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Benzo(k)fluoranthene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Chrysene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Dibenz(a,h)anthracene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Fluoranthene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Fluorene	0.12 U	0.2	0.12	0.06	ug/L	10/26/10	10/27/10
BLANK	Indeno(1,2,3-cd)pyrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Naphthalene	0.10 U	0.2	0.10	0.05	ug/L	10/26/10	10/27/10
BLANK	Phenanthrene	0.14 U	0.2	0.14	0.07	ug/L	10/26/10	10/27/10
BLANK	Pyrene	0.16 U	0.2	0.16	0.08	ug/L	10/26/10	10/27/10
BLANK	Surrogate: 2-Fluorobiphenyl (S)	58.0	50-110			%	10/26/10	10/27/10
BLANK	Surrogate: Nitrobenzene-D5 (S)	77.8	40-110			%	10/26/10	10/27/10
BLANK	Surrogate: Terphenyl-d14 (S)	67.4	50-135			%	10/26/10	10/27/10

Quant Method: SIM.M
Run #: 1027L003
Instrument: Linus
Sequence: L100707
Initials: LF

GC SC-Blank-REG MDLs  
 Printed: 11/16/10 9:45:40 AM

Data File : M:\LINUS\DATA\L100707\1027L003.D Vial: 3  
 Acq On : 27 Oct 10 19:00 Operator: LF  
 Sample : 101026A BLK 1/1000 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Nov 16 8:46 2010 Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	5.99	136	1637	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	832	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1598	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2732	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.42	264	2366	2.50000	ppb	0.01

#### System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	455	1.555603	ppb	0.00
Spiked Amount	2.000		Recovery	=	77.800%	
7) Surrogate Recovery (FBP)	7.23	172	809	1.15860	ppb	0.00
Spiked Amount	2.000		Recovery	=	57.950%	
17) Surrogate Recovery (TPH)	11.61	244	1282	1.34795	ppb	0.00
Spiked Amount	2.000		Recovery	=	67.400%	

Target Compounds	Qvalue
------------------	--------

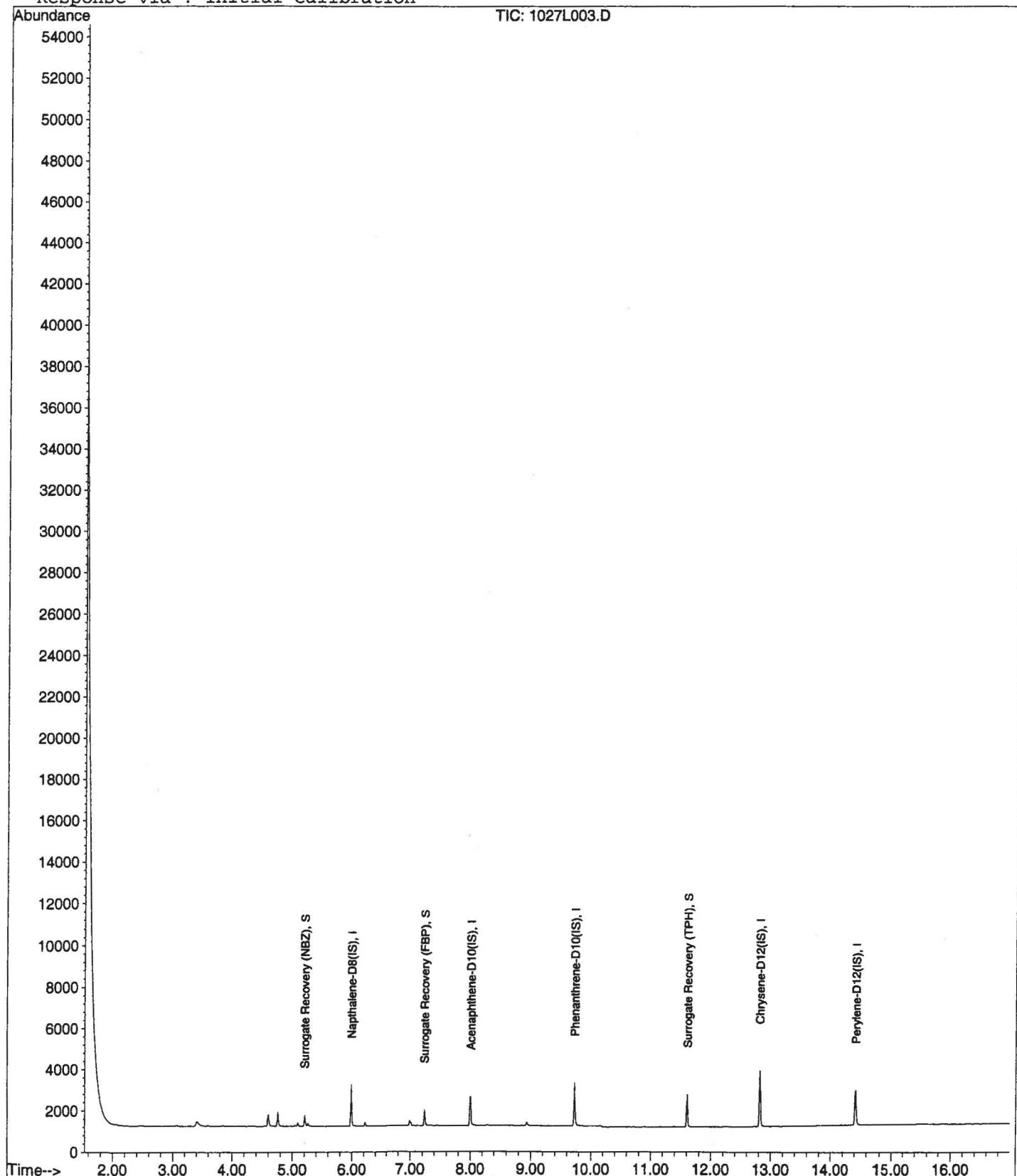
## Quantitation Report

Data File : M:\LINUS\DATA\L100707\1027L003.D Vial: 3  
Acc On : 27 Oct 10 19:00 Operator: LF  
Sample : 101026A BLK 1/1000 Inst : Linus  
Misc :

Quant Time: Nov 16 8:46 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
Title : EPA 8270C  
Last Update : Mon Nov 01 09:51:01 2010  
Response via : Initial Calibration



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

APPL ID: 101026W-25117 LCS - 149081

Batch ID: #SIMHC-101026A

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L		
1-methylnaphthalene	4.00	2.20	55.0	45-105
2-Methylnaphthalene	4.00	2.03	50.7	45-105
Acenaphthene	4.00	2.31	57.8	45-110
Acenaphthylene	4.00	2.53	63.2	50-105
Anthracene	4.00	2.65	66.3	55-110
Benzo(a)anthracene	4.00	3.07	76.8	55-110
Benzo(a)pyrene	4.00	2.75	68.8	55-110
Benzo(b)fluoranthene	4.00	3.52	88.0	45-120
Benzo(ghi)perylene	4.00	2.67	66.8	40-125
Benzo(k)fluoranthene	4.00	2.18	54.5	45-125
Chrysene	4.00	2.44	61.0	55-110
Dibenz(a,h)anthracene	4.00	3.33	83.3	40-125
Fluoranthene	4.00	2.65	66.3	55-115
Fluorene	4.00	2.78	69.5	50-110
Indeno(1,2,3-cd)pyrene	4.00	3.15	78.8	45-125
Naphthalene	4.00	2.03	50.7	40-100
Phenanthrene	4.00	2.65	66.3	50-115
Pyrene	4.00	2.76	69.0	50-130
Surrogate: 2-Fluorobiphenyl (S)	2.00	1.05	52.5	50-110
Surrogate: Nitrobenzene-D5 (S)	2.00	1.77	88.5	40-110
Surrogate: Terphenyl-d14 (S)	2.00	1.54	77.0	50-135

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

Primary	SPK
Quant Method :	SIM.M
Extraction Date :	10/26/10
Analysis Date :	10/27/10
Instrument :	Linus
Run :	1027L004
Initials :	LF

Printed: 11/16/10 9:45:43 AM

APPL Standard LCS

Data File : M:\LINUS\DATA\L100707\1027L004.D  
 Acq On : 27 Oct 10 19:26  
 Sample : 101026A LCS-1 1/1000  
 Misc :

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

Quant Time: Nov 16 8:46 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Napthalene-D8(IS)	5.99	136	1501	2.50000	ppb	0.00
6) Acenaphthene-D10(IS)	8.00	164	771	2.50000	ppb	0.00
11) Phenanthrene-D10(IS)	9.73	188	1524	2.50000	ppb	0.00
15) Chrysene-D12(IS)	12.81	240	2642	2.50000	ppb	0.00
21) Perylene-D12(IS)	14.41	264	2298	2.50000	ppb	0.00

## System Monitoring Compounds

2) Surrogate Recovery (NBZ)	5.20	82	474	1.76788	ppb	0.00
Spiked Amount 2.000			Recovery	=	88.400%	
7) Surrogate Recovery (FBP)	7.23	172	677	1.04627	ppb	0.00
Spiked Amount 2.000			Recovery	=	52.300%	
17) Surrogate Recovery (TPH)	11.61	244	1420	1.54391	ppb	0.00
Spiked Amount 2.000			Recovery	=	77.200%	

## Target Compounds

					Qvalue
3) Naphthalene	6.01	128	1851	2.02660	ppb
4) 2-Methylnaphthalene	6.81	142	1158	2.03320	ppb
5) 1-Methylnaphthalene	6.92	142	1146	2.20266	ppb
8) Acenaphthylene	7.83	152	2345	2.52947	ppb
9) Acenaphthene	8.04	154	1215	2.30935	ppb
10) Fluorene	8.64	166	1734	2.77537	ppb
12) Phenanthrene	9.75	178	2708	2.65305	ppb
13) Anthracene	9.81	178	2538	2.64861	ppb
14) Fluoranthene	11.14	202	4194	2.65320	ppb
16) Pyrene	11.40	202	4449	2.75778	ppb
18) Benz (a) anthracene	12.80	228	4103	3.07291	ppb
19) Chrysene	12.84	228	3836	2.44104	ppb
20) Indeno (1,2,3-cd) pyrene	15.85	276	3846	3.15018	ppb
22) Benzo (b) fluoranthene	13.98	252	4574	3.51994	ppb
23) Benzo (k) fluoranthene	14.01	252	3391	2.18340	ppb
24) Benzo (a) pyrene	14.35	252	3709	2.74595	ppb
25) Dibenz (a,h) anthracene	15.88	278	3206	3.33485	ppb
26) Benzo (g,h,i) perylene	16.27	276	3094	2.66501	ppb

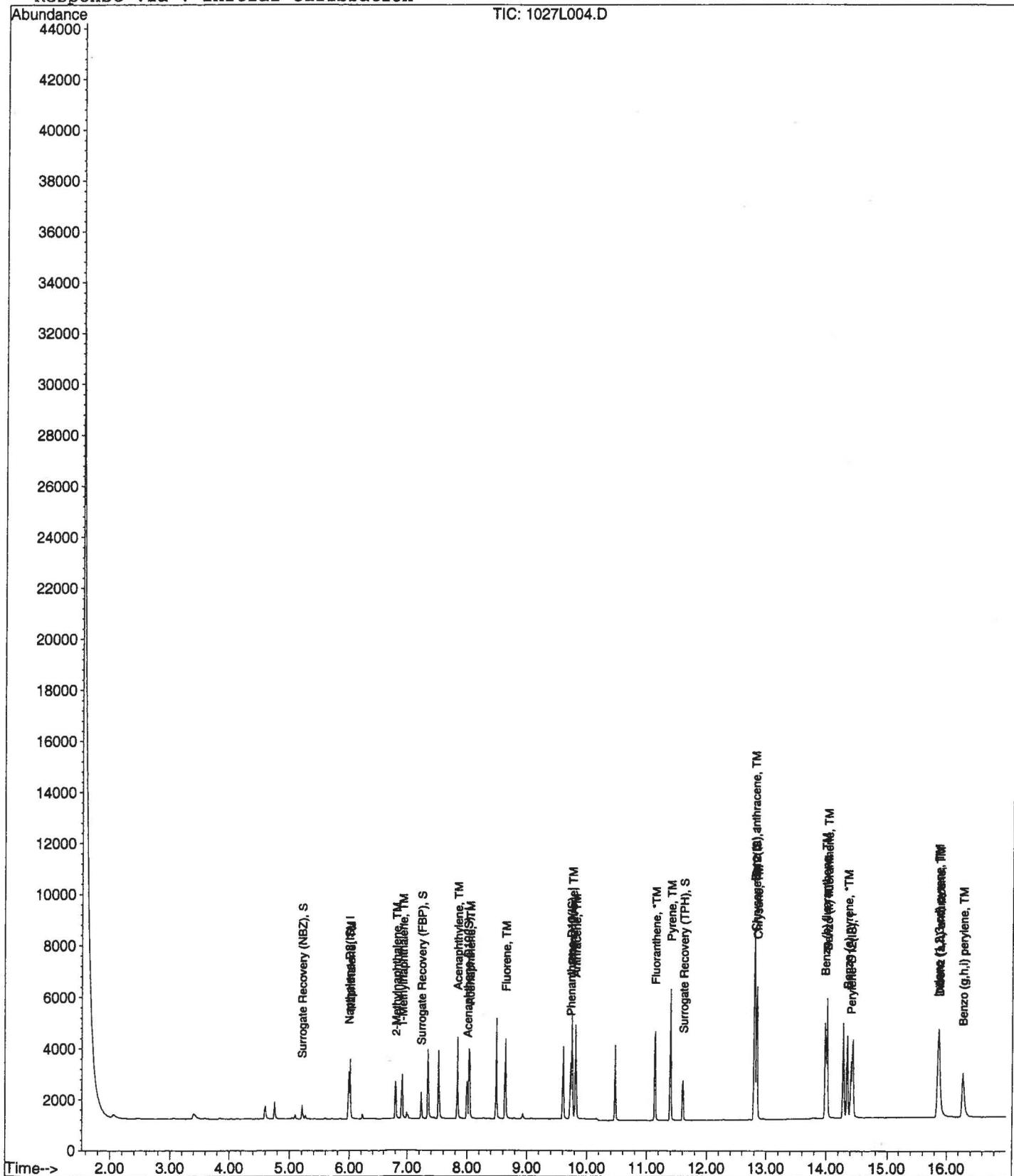
## Quantitation Report

Data File : M:\LINUS\DATA\L100707\1027L004.D Vial: 4  
 Acq On : 27 Oct 10 19:26 Operator: LF  
 Sample : 101026A LCS-1 1/1000 Inst : Linus  
 Misc : Multiplr: 1.00

Quant Time: Nov 16 8:46 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration



# Matrix Spike Recoveries

## EPA 8270D SIM

APPL ID: 101026W-25117 MS - 149081

Batch ID: #SIMHC-101026A

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK %	DUP %	Recovery	RPD	RPD
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	Limits
1-methylnaphthalene	3.88	ND	2.10	2.58	54.1	66.5	45-105	20.5	25
2-Methylnaphthalene	3.88	ND	2.05	2.41	52.8	62.1	45-105	16.1	25
Acenaphthene	3.88	ND	2.04	2.47	52.6	63.7	45-110	19.1	25
Acenaphthylene	3.88	ND	2.08	2.44	53.6	62.9	50-105	15.9	25
Anthracene	3.88	ND	2.28	2.48	58.8	63.9	55-110	8.4	25
Benzo(a)anthracene	3.88	ND	2.72	3.23	70.1	83.2	55-110	17.1	25
Benzo(a)pyrene	3.88	ND	2.22	2.58	57.2	66.5	55-110	15.0	25
Benzo(b)fluoranthene	3.88	ND	3.34	3.67	86.1	94.6	45-120	9.4	25
Benzo(ghi)perylene	3.88	ND	2.33	3.20	60.1	82.5	40-125	31.5 #	25
Benzo(k)fluoranthene	3.88	ND	2.38	2.48	61.3	63.9	45-125	4.1	25
Chrysene	3.88	ND	2.11	2.47	54.4 #	63.7	55-110	15.7	25
Dibenz(a,h)anthracene	3.88	ND	2.92	3.44	75.3	88.7	40-125	16.4	25
Fluoranthene	3.88	ND	2.30	2.52	59.3	64.9	55-115	9.1	25
Fluorene	3.88	ND	2.32	2.71	59.8	69.8	50-110	15.5	25
Indeno(1,2,3-cd)pyrene	3.88	ND	2.73	3.08	70.4	79.4	45-125	12.0	25
Naphthalene	3.88	ND	2.05	2.14	52.8	55.2	40-100	4.3	25
Phenanthrene	3.88	ND	2.30	2.47	59.3	63.7	50-115	7.1	25
Pyrene	3.88	ND	2.40	2.66	61.9	68.6	50-130	10.3	25
Surrogate: 2-Fluorobiphenyl (S)	1.94	NA	1.03	1.19	53.1	61.3	50-110		
Surrogate: Nitrobenzene-D5 (S)	1.94	NA	1.62	1.67	83.5	86.1	40-110		
Surrogate: Terphenyl-d14 (S)	1.94	NA	1.38	1.49	71.1	76.8	50-135		

# = Recovery is outside QC limits.

Comments:

Primary	SPK	DUP
Quant Method :	SIM.M	SIM.M
Extraction Date :	10/26/10	10/26/10
Analysis Date :	10/27/10	10/27/10
Instrument :	Linus	Linus
Run :	1027L010	1027L011
Initials :	LF	

Printed: 11/16/10 9:45:45 AM

APPL MSD SCII

## Quantitation Report (QT Reviewed)

Data File : M:\LINUS\DATA\L100707\1027L010.D Vial: 10  
 Acq On : 27 Oct 10 21:58 Operator: LF  
 Sample : AY25117W17 MS-1 1/1030 Inst : Linus  
 Misc : Multiplr: 0.97

Quant Time: Nov 16 8:48 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Naphthalene-D8 (IS)	5.99	136	1644	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	7.99	164	921	2.50000	ppb	-0.01
11) Phenanthrene-D10 (IS)	9.73	188	1671	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2832	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2484	2.50000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.20	82	491	1.62329	ppb	0.00
Spiked Amount 1.942			Recovery	= 83.584%		
7) Surrogate Recovery (FBP)	7.23	172	823	1.03374	ppb	0.00
Spiked Amount 1.942			Recovery	= 53.251%		
17) Surrogate Recovery (TPH)	11.60	244	1405	1.38360	ppb	-0.01
Spiked Amount 1.942			Recovery	= 71.276%		
<b>Target Compounds</b>						
3) Naphthalene	6.01	128	2109	2.04681	ppb	99
4) 2-Methylnaphthalene	6.79	142	1314	2.04506	ppb	88
5) 1-Methylnaphthalene	6.92	142	1232	2.09900	ppb	99
8) Acenaphthylene	7.83	152	2367	2.07511	ppb	96
9) Acenaphthene	8.03	154	1322	2.04221	ppb	87
10) Fluorene	8.64	166	1783	2.31942	ppb	98
12) Phenanthrene	9.75	178	2656	2.30406	ppb	99
13) Anthracene	9.81	178	2472	2.28426	ppb	97
14) Fluoranthene	11.13	202	4106	2.30001	ppb	# 79
16) Pyrene	11.40	202	4282	2.40405	ppb	# 89
18) Benz (a) anthracene	12.80	228	4009	2.71947	ppb	97
19) Chrysene	12.83	228	3659	2.10892	ppb	# 96
20) Indeno (1,2,3-cd) pyrene	15.85	276	3675	2.72636	ppb	# 99
22) Benzo (b) fluoranthene	13.98	252	4830	3.33846	ppb	# 97
23) Benzo (k) fluoranthene	14.01	252	4117	2.38093	ppb	95
24) Benzo (a) pyrene	14.34	252	3346	2.22496	ppb	98
25) Dibenz (a,h) anthracene	15.88	278	3129	2.92333	ppb	97
26) Benzo (g,h,i) perylene	16.27	276	3008	2.32710	ppb	99

## Quantitation Report

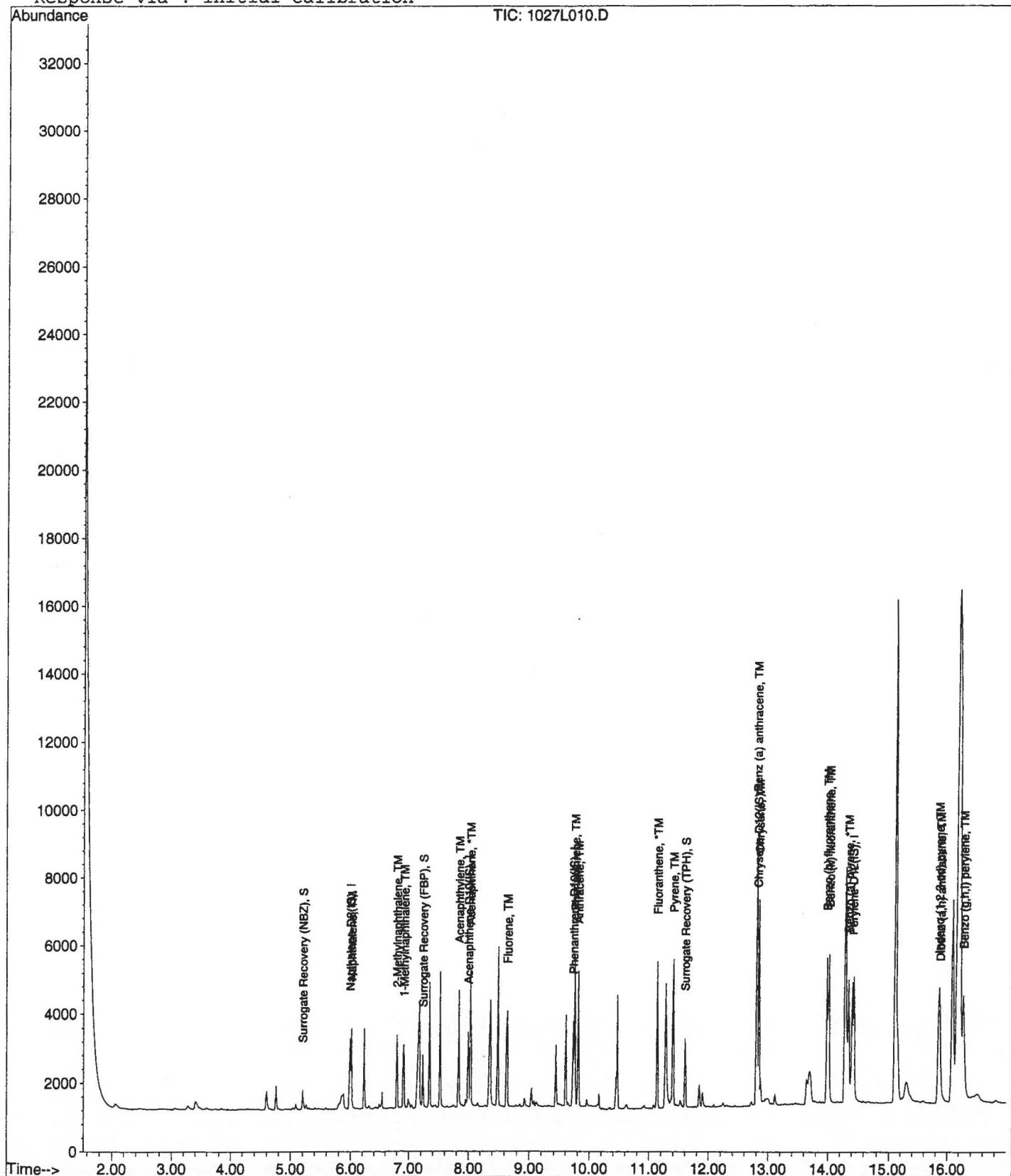
Data File : M:\LINUS\DATA\L100707\1027L010.D  
 Acq On : 27 Oct 10 21:58  
 Sample : AY25117W17 MS-1 1/1030  
 Misc :

Vial: 10  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.97

Quant Time: Nov 16 8:48 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration



Data File : M:\LINUS\DATA\L100707\1027L011.D Vial: 11  
 Acq On : 27 Oct 10 22:23 Operator: LF  
 Sample : AY25117W19 MSD-1 1/1030 Inst : Linus  
 Misc :

Quant Time: Nov 16 8:48 2010

Quant Results File: SIM.RES

Quant Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration  
 DataAcq Meth : 87SIMAQ

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Naphthalene-D8 (IS)	5.99	136	1668	2.50000	ppb	0.00
6) Acenaphthene-D10 (IS)	8.00	164	894	2.50000	ppb	0.00
11) Phenanthrene-D10 (IS)	9.73	188	1686	2.50000	ppb	0.00
15) Chrysene-D12 (IS)	12.81	240	2782	2.50000	ppb	0.00
21) Perylene-D12 (IS)	14.41	264	2339	2.50000	ppb	0.00
<b>System Monitoring Compounds</b>						
2) Surrogate Recovery (NBZ)	5.20	82	512	1.66836	ppb	0.00
Spiked Amount 1.942			Recovery	= 85.902%		
7) Surrogate Recovery (FBP)	7.23	172	917	1.18659	ppb	0.00
Spiked Amount 1.942			Recovery	= 61.131%		
17) Surrogate Recovery (TPH)	11.60	244	1490	1.49368	ppb	-0.01
Spiked Amount 1.942			Recovery	= 76.941%		
<b>Target Compounds</b>						
3) Naphthalene	6.01	128	2234	2.13693	ppb	99
4) 2-Methylnaphthalene	6.80	142	1572	2.41140	ppb	87
5) 1-Methylnaphthalene	6.92	142	1537	2.58097	ppb	100
8) Acenaphthylene	7.83	152	2701	2.43944	ppb	98
9) Acenaphthene	8.04	154	1553	2.47151	ppb	97
10) Fluorene	8.64	166	2023	2.71110	ppb	99
12) Phenanthrene	9.75	178	2875	2.47185	ppb	99
13) Anthracene	9.81	178	2703	2.47549	ppb	97
14) Fluoranthene	11.13	202	4536	2.51827	ppb	# 77
16) Pyrene	11.40	202	4647	2.65586	ppb	# 91
18) Benz (a) anthracene	12.80	228	4682	3.23308	ppb	# 91
19) Chrysene	12.84	228	4203	2.46600	ppb	# 90
20) Indeno (1,2,3-cd) pyrene	15.85	276	4083	3.08348	ppb	# 98
22) Benzo (b) fluoranthene	13.98	252	4994	3.66580	ppb	# 95
23) Benzo (k) fluoranthene	14.01	252	4039	2.48062	ppb	96
24) Benzo (a) pyrene	14.35	252	3652	2.57898	ppb	# 95
25) Dibenz (a,h) anthracene	15.88	278	3465	3.43793	ppb	99
26) Benzo (g,h,i) perylene	16.28	276	3894	3.19930	ppb	98

## Quantitation Report

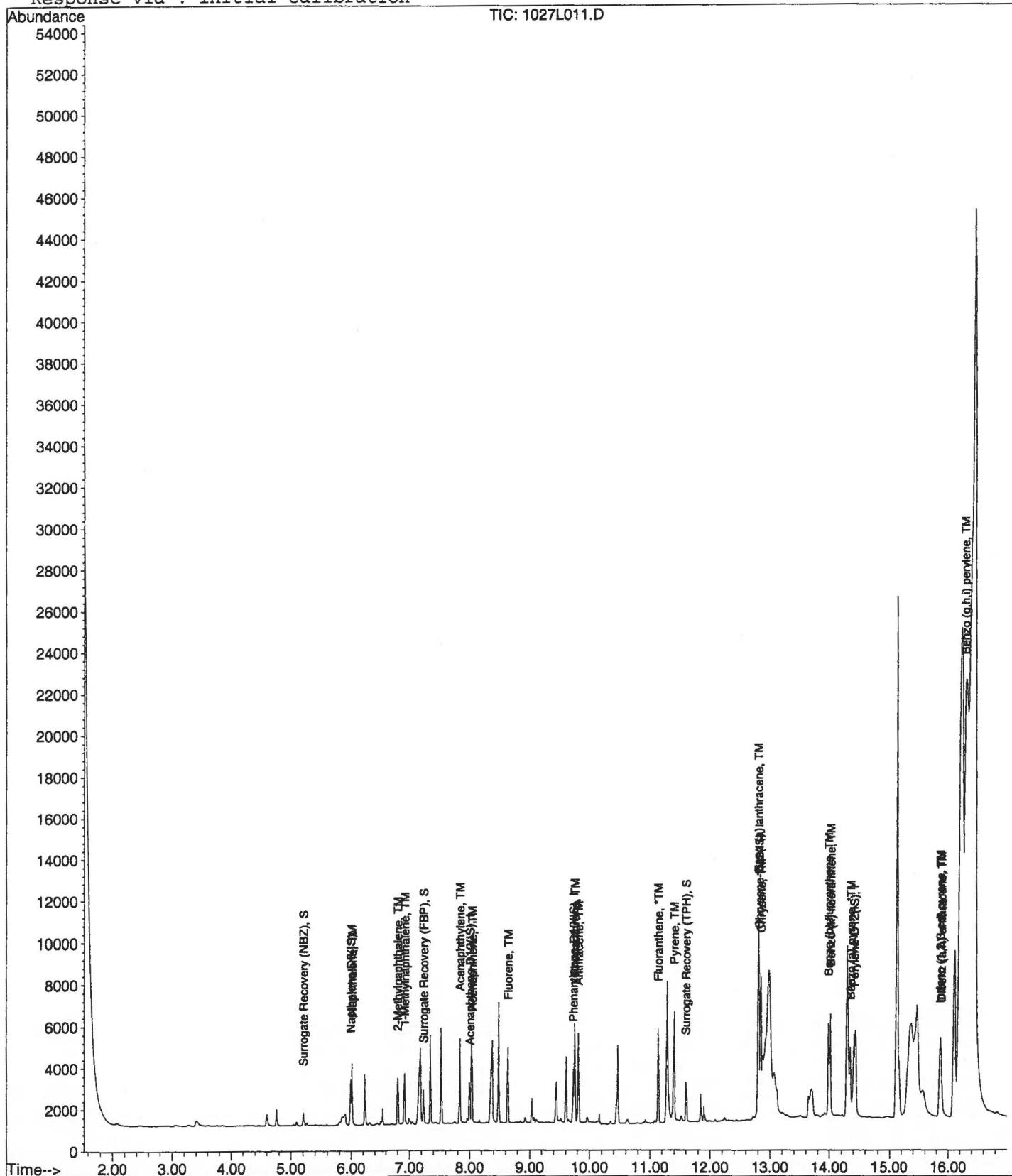
Data File : M:\LINUS\DATA\L100707\1027L011.D  
 Acq On : 27 Oct 10 22:23  
 Sample : AY25117W19 MSD-1 1/1030  
 Misc :

Vial: 11  
 Operator: LF  
 Inst : Linus  
 Multiplr: 0.97

Quant Time: Nov 16 8:48 2010

Quant Results File: SIM.RES

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C  
 Last Update : Mon Nov 01 09:51:01 2010  
 Response via : Initial Calibration

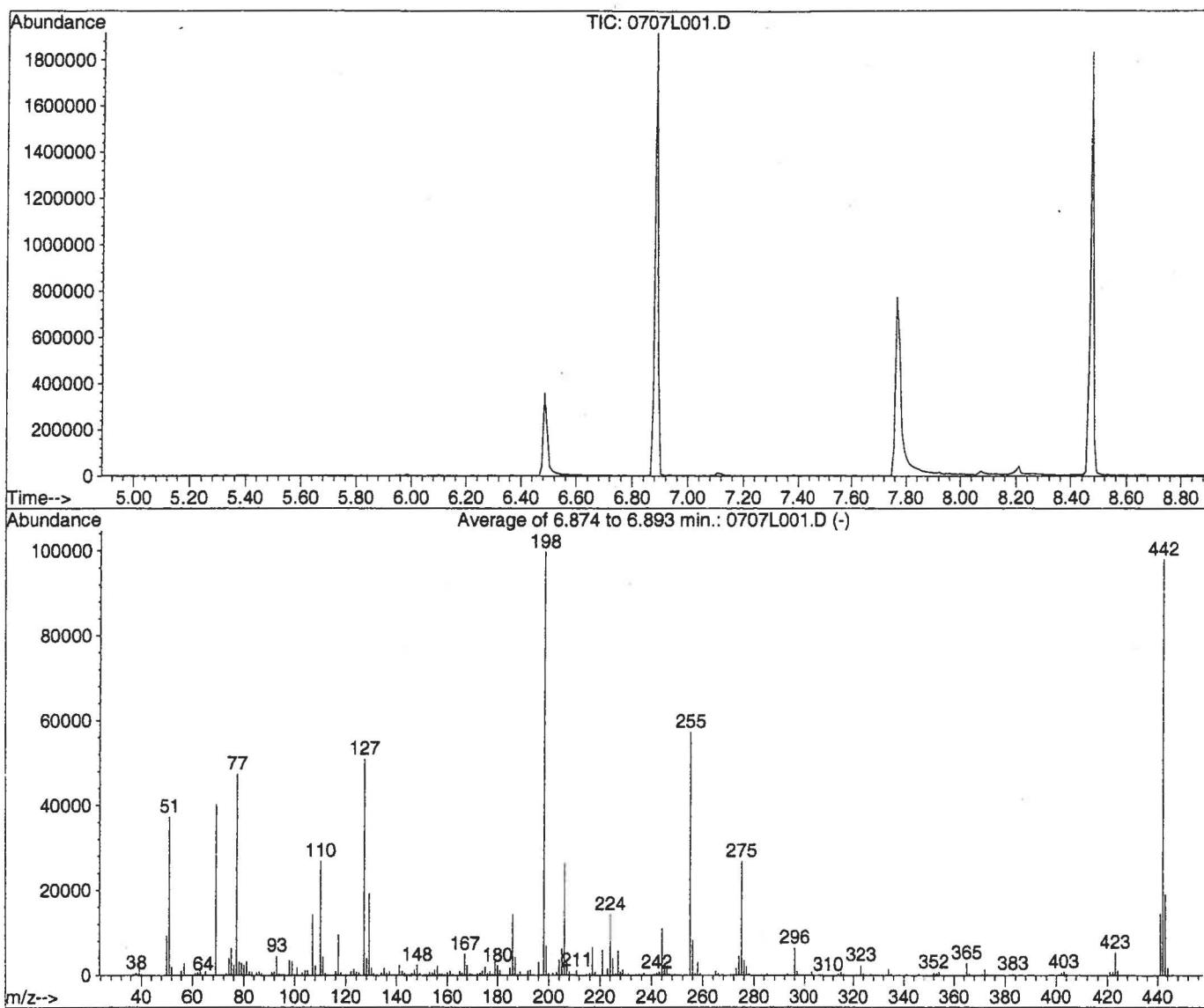


## DFTPP

Data File : M:\LINUS\DATA\L100707\0707L001.D  
 Acq On : 7 Jul 10 11:15  
 Sample : SVTUNE 04-12-10  
 Misc :

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

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C



AutoFind: Scans 463, 464, 465; Background Corrected with Scan 461

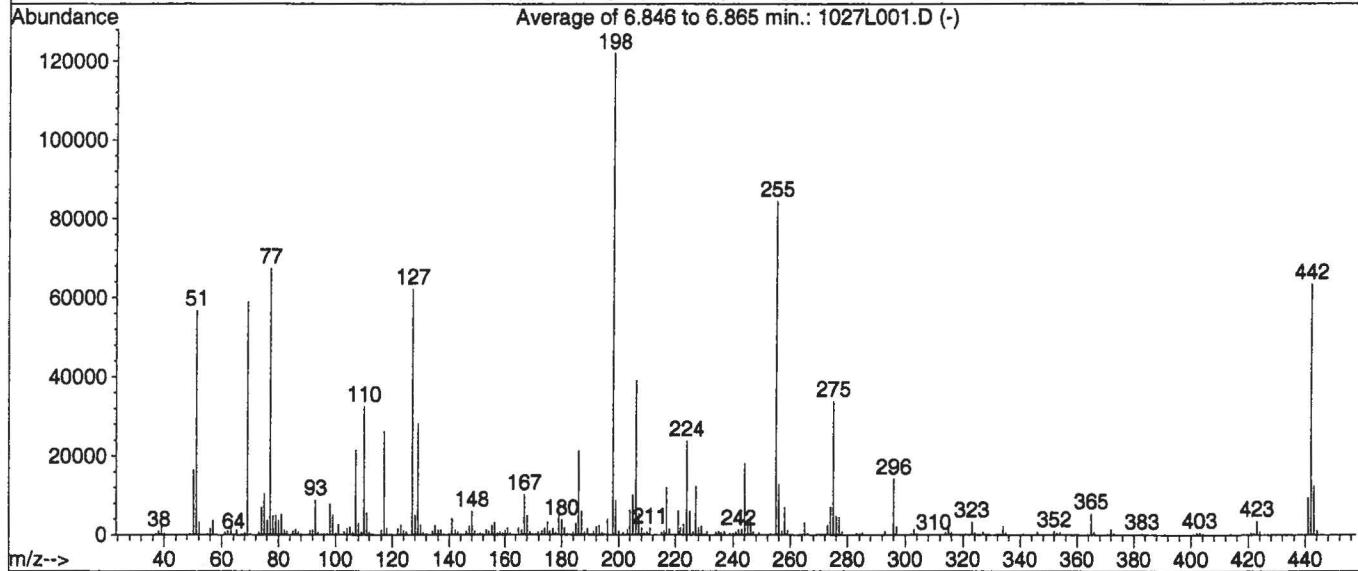
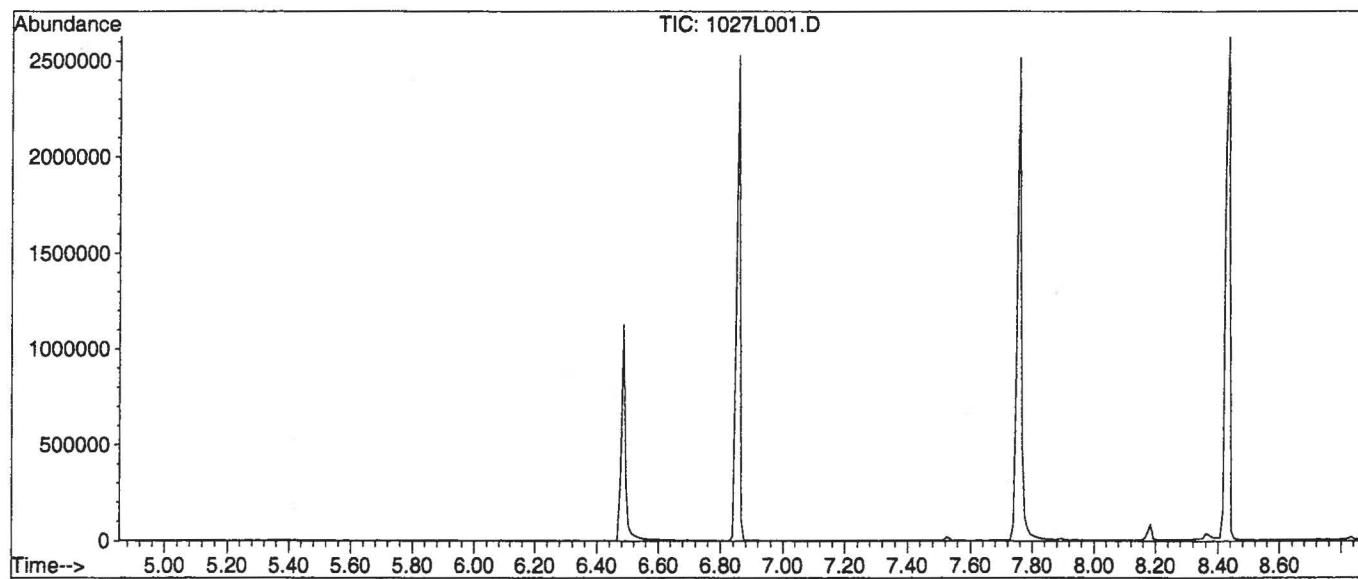
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.4	37308	PASS
68	69	0.00	2	0.0	0	PASS
70	69	0.00	2	0.6	243	PASS
127	198	40	60	51.1	50916	PASS
197	198	0.00	1	0.1	79	PASS
198	198	100	100	100.0	99715	PASS
199	198	5	9	6.9	6907	PASS
275	198	10	30	26.9	26802	PASS
365	198	1	100	2.9	2895	PASS
441	443	0.01	100	76.4	14518	PASS
442	198	40	150	98.2	97907	PASS
443	442	17	23	19.4	18992	PASS

## DFTPP

Data File : M:\LINUS\DATA\L100707\1027L001.D  
 Acq On : 27 Oct 10 18:17  
 Sample : SVTUNE 04-12-10  
 Misc :

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

Method : M:\LINUS\DATA\L100707\SIM.M (RTE Integrator)  
 Title : EPA 8270C



Spectrum Information: Average of 6.846 to 6.865 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.5	56730	PASS
68	69	0.00	2	0.9	525	PASS
70	69	0.00	2	0.6	381	PASS
127	198	40	60	50.9	62151	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	122053	PASS
199	198	5	9	7.1	8705	PASS
275	198	10	30	27.7	33850	PASS
365	198	1	100	4.4	5364	PASS
441	443	0.01	100	75.3	9379	PASS
442	198	40	150	52.0	63523	PASS
443	442	17	23	19.6	12452	PASS

GC/MS STANDARD PREPARATION BOOK # 5 PAGE # 49

*IF 2/23/10*

Part #: 82705 Lot #: 092309	Laboratory Use Only - See MSDS Exp: 092312 Storage 4 °C
<b>EPA Method 8270A - Mix #11</b> <b>4 components</b> <b>2000 ug/mL in ace</b> <b>ABSOLUTE STANDAR</b>	

*exp 2/23/11*

*IF 2/23/10*

Part #: 94552 Lot #: 052908	Laboratory Use Only-See MSDS Exp: 052911 1 mL
<b>Semi-Volatile Standard</b> <b>11 components</b> <b>Varied ug/mL in</b> <b>ABSOLUTE STANDAR</b>	

*exp 2/23/11*

*IF 2/23/10*

PREP DATE: 02-23-10							
<b>8270C Stock/Spike Standard</b>							
Exp:	08-24-10						
		Conc.		Date	CODE:	P	
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	
Absolute	10001	2000	032009-25511	2-23-10A	03-20-12	1000	
Absolute	10002	2000	073109-25517	2-23-10B	07-31-12	1000	
Absolute	10004	2000	060407-25522	2-23-10C	06-04-12	1000	
Absolute	10005	2000	121208-25527	2-23-10D	12-12-13	1000	
Absolute	10006	2000	102109-25532	2-23-10E	10-21-12	1000	
Absolute	10007	2000	101409-25537	2-23-10F	10-14-14	1000	
Absolute	10018	2000	073109-25542	2-23-10G	07-31-14	1000	
Absolute	70023	1000	031909-25547	2-23-10H	03-19-14	1000	
Absolute	82705	2000	092309-25552	2-23-10I	09-23-12	1000	
Absolute	94552	2000	052908-25557	2-23-10J	05-29-11	1000	
				Final Vol		10000	

*IF 3/4/10*

**02Si** 8270D PAH SIM Solution, 200 mg/L, 1 ml  
 Cat. No: 110780-01 Exp: 5/11/2011  
 Lot No: 146582 Storage: <= -10 Degrees C  
**8270D PAH SIM** Solvent: Methylene  
 Lot #: 146582 - 26313 xtion For Research Use Only  
 Rec: 3/15/10 MFR exp. 05/11/11 Opened: \_\_\_\_\_

*IF exp 3/4/11*

*IF 3/4/10*

**02Si** 8270D PAH SIM Solution, Second Source, 200 mg/L, 1 ml  
 Cat. No: 110780-01-SS Exp: 4/3/2011  
 Lot No: 145112 Storage: <= -10 Degrees C  
**8270D PAH SIM (SS)** Solvent: Methylene  
 Lot #: 145112 - 24097 xtion For Research Use Only  
 Rec: 4/6/09 MFR exp. 04/03/11 Opened: \_\_\_\_\_

*IF exp 3/4/11*

*IF 3/4/10*

**02Si** 8270 BN:A (200:400) Surrogate Solution, 1 ml  
 Cat. No: 110004-17 Exp: 7/29/2011  
 Lot No: 149231 Storage: <= -10 Degrees C  
**8270 BN:A (200:400) Surrogate Solution** Solvent: Methylene Chloride  
 Lot #: 149231 - 24856 xtion For Research Use Only  
 Rec: 8/5/09 MFR exp. 07/29/11 Opened: \_\_\_\_\_

*IF exp 3/4/11*

GC/MS STANDARD PREPARATION BOOK # 5 PAGE # 50

*V3/4/10*

PREP DATE: 03-04-10															
8270 SIM STANDARD CURVE															
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:	0.10	0.20	0.50	1.00	5.00	10.00	50.00	100.00		
						μL	μL	μL	μL	μL	μL	μL	μL		
	8270D PAH SIM	200	146582-26313	03/04/10	03-04-11	0	0	0	0	5	5	25	50		
	5.0ug/mL	5		03/04/10		0	0	10	20	0	0	0	0		
	1.0ug/mL	1		03/04/10		10	20	0	0	0	0	0	0		
	Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	0	0	0	0	5	5	25	50		
EM Science	Methylene Chloride	47080				90	80	90	80	190	90	50	0		
					Final Vol.	100	100	100	100	200	100	100	100		

*V3/4/10*

PREP DATE: 03-04-10																
SIM 8270 Second Source (5μg/mL)																
Exp:	03-18-10															
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:											
	8270D PAH SIM (SS)	200	145112-24097	03/04/10	03-04-11	5										
	Mec12			Lot#47080												
					Final Volume											
						195										

*V3/12/10*

PREP DATE: 03-12-10																
8270T STANDARD CURVE																
Exp:	04-11-10															
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:	0.1	0.2	1	5	10	20	40	50	60	80	100
	8270T Stock	200		02/23/10	08-24-10	0	0	0	5	5	10	20	25	30	40	50
	5.0ug/mL			03/12/10		0	0	20	0	0	0	0	0	0	0	0
	1.0ug/mL			03/12/10		10	20	0	0	0	0	0	0	0	0	0
	Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	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	100	100

*V3/12/10*

PREP DATE: 03-12-10																
8270/625 Second Source (5S) 50ug/mL																
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:	50										
	8270C SS	200		02/23/10	08-24-10	25										
EM Science	Methylene Chloride	47080				75										
					Final Vol.	100										

*V4/6/10*

PREP DATE: 04-06-10																
8270 STANDARD CURVE																
Exp:	04-13-10															
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:	5	10	20	40	50	60	80	100			
	8270T Stock	200		03/23/10	08-24-10	5	5	10	20	25	30	40	50			
	Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	5	5	10	20	25	30	40	50			
EM Science	Methylene Chloride	47080				190	90	80	60	50	40	20	0			
					Final Vol.	200	100	100	100	100	100	100	100			

*V4/6/10*

PREP DATE: 04-06-10																
8270/625 Second Source (5S) 50ug/mL																
Supplier	ID #	Conc. μg/mL	Lot #	Date Code	CODE:	50										
	8270C SS	200		02/23/10	08-24-10	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  
4 analyte(s) at 1000 μg/mL in dichloromethane  
250 Smith St, Illo Kingstown, RI 02852 USA



Semi-volatiles GC/MS Tuning Standard  
Lot #: CF-2995 - 26132  
Rec: 2/17/10 MFR exp. 08/31/11

exp 4/12/11

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PREP DATE:	04-12-10	Conc.	Date	CODE:	B
SV Tune Mix	50ug/ml				
Exp:	04-12-11				
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date
U. Scientific	GCM-150	1000	CF-2995-26132	04/12/10	08-31-11
EM Science	MeCl2		47080		
					Final Vol 19000
					20000

4/12/10

Part #: 10001 Laboratory Use Only - See MSDS  
 Lot #: 032009 Exp: 032012 Storage 0 °C  
  
**CLP Semi-Volatiles Base/Neutrals Mix #1**  
 14 components CLP Semi-Volatiles Base/Neutrals Mix #1  
 2000 ug/mL in ml Lot #: 032009 - 25510  
**ABSOLUTE STANDA** Rec: 11/17/09 MFR exp. 03/20/12

exp 4/12/11

4/12/10

Part #: 10002 Laboratory Use Only - See MSDS  
 Lot #: 073109 Exp: 073112 Storage 4 °C  
  
**CLP Semi-Volatiles Base/Neutrals Mix #2**  
 14 components CLP Semi-Volatiles Base Neutrals Mix #2  
 2000 ug/mL in ml Lot #: 073109 - 25516  
**ABSOLUTE STANDA** Rec: 11/17/09 MFR exp. 07/31/12

exp 4/12/11

4/12/10

Part #: 10004 Laboratory Use Only - See MSDS  
 Lot #: 060407 Exp: 060412 Storage 4 °C  
  
**CLP Semi-Volatiles Toxic Substances #1**  
 4 components CLP Semi-Volatiles Toxic Substances #1  
 2000 ug/mL in ml Lot #: 060407 - 25521  
**ABSOLUTE STANDA** Rec: 11/17/09 MFR exp. 06/04/12

exp 4/12/11

4/12/10

Part #: 10005 Laboratory Use Only - See MSDS  
 Lot #: 121208 Exp: 121213 Storage 4 °C  
  
**CLP Semi-Volatiles Toxic Substances #2**  
 8 components CLP Semi-Volatiles Toxic Substances #2  
 2000 ug/mL in met Lot #: 121208 - 25526  
**ABSOLUTE STANDAR** Rec: 11/17/09 MFR exp. 12/12/13

exp 4/12/11

4/12/10

Part #: 10006 Laboratory Use Only - See MSDS  
 Lot #: 102109 Exp: 102112 Storage 4 °C  
  
**CLP Semi-Volatiles - Benzidines**  
 2 components CLP Semi-Volatiles - Benzidines  
 2000 ug/mL in met Lot #: 102109 - 25531  
**ABSOLUTE STANDAR** Rec: 11/17/09 MFR exp. 10/21/12

exp 4/12/11

4/12/10

Part #: 10007 Laboratory Use Only - See MSDS  
 Lot #: 101409 Exp: 101414 Storage 4 °C  
  
**CLP Semi-Volatiles - PAH Standard**  
 17 components CLP Semi-Volatiles - PAH Mix  
 2000 ug/mL in met Lot #: 101409 - 25536  
**ABSOLUTE STANDAR** Rec: 11/17/09 MFR exp. 10/14/14

exp 4/12/11

4/12/10

Part #: 10018 Laboratory Use Only - See MSDS  
 Lot #: 073109 Exp: 073114 Storage 4 °C  
  
**EPA Method 8270A - Analytes Mix #8**  
 13 components - Pt EPA Method 8270A - Analytes Mix #8  
 2000 ug/mL in met Lot #: 073109 - 25541  
**ABSOLUTE STANDAR** Rec: 11/17/09 MFR e14731/14

exp 4/12/11

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4/11/10

Part #: <b>70023</b>	Laboratory Use Only - See MSDS
Lot #: <b>031909</b>	Exp: <b>031914</b> Storage 4 °C
	Atrazine
1000 ug/mL in acetic acid	Lot #: 031909 - 25546 Rec: 11/17/09 MFR exp. 03/19/14
<b>ABSOLUTE STANDARDS</b>	

exp 4/12/11

4/11/10

Part #: <b>82705</b>	Laboratory Use Only - See MSDS
Lot #: <b>092309</b>	Exp: <b>092312</b> Storage 4 °C
	EPA Method 8270A - Mix #11
4 components	EPA Method 8270A-Mix#11
2000 ug/mL in acetic acid	Lot #: 092309 - 25551 Rec: 11/17/09 MFR exp. 09/23/12
<b>ABSOLUTE STANDARDS</b>	

exp 4/12/11

4/11/10

Part #: <b>94552</b>	Laboratory Use Only-See MSDS
Lot #: <b>052908</b>	Exp: <b>052911</b> 1 mL
	Semi-Volatile Standard
11 components	Semi-Volatile Standard
Varied ug/mL in acetic acid	Lot #: 052908 - 25556 Rec: 11/17/09 MFR exp. 05/29/11
<b>ABSOLUTE STANDARDS</b>	

exp 4/12/11

4/11/10

PREP DATE: 04-12-10						
8270C Stock/Spike Standard						
Exp:	Conc.	Date	CODE:	P	Supplier	ID #
	µg/mL	Lot #	Code	Exp.Date	µL	
Absolute	10001	2000	032009-25510	4-12-10A	03-20-12	1000
Absolute	10002	2000	073109-25516	4-12-10B	07-31-12	1000
Absolute	10004	2000	060407-25521	4-12-10C	06-04-12	1000
Absolute	10005	2000	121208-25526	4-12-10D	12-12-13	1000
Absolute	10006	2000	102109-25531	4-12-10E	10-21-12	1000
Absolute	10007	2000	101409-25536	4-12-10F	10-14-14	1000
Absolute	10018	2000	073109-25541	4-12-10G	07-31-14	1000
Absolute	70023	1000	031909-25546	4-12-10H	03-19-14	1000
Absolute	82705	2000	092309-25551	4-12-10I	09-23-12	1000
Absolute	94552	2000	052908-25556	4-12-10J	05-29-11	1000
				Final Vol	10000	

4/19/10

TCL Hazardous Substances Solution 2, 2,000 mg/L, 1 ml  
**O2Si** Cat. No: 110394-01 Exp: 4/17/2013  
 TCL Hzd. Soln. 2 Lot No: 158122 Storage: <= -10 Degrees C  
 Lot #: 148122 - 26460 Solvent: Methylene Chloride  
 Rec: 4/19/10 MFR exp. 04/17/13 tion For Research Use Only  
 Opened: \_\_\_\_\_

exp 4/19/11

4/19/10

Atrazine Solution, 1,000 mg/L, 1 ml  
**O2Si** Cat. No: 010337-01 Exp: 4/12/2012  
 Atrazine Lot No: 158126 Storage: <= -10 Degrees C  
 Lot #: 158136 - 26468 Solvent: Methylene Chloride  
 Rec: 4/19/10 MFR exp. 04/12/12 n For Research Use Only  
 Red: \_\_\_\_\_

exp 4/19/11

4/19/10

8270 BN Solution 14-4, 2,000 mg/L, 1 ml  
**O2Si** Cat. No: 110391-01 Exp: 4/17/2013  
 8270BN Solution 14-4 Lot No: 158110 Storage: <= -10 Degrees C  
 Lot #: 158119 - 26454 Solvent: Methylene Chloride  
 Rec: 4/19/10 MFR exp. 04/17/13 option For Research Use Only  
 Opened: \_\_\_\_\_ 148.

exp 4/19/11

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*4/19/10-UR*

**O2Si**

8270BN Solution 14-3

Lot #: 158120 - 26456

Rec: 4/19/10 MFR exp. 04/17/13

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

Cat. No: 110392-01

Lot No: 158120

Exp: 4/17/2013

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*F exp 4/19/11*

*4/19/10-UR*

**O2Si**

8270B Acid Solution 4-6

Lot #: 158121 - 26458

Rec: 4/19/10 MFR exp. 04/17/13

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

Cat. No: 110393-01

Lot No: 158121

Exp: 4/17/2013

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*exp 4/19/11*

*4/19/10-UR*

**O2Si**

smar

114-371-4

PAH Solution

Lot #: 158123 - 26462

Rec: 4/19/10 MFR exp. 04/17/13

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

Cat. No: 116070-02

Lot No: 158123

Exp: 4/17/2013

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*exp 4/19/11*

*4/19/10-UR*

**O2Si**

SI

8270

Acid Solution 13-4

Lot #: 158124 - 26464

Rec: 4/19/10 MFR exp. 04/17/13

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

Cat. No: 110396-01

Lot No: 158124

Exp: 4/17/2013

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*exp 4/19/11*

*4/19/10-UR*

**O2Si**

SI

8270

BN Solution 4-21

Lot #: 158125 - 26466

Rec: 4/19/10 MFR exp. 04/17/13

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

Cat. No: 110395-01

Lot No: 158125

Exp: 4/17/2013

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*exp 4/19/11*

*4/19/10-UR*

**O2Si**

SI

8270 11 Compound Mix

Lot #: 158127 - 26469

Rec: 4/19/10 MFR exp. 04/12/12

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

Cat. No: 110397-01

Lot No: 158127

Exp: 4/12/2012

Storage: <= -10 Degrees C

Solvent: Methylene Chloride

For Research Use Only

Opened: \_\_\_\_\_

*exp 4/19/11*

*4/19/10-UR*

PREP DATE:	04-19-10	Conc.	Date	CODE:	P	
<b>8270C Second Source Stock Standard</b>						
Exp:	04-19-11					
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL
O2Si	110391-01	2000	158119-26454	4-19-10A	04-17-13	1000
O2Si	110392-01	2000	158120-26456	4-19-10B	04-17-13	1000
O2Si	110393-01	2000	158121-26458	4-19-10C	04-17-13	1000
O2Si	110394-01	2000	148122-26460	4-19-10D	04-17-13	1000
O2Si	116070-02	2000	158123-26462	4-19-10F	04-17-13	1000
O2Si	110395-01	2000	158125-26466	4-19-10G	04-17-13	1000
O2Si	110396-01	2000	158124-26464	4-19-10H	04-17-13	1000
O2Si	110397-01	2000	158127-26469	4-19-10I	04-12-12	1000
O2Si	010337-01	1000	158136-26468	4-19-10J	04-12-12	1000
EM Science	MeCl2		47080			1000
				Final Vol		10000

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VS/18/10



Ethylene Glycol/Propylene Glycol Solution, 100,000 mg/L, 5 ml  
 Cat. No: 110306-01  
 Lot No: 158827-  
 Ethylene Glycol/Propylene Glycol  
 Lot #: 158826 - 26507  
 Rec: 5/6/10 MFR exp. 05/02/12

Exp: 5/2/2012  
 Storage: Refrigerate  
 Solvent: Water, HPLC Grade  
 n For Research Use Only  
 ned: \_\_\_\_\_

IF

Cy/5/18/11

VS/18/10



Ethylene Glycol/Propylene Glycol Solution (Second Source),  
 100,000 mg/L, 5 ml  
 Cat. No: 110306-01-SS  
 Lot No: 158827-  
 Ethylene Glycol/Propylene Glycol (SS)  
 Lot #: 158827 - 26516  
 Rec: 5/6/10 MFR exp. 05/02/12

Exp: 5/2/2012  
 Storage: Refrigerate  
 Solvent: Water, HPLC Grade  
 n For Research Use Only  
 ts Opened: \_\_\_\_\_

IF

exp 5/18/11

VS/18/10

PREP DATE:	05-18-10	Exp:	11-18-10				
Glycols		Conc.		Date	CODE:	B	IF
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	
O2SI	110306-01	100000	158826-26507	05/18/10	05-18-11	10	
P&T DI Water	100518					990	
						Final Vol	1000

VS/18/10

PREP DATE:	05-18-10	Exp:	11-18-10				
Glycols SS (Second Source)		Conc.		Date	CODE:	B	IF
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	µL	
O2SI	110306-01-SS	100000	158827-26516	05/18/10	05-18-11	10	
P&T DI Water	100518					990	
						Final Vol	1000

VS/18/10

PREP DATE:	05-18-10								
Glycol Calibration Curve						25	50	100	200
Exp:	06-17-10	Conc.	Date			µL	µL	µL	µL
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	25	50	20	50
Glycols		1000			05/18/10	11-18-10		20	100
P&T DI Water	100518					975	950	180	80
						Final Vol.	1000	100	100

VS/18/10

PREP DATE:	05-18-10								
Glycol SS (Second Source)						100			
Exp:	06-17-10	Conc.	Date			µL			
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	20			
Glycols SS		1000			05/18/10	11-18-10			
P&T DI Water	100518					180			
						Final Vol.	200		

VS/18/10

PREP DATE:	05-18-10								
Glycol LCS 100518A						100			
Exp:	06-17-10	Conc.	Date			µL			
Supplier	ID #	µg/mL	Lot #	Code	Exp.Date	20			
Glycols		1000			05/18/10	11-18-10			
P&T DI Water	100518					180			
						Final Vol.	200		

VS/18/10



Cat. No: 110001-02  
 Lot No: 154417  
 8270 Internal Standard  
 Lot #: 154412 - 25840  
 Rec: 12/30/09 MFR exp. 07/17/12

Exp: 7/17/2012  
 Storage: -10 Degrees C  
 Solvent: Methylene Chloride  
 n For Research Use Only  
 ened: 150

IF

exp 5/18/11

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*1/8/10*

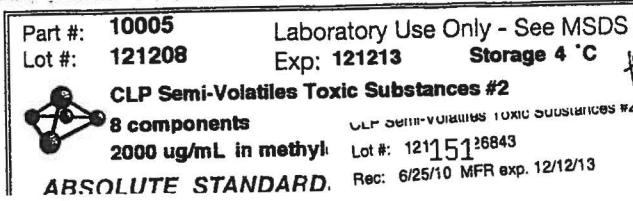
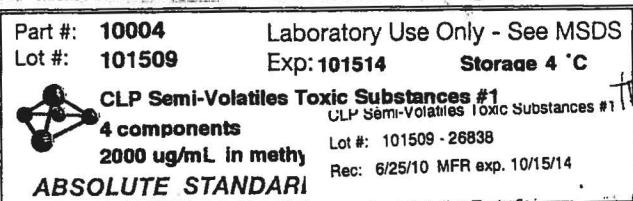
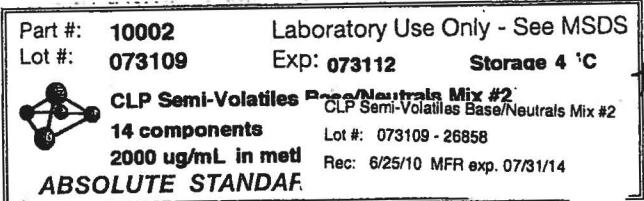
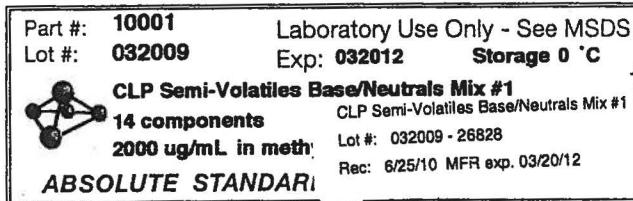
PREP DATE: 08-10-10			8270T STANDARD CURVE													
Supplier	ID #	Conc. µg/mL	Lot #	Date Code	Exp.Date	0.1	0.2	1	2	10	20	40	50	60	80	100
						µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	
	8270T Stock	200		07/28/10	01-28-11	0	0	5	5	10	20	25	30	40	50	
	5.0ug/mL			08/10/10		0	0	20	0	0	0	0	0	0	0	
	1.0ug/mL			08/10/10		10	20	0	0	0	0	0	0	0	0	
	Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	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

*1/8/10*

PREP DATE: 08-10-10			8270 Second Source (SS) 50ug/mL														
Supplier	ID #	Conc. µg/mL	Lot #	Date Code	Exp.Date	50											
						µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	
	8270C SS	200			04/19/10	04-19-11	25										
EM Science	Methylene Chloride	47080				75											
						Final Vol.	100										

*1/8/10*

PREP DATE: 08-13-10			8270 SIM CCV														
Supplier	ID #	Conc. µg/mL	Lot #	Date Code	Exp.Date	5.00											
						µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	
	8270D PAH SIM	200	146582-26313	03/04/10	03-04-11	5											
	Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	5											
EM Science	Methylene Chloride	47080				190											
						Final Vol.	200										



GC/MS STANDARD PREPARATION BOOK # 5 PAGE # 66

fmn 8/18/10

Part #: 10006 Lot #: 020810	Laboratory Use Only - See MSDS Exp: 020813 Storage 4 °C
<b>CLP Semi-Volatiles - Benzidines</b> 2 components 2000 ug/mL in metha	
CLP Semi-Volatiles - Benzidines Lot #: 020810 - 26848 Rec: 6/25/10 MFR exp. 02/08/13	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11

fmn 8/18/10

Part #: 10007 Lot #: 101409	Laboratory Use Only - See MSDS Exp: 101414 Storage 4 °C
<b>CLP Semi-Volatiles - PAH Standard</b> 17 components 2000 ug/mL in metha	
CLP Semi-Volatiles - PAH Mix Lot #: 101409 - 26853 Rec: 6/25/10 MFR exp. 10/14/14	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11

fmn 8/18/10

Part #: 10018 Lot #: 073109	Laboratory Use Only - See MSDS Exp: 073114 Storage 4 °C
<b>EPA Method 8270A - Analytes Mix #8</b> 13 components - P/ 2000 ug/mL in met	
CLP Semi-Volatiles Base/Neutrals Mix #2 Lot #: 073109 - 26833 Rec: 6/25/10 MFR exp. 07/31/12	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11

fmn 8/18/10

Part #: 70023 Lot #: 011910	Laboratory Use Only - See MSDS Exp: 011915 Storage 4 °C
<b>Atrazine</b>	
Atrazine Lot #: 011910 - 26863 Rec: 6/25/10 MFR exp. 01/19/15	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11

fmn 8/18/10

Part #: 82705 Lot #: 031610	Laboratory Use Only - See MSDS Exp: 031613 Storage 4 °C
<b>EPA Method 8270A - Mix #11</b>	
EPA Method 8270A - Mix #18 4 components 2000 ug/mL in acet	
Lot #: 031610 - 26868 Rec: 6/25/10 MFR exp. 03/16/13	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11

fmn 8/18/10

Part #: 94552 Lot #: 052908	Laboratory Use Only - See MSDS Exp: 052911 1 mL
<b>Semi-Volatile Standard</b>	
11 components Varied ug/mL in	
Semi-Volatile Standard Lot #: 052908 - 26873 Rec: 6/25/10 MFR exp. 05/29/11	
<b>ABSOLUTE STANDAR</b>	

exp. 8/18/11  
5/29/11

GC/MS STANDARD PREPARATION BOOK # 5 PAGE # 67

*VP 8/18/10*

PREP DATE:		08-18-10												
8270C Stock/Spike Standard														
Exp:	02-18-11													
Supplier	ID #	Conc.	Date	CODE:	P									
		µg/mL	Lot #	Code	Exp.Date	µL								
Absolute	10001	2000	032009-26828	08-18-10A	03-20-12	1000								
Absolute	10002	2000	073109-26858	08-18-10B	07-31-14	1000								
Absolute	10004	2000	101509-26838	08-18-10C	10-15-14	1000								
Absolute	10005	2000	121208-26843	08-18-10D	12-12-13	1000								
Absolute	10006	2000	020810-26848	08-18-10E	02-08-13	1000								
Absolute	10007	2000	101409-26853	08-18-10F	10-14-14	1000								
Absolute	10018	2000	073109-26833	08-18-10G	07-31-12	1000								
Absolute	70023	1000	011910-26863	08-18-10H	01-19-15	1000								
Absolute	82705	2000	031610-26868	08-18-10I	03-16-13	1000								
Absolute	94552	2000	052908-26873	08-18-10J	05-29-11	1000								
					Final Vol.	10000								

*OF 9/5/10*

PREP DATE:		09-27-10														
8270T STANDARD CURVE																
Exp:	10-27-10															
Supplier	ID #	Conc.	Date	0.1	0.2	1	5	10	20	40	50	60	80	100		
		µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	
8270T Stock	200		08/18/10	02-18-11	0	0	0	5	5	10	20	25	30	40	50	
5.0ug/mL			09/27/10		0	0	20	0	0	0	0	0	0	0	0	
1.0ug/mL			09/27/10		10	20	0	0	0	0	0	0	0	0	0	
Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	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	

*VP 9/17/10*

PREP DATE:		09-27-10													
8270 Second Source (SS) 50ug/mL															
Supplier	ID #	Conc.	Date	0.1	0.2	1	5	10	20	40	50	60	80	100	
		µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
8270C SS	200		04/19/10	04-19-11	25										
EM Science	Methylene Chloride	47080			75										
					Final Vol.		100	200	100	100	100	100	100	100	100

*VP 10/10/10*

PREP DATE:		09-28-10														
8270T STANDARD CURVE																
Exp:	10-28-10															
Supplier	ID #	Conc.	Date	0.1	0.2	1	5	10	20	40	50	60	80	100		
		µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL	
8270T Stock	200		08/18/10	02-18-11	0	0	0	5	5	10	20	25	30	40	50	
5.0ug/mL			09/28/10		0	0	20	0	0	0	0	0	0	0	0	
1.0ug/mL			09/28/10		10	20	0	0	0	0	0	0	0	0	0	
Surrogate Stock	VAR	149231-24856	03/04/10	03-04-11	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	

*VP 10/10/10*

PREP DATE:		09-28-10													
8270 Second Source (SS) 50ug/mL															
Supplier	ID #	Conc.	Date	0.1	0.2	1	5	10	20	40	50	60	80	100	
		µg/mL	Lot #	Code	Exp.Date	µL	µL	µL	µL	µL	µL	µL	µL	µL	µL
8270C SS	200		04/19/10	04-19-11	25										
EM Science	Methylene Chloride	47080			75										
					Final Vol.		100	200	100	100	100	100	100	100	100

## Organic Extraction Worksheet

Method	SIM Separatory Funnel Extra 3510C	Extraction Set	101026A	Extraction Method	SEP004S	Units	mL
Spiked ID 1	SIM Spike 146472-24385		Surrogate ID 1	8270 Surrogate 164394-27498			
Spiked ID 2			Surrogate ID 2				
Spiked ID 3			Surrogate ID 3				
Spiked ID 4			Surrogate ID 4				
Spiked ID 5			Surrogate ID 5				
Spiked ID 6			Sufficient Vol for Matrix QC:	YES			
Spiked ID 7			Ext. Start Time:				
Spiked ID 8			Ext. End Time:				
			GC Requires Extract By:	11/05/10 0:00			
			pH1	2	10/26/10 9:32:00 AM	W Bath Temp	80 °C
			pH2	14	10/26/10 1:55:00 PM		
			pH3				

Spiked By: SH

Date 10/26/10

Witnessed By: GH

Date 10/26/10

Sample	Sample Container	Spike Amount	Spike ID	Surrogate Amount	Surrogate ID	Extract Amount	Final Volume	pH	Extract Date/Time	Comments
1 101026A Blk				0.025	1	1000	1	2/14	10/26/10 9:30	
2 101026A LCS-1		0.025	1	0.025	1	1000	1	2/14	10/26/10 9:30	
3 AY25113	AY25113W06			0.025	1	1020	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
4 AY25115	AY25115W07			0.025	1	1000	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
5 AY25116	AY25116W05			0.025	1	1000	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
6 AY25117 MS-1	AY25117W17	0.025	1	0.025	1	1030	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
7 AY25117 MSD-1	AY25117W19	0.025	1	0.025	1	1030	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
8 AY25117	AY25117W14			0.025	1	1030	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter
9 AY25118	AY25118W03			0.025	1	1040	1	2/14	10/26/10 9:30	62931-2 WEEK RUSH -- Amber Liter

10/26/10

HM

Solvent and Lot#	
MC	VWR 091310C
Na2SO4	1750C276
10N NaOH	10/11/10
1+1 Acid	10/8/10
A. Na2SO4	10/8/10

Extraction COC Transfer	
Extraction lab employee Initials	HM
GC analyst's initials	JP
Date	10/27/10
Time	17:00
Refrigerator	Hanek

Technician's Initials	
Scanned By	HM
Sample Preparation	SH/GH
Extraction	SH/HM
Concentration	DL
Modified	10/26/10 8:23:42 AM

Reviewed By: HM Date 10/26/10

Ext\_ID 154 28116

## Injection Log

Directory: M:\LINUS\DATA\L100707\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	0707L001.D	1	SVTUNE 04-12-10		7 Jul 10 11:15
2	2	0707L002.D	1	0.1ug/ml PAH	7-07-10	7 Jul 10 11:33
3	3	0707L003.D	1	0.2ug/ml PAH		7 Jul 10 11:59
4	4	0707L004.D	1	0.5ug/ml PAH		7 Jul 10 12:24
5	5	0707L005.D	1	1.0ug/ml PAH		7 Jul 10 12:49
6	6	0707L006.D	1	5.0ug/ml PAH		7 Jul 10 13:15
7	7	0707L007.D	1	10ug/ml PAH		7 Jul 10 13:40
8	8	0707L008.D	1	50ug/ml PAH		7 Jul 10 14:06
9	9	0707L009.D	1	100ug/ml PAH		7 Jul 10 14:31
10	10	0707L010.D	1	5.0ug/ml PAH SS	7-07-10	7 Jul 10 14:57
11	1	1027L001.D	1	SVTUNE 04-12-10		27 Oct 10 18:17
12	2	1027L002.D	1	5.0ug/mL PAH	8-13-10	27 Oct 10 18:34
13	3	1027L003.D	1	101026A BLK	1/1000	27 Oct 10 19:00
14	4	1027L004.D	1	101026A LCS-1	1/1000	27 Oct 10 19:26
15	7	1027L007.D	1	AY25113W06	1/1020	27 Oct 10 20:42
16	8	1027L008.D	1	AY25115W07	1/1000	27 Oct 10 21:07
17	9	1027L009.D	1	AY25116W05	1/1000	27 Oct 10 21:32
18	10	1027L010.D	0.97087	AY25117W17 MS-1	1/1030	27 Oct 10 21:58
19	11	1027L011.D	0.97087	AY25117W19 MSD-1	1/1030	27 Oct 10 22:23
20	12	1027L012.D	0.97087	AY25117W14	1/1030	27 Oct 10 22:48
21	13	1027L013.D	0.96154	AY25118W03	1/1040	27 Oct 10 23:13

**EPA METHOD 8260B**  
**Volatile Organic Compounds**

**EPA METHOD 8260B  
Volatile Organic Compounds  
QC Summary**

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 101029W-25117 - 148687  
 Batch ID: #86RHB-101029AN

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	10/30/10	10/30/10
BLANK	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
BLANK	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
BLANK	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
BLANK	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
BLANK	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
BLANK	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
BLANK	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
BLANK	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
BLANK	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
BLANK	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
BLANK	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
BLANK	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
BLANK	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
BLANK	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
BLANK	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
BLANK	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
BLANK	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
 Run #: 1029N34  
 Instrument: Neo  
 Sequence: N101029  
 Initials: GM

GC SC-Blank-REG MDLs  
 Printed: 11/08/10 1:32:38 PM

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: **101029W-25117 - 148687**  
 Batch ID: #86RHB-101029AN

APPL Inc.  
 908 North Temperance Avenu  
 Clovis, CA 93611

Sample Type	Analyte	Result	LOQ	LOD	DL	Units	Extraction Date	Analysis Date
BLANK	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10
BLANK	Styrene	0.50 U	1.0	0.50	0.25	ug/L	10/30/10	10/30/10
BLANK	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
BLANK	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
BLANK	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Surrogate: 1,2-Dichloroethane-d4 (	104	70-120			%	10/30/10	10/30/10
BLANK	Surrogate: 4-Bromofluorobenzene	111	75-120			%	10/30/10	10/30/10
BLANK	Surrogate: Dibromofluoromethane	94.1	85-115			%	10/30/10	10/30/10
BLANK	Surrogate: Toluene-D8 (S)	112	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
 Run #: 1029N34  
 Instrument: Neo  
 Sequence: N101029  
 Initials: GM

GC SC-Blank-REG MDLs  
 Printed: 11/08/10 1:32:38 PM

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 62931

Case No: 62931

Date Analyzed: 10/30/10

Matrix: WATER

Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: 1,2-Dichloroethane-d4	Surrogate: 4-Bromofluorobenzene
101029AN-LCS	Lab Control Spike	109	108
101029AN-BLK	Blank	104	111
AY25118	ES008	104	97.5
AY25114	TRIP BLANK	113	108
AY25113	ES004	101	109
AY25115	ES005	102	111
AY25116	ES006	103	101
AY25117	ES007	105	112
AY25117-MS	Matrix Spike	111	99.3
AY25117-MSD	Matrix SpikeD	99.3	105

Comments: Batch: #86RHB-101029AN

Printed: 11/08/10 1:32:40 PM  
Form 2 & 8, Surrogate Recovery Summary

Form 2 & 8

**Surrogate Recovery**

Lab Name: APPL, Inc.

SDG No: 62931

Case No: 62931

Date Analyzed: 10/30/10

Matrix: WATER

Instrument: Neo

APPL ID.	Client Sample No.	Surrogate: Dibromofluoromethane	Surrogate: Toluene-D8 (S)
101029AN-LCS	Lab Control Spike	101	109
101029AN-BLK	Blank	94.1	112
AY25118	ES008	101	99.7
AY25114	TRIP BLANK	99.9	113
AY25113	ES004	94.3	110
AY25115	ES005	96.5	114
AY25116	ES006	94.9	102
AY25117	ES007	97.6	113
AY25117-MS	Matrix Spike	102	101
AY25117-MSD	Matrix SpikeD	94.6	104

Comments: Batch: #86RHB-101029AN

Printed: 11/08/10 1:32:41 PM  
Form 2 & 8, Surrogate Recovery Summary

**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 LCS - 148687

Batch ID: #86RHB-101029AN

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L		
1,1,1,2-Tetrachloroethane	10.00	10.8	108	80-130
1,1,1-Trichloroethane	10.00	10.3	103	65-130
1,1,2,2-Tetrachloroethane	10.00	9.39	93.9	65-130
1,1,2-Trichloroethane	10.00	10.4	104	75-125
1,1-Dichloroethane	10.00	9.96	99.6	70-135
1,1-Dichloroethene	10.00	9.42	94.2	70-130
1,2,3-Trichloropropane	10.00	10.2	102	75-125
1,2,4-Trichlorobenzene	10.00	10.0	100	65-135
1,2-Dibromo-3-chloropropane	10.00	10.6	106	50-130
1,2-Dibromoethane	10.00	10.7	107	70-130
1,2-Dichlorobenzene	10.00	9.83	98.3	70-120
1,2-Dichloroethane	10.00	10.4	104	70-130
1,2-Dichloropropane	10.00	10.3	103	75-125
1,3-Dichlorobenzene	10.00	9.81	98.1	75-125
1,3-Dichloropropene, total	20.0	19.1	95.5	70-130
1,4-Dichlorobenzene	10.00	10.2	102	75-125
2-Butanone	10.00	9.72	97.2	30-150
4-Methyl-2-pentanone	10.00	10.0	100	60-135
Acetone	10.00	9.83	98.3	40-140
Benzene	10.00	10.5	105	80-120
Bromodichloromethane	10.00	10.6	106	75-120
Bromoform	10.00	10.5	105	70-130
Bromomethane	10.00	9.85	98.5	30-145
Carbon tetrachloride	10.00	10.4	104	65-140
Chlorobenzene	10.00	10.6	106	80-120
Chlorodibromomethane	10.00	10.5	105	60-135

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

Primary	SPK
Quant Method :	N86DODW.M
Extraction Date :	10/30/10
Analysis Date :	10/30/10
Instrument :	Neo
Run :	1029N29
Initials :	GM

Printed: 11/08/10 1:32:49 PM

APPL Standard LCS

**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 LCS - 148687

Batch ID: #86RHB-101029AN

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK %	Recovery
	ug/L	ug/L	Recovery	Limits
Chloroethane	10.00	10.2	102	60-135
Chloroform	10.00	10.0	100	65-135
Chloromethane	10.00	9.29	92.9	40-125
cis-1,2-Dichloroethene	10.00	9.88	98.8	70-125
Ethylbenzene	10.00	10.7	107	75-125
Gasoline	300	286	95.3	75-125
Hexachlorobutadiene	10.00	10.9	109	50-140
Methyl tert-butyl ether	10.00	10.2	102	65-125
Methylene chloride	10.00	10.6	106	55-140
Styrene	10.00	10.6	106	65-135
Tetrachloroethene	10.00	11.4	114	45-150
Toluene	10.00	9.84	98.4	75-120
trans-1,2-Dichloroethene	10.00	10.0	100	60-140
Trichloroethene	10.00	10.8	108	70-125
Vinyl chloride	10.00	8.82	88.2	50-145
Xylenes (Total)	30.0	33.1	110	80-120
Surrogate: 1,2-Dichloroethane-d4 (S)	22.9	24.8	109	70-120
Surrogate: 4-Bromofluorobenzene (S)	24.0	25.8	108	75-120
Surrogate: Dibromofluoromethane (S)	24.5	24.7	101	85-115
Surrogate: Toluene-D8 (S)	23.4	25.6	109	85-120

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

Primary	SPK
Quant Method :	N86DODW.M
Extraction Date :	10/30/10
Analysis Date :	10/30/10
Instrument :	Neo
Run :	1029N29
Initials :	GM

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APPL Standard LCS

**Matrix Spike Recoveries**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 MS - 148687

Batch ID: #86RHB-101029AN

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK %	DUP %	Recovery	RPD	RPD
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	Limits
1,1,1,2-Tetrachloroethane	10.00	ND	9.65	10.1	96.5	101	80-130	4.6	30
1,1,1-Trichloroethane	10.00	ND	9.87	9.51	98.7	95.1	65-130	3.7	30
1,1,2,2-Tetrachloroethane	10.00	ND	10.1	10.9	101	109	65-130	7.6	30
1,1,2-Trichloroethane	10.00	ND	9.86	9.19	98.6	91.9	75-125	7.0	30
1,1-Dichloroethane	10.00	ND	9.89	9.49	98.9	94.9	70-135	4.1	30
1,1-Dichloroethene	10.00	ND	9.17	9.50	91.7	95.0	70-130	3.5	30
1,2,3-Trichloropropane	10.00	ND	9.56	11.1	95.6	111	75-125	14.9	30
1,2,4-Trichlorobenzene	10.00	ND	7.71	8.09	77.1	80.9	65-135	4.8	30
1,2-Dibromo-3-chloropropane	10.00	ND	9.72	10.3	97.2	103	50-130	5.8	30
1,2-Dibromoethane	10.00	ND	9.87	10.6	98.7	106	70-130	7.1	30
1,2-Dichlorobenzene	10.00	ND	8.84	9.38	88.4	93.8	70-120	5.9	30
1,2-Dichloroethane	10.00	ND	11.2	9.92	112	99.2	70-130	12.1	30
1,2-Dichloropropane	10.00	ND	10.4	9.00	104	90.0	75-125	14.4	30
1,3-Dichlorobenzene	10.00	ND	8.34	8.91	83.4	89.1	75-125	6.6	30
1,3-Dichloropropene, total	20.0	ND	19.1	17.8	95.5	89.0	70-130	7.0	30
1,4-Dichlorobenzene	10.00	ND	8.76	9.26	87.6	92.6	75-125	5.5	30
2-Butanone	10.00	ND	9.60	8.37	96.0	83.7	30-150	13.7	30
4-Methyl-2-pentanone	10.00	ND	9.67	10.9	96.7	109	60-135	12.0	30
Acetone	10.00	1.4	11.6	12.8	102	114	40-140	9.8	30
Benzene	10.00	ND	10.0	9.54	100	95.4	80-120	4.7	30
Bromodichloromethane	10.00	ND	10.1	9.15	101	91.5	75-120	9.9	30
Bromoform	10.00	ND	9.70	10.3	97.0	103	70-130	6.0	30
Bromomethane	10.00	ND	8.13	8.18	81.3	81.8	30-145	0.61	30
Carbon tetrachloride	10.00	ND	10.0	9.42	100	94.2	65-140	6.0	30
Chlorobenzene	10.00	ND	9.13	10.1	91.3	101	80-120	10.1	30

# = Recovery is outside QC limits.

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

Primary	SPK	DUP
Quant Method :	N86DODW.M	N86DODW.M
Extraction Date :	10/30/10	10/30/10
Analysis Date :	10/30/10	10/30/10
Instrument :	Neo	Neo
Run :	1029N43	1029N44
Initials :	GM	

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APPL MSD SCI

**Matrix Spike Recoveries**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 MS - 148687

Batch ID: #86RHB-101029AN

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK % Recovery	DUP % Recovery	Recovery Limits	RPD %	RPD Limits
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	Limits
Chlorodibromomethane	10.00	ND	9.70	10.4	97.0	104	60-135	7.0	30
Chloroethane	10.00	ND	8.24	7.41	82.4	74.1	60-135	10.6	30
Chloroform	10.00	ND	9.92	9.76	99.2	97.6	65-135	1.6	30
Chloromethane	10.00	ND	9.70	9.04	97.0	90.4	40-125	7.0	30
cis-1,2-Dichloroethene	10.00	ND	9.77	9.09	97.7	90.9	70-125	7.2	30
Ethylbenzene	10.00	ND	9.31	9.28	93.1	92.8	75-125	0.32	30
Gasoline	300	ND	323	335	108	112	75-125	3.6	30
Hexachlorobutadiene	10.00	ND	4.85	5.22	48.5 #	52.2	50-140	7.3	30
Methyl tert-butyl ether	10.00	ND	10.5	9.34	105	93.4	65-125	11.7	30
Methylene chloride	10.00	ND	9.33	8.51	93.3	85.1	55-140	9.2	30
Styrene	10.00	ND	8.61	8.85	86.1	88.5	65-135	2.7	30
Tetrachloroethene	10.00	ND	9.06	9.85	90.6	98.5	45-150	8.4	30
Toluene	10.00	ND	9.66	8.77	96.6	87.7	75-120	9.7	30
trans-1,2-Dichloroethene	10.00	ND	9.99	9.55	99.9	95.5	60-140	4.5	30
Trichloroethene	10.00	ND	9.50	8.91	95.0	89.1	70-125	6.4	30
Vinyl chloride	10.00	ND	9.93	8.99	99.3	89.9	50-145	9.9	30
Xylenes (Total)	30.0	ND	27.6	29.0	92.0	96.7	80-120	4.9	30
Surrogate: 1,2-Dichloroethane-d4 (S)	22.9	NA	25.4	22.7	111	99.3	70-120		
Surrogate: 4-Bromofluorobenzene (S)	24.0	NA	23.8	25.2	99.3	105	75-120		
Surrogate: Dibromofluoromethane (S)	24.5	NA	25.1	23.2	102	94.6	85-115		
Surrogate: Toluene-D8 (S)	23.4	NA	23.6	24.3	101	104	85-120		

# = Recovery is outside QC limits.

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

Primary	SPK	DUP
Quant Method :	N86DODW.M	N86DODW.M
Extraction Date :	10/30/10	10/30/10
Analysis Date :	10/30/10	10/30/10
Instrument :	Neo	Neo
Run :	1029N43	1029N44
Initials :	GM	

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APPL MSD SCII

**EPA 8260B****Form 4****Blank Summary**

Lab Name: APPL, Inc.  
Case No: 62931  
Matrix: WATER  
Blank ID: 101029AN-BLK

SDG No: 62931  
Date Analyzed: 10/30/10  
Instrument: Neo  
Time Analyzed: 1020

APPL ID.	Client Sample No.	File ID.	Date Analyzed
101029AN-LCS	Lab Control Spike	1029N29	10/30/10 0726
101029AN-BLK	Blank	1029N34	10/30/10 1020
AY25118	ES008	1029N35	10/30/10 1055
AY25114	TRIP BLANK	1029N37	10/30/10 1205
AY25113	ES004	1029N39	10/30/10 1315
AY25115	ES005	1029N40	10/30/10 1350
AY25116	ES006	1029N41	10/30/10 1425
AY25117	ES007	1029N42	10/30/10 1500
101029AN-MS	Matrix Spike	1029N43	10/30/10 1535
101029AN-MSD	Matrix SpikeD	1029N44	10/30/10 1611

Comments: Batch: #86RHB-101029AN

Form 5  
Tune Summary

Lab Name: APPL Inc.  
Case No: 62931  
Matrix: Water  
ID: 20ug/ml BFB Std 09-27-10C

SDG No: 62931  
Date Analyzed: 10/30/2010  
Instrument: Neo  
Time Analyzed: 6:51

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Lab Control Spike	101029A LCS-1WN(SS)	10/30/2010 7:26
2	Lab Control Spike	GAS 300ug/L LCS-1WN	10/30/2010 9:11
3	Lab Control SpikeD	GAS 300ug/L LCSD-1WN	10/30/2010 9:45
4	Blank	101029A BLK-1WN	10/30/2010 10:20
5	ES008	AY25118W01	10/30/2010 10:55
6	TRIP BLANK	AY25114W01	10/30/2010 12:05
7	ES004	AY25113W01	10/30/2010 13:15
8	ES005	AY25115W01	10/30/2010 13:50
9	ES006	AY25116W01	10/30/2010 14:25
10	ES007	AY25117W01	10/30/2010 15:00
11		AY25117W234 MS-1WN	10/30/2010 15:35
12		AY25117W234 MSD-1WN	10/30/2010 16:11
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

m/e

50 15 - 40% of mass 95	19.7
75 30 - 60% of mass 95	40.1
95 100 - 100% of mass 95	100.0
96 5 - 9% of mass 95	6.5
173 0 - 2% of mass 174	0.3
174 50 - 100% of mass 95	83.3
175 5 - 9% of mass 174	7.0
176 95 - 101% of mass 174	97.3
177 5 - 9% of mass 176	6.4

Form 5  
Tune Summary

Lab Name: APPL Inc.

Case No: 1101N01W.D

Matrix: Water

ID: 20ug/ml BFB Std 09-27-10C

SDG No: Neo

Date Analyzed: 11/1/2010

Instrument: Neo

Time Analyzed: 9:57

Client Sample No.	APPL ID.	File ID.	Date Analyzed
1	Lab Control Spike	GAS 300ug/L LCS-1WN	11/1/2010 11:41
2		AY25117W456 MS-1WN	11/1/2010 18:45
3		AY25117W456 MSD-1WN	11/1/2010 19:21
4			
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21			
22			

m/e

50 15 - 40% of mass 95	19.7
75 30 - 60% of mass 95	41.3
95 100 - 100% of mass 95	100.0
96 5 - 9% of mass 95	6.7
173 0 - 2% of mass 174	0.4
174 50 - 100% of mass 95	87.9
175 5 - 9% of mass 174	7.1
176 95 - 101% of mass 174	97.3
177 5 - 9% of mass 176	6.6

8A  
INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: APPL Inc.

Contract: Review

Lab Code: \_\_\_\_\_

SDG No.: 62931

Lab File ID (Standard): 1029N20W.D

Date Analyzed: 10/30/10

Instrument ID: Neo

Time Analyzed: 1:03

GC Column: \_\_\_\_\_

ID: \_\_\_\_\_ Heated Purge: (Y/N) \_\_\_\_\_

Fluorobenzene (IS)		Chlorobenzene-D5 (IS)		1,4-Dichlorobenzene-D (IS)	
	AREA #	RT #	AREA #	RT #	AREA #
12 HOUR STD	247488	13.36	145536	18.53	74544
UPPER LIMIT	494976	13.86	291072	19.03	149088
LOWER LIMIT	123744	12.86	72768	18.03	37272
SAMPLE NO.					
01 101029A LCS-1WN(SS)	219200	13.35	136640	18.52	73928
02 101029A BLK-1WN	225408	13.34	133888	18.51	77992
03 AY25118W01	215168	13.34	149696	18.52	71472
04 AY25114W01	209344	13.34	133952	18.51	72776
05 AY25113W01	227968	13.34	134656	18.51	71280
06 AY25115W01	214080	13.34	126568	18.52	72544
07 AY25116W01	210560	13.34	133760	18.51	63672
08 AY25117W01	206784	13.34	126008	18.51	71592
09 AY25117W234 MS-1WN	197504	13.34	137536	18.52	71416
10 AY25117W234 MSD-1W	215808	13.35	130856	18.51	66352
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.: 62931

Lab File ID (Standard): 1029N09W.D

Date Analyzed: 10/29/10

Instrument ID: Neo

Time Analyzed: 18:40

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	424045	13.38	408547	18.54	405852	22.74
UPPER LIMIT	848090	13.88	817094	19.04	811704	23.24
LOWER LIMIT	212023	12.88	204274	18.04	202926	22.24
SAMPLE						
NO.						
01 GAS 300ug/L LCS-1WN	442280	13.35	435190	18.52	485036	22.70
02 GAS 300ug/L LCSD-1W	494526	13.34	413768	18.51	452363	22.70
03 101029A BLK-1WN	340667	13.41	397819	18.51	451612	22.70
04 AY25118W01	453345	13.34	428614	18.52	427600	22.70
05 AY25114W01	453528	13.34	418748	18.51	424384	22.70
06 AY25113W01	485171	13.34	404542	18.51	432880	22.70
07 AY25115W01	456080	13.34	386313	18.51	436960	22.70
08 AY25116W01	449360	13.34	413871	18.51	380236	22.70
09 AY25117W01	447361	13.34	386222	18.51	437203	22.70
10 GAS 300ug/L LCS-1WN	485207	13.31	462495	18.47	521911	22.67
11 AY25117W456 MS-1WN	461742	13.32	413546	18.48	438208	22.68
12 AY25117W456 MSD-1W	325009	13.38	421127	18.49	468595	22.68
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = -50% of internal standard area.

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

**EPA METHOD 8260B  
Volatile Organic Compounds  
Sample Data**

# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES004**  
Sample Collection Date: 10/19/10

ARF: 62931  
**APPL ID: AY25113**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N39  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

## EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES004**  
Sample Collection Date: 10/19/10

ARF: 62931  
**APPL ID: AY25113**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	101	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	109	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	94.3	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	110	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N39  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N39W.D Vial: 1  
 Acq On : 30 Oct 10 13:15 Operator: GM  
 Sample : AY25113W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:48 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	227968	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.51	117	134656	25.00000	ppb	-0.02
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	71280	25.00000	ppb	-0.02

System Monitoring Compounds						
20) Dibromofluoromethane(S)	11.94	111	223851	23.12767	ppb	-0.02
Spiked Amount	24.523		Recovery	=	94.311%	
23) 1,2-DCA-D4(S)	12.73	65	161495	23.08505	ppb	-0.02
Spiked Amount	22.857		Recovery	=	100.998%	
36) Toluene-D8(S)	15.98	98	692061	25.69807	ppb	-0.03
Spiked Amount	23.425		Recovery	=	109.703%	
44) 4-Bromofluorobenzene(S)	20.58	95	251991	26.11789	ppb	-0.02
Spiked Amount	23.962		Recovery	=	108.995%	

Target Compounds	Qvalue
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## Quantitation Report

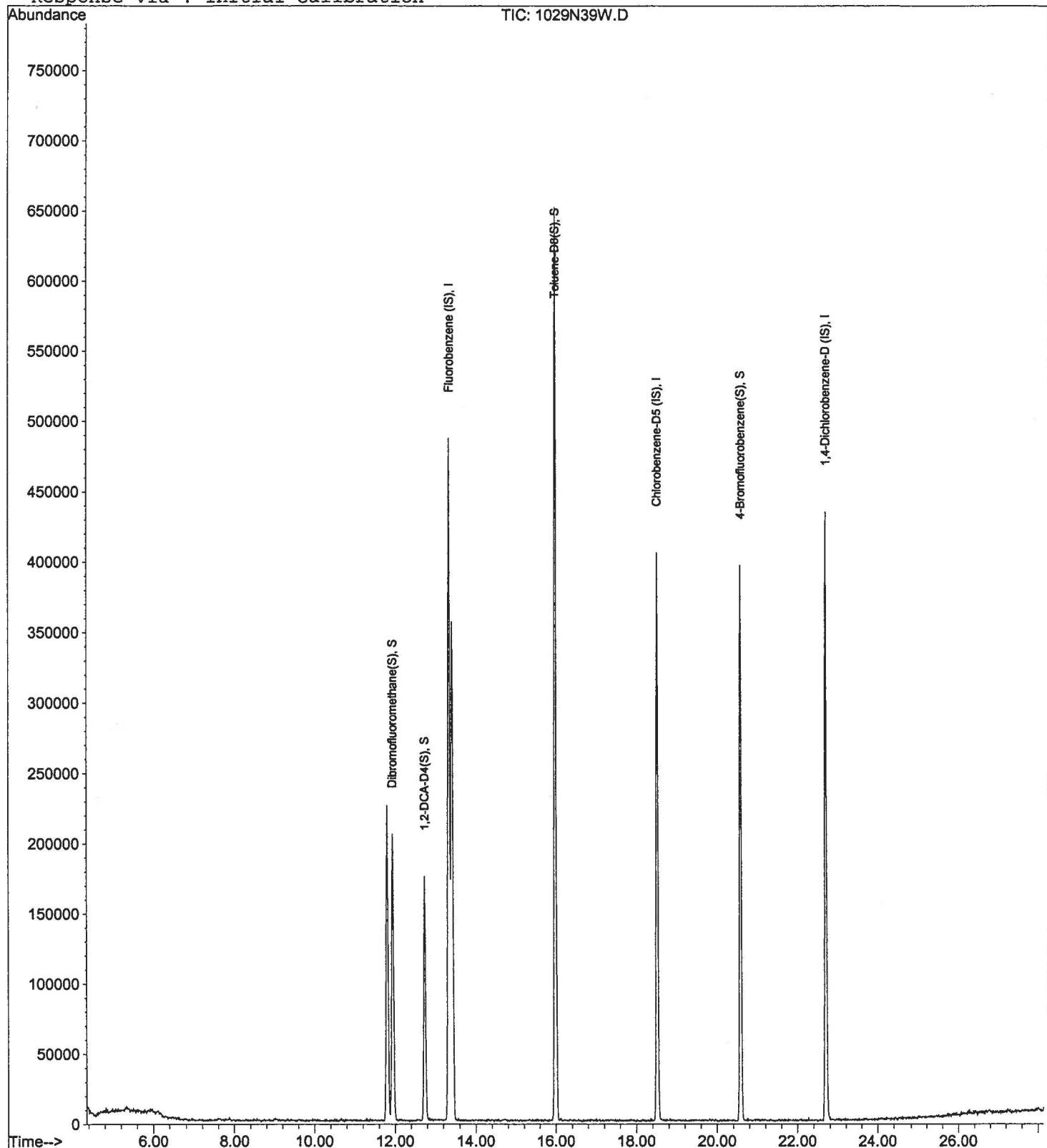
Data File : M:\NEO\DATA\N101029\1029N39W.D  
Acq On : 30 Oct 10 13:15  
Sample : AY25113W01  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 3 8:48 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N39W.D Vial: 1  
 Acq On : 30 Oct 10 13:15 Operator: GM  
 Sample : AY25113W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:35 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	TIC	485171	25.00000	ppb	-0.03
5) Chlorobenzene-D5 (IS)	18.51	TIC	404542	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	432880	25.00000	ppb	-0.03
<b>System Monitoring Compounds</b>						
3) Dibromofluoromethane(S)	11.94	TIC	664915	19.43520	ppb	-0.03
Spiked Amount	24.523		Recovery	=	79.252%	
4) 1,2-DCA-D4(S)	12.73	TIC	547660	3.10028	ppb	0.02
Spiked Amount	22.857		Recovery	=	13.563%	
6) Toluene-D8(S)	15.98	TIC	1936609	23.88232	ppb	-0.03
Spiked Amount	23.425		Recovery	=	101.950%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1166979	25.38485	ppb	-0.03
Spiked Amount	23.162		Recovery	=	109.595%	

Target Compounds	Qvalue
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## Quantitation Report

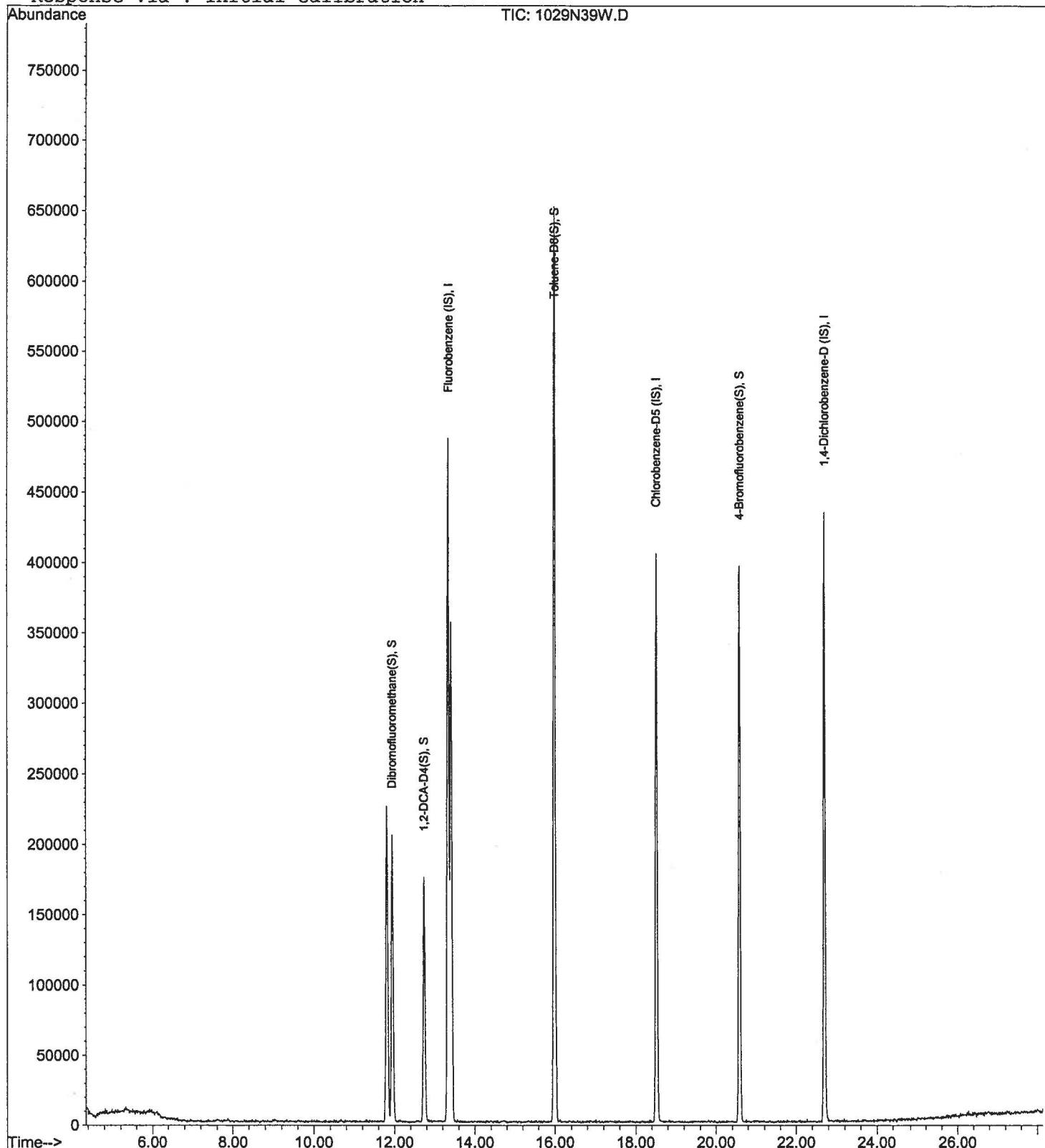
Data File : M:\NEO\DATA\N101029\1029N39W.D  
 Acq On : 30 Oct 10 13:15  
 Sample : AY25113W01  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra

Project: LTM Red Hill Bulk Fuel Storage Facility

ARF: 62931

**Sample ID: TRIP BLANK**

**APPL ID: AY25114**

Sample Collection Date: 10/19/10

QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.3 J	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

J = Estimated value.

Quant Method: N86DODW.M  
Run #: 1029N37  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: TRIP BLANK**  
Sample Collection Date: 10/19/10

ARF: 62931  
**APPL ID: AY25114**  
**QCG: #86RHB-101029AN-148687**

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	113	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	108	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	99.9	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	113	85-120			%	10/30/10	10/30/10

J = Estimated value.

Quant Method: N86DODW.M  
Run #: 1029N37  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N37W.D Vial: 1  
 Acq On : 30 Oct 10 12:05 Operator: GM  
 Sample : AY25114W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:47 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	209344	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.51	117	133952	25.00000	ppb	-0.02
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	72776	25.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.94	111	217713	24.49461	ppb	-0.02
Spiked Amount 24.523			Recovery	= 99.886%		
23) 1,2-DCA-D4(S)	12.73	65	166101	25.85576	ppb	-0.02
Spiked Amount 22.857			Recovery	= 113.121%		
36) Toluene-D8(S)	15.98	98	709637	26.48921	ppb	-0.03
Spiked Amount 23.425			Recovery	= 113.080%		
44) 4-Bromofluorobenzene(S)	20.59	95	247629	25.80068	ppb	0.00
Spiked Amount 23.962			Recovery	= 107.672%		
<b>Target Compounds</b>						
8) Acetone	7.82	43	1313	1.26074	ppb	85

(#) = qualifier out of range (m) = manual integration  
 1029N37W.D N86DODW.M Tue Nov 16 12:07:20 2010

## Quantitation Report

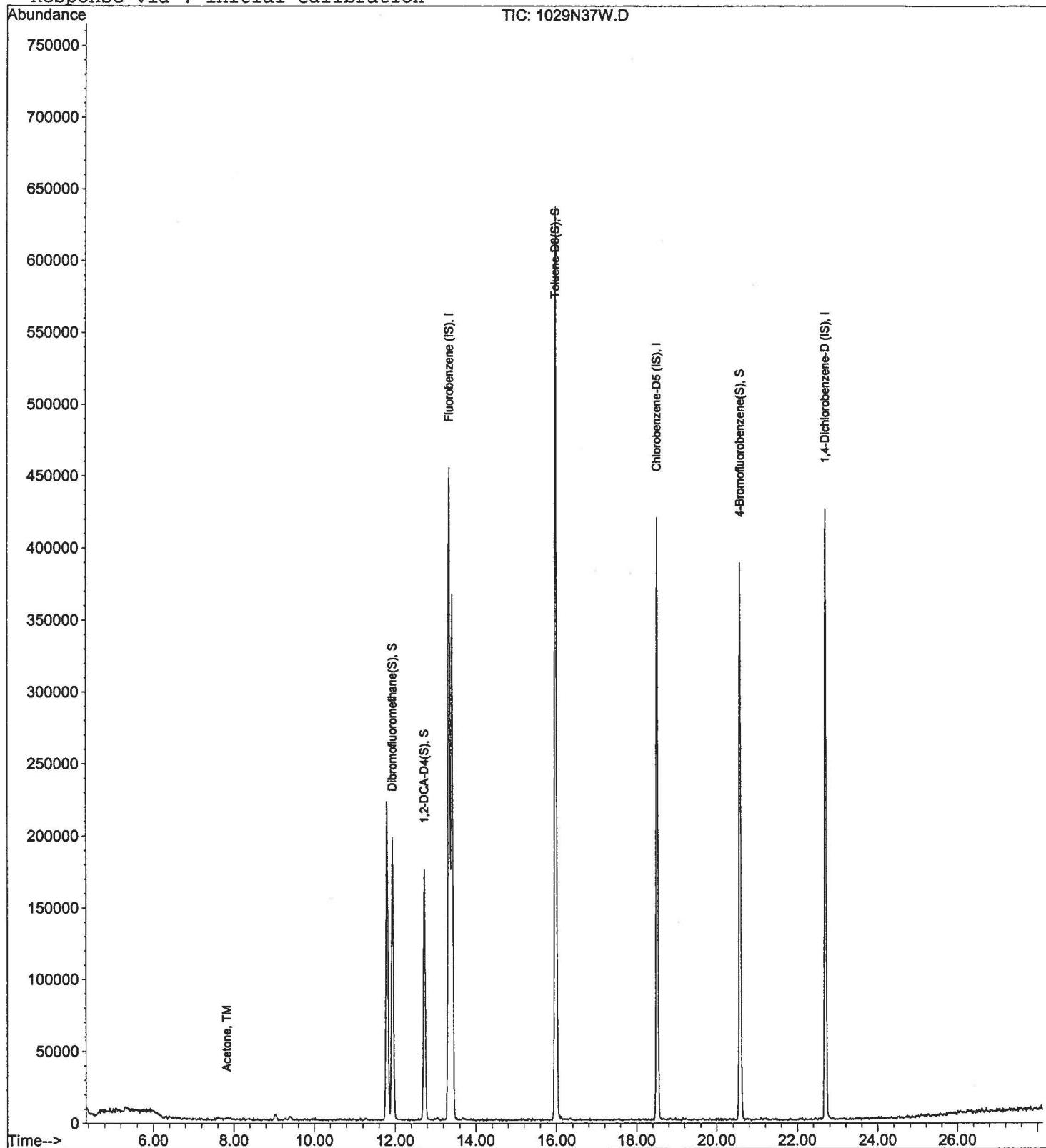
Data File : M:\NEO\DATA\N101029\1029N37W.D  
 Acq On : 30 Oct 10 12:05  
 Sample : AY25114W01  
 Misc : Water 10mL w/IS&S:09-24-10A

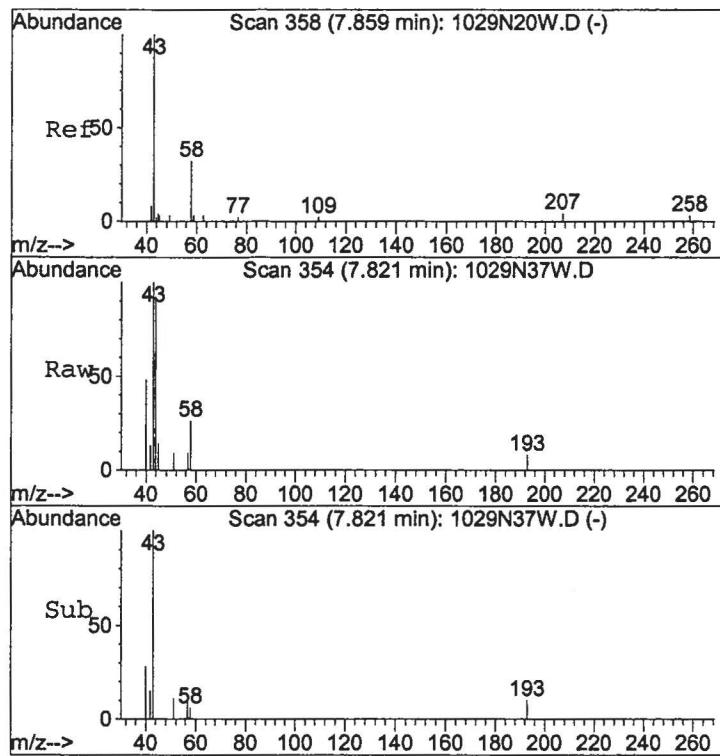
Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 3 8:47 2010

Quant Results File: N86DODW.RES

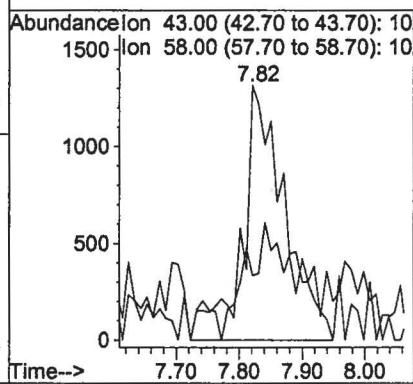
Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration





#8  
Acetone  
Concen: 1.26074 ppb  
RT: 7.82 min Scan# 354  
Delta R.T. -0.04 min  
Lab File: 1029N37W.D  
Acq: 30 Oct 10 12:05

Tgt Ion: 43 Resp: 1313  
Ion Ratio Lower Upper  
43 100  
58 25.5 23.8 44.2



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N37W.D Vial: 1  
 Acq On : 30 Oct 10 12:05 Operator: GM  
 Sample : AY25114W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	TIC	453528	25.00000	ppb	-0.04
5) Chlorobenzene-D5 (IS)	18.51	TIC	418748	25.00000	ppb	-0.04
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	424384	25.00000	ppb	-0.04
<b>System Monitoring Compounds</b>						
3) Dibromofluoromethane(S)	11.94	TIC	654148	20.45454	ppb	-0.04
Spiked Amount 24.523			Recovery =	83.411%		
4) 1,2-DCA-D4(S)	12.73	TIC	558084	3.37972	ppb	0.01
Spiked Amount 22.857			Recovery =	14.788%		
6) Toluene-D8(S)	15.98	TIC	1993168	23.74593	ppb	-0.04
Spiked Amount 23.425			Recovery =	101.370%		
7) 4-Bromofluorobenzene(S)	20.59	TIC	1151159	24.19122	ppb	-0.04
Spiked Amount 23.162			Recovery =	104.440%		

Target Compounds	Qvalue
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## Quantitation Report

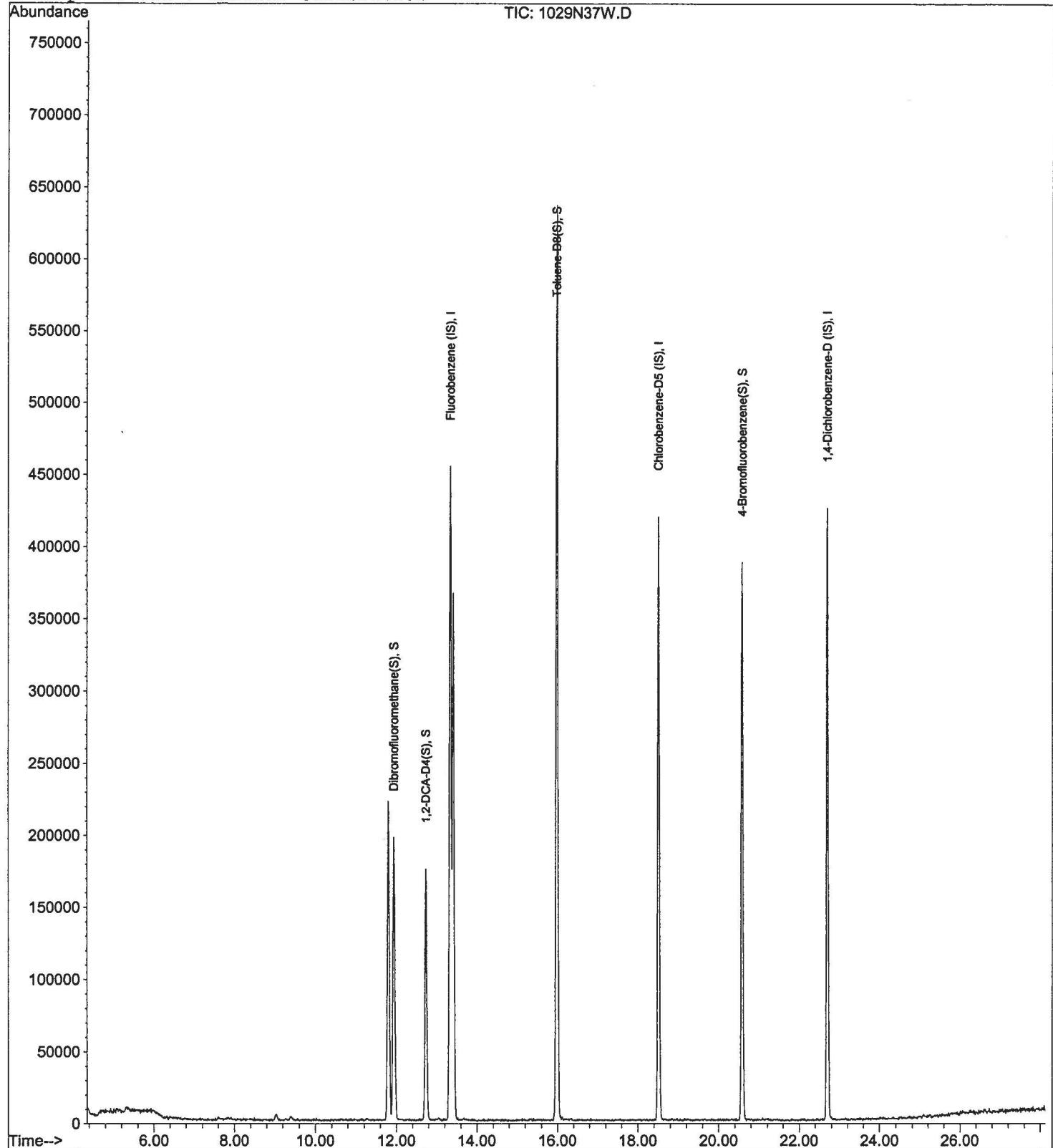
Data File : M:\NEO\DATA\N101029\1029N37W.D  
 Acq On : 30 Oct 10 12:05  
 Sample : AY25114W01  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES005**  
Sample Collection Date: 10/20/10

ARF: 62931  
**APPL ID: AY25115**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N40  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

# EPA 8260B VOCs + Gas Water

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

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES005**  
Sample Collection Date: 10/20/10

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 62931  
**APPL ID: AY25115**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	102	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	111	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	96.5	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	114	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N40  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N40W.D Vial: 1  
 Acq On : 30 Oct 10 13:50 Operator: GM  
 Sample : AY25115W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:48 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	214080	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.52	117	126568	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	72544	25.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.95	111	215136	23.66921	ppb	0.00
Spiked Amount	24.523		Recovery	=	96.518%	
23) 1,2-DCA-D4(S)	12.73	65	153530	23.37022	ppb	-0.02
Spiked Amount	22.857		Recovery	=	102.244%	
36) Toluene-D8(S)	15.99	98	673801	26.61887	ppb	-0.02
Spiked Amount	23.425		Recovery	=	113.635%	
44) 4-Bromofluorobenzene(S)	20.58	95	240739	26.54614	ppb	-0.02
Spiked Amount	23.962		Recovery	=	110.782%	

Target Compounds	Qvalue
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## Quantitation Report

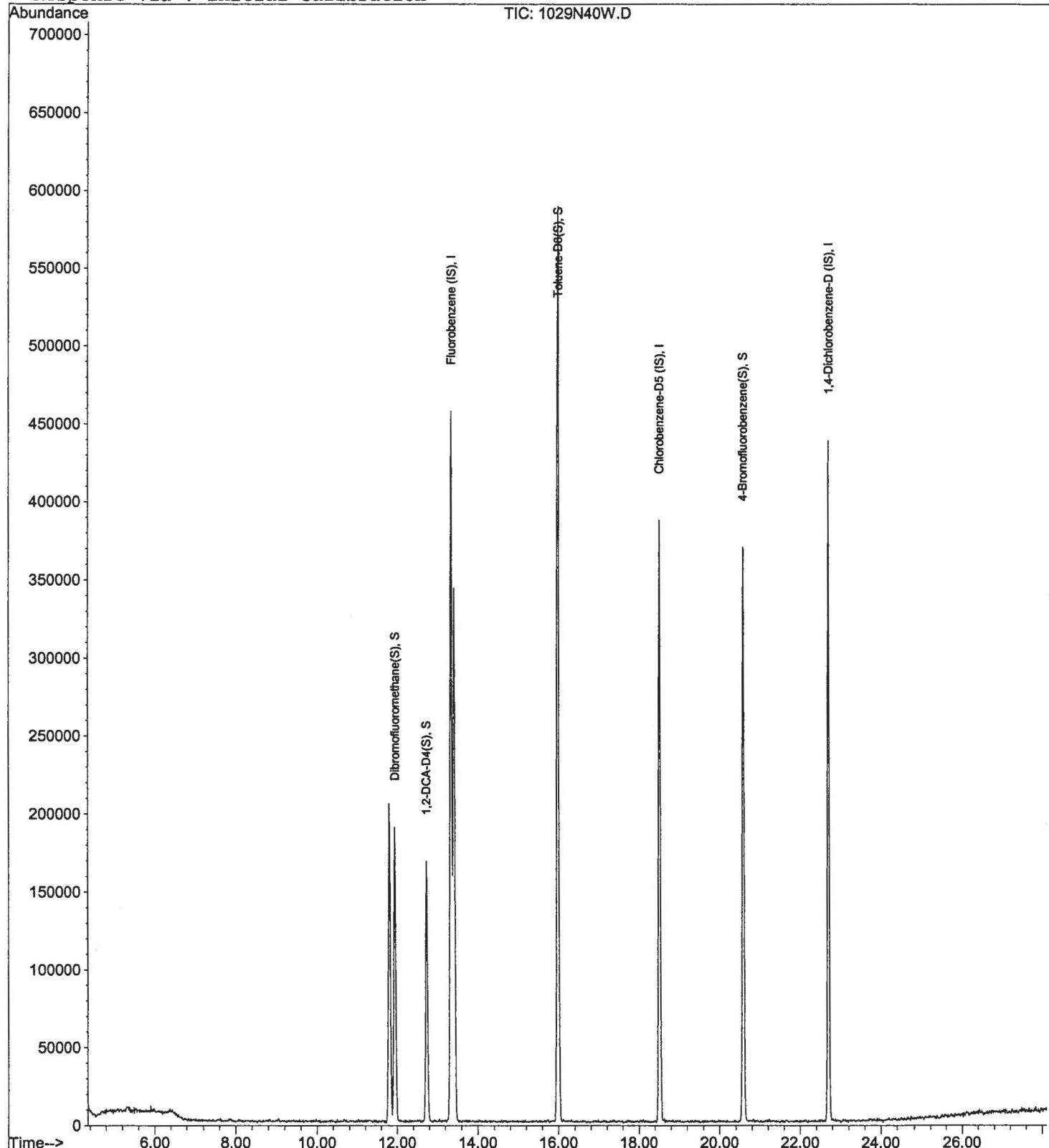
Data File : M:\NEO\DATA\N101029\1029N40W.D  
 Acq On : 30 Oct 10 13:50  
 Sample : AY25115W01  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 3 8:48 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N40W.D Vial: 1  
 Acq On : 30 Oct 10 13:50 Operator: GM  
 Sample : AY25115W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:35 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	TIC	456080	25.00000	ppb	-0.03
5) Chlorobenzene-D5 (IS)	18.51	TIC	386313	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	436960	25.00000	ppb	-0.03

System Monitoring Compounds						
3) Dibromofluoromethane(S)	11.95	TIC	635994	19.77560	ppb	-0.02
Spiked Amount	24.523			Recovery	=	80.643%
4) 1,2-DCA-D4(S)	12.73	TIC	530143	3.19254	ppb	0.01
Spiked Amount	22.857			Recovery	=	13.969%
6) Toluene-D8(S)	15.99	TIC	1884251	24.33311	ppb	-0.02
Spiked Amount	23.425			Recovery	=	103.876%
7) 4-Bromofluorobenzene(S)	20.58	TIC	1105852	25.19027	ppb	-0.04
Spiked Amount	23.162			Recovery	=	108.753%

Target Compounds	Qvalue
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## Quantitation Report

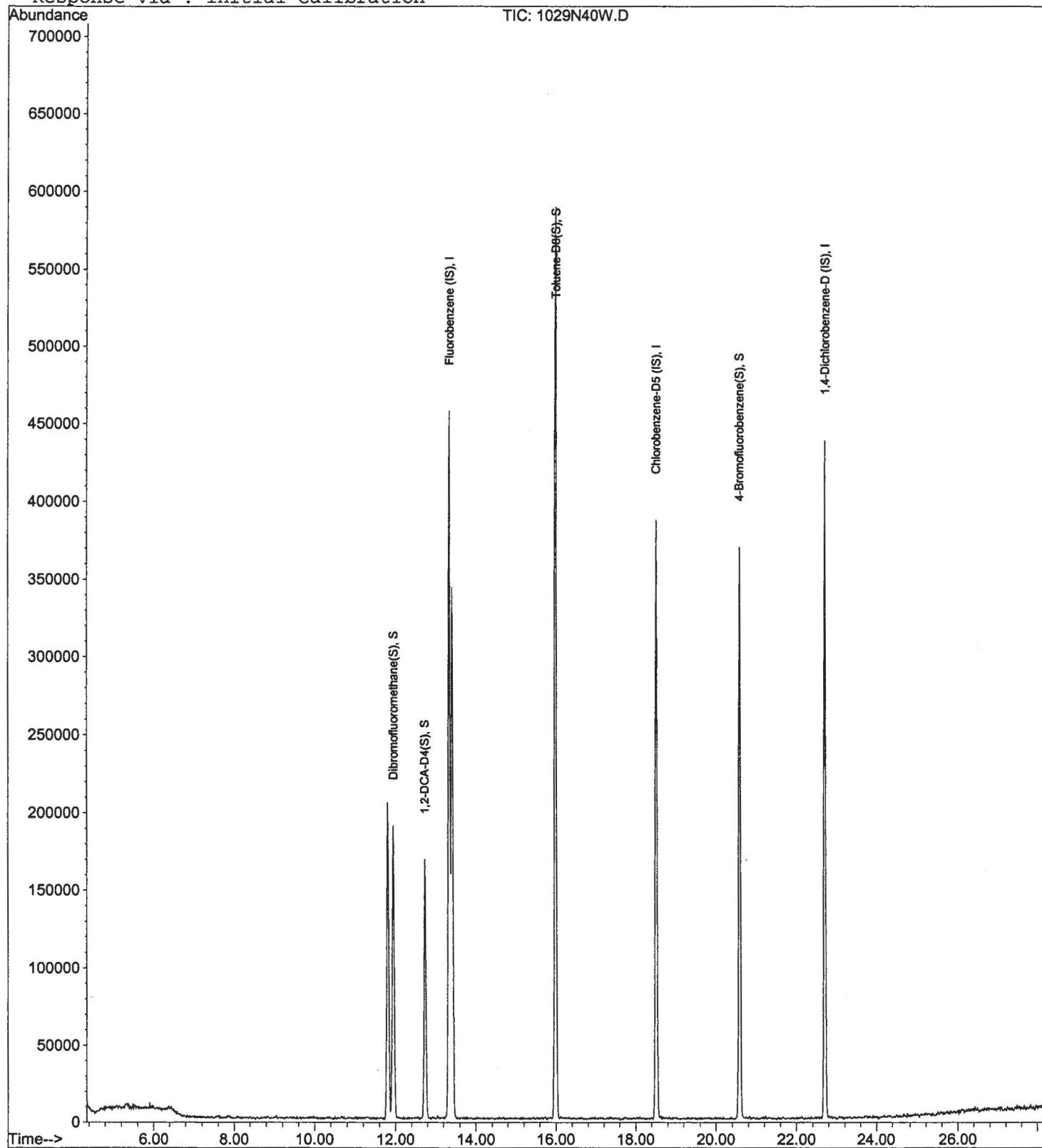
Data File : M:\NEO\DATA\N101029\1029N40W.D  
 Acq On : 30 Oct 10 13:50  
 Sample : AY25115W01  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES006**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25116**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N41  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:14 PM  
APPL-F1-SC-NoMC-REG MDLs

# EPA 8260B VOCs + Gas Water

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

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES006**  
Sample Collection Date: 10/21/10

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 62931  
**APPL ID: AY25116**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	103	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	101	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	94.9	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	102	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N41  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:15 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N41W.D Vial: 1  
 Acq On : 30 Oct 10 14:25 Operator: GM  
 Sample : AY25116W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:49 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	210560	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.51	117	133760	25.00000	ppb	-0.02
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	63672	25.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.95	111	208059	23.27327	ppb	0.00
Spiked Amount	24.523		Recovery	=	94.903%	
23) 1,2-DCA-D4 (S)	12.74	65	152394	23.58509	ppb	0.00
Spiked Amount	22.857		Recovery	=	103.185%	
36) Toluene-D8 (S)	15.99	98	638464	23.86668	ppb	-0.02
Spiked Amount	23.425		Recovery	=	101.886%	
44) 4-Bromofluorobenzene(S)	20.58	95	231887	24.19519	ppb	-0.02
Spiked Amount	23.962		Recovery	=	100.970%	

Target Compounds	Qvalue
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## Quantitation Report

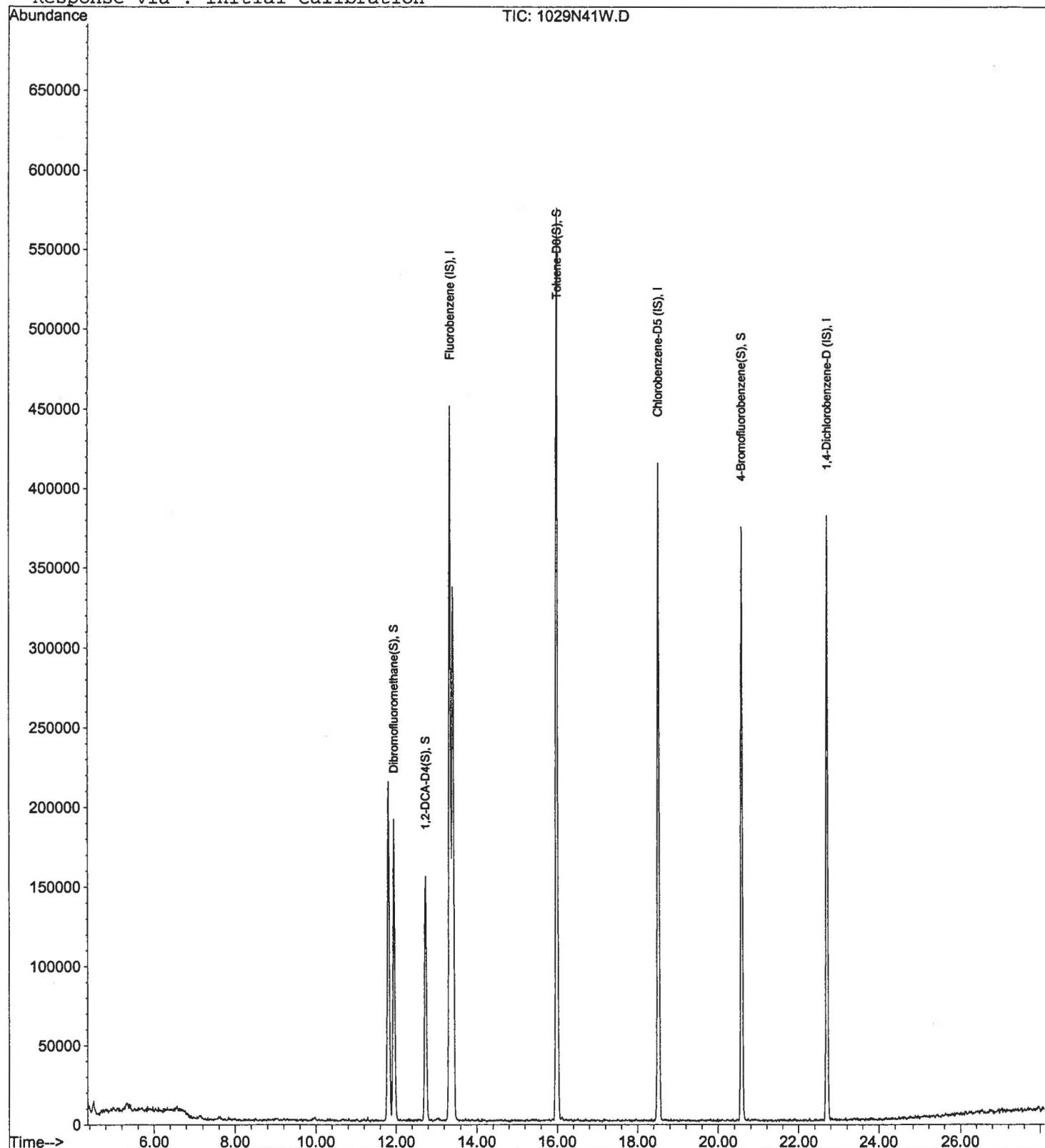
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Acq On : 30 Oct 10 14:25  
Sample : AY25116W01  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 3 8:49 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N41W.D Vial: 1  
 Acq On : 30 Oct 10 14:25 Operator: GM  
 Sample : AY25116W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	TIC	449360	25.00000	ppb	-0.03
5) Chlorobenzene-D5 (IS)	18.51	TIC	413871	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	380236	25.00000	ppb	-0.03

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.95	TIC	621554	19.61563	ppb	-0.02
Spiked Amount	24.523		Recovery	=	79.990%	
4) 1,2-DCA-D4(S)	12.74	TIC	512856	3.13463	ppb	0.03
Spiked Amount	22.857		Recovery	=	13.716%	
6) Toluene-D8(S)	15.99	TIC	1788581	21.55965	ppb	-0.02
Spiked Amount	23.425		Recovery	=	92.038%	
7) 4-Bromofluorobenzene(S)	20.58	TIC	1084003	23.04839	ppb	-0.04
Spiked Amount	23.162		Recovery	=	99.506%	

## Target Compounds

Qvalue

## Quantitation Report

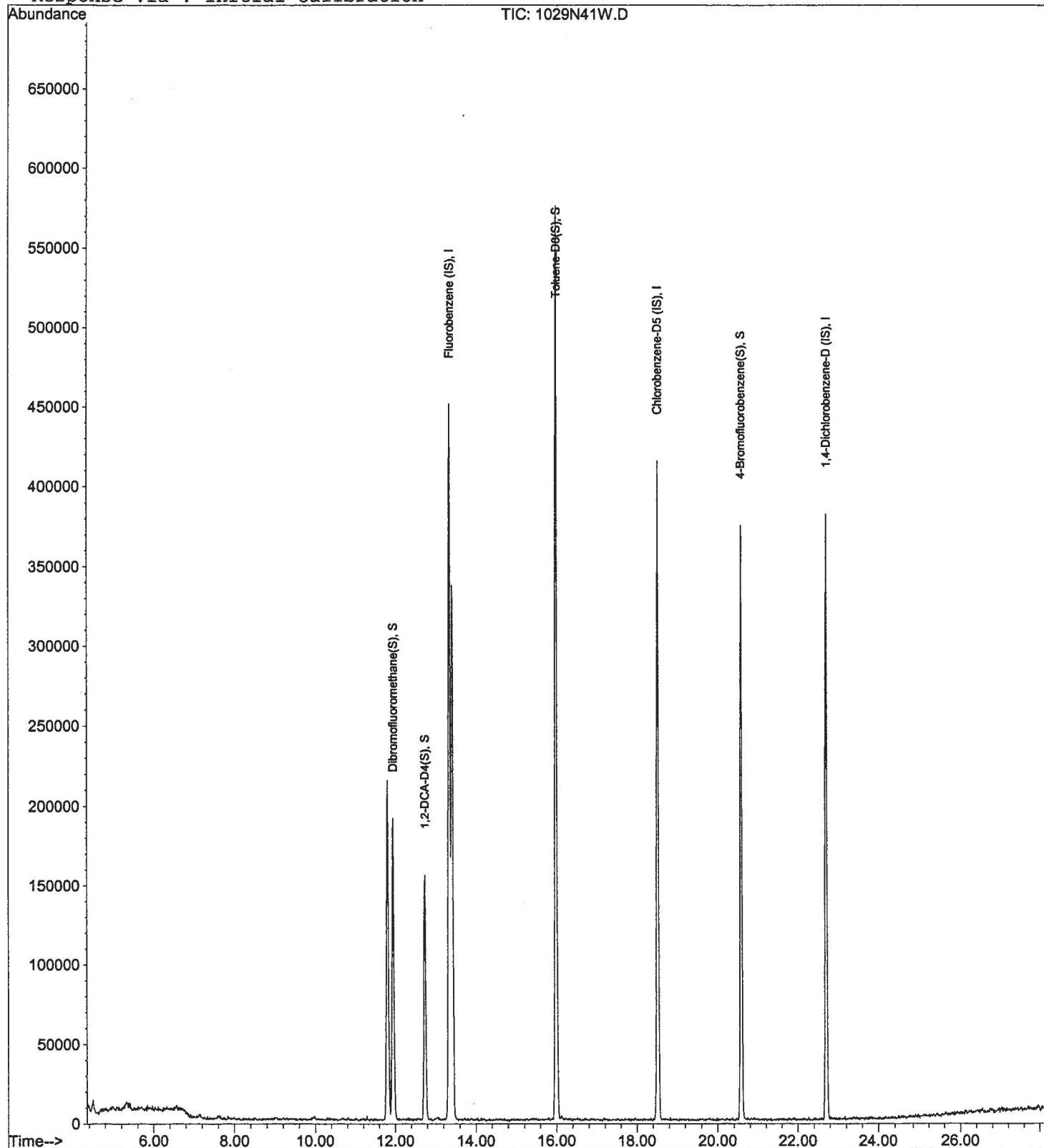
Data File : M:\NEO\DATA\N101029\1029N41W.D  
Acq On : 30 Oct 10 14:25  
Sample : AY25116W01  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 4 11:35 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 04 12:41:37 2010  
Response via : Initial Calibration



# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES007**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25117**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.4 J	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

J = Estimated value.

Quant Method: N86DODW.M  
Run #: 1029N42  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:15 PM

APPL-F1-SC-NoMC-REG MDLs

## EPA 8260B VOCs + Gas Water

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

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES007**  
Sample Collection Date: 10/21/10

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 62931  
**APPL ID: AY25117**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	105	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	112	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	97.6	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	113	85-120			%	10/30/10	10/30/10

J = Estimated value.

Quant Method: N86DODW.M
Run #: 1029N42
Instrument: Neo
Sequence: N101029
Dilution Factor: 1
Initials: GM

Printed: 11/08/10 1:33:15 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N42W.D Vial: 1  
 Acq On : 30 Oct 10 15:00 Operator: GM  
 Sample : AY25117W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:49 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	206784	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.51	117	126008	25.00000	ppb	-0.02
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	71592	25.00000	ppb	-0.02

System Monitoring Compounds						
20) Dibromofluoromethane(S)	11.94	111	210127	23.93380	ppb	0.00
Spiked Amount	24.523		Recovery	=	97.598%	
23) 1,2-DCA-D4(S)	12.73	65	151964	23.94801	ppb	-0.02
Spiked Amount	22.857		Recovery	=	104.773%	
36) Toluene-D8(S)	15.98	98	665079	26.39107	ppb	-0.03
Spiked Amount	23.425		Recovery	=	112.661%	
44) 4-Bromofluorobenzene(S)	20.59	95	241342	26.73090	ppb	0.00
Spiked Amount	23.962		Recovery	=	111.554%	

Target Compounds					Qvalue	
8) Acetone	7.85	43	1350	1.40816	ppb	84

## Quantitation Report

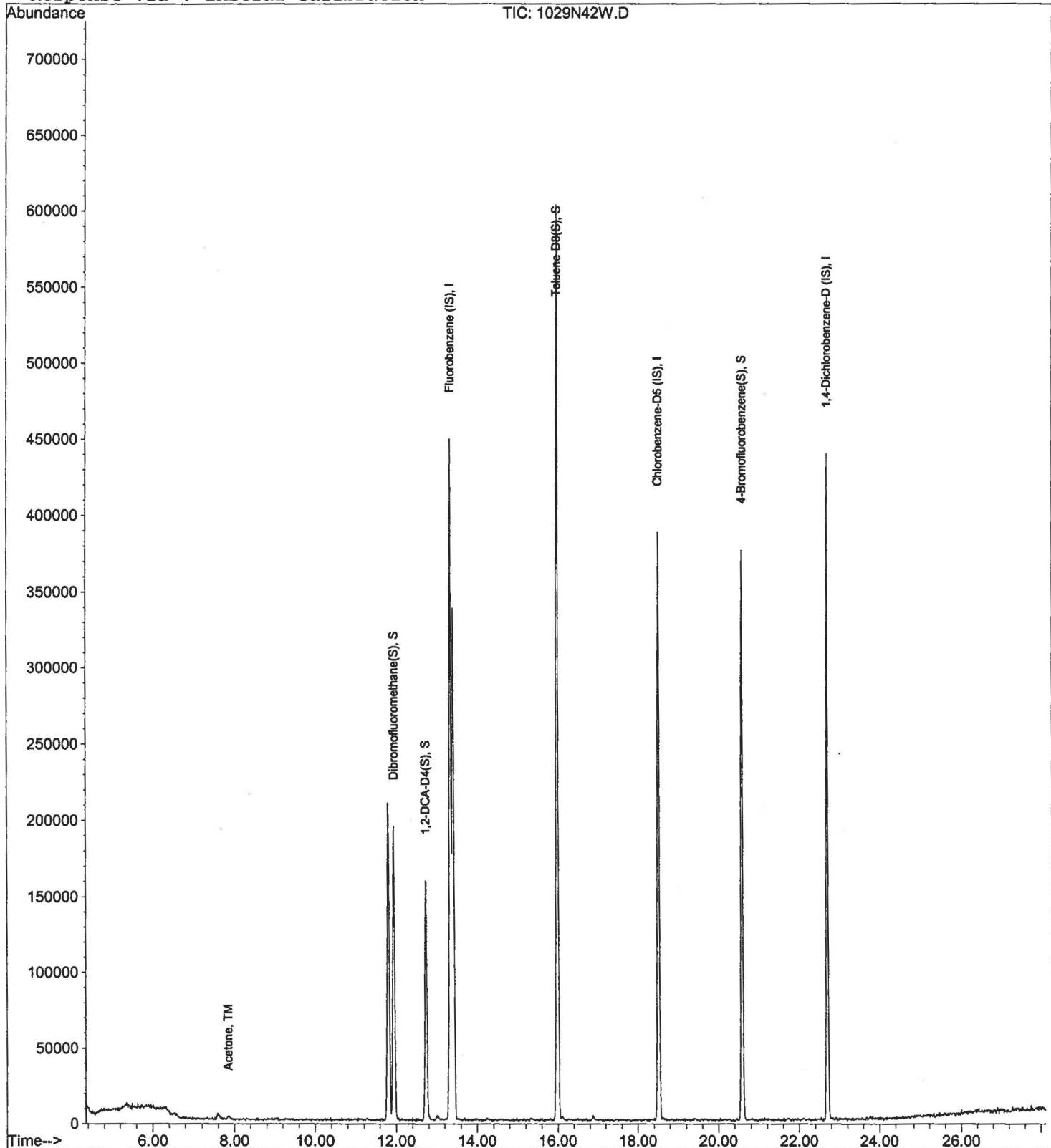
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 Acq On : 30 Oct 10 15:00  
 Sample : AY25117W01  
 Misc : Water 10mL w/IS&S:09-24-10A

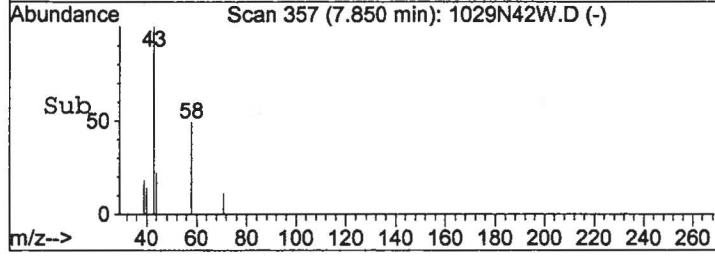
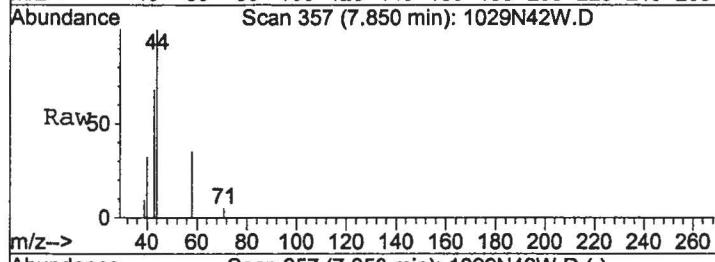
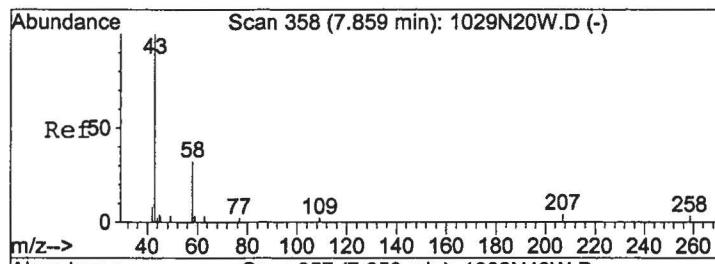
Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 3 8:49 2010

Quant Results File: N86DODW.RES

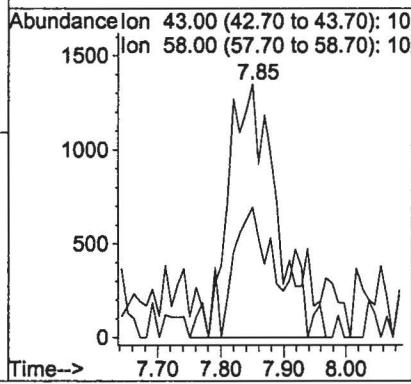
Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration





#8  
 Acetone  
 Concen: 1.40816 ppb  
 RT: 7.85 min Scan# 357  
 Delta R.T. -0.01 min  
 Lab File: 1029N42W.D  
 Acq: 30 Oct 10 15:00

Tgt Ion: 43 Resp: 1350  
 Ion Ratio Lower Upper  
 43 100  
 58 43.3 23.8 44.2



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N42W.D Vial: 1  
 Acq On : 30 Oct 10 15:00 Operator: GM  
 Sample : AY25117W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:36 2010

Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.34	TIC	447361	25.00000	ppb	-0.04
5) Chlorobenzene-D5 (IS)	18.51	TIC	386222	25.00000	ppb	-0.04
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	437203	25.00000	ppb	-0.04

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.94	TIC	631833	20.02912	ppb	-0.03
Spiked Amount	24.523			Recovery	= 81.674%	
4) 1,2-DCA-D4(S)	12.73	TIC	522888	3.21022	ppb	0.01
Spiked Amount	22.857			Recovery	= 14.044%	
6) Toluene-D8(S)	15.98	TIC	1870623	24.16281	ppb	-0.04
Spiked Amount	23.425			Recovery	= 103.150%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1104966	25.17602	ppb	-0.04
Spiked Amount	23.162			Recovery	= 108.693%	

Target Compounds	Qvalue
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## Quantitation Report

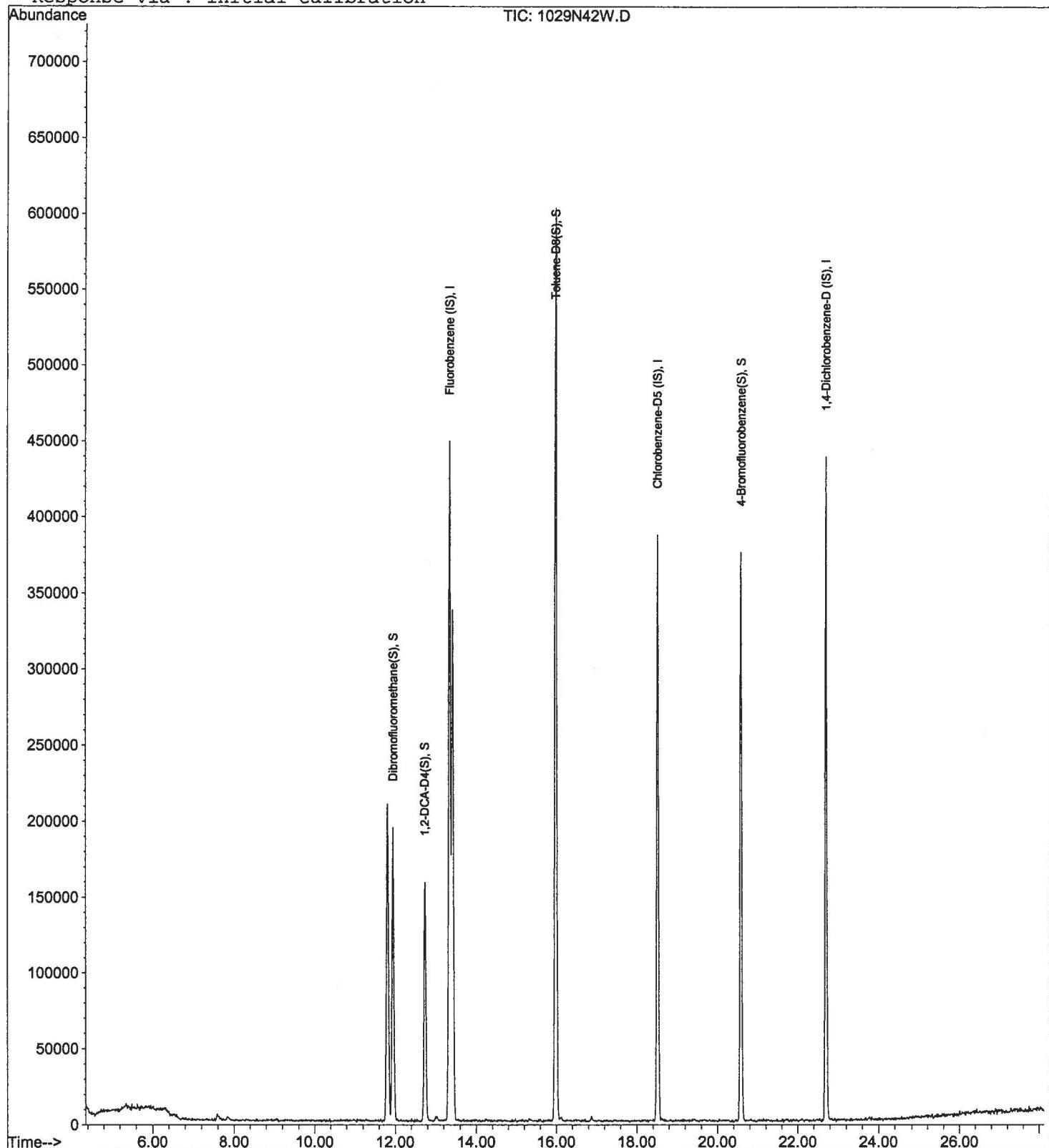
Data File : M:\NEO\DATA\N101029\1029N42W.D  
Acq On : 30 Oct 10 15:00  
Sample : AY25117W01  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 4 11:36 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 04 12:41:37 2010  
Response via : Initial Calibration



# EPA 8260B VOCs + Gas Water

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES008**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25118**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
EPA 8260B	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
EPA 8260B	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
EPA 8260B	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
EPA 8260B	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
EPA 8260B	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
EPA 8260B	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
EPA 8260B	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
EPA 8260B	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
EPA 8260B	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
EPA 8260B	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
EPA 8260B	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
EPA 8260B	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Methylene chloride	0.70 U	5.0	0.70	0.35	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N35  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:15 PM  
APPL-F1-SC-NoMC-REG MDLs

## EPA 8260B VOCs + Gas Water

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

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES008**  
Sample Collection Date: 10/21/10

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

ARF: 62931  
**APPL ID: AY25118**  
QCG: #86RHB-101029AN-148687

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	10/30/10	10/30/10
EPA 8260B	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
EPA 8260B	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
EPA 8260B	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
EPA 8260B	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
EPA 8260B	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
EPA 8260B	Surrogate: 1,2-Dichloroethane-d4 (S)	104	70-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: 4-Bromofluorobenzene (S)	97.5	75-120			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Dibromofluoromethane (S)	101	85-115			%	10/30/10	10/30/10
EPA 8260B	Surrogate: Toluene-D8 (S)	99.7	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
Run #: 1029N35  
Instrument: Neo  
Sequence: N101029  
Dilution Factor: 1  
Initials: GM

Printed: 11/08/10 1:33:15 PM  
APPL-F1-SC-NoMC-REG MDLs

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N35W.D Vial: 1  
 Acq On : 30 Oct 10 10:55 Operator: GM  
 Sample : AY25118W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 3 8:46 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	215168	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.52	117	149696	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	71472	25.00000	ppb	-0.02

System Monitoring Compounds						
20) Dibromofluoromethane(S)	11.93	111	225246	24.65620	ppb	-0.02
Spiked Amount	24.523		Recovery	=	100.542%	
23) 1,2-DCA-D4(S)	12.74	65	156785	23.74501	ppb	0.00
Spiked Amount	22.857		Recovery	=	103.885%	
36) Toluene-D8(S)	15.99	98	699463	23.36342	ppb	-0.02
Spiked Amount	23.425		Recovery	=	99.735%	
44) 4-Bromofluorobenzene(S)	20.58	95	250704	23.37383	ppb	-0.02
Spiked Amount	23.962		Recovery	=	97.544%	

Target Compounds	Qvalue
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## Quantitation Report

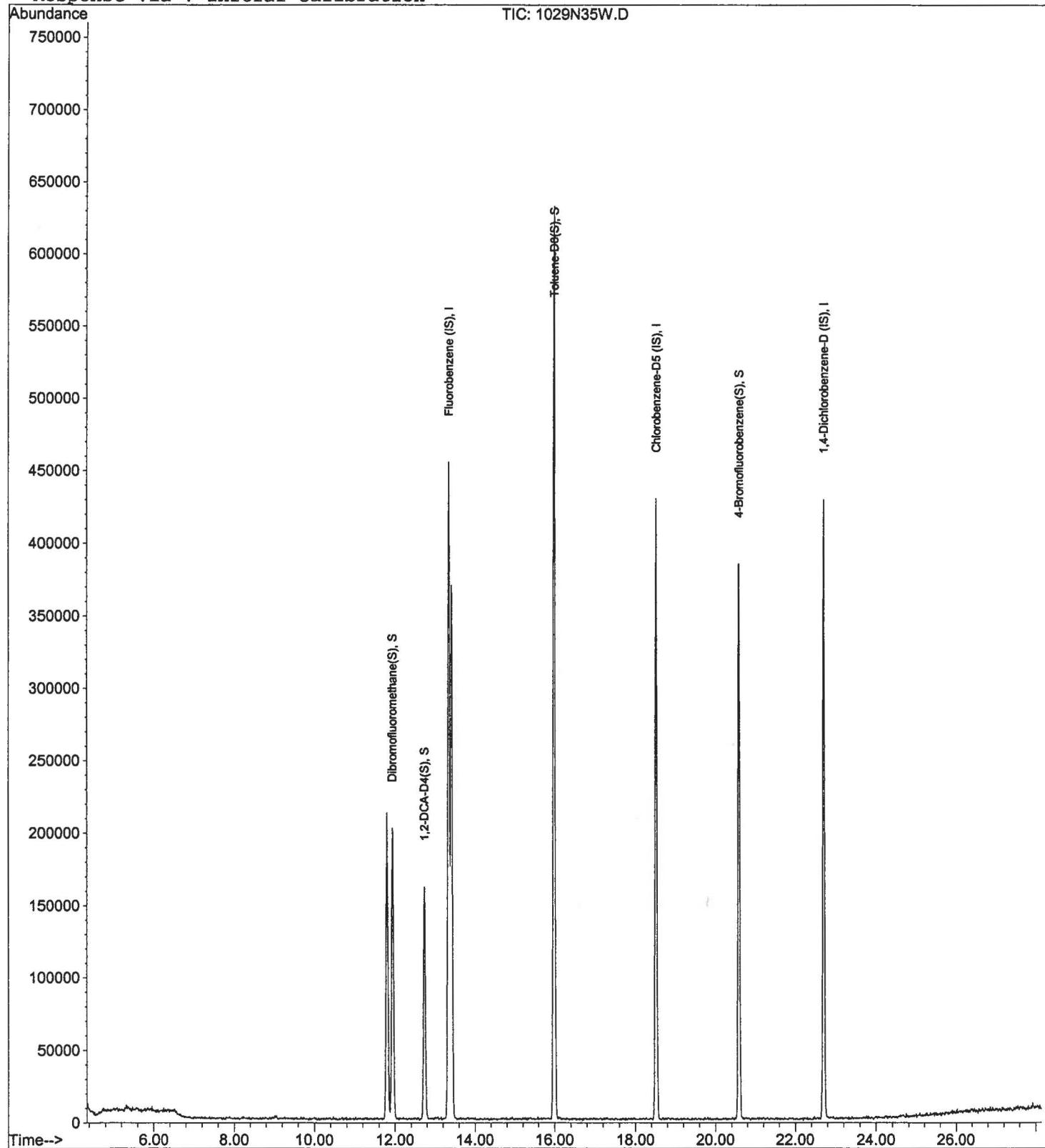
Data File : M:\NEO\DATA\N101029\1029N35W.D  
Acq On : 30 Oct 10 10:55  
Sample : AY25118W01  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 3 8:46 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N35W.D Vial: 1  
 Acq On : 30 Oct 10 10:55 Operator: GM  
 Sample : AY25118W01 Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 8 11:13 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	TIC	453345	25.00000	ppb	-0.04
5) Chlorobenzene-D5 (IS)	18.52	TIC	428614	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	427600	25.00000	ppb	-0.04

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.93	TIC	661731	20.70000	ppb	-0.04
Spiked Amount	24.523		Recovery	=	84.411%	
4) 1,2-DCA-D4(S)	12.73	TIC	541943	3.28329	ppb	0.01
Spiked Amount	22.857		Recovery	=	14.363%	
6) Toluene-D8(S)	15.99	TIC	1954204	22.74582	ppb	-0.03
Spiked Amount	23.425		Recovery	=	97.101%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1145181	23.51164	ppb	-0.04
Spiked Amount	23.162		Recovery	=	101.509%	

Target Compounds	Qvalue
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## Quantitation Report

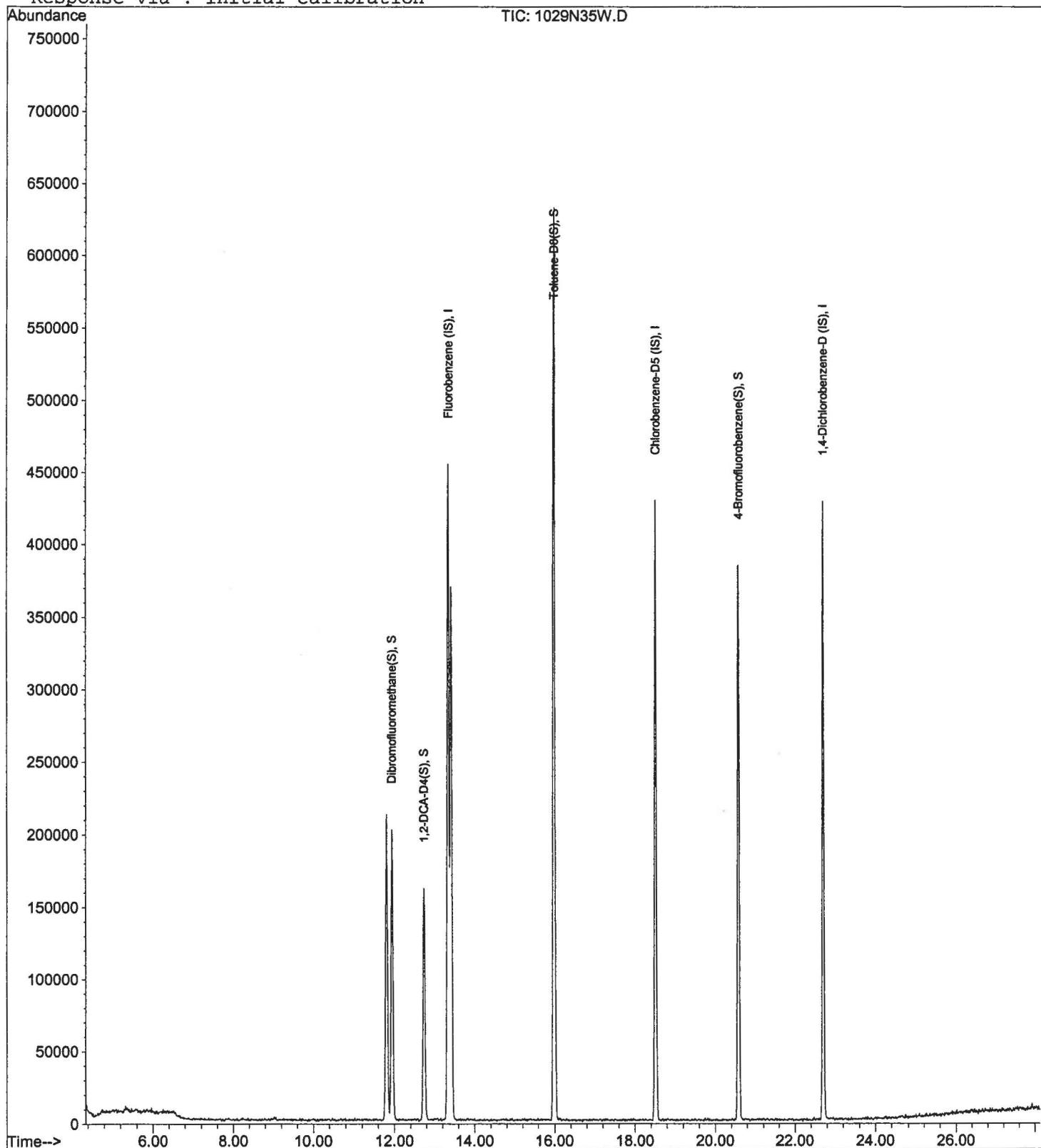
Data File : M:\NEO\DATA\N101029\1029N35W.D  
 Acq On : 30 Oct 10 10:55  
 Sample : AY25118W01  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 8 11:13 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 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.

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

**Matrix:**

SDG No: 62931  
Initial Cat. Date: 10/29/10

**Instrument:** Neo

**Instrument:** Neo

**Initials:** \_\_\_\_\_

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

**Form 6**  
**Initial Calibration**

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

SDG No: 62931  
Initial Cal. Date: 10/29/10  
Instrument: Neo

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

	Compound	0.5	1	5	10	20	40	100	200			Avg	%RSD		
36	S Toluene-D8(S)	4.722	5.008	5.076	5.275	5.095	4.761	4.922	5.139			5.0	3.8	S	
37	TM 1,2-EDB	1.015	1.033	1.130	1.113	1.198	1.103	1.087	1.076			1.1	5.2	TM	
38	TM Tetrachloroethene	0.9971	0.9110	0.9660	1.012	1.035	0.8998	0.9506	0.9461			0.96	4.9	TM	
39	TM 1-Chlorohexane	2.168	1.993	1.940	2.073	1.965	1.896	1.965	1.916			2.0	4.5	TM	
40	TM 1,1,1,2-Tetrachloroethane	1.242	1.276	1.290	1.302	1.340	1.206	1.206	1.152			1.3	4.9	TM	
41	TM m&p-Xylene	2.385	2.288	2.476	2.407	2.423	2.157	2.396	2.316			2.4	4.2	TM	
42	TM o-Xylene	2.417	2.507	2.409	2.573	2.543	2.314	2.391	2.276			2.4	4.4	TM	
43	TM Styrene	4.292	4.365	4.140	4.428	4.556	4.183	4.189	4.012			4.3	4.1	TM	
44	S 4-Bromofluorobenzene(S)	1.728	1.809	1.758	1.773	1.887	1.764	1.838	1.773			1.8	2.8	S	
45	TM 2-Hexanone	0.2984	0.3443	0.3168	0.3317	0.3438	0.3161	0.3232	0.2914			0.32	6.0	TM	
46	TM 1,3-Dichloropropane	1.706	1.933	1.999	2.002	2.021	1.900	1.976	1.985			1.9	5.3	TM	
47	TM Dibromochloromethane	1.099	1.184	1.309	1.351	1.299	1.205	1.252	1.245			1.2	6.5	TM	
48	TM** Chlorobenzene	3.766	3.914	3.920	4.174	3.932	3.753	3.788	3.842			3.9	3.5	TM**	
49	TM* Ethylbenzene	6.561	6.534	6.913	6.730	6.773	6.177	6.524	6.036			6.5	4.5	TM*	
50	TM** Bromoform		0.7324	0.7903	0.8328	0.8784	0.7704	0.7972	0.7457			0.79	6.4	TM**	
51	I 1,4-Dichlorobenzene-D (IS)	ISTD													
52	TML MIBK (methyl isobutyl ketone)	3.230	3.749	2.533	2.877	2.564	2.706	2.441	2.540			2.8	16	TML	0.999
53	TM Isopropylbenzene	10.4	10.5	10.6	11.4	10.7	10.9	10.5	11.0			11	3.1	TM	
54	TM** 1,1,2,2-Tetrachloroethane	2.514	2.696	2.553	2.675	2.526	2.775	2.515	2.612			2.6	3.8	TM**	
55	TM 1,2,3-Trichloropropane	0.3950	0.5450	0.4850	0.5278	0.4863	0.5351	0.4929	0.4903			0.49	9.5	TM	
56	TM Bromobenzene	2.855	2.946	2.855	3.035	2.964	3.032	2.801	2.937			2.9	2.9	TM	
57	TM n-Propylbenzene	13.5	16.2	14.5	14.7	14.5	15.4	14.5	15.3			15	5.5	TM	
58	TM 4-Ethyltoluene	10.1	11.6	10.3	11.4	10.9	11.4	10.3	10.7			11	5.4	TM	
59	TM 2-Chlorotoluene	7.293	11.0	9.293	9.777	9.625	9.794	8.810	9.302			9.4	11	TM	
60	TM 1,3,5-Trimethylbenzene	7.674	9.231	8.269	8.516	8.253	9.112	8.248	8.157			8.4	6.1	TM	
61	TM 4-Chlorotoluene	7.293	8.989	7.707	8.500	7.972	8.914	8.425	8.516			8.3	7.1	TM	
62	TM Tert-Butylbenzene	7.873	8.568	7.960	8.318	7.730	7.984	7.368	8.003			8.0	4.5	TM	
63	TM 1,2,4-Trimethylbenzene	7.940	9.326	8.962	9.315	8.655	8.871	8.185	8.793			8.8	5.6	TM	
64	TM Sec-Butylbenzene	11.2	12.3	11.7	12.8	11.7	12.0	11.3	12.4			12	4.6	TM	
65	TM p-Isopropyltoluene	7.439	9.173	8.413	8.813	8.967	8.933	8.598	8.643			8.6	6.2	TM	
66	TM 1,3-DCB	5.540	5.674	5.671	5.615	5.270	5.677	4.948	5.246			5.5	5.0	TM	
67	TM 1,4-DCB	4.966	5.987	5.159	5.579	5.377	5.535	5.072	5.264			5.4	6.1	TM	
68	TM n-Butylbenzene	9.327	10.6	9.248	10.1	9.713	9.690	9.184	9.867			9.7	4.9	TM	
69	TM 1,2-DCB	4.318	5.671	4.984	5.233	4.950	5.036	4.634	4.737			4.9	8.2	TM	
70	TM 1,2-Dibromo-3-chloropropane	0.2978	0.3532	0.3319	0.3328	0.3502	0.3670	0.3252	0.3344			0.34	6.2	TM	

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

**Form 6**  
**Initial Calibration**

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

SDG No: 62931  
Initial Cal. Date: 10/29/10  
Instrument: Neo

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

	Compound	0.5	1	5	10	20	40	100	200			Avg	%RSD		
71	TM 1,2,4-Trichlorobenzene	3.814	4.013	3.508	3.697	3.599	3.916	3.440	3.584			3.7	5.5	TM	
72	TML Hexachlorobutadiene	0.1963	0.3605	0.6750	0.5109	0.5997	0.6345	0.5807	0.5763			0.52	31	TML	1.000
73	TM Naphthalene	5.081	6.254	5.492	6.107	5.984	6.362	5.797	5.569			5.8	7.4	TM	
74	TM 1,2,3-Trichlorobenzene	1.195	1.387	1.145	1.156	1.174	1.238	1.104	1.110			1.2	7.7	TM	
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## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N17W.D Vial: 1  
 Acq On : 29 Oct 10 23:20 Operator: GM  
 Sample : Vol Std 10-29-10@0.5ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.37	96	219648	25.00000	ppb	0.01
35) Chlorobenzene-D5 (IS)	18.54	117	150784	25.00000	ppb	0.01
51) 1,4-Dichlorobenzene-D (IS)	22.73	152	82272	25.00000	ppb	0.01
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.96	111	9322	1.00488	ppb	0.00
Spiked Amount	24.523		Recovery	=	4.098%	
23) 1,2-DCA-D4 (S)	12.76	65	7707	1.17562	ppb	0.01
Spiked Amount	22.857		Recovery	=	5.145%	
36) Toluene-D8 (S)	16.01	98	28479	0.93672	ppb	0.00
Spiked Amount	23.425		Recovery	=	4.000%	
44) 4-Bromofluorobenzene(S)	20.62	95	10421	0.94418	ppb	0.02
Spiked Amount	23.962		Recovery	=	3.939%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	4600	0.61550	ppb	96
3) Chloromethane	5.13	50	2214	0.63123	ppb	97
4) Vinyl chloride	5.37	62	1406	0.48039	ppb	94
5) Bromomethane	6.29	94	1608	3.16800	ppb	98
6) Chloroethane	6.49	64	2328	1.26665	ppb	# 58
7) Trichlorofluoromethane	7.11	101	928	0.56648	ppb	92
8) Acetone	7.86	43	555	-0.60032	ppb	# 61
9) 1,1-DCE	8.31	96	1012	0.65968	ppb	85
10) Methylene chloride	9.07	84	8318	0.74295	ppb	92
11) Carbon disulfide	9.18	76	1469	0.45542	ppb	# 12
12) Methyl t-butyl ether (MtBE)	9.47	73	7597	0.50494	ppb	# 82
13) Trans-1,2-DCE	9.68	96	4387	0.49450	ppb	97
14) 1,1-DCA	10.35	63	10727	0.58955	ppb	# 84
15) MEK (2-Butanone)	10.97	43	3532	0.57839	ppb	# 66
16) Cis-1,2-DCE	11.37	96	5848	0.54994	ppb	97
17) 2,2-Dichloropropane	11.38	77	1338	0.58746	ppb	# 80
18) Chloroform	11.64	83	7616	0.53991	ppb	85
19) Bromochloromethane	11.88	128	1600	0.44888	ppb	74
21) 1,1,1-TCA	12.38	97	4854	0.51812	ppb	96
22) 1,1-Dichloropropene	12.65	75	6745	0.57489	ppb	89
24) Carbon Tetrachloride	12.83	117	3862	0.55523	ppb	# 87
25) 1,2-DCA	12.91	62	3871	0.49129	ppb	93
26) Benzene	13.03	78	20105	0.52240	ppb	93
27) TCE	14.06	95	4211	0.47846	ppb	# 76
28) 1,2-Dichloropropane	14.28	63	6043	0.51931	ppb	# 82
29) Bromodichloromethane	14.64	83	5314	0.49348	ppb	# 81
30) Dibromomethane	14.70	93	2389	0.49319	ppb	84
31) Cis-1,3-Dichloropropene	15.52	75	7707	0.52478	ppb	82
32) Toluene	16.15	91	19896	0.57346	ppb	97
33) Trans-1,3-Dichloropropene	16.30	75	4926	0.46439	ppb	# 81
34) 1,1,2-TCA	16.60	83	2923	0.51902	ppb	# 63
37) 1,2-EDB	17.85	107	3060	0.45333	ppb	# 64
38) Tetrachloroethene	17.29	129	3007	0.52279	ppb	# 57
39) 1-Chlorohexane	18.21	91	6537	0.55212	ppb	# 75
40) 1,1,2-Tetrachloroethane	18.66	131	3745	0.51199	ppb	77
41) m,p-Xylene	18.86	106	14386	1.02016	ppb	99
42) o-Xylene	19.61	106	7290	0.50929	ppb	85
43) Styrene	19.62	104	12944	0.51079	ppb	94
45) 2-Hexanone	16.60	43	900	0.44817	ppb	# 78

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

1029N17W.D N86DODW.M Wed Nov 03 11:02:10 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N17W.D Vial: 1  
 Acq On : 29 Oct 10 23:20 Operator: GM  
 Sample : Vol Std 10-29-10@0.5ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	17.00	76	5145	0.42378	ppb	96
47) Dibromochloromethane	17.49	129	3313	0.44037	ppb	98
48) Chlorobenzene	18.62	112	11356	0.47599	ppb	84
49) Ethylbenzene	18.72	91	19787	0.50452	ppb	98
50) Bromoform	20.16	173	872	0.19372	ppb	90
52) MIBK (methyl isobutyl keto	15.17	43	5315	1.40691	ppb	95
53) Isopropylbenzene	20.22	105	17165	0.48253	ppb	# 83
54) 1,1,2,2-Tetrachloroethane	20.40	83	4136	0.47768	ppb	# 71
55) 1,2,3-Trichloropropane	20.65	110	650	0.37330	ppb	94
56) Bromobenzene	20.99	156	4697	0.49268	ppb	79
57) n-Propylbenzene	20.94	91	22159	0.46289	ppb	96
58) 4-Ethyltoluene	21.14	105	16549	0.45917	ppb	94
59) 2-Chlorotoluene	21.33	91	12000	0.39196	ppb	96
60) 1,3,5-Trimethylbenzene	21.21	105	12627	0.46221	ppb	82
61) 4-Chlorotoluene	21.33	91	12000	0.43718	ppb	95
62) Tert-Butylbenzene	21.86	119	12954	0.49418	ppb	90
63) 1,2,4-Trimethylbenzene	21.94	105	13065	0.45195	ppb	86
64) Sec-Butylbenzene	22.25	105	18484	0.47299	ppb	94
65) p-Isopropyltoluene	22.47	119	12241	0.42888	ppb	96
66) 1,3-DCB	22.63	146	9116	0.52415	ppb	# 71
67) 1,4-DCB	22.78	146	8172	0.46369	ppb	100
68) n-Butylbenzene	23.17	91	15347	0.46968	ppb	88
69) 1,2-DCB	23.40	146	7105	0.43090	ppb	93
70) 1,2-Dibromo-3-chloropropan	24.60	155	490	0.43823	ppb	# 38
71) 1,2,4-Trichlorobenzene	26.04	180	6275	0.49867	ppb	96
72) Hexachlorobutadiene	26.31	225	323	1.22062	ppb	# 17
73) Naphthalene	26.39	128	8360	0.42546	ppb	98
74) 1,2,3-Trichlorobenzene	26.76	180	1966	0.48709	ppb	# 75

(#) = qualifier out of range (m) = manual integration  
 1029N17W.D N86DODW.M Wed Nov 03 11:02:10 2010

## Quantitation Report

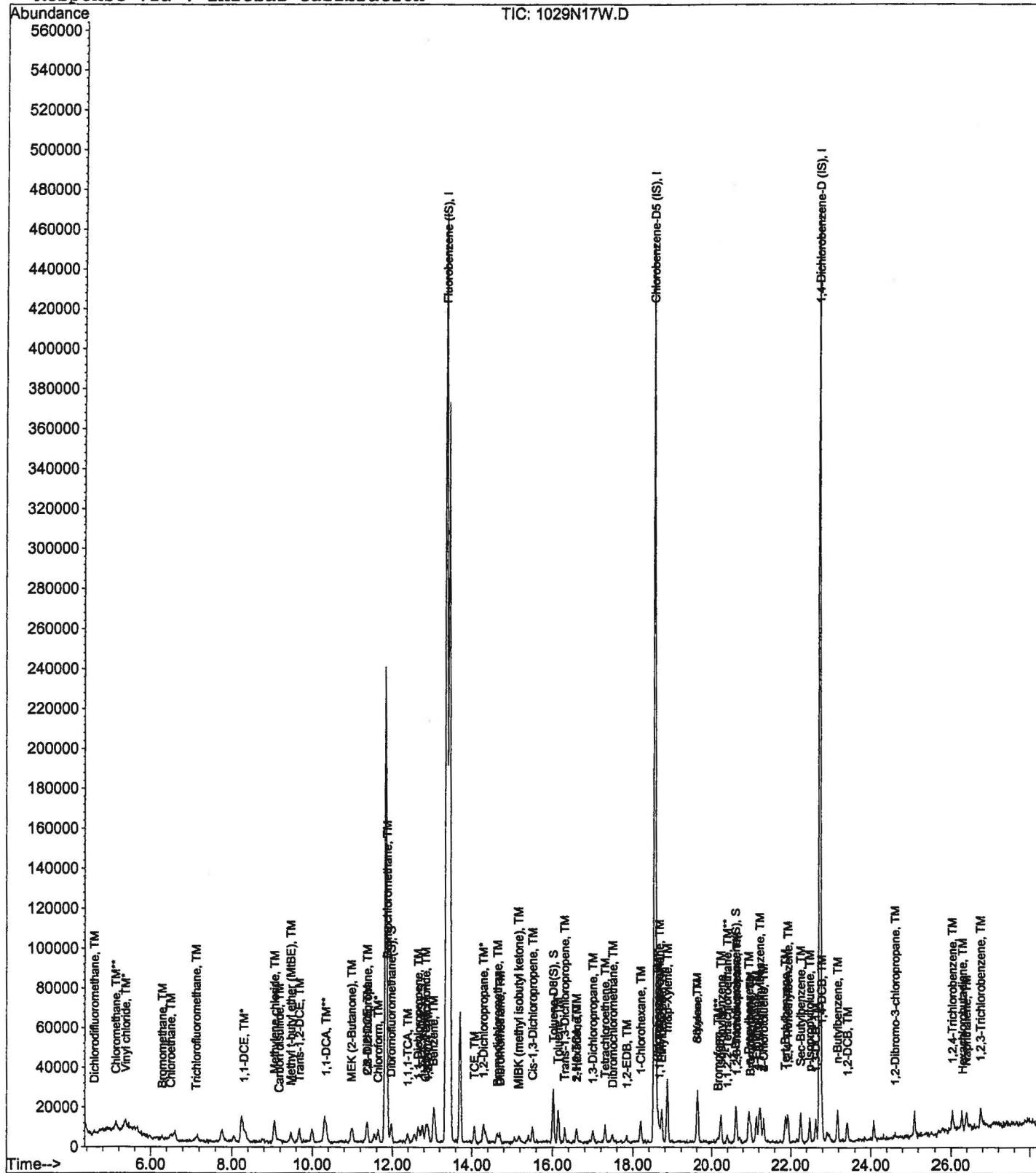
Data File : M:\NEO\DATA\N101029\1029N17W.D  
 Acq On : 29 Oct 10 23:20  
 Sample : Vol Std 10-29-10@0.5ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N18W.D Vial: 1  
 Acq On : 29 Oct 10 23:54 Operator: GM  
 Sample : Vol Std 10-29-10@1.0ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.37	96	215552	25.00000	ppb	0.01
35) Chlorobenzene-D5 (IS)	18.54	117	146240	25.00000	ppb	0.01
51) 1,4-Dichlorobenzene-D (IS)	22.73	152	71840	25.00000	ppb	0.01
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.97	111	17867	1.96259	ppb	0.02
Spiked Amount 24.523			Recovery	=	8.005%	
23) 1,2-DCA-D4(S)	12.76	65	13035	2.02613	ppb	0.01
Spiked Amount 22.857			Recovery	=	8.864%	
36) Toluene-D8(S)	16.01	98	58594	1.98713	ppb	0.00
Spiked Amount 23.425			Recovery	=	8.482%	
44) 4-Bromofluorobenzene(S)	20.61	95	21158	1.97656	ppb	0.01
Spiked Amount 23.962			Recovery	=	8.250%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.59	85	8690	1.18486	ppb	# 83
3) Chloromethane	5.12	50	3812	1.10749	ppb	99
4) Vinyl chloride	5.37	62	2953	1.02812	ppb	89
5) Bromomethane	6.33	94	2250	3.25550	ppb	93
6) Chloroethane	6.50	64	2607	1.44541	ppb	96
7) Trichlorofluoromethane	7.11	101	1781	1.10784	ppb	98
8) Acetone	7.88	43	1248	1.23320	ppb	# 82
9) 1,1-DCE	8.27	96	1845	1.22552	ppb	# 73
10) Methylene chloride	9.06	84	13504	1.33688	ppb	94
11) Carbon disulfide	9.17	76	4169	1.31704	ppb	95
12) Methyl t-butyl ether (MtBE)	9.46	73	14165	0.95937	ppb	# 91
13) Trans-1,2-DCE	9.68	96	10368	1.19089	ppb	# 66
14) 1,1-DCA	10.36	63	20196	1.13106	ppb	94
15) MEK (2-Butanone)	11.00	43	6511	1.15711	ppb	92
16) Cis-1,2-DCE	11.36	96	11709	1.12202	ppb	93
17) 2,2-Dichloropropane	11.36	77	2317	1.03664	ppb	88
18) Chloroform	11.65	83	15165	1.09550	ppb	92
19) Bromochloromethane	11.87	128	3838	1.09722	ppb	95
21) 1,1,1-TCA	12.39	97	10270	1.11707	ppb	89
22) 1,1-Dichloropropene	12.65	75	11617	1.00896	ppb	92
24) Carbon Tetrachloride	12.83	117	7527	1.10271	ppb	# 72
25) 1,2-DCA	12.92	62	7604	0.98340	ppb	# 85
26) Benzene	13.04	78	38026	1.00682	ppb	100
27) TCE	14.06	95	9465	1.09587	ppb	# 88
28) 1,2-Dichloropropane	14.29	63	12079	1.05775	ppb	# 93
29) Bromodichloromethane	14.63	83	10572	1.00042	ppb	98
30) Dibromomethane	14.71	93	5182	1.09011	ppb	# 82
31) Cis-1,3-Dichloropropene	15.52	75	14308	0.99276	ppb	90
32) Toluene	16.15	91	36577	1.07430	ppb	94
33) Trans-1,3-Dichloropropene	16.29	75	10785	1.03606	ppb	92
34) 1,1,2-TCA	16.58	83	6910	1.25028	ppb	94
37) 1,2-EDB	17.84	107	6042	0.92292	ppb	# 88
38) Tetrachloroethene	17.29	129	5329	0.95527	ppb	# 79
39) 1-Chlorohexane	18.18	91	11656	1.01506	ppb	88
40) 1,1,1,2-Tetrachloroethane	18.65	131	7462	1.05186	ppb	75
41) m,p-Xylene	18.85	106	26765	1.95697	ppb	99
42) o-Xylene	19.59	106	14665	1.05636	ppb	86
43) Styrene	19.62	104	25532	1.03884	ppb	90
45) 2-Hexanone	16.59	43	2014	1.03407	ppb	# 84

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

1029N18W.D N86DODW.M Wed Nov 03 11:02:15 2010

Data File : M:\NEO\DATA\N101029\1029N18W.D  
 Acq On : 29 Oct 10 23:54  
 Sample : Vol Std 10-29-10@1.0ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.99	76	11309	0.96044	ppb	94
47) Dibromochloromethane	17.49	129	6925	0.94910	ppb	76
48) Chlorobenzene	18.61	112	22898	0.98960	ppb	92
49) Ethylbenzene	18.71	91	38220	1.00479	ppb	100
50) Bromoform	20.15	173	4284	0.98128	ppb	# 24
52) MIBK (methyl isobutyl keto	15.18	43	10773	2.22217	ppb	92
53) Isopropylbenzene	20.22	105	30247	0.97375	ppb	# 83
54) 1,1,2,2-Tetrachloroethane	20.39	83	7746	1.02452	ppb	# 90
55) 1,2,3-Trichloropropane	20.65	110	1566	1.02995	ppb	87
56) Bromobenzene	20.98	156	8465	1.01685	ppb	92
57) n-Propylbenzene	20.93	91	46553	1.11367	ppb	96
58) 4-Ethyltoluene	21.13	105	33313	1.05852	ppb	96
59) 2-Chlorotoluene	21.24	91	31606	1.18225	ppb	90
60) 1,3,5-Trimethylbenzene	21.21	105	26527	1.11202	ppb	98
61) 4-Chlorotoluene	21.31	91	25830	1.07768	ppb	86
62) Tert-Butylbenzene	21.87	119	24622	1.07569	ppb	97
63) 1,2,4-Trimethylbenzene	21.92	105	26800	1.06169	ppb	91
64) Sec-Butylbenzene	22.25	105	35429	1.03826	ppb	97
65) p-Isopropyltoluene	22.48	119	26360	1.05767	ppb	87
66) 1,3-DCB	22.62	146	16306	1.07370	ppb	93
67) 1,4-DCB	22.78	146	17203	1.11786	ppb	94
68) n-Butylbenzene	23.16	91	30464	1.06771	ppb	90
69) 1,2-DCB	23.41	146	16296	1.13182	ppb	# 76
70) 1,2-Dibromo-3-chloropropan	24.60	155	1015	1.03957	ppb	# 61
71) 1,2,4-Trichlorobenzene	26.04	180	11533	1.04962	ppb	88
72) Hexachlorobutadiene	26.25	225	1036	1.60414	ppb	# 17
73) Naphthalene	26.39	128	17971	1.04740	ppb	# 91
74) 1,2,3-Trichlorobenzene	26.76	180	3985	1.13067	ppb	97

(#) = qualifier out of range (m) = manual integration  
 1029N18W.D N86DODW.M Wed Nov 03 11:02:15 2010

Quantitation Report

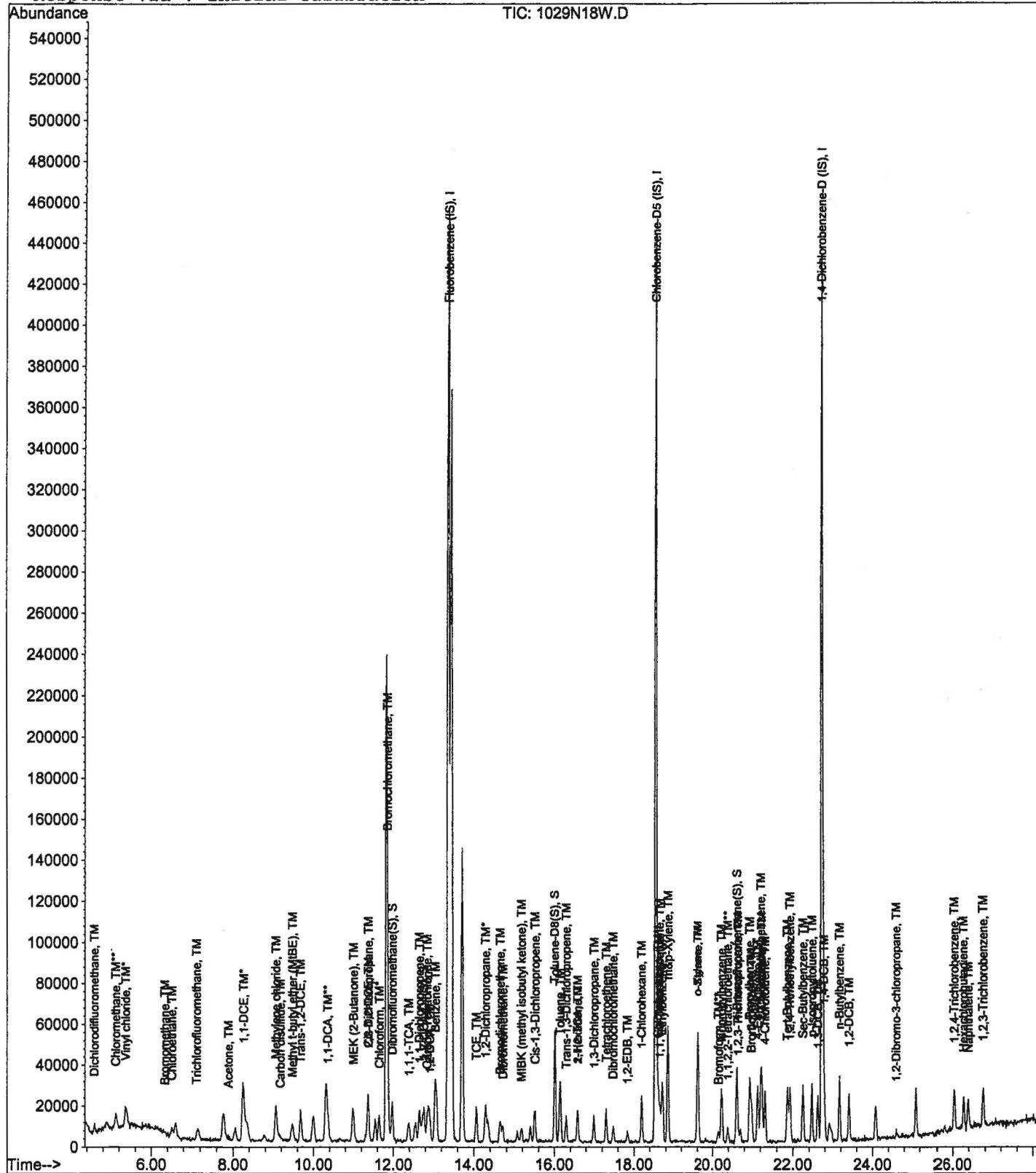
Data File : M:\NEO\DATA\N101029\1029N18W.D  
 Acq On : 29 Oct 10 23:54  
 Sample : Vol Std 10-29-10@1.0ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N19W.D Vial: 1  
 Acq On : 30 Oct 10 00:29 Operator: GM  
 Sample : Vol Std 10-29-10@5.0ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.37	96	225920	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.54	117	153472	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.73	152	81656	25.00000	ppb	0.00

## System Monitoring Compounds

20) Dibromofluoromethane(S)	11.96	111	99322	10.40930	ppb	0.00
Spiked Amount	24.523		Recovery	= 42.446%		
23) 1,2-DCA-D4 (S)	12.77	65	67841	10.06113	ppb	0.02
Spiked Amount	22.857		Recovery	= 44.017%		
36) Toluene-D8 (S)	16.02	98	311628	10.07038	ppb	0.00
Spiked Amount	23.425		Recovery	= 42.988%		
44) 4-Bromofluorobenzene(S)	20.60	95	107942	9.60865	ppb	0.00
Spiked Amount	23.962		Recovery	= 40.100%		

## Target Compounds

				Qvalue		
2) Dichlorodifluoromethane	4.58	85	34887	4.53846	ppb	89
3) Chloromethane	5.11	50	16462	4.56317	ppb	87
4) Vinyl chloride	5.36	62	12973	4.30942	ppb	93
5) Bromomethane	6.31	94	18809	5.29908	ppb	89
6) Chloroethane	6.50	64	10207	5.39938	ppb	87
7) Trichlorofluoromethane	7.12	101	7193	4.26895	ppb	89
8) Acetone	7.87	43	1909	2.72795	ppb	87
9) 1,1-DCE	8.29	96	8912	5.64804	ppb	98
10) Methylene chloride	9.06	84	57335	5.91821	ppb	97
11) Carbon disulfide	9.18	76	17589	5.30157	ppb	# 90
12) Methyl t-butyl ether (MtBE	9.46	73	76717	4.95746	ppb	95
13) Trans-1,2-DCE	9.67	96	49296	5.40237	ppb	94
14) 1,1-DCA	10.36	63	101217	5.40844	ppb	99
15) MEK (2-Butanone)	10.97	43	30274	5.40957	ppb	# 83
16) Cis-1,2-DCE	11.36	96	57470	5.25434	ppb	98
17) 2,2-Dichloropropane	11.36	77	10884	4.64607	ppb	83
18) Chloroform	11.64	83	79709	5.49382	ppb	95
19) Bromochloromethane	11.88	128	18835	5.13751	ppb	96
21) 1,1,1-TCA	12.37	97	54504	5.65633	ppb	95
22) 1,1-Dichloropropene	12.64	75	66060	5.47415	ppb	97
24) Carbon Tetrachloride	12.84	117	41646	5.82115	ppb	96
25) 1,2-DCA	12.92	62	42934	5.29771	ppb	99
26) Benzene	13.04	78	200907	5.07533	ppb	97
27) TCE	14.06	95	49640	5.48364	ppb	95
28) 1,2-Dichloropropane	14.28	63	64077	5.35368	ppb	100
29) Bromodichloromethane	14.63	83	59128	5.33843	ppb	# 97
30) Dibromomethane	14.69	93	25639	5.14600	ppb	91
31) Cis-1,3-Dichloropropene	15.50	75	76443	5.06058	ppb	94
32) Toluene	16.14	91	194211	5.44236	ppb	99
33) Trans-1,3-Dichloropropene	16.29	75	55946	5.12779	ppb	98
34) 1,1,2-TCA	16.58	83	31704	5.47319	ppb	97
37) 1,2-EDB	17.84	107	34678	5.04747	ppb	93
38) Tetrachloroethene	17.30	129	29651	5.06472	ppb	92
39) 1-Chlorohexane	18.18	91	59547	4.94126	ppb	97
40) 1,1,1,2-Tetrachloroethane	18.65	131	39600	5.31906	ppb	95
41) m&p-Xylene	18.85	106	151975	10.58831	ppb	88
42) o-Xylene	19.60	106	73928	5.07430	ppb	93
43) Styrene	19.62	104	127068	4.92648	ppb	99
45) 2-Hexanone	16.59	43	9725	4.75793	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1029N19W.D N86DODW.M Wed Nov 03 11:02:20 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N19W.D  
 Acq On : 30 Oct 10 00:29  
 Sample : Vol Std 10-29-10@5.0ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.99	76	61357	4.96532	ppb	98
47) Dibromochloromethane	17.47	129	40193	5.24901	ppb	97
48) Chlorobenzene	18.60	112	120313	4.95464	ppb	96
49) Ethylbenzene	18.71	91	212193	5.31561	ppb	99
50) Bromoform	20.14	173	24258	5.29461	ppb	98
52) MIBK (methyl isobutyl keto	15.16	43	41361	5.62786	ppb	98
53) Isopropylbenzene	20.23	105	173184	4.90515	ppb	94
54) 1,1,2,2-Tetrachloroethane	20.39	83	41699	4.85230	ppb	# 89
55) 1,2,3-Trichloropropane	20.64	110	7921	4.58336	ppb	81
56) Bromobenzene	20.98	156	46623	4.92728	ppb	100
57) n-Propylbenzene	20.93	91	237039	4.98893	ppb	95
58) 4-Ethyltoluene	21.13	105	168598	4.71319	ppb	94
59) 2-Chlorotoluene	21.23	91	151764	4.99446	ppb	99
60) 1,3,5-Trimethylbenzene	21.20	105	135047	4.98067	ppb	98
61) 4-Chlorotoluene	21.31	91	125858	4.61983	ppb	99
62) Tert-Butylbenzene	21.86	119	129994	4.99651	ppb	98
63) 1,2,4-Trimethylbenzene	21.92	105	146356	5.10095	ppb	97
64) Sec-Butylbenzene	22.25	105	191258	4.93110	ppb	97
65) p-Isopropyltoluene	22.46	119	137394	4.85009	ppb	98
66) 1,3-DCB	22.61	146	92608	5.36489	ppb	94
67) 1,4-DCB	22.78	146	84251	4.81654	ppb	95
68) n-Butylbenzene	23.16	91	151029	4.65697	ppb	98
69) 1,2-DCB	23.41	146	81395	4.97362	ppb	93
70) 1,2-Dibromo-3-chloropropan	24.61	155	5420	4.88389	ppb	93
71) 1,2,4-Trichlorobenzene	26.02	180	57297	4.58775	ppb	95
72) Hexachlorobutadiene	26.27	225	11023	6.01018	ppb	85
73) Naphthalene	26.38	128	89689	4.59894	ppb	# 93
74) 1,2,3-Trichlorobenzene	26.75	180	18696	4.66698	ppb	92

(#) = qualifier out of range (m) = manual integration  
 1029N19W.D N86DODW.M Wed Nov 03 11:02:20 2010

Quantitation Report

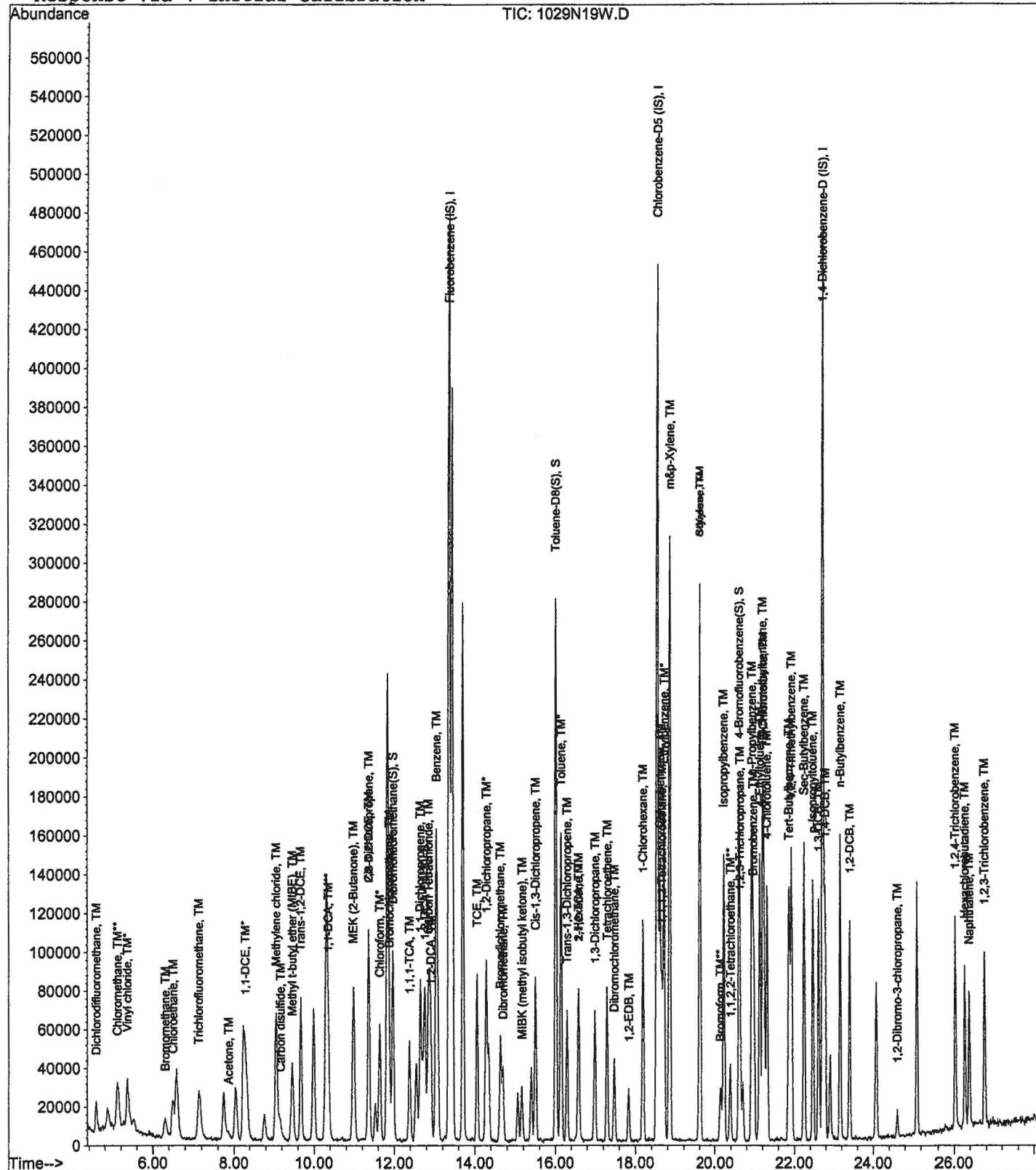
Data File : M:\NEO\DATA\N101029\1029N19W.D  
 Acq On : 30 Oct 10 00:29  
 Sample : Vol Std 10-29-10@5.0ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N20W.D Vial: 1  
 Acq On : 30 Oct 10 1:03 Operator: GM  
 Sample : Vol Std 10-29-10@10ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.36	96	247488	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.53	117	145536	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.72	152	74544	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.95	111	248001	23.72631	ppb	0.00
Spiked Amount	24.523		Recovery	= 96.750%		
23) 1,2-DCA-D4(S)	12.75	65	174591	23.63615	ppb	0.00
Spiked Amount	22.857		Recovery	= 103.408%		
36) Toluene-D8(S)	16.01	98	767714	26.16180	ppb	0.00
Spiked Amount	23.425		Recovery	= 111.684%		
44) 4-Bromofluorobenzene(S)	20.59	95	258026	24.22112	ppb	0.00
Spiked Amount	23.962		Recovery	= 101.079%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.57	85	76734	9.11242	ppb	100
3) Chloromethane	5.11	50	34344	8.69032	ppb	100
4) Vinyl chloride	5.35	62	27928	8.46874	ppb	100
5) Bromomethane	6.30	94	56033	9.31660	ppb	100
6) Chloroethane	6.49	64	20016	9.66549	ppb	100
7) Trichlorofluoromethane	7.13	101	17832	9.66078	ppb	100
8) Acetone	7.86	43	4527	8.25821	ppb	97
9) 1,1-DCE	8.28	96	17112	9.89974	ppb	100
10) Methylene chloride	9.05	84	105791	10.08101	ppb	100
11) Carbon disulfide	9.17	76	37945	10.44043	ppb	100
12) Methyl t-butyl ether (MtBE)	9.45	73	151512	8.93748	ppb	100
13) Trans-1,2-DCE	9.66	96	98102	9.81411	ppb	100
14) 1,1-DCA	10.35	63	201574	9.83226	ppb	100
15) MEK (2-Butanone)	10.97	43	57869	9.49918	ppb	100
16) Cis-1,2-DCE	11.35	96	116385	9.71346	ppb	100
17) 2,2-Dichloropropane	11.35	77	19976	7.78407	ppb	100
18) Chloroform	11.63	83	146419	9.21223	ppb	100
19) Bromochloromethane	11.87	128	37301	9.28769	ppb	100
21) 1,1,1-TCA	12.37	97	99100	9.38816	ppb	100
22) 1,1-Dichloropropene	12.63	75	127837	9.67020	ppb	100
24) Carbon Tetrachloride	12.83	117	79901	10.19502	ppb	100
25) 1,2-DCA	12.90	62	85518	9.63262	ppb	100
26) Benzene	13.03	78	425073	9.80242	ppb	100
27) TCE	14.05	95	100515	10.13605	ppb	100
28) 1,2-Dichloropropane	14.28	63	126953	9.68265	ppb	100
29) Bromodichloromethane	14.63	83	115252	9.49882	ppb	100
30) Dibromomethane	14.68	93	52766	9.66771	ppb	100
31) Cis-1,3-Dichloropropene	15.50	75	156631	9.46544	ppb	100
32) Toluene	16.14	91	377943	9.66807	ppb	100
33) Trans-1,3-Dichloropropene	16.28	75	108272	9.05896	ppb	100
34) 1,1,2-TCA	16.58	83	62024	9.77433	ppb	100
37) 1,2-EDB	17.83	107	64797	9.94565	ppb	100
38) Tetrachloroethene	17.29	129	58907	10.61065	ppb	100
39) 1-Chlorohexane	18.18	91	120678	10.56001	ppb	100
40) 1,1,1,2-Tetrachloroethane	18.65	131	75817	10.73902	ppb	100
41) m&p-Xylene	18.85	106	280267	20.59137	ppb	100
42) o-Xylene	19.59	106	149794	10.84228	ppb	100
43) Styrene	19.61	104	257767	10.53868	ppb	100
45) 2-Hexanone	16.58	43	19312	9.96356	ppb	100

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

1029N20W.D N86DODW.M Wed Nov 03 11:02:24 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N20W.D  
 Acq On : 30 Oct 10 1:03  
 Sample : Vol Std 10-29-10@10ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.98	76	116540	9.94528	ppb	100
47) Dibromochloromethane	17.47	129	78672	10.83442	ppb	100
48) Chlorobenzene	18.61	112	242978	10.55176	ppb	100
49) Ethylbenzene	18.70	91	391793	10.34993	ppb	100
50) Bromoform	20.14	173	48480	11.15835	ppb	100
52) MIBK (methyl isobutyl keto	15.16	43	85797	11.78300	ppb	100
53) Isopropylbenzene	20.22	105	339894	10.54540	ppb	100
54) 1,1,2,2-Tetrachloroethane	20.38	83	79776	10.16880	ppb	100
55) 1,2,3-Trichloropropane	20.63	110	15738	9.97538	ppb	100
56) Bromobenzene	20.97	156	90508	10.47779	ppb	100
57) n-Propylbenzene	20.92	91	438965	10.12029	ppb	100
58) 4-Ethyltoluene	21.13	105	339975	10.41081	ppb	100
59) 2-Chlorotoluene	21.23	91	291514	10.50883	ppb	100
60) 1,3,5-Trimethylbenzene	21.20	105	253918	10.25821	ppb	100
61) 4-Chlorotoluene	21.31	91	253444	10.19067	ppb	100
62) Tert-Butylbenzene	21.86	119	248013	10.44224	ppb	100
63) 1,2,4-Trimethylbenzene	21.91	105	277752	10.60409	ppb	100
64) Sec-Butylbenzene	22.25	105	380322	10.74115	ppb	100
65) p-Isopropyltoluene	22.46	119	262774	10.16108	ppb	100
66) 1,3-DCB	22.61	146	167416	10.62392	ppb	100
67) 1,4-DCB	22.78	146	166367	10.41844	ppb	100
68) n-Butylbenzene	23.16	91	299872	10.12872	ppb	100
69) 1,2-DCB	23.40	146	156038	10.44433	ppb	100
70) 1,2-Dibromo-3-chloropropan	24.61	155	9924	9.79555	ppb	100
71) 1,2,4-Trichlorobenzene	26.03	180	110232	9.66831	ppb	100
72) Hexachlorobutadiene	26.28	225	15233	8.54464	ppb	100
73) Naphthalene	26.38	128	182098	10.22819	ppb	100
74) 1,2,3-Trichlorobenzene	26.75	180	34480	9.42823	ppb	100

(#) = qualifier out of range (m) = manual integration  
 1029N20W.D N86DODW.M Wed Nov 03 11:02:25 2010

## Quantitation Report

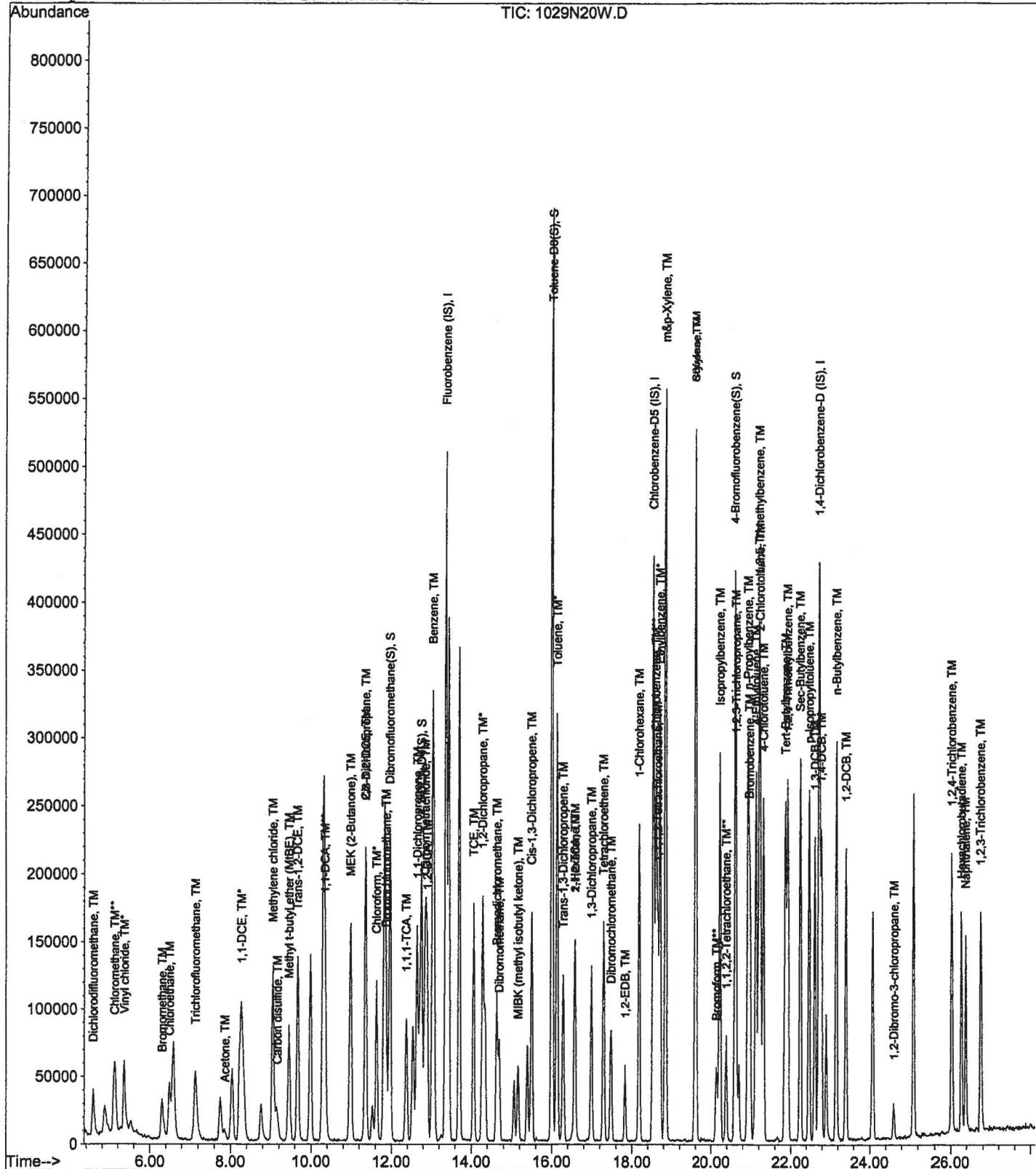
Data File : M:\NEO\DATA\N101029\1029N20W.D  
Acq On : 30 Oct 10 1:03  
Sample : Vol Std 10-29-10@10ug/L  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N21W.D Vial: 1  
 Acq On : 30 Oct 10 1:38 Operator: GM  
 Sample : Vol Std 10-29-10@20ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.36	96	235904	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.54	117	146240	25.00000	ppb	0.01
51) 1,4-Dichlorobenzene-D (IS)	22.72	152	78704	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.95	111	397196	39.86579	ppb	0.00
Spiked Amount	24.523		Recovery	= 162.566%		
23) 1,2-DCA-D4(S)	12.75	65	277169	39.36573	ppb	0.00
Spiked Amount	22.857		Recovery	= 172.227%		
36) Toluene-D8(S)	16.01	98	1192179	40.43095	ppb	0.00
Spiked Amount	23.425		Recovery	= 172.597%		
44) 4-Bromofluorobenzene(S)	20.60	95	441529	41.24717	ppb	0.00
Spiked Amount	23.962		Recovery	= 172.132%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.57	85	158502	19.74692	ppb	97
3) Chloromethane	5.10	50	71402	18.95458	ppb	98
4) Vinyl chloride	5.34	62	66520	21.16168	ppb	98
5) Bromomethane	6.30	94	109482	15.98726	ppb	99
6) Chloroethane	6.49	64	40192	20.36127	ppb	98
7) Trichlorofluoromethane	7.12	101	32672	18.56977	ppb	78
8) Acetone	7.85	43	9380	20.32251	ppb	85
9) 1,1-DCE	8.27	96	34496	20.93681	ppb	95
10) Methylene chloride	9.05	84	203087	20.46987	ppb	91
11) Carbon disulfide	9.16	76	73290	21.15569	ppb	96
12) Methyl t-butyl ether (MtBE)	9.45	73	312401	19.33301	ppb	97
13) Trans-1,2-DCE	9.66	96	200063	20.99708	ppb	94
14) 1,1-DCA	10.34	63	395246	20.22578	ppb	96
15) MEK (2-Butanone)	10.97	43	113611	19.65018	ppb	93
16) Cis-1,2-DCE	11.35	96	224226	19.63279	ppb	98
17) 2,2-Dichloropropane	11.34	77	38696	15.81914	ppb	86
18) Chloroform	11.63	83	297647	19.64662	ppb	100
19) Bromochloromethane	11.87	128	75852	19.81405	ppb	94
21) 1,1,1-TCA	12.37	97	205129	20.38697	ppb	92
22) 1,1-Dichloropropene	12.63	75	246912	19.59475	ppb	96
24) Carbon Tetrachloride	12.83	117	162779	21.78980	ppb	99
25) 1,2-DCA	12.90	62	165476	19.55424	ppb	99
26) Benzene	13.04	78	798369	19.31490	ppb	97
27) TCE	14.05	95	181015	19.15011	ppb	98
28) 1,2-Dichloropropane	14.28	63	258316	20.66909	ppb	# 96
29) Bromodichloromethane	14.62	83	233273	20.16994	ppb	98
30) Dibromomethane	14.68	93	104285	20.04519	ppb	92
31) Cis-1,3-Dichloropropene	15.50	75	310427	19.68074	ppb	98
32) Toluene	16.14	91	719296	19.30368	ppb	98
33) Trans-1,3-Dichloropropene	16.28	75	223072	19.58059	ppb	97
34) 1,1,2-TCA	16.57	83	128570	21.25620	ppb	98
37) 1,2-EDB	17.83	107	140144	21.40706	ppb	# 93
38) Tetrachloroethene	17.29	129	121136	21.71464	ppb	93
39) 1-Chlorohexane	18.18	91	229879	20.01888	ppb	99
40) 1,1,2-Tetrachloroethane	18.65	131	156800	22.10286	ppb	99
41) m&p-Xylene	18.84	106	566830	41.44482	ppb	94
42) o-Xylene	19.59	106	297468	21.42746	ppb	99
43) Styrene	19.61	104	532962	21.68500	ppb	99
45) 2-Hexanone	16.58	43	40224	20.65271	ppb	98

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

1029N21W.D N86DODW.M Wed Nov 03 11:02:29 2010

Data File : M:\NEO\DATA\N101029\1029N21W.D Vial: 1  
 Acq On : 30 Oct 10 1:38 Operator: GM  
 Sample : Vol Std 10-29-10@20ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.98	76	236475	20.08313	ppb	99
47) Dibromochloromethane	17.48	129	151990	20.83075	ppb	98
48) Chlorobenzene	18.60	112	460001	19.88021	ppb	94
49) Ethylbenzene	18.71	91	792349	20.83059	ppb	98
50) Bromoform	20.14	173	102768	23.53962	ppb	92
52) MIBK (methyl isobutyl keto	15.15	43	161450	20.38296	ppb	95
53) Isopropylbenzene	20.22	105	671449	19.73098	ppb	95
54) 1,1,2,2-Tetrachloroethane	20.37	83	159033	19.19997	ppb	95
55) 1,2,3-Trichloropropane	20.64	110	30618	18.38114	ppb	96
56) Bromobenzene	20.98	156	186623	20.46273	ppb	98
57) n-Propylbenzene	20.93	91	911610	19.90618	ppb	96
58) 4-Ethyltoluene	21.13	105	683505	19.82418	ppb	98
59) 2-Chlorotoluene	21.23	91	606020	20.69178	ppb	95
60) 1,3,5-Trimethylbenzene	21.20	105	519637	19.88356	ppb	99
61) 4-Chlorotoluene	21.31	91	501963	19.11649	ppb	98
62) Tert-Butylbenzene	21.85	119	486710	19.40909	ppb	98
63) 1,2,4-Trimethylbenzene	21.91	105	544969	19.70624	ppb	93
64) Sec-Butylbenzene	22.24	105	736660	19.70526	ppb	96
65) p-Isopropyltoluene	22.47	119	564561	20.67685	ppb	96
66) 1,3-DCB	22.61	146	331795	19.94223	ppb	97
67) 1,4-DCB	22.77	146	338541	20.07995	ppb	95
68) n-Butylbenzene	23.16	91	611552	19.56445	ppb	94
69) 1,2-DCB	23.40	146	311652	19.75767	ppb	97
70) 1,2-Dibromo-3-chloropropan	24.60	155	22050	20.61419	ppb	89
71) 1,2,4-Trichlorobenzene	26.02	180	226611	18.82521	ppb	98
72) Hexachlorobutadiene	26.26	225	37759	18.60891	ppb	91
73) Naphthalene	26.38	128	376774	20.04428	ppb	98
74) 1,2,3-Trichlorobenzene	26.76	180	73925	19.14565	ppb	95

(#) = qualifier out of range (m) = manual integration  
 1029N21W.D N86DODW.M Wed Nov 03 11:02:30 2010

Quantitation Report

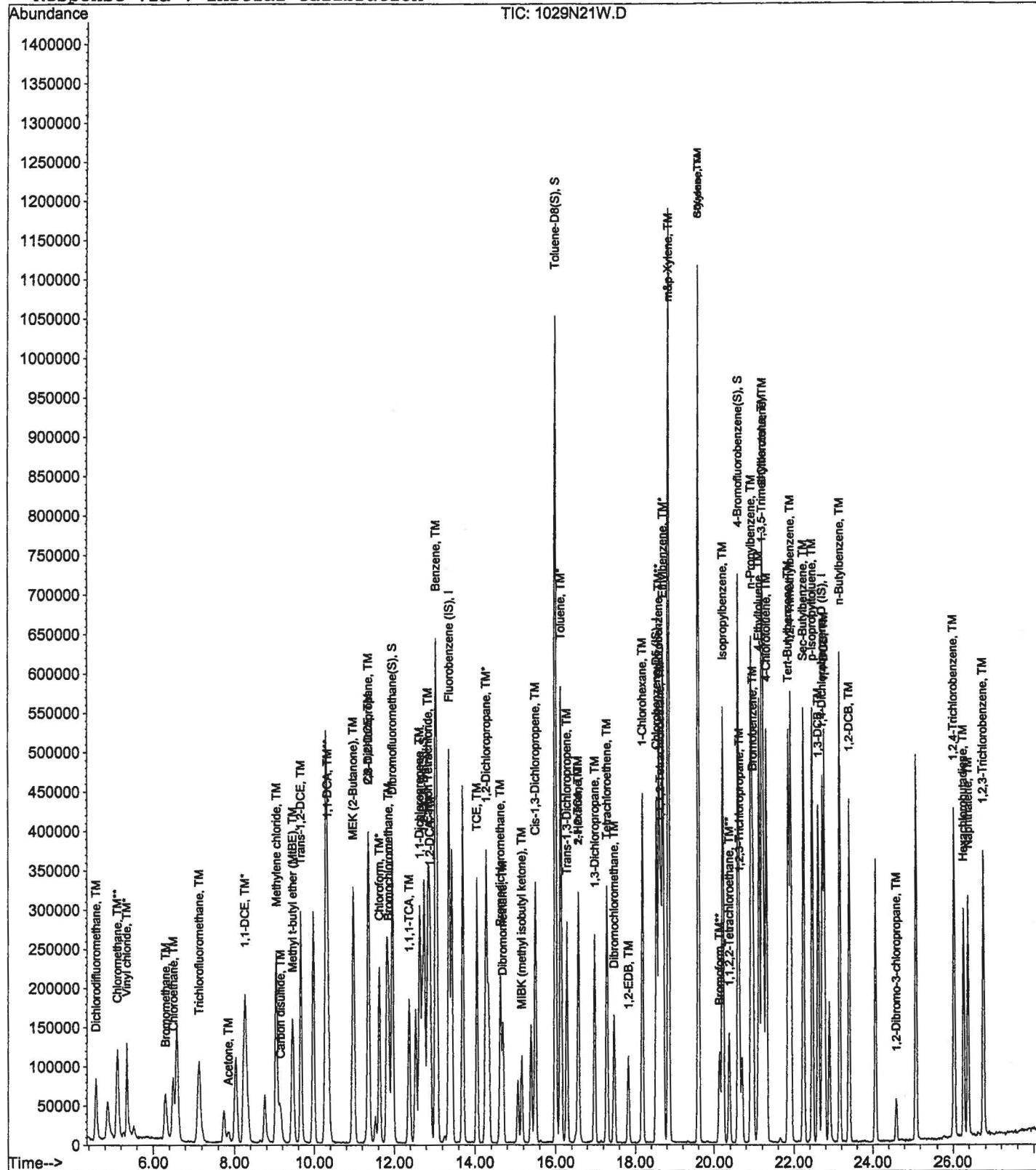
Data File : M:\NEO\DATA\N101029\1029N21W.D  
 Acq On : 30 Oct 10 1:38  
 Sample : Vol Std 10-29-10@20ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N22W.D Vial: 1  
 Acq On : 30 Oct 10 2:13 Operator: GM  
 Sample : Vol Std 10-29-10@40ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.36	96	217088	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.53	117	157440	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.72	152	75072	25.00000	ppb	0.00

System Monitoring Compounds						
20) Dibromofluoromethane(S)	11.95	111	779193	84.98457	ppb	0.00
Spiked Amount	24.523			Recovery	= 346.552%	
23) 1,2-DCA-D4 (S)	12.74	65	563010	86.89390	ppb	0.00
Spiked Amount	22.857			Recovery	= 380.164%	
36) Toluene-D8 (S)	16.00	98	2398705	75.56147	ppb	0.00
Spiked Amount	23.425			Recovery	= 322.564%	
44) 4-Bromofluorobenzene(S)	20.60	95	888939	77.13616	ppb	0.00
Spiked Amount	23.962			Recovery	= 321.903%	

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.57	85	306421	41.48419	ppb
3) Chloromethane	5.11	50	146803	42.34852	ppb
4) Vinyl chloride	5.34	62	137984	47.70086	ppb
5) Bromomethane	6.30	94	209757	30.07953	ppb
6) Chloroethane	6.47	64	73968	40.72008	ppb
7) Trichlorofluoromethane	7.11	101	67104	41.44563	ppb
8) Acetone	7.86	43	17192	42.47962	ppb
9) 1,1-DCE	8.27	96	63792	42.07338	ppb
10) Methylene chloride	9.04	84	409924	45.09551	ppb
11) Carbon disulfide	9.16	76	147870	46.38335	ppb
12) Methyl t-butyl ether (MtBE	9.46	73	596257	40.09776	ppb
13) Trans-1,2-DCE	9.66	96	389481	44.41993	ppb
14) 1,1-DCA	10.34	63	804648	44.74488	ppb
15) MEK (2-Butanone)	10.96	43	230667	43.45119	ppb
16) Cis-1,2-DCE	11.35	96	455081	43.29963	ppb
17) 2,2-Dichloropropane	11.34	77	85472	37.96996	ppb
18) Chloroform	11.63	83	607385	43.56623	ppb
19) Bromochloromethane	11.86	128	154491	43.85396	ppb
21) 1,1,1-TCA	12.37	97	384913	41.57073	ppb
22) 1,1-Dichloropropene	12.63	75	503771	43.44404	ppb
24) Carbon Tetrachloride	12.82	117	309007	44.94927	ppb
25) 1,2-DCA	12.90	62	329810	42.35154	ppb
26) Benzene	13.02	78	1570494	41.28806	ppb
27) TCE	14.05	95	382531	43.97672	ppb
28) 1,2-Dichloropropane	14.27	63	503544	43.78314	ppb
29) Bromodichloromethane	14.62	83	449525	42.23703	ppb
30) Dibromomethane	14.68	93	204836	42.78526	ppb
31) Cis-1,3-Dichloropropene	15.50	75	607353	41.84298	ppb
32) Toluene	16.13	91	1469818	42.86428	ppb
33) Trans-1,3-Dichloropropene	16.29	75	453874	43.29279	ppb
34) 1,1,2-TCA	16.56	83	250727	45.04499	ppb
37) 1,2-EDB	17.82	107	277925	39.43312	ppb
38) Tetrachloroethene	17.28	129	226658	37.73997	ppb
39) 1-Chlorohexane	18.17	91	477565	38.62993	ppb
40) 1,1,1,2-Tetrachloroethane	18.65	131	303880	39.78832	ppb
41) m&p-Xylene	18.84	106	1086543	73.79305	ppb
42) o-Xylene	19.59	106	582789	38.99357	ppb
43) Styrene	19.60	104	1053657	39.82113	ppb
45) 2-Hexanone	16.57	43	79616	37.97022	ppb

(#) = qualifier out of range (m) = manual integration  
 1029N22W.D N86DODW.M Wed Nov 03 11:02:34 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N22W.D Vial: 1  
 Acq On : 30 Oct 10 2:13 Operator: GM  
 Sample : Vol Std 10-29-10@40ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.97	76	478613	37.75563	ppb	96
47) Dibromochloromethane	17.47	129	303640	38.65449	ppb	93
48) Chlorobenzene	18.60	112	945432	37.95279	ppb	96
49) Ethylbenzene	18.70	91	1556037	37.99759	ppb	99
50) Bromoform	20.13	173	194069	41.29038	ppb	96
52) MIBK (methyl isobutyl keto	15.15	43	324984	42.13703	ppb	96
53) Isopropylbenzene	20.21	105	1313863	40.47664	ppb	97
54) 1,1,2,2-Tetrachloroethane	20.38	83	333303	42.18630	ppb	97
55) 1,2,3-Trichloropropane	20.63	110	64276	40.45417	ppb	95
56) Bromobenzene	20.97	156	364175	41.86272	ppb	96
57) n-Propylbenzene	20.92	91	1844994	42.23696	ppb	98
58) 4-Ethyltoluene	21.12	105	1373260	41.75659	ppb	99
59) 2-Chlorotoluene	21.23	91	1176419	42.11062	ppb	97
60) 1,3,5-Trimethylbenzene	21.20	105	1094485	43.90589	ppb	97
61) 4-Chlorotoluene	21.30	91	1070765	42.75131	ppb	98
62) Tert-Butylbenzene	21.86	119	959051	40.09548	ppb	98
63) 1,2,4-Trimethylbenzene	21.91	105	1065590	40.39624	ppb	97
64) Sec-Butylbenzene	22.24	105	1438675	40.34564	ppb	96
65) p-Isopropyltoluene	22.47	119	1073031	41.20070	ppb	96
66) 1,3-DCB	22.61	146	681862	42.96542	ppb	98
67) 1,4-DCB	22.77	146	664833	41.34118	ppb	96
68) n-Butylbenzene	23.15	91	1163868	39.03524	ppb	96
69) 1,2-DCB	23.40	146	604841	40.19999	ppb	98
70) 1,2-Dibromo-3-chloropropan	24.59	155	44088	43.21127	ppb	92
71) 1,2,4-Trichlorobenzene	26.03	180	470386	40.96681	ppb	97
72) Hexachlorobutadiene	26.26	225	76216	38.17681	ppb	99
73) Naphthalene	26.38	128	764181	42.62110	ppb	98
74) 1,2,3-Trichlorobenzene	26.76	180	148672	40.36704	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1029N22W.D N86DODW.M Wed Nov 03 11:02:35 2010

Quantitation Report

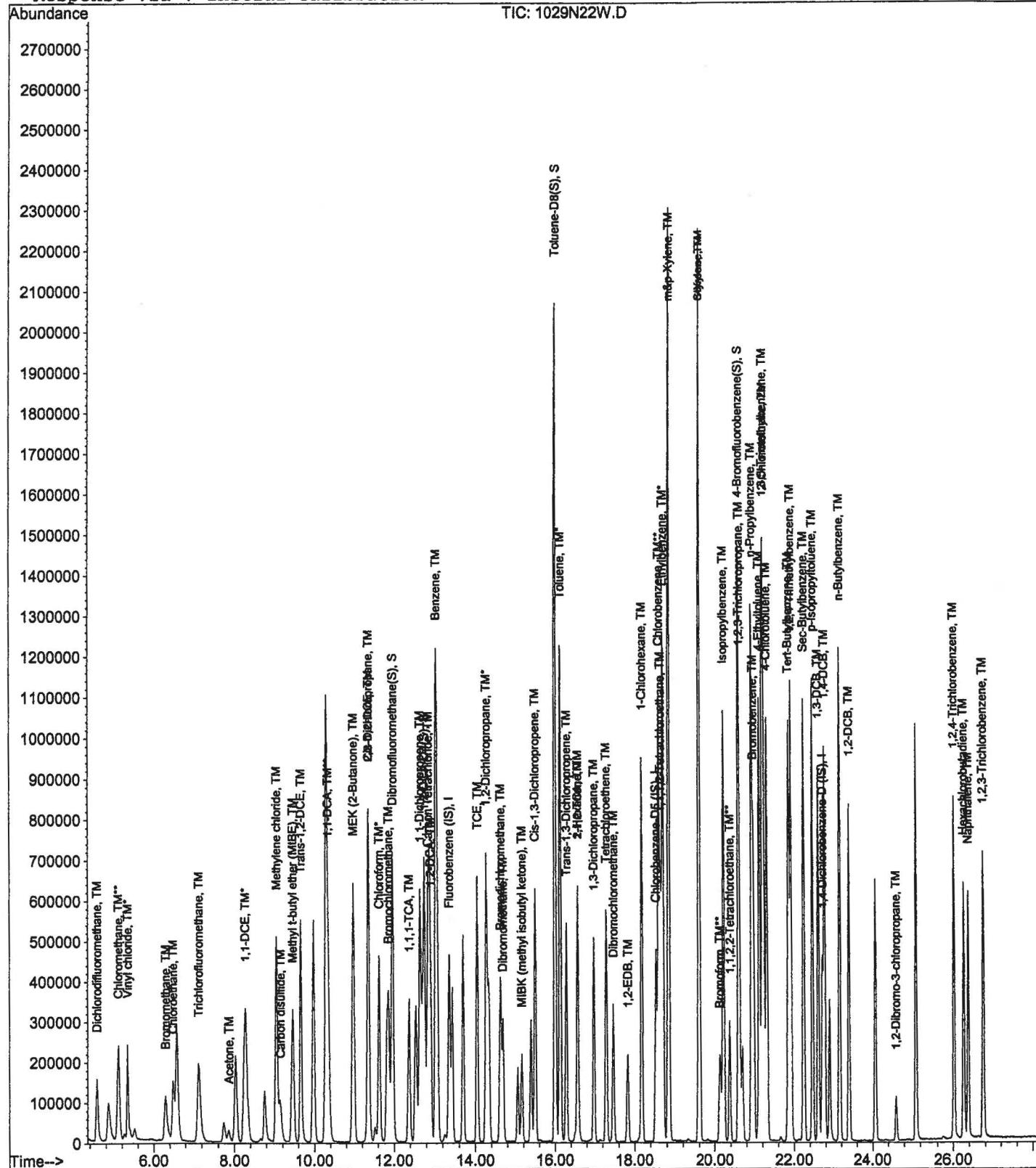
Data File : M:\NEO\DATA\N101029\1029N22W.D  
 Acq On : 30 Oct 10 2:13  
 Sample : Vol Std 10-29-10@40ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N23W.D Vial: 1  
 Acq On : 30 Oct 10 2:48 Operator: GM  
 Sample : Vol Std 10-29-10@100ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.36	96	224768	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.53	117	150720	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.73	152	79792	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.96	111	976550	102.87050	ppb	0.00
Spiked Amount	24.523		Recovery	= 419.488%		
23) 1,2-DCA-D4 (S)	12.75	65	677612	101.00796	ppb	0.00
Spiked Amount	22.857		Recovery	= 441.913%		
36) Toluene-D8 (S)	16.00	98	2967325	97.64114	ppb	0.00
Spiked Amount	23.425		Recovery	= 416.822%		
44) 4-Bromofluorobenzene(S)	20.60	95	1107882	100.42082	ppb	0.00
Spiked Amount	23.962		Recovery	= 419.076%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.57	85	786477	102.83750	ppb	92
3) Chloromethane	5.10	50	370647	103.26785	ppb	98
4) Vinyl chloride	5.34	62	342016	114.19450	ppb	100
5) Bromomethane	6.29	94	597740	77.59687	ppb	97
6) Chloroethane	6.47	64	186944	99.39800	ppb	96
7) Trichlorofluoromethane	7.11	101	161728	96.47546	ppb	91
8) Acetone	7.86	43	42064	103.13806	ppb	89
9) 1,1-DCE	8.27	96	173312	110.40052	ppb	94
10) Methylene chloride	9.04	84	978091	104.13764	ppb	95
11) Carbon disulfide	9.15	76	376671	114.11574	ppb	# 94
12) Methyl t-butyl ether (MtBE	9.45	73	1508647	97.98860	ppb	100
13) Trans-1,2-DCE	9.66	96	973339	107.21536	ppb	97
14) 1,1-DCA	10.35	63	1971079	105.86264	ppb	97
15) MEK (2-Butanone)	10.97	43	549911	100.15310	ppb	96
16) Cis-1,2-DCE	11.36	96	1156034	106.23495	ppb	98
17) 2,2-Dichloropropane	11.35	77	215168	92.31989	ppb	86
18) Chloroform	11.62	83	1518312	105.18365	ppb	96
19) Bromochloromethane	11.86	128	382960	104.99301	ppb	87
21) 1,1,1-TCA	12.36	97	1002085	104.52760	ppb	99
22) 1,1-Dichloropropene	12.63	75	1267174	105.54426	ppb	97
24) Carbon Tetrachloride	12.83	117	784063	110.15561	ppb	97
25) 1,2-DCA	12.90	62	798158	98.99096	ppb	97
26) Benzene	13.02	78	3983520	101.14782	ppb	99
27) TCE	14.05	95	943539	104.76528	ppb	97
28) 1,2-Dichloropropane	14.27	63	1239040	104.05336	ppb	# 98
29) Bromodichloromethane	14.63	83	1145190	103.92462	ppb	97
30) Dibromomethane	14.69	93	500100	100.88952	ppb	87
31) Cis-1,3-Dichloropropene	15.49	75	1522085	101.27952	ppb	98
32) Toluene	16.13	91	3697034	104.13260	ppb	100
33) Trans-1,3-Dichloropropene	16.29	75	1084841	99.94193	ppb	95
34) 1,1,2-TCA	16.58	83	601235	104.32562	ppb	98
37) 1,2-EDB	17.83	107	655097	97.09197	ppb	# 93
38) Tetrachloroethene	17.28	129	573083	99.67637	ppb	92
39) 1-Chlorohexane	18.18	91	1184916	100.12055	ppb	98
40) 1,1,1,2-Tetrachloroethane	18.64	131	727118	99.44949	ppb	96
41) m&p-Xylene	18.85	106	2888563	204.92482	ppb	92
42) o-Xylene	19.60	106	1441195	100.72762	ppb	97
43) Styrene	19.61	104	2525567	99.70511	ppb	99
45) 2-Hexanone	16.58	43	194880	97.08547	ppb	97

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

1029N23W.D N86DODW.M Wed Nov 03 11:02:39 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N23W.D Vial: 1  
 Acq On : 30 Oct 10 2:48 Operator: GM  
 Sample : Vol Std 10-29-10@100ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.98	76	1191510	98.18364	ppb	97
47) Dibromochloromethane	17.47	129	754980	100.39698	ppb	96
48) Chlorobenzene	18.60	112	2283970	95.77407	ppb	94
49) Ethylbenzene	18.70	91	3933064	100.32551	ppb	100
50) Bromoform	20.14	173	480638	106.82060	ppb	95
52) MIBK (methyl isobutyl keto	15.16	43	779052	94.04415	ppb	95
53) Isopropylbenzene	20.22	105	3345223	96.96122	ppb	97
54) 1,1,2,2-Tetrachloroethane	20.38	83	802840	95.60484	ppb	99
55) 1,2,3-Trichloropropane	20.64	110	157320	93.15733	ppb	91
56) Bromobenzene	20.97	156	893865	96.67359	ppb	99
57) n-Propylbenzene	20.93	91	4630431	99.73273	ppb	99
58) 4-Ethyltoluene	21.12	105	3300553	94.42296	ppb	99
59) 2-Chlorotoluene	21.23	91	2811809	94.69653	ppb	97
60) 1,3,5-Trimethylbenzene	21.20	105	2632493	99.35708	ppb	98
61) 4-Chlorotoluene	21.31	91	2689018	101.01076	ppb	94
62) Tert-Butylbenzene	21.86	119	2351754	92.50480	ppb	96
63) 1,2,4-Trimethylbenzene	21.92	105	2612387	93.17663	ppb	96
64) Sec-Butylbenzene	22.24	105	3596113	94.88245	ppb	96
65) p-Isopropyltoluene	22.47	119	2744241	99.13640	ppb	96
66) 1,3-DCB	22.62	146	1579376	93.63253	ppb	98
67) 1,4-DCB	22.78	146	1618976	94.71730	ppb	98
68) n-Butylbenzene	23.16	91	2931352	92.49958	ppb	98
69) 1,2-DCB	23.41	146	1478908	92.47930	ppb	99
70) 1,2-Dibromo-3-chloropropan	24.61	155	103785	95.70394	ppb	94
71) 1,2,4-Trichlorobenzene	26.03	180	1097848	89.95776	ppb	99
72) Hexachlorobutadiene	26.28	225	185344	85.96018	ppb	96
73) Naphthalene	26.39	128	1850085	97.08200	ppb	98
74) 1,2,3-Trichlorobenzene	26.75	180	352512	90.05135	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1029N23W.D N86DODW.M Wed Nov 03 11:02:40 2010

## Quantitation Report

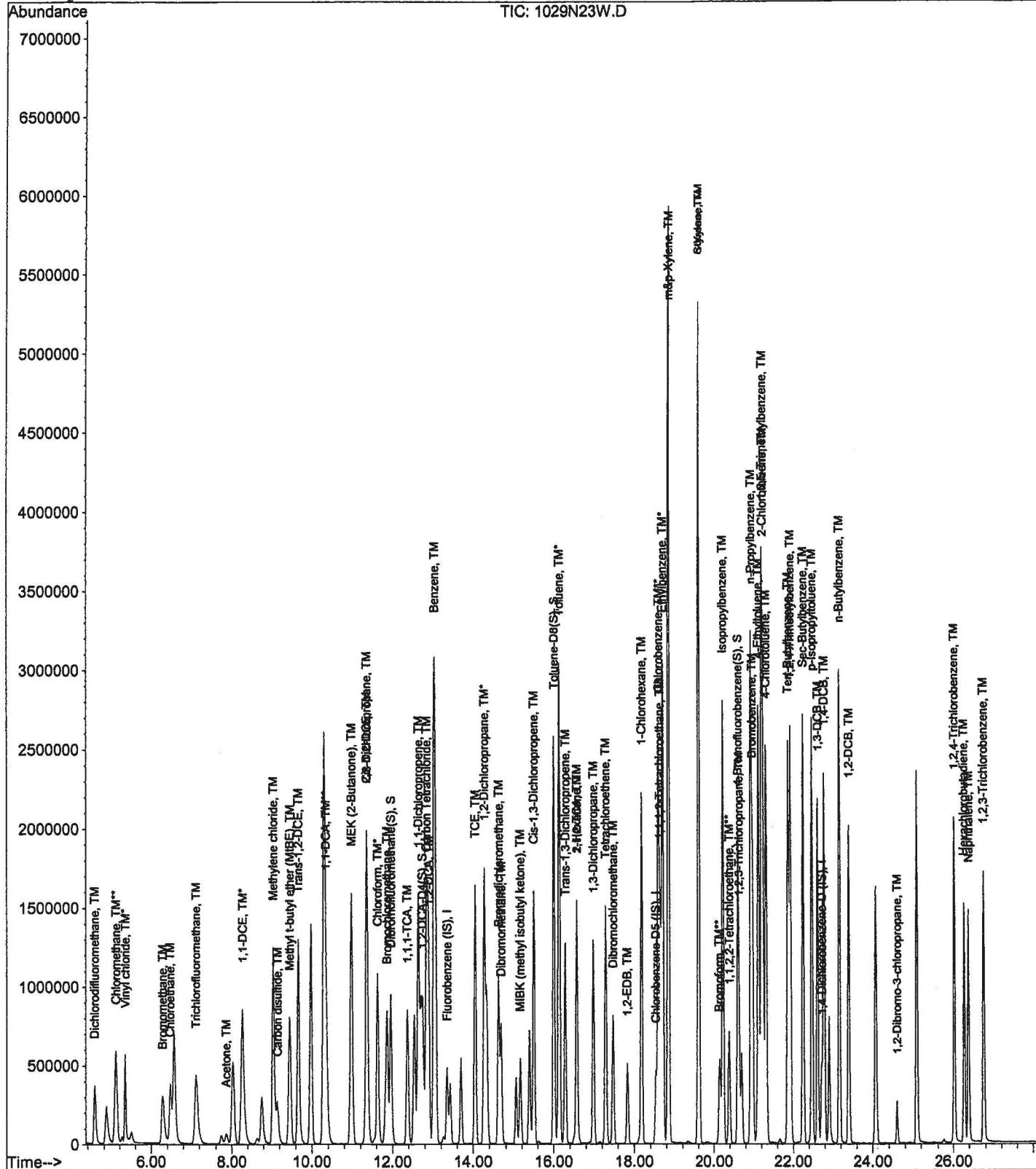
Data File : M:\NEO\DATA\N101029\1029N23W.D  
Acq On : 30 Oct 10 2:48  
Sample : Vol Std 10-29-10@100ug/L  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

**Quant Results File: N86DODW.RES**

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N24W.D Vial: 1  
 Acq On : 30 Oct 10 3:23 Operator: GM  
 Sample : Vol Std 10-29-10@200ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.36	96	236352	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.54	117	152256	25.00000	ppb	0.02
51) 1,4-Dichlorobenzene-D (IS)	22.73	152	74528	25.00000	ppb	0.00

## System Monitoring Compounds

20) Dibromofluoromethane(S)	11.96	111	1464955	146.75600	ppb	0.00
Spiked Amount	24.523		Recovery	= 598.442%		
23) 1,2-DCA-D4(S)	12.75	65	1063098	150.70339	ppb	0.00
Spiked Amount	22.857		Recovery	= 659.330%		
36) Toluene-D8(S)	16.01	98	4694779	152.92530	ppb	0.00
Spiked Amount	23.425		Recovery	= 652.825%		
44) 4-Bromofluorobenzene(S)	20.61	95	1620154	145.37275	ppb	0.02
Spiked Amount	23.962		Recovery	= 606.669%		

## Target Compounds

				Qvalue	
2) Dichlorodifluoromethane	4.57	85	1584236	196.99743	ppb
3) Chloromethane	5.10	50	662374	175.50243	ppb
4) Vinyl chloride	5.33	62	644544	204.65697	ppb
5) Bromomethane	6.28	94	1609168	194.03712	ppb
6) Chloroethane	6.46	64	385608	194.97878	ppb
7) Trichlorofluoromethane	7.09	101	329664	187.01583	ppb
8) Acetone	7.87	43	81954	192.81978	ppb
9) 1,1-DCE	8.26	96	345024	209.00997	ppb
10) Methylene chloride	9.04	84	2013814	204.06055	ppb
11) Carbon disulfide	9.15	76	750952	216.35689	ppb
12) Methyl t-butyl ether (MtBE)	9.46	73	3099445	191.44633	ppb
13) Trans-1,2-DCE	9.67	96	2001878	209.70350	ppb
14) 1,1-DCA	10.35	63	3930002	200.72741	ppb
15) MEK (2-Butanone)	10.98	43	1107717	191.92989	ppb
16) Cis-1,2-DCE	11.36	96	2279126	199.17753	ppb
17) 2,2-Dichloropropane	11.35	77	464704	189.61349	ppb
18) Chloroform	11.64	83	3062787	201.78051	ppb
19) Bromochloromethane	11.86	128	788845	205.67138	ppb
21) 1,1,1-TCA	12.36	97	2119399	210.23951	ppb
22) 1,1-Dichloropropene	12.63	75	2637072	208.87936	ppb
24) Carbon Tetrachloride	12.83	117	1612318	215.41780	ppb
25) 1,2-DCA	12.91	62	1648509	194.43444	ppb
26) Benzene	13.03	78	8162695	197.10530	ppb
27) TCE	14.06	95	1951660	206.08048	ppb
28) 1,2-Dichloropropane	14.27	63	2602825	207.86959	ppb
29) Bromodichloromethane	14.63	83	2329334	201.02397	ppb
30) Dibromomethane	14.70	93	982609	188.51466	ppb
31) Cis-1,3-Dichloropropene	15.50	75	3132072	198.19362	ppb
32) Toluene	16.14	91	7302789	195.61278	ppb
33) Trans-1,3-Dichloropropene	16.29	75	2215997	194.14491	ppb
34) 1,1,2-TCA	16.58	83	1214791	200.45804	ppb
37) 1,2-EDB	17.84	107	1310532	192.27456	ppb
38) Tetrachloroethene	17.29	129	1152407	198.41616	ppb
39) 1-Chlorohexane	18.19	91	2333262	195.16217	ppb
40) 1,1,1,2-Tetrachloroethane	18.65	131	1402868	189.93759	ppb
41) m,p-Xylene	18.85	106	5641460	396.18745	ppb
42) o-Xylene	19.60	106	2771993	191.78490	ppb
43) Styrene	19.62	104	4887091	190.98771	ppb
45) 2-Hexanone	16.59	43	354880	175.01085	ppb

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

1029N24W.D N86DODW.M Wed Nov 03 11:02:44 2010

Data File : M:\NEO\DATA\N101029\1029N24W.D Vial: 1  
 Acq On : 30 Oct 10 3:23 Operator: GM  
 Sample : Vol Std 10-29-10@200ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:44:55 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.99	76	2417991	197.23891	ppb	98
47) Dibromochloromethane	17.48	129	1516538	199.63421	ppb	98
48) Chlorobenzene	18.60	112	4680231	194.27697	ppb	94
49) Ethylbenzene	18.71	91	7352258	185.65113	ppb	99
50) Bromoform	20.15	173	908340	199.83973	ppb	95
52) MIBK (methyl isobutyl keto	15.17	43	1514242	194.85053	ppb	96
53) Isopropylbenzene	20.23	105	6558179	203.51486	ppb	99
54) 1,1,2,2-Tetrachloroethane	20.38	83	1557086	198.51958	ppb	99
55) 1,2,3-Trichloropropane	20.64	110	292354	185.34549	ppb	84
56) Bromobenzene	20.99	156	1751149	202.76775	ppb	97
57) n-Propylbenzene	20.94	91	9134856	210.64826	ppb	98
58) 4-Ethyltoluene	21.13	105	6352549	194.57131	ppb	100
59) 2-Chlorotoluene	21.24	91	5545877	199.96702	ppb	98
60) 1,3,5-Trimethylbenzene	21.21	105	4863692	196.53393	ppb	96
61) 4-Chlorotoluene	21.32	91	5077459	204.20212	ppb	96
62) Tert-Butylbenzene	21.86	119	4771845	200.95489	ppb	97
63) 1,2,4-Trimethylbenzene	21.93	105	5242641	200.19788	ppb	97
64) Sec-Butylbenzene	22.25	105	7380361	208.48272	ppb	97
65) p-Isopropyltoluene	22.47	119	5153457	199.31935	ppb	98
66) 1,3-DCB	22.62	146	3127677	198.51943	ppb	98
67) 1,4-DCB	22.79	146	3138772	196.60229	ppb	98
68) n-Butylbenzene	23.17	91	5882796	198.74467	ppb	96
69) 1,2-DCB	23.41	146	2824059	189.06755	ppb	98
70) 1,2-Dibromo-3-chloropropan	24.61	155	199352	196.81388	ppb	93
71) 1,2,4-Trichlorobenzene	26.03	180	2136961	187.47048	ppb	99
72) Hexachlorobutadiene	26.28	225	343616	169.55996	ppb	97
73) Naphthalene	26.39	128	3320327	186.53820	ppb	98
74) 1,2,3-Trichlorobenzene	26.75	180	661700	180.97447	ppb	99

(#) = qualifier out of range (m) = manual integration  
 1029N24W.D N86DODW.M Wed Nov 03 11:02:45 2010

## Quantitation Report

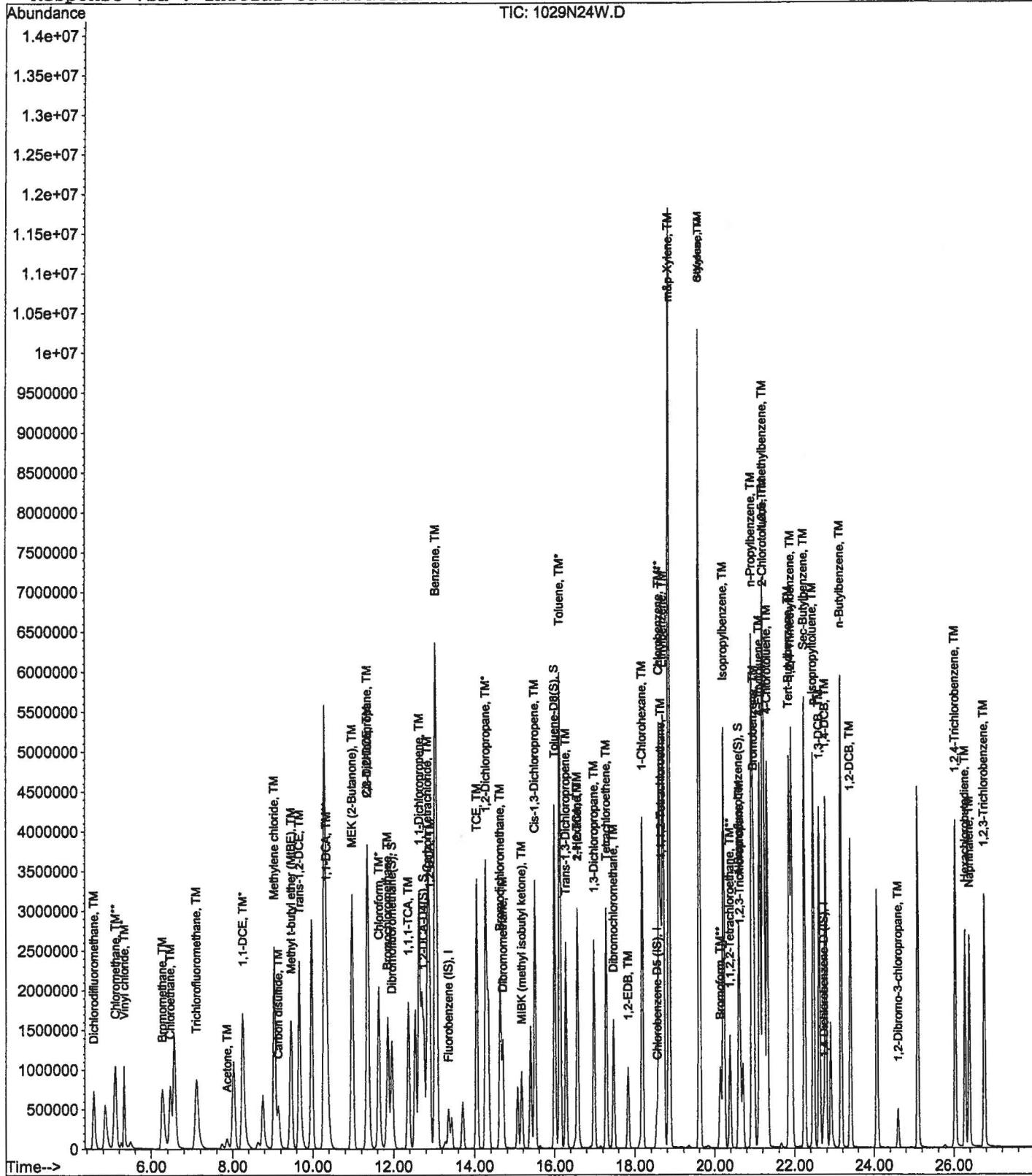
Data File : M:\NEO\DATA\N101029\1029N24W.D  
 Acq On : 30 Oct 10 3:23  
 Sample : Vol Std 10-29-10@200ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

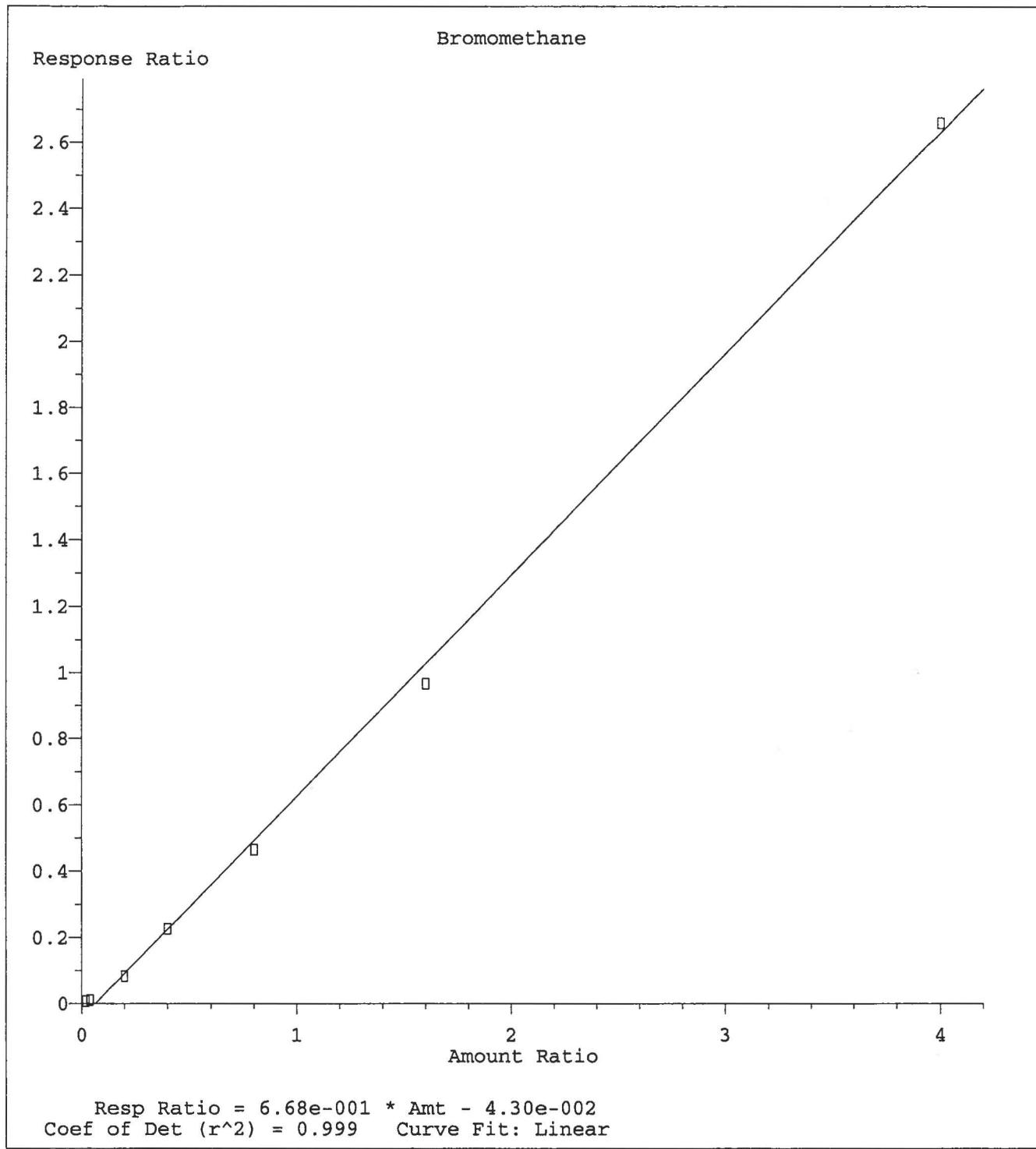
Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 1 11:45 2010

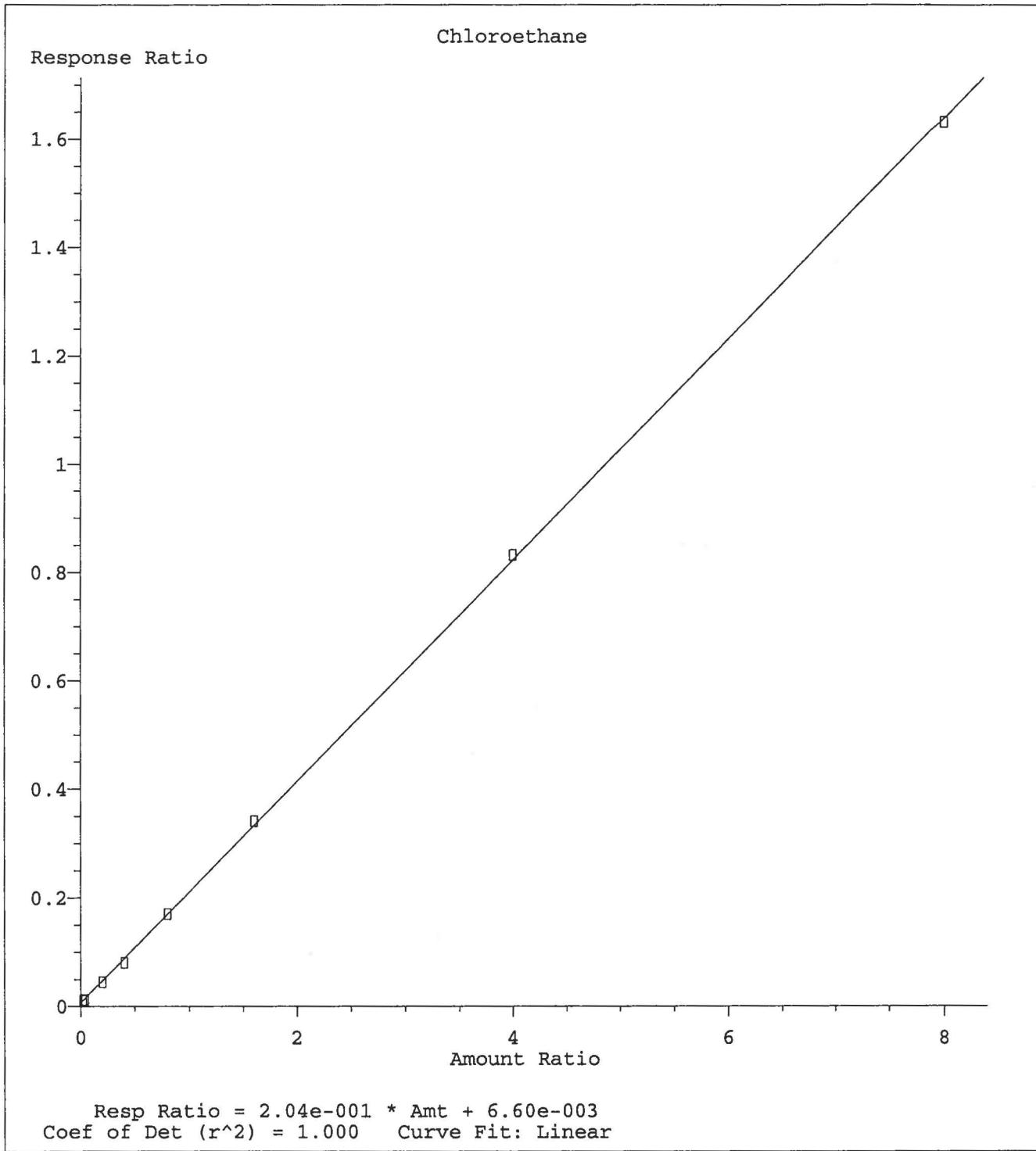
Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration

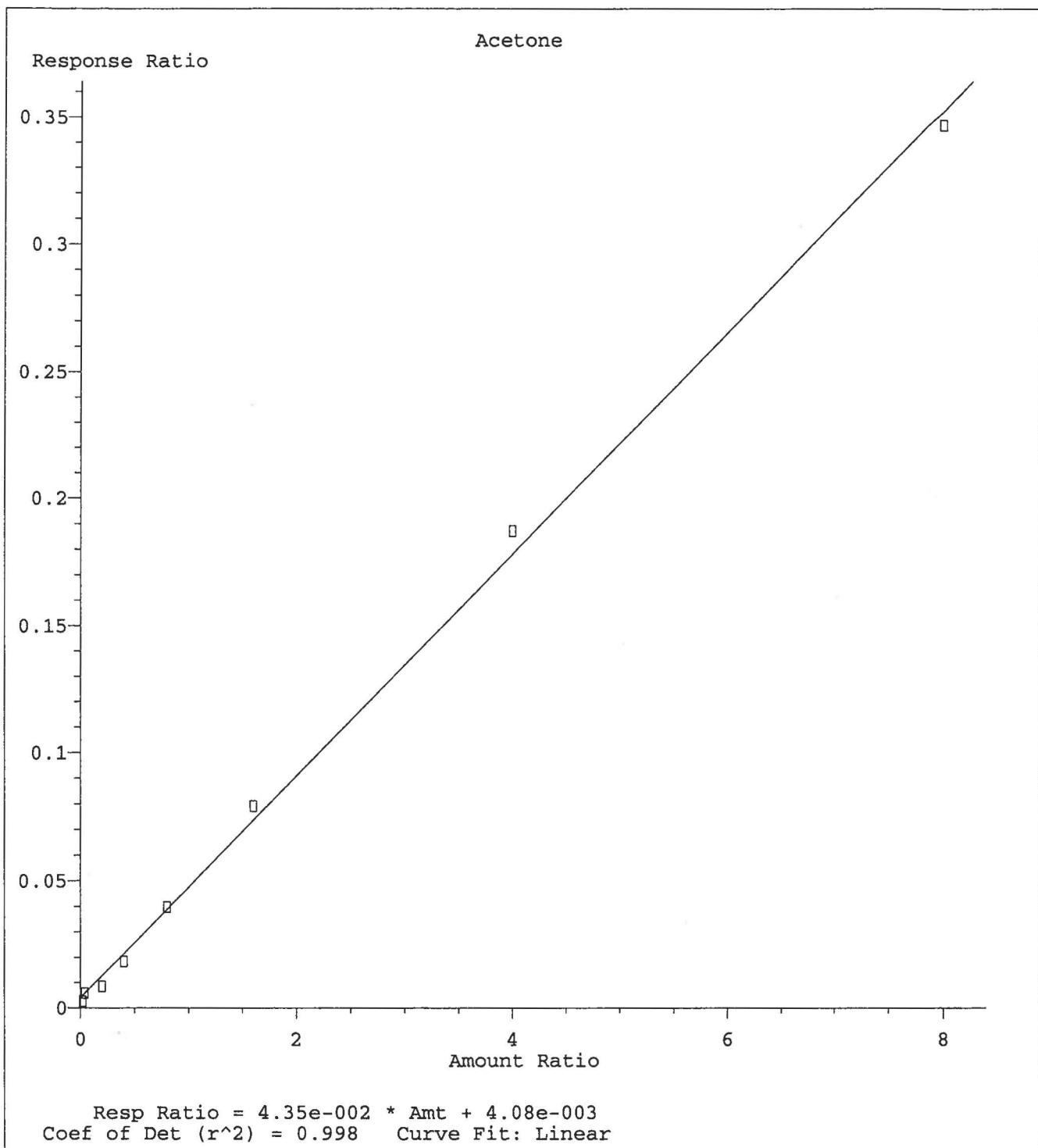




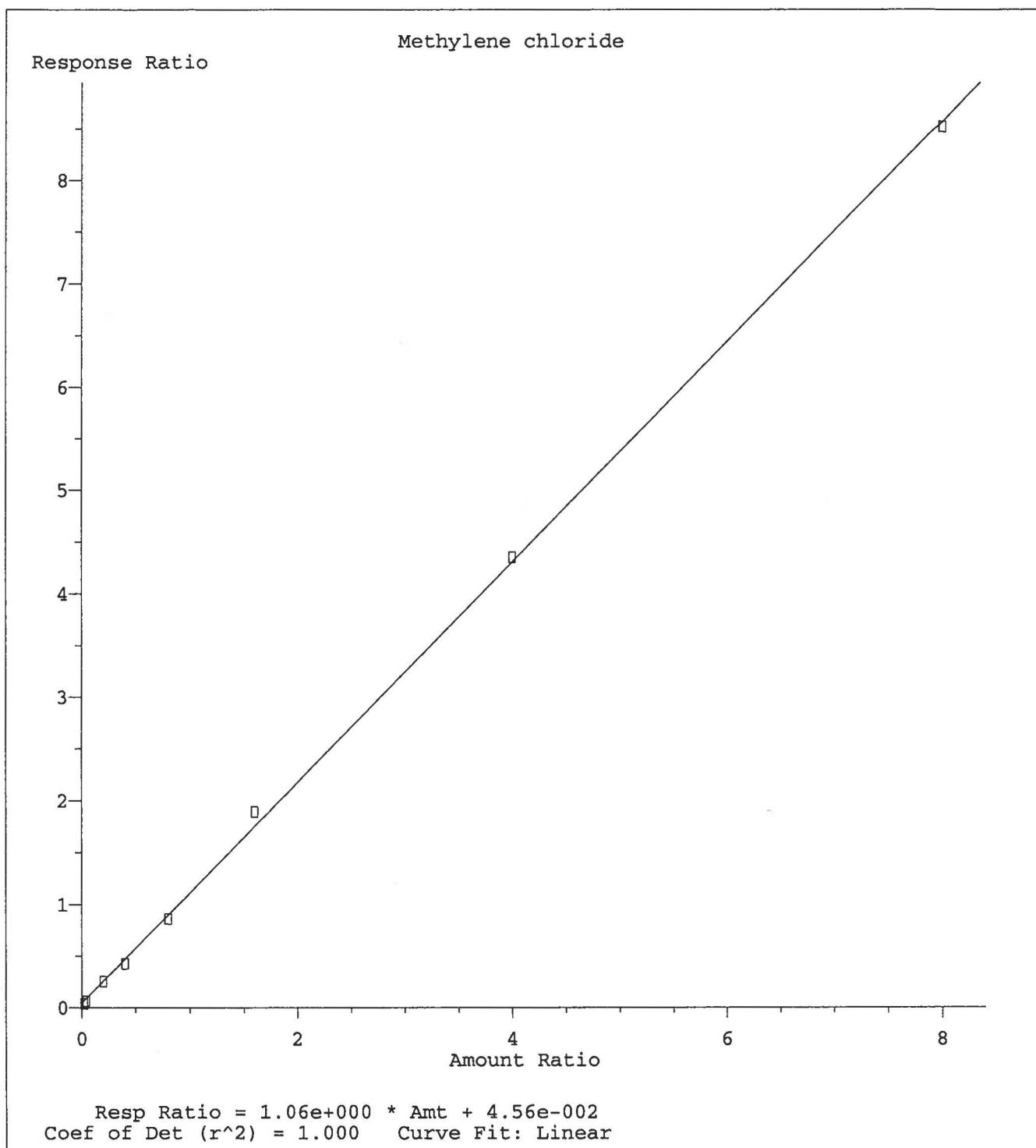
Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010



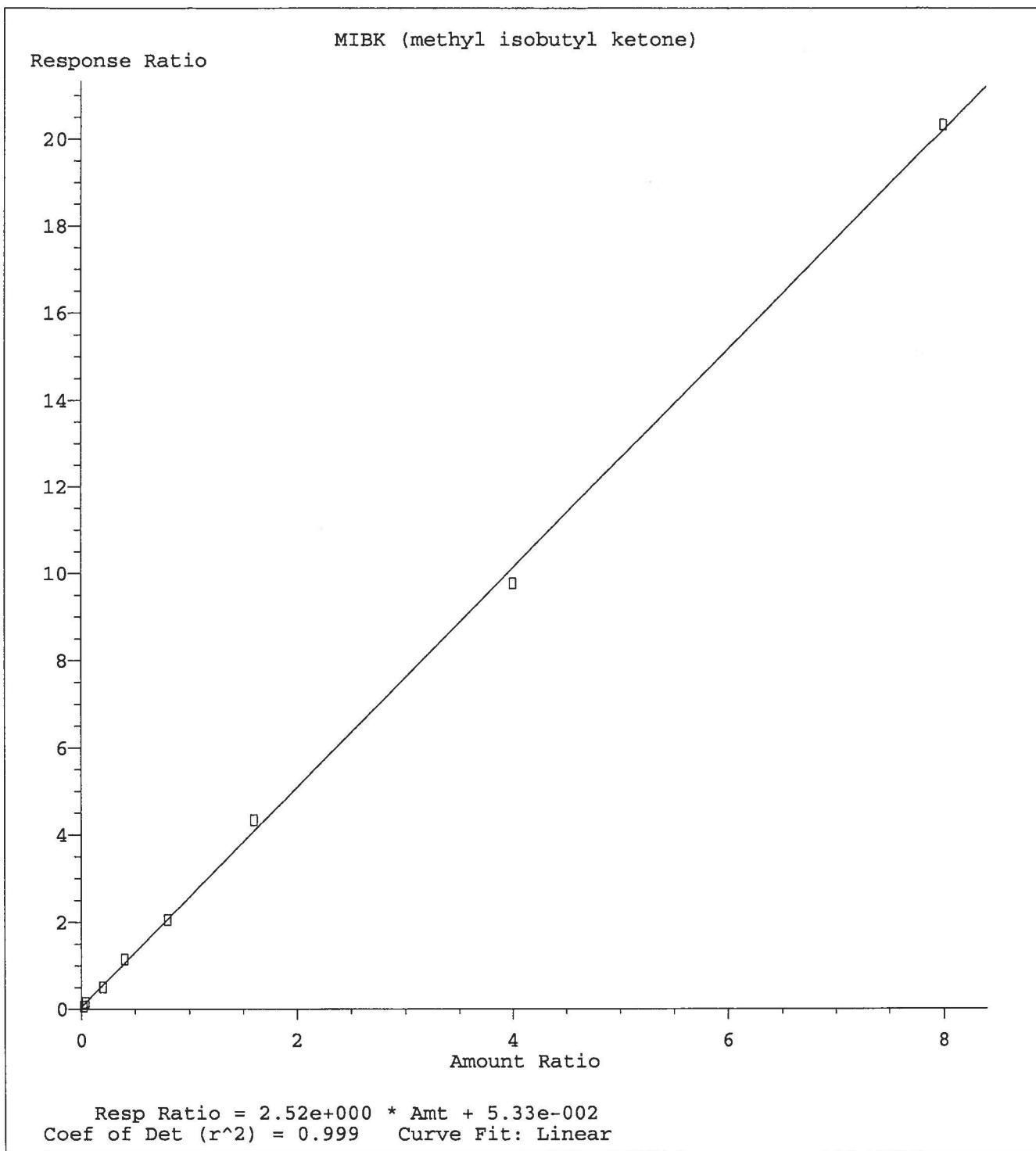
Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010



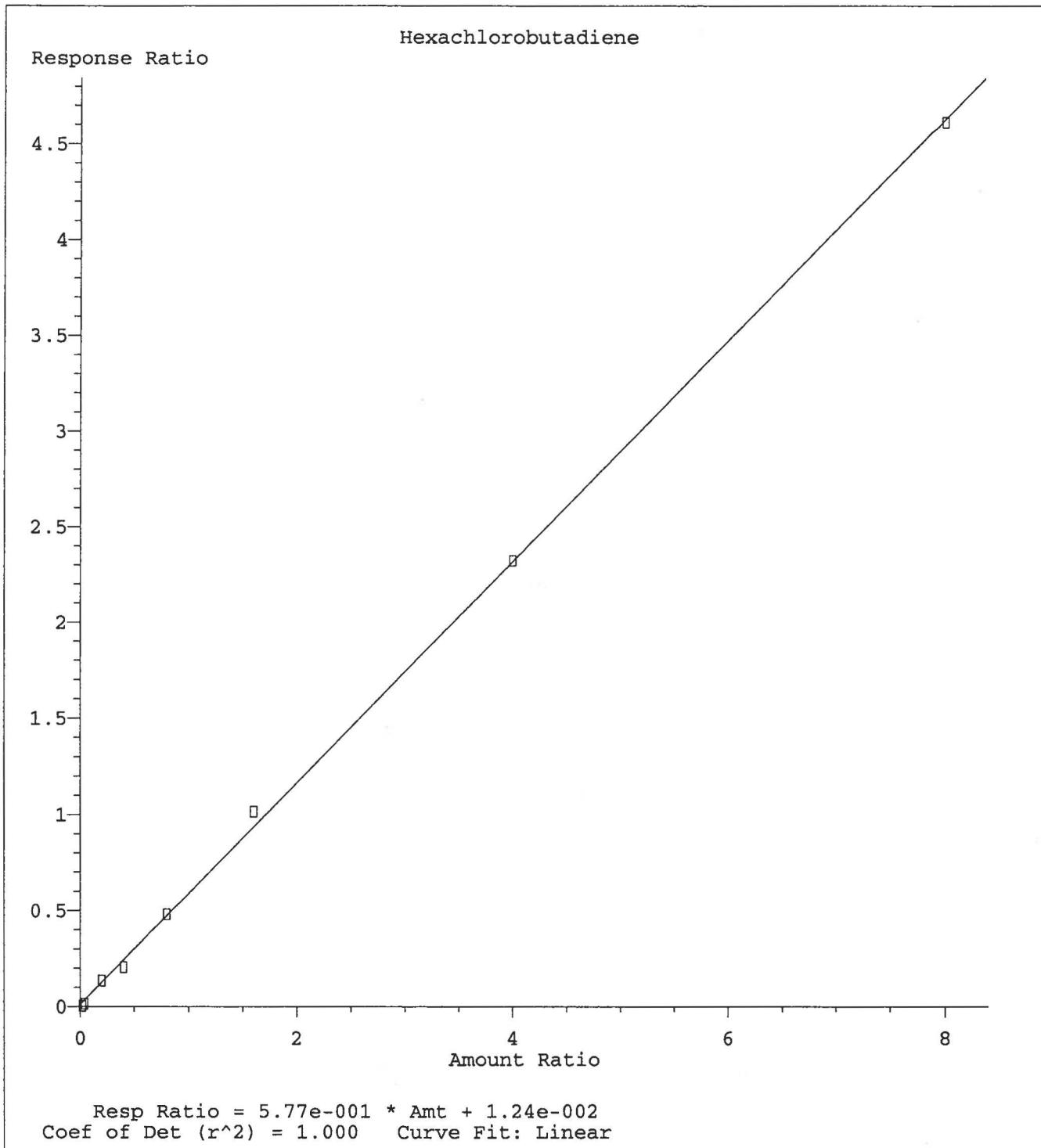
Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010



Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010



Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010



Method Name: M:\NEO\DATA\N101029\N86DODW.M  
Calibration Table Last Updated: Mon Nov 01 11:51:32 2010

**VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B**

Form 7

**Second Source Calibration/CCV**

Lab Name: APPL, Inc.

SDG No: 62931

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

Date Analyzed: 10/30/10

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

Instrument: Neo

Initial Cal. Date: 10/29/10

Data File: 1029N29W.D

		Compound	MEAN	CCRF	%D	%Drift	
1	I	Fluorobenzene (IS)	ISTD			I	
2	TM	Dichlorodifluoromethane	0.8796	0.8284	5.8	TM	
3	TM**	Chloromethane	0.4026	0.3741	7.1	TM**	
4	TM*	Vinyl chloride	0.3378	0.2979	12	TM*	
5	TML	Bromomethane	0.4940	0.5511	12	TML	1.5
6	TML	Chloroethane	0.2623	0.2244	14	TML	2.0
7	TM	Trichlorofluoromethane	0.1847	0.2070	12	TM	
8	TML	Acetone	0.0685	0.0530	23	TML	1.7
9	TM*	1,1-DCE	0.1945	0.1832	5.8	TM*	
10	TML	Methylene chloride	1.276	1.246	2.3	TML	6.3
11	TM	Carbon disulfide	0.4026	0.3979	1.2	TM	
12	TM	Methyl t-butyl ether (MtBE)	1.661	1.690	1.8	TM	
13	TM	Trans-1,2-DCE	1.076	1.078	0.25	TM	
14	TM**	1,1-DCA	2.218	2.208	0.42	TM**	
15	TM	MEK (2-Butanone)	0.6597	0.6410	2.8	TM	
16	TM	Cis-1,2-DCE	1.266	1.250	1.2	TM	
17	TM	2,2-Dichloropropane	0.2440	0.1966	19	TM	
18	TM*	Chloroform	1.671	1.672	0.02	TM*	
19	TM	Bromochloromethane	0.4116	0.4109	0.17	TM	
20	S	Dibromofluoromethane(S)	1.061	1.049	1.2	S	
21	TM	1,1,1-TCA	1.117	1.148	2.8	TM	
22	TM	1,1-Dichloropropene	1.400	1.489	6.4	TM	
23	S	1,2-DCA-D4(S)	0.7672	0.7617	0.71	S	
24	TM	Carbon Tetrachloride	0.8697	0.9010	.36	TM	
25	TM	1,2-DCA	0.8954	0.9316	4.0	TM	
26	TM	Benzene	4.403	4.645	5.5	TM	
27	TM	TCE	1.039	1.127	8.5	TM	
28	TM*	1,2-Dichloropropane	1.381	1.416	2.5	TM*	
29	TM	Bromodichloromethane	1.243	1.315	5.8	TM	
30	TM	Dibromomethane	0.5579	0.5851	4.9	TM	
31	TM	Cis-1,3-Dichloropropene	1.679	1.691	0.75	TM	
32	TM*	Toluene	4.113	4.047	1.6	TM*	
33	TM	Trans-1,3-Dichloropropene	1.196	1.183	1.1	TM	
34	TM	1,1,2-TCA	0.6887	0.7192	4.4	TM	
35	I	Chlorobenzene-D5 (IS)	ISTD			I	
36	S	Toluene-D8(S)	5.000	5.121	2.4	S	
37	TM	1,2-EDB	1.094	1.166	6.6	TM	
38	TM	Tetrachloroethene	0.9647	1.097	14	TM	
39	TM	1-Chlorohexane	1.989	2.037	2.4	TM	
40	TM	1,1,1,2-Tetrachloroethane	1.252	1.348	7.7	TM	
Average					5.5		

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7

Second Source Calibration/CCV

Lab Name: APPL, Inc.  
Case No: \_\_\_\_\_  
Matrix: 0

SDG No: 62931  
Date Analyzed: 10/30/10  
Instrument: Neo  
Cal. Date: 10/29/10  
Data File: 1029N29W.D

		Compound	MEAN	CCRF	%D	%Drift
41	TM	m&p-Xylene	2.356	2.648	12	TM
42	TM	o-Xylene	2.429	2.581	6.3	TM
43	TM	Styrene	4.271	4.539	6.3	TM
44	S	4-Bromofluorobenzene(S)	1.791	1.852	3.4	S
45	TM	2-Hexanone	0.3207	0.3665	14	TM
46	TM	1,3-Dichloropropane	1.940	2.087	7.6	TM
47	TM	Dibromochloromethane	1.243	1.310	5.4	TM
48	TM**	Chlorobenzene	3.886	4.122	6.1	TM**
49	TM*	Ethylbenzene	6.531	6.987	7.0	TM*
50	TM**	Bromoform	0.7925	0.8341	5.3	TM**
51	I	1,4-Dichlorobenzene-D (IS)	ISTD			I
52	TML	MIBK (methyl isobutyl ketone)	2.830	2.658	6.1	TML
53	TM	Isopropylbenzene	10.8	10.9	1.4	TM
54	TM**	1,1,2,2-Tetrachloroethane	2.608	2.448	6.1	TM**
55	TM	1,2,3-Trichloropropane	0.4947	0.5040	1.9	TM
56	TM	Bromobenzene	2.928	2.977	1.7	TM
57	TM	n-Propylbenzene	14.8	14.9	0.34	TM
58	TM	4-Ethyltoluene	10.8	11.0	1.1	TM
59	TM	2-Chlorotoluene	9.361	9.508	1.6	TM
60	TM	1,3,5-Trimethylbenzene	8.433	8.373	0.71	TM
61	TM	4-Chlorotoluene	8.289	8.451	1.9	TM
62	TM	Tert-Butylbenzene	7.976	8.025	0.61	TM
63	TM	1,2,4-Trimethylbenzene	8.756	8.750	0.07	TM
64	TM	Sec-Butylbenzene	11.9	12.0	0.61	TM
65	TM	p-Isopropyltoluene	8.622	9.313	8.0	TM
66	TM	1,3-DCB	5.455	5.352	1.9	TM
67	TM	1,4-DCB	5.368	5.490	2.3	TM
68	TM	n-Butylbenzene	9.711	10.1	3.8	TM
69	TM	1,2-DCB	4.945	4.860	1.7	TM
70	TM	1,2-Dibromo-3-chloropropane	0.3366	0.3561	5.8	TM
71	TM	1,2,4-Trichlorobenzene	3.696	3.706	0.27	TM
72	TML	Hexachlorobutadiene	0.5167	0.6606	28	TML
73	TM	Naphthalene	5.831	5.698	2.3	TM
74	TM	1,2,3-Trichlorobenzene	1.189	1.243	4.5	TM
75						
76						
77						
78						
79						
80						

Average

4.7

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N29W.D  
 Acq On : 30 Oct 10 7:26  
 Sample : 101029A LCS-1WN(SS)  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 11:29 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.35	96	219200	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.52	117	136640	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.71	152	73928	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.95	111	229971	24.71037	ppb	0.00
Spiked Amount 24.523			Recovery	= 100.763%		
23) 1,2-DCA-D4(S)	12.74	65	166964	24.82149	ppb	0.00
Spiked Amount 22.857			Recovery	= 108.593%		
36) Toluene-D8(S)	16.00	98	699730	25.60558	ppb	0.00
Spiked Amount 23.425			Recovery	= 109.310%		
44) 4-Bromofluorobenzene(S)	20.60	95	253020	25.84377	ppb	0.00
Spiked Amount 23.962			Recovery	= 107.852%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.56	85	72633	9.41761	ppb	94
3) Chloromethane	5.10	50	32800	9.29143	ppb	100
4) Vinyl chloride	5.34	62	26120	8.81755	ppb	93
5) Bromomethane	6.30	94	48319	9.85468	ppb	85
6) Chloroethane	6.48	64	19674	10.19666	ppb	90
7) Trichlorofluoromethane	7.12	101	18152	11.20813	ppb	92
8) Acetone	7.86	43	4645	9.83247	ppb	88
9) 1,1-DCE	8.26	96	16064	9.41881	ppb	90
10) Methylene chloride	9.05	84	109250	10.62910	ppb	91
11) Carbon disulfide	9.17	76	34886	9.88309	ppb	# 92
12) Methyl t-butyl ether (MtBE	9.45	73	148218	10.17588	ppb	94
13) Trans-1,2-DCE	9.66	96	94554	10.02477	ppb	97
14) 1,1-DCA	10.34	63	193631	9.95762	ppb	98
15) MEK (2-Butanone)	10.96	43	56203	9.71707	ppb	96
16) Cis-1,2-DCE	11.35	96	109609	9.87609	ppb	89
17) 2,2-Dichloropropane	11.35	77	17240	8.05761	ppb	100
18) Chloroform	11.63	83	146562	10.00175	ppb	95
19) Bromochloromethane	11.87	128	36028	9.98291	ppb	95
21) 1,1,1-TCA	12.37	97	100637	10.27785	ppb	98
22) 1,1-Dichloropropene	12.63	75	130584	10.63905	ppb	96
24) Carbon Tetrachloride	12.82	117	78998	10.35923	ppb	95
25) 1,2-DCA	12.90	62	81684	10.40457	ppb	92
26) Benzene	13.03	78	407259	10.54840	ppb	100
27) TCE	14.04	95	98820	10.84693	ppb	98
28) 1,2-Dichloropropane	14.27	63	124191	10.25432	ppb	98
29) Bromodichloromethane	14.62	83	115342	10.58258	ppb	94
30) Dibromomethane	14.67	93	51302	10.48689	ppb	96
31) Cis-1,3-Dichloropropene	15.49	75	148298	10.07452	ppb	96
32) Toluene	16.13	91	354806	9.83837	ppb	99
33) Trans-1,3-Dichloropropene	16.28	75	103756	9.89070	ppb	98
34) 1,1,2-TCA	16.57	83	63056	10.44282	ppb	94
37) 1,2-EDB	17.83	107	63751	10.65918	ppb	# 97
38) Tetrachloroethene	17.28	129	59969	11.37310	ppb	96
39) 1-Chlorohexane	18.17	91	111312	10.23734	ppb	91
40) 1,1,1,2-Tetrachloroethane	18.64	131	73663	10.76655	ppb	98
41) m&p-Xylene	18.83	106	289472	22.48180	ppb	94
42) o-Xylene	19.59	106	141079	10.62859	ppb	94
43) Styrene	19.60	104	248092	10.62898	ppb	97
45) 2-Hexanone	16.57	43	20032	11.42763	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1029N29W.D N86DODW.M Tue Nov 16 12:06:37 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N29W.D  
 Acq On : 30 Oct 10 7:26  
 Sample : 101029A LCS-1WN(SS)  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 11:29 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.97	76	114074	10.75629	ppb	93
47) Dibromochloromethane	17.47	129	71605	10.53860	ppb	89
48) Chlorobenzene	18.59	112	225299	10.60711	ppb	94
49) Ethylbenzene	18.70	91	381898	10.69865	ppb	96
50) Bromoform	20.13	173	45589	10.52550	ppb	97
52) MIBK (methyl isobutyl keto	15.15	43	78593	10.02955	ppb	95
53) Isopropylbenzene	20.21	105	322479	10.13911	ppb	99
54) 1,1,2,2-Tetrachloroethane	20.37	83	72404	9.38754	ppb	94
55) 1,2,3-Trichloropropane	20.62	110	14905	10.18907	ppb	95
56) Bromobenzene	20.97	156	88025	10.16632	ppb	97
57) n-Propylbenzene	20.92	91	439761	10.03366	ppb	95
58) 4-Ethyltoluene	21.12	105	323938	10.11263	ppb	98
59) 2-Chlorotoluene	21.23	91	281151	10.15611	ppb	98
60) 1,3,5-Trimethylbenzene	21.19	105	247600	9.92936	ppb	97
61) 4-Chlorotoluene	21.30	91	249905	10.19479	ppb	99
62) Tert-Butylbenzene	21.85	119	237297	10.06142	ppb	91
63) 1,2,4-Trimethylbenzene	21.91	105	258745	9.99303	ppb	96
64) Sec-Butylbenzene	22.23	105	354599	10.06074	ppb	95
65) p-Isopropyltoluene	22.47	119	275391	10.80064	ppb	97
66) 1,3-DCB	22.60	146	158264	9.81101	ppb	94
67) 1,4-DCB	22.77	146	162344	10.22809	ppb	96
68) n-Butylbenzene	23.15	91	298169	10.38334	ppb	96
69) 1,2-DCB	23.39	146	143710	9.82732	ppb	97
70) 1,2-Dibromo-3-chloropropan	24.59	155	10531	10.58122	ppb	94
71) 1,2,4-Trichlorobenzene	26.02	180	109599	10.02664	ppb	99
72) Hexachlorobutadiene	26.26	225	19536	10.91449	ppb	98
73) Naphthalene	26.37	128	168490	9.77213	ppb	98
74) 1,2,3-Trichlorobenzene	26.75	180	36743	10.45361	ppb	95

(#) = qualifier out of range (m) = manual integration  
 1029N29W.D N86DODW.M Tue Nov 16 12:06:37 2010

## Quantitation Report

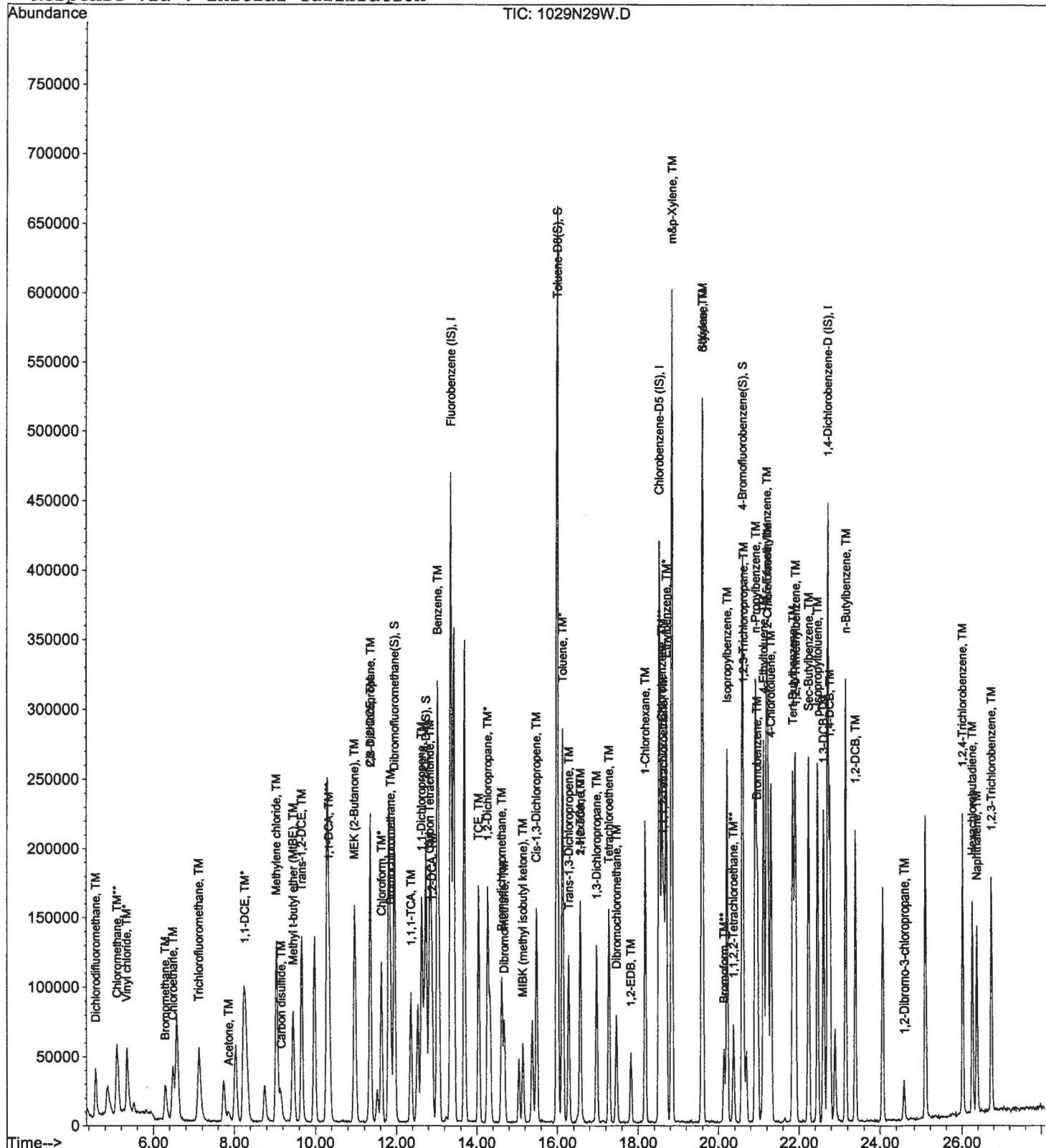
Data File : M:\NEO\DATA\N101029\1029N29W.D  
Acq On : 30 Oct 10 7:26  
Sample : 101029A LCS-1WN(SS)  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 2 11:29 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Mon Nov 01 11:51:32 2010  
Response via : Initial Calibration



**VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B**

**Form 6**  
**Initial Calibration**

**Lab Name:** APPL, Inc.

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

**Matrix:**

SDG No: 62931

Initial Cal. Date: 10/29/2010

**Instrument:** Neo

**Initials:**

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N06W.D Vial: 1  
 Acq On : 29 Oct 10 16:50 Operator: GM  
 Sample : Vol Std 10-29-10@20ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:24 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.37	TIC	430945	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.55	TIC	400356	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.74	TIC	380797	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.97	TIC	614607	34.08478	ppb	0.00
Spiked Amount	24.523			Recovery	= 138.992%	
4) 1,2-DCA-D4 (S)	12.77	TIC	629382	43.31719	ppb	0.00
Spiked Amount	22.857			Recovery	= 189.513%	
6) Toluene-D8 (S)	16.02	TIC	1817953	21.26076	ppb	0.00
Spiked Amount	23.425			Recovery	= 90.762%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1055658	34.15659	ppb	0.00
Spiked Amount	23.162			Recovery	= 147.467%	

Target Compounds				Qvalue
2) Gasoline	16.00	TIC	4135575m	8.84795 ppb 100

## Quantitation Report

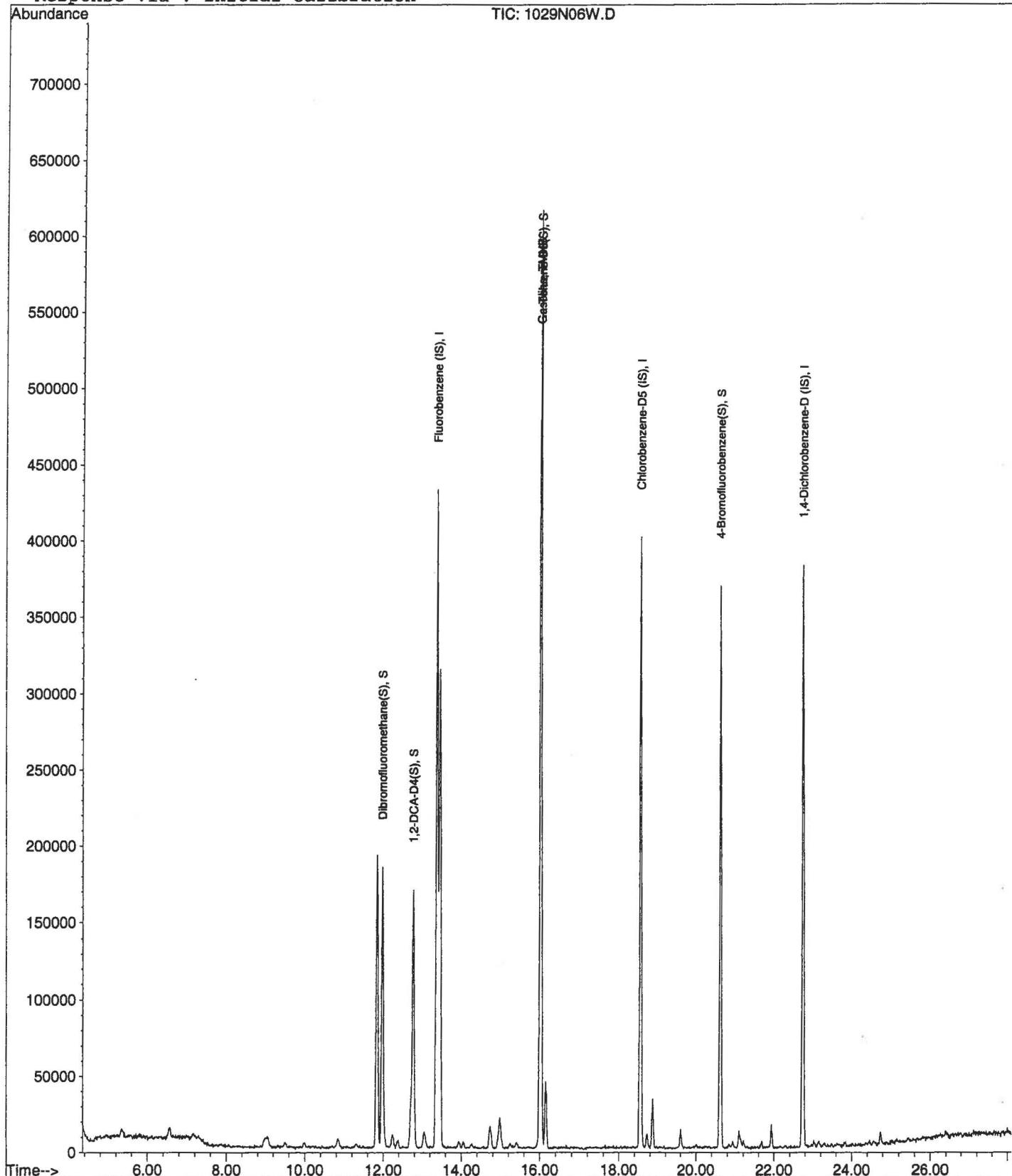
Data File : M:\NEO\DATA\N101029\1029N06W.D  
Acq On : 29 Oct 10 16:50  
Sample : Vol Std 10-29-10@20ug/L  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 4 12:24 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 04 12:41:37 2010  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N07W.D Vial: 1  
 Acq On : 29 Oct 10 17:26 Operator: GM  
 Sample : Vol Std 10-29-10@50ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:25 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.38	TIC	425836	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.55	TIC	395306	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.74	TIC	386772	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.98	TIC	666723	26.92161	ppb	0.00
Spiked Amount	24.523			Recovery	= 109.783%	
4) 1,2-DCA-D4(S)	12.77	TIC	929319	34.15460	ppb	0.00
Spiked Amount	22.857			Recovery	= 149.429%	
6) Toluene-D8(S)	16.02	TIC	1888137	24.64015	ppb	0.00
Spiked Amount	23.425			Recovery	= 105.186%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1066639	23.70190	ppb	0.00
Spiked Amount	23.162			Recovery	= 102.329%	

Target Compounds				Qvalue
2) Gasoline	16.00	TIC	5839065m	28.57702 ppb 100

## Quantitation Report

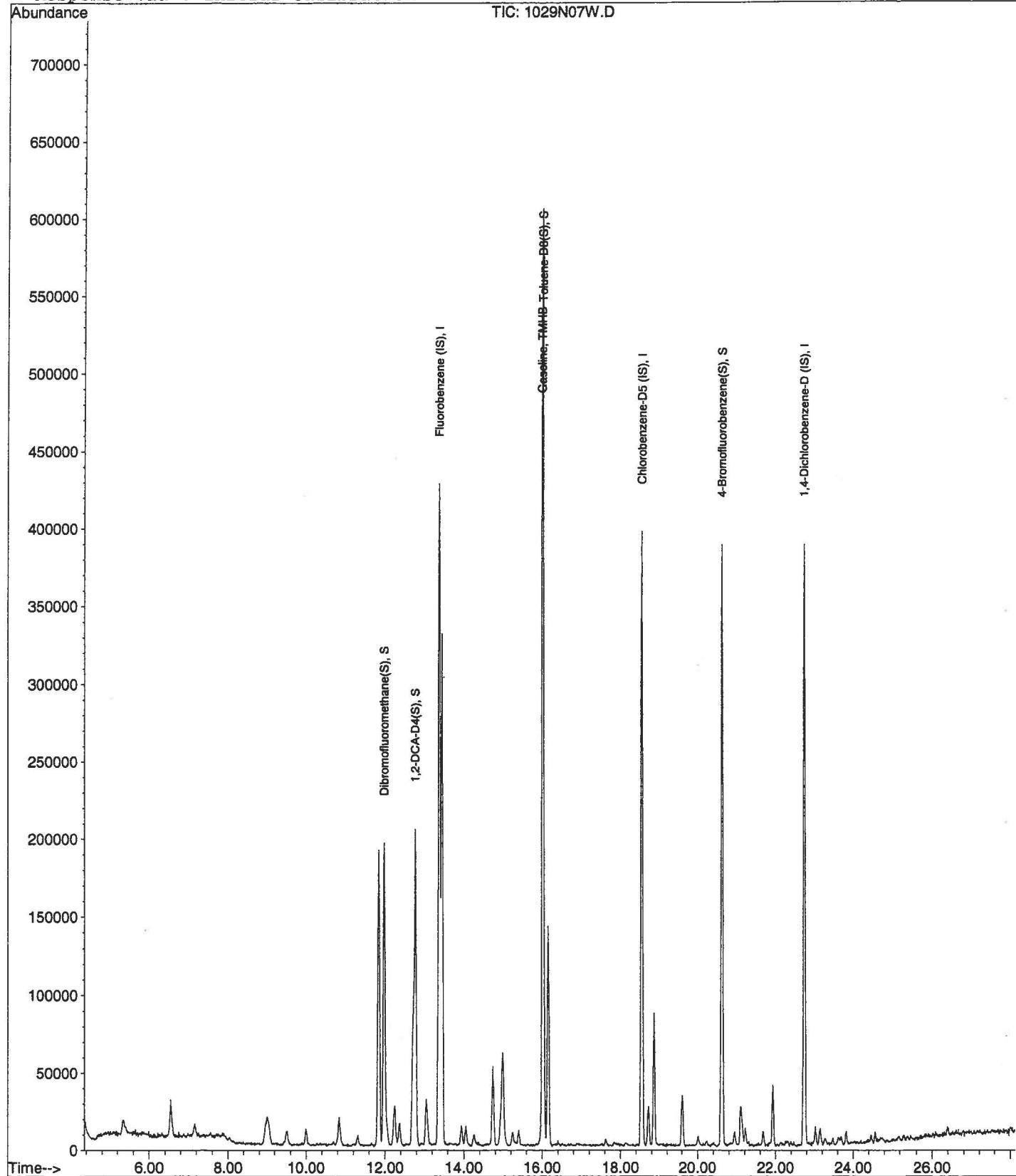
Data File : M:\NEO\DATA\N101029\1029N07W.D  
 Acq On : 29 Oct 10 17:26  
 Sample : Vol Std 10-29-10@50ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:25 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N08W.D Vial: 1  
 Acq On : 29 Oct 10 18:05 Operator: GM  
 Sample : Vol Std 10-29-10@100ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:25 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.39	TIC	463440	25.00000	ppb	0.02
5) Chlorobenzene-D5 (IS)	18.55	TIC	394712	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.73	TIC	400707	25.00000	ppb	0.00
<b>System Monitoring Compounds</b>						
3) Dibromofluoromethane(S)	11.99	TIC	664997	23.52274	ppb	0.02
Spiked Amount 24.523			Recovery	=	95.922%	
4) 1,2-DCA-D4(S)	12.78	TIC	1111000	30.08384	ppb	0.02
Spiked Amount 22.857			Recovery	=	131.618%	
6) Toluene-D8(S)	16.02	TIC	1901126	24.21883	ppb	0.00
Spiked Amount 23.425			Recovery	=	103.389%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1132972	24.92330	ppb	0.00
Spiked Amount 23.162			Recovery	=	107.601%	
<b>Target Compounds</b>						
2) Gasoline	16.00	TIC	7807604m	44.68324	ppb	100

## Quantitation Report

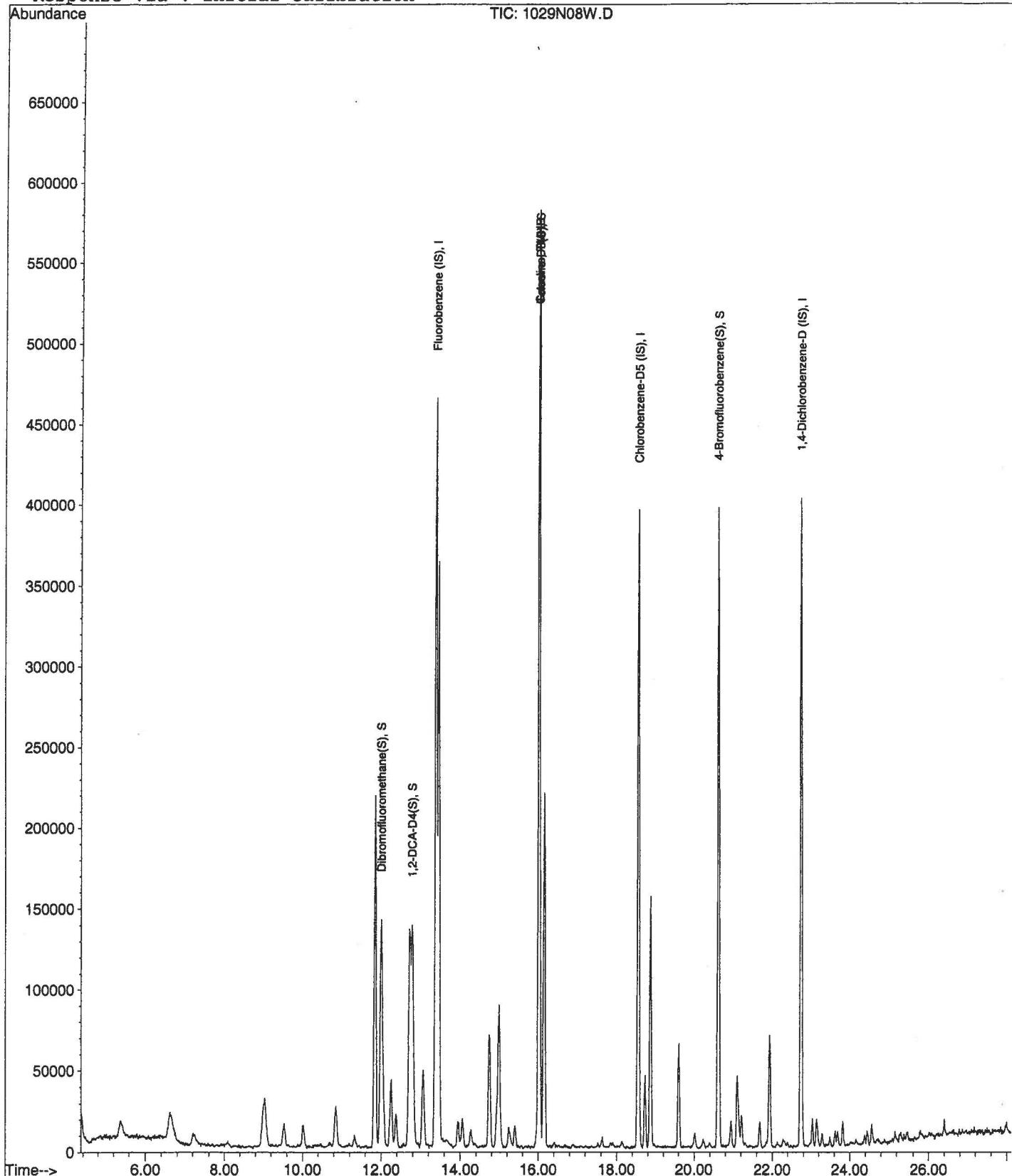
Data File : M:\NEO\DATA\N101029\1029N08W.D  
Acq On : 29 Oct 10 18:05  
Sample : Vol Std 10-29-10@100ug/L  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 4 12:25 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 04 12:41:37 2010  
Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N09W.D Vial: 1  
 Acq On : 29 Oct 10 18:40 Operator: GM  
 Sample : Vol Std 10-29-10@300ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:25 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.38	TIC	424045	25.00000	ppb	-0.01
5) Chlorobenzene-D5 (IS)	18.54	TIC	408547	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.74	TIC	405852	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.97	TIC	827910	32.44727	ppb	-0.02
Spiked Amount	24.523			Recovery	= 132.313%	
4) 1,2-DCA-D4(S)	12.72	TIC	2739602	73.34524	ppb	-0.06
Spiked Amount	22.857			Recovery	= 320.886%	
6) Toluene-D8(S)	16.02	TIC	1932608	23.52047	ppb	0.00
Spiked Amount	23.425			Recovery	= 100.405%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1055767	21.88375	ppb	0.00
Spiked Amount	23.162			Recovery	= 94.480%	

Target Compounds Qvalue  
 2) Gasoline 16.00 TIC 17145199m 131.48252 ppb 100

Quantitation Report

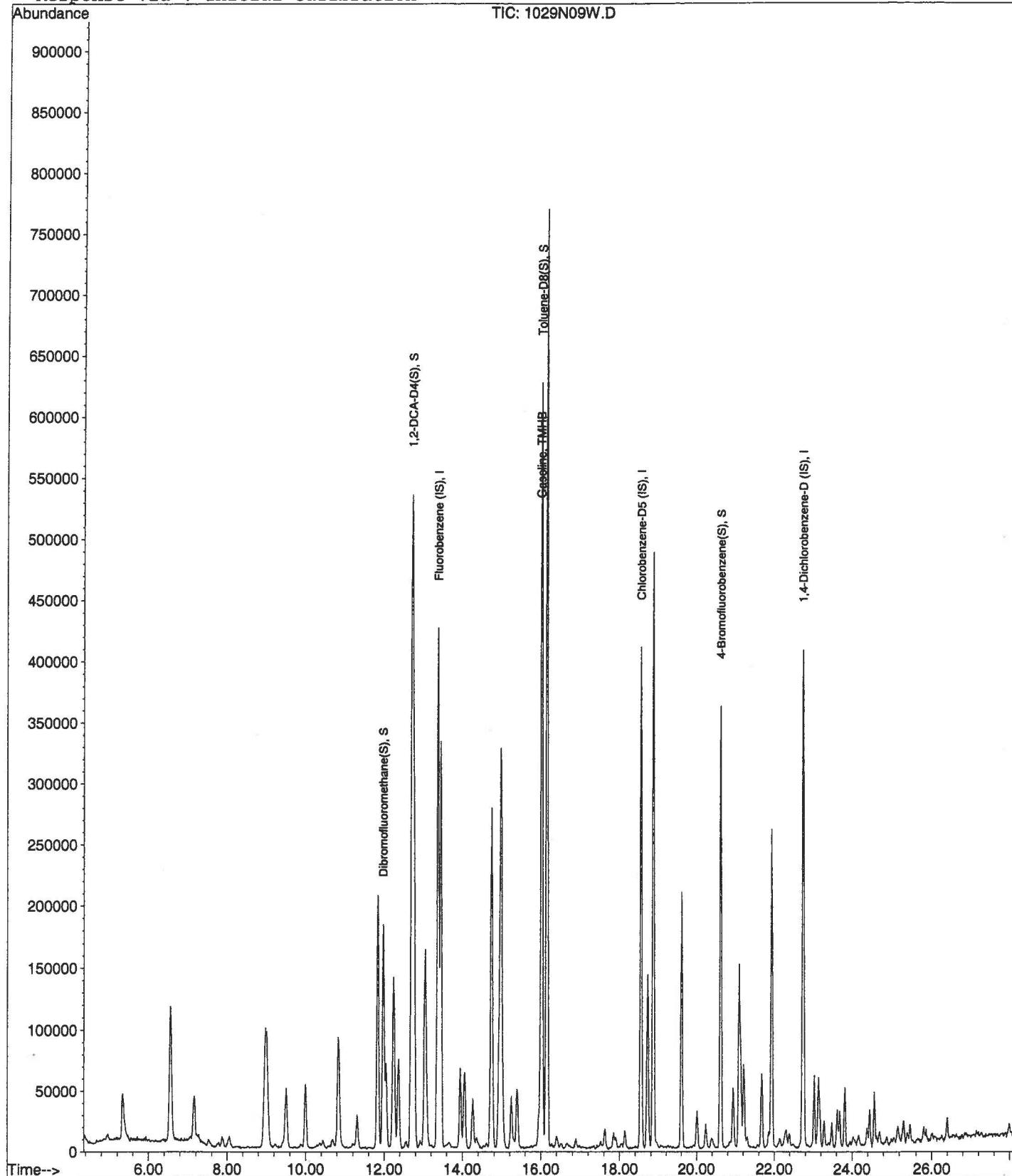
Data File : M:\NEO\DATA\N101029\1029N09W.D  
 Acq On : 29 Oct 10 18:40  
 Sample : Vol Std 10-29-10@300ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:25 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N10W.D Vial: 1  
 Acq On : 29 Oct 10 19:16 Operator: GM  
 Sample : Vol Std 10-29-10@600ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:25 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.37	TIC	422175	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.55	TIC	440330	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.73	TIC	476283	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.97	TIC	1097950	39.99062	ppb	0.00
Spiked Amount	24.523			Recovery	= 163.075%	
4) 1,2-DCA-D4 (S)	12.72	TIC	4881188	84.56225	ppb	0.00
Spiked Amount	22.857			Recovery	= 369.961%	
6) Toluene-D8 (S)	16.02	TIC	2069834	23.34851	ppb	0.00
Spiked Amount	23.425			Recovery	= 99.675%	
7) 4-Bromofluorobenzene(S)	20.61	TIC	1116225	21.76721	ppb	0.00
Spiked Amount	23.162			Recovery	= 93.975%	

## Target Compounds

Target Compounds	Qvalue
2) Gasoline	100

16.00 TIC 31622411m 283.37353 ppb 100

## Quantitation Report

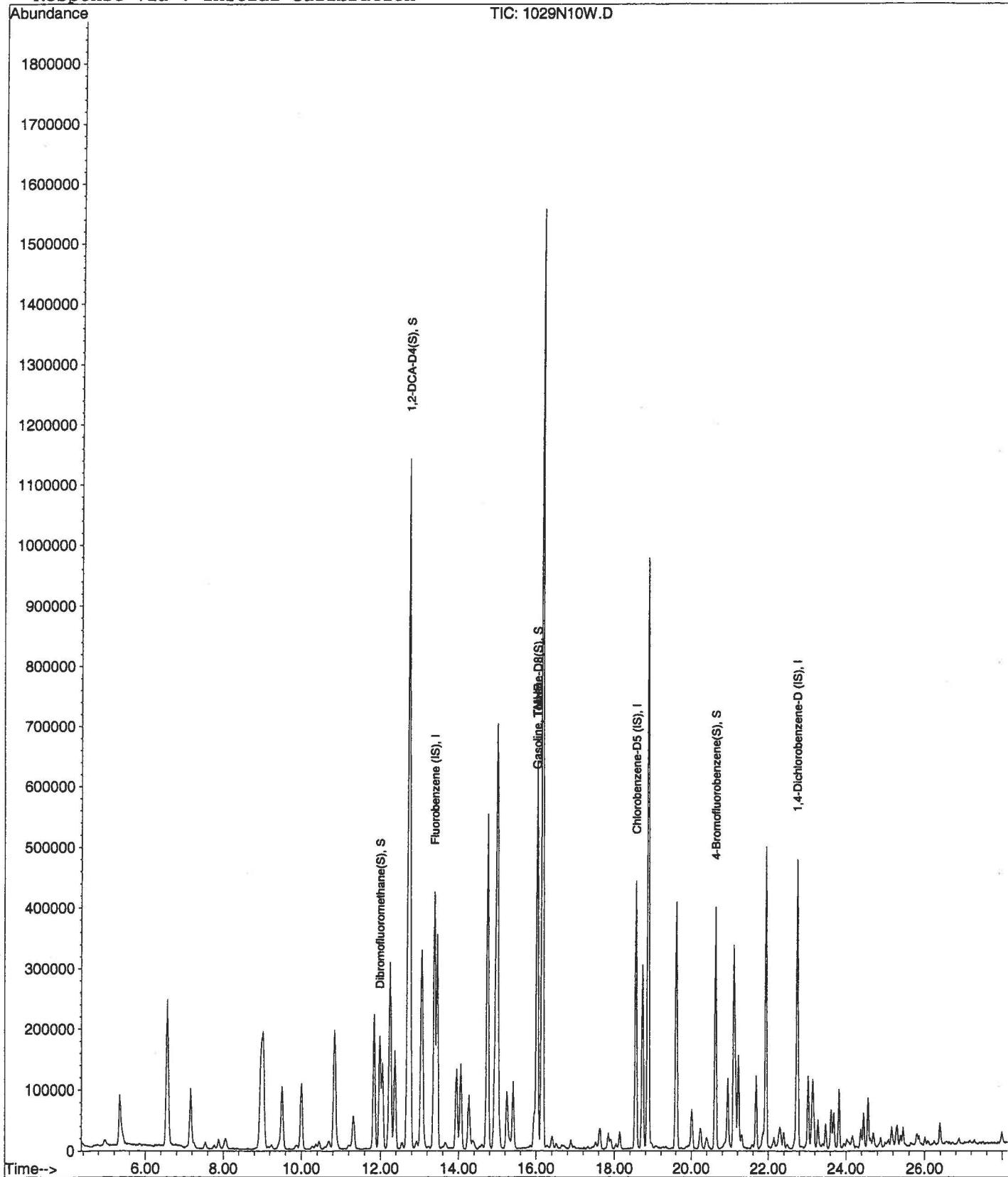
Data File : M:\NEO\DATA\N101029\1029N10W.D  
 Acq On : 29 Oct 10 19:16  
 Sample : Vol Std 10-29-10@600ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:25 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N11W.D Vial: 1  
 Acq On : 29 Oct 10 19:51 Operator: GM  
 Sample : Vol Std 10-29-10@800ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:26 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.37	TIC	436758	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.54	TIC	451839	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.73	TIC	539882	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.98	TIC	685989	21.44613	ppb	0.00
Spiked Amount	24.523		Recovery	=	87.453%	
4) 1,2-DCA-D4(S)	12.71	TIC	6813338	74.09062	ppb	0.00
Spiked Amount	22.857		Recovery	=	324.150%	
6) Toluene-D8(S)	16.02	TIC	1980625	21.78734	ppb	0.00
Spiked Amount	23.425		Recovery	=	93.007%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1142299	21.97291	ppb	0.00
Spiked Amount	23.162		Recovery	=	94.865%	

Target Compounds				Qvalue
2) Gasoline	16.00	TIC	43497528m	421.23131 ppb 100

## Quantitation Report

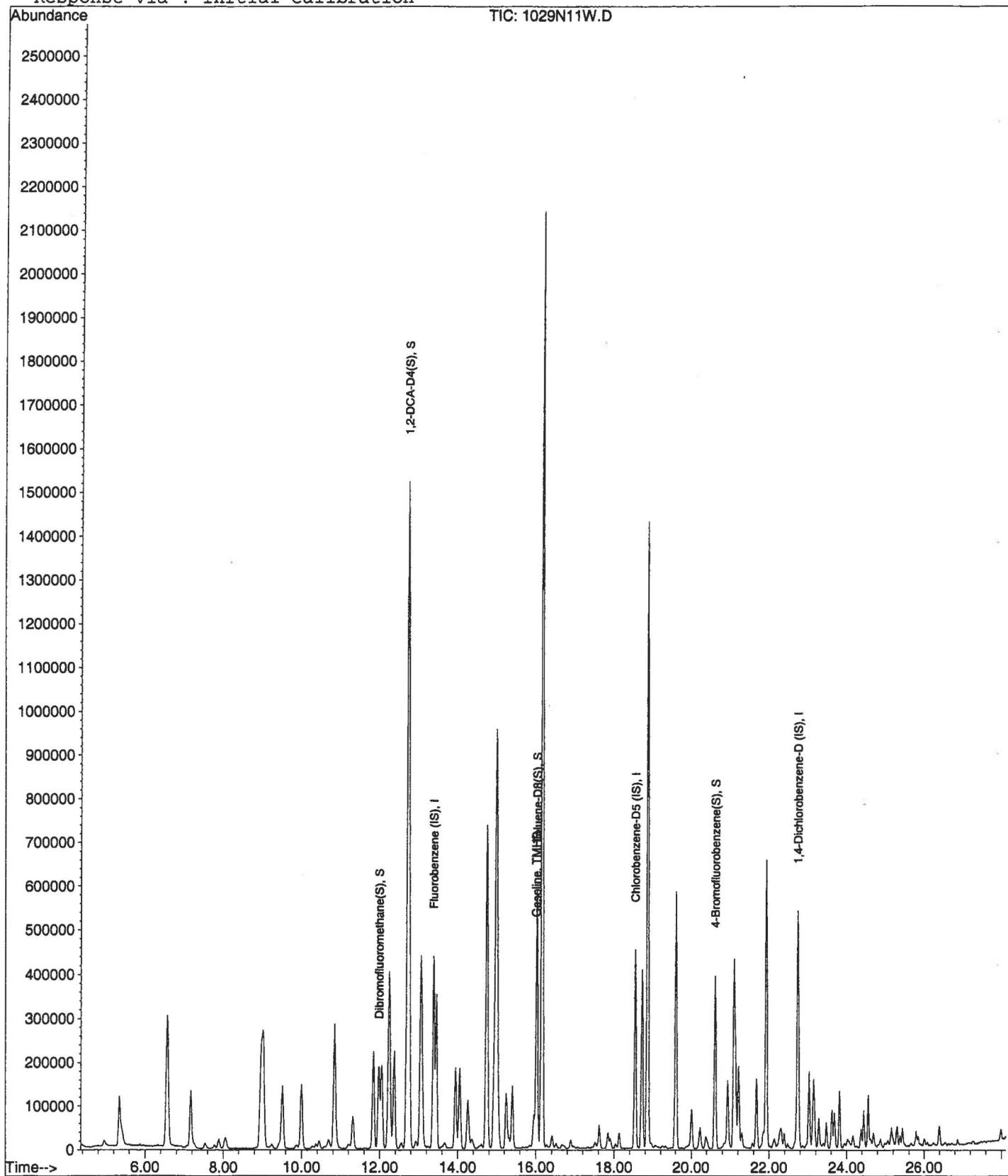
Data File : M:\NEO\DATA\N101029\1029N11W.D  
 Acq On : 29 Oct 10 19:51  
 Sample : Vol Std 10-29-10@800ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:26 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N12W.D Vial: 1  
 Acq On : 29 Oct 10 20:26 Operator: GM  
 Sample : Vol Std 10-29-10@1000ug/L Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:26 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:24:34 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.38	TIC	456877	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.55	TIC	460091	25.00000	ppb	0.00
8) 1,4-Dichlorobenzene-D (IS)	22.74	TIC	563851	25.00000	ppb	0.00

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.97	TIC	710064	21.67449	ppb	0.00
Spiked Amount	24.523		Recovery	=	88.382%	
4) 1,2-DCA-D4(S)	12.71	TIC	8494414	64.28713	ppb	0.00
Spiked Amount	22.857		Recovery	=	281.257%	
6) Toluene-D8(S)	16.02	TIC	2263735	24.74330	ppb	0.00
Spiked Amount	23.425		Recovery	=	105.626%	
7) 4-Bromofluorobenzene(S)	20.62	TIC	1183315	22.54655	ppb	0.00
Spiked Amount	23.162		Recovery	=	97.343%	

Target Compounds				Qvalue
2) Gasoline	16.00	TIC	55628754m	559.10706 ppb 100

## Quantitation Report

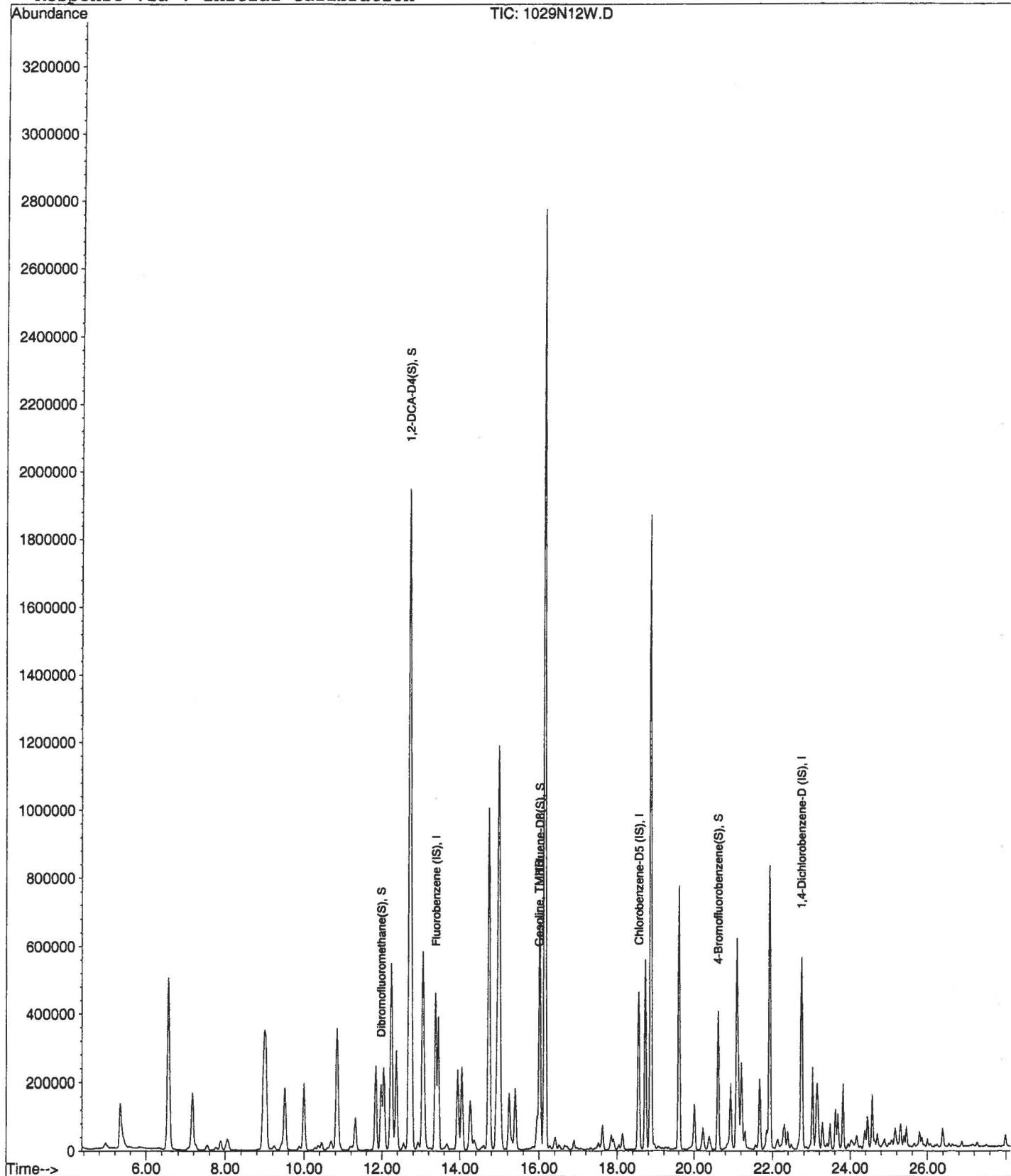
Data File : M:\NEO\DATA\N101029\1029N12W.D  
 Acq On : 29 Oct 10 20:26  
 Sample : Vol Std 10-29-10@1000ug/L  
 Misc : Water 10mL w/IS&S:09-24-10A

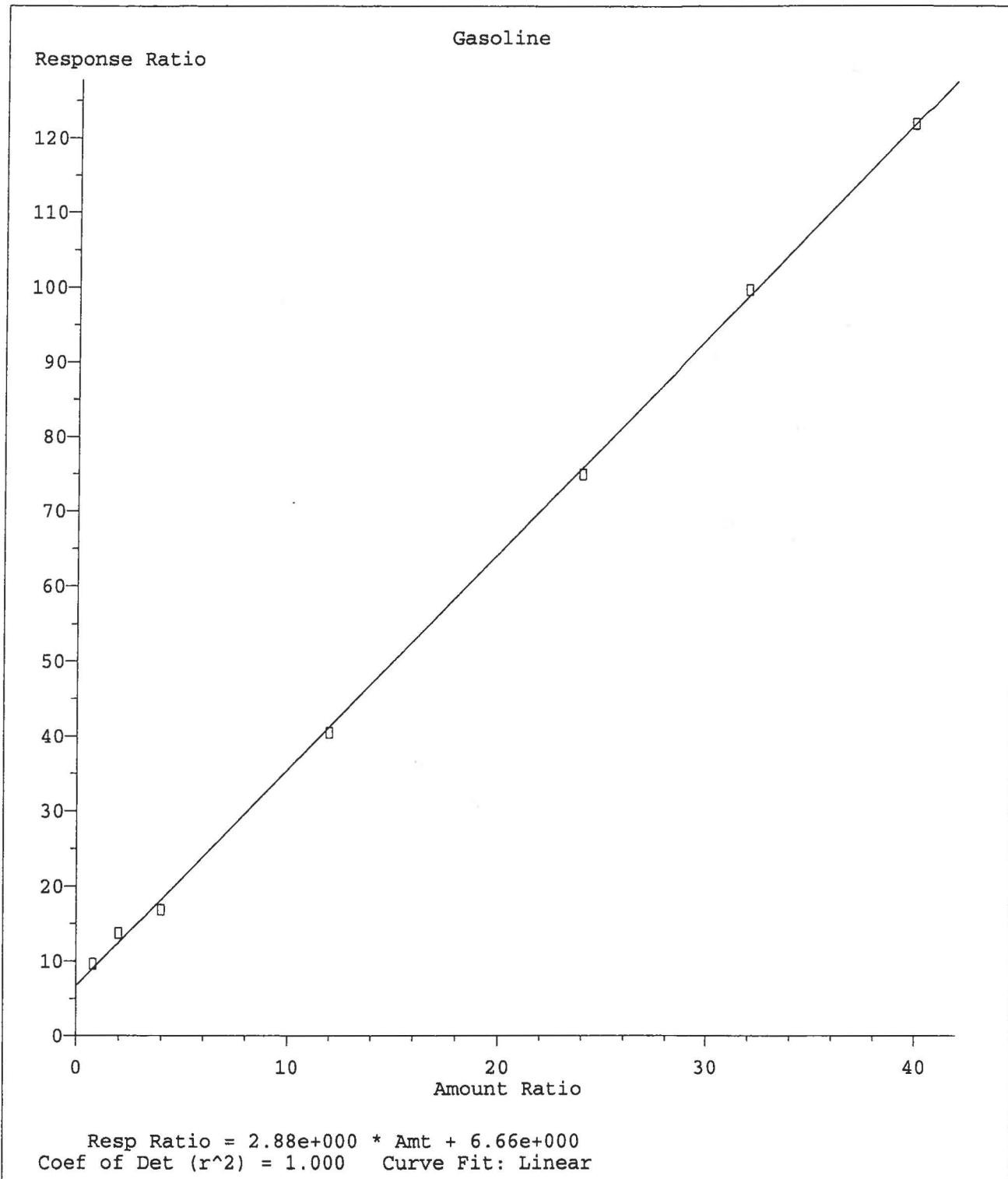
Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:26 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration





Method Name: M:\NEO\DATA\N101029\NGAS.M  
Calibration Table Last Updated: Thu Nov 04 12:41:37 2010

VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7  
Second Source Calibration

Lab Name: APPL, Inc.

SDG No: 6293/

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

Date Analyzed: 10/30/10

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

Instrument: Neo

Initial Cal. Date: 10/29/10

Data File: 1029N27W.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TMHB	Gasoline	5.101	3.594	30	TMHBL 5.6
3						
4						
5						
6						
7						
8						
9						
10						
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Average

30.0

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N27W.D Vial: 1  
 Acq On : 30 Oct 10 6:16 Operator: GM  
 Sample : GAS 300ug/L(SS) Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 12:31 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.36	TIC	483643	25.00000	ppb	-0.02
5) Chlorobenzene-D5 (IS)	18.53	TIC	440972	25.00000	ppb	-0.01
8) 1,4-Dichlorobenzene-D (IS)	22.72	TIC	473059	25.00000	ppb	-0.02

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.96	TIC	859457	25.20095	ppb	-0.01
Spiked Amount	24.523		Recovery	=	102.765%	
4) 1,2-DCA-D4(S)	12.74	TIC	1306587	7.41990	ppb	0.02
Spiked Amount	22.857		Recovery	=	32.463%	
6) Toluene-D8(S)	16.00	TIC	2011161	22.75275	ppb	-0.01
Spiked Amount	23.425		Recovery	=	97.131%	
7) 4-Bromofluorobenzene(S)	20.60	TIC	1136809	22.68567	ppb	-0.02
Spiked Amount	23.162		Recovery	=	97.943%	

## Target Compounds

2) Gasoline	16.13	TIC	20857468m	316.92153	ppb	100	Qvalue
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## Quantitation Report

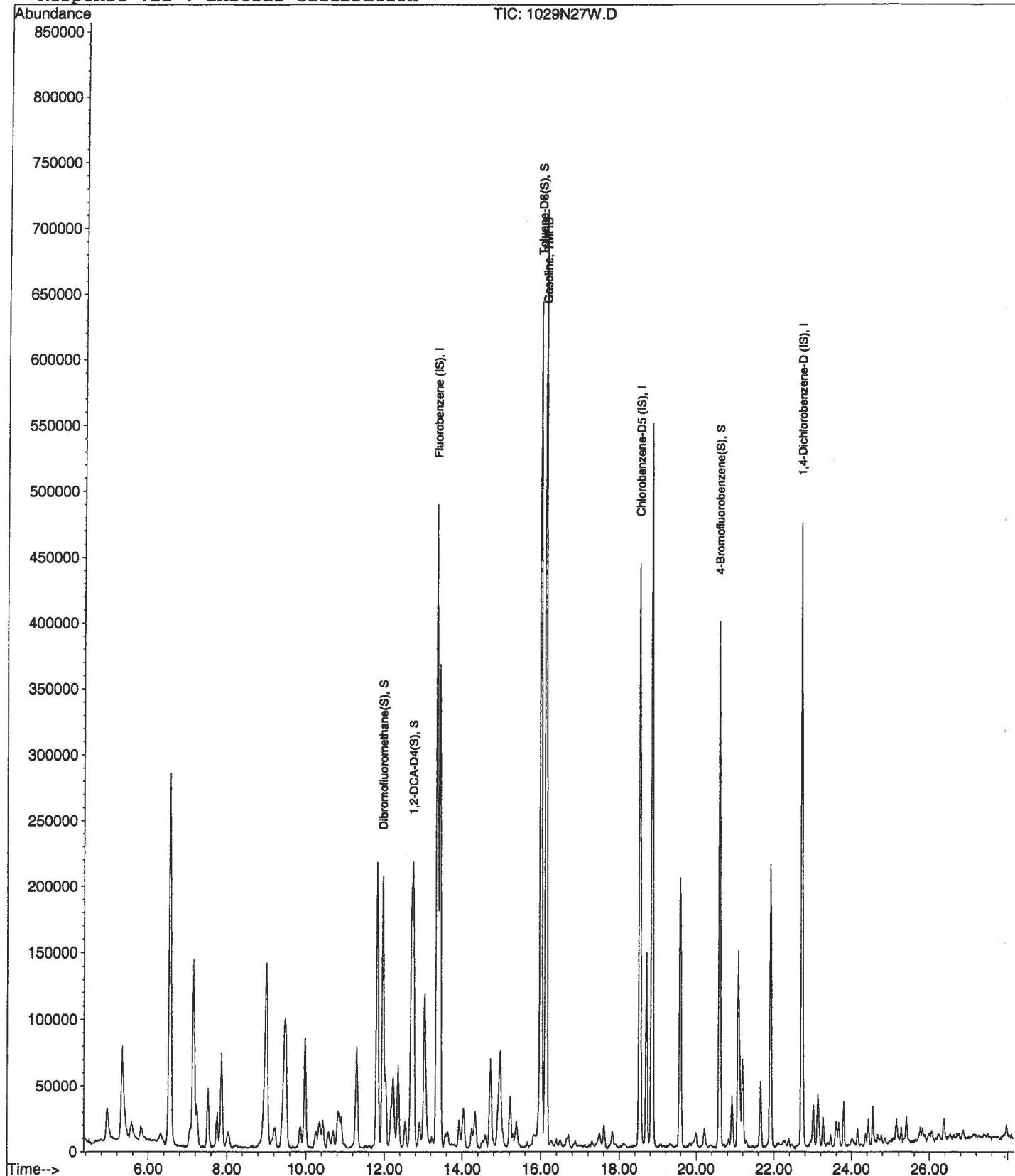
Data File : M:\NEO\DATA\N101029\1029N27W.D  
 Acq On : 30 Oct 10 6:16  
 Sample : GAS 300ug/L(SS)  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 12:31 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7  
Continuing Calibration

Lab Name: APPL, Inc.

SDG No: 62931

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

Date Analyzed: 10/30/10

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

Instrument: Neo

Initial Cal. Date: 10/29/10

Data File: 1029N32W.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TMHBL	Gasoline	5.101	3.179	38	TMHBL 8.8
3						
4						
5						
6						
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Average

38.0

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N32W.D Vial: 1  
 Acq On : 30 Oct 10 9:11 Operator: GM  
 Sample : GAS 300ug/L LCS-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:32 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.35	TIC	442280	25.00000	ppb	-0.03
5) Chlorobenzene-D5 (IS)	18.52	TIC	435190	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	485036	25.00000	ppb	-0.03

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.95	TIC	854930	27.41265	ppb	-0.03
Spiked Amount	24.523		Recovery	=	111.785%	
4) 1,2-DCA-D4(S)	12.69	TIC	2420141	15.02894	ppb	-0.03
Spiked Amount	22.857		Recovery	=	65.752%	
6) Toluene-D8(S)	15.99	TIC	2032114	23.29524	ppb	-0.03
Spiked Amount	23.425		Recovery	=	99.445%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1170135	23.66095	ppb	-0.03
Spiked Amount	23.162		Recovery	=	102.152%	

## Target Compounds

2) Gasoline	16.00	TIC	16874311m	273.69973	ppb	Qvalue 100
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## Quantitation Report

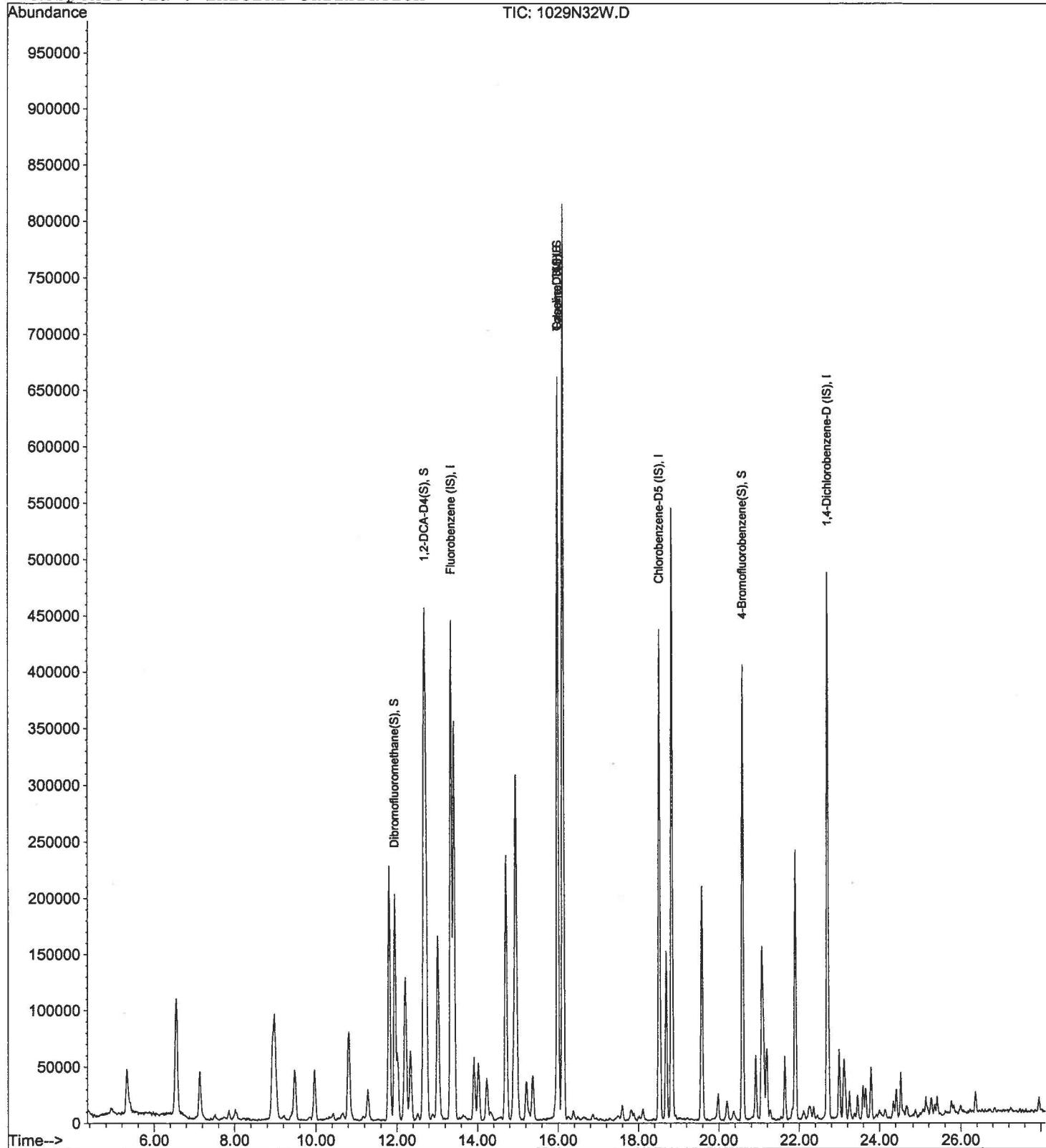
Data File : M:\NEO\DATA\N101029\1029N32W.D  
 Acq On : 30 Oct 10 9:11  
 Sample : GAS 300ug/L LCS-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:32 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



VOLATILE ORGANIC ANALYSIS BY  
EPA METHOD 8260B

Form 7  
Continuing Calibration

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

SDG No: 62931  
Date Analyzed: 1 Nov 10 11:41  
Instrument: Neo  
Initial Cal. Date: 10/29/2010  
Data File: 1101N04W.D

		Compound	MEAN	CCRF	%D	%Drift
1	I	Fluorobenzene (IS)	ISTD			I
2	TMHB	Gasoline	5.101	3.298	35	TMHBL 4.6
3						
4						
5						
6						
7						
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Average

35.0

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1101N04W.D Vial: 1  
 Acq On : 1 Nov 10 11:41 Operator: GM  
 Sample : GAS 300ug/L LCS-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:36 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.31	TIC	485207	25.00000	ppb	-0.07
5) Chlorobenzene-D5 (IS)	18.47	TIC	462495	25.00000	ppb	-0.07
8) 1,4-Dichlorobenzene-D (IS)	22.67	TIC	521911	25.00000	ppb	-0.07

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev (Min)
3) Dibromofluoromethane(S)	11.90	TIC	948733	27.72903	ppb	-0.07
Spiked Amount 24.523			Recovery	= 113.073%		
4) 1,2-DCA-D4(S)	12.64	TIC	2835747	16.05186	ppb	-0.08
Spiked Amount 22.857			Recovery	= 70.228%		
6) Toluene-D8(S)	15.95	TIC	2152609	23.21968	ppb	-0.07
Spiked Amount 23.425			Recovery	= 99.124%		
7) 4-Bromofluorobenzene(S)	20.55	TIC	1249218	23.76875	ppb	-0.07
Spiked Amount 23.162			Recovery	= 102.619%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Gasoline	16.00	TIC	19204476m	286.10249	ppb	100

## Quantitation Report

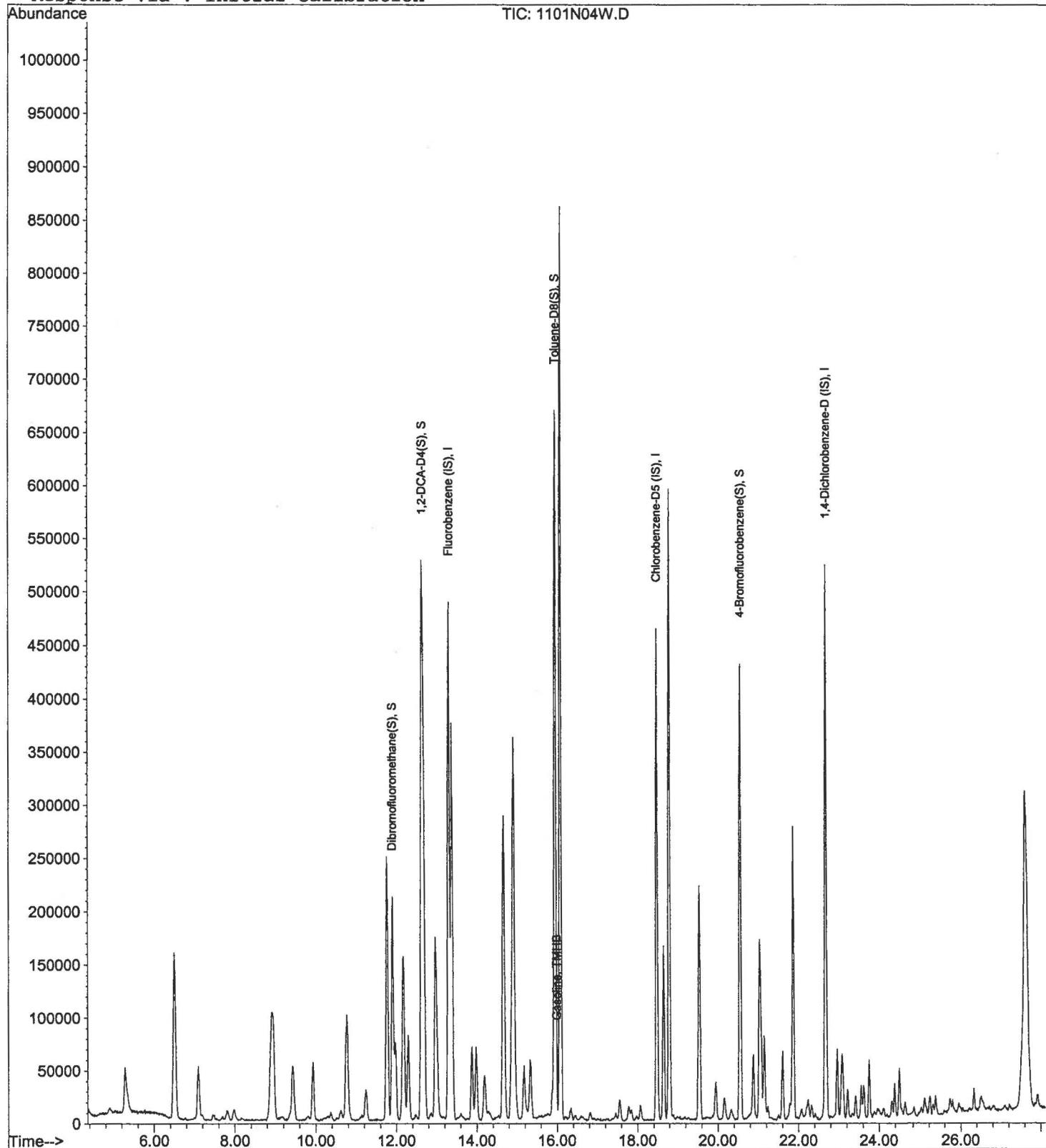
Data File : M:\NEO\DATA\N101029\1101N04W.D  
 Acq On : 1 Nov 10 11:41  
 Sample : GAS 300ug/L LCS-1WN  
 Misc : Water 10ML w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:36 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



**EPA METHOD 8260B  
Volatile Organic Compounds  
Raw Data**

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: 101029W-25117 - 148687  
 Batch ID: #86RHB-101029AN

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	10/30/10	10/30/10
BLANK	1,1,1-Trichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	1,1,2,2-Tetrachloroethane	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
BLANK	1,1,2-Trichloroethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
BLANK	1,1-Dichloroethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	1,1-Dichloroethene	0.60 U	1.0	0.60	0.30	ug/L	10/30/10	10/30/10
BLANK	1,2,3-Trichloropropane	0.78 U	2.0	0.78	0.39	ug/L	10/30/10	10/30/10
BLANK	1,2,4-Trichlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	1,2-Dibromo-3-chloropropane	1.52 U	2.0	1.52	0.76	ug/L	10/30/10	10/30/10
BLANK	1,2-Dibromoethane	0.40 U	1.0	0.40	0.20	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichlorobenzene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichloroethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	1,2-Dichloropropane	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	1,3-Dichlorobenzene	0.22 U	1.0	0.22	0.11	ug/L	10/30/10	10/30/10
BLANK	1,3-Dichloropropene, total	0.36 U	1.0	0.36	0.18	ug/L	10/30/10	10/30/10
BLANK	1,4-Dichlorobenzene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	2-Butanone	1.20 U	10.0	1.20	0.60	ug/L	10/30/10	10/30/10
BLANK	4-Methyl-2-pentanone	3.80 U	10.0	3.80	1.90	ug/L	10/30/10	10/30/10
BLANK	Acetone	1.90 U	10.0	1.90	0.95	ug/L	10/30/10	10/30/10
BLANK	Benzene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Bromodichloromethane	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	Bromoform	0.28 U	1.0	0.28	0.14	ug/L	10/30/10	10/30/10
BLANK	Bromomethane	0.48 U	2.0	0.48	0.24	ug/L	10/30/10	10/30/10
BLANK	Carbon tetrachloride	0.20 U	1.0	0.20	0.10	ug/L	10/30/10	10/30/10
BLANK	Chlorobenzene	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	Chlorodibromomethane	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Chloroethane	0.42 U	1.0	0.42	0.21	ug/L	10/30/10	10/30/10
BLANK	Chloroform	0.14 U	1.0	0.14	0.07	ug/L	10/30/10	10/30/10
BLANK	Chloromethane	0.62 U	1.0	0.62	0.31	ug/L	10/30/10	10/30/10
BLANK	cis-1,2-Dichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Ethylbenzene	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
BLANK	Gasoline	12.12 U	20.0	12.12	6.06	ug/L	10/30/10	10/30/10
BLANK	Hexachlorobutadiene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Methyl tert-butyl ether	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10

Quant Method: N86DODW.M  
 Run #: 1029N34  
 Instrument: Neo  
 Sequence: N101029  
 Initials: GM

GC SC-Blank-REG MDLs  
 Printed: 11/08/10 1:33:18 PM

**Method Blank**  
**EPA 8260B VOCs + Gas Water**

Blank Name/QCG: **101029W-25117 - 148687**  
 Batch ID: #86RHB-101029AN

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	10/30/10	10/30/10
BLANK	Styrene	0.50 U	1.0	0.50	0.25	ug/L	10/30/10	10/30/10
BLANK	Tetrachloroethene	0.30 U	1.0	0.30	0.15	ug/L	10/30/10	10/30/10
BLANK	Toluene	0.34 U	1.0	0.34	0.17	ug/L	10/30/10	10/30/10
BLANK	trans-1,2-Dichloroethene	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Trichloroethene	0.32 U	1.0	0.32	0.16	ug/L	10/30/10	10/30/10
BLANK	Vinyl chloride	0.46 U	1.0	0.46	0.23	ug/L	10/30/10	10/30/10
BLANK	Xylenes (Total)	0.38 U	1.0	0.38	0.19	ug/L	10/30/10	10/30/10
BLANK	Surrogate: 1,2-Dichloroethane-d4 (	104	70-120			%	10/30/10	10/30/10
BLANK	Surrogate: 4-Bromofluorobenzene	111	75-120			%	10/30/10	10/30/10
BLANK	Surrogate: Dibromofluoromethane	94.1	85-115			%	10/30/10	10/30/10
BLANK	Surrogate: Toluene-D8 (S)	112	85-120			%	10/30/10	10/30/10

Quant Method: N86DODW.M  
 Run #: 1029N34  
 Instrument: Neo  
 Sequence: N101029  
 Initials: GM

GC SC-Blank-REG MDLs  
 Printed: 11/08/10 1:33:18 PM

## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N34W.D Vial: 1  
 Acq On : 30 Oct 10 10:20 Operator: GM  
 Sample : 101029A BLK-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 8 11:12 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	225408	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.51	117	133888	25.00000	ppb	-0.02
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	77992	25.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.94	111	220855	23.07728	ppb	0.00
Spiked Amount 24.523			Recovery =	94.103%		
23) 1,2-DCA-D4(S)	12.74	65	163635	23.65661	ppb	0.00
Spiked Amount 22.857			Recovery =	103.500%		
36) Toluene-D8(S)	15.99	98	701169	26.18563	ppb	-0.02
Spiked Amount 23.425			Recovery =	111.786%		
44) 4-Bromofluorobenzene(S)	20.59	95	254445	26.52352	ppb	0.00
Spiked Amount 23.962			Recovery =	110.690%		

Target Compounds	Qvalue
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## Quantitation Report

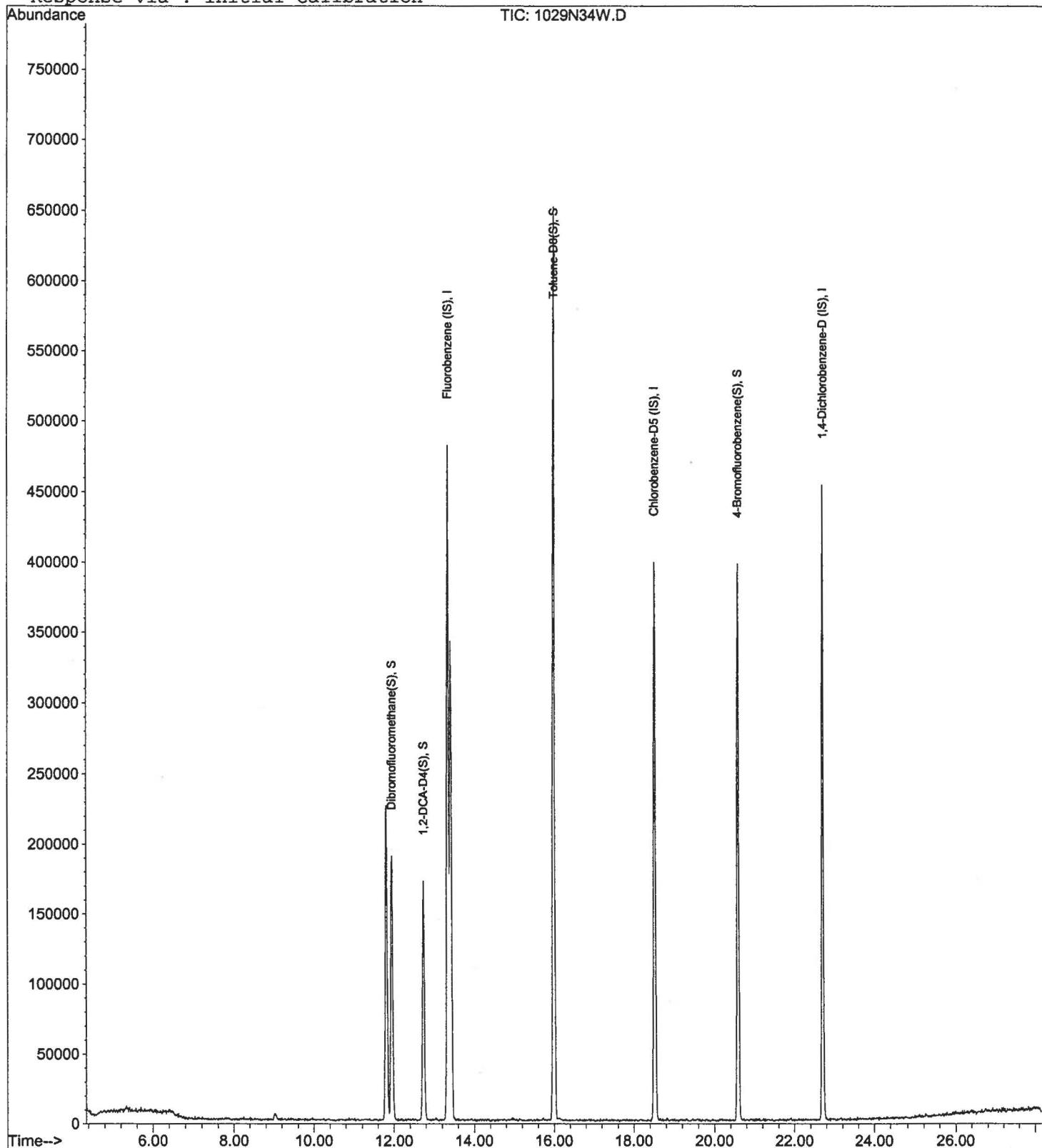
Data File : M:\NEO\DATA\N101029\1029N34W.D  
 Acq On : 30 Oct 10 10:20  
 Sample : 101029A BLK-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 8 11:12 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N34W.D Vial: 1  
 Acq On : 30 Oct 10 10:20 Operator: GM  
 Sample : 101029A BLK-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 8 11:13 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.41	TIC	340667	25.00000	ppb	0.03
5) Chlorobenzene-D5 (IS)	18.51	TIC	397819	25.00000	ppb	-0.04
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	451612	25.00000	ppb	-0.04

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.94	TIC	665380	27.69857	ppb	-0.03
Spiked Amount	24.523		Recovery	=	112.951%	
4) 1,2-DCA-D4 (S)	12.74	TIC	557007	4.49072	ppb	0.02
Spiked Amount	22.857		Recovery	=	19.648%	
6) Toluene-D8 (S)	15.99	TIC	1967742	24.67634	ppb	-0.03
Spiked Amount	23.425		Recovery	=	105.340%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1163082	25.72764	ppb	-0.04
Spiked Amount	23.162		Recovery	=	111.076%	

Target Compounds	Qvalue
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Quantitation Report

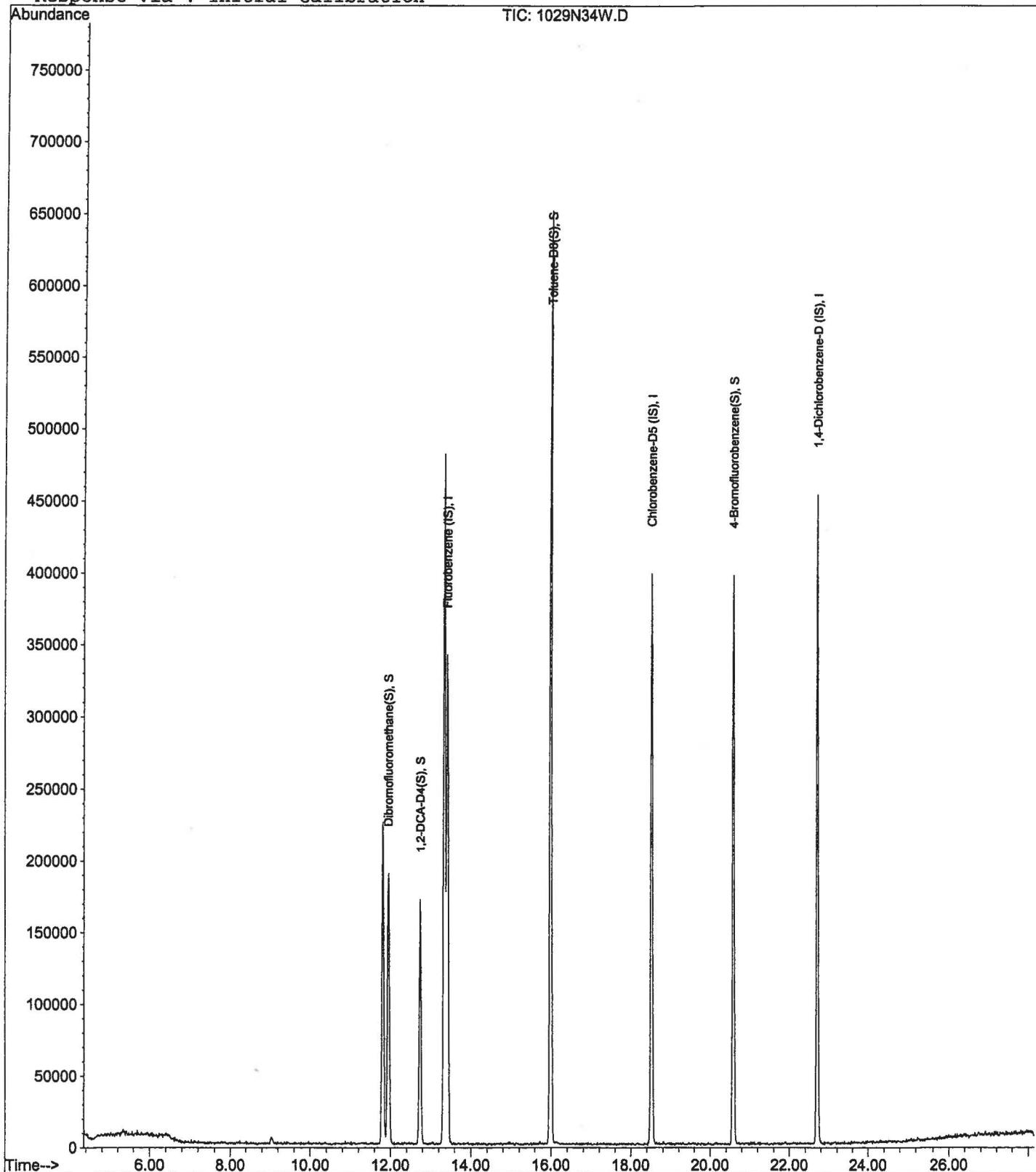
Data File : M:\NEO\DATA\N101029\1029N34W.D  
 Acq On : 30 Oct 10 10:20  
 Sample : 101029A BLK-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 8 11:13 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 LCS - 148687

Batch ID: #86RHB-101029AN

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L		
1,1,1,2-Tetrachloroethane	10.00	10.8	108	80-130
1,1,1-Trichloroethane	10.00	10.3	103	65-130
1,1,2,2-Tetrachloroethane	10.00	9.39	93.9	65-130
1,1,2-Trichloroethane	10.00	10.4	104	75-125
1,1-Dichloroethane	10.00	9.96	99.6	70-135
1,1-Dichloroethene	10.00	9.42	94.2	70-130
1,2,3-Trichloropropane	10.00	10.2	102	75-125
1,2,4-Trichlorobenzene	10.00	10.0	100	65-135
1,2-Dibromo-3-chloropropane	10.00	10.6	106	50-130
1,2-Dibromoethane	10.00	10.7	107	70-130
1,2-Dichlorobenzene	10.00	9.83	98.3	70-120
1,2-Dichloroethane	10.00	10.4	104	70-130
1,2-Dichloropropane	10.00	10.3	103	75-125
1,3-Dichlorobenzene	10.00	9.81	98.1	75-125
1,3-Dichloropropene, total	20.0	19.1	95.5	70-130
1,4-Dichlorobenzene	10.00	10.2	102	75-125
2-Butanone	10.00	9.72	97.2	30-150
4-Methyl-2-pentanone	10.00	10.0	100	60-135
Acetone	10.00	9.83	98.3	40-140
Benzene	10.00	10.5	105	80-120
Bromodichloromethane	10.00	10.6	106	75-120
Bromoform	10.00	10.5	105	70-130
Bromomethane	10.00	9.85	98.5	30-145
Carbon tetrachloride	10.00	10.4	104	65-140
Chlorobenzene	10.00	10.6	106	80-120
Chlorodibromomethane	10.00	10.5	105	60-135

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

Primary	SPK
Quant Method :	N86DODW.M
Extraction Date :	10/30/10
Analysis Date :	10/30/10
Instrument :	Neo
Run :	1029N29
Initials :	GM

Printed: 11/08/10 1:33:20 PM

APPL Standard LCS

**Laboratory Control Spike Recovery**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 LCS - 148687

Batch ID: #86RHB-101029AN

APPL Inc.

908 North Temperance Avenue  
 Clovis, CA 93611

Compound Name	Spike Level	SPK Result	SPK % Recovery	Recovery Limits
	ug/L	ug/L	Recovery	Limits
Chloroethane	10.00	10.2	102	60-135
Chloroform	10.00	10.0	100	65-135
Chloromethane	10.00	9.29	92.9	40-125
cis-1,2-Dichloroethene	10.00	9.88	98.8	70-125
Ethylbenzene	10.00	10.7	107	75-125
Gasoline	300	286	95.3	75-125
Hexachlorobutadiene	10.00	10.9	109	50-140
Methyl tert-butyl ether	10.00	10.2	102	65-125
Methylene chloride	10.00	10.6	106	55-140
Styrene	10.00	10.6	106	65-135
Tetrachloroethene	10.00	11.4	114	45-150
Toluene	10.00	9.84	98.4	75-120
trans-1,2-Dichloroethene	10.00	10.0	100	60-140
Trichloroethene	10.00	10.8	108	70-125
Vinyl chloride	10.00	8.82	88.2	50-145
Xylenes (Total)	30.0	33.1	110	80-120
Surrogate: 1,2-Dichloroethane-d4 (S)	22.9	24.8	109	70-120
Surrogate: 4-Bromofluorobenzene (S)	24.0	25.8	108	75-120
Surrogate: Dibromofluoromethane (S)	24.5	24.7	101	85-115
Surrogate: Toluene-D8 (S)	23.4	25.6	109	85-120

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

Primary	SPK
Quant Method :	N86DODW.M
Extraction Date :	10/30/10
Analysis Date :	10/30/10
Instrument :	Neo
Run :	1029N29
Initials :	GM

Printed: 11/08/10 1:33:20 PM

APPL Standard LCS

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N29W.D Vial: 1  
 Acq On : 30 Oct 10 7:26 Operator: GM  
 Sample : 101029A LCS-1WN(SS) Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 2 12:29 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene (IS)	13.35	96	219200	25.00000	ppb	0.00
35) Chlorobenzene-D5 (IS)	18.52	117	136640	25.00000	ppb	0.00
51) 1,4-Dichlorobenzene-D (IS)	22.71	152	73928	25.00000	ppb	0.00

## System Monitoring Compounds

20) Dibromofluoromethane(S)	11.95	111	229971	24.71037	ppb	0.00
Spiked Amount	24.523		Recovery	= 100.763%		
23) 1,2-DCA-D4 (S)	12.74	65	166964	24.82149	ppb	0.00
Spiked Amount	22.857		Recovery	= 108.593%		
36) Toluene-D8 (S)	16.00	98	699730	25.60558	ppb	0.00
Spiked Amount	23.425		Recovery	= 109.310%		
44) 4-Bromofluorobenzene(S)	20.60	95	253020	25.84377	ppb	0.00
Spiked Amount	23.962		Recovery	= 107.852%		

## Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	4.56	85	72633	9.41761	ppb	94
3) Chloromethane	5.10	50	32800	9.29143	ppb	100
4) Vinyl chloride	5.34	62	26120	8.81755	ppb	93
5) Bromomethane	6.30	94	48319	9.85468	ppb	85
6) Chloroethane	6.48	64	19674	10.19666	ppb	90
7) Trichlorofluoromethane	7.12	101	18152	11.20813	ppb	92
8) Acetone	7.86	43	4645	9.83247	ppb	88
9) 1,1-DCE	8.26	96	16064	9.41881	ppb	90
10) Methylene chloride	9.05	84	109250	10.62910	ppb	91
11) Carbon disulfide	9.17	76	34886	9.88309	ppb	# 92
12) Methyl t-butyl ether (MtBE)	9.45	73	148218	10.17588	ppb	94
13) Trans-1,2-DCE	9.66	96	94554	10.02477	ppb	97
14) 1,1-DCA	10.34	63	193631	9.95762	ppb	98
15) MEK (2-Butanone)	10.96	43	56203	9.71707	ppb	96
16) Cis-1,2-DCE	11.35	96	109609	9.87609	ppb	89
17) 2,2-Dichloropropane	11.35	77	17240	8.05761	ppb	100
18) Chloroform	11.63	83	146562	10.00175	ppb	95
19) Bromochloromethane	11.87	128	36028	9.98291	ppb	95
21) 1,1,1-TCA	12.37	97	100637	10.27785	ppb	98
22) 1,1-Dichloropropene	12.63	75	130584	10.63905	ppb	96
24) Carbon Tetrachloride	12.82	117	78998	10.35923	ppb	95
25) 1,2-DCA	12.90	62	81684	10.40457	ppb	92
26) Benzene	13.03	78	407259	10.54840	ppb	100
27) TCE	14.04	95	98820	10.84693	ppb	98
28) 1,2-Dichloropropane	14.27	63	124191	10.25432	ppb	98
29) Bromodichloromethane	14.62	83	115342	10.58258	ppb	94
30) Dibromomethane	14.67	93	51302	10.48689	ppb	# 96
31) Cis-1,3-Dichloropropene	15.49	75	148298	10.07452	ppb	96
32) Toluene	16.13	91	354806	9.83837	ppb	99
33) Trans-1,3-Dichloropropene	16.28	75	103756	9.89070	ppb	98
34) 1,1,2-TCA	16.57	83	63056	10.44282	ppb	94
37) 1,2-EDB	17.83	107	63751	10.65918	ppb	# 97
38) Tetrachloroethene	17.28	129	59969	11.37310	ppb	96
39) 1-Chlorohexane	18.17	91	111312	10.23734	ppb	91
40) 1,1,1,2-Tetrachloroethane	18.64	131	73663	10.76655	ppb	98
41) m,p-Xylene	18.83	106	289472	22.48180	ppb	94
42) o-Xylene	19.59	106	141079	10.62859	ppb	94
43) Styrene	19.60	104	248092	10.62898	ppb	97
45) 2-Hexanone	16.57	43	20032	11.42763	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1029N29W.D N86DODW.M Wed Nov 03 11:02:49 2010

19.96522

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N29W.D Vial: 1  
 Acq On : 30 Oct 10 7:26 Operator: GM  
 Sample : 101029A LCS-1WN(SS) Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 2 12:29 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.97	76	114074	10.75629	ppb	93
47) Dibromochloromethane	17.47	129	71605	10.53860	ppb	89
48) Chlorobenzene	18.59	112	225299	10.60711	ppb	94
49) Ethylbenzene	18.70	91	381898	10.69865	ppb	96
50) Bromoform	20.13	173	45589	10.52550	ppb	97
52) MIBK (methyl isobutyl keto	15.15	43	78593	10.02955	ppb	95
53) Isopropylbenzene	20.21	105	322479	10.13911	ppb	99
54) 1,1,2,2-Tetrachloroethane	20.37	83	72404	9.38754	ppb	94
55) 1,2,3-Trichloropropane	20.62	110	14905	10.18907	ppb	95
56) Bromobenzene	20.97	156	88025	10.16632	ppb	97
57) n-Propylbenzene	20.92	91	439761	10.03366	ppb	95
58) 4-Ethyltoluene	21.12	105	323938	10.11263	ppb	98
59) 2-Chlorotoluene	21.23	91	281151	10.15611	ppb	98
60) 1,3,5-Trimethylbenzene	21.19	105	247600	9.92936	ppb	97
61) 4-Chlorotoluene	21.30	91	249905	10.19479	ppb	99
62) Tert-Butylbenzene	21.85	119	237297	10.06142	ppb	91
63) 1,2,4-Trimethylbenzene	21.91	105	258745	9.99303	ppb	96
64) Sec-Butylbenzene	22.23	105	354599	10.06074	ppb	95
65) p-Isopropyltoluene	22.47	119	275391	10.80064	ppb	97
66) 1,3-DCB	22.60	146	158264	9.81101	ppb	94
67) 1,4-DCB	22.77	146	162344	10.22809	ppb	96
68) n-Butylbenzene	23.15	91	298169	10.38334	ppb	96
69) 1,2-DCB	23.39	146	143710	9.82732	ppb	97
70) 1,2-Dibromo-3-chloropropan	24.59	155	10531	10.58122	ppb	94
71) 1,2,4-Trichlorobenzene	26.02	180	109599	10.02664	ppb	99
72) Hexachlorobutadiene	26.26	225	19536	10.91449	ppb	98
73) Naphthalene	26.37	128	168490	9.77213	ppb	98
74) 1,2,3-Trichlorobenzene	26.75	180	36743	10.45361	ppb	95

(#) = qualifier out of range (m) = manual integration  
 1029N29W.D N86DODW.M Wed Nov 03 11:02:50 2010

Quantitation Report

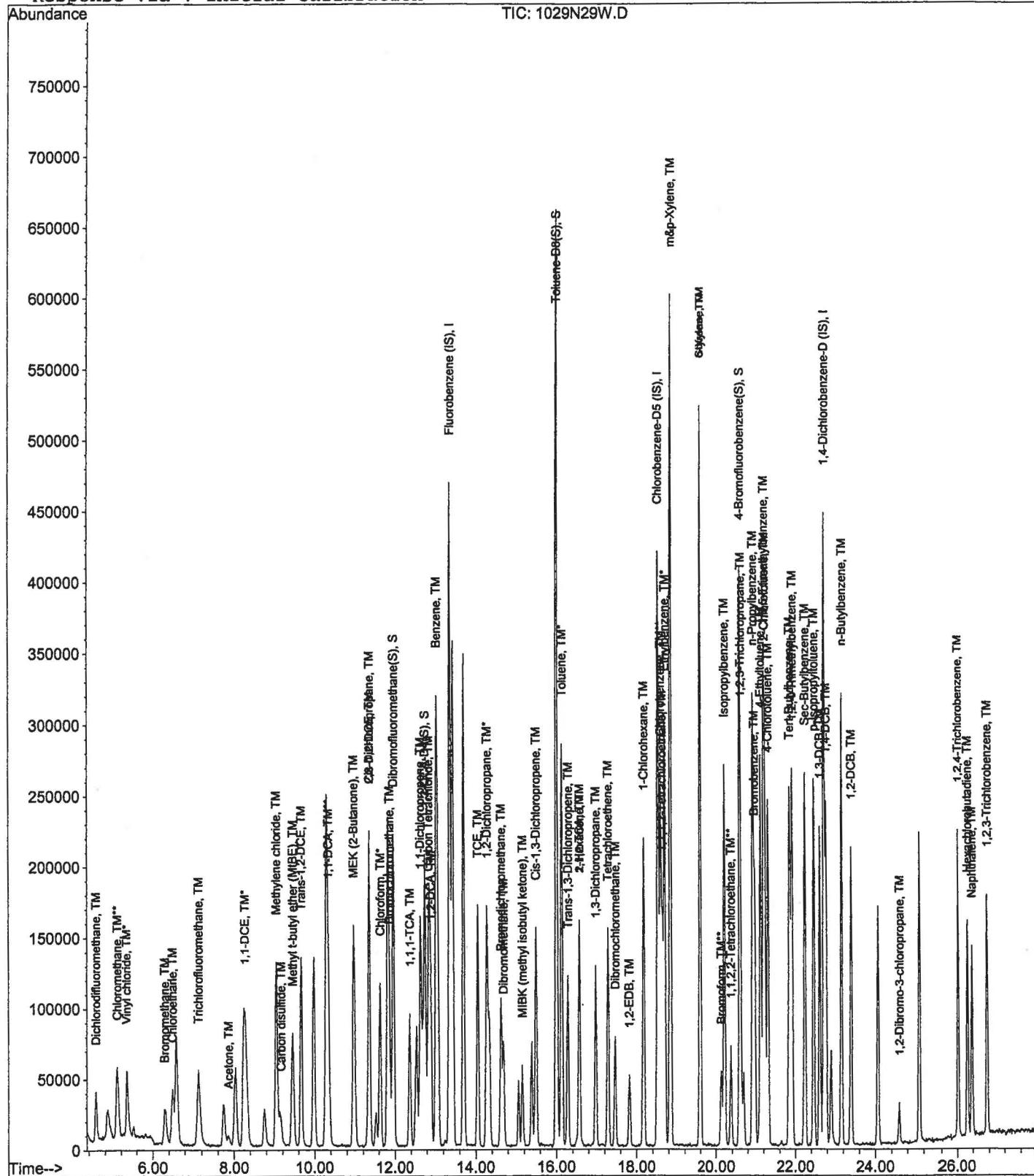
Data File : M:\NEO\DATA\N101029\1029N29W.D  
 Acq On : 30 Oct 10 7:26  
 Sample : 101029A LCS-1WN(SS)  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 12:29 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1029N32W.D Vial: 1  
 Acq On : 30 Oct 10 9:11 Operator: GM  
 Sample : GAS 300ug/L LCS-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:32 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.35	TIC	442280	25.00000	ppb	-0.03
5) Chlorobenzene-D5 (IS)	18.52	TIC	435190	25.00000	ppb	-0.03
8) 1,4-Dichlorobenzene-D (IS)	22.70	TIC	485036	25.00000	ppb	-0.03

## System Monitoring Compounds

3) Dibromofluoromethane(S)	11.95	TIC	854930	27.41265	ppb	-0.03
Spiked Amount	24.523		Recovery	=	111.785%	
4) 1,2-DCA-D4 (S)	12.69	TIC	2420141	15.02894	ppb	-0.03
Spiked Amount	22.857		Recovery	=	65.752%	
6) Toluene-D8 (S)	15.99	TIC	2032114	23.29524	ppb	-0.03
Spiked Amount	23.425		Recovery	=	99.445%	
7) 4-Bromofluorobenzene(S)	20.59	TIC	1170135	23.66095	ppb	-0.03
Spiked Amount	23.162		Recovery	=	102.152%	

## Target Compounds

				Qvalue
2) Gasoline	16.00	TIC	16874311m	273.69973 ppb 100

## Quantitation Report

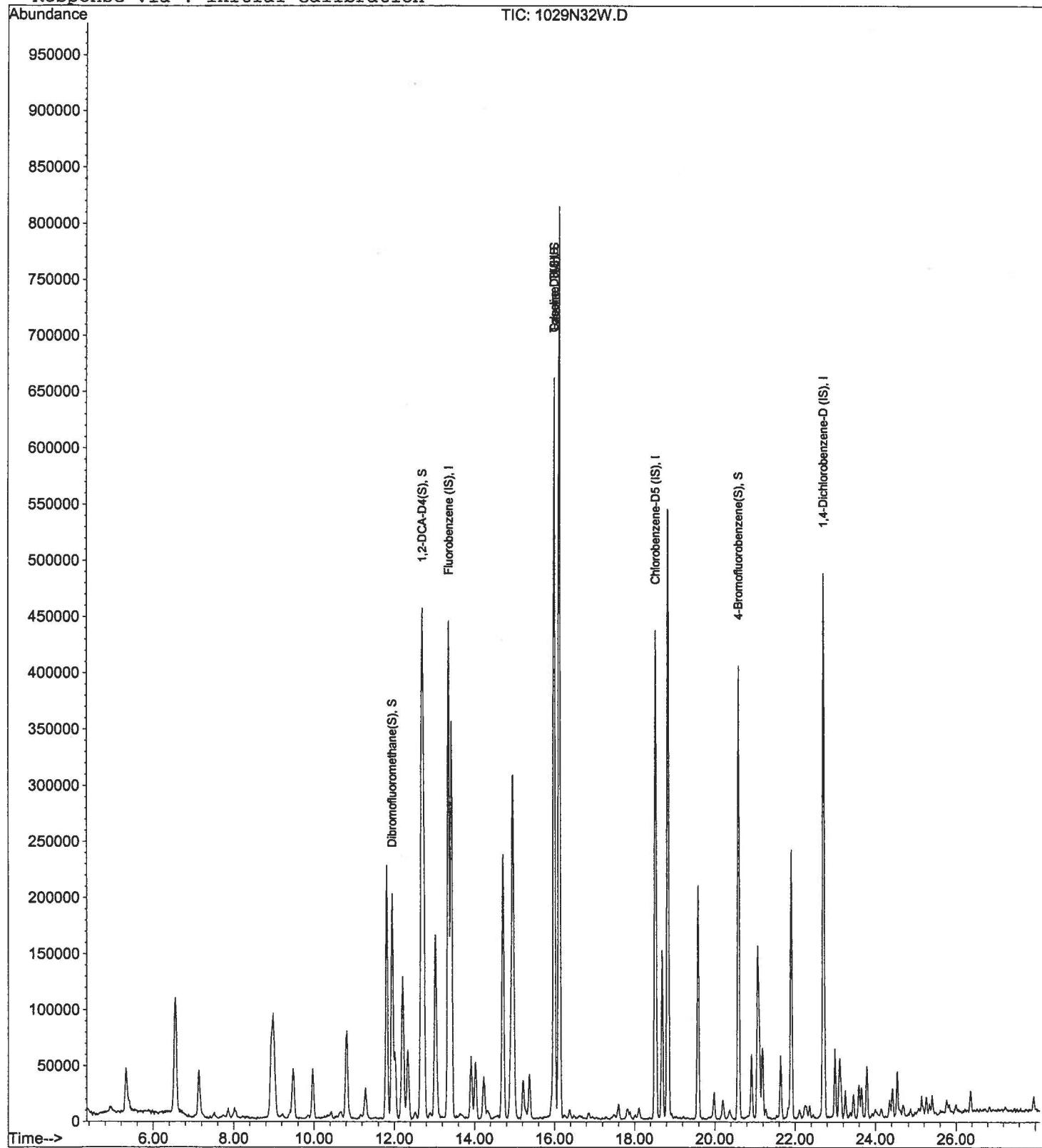
Data File : M:\NEO\DATA\N101029\1029N32W.D  
 Acq On : 30 Oct 10 9:11  
 Sample : GAS 300ug/L LCS-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:32 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



**Matrix Spike Recoveries**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 MS - 148687

APPL Inc.

Batch ID: #86RHB-101029AN

908 North Temperance Avenue

Sample ID: AY25117

Clovis, CA 93611

Client ID: ES007

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	9.65	10.1	96.5	101	80-130	4.6	30
1,1,1-Trichloroethane	10.00	ND	9.87	9.51	98.7	95.1	65-130	3.7	30
1,1,2,2-Tetrachloroethane	10.00	ND	10.1	10.9	101	109	65-130	7.6	30
1,1,2-Trichloroethane	10.00	ND	9.86	9.19	98.6	91.9	75-125	7.0	30
1,1-Dichloroethane	10.00	ND	9.89	9.49	98.9	94.9	70-135	4.1	30
1,1-Dichloroethene	10.00	ND	9.17	9.50	91.7	95.0	70-130	3.5	30
1,2,3-Trichloropropane	10.00	ND	9.56	11.1	95.6	111	75-125	14.9	30
1,2,4-Trichlorobenzene	10.00	ND	7.71	8.09	77.1	80.9	65-135	4.8	30
1,2-Dibromo-3-chloropropane	10.00	ND	9.72	10.3	97.2	103	50-130	5.8	30
1,2-Dibromoethane	10.00	ND	9.87	10.6	98.7	106	70-130	7.1	30
1,2-Dichlorobenzene	10.00	ND	8.84	9.38	88.4	93.8	70-120	5.9	30
1,2-Dichloroethane	10.00	ND	11.2	9.92	112	99.2	70-130	12.1	30
1,2-Dichloropropane	10.00	ND	10.4	9.00	104	90.0	75-125	14.4	30
1,3-Dichlorobenzene	10.00	ND	8.34	8.91	83.4	89.1	75-125	6.6	30
1,3-Dichloropropene, total	20.0	ND	19.1	17.8	95.5	89.0	70-130	7.0	30
1,4-Dichlorobenzene	10.00	ND	8.76	9.26	87.6	92.6	75-125	5.5	30
2-Butanone	10.00	ND	9.60	8.37	96.0	83.7	30-150	13.7	30
4-Methyl-2-pentanone	10.00	ND	9.67	10.9	96.7	109	60-135	12.0	30
Acetone	10.00	1.4	11.6	12.8	102	114	40-140	9.8	30
Benzene	10.00	ND	10.0	9.54	100	95.4	80-120	4.7	30
Bromodichloromethane	10.00	ND	10.1	9.15	101	91.5	75-120	9.9	30
Bromoform	10.00	ND	9.70	10.3	97.0	103	70-130	6.0	30
Bromomethane	10.00	ND	8.13	8.18	81.3	81.8	30-145	0.61	30
Carbon tetrachloride	10.00	ND	10.0	9.42	100	94.2	65-140	6.0	30
Chlorobenzene	10.00	ND	9.13	10.1	91.3	101	80-120	10.1	30

# = Recovery is outside QC limits.

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

Primary	SPK	DUP
Quant Method :	N86DODW.M	N86DODW.M
Extraction Date :	10/30/10	10/30/10
Analysis Date :	10/30/10	10/30/10
Instrument :	Neo	Neo
Run :	1029N43	1029N44
Initials :	GM	

Printed: 11/08/10 1:33:22 PM

APPL MSD SCII

**Matrix Spike Recoveries**  
**EPA 8260B VOCs + Gas Water**

APPL ID: 101030W-25117 MS - 148687

Batch ID: #86RHB-101029AN

Sample ID: AY25117

Client ID: ES007

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Compound Name	Spike Lvl	Matrix Result	SPK Result	DUP Result	SPK %	DUP %	Recovery	RPD	RPD
	ug/L	ug/L	ug/L	ug/L	Recovery	Recovery	Limits	%	Limits
Chlorodibromomethane	10.00	ND	9.70	10.4	97.0	104	60-135	7.0	30
Chloroethane	10.00	ND	8.24	7.41	82.4	74.1	60-135	10.6	30
Chloroform	10.00	ND	9.92	9.76	99.2	97.6	65-135	1.6	30
Chloromethane	10.00	ND	9.70	9.04	97.0	90.4	40-125	7.0	30
cis-1,2-Dichloroethene	10.00	ND	9.77	9.09	97.7	90.9	70-125	7.2	30
Ethylbenzene	10.00	ND	9.31	9.28	93.1	92.8	75-125	0.32	30
Gasoline	300	ND	323	335	108	112	75-125	3.6	30
Hexachlorobutadiene	10.00	ND	4.85	5.22	48.5 #	52.2	50-140	7.3	30
Methyl tert-butyl ether	10.00	ND	10.5	9.34	105	93.4	65-125	11.7	30
Methylene chloride	10.00	ND	9.33	8.51	93.3	85.1	55-140	9.2	30
Styrene	10.00	ND	8.61	8.85	86.1	88.5	65-135	2.7	30
Tetrachloroethene	10.00	ND	9.06	9.85	90.6	98.5	45-150	8.4	30
Toluene	10.00	ND	9.66	8.77	96.6	87.7	75-120	9.7	30
trans-1,2-Dichloroethene	10.00	ND	9.99	9.55	99.9	95.5	60-140	4.5	30
Trichloroethene	10.00	ND	9.50	8.91	95.0	89.1	70-125	6.4	30
Vinyl chloride	10.00	ND	9.93	8.99	99.3	89.9	50-145	9.9	30
Xylenes (Total)	30.0	ND	27.6	29.0	92.0	96.7	80-120	4.9	30
Surrogate: 1,2-Dichloroethane-d4 (S)	22.9	NA	25.4	22.7	111	99.3	70-120		
Surrogate: 4-Bromofluorobenzene (S)	24.0	NA	23.8	25.2	99.3	105	75-120		
Surrogate: Dibromofluoromethane (S)	24.5	NA	25.1	23.2	102	94.6	85-115		
Surrogate: Toluene-D8 (S)	23.4	NA	23.6	24.3	101	104	85-120		

# = Recovery is outside QC limits.

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

Primary	SPK	DUP
Quant Method :	N86DODW.M	N86DODW.M
Extraction Date :	10/30/10	10/30/10
Analysis Date :	10/30/10	10/30/10
Instrument :	Neo	Neo
Run :	1029N43	1029N44
Initials :	GM	

Printed: 11/08/10 1:33:22 PM

APPL MSD SCII

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N43W.D  
 Acq On : 30 Oct 10 15:35 Vial: 1  
 Sample : AY25117W234 MS-1WN Operator: GM  
 Misc : Water 10mL w/IS&S:09-24-10A Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 11:30 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.34	96	197504	25.00000	ppb	-0.02
35) Chlorobenzene-D5 (IS)	18.52	117	137536	25.00000	ppb	-0.01
51) 1,4-Dichlorobenzene-D (IS)	22.70	152	71416	25.00000	ppb	-0.02
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.94	111	210294	25.07828	ppb	-0.01
Spiked Amount 24.523			Recovery	= 102.263%		
23) 1,2-DCA-D4(S)	12.74	65	154108	25.42699	ppb	-0.01
Spiked Amount 22.857			Recovery	= 111.244%		
36) Toluene-D8(S)	15.99	98	647978	23.55732	ppb	-0.02
Spiked Amount 23.425			Recovery	= 100.563%		
44) 4-Bromofluorobenzene(S)	20.58	95	234496	23.79567	ppb	-0.01
Spiked Amount 23.962			Recovery	= 99.305%		
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.57	85	66355	9.54871	ppb	97
3) Chloromethane	5.10	50	30851	9.69935	ppb	98
4) Vinyl chloride	5.34	62	26496	9.92704	ppb	93
5) Bromomethane	6.29	94	34410	8.12603	ppb	98
6) Chloroethane	6.47	64	14575	8.23980	ppb	84
7) Trichlorofluoromethane	7.11	101	14887	10.20189	ppb	97
8) Acetone	7.86	43	4779	11.55977	ppb	# 67
9) 1,1-DCE	8.26	96	14088	9.16761	ppb	85
10) Methylene chloride	9.04	84	87522	9.33177	ppb	99
11) Carbon disulfide	9.14	76	32250	10.13996	ppb	# 89
12) Methyl t-butyl ether (MtBE	9.45	73	137913	10.50850	ppb	95
13) Trans-1,2-DCE	9.66	96	84865	9.98592	ppb	92
14) 1,1-DCA	10.33	63	173331	9.89285	ppb	95
15) MEK (2-Butanone)	10.95	43	50054	9.60460	ppb	91
16) Cis-1,2-DCE	11.34	96	97704	9.77047	ppb	97
17) 2,2-Dichloropropane	11.34	77	14076	7.30151	ppb	85
18) Chloroform	11.62	83	130956	9.91847	ppb	98
19) Bromochloromethane	11.85	128	31776	9.77194	ppb	97
21) 1,1,1-TCA	12.34	97	87086	9.87092	ppb	94
22) 1,1-Dichloropropene	12.62	75	110455	9.98765	ppb	98
24) Carbon Tetrachloride	12.81	117	68816	10.01534	ppb	99
25) 1,2-DCA	12.88	62	79085	11.18010	ppb	96
26) Benzene	13.01	78	348294	10.01214	ppb	98
27) TCE	14.03	95	77989	9.50080	ppb	94
28) 1,2-Dichloropropane	14.26	63	113348	10.38713	ppb	# 97
29) Bromodichloromethane	14.61	83	99571	10.13915	ppb	97
30) Dibromomethane	14.67	93	42626	9.67056	ppb	96
31) Cis-1,3-Dichloropropene	15.48	75	129301	9.74890	ppb	93
32) Toluene	16.12	91	313925	9.66102	ppb	97
33) Trans-1,3-Dichloropropene	16.27	75	87989	9.30908	ppb	96
34) 1,1,2-TCA	16.55	83	53644	9.86001	ppb	92
37) 1,2-EDB	17.81	107	59417	9.86981	ppb	# 98
38) Tetrachloroethene	17.27	129	48089	9.06065	ppb	91
39) 1-Chlorohexane	18.16	91	88817	8.11527	ppb	96
40) 1,1,1,2-Tetrachloroethane	18.63	131	66426	9.64554	ppb	93
41) m&p-Xylene	18.83	106	244112	18.83541	ppb	99
42) o-Xylene	19.57	106	117378	8.78539	ppb	94
43) Styrene	19.59	104	202187	8.60585	ppb	98
45) 2-Hexanone	16.56	43	17712	10.03832	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1029N43W.D N86DODW.M Tue Nov 16 12:06:41 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N43W.D Vial: 1  
 Acq On : 30 Oct 10 15:35 Operator: GM  
 Sample : AY25117W234 MS-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 2 11:30 2010 Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.96	76	105108	9.84630	ppb	97
47) Dibromochloromethane	17.45	129	66357	9.70259	ppb	92
48) Chlorobenzene	18.58	112	195302	9.13495	ppb	95
49) Ethylbenzene	18.68	91	334578	9.31195	ppb	99
50) Bromoform	20.12	173	42303	9.70321	ppb	99
52) MIBK (methyl isobutyl keto	15.14	43	73331	9.66914	ppb	98
53) Isopropylbenzene	20.20	105	278635	9.06875	ppb	97
54) 1,1,2,2-Tetrachloroethane	20.36	83	75447	10.12615	ppb	91
55) 1,2,3-Trichloropropane	20.61	110	13504	9.55605	ppb	87
56) Bromobenzene	20.96	156	75601	9.03855	ppb	96
57) n-Propylbenzene	20.91	91	367208	8.67298	ppb	99
58) 4-Ethyltoluene	21.10	105	269966	8.72418	ppb	96
59) 2-Chlorotoluene	21.21	91	237432	8.87852	ppb	99
60) 1,3,5-Trimethylbenzene	21.18	105	194361	8.06851	ppb	100
61) 4-Chlorotoluene	21.29	91	213600	9.02023	ppb	94
62) Tert-Butylbenzene	21.84	119	180071	7.90359	ppb	98
63) 1,2,4-Trimethylbenzene	21.90	105	205475	8.21481	ppb	100
64) Sec-Butylbenzene	22.23	105	261423	7.67803	ppb	96
65) p-Isopropyltoluene	22.45	119	194586	7.89996	ppb	95
66) 1,3-DCB	22.59	146	129970	8.34042	ppb	97
67) 1,4-DCB	22.76	146	134246	8.75534	ppb	99
68) n-Butylbenzene	23.14	91	200719	7.23563	ppb	96
69) 1,2-DCB	23.38	146	124922	8.84302	ppb	96
70) 1,2-Dibromo-3-chloropropan	24.58	155	9341	9.71567	ppb	98
71) 1,2,4-Trichlorobenzene	26.00	180	81433	7.71192	ppb	99
72) Hexachlorobutadiene	26.25	225	8885	4.85322	ppb	99
73) Naphthalene	26.36	128	160817	9.65518	ppb	# 95
74) 1,2,3-Trichlorobenzene	26.73	180	26728	7.87176	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1029N43W.D N86DODW.M Tue Nov 16 12:06:41 2010

## Quantitation Report

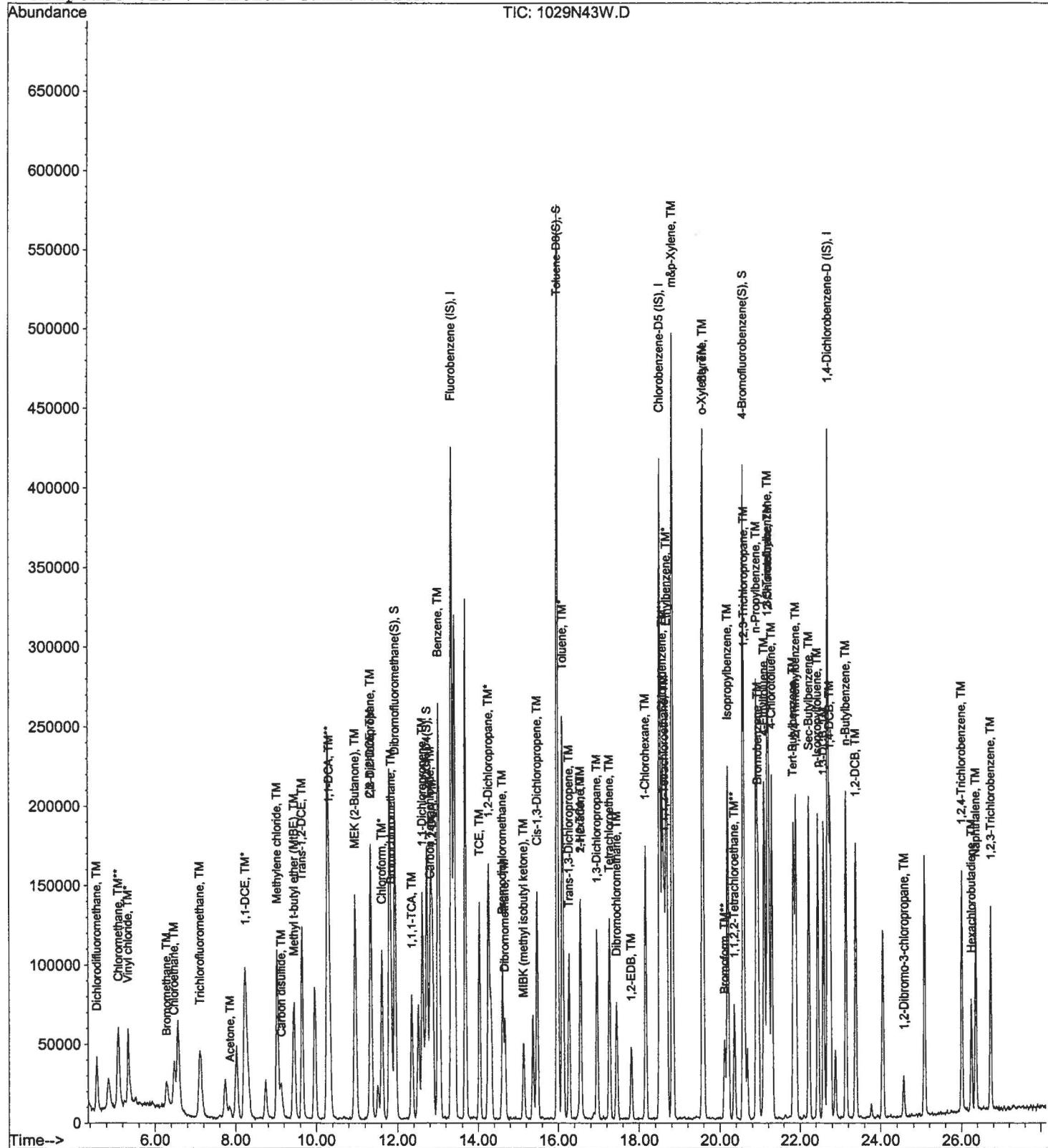
Data File : M:\NEO\DATA\N101029\1029N43W.D  
 Acq On : 30 Oct 10 15:35  
 Sample : AY25117W234 MS-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 11:30 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N44W.D Vial: 1  
 Acq On : 30 Oct 10 16:11 Operator: GM  
 Sample : AY25117W234 MSD-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 2 11:30 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)

Title : METHOD 8260B

Last Update : Mon Nov 01 11:51:32 2010

Response via : Initial Calibration

DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.35	96	215808	25.00000	ppb	-0.01
35) Chlorobenzene-D5 (IS)	18.51	117	130856	25.00000	ppb	-0.01
51) 1,4-Dichlorobenzene-D (IS)	22.71	152	66352	25.00000	ppb	-0.01
<b>System Monitoring Compounds</b>						
20) Dibromofluoromethane(S)	11.94	111	212560	23.19854	ppb	-0.01
Spiked Amount	24.523		Recovery	=	94.601%	
23) 1,2-DCA-D4(S)	12.74	65	150124	22.66878	ppb	-0.01
Spiked Amount	22.857		Recovery	=	99.177%	
36) Toluene-D8(S)	15.98	98	636668	24.32771	ppb	-0.02
Spiked Amount	23.425		Recovery	=	103.854%	
44) 4-Bromofluorobenzene(S)	20.58	95	236737	25.24942	ppb	-0.01
Spiked Amount	23.962		Recovery	=	105.369%	
<b>Target Compounds</b>						
2) Dichlorodifluoromethane	4.57	85	66302	8.73185	ppb	99
3) Chloromethane	5.09	50	31435	9.04473	ppb	95
4) Vinyl chloride	5.34	62	26224	8.99181	ppb	97
5) Bromomethane	6.29	94	37897	8.17769	ppb	96
6) Chloroethane	6.47	64	14468	7.41145	ppb	86
7) Trichlorofluoromethane	7.10	101	14724	9.23437	ppb	86
8) Acetone	7.84	43	5677	12.77141	ppb	84
9) 1,1-DCE	8.26	96	15958	9.50372	ppb	90
10) Methylene chloride	9.03	84	88098	8.51208	ppb	99
11) Carbon disulfide	9.15	76	32858	9.45488	ppb	# 94
12) Methyl t-butyl ether (MtBE	9.45	73	133879	9.33591	ppb	98
13) Trans-1,2-DCE	9.65	96	88652	9.54676	ppb	96
14) 1,1-DCA	10.33	63	181653	9.48847	ppb	97
15) MEK (2-Butanone)	10.96	43	47642	8.36640	ppb	# 86
16) Cis-1,2-DCE	11.34	96	99320	9.08967	ppb	94
17) 2,2-Dichloropropane	11.34	77	14730	6.99269	ppb	91
18) Chloroform	11.61	83	140794	9.75915	ppb	94
19) Bromochloromethane	11.86	128	33203	9.34474	ppb	86
21) 1,1,1-TCA	12.35	97	91645	9.50663	ppb	96
22) 1,1-Dichloropropene	12.62	75	107000	8.85462	ppb	96
24) Carbon Tetrachloride	12.82	117	70751	9.42360	ppb	94
25) 1,2-DCA	12.88	62	76663	9.91850	ppb	100
26) Benzene	13.01	78	362797	9.54449	ppb	98
27) TCE	14.04	95	79955	8.91416	ppb	97
28) 1,2-Dichloropropane	14.25	63	107264	8.99589	ppb	99
29) Bromodichloromethane	14.62	83	98186	9.15012	ppb	# 94
30) Dibromomethane	14.67	93	46981	9.75456	ppb	96
31) Cis-1,3-Dichloropropene	15.48	75	126159	8.70523	ppb	94
32) Toluene	16.11	91	311283	8.76720	ppb	99
33) Trans-1,3-Dichloropropene	16.27	75	93826	9.08468	ppb	93
34) 1,1,2-TCA	16.56	83	54650	9.19294	ppb	97
37) 1,2-EDB	17.82	107	60724	10.60184	ppb	94
38) Tetrachloroethene	17.26	129	49729	9.84796	ppb	89
39) 1-Chlorohexane	18.17	91	99304	9.53666	ppb	97
40) 1,1,1,2-Tetrachloroethane	18.63	131	66473	10.14511	ppb	94
41) m&p-Xylene	18.83	106	238594	19.34943	ppb	91
42) o-Xylene	19.58	106	122433	9.63154	ppb	92
43) Styrene	19.60	104	197881	8.85252	ppb	98
45) 2-Hexanone	16.57	43	17528	10.44115	ppb	98

(#) = qualifier out of range (m) = manual integration  
 1029N44W.D N86DODW.M Tue Nov 16 12:06:45 2010

## Quantitation Report (Not Reviewed)

Data File : M:\NEO\DATA\N101029\1029N44W.D Vial: 1  
 Acq On : 30 Oct 10 16:11 Operator: GM  
 Sample : AY25117W234 MSD-1WN Inst : Neo  
 Misc : Water 10ML w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 2 11:30 2010

Quant Results File: N86DODW.RES

Quant Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 1,3-Dichloropropane	16.96	76	103185	10.15960	ppb	94
47) Dibromochloromethane	17.45	129	67533	10.37862	ppb	85
48) Chlorobenzene	18.58	112	205034	10.07971	ppb	92
49) Ethylbenzene	18.69	91	317343	9.28314	ppb	95
50) Bromoform	20.12	173	42632	10.27786	ppb	94
52) MIBK (methyl isobutyl keto	15.14	43	76292	10.89071	ppb	94
53) Isopropylbenzene	20.20	105	271403	9.50754	ppb	97
54) 1,1,2,2-Tetrachloroethane	20.35	83	75164	10.85810	ppb	# 92
55) 1,2,3-Trichloropropane	20.62	110	14569	11.09653	ppb	90
56) Bromobenzene	20.95	156	77151	9.92783	ppb	97
57) n-Propylbenzene	20.91	91	367832	9.35076	ppb	100
58) 4-Ethyltoluene	21.10	105	260828	9.07218	ppb	96
59) 2-Chlorotoluene	21.21	91	243714	9.80896	ppb	100
60) 1,3,5-Trimethylbenzene	21.18	105	207367	9.26542	ppb	93
61) 4-Chlorotoluene	21.29	91	206595	9.39027	ppb	97
62) Tert-Butylbenzene	21.84	119	185430	8.75996	ppb	96
63) 1,2,4-Trimethylbenzene	21.90	105	223678	9.62506	ppb	97
64) Sec-Butylbenzene	22.22	105	264729	8.36853	ppb	98
65) p-Isopropyltoluene	22.44	119	188699	8.24564	ppb	96
66) 1,3-DCB	22.60	146	129004	8.91024	ppb	95
67) 1,4-DCB	22.76	146	131847	9.25515	ppb	96
68) n-Butylbenzene	23.14	91	201443	7.81595	ppb	93
69) 1,2-DCB	23.39	146	123134	9.38169	ppb	96
70) 1,2-Dibromo-3-chloropropan	24.58	155	9187	10.28477	ppb	85
71) 1,2,4-Trichlorobenzene	26.00	180	79366	8.08981	ppb	95
72) Hexachlorobutadiene	26.25	225	8823	5.22426	ppb	88
73) Naphthalene	26.36	128	160301	10.35872	ppb	96
74) 1,2,3-Trichlorobenzene	26.73	180	27960	8.86306	ppb	94

(#) = qualifier out of range (m) = manual integration  
 1029N44W.D N86DODW.M Tue Nov 16 12:06:45 2010

Quantitation Report

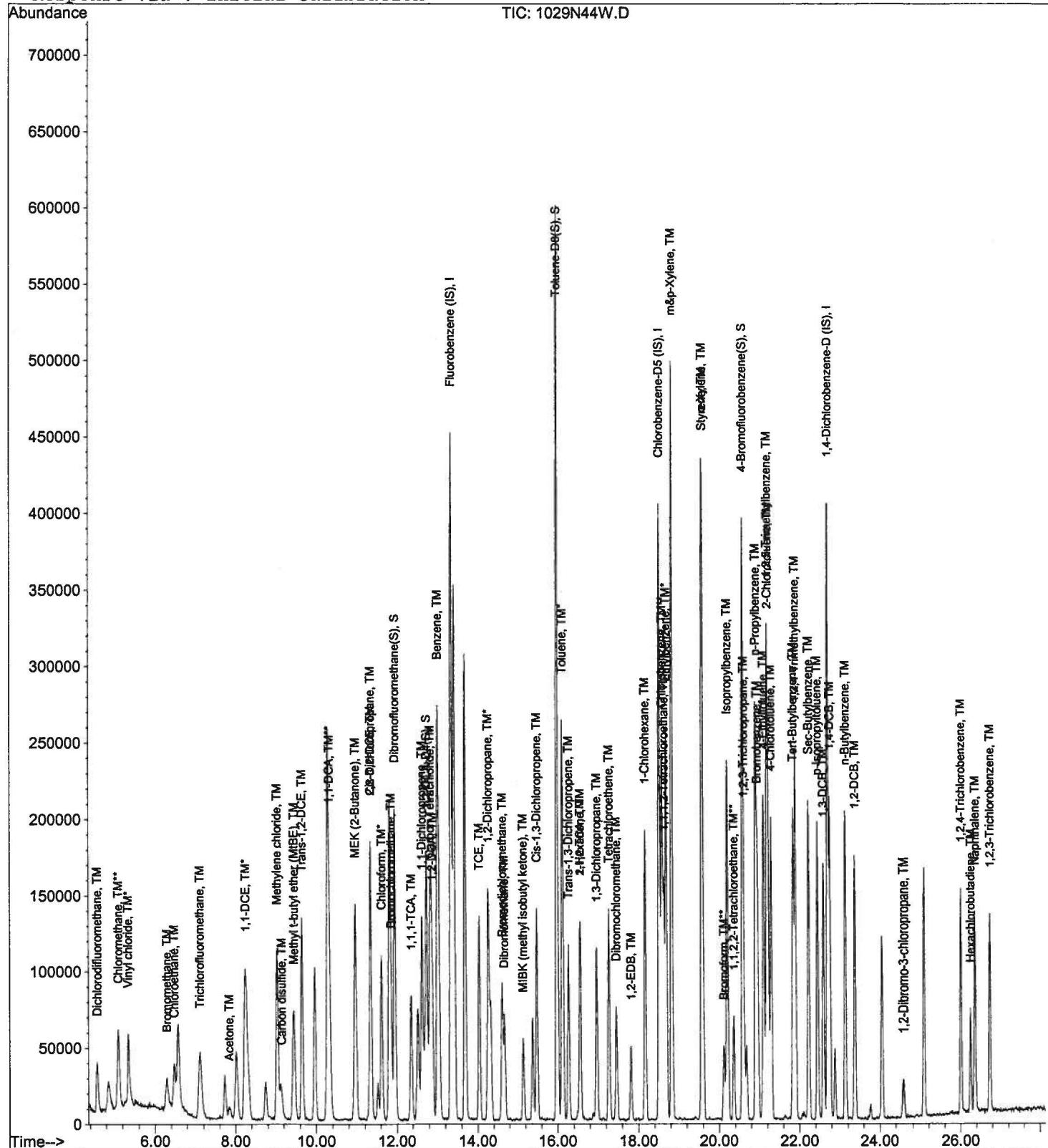
Data File : M:\NEO\DATA\N101029\1029N44W.D  
 Acq On : 30 Oct 10 16:11  
 Sample : AY25117W234 MSD-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 2 11:30 2010

Quant Results File: N86DODW.RES

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Mon Nov 01 11:51:32 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1101N16W.D Vial: 1  
 Acq On : 1 Nov 10 18:45 Operator: GM  
 Sample : AY25117W456 MS-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:39 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:28:48 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.32	TIC	461742	25.00000	ppb	-0.06
5) Chlorobenzene-D5 (IS)	18.48	TIC	413546	25.00000	ppb	-0.06
8) 1,4-Dichlorobenzene-D (IS)	22.68	TIC	438208	25.00000	ppb	-0.06

System Monitoring Compounds						
3) Dibromofluoromethane(S)	11.91	TIC	790709	24.28483	ppb	-0.06
Spiked Amount	24.523		Recovery	=	99.029%	
4) 1,2-DCA-D4 (S)	12.66	TIC	1862987	11.08142	ppb	-0.06
Spiked Amount	22.857		Recovery	=	48.480%	
6) Toluene-D8 (S)	15.95	TIC	1933712	23.32739	ppb	-0.06
Spiked Amount	23.425		Recovery	=	99.581%	
7) 4-Bromofluorobenzene(S)	20.56	TIC	1081839	23.02046	ppb	-0.06
Spiked Amount	23.162		Recovery	=	99.385%	

Target Compounds				Qvalue
2) Gasoline	16.09	TIC	20243135m	323.13647 ppb 100

## Quantitation Report

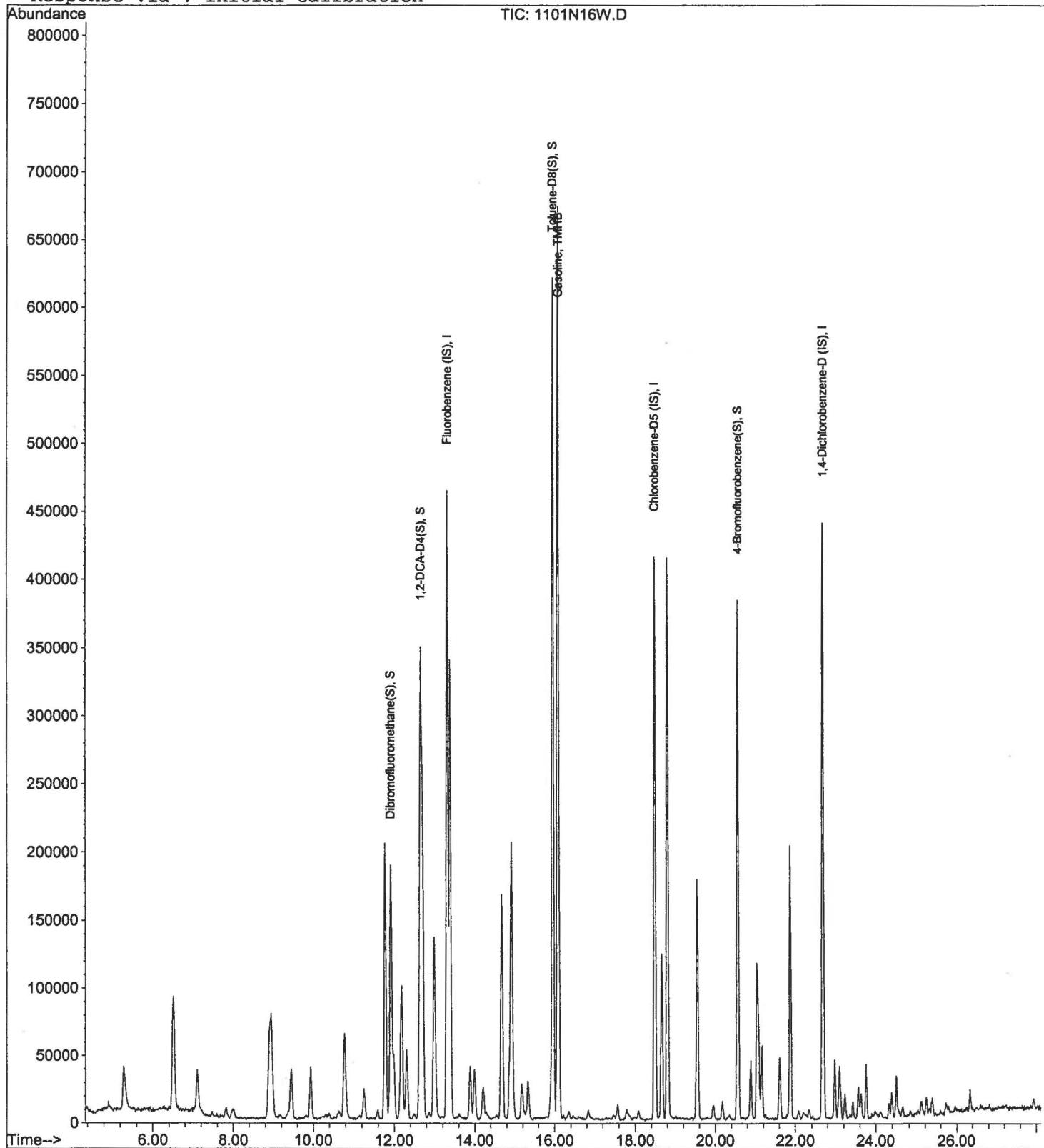
Data File : M:\NEO\DATA\N101029\1101N16W.D  
 Acq On : 1 Nov 10 18:45  
 Sample : AY25117W456 MS-1WN  
 Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Quant Time: Nov 4 11:39 2010

Quant Results File: NGAS.RES

Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:37 2010  
 Response via : Initial Calibration



## Quantitation Report (QT Reviewed)

Data File : M:\NEO\DATA\N101029\1101N17W.D Vial: 1  
 Acq On : 1 Nov 10 19:21 Operator: GM  
 Sample : AY25117W456 MSD-1WN Inst : Neo  
 Misc : Water 10mL w/IS&S:09-24-10A Multiplr: 1.00

Quant Time: Nov 4 11:41 2010 Quant Results File: NGAS.RES

Quant Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
 Title : METHOD 8260B  
 Last Update : Thu Nov 04 12:41:21 2010  
 Response via : Initial Calibration  
 DataAcq Meth : N8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene (IS)	13.38	TIC	325009	25.00000	ppb	0.00
5) Chlorobenzene-D5 (IS)	18.49	TIC	421127	25.00000	ppb	-0.05
8) 1,4-Dichlorobenzene-D (IS)	22.68	TIC	468595	25.00000	ppb	-0.05
<b>System Monitoring Compounds</b>						
3) Dibromofluoromethane(S)	11.92	TIC	854193	37.27163	ppb	-0.05
Spiked Amount	24.523		Recovery	=	151.988%	
4) 1,2-DCA-D4(S)	12.65	TIC	2303102	19.46268	ppb	-0.06
Spiked Amount	22.857		Recovery	=	85.151%	
6) Toluene-D8(S)	15.96	TIC	1952069	23.12492	ppb	-0.05
Spiked Amount	23.425		Recovery	=	98.719%	
7) 4-Bromofluorobenzene(S)	20.56	TIC	1112905	23.25521	ppb	-0.06
Spiked Amount	23.162		Recovery	=	100.399%	
<b>Target Compounds</b>						
2) Gasoline	16.00	TIC	14682709m	334.74448	ppb	100

## Quantitation Report

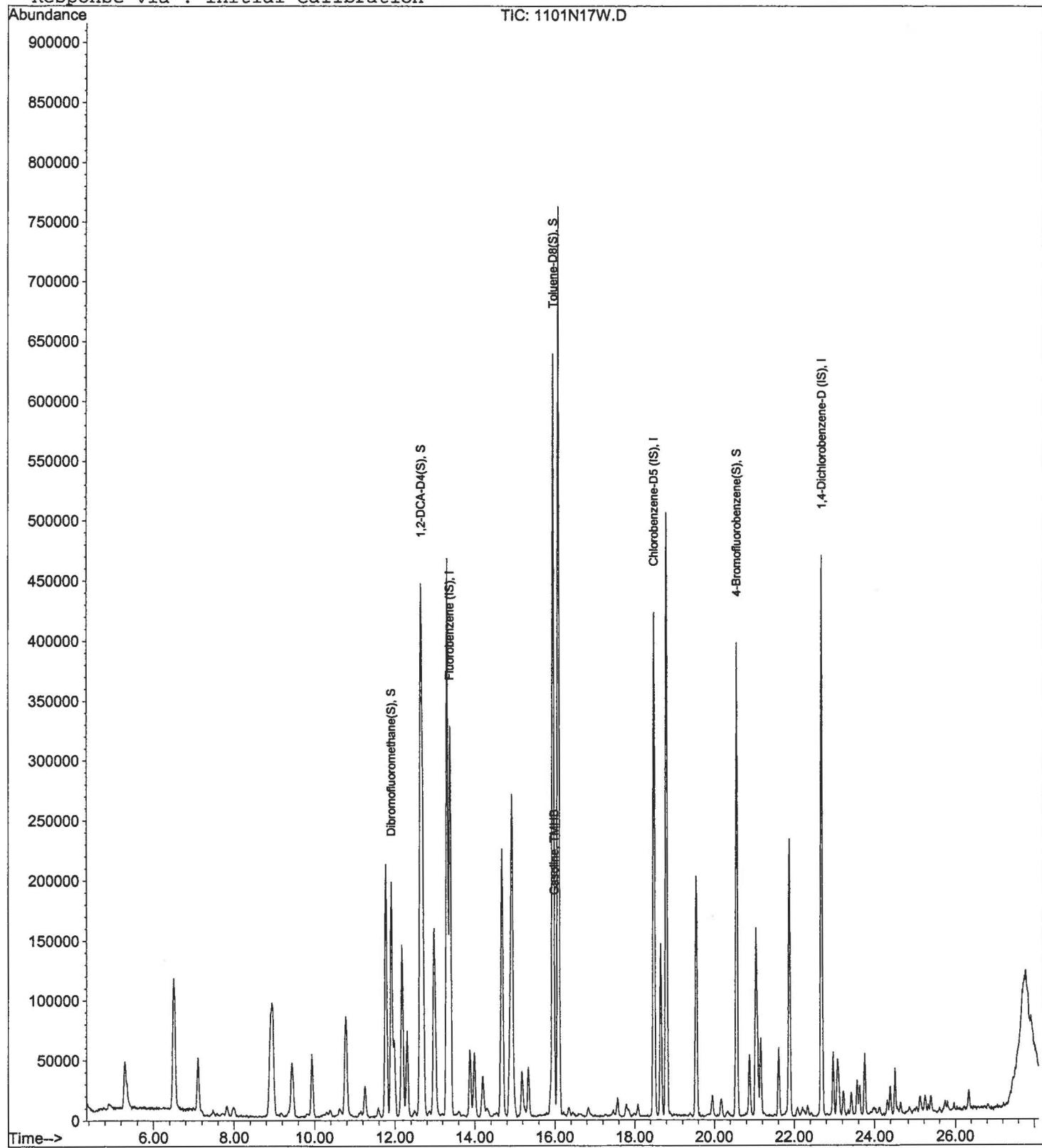
Data File : M:\NEO\DATA\N101029\1101N17W.D  
Acq On : 1 Nov 10 19:21  
Sample : AY25117W456 MSD-1WN  
Misc : Water 10mL w/IS&S:09-24-10A

Vial: 1  
Operator: GM  
Inst : Neo  
Multiplr: 1.00

Quant Time: Nov 4 11:41 2010

Quant Results File: NGAS.RES

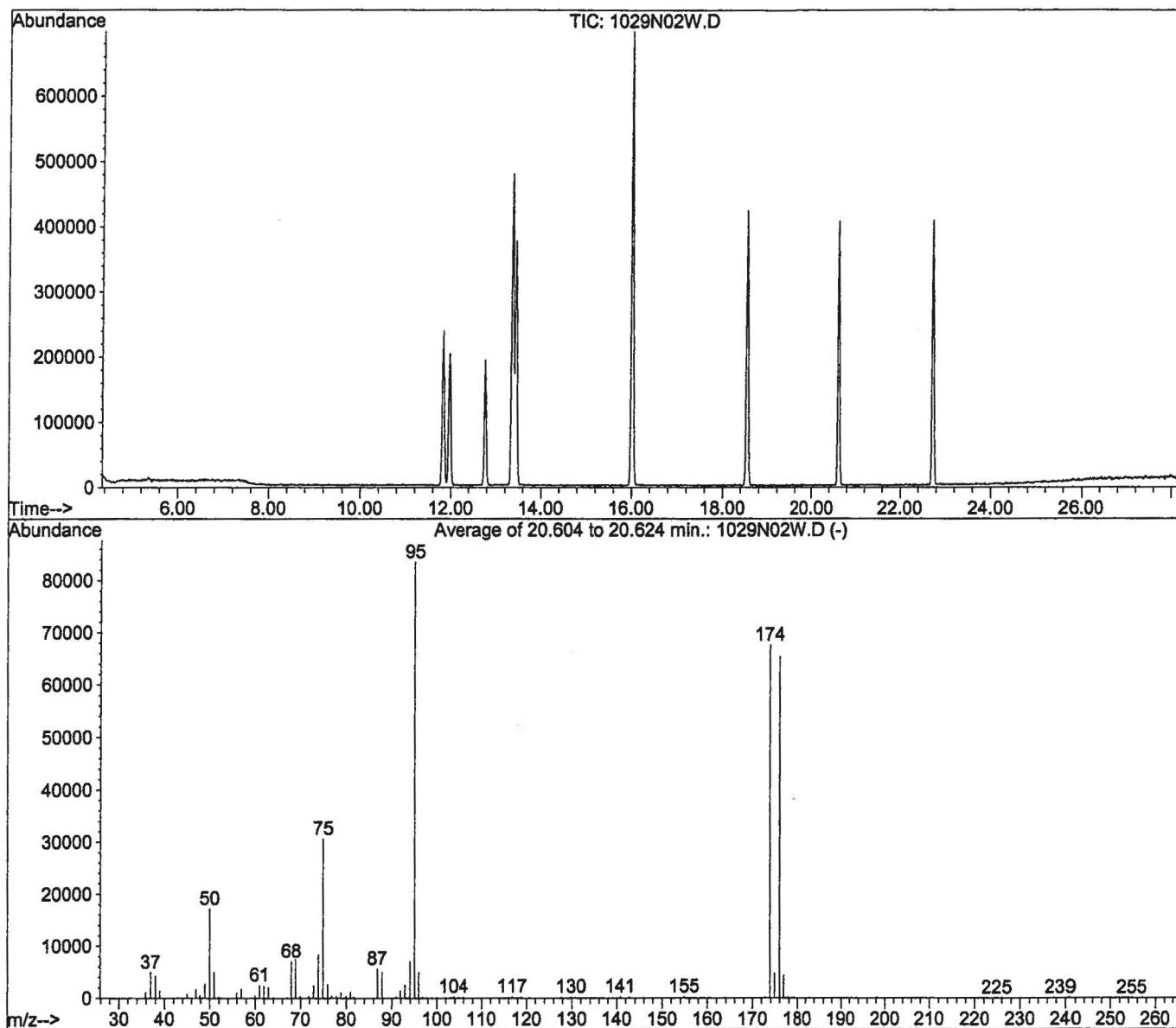
Method : M:\NEO\DATA\N101029\NGAS.M (RTE Integrator)  
Title : METHOD 8260B  
Last Update : Thu Nov 04 12:41:37 2010  
Response via : Initial Calibration



## BFB

Data File : M:\NEO\DATA\N101029\1029N02W.D Vial: 1  
 Acq On : 29 Oct 10 14:29 Operator: GM  
 Sample : 20ug/ml BFB Std 09-27-10C Inst : Neo  
 Misc : 2ul Multiplr: 1.00

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Average of 20.604 to 20.624 min.

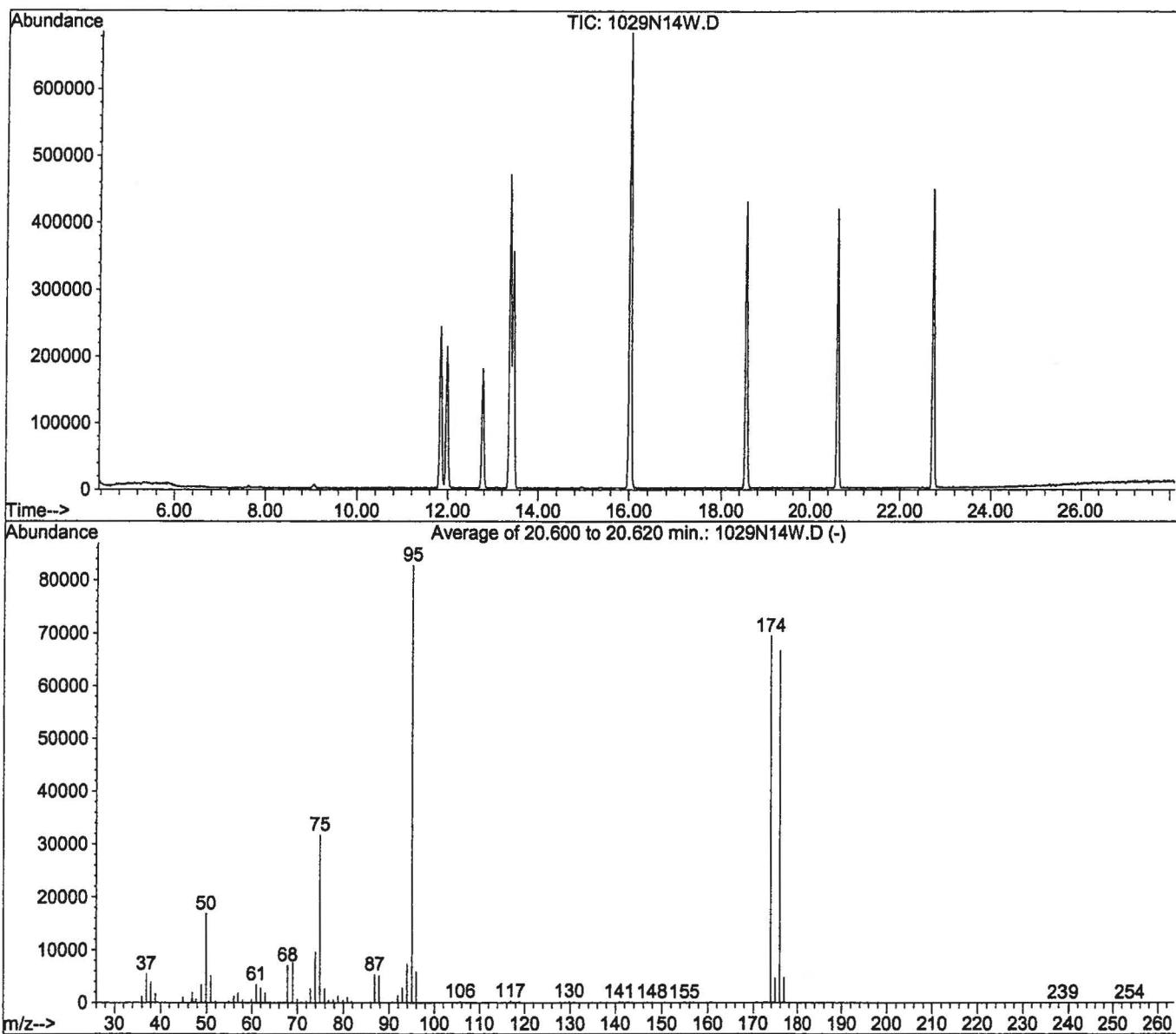
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	17171	PASS
75	95	30	60	36.7	30627	PASS
95	95	100	100	100.0	83496	PASS
96	95	5	9	5.9	4922	PASS
173	174	0.00	2	0.3	202	PASS
174	95	50	100	80.9	67576	PASS
175	174	5	9	7.1	4778	PASS
176	174	95	101	96.7	65317	PASS
177	176	5	9	6.6	4337	PASS

## BFB

Data File : M:\NEO\DATA\N101029\1029N14W.D  
 Acq On : 29 Oct 10 21:35  
 Sample : 20ug/ml BFB Std 09-27-10C  
 Misc : 2ul

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Average of 20.600 to 20.620 min.

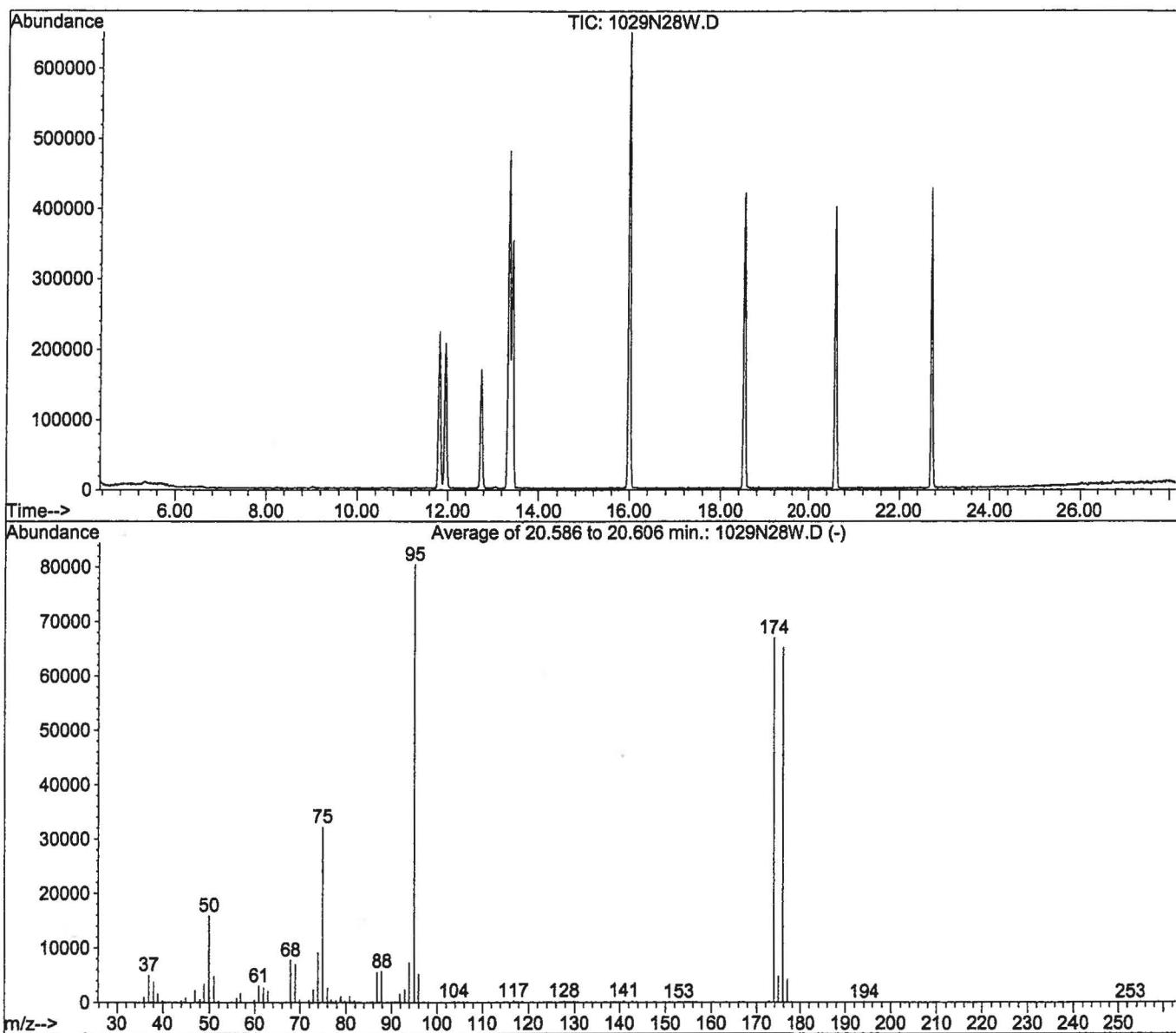
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.3	16834	PASS
75	95	30	60	38.3	31739	PASS
95	95	100	100	100.0	82789	PASS
96	95	5	9	7.1	5904	PASS
173	174	0.00	2	0.1	99	PASS
174	95	50	100	83.9	69493	PASS
175	174	5	9	6.6	4600	PASS
176	174	95	101	96.0	66709	PASS
177	176	5	9	7.1	4724	PASS

## BFB

Data File : M:\NEO\DATA\N101029\1029N28W.D  
 Acq On : 30 Oct 10 6:51  
 Sample : 20ug/ml BFB Std 09-27-10C  
 Misc : 2ul

Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00

Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B

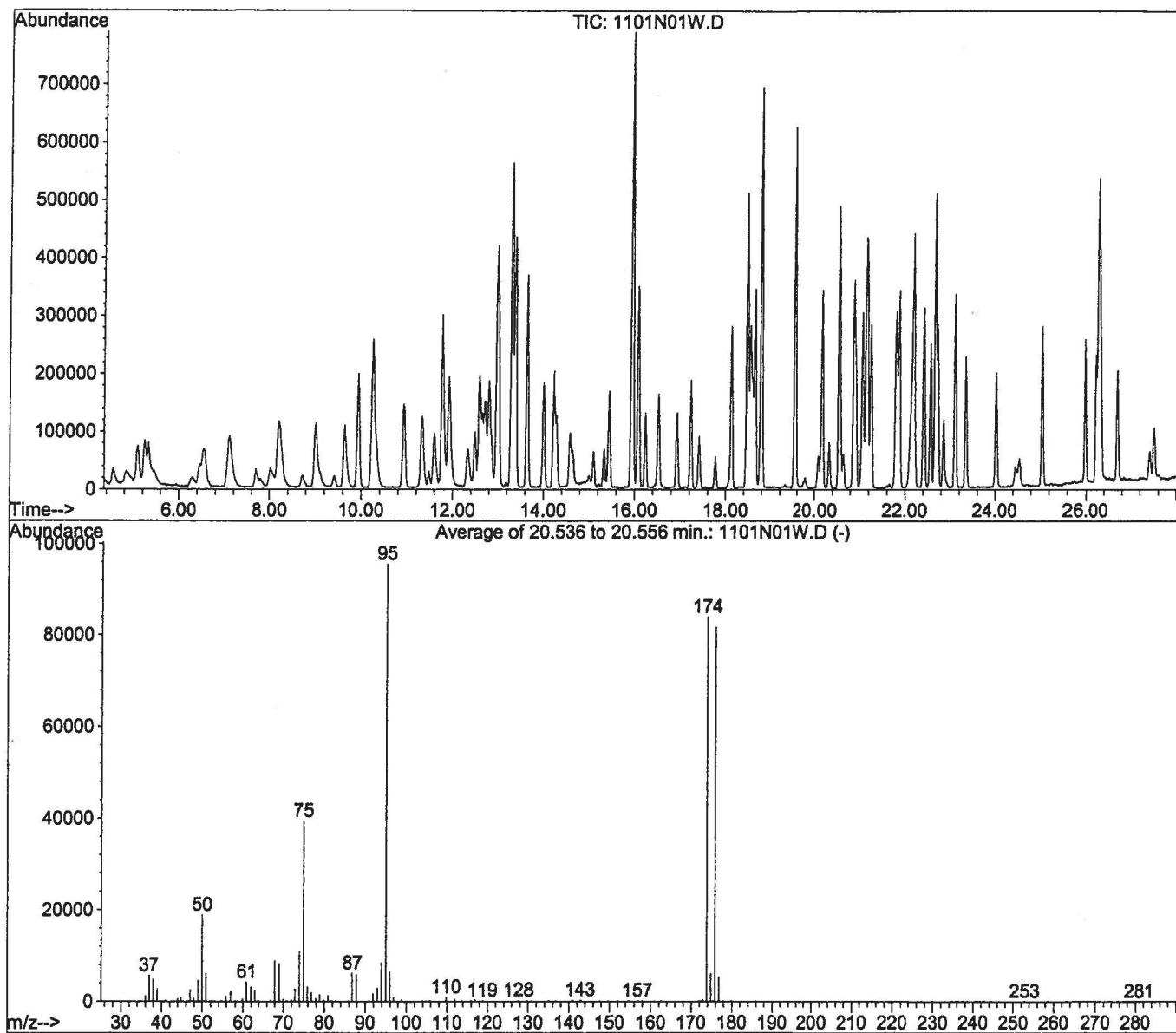


Spectrum Information: Average of 20.586 to 20.606 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	15871	PASS
75	95	30	60	40.1	32243	PASS
95	95	100	100	100.0	80437	PASS
96	95	5	9	6.5	5205	PASS
173	174	0.00	2	0.3	210	PASS
174	95	50	100	83.3	66992	PASS
175	174	5	9	7.0	4693	PASS
176	174	95	101	97.3	65211	PASS
177	176	5	9	6.4	4141	PASS

## BFB

Data File : M:\NEO\DATA\N101029\1101N01W.D  
 Acq On : 1 Nov 10 9:57  
 Sample : 20ug/ml BFB Std 09-27-10C  
 Misc : 2ul  
 Vial: 1  
 Operator: GM  
 Inst : Neo  
 Multiplr: 1.00  
 Method : M:\NEO\DATA\N101029\N86DODW.M (RTE Integrator)  
 Title : METHOD 8260B



Spectrum Information: Average of 20.536 to 20.556 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	18830	PASS
75	95	30	60	41.3	39437	PASS
95	95	100	100	100.0	95517	PASS
96	95	5	9	6.7	6446	PASS
173	174	0.00	2	0.4	347	PASS
174	95	50	100	87.9	83957	PASS
175	174	5	9	7.1	6001	PASS
176	174	95	101	97.3	81656	PASS
177	176	5	9	6.6	5356	PASS

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## GC/MS STANDARD PREPARATION BOOK # \_\_\_\_\_ PAGE # \_\_\_\_\_

Sweetpea						
10-22-10C						
250ug/ml 8260 Internal Standard - Sweetpea		Conc.		Date	Exp.	
Supplier	ID #	ug/ml	Lot #	Code	Date	
O2SI	120302-03	Internal Standard Mix	2000	153416-26932	10-22-10A	01/10/11
	020132-02	Fluorobenzene Standard	2000	156001-26342	10-212-10B	01/10/11
J.T.Baker		Purge & Trap MeOH	G46E44-00464		10/17/10	09/14/11
10-22-10D						
8260 Surrogate - Sweetpea		Conc.		Date	Exp.	
Supplier	ID #	ug/ml	Lot #	Code	Date	
O2SI	120002-01	Surrogate Standards	2000	153000-27234	10-20-10A	01/10/11
J.T.Baker		Purge & Trap MeOH	G46E44-00464		10/17/10	09/14/11

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-Sweetpea											
Expiration Date: 10/23/10											
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Code	µg/L	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10
10-22-10E	0.3	3	6	n/a	n/a	n/a	n/a	3	n/a	n/a	n/a
10-22-10F	0.5	5	10	n/a	n/a	n/a	n/a	5	n/a	n/a	n/a
10-22-10G	1	10	20	n/a	n/a	n/a	n/a	10	n/a	n/a	n/a
10-22-10H	5	n/a	n/a	5	5	10	n/a	5	n/a	n/a	n/a
10-22-10I	10	n/a	n/a	10	10	25	n/a	10	n/a	n/a	n/a
10-22-10J	20	n/a	n/a	20	20	40	n/a	20	n/a	n/a	n/a
10-22-10K	40	n/a	n/a	40	40	80	n/a	40	n/a	n/a	n/a
10-22-10L	100	n/a	n/a	100	100	n/a	n/a	100	n/a	n/a	n/a
10-22-10M	200	n/a	n/a	200	200	n/a	n/a	200	n/a	n/a	n/a

Volatile Standard Curve Preparation for 10mL Purge (8260 water)-Sweetpea											
Expiration Date: 10/23/10											
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	5ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Code	µg/L	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10
10-22-10E	0.3	3	6	n/a	n/a	n/a	n/a	3	n/a	n/a	n/a
10-22-10F	0.5	5	10	n/a	n/a	n/a	n/a	5	n/a	n/a	n/a
10-22-10G	1	10	20	n/a	n/a	n/a	n/a	10	n/a	n/a	n/a
10-22-10H	5	n/a	n/a	5	5	10	n/a	5	n/a	n/a	n/a
10-22-10I	10	n/a	n/a	10	10	25	n/a	10	n/a	n/a	n/a
10-22-10J	20	n/a	n/a	20	20	40	n/a	20	n/a	n/a	n/a
10-22-10K	40	n/a	n/a	40	40	80	n/a	40	n/a	n/a	n/a
10-22-10L	100	n/a	n/a	100	100	n/a	n/a	100	n/a	n/a	n/a
10-22-10M	200	n/a	n/a	200	200	n/a	n/a	200	n/a	n/a	n/a

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-Chico											
Expiration Date: 10/23/10											
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Vol Std #10	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Vol Std #9	50ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Vol Std #10	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Vol Std #9	50ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Code	µg/L	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10
10-22-10N	2	2	2	n/a	n/a	n/a	n/a	2	n/a	n/a	n/a
10-22-10O	5	5	5	n/a	n/a	n/a	n/a	5	n/a	n/a	n/a
10-22-10P	10	10	10	n/a	n/a	n/a	n/a	10	n/a	n/a	n/a
10-22-10Q	20	20	20	n/a	n/a	n/a	n/a	20	n/a	n/a	n/a
10-22-10R	50	n/a	n/a	5	5	5	n/a	5	n/a	n/a	n/a
10-22-10S	100	n/a	n/a	10	10	10	n/a	10	n/a	n/a	n/a
10-22-10T	200	n/a	n/a	20	20	20	n/a	20	n/a	n/a	n/a

Volatile Standard Curve Preparation for 5mL Purge (8260 soil)-Chico											
Expiration Date: 10/23/10											
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Vol Std #10	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Vol Std #9	50ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Vol Std #10	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Vol Std #9	50ug/mL Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #12	250ug/mL TAPD	Final Vol
Code	µg/L	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10	Exp:10-24-10
10-22-10S	1	n/a	n/a	n/a	n/a	n/a	n/a	1	n/a	n/a	n/a
10-22-10T	2	n/a	n/a	n/a	n/a	n/a	n/a	2	n/a	n/a	n/a
10-22-10U	3	n/a	n/a	n/a	n/a	n/a	n/a	3	n/a	n/a	n/a
10-22-10V	4	n/a	n/a	n/a	n/a	n/a	n/a	4	n/a	n/a	n/a
10-22-10W	5	n/a	n/a	n/a	n/a	n/a	n/a	5	n/a	n/a	n/a
10-22-10X	6	n/a	n/a	n/a	n/a	n/a	n/a	6	n/a	n/a	n/a
10-22-10Y	7	n/a	n/a	n/a	n/a	n/a	n/a	7	n/a	n/a	n/a

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

**O2Si**  
Method 8260 Gases  
Cat. No: 120016-03  
Lot No: 159409  
Rec: 6/8/10 MFR exp. 05/21/13

Exp: 5/21/2013  
Storage: <= -10 Degrees C  
Solvent: P/T Methanol  
umption For Research Use Only  
ate Opened:

10-25-10A-

RS

## GC/MS STANDARD PREPARATION BOOK #

PAGE #

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10-25-10 B-

PS

**02Si**  
smart solutions

2-Chloroethyl Vinyl Ether Solution, 2,000 mg/L, 2 X 0.6 ml  
 Cat. No: 020145-02-02  
 Lot No: 146517  
 1 2-Chloroethyl vinyl ether  
 Lot #: 146517 - 26254  
 Rec: 3/12/10 MFR exp. 05/07/11

Exp: 5/7/2011  
 Storage: <= -10 Degrees C  
 Solvent: P/T Methanol  
 m For Research Use Only  
 med: \_\_\_\_\_

25

10-25-10 C-

PS

**02Si**  
Method 8260B Surrogate

Method 8260B Surrogate Solution, 2,000 mg/L, 1 ml  
 Cat. No: 120002-01  
 Lot No: 143000  
 Lot #: 153000 - 27239  
 Rec: 9/15/10 MFR exp. 11/21/12

Exp: 11/21/2012  
 Storage: <= -10 Degrees C  
 Solvent: P/T Methanol  
 m For Research Use Only  
 Opened: \_\_\_\_\_

25

10-25-10 D-

PS

**02Si**  
smart VOC Mix 4-3

VOC Mix 4-3, 2,000 mg/L, 1 ml  
 Cat. No: 120166-01  
 Lot No: 162334  
 Lot #: 162334 - 26984  
 Rec: 8/4/10 MFR exp. 08/01/12

Exp: 8/1/2012  
 Storage: ≤ 6 Degrees C  
 Solvent: P/T Methanol  
 m For Research Use Only  
 d: \_\_\_\_\_

25

10-25-10 E-

**02Si**  
Method 8260 Gases (SS)

Method 8260 Gases (Second Source), 2,000 mg/L, 2 X 0.6 ml  
 Cat. No: 120016-03-SS  
 Lot No: 152266  
 Lot #: 152266 - 26212  
 Rec: 3/3/10 MFR exp. 10/31/12

Exp: 10/31/2012  
 Storage: <= -10 Degrees C  
 Solvent: P/T Methanol  
 m For Research Use Only  
 d: \_\_\_\_\_

25

10-25-10F									
50ug/ml Vol Work Std #7									
Exp:11/01/10									
Supplier	ID #	ID	Conc.			Date		Exp.	
02Si	120016-03	Gas Mix	ug/ml	Lot #	Code	Date	ul		
			2000	159409-26686	10-25-10A	11/01/10	100		
02Si	020145-02-02	HEXACHLOROETHANE	1000	157911-26378	10-17-10B	01/14/11	200		
02Si	020232-02	Benzyl Chloride	1000	154534-26945	10-17-10C	01/14/11	200		
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	3500		
10-25-10G									
50ug/ml Vol Work Std #1									
Exp:11/01/10									
Supplier	ID #	ID	Conc.		Lot #	Date		Exp.	
02Si	020145-02-02	2-CEVE	ug/ml		Code	Date	ul		
J&T Brand		Purge & Trap MeOH	2000	146517-26254	10-25-10B	01/14/11	50		
10-25-10H									
50ug/ml Vol Work Std #8									
Exp:11/01/10									
Supplier	ID #	ID	Conc.		Lot #	Date		Exp.	
02Si	122039-02	Volatile Mix, 20-29	ug/ml		Code	Date	ul		
			2000	146446-25415	10-04-10L	01/14/11	100		
02Si	120023-03	VOC' S-54 COMP	2000	151805-25464	10-17-10D	01/14/11	100		
02Si	020232-02	Vinyl Acetate	2000	163376-27151	10-17-10E	11/04/10	100		
02Si	020620-02	n-Hexane	1000	154156-26556	10-17-10F	01/14/11	200		
02Si	020546-02	Heptane	1000	149235-26997	10-17-10G	01/14/11	200		
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	3300		

10-25-10I							
50ug/ml Vol Work Std #2							
Exp:11/01/10			ug/ml				
Supplier	ID #	ID					
02SI	121020-05	HSL'S-Ketone Solution	2000	144425-27141	10-04-10E	01/14/11	100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	3900
10-25-10J							
5ug/ml Vol Work Std #3							
SOURCES		Lot	APPL Code	APPL Exp Date	uL		
50ug/ml Vol Work Std #7			10-25-10F	12/14/10	200		
50ug/ml Vol Work Std #8			10-25-10H	12/14/10	200		
J&T Brand			10/17/10	10/14/11	1800		
10-25-10K							
5ug/ml Vol Work Std #10							
SOURCES		Lot	APPL Code	APPL Exp Date	uL		
50ug/ml Vol Work Std #1			10-25-10G	12/14/10	200		
J&T Brand			10/17/10	10/14/11	1800		
10-25-10L							
5ug/ml Vol Work Std #12							
SOURCES		Lot	APPL Code	APPL Exp Date	uL		
50ug/ml Vol Work Std #2			10-25-10I	12/14/10	200		
J&T Brand			10/17/10	10/14/11	1800		
10-25-10M							
50ug/ml 8260 Surrogate		Conc.		Date	Exp.		
Exp:11/01/10		ug/ml	Lot #	Code	Date	uL	
02SI	120002-01	8260B Surr Solution	2000	153000-27239	10-25-10C	12/14/10	100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	3900
10-25-10N							
5.0ug/ml 8260 Surrogate		Lot	APPL Code	APPL Exp Date	uL		
J&T Brand			10-25-10M	09/14/10	200		
		Purge & Trap MeOH		10/17/10	10/14/11	1800	
10-25-10O							
250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:11/01/10		Conc.		Date	Exp.		
Supplier	ID #	ug/ml	Lot #	Code	Date	uL	
02SI	120166-01	Volatile Mix 4-3	2000	162334-36984	10-25-10D	01/14/11	500
02SI	020229-09	Acrolein	10000	164690-27559	10-17-10J	11/22/10	100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	3400
10-25-10P							
50ug/ml VOC Std#5							
Exp:11/01/10							
Supplier	ID #	ID	Conc.		Date	Exp.	
02SI	120016-03-SS	8260 Gases (SS)	2000	152266-26212	10-25-10E	11/29/10	50
02SI	020145-02-02-2-CEVE		2000	151530-25442	10-11-10F	11/03/11	50
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	1800
10-25-10Q							
50ug/ml VOC Std#6							
Exp:11/01/10							
Supplier	ID #	ID	ug/ml	Lot #	Code	Date	uL
02SI	120023-03-SS	VOC'S 54 COMP.	2000	143038-23891	09-27-10K	12/14/10	50
02SI	120295-01	Custom 8260 Solution	2000	154167-25826	08-24-10L	12/14/10	50
02SI	020232-02-SS	Vinyl Acetate (SS)	2000	163379-27164	09-07-10J	11/28/10	50
02SI	020520-02-SS	n-HEXANE	1000	155529-25158	10-11-10G	12/14/10	100
02SI	020049-02-SS	HEXAChLORoETHANE	1000	154535-25908	09-27-10L	12/14/10	100
02SI	020546-02-SS	Heptane (SS)	1000	142276-23575	10-11-10H	12/14/10	100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	1550
10-25-10R							
250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P						APPL	
Exp:11/01/10		Conc.		Date	Exp.		
Supplier	ID #		ug/ml	Lot #	Code	Date	uL
02SI	120166-01-SS	VOC Mix 4-3 (SS)	2000	142274-25474	10-04-10H	12/14/10	250
02SI	020229-09-SS	Acrolein SOLUTION (SS)	10000	164691-27561	10-17-10L	11/22/10	50
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11	1700

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10-25-10S			Conc.	Date	Exp.	
50ug/ml Vol Work Std #7			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	120016-03	Gas Mix	2000	159409-26686	10-25-10A	11/01/10 100
02SI	020049-02	HEXACHLOROETHANE	1000	157911-26378	10-17-10B	01/14/11 200
02SI	020228-02	Benzyl Chloride	1000	154534-26945	10-17-10C	01/14/11 200
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 3500
10-25-10T			Conc.	Date	Exp.	
50ug/ml Vol Work Std #1			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	020145-02-02	2-CEVE	2000	146517-26254	10-25-10B	01/14/11 50
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 1950
10-25-10U			Conc.	Date	Exp.	
50ug/ml Vol Work Std #8			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	122039-02	Volatile Mix, 20-29	2000	148446-25415	10-04-10L	01/14/11 100
02SI	120023-03	VOC'S-54 COMP	2000	151805-25464	10-17-10D	01/14/11 100
02SI	020232-02	Vinyl Acetate	2000	163376-27151	10-17-10E	11/04/10 100
02SI	020620-02	n-Hexane	1000	154166-26556	10-17-10F	01/14/11 200
02SI	020546-02	Heptane	1000	149236-26997	10-17-10G	01/14/11 200
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 3300
10-25-10V			Conc.	Date	Exp.	
50ug/ml Vol Work Std #2			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	121020-05	HSI'S-Ketone Solution	2000	144425-27141	10-04-10E	01/14/11 100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 3900
10-25-10W			Conc.	Date	Exp.	
50ug/ml Vol Work Std #9			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
SOURCES		Lot	APPL Code	APPL Exp Date	ul	
50ug/ml Vol Work Std #7			10-25-10S	12/14/10	200	
50ug/ml Vol Work Std #8			10-25-10U	12/14/10	200	
J&T Brand			10/17/10	10/14/11	1600	
10-25-10X			Conc.	Date	Exp.	
50ug/ml Vol Work Std #10			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
SOURCES		Lot	APPL Code	APPL Exp Date	ul	
50ug/ml Vol Work Std #1			10-25-10T	12/14/10	200	
J&T Brand			10/17/10	10/14/11	1800	
10-25-10Y			Conc.	Date	Exp.	
50ug/ml Vol Work Std #12			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
SOURCES		Lot	APPL Code	APPL Exp Date	ul	
50ug/ml Vol Work Std #2			10-25-10V	12/14/10	200	
J&T Brand			10/17/10	10/14/11	1800	
10-25-10Z			Conc.	Date	Exp.	
50ug/ml 8260 Surrogate			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
02SI	120002-01	8260B Surr Solution	2000	153000-27239	10-25-10C	12/14/10 100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 3900
10-25-10AA			Conc.	Date	Exp.	
5.0ug/ml 8260 Surrogate			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
J&T Brand		50ug/ml 8260 Surrogate		10-25-10Z	09/14/10	200
		Purge & Trap MeOH		10/17/10	10/14/11	1600
10-25-10AB			Conc.	Date	Exp.	
250ug/ml TBA/TBA/Acetonitrile/Cyclohexanone/Acrolein/2-P			ug/ml	Lot #	Code	Date ul
Exp:11/01/10						
Supplier	ID #	ID	ug/ml	Lot #	Date	Exp.
02SI	120166-01	Volatile Mix 4-3	2000	162334-26984	10-25-10D	01/14/11 500
02SI	020229-09	Acrolein	10000	164690-27559	10-17-10J	11/22/10 100
J&T Brand		Purge & Trap MeOH		H46E44-00464	10/17/10	10/14/11 3400

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10-29-10  
PS.

10/29/10C									APPL		
1ug/ml Gasoline									APPL		
Supplier	ID #		Conc.	ug/ml	Lot #	Date	Code	Date	Exp.	uL	
Supelco	LB61226	Gasoline	1000		LB61226-26324	10-29-10A	09/02/11	09/02/11	400		
J&T Brand		Purge & Trap MeOH	2000		H46E44-00464	10/17/10	03/02/12	03/02/12	3600		

10/29/10D									APPL		
1ug/ml Unleaded Gasoline									APPL		
Supplier	ID #		Conc.	ug/ml	Lot #	Date	Code	Date	Exp.	uL	
Supelco	30205	Unleaded Gasoline	50,000		A050005-21115	10-29-10B	11/30/12	11/30/12	150		
J&T Brand		Purge & Trap MeOH			H46E44-00464	10/17/10	03/02/12	03/02/12	3840		

Gasoline Curve Preparation for 100mL Purge (water)-Neo											
Expiration Date:			10/30/10			Final Vol					
Date	Conc.	1ug/ml Gasoline	w/P&T H2O	ug/L	Exp.11-05-10	mL					
10-29-10E	20	1	100								
10-29-10F	50	2.5	100								
10-29-10G	100	5	100								
10-29-10H	300	15	100								
10-29-10I	600	30	100								
10-29-10J	800	40	100								
10-29-10K	1000	50	100								

Volatile Standard Curve Preparation for 10mL Purge (6260 water)-Neo											
Expiration Date:			10/30/10			Final Vol					
Date	Conc.	5ug/mL Vol Std #9	5ug/mL Surr	50ug/mL Vol Std #7	50ug/mL Vol Std #8	50ug/mL Surr	Suppl. Vol Std #10	50ug/mL Vol Std #11	50ug/mL Vol Std #2	50ug/mL Vol Std #12	
Date	Conc.	10-25-10J	10-25-10N	10-25-10F	10-25-10H	10-25-10M	10-25-10K	10-25-10G	10-25-10I	10-25-10L	
Code	ug/L	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	Exp.11-01-10
10-29-10L	0.3	3	6	n/a	n/a	n/a	3	n/a	n/a	n/a	
10-29-10M	0.5	5	10	n/a	n/a	n/a	5	n/a	n/a	n/a	
10-29-10N	1	10	20	n/a	n/a	n/a	10	n/a	5	5	
10-29-10O	5	n/a	n/a	5	5	10	n/a	5	5	5	
10-29-10P	10	n/a	n/a	10	10	25	n/a	10	10	10	
10-29-10Q	20	n/a	n/a	20	20	40	n/a	20	20	20	
10-29-10R	40	n/a	n/a	40	40	80	n/a	40	40	40	
10-29-10S	100	n/a	n/a	100	100	n/a	n/a	100	100	100	
10-29-10T	200	n/a	n/a	200	200	n/a	n/a	200	200	200	

Suppl. Vol Std #12			250ug/mL TAPD	Final Vol		
10-25-10L			10-25-10O	w/P&T H2O		
Exp.11-01-10	Exp.11-01-10	Exp.11-01-10	mL			
3	5	10	50			
n/a	20	25	50			
n/a	30	35	50			
n/a	40	45	50			

## Injection Log

Directory: M:\NEO\DATA\N101029\

Line	Vial	FileName	Multiplier	SampleName	Misc Info	Injected
1	1	1029N02W.D	1	20ug/ml BFB Std 09-27-10C	2ul	29 Oct 10 14:29
2	1	1029N06W.D	1	Vol Std 10-29-10@20ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 16:50
3	1	1029N07W.D	1	Vol Std 10-29-10@50ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 17:26
4	1	1029N08W.D	1	Vol Std 10-29-10@100ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 18:05
5	1	1029N09W.D	1	Vol Std 10-29-10@300ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 18:40
6	1	1029N10W.D	1	Vol Std 10-29-10@600ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 19:16
7	1	1029N11W.D	1	Vol Std 10-29-10@800ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 19:51
8	1	1029N12W.D	1	Vol Std 10-29-10@1000ug/L	Water 10mL w/IS&S:09-24-10A	29 Oct 10 20:26
9	1	1029N14W.D	1	20ug/ml BFB Std 09-27-10C	2ul	29 Oct 10 21:35
10	1	1029N17W.D	1	Vol Std 10-29-10@0.5ug/L	Water 10mL w/IS:09-24-10A	29 Oct 10 23:20
11	1	1029N18W.D	1	Vol Std 10-29-10@1.0ug/L	Water 10mL w/IS:09-24-10A	29 Oct 10 23:54
12	1	1029N19W.D	1	Vol Std 10-29-10@5.0ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 00:29
13	1	1029N20W.D	1	Vol Std 10-29-10@10ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 1:03
14	1	1029N21W.D	1	Vol Std 10-29-10@20ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 1:38
15	1	1029N22W.D	1	Vol Std 10-29-10@40ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 2:13
16	1	1029N23W.D	1	Vol Std 10-29-10@100ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 2:48
17	1	1029N24W.D	1	Vol Std 10-29-10@200ug/L	Water 10mL w/IS:09-24-10A	30 Oct 10 3:23
18	1	1029N27W.D	1	GAS 300ug/L(SS)	Water 10mL w/IS&S:09-24-10A	30 Oct 10 6:16
19	1	1029N28W.D	1	20ug/ml BFB Std 09-27-10C	2ul	30 Oct 10 6:51
20	1	1029N29W.D	1	101029A LCS-1WN(SS)	Water 10mL w/IS&S:09-24-10A	30 Oct 10 7:26
21	1	1029N32W.D	1	GAS 300ug/L LCS-1WN	Water 10mL w/IS&S:09-24-10A	30 Oct 10 9:11
22	1	1029N34W.D	1	101029A BLK-1WN	Water 10mL w/IS&S:09-24-10A	30 Oct 10 10:20
23	1	1029N35W.D	1	AY25118W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 10:55
24	1	1029N37W.D	1	AY25114W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 12:05
25	1	1029N39W.D	1	AY25113W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 13:15
26	1	1029N40W.D	1	AY25115W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 13:50
27	1	1029N41W.D	1	AY25116W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 14:25
28	1	1029N42W.D	1	AY25117W01	Water 10mL w/IS&S:09-24-10A	30 Oct 10 15:00
29	1	1029N43W.D	1	AY25117W234 MS-1WN	Water 10mL w/IS&S:09-24-10A	30 Oct 10 15:35
30	1	1029N44W.D	1	AY25117W234 MSD-1WN	Water 10mL w/IS&S:09-24-10A	30 Oct 10 16:11
31	1	1101N01W.D	1	20ug/ml BFB Std 09-27-10C	2ul	1 Nov 10 9:57
32	1	1101N04W.D	1	GAS 300ug/L LCS-1WN	Water 10mL w/IS&S:09-24-10A	1 Nov 10 11:41
33	1	1101N16W.D	1	AY25117W456 MS-1WN	Water 10mL w/IS&S:09-24-10A	1 Nov 10 18:45
34	1	1101N17W.D	1	AY25117W456 MSD-1WN	Water 10mL w/IS&S:09-24-10A	1 Nov 10 19:21

## 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) (Dissolved)	0.22 U	0.5	0.22	0.11	ug/L	10/26/10	10/28/10	#602D-101026A-AY24864

# Laboratory Control Spike Recovery

## METALS

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
6020	Lead (Pb) (Dissolved)	250	253	101	80-120	10/26/10	10/28/10	#602D-101026A-AY24864

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

\_\_\_\_\_

# Matrix Spike Recoveries

## METALS

APPL ID: 101026W-25117 MS - 148407

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample ID: AY25117

Client ID: ES007

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD Max	RPD Limits	Recovery Date-Spk	Extract Date-Spk	Analysis Date-Dup	Extract Date-Dup	Analysis Date-Dup Group	QC	QC Sample
6020	Lead (Pb) (Dissolved)	250	0.60	245	239	97.8	95.4	2.5	20	80-120	10/26/10	10/28/10	10/26/10	10/28/10	148407	AY25117

**METALS**  
**Sample Data**

**APPL, INC.**

## Metals Analysis

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES004**  
Sample Collection Date: 10/19/10

ARF: 62931  
**APPL ID: AY25113**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	Lead (Pb) (Dissolved)	3.3	0.5	0.22	0.11	ug/L	1	10/26/10	10/28/10

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\072SMPL.D\072SMPL.D#  
 Date Acquired: Oct 28 2010 07:31 pm  
 Operator: SDM  
 Sample Name: AY25113W09  
 Misc Info: 101026A-3015  
 Vial Number: 3311  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	0.00 ug/l	0.00	202.76	1000	
11 B	44.98 ug/l	49.97	1.56	1000	
23 Na	44650.00 ug/l	49606.15	11.81	25000	>Cal
24 Mg	21530.00 ug/l	23919.83	12.03	50000	
27 Al	31.41 ug/l	34.90	11.71	20000	
39 K	2832.00 ug/l	3146.35	11.83	20000	
44 Ca	24590.00 ug/l	27319.49	11.44	50000	
47 Ti	2.81 ug/l	3.13	8.28	1000	
51 V	12.64 ug/l	14.04	12.01	1000	
52 Cr	2.22 ug/l	2.46	10.86	1000	
55 Mn	6.48 ug/l	7.20	13.40	1000	
56 Fe	65.73 ug/l	73.03	13.83	20000	
59 Co	0.54 ug/l	0.60	14.56	1000	
60 Ni	1.35 ug/l	1.50	10.60	1000	
63 Cu	2.20 ug/l	2.44	12.29	1000	
65 Cu	2.23 ug/l	2.48	9.74	1000	
66 Zn	13.29 ug/l	14.77	10.22	1000	
75 As	0.32 ug/l	0.36	7.15	1000	
78 Se	0.15 ug/l	0.16	9.32	1000	
78 Se	0.20 ug/l	0.23	66.78	1000	
88 Sr	204.00 ug/l	226.64	9.94	1000	
88 Sr	187.60 ug/l	208.42	0.79	1000	
95 Mo	0.31 ug/l	0.35	3.62	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.01 ug/l	0.01	12.31	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.03 ug/l	0.03	14.92	1000	
118 Sn	0.98 ug/l	1.08	2.18	1000	
121 Sb	-0.20 ug/l	-0.22	4.96	1000	
137 Ba	9.77 ug/l	10.85	0.89	1000	
205 Tl	0.02 ug/l	0.02	41.97	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	2.95 ug/l	3.28	0.58	1000	

**ISTD Elements**

Element	CPS Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	666467.94	3.49	1367210.50	48.7	30 - 120	
45 Sc	353946.34	7.95	677229.44	52.3	30 - 120	
45 Sc	30449.56	15.08	51699.54	58.9	30 - 120	
45 Sc	1165826.40	1.80	1734110.10	67.2	30 - 120	
72 Ge	76547.84	7.32	152157.89	50.3	30 - 120	
72 Ge	14082.19	12.09	23935.47	58.8	30 - 120	
72 Ge	183348.33	1.58	318037.72	57.6	30 - 120	
115 In	1632862.40	1.53	2383817.30	68.5	30 - 120	
159 Tb	2523430.80	0.71	3312619.80	76.2	30 - 120	
165 Ho	2516490.80	0.93	3267807.00	77.0	30 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

## Metals Analysis

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES005**  
Sample Collection Date: 10/20/10

ARF: 62931  
**APPL ID: AY25115**

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	10/26/10	10/28/10

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\073SMPL.D\073SMPL.D#  
 Date Acquired: Oct 28 2010 07:37 pm  
 Operator: SDM  
 Sample Name: AY25115W08  
 Misc Info: 101026A-3015  
 Vial Number: 3312  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	0.00 ug/l	0.00	179.64	1000	
11 B	140.90 ug/l	156.54	6.32	1000	
23 Na	32510.00 ug/l	36118.61	1.17	25000	>Cal
24 Mg	10040.00 ug/l	11154.44	1.36	50000	
27 Al	65.85 ug/l	73.16	3.72	20000	
39 K	1717.00 ug/l	1907.59	1.17	20000	
44 Ca	8014.00 ug/l	8903.55	1.28	50000	
47 Ti	2.96 ug/l	3.28	4.31	1000	
51 V	20.51 ug/l	22.79	1.25	1000	
52 Cr	2.52 ug/l	2.79	2.34	1000	
55 Mn	3.17 ug/l	3.52	3.24	1000	
56 Fe	42.50 ug/l	47.22	1.68	20000	
59 Co	1.69 ug/l	1.88	2.35	1000	
60 Ni	0.77 ug/l	0.86	4.26	1000	
63 Cu	0.24 ug/l	0.27	9.61	1000	
65 Cu	0.24 ug/l	0.26	23.56	1000	
66 Zn	3.80 ug/l	4.23	1.29	1000	
75 As	0.06 ug/l	0.07	25.95	1000	
78 Se	0.10 ug/l	0.11	9.48	1000	
78 Se	0.12 ug/l	0.14	135.15	1000	
88 Sr	75.92 ug/l	84.35	0.78	1000	
88 Sr	75.42 ug/l	83.79	4.94	1000	
95 Mo	0.39 ug/l	0.44	11.61	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.00 ug/l	-0.01	34.38	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.02 ug/l	0.02	23.06	1000	
118 Sn	0.32 ug/l	0.36	10.78	1000	
121 Sb	-0.06 ug/l	-0.07	64.41	1000	
137 Ba	4.70 ug/l	5.22	5.54	1000	
205 Tl	0.02 ug/l	0.02	20.81	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.04 ug/l	0.05	18.71	1000	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	640077.25	7.23	1367210.50	46.8	30 -	120	
45 Sc	306510.75	0.64	677229.44	45.3	30 -	120	
45 Sc	32239.18	5.62	51699.54	62.4	30 -	120	
45 Sc	1095741.90	7.08	1734110.10	63.2	30 -	120	
72 Ge	69028.94	0.83	152157.89	45.4	30 -	120	
72 Ge	14749.38	5.23	23935.47	61.6	30 -	120	
72 Ge	177800.00	5.11	318037.72	55.9	30 -	120	
115 In	1571974.60	5.62	2383817.30	65.9	30 -	120	
159 Tb	2417845.50	5.23	3312619.80	73.0	30 -	120	
165 Ho	2428106.00	4.98	3267807.00	74.3	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

## Metals Analysis

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES006**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25116**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	Lead (Pb) (Dissolved)	0.56	0.5	0.22	0.11	ug/L	1	10/26/10	10/28/10

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\074SMPL.D\074SMPL.D#  
 Date Acquired: Oct 28 2010 07:43 pm  
 Operator: SDM  
 Sample Name: AY25116W09  
 Misc Info: 101026A-3015  
 Vial Number: 3401  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	0.00 ug/l	0.00	22.98	1000	
11 B	41.25 ug/l	45.83	1.16	1000	
23 Na	39550.00 ug/l	43940.05	0.15	25000	>Cal
24 Mg	11830.00 ug/l	13143.13	0.33	50000	
27 Al	10.32 ug/l	11.47	9.29	20000	
39 K	666.90 ug/l	740.93	1.45	20000	
44 Ca	9818.00 ug/l	10907.80	1.83	50000	
47 Ti	2.65 ug/l	2.94	10.22	1000	
51 V	-0.15 ug/l	-0.17	3.42	1000	
52 Cr	0.13 ug/l	0.15	14.75	1000	
55 Mn	355.30 ug/l	394.74	0.40	1000	
56 Fe	5741.00 ug/l	6378.25	0.55	20000	
59 Co	1.83 ug/l	2.04	1.50	1000	
60 Ni	1.50 ug/l	1.66	4.52	1000	
63 Cu	0.50 ug/l	0.55	4.60	1000	
65 Cu	0.53 ug/l	0.59	13.86	1000	
66 Zn	7.40 ug/l	8.22	3.12	1000	
75 As	0.00 ug/l	0.00	299.25	1000	
78 Se	0.07 ug/l	0.08	7.88	1000	
78 Se	0.04 ug/l	0.05	259.34	1000	
88 Sr	102.70 ug/l	114.10	0.85	1000	
88 Sr	102.80 ug/l	114.21	1.51	1000	
95 Mo	0.44 ug/l	0.49	3.19	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.57 ug/l	0.64	3.89	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.02 ug/l	0.02	30.91	1000	
118 Sn	0.34 ug/l	0.38	2.51	1000	
121 Sb	0.26 ug/l	0.29	11.29	1000	
137 Ba	2.50 ug/l	2.78	4.80	1000	
205 Tl	0.04 ug/l	0.05	7.76	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.50 ug/l	0.56	2.89	1000	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	645958.38	2.65	1367210.50	47.2	30 -	120	
45 Sc	314284.47	0.83	677229.44	46.4	30 -	120	
45 Sc	31969.74	4.56	51699.54	61.8	30 -	120	
45 Sc	1064751.90	0.05	1734110.10	61.4	30 -	120	
72 Ge	70836.24	1.32	152157.89	46.6	30 -	120	
72 Ge	14784.24	4.46	23935.47	61.8	30 -	120	
72 Ge	181348.36	1.01	318037.72	57.0	30 -	120	
115 In	1593992.90	0.48	2383817.30	66.9	30 -	120	
159 Tb	2461880.30	0.74	3312619.80	74.3	30 -	120	
165 Ho	2459754.50	0.61	3267807.00	75.3	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

## Metals Analysis

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES007**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25117**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	Lead (Pb) (Dissolved)	0.60	0.5	0.22	0.11	ug/L	1	10/26/10	10/28/10

Printed: 10/29/10 12:14:07 PM  
APPL-F1-SC-NoMC-REG MDLs

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\075SMPL.D\075SMPL.D#  
 Date Acquired: Oct 28 2010 07:49 pm  
 Operator: SDM  
 Sample Name: AY25117W21  
 Misc Info: 101026A-3015  
 Vial Number: 3402  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD(%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	0.00 ug/l	0.00	78.16	1000	
11 B	46.91 ug/l	52.12	0.33	1000	
23 Na	262300.00 ug/l	291415.30	0.80	25000	>Cal
24 Mg	154600.00 ug/l	171760.60	0.44	50000	>Cal
27 Al	18.31 ug/l	20.34	3.95	20000	
39 K	6632.00 ug/l	7368.15	0.24	20000	
44 Ca	92070.00 ug/l	102289.77	0.69	50000	>Cal
47 Ti	1.97 ug/l	2.19	26.09	1000	
51 V	3.97 ug/l	4.41	0.52	1000	
52 Cr	5.21 ug/l	5.79	1.46	1000	
55 Mn	14.52 ug/l	16.13	0.60	1000	
56 Fe	105.10 ug/l	116.77	1.20	20000	
59 Co	0.69 ug/l	0.77	2.39	1000	
60 Ni	36.91 ug/l	41.01	0.50	1000	
63 Cu	1.18 ug/l	1.31	1.51	1000	
65 Cu	1.26 ug/l	1.40	2.31	1000	
66 Zn	8.25 ug/l	9.16	4.93	1000	
75 As	1.80 ug/l	2.00	6.02	1000	
78 Se	2.61 ug/l	2.90	1.15	1000	
78 Se	2.88 ug/l	3.20	12.58	1000	
88 Sr	1543.00 ug/l	1714.27	0.90	1000	>Cal
88 Sr	1481.00 ug/l	1645.39	0.34	1000	>Cal
95 Mo	1.44 ug/l	1.60	2.54	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.00 ug/l	0.00	51.22	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.03 ug/l	0.03	24.74	1000	
118 Sn	0.25 ug/l	0.27	5.29	1000	
121 Sb	-0.32 ug/l	-0.36	3.44	1000	
137 Ba	62.98 ug/l	69.97	0.33	1000	
205 Tl	-0.01 ug/l	-0.01	12.15	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.54 ug/l	0.60	0.21	1000	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	693799.88	0.86	1367210.50		50.7	30 - 120	
45 Sc	371726.00	0.26	677229.44		54.9	30 - 120	
45 Sc	36650.53	5.81	51699.54		70.9	30 - 120	
45 Sc	1386472.80	0.15	1734110.10		80.0	30 - 120	
72 Ge	74836.54	0.54	152157.89		49.2	30 - 120	
72 Ge	15455.98	5.41	23935.47		64.6	30 - 120	
72 Ge	202727.70	0.51	318037.72		63.7	30 - 120	
115 In	1713733.10	0.76	2383817.30		71.9	30 - 120	
159 Tb	2564033.50	0.76	3312619.80		77.4	30 - 120	
165 Ho	2559911.80	0.30	3267807.00		78.3	30 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

5 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

## Metals Analysis

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

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Attn: Vilma Dupra  
Project: LTM Red Hill Bulk Fuel Storage Facility  
**Sample ID: ES008**  
Sample Collection Date: 10/21/10

ARF: 62931  
**APPL ID: AY25118**

Method	Analyte	Result	LOQ	LOD	DL	Units	DF	Prep Date	Analysis Date
6020	Lead (Pb) (Dissolved)	0.57	0.5	0.22	0.11	ug/L	1	10/26/10	10/28/10

Printed: 10/29/10 12:14:07 PM  
APPL-F1-SC-NoMC-REG MDLs

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\078SMPL.D\078SMPL.D#  
 Date Acquired: Oct 28 2010 08:08 pm  
 Operator: SDM  
 Sample Name: AY25118W05  
 Misc Info: 101026A-3015  
 Vial Number: 3405  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	0.00 ug/l	0.00	455.24	1000	
11 B	47.26 ug/l	52.51	1.24	1000	
23 Na	253400.00 ug/l	281527.40	0.68	25000	>Cal
24 Mg	127200.00 ug/l	141319.20	0.06	50000	>Cal
27 Al	50.36 ug/l	55.95	5.20	20000	
39 K	7298.00 ug/l	8108.08	0.55	20000	
44 Ca	125700.00 ug/l	139652.70	0.30	50000	>Cal
47 Ti	6.38 ug/l	7.09	6.17	1000	
51 V	3.14 ug/l	3.49	1.19	1000	
52 Cr	12.08 ug/l	13.42	0.85	1000	
55 Mn	7.23 ug/l	8.03	2.61	1000	
56 Fe	124.90 ug/l	138.76	0.70	20000	
59 Co	1.54 ug/l	1.71	1.57	1000	
60 Ni	32.42 ug/l	36.02	1.90	1000	
63 Cu	5.31 ug/l	5.90	1.28	1000	
65 Cu	5.94 ug/l	6.60	1.70	1000	
66 Zn	9.31 ug/l	10.34	2.05	1000	
75 As	1.62 ug/l	1.80	5.10	1000	
78 Se	2.57 ug/l	2.85	1.64	1000	
78 Se	2.77 ug/l	3.08	15.86	1000	
88 Sr	2360.00 ug/l	2621.96	1.08	1000	>Cal
88 Sr	2274.00 ug/l	2526.41	0.88	1000	>Cal
95 Mo	1.56 ug/l	1.73	4.23	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.01 ug/l	0.01	21.50	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.02 ug/l	0.02	35.72	1000	
118 Sn	1.23 ug/l	1.37	7.79	1000	
121 Sb	-0.24 ug/l	-0.27	5.20	1000	
137 Ba	123.60 ug/l	137.32	0.69	1000	
205 Tl	0.43 ug/l	0.48	4.07	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.51 ug/l	0.57	3.24	1000	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	674254.25	0.77	1367210.50	49.3	30 -	120	
45 Sc	404465.69	1.26	677229.44	59.7	30 -	120	
45 Sc	40184.90	4.07	51699.54	77.7	30 -	120	
45 Sc	1416204.60	0.58	1734110.10	81.7	30 -	120	
72 Ge	81789.75	0.49	152157.89	53.8	30 -	120	
72 Ge	16630.09	2.80	23935.47	69.5	30 -	120	
72 Ge	213060.36	0.95	318037.72	67.0	30 -	120	
115 In	1766106.50	0.70	2383817.30	74.1	30 -	120	
159 Tb	2595032.80	0.33	3312619.80	78.3	30 -	120	
165 Ho	2595986.30	0.88	3267807.00	79.4	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

5 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**METALS**  
**Calibration Data**

**APPL, INC.**

A.P.P.L. INC.

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.  
ARF No: 62931 SDG: 62931  
Initial Calibration Source: CPI  
Continuing Calibration Source: Environmental Express  
Analysis Date: 10/28/10 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M	
	True	Found 13:15	%R(1)	True CCV1	Found 13:40	%R(1)	True CCV1	Found 14:34		
Lead (Pb)	100	95.84	95.8	50	50.21	100	50	54.09	108	P

(1) Control Limits: Metals 90-110

ILM02.0

25117\_602D\_Opti\_101028B

FORM II (PART 1) - IN

## A.P.P.L. INC.

2A

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.

ARF No: 62931 SDG: 62931

Initial Calibration Source: CPI

Continuing Calibration Source: Environmental Express

Analysis Date: 10/28/10 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M	
	True	Found 13:15	%R(1)	True CCV1	Found 14:58	%R(1)	True CCV1	Found 16:11		
Lead (Pb)	100	95.84	95.8	50	54.59	109	50	48.79	97.6	P

(1) Control Limits: Metals 90-110

ILM02.0

25117\_602D\_Opti\_101028B

FORM II (PART 1) - IN

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: A.P.P.L. INC. Contract: Environet, Inc.  
 ARF No: 62931 SDG: 62931  
 Initial Calibration Source: CPI  
 Continuing Calibration Source: Environmental Express  
 Analysis Date: 10/28/10 Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M	
	True	Found 13:15	%R(1)	True CCV1	Found 19:06	%R(1)	True CCV1	Found 20:14		
Lead (Pb)	100	95.84	95.8	50	51.1	102	50	50.18	100	P

(1) Control Limits: Metals 90-110

ILM02.0

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: Environet, Inc.

ARF No.: 62931

SDG: 62931

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 10/28/10

Analyte	Initial Calibration Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	M
		C	1	C	2	C	3		
Lead (Pb)	.50 U	13:27		13:46		14:40		15:04	15:47

A.P.P.L. INC.

3

BLANKS

Lab Name: A.P.P.L. INC.

Contract: Environet, Inc.

ARF No.: 62931

SDG: 62931

Preparation Blank Matrix (soil/water): water

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

Analysis Date: 10/28/10

Analyte	Initial Calibration Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	M	
		C	1	C	2	C	3			
Lead (Pb)	.50 U	13:27	C	16:17	19:12	C	20:20	15:47	.50 U	P

## ICP INTERFERENCE CHECK SAMPLE

Lab Name: A.P.P.L. INC.  
ARF No.: 62931  
ICP ID Number: Optimus

Contract: Environet, Inc.  
SDG: 62931  
ICS Source: Environmental Express

Analysis Date: 10/28/10

Concentration Units: ug/L

Analyte	True		Initial Found		
	Sol A	Sol AB	Sol A 13:52	Sol AB 14:21	%R(1)
Lead (Pb)		500	0.9529	453.1	90.6

(1) Control Limits: Metals 80-120

25117\_602D\_Opti\_101028B

FORM V - IN

ILM02.0

**Calibration Blank QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\005CAL  
 Date Acquired: Oct 28 2010 12:45 pm  
 Operator: SDM  
 Sample Name: Calibration Blank  
 Misc Info:  
 Vial Number: 1101  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 12:42 pm  
 Sample Type: CalBlk  
 Total Dil Factor: 1.00

**QC&ISTD Elements**

Element	CPS Mean	SD	RSD (%)
6 Li	1367211.00 A	14240.00	1.04
7 (Li)	268095.50 P	1939.00	0.72
9 Be	23.33 P	3.33	14.28
11 B	6525.87 P	109.10	1.67
23 Na	7085.03 P	165.80	2.34
24 Mg	138.89 P	22.20	15.98
27 Al	225.57 P	25.46	11.29
39 K	7934.40 P	632.20	7.97
44 Ca	18.74 P	7.70	41.09
45 Sc	677229.38 P	2318.00	0.34
45 Sc	51699.54 P	1028.00	1.99
45 Sc	1734110.00 A	7601.00	0.44
47 Ti	2.22 P	0.77	34.64
51 V	395.57 P	36.52	9.23
52 Cr	83.11 P	10.10	12.15
55 Mn	55.11 P	3.36	6.09
56 Fe	1542.32 P	131.70	8.54
59 Co	37.33 P	11.62	31.13
60 Ni	10.22 P	3.08	30.12
63 Cu	133.34 P	17.44	13.08
65 Cu	74.67 P	6.11	8.18
66 Zn	120.45 P	16.67	13.84
72 Ge	152157.91 P	476.20	0.31
72 Ge	23935.47 P	399.00	1.67
72 Ge	318037.69 P	2314.00	0.73
75 As	19.56 P	2.71	13.88
78 Se	5.78 P	1.02	17.62
78 Se	3.44 P	1.84	53.30
88 Sr	10.00 P	10.00	100.00
88 Sr	213.34 P	14.53	6.81
95 Mo	527.80 P	37.47	7.10
106 (Cd)	12.22 P	5.09	41.66
107 Ag	167.78 P	32.89	19.60
108 (Cd)	7.78 P	7.70	98.97
111 Cd	14.80 P	3.72	25.14
115 In	2383817.00 A	33690.00	1.41
118 Sn	1786.82 P	127.40	7.13
121 Sb	4863.12 P	32.72	0.67
137 Ba	54.45 P	6.94	12.75
159 Tb	3312620.00 A	17580.00	0.53
165 Ho	3267807.00 A	13320.00	0.41
205 Tl	1025.62 P	63.81	6.22
206 (Pb)	1312.33 P	93.66	7.14
207 (Pb)	1138.97 P	59.67	5.24
208 Pb	5204.99 P	177.10	3.40

## Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\006CALS.D\006CALS.D#  
 Date Acquired: Oct 28 2010 12:51 pm  
 Operator: SDM  
 Sample Name: 101025 Standard 1  
 Misc Info:  
 Vial Number: 1103  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 12:49 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

## QC&amp;ISTD Elements

Element	CPS Mean	SD	RSD(%)	Cal Coef	
6 Li	1347167.00	A	7685.00	0.57	0.0000
7 (Li)	264945.59	P	3217.00	1.21	0.0000
9 Be	2958.13	P	122.80	4.15	0.0000
11 B	7007.21	P	56.24	0.80	0.0000
23 Na	17637.51	P	606.20	3.44	0.0000
24 Mg	1964.62	P	39.50	2.01	0.0000
27 Al	804.49	P	61.13	7.60	0.0000
39 K	10125.60	P	541.80	5.35	0.0000
44 Ca	125.07	P	38.60	30.86	0.0000
45 Sc	687780.50	P	2864.00	0.42	0.0000
45 Sc	51988.93	P	1388.00	2.67	0.0000
45 Sc	1715261.00	A	15160.00	0.88	0.0000
47 Ti	9.33	P	3.53	37.80	0.0000
51 V	1138.72	P	36.00	3.16	0.0000
52 Cr	987.15	P	43.36	4.39	0.0000
55 Mn	546.68	P	3.53	0.65	0.0000
56 Fe	5685.93	P	113.00	1.99	0.0000
59 Co	1551.65	P	76.86	4.95	0.0000
60 Ni	437.35	P	15.03	3.44	0.0000
63 Cu	1869.91	P	102.60	5.49	0.0000
65 Cu	925.82	P	50.32	5.44	0.0000
66 Zn	548.02	P	16.17	2.95	0.0000
72 Ge	154497.70	P	415.90	0.27	0.0000
72 Ge	23862.79	P	609.60	2.55	0.0000
72 Ge	316384.59	P	2073.00	0.66	0.0000
75 As	98.33	P	4.81	4.89	0.0000
78 Se	122.78	P	4.76	3.88	0.0000
78 Se	10.78	P	1.39	12.88	0.0000
88 Sr	551.14	P	27.96	5.07	0.0000
88 Sr	11556.72	P	223.00	1.93	0.0000
95 Mo	875.61	P	37.17	4.25	0.0000
106 (Cd)	127.78	P	54.81	42.89	0.0000
107 Ag	763.38	P	5.78	0.76	0.0000
108 (Cd)	100.00	P	15.28	15.28	0.0000
111 Cd	1212.65	P	27.84	2.30	0.0000
115 In	2377690.00	A	17320.00	0.73	0.0000
118 Sn	2342.48	P	22.19	0.95	0.0000
121 Sb	5024.29	P	129.80	2.58	0.0000
137 Ba	1760.16	P	117.30	6.66	0.0000
159 Tb	3314432.00	A	20730.00	0.63	0.0000
165 Ho	3274504.00	A	19360.00	0.59	0.0000
205 Tl	11517.01	P	231.50	2.01	0.0000
206 (Pb)	4571.97	P	23.66	0.52	0.0000
207 (Pb)	4035.13	P	82.23	2.04	0.0000
208 Pb	18412.91	P	28.69	0.16	0.0000

## ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1347166.80	0.57	1367210.50	98.5	30 -	120
45 Sc	687780.50	0.42	677229.44	101.6	30 -	120
45 Sc	51988.93	2.67	51699.54	100.6	30 -	120
45 Sc	1715261.40	0.88	1734110.10	98.9	30 -	120
72 Ge	154497.67	0.27	152157.89	101.5	30 -	120
72 Ge	23862.79	2.55	23935.47	99.7	30 -	120
72 Ge	316384.63	0.66	318037.72	99.5	30 -	120
115 In	2377689.80	0.73	2383817.30	99.7	30 -	120
159 Tb	3314431.80	0.63	3312619.80	100.1	30 -	120
165 Ho	3274504.00	0.59	3267807.00	100.2	30 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Pass  
 ISTD: Pass

## Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\007CALS.D\007CALS.D#  
 Date Acquired: Oct 28 2010 12:57 pm  
 Operator: SDM  
 Sample Name: 101025 Standard 2  
 Misc Info:  
 Vial Number: 1104  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 12:55 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

## QC&amp;ISTD Elements

Element	CPS Mean	SD	RSD (%)	Cal Coef
6 Li	1357822.00 A	11830.00	0.87	0.0000
7 (Li)	265880.59 P	4257.00	1.60	-1.0000
9 Be	6926.05 P	51.89	0.75	1.0000
11 B	10012.12 P	38.39	0.38	1.0000
23 Na	25892.76 P	466.70	1.80	1.0000
24 Mg	15742.27 P	155.30	0.99	1.0000
27 Al	2531.38 P	119.50	4.72	1.0000
39 K	11483.25 P	1013.00	8.82	1.0000
44 Ca	467.53 P	62.35	13.34	1.0000
45 Sc	682005.69 P	832.30	0.12	0.0000
45 Sc	50079.30 P	488.10	0.97	0.0000
45 Sc	1730029.00 A	11050.00	0.64	0.0000
47 Ti	62.67 P	1.33	2.13	1.0000
51 V	2078.82 P	80.02	3.85	1.0000
52 Cr	2197.06 P	112.50	5.12	1.0000
55 Mn	1192.06 P	59.57	5.00	1.0000
56 Fe	36733.11 P	946.50	2.58	1.0000
59 Co	3438.62 P	40.72	1.18	1.0000
60 Ni	945.82 P	37.72	3.99	1.0000
63 Cu	2614.02 P	77.56	2.97	1.0000
65 Cu	1322.29 P	50.64	3.83	1.0000
66 Zn	477.35 P	26.63	5.58	1.0000
72 Ge	153527.91 P	932.70	0.61	0.0000
72 Ge	23181.86 P	377.20	1.63	0.0000
72 Ge	317355.81 P	2826.00	0.89	0.0000
75 As	205.67 P	10.15	4.94	1.0000
78 Se	276.23 P	2.69	0.98	1.0000
78 Se	19.22 P	3.36	17.46	1.0000
88 Sr	1203.42 P	106.00	8.81	1.0000
88 Sr	25515.41 P	85.34	0.33	1.0000
95 Mo	4726.39 P	120.00	2.54	1.0000
106 (Cd)	257.79 P	29.88	11.59	1.0000
107 Ag	6397.05 P	303.00	4.74	1.0000
108 (Cd)	197.79 P	20.09	10.16	1.0000
111 Cd	2851.68 P	75.64	2.65	1.0000
115 In	2382400.00 A	6569.00	0.28	0.0000
118 Sn	8963.93 P	61.88	0.69	1.0000
121 Sb	13466.15 P	252.10	1.87	1.0000
137 Ba	3890.63 P	87.45	2.25	1.0000
159 Tb	3304585.00 A	41700.00	1.26	0.0000
165 Ho	3248092.00 A	25130.00	0.77	0.0000
205 Tl	25327.94 P	209.60	0.83	1.0000
206 (Pb)	9353.29 P	136.60	1.46	1.0000
207 (Pb)	8345.99 P	156.90	1.88	1.0000
208 Pb	37710.15 P	150.10	0.40	1.0000

## ISTD Elements

Element	CPS Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1357822.60	0.87	1367210.50	99.3	30 -	120
45 Sc	682005.69	0.12	677229.44	100.7	30 -	120
45 Sc	50079.30	0.97	51699.54	96.9	30 -	120
45 Sc	1730029.00	0.64	1734110.10	99.8	30 -	120
72 Ge	153527.92	0.61	152157.89	100.9	30 -	120
72 Ge	23181.86	1.63	23935.47	96.9	30 -	120
72 Ge	317355.78	0.89	318037.72	99.8	30 -	120
115 In	2382400.30	0.28	2383817.30	99.9	30 -	120
159 Tb	3304584.80	1.26	3312619.80	99.8	30 -	120
165 Ho	3248091.50	0.77	3267807.00	99.4	30 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

## Data Results:

Analytes: Pass  
 ISTD: Pass

**Calibration Standard QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\008CALS.D\008CALS.D#  
 Date Acquired: Oct 28 2010 01:03 pm  
 Operator: SDM  
 Sample Name: 101025 Standard 3  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:01 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

**QC&ISTD Elements**

Element	CPS Mean	SD	RSD (%)	Cal Coef
6 Li	1358535.00 A	3817.00	0.28	0.0000
7 (Li)	264773.50 P	1074.00	0.41	-0.3158
9 Be	349345.19 P	3783.00	1.08	0.9391
11 B	260637.59 P	2413.00	0.93	0.9980
23 Na	780331.50 P	18150.00	2.33	0.8917
24 Mg	764745.19 P	19060.00	2.49	0.9999
27 Al	115379.10 P	2705.00	2.34	0.9900
39 K	187527.09 P	5061.00	2.70	0.8841
44 Ca	22022.06 P	347.40	1.58	0.9920
45 Sc	675318.38 P	5747.00	0.85	0.0000
45 Sc	51758.57 P	1250.00	2.42	0.0000
45 Sc	1742232.00 A	14630.00	0.84	0.0000
47 Ti	2633.58 P	75.31	2.86	0.9999
51 V	84056.97 P	1940.00	2.31	0.9420
52 Cr	104284.70 P	2293.00	2.20	0.9459
55 Mn	57521.92 P	1643.00	2.86	0.9441
56 Fe	1744897.00 A	42500.00	2.44	0.9999
59 Co	167136.80 P	2928.00	1.75	0.9393
60 Ni	46793.73 P	711.30	1.52	0.9348
63 Cu	121099.40 P	2632.00	2.17	0.8085
65 Cu	58661.36 P	1365.00	2.33	0.8158
66 Zn	17401.41 P	276.80	1.59	0.4716
72 Ge	152868.20 P	627.10	0.41	0.0000
72 Ge	23960.72 P	626.30	2.61	0.0000
72 Ge	314386.91 P	1933.00	0.61	0.0000
75 As	9279.10 P	251.80	2.71	0.9463
78 Se	13177.91 P	125.50	0.95	0.9388
78 Se	837.91 P	6.34	0.76	0.9310
88 Sr	57771.26 P	1238.00	2.14	0.9346
88 Sr	1285071.00 A	7184.00	0.56	0.9306
95 Mo	212130.09 P	951.90	0.45	0.9999
106 (Cd)	12330.71 P	320.50	2.60	0.9216
107 Ag	304257.91 P	1752.00	0.58	1.0000
108 (Cd)	9189.61 P	89.76	0.98	0.9148
111 Cd	136565.50 P	925.40	0.68	0.9414
115 In	2386530.00 A	3475.00	0.15	0.0000
118 Sn	368221.69 P	1248.00	0.34	0.9998
121 Sb	434271.59 P	956.10	0.22	0.9973
137 Ba	185372.50 P	985.40	0.53	0.9324
159 Tb	3353698.00 A	32520.00	0.97	0.0000
165 Ho	3329407.00 A	13160.00	0.40	0.0000
205 Tl	1223683.00 P	16410.00	1.34	0.9385
206 (Pb)	415992.00 P	4778.00	1.15	0.9480
207 (Pb)	368386.41 P	3870.00	1.05	0.9493
208 Pb	1677902.00 P	17040.00	1.02	0.9482

**ISTD Elements**

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1358535.30	0.28	1367210.50	99.4	30 -	120
45 Sc	675318.44	0.85	677229.44	99.7	30 -	120
45 Sc	51758.57	2.42	51699.54	100.1	30 -	120
45 Sc	1742232.40	0.84	1734110.10	100.5	30 -	120
72 Ge	152868.23	0.41	152157.89	100.5	30 -	120
72 Ge	23960.72	2.61	23935.47	100.1	30 -	120
72 Ge	314386.88	0.61	318037.72	98.9	30 -	120
115 In	2386530.00	0.15	2383817.30	100.1	30 -	120
159 Tb	3353698.50	0.97	3312619.80	101.2	30 -	120
165 Ho	3329407.00	0.40	3267807.00	101.9	30 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

**Calibration Standard QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\009CALS.D\009CALS.D#  
 Date Acquired: Oct 28 2010 01:09 pm  
 Operator: SDM  
 Sample Name: 101025 Standard 4  
 Misc Info:  
 Vial Number: 1106  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:07 pm  
 Sample Type: CalStd  
 Total Dil Factor: 1.00

**QC&ISTD Elements**

Element	CPS Mean	SD	RSD(%)	Cal Coef
6 Li	1367205.00 A	7440.00	0.54	0.0000
7 (Li)	264387.59 P	2422.00	0.92	-0.5069
9 Be	695343.50 P	4284.00	0.62	1.0000
11 B	516680.19 P	2123.00	0.41	1.0000
23 Na	1498299.00 A	34700.00	2.32	1.0000
24 Mg	1505684.00 A	27090.00	1.80	1.0000
27 Al	226844.00 P	5731.00	2.53	1.0000
39 K	361185.59 P	9567.00	2.65	1.0000
44 Ca	43633.01 P	1900.00	4.35	1.0000
45 Sc	680651.50 P	3275.00	0.48	0.0000
45 Sc	51735.95 P	1172.00	2.27	0.0000
45 Sc	1736043.00 A	5479.00	0.32	0.0000
47 Ti	5278.68 P	72.05	1.36	1.0000
51 V	165198.59 P	3634.00	2.20	1.0000
52 Cr	205443.30 P	4020.00	1.96	1.0000
55 Mn	112869.70 P	2037.00	1.80	1.0000
56 Fe	3362105.00 A	72630.00	2.16	1.0000
59 Co	326753.41 P	7800.00	2.39	1.0000
60 Ni	91039.74 P	2010.00	2.21	1.0000
63 Cu	235586.91 P	3789.00	1.61	0.9999
65 Cu	115282.20 P	2002.00	1.74	0.9999
66 Zn	34179.82 P	466.00	1.36	0.9998
72 Ge	151541.09 P	1104.00	0.73	0.0000
72 Ge	23734.46 P	459.20	1.93	0.0000
72 Ge	311701.41 P	1851.00	0.59	0.0000
75 As	18423.76 P	534.50	2.90	1.0000
78 Se	25972.61 P	34.07	0.13	1.0000
78 Se	1666.65 P	58.33	3.50	1.0000
88 Sr	114062.40 P	3073.00	2.69	1.0000
88 Sr	2529310.00 A	12680.00	0.50	1.0000
95 Mo	428440.50 P	2518.00	0.59	1.0000
106 (Cd)	24107.95 P	443.00	1.84	1.0000
107 Ag	598398.13 P	5027.00	0.84	1.0000
108 (Cd)	18075.32 P	291.50	1.61	1.0000
111 Cd	267598.59 P	2063.00	0.77	1.0000
115 In	2366609.00 A	9344.00	0.39	0.0000
118 Sn	729999.81 P	4306.00	0.59	1.0000
121 Sb	856544.38 P	610.30	0.07	1.0000
137 Ba	365785.91 P	3256.00	0.89	1.0000
159 Tb	3310223.00 A	40740.00	1.23	0.0000
165 Ho	3303389.00 A	50260.00	1.52	0.0000
205 Tl	2465539.00 A	29580.00	1.20	1.0000
206 (Pb)	812439.13 P	9354.00	1.15	1.0000
207 (Pb)	727315.88 P	8774.00	1.21	1.0000
208 Pb	3329295.00 A	33900.00	1.02	1.0000

**ISTD Elements**

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1367205.00	0.54	1367210.50	100.0	30 -	120
45 Sc	680651.50	0.48	677229.44	100.5	30 -	120
45 Sc	51735.95	2.27	51699.54	100.1	30 -	120
45 Sc	1736042.80	0.32	1734110.10	100.1	30 -	120
72 Ge	151541.16	0.73	152157.89	99.6	30 -	120
72 Ge	23734.46	1.93	23935.47	99.2	30 -	120
72 Ge	311701.38	0.59	318037.72	98.0	30 -	120
115 In	2366609.30	0.39	2383817.30	99.3	30 -	120
159 Tb	3310223.30	1.23	3312619.80	99.9	30 -	120
165 Ho	3303389.00	1.52	3267807.00	101.1	30 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

**QCS QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\010\_QCS.D\010\_QCS.D#  
 Date Acquired: Oct 28 2010 01:15 pm  
 Operator: SDM  
 Sample Name: ICV 101025  
 Misc Info:  
 Vial Number: 1107  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: QCS  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	RSD (%)	Expected QC Range (%)	Flag
7 Li	----- ug/l	-----	100.00 90 - 110	
9 Be	97.48 ug/l	1.16	100.00 90 - 110	
11 B	98.87 ug/l	1.38	100.00 90 - 110	
23 Na	2422.00 ug/l	0.32	2500.00 90 - 110	
24 Mg	2432.00 ug/l	0.36	2500.00 90 - 110	
27 Al	2436.00 ug/l	0.45	2500.00 90 - 110	
39 K	2434.00 ug/l	0.50	2500.00 90 - 110	
44 Ca	2568.00 ug/l	1.52	2500.00 90 - 110	
47 Ti	95.98 ug/l	0.72	100.00 90 - 110	
51 V	96.10 ug/l	0.28	100.00 90 - 110	
52 Cr	97.56 ug/l	0.61	100.00 90 - 110	
55 Mn	97.20 ug/l	0.32	100.00 90 - 110	
56 Fe	2426.00 ug/l	0.26	2500.00 90 - 110	
59 Co	98.17 ug/l	0.44	100.00 90 - 110	
60 Ni	97.21 ug/l	0.74	100.00 90 - 110	
63 Cu	97.69 ug/l	0.12	100.00 90 - 110	
65 Cu	97.43 ug/l	1.43	100.00 90 - 110	
66 Zn	95.00 ug/l	1.48	100.00 90 - 110	
75 As	96.06 ug/l	1.06	100.00 90 - 110	
78 Se	97.52 ug/l	0.32	100.00 90 - 110	
78 Se	95.69 ug/l	1.46	100.00 90 - 110	
88 Sr	93.67 ug/l	0.80	100.00 90 - 110	
88 Sr	94.15 ug/l	0.68	100.00 90 - 110	
95 Mo	96.48 ug/l	0.68	100.00 90 - 110	
106 (Cd)	----- ug/l	-----	100.00 90 - 110	
107 Ag	49.56 ug/l	0.26	50.00 90 - 110	
108 (Cd)	----- ug/l	-----	100.00 90 - 110	
111 Cd	97.23 ug/l	0.54	100.00 90 - 110	
118 Sn	42.71 ug/l	6.29	50.00 90 - 110	Fail
121 Sb	102.10 ug/l	0.73	100.00 90 - 110	
137 Ba	96.18 ug/l	0.77	100.00 90 - 110	
205 Tl	97.02 ug/l	0.90	100.00 90 - 110	
206 (Pb)	----- ug/l	-----	100.00 90 - 110	
207 (Pb)	----- ug/l	-----	100.00 90 - 110	
208 Pb	95.84 ug/l	0.97	100.00 90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1360229.10	1.87	1367210.50	99.5	30 -	120	
45 Sc	681380.69	0.16	677229.44	100.6	30 -	120	
45 Sc	51461.74	2.33	51699.54	99.5	30 -	120	
45 Sc	1743837.10	0.40	1734110.10	100.6	30 -	120	
72 Ge	151843.28	0.31	152157.89	99.8	30 -	120	
72 Ge	23737.82	1.39	23935.47	99.2	30 -	120	
72 Ge	312890.84	0.79	318037.72	98.4	30 -	120	
115 In	2374669.80	0.39	2383817.30	99.6	30 -	120	
159 Tb	3331951.80	0.68	3312619.80	100.6	30 -	120	
165 Ho	3280780.30	0.51	3267807.00	100.4	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\012\_CCB.D\012\_CCB.D#  
 Date Acquired: Oct 28 2010 01:27 pm  
 Operator: SDM  
 Sample Name: ICB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	-----	#VALUE!	
9 Be	0.01 ug/l	25.94	0.12	
11 B	-0.54 ug/l	5.61	15.00	
23 Na	-0.81 ug/l	20.48	77.10	
24 Mg	0.13 ug/l	59.01	7.50	
27 Al	-1.62 ug/l	4.66	3.96	
39 K	-0.93 ug/l	536.11	19.20	
44 Ca	-0.29 ug/l	179.61	90.00	
47 Ti	-0.01 ug/l	255.28	0.78	
51 V	-0.21 ug/l	2.90	0.21	
52 Cr	-0.02 ug/l	16.19	0.12	
55 Mn	-0.01 ug/l	28.93	0.18	
56 Fe	-0.41 ug/l	10.35	40.80	
59 Co	0.00 ug/l	234.30	0.09	
60 Ni	0.00 ug/l	44.84	0.48	
63 Cu	-0.02 ug/l	34.68	0.39	
65 Cu	-0.01 ug/l	56.42	0.39	
66 Zn	-0.18 ug/l	6.47	6.90	
75 As	-0.05 ug/l	17.80	0.27	
78 Se	0.03 ug/l	27.36	0.30	
78 Se	-0.03 ug/l	156.97	0.30	
88 Sr	0.00 ug/l	173.97	0.03	
88 Sr	0.00 ug/l	66.57	0.03	
95 Mo	0.08 ug/l	5.68	0.21	
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	-0.01 ug/l	12.38	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.00 ug/l	110.13	0.06	
118 Sn	-0.21 ug/l	4.13	0.30	
121 Sb	-0.41 ug/l	0.97	0.03	
137 Ba	0.01 ug/l	37.06	0.12	
205 Tl	0.01 ug/l	3.69	0.03	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.03 ug/l	22.69	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1336940.00	1.16	1367210.50	97.8	30 -	120	
45 Sc	574040.88	2.89	677229.44	84.8	30 -	120	
45 Sc	49179.70	2.92	51699.54	95.1	30 -	120	
45 Sc	1535798.00	0.17	1734110.10	88.6	30 -	120	
72 Ge	142782.61	0.18	152157.89	93.8	30 -	120	
72 Ge	23653.60	2.28	23935.47	98.8	30 -	120	
72 Ge	292279.81	0.73	318037.72	91.9	30 -	120	
115 In	2207333.80	0.61	2383817.30	92.6	30 -	120	
159 Tb	3076613.00	0.32	3312619.80	92.9	30 -	120	
165 Ho	3018248.00	0.38	3267807.00	92.4	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\014\_CCV.D\014\_CCV.D#  
 Date Acquired: Oct 28 2010 01:40 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	50.98 ug/l	0.26	50.00	90 - 110	
11 B	49.54 ug/l	1.17	50.00	90 - 110	
23 Na	1265.00 ug/l	0.81	1250.00	90 - 110	
24 Mg	2494.00 ug/l	0.48	2500.00	90 - 110	
27 Al	1006.00 ug/l	0.90	1000.00	90 - 110	
39 K	1007.00 ug/l	0.64	1000.00	90 - 110	
44 Ca	2545.00 ug/l	0.70	2500.00	90 - 110	
47 Ti	50.89 ug/l	1.36	50.00	90 - 110	
51 V	49.57 ug/l	0.55	50.00	90 - 110	
52 Cr	49.62 ug/l	0.80	50.00	90 - 110	
55 Mn	50.20 ug/l	0.43	50.00	90 - 110	
56 Fe	1011.00 ug/l	0.75	1000.00	90 - 110	
59 Co	49.90 ug/l	0.50	50.00	90 - 110	
60 Ni	49.97 ug/l	0.96	50.00	90 - 110	
63 Cu	50.02 ug/l	0.52	50.00	90 - 110	
65 Cu	50.27 ug/l	1.50	50.00	90 - 110	
66 Zn	50.11 ug/l	1.18	50.00	90 - 110	
75 As	50.13 ug/l	0.67	50.00	90 - 110	
78 Se	50.04 ug/l	0.35	50.00	90 - 110	
78 Se	50.55 ug/l	1.27	50.00	90 - 110	
88 Sr	50.30 ug/l	1.03	50.00	90 - 110	
88 Sr	50.40 ug/l	0.63	50.00	90 - 110	
95 Mo	49.92 ug/l	0.21	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.93 ug/l	0.45	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	50.35 ug/l	1.27	50.00	90 - 110	
118 Sn	49.80 ug/l	0.87	50.00	90 - 110	
121 Sb	49.64 ug/l	1.15	50.00	90 - 110	
137 Ba	49.58 ug/l	0.84	50.00	90 - 110	
205 Tl	49.55 ug/l	0.45	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.21 ug/l	0.54	50.00	90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1359522.00	1.29	1367210.50	99.4	30 - 120		
45 Sc	679260.31	0.22	677229.44	100.3	30 - 120		
45 Sc	52289.84	2.05	51699.54	101.1	30 - 120		
45 Sc	1706563.50	0.26	1734110.10	98.4	30 - 120		
72 Ge	151690.36	0.28	152157.89	99.7	30 - 120		
72 Ge	23972.58	2.31	23935.47	100.2	30 - 120		
72 Ge	308294.53	0.39	318037.72	96.9	30 - 120		
115 In	2363495.30	0.70	2383817.30	99.1	30 - 120		
159 Tb	3279724.50	1.14	3312619.80	99.0	30 - 120		
165 Ho	3260365.80	1.33	3267807.00	99.8	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\015\_CCB.D\015\_CCB.D#  
 Date Acquired: Oct 28 2010 01:46 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	RSD(%)	High Limit	Flag
7 (Li)	----- ug/l	-----	#VALUE!	
9 Be	0.01 ug/l	17.18	0.12	
11 B	-0.43 ug/l	7.21	15.00	
23 Na	0.04 ug/l	849.76	77.10	
24 Mg	0.68 ug/l	30.50	7.50	
27 Al	-1.38 ug/l	14.02	3.96	
39 K	-1.27 ug/l	348.86	19.20	
44 Ca	-0.46 ug/l	119.94	90.00	
47 Ti	-0.04 ug/l	0.00	0.78	
51 V	-0.21 ug/l	1.43	0.21	
52 Cr	-0.01 ug/l	41.80	0.12	
55 Mn	0.00 ug/l	3755.20	0.18	
56 Fe	-0.25 ug/l	5.27	40.80	
59 Co	0.01 ug/l	62.25	0.09	
60 Ni	0.02 ug/l	78.96	0.48	
63 Cu	0.00 ug/l	305.65	0.39	
65 Cu	-0.02 ug/l	41.86	0.39	
66 Zn	-0.13 ug/l	31.00	6.90	
75 As	-0.03 ug/l	58.01	0.27	
78 Se	0.05 ug/l	29.99	0.30	
78 Se	0.04 ug/l	36.99	0.30	
88 Sr	0.02 ug/l	53.86	0.03	
88 Sr	0.01 ug/l	9.46	0.03	
95 Mo	0.22 ug/l	5.37	0.21	Fail
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	-0.01 ug/l	9.50	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.01 ug/l	47.74	0.06	
118 Sn	-0.19 ug/l	5.53	0.30	
121 Sb	-0.27 ug/l	3.36	0.03	
137 Ba	0.02 ug/l	19.41	0.12	
205 Tl	0.03 ug/l	17.58	0.03	Fail
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.03 ug/l	15.59	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1323089.50	0.62	1367210.50	96.8	30 -	120	
45 Sc	579694.38	1.96	677229.44	85.6	30 -	120	
45 Sc	48869.13	3.54	51699.54	94.5	30 -	120	
45 Sc	1515945.40	0.22	1734110.10	87.4	30 -	120	
72 Ge	144683.53	0.37	152157.89	95.1	30 -	120	
72 Ge	23503.38	2.57	23935.47	98.2	30 -	120	
72 Ge	288147.69	0.31	318037.72	90.6	30 -	120	
115 In	2187821.30	0.29	2383817.30	91.8	30 -	120	
159 Tb	3050559.30	0.41	3312619.80	92.1	30 -	120	
165 Ho	2998080.80	0.63	3267807.00	91.7	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\016SMPL.D\016SMPL.D#  
 Date Acquired: Oct 28 2010 01:52 pm  
 Operator: SDM  
 Sample Name: ICSA 101025  
 Misc Info:  
 Vial Number: 2102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.00  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 Li	----- ug/l	#VALUE!	-----	0	
9 Be	0.35 ug/l	0.35	2.66	1000	
11 B	0.67 ug/l	0.67	43.60	1000	
23 Na	89400.00 ug/l	89400.00	1.99	25000	>Cal
24 Mg	88650.00 ug/l	88650.00	2.15	50000	>Cal
27 Al	89730.00 ug/l	89730.00	2.79	20000	>Cal
39 K	91620.00 ug/l	91620.00	2.61	20000	>Cal
44 Ca	93800.00 ug/l	93800.00	1.89	50000	>Cal
47 Ti	2010.00 ug/l	2010.00	2.78	1000	>Cal
51 V	0.46 ug/l	0.46	4.33	1000	
52 Cr	1.23 ug/l	1.23	2.68	1000	
55 Mn	6.30 ug/l	6.30	2.40	1000	
56 Fe	89290.00 ug/l	89290.00	2.23	20000	>Cal
59 Co	1.80 ug/l	1.80	3.44	1000	
60 Ni	2.06 ug/l	2.06	4.24	1000	
63 Cu	1.10 ug/l	1.10	0.96	1000	
65 Cu	1.14 ug/l	1.14	5.60	1000	
66 Zn	1.98 ug/l	1.98	3.28	1000	
75 As	0.65 ug/l	0.65	4.26	1000	
78 Se	0.46 ug/l	0.46	6.59	1000	
78 Se	0.54 ug/l	0.54	12.66	1000	
88 Sr	2.76 ug/l	2.76	0.98	1000	
88 Sr	2.67 ug/l	2.67	1.54	1000	
95 Mo	1799.00 ug/l	1799.00	0.27	1000	>Cal
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.31 ug/l	0.31	0.71	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.87 ug/l	0.87	2.20	1000	
118 Sn	0.26 ug/l	0.26	3.20	1000	
121 Sb	0.96 ug/l	0.96	2.38	1000	
137 Ba	3.02 ug/l	3.02	2.97	1000	
205 Tl	0.68 ug/l	0.68	0.68	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	0.95 ug/l	0.95	2.49	1000	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1295766.50	0.79	1367210.50	94.8	30 -	120	
45 Sc	724582.81	0.27	677229.44	107.0	30 -	120	
45 Sc	51256.70	1.22	51699.54	99.1	30 -	120	
45 Sc	1779595.60	0.70	1734110.10	102.6	30 -	120	
72 Ge	152827.45	0.38	152157.89	100.4	30 -	120	
72 Ge	23096.54	2.88	23935.47	96.5	30 -	120	
72 Ge	327453.31	0.80	318037.72	103.0	30 -	120	
115 In	2215466.50	0.57	2383817.30	92.9	30 -	120	
159 Tb	3266228.00	0.23	3312619.80	98.6	30 -	120	
165 Ho	3232414.00	0.32	3267807.00	98.9	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

8 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\020SMPL.D\020SMPL.D#  
 Date Acquired: Oct 28 2010 02:16 pm  
 Operator: SDM  
 Sample Name: LDR 101025  
 Misc Info:  
 Vial Number: 2101  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.00  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	#VALUE!	-----	0	
9 Be	760.70 ug/l	760.70	9.41	1000	
11 B	1013.00 ug/l	1013.00	8.20	1000	>Cal
23 Na	22570.00 ug/l	22570.00	0.70	25000	
24 Mg	44790.00 ug/l	44790.00	0.52	50000	
27 Al	18530.00 ug/l	18530.00	0.19	20000	
39 K	18150.00 ug/l	18150.00	0.23	20000	
44 Ca	45980.00 ug/l	45980.00	0.31	50000	
47 Ti	970.20 ug/l	970.20	1.13	1000	
51 V	952.80 ug/l	952.80	0.92	1000	
52 Cr	936.10 ug/l	936.10	1.12	1000	
55 Mn	892.70 ug/l	892.70	0.87	1000	
56 Fe	17940.00 ug/l	17940.00	1.69	20000	
59 Co	914.60 ug/l	914.60	1.73	1000	
60 Ni	877.10 ug/l	877.10	1.47	1000	
63 Cu	876.50 ug/l	876.50	1.01	1000	
65 Cu	904.50 ug/l	904.50	0.78	1000	
66 Zn	847.90 ug/l	847.90	1.12	1000	
75 As	926.30 ug/l	926.30	0.50	1000	
78 Se	929.30 ug/l	929.30	0.97	1000	
78 Se	846.30 ug/l	846.30	0.91	1000	
88 Sr	930.00 ug/l	930.00	0.49	1000	
88 Sr	890.80 ug/l	890.80	8.66	1000	
95 Mo	950.10 ug/l	950.10	8.43	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	401.50 ug/l	401.50	9.21	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	893.20 ug/l	893.20	9.52	1000	
118 Sn	937.00 ug/l	937.00	10.02	1000	
121 Sb	918.40 ug/l	918.40	9.64	1000	
137 Ba	940.80 ug/l	940.80	9.88	1000	
205 Tl	848.60 ug/l	848.60	10.23	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	841.90 ug/l	841.90	9.86	1000	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1164100.00	8.08	1367210.50	85.1	30 -	120	
45 Sc	718816.88	0.52	677229.44	106.1	30 -	120	
45 Sc	50419.71	1.46	51699.54	97.5	30 -	120	
45 Sc	1781793.30	9.04	1734110.10	102.7	30 -	120	
72 Ge	152757.14	0.26	152157.89	100.4	30 -	120	
72 Ge	22263.85	0.99	23935.47	93.0	30 -	120	
72 Ge	308478.28	8.31	318037.72	97.0	30 -	120	
115 In	2302398.00	9.61	2383817.30	96.6	30 -	120	
159 Tb	3381065.30	9.81	3312619.80	102.1	30 -	120	
165 Ho	3375399.80	9.69	3267807.00	103.3	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytics:	Fail
ISTD:	Pass

## ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\021ICSB.D\021ICSB.D#  
 Date Acquired: Oct 28 2010 02:21 pm  
 Acc. Method: 62-1028.M  
 Operator: SDM  
 Sample Name: ICSAB 101025  
 Misc Info:  
 Vial Number: 2103  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal. Update: Oct 28 2010 01:13 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	215.70	2.57	250	86.3	80 - 120	-
11 B	6	3	5.93	3.80	---	-	-	-
23 Na	45	2	96110.00	0.24	---	-	-	-
24 Mg	45	2	94230.00	0.65	---	-	-	-
27 Al	45	2	93170.00	0.70	---	-	-	-
39 K	45	2	96280.00	0.92	---	-	-	-
44 Ca	45	2	96670.00	0.94	---	-	-	-
47 Ti	45	2	2088.00	0.63	2000	104.4	80 - 120	-
51 V	45	2	258.50	0.47	250	103.4	80 - 120	-
52 Cr	45	2	246.50	0.20	250	98.6	80 - 120	-
55 Mn	45	2	244.40	0.24	250	97.8	80 - 120	-
56 Fe	45	2	93320.00	0.55	---	-	-	-
59 Co	45	2	239.70	0.90	250	95.9	80 - 120	-
60 Ni	45	2	450.80	0.51	500	90.2	80 - 120	-
63 Cu	45	2	226.40	0.07	250	90.6	80 - 120	-
65 Cu	72	2	236.50	1.73	250	94.6	80 - 120	-
66 Zn	72	2	419.60	2.05	500	83.9	80 - 120	-
75 As	72	2	245.30	0.78	250	98.1	80 - 120	-
78 Se	72	1	239.10	0.34	250	95.6	80 - 120	-
78 Se	72	2	224.90	1.00	250	90.0	80 - 120	-
88 Sr	72	2	3.19	2.71	---	-	-	-
88 Sr	72	3	3.15	1.06	---	-	-	-
95 Mo	72	3	2193.00	0.81	2000	109.7	80 - 120	-
106 Cd	---	3	-----	-----	---	-	-	-
107 Ag	115	3	414.60	1.67	500	82.9	80 - 120	-
108 Cd	---	3	-----	-----	---	-	-	-
111 Cd	115	3	471.00	0.89	500	94.2	80 - 120	-
118 Sn	115	3	2.06	4.03	---	-	-	-
121 Sb	115	3	267.40	0.62	250	107.0	80 - 120	-
137 Ba	115	3	265.50	0.92	250	106.2	80 - 120	-
205 Tl	159	3	237.80	0.57	250	95.1	80 - 120	-
206 Pb	---	3	-----	-----	---	-	-	-
207 Pb	---	3	-----	-----	---	-	-	-
208 Pb	159	3	453.10	0.57	500	90.6	80 - 120	-

## ISTD Elements

Element	Tune	CPS Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	3	1168538	0.67	1367211	85.5	30 - 120	-
45 Sc	1	708975	0.26	677229	104.7	30 - 120	-
45 Sc	2	48864	1.52	51700	94.5	30 - 120	-
45 Sc	3	1702198	1.01	1734110	98.2	30 - 120	-
72 Ge	1	149326	0.54	152158	98.1	30 - 120	-
72 Ge	2	21522	2.78	23935	89.9	30 - 120	-
72 Ge	3	310592	0.12	318038	97.7	30 - 120	-
115 In	3	2175260	0.23	2383817	91.3	30 - 120	-
159 Tb	3	3184056	0.90	3312620	96.1	30 - 120	-
165 Ho	3	3155092	0.46	3267807	96.6	30 - 120	-

Tune File# 1 c:\icpcchem\1\7500\h2.u  
 Tune File# 2 c:\icpcchem\1\7500\he.u  
 Tune File# 3 c:\icpcchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

0 :Element Failures                    0 :Max. Number of Failures Allowed  
 0 :ISTD Failures                    0 :Max. Number of ISTD Failures Allowed

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\023\_CCV.D\023\_CCV.D#  
 Date Acquired: Oct 28 2010 02:34 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	43.43 ug/l	1.20	50.00	90 - 110	Fail
11 B	55.62 ug/l	0.58	50.00	90 - 110	Fail
23 Na	1303.00 ug/l	0.28	1250.00	90 - 110	
24 Mg	2533.00 ug/l	0.26	2500.00	90 - 110	
27 Al	977.30 ug/l	0.80	1000.00	90 - 110	
39 K	1010.00 ug/l	1.33	1000.00	90 - 110	
44 Ca	2500.00 ug/l	0.57	2500.00	90 - 110	
47 Ti	50.25 ug/l	3.48	50.00	90 - 110	
51 V	50.73 ug/l	0.69	50.00	90 - 110	
52 Cr	51.15 ug/l	0.83	50.00	90 - 110	
55 Mn	49.96 ug/l	0.11	50.00	90 - 110	
56 Fe	1024.00 ug/l	0.61	1000.00	90 - 110	
59 Co	51.57 ug/l	0.69	50.00	90 - 110	
60 Ni	52.02 ug/l	1.23	50.00	90 - 110	
63 Cu	52.02 ug/l	0.74	50.00	90 - 110	
65 Cu	51.39 ug/l	0.63	50.00	90 - 110	
66 Zn	49.78 ug/l	1.17	50.00	90 - 110	
75 As	50.44 ug/l	0.55	50.00	90 - 110	
78 Se	50.14 ug/l	0.67	50.00	90 - 110	
78 Se	47.99 ug/l	3.77	50.00	90 - 110	
88 Sr	48.15 ug/l	0.37	50.00	90 - 110	
88 Sr	51.37 ug/l	0.63	50.00	90 - 110	
95 Mo	50.99 ug/l	0.47	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.97 ug/l	0.77	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	50.01 ug/l	1.50	50.00	90 - 110	
118 Sn	50.61 ug/l	0.81	50.00	90 - 110	
121 Sb	50.68 ug/l	0.62	50.00	90 - 110	
137 Ba	50.02 ug/l	0.82	50.00	90 - 110	
205 Tl	49.66 ug/l	0.87	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.65 ug/l	0.88	50.00	90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1148653.00	1.26	1367210.50	84.0	30 - 120		
45 Sc	711527.63	0.09	677229.44	105.1	30 - 120		
45 Sc	51203.97	1.97	51699.54	99.0	30 - 120		
45 Sc	1767539.50	1.37	1734110.10	101.9	30 - 120		
72 Ge	159679.19	0.27	152157.89	104.9	30 - 120		
72 Ge	23751.87	1.14	23935.47	99.2	30 - 120		
72 Ge	322213.25	0.30	318037.72	101.3	30 - 120		
115 In	2466954.30	0.80	2383817.30	103.5	30 - 120		
159 Tb	3465265.30	0.15	3312619.80	104.6	30 - 120		
165 Ho	3428593.00	0.79	3267807.00	104.9	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\024\_CCB.D\024\_CCB.D#  
 Date Acquired: Oct 28 2010 02:40 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	-----	#VALUE!	
9 Be	0.02 ug/l	16.34	0.12	
11 B	0.13 ug/l	14.74	15.00	
23 Na	2.56 ug/l	3.45	77.10	
24 Mg	0.94 ug/l	22.48	7.50	
27 Al	-1.30 ug/l	12.66	3.96	
39 K	0.95 ug/l	530.50	19.20	
44 Ca	0.75 ug/l	203.35	90.00	
47 Ti	-0.02 ug/l	158.35	0.78	
51 V	-0.22 ug/l	1.82	0.21	
52 Cr	-0.02 ug/l	9.37	0.12	
55 Mn	-0.01 ug/l	61.90	0.18	
56 Fe	-0.05 ug/l	53.60	40.80	
59 Co	0.01 ug/l	9.20	0.09	
60 Ni	0.01 ug/l	45.38	0.48	
63 Cu	0.00 ug/l	138.40	0.39	
65 Cu	-0.01 ug/l	23.56	0.39	
66 Zn	-0.17 ug/l	11.44	6.90	
75 As	-0.01 ug/l	175.93	0.27	
78 Se	0.08 ug/l	28.56	0.30	
78 Se	0.13 ug/l	49.35	0.30	
88 Sr	0.01 ug/l	89.03	0.03	
88 Sr	0.01 ug/l	2.40	0.03	
95 Mo	0.73 ug/l	2.93	0.21	Fail
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	0.01 ug/l	12.33	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.02 ug/l	20.09	0.06	
118 Sn	-0.18 ug/l	3.31	0.30	
121 Sb	-0.14 ug/l	7.50	0.03	
137 Ba	0.02 ug/l	36.91	0.12	
205 Tl	0.04 ug/l	9.99	0.03	Fail
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.04 ug/l	10.09	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1219477.60	1.04	1367210.50	89.2	30 -	120	
45 Sc	645888.75	2.52	677229.44	95.4	30 -	120	
45 Sc	51351.85	2.18	51699.54	99.3	30 -	120	
45 Sc	1772120.60	0.41	1734110.10	102.2	30 -	120	
72 Ge	161841.33	0.48	152157.89	106.4	30 -	120	
72 Ge	24810.85	2.02	23935.47	103.7	30 -	120	
72 Ge	335778.91	0.35	318037.72	105.6	30 -	120	
115 In	2489153.50	0.88	2383817.30	104.4	30 -	120	
159 Tb	3462711.30	0.59	3312619.80	104.5	30 -	120	
165 Ho	3412176.00	1.31	3267807.00	104.4	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\027\_CCV.D\027\_CCV.D#  
 Date Acquired: Oct 28 2010 02:58 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	43.51 ug/l	1.21	50.00	90 - 110	Fail
11 B	56.85 ug/l	0.74	50.00	90 - 110	Fail
23 Na	1311.00 ug/l	0.71	1250.00	90 - 110	
24 Mg	2544.00 ug/l	0.63	2500.00	90 - 110	
27 Al	985.60 ug/l	1.35	1000.00	90 - 110	
39 K	1003.00 ug/l	0.15	1000.00	90 - 110	
44 Ca	2482.00 ug/l	1.01	2500.00	90 - 110	
47 Ti	51.02 ug/l	3.47	50.00	90 - 110	
51 V	50.50 ug/l	1.33	50.00	90 - 110	
52 Cr	51.04 ug/l	1.26	50.00	90 - 110	
55 Mn	50.13 ug/l	0.44	50.00	90 - 110	
56 Fe	1023.00 ug/l	0.30	1000.00	90 - 110	
59 Co	51.66 ug/l	0.82	50.00	90 - 110	
60 Ni	51.59 ug/l	0.52	50.00	90 - 110	
63 Cu	51.75 ug/l	0.74	50.00	90 - 110	
65 Cu	51.56 ug/l	0.21	50.00	90 - 110	
66 Zn	49.81 ug/l	0.93	50.00	90 - 110	
75 As	49.61 ug/l	0.64	50.00	90 - 110	
78 Se	50.08 ug/l	0.57	50.00	90 - 110	
78 Se	46.67 ug/l	3.39	50.00	90 - 110	
88 Sr	47.86 ug/l	1.71	50.00	90 - 110	
88 Sr	51.08 ug/l	0.71	50.00	90 - 110	
95 Mo	49.98 ug/l	0.89	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.76 ug/l	1.19	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	49.76 ug/l	0.37	50.00	90 - 110	
118 Sn	50.30 ug/l	0.25	50.00	90 - 110	
121 Sb	51.68 ug/l	0.32	50.00	90 - 110	
137 Ba	50.24 ug/l	0.47	50.00	90 - 110	
205 Tl	49.92 ug/l	0.43	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	51.12 ug/l	1.11	50.00	90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1132649.60	1.29	1367210.50	82.8	30 - 120		
45 Sc	707816.13	0.39	677229.44	104.5	30 - 120		
45 Sc	50047.88	2.40	51699.54	96.8	30 - 120		
45 Sc	1747352.10	0.78	1734110.10	100.8	30 - 120		
72 Ge	157351.61	0.32	152157.89	103.4	30 - 120		
72 Ge	23261.55	1.66	23935.47	97.2	30 - 120		
72 Ge	315869.53	0.61	318037.72	99.3	30 - 120		
115 In	2425684.30	0.53	2383817.30	101.8	30 - 120		
159 Tb	3413062.30	0.56	3312619.80	103.0	30 - 120		
165 Ho	3384083.80	0.22	3267807.00	103.6	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\028\_CCB.D\028\_CCB.D#  
 Date Acquired: Oct 28 2010 03:04 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: CCB  
 Total Dil Factor: 1.00

**QC Elements**

Element	Conc.	RSD (%)	High Limit	Flag
7 (Li)	----- ug/l	-----	#VALUE!	
9 Be	0.01 ug/l	24.55	0.12	
11 B	0.18 ug/l	22.92	15.00	
23 Na	2.27 ug/l	1.39	77.10	
24 Mg	0.42 ug/l	28.44	7.50	
27 Al	-1.61 ug/l	7.60	3.96	
39 K	2.46 ug/l	245.58	19.20	
44 Ca	0.17 ug/l	211.22	90.00	
47 Ti	0.01 ug/l	266.38	0.78	
51 V	-0.22 ug/l	1.38	0.21	
52 Cr	-0.01 ug/l	26.48	0.12	
55 Mn	0.01 ug/l	194.93	0.18	
56 Fe	-0.28 ug/l	11.80	40.80	
59 Co	0.00 ug/l	282.63	0.09	
60 Ni	0.01 ug/l	28.79	0.48	
63 Cu	0.00 ug/l	449.29	0.39	
65 Cu	-0.02 ug/l	27.05	0.39	
66 Zn	-0.19 ug/l	18.84	6.90	
75 As	-0.04 ug/l	21.33	0.27	
78 Se	0.05 ug/l	21.31	0.30	
78 Se	0.12 ug/l	75.90	0.30	
88 Sr	0.01 ug/l	158.71	0.03	
88 Sr	0.01 ug/l	25.89	0.03	
95 Mo	0.34 ug/l	4.03	0.21	Fail
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	0.00 ug/l	18.28	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.02 ug/l	49.31	0.06	
118 Sn	-0.19 ug/l	2.44	0.30	
121 Sb	-0.26 ug/l	1.75	0.03	
137 Ba	0.02 ug/l	56.15	0.12	
205 Tl	-0.01 ug/l	50.00	0.03	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.04 ug/l	8.45	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1203140.10	1.24	1367210.50	88.0	30 -	120	
45 Sc	622950.31	2.19	677229.44	92.0	30 -	120	
45 Sc	50199.84	2.07	51699.54	97.1	30 -	120	
45 Sc	1765803.60	0.43	1734110.10	101.8	30 -	120	
72 Ge	157894.11	0.27	152157.89	103.8	30 -	120	
72 Ge	24371.67	1.21	23935.47	101.8	30 -	120	
72 Ge	332086.03	0.40	318037.72	104.4	30 -	120	
115 In	2475106.00	0.61	2383817.30	103.8	30 -	120	
159 Tb	3422934.50	0.48	3312619.80	103.3	30 -	120	
165 Ho	3358973.80	0.73	3267807.00	102.8	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

1 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\039\_CCV.D\039\_CCV.D#  
 Date Acquired: Oct 28 2010 04:11 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	43.26 ug/l	1.56	50.00	90 - 110	Fail
11 B	57.89 ug/l	0.73	50.00	90 - 110	Fail
23 Na	1339.00 ug/l	1.24	1250.00	90 - 110	
24 Mg	2499.00 ug/l	0.98	2500.00	90 - 110	
27 Al	968.00 ug/l	0.26	1000.00	90 - 110	
39 K	1007.00 ug/l	0.35	1000.00	90 - 110	
44 Ca	2490.00 ug/l	1.72	2500.00	90 - 110	
47 Ti	49.30 ug/l	0.91	50.00	90 - 110	
51 V	49.99 ug/l	0.77	50.00	90 - 110	
52 Cr	49.84 ug/l	1.29	50.00	90 - 110	
55 Mn	48.88 ug/l	0.85	50.00	90 - 110	
56 Fe	989.30 ug/l	0.83	1000.00	90 - 110	
59 Co	50.22 ug/l	0.49	50.00	90 - 110	
60 Ni	50.21 ug/l	1.46	50.00	90 - 110	
63 Cu	50.26 ug/l	0.35	50.00	90 - 110	
65 Cu	50.48 ug/l	0.32	50.00	90 - 110	
66 Zn	48.70 ug/l	0.40	50.00	90 - 110	
75 As	49.58 ug/l	1.54	50.00	90 - 110	
78 Se	49.14 ug/l	0.83	50.00	90 - 110	
78 Se	45.91 ug/l	0.90	50.00	90 - 110	
88 Sr	47.64 ug/l	0.88	50.00	90 - 110	
88 Sr	49.95 ug/l	0.61	50.00	90 - 110	
95 Mo	48.54 ug/l	0.66	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	25.35 ug/l	1.66	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	49.80 ug/l	1.04	50.00	90 - 110	
118 Sn	50.32 ug/l	0.80	50.00	90 - 110	
121 Sb	51.00 ug/l	0.89	50.00	90 - 110	
137 Ba	49.93 ug/l	1.54	50.00	90 - 110	
205 Tl	49.71 ug/l	0.83	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	48.79 ug/l	0.85	50.00	90 - 110	

**ISTD Elements**

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1359386.90	1.04	1367210.50	99.4	30 - 120	
45 Sc	843129.50	0.32	677229.44	124.5	30 - 120	IS Fail
45 Sc	61543.11	1.34	51699.54	119.0	30 - 120	
45 Sc	2025294.80	0.47	1734110.10	116.8	30 - 120	
72 Ge	184887.09	0.98	152157.89	121.5	30 - 120	IS Fail
72 Ge	28056.11	0.61	23935.47	117.2	30 - 120	
72 Ge	363926.16	1.16	318037.72	114.4	30 - 120	
115 In	2687549.50	0.67	2383817.30	112.7	30 - 120	
159 Tb	3674039.30	0.39	3312619.80	110.9	30 - 120	
165 Ho	3657085.50	0.86	3267807.00	111.9	30 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.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

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\040\_CCB.D\040\_CCB.D#  
 Date Acquired: Oct 28 2010 04:17 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	59.84	0.12	
11 B	1.66 ug/l	3.44	15.00	
23 Na	39.43 ug/l	2.25	77.10	
24 Mg	3.42 ug/l	21.95	7.50	
27 Al	-1.46 ug/l	9.51	3.96	
39 K	2.70 ug/l	233.88	19.20	
44 Ca	1.94 ug/l	46.00	90.00	
47 Ti	-0.02 ug/l	171.37	0.78	
51 V	-0.21 ug/l	1.05	0.21	
52 Cr	-0.02 ug/l	2.51	0.12	
55 Mn	0.00 ug/l	726.15	0.18	
56 Fe	-0.36 ug/l	18.55	40.80	
59 Co	0.00 ug/l	166.59	0.09	
60 Ni	0.02 ug/l	48.02	0.48	
63 Cu	-0.01 ug/l	44.95	0.39	
65 Cu	-0.02 ug/l	33.92	0.39	
66 Zn	-0.02 ug/l	335.59	6.90	
75 As	-0.03 ug/l	28.32	0.27	
78 Se	0.05 ug/l	38.82	0.30	
78 Se	0.10 ug/l	41.14	0.30	
88 Sr	0.05 ug/l	47.33	0.03	Fail
88 Sr	0.03 ug/l	14.08	0.03	
95 Mo	0.29 ug/l	3.46	0.21	Fail
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	-0.01 ug/l	19.33	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.00 ug/l	94.49	0.06	
118 Sn	1.86 ug/l	7.22	0.30	Fail
121 Sb	-0.22 ug/l	6.62	0.03	
137 Ba	0.00 ug/l	797.43	0.12	
205 Tl	-0.02 ug/l	14.75	0.03	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.04 ug/l	11.75	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1414856.50	1.50	1367210.50	103.5	30 -	120	
45 Sc	725623.50	2.89	677229.44	107.1	30 -	120	
45 Sc	61200.26	1.54	51699.54	118.4	30 -	120	
45 Sc	1969160.60	0.78	1734110.10	113.6	30 -	120	
72 Ge	183312.88	0.57	152157.89	120.5	30 -	120	IS Fail
72 Ge	29183.68	2.36	23935.47	121.9	30 -	120	IS Fail
72 Ge	371949.47	1.00	318037.72	117.0	30 -	120	
115 In	2699331.00	1.12	2383817.30	113.2	30 -	120	
159 Tb	3620793.50	0.50	3312619.80	109.3	30 -	120	
165 Ho	3551916.00	0.55	3267807.00	108.7	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

3 :Element Failures 0 :Max. Number of Failures Allowed  
 2 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Fail

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\068\_CCV.D\068\_CCV.D#  
 Date Acquired: Oct 28 2010 07:06 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	44.94 ug/l	0.96	50.00 90 - 110	Fail
11 B	62.87 ug/l	1.82	50.00 90 - 110	Fail
23 Na	1272.00 ug/l	0.90	1250.00 90 - 110	
24 Mg	2469.00 ug/l	0.93	2500.00 90 - 110	
27 Al	1013.00 ug/l	0.94	1000.00 90 - 110	
39 K	1000.00 ug/l	0.18	1000.00 90 - 110	
44 Ca	2511.00 ug/l	1.36	2500.00 90 - 110	
47 Ti	49.35 ug/l	7.82	50.00 90 - 110	
51 V	48.39 ug/l	1.27	50.00 90 - 110	
52 Cr	48.18 ug/l	0.80	50.00 90 - 110	
55 Mn	50.78 ug/l	0.27	50.00 90 - 110	
56 Fe	1003.00 ug/l	0.63	1000.00 90 - 110	
59 Co	48.78 ug/l	1.64	50.00 90 - 110	
60 Ni	47.81 ug/l	0.50	50.00 90 - 110	
63 Cu	48.03 ug/l	1.30	50.00 90 - 110	
65 Cu	46.17 ug/l	0.51	50.00 90 - 110	
66 Zn	47.39 ug/l	1.64	50.00 90 - 110	
75 As	47.17 ug/l	1.79	50.00 90 - 110	
78 Se	50.37 ug/l	0.83	50.00 90 - 110	
78 Se	48.90 ug/l	4.08	50.00 90 - 110	
88 Sr	51.88 ug/l	0.81	50.00 90 - 110	
88 Sr	51.25 ug/l	0.27	50.00 90 - 110	
95 Mo	50.70 ug/l	0.63	50.00 90 - 110	
106 (Cd)	----- ug/l	-----	50.00 90 - 110	
107 Ag	23.87 ug/l	1.05	25.00 90 - 110	
108 (Cd)	----- ug/l	-----	50.00 90 - 110	
111 Cd	48.42 ug/l	1.33	50.00 90 - 110	
118 Sn	50.17 ug/l	0.15	50.00 90 - 110	
121 Sb	49.77 ug/l	0.98	50.00 90 - 110	
137 Ba	50.59 ug/l	0.84	50.00 90 - 110	
205 Tl	50.07 ug/l	1.07	50.00 90 - 110	
206 (Pb)	----- ug/l	-----	50.00 90 - 110	
207 (Pb)	----- ug/l	-----	50.00 90 - 110	
208 Pb	51.10 ug/l	0.59	50.00 90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	684661.31	2.80	1367210.50	50.1	30 -	120	
45 Sc	393763.38	1.68	677229.44	58.1	30 -	120	
45 Sc	36686.14	4.01	51699.54	71.0	30 -	120	
45 Sc	1126658.90	1.56	1734110.10	65.0	30 -	120	
72 Ge	93097.90	1.19	152157.89	61.2	30 -	120	
72 Ge	17575.89	2.39	23935.47	73.4	30 -	120	
72 Ge	210868.17	1.46	318037.72	66.3	30 -	120	
115 In	1781676.10	0.56	2383817.30	74.7	30 -	120	
159 Tb	2636271.00	0.37	3312619.80	79.6	30 -	120	
165 Ho	2634968.50	0.65	3267807.00	80.6	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\069\_CCB.D\069\_CCB.D#  
 Date Acquired: Oct 28 2010 07:12 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	107.05	0.12	
11 B	0.79 ug/l	7.63	15.00	
23 Na	24.82 ug/l	2.37	77.10	
24 Mg	0.23 ug/l	39.29	7.50	
27 Al	-1.63 ug/l	15.25	3.96	
39 K	-2.63 ug/l	242.41	19.20	
44 Ca	-0.71 ug/l	189.47	90.00	
47 Ti	0.25 ug/l	190.65	0.78	
51 V	-0.21 ug/l	2.44	0.21	
52 Cr	-0.03 ug/l	13.47	0.12	
55 Mn	-0.01 ug/l	129.88	0.18	
56 Fe	-0.42 ug/l	3.33	40.80	
59 Co	0.00 ug/l	16.44	0.09	
60 Ni	0.00 ug/l	255.74	0.48	
63 Cu	-0.03 ug/l	5.97	0.39	
65 Cu	-0.04 ug/l	7.65	0.39	
66 Zn	-0.14 ug/l	47.40	6.90	
75 As	-0.04 ug/l	34.03	0.27	
78 Se	0.06 ug/l	38.57	0.30	
78 Se	0.03 ug/l	94.36	0.30	
88 Sr	0.00 ug/l	1470.30	0.03	
88 Sr	0.01 ug/l	40.90	0.03	
95 Mo	0.21 ug/l	11.29	0.21	Fail
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	0.02 ug/l	12.98	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.00 ug/l	125.99	0.06	
118 Sn	1.87 ug/l	6.18	0.30	Fail
121 Sb	-0.31 ug/l	4.52	0.03	
137 Ba	0.01 ug/l	81.02	0.12	
205 Tl	-0.01 ug/l	87.19	0.03	
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.07 ug/l	7.45	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range(%)	Flag
6 Li	732381.44	2.65	1367210.50	53.6	30 -	120	
45 Sc	356165.69	1.93	677229.44	52.6	30 -	120	
45 Sc	35869.92	4.01	51699.54	69.4	30 -	120	
45 Sc	1086355.10	1.82	1734110.10	62.6	30 -	120	
72 Ge	92002.53	0.52	152157.89	60.5	30 -	120	
72 Ge	17826.16	3.68	23935.47	74.5	30 -	120	
72 Ge	212879.66	1.07	318037.72	66.9	30 -	120	
115 In	1775342.90	0.34	2383817.30	74.5	30 -	120	
159 Tb	2581907.00	0.94	3312619.80	77.9	30 -	120	
165 Ho	2555548.50	0.73	3267807.00	78.2	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCV QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\079\_CCV.D\079\_CCV.D#  
 Date Acquired: Oct 28 2010 08:14 pm  
 Operator: SDM  
 Sample Name: CCV 101025  
 Misc Info:  
 Vial Number: 1105  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	42.94 ug/l	2.70	50.00	90 - 110	Fail
11 B	62.86 ug/l	4.93	50.00	90 - 110	Fail
23 Na	1266.00 ug/l	0.56	1250.00	90 - 110	
24 Mg	2446.00 ug/l	0.61	2500.00	90 - 110	
27 Al	991.90 ug/l	0.17	1000.00	90 - 110	
39 K	1000.00 ug/l	0.49	1000.00	90 - 110	
44 Ca	2482.00 ug/l	1.43	2500.00	90 - 110	
47 Ti	49.00 ug/l	3.38	50.00	90 - 110	
51 V	48.32 ug/l	0.41	50.00	90 - 110	
52 Cr	48.19 ug/l	0.27	50.00	90 - 110	
55 Mn	49.86 ug/l	0.98	50.00	90 - 110	
56 Fe	990.40 ug/l	0.34	1000.00	90 - 110	
59 Co	48.77 ug/l	0.70	50.00	90 - 110	
60 Ni	48.55 ug/l	0.59	50.00	90 - 110	
63 Cu	48.44 ug/l	0.68	50.00	90 - 110	
65 Cu	47.57 ug/l	0.57	50.00	90 - 110	
66 Zn	47.71 ug/l	1.07	50.00	90 - 110	
75 As	48.23 ug/l	0.23	50.00	90 - 110	
78 Se	49.92 ug/l	4.21	50.00	90 - 110	
78 Se	47.23 ug/l	1.88	50.00	90 - 110	
88 Sr	51.46 ug/l	0.84	50.00	90 - 110	
88 Sr	51.78 ug/l	4.20	50.00	90 - 110	
95 Mo	51.28 ug/l	4.57	50.00	90 - 110	
106 (Cd)	----- ug/l	-----	50.00	90 - 110	
107 Ag	24.35 ug/l	3.73	25.00	90 - 110	
108 (Cd)	----- ug/l	-----	50.00	90 - 110	
111 Cd	48.83 ug/l	3.76	50.00	90 - 110	
118 Sn	49.67 ug/l	4.18	50.00	90 - 110	
121 Sb	49.66 ug/l	4.10	50.00	90 - 110	
137 Ba	51.31 ug/l	3.71	50.00	90 - 110	
205 Tl	49.64 ug/l	3.95	50.00	90 - 110	
206 (Pb)	----- ug/l	-----	50.00	90 - 110	
207 (Pb)	----- ug/l	-----	50.00	90 - 110	
208 Pb	50.18 ug/l	3.81	50.00	90 - 110	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	671650.88	5.76	1367210.50	49.1	30 - 120		
45 Sc	370722.66	2.96	677229.44	54.7	30 - 120		
45 Sc	39681.07	2.99	51699.54	76.8	30 - 120		
45 Sc	1201210.00	3.84	1734110.10	69.3	30 - 120		
72 Ge	90967.19	3.23	152157.89	59.8	30 - 120		
72 Ge	18695.66	2.93	23935.47	78.1	30 - 120		
72 Ge	223865.06	4.83	318037.72	70.4	30 - 120		
115 In	1848269.30	4.46	2383817.30	77.5	30 - 120		
159 Tb	2665265.30	4.51	3312619.80	80.5	30 - 120		
165 Ho	2643631.30	4.31	3267807.00	80.9	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**CCB QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\080\_CCB.D\080\_CCB.D#  
 Date Acquired: Oct 28 2010 08:20 pm  
 Operator: SDM  
 Sample Name: CCB 101025  
 Misc Info:  
 Vial Number: 1102  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	81.55	0.12	
11 B	0.01 ug/l	168.48	15.00	
23 Na	28.40 ug/l	1.38	77.10	
24 Mg	0.46 ug/l	27.59	7.50	
27 Al	-1.52 ug/l	17.14	3.96	
39 K	0.47 ug/l	1448.10	19.20	
44 Ca	0.26 ug/l	472.32	90.00	
47 Ti	-0.01 ug/l	20.85	0.78	
51 V	-0.22 ug/l	2.37	0.21	
52 Cr	-0.03 ug/l	16.70	0.12	
55 Mn	-0.01 ug/l	60.03	0.18	
56 Fe	-0.39 ug/l	3.05	40.80	
59 Co	-0.01 ug/l	24.54	0.09	
60 Ni	0.00 ug/l	4074.00	0.48	
63 Cu	-0.03 ug/l	2.10	0.39	
65 Cu	-0.03 ug/l	28.33	0.39	
66 Zn	-0.08 ug/l	35.67	6.90	
75 As	-0.05 ug/l	8.09	0.27	
78 Se	0.05 ug/l	35.49	0.30	
78 Se	0.09 ug/l	78.59	0.30	
88 Sr	0.01 ug/l	31.36	0.03	
88 Sr	0.02 ug/l	11.51	0.03	
95 Mo	0.16 ug/l	12.37	0.21	
106 (Cd)	----- ug/l	-----	#VALUE!	
107 Ag	0.00 ug/l	102.84	0.09	
108 (Cd)	----- ug/l	-----	#VALUE!	
111 Cd	0.00 ug/l	223.26	0.06	
118 Sn	1.69 ug/l	17.59	0.30	Fail
121 Sb	-0.40 ug/l	0.32	0.03	
137 Ba	0.01 ug/l	74.98	0.12	
205 Tl	0.11 ug/l	16.99	0.03	Fail
206 (Pb)	----- ug/l	-----	#VALUE!	
207 (Pb)	----- ug/l	-----	#VALUE!	
208 Pb	-0.08 ug/l	4.10	0.33	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	725583.88	2.02	1367210.50	53.1	30 -	120	
45 Sc	300515.41	5.06	677229.44	44.4	30 -	120	
45 Sc	37736.23	4.48	51699.54	73.0	30 -	120	
45 Sc	1164448.30	1.23	1734110.10	67.1	30 -	120	
72 Ge	87541.76	2.88	152157.89	57.5	30 -	120	
72 Ge	18958.93	2.98	23935.47	79.2	30 -	120	
72 Ge	222973.03	1.16	318037.72	70.1	30 -	120	
115 In	1811094.30	0.84	2383817.30	76.0	30 -	120	
159 Tb	2588294.50	0.33	3312619.80	78.1	30 -	120	
165 Ho	2554459.50	0.35	3267807.00	78.2	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

2 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

## **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) (Dissolved)	0.22 U	0.5	0.22	0.11	ug/L	10/26/10	10/28/10	#602D-101026A-AY24864

Metals SC-Blank-REG MDLs  
Printed: 10/29/10 12:14:11 PM

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\035SMPL.D\035SMPL.D#  
 Date Acquired: Oct 28 2010 03:47 pm  
 Operator: SDM  
 Sample Name: 101026A BLK  
 Misc Info: 101026A-3015  
 Vial Number: 3302  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	34.40	1000	
11 B	-0.06 ug/l	-0.07	41.61	1000	
23 Na	9.52 ug/l	10.58	5.29	25000	
24 Mg	0.63 ug/l	0.70	5.40	50000	
27 Al	-0.80 ug/l	-0.89	24.54	20000	
39 K	4.09 ug/l	4.55	127.49	20000	
44 Ca	10.24 ug/l	11.38	37.16	50000	
47 Ti	-0.02 ug/l	-0.02	4.04	1000	
51 V	-0.21 ug/l	-0.23	2.01	1000	
52 Cr	0.00 ug/l	0.00	418.43	1000	
55 Mn	0.04 ug/l	0.04	14.37	1000	
56 Fe	-0.28 ug/l	-0.31	2.94	20000	
59 Co	0.01 ug/l	0.01	25.54	1000	
60 Ni	0.02 ug/l	0.03	71.64	1000	
63 Cu	0.06 ug/l	0.07	4.18	1000	
65 Cu	0.05 ug/l	0.06	10.76	1000	
66 Zn	0.11 ug/l	0.12	71.41	1000	
75 As	-0.03 ug/l	-0.03	21.12	1000	
78 Se	0.05 ug/l	0.06	19.05	1000	
78 Se	0.04 ug/l	0.04	269.93	1000	
88 Sr	0.02 ug/l	0.02	39.03	1000	
88 Sr	0.01 ug/l	0.02	10.50	1000	
95 Mo	0.07 ug/l	0.08	9.11	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	0.00 ug/l	-0.01	21.31	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	0.01 ug/l	0.01	56.72	1000	
118 Sn	-0.17 ug/l	-0.19	2.00	1000	
121 Sb	-0.32 ug/l	-0.36	0.68	1000	
137 Ba	0.03 ug/l	0.03	19.79	1000	
205 Tl	-0.02 ug/l	-0.02	10.60	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	-0.05 ug/l	-0.06	2.91	1000	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1249943.10	1.82	1367210.50	91.4	30 -	120	
45 Sc	618695.81	3.25	677229.44	91.4	30 -	120	
45 Sc	51019.72	2.59	51699.54	98.7	30 -	120	
45 Sc	1700946.00	0.76	1734110.10	98.1	30 -	120	
72 Ge	155259.25	0.54	152157.89	102.0	30 -	120	
72 Ge	24664.73	2.07	23935.47	103.0	30 -	120	
72 Ge	323428.38	0.82	318037.72	101.7	30 -	120	
115 In	2404491.80	0.52	2383817.30	100.9	30 -	120	
159 Tb	3324117.30	0.67	3312619.80	100.3	30 -	120	
165 Ho	3290713.50	0.29	3267807.00	100.7	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

# Laboratory Control Spike Recovery

## METALS

APPL Inc.  
908 North Temperance Avenue  
Clovis, CA 93611

Method	Compound Name	Spike Level ug/L	SPK Result ug/L	SPK % Recovery	Recovery Limits	Extract Date	Analysis Date	QC Group
6020	Lead (Pb) (Dissolved)	250	253	101	80-120	10/26/10	10/28/10	#602D-101026A-AY24864

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Comments:

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\033SMPL.D\033SMPL.D#  
 Date Acquired: Oct 28 2010 03:34 pm  
 Operator: SDM  
 Sample Name: 101026A LCS  
 Misc Info: 101026A-3015  
 Vial Number: 3303  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 pm  
 Sample Type: Sample  
 Prep Dil Factor: 1.11  
 Total Dil Factor: 1.11

**QC Elements**

Element	Conc.	Corr. Conc.	RSD (%)	High Limit	Flag
7 Li	----- ug/l	#VALUE!	-----	0	
9 Be	37.53 ug/l	41.70	0.21	1000	
11 B	265.30 ug/l	294.75	0.53	1000	
23 Na	23040.00 ug/l	25597.44	1.21	25000	
24 Mg	22830.00 ug/l	25364.13	1.20	50000	
27 Al	1942.00 ug/l	2157.56	1.44	20000	
39 K	4763.00 ug/l	5291.69	1.22	20000	
44 Ca	23790.00 ug/l	26430.69	0.56	50000	
47 Ti	251.80 ug/l	279.75	0.91	1000	
51 V	240.10 ug/l	266.75	1.02	1000	
52 Cr	237.60 ug/l	263.97	0.81	1000	
55 Mn	234.80 ug/l	260.86	1.08	1000	
56 Fe	973.50 ug/l	1081.56	0.40	20000	
59 Co	232.40 ug/l	258.20	1.27	1000	
60 Ni	224.20 ug/l	249.09	1.39	1000	
63 Cu	221.50 ug/l	246.09	1.18	1000	
65 Cu	237.60 ug/l	263.97	0.15	1000	
66 Zn	396.60 ug/l	440.62	0.34	1000	
75 As	199.70 ug/l	221.87	0.42	1000	
78 Se	172.60 ug/l	191.76	0.32	1000	
78 Se	168.50 ug/l	187.20	1.71	1000	
88 Sr	254.60 ug/l	282.86	0.91	1000	
88 Sr	252.80 ug/l	280.86	0.41	1000	
95 Mo	259.60 ug/l	288.42	0.68	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	90.97 ug/l	101.07	0.40	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	42.26 ug/l	46.95	0.96	1000	
118 Sn	247.30 ug/l	274.75	0.90	1000	
121 Sb	212.00 ug/l	235.53	1.04	1000	
137 Ba	240.10 ug/l	266.75	0.38	1000	
205 Tl	227.70 ug/l	252.97	0.78	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	227.60 ug/l	252.86	0.66	1000	

**ISTD Elements**

Element	CPS	Mean	RSD (%)	Ref Value	Rec (%)	QC Range (%)	Flag
6 Li	1227272.90	0.66	1367210.50	89.8	30 - 120		
45 Sc	674597.56	1.23	677229.44	99.6	30 - 120		
45 Sc	52289.17	3.16	51699.54	101.1	30 - 120		
45 Sc	1823453.00	0.72	1734110.10	105.2	30 - 120		
72 Ge	142078.77	0.70	152157.89	93.4	30 - 120		
72 Ge	22415.93	2.32	23935.47	93.7	30 - 120		
72 Ge	306548.56	0.31	318037.72	96.4	30 - 120		
115 In	2403756.80	0.54	2383817.30	100.8	30 - 120		
159 Tb	3461030.80	0.45	3312619.80	104.5	30 - 120		
165 Ho	3441361.50	0.33	3267807.00	105.3	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

0 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Pass  
 ISTD: Pass

# Matrix Spike Recoveries

## METALS

APPL ID: **101026W-25117 MS - 148407**

APPL Inc.

908 North Temperance Avenue

Clovis, CA 93611

Sample ID: AY25117

Client ID: ES007

Method	Compound Name	Spike Lvl ug/L	Matrix Res ug/L	SPK Res ug/L	DUP Res ug/L	SPK % Recovery	DUP % Recovery	RPD Max	Recovery Limits	Extract Date-Spk	Analysis Date-Spk	Extract Date-Dup	Analysis Date-Dup	QC Group	QC Sample	
6020	Lead (Pb) (Dissolved)	250	0.60	245	239	97.8	95.4	2.5	20	80-120	10/26/10	10/28/10	10/26/10	10/28/10	148407	AY25117

360

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

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\076SMPL.D\076SMPL.D#  
 Date Acquired: Oct 28 2010 07:56 pm  
 Operator: SDM  
 Sample Name: AY25117W22 MS  
 Misc Info: 101026A-3015  
 Vial Number: 3403  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	31.19 ug/l	34.65	1.57	1000	
11 B	300.50 ug/l	333.86	1.18	1000	
23 Na	266300.00 ug/l	295859.30	0.32	25000	>Cal
24 Mg	148600.00 ug/l	165094.60	0.29	50000	>Cal
27 Al	1921.00 ug/l	2134.23	0.34	20000	
39 K	11550.00 ug/l	12832.05	1.26	20000	
44 Ca	136300.00 ug/l	151429.30	0.71	50000	>Cal
47 Ti	252.50 ug/l	280.53	1.33	1000	
51 V	234.50 ug/l	260.53	0.54	1000	
52 Cr	232.60 ug/l	258.42	0.53	1000	
55 Mn	238.80 ug/l	265.31	0.67	1000	
56 Fe	1125.00 ug/l	1249.88	0.42	20000	
59 Co	210.40 ug/l	233.75	0.73	1000	
60 Ni	226.40 ug/l	251.53	0.88	1000	
63 Cu	197.30 ug/l	219.20	0.46	1000	
65 Cu	222.10 ug/l	246.75	1.38	1000	
66 Zn	372.80 ug/l	414.18	1.81	1000	
75 As	205.10 ug/l	227.87	0.75	1000	
78 Se	193.10 ug/l	214.53	5.86	1000	
78 Se	184.00 ug/l	204.42	1.63	1000	
88 Sr	2441.00 ug/l	2711.95	0.97	1000	>Cal
88 Sr	2324.00 ug/l	2581.96	0.85	1000	>Cal
95 Mo	280.30 ug/l	311.41	0.65	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	42.95 ug/l	47.72	0.57	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	40.46 ug/l	44.95	1.11	1000	
118 Sn	250.10 ug/l	277.86	0.18	1000	
121 Sb	228.50 ug/l	253.86	0.75	1000	
137 Ba	340.80 ug/l	378.63	0.77	1000	
205 Tl	218.30 ug/l	242.53	0.93	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	220.90 ug/l	245.42	0.75	1000	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	699212.50	1.04	1367210.50	51.1	30 -	120	
45 Sc	388511.75	7.07	677229.44	57.4	30 -	120	
45 Sc	38624.93	4.14	51699.54	74.7	30 -	120	
45 Sc	1420953.30	0.99	1734110.10	81.9	30 -	120	
72 Ge	78120.26	5.92	152157.89	51.3	30 -	120	
72 Ge	15870.81	4.63	23935.47	66.3	30 -	120	
72 Ge	208410.89	0.22	318037.72	65.5	30 -	120	
115 In	1753871.10	0.87	2383817.30	73.6	30 -	120	
159 Tb	2591834.30	1.43	3312619.80	78.2	30 -	120	
165 Ho	2588148.80	0.41	3267807.00	79.2	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

5 :Element Failures      0 :Max. Number of Failures Allowed  
 0 :ISTD Failures      0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

**Sample QC Report**

Data File: C:\ICPCHEM\1\DATA\10J28m00.B\077SMPL.D\077SMPL.D#  
 Date Acquired: Oct 28 2010 08:02 pm  
 Operator: SDM  
 Sample Name: AY25117W22 MSD  
 Misc Info: 101026A-3015  
 Vial Number: 3404  
 Current Method: C:\ICPCHEM\1\METHODS\62-1028.M  
 Calibration File: C:\ICPCHEM\1\CALIB\62-1028.C  
 Last Cal Update: Oct 28 2010 01:13 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	31.03 ug/l	34.47	1.34	1000	
11 B	314.70 ug/l	349.63	4.91	1000	
23 Na	272600.00 ug/l	302858.60	0.58	25000	>Cal
24 Mg	152500.00 ug/l	169427.50	0.84	50000	>Cal
27 Al	1985.00 ug/l	2205.34	0.52	20000	
39 K	11820.00 ug/l	13132.02	1.47	20000	
44 Ca	138200.00 ug/l	153540.20	0.58	50000	>Cal
47 Ti	250.90 ug/l	278.75	1.18	1000	
51 V	239.80 ug/l	266.42	0.34	1000	
52 Cr	237.00 ug/l	263.31	0.68	1000	
55 Mn	233.40 ug/l	259.31	0.30	1000	
56 Fe	1043.00 ug/l	1158.77	0.35	20000	
59 Co	214.30 ug/l	238.09	0.51	1000	
60 Ni	230.40 ug/l	255.97	0.26	1000	
63 Cu	199.80 ug/l	221.98	0.77	1000	
65 Cu	221.30 ug/l	245.86	0.60	1000	
66 Zn	374.10 ug/l	415.63	0.76	1000	
75 As	207.00 ug/l	229.98	0.18	1000	
78 Se	195.70 ug/l	217.42	0.57	1000	
78 Se	187.00 ug/l	207.76	0.96	1000	
88 Sr	2416.00 ug/l	2684.18	0.46	1000	>Cal
88 Sr	2323.00 ug/l	2580.85	0.32	1000	>Cal
95 Mo	279.70 ug/l	310.75	0.69	1000	
106 (Cd)	----- ug/l	#VALUE!	-----	#####	
107 Ag	43.38 ug/l	48.20	0.67	500	
108 (Cd)	----- ug/l	#VALUE!	-----	#####	
111 Cd	40.41 ug/l	44.90	0.68	1000	
118 Sn	252.30 ug/l	280.31	0.90	1000	
121 Sb	227.40 ug/l	252.64	0.55	1000	
137 Ba	341.30 ug/l	379.18	0.30	1000	
205 Tl	218.60 ug/l	242.86	0.62	1000	
206 (Pb)	----- ug/l	#VALUE!	-----	#####	
207 (Pb)	----- ug/l	#VALUE!	-----	#####	
208 Pb	215.60 ug/l	239.53	0.69	1000	

**ISTD Elements**

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	697024.06	0.34	1367210.50	51.0	30 -	120	
45 Sc	393743.91	0.65	677229.44	58.1	30 -	120	
45 Sc	39153.19	3.53	51699.54	75.7	30 -	120	
45 Sc	1447307.60	0.41	1734110.10	83.5	30 -	120	
72 Ge	79780.17	0.32	152157.89	52.4	30 -	120	
72 Ge	16281.59	3.66	23935.47	68.0	30 -	120	
72 Ge	212658.11	0.51	318037.72	66.9	30 -	120	
115 In	1769381.00	0.30	2383817.30	74.2	30 -	120	
159 Tb	2601071.50	0.38	3312619.80	78.5	30 -	120	
165 Ho	2585871.50	0.31	3267807.00	79.1	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\10J28m00.B\005CALB.D\005CALB.D#

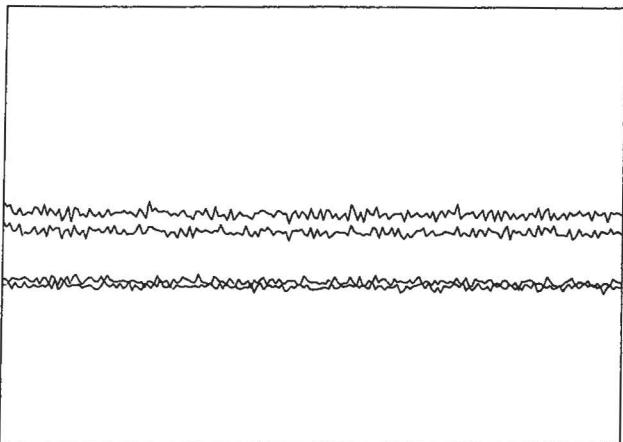
5 :Element Failures 0 :Max. Number of Failures Allowed  
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

**Data Results:**

Analytes: Fail  
 ISTD: Pass

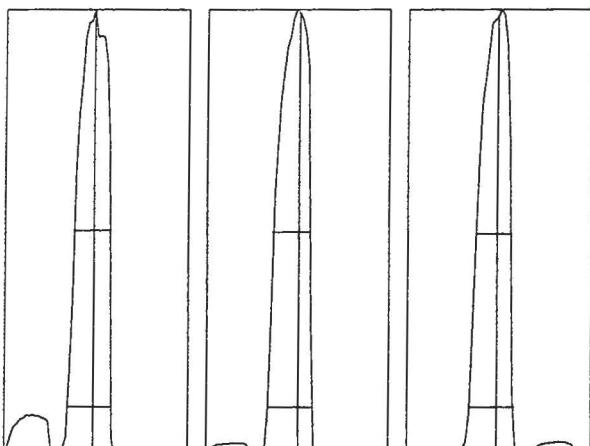
# Tune Report

Tune File : nogas.u  
Comment : 101028



Integration Time: 0.1000 sec  
Sampling Period: 0.6200 sec  
n: 200  
Oxide: 156/140 0.991%  
Doubly Charged: 70/140 1.100%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	17948.0	18137.5	1.65	1.60
89	50,000	23923.0	24358.7	1.75	3.40
205	50,000	18513.0	18715.2	1.80	9.60
156/140	2	1.014%	0.973%	6.59	
70/140	2	1.129%	1.066%	7.06	
140	50,000	26127.0	26425.5	1.80	7.20



m/z: 7 89 205  
Height: 18,370 24,395 18,559  
Axis: 7.00 89.05 205.00  
W-50%: 0.65 0.65 0.60  
W-10%: 0.7500 0.7500 0.7500

Integration Time: 0.1000 sec  
Acquisition Time: 22.7600 sec

Y axis : Linear

# Tune Report

Tune File : nogas.u  
Comment : 101028

## Tuning Parameters

### ==Plasma Condition==

RF Power : 1600 W  
RF Matching : 1.7 V  
Smpl Depth : 8 mm  
Torch-H : 0.5 mm  
Torch-V : 0.2 mm  
Carrier Gas : 1.05 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 : -136 V  
Omega Bias-ce : -34 V  
Omega Lens-ce : -1 V  
Cell Entrance : -30 V  
QP Focus : 5 V  
Cell Exit : -30 V

### ==Q-Pole Parameters==

AMU Gain : 126  
AMU Offset : 127  
Axis Gain : 0.9997  
Axis Offset : -0.02  
QP Bias : -3 V

### ==Detector Parameters==

Discriminator : 8 mV  
Analog HV : 1690 V  
Pulse HV : 1450 V

### ==Reaction Cell==

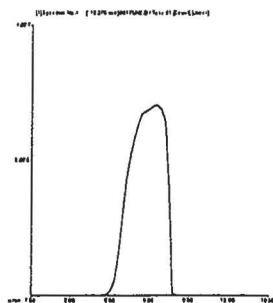
Reaction Mode : OFF  
H2 Gas : 0 mL/min      He Gas : 0 mL/min      Optional Gas : --- %

## 200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\10J28j00.B\001TUNE.D  
 Date Acquired: Oct 28 2010 09:34 am  
 Acq. Method: TN200\_8.M  
 Operator: AS  
 Sample Name: 100ppb tune sol  
 Misc Info:  
 Vial Number: 1303  
 Current Method: C:\ICPCHEM\1\METHODS\TN200\_8.M

### RSD (%)

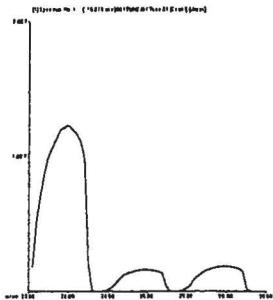
Element	CPS Mean	Rep1	Rep2	Rep3	Rep4	Rep5	%RSD	Required	Flag
9 Be	39281613	39514480	39605808	39452912	38911432	38923432	0.91	5.00	
24 Mg	69309117	69674080	69295592	69474528	69418784	68682600	0.62	5.00	
59 Co	103316618	#####	#####	#####	#####	#####	0.78	5.00	
115 In	165255560	#####	#####	#####	#####	#####	0.44	5.00	
208 Pb	85832714	86087016	85399048	85768400	85603344	86305760	0.51	5.00	



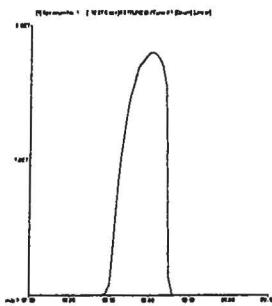
**9 Be**  
 Mass Calib.

Actual: 9.05  
 Required: 8.90 - 9.10  
 Flag:

**Peak Width**  
 Actual: 0.65  
 Required: 0.90  
 Flag:



**24 Mg**  
 Mass Calib.  
 Actual: 24.00  
 Required: 23.90 - 24.10  
 Flag:  
**Peak Width**  
 Actual: 0.65  
 Required: 0.80  
 Flag:



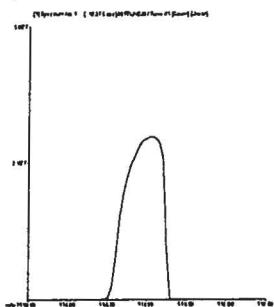
**59 Co**

**Mass Calib.**

Actual: 59.00  
Required: 58.90 - 59.10  
Flag:

**Peak Width**

Actual: 0.65  
Required: 0.90  
Flag:



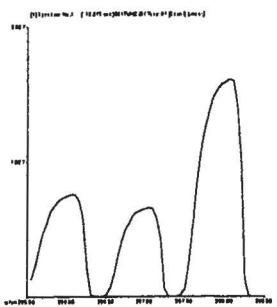
**115 In**

**Mass Calib.**

Actual: 115.05  
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: 0.60  
Required: 0.80  
Flag:

Tune Result: Pass

040

## Metals Standards Log Book # 32 Page # 040

N

10/28/10

RJS

200.3

(A)

ICP-MS STANDARDS 200.8			10/28/2010	Standard 2	11/4/2010
Today's Date:				Amount	STD
Expires:	11/4/2010			500 uL	Standard 4
Prep Date 1% HNO3/1.0%HCL					
20 mL HNO3 / 2000 mL Di Water					10/28/2010
Lot # 1110020					10/28/2010
10mL HCL / 200mL Di Water				Standard 1	11/4/2010
Lot # #4110020				Amount	STD
Expires: 11/4/2010				50 uL	Standard 4
Standard 4			11/4/2010		
Amount STD	Manufacturer	Lot #			10/28/2010
50 uL CCV-A	Env. Express	1006727-26314	ICP-MS ICV	11/4/2010	
50 uL CCV-B	Env. Express	1006728-26315	Amount	STD	
50 uL CCV-C	Env. Express	1006729-26316	50 uL	QCS ICV A	CPI
Prepared in 100 mL of 1% HNO3/1.0% HCL			50 uL	QCS ICV B	CPI
		10/28/2010			
Standard 3			Prepared in 50 mL of 1% HNO3/1.0% HCL		
Amount STD	Manufacturer	Lot #	ICSA Prep:	11/4/2010	
25 uL CCV-A	Env. Express	1006727-26314	1 mL	ICSA	CPI
25 uL CCV-B	Env. Express	1006728-26315	Prepared in 5 mL of 1% HNO3/1.0% HCL		10F123-26793
25 uL CCV-C	Env. Express	1006729-26316	ICSAB Prep:	11/4/2010	
Prepared in 100 mL of 1% HNO3/1.0% HCL		10/28/2010	1mL	ICSA	CPI
			0.025mL	INT	O2SI
			Prepared in 5 mL of 1% HNO3/1.0% HCL		1016502-26434
			ICP-LDR	11/4/2010	
			Amount	STD	
			50 uL	CCV-A	Env. Express
			50 uL	CCV-B	Env. Express
			50 uL	CCV-C	Env. Express
			Prepared in 10 mL of 1% HNO3/1.0% HCL		1006727-26314
					1006728-26315
					1006729-26316
					10/28/2010

AS 10/28/10

## Hg WORKING STANDARD

RJS 10/28/10

1ml X 10ug/ml Hg STOCK STD. (10/07/10RJS)/200ml 1% HNO3 Lot#1110020  
 1ml X 10ug/ml Hg STOCK ICV (10/07/10RJS)/200ml 1% HNO3 Lot#1110020  
 Final concentration is 50 ug/L. Expires.....10/28/10.....

## Metals Digestion Worksheet

Method Name 3015 Digestion

Prep Method M3015

Set 101026A

Units mL

Spikes	
Spiked ID 1	LCSW LOT# 10G216 26978
Spiked ID 2	LCSW LOT# 10G215 26976
Spiked ID 3	
Spiked ID 4	
Spiked By	dp Date: 10/26/10 10:45:00 AM
Witnessed By	sdm Date: 10/26/10 10:45:00 AM

Starting Temp:	36°
Ending Temp:	160°
Temperature Type:	Microwave
Sufficient Vol for Matrix QC:	YES
End Date/Time	10/26/10 1245

Sample	Sample Container	Spike Amount	Spike ID	Digested	Final Volume	Start Date/Time	Comments
1 101026A Blk				45mL	50mL	10/26/10 10:45	
2 101026A LCS		450uL	1+2	45mL	50mL	10/26/10 10:45	
3 AY24863	AY24863W09			45mL	50mL	10/26/10 10:45	
4 AY24864	AY24864W22			45mL	50mL	10/26/10 10:45	
5 AY24864 MS	AY24864W24	450uL	1+2	45mL	50mL	10/26/10 10:45	
6 AY24864 MSD	AY24864W24	450uL	1+2	45mL	50mL	10/26/10 10:45	
7 AY24865	AY24865W09			45mL	50mL	10/26/10 10:45	
8 AY25113	AY25113W09			45mL	50mL	10/26/10 10:45	
9 AY25115	AY25115W08			45mL	50mL	10/26/10 10:45	
10 AY25116	AY25116W09			45mL	50mL	10/26/10 10:45	
11 AY25117	AY25117W21			45mL	50mL	10/26/10 10:45	
12 AY25117 MS	AY25117W22	450uL	1+2	45mL	50mL	10/26/10 10:45	
13 AY25117 MSD	AY25117W22	450uL	1+2	45mL	50mL	10/26/10 10:45	
14 AY25118	AY25118W05			45mL	50mL	10/26/10 10:45	

Solvent and Lot#	
HNO3 BDH 1110020 2670	

Sample COC Transfer	
Sample prep employee Initials	DP
Analyst's initials	AS
Date	10/26/10
Time	16:01
Moved to	170411

Technician's Initials	
Scanned By	DP
Sample Preparation	DP
Digestion	DP
Bring up to volume	DP
Modified	10/26/10 9:44:26 AM

Reviewed By: SDR

Date: 10-26-10

RunID	Injected		Sample Name	Misc Info	FileName	Multiplier
1	28 Oct 2010	12:45	Calibration Blank		101028B	1.
2	28 Oct 2010	12:51	101025 Standard 1		101028B	1.
3	28 Oct 2010	12:57	101025 Standard 2		101028B	1.
4	28 Oct 2010	13:03	101025 Standard 3		101028B	1.
5	28 Oct 2010	13:09	101025 Standard 4		101028B	1.
6	28 Oct 2010	13:15	ICV 101025		101028B	1.
7	28 Oct 2010	13:27	ICB 101025		101028B	1.
9	28 Oct 2010	13:40	CCV 101025		101028B	1.
10	28 Oct 2010	13:46	CCB 101025		101028B	1.
11	28 Oct 2010	13:52	ICSA 101025		101028B	1.
12	28 Oct 2010	14:16	LDR 101025		101028B	1.
13	28 Oct 2010	14:21	ICSAB 101025		101028B	1.
14	28 Oct 2010	14:34	CCV 101025		101028B	1.
15	28 Oct 2010	14:40	CCB 101025		101028B	1.
18	28 Oct 2010	14:58	CCV 101025		101028B	1.
19	28 Oct 2010	15:04	CCB 101025		101028B	1.
20	28 Oct 2010	15:34	101026A LCS		101028B	1.
22	28 Oct 2010	15:47	101026A BLK		101028B	1.
26	28 Oct 2010	16:11	CCV 101025		101028B	1.
27	28 Oct 2010	16:17	CCB 101025		101028B	1.
50	28 Oct 2010	19:06	CCV 101025		101028B	1.
51	28 Oct 2010	19:12	CCB 101025		101028B	1.
54	28 Oct 2010	19:31	AY25113W09		101028B	1.
55	28 Oct 2010	19:37	AY25115W08		101028B	1.
56	28 Oct 2010	19:43	AY25116W09		101028B	1.
57	28 Oct 2010	19:49	AY25117W21		101028B	1.
58	28 Oct 2010	19:56	AY25117W22 MS		101028B	1.
59	28 Oct 2010	20:02	AY25117W22 MSD		101028B	1.
60	28 Oct 2010	20:08	AY25118W05		101028B	1.
61	28 Oct 2010	20:14	CCV 101025		101028B	1.
62	28 Oct 2010	20:20	CCB 101025		101028B	1.