A

ENVIRONMENTAL SAMPLING LABORATORY REPORTS

This page intentionally left blank.

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178

www.gel.com

August 25, 2011

Mr.Steve Hall
US EPA Equipment Warehouse
1620 S. 92nd Place, Unit B
Seattle, Washington 98108

Re: Project No. 002233.0599.01SF
Work Order: 284538

Dear Mr.Steve Hall:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on August 23, 2011. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4422.

Sincerely,

Jennifer Pellegrini for
Jake Crook
Project Manager

Purchase Order: 002233.0599.01SF
Enclosures

Ecology and Environment, Inc. Start-3 002233.2008
Project No. 002233.0599.01SF
SDG: 284538

Table of Contents

Case Narrative

Case Narrative
for
Ecology and Environment, Inc. Start-3 002233.2008
SDG: 284538

August 25, 2011

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary

Sample Receipt The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on August 23, 2011 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification The laboratory received the following samples:

Laboratory ID	Client ID
284538001	11080101
284538002	11080106

Case Narrative

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

Data Package

The enclosed data package contains the following sections: General Narrative, Chain of Custody and Supporting Documentation, and data from the following fractions: GC Semivolatile PCB, GC Semivolatile Pesticide, GC/MS Semivolatile, GC/MS Volatile and Metals.

Jennifer Pellegrini for
Jake Crook
Project Manager

List of current GEL Certifications as of 25 August 2011

State	Certification
Arkansas	88−0651
CLIA	42D0904046
California − NELAP	01151CA
Colorado	E87156 (FL/NELAP)
Connecticut	PH−0169
DoD ELAP − A2LA	2567.01
Florida − NELAP	E87156
Foreign Soils Permit USDA	P330−09−00191
Georgia	E87156 (FL/NELAP)
Georgia SDWA	967
Hawaii	E87156 (FL/NELAP)
ISO 17025	2567.01
Idaho	SC00012
Illinois − NELAP	200029
Indiana	C−SC−01
Kansas − NELAP	E−10332
Kentucky	90129
Louisiana − NELAP	03046 (Al33904)
Louisiana SDWA	LA110006
Maryland	270
Massachusetts	M−SC012
Mississippi	E87156 (FL/NELAP)
Nevada	SC00012
New Hampshire	2054
New Jersey − NELAP	SC002
New Mexico	E87156 (FL/NELAP)
New York − NELAP	11501
North Carolina	233
North Carolina DW	45709
Oklahoma	9904
Pennsylvania − NELAP	68−00485
South Carolina	10120001/10120002
Tennessee	TN 02934
Texas − NELAP	T104704235−10−3
Utah − NELAP	SC00012
Vermont	VT87156
Virginia	00151
Washington	C780
Wisconsin	999887790

Chain of Custody and Supporting Documentation

Page 1 of 1

2011 0881830

284538

USEPA
DateShipped:
CarrierName:
AirbillNo:

CHAIN OF CUSTODY RECORD
Site #: 10GL
Contact Name:
Contact Phone:

No: 10-081611-104804-0002
Cooler #:
Lab: GEL Laboratories, LLC
Lab Phone: 843-556-8171

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
	11080101	SB05	VOCs	Ground Water	8/18/201	9	40 ml VOA	HCl	Y
	11080101	SB05	Semivolatiles (SVOAs)	Ground Water	8/18/201	6	1 liter amber	4 C	Y
	11080101	SB05	Pesticide/PCBs	Ground Water	8/18/201	12	1 liter amber	4 C	Y
	11080101	SB05	Metals	Ground Water	8/18/201	3	1 L poly	HNO3 pH<2	Y
	11080106	TB01	VOCs	Water	8/18/201	3	40 ml VOA	HCl	N

TH 8-22-2011

Special Instructions:

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
2		8/22/11		8/23/11	0850						

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: ECDL	SDG/AR/COC/Work Order: 284538
Received By: BD	Date Received: 8-23-11

Suspected Hazard Information	Yes	No	*If Counts > x2 area background on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
COC/Samples marked as radioactive?		/	Maximum Counts Observed*: 100cpm
Classified Radioactive II or III by RSO?		/	
COC/Samples marked containing PCBs?		/	
Shipped as a DOT Hazardous?		/	Hazard Class Shipped: UN#:
Samples identified as Foreign Soil?		/	

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Samples requiring cold preservation within (0 ≤ 6 deg. C)?	/			5C Preservation Method: (Ice bags) Blue ice Dry ice None Other (describe)
2a	Daily check performed and passed on IR temperature gun?	/			Temperature Device Serial #: 310SWT Secondary Temperature Device Serial # (If Applicable):
3	Chain of custody documents included with shipment?	/			
4	Sample containers intact and sealed?	/			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
5	Samples requiring chemical preservation at proper pH?	/			Sample ID's, containers affected and observed pH: If Preservation added, Lot#:
6	VOA vials free of headspace (defined as < 6mm bubble)?	/			Sample ID's and containers affected:
7	Are Encore containers present?		/		(If yes, immediately deliver to Volatiles laboratory)
8	Samples received within holding time?	/			ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	/			Sample ID's and containers affected:
10	Date & time on COC match date & time on bottles?	/			Sample ID's affected:
11	Number of containers received match number indicated on COC?	/			Sample ID's affected:
12	Are sample containers identifiable as GEL provided?			/	
13	COC form is properly signed in relinquished/received sections?	/			
14	Carrier and tracking number.	/			Circle Applicable: (FedEx Air) FedEx Ground UPS Field Services Courier Other 8064 1445 3486 7955 4012 7418

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JMC Date 08/23/11 Page 1 of 1

Data Review Qualifier Definitions

Data Review Qualifier Definitions

Qualifier	Explanation
*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

Volatile Analysis

Case Narrative

ChemStation Case Narrative
Ecology and Environment, Inc. Start-3 002233.2008 (ECOL)
SDG 284538

Method/Analysis Information

Procedure:	**Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer**
Analytical Method:	SW846 8260B
Analytical Batch Number:	1137563

Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

Sample ID	Client ID
284538001	11080101
284538002	11080106
1202477757	Method Blank (MB)
1202477758	284538001(11080101) Post Spike (PS)
1202477759	284538001(11080101) Post Spike Duplicate (PSD)
1202477760	Laboratory Control Sample (LCS)
1202478370	Method Blank (MB)
1202478371	Laboratory Control Sample (LCS)

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 16.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery groups (SDG). A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 284538001 (11080101) was designated for spike analysis.

Matrix Spike (PS) Recovery Statement
The matrix spike recoveries within the acceptance limits.

Matrix Spike Duplicate (PSD) Recovery Statement
The matrix spike duplicate recoveries within the acceptance limits.

Relative Percent Difference (RPD) Statement
The RPD(s) between the matrix spike pair met the acceptance limits.

Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

Sample Dilutions/Methanol Dilutions
Sample 284538002 (11080106) was diluted because target analyte concentrations exceeded the calibration range.

Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

Miscellaneous Information

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
A Data Exception Report was not required for this SDG.

Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

TIC Comment
Tentatively identified compounds (TIC) were not required for this SDG.

Additional Comments
Additional comments were not required for this SDG.

Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

System Configuration

The Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description	P & T Trap
VOA3.I	Agilent 6890/5973 GC/MS w/ OI 4560/Archon Autosampler	HP6890/HP5973	DB-624	J&W, 60m x 0.25mm x 1.4um	Trap 10

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

ECOL008 Ecology and Environment, Inc. Start-3 002233.2008

Client SDG: 284538 GEL Work Order: 284538

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

E Organics--Concentration of the target analyte exceeds the instrument calibration range

J Value is estimated

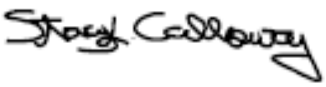
U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:  **Name: Stacy Calloway**

Date: 14 SEP 2011 **Title: Data Validator**

Sample Data Summary

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	U	1.50	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether	U	0.250	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone	U	1.25	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	U	0.250	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone	U	1.25	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	E	1040	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		55.0	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone		12.1	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	J	0.430	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		7.81	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		2.90	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.50	ug/L	1.50	5.00
74-87-3	Chloromethane	U	1.50	ug/L	1.50	5.00
75-01-4	Vinyl chloride	U	2.50	ug/L	2.50	5.00
74-83-9	Bromomethane	U	1.50	ug/L	1.50	5.00
75-00-3	Chloroethane	U	1.50	ug/L	1.50	5.00
75-69-4	Trichlorofluoromethane	U	1.50	ug/L	1.50	5.00
60-29-7	Ethyl ether	U	1.50	ug/L	1.50	5.00
67-64-1	Acetone		959	ug/L	7.50	25.0
75-05-8	Acetonitrile	U	31.3	ug/L	31.3	125
75-35-4	1,1-Dichloroethylene	U	1.50	ug/L	1.50	5.00
79-20-9	Methyl acetate	U	6.25	ug/L	6.25	25.0
74-88-4	Iodomethane	U	6.25	ug/L	6.25	25.0
75-09-2	Methylene chloride	U	10.0	ug/L	10.0	25.0
75-15-0	Carbon disulfide	U	6.25	ug/L	6.25	25.0
1634-04-4	tert-Butyl methyl ether		69.0	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.50	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	7.50	ug/L	7.50	25.0
75-34-3	1,1-Dichloroethane	U	1.50	ug/L	1.50	5.00
78-93-3	2-Butanone		32.6	ug/L	6.25	25.0
156-59-2	cis-1,2-Dichloroethylene	U	1.50	ug/L	1.50	5.00
594-20-7	2,2-Dichloropropane	U	1.50	ug/L	1.50	5.00
67-66-3	Chloroform	U	1.25	ug/L	1.25	5.00
74-97-5	Bromochloromethane	U	1.50	ug/L	1.50	5.00
71-55-6	1,1,1-Trichloroethane	U	1.63	ug/L	1.63	5.00
110-82-7	Cyclohexane	U	1.50	ug/L	1.50	5.00
563-58-6	1,1-Dichloropropene	U	1.25	ug/L	1.25	5.00
71-36-3	n-Butyl alcohol	U	75.0	ug/L	75.0	250
56-23-5	Carbon tetrachloride	U	1.50	ug/L	1.50	5.00
107-06-2	1,2-Dichloroethane	U	1.25	ug/L	1.25	5.00
71-43-2	Benzene	U	1.50	ug/L	1.50	5.00
79-01-6	Trichloroethylene	U	1.25	ug/L	1.25	5.00
78-87-5	1,2-Dichloropropane	U	1.25	ug/L	1.25	5.00
108-87-2	Methylcyclohexane	U	1.25	ug/L	1.25	5.00
75-27-4	Bromodichloromethane	U	1.25	ug/L	1.25	5.00
74-95-3	Dibromomethane	U	1.50	ug/L	1.50	5.00
110-75-8	2-Chloroethylvinyl ether	U	7.50	ug/L	7.50	25.0
108-10-1	4-Methyl-2-pentanone		35.1	ug/L	6.25	25.0
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/L	1.25	5.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	1.25	ug/L	1.25	5.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/L	1.25	5.00
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/L	1.25	5.00
591-78-6	2-Hexanone	U	6.25	ug/L	6.25	25.0
142-28-9	1,3-Dichloropropane	U	1.50	ug/L	1.50	5.00
127-18-4	Tetrachloroethylene	U	1.50	ug/L	1.50	5.00
124-48-1	Dibromochloromethane	U	1.50	ug/L	1.50	5.00
106-93-4	1,2-Dibromoethane	U	1.25	ug/L	1.25	5.00
108-90-7	Chlorobenzene	U	1.25	ug/L	1.25	5.00
100-41-4	Ethylbenzene	U	1.25	ug/L	1.25	5.00
179601-23-1	m,p-Xylenes	U	2.50	ug/L	2.50	10.0
95-47-6	o-Xylene	U	1.50	ug/L	1.50	5.00
100-42-5	Styrene	U	1.25	ug/L	1.25	5.00
75-25-2	Bromoform	U	1.25	ug/L	1.25	5.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/L	1.25	5.00
96-18-4	1,2,3-Trichloropropane	U	1.50	ug/L	1.50	5.00
108-86-1	Bromobenzene	U	1.25	ug/L	1.25	5.00
103-65-1	n-Propylbenzene	U	1.25	ug/L	1.25	5.00
95-49-8	2-Chlorotoluene	U	1.25	ug/L	1.25	5.00
98-82-8	Isopropylbenzene	U	1.25	ug/L	1.25	5.00
108-67-8	1,3,5-Trimethylbenzene	J	2.80	ug/L	1.25	5.00
106-43-4	4-Chlorotoluene	U	1.25	ug/L	1.25	5.00
98-06-6	tert-Butylbenzene	U	1.25	ug/L	1.25	5.00
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/L	1.25	5.00
135-98-8	sec-Butylbenzene	U	1.25	ug/L	1.25	5.00
99-87-6	4-Isopropyltoluene	U	1.25	ug/L	1.25	5.00
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/L	1.25	5.00
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/L	1.25	5.00
104-51-8	n-Butylbenzene	U	1.25	ug/L	1.25	5.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.50	ug/L	1.50	5.00
87-68-3	Hexachlorobutadiene	U	1.50	ug/L	1.50	5.00
91-20-3	Naphthalene	U	1.25	ug/L	1.25	5.00
87-61-6	1,2,3-Trichlorobenzene	U	1.66	ug/L	1.66	5.00
107-02-8	Acrolein	U	6.25	ug/L	6.25	25.0
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	5.00	25.0
107-05-1	Allyl chloride	U	7.50	ug/L	7.50	25.0
107-13-1	Acrylonitrile	U	5.00	ug/L	5.00	25.0
126-99-8	2-Chloro-1,3-butadiene	U	1.50	ug/L	1.50	5.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	7.50	ug/L	7.50	25.0
126-98-7	Methacrylonitrile	U	5.00	ug/L	5.00	25.0
78-83-1	Isobutyl alcohol	U	62.5	ug/L	62.5	250
80-62-6	Methyl methacrylate	U	5.00	ug/L	5.00	25.0
97-63-2	Ethyl methacrylate	U	5.00	ug/L	5.00	25.0
79-46-9	2-Nitropropane	U	5.00	ug/L	5.00	25.0
108-94-1	Cyclohexanone	U	75.0	ug/L	75.0	250
1476-11-5	cis-1,4-Dichloro-2-butene	U	5.00	ug/L	5.00	25.0
110-57-6	trans-1,4-Dichloro-2-butene	U	5.00	ug/L	5.00	25.0
76-01-7	Pentachloroethane	U	5.00	ug/L	5.00	25.0
100-44-7	Benzyl chloride	U	6.50	ug/L	6.50	25.0
39638-32-9	bis(2-Chloroisopropyl)ether	U	7.50	ug/L	7.50	25.0
540-59-0	1,2-Dichloroethylene (total)	U	1.50	ug/L	1.50	5.00
1330-20-7	Xylenes (total)	U	1.50	ug/L	1.50	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.50	ug/L	1.50	5.00
120-82-1	1,2,4-Trichlorobenzene	U	1.50	ug/L	1.50	5.00
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/L	1.25	5.00

Quality Control Summary

Volatile

Surrogate Recovery Report

SDG Number: 284538

Matrix Type: LIQUID

Sample ID	Client ID	DCED4 %REC		TOL %REC		BFB %REC	
1202477760	LCS for batch 1137563	99		95		101	
1202477757	MB for batch 1137563	100		101		103	
284538002	11080106	90		96		101	
284538001	11080101	96		99		102	
1202477758	11080101PS	96		97		103	
1202477759	11080101PSD	97		99		102	
1202478371	LCS for batch 1137563	97		97		100	
1202478370	MB for batch 1137563	101		100		100	
284538002	11080106DL	94	D	96	D	101	D

Surrogate			Acceptance Limits
DCED4	=	1,2-Dichloroethane-d4	(79%-124%)
TOL	=	Toluene-d8	(80%-120%)
BFB	=	Bromofluorobenzene	(80%-120%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Post Spike**
Client ID: **11080101PS**
Matrix: **GROUND WATER**
Lab Sample ID: **1202477758**
Instrument: **VOA3.I**
Analysis Date: **08/31/2011 00:28**
Dilution: **1**
Analyst: **SYK1**
Prep Batch ID: **1137563**
Purge Vol: **5 mL**
Batch ID: **1137563**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	PS	1,1-Dichloroethylene	50.0	0.00	U	42.5	85	64-127
71-43-2	PS	Benzene	50.0	0.00	U	44.3	89	75-118
79-01-6	PS	Trichloroethylene	50.0	0.00	U	43.5	87	69-128
108-88-3	PS	Toluene	50.0	0.00	U	43.5	87	67-119
108-90-7	PS	Chlorobenzene	50.0	0.00	U	44.1	88	73-123

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Post Spike Duplicate**
Client ID: **11080101PSD**
Matrix: **GROUND WATER**
Lab Sample ID: **1202477759**
Instrument: **VOA3.I**
Analysis Date: **08/31/2011 00:58**
Dilution: **1**
Analyst: **SYK1**
Prep Batch ID: **1137563**
Purge Vol: **5 mL**
Batch ID: **1137563**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
75-35-4	PSD	1,1-Dichloroethylene	50.0	0.00	U	42.1	84	64-127	1	0-20
71-43-2	PSD	Benzene	50.0	0.00	U	43.3	87	75-118	2	0-20
79-01-6	PSD	Trichloroethylene	50.0	0.00	U	42.3	85	69-128	3	0-20
108-88-3	PSD	Toluene	50.0	0.00	U	43.6	87	67-119	0	0-20
108-90-7	PSD	Chlorobenzene	50.0	0.00	U	44.0	88	73-123	0	0-20

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 1137563**
Matrix: **GROUND WATER**
Lab Sample ID: **1202477760**
Instrument: **VOA3.I**
Analysis Date: **08/30/2011 21:28**
Dilution: **1**
Analyst: **SYK1**
Prep Batch ID: **1137563**
Purge Vol: **5 mL**
Batch ID: **1137563**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	43.3	87	73-125
71-43-2	LCS	Benzene	50.0	0.0	45.2	90	80-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	44.9	90	80-120
108-88-3	LCS	Toluene	50.0	0.0	44.2	88	77-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	45.9	92	80-120

Volatile

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 1137563**
Matrix: **GROUND WATER**
Lab Sample ID: **1202478371**
Instrument: **VOA3.I**
Analysis Date: **08/31/2011 07:53**
Dilution: **1**
Analyst: **SYK1**
Prep Batch ID: **1137563**
Purge Vol: **5 mL**
Batch ID: **1137563**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
75-35-4	LCS	1,1-Dichloroethylene	50.0	0.0	45.4	91	73-125
71-43-2	LCS	Benzene	50.0	0.0	45.2	90	80-120
79-01-6	LCS	Trichloroethylene	50.0	0.0	45.9	92	80-120
108-88-3	LCS	Toluene	50.0	0.0	45.4	91	77-120
108-90-7	LCS	Chlorobenzene	50.0	0.0	46.0	92	80-120

Method Blank Summary

SDG Number:	**284538**	**Client:**	**ECOL008**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 1137563**	**Instrument ID:**	**VOA3.I**	**Data File:**	**083011V3\3B230A.D**
Lab Sample ID:	**1202477757**	**Prep Date:**	**08/30/2011 22:28**	**Analyzed:**	**08/30/11 22:28**
Column:	**DB-624**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 1137563	1202477760	083011V3\3B228A.D	08/30/11	2128
02	11080106	284538002	083011V3\3B231.D	08/30/11	2258
03	11080101	284538001	083011V3\3B232.D	08/30/11	2328
04	11080101PS	1202477758	083011V3\3B234.D	08/31/11	0028
05	11080101PSD	1202477759	083011V3\3B235.D	08/31/11	0058

Method Blank Summary

SDG Number:	**284538**	**Client:**	**ECOL008**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 1137563**	**Instrument ID:**	**VOA3.I**	**Data File:**	**083111V3\3B308A.D**
Lab Sample ID:	**1202478370**	**Prep Date:**	**08/31/2011 10:24**	**Analyzed:**	**08/31/11 10:24**
Column:	**DB-624**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 1137563	1202478371	083111V3\3B303A.D	08/31/11	0753
02	11080106DL	284538002	083111V3\3B309.D	08/31/11	1054

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: VOA3.I **Injection Date/Time:** 24-AUG-11 11:37

Column Description: DB-624 **Lab File ID** 082411V3\3A309.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	18.6
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0
174	50.0 - 100.0% of mass 95	77.3
175	5.0 -9.0% of mass 174	7.1
176	95.0 - 101.0% of mass 174	96.6
177	5.0 - 9.0% of mass 176	6.6

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	W3VM110824-01	082411V3\3A310.D	24-AUG-11 12:07
ICALMIX[A]	W3VM110824-02	082411V3\3A311.D	24-AUG-11 12:37
ICALMIX[A]	W3VM110824-03	082411V3\3A312.D	24-AUG-11 13:07
ICALMIX[A]	W3VM110824-04	082411V3\3A313.D	24-AUG-11 13:37
ICALMIX[A]	W3VM110824-05	082411V3\3A314.D	24-AUG-11 14:07
ICALMIX[A]	W3VM110824-06	082411V3\3A315.D	24-AUG-11 14:37
ICALMIX[A]	W3VM110824-07	082411V3\3A316.D	24-AUG-11 15:07
ICALMIX[A]	W3VM110824-08	082411V3\3A317.D	24-AUG-11 15:37
ICALMIX[A]	W3VM110824-09	082411V3\3A318.D	24-AUG-11 16:07
ICVMIX[A]01	W3VM110824-11	082411V3\3A321.D	24-AUG-11 17:38
ICALMIX[B]	W3VM110824-12	082411V3\3A323.D	24-AUG-11 18:38
ICALMIX[B]	W3VM110824-13	082411V3\3A324.D	24-AUG-11 19:08
ICALMIX[B]	W3VM110824-14	082411V3\3A325.D	24-AUG-11 19:38
ICALMIX[B]	W3VM110824-15	082411V3\3A326.D	24-AUG-11 20:08
ICALMIX[B]	W3VM110824-16	082411V3\3A327.D	24-AUG-11 20:38
ICALMIX[B]	W3VM110824-17	082411V3\3A328.D	24-AUG-11 21:08

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: VOA3.I **Injection Date/Time:** 25-AUG-11 08:52

Column Description: DB-624 **Lab File ID** 082511V3\3A401.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	18
75	30.0 - 60.0% of mass 95	46.1
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0
174	50.0 - 100.0% of mass 95	77.8
175	5.0 -9.0% of mass 174	7.5
176	95.0 - 101.0% of mass 174	100
177	5.0 - 9.0% of mass 176	6.5

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[B]	W3VM110825-01	082511V3\3A402.D	25-AUG-11 09:22
ICALMIX[B]	W3VM110825-02	082511V3\3A403.D	25-AUG-11 09:52
ICVMIX[B]02	W3VM110825-03	082511V3\3A405.D	25-AUG-11 10:53

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: VOA3.I **Injection Date/Time:** 30-AUG-11 20:28

Column Description: DB-624 **Lab File ID** 083011V3\3B226.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	17.4
75	30.0 - 60.0% of mass 95	47.1
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0
174	50.0 - 100.0% of mass 95	88.5
175	5.0 -9.0% of mass 174	6.8
176	95.0 - 101.0% of mass 174	95.1
177	5.0 - 9.0% of mass 176	6.8

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]03	W3VM110830-06	083011V3\3B227.D	30-AUG-11 20:58
BLK01LCS	1202477760	083011V3\3B228A.D	30-AUG-11 21:28
CCVMIX[B]04	W3VM110830-08	083011V3\3B229.D	30-AUG-11 21:58
BLK01	1202477757	083011V3\3B230A.D	30-AUG-11 22:28
11080106	284538002	083011V3\3B231.D	30-AUG-11 22:58
11080101	284538001	083011V3\3B232.D	30-AUG-11 23:28
11080101MS	1202477758	083011V3\3B234.D	31-AUG-11 00:28
11080101MSD	1202477759	083011V3\3B235.D	31-AUG-11 00:58

Instrument Performance Check

BROMOFLUOROBENZENE

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: VOA3.I **Injection Date/Time:** 31-AUG-11 06:53

Column Description: DB-624 **Lab File ID** 083111V3\3B301.D

m/e	Ion Abundance Criteria	% Relative Abundance
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	44.8
95	Base Peak, 100% Relative Abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0
174	50.0 - 100.0% of mass 95	76.8
175	5.0 -9.0% of mass 174	7.2
176	95.0 - 101.0% of mass 174	98.3
177	5.0 - 9.0% of mass 176	6.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]05	W3VM110831-01	083111V3\3B302.D	31-AUG-11 07:23
BLK02LCS	1202478371	083111V3\3B303A.D	31-AUG-11 07:53
CCVMIX[B]06	W3VM110831-04	083111V3\3B305.D	31-AUG-11 08:53
BLK02	1202478370	083111V3\3B308A.D	31-AUG-11 10:24
11080106DL	284538002	083111V3\3B309.D	31-AUG-11 10:54

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 284538

Instrument: VOA3.I

STD Analysis Time: 30-AUG-11 20:58

GC Column: DB-624

Data File: 083011V3\3B227.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	1334304	12.0	578506	15.6	580207	18.2
Upper Limit	2668608	12.5	1157012	16.1	1160414	18.7
Lower Limit	667152	11.5	289253	15.1	290104	17.7
Sample ID						
BLK01LCS	1329586	12.0	580493	15.6	592456	18.2
BLK01	1359890	12.0	576500	15.6	585807	18.2
11080106	1297699	12.0	551713	15.6	552655	18.2
11080101	1333681	12.0	559493	15.6	556848	18.2
11080101MS	1280033	12.0	553520	15.6	548589	18.2
11080101MSD	1287143	12.0	543824	15.6	543506	18.2

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
* Value outside of QC Limits

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 284538

Instrument: VOA3.I

STD Analysis Time: 31-AUG-11 07:23

GC Column: DB-624

Data File: 083111V3\3B302.D

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	1352307	12.0	580645	15.6	602656	18.2
Upper Limit	2704614	12.5	1161290	16.1	1205312	18.7
Lower Limit	676154	11.5	290323	15.1	301328	17.7
Sample ID						
BLK02LCS	1352348	12.0	584102	15.6	602470	18.2
BLK02	1344594	12.0	572255	15.6	588335	18.2
11080106DL	1335142	12.0	566062	15.6	571151	18.2

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
* Value outside of QC Limits

Sample Data

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	U	1.50	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether	U	0.250	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone	U	1.25	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	U	0.250	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone	U	1.25	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 23:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 23:28**				
Data File:	**083011V3\3B232.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B232.D
Acq On : 30 Aug 2011 23:28
Operator : SYK1
InstName : VOA3
Sample : |284538001|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 31 07:19:27 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1333681	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	559493	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	556848	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1333681	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	559493	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	556848	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	72959	47.84	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1233664	49.65	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	535952	50.86	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	95.68%
43) Toluene-d8	50.000	80 - 120	99.30%
61) Bromofluorobenzene	50.000	80 - 120	101.72%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.666	0.000	0	N.D.		
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether	59	7.299	7.299	0.608	635	N.D.		
9) Acetone	43	7.773	7.762	0.647	19625	Below Cal		85
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile	41	8.248	8.224	0.687	3306	Below Cal	#	86
13) Methyl acetate	43	8.307	8.295	0.692	576	N.D.		
14) Carbon disulfide	76	8.200	8.212	0.683	2945	N.D.		
15) Methylene chloride	84	8.532	8.532	0.711	9099	N.D.		
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate	43	9.611	9.612	0.800	1214	N.D.		
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone	43	10.181	10.406	0.848	5025	N.D.		
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane	56	11.295	11.307	0.941	607	N.D.		
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene	78	11.687	11.687	0.973	1047	N.D.		
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		0.000	12.185	0.000	0m	N.D.	d	
34) Trichloroethylene		0.000	12.481	0.000	0	N.D.		
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B232.D
Acq On : 30 Aug 2011 23:28
Operator : SYK1
InstName : VOA3
Sample : |284538001|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 31 07:19:27 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
36) Methylcyclohexane	83	12.766	12.766	1.063	404	N.D.	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.	
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.	
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.	
44) Toluene	91	14.035	14.035	0.898	2391	N.D.	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.	
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.	
47) 2-Hexanone	58	14.687	14.675	0.939	821	Below Cal #	1
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.	
49) Tetrachloroethylene	164	14.699	14.699	0.940	195	N.D.	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.	
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.	
52) Chlorobenzene		0.000	15.671	0.000	0	N.D.	
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.	
54) Ethylbenzene	91	15.754	15.754	1.008	206	N.D.	
55) m,p-Xylenes	106	15.873	15.873	1.015	578	N.D.	
56) o-Xylene		0.000	16.335	0.000	0	N.D.	
57) Styrene	104	16.347	16.335	1.046	415	N.D.	
59) Bromoform		0.000	16.608	0.000	0	N.D.	
60) Isopropylbenzene	105	16.916	16.715	0.930	450	N.D.	
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.	
64) Bromobenzene		0.000	17.142	0.000	0	N.D.	
65) n-Propylbenzene	91	17.106	17.165	0.940	391	N.D.	
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	633	N.D.	
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.	
68) 4-Chlorotoluene	91	17.426	17.415	0.958	405	N.D.	
69) tert-Butylbenzene		0.000	17.711	0.000	0	N.D.	
70) 1,2,4-Trimethylbenzene	105	17.746	17.747	0.975	441	N.D.	
71) sec-Butylbenzene		0.000	17.948	0.000	0	N.D.	
72) 4-Isopropyltoluene	119	18.066	18.067	0.993	4195	N.D.	
73) 1,3-Dichlorobenzene		0.000	18.126	0.000	0	N.D.	
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	692	N.D.	
75) n-Butylbenzene	91	18.339	18.529	1.008	1244	N.D.	
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.	
78) 1,2,4-Trichlorobenzene		0.000	20.676	0.000	0	N.D.	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.	
80) Naphthalene	128	21.079	21.079	1.158	1754	N.D.	
81) 1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.	
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.	
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.	
85) Acrolein	56	7.548	7.524	0.629	880	N.D.	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.	
87) Isopropyl Alcohol		0.000	7.928	0.000	0	N.D.	
88) Allyl chloride	41	8.248	8.331	0.687	3306	Below Cal #	18
89) tert-Butyl Alcohol	59	8.568	8.580	0.714	2550	N.D.	
90) Acrylonitrile		0.000	8.864	0.000	0	N.D.	
91) Isopropyl ether		0.000	9.647	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B232.D
Acq On : 30 Aug 2011 23:28
Operator : SYK1
InstName : VOA3
Sample : |284538001|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 31 07:19:27 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

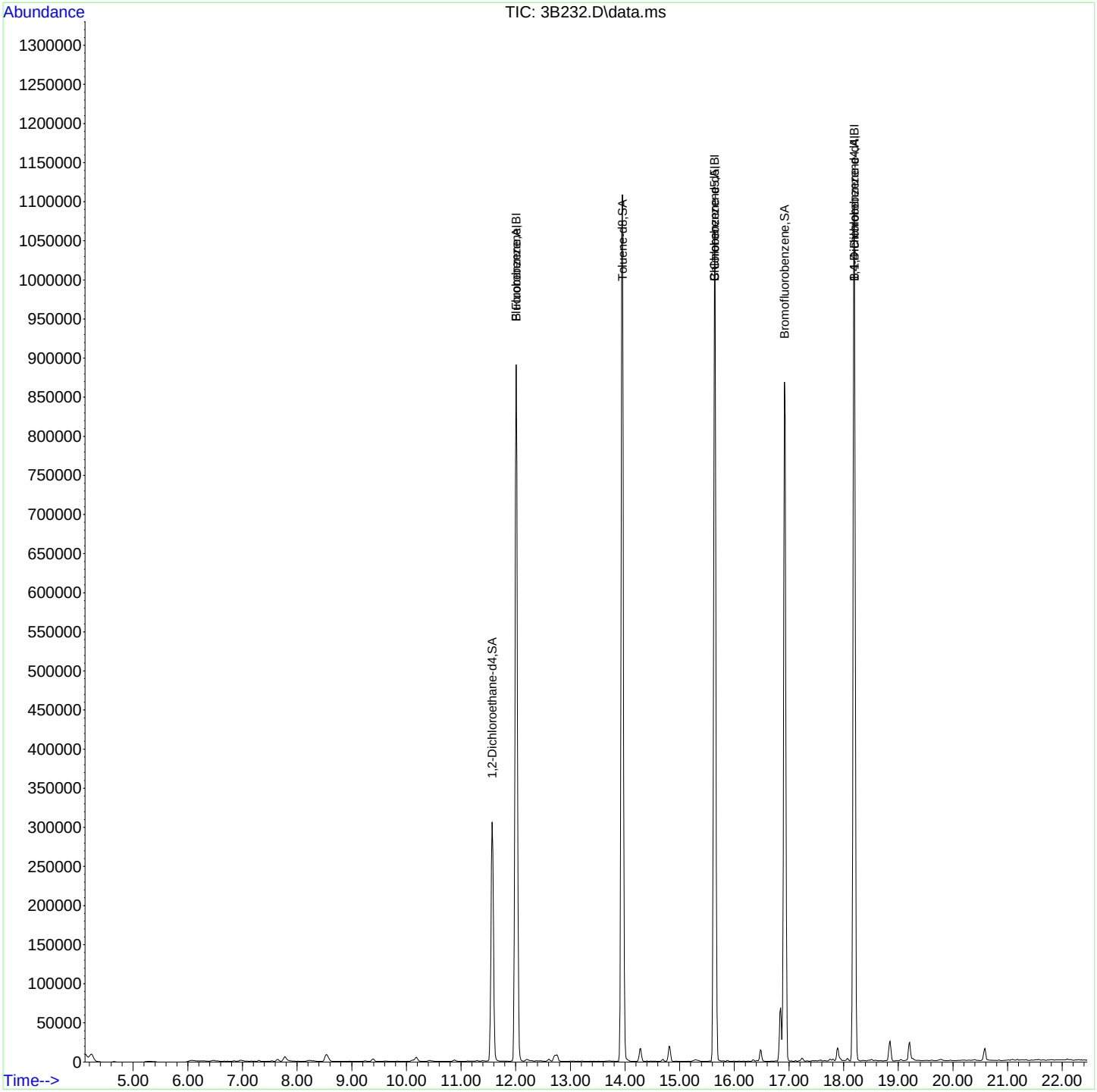
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.	
94) Ethyl acetate	43	10.418	10.454	0.868	5167	N.D.	
95) Propionitrile		0.000	10.501	0.000	0	N.D.	
96) Methacrylonitrile	41	10.868	10.726	0.905	1521	N.D.	
97) Tetrahydrofuran	42	10.880	10.869	0.906	1745	Below Cal #	42
98) Isobutyl alcohol	41	11.390	11.343	0.949	573	N.D.	
99) Methyl tert-amyl ether		0.000	11.746	0.000	0	N.D.	
100) Methyl methacrylate		0.000	12.778	0.000	0	N.D.	
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102) 2-Nitropropane	43	13.216	13.300	1.101	791	N.D.	
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		0.000	15.553	0.000	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		0.000	16.762	0.000	0	N.D.	
108) Cyclohexanone		0.000	16.869	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0	N.D.	
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111) Benzyl chloride	91	18.339	18.339	1.008	1244	N.D.	
112) bis(2-Chloroisopropyl)...	45	18.837	18.754	1.035	2354	N.D.	

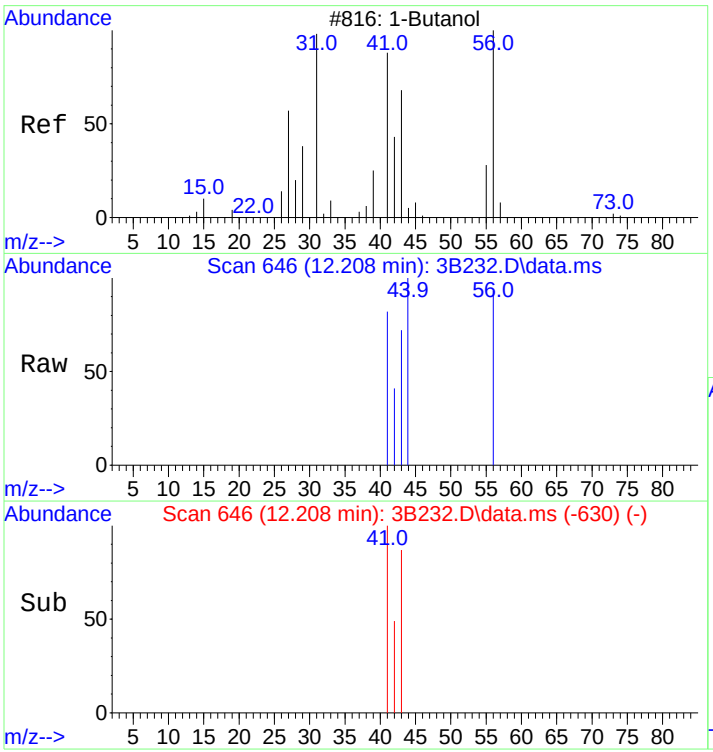
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B232.D
Acq On : 30 Aug 2011 23:28
Operator : SYK1
InstName : VOA3
Sample : |284538001|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 31 07:19:27 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

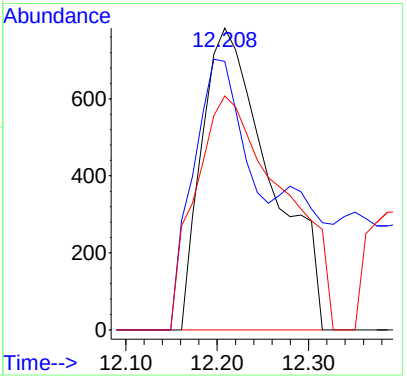


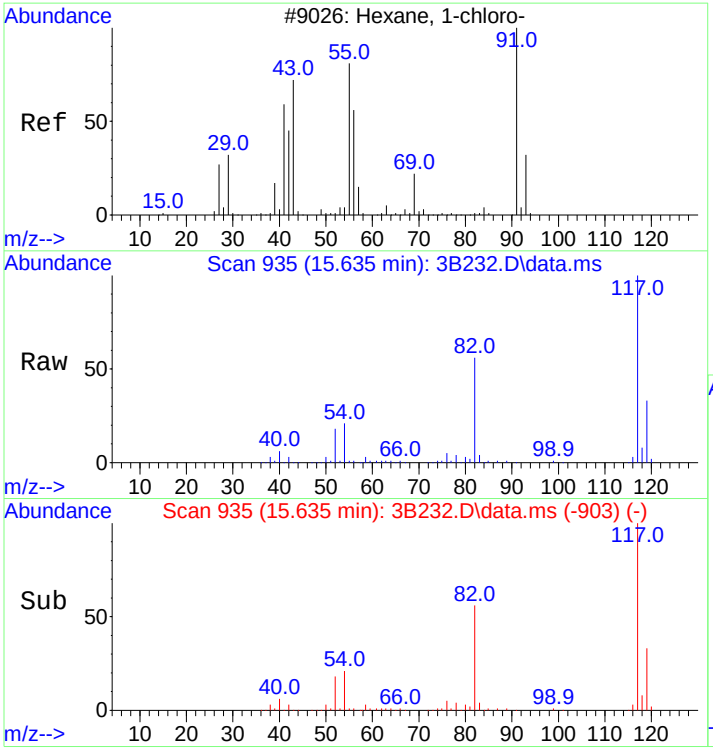


#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 72.92 ug/L
RT: 12.208 min Scan# 646
Delta R.T. 0.023 min
Lab File: 3B232.D
Acq: 30 Aug 2011 23:28

Tgt Ion: 56 Resp: 4089

Ion	Ratio	Lower	Upper
56	100		
41	104.7	37.4	97.4#
43	99.3	25.1	85.1#

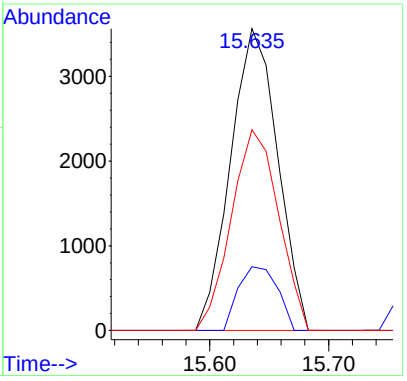




#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.45 ug/L
RT: 15.635 min Scan# 935
Delta R.T. 0.082 min
Lab File: 3B232.D
Acq: 30 Aug 2011 23:28

Tgt Ion: 55 Resp: 9842

Ion	Ratio	Lower	Upper
55	100		
91	17.6	123.6	183.6#
56	66.7	31.5	91.5



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	E	1040	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		55.0	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone		12.1	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	J	0.430	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		7.81	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		2.90	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:58**				
Data File:	**083011V3\3B231.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B231.D
Acq On : 30 Aug 2011 22:58
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 31 07:43:23 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1297699	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	551713	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	552655	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1297699	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	551713	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	552655	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	66409	44.76	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1178137	48.08	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	528069	50.49	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	89.52%
43) Toluene-d8	50.000	80 - 120	96.16%
61) Bromofluorobenzene	50.000	80 - 120	100.98%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.666	0.000	0	N.D.		
3) Chloromethane		0.000	5.068	0.000	0m	N.D.	d	
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether	59	7.311	7.299	0.609	585	N.D.		
9) Acetone	43	7.761	7.762	0.646	3891527	1035.04	ug/L	98 A
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile	41	8.248	8.224	0.687	3780	Below Cal	#	75
13) Methyl acetate	43	8.307	8.295	0.692	1159	N.D.		
14) Carbon disulfide	76	8.200	8.212	0.683	3156	N.D.		
15) Methylene chloride		0.000	8.532	0.000	0m	N.D.	d	
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	1214869	54.99	ug/L	100
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate	43	9.789	9.612	0.815	379	N.D.		
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone	43	10.418	10.406	0.868	68549	12.06	ug/L	92
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform	83	10.868	10.869	0.905	5703	0.43	ug/L	84
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane	56	11.295	11.307	0.941	191	N.D.		
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene	78	11.687	11.687	0.973	651	N.D.		
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		0.000	12.185	0.000	0m	N.D.	d	
34) Trichloroethylene		0.000	12.481	0.000	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B231.D
Acq On : 30 Aug 2011 22:58
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 31 07:43:23 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
36)	Methylcyclohexane	83	12.706	12.766	1.058	1864	N.D.			
37)	Dibromomethane		0.000	12.920	0.000	0	N.D.			
38)	Bromodichloromethane		0.000	13.062	0.000	0	N.D.			
39)	2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.			
40)	cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.			
42)	4-Methyl-2-pentanone	58	13.714	13.715	0.877	22596	7.81	ug/L	#	1
44)	Toluene	91	14.035	14.035	0.898	3050	N.D.			
45)	trans-1,3-Dichloroprop...	75	14.272	14.213	0.913	186	N.D.			
46)	1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.			
47)	2-Hexanone	58	14.675	14.675	0.939	2051	Below Cal		#	1
48)	1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.			
49)	Tetrachloroethylene		0.000	14.699	0.000	0	N.D.			
50)	Dibromochloromethane		0.000	14.960	0.000	0	N.D.			
51)	1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.			
52)	Chlorobenzene	112	15.671	15.671	1.002	381	N.D.			
53)	1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.			
54)	Ethylbenzene	91	15.754	15.754	1.008	824	N.D.			
55)	m,p-Xylenes	106	15.873	15.873	1.015	3367	N.D.			
56)	o-Xylene	106	16.335	16.335	1.045	201	N.D.			
57)	Styrene	104	16.335	16.335	1.045	193	N.D.			
59)	Bromoform		0.000	16.608	0.000	0	N.D.			
60)	Isopropylbenzene	105	16.833	16.715	0.925	182	N.D.			
62)	1,1,2,2-Tetrachloroethane	83	16.999	17.011	0.934	1217	N.D.			
63)	1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.			
64)	Bromobenzene		0.000	17.142	0.000	0	N.D.			
65)	n-Propylbenzene		0.000	17.165	0.000	0	N.D.			
66)	1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	80409	2.90	ug/L		96
67)	2-Chlorotoluene	126	17.272	17.320	0.949	369	N.D.			
68)	4-Chlorotoluene	91	17.426	17.415	0.958	689	N.D.			
69)	tert-Butylbenzene		0.000	17.711	0.000	0	N.D.			
70)	1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	687	N.D.			
71)	sec-Butylbenzene		0.000	17.948	0.000	0	N.D.			
72)	4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.			
73)	1,3-Dichlorobenzene	146	18.138	18.126	0.997	409	N.D.			
74)	1,4-Dichlorobenzene	146	18.221	18.221	1.001	906	N.D.			
75)	n-Butylbenzene	91	18.470	18.529	1.015	956	N.D.			
76)	1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.			
77)	1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.			
78)	1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	401	N.D.			
79)	Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.			
80)	Naphthalene	128	21.079	21.079	1.158	3292	N.D.			
81)	1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.			
83)	Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84)	2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85)	Acrolein	56	7.524	7.524	0.627	916	N.D.			
86)	Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87)	Isopropyl Alcohol		0.000	7.928	0.000	0m	N.D.	d		
88)	Allyl chloride	41	8.378	8.331	0.698	364	Below Cal		#	27
89)	tert-Butyl Alcohol	59	8.568	8.580	0.714	3218167	3636.02	ug/L		98
90)	Acrylonitrile		0.000	8.864	0.000	0m	N.D.	d		
91)	Isopropyl ether		0.000	9.647	0.000	0	N.D.			
92)	2-Chloro-1,3-butadiene		0.000	9.766	0.000	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B231.D
Acq On : 30 Aug 2011 22:58
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 31 07:43:23 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

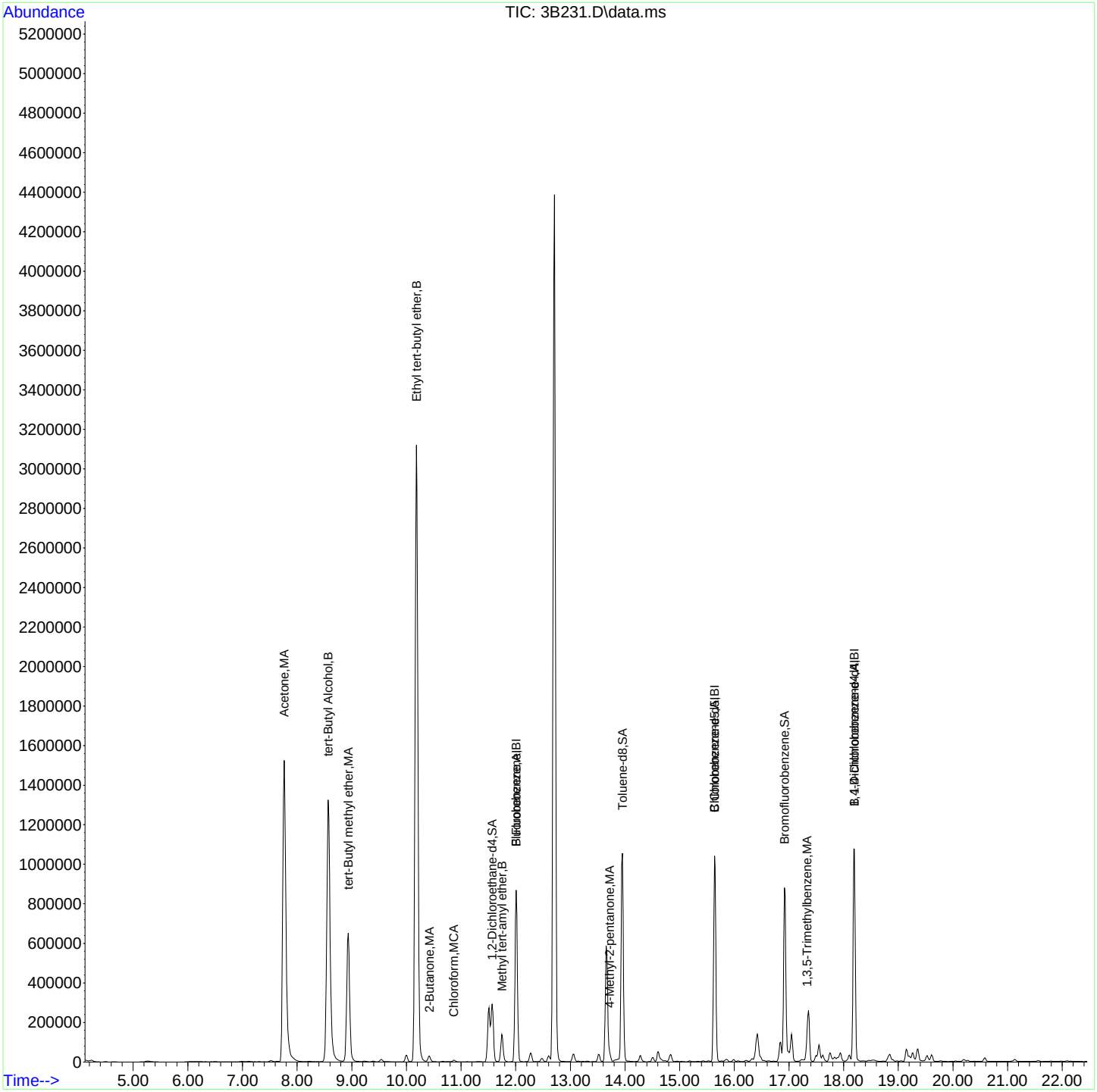
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	4788585	200.21	ug/L	98	A
94) Ethyl acetate		0.000	10.454	0.000	0m	N.D.	d		
95) Propionitrile		0.000	10.501	0.000	0	N.D.			
96) Methacrylonitrile		0.000	10.726	0.000	0m	N.D.	d		
97) Tetrahydrofuran	42	10.868	10.869	0.905	2918	Below Cal	#	51	
98) Isobutyl alcohol	41	11.307	11.343	0.942	1951	N.D.			
99) Methyl tert-amyl ether	73	11.746	11.746	0.978	174897	7.98	ug/L	98	
100) Methyl methacrylate		0.000	12.778	0.000	0m	N.D.	d		
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.			
102) 2-Nitropropane	43	13.442	13.300	1.120	1840	N.D.			
104) Ethyl methacrylate	69	14.248	14.248	0.911	376	N.D.			
106) 1-Chlorohexane		0.000	15.553	0.000	0m	N.D.	d		
107) cis-1,4-Dichloro-2-butene	53	16.904	16.762	0.929	1474	N.D.			
108) Cyclohexanone	42	16.904	16.869	0.929	3149	Below Cal	#	39	
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0m	N.D.	d		
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.			
111) Benzyl chloride	91	18.339	18.339	1.008	2480	N.D.			
112) bis(2-Chloroisopropyl)...	45	18.837	18.754	1.035	3217	N.D.			

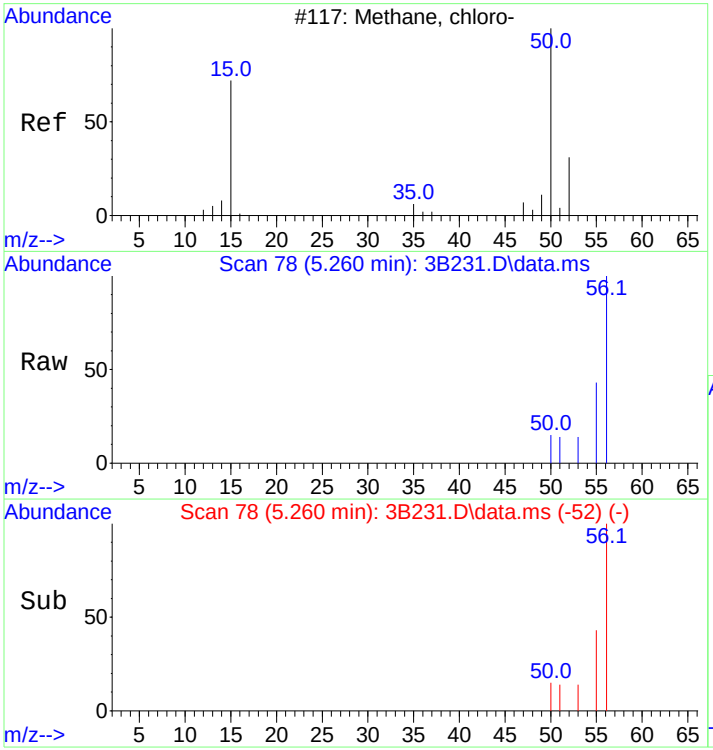
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B231.D
Acq On : 30 Aug 2011 22:58
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 31 07:43:23 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

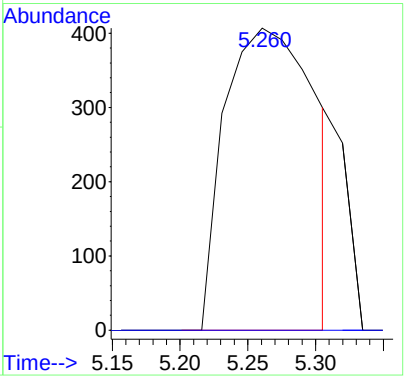


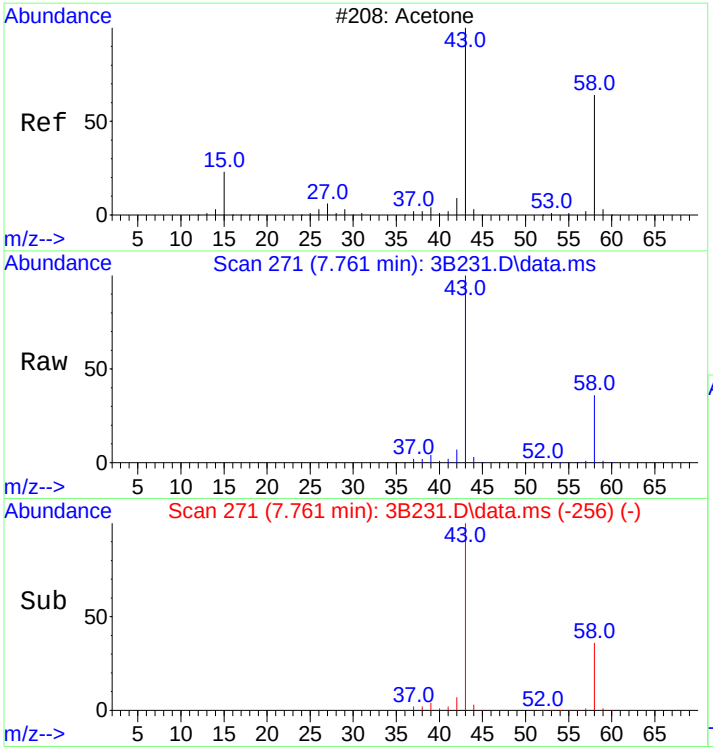


#3 BEFORE analyst DELETION
Chloromethane
Concen: 0.30 ug/L
RT: 5.260 min Scan# 78
Delta R.T. 0.192 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 50 Resp: 1886

Ion	Ratio	Lower	Upper
50	100		
52	0.0	2.2	62.2#

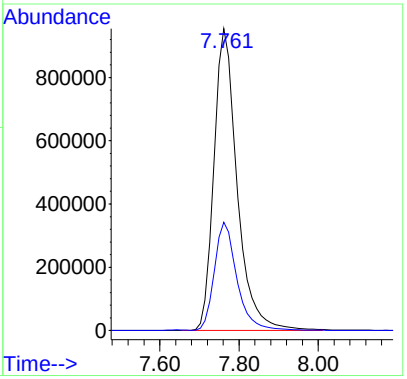


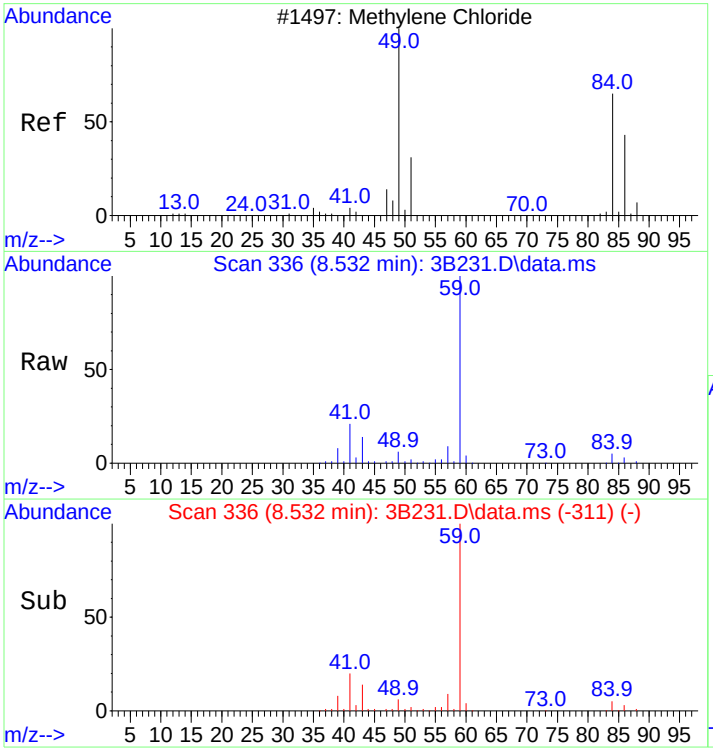


#9
Acetone
Concen: 1035.04 ug/L
RT: 7.761 min Scan# 271
Delta R.T. -0.001 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 43 Resp: 3891527

Ion	Ratio	Lower	Upper
43	100		
58	34.6	3.6	63.6

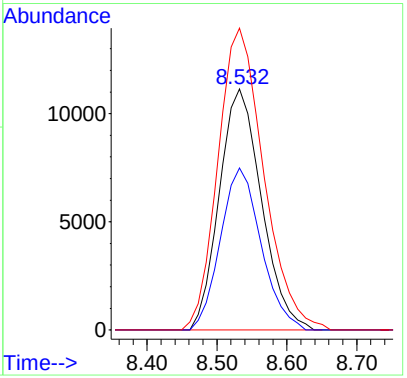


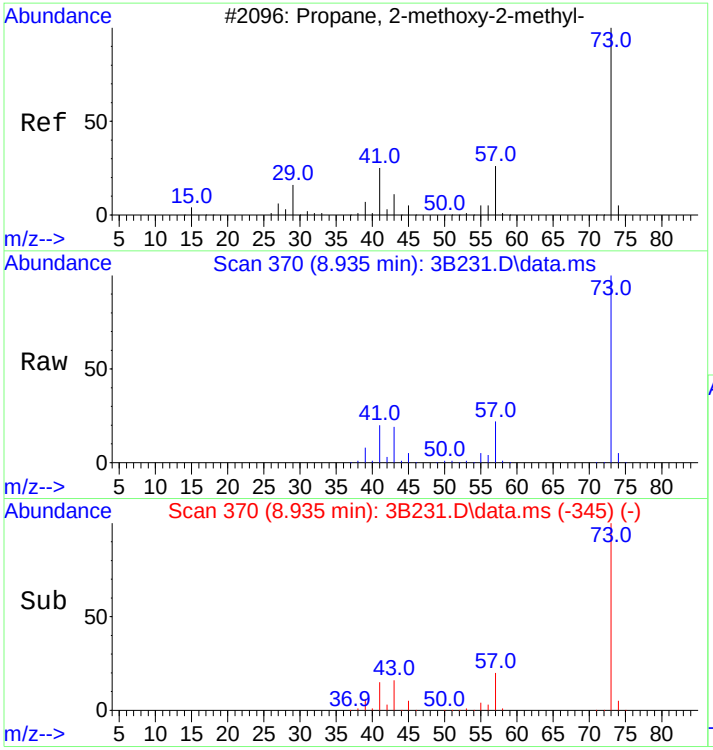


#15 BEFORE analyst DELETION
Methylene chloride
Concen: 5.12 ug/L
RT: 8.532 min Scan# 336
Delta R.T. 0.000 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 84 Resp: 46696

Ion	Ratio	Lower	Upper
84	100		
86	64.7	35.0	95.0
49	135.8	92.2	152.2

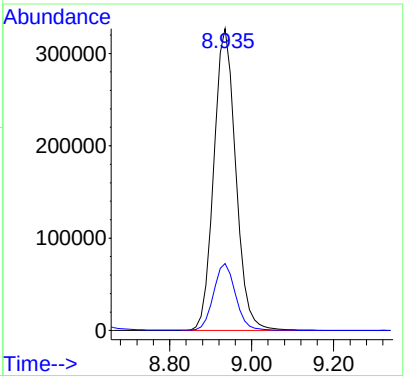


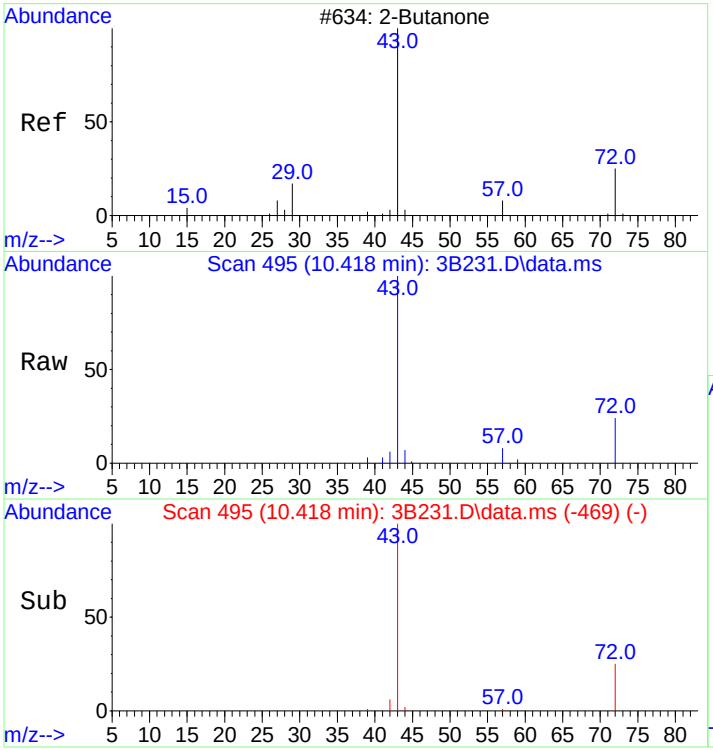


#16
tert-Butyl methyl ether
Concen: 54.99 ug/L
RT: 8.935 min Scan# 370
Delta R.T. -0.001 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 73 Resp: 1214869

Ion	Ratio	Lower	Upper
73	100		
57	22.3	0.0	52.2

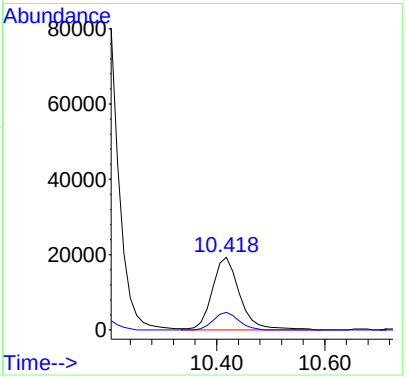


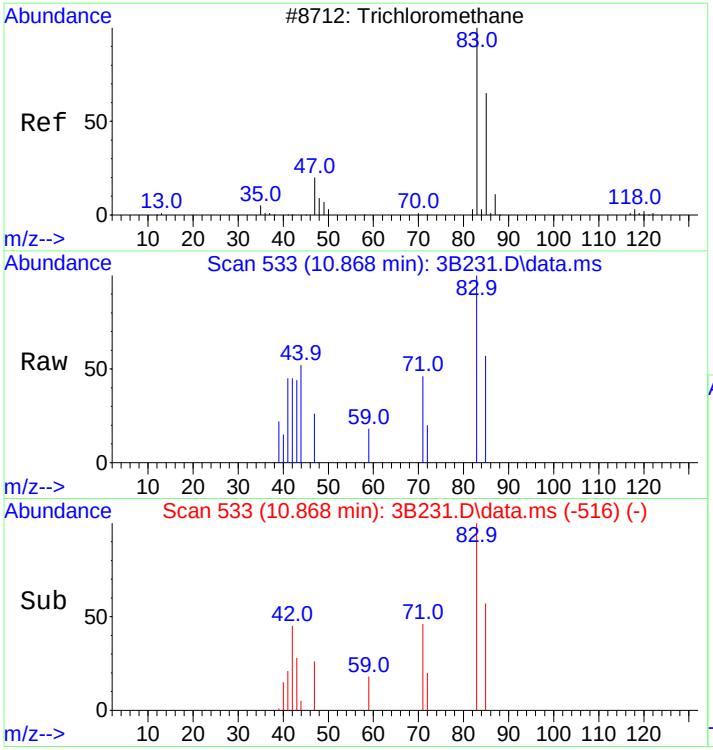


#20
2-Butanone
Concen: 12.06 ug/L
RT: 10.418 min Scan# 495
Delta R.T. 0.012 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 43 Resp: 68549

Ion	Ratio	Lower	Upper
43	100		
72	22.4	0.0	56.6

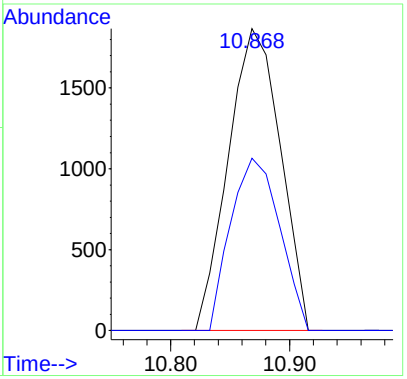


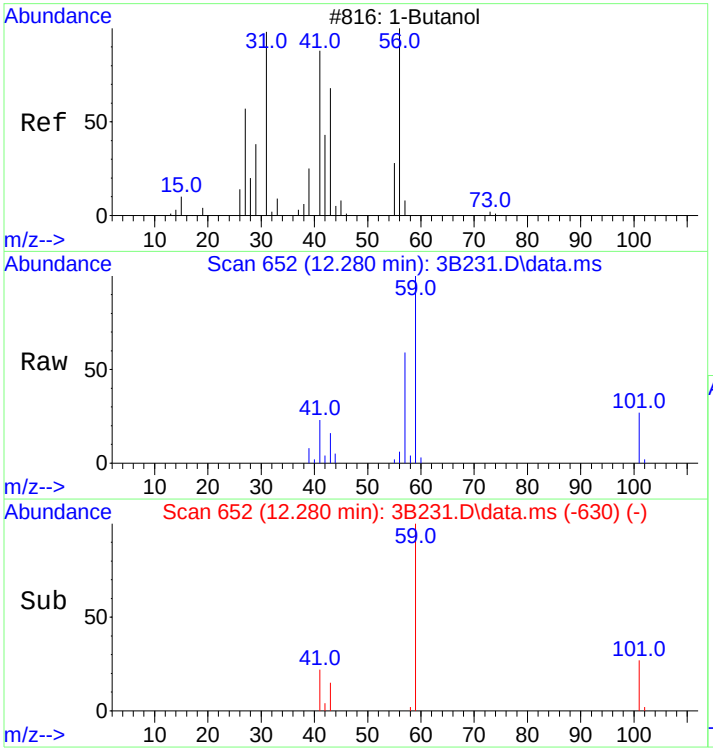


#24
Chloroform
Concen: 0.43 ug/L
RT: 10.868 min Scan# 533
Delta R.T. -0.001 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 83 Resp: 5703

Ion	Ratio	Lower	Upper
83	100		
85	53.6	36.8	96.8

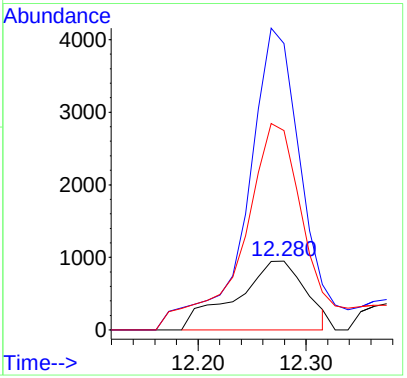


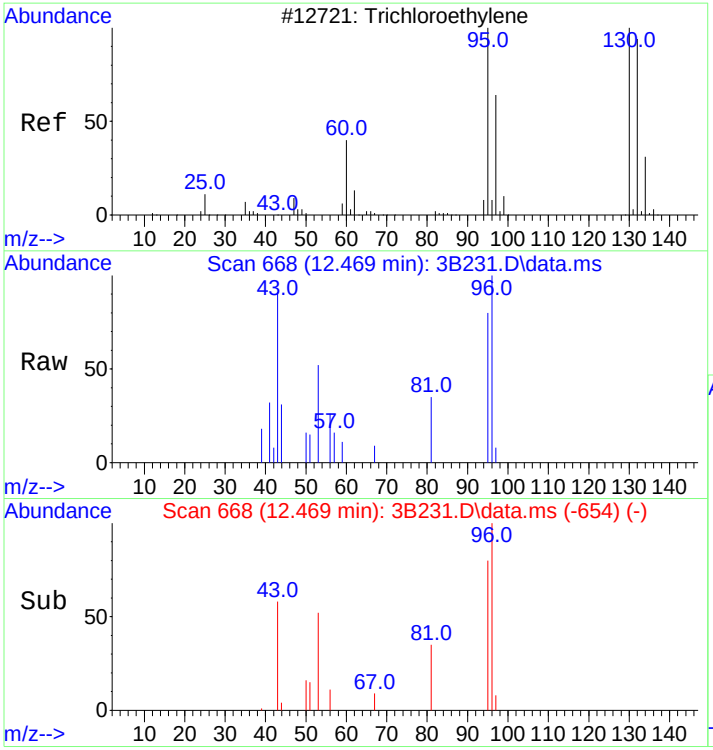


#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 74.24 ug/L
RT: 12.280 min Scan# 652
Delta R.T. 0.095 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 56 Resp: 4257

Ion	Ratio	Lower	Upper
56	100		
41	333.5	37.4	97.4#
43	252.1	25.1	85.1#

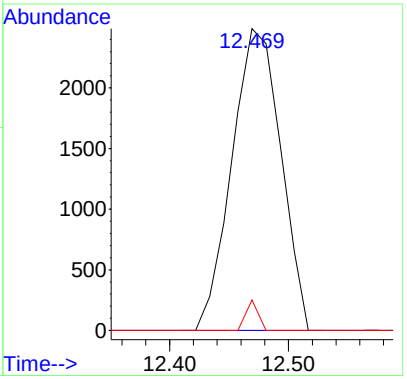


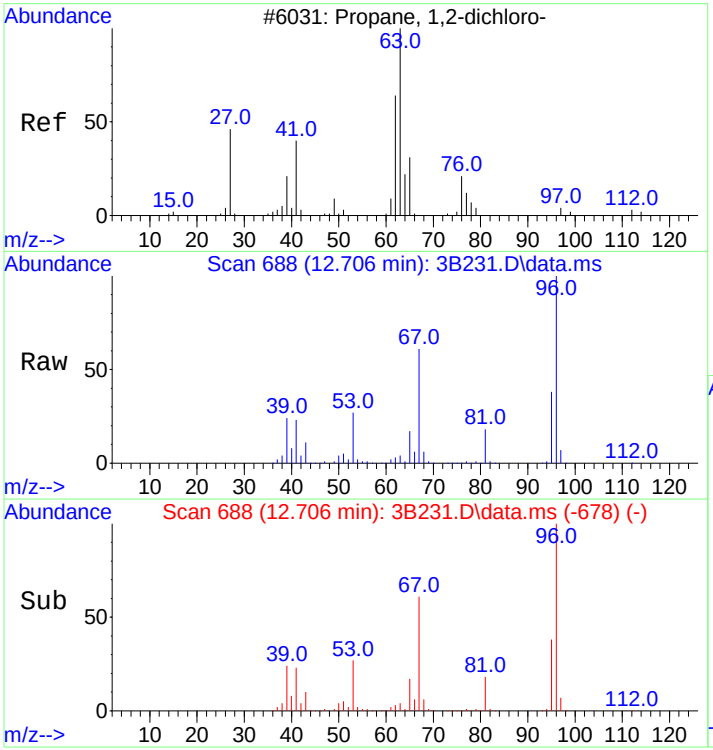


#34 BEFORE analyst DELETION
Trichloroethylene
Concen: 0.95 ug/L
RT: 12.469 min Scan# 668
Delta R.T. -0.012 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 95 Resp: 7129

Ion	Ratio	Lower	Upper
95	100		
130	0.0	72.9	132.9#
97	2.5	35.9	95.9#

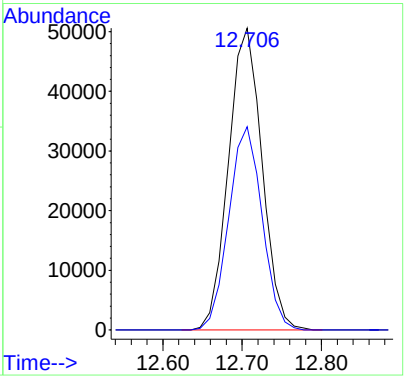


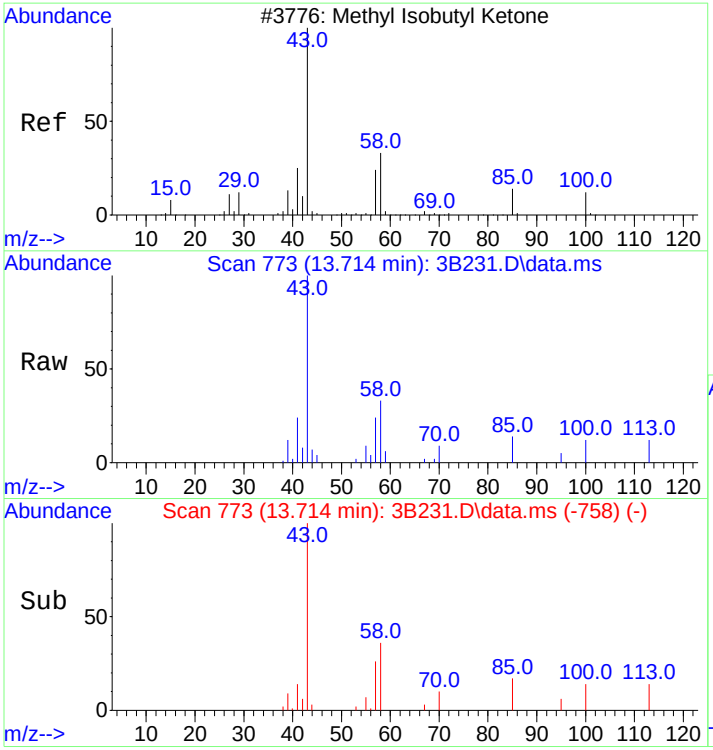


#35 BEFORE analyst DELETION
1,2-Dichloropropane
Concen: 20.87 ug/L
RT: 12.706 min Scan# 688
Delta R.T. -0.060 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 63 Resp: 149281

Ion	Ratio	Lower	Upper
63	100		
62	66.8	39.9	99.9

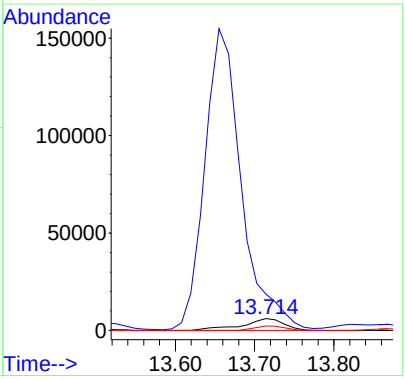


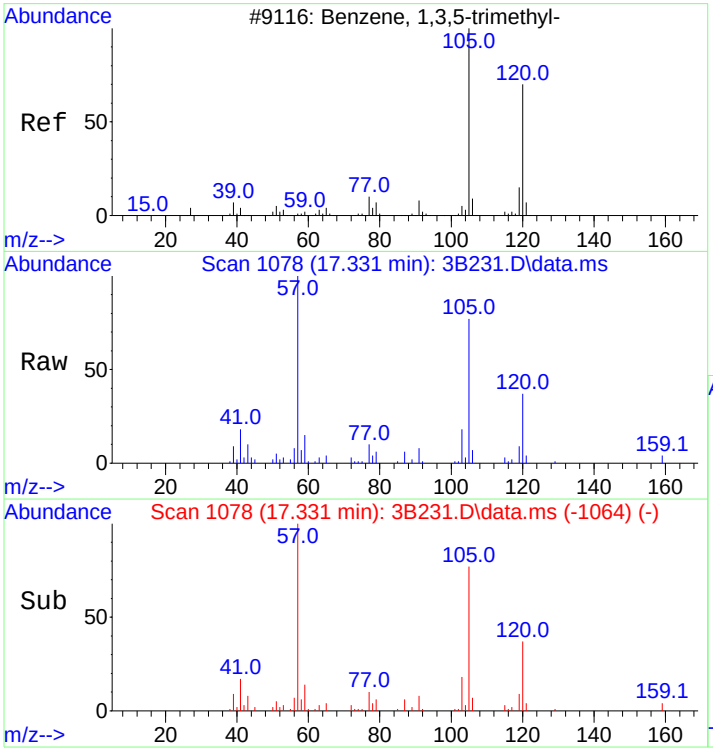


#42
4-Methyl-2-pentanone
Concen: 7.81 ug/L
RT: 13.714 min Scan# 773
Delta R.T. -0.001 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 58 Resp: 22596

Ion	Ratio	Lower	Upper
58	100		
43	0.0	206.5	266.5#
100	26.7	7.6	67.6

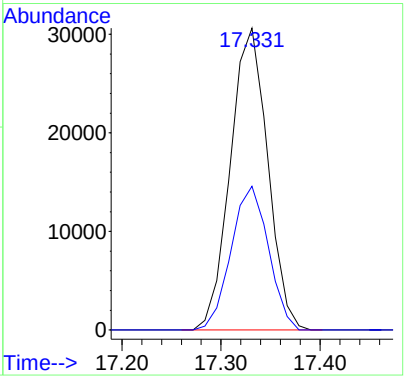


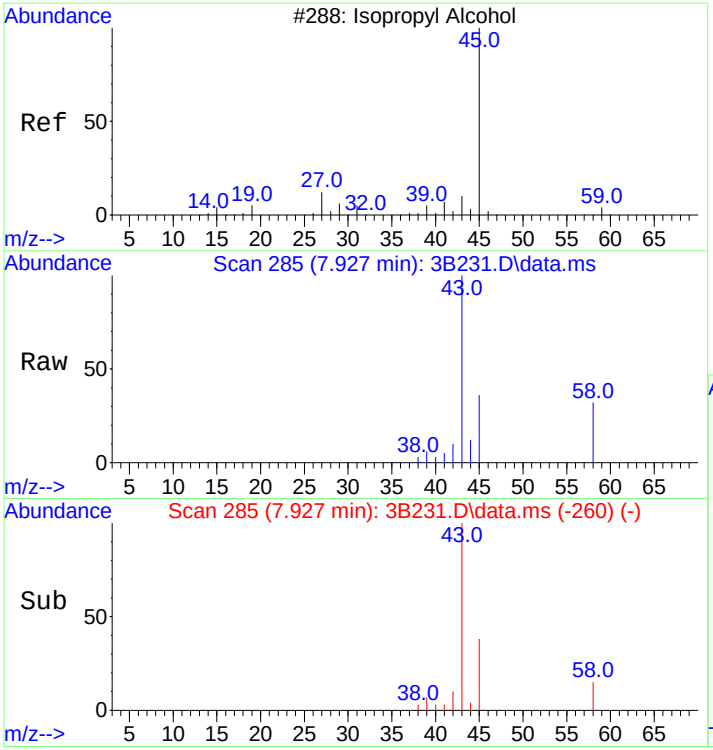


#66
1,3,5-Trimethylbenzene
Concen: 2.90 ug/L
RT: 17.331 min Scan# 1078
Delta R.T. 0.000 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion:105 Resp: 80409

Ion	Ratio	Lower	Upper
105	100		
120	47.6	20.6	80.6

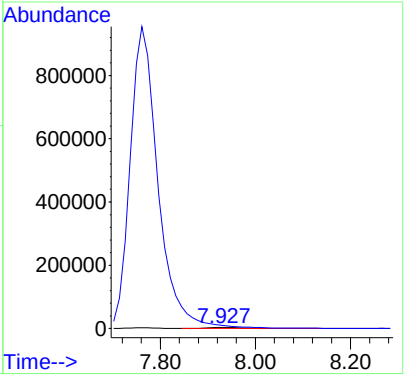


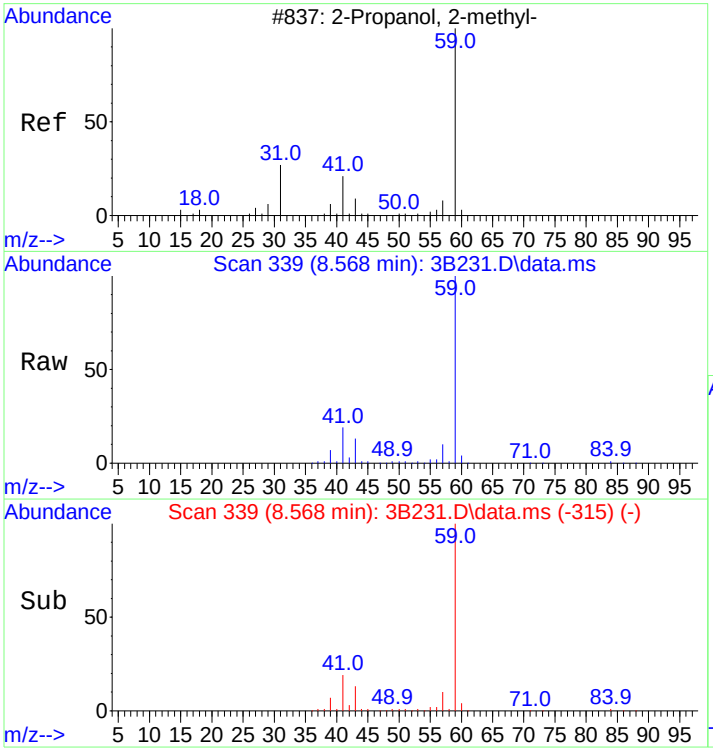


#87 BEFORE analyst DELETION
Isopropyl Alcohol
Concen: 42.09 ug/L
RT: 7.927 min Scan# 285
Delta R.T. -0.001 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 45 Resp: 20097

Ion	Ratio	Lower	Upper
45	100		
43	0.0	0.0	47.0

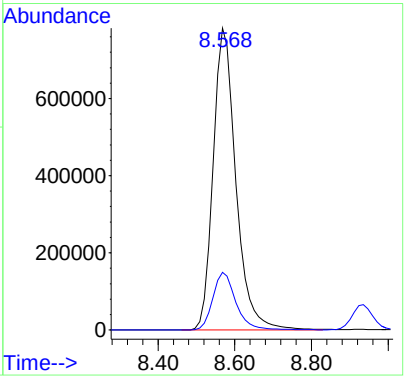


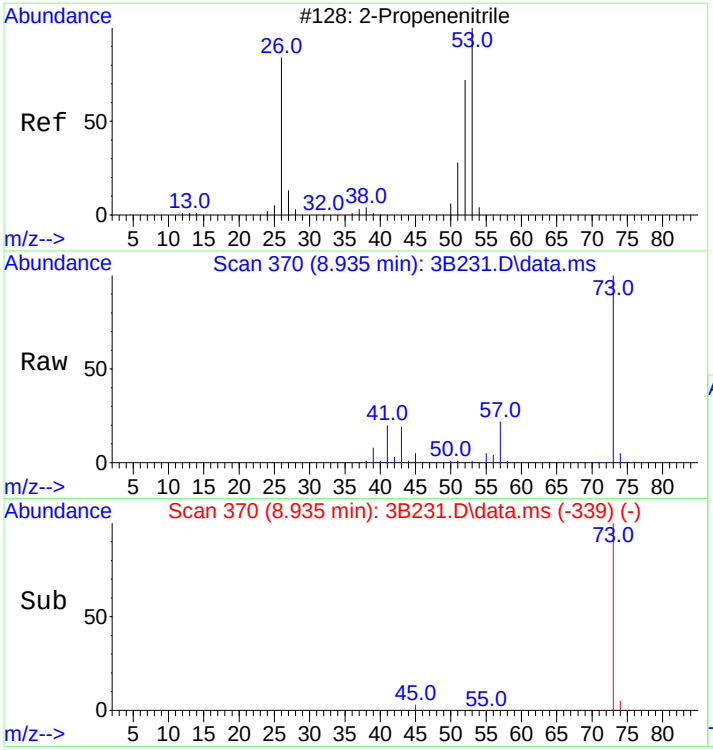


#89
tert-Butyl Alcohol
Concen: 3636.02 ug/L
RT: 8.568 min Scan# 339
Delta R.T. -0.012 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 59 Resp: 3218167

Ion	Ratio	Lower	Upper
59	100		
41	19.4	0.0	48.5

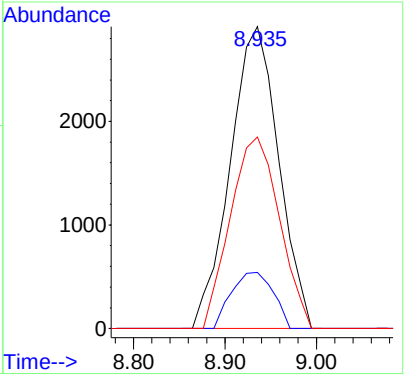


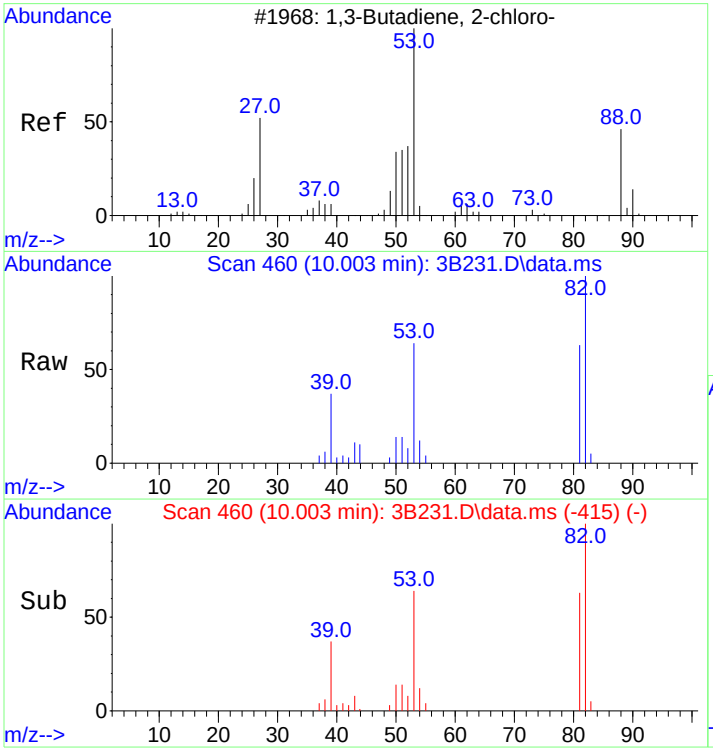


#90 BEFORE analyst DELETION
Acrylonitrile
Concen: 4.40 ug/L
RT: 8.935 min Scan# 370
Delta R.T. 0.071 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 53 Resp: 10714

Ion	Ratio	Lower	Upper
53	100		
52	16.1	50.4	110.4#
51	64.2	4.8	64.8

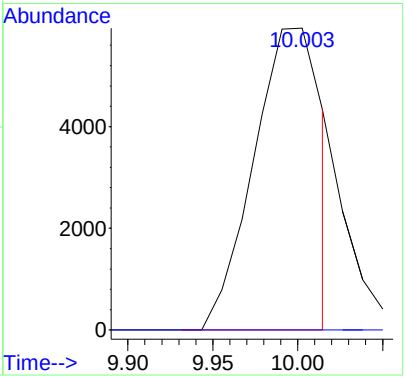


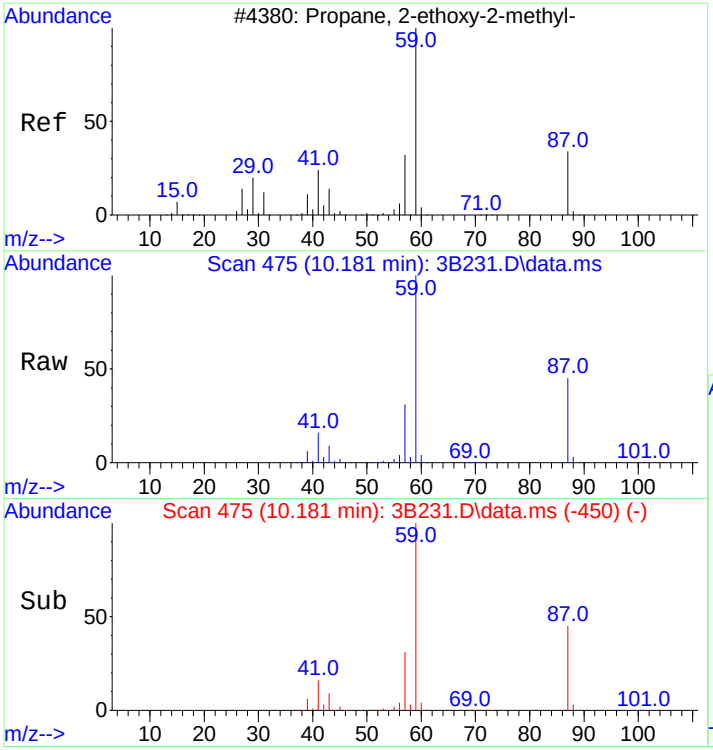


#92 BEFORE analyst DELETION
2-Chloro-1,3-butadiene
Concen: 1.82 ug/L
RT: 10.003 min Scan# 460
Delta R.T. 0.237 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 53 Resp: 16645

Ion	Ratio	Lower	Upper
53	100		
88	0.0	30.7	90.7#

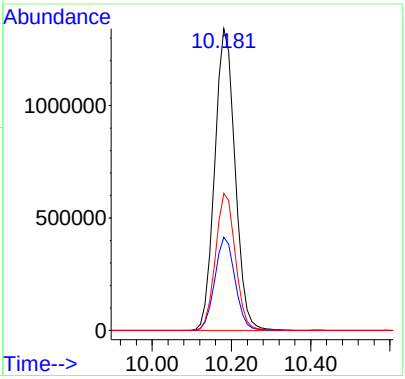


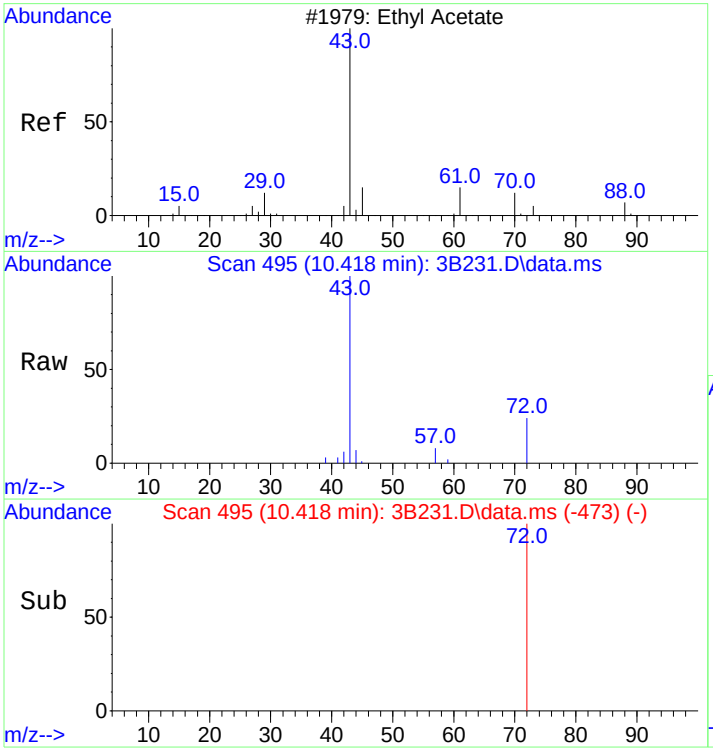


#93
Ethyl tert-butyl ether
Concen: 200.21 ug/L
RT: 10.181 min Scan# 475
Delta R.T. -0.000 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 59 Resp: 4788585

Ion	Ratio	Lower	Upper
59	100		
57	30.8	0.9	60.9
87	44.6	12.1	72.1

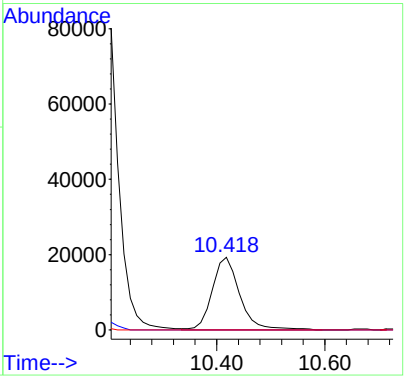


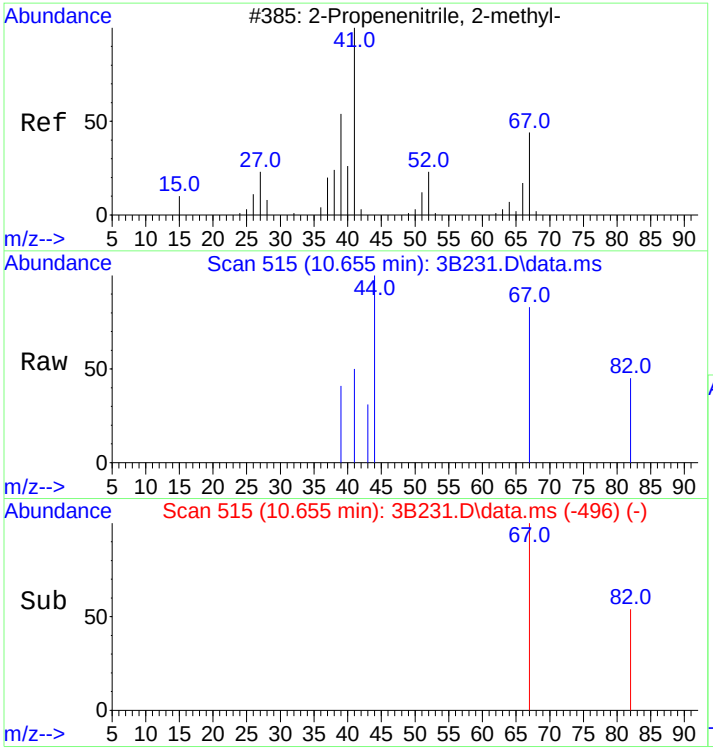


#94 BEFORE analyst DELETION
Ethyl acetate
Concen: 10.52 ug/L
RT: 10.418 min Scan# 495
Delta R.T. -0.036 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 43 Resp: 68549

Ion	Ratio	Lower	Upper
43	100		
61	0.0	0.0	44.8
70	0.0	0.0	42.4

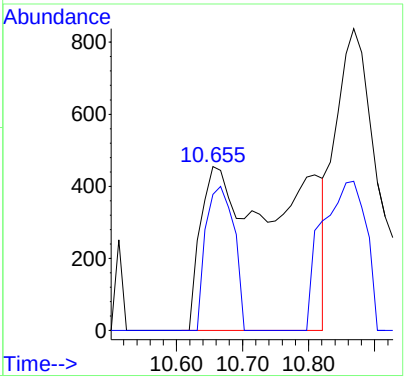


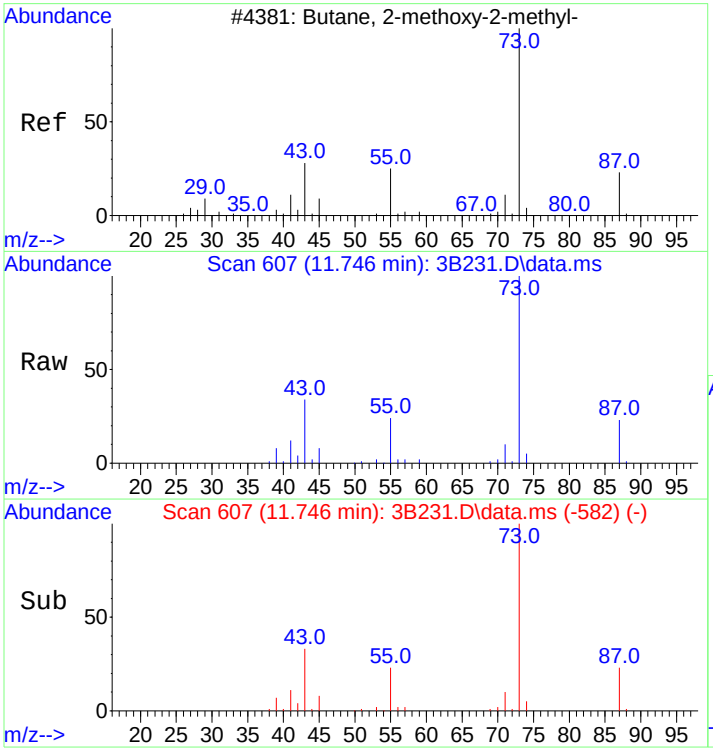


#96 BEFORE analyst DELETION
Methacrylonitrile
Concen: 1.09 ug/L
RT: 10.655 min Scan# 515
Delta R.T. -0.071 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 41 Resp: 4339

Ion	Ratio	Lower	Upper
41	100		
39	27.3	21.7	81.7

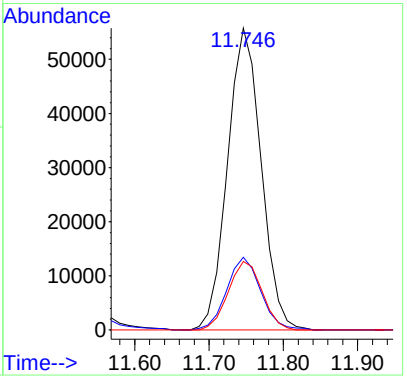


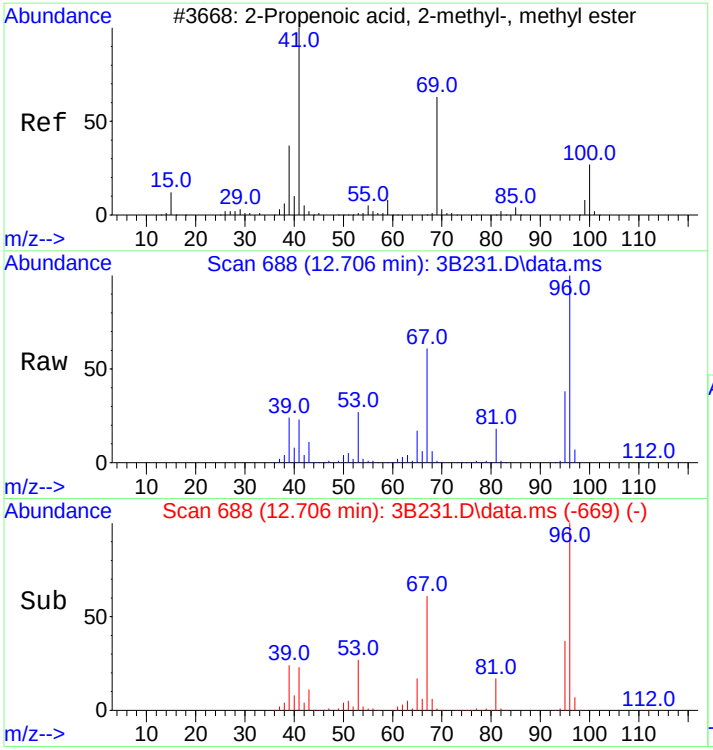


#99
Methyl tert-amyl ether
Concen: 7.98 ug/L
RT: 11.746 min Scan# 607
Delta R.T. -0.000 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 73 Resp: 174897

Ion	Ratio	Lower	Upper
73	100		
55	24.4	0.0	53.6
87	22.8	0.0	54.4

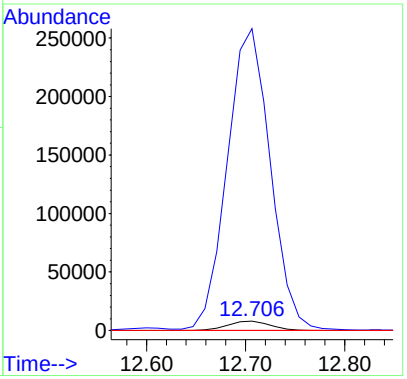


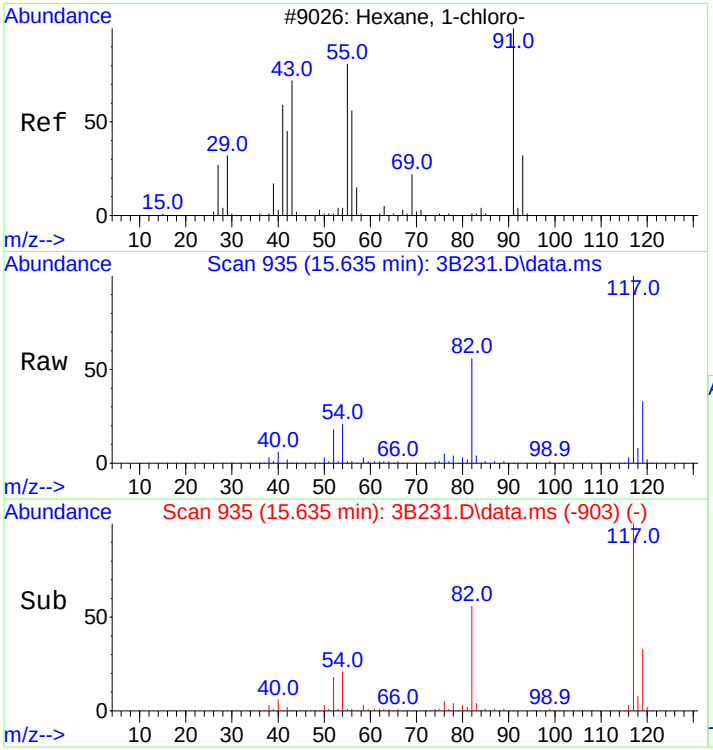


#100 BEFORE analyst DELETION
Methyl methacrylate
Concen: 5.19 ug/L
RT: 12.706 min Scan# 688
Delta R.T. -0.072 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 69 Resp: 23958

Ion	Ratio	Lower	Upper
69	100		
41	3273.2	91.0	151.0#
100	0.0	8.4	68.4#

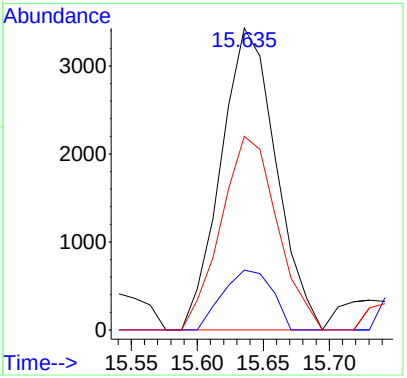


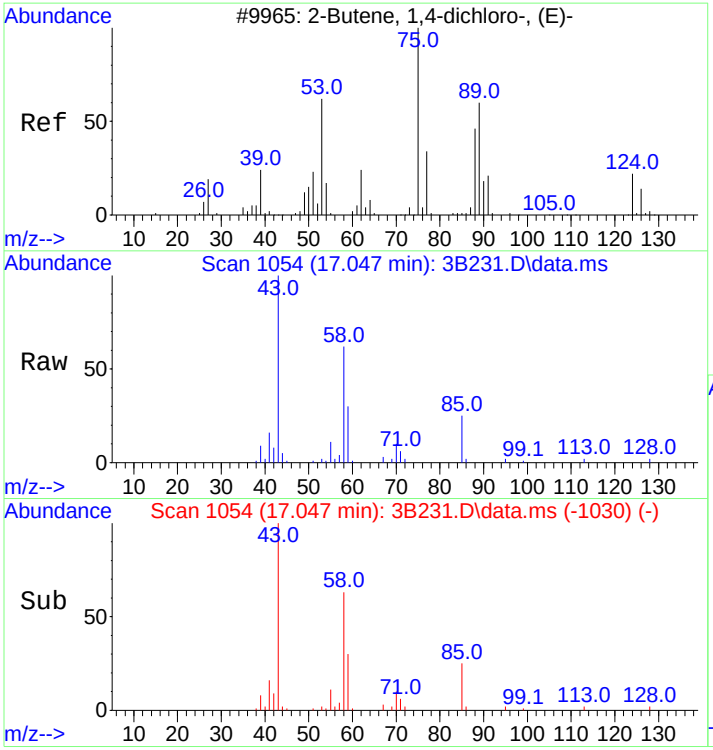


#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.48 ug/L
RT: 15.635 min Scan# 935
Delta R.T. 0.082 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 55 Resp: 9972

Ion	Ratio	Lower	Upper
55	100		
91	17.9	123.6	183.6#
56	65.5	31.5	91.5

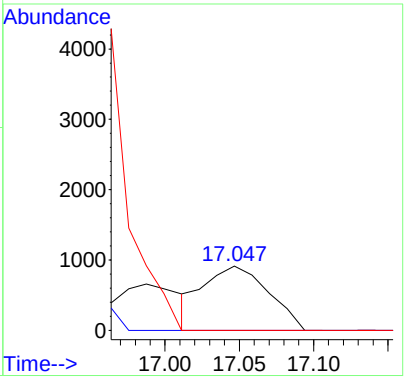




#109 BEFORE analyst DELETION
trans-1,4-Dichloro-2-butene
Concen: 1.36 ug/L
RT: 17.047 min Scan# 1054
Delta R.T. -0.012 min
Lab File: 3B231.D
Acq: 30 Aug 2011 22:58

Tgt Ion: 53 Resp: 2778

Ion	Ratio	Lower	Upper
53	100		
88	0.0	29.1	89.1#
75	0.0	116.7	176.7#



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	1.50	ug/L	1.50	5.00
74-87-3	Chloromethane	U	1.50	ug/L	1.50	5.00
75-01-4	Vinyl chloride	U	2.50	ug/L	2.50	5.00
74-83-9	Bromomethane	U	1.50	ug/L	1.50	5.00
75-00-3	Chloroethane	U	1.50	ug/L	1.50	5.00
75-69-4	Trichlorofluoromethane	U	1.50	ug/L	1.50	5.00
60-29-7	Ethyl ether	U	1.50	ug/L	1.50	5.00
67-64-1	Acetone		959	ug/L	7.50	25.0
75-05-8	Acetonitrile	U	31.3	ug/L	31.3	125
75-35-4	1,1-Dichloroethylene	U	1.50	ug/L	1.50	5.00
79-20-9	Methyl acetate	U	6.25	ug/L	6.25	25.0
74-88-4	Iodomethane	U	6.25	ug/L	6.25	25.0
75-09-2	Methylene chloride	U	10.0	ug/L	10.0	25.0
75-15-0	Carbon disulfide	U	6.25	ug/L	6.25	25.0
1634-04-4	tert-Butyl methyl ether		69.0	ug/L	1.25	5.00
156-60-5	trans-1,2-Dichloroethylene	U	1.50	ug/L	1.50	5.00
108-05-4	Vinyl acetate	U	7.50	ug/L	7.50	25.0
75-34-3	1,1-Dichloroethane	U	1.50	ug/L	1.50	5.00
78-93-3	2-Butanone		32.6	ug/L	6.25	25.0
156-59-2	cis-1,2-Dichloroethylene	U	1.50	ug/L	1.50	5.00
594-20-7	2,2-Dichloropropane	U	1.50	ug/L	1.50	5.00
67-66-3	Chloroform	U	1.25	ug/L	1.25	5.00
74-97-5	Bromochloromethane	U	1.50	ug/L	1.50	5.00
71-55-6	1,1,1-Trichloroethane	U	1.63	ug/L	1.63	5.00
110-82-7	Cyclohexane	U	1.50	ug/L	1.50	5.00
563-58-6	1,1-Dichloropropene	U	1.25	ug/L	1.25	5.00
71-36-3	n-Butyl alcohol	U	75.0	ug/L	75.0	250
56-23-5	Carbon tetrachloride	U	1.50	ug/L	1.50	5.00
107-06-2	1,2-Dichloroethane	U	1.25	ug/L	1.25	5.00
71-43-2	Benzene	U	1.50	ug/L	1.50	5.00
79-01-6	Trichloroethylene	U	1.25	ug/L	1.25	5.00
78-87-5	1,2-Dichloropropane	U	1.25	ug/L	1.25	5.00
108-87-2	Methylcyclohexane	U	1.25	ug/L	1.25	5.00
75-27-4	Bromodichloromethane	U	1.25	ug/L	1.25	5.00
74-95-3	Dibromomethane	U	1.50	ug/L	1.50	5.00
110-75-8	2-Chloroethylvinyl ether	U	7.50	ug/L	7.50	25.0
108-10-1	4-Methyl-2-pentanone		35.1	ug/L	6.25	25.0
10061-01-5	cis-1,3-Dichloropropylene	U	1.25	ug/L	1.25	5.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	1.25	ug/L	1.25	5.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.25	ug/L	1.25	5.00
79-00-5	1,1,2-Trichloroethane	U	1.25	ug/L	1.25	5.00
591-78-6	2-Hexanone	U	6.25	ug/L	6.25	25.0
142-28-9	1,3-Dichloropropane	U	1.50	ug/L	1.50	5.00
127-18-4	Tetrachloroethylene	U	1.50	ug/L	1.50	5.00
124-48-1	Dibromochloromethane	U	1.50	ug/L	1.50	5.00
106-93-4	1,2-Dibromoethane	U	1.25	ug/L	1.25	5.00
108-90-7	Chlorobenzene	U	1.25	ug/L	1.25	5.00
100-41-4	Ethylbenzene	U	1.25	ug/L	1.25	5.00
179601-23-1	m,p-Xylenes	U	2.50	ug/L	2.50	10.0
95-47-6	o-Xylene	U	1.50	ug/L	1.50	5.00
100-42-5	Styrene	U	1.25	ug/L	1.25	5.00
75-25-2	Bromoform	U	1.25	ug/L	1.25	5.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.25	ug/L	1.25	5.00
96-18-4	1,2,3-Trichloropropane	U	1.50	ug/L	1.50	5.00
108-86-1	Bromobenzene	U	1.25	ug/L	1.25	5.00
103-65-1	n-Propylbenzene	U	1.25	ug/L	1.25	5.00
95-49-8	2-Chlorotoluene	U	1.25	ug/L	1.25	5.00
98-82-8	Isopropylbenzene	U	1.25	ug/L	1.25	5.00
108-67-8	1,3,5-Trimethylbenzene	J	2.80	ug/L	1.25	5.00
106-43-4	4-Chlorotoluene	U	1.25	ug/L	1.25	5.00
98-06-6	tert-Butylbenzene	U	1.25	ug/L	1.25	5.00
95-63-6	1,2,4-Trimethylbenzene	U	1.25	ug/L	1.25	5.00
135-98-8	sec-Butylbenzene	U	1.25	ug/L	1.25	5.00
99-87-6	4-Isopropyltoluene	U	1.25	ug/L	1.25	5.00
541-73-1	1,3-Dichlorobenzene	U	1.25	ug/L	1.25	5.00
106-46-7	1,4-Dichlorobenzene	U	1.25	ug/L	1.25	5.00
104-51-8	n-Butylbenzene	U	1.25	ug/L	1.25	5.00
96-12-8	1,2-Dibromo-3-chloropropane	U	1.50	ug/L	1.50	5.00
87-68-3	Hexachlorobutadiene	U	1.50	ug/L	1.50	5.00
91-20-3	Naphthalene	U	1.25	ug/L	1.25	5.00
87-61-6	1,2,3-Trichlorobenzene	U	1.66	ug/L	1.66	5.00
107-02-8	Acrolein	U	6.25	ug/L	6.25	25.0
76-13-1	Trichlorotrifluoroethane	U	5.00	ug/L	5.00	25.0
107-05-1	Allyl chloride	U	7.50	ug/L	7.50	25.0
107-13-1	Acrylonitrile	U	5.00	ug/L	5.00	25.0
126-99-8	2-Chloro-1,3-butadiene	U	1.50	ug/L	1.50	5.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**WATER**
Lab Sample ID:	**284538002**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080106DL**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**5**
Run Date:	**08/31/2011 10:54**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:54**				
Data File:	**083111V3\3B309.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	7.50	ug/L	7.50	25.0
126-98-7	Methacrylonitrile	U	5.00	ug/L	5.00	25.0
78-83-1	Isobutyl alcohol	U	62.5	ug/L	62.5	250
80-62-6	Methyl methacrylate	U	5.00	ug/L	5.00	25.0
97-63-2	Ethyl methacrylate	U	5.00	ug/L	5.00	25.0
79-46-9	2-Nitropropane	U	5.00	ug/L	5.00	25.0
108-94-1	Cyclohexanone	U	75.0	ug/L	75.0	250
1476-11-5	cis-1,4-Dichloro-2-butene	U	5.00	ug/L	5.00	25.0
110-57-6	trans-1,4-Dichloro-2-butene	U	5.00	ug/L	5.00	25.0
76-01-7	Pentachloroethane	U	5.00	ug/L	5.00	25.0
100-44-7	Benzyl chloride	U	6.50	ug/L	6.50	25.0
39638-32-9	bis(2-Chloroisopropyl)ether	U	7.50	ug/L	7.50	25.0
540-59-0	1,2-Dichloroethylene (total)	U	1.50	ug/L	1.50	5.00
1330-20-7	Xylenes (total)	U	1.50	ug/L	1.50	5.00
630-20-6	1,1,1,2-Tetrachloroethane	U	1.50	ug/L	1.50	5.00
120-82-1	1,2,4-Trichlorobenzene	U	1.50	ug/L	1.50	5.00
95-50-1	1,2-Dichlorobenzene	U	1.25	ug/L	1.25	5.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B309.D
Acq On : 31 Aug 2011 10:54
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|5|VOA|2|VOA8260BL|
Misc : ECOL 1ML pH2
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 31 11:17:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1335142	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	566062	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	571151	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1335142	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	566062	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	571151	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	71637	46.93	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1208925	48.09	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	543832	50.31	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	93.86%
43) Toluene-d8	50.000	80 - 120	96.18%
61) Bromofluorobenzene	50.000	80 - 120	100.62%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.666	0.000	0	N.D.		
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone	43	7.761	7.762	0.646	788229	191.87	ug/L	98
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile	41	8.248	8.224	0.687	2531	Below Cal	#	86
13) Methyl acetate	43	8.295	8.295	0.691	1962	N.D.		
14) Carbon disulfide	76	8.200	8.212	0.683	1182	N.D.		
15) Methylene chloride	84	8.532	8.532	0.711	15600	N.D.		
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	313743	13.80	ug/L	100
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate	43	9.623	9.612	0.801	813	N.D.		
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone	43	10.418	10.406	0.868	38151	6.52	ug/L	92
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform	83	10.868	10.869	0.905	1151	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		0.000	11.307	0.000	0	N.D.		
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		0.000	11.687	0.000	0	N.D.		
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		0.000	12.185	0.000	0	N.D.		
34) Trichloroethylene		0.000	12.481	0.000	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B309.D
Acq On : 31 Aug 2011 10:54
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|5|VOA|2|VOA8260BL|
Misc : ECOL 1ML pH2
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 31 11:17:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
36)	Methylcyclohexane		0.000	12.766	0.000	0	N.D.			
37)	Dibromomethane		0.000	12.920	0.000	0	N.D.			
38)	Bromodichloromethane		0.000	13.062	0.000	0	N.D.			
39)	2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.			
40)	cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.			
42)	4-Methyl-2-pentanone	58	13.714	13.715	0.877	20814	7.01	ug/L	#	1
44)	Toluene	91	14.035	14.035	0.898	924	N.D.			
45)	trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.			
46)	1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.			
47)	2-Hexanone	58	14.675	14.675	0.939	2917	Below Cal		#	62
48)	1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.			
49)	Tetrachloroethylene		0.000	14.699	0.000	0	N.D.			
50)	Dibromochloromethane		0.000	14.960	0.000	0	N.D.			
51)	1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.			
52)	Chlorobenzene		0.000	15.671	0.000	0	N.D.			
53)	1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.			
54)	Ethylbenzene	91	15.754	15.754	1.008	199	N.D.			
55)	m,p-Xylenes	106	15.873	15.873	1.015	412	N.D.			
56)	o-Xylene		0.000	16.335	0.000	0	N.D.			
57)	Styrene		0.000	16.335	0.000	0	N.D.			
59)	Bromoform		0.000	16.608	0.000	0	N.D.			
60)	Isopropylbenzene		0.000	16.715	0.000	0	N.D.			
62)	1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.			
63)	1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.			
64)	Bromobenzene		0.000	17.142	0.000	0	N.D.			
65)	n-Propylbenzene		0.000	17.165	0.000	0	N.D.			
66)	1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	16046	0.56	ug/L		92
67)	2-Chlorotoluene		0.000	17.320	0.000	0	N.D.			
68)	4-Chlorotoluene	91	17.426	17.415	0.958	935	N.D.			
69)	tert-Butylbenzene		0.000	17.711	0.000	0	N.D.			
70)	1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	196	N.D.			
71)	sec-Butylbenzene		0.000	17.948	0.000	0	N.D.			
72)	4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.			
73)	1,3-Dichlorobenzene	146	18.126	18.126	0.996	410	N.D.			
74)	1,4-Dichlorobenzene	146	18.221	18.221	1.001	699	N.D.			
75)	n-Butylbenzene	91	18.339	18.529	1.008	958	N.D.			
76)	1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.			
77)	1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.			
78)	1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	189	N.D.			
79)	Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.			
80)	Naphthalene	128	21.079	21.079	1.158	2137	N.D.			
81)	1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.			
83)	Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84)	2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85)	Acrolein		0.000	7.524	0.000	0	N.D.			
86)	Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87)	Isopropyl Alcohol	45	7.928	7.928	0.660	3635	N.D.			
88)	Allyl chloride	41	8.248	8.331	0.687	2531	Below Cal		#	45
89)	tert-Butyl Alcohol	59	8.568	8.580	0.714	906486	995.46	ug/L		97
90)	Acrylonitrile	53	8.935	8.864	0.744	2180	N.D.			
91)	Isopropyl ether		0.000	9.647	0.000	0	N.D.			
92)	2-Chloro-1,3-butadiene		0.000	9.766	0.000	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B309.D
Acq On : 31 Aug 2011 10:54
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|5|VOA|2|VOA8260BL|
Misc : ECOL 1ML pH2
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 31 11:17:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

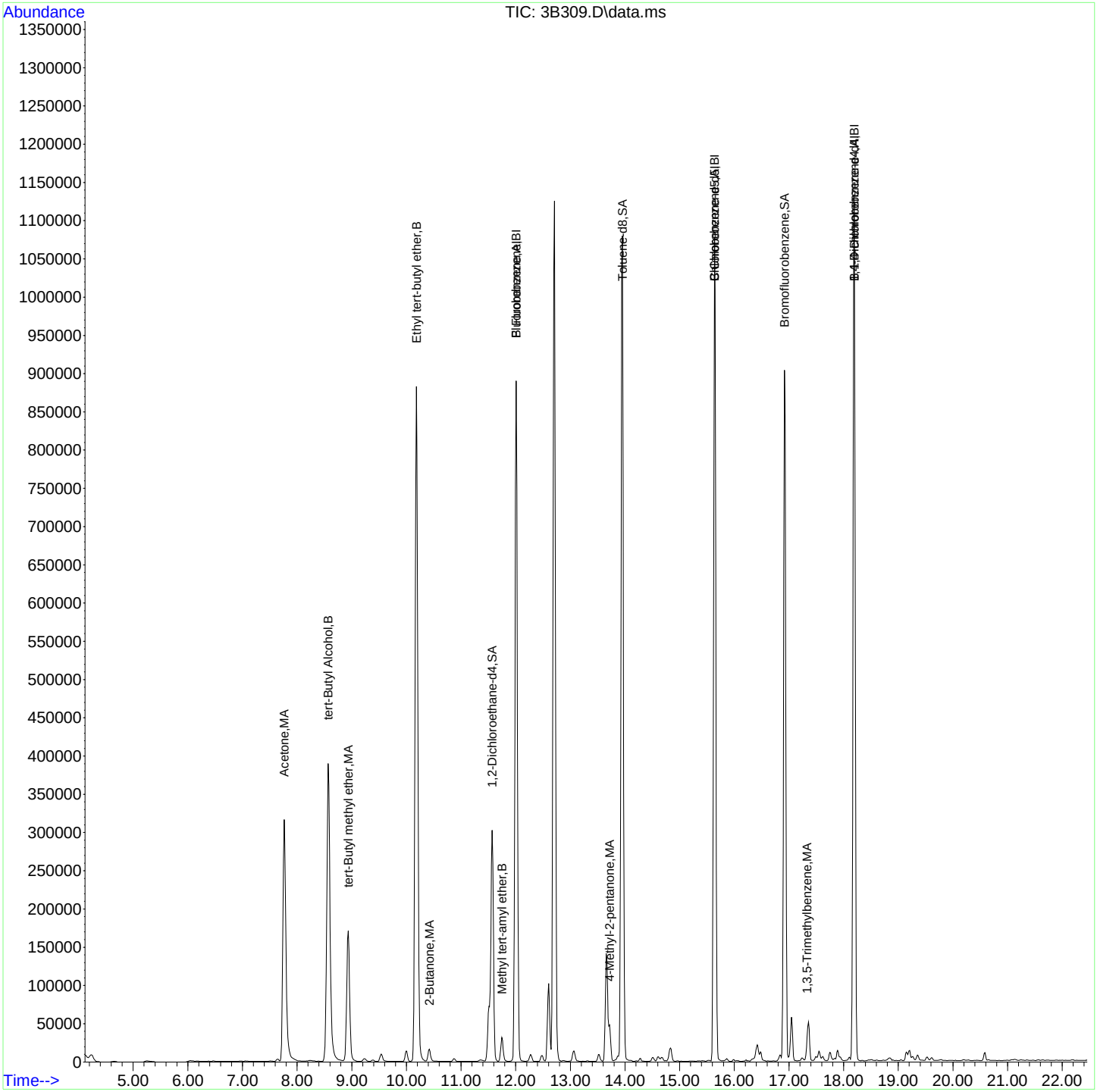
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
93)	Ethyl tert-butyl ether	59	10.181	10.181	0.848	1319741	53.63	ug/L	100
94)	Ethyl acetate		0.000	10.454	0.000	0m	N.D.	d	
95)	Propionitrile		0.000	10.501	0.000	0	N.D.		
96)	Methacrylonitrile	41	10.868	10.726	0.905	1887	N.D.		
97)	Tetrahydrofuran	42	10.868	10.869	0.905	3077	Below Cal		89
98)	Isobutyl alcohol		0.000	11.343	0.000	0m	N.D.	d	
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	40082	1.78	ug/L	97
100)	Methyl methacrylate		0.000	12.778	0.000	0m	N.D.	d	
101)	1,4-Dioxane		0.000	12.884	0.000	0	N.D.		
102)	2-Nitropropane		0.000	13.300	0.000	0m	N.D.	d	
104)	Ethyl methacrylate	69	14.201	14.248	0.908	396	N.D.		
106)	1-Chlorohexane		0.000	15.553	0.000	0m	N.D.	d	
107)	cis-1,4-Dichloro-2-butene		0.000	16.762	0.000	0	N.D.		
108)	Cyclohexanone	42	16.893	16.869	0.928	876	Below Cal	#	21
109)	trans-1,4-Dichloro-2-b...	53	17.047	17.059	0.937	1084	N.D.		
110)	Pentachloroethane		0.000	17.782	0.000	0	N.D.		
111)	Benzyl chloride	91	18.339	18.339	1.008	958	N.D.		
112)	bis(2-Chloroisopropyl)...		0.000	18.754	0.000	0	N.D.		

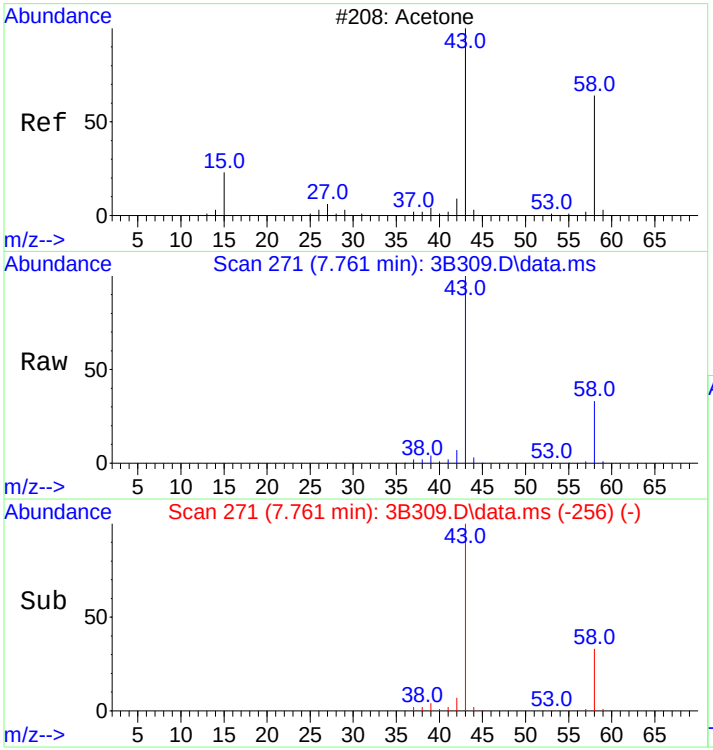
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B309.D
Acq On : 31 Aug 2011 10:54
Operator : SYK1
InstName : VOA3
Sample : |284538002|1137563|5|VOA|2|VOA8260BL|
Misc : ECOL 1ML pH2
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 31 11:17:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

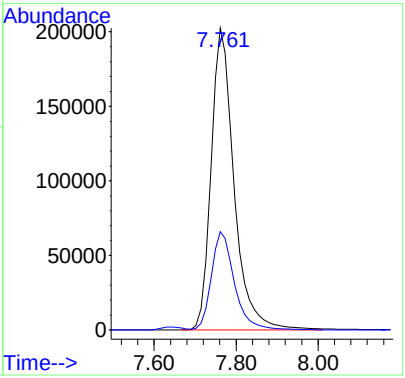


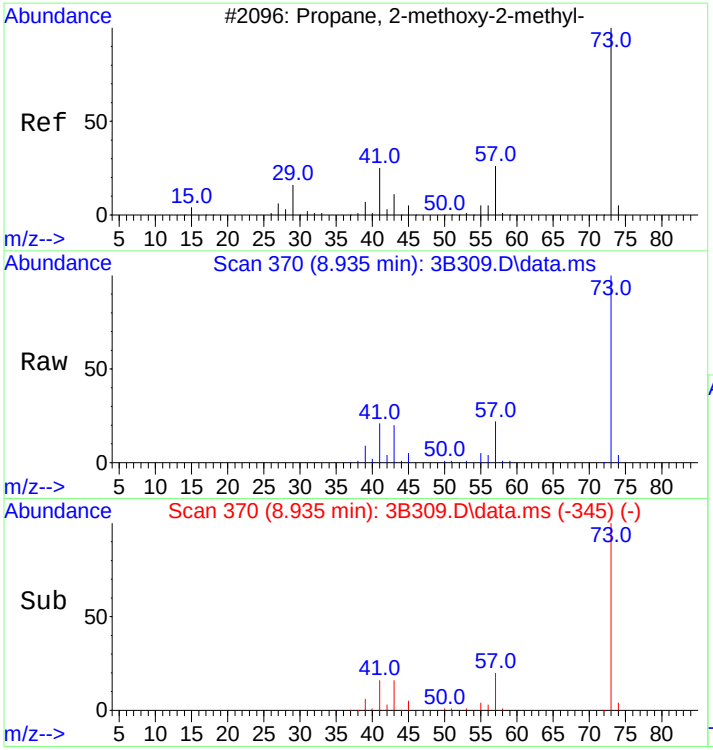


#9
Acetone
Concen: 191.87 ug/L
RT: 7.761 min Scan# 271
Delta R.T. -0.000 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 43 Resp: 788229

Ion	Ratio	Lower	Upper
43	100		
58	32.6	3.6	63.6

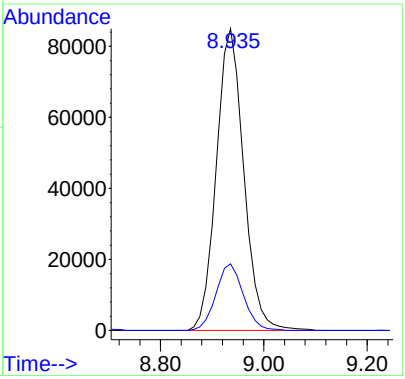


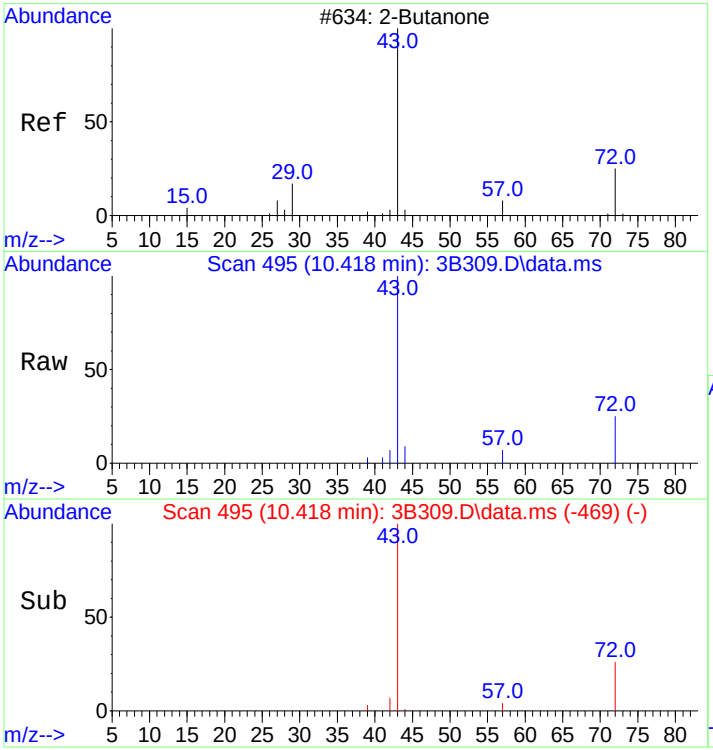


#16
tert-Butyl methyl ether
Concen: 13.80 ug/L
RT: 8.935 min Scan# 370
Delta R.T. -0.001 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 73 Resp: 313743

Ion	Ratio	Lower	Upper
73	100		
57	22.1	0.0	52.2

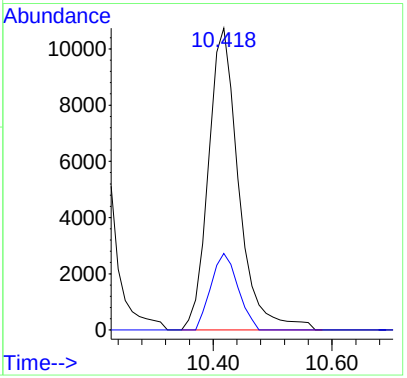


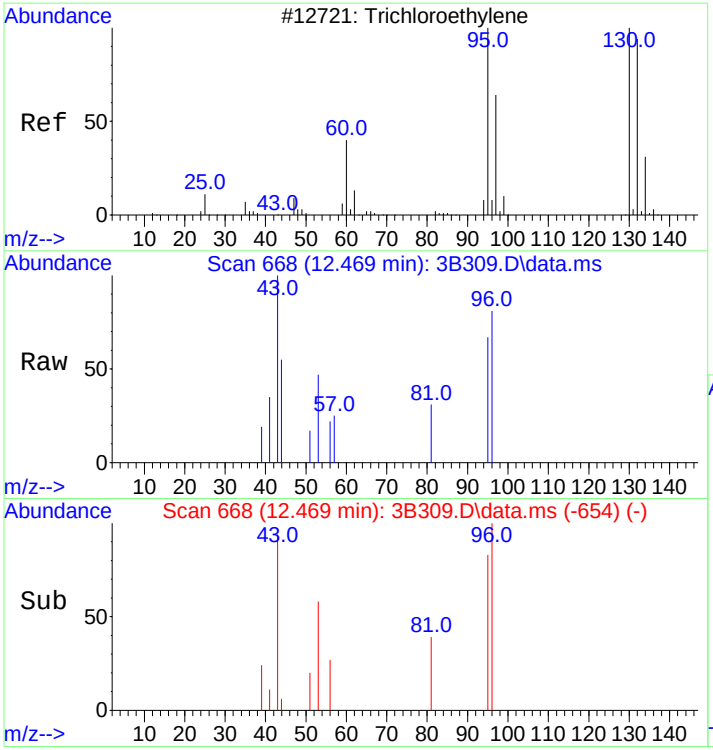


#20
2-Butanone
Concen: 6.52 ug/L
RT: 10.418 min Scan# 495
Delta R.T. 0.012 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 43 Resp: 38151

Ion	Ratio	Lower	Upper
43	100		
72	22.6	0.0	56.6

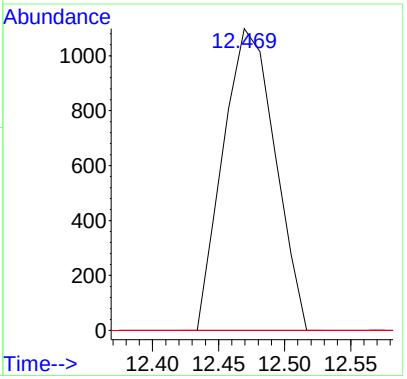


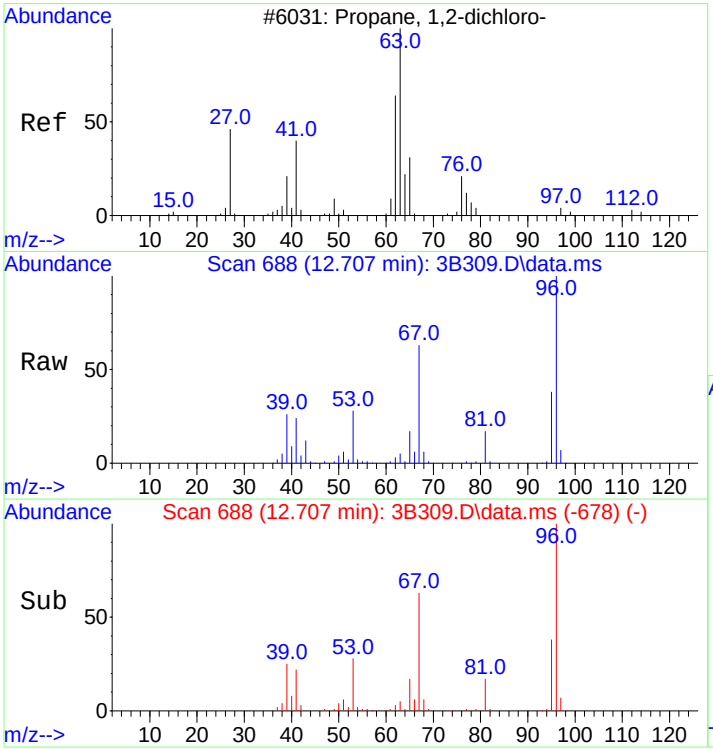


#34 BEFORE analyst DELETION
Trichloroethylene
Concen: 0.39 ug/L
RT: 12.469 min Scan# 668
Delta R.T. -0.012 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 95 Resp: 3013

Ion	Ratio	Lower	Upper
95	100		
130	0.0	72.9	132.9#
97	0.0	35.9	95.9#

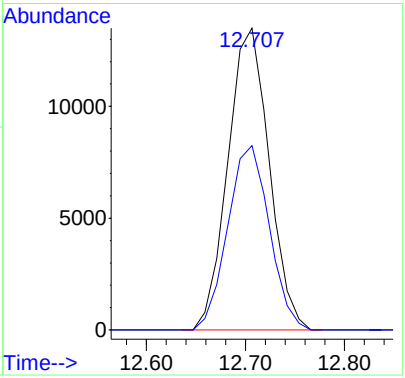


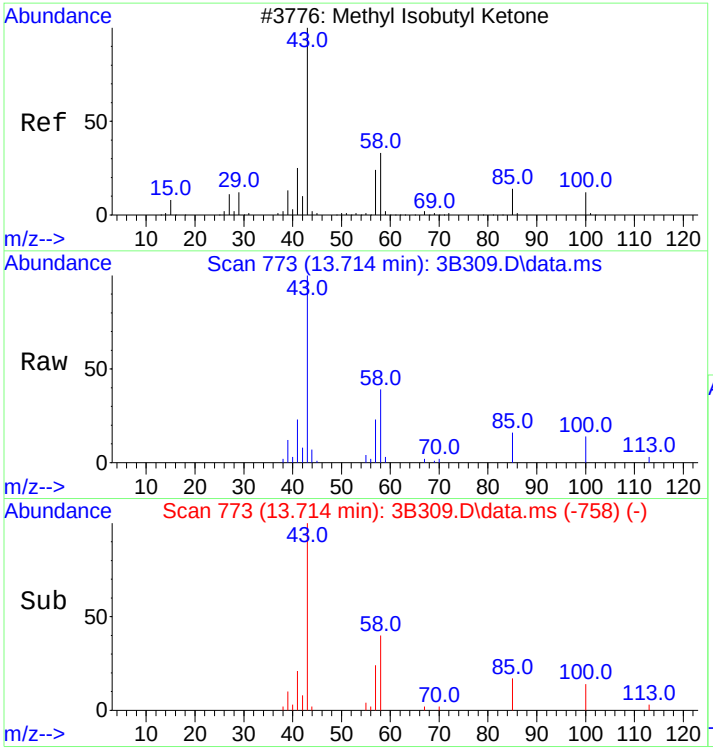


#35 BEFORE analyst DELETION
1,2-Dichloropropane
Concen: 5.31 ug/L
RT: 12.707 min Scan# 688
Delta R.T. -0.059 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 63 Resp: 39096

Ion	Ratio	Lower	Upper
63	100		
62	61.7	39.9	99.9

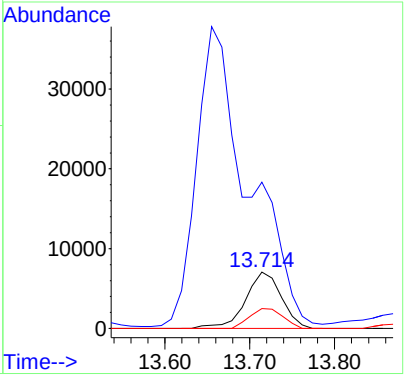


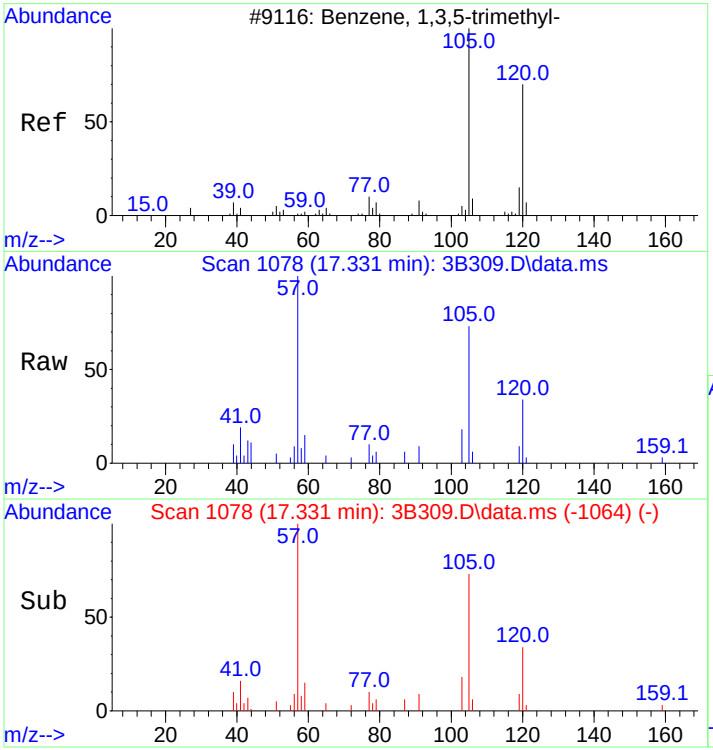


#42
4-Methyl-2-pentanone
Concen: 7.01 ug/L
RT: 13.714 min Scan# 773
Delta R.T. -0.001 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 58 Resp: 20814

Ion	Ratio	Lower	Upper
58	100		
43	0.0	206.5	266.5#
100	32.8	7.6	67.6

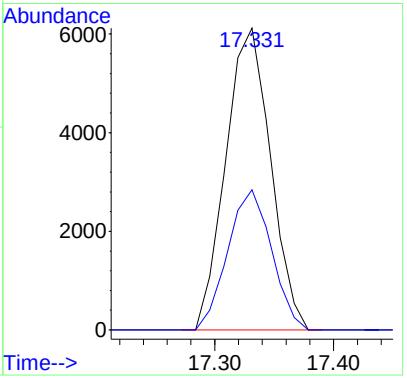


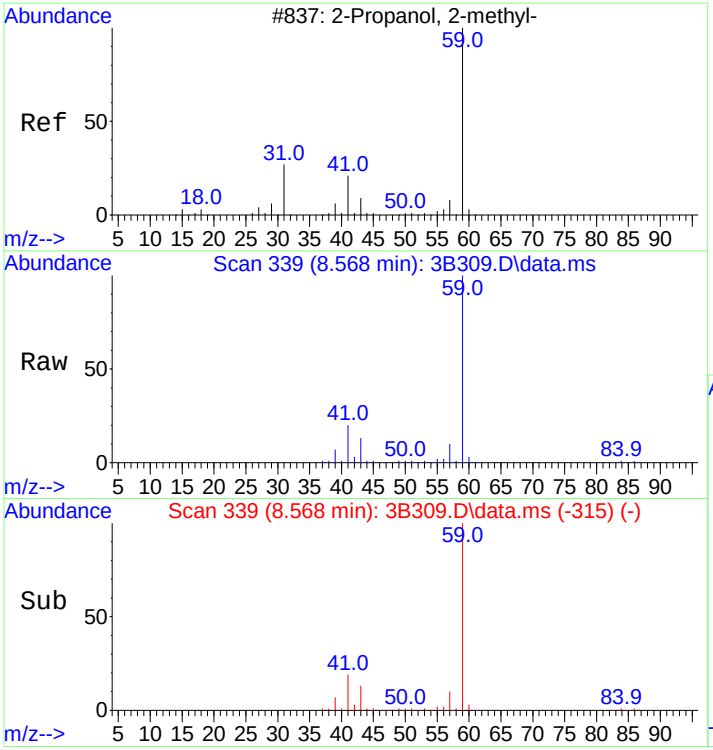


#66
1,3,5-Trimethylbenzene
Concen: 0.56 ug/L
RT: 17.331 min Scan# 1078
Delta R.T. 0.000 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion:105 Resp: 16046

Ion	Ratio	Lower	Upper
105	100		
120	45.4	20.6	80.6

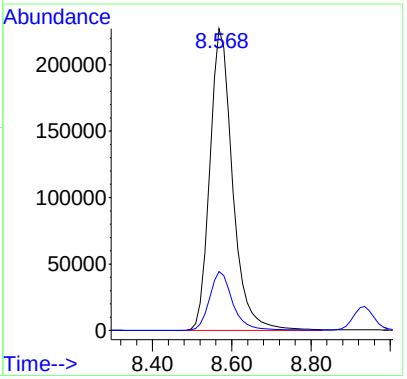


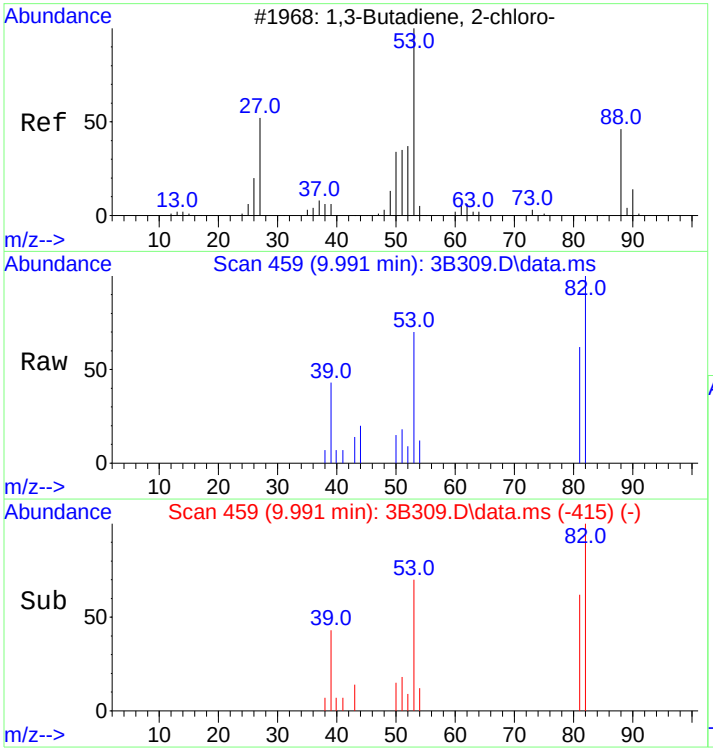


#89
tert-Butyl Alcohol
Concen: 995.46 ug/L
RT: 8.568 min Scan# 339
Delta R.T. -0.012 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 59 Resp: 906486

Ion	Ratio	Lower	Upper
59	100		
41	20.0	0.0	48.5

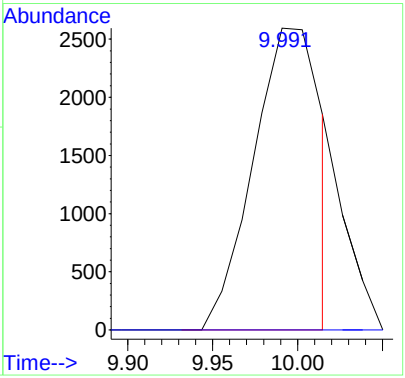


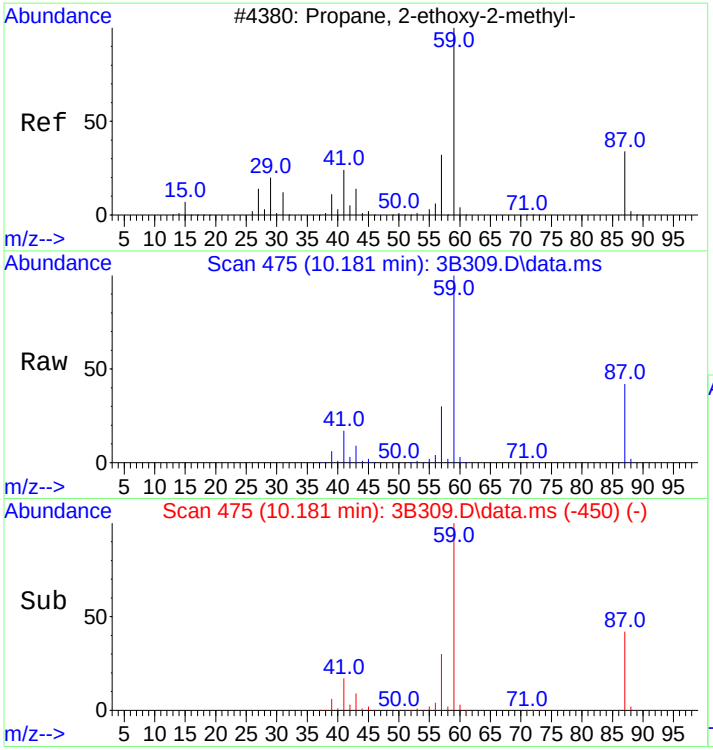


#92 BEFORE analyst DELETION
2-Chloro-1,3-butadiene
Concen: 0.77 ug/L
RT: 9.991 min Scan# 459
Delta R.T. 0.225 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 53 Resp: 7242

Ion	Ratio	Lower	Upper
53	100		
88	0.0	30.7	90.7#

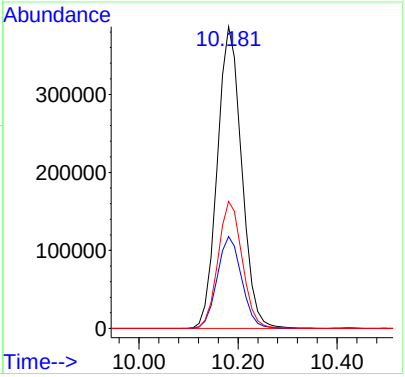


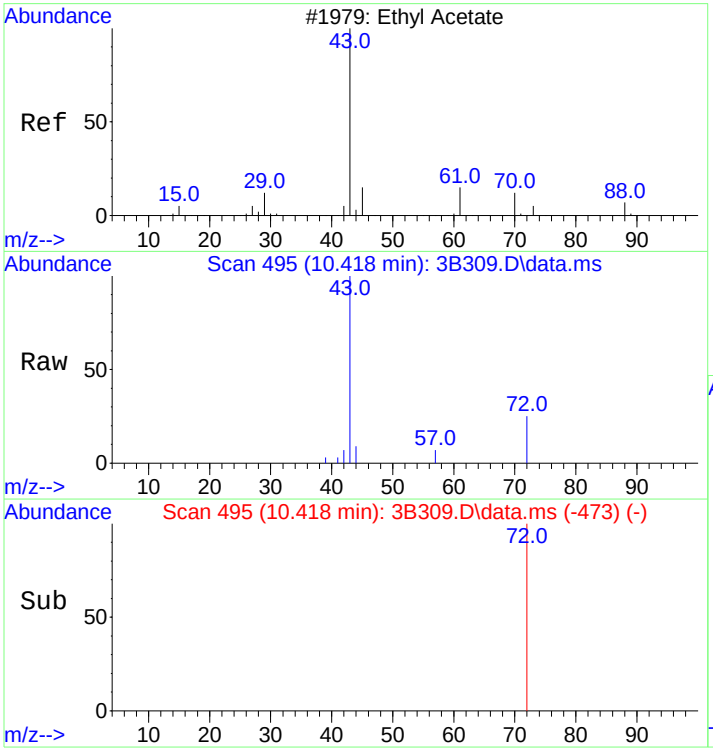


#93
Ethyl tert-butyl ether
Concen: 53.63 ug/L
RT: 10.181 min Scan# 475
Delta R.T. -0.000 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 59 Resp: 1319741

Ion	Ratio	Lower	Upper
59	100		
57	30.6	0.9	60.9
87	41.9	12.1	72.1

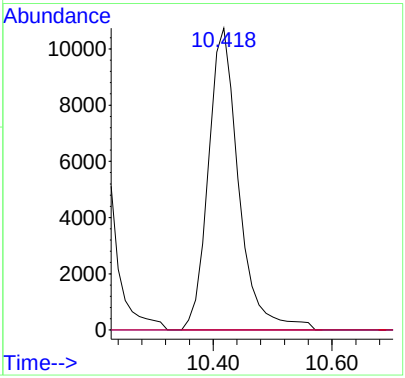


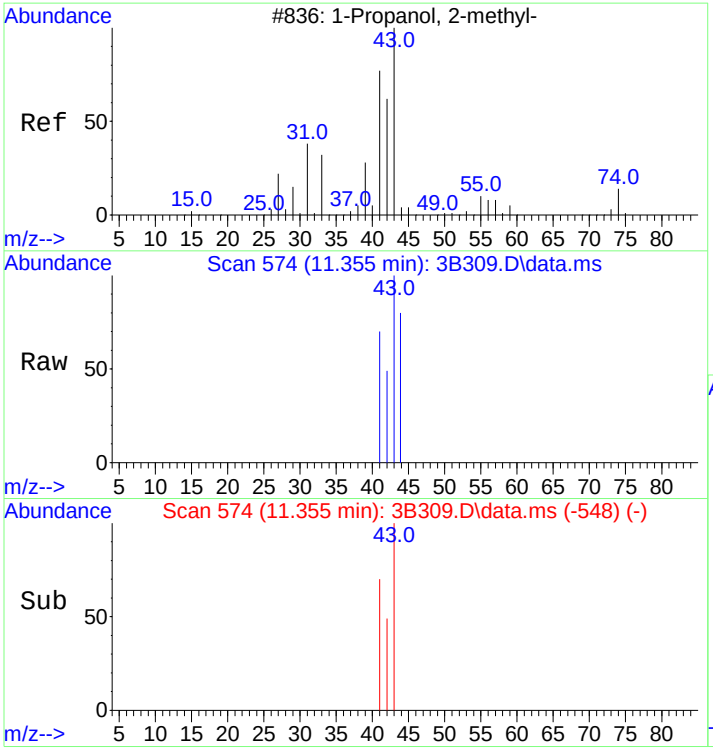


#94 BEFORE analyst DELETION
Ethyl acetate
Concen: 5.69 ug/L
RT: 10.418 min Scan# 495
Delta R.T. -0.036 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 43 Resp: 38151

Ion	Ratio	Lower	Upper
43	100		
61	0.0	0.0	44.8
70	0.0	0.0	42.4

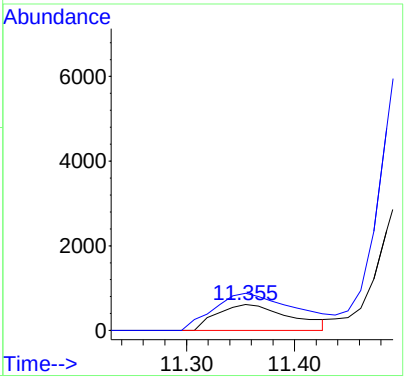


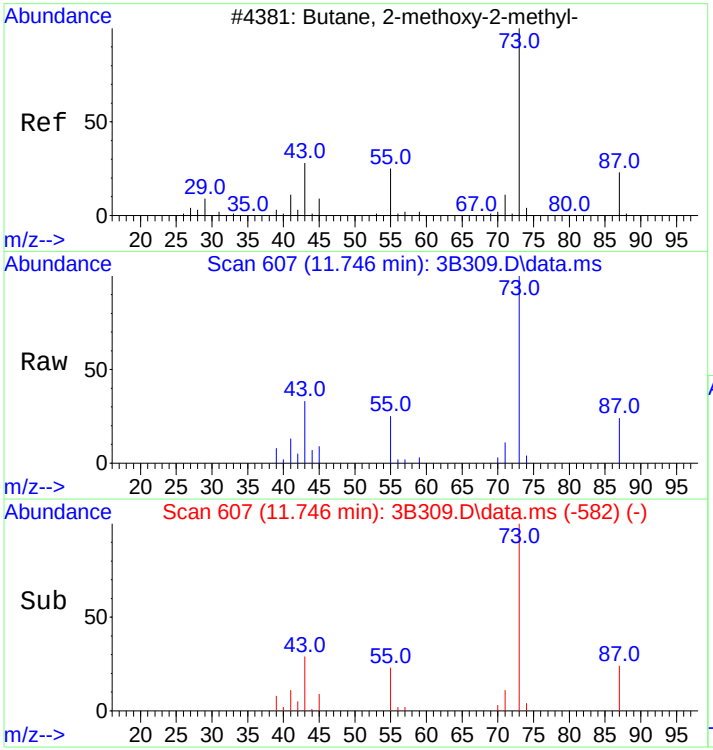


#98 BEFORE analyst DELETION
Isobutyl alcohol
Concen: 13.57 ug/L
RT: 11.355 min Scan# 574
Delta R.T. 0.012 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 41 Resp: 2918

Ion	Ratio	Lower	Upper
41	100		
43	166.0	114.9	174.9

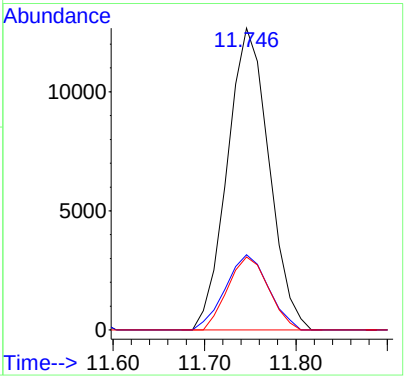


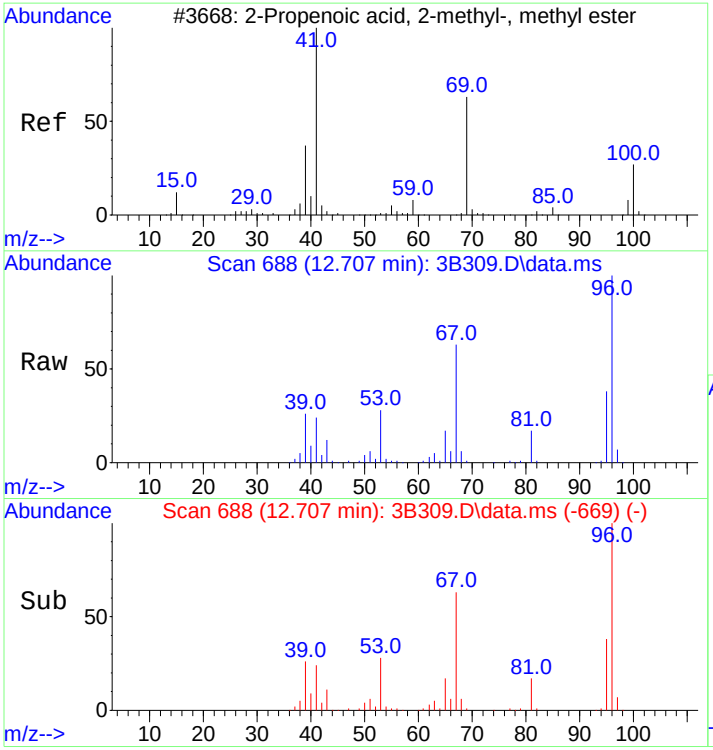


#99
Methyl tert-amyl ether
Concen: 1.78 ug/L
RT: 11.746 min Scan# 607
Delta R.T. -0.000 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 73 Resp: 40082

Ion	Ratio	Lower	Upper
73	100		
55	25.9	0.0	53.6
87	23.7	0.0	54.4

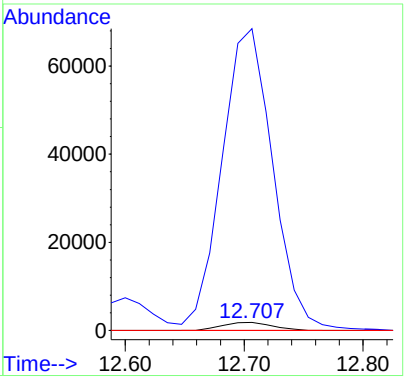


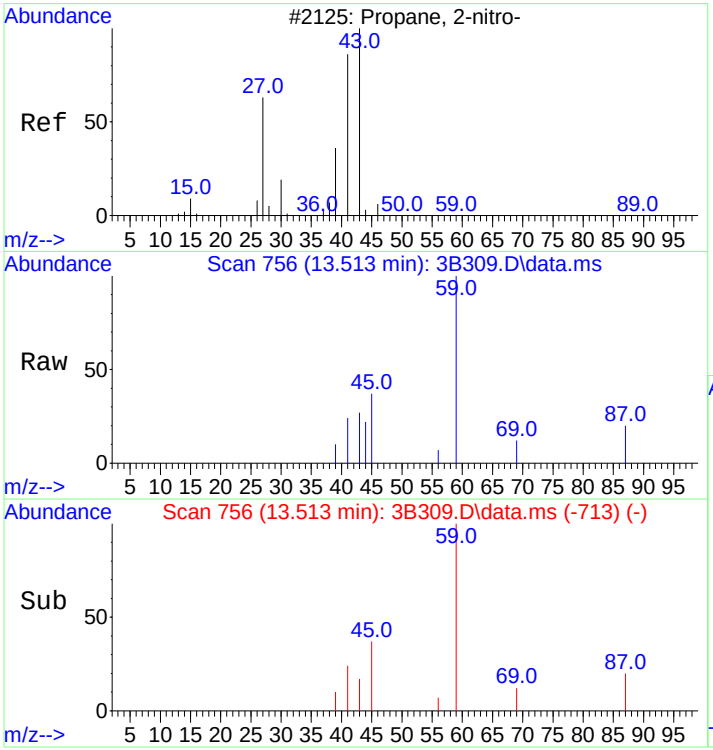


#100 BEFORE analyst DELETION
Methyl methacrylate
Concen: 1.13 ug/L
RT: 12.707 min Scan# 688
Delta R.T. -0.072 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 69 Resp: 5381

Ion	Ratio	Lower	Upper
69	100		
41	3808.8	91.0	151.0#
100	0.0	8.4	68.4#

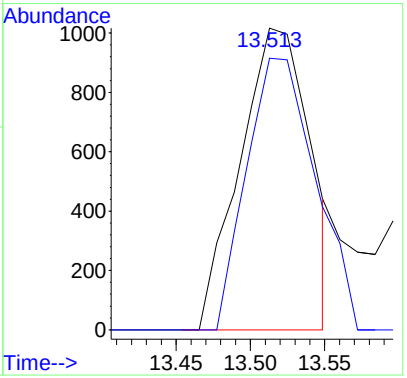


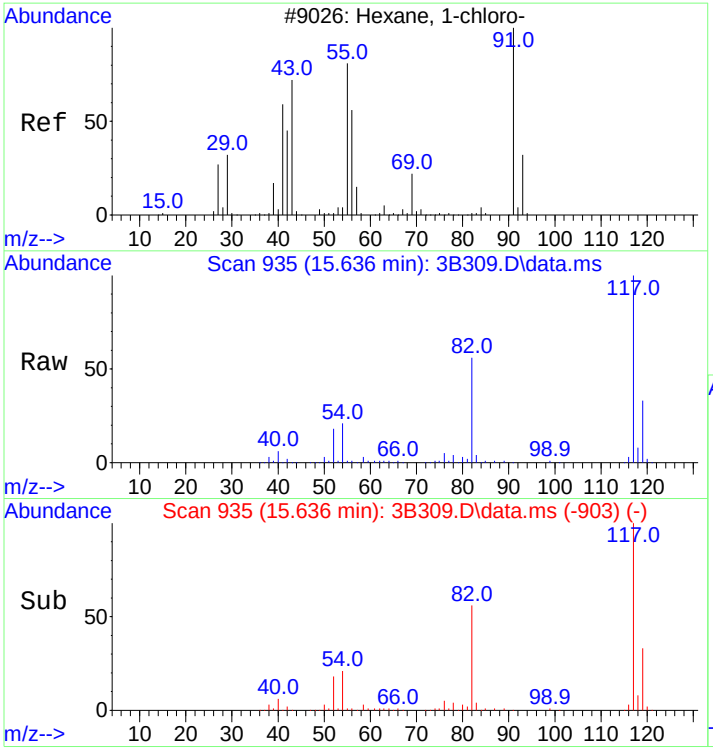


#102 BEFORE analyst DELETION
2-Nitropropane
Concen: 1.50 ug/L
RT: 13.513 min Scan# 756
Delta R.T. 0.213 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 43 Resp: 3341

Ion	Ratio	Lower	Upper
43	100		
41	82.4	50.5	110.5

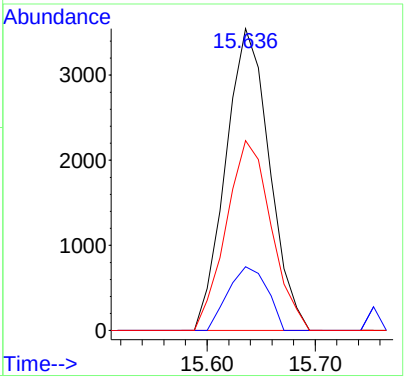




#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.44 ug/L
RT: 15.636 min Scan# 935
Delta R.T. 0.083 min
Lab File: 3B309.D
Acq: 31 Aug 2011 10:54

Tgt Ion: 55 Resp: 10006

Ion	Ratio	Lower	Upper
55	100		
91	18.9	123.6	183.6#
56	64.9	31.5	91.5



Standards

Low level SW846 8260B and Regular level 8260B and EPA 624

Calibration Standard Concentration Levels

	Level 1	Level 1a	Level 2	Level 3	Level 4	Level 5	Level 6 #	Level 7 !	Level 7a
Fluorobenzene (IS)	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50	20/50
1,2-Dichloroethane-d4(surr)		20/50	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Dichlorodifluoromethane		0.5	1	2	5	10	20	50	100
Chloromethane		0.5	1	2	5	10	20	50	100
Vinyl chloride		0.5	1	2	5	10	20	50	100
Bromomethane		0.5	1	2	5	10	20	50	100
Chloroethane		0.5	1	2	5	10	20	50	100
Trichlorofluoromethane		0.5	1	2	5	10	20	50	100
1,1-Dichloroethene		0.5	1	2	5	10	20	50	100
Acetone	1	2.5	5	10	25	50	100	250	500
Iodomethane	1	2.5	5	10	25	50	100	250	500
Carbon disulfide	1	2.5	5	10	25	50	100	250	500
Methylene chloride		0.5	1	2	5	10	20	50	100
trans-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,1-Dichloroethane		0.5	1	2	5	10	20	50	100
Ethyl ether		0.5	1	2	5	10	20	50	100
Vinyl acetate	1	2.5	5	10	25	50	100	250	500
cis-1,2-Dichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethene (total)		1	2	4	10	20	40	100	200
Cyclohexene		0.5	1	2	5	10	20	50	100
2-Chloroethylvinyl ether			5	10	25	50	100	250	500
2,2-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Butanone	1	2.5	5	10	25	50	100	250	500
Bromochloromethane		0.5	1	2	5	10	20	50	100
Chloroform		0.5	1	2	5	10	20	50	100
1,1,1-Trichloroethane		0.5	1	2	5	10	20	50	100
1,1-Dichloropropene		0.5	1	2	5	10	20	50	100
Carbon tetrachloride		0.5	1	2	5	10	20	50	100
Benzene		0.5	1	2	5	10	20	50	100
1,2-Dichloroethane		0.5	1	2	5	10	20	50	100
Trichloroethene		0.5	1	2	5	10	20	50	100
1,2-Dichloropropane		0.5	1	2	5	10	20	50	100
Dibromomethane		0.5	1	2	5	10	20	50	100
Bromodichloromethane		0.5	1	2	5	10	20	50	100
cis-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
tert-Butylmethylether		0.5	1	2	5	10	20	50	100
Ethyl Ether			1	2	5	10	20	50	100
Acetonitrile			25	50	125	250	500	1250	2500
Methyl acetate			5	10	25	50	100	250	500
Cyclohexane			1	2	5	10	20	50	100
Methylcyclohexane			1	2	5	10	20	50	100
n-Butyl alcohol		50	100	200	500	1000	2000	5000	10000
2-Nitropropane			5	10	25	50	100	250	500
Ethyl acetate			5	10	25	50	100	250	500
Acrolein			5	10	25	50	100	250	500
Trichlorotrifluoroethane		2	5	10	25	50	100	250	500
Allyl chloride			5	10	25	50	100	250	500
Acrylonitrile			5	10	25	50	100	250	500
1,4-Dioxane			50	100	250	500	1000	2500	5000
Isobutyl alcohol			50	100	250	500	1000	2500	5000
Methacrylonitrile			5	10	25	50	100	250	500
Propionitrile			5	10	25	50	100	250	500
Methyl methacrylate			5	10	25	50	100	250	500
Chlorotrifluoroethylene			5	10	25	50	100	150	200
2-Chloro-1,1,1-trifluoroethane			5	10	25	50	100	150	200
Tetrahydrofuran			5	10	25	50	100	250	500
tert-Butyl alcohol			50	100	250	500	1000	2500	5000
Isopropyl ether			1	2	5	10	20	50	100
Ethyl tert-butyl ether			1	2	5	10	20	50	100
Isopropyl alcohol			50	100	250	500	1000	2500	5000
Methyl tert-amyl ether			1	2	5	10	20	50	100
1-Chlorohexane			1	2	5	10	20	50	100
2-Chloro-1,3-butadiene(chloroprene)			1	2	5	10	20	50	100
Chlorobenzene-d5 (IS)	20	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Toluene-d8 (surr)		20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
4-Methyl-2-pentanone	1	2.5	5	10	25	50	100	250	500
Toluene		0.5	1	2	5	10	20	50	100
trans-1,3-Dichloropropene		0.5	1	2	5	10	20	50	100
1,1,2-Trichloroethane		0.5	1	2	5	10	20	50	100
Tetrachloroethene		0.5	1	2	5	10	20	50	100
1,3-Dichloropropane		0.5	1	2	5	10	20	50	100
2-Hexanone	1	2.5	5	10	25	50	20	250	500
Dibromochloromethane		0.5	1	2	5	10	20	50	100
1,2-Dibromoethane		0.5	1	2	5	10	20	50	100
Chlorobenzene		0.5	1	2	5	10	20	50	100
1,1,1,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Ethylbenzene		0.5	1	2	5	10	20	50	100
m,p-Xylene		1	2	4	10	20	20	100	200
o-Xylene		0.5	1	2	5	10	20	50	100
Xylenes (total)		1.5	3	6	15	30	60	150	300
Stryene		0.5	1	2	5	10	20	50	100
Ethyl methacrylate			5	10	25	50	100	250	500
1,4-Dichlorobenzene-d4 (IS)	20	20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Bromofluorobenzene (surr)		20	20/50	20/50	20/50	20/50	20/50	20/50	20/50
Bromoform		0.5	1	2	5	10	20	50	100
Isopropylbenzene		0.5	1	2	5	10	20	50	100
1,1,2,2-Tetrachloroethane		0.5	1	2	5	10	20	50	100
Bromobenzene		0.5	1	2	5	10	20	50	100
1,2,3-Trichloropropane		0.5	1	2	5	10	20	50	100
n-Propylbenzene		0.5	1	2	5	10	20	50	100
2-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,3,5-Trimethylbenzene		0.5	1	2	5	10	20	50	100
4-Chlorotoluene		0.5	1	2	5	10	20	50	100
1,2,4-Trimethylbenzene		0.5	1	2	5	10	20	50	100
sec-Butylbenzene		0.5	1	2	5	10	20	50	100
1,3-Dichlorobenzene		0.5	1	2	5	10	20	50	100
tert-Butylbenzene		0.5	1	2	5	10	20	50	100
Isopropyltoluene		0.5	1	2	5	10	20	50	100
1,4-Dichlorobenzene		0.5	1	2	5	10	20	50	100
n-Butylbenzene		0.5	1	2	5	10	20	50	100
1,2-Dichlorobenzene		0.5	1	2	5	10	20	50	100
1,2-Dibromo-3-chloropropa		0.5	1	2	5	10	20	50	100
1,2,4-Trichlorobenzene		0.5	1	2	5	10	20	50	100
Hexachlorobutadiene		0.5	1	2	5	10	20	50	100
Naphthalene		0.5	1	2	5	10	20	50	100
1,2,3-Trichlorobenzene		0.5	1	2	5	10	20	50	100
cis-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
trans-1,4-Dichloro-2-butene			5	10	25	50	100	250	500
Pentachloroethane			5	10	25	50	100	250	500
Benzyl chloride			5	10	25	50	100	250	500
Cyclohexanone			25	50	125	250	500	1250	2500
bis(2-Chloro-isopropyl)ether			5	10	25	50	100	250	500

Method	PQL	Concentration range		
SW 846 8260B low level	Level 1 &1a	Levels 1-> 7a	IS/SS @ 20 ppb	
EPA 524.2	Level 1a	Levels 1a-> 7a	IS/SS @ 20 ppb	
SW846 8260B/624	Level 2	Levels 1a-> 7a	IS/SS @ 50 ppb	n-butyl alchol only in 1a

#: Indicates calibration verification concentration level used for low level analysis

!: Indicates calibration verification concentration level used for regular level analysis

Calibration History Report VOA3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:8 Amt:0.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A310.D

Injection Date	Mix	Calibration File
24 Aug 2011 12:07	A	C:\msdchem\1\DATA\082411V3\3A310.D

Cal Lvl:1 Amt:1.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A323.D

Injection Date	Mix	Calibration File
24 Aug 2011 12:37	A	C:\msdchem\1\DATA\082411V3\3A311.D
24 Aug 2011 18:38	B	C:\msdchem\1\DATA\082411V3\3A323.D

Cal Lvl:2 Amt:2.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A324.D

Injection Date	Mix	Calibration File
24 Aug 2011 13:07	A	C:\msdchem\1\DATA\082411V3\3A312.D
24 Aug 2011 19:08	B	C:\msdchem\1\DATA\082411V3\3A324.D

Cal Lvl:3 Amt:5.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A325.D

Injection Date	Mix	Calibration File
24 Aug 2011 13:37	A	C:\msdchem\1\DATA\082411V3\3A313.D
24 Aug 2011 19:38	B	C:\msdchem\1\DATA\082411V3\3A325.D

Cal Lvl:4 Amt:10.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A326.D

Injection Date	Mix	Calibration File
24 Aug 2011 14:07	A	C:\msdchem\1\DATA\082411V3\3A314.D
24 Aug 2011 20:08	B	C:\msdchem\1\DATA\082411V3\3A326.D

Cal Lvl:5 Amt:20.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A327.D

Injection Date	Mix	Calibration File
24 Aug 2011 14:37	A	C:\msdchem\1\DATA\082411V3\3A315.D
24 Aug 2011 20:38	B	C:\msdchem\1\DATA\082411V3\3A327.D

Cal Lvl:6 Amt:50.00 Last Updated with: C:\msdchem\1\DATA\082411V3\3A328.D

Injection Date	Mix	Calibration File
24 Aug 2011 15:07	A	C:\msdchem\1\DATA\082411V3\3A316.D
24 Aug 2011 21:08	B	C:\msdchem\1\DATA\082411V3\3A328.D

Cal Lvl:7 Amt:100.00 Last Updated with: C:\msdchem\1\DATA\082511V3\3A403.D

Injection Date	Mix	Calibration File
24 Aug 2011 16:07	A	C:\msdchem\1\DATA\082411V3\3A318.D
25 Aug 2011 09:52	B	C:\msdchem\1\DATA\082511V3\3A403.D

Cal Lvl:9 Amt:80.00 Last Updated with: C:\msdchem\1\DATA\082511V3\3A402.D

Injection Date	Mix	Calibration File

Calibration History Report VOA3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

24 Aug 2011 15:37	A	C:\msdchem\1\DATA\082411V3\3A317.D
25 Aug 2011 09:22	B	C:\msdchem\1\DATA\082511V3\3A402.D

VOA3-8260-082411.M Wed Sep 07 11:18:01 2011

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b | m1 | m2	6	7	9							
2)MA Dichlorodifluoromethane		0.2066334	0.1620559	0.2118402	0.1834713	0.2116538				
	0.2195281	0.2063447	0.2100296				0.2014	AVRG		9.4532
3)MPA Chloromethane		0.2750444	0.2121559	0.2487080	0.2329658	0.2542693				
	0.2380538	0.2201670	0.2295825				0.2389	AVRG		8.4142
4)MCA Vinyl chloride		0.2665231	0.2257862	0.2495386	0.2395662	0.2545830				
	0.2413465	0.2300347	0.2360064				0.2429	AVRG		5.5186
5)MA Bromomethane		0.3515368	0.2982162	0.3003132	0.2982980	0.3001584				
	0.2789268	0.2719602	0.2749791				0.2968	AVRG		8.4823
6)MA Chloroethane		0.1780688	0.1652139	0.1885747	0.1873411	0.1922242				
	0.1829379	0.1811698	0.1821610				0.1822	AVRG		4.5197
7)MA Trichlorofluoromethane		0.4065857	0.3850711	0.4093624	0.3930551	0.4036742				
	0.3803117	0.3718496	0.3779977				0.3910	AVRG		3.6558
8)MA Ethyl ether		0.2402388	0.2381533	0.2419480	0.2457800	0.2468808				
	0.2288364	0.2223173	0.2251809				0.2362	AVRG		4.0087
9)MA Acetone		33416	48962	127595	221461	476084				
0.0423 | 0.1428 | 0.00	1016561	1808359	1450597					LINR	#	0.9952
10)MCA 1,1-Dichloroethylene		0.4547135	0.4382884	0.4539444	0.4385210	0.4288891				
	0.3959441	0.3820435	0.3937460				0.4233	AVRG		6.7639
11)MA Iodomethane		0.5720284	0.5492500	0.5617469	0.5361779	0.5185386				
	0.4850503	0.4530934	0.4688803				0.5181	AVRG		8.5859
12)MA Acetonitrile		30128	46069	124958	226302	449275				
0.0331 | 0.0291 | 0.00	990077	1847153	1474096					LINR	#	0.9979
13)MA Methyl acetate		0.2504005	0.2061129	0.2317305	0.2164088	0.2246026				
	0.1913368	0.1825882	0.1835553				0.2108	AVRG		11.5722
14)MA Carbon disulfide		1.0371116	0.9920166	1.0041926	0.9474983	0.8998458				
	0.8102015	0.7352041	0.7675222				0.8992	AVRG		12.8285
15)MA Methylene chloride			0.4455416	0.3896004	0.3503236	0.3378137				
	0.3165256	0.3117369	0.3095636				0.3516	AVRG		14.2435
16)MA tert-Butyl methyl ether		0.9084268	0.8470139	0.9224122	0.8823403	0.8712392				
	0.8115046	0.7858636	0.7804093				0.8512	AVRG		6.3721

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b | m1 | m2	6	7	9							
17)MA trans-1,2-Dichloroethyle		0.4186677	0.4115983	0.4310818	0.4053687	0.3952020				
	0.3669922	0.3525394	0.3600271				0.3927	AVRG		7.4635
18)MA Vinyl acetate		0.5690120	0.5446006	0.5707225	0.5601744	0.4966682				
	0.4676471	0.4166238	0.4268733				0.5065	AVRG		12.5723
19)MPA 1,1-Dichloroethane		0.5629310	0.5291163	0.5290617	0.5072755	0.4767236				
	0.4473872	0.4206305	0.4281950				0.4877	AVRG		10.7544
20)MA 2-Butanone		0.2748684	0.2185085	0.2426865	0.2142618	0.2159552				
	0.2109306	0.1889550	0.1864803				0.2191	AVRG		13.0703
21)MA cis-1,2-Dichloroethylene		0.3766209	0.3404518	0.3583988	0.3387303	0.3270070				
	0.3020914	0.2962615	0.2972067				0.3296	AVRG		9.0045
22)MA 2,2-Dichloropropane		0.4476723	0.4193812	0.4125698	0.3873825	0.3687099				
	0.3335597	0.3230060	0.3281337				0.3776	AVRG		12.4314
23)MA Bromochloromethane		0.1792290	0.1539062	0.1663618	0.1641300	0.1620185				
	0.1545783	0.1544848	0.1535339				0.1610	AVRG		5.5624
24)MCA Chloroform		0.5802538	0.5389773	0.5556332	0.5141444	0.5033054				
	0.4645402	0.4493563	0.4561742				0.5078	AVRG		9.5674
25)MA 1,1,1-Trichloroethane		0.4503128	0.4678512	0.4662391	0.4517706	0.4396061				
	0.4159358	0.3977659	0.4087194				0.4373	AVRG		6.1065
26)MA Cyclohexane		0.5514091	0.5513241	0.5293002	0.5010373	0.4715128				
	0.4436163	0.4204578	0.4361260				0.4881	AVRG		10.7859
27)MA 1,1-Dichloropropene		0.4181876	0.3802425	0.3962535	0.3822267	0.3570192				
	0.3303667	0.3132446	0.3274051				0.3631	AVRG		10.2312
28)MA Carbon tetrachloride		0.4008248	0.3882903	0.3969525	0.3802979	0.3614804				
	0.3406402	0.3317829	0.3416743				0.3677	AVRG		7.4640
29)SA 1,2-Dichloroethane-d4		0.0576557	0.0558537	0.0584516	0.0580937	0.0586041				
	0.0569194	0.0563775	0.0554055				0.0572	AVRG		2.1244
30)MA 1,2-Dichloroethane		0.3672593	0.3643303	0.3894605	0.3674797	0.3543791				
	0.3259343	0.3072522	0.3104612				0.3483	AVRG		8.6349
31)MA Benzene		1.2209173	1.1424592	1.1792125	1.1229156	1.0761645				
	1.0040088	0.9635532	0.9796109				1.0861	AVRG		8.8431

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound b | m1 | m2	8 6	1 7	2 9	3	4	5	Avg	Curve	Exp	%RSD/r^2
32)MA Cyclohexene		0.6455043	0.5669714	0.5961361	0.5777308	0.5470413				
	0.5075100	0.4865031	0.5027754				0.5538	AVRG		9.7171
33)MA n-Butyl alcohol	5757	11982	22414	84720	171501	409242				
-0.0087 | 0.0081 | 0.00	1021924	2011802	1586582					LINR	# #	0.9994
34)MA Trichloroethylene		0.3006486	0.3051638	0.3205440	0.3039502	0.2927842				
	0.2719307	0.2579379	0.2641227				0.2896	AVRG		7.7221
35)MCA 1,2-Dichloropropane		0.3099701	0.2902907	0.3050337	0.2858745	0.2758541				
	0.2552848	0.2390916	0.2437849				0.2756	AVRG		9.8180
36)MA Methylcyclohexane		0.5438079	0.5034652	0.5192670	0.5001054	0.4853567				
	0.4461527	0.4276130	0.4413509				0.4834	AVRG		8.5255
37)MA Dibromomethane		0.1981520	0.1679032	0.1950798	0.1827510	0.1805884				
	0.1688301	0.1687955	0.1678734				0.1787	AVRG		7.0001
38)MA Bromodichloromethane		0.4232684	0.3973567	0.4219286	0.3981050	0.4019733				
	0.3783667	0.3665335	0.3697492				0.3947	AVRG		5.5113
39)MA 2-Chloroethylvinyl ether		0.1409908	0.1270898	0.1821250	0.1437495	0.1491914				
	0.1299272	0.1266274	0.1294564				0.1411	AVRG		13.1779
40)MA cis-1,3-Dichloropropylen		0.4845983	0.4732300	0.5059854	0.4910594	0.4766645				
	0.4440559	0.4349291	0.4397446				0.4688	AVRG		5.5935
42)MA 4-Methyl-2-pentanone		0.3055974	0.2500061	0.3043635	0.2699051	0.2708923				
	0.2446821	0.2265066	0.2268734				0.2624	AVRG		11.8568
43)SA Toluene-d8		2.2188205	2.2249867	2.2401525	2.2119854	2.2190059				
	2.1962226	2.2291198	2.2243843				2.2206	AVRG		0.5804
44)MCA Toluene		3.0263082	2.7906630	2.8425271	2.6816037	2.5979795				
	2.4173532	2.2944280	2.3568235				2.6260	AVRG		9.8050
45)MA trans-1,3-Dichloropropyl		1.0474898	0.9585801	1.0675258	1.0238647	1.0182298				
	0.9515509	0.9309503	0.9447760				0.9929	AVRG		5.2736
46)MA 1,1,2-Trichloroethane		0.5245329	0.4691977	0.5379396	0.5105647	0.5117223				
	0.4698415	0.4524734	0.4583294				0.4918	AVRG		6.7036
47)MA 2-Hexanone		23856	36464	105278	181482	359336				
0.0767 | 0.2639 | 0.00	840120	1432295	1153887					LINR	#	0.9941

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b | m1 | m2	6	7	9							
48)MA 1,3-Dichloropropane		1.1134040	0.9759822	1.0747401	1.0092176	0.9902477				
	0.8797514	0.8172306	0.8362419				0.9621	AVRG		11.2766
49)MA Tetrachloroethylene		0.6442169	0.5808261	0.5798774	0.5457774	0.5251810				
	0.4865635	0.4597443	0.4781455				0.5375	AVRG		11.6486
50)MA Dibromochloromethane		0.7491605	0.6739205	0.7608613	0.7281233	0.7459892				
	0.7251846	0.7225720	0.7207383				0.7283	AVRG		3.6197
51)MA 1,2-Dibromoethane		0.6729559	0.6019539	0.6815610	0.6582674	0.6614355				
	0.6241601	0.6199735	0.6153071				0.6420	AVRG		4.6678
52)MPA Chlorobenzene		1.9072491	1.8209060	1.8361710	1.7685674	1.7586132				
	1.6526962	1.6168378	1.6307123				1.7490	AVRG		6.0749
53)MA 1,1,1,2-Tetrachloroethan		0.6706382	0.6261943	0.7033748	0.6817456	0.6791574				
	0.6425989	0.6282381	0.6355051				0.6584	AVRG		4.3977
54)MCA Ethylbenzene		3.3402121	3.2245848	3.2231761	3.0127352	2.9051127				
	2.6247176	2.3873374	2.5003621				2.9023	AVRG		12.4545
55)MA m,p-Xylenes		1.3034986	1.2484036	1.2868309	1.2317472	1.2036530				
	1.0988077	1.0209081	1.0609662				1.1819	AVRG		9.0808
56)MA o-Xylene		1.3185633	1.2680459	1.3192857	1.2505438	1.2545836				
	1.1616285	1.1081386	1.1357922				1.2271	AVRG		6.6507
57)MA Styrene		2.2604605	2.1405113	2.1791347	2.0682950	2.0761290				
	1.8984476	1.7437648	1.7872643				2.0193	AVRG		9.3289
59)MPA Bromoform		0.4234955	0.4447950	0.4733194	0.4853358	0.5008265				
	0.4985620	0.4909865	0.5200758				0.4797	AVRG		6.5970
60)MA Isopropylbenzene		3.3758308	3.2715688	3.2015631	3.1810764	3.0177952				
	2.7784262	2.4907504	2.7638883				3.0101	AVRG		10.1396
61)SA Bromofluorobenzene		0.9321574	0.9624566	0.9449437	0.9485299	0.9450058				
	0.9368384	0.9236921	0.9764053				0.9463	AVRG		1.7758
62)MPA 1,1,2,2-Tetrachloroethan		0.8334993	0.7452364	0.8129669	0.7810672	0.7846956				
	0.7566946	0.7095533	0.7470161				0.7713	AVRG		5.1799
63)MA 1,2,3-Trichloropropane		0.2280918	0.2231878	0.2381269	0.2291168	0.2271938				
	0.2203637	0.2134478	0.2235084				0.2254	AVRG		3.1949

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b m1 m2	6	7	9							
64)MA Bromobenzene		0.8708053	0.8557766	0.8347474	0.8238638	0.8139307				
	0.7746836	0.7330879	0.7857833				0.8116	AVRG		5.5773
65)MA n-Propylbenzene		3.9704631	3.9037266	3.7401692	3.6228887	3.4307897				
	3.1405191	2.8105641	3.1364054				3.4694	AVRG		11.8900
66)MA 1,3,5-Trimethylbenzene		2.7989460	2.8046944	2.6987900	2.6502208	2.5346065				
	2.2890839	2.0302890	2.2460032				2.5066	AVRG		11.4319
67)MA 2-Chlorotoluene		0.7875007	0.7879103	0.7731242	0.7884269	0.7415211				
	0.7108220	0.6548525	0.7211112				0.7457	AVRG		6.4513
68)MA 4-Chlorotoluene		2.5425125	2.4928063	2.4514587	2.3709292	2.2902225				
	2.1026109	1.9146381	2.0916227				2.2821	AVRG		9.8315
69)MA tert-Butylbenzene		0.5951756	0.6304815	0.5805631	0.5829071	0.5748231				
	0.5648981	0.5294885	0.5746033				0.5791	AVRG		4.8913
70)MA 1,2,4-Trimethylbenzene		2.8855104	2.8264864	2.7543438	2.6771297	2.5784682				
	2.4062615	2.1688928	2.3696052				2.5833	AVRG		9.6751
71)MA sec-Butylbenzene		3.7175610	3.6970145	3.5961448	3.5497792	3.4460132				
	3.2159248	2.8795231	3.1356984				3.4047	AVRG		8.7871
72)MA 4-Isopropyltoluene		2.9445481	2.9217962	2.8667820	2.8362006	2.7549640				
	2.5987255	2.3675749	2.5427238				2.7292	AVRG		7.5484
73)MA 1,3-Dichlorobenzene		1.7008638	1.6270676	1.6247309	1.5609200	1.5295127				
	1.4684500	1.3866523	1.4474295				1.5432	AVRG		6.8537
74)MA 1,4-Dichlorobenzene		1.5635922	1.5606381	1.5397416	1.5082245	1.4876585				
	1.4391592	1.3618674	1.4122914				1.4841	AVRG		4.9634
75)MA n-Butylbenzene		3.0458719	2.9103494	2.9612672	2.9150046	2.8128871				
	2.5770952	2.2839569	2.4580865				2.7456	AVRG		9.9387
76)MA 1,2-Dichlorobenzene		1.6238070	1.5259626	1.5914861	1.5472217	1.5345088				
	1.4491875	1.3644541	1.4304525				1.5084	AVRG		5.7699
77)MA 1,2-Dibromo-3-chloroprop		0.1416179	0.1455031	0.1669531	0.1650966	0.1779969				
	0.1738074	0.1814149	0.1694221				0.1652	AVRG		8.7580
78)MA 1,2,4-Trichlorobenzene		1.0201199	0.9721600	1.0511668	1.0070377	1.0441538				
	0.9675130	0.9521536	0.8880779				0.9878	AVRG		5.4754

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b | m1 | m2	6	7	9							
79)MA Hexachlorobutadiene		0.6284974	0.5704699	0.6147374	0.6007820	0.6028736				
	0.5698001	0.5654031	0.5343442				0.5859	AVRG		5.2930
80)MA Naphthalene		2.0930296	1.7781743	2.0792225	2.0424471	2.1426453				
	1.9620249	1.9714412	1.8062262				1.9844	AVRG		6.7110
81)MA 1,2,3-Trichlorobenzene		0.8374835	0.7679863	0.8728222	0.8426771	0.8647010				
	0.8019376	0.8030136	0.7261116				0.8146	AVRG		6.1397
83)B Chlorotrifluoroethylene		0.1258434	0.1046332	0.1085185	0.1049998	0.1068877				
	0.1031050	0.0909428	0.0967930				0.1052	AVRG		9.6304
84)B 2-Chloro-1,1,1-trifluoro		0.3025450	0.2977154	0.2895566	0.2776973	0.2705728				
	0.2518381	0.2668083	0.2843286				0.2801	AVRG		6.0239
85)B Acrolein		0.0538869	0.0410052	0.0528690	0.0502029	0.0519501				
	0.0448017	0.0476929	0.0507783				0.0491	AVRG		8.9432
86)B Trichlorotrifluoroethane		0.1060320	0.0967823	0.0992119	0.0939009	0.0925368				
	0.0830778	0.0704489	0.0759735				0.0897	AVRG		13.5551
87)B Isopropyl Alcohol		0.0189271	0.0166137	0.0197125	0.0197370	0.0199722				
	0.0166596	0.0161527	0.0193936				0.0184	AVRG		8.8413
88)B Allyl chloride		62132	114723	295316	564331	1080822				
0.1116 | 0.3130 | 0.00	2437766	4271263	2747424					LINR	#	0.9901
89)B tert-Butyl Alcohol		0.0380488	0.0332823	0.0385179	0.0381218	0.0370748				
	0.0285805	0.0267291	0.0324596				0.0341	AVRG		13.4967
90)B Acrylonitrile		0.0964676	0.0875231	0.1035842	0.1030220	0.1043361				
	0.0857806	0.0801580	0.0904338				0.0939	AVRG		9.8578
91)B Isopropyl ether		1.0238749	1.0027980	0.9968590	0.9986328	0.9865477				
	0.8859249	0.8304564	0.8740896				0.9499	AVRG		7.7871
92)B 2-Chloro-1,3-butadiene		0.3800644	0.3538349	0.3727182	0.3666853	0.3610841				
	0.3324498	0.3147460	0.3317068				0.3517	AVRG		6.5372
93)B Ethyl tert-butyl ether		0.9700507	0.9760707	0.9822924	0.9589455	0.9577174				
	0.8654430	0.8073728	0.8544283				0.9215	AVRG		7.3838
94)B Ethyl acetate		0.2958916	0.2451128	0.2690954	0.2692442	0.2568611				
	0.2047621		0.2169031				0.2511	AVRG		12.6396

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b m1 m2	6	7	9							
95)B Propionitrile		0.0387204	0.0357142	0.0389215	0.0395162	0.0396589				
	0.0319138	0.0309013	0.0346392				0.0362	AVRG		9.6596
96)B Methacrylonitrile		0.1759485	0.1570179	0.1688028	0.1681478	0.1642901				
	0.1328370	0.1198751	0.1390257				0.1532	AVRG		13.1626
97)B Tetrahydrofuran		15020	22862	59272	116822	223672				
0.0217 | 0.0646 | 0.00	450754	879306	609743					LINR	#	0.9900
98)B Isobutyl alcohol		0.0076193	0.0058691	0.0082712	0.0087360	0.0094600				
	0.0076351	0.0075399	0.0092823				0.0081	AVRG	#	14.3927
99)B Methyl tert-amyl ether		0.8848422	0.8711068	0.9060705	0.8819819	0.8822739				
	0.7947954	0.7413892	0.7935536				0.8445	AVRG		7.0277
100)B Methyl methacrylate		0.2034568	0.1811852	0.1961867	0.1939994	0.1902208				
	0.1533490	0.1396765	0.1656551				0.1780	AVRG		12.7835
101)B 1,4-Dioxane		0.0028089	0.0024175	0.0027784	0.0029330	0.0028651				
	0.0024639	0.0024047	0.0027239				0.0027	AVRG	#	7.9652
102)B 2-Nitropropane		0.0912735	0.0819403	0.0890608	0.0889763	0.0895666				
	0.0748098	0.0703453	0.0829347				0.0836	AVRG		9.1459
104)B Ethyl methacrylate		0.8941451	0.8397013	0.8997172	0.8887281	0.8357004				
	0.7093556	0.6062902	0.7142966				0.7985	AVRG		13.6039
106)B 1-Chlorohexane		0.7425768	0.6952003	0.6216893	0.5995022	0.5941291				
	0.5409185	0.5276735	0.5591123				0.6101	AVRG		12.3085
107)B cis-1,4-Dichloro-2-buten		0.2356933	0.2228384	0.2430724	0.2480103	0.2358122				
	0.1963744	0.1827962	0.2121648				0.2221	AVRG		10.4766
108)B Cyclohexanone		9401	9214	29045	51990	101123				
0.0117 | 0.0149 | 0.00	216689		289584					LINR	#	0.9979
109)B trans-1,4-Dichloro-2-but		0.1835531	0.1791798	0.2025683	0.2044984	0.2000922				
	0.1670315	0.1578152	0.1842341				0.1849	AVRG		9.1772
110)B Pentachloroethane		0.4177334	0.4024236	0.4039802	0.4139435	0.4127129				
	0.3858668	0.3610877	0.4181338				0.4020	AVRG		4.8888
111)B Benzyl chloride		1.2392090	1.1564966	1.2591838	1.2527115	1.2140677				
	1.0342070	1.0654744	1.2782708				1.1875	AVRG		7.8201

Response Factor Report VOA3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Last Update : Thu Aug 25 11:40:17 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			8	1	2	3	4	5	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	6	7	9							
112)B bis(2-Chloroisopropyl)et				0.3723764	0.3378757	0.3743594	0.3792479	0.3724486				
			0.3005188	0.2825156	0.3441934				0.3454	AVRG		10.6479

(#) = Out of Range ($) = Individual RF Out of Range
AVRG = Average, LINR = Linear Regression, 1/x = the inverse of concentration, 1/x^2 = the inverse square of concentration

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A310.D
Acq On : 24 Aug 2011 12:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD0005L 5ML n/a MIX[A] 0723-01B+0727-01C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 25 11:41:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		Dev(Min)
Internal Standards									
1) Fluorobenzene	96	12.007	12.007	1.000	1244680	50.00	ug/L		0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	534627	50.00	ug/L		0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	558132	50.00	ug/L		0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L		0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L		0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L		0.00
System Monitoring Compounds									Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	74085	52.06	ug/L		0.00
43) Toluene-d8	98	13.952	13.952	0.892	1201002	50.58	ug/L		0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	514417	48.70	ug/L		0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		QValue
2) Dichlorodifluoromethane	85	4.652	4.666	0.387	3283	0.65	ug/L		66
3) Chloromethane	50	5.053	5.068	0.421	3959	0.67	ug/L		78
4) Vinyl chloride	62	5.350	5.365	0.446	3735	0.62	ug/L		86
5) Bromomethane	94	6.101	6.125	0.508	2785	0.38	ug/L		95
6) Chloroethane	64	6.327	6.327	0.527	2204	0.49	ug/L	#	42
7) Trichlorofluoromethane	101	6.837	6.849	0.569	5165	0.53	ug/L		78
8) Ethyl ether	59	7.299	7.299	0.608	2936	0.50	ug/L		71
9) Acetone	43	7.774	7.762	0.647	19642	Below Cal			95
10) 1,1-Dichloroethylene	61	7.762	7.774	0.646	5195	0.49	ug/L		95
11) Iodomethane	142	8.058	8.070	0.671	33916	2.63	ug/L		97
12) Acetonitrile	41	8.236	8.224	0.686	18609	Below Cal			71
13) Methyl acetate	43	8.307	8.295	0.692	15573	2.97	ug/L		94
14) Carbon disulfide	76	8.212	8.212	0.684	63886	2.85	ug/L		99
15) Methylene chloride	84	8.532	8.532	0.711	10103	N.D.			
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	11534	0.54	ug/L		87
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	4882	0.50	ug/L		95
18) Vinyl acetate	43	9.612	9.612	0.800	36286	2.88	ug/L		92
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	6225	0.51	ug/L		93
20) 2-Butanone	43	10.418	10.406	0.868	17977	3.30	ug/L		91
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	4410	0.54	ug/L		95
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	5497	0.58	ug/L		94
23) Bromochloromethane	128	10.809	10.797	0.900	1905	0.48	ug/L		97
24) Chloroform	83	10.869	10.869	0.905	7236	0.57	ug/L		98
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	5828	0.54	ug/L		97
26) Cyclohexane	56	11.307	11.307	0.942	8074	0.66	ug/L		86
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	5076	0.56	ug/L	#	65
28) Carbon tetrachloride	117	11.438	11.438	0.953	4773	0.52	ug/L		99
30) 1,2-Dichloroethane	62	11.675	11.663	0.972	4679	0.54	ug/L		90
31) Benzene	78	11.687	11.687	0.973	15767	0.58	ug/L		97
32) Cyclohexene	67	11.829	11.829	0.985	7444	0.54	ug/L		96
33) n-Butyl alcohol	56	12.220	12.185	1.018	5757	82.55	ug/L		91
34) Trichloroethylene	95	12.481	12.481	1.040	4256	0.59	ug/L		90
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	4144	0.60	ug/L		89
36) Methylcyclohexane	83	12.766	12.766	1.063	6757	0.56	ug/L	#	72
37) Dibromomethane	93	12.920	12.920	1.076	2391	0.54	ug/L		92
38) Bromodichloromethane	83	13.062	13.062	1.088	5258	0.54	ug/L	#	92
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	8324	2.37	ug/L		95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A310.D
Acq On : 24 Aug 2011 12:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD0005L 5ML n/a MIX[A] 0723-01B+0727-01C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 25 11:41:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	6321	0.54	ug/L		97
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	8312	2.96	ug/L		89
44) Toluene	91	14.035	14.035	0.898	17759	0.63	ug/L		91
45) trans-1,3-Dichloroprop...	75	14.225	14.213	0.910	5472	0.52	ug/L		77
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	2732	0.52	ug/L		98
47) 2-Hexanone	58	14.675	14.675	0.939	11836	Below Cal			87
48) 1,3-Dichloropropane	76	14.675	14.663	0.939	5490	0.53	ug/L	#	67
49) Tetrachloroethylene	164	14.699	14.699	0.940	3292	0.57	ug/L		92
50) Dibromochloromethane	129	14.960	14.960	0.957	3760	0.48	ug/L		100
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	3307	0.48	ug/L		98
52) Chlorobenzene	112	15.671	15.671	1.002	10103	0.54	ug/L	#	24
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	3860	0.55	ug/L		96
54) Ethylbenzene	91	15.754	15.754	1.008	18657	0.60	ug/L		95
55) m,p-Xylenes	106	15.873	15.873	1.015	14359	1.14	ug/L		80
56) o-Xylene	106	16.335	16.335	1.045	7345	0.56	ug/L		81
57) Styrene	104	16.335	16.335	1.045	12166	0.56	ug/L		89
59) Bromoform	173	16.608	16.608	0.913	2273	0.42	ug/L		96
60) Isopropylbenzene	105	16.715	16.715	0.919	19124	0.57	ug/L		95
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	4360	0.51	ug/L		91
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	905	0.36	ug/L	#	1
64) Bromobenzene	156	17.142	17.142	0.942	4625	0.51	ug/L		89
65) n-Propylbenzene	91	17.165	17.165	0.943	22523	0.58	ug/L		93
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	16245	0.58	ug/L		92
67) 2-Chlorotoluene	126	17.320	17.320	0.952	4285	0.51	ug/L	#	66
68) 4-Chlorotoluene	91	17.426	17.415	0.958	14592	0.57	ug/L		95
69) tert-Butylbenzene	134	17.711	17.711	0.973	3305	0.51	ug/L	#	81
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	17224	0.60	ug/L		90
71) sec-Butylbenzene	105	17.948	17.948	0.986	20807	0.55	ug/L		96
72) 4-Isopropyltoluene	119	18.079	18.067	0.993	16159	0.53	ug/L		95
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	9541	0.55	ug/L		94
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	9390	0.57	ug/L	#	63
75) n-Butylbenzene	91	18.529	18.529	1.018	16822	0.55	ug/L		95
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	8925	0.53	ug/L		96
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	461	N.D.			
78) 1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	6273	0.57	ug/L		93
79) Hexachlorobutadiene	225	20.865	20.865	1.147	3336	0.51	ug/L		93
80) Naphthalene	128	21.079	21.079	1.158	11314	0.51	ug/L		94
81) 1,2,3-Trichlorobenzene	180	21.435	21.435	1.178	4543	0.50	ug/L		97
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85) Acrolein		7.548	7.524	0.629	0m	N.D.	d		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87) Isopropyl Alcohol		7.951	7.928	0.662	0m	N.D.	d		
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d		
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.			
90) Acrylonitrile		0.000	8.864	0.000	0	N.D.			
91) Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d		
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.			
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d		
95) Propionitrile		0.000	10.501	0.000	0	N.D.			
96) Methacrylonitrile		10.726	10.726	0.893	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A310.D
Acq On : 24 Aug 2011 12:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD0005L 5ML n/a MIX[A] 0723-01B+0727-01C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 25 11:41:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

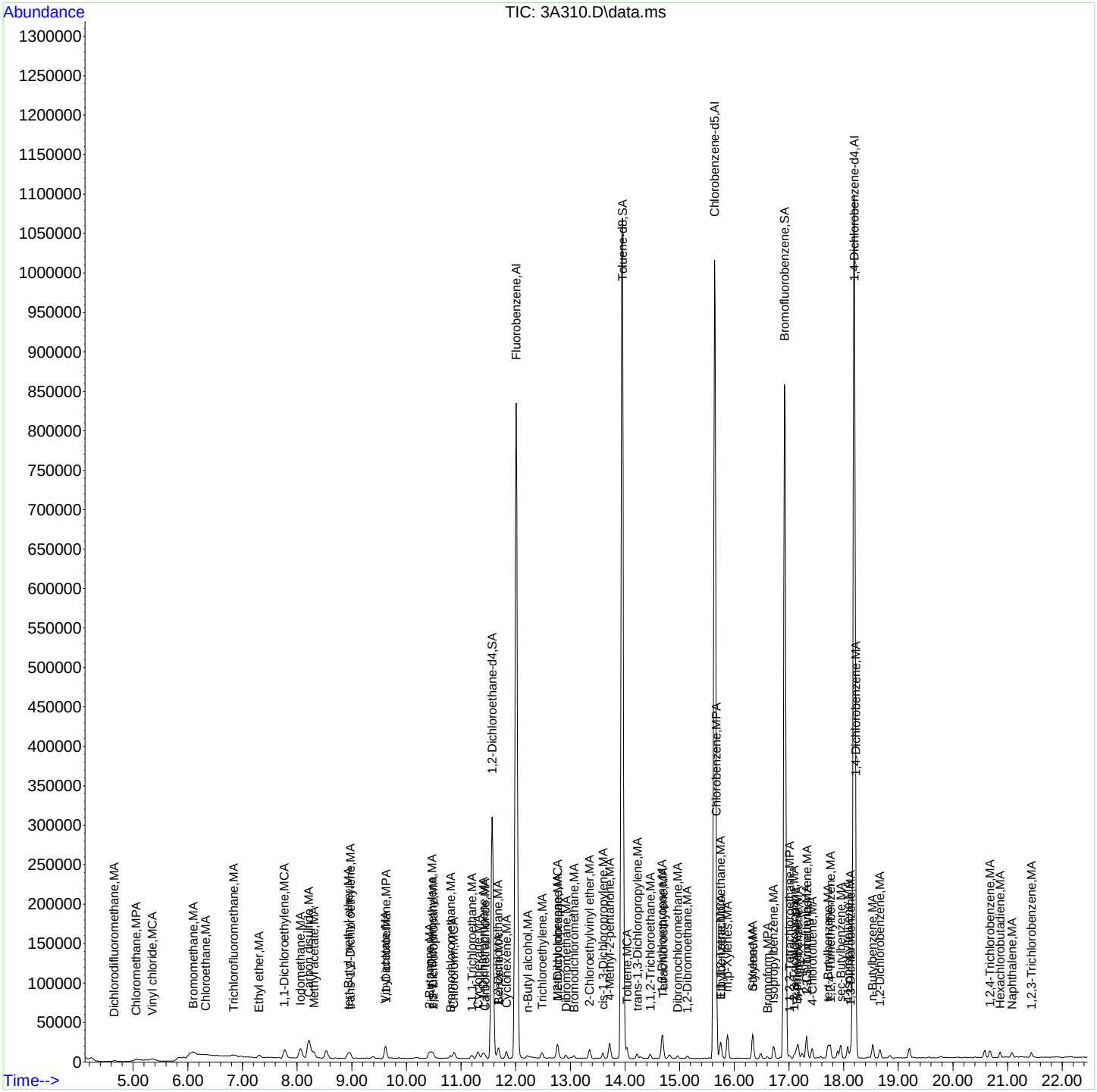
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.201	11.343	0.933	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	11.746	0.000	0	N.D.	
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.553	15.553	0.855	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		0.000	16.762	0.000	0	N.D.	
108) Cyclohexanone		16.869	16.869	0.927	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0	N.D.	
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111) Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.719	18.754	1.029	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A310.D
Acq On : 24 Aug 2011 12:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD0005L 5ML n/a MIX[A] 0723-01B+0727-01C
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 25 11:41:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A311.D
Acq On : 24 Aug 2011 12:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD001L 5ML n/a MIX[A] 0723-02B+0727-02C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:41:40 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1249798	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	539337	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	552190	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	72058	50.42	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1196692	49.96	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	514728	49.26	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	5165	1.03	ug/L	84
3) Chloromethane	50	5.053	5.068	0.421	6875	1.15	ug/L	93
4) Vinyl chloride	62	5.350	5.365	0.446	6662	1.10	ug/L	94
5) Bromomethane	94	6.101	6.125	0.508	8787	1.18	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	4451	0.98	ug/L	91
7) Trichlorofluoromethane	101	6.837	6.849	0.569	10163	1.04	ug/L	83
8) Ethyl ether	59	7.299	7.299	0.608	6005	1.02	ug/L	82
9) Acetone	43	7.773	7.762	0.647	33416	Below Cal		97
10) 1,1-Dichloroethylene	61	7.761	7.774	0.646	11366	1.07	ug/L	97
11) Iodomethane	142	8.058	8.070	0.671	71492	5.52	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	30128	Below Cal		71
13) Methyl acetate	43	8.307	8.295	0.692	31295	5.94	ug/L	95
14) Carbon disulfide	76	8.212	8.212	0.684	129618	5.77	ug/L	99
15) Methylene chloride	84	8.532	8.532	0.711	15225	N.D.		
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	22707	1.07	ug/L	95
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	10465	1.07	ug/L	97
18) Vinyl acetate	43	9.611	9.612	0.800	71115	5.62	ug/L	94
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	14071	1.15	ug/L	97
20) 2-Butanone	43	10.418	10.406	0.868	34353	6.27	ug/L	94
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	9414	1.14	ug/L	96
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	11190	1.19	ug/L	72
23) Bromochloromethane	128	10.809	10.797	0.900	4480	1.11	ug/L	93
24) Chloroform	83	10.868	10.869	0.905	14504	1.14	ug/L	95
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	11256	1.03	ug/L	94
26) Cyclohexane	56	11.307	11.307	0.942	13783	1.13	ug/L	96
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	10453	1.15	ug/L	82
28) Carbon tetrachloride	117	11.438	11.438	0.953	10019	1.09	ug/L	98
30) 1,2-Dichloroethane	62	11.675	11.663	0.972	9180	1.05	ug/L	96
31) Benzene	78	11.687	11.687	0.973	30518	1.12	ug/L	95
32) Cyclohexene	67	11.829	11.829	0.985	16135	1.17	ug/L	97
33) n-Butyl alcohol	56	12.208	12.185	1.017	11982	113.18	ug/L	87
34) Trichloroethylene	95	12.481	12.481	1.040	7515	1.04	ug/L	97
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	7748	1.12	ug/L	96
36) Methylcyclohexane	83	12.766	12.766	1.063	13593	1.12	ug/L	83
37) Dibromomethane	93	12.920	12.920	1.076	4953	1.11	ug/L	91
38) Bromodichloromethane	83	13.062	13.062	1.088	10580	1.07	ug/L	96
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	17621	4.99	ug/L	95

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A311.D
Acq On : 24 Aug 2011 12:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD001L 5ML n/a MIX[A] 0723-02B+0727-02C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:41:40 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	12113	1.03	ug/L		80
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	16482	5.82	ug/L	#	83
44) Toluene	91	14.035	14.035	0.898	32644	1.15	ug/L		96
45) trans-1,3-Dichloroprop...	75	14.224	14.213	0.910	11299	1.06	ug/L		84
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	5658	1.07	ug/L		96
47) 2-Hexanone	58	14.675	14.675	0.939	23856	Below Cal			93
48) 1,3-Dichloropropane	76	14.675	14.663	0.939	12010	1.16	ug/L		84
49) Tetrachloroethylene	164	14.699	14.699	0.940	6949	1.20	ug/L		97
50) Dibromochloromethane	129	14.960	14.960	0.957	8081	1.03	ug/L		100
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	7259	1.05	ug/L		98
52) Chlorobenzene	112	15.671	15.671	1.002	20573	1.09	ug/L	#	60
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	7234	1.02	ug/L		93
54) Ethylbenzene	91	15.754	15.754	1.008	36030	1.15	ug/L		96
55) m,p-Xylenes	106	15.873	15.873	1.015	28121	2.21	ug/L		85
56) o-Xylene	106	16.335	16.335	1.045	14223	1.07	ug/L		80
57) Styrene	104	16.335	16.335	1.045	24383	1.12	ug/L		97
59) Bromoform	173	16.608	16.608	0.913	4677	0.88	ug/L		100
60) Isopropylbenzene	105	16.727	16.715	0.919	37282	1.12	ug/L		93
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	9205	1.08	ug/L		95
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	2519	1.01	ug/L	#	73
64) Bromobenzene	156	17.142	17.142	0.942	9617	1.07	ug/L		94
65) n-Propylbenzene	91	17.165	17.165	0.943	43849	1.14	ug/L		96
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	30911	1.12	ug/L		98
67) 2-Chlorotoluene	126	17.319	17.320	0.952	8697	1.06	ug/L	#	75
68) 4-Chlorotoluene	91	17.426	17.415	0.958	28079	1.11	ug/L		97
69) tert-Butylbenzene	134	17.711	17.711	0.973	6573	1.03	ug/L	#	88
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	31867	1.12	ug/L		95
71) sec-Butylbenzene	105	17.948	17.948	0.986	41056	1.09	ug/L		98
72) 4-Isopropyltoluene	119	18.078	18.067	0.993	32519	1.08	ug/L		97
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	18784	1.10	ug/L		98
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	17268	1.05	ug/L	#	79
75) n-Butylbenzene	91	18.529	18.529	1.018	33638	1.11	ug/L		93
76) 1,2-Dichlorobenzene	146	18.671	18.660	1.026	17933	1.08	ug/L		99
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	1564	0.86	ug/L		88
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	11266	1.03	ug/L		99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	6941	1.07	ug/L		97
80) Naphthalene	128	21.079	21.079	1.158	23115	1.05	ug/L		97
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	9249	1.03	ug/L		99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85) Acrolein		7.429	7.524	0.619	0m	N.D.	d		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87) Isopropyl Alcohol		7.880	7.928	0.656	0m	N.D.	d		
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d		
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.			
90) Acrylonitrile		0.000	8.864	0.000	0	N.D.			
91) Isopropyl ether		9.623	9.647	0.801	0m	N.D.	d		
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.			
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d		
95) Propionitrile		0.000	10.501	0.000	0	N.D.			
96) Methacrylonitrile		10.785	10.726	0.898	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A311.D
Acq On : 24 Aug 2011 12:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD001L 5ML n/a MIX[A] 0723-02B+0727-02C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:41:40 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

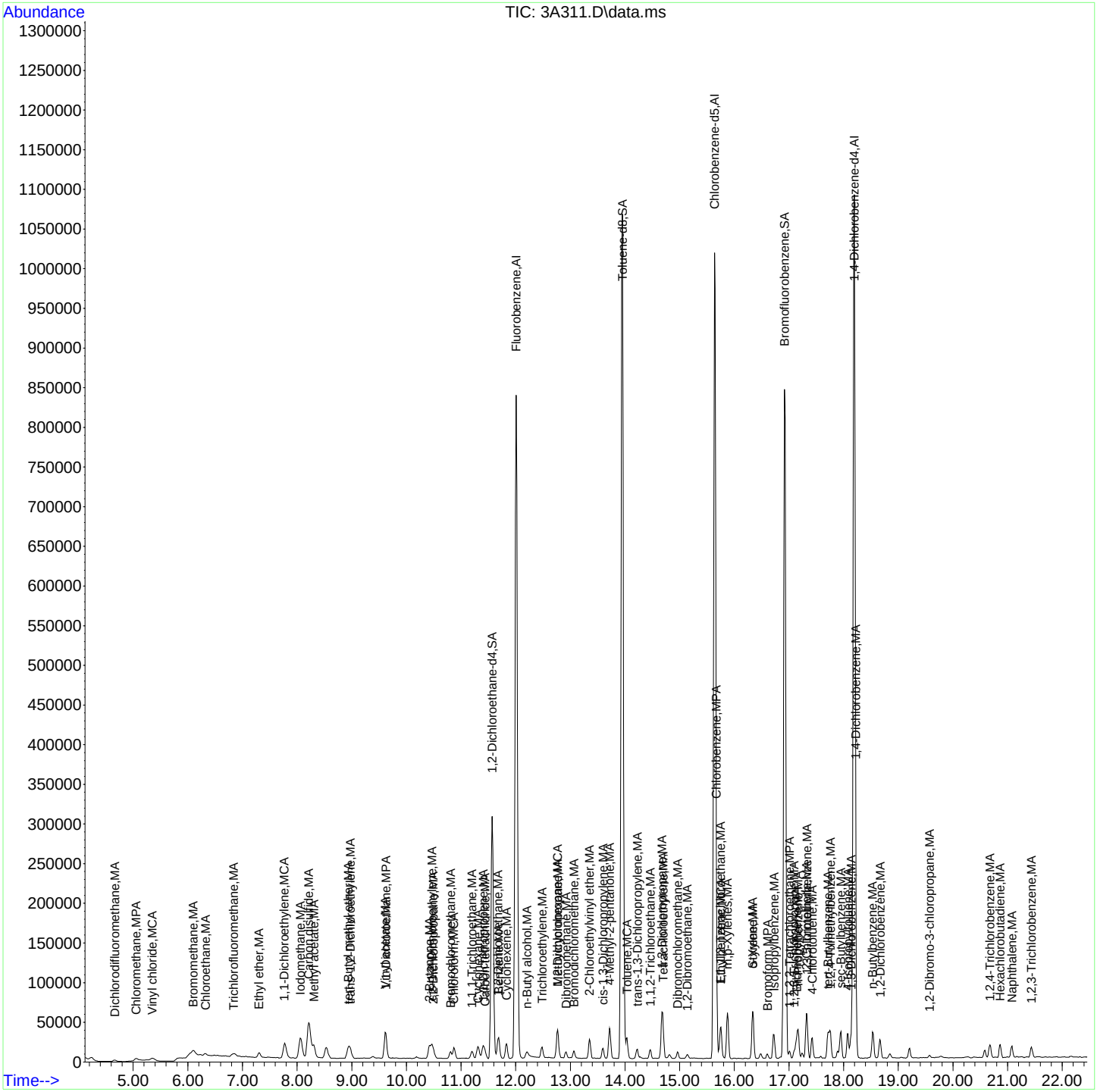
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		0.000	11.746	0.000	0	N.D.	
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102) 2-Nitropropane		13.193	13.300	1.099	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		0.000	16.762	0.000	0	N.D.	
108) Cyclohexanone		0.000	16.869	0.000	0	N.D.	
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0	N.D.	
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111) Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.707	18.754	1.028	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A311.D
Acq On : 24 Aug 2011 12:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD001L 5ML n/a MIX[A] 0723-02B+0727-02C
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 25 11:41:40 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A312.D
Acq On : 24 Aug 2011 13:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-03|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD002L 5ML n/a MIX[A] 0723-03B+0727-03C
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 11:41:44 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1227046	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	530107	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	521982	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	68535	48.85	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1179481	50.10	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	502385	50.86	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	7954	1.61	ug/L	87
3) Chloromethane	50	5.053	5.068	0.421	10413	1.78	ug/L	99
4) Vinyl chloride	62	5.350	5.365	0.446	11082	1.86	ug/L	95
5) Bromomethane	94	6.113	6.125	0.509	14637	2.01	ug/L	95
6) Chloroethane	64	6.327	6.327	0.527	8109	1.81	ug/L	98
7) Trichlorofluoromethane	101	6.837	6.849	0.569	18900	1.97	ug/L	95
8) Ethyl ether	59	7.299	7.299	0.608	11689	2.02	ug/L	94
9) Acetone	43	7.773	7.762	0.647	48962	Below Cal		96
10) 1,1-Dichloroethylene	61	7.762	7.774	0.646	21512	2.07	ug/L	98
11) Iodomethane	142	8.058	8.070	0.671	134791	10.60	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	46069	7.66	ug/L	82
13) Methyl acetate	43	8.307	8.295	0.692	50582	9.78	ug/L	98
14) Carbon disulfide	76	8.212	8.212	0.684	243450	11.03	ug/L	98
15) Methylene chloride	84	8.532	8.532	0.711	21868	2.53	ug/L	97
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	41573	1.99	ug/L	95
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	20202	2.10	ug/L	99
18) Vinyl acetate	43	9.612	9.612	0.800	133650	10.75	ug/L	96
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	25970	2.17	ug/L	98
20) 2-Butanone	43	10.418	10.406	0.868	53624	9.97	ug/L	94
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	16710	2.07	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	20584	2.22	ug/L	98
23) Bromochloromethane	128	10.809	10.797	0.900	7554	1.91	ug/L	90
24) Chloroform	83	10.869	10.869	0.905	26454	2.12	ug/L	97
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	22963	2.14	ug/L	98
26) Cyclohexane	56	11.307	11.307	0.942	27060	2.26	ug/L	95
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	18663	2.09	ug/L	97
28) Carbon tetrachloride	117	11.438	11.438	0.953	19058	2.11	ug/L	99
30) 1,2-Dichloroethane	62	11.675	11.663	0.972	17882	2.09	ug/L	98
31) Benzene	78	11.687	11.687	0.973	56074	2.10	ug/L	96
32) Cyclohexene	67	11.829	11.829	0.985	27828	2.05	ug/L	96
33) n-Butyl alcohol	56	12.197	12.185	1.016	22414	166.78	ug/L	86
34) Trichloroethylene	95	12.481	12.481	1.040	14978	2.11	ug/L	98
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	14248	2.11	ug/L	98
36) Methylcyclohexane	83	12.766	12.766	1.063	24711	2.08	ug/L	86
37) Dibromomethane	93	12.920	12.920	1.076	8241	1.88	ug/L	96
38) Bromodichloromethane	83	13.062	13.062	1.088	19503	2.01	ug/L	99
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	31189	9.00	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A312.D
Acq On : 24 Aug 2011 13:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-03|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD002L 5ML n/a MIX[A] 0723-03B+0727-03C
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 11:41:44 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40)	cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	23227	2.02	ug/L		90
42)	4-Methyl-2-pentanone	58	13.715	13.715	0.877	26506	9.53	ug/L		85
44)	Toluene	91	14.035	14.035	0.898	59174	2.13	ug/L		97
45)	trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	20326	1.93	ug/L		88
46)	1,1,2-Trichloroethane	83	14.462	14.462	0.925	9949	1.91	ug/L		94
47)	2-Hexanone	58	14.675	14.675	0.939	36464	Below Cal			89
48)	1,3-Dichloropropane	76	14.663	14.663	0.938	20695	2.03	ug/L		87
49)	Tetrachloroethylene	164	14.699	14.699	0.940	12316	2.16	ug/L		98
50)	Dibromochloromethane	129	14.960	14.960	0.957	14290	1.85	ug/L		98
51)	1,2-Dibromoethane	107	15.138	15.138	0.968	12764	1.88	ug/L		98
52)	Chlorobenzene	112	15.671	15.671	1.002	38611	2.08	ug/L		83
53)	1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	13278	1.90	ug/L		95
54)	Ethylbenzene	91	15.754	15.754	1.008	68375	2.22	ug/L		95
55)	m,p-Xylenes	106	15.873	15.873	1.015	52943	4.23	ug/L		88
56)	o-Xylene	106	16.335	16.335	1.045	26888	2.07	ug/L		85
57)	Styrene	104	16.335	16.335	1.045	45388	2.12	ug/L		97
59)	Bromoform	173	16.608	16.608	0.913	9287	1.85	ug/L		98
60)	Isopropylbenzene	105	16.715	16.715	0.919	68308	2.17	ug/L		96
62)	1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	15560	1.93	ug/L		96
63)	1,2,3-Trichloropropane	110	17.094	17.094	0.939	4660	1.98	ug/L	#	77
64)	Bromobenzene	156	17.142	17.142	0.942	17868	2.11	ug/L		95
65)	n-Propylbenzene	91	17.165	17.165	0.943	81507	2.25	ug/L		95
66)	1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	58560	2.24	ug/L		95
67)	2-Chlorotoluene	126	17.320	17.320	0.952	16451	2.11	ug/L	#	81
68)	4-Chlorotoluene	91	17.426	17.415	0.958	52048	2.18	ug/L		97
69)	tert-Butylbenzene	134	17.711	17.711	0.973	13164	2.18	ug/L		96
70)	1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	59015	2.19	ug/L		95
71)	sec-Butylbenzene	105	17.948	17.948	0.986	77191	2.17	ug/L		96
72)	4-Isopropyltoluene	119	18.067	18.067	0.993	61005	2.14	ug/L		96
73)	1,3-Dichlorobenzene	146	18.126	18.126	0.996	33972	2.11	ug/L		98
74)	1,4-Dichlorobenzene	146	18.221	18.221	1.001	32585	2.10	ug/L		88
75)	n-Butylbenzene	91	18.529	18.529	1.018	60766	2.12	ug/L		96
76)	1,2-Dichlorobenzene	146	18.660	18.660	1.025	31861	2.02	ug/L		97
77)	1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	3038	1.76	ug/L		93
78)	1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	20298	1.97	ug/L		98
79)	Hexachlorobutadiene	225	20.865	20.865	1.147	11911	1.95	ug/L		96
80)	Naphthalene	128	21.079	21.079	1.158	37127	1.79	ug/L		98
81)	1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	16035	1.89	ug/L		99
83)	Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84)	2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85)	Acrolein		7.548	7.524	0.629	0m	N.D.	d		
86)	Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87)	Isopropyl Alcohol		7.999	7.928	0.666	0m	N.D.	d		
88)	Allyl chloride		8.236	8.331	0.686	0m	N.D.	d		
89)	tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.			
90)	Acrylonitrile		0.000	8.864	0.000	0	N.D.			
91)	Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d		
92)	2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.			
93)	Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94)	Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d		
95)	Propionitrile		0.000	10.501	0.000	0	N.D.			
96)	Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A312.D
Acq On : 24 Aug 2011 13:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-03|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD002L 5ML n/a MIX[A] 0723-03B+0727-03C
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 11:41:44 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

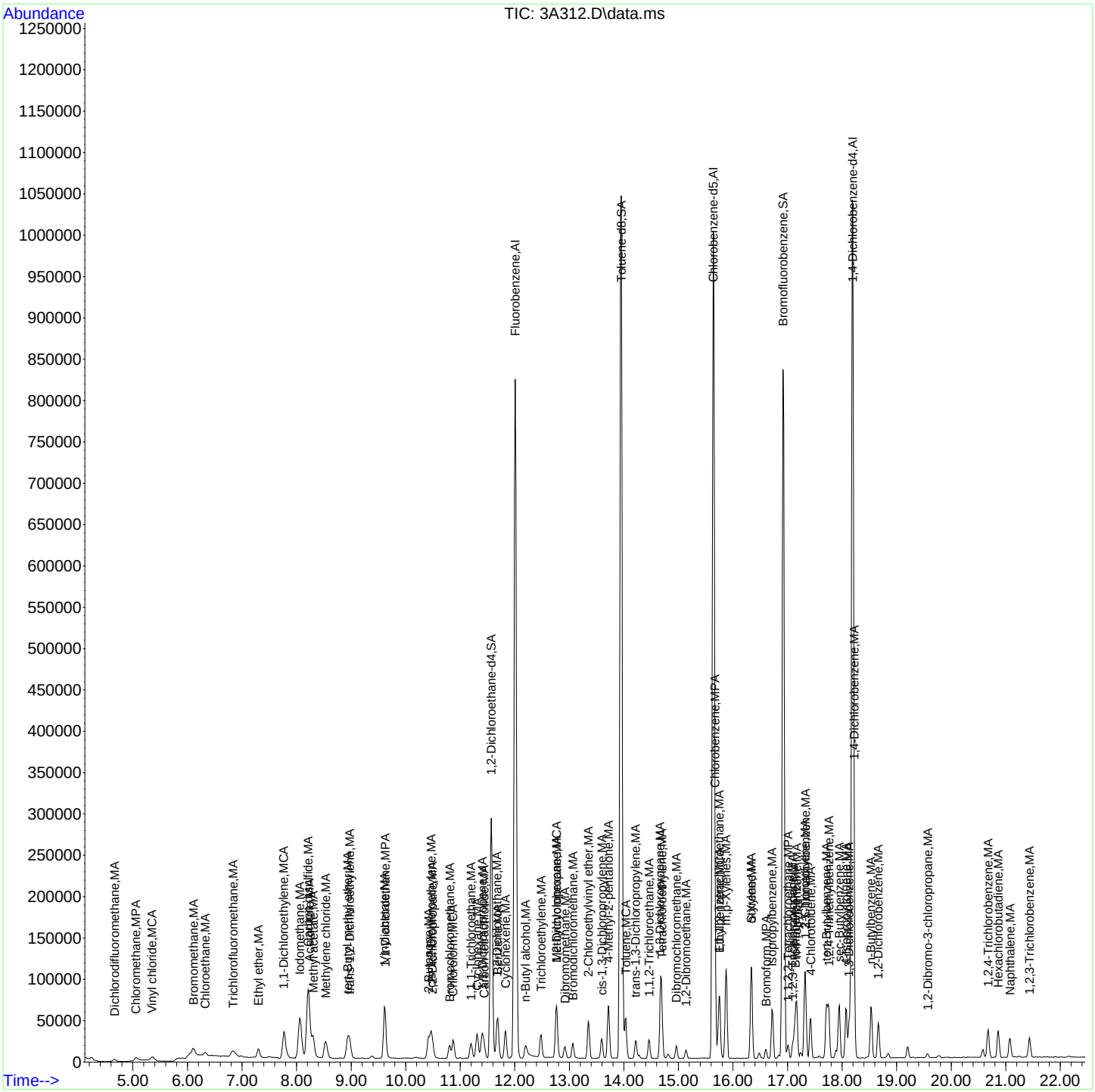
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.556	11.343	0.962	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.988	16.869	0.934	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0	N.D.	
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111) Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.671	18.754	1.026	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A312.D
Acq On : 24 Aug 2011 13:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-03|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD002L 5ML n/a MIX[A] 0723-03B+0727-03C
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 25 11:41:44 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A313.D
Acq On : 24 Aug 2011 13:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-04|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005L 5ML n/a MIX[A] 0723-04B+0727-04C
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:41:48 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1215964	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	526732	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	548657	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	71075	51.12	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1179960	50.44	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	518450	49.93	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	25759	5.26	ug/L	96
3) Chloromethane	50	5.053	5.068	0.421	30242	5.21	ug/L	98
4) Vinyl chloride	62	5.350	5.365	0.446	30343	5.14	ug/L	98
5) Bromomethane	94	6.113	6.125	0.509	36517	5.06	ug/L	97
6) Chloroethane	64	6.327	6.327	0.527	22930	5.17	ug/L	97
7) Trichlorofluoromethane	101	6.837	6.849	0.569	49777	5.23	ug/L	99
8) Ethyl ether	59	7.299	7.299	0.608	29420	5.12	ug/L	97
9) Acetone	43	7.774	7.762	0.647	127595	21.93	ug/L	97
10) 1,1-Dichloroethylene	61	7.762	7.774	0.646	55198	5.36	ug/L	99
11) Iodomethane	142	8.058	8.070	0.671	341532	27.11	ug/L	98
12) Acetonitrile	41	8.236	8.224	0.686	124958	119.56	ug/L	92
13) Methyl acetate	43	8.307	8.295	0.692	140888	27.48	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	610531	27.92	ug/L	99
15) Methylene chloride	84	8.532	8.532	0.711	47374	5.54	ug/L	97
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	112162	5.42	ug/L	98
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	52418	5.49	ug/L	98
18) Vinyl acetate	43	9.612	9.612	0.800	346989	28.17	ug/L	96
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	64332	5.42	ug/L	99
20) 2-Butanone	43	10.418	10.406	0.868	147549	27.69	ug/L	97
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	43580	5.44	ug/L	99
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	50167	5.46	ug/L	94
23) Bromochloromethane	128	10.809	10.797	0.900	20229	5.17	ug/L	93
24) Chloroform	83	10.869	10.869	0.905	67563	5.47	ug/L	97
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	56693	5.33	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	64361	5.42	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	48183	5.46	ug/L	94
28) Carbon tetrachloride	117	11.438	11.438	0.953	48268	5.40	ug/L	100
30) 1,2-Dichloroethane	62	11.675	11.663	0.972	47357	5.59	ug/L	99
31) Benzene	78	11.687	11.687	0.973	143388	5.43	ug/L	98
32) Cyclohexene	67	11.829	11.829	0.985	72488	5.38	ug/L	98
33) n-Butyl alcohol	56	12.197	12.185	1.016	84720	484.21	ug/L	95
34) Trichloroethylene	95	12.481	12.481	1.040	38977	5.53	ug/L	96
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	37091	5.53	ug/L	99
36) Methylcyclohexane	83	12.766	12.766	1.063	63141	5.37	ug/L	92
37) Dibromomethane	93	12.920	12.920	1.076	23721	5.46	ug/L	98
38) Bromodichloromethane	83	13.062	13.062	1.088	51305	5.35	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	88583	25.81	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A313.D
Acq On : 24 Aug 2011 13:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-04|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005L 5ML n/a MIX[A] 0723-04B+0727-04C
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:41:48 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	61526	5.40	ug/L		94
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	80159	29.00	ug/L		91
44) Toluene	91	14.035	14.035	0.898	149725	5.41	ug/L		97
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	56230	5.38	ug/L		93
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	28335	5.47	ug/L		99
47) 2-Hexanone	58	14.675	14.675	0.939	105278	23.34	ug/L		94
48) 1,3-Dichloropropane	76	14.675	14.663	0.939	56610	5.59	ug/L		89
49) Tetrachloroethylene	164	14.699	14.699	0.940	30544	5.39	ug/L		97
50) Dibromochloromethane	129	14.960	14.960	0.957	40077	5.22	ug/L		98
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	35900	5.31	ug/L		98
52) Chlorobenzene	112	15.671	15.671	1.002	96717	5.25	ug/L		91
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	37049	5.34	ug/L		99
54) Ethylbenzene	91	15.754	15.754	1.008	169775	5.55	ug/L		97
55) m,p-Xylenes	106	15.873	15.873	1.015	135563	10.89	ug/L		90
56) o-Xylene	106	16.335	16.335	1.045	69491	5.38	ug/L		87
57) Styrene	104	16.335	16.335	1.045	114782	5.40	ug/L		94
59) Bromoform	173	16.608	16.608	0.913	25969	4.93	ug/L		99
60) Isopropylbenzene	105	16.715	16.715	0.919	175656	5.32	ug/L		96
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	44604	5.27	ug/L		97
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	13065	5.28	ug/L	#	90
64) Bromobenzene	156	17.142	17.142	0.942	45799	5.14	ug/L		95
65) n-Propylbenzene	91	17.165	17.165	0.943	205207	5.39	ug/L		97
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	148071	5.38	ug/L		97
67) 2-Chlorotoluene	126	17.320	17.320	0.952	42418	5.18	ug/L	#	83
68) 4-Chlorotoluene	91	17.426	17.415	0.958	134501	5.37	ug/L		96
69) tert-Butylbenzene	134	17.711	17.711	0.973	31853	5.01	ug/L	#	85
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	151119	5.33	ug/L		96
71) sec-Butylbenzene	105	17.948	17.948	0.986	197305	5.28	ug/L		97
72) 4-Isopropyltoluene	119	18.079	18.067	0.993	157288	5.25	ug/L		98
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	89142	5.26	ug/L		97
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	84479	5.19	ug/L		96
75) n-Butylbenzene	91	18.529	18.529	1.018	162472	5.39	ug/L		95
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	87318	5.28	ug/L		100
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	9160	5.05	ug/L		96
78) 1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	57673	5.32	ug/L		97
79) Hexachlorobutadiene	225	20.865	20.865	1.147	33728	5.25	ug/L		98
80) Naphthalene	128	21.079	21.079	1.158	114078	5.24	ug/L		99
81) 1,2,3-Trichlorobenzene	180	21.435	21.435	1.178	47888	5.36	ug/L		99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85) Acrolein		7.524	7.524	0.627	0m	N.D.	d		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87) Isopropyl Alcohol		7.868	7.928	0.655	0m	N.D.	d		
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d		
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.			
90) Acrylonitrile		8.924	8.864	0.743	0m	N.D.	d		
91) Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d		
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.			
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d		
95) Propionitrile		0.000	10.501	0.000	0	N.D.			
96) Methacrylonitrile		10.750	10.726	0.895	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A313.D
Acq On : 24 Aug 2011 13:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-04|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005L 5ML n/a MIX[A] 0723-04B+0727-04C
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:41:48 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

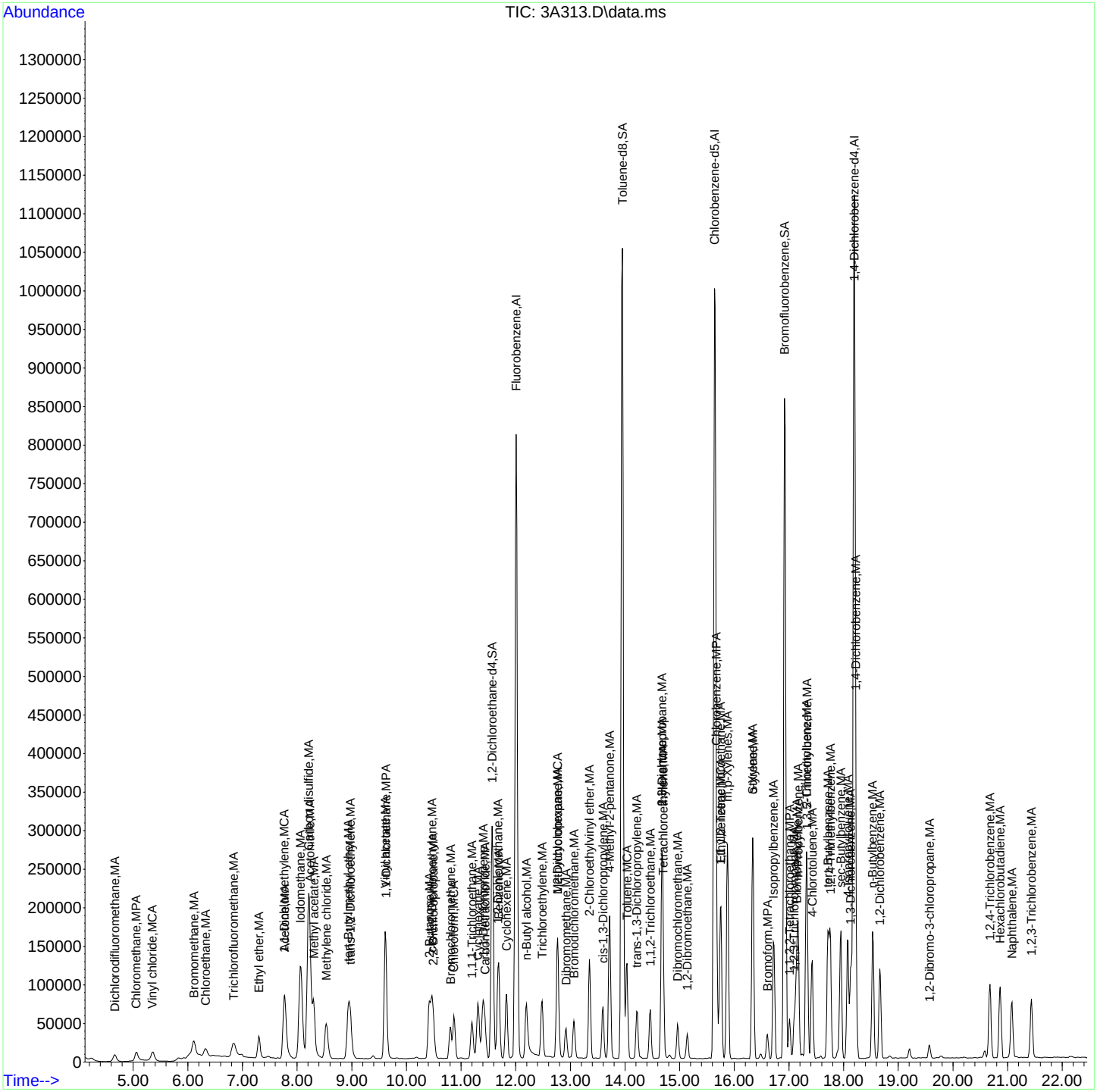
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.529	15.553	0.853	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.893	16.869	0.928	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111) Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.826	18.754	1.035	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A313.D
Acq On : 24 Aug 2011 13:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-04|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005L 5ML n/a MIX[A] 0723-04B+0727-04C
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 25 11:41:48 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A314.D
Acq On : 24 Aug 2011 14:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-05|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010L 5ML n/a MIX[A] 0723-05B+0727-05C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1228721	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	535603	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	543500	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	71381	50.81	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1184746	49.81	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	515526	50.12	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	45087	9.11	ug/L	96
3) Chloromethane	50	5.067	5.068	0.422	57250	9.75	ug/L	99
4) Vinyl chloride	62	5.350	5.365	0.446	58872	9.86	ug/L	98
5) Bromomethane	94	6.113	6.125	0.509	73305	10.05	ug/L	98
6) Chloroethane	64	6.327	6.327	0.527	46038	10.28	ug/L	98
7) Trichlorofluoromethane	101	6.837	6.849	0.569	96591	10.05	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	60399	10.41	ug/L	97
9) Acetone	43	7.761	7.762	0.646	221461	48.29	ug/L	97
10) 1,1-Dichloroethylene	61	7.761	7.774	0.646	107764	10.36	ug/L	99
11) Iodomethane	142	8.058	8.070	0.671	658813	51.75	ug/L	98
12) Acetonitrile	41	8.236	8.224	0.686	226302	259.25	ug/L	96
13) Methyl acetate	43	8.307	8.295	0.692	265906	51.32	ug/L	98
14) Carbon disulfide	76	8.212	8.212	0.684	1164211	52.69	ug/L	98
15) Methylene chloride	84	8.532	8.532	0.711	86090	9.96	ug/L	98
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	216830	10.37	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	99617	10.32	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	688298	55.29	ug/L	97
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	124660	10.40	ug/L	100
20) 2-Butanone	43	10.418	10.406	0.868	263268	48.90	ug/L	98
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	83241	10.28	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	95197	10.26	ug/L	97
23) Bromochloromethane	128	10.797	10.797	0.899	40334	10.19	ug/L	96
24) Chloroform	83	10.868	10.869	0.905	126348	10.12	ug/L	98
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	111020	10.33	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	123127	10.27	ug/L	98
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	93930	10.53	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	93456	10.34	ug/L	98
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	90306	10.55	ug/L	98
31) Benzene	78	11.687	11.687	0.973	275950	10.34	ug/L	99
32) Cyclohexene	67	11.829	11.829	0.985	141974	10.43	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	171501	915.86	ug/L	95
34) Trichloroethylene	95	12.481	12.481	1.040	74694	10.49	ug/L	97
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	70252	10.37	ug/L	98
36) Methylcyclohexane	83	12.766	12.766	1.063	122898	10.35	ug/L	97
37) Dibromomethane	93	12.920	12.920	1.076	44910	10.22	ug/L	99
38) Bromodichloromethane	83	13.062	13.062	1.088	97832	10.09	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	176628	50.92	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A314.D
Acq On : 24 Aug 2011 14:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-05|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010L 5ML n/a MIX[A] 0723-05B+0727-05C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	120675	10.48	ug/L		97
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	144562	51.44	ug/L		90
44) Toluene	91	14.035	14.035	0.898	287255	10.21	ug/L		98
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	109677	10.31	ug/L		95
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	54692	10.38	ug/L		100
47) 2-Hexanone	58	14.675	14.675	0.939	181482	49.67	ug/L		93
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	108108	10.49	ug/L		94
49) Tetrachloroethylene	164	14.699	14.699	0.940	58464	10.15	ug/L		97
50) Dibromochloromethane	129	14.960	14.960	0.957	77997	10.00	ug/L		99
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	70514	10.25	ug/L		97
52) Chlorobenzene	112	15.671	15.671	1.002	189450	10.11	ug/L		96
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	73029	10.35	ug/L		99
54) Ethylbenzene	91	15.754	15.754	1.008	322726	10.38	ug/L		98
55) m,p-Xylenes	106	15.873	15.873	1.015	263891	20.84	ug/L		92
56) o-Xylene	106	16.335	16.335	1.045	133959	10.19	ug/L		87
57) Styrene	104	16.335	16.335	1.045	221557	10.24	ug/L		94
59) Bromoform	173	16.608	16.608	0.913	52756	10.12	ug/L		100
60) Isopropylbenzene	105	16.715	16.715	0.919	345783	10.57	ug/L		98
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	84902	10.13	ug/L		98
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	24905	10.17	ug/L	#	88
64) Bromobenzene	156	17.142	17.142	0.942	89554	10.15	ug/L		95
65) n-Propylbenzene	91	17.165	17.165	0.943	393808	10.44	ug/L		97
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	288079	10.57	ug/L		97
67) 2-Chlorotoluene	126	17.319	17.320	0.952	85702	10.57	ug/L		93
68) 4-Chlorotoluene	91	17.426	17.415	0.958	257720	10.39	ug/L		97
69) tert-Butylbenzene	134	17.711	17.711	0.973	63362	10.07	ug/L	#	87
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	291004	10.36	ug/L		97
71) sec-Butylbenzene	105	17.948	17.948	0.986	385861	10.43	ug/L		97
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	308295	10.39	ug/L		98
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	169672	10.11	ug/L		98
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	163944	10.16	ug/L		97
75) n-Butylbenzene	91	18.529	18.529	1.018	316861	10.62	ug/L		97
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	168183	10.26	ug/L		98
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	17946	9.99	ug/L		96
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	109465	10.19	ug/L		99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	65305	10.25	ug/L		99
80) Naphthalene	128	21.079	21.079	1.158	222014	10.29	ug/L		99
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	91599	10.34	ug/L		100
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85) Acrolein		7.607	7.524	0.634	0m	N.D.	d		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87) Isopropyl Alcohol		7.963	7.928	0.663	0m	N.D.	d		
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d		
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.			
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d		
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d		
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.			
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d		
95) Propionitrile		0.000	10.501	0.000	0	N.D.			
96) Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A314.D
Acq On : 24 Aug 2011 14:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-05|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010L 5ML n/a MIX[A] 0723-05B+0727-05C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

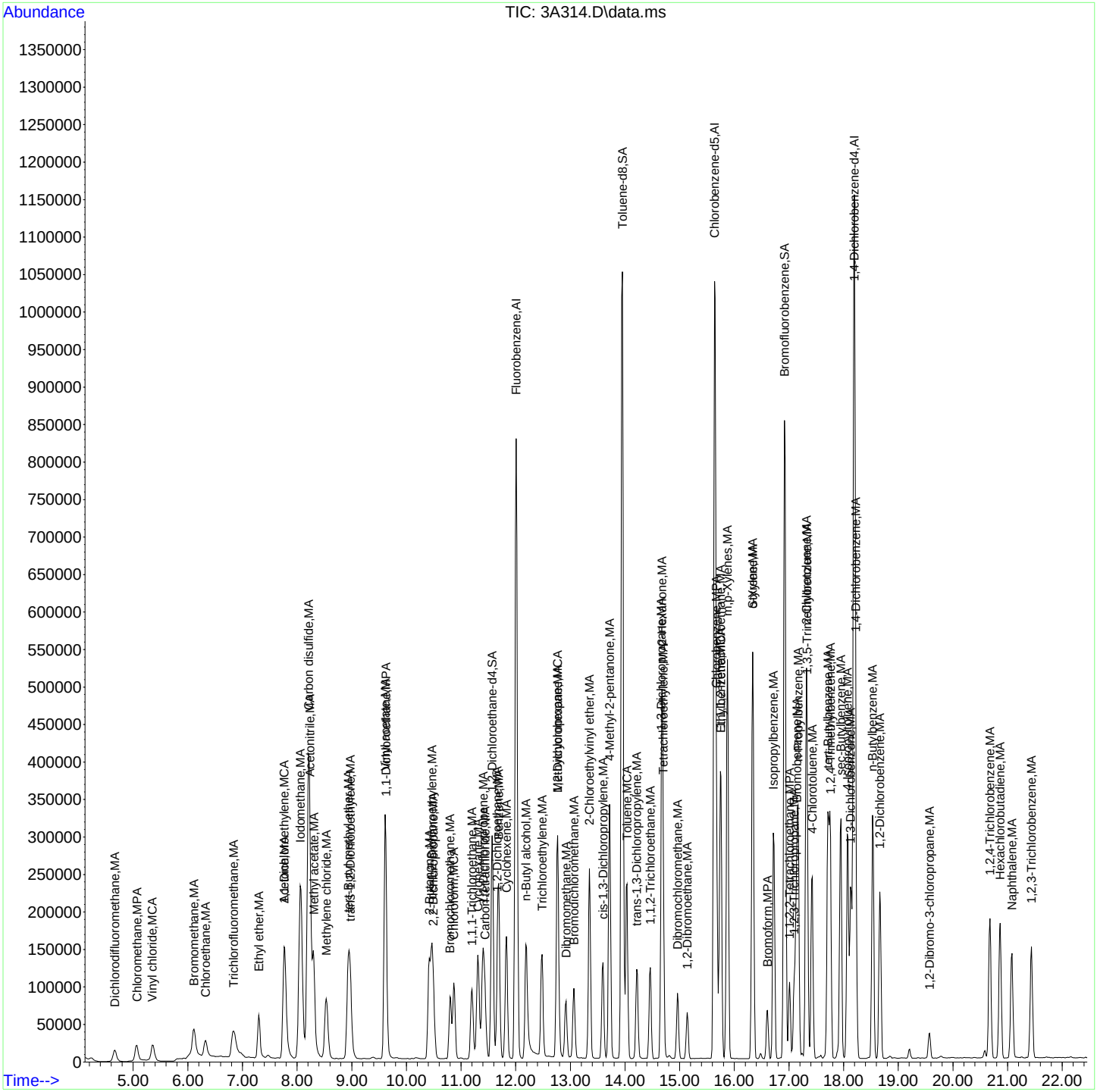
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97)	Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98)	Isobutyl alcohol		11.165	11.343	0.930	0m	N.D.	d
99)	Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100)	Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101)	1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102)	2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104)	Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106)	1-Chlorohexane		15.493	15.553	0.851	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108)	Cyclohexanone		16.881	16.869	0.928	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110)	Pentachloroethane		0.000	17.782	0.000	0	N.D.	
111)	Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		18.695	18.754	1.027	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A314.D
Acq On : 24 Aug 2011 14:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-05|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010L 5ML n/a MIX[A] 0723-05B+0727-05C
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 25 11:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A315.D
Acq On : 24 Aug 2011 14:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-06|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD020L 5ML n/a MIX[A] 0723-06B+0727-06C
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 11:41:57 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1227252	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	530698	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	552931	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	71922	51.25	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1177622	49.96	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	522523	49.93	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	103901	21.01	ug/L	98
3) Chloromethane	50	5.067	5.068	0.422	124821	21.29	ug/L	98
4) Vinyl chloride	62	5.364	5.365	0.447	124975	20.96	ug/L	99
5) Bromomethane	94	6.113	6.125	0.509	147348	20.23	ug/L	100
6) Chloroethane	64	6.327	6.327	0.527	94363	21.10	ug/L	99
7) Trichlorofluoromethane	101	6.836	6.849	0.569	198164	20.65	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	121194	20.91	ug/L	100
9) Acetone	43	7.761	7.762	0.646	476084	121.00	ug/L	98
10) 1,1-Dichloroethylene	61	7.761	7.774	0.646	210542	20.27	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	1272755	100.09	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	449275	571.36	ug/L	99
13) Methyl acetate	43	8.295	8.295	0.691	551288	106.53	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	2208675	100.07	ug/L	99
15) Methylene chloride	84	8.532	8.532	0.711	165833	19.22	ug/L	99
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	427692	20.47	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	194005	20.13	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	1219074	98.05	ug/L	97
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	234024	19.55	ug/L	100
20) 2-Butanone	43	10.418	10.406	0.868	530063	98.57	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	160528	19.84	ug/L	99
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	181000	19.53	ug/L	99
23) Bromochloromethane	128	10.797	10.797	0.899	79535	20.12	ug/L	97
24) Chloroform	83	10.868	10.869	0.905	247073	19.82	ug/L	98
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	215803	20.11	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	231466	19.32	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	175261	19.66	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	177451	19.66	ug/L	99
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	173965	20.35	ug/L	100
31) Benzene	78	11.687	11.687	0.973	528290	19.82	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	268543	19.76	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	409242	2113.09	ug/L	99
34) Trichloroethylene	95	12.481	12.481	1.040	143728	20.22	ug/L	98
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	135417	20.01	ug/L	99
36) Methylcyclohexane	83	12.766	12.766	1.063	238262	20.08	ug/L	98
37) Dibromomethane	93	12.920	12.920	1.076	88651	20.21	ug/L	98
38) Bromodichloromethane	83	13.062	13.062	1.088	197329	20.37	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	366191	105.70	ug/L	99

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A315.D
Acq On : 24 Aug 2011 14:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-06|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD020L 5ML n/a MIX[A] 0723-06B+0727-06C
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 11:41:57 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	233995	20.34	ug/L	97
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	287524	103.25	ug/L	95
44) Toluene	91	14.035	14.035	0.898	551497	19.79	ug/L	99
45) trans-1,3-Dichloroprop...	75	14.212	14.213	0.909	216149	20.51	ug/L	96
46) 1,1,2-Trichloroethane	83	14.461	14.462	0.925	108628	20.81	ug/L	97
47) 2-Hexanone	58	14.675	14.675	0.939	359336	113.76	ug/L	95
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	210209	20.59	ug/L	97
49) Tetrachloroethylene	164	14.699	14.699	0.940	111485	19.54	ug/L	100
50) Dibromochloromethane	129	14.960	14.960	0.957	158358	20.49	ug/L	100
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	140409	20.61	ug/L	99
52) Chlorobenzene	112	15.671	15.671	1.002	373317	20.11	ug/L	98
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	144171	20.63	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	616695	20.02	ug/L	99
55) m,p-Xylenes	106	15.873	15.873	1.015	511021	40.74	ug/L	95
56) o-Xylene	106	16.335	16.335	1.045	266322	20.45	ug/L	93
57) Styrene	104	16.335	16.335	1.045	440719	20.56	ug/L	98
59) Bromoform	173	16.608	16.608	0.913	110769	20.88	ug/L	100
60) Isopropylbenzene	105	16.715	16.715	0.919	667453	20.05	ug/L	99
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	173553	20.35	ug/L	100
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	50249	20.16	ug/L	93
64) Bromobenzene	156	17.142	17.142	0.942	180019	20.06	ug/L	98
65) n-Propylbenzene	91	17.165	17.165	0.943	758796	19.78	ug/L	98
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	560585	20.22	ug/L	97
67) 2-Chlorotoluene	126	17.319	17.320	0.952	164004	19.89	ug/L	91
68) 4-Chlorotoluene	91	17.426	17.415	0.958	506534	20.07	ug/L	98
69) tert-Butylbenzene	134	17.711	17.711	0.973	127135	19.85	ug/L	92
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	570286	19.96	ug/L	97
71) sec-Butylbenzene	105	17.948	17.948	0.986	762163	20.24	ug/L	98
72) 4-Isopropyltoluene	119	18.078	18.067	0.993	609322	20.19	ug/L	98
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	338286	19.82	ug/L	99
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	329029	20.05	ug/L	99
75) n-Butylbenzene	91	18.529	18.529	1.018	622133	20.49	ug/L	98
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	339391	20.35	ug/L	99
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	39368	21.55	ug/L	98
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	230938	21.14	ug/L	100
79) Hexachlorobutadiene	225	20.865	20.865	1.147	133339	20.58	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	473894	21.59	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	191248	21.23	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.382	7.524	0.615	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.963	7.928	0.663	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.		
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.		
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d	
95) Propionitrile		10.418	10.501	0.868	0m	N.D.	d	
96) Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A315.D
Acq On : 24 Aug 2011 14:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-06|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD020L 5ML n/a MIX[A] 0723-06B+0727-06C
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 11:41:57 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

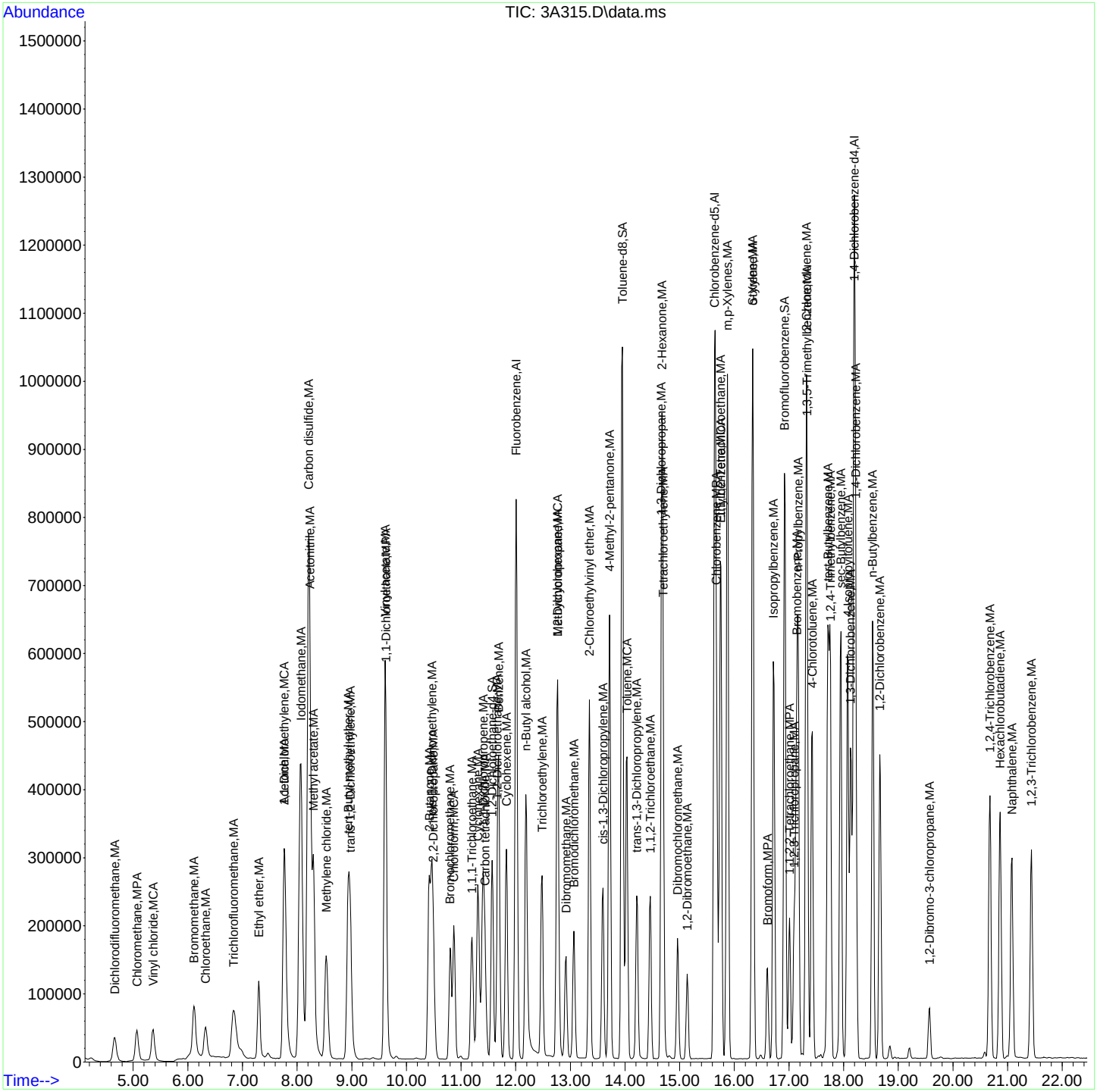
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97)	Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98)	Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99)	Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100)	Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101)	1,4-Dioxane		0.000	12.884	0.000	0	N.D.	
102)	2-Nitropropane		13.252	13.300	1.104	0m	N.D.	d
104)	Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106)	1-Chlorohexane		15.552	15.553	0.855	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108)	Cyclohexanone		16.869	16.869	0.927	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110)	Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111)	Benzyl chloride		18.185	18.339	0.999	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		18.742	18.754	1.030	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A315.D
Acq On : 24 Aug 2011 14:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-06|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD020L 5ML n/a MIX[A] 0723-06B+0727-06C
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 25 11:41:57 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A316.D
Acq On : 24 Aug 2011 15:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-07|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050L 5ML n/a MIX[A] 0723-07B+0727-07C
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 11:42:00 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1244269	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	539948	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	552836	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	70823	49.78	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1185846	49.45	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	517918	49.50	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	273152	54.49	ug/L	100
3) Chloromethane	50	5.068	5.068	0.422	296203	49.83	ug/L	100
4) Vinyl chloride	62	5.365	5.365	0.447	300300	49.68	ug/L	100
5) Bromomethane	94	6.125	6.125	0.510	347060	46.99	ug/L	100
6) Chloroethane	64	6.327	6.327	0.527	227624	50.20	ug/L	100
7) Trichlorofluoromethane	101	6.849	6.849	0.570	473210	48.63	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	284734	48.45	ug/L	100
9) Acetone	43	7.762	7.762	0.646	1016561	271.21	ug/L	100
10) 1,1-Dichloroethylene	61	7.774	7.774	0.647	492661	46.77	ug/L	100
11) Iodomethane	142	8.070	8.070	0.672	3017665	234.05	ug/L	100
12) Acetonitrile	41	8.224	8.224	0.685	990077	1308.51	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1190372	226.87	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	5040543	225.26	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	393843	45.01	ug/L	100
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	1009730	47.67	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	456637	46.73	ug/L	100
18) Vinyl acetate	43	9.612	9.612	0.800	2909394	230.80	ug/L	100
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	556670	45.87	ug/L	100
20) 2-Butanone	43	10.406	10.406	0.867	1312272	240.70	ug/L	100
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	375883	45.83	ug/L	100
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	415038	44.17	ug/L	100
23) Bromochloromethane	128	10.797	10.797	0.899	192337	48.00	ug/L	100
24) Chloroform	83	10.869	10.869	0.905	578013	45.74	ug/L	100
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	517536	47.56	ug/L	100
26) Cyclohexane	56	11.307	11.307	0.942	551978	45.44	ug/L	100
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	411065	45.49	ug/L	100
28) Carbon tetrachloride	117	11.438	11.438	0.953	423848	46.31	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	405550	46.79	ug/L	100
31) Benzene	78	11.687	11.687	0.973	1249257	46.22	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	631479	45.82	ug/L	100
33) n-Butyl alcohol	56	12.185	12.185	1.015	1021924	5125.50	ug/L	100
34) Trichloroethylene	95	12.481	12.481	1.040	338355	46.94	ug/L	100
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	317643	46.31	ug/L	100
36) Methylcyclohexane	83	12.766	12.766	1.063	555134	46.15	ug/L	100
37) Dibromomethane	93	12.920	12.920	1.076	210070	47.23	ug/L	100
38) Bromodichloromethane	83	13.062	13.062	1.088	470790	47.94	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	808322	230.13	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A316.D
Acq On : 24 Aug 2011 15:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-07|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050L 5ML n/a MIX[A] 0723-07B+0727-07C
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 11:42:00 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40)	cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	552525	47.36	ug/L	100
42)	4-Methyl-2-pentanone	58	13.715	13.715	0.877	660578	233.16	ug/L	100
44)	Toluene	91	14.035	14.035	0.898	1305245	46.03	ug/L	100
45)	trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	513788	47.92	ug/L	100
46)	1,1,2-Trichloroethane	83	14.462	14.462	0.925	253690	47.77	ug/L	100
47)	2-Hexanone	58	14.675	14.675	0.939	840120	280.25	ug/L	100
48)	1,3-Dichloropropane	76	14.663	14.663	0.938	475020	45.72	ug/L	100
49)	Tetrachloroethylene	164	14.699	14.699	0.940	262719	45.26	ug/L	100
50)	Dibromochloromethane	129	14.960	14.960	0.957	391562	49.78	ug/L	100
51)	1,2-Dibromoethane	107	15.138	15.138	0.968	337014	48.61	ug/L	100
52)	Chlorobenzene	112	15.671	15.671	1.002	892370	47.25	ug/L	100
53)	1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	346970	48.80	ug/L	100
54)	Ethylbenzene	91	15.754	15.754	1.008	1417211	45.22	ug/L	100
55)	m,p-Xylenes	106	15.873	15.873	1.015	1186598	92.97	ug/L	100
56)	o-Xylene	106	16.335	16.335	1.045	627219	47.33	ug/L	100
57)	Styrene	104	16.335	16.335	1.045	1025063	47.01	ug/L	100
59)	Bromoform	173	16.608	16.608	0.913	275623	51.97	ug/L	100
60)	Isopropylbenzene	105	16.715	16.715	0.919	1536014	46.15	ug/L	100
62)	1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	418328	49.05	ug/L	100
63)	1,2,3-Trichloropropane	110	17.094	17.094	0.939	121825	48.89	ug/L	100
64)	Bromobenzene	156	17.142	17.142	0.942	428273	47.73	ug/L	100
65)	n-Propylbenzene	91	17.165	17.165	0.943	1736192	45.26	ug/L	100
66)	1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1265488	45.66	ug/L	100
67)	2-Chlorotoluene	126	17.320	17.320	0.952	392968	47.66	ug/L	100
68)	4-Chlorotoluene	91	17.415	17.415	0.957	1162399	46.07	ug/L	100
69)	tert-Butylbenzene	134	17.711	17.711	0.973	312296	48.77	ug/L	100
70)	1,2,4-Trimethylbenzene	105	17.747	17.747	0.975	1330268	46.57	ug/L	100
71)	sec-Butylbenzene	105	17.948	17.948	0.986	1777879	47.23	ug/L	100
72)	4-Isopropyltoluene	119	18.067	18.067	0.993	1436669	47.61	ug/L	100
73)	1,3-Dichlorobenzene	146	18.126	18.126	0.996	811812	47.58	ug/L	100
74)	1,4-Dichlorobenzene	146	18.221	18.221	1.001	795619	48.48	ug/L	100
75)	n-Butylbenzene	91	18.529	18.529	1.018	1424711	46.93	ug/L	100
76)	1,2-Dichlorobenzene	146	18.660	18.660	1.025	801163	48.04	ug/L	100
77)	1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	96087	52.60	ug/L	100
78)	1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	534876	48.97	ug/L	100
79)	Hexachlorobutadiene	225	20.865	20.865	1.147	315006	48.63	ug/L	100
80)	Naphthalene	128	21.079	21.079	1.158	1084678	49.44	ug/L	100
81)	1,2,3-Trichlorobenzene	180	21.435	21.435	1.178	443340	49.22	ug/L	100
83)	Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84)	2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85)	Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86)	Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87)	Isopropyl Alcohol		7.951	7.928	0.662	0m	N.D.	d	
88)	Allyl chloride		8.224	8.331	0.685	0m	N.D.	d	
89)	tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90)	Acrylonitrile		8.936	8.864	0.744	0m	N.D.	d	
91)	Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d	
92)	2-Chloro-1,3-butadiene		9.813	9.766	0.817	0m	N.D.	d	
93)	Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94)	Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d	
95)	Propionitrile		10.406	10.501	0.867	0m	N.D.	d	
96)	Methacrylonitrile		10.880	10.726	0.906	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A316.D
Acq On : 24 Aug 2011 15:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-07|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050L 5ML n/a MIX[A] 0723-07B+0727-07C
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 11:42:00 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

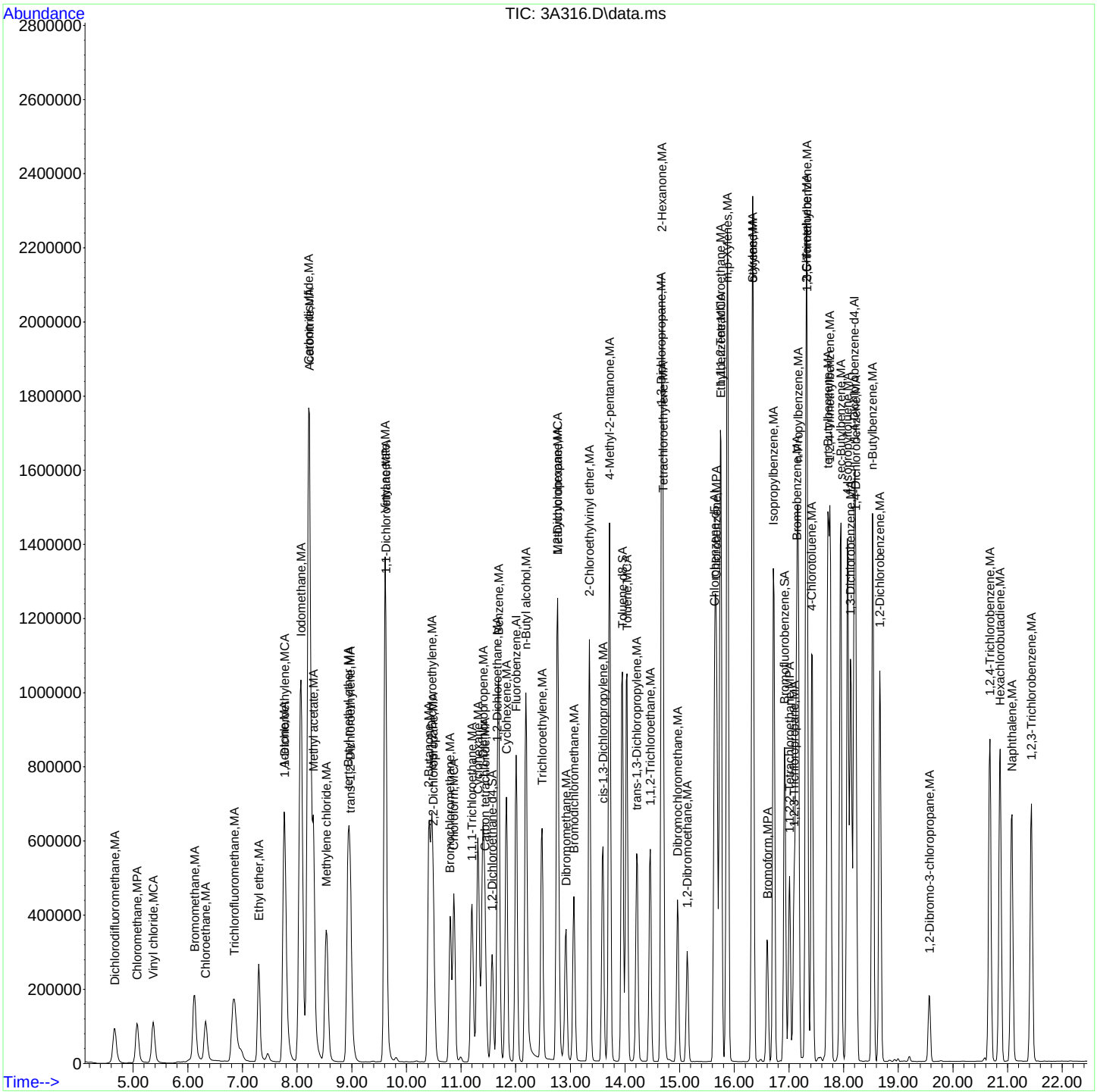
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.556	11.343	0.962	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.541	15.553	0.854	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.881	16.869	0.928	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.790	18.754	1.033	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A316.D
Acq On : 24 Aug 2011 15:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-07|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050L 5ML n/a MIX[A] 0723-07B+0727-07C
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 25 11:42:00 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A317.D
Acq On : 24 Aug 2011 15:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-08|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD080L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 11:42:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1254100	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	540216	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	538341	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	69484	48.46	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1201648	50.09	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	525639	51.59	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	421437	83.41	ug/L	99
3) Chloromethane	50	5.082	5.068	0.423	460671	76.89	ug/L	99
4) Vinyl chloride	62	5.379	5.365	0.448	473561	77.72	ug/L	99
5) Bromomethane	94	6.125	6.125	0.510	551762	74.12	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	365517	79.98	ug/L	99
7) Trichlorofluoromethane	101	6.848	6.849	0.570	758475	77.34	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	451839	76.28	ug/L	100
9) Acetone	43	7.762	7.762	0.646	1450597	390.13	ug/L	100
10) 1,1-Dichloroethylene	61	7.773	7.774	0.647	790075	74.42	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	4704182	362.00	ug/L	100
12) Acetonitrile	41	8.224	8.224	0.685	1474096	1960.01	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1841574	348.23	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	7700397	341.42	ug/L	99
15) Methylene chloride	84	8.532	8.532	0.711	621158	70.44	ug/L	100
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	1565938	73.35	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	722416	73.35	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	4282734	337.09	ug/L	99
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	859199	70.24	ug/L	99
20) 2-Butanone	43	10.406	10.406	0.867	1870920	340.48	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	596363	72.14	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	658420	69.53	ug/L	99
23) Bromochloromethane	128	10.809	10.797	0.900	308075	76.28	ug/L	98
24) Chloroform	83	10.868	10.869	0.905	915341	71.87	ug/L	100
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	820120	74.78	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	875113	71.48	ug/L	100
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	656958	72.13	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	685590	74.33	ug/L	99
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	622959	71.30	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1965648	72.16	ug/L	99
32) Cyclohexene	67	11.829	11.829	0.985	1008849	72.63	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1586582	7866.01	ug/L	98
34) Trichloroethylene	95	12.481	12.481	1.040	529978	72.95	ug/L	100
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	489169	70.75	ug/L	100
36) Methylcyclohexane	83	12.766	12.766	1.063	885597	73.04	ug/L	99
37) Dibromomethane	93	12.920	12.920	1.076	336848	75.13	ug/L	99
38) Bromodichloromethane	83	13.062	13.062	1.088	741924	74.95	ug/L	99
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	1298810	366.88	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A317.D
Acq On : 24 Aug 2011 15:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-08|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD080L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 11:42:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	882374	75.04	ug/L	99
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	980485	345.91	ug/L	97
44) Toluene	91	14.035	14.035	0.898	2037110	71.80	ug/L	98
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	816613	76.12	ug/L	99
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	396155	74.55	ug/L	99
47) 2-Hexanone	58	14.675	14.675	0.939	1153887	390.15	ug/L	98
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	722802	69.53	ug/L	95
49) Tetrachloroethylene	164	14.699	14.699	0.940	413283	71.16	ug/L	98
50) Dibromochloromethane	129	14.960	14.960	0.957	622967	79.17	ug/L	100
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	531838	76.68	ug/L	99
52) Chlorobenzene	112	15.671	15.671	1.002	1409499	74.59	ug/L	99
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	549296	77.21	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	2161177	68.92	ug/L	99
55) m,p-Xylenes	106	15.873	15.873	1.015	1834083	143.63	ug/L	96
56) o-Xylene	106	16.335	16.335	1.045	981717	74.05	ug/L	95
57) Styrene	104	16.335	16.335	1.045	1544814	70.81	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	447965	86.74	ug/L	99
60) Isopropylbenzene	105	16.715	16.715	0.919	2380663	73.46	ug/L	99
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	643439	77.48	ug/L	98
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	192518	79.34	ug/L	97
64) Bromobenzene	156	17.142	17.142	0.942	676831	77.46	ug/L	99
65) n-Propylbenzene	91	17.165	17.165	0.943	2701529	72.32	ug/L	98
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1933962	71.66	ug/L	98
67) 2-Chlorotoluene	126	17.319	17.320	0.952	621126	77.37	ug/L	94
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1801610	73.32	ug/L	99
69) tert-Butylbenzene	134	17.711	17.711	0.973	494932	79.38	ug/L	98
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	2041049	73.38	ug/L	98
71) sec-Butylbenzene	105	17.948	17.948	0.986	2700920	73.68	ug/L	99
72) 4-Isopropyltoluene	119	18.078	18.067	0.993	2190164	74.53	ug/L	99
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	1246737	75.04	ug/L	99
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	1216471	76.13	ug/L	99
75) n-Butylbenzene	91	18.529	18.529	1.018	2117262	71.62	ug/L	98
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	1232114	75.87	ug/L	99
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	145931	82.03	ug/L	99
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	764942	71.92	ug/L	99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	460255	72.97	ug/L	100
80) Naphthalene	128	21.079	21.079	1.158	1555785	72.82	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	625433	71.31	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.548	7.524	0.629	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.762	7.928	0.646	0m	N.D.	d	
88) Allyl chloride		8.224	8.331	0.685	0m	N.D.	d	
89) tert-Butyl Alcohol		8.592	8.580	0.716	0m	N.D.	d	
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		9.813	9.766	0.817	0m	N.D.	d	
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d	
95) Propionitrile		10.418	10.501	0.868	0m	N.D.	d	
96) Methacrylonitrile		10.868	10.726	0.905	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A317.D
Acq On : 24 Aug 2011 15:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-08|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD080L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 11:42:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

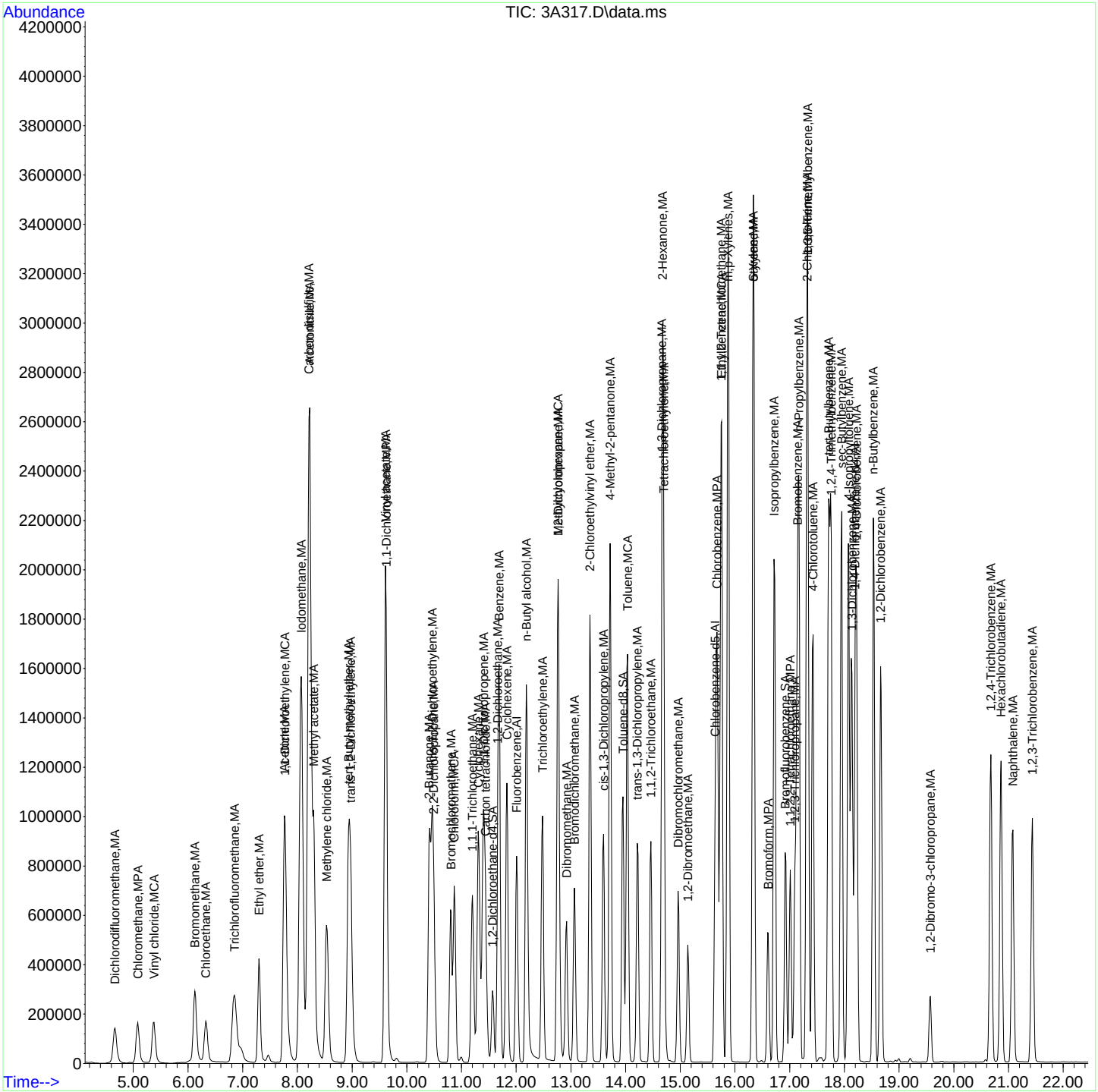
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97)	Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98)	Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99)	Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100)	Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101)	1,4-Dioxane		12.908	12.884	1.075	0m	N.D.	d
102)	2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104)	Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106)	1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108)	Cyclohexanone		16.821	16.869	0.924	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110)	Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111)	Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		18.742	18.754	1.030	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A317.D
Acq On : 24 Aug 2011 15:37
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-08|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD080L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 25 11:42:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A318.D
Acq On : 24 Aug 2011 16:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-09|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 11:42:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1244912	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	537352	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	580294	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	70185	49.31	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1197822	50.19	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	536013	48.81	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.651	4.666	0.387	513762	102.43	ug/L	99 A
3) Chloromethane	50	5.082	5.068	0.423	548177	92.17	ug/L	99
4) Vinyl chloride	62	5.365	5.365	0.447	572746	94.69	ug/L	99
5) Bromomethane	94	6.125	6.125	0.510	677133	91.63	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	451081	99.43	ug/L	99
7) Trichlorofluoromethane	101	6.848	6.849	0.570	925840	95.11	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	553531	94.14	ug/L	99
9) Acetone	43	7.761	7.762	0.646	1808359	493.73	ug/L	99
10) 1,1-Dichloroethylene	61	7.773	7.774	0.647	951221	90.26	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	5640614	437.27	ug/L	100
12) Acetonitrile	41	8.224	8.224	0.685	1847153	2489.06	ug/L	99
13) Methyl acetate	43	8.295	8.295	0.691	2273063	433.00	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	9152644	408.81	ug/L	98
15) Methylene chloride	84	8.532	8.532	0.711	776170	88.67	ug/L	98
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	1956662	92.33	ug/L	99
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	877761	89.78	ug/L	98
18) Vinyl acetate	43	9.611	9.612	0.800	5186600	411.24	ug/L	98
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	1047296	86.25	ug/L	99
20) 2-Butanone	43	10.406	10.406	0.867	2352324	431.25	ug/L	98
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	737639	89.89	ug/L	97
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	804228	85.55	ug/L	98
23) Bromochloromethane	128	10.797	10.797	0.899	384640	95.94	ug/L	97
24) Chloroform	83	10.868	10.869	0.905	1118818	88.49	ug/L	99
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	990367	90.96	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	1046866	86.14	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	779924	86.27	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	826081	90.22	ug/L	99
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	765004	88.21	ug/L	99
31) Benzene	78	11.687	11.687	0.973	2399078	88.72	ug/L	99
32) Cyclohexene	67	11.829	11.829	0.985	1211307	87.85	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	2011802	10032.82	ug/L	97 A
34) Trichloroethylene	95	12.481	12.481	1.040	642220	89.06	ug/L	100
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	595296	86.74	ug/L	99
36) Methylcyclohexane	83	12.766	12.766	1.063	1064681	88.46	ug/L	98
37) Dibromomethane	93	12.920	12.920	1.076	420271	94.43	ug/L	99
38) Bromodichloromethane	83	13.062	13.062	1.088	912604	92.87	ug/L	98
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	1576400	448.57	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A318.D
Acq On : 24 Aug 2011 16:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-09|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 11:42:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	1082897	92.78	ug/L	99	
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	1217138	431.68	ug/L	95	
44) Toluene	91	14.035	14.035	0.898	2465831	87.37	ug/L	97	
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	1000496	93.76	ug/L	99	
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	486275	92.00	ug/L	98	
47) 2-Hexanone	58	14.675	14.675	0.939	1432295	490.46	ug/L	97	
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	878281	84.94	ug/L	94	
49) Tetrachloroethylene	164	14.699	14.699	0.940	494089	85.53	ug/L	99	
50) Dibromochloromethane	129	14.960	14.960	0.957	776551	99.21	ug/L	100	
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	666288	96.58	ug/L	99	
52) Chlorobenzene	112	15.671	15.671	1.002	1737622	92.45	ug/L	99	
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	675170	95.41	ug/L	100	
54) Ethylbenzene	91	15.754	15.754	1.008	2565681	82.26	ug/L	97	
55) m,p-Xylenes	106	15.873	15.873	1.015	2194348	172.76	ug/L	94	
56) o-Xylene	106	16.335	16.335	1.045	1190921	90.31	ug/L	94	
57) Styrene	104	16.335	16.335	1.045	1874031	86.36	ug/L	100	
59) Bromoform	173	16.608	16.608	0.913	569833	102.36	ug/L	98	A
60) Isopropylbenzene	105	16.715	16.715	0.919	2890735	82.75	ug/L	97	
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	823499	91.99	ug/L	98	
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	247725	94.71	ug/L	93	
64) Bromobenzene	156	17.142	17.142	0.942	850813	90.33	ug/L	98	
65) n-Propylbenzene	91	17.165	17.165	0.943	3261907	81.01	ug/L	97	
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	2355832	80.98	ug/L	97	
67) 2-Chlorotoluene	126	17.319	17.320	0.952	760014	87.82	ug/L	92	
68) 4-Chlorotoluene	91	17.426	17.415	0.958	2222106	83.90	ug/L	97	
69) tert-Butylbenzene	134	17.711	17.711	0.973	614518	91.43	ug/L	95	
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	2517191	83.96	ug/L	97	
71) sec-Butylbenzene	105	17.948	17.948	0.986	3341940	84.57	ug/L	98	
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	2747779	86.75	ug/L	99	
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	1609332	89.86	ug/L	99	
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	1580567	91.76	ug/L	98	
75) n-Butylbenzene	91	18.529	18.529	1.018	2650733	83.19	ug/L	97	
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	1583569	90.46	ug/L	98	
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	210548	109.80	ug/L	97	A
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	1105058	96.39	ug/L	98	
79) Hexachlorobutadiene	225	20.865	20.865	1.147	656200	96.51	ug/L	99	
80) Naphthalene	128	21.079	21.079	1.158	2288031	99.35	ug/L	100	
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	931968	98.58	ug/L	98	
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.			
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.			
85) Acrolein		7.465	7.524	0.622	0m	N.D.	d		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.			
87) Isopropyl Alcohol		7.975	7.928	0.664	0m	N.D.	d		
88) Allyl chloride		8.224	8.331	0.685	0m	N.D.	d		
89) tert-Butyl Alcohol		8.592	8.580	0.716	0m	N.D.	d		
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d		
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d		
92) 2-Chloro-1,3-butadiene		9.813	9.766	0.817	0m	N.D.	d		
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.			
94) Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d		
95) Propionitrile		10.418	10.501	0.868	0m	N.D.	d		
96) Methacrylonitrile		10.880	10.726	0.906	0m	N.D.	d		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A318.D
Acq On : 24 Aug 2011 16:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-09|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 11:42:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

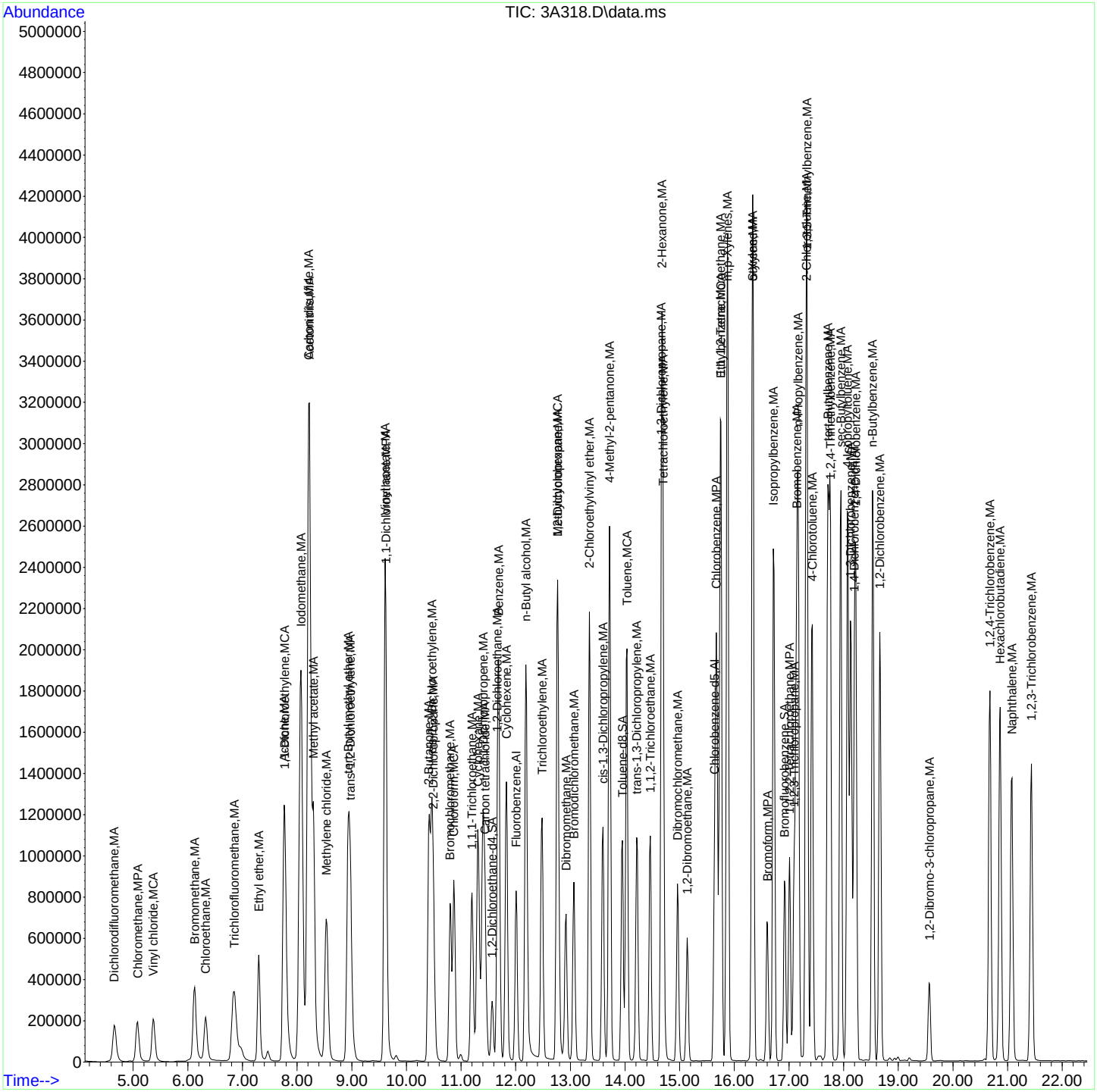
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97)	Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98)	Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99)	Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100)	Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101)	1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102)	2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104)	Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106)	1-Chlorohexane		15.505	15.553	0.852	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108)	Cyclohexanone		16.881	16.869	0.928	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110)	Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111)	Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		18.683	18.754	1.027	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A318.D
Acq On : 24 Aug 2011 16:07
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-09|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100L 5ML n/a MIX[A] 0723-08B+0727-08C
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 25 11:42:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 24-AUG-11 17:38

Data File: 082411V3\3A321.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110824-11 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.0572	0.05898		.01		3.11189	30		Averaged	
S	Toluene-d8	2.2206	2.228		.01		0.33324	30		Averaged	
S	Bromofluorobenzene	0.9463	0.94752		.01		0.12892	30		Averaged	
	Dichlorodifluoromethane	0.2014	0.21993		.01		9.2006	30		Averaged	
	Chloromethane	0.2389	0.24809		.1		3.8468	30		Averaged	spcc
	Vinyl chloride	0.2429	0.23243		.01		-4.31042	20		Averaged	ccc
	Bromomethane	0.2968	0.27213		.01		-8.31199	30		Averaged	
	Chloroethane	0.1822	0.18615		.01		2.16795	30		Averaged	
	Trichlorofluoromethane	0.391	0.41041		.01		4.96419	30		Averaged	
	Ethyl ether	0.2362	0.21958		.01		-7.03641	30		Averaged	
	Acetone	250	185.6	250			-25.76	40		Linear	
	1,1-Dichloroethylene	0.4233	0.37749		.01		-10.82211	20		Averaged	ccc
	Iodomethane	0.5181	0.44523		.01		-14.06485	30		Averaged	
	Carbon disulfide	0.8992	0.72549		.01		-19.31828	30		Averaged	
	Acetonitrile	1250	1275.34	1250			2.0272	30		Linear	
	Methyl acetate	0.2108	0.1789		.01		-15.13283	40		Averaged	
	Methylene chloride	0.3516	0.31261		.01		-11.08931	30		Averaged	
	tert-Butyl methyl ether	0.8512	0.7855		.01		-7.71852	30		Averaged	
	trans-1,2-Dichloroethylene	0.3927	0.2863		.01		-27.09447	30		Averaged	
	Vinyl acetate	0.5065	0.49703		.01		-1.86969	40		Averaged	
	1,1-Dichloroethane	0.4877	0.42536		.1		-12.78245	30		Averaged	spcc
	2-Butanone	0.2191	0.14517		.01		-33.74258	40		Averaged	
	cis-1,2-Dichloroethylene	0.3296	0.34907		.01		5.90716	30		Averaged	
	2,2-Dichloropropane	0.3776	0.32433		.01		-14.10752	30		Averaged	
	Bromochloromethane	0.161	0.1534		.01		-4.7205	30		Averaged	
	Chloroform	0.5078	0.46327		.01		-8.7692	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4373	0.3959		.01		-9.46718	30		Averaged	
	Cyclohexane	0.4881	0.41245		.01		-15.49887	30		Averaged	
	1,1-Dichloropropene	0.3631	0.31963		.01		-11.97191	30		Averaged	
	Carbon tetrachloride	0.3677	0.33389		.01		-9.195	30		Averaged	
	1,2-Dichloroethane	0.3483	0.31336		.01		-10.03158	30		Averaged	
	Benzene	1.0861	0.96669		.01		-10.99438	30		Averaged	
	Cyclohexene	0.5538	0.47893		.01		-13.51932	30		Averaged	
	n-Butyl alcohol	5000	5035.97	5000			0.7194	40		Linear	
	Trichloroethylene	0.2896	0.25557		.01		-11.75069	30		Averaged	
	1,2-Dichloropropane	0.2756	0.24708		.01		-10.34833	20		Averaged	ccc
	Methylcyclohexane	0.4834	0.42241		.01		-12.61688	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 24-AUG-11 17:38

Data File: 082411V3\3A321.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110824-11 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1787	0.1694		.01		-5.20425	30		Averaged	
Bromodichloromethane	0.3947	0.37159		.01		-5.85508	30		Averaged	
2-Chloroethylvinyl ether	0.1411	0.12258		.01		-13.12544	30		Averaged	
cis-1,3-Dichloropropylene	0.4688	0.43977		.01		-6.19241	30		Averaged	
4-Methyl-2-pentanone	0.2624	0.23328		.01		-11.09756	40		Averaged	
Toluene	2.626	2.30912		.01		-12.06702	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.9929	0.94248		.01		-5.07805	30		Averaged	
1,1,2-Trichloroethane	0.4918	0.4583		.01		-6.81171	30		Averaged	
1,3-Dichloropropane	0.9621	0.87165		.01		-9.40131	30		Averaged	
2-Hexanone	250	213.94	250			-14.424	40		Linear	
Tetrachloroethylene	0.5375	0.46327		.01		-13.81023	30		Averaged	
Dibromochloromethane	0.7283	0.68305		.01		-6.2131	30		Averaged	
1,2-Dibromoethane	0.642	0.60326		.01		-6.03427	30		Averaged	
Chlorobenzene	1.749	1.59358		.3		-8.88622	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.6584	0.62996		.01		-4.31956	30		Averaged	
Ethylbenzene	2.9023	2.47444		.01		-14.7421	20		Averaged	ccc
m,p-Xylenes	1.1819	1.05115		.01		-11.0627	30		Averaged	
o-Xylene	1.2271	1.11372		.01		-9.23967	30		Averaged	
Styrene	2.0193	1.8012		.01		-10.80077	30		Averaged	
Bromoform	0.4797	0.4843		.1		0.95893	30		Averaged	spcc
Isopropylbenzene	3.0101	2.65751		.01		-11.71356	30		Averaged	
1,1,2,2-Tetrachloroethane	0.7713	0.70954		.3		-8.00726	30		Averaged	spcc
1,2,3-Trichloropropane	0.2254	0.21191		.01		-5.98492	30		Averaged	
Bromobenzene	0.8116	0.74184		.01		-8.59537	30		Averaged	
n-Propylbenzene	3.4694	2.85686		.01		-17.6555	30		Averaged	
2-Chlorotoluene	0.7457	0.68882		.01		-7.62773	30		Averaged	
1,3,5-Trimethylbenzene	2.5066	2.19436		.01		-12.45671	30		Averaged	
4-Chlorotoluene	2.2821	1.94883		.01		-14.60365	30		Averaged	
tert-Butylbenzene	0.5791	0.52554		.01		-9.24883	30		Averaged	
1,2,4-Trimethylbenzene	2.5833	2.28354		.01		-11.60376	30		Averaged	
sec-Butylbenzene	3.4047	2.97154		.01		-12.72241	30		Averaged	
4-Isopropyltoluene	2.7292	2.51726		.01		-7.76565	30		Averaged	
1,3-Dichlorobenzene	1.5432	1.39535		.01		-9.58074	30		Averaged	
1,4-Dichlorobenzene	1.4841	1.33125		.01		-10.29917	30		Averaged	
n-Butylbenzene	2.7456	2.43692		.01		-11.24272	30		Averaged	
1,2-Dichlorobenzene	1.5084	1.36921		.01		-9.22766	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1652	0.16992		.01		2.85714	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 24-AUG-11 17:38

Data File: 082411V3\3A321.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110824-11 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9878	0.90013		.01		-8.87528	30		Averaged
Hexachlorobutadiene	0.5859	0.51918		.01		-11.38761	30		Averaged
Naphthalene	1.9844	1.92877		.01		-2.80337	30		Averaged
1,2,3-Trichlorobenzene	0.8146	0.78039		.01		-4.19961	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A321.D
Acq On : 24 Aug 2011 17:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-11|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[A] 0808-01B+0822-01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 25 11:42:18 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1251369	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	550720	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	570912	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1251369	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	550720	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	570912	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	73805	51.58	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1227003	50.17	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	540953	50.07	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	275209	54.59	ug/L	99
3) Chloromethane	50	5.068	5.068	0.422	310456	51.93	ug/L	100
4) Vinyl chloride	62	5.365	5.365	0.447	290857	47.84	ug/L	99
5) Bromomethane	94	6.125	6.125	0.510	340537	45.84	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	232945	51.08	ug/L	100
7) Trichlorofluoromethane	101	6.837	6.849	0.569	513576	52.48	ug/L	99
8) Ethyl ether	59	7.299	7.299	0.608	274781	46.49	ug/L	100
9) Acetone	43	7.762	7.762	0.646	716332	185.60	ug/L	99
10) 1,1-Dichloroethylene	61	7.774	7.774	0.647	472374	44.59	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	2785722	214.84	ug/L	100
12) Acetonitrile	41	8.236	8.224	0.686	971537	1275.34	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1119347	212.13	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	4539293	201.71	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	391187	44.46	ug/L	99
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	982949	46.14	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	358271	36.45	ug/L	100
18) Vinyl acetate	43	9.612	9.612	0.800	3109821	245.30	ug/L	100
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	532286	43.61	ug/L	100
20) 2-Butanone	43	10.406	10.406	0.867	908327	165.66	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	436820	52.95	ug/L	97
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	405856	42.95	ug/L	98
23) Bromochloromethane	128	10.797	10.797	0.899	191956	47.63	ug/L	100
24) Chloroform	83	10.869	10.869	0.905	579727	45.62	ug/L	99
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	495413	45.27	ug/L	100
26) Cyclohexane	56	11.307	11.307	0.942	516126	42.25	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	399979	44.01	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	417823	45.40	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	392129	44.98	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1209685	44.50	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	599321	43.24	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1009613	5035.97	ug/L	99
34) Trichloroethylene	95	12.481	12.481	1.040	319809	44.12	ug/L	99
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	309184	44.82	ug/L	99
36) Methylcyclohexane	83	12.766	12.766	1.063	528592	43.69	ug/L	99
37) Dibromomethane	93	12.920	12.920	1.076	211986	47.39	ug/L	100
38) Bromodichloromethane	83	13.062	13.062	1.088	464999	47.08	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	766949	217.11	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A321.D
Acq On : 24 Aug 2011 17:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-11|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[A] 0808-01B+0822-01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 25 11:42:18 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	550310	46.91	ug/L	100
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	642369	222.30	ug/L	100
44) Toluene	91	14.035	14.035	0.898	1271680	43.97	ug/L	100
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	519043	47.46	ug/L	98
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	252393	46.59	ug/L	99
47) 2-Hexanone	58	14.675	14.675	0.939	664113	213.94	ug/L	99
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	480036	45.30	ug/L	91
49) Tetrachloroethylene	164	14.699	14.699	0.940	255134	43.09	ug/L	100
50) Dibromochloromethane	129	14.960	14.960	0.957	376169	46.89	ug/L	99
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	332226	46.99	ug/L	100
52) Chlorobenzene	112	15.671	15.671	1.002	877619	45.56	ug/L	99
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	346930	47.84	ug/L	98
54) Ethylbenzene	91	15.754	15.754	1.008	1362721	42.63	ug/L	100
55) m,p-Xylenes	106	15.873	15.873	1.015	1157775	88.94	ug/L	100
56) o-Xylene	106	16.335	16.335	1.045	613349	45.38	ug/L	100
57) Styrene	104	16.335	16.335	1.045	991955	44.60	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	276493	50.48	ug/L	98
60) Isopropylbenzene	105	16.715	16.715	0.919	1517203	44.14	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	405087	45.99	ug/L	99
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	120980	47.01	ug/L	98
64) Bromobenzene	156	17.142	17.142	0.942	423525	45.70	ug/L	99
65) n-Propylbenzene	91	17.165	17.165	0.943	1631018	41.17	ug/L	100
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1252789	43.77	ug/L	100
67) 2-Chlorotoluene	126	17.320	17.320	0.952	393254	46.19	ug/L	98
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1112609	42.70	ug/L	99
69) tert-Butylbenzene	134	17.711	17.711	0.973	300036	45.37	ug/L	98
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1303699	44.20	ug/L	100
71) sec-Butylbenzene	105	17.948	17.948	0.986	1696489	43.64	ug/L	100
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	1437133	46.12	ug/L	100
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	796620	45.21	ug/L	100
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	760026	44.85	ug/L	99
75) n-Butylbenzene	91	18.529	18.529	1.018	1391269	44.38	ug/L	100
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	781696	45.39	ug/L	100
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	97008	51.42	ug/L	99
78) 1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	513897	45.56	ug/L	100
79) Hexachlorobutadiene	225	20.865	20.865	1.147	296405	44.31	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	1101156	48.60	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.435	21.435	1.178	445533	47.90	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.809	7.928	0.650	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90) Acrylonitrile		8.936	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.		
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d	
95) Propionitrile		10.418	10.501	0.868	0m	N.D.	d	
96) Methacrylonitrile		10.869	10.726	0.905	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A321.D
Acq On : 24 Aug 2011 17:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-11|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[A] 0808-01B+0822-01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 25 11:42:18 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

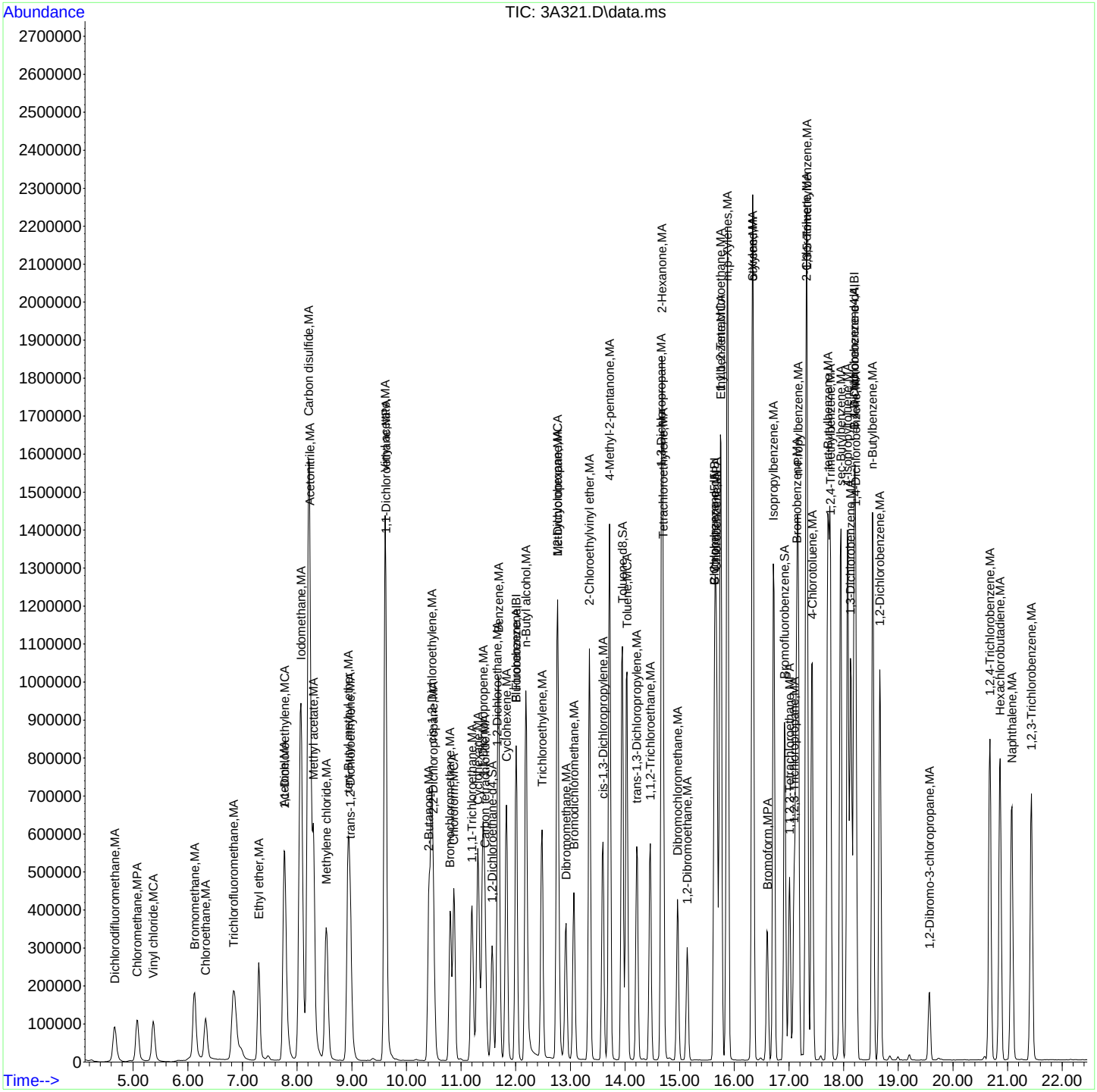
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.908	12.884	1.075	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.553	15.553	0.855	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.833	16.869	0.925	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.778	18.754	1.032	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A321.D
Acq On : 24 Aug 2011 17:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-11|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[A] 0808-01B+0822-01
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 25 11:42:18 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A323.D
Acq On : 24 Aug 2011 18:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-12|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005S 5ML n/a MIX[B] 0728-01+0728-09+0705-
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:42:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1274521	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	551689	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	588222	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.319	8.295	0.693	0m	N.D.	d	
14) Carbon disulfide		8.200	8.212	0.683	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone		10.465	10.406	0.872	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.295	11.307	0.941	0m	N.D.	d	
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		12.220	12.185	1.018	0m	N.D.	d	
34) Trichloroethylene		0.000	12.481	0.000	0	N.D.		
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		0.000	12.766	0.000	0	N.D.		
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A323.D
Acq On : 24 Aug 2011 18:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-12|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005S 5ML n/a MIX[B] 0728-01+0728-09+0705-
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:42:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.			
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.			
44) Toluene		14.035	14.035	0.898	0m	N.D.	d		
45) trans-1,3-Dichloroprop...		14.213	14.213	0.909	0m	N.D.	d		
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.			
47) 2-Hexanone		14.687	14.675	0.939	0m	N.D.	d		
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.			
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d		
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.			
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.			
52) Chlorobenzene		15.683	15.671	1.003	0m	N.D.	d		
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.			
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d		
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d		
56) o-Xylene		0.000	16.335	0.000	0	N.D.			
57) Styrene		16.335	16.335	1.045	0m	N.D.	d		
59) Bromoform		0.000	16.608	0.000	0	N.D.			
60) Isopropylbenzene		16.727	16.715	0.919	0m	N.D.	d		
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.			
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.			
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d		
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d		
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d		
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.			
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d		
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d		
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d		
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d		
72) 4-Isopropyltoluene		18.078	18.067	0.993	0m	N.D.	d		
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d		
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d		
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d		
76) 1,2-Dichlorobenzene		18.660	18.660	1.025	0m	N.D.	d		
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.			
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d		
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.			
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d		
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d		
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	16039	5.98	ug/L		97
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	38560	5.40	ug/L		99
85) Acrolein	56	7.536	7.524	0.628	6868	5.48	ug/L	#	62
86) Trichlorotrifluoroethane	85	7.738	7.750	0.644	13514	5.91	ug/L		96
87) Isopropyl Alcohol	45	7.939	7.928	0.661	24123	51.44	ug/L		94
88) Allyl chloride	41	8.331	8.331	0.694	62132	Below Cal			91
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	48494	55.79	ug/L		98
90) Acrylonitrile	53	8.864	8.864	0.738	12295	5.14	ug/L		98
91) Isopropyl ether	45	9.647	9.647	0.803	26099	1.08	ug/L		80
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	9688	1.08	ug/L		91
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	24727	1.05	ug/L		94
94) Ethyl acetate	43	10.465	10.454	0.872	37712	5.89	ug/L		96
95) Propionitrile	54	10.501	10.501	0.875	4935	5.34	ug/L		54
96) Methacrylonitrile	41	10.726	10.726	0.893	22425	5.74	ug/L		88

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A323.D
Acq On : 24 Aug 2011 18:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-12|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005S 5ML n/a MIX[B] 0728-01+0728-09+0705-
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:42:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

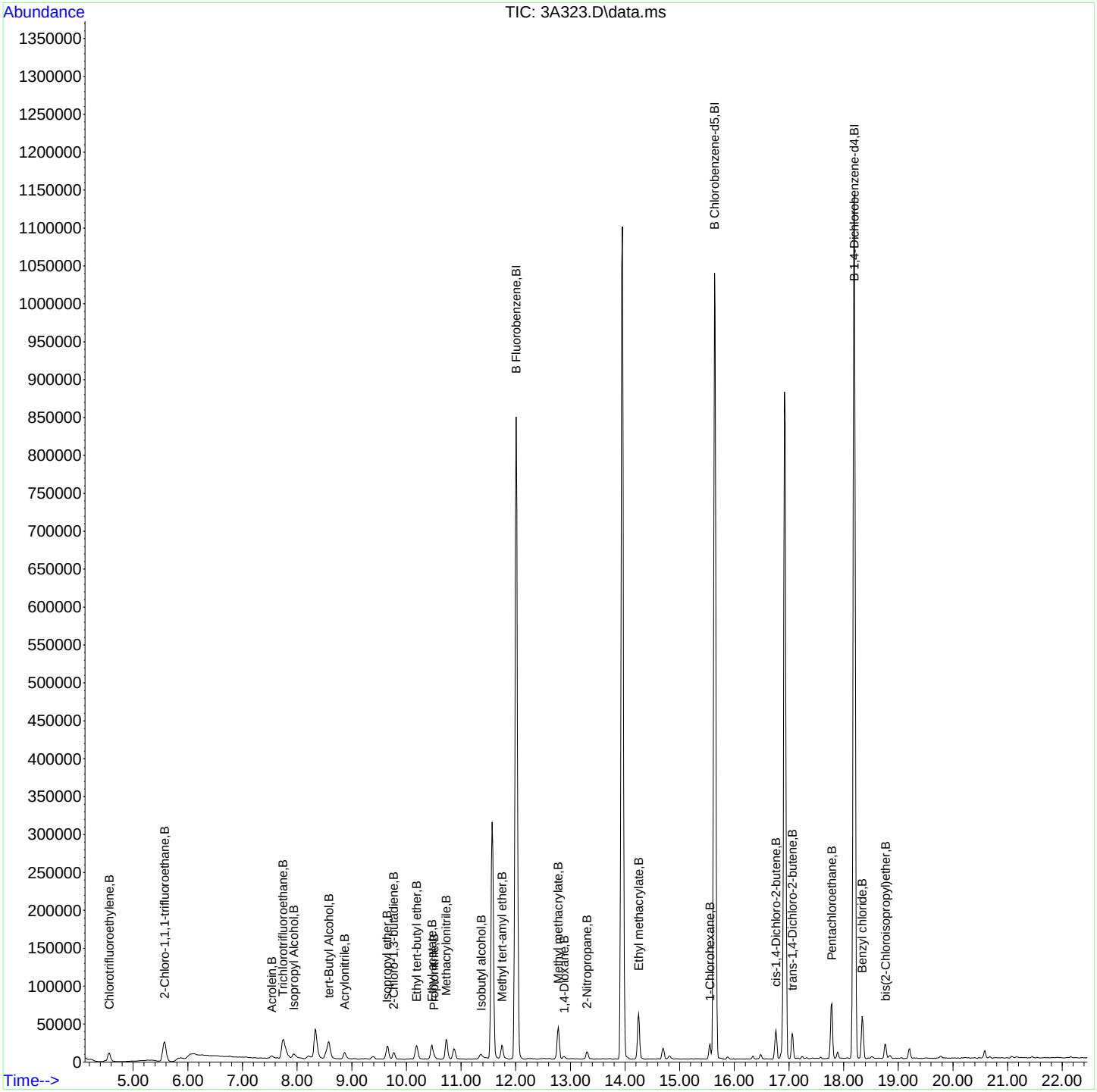
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97) Tetrahydrofuran	42	10.868	10.869	0.905	15020	Below Cal		98
98) Isobutyl alcohol	41	11.367	11.343	0.947	9711	47.32	ug/L	83
99) Methyl tert-amyl ether	73	11.746	11.746	0.978	22555	1.05	ug/L	90
100) Methyl methacrylate	69	12.778	12.778	1.064	25931	5.72	ug/L	91
101) 1,4-Dioxane	88	12.884	12.884	1.073	3580	52.51	ug/L	91
102) 2-Nitropropane	43	13.299	13.300	1.108	11633	5.46	ug/L	95
104) Ethyl methacrylate	69	14.248	14.248	0.911	49329	5.60	ug/L	90
106) 1-Chlorohexane	55	15.553	15.553	0.855	8736	1.22	ug/L	88
107) cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	13864	5.31	ug/L	91
108) Cyclohexanone	42	16.869	16.869	0.927	9401	N.D.		
109) trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	10797	4.96	ug/L	97
110) Pentachloroethane	167	17.782	17.782	0.977	24572	5.20	ug/L	94
111) Benzyl chloride	91	18.339	18.339	1.008	72893	5.22	ug/L	96
112) bis(2-Chloroisopropyl)...	45	18.766	18.754	1.031	21904	5.39	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A323.D
Acq On : 24 Aug 2011 18:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-12|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD005S 5ML n/a MIX[B] 0728-01+0728-09+0705-
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 25 11:42:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A324.D
Acq On : 24 Aug 2011 19:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-13|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010S 5ML n/a MIX[B] 0728-01+0728-10+0705-
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:42:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1285204	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	554340	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	579725	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		5.053	5.068	0.421	0m	N.D.	d	
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone		7.785	7.762	0.648	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		8.070	8.070	0.672	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.212	8.212	0.684	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone		10.181	10.406	0.848	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.295	11.307	0.941	0m	N.D.	d	
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		12.149	12.185	1.012	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		0.000	12.766	0.000	0	N.D.		
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A324.D
Acq On : 24 Aug 2011 19:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-13|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010S 5ML n/a MIX[B] 0728-01+0728-10+0705-
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:42:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.			
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.			
44) Toluene		14.035	14.035	0.898	0m	N.D.	d		
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.			
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.			
47) 2-Hexanone		14.687	14.675	0.939	0m	N.D.	d		
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.			
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d		
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.			
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.			
52) Chlorobenzene		15.683	15.671	1.003	0m	N.D.	d		
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.			
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d		
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d		
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d		
57) Styrene		16.335	16.335	1.045	0m	N.D.	d		
59) Bromoform		0.000	16.608	0.000	0	N.D.			
60) Isopropylbenzene		16.715	16.715	0.919	0m	N.D.	d		
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.			
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.			
64) Bromobenzene		0.000	17.142	0.000	0	N.D.			
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d		
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d		
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.			
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d		
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d		
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d		
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d		
72) 4-Isopropyltoluene		18.067	18.067	0.993	0m	N.D.	d		
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d		
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d		
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d		
76) 1,2-Dichlorobenzene		18.671	18.660	1.026	0m	N.D.	d		
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.			
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d		
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.			
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d		
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d		
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	26895	9.94	ug/L		95
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	76525	10.63	ug/L		98
85) Acrolein	56	7.536	7.524	0.628	10540	8.34	ug/L	#	54
86) Trichlorotrifluoroethane	85	7.738	7.750	0.644	24877	10.78	ug/L		95
87) Isopropyl Alcohol	45	7.939	7.928	0.661	42704	90.31	ug/L		96
88) Allyl chloride	41	8.331	8.331	0.694	114723	Below Cal			97
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	85549	97.60	ug/L		97
90) Acrylonitrile	53	8.864	8.864	0.738	22497	9.32	ug/L		97
91) Isopropyl ether	45	9.647	9.647	0.803	51552	2.11	ug/L		91
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	18190	2.01	ug/L		95
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	50178	2.12	ug/L		98
94) Ethyl acetate	43	10.465	10.454	0.872	63004	9.76	ug/L		97
95) Propionitrile	54	10.501	10.501	0.875	9180	9.85	ug/L		70
96) Methacrylonitrile	41	10.726	10.726	0.893	40360	10.25	ug/L		91

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A324.D
Acq On : 24 Aug 2011 19:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-13|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010S 5ML n/a MIX[B] 0728-01+0728-10+0705-
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:42:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

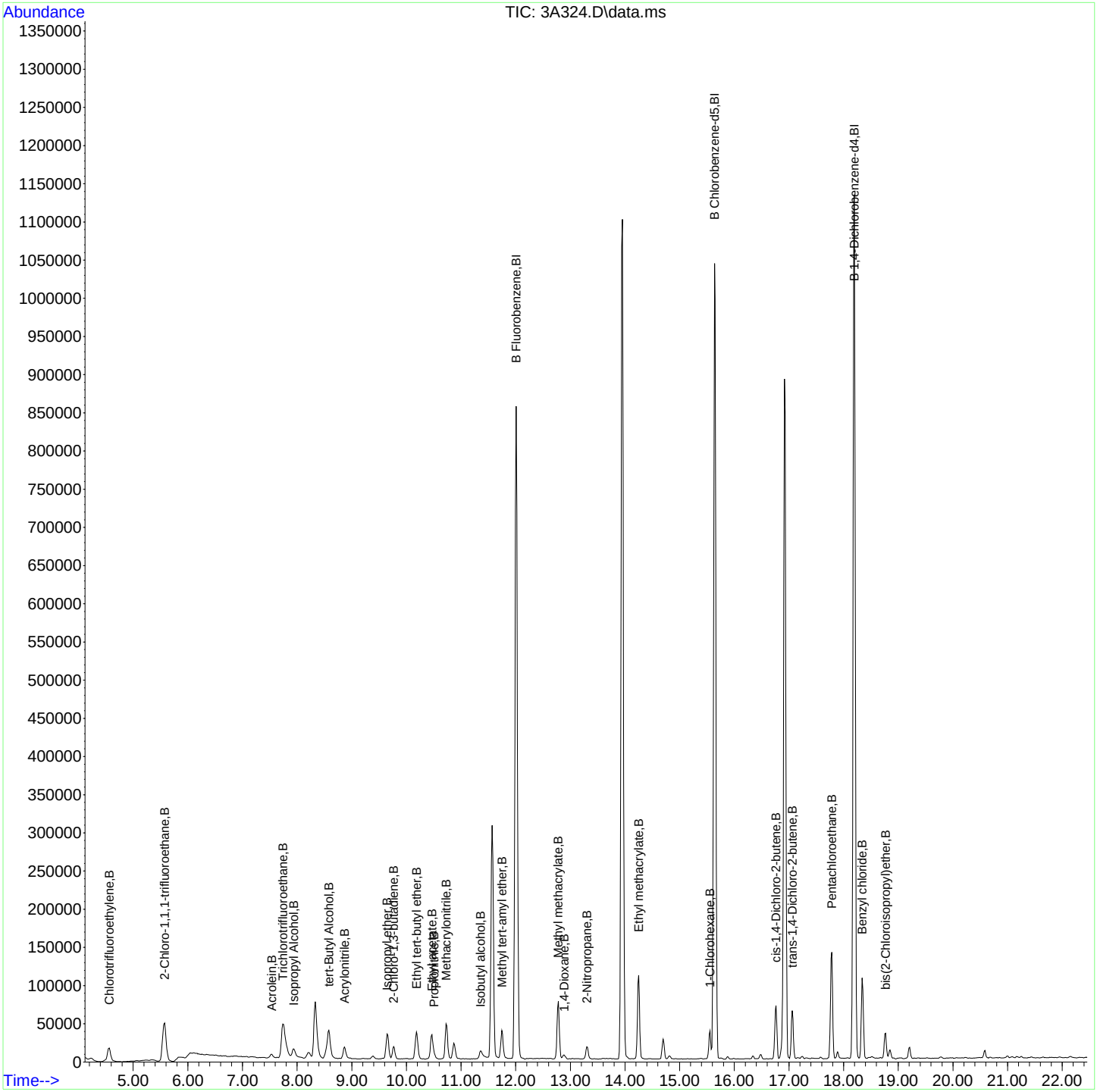
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.868	10.869	0.905	22862	Below Cal		98
98)	Isobutyl alcohol	41	11.355	11.343	0.946	15086	72.89	ug/L	86
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	44782	2.06	ug/L	95
100)	Methyl methacrylate	69	12.778	12.778	1.064	46572	10.18	ug/L	91
101)	1,4-Dioxane	88	12.884	12.884	1.073	6214	90.39	ug/L	96
102)	2-Nitropropane	43	13.299	13.300	1.108	21062	9.80	ug/L	93
104)	Ethyl methacrylate	69	14.248	14.248	0.911	93096	10.52	ug/L	96
106)	1-Chlorohexane	55	15.553	15.553	0.855	16121	2.28	ug/L	86
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	25837	10.03	ug/L	91
108)	Cyclohexanone	42	16.869	16.869	0.927	9214	N.D.		
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	20775	9.69	ug/L	97
110)	Pentachloroethane	167	17.782	17.782	0.977	46659	10.01	ug/L	94
111)	Benzyl chloride	91	18.339	18.339	1.008	134090	9.74	ug/L	96
112)	bis(2-Chloroisopropyl)...	45	18.766	18.754	1.031	39175	9.78	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A324.D
Acq On : 24 Aug 2011 19:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-13|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD010S 5ML n/a MIX[B] 0728-01+0728-10+0705-
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 25 11:42:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A325.D
Acq On : 24 Aug 2011 19:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-14|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD025S 5ML n/a MIX[B] 0728-03+0728-11+0705-
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 25 11:42:33 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1295429	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	548170	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	581078	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone		7.774	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.331	8.212	0.694	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.766	9.623	0.813	0m	N.D.	d	
20) 2-Butanone		10.181	10.406	0.848	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.355	11.307	0.946	0m	N.D.	d	
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		11.675	11.687	0.972	0m	N.D.	d	
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		12.209	12.185	1.017	0m	N.D.	d	
34) Trichloroethylene		0.000	12.481	0.000	0	N.D.		
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		0.000	12.766	0.000	0	N.D.		
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A325.D
Acq On : 24 Aug 2011 19:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-14|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD025S 5ML n/a MIX[B] 0728-03+0728-11+0705-
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 25 11:42:33 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.		
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.		
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.		
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.		
47) 2-Hexanone		14.687	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.		
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.		
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.		
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.		
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		0.000	16.335	0.000	0	N.D.		
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		0.000	16.608	0.000	0	N.D.		
60) Isopropylbenzene		16.727	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.		
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		0.000	17.142	0.000	0	N.D.		
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		0.000	17.331	0.000	0	N.D.		
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.		
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.747	17.747	0.975	0m	N.D.	d	
71) sec-Butylbenzene		0.000	17.948	0.000	0	N.D.		
72) 4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.		
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.		
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		20.676	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.		
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	70289	25.78	ug/L	99
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	187550	25.84	ug/L	99
85) Acrolein	56	7.524	7.524	0.627	34244	26.89	ug/L	96
86) Trichlorotrifluoroethane	85	7.738	7.750	0.644	64261	27.64	ug/L	98
87) Isopropyl Alcohol	45	7.928	7.928	0.660	127681	267.89	ug/L	98
88) Allyl chloride	41	8.331	8.331	0.694	295316	18.59	ug/L	98
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	249486	282.37	ug/L	100
90) Acrylonitrile	53	8.864	8.864	0.738	67093	27.57	ug/L	98
91) Isopropyl ether	45	9.647	9.647	0.803	129136	5.25	ug/L	96
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	48283	5.30	ug/L	97
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	127249	5.33	ug/L	97
94) Ethyl acetate	43	10.454	10.454	0.871	174297	26.79	ug/L	97
95) Propionitrile	54	10.501	10.501	0.875	25210	26.84	ug/L	88
96) Methacrylonitrile	41	10.726	10.726	0.893	109336	27.54	ug/L	94

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A325.D
Acq On : 24 Aug 2011 19:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-14|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD025S 5ML n/a MIX[B] 0728-03+0728-11+0705-
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 25 11:42:33 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

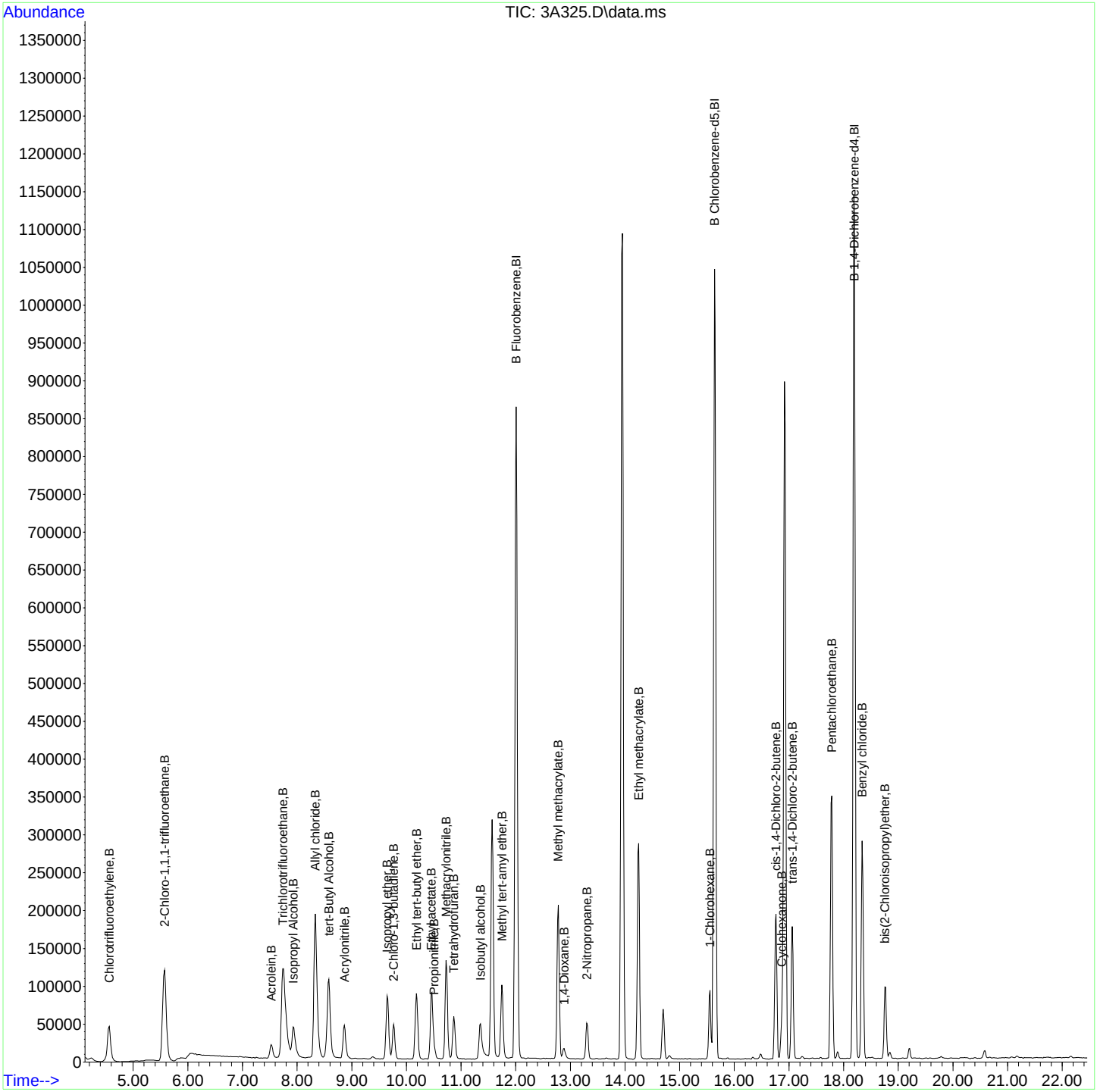
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.869	10.869	0.905	59272	18.59	ug/L	98
98)	Isobutyl alcohol	41	11.355	11.343	0.946	53574	256.82	ug/L	91
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	117375	5.36	ug/L	96
100)	Methyl methacrylate	69	12.778	12.778	1.064	127073	27.56	ug/L	94
101)	1,4-Dioxane	88	12.885	12.884	1.073	17996	259.72	ug/L	95
102)	2-Nitropropane	43	13.300	13.300	1.108	57686	26.63	ug/L	97
104)	Ethyl methacrylate	69	14.248	14.248	0.911	246599	28.17	ug/L	95
106)	1-Chlorohexane	55	15.553	15.553	0.855	36125	5.09	ug/L	94
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	70622	27.36	ug/L	91
108)	Cyclohexanone	42	16.869	16.869	0.927	29045	128.24	ug/L	91
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	58854	27.39	ug/L	94
110)	Pentachloroethane	167	17.782	17.782	0.977	117372	25.12	ug/L	93
111)	Benzyl chloride	91	18.339	18.339	1.008	365842	26.51	ug/L	97
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	108766	27.09	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A325.D
Acq On : 24 Aug 2011 19:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-14|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD025S 5ML n/a MIX[B] 0728-03+0728-11+0705-
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 25 11:42:33 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A326.D
Acq On : 24 Aug 2011 20:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-15|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050S 5ML n/a MIX[B] 0728-04+0728-12+0705-
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 11:42:37 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1285803	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	543129	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	570073	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		5.052	5.068	0.421	0m	N.D.	d	
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.761	7.774	0.646	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.212	8.212	0.684	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.935	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.623	9.623	0.801	0m	N.D.	d	
20) 2-Butanone		10.453	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		10.453	10.465	0.871	0m	N.D.	d	
22) 2,2-Dichloropropane		10.489	10.489	0.874	0m	N.D.	d	
23) Bromochloromethane		10.809	10.797	0.900	0m	N.D.	d	
24) Chloroform		10.868	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		11.200	11.201	0.933	0m	N.D.	d	
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.402	11.402	0.950	0m	N.D.	d	
28) Carbon tetrachloride		11.438	11.438	0.953	0m	N.D.	d	
30) 1,2-Dichloroethane		11.675	11.663	0.972	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.829	11.829	0.985	0m	N.D.	d	
33) n-Butyl alcohol		12.232	12.185	1.019	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		12.766	12.766	1.063	0m	N.D.	d	
36) Methylcyclohexane		12.766	12.766	1.063	0m	N.D.	d	
37) Dibromomethane		12.920	12.920	1.076	0m	N.D.	d	
38) Bromodichloromethane		13.062	13.062	1.088	0m	N.D.	d	
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A326.D
Acq On : 24 Aug 2011 20:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-15|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050S 5ML n/a MIX[B] 0728-04+0728-12+0705-
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 11:42:37 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		13.596	13.596	1.132	0m	N.D.	d	
42) 4-Methyl-2-pentanone		13.714	13.715	0.877	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		14.212	14.213	0.909	0m	N.D.	d	
46) 1,1,2-Trichloroethane		14.462	14.462	0.925	0m	N.D.	d	
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.675	14.663	0.939	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		14.960	14.960	0.957	0m	N.D.	d	
51) 1,2-Dibromoethane		15.137	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		16.608	16.608	0.913	0m	N.D.	d	
60) Isopropylbenzene		16.715	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.011	17.011	0.935	0m	N.D.	d	
63) 1,2,3-Trichloropropane		17.094	17.094	0.939	0m	N.D.	d	
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d	
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.319	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.078	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.126	18.126	0.996	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.671	18.660	1.026	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		20.865	20.865	1.147	0m	N.D.	d	
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	135009	49.90	ug/L	99
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	357064	49.57	ug/L	99
85) Acrolein	56	7.524	7.524	0.627	64551	51.07	ug/L	95
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	120738	52.32	ug/L	97
87) Isopropyl Alcohol	45	7.927	7.928	0.660	253779	536.45	ug/L	98
88) Allyl chloride	41	8.331	8.331	0.694	564331	52.28	ug/L	98
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	490171	558.94	ug/L	99
90) Acrylonitrile	53	8.864	8.864	0.738	132466	54.85	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	256809	10.51	ug/L	98
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	94297	10.43	ug/L	98
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	246603	10.41	ug/L	99
94) Ethyl acetate	43	10.453	10.454	0.871	346195	53.61	ug/L	99
95) Propionitrile	54	10.501	10.501	0.875	50810	54.51	ug/L	95
96) Methacrylonitrile	41	10.726	10.726	0.893	216205	54.86	ug/L	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A326.D
Acq On : 24 Aug 2011 20:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-15|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050S 5ML n/a MIX[B] 0728-04+0728-12+0705-
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 11:42:37 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

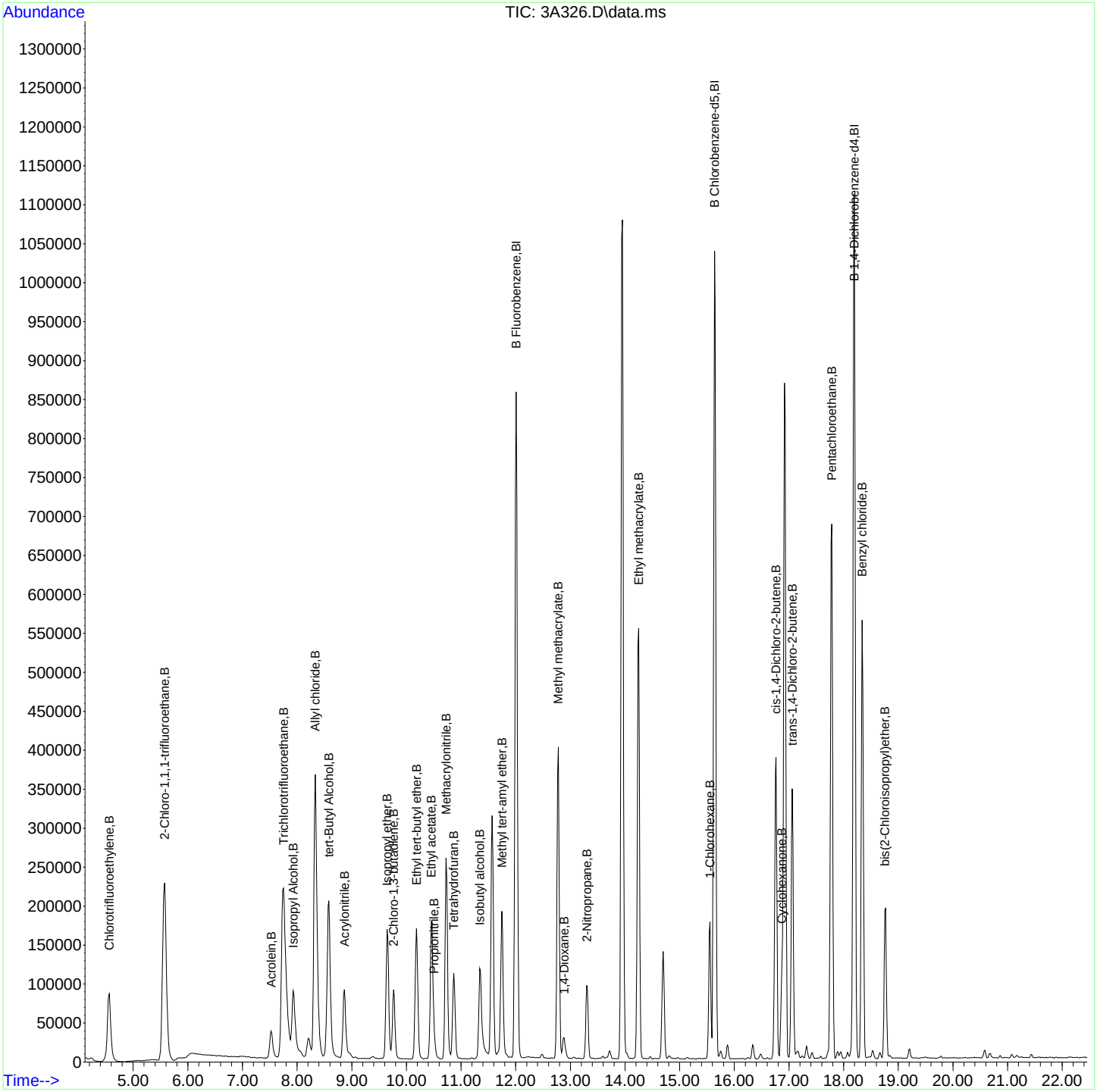
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.868	10.869	0.905	116822	53.48	ug/L	97
98)	Isobutyl alcohol	41	11.343	11.343	0.945	112328	542.50	ug/L	97
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	226811	10.44	ug/L	97
100)	Methyl methacrylate	69	12.778	12.778	1.064	249445	54.50	ug/L	95
101)	1,4-Dioxane	88	12.884	12.884	1.073	37713	548.35	ug/L	99
102)	2-Nitropropane	43	13.299	13.300	1.108	114406	53.21	ug/L	98
104)	Ethyl methacrylate	69	14.248	14.248	0.911	482694	55.65	ug/L	96
106)	1-Chlorohexane	55	15.552	15.553	0.855	68352	9.83	ug/L	97
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	141384	55.83	ug/L	94
108)	Cyclohexanone	42	16.869	16.869	0.927	51990	266.41	ug/L	99
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	116579	55.31	ug/L	97
110)	Pentachloroethane	167	17.782	17.782	0.977	235978	51.49	ug/L	96
111)	Benzyl chloride	91	18.339	18.339	1.008	714137	52.75	ug/L	97
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	216199	54.89	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A326.D
Acq On : 24 Aug 2011 20:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-15|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD050S 5ML n/a MIX[B] 0728-04+0728-12+0705-
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 25 11:42:37 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A327.D
Acq On : 24 Aug 2011 20:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-16|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100S 5ML n/a MIX[B] 0728-05+0728-13+0705-
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 11:42:41 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1268631	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	548708	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	576007	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.761	7.774	0.646	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.212	8.212	0.684	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.935	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.766	9.623	0.813	0m	N.D.	d	
20) 2-Butanone		10.181	10.406	0.848	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.868	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		11.675	11.663	0.972	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.829	11.829	0.985	0m	N.D.	d	
33) n-Butyl alcohol		12.256	12.185	1.021	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A327.D
Acq On : 24 Aug 2011 20:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-16|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100S 5ML n/a MIX[B] 0728-05+0728-13+0705-
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 11:42:41 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		13.596	13.596	1.132	0m	N.D.	d	
42) 4-Methyl-2-pentanone		13.714	13.715	0.877	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		14.224	14.213	0.910	0m	N.D.	d	
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.		
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.675	14.663	0.939	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.		
51) 1,2-Dibromoethane		15.137	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.		
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		0.000	16.608	0.000	0	N.D.		
60) Isopropylbenzene		16.727	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d	
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.319	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.078	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.659	18.660	1.025	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.		
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	271202	101.59	ug/L	99
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	686514	96.59	ug/L	99
85) Acrolein	56	7.524	7.524	0.627	131811	105.70	ug/L	99
86) Trichlorotrifluoroethane	85	7.738	7.750	0.644	234790	103.11	ug/L	99
87) Isopropyl Alcohol	45	7.927	7.928	0.660	506748	1085.68	ug/L	100
88) Allyl chloride	41	8.331	8.331	0.694	1080822	118.26	ug/L	98
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	940684	1087.18	ug/L	100
90) Acrylonitrile	53	8.864	8.864	0.738	264728	111.10	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	500626	20.77	ug/L	99
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	183233	20.54	ug/L	99
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	485996	20.79	ug/L	99
94) Ethyl acetate	43	10.453	10.454	0.871	651724	102.28	ug/L	99
95) Propionitrile	54	10.501	10.501	0.875	100625	109.41	ug/L	98
96) Methacrylonitrile	41	10.726	10.726	0.893	416847	107.21	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A327.D
Acq On : 24 Aug 2011 20:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-16|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100S 5ML n/a MIX[B] 0728-05+0728-13+0705-
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 11:42:41 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

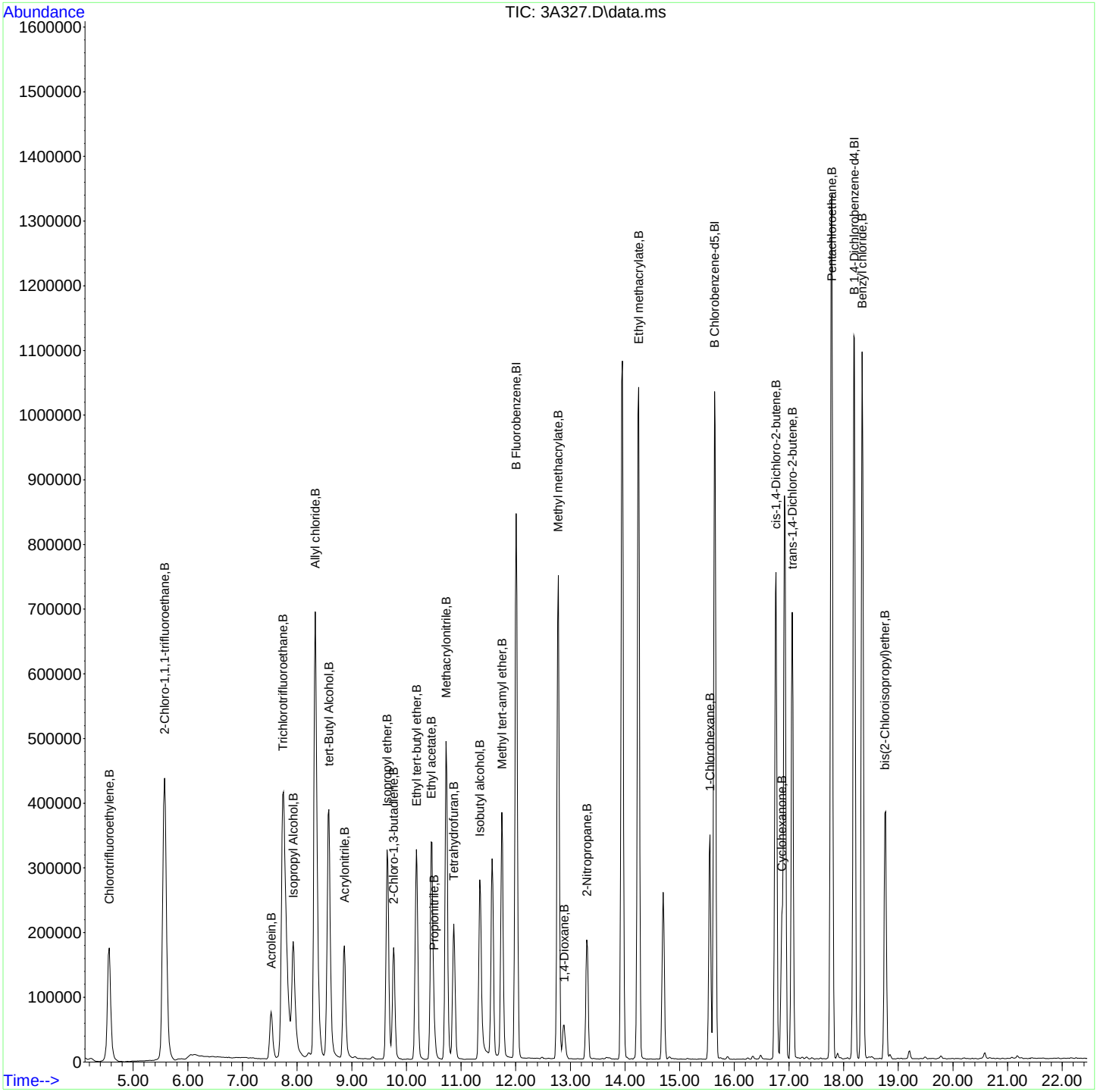
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.868	10.869	0.905	223672	119.59	ug/L	99
98)	Isobutyl alcohol	41	11.343	11.343	0.945	240025	1174.92	ug/L	99
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	447712	20.89	ug/L	98
100)	Methyl methacrylate	69	12.778	12.778	1.064	482640	106.89	ug/L	97
101)	1,4-Dioxane	88	12.884	12.884	1.073	72695	1071.29	ug/L	99
102)	2-Nitropropane	43	13.299	13.300	1.108	227254	107.12	ug/L	98
104)	Ethyl methacrylate	69	14.248	14.248	0.911	917111	104.66	ug/L	97
106)	1-Chlorohexane	55	15.553	15.553	0.855	136889	19.48	ug/L	96
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	271659	106.18	ug/L	96
108)	Cyclohexanone	42	16.869	16.869	0.927	101123	549.23	ug/L	99
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	230509	108.23	ug/L	97
110)	Pentachloroethane	167	17.782	17.782	0.977	475451	102.67	ug/L	98
111)	Benzyl chloride	91	18.339	18.339	1.008	1398623	102.24	ug/L	98
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	429066	107.82	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A327.D
Acq On : 24 Aug 2011 20:38
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-16|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD100S 5ML n/a MIX[B] 0728-05+0728-13+0705-
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 25 11:42:41 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A328.D
Acq On : 24 Aug 2011 21:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-17|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD250S 5ML n/a MIX[B] 0728-06+0728-14+0705-
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 25 11:42:45 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1305692	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	543665	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	574251	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.762	7.774	0.646	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.212	8.212	0.684	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.936	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.623	9.623	0.801	0m	N.D.	d	
20) 2-Butanone		10.454	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		10.465	10.465	0.872	0m	N.D.	d	
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.869	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		11.438	11.438	0.953	0m	N.D.	d	
30) 1,2-Dichloroethane		11.663	11.663	0.971	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.829	11.829	0.985	0m	N.D.	d	
33) n-Butyl alcohol		12.220	12.185	1.018	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		13.062	13.062	1.088	0m	N.D.	d	
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A328.D
Acq On : 24 Aug 2011 21:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-17|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD250S 5ML n/a MIX[B] 0728-06+0728-14+0705-
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 25 11:42:45 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		13.596	13.596	1.132	0m	N.D.	d	
42) 4-Methyl-2-pentanone		13.715	13.715	0.877	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		14.225	14.213	0.910	0m	N.D.	d	
46) 1,1,2-Trichloroethane		14.462	14.462	0.925	0m	N.D.	d	
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.711	14.663	0.941	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.		
51) 1,2-Dibromoethane		15.138	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		16.608	16.608	0.913	0m	N.D.	d	
60) Isopropylbenzene		16.715	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d	
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.320	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.079	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.660	18.660	1.025	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		20.676	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		20.865	20.865	1.147	0m	N.D.	d	
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	403870	146.99	ug/L	100
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	986469	134.85	ug/L	100
85) Acrolein	56	7.524	7.524	0.627	292486	227.89	ug/L	100
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	542370	231.43	ug/L	100
87) Isopropyl Alcohol	45	7.928	7.928	0.660	1087617	2264.02	ug/L	100
88) Allyl chloride	41	8.331	8.331	0.694	2437766	280.42	ug/L	100
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	1865868	2095.23	ug/L	100
90) Acrylonitrile	53	8.864	8.864	0.738	560015	228.35	ug/L	100
91) Isopropyl ether	45	9.647	9.647	0.803	1156745	46.63	ug/L	100
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	434077	47.27	ug/L	100
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	1130002	46.96	ug/L	100
94) Ethyl acetate	43	10.454	10.454	0.871	1336781	203.85	ug/L	100
95) Propionitrile	54	10.501	10.501	0.875	208348	220.11	ug/L	100
96) Methacrylonitrile	41	10.726	10.726	0.893	867221	216.71	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A328.D
Acq On : 24 Aug 2011 21:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-17|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD250S 5ML n/a MIX[B] 0728-06+0728-14+0705-
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 25 11:42:45 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

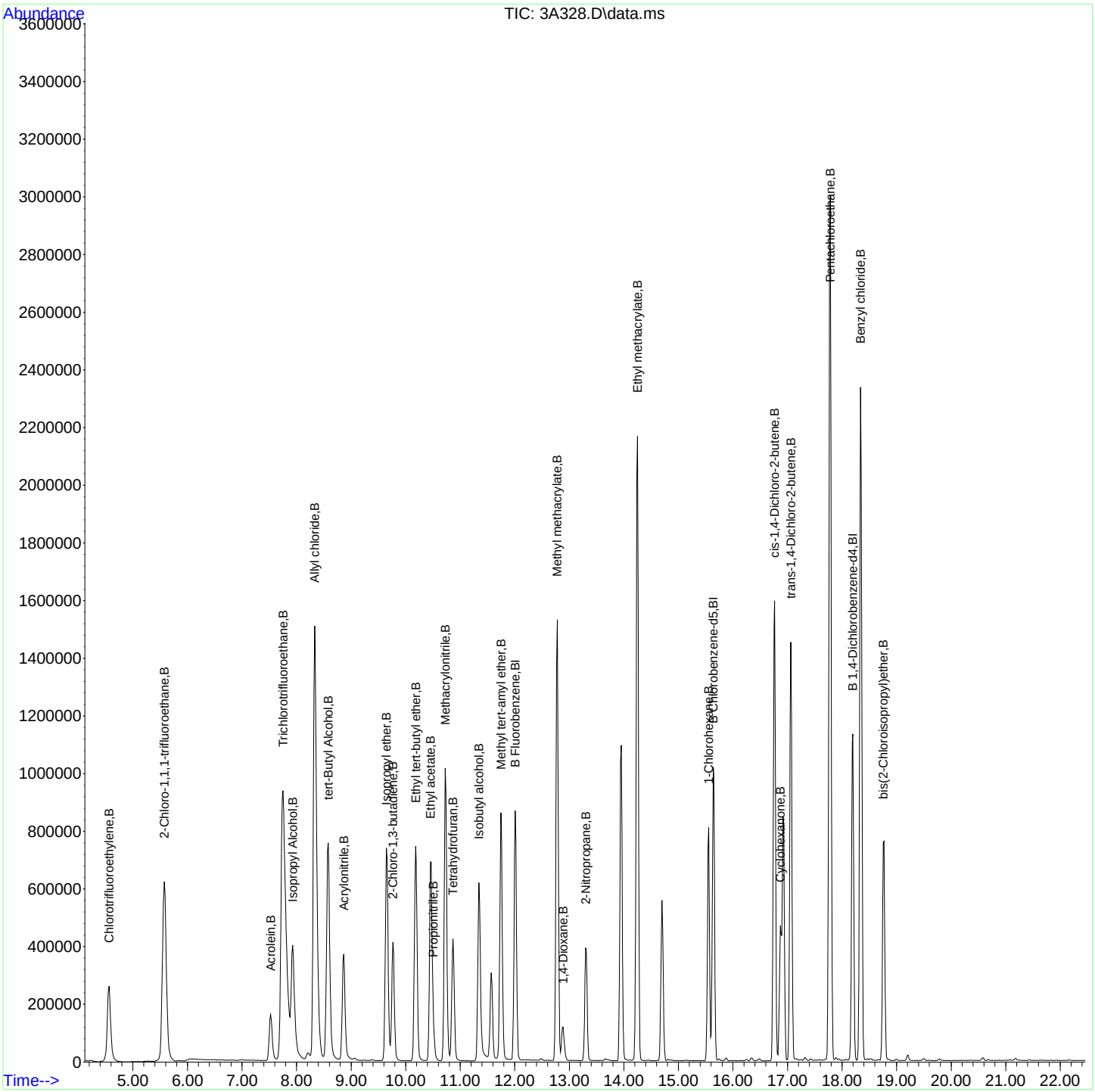
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97) Tetrahydrofuran	42	10.869	10.869	0.905	450754	250.26	ug/L	100
98) Isobutyl alcohol	41	11.343	11.343	0.945	498453	2370.67	ug/L	100
99) Methyl tert-amyl ether	73	11.746	11.746	0.978	1037758	47.06	ug/L	100
100) Methyl methacrylate	69	12.778	12.778	1.064	1001133	215.42	ug/L	100
101) 1,4-Dioxane	88	12.884	12.884	1.073	160855	2303.21	ug/L	100
102) 2-Nitropropane	43	13.300	13.300	1.108	488393	223.68	ug/L	100
104) Ethyl methacrylate	69	14.248	14.248	0.911	1928259	222.09	ug/L	100
106) 1-Chlorohexane	55	15.553	15.553	0.855	310623	44.33	ug/L	100
107) cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	563841	221.05	ug/L	100
108) Cyclohexanone	42	16.869	16.869	0.927	216689	1225.71	ug/L	100
109) trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	479590	225.88	ug/L	100
110) Pentachloroethane	167	17.782	17.782	0.977	1107922	239.98	ug/L	100
111) Benzyl chloride	91	18.339	18.339	1.008	2969472	217.74	ug/L	100
112) bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	862866	217.49	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A328.D
Acq On : 24 Aug 2011 21:08
Operator : SYK1
InstName : VOA3
Sample : |W3VM110824-17|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD250S 5ML n/a MIX[B] 0728-06+0728-14+0705-
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 25 11:42:45 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A402.D
Acq On : 25 Aug 2011 09:22
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD300S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 25 11:43:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1355140	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	577749	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	629784	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.750	7.774	0.645	0m	N.D.	d	
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.295	8.295	0.691	0m	N.D.	d	
14) Carbon disulfide		8.331	8.212	0.694	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.935	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.765	9.623	0.813	0m	N.D.	d	
20) 2-Butanone		10.453	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.868	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		11.746	11.663	0.978	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.746	11.829	0.978	0m	N.D.	d	
33) n-Butyl alcohol		12.232	12.185	1.019	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A402.D
Acq On : 25 Aug 2011 09:22
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD300S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 25 11:43:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.		
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.		
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.		
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.		
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.711	14.663	0.941	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.		
51) 1,2-Dibromoethane		15.137	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		0.000	15.671	0.000	0	N.D.		
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		0.000	16.335	0.000	0	N.D.		
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		0.000	16.608	0.000	0	N.D.		
60) Isopropylbenzene		16.726	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.058	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		0.000	17.142	0.000	0	N.D.		
65) n-Propylbenzene		17.058	17.165	0.937	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		0.000	17.331	0.000	0	N.D.		
67) 2-Chlorotoluene		17.319	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.806	17.747	0.978	0m	N.D.	d	
71) sec-Butylbenzene		0.000	17.948	0.000	0	N.D.		
72) 4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.		
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.339	18.529	1.008	0m	N.D.	d	
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.		
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		0.000	20.676	0.000	0	N.D.		
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.		
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.		
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	419738	147.19	ug/L	100
84) 2-Chloro-1,1,1-trifluo...	118	5.572	5.573	0.464	1232976	162.40	ug/L	100
85) Acrolein	56	7.524	7.524	0.627	412870	309.95	ug/L	98
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	617728	253.96	ug/L	100
87) Isopropyl Alcohol	45	7.927	7.928	0.660	2102486	4216.91	ug/L	100
88) Allyl chloride	41	8.331	8.331	0.694	2747424	306.04	ug/L	99
89) tert-Butyl Alcohol	59	8.568	8.580	0.714	3518982	3807.37	ug/L	99
90) Acrylonitrile	53	8.864	8.864	0.738	735303	288.89	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	1895222	73.62	ug/L	99
92) 2-Chloro-1,3-butadiene	53	9.765	9.766	0.813	539411	56.60	ug/L	98
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	1852592	74.17	ug/L	99
94) Ethyl acetate	43	10.453	10.454	0.871	1763604	259.12	ug/L	99
95) Propionitrile	54	10.501	10.501	0.875	281646	286.68	ug/L	99
96) Methacrylonitrile	41	10.726	10.726	0.893	1130396	272.17	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A402.D
Acq On : 25 Aug 2011 09:22
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD300S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 25 11:43:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

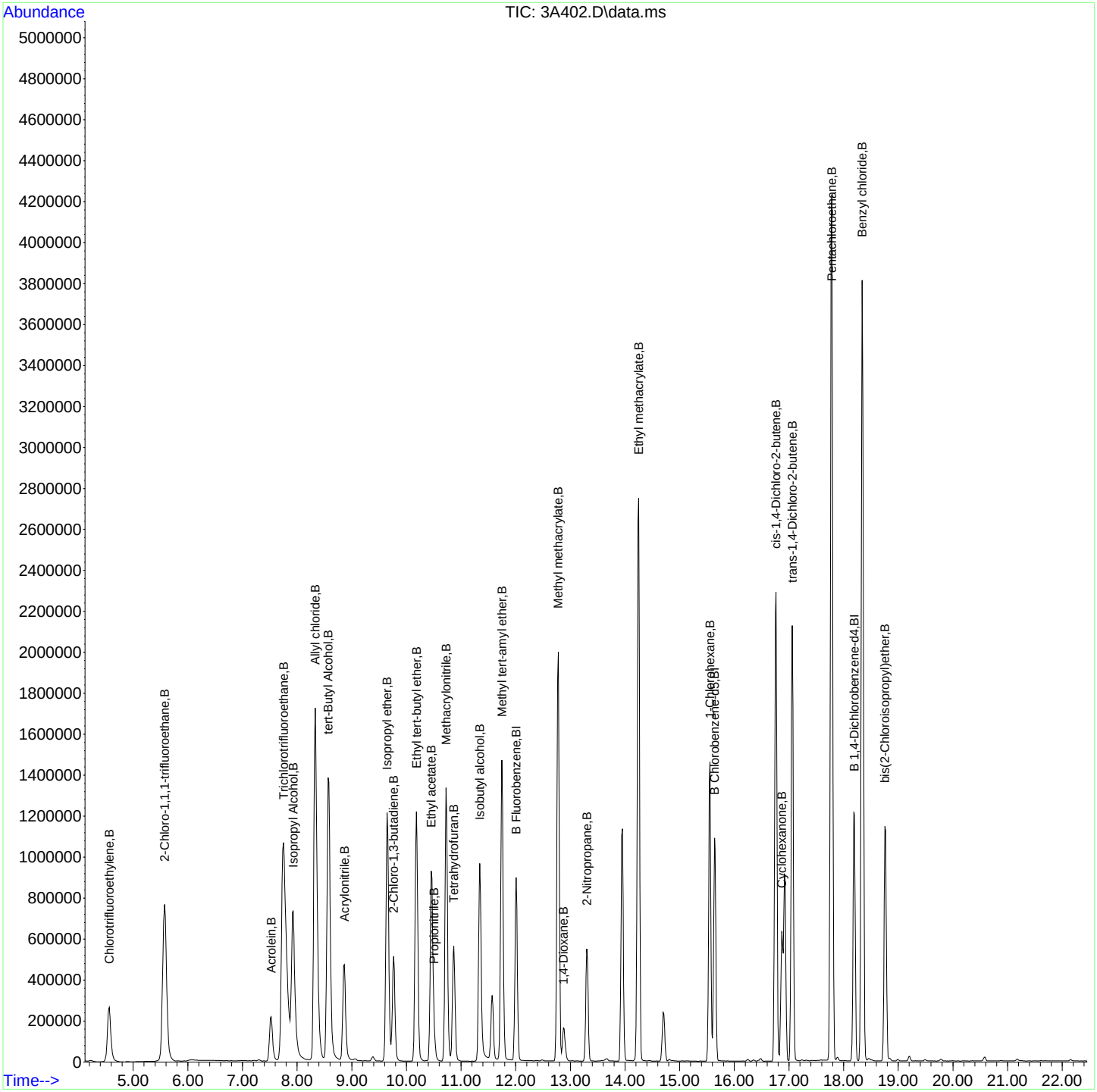
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
97)	Tetrahydrofuran	42	10.868	10.869	0.905	609743	331.27	ug/L	100	
98)	Isobutyl alcohol	41	11.343	11.343	0.945	754729	3458.55	ug/L	97	
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	1720602	75.17	ug/L	100	
100)	Methyl methacrylate	69	12.778	12.778	1.064	1346915	279.25	ug/L	98	
101)	1,4-Dioxane	88	12.872	12.884	1.072	221475	3055.49	ug/L	99	
102)	2-Nitropropane	43	13.299	13.300	1.108	674329	297.56	ug/L	99	
104)	Ethyl methacrylate	69	14.248	14.248	0.911	2476105	268.37	ug/L	99	
106)	1-Chlorohexane	55	15.552	15.553	0.855	563392	73.31	ug/L	97	
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	801708	286.59	ug/L	96	
108)	Cyclohexanone	42	16.869	16.869	0.927	289584	1502.20	ug/L	97	A
109)	trans-1,4-Dichloro-2-b...	53	17.058	17.059	0.937	696166	298.97	ug/L	98	
110)	Pentachloroethane	167	17.782	17.782	0.977	1580004	312.05	ug/L	100	
111)	Benzyl chloride	91	18.339	18.339	1.008	4830207	322.94	ug/L	97	
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	1300605	298.92	ug/L	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A402.D
Acq On : 25 Aug 2011 09:22
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-01|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD300S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 25 11:43:04 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A403.D
Acq On : 25 Aug 2011 09:52
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD500S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 25 11:43:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	0m	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	0m	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	0m	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1376000	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	572224	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	624659	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	0d	0.00	ug/L	
43) Toluene-d8	98	13.952	13.952	0.892	0d	0.00	ug/L	
61) Bromofluorobenzene	95	16.916	16.916	0.930	0d	0.00	ug/L	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		5.068	5.068	0.422	0m	N.D.	d	
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.750	7.774	0.645	0m	N.D.	d	
11) Iodomethane		8.082	8.070	0.673	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.331	8.212	0.694	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.936	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.766	9.623	0.813	0m	N.D.	d	
20) 2-Butanone		10.454	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.869	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		11.746	11.663	0.978	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.746	11.829	0.978	0m	N.D.	d	
33) n-Butyl alcohol		12.220	12.185	1.018	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A403.D
Acq On : 25 Aug 2011 09:52
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD500S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 25 11:43:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.			
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.			
44) Toluene		14.035	14.035	0.898	0m	N.D.	d		
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.			
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.			
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d		
48) 1,3-Dichloropropane		14.723	14.663	0.942	0m	N.D.	d		
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d		
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.			
51) 1,2-Dibromoethane		15.138	15.138	0.968	0m	N.D.	d		
52) Chlorobenzene		0.000	15.671	0.000	0	N.D.			
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d		
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d		
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d		
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d		
57) Styrene		16.335	16.335	1.045	0m	N.D.	d		
59) Bromoform		0.000	16.608	0.000	0	N.D.			
60) Isopropylbenzene		16.727	16.715	0.919	0m	N.D.	d		
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d		
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.			
64) Bromobenzene		0.000	17.142	0.000	0	N.D.			
65) n-Propylbenzene		17.059	17.165	0.937	0m	N.D.	d		
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d		
67) 2-Chlorotoluene		17.320	17.320	0.952	0m	N.D.	d		
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d		
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d		
70) 1,2,4-Trimethylbenzene		17.806	17.747	0.978	0m	N.D.	d		
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d		
72) 4-Isopropyltoluene		18.067	18.067	0.993	0m	N.D.	d		
73) 1,3-Dichlorobenzene		18.126	18.126	0.996	0m	N.D.	d		
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d		
75) n-Butylbenzene		18.339	18.529	1.008	0m	N.D.	d		
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.			
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.			
78) 1,2,4-Trichlorobenzene		20.676	20.676	1.136	0m	N.D.	d		
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.			
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d		
81) 1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.			
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	500549	172.87	ug/L	100	
84) 2-Chloro-1,1,1-trifluo...	118	5.588	5.573	0.465	1468513	190.49	ug/L	100	
85) Acrolein	56	7.524	7.524	0.627	656254	485.19	ug/L	98	
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	969377	392.49	ug/L	99	
87) Isopropyl Alcohol	45	7.928	7.928	0.660	2222612	4390.26	ug/L	100	
88) Allyl chloride	41	8.331	8.331	0.694	4271263	478.03	ug/L	98	
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	3677920	3919.01	ug/L	100	
90) Acrylonitrile	53	8.864	8.864	0.738	1102974	426.77	ug/L	99	
91) Isopropyl ether	45	9.647	9.647	0.803	2285416	87.43	ug/L	99	
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	866181	89.50	ug/L	96	
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	2221890	87.61	ug/L	99	
94) Ethyl acetate	43	10.454	10.454	0.871	2507271	362.80	ug/L	98	A
95) Propionitrile	54	10.501	10.501	0.875	425202	426.25	ug/L	100	
96) Methacrylonitrile	41	10.726	10.726	0.893	1649482	391.13	ug/L	100	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A403.D
Acq On : 25 Aug 2011 09:52
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD500S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 25 11:43:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

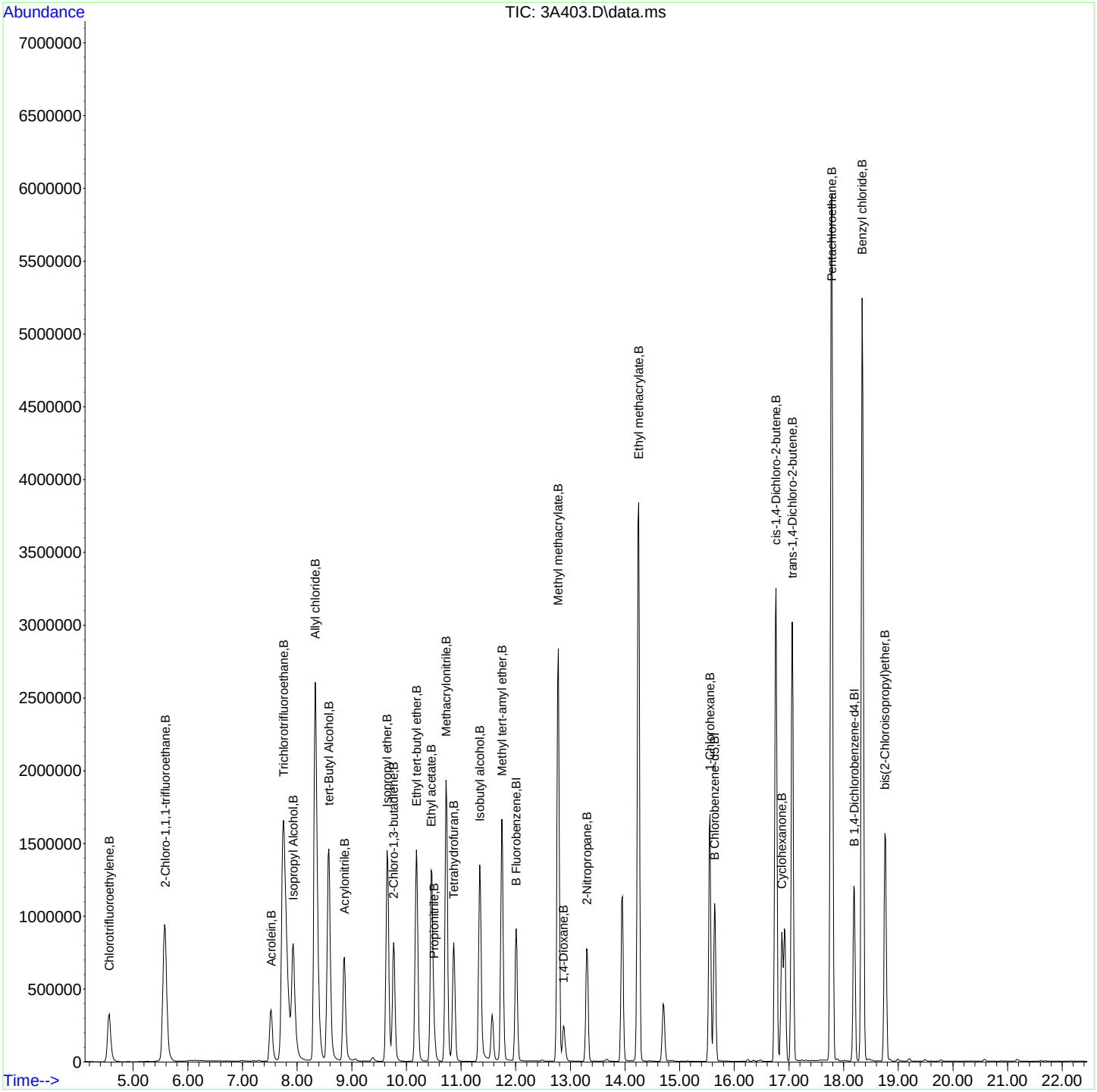
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
97)	Tetrahydrofuran	42	10.869	10.869	0.905	879306	477.55	ug/L	99	
98)	Isobutyl alcohol	41	11.343	11.343	0.945	1037484	4682.20	ug/L	95	
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	2040303	87.79	ug/L	99	
100)	Methyl methacrylate	69	12.778	12.778	1.064	1921949	392.42	ug/L	96	
101)	1,4-Dioxane	88	12.873	12.884	1.072	330884	4495.70	ug/L	99	
102)	2-Nitropropane	43	13.300	13.300	1.108	967952	420.66	ug/L	100	
104)	Ethyl methacrylate	69	14.248	14.248	0.911	3469338	379.65	ug/L	99	
106)	1-Chlorohexane	55	15.553	15.553	0.855	659232	86.49	ug/L	97	
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	1141853	411.53	ug/L	97	
108)	Cyclohexanone	42	16.869	16.869	0.927	404091	2129.41	ug/L	97	A
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	985807	426.82	ug/L	97	
110)	Pentachloroethane	167	17.782	17.782	0.977	2255567	449.13	ug/L	99	
111)	Benzyl chloride	91	18.339	18.339	1.008	6655582	448.64	ug/L	96	
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	1764759	408.92	ug/L	97	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A403.D
Acq On : 25 Aug 2011 09:52
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-02|ICAL|1|VOA|1|VOA8260BL|
Misc : VSTD500S 5ML n/a MIX[B] 0728-07+0728-15+0705-
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 25 11:43:09 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 25-AUG-11 10:53

Data File: 082511V3\3A405.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110825-03 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.0572	0.05705		.01		-0.26224	30		Averaged
S	Toluene-d8	2.2206	2.24885		.01		1.27218	30		Averaged
S	Bromofluorobenzene	0.9463	0.89986		.01		-4.90753	30		Averaged
	Chlorotrifluoroethylene	0.1052	0.10636		.01		1.10266	30		Averaged
	2-Chloro-1,1,1-trifluoroethane	0.2801	0.27263		.01		-2.6669	30		Averaged
	Acrolein	0.0491	0.04611		.01		-6.08961	30		Averaged
	Trichlorotrifluoroethane	0.0897	0.07782		.01		-13.24415	30		Averaged
	Isopropyl Alcohol	0.0184	0.01984		.01		7.82609	40		Averaged
	Allyl chloride	250	229.2	250			-8.32	30		Linear
	tert-Butyl Alcohol	0.0341	0.03481		.01		2.08211	40		Averaged
	Acrylonitrile	0.0939	0.08894		.01		-5.28222	30		Averaged
	Isopropyl ether	0.9499	0.92042		.01		-3.10348	30		Averaged
	2-Chloro-1,3-butadiene	0.3517	0.25626		.01		-27.13676	30		Averaged
	Ethyl tert-butyl ether	0.9215	0.89906		.01		-2.43516	30		Averaged
	Ethyl acetate	0.2511	0.22266		.01		-11.32616	40		Averaged
	Propionitrile	0.0362	0.0361		.01		-0.27624	30		Averaged
	Methacrylonitrile	0.1532	0.13583		.01		-11.33812	30		Averaged
	Tetrahydrofuran	250	283.12	250			13.248	30		Linear
	Isobutyl alcohol	0.0081	0.00896		.01		10.61728	40		Averaged
	Methyl tert-amyl ether	0.8445	0.83126		.01		-1.56779	30		Averaged
	Methyl methacrylate	0.178	0.1629		.01		-8.48315	30		Averaged
	1,4-Dioxane	0.0027	0.00272		.01		0.74074	40		Averaged
	2-Nitropropane	0.0836	0.08166		.01		-2.32057	30		Averaged
	Ethyl methacrylate	0.7985	0.69667		.01		-12.75266	30		Averaged
	1-Chlorohexane	0.6101	0.56456		.01		-7.46435	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2221	0.20302		.01		-8.59072	30		Averaged
	Cyclohexanone	1250	1203.47	1250			-3.7224	40		Linear
	trans-1,4-Dichloro-2-butene	0.1849	0.18468		.01		-0.11898	30		Averaged
	Pentachloroethane	0.402	0.4057		.01		0.9204	30		Averaged
	Benzyl chloride	1.1875	1.16943		.01		-1.52168	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3454	0.33022		.01		-4.3949	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A405.D
Acq On : 25 Aug 2011 10:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-03|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[B] 0728-08C+0729-08C+0728-16B
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 25 11:43:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1313600	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	562765	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	608697	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1313600	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	562765	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	608697	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	74937	49.89	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1265573	50.64	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	547744	47.55	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		5.573	5.365	0.464	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.738	7.774	0.644	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.331	8.212	0.694	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.936	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.766	9.623	0.813	0m	N.D.	d	
20) 2-Butanone		10.454	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.869	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.746	11.829	0.978	0m	N.D.	d	
33) n-Butyl alcohol		12.197	12.185	1.016	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.		
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A405.D
Acq On : 25 Aug 2011 10:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-03|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[B] 0728-08C+0729-08C+0728-16B
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 25 11:43:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.		
42) 4-Methyl-2-pentanone		13.726	13.715	0.878	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.		
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.		
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.723	14.663	0.942	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.		
51) 1,2-Dibromoethane		15.138	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		0.000	16.608	0.000	0	N.D.		
60) Isopropylbenzene		16.715	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		0.000	17.142	0.000	0	N.D.		
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.320	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.079	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.339	18.529	1.008	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.660	18.660	1.025	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.		
78) 1,2,4-Trichlorobenzene		20.676	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.		
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.		
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	419136	151.63	ug/L	100
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	1074394	145.98	ug/L	100
85) Acrolein	56	7.524	7.524	0.627	302856	234.55	ug/L	99
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	511123	216.78	ug/L	100
87) Isopropyl Alcohol	45	7.928	7.928	0.660	1303286	2696.63	ug/L	100
88) Allyl chloride	41	8.331	8.331	0.694	2031402	229.20	ug/L	100
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	2286028	2551.59	ug/L	100
90) Acrylonitrile	53	8.864	8.864	0.738	584134	236.75	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	1209058	48.45	ug/L	100
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	336628	36.44	ug/L	99
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	1181011	48.78	ug/L	100
94) Ethyl acetate	43	10.454	10.454	0.871	1462457	221.67	ug/L	100
95) Propionitrile	54	10.501	10.501	0.875	237127	249.00	ug/L	100
96) Methacrylonitrile	41	10.726	10.726	0.893	892099	221.58	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A405.D
Acq On : 25 Aug 2011 10:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-03|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[B] 0728-08C+0729-08C+0728-16B
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 25 11:43:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

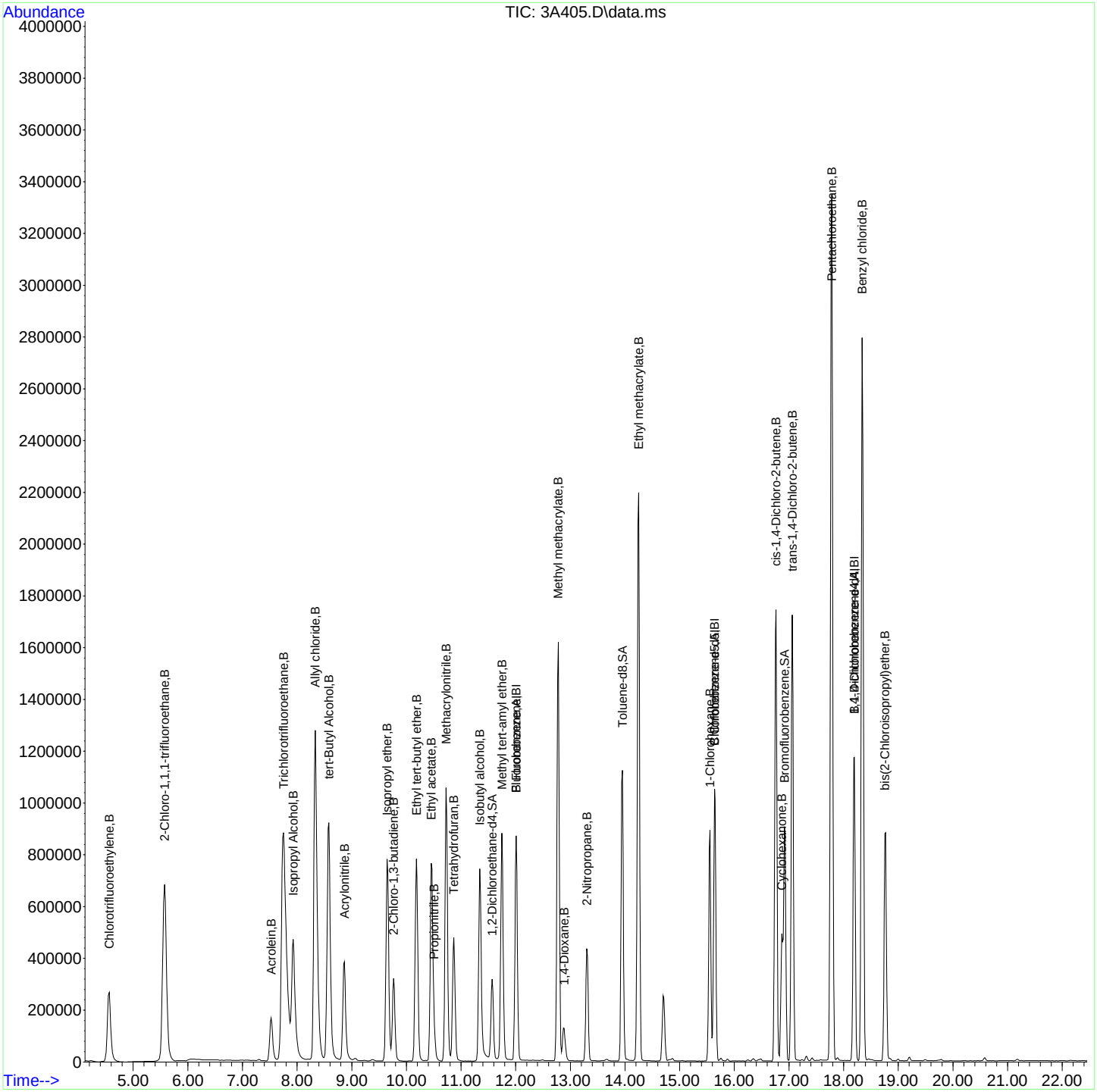
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.869	10.869	0.905	509277	283.12	ug/L	99
98)	Isobutyl alcohol	41	11.343	11.343	0.945	588388	2781.55	ug/L	98
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	1091942	49.22	ug/L	99
100)	Methyl methacrylate	69	12.778	12.778	1.064	1069960	228.84	ug/L	99
101)	1,4-Dioxane	88	12.884	12.884	1.073	178927	2546.55	ug/L	100
102)	2-Nitropropane	43	13.300	13.300	1.108	536373	244.17	ug/L	99
104)	Ethyl methacrylate	69	14.248	14.248	0.911	1960298	218.12	ug/L	100
106)	1-Chlorohexane	55	15.553	15.553	0.855	343645	46.27	ug/L	100
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	617886	228.53	ug/L	100
108)	Cyclohexanone	42	16.869	16.869	0.927	225649	1203.47	ug/L	99
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	562083	249.75	ug/L	98
110)	Pentachloroethane	167	17.782	17.782	0.977	1234740	252.31	ug/L	100
111)	Benzyl chloride	91	18.339	18.339	1.008	3559128	246.20	ug/L	99
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	1005026	238.99	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A405.D
Acq On : 25 Aug 2011 10:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110825-03|ICV|1|VOA|1|VOA8260BL|
Misc : ICV 5ML n/a MIX[B] 0728-08C+0729-08C+0728-16B
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 25 11:43:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 30-AUG-11 20:58

Data File: 083011V3\3B227.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110830-06 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.0572	0.0541		.01		-5.41958	30		Averaged	
S	Toluene-d8	2.2206	2.14263		.01		-3.51121	30		Averaged	
S	Bromofluorobenzene	0.9463	0.97173		.01		2.68731	30		Averaged	
	Dichlorodifluoromethane	0.2014	0.21028		.01		4.40914	30		Averaged	
	Chloromethane	0.2389	0.24434		.1		2.2771	30		Averaged	spcc
	Vinyl chloride	0.2429	0.24883		.01		2.44133	20		Averaged	ccc
	Bromomethane	0.2968	0.28252		.01		-4.81132	30		Averaged	
	Chloroethane	0.1822	0.18188		.01		-0.17563	30		Averaged	
	Trichlorofluoromethane	0.391	0.36498		.01		-6.65473	30		Averaged	
	Ethyl ether	0.2362	0.22426		.01		-5.05504	30		Averaged	
	Acetone	250	276.12	250			10.448	40		Linear	
	1,1-Dichloroethylene	0.4233	0.38746		.01		-8.46681	20		Averaged	ccc
	Iodomethane	0.5181	0.47247		.01		-8.80718	30		Averaged	
	Carbon disulfide	0.8992	0.8058		.01		-10.38701	30		Averaged	
	Acetonitrile	1250	1295.34	1250			3.6272	30		Linear	
	Methyl acetate	0.2108	0.18698		.01		-11.29981	40		Averaged	
	Methylene chloride	0.3516	0.31544		.01		-10.28441	30		Averaged	
	tert-Butyl methyl ether	0.8512	0.77535		.01		-8.91095	30		Averaged	
	trans-1,2-Dichloroethylene	0.3927	0.35622		.01		-9.28953	30		Averaged	
	Vinyl acetate	0.5065	0.44486		.01		-12.16979	40		Averaged	
	1,1-Dichloroethane	0.4877	0.43539		.1		-10.72586	30		Averaged	spcc
	2-Butanone	0.2191	0.2089		.01		-4.65541	40		Averaged	
	cis-1,2-Dichloroethylene	0.3296	0.30124		.01		-8.60437	30		Averaged	
	2,2-Dichloropropane	0.3776	0.31683		.01		-16.09375	30		Averaged	
	Bromochloromethane	0.161	0.15324		.01		-4.81988	30		Averaged	
	Chloroform	0.5078	0.45805		.01		-9.79716	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4373	0.39251		.01		-10.2424	30		Averaged	
	Cyclohexane	0.4881	0.43031		.01		-11.83979	30		Averaged	
	1,1-Dichloropropene	0.3631	0.32188		.01		-11.35224	30		Averaged	
	Carbon tetrachloride	0.3677	0.31686		.01		-13.82649	30		Averaged	
	1,2-Dichloroethane	0.3483	0.31329		.01		-10.05168	30		Averaged	
	Benzene	1.0861	0.99087		.01		-8.76807	30		Averaged	
	Cyclohexene	0.5538	0.49741		.01		-10.18238	30		Averaged	
	n-Butyl alcohol	5000	4824.51	5000			-3.5098	40		Linear	
	Trichloroethylene	0.2896	0.26507		.01		-8.4703	30		Averaged	
	1,2-Dichloropropane	0.2756	0.25274		.01		-8.29463	20		Averaged	ccc
	Methylcyclohexane	0.4834	0.42711		.01		-11.6446	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 30-AUG-11 20:58

Data File: 083011V3\3B227.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110830-06 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1787	0.1675		.01		-6.26749	30		Averaged	
Bromodichloromethane	0.3947	0.36758		.01		-6.87104	30		Averaged	
2-Chloroethylvinyl ether	0.1411	0.13046		.01		-7.54075	30		Averaged	
cis-1,3-Dichloropropylene	0.4688	0.4374		.01		-6.69795	30		Averaged	
4-Methyl-2-pentanone	0.2624	0.23384		.01		-10.88415	40		Averaged	
Toluene	2.626	2.3684		.01		-9.8096	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.9929	0.90211		.01		-9.14392	30		Averaged	
1,1,2-Trichloroethane	0.4918	0.46735		.01		-4.97153	30		Averaged	
1,3-Dichloropropane	0.9621	0.87088		.01		-9.48134	30		Averaged	
2-Hexanone	250	274.27	250			9.708	40		Linear	
Tetrachloroethylene	0.5375	0.46373		.01		-13.72465	30		Averaged	
Dibromochloromethane	0.7283	0.68167		.01		-6.40258	30		Averaged	
1,2-Dibromoethane	0.642	0.61046		.01		-4.91277	30		Averaged	
Chlorobenzene	1.749	1.60951		.3		-7.97541	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.6584	0.62927		.01		-4.42436	30		Averaged	
Ethylbenzene	2.9023	2.55907		.01		-11.82614	20		Averaged	ccc
m,p-Xylenes	1.1819	1.0734		.01		-9.18013	30		Averaged	
o-Xylene	1.2271	1.14209		.01		-6.92772	30		Averaged	
Styrene	2.0193	1.83839		.01		-8.95905	30		Averaged	
Bromoform	0.4797	0.47737		.1		-0.48572	30		Averaged	spcc
Isopropylbenzene	3.0101	2.72823		.01		-9.36414	30		Averaged	
1,1,2,2-Tetrachloroethane	0.7713	0.75425		.3		-2.21055	30		Averaged	spcc
1,2,3-Trichloropropane	0.2254	0.21118		.01		-6.30878	30		Averaged	
Bromobenzene	0.8116	0.77082		.01		-5.02464	30		Averaged	
n-Propylbenzene	3.4694	3.1563		.01		-9.02462	30		Averaged	
2-Chlorotoluene	0.7457	0.71447		.01		-4.18801	30		Averaged	
1,3,5-Trimethylbenzene	2.5066	2.28515		.01		-8.83468	30		Averaged	
4-Chlorotoluene	2.2821	2.08319		.01		-8.71609	30		Averaged	
tert-Butylbenzene	0.5791	0.5536		.01		-4.40338	30		Averaged	
1,2,4-Trimethylbenzene	2.5833	2.38105		.01		-7.82913	30		Averaged	
sec-Butylbenzene	3.4047	3.13779		.01		-7.83946	30		Averaged	
4-Isopropyltoluene	2.7292	2.52981		.01		-7.3058	30		Averaged	
1,3-Dichlorobenzene	1.5432	1.45699		.01		-5.58644	30		Averaged	
1,4-Dichlorobenzene	1.4841	1.40609		.01		-5.25638	30		Averaged	
n-Butylbenzene	2.7456	2.5434		.01		-7.36451	30		Averaged	
1,2-Dichlorobenzene	1.5084	1.44148		.01		-4.43649	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1652	0.16348		.01		-1.04116	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 30-AUG-11 20:58

Data File: 083011V3\3B227.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110830-06 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9878	0.94756		.01		-4.0737	30		Averaged
Hexachlorobutadiene	0.5859	0.54847		.01		-6.38846	30		Averaged
Naphthalene	1.9844	1.90867		.01		-3.81627	30		Averaged
1,2,3-Trichlorobenzene	0.8146	0.76444		.01		-6.15762	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B227.D
Acq On : 30 Aug 2011 20:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-06|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0723-07B+0727-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 31 06:58:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1334304	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	578506	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	580207	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1334304	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	578506	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	580207	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	72182	47.31	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1239526	48.24	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	563807	51.35	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.652	4.666	0.387	280575	52.19	ug/L	100
3) Chloromethane	50	5.068	5.068	0.422	326024	51.15	ug/L	100
4) Vinyl chloride	62	5.365	5.365	0.447	332010	51.22	ug/L	100
5) Bromomethane	94	6.125	6.125	0.510	376966	47.59	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	242680	49.91	ug/L	99
7) Trichlorofluoromethane	101	6.837	6.849	0.569	486991	46.67	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	299230	47.48	ug/L	97
9) Acetone	43	7.762	7.762	0.646	1108833	276.12	ug/L	100
10) 1,1-Dichloroethylene	61	7.774	7.774	0.647	516990	45.77	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	3152089	227.98	ug/L	99
12) Acetonitrile	41	8.224	8.224	0.685	1051476	1295.34	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1247410	221.70	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	5375920	224.03	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	420895	44.86	ug/L	100
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	1034549	45.55	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	475307	45.36	ug/L	99
18) Vinyl acetate	43	9.612	9.612	0.800	2967864	219.56	ug/L	99
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	580945	44.64	ug/L	100
20) 2-Butanone	43	10.406	10.406	0.867	1393683	238.38	ug/L	100
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	401946	45.70	ug/L	99
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	422741	41.96	ug/L	97
23) Bromochloromethane	128	10.809	10.797	0.900	204474	47.58	ug/L	98
24) Chloroform	83	10.869	10.869	0.905	611174	45.10	ug/L	100
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	523734	44.88	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	574158	44.08	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	429481	44.32	ug/L	100
28) Carbon tetrachloride	117	11.438	11.438	0.953	422787	43.08	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	418029	44.97	ug/L	100
31) Benzene	78	11.687	11.687	0.973	1322123	45.62	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	663697	44.91	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1030833	4824.51	ug/L	99
34) Trichloroethylene	95	12.481	12.481	1.040	353684	45.76	ug/L	98
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	337230	45.84	ug/L	99
36) Methylcyclohexane	83	12.766	12.766	1.063	569890	44.18	ug/L	100
37) Dibromomethane	93	12.920	12.920	1.076	223497	46.85	ug/L	98
38) Bromodichloromethane	83	13.062	13.062	1.088	490463	46.57	ug/L	99
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	870357	231.07	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B227.D
Acq On : 30 Aug 2011 20:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-06|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0723-07B+0727-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 31 06:58:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	583621	46.65	ug/L	100
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	676397	222.83	ug/L	99
44) Toluene	91	14.035	14.035	0.898	1370133	45.10	ug/L	100
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	521874	45.43	ug/L	99
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	270367	47.51	ug/L	100
47) 2-Hexanone	58	14.675	14.675	0.939	881847	274.27	ug/L	100
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	503812	45.26	ug/L	99
49) Tetrachloroethylene	164	14.699	14.699	0.940	268269	43.13	ug/L	100
50) Dibromochloromethane	129	14.960	14.960	0.957	394352	46.80	ug/L	100
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	353155	47.55	ug/L	99
52) Chlorobenzene	112	15.671	15.671	1.002	931114	46.01	ug/L	100
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	364036	47.79	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	1480437	44.09	ug/L	100
55) m,p-Xylenes	106	15.873	15.873	1.015	1241933	90.82	ug/L	99
56) o-Xylene	106	16.335	16.335	1.045	660704	46.54	ug/L	99
57) Styrene	104	16.335	16.335	1.045	1063520	45.52	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	276971	49.76	ug/L	99
60) Isopropylbenzene	105	16.715	16.715	0.919	1582941	45.32	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	437621	48.89	ug/L	99
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	122528	46.85	ug/L	93
64) Bromobenzene	156	17.142	17.142	0.942	447234	47.49	ug/L	100
65) n-Propylbenzene	91	17.165	17.165	0.943	1831307	45.49	ug/L	100
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1325860	45.58	ug/L	100
67) 2-Chlorotoluene	126	17.320	17.320	0.952	414543	47.91	ug/L	100
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1208684	45.64	ug/L	100
69) tert-Butylbenzene	134	17.711	17.711	0.973	321204	47.80	ug/L	99
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1381504	46.08	ug/L	100
71) sec-Butylbenzene	105	17.948	17.948	0.986	1820568	46.08	ug/L	99
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	1467814	46.35	ug/L	100
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	845355	47.21	ug/L	100
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	815821	47.37	ug/L	100
75) n-Butylbenzene	91	18.529	18.529	1.018	1475698	46.32	ug/L	99
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	836357	47.78	ug/L	100
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	94850	49.47	ug/L	98
78) 1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	549783	47.96	ug/L	100
79) Hexachlorobutadiene	225	20.865	20.865	1.147	318227	46.81	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	1107426	48.09	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	443534	46.92	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.762	7.928	0.646	0m	N.D.	d	
88) Allyl chloride		8.224	8.331	0.685	0m	N.D.	d	
89) tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90) Acrylonitrile		8.936	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		9.813	9.766	0.817	0m	N.D.	d	
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d	
95) Propionitrile		10.406	10.501	0.867	0m	N.D.	d	
96) Methacrylonitrile		10.880	10.726	0.906	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B227.D
Acq On : 30 Aug 2011 20:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-06|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0723-07B+0727-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 31 06:58:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

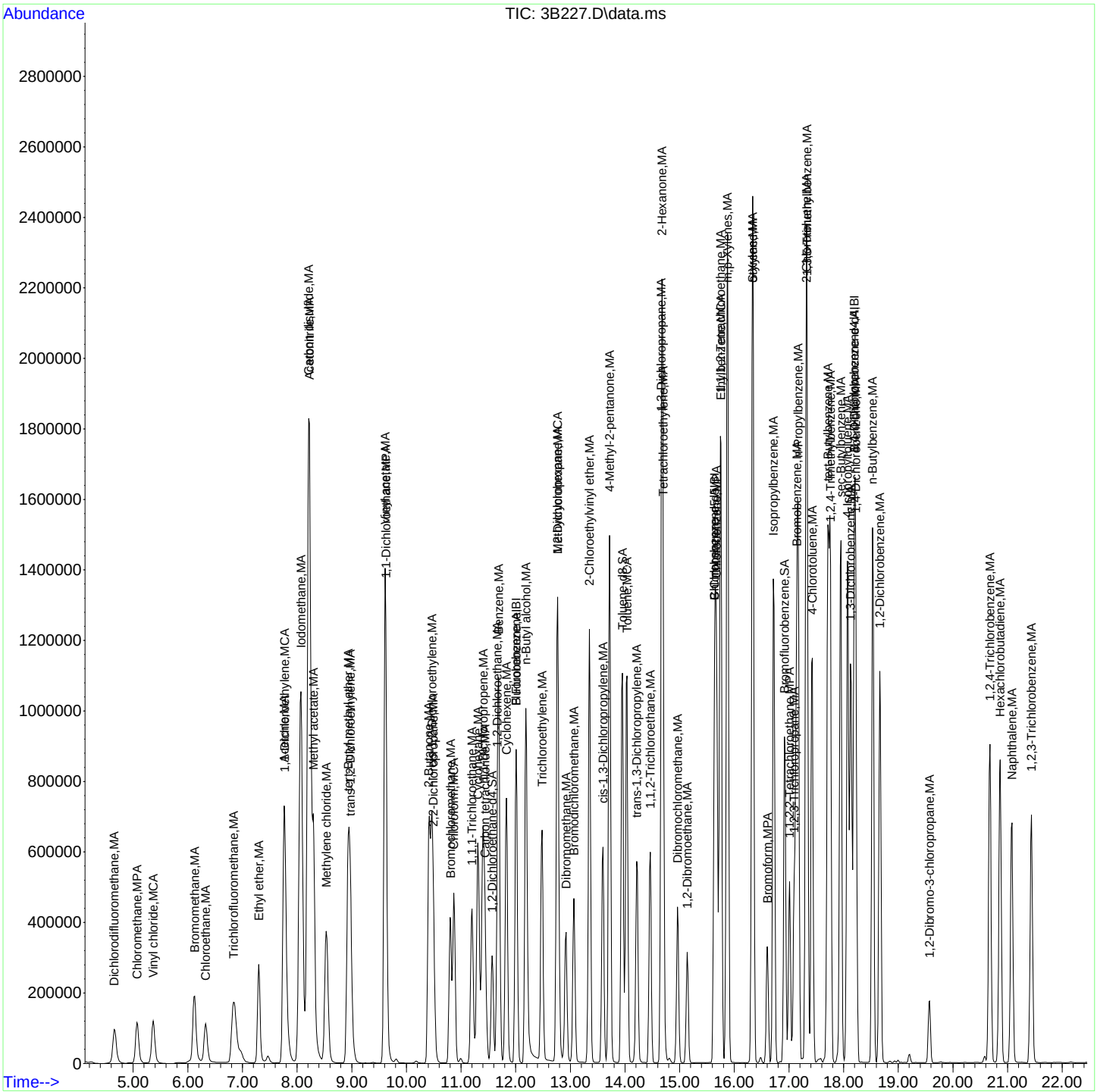
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.908	12.884	1.075	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		14.248	14.248	0.911	0m	N.D.	d
106) 1-Chlorohexane		15.541	15.553	0.854	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.059	17.059	0.937	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.766	18.754	1.031	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B227.D
Acq On : 30 Aug 2011 20:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-06|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0723-07B+0727-07D
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 31 06:58:15 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 30-AUG-11 21:58

Data File: 083011V3\3B229.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110830-08 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.0572	0.05427		.01		-5.12238	30		Averaged
S	Toluene-d8	2.2206	2.25178		.01		1.40413	30		Averaged
S	Bromofluorobenzene	0.9463	0.9344		.01		-1.25753	30		Averaged
	Chlorotrifluoroethylene	0.1052	0.10094		.01		-4.04943	30		Averaged
	2-Chloro-1,1,1-trifluoroethane	0.2801	0.25801		.01		-7.88647	30		Averaged
	Acrolein	0.0491	0.04756		.01		-3.13646	30		Averaged
	Trichlorotrifluoroethane	0.0897	0.09264		.01		3.27759	30		Averaged
	Isopropyl Alcohol	0.0184	0.0175		.01		-4.8913	40		Averaged
	Allyl chloride	250	279.37	250			11.748	30		Linear
	tert-Butyl Alcohol	0.0341	0.02986		.01		-12.43402	40		Averaged
	Acrylonitrile	0.0939	0.09023		.01		-3.90841	30		Averaged
	Isopropyl ether	0.9499	0.92198		.01		-2.93926	30		Averaged
	2-Chloro-1,3-butadiene	0.3517	0.29173		.01		-17.05146	30		Averaged
	Ethyl tert-butyl ether	0.9215	0.88213		.01		-4.27238	30		Averaged
	Ethyl acetate	0.2511	0.22133		.01		-11.85583	40		Averaged
	Propionitrile	0.0362	0.03472		.01		-4.0884	30		Averaged
	Methacrylonitrile	0.1532	0.13889		.01		-9.34073	30		Averaged
	Tetrahydrofuran	250	277.02	250			10.808	30		Linear
	Isobutyl alcohol	0.0081	0.00844		.01		4.19753	40		Averaged
	Methyl tert-amyl ether	0.8445	0.80453		.01		-4.73298	30		Averaged
	Methyl methacrylate	0.178	0.1625		.01		-8.70787	30		Averaged
	1,4-Dioxane	0.0027	0.00259		.01		-4.07407	40		Averaged
	2-Nitropropane	0.0836	0.07721		.01		-7.64354	30		Averaged
	Ethyl methacrylate	0.7985	0.72215		.01		-9.56168	30		Averaged
	1-Chlorohexane	0.6101	0.55417		.01		-9.16735	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2221	0.20068		.01		-9.6443	30		Averaged
	Cyclohexanone	1250	983.13	1250			-21.3496	40		Linear
	trans-1,4-Dichloro-2-butene	0.1849	0.18397		.01		-0.50297	30		Averaged
	Pentachloroethane	0.402	0.40105		.01		-0.23632	30		Averaged
	Benzyl chloride	1.1875	1.06631		.01		-10.20547	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3454	0.31207		.01		-9.64968	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B229.D
Acq On : 30 Aug 2011 21:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-08|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0729-08D+0728-08B+0728-16B
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 31 06:59:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1363474	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	565108	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	603735	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1363474	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	565108	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	603735	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	73992	47.46	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1272499	50.70	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	564129	49.37	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.562	4.666	0.380	0m	N.D.	d	
3) Chloromethane		5.053	5.068	0.421	0m	N.D.	d	
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		6.101	6.125	0.508	0m	N.D.	d	
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		6.837	6.849	0.569	0m	N.D.	d	
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.761	7.774	0.646	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.212	8.212	0.684	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.935	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.623	9.623	0.801	0m	N.D.	d	
20) 2-Butanone		10.453	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		10.465	10.465	0.872	0m	N.D.	d	
22) 2,2-Dichloropropane		10.489	10.489	0.874	0m	N.D.	d	
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.868	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		11.200	11.201	0.933	0m	N.D.	d	
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		11.438	11.438	0.953	0m	N.D.	d	
30) 1,2-Dichloroethane		11.663	11.663	0.971	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.829	11.829	0.985	0m	N.D.	d	
33) n-Butyl alcohol		12.208	12.185	1.017	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		12.754	12.766	1.062	0m	N.D.	d	
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		13.062	13.062	1.088	0m	N.D.	d	
39) 2-Chloroethylvinyl ether		13.347	13.347	1.112	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B229.D
Acq On : 30 Aug 2011 21:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-08|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0729-08D+0728-08B+0728-16B
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 31 06:59:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		13.596	13.596	1.132	0m	N.D.	d	
42) 4-Methyl-2-pentanone		13.714	13.715	0.877	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		14.224	14.213	0.910	0m	N.D.	d	
46) 1,1,2-Trichloroethane		14.462	14.462	0.925	0m	N.D.	d	
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.711	14.663	0.941	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		14.960	14.960	0.957	0m	N.D.	d	
51) 1,2-Dibromoethane		15.137	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		0.000	16.608	0.000	0	N.D.		
60) Isopropylbenzene		16.727	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d	
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.319	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.758	17.747	0.976	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.078	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.138	18.126	0.997	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.659	18.660	1.025	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		19.573	19.573	1.076	0m	N.D.	d	
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		20.865	20.865	1.147	0m	N.D.	d	
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	412899	143.91	ug/L	99
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	1055375	138.15	ug/L	99
85) Acrolein	56	7.524	7.524	0.627	324255	241.94	ug/L	98
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	631588	258.07	ug/L	99
87) Isopropyl Alcohol	45	7.928	7.928	0.660	1193133	2378.41	ug/L	99
88) Allyl chloride	41	8.331	8.331	0.694	2536737	279.37	ug/L	100
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	2035389	2188.73	ug/L	99
90) Acrylonitrile	53	8.864	8.864	0.738	615102	240.18	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	1257102	48.53	ug/L	99
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	397767	41.48	ug/L	100
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	1202765	47.86	ug/L	99
94) Ethyl acetate	43	10.453	10.454	0.871	1508868	220.34	ug/L	100
95) Propionitrile	54	10.501	10.501	0.875	236711	239.47	ug/L	99
96) Methacrylonitrile	41	10.726	10.726	0.893	946834	226.58	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B229.D
Acq On : 30 Aug 2011 21:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-08|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0729-08D+0728-08B+0728-16B
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 31 06:59:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

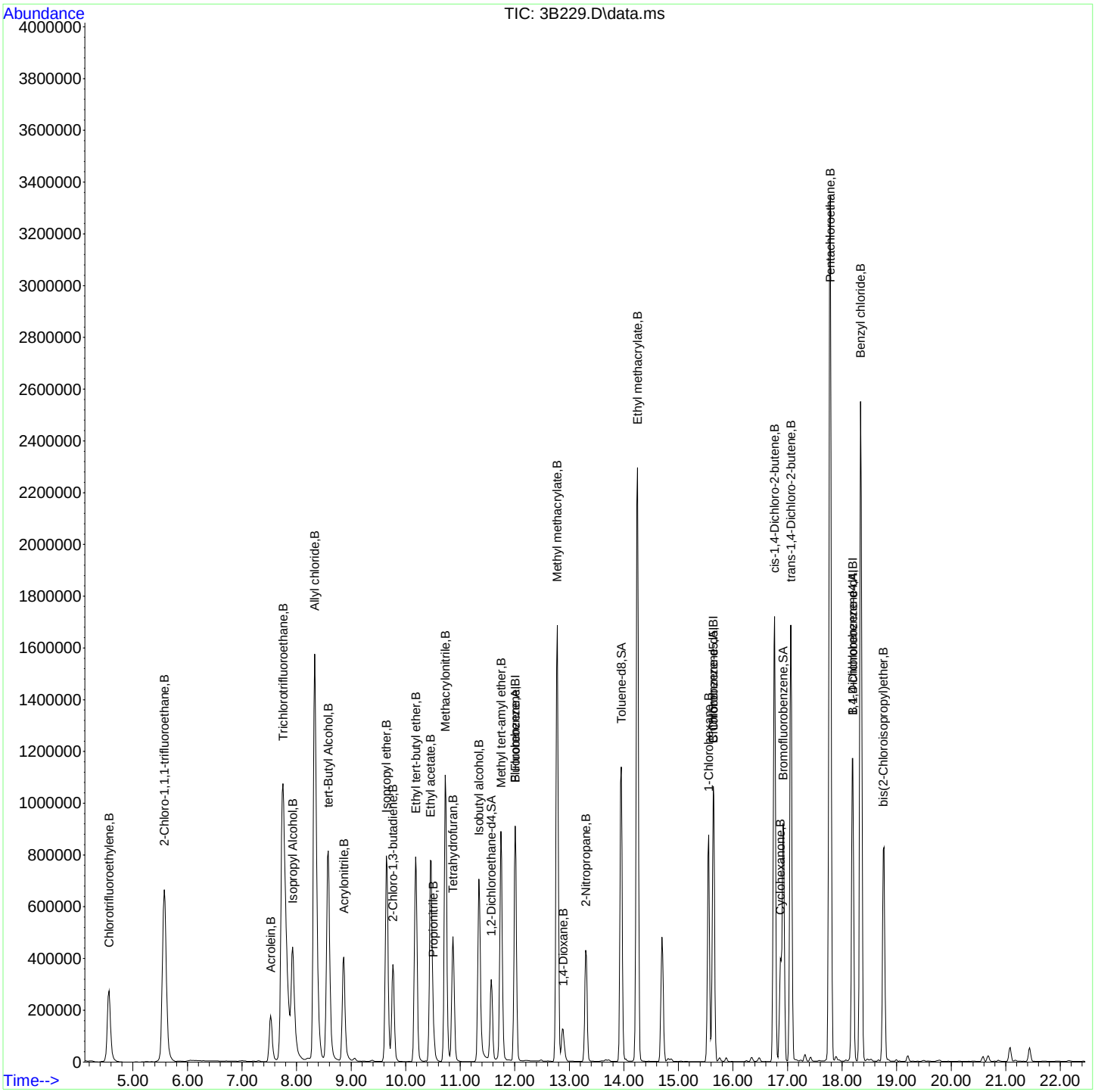
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.868	10.869	0.905	517871	277.02	ug/L	100
98)	Isobutyl alcohol	41	11.343	11.343	0.945	575305	2620.22	ug/L	100
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	1096958	47.63	ug/L	100
100)	Methyl methacrylate	69	12.778	12.778	1.064	1107854	228.28	ug/L	99
101)	1,4-Dioxane	88	12.884	12.884	1.073	176729	2423.26	ug/L	99
102)	2-Nitropropane	43	13.299	13.300	1.108	526360	230.85	ug/L	98
104)	Ethyl methacrylate	69	14.248	14.248	0.911	2040474	226.10	ug/L	100
106)	1-Chlorohexane	55	15.553	15.553	0.855	334574	45.42	ug/L	99
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	605778	225.89	ug/L	98
108)	Cyclohexanone	42	16.869	16.869	0.927	184129	983.13	ug/L	99
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	555349	248.78	ug/L	99
110)	Pentachloroethane	167	17.782	17.782	0.977	1210644	249.42	ug/L	99
111)	Benzyl chloride	91	18.339	18.339	1.008	3218831	224.49	ug/L	100
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	942023	225.84	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B229.D
Acq On : 30 Aug 2011 21:58
Operator : SYK1
InstName : VOA3
Sample : |W3VM110830-08|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0729-08D+0728-08B+0728-16B
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 31 06:59:29 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 31-AUG-11 07:23

Data File: 083111V3\3B302.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110831-01 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	1,2-Dichloroethane-d4	0.0572	0.05504		.01		-3.77622	30		Averaged	
S	Toluene-d8	2.2206	2.16475		.01		-2.51509	30		Averaged	
S	Bromofluorobenzene	0.9463	0.95425		.01		0.84011	30		Averaged	
	Dichlorodifluoromethane	0.2014	0.24315		.01		20.72989	30		Averaged	
	Chloromethane	0.2389	0.25449		.1		6.52574	30		Averaged	spcc
	Vinyl chloride	0.2429	0.26503		.01		9.11075	20		Averaged	ccc
	Bromomethane	0.2968	0.2957		.01		-0.37062	30		Averaged	
	Chloroethane	0.1822	0.19617		.01		7.6674	30		Averaged	
	Trichlorofluoromethane	0.391	0.41335		.01		5.71611	30		Averaged	
	Ethyl ether	0.2362	0.23087		.01		-2.25656	30		Averaged	
	1,1-Dichloroethylene	0.4233	0.41158		.01		-2.76872	20		Averaged	ccc
	Acetone	250	317.66	250			27.064	40		Linear	
	Iodomethane	0.5181	0.48798		.01		-5.81355	30		Averaged	
	Carbon disulfide	0.8992	0.85169		.01		-5.28359	30		Averaged	
	Acetonitrile	1250	1282.02	1250			2.5616	30		Linear	
	Methyl acetate	0.2108	0.1871		.01		-11.24288	40		Averaged	
	Methylene chloride	0.3516	0.32183		.01		-8.46701	30		Averaged	
	tert-Butyl methyl ether	0.8512	0.77212		.01		-9.29041	30		Averaged	
	trans-1,2-Dichloroethylene	0.3927	0.37392		.01		-4.78228	30		Averaged	
	Vinyl acetate	0.5065	0.46551		.01		-8.09279	40		Averaged	
	1,1-Dichloroethane	0.4877	0.44639		.1		-8.47037	30		Averaged	spcc
	2-Butanone	0.2191	0.23673		.01		8.04655	40		Averaged	
	cis-1,2-Dichloroethylene	0.3296	0.30189		.01		-8.40716	30		Averaged	
	2,2-Dichloropropane	0.3776	0.35652		.01		-5.58263	30		Averaged	
	Bromochloromethane	0.161	0.14991		.01		-6.8882	30		Averaged	
	Chloroform	0.5078	0.46477		.01		-8.47381	20		Averaged	ccc
	1,1,1-Trichloroethane	0.4373	0.43032		.01		-1.59616	30		Averaged	
	Cyclohexane	0.4881	0.47488		.01		-2.70846	30		Averaged	
	1,1-Dichloropropene	0.3631	0.34363		.01		-5.36216	30		Averaged	
	Carbon tetrachloride	0.3677	0.34905		.01		-5.07207	30		Averaged	
	1,2-Dichloroethane	0.3483	0.31082		.01		-10.76084	30		Averaged	
	Benzene	1.0861	1.02169		.01		-5.93039	30		Averaged	
	Cyclohexene	0.5538	0.54264		.01		-2.01517	30		Averaged	
	n-Butyl alcohol	5000	5059.15	5000			1.183	40		Linear	
	Trichloroethylene	0.2896	0.2793		.01		-3.55663	30		Averaged	
	1,2-Dichloropropane	0.2756	0.25091		.01		-8.95864	20		Averaged	ccc
	Methylcyclohexane	0.4834	0.47498		.01		-1.74183	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 31-AUG-11 07:23

Data File: 083111V3\3B302.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110831-01 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Dibromomethane	0.1787	0.1663		.01		-6.939	30		Averaged	
Bromodichloromethane	0.3947	0.36383		.01		-7.82113	30		Averaged	
2-Chloroethylvinyl ether	0.1411	0.13173		.01		-6.64068	30		Averaged	
cis-1,3-Dichloropropylene	0.4688	0.44678		.01		-4.6971	30		Averaged	
4-Methyl-2-pentanone	0.2624	0.25308		.01		-3.55183	40		Averaged	
Toluene	2.626	2.47985		.01		-5.5655	20		Averaged	ccc
trans-1,3-Dichloropropylene	0.9929	0.9266		.01		-6.67741	30		Averaged	
1,1,2-Trichloroethane	0.4918	0.47211		.01		-4.00366	30		Averaged	
1,3-Dichloropropane	0.9621	0.8586		.01		-10.75772	30		Averaged	
2-Hexanone	250	323.47	250			29.388	40		Linear	
Tetrachloroethylene	0.5375	0.51293		.01		-4.57116	30		Averaged	
Dibromochloromethane	0.7283	0.70413		.01		-3.31869	30		Averaged	
1,2-Dibromoethane	0.642	0.6207		.01		-3.31776	30		Averaged	
Chlorobenzene	1.749	1.67368		.3		-4.30646	30		Averaged	spcc
1,1,1,2-Tetrachloroethane	0.6584	0.64234		.01		-2.43925	30		Averaged	
Ethylbenzene	2.9023	2.6991		.01		-7.00134	20		Averaged	ccc
m,p-Xylenes	1.1819	1.12114		.01		-5.14087	30		Averaged	
o-Xylene	1.2271	1.1864		.01		-3.31676	30		Averaged	
Styrene	2.0193	1.89246		.01		-6.28138	30		Averaged	
Bromoform	0.4797	0.47562		.1		-0.85053	30		Averaged	spcc
Isopropylbenzene	3.0101	2.83085		.01		-5.95495	30		Averaged	
1,1,2,2-Tetrachloroethane	0.7713	0.74428		.3		-3.50318	30		Averaged	spcc
1,2,3-Trichloropropane	0.2254	0.21862		.01		-3.00799	30		Averaged	
Bromobenzene	0.8116	0.76831		.01		-5.33391	30		Averaged	
n-Propylbenzene	3.4694	3.25511		.01		-6.17657	30		Averaged	
2-Chlorotoluene	0.7457	0.72172		.01		-3.21577	30		Averaged	
1,3,5-Trimethylbenzene	2.5066	2.27857		.01		-9.09718	30		Averaged	
4-Chlorotoluene	2.2821	2.12504		.01		-6.88226	30		Averaged	
tert-Butylbenzene	0.5791	0.57072		.01		-1.44707	30		Averaged	
1,2,4-Trimethylbenzene	2.5833	2.39321		.01		-7.35842	30		Averaged	
sec-Butylbenzene	3.4047	3.24483		.01		-4.69557	30		Averaged	
4-Isopropyltoluene	2.7292	2.63002		.01		-3.63403	30		Averaged	
1,3-Dichlorobenzene	1.5432	1.47351		.01		-4.51594	30		Averaged	
1,4-Dichlorobenzene	1.4841	1.43036		.01		-3.62105	30		Averaged	
n-Butylbenzene	2.7456	2.60784		.01		-5.01748	30		Averaged	
1,2-Dichlorobenzene	1.5084	1.44448		.01		-4.2376	30		Averaged	
1,2-Dibromo-3-chloropropane	0.1652	0.16771		.01		1.51937	30		Averaged	

Continuing Calibration Summary

Instrument ID: VOA3.I **Injection Date:** 31-AUG-11 07:23

Data File: 083111V3\3B302.D **Init. Cal. Date(s)** 24-AUG-11 12:07 25-AUG-11 09:5

Lab Sample ID W3VM110831-01 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
1,2,4-Trichlorobenzene	0.9878	0.97575		.01		-1.21988	30		Averaged
Hexachlorobutadiene	0.5859	0.54379		.01		-7.18723	30		Averaged
Naphthalene	1.9844	1.85757		.01		-6.39135	30		Averaged
1,2,3-Trichlorobenzene	0.8146	0.75431		.01		-7.40118	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B302.D
Acq On : 31 Aug 2011 07:23
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0727-07D+0723-07B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 07:48:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1352307	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	580645	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	602656	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1352307	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	580645	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	602656	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	74429	48.14	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1256954	48.74	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	575087	50.42	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.651	4.666	0.387	328815	60.35	ug/L	100
3) Chloromethane	50	5.067	5.068	0.422	344145	53.27	ug/L	100
4) Vinyl chloride	62	5.365	5.365	0.447	358396	54.55	ug/L	99
5) Bromomethane	94	6.125	6.125	0.510	399881	49.82	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	265286	53.83	ug/L	100
7) Trichlorofluoromethane	101	6.837	6.849	0.569	558981	52.86	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	312206	48.88	ug/L	100
9) Acetone	43	7.762	7.762	0.646	1284248	317.66	ug/L	99
10) 1,1-Dichloroethylene	61	7.762	7.774	0.646	556581	48.62	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	3299517	235.47	ug/L	100
12) Acetonitrile	41	8.236	8.224	0.686	1055166	1282.02	ug/L	99
13) Methyl acetate	43	8.295	8.295	0.691	1265093	221.85	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	5758721	236.79	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	435208	45.77	ug/L	99
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	1044146	45.36	ug/L	99
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	505659	47.61	ug/L	99
18) Vinyl acetate	43	9.612	9.612	0.800	3147558	229.75	ug/L	100
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	603650	45.77	ug/L	99
20) 2-Butanone	43	10.406	10.406	0.867	1600643	270.14	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	408249	45.80	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	482130	47.22	ug/L	100
23) Bromochloromethane	128	10.809	10.797	0.900	202721	46.55	ug/L	99
24) Chloroform	83	10.869	10.869	0.905	628514	45.76	ug/L	100
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	581920	49.20	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	642185	48.65	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	464687	47.32	ug/L	100
28) Carbon tetrachloride	117	11.438	11.438	0.953	472023	47.46	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	420330	44.62	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1381633	47.03	ug/L	99
32) Cyclohexene	67	11.829	11.829	0.985	733822	49.00	ug/L	98
33) n-Butyl alcohol	56	12.185	12.185	1.015	1096127	5059.15	ug/L	99
34) Trichloroethylene	95	12.481	12.481	1.040	377693	48.22	ug/L	99
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	339312	45.51	ug/L	100
36) Methylcyclohexane	83	12.766	12.766	1.063	642314	49.13	ug/L	99
37) Dibromomethane	93	12.920	12.920	1.076	224894	46.52	ug/L	99
38) Bromodichloromethane	83	13.062	13.062	1.088	492009	46.09	ug/L	99
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	890698	233.32	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B302.D
Acq On : 31 Aug 2011 07:23
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0727-07D+0723-07B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 07:48:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	604187	47.65	ug/L	99
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	734756	241.17	ug/L	99
44) Toluene	91	14.035	14.035	0.898	1439914	47.22	ug/L	100
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	538028	46.66	ug/L	99
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	274126	48.00	ug/L	100
47) 2-Hexanone	58	14.675	14.675	0.939	1035882	323.47	ug/L	99
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	498541	44.62	ug/L	95
49) Tetrachloroethylene	164	14.699	14.699	0.940	297830	47.71	ug/L	100
50) Dibromochloromethane	129	14.960	14.960	0.957	408848	48.34	ug/L	100
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	360404	48.34	ug/L	100
52) Chlorobenzene	112	15.671	15.671	1.002	971815	47.85	ug/L	100
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	372969	48.78	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	1567221	46.50	ug/L	99
55) m,p-Xylenes	106	15.873	15.873	1.015	1301968	94.86	ug/L	98
56) o-Xylene	106	16.335	16.335	1.045	688880	48.34	ug/L	99
57) Styrene	104	16.335	16.335	1.045	1098845	46.86	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	286638	49.58	ug/L	98
60) Isopropylbenzene	105	16.715	16.715	0.919	1706029	47.02	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	448545	48.25	ug/L	98
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	131750	48.50	ug/L	99
64) Bromobenzene	156	17.142	17.142	0.942	463028	47.33	ug/L	100
65) n-Propylbenzene	91	17.165	17.165	0.943	1961710	46.91	ug/L	99
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1373191	45.45	ug/L	100
67) 2-Chlorotoluene	126	17.320	17.320	0.952	434949	48.39	ug/L	96
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1280670	46.56	ug/L	100
69) tert-Butylbenzene	134	17.711	17.711	0.973	343946	49.27	ug/L	100
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1442280	46.32	ug/L	99
71) sec-Butylbenzene	105	17.948	17.948	0.986	1955514	47.65	ug/L	100
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	1585000	48.18	ug/L	100
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	888020	47.74	ug/L	100
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	862016	48.19	ug/L	99
75) n-Butylbenzene	91	18.529	18.529	1.018	1571631	47.49	ug/L	100
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	870523	47.88	ug/L	99
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	101074	50.75	ug/L	99
78) 1,2,4-Trichlorobenzene	180	20.676	20.676	1.136	588042	49.39	ug/L	99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	327720	46.41	ug/L	100
80) Naphthalene	128	21.079	21.079	1.158	1119475	46.80	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	454588	46.30	ug/L	98
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.762	7.928	0.646	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90) Acrylonitrile		8.936	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.612	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		9.813	9.766	0.817	0m	N.D.	d	
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate		10.406	10.454	0.867	0m	N.D.	d	
95) Propionitrile		10.406	10.501	0.867	0m	N.D.	d	
96) Methacrylonitrile		10.880	10.726	0.906	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B302.D
Acq On : 31 Aug 2011 07:23
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0727-07D+0723-07B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 07:48:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

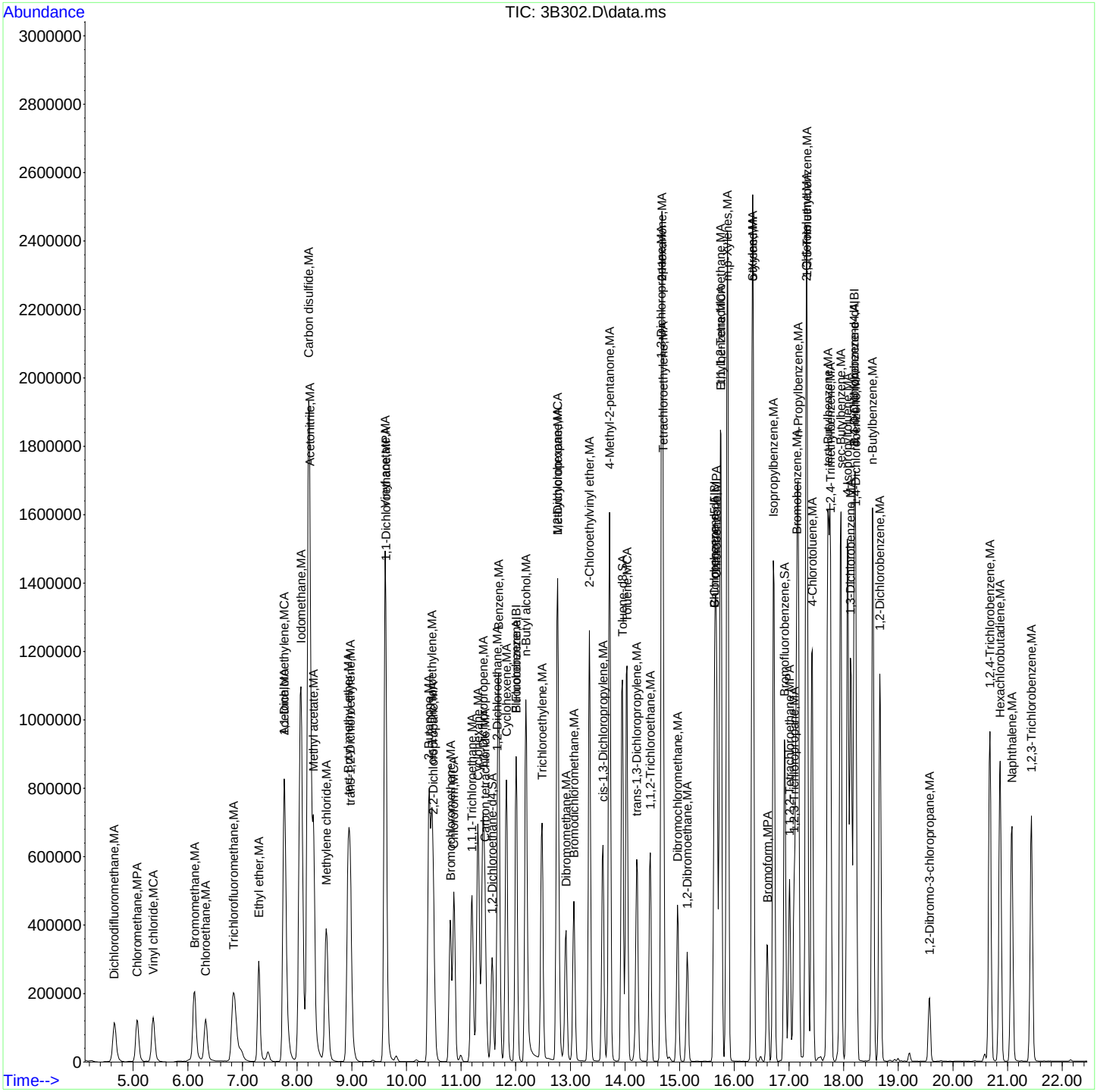
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
97) Tetrahydrofuran		10.869	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		0.000	18.754	0.000	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B302.D
Acq On : 31 Aug 2011 07:23
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-01|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[A] 0727-07D+0723-07B
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 07:48:25 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: VOA3.I **Injection Date:** 31-AUG-11 08:53

Data File: 083111V3\3B305.D **Init. Cal. Date(s)** 24-AUG-11 12:07 - 25-AUG-11 09:5

Lab Sample ID W3VM110831-04 **Method:** 082411V3\VOA3-8260-082411.M

Quant Type ISTD **Method Update:** 25-AUG-11 11:40

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	1,2-Dichloroethane-d4	0.0572	0.05632		.01		-1.53846	30		Averaged
S	Toluene-d8	2.2206	2.2354		.01		0.66649	30		Averaged
S	Bromofluorobenzene	0.9463	0.89832		.01		-5.07027	30		Averaged
	Chlorotrifluoroethylene	0.1052	0.10685		.01		1.56844	30		Averaged
	2-Chloro-1,1,1-trifluoroethane	0.2801	0.27435		.01		-2.05284	30		Averaged
	Acrolein	0.0491	0.05295		.01		7.84114	30		Averaged
	Trichlorotrifluoroethane	0.0897	0.09831		.01		9.59866	30		Averaged
	Isopropyl Alcohol	0.0184	0.01986		.01		7.93478	40		Averaged
	Allyl chloride	250	280.81	250			12.324	30		Linear
	tert-Butyl Alcohol	0.0341	0.03443		.01		0.96774	40		Averaged
	Acrylonitrile	0.0939	0.09676		.01		3.04579	30		Averaged
	Isopropyl ether	0.9499	0.8988		.01		-5.37951	30		Averaged
	2-Chloro-1,3-butadiene	0.3517	0.29689		.01		-15.5843	30		Averaged
	Ethyl tert-butyl ether	0.9215	0.88387		.01		-4.08356	30		Averaged
	Ethyl acetate	0.2511	0.23889		.01		-4.8626	40		Averaged
	Propionitrile	0.0362	0.03742		.01		3.37017	30		Averaged
	Methacrylonitrile	0.1532	0.14411		.01		-5.93342	30		Averaged
	Tetrahydrofuran	250	302.99	250			21.196	30		Linear
	Isobutyl alcohol	0.0081	0.00964		.01		19.01235	40		Averaged
	Methyl tert-amyl ether	0.8445	0.81108		.01		-3.95737	30		Averaged
	Methyl methacrylate	0.178	0.1731		.01		-2.75281	30		Averaged
	1,4-Dioxane	0.0027	0.00284		.01		5.18519	40		Averaged
	2-Nitropropane	0.0836	0.08433		.01		0.87321	30		Averaged
	Ethyl methacrylate	0.7985	0.73999		.01		-7.32749	30		Averaged
	1-Chlorohexane	0.6101	0.55055		.01		-9.76069	30		Averaged
	cis-1,4-Dichloro-2-butene	0.2221	0.20697		.01		-6.81225	30		Averaged
	Cyclohexanone	1250	1043.3	1250			-16.536	40		Linear
	trans-1,4-Dichloro-2-butene	0.1849	0.19283		.01		4.2888	30		Averaged
	Pentachloroethane	0.402	0.40494		.01		0.73134	30		Averaged
	Benzyl chloride	1.1875	1.22076		.01		2.80084	30		Averaged
	bis(2-Chloroisopropyl)ether	0.3454	0.34707		.01		0.4835	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B305.D
Acq On : 31 Aug 2011 08:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0728-08B+0729-08D+0728-16B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 31 09:12:42 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1370411	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	576188	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	639735	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1370411	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	576188	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	639735	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	77183	49.26	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1288013	50.33	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	574689	47.47	ug/L	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		4.547	4.666	0.379	0m	N.D.	d	
3) Chloromethane		5.053	5.068	0.421	0m	N.D.	d	
4) Vinyl chloride		5.350	5.365	0.446	0m	N.D.	d	
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		6.825	6.849	0.568	0m	N.D.	d	
8) Ethyl ether		7.299	7.299	0.608	0m	N.D.	d	
9) Acetone		7.773	7.762	0.647	0m	N.D.	d	
10) 1,1-Dichloroethylene		7.750	7.774	0.645	0m	N.D.	d	
11) Iodomethane		8.058	8.070	0.671	0m	N.D.	d	
12) Acetonitrile		8.331	8.224	0.694	0m	N.D.	d	
13) Methyl acetate		8.307	8.295	0.692	0m	N.D.	d	
14) Carbon disulfide		8.200	8.212	0.683	0m	N.D.	d	
15) Methylene chloride		8.532	8.532	0.711	0m	N.D.	d	
16) tert-Butyl methyl ether		8.936	8.936	0.744	0m	N.D.	d	
17) trans-1,2-Dichloroethy...		8.971	8.971	0.747	0m	N.D.	d	
18) Vinyl acetate		9.647	9.612	0.803	0m	N.D.	d	
19) 1,1-Dichloroethane		9.623	9.623	0.801	0m	N.D.	d	
20) 2-Butanone		10.453	10.406	0.871	0m	N.D.	d	
21) cis-1,2-Dichloroethylene		10.453	10.465	0.871	0m	N.D.	d	
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		10.868	10.869	0.905	0m	N.D.	d	
25) 1,1,1-Trichloroethane		11.201	11.201	0.933	0m	N.D.	d	
26) Cyclohexane		11.343	11.307	0.945	0m	N.D.	d	
27) 1,1-Dichloropropene		11.343	11.402	0.945	0m	N.D.	d	
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		11.675	11.663	0.972	0m	N.D.	d	
31) Benzene		11.687	11.687	0.973	0m	N.D.	d	
32) Cyclohexene		11.829	11.829	0.985	0m	N.D.	d	
33) n-Butyl alcohol		12.208	12.185	1.017	0m	N.D.	d	
34) Trichloroethylene		12.481	12.481	1.040	0m	N.D.	d	
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		
36) Methylcyclohexane		12.778	12.766	1.064	0m	N.D.	d	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.		
38) Bromodichloromethane		13.062	13.062	1.088	0m	N.D.	d	
39) 2-Chloroethylvinyl ether		13.347	13.347	1.112	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B305.D
Acq On : 31 Aug 2011 08:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0728-08B+0729-08D+0728-16B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 31 09:12:42 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
40) cis-1,3-Dichloropropylene		13.596	13.596	1.132	0m	N.D.	d	
42) 4-Methyl-2-pentanone		13.715	13.715	0.877	0m	N.D.	d	
44) Toluene		14.035	14.035	0.898	0m	N.D.	d	
45) trans-1,3-Dichloroprop...		14.224	14.213	0.910	0m	N.D.	d	
46) 1,1,2-Trichloroethane		14.462	14.462	0.925	0m	N.D.	d	
47) 2-Hexanone		14.675	14.675	0.939	0m	N.D.	d	
48) 1,3-Dichloropropane		14.711	14.663	0.941	0m	N.D.	d	
49) Tetrachloroethylene		14.699	14.699	0.940	0m	N.D.	d	
50) Dibromochloromethane		14.960	14.960	0.957	0m	N.D.	d	
51) 1,2-Dibromoethane		15.138	15.138	0.968	0m	N.D.	d	
52) Chlorobenzene		15.671	15.671	1.002	0m	N.D.	d	
53) 1,1,1,2-Tetrachloroethane		15.742	15.742	1.007	0m	N.D.	d	
54) Ethylbenzene		15.754	15.754	1.008	0m	N.D.	d	
55) m,p-Xylenes		15.873	15.873	1.015	0m	N.D.	d	
56) o-Xylene		16.335	16.335	1.045	0m	N.D.	d	
57) Styrene		16.335	16.335	1.045	0m	N.D.	d	
59) Bromoform		16.596	16.608	0.912	0m	N.D.	d	
60) Isopropylbenzene		16.715	16.715	0.919	0m	N.D.	d	
62) 1,1,2,2-Tetrachloroethane		17.059	17.011	0.937	0m	N.D.	d	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.		
64) Bromobenzene		17.142	17.142	0.942	0m	N.D.	d	
65) n-Propylbenzene		17.165	17.165	0.943	0m	N.D.	d	
66) 1,3,5-Trimethylbenzene		17.331	17.331	0.952	0m	N.D.	d	
67) 2-Chlorotoluene		17.320	17.320	0.952	0m	N.D.	d	
68) 4-Chlorotoluene		17.426	17.415	0.958	0m	N.D.	d	
69) tert-Butylbenzene		17.782	17.711	0.977	0m	N.D.	d	
70) 1,2,4-Trimethylbenzene		17.746	17.747	0.975	0m	N.D.	d	
71) sec-Butylbenzene		17.948	17.948	0.986	0m	N.D.	d	
72) 4-Isopropyltoluene		18.067	18.067	0.993	0m	N.D.	d	
73) 1,3-Dichlorobenzene		18.126	18.126	0.996	0m	N.D.	d	
74) 1,4-Dichlorobenzene		18.221	18.221	1.001	0m	N.D.	d	
75) n-Butylbenzene		18.529	18.529	1.018	0m	N.D.	d	
76) 1,2-Dichlorobenzene		18.660	18.660	1.025	0m	N.D.	d	
77) 1,2-Dibromo-3-chloropr...		19.573	19.573	1.076	0m	N.D.	d	
78) 1,2,4-Trichlorobenzene		20.675	20.676	1.136	0m	N.D.	d	
79) Hexachlorobutadiene		20.865	20.865	1.147	0m	N.D.	d	
80) Naphthalene		21.079	21.079	1.158	0m	N.D.	d	
81) 1,2,3-Trichlorobenzene		21.434	21.435	1.178	0m	N.D.	d	
83) Chlorotrifluoroethylene	116	4.562	4.562	0.380	439272	152.33	ug/L	100
84) 2-Chloro-1,1,1-trifluo...	118	5.573	5.573	0.464	1127898	146.90	ug/L	100
85) Acrolein	56	7.524	7.524	0.627	362798	269.32	ug/L	97
86) Trichlorotrifluoroethane	85	7.750	7.750	0.645	673628	273.86	ug/L	99
87) Isopropyl Alcohol	45	7.928	7.928	0.660	1360599	2698.51	ug/L	99
88) Allyl chloride	41	8.331	8.331	0.694	2561939	280.81	ug/L	100
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	2359007	2523.89	ug/L	100
90) Acrylonitrile	53	8.864	8.864	0.738	663000	257.58	ug/L	99
91) Isopropyl ether	45	9.647	9.647	0.803	1231732	47.31	ug/L	100
92) 2-Chloro-1,3-butadiene	53	9.766	9.766	0.813	406860	42.21	ug/L	99
93) Ethyl tert-butyl ether	59	10.181	10.181	0.848	1211270	47.96	ug/L	99
94) Ethyl acetate	43	10.453	10.454	0.871	1636863	237.82	ug/L	99
95) Propionitrile	54	10.501	10.501	0.875	256430	258.11	ug/L	99
96) Methacrylonitrile	41	10.726	10.726	0.893	987447	235.10	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B305.D
Acq On : 31 Aug 2011 08:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0728-08B+0729-08D+0728-16B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 31 09:12:42 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

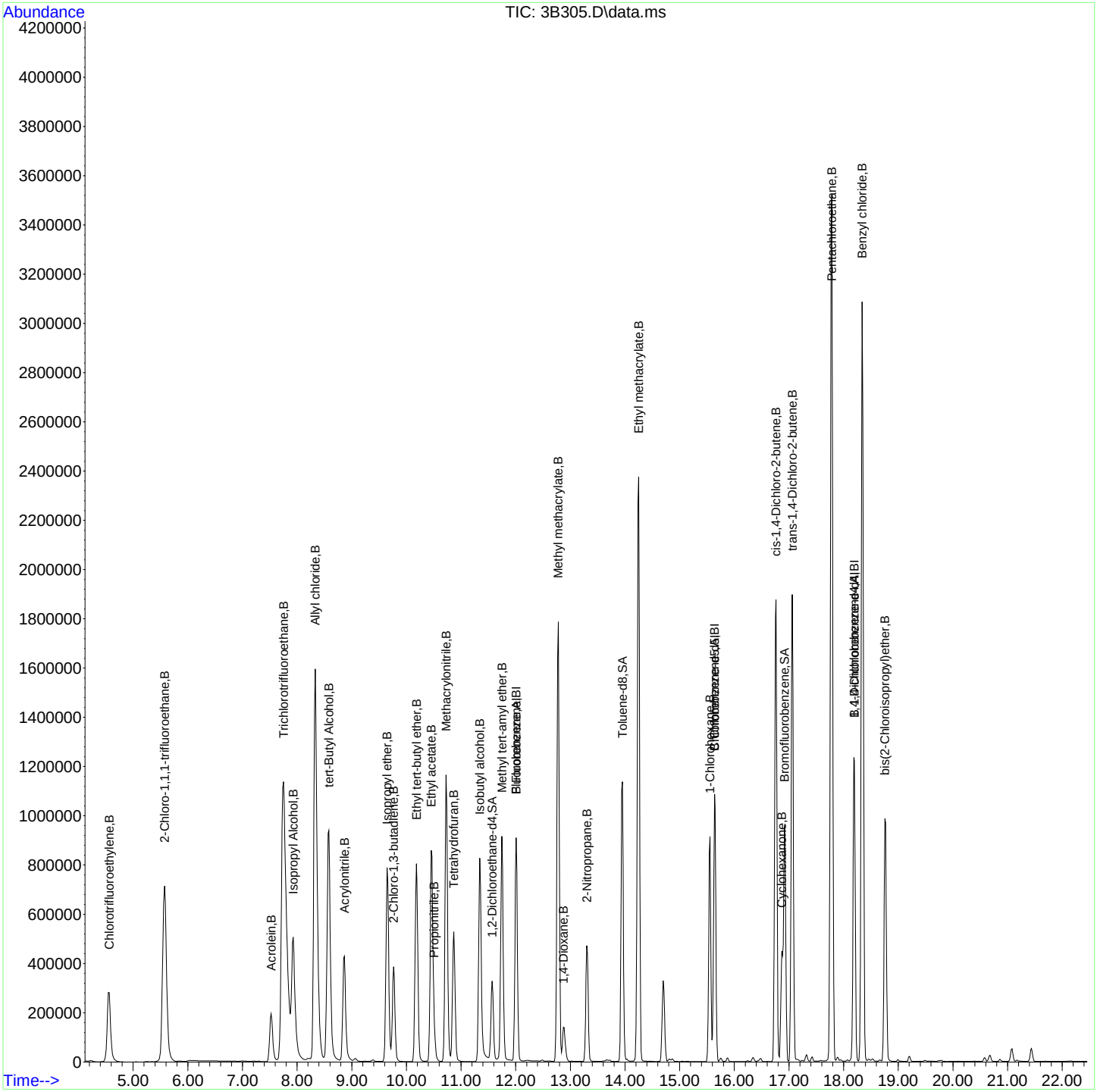
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
97)	Tetrahydrofuran	42	10.868	10.869	0.905	566503	302.99	ug/L	99
98)	Isobutyl alcohol	41	11.343	11.343	0.945	660737	2994.09	ug/L	99
99)	Methyl tert-amyl ether	73	11.746	11.746	0.978	1111513	48.02	ug/L	100
100)	Methyl methacrylate	69	12.778	12.778	1.064	1186088	243.16	ug/L	99
101)	1,4-Dioxane	88	12.873	12.884	1.072	194739	2656.70	ug/L	99
102)	2-Nitropropane	43	13.299	13.300	1.108	577817	252.14	ug/L	99
104)	Ethyl methacrylate	69	14.248	14.248	0.911	2131861	231.68	ug/L	100
106)	1-Chlorohexane	55	15.553	15.553	0.855	352204	45.12	ug/L	98
107)	cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	662040	232.98	ug/L	99
108)	Cyclohexanone	42	16.869	16.869	0.927	206591	1043.30	ug/L	100
109)	trans-1,4-Dichloro-2-b...	53	17.059	17.059	0.937	616801	260.76	ug/L	98
110)	Pentachloroethane	167	17.782	17.782	0.977	1295260	251.84	ug/L	99
111)	Benzyl chloride	91	18.339	18.339	1.008	3904812	257.01	ug/L	99
112)	bis(2-Chloroisopropyl)...	45	18.754	18.754	1.031	1110156	251.18	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B305.D
Acq On : 31 Aug 2011 08:53
Operator : SYK1
InstName : VOA3
Sample : |W3VM110831-04|CCV|1|VOA|1|VOA8260BL|
Misc : CCV 5ML n/a MIX[B] 0728-08B+0729-08D+0728-16B
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 31 09:12:42 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



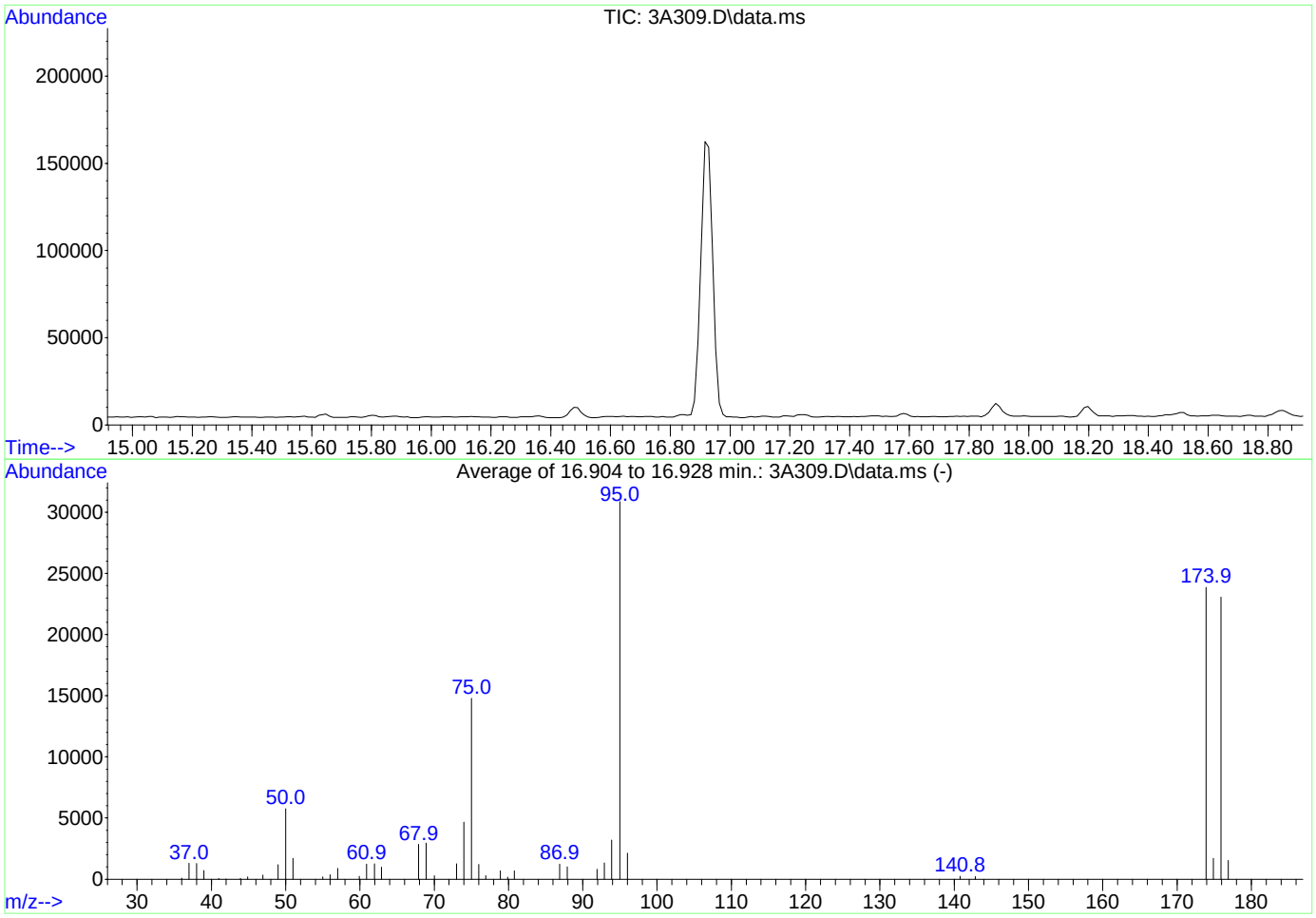
Quality Control Data

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082411V3\
Data File : 3A309.D
Acq On : 24 Aug 2011 11:37
Operator : SYK1
Sample : |IVM110802-01|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 10ML n/a
ALS Vial : 2 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Title : Volatile Organics 8260B SubList :
Last Update : Thu Aug 25 11:40:17 2011



AutoFind: Scans 1042, 1043, 1044; Background Corrected with Scan 1036

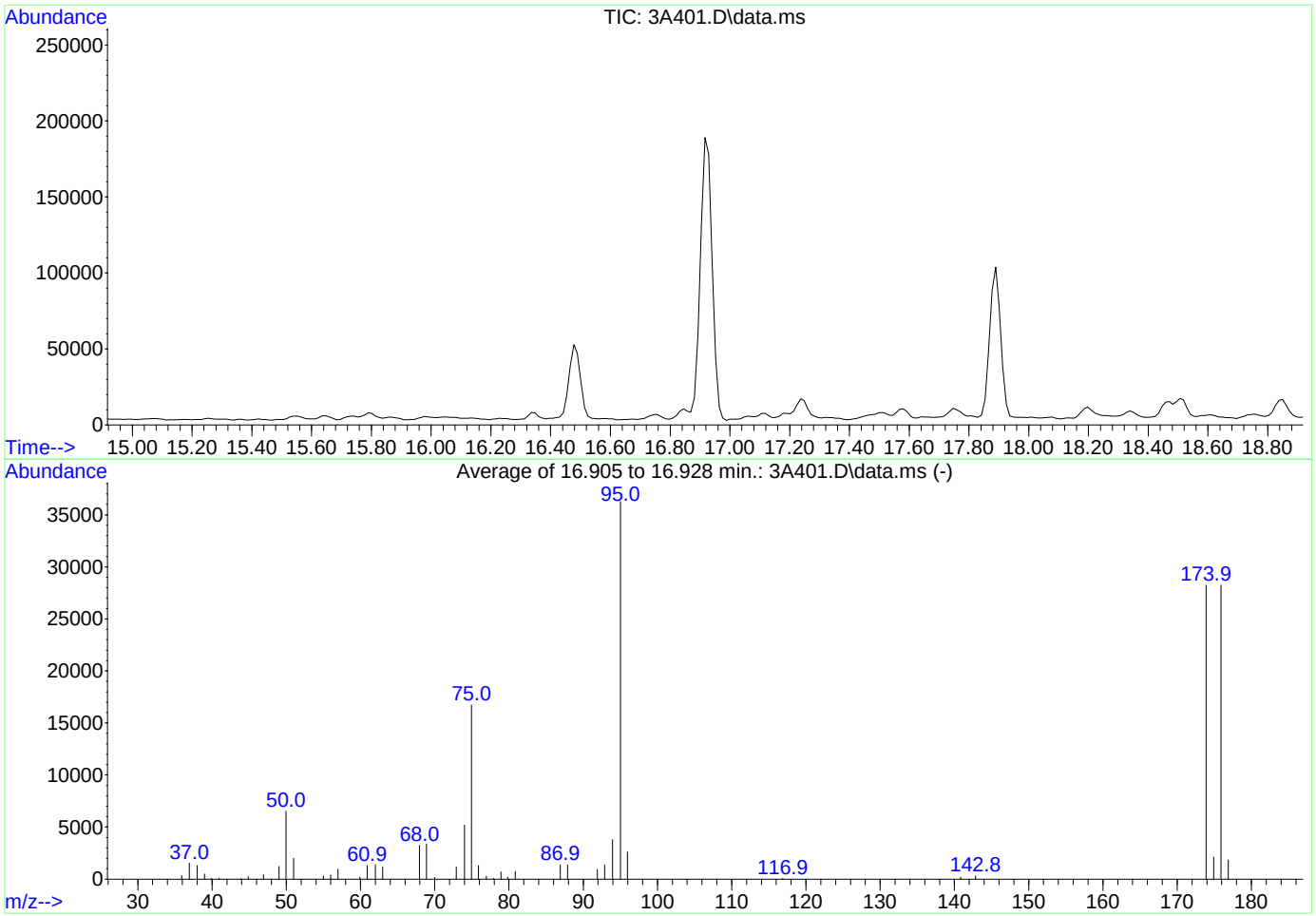
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.6	5756	PASS
75	95	30	60	47.9	14779	PASS
95	95	100	100	100.0	30883	PASS
96	95	5	9	6.9	2130	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.3	23863	PASS
175	174	5	9	7.1	1695	PASS
176	174	95	101	96.6	23054	PASS
177	176	5	9	6.6	1525	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\082511V3\
Data File : 3A401.D
Acq On : 25 Aug 2011 08:52
Operator : SYK1
Sample : |IVM110802-01|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 10ML n/a
ALS Vial : 28 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Title : Volatile Organics 8260B SubList :
Last Update : Thu Aug 25 11:40:17 2011



AutoFind: Scans 1042, 1043, 1044; Background Corrected with Scan 1036

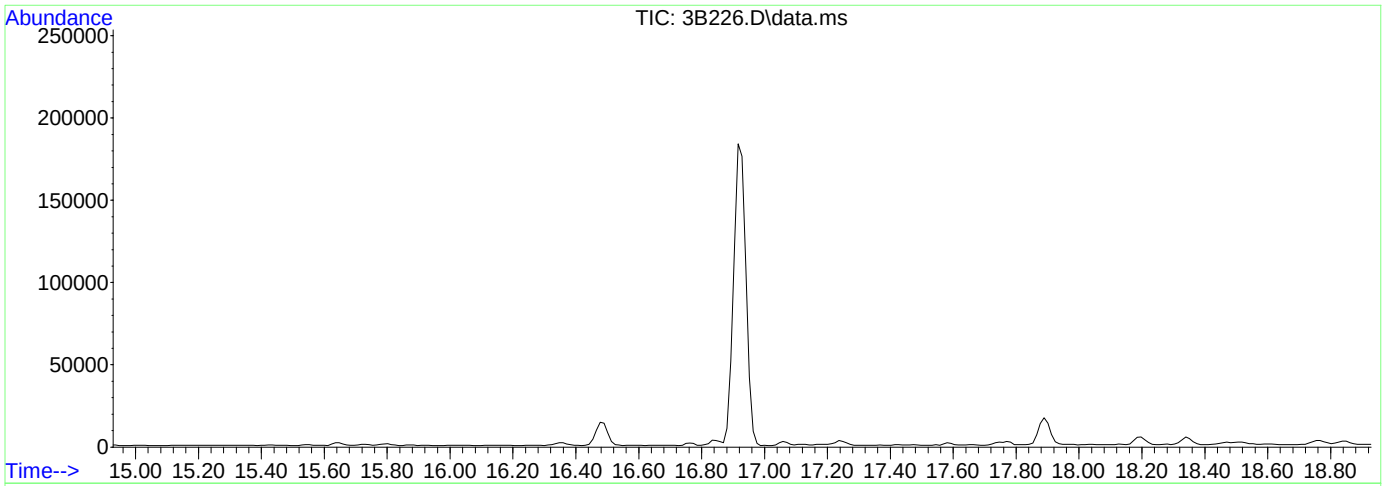
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	6528	PASS
75	95	30	60	46.1	16736	PASS
95	95	100	100	100.0	36288	PASS
96	95	5	9	7.2	2603	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	77.8	28248	PASS
175	174	5	9	7.5	2106	PASS
176	174	95	101	100.0	28248	PASS
177	176	5	9	6.5	1839	PASS

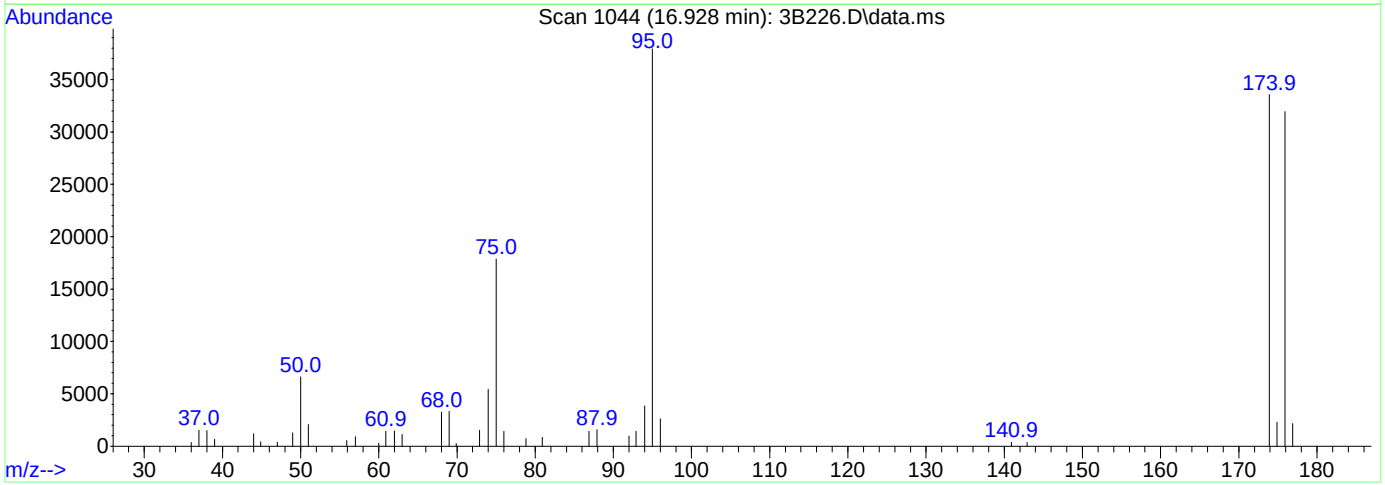
Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B226.D
Acq On : 30 Aug 2011 20:28
Operator : SYK1
Sample : |IVM110802-01|BFB2|1|VOA|1|VOA8260BL|
Misc : BFB 10ML n/a
ALS Vial : 26 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Title : Volatile Organics 8260B SubList :
Last Update : Thu Aug 25 11:40:17 2011





Spectrum Information: Scan 1044

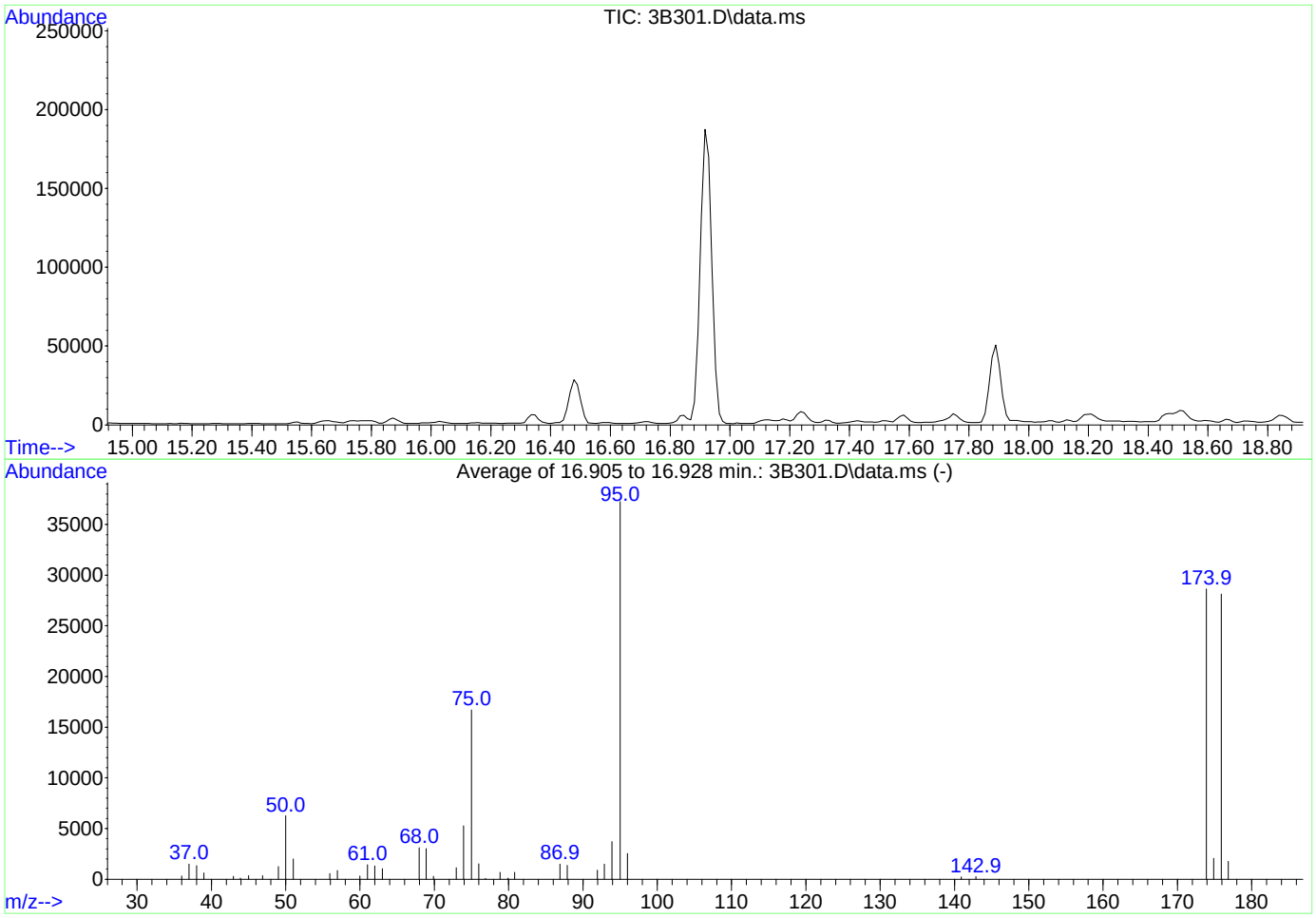
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	6616	PASS
75	95	30	60	47.1	17872	PASS
95	95	100	100	100.0	37944	PASS
96	95	5	9	6.9	2615	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	88.5	33576	PASS
175	174	5	9	6.8	2290	PASS
176	174	95	101	95.1	31936	PASS
177	176	5	9	6.8	2171	PASS

Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B301.D
Acq On : 31 Aug 2011 06:53
Operator : SYK1
Sample : |IVM110802-01|BFB|1|VOA|1|VOA8260BL|
Misc : BFB 10ML n/a
ALS Vial : 1 Sample Multiplier: 1

Integration File: ron.P

Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Title : Volatile Organics 8260B SubList :
Last Update : Thu Aug 25 11:40:17 2011



AutoFind: Scans 1042, 1043, 1044; Background Corrected with Scan 1036

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	6252	PASS
75	95	30	60	44.8	16703	PASS
95	95	100	100	100.0	37269	PASS
96	95	5	9	6.8	2523	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	76.8	28637	PASS
175	174	5	9	7.2	2068	PASS
176	174	95	101	98.3	28136	PASS
177	176	5	9	6.2	1747	PASS

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477757**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:28**				
Data File:	**083011V3\3B230A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	U	1.50	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether	U	0.250	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone	U	1.25	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	U	0.250	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone	U	1.25	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477757**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:28**				
Data File:	**083011V3\3B230A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477757**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 22:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 22:28**				
Data File:	**083011V3\3B230A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B230A.D
Acq On : 30 Aug 2011 22:28
Operator : SYK1
InstName : VOA3
Sample : |1202477757|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 31 07:00:59 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1359890	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	576500	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	585807	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1359890	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	576500	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	585807	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	77854	50.07	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1296051	50.62	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	569274	51.35	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	100.14%
43) Toluene-d8	50.000	80 - 120	101.24%
61) Bromofluorobenzene	50.000	80 - 120	102.70%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.666	0.000	0	N.D.		
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether	59	7.299	7.299	0.608	1582	N.D.		
9) Acetone	43	7.773	7.762	0.647	7114	Below Cal		70
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile	41	8.248	8.224	0.687	5796	Below Cal	#	84
13) Methyl acetate	43	8.319	8.295	0.693	1783	N.D.		
14) Carbon disulfide	76	8.188	8.212	0.682	2458	N.D.		
15) Methylene chloride	84	8.532	8.532	0.711	9999	N.D.		
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate	43	9.623	9.612	0.801	2351	N.D.		
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone	43	10.181	10.406	0.848	5760	N.D.		
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		0.000	11.307	0.000	0	N.D.		
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene		0.000	11.687	0.000	0	N.D.		
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		0.000	12.185	0.000	0m	N.D.	d	
34) Trichloroethylene		0.000	12.481	0.000	0	N.D.		
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B230A.D
Acq On : 30 Aug 2011 22:28
Operator : SYK1
InstName : VOA3
Sample : |1202477757|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 31 07:00:59 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
36) Methylcyclohexane		0.000	12.766	0.000	0	N.D.	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.	
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.	
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.	
44) Toluene	91	14.035	14.035	0.898	1101	N.D.	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.	
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.	
47) 2-Hexanone	58	14.687	14.675	0.939	1379	Below Cal #	26
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.	
49) Tetrachloroethylene	164	14.699	14.699	0.940	657	N.D.	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.	
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.	
52) Chlorobenzene	112	15.683	15.671	1.003	466	N.D.	
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.	
54) Ethylbenzene	91	15.754	15.754	1.008	674	N.D.	
55) m,p-Xylenes	106	15.873	15.873	1.015	670	N.D.	
56) o-Xylene		0.000	16.335	0.000	0	N.D.	
57) Styrene	104	16.335	16.335	1.045	186	N.D.	
59) Bromoform		0.000	16.608	0.000	0	N.D.	
60) Isopropylbenzene	105	16.715	16.715	0.919	369	N.D.	
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.	
64) Bromobenzene		0.000	17.142	0.000	0	N.D.	
65) n-Propylbenzene	91	17.165	17.165	0.943	384	N.D.	
66) 1,3,5-Trimethylbenzene		0.000	17.331	0.000	0	N.D.	
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.	
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1088	N.D.	
69) tert-Butylbenzene		0.000	17.711	0.000	0	N.D.	
70) 1,2,4-Trimethylbenzene		0.000	17.747	0.000	0	N.D.	
71) sec-Butylbenzene		0.000	17.948	0.000	0	N.D.	
72) 4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.	
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	438	N.D.	
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	1111	N.D.	
75) n-Butylbenzene	91	18.541	18.529	1.019	362	N.D.	
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.	
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	668	N.D.	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.	
80) Naphthalene	128	21.079	21.079	1.158	4281	N.D.	
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	641	N.D.	
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.	
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.	
85) Acrolein	56	7.536	7.524	0.628	665	N.D.	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.	
87) Isopropyl Alcohol	45	7.951	7.928	0.662	594	N.D.	
88) Allyl chloride	41	8.248	8.331	0.687	5796	Below Cal #	27
89) tert-Butyl Alcohol	59	8.580	8.580	0.715	413	N.D.	
90) Acrylonitrile	53	8.876	8.864	0.739	605	N.D.	
91) Isopropyl ether		0.000	9.647	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B230A.D
Acq On : 30 Aug 2011 22:28
Operator : SYK1
InstName : VOA3
Sample : |1202477757|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 31 07:00:59 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

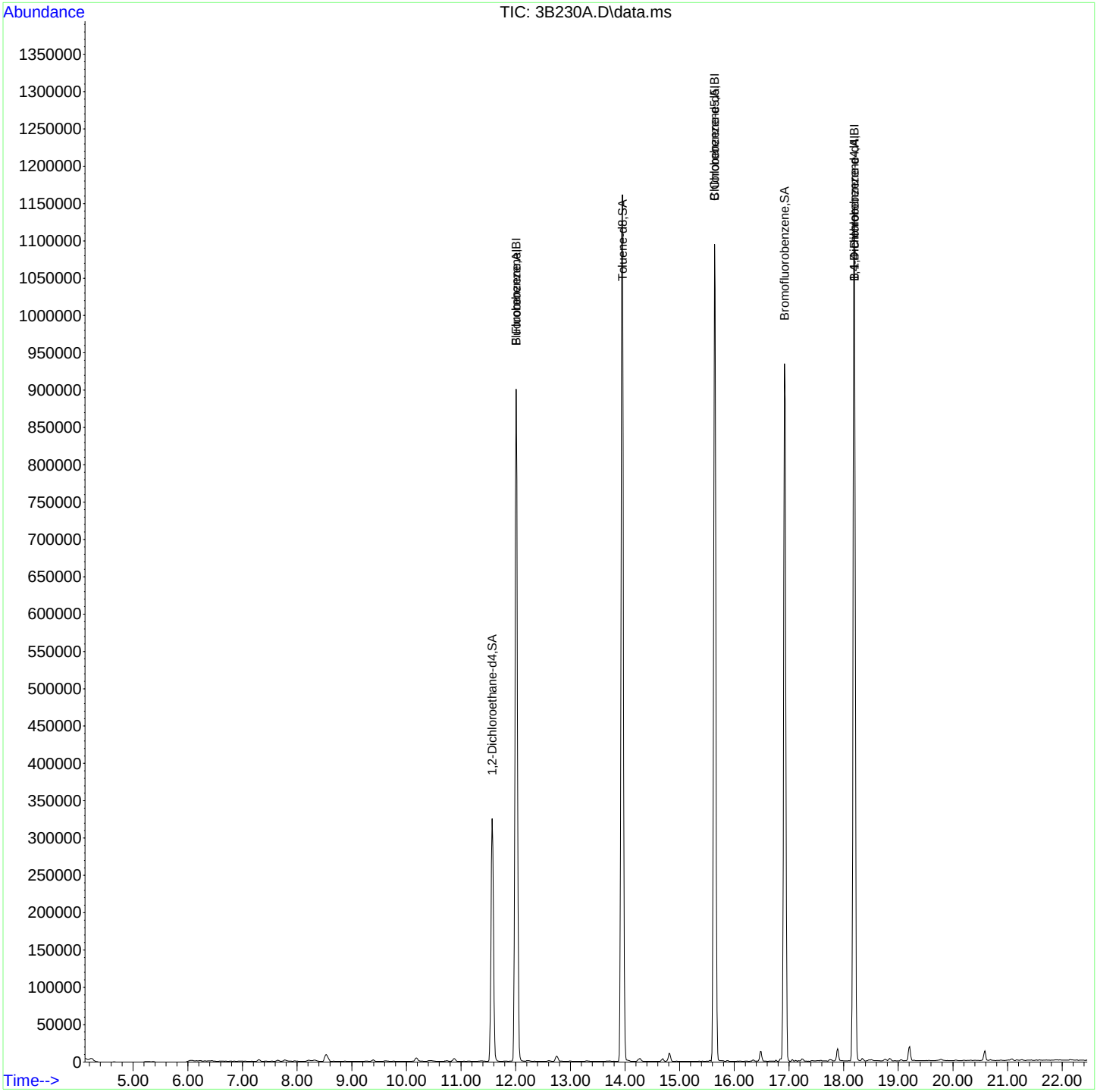
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate	43	10.430	10.454	0.869	5769	N.D.		
95) Propionitrile		0.000	10.501	0.000	0	N.D.		
96) Methacrylonitrile	41	10.868	10.726	0.905	2392	N.D.		
97) Tetrahydrofuran	42	10.868	10.869	0.905	3859	Below Cal		67
98) Isobutyl alcohol	41	11.366	11.343	0.947	640	N.D.		
99) Methyl tert-amyl ether		0.000	11.746	0.000	0	N.D.		
100) Methyl methacrylate	69	12.778	12.778	1.064	661	N.D.		
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.		
102) 2-Nitropropane	43	13.311	13.300	1.109	1453	N.D.		
104) Ethyl methacrylate	69	14.248	14.248	0.911	2205	N.D.		
106) 1-Chlorohexane	55	15.541	15.553	0.854	422	N.D.		
107) cis-1,4-Dichloro-2-butene	53	16.762	16.762	0.921	504	N.D.		
108) Cyclohexanone	42	16.869	16.869	0.927	888	Below Cal	#	16
109) trans-1,4-Dichloro-2-b...	53	17.058	17.059	0.937	852	N.D.		
110) Pentachloroethane	167	17.782	17.782	0.977	410	N.D.		
111) Benzyl chloride	91	18.339	18.339	1.008	6448	N.D.		
112) bis(2-Chloroisopropyl)...	45	18.766	18.754	1.031	2915	N.D.		

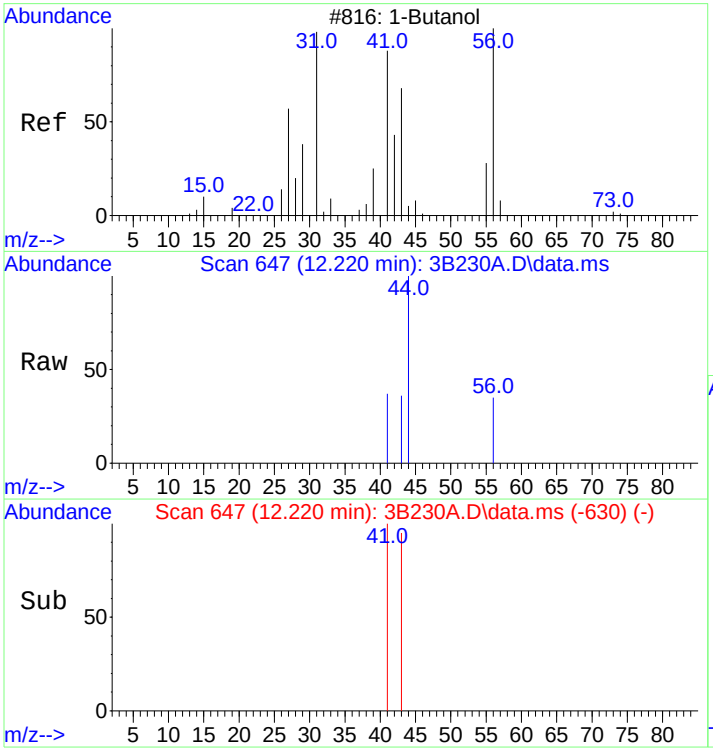
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B230A.D
Acq On : 30 Aug 2011 22:28
Operator : SYK1
InstName : VOA3
Sample : |1202477757|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 31 07:00:59 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

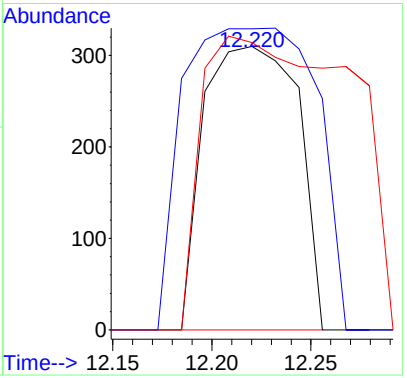




#33 BEFORE analyst DELETION
n-Butyl alcohol
Concen: 58.62 ug/L
RT: 12.220 min Scan# 647
Delta R.T. 0.035 min
Lab File: 3B230A.D
Acq: 30 Aug 2011 22:28

Tgt Ion: 56 Resp: 1020

Ion	Ratio	Lower	Upper
56	100		
41	149.3	37.4	97.4#
43	163.8	25.1	85.1#



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478370**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 10:24**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:24**				
Data File:	**083111V3\3B308A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane	U	0.300	ug/L	0.300	1.00
74-87-3	Chloromethane	U	0.300	ug/L	0.300	1.00
75-01-4	Vinyl chloride	U	0.500	ug/L	0.500	1.00
74-83-9	Bromomethane	U	0.300	ug/L	0.300	1.00
75-00-3	Chloroethane	U	0.300	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane	U	0.300	ug/L	0.300	1.00
60-29-7	Ethyl ether	U	0.300	ug/L	0.300	1.00
67-64-1	Acetone	U	1.50	ug/L	1.50	5.00
75-05-8	Acetonitrile	U	6.25	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene	U	0.300	ug/L	0.300	1.00
79-20-9	Methyl acetate	U	1.25	ug/L	1.25	5.00
74-88-4	Iodomethane	U	1.25	ug/L	1.25	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	5.00
75-15-0	Carbon disulfide	U	1.25	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether	U	0.250	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
108-05-4	Vinyl acetate	U	1.50	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane	U	0.300	ug/L	0.300	1.00
78-93-3	2-Butanone	U	1.25	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene	U	0.300	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane	U	0.300	ug/L	0.300	1.00
67-66-3	Chloroform	U	0.250	ug/L	0.250	1.00
74-97-5	Bromochloromethane	U	0.300	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane	U	0.325	ug/L	0.325	1.00
110-82-7	Cyclohexane	U	0.300	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene	U	0.250	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol	U	15.0	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride	U	0.300	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane	U	0.250	ug/L	0.250	1.00
71-43-2	Benzene	U	0.300	ug/L	0.300	1.00
79-01-6	Trichloroethylene	U	0.250	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane	U	0.250	ug/L	0.250	1.00
108-87-2	Methylcyclohexane	U	0.250	ug/L	0.250	1.00
75-27-4	Bromodichloromethane	U	0.250	ug/L	0.250	1.00
74-95-3	Dibromomethane	U	0.300	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone	U	1.25	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478370**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 10:24**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:24**				
Data File:	**083111V3\3B308A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene	U	0.250	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene	U	0.250	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane	U	0.250	ug/L	0.250	1.00
591-78-6	2-Hexanone	U	1.25	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane	U	0.300	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene	U	0.300	ug/L	0.300	1.00
124-48-1	Dibromochloromethane	U	0.300	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane	U	0.250	ug/L	0.250	1.00
108-90-7	Chlorobenzene	U	0.250	ug/L	0.250	1.00
100-41-4	Ethylbenzene	U	0.250	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes	U	0.500	ug/L	0.500	2.00
95-47-6	o-Xylene	U	0.300	ug/L	0.300	1.00
100-42-5	Styrene	U	0.250	ug/L	0.250	1.00
75-25-2	Bromoform	U	0.250	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane	U	0.250	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane	U	0.300	ug/L	0.300	1.00
108-86-1	Bromobenzene	U	0.250	ug/L	0.250	1.00
103-65-1	n-Propylbenzene	U	0.250	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-82-8	Isopropylbenzene	U	0.250	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene	U	0.250	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene	U	0.250	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene	U	0.250	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene	U	0.250	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene	U	0.250	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene	U	0.250	ug/L	0.250	1.00
104-51-8	n-Butylbenzene	U	0.250	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane	U	0.300	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.250	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene	U	0.332	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478370**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 10:24**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 10:24**				
Data File:	**083111V3\3B308A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)	U	0.300	ug/L	0.300	1.00
1330-20-7	Xylenes (total)	U	0.300	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane	U	0.300	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene	U	0.300	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene	U	0.250	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B308A.D
Acq On : 31 Aug 2011 10:24
Operator : SYK1
InstName : VOA3
Sample : |1202478370|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 10:46:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) Fluorobenzene	96	12.007	12.007	1.000	1344594	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	572255	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	588335	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1344594	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	572255	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	588335	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	77270	50.26	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1268843	49.93	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	558272	50.14	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	100.52%
43) Toluene-d8	50.000	80 - 120	99.86%
61) Bromofluorobenzene	50.000	80 - 120	100.28%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane		0.000	4.666	0.000	0	N.D.		
3) Chloromethane		0.000	5.068	0.000	0	N.D.		
4) Vinyl chloride		0.000	5.365	0.000	0	N.D.		
5) Bromomethane		0.000	6.125	0.000	0	N.D.		
6) Chloroethane		0.000	6.327	0.000	0	N.D.		
7) Trichlorofluoromethane		0.000	6.849	0.000	0	N.D.		
8) Ethyl ether		0.000	7.299	0.000	0	N.D.		
9) Acetone	43	7.773	7.762	0.647	5957	Below Cal		66
10) 1,1-Dichloroethylene		0.000	7.774	0.000	0	N.D.		
11) Iodomethane		0.000	8.070	0.000	0	N.D.		
12) Acetonitrile	41	8.248	8.224	0.687	3245	Below Cal	#	81
13) Methyl acetate	43	8.307	8.295	0.692	618	N.D.		
14) Carbon disulfide	76	8.188	8.212	0.682	2129	N.D.		
15) Methylene chloride	84	8.532	8.532	0.711	14438	N.D.		
16) tert-Butyl methyl ether		0.000	8.936	0.000	0	N.D.		
17) trans-1,2-Dichloroethy...		0.000	8.971	0.000	0	N.D.		
18) Vinyl acetate	43	9.623	9.612	0.801	1180	N.D.		
19) 1,1-Dichloroethane		0.000	9.623	0.000	0	N.D.		
20) 2-Butanone	43	10.181	10.406	0.848	3308	N.D.		
21) cis-1,2-Dichloroethylene		0.000	10.465	0.000	0	N.D.		
22) 2,2-Dichloropropane		0.000	10.489	0.000	0	N.D.		
23) Bromochloromethane		0.000	10.797	0.000	0	N.D.		
24) Chloroform		0.000	10.869	0.000	0	N.D.		
25) 1,1,1-Trichloroethane		0.000	11.201	0.000	0	N.D.		
26) Cyclohexane		0.000	11.307	0.000	0	N.D.		
27) 1,1-Dichloropropene		0.000	11.402	0.000	0	N.D.		
28) Carbon tetrachloride		0.000	11.438	0.000	0	N.D.		
30) 1,2-Dichloroethane		0.000	11.663	0.000	0	N.D.		
31) Benzene	78	11.687	11.687	0.973	193	N.D.		
32) Cyclohexene		0.000	11.829	0.000	0	N.D.		
33) n-Butyl alcohol		0.000	12.185	0.000	0	N.D.		
34) Trichloroethylene		0.000	12.481	0.000	0	N.D.		
35) 1,2-Dichloropropane		0.000	12.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B308A.D
Acq On : 31 Aug 2011 10:24
Operator : SYK1
InstName : VOA3
Sample : |1202478370|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 10:46:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
36) Methylcyclohexane		0.000	12.766	0.000	0	N.D.	
37) Dibromomethane		0.000	12.920	0.000	0	N.D.	
38) Bromodichloromethane		0.000	13.062	0.000	0	N.D.	
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.	
40) cis-1,3-Dichloropropylene		0.000	13.596	0.000	0	N.D.	
42) 4-Methyl-2-pentanone		0.000	13.715	0.000	0	N.D.	
44) Toluene	91	14.035	14.035	0.898	776	N.D.	
45) trans-1,3-Dichloroprop...		0.000	14.213	0.000	0	N.D.	
46) 1,1,2-Trichloroethane		0.000	14.462	0.000	0	N.D.	
47) 2-Hexanone	58	14.687	14.675	0.939	448	Below Cal #	1
48) 1,3-Dichloropropane		0.000	14.663	0.000	0	N.D.	
49) Tetrachloroethylene		0.000	14.699	0.000	0	N.D.	
50) Dibromochloromethane		0.000	14.960	0.000	0	N.D.	
51) 1,2-Dibromoethane		0.000	15.138	0.000	0	N.D.	
52) Chlorobenzene	112	15.671	15.671	1.002	186	N.D.	
53) 1,1,1,2-Tetrachloroethane		0.000	15.742	0.000	0	N.D.	
54) Ethylbenzene		0.000	15.754	0.000	0	N.D.	
55) m,p-Xylenes	106	15.873	15.873	1.015	181	N.D.	
56) o-Xylene		0.000	16.335	0.000	0	N.D.	
57) Styrene	104	16.347	16.335	1.046	387	N.D.	
59) Bromoform		0.000	16.608	0.000	0	N.D.	
60) Isopropylbenzene		0.000	16.715	0.000	0	N.D.	
62) 1,1,2,2-Tetrachloroethane		0.000	17.011	0.000	0	N.D.	
63) 1,2,3-Trichloropropane		0.000	17.094	0.000	0	N.D.	
64) Bromobenzene		0.000	17.142	0.000	0	N.D.	
65) n-Propylbenzene	91	17.165	17.165	0.943	384	N.D.	
66) 1,3,5-Trimethylbenzene		0.000	17.331	0.000	0	N.D.	
67) 2-Chlorotoluene		0.000	17.320	0.000	0	N.D.	
68) 4-Chlorotoluene	91	17.426	17.415	0.958	508	N.D.	
69) tert-Butylbenzene		0.000	17.711	0.000	0	N.D.	
70) 1,2,4-Trimethylbenzene		0.000	17.747	0.000	0	N.D.	
71) sec-Butylbenzene		0.000	17.948	0.000	0	N.D.	
72) 4-Isopropyltoluene		0.000	18.067	0.000	0	N.D.	
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	417	N.D.	
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	827	N.D.	
75) n-Butylbenzene	91	18.339	18.529	1.008	1913	N.D.	
76) 1,2-Dichlorobenzene		0.000	18.660	0.000	0	N.D.	
77) 1,2-Dibromo-3-chloropr...		0.000	19.573	0.000	0	N.D.	
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	198	N.D.	
79) Hexachlorobutadiene		0.000	20.865	0.000	0	N.D.	
80) Naphthalene	128	21.079	21.079	1.158	2019	N.D.	
81) 1,2,3-Trichlorobenzene		0.000	21.435	0.000	0	N.D.	
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.	
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.	
85) Acrolein		0.000	7.524	0.000	0	N.D.	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.	
87) Isopropyl Alcohol		0.000	7.928	0.000	0	N.D.	
88) Allyl chloride	41	8.248	8.331	0.687	3245	Below Cal #	27
89) tert-Butyl Alcohol		0.000	8.580	0.000	0	N.D.	
90) Acrylonitrile		0.000	8.864	0.000	0	N.D.	
91) Isopropyl ether		0.000	9.647	0.000	0	N.D.	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B308A.D
Acq On : 31 Aug 2011 10:24
Operator : SYK1
InstName : VOA3
Sample : |1202478370|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 10:46:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

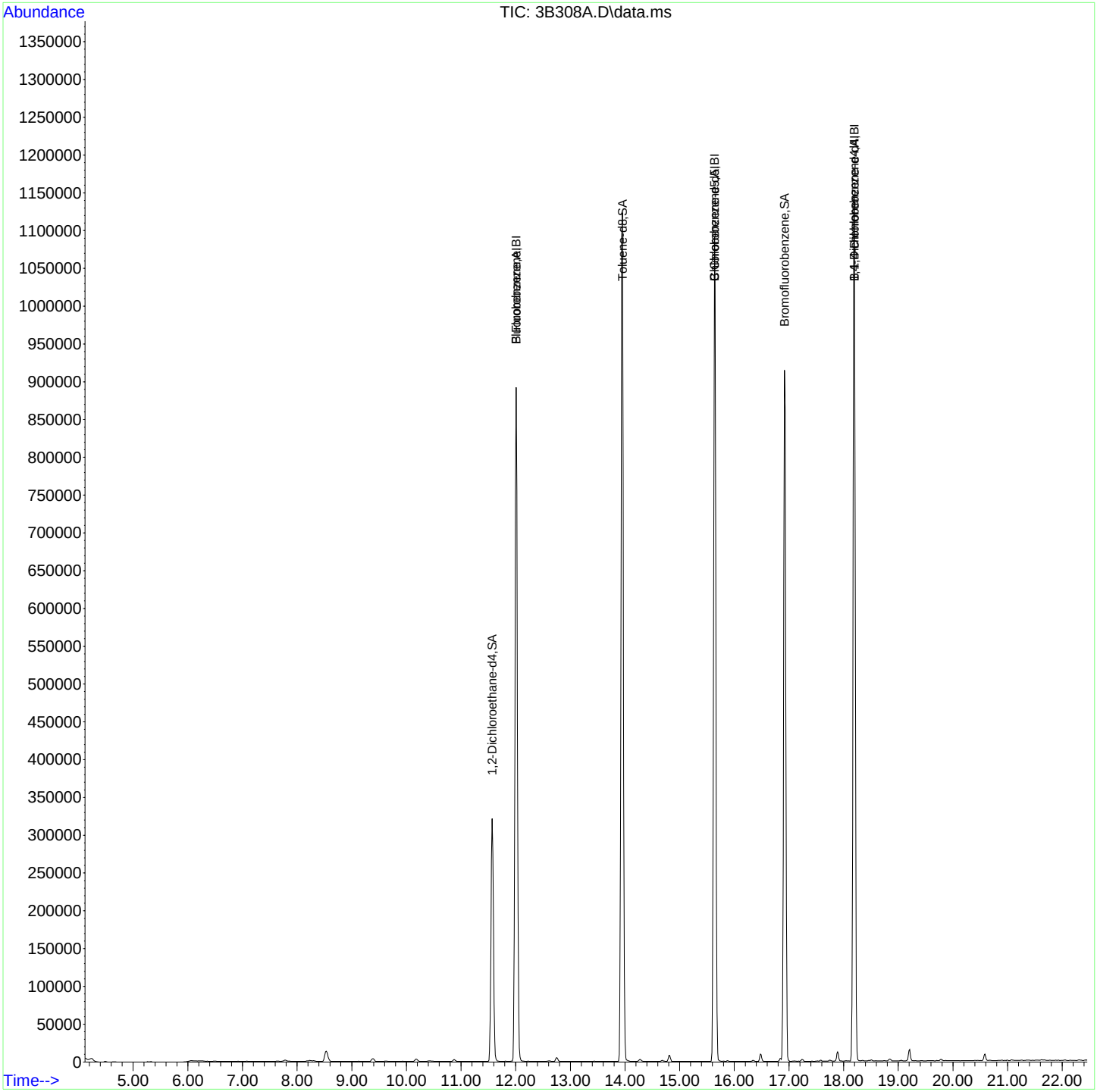
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.		
94) Ethyl acetate	43	10.418	10.454	0.868	3329	N.D.		
95) Propionitrile		0.000	10.501	0.000	0	N.D.		
96) Methacrylonitrile	41	10.868	10.726	0.905	1660	N.D.		
97) Tetrahydrofuran	42	10.868	10.869	0.905	2443	Below Cal		69
98) Isobutyl alcohol		0.000	11.343	0.000	0	N.D.		
99) Methyl tert-amyl ether		0.000	11.746	0.000	0	N.D.		
100) Methyl methacrylate		0.000	12.778	0.000	0	N.D.		
101) 1,4-Dioxane		0.000	12.884	0.000	0	N.D.		
102) 2-Nitropropane		0.000	13.300	0.000	0	N.D.		
104) Ethyl methacrylate	69	14.248	14.248	0.911	206	N.D.		
106) 1-Chlorohexane		0.000	15.553	0.000	0m	N.D.	d	
107) cis-1,4-Dichloro-2-butene		0.000	16.762	0.000	0	N.D.		
108) Cyclohexanone		0.000	16.869	0.000	0	N.D.		
109) trans-1,4-Dichloro-2-b...		0.000	17.059	0.000	0	N.D.		
110) Pentachloroethane		0.000	17.782	0.000	0	N.D.		
111) Benzyl chloride	91	18.339	18.339	1.008	1913	N.D.		
112) bis(2-Chloroisopropyl)...		0.000	18.754	0.000	0	N.D.		

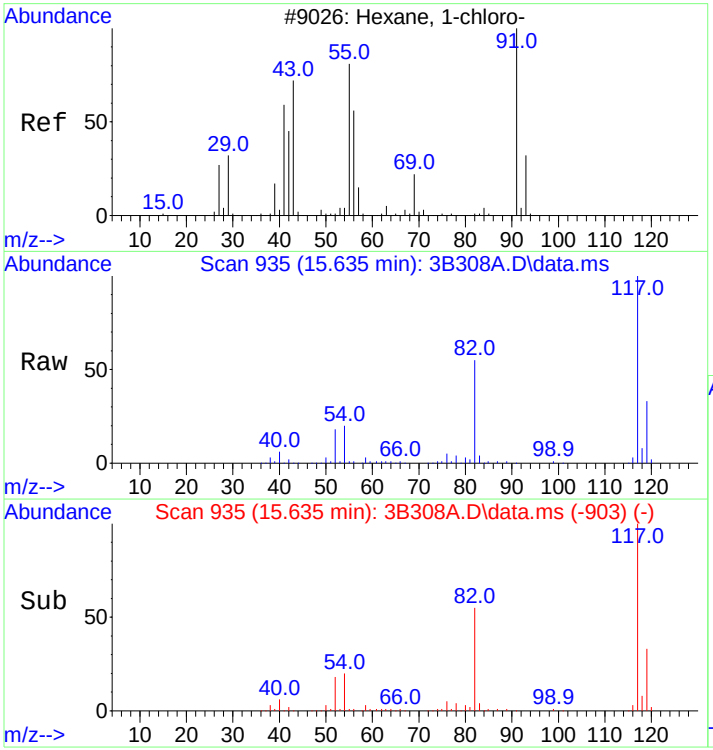
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B308A.D
Acq On : 31 Aug 2011 10:24
Operator : SYK1
InstName : VOA3
Sample : |1202478370|1137563|1|VOA|1|VOA8260BL|
Misc : BLANK 5ML n/a
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 31 10:46:36 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

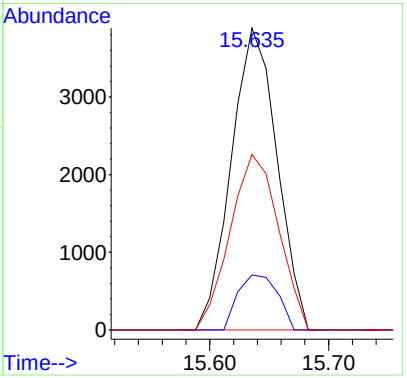




#106 BEFORE analyst DELETION
1-Chlorohexane
Concen: 1.45 ug/L
RT: 15.635 min Scan# 935
Delta R.T. 0.082 min
Lab File: 3B308A.D
Acq: 31 Aug 2011 10:24

Tgt Ion: 55 Resp: 10399

Ion	Ratio	Lower	Upper
55	100		
91	15.8	123.6	183.6#
56	61.6	31.5	91.5



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477760**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 21:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 21:28**				
Data File:	**083011V3\3B228A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		38.8	ug/L	0.300	1.00
74-87-3	Chloromethane		47.0	ug/L	0.300	1.00
75-01-4	Vinyl chloride		45.8	ug/L	0.500	1.00
74-83-9	Bromomethane		46.1	ug/L	0.300	1.00
75-00-3	Chloroethane		50.8	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane		45.5	ug/L	0.300	1.00
60-29-7	Ethyl ether		48.9	ug/L	0.300	1.00
67-64-1	Acetone		189	ug/L	1.50	5.00
75-05-8	Acetonitrile		1370	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene		43.3	ug/L	0.300	1.00
79-20-9	Methyl acetate		242	ug/L	1.25	5.00
74-88-4	Iodomethane		231	ug/L	1.25	5.00
75-09-2	Methylene chloride		45.6	ug/L	2.00	5.00
75-15-0	Carbon disulfide		230	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		45.6	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene		43.6	ug/L	0.300	1.00
108-05-4	Vinyl acetate		233	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane		44.1	ug/L	0.300	1.00
78-93-3	2-Butanone		185	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		45.4	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane		41.9	ug/L	0.300	1.00
67-66-3	Chloroform		45.3	ug/L	0.250	1.00
74-97-5	Bromochloromethane		47.6	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane		44.2	ug/L	0.325	1.00
110-82-7	Cyclohexane		43.3	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene		42.8	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol		5260	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride		42.8	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane		45.0	ug/L	0.250	1.00
71-43-2	Benzene		45.2	ug/L	0.300	1.00
79-01-6	Trichloroethylene		44.9	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		45.6	ug/L	0.250	1.00
108-87-2	Methylcyclohexane		43.5	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		46.9	ug/L	0.250	1.00
74-95-3	Dibromomethane		47.1	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether		214	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		240	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		46.7	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477760**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 21:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 21:28**				
Data File:	**083011V3\3B228A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene		44.2	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.2	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		47.7	ug/L	0.250	1.00
591-78-6	2-Hexanone		232	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane		46.3	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene		43.3	ug/L	0.300	1.00
124-48-1	Dibromochloromethane		47.6	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane		48.4	ug/L	0.250	1.00
108-90-7	Chlorobenzene		45.9	ug/L	0.250	1.00
100-41-4	Ethylbenzene		43.0	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		88.8	ug/L	0.500	2.00
95-47-6	o-Xylene		45.3	ug/L	0.300	1.00
100-42-5	Styrene		44.7	ug/L	0.250	1.00
75-25-2	Bromoform		49.1	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		49.0	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane		48.4	ug/L	0.300	1.00
108-86-1	Bromobenzene		46.1	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		43.6	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene		46.6	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		44.2	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		44.2	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		44.4	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		46.0	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene		44.2	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		44.6	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		44.5	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		45.7	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		46.2	ug/L	0.250	1.00
104-51-8	n-Butylbenzene		45.0	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		52.0	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene		43.8	ug/L	0.300	1.00
91-20-3	Naphthalene		50.7	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		48.4	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477760**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 21:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/30/2011 21:28**				
Data File:	**083011V3\3B228A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)		89.0	ug/L	0.300	1.00
1330-20-7	Xylenes (total)		134	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane		46.8	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene		46.8	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene		46.6	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B228A.D
Acq On : 30 Aug 2011 21:28
Operator : SYK1
InstName : VOA3
Sample : |1202477760|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 31 06:58:43 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1329586	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	580493	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	592456	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1329586	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	580493	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	592456	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	75221	49.48	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1229853	47.70	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	567722	50.63	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	98.96%
43) Toluene-d8	50.000	80 - 120	95.40%
61) Bromofluorobenzene	50.000	80 - 120	101.26%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.651	4.666	0.387	207995	38.83	ug/L	98
3) Chloromethane	50	5.067	5.068	0.422	298460	46.99	ug/L	99
4) Vinyl chloride	62	5.365	5.365	0.447	295532	45.75	ug/L	100
5) Bromomethane	94	6.113	6.125	0.509	363794	46.09	ug/L	99
6) Chloroethane	64	6.327	6.327	0.527	246295	50.83	ug/L	100
7) Trichlorofluoromethane	101	6.837	6.849	0.569	472921	45.49	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	307064	48.89	ug/L	98
9) Acetone	43	7.761	7.762	0.646	773770	188.93	ug/L	100
10) 1,1-Dichloroethylene	61	7.773	7.774	0.647	487258	43.29	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	3182865	231.03	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	1102654	1366.18	ug/L	99
13) Methyl acetate	43	8.295	8.295	0.691	1354388	241.57	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	5509081	230.40	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	426178	45.58	ug/L	99
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	1032904	45.64	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	455510	43.62	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	3142692	233.31	ug/L	99
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	571606	44.08	ug/L	99
20) 2-Butanone	43	10.418	10.406	0.868	1078113	185.06	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	397752	45.38	ug/L	99
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	420473	41.88	ug/L	100
23) Bromochloromethane	128	10.809	10.797	0.900	203796	47.59	ug/L	98
24) Chloroform	83	10.868	10.869	0.905	610991	45.25	ug/L	99
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	513781	44.19	ug/L	100
26) Cyclohexane	56	11.307	11.307	0.942	561666	43.27	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	412924	42.76	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	418487	42.79	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	416504	44.97	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1305370	45.20	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	629720	42.76	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1119962	5255.38	ug/L	99
34) Trichloroethylene	95	12.481	12.481	1.040	346072	44.93	ug/L	99
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	333948	45.56	ug/L	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B228A.D
Acq On : 30 Aug 2011 21:28
Operator : SYK1
InstName : VOA3
Sample : |1202477760|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 31 06:58:43 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
36)	Methylcyclohexane	83	12.766	12.766	1.063	558457	43.45	ug/L	99
37)	Dibromomethane	93	12.920	12.920	1.076	223862	47.10	ug/L	98
38)	Bromodichloromethane	83	13.062	13.062	1.088	492193	46.90	ug/L	100
39)	2-Chloroethylvinyl ether	63	13.347	13.347	1.112	803051	213.96	ug/L	98
40)	cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	582663	46.74	ug/L	99
42)	4-Methyl-2-pentanone	58	13.714	13.715	0.877	731133	240.04	ug/L	100
44)	Toluene	91	14.035	14.035	0.898	1345857	44.15	ug/L	100
45)	trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	532864	46.23	ug/L	99
46)	1,1,2-Trichloroethane	83	14.462	14.462	0.925	272235	47.68	ug/L	100
47)	2-Hexanone	58	14.675	14.675	0.939	755079	231.91	ug/L	99
48)	1,3-Dichloropropane	76	14.663	14.663	0.938	516682	46.26	ug/L	93
49)	Tetrachloroethylene	164	14.699	14.699	0.940	270021	43.27	ug/L	99
50)	Dibromochloromethane	129	14.960	14.960	0.957	402034	47.55	ug/L	99
51)	1,2-Dibromoethane	107	15.137	15.138	0.968	360676	48.39	ug/L	100
52)	Chlorobenzene	112	15.671	15.671	1.002	931677	45.88	ug/L	100
53)	1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	357890	46.82	ug/L	99
54)	Ethylbenzene	91	15.754	15.754	1.008	1447345	42.95	ug/L	100
55)	m,p-Xylenes	106	15.873	15.873	1.015	1218470	88.80	ug/L	99
56)	o-Xylene	106	16.335	16.335	1.045	645074	45.28	ug/L	100
57)	Styrene	104	16.335	16.335	1.045	1048254	44.71	ug/L	100
59)	Bromoform	173	16.608	16.608	0.913	278875	49.07	ug/L	98
60)	Isopropylbenzene	105	16.715	16.715	0.919	1576480	44.20	ug/L	100
62)	1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	448190	49.04	ug/L	99
63)	1,2,3-Trichloropropane	110	17.094	17.094	0.939	129309	48.42	ug/L	99
64)	Bromobenzene	156	17.142	17.142	0.942	443579	46.13	ug/L	98
65)	n-Propylbenzene	91	17.165	17.165	0.943	1791399	43.58	ug/L	100
66)	1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1312069	44.18	ug/L	100
67)	2-Chlorotoluene	126	17.319	17.320	0.952	411945	46.62	ug/L	98
68)	4-Chlorotoluene	91	17.426	17.415	0.958	1200790	44.41	ug/L	100
69)	tert-Butylbenzene	134	17.711	17.711	0.973	315920	46.04	ug/L	97
70)	1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1354248	44.24	ug/L	100
71)	sec-Butylbenzene	105	17.948	17.948	0.986	1798692	44.59	ug/L	99
72)	4-Isopropyltoluene	119	18.067	18.067	0.993	1437620	44.46	ug/L	99
73)	1,3-Dichlorobenzene	146	18.126	18.126	0.996	836168	45.73	ug/L	99
74)	1,4-Dichlorobenzene	146	18.221	18.221	1.001	812623	46.21	ug/L	100
75)	n-Butylbenzene	91	18.529	18.529	1.018	1463128	44.97	ug/L	100
76)	1,2-Dichlorobenzene	146	18.659	18.660	1.025	832185	46.56	ug/L	100
77)	1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	101833	52.01	ug/L	96
78)	1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	548270	46.84	ug/L	99
79)	Hexachlorobutadiene	225	20.865	20.865	1.147	304241	43.83	ug/L	99
80)	Naphthalene	128	21.079	21.079	1.158	1191672	50.68	ug/L	100
81)	1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	466802	48.36	ug/L	99
83)	Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84)	2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85)	Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86)	Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87)	Isopropyl Alcohol		7.773	7.928	0.647	0m	N.D.	d	
88)	Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89)	tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90)	Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d	
91)	Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92)	2-Chloro-1,3-butadiene		9.611	9.766	0.800	0m	N.D.	d	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B228A.D
Acq On : 30 Aug 2011 21:28
Operator : SYK1
InstName : VOA3
Sample : |1202477760|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 31 06:58:43 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

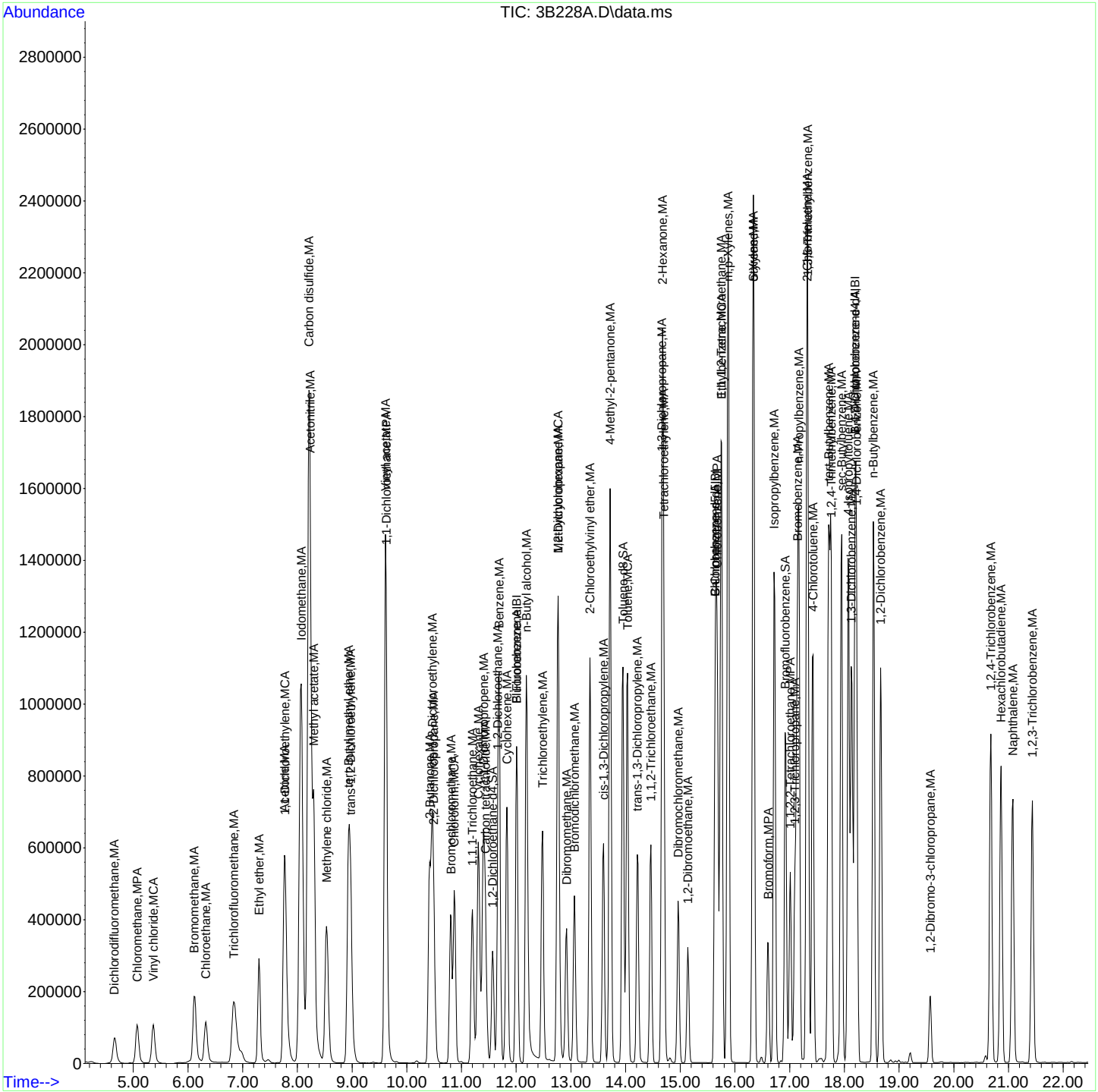
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.	
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d
95) Propionitrile		10.406	10.501	0.867	0m	N.D.	d
96) Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d
97) Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.541	15.553	0.854	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.837	18.754	1.035	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B228A.D
Acq On : 30 Aug 2011 21:28
Operator : SYK1
InstName : VOA3
Sample : |1202477760|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 31 06:58:43 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478371**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 07:53**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 07:53**				
Data File:	**083111V3\3B303A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		42.2	ug/L	0.300	1.00
74-87-3	Chloromethane		47.0	ug/L	0.300	1.00
75-01-4	Vinyl chloride		46.6	ug/L	0.500	1.00
74-83-9	Bromomethane		46.3	ug/L	0.300	1.00
75-00-3	Chloroethane		52.1	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane		49.3	ug/L	0.300	1.00
60-29-7	Ethyl ether		46.1	ug/L	0.300	1.00
67-64-1	Acetone		192	ug/L	1.50	5.00
75-05-8	Acetonitrile		1220	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene		45.4	ug/L	0.300	1.00
79-20-9	Methyl acetate		219	ug/L	1.25	5.00
74-88-4	Iodomethane		233	ug/L	1.25	5.00
75-09-2	Methylene chloride		44.8	ug/L	2.00	5.00
75-15-0	Carbon disulfide		237	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		43.9	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene		44.7	ug/L	0.300	1.00
108-05-4	Vinyl acetate		225	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane		43.7	ug/L	0.300	1.00
78-93-3	2-Butanone		177	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		44.7	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane		44.3	ug/L	0.300	1.00
67-66-3	Chloroform		44.8	ug/L	0.250	1.00
74-97-5	Bromochloromethane		45.3	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane		46.3	ug/L	0.325	1.00
110-82-7	Cyclohexane		45.7	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene		45.0	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol		4700	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride		45.9	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane		43.2	ug/L	0.250	1.00
71-43-2	Benzene		45.2	ug/L	0.300	1.00
79-01-6	Trichloroethylene		45.9	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		44.1	ug/L	0.250	1.00
108-87-2	Methylcyclohexane		46.1	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		46.0	ug/L	0.250	1.00
74-95-3	Dibromomethane		45.2	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether		206	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		223	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.8	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478371**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 07:53**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 07:53**				
Data File:	**083111V3\3B303A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene		45.4	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		46.1	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		46.1	ug/L	0.250	1.00
591-78-6	2-Hexanone		226	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane		43.9	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene		45.5	ug/L	0.300	1.00
124-48-1	Dibromochloromethane		46.7	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane		46.5	ug/L	0.250	1.00
108-90-7	Chlorobenzene		46.0	ug/L	0.250	1.00
100-41-4	Ethylbenzene		44.8	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		92.6	ug/L	0.500	2.00
95-47-6	o-Xylene		46.6	ug/L	0.300	1.00
100-42-5	Styrene		45.7	ug/L	0.250	1.00
75-25-2	Bromoform		48.1	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		45.9	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane		44.9	ug/L	0.300	1.00
108-86-1	Bromobenzene		45.6	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		44.4	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene		47.5	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		45.3	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		44.9	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		44.9	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		47.3	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene		45.3	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		45.7	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		46.5	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		46.2	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		46.8	ug/L	0.250	1.00
104-51-8	n-Butylbenzene		46.1	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.5	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene		45.1	ug/L	0.300	1.00
91-20-3	Naphthalene		49.5	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		48.6	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202478371**				
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1137563**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 07:53**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 07:53**				
Data File:	**083111V3\3B303A.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)		89.4	ug/L	0.300	1.00
1330-20-7	Xylenes (total)		139	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane		47.2	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene		49.0	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene		46.2	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B303A.D
Acq On : 31 Aug 2011 07:53
Operator : SYK1
InstName : VOA3
Sample : |1202478371|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 08:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1352348	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	584102	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	602470	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1352348	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	584102	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	602470	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	74656	48.28	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1252764	48.29	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	571575	50.13	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	96.56%
43) Toluene-d8	50.000	80 - 120	96.58%
61) Bromofluorobenzene	50.000	80 - 120	100.26%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.651	4.666	0.387	229965	42.21	ug/L	99
3) Chloromethane	50	5.067	5.068	0.422	303511	46.98	ug/L	100
4) Vinyl chloride	62	5.365	5.365	0.447	305855	46.55	ug/L	100
5) Bromomethane	94	6.125	6.125	0.510	371330	46.26	ug/L	100
6) Chloroethane	64	6.327	6.327	0.527	256897	52.13	ug/L	99
7) Trichlorofluoromethane	101	6.837	6.849	0.569	521378	49.30	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	294251	46.07	ug/L	98
9) Acetone	43	7.762	7.762	0.646	800092	192.31	ug/L	99
10) 1,1-Dichloroethylene	61	7.762	7.774	0.646	519653	45.39	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	3270260	233.37	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	1003730	1216.72	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1247592	218.77	ug/L	100
14) Carbon disulfide	76	8.212	8.212	0.684	5759313	236.81	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	425864	44.78	ug/L	99
16) tert-Butyl methyl ether	73	8.936	8.936	0.744	1011468	43.94	ug/L	99
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	474396	44.67	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	3078290	224.69	ug/L	100
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	576558	43.71	ug/L	100
20) 2-Butanone	43	10.418	10.406	0.868	1050998	177.37	ug/L	100
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	398631	44.72	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	452797	44.34	ug/L	98
23) Bromochloromethane	128	10.809	10.797	0.900	197243	45.29	ug/L	98
24) Chloroform	83	10.868	10.869	0.905	614708	44.76	ug/L	99
25) 1,1,1-Trichloroethane	97	11.201	11.201	0.933	546977	46.25	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	603405	45.71	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	442164	45.02	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	456843	45.93	ug/L	99
30) 1,2-Dichloroethane	62	11.675	11.663	0.972	407015	43.20	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1327493	45.19	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	666479	44.50	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1017879	4701.71	ug/L	100
34) Trichloroethylene	95	12.481	12.481	1.040	359519	45.89	ug/L	100
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	328558	44.07	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B303A.D
Acq On : 31 Aug 2011 07:53
Operator : SYK1
InstName : VOA3
Sample : |1202478371|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 08:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
36) Methylcyclohexane	83	12.766	12.766	1.063	602648	46.09	ug/L	100
37) Dibromomethane	93	12.920	12.920	1.076	218530	45.20	ug/L	98
38) Bromodichloromethane	83	13.062	13.062	1.088	491318	46.03	ug/L	100
39) 2-Chloroethylvinyl ether	63	13.347	13.347	1.112	786382	205.99	ug/L	99
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	580934	45.82	ug/L	99
42) 4-Methyl-2-pentanone	58	13.715	13.715	0.877	683952	223.16	ug/L	100
44) Toluene	91	14.035	14.035	0.898	1393715	45.43	ug/L	100
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	534082	46.05	ug/L	98
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	264673	46.07	ug/L	99
47) 2-Hexanone	58	14.675	14.675	0.939	741869	226.10	ug/L	99
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	493325	43.89	ug/L	93
49) Tetrachloroethylene	164	14.699	14.699	0.940	285980	45.54	ug/L	100
50) Dibromochloromethane	129	14.960	14.960	0.957	397276	46.69	ug/L	100
51) 1,2-Dibromoethane	107	15.138	15.138	0.968	348953	46.53	ug/L	100
52) Chlorobenzene	112	15.671	15.671	1.002	940540	46.03	ug/L	100
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	362983	47.19	ug/L	100
54) Ethylbenzene	91	15.754	15.754	1.008	1519418	44.81	ug/L	100
55) m,p-Xylenes	106	15.873	15.873	1.015	1277966	92.56	ug/L	98
56) o-Xylene	106	16.335	16.335	1.045	667995	46.60	ug/L	99
57) Styrene	104	16.335	16.335	1.045	1076727	45.65	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	278200	48.13	ug/L	99
60) Isopropylbenzene	105	16.715	16.715	0.919	1644105	45.33	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	426921	45.93	ug/L	99
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	122000	44.92	ug/L	95
64) Bromobenzene	156	17.142	17.142	0.942	446010	45.61	ug/L	100
65) n-Propylbenzene	91	17.165	17.165	0.943	1857941	44.44	ug/L	100
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1355104	44.87	ug/L	99
67) 2-Chlorotoluene	126	17.320	17.320	0.952	426485	47.47	ug/L	97
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1233206	44.85	ug/L	100
69) tert-Butylbenzene	134	17.711	17.711	0.973	329740	47.25	ug/L	99
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1410331	45.31	ug/L	100
71) sec-Butylbenzene	105	17.948	17.948	0.986	1874715	45.70	ug/L	99
72) 4-Isopropyltoluene	119	18.078	18.067	0.993	1529850	46.52	ug/L	100
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	859519	46.22	ug/L	99
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	836267	46.76	ug/L	100
75) n-Butylbenzene	91	18.529	18.529	1.018	1523799	46.06	ug/L	100
76) 1,2-Dichlorobenzene	146	18.660	18.660	1.025	839605	46.20	ug/L	100
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	94502	47.47	ug/L	99
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	583335	49.01	ug/L	99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	318046	45.05	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	1182496	49.45	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	477370	48.64	ug/L	100
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		0.000	7.524	0.000	0	N.D.		
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.762	7.928	0.646	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		8.592	8.580	0.716	0m	N.D.	d	
90) Acrylonitrile		8.936	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B303A.D
Acq On : 31 Aug 2011 07:53
Operator : SYK1
InstName : VOA3
Sample : |1202478371|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 08:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

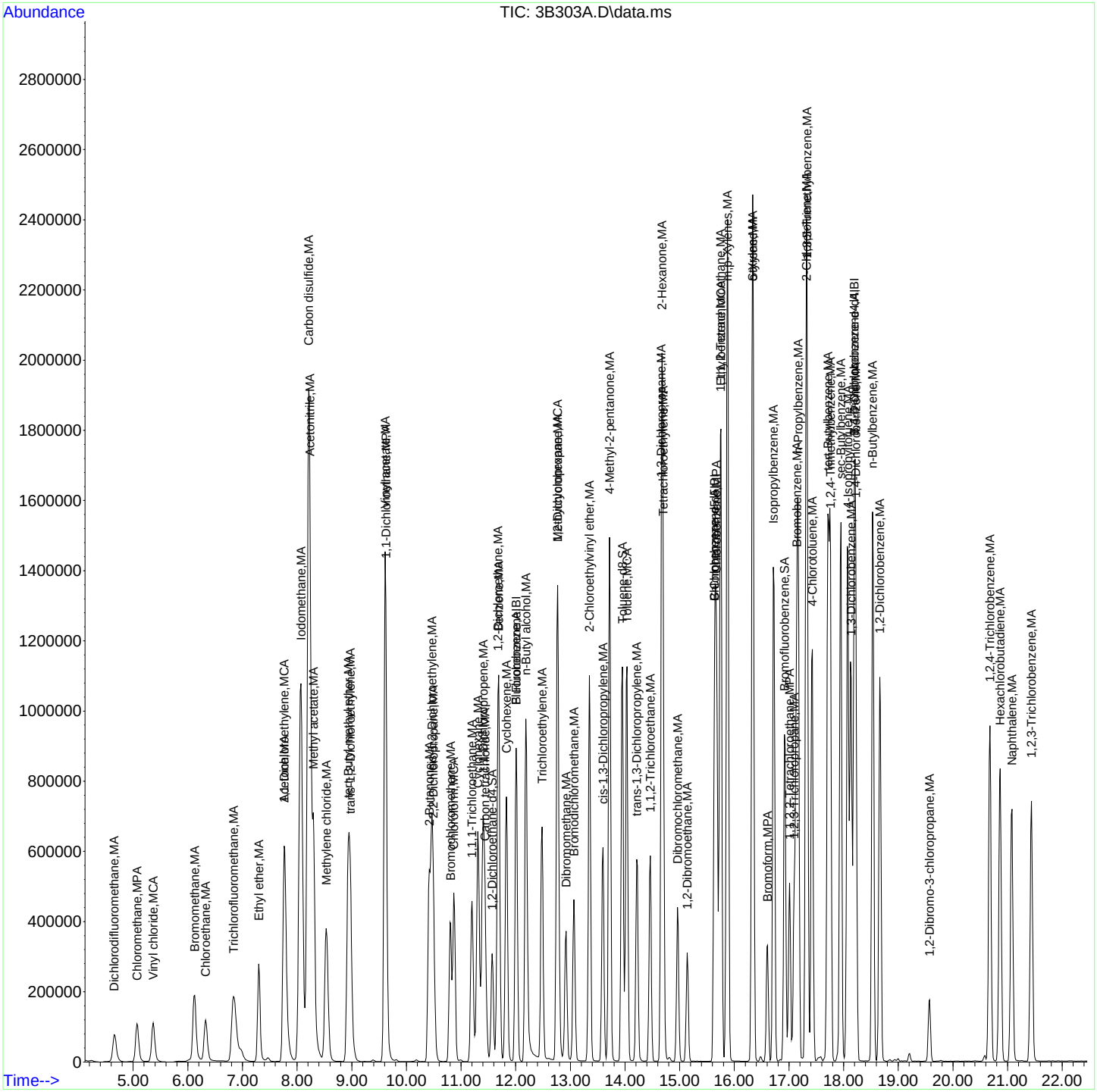
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.	
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d
95) Propionitrile		10.406	10.501	0.867	0m	N.D.	d
96) Methacrylonitrile		10.868	10.726	0.905	0m	N.D.	d
97) Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102) 2-Nitropropane		13.347	13.300	1.112	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.529	18.339	1.018	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		0.000	18.754	0.000	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083111V3\
Data File : 3B303A.D
Acq On : 31 Aug 2011 07:53
Operator : SYK1
InstName : VOA3
Sample : |1202478371|1137563|1|VOA|1|VOA8260BL|
Misc : LCS 5ML n/a MIX[A] 0817-01A+0827-01
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 08:41:53 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477758**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:28**				
Data File:	**083011V3\3B234.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		37.5	ug/L	0.300	1.00
74-87-3	Chloromethane		47.0	ug/L	0.300	1.00
75-01-4	Vinyl chloride		45.4	ug/L	0.500	1.00
74-83-9	Bromomethane		45.3	ug/L	0.300	1.00
75-00-3	Chloroethane		48.7	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane		44.0	ug/L	0.300	1.00
60-29-7	Ethyl ether		47.2	ug/L	0.300	1.00
67-64-1	Acetone		126	ug/L	1.50	5.00
75-05-8	Acetonitrile		1270	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene		42.5	ug/L	0.300	1.00
79-20-9	Methyl acetate		202	ug/L	1.25	5.00
74-88-4	Iodomethane		227	ug/L	1.25	5.00
75-09-2	Methylene chloride		44.9	ug/L	2.00	5.00
75-15-0	Carbon disulfide		225	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		44.3	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene		43.0	ug/L	0.300	1.00
108-05-4	Vinyl acetate		204	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane		43.4	ug/L	0.300	1.00
78-93-3	2-Butanone		148	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		44.6	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane		39.3	ug/L	0.300	1.00
67-66-3	Chloroform		44.5	ug/L	0.250	1.00
74-97-5	Bromochloromethane		46.5	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane		42.2	ug/L	0.325	1.00
110-82-7	Cyclohexane		41.1	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene		41.8	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol		4750	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride		41.3	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane		44.1	ug/L	0.250	1.00
71-43-2	Benzene		44.3	ug/L	0.300	1.00
79-01-6	Trichloroethylene		43.5	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		44.6	ug/L	0.250	1.00
108-87-2	Methylcyclohexane		41.3	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		45.2	ug/L	0.250	1.00
74-95-3	Dibromomethane		46.3	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		223	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		45.1	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477758**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:28**				
Data File:	**083011V3\3B234.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene		43.5	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		43.7	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		46.5	ug/L	0.250	1.00
591-78-6	2-Hexanone		203	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane		45.7	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene		41.5	ug/L	0.300	1.00
124-48-1	Dibromochloromethane		46.1	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane		46.2	ug/L	0.250	1.00
108-90-7	Chlorobenzene		44.1	ug/L	0.250	1.00
100-41-4	Ethylbenzene		42.6	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		87.2	ug/L	0.500	2.00
95-47-6	o-Xylene		45.0	ug/L	0.300	1.00
100-42-5	Styrene		44.2	ug/L	0.250	1.00
75-25-2	Bromoform		48.3	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		47.9	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane		47.4	ug/L	0.300	1.00
108-86-1	Bromobenzene		46.6	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		43.5	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene		47.5	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		44.3	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		44.1	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		44.7	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		45.4	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene		44.0	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		44.7	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		44.6	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		45.4	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		45.4	ug/L	0.250	1.00
104-51-8	n-Butylbenzene		43.4	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		47.6	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene		43.2	ug/L	0.300	1.00
91-20-3	Naphthalene		45.3	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		43.0	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477758**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PS**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:28**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:28**				
Data File:	**083011V3\3B234.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)		87.6	ug/L	0.300	1.00
1330-20-7	Xylenes (total)		132	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane		46.3	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene		43.2	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene		46.1	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B234.D
Acq On : 31 Aug 2011 00:28
Operator : SYK1
InstName : VOA3
Sample : |1202477758|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MS 284538001 MIX[A]
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 31 07:20:32 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1280033	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.636	15.636	1.000	553520	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	548589	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1280033	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.636	15.636	1.000	553520	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	548589	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	70026	47.85	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1197151	48.70	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	534651	51.50	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	95.70%
43) Toluene-d8	50.000	80 - 120	97.40%
61) Bromofluorobenzene	50.000	80 - 120	103.00%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	193396	37.50	ug/L	99
3) Chloromethane	50	5.067	5.068	0.422	287157	46.96	ug/L	99
4) Vinyl chloride	62	5.365	5.365	0.447	282588	45.44	ug/L	99
5) Bromomethane	94	6.125	6.125	0.510	344089	45.29	ug/L	100
6) Chloroethane	64	6.327	6.327	0.527	227181	48.70	ug/L	99
7) Trichlorofluoromethane	101	6.837	6.849	0.569	440820	44.04	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	285107	47.16	ug/L	97
9) Acetone	43	7.773	7.762	0.647	516553	126.47	ug/L	97
10) 1,1-Dichloroethylene	61	7.773	7.774	0.647	460434	42.49	ug/L	100
11) Iodomethane	142	8.070	8.070	0.672	3012142	227.10	ug/L	100
12) Acetonitrile	41	8.236	8.224	0.686	992331	1273.38	ug/L	100
13) Methyl acetate	43	8.295	8.295	0.691	1090092	201.96	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	5171242	224.64	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	404094	44.90	ug/L	99
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	964615	44.27	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	432288	43.00	ug/L	100
18) Vinyl acetate	43	9.611	9.612	0.800	2644047	203.89	ug/L	99
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	541913	43.41	ug/L	99
20) 2-Butanone	43	10.418	10.406	0.868	831341	148.23	ug/L	99
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	376461	44.62	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	379970	39.31	ug/L	99
23) Bromochloromethane	128	10.809	10.797	0.900	191628	46.48	ug/L	97
24) Chloroform	83	10.868	10.869	0.905	578099	44.47	ug/L	100
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	472062	42.17	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	513997	41.13	ug/L	98
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	388863	41.83	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	388874	41.31	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	393412	44.12	ug/L	99
31) Benzene	78	11.687	11.687	0.973	1232552	44.33	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	574301	40.51	ug/L	100
33) n-Butyl alcohol	56	12.185	12.185	1.015	973018	4747.87	ug/L	100
34) Trichloroethylene	95	12.481	12.481	1.040	322731	43.52	ug/L	99
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	314857	44.62	ug/L	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B234.D
Acq On : 31 Aug 2011 00:28
Operator : SYK1
InstName : VOA3
Sample : |1202477758|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MS 284538001 MIX[A]
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 31 07:20:32 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
36) Methylcyclohexane	83	12.766	12.766	1.063	510446	41.25	ug/L	100
37) Dibromomethane	93	12.920	12.920	1.076	211724	46.27	ug/L	97
38) Bromodichloromethane	83	13.062	13.062	1.088	456368	45.17	ug/L	99
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	540994	45.08	ug/L	99
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	647991	223.11	ug/L	99
44) Toluene	91	14.035	14.035	0.898	1264439	43.50	ug/L	99
45) trans-1,3-Dichloroprop...	75	14.213	14.213	0.909	480118	43.68	ug/L	99
46) 1,1,2-Trichloroethane	83	14.462	14.462	0.925	253167	46.50	ug/L	100
47) 2-Hexanone	58	14.675	14.675	0.939	634306	202.58	ug/L	99
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	487009	45.72	ug/L	90
49) Tetrachloroethylene	164	14.699	14.699	0.940	246904	41.49	ug/L	99
50) Dibromochloromethane	129	14.960	14.960	0.957	371374	46.06	ug/L	100
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	328583	46.24	ug/L	100
52) Chlorobenzene	112	15.671	15.671	1.002	854681	44.14	ug/L	99
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	337575	46.31	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	1368768	42.60	ug/L	100
55) m,p-Xylenes	106	15.873	15.873	1.015	1140860	87.20	ug/L	100
56) o-Xylene	106	16.335	16.335	1.045	611741	45.03	ug/L	99
57) Styrene	104	16.335	16.335	1.045	988033	44.20	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	254038	48.27	ug/L	98
60) Isopropylbenzene	105	16.715	16.715	0.919	1463142	44.30	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	405401	47.90	ug/L	98
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	117272	47.42	ug/L	98
64) Bromobenzene	156	17.142	17.142	0.942	414716	46.57	ug/L	99
65) n-Propylbenzene	91	17.165	17.165	0.943	1653853	43.45	ug/L	99
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1212339	44.08	ug/L	99
67) 2-Chlorotoluene	126	17.319	17.320	0.952	388964	47.54	ug/L	98
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1119511	44.71	ug/L	100
69) tert-Butylbenzene	134	17.711	17.711	0.973	288668	45.43	ug/L	96
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1246178	43.97	ug/L	99
71) sec-Butylbenzene	105	17.948	17.948	0.986	1670376	44.72	ug/L	99
72) 4-Isopropyltoluene	119	18.067	18.067	0.993	1334116	44.55	ug/L	100
73) 1,3-Dichlorobenzene	146	18.126	18.126	0.996	768079	45.36	ug/L	100
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	738940	45.38	ug/L	100
75) n-Butylbenzene	91	18.529	18.529	1.018	1307364	43.40	ug/L	99
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	762131	46.05	ug/L	100
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	86274	47.59	ug/L	98
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	468546	43.23	ug/L	100
79) Hexachlorobutadiene	225	20.865	20.865	1.147	277417	43.16	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	986569	45.31	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	384019	42.97	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.773	7.928	0.647	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		8.592	8.580	0.716	0m	N.D.	d	
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B234.D
Acq On : 31 Aug 2011 00:28
Operator : SYK1
InstName : VOA3
Sample : |1202477758|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MS 284538001 MIX[A]
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 31 07:20:32 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

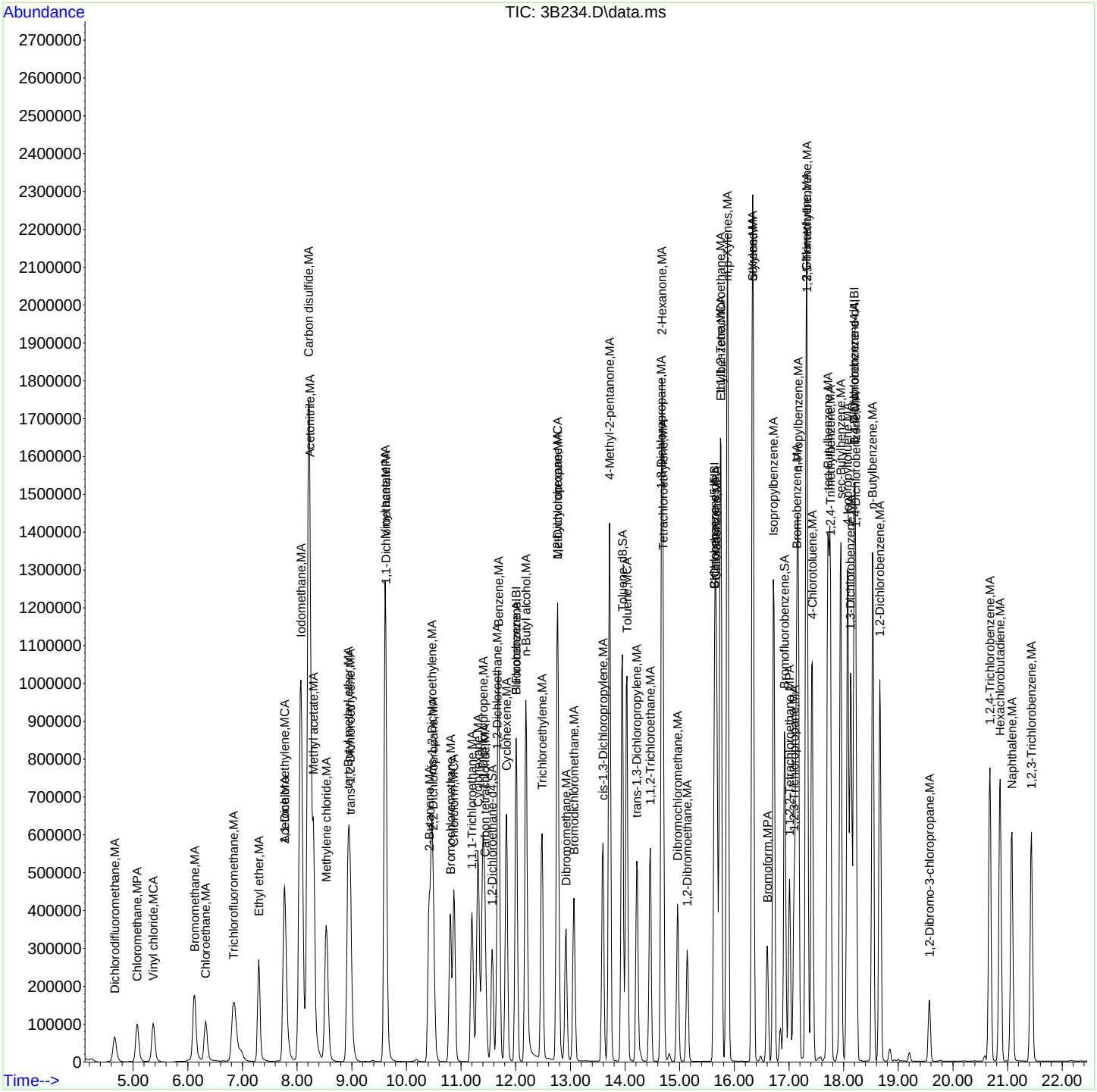
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
93)	Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.	
94)	Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d
95)	Propionitrile		10.418	10.501	0.868	0m	N.D.	d
96)	Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d
97)	Tetrahydrofuran		10.880	10.869	0.906	0m	N.D.	d
98)	Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99)	Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100)	Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101)	1,4-Dioxane		12.920	12.884	1.076	0m	N.D.	d
102)	2-Nitropropane		13.240	13.300	1.103	0m	N.D.	d
104)	Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106)	1-Chlorohexane		15.636	15.553	0.859	0m	N.D.	d
107)	cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108)	Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109)	trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110)	Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111)	Benzyl chloride		18.339	18.339	1.008	0m	N.D.	d
112)	bis(2-Chloroisopropyl)...		18.837	18.754	1.035	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B234.D
Acq On : 31 Aug 2011 00:28
Operator : SYK1
InstName : VOA3
Sample : |1202477758|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MS 284538001 MIX[A]
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 31 07:20:32 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477759**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:58**				
Data File:	**083011V3\3B235.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
75-71-8	Dichlorodifluoromethane		36.9	ug/L	0.300	1.00
74-87-3	Chloromethane		44.8	ug/L	0.300	1.00
75-01-4	Vinyl chloride		42.7	ug/L	0.500	1.00
74-83-9	Bromomethane		43.9	ug/L	0.300	1.00
75-00-3	Chloroethane		48.6	ug/L	0.300	1.00
75-69-4	Trichlorofluoromethane		43.5	ug/L	0.300	1.00
60-29-7	Ethyl ether		47.0	ug/L	0.300	1.00
67-64-1	Acetone		132	ug/L	1.50	5.00
75-05-8	Acetonitrile		1350	ug/L	6.25	25.0
75-35-4	1,1-Dichloroethylene		42.1	ug/L	0.300	1.00
79-20-9	Methyl acetate		209	ug/L	1.25	5.00
74-88-4	Iodomethane		222	ug/L	1.25	5.00
75-09-2	Methylene chloride		43.9	ug/L	2.00	5.00
75-15-0	Carbon disulfide		221	ug/L	1.25	5.00
1634-04-4	tert-Butyl methyl ether		43.3	ug/L	0.250	1.00
156-60-5	trans-1,2-Dichloroethylene		41.9	ug/L	0.300	1.00
108-05-4	Vinyl acetate		205	ug/L	1.50	5.00
75-34-3	1,1-Dichloroethane		42.9	ug/L	0.300	1.00
78-93-3	2-Butanone		157	ug/L	1.25	5.00
156-59-2	cis-1,2-Dichloroethylene		43.7	ug/L	0.300	1.00
594-20-7	2,2-Dichloropropane		38.4	ug/L	0.300	1.00
67-66-3	Chloroform		43.4	ug/L	0.250	1.00
74-97-5	Bromochloromethane		44.7	ug/L	0.300	1.00
71-55-6	1,1,1-Trichloroethane		42.5	ug/L	0.325	1.00
110-82-7	Cyclohexane		41.3	ug/L	0.300	1.00
563-58-6	1,1-Dichloropropene		41.6	ug/L	0.250	1.00
71-36-3	n-Butyl alcohol		5110	ug/L	15.0	50.0
56-23-5	Carbon tetrachloride		41.4	ug/L	0.300	1.00
107-06-2	1,2-Dichloroethane		43.5	ug/L	0.250	1.00
71-43-2	Benzene		43.3	ug/L	0.300	1.00
79-01-6	Trichloroethylene		42.3	ug/L	0.250	1.00
78-87-5	1,2-Dichloropropane		43.8	ug/L	0.250	1.00
108-87-2	Methylcyclohexane		41.4	ug/L	0.250	1.00
75-27-4	Bromodichloromethane		44.7	ug/L	0.250	1.00
74-95-3	Dibromomethane		45.8	ug/L	0.300	1.00
110-75-8	2-Chloroethylvinyl ether	U	1.50	ug/L	1.50	5.00
108-10-1	4-Methyl-2-pentanone		238	ug/L	1.25	5.00
10061-01-5	cis-1,3-Dichloropropylene		44.3	ug/L	0.250	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477759**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:58**				
Data File:	**083011V3\3B235.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-88-3	Toluene		43.6	ug/L	0.250	1.00
10061-02-6	trans-1,3-Dichloropropylene		44.1	ug/L	0.250	1.00
79-00-5	1,1,2-Trichloroethane		46.7	ug/L	0.250	1.00
591-78-6	2-Hexanone		210	ug/L	1.25	5.00
142-28-9	1,3-Dichloropropane		44.4	ug/L	0.300	1.00
127-18-4	Tetrachloroethylene		40.6	ug/L	0.300	1.00
124-48-1	Dibromochloromethane		46.3	ug/L	0.300	1.00
106-93-4	1,2-Dibromoethane		47.0	ug/L	0.250	1.00
108-90-7	Chlorobenzene		44.0	ug/L	0.250	1.00
100-41-4	Ethylbenzene		42.6	ug/L	0.250	1.00
179601-23-1	m,p-Xylenes		86.4	ug/L	0.500	2.00
95-47-6	o-Xylene		44.2	ug/L	0.300	1.00
100-42-5	Styrene		43.2	ug/L	0.250	1.00
75-25-2	Bromoform		49.0	ug/L	0.250	1.00
79-34-5	1,1,2,2-Tetrachloroethane		48.7	ug/L	0.250	1.00
96-18-4	1,2,3-Trichloropropane		48.1	ug/L	0.300	1.00
108-86-1	Bromobenzene		45.6	ug/L	0.250	1.00
103-65-1	n-Propylbenzene		43.2	ug/L	0.250	1.00
95-49-8	2-Chlorotoluene		46.3	ug/L	0.250	1.00
98-82-8	Isopropylbenzene		43.9	ug/L	0.250	1.00
108-67-8	1,3,5-Trimethylbenzene		43.5	ug/L	0.250	1.00
106-43-4	4-Chlorotoluene		44.0	ug/L	0.250	1.00
98-06-6	tert-Butylbenzene		45.8	ug/L	0.250	1.00
95-63-6	1,2,4-Trimethylbenzene		43.4	ug/L	0.250	1.00
135-98-8	sec-Butylbenzene		44.7	ug/L	0.250	1.00
99-87-6	4-Isopropyltoluene		43.9	ug/L	0.250	1.00
541-73-1	1,3-Dichlorobenzene		44.1	ug/L	0.250	1.00
106-46-7	1,4-Dichlorobenzene		44.6	ug/L	0.250	1.00
104-51-8	n-Butylbenzene		43.7	ug/L	0.250	1.00
96-12-8	1,2-Dibromo-3-chloropropane		51.2	ug/L	0.300	1.00
87-68-3	Hexachlorobutadiene		44.0	ug/L	0.300	1.00
91-20-3	Naphthalene		49.8	ug/L	0.250	1.00
87-61-6	1,2,3-Trichlorobenzene		46.0	ug/L	0.332	1.00
107-02-8	Acrolein	U	1.25	ug/L	1.25	5.00
76-13-1	Trichlorotrifluoroethane	U	1.00	ug/L	1.00	5.00
107-05-1	Allyl chloride	U	1.50	ug/L	1.50	5.00
107-13-1	Acrylonitrile	U	1.00	ug/L	1.00	5.00
126-99-8	2-Chloro-1,3-butadiene	U	0.300	ug/L	0.300	1.00

Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202477759**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1137563**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101PSD**	**Method:**	**SW846 8260B**	**SOP Ref:**	**GL-OA-E-038**
Batch ID:	**1137563**	**Inst:**	**VOA3.I**	**Dilution:**	**1**
Run Date:	**08/31/2011 00:58**	**Analyst:**	**SYK1**	**Purge Vol:**	**5 mL**
Prep Date:	**08/31/2011 00:58**				
Data File:	**083011V3\3B235.D**	**Column:**	**DB-624**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
107-12-0	Propionitrile	U	1.50	ug/L	1.50	5.00
126-98-7	Methacrylonitrile	U	1.00	ug/L	1.00	5.00
78-83-1	Isobutyl alcohol	U	12.5	ug/L	12.5	50.0
80-62-6	Methyl methacrylate	U	1.00	ug/L	1.00	5.00
97-63-2	Ethyl methacrylate	U	1.00	ug/L	1.00	5.00
79-46-9	2-Nitropropane	U	1.00	ug/L	1.00	5.00
108-94-1	Cyclohexanone	U	15.0	ug/L	15.0	50.0
1476-11-5	cis-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
110-57-6	trans-1,4-Dichloro-2-butene	U	1.00	ug/L	1.00	5.00
76-01-7	Pentachloroethane	U	1.00	ug/L	1.00	5.00
100-44-7	Benzyl chloride	U	1.30	ug/L	1.30	5.00
39638-32-9	bis(2-Chloroisopropyl)ether	U	1.50	ug/L	1.50	5.00
540-59-0	1,2-Dichloroethylene (total)		85.6	ug/L	0.300	1.00
1330-20-7	Xylenes (total)		131	ug/L	0.300	1.00
630-20-6	1,1,1,2-Tetrachloroethane		46.7	ug/L	0.300	1.00
120-82-1	1,2,4-Trichlorobenzene		43.2	ug/L	0.300	1.00
95-50-1	1,2-Dichlorobenzene		45.5	ug/L	0.250	1.00

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B235.D
Acq On : 31 Aug 2011 00:58
Operator : SYK1
InstName : VOA3
Sample : |1202477759|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MSD 284538001 MIX[A]
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 31 07:20:51 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) Fluorobenzene	96	12.007	12.007	1.000	1287143	50.00	ug/L	0.00
41) Chlorobenzene-d5	82	15.635	15.636	1.000	543824	50.00	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	543506	50.00	ug/L	0.00
82) B Fluorobenzene	96	12.007	12.007	1.000	1287143	50.00	ug/L	0.00
103) B Chlorobenzene-d5	82	15.635	15.636	1.000	543824	50.00	ug/L	0.00
105) B 1,4-Dichlorobenzene-d4	152	18.197	18.197	1.000	543506	50.00	ug/L	0.00
System Monitoring Compounds								Dev(Min)
29) 1,2-Dichloroethane-d4	102	11.568	11.568	0.963	71265	48.42	ug/L	0.00
43) Toluene-d8	98	13.952	13.952	0.892	1194712	49.47	ug/L	0.00
61) Bromofluorobenzene	95	16.916	16.916	0.930	525708	51.11	ug/L	0.00

Compound	Amount	Range	Recovery
29) 1,2-Dichloroethane-d4	50.000	79 - 124	96.84%
43) Toluene-d8	50.000	80 - 120	98.94%
61) Bromofluorobenzene	50.000	80 - 120	102.22%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) Dichlorodifluoromethane	85	4.666	4.666	0.389	191470	36.92	ug/L	100
3) Chloromethane	50	5.067	5.068	0.422	275430	44.79	ug/L	100
4) Vinyl chloride	62	5.364	5.365	0.447	267293	42.74	ug/L	100
5) Bromomethane	94	6.113	6.125	0.509	335237	43.88	ug/L	100
6) Chloroethane	64	6.327	6.327	0.527	227818	48.57	ug/L	99
7) Trichlorofluoromethane	101	6.836	6.849	0.569	437981	43.51	ug/L	100
8) Ethyl ether	59	7.299	7.299	0.608	285468	46.95	ug/L	97
9) Acetone	43	7.773	7.762	0.647	540603	132.23	ug/L	99
10) 1,1-Dichloroethylene	61	7.773	7.774	0.647	458279	42.06	ug/L	99
11) Iodomethane	142	8.070	8.070	0.672	2962083	222.09	ug/L	99
12) Acetonitrile	41	8.236	8.224	0.686	1056376	1351.41	ug/L	100
13) Methyl acetate	43	8.307	8.295	0.692	1135228	209.16	ug/L	99
14) Carbon disulfide	76	8.212	8.212	0.684	5105119	220.54	ug/L	100
15) Methylene chloride	84	8.532	8.532	0.711	397018	43.87	ug/L	99
16) tert-Butyl methyl ether	73	8.935	8.936	0.744	949090	43.32	ug/L	100
17) trans-1,2-Dichloroethy...	61	8.971	8.971	0.747	423447	41.89	ug/L	99
18) Vinyl acetate	43	9.611	9.612	0.800	2679031	205.45	ug/L	99
19) 1,1-Dichloroethane	63	9.623	9.623	0.801	538292	42.88	ug/L	99
20) 2-Butanone	43	10.418	10.406	0.868	887845	157.43	ug/L	98
21) cis-1,2-Dichloroethylene	96	10.465	10.465	0.872	370473	43.66	ug/L	98
22) 2,2-Dichloropropane	77	10.489	10.489	0.874	373599	38.44	ug/L	100
23) Bromochloromethane	128	10.809	10.797	0.900	185191	44.67	ug/L	98
24) Chloroform	83	10.868	10.869	0.905	567560	43.42	ug/L	99
25) 1,1,1-Trichloroethane	97	11.200	11.201	0.933	477843	42.45	ug/L	99
26) Cyclohexane	56	11.307	11.307	0.942	518677	41.28	ug/L	99
27) 1,1-Dichloropropene	75	11.402	11.402	0.950	389204	41.64	ug/L	99
28) Carbon tetrachloride	117	11.438	11.438	0.953	392193	41.43	ug/L	100
30) 1,2-Dichloroethane	62	11.663	11.663	0.971	389720	43.46	ug/L	100
31) Benzene	78	11.687	11.687	0.973	1209740	43.27	ug/L	100
32) Cyclohexene	67	11.829	11.829	0.985	569894	39.98	ug/L	99
33) n-Butyl alcohol	56	12.185	12.185	1.015	1054281	5111.80	ug/L	100
34) Trichloroethylene	95	12.481	12.481	1.040	315113	42.26	ug/L	100
35) 1,2-Dichloropropane	63	12.766	12.766	1.063	310443	43.75	ug/L	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B235.D
Acq On : 31 Aug 2011 00:58
Operator : SYK1
InstName : VOA3
Sample : |1202477759|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MSD 284538001 MIX[A]
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 31 07:20:51 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
36) Methylcyclohexane	83	12.766	12.766	1.063	515487	41.43	ug/L	99
37) Dibromomethane	93	12.920	12.920	1.076	210689	45.79	ug/L	98
38) Bromodichloromethane	83	13.062	13.062	1.088	454226	44.71	ug/L	100
39) 2-Chloroethylvinyl ether		0.000	13.347	0.000	0	N.D.		
40) cis-1,3-Dichloropropylene	75	13.596	13.596	1.132	534198	44.27	ug/L	100
42) 4-Methyl-2-pentanone	58	13.714	13.715	0.877	680266	238.40	ug/L	99
44) Toluene	91	14.035	14.035	0.898	1244673	43.58	ug/L	99
45) trans-1,3-Dichloroprop...	75	14.212	14.213	0.909	476190	44.10	ug/L	99
46) 1,1,2-Trichloroethane	83	14.461	14.462	0.925	249897	46.72	ug/L	99
47) 2-Hexanone	58	14.675	14.675	0.939	645849	210.47	ug/L	98
48) 1,3-Dichloropropane	76	14.663	14.663	0.938	464230	44.36	ug/L	92
49) Tetrachloroethylene	164	14.699	14.699	0.940	237506	40.62	ug/L	99
50) Dibromochloromethane	129	14.960	14.960	0.957	366405	46.25	ug/L	100
51) 1,2-Dibromoethane	107	15.137	15.138	0.968	328440	47.04	ug/L	99
52) Chlorobenzene	112	15.671	15.671	1.002	837298	44.02	ug/L	100
53) 1,1,1,2-Tetrachloroethane	131	15.742	15.742	1.007	334660	46.73	ug/L	99
54) Ethylbenzene	91	15.754	15.754	1.008	1343155	42.55	ug/L	100
55) m,p-Xylenes	106	15.873	15.873	1.015	1110513	86.39	ug/L	100
56) o-Xylene	106	16.335	16.335	1.045	589429	44.16	ug/L	99
57) Styrene	104	16.335	16.335	1.045	948966	43.21	ug/L	100
59) Bromoform	173	16.608	16.608	0.913	255615	49.02	ug/L	99
60) Isopropylbenzene	105	16.715	16.715	0.919	1436421	43.90	ug/L	100
62) 1,1,2,2-Tetrachloroethane	83	17.011	17.011	0.935	408516	48.72	ug/L	99
63) 1,2,3-Trichloropropane	110	17.094	17.094	0.939	117866	48.11	ug/L	98
64) Bromobenzene	156	17.142	17.142	0.942	402382	45.61	ug/L	99
65) n-Propylbenzene	91	17.165	17.165	0.943	1627524	43.16	ug/L	99
66) 1,3,5-Trimethylbenzene	105	17.331	17.331	0.952	1183840	43.45	ug/L	100
67) 2-Chlorotoluene	126	17.319	17.320	0.952	375157	46.28	ug/L	100
68) 4-Chlorotoluene	91	17.426	17.415	0.958	1091913	44.02	ug/L	100
69) tert-Butylbenzene	134	17.711	17.711	0.973	288360	45.81	ug/L	97
70) 1,2,4-Trimethylbenzene	105	17.758	17.747	0.976	1217657	43.36	ug/L	100
71) sec-Butylbenzene	105	17.948	17.948	0.986	1654465	44.70	ug/L	99
72) 4-Isopropyltoluene	119	18.078	18.067	0.993	1302852	43.92	ug/L	100
73) 1,3-Dichlorobenzene	146	18.138	18.126	0.997	739401	44.08	ug/L	100
74) 1,4-Dichlorobenzene	146	18.221	18.221	1.001	718762	44.55	ug/L	99
75) n-Butylbenzene	91	18.529	18.529	1.018	1304422	43.71	ug/L	100
76) 1,2-Dichlorobenzene	146	18.659	18.660	1.025	745468	45.47	ug/L	99
77) 1,2-Dibromo-3-chloropr...	157	19.573	19.573	1.076	91976	51.21	ug/L	99
78) 1,2,4-Trichlorobenzene	180	20.675	20.676	1.136	464165	43.23	ug/L	99
79) Hexachlorobutadiene	225	20.865	20.865	1.147	280264	44.01	ug/L	99
80) Naphthalene	128	21.079	21.079	1.158	1073330	49.76	ug/L	100
81) 1,2,3-Trichlorobenzene	180	21.434	21.435	1.178	407328	46.00	ug/L	99
83) Chlorotrifluoroethylene		0.000	4.562	0.000	0	N.D.		
84) 2-Chloro-1,1,1-trifluo...		0.000	5.573	0.000	0	N.D.		
85) Acrolein		7.536	7.524	0.628	0m	N.D.	d	
86) Trichlorotrifluoroethane		0.000	7.750	0.000	0	N.D.		
87) Isopropyl Alcohol		7.761	7.928	0.646	0m	N.D.	d	
88) Allyl chloride		8.236	8.331	0.686	0m	N.D.	d	
89) tert-Butyl Alcohol		8.580	8.580	0.715	0m	N.D.	d	
90) Acrylonitrile		8.935	8.864	0.744	0m	N.D.	d	
91) Isopropyl ether		9.611	9.647	0.800	0m	N.D.	d	
92) 2-Chloro-1,3-butadiene		0.000	9.766	0.000	0	N.D.		

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B235.D
Acq On : 31 Aug 2011 00:58
Operator : SYK1
InstName : VOA3
Sample : |1202477759|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MSD 284538001 MIX[A]
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 31 07:20:51 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE

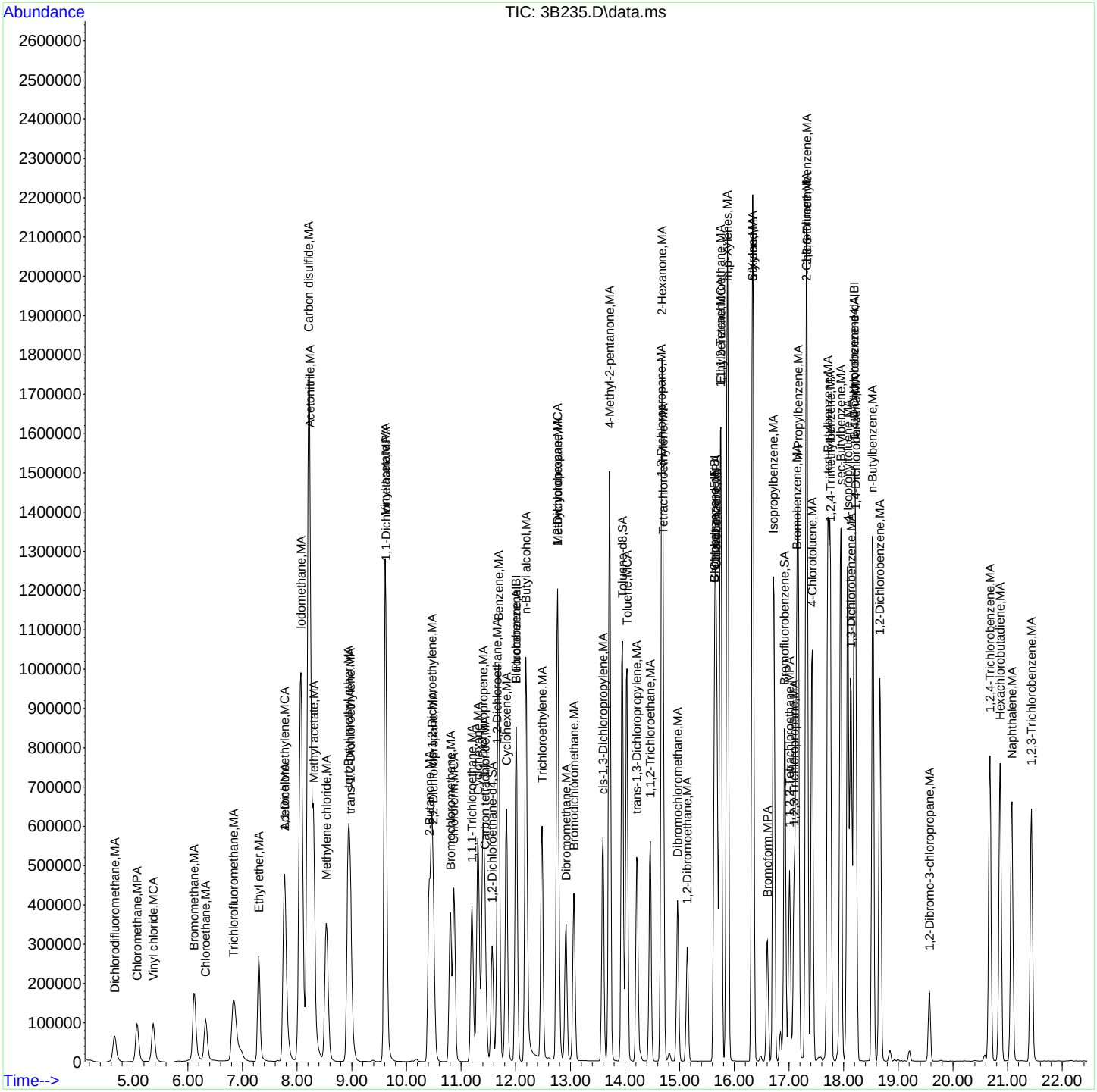
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units
93) Ethyl tert-butyl ether		0.000	10.181	0.000	0	N.D.	
94) Ethyl acetate		10.418	10.454	0.868	0m	N.D.	d
95) Propionitrile		10.406	10.501	0.867	0m	N.D.	d
96) Methacrylonitrile		10.489	10.726	0.874	0m	N.D.	d
97) Tetrahydrofuran		10.868	10.869	0.905	0m	N.D.	d
98) Isobutyl alcohol		11.307	11.343	0.942	0m	N.D.	d
99) Methyl tert-amyl ether		11.687	11.746	0.973	0m	N.D.	d
100) Methyl methacrylate		12.766	12.778	1.063	0m	N.D.	d
101) 1,4-Dioxane		12.908	12.884	1.075	0m	N.D.	d
102) 2-Nitropropane		13.299	13.300	1.108	0m	N.D.	d
104) Ethyl methacrylate		0.000	14.248	0.000	0	N.D.	
106) 1-Chlorohexane		15.635	15.553	0.859	0m	N.D.	d
107) cis-1,4-Dichloro-2-butene		16.715	16.762	0.919	0m	N.D.	d
108) Cyclohexanone		16.715	16.869	0.919	0m	N.D.	d
109) trans-1,4-Dichloro-2-b...		17.165	17.059	0.943	0m	N.D.	d
110) Pentachloroethane		17.782	17.782	0.977	0m	N.D.	d
111) Benzyl chloride		18.339	18.339	1.008	0m	N.D.	d
112) bis(2-Chloroisopropyl)...		18.837	18.754	1.035	0m	N.D.	d

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\083011V3\
Data File : 3B235.D
Acq On : 31 Aug 2011 00:58
Operator : SYK1
InstName : VOA3
Sample : |1202477759|1137563|1|VOA|1|VOA8260BL|
Misc : ECOL 5ML pH2 MSD 284538001 MIX[A]
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 31 07:20:51 2011
Quant Method : C:\msdchem\1\DATA\082411V3\VOA3-8260-082411.M
Quant Title : Volatile Organics 8260B SubList :
QLast Update : Thu Aug 25 11:40:17 2011
Response via : Initial Calibration
Integrator: RTE



Miscellaneous

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/24/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 8/24/2011-8/25/2011

(See pg. 238 and 239 for ICAL Std. Sci. Ids)

Cl test lot # N/A

Sequence Number: 082411V3

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
			5+5		
IS	UVM110615-01	1	1	1	
SS	UVM110725-02	1	1	1	
Long List ICV	W3VM110824-11		5+5		
BFB	IVM110802-01				1
Short List ICV			5+5		

Purge Amount	
5	Water Purge Vol:
n/a	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/24/2011	7:02	3A301.D	IVM110802-01	-----	BFB	5ML	1	N/A	1	w	SYK1	N/A	X	Passed but see 3A309
8/24/2011	7:32	3A302.D	IVM110802-01	-----	BFB	5ML	1	N/A	2	w	SYK1	N/A	X	Passed but see 3A309
8/24/2011	8:02	3A303.D	IVM110802-01	-----	BFB	5ML	1	N/A	3	w	SYK1	N/A	X	Passed but see 3A309
8/24/2011	8:32	3A304.D	W3VM110824-01	VSTD001L	ICAL	5ML	1	N/A	4	w	SYK1	N/A	X	MIX[A] UVM110723-02B+UVM110727-02C; lowered Emvolts
8/24/2011	9:33	3A305.D	12024-----	-----	BLANK	5ML	1	N/A	5	w	SYK1	N/A	X	RINSE
8/24/2011	10:03	3A306.D	IVM110802-01	-----	BFB	5ML	1	N/A	6	w	SYK1	N/A	X	Passed but see 3A309
8/24/2011	10:33	3A307.D	W3VM110824-01	VSTD001L	ICAL	5ML	1	N/A	7	w	SYK1	N/A	X	MIX[A] UVM110723-02B+UVM110727-02C; lowered Emvolts
8/24/2011	11:07	3A308.D	12024-----	-----	BLANK	5ML	1	N/A	1	w	SYK1	N/A	X	RINSE
8/24/2011	11:37	3A309.D	IVM110802-01	-----	BFB	5ML	1	N/A	2	w	SYK1	N/A	O	
8/24/2011	12:07	3A310.D	W3VM110824-01	VSTD0005L	ICAL	5ML	1	N/A	3	w	SYK1	N/A	O	MIX[A] UVM110723-01B+UVM110727-01C
8/24/2011	12:37	3A311.D	W3VM110824-02	VSTD001L	ICAL	5ML	1	N/A	4	w	SYK1	N/A	O	MIX[A] UVM110723-02B+UVM110727-02C
8/24/2011	13:07	3A312.D	W3VM110824-03	VSTD002L	ICAL	5ML	1	N/A	5	w	SYK1	N/A	O	MIX[A] UVM110723-03B+UVM110727-03C
8/24/2011	13:37	3A313.D	W3VM110824-04	VSTD005L	ICAL	5ML	1	N/A	6	w	SYK1	N/A	O	MIX[A] UVM110723-04B+UVM110727-04C
8/24/2011	14:07	3A314.D	W3VM110824-05	VSTD010L	ICAL	5ML	1	N/A	7	w	SYK1	N/A	O	MIX[A] UVM110723-05B+UVM110727-05C
8/24/2011	14:37	3A315.D	W3VM110824-06	VSTD020L	ICAL	5ML	1	N/A	8	w	SYK1	N/A	O	MIX[A] UVM110723-06B+UVM110727-06C
8/24/2011	15:07	3A316.D	W3VM110824-07	VSTD050L	ICAL	5ML	1	N/A	9	w	SYK1	N/A	O	MIX[A] UVM110723-07B+UVM110727-07C
8/24/2011	15:37	3A317.D	W3VM110824-08	VSTD080L	ICAL	5ML	1	N/A	10	w	SYK1	N/A	O	MIX[A] UVM110723-08B+UVM110727-08C
8/24/2011	16:07	3A318.D	W3VM110824-09	VSTD100L	ICAL	5ML	1	N/A	11	w	SYK1	N/A	O	MIX[A] UVM110723-08B+UVM110727-08C
8/24/2011	16:37	3A319.D	12024-----	-----	BLANK	5ML	1	N/A	12	w	SYK1	N/A	X	RINSE
8/24/2011	17:07	3A320.D	W3VM110824-10	ICV	ICV	5ML	1	N/A	13	w	SYK1	N/A	X	MIX[A] UVM110718-01E+IVM110822-01; ccc out
8/24/2011	17:38	3A321.D	W3VM110824-11	ICV	ICV	5ML	1	N/A	14	w	SYK1	N/A	O	MIX[A] UVM110808-01B+IVM110822-01
8/24/2011	18:08	3A322.D	12024-----	-----	BLANK	5ML	1	N/A	15	w	SYK1	N/A	X	RINSE
8/24/2011	18:38	3A323.D	W3VM110824-12	VSTD005S	ICAL	5ML	1	N/A	16	w	SYK1	N/A	O	MIX[B] UVM110728-01+UVM110728-09+UVM110705-01E
8/24/2011	19:08	3A324.D	W3VM110824-13	VSTD010S	ICAL	5ML	1	N/A	17	w	SYK1	N/A	O	MIX[B] UVM110728-01+UVM110728-10+UVM110705-02E
8/24/2011	19:38	3A325.D	W3VM110824-14	VSTD025S	ICAL	5ML	1	N/A	18	w	SYK1	N/A	O	MIX[B] UVM110728-03+UVM110728-11+UVM110705-03E
8/24/2011	20:08	3A326.D	W3VM110824-15	VSTD050S	ICAL	5ML	1	N/A	19	w	SYK1	N/A	O	MIX[B] UVM110728-04+UVM110728-12+UVM110705-04E
8/24/2011	20:38	3A327.D	W3VM110824-16	VSTD100S	ICAL	5ML	1	N/A	20	w	SYK1	N/A	O	MIX[B] UVM110728-05+UVM110728-13+UVM110705-05E
8/24/2011	21:08	3A328.D	W3VM110824-17	VSTD250S	ICAL	5ML	1	N/A	21	w	SYK1	N/A	O	MIX[B] UVM110728-06+UVM110728-14+UVM110705-06E

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/24/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 8/24/2011-8/25/2011

(See pg. 238 and 239 for ICAL Std. Sci. Ids)

Cl test lot # N/A

Sequence Number: 082411V3

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
			5+5		
IS	UVM110615-01	1	1	1	
SS	UVM110725-02	1	1	1	
Long List ICV	W3VM110824-11		5+5		
BFB	IVM110802-01				1
Short List ICV			5+5		

Purge Amount	
5	Water Purge Vol:
n/a	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
x	Heated Purge

Analysis Date Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/24/2011 21:38	3A329.D	W3VM110824-18	VSTD300S	ICAL	5ML	1	N/A	22	w	SYK1	N/A	X	MIX[B] UVM110728-07+UVM110728-15+UVM110705-07E; compounds low, see 3A402
8/24/2011 22:08	3A330.D	W3VM110824-19	VSTD500S	ICAL	5ML	1	N/A	23	w	SYK1	N/A	X	MIX[B] UVM110728-07+UVM110728-15+UVM110705-07E; compounds low, see 3A403
8/24/2011 22:38	3A331.D	12024-----	-----	BLANK	5ML	1	N/A	24	w	SYK1	N/A	X	RINSE
8/24/2011 23:08	3A332.D	W3VM110824-20	ICV	ICV	5ML	1	N/A	25	w	SYK1	N/A	X	MIX[B] 0728-08C+0729-08C+07; see 3A405

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/25/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/24/2011-08/25/2011

(See pg. 238-239 for ICAL Std. Sci. Ids)

Cl test lot # 1177

Sequence Number: 082511V3

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W3VM110825-04		5+5		
IS	UVM110615-01	1	1	1	
SS	UVM110725-02	1	1	1	
LCS/MS	W3VM110825-05/06			5+5	
BFB	IVM110802-01				1
SHORT	W3VM110825-07		5+5+5	5+5+5	

Purge Amount

5	Water Purge Vol:
varied	Soil Purge Wt.
x	Mid level ext. MeOH Vol:
100	ul
DD946	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/25/2011	8:52	3A401.D	IVM110802-01	-----	BFB	5ML	1	N/A	28	w	SYK1	N/A	O	
8/25/2011	9:22	3A402.D	W3VM110825-01	VSTD300S	ICAL	5ML	1	N/A	29	w	SYK1	N/A	O	MIX[B] UVM110728-07+0728-15+UVM110705-07E
8/25/2011	9:52	3A403.D	W3VM110825-02	VSTD500S	ICAL	5ML	1	N/A	30	w	SYK1	N/A	O	MIX[B] UVM110728-07+0728-15+UVM110705-07E
8/25/2011	10:22	3A404.D	12024-----	-----	BLANK	5ML	1	N/A	31	w	SYK1	N/A	X	RINSE
8/25/2011	10:53	3A405.D	W3VM110825-03	ICV	ICV	5ML	1	N/A	32	w	SYK1	N/A	O	MIX[B] UVM110728-08C+UVM110729-08C+UVM110728-16B
8/25/2011	11:23	3A406.D	W3VM110825-04	-----	CCV	5ML	1	N/A	1	w	SYK1	N/A	O	MIX[A] UVM110727-07C+UVM110723-07B
8/25/2011	11:53	3A407.D	W3VM110825-05	-----	LCS	5ML	1	N/A	2	w	SYK1	N/A	O	MIX[A] UVM110718-01E+IVM110822-01
8/25/2011	12:23	3A408.D	W3VM110825-06	-----	LCS	5G	1	N/A	3	s	SYK1	N/A	O	MIX[A] UVM110718-01E+IVM110822-01 SOIL
8/25/2011	12:53	3A409.D	W3VM110825-07	-----	CCV/LCS	5G	1	N/A	4	s	SYK1	N/A	O	MIX[B] UVM110729-08C+UVM110728-08C+0728-16B SOIL
8/25/2011	13:23	3A410.D	12024-----	-----	BLANK	5ML	1	N/A	5	w	SYK1	N/A	O	
8/25/2011	13:53	3A411.D	12024-----	-----	BLANK	5G	1	N/A	6	s	SYK1	N/A	O	SOIL
8/25/2011	14:24	3A412.D	284525008	UCOR	1136142	5ML	1	pH5	7	w	SYK1	N	O	624
8/25/2011	14:53	3A413.D	284525001	UCOR	1136142	5ML	1	pH7	8	w	SYK1	N	O	624
8/25/2011	15:23	3A414.D	1202474200	UCOR	1136142	5ML	1	pH7	9	w	SYK1	N	O	DUP
8/25/2011	15:53	3A415.D	12024-----	-----	BLANK	100uL	50	N/A	10	s	SYK1	N/A	O	MeOH BLNK
8/25/2011	16:24	3A416.D	284175001	CARE	1136192	100uL	50	N/A	11	s	SYK1	N/A	O	SOIL; O/R for Trichloroethylene, rerun AT 100x on 08/26
8/25/2011	16:54	3A417.D	284175002	CARE	1136192	100uL	50	N/A	12	s	SYK1	N/A	X	SOIL: C/O, rerun on 08/26
8/25/2011	17:24	3A418.D	284598001	SRNS	1136296	5ML	1	pH2	13	w	SYK1	N	X	C/O
8/25/2011	17:54	3A419.D	284598002	SRNS	1136296	5ML	1	pH2	14	w	SYK1	N	X	C/O
8/25/2011	18:25	3A420.D	1202474201	UCOR	1136142	5ML	1	pH7	15	w	SYK1	N	O	MS 284525001 MIX[A]
8/25/2011	18:55	3A421.D	1202474334	CARE	1136192	100uL	50	N/A	16	s	SYK1	N/A	O	MS 284175001 MIX[A] SOIL
8/25/2011	19:25	3A422.D	1202474335	CARE	1136192	100uL	50	N/A	17	s	SYK1	N/A	O	MSD 284175001 MIX[A] SOIL
8/25/2011	19:55	3A423.D	1202474584	SRNS	1136296	5ML	1	pH2	18	w	SYK1	N	O	MS 284598001 MIX[A]
8/25/2011	20:25	3A424.D	1202474585	SRNS	1136296	5ML	1	pH2	19	w	SYK1	N	O	MSD 284598001 MIX[A]

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/30/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/24/2011-08/25/2011

(See pg. 238-239 for ICAL Std. Sci. Ids)

Cl test lot # 1177

Sequence Number: 083011V3PM

	Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W3VM110830-06			5+5		
IS	UVM110615-01		1	1	1	
SS	UVM110725-02		1	1	1	
LCS/MS	W3VM110830-07				5+5	
BFB	IVM110802-01					1
SHORT	W3VM110830-08			5+5+5	5+5+5	

Purge Amount	
5	Water Purge Vol:
n/a	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/30/2011	20:28	3B226.D	IVM110802-01	-----	BFB2	5ML	1	N/A	26	w	SYK1	N/A	O	
8/30/2011	20:58	3B227.D	W3VM110830-06	-----	CCV	5ML	1	N/A	27	w	SYK1	N/A	O	MIX[A] UVM110723-07B+UVM110727-07D
8/30/2011	21:28	3B228.D	W3VM110830-07	-----	LCS	5ML	1	N/A	28	w	SYK1	N/A	O	MIX[A] UVM110817-01A+IVM110827-01
8/30/2011	21:58	3B229.D	W3VM110830-08	-----	CCV/LCS	5ML	1	N/A	29	w	SYK1	N/A	O	MIX[B] UVM110729-08D+UVM110728-08B+UVM110728-16B
8/30/2011	22:28	3B230.D	12024-----	-----	BLANK	5ML	1	N/A	30	w	SYK1	N/A	O	
8/30/2011	22:58	3B231.D	284538002	ECOL	1137563	5ML	1	pH2	31	w	SYK1	N	O	O/R for Acetone; rerunning at 5X on 08/31
8/30/2011	23:28	3B232.D	284538001	ECOL	1137563	5ML	1	pH2	32	w	SYK1	N	O	
8/30/2011	23:58	3B233.D	284774001	WSRS	1137566	5ML	1	pH8	33	w	SYK1	N	O	
8/31/2011	0:28	3B234.D	1202477758	ECOL	1137563	5ML	1	pH2	34	w	SYK1	N	O	MS 284538001 MIX[A]
8/31/2011	0:58	3B235.D	1202477759	ECOL	1137563	5ML	1	pH2	35	w	SYK1	N	O	MSD 284538001 MIX[A]
8/31/2011	1:28	3B236.D	1202477766	WSRS	1137566	5ML	1	pH8	36	w	SYK1	N	O	MS 284774001 MIX[A]
8/31/2011	1:58	3B237.D	1202477767	WSRS	1137566	5ML	1	pH8	37	w	SYK1	N	O	MSD 284774001 MIX[A]

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/31/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/24/2011-08/25/2011

(See pg. 238-239 for ICAL Std. Sci. Ids)

Cl test lot # 1177

Sequence Number: 083111V3

Daily Standard Volume Added for Purge (ul)

Solution ID#		Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W3VM110831-01		5+5		
IS	UVM110615-01	1	1	1	
SS	UVM110725-02	1	1	1	
LCS/MS	W3VM110831-02/03			5+5	
BFB	IVM110802-01				1
SHORT	W3VM110831-04/05		5+5+5	5+5+5	

Purge Amount

5	Water Purge Vol:
5g	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/31/2011	6:53	3B301.D	IVM110802-01	-----	BFB	5ML	1	N/A	1	w	SYK1	N/A	O	
8/31/2011	7:23	3B302.D	W3VM110831-01	-----	CCV	5ML	1	N/A	2	w	SYK1	N/A	O	MIX[A] UVM110727-07D+UVM110723-07B
8/31/2011	7:53	3B303.D	W3VM110831-02	-----	LCS	5ML	1	N/A	3	w	SYK1	N/A	O	MIX[A] UVM110817-01A+IVM110827-01
8/31/2011	8:23	3B304.D	W3VM110831-03	-----	LCS	5G	1	N/A	4	s	SYK1	N/A	O	MIX[A] UVM110817-01A+IVM110827-01 SOIL
8/31/2011	8:53	3B305.D	W3VM110831-04	-----	CCV/LCS	5ML	1	N/A	5	w	SYK1	N/A	O	MIX[B] UVM110728-08B+UVM110729-08D+0728-16B
8/31/2011	9:24	3B306.D	W3VM110831-05	-----	LCS	5G	1	N/A	6	s	SYK1	N/A	O	MIX[B] UVM110728-08B+UVM110729-08D+0728-16B SOIL
8/31/2011	9:54	3B307.D	12024-----	-----	BLANK	5G	1	N/A	7	s	SYK1	N/A	O	SOIL
8/31/2011	10:24	3B308.D	12024-----	-----	BLANK	5ML	1	N/A	8	w	SYK1	N/A	O	
8/31/2011	10:54	3B309.D	284538002	ECOL	1137563	1ML	5	pH2	9	w	SYK1	N	O	
8/31/2011	11:24	3B310.D	284534001	COAN	1137567	1ML	5	pH2	10	w	SYK1	N	O	
8/31/2011	11:54	3B311.D	1202477770	COAN	1137567	1ML	5	pH2	11	w	SYK1	N	O	MS 284534001 MIX[B]
8/31/2011	12:24	3B312.D	1202477771	COAN	1137567	1ML	5	pH2	12	w	SYK1	N	O	MSD 284534001 MIX[B]
8/31/2011	12:54	3B313.D	12024-----	-----	BLANK	5ML	1	N/A	13	w	SYK1	N/A	X	RINSE
8/31/2011	13:23	3B314.D	284928007	UCOR	1137760	5ML	1	pH5	14	w	SYK1	N	O	
8/31/2011	13:53	3B315.D	284928001	UCOR	1137760	5ML	1	pH7	15	w	SYK1	N	O	
8/31/2011	14:23	3B316.D	284392001	ARSL	1137756	5G	1	n/a	16	s	SYK1	N/A	O	SOIL
8/31/2011	14:53	3B317.D	284671002	LLNL	1137764	5ML	1	pH2	17	w	SYK1	N	O	
8/31/2011	15:23	3B318.D	284671001	LLNL	1137764	200ul	25	pH13	18	w	SYK1	N	X	rerunning at 20X on 09/01
8/31/2011	15:53	3B319.D	1202478191	UCOR	1137760	5ML	1	pH7	19	w	SYK1	N	O	MS 284928001 MIX[A]
8/31/2011	16:23	3B320.D	1202478192	UCOR	1137760	5ML	1	pH7	20	w	SYK1	N	O	MSD 284928001 MIX[A]
8/31/2011	16:53	3B321.D	1202478182	ARSL	1137756	5G	1	N/A	21	s	SYK1	N/A	X	SOIL MS 284392001 MIX[A]
8/31/2011	17:22	3B322.D	1202478183	ARSL	1137756	5G	1	N/A	22	s	SYK1	N/A	X	SOIL MSD 284392001 MIX[A]; bad purge, rerunning on 09/01
8/31/2011	17:53	3B323.D	1202478205	LLNL	1137764	200ul	25	pH13	23	w	SYK1	N	X	MS 284671001 MIX[A]; rerunning at 20X on 09/01
8/31/2011	18:22	3B324.D	1202478206	LLNL	1137764	200ul	25	pH13	24	w	SYK1	N	X	MSD 284671001 MIX[A]; rerunning at 20X on 09/01

General Engineering Laboratories, LLC
Revision:11/22/04

ORGANIC RUN LOG - INSTRUMENT ID#VOA3

Date: 8/31/2011 Method 8260/624 Operator: SYK1

REVIEWED BY: _____
DATE: _____

HARDWARE CONFIGURATION & METHOD CONDITIONS SUMMARY No# 1

Daily Instrument Readings:
Multiplier Voltage: 1506

CALIBRATION & CC INFORMATION:

Initial Calibration Date: 08/24/2011-08/25/2011

(See pg. 238-239 for ICAL Std. Sci. Ids)

Cl test lot # 1177

Sequence Number: 083111V3

Daily Standard Solution ID#		Volume Added for Purge (ul) Blk/ Smpl	CCV	MS/ LCS	BFB
CCV	W3VM110831-01		5+5		
IS	UVM110615-01	1	1	1	
SS	UVM110725-02	1	1	1	
LCS/MS	W3VM110831-02/03			5+5	
BFB	IVM110802-01				1
SHORT	W3VM110831-04/05		5+5+5	5+5+5	

Purge Amount	
5	Water Purge Vol:
5g	Soil Purge Wt.
n/a	Mid level ext. MeOH Vol:
n/a	ul
n/a	Methanol Lot #
x	Heated Purge

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Wt.(g) or Vol(ml/ul)	Dil. Factor	pH	AS Slot #	Matrix w or s	Analyst	Cl test (Y/N)	Acceptable(O/X)	Comments
8/31/2011	18:52	3B325.D	12024-----	-----	BLANK	5ML	1	N/A	25	w	JEB	N/A	X	RINSE
8/31/2011	19:22	3B326.D	12024-----	-----	BLANK	5ML	1	N/A	26	w	JEB	N/A	X	RINSE
8/31/2011	19:52	3B327.D	284751001	WSRB	1136536	250UL	20	N/A	27	w	JEB	N/A	X	284751001; screen
8/31/2011	20:22	3B328.D	284751001	WSRB	1136536	250UL	20	N/A	28	w	JEB	N/A	X	284751001; screen
8/31/2011	20:52	3B329.D	284751001	WSRB	1136536	250UL	20	N/A	29	w	JEB	N/A	X	284751001; screen
8/31/2011	21:22	3B330.D	284751002	WSRB	1136536	250UL	20	N/A	30	w	JEB	N/A	X	284751002; screen
8/31/2011	21:52	3B331.D	284751002	WSRB	1136536	250UL	20	N/A	31	w	JEB	N/A	X	284751002; screen
8/31/2011	22:22	3B332.D	284751003	WSRB	1136536	25UL	200	N/A	32	w	JEB	N/A	X	284751003; screen
8/31/2011	22:52	3B333.D	284751003	WSRB	1136536	25UL	200	N/A	33	w	JEB	N/A	X	284751003;screen
8/31/2011	23:21	3B334.D	284751001	WSRB	1136536	5ML	1	N/A	34	w	JEB	N/A	X	284751001; screen
8/31/2011	23:51	3B335.D	12024-----	-----	BLANK	5ML	1	N/A	35	w	JEB	N/A	X	RINSE
1 Sep 2011	00:21	3B336.D	284751001	WSRB	1136536	5ML	1	N/A	36	w	JEB	N/A	X	284751001; screen
1 Sep 2011	00:51	3B337.D	12024-----	-----	BLANK	5ML	1	N/A	37	w	JEB	N/A	X	RINSE
1 Sep 2011	01:21	3B338.D	284751001	WSRB	1136536	5ML	1	N/A	38	w	JEB	N/A	X	284751001; screen
1 Sep 2011	01:50	3B339.D	12024-----	-----	BLANK	5ML	1	N/A	39	w	JEB	N/A	X	RINSE
1 Sep 2011	02:20	3B340.D	284751002	WSRB	1136536	5ML	1	N/A	40	w	JEB	N/A	X	284751002; screen
1 Sep 2011	02:50	3B341.D	12024-----	-----	BLANK	5ML	1	N/A	41	w	JEB	N/A	X	RINSE
1 Sep 2011	03:20	3B342.D	284751002	WSRB	1136536	5ML	1	N/A	42	w	JEB	N/A	X	284751002; screen
1 Sep 2011	03:50	3B343.D	12024-----	-----	BLANK	5ML	1	N/A	43	w	JEB	N/A	X	RINSE
1 Sep 2011	04:19	3B344.D	12024-----	-----	BLANK	5ML	1	N/A	44	w	JEB	N/A	X	RINSE
1 Sep 2011	04:49	3B345.D	12024-----	-----	BLANK	5ML	1	N/A	45	w	JEB	N/A	X	RINSE
1 Sep 2011	05:19	3B346.D	12024-----	-----	BLANK	5ML	1	N/A	46	w	JEB	N/A	X	RINSE
1 Sep 2011	05:49	3B347.D	12024-----	-----	BLANK	5ML	1	N/A	47	w	JEB	N/A	X	RINSE

Semi-Volatile Analysis

Case Narrative

Semi-Volatile Case Narrative
Ecology and Environment, Inc. Start-3 002233.2008 (ECOL)
SDG 284538

Method/Analysis Information

Procedure:	**Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry**
Analytical Method:	SW846 3510C/8270D
Prep Method:	SW846 3510C
Analytical Batch Number:	1135988
Prep Batch Number:	1135986

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3510C/8270D:

Sample ID	Client ID
284538001	11080101
1202473715	Method Blank (MB)
1202473716	Laboratory Control Sample (LCS)
1202473717	284538001(11080101) Matrix Spike (MS)
1202473718	284538001(11080101) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 26.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 18.2.

Calibration Information

Due to software limitations, the Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

CCV Requirements
Not all calibration verification standards (CCV) met the acceptance criteria as outlined in Method 8270 D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270 D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG in this batch met the acceptance criteria.

Surrogate Recoveries
The MS(1202473717(11080101)) failed surrogate recovery for 2,4,6-Tribromophenol at 14%. The limits are 33%-126%. The MB, LCS and MSD satisfied surrogate recovery acceptance criteria. Also, all associated client samples displayed acceptable surrogate recoveries. Therefore, it was determined that the failure was limited to the MS sample only and re-extraction was considered un-necessary.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 284538001 (11080101) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The MS(1202473717(11080101)) failed multiple spike recoveries. Please see the QC Summary for specific values. The MB, LCS and MSD satisfied batch QC acceptance criteria (with the exception of 4-Nitrophenol in the MSD - see MSD recovery statement). Therefore, it was determined that the failures were limited to the MS sample only and re-extraction was considered un-necessary.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD(1202473718(11080101)) failed spike recovery for 4-Nitrophenol at 34%. The limits are 39%-96%. 4-Nitrophenol was identified as poor responding analyte in the analytical method (EPA 8270 D). This may account for the low recovery it displayed in the MSD (as well as in the MS). The data were reported.

MS/MSD Relative Percent Difference (RPD) Statement
Multiple MS(1202473717(11080101))/MSD(1202473718(11080101)) RPD values were outside of the established acceptance limits. Please see the QC Summary for specific failures. The failures were attributed to the poor recoveries in the MS (see the MS recovery statement).

Internal Standard (ISTD) Acceptance
The internal standard responses were within the required acceptance criteria for all samples and QC.

Technical Information:

Holding Time Specifications
All samples in this SDG in this batch met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

Sample Dilutions
The samples in this SDG in this batch did not require dilutions.

Sample Re-extraction/Re-analysis
The MS(1202473717(11080101)) was re-analyzed due to multiple spike and surrogate failures.

Miscellaneous Information:

Data Exception (DER) Documentation
The following DER was generated for this SDG: 990643.

Manual Integrations
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

TIC Comment
Tentatively identified compounds (TIC) were not required for the SDG associated samples in this batch.

Additional Comments
Additional comments were not required for the SDG associated samples in this batch.

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

System Configuration

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
MSD3.I	Agilent 7890A/5975C GC/MS w/ 7683 Autosampler	HP7890A/HP5975C	DB-5MS	25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

ECOL008 Ecology and Environment, Inc. Start-3 002233.2008

Client SDG: 284538 GEL Work Order: 284538

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

E Organics--Concentration of the target analyte exceeds the instrument calibration range

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Dan Beacham **Name: Daniel Beacham**

Date: 13 SEP 2011 **Title: Data Validator**

Sample Data Summary

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:07**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2612.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
95-57-8	2-Chlorophenol	U	3.00	ug/L	3.00	10.0
39638-32-9	bis(2-Chloroisopropyl)ether	U	3.00	ug/L	3.00	10.0
95-48-7	o-Cresol	U	3.00	ug/L	3.00	10.0
65794-96-9	m,p-Cresols	U	3.00	ug/L	3.00	10.0
621-64-7	N-Nitrosodipropylamine	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.00	ug/L	3.00	10.0
88-75-5	2-Nitrophenol	U	3.00	ug/L	3.00	10.0
105-67-9	2,4-Dimethylphenol	U	3.00	ug/L	3.00	10.0
111-91-1	bis(2-Chloroethoxy)methane	U	3.00	ug/L	3.00	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
106-47-8	4-Chloroaniline	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
59-50-7	4-Chloro-3-methylphenol	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
91-58-7	2-Chloronaphthalene	U	0.300	ug/L	0.300	1.00
88-74-4	o-Nitroaniline	U	3.00	ug/L	3.00	10.0
99-09-2	m-Nitroaniline	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	3.00	ug/L	3.00	10.0
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
208-96-8	Acenaphthylene	U	0.300	ug/L	0.300	1.00
83-32-9	Acenaphthene	U	0.300	ug/L	0.300	1.00
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
132-64-9	Dibenzofuran	U	3.00	ug/L	3.00	10.0
58-90-2	2,3,4,6-Tetrachlorophenol	U	3.00	ug/L	3.00	10.0
84-66-2	Diethylphthalate	U	3.00	ug/L	3.00	10.0
100-02-7	4-Nitrophenol	U	3.00	ug/L	3.00	10.0
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
7005-72-3	4-Chlorophenylphenylether	U	3.00	ug/L	3.00	10.0
100-01-6	p-Nitroaniline	U	3.00	ug/L	3.00	10.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:07**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2612.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
101-55-3	4-Bromophenylphenylether	U	3.00	ug/L	3.00	10.0
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
86-74-8	Carbazole	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	3.00	ug/L	3.00	10.0
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
85-68-7	Butylbenzylphthalate	U	3.00	ug/L	3.00	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	J	4.56	ug/L	3.00	10.0
56-55-3	Benzo(a)anthracene	U	0.300	ug/L	0.300	1.00
218-01-9	Chrysene	U	0.300	ug/L	0.300	1.00
117-84-0	Di-n-octylphthalate	U	3.00	ug/L	3.00	10.0
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.300	ug/L	0.300	1.00
53-70-3	Dibenzo(a,h)anthracene	U	0.300	ug/L	0.300	1.00
191-24-2	Benzo(ghi)perylene	U	0.300	ug/L	0.300	1.00
100-52-7	Benzaldehyde	U	3.00	ug/L	3.00	10.0
98-86-2	Acetophenone	U	3.00	ug/L	3.00	10.0
105-60-2	Caprolactam	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
92-52-4	1,1'-Biphenyl	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Quality Control Summary

Surrogate Recovery Report

SDG Number: 284538

Matrix Type: LIQUID

Sample ID	Client ID	2FP %REC	PHL %REC	NBZ %REC	FBP %REC	TBP %REC	TPH %REC
1202473715	MB for batch 1135986	49	28	88	88	102	112
1202473716	LCS for batch 1135986	50	29	78	85	107	88
284538001	11080101	41	24	75	72	90	60
1202473718	11080101MSD	45	34	66	69	59	62
1202473717	11080101MS	31	26	68	74	14 *	63

Surrogate			Acceptance Limits
2FP	=	2-Fluorophenol	(14%-78%)
PHL	=	Phenol-d5	(14%-80%)
NBZ	=	Nitrobenzene-d5	(40%-117%)
FBP	=	2-Fluorobiphenyl	(37%-102%)
TBP	=	2,4,6-Tribromophenol	(33%-126%)
TPH	=	p-Terphenyl-d14	(44%-134%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 1135986**
Matrix: **GROUND WATER**
Lab Sample ID: **1202473716**
Instrument: **MSD3.I**
Analysis Date: **08/26/2011 11:49**
Dilution: **1**
Analyst: **JLD1**
Prep Batch ID **1135986**
Inj. Vol: **1 uL**
Batch ID: **1135988**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
108-95-2	LCS	Phenol	50.0	0.0	15.0	30	15-103
95-57-8	LCS	2-Chlorophenol	50.0	0.0	40.3	81	49-98
621-64-7	LCS	N-Nitrosodipropylamine	50.0	0.0	37.0	74	50-114
59-50-7	LCS	4-Chloro-3-methylphenol	50.0	0.0	43.2	86	55-107
121-14-2	LCS	2,4-Dinitrotoluene	50.0	0.0	57.8	116	58-118
83-32-9	LCS	Acenaphthene	50.0	0.0	39.0	78	50-96
100-02-7	LCS	4-Nitrophenol	50.0	0.0	17.3	35	15-103
87-86-5	LCS	Pentachlorophenol	50.0	0.0	44.6	89	40-107
129-00-0	LCS	Pyrene	50.0	0.0	41.2	82	53-113

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Matrix Spike**
Client ID: **11080101MS**
Matrix: **GROUND WATER**
Lab Sample ID: **1202473717**
Instrument: **MSD3.I**
Analysis Date: **08/26/2011 17:18**
Dilution: **1**
Analyst: **JLD1**
Prep Batch ID **1135986**
Inj. Vol: **1 uL**
Batch ID: **1135988**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
108-95-2	MS	Phenol	100	0.00	U	26.7	27 *	31-137
95-57-8	MS	2-Chlorophenol	100	0.00	U	24.4	24 *	43-106
621-64-7	MS	N-Nitrosodipropylamine	100	0.00	U	60.9	61	45-120
59-50-7	MS	4-Chloro-3-methylphenol	100	0.00	U	40.2	40 *	47-117
121-14-2	MS	2,4-Dinitrotoluene	100	0.00	U	85.5	85	52-117
83-32-9	MS	Acenaphthene	100	0.00	U	67.4	67	45-103
100-02-7	MS	4-Nitrophenol	100	0.00	U	29.0	29 *	39-96
87-86-5	MS	Pentachlorophenol	100	0.00	U	9.42	9 *	35-116
129-00-0	MS	Pyrene	100	0.00	U	68.2	68	42-125

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Matrix Spike Duplicate**
Client ID: **11080101MSD**
Matrix: **GROUND WATER**
Lab Sample ID: **1202473718**
Instrument: **MSD3.I**
Analysis Date: **08/26/2011 13:57**
Dilution: **1**
Analyst: **JLD1**
Prep Batch ID **1135986**
Inj. Vol: **1 uL**
Batch ID: **1135988**

CAS No	Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
108-95-2	MSD Phenol	100	0.00	U	35.8	36	31-137	29 *	0-25
95-57-8	MSD 2-Chlorophenol	100	0.00	U	57.3	57	43-106	81 *	0-25
621-64-7	MSD N-Nitrosodipropylamine	100	0.00	U	61.6	62	45-120	1	0-28
59-50-7	MSD 4-Chloro-3-methylphenol	100	0.00	U	71.3	71	47-117	56 *	0-25
121-14-2	MSD 2,4-Dinitrotoluene	100	0.00	U	96.5	96	52-117	12	0-23
83-32-9	MSD Acenaphthene	100	0.00	U	67.4	67	45-103	0	0-29
100-02-7	MSD 4-Nitrophenol	100	0.00	U	33.9	34 *	39-96	16	0-25
87-86-5	MSD Pentachlorophenol	100	0.00	U	36.4	36	35-116	118 *	0-25
129-00-0	MSD Pyrene	100	0.00	U	67.9	68	42-125	0	0-25

Method Blank Summary

SDG Number:	**284538**	**Client:**	**ECOL008**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 1135986**	**Instrument ID:**	**MSD3.I**	**Data File:**	**s082611.B\s3h2608.D**
Lab Sample ID:	**1202473715**	**Prep Date:**	**08/25/2011 18:55**	**Analyzed:**	**08/26/11 11:24**
Column:	**DB-5ms**				

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 1135986	1202473716	s082611.B\s3h2609.D	08/26/11	1149
02	11080101	284538001	s082611.B\s3h2612.D	08/26/11	1307
03	11080101MSD	1202473718	s082611.B\s3h2614.D	08/26/11	1357
04	11080101MS	1202473717	s082611.B\s3h2622.D	08/26/11	1718

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: MSD3.I **Injection Date/Time:** 12-AUG-11 08:54

Column Description: DB-5ms **Lab File ID** s081211.B\s3h1202.D

m/e	Ion Abundance Criteria	% Relative Abundance
51	10 - 80% of mass 198	58.6
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	43.6
70	Less than 2% of mass 69	0.5
127	10 - 80% of mass 198	50.1
197	Less than 2% of mass 198	0
198	Base Peak, 100% Relative Abundance	100
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	24
365	Greater than 1% of mass 198	3.4
441	Less than 24% of mass 442	16.1
442	Greater than 50% of mass 198	93.5
443	15 - 24% of mass 442	21.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[B]	WBN110719-17	s081211.B\s3h1215.D	12-AUG-11 15:29
ICALMIX[B]	WBN110719-16	s081211.B\s3h1216.D	12-AUG-11 15:53
ICALMIX[B]	WBN110719-15.1	s081211.B\s3h1217.D	12-AUG-11 16:18
ICALMIX[B]	WBN110719-14	s081211.B\s3h1218.D	12-AUG-11 16:42
ICALMIX[B]	WBN110719-13	s081211.B\s3h1219.D	12-AUG-11 17:07
ICALMIX[B]	WBN110719-12	s081211.B\s3h1220.D	12-AUG-11 17:32
ICALMIX[B]	WBN110719-11	s081211.B\s3h1221.D	12-AUG-11 17:57
ICVMIX[B]01	WBN110809-18.1	s081211.B\s3h1222.D	12-AUG-11 18:22

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: MSD3.I **Injection Date/Time:** 13-AUG-11 05:04

Column Description: DB-5ms **Lab File ID** s081211.B\s3h1248.D

m/e	Ion Abundance Criteria	% Relative Abundance
51	10 - 80% of mass 198	59.9
68	Less than 2% of mass 69	1.4
69	Mass 69 Relative Abundance	44.6
70	Less than 2% of mass 69	0.5
127	10 - 80% of mass 198	51.3
197	Less than 2% of mass 198	0.2
198	Base Peak, 100% Relative Abundance	100
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	23.4
365	Greater than 1% of mass 198	3.3
441	Less than 24% of mass 442	15.7
442	Greater than 50% of mass 198	92.6
443	15 - 24% of mass 442	21.2

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
ICALMIX[A]	WBN110812-08	s081211.B\s3h1258.D	13-AUG-11 09:50
ICALMIX[A]	WBN110812-07	s081211.B\s3h1259.D	13-AUG-11 10:21
ICALMIX[A]	WBN110812-06	s081211.B\s3h1260.D	13-AUG-11 10:52
ICALMIX[A]	WBN110812-05.1	s081211.B\s3h1261.D	13-AUG-11 11:24
ICALMIX[A]	WBN110812-04	s081211.B\s3h1262.D	13-AUG-11 11:55
ICALMIX[A]	WBN110812-03	s081211.B\s3h1263.D	13-AUG-11 12:26
ICALMIX[A]	WBN110812-02	s081211.B\s3h1264.D	13-AUG-11 12:57
ICALMIX[A]	WBN110812-01	s081211.B\s3h1265.D	13-AUG-11 13:28
ICVMIX[A]02	WBN110812-09.1	s081211.B\s3h1266.D	13-AUG-11 13:59

Instrument Performance Check

DFTPP

Lab Name GEL Laboratories LLC **Client SDG:** 284538

Instrument ID: MSD3.I **Injection Date/Time:** 26-AUG-11 09:22

Column Description: DB-5ms **Lab File ID** s082611.B\s3h2604.D

m/e	Ion Abundance Criteria	% Relative Abundance
51	10 - 80% of mass 198	38.8
68	Less than 2% of mass 69	1.3
69	Mass 69 Relative Abundance	35.9
70	Less than 2% of mass 69	0.5
127	10 - 80% of mass 198	47.9
197	Less than 2% of mass 198	0
198	Base Peak, 100% Relative Abundance	100
199	5 - 9% of mass 198	6.7
275	10 - 60% of mass 198	24.4
365	Greater than 1% of mass 198	3
441	Less than 24% of mass 442	15.2
442	Greater than 50% of mass 198	96.8
443	15 - 24% of mass 442	19.1

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, LCS, LCSD,BLANKS AND STANDARDS

Client Sample ID	Lab Sample ID	Lab File ID	Time Analyzed
CCVMIX[A]01	WBN110812-05.3	s082611.B\s3h2605.D	26-AUG-11 09:34
CCVMIX[B]02	WBN110809-18.3	s082611.B\s3h2606.D	26-AUG-11 10:06
BLK01	1202473715	s082611.B\s3h2608.D	26-AUG-11 11:24
BLK01LCS	1202473716	s082611.B\s3h2609.D	26-AUG-11 11:49
11080101	284538001	s082611.B\s3h2612.D	26-AUG-11 13:07
11080101MSD	1202473718	s082611.B\s3h2614.D	26-AUG-11 13:57
11080101MS	1202473717	s082611.B\s3h2622.D	26-AUG-11 17:18

Internal Standard
Area and RT Summary

Lab Name : GEL Laboratories LLC

Client SDG: 284538

Instrument: MSD3.I

STD Analysis Time: 26-AUG-11 09:34

GC Column: DB-5ms

Data File: s082611.B\s3h2605.D

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10		Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #	Area #	RT #
12 Hour STD	520022	4.9	2079837	6.18	1019046	8.06	1833310	9.67	1340846	12.7	926118	15.1
Upper Limit	1040044	5.4	4159674	6.68	2038092	8.56	3666620	10.2	2681692	13.2	1852236	15.6
Lower Limit	260011	4.4	1039919	5.68	509523	7.56	916655	9.17	670423	12.2	463059	14.6
Sample ID												
BLK01	441882	4.89	1599052	6.18	827843	8.05	1396617	9.66	788805	12.7	556659	15.1
BLK01LCS	464442	4.9	1841128	6.18	892778	8.05	1581375	9.67	1098909	12.7	709470	15.1
11080101	491404	4.89	1752130	6.17	912985	8.05	1517756	9.66	952221	12.7	601876	15.1
11080101MSD	514946	4.89	2002021	6.18	965901	8.05	1665873	9.67	1118891	12.7	744995	15.1
11080101MS	479448	4.89	1831235	6.18	825095	8.05	1298083	9.67	1073331	12.7	579836	15.1

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
* Value outside of QC Limits

Sample Data

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:07**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2612.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
95-57-8	2-Chlorophenol	U	3.00	ug/L	3.00	10.0
39638-32-9	bis(2-Chloroisopropyl)ether	U	3.00	ug/L	3.00	10.0
95-48-7	o-Cresol	U	3.00	ug/L	3.00	10.0
65794-96-9	m,p-Cresols	U	3.00	ug/L	3.00	10.0
621-64-7	N-Nitrosodipropylamine	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.00	ug/L	3.00	10.0
88-75-5	2-Nitrophenol	U	3.00	ug/L	3.00	10.0
105-67-9	2,4-Dimethylphenol	U	3.00	ug/L	3.00	10.0
111-91-1	bis(2-Chloroethoxy)methane	U	3.00	ug/L	3.00	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
106-47-8	4-Chloroaniline	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
59-50-7	4-Chloro-3-methylphenol	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
91-58-7	2-Chloronaphthalene	U	0.300	ug/L	0.300	1.00
88-74-4	o-Nitroaniline	U	3.00	ug/L	3.00	10.0
99-09-2	m-Nitroaniline	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	3.00	ug/L	3.00	10.0
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
208-96-8	Acenaphthylene	U	0.300	ug/L	0.300	1.00
83-32-9	Acenaphthene	U	0.300	ug/L	0.300	1.00
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
132-64-9	Dibenzofuran	U	3.00	ug/L	3.00	10.0
58-90-2	2,3,4,6-Tetrachlorophenol	U	3.00	ug/L	3.00	10.0
84-66-2	Diethylphthalate	U	3.00	ug/L	3.00	10.0
100-02-7	4-Nitrophenol	U	3.00	ug/L	3.00	10.0
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
7005-72-3	4-Chlorophenylphenylether	U	3.00	ug/L	3.00	10.0
100-01-6	p-Nitroaniline	U	3.00	ug/L	3.00	10.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:07**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2612.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
101-55-3	4-Bromophenylphenylether	U	3.00	ug/L	3.00	10.0
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
86-74-8	Carbazole	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	3.00	ug/L	3.00	10.0
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
85-68-7	Butylbenzylphthalate	U	3.00	ug/L	3.00	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	J	4.56	ug/L	3.00	10.0
56-55-3	Benzo(a)anthracene	U	0.300	ug/L	0.300	1.00
218-01-9	Chrysene	U	0.300	ug/L	0.300	1.00
117-84-0	Di-n-octylphthalate	U	3.00	ug/L	3.00	10.0
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.300	ug/L	0.300	1.00
53-70-3	Dibenzo(a,h)anthracene	U	0.300	ug/L	0.300	1.00
191-24-2	Benzo(ghi)perylene	U	0.300	ug/L	0.300	1.00
100-52-7	Benzaldehyde	U	3.00	ug/L	3.00	10.0
98-86-2	Acetophenone	U	3.00	ug/L	3.00	10.0
105-60-2	Caprolactam	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
92-52-4	1,1'-Biphenyl	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2612.D
Acq On : 26 Aug 2011 13:07
Operator : JLD1
InstName : MSD 3
Sample : |284538001|1135988|1|SVM|1|ECOL
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 13:58:31 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	491404	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.174	6.180	1.000	1752130	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.050	8.056	1.000	912985	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.664	9.670	1.000	1517756	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.693	12.704	1.000	952221	40.00	ng/uL	-0.01
91) A Perylene-d12	264	15.054	15.066	1.000	601876	40.00	ng/uL	-0.01
99) B 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	491404	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.174	6.180	1.000	1752130	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.050	8.056	1.000	912985	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.664	9.670	1.000	1517756	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.693	12.704	1.000	952221	40.00	ng/uL	-0.01
153) B Perylene-d12	264	15.054	15.066	1.000	601876	40.00	ng/uL	-0.01
156) D Naphthalene-d8	136	6.174	6.180	1.000	1752130	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.050	8.056	1.000	912985	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.664	9.670	1.000	1517756	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.693	12.704	1.000	952221	40.00	ng/uL	-0.01
170) E Naphthalene-d8	136	6.174	6.180	1.000	1754444	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.054	15.066	1.000	601876	40.00	ng/uL	-0.01
174) F 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	491404	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.174	6.180	1.000	1752130	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.050	8.056	1.000	912985	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.664	9.670	1.000	1517756	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.693	12.704	1.000	952221	40.00	ng/uL	-0.01
192) J 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	491404	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.174	6.180	1.000	1752130	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.693	12.704	1.000	952221	40.00	ng/uL	-0.01
199) J Perylene-d12	264	15.054	15.066	1.000	601876	40.00	ng/uL	-0.01
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.714	3.676	0.759	657862	41.05	ng/uL	0.04
8) Phenol-d5	99	4.484	4.484	0.916	494935	24.35	ng/uL	0.00
25) Nitrobenzene-d5	82	5.430	5.423	0.879	581231	37.47	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.303	7.299	0.907	1200795	35.97	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.899	8.920	1.106	344672	89.81	ng/uL	-0.02
83) p-Terphenyl-d14	244	11.371	11.400	0.896	722124	29.86	ng/uL	-0.03

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	14 - 78	41.05%
8) Phenol-d5	100.000	14 - 80	24.35%
25) Nitrobenzene-d5	50.000	40 - 117	74.94%
47) 2-Fluorobiphenyl	50.000	37 - 102	71.94%
66) 2,4,6-Tribromophenol	100.000	33 - 126	89.81%
83) p-Terphenyl-d14	50.000	44 - 134	59.72%

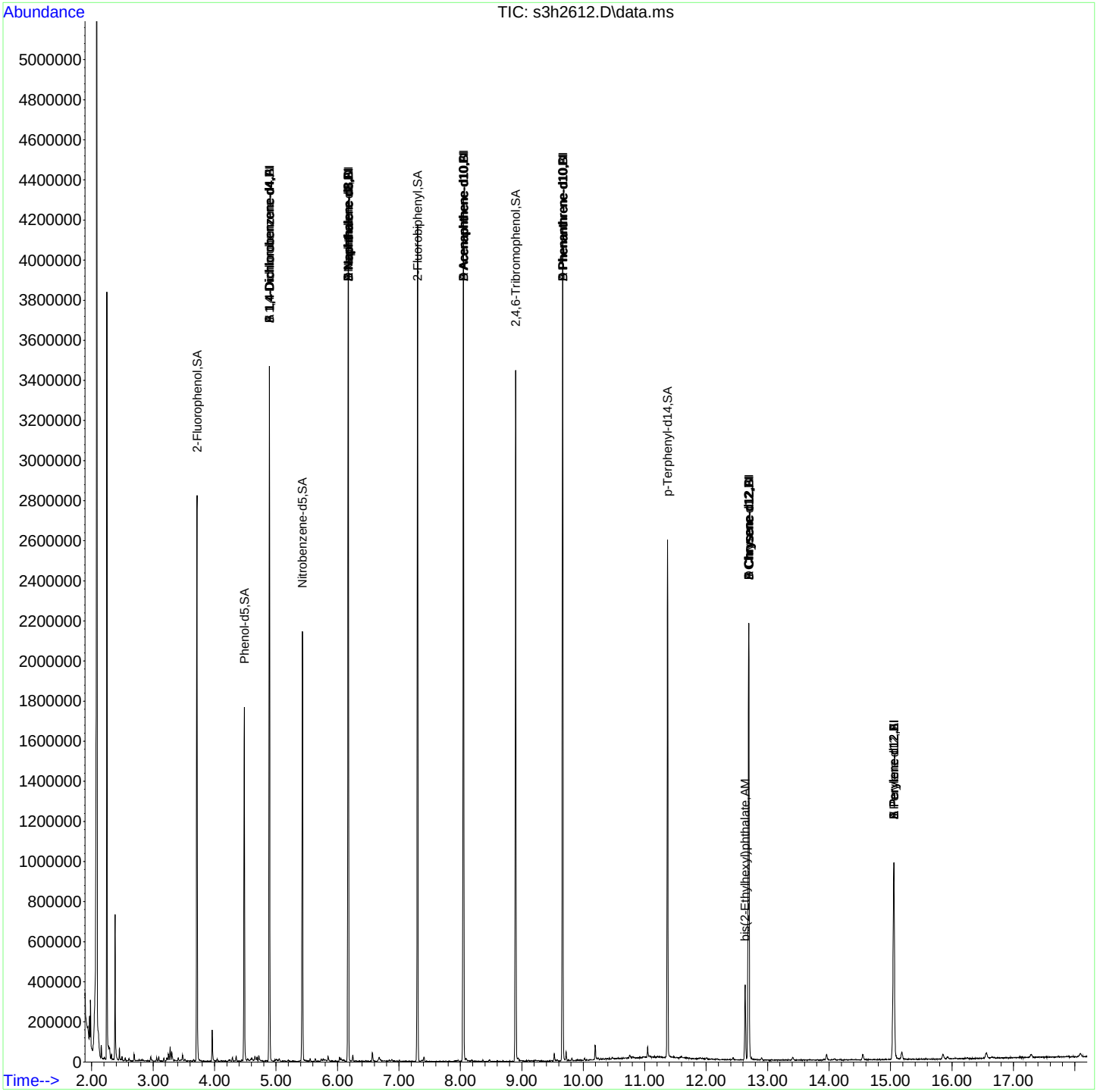
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
85) bis(2-Ethylhexyl)phtha...	149	12.633	12.658	0.995	121830	4.56	ng/uL	97

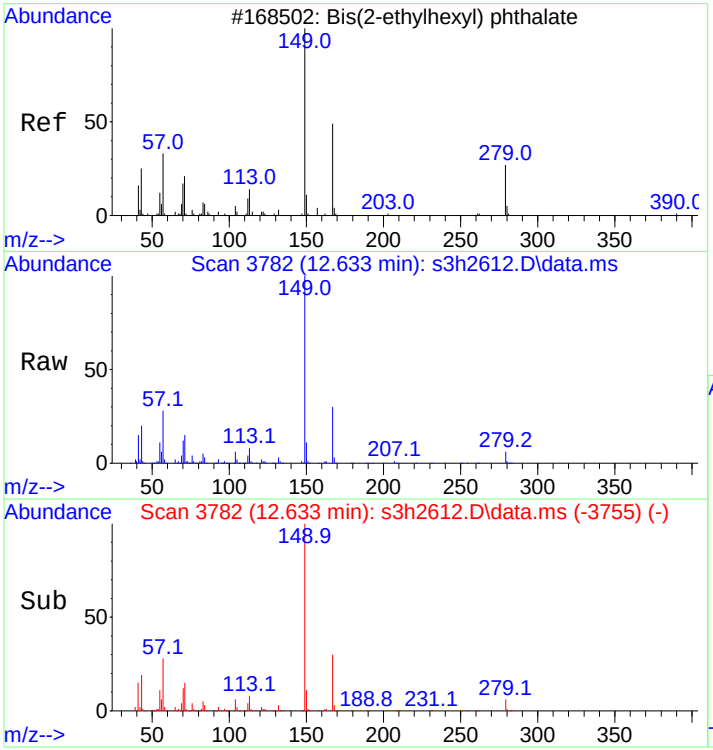
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2612.D
Acq On : 26 Aug 2011 13:07
Operator : JLD1
InstName : MSD 3
Sample : |284538001|1135988|1|SVM|1|ECOL
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 26 13:58:31 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

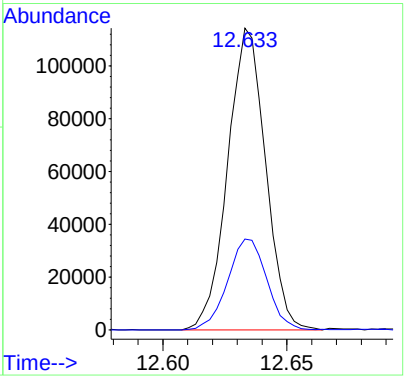


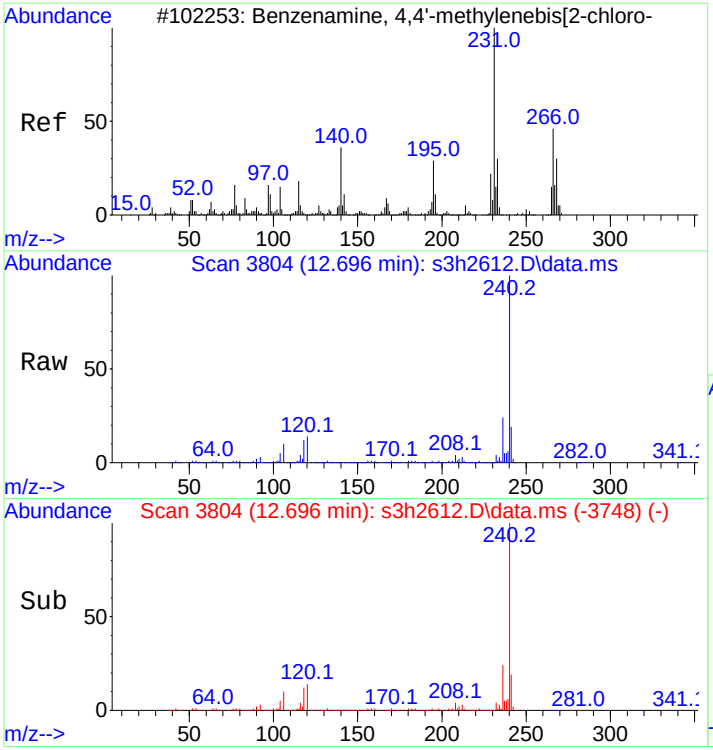


#85
bis(2-Ethylhexyl)phthalate
Concen: 4.56 ng/uL
RT: 12.633 min Scan# 3782
Delta R.T. -0.025 min
Lab File: s3h2612.D
Acq: 26 Aug 2011 13:07

Tgt Ion:149 Resp: 121830

Ion	Ratio	Lower	Upper
149	100		
167	31.2	2.6	62.6

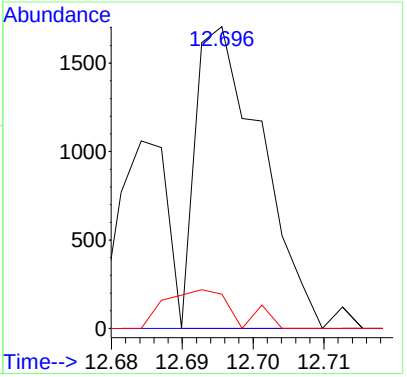




#89 BEFORE analyst DELETION
Methylenebis(2-chloroaniline)
Concen: 5.79 ng/uL
RT: 12.696 min Scan# 3804
Delta R.T. 0.060 min
Lab File: s3h2612.D
Acq: 26 Aug 2011 13:07

Tgt Ion:231 Resp: 1101

Ion	Ratio	Lower	Upper
231	100		
266	0.0	29.2	89.2#
140	0.0	13.0	73.0#



Standards

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1,4-Dichlorobenzene-d4 (INTERNAL STANDARD)								
Naphthalene-d8 (INTERNAL STANDARD)								
Acenaphthene-d10 (INTERNAL STANDARD)								
Phenanthrene-d10 (INTERNAL STANDARD)								
Chrysene-d12 (INTERNAL STANDARD)								
Perylene-d12 (INTERNAL STANDARD)								
2-Fluorophenol (SURROGATE)		10	20	40	50	80	100	120
Phenol-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Chlorophenol-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
1,2-Dichlorobenzene-d4 (CLP SURROGATE)		10	20	40	50	80	100	120
Nitrobenzene-d5 (SURROGATE)		10	20	40	50	80	100	120
2-Fluorobiphenyl (SURROGATE)		10	20	40	50	80	100	120
2,4,6-Tribromophenol (SURROGATE)		10	20	40	50	80	100	120
p-Terphenyl-d14 (SURROGATE)		10	20	40	50	80	100	120
N-Nitrosodimethylamine	1**	10	20	40	50	80	100	120
Pyridine		10	20	40	50	80	100	120
Aniline		10	20	40	50	80	100	120
Phenol		10	20	40	50	80	100	120
bis(2-Chloroethyl)ether		10	20	40	50	80	100	120
2-Chlorophenol		10	20	40	50	80	100	120
n-Decane		10	20	40	50	80	100	120
1,3-Dichlorobenzene		10	20	40	50	80	100	120
1,4-Dichlorobenzene		10	20	40	50	80	100	120
Benzyl Alcohol		10	20	40	50	80	100	120
1,2-Dichlorobenzene		10	20	40	50	80	100	120
bis(2-Chloroisopropyl)ether		10	20	40	50	80	100	120
o-Cresol (2-Methylphenol)		10	20	40	50	80	100	120
N-Nitrosodipropylamine	1**	10	20	40	50	80	100	120
m,p-Cresols (3-Methylphenol & 4-Methylphenol)		10	20	40	50	80	100	120
Hexachloroethane		10	20	40	50	80	100	120
Nitrobenzene		10	20	40	50	80	100	120
Isophorone		10	20	40	50	80	100	120
2-Nitrophenol		10	20	40	50	80	100	120
2,4-Dimethylphenol		10	20	40	50	80	100	120
bis(2-Chloroethoxy)methane		10	20	40	50	80	100	120
2,4-Dichlorophenol		10	20	40	50	80	100	120
Benzoic Acid			20	40	50	80	100	120
1,2,4-Trichlorobenzene		10	20	40	50	80	100	120
Naphthalene	1	10	20	40	50	80	100	120
alpha-Terpineol		10	20	40	50	80	100	120
4-Chloroaniline		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorobutadiene		10	20	40	50	80	100	120
4-Chloro-3-methylphenol		10	20	40	50	80	100	120
2-Methylnaphthalene	1	10	20	40	50	80	100	120

1-Methylnaphthalene	1	10	20	40	50	80	100	120
Hexachlorocyclopentadiene		10	20	40	50	80	100	120
2,3-Dichloroaniline		10	20	40	50	80	100	120
2,4,6-Trichlorophenol		10	20	40	50	80	100	120
2,4,5-Trichlorophenol		10	20	40	50	80	100	120
2-Chloronaphthalene	1	10	20	40	50	80	100	120
o-Nitroaniline		10	20	40	50	80	100	120
m-Nitroaniline		10	20	40	50	80	100	120
Dimethylphthalate	1**	10	20	40	50	80	100	120
2,6-Dinitrotoluene		10	20	40	50	80	100	120
Acenaphthylene	1	10	20	40	50	80	100	120
Acenaphthene	1	10	20	40	50	80	100	120
2,4-Dinitrophenol			20	40	50	80	100	120
Dibenzofuran		10	20	40	50	80	100	120
2,4-Dinitrotoluene		10	20	40	50	80	100	120
Diethylphthalate	1**	10	20	40	50	80	100	120
4-Nitrophenol		10	20	40	50	80	100	120
Fluorene	1	10	20	40	50	80	100	120
4-Chlorophenyl phenyl ether		10	20	40	50	80	100	120
2-Methyl-4,6-dinitrophenol		10	20	40	50	80	100	120
p-Nitroaniline		10	20	40	50	80	100	120
Diphenylamine		10	20	40	50	80	100	120
1,2-Diphenylhydrazine		10	20	40	50	80	100	120
4-Bromophenyl phenyether		10	20	40	50	80	100	120
Hexachlorobenzene		10	20	40	50	80	100	120
Pentachlorophenol		10	20	40	50	80	100	120
n-Octadecane		10	20	40	50	80	100	120
Phenanthrene	1	10	20	40	50	80	100	120
Anthracene	1	10	20	40	50	80	100	120
Di-n-butylphthalate	1**	10	20	40	50	80	100	120
Fluoranthene	1	10	20	40	50	80	100	120
Pyrene	1	10	20	40	50	80	100	120
Butylbenzylphthalate	1**	10	20	40	50	80	100	120
Benzo(a)anthracene	1	10	20	40	50	80	100	120
Chrysene	1	10	20	40	50	80	100	120
bis (2-Ethylhexyl) phthalate	1	10	20	40	50	80	100	120
Di-n-octylphthalate	1**	10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
MEGA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzo(b)fluoranthene	1	10	20	40	50	80	100	120
Benzo(k)fluoranthene	1	10	20	40	50	80	100	120
Benzo(a)pyrene	1	10	20	40	50	80	100	120
Indeno-(1,2,3-cd)pyrene	1	10	20	40	50	80	100	120
Dibenzo(a,h)anthracene	1	10	20	40	50	80	100	120
Benzo(ghi)perylene	1	10	20	40	50	80	100	120
m-Dinitrobenzene		10	20	40	50	80	100	120
2,3,4,6-Tetrachlorophenol		10	20	40	50	80	100	120
Dinoseb		10	20	40	50	80	100	120
Carbazole	1	10	20	40	50	80	100	120

p-Benzoquinone		10	20	40	50	80	100	120
Methoxychlor	1**	10	20	40	50	80	100	120
p-Toluidine		10	20	40	50	80	100	120
m-Toluidine		10	20	40	50	80	10	120
1,4-Dinitrobenzene		10	20	40	50	80	100	120
2-Ethoxyethanol		10	20	40	50	80	100	120
Phthalic anhydride		10	20	40	50	80	100	120
Methylenebis(2-chloroaniline)		10	20	40	50	80	100	120
Dibenzo(a,e)pyrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Benzaldehyde		10	20	40	50	80	100	120
Acetophenone		10	20	40	50	80	100	120
Caprolactam		10	20	40	50	80	100	120
1,1'-Biphenyl		10	20	40	50	80	100	120
Atrazine		10	20	40	50	80	100	120
Benzidine		10	20	40	50	80	100	120
3,3'-Dichlorobenzidene		10	20	40	50	80	100	120
1,4-Dioxane		10	20	40	50	80	100	120
Methyl methacrylate		10	20	40	50	80	100	120
Ethyl methacrylate		10	20	40	50	80	100	120
2-Picoline		10	20	40	50	80	100	120
N-Nitrosomethylethylamine		10	20	40	50	80	100	120
Methyl methanesulfonate		10	20	40	50	80	100	120
N-Nitrosodiethylamine		10	20	40	50	80	100	120
Ethyl methanesulfonate		10	20	40	50	80	100	120
Pentachloroethane		10	20	40	50	80	100	120
N-Nitrosopyrrolidine		10	20	40	50	80	100	120
N-Nitrosomorpholine		10	20	40	50	80	100	120
o-Toluidine		10	20	40	50	80	100	120
N-Nitrosopiperidine		10	20	40	50	80	100	120
a,a-Dimethhylphenethylamine		10	20	40	50	80	100	120
2,6-Dichlorophenol		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
AP MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachloropropene		10	20	40	50	80	100	120
p-Phenylenediamine		10	20	40	50	80	100	120
N-Nitrosodi-n-butylamine		10	20	40	50	80	100	120
Safrole		10	20	40	50	80	100	120
1,2,4,5-Tetrachlorobenzene		10	20	40	50	80	100	120
Isosafrole		10	20	40	50	80	100	120
1,4-Naphthoquinone		10	20	40	50	80	100	120
Pentachlorobenzene		10	20	40	50	80	100	120
1-Naphthylamine		10	20	40	50	80	100	120
2-Naphthylamine		10	20	40	50	80	100	120
5-Nitro-o-toluidine		10	20	40	50	80	100	120
1,3,5-Trinitrobenzene		10	20	40	50	80	100	120
Phenacetin		10	20	40	50	80	100	120
Diallate		10	20	40	50	80	100	120
cis-Diallate		1.5	3	6	7.5	12	15	18
trans-Diallate		8.5	17	34	42	68	85	102
4-Aminobiphenyl		10	20	40	50	80	100	120

Pentachloronitrobenzene		10	20	40	50	80	100	120
Pronamide		10	20	40	50	80	100	120
4-Nitroquinoline oxide		10	20	40	50	80	100	120
Methapyrilene	1**	10	20	40	50	80	100	120
Isodrin	1**	10	20	40	50	80	100	120
Aramite		10	20	40	50	80	100	120
Kepone	1**	10	20	40	50	80	100	120
p-(Dimethylamino)azobenzene		10	20	40	50	80	100	120
Chlorobenzilate		10	20	40	50	80	100	120
3,3'-Dimethylbenzidine		10	20	40	50	80	100	120
2-Acetylaminofluorene		10	20	40	50	80	100	120
7,12-Dimethylbenz(a)anthracene		10	20	40	50	80	100	120
3-Methylcholanthrene		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Hexachlorophene		500	1000	1250	1500	1750	2000	

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
PEST MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
Tributylphosphate		10	20	40	50	80	100	120
Triethylphosphorothioate		10	20	40	50	80	100	120
Thionazin		10	20	40	50	80	100	120
Sulfotepp		10	20	40	50	80	100	120
Phorate		10	20	40	50	80	100	120
Dimethoate		10	20	40	50	80	100	120
Disulfoton		10	20	40	50	80	100	120
Methyl parathion		10	20	40	50	80	100	120
Famphur		10	20	40	50	80	100	120
Parathion		10	20	40	50	80	100	120

SW846 8270/EPA 625								
Calibration Standard Concentration Levels*								
NEVADA MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
bis(Chloromethyl)ether		10	20	40	50	80	100	120
4-Chlorothiophenol		10	20	40	50	80	100	120
4-Chlorothioanisole		10	20	40	50	80	100	120
Phthalic acid		10	20	40	50	80	100	120
Hydroxymethyl phthalimide		10	20	40	50	80	100	120
Diphenyl sulfide		10	20	40	50	80	100	120
Diphenyl disulfide		10	20	40	50	80	100	120
Phenyl sulfone		10	20	40	50	80	100	120
Octachlorostyrene		10	20	40	50	80	100	120
Thiophenol		10	20	40	50	80	100	120
2,2'-Dichlorobenzil		10	20	40	50	80	100	120
bis(p-Chlorophenyl)disulfide		10	20	40	50	80	100	120

bis(p-Chlorophenyl)sulfone		10	20	40	50	80	100	120

SW846 8270C/8270D/EPA 625								
Calibration Standard Concentration Levels*								
BJCO MIX	Level 1	Level 2	Level 3	Level 4#	Level 5	Level 6	Level 7	Level 8
1-Hexanol		10	20	40	50	80	100	120
Quinoline		10	20	40	50	80	100	120
2,4-Toluene diisocyanate		10	20	40	50	80	100	120
1-Nitropyrene		10	20	40	50	80	100	120
5-Methylchrysene		10	20	40	50	80	100	120
Benzo(j)fluoranthene		10	20	40	50	80	100	120
Dibenzo(a,h)pyrene		10	20	40	50	80	100	120
Dibenzo(a,h)acridine		10	20	40	50	80	100	120
Dibenzo(a,j)acridine		10	20	40	50	80	100	120
Dibenzo(a,i)pyrene		10	20	40	50	80	100	120
Dibenzo(a,l)pyrene		10	20	40	50	80	100	120
7H-Dibenzo(c,g)carbazole		10	20	40	50	80	10	120

All values are mg/L without the prep factor.
# Indicates the calibration verification concentration level used
* Usual calibration levels using SCAN methodology
** This analyte included in this level at special client request.
(0210/Full list)

Calibration History Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:1 Amt:0.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1258.D

Injection Date	Mix	Calibration File
13 Aug 2011 09:50	A	C:\msdchem\1\DATA\s081211.B\s3h1258.D

Cal Lvl:2 Amt:10.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1287.D

Injection Date	Mix	Calibration File
13 Aug 2011 10:21	A	C:\msdchem\1\DATA\s081211.B\s3h1259.D
12 Aug 2011 15:29	B	C:\msdchem\1\DATA\s081211.B\s3h1215.D
14 Aug 2011 17:22	D	C:\msdchem\1\DATA\s081211.B\s3h1272.D
14 Aug 2011 20:40	E	C:\msdchem\1\DATA\s081211.B\s3h1280.D
14 Aug 2011 23:34	F	C:\msdchem\1\DATA\s081211.B\s3h1287.D
13 Aug 2011 05:42	J	C:\msdchem\1\DATA\s081211.B\s3h1250.D

Cal Lvl:3 Amt:20.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1288.D

Injection Date	Mix	Calibration File
13 Aug 2011 10:52	A	C:\msdchem\1\DATA\s081211.B\s3h1260.D
12 Aug 2011 15:53	B	C:\msdchem\1\DATA\s081211.B\s3h1216.D
14 Aug 2011 17:47	D	C:\msdchem\1\DATA\s081211.B\s3h1273.D
14 Aug 2011 21:05	E	C:\msdchem\1\DATA\s081211.B\s3h1281.D
14 Aug 2011 23:59	F	C:\msdchem\1\DATA\s081211.B\s3h1288.D
13 Aug 2011 06:12	J	C:\msdchem\1\DATA\s081211.B\s3h1251.D

Cal Lvl:4 Amt:40.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1289.D

Injection Date	Mix	Calibration File
13 Aug 2011 11:24	A	C:\msdchem\1\DATA\s081211.B\s3h1261.D
12 Aug 2011 16:18	B	C:\msdchem\1\DATA\s081211.B\s3h1217.D
14 Aug 2011 18:12	D	C:\msdchem\1\DATA\s081211.B\s3h1274.D
14 Aug 2011 21:30	E	C:\msdchem\1\DATA\s081211.B\s3h1282.D
15 Aug 2011 00:24	F	C:\msdchem\1\DATA\s081211.B\s3h1289.D
13 Aug 2011 06:43	J	C:\msdchem\1\DATA\s081211.B\s3h1252.D

Cal Lvl:5 Amt:50.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1290.D

Injection Date	Mix	Calibration File
13 Aug 2011 11:55	A	C:\msdchem\1\DATA\s081211.B\s3h1262.D
12 Aug 2011 16:42	B	C:\msdchem\1\DATA\s081211.B\s3h1218.D
14 Aug 2011 18:36	D	C:\msdchem\1\DATA\s081211.B\s3h1275.D
14 Aug 2011 21:55	E	C:\msdchem\1\DATA\s081211.B\s3h1283.D
15 Aug 2011 00:49	F	C:\msdchem\1\DATA\s081211.B\s3h1290.D
13 Aug 2011 07:15	J	C:\msdchem\1\DATA\s081211.B\s3h1253.D

Cal Lvl:6 Amt:80.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1291.D

Injection Date	Mix	Calibration File
13 Aug 2011 12:26	A	C:\msdchem\1\DATA\s081211.B\s3h1263.D
12 Aug 2011 17:07	B	C:\msdchem\1\DATA\s081211.B\s3h1219.D
14 Aug 2011 19:01	D	C:\msdchem\1\DATA\s081211.B\s3h1276.D
14 Aug 2011 22:20	E	C:\msdchem\1\DATA\s081211.B\s3h1284.D
15 Aug 2011 01:13	F	C:\msdchem\1\DATA\s081211.B\s3h1291.D
13 Aug 2011 07:46	J	C:\msdchem\1\DATA\s081211.B\s3h1254.D

Calibration History Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

Cal Lvl:7 Amt:100.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1292.D

Injection Date	Mix	Calibration File
13 Aug 2011 12:57	A	C:\msdchem\1\DATA\s081211.B\s3h1264.D
12 Aug 2011 17:32	B	C:\msdchem\1\DATA\s081211.B\s3h1220.D
14 Aug 2011 19:26	D	C:\msdchem\1\DATA\s081211.B\s3h1277.D
14 Aug 2011 22:44	E	C:\msdchem\1\DATA\s081211.B\s3h1285.D
15 Aug 2011 01:38	F	C:\msdchem\1\DATA\s081211.B\s3h1292.D
13 Aug 2011 08:17	J	C:\msdchem\1\DATA\s081211.B\s3h1255.D

Cal Lvl:8 Amt:120.00 Last Updated with: C:\msdchem\1\DATA\s081211.B\s3h1293.D

Injection Date	Mix	Calibration File
13 Aug 2011 13:28	A	C:\msdchem\1\DATA\s081211.B\s3h1265.D
12 Aug 2011 17:57	B	C:\msdchem\1\DATA\s081211.B\s3h1221.D
14 Aug 2011 19:51	D	C:\msdchem\1\DATA\s081211.B\s3h1278.D
15 Aug 2011 02:03	F	C:\msdchem\1\DATA\s081211.B\s3h1293.D
13 Aug 2011 08:48	J	C:\msdchem\1\DATA\s081211.B\s3h1256.D

MSD3_8270d_081211.m Mon Aug 15 15:22:02 2011

Response Factor Report MSD 3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	7	8								
2)A	2-Ethoxyethanol			1.2340145	1.2181249	1.2348480	1.2471251	1.2308013				
			1.2185351	1.2308278					1.2306	AVRG		0.8154
3)AM	N-Methyl-N-nitrosomethyl			0.9397979	0.9237424	0.9263692	0.9356428	0.9204513				
			0.9248948	0.9193873					0.9272	AVRG		0.8291
4)AM	Pyridine			1.2514929	1.2608555	1.2802964	1.3043075	1.2898786				
			1.3063024	1.2971082					1.2843	AVRG		1.6583
5)SA	2-Fluorophenol			1.3045354	1.2880741	1.3011337	1.3179987	1.3086597				
			1.3135329	1.2978635					1.3045	AVRG		0.7706
6)A	p-Benzoquinone			0.1737111	0.2035249	0.2566364	0.2771401	0.2928395				
			0.3011836	0.2756648					0.2544	AVRG		18.8113
7)AM	Aniline			0.8034789	0.8044218	0.8124923	0.8177751	0.8024846				
			0.8190849	0.8152829					0.8107	AVRG		0.8775
8)SA	Phenol-d5			1.6370335	1.6313587	1.6405326	1.6805269	1.6506674				
			1.6750398	1.6663835					1.6545	AVRG		1.1810
9)AM	Phenol			1.7406881	1.7184266	1.7216259	1.7461898	1.7026914				
			1.7144286	1.7097324					1.7220	AVRG		0.9267
10)AM	bis(2-Chloroethyl) ether			1.4079233	1.3967876	1.3967046	1.4070752	1.3731332				
			1.3879889	1.3806242					1.3929	AVRG		0.9369
11)AM	2-Chlorophenol			1.3251409	1.3210041	1.3223636	1.3309848	1.2551342				
			1.2520895	1.2371367					1.2920	AVRG		3.2136
12)AM	n-Decane			2.7695621	2.7102941	2.6849855	2.6590415	2.3743575				
			2.2609385	2.2056382					2.5235	AVRG		9.3229
13)AM	1,3-Dichlorobenzene			1.4581549	1.4365727	1.4409410	1.4633700	1.4261529				
			1.4280563	1.4276832					1.4401	AVRG		1.0509
14)AM	1,4-Dichlorobenzene			1.4814231	1.4617310	1.4744835	1.4832974	1.4377739				
			1.4457495	1.4336816					1.4597	AVRG		1.4271
15)AM	1,2-Dichlorobenzene			1.3855838	1.3686587	1.3701046	1.3930206	1.3592740				
			1.3713911	1.3559335					1.3720	AVRG		0.9695
16)AM	bis(2-Chloroisopropyl) e			3.8006494	3.7617683	3.7597980	3.7622288	3.6055230				
			3.6270420	3.5949022					3.7017	AVRG		2.3825

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
17)AM Benzyl alcohol		0.8644998	0.8647657	0.8716919	0.8765932	0.8563810				
	0.8687814	0.8706352					0.8676	AVRG		0.7466
18)AM o-Cresol		1.1041770	1.0981018	1.0994741	1.1119514	1.0785479				
	1.0966248	1.0902704					1.0970	AVRG		0.9620
19)AM m,p-Cresols		1.3962546	1.3981706	1.4017147	1.4231165	1.3873682				
	1.4145003	1.4149124					1.4051	AVRG		0.9008
20)AM N-Nitrosodipropylamine		1.0484075	1.0533550	1.0596671	1.0642583	0.9930990				
	1.0260306	1.0143470					1.0370	AVRG		2.5559
21)A p-Toluidine		1.5530753	1.5544253	1.5463842	1.5623051	1.3880718				
	1.2551263	1.1805248					1.4343	AVRG		11.2469
22)A m-Toluidine		1.5741550	1.5670139	1.5853090	1.6042786	1.6069318				
	1.7195188	1.7388191					1.6280	AVRG		4.3509
23)AM Hexachloroethane		0.6127488	0.6056286	0.6067716	0.6135475	0.6001665				
	0.6095686	0.6036470					0.6074	AVRG		0.7981
25)SA Nitrobenzene-d5		0.3847496	0.3720308	0.3481338	0.3388726	0.3207613				
	0.3575545	0.3568489					0.3541	AVRG		5.9449
26)AM Nitrobenzene		0.3955608	0.3781873	0.3539102	0.3458167	0.3227168				
	0.3592166	0.3582758					0.3591	AVRG		6.4527
27)AM Isophorone		0.7394561	0.7111853	0.6764076	0.6529307	0.5979806				
	0.6624775	0.6525730					0.6704	AVRG		6.7804
28)AM 2-Nitrophenol		0.1890266	0.1834409	0.1748789	0.1730542	0.1626883				
	0.1821913	0.1812481					0.1781	AVRG		4.8520
29)AM 2,4-Dimethylphenol		0.3333155	0.3150542	0.2906808	0.2801705	0.2580222				
	0.2814751	0.2818442					0.2915	AVRG		8.5725
30)AM bis(2-Chloroethoxy)metha		0.4581611	0.4394210	0.4147480	0.4029785	0.3715247				
	0.4129914	0.4121044					0.4160	AVRG		6.5830
31)AM 2,4-Dichlorophenol		0.2566695	0.2518249	0.2431991	0.2383093	0.2254503				
	0.2553385	0.2541126					0.2464	AVRG		4.6533
32)AM Benzoic acid			0.1708694	0.1872013	0.1950925	0.2056327				
	0.2425314	0.2460597					0.2079	AVRG		14.6282

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
33)AM 1,2,4-Trichlorobenzene		0.3209954	0.3058984	0.2862685	0.2804806	0.2614994				
	0.2887139	0.2871298					0.2901	AVRG		6.5092
34)AM alpha-Terpineol		0.4753656	0.4592113	0.4388881	0.4184347	0.3734345				
	0.4075786	0.4046225					0.4254	AVRG		8.2114
35)AM Naphthalene	1.0536353	1.0140813	0.9656164	0.9067097	0.8748064	0.7787454				
	0.8383846	0.8304498					0.9078	AVRG		10.5701
36)AM 4-Chloroaniline		0.3805379	0.3700351	0.3500252	0.3439459	0.3191124				
	0.3594661	0.3567017					0.3543	AVRG		5.5651
37)AM Hexachlorobutadiene		0.1667874	0.1590846	0.1507928	0.1488281	0.1394586				
	0.1552110	0.1553544					0.1536	AVRG		5.5753
38)AM 4-Chloro-3-methylphenol		0.2830978	0.2798073	0.2682314	0.2613692	0.2412951				
	0.2743432	0.2715364					0.2685	AVRG		5.2122
39)AM 2-Methylnaphthalene	0.6664630	0.6796850	0.6517329	0.6189316	0.5967804	0.5454736				
	0.6147992	0.6080285					0.6227	AVRG		6.9023
40)A Phthalic anhydride		0.0210547	0.0265786	0.0354530	0.0385176	0.0455607				
	0.0544745	0.0589918					0.0401	AVRG	#	34.7277
41)AM 1-Methylnaphthalene	0.6494408	0.6464591	0.6256483	0.5928635	0.5728658	0.5192106				
	0.5849820	0.5810295					0.5966	AVRG		7.2420
43)AM Hexachlorocyclopentadien		0.2826726	0.2942699	0.2753431	0.2803945	0.2971398				
	0.2779914	0.2682205					0.2823	AVRG		3.6370
44)AM 2,3-Dichloroaniline		0.6938742	0.6914236	0.6859524	0.6925602	0.6923290				
	0.6688189	0.6715452					0.6852	AVRG		1.5472
45)AM 2,4,6-Trichlorophenol		0.3695687	0.3682602	0.3715931	0.3740127	0.3695398				
	0.3563160	0.3598530					0.3670	AVRG		1.7592
46)AM 2,4,5-Trichlorophenol		0.3735105	0.3831921	0.3923466	0.3983383	0.3990314				
	0.3905112	0.3897157					0.3895	AVRG		2.2808
47)SA 2-Fluorobiphenyl		1.4862240	1.4654002	1.4546405	1.4839271	1.4798887				
	1.4319106	1.4349288					1.4624	AVRG		1.5519
48)AM 2-Chloronaphthalene	1.2117024	1.2195233	1.2073443	1.1965152	1.2139506	1.2047631				
	1.1756393	1.1754749					1.2006	AVRG		1.4055

Response Factor Report MSD 3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
49)AM o-Nitroaniline		0.4484038	0.4503951	0.4497502	0.4514850	0.4534366				
	0.4567365	0.4537891					0.4520	AVRG		0.6292
50)A 1,4-Dinitrobenzene		0.2033650	0.2037924	0.2136706	0.2141357	0.2139762				
	0.2203966	0.2195826					0.2127	AVRG		3.1986
51)AM m-Nitroaniline		0.3138187	0.3117533	0.3114793	0.3055341	0.3061891				
	0.3127700	0.3079626					0.3099	AVRG		1.0709
52)AM Dimethylphthalate		1.3852354	1.3453410	1.3691302	1.3448377	1.3233218				
	1.3250552	1.3192880					1.3446	AVRG		1.8541
53)A m-Dinitrobenzene		0.2433971	0.2394439	0.2492488	0.2425111	0.2453956				
	0.2476290	0.2465984					0.2449	AVRG		1.3668
54)AM 2,6-Dinitrotoluene		0.3116580	0.3054856	0.3109493	0.3091113	0.3071169				
	0.3061856	0.3069491					0.3082	AVRG		0.7781
55)AM 2,4-Dinitrotoluene		0.3792879	0.3633328	0.3822628	0.3704037	0.3802784				
	0.3794660	0.3782610					0.3762	AVRG		1.8062
56)AM Acenaphthylene	1.9854889	2.0457071	1.9996955	2.0076747	2.0030568	1.9797479				
	1.9371125	1.9298115					1.9860	AVRG		1.9126
57)AM Acenaphthene	1.2291521	1.2675373	1.2548721	1.2625051	1.2709268	1.2735595				
	1.2554613	1.2540661					1.2585	AVRG		1.1166
58)AM 2,4-Dinitrophenol			0.1152866	0.1292610	0.1334810	0.1572140				
	0.1663797	0.1652520					0.1445	AVRG		14.7739
59)AM Dibenzofuran		1.7132067	1.6705070	1.6679757	1.6651860	1.6401212				
	1.6160442	1.6119641					1.6550	AVRG		2.1351
60)A 2,3,4,6-Tetrachloropheno		0.2526601	0.2534037	0.2756033	0.2728425	0.3004628				
	0.3000327	0.2974060					0.2789	AVRG		7.5208
61)AM Diethylphthalate		1.4713257	1.4131531	1.4662638	1.4265819	1.4037471				
	1.3910244	1.3876238					1.4228	AVRG		2.3940
62)AM 4-Nitrophenol		0.1843336	0.1955583	0.2041296	0.2029580	0.2130078				
	0.2122573	0.2088423					0.2030	AVRG		5.0277
63)AM Fluorene	1.4460161	1.4585279	1.4188186	1.4513198	1.4261386	1.4136222				
	1.3928689	1.3901494					1.4247	AVRG		1.8137

Response Factor Report MSD 3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
64)AM 4-Chlorophenylphenylethe		0.6668283	0.6507019	0.6599946	0.6465864	0.6333674				
	0.6214660	0.6179163					0.6424	AVRG		2.9205
65)AM p-Nitroaniline		0.2543537	0.2531474	0.2559549	0.2521460	0.2707466				
	0.2742173	0.2696710					0.2615	AVRG		3.6720
66)SA 2,4,6-Tribromophenol		0.1610656	0.1607498	0.1680278	0.1640528	0.1727882				
	0.1736463	0.1766724					0.1681	AVRG		3.8090
68)AM 2-Methyl-4,6-dinitrophen		0.0936103	0.1083619	0.1152277	0.1197509	0.1268146				
	0.1307791	0.1299813					0.1178	AVRG		11.4046
69)AM Diphenylamine		0.7009439	0.7130662	0.7064357	0.7017898	0.6787357				
	0.6833116	0.6792333					0.6948	AVRG		2.0253
70)AM 1,2-Diphenylhydrazine		1.0058797	1.0207063	1.0028684	0.9932106	0.9414947				
	0.9388096	0.9342337					0.9767	AVRG		3.7904
71)AM 4-Bromophenylphenylether		0.2014780	0.2068005	0.2070178	0.2054963	0.1994325				
	0.2020533	0.2019762					0.2035	AVRG		1.4510
72)AM Hexachlorobenzene		0.2375483	0.2383274	0.2425946	0.2441934	0.2387646				
	0.2373396	0.2383359					0.2396	AVRG		1.1213
73)AM Pentachlorophenol		0.1126156	0.1220044	0.1293770	0.1329834	0.1408001				
	0.1399355	0.1406935					0.1312	AVRG		8.2033
74)AM n-Octadecane		1.0501987	1.0851312	1.0788158	1.0656063	0.9865446				
	0.9716585	0.9652860					1.0290	AVRG		5.1071
75)A Dinoseb		0.1390025	0.1592590	0.1710924	0.1789236	0.1928701				
	0.1969950	0.1974306					0.1765	AVRG		12.3789
76)AM Phenanthrene	1.0329471	1.0600011	1.0463786	1.0469990	1.0432203	1.0317274				
	1.0176073	1.0153413					1.0368	AVRG		1.4785
77)AM Anthracene	1.0166921	1.0648462	1.0558774	1.0574476	1.0470381	1.0454461				
	1.0341722	1.0325231					1.0443	AVRG		1.5104
78)AM Carbazole	0.8359421	0.9061888	0.8597563	0.8613841	0.8627430	0.9042434				
	0.8929085	0.8920385					0.8769	AVRG		2.8925
79)AM Di-n-butylphthalate		1.4065621	1.3994041	1.4279410	1.4410198	1.4237995				
	1.3721392	1.3784545					1.4070	AVRG		1.8272

Response Factor Report MSD 3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b | m1 | m2	7	8								
80)AM Fluoranthene	0.9552389	1.0508433	1.0493604	1.0202246	1.0472383	1.0260961				
	1.0104656	1.0005930					1.0200	AVRG		3.1560
82)AM Pyrene	1.4527635	1.5131805	1.5753499	1.6484773	1.7143117	1.8506005				
	1.8108437	1.8948312					1.6825	AVRG		9.6598
83)SA p-Terphenyl-d14		0.8953401	0.9278495	0.9777162	1.0137265	1.0956182				
	1.0722079	1.1282265					1.0158	AVRG		8.6096
84)AM Butylbenzylphthalate		0.7227566	0.7672266	0.8162797	0.8468672	0.8647923				
	0.8567864	0.8820108					0.8224	AVRG		7.0453
85)AM bis(2-Ethylhexyl)phthala		1.0412361	1.0694746	1.1138986	1.1482956	1.1443981				
	1.1515113	1.1899950					1.1227	AVRG		4.6042
86)AM Benzo(a)anthracene	1.1528866	1.1013661	1.0860401	1.0975748	1.0823237	1.0910594				
	1.0882950	1.0953250					1.0994	AVRG		2.0478
87)AM Chrysene	1.0359204	1.0176740	1.0009908	1.0219435	1.0058952	1.0102553				
	1.0102696	1.0212910					1.0155	AVRG		1.0879
88)A Methoxychlor		0.7017069	0.7353051	0.7710891	0.7812632	0.7651653				
	0.7659386	0.7732703					0.7562	AVRG		3.7098
89)A Methylenebis(2-chloroani		32596	59405	114530	156137	282593		1/x^2		
-0.0214 | 0.1562 | 0.00	362329	353445						LINR	#	0.9935
90)AM Di-n-octylphthalate		1.3647793	1.3511674	1.4518507	1.4634701	1.4829731				
	1.5415827	1.5633439					1.4599	AVRG		5.5121
92)AM Benzo(b)fluoranthene	1.1085966	1.2007951	1.2317326	1.2702653	1.2624491	1.2943221				
	1.2651488	1.3206321					1.2442	AVRG		5.2819
93)AM Benzo(k)fluoranthene	1.1557984	1.2515474	1.2458289	1.2673182	1.2780030	1.3027951				
	1.2419775	1.2861046					1.2537	AVRG		3.5704
94)AM Benzo(a)pyrene	0.8615413	1.0388803	1.0391397	1.0871348	1.0848932	1.0971686				
	1.0981595	1.1200820					1.0534	AVRG		7.8382
95)AM Indeno(1,2,3-cd)pyrene	0.6518272	0.7659877	0.7777163	0.7785020	0.8190644	0.7833698				
	0.8737445	0.8026367					0.7816	AVRG		8.0118
96)AM Dibenzo(a,h)anthracene	0.5254707	0.6257949	0.6382678	0.6367991	0.6712651	0.6557704				
	0.7363792	0.6709464					0.6451	AVRG		9.1893

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	7	8								
97)AM	Benzo(ghi)perylene		0.5529512	0.6170715	0.6220469	0.6014391	0.6374830	0.6043495				
			0.6885568	0.6066471					0.6163	AVRG		6.1855
98)A	Dibenzo(a,e)pyrene			0.2880979	0.3229936	0.3017782	0.3564862	0.3365801				
			0.4159018	0.3329114					0.3364	AVRG		12.4047
100)BM	1,4-Dioxane			0.6115028	0.5810773	0.5694676	0.5505934	0.5302150				
			0.5261045	0.5170784					0.5551	AVRG		6.1476
101)B	Methyl methacrylate			0.3437529	0.3180373	0.3131443	0.3011771	0.2883165				
			0.2864664	0.2809116					0.3045	AVRG		7.2850
102)B	Ethyl methacrylate			1.3605589	1.2877645	1.2791191	1.2378656	1.2041511				
			1.2053052	1.1830246					1.2511	AVRG		4.9725
103)B	2-Picoline			1.7053354	1.6215135	1.6158415	1.5723865	1.5236540				
			1.5269697	1.5027670					1.5812	AVRG		4.5250
104)B	N-Nitrosomethylethylamin			0.7005446	0.6708662	0.6672186	0.6542599	0.6464114				
			0.6441070	0.6427430					0.6609	AVRG		3.1357
105)B	Methyl methanesulfonate			0.7991030	0.7482029	0.7113305	0.7281019	0.6690400				
			0.6539832	0.6381356					0.7068	AVRG		8.0939
106)B	N-Nitrosodiethylamine			0.7078317	0.6840381	0.6775300	0.6641467	0.6539772				
			0.6497070	0.6502468					0.6696	AVRG		3.2128
107)B	Ethyl methanesulfonate			1.0502140	1.0155401	1.0024189	1.0071592	0.9781405				
			0.9632532	0.9617517					0.9969	AVRG		3.1839
108)BM	Benzaldehyde			1.2345349	1.1666736	1.1003712	1.0798587	0.9702624				
			0.9240379	0.9146306					1.0558	AVRG		11.6911
109)B	Pentachloroethane			0.5725427	0.5560349	0.5494701	0.5433006	0.5309644				
			0.5248453	0.5226952					0.5428	AVRG		3.3390
110)BM	N-Nitrosopyrrolidine			0.6815460	0.6724311	0.6624423	0.6742266	0.5955882				
			0.5708887	0.6028417					0.6371	AVRG		7.1710
111)BM	Acetophenone			1.8711349	1.8139493	1.7743015	1.7653673	1.7199329				
			1.6865405	1.7169814					1.7640	AVRG		3.6027
112)B	N-Nitrosomorpholine			1.2482937	1.2063190	1.1863161	1.1917272	1.1520943				
			1.1163781	1.1310716					1.1760	AVRG		3.9035

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	7	8								
113)B	o-Toluidine			2.0986495	2.0386537	2.0142524	2.0023591	1.9348595				
			1.8956802	1.9102052					1.9850	AVRG		3.7384
115)B	N-Nitrosopiperidine			0.1907316	0.1845839	0.1813435	0.1839915	0.1797829				
			0.1781537	0.1796008					0.1826	AVRG		2.3478
116)B	a,a-Dimethylphenethylami			1.2799436	1.2971317	1.3393709	1.3942882	1.4259988				
			1.4657715	1.5098692					1.3875	AVRG		6.2195
117)BM	2,6-Dichlorophenol			0.2688204	0.2593350	0.2597708	0.2637486	0.2607892				
			0.2585768	0.2626895					0.2620	AVRG		1.3523
118)B	Hexachloropropene			0.1787076	0.1711401	0.1764204	0.1807171	0.1604705				
			0.1622830	0.1761435					0.1723	AVRG		4.6516
119)BM	Caprolactam			0.1098572	0.1054623	0.1060604	0.1104002	0.1053556				
			0.1061776	0.1107780					0.1077	AVRG		2.3028
120)B	N-Nitrosodi-n-butylamine			0.3338354	0.3188046	0.3114790	0.2898521	0.3093224				
			0.2611480	0.2612235					0.2980	AVRG		9.4967
121)B	Safrole			0.2938711	0.2824689	0.2768844	0.2787276	0.2700356				
			0.2668166	0.2687075					0.2768	AVRG		3.4217
123)B	1,2,4,5-Tetrachlorobenze			0.6287216	0.6049206	0.6177365	0.5905812	0.5872660				
			0.5862129	0.5730920					0.5984	AVRG		3.2791
124)BM	1,1-Biphenyl			1.7953559	1.7294755	1.7371115	1.6755984	1.6479257				
			1.6333790	1.5969973					1.6880	AVRG		4.0960
125)B	Isosafrole			0.5827506	0.5677701	0.5657852	0.5604764	0.5555003				
			0.5556751	0.5414404					0.5613	AVRG		2.2796
126)B	1,4-Naphthoquinone			0.5064997	0.4878614	0.4163983	0.3902205	0.3421062				
			0.3312701	0.3081318					0.3975	AVRG		19.4591
127)B	Pentachlorobenzene			0.5274705	0.5017582	0.5007704	0.4986623	0.4912654				
			0.4941669	0.4960632					0.5015	AVRG		2.4030
128)B	1-Naphthylamine			1.2167924	1.1596754	1.1211537	1.1626714	1.0840179				
			1.0835667	1.1098598					1.1340	AVRG		4.2788
129)B	2-Naphthylamine			1.2478141	1.1980307	1.1603391	1.2230546	1.1509788				
			1.1662269	1.1548173					1.1859	AVRG		3.1901

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	7	8								
130)B	5-Nitro-o-toluidine			0.2999272	0.3010682	0.3118955	0.3294241	0.3288770				
			0.3550817	0.3365365					0.3233	AVRG		6.2185
132)B	1,3,5-Trinitrobenzene			0.1398568	0.1565952	0.1651613	0.1462352	0.1457280				
			0.1540059	0.1397701					0.1496	AVRG		6.2719
133)B	Phenacetin			0.3185867	0.3335826	0.3560877	0.3550732	0.3596961				
			0.3672782	0.3493107					0.3485	AVRG		4.8251
134)B	Diallate			0.4027942	0.3896167	0.3809573	0.3670376	0.3557829				
			0.3426359	0.3599606					0.3713	AVRG		5.6391
135)B	Cis Diallate			0.5502175	0.5129534	0.5065352	0.4879007	0.4825740				
			0.4706651	0.4914154					0.5003	AVRG		5.2348
136)B	Trans Diallate			0.4738755	0.4583726	0.4481850	0.4318089	0.4185681				
			0.4031011	0.4234831					0.4368	AVRG		5.6391
137)BM	50Atrazine			0.0638603	0.0599240	0.0517746	0.0531892	0.0429148				
			0.0367325						0.0514	AVRG		19.8102
138)B	4-Aminobiphenyl			0.6965265	0.6731886	0.7691197	0.7691612	0.7436596				
			0.7300232	0.7150581					0.7281	AVRG		4.9509
139)B	Pentachloronitrobenzene			0.0927522	0.0947951	0.0972713	0.0955113	0.0946181				
			0.0927490	0.0949474					0.0947	AVRG		1.6668
140)B	Pronamide			0.3678326	0.3664038	0.3812215	0.3435345	0.3581199				
			0.3510046	0.3674947					0.3622	AVRG		3.4363
141)B	4-Nitroquinoline-1-oxide			0.0277480	0.0255515	0.0215707	0.0196976	0.0127609				
			0.0123805	0.0140042					0.0191	AVRG	#	32.7052
142)B	Methapyrilene			0.9282231	0.8807702	0.7828059	0.7223596	0.5345827				
			0.4824758	0.4981883					0.6899	AVRG	#	26.9104
143)B	Isodrin			0.1491980	0.1486678	0.1546041	0.1451178	0.1466576				
			0.1443241	0.1428789					0.1473	AVRG		2.6630
144)BM	Benzidine			0.3266854	0.3686833	0.3281903	0.3445587	0.2684307				
			0.2478562	0.2396376					0.3034	AVRG		16.7430
146)B	Aramite			0.0858450	0.0891703	0.0980078	0.0971183	0.1042121				
			0.1022476	0.1048174					0.0973	AVRG		7.5790

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound			1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b	m1	m2	7	8								
147)B	Kepone		0.1135771	0.1140741	0.1217917	0.1056720	0.1164615					
			0.1174585	0.1241716					0.1162	AVRG		5.1969
148)B	p-(Dimethylamino)azobenz		0.4408974	0.4490422	0.4981289	0.4876984	0.5314249					
			0.5432143	0.5550414					0.5008	AVRG		8.9767
149)B	Chlorobenzilate		0.4148657	0.4271440	0.4800955	0.4632722	0.5111021					
			0.5188039	0.5464299					0.4802	AVRG		10.1305
150)B	3,3'-Dimethylbenzidine		0.6544922	0.6326063	0.5605062	0.6026023	0.5363635					
			0.5203613	0.5580504					0.5807	AVRG		8.6521
151)B	2-Acetylaminofluorene		0.2467822	0.2633561	0.2395374	0.3036658	0.2563043					
			0.2681929	0.2943585					0.2675	AVRG		8.8787
152)BM	3,3'-Dichlorobenzidine		0.2922073	0.2926177	0.2787692	0.3142338	0.2826374					
			0.2866892	0.3023787					0.2928	AVRG		4.1574
154)B	7,12-Dimethylbenz(a)anth		0.7259846	0.7277687	0.7668868	0.6736280	0.7275850					
			0.6993762	0.6812204					0.7146	AVRG		4.5091
155)B	3-Methylcholanthrene		0.1051323	0.1071936	0.1058539	0.1117660	0.1093591					
			0.1105437	0.1135348					0.1091	AVRG		2.8712
157)D	Triethylphosphorothioate		0.1716467	0.1668714	0.1635396	0.1650917	0.1641491					
			0.1640643	0.1584963					0.1648	AVRG		2.3953
159)D	Thionazine		0.2104992	0.2103125	0.2132654	0.2135837	0.2182464					
			0.2174825	0.2132211					0.2138	AVRG		1.4423
160)DM	Tributylphosphate		1.6150304	1.6607327	1.6888663	1.6769230	1.6825665					
			1.6617202	1.5907588					1.6538	AVRG		2.2326
162)D	Sulfotepp		0.1361412	0.1320779	0.1324468	0.1305826	0.1251256					
			0.1286685	0.1293748					0.1306	AVRG		2.6425
163)D	Phorate		0.5437339	0.5368437	0.5313380	0.5319922	0.5043640					
			0.5112885	0.5058855					0.5236	AVRG		3.0660
164)D	Dimethoate		0.2730810	0.2853086	0.2965257	0.3017814	0.3041522					
			0.3093549	0.3081169					0.2969	AVRG		4.4751
165)D	Disulfoton		0.4558737	0.4512856	0.4484512	0.4486222	0.4355013					
			0.4383345	0.4352684					0.4448	AVRG		1.8625

Response Factor Report MSD 3
GEL Laboratories, LLC
Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
166)D Methyl parathion		0.2215669	0.2425153	0.2583014	0.2652198	0.2697932				
	0.2726460	0.2712505					0.2573	AVRG		7.3483
167)D Parathion		0.0791457	0.0870420	0.0892264	0.0901307	0.0906022				
	0.0918825	0.0896748					0.0882	AVRG		4.8433
169)D Famphur		0.4303921	0.4465300	0.4663461	0.4574291	0.4829436				
	0.4630855	0.4445022					0.4559	AVRG		3.7598
171)E p-Phenylenediamine		0.4114053	0.3876672	0.4057720	0.3833670	0.3992074				
	0.3940926						0.3969	AVRG		2.6917
173)E Hexachlorophene		0.0990701	0.1072945	0.1301036	0.1367407	0.1405513				
	0.1441406						0.1263	AVRG		14.8002
175)F bis(Chloromethyl)ether		1.0309680	1.0242257	1.0052152	1.0247227	0.9993850				
	0.9642218	0.9667863					1.0022	AVRG		2.7427
176)F Thiophenol		58709	305905	800567	879139	1621805				
-0.1656 | 1.2903 | 0.00	2172596	2565267						LINR	#	0.9986
178)F 4-Chlorothiophenol		24582	153414	460592	505911	1010476				
-0.0525 | 0.2396 | 0.00	1397335	1681100						LINR	#	0.9988
179)F 4-Chlorothioanisole		0.2109742	0.2613131	0.2679082	0.2764484	0.2784287				
	0.2787612	0.2762253					0.2643	AVRG		9.2217
180)F Phthalic acid		8679	26667	92652	106779	226389				
-0.0152 | 0.0556 | 0.00	317502	386094						LINR	#	0.9964
182)F Hydroxymethyl phthalimid		0.1379649	0.1336061	0.1094466	0.1369201	0.0925769				
	0.0866219						0.1162	AVRG		19.9426
183)F Diphenyl sulfide		0.8471886	0.8413022	0.8394305	0.8766565	0.8627481				
	0.8468971	0.8333658					0.8497	AVRG		1.7679
185)F Diphenyl disulfide		0.2906454	0.2578598	0.2578501	0.2659494	0.2627204				
	0.2587783	0.2569457					0.2644	AVRG		4.5463
186)F Phenyl sulfone		0.4621204	0.4559569	0.4580178	0.4745696	0.4656773				
	0.4638590	0.4576581					0.4626	AVRG		1.3789
187)F Octachlorostyrene		0.0776341	0.0766223	0.0759365	0.0798394	0.0802791				
	0.0799522	0.0800310					0.0786	AVRG		2.3322

Response Factor Report MSD 3
GEL Laboratories, LLC

Method File : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Last Update : Mon Aug 15 15:17:29 2011
Integrator : (RTE Integrator) Response via : Initial Calibration

For Linear Calibration: x = concentration ratio, y = response ratio. y = b + m1(x) + m2(xE2)

Compound	1	2	3	4	5	6	Avg	Curve	Exp	%RSD/r^2
b m1 m2	7	8								
189)F 2,2'-Dichlorobenzil		0.9041338	0.9096889	0.9187005	1.0320688	0.9237939				
	0.9319363	0.9329639					0.9362	AVRG		4.6582
190)F bis(p-Chlorophenyl)disul		0.2347826	0.2219133	0.2136192	0.2350770	0.2143606				
	0.2088478	0.2213168					0.2214	AVRG		4.6428
191)F bis(p-Chlorophenyl)sulfo		0.4688278	0.4664919	0.4584262	0.5142402	0.4670518				
	0.4718099	0.4738718					0.4744	AVRG		3.8457
193)J 1-Hexanol		1.2046119	1.1811266	1.1155518	1.1564532	1.1402588				
	1.1456909	1.1744229					1.1597	AVRG		2.5450
195)J Quinoline		0.6204234	0.6059015	0.5838192	0.5971225	0.6003339				
	0.6095832	0.6185456					0.6051	AVRG		2.1073
197)J 5-Methylchrysene		0.5984914	0.5739119	0.5608350	0.5654432	0.5507656				
	0.5570120	0.5598956					0.5666	AVRG		2.7837
198)J 1-Nitropyrene		0.1515139	0.1510041	0.1801080	0.1687605	0.1695938				
	0.1741999	0.1730024					0.1669	AVRG		6.7666
200)J Benzo(j)fluoranthene		1.0413941	1.0936472	0.9958036	1.0686334	1.1105909				
	1.1507718	1.1953196					1.0937	AVRG		6.1125
201)J Dibenzo(a,j)acridine		0.6230375	0.5811909	0.5841871	0.5844945	0.5979581				
	0.6248149	0.6565931					0.6075	AVRG		4.6596
202)J Dibenzo(a,h)acridine		0.5823946	0.5388924	0.5546289	0.5503043	0.5641593				
	0.5881977	0.6185732					0.5710	AVRG		4.7761
203)J 7H-Dibenzo(c,g)carbazole		0.3670501	0.3538817	0.3516413	0.3599175	0.3764543				
	0.4196246	0.4281366					0.3795	AVRG		8.3012
204)J Dibenzo(a,l)pyrene		0.2936980	0.2743351	0.2410144	0.2605637	0.2601672				
	0.2968859	0.3009402					0.2754	AVRG		8.2336
205)J Dibenzo(a,h)pyrene		0.3053502	0.2705375	0.2403431	0.2645794	0.2765676				
	0.3292717	0.3272543					0.2877	AVRG		11.7014
206)J Dibenzo(a,i)pyrene		0.1887411	0.1562712	0.1408166	0.1668361	0.1731519				
	0.2077527	0.2090345					0.1775	AVRG		14.4814

(#) = Out of Range ($) = Individual RF Out of Range

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1215.D
Acq On : 12 Aug 2011 15:29
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-17|ICAL|1|SVM|1|A2
Misc : |MIX[B]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 15 12:06:01 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.531	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.830	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	461087	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1615443	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	787191	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.533	9.536	1.000	1175002	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.531	12.528	1.000	835133	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.830	14.824	1.000	508997	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.830	14.852	1.000	0m	40.00	ng/uL	-0.02
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.830	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	4.353	4.367	0.914	0d	0.00	ng/uL	
25) Nitrobenzene-d5	82	5.299	5.308	0.876	0d	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	7.172	7.178	0.906	0d	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	11.241	11.244	0.897	0d	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.395	2.398	0.503	70489	11.02	ng/uL	99
101) Methyl methacrylate	100	2.393	2.396	0.502	39625	11.29	ng/uL	99
102) Ethyl methacrylate	69	2.907	2.907	0.610	156834	10.87	ng/uL	98
103) 2-Picoline	93	3.160	3.163	0.663	196577	10.79	ng/uL	100
104) N-Nitrosomethylethylamine	88	3.231	3.234	0.678	80753	10.60	ng/uL	99
105) Methyl methanesulfonate	80	3.455	3.464	0.725	92114	11.31	ng/uL	100
106) N-Nitrosodiethylamine	102	3.788	3.796	0.795	81593	10.57	ng/uL	100
107) Ethyl methanesulfonate	79	4.026	4.035	0.845	121060	10.53	ng/uL	99
108) Benzaldehyde	77	4.359	4.365	0.915	142307	11.69	ng/uL	99
109) Pentachloroethane	167	4.504	4.507	0.945	65998	10.55	ng/uL	100
110) N-Nitrosopyrrolidine	100	5.118	5.135	1.074	78563	10.70	ng/uL	99
111) Acetophenone	105	5.140	5.149	1.079	215689	10.61	ng/uL	100
112) N-Nitrosomorpholine	56	5.155	5.166	1.082	143893	10.61	ng/uL	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1215.D
Acq On : 12 Aug 2011 15:29
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-17|ICAL|1|SVM|1|A2
Misc : |MIX[B]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 15 12:06:01 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

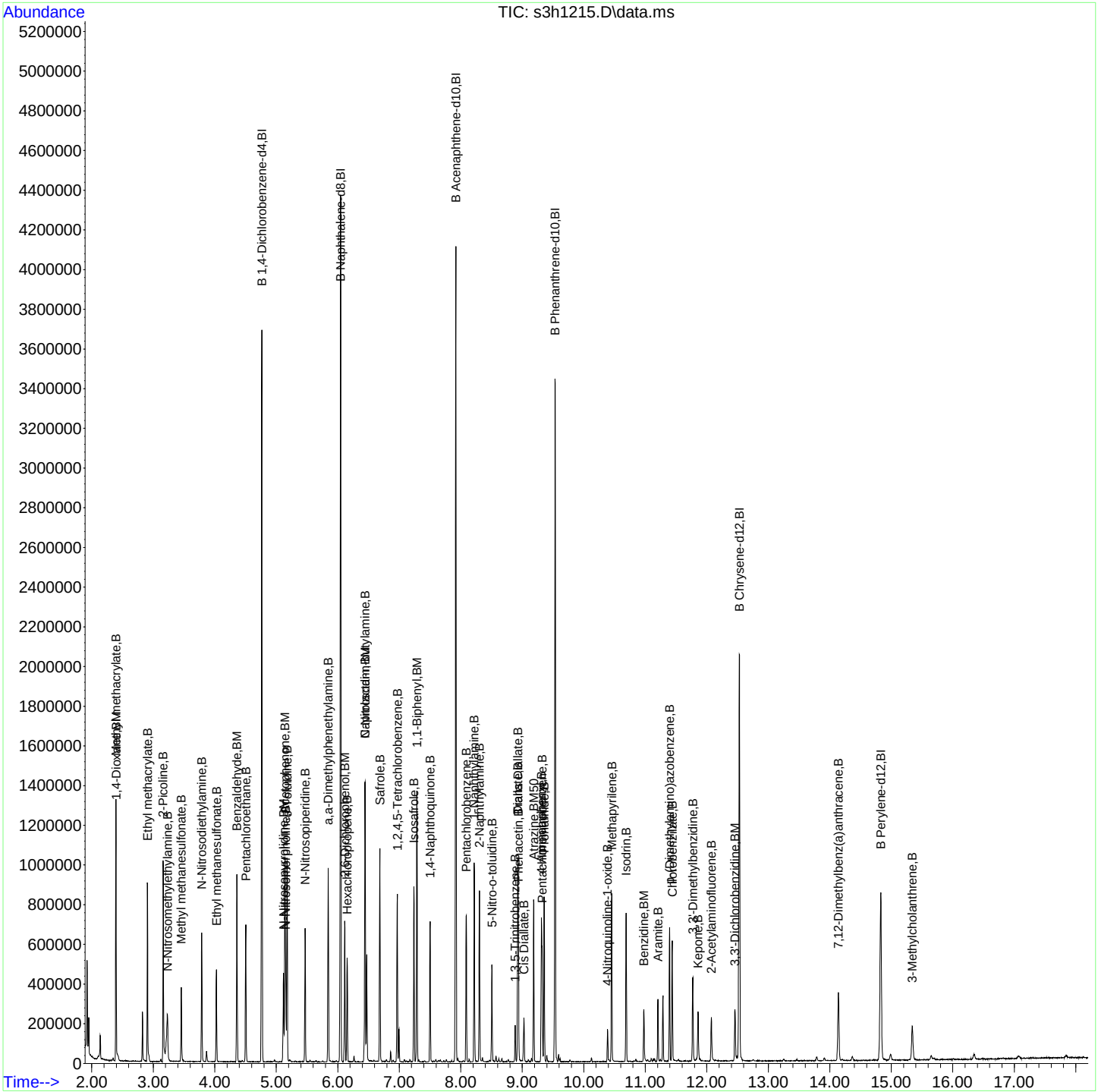
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.177	5.186	1.086	241915	10.57	ng/uL	100
115) N-Nitrosopiperidine	114	5.470	5.479	0.905	77029	10.45	ng/uL	98
116) a,a-Dimethylphenethyla...	58	5.845	5.862	0.967	516919	9.22	ng/uL	100
117) 2,6-Dichlorophenol	162	6.112	6.118	1.011	108566	10.26	ng/uL	100
118) Hexachloropropene	213	6.152	6.155	1.017	72173	10.37	ng/uL	99
119) Caprolactam	113	6.445	6.473	1.066	44367	10.20	ng/uL	95
120) N-Nitrosodi-n-butylamine	84	6.445	6.450	1.066	134823	11.20	ng/uL	98
121) Safrole	162	6.683	6.686	1.105	118683	10.62	ng/uL	100
123) 1,2,4,5-Tetrachloroben...	216	6.967	6.970	0.880	123731	10.51	ng/uL	100
124) 1,1-Biphenyl	154	7.286	7.291	0.920	353322	10.64	ng/uL	100
125) Isosafrole	162	7.237	7.243	0.914	114684	10.38	ng/uL	100
126) 1,4-Naphthoquinone	158	7.502	7.505	0.947	99678	12.74	ng/uL	99
127) Pentachlorobenzene	250	8.090	8.090	1.022	103805	10.52	ng/uL	98
128) 1-Naphthylamine	143	8.218	8.223	1.038	239462	10.73	ng/uL	99
129) 2-Naphthylamine	143	8.303	8.309	1.048	245567	10.52	ng/uL	100
130) 5-Nitro-o-toluidine	152	8.507	8.510	1.074	59025	9.28	ng/uL	98
132) 1,3,5-Trinitrobenzene	75	8.882	8.885	0.932	41083	9.35	ng/uL	97
133) Phenacetin	108	8.936	8.951	0.937	93585	9.14	ng/uL	99
134) Diallate	86	8.928	8.928	0.937	118321	10.85	ng/uL	99
135) Cis Diallate	86	9.027	9.028	0.947	24244	1.65	ng/uL	97
136) Trans Diallate	86	8.928	8.928	0.937	118321	9.22	ng/uL	99
137) Atrazine	173	9.187	9.192	0.964	18759	12.42	ng/uL	99
138) 4-Aminobiphenyl	169	9.312	9.315	0.977	204605	9.57	ng/uL	99
139) Pentachloronitrobenzene	237	9.323	9.326	0.978	27246	9.80	ng/uL	96
140) Pronamide	173	9.354	9.360	0.981	108051	10.15	ng/uL	99
141) 4-Nitroquinoline-1-oxide	101	10.386	10.389	1.089	8151	14.53	ng/uL	96
142) Methapyrilene	58	10.454	10.454	1.097	272666	13.45	ng/uL	100
143) Isodrin	193	10.690	10.690	1.121	43827	10.13	ng/uL	98
144) Benzidine	184	10.977	10.980	1.151	95964	10.77	ng/uL	99
146) Aramite	185	11.207	11.207	0.894	17923	7.10	ng/uL	98
147) Kepone	272	11.857	11.858	0.946	23713	9.78	ng/uL	99
148) p-(Dimethylamino)azobe...	120	11.394	11.397	0.909	92052	8.80	ng/uL	100
149) Chlorobenzilate	251	11.437	11.440	0.913	86617	8.64	ng/uL	100
150) 3,3'-Dimethylbenzidine	212	11.772	11.772	0.939	136647	11.27	ng/uL	99
151) 2-Acetylaminofluorene	181	12.073	12.079	0.963	51524	9.23	ng/uL	97
152) 3,3'-Dichlorobenzidine	252	12.457	12.457	0.994	61008	9.98	ng/uL	99
154) 7,12-Dimethylbenz(a)an...	256	14.139	14.142	0.953	92381	10.16	ng/uL	99
155) 3-Methylcholanthrene	269	15.338	15.344	1.034	13378	9.64	ng/uL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1215.D
Acq On : 12 Aug 2011 15:29
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-17|ICAL|1|SVM|1|A2
Misc : |MIX[B]
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 15 12:06:01 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1216.D
Acq On : 12 Aug 2011 15:53
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-16|ICAL|1|SVM|1|A3
Misc : |MIX[B]
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 15 12:06:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	477988	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1685835	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	816732	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.533	9.536	1.000	1219578	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	896330	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.827	14.824	1.000	508799	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	11.241	11.244	0.897	0d	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.398	2.398	0.503	138874	20.93	ng/uL	98
101) Methyl methacrylate	100	2.393	2.396	0.502	76009	20.89	ng/uL	98
102) Ethyl methacrylate	69	2.907	2.907	0.610	307768	20.59	ng/uL	99
103) 2-Picoline	93	3.163	3.163	0.664	387532	20.51	ng/uL	100
104) N-Nitrosomethylethylamine	88	3.234	3.234	0.679	160333	20.30	ng/uL	99
105) Methyl methanesulfonate	80	3.461	3.464	0.726	178816	21.17	ng/uL	99
106) N-Nitrosodiethylamine	102	3.791	3.796	0.795	163481	20.43	ng/uL	99
107) Ethyl methanesulfonate	79	4.029	4.035	0.846	242708	20.37	ng/uL	99
108) Benzaldehyde	77	4.362	4.365	0.915	278828	22.10	ng/uL	99
109) Pentachloroethane	167	4.504	4.507	0.945	132889	20.49	ng/uL	99
110) N-Nitrosopyrrolidine	100	5.123	5.135	1.075	160707	21.11	ng/uL	99
111) Acetophenone	105	5.143	5.149	1.079	433523	20.57	ng/uL	99
112) N-Nitrosomorpholine	56	5.157	5.166	1.082	288303	20.52	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1216.D
Acq On : 12 Aug 2011 15:53
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-16|ICAL|1|SVM|1|A3
Misc : |MIX[B]
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 15 12:06:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

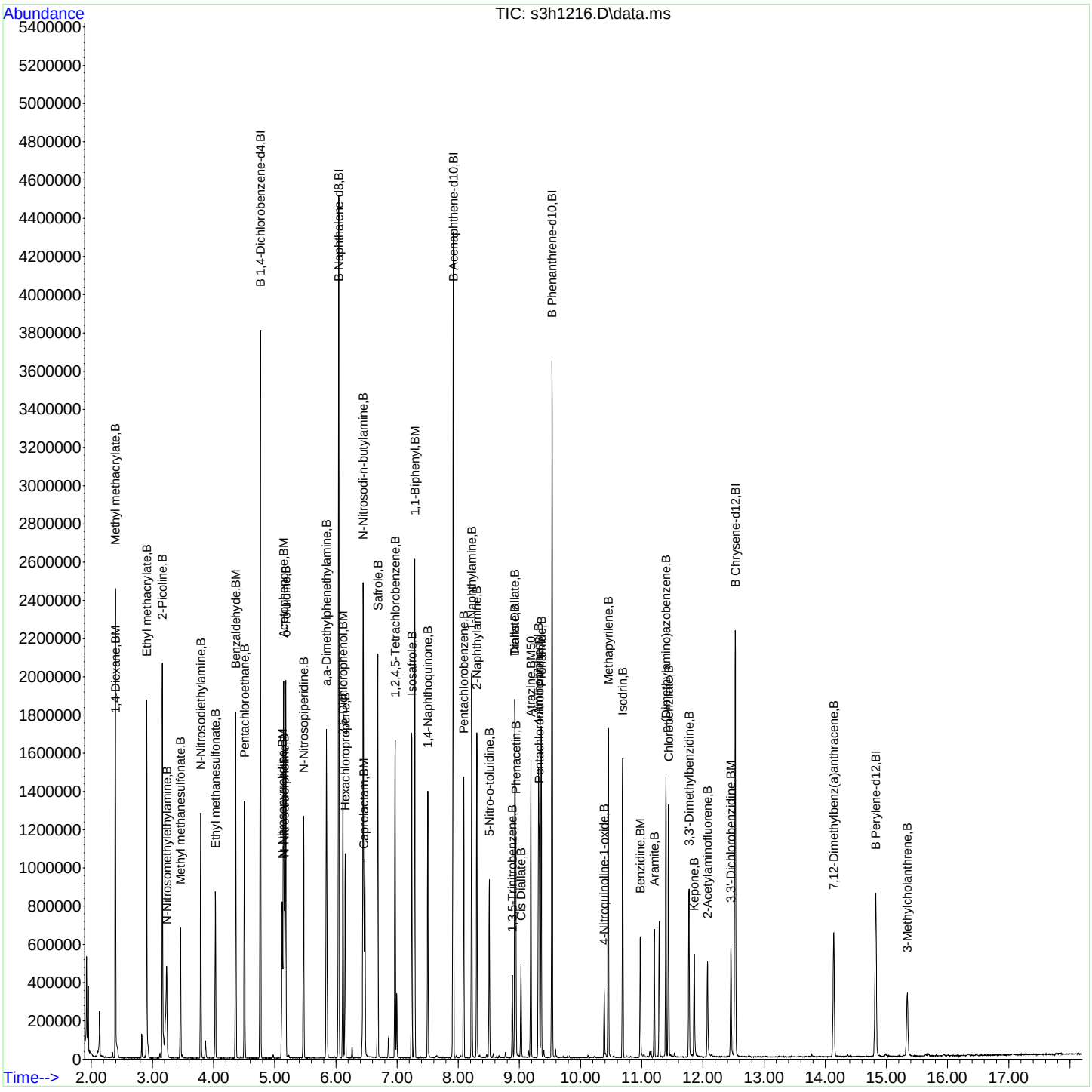
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.180	5.186	1.087	487226	20.54	ng/uL	100
115) N-Nitrosopiperidine	114	5.473	5.479	0.905	155589	20.22	ng/uL	100
116) a,a-Dimethylphenethyla...	58	5.845	5.862	0.967	1093375	18.70	ng/uL	99
117) 2,6-Dichlorophenol	162	6.115	6.118	1.011	218598	19.80	ng/uL	99
118) Hexachloropropene	213	6.152	6.155	1.017	144257	19.87	ng/uL	100
119) Caprolactam	113	6.456	6.473	1.068	88896	19.58	ng/uL	96
120) N-Nitrosodi-n-butylamine	84	6.445	6.450	1.066	268726	21.40	ng/uL	99
121) Safrole	162	6.683	6.686	1.105	238098	20.41	ng/uL	99
123) 1,2,4,5-Tetrachloroben...	216	6.967	6.970	0.880	247029	20.22	ng/uL	99
124) 1,1-Biphenyl	154	7.289	7.291	0.920	706259	20.49	ng/uL	100
125) Isosafrole	162	7.240	7.243	0.914	231858	20.23	ng/uL	99
126) 1,4-Naphthoquinone	158	7.502	7.505	0.947	199226	24.55	ng/uL	99
127) Pentachlorobenzene	250	8.090	8.090	1.022	204901	20.01	ng/uL	99
128) 1-Naphthylamine	143	8.221	8.223	1.038	473572	20.45	ng/uL	100
129) 2-Naphthylamine	143	8.303	8.309	1.048	489235	20.20	ng/uL	100
130) 5-Nitro-o-toluidine	152	8.508	8.510	1.074	122946	18.63	ng/uL	99
132) 1,3,5-Trinitrobenzene	75	8.883	8.885	0.932	95490	20.93	ng/uL	99
133) Phenacetin	108	8.942	8.951	0.938	203415	19.14	ng/uL	99
134) Diallate	86	8.925	8.928	0.936	237584	20.99	ng/uL	99
135) Cis Diallate	86	9.025	9.028	0.947	46919	3.08	ng/uL	98
136) Trans Diallate	86	8.925	8.928	0.936	237584	17.84	ng/uL	99
137) Atrazine	173	9.187	9.192	0.964	36541	23.32	ng/uL	100
138) 4-Aminobiphenyl	169	9.312	9.315	0.977	410503	18.49	ng/uL	99
139) Pentachloronitrobenzene	237	9.323	9.326	0.978	57805	20.03	ng/uL	96
140) Pronamide	173	9.357	9.360	0.982	223429	20.23	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.386	10.389	1.089	15581	26.75	ng/uL	96
142) Methapyrilene	58	10.451	10.454	1.096	537084	25.53	ng/uL	100
143) Isodrin	193	10.687	10.690	1.121	90656	20.18	ng/uL	98
144) Benzidine	184	10.977	10.980	1.151	224819	24.30	ng/uL	99
146) Aramite	185	11.204	11.207	0.894	39963	14.75	ng/uL	100
147) Kepone	272	11.858	11.858	0.946	51124	19.64	ng/uL	99
148) p-(Dimethylamino)azobe...	120	11.394	11.397	0.910	201245	17.93	ng/uL	98
149) Chlorobenzilate	251	11.437	11.440	0.913	191431	17.79	ng/uL	99
150) 3,3'-Dimethylbenzidine	212	11.772	11.772	0.940	283512	21.79	ng/uL	99
151) 2-Acetylaminofluorene	181	12.074	12.079	0.964	118027	19.69	ng/uL	100
152) 3,3'-Dichlorobenzidine	252	12.457	12.457	0.994	131141	19.99	ng/uL	100
154) 7,12-Dimethylbenz(a)an...	256	14.139	14.142	0.954	185144	20.37	ng/uL	99
155) 3-Methylcholanthrene	269	15.338	15.344	1.034	27270	19.66	ng/uL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1216.D
Acq On : 12 Aug 2011 15:53
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-16|ICAL|1|SVM|1|A3
Misc : |MIX[B]
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 15 12:06:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1217.D
Acq On : 12 Aug 2011 16:18
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-15.1|ICAL|1|SVM|1|A4
Misc : |MIX[B]
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 15 12:06:07 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	471709	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1657688	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	772993	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.536	9.536	1.000	1165842	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	816098	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	389669	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.398	2.398	0.503	268623	41.03	ng/uL	100
101) Methyl methacrylate	100	2.396	2.396	0.503	147713	41.13	ng/uL	100
102) Ethyl methacrylate	69	2.907	2.907	0.610	603372	40.90	ng/uL	100
103) 2-Picoline	93	3.163	3.163	0.664	762207	40.88	ng/uL	100
104) N-Nitrosomethylethylamine	88	3.234	3.234	0.679	314733	40.38	ng/uL	100
105) Methyl methanesulfonate	80	3.464	3.464	0.727	335541	40.25	ng/uL	100
106) N-Nitrosodiethylamine	102	3.796	3.796	0.797	319597	40.47	ng/uL	100
107) Ethyl methanesulfonate	79	4.035	4.035	0.847	472850	40.22	ng/uL	100
108) Benzaldehyde	77	4.365	4.365	0.916	519055	41.69	ng/uL	100
109) Pentachloroethane	167	4.507	4.507	0.946	259190	40.49	ng/uL	100
110) N-Nitrosopyrrolidine	100	5.135	5.135	1.078	312480	41.59	ng/uL	100
111) Acetophenone	105	5.149	5.149	1.080	836954	40.23	ng/uL	100
112) N-Nitrosomorpholine	56	5.166	5.166	1.084	559596	40.35	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1217.D
Acq On : 12 Aug 2011 16:18
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-15.1|ICAL|1|SVM|1|A4
Misc : |MIX[B]
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 15 12:06:07 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

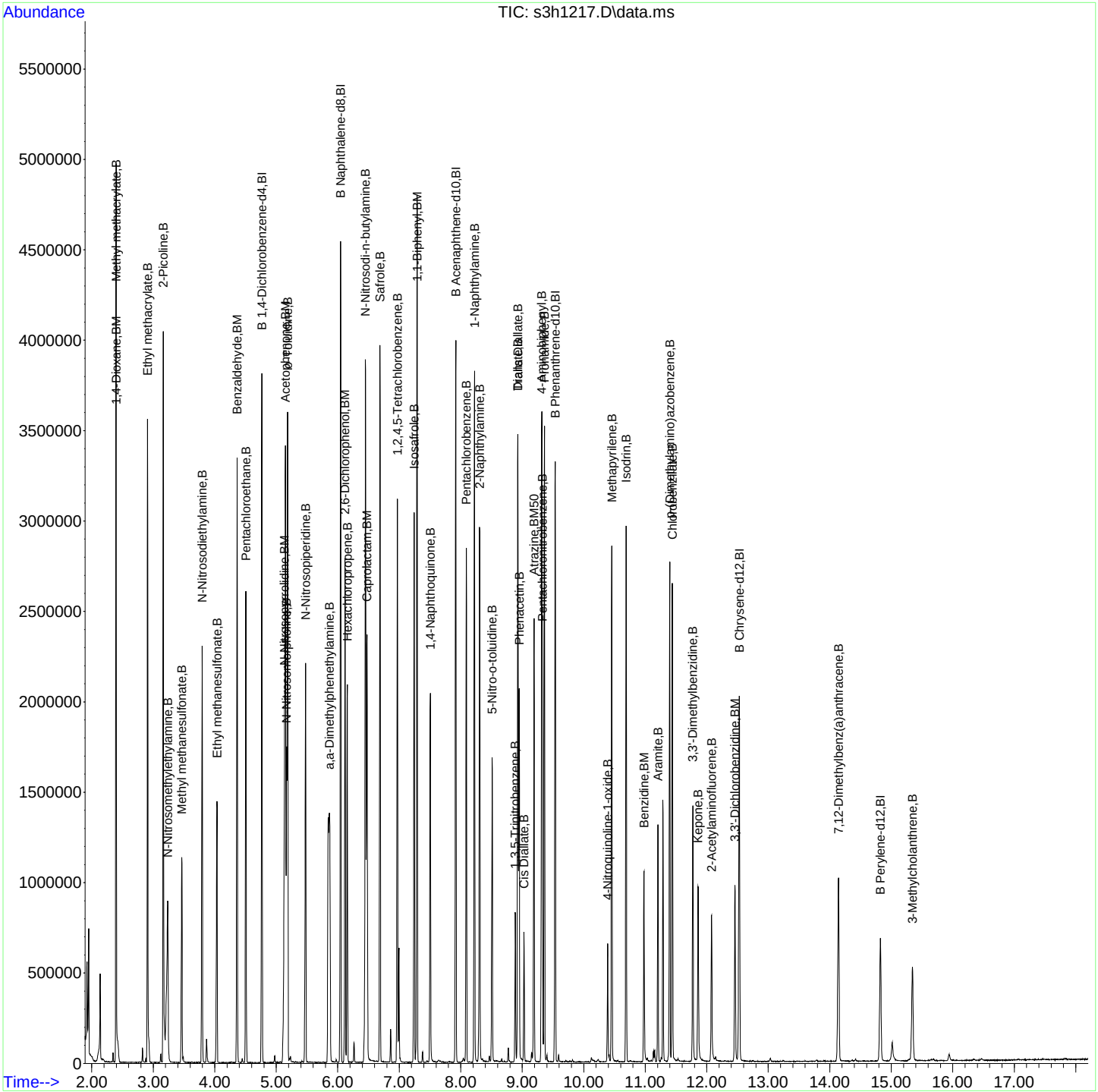
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.186	5.186	1.088	950141	40.59	ng/uL	100
115) N-Nitrosopiperidine	114	5.479	5.479	0.906	300611	39.73	ng/uL	100
116) a,a-Dimethylphenethyla...	58	5.862	5.862	0.969	2220259	38.61	ng/uL	100
117) 2,6-Dichlorophenol	162	6.118	6.118	1.012	430619	39.67	ng/uL	100
118) Hexachloropropene	213	6.155	6.155	1.018	292450	40.96	ng/uL	100
119) Caprolactam	113	6.473	6.473	1.070	175815	39.38	ng/uL	100
120) N-Nitrosodi-n-butylamine	84	6.450	6.450	1.067	516335	41.82	ng/uL	100
121) Safrole	162	6.686	6.686	1.106	458988	40.01	ng/uL	100
123) 1,2,4,5-Tetrachloroben...	216	6.970	6.970	0.880	477506	41.30	ng/uL	100
124) 1,1-Biphenyl	154	7.291	7.291	0.921	1342775	41.16	ng/uL	100
125) Isosafrole	162	7.243	7.243	0.915	437348	40.32	ng/uL	100
126) 1,4-Naphthoquinone	158	7.505	7.505	0.948	321873	41.90	ng/uL	100
127) Pentachlorobenzene	250	8.090	8.090	1.022	387092	39.95	ng/uL	100
128) 1-Naphthylamine	143	8.223	8.223	1.038	866644	39.55	ng/uL	100
129) 2-Naphthylamine	143	8.309	8.309	1.049	896934	39.14	ng/uL	100
130) 5-Nitro-o-toluidine	152	8.510	8.510	1.075	241093	38.59	ng/uL	100
132) 1,3,5-Trinitrobenzene	75	8.885	8.885	0.932	192552	44.15	ng/uL	100
133) Phenacetin	108	8.951	8.951	0.939	415142	40.87	ng/uL	100
134) Diallate	86	8.928	8.928	0.936	444136	41.05	ng/uL	100
135) Cis Diallate	86	9.028	9.028	0.947	88581	6.07	ng/uL	100
136) Trans Diallate	86	8.928	8.928	0.936	444136	34.89	ng/uL	100
137) Atrazine	173	9.192	9.192	0.964	60361	40.29	ng/uL	100
138) 4-Aminobiphenyl	169	9.315	9.315	0.977	896672	42.25	ng/uL	100
139) Pentachloronitrobenzene	237	9.326	9.326	0.978	113403	41.10	ng/uL	100
140) Pronamide	173	9.360	9.360	0.982	444444	42.10	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.389	10.389	1.089	25148	45.17	ng/uL	100
142) Methapyrilene	58	10.454	10.454	1.096	912628	45.39	ng/uL	100
143) Isodrin	193	10.690	10.690	1.121	180244	41.97	ng/uL	100
144) Benzidine	184	10.980	10.980	1.151	382618	43.26	ng/uL	100
146) Aramite	185	11.207	11.207	0.895	79984	32.41	ng/uL	100
147) Kepone	272	11.858	11.858	0.946	99394	41.93	ng/uL	100
148) p-(Dimethylamino)azobe...	120	11.397	11.397	0.910	406522	39.79	ng/uL	100
149) Chlorobenzilate	251	11.440	11.440	0.913	391805	39.99	ng/uL	100
150) 3,3'-Dimethylbenzidine	212	11.772	11.772	0.940	457428	38.61	ng/uL	100
151) 2-Acetylaminofluorene	181	12.079	12.079	0.964	195486	35.82	ng/uL	100
152) 3,3'-Dichlorobenzidine	252	12.457	12.457	0.994	227503	38.08	ng/uL	100
154) 7,12-Dimethylbenz(a)an...	256	14.142	14.142	0.954	298832	42.92	ng/uL	100
155) 3-Methylcholanthrene	269	15.344	15.344	1.035	41248	38.83	ng/uL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1217.D
Acq On : 12 Aug 2011 16:18
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-15.1|ICAL|1|SVM|1|A4
Misc : |MIX[B]
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 15 12:06:07 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1218.D
Acq On : 12 Aug 2011 16:42
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-14|ICAL|1|SVM|1|A5
Misc : |MIX[B]
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 15 12:06:11 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	497148	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1759794	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	857669	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.536	9.536	1.000	1356757	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	916655	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.827	14.824	1.000	517925	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.398	2.398	0.503	342158	49.59	ng/uL	99
101) Methyl methacrylate	100	2.395	2.396	0.503	187162	49.45	ng/uL	100
102) Ethyl methacrylate	69	2.907	2.907	0.610	769253	49.47	ng/uL	100
103) 2-Picoline	93	3.163	3.163	0.664	977136	49.72	ng/uL	100
104) N-Nitrosomethylethylamine	88	3.237	3.234	0.679	406580	49.50	ng/uL	100
105) Methyl methanesulfonate	80	3.470	3.464	0.728	452468	51.50	ng/uL	99
106) N-Nitrosodiethylamine	102	3.799	3.796	0.797	412724	49.59	ng/uL	100
107) Ethyl methanesulfonate	79	4.041	4.035	0.848	625884	50.51	ng/uL	99
108) Benzaldehyde	77	4.365	4.365	0.916	671062	51.14	ng/uL	100
109) Pentachloroethane	167	4.507	4.507	0.946	337626	50.04	ng/uL	100
110) N-Nitrosopyrrolidine	100	5.140	5.135	1.079	418988	52.91	ng/uL	99
111) Acetophenone	105	5.152	5.149	1.081	1097061	50.04	ng/uL	100
112) N-Nitrosomorpholine	56	5.172	5.166	1.085	740581	50.67	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1218.D
Acq On : 12 Aug 2011 16:42
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-14|ICAL|1|SVM|1|A5
Misc : |MIX[B]
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 15 12:06:11 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

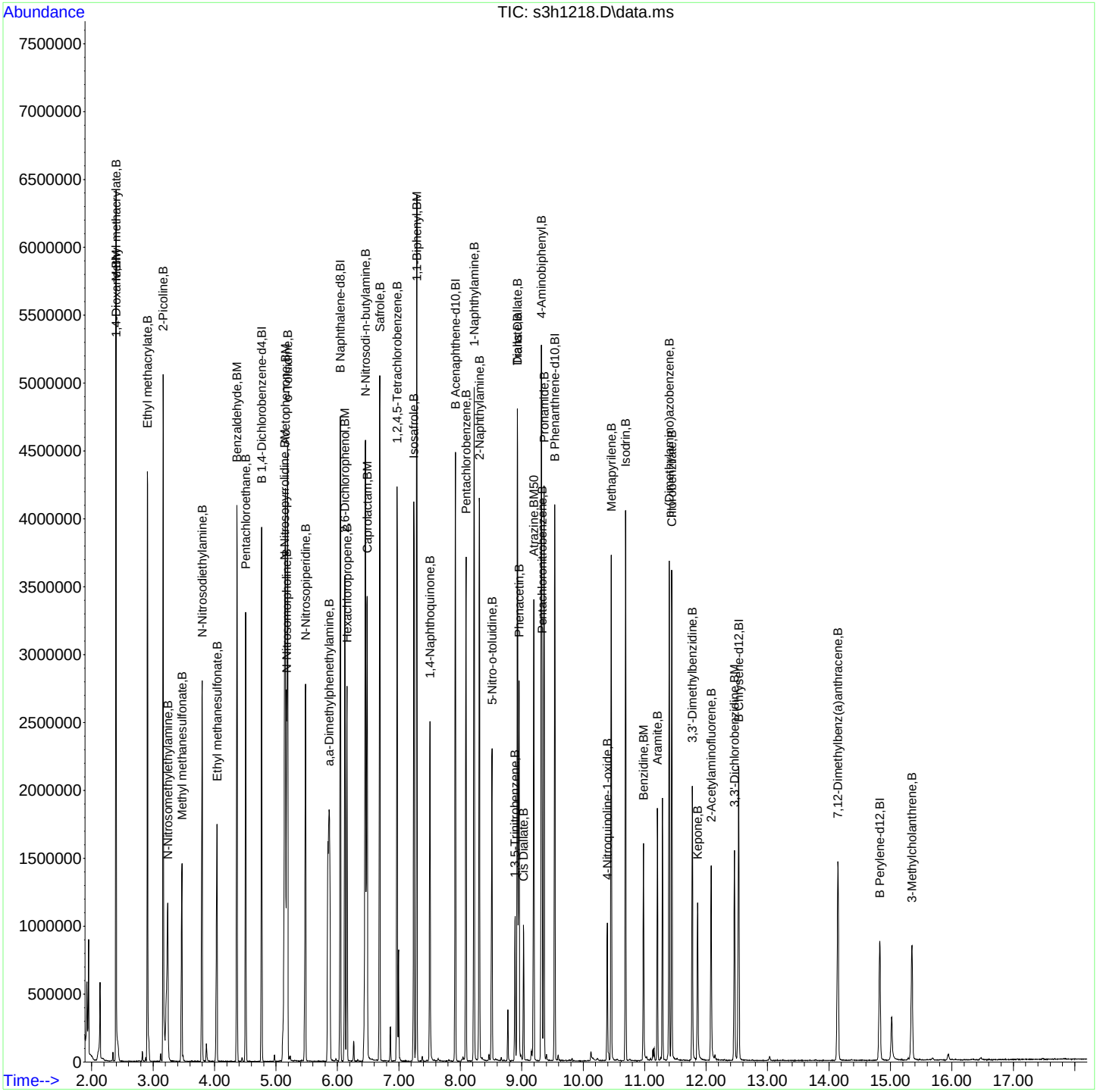
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.189	5.186	1.089	1244336	50.44	ng/uL	100
115) N-Nitrosopiperidine	114	5.481	5.479	0.906	404734	50.38	ng/uL	98
116) a,a-Dimethylphenethyla...	58	5.865	5.862	0.970	3067075	50.25	ng/uL	100
117) 2,6-Dichlorophenol	162	6.121	6.118	1.012	580179	50.34	ng/uL	100
118) Hexachloropropene	213	6.155	6.155	1.018	397531	52.45	ng/uL	100
119) Caprolactam	113	6.484	6.473	1.072	242852	51.24	ng/uL	99
120) N-Nitrosodi-n-butylamine	84	6.456	6.450	1.068	637600	48.64	ng/uL	90
121) Safrole	162	6.689	6.686	1.106	613129	50.35	ng/uL	99
123) 1,2,4,5-Tetrachloroben...	216	6.970	6.970	0.880	633154	49.35	ng/uL	100
124) 1,1-Biphenyl	154	7.291	7.291	0.921	1796386	49.63	ng/uL	100
125) Isosafrole	162	7.243	7.243	0.915	600879	49.92	ng/uL	99
126) 1,4-Naphthoquinone	158	7.504	7.505	0.948	418350	49.08	ng/uL	100
127) Pentachlorobenzene	250	8.093	8.090	1.022	534609	49.72	ng/uL	100
128) 1-Naphthylamine	143	8.226	8.223	1.039	1246484	51.27	ng/uL	100
129) 2-Naphthylamine	143	8.311	8.309	1.050	1311220	51.57	ng/uL	100
130) 5-Nitro-o-toluidine	152	8.516	8.510	1.075	353171	50.95	ng/uL	100
132) 1,3,5-Trinitrobenzene	75	8.888	8.885	0.932	248007	48.87	ng/uL	99
133) Phenacetin	108	8.956	8.951	0.939	602185	50.94	ng/uL	100
134) Diallate	86	8.928	8.928	0.936	622476	49.43	ng/uL	100
135) Cis Diallate	86	9.027	9.028	0.947	124118	7.31	ng/uL	99
136) Trans Diallate	86	8.928	8.928	0.936	622476	42.02	ng/uL	100
137) Atrazine	173	9.198	9.192	0.965	90206	51.74	ng/uL	99
138) 4-Aminobiphenyl	169	9.317	9.315	0.977	1304456	52.82	ng/uL	100
139) Pentachloronitrobenzene	237	9.329	9.326	0.978	161982	50.45	ng/uL	98
140) Pronamide	173	9.363	9.360	0.982	582616	47.42	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.391	10.389	1.090	33406	51.56	ng/uL	89
142) Methapyrilene	58	10.454	10.454	1.096	1225083	52.35	ng/uL	100
143) Isodrin	193	10.690	10.690	1.121	246112	49.24	ng/uL	99
144) Benzidine	184	10.979	10.980	1.151	584353	56.78	ng/uL	100
146) Aramite	185	11.207	11.207	0.895	111280	40.15	ng/uL	99
147) Kepone	272	11.860	11.858	0.947	121081	45.48	ng/uL	99
148) p-(Dimethylamino)azobe...	120	11.400	11.397	0.910	558814	48.69	ng/uL	99
149) Chlorobenzilate	251	11.440	11.440	0.913	530826	48.23	ng/uL	99
150) 3,3'-Dimethylbenzidine	212	11.775	11.772	0.940	690473	51.88	ng/uL	100
151) 2-Acetylaminofluorene	181	12.082	12.079	0.964	347946	56.77	ng/uL	100
152) 3,3'-Dichlorobenzidine	252	12.460	12.457	0.995	360055	53.66	ng/uL	99
154) 7,12-Dimethylbenz(a)an...	256	14.145	14.142	0.954	436111	47.13	ng/uL	99
155) 3-Methylcholanthrene	269	15.347	15.344	1.035	72358	51.24	ng/uL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1218.D
Acq On : 12 Aug 2011 16:42
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-14|ICAL|1|SVM|1|A5
Misc : |MIX[B]
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 15 12:06:11 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1219.D
Acq On : 12 Aug 2011 17:07
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-13|ICAL|1|SVM|1|A6
Misc : |MIX[B]
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 15 12:06:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	509069	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1794267	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	851265	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.539	9.536	1.000	1353858	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	805794	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	378999	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.401	2.398	0.504	539832	76.41	ng/uL	99
101) Methyl methacrylate	100	2.398	2.396	0.503	293546	75.74	ng/uL	98
102) Ethyl methacrylate	69	2.910	2.907	0.611	1225992	77.00	ng/uL	99
103) 2-Picoline	93	3.166	3.163	0.664	1551290	77.09	ng/uL	99
104) N-Nitrosomethylethylamine	88	3.242	3.234	0.680	658136	78.25	ng/uL	100
105) Methyl methanesulfonate	80	3.475	3.464	0.729	681175	75.72	ng/uL	100
106) N-Nitrosodiethylamine	102	3.805	3.796	0.798	665839	78.13	ng/uL	100
107) Ethyl methanesulfonate	79	4.046	4.035	0.849	995882	78.49	ng/uL	100
108) Benzaldehyde	77	4.367	4.365	0.917	987861	73.52	ng/uL	100
109) Pentachloroethane	167	4.507	4.507	0.946	540595	78.25	ng/uL	99
110) N-Nitrosopyrrolidine	100	5.152	5.135	1.081	606391	74.78	ng/uL	97
111) Acetophenone	105	5.157	5.149	1.082	1751129	78.00	ng/uL	99
112) N-Nitrosomorpholine	56	5.183	5.166	1.088	1172991	78.37	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1219.D
Acq On : 12 Aug 2011 17:07
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-13|ICAL|1|SVM|1|A6
Misc : |MIX[B]
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 15 12:06:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

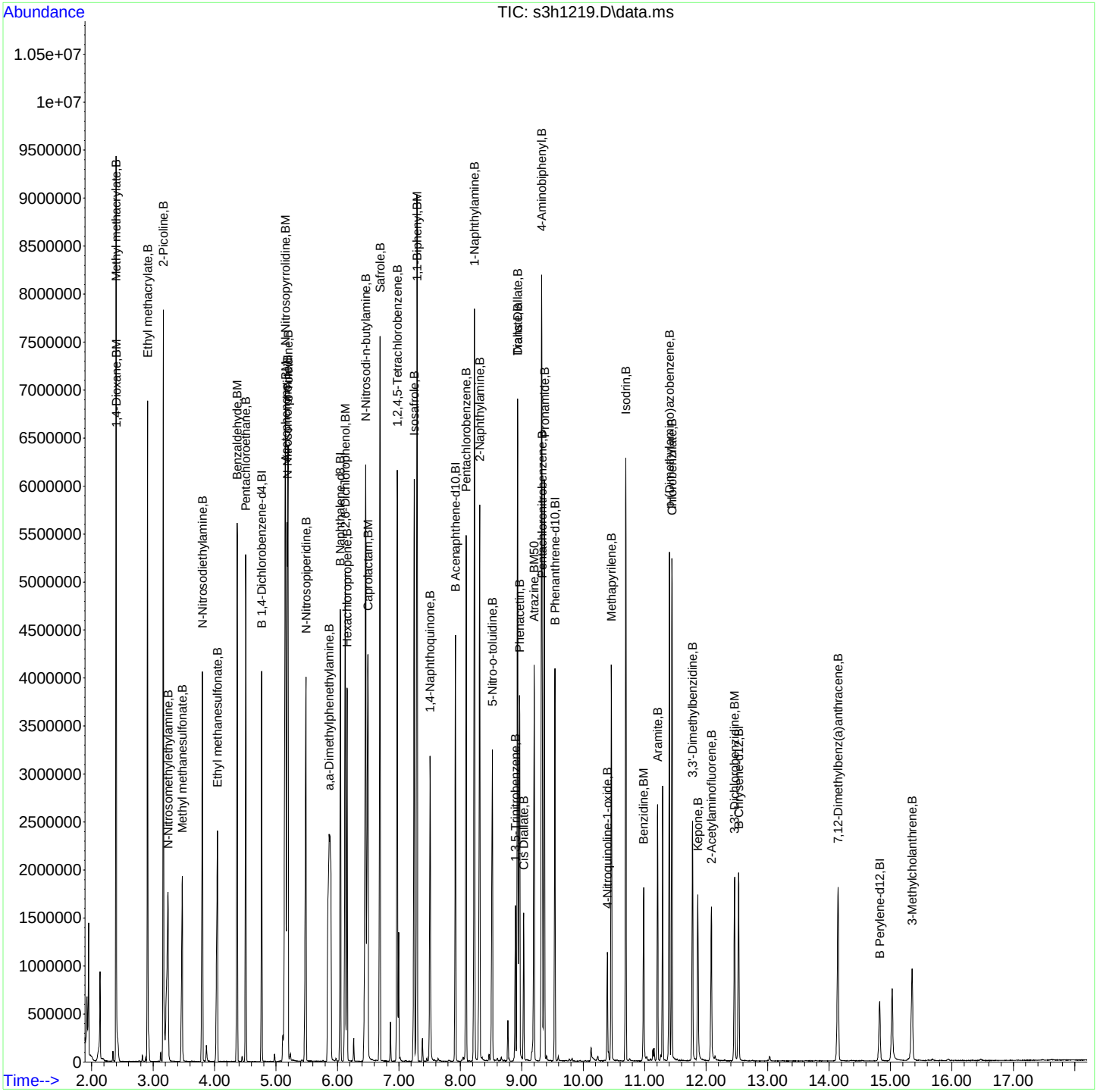
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.194	5.186	1.090	1969954	77.98	ng/uL	100
115) N-Nitrosopiperidine	114	5.487	5.479	0.907	645157	78.77	ng/uL	98
116) a,a-Dimethylphenethyla...	58	5.865	5.862	0.970	5117245	82.22	ng/uL	100
117) 2,6-Dichlorophenol	162	6.126	6.118	1.013	935851	79.64	ng/uL	100
118) Hexachloropropene	213	6.158	6.155	1.018	575854	74.52	ng/uL	99
119) Caprolactam	113	6.496	6.473	1.074	378072	78.24	ng/uL	99
120) N-Nitrosodi-n-butylamine	84	6.459	6.450	1.068	1110014	83.05	ng/uL	83
121) Safrole	162	6.692	6.686	1.107	969032	78.05	ng/uL	99
123) 1,2,4,5-Tetrachloroben...	216	6.973	6.970	0.881	999838	78.52	ng/uL	100
124) 1,1-Biphenyl	154	7.294	7.291	0.921	2805643	78.10	ng/uL	100
125) Isosafrole	162	7.249	7.243	0.915	945756	79.17	ng/uL	99
126) 1,4-Naphthoquinone	158	7.507	7.505	0.948	582446	68.85	ng/uL	100
127) Pentachlorobenzene	250	8.095	8.090	1.022	836394	78.38	ng/uL	100
128) 1-Naphthylamine	143	8.229	8.223	1.039	1845573	76.48	ng/uL	99
129) 2-Naphthylamine	143	8.314	8.309	1.050	1959576	77.64	ng/uL	99
130) 5-Nitro-o-toluidine	152	8.522	8.510	1.076	559923	81.39	ng/uL	99
132) 1,3,5-Trinitrobenzene	75	8.897	8.885	0.933	394590	77.92	ng/uL	99
133) Phenacetin	108	8.965	8.951	0.940	973955	82.57	ng/uL	100
134) Diallate	86	8.931	8.928	0.936	963359	76.67	ng/uL	100
135) Cis Diallate	86	9.030	9.028	0.947	196001	11.57	ng/uL	99
136) Trans Diallate	86	8.931	8.928	0.936	963359	65.17	ng/uL	100
137) Atrazine	173	9.201	9.192	0.965	116201	66.79	ng/uL	99
138) 4-Aminobiphenyl	169	9.323	9.315	0.977	2013619	81.71	ng/uL	99
139) Pentachloronitrobenzene	237	9.331	9.326	0.978	256199	79.96	ng/uL	99
140) Pronamide	173	9.368	9.360	0.982	969687	79.09	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.391	10.389	1.089	34553	53.44	ng/uL	86
142) Methapyrilene	58	10.457	10.454	1.096	1447498	61.99	ng/uL	100
143) Isodrin	193	10.692	10.690	1.121	397107	79.62	ng/uL	98
144) Benzidine	184	10.982	10.980	1.151	726834	70.77	ng/uL	100
146) Aramite	185	11.210	11.207	0.895	167947	68.93	ng/uL	100
147) Kepone	272	11.863	11.858	0.947	187688	80.20	ng/uL	99
148) p-(Dimethylamino)azobe...	120	11.403	11.397	0.910	856438	84.90	ng/uL	100
149) Chlorobenzilate	251	11.443	11.440	0.913	823686	85.14	ng/uL	99
150) 3,3'-Dimethylbenzidine	212	11.778	11.772	0.940	864397	73.89	ng/uL	100
151) 2-Acetylaminofluorene	181	12.085	12.079	0.965	413057	76.66	ng/uL	99
152) 3,3'-Dichlorobenzidine	252	12.463	12.457	0.995	455495	77.23	ng/uL	100
154) 7,12-Dimethylbenz(a)an...	256	14.148	14.142	0.954	551508	81.45	ng/uL	99
155) 3-Methylcholanthrene	269	15.352	15.344	1.036	82894	80.22	ng/uL	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1219.D
Acq On : 12 Aug 2011 17:07
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-13|ICAL|1|SVM|1|A6
Misc : |MIX[B]
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 15 12:06:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1220.D
Acq On : 12 Aug 2011 17:32
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-12|ICAL|1|SVM|1|A7
Misc : |MIX[B]
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 15 12:06:19 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.049	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.531	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	512708	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.049	6.047	1.000	1784697	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	835304	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.539	9.536	1.000	1404237	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.531	12.528	1.000	796482	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	403956	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	5.240	5.308	0.866	0d	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.404	2.398	0.504	674345	94.77	ng/uL	100
101) Methyl methacrylate	100	2.401	2.396	0.504	367184	94.06	ng/uL	94
102) Ethyl methacrylate	69	2.913	2.907	0.611	1544924	96.34	ng/uL	98
103) 2-Picoline	93	3.168	3.163	0.665	1957224	96.57	ng/uL	99
104) N-Nitrosomethylethylamine	88	3.245	3.234	0.681	825597	97.46	ng/uL	100
105) Methyl methanesulfonate	80	3.478	3.464	0.730	838256	92.52	ng/uL	100
106) N-Nitrosodiethylamine	102	3.808	3.796	0.799	832775	97.02	ng/uL	99
107) Ethyl methanesulfonate	79	4.049	4.035	0.850	1234669	96.62	ng/uL	100
108) Benzaldehyde	77	4.370	4.365	0.917	1184404	87.52	ng/uL	99
109) Pentachloroethane	167	4.509	4.507	0.946	672731	96.69	ng/uL	99
110) N-Nitrosopyrrolidine	100	5.157	5.135	1.082	731748	89.60	ng/uL	97
111) Acetophenone	105	5.160	5.149	1.083	2161757	95.61	ng/uL	98
112) N-Nitrosomorpholine	56	5.186	5.166	1.088	1430940	94.93	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1220.D
Acq On : 12 Aug 2011 17:32
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-12|ICAL|1|SVM|1|A7
Misc : |MIX[B]
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 15 12:06:19 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

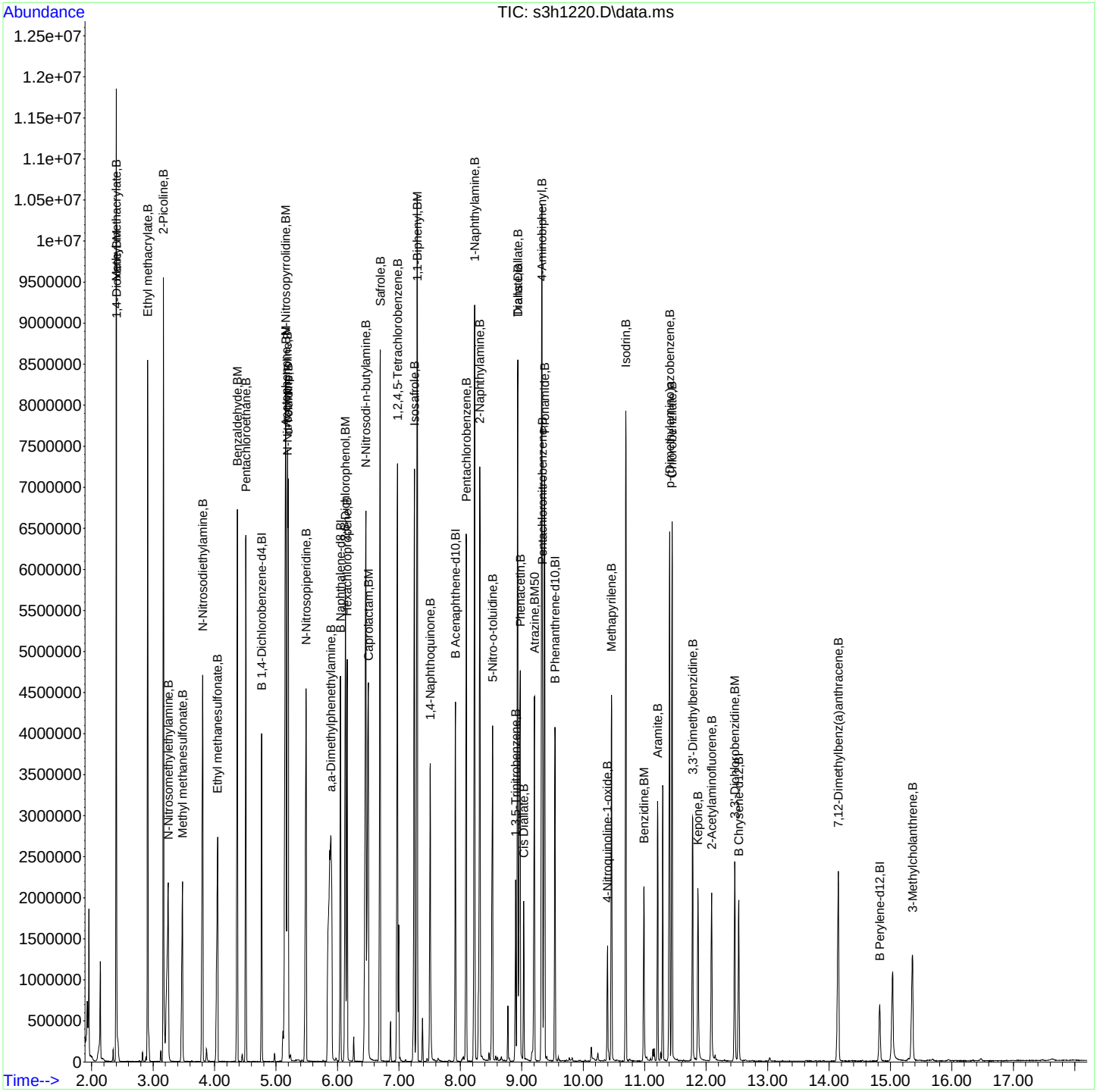
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.197	5.186	1.091	2429826	95.50	ng/uL	100
115) N-Nitrosopiperidine	114	5.490	5.479	0.907	794876	97.57	ng/uL	98
116) a,a-Dimethylphenethyla...	58	5.890	5.862	0.974	6539895	105.64	ng/uL	100
117) 2,6-Dichlorophenol	162	6.129	6.118	1.013	1153703	98.71	ng/uL	99
118) Hexachloropropene	213	6.157	6.155	1.018	724065	94.20	ng/uL	99
119) Caprolactam	113	6.504	6.473	1.075	473737	98.56	ng/uL	99
120) N-Nitrosodi-n-butylamine	84	6.461	6.450	1.068	1165175	87.65	ng/uL	85
121) Safrole	162	6.694	6.686	1.107	1190467	96.40	ng/uL	99
123) 1,2,4,5-Tetrachloroben...	216	6.976	6.970	0.881	1224165	97.97	ng/uL	99
124) 1,1-Biphenyl	154	7.297	7.291	0.921	3410920	96.77	ng/uL	99
125) Isosafrole	162	7.251	7.243	0.916	1160394	98.99	ng/uL	99
126) 1,4-Naphthoquinone	158	7.510	7.505	0.948	691778	83.34	ng/uL	99
127) Pentachlorobenzene	250	8.098	8.090	1.023	1031949	98.55	ng/uL	100
128) 1-Naphthylamine	143	8.232	8.223	1.039	2262769	95.56	ng/uL	99
129) 2-Naphthylamine	143	8.317	8.309	1.050	2435385	98.34	ng/uL	99
130) 5-Nitro-o-toluidine	152	8.524	8.510	1.076	741503	109.84	ng/uL	99
132) 1,3,5-Trinitrobenzene	75	8.899	8.885	0.933	540652	102.93	ng/uL	99
133) Phenacetin	108	8.973	8.951	0.941	1289364	105.38	ng/uL	99
134) Diallate	86	8.934	8.928	0.937	1202855	92.29	ng/uL	99
135) Cis Diallate	86	9.030	9.028	0.947	247847	14.11	ng/uL	99
136) Trans Diallate	86	8.934	8.928	0.937	1202855	78.45	ng/uL	99
137) Atrazine	173	9.206	9.192	0.965	128953	71.47	ng/uL	100
138) 4-Aminobiphenyl	169	9.326	9.315	0.978	2562814	100.26	ng/uL	100
139) Pentachloronitrobenzene	237	9.334	9.326	0.979	325604	97.98	ng/uL	99
140) Pronamide	173	9.371	9.360	0.982	1232234	96.90	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.394	10.389	1.090	43463	64.81	ng/uL	83
142) Methapyrilene	58	10.459	10.454	1.097	1693776	69.93	ng/uL	100
143) Isodrin	193	10.692	10.690	1.121	506663	97.95	ng/uL	99
144) Benzidine	184	10.988	10.980	1.152	870122	81.68	ng/uL	99
146) Aramite	185	11.210	11.207	0.895	203596	84.54	ng/uL	99
147) Kepone	272	11.866	11.858	0.947	233884	101.11	ng/uL	99
148) p-(Dimethylamino)azobe...	120	11.406	11.397	0.910	1081651	108.47	ng/uL	100
149) Chlorobenzilate	251	11.445	11.440	0.913	1033045	108.03	ng/uL	99
150) 3,3'-Dimethylbenzidine	212	11.781	11.772	0.940	1036146	89.61	ng/uL	99
151) 2-Acetylaminofluorene	181	12.088	12.079	0.965	534027	100.28	ng/uL	100
152) 3,3'-Dichlorobenzidine	252	12.465	12.457	0.995	570857	97.92	ng/uL	99
154) 7,12-Dimethylbenz(a)an...	256	14.150	14.142	0.955	706293	97.86	ng/uL	99
155) 3-Methylcholanthrene	269	15.358	15.344	1.036	111637	101.37	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1220.D
Acq On : 12 Aug 2011 17:32
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-12|ICAL|1|SVM|1|A7
Misc : |MIX[B]
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 15 12:06:19 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1221.D
Acq On : 12 Aug 2011 17:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-11|ICAL|1|SVM|1|A8
Misc : |MIX[B]
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 15 12:06:23 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	0m	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	0m	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	0m	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	0m	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	454347	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1609171	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	787649	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.539	9.536	1.000	1264479	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	631870	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	347905	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.852	1.000	0m	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.396	2.398	0.503	704799	111.77	ng/uL	100
101) Methyl methacrylate	100	2.393	2.396	0.502	382894	110.69	ng/uL	95
102) Ethyl methacrylate	69	2.910	2.907	0.611	1612511	113.47	ng/uL	99
103) 2-Picoline	93	3.166	3.163	0.664	2048333	114.05	ng/uL	99
104) N-Nitrosomethylethylamine	88	3.245	3.234	0.681	876085	116.71	ng/uL	99
105) Methyl methanesulfonate	80	3.478	3.464	0.730	869805	108.34	ng/uL	100
106) N-Nitrosodiethylamine	102	3.808	3.796	0.799	886313	116.52	ng/uL	100
107) Ethyl methanesulfonate	79	4.052	4.035	0.850	1310907	115.77	ng/uL	100
108) Benzaldehyde	77	4.370	4.365	0.917	1246679	103.96	ng/uL	100
109) Pentachloroethane	167	4.510	4.507	0.946	712455	115.55	ng/uL	100
110) N-Nitrosopyrrolidine	100	5.160	5.135	1.083	821698	113.54	ng/uL	87
111) Acetophenone	105	5.157	5.149	1.082	2340316	116.80	ng/uL	99
112) N-Nitrosomorpholine	56	5.189	5.166	1.089	1541697	115.41	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1221.D
Acq On : 12 Aug 2011 17:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-11|ICAL|1|SVM|1|A8
Misc : |MIX[B]
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 15 12:06:23 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE

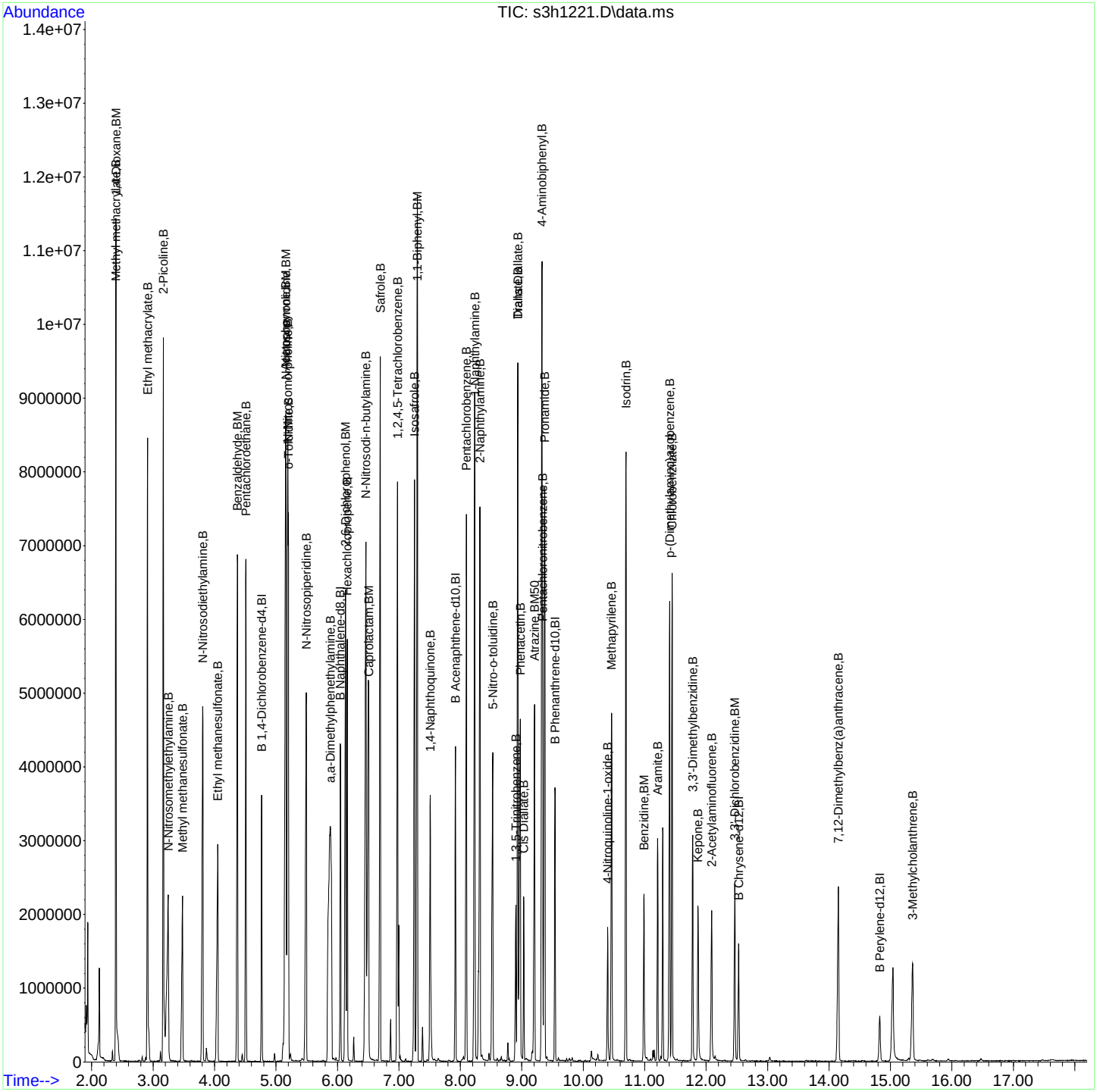
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
113) o-Toluidine	106	5.200	5.186	1.091	2603688	115.48	ng/uL	100	
115) N-Nitrosopiperidine	114	5.493	5.479	0.908	867025	118.03	ng/uL	98	
116) a,a-Dimethylphenethyla...	58	5.885	5.862	0.973	7288913	130.58	ng/uL	100	A
117) 2,6-Dichlorophenol	162	6.132	6.118	1.014	1268137	120.33	ng/uL	99	A
118) Hexachloropropene	213	6.158	6.155	1.018	850335	122.70	ng/uL	99	A
119) Caprolactam	113	6.510	6.473	1.077	534782	123.40	ng/uL	98	A
120) N-Nitrosodi-n-butylamine	84	6.462	6.450	1.069	1261060	105.21	ng/uL	83	
121) Safrole	162	6.695	6.686	1.107	1297189	116.50	ng/uL	99	
123) 1,2,4,5-Tetrachloroben...	216	6.976	6.970	0.881	1354186	114.93	ng/uL	100	
124) 1,1-Biphenyl	154	7.300	7.291	0.922	3773620	113.53	ng/uL	99	
125) Isosafrole	162	7.254	7.243	0.916	1279395	115.75	ng/uL	100	
126) 1,4-Naphthoquinone	158	7.510	7.505	0.948	728099	93.02	ng/uL	99	
127) Pentachlorobenzene	250	8.098	8.090	1.023	1172171	118.71	ng/uL	100	
128) 1-Naphthylamine	143	8.235	8.223	1.040	2622540	117.45	ng/uL	100	
129) 2-Naphthylamine	143	8.320	8.309	1.051	2728772	116.86	ng/uL	98	
130) 5-Nitro-o-toluidine	152	8.527	8.510	1.077	795218	124.93	ng/uL	99	A
132) 1,3,5-Trinitrobenzene	75	8.902	8.885	0.933	530209	112.10	ng/uL	100	
133) Phenacetin	108	8.976	8.951	0.941	1325088	120.27	ng/uL	99	A
134) Diallate	86	8.934	8.928	0.937	1365488	116.35	ng/uL	100	
135) Cis Diallate	86	9.030	9.028	0.947	279623	17.68	ng/uL	99	
136) Trans Diallate	86	8.934	8.928	0.937	1365488	98.90	ng/uL	100	
137) Atrazine	173	9.206	9.192	0.965	144690	89.05	ng/uL	100	
138) 4-Aminobiphenyl	169	9.326	9.315	0.978	2712528	117.85	ng/uL	100	
139) Pentachloronitrobenzene	237	9.337	9.326	0.979	360177	120.36	ng/uL	99	A
140) Pronamide	173	9.374	9.360	0.983	1394068	121.74	ng/uL	99	A
141) 4-Nitroquinoline-1-oxide	101	10.397	10.389	1.090	53124	87.98	ng/uL	79	
142) Methapyrilene	58	10.460	10.454	1.097	1889846	86.65	ng/uL	100	
143) Isodrin	193	10.695	10.690	1.121	542002	116.36	ng/uL	100	
144) Benzidine	184	10.988	10.980	1.152	909050	94.77	ng/uL	99	
146) Aramite	185	11.210	11.207	0.895	198693	104.00	ng/uL	99	
147) Kepone	272	11.866	11.858	0.947	235381	128.26	ng/uL	99	A
148) p-(Dimethylamino)azobe...	120	11.406	11.397	0.910	1052142	133.00	ng/uL	100	A
149) Chlorobenzilate	251	11.445	11.440	0.914	1035818	136.54	ng/uL	99	A
150) 3,3'-Dimethylbenzidine	212	11.781	11.772	0.940	1057846	115.32	ng/uL	99	
151) 2-Acetylaminofluorene	181	12.088	12.079	0.965	557989	132.07	ng/uL	98	A
152) 3,3'-Dichlorobenzidine	252	12.466	12.457	0.995	573192	123.93	ng/uL	99	A
154) 7,12-Dimethylbenz(a)an...	256	14.151	14.142	0.955	711000	114.39	ng/uL	99	
155) 3-Methylcholanthrene	269	15.358	15.344	1.036	118498	124.93	ng/uL	97	A

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1221.D
Acq On : 12 Aug 2011 17:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110719-11|ICAL|1|SVM|1|A8
Misc : |MIX[B]
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 15 12:06:23 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:05:20 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: MSD3.I **Injection Date:** 12-AUG-11 18:22

Data File: s081211.B\s3h1222.D **Init. Cal. Date(s)** 12-AUG-11 15:29 - 13-AUG-11 13:2

Lab Sample ID WBN110809-18.1 **Method:** s081211.B\MSD3_8270d_081211.m

Quant Type ISTD **Method Update:** 15-AUG-11 15:17

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Methyl methacrylate	0.3045	0.3091		.01		1.51067	30		Averaged
1,4-Dioxane	0.5551	0.54995		.01		-0.92776	30		Averaged
Ethyl methacrylate	1.2511	1.24994		.01		-0.09272	30		Averaged
2-Picoline	1.5812	1.51542		.01		-4.16013	30		Averaged
N-Nitrosomethylethylamine	0.6609	0.67853		.01		2.66757	30		Averaged
Methyl methanesulfonate	0.7068	0.76306		.01		7.95982	30		Averaged
N-Nitrosodiethylamine	0.6696	0.6759		.01		0.94086	30		Averaged
Ethyl Methanesulfonate	0.9969	0.93984		.01		-5.72374	30		Averaged
Benzaldehyde	1.0558	1.06889		.01		1.23982	30		Averaged
Pentachloroethane	0.5428	0.55041		.01		1.40199	30		Averaged
N-Nitrosopyrrolidine	0.6371	0.71659		.01		12.47685	30		Averaged
Acetophenone	1.764	1.79762		.01		1.9059	30		Averaged
N-Nitrosomorpholine	1.176	1.23319		.01		4.8631	30		Averaged
o-Toluidine	1.985	2.07945		.01		4.75819	30		Averaged
N-Nitrosopiperidine	0.1826	0.18493		.01		1.27601	30		Averaged
a,a-Dimethylphenethylamine	1.3875	1.47584		.01		6.36685	30		Averaged
2,6-Dichlorophenol	0.262	0.27171		.01		3.70611	30		Averaged
Hexachloropropene	0.1723	0.17192		.01		-0.22055	30		Averaged
N-Nitrosodi-n-butylamine	0.298	0.29542		.01		-0.86577	30		Averaged
Caprolactam	0.1077	0.11488		.01		6.66667	30		Averaged
Safrole	0.2768	0.26186		.01		-5.3974	30		Averaged
1,2,4,5-Tetrachlorobenzene	0.5984	0.58805		.01		-1.72961	30		Averaged
Isosafrole	0.5613	0.57729		.01		2.84874	30		Averaged
1,1'-Biphenyl	1.688	1.64023		.01		-2.82998	30		Averaged
1,4-Naphthoquinone	0.3975	0.43051		.01		8.3044	30		Averaged
Pentachlorobenzene	0.5015	0.52237		.01		4.16152	30		Averaged
1-Naphthylamine	1.134	1.19694		.01		5.55026	30		Averaged
2-Naphthylamine	1.1859	1.32755		.01		11.94451	30		Averaged
5-Nitro-o-toluidine	0.3233	0.34541		.01		6.83885	30		Averaged
1,3,5-Trinitrobenzene	0.1496	0.13448		.01		-10.10695	30		Averaged
Trans Diallate	0.4368	0.38901		.01		-10.94093	30		Averaged
Diallate	0.3713	0.33066		.01		-10.94533	30		Averaged
Phenacetin	0.3485	0.35057		.01		0.59397	30		Averaged
Cis Diallate	0.5003	0.80879		.01		61.661	30	*	Averaged
Atrazine	0.0514	0.05385		.01		4.76654	30		Averaged
4-Aminobiphenyl	0.7281	0.82221		.01		12.92542	30		Averaged
Pentachloronitrobenzene	0.0947	0.09499		.01		0.30623	30		Averaged

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 12-AUG-11 18:22

Data File: s081211.B\s3h1222.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID WBN110809-18.1 **Method:** s081211.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
Pronamide	0.3622	0.35448		.01		-2.13142	30		Averaged
4-Nitroquinoline-1-oxide	0.0191	0.0168		.01		-12.04188	30		Averaged
Methapyrilene	0.6899	0.61136		.01		-11.38426	30		Averaged
Isodrin	0.1473	0.12803		.01		-13.08215	30		Averaged
Benzidine	0.3034	0.39363		.01		29.73962	30		Averaged
Aramite	0.0973	0.08442		.01		-13.23741	30		Averaged
p-(Dimethylamino)azobenzene	0.5008	0.45891		.01		-8.36462	30		Averaged
Chlorobenzilate	0.4802	0.45417		.01		-5.42066	30		Averaged
3,3'-Dimethylbenzidine	0.5807	0.60326		.01		3.88497	30		Averaged
Kepone	0.1162	0.12082		.01		3.9759	30		Averaged
2-Acetylaminofluorene	0.2675	0.29524		.01		10.37009	30		Averaged
3,3'-Dichlorobenzidine	0.2928	0.3133		.01		7.00137	30		Averaged
7,12Dimethylbenz(a)anthracene	0.7146	0.62341		.01		-12.76099	30		Averaged
3-Methylcholanthrene	0.1091	0.11297		.01		3.5472	30		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1222.D
Acq On : 12 Aug 2011 18:22
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.1|ICV|1|SVM|1|AICV
Misc : |MIX[B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 15 15:22:59 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	503669	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	1815686	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	906126	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.536	9.533	1.000	1429269	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	943187	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	540551	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	503669	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	1815686	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	906126	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.536	9.536	1.000	1429269	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	943187	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.827	14.824	1.000	540551	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.044	1.000	1815686	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.916	1.000	906126	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.536	9.533	1.000	1429269	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	943187	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.044	1.000	1816087	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.852	1.000	540551	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	503669	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.044	1.000	1815686	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.916	1.000	906126	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.536	9.533	1.000	1429269	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	943187	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	503669	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	1815686	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	943187	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.827	14.827	1.000	540551	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	0.000	3.580	0.000	0	0.00	ng/uL	
8) Phenol-d5	99	0.000	4.367	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	0.000	5.308	0.000	0	0.00	ng/uL	
47) 2-Fluorobiphenyl	172	0.000	7.178	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.772	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.244	0.000	0	0.00	ng/uL	
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.395	2.398	0.503	276993	39.63	ng/uL	99
101) Methyl methacrylate	100	2.393	2.396	0.502	155683	40.60	ng/uL	98
102) Ethyl methacrylate	69	2.907	2.907	0.610	629554	39.96	ng/uL	100
103) 2-Picoline	93	3.163	3.163	0.664	763271	38.34	ng/uL	99
104) N-Nitrosomethylethylamine	88	3.237	3.234	0.679	341754	41.07	ng/uL	100
105) Methyl methanesulfonate	80	3.467	3.464	0.727	384328	43.18	ng/uL	99
106) N-Nitrosodiethylamine	102	3.796	3.796	0.797	340430	40.37	ng/uL	100
107) Ethyl methanesulfonate	79	4.038	4.035	0.847	473369	37.71	ng/uL	100
108) Benzaldehyde	77	4.365	4.365	0.916	538366	40.50	ng/uL	99
109) Pentachloroethane	167	4.507	4.507	0.946	277223	40.56	ng/uL	100
110) N-Nitrosopyrrolidine	100	5.135	5.135	1.078	360925	44.99	ng/uL	98
111) Acetophenone	105	5.149	5.149	1.080	905406	40.76	ng/uL	99
112) N-Nitrosomorpholine	56	5.169	5.166	1.085	621120	41.94	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1222.D
Acq On : 12 Aug 2011 18:22
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.1|ICV|1|SVM|1|AICV
Misc : |MIX[B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 15 15:22:59 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

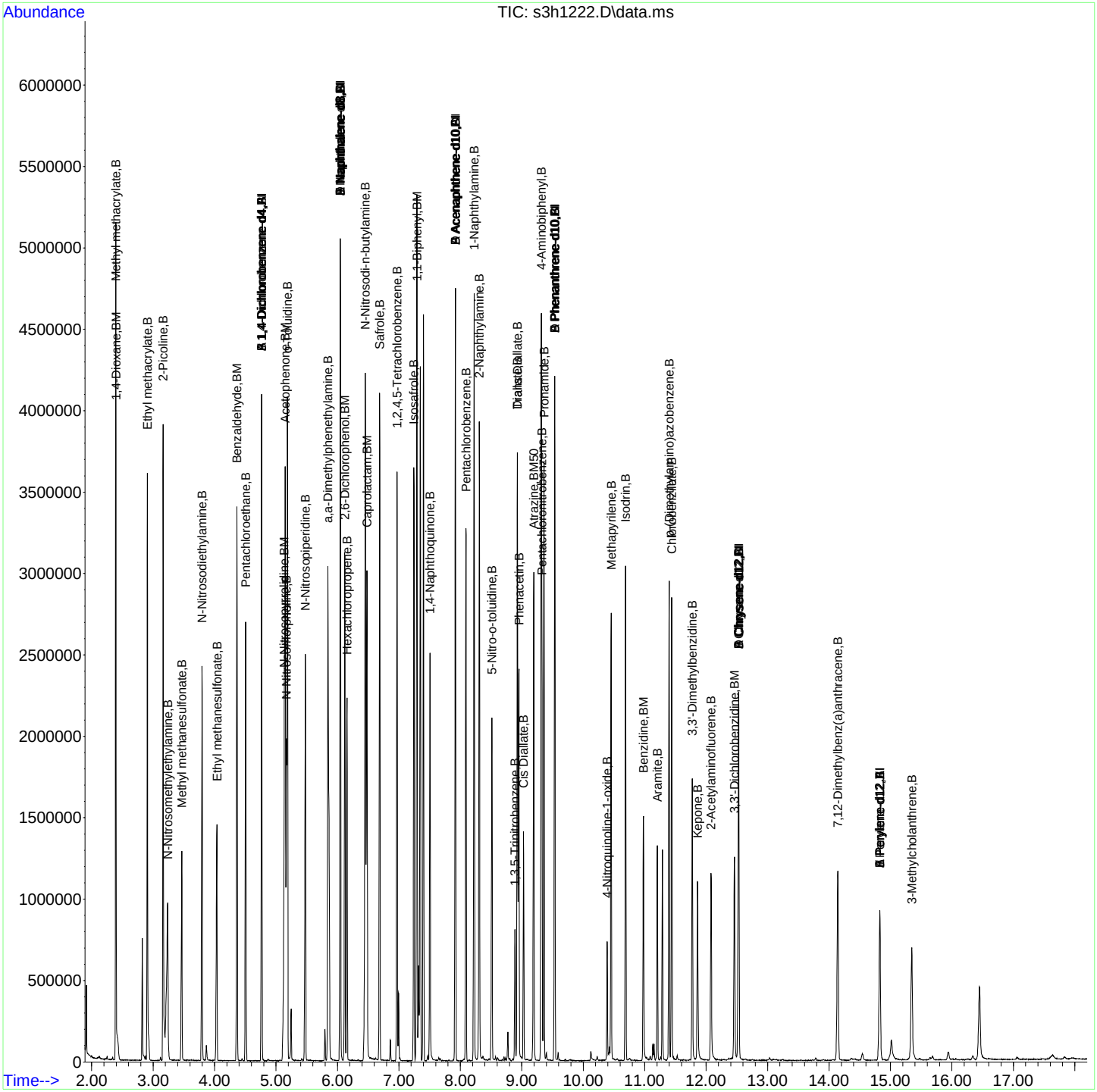
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.186	5.186	1.088	1047354	41.90	ng/uL	100
115) N-Nitrosopiperidine	114	5.478	5.479	0.906	335775	40.51	ng/uL	100
116) a,a-Dimethylphenethyla...	58	5.845	5.862	0.967	2679658	42.55	ng/uL	100
117) 2,6-Dichlorophenol	162	6.121	6.118	1.012	493331	41.49	ng/uL	100
118) Hexachloropropene	213	6.155	6.155	1.018	312151	39.92	ng/uL	99
119) Caprolactam	113	6.479	6.473	1.071	208579	42.65	ng/uL	98
120) N-Nitrosodi-n-butylamine	84	6.453	6.450	1.067	536389	39.66	ng/uL	90
121) Safrole	162	6.686	6.686	1.106	475459	37.84	ng/uL	100
123) 1,2,4,5-Tetrachloroben...	216	6.970	6.970	0.880	532851	39.31	ng/uL	100
124) 1,1-Biphenyl	154	7.294	7.291	0.921	1486256	38.87	ng/uL	99
125) Isosafrole	162	7.243	7.243	0.915	523102	41.14	ng/uL	99
126) 1,4-Naphthoquinone	158	7.507	7.505	0.948	390093	43.32	ng/uL	99
127) Pentachlorobenzene	250	8.093	8.090	1.022	473330	41.67	ng/uL	99
128) 1-Naphthylamine	143	8.223	8.223	1.038	1084576	42.22	ng/uL	100
129) 2-Naphthylamine	143	8.309	8.309	1.049	1202932	44.78	ng/uL	100
130) 5-Nitro-o-toluidine	152	8.513	8.510	1.075	312986	42.74	ng/uL	100
132) 1,3,5-Trinitrobenzene	75	8.888	8.885	0.932	192204	35.95	ng/uL	99
133) Phenacetin	108	8.954	8.951	0.939	501064	40.24	ng/uL	99
134) Diallate	86	8.928	8.928	0.936	472595	35.63	ng/uL	99
135) Cis Diallate	86	9.027	9.028	0.947	173397	9.70	ng/uL	99
136) Trans Diallate	86	8.928	8.928	0.936	472595	30.28	ng/uL	99
137) Atrazine	173	9.195	9.192	0.964	76964	41.91	ng/uL	97
138) 4-Aminobiphenyl	169	9.317	9.315	0.977	1175166	45.17	ng/uL	99
139) Pentachloronitrobenzene	237	9.326	9.326	0.978	135768	40.14	ng/uL	99
140) Pronamide	173	9.360	9.360	0.982	506648	39.14	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.388	10.389	1.089	24006	35.17	ng/uL	91
142) Methapyrilene	58	10.454	10.454	1.096	873797	35.45	ng/uL	99
143) Isodrin	193	10.687	10.690	1.121	182984	34.75	ng/uL	99
144) Benzidine	184	10.979	10.980	1.151	562608	51.89	ng/uL	99
146) Aramite	185	11.204	11.207	0.894	79628	34.69	ng/uL	99
147) Kepone	272	11.860	11.858	0.947	113958	41.60	ng/uL	98
148) p-(Dimethylamino)azobe...	120	11.397	11.397	0.910	432836	36.66	ng/uL	100
149) Chlorobenzilate	251	11.440	11.440	0.913	428365	37.83	ng/uL	99
150) 3,3'-Dimethylbenzidine	212	11.775	11.772	0.940	568990	41.55	ng/uL	99
151) 2-Acetylaminofluorene	181	12.079	12.079	0.964	278463	44.15	ng/uL	98
152) 3,3'-Dichlorobenzidine	252	12.460	12.457	0.995	295499	42.80	ng/uL	99
154) 7,12-Dimethylbenz(a)an...	256	14.142	14.142	0.954	336986	34.89	ng/uL	99
155) 3-Methylcholanthrene	269	15.347	15.344	1.035	61065	41.44	ng/uL	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1222.D
Acq On : 12 Aug 2011 18:22
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.1|ICV|1|SVM|1|AICV
Misc : |MIX[B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 15 15:22:59 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1258.D
Acq On : 13 Aug 2011 09:50
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-08|ICAL|1|SVM|1|M1
Misc : |MIX[A]
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 14 16:12:25 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	638749	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.047	6.049	1.000	2324030	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.919	7.922	1.000	1146156	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.533	9.533	1.000	1850511	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.528	12.531	1.000	1208896	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	742344	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.047	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.919	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.533	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.047	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.919	7.919	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.047	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.047	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.919	7.919	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.047	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.528	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.578	3.580	0.751	19880	0.95	ng/uL	0.00
8) Phenol-d5	99	4.353	4.367	0.914	24310	0.92	ng/uL	-0.01
25) Nitrobenzene-d5	82	5.297	5.308	0.876	22407	1.09	ng/uL	-0.01
47) 2-Fluorobiphenyl	172	7.172	7.178	0.906	41807	1.00	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.760	8.772	1.106	3494	0.73	ng/uL	-0.01
83) p-Terphenyl-d14	244	11.241	11.244	0.897	25660	0.84	ng/uL	0.00

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
35) Naphthalene	128	6.064	6.072	1.003	61217	1.16	ng/uL	97
39) 2-Methylnaphthalene	142	6.788	6.797	1.123	38722	1.07	ng/uL	99
41) 1-Methylnaphthalene	142	6.896	6.905	1.141	37733	1.09	ng/uL	98
48) 2-Chloronaphthalene	162	7.314	7.320	0.924	34720	1.01	ng/uL	98
56) Acenaphthylene	152	7.763	7.771	0.980	56892	1.00	ng/uL	99
57) Acenaphthene	154	7.951	7.959	1.004	35220	0.98	ng/uL	97
63) Fluorene	166	8.505	8.516	1.074	41434	1.01	ng/uL	98
76) Phenanthrene	178	9.553	9.562	1.002	47787	1.00	ng/uL	99
77) Anthracene	178	9.607	9.618	1.008	47035	0.97	ng/uL	100
78) Carbazole	167	9.769	9.780	1.025	38673	0.95	ng/uL	100
80) Fluoranthene	202	10.843	10.852	1.137	44192	0.94	ng/uL	100
82) Pyrene	202	11.093	11.102	0.885	43906	0.86	ng/uL	98
86) Benzo(a)anthracene	228	12.508	12.514	0.998	34843	1.05	ng/uL	97

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1258.D
Acq On : 13 Aug 2011 09:50
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-08|ICAL|1|SVM|1|M1
Misc : |MIX[A]
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 14 16:12:25 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

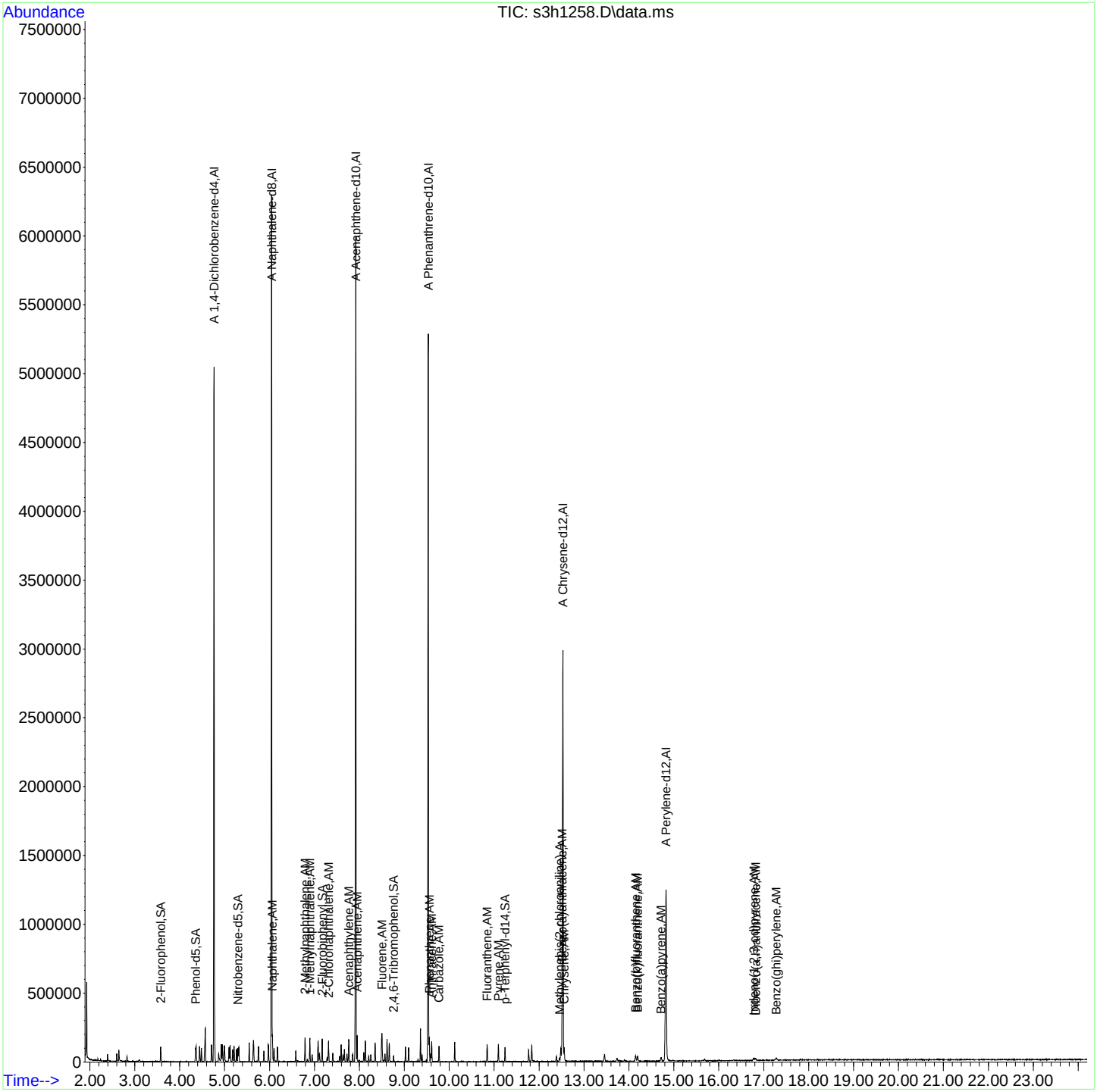
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
87)	Chrysene	228	12.557	12.568	1.002	31308	1.02	ng/uL	97
89)	Methylenebis(2-chloroa...	231	12.454	12.463	0.994	2838	6.09	ng/uL	92
92)	Benzo(b)fluoranthene	252	14.145	14.159	0.954	20574	0.89	ng/uL	93
93)	Benzo(k)fluoranthene	252	14.193	14.207	0.957	21450	0.92	ng/uL	99
94)	Benzo(a)pyrene	252	14.710	14.727	0.992	15989	0.82	ng/uL	97
95)	Indeno(1,2,3-cd)pyrene	276	16.779	16.787	1.132	12097	0.83	ng/uL	71
96)	Dibenzo(a,h)anthracene	278	16.819	16.821	1.135	9752	0.81	ng/uL	66
97)	Benzo(ghi)perylene	276	17.279	17.290	1.166	10262	0.90	ng/uL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1258.D
Acq On : 13 Aug 2011 09:50
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-08|ICAL|1|SVM|1|M1
Misc : |MIX[A]
ALS Vial : 51 Sample Multiplier: 1

Quant Time: Aug 14 16:12:25 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1259.D
Acq On : 13 Aug 2011 10:21
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-07|ICAL|1|SVM|1|M2
Misc : |MIX[A]
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 15 15:08:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:32:54 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	809689	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.050	6.049	1.000	3008741	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.922	7.922	1.000	1464323	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.536	9.533	1.000	2389224	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.534	12.531	1.000	1650957	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.832	14.824	1.000	1040424	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.050	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.536	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.832	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.050	6.044	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.922	7.916	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.050	6.044	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.832	14.852	1.000	0m	40.00	ng/uL	-0.02
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.760	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.050	6.044	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.922	7.916	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.050	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.832	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.580	3.580	0.751	264067	10.00	ng/uL	0.00
8) Phenol-d5	99	4.359	4.367	0.915	331372	9.89	ng/uL	0.00
25) Nitrobenzene-d5	82	5.302	5.308	0.876	289403	10.86	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.172	7.178	0.905	544078	10.16	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.766	8.772	1.107	58963	9.58	ng/uL	0.00
83) p-Terphenyl-d14	244	11.241	11.244	0.897	369542	8.81	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.390	2.384	0.502	249792	10.03	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.600	2.603	0.546	190236	10.14	ng/uL	99
4) Pyridine	79	2.637	2.631	0.553	253330	9.74	ng/uL	97
6) p-Benzoquinone	54	4.018	4.021	0.843	35163	6.83	ng/uL	97
7) Aniline	66	4.447	4.455	0.933	162642	9.91	ng/uL	97
9) Phenol	94	4.370	4.382	0.917	352354	10.11	ng/uL	99
10) bis(2-Chloroethyl) ether	63	4.487	4.492	0.942	284995	10.11	ng/uL	100
11) 2-Chlorophenol	128	4.558	4.563	0.956	268238	10.26	ng/uL	99
12) n-Decane	43	4.569	4.572	0.959	560621	10.97	ng/uL	100
13) 1,3-Dichlorobenzene	146	4.711	4.717	0.989	295163	10.13	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.782	4.785	1.004	299873	10.15	ng/uL	97
15) 1,2-Dichlorobenzene	146	4.930	4.933	1.035	280473	10.10	ng/uL	100
16) bis(2-Chloroisopropyl)...	45	4.998	5.004	1.049	769336	10.27	ng/uL	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1259.D
Acq On : 13 Aug 2011 10:21
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-07|ICAL|1|SVM|1|M2
Misc : |MIX[A]
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 15 15:08:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:32:54 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17)	Benzyl alcohol	108	4.870	4.879	1.022	174994	9.96	ng/uL	99
18)	o-Cresol	107	4.956	4.961	1.040	223510	10.07	ng/uL	98
19)	m,p-Cresols	107	5.106	5.117	1.072	282633	9.94	ng/uL	100
20)	N-Nitrosodipropylamine	70	5.132	5.149	1.077	212221	10.11	ng/uL	100
21)	p-Toluidine	106	5.183	5.189	1.088	314377	10.83	ng/uL	100
22)	m-Toluidine	106	5.214	5.223	1.094	318644	9.67	ng/uL	99
23)	Hexachloroethane	117	5.265	5.268	1.105	124034	10.09	ng/uL	98
26)	Nitrobenzene	77	5.322	5.331	0.880	297535	11.02	ng/uL	99
27)	Isophorone	82	5.552	5.564	0.918	556208	11.03	ng/uL	98
28)	2-Nitrophenol	139	5.640	5.643	0.932	142183	10.61	ng/uL	95
29)	2,4-Dimethylphenol	122	5.649	5.655	0.934	250715	11.43	ng/uL	98
30)	bis(2-Chloroethoxy)met...	93	5.757	5.762	0.952	344622	11.01	ng/uL	98
31)	2,4-Dichlorophenol	162	5.879	5.885	0.972	193063	10.42	ng/uL	99
32)	Benzoic acid	105	5.711	5.765	0.944	97843	6.26	ng/uL	94
33)	1,2,4-Trichlorobenzene	180	5.976	5.978	0.988	241448	11.06	ng/uL	100
34)	alpha-Terpineol	59	6.055	6.061	1.001	357563	11.18	ng/uL	99
35)	Naphthalene	128	6.069	6.072	1.003	762777	11.17	ng/uL	97
36)	4-Chloroaniline	127	6.104	6.109	1.009	286235	10.74	ng/uL	99
37)	Hexachlorobutadiene	225	6.177	6.180	1.021	125455	10.86	ng/uL	99
38)	4-Chloro-3-methylphenol	107	6.587	6.592	1.089	212942	10.54	ng/uL	99
39)	2-Methylnaphthalene	142	6.791	6.797	1.123	511249	10.91	ng/uL	100
40)	Phthalic anhydride	104	6.840	6.845	1.131	15837	5.25	ng/uL#	1
41)	1-Methylnaphthalene	142	6.899	6.905	1.140	486257	10.84	ng/uL	99
43)	Hexachlorocyclopentadiene	237	6.950	6.953	0.877	103481	10.01	ng/uL	99
44)	2,3-Dichloroaniline	161	7.087	7.092	0.895	254014	10.13	ng/uL	99
45)	2,4,6-Trichlorophenol	196	7.078	7.084	0.893	135292	10.07	ng/uL	99
46)	2,4,5-Trichlorophenol	196	7.112	7.118	0.898	136735	9.59	ng/uL	99
48)	2-Chloronaphthalene	162	7.317	7.320	0.924	446444	10.16	ng/uL	100
49)	o-Nitroaniline	65	7.413	7.419	0.936	164152	9.92	ng/uL	97
50)	1,4-Dinitrobenzene	168	7.561	7.570	0.954	74448	9.56	ng/uL	92
51)	m-Nitroaniline	138	7.857	7.865	0.992	114883	10.13	ng/uL	95
52)	Dimethylphthalate	163	7.601	7.612	0.959	507108	10.30	ng/uL	100
53)	m-Dinitrobenzene	168	7.641	7.649	0.964	89103	9.94	ng/uL	96
54)	2,6-Dinitrotoluene	165	7.672	7.680	0.968	114092	10.11	ng/uL	95
55)	2,4-Dinitrotoluene	165	8.104	8.112	1.023	138850	10.08	ng/uL	98
56)	Acenaphthylene	152	7.766	7.771	0.980	748894	10.30	ng/uL	100
57)	Acenaphthene	154	7.953	7.959	1.004	464021	10.07	ng/uL	99
59)	Dibenzofuran	168	8.138	8.144	1.027	627172	10.35	ng/uL	99
60)	2,3,4,6-Tetrachlorophenol	232	8.257	8.260	1.042	92494	9.06	ng/uL	97
61)	Diethylphthalate	149	8.354	8.362	1.055	538624	10.34	ng/uL	100
62)	4-Nitrophenol	139	7.999	8.010	1.010	67481	9.08	ng/uL	96
63)	Fluorene	166	8.507	8.516	1.074	533939	10.24	ng/uL	100
64)	4-Chlorophenylphenylether	204	8.496	8.499	1.072	244113	10.38	ng/uL	100
65)	p-Nitroaniline	138	8.513	8.527	1.075	93114	9.73	ng/uL	100
68)	2-Methyl-4,6-dinitroph...	198	8.542	8.553	0.896	55914	7.95	ng/uL	90
69)	Diphenylamine	169	8.621	8.630	0.904	418678	10.09	ng/uL	99
70)	1,2-Diphenylhydrazine	77	8.669	8.675	0.909	600818	10.30	ng/uL	99
71)	4-Bromophenylphenylether	248	9.027	9.033	0.947	120344	9.90	ng/uL	97
72)	Hexachlorobenzene	284	9.098	9.104	0.954	141889	9.91	ng/uL	100
73)	Pentachlorophenol	266	9.306	9.309	0.976	67266	8.58	ng/uL	99
74)	n-Octadecane	57	9.363	9.365	0.982	627290	10.21	ng/uL	99
75)	Dinoseb	211	9.491	9.496	0.995	83027	7.88	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1259.D
Acq On : 13 Aug 2011 10:21
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-07|ICAL|1|SVM|1|M2
Misc : |MIX[A]
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 15 15:08:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:32:54 2011
Response via : Initial Calibration
Integrator: RTE

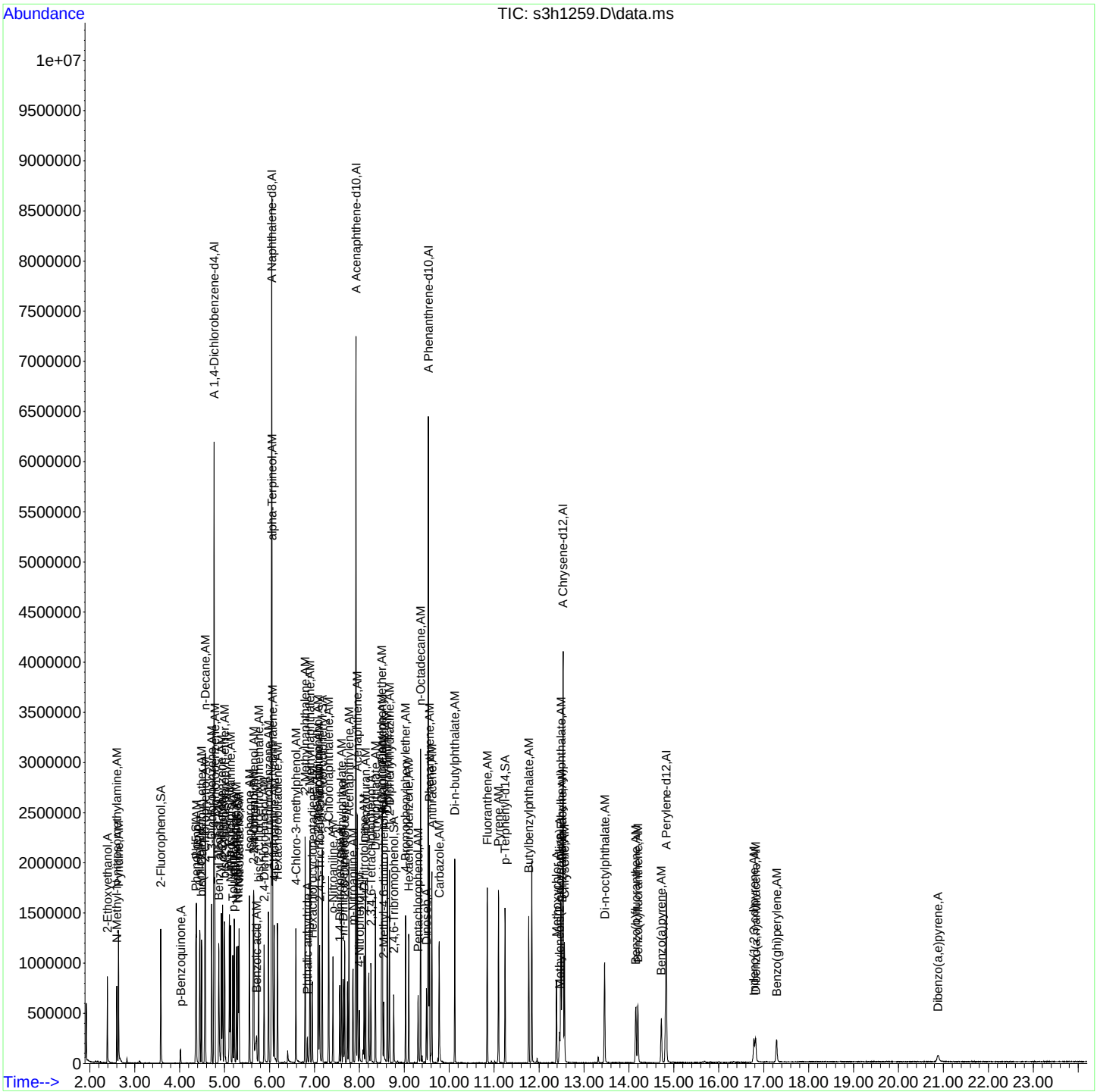
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
76) Phenanthrene	178	9.559	9.562	1.002	633145	10.22	ng/uL	99
77) Anthracene	178	9.613	9.618	1.008	636039	10.20	ng/uL	100
78) Carbazole	167	9.775	9.780	1.025	541272	10.33	ng/uL	99
79) Di-n-butylphthalate	149	10.124	10.127	1.062	840148	10.00	ng/uL	99
80) Fluoranthene	202	10.846	10.852	1.137	627675	10.30	ng/uL	99
82) Pyrene	202	11.096	11.102	0.885	624549	8.99	ng/uL	100
84) Butylbenzylphthalate	149	11.769	11.772	0.939	298310	8.79	ng/uL	96
85) bis(2-Ethylhexyl)phtha...	149	12.485	12.485	0.996	429759	9.27	ng/uL	99
86) Benzo(a)anthracene	228	12.511	12.514	0.998	454577	10.02	ng/uL	99
87) Chrysene	228	12.565	12.568	1.002	420034	10.02	ng/uL	99
88) Methoxychlor	227	12.386	12.392	0.988	289622	9.28	ng/uL	99
89) Methylenebis(2-chloroa...	231	12.457	12.463	0.994	32596	10.54	ng/uL	89
90) Di-n-octylphthalate	149	13.457	13.460	1.074	563298	9.35	ng/uL	98
92) Benzo(b)fluoranthene	252	14.151	14.159	0.954	312334	9.65	ng/uL	100
93) Benzo(k)fluoranthene	252	14.199	14.207	0.957	325535	9.98	ng/uL	98
94) Benzo(a)pyrene	252	14.719	14.727	0.992	270219	9.86	ng/uL	99
95) Indeno(1,2,3-cd)pyrene	276	16.779	16.787	1.131	199238	9.80	ng/uL	100
96) Dibenzo(a,h)anthracene	278	16.819	16.821	1.134	162773	9.70	ng/uL	98
97) Benzo(ghi)perylene	276	17.287	17.290	1.166	160504	10.01	ng/uL	100
98) Dibenzo(a,e)pyrene	302	20.873	20.887	1.407	74936	8.56	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1259.D
Acq On : 13 Aug 2011 10:21
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-07|ICAL|1|SVM|1|M2
Misc : |MIX[A]
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Aug 15 15:08:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 12:32:54 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1260.D
Acq On : 13 Aug 2011 10:52
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-06|ICAL|1|SVM|1|M3
Misc : |MIX[A]
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Aug 14 16:12:35 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.765	4.768	1.000	634861	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.050	6.049	1.000	2453324	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.922	7.922	1.000	1162477	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.533	9.533	1.000	1814328	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.531	12.531	1.000	1207088	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	688125	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.050	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.533	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.827	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.050	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.050	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.050	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.765	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.050	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.580	3.580	0.751	408874	19.75	ng/uL	0.00
8) Phenol-d5	99	4.362	4.367	0.915	517843	19.72	ng/uL	0.00
25) Nitrobenzene-d5	82	5.305	5.308	0.877	456356	21.01	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.175	7.178	0.906	851747	20.04	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.766	8.772	1.107	93434	19.12	ng/uL	0.00
83) p-Terphenyl-d14	244	11.244	11.244	0.897	559998	18.27	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.390	2.384	0.502	386670	19.80	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.603	2.603	0.546	293224	19.93	ng/uL	99
4) Pyridine	79	2.637	2.631	0.553	400234	19.63	ng/uL	98
6) p-Benzoquinone	54	4.018	4.021	0.843	64605	16.00	ng/uL	99
7) Aniline	66	4.450	4.455	0.934	255348	19.84	ng/uL	98
9) Phenol	94	4.376	4.382	0.918	545481	19.97	ng/uL	100
10) bis(2-Chloroethyl) ether	63	4.490	4.492	0.942	443383	20.06	ng/uL	99
11) 2-Chlorophenol	128	4.561	4.563	0.957	419327	20.45	ng/uL	99
12) n-Decane	43	4.572	4.572	0.959	860330	21.48	ng/uL	100
13) 1,3-Dichlorobenzene	146	4.714	4.717	0.989	456012	19.95	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.782	4.785	1.004	463998	20.03	ng/uL	99
15) 1,2-Dichlorobenzene	146	4.930	4.933	1.035	434454	19.95	ng/uL	99
16) bis(2-Chloroisopropyl)...	45	5.001	5.004	1.049	1194100	20.32	ng/uL	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1260.D
Acq On : 13 Aug 2011 10:52
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-06|ICAL|1|SVM|1|M3
Misc : |MIX[A]
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Aug 14 16:12:35 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17) Benzyl alcohol	108	4.873	4.879	1.023	274503	19.93	ng/uL	99
18) o-Cresol	107	4.958	4.961	1.041	348571	20.02	ng/uL	99
19) m,p-Cresols	107	5.112	5.117	1.073	443822	19.90	ng/uL	99
20) N-Nitrosodipropylamine	70	5.140	5.149	1.079	334367	20.31	ng/uL	100
21) p-Toluidine	106	5.186	5.189	1.088	493422	21.68	ng/uL	99
22) m-Toluidine	106	5.220	5.223	1.095	497418	19.25	ng/uL	99
23) Hexachloroethane	117	5.268	5.268	1.106	192245	19.94	ng/uL	98
26) Nitrobenzene	77	5.325	5.331	0.880	463908	21.06	ng/uL	98
27) Isophorone	82	5.558	5.564	0.919	872384	21.22	ng/uL	98
28) 2-Nitrophenol	139	5.640	5.643	0.932	225020	20.60	ng/uL	95
29) 2,4-Dimethylphenol	122	5.652	5.655	0.934	386465	21.62	ng/uL	99
30) bis(2-Chloroethoxy)met...	93	5.760	5.762	0.952	539021	21.13	ng/uL	98
31) 2,4-Dichlorophenol	162	5.882	5.885	0.972	308904	20.44	ng/uL	99
32) Benzoic acid	105	5.737	5.765	0.948	209599	16.42	ng/uL#	53
33) 1,2,4-Trichlorobenzene	180	5.979	5.978	0.988	375234	21.09	ng/uL	100
34) alpha-Terpineol	59	6.058	6.061	1.001	563297	21.59	ng/uL	99
35) Naphthalene	128	6.069	6.072	1.003	1184485	21.27	ng/uL	97
36) 4-Chloroaniline	127	6.106	6.109	1.009	453908	20.89	ng/uL	98
37) Hexachlorobutadiene	225	6.180	6.180	1.022	195143	20.71	ng/uL	99
38) 4-Chloro-3-methylphenol	107	6.589	6.592	1.089	343229	20.84	ng/uL	99
39) 2-Methylnaphthalene	142	6.794	6.797	1.123	799456	20.93	ng/uL	100
40) Phthalic anhydride	104	6.842	6.845	1.131	32603	13.26	ng/uL#	1
41) 1-Methylnaphthalene	142	6.902	6.905	1.141	767459	20.98	ng/uL	99
43) Hexachlorocyclopentadiene	237	6.950	6.953	0.877	171041	20.85	ng/uL	100
44) 2,3-Dichloroaniline	161	7.090	7.092	0.895	401882	20.18	ng/uL	99
45) 2,4,6-Trichlorophenol	196	7.081	7.084	0.894	214047	20.07	ng/uL	99
46) 2,4,5-Trichlorophenol	196	7.115	7.118	0.898	222726	19.68	ng/uL	99
48) 2-Chloronaphthalene	162	7.317	7.320	0.924	701755	20.11	ng/uL	100
49) o-Nitroaniline	65	7.413	7.419	0.936	261787	19.93	ng/uL	97
50) 1,4-Dinitrobenzene	168	7.564	7.570	0.955	118452	19.16	ng/uL	93
51) m-Nitroaniline	138	7.860	7.865	0.992	181203	20.12	ng/uL	98
52) Dimethylphthalate	163	7.604	7.612	0.960	781964	20.01	ng/uL	99
53) m-Dinitrobenzene	168	7.644	7.649	0.965	139174	19.56	ng/uL	96
54) 2,6-Dinitrotoluene	165	7.675	7.680	0.969	177560	19.82	ng/uL	94
55) 2,4-Dinitrotoluene	165	8.107	8.112	1.023	211183	19.32	ng/uL	97
56) Acenaphthylene	152	7.769	7.771	0.981	1162300	20.14	ng/uL	100
57) Acenaphthene	154	7.956	7.959	1.004	729380	19.94	ng/uL	100
58) 2,4-Dinitrophenol	184	7.965	7.970	1.005	67009	15.96	ng/uL	98
59) Dibenzofuran	168	8.138	8.144	1.027	970963	20.19	ng/uL	99
60) 2,3,4,6-Tetrachlorophenol	232	8.257	8.260	1.042	147288	18.17	ng/uL	95
61) Diethylphthalate	149	8.360	8.362	1.055	821379	19.86	ng/uL	100
62) 4-Nitrophenol	139	8.004	8.010	1.010	113666	19.27	ng/uL	95
63) Fluorene	166	8.510	8.516	1.074	824672	19.92	ng/uL	100
64) 4-Chlorophenylphenylether	204	8.496	8.499	1.072	378213	20.26	ng/uL	100
65) p-Nitroaniline	138	8.516	8.527	1.075	147139	19.36	ng/uL	98
68) 2-Methyl-4,6-dinitroph...	198	8.547	8.553	0.897	98302	18.40	ng/uL	92
69) Diphenylamine	169	8.624	8.630	0.905	646868	20.53	ng/uL	100
70) 1,2-Diphenylhydrazine	77	8.672	8.675	0.910	925948	20.90	ng/uL	98
71) 4-Bromophenylphenylether	248	9.030	9.033	0.947	187602	20.33	ng/uL	99
72) Hexachlorobenzene	284	9.101	9.104	0.955	216202	19.89	ng/uL	100
73) Pentachlorophenol	266	9.306	9.309	0.976	110678	18.60	ng/uL	99
74) n-Octadecane	57	9.363	9.365	0.982	984392	21.09	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1260.D
Acq On : 13 Aug 2011 10:52
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-06|ICAL|1|SVM|1|M3
Misc : |MIX[A]
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Aug 14 16:12:35 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

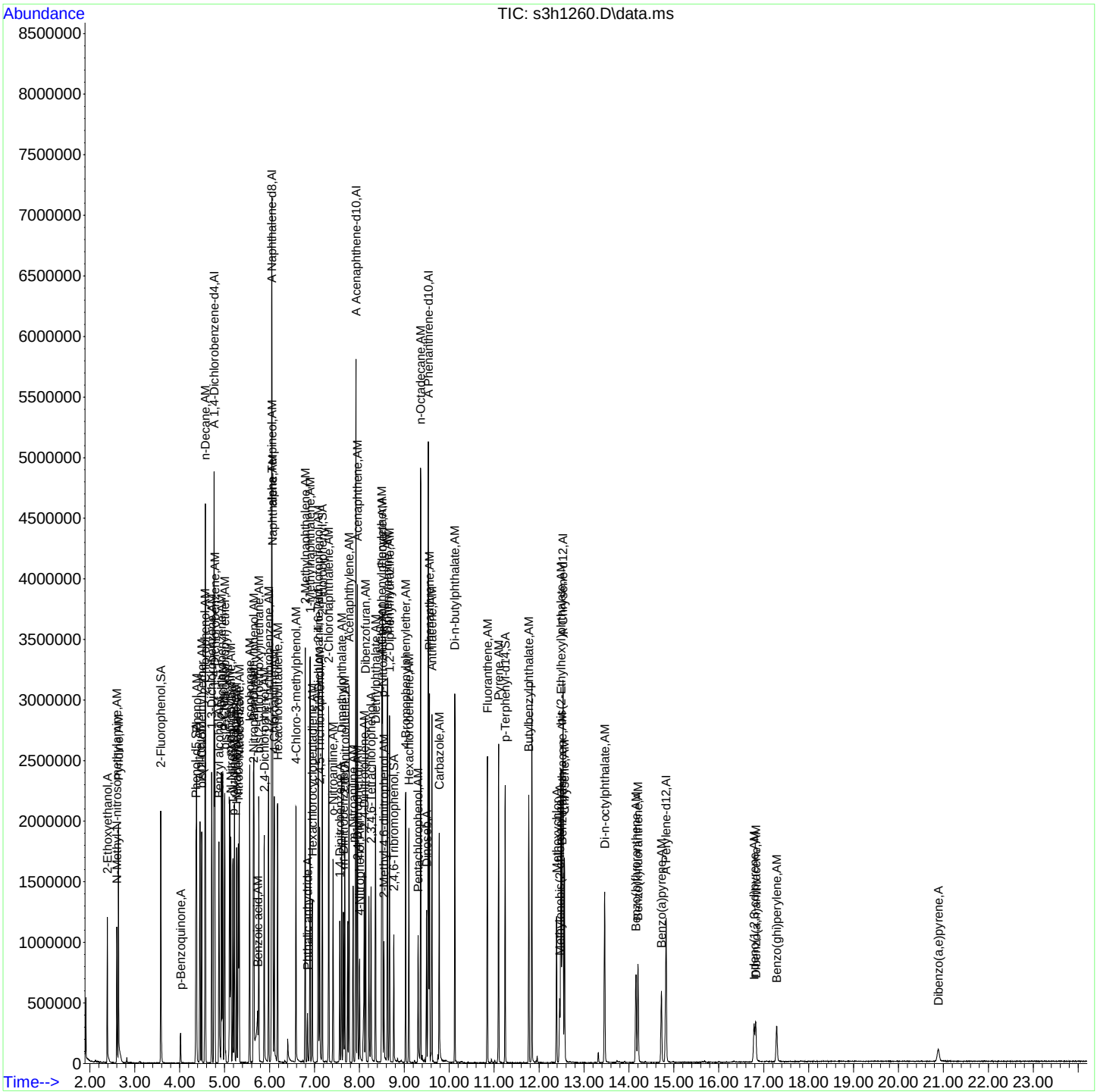
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.493	9.496	0.996	144474	18.05	ng/uL	100
76) Phenanthrene	178	9.559	9.562	1.003	949237	20.19	ng/uL	99
77) Anthracene	178	9.613	9.618	1.008	957854	20.22	ng/uL	100
78) Carbazole	167	9.775	9.780	1.025	779940	19.61	ng/uL	99
79) Di-n-butylphthalate	149	10.124	10.127	1.062	1269489	19.89	ng/uL	100
80) Fluoranthene	202	10.849	10.852	1.138	951942	20.58	ng/uL	99
82) Pyrene	202	11.099	11.102	0.886	950793	18.73	ng/uL	99
84) Butylbenzylphthalate	149	11.772	11.772	0.939	463055	18.66	ng/uL	97
85) bis(2-Ethylhexyl)phtha...	149	12.485	12.485	0.996	645475	19.05	ng/uL	99
86) Benzo(a)anthracene	228	12.511	12.514	0.998	655473	19.76	ng/uL	99
87) Chrysene	228	12.565	12.568	1.003	604142	19.71	ng/uL	100
88) Methoxychlor	227	12.389	12.392	0.989	443789	19.45	ng/uL	100
89) Methylenebis(2-chloroa...	231	12.460	12.463	0.994	59405	18.09	ng/uL	90
90) Di-n-octylphthalate	149	13.457	13.460	1.074	815489	18.51	ng/uL	98
92) Benzo(b)fluoranthene	252	14.156	14.159	0.955	423793	19.80	ng/uL	100
93) Benzo(k)fluoranthene	252	14.202	14.207	0.958	428643	19.87	ng/uL	99
94) Benzo(a)pyrene	252	14.722	14.727	0.993	357529	19.73	ng/uL	99
95) Indeno(1,2,3-cd)pyrene	276	16.784	16.787	1.132	267583	19.90	ng/uL	100
96) Dibenzo(a,h)anthracene	278	16.821	16.821	1.135	219604	19.79	ng/uL	97
97) Benzo(ghi)perylene	276	17.287	17.290	1.166	214023	20.19	ng/uL	99
98) Dibenzo(a,e)pyrene	302	20.885	20.887	1.409	111130	19.20	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1260.D
Acq On : 13 Aug 2011 10:52
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-06|ICAL|1|SVM|1|M3
Misc : |MIX[A]
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Aug 14 16:12:35 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1261.D
Acq On : 13 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.1|ICAL|1|SVM|1|M4
Misc : |MIX[A]
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Aug 14 16:12:40 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.768	4.768	1.000	494209	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.049	6.049	1.000	2042956	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.922	7.922	1.000	930203	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.533	9.533	1.000	1500499	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.531	12.531	1.000	916763	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	513377	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.533	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.922	7.919	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.533	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.531	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.580	3.580	0.751	643032	39.90	ng/uL	0.00
8) Phenol-d5	99	4.367	4.367	0.916	810766	39.66	ng/uL	0.00
25) Nitrobenzene-d5	82	5.308	5.308	0.877	711222	39.32	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.178	7.178	0.906	1353111	39.79	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.772	8.772	1.107	156300	39.97	ng/uL	0.00
83) p-Terphenyl-d14	244	11.244	11.244	0.897	896334	38.50	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.384	2.384	0.500	610273	40.14	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.603	2.603	0.546	457820	39.96	ng/uL	99
4) Pyridine	79	2.631	2.631	0.552	632734	39.87	ng/uL	98
6) p-Benzoquinone	54	4.021	4.021	0.843	126832	40.35	ng/uL	97
7) Aniline	66	4.455	4.455	0.934	401541	40.09	ng/uL	99
9) Phenol	94	4.382	4.382	0.919	850843	40.02	ng/uL	99
10) bis(2-Chloroethyl) ether	63	4.492	4.492	0.942	690264	40.11	ng/uL	100
11) 2-Chlorophenol	128	4.563	4.563	0.957	653524	40.94	ng/uL	99
12) n-Decane	43	4.572	4.572	0.959	1326944	42.56	ng/uL	99
13) 1,3-Dichlorobenzene	146	4.717	4.717	0.989	712126	40.02	ng/uL	100
14) 1,4-Dichlorobenzene	146	4.785	4.785	1.004	728703	40.40	ng/uL	99
15) 1,2-Dichlorobenzene	146	4.933	4.933	1.035	677118	39.94	ng/uL	100
16) bis(2-Chloroisopropyl)...	45	5.004	5.004	1.049	1858126	40.63	ng/uL	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1261.D
Acq On : 13 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.1|ICAL|1|SVM|1|M4
Misc : |MIX[A]
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Aug 14 16:12:40 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17) Benzyl alcohol	108	4.879	4.879	1.023	430798	40.19	ng/uL	99
18) o-Cresol	107	4.961	4.961	1.041	543370	40.09	ng/uL	99
19) m,p-Cresols	107	5.117	5.117	1.073	692740	39.90	ng/uL	100
20) N-Nitrosodipropylamine	70	5.149	5.149	1.080	523697	40.87	ng/uL	100
21) p-Toluidine	106	5.189	5.189	1.088	764237	43.13	ng/uL	99
22) m-Toluidine	106	5.223	5.223	1.095	783474	38.96	ng/uL	100
23) Hexachloroethane	117	5.268	5.268	1.105	299872	39.96	ng/uL	99
26) Nitrobenzene	77	5.331	5.331	0.881	723023	39.42	ng/uL	99
27) Isophorone	82	5.564	5.564	0.920	1381871	40.36	ng/uL	98
28) 2-Nitrophenol	139	5.643	5.643	0.933	357270	39.28	ng/uL	97
29) 2,4-Dimethylphenol	122	5.655	5.655	0.935	593848	39.89	ng/uL	98
30) bis(2-Chloroethoxy)met...	93	5.762	5.762	0.953	847312	39.88	ng/uL	99
31) 2,4-Dichlorophenol	162	5.885	5.885	0.973	496845	39.48	ng/uL	99
32) Benzoic acid	105	5.765	5.765	0.953	382444	35.99	ng/uL#	53
33) 1,2,4-Trichlorobenzene	180	5.978	5.978	0.988	584834	39.47	ng/uL	99
34) alpha-Terpineol	59	6.061	6.061	1.002	896629	41.27	ng/uL	99
35) Naphthalene	128	6.072	6.072	1.004	1852368	39.95	ng/uL	96
36) 4-Chloroaniline	127	6.109	6.109	1.010	715086	39.52	ng/uL	98
37) Hexachlorobutadiene	225	6.180	6.180	1.022	308063	39.26	ng/uL	99
38) 4-Chloro-3-methylphenol	107	6.592	6.592	1.090	547985	39.96	ng/uL	99
39) 2-Methylnaphthalene	142	6.797	6.797	1.124	1264450	39.76	ng/uL	99
40) Phthalic anhydride	104	6.845	6.845	1.132	72429	35.37	ng/uL#	1
41) 1-Methylnaphthalene	142	6.905	6.905	1.141	1211194	39.75	ng/uL	100
43) Hexachlorocyclopentadiene	237	6.953	6.953	0.878	256125	39.02	ng/uL	100
44) 2,3-Dichloroaniline	161	7.092	7.092	0.895	638075	40.04	ng/uL	99
45) 2,4,6-Trichlorophenol	196	7.084	7.084	0.894	345657	40.50	ng/uL	100
46) 2,4,5-Trichlorophenol	196	7.118	7.118	0.898	364962	40.29	ng/uL	100
48) 2-Chloronaphthalene	162	7.320	7.320	0.924	1113002	39.86	ng/uL	100
49) o-Nitroaniline	65	7.419	7.419	0.937	418359	39.80	ng/uL	98
50) 1,4-Dinitrobenzene	168	7.570	7.570	0.956	198757	40.18	ng/uL	95
51) m-Nitroaniline	138	7.865	7.865	0.993	289739	40.20	ng/uL	98
52) Dimethylphthalate	163	7.612	7.612	0.961	1273569	40.73	ng/uL	100
53) m-Dinitrobenzene	168	7.649	7.649	0.966	231852	40.71	ng/uL	97
54) 2,6-Dinitrotoluene	165	7.680	7.680	0.970	289246	40.36	ng/uL	95
55) 2,4-Dinitrotoluene	165	8.112	8.112	1.024	355582	40.65	ng/uL	97
56) Acenaphthylene	152	7.771	7.771	0.981	1867545	40.44	ng/uL	100
57) Acenaphthene	154	7.959	7.959	1.005	1174386	40.13	ng/uL	100
58) 2,4-Dinitrophenol	184	7.970	7.970	1.006	120239	35.79	ng/uL#	78
59) Dibenzofuran	168	8.144	8.144	1.028	1551556	40.31	ng/uL	99
60) 2,3,4,6-Tetrachlorophenol	232	8.260	8.260	1.043	256367	39.52	ng/uL	98
61) Diethylphthalate	149	8.362	8.362	1.056	1363923	41.22	ng/uL	100
62) 4-Nitrophenol	139	8.010	8.010	1.011	189882	40.22	ng/uL	98
63) Fluorene	166	8.516	8.516	1.075	1350022	40.75	ng/uL	99
64) 4-Chlorophenylphenylether	204	8.499	8.499	1.073	613929	41.09	ng/uL	100
65) p-Nitroaniline	138	8.527	8.527	1.076	238090	39.16	ng/uL	98
68) 2-Methyl-4,6-dinitroph...	198	8.553	8.553	0.897	172899	39.13	ng/uL	95
69) Diphenylamine	169	8.630	8.630	0.905	1060006	40.67	ng/uL	100
70) 1,2-Diphenylhydrazine	77	8.675	8.675	0.910	1504803	41.07	ng/uL	99
71) 4-Bromophenylphenylether	248	9.033	9.033	0.948	310630	40.70	ng/uL	99
72) Hexachlorobenzene	284	9.104	9.104	0.955	364013	40.50	ng/uL	100
73) Pentachlorophenol	266	9.309	9.309	0.976	194130	39.44	ng/uL	99
74) n-Octadecane	57	9.365	9.365	0.982	1618762	41.94	ng/uL	99

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1261.D
Acq On : 13 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.1|ICAL|1|SVM|1|M4
Misc : |MIX[A]
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Aug 14 16:12:40 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

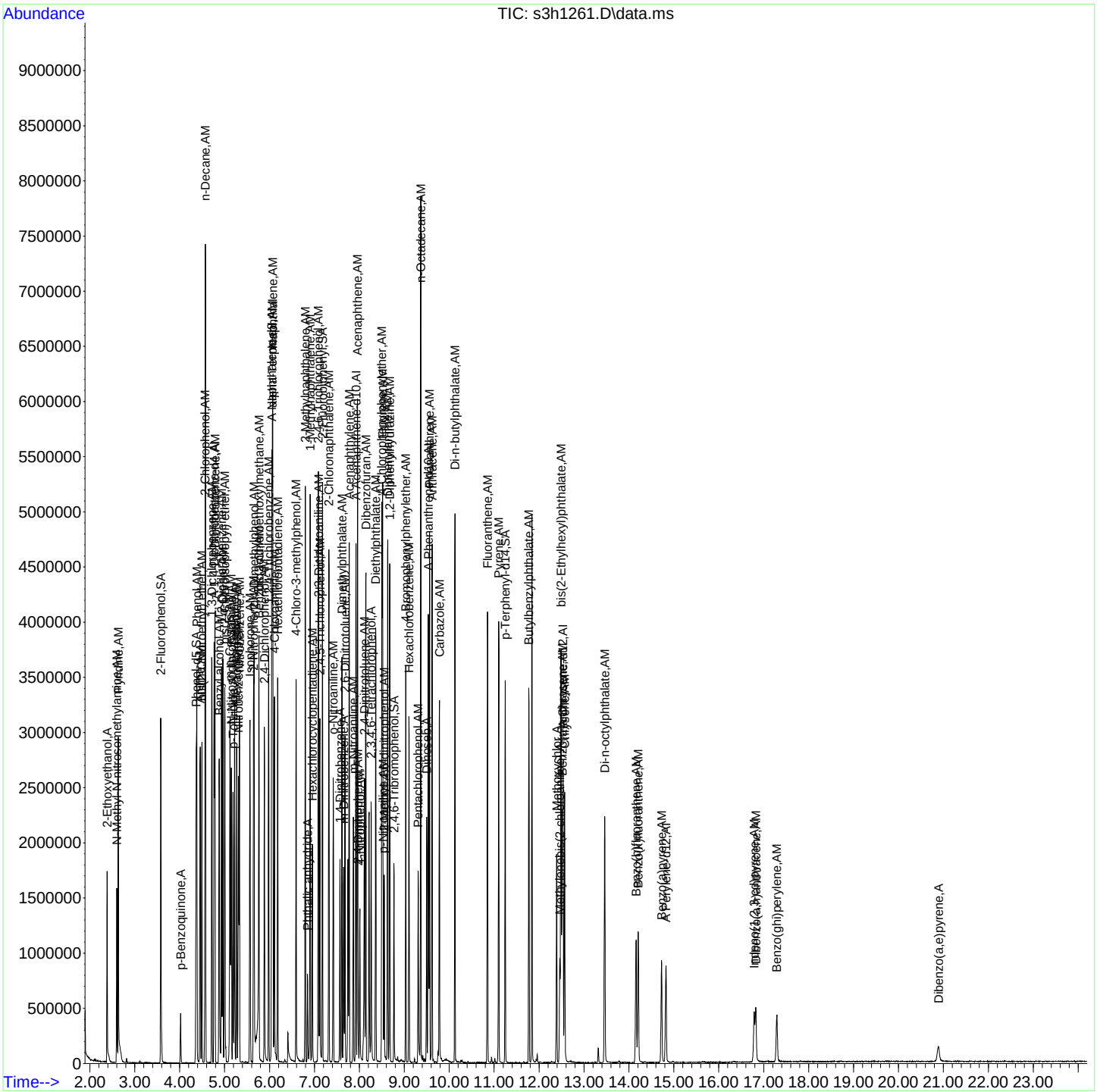
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.496	9.496	0.996	256724	38.77	ng/uL	100
76) Phenanthrene	178	9.562	9.562	1.003	1571021	40.39	ng/uL	100
77) Anthracene	178	9.618	9.618	1.009	1586699	40.51	ng/uL	100
78) Carbazole	167	9.780	9.780	1.026	1292506	39.29	ng/uL	99
79) Di-n-butylphthalate	149	10.127	10.127	1.062	2142624	40.59	ng/uL	100
80) Fluoranthene	202	10.852	10.852	1.138	1530846	40.01	ng/uL	99
82) Pyrene	202	11.102	11.102	0.886	1511263	39.19	ng/uL	99
84) Butylbenzylphthalate	149	11.772	11.772	0.939	748335	39.70	ng/uL	97
85) bis(2-Ethylhexyl)phtha...	149	12.485	12.485	0.996	1021181	39.69	ng/uL	100
86) Benzo(a)anthracene	228	12.514	12.514	0.999	1006216	39.94	ng/uL	99
87) Chrysene	228	12.568	12.568	1.003	936880	40.25	ng/uL	100
88) Methoxychlor	227	12.392	12.392	0.989	706906	40.78	ng/uL	100
89) Methylenebis(2-chloroa...	231	12.463	12.463	0.995	114530	37.48	ng/uL	97
90) Di-n-octylphthalate	149	13.460	13.460	1.074	1331003	39.78	ng/uL	99
92) Benzo(b)fluoranthene	252	14.159	14.159	0.955	652125	40.84	ng/uL	100
93) Benzo(k)fluoranthene	252	14.207	14.207	0.958	650612	40.44	ng/uL	99
94) Benzo(a)pyrene	252	14.727	14.727	0.993	558110	41.28	ng/uL	99
95) Indeno(1,2,3-cd)pyrene	276	16.787	16.787	1.132	399665	39.84	ng/uL	100
96) Dibenzo(a,h)anthracene	278	16.821	16.821	1.135	326918	39.49	ng/uL	97
97) Benzo(ghi)perylene	276	17.290	17.290	1.166	308765	39.03	ng/uL	99
98) Dibenzo(a,e)pyrene	302	20.887	20.887	1.409	154926	35.88	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1261.D
Acq On : 13 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.1|ICAL|1|SVM|1|M4
Misc : |MIX[A]
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Aug 14 16:12:40 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1262.D
Acq On : 13 Aug 2011 11:55
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-04|ICAL|1|SVM|1|M5
Misc : |MIX[A]
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Aug 14 16:12:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.768	4.768	1.000	521853	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.049	6.049	1.000	2221510	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.925	7.922	1.000	958267	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.536	9.533	1.000	1522554	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.534	12.531	1.000	917554	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.824	14.824	1.000	483120	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.925	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.536	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.824	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.925	7.919	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.049	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.925	7.919	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.536	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.768	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.049	6.044	1.000	0m	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.534	12.528	1.000	0m	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.824	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.583	3.580	0.751	859752	50.52	ng/uL	0.00
8) Phenol-d5	99	4.370	4.367	0.917	1096235	50.79	ng/uL	0.00
25) Nitrobenzene-d5	82	5.311	5.308	0.878	941011	47.84	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.180	7.178	0.906	1777498	50.74	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.772	8.772	1.107	196508	48.78	ng/uL	0.00
83) p-Terphenyl-d14	244	11.246	11.244	0.897	1162686	49.90	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.393	2.384	0.502	813520	50.67	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.608	2.603	0.547	610335	50.46	ng/uL	99
4) Pyridine	79	2.637	2.631	0.553	850821	50.78	ng/uL	98
6) p-Benzoquinone	54	4.021	4.021	0.843	180783	54.47	ng/uL	99
7) Aniline	66	4.458	4.455	0.935	533448	50.44	ng/uL	100
9) Phenol	94	4.384	4.382	0.920	1139068	50.74	ng/uL	100
10) bis(2-Chloroethyl) ether	63	4.495	4.492	0.943	917858	50.51	ng/uL	99
11) 2-Chlorophenol	128	4.566	4.563	0.958	868223	51.51	ng/uL	99
12) n-Decane	43	4.575	4.572	0.959	1734536	52.68	ng/uL	98
13) 1,3-Dichlorobenzene	146	4.717	4.717	0.989	954580	50.81	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.785	4.785	1.004	967579	50.81	ng/uL	99
15) 1,2-Dichlorobenzene	146	4.933	4.933	1.035	908690	50.77	ng/uL	100
16) bis(2-Chloroisopropyl)...	45	5.004	5.004	1.049	2454163	50.82	ng/uL	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1262.D
Acq On : 13 Aug 2011 11:55
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-04|ICAL|1|SVM|1|M5
Misc : |MIX[A]
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Aug 14 16:12:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17) Benzyl alcohol	108	4.882	4.879	1.024	571816	50.52	ng/uL	99
18) o-Cresol	107	4.964	4.961	1.041	725344	50.68	ng/uL	99
19) m,p-Cresols	107	5.123	5.117	1.074	928322	50.64	ng/uL	99
20) N-Nitrosodipropylamine	70	5.154	5.149	1.081	694233	51.31	ng/uL	99
21) p-Toluidine	106	5.191	5.189	1.089	1019117	54.46	ng/uL	100
22) m-Toluidine	106	5.225	5.223	1.096	1046497	49.28	ng/uL	99
23) Hexachloroethane	117	5.268	5.268	1.105	400227	50.50	ng/uL	98
26) Nitrobenzene	77	5.333	5.331	0.882	960294	48.15	ng/uL	99
27) Isophorone	82	5.566	5.564	0.920	1813115	48.69	ng/uL	98
28) 2-Nitrophenol	139	5.646	5.643	0.933	480552	48.59	ng/uL	98
29) 2,4-Dimethylphenol	122	5.660	5.655	0.936	778002	48.06	ng/uL	98
30) bis(2-Chloroethoxy)met...	93	5.765	5.762	0.953	1119026	48.44	ng/uL	100
31) 2,4-Dichlorophenol	162	5.887	5.885	0.973	661758	48.36	ng/uL	99
32) Benzoic acid	105	5.785	5.765	0.956	541750	46.88	ng/uL#	49
33) 1,2,4-Trichlorobenzene	180	5.981	5.978	0.989	778863	48.34	ng/uL	100
34) alpha-Terpineol	59	6.064	6.061	1.002	1161946	49.19	ng/uL	99
35) Naphthalene	128	6.075	6.072	1.004	2429239	48.18	ng/uL	73
36) 4-Chloroaniline	127	6.112	6.109	1.010	955099	48.54	ng/uL	98
37) Hexachlorobutadiene	225	6.183	6.180	1.022	413279	48.43	ng/uL	100
38) 4-Chloro-3-methylphenol	107	6.595	6.592	1.090	725793	48.67	ng/uL	99
39) 2-Methylnaphthalene	142	6.797	6.797	1.124	1657192	47.92	ng/uL	99
40) Phthalic anhydride	104	6.848	6.845	1.132	106959	48.04	ng/uL#	1
41) 1-Methylnaphthalene	142	6.905	6.905	1.141	1590784	48.01	ng/uL	99
43) Hexachlorocyclopentadiene	237	6.953	6.953	0.877	335866	49.66	ng/uL	100
44) 2,3-Dichloroaniline	161	7.092	7.092	0.895	829572	50.54	ng/uL	99
45) 2,4,6-Trichlorophenol	196	7.087	7.084	0.894	448005	50.95	ng/uL	98
46) 2,4,5-Trichlorophenol	196	7.121	7.118	0.899	477143	51.13	ng/uL	100
48) 2-Chloronaphthalene	162	7.322	7.320	0.924	1454111	50.56	ng/uL	100
49) o-Nitroaniline	65	7.422	7.419	0.937	540804	49.94	ng/uL	98
50) 1,4-Dinitrobenzene	168	7.572	7.570	0.956	256499	50.34	ng/uL	96
51) m-Nitroaniline	138	7.868	7.865	0.993	365979	49.29	ng/uL	99
52) Dimethylphthalate	163	7.618	7.612	0.961	1610892	50.01	ng/uL	100
53) m-Dinitrobenzene	168	7.655	7.649	0.966	290488	49.51	ng/uL	98
54) 2,6-Dinitrotoluene	165	7.683	7.680	0.970	370264	50.15	ng/uL	98
55) 2,4-Dinitrotoluene	165	8.118	8.112	1.024	443682	49.23	ng/uL	96
56) Acenaphthylene	152	7.774	7.771	0.981	2399329	50.43	ng/uL	100
57) Acenaphthene	154	7.962	7.959	1.005	1522359	50.49	ng/uL	99
58) 2,4-Dinitrophenol	184	7.973	7.970	1.006	159888	46.19	ng/uL#	72
59) Dibenzofuran	168	8.144	8.144	1.028	1994616	50.31	ng/uL	99
60) 2,3,4,6-Tetrachlorophenol	232	8.263	8.260	1.043	326820	48.91	ng/uL	96
61) Diethylphthalate	149	8.365	8.362	1.056	1708808	50.13	ng/uL	100
62) 4-Nitrophenol	139	8.016	8.010	1.011	243110	49.99	ng/uL	98
63) Fluorene	166	8.516	8.516	1.075	1708277	50.05	ng/uL	100
64) 4-Chlorophenylphenylether	204	8.502	8.499	1.073	774503	50.33	ng/uL	99
65) p-Nitroaniline	138	8.533	8.527	1.077	302029	48.22	ng/uL	99
68) 2-Methyl-4,6-dinitroph...	198	8.558	8.553	0.897	227909	50.83	ng/uL	95
69) Diphenylamine	169	8.632	8.630	0.905	1335641	50.50	ng/uL	99
70) 1,2-Diphenylhydrazine	77	8.678	8.675	0.910	1890271	50.84	ng/uL	99
71) 4-Bromophenylphenylether	248	9.036	9.033	0.948	391099	50.50	ng/uL	99
72) Hexachlorobenzene	284	9.107	9.104	0.955	464747	50.96	ng/uL	99
73) Pentachlorophenol	266	9.311	9.309	0.976	253093	50.68	ng/uL	98
74) n-Octadecane	57	9.368	9.365	0.982	2028054	51.78	ng/uL	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1262.D
Acq On : 13 Aug 2011 11:55
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-04|ICAL|1|SVM|1|M5
Misc : |MIX[A]
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Aug 14 16:12:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

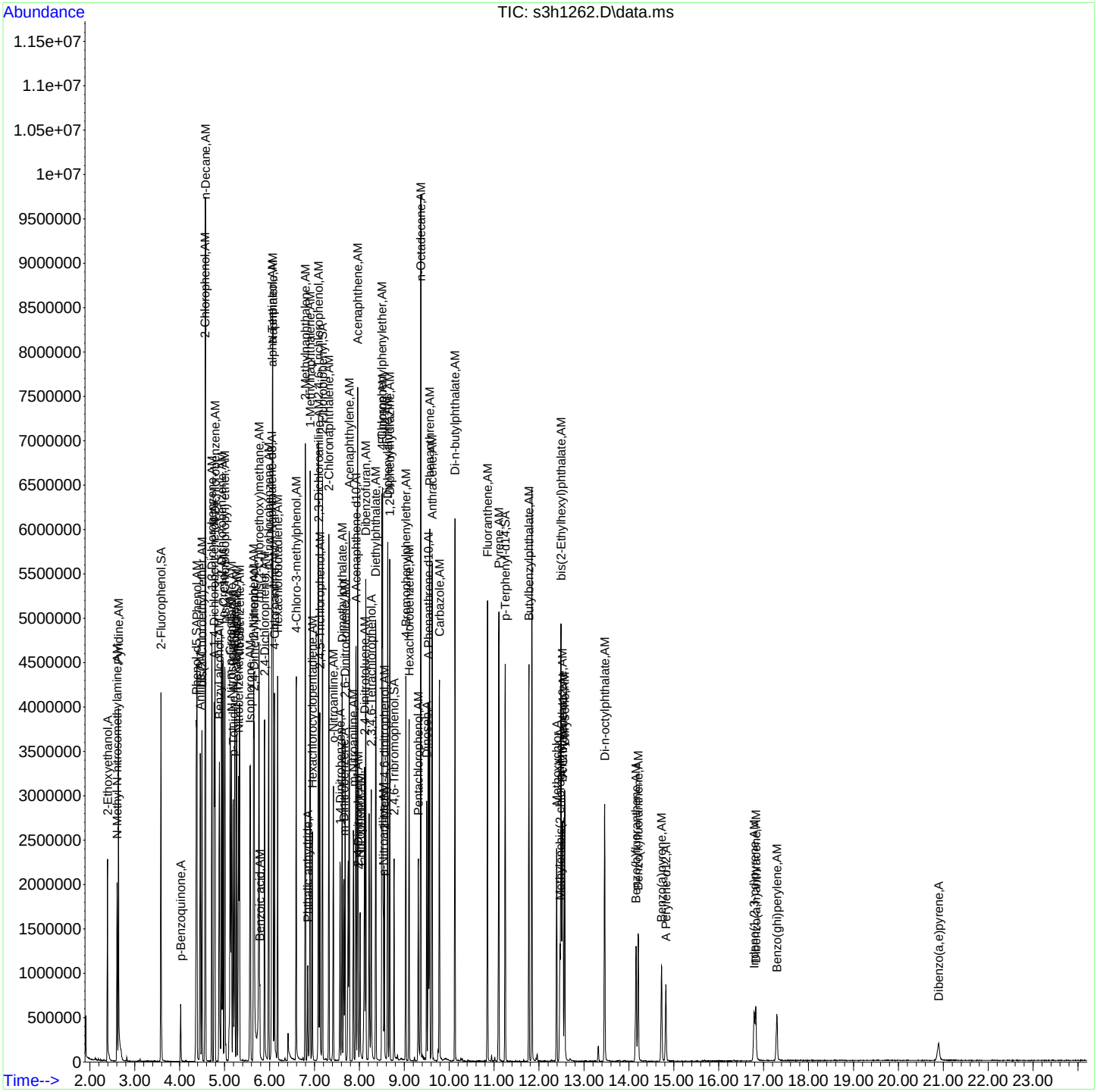
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.499	9.496	0.996	340526	50.68	ng/uL	100
76) Phenanthrene	178	9.564	9.562	1.003	1985449	50.31	ng/uL	100
77) Anthracene	178	9.621	9.618	1.009	1992715	50.13	ng/uL	100
78) Carbazole	167	9.783	9.780	1.026	1641966	49.19	ng/uL	100
79) Di-n-butylphthalate	149	10.127	10.127	1.062	2742538	51.21	ng/uL	100
80) Fluoranthene	202	10.854	10.852	1.138	1993096	51.33	ng/uL	99
82) Pyrene	202	11.104	11.102	0.886	1966217	50.94	ng/uL	99
84) Butylbenzylphthalate	149	11.775	11.772	0.939	971308	51.49	ng/uL	98
85) bis(2-Ethylhexyl)phtha...	149	12.488	12.485	0.996	1317029	51.14	ng/uL	100
86) Benzo(a)anthracene	228	12.517	12.514	0.999	1241363	49.23	ng/uL	100
87) Chrysene	228	12.571	12.568	1.003	1153704	49.53	ng/uL	99
88) Methoxychlor	227	12.392	12.392	0.989	896064	51.65	ng/uL	100
89) Methylenebis(2-chloroa...	231	12.465	12.463	0.995	156137	49.06	ng/uL	98
90) Di-n-octylphthalate	149	13.460	13.460	1.074	1678516	50.12	ng/uL	99
92) Benzo(b)fluoranthene	252	14.159	14.159	0.955	762393	50.73	ng/uL	100
93) Benzo(k)fluoranthene	252	14.207	14.207	0.958	771786	50.97	ng/uL	100
94) Benzo(a)pyrene	252	14.727	14.727	0.993	655167	51.50	ng/uL	100
95) Indeno(1,2,3-cd)pyrene	276	16.790	16.787	1.133	494633	52.40	ng/uL	99
96) Dibenzo(a,h)anthracene	278	16.824	16.821	1.135	405377	52.03	ng/uL	99
97) Benzo(ghi)perylene	276	17.296	17.290	1.167	384976	51.72	ng/uL	100
98) Dibenzo(a,e)pyrene	302	20.893	20.887	1.409	215282	52.99	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1262.D
Acq On : 13 Aug 2011 11:55
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-04|ICAL|1|SVM|1|M5
Misc : |MIX[A]
ALS Vial : 55 Sample Multiplier: 1

Quant Time: Aug 14 16:12:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1263.D
Acq On : 13 Aug 2011 12:26
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-03|ICAL|1|SVM|1|M6
Misc : |MIX[A]
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Aug 14 16:12:50 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.771	4.768	1.000	604039	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.055	6.049	1.000	2680347	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.928	7.922	1.000	1043943	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.539	9.533	1.000	1722613	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.539	12.531	1.000	927329	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	505786	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.539	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.539	12.528	1.000	0m	40.00	ng/uL	0.01
153) B Perylene-d12	264	14.827	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.539	12.528	1.000	0m	40.00	ng/uL	0.01
170) E Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.539	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.539	12.528	1.000	0m	40.00	ng/uL	0.01
192) J 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.055	6.044	1.000	0m	40.00	ng/uL	0.01
196) J Chrysene-d12	240	12.539	12.528	1.000	0m	40.00	ng/uL	0.01
199) J Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.586	3.580	0.752	1580963	80.25	ng/uL	0.00
8) Phenol-d5	99	4.382	4.367	0.918	1994135	79.81	ng/uL	0.01
25) Nitrobenzene-d5	82	5.322	5.308	0.879	1719503	72.46	ng/uL	0.01
47) 2-Fluorobiphenyl	172	7.186	7.178	0.906	3089839	80.96	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.780	8.772	1.108	360762	82.21	ng/uL	0.00
83) p-Terphenyl-d14	244	11.252	11.244	0.897	2031997	86.29	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.398	2.384	0.503	1486904	80.01	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.617	2.603	0.549	1111977	79.42	ng/uL	99
4) Pyridine	79	2.640	2.631	0.553	1558274	80.35	ng/uL	99
6) p-Benzoquinone	54	4.024	4.021	0.843	353773	92.09	ng/uL	99
7) Aniline	66	4.464	4.455	0.936	969464	79.19	ng/uL	99
9) Phenol	94	4.399	4.382	0.922	2056984	79.16	ng/uL	100
10) bis(2-Chloroethyl) ether	63	4.504	4.492	0.944	1658852	78.87	ng/uL	98
11) 2-Chlorophenol	128	4.572	4.563	0.958	1516300	77.72	ng/uL	98
12) n-Decane	43	4.578	4.572	0.960	2868409	75.27	ng/uL	93
13) 1,3-Dichlorobenzene	146	4.720	4.717	0.989	1722904	79.22	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.788	4.785	1.004	1736943	78.80	ng/uL	100
15) 1,2-Dichlorobenzene	146	4.939	4.933	1.035	1642109	79.26	ng/uL	100
16) bis(2-Chloroisopropyl)...	45	5.010	5.004	1.050	4355753	77.92	ng/uL	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1263.D
Acq On : 13 Aug 2011 12:26
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-03|ICAL|1|SVM|1|M6
Misc : |MIX[A]
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Aug 14 16:12:50 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17) Benzyl alcohol	108	4.896	4.879	1.026	1034575	78.96	ng/uL	99
18) o-Cresol	107	4.973	4.961	1.042	1302970	78.65	ng/uL	98
19) m,p-Cresols	107	5.140	5.117	1.077	1676049	78.99	ng/uL	99
20) N-Nitrosodipropylamine	70	5.174	5.149	1.085	1199741	76.61	ng/uL	97
21) p-Toluidine	106	5.200	5.189	1.090	1676899	77.42	ng/uL	100
22) m-Toluidine	106	5.237	5.223	1.098	1941299	78.98	ng/uL	99
23) Hexachloroethane	117	5.271	5.268	1.105	725048	79.04	ng/uL	98
26) Nitrobenzene	77	5.342	5.331	0.882	1729986	71.90	ng/uL	99
27) Isophorone	82	5.586	5.564	0.923	3205591	71.35	ng/uL	99
28) 2-Nitrophenol	139	5.652	5.643	0.933	872122	73.09	ng/uL	98
29) 2,4-Dimethylphenol	122	5.672	5.655	0.937	1383178	70.81	ng/uL	98
30) bis(2-Chloroethoxy)met...	93	5.774	5.762	0.954	1991630	71.45	ng/uL	99
31) 2,4-Dichlorophenol	162	5.896	5.885	0.974	1208570	73.19	ng/uL	99
32) Benzoic acid	105	5.834	5.765	0.963	1102334	79.06	ng/uL#	11
33) 1,2,4-Trichlorobenzene	180	5.987	5.978	0.989	1401818	72.10	ng/uL	99
34) alpha-Terpineol	59	6.072	6.061	1.003	2001868	70.23	ng/uL	97
35) Naphthalene	128	6.081	6.072	1.004	4174616	68.63	ng/uL	73
36) 4-Chloroaniline	127	6.121	6.109	1.011	1710664	72.06	ng/uL	97
37) Hexachlorobutadiene	225	6.186	6.180	1.022	747595	72.61	ng/uL	100
38) 4-Chloro-3-methylphenol	107	6.601	6.592	1.090	1293509	71.89	ng/uL	99
39) 2-Methylnaphthalene	142	6.803	6.797	1.123	2924117	70.07	ng/uL	100
40) Phthalic anhydride	104	6.856	6.845	1.132	244237	90.92	ng/uL#	1
41) 1-Methylnaphthalene	142	6.910	6.905	1.141	2783329	69.63	ng/uL	100
43) Hexachlorocyclopentadiene	237	6.956	6.953	0.877	620394	84.21	ng/uL	100
44) 2,3-Dichloroaniline	161	7.101	7.092	0.896	1445504	80.83	ng/uL	100
45) 2,4,6-Trichlorophenol	196	7.092	7.084	0.895	771557	80.55	ng/uL	99
46) 2,4,5-Trichlorophenol	196	7.126	7.118	0.899	833132	81.95	ng/uL	100
48) 2-Chloronaphthalene	162	7.328	7.320	0.924	2515408	80.28	ng/uL	99
49) o-Nitroaniline	65	7.430	7.419	0.937	946724	80.25	ng/uL	98
50) 1,4-Dinitrobenzene	168	7.581	7.570	0.956	446758	80.48	ng/uL	95
51) m-Nitroaniline	138	7.882	7.865	0.994	639288	79.03	ng/uL	99
52) Dimethylphthalate	163	7.629	7.612	0.962	2762945	78.73	ng/uL	99
53) m-Dinitrobenzene	168	7.666	7.649	0.967	512358	80.17	ng/uL	83
54) 2,6-Dinitrotoluene	165	7.695	7.680	0.971	641225	79.72	ng/uL#	64
55) 2,4-Dinitrotoluene	165	8.129	8.112	1.025	793978	80.87	ng/uL	93
56) Acenaphthylene	152	7.783	7.771	0.982	4133488	79.75	ng/uL	100
57) Acenaphthene	154	7.970	7.959	1.005	2659047	80.96	ng/uL	99
58) 2,4-Dinitrophenol	184	7.985	7.970	1.007	328245	87.05	ng/uL#	42
59) Dibenzofuran	168	8.152	8.144	1.028	3424386	79.28	ng/uL	99
60) 2,3,4,6-Tetrachlorophenol	232	8.269	8.260	1.043	627332	86.18	ng/uL	99
61) Diethylphthalate	149	8.377	8.362	1.057	2930864	78.93	ng/uL	100
62) 4-Nitrophenol	139	8.030	8.010	1.013	444736	83.94	ng/uL	97
63) Fluorene	166	8.524	8.516	1.075	2951482	79.38	ng/uL	100
64) 4-Chlorophenylphenylether	204	8.507	8.499	1.073	1322399	78.87	ng/uL	98
65) p-Nitroaniline	138	8.553	8.527	1.079	565288	82.84	ng/uL#	54
68) 2-Methyl-4,6-dinitroph...	198	8.573	8.553	0.899	436905	86.13	ng/uL	89
69) Diphenylamine	169	8.641	8.630	0.906	2338398	78.15	ng/uL	99
70) 1,2-Diphenylhydrazine	77	8.684	8.675	0.910	3243662	77.11	ng/uL	99
71) 4-Bromophenylphenylether	248	9.042	9.033	0.948	687090	78.41	ng/uL	98
72) Hexachlorobenzene	284	9.113	9.104	0.955	822598	79.73	ng/uL	99
73) Pentachlorophenol	266	9.317	9.309	0.977	485088	85.85	ng/uL	99
74) n-Octadecane	57	9.374	9.365	0.983	3398869	76.70	ng/uL	96

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1263.D
Acq On : 13 Aug 2011 12:26
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-03|ICAL|1|SVM|1|M6
Misc : |MIX[A]
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Aug 14 16:12:50 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

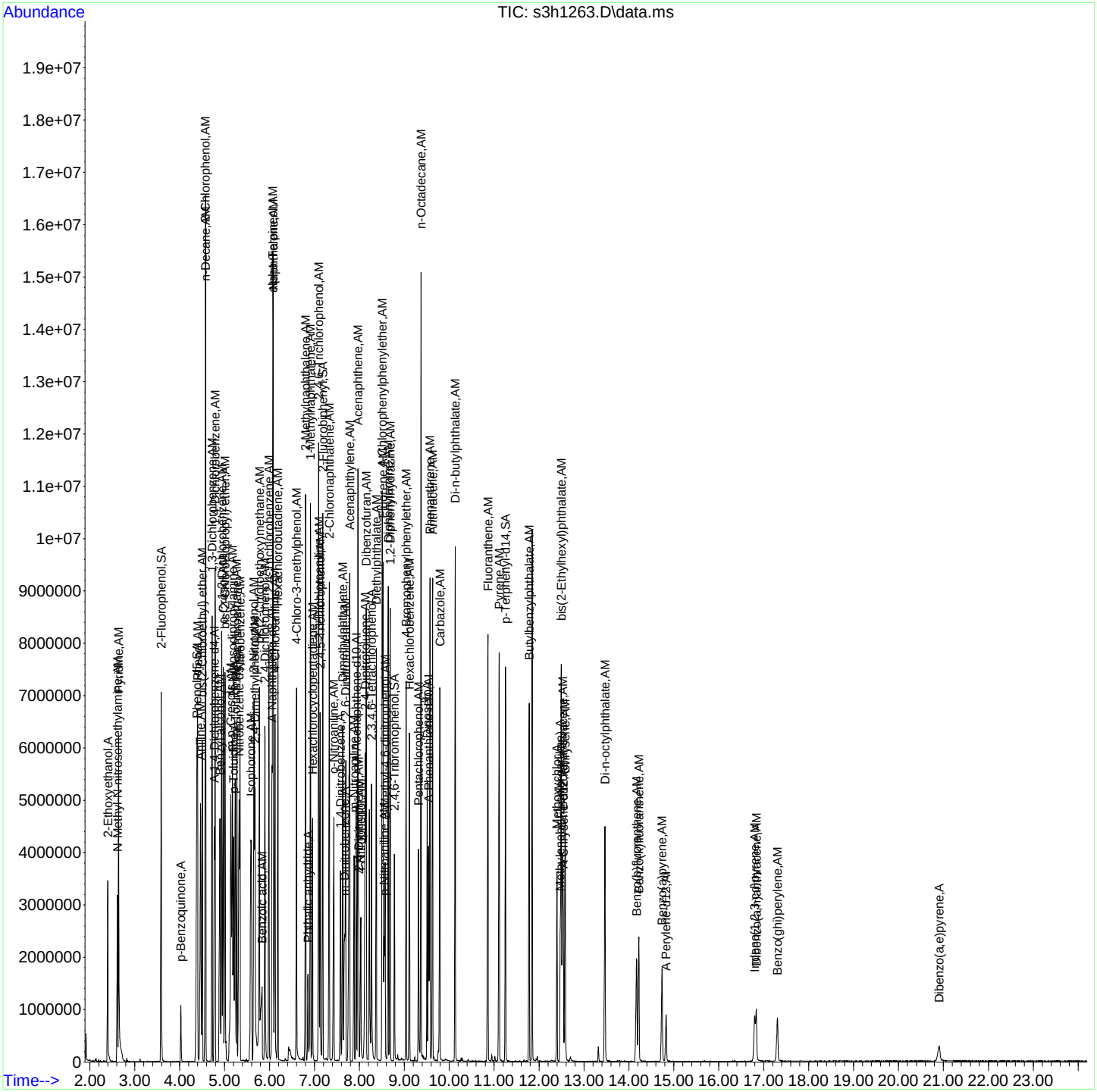
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.508	9.496	0.997	664481	87.41	ng/uL	99
76) Phenanthrene	178	9.570	9.562	1.003	3554534	79.61	ng/uL	99
77) Anthracene	178	9.630	9.618	1.010	3601798	80.09	ng/uL	99
78) Carbazole	167	9.792	9.780	1.027	3115323	82.49	ng/uL	100
79) Di-n-butylphthalate	149	10.133	10.127	1.062	4905311	80.95	ng/uL	99
80) Fluoranthene	202	10.860	10.852	1.139	3535133	80.48	ng/uL	99
82) Pyrene	202	11.110	11.102	0.886	3432231	87.99	ng/uL	99
84) Butylbenzylphthalate	149	11.778	11.772	0.939	1603894	84.12	ng/uL	98
85) bis(2-Ethylhexyl)phtha...	149	12.491	12.485	0.996	2122467	81.55	ng/uL	100
86) Benzo(a)anthracene	228	12.522	12.514	0.999	2023542	79.40	ng/uL	99
87) Chrysene	228	12.579	12.568	1.003	1873678	79.58	ng/uL	99
88) Methoxychlor	227	12.397	12.392	0.989	1419120	80.94	ng/uL	100
89) Methylenebis(2-chloroa...	231	12.468	12.463	0.994	282593	83.51	ng/uL	100
90) Di-n-octylphthalate	149	13.466	13.460	1.074	2750408	81.27	ng/uL	100
92) Benzo(b)fluoranthene	252	14.170	14.159	0.956	1309300	83.22	ng/uL	99
93) Benzo(k)fluoranthene	252	14.219	14.207	0.959	1317871	83.13	ng/uL	99
94) Benzo(a)pyrene	252	14.736	14.727	0.994	1109865	83.33	ng/uL	99
95) Indeno(1,2,3-cd)pyrene	276	16.796	16.787	1.133	792435	80.18	ng/uL	99
96) Dibenzo(a,h)anthracene	278	16.833	16.821	1.135	663359	81.32	ng/uL	97
97) Benzo(ghi)perylene	276	17.304	17.290	1.167	611343	78.45	ng/uL	99
98) Dibenzo(a,e)pyrene	302	20.907	20.887	1.410	340475	80.04	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1263.D
Acq On : 13 Aug 2011 12:26
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-03|ICAL|1|SVM|1|M6
Misc : |MIX[A]
ALS Vial : 56 Sample Multiplier: 1

Quant Time: Aug 14 16:12:50 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1264.D
Acq On : 13 Aug 2011 12:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-02|ICAL|1|SVM|1|M7
Misc : |MIX[A]
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Aug 14 16:12:55 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.771	4.768	1.000	565327	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.055	6.049	1.000	2307195	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.930	7.922	1.000	1049575	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.542	9.533	1.000	1720192	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.542	12.531	1.000	936449	40.00	ng/uL	0.01
91) A Perylene-d12	264	14.832	14.824	1.000	557346	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.930	7.919	1.000	0m	40.00	ng/uL	0.01
131) B Phenanthrene-d10	188	9.542	9.536	1.000	0m	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01
153) B Perylene-d12	264	14.832	14.824	1.000	0m	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.930	7.919	1.000	0m	40.00	ng/uL	0.01
161) D Phenanthrene-d10	188	9.542	9.533	1.000	0m	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01
170) E Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.832	14.827	1.000	0m	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.930	7.919	1.000	0m	40.00	ng/uL	0.01
184) F Phenanthrene-d10	188	9.542	9.533	1.000	0m	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01
192) J 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.055	6.044	1.000	0m	40.00	ng/uL	0.01
196) J Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01
199) J Perylene-d12	264	14.832	14.827	1.000	0m	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.589	3.580	0.752	1856439	100.69	ng/uL	0.00
8) Phenol-d5	99	4.387	4.367	0.920	2367363	101.24	ng/uL	0.02
25) Nitrobenzene-d5	82	5.325	5.308	0.879	2062370	100.97	ng/uL	0.02
47) 2-Fluorobiphenyl	172	7.189	7.178	0.906	3757244	97.91	ng/uL	0.01
66) 2,4,6-Tribromophenol	330	8.786	8.772	1.108	455637	103.27	ng/uL	0.01
83) p-Terphenyl-d14	244	11.255	11.244	0.897	2510170	105.55	ng/uL	0.01
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.395	2.384	0.502	1722177	99.02	ng/uL	100
3) N-Methyl-N-nitrosometh...	74	2.617	2.603	0.549	1307170	99.75	ng/uL	99
4) Pyridine	79	2.637	2.631	0.553	1846220	101.71	ng/uL	99
6) p-Benzoquinone	54	4.026	4.021	0.844	425668	118.40	ng/uL	99
7) Aniline	66	4.467	4.455	0.936	1157627	101.03	ng/uL	96
9) Phenol	94	4.404	4.382	0.923	2423032	99.63	ng/uL	99
10) bis(2-Chloroethyl) ether	63	4.509	4.492	0.945	1961669	99.65	ng/uL	96
11) 2-Chlorophenol	128	4.572	4.563	0.958	1769600	96.91	ng/uL	98
12) n-Decane	43	4.580	4.572	0.960	3195424	89.59	ng/uL	90
13) 1,3-Dichlorobenzene	146	4.723	4.717	0.990	2018297	99.16	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.791	4.785	1.004	2043303	99.04	ng/uL	99
15) 1,2-Dichlorobenzene	146	4.938	4.933	1.035	1938211	99.96	ng/uL	99
16) bis(2-Chloroisopropyl)...	45	5.012	5.004	1.051	5126162	97.98	ng/uL	94

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1264.D
Acq On : 13 Aug 2011 12:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-02|ICAL|1|SVM|1|M7
Misc : |MIX[A]
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Aug 14 16:12:55 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
17)	Benzyl alcohol	108	4.902	4.879	1.027	1227864	100.13	ng/uL	98	
18)	o-Cresol	107	4.975	4.961	1.043	1549879	99.96	ng/uL	99	
19)	m,p-Cresols	107	5.143	5.117	1.078	1999138	100.67	ng/uL	99	
20)	N-Nitrosodipropylamine	70	5.183	5.149	1.086	1450107	98.94	ng/uL	96	
21)	p-Toluidine	106	5.203	5.189	1.091	1773892	87.51	ng/uL	99	
22)	m-Toluidine	106	5.240	5.223	1.098	2430226	105.64	ng/uL	98	
23)	Hexachloroethane	117	5.274	5.268	1.105	861514	100.35	ng/uL	99	
26)	Nitrobenzene	77	5.348	5.331	0.883	2071957	100.03	ng/uL	99	
27)	Isophorone	82	5.595	5.564	0.924	3821162	98.81	ng/uL	99	
28)	2-Nitrophenol	139	5.657	5.643	0.934	1050877	102.31	ng/uL	100	
29)	2,4-Dimethylphenol	122	5.677	5.655	0.938	1623545	96.56	ng/uL	98	
30)	bis(2-Chloroethoxy)met...	93	5.777	5.762	0.954	2382129	99.28	ng/uL	99	
31)	2,4-Dichlorophenol	162	5.902	5.885	0.975	1472789	103.62	ng/uL	100	
32)	Benzoic acid	105	5.853	5.765	0.967	1398918	116.56	ng/uL#	11	
33)	1,2,4-Trichlorobenzene	180	5.987	5.978	0.989	1665298	99.51	ng/uL	99	
34)	alpha-Terpineol	59	6.078	6.061	1.004	2350908	95.82	ng/uL	96	
35)	Naphthalene	128	6.084	6.072	1.005	4835792	92.35	ng/uL	73	
36)	4-Chloroaniline	127	6.126	6.109	1.012	2073396	101.47	ng/uL	97	
37)	Hexachlorobutadiene	225	6.189	6.180	1.022	895255	101.02	ng/uL	100	
38)	4-Chloro-3-methylphenol	107	6.606	6.592	1.091	1582408	102.17	ng/uL	99	
39)	2-Methylnaphthalene	142	6.805	6.797	1.124	3546154	98.73	ng/uL	100	
40)	Phthalic anhydride	104	6.862	6.845	1.133	314208	135.88	ng/uL#	1	A
41)	1-Methylnaphthalene	142	6.913	6.905	1.142	3374169	98.06	ng/uL	100	
43)	Hexachlorocyclopentadiene	237	6.956	6.953	0.877	729432	98.48	ng/uL	99	
44)	2,3-Dichloroaniline	161	7.104	7.092	0.896	1754939	97.61	ng/uL	99	
45)	2,4,6-Trichlorophenol	196	7.095	7.084	0.895	934951	97.08	ng/uL	99	
46)	2,4,5-Trichlorophenol	196	7.132	7.118	0.899	1024677	100.25	ng/uL	100	
48)	2-Chloronaphthalene	162	7.331	7.320	0.924	3084804	97.92	ng/uL	99	
49)	o-Nitroaniline	65	7.436	7.419	0.938	1198448	101.05	ng/uL	98	
50)	1,4-Dinitrobenzene	168	7.587	7.570	0.957	578307	103.62	ng/uL	97	
51)	m-Nitroaniline	138	7.891	7.865	0.995	820689	100.92	ng/uL	99	
52)	Dimethylphthalate	163	7.638	7.612	0.963	3476862	98.55	ng/uL	99	
53)	m-Dinitrobenzene	168	7.683	7.649	0.969	649763	101.12	ng/uL	86	
54)	2,6-Dinitrotoluene	165	7.700	7.680	0.971	803412	99.34	ng/uL	64	
55)	2,4-Dinitrotoluene	165	8.138	8.112	1.026	995695	100.87	ng/uL#	73	
56)	Acenaphthylene	152	7.786	7.771	0.982	5082862	97.54	ng/uL	99	
57)	Acenaphthene	154	7.973	7.959	1.005	3294252	99.76	ng/uL	98	
58)	2,4-Dinitrophenol	184	7.990	7.970	1.008	436570	115.16	ng/uL#	30	
59)	Dibenzofuran	168	8.155	8.144	1.028	4240399	97.65	ng/uL	98	
60)	2,3,4,6-Tetrachlorophenol	232	8.274	8.260	1.043	787267	107.57	ng/uL	99	
61)	Diethylphthalate	149	8.382	8.362	1.057	3649961	97.77	ng/uL	99	
62)	4-Nitrophenol	139	8.038	8.010	1.014	556950	104.55	ng/uL	96	
63)	Fluorene	166	8.530	8.516	1.076	3654801	97.77	ng/uL	100	
64)	4-Chlorophenylphenylether	204	8.513	8.499	1.073	1630688	96.74	ng/uL	97	
65)	p-Nitroaniline	138	8.567	8.527	1.080	719529	104.88	ng/uL#	52	
68)	2-Methyl-4,6-dinitroph...	198	8.581	8.553	0.899	562413	111.03	ng/uL	83	
69)	Diphenylamine	169	8.649	8.630	0.906	2938568	98.35	ng/uL	99	
70)	1,2-Diphenylhydrazine	77	8.689	8.675	0.911	4037332	96.12	ng/uL	100	
71)	4-Bromophenylphenylether	248	9.044	9.033	0.948	868926	99.31	ng/uL	99	
72)	Hexachlorobenzene	284	9.118	9.104	0.956	1020674	99.06	ng/uL	99	
73)	Pentachlorophenol	266	9.320	9.309	0.977	601790	106.66	ng/uL	100	
74)	n-Octadecane	57	9.377	9.365	0.983	4178598	94.42	ng/uL	95	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1264.D
Acq On : 13 Aug 2011 12:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-02|ICAL|1|SVM|1|M7
Misc : |MIX[A]
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Aug 14 16:12:55 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

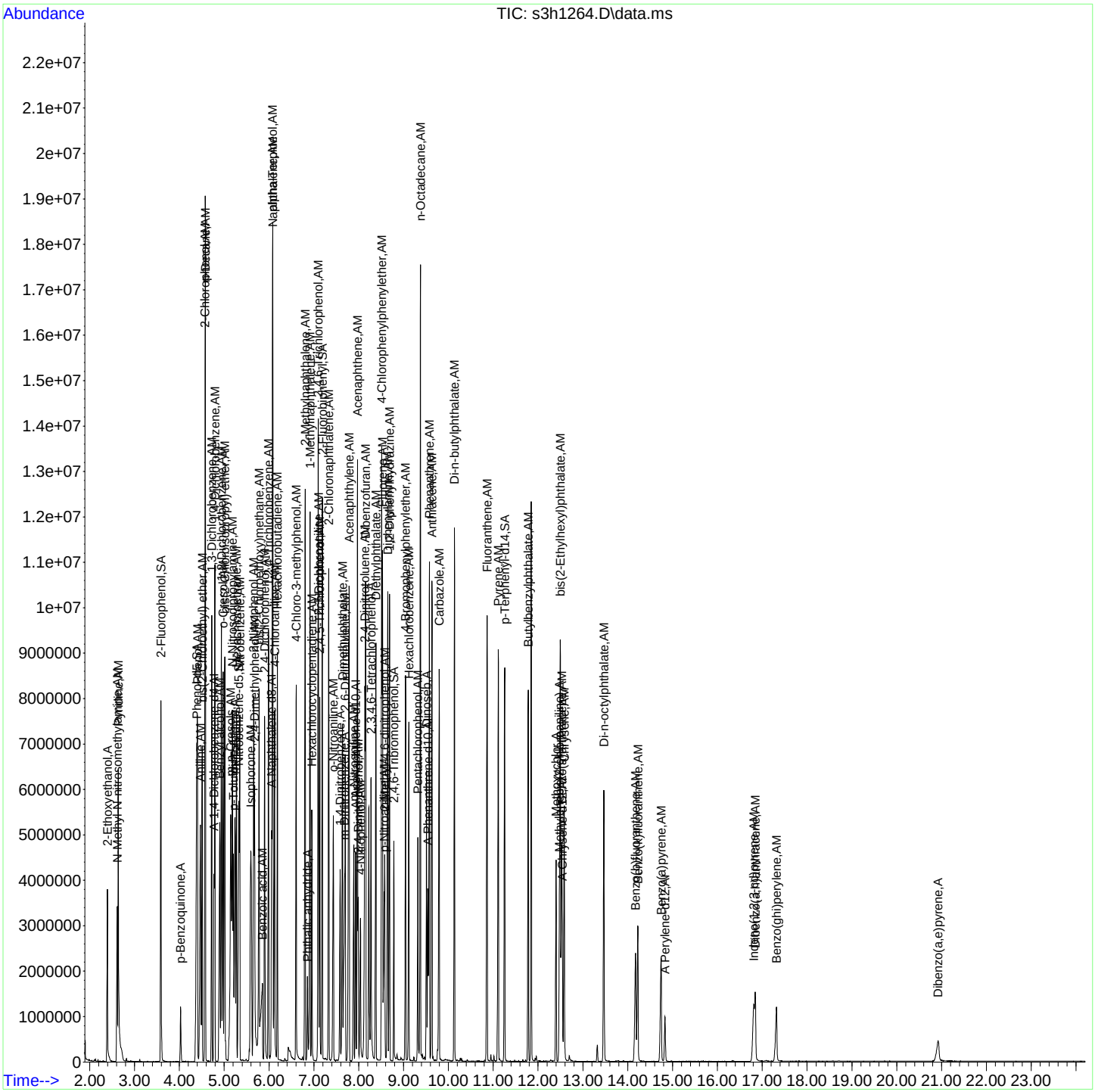
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
75) Dinoseb	211	9.513	9.496	0.997	847173	111.61	ng/uL	100	
76) Phenanthrene	178	9.576	9.562	1.004	4376200	98.15	ng/uL	99	
77) Anthracene	178	9.633	9.618	1.010	4447437	99.03	ng/uL	99	
78) Carbazole	167	9.794	9.780	1.027	3839935	101.83	ng/uL	99	
79) Di-n-butylphthalate	149	10.135	10.127	1.062	5900857	97.52	ng/uL	99	
80) Fluoranthene	202	10.863	10.852	1.138	4345487	99.06	ng/uL	99	
82) Pyrene	202	11.113	11.102	0.886	4239407	107.63	ng/uL	99	
84) Butylbenzylphthalate	149	11.781	11.772	0.939	2005842	104.18	ng/uL	98	
85) bis(2-Ethylhexyl)phtha...	149	12.494	12.485	0.996	2695829	102.57	ng/uL	100	
86) Benzo(a)anthracene	228	12.525	12.514	0.999	2547832	98.99	ng/uL	99	
87) Chrysene	228	12.585	12.568	1.003	2365165	99.48	ng/uL	99	
88) Methoxychlor	227	12.400	12.392	0.989	1793156	101.28	ng/uL	100	
89) Methylenebis(2-chloroa...	231	12.474	12.463	0.995	362329	104.55	ng/uL	100	
90) Di-n-octylphthalate	149	13.468	13.460	1.074	3609034	105.60	ng/uL	100	
92) Benzo(b)fluoranthene	252	14.176	14.159	0.956	1762814	101.68	ng/uL	99	
93) Benzo(k)fluoranthene	252	14.227	14.207	0.959	1730528	99.07	ng/uL	99	
94) Benzo(a)pyrene	252	14.744	14.727	0.994	1530137	104.25	ng/uL	99	
95) Indeno(1,2,3-cd)pyrene	276	16.810	16.787	1.133	1217445	111.79	ng/uL	98	
96) Dibenzo(a,h)anthracene	278	16.841	16.821	1.135	1026045	114.15	ng/uL	98	
97) Benzo(ghi)perylene	276	17.316	17.290	1.167	959411	111.72	ng/uL	100	
98) Dibenzo(a,e)pyrene	302	20.922	20.887	1.411	579503	123.64	ng/uL	99	A

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1264.D
Acq On : 13 Aug 2011 12:57
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-02|ICAL|1|SVM|1|M7
Misc : |MIX[A]
ALS Vial : 57 Sample Multiplier: 1

Quant Time: Aug 14 16:12:55 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1265.D
Acq On : 13 Aug 2011 13:28
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-01|ICAL|1|SVM|1|M8
Misc : |MIX[A]
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Aug 14 16:13:00 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
Internal Standards								Dev(Min)	
1) A 1,4-Dichlorobenzene-d4	152	4.771	4.768	1.000	499082	40.00	ng/uL	0.00	
24) A Naphthalene-d8	136	6.055	6.049	1.000	2029594	40.00	ng/uL	0.00	
42) A Acenaphthene-d10	164	7.928	7.922	1.000	913046	40.00	ng/uL	0.00	
67) A Phenanthrene-d10	188	9.542	9.533	1.000	1491945	40.00	ng/uL	0.00	
81) A Chrysene-d12	240	12.542	12.531	1.000	763420	40.00	ng/uL	0.01	
91) A Perylene-d12	264	14.827	14.824	1.000	420274	40.00	ng/uL	0.00	
99) B 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00	
114) B Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00	
122) B Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00	
131) B Phenanthrene-d10	188	9.542	9.536	1.000	0m	40.00	ng/uL	0.00	
145) B Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01	
153) B Perylene-d12	264	14.827	14.824	1.000	0m	40.00	ng/uL	0.00	
156) D Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00	
158) D Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00	
161) D Phenanthrene-d10	188	9.542	9.533	1.000	0m	40.00	ng/uL	0.00	
168) D Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01	
170) E Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00	
172) E Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00	
174) F 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00	
177) F Naphthalene-d8	136	6.055	6.047	1.000	0m	40.00	ng/uL	0.00	
181) F Acenaphthene-d10	164	7.928	7.919	1.000	0m	40.00	ng/uL	0.00	
184) F Phenanthrene-d10	188	9.542	9.533	1.000	0m	40.00	ng/uL	0.00	
188) F Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01	
192) J 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	0m	40.00	ng/uL	0.00	
194) J Naphthalene-d8	136	6.055	6.044	1.000	0m	40.00	ng/uL	0.01	
196) J Chrysene-d12	240	12.542	12.528	1.000	0m	40.00	ng/uL	0.01	
199) J Perylene-d12	264	14.827	14.827	1.000	0m	40.00	ng/uL	0.00	
System Monitoring Compounds								Dev(Min)	
5) 2-Fluorophenol	112	3.589	3.580	0.752	1943221	119.39	ng/uL	0.00	
8) Phenol-d5	99	4.390	4.367	0.920	2494986	120.86	ng/uL	0.02	A
25) Nitrobenzene-d5	82	5.328	5.308	0.880	2172775	120.92	ng/uL	0.02	A
47) 2-Fluorobiphenyl	172	7.189	7.178	0.907	3930468	117.74	ng/uL	0.01	
66) 2,4,6-Tribromophenol	330	8.786	8.772	1.108	483930	126.09	ng/uL	0.01	A
83) p-Terphenyl-d14	244	11.255	11.244	0.897	2583932	133.28	ng/uL	0.01	A
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue	
2) 2-Ethoxyethanol	59	2.398	2.384	0.503	1842852	120.02	ng/uL	100	A
3) N-Methyl-N-nitrosometh...	74	2.620	2.603	0.549	1376549	118.99	ng/uL	99	
4) Pyridine	79	2.637	2.631	0.553	1942090	121.19	ng/uL	98	A
6) p-Benzoquinone	54	4.026	4.021	0.844	412738	130.04	ng/uL	99	A
7) Aniline	66	4.467	4.455	0.936	1220679	120.68	ng/uL	97	A
9) Phenol	94	4.404	4.382	0.923	2559890	119.23	ng/uL	99	
10) bis(2-Chloroethyl) ether	63	4.510	4.492	0.945	2067134	118.94	ng/uL	96	
11) 2-Chlorophenol	128	4.575	4.563	0.959	1852298	114.91	ng/uL	98	
12) n-Decane	43	4.581	4.572	0.960	3302383	104.88	ng/uL	90	
13) 1,3-Dichlorobenzene	146	4.723	4.717	0.990	2137593	118.96	ng/uL	99	
14) 1,4-Dichlorobenzene	146	4.791	4.785	1.004	2146574	117.86	ng/uL	99	
15) 1,2-Dichlorobenzene	146	4.939	4.933	1.035	2030166	118.60	ng/uL	99	
16) bis(2-Chloroisopropyl)...	45	5.012	5.004	1.051	5382453	116.54	ng/uL	94	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1265.D
Acq On : 13 Aug 2011 13:28
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-01|ICAL|1|SVM|1|M8
Misc : |MIX[A]
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Aug 14 16:13:00 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
17)	Benzyl alcohol	108	4.904	4.879	1.028	1303555	120.42	ng/uL	100	A
18)	o-Cresol	107	4.978	4.961	1.043	1632403	119.26	ng/uL	99	
19)	m,p-Cresols	107	5.146	5.117	1.079	2118472	120.83	ng/uL	99	A
20)	N-Nitrosodipropylamine	70	5.186	5.149	1.087	1518727	117.38	ng/uL	96	
21)	p-Toluidine	106	5.203	5.189	1.091	1767536	98.77	ng/uL	98	
22)	m-Toluidine	106	5.240	5.223	1.098	2603440	128.19	ng/uL	98	A
23)	Hexachloroethane	117	5.274	5.268	1.105	903808	119.25	ng/uL	99	
26)	Nitrobenzene	77	5.348	5.331	0.883	2181463	119.73	ng/uL	99	
27)	Isophorone	82	5.601	5.564	0.925	3973375	116.80	ng/uL	99	
28)	2-Nitrophenol	139	5.657	5.643	0.934	1103580	122.14	ng/uL	100	A
29)	2,4-Dimethylphenol	122	5.677	5.655	0.938	1716088	116.02	ng/uL	98	
30)	bis(2-Chloroethoxy)met...	93	5.780	5.762	0.954	2509214	118.88	ng/uL	100	
31)	2,4-Dichlorophenol	162	5.902	5.885	0.975	1547236	123.75	ng/uL	99	A
32)	Benzoic acid	105	5.859	5.765	0.968	1498204	141.91	ng/uL#	11	A
33)	1,2,4-Trichlorobenzene	180	5.990	5.978	0.989	1748271	118.75	ng/uL	99	
34)	alpha-Terpineol	59	6.078	6.061	1.004	2463658	114.15	ng/uL	96	
35)	Naphthalene	128	6.084	6.072	1.005	5056428	109.77	ng/uL	73	
36)	4-Chloroaniline	127	6.126	6.109	1.012	2171879	120.83	ng/uL	97	A
37)	Hexachlorobutadiene	225	6.189	6.180	1.022	945919	121.33	ng/uL	100	A
38)	4-Chloro-3-methylphenol	107	6.606	6.592	1.091	1653326	121.35	ng/uL	99	A
39)	2-Methylnaphthalene	142	6.805	6.797	1.124	3702153	117.17	ng/uL	99	
40)	Phthalic anhydride	104	6.865	6.845	1.134	359188	176.58	ng/uL#	1	A
41)	1-Methylnaphthalene	142	6.916	6.905	1.142	3537762	116.88	ng/uL	100	
43)	Hexachlorocyclopentadiene	237	6.956	6.953	0.877	734693	114.02	ng/uL	100	
44)	2,3-Dichloroaniline	161	7.104	7.092	0.896	1839455	117.61	ng/uL	99	
45)	2,4,6-Trichlorophenol	196	7.098	7.084	0.895	985687	117.66	ng/uL	99	
46)	2,4,5-Trichlorophenol	196	7.132	7.118	0.900	1067485	120.06	ng/uL	99	A
48)	2-Chloronaphthalene	162	7.334	7.320	0.925	3219788	117.49	ng/uL	99	
49)	o-Nitroaniline	65	7.436	7.419	0.938	1242991	120.48	ng/uL	98	A
50)	1,4-Dinitrobenzene	168	7.587	7.570	0.957	601467	123.88	ng/uL	97	A
51)	m-Nitroaniline	138	7.891	7.865	0.995	843552	119.24	ng/uL	99	
52)	Dimethylphthalate	163	7.638	7.612	0.963	3613712	117.74	ng/uL	99	
53)	m-Dinitrobenzene	168	7.683	7.649	0.969	675467	120.84	ng/uL	85	A
54)	2,6-Dinitrotoluene	165	7.703	7.680	0.972	840776	119.51	ng/uL	66	
55)	2,4-Dinitrotoluene	165	8.141	8.112	1.027	1036109	120.66	ng/uL#	73	A
56)	Acenaphthylene	152	7.789	7.771	0.982	5286020	116.60	ng/uL	99	
57)	Acenaphthene	154	7.973	7.959	1.006	3435060	119.58	ng/uL	98	
58)	2,4-Dinitrophenol	184	7.990	7.970	1.008	452648	137.25	ng/uL#	32	A
59)	Dibenzofuran	168	8.158	8.144	1.029	4415392	116.88	ng/uL	98	
60)	2,3,4,6-Tetrachlorophenol	232	8.274	8.260	1.044	814636	127.96	ng/uL	99	A
61)	Diethylphthalate	149	8.385	8.362	1.058	3800893	117.03	ng/uL	99	
62)	4-Nitrophenol	139	8.041	8.010	1.014	572048	123.45	ng/uL	96	A
63)	Fluorene	166	8.530	8.516	1.076	3807811	117.09	ng/uL	100	
64)	4-Chlorophenylphenylether	204	8.513	8.499	1.074	1692558	115.42	ng/uL	97	
65)	p-Nitroaniline	138	8.567	8.527	1.081	738666	123.77	ng/uL#	53	A
68)	2-Methyl-4,6-dinitroph...	198	8.584	8.553	0.900	581775	132.42	ng/uL	84	A
69)	Diphenylamine	169	8.649	8.630	0.906	3040136	117.31	ng/uL	99	
70)	1,2-Diphenylhydrazine	77	8.689	8.675	0.911	4181476	114.78	ng/uL	100	
71)	4-Bromophenylphenylether	248	9.044	9.033	0.948	904012	119.12	ng/uL	99	
72)	Hexachlorobenzene	284	9.118	9.104	0.956	1066752	119.37	ng/uL	100	
73)	Pentachlorophenol	266	9.320	9.309	0.977	629721	128.68	ng/uL	99	A
74)	n-Octadecane	57	9.377	9.365	0.983	4320461	112.57	ng/uL	95	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1265.D
Acq On : 13 Aug 2011 13:28
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-01|ICAL|1|SVM|1|M8
Misc : |MIX[A]
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Aug 14 16:13:00 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE

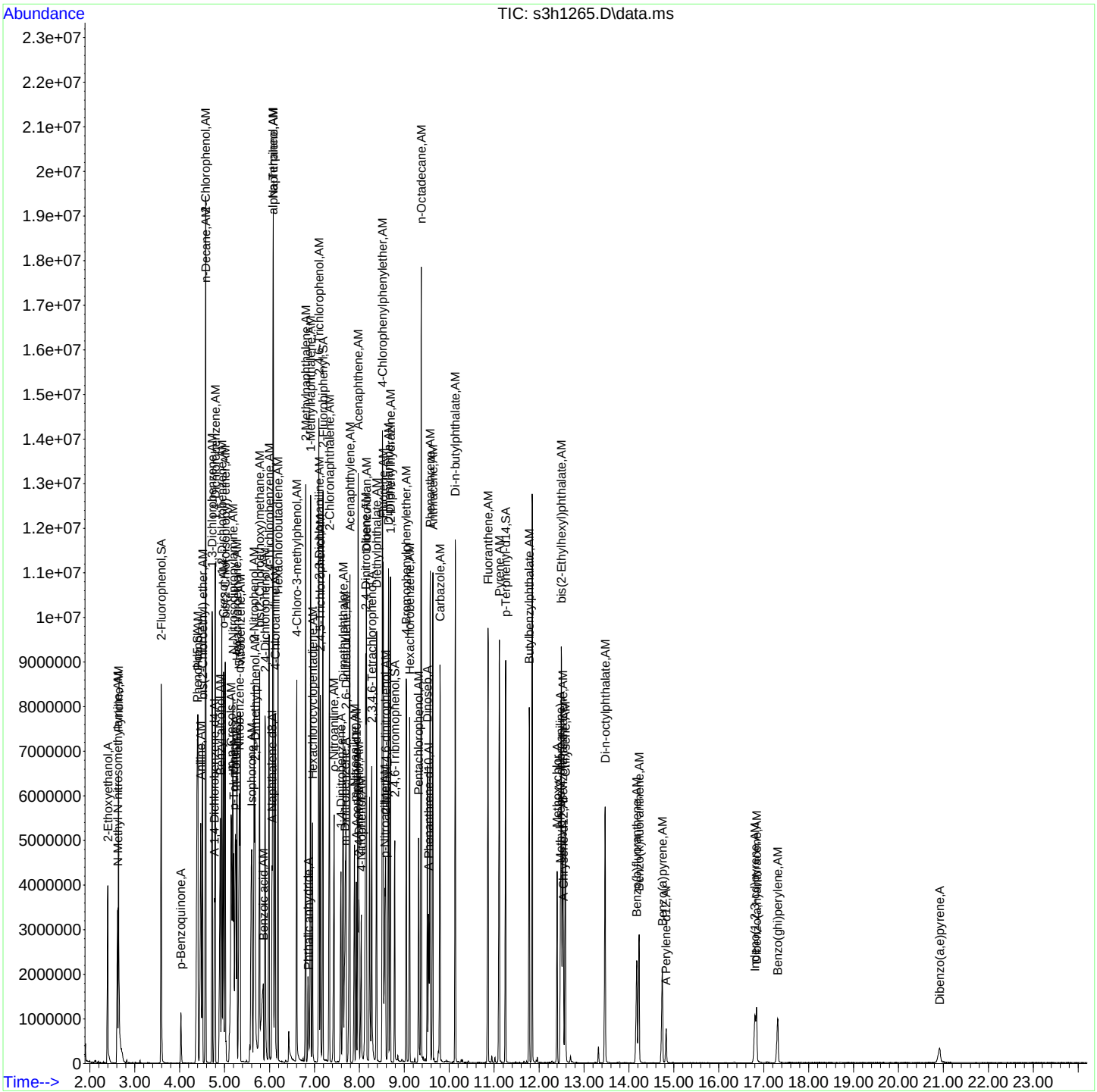
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
75) Dinoseb	211	9.513	9.496	0.997	883667	134.22	ng/uL	99	A
76) Phenanthrene	178	9.576	9.562	1.004	4544500	117.52	ng/uL	99	
77) Anthracene	178	9.635	9.618	1.010	4621403	118.65	ng/uL	99	
78) Carbazole	167	9.795	9.780	1.027	3992617	122.07	ng/uL	99	A
79) Di-n-butylphthalate	149	10.136	10.127	1.062	6169735	117.56	ng/uL	99	
80) Fluoranthene	202	10.863	10.852	1.138	4478489	117.72	ng/uL	99	
82) Pyrene	202	11.116	11.102	0.886	4339656	135.14	ng/uL	99	A
84) Butylbenzylphthalate	149	11.781	11.772	0.939	2020034	128.70	ng/uL	98	A
85) bis(2-Ethylhexyl)phtha...	149	12.494	12.485	0.996	2725398	127.19	ng/uL	100	A
86) Benzo(a)anthracene	228	12.528	12.514	0.999	2508579	119.56	ng/uL	99	
87) Chrysene	228	12.585	12.568	1.003	2339022	120.68	ng/uL	99	A
88) Methoxychlor	227	12.403	12.392	0.989	1770990	122.70	ng/uL	100	A
89) Methylenebis(2-chloroa...	231	12.474	12.463	0.995	353445	124.03	ng/uL	99	A
90) Di-n-octylphthalate	149	13.469	13.460	1.074	3580464	128.50	ng/uL	100	A
92) Benzo(b)fluoranthene	252	14.173	14.159	0.956	1665082	127.37	ng/uL	100	A
93) Benzo(k)fluoranthene	252	14.224	14.207	0.959	1621549	123.10	ng/uL	99	A
94) Benzo(a)pyrene	252	14.744	14.727	0.994	1412224	127.60	ng/uL	100	A
95) Indeno(1,2,3-cd)pyrene	276	16.804	16.787	1.133	1011982	123.23	ng/uL	99	A
96) Dibenzo(a,h)anthracene	278	16.839	16.821	1.136	845944	124.81	ng/uL	98	A
97) Benzo(ghi)perylene	276	17.310	17.290	1.167	764874	118.12	ng/uL	99	
98) Dibenzo(a,e)pyrene	302	20.916	20.887	1.411	419742	118.76	ng/uL	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1265.D
Acq On : 13 Aug 2011 13:28
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-01|ICAL|1|SVM|1|M8
Misc : |MIX[A]
ALS Vial : 58 Sample Multiplier: 1

Quant Time: Aug 14 16:13:00 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Sun Aug 14 16:04:01 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: MSD3.I **Injection Date:** 13-AUG-11 13:59

Data File: s081211.B\s3h1266.D **Init. Cal. Date(s)** 12-AUG-11 15:29 - 13-AUG-11 13:2

Lab Sample ID WBN110812-09.1 **Method:** s081211.B\MSD3_8270d_081211.m

Quant Type ISTD **Method Update:** 15-AUG-11 15:17

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	2-Fluorophenol	1.3045	1.43995		.01		10.38329	30		Averaged	
S	Phenol-d5	1.6545	1.76511		.01		6.6854	30		Averaged	
S	Nitrobenzene-d5	0.3541	0.36729		.01		3.72494	30		Averaged	
S	2-Fluorobiphenyl	1.4624	1.49388		.01		2.15263	30		Averaged	
S	2,4,6-Tribromophenol	0.1681	0.19141		.01		13.86675	30		Averaged	
S	p-Terphenyl-d14	1.0158	1.31214		.01		29.17307	30		Averaged	
	2-Ethoxyethanol	1.2306	1.25146		.01		1.69511	30		Averaged	
	N-Methyl-N-nitrosomethylami	0.9272	0.90927		.01		-1.93378	30		Averaged	
	Pyridine	1.2843	1.10404		.01		-14.03566	30		Averaged	
	p-Benzoquinone	0.2544	0.2751		.01		8.13679	30		Averaged	
	Phenol	1.722	1.67995		.01		-2.44193	30		Averaged	ccc
	Aniline	0.8107	0.7286		.01		-10.12705	30		Averaged	
	bis(2-Chloroethyl) ether	1.3929	1.37204		.01		-1.49759	30		Averaged	
	2-Chlorophenol	1.292	1.27827		.01		-1.06269	30		Averaged	
	n-Decane	2.5235	2.76079		.01		9.40321	30		Averaged	
	1,3-Dichlorobenzene	1.4401	1.48447		.01		3.08104	30		Averaged	
	1,4-Dichlorobenzene	1.4597	1.49138		.01		2.17031	30		Averaged	ccc
	Benzyl alcohol	0.8676	0.85992		.01		-0.8852	30		Averaged	
	1,2-Dichlorobenzene	1.372	1.39234		.01		1.48251	30		Averaged	
	o-Cresol	1.097	1.12111		.01		2.19781	30		Averaged	
	bis(2-Chloroisopropyl)ether	3.7017	3.68449		.01		-0.46492	30		Averaged	
	m,p-Cresols	1.4051	1.44407		.01		2.77347	30		Averaged	
	N-Nitrosodipropylamine	1.037	1.05586		.01		1.81871	30		Averaged	spcc
	p-Toluidine	1.4343	1.16703		.01		-18.63418	30		Averaged	
	m-Toluidine	1.628	1.47786		.01		-9.22236	30		Averaged	
	Hexachloroethane	0.6074	0.61469		.01		1.2002	30		Averaged	
	Nitrobenzene	0.3591	0.36691		.01		2.17488	30		Averaged	
	Isophorone	0.6704	0.65379		.01		-2.47763	30		Averaged	
	2-Nitrophenol	0.1781	0.17934		.01		0.69624	30		Averaged	ccc
	2,4-Dimethylphenol	0.2915	0.27144		.01		-6.88165	30		Averaged	
	bis(2-Chloroethoxy)methane	0.416	0.3927		.01		-5.60096	30		Averaged	
	Benzoic acid	0.2079	0.21922		.01		5.44493	30		Averaged	
	2,4-Dichlorophenol	0.2464	0.24104		.01		-2.17532	30		Averaged	ccc
	1,2,4-Trichlorobenzene	0.2901	0.2788		.01		-3.89521	30		Averaged	
	alpha-Terpineol	0.4254	0.41113		.01		-3.35449	30		Averaged	
	Naphthalene	0.9078	0.90154		.01		-0.68958	30		Averaged	
	4-Chloroaniline	0.3543	0.32549		.01		-8.13153	30		Averaged	

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 13-AUG-11 13:59

Data File: s081211.B\s3h1266.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID WBN110812-09.1 **Method:** s081211.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Hexachlorobutadiene	0.1536	0.15763		.01		2.6237	30		Averaged	ccc
4-Chloro-3-methylphenol	0.2685	0.2583		.01		-3.79888	30		Averaged	ccc
2-Methylnaphthalene	0.6227	0.62169		.01		-0.1622	30		Averaged	
Phthalic Anhydride	0.0401	0.1419		.01		253.86534	30	*	Averaged	
1-Methylnaphthalene	0.5966	0.58042		.01		-2.71203	30		Averaged	
Hexachlorocyclopentadiene	0.2823	0.23686		.01		-16.09635	30		Averaged	spcc
2,4,6-Trichlorophenol	0.367	0.37138		.01		1.19346	30		Averaged	ccc
2,3-Dichloroaniline	0.6852	0.6892		.01		0.58377	30		Averaged	
2,4,5-Trichlorophenol	0.3895	0.39843		.01		2.29268	30		Averaged	
2-Chloronaphthalene	1.2006	1.25445		.01		4.48526	30		Averaged	
o-Nitroaniline	0.452	0.44763		.01		-0.96681	30		Averaged	
1,4-Dinitrobenzene	0.2127	0.21549		.01		1.31171	30		Averaged	
Dimethylphthalate	1.3446	1.37564		.01		2.30849	30		Averaged	
m-Dinitrobenzene	0.2449	0.23728		.01		-3.11147	30		Averaged	
2,6-Dinitrotoluene	0.3082	0.31194		.01		1.2135	30		Averaged	
Acenaphthylene	1.986	2.05708		.01		3.57905	30		Averaged	
m-Nitroaniline	0.3099	0.27247		.01		-12.07809	30		Averaged	
Acenaphthene	1.2585	1.2594		.01		0.07151	30		Averaged	ccc
2,4-Dinitrophenol	0.1445	0.13844		.01		-4.19377	30		Averaged	spcc
4-Nitrophenol	0.203	0.17755		.01		-12.53695	30		Averaged	spcc
2,4-Dinitrotoluene	0.3762	0.37728		.01		0.28708	30		Averaged	
Dibenzofuran	1.655	1.70221		.01		2.85257	30		Averaged	
2,3,4,6-Tetrachlorophenol	0.2789	0.29389		.01		5.37469	30		Averaged	
Diethylphthalate	1.4228	1.45211		.01		2.06002	30		Averaged	
4-Chlorophenylphenylether	0.6424	0.62819		.01		-2.21202	30		Averaged	
Fluorene	1.4247	1.38848		.01		-2.54229	30		Averaged	
p-Nitroaniline	0.2615	0.25993		.01		-0.60038	30		Averaged	
2-Methyl-4,6-dinitrophenol	0.1178	0.11707		.01		-0.61969	30		Averaged	
Diphenylamine	0.6948	0.7036		.01		1.26655	30		Averaged	ccc
1,2-Diphenylhydrazine	0.9767	0.96817		.01		-0.87335	30		Averaged	
4-Bromophenylphenylether	0.2035	0.20433		.01		0.40786	30		Averaged	
Hexachlorobenzene	0.2396	0.2473		.01		3.21369	30		Averaged	
Pentachlorophenol	0.1312	0.12735		.01		-2.93445	30		Averaged	ccc
n-Octadecane	1.029	1.09857		.01		6.76093	30		Averaged	
Dinoseb	0.1765	0.18435		.01		4.44759	30		Averaged	
Phenanthrene	1.0368	1.05631		.01		1.88175	30		Averaged	
Anthracene	1.0443	1.06114		.01		1.61256	30		Averaged	

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 13-AUG-11 13:59

Data File: s081211.B\s3h1266.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID WBN110812-09.1 **Method:** s081211.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Carbazole	0.8769	0.99025		.01		12.92622	30		Averaged	
Di-n-butylphthalate	1.407	1.52156		.01		8.14215	30		Averaged	
Fluoranthene	1.02	1.0303		.01		1.0098	30		Averaged	ccc
Pyrene	1.6825	1.9735		.01		17.29569	30		Averaged	
Butylbenzylphthalate	0.8224	0.97172		.01		18.15661	30		Averaged	
Methoxychlor	0.7562	0.71015		.01		-6.08966	30		Averaged	
4,4'-Methylenebis(2-chloroanili	40	41.71	40			4.275	30		Linear	
bis(2-Ethylhexyl)phthalate	1.1227	1.3158		.01		17.19961	30		Averaged	
Benzo(a)anthracene	1.0994	1.10176		.01		0.21466	30		Averaged	
Chrysene	1.0155	1.01635		.01		0.0837	30		Averaged	
Di-n-octylphthalate	1.4599	1.54745		.01		5.99699	30		Averaged	ccc
Benzo(b)fluoranthene	1.2442	1.28765		.01		3.4922	30		Averaged	
Benzo(k)fluoranthene	1.2537	1.29511		.01		3.30302	30		Averaged	
Benzo(a)pyrene	1.0534	1.07225		.01		1.78944	30		Averaged	ccc
Indeno(1,2,3-cd)pyrene	0.7816	0.8016		.01		2.55885	30		Averaged	
Dibenzo(a,h)anthracene	0.6451	0.66897		.01		3.7002	30		Averaged	
Benzo(ghi)perylene	0.6163	0.6112		.01		-0.82752	30		Averaged	
Dibenzo(a,e)pyrene	0.3364	0.3234		.01		-3.86445	30		Averaged	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1266.D
Acq On : 13 Aug 2011 13:59
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-09.1|ICV|1|SVM|1|MICV
Misc : |MIX[A]
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Aug 15 15:25:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.771	4.768	1.000	816694	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.052	6.049	1.000	3277968	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	7.928	7.922	1.000	1404416	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.539	9.533	1.000	2256466	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.536	12.531	1.000	1169343	40.00	ng/uL	0.00
91) A Perylene-d12	264	14.827	14.824	1.000	596860	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	816694	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.052	6.047	1.000	3277968	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	7.928	7.919	1.000	1404416	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.539	9.536	1.000	2256466	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.536	12.528	1.000	1169343	40.00	ng/uL	0.00
153) B Perylene-d12	264	14.827	14.824	1.000	596860	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.052	6.044	1.000	3277968	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	7.928	7.916	1.000	1404416	40.00	ng/uL	0.01
161) D Phenanthrene-d10	188	9.539	9.533	1.000	2256466	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.536	12.528	1.000	1169343	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.052	6.044	1.000	3297902	40.00	ng/uL	0.00
172) E Perylene-d12	264	14.827	14.852	1.000	596860	40.00	ng/uL	-0.03
174) F 1,4-Dichlorobenzene-d4	152	4.771	4.760	1.000	816694	40.00	ng/uL	0.01
177) F Naphthalene-d8	136	6.052	6.044	1.000	3277968	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	7.928	7.916	1.000	1404416	40.00	ng/uL	0.01
184) F Phenanthrene-d10	188	9.539	9.533	1.000	2256466	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.536	12.528	1.000	1169343	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.771	4.765	1.000	816694	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.052	6.044	1.000	3277968	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.536	12.528	1.000	1169343	40.00	ng/uL	0.00
199) J Perylene-d12	264	14.827	14.827	1.000	596860	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.583	3.580	0.751	1175999	44.15	ng/uL	0.00
8) Phenol-d5	99	4.376	4.367	0.917	1441555	42.67	ng/uL	0.00
25) Nitrobenzene-d5	82	5.314	5.308	0.878	1203950	41.49	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.180	7.178	0.906	2098026	40.86	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.774	8.772	1.107	268823	45.54	ng/uL	0.00
83) p-Terphenyl-d14	244	11.249	11.244	0.897	1534347	51.67	ng/uL	0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.395	2.384	0.502	1022062	40.68	ng/uL	99
3) N-Methyl-N-nitrosometh...	74	2.611	2.603	0.547	742598	39.23	ng/uL	98
4) Pyridine	79	2.640	2.631	0.553	901663	34.39	ng/uL	98
6) p-Benzoquinone	54	4.024	4.021	0.843	224674	43.26	ng/uL	98
7) Aniline	66	4.461	4.455	0.935	595046	35.95	ng/uL	98
9) Phenol	94	4.390	4.382	0.920	1372003	39.02	ng/uL	98
10) bis(2-Chloroethyl) ether	63	4.501	4.492	0.943	1120540	39.40	ng/uL	98
11) 2-Chlorophenol	128	4.569	4.563	0.958	1043953	39.58	ng/uL	93
12) n-Decane	43	4.575	4.572	0.959	2254721	43.76	ng/uL	95
13) 1,3-Dichlorobenzene	146	4.720	4.717	0.989	1212361	41.23	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.788	4.785	1.004	1218002	40.87	ng/uL	99
15) 1,2-Dichlorobenzene	146	4.938	4.933	1.035	1137115	40.59	ng/uL	99
16) bis(2-Chloroisopropyl)...	45	5.007	5.004	1.049	3009101	39.81	ng/uL	98

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1266.D
Acq On : 13 Aug 2011 13:59
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-09.1|ICV|1|SVM|1|MICV
Misc : |MIX[A]
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Aug 15 15:25:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
17)	Benzyl alcohol	108	4.887	4.879	1.024	702295	39.65	ng/uL	98	
18)	o-Cresol	107	4.967	4.961	1.041	915603	40.88	ng/uL	99	
19)	m,p-Cresols	107	5.129	5.117	1.075	1179362	41.11	ng/uL	99	
20)	N-Nitrosodipropylamine	70	5.163	5.149	1.082	862317	40.73	ng/uL	100	
21)	p-Toluidine	106	5.191	5.189	1.088	953105	32.55	ng/uL	99	
22)	m-Toluidine	106	5.228	5.223	1.096	1206963	36.31	ng/uL	99	
23)	Hexachloroethane	117	5.271	5.268	1.105	502014	40.48	ng/uL	98	
26)	Nitrobenzene	77	5.336	5.331	0.882	1202708	40.87	ng/uL	98	
27)	Isophorone	82	5.572	5.564	0.921	2143101	39.01	ng/uL	98	
28)	2-Nitrophenol	139	5.649	5.643	0.933	587863	40.28	ng/uL	99	
29)	2,4-Dimethylphenol	122	5.663	5.655	0.936	889782	37.25	ng/uL	98	
30)	bis(2-Chloroethoxy)met...	93	5.768	5.762	0.953	1287269	37.76	ng/uL	99	
31)	2,4-Dichlorophenol	162	5.893	5.885	0.974	790123	39.13	ng/uL	100	
32)	Benzoic acid	105	5.802	5.765	0.959	718591	42.18	ng/uL#	12	
33)	1,2,4-Trichlorobenzene	180	5.981	5.978	0.988	913908	38.44	ng/uL	99	
34)	alpha-Terpineol	59	6.066	6.061	1.002	1347685	38.66	ng/uL	93	
35)	Naphthalene	128	6.078	6.072	1.004	2955212	39.72	ng/uL	73	
36)	4-Chloroaniline	127	6.115	6.109	1.010	1066955	36.75	ng/uL	97	
37)	Hexachlorobutadiene	225	6.183	6.180	1.022	516690	41.04	ng/uL	100	
38)	4-Chloro-3-methylphenol	107	6.595	6.592	1.090	846712	38.48	ng/uL	100	
39)	2-Methylnaphthalene	142	6.800	6.797	1.123	2037892	39.93	ng/uL	99	
40)	Phthalic anhydride	104	6.856	6.845	1.133	465141	141.58	ng/uL#	1	A
41)	1-Methylnaphthalene	142	6.908	6.905	1.141	1902594	38.92	ng/uL	100	
43)	Hexachlorocyclopentadiene	237	6.953	6.953	0.877	332644	33.56	ng/uL	100	
44)	2,3-Dichloroaniline	161	7.095	7.092	0.895	967926	40.23	ng/uL	99	
45)	2,4,6-Trichlorophenol	196	7.089	7.084	0.894	521568	40.47	ng/uL	99	
46)	2,4,5-Trichlorophenol	196	7.124	7.118	0.899	559557	40.91	ng/uL	100	
48)	2-Chloronaphthalene	162	7.325	7.320	0.924	1761768	41.79	ng/uL	99	
49)	o-Nitroaniline	65	7.425	7.419	0.937	628660	39.61	ng/uL	98	
50)	1,4-Dinitrobenzene	168	7.575	7.570	0.956	302644	40.53	ng/uL	96	
51)	m-Nitroaniline	138	7.871	7.865	0.993	382660	35.17	ng/uL	97	
52)	Dimethylphthalate	163	7.621	7.612	0.961	1931969	40.92	ng/uL	100	
53)	m-Dinitrobenzene	168	7.661	7.649	0.966	333234	38.76	ng/uL	97	
54)	2,6-Dinitrotoluene	165	7.686	7.680	0.970	438098	40.48	ng/uL	97	
55)	2,4-Dinitrotoluene	165	8.121	8.112	1.024	529864	40.12	ng/uL	98	
56)	Acenaphthylene	152	7.777	7.771	0.981	2888991	41.43	ng/uL	100	
57)	Acenaphthene	154	7.965	7.959	1.005	1768721	40.03	ng/uL	99	
58)	2,4-Dinitrophenol	184	7.976	7.970	1.006	194426	38.33	ng/uL#	63	
59)	Dibenzofuran	168	8.146	8.144	1.028	2390613	41.14	ng/uL	99	
60)	2,3,4,6-Tetrachlorophenol	232	8.263	8.260	1.042	412740	42.15	ng/uL	97	
61)	Diethylphthalate	149	8.368	8.362	1.056	2039370	40.82	ng/uL	99	
62)	4-Nitrophenol	139	8.019	8.010	1.011	249356	34.98	ng/uL	97	
63)	Fluorene	166	8.519	8.516	1.075	1950003	38.98	ng/uL	100	
64)	4-Chlorophenylphenylether	204	8.502	8.499	1.072	882243	39.11	ng/uL	99	
65)	p-Nitroaniline	138	8.536	8.527	1.077	365043	39.76	ng/uL	99	
68)	2-Methyl-4,6-dinitroph...	198	8.561	8.553	0.898	264173	39.76	ng/uL	95	
69)	Diphenylamine	169	8.635	8.630	0.905	1587642	40.51	ng/uL	100	
70)	1,2-Diphenylhydrazine	77	8.678	8.675	0.910	2184641	39.65	ng/uL	99	
71)	4-Bromophenylphenylether	248	9.036	9.033	0.947	461061	40.17	ng/uL	99	
72)	Hexachlorobenzene	284	9.110	9.104	0.955	558028	41.29	ng/uL	99	
73)	Pentachlorophenol	266	9.311	9.309	0.976	287366	38.83	ng/uL	99	
74)	n-Octadecane	57	9.368	9.365	0.982	2478892	42.70	ng/uL	97	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1266.D
Acq On : 13 Aug 2011 13:59
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-09.1|ICV|1|SVM|1|MICV
Misc : |MIX[A]
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Aug 15 15:25:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

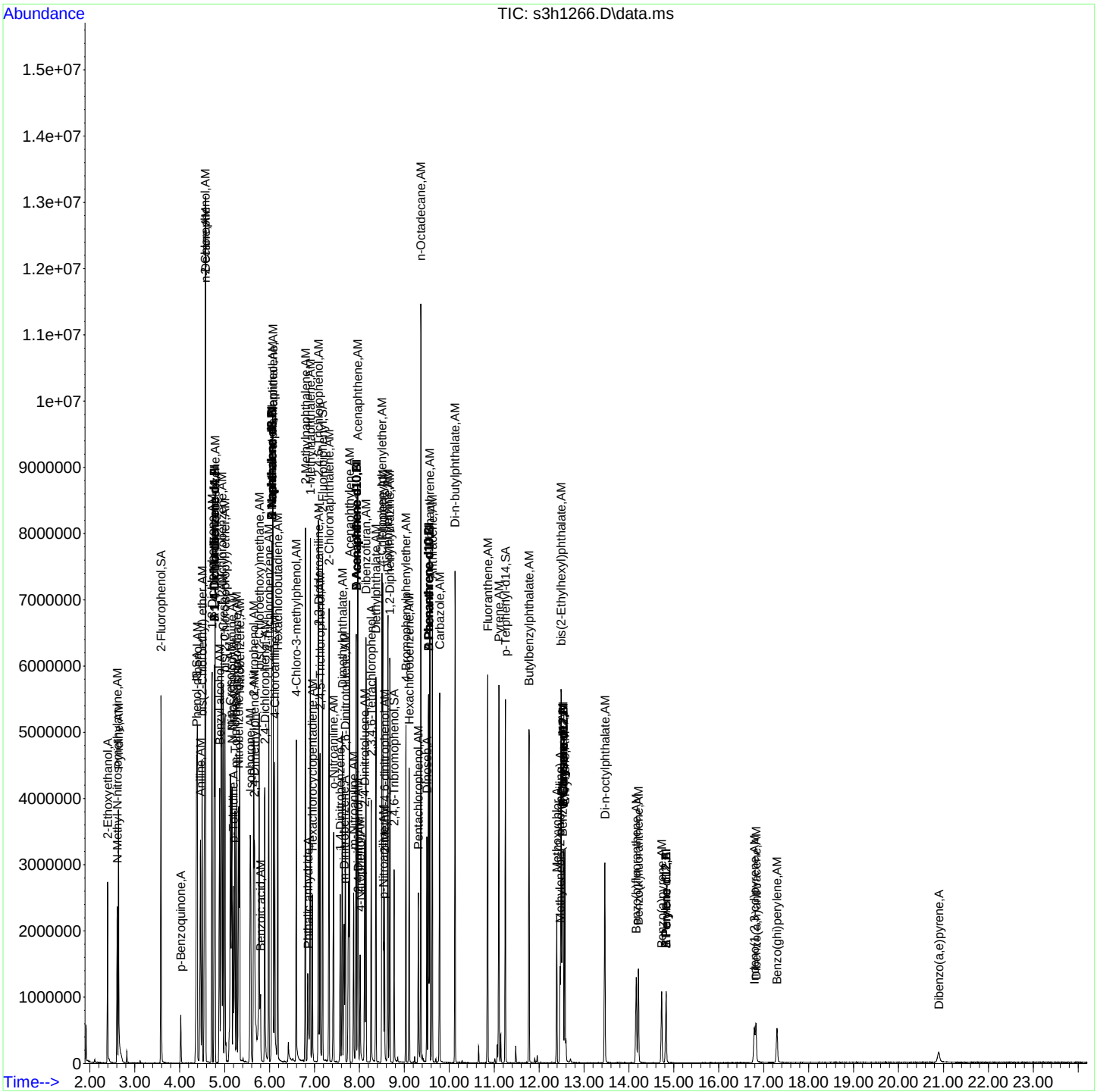
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.502	9.496	0.996	415973	41.78	ng/uL	100
76) Phenanthrene	178	9.567	9.562	1.003	2383528	40.75	ng/uL	99
77) Anthracene	178	9.624	9.618	1.009	2394433	40.65	ng/uL	100
78) Carbazole	167	9.786	9.780	1.026	2234474	45.17	ng/uL	99
79) Di-n-butylphthalate	149	10.130	10.127	1.062	3433344	43.26	ng/uL	100
80) Fluoranthene	202	10.854	10.852	1.138	2324841	40.40	ng/uL	99
82) Pyrene	202	11.107	11.102	0.886	2307701	46.92	ng/uL	99
84) Butylbenzylphthalate	149	11.775	11.772	0.939	1136275	47.26	ng/uL	98
85) bis(2-Ethylhexyl)phtha...	149	12.488	12.485	0.996	1538616	46.88	ng/uL	99
86) Benzo(a)anthracene	228	12.519	12.514	0.999	1288338	40.09	ng/uL	100
87) Chrysene	228	12.573	12.568	1.003	1188464	40.03	ng/uL	99
88) Methoxychlor	227	12.392	12.392	0.988	830413	37.56	ng/uL	100
89) Methylenebis(2-chloroa...	231	12.465	12.463	0.994	165438	41.71	ng/uL	98
90) Di-n-octylphthalate	149	13.463	13.460	1.074	1809500	42.40	ng/uL	99
92) Benzo(b)fluoranthene	252	14.162	14.159	0.955	768549	41.40	ng/uL	100
93) Benzo(k)fluoranthene	252	14.210	14.207	0.958	773001	41.32	ng/uL	99
94) Benzo(a)pyrene	252	14.727	14.727	0.993	639986	40.72	ng/uL	99
95) Indeno(1,2,3-cd)pyrene	276	16.790	16.787	1.132	478441	41.02	ng/uL	100
96) Dibenzo(a,h)anthracene	278	16.827	16.821	1.135	399283	41.48	ng/uL	97
97) Benzo(ghi)perylene	276	17.296	17.290	1.167	364801	39.67	ng/uL	99
98) Dibenzo(a,e)pyrene	302	20.899	20.887	1.410	193022	38.45	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1266.D
Acq On : 13 Aug 2011 13:59
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-09.1|ICV|1|SVM|1|MICV
Misc : |MIX[A]
ALS Vial : 59 Sample Multiplier: 1

Quant Time: Aug 15 15:25:04 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: MSD3.I **Injection Date:** 26-AUG-11 09:34

Data File: s082611.B\s3h2605.D **Init. Cal. Date(s)** 12-AUG-11 15:29 - 13-AUG-11 13:2

Lab Sample ID WBN110812-05.3 **Method:** s082611.B\MSD3_8270d_081211.m

Quant Type ISTD **Method Update:** 15-AUG-11 15:17

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
S	2-Fluorophenol	1.3045	1.21698		.01		-6.70908	20		Averaged	
S	Phenol-d5	1.6545	1.44343		.01		-12.75733	20		Averaged	
S	Nitrobenzene-d5	0.3541	0.31306		.01		-11.58995	20		Averaged	
S	2-Fluorobiphenyl	1.4624	1.48191		.01		1.33411	20		Averaged	
S	2,4,6-Tribromophenol	0.1681	0.19241		.01		14.46163	20		Averaged	
S	p-Terphenyl-d14	1.0158	0.84115		.01		-17.19335	20		Averaged	
	2-Ethoxyethanol	1.2306	0.78892		.01		-35.89144	20	*	Averaged	
	N-Methyl-N-nitrosomethylami	0.9272	0.73856		.01		-20.34513	20	*	Averaged	
	Pyridine	1.2843	1.05253		.01		-18.04641	20		Averaged	
	p-Benzoquinone	0.2544	0.09592		.01		-62.2956	20	*	Averaged	
	Phenol	1.722	1.49413		.01		-13.23287	20		Averaged	ccc
	Aniline	0.8107	0.61586		.01		-24.03355	20	*	Averaged	
	bis(2-Chloroethyl) ether	1.3929	0.98119		.01		-29.55776	20	*	Averaged	
	2-Chlorophenol	1.292	1.27532		.01		-1.29102	20		Averaged	
	n-Decane	2.5235	1.63064		.01		-35.38181	20	*	Averaged	
	1,3-Dichlorobenzene	1.4401	1.45961		.01		1.35477	20		Averaged	
	1,4-Dichlorobenzene	1.4597	1.47311		.01		0.91868	20		Averaged	ccc
	Benzyl alcohol	0.8676	0.82388		.01		-5.03919	20		Averaged	
	1,2-Dichlorobenzene	1.372	1.38713		.01		1.10277	20		Averaged	
	o-Cresol	1.097	1.03113		.01		-6.00456	20		Averaged	
	bis(2-Chloroisopropyl)ether	3.7017	2.28369		.01		-38.30699	20	*	Averaged	
	m,p-Cresols	1.4051	1.33291		.01		-5.13771	20		Averaged	
	N-Nitrosodipropylamine	1.037	0.88707		.01		-14.45805	20		Averaged	spcc
	p-Toluidine	1.4343	1.4828		.01		3.38144	20		Averaged	
	m-Toluidine	1.628	1.48582		.01		-8.73342	20		Averaged	
	Hexachloroethane	0.6074	0.58434		.01		-3.79651	20		Averaged	
	Nitrobenzene	0.3591	0.31171		.01		-13.19688	20		Averaged	
	Isophorone	0.6704	0.58931		.01		-12.09576	20		Averaged	
	2-Nitrophenol	0.1781	0.18302		.01		2.76249	20		Averaged	ccc
	2,4-Dimethylphenol	0.2915	0.30127		.01		3.35163	20		Averaged	
	Benzoic acid	0.2079	0.19347		.01		-6.94084	20		Averaged	
	bis(2-Chloroethoxy)methane	0.416	0.36745		.01		-11.67067	20		Averaged	
	2,4-Dichlorophenol	0.2464	0.26844		.01		8.94481	20		Averaged	ccc
	1,2,4-Trichlorobenzene	0.2901	0.31328		.01		7.99035	20		Averaged	
	alpha-Terpineol	0.4254	0.30049		.01		-29.36295	20	*	Averaged	
	Naphthalene	0.9078	0.91452		.01		0.74025	20		Averaged	
	4-Chloroaniline	0.3543	0.36133		.01		1.98419	20		Averaged	

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 26-AUG-11 09:34

Data File: s082611.B\s3h2605.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID WBN110812-05.3 **Method:** s082611.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Hexachlorobutadiene	0.1536	0.1772		.01		15.36458	20		Averaged	ccc
4-Chloro-3-methylphenol	0.2685	0.27279		.01		1.59777	20		Averaged	ccc
2-Methylnaphthalene	0.6227	0.64405		.01		3.42862	20		Averaged	
Phthalic Anhydride	0.0401	0.02316		.01		-42.24439	20	*	Averaged	
1-Methylnaphthalene	0.5966	0.61473		.01		3.03889	20		Averaged	
Hexachlorocyclopentadiene	0.2823	0.3244		.01		14.91321	20		Averaged	spcc
2,4,6-Trichlorophenol	0.367	0.39896		.01		8.70845	20		Averaged	ccc
2,3-Dichloroaniline	0.6852	0.6865		.01		0.18973	20		Averaged	
2,4,5-Trichlorophenol	0.3895	0.42788		.01		9.85366	20		Averaged	
2-Chloronaphthalene	1.2006	1.20406		.01		0.28819	20		Averaged	
o-Nitroaniline	0.452	0.34372		.01		-23.95575	20	*	Averaged	
1,4-Dinitrobenzene	0.2127	0.22829		.01		7.32957	20		Averaged	
Dimethylphthalate	1.3446	1.39281		.01		3.58545	20		Averaged	
m-Dinitrobenzene	0.2449	0.26065		.01		6.4312	20		Averaged	
2,6-Dinitrotoluene	0.3082	0.32781		.01		6.36275	20		Averaged	
Acenaphthylene	1.986	2.01884		.01		1.65358	20		Averaged	
m-Nitroaniline	0.3099	0.31914		.01		2.98161	20		Averaged	
Acenaphthene	1.2585	1.29146		.01		2.61899	20		Averaged	ccc
2,4-Dinitrophenol	0.1445	0.17801		.01		23.19031	20	*	Averaged	spcc
4-Nitrophenol	0.203	0.23218		.01		14.37438	20		Averaged	spcc
2,4-Dinitrotoluene	0.3762	0.41022		.01		9.04306	20		Averaged	
Dibenzofuran	1.655	1.73124		.01		4.60665	20		Averaged	
2,3,4,6-Tetrachlorophenol	0.2789	0.34455		.01		23.5389	20	*	Averaged	
Diethylphthalate	1.4228	1.49082		.01		4.78071	20		Averaged	
4-Chlorophenylphenylether	0.6424	0.708		.01		10.21171	20		Averaged	
Fluorene	1.4247	1.49216		.01		4.73503	20		Averaged	
p-Nitroaniline	0.2615	0.2703		.01		3.3652	20		Averaged	
2-Methyl-4,6-dinitrophenol	0.1178	0.13267		.01		12.62309	20		Averaged	
Diphenylamine	0.6948	0.66642		.01		-4.08463	20		Averaged	ccc
1,2-Diphenylhydrazine	0.9767	0.76116		.01		-22.06819	20	*	Averaged	
4-Bromophenylphenylether	0.2035	0.22186		.01		9.02211	20		Averaged	
Hexachlorobenzene	0.2396	0.229		.01		-4.42404	20		Averaged	
Pentachlorophenol	0.1312	0.14099		.01		7.46189	20		Averaged	ccc
n-Octadecane	1.029	0.63063		.01		-38.71429	20	*	Averaged	
Dinoseb	0.1765	0.19955		.01		13.05949	20		Averaged	
Phenanthrene	1.0368	1.03936		.01		0.24691	20		Averaged	
Anthracene	1.0443	1.05855		.01		1.36455	20		Averaged	

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 26-AUG-11 09:34

Data File: s082611.B\s3h2605.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID WBN110812-05.3 **Method:** s082611.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type	
Carbazole	0.8769	0.83401		.01		-4.89109	20		Averaged	
Di-n-butylphthalate	1.407	1.35738		.01		-3.52665	20		Averaged	
Fluoranthene	1.02	1.07188		.01		5.08627	20		Averaged	ccc
Pyrene	1.6825	1.45747		.01		-13.37474	20		Averaged	
Butylbenzylphthalate	0.8224	0.70378		.01		-14.42364	20		Averaged	
Methoxychlor	0.7562	0.83427		.01		10.32399	20		Averaged	
4,4'-Methylenebis(2-chloroanili	40	49.54	40			23.85	20	*	Linear	
bis(2-Ethylhexyl)phthalate	1.1227	1.01268		.01		-9.79959	20		Averaged	
Benzo(a)anthracene	1.0994	1.13846		.01		3.55285	20		Averaged	
Chrysene	1.0155	1.07761		.01		6.1162	20		Averaged	
Di-n-octylphthalate	1.4599	1.55096		.01		6.23741	20		Averaged	ccc
Benzo(b)fluoranthene	1.2442	1.26974		.01		2.05272	20		Averaged	
Benzo(k)fluoranthene	1.2537	1.28681		.01		2.64098	20		Averaged	
Benzo(a)pyrene	1.0534	1.13585		.01		7.82704	20		Averaged	ccc
Indeno(1,2,3-cd)pyrene	0.7816	0.95399		.01		22.05604	20	*	Averaged	
Dibenzo(a,h)anthracene	0.6451	0.7871		.01		22.01209	20	*	Averaged	
Benzo(ghi)perylene	0.6163	0.75502		.01		22.50852	20	*	Averaged	
Dibenzo(a,e)pyrene	0.3364	0.41448		.01		23.21046	20	*	Averaged	

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2605.D
Acq On : 26 Aug 2011 09:34
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.3|CCV|1|SVM|1|MCCV
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 10:09:48 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	520022	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.180	6.180	1.000	2079837	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.056	8.056	1.000	1019046	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.670	9.670	1.000	1833310	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.704	12.704	1.000	1340846	40.00	ng/uL	0.00
91) A Perylene-d12	264	15.066	15.066	1.000	926118	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	520022	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.180	6.180	1.000	2079837	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.056	8.056	1.000	1019046	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.670	9.670	1.000	1833310	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.704	12.704	1.000	1340846	40.00	ng/uL	0.00
153) B Perylene-d12	264	15.066	15.066	1.000	926118	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.180	6.180	1.000	2079837	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.056	8.056	1.000	1019046	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.670	9.670	1.000	1833310	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.704	12.704	1.000	1340846	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.180	6.180	1.000	2080736	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.066	15.066	1.000	926118	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	520022	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.180	6.180	1.000	2079837	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.056	8.056	1.000	1019046	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.670	9.670	1.000	1833310	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.704	12.704	1.000	1340846	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	520022	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.180	6.180	1.000	2079837	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.704	12.704	1.000	1340846	40.00	ng/uL	0.00
199) J Perylene-d12	264	15.066	15.066	1.000	926118	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.711	3.676	0.758	632857	37.32	ng/uL	0.04
8) Phenol-d5	99	4.493	4.484	0.918	750614	34.90	ng/uL	0.00
25) Nitrobenzene-d5	82	5.439	5.423	0.880	651121	35.36	ng/uL	0.02
47) 2-Fluorobiphenyl	172	7.306	7.299	0.907	1510134	40.53	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.905	8.920	1.105	196078	45.77	ng/uL	-0.01
83) p-Terphenyl-d14	244	11.375	11.400	0.895	1127859	33.12	ng/uL	-0.02
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) 2-Ethoxyethanol	59	2.526	2.448	0.516	410255	25.64	ng/uL	96
3) N-Methyl-N-nitrosometh...	74	2.739	2.673	0.560	384066	31.86	ng/uL	83
4) Pyridine	79	2.776	2.702	0.567	547337	32.78	ng/uL#	73
6) p-Benzoquinone	54	4.149	4.129	0.847	49878	15.08	ng/uL	73
7) Aniline	66	4.583	4.575	0.936	320263	30.39	ng/uL	84
9) Phenol	94	4.507	4.500	0.920	776978	34.71	ng/uL	96
10) bis(2-Chloroethyl) ether	63	4.618	4.613	0.943	510238	28.18	ng/uL	80
11) 2-Chlorophenol	128	4.694	4.686	0.959	663192	39.48	ng/uL	87
12) n-Decane	43	4.694	4.695	0.959	847970	25.85	ng/uL	95
13) 1,3-Dichlorobenzene	146	4.845	4.844	0.990	759031	40.54	ng/uL	99
14) 1,4-Dichlorobenzene	146	4.913	4.914	1.003	766049	40.37	ng/uL	99
15) 1,2-Dichlorobenzene	146	5.061	5.065	1.034	721339	40.44	ng/uL	99
16) bis(2-Chloroisopropyl)...	45	5.129	5.138	1.048	1187569	24.68	ng/uL	84

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2605.D
Acq On : 26 Aug 2011 09:34
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.3|CCV|1|SVM|1|MCCV
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 10:09:48 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
17) Benzyl alcohol	108	5.007	5.010	1.023	428436	37.98	ng/uL	93
18) o-Cresol	107	5.086	5.094	1.039	536209	37.60	ng/uL	98
19) m,p-Cresols	107	5.246	5.254	1.071	693145	37.94	ng/uL	99
20) N-Nitrosodipropylamine	70	5.274	5.287	1.077	461295	34.22	ng/uL	77
21) p-Toluidine	106	5.317	5.328	1.086	771089	41.35	ng/uL	99
22) m-Toluidine	106	5.351	5.363	1.093	772661	36.51	ng/uL	99
23) Hexachloroethane	117	5.396	5.410	1.102	303871	38.48	ng/uL	89
26) Nitrobenzene	77	5.459	5.446	0.883	648312	34.72	ng/uL	94
27) Isophorone	82	5.694	5.684	0.921	1225665	35.16	ng/uL	95
28) 2-Nitrophenol	139	5.774	5.765	0.934	380642	41.11	ng/uL	88
29) 2,4-Dimethylphenol	122	5.783	5.777	0.936	626587	41.34	ng/uL	99
30) bis(2-Chloroethoxy)met...	93	5.888	5.887	0.953	764244	35.33	ng/uL	99
31) 2,4-Dichlorophenol	162	6.016	6.012	0.973	558312	43.58	ng/uL	97
32) Benzoic acid	105	5.891	5.890	0.953	402378	37.22	ng/uL	95
33) 1,2,4-Trichlorobenzene	180	6.109	6.107	0.989	651578	43.19	ng/uL	100
34) alpha-Terpineol	59	6.186	6.192	1.001	624965	28.26	ng/uL	76
35) Naphthalene	128	6.203	6.203	1.004	1902049	40.30	ng/uL	98
36) 4-Chloroaniline	127	6.240	6.241	1.010	751498	40.80	ng/uL	89
37) Hexachlorobutadiene	225	6.308	6.314	1.021	368542	46.13	ng/uL	100
38) 4-Chloro-3-methylphenol	107	6.720	6.735	1.087	567358	40.64	ng/uL	97
39) 2-Methylnaphthalene	142	6.928	6.944	1.121	1339527	41.37	ng/uL	100
40) Phthalic anhydride	104	6.979	6.993	1.129	48163	23.11	ng/uL#	1
41) 1-Methylnaphthalene	142	7.036	7.054	1.138	1278546	41.22	ng/uL	100
43) Hexachlorocyclopentadiene	237	7.081	7.070	0.879	330577	45.97	ng/uL	99
44) 2,3-Dichloroaniline	161	7.223	7.212	0.897	699575	40.08	ng/uL	98
45) 2,4,6-Trichlorophenol	196	7.215	7.204	0.896	406556	43.48	ng/uL	99
46) 2,4,5-Trichlorophenol	196	7.252	7.238	0.900	436034	43.94	ng/uL	100
48) 2-Chloronaphthalene	162	7.453	7.444	0.925	1226994	40.11	ng/uL	99
49) o-Nitroaniline	65	7.550	7.544	0.937	350262	30.42	ng/uL	81
50) 1,4-Dinitrobenzene	168	7.698	7.698	0.956	232639	42.93	ng/uL#	70
51) m-Nitroaniline	138	7.996	7.998	0.993	325221	41.19	ng/uL	89
52) Dimethylphthalate	163	7.740	7.741	0.961	1419335	41.43	ng/uL	100
53) m-Dinitrobenzene	168	7.783	7.778	0.966	265610	42.57	ng/uL	85
54) 2,6-Dinitrotoluene	165	7.811	7.810	0.970	334056	42.54	ng/uL	77
55) 2,4-Dinitrotoluene	165	8.246	8.249	1.024	418028	43.62	ng/uL	83
56) Acenaphthylene	152	7.908	7.902	0.982	2057292	40.66	ng/uL	100
57) Acenaphthene	154	8.093	8.093	1.005	1316062	41.05	ng/uL	98
58) 2,4-Dinitrophenol	184	8.101	8.105	1.006	181401	49.28	ng/uL#	25
59) Dibenzofuran	168	8.275	8.281	1.027	1764213	41.84	ng/uL	100
60) 2,3,4,6-Tetrachlorophenol	232	8.394	8.399	1.042	351108	49.41	ng/uL	98
61) Diethylphthalate	149	8.490	8.503	1.054	1519215	41.91	ng/uL	99
62) 4-Nitrophenol	139	8.144	8.145	1.011	236603	45.75	ng/uL	88
63) Fluorene	166	8.650	8.660	1.074	1520576	41.89	ng/uL	99
64) 4-Chlorophenylphenylether	204	8.630	8.643	1.071	721483	44.08	ng/uL	98
65) p-Nitroaniline	138	8.661	8.671	1.075	275447	41.35	ng/uL#	51
68) 2-Methyl-4,6-dinitroph...	198	8.687	8.676	0.898	243234	45.05	ng/uL	77
69) Diphenylamine	169	8.760	8.754	0.906	1221750	38.37	ng/uL	99
70) 1,2-Diphenylhydrazine	77	8.806	8.799	0.911	1395450	31.17	ng/uL	93
71) 4-Bromophenylphenylether	248	9.164	9.163	0.948	406733	43.62	ng/uL	91
72) Hexachlorobenzene	284	9.241	9.235	0.956	419831	38.23	ng/uL	99
73) Pentachlorophenol	266	9.442	9.442	0.976	258479	42.98	ng/uL	99
74) n-Octadecane	57	9.488	9.499	0.981	1156144	24.51	ng/uL	92

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2605.D
Acq On : 26 Aug 2011 09:34
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.3|CCV|1|SVM|1|MCCV
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 10:09:48 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

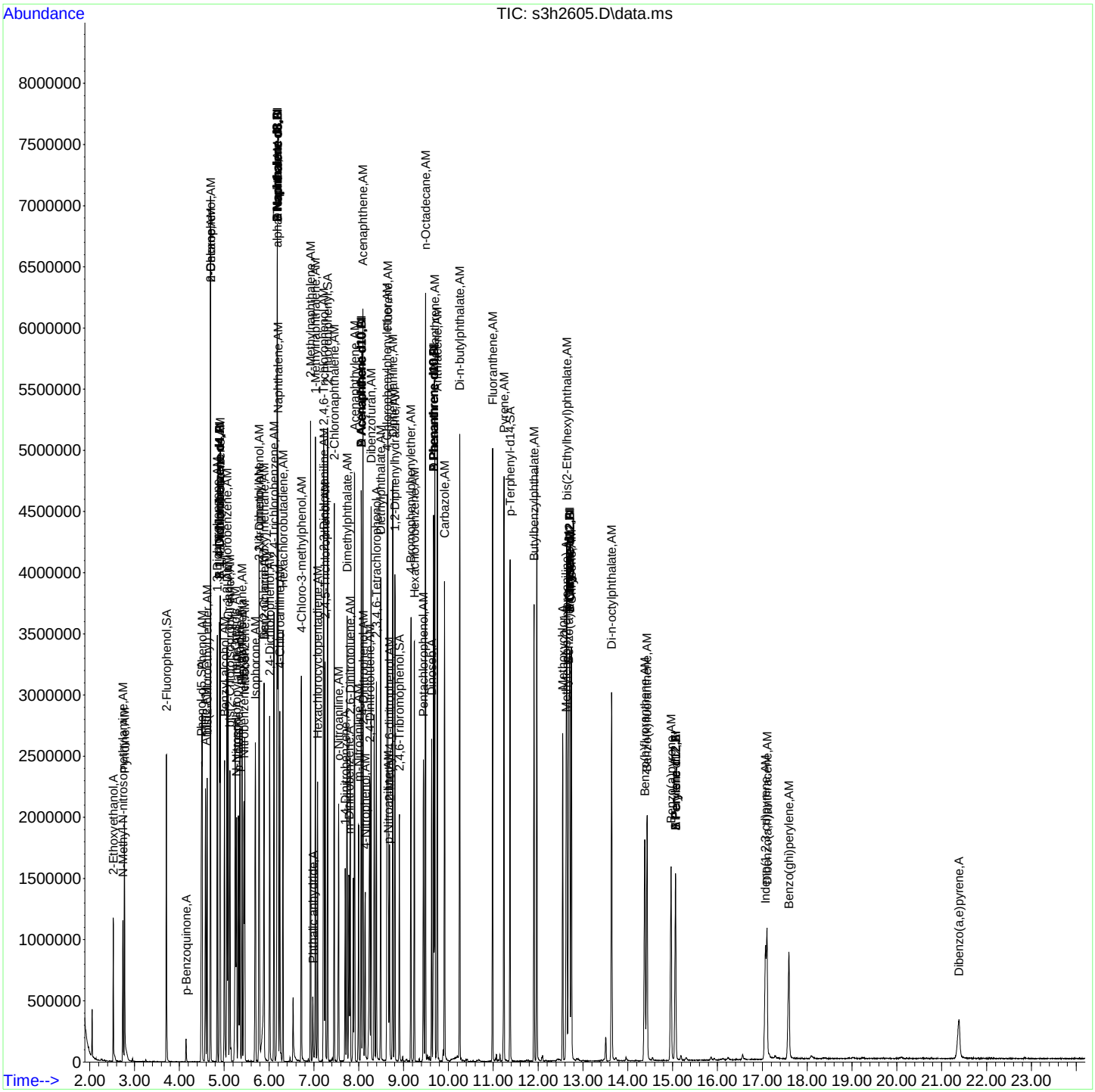
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
75) Dinoseb	211	9.627	9.632	0.996	365838	45.22	ng/uL	97
76) Phenanthrene	178	9.698	9.699	1.003	1905477	40.10	ng/uL	100
77) Anthracene	178	9.752	9.756	1.009	1940651	40.55	ng/uL	100
78) Carbazole	167	9.914	9.920	1.025	1529007	38.04	ng/uL	100
79) Di-n-butylphthalate	149	10.252	10.272	1.060	2488491	38.59	ng/uL	100
80) Fluoranthene	202	10.985	11.008	1.136	1965096	42.03	ng/uL	97
82) Pyrene	202	11.238	11.256	0.885	1954246	34.65	ng/uL	96
84) Butylbenzylphthalate	149	11.909	11.935	0.937	943659	34.23	ng/uL	92
85) bis(2-Ethylhexyl)phtha...	149	12.639	12.658	0.995	1357849	36.08	ng/uL	98
86) Benzo(a)anthracene	228	12.684	12.687	0.998	1526495	41.42	ng/uL	100
87) Chrysene	228	12.741	12.742	1.003	1444909	42.45	ng/uL	100
88) Methoxychlor	227	12.548	12.563	0.988	1118628	44.13	ng/uL	99
89) Methylenebis(2-chloroa...	231	12.625	12.635	0.994	230672	49.54	ng/uL	93
90) Di-n-octylphthalate	149	13.639	13.646	1.074	2079603	42.50	ng/uL	86
92) Benzo(b)fluoranthene	252	14.378	14.390	0.954	1175931	40.82	ng/uL	98
93) Benzo(k)fluoranthene	252	14.429	14.439	0.958	1191742	41.06	ng/uL	97
94) Benzo(a)pyrene	252	14.966	14.967	0.993	1051928	43.13	ng/uL	98
95) Indeno(1,2,3-cd)pyrene	276	17.069	17.061	1.133	883503	48.82	ng/uL	94
96) Dibenzo(a,h)anthracene	278	17.103	17.095	1.135	728947	48.81	ng/uL	92
97) Benzo(ghi)perylene	276	17.592	17.572	1.168	699242	49.00	ng/uL	94
98) Dibenzo(a,e)pyrene	302	21.382	21.228	1.419	383853	49.28	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2605.D
Acq On : 26 Aug 2011 09:34
Operator : JLD1
InstName : MSD 3
Sample : |WBN110812-05.3|CCV|1|SVM|1|MCCV
Misc : |MIX[A]
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 26 10:09:48 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: MSD3.I **Injection Date:** 26-AUG-11 10:06

Data File: s082611.B\s3h2606.D **Init. Cal. Date(s)** 12-AUG-11 15:29 - 13-AUG-11 13:2

Lab Sample ID **Method:** s082611.B\MSD3_8270d_081211.m

Quant Type ISTD **Method Update:** 15-AUG-11 15:17

	Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
S	2-Fluorophenol	1.3045	0.00194		.01		-99.85128	20	*	Averaged
S	Nitrobenzene-d5	0.3541	0.00048		.01		-99.86445	20	*	Averaged
	Methyl methacrylate	0.3045	0.28935		.01		-4.97537	20		Averaged
	1,4-Dioxane	0.5551	0.47148		.01		-15.06395	20		Averaged
	Ethyl methacrylate	1.2511	1.03635		.01		-17.16489	20		Averaged
	2-Picoline	1.5812	1.30134		.01		-17.69922	20		Averaged
	N-Nitrosomethylethylamine	0.6609	0.57571		.01		-12.89	20		Averaged
	Methyl methanesulfonate	0.7068	0.69718		.01		-1.36106	20		Averaged
	N-Nitrosodiethylamine	0.6696	0.63123		.01		-5.73029	20		Averaged
	Ethyl Methanesulfonate	0.9969	0.81943		.01		-17.80219	20		Averaged
	Benzaldehyde	1.0558	0.95547		.01		-9.50275	20		Averaged
	Pentachloroethane	0.5428	0.58134		.01		7.10022	20		Averaged
	N-Nitrosopyrrolidine	0.6371	0.67468		.01		5.8986	20		Averaged
	Acetophenone	1.764	1.73368		.01		-1.71882	20		Averaged
	N-Nitrosomorpholine	1.176	0.83217		.01		-29.23724	20	*	Averaged
	o-Toluidine	1.985	1.90826		.01		-3.86599	20		Averaged
	N-Nitrosopiperidine	0.1826	0.18014		.01		-1.34721	20		Averaged
	a,a-Dimethylphenethylamine	1.3875	1.00619		.01		-27.4818	20	*	Averaged
	2,6-Dichlorophenol	0.262	0.29627		.01		13.08015	20		Averaged
	Hexachloropropene	0.1723	0.21873		.01		26.94719	20	*	Averaged
	N-Nitrosodi-n-butylamine	0.298	0.25922		.01		-13.01342	20		Averaged
	Caprolactam	0.1077	0.11148		.01		3.50975	20		Averaged
	Safrole	0.2768	0.27879		.01		0.71893	20		Averaged
	1,2,4,5-Tetrachlorobenzene	0.5984	0.63324		.01		5.82219	20		Averaged
	Isosafrole	0.5613	0.58785		.01		4.73009	20		Averaged
	1,1'-Biphenyl	1.688	1.65436		.01		-1.99289	20		Averaged
	1,4-Naphthoquinone	0.3975	0.39531		.01		-0.55094	20		Averaged
	Pentachlorobenzene	0.5015	0.56232		.01		12.12762	20		Averaged
	1-Naphthylamine	1.134	1.25919		.01		11.03968	20		Averaged
	2-Naphthylamine	1.1859	1.38625		.01		16.89434	20		Averaged
	5-Nitro-o-toluidine	0.3233	0.36605		.01		13.22301	20		Averaged
	1,3,5-Trinitrobenzene	0.1496	0.12604		.01		-15.74866	20		Averaged
	Diallate	0.3713	0.27383		.01		-26.25101	20	*	Averaged
	Trans Diallate	0.4368	0.32215		.01		-26.24771	20	*	Averaged
	Phenacetin	0.3485	0.31839		.01		-8.63989	20		Averaged
	Cis Diallate	0.5003	0.65884		.01		31.68899	20	*	Averaged
	Atrazine	0.0514	0.05515		.01		7.29572	20		Averaged

Continuing Calibration Summary

Instrument ID: MSD3.I **Injection Date:** 26-AUG-11 10:06

Data File: s082611.B\s3h2606.D **Init. Cal. Date(s)** 12-AUG-11 15:29 13-AUG-11 13:2

Lab Sample ID **Method:** s082611.B\MSD3_8270d_081211.m

Quant Type ISTD

Compound	AVERF / Amount	RF CCV	Nominal CCV	Min RF	RF Q	%D / %Drift	Max	Drift Q	Curve Type
4-Aminobiphenyl	0.7281	0.82019		.01		12.64799	20		Averaged
Pentachloronitrobenzene	0.0947	0.09593		.01		1.29884	20		Averaged
Pronamide	0.3622	0.36342		.01		0.33683	20		Averaged
4-Nitroquinoline-1-oxide	0.0191	0.01946		.01		1.88482	20		Averaged
Methapyrilene	0.6899	0.42045		.01		-39.05638	20	*	Averaged
Isodrin	0.1473	0.13097		.01		-11.08622	20		Averaged
Benzidine	0.3034	0.51507		.01		69.76599	20	*	Averaged
Aramite	0.0973	0.07894		.01		-18.86948	20		Averaged
p-(Dimethylamino)azobenzene	0.5008	0.40447		.01		-19.23522	20		Averaged
Chlorobenzilate	0.4802	0.42887		.01		-10.6893	20		Averaged
3,3'-Dimethylbenzidine	0.5807	0.75095		.01		29.31806	20	*	Averaged
Kepone	0.1162	0.14131		.01		21.60929	20	*	Averaged
2-Acetylaminofluorene	0.2675	0.35407		.01		32.36262	20	*	Averaged
3,3'-Dichlorobenzidine	0.2928	0.35723		.01		22.00478	20	*	Averaged
7,12Dimethylbenz(a)anthracene	0.7146	0.66864		.01		-6.43157	20		Averaged
3-Methylcholanthrene	0.1091	0.11754		.01		7.73602	20		Averaged

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2606.D
Acq On : 26 Aug 2011 10:06
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.3|CCV|1|SVM|1|ACCV
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 11:04:38 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514926	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.178	6.180	1.000	1837104	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.050	8.056	1.000	974125	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.670	9.670	1.000	1667258	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.696	12.704	1.000	1176906	40.00	ng/uL	0.00
91) A Perylene-d12	264	15.057	15.066	1.000	739520	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514926	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.178	6.180	1.000	1837104	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.050	8.056	1.000	974125	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.670	9.670	1.000	1667258	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.696	12.704	1.000	1176906	40.00	ng/uL	0.00
153) B Perylene-d12	264	15.057	15.066	1.000	739520	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.178	6.180	1.000	1837104	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.050	8.056	1.000	974125	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.670	9.670	1.000	1667258	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.696	12.704	1.000	1176906	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.178	6.180	1.000	1837505	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.057	15.066	1.000	739520	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514926	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.178	6.180	1.000	1837104	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.050	8.056	1.000	974125	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.670	9.670	1.000	1667258	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.696	12.704	1.000	1176906	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514926	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.178	6.180	1.000	1837104	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.696	12.704	1.000	1176906	40.00	ng/uL	0.00
199) J Perylene-d12	264	15.057	15.066	1.000	739520	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.597	3.676	0.735	1001	0.06	ng/uL	-0.08
8) Phenol-d5	99	0.000	4.484	0.000	0	0.00	ng/uL	
25) Nitrobenzene-d5	82	5.359	5.423	0.868	873	0.05	ng/uL	-0.06
47) 2-Fluorobiphenyl	172	0.000	7.299	0.000	0	0.00	ng/uL	
66) 2,4,6-Tribromophenol	330	0.000	8.920	0.000	0	0.00	ng/uL	
83) p-Terphenyl-d14	244	0.000	11.400	0.000	0	0.00	ng/uL	

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
100) 1,4-Dioxane	88	2.535	2.464	0.518	242779	33.97	ng/uL#	73
101) Methyl methacrylate	100	2.526	2.462	0.516	148996	38.00	ng/uL#	55
102) Ethyl methacrylate	69	3.035	2.987	0.620	533642	33.13	ng/uL	80
103) 2-Picoline	93	3.296	3.250	0.674	670092	32.92	ng/uL	92
104) N-Nitrosomethylethylamine	88	3.364	3.323	0.688	296448	34.85	ng/uL#	73
105) Methyl methanesulfonate	80	3.595	3.559	0.735	358998	39.45	ng/uL	95
106) N-Nitrosodiethylamine	102	3.924	3.900	0.802	325038	37.71	ng/uL	72
107) Ethyl methanesulfonate	79	4.163	4.146	0.851	421948	32.88	ng/uL	91
108) Benzaldehyde	77	4.493	4.485	0.918	491997	36.20	ng/uL	90
109) Pentachloroethane	167	4.635	4.631	0.947	299348	42.84	ng/uL	99
110) N-Nitrosopyrrolidine	100	5.263	5.276	1.075	347412	42.36	ng/uL#	68
111) Acetophenone	105	5.277	5.290	1.078	892717	39.31	ng/uL	93
112) N-Nitrosomorpholine	56	5.297	5.308	1.082	428505	28.30	ng/uL	79

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2606.D
Acq On : 26 Aug 2011 10:06
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.3|CCV|1|SVM|1|ACCV
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 11:04:38 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

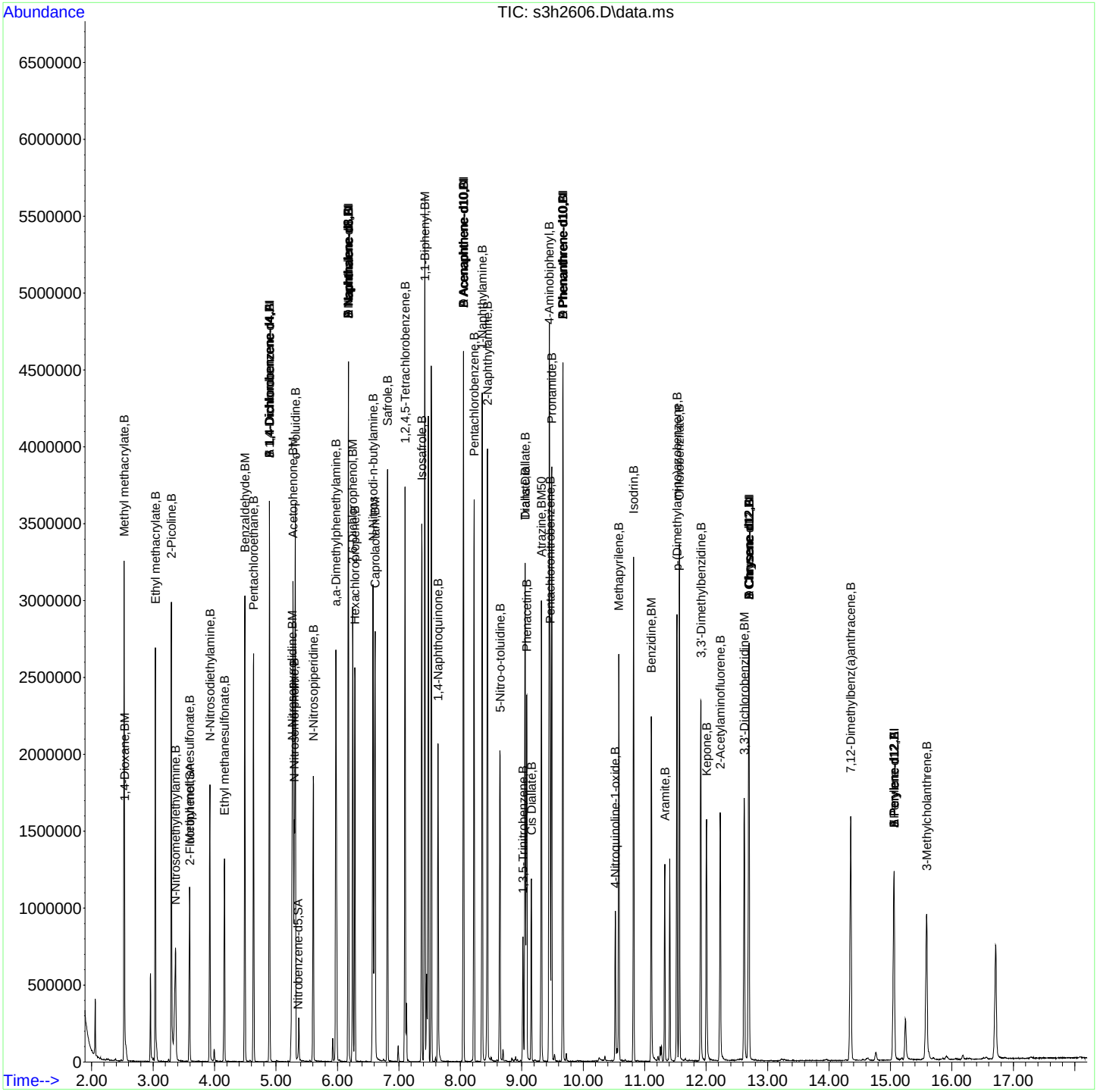
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
113) o-Toluidine	106	5.314	5.328	1.086	982614	38.45	ng/uL	99
115) N-Nitrosopiperidine	114	5.609	5.600	0.908	330939	39.46	ng/uL#	61
116) a,a-Dimethylphenethyla...	58	5.976	5.991	0.967	1848482	29.01	ng/uL	92
117) 2,6-Dichlorophenol	162	6.249	6.253	1.011	544271	45.24	ng/uL	100
118) Hexachloropropene	213	6.283	6.291	1.017	401836	50.79	ng/uL	99
119) Caprolactam	113	6.612	6.616	1.070	204802	41.39	ng/uL#	54
120) N-Nitrosodi-n-butylamine	84	6.578	6.592	1.065	476211	34.80	ng/uL#	77
121) Safrole	162	6.814	6.833	1.103	512166	40.29	ng/uL	99
123) 1,2,4,5-Tetrachloroben...	216	7.101	7.090	0.882	616855	42.33	ng/uL	100
124) 1,1-Biphenyl	154	7.422	7.417	0.922	1611558	39.20	ng/uL	98
125) Isosafrole	162	7.371	7.368	0.916	572639	41.89	ng/uL	97
126) 1,4-Naphthoquinone	158	7.638	7.635	0.949	385079	39.78	ng/uL	99
127) Pentachlorobenzene	250	8.223	8.230	1.022	547766	44.86	ng/uL	97
128) 1-Naphthylamine	143	8.357	8.365	1.038	1226613	44.42	ng/uL	99
129) 2-Naphthylamine	143	8.442	8.452	1.049	1350380	46.76	ng/uL	99
130) 5-Nitro-o-toluidine	152	8.647	8.657	1.074	356583	45.30	ng/uL	94
132) 1,3,5-Trinitrobenzene	75	9.019	9.010	0.933	210147	33.70	ng/uL	93
133) Phenacetin	108	9.081	9.076	0.939	530837	36.54	ng/uL	94
134) Diallate	86	9.053	9.053	0.936	456545	29.50	ng/uL	88
135) Cis Diallate	86	9.155	9.155	0.947	164768	7.90	ng/uL	87
136) Trans Diallate	86	9.053	9.053	0.936	456545	25.08	ng/uL	88
137) Atrazine	173	9.320	9.321	0.964	91957	42.92	ng/uL	95
138) 4-Aminobiphenyl	169	9.445	9.446	0.977	1367468	45.06	ng/uL	100
139) Pentachloronitrobenzene	237	9.459	9.457	0.978	159943	40.54	ng/uL	95
140) Pronamide	173	9.488	9.491	0.981	605923	40.13	ng/uL	100
141) 4-Nitroquinoline-1-oxide	101	10.519	10.535	1.088	32449	40.76	ng/uL	89
142) Methapyrilene	58	10.579	10.601	1.094	701001	24.38	ng/uL	77
143) Isodrin	193	10.820	10.840	1.119	218363	35.55	ng/uL	98
144) Benzidine	184	11.107	11.134	1.149	858760	67.90	ng/uL	98
146) Aramite	185	11.326	11.326	0.892	92904	32.44	ng/uL	99
147) Kepone	272	12.005	12.025	0.946	166308	48.66	ng/uL	98
148) p-(Dimethylamino)azobe...	120	11.525	11.557	0.908	476024	32.31	ng/uL	90
149) Chlorobenzilate	251	11.565	11.601	0.911	504738	35.72	ng/uL	97
150) 3,3'-Dimethylbenzidine	212	11.914	11.938	0.938	883792	51.73	ng/uL	100
151) 2-Acetylaminofluorene	181	12.230	12.249	0.963	416708	52.95	ng/uL	99
152) 3,3'-Dichlorobenzidine	252	12.619	12.632	0.994	420426	48.80	ng/uL	99
154) 7,12-Dimethylbenz(a)an...	256	14.352	14.372	0.953	494472	37.43	ng/uL	100
155) 3-Methylcholanthrene	269	15.588	15.594	1.035	86926	43.11	ng/uL	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2606.D
Acq On : 26 Aug 2011 10:06
Operator : JLD1
InstName : MSD 3
Sample : |WBN110809-18.3|CCV|1|SVM|1|ACCV
Misc : |MIX[B]
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 26 11:04:38 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



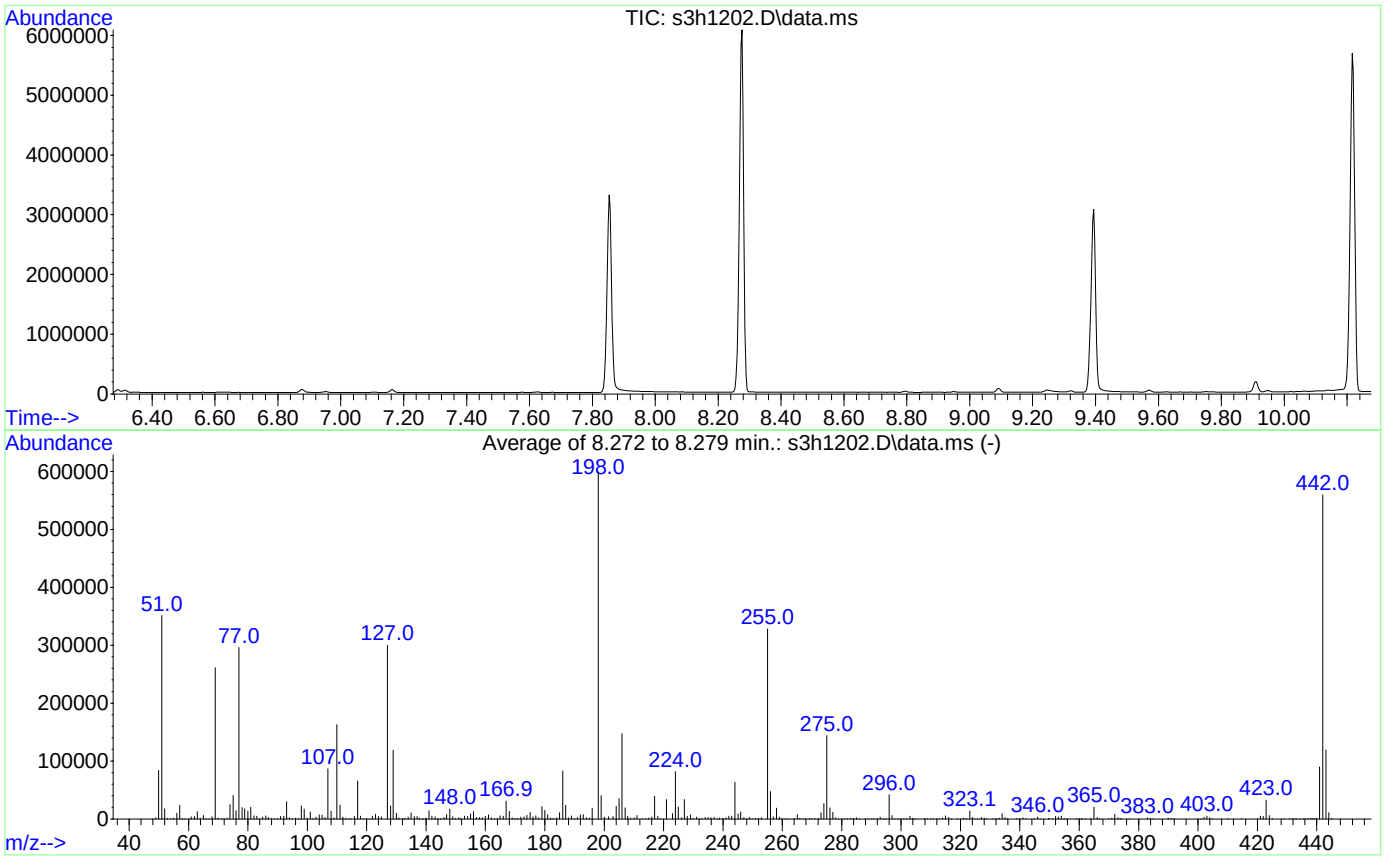
Quality Control Data

DFTPP Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1202.D
Acq On : 12 Aug 2011 08:54
Operator : JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Title : dftpp / endrin / ddt SubList :
Last Update : Tue Jun 08 08:47:00 2010



AutoFind: Scans 789, 790, 791; Background Corrected with Scan 778

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	58.6	351128	PASS
68	69	0.00	2	1.4	3653	PASS
69	198	0.00	100	43.6	261124	PASS
70	69	0.00	2	0.5	1377	PASS
127	198	10	80	50.1	300032	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	599104	PASS
199	198	5	9	6.7	39915	PASS
275	198	10	60	24.0	143896	PASS
365	198	1	100	3.4	20347	PASS
441	442	0.01	24	16.1	89944	PASS
442	198	50	100	93.5	559915	PASS
443	442	15	24	21.2	118925	PASS

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1202.D
Acq On : 12 Aug 2011 08:54
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 15:50:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

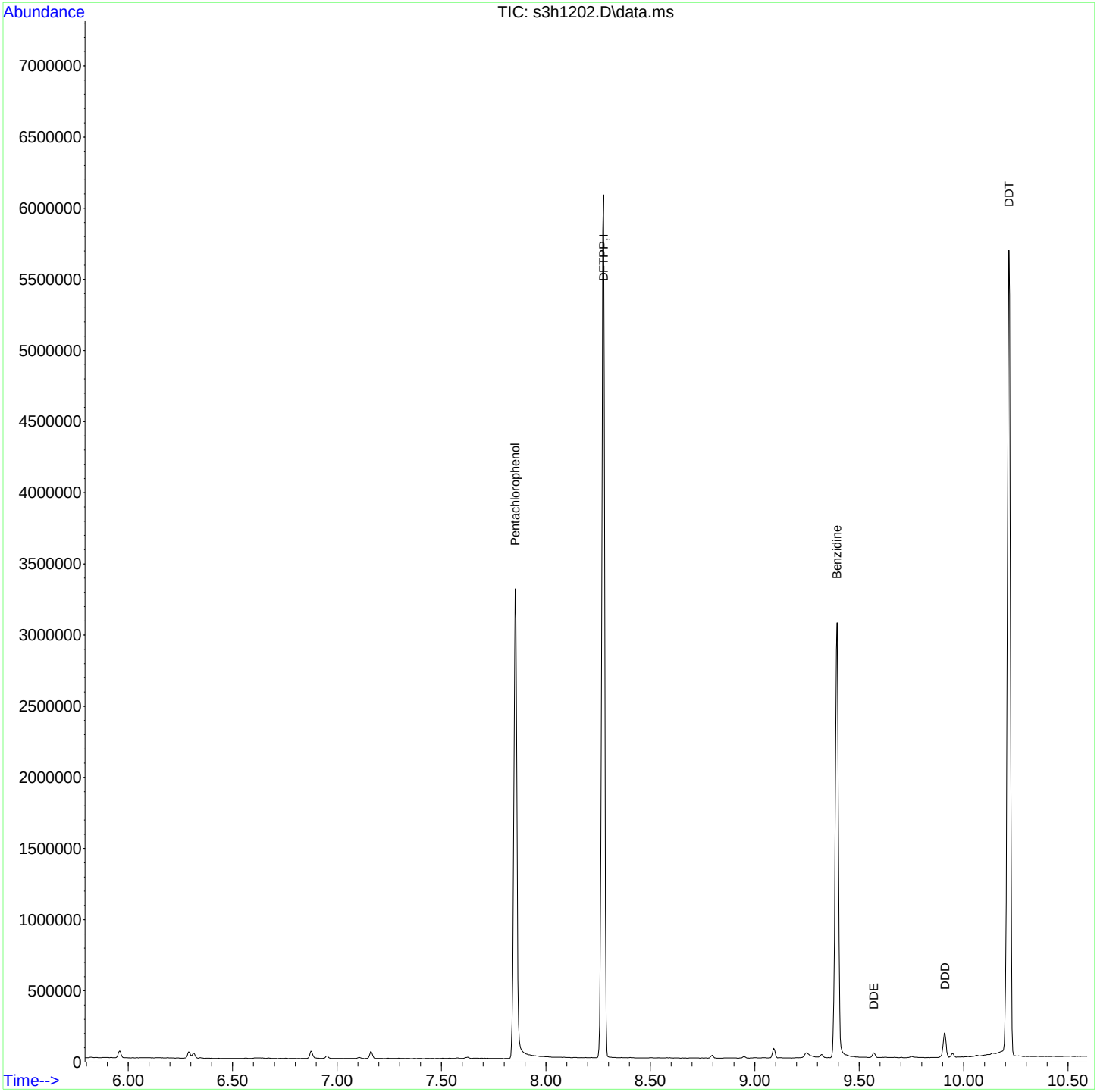
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	8.276	8.276	1.000	5759585	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	8.276	8.276	1.000	5759585	No Calib	#	
3) Pentachlorophenol	266	7.853	7.853	0.949	371323	3.20	ug/l	100
4) Benzidine	184	9.394	9.394	1.135	1301278	6.61	ug/l	100
5) DDE	246	9.570	9.570	1.156	3245	1.13	ug/l	97
6) DDD	235	9.910	9.910	1.198	31956	2.98	ug/l	98
7) DDT	235	10.216	10.216	1.234	1079434	3.73	ug/l	99

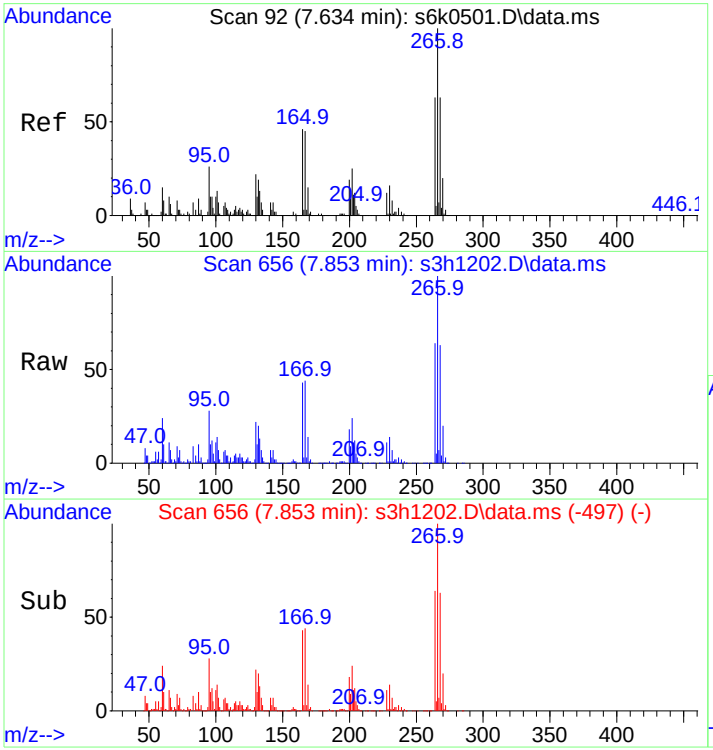
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1202.D
Acq On : 12 Aug 2011 08:54
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 15:50:45 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

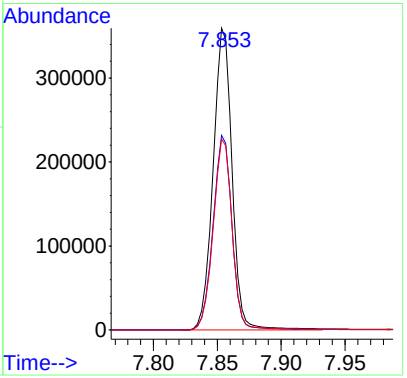


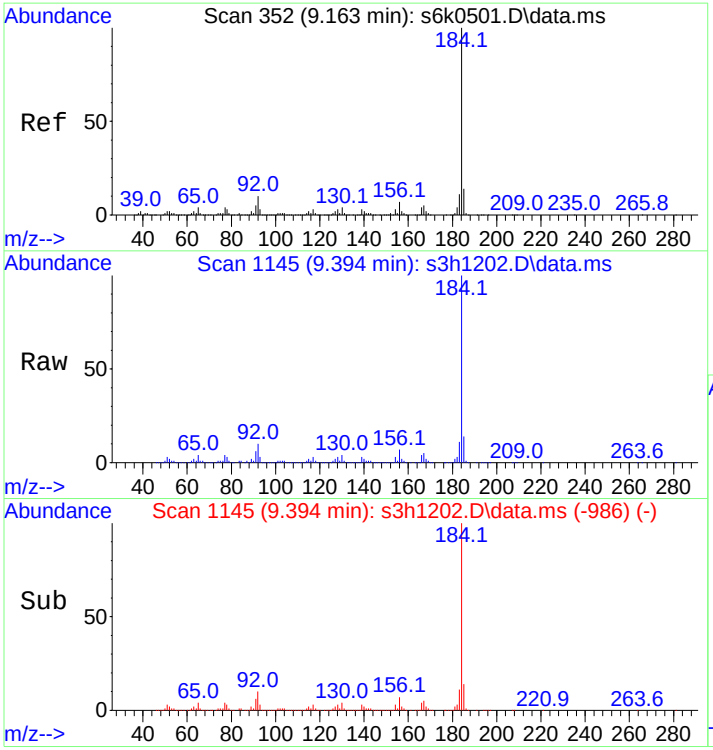


#3
Pentachlorophenol
Concen: 3.20 ug/l
RT: 7.853 min Scan# 656
Delta R.T. 0.000 min
Lab File: s3h1202.D
Acq: 12 Aug 2011 08:54

Tgt Ion:266 Resp: 371323

Ion	Ratio	Lower	Upper
266	100		
264	64.2	0.0	164.5
268	63.3	0.0	163.3

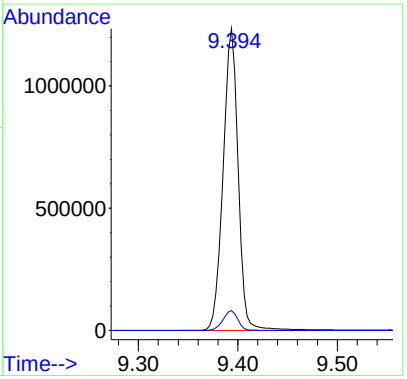


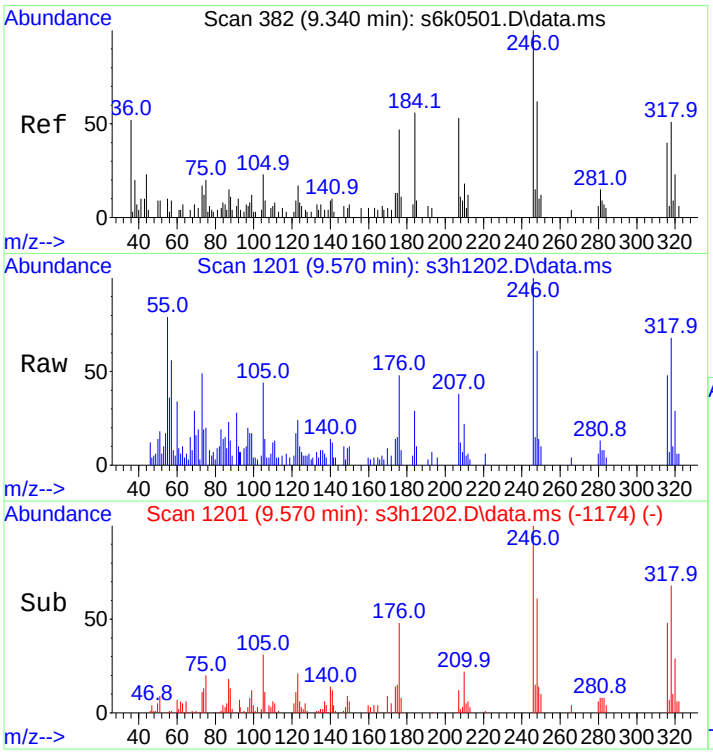


#4
Benzidine
Concen: 6.61 ug/l
RT: 9.394 min Scan# 1145
Delta R.T. 0.000 min
Lab File: s3h1202.D
Acq: 12 Aug 2011 08:54

Tgt Ion:184 Resp: 1301278

Ion	Ratio	Lower	Upper
184	100		
156	6.5	0.0	106.6

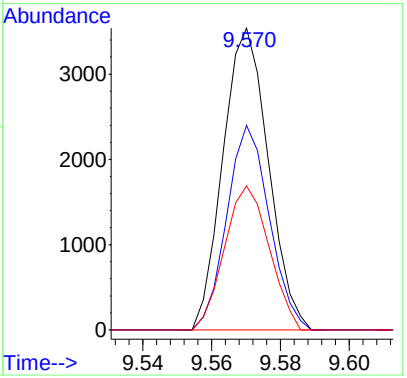


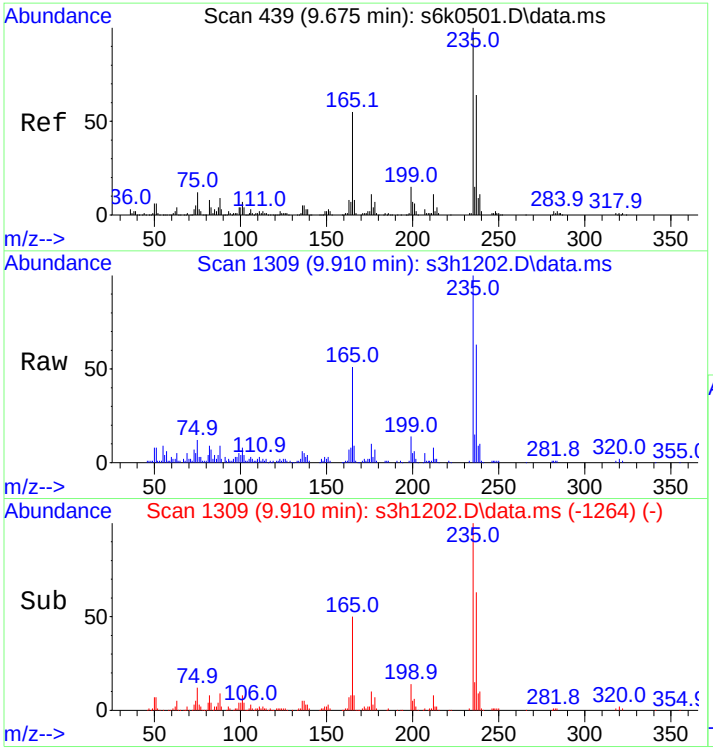


#5
DDE
Concen: 1.13 ug/l
RT: 9.570 min Scan# 1201
Delta R.T. 0.000 min
Lab File: s3h1202.D
Acq: 12 Aug 2011 08:54

Tgt Ion:246 Resp: 3245

Ion	Ratio	Lower	Upper
246	100		
318	63.6	0.0	167.7
316	46.9	0.0	147.7

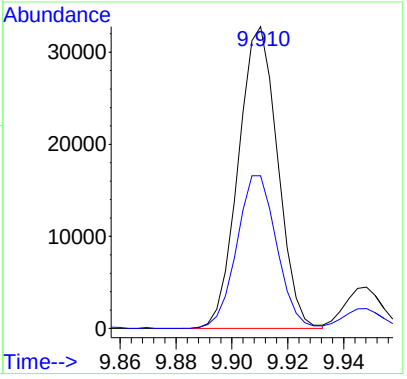


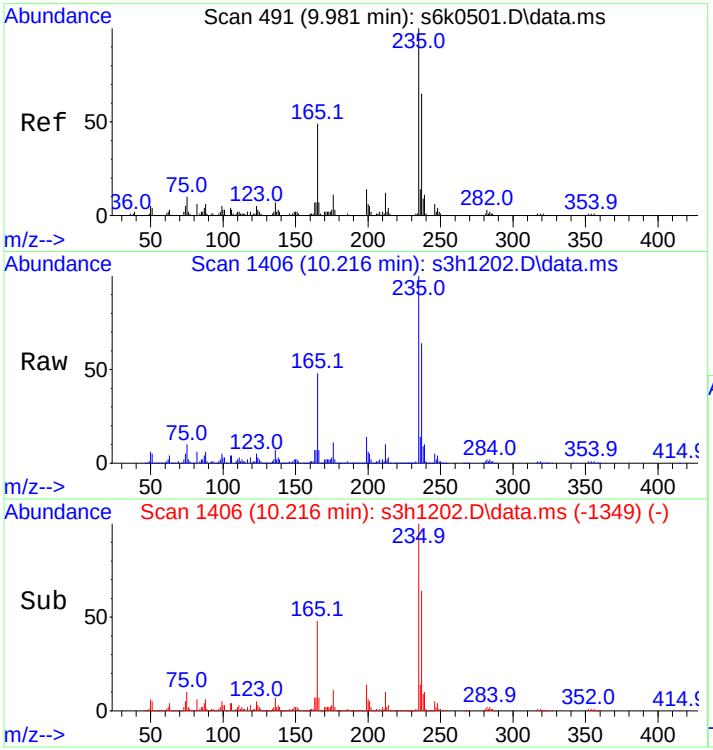


#6
DDD
Concen: 2.98 ug/l
RT: 9.910 min Scan# 1309
Delta R.T. 0.000 min
Lab File: s3h1202.D
Acq: 12 Aug 2011 08:54

Tgt Ion:235 Resp: 31956

Ion	Ratio	Lower	Upper
235	100		
165	51.7	0.0	150.6

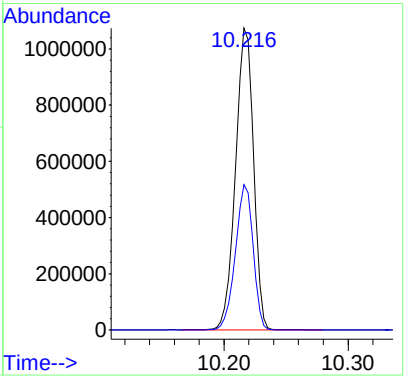




#7
DDT
Concen: 3.73 ug/l
RT: 10.216 min Scan# 1406
Delta R.T. 0.000 min
Lab File: s3h1202.D
Acq: 12 Aug 2011 08:54

Tgt Ion:235 Resp: 1079434

Ion	Ratio	Lower	Upper
235	100		
165	47.5	0.0	148.1



8270 Breakdown Report

Data File : C:\msdchem\1\DATA\s081211.B\s3h1202.D Vial: 1
Acq On : 12 Aug 2011 08:54 Operator: JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP| Inst : MSD 3
Misc : |WBN11724-01| Multiplr: 1.00
IntFile : rteint.p

Compounds	Area/%Breakdown	8270C	8270D
DDE	3245		
DDD	31956		
DDT	1079434		
Breakdown	3.16%	Pass(<20)	Pass(<20)

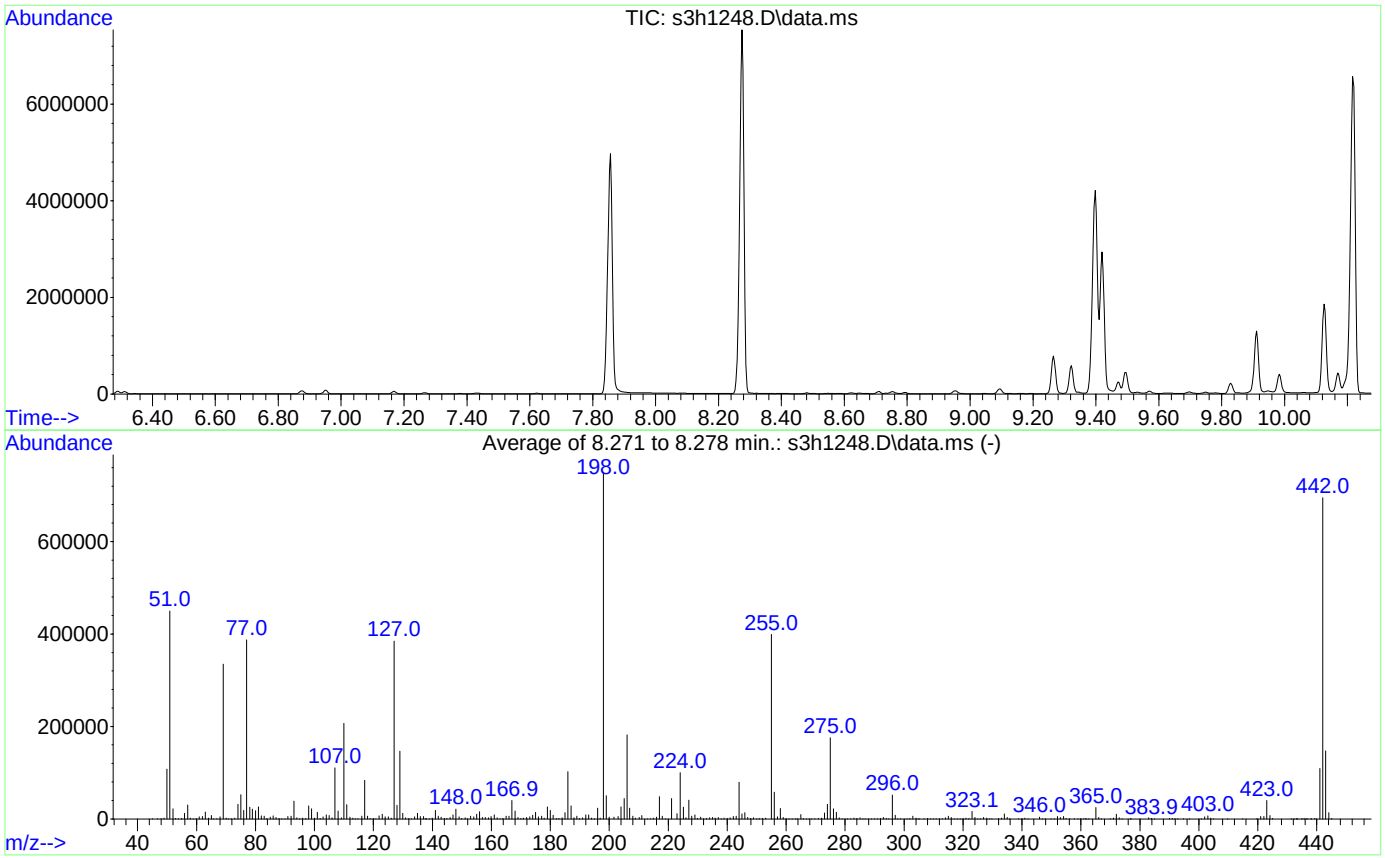
Compounds	Tailing Factor	8270C	8270D
Benzidine	0.80	Pass(<3)	Pass(<2)
Pentachlorophenol	1.02	Pass(<5)	Pass(<2)

DFTPP Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1248.D
Acq On : 13 Aug 2011 05:04
Operator : JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Title : dftpp / endrin / ddt SubList :
Last Update : Tue Jun 08 08:47:00 2010



AutoFind: Scans 790, 791, 792; Background Corrected with Scan 779

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	59.9	449814	PASS
68	69	0.00	2	1.4	4556	PASS
69	198	0.00	100	44.6	334528	PASS
70	69	0.00	2	0.5	1615	PASS
127	198	10	80	51.3	384789	PASS
197	198	0.00	2	0.2	1611	PASS
198	198	50	100	100.0	750336	PASS
199	198	5	9	6.7	50192	PASS
275	198	10	60	23.4	175296	PASS
365	198	1	100	3.3	24549	PASS
441	442	0.01	24	15.7	108779	PASS
442	198	50	100	92.6	694699	PASS
443	442	15	24	21.2	147136	PASS

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1248.D
Acq On : 13 Aug 2011 05:04
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 15:48:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

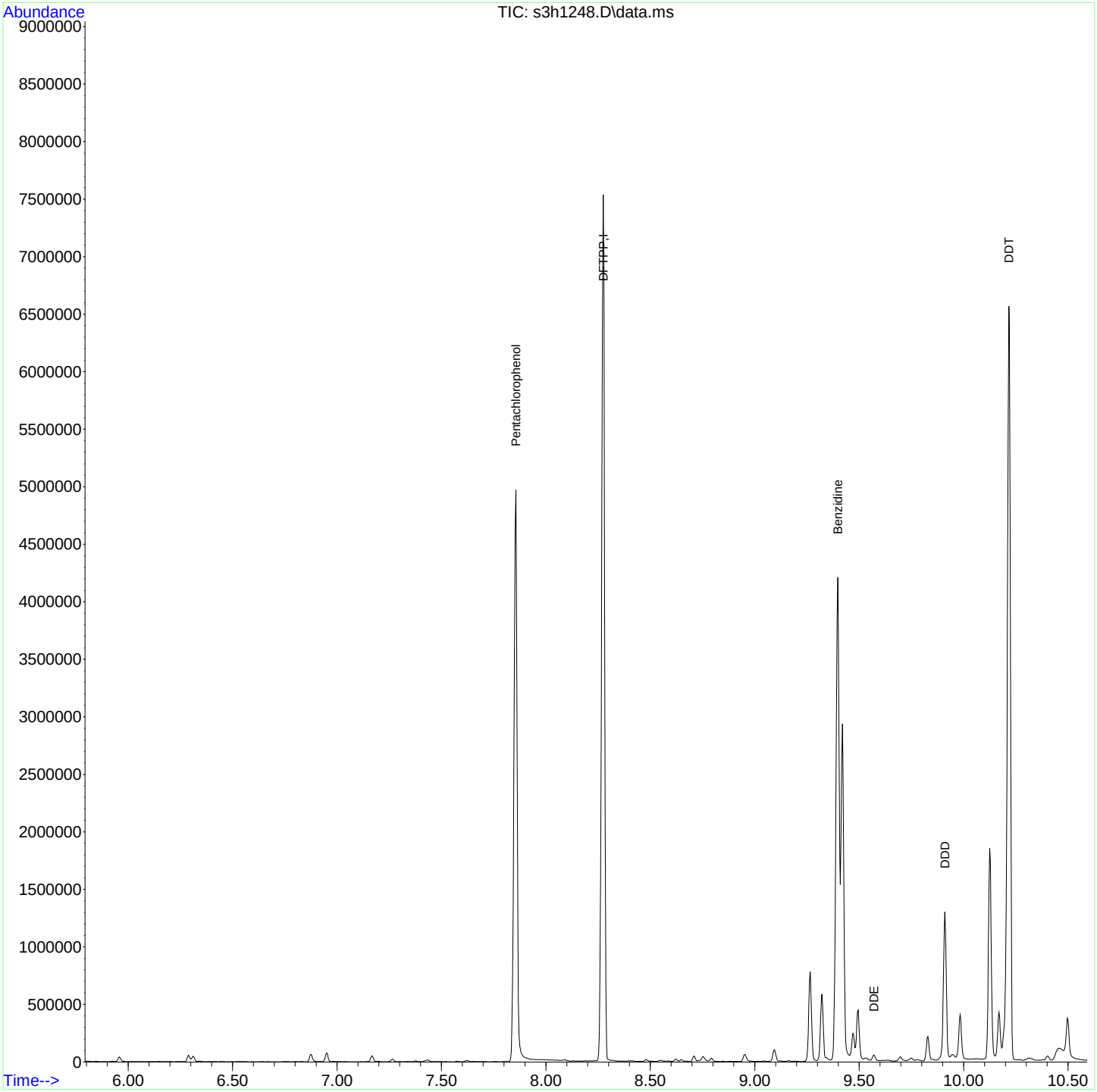
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	8.275	8.276	1.000	7293486	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	8.275	8.276	1.000	7293486	No Calib	#	
3) Pentachlorophenol	266	7.856	7.853	0.949	596225	4.06	ug/l	99
4) Benzidine	184	9.397	9.394	1.136	1940222	7.78	ug/l	100
5) DDE	246	9.571	9.570	1.157	4514	1.24	ug/l	93
6) DDD	235	9.911	9.910	1.198	219850	16.21	ug/l	96
7) DDT	235	10.216	10.216	1.235	1272992	3.47	ug/l	99

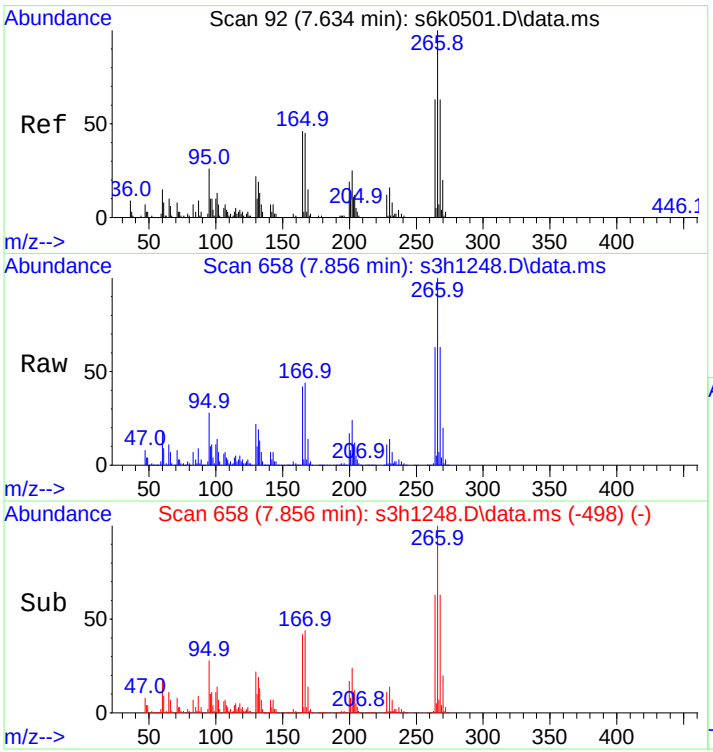
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s081211.B\
Data File : s3h1248.D
Acq On : 13 Aug 2011 05:04
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 15:48:15 2011
Quant Method : C:\msdchem\1\DATA\s081211.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

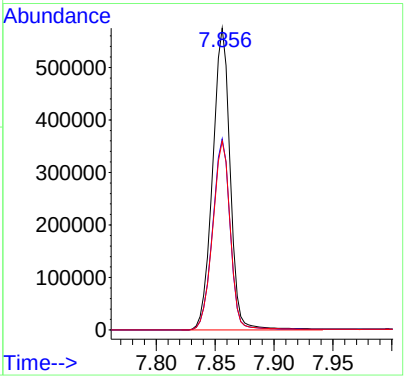


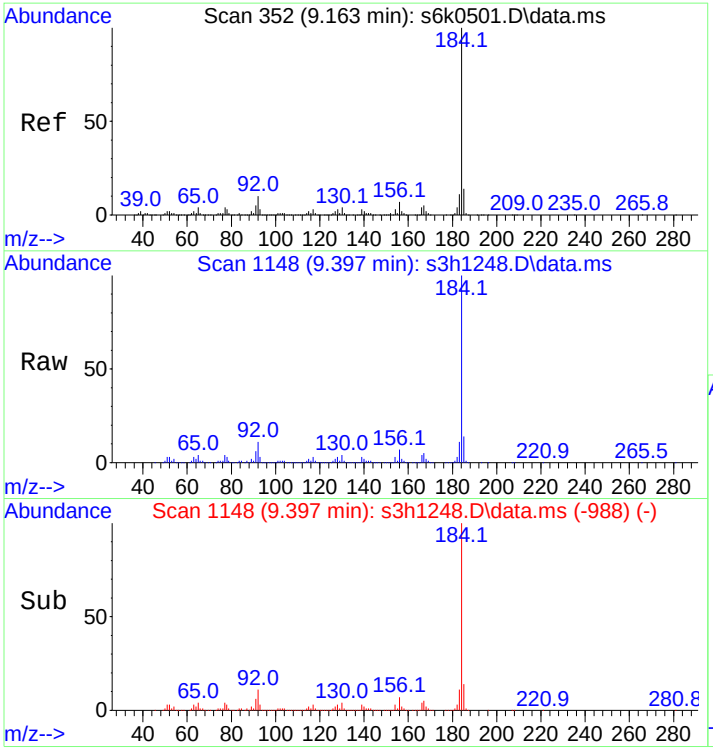


#3
Pentachlorophenol
Concen: 4.06 ug/l
RT: 7.856 min Scan# 658
Delta R.T. 0.003 min
Lab File: s3h1248.D
Acq: 13 Aug 2011 05:04

Tgt Ion:266 Resp: 596225

Ion	Ratio	Lower	Upper
266	100		
264	63.5	0.0	164.5
268	62.9	0.0	163.3

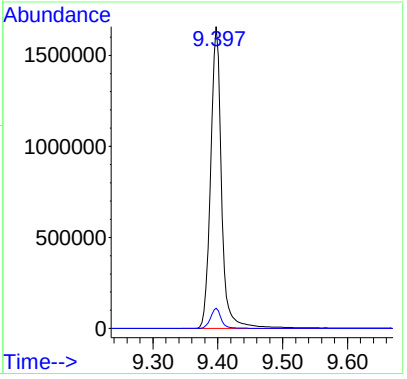


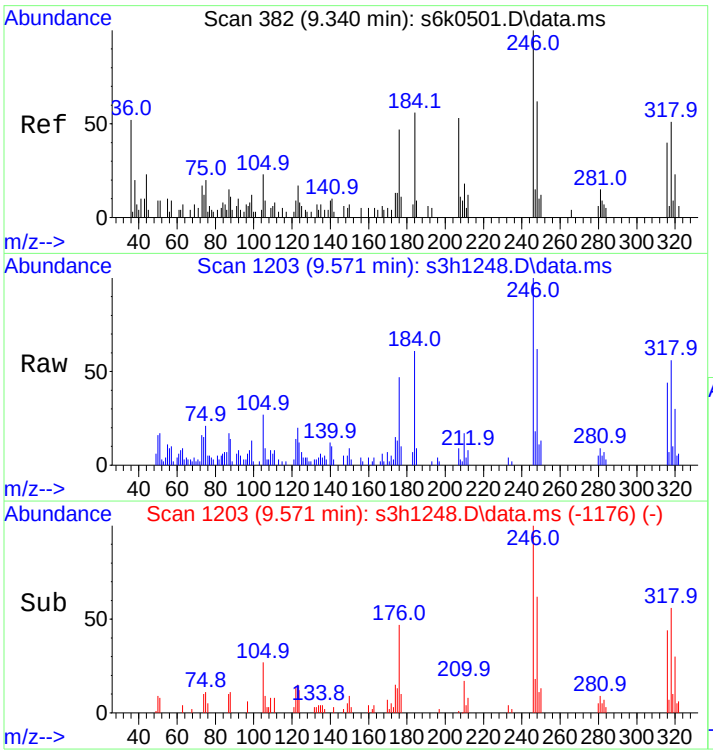


#4
Benzidine
Concen: 7.78 ug/l
RT: 9.397 min Scan# 1148
Delta R.T. 0.004 min
Lab File: s3h1248.D
Acq: 13 Aug 2011 05:04

Tgt Ion:184 Resp: 1940222

Ion	Ratio	Lower	Upper
184	100		
156	6.6	0.0	106.6

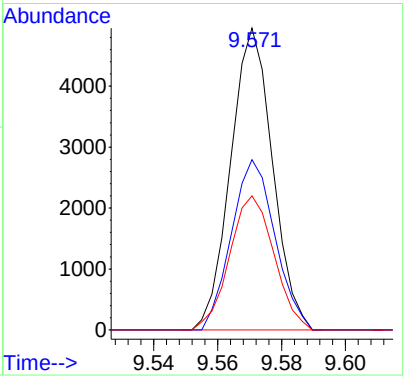


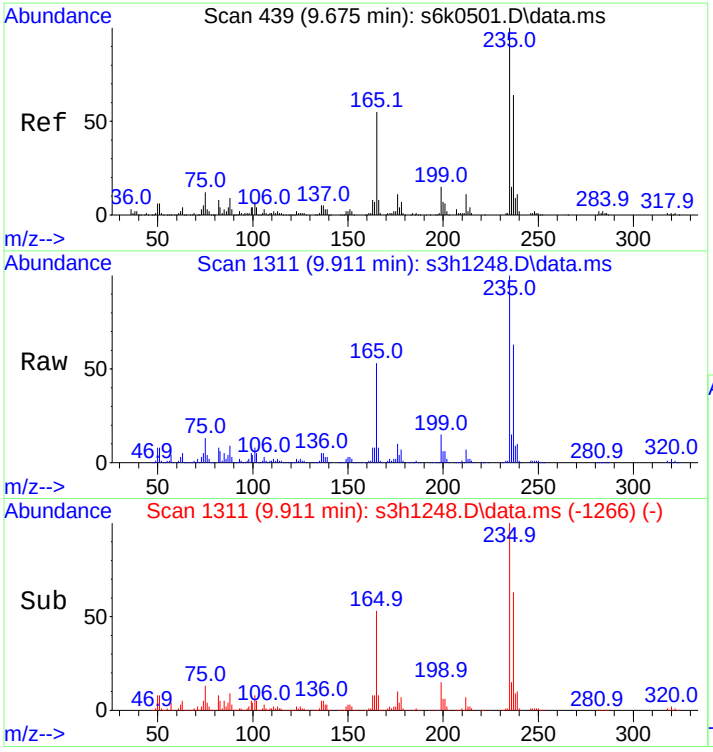


#5
DDE
Concen: 1.24 ug/l
RT: 9.571 min Scan# 1203
Delta R.T. 0.001 min
Lab File: s3h1248.D
Acq: 13 Aug 2011 05:04

Tgt Ion:246 Resp: 4514

Ion	Ratio	Lower	Upper
246	100		
318	58.5	0.0	167.7
316	47.0	0.0	147.7

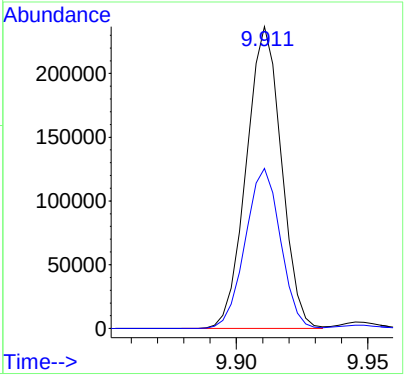


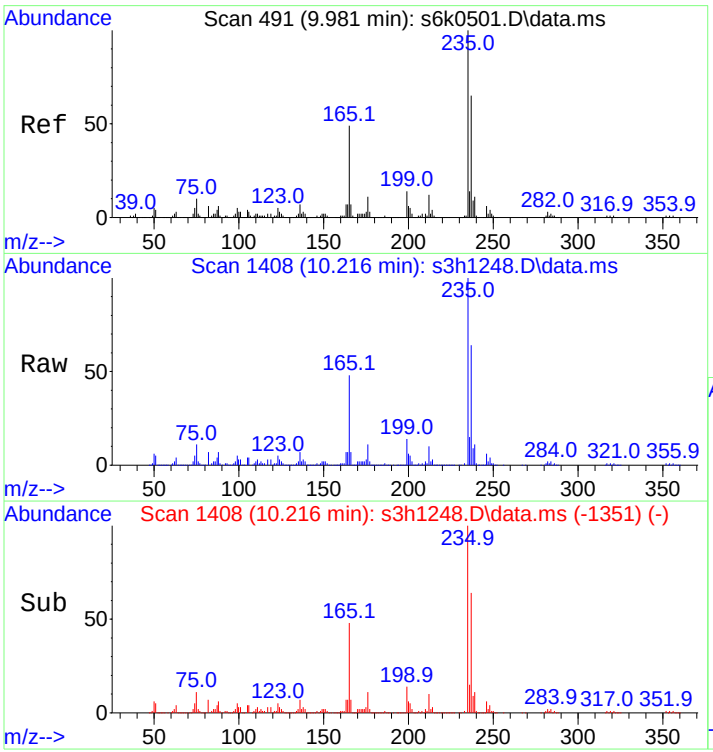


#6
DDD
Concen: 16.21 ug/l
RT: 9.911 min Scan# 1311
Delta R.T. 0.000 min
Lab File: s3h1248.D
Acq: 13 Aug 2011 05:04

Tgt Ion:235 Resp: 219850

Ion	Ratio	Lower	Upper
235	100		
165	53.2	0.0	150.6

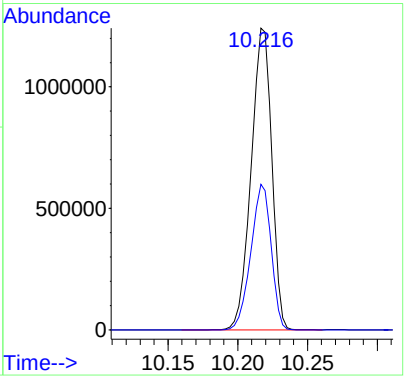




#7
DDT
Concen: 3.47 ug/l
RT: 10.216 min Scan# 1408
Delta R.T. 0.000 min
Lab File: s3h1248.D
Acq: 13 Aug 2011 05:04

Tgt Ion:235 Resp: 1272992

Ion	Ratio	Lower	Upper
235	100		
165	47.5	0.0	148.1



8270 Breakdown Report

Data File : C:\msdchem\1\DATA\s081211.B\s3h1248.D Vial: 1
Acq On : 13 Aug 2011 05:04 Operator: JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP| Inst : MSD 3
Misc : |WBN11724-01| Multiplr: 1.00
IntFile : rteint.p

Compounds	Area/%Breakdown	8270C	8270D
DDE	4514		
DDD	219850		
DDT	1272992		
Breakdown	14.98%	Pass(<20)	Pass(<20)

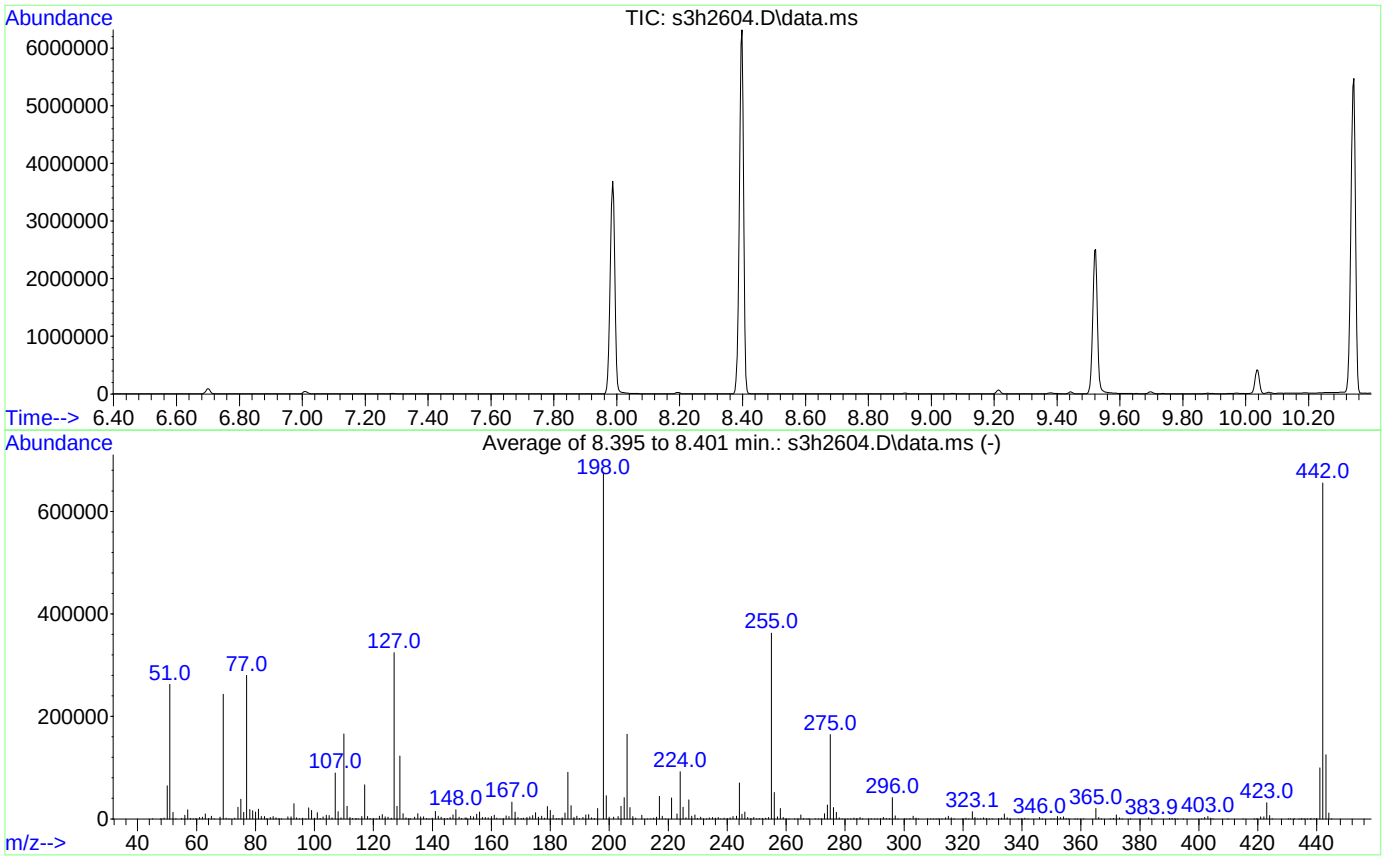
Compounds	Tailing Factor	8270C	8270D
Benzidine	0.94	Pass(<3)	Pass(<2)
Pentachlorophenol	0.80	Pass(<5)	Pass(<2)

DFTPP Tune Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2604.D
Acq On : 26 Aug 2011 09:22
Operator : JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\DATA\s082611.B\BNABrk_Down8270D.m
Title : dftpp / endrin / ddt SubList :
Last Update : Tue Jun 08 08:47:00 2010



AutoFind: Scans 830, 831, 832; Background Corrected with Scan 819

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.8	262422	PASS
68	69	0.00	2	1.3	3251	PASS
69	198	0.00	100	35.9	243179	PASS
70	69	0.00	2	0.5	1319	PASS
127	198	10	80	47.9	324160	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	676736	PASS
199	198	5	9	6.7	45024	PASS
275	198	10	60	24.4	164843	PASS
365	198	1	100	3.0	20379	PASS
441	442	0.01	24	15.2	99824	PASS
442	198	50	100	96.8	655296	PASS
443	442	15	24	19.1	125333	PASS

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2604.D
Acq On : 26 Aug 2011 09:22
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 12:03:29 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

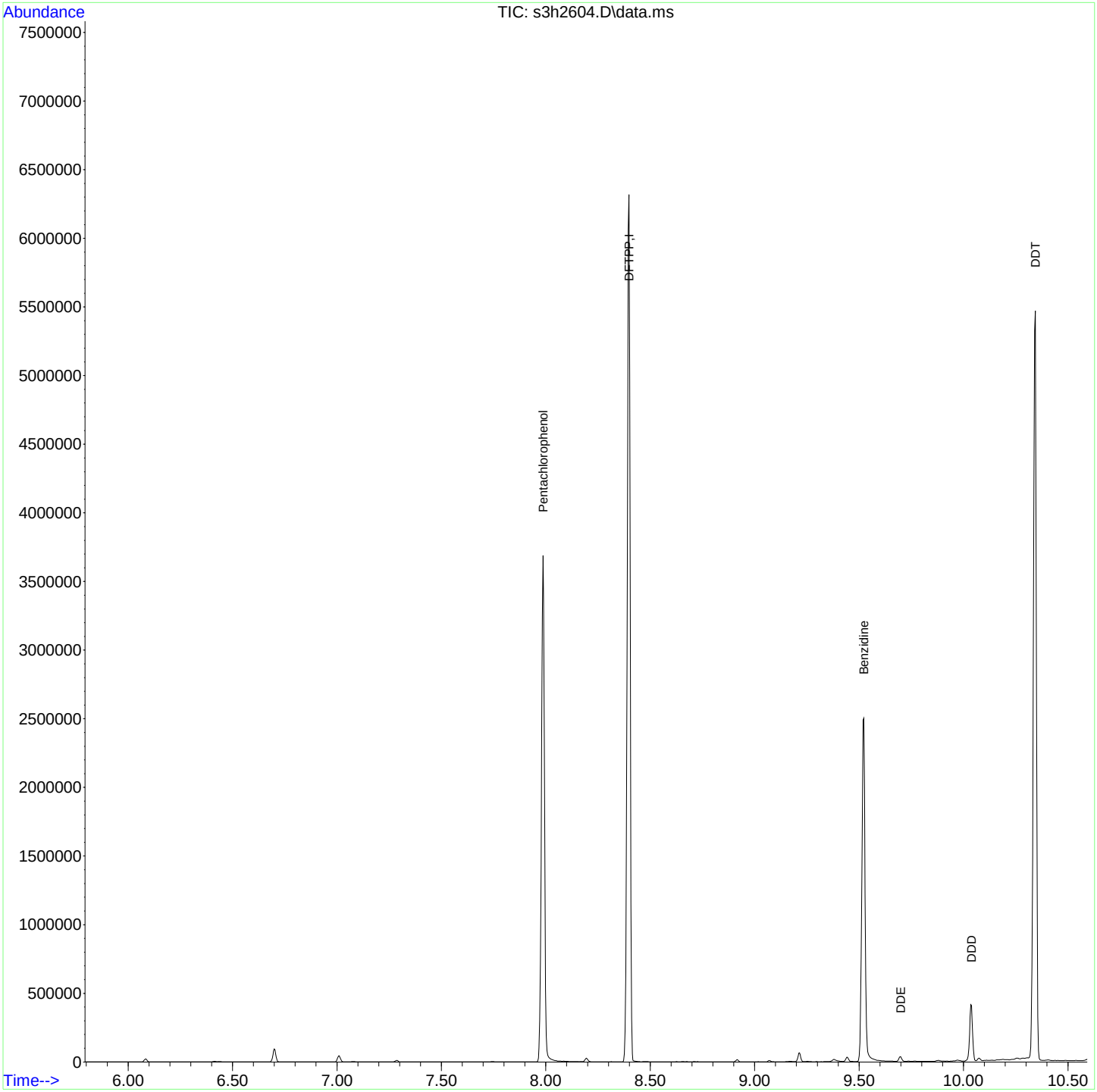
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
Internal Standards								Dev(Min)
1) DFTPP	TIC	8.398	8.398	1.000	6017375	5.00	ug/l	# 0.00
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
2) DFTPP	TIC	8.398	8.398	1.000	6017375	No Calib	#	
3) Pentachlorophenol	266	7.986	7.986	0.951	445919	3.68	ug/l	100
4) Benzidine	184	9.523	9.523	1.134	1152959	5.61	ug/l	100
5) DDE	246	9.699	9.699	1.155	3751	1.25	ug/l	98
6) DDD	235	10.038	10.038	1.195	77704	6.94	ug/l	98
7) DDT	235	10.343	10.343	1.232	1067694	3.53	ug/l	100

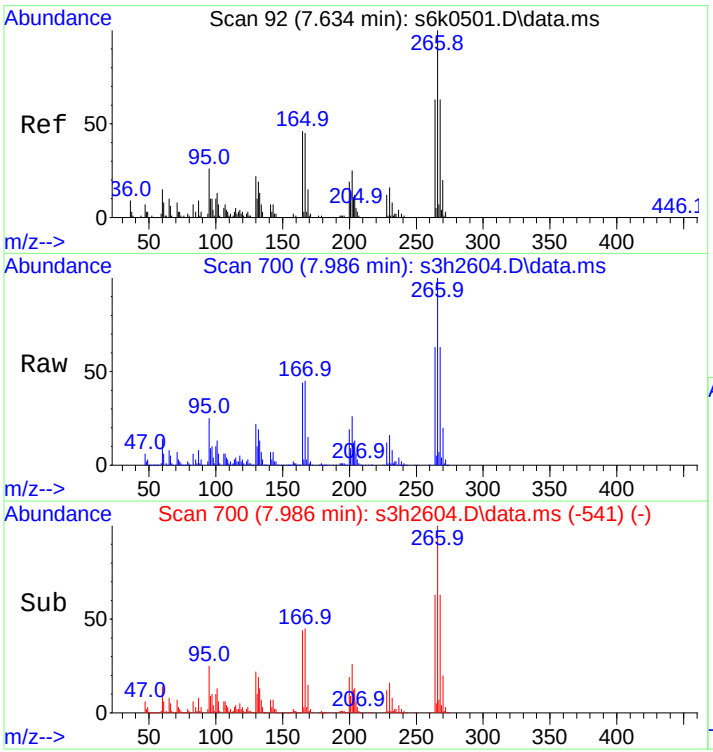
(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2604.D
Acq On : 26 Aug 2011 09:22
Operator : JLD1
InstName : MSD 3
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP|
Misc : |WBN11724-01|
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 12:03:29 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\BNABrk_Down8270D.m
Quant Title : dftpp / endrin / ddt SubList :
QLast Update : Tue Jun 08 08:47:00 2010
Response via : Initial Calibration
Integrator: RTE

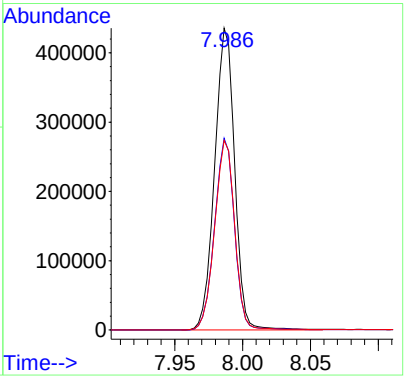


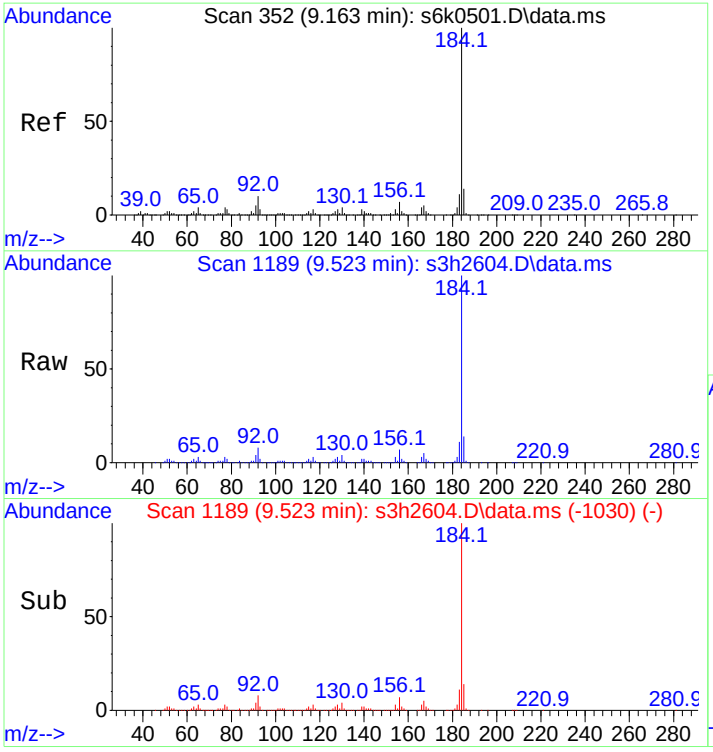


#3
Pentachlorophenol
Concen: 3.68 ug/l
RT: 7.986 min Scan# 700
Delta R.T. 0.000 min
Lab File: s3h2604.D
Acq: 26 Aug 2011 09:22

Tgt Ion:266 Resp: 445919

Ion	Ratio	Lower	Upper
266	100		
264	63.1	0.0	163.5
268	63.1	0.0	162.7

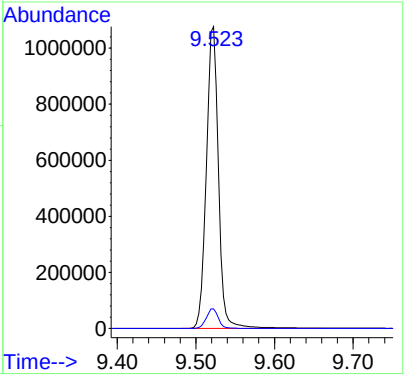


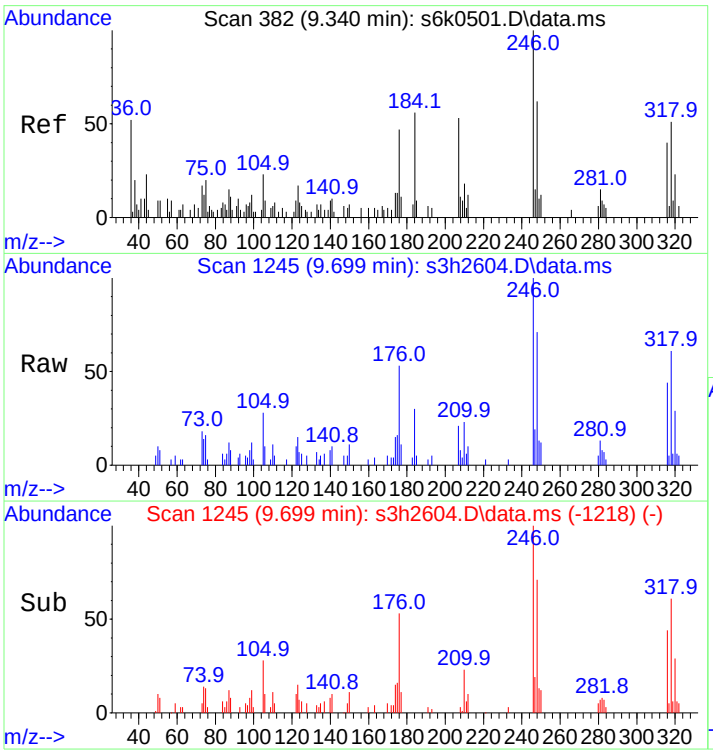


#4
Benzidine
Concen: 5.61 ug/l
RT: 9.523 min Scan# 1189
Delta R.T. 0.000 min
Lab File: s3h2604.D
Acq: 26 Aug 2011 09:22

Tgt Ion:184 Resp: 1152959

Ion	Ratio	Lower	Upper
184	100		
156	6.5	0.0	106.5

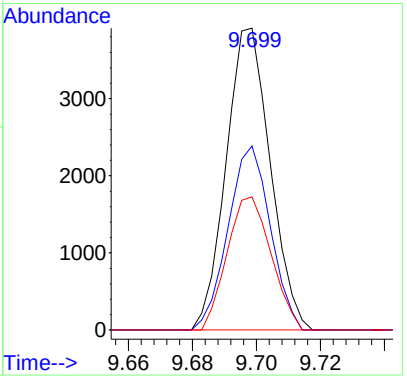


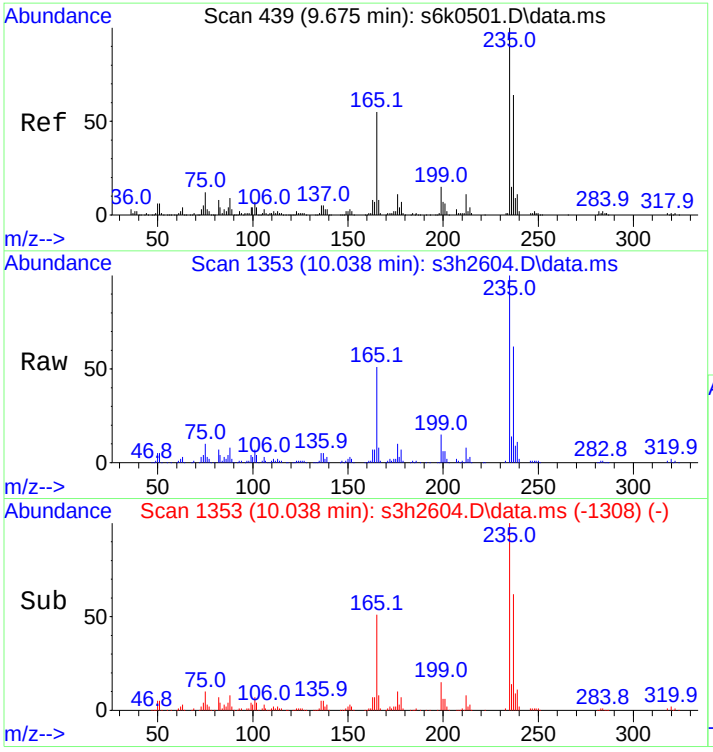


#5
DDE
Concen: 1.25 ug/l
RT: 9.699 min Scan# 1245
Delta R.T. 0.000 min
Lab File: s3h2604.D
Acq: 26 Aug 2011 09:22

Tgt Ion:246 Resp: 3751

Ion	Ratio	Lower	Upper
246	100		
318	58.3	0.0	161.0
316	43.9	0.0	144.1

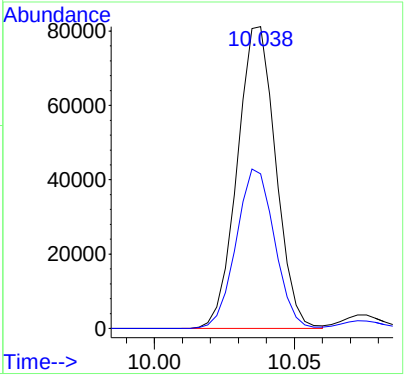


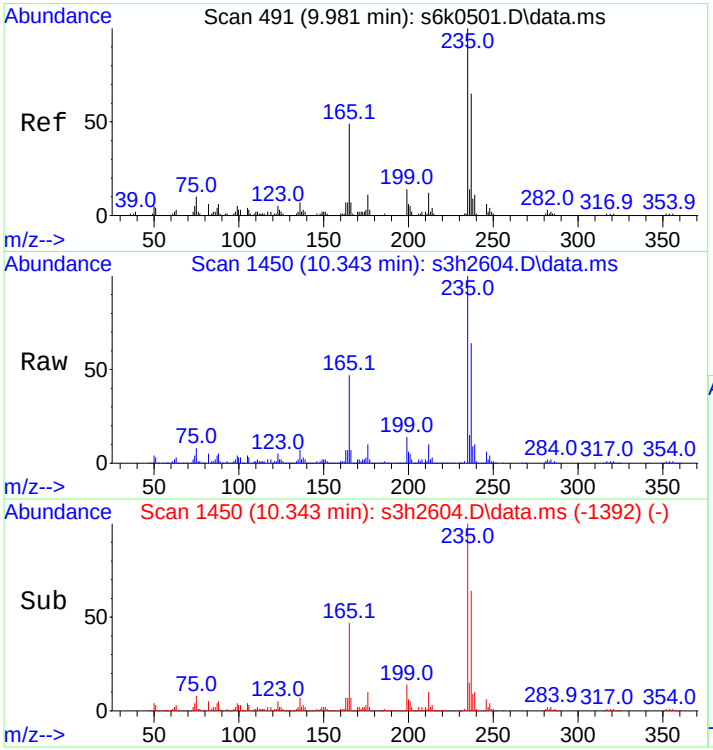


#6
DDD
Concen: 6.94 ug/l
RT: 10.038 min Scan# 1353
Delta R.T. 0.000 min
Lab File: s3h2604.D
Acq: 26 Aug 2011 09:22

Tgt Ion:235 Resp: 77704

Ion	Ratio	Lower	Upper
235	100		
165	52.7	0.0	151.2

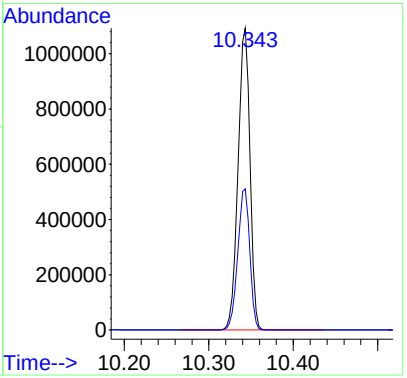




#7
DDT
Concen: 3.53 ug/l
RT: 10.343 min Scan# 1450
Delta R.T. 0.000 min
Lab File: s3h2604.D
Acq: 26 Aug 2011 09:22

Tgt Ion:235 Resp: 1067694

Ion	Ratio	Lower	Upper
235	100		
165	47.0	0.0	146.7



8270 Breakdown Report

Data File : C:\msdchem\1\DATA\s082611.B\s3h2604.D Vial: 1
Acq On : 26 Aug 2011 09:22 Operator: JLD1
Sample : |WBN110724-01|DFTPP|1|SVM|1|DFTPP| Inst : MSD 3
Misc : |WBN11724-01| Multiplr: 1.00
IntFile : rteint.p

Compounds	Area/%Breakdown	8270C	8270D
DDE	3751		
DDD	77704		
DDT	1067694		
Breakdown	7.09%	Pass(<20)	Pass(<20)

Compounds	Tailing Factor	8270C	8270D
Benzidine	0.76	Pass(<3)	Pass(<2)
Pentachlorophenol	0.98	Pass(<5)	Pass(<2)

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473715**				
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1135986**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 11:24**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2608.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol	U	3.00	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether	U	3.00	ug/L	3.00	10.0
95-57-8	2-Chlorophenol	U	3.00	ug/L	3.00	10.0
39638-32-9	bis(2-Chloroisopropyl)ether	U	3.00	ug/L	3.00	10.0
95-48-7	o-Cresol	U	3.00	ug/L	3.00	10.0
65794-96-9	m,p-Cresols	U	3.00	ug/L	3.00	10.0
621-64-7	N-Nitrosodipropylamine	U	3.00	ug/L	3.00	10.0
67-72-1	Hexachloroethane	U	3.00	ug/L	3.00	10.0
98-95-3	Nitrobenzene	U	3.00	ug/L	3.00	10.0
78-59-1	Isophorone	U	3.00	ug/L	3.00	10.0
88-75-5	2-Nitrophenol	U	3.00	ug/L	3.00	10.0
105-67-9	2,4-Dimethylphenol	U	3.00	ug/L	3.00	10.0
111-91-1	bis(2-Chloroethoxy)methane	U	3.00	ug/L	3.00	10.0
120-83-2	2,4-Dichlorophenol	U	3.00	ug/L	3.00	10.0
106-47-8	4-Chloroaniline	U	3.00	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene	U	3.00	ug/L	3.00	10.0
59-50-7	4-Chloro-3-methylphenol	U	3.00	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene	U	0.300	ug/L	0.300	1.00
91-20-3	Naphthalene	U	0.300	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene	U	3.00	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol	U	3.00	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol	U	3.00	ug/L	3.00	10.0
91-58-7	2-Chloronaphthalene	U	0.300	ug/L	0.300	1.00
88-74-4	o-Nitroaniline	U	3.00	ug/L	3.00	10.0
99-09-2	m-Nitroaniline	U	3.00	ug/L	3.00	10.0
131-11-3	Dimethylphthalate	U	3.00	ug/L	3.00	10.0
606-20-2	2,6-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene	U	3.00	ug/L	3.00	10.0
208-96-8	Acenaphthylene	U	0.300	ug/L	0.300	1.00
83-32-9	Acenaphthene	U	0.300	ug/L	0.300	1.00
51-28-5	2,4-Dinitrophenol	U	5.00	ug/L	5.00	20.0
132-64-9	Dibenzofuran	U	3.00	ug/L	3.00	10.0
58-90-2	2,3,4,6-Tetrachlorophenol	U	3.00	ug/L	3.00	10.0
84-66-2	Diethylphthalate	U	3.00	ug/L	3.00	10.0
100-02-7	4-Nitrophenol	U	3.00	ug/L	3.00	10.0
86-73-7	Fluorene	U	0.300	ug/L	0.300	1.00
7005-72-3	4-Chlorophenylphenylether	U	3.00	ug/L	3.00	10.0
100-01-6	p-Nitroaniline	U	3.00	ug/L	3.00	10.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473715**				
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1135986**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 11:24**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2608.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol	U	3.00	ug/L	3.00	10.0
122-39-4	Diphenylamine	U	3.00	ug/L	3.00	10.0
101-55-3	4-Bromophenylphenylether	U	3.00	ug/L	3.00	10.0
118-74-1	Hexachlorobenzene	U	3.00	ug/L	3.00	10.0
87-86-5	Pentachlorophenol	U	3.00	ug/L	3.00	10.0
85-01-8	Phenanthrene	U	0.300	ug/L	0.300	1.00
120-12-7	Anthracene	U	0.300	ug/L	0.300	1.00
86-74-8	Carbazole	U	0.300	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate	U	3.00	ug/L	3.00	10.0
206-44-0	Fluoranthene	U	0.300	ug/L	0.300	1.00
129-00-0	Pyrene	U	0.300	ug/L	0.300	1.00
85-68-7	Butylbenzylphthalate	U	3.00	ug/L	3.00	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	3.00	ug/L	3.00	10.0
56-55-3	Benzo(a)anthracene	U	0.300	ug/L	0.300	1.00
218-01-9	Chrysene	U	0.300	ug/L	0.300	1.00
117-84-0	Di-n-octylphthalate	U	3.00	ug/L	3.00	10.0
205-99-2	Benzo(b)fluoranthene	U	0.300	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene	U	0.300	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene	U	0.300	ug/L	0.300	1.00
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.300	ug/L	0.300	1.00
53-70-3	Dibenzo(a,h)anthracene	U	0.300	ug/L	0.300	1.00
191-24-2	Benzo(ghi)perylene	U	0.300	ug/L	0.300	1.00
100-52-7	Benzaldehyde	U	3.00	ug/L	3.00	10.0
98-86-2	Acetophenone	U	3.00	ug/L	3.00	10.0
105-60-2	Caprolactam	U	3.00	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene	U	3.00	ug/L	3.00	10.0
92-52-4	1,1'-Biphenyl	U	3.00	ug/L	3.00	10.0
1912-24-9	Atrazine	U	3.00	ug/L	3.00	10.0
91-94-1	3,3'-Dichlorobenzidine	U	3.00	ug/L	3.00	10.0

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2608.D
Acq On : 26 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |1202473715|1135988|1|SVM|1|MB
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 11:47:57 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	441882	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.175	6.180	1.000	1599052	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.050	8.056	1.000	827843	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.664	9.670	1.000	1396617	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.693	12.704	1.000	788805	40.00	ng/uL	-0.01
91) A Perylene-d12	264	15.057	15.066	1.000	556659	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	441882	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.175	6.180	1.000	1599052	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.050	8.056	1.000	827843	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.664	9.670	1.000	1396617	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.693	12.704	1.000	788805	40.00	ng/uL	-0.01
153) B Perylene-d12	264	15.057	15.066	1.000	556659	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.175	6.180	1.000	1599052	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.050	8.056	1.000	827843	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.664	9.670	1.000	1396617	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.693	12.704	1.000	788805	40.00	ng/uL	-0.01
170) E Naphthalene-d8	136	6.175	6.180	1.000	1600852	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.057	15.066	1.000	556659	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	441882	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.175	6.180	1.000	1599052	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.050	8.056	1.000	827843	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.664	9.670	1.000	1396617	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.693	12.704	1.000	788805	40.00	ng/uL	-0.01
192) J 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	441882	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.175	6.180	1.000	1599052	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.693	12.704	1.000	788805	40.00	ng/uL	-0.01
199) J Perylene-d12	264	15.057	15.066	1.000	556659	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.708	3.676	0.758	703627	48.82	ng/uL	0.03
8) Phenol-d5	99	4.481	4.484	0.916	502631	27.50	ng/uL	0.00
25) Nitrobenzene-d5	82	5.430	5.423	0.879	621823	43.92	ng/uL	0.00
47) 2-Fluorobiphenyl	172	7.306	7.299	0.908	1330435	43.96	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.902	8.920	1.106	355802	102.24	ng/uL	-0.02
83) p-Terphenyl-d14	244	11.375	11.400	0.896	1124295	56.13	ng/uL	-0.02

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	14 - 78	48.82%
8) Phenol-d5	100.000	14 - 80	27.50%
25) Nitrobenzene-d5	50.000	40 - 117	87.84%
47) 2-Fluorobiphenyl	50.000	37 - 102	87.92%
66) 2,4,6-Tribromophenol	100.000	33 - 126	102.24%
83) p-Terphenyl-d14	50.000	44 - 134	112.26%

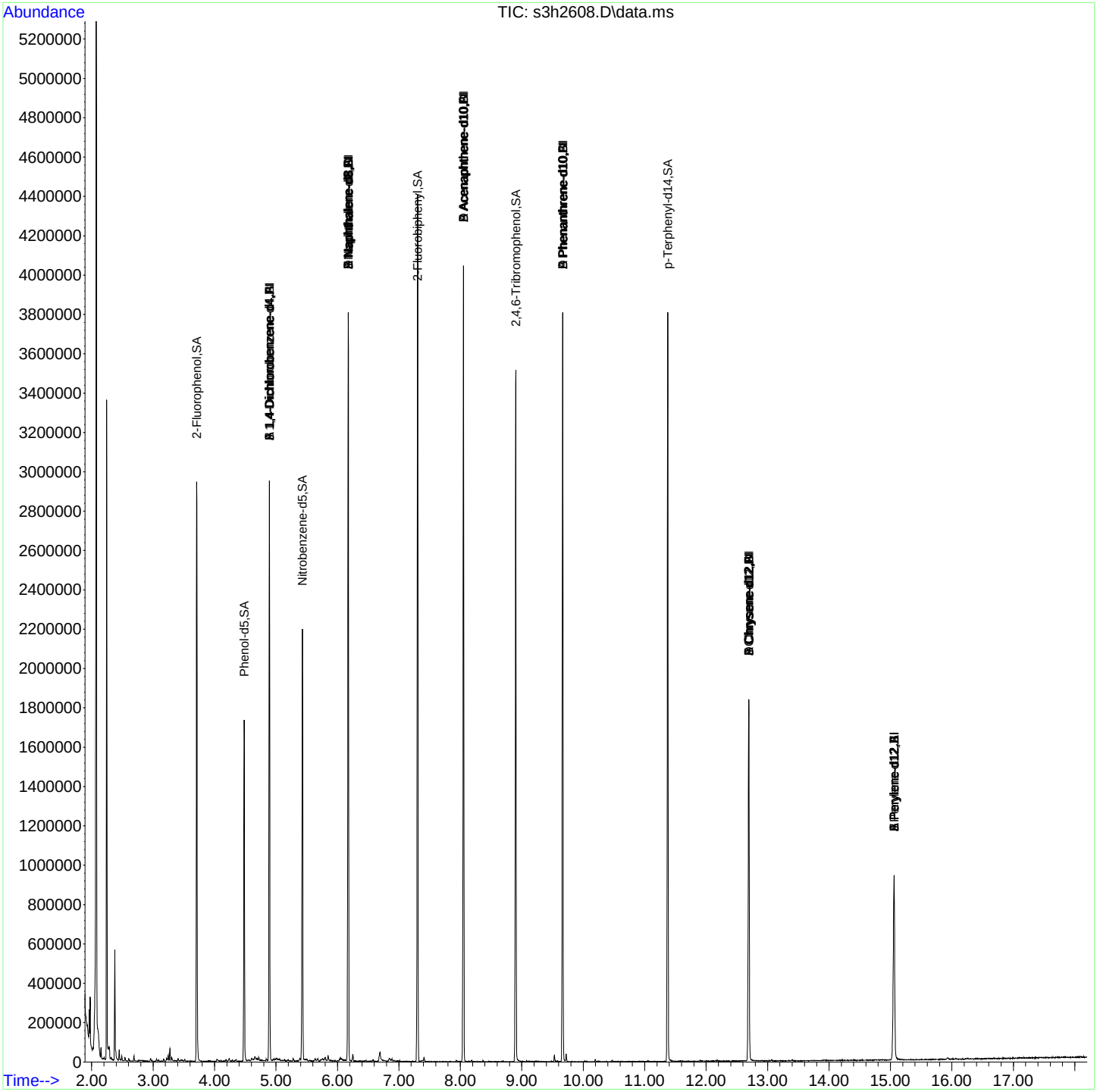
Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2608.D
Acq On : 26 Aug 2011 11:24
Operator : JLD1
InstName : MSD 3
Sample : |1202473715|1135988|1|SVM|1|MB
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 26 11:47:57 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473716**				
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1135986**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 11:49**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2609.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol		15.0	ug/L	3.00	10.0
111-44-4	bis(2-Chloroethyl) ether		32.5	ug/L	3.00	10.0
95-57-8	2-Chlorophenol		40.3	ug/L	3.00	10.0
39638-32-9	bis(2-Chloroisopropyl)ether		27.8	ug/L	3.00	10.0
95-48-7	o-Cresol		32.7	ug/L	3.00	10.0
65794-96-9	m,p-Cresols		34.1	ug/L	3.00	10.0
621-64-7	N-Nitrosodipropylamine		37.0	ug/L	3.00	10.0
67-72-1	Hexachloroethane		26.8	ug/L	3.00	10.0
98-95-3	Nitrobenzene		43.9	ug/L	3.00	10.0
78-59-1	Isophorone		44.2	ug/L	3.00	10.0
88-75-5	2-Nitrophenol		43.2	ug/L	3.00	10.0
105-67-9	2,4-Dimethylphenol		42.9	ug/L	3.00	10.0
111-91-1	bis(2-Chloroethoxy)methane		40.0	ug/L	3.00	10.0
120-83-2	2,4-Dichlorophenol		46.2	ug/L	3.00	10.0
106-47-8	4-Chloroaniline		46.6	ug/L	3.00	10.0
87-68-3	Hexachlorobutadiene		33.3	ug/L	3.00	10.0
59-50-7	4-Chloro-3-methylphenol		43.2	ug/L	3.00	10.0
91-57-6	2-Methylnaphthalene		36.6	ug/L	0.300	1.00
91-20-3	Naphthalene		36.9	ug/L	0.300	1.00
77-47-4	Hexachlorocyclopentadiene		29.7	ug/L	3.00	10.0
88-06-2	2,4,6-Trichlorophenol		48.3	ug/L	3.00	10.0
95-95-4	2,4,5-Trichlorophenol		47.4	ug/L	3.00	10.0
91-58-7	2-Chloronaphthalene		37.3	ug/L	0.300	1.00
88-74-4	o-Nitroaniline		34.0	ug/L	3.00	10.0
99-09-2	m-Nitroaniline		45.8	ug/L	3.00	10.0
131-11-3	Dimethylphthalate		60.9	ug/L	3.00	10.0
606-20-2	2,6-Dinitrotoluene		55.4	ug/L	3.00	10.0
121-14-2	2,4-Dinitrotoluene		57.8	ug/L	3.00	10.0
208-96-8	Acenaphthylene		40.3	ug/L	0.300	1.00
83-32-9	Acenaphthene		39.0	ug/L	0.300	1.00
51-28-5	2,4-Dinitrophenol		48.5	ug/L	5.00	20.0
132-64-9	Dibenzofuran		42.6	ug/L	3.00	10.0
58-90-2	2,3,4,6-Tetrachlorophenol		58.1	ug/L	3.00	10.0
84-66-2	Diethylphthalate		61.8	ug/L	3.00	10.0
100-02-7	4-Nitrophenol		17.3	ug/L	3.00	10.0
86-73-7	Fluorene		40.7	ug/L	0.300	1.00
7005-72-3	4-Chlorophenylphenylether		45.9	ug/L	3.00	10.0
100-01-6	p-Nitroaniline		48.5	ug/L	3.00	10.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473716**				
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1135986**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 11:49**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2609.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol		47.7	ug/L	3.00	10.0
122-39-4	Diphenylamine		43.5	ug/L	3.00	10.0
101-55-3	4-Bromophenylphenylether		49.3	ug/L	3.00	10.0
118-74-1	Hexachlorobenzene		43.0	ug/L	3.00	10.0
87-86-5	Pentachlorophenol		44.6	ug/L	3.00	10.0
85-01-8	Phenanthrene		44.1	ug/L	0.300	1.00
120-12-7	Anthracene		44.0	ug/L	0.300	1.00
86-74-8	Carbazole		45.4	ug/L	0.300	1.00
84-74-2	Di-n-butylphthalate		56.7	ug/L	3.00	10.0
206-44-0	Fluoranthene		47.0	ug/L	0.300	1.00
129-00-0	Pyrene		41.2	ug/L	0.300	1.00
85-68-7	Butylbenzylphthalate		53.8	ug/L	3.00	10.0
117-81-7	bis(2-Ethylhexyl)phthalate		56.5	ug/L	3.00	10.0
56-55-3	Benzo(a)anthracene		48.0	ug/L	0.300	1.00
218-01-9	Chrysene		48.0	ug/L	0.300	1.00
117-84-0	Di-n-octylphthalate		61.8	ug/L	3.00	10.0
205-99-2	Benzo(b)fluoranthene		47.2	ug/L	0.300	1.00
207-08-9	Benzo(k)fluoranthene		47.8	ug/L	0.300	1.00
50-32-8	Benzo(a)pyrene		47.6	ug/L	0.300	1.00
193-39-5	Indeno(1,2,3-cd)pyrene		56.2	ug/L	0.300	1.00
53-70-3	Dibenzo(a,h)anthracene		56.4	ug/L	0.300	1.00
191-24-2	Benzo(ghi)perylene		57.5	ug/L	0.300	1.00
100-52-7	Benzaldehyde		31.9	ug/L	3.00	10.0
98-86-2	Acetophenone		42.2	ug/L	3.00	10.0
105-60-2	Caprolactam		12.0	ug/L	3.00	10.0
95-94-3	1,2,4,5-Tetrachlorobenzene		34.9	ug/L	3.00	10.0
92-52-4	1,1'-Biphenyl		35.3	ug/L	3.00	10.0
1912-24-9	Atrazine		46.8	ug/L	3.00	10.0
91-94-1	3,3'-Dichlorobenzidine		51.1	ug/L	3.00	10.0

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2609.D
Acq On : 26 Aug 2011 11:49
Operator : JLD1
InstName : MSD 3
Sample : |1202473716|1135988|1|SVM|1|LCS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 12:06:28 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	464442	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.180	6.180	1.000	1841128	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.053	8.056	1.000	892778	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.670	9.670	1.000	1581375	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.704	12.704	1.000	1098909	40.00	ng/uL	0.00
91) A Perylene-d12	264	15.063	15.066	1.000	709470	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	464442	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.180	6.180	1.000	1841128	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.053	8.056	1.000	892778	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.670	9.670	1.000	1581375	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.704	12.704	1.000	1098909	40.00	ng/uL	0.00
153) B Perylene-d12	264	15.063	15.066	1.000	709470	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.180	6.180	1.000	1841128	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.053	8.056	1.000	892778	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.670	9.670	1.000	1581375	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.704	12.704	1.000	1098909	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.180	6.180	1.000	1861883	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.063	15.066	1.000	709470	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	464442	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.180	6.180	1.000	1841128	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.053	8.056	1.000	892778	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.670	9.670	1.000	1581375	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.704	12.704	1.000	1098909	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.896	4.896	1.000	464442	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.180	6.180	1.000	1841128	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.704	12.704	1.000	1098909	40.00	ng/uL	0.00
199) J Perylene-d12	264	15.063	15.066	1.000	709470	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.714	3.676	0.759	756625	49.95	ng/uL	0.04
8) Phenol-d5	99	4.492	4.484	0.918	553783	28.83	ng/uL	0.00
25) Nitrobenzene-d5	82	5.439	5.423	0.880	633374	38.86	ng/uL	0.02
47) 2-Fluorobiphenyl	172	7.305	7.299	0.907	1380956	42.31	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.908	8.920	1.106	401807	107.07	ng/uL	-0.01
83) p-Terphenyl-d14	244	11.374	11.400	0.895	1234575	44.24	ng/uL	-0.03

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	14 - 78	49.95%
8) Phenol-d5	100.000	14 - 80	28.83%
25) Nitrobenzene-d5	50.000	40 - 117	77.72%
47) 2-Fluorobiphenyl	50.000	37 - 102	84.62%
66) 2,4,6-Tribromophenol	100.000	33 - 126	107.07%
83) p-Terphenyl-d14	50.000	44 - 134	88.48%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.739	2.673	0.559	242083	22.49	ng/uL	82
4) Pyridine	79	2.779	2.702	0.568	416405	27.92	ng/uL#	74
7) Aniline	66	4.580	4.575	0.936	314849	33.45	ng/uL	83
9) Phenol	94	4.504	4.500	0.920	298830	14.95	ng/uL	97
10) bis(2-Chloroethyl) ether	63	4.617	4.613	0.943	524963	32.46	ng/uL	81
11) 2-Chlorophenol	128	4.694	4.686	0.959	604479	40.30	ng/uL	86

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2609.D
Acq On : 26 Aug 2011 11:49
Operator : JLD1
InstName : MSD 3
Sample : |1202473716|1135988|1|SVM|1|LCS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 12:06:28 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
12)	n-Decane	43	4.694	4.695	0.959	438129	14.95	ng/uL	97
13)	1,3-Dichlorobenzene	146	4.842	4.844	0.989	508601	30.42	ng/uL	99
14)	1,4-Dichlorobenzene	146	4.910	4.914	1.003	524675	30.96	ng/uL	99
15)	1,2-Dichlorobenzene	146	5.061	5.065	1.034	504405	31.66	ng/uL	99
16)	bis(2-Chloroisopropyl)...	45	5.126	5.138	1.047	1195395	27.81	ng/uL	85
17)	Benzyl alcohol	108	5.004	5.010	1.022	370957	36.82	ng/uL	92
18)	o-Cresol	107	5.086	5.094	1.039	417001	32.74	ng/uL	98
19)	m,p-Cresols	107	5.243	5.254	1.071	557039	34.14	ng/uL#	55
20)	N-Nitrosodipropylamine	70	5.268	5.287	1.076	445983	37.04	ng/uL	78
23)	Hexachloroethane	117	5.396	5.410	1.102	189152	26.82	ng/uL	89
26)	Nitrobenzene	77	5.459	5.446	0.883	725390	43.89	ng/uL	94
27)	Isophorone	82	5.691	5.684	0.921	1364435	44.22	ng/uL	95
28)	2-Nitrophenol	139	5.774	5.765	0.934	353779	43.16	ng/uL	88
29)	2,4-Dimethylphenol	122	5.782	5.777	0.936	575453	42.89	ng/uL	98
30)	bis(2-Chloroethoxy)met...	93	5.888	5.887	0.953	764868	39.95	ng/uL	100
31)	2,4-Dichlorophenol	162	6.015	6.012	0.973	523421	46.15	ng/uL	97
32)	Benzoic acid	105	5.868	5.890	0.949	185017	19.33	ng/uL	95
33)	1,2,4-Trichlorobenzene	180	6.109	6.107	0.989	447612	33.52	ng/uL	99
34)	alpha-Terpineol	59	6.189	6.192	1.001	530075	27.07	ng/uL	77
35)	Naphthalene	128	6.203	6.203	1.004	1541817	36.90	ng/uL	73
36)	4-Chloroaniline	127	6.243	6.241	1.010	759437	46.57	ng/uL	90
37)	Hexachlorobutadiene	225	6.308	6.314	1.021	235739	33.33	ng/uL	99
38)	4-Chloro-3-methylphenol	107	6.723	6.735	1.088	533345	43.15	ng/uL	97
39)	2-Methylnaphthalene	142	6.925	6.944	1.120	1047836	36.56	ng/uL	99
41)	1-Methylnaphthalene	142	7.035	7.054	1.138	1016133	37.01	ng/uL	100
43)	Hexachlorocyclopentadiene	237	7.084	7.070	0.880	186786	29.65	ng/uL	99
44)	2,3-Dichloroaniline	161	7.223	7.212	0.897	631084	41.26	ng/uL	98
45)	2,4,6-Trichlorophenol	196	7.215	7.204	0.896	395441	48.27	ng/uL	99
46)	2,4,5-Trichlorophenol	196	7.251	7.238	0.900	412351	47.43	ng/uL	99
48)	2-Chloronaphthalene	162	7.453	7.444	0.926	999266	37.29	ng/uL	98
49)	o-Nitroaniline	65	7.550	7.544	0.938	342517	33.95	ng/uL	81
51)	m-Nitroaniline	138	7.996	7.998	0.993	317083	45.84	ng/uL	90
52)	Dimethylphthalate	163	7.734	7.741	0.960	1827678	60.90	ng/uL	99
54)	2,6-Dinitrotoluene	165	7.811	7.810	0.970	381139	55.41	ng/uL	78
55)	2,4-Dinitrotoluene	165	8.243	8.249	1.024	485069	57.77	ng/uL	83
56)	Acenaphthylene	152	7.905	7.902	0.982	1787260	40.32	ng/uL	100
57)	Acenaphthene	154	8.090	8.093	1.005	1094844	38.98	ng/uL	98
58)	2,4-Dinitrophenol	184	8.101	8.105	1.006	156434	48.51	ng/uL#	19
59)	Dibenzofuran	168	8.274	8.281	1.028	1575154	42.64	ng/uL	100
60)	2,3,4,6-Tetrachlorophenol	232	8.394	8.399	1.042	361877	58.13	ng/uL	97
61)	Diethylphthalate	149	8.490	8.503	1.054	1962782	61.81	ng/uL	99
62)	4-Nitrophenol	139	8.147	8.145	1.012	78241	17.27	ng/uL	87
63)	Fluorene	166	8.647	8.660	1.074	1294498	40.71	ng/uL	99
64)	4-Chlorophenylphenylether	204	8.630	8.643	1.072	658343	45.92	ng/uL	99
65)	p-Nitroaniline	138	8.661	8.671	1.076	283037	48.50	ng/uL	95
68)	2-Methyl-4,6-dinitroph...	198	8.686	8.676	0.898	222137	47.70	ng/uL	79
69)	Diphenylamine	169	8.760	8.754	0.906	1194432	43.48	ng/uL	99
70)	1,2-Diphenylhydrazine	77	8.806	8.799	0.911	1264513	32.75	ng/uL	92
71)	4-Bromophenylphenylether	248	9.164	9.163	0.948	396215	49.26	ng/uL	92
72)	Hexachlorobenzene	284	9.240	9.235	0.956	407037	42.97	ng/uL	100
73)	Pentachlorophenol	266	9.448	9.442	0.977	231321	44.60	ng/uL	99
74)	n-Octadecane	57	9.488	9.499	0.981	1043052	25.64	ng/uL	92

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2609.D
Acq On : 26 Aug 2011 11:49
Operator : JLD1
InstName : MSD 3
Sample : |1202473716|1135988|1|SVM|1|LCS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 12:06:28 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

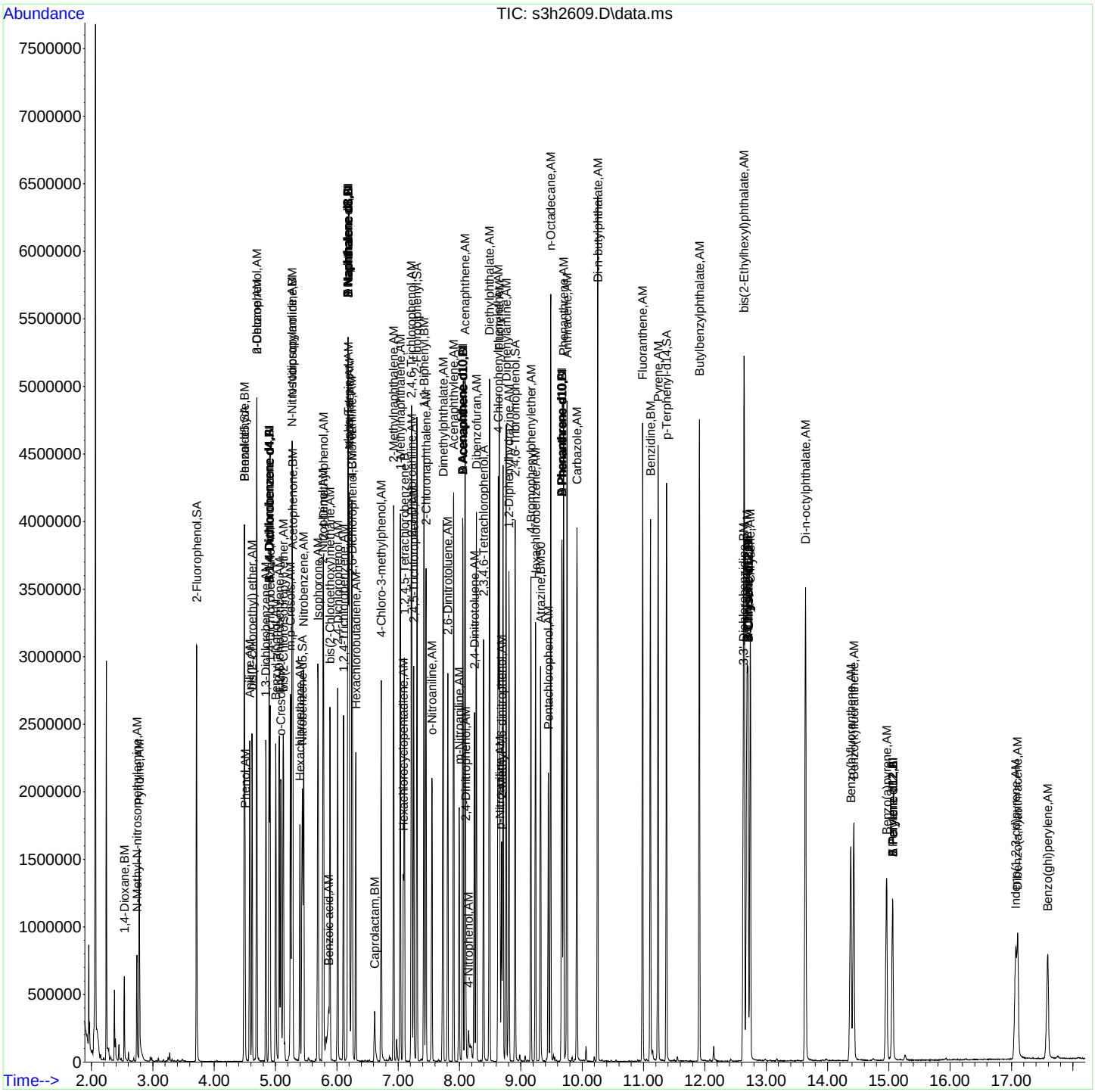
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units		
76)	Phenanthrene	178	9.695	9.699	1.003	1808927	44.13	ng/uL	100	
77)	Anthracene	178	9.752	9.756	1.009	1816260	43.99	ng/uL	100	
78)	Carbazole	167	9.914	9.920	1.025	1573637	45.39	ng/uL	100	
79)	Di-n-butylphthalate	149	10.252	10.272	1.060	3155980	56.74	ng/uL	100	
80)	Fluoranthene	202	10.985	11.008	1.136	1896032	47.02	ng/uL	97	
82)	Pyrene	202	11.238	11.256	0.885	1904004	41.19	ng/uL	96	
84)	Butylbenzylphthalate	149	11.911	11.935	0.938	1215955	53.82	ng/uL	92	
85)	bis(2-Ethylhexyl)phtha...	149	12.639	12.658	0.995	1741779	56.47	ng/uL	97	
86)	Benzo(a)anthracene	228	12.684	12.687	0.998	1448746	47.97	ng/uL	100	
87)	Chrysene	228	12.741	12.742	1.003	1339101	48.00	ng/uL	99	
90)	Di-n-octylphthalate	149	13.642	13.646	1.074	2478137	61.79	ng/uL	86	
92)	Benzo(b)fluoranthene	252	14.378	14.390	0.955	1041541	47.20	ng/uL	98	
93)	Benzo(k)fluoranthene	252	14.429	14.439	0.958	1063546	47.83	ng/uL	97	
94)	Benzo(a)pyrene	252	14.963	14.967	0.993	889870	47.63	ng/uL	98	
95)	Indeno(1,2,3-cd)pyrene	276	17.066	17.061	1.133	779595	56.24	ng/uL	94	
96)	Dibenzo(a,h)anthracene	278	17.097	17.095	1.135	645345	56.40	ng/uL	92	
97)	Benzo(ghi)perylene	276	17.589	17.572	1.168	627991	57.45	ng/uL	93	
100)	1,4-Dioxane	88	2.535	2.464	0.518	154845	24.02	ng/uL#	69	
108)	Benzaldehyde	77	4.492	4.485	0.918	391151	31.91	ng/uL	91	
110)	N-Nitrosopyrrolidine	100	5.271	5.276	1.077	320662	43.35	ng/uL#	68	
111)	Acetophenone	105	5.279	5.290	1.078	864130	42.19	ng/uL#	9	
117)	2,6-Dichlorophenol	162	6.251	6.253	1.011	538309	44.64	ng/uL	99	
119)	Caprolactam	113	6.618	6.616	1.071	59307	11.96	ng/uL#	32	
123)	1,2,4,5-Tetrachloroben...	216	7.101	7.090	0.882	465808	34.88	ng/uL	99	
124)	1,1-Biphenyl	154	7.422	7.417	0.922	1331088	35.33	ng/uL	98	
137)	Atrazine	173	9.323	9.321	0.964	95114	46.81	ng/uL	93	
144)	Benzidine	184	11.113	11.134	1.149	1578065	131.55	ng/uL	97	A
152)	3,3'-Dichlorobenzidine	252	12.625	12.632	0.994	410770	51.07	ng/uL	99	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2609.D
Acq On : 26 Aug 2011 11:49
Operator : JLD1
InstName : MSD 3
Sample : |1202473716|1135988|1|SVM|1|LCS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 26 12:06:28 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473717**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MS**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 17:18**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**500 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2622.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol		26.7	ug/L	6.00	20.0
111-44-4	bis(2-Chloroethyl) ether		54.9	ug/L	6.00	20.0
95-57-8	2-Chlorophenol		24.4	ug/L	6.00	20.0
39638-32-9	bis(2-Chloroisopropyl)ether		47.0	ug/L	6.00	20.0
95-48-7	o-Cresol		44.2	ug/L	6.00	20.0
65794-96-9	m,p-Cresols		47.1	ug/L	6.00	20.0
621-64-7	N-Nitrosodipropylamine		60.9	ug/L	6.00	20.0
67-72-1	Hexachloroethane		46.0	ug/L	6.00	20.0
98-95-3	Nitrobenzene		77.6	ug/L	6.00	20.0
78-59-1	Isophorone		73.5	ug/L	6.00	20.0
88-75-5	2-Nitrophenol	J	14.4	ug/L	6.00	20.0
105-67-9	2,4-Dimethylphenol		65.9	ug/L	6.00	20.0
111-91-1	bis(2-Chloroethoxy)methane		67.3	ug/L	6.00	20.0
120-83-2	2,4-Dichlorophenol	J	19.6	ug/L	6.00	20.0
106-47-8	4-Chloroaniline		78.4	ug/L	6.00	20.0
87-68-3	Hexachlorobutadiene		58.0	ug/L	6.00	20.0
59-50-7	4-Chloro-3-methylphenol		40.2	ug/L	6.00	20.0
91-57-6	2-Methylnaphthalene		65.5	ug/L	0.600	2.00
91-20-3	Naphthalene		66.5	ug/L	0.600	2.00
77-47-4	Hexachlorocyclopentadiene		61.6	ug/L	6.00	20.0
88-06-2	2,4,6-Trichlorophenol	J	13.3	ug/L	6.00	20.0
95-95-4	2,4,5-Trichlorophenol	J	15.1	ug/L	6.00	20.0
91-58-7	2-Chloronaphthalene		71.3	ug/L	0.600	2.00
88-74-4	o-Nitroaniline		55.3	ug/L	6.00	20.0
99-09-2	m-Nitroaniline		73.6	ug/L	6.00	20.0
131-11-3	Dimethylphthalate		96.5	ug/L	6.00	20.0
606-20-2	2,6-Dinitrotoluene		88.0	ug/L	6.00	20.0
121-14-2	2,4-Dinitrotoluene		85.5	ug/L	6.00	20.0
208-96-8	Acenaphthylene		73.0	ug/L	0.600	2.00
83-32-9	Acenaphthene		67.4	ug/L	0.600	2.00
51-28-5	2,4-Dinitrophenol	U	10.0	ug/L	10.0	40.0
132-64-9	Dibenzofuran		75.7	ug/L	6.00	20.0
58-90-2	2,3,4,6-Tetrachlorophenol	J	12.3	ug/L	6.00	20.0
84-66-2	Diethylphthalate		92.2	ug/L	6.00	20.0
100-02-7	4-Nitrophenol		29.0	ug/L	6.00	20.0
86-73-7	Fluorene		68.9	ug/L	0.600	2.00
7005-72-3	4-Chlorophenylphenylether		80.7	ug/L	6.00	20.0
100-01-6	p-Nitroaniline		76.7	ug/L	6.00	20.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473717**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MS**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 17:18**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**500 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2622.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol	J	9.50	ug/L	6.00	20.0
122-39-4	Diphenylamine		57.7	ug/L	6.00	20.0
101-55-3	4-Bromophenylphenylether		88.9	ug/L	6.00	20.0
118-74-1	Hexachlorobenzene		74.6	ug/L	6.00	20.0
87-86-5	Pentachlorophenol	J	9.42	ug/L	6.00	20.0
85-01-8	Phenanthrene		76.1	ug/L	0.600	2.00
120-12-7	Anthracene		74.7	ug/L	0.600	2.00
86-74-8	Carbazole		81.8	ug/L	0.600	2.00
84-74-2	Di-n-butylphthalate		99.8	ug/L	6.00	20.0
206-44-0	Fluoranthene		90.4	ug/L	0.600	2.00
129-00-0	Pyrene		68.2	ug/L	0.600	2.00
85-68-7	Butylbenzylphthalate		88.5	ug/L	6.00	20.0
117-81-7	bis(2-Ethylhexyl)phthalate		92.4	ug/L	6.00	20.0
56-55-3	Benzo(a)anthracene		76.9	ug/L	0.600	2.00
218-01-9	Chrysene		77.2	ug/L	0.600	2.00
117-84-0	Di-n-octylphthalate		80.3	ug/L	6.00	20.0
205-99-2	Benzo(b)fluoranthene		76.5	ug/L	0.600	2.00
207-08-9	Benzo(k)fluoranthene		78.1	ug/L	0.600	2.00
50-32-8	Benzo(a)pyrene		76.5	ug/L	0.600	2.00
193-39-5	Indeno(1,2,3-cd)pyrene		90.0	ug/L	0.600	2.00
53-70-3	Dibenzo(a,h)anthracene		89.8	ug/L	0.600	2.00
191-24-2	Benzo(ghi)perylene		91.7	ug/L	0.600	2.00
100-52-7	Benzaldehyde		59.6	ug/L	6.00	20.0
98-86-2	Acetophenone		70.9	ug/L	6.00	20.0
105-60-2	Caprolactam		36.9	ug/L	6.00	20.0
95-94-3	1,2,4,5-Tetrachlorobenzene		69.1	ug/L	6.00	20.0
92-52-4	1,1'-Biphenyl		67.9	ug/L	6.00	20.0
1912-24-9	Atrazine		80.3	ug/L	6.00	20.0
91-94-1	3,3'-Dichlorobenzidine		79.3	ug/L	6.00	20.0

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2622.D
Acq On : 26 Aug 2011 17:18
Operator : JLD1
InstName : MSD 3
Sample : |1202473717|1135988|1|SVM|1|MS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 27 15:45:08 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	479448	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.180	6.180	1.000	1831235	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.053	8.056	1.000	825095	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.667	9.670	1.000	1298083	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.701	12.704	1.000	1073331	40.00	ng/uL	0.00
91) A Perylene-d12	264	15.057	15.066	1.000	579836	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	479448	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.180	6.180	1.000	1831235	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.053	8.056	1.000	825095	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.667	9.670	1.000	1298083	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.701	12.704	1.000	1073331	40.00	ng/uL	0.00
153) B Perylene-d12	264	15.057	15.066	1.000	579836	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.180	6.180	1.000	1831235	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.053	8.056	1.000	825095	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.667	9.670	1.000	1298083	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.701	12.704	1.000	1073331	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.180	6.180	1.000	1846329	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.057	15.066	1.000	579836	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	479448	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.180	6.180	1.000	1831235	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.053	8.056	1.000	825095	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.667	9.670	1.000	1298083	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.701	12.704	1.000	1073331	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	479448	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.180	6.180	1.000	1831235	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.701	12.704	1.000	1073331	40.00	ng/uL	0.00
199) J Perylene-d12	264	15.057	15.066	1.000	579836	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.711	3.676	0.758	489082	31.28	ng/uL	0.03
8) Phenol-d5	99	4.489	4.484	0.918	522099	26.33	ng/uL	0.00
25) Nitrobenzene-d5	82	5.436	5.423	0.880	550370	33.95	ng/uL	0.01
47) 2-Fluorobiphenyl	172	7.305	7.299	0.907	1118438	37.08	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.902	8.920	1.106	49436	14.25	ng/uL	-0.02
83) p-Terphenyl-d14	244	11.374	11.400	0.896	863493	31.68	ng/uL	-0.03

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	14 - 78	31.28%
8) Phenol-d5	100.000	14 - 80	26.33%
25) Nitrobenzene-d5	50.000	40 - 117	67.90%
47) 2-Fluorobiphenyl	50.000	37 - 102	74.16%
66) 2,4,6-Tribromophenol	100.000	33 - 126	14.25%#
83) p-Terphenyl-d14	50.000	44 - 134	63.36%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.742	2.673	0.560	285511	25.69	ng/uL	82
4) Pyridine	79	2.779	2.702	0.568	461972	30.01	ng/uL#	73
7) Aniline	66	4.580	4.575	0.936	289190	29.76	ng/uL	83
9) Phenol	94	4.504	4.500	0.920	275722	13.36	ng/uL	96
10) bis(2-Chloroethyl) ether	63	4.617	4.613	0.944	457953	27.43	ng/uL	79
11) 2-Chlorophenol	128	4.691	4.686	0.959	188925	12.20	ng/uL	86

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2622.D
Acq On : 26 Aug 2011 17:18
Operator : JLD1
InstName : MSD 3
Sample : |1202473717|1135988|1|SVM|1|MS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 27 15:45:08 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
12) n-Decane	43	4.694	4.695	0.959	404668	13.38	ng/uL	96
13) 1,3-Dichlorobenzene	146	4.842	4.844	0.990	460331	26.67	ng/uL	98
14) 1,4-Dichlorobenzene	146	4.910	4.914	1.003	473156	27.04	ng/uL	99
15) 1,2-Dichlorobenzene	146	5.061	5.065	1.034	463684	28.20	ng/uL	98
16) bis(2-Chloroisopropyl)...	45	5.126	5.138	1.048	1041809	23.48	ng/uL	84
17) Benzyl alcohol	108	5.004	5.010	1.023	359312	34.55	ng/uL	93
18) o-Cresol	107	5.086	5.094	1.039	290431	22.09	ng/uL	99
19) m,p-Cresols	107	5.240	5.254	1.071	396915	23.57	ng/uL#	43
20) N-Nitrosodipropylamine	70	5.265	5.287	1.076	378565	30.46	ng/uL	75
23) Hexachloroethane	117	5.396	5.410	1.103	167376	22.99	ng/uL	90
26) Nitrobenzene	77	5.458	5.446	0.883	637826	38.80	ng/uL	93
27) Isophorone	82	5.686	5.684	0.920	1128046	36.75	ng/uL	95
28) 2-Nitrophenol	139	5.771	5.765	0.934	58645	7.19	ng/uL#	61
29) 2,4-Dimethylphenol	122	5.779	5.777	0.935	439908	32.96	ng/uL	97
30) bis(2-Chloroethoxy)met...	93	5.887	5.887	0.953	640861	33.65	ng/uL	99
31) 2,4-Dichlorophenol	162	6.010	6.012	0.972	110421	9.79	ng/uL	96
32) Benzoic acid	105	5.876	5.890	0.951	287311	30.19	ng/uL	94
33) 1,2,4-Trichlorobenzene	180	6.109	6.107	0.989	394195	29.68	ng/uL	99
34) alpha-Terpineol	59	6.186	6.192	1.001	435094	22.34	ng/uL	75
35) Naphthalene	128	6.203	6.203	1.004	1382666	33.27	ng/uL	91
36) 4-Chloroaniline	127	6.240	6.241	1.010	636158	39.22	ng/uL	88
37) Hexachlorobutadiene	225	6.308	6.314	1.021	203817	28.98	ng/uL	100
38) 4-Chloro-3-methylphenol	107	6.723	6.735	1.088	247046	20.10	ng/uL	96
39) 2-Methylnaphthalene	142	6.925	6.944	1.120	933483	32.74	ng/uL	100
41) 1-Methylnaphthalene	142	7.033	7.054	1.138	902833	33.06	ng/uL	100
43) Hexachlorocyclopentadiene	237	7.084	7.070	0.880	179252	30.78	ng/uL	100
44) 2,3-Dichloroaniline	161	7.220	7.212	0.897	505263	35.75	ng/uL	97
45) 2,4,6-Trichlorophenol	196	7.212	7.204	0.896	50322	6.65	ng/uL	100
46) 2,4,5-Trichlorophenol	196	7.251	7.238	0.900	60604	7.54	ng/uL	98
48) 2-Chloronaphthalene	162	7.453	7.444	0.926	883071	35.66	ng/uL	99
49) o-Nitroaniline	65	7.550	7.544	0.938	257808	27.65	ng/uL	80
51) m-Nitroaniline	138	7.993	7.998	0.993	235327	36.81	ng/uL	89
52) Dimethylphthalate	163	7.732	7.741	0.960	1337719	48.23	ng/uL	100
54) 2,6-Dinitrotoluene	165	7.805	7.810	0.969	279735	44.00	ng/uL	78
55) 2,4-Dinitrotoluene	165	8.237	8.249	1.023	331540	42.73	ng/uL	83
56) Acenaphthylene	152	7.902	7.902	0.981	1496140	36.52	ng/uL	100
57) Acenaphthene	154	8.090	8.093	1.005	875088	33.71	ng/uL	96
59) Dibenzofuran	168	8.271	8.281	1.027	1292888	37.87	ng/uL	100
60) 2,3,4,6-Tetrachlorophenol	232	8.388	8.399	1.042	35433	6.16	ng/uL	99
61) Diethylphthalate	149	8.485	8.503	1.054	1353354	46.11	ng/uL	99
62) 4-Nitrophenol	139	8.141	8.145	1.011	60628	14.48	ng/uL	90
63) Fluorene	166	8.644	8.660	1.073	1012590	34.46	ng/uL	99
64) 4-Chlorophenylphenylether	204	8.629	8.643	1.072	534481	40.33	ng/uL	98
65) p-Nitroaniline	138	8.652	8.671	1.074	206763	38.34	ng/uL	95
68) 2-Methyl-4,6-dinitroph...	198	8.678	8.676	0.898	18151	4.75	ng/uL	87
69) Diphenylamine	169	8.754	8.754	0.906	650787	28.86	ng/uL	100
70) 1,2-Diphenylhydrazine	77	8.803	8.799	0.911	939700	29.65	ng/uL	92
71) 4-Bromophenylphenylether	248	9.161	9.163	0.948	293564	44.46	ng/uL	91
72) Hexachlorobenzene	284	9.238	9.235	0.956	290173	37.32	ng/uL	100
73) Pentachlorophenol	266	9.442	9.442	0.977	20073	4.71	ng/uL	97
74) n-Octadecane	57	9.485	9.499	0.981	723673	21.67	ng/uL	92
76) Phenanthrene	178	9.695	9.699	1.003	1279894	38.04	ng/uL	100

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2622.D
Acq On : 26 Aug 2011 17:18
Operator : JLD1
InstName : MSD 3
Sample : |1202473717|1135988|1|SVM|1|MS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 27 15:45:08 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

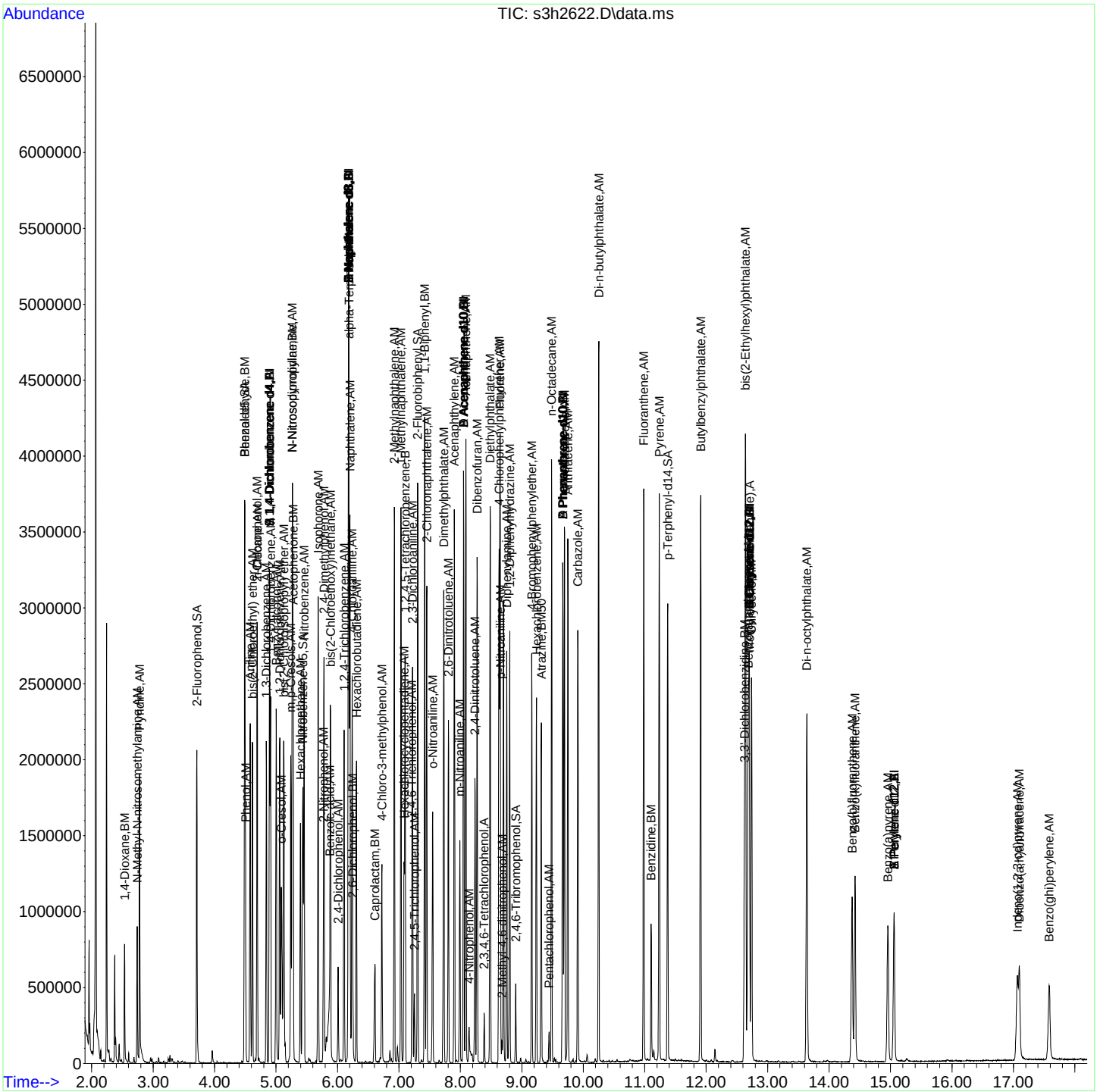
Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
77) Anthracene	178	9.749	9.756	1.009	1266448	37.37	ng/uL	100
78) Carbazole	167	9.911	9.920	1.025	1163829	40.90	ng/uL	100
79) Di-n-butylphthalate	149	10.252	10.272	1.061	2277414	49.88	ng/uL	100
80) Fluoranthene	202	10.985	11.008	1.136	1495727	45.19	ng/uL	97
82) Pyrene	202	11.238	11.256	0.885	1540414	34.12	ng/uL	96
84) Butylbenzylphthalate	149	11.911	11.935	0.938	976389	44.25	ng/uL	91
85) bis(2-Ethylhexyl)phtha...	149	12.639	12.658	0.995	1392417	46.22	ng/uL	98
86) Benzo(a)anthracene	228	12.684	12.687	0.999	1134860	38.47	ng/uL	100
87) Chrysene	228	12.738	12.742	1.003	1052186	38.61	ng/uL	99
89) Methylenebis(2-chloroa...	231	12.704	12.635	1.000	1933	5.95	ng/uL#	1
90) Di-n-octylphthalate	149	13.639	13.646	1.074	1572396	40.14	ng/uL	86
92) Benzo(b)fluoranthene	252	14.375	14.390	0.955	690172	38.27	ng/uL	98
93) Benzo(k)fluoranthene	252	14.423	14.439	0.958	710047	39.07	ng/uL	97
94) Benzo(a)pyrene	252	14.957	14.967	0.993	584138	38.25	ng/uL	98
95) Indeno(1,2,3-cd)pyrene	276	17.063	17.061	1.133	509780	44.99	ng/uL	94
96) Dibenzo(a,h)anthracene	278	17.094	17.095	1.135	420044	44.92	ng/uL	91
97) Benzo(ghi)perylene	276	17.583	17.572	1.168	409557	45.84	ng/uL	93
100) 1,4-Dioxane	88	2.535	2.464	0.518	182380	27.41	ng/uL#	69
108) Benzaldehyde	77	4.489	4.485	0.918	376838	29.78	ng/uL	91
110) N-Nitrosopyrrolidine	100	5.265	5.276	1.076	289612	37.92	ng/uL#	71
111) Acetophenone	105	5.279	5.290	1.079	749666	35.46	ng/uL#	9
117) 2,6-Dichlorophenol	162	6.248	6.253	1.011	80218	6.69	ng/uL	99
119) Caprolactam	113	6.609	6.616	1.069	90961	18.44	ng/uL#	32
123) 1,2,4,5-Tetrachloroben...	216	7.101	7.090	0.882	426336	34.54	ng/uL	99
124) 1,1-Biphenyl	154	7.419	7.417	0.921	1182414	33.96	ng/uL	97
137) Atrazine	173	9.317	9.321	0.964	66979	40.15	ng/uL	95
144) Benzidine	184	11.104	11.134	1.149	338918	34.42	ng/uL	97
152) 3,3'-Dichlorobenzidine	252	12.622	12.632	0.994	311326	39.63	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2622.D
Acq On : 26 Aug 2011 17:18
Operator : JLD1
InstName : MSD 3
Sample : |1202473717|1135988|1|SVM|1|MS
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 27 15:45:08 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473718**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MSD**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:57**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**500 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2614.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
108-95-2	Phenol		35.8	ug/L	6.00	20.0
111-44-4	bis(2-Chloroethyl) ether		55.7	ug/L	6.00	20.0
95-57-8	2-Chlorophenol		57.3	ug/L	6.00	20.0
39638-32-9	bis(2-Chloroisopropyl)ether		47.4	ug/L	6.00	20.0
95-48-7	o-Cresol		59.9	ug/L	6.00	20.0
65794-96-9	m,p-Cresols		65.2	ug/L	6.00	20.0
621-64-7	N-Nitrosodipropylamine		61.6	ug/L	6.00	20.0
67-72-1	Hexachloroethane		43.0	ug/L	6.00	20.0
98-95-3	Nitrobenzene		77.4	ug/L	6.00	20.0
78-59-1	Isophorone		75.1	ug/L	6.00	20.0
88-75-5	2-Nitrophenol		53.4	ug/L	6.00	20.0
105-67-9	2,4-Dimethylphenol		74.8	ug/L	6.00	20.0
111-91-1	bis(2-Chloroethoxy)methane		68.5	ug/L	6.00	20.0
120-83-2	2,4-Dichlorophenol		59.0	ug/L	6.00	20.0
106-47-8	4-Chloroaniline		80.7	ug/L	6.00	20.0
87-68-3	Hexachlorobutadiene		54.8	ug/L	6.00	20.0
59-50-7	4-Chloro-3-methylphenol		71.3	ug/L	6.00	20.0
91-57-6	2-Methylnaphthalene		64.1	ug/L	0.600	2.00
91-20-3	Naphthalene		64.1	ug/L	0.600	2.00
77-47-4	Hexachlorocyclopentadiene		54.1	ug/L	6.00	20.0
88-06-2	2,4,6-Trichlorophenol		47.6	ug/L	6.00	20.0
95-95-4	2,4,5-Trichlorophenol		55.1	ug/L	6.00	20.0
91-58-7	2-Chloronaphthalene		68.0	ug/L	0.600	2.00
88-74-4	o-Nitroaniline		58.0	ug/L	6.00	20.0
99-09-2	m-Nitroaniline		79.7	ug/L	6.00	20.0
131-11-3	Dimethylphthalate		104	ug/L	6.00	20.0
606-20-2	2,6-Dinitrotoluene		95.3	ug/L	6.00	20.0
121-14-2	2,4-Dinitrotoluene		96.5	ug/L	6.00	20.0
208-96-8	Acenaphthylene		72.5	ug/L	0.600	2.00
83-32-9	Acenaphthene		67.4	ug/L	0.600	2.00
51-28-5	2,4-Dinitrophenol	J	22.7	ug/L	10.0	40.0
132-64-9	Dibenzofuran		76.7	ug/L	6.00	20.0
58-90-2	2,3,4,6-Tetrachlorophenol		52.4	ug/L	6.00	20.0
84-66-2	Diethylphthalate		105	ug/L	6.00	20.0
100-02-7	4-Nitrophenol		33.9	ug/L	6.00	20.0
86-73-7	Fluorene		73.2	ug/L	0.600	2.00
7005-72-3	4-Chlorophenylphenylether		84.7	ug/L	6.00	20.0
100-01-6	p-Nitroaniline		80.6	ug/L	6.00	20.0

Semi-Volatile
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473718**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1135986**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MSD**	**Method:**	**SW846 3510C/8270D**	**SOP Ref:**	**GL-OA-E-009**
Batch ID:	**1135988**	**Inst:**	**MSD3.I**	**Dilution:**	**1**
Run Date:	**08/26/2011 13:57**	**Analyst:**	**JLD1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:55**	**Aliquot:**	**500 mL**	**Final Volume:**	**1 mL**
Data File:	**s082611.B\s3h2614.D**	**Column:**	**DB-5ms**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ
534-52-1	2-Methyl-4,6-dinitrophenol		30.2	ug/L	6.00	20.0
122-39-4	Diphenylamine		59.0	ug/L	6.00	20.0
101-55-3	4-Bromophenylphenylether		88.6	ug/L	6.00	20.0
118-74-1	Hexachlorobenzene		74.0	ug/L	6.00	20.0
87-86-5	Pentachlorophenol		36.4	ug/L	6.00	20.0
85-01-8	Phenanthrene		74.7	ug/L	0.600	2.00
120-12-7	Anthracene		72.7	ug/L	0.600	2.00
86-74-8	Carbazole		74.1	ug/L	0.600	2.00
84-74-2	Di-n-butylphthalate		93.8	ug/L	6.00	20.0
206-44-0	Fluoranthene		75.2	ug/L	0.600	2.00
129-00-0	Pyrene		67.9	ug/L	0.600	2.00
85-68-7	Butylbenzylphthalate		87.8	ug/L	6.00	20.0
117-81-7	bis(2-Ethylhexyl)phthalate		94.4	ug/L	6.00	20.0
56-55-3	Benzo(a)anthracene		75.6	ug/L	0.600	2.00
218-01-9	Chrysene		76.5	ug/L	0.600	2.00
117-84-0	Di-n-octylphthalate		91.8	ug/L	6.00	20.0
205-99-2	Benzo(b)fluoranthene		73.1	ug/L	0.600	2.00
207-08-9	Benzo(k)fluoranthene		75.3	ug/L	0.600	2.00
50-32-8	Benzo(a)pyrene		74.9	ug/L	0.600	2.00
193-39-5	Indeno(1,2,3-cd)pyrene		85.8	ug/L	0.600	2.00
53-70-3	Dibenzo(a,h)anthracene		86.3	ug/L	0.600	2.00
191-24-2	Benzo(ghi)perylene		86.2	ug/L	0.600	2.00
100-52-7	Benzaldehyde		58.2	ug/L	6.00	20.0
98-86-2	Acetophenone		72.1	ug/L	6.00	20.0
105-60-2	Caprolactam		40.1	ug/L	6.00	20.0
95-94-3	1,2,4,5-Tetrachlorobenzene		63.2	ug/L	6.00	20.0
92-52-4	1,1'-Biphenyl		64.3	ug/L	6.00	20.0
1912-24-9	Atrazine		81.7	ug/L	6.00	20.0
91-94-1	3,3'-Dichlorobenzidine		79.3	ug/L	6.00	20.0

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2614.D
Acq On : 26 Aug 2011 13:57
Operator : JLD1
InstName : MSD 3
Sample : |1202473718|1135988|1|SVM|1|MSD
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 14:50:09 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	Dev(Min)
Internal Standards								
1) A 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514946	40.00	ng/uL	0.00
24) A Naphthalene-d8	136	6.180	6.180	1.000	2002021	40.00	ng/uL	0.00
42) A Acenaphthene-d10	164	8.053	8.056	1.000	965901	40.00	ng/uL	0.00
67) A Phenanthrene-d10	188	9.667	9.670	1.000	1665873	40.00	ng/uL	0.00
81) A Chrysene-d12	240	12.701	12.704	1.000	1118891	40.00	ng/uL	0.00
91) A Perylene-d12	264	15.060	15.066	1.000	744995	40.00	ng/uL	0.00
99) B 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514946	40.00	ng/uL	0.00
114) B Naphthalene-d8	136	6.180	6.180	1.000	2002021	40.00	ng/uL	0.00
122) B Acenaphthene-d10	164	8.053	8.056	1.000	965901	40.00	ng/uL	0.00
131) B Phenanthrene-d10	188	9.667	9.670	1.000	1665873	40.00	ng/uL	0.00
145) B Chrysene-d12	240	12.701	12.704	1.000	1118891	40.00	ng/uL	0.00
153) B Perylene-d12	264	15.060	15.066	1.000	744995	40.00	ng/uL	0.00
156) D Naphthalene-d8	136	6.180	6.180	1.000	2002021	40.00	ng/uL	0.00
158) D Acenaphthene-d10	164	8.053	8.056	1.000	965901	40.00	ng/uL	0.00
161) D Phenanthrene-d10	188	9.667	9.670	1.000	1665873	40.00	ng/uL	0.00
168) D Chrysene-d12	240	12.701	12.704	1.000	1118891	40.00	ng/uL	0.00
170) E Naphthalene-d8	136	6.180	6.180	1.000	2020221	40.00	ng/uL	0.00
172) E Perylene-d12	264	15.060	15.066	1.000	744995	40.00	ng/uL	0.00
174) F 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514946	40.00	ng/uL	0.00
177) F Naphthalene-d8	136	6.180	6.180	1.000	2002021	40.00	ng/uL	0.00
181) F Acenaphthene-d10	164	8.053	8.056	1.000	965901	40.00	ng/uL	0.00
184) F Phenanthrene-d10	188	9.667	9.670	1.000	1665873	40.00	ng/uL	0.00
188) F Chrysene-d12	240	12.701	12.704	1.000	1118891	40.00	ng/uL	0.00
192) J 1,4-Dichlorobenzene-d4	152	4.893	4.896	1.000	514946	40.00	ng/uL	0.00
194) J Naphthalene-d8	136	6.180	6.180	1.000	2002021	40.00	ng/uL	0.00
196) J Chrysene-d12	240	12.701	12.704	1.000	1118891	40.00	ng/uL	0.00
199) J Perylene-d12	264	15.060	15.066	1.000	744995	40.00	ng/uL	0.00
System Monitoring Compounds								Dev(Min)
5) 2-Fluorophenol	112	3.714	3.676	0.759	756622	45.05	ng/uL	0.04
8) Phenol-d5	99	4.492	4.484	0.918	734512	34.48	ng/uL	0.00
25) Nitrobenzene-d5	82	5.439	5.423	0.880	588507	33.20	ng/uL	0.02
47) 2-Fluorobiphenyl	172	7.305	7.299	0.907	1216406	34.45	ng/uL	0.00
66) 2,4,6-Tribromophenol	330	8.905	8.920	1.106	238544	58.75	ng/uL	-0.01
83) p-Terphenyl-d14	244	11.372	11.400	0.895	884406	31.13	ng/uL	-0.03

Compound	Amount	Range	Recovery
5) 2-Fluorophenol	100.000	14 - 78	45.05%
8) Phenol-d5	100.000	14 - 80	34.48%
25) Nitrobenzene-d5	50.000	40 - 117	66.40%
47) 2-Fluorobiphenyl	50.000	37 - 102	68.90%
66) 2,4,6-Tribromophenol	100.000	33 - 126	58.75%
83) p-Terphenyl-d14	50.000	44 - 134	62.26%

Target Compounds	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	QValue
3) N-Methyl-N-nitrosometh...	74	2.742	2.673	0.560	304214	25.49	ng/uL	81
4) Pyridine	79	2.779	2.702	0.568	501252	30.32	ng/uL#	73
7) Aniline	66	4.581	4.575	0.936	321365	30.79	ng/uL	85
9) Phenol	94	4.504	4.500	0.920	396626	17.89	ng/uL	97
10) bis(2-Chloroethyl) ether	63	4.617	4.613	0.944	499021	27.83	ng/uL	78
11) 2-Chlorophenol	128	4.691	4.686	0.959	476349	28.64	ng/uL	86

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2614.D
Acq On : 26 Aug 2011 13:57
Operator : JLD1
InstName : MSD 3
Sample : |1202473718|1135988|1|SVM|1|MSD
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 14:50:09 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
12)	n-Decane	43	4.694	4.695	0.959	397460	12.23	ng/uL	96
13)	1,3-Dichlorobenzene	146	4.842	4.844	0.990	465551	25.11	ng/uL	99
14)	1,4-Dichlorobenzene	146	4.910	4.914	1.003	479106	25.50	ng/uL	99
15)	1,2-Dichlorobenzene	146	5.061	5.065	1.034	472761	26.77	ng/uL	98
16)	bis(2-Chloroisopropyl)...	45	5.126	5.138	1.048	1130367	23.72	ng/uL	82
17)	Benzyl alcohol	108	5.004	5.010	1.023	394612	35.33	ng/uL	92
18)	o-Cresol	107	5.086	5.094	1.039	423160	29.96	ng/uL	98
19)	m,p-Cresols	107	5.243	5.254	1.071	589597	32.59	ng/uL#	60
20)	N-Nitrosodipropylamine	70	5.268	5.287	1.077	411477	30.82	ng/uL	74
23)	Hexachloroethane	117	5.396	5.410	1.103	168209	21.51	ng/uL	90
26)	Nitrobenzene	77	5.459	5.446	0.883	695180	38.68	ng/uL	94
27)	Isophorone	82	5.689	5.684	0.920	1260769	37.57	ng/uL	94
28)	2-Nitrophenol	139	5.771	5.765	0.934	238075	26.71	ng/uL	92
29)	2,4-Dimethylphenol	122	5.782	5.777	0.936	545401	37.38	ng/uL	99
30)	bis(2-Chloroethoxy)met...	93	5.888	5.887	0.953	713469	34.27	ng/uL	99
31)	2,4-Dichlorophenol	162	6.013	6.012	0.973	363716	29.49	ng/uL	96
32)	Benzoic acid	105	5.882	5.890	0.952	325000	31.23	ng/uL	92
33)	1,2,4-Trichlorobenzene	180	6.106	6.107	0.988	408953	28.16	ng/uL	100
34)	alpha-Terpineol	59	6.186	6.192	1.001	487732	22.91	ng/uL	76
35)	Naphthalene	128	6.203	6.203	1.004	1455334	32.03	ng/uL	93
36)	4-Chloroaniline	127	6.240	6.241	1.010	715874	40.37	ng/uL	89
37)	Hexachlorobutadiene	225	6.308	6.314	1.021	210540	27.38	ng/uL	100
38)	4-Chloro-3-methylphenol	107	6.726	6.735	1.088	479035	35.64	ng/uL	98
39)	2-Methylnaphthalene	142	6.925	6.944	1.120	999566	32.07	ng/uL	99
41)	1-Methylnaphthalene	142	7.033	7.054	1.138	985090	32.99	ng/uL	100
43)	Hexachlorocyclopentadiene	237	7.084	7.070	0.880	184448	27.06	ng/uL	99
44)	2,3-Dichloroaniline	161	7.223	7.212	0.897	579314	35.01	ng/uL	98
45)	2,4,6-Trichlorophenol	196	7.215	7.204	0.896	210921	23.80	ng/uL	100
46)	2,4,5-Trichlorophenol	196	7.251	7.238	0.900	259072	27.54	ng/uL	99
48)	2-Chloronaphthalene	162	7.453	7.444	0.926	985313	33.99	ng/uL	98
49)	o-Nitroaniline	65	7.550	7.544	0.938	316588	29.01	ng/uL	81
51)	m-Nitroaniline	138	7.993	7.998	0.993	298223	39.85	ng/uL	89
52)	Dimethylphthalate	163	7.732	7.741	0.960	1684015	51.87	ng/uL	99
54)	2,6-Dinitrotoluene	165	7.808	7.810	0.970	354765	47.67	ng/uL	78
55)	2,4-Dinitrotoluene	165	8.240	8.249	1.023	438112	48.23	ng/uL	83
56)	Acenaphthylene	152	7.902	7.902	0.981	1737546	36.23	ng/uL	100
57)	Acenaphthene	154	8.090	8.093	1.005	1023786	33.69	ng/uL	97
58)	2,4-Dinitrophenol	184	8.098	8.105	1.006	39586	11.35	ng/uL#	1
59)	Dibenzofuran	168	8.274	8.281	1.028	1531910	38.33	ng/uL	100
60)	2,3,4,6-Tetrachlorophenol	232	8.391	8.399	1.042	176418	26.19	ng/uL	98
61)	Diethylphthalate	149	8.487	8.503	1.054	1795992	52.27	ng/uL	99
62)	4-Nitrophenol	139	8.147	8.145	1.012	83128	16.96	ng/uL	87
63)	Fluorene	166	8.647	8.660	1.074	1259523	36.61	ng/uL	100
64)	4-Chlorophenylphenylether	204	8.630	8.643	1.072	657282	42.37	ng/uL	98
65)	p-Nitroaniline	138	8.658	8.671	1.075	254390	40.29	ng/uL	95
68)	2-Methyl-4,6-dinitroph...	198	8.681	8.676	0.898	74112	15.11	ng/uL	80
69)	Diphenylamine	169	8.757	8.754	0.906	853670	29.50	ng/uL	100
70)	1,2-Diphenylhydrazine	77	8.803	8.799	0.911	1188047	29.21	ng/uL	92
71)	4-Bromophenylphenylether	248	9.164	9.163	0.948	375245	44.28	ng/uL	93
72)	Hexachlorobenzene	284	9.238	9.235	0.956	368945	36.98	ng/uL	99
73)	Pentachlorophenol	266	9.445	9.442	0.977	99428	18.20	ng/uL	100
74)	n-Octadecane	57	9.485	9.499	0.981	897578	20.94	ng/uL	92

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2614.D
Acq On : 26 Aug 2011 13:57
Operator : JLD1
InstName : MSD 3
Sample : |1202473718|1135988|1|SVM|1|MSD
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 14:50:09 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE

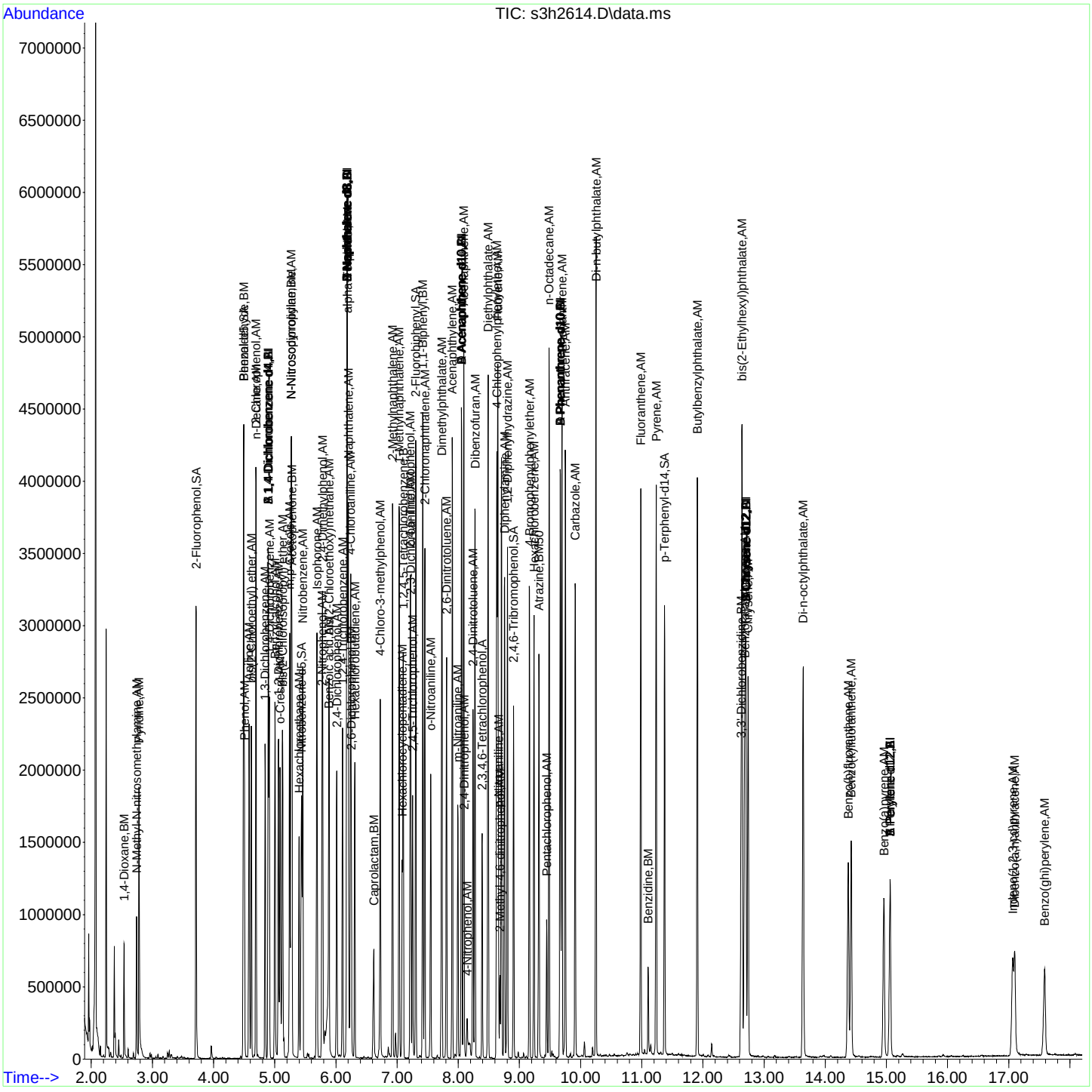
	Compound	QIon	R.T.	Exp RT	Rel RT	Response	Conc	Units	
76)	Phenanthrene	178	9.695	9.699	1.003	1613254	37.36	ng/uL	100
77)	Anthracene	178	9.749	9.756	1.009	1580599	36.34	ng/uL	100
78)	Carbazole	167	9.911	9.920	1.025	1352691	37.04	ng/uL	100
79)	Di-n-butylphthalate	149	10.252	10.272	1.061	2748216	46.90	ng/uL	100
80)	Fluoranthene	202	10.985	11.008	1.136	1596467	37.58	ng/uL	97
82)	Pyrene	202	11.235	11.256	0.885	1598099	33.96	ng/uL	96
84)	Butylbenzylphthalate	149	11.909	11.935	0.938	1009697	43.89	ng/uL	91
85)	bis(2-Ethylhexyl)phtha...	149	12.639	12.658	0.995	1481670	47.18	ng/uL	98
86)	Benzo(a)anthracene	228	12.684	12.687	0.999	1161679	37.78	ng/uL	100
87)	Chrysene	228	12.738	12.742	1.003	1086288	38.24	ng/uL	100
90)	Di-n-octylphthalate	149	13.639	13.646	1.074	1874461	45.90	ng/uL	86
92)	Benzo(b)fluoranthene	252	14.375	14.390	0.955	847061	36.55	ng/uL	98
93)	Benzo(k)fluoranthene	252	14.423	14.439	0.958	878592	37.63	ng/uL	96
94)	Benzo(a)pyrene	252	14.960	14.967	0.993	734617	37.44	ng/uL	98
95)	Indeno(1,2,3-cd)pyrene	276	17.063	17.061	1.133	624528	42.90	ng/uL	93
96)	Dibenzo(a,h)anthracene	278	17.097	17.095	1.135	518484	43.15	ng/uL	91
97)	Benzo(ghi)perylene	276	17.586	17.572	1.168	494678	43.09	ng/uL	93
100)	1,4-Dioxane	88	2.538	2.464	0.519	197270	27.60	ng/uL#	69
108)	Benzaldehyde	77	4.492	4.485	0.918	395487	29.10	ng/uL	91
110)	N-Nitrosopyrrolidine	100	5.268	5.276	1.077	319354	38.93	ng/uL#	72
111)	Acetophenone	105	5.279	5.290	1.079	818581	36.05	ng/uL#	9
117)	2,6-Dichlorophenol	162	6.251	6.253	1.011	308798	23.55	ng/uL	99
119)	Caprolactam	113	6.621	6.616	1.071	108225	20.07	ng/uL#	32
123)	1,2,4,5-Tetrachloroben...	216	7.101	7.090	0.882	456833	31.62	ng/uL	100
124)	1,1-Biphenyl	154	7.419	7.417	0.921	1311420	32.17	ng/uL	98
137)	Atrazine	173	9.320	9.321	0.964	87433	40.84	ng/uL	96
144)	Benzidine	184	11.104	11.134	1.149	233375	18.47	ng/uL	97
152)	3,3'-Dichlorobenzidine	252	12.622	12.632	0.994	324724	39.65	ng/uL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
(A) = Over the calibration range (d) = deleted

Quantitation Report
GEL Laboratories, LLC

Data Path : C:\msdchem\1\DATA\s082611.B\
Data File : s3h2614.D
Acq On : 26 Aug 2011 13:57
Operator : JLD1
InstName : MSD 3
Sample : |1202473718|1135988|1|SVM|1|MSD
Misc : |MSD1C70D_L|UBN110329-01.4|MIX[A,B]
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 26 14:50:09 2011
Quant Method : C:\msdchem\1\DATA\s082611.B\MSD3_8270d_081211.m
Quant Title : BNA01 SubList :
QLast Update : Mon Aug 15 15:17:29 2011
Response via : Initial Calibration
Integrator: RTE



Miscellaneous

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Groundwater, Wastewater, and Other Aqueous Samples

Batch ID: 1135986 **Verified by:** _____
Analyst: Alton Willis
Method: SW846 3510C

Lab SOP: GL-OA-E-013 REV# 24
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Ph 1	Ph 2	Ph 3	Final Volume (mL)	Prepped Factor (mL/mL)
1202473715 MB	25-AUG-2011 18:55:00	1000	5	1	13	1	0.001
1202473716 LCS	25-AUG-2011 18:55:00	1000	5	1	13	1	0.001
284538001	25-AUG-2011 18:55:00	1000	6	1	13	1	0.001
1202473717 MS (284538001)	25-AUG-2011 18:55:00	500	6	1	13	1	0.002
1202473718 MSD (284538001)	25-AUG-2011 18:55:00	500	6	1	13	1	0.002

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202473716	BNA LCS w/o Benzidine 50ppm	UE110714-19	1	mL
LCS	1202473716	BENZIDINE LCS	UE110728-02	1	mL
MS	1202473717	BNA LCS w/o Benzidine 50ppm	UE110714-19	1	mL
MS	1202473717	BENZIDINE LCS	UE110728-02	1	mL
MSD	1202473718	BNA LCS w/o Benzidine 50ppm	UE110714-19	1	mL
MSD	1202473718	BENZIDINE LCS	UE110728-02	1	mL
SURR	All	BNA for all Surrogate	UE110728-28	1	mL
REGNT	All	Methylene Chloride	1605750-D	360	mL
REGNT	All	10 N Sodium Hydroxide Solution	1606966	10	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1607507	2	mL
SOURC	All	SODIUM SULFATE	1594298	30	g

Comments:

Final Solvent: CH2Cl2
Verified By: SSS

Int Ext pH: 1
Sec Ext pH: 13

Samples 284538001 (MS/MSD) were emulsive during acid extraction.

ORGANIC RUN LOG - INSTRUMENT ID#MSD3

GEL ORGANIC RUN LOG

DATE: 12-Aug-11 METHOD: See Data OPERATOR: JLD1 REVIEWED BY:

REVIEWED DATE:

Multiplier Voltage: 1400
Internal Std ID: UBN110329-01.2

Calibration & QC Information:
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP: GL-OA-E-009

Solvent Lot: 1574759-D

Sequence Number: S081211.B

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
08/12/2011	08:37	s3h1201.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	DUSE
08/12/2011	08:54	s3h1202.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	USE; AP ONLY
08/12/2011	09:08	s3h1203.D	INSTRUMENTBLANK			1	2	JLD1	IB
08/12/2011	09:36	s3h1204.D	WBN110721-08	M1	ICAL	1	3	JLD1	DUSE
08/12/2011	10:05	s3h1205.D	WBN110721-07	M2	ICAL	1	4	JLD1	DUSE
08/12/2011	10:35	s3h1206.D	WBN110721-07	M2	ICAL	1	4	JLD1	DUSE
08/12/2011	11:06	s3h1207.D	WBN110721-06	M3	ICAL	1	5	JLD1	DUSE
08/12/2011	11:37	s3h1208.D	WBN110721-05.1	M4	ICAL	1	6	JLD1	DUSE
08/12/2011	12:08	s3h1209.D	WBN110721-04	M5	ICAL	1	7	JLD1	DUSE
08/12/2011	12:39	s3h1210.D	WBN110721-03	M6	ICAL	1	8	JLD1	DUSE
08/12/2011	13:10	s3h1211.D	WBN110721-02	M7	ICAL	1	9	JLD1	DUSE
08/12/2011	13:41	s3h1212.D	WBN110721-01	M8	ICAL	1	10	JLD1	DUSE
08/12/2011	14:12	s3h1213.D	WBN110721-08	M1	ICAL	1	3	JLD1	DUSE
08/12/2011	14:43	s3h1214.D	WBN110721-09.1	MICV	ICV	1	11	JLD1	DUSE; FAILS AQA
08/12/2011	15:29	s3h1215.D	WBN110719-17	A2	ICAL	1	12	JLD1	USE
08/12/2011	15:53	s3h1216.D	WBN110719-16	A3	ICAL	1	13	JLD1	USE
08/12/2011	16:18	s3h1217.D	WBN110719-15.1	A4	ICAL	1	14	JLD1	USE
08/12/2011	16:42	s3h1218.D	WBN110719-14	A5	ICAL	1	15	JLD1	USE
08/12/2011	17:07	s3h1219.D	WBN110719-13	A6	ICAL	1	16	JLD1	USE
08/12/2011	17:32	s3h1220.D	WBN110719-12	A7	ICAL	1	17	JLD1	USE
08/12/2011	17:57	s3h1221.D	WBN110719-11	A8	ICAL	1	18	JLD1	USE
08/12/2011	18:22	s3h1222.D	WBN110809-18.1	AICV	ICV	1	19	JLD1	USE
08/12/2011	18:48	s3h1223.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	DUSE; FAILS BREAKDOWN
08/12/2011	19:01	s3h1224.D	INSTRUMENTBLANK			1	2	JLD1	IB
08/12/2011	19:32	s3h1225.D	WBN110726-25	P2	ICAL	1	20	JLD1	DUSE; NOT PROCESSED
08/12/2011	19:57	s3h1226.D	WBN110726-24	P3	ICAL	1	21	JLD1	DUSE; NOT PROCESSED
08/12/2011	20:22	s3h1227.D	WBN110726-23.1	P4	ICAL	1	22	JLD1	DUSE; NOT PROCESSED
08/12/2011	20:47	s3h1228.D	WBN110726-22	P5	ICAL	1	23	JLD1	DUSE; NOT PROCESSED

ORGANIC RUN LOG - INSTRUMENT ID#MSD3

GEL ORGANIC RUN LOG

08/12/2011 21:12	s3h1229.D	WBN110726-21	P6	ICAL	1	24	JLD1	DUSE; NOT PROCESSED
08/12/2011 21:36	s3h1230.D	WBN110726-20	P7	ICAL	1	25	JLD1	DUSE; NOT PROCESSED
08/12/2011 22:01	s3h1231.D	WBN110726-19	P8	ICAL	1	26	JLD1	DUSE; NOT PROCESSED
08/12/2011 22:26	s3h1232.D	WBN110726-26.1	PICV	ICV	1	27	JLD1	DUSE; NOT PROCESSED
08/12/2011 22:51	s3h1233.D	WBN110802-31	H2	ICAL	1	28	JLD1	DUSE; NOT PROCESSED
08/12/2011 23:16	s3h1234.D	WBN110802-32	H3	ICAL	1	29	JLD1	DUSE; NOT PROCESSED
08/12/2011 23:40	s3h1235.D	WBN110802-33.1	H4	ICAL	1	30	JLD1	DUSE; NOT PROCESSED
08/13/2011 00:05	s3h1236.D	WBN110802-34	H5	ICAL	1	31	JLD1	DUSE; NOT PROCESSED
08/13/2011 00:30	s3h1237.D	WBN110802-35	H6	ICAL	1	32	JLD1	DUSE; NOT PROCESSED
08/13/2011 00:55	s3h1238.D	WBN110802-36	H7	ICAL	1	33	JLD1	DUSE; NOT PROCESSED
08/13/2011 01:19	s3h1239.D	WBN110802-33.2	HCCV	CCV	1	34	JLD1	DUSE; NOT PROCESSED
08/13/2011 01:44	s3h1240.D	WBN110615-51	N2	ICAL	1	35	JLD1	DUSE; NOT PROCESSED
08/13/2011 02:09	s3h1241.D	WBN110615-52	N3	ICAL	1	36	JLD1	DUSE; NOT PROCESSED
08/13/2011 02:34	s3h1242.D	WBN110615-53	N4	ICAL	1	37	JLD1	DUSE; NOT PROCESSED
08/13/2011 02:58	s3h1243.D	WBN110615-54	N5	ICAL	1	38	JLD1	DUSE; NOT PROCESSED
08/13/2011 03:23	s3h1244.D	WBN110615-55	N6	ICAL	1	39	JLD1	DUSE; NOT PROCESSED
08/13/2011 03:48	s3h1245.D	WBN110615-56	N7	ICAL	1	40	JLD1	DUSE; NOT PROCESSED
08/13/2011 04:13	s3h1246.D	WBN110615-57	N8	ICAL	1	41	JLD1	DUSE; NOT PROCESSED
08/13/2011 04:37	s3h1247.D	WBN110615-58	NCCV	CCV	1	42	JLD1	DUSE; NOT PROCESSED
08/13/2011 05:04	s3h1248.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	USE; BJCO/MEGA
08/13/2011 05:17	s3h1249.D	INSTRUMENTBLANK			1	2	JLD1	IB
08/13/2011 05:42	s3h1250.D	WBN110802-47	B2	ICAL	1	43	JLD1	USE
08/13/2011 06:12	s3h1251.D	WBN110802-46	B3	ICAL	1	44	JLD1	USE
08/13/2011 06:43	s3h1252.D	WBN110802-45.1	B4	ICAL	1	45	JLD1	USE
08/13/2011 07:15	s3h1253.D	WBN110802-44	B5	ICAL	1	46	JLD1	USE
08/13/2011 07:46	s3h1254.D	WBN110802-43	B6	ICAL	1	47	JLD1	USE
08/13/2011 08:17	s3h1255.D	WBN110802-42	B7	ICAL	1	48	JLD1	USE
08/13/2011 08:48	s3h1256.D	WBN110802-41	B8	ICAL	1	49	JLD1	USE
08/13/2011 09:19	s3h1257.D	WBN110802-45.2	BCCV	CCV	1	50	JLD1	USE
08/13/2011 09:50	s3h1258.D	WBN110812-08	M1	ICAL	1	51	JLD1	USE
08/13/2011 10:21	s3h1259.D	WBN110812-07	M2	ICAL	1	52	JLD1	USE
08/13/2011 10:52	s3h1260.D	WBN110812-06	M3	ICAL	1	53	JLD1	USE
08/13/2011 11:24	s3h1261.D	WBN110812-05.1	M4	ICAL	1	54	JLD1	USE
08/13/2011 11:55	s3h1262.D	WBN110812-04	M5	ICAL	1	55	JLD1	USE
08/13/2011 12:26	s3h1263.D	WBN110812-03	M6	ICAL	1	56	JLD1	USE
08/13/2011 12:57	s3h1264.D	WBN110812-02	M7	ICAL	1	57	JLD1	USE
08/13/2011 13:28	s3h1265.D	WBN110812-01	M8	ICAL	1	58	JLD1	USE
08/13/2011 13:59	s3h1266.D	WBN110812-09.1	MICV	ICV	1	59	JLD1	USE
08/14/2011 15:46	s3h1267.D	WBN110724-01	DFTPP	DFTPP	1	60	JLD1	DUSE; FAILS BREAKDOWN
08/14/2011 16:01	s3h1268.D	WBN110724-01	DFTPP	DFTPP	1	60	JLD1	DUSE; FAILS BREAKDOWN
08/14/2011 16:23	s3h1269.D	WBN110724-01	DFTPP	DFTPP	1	60	JLD1	DUSE; FAILS BREAKDOWN

ORGANIC RUN LOG - INSTRUMENT ID#MSD3

GEL ORGANIC RUN LOG

08/14/2011 16:38	s3h1270.D	WBN110724-01	DFTPP	DFTPP	1	60	JLD1	USE; PEST/HEX/NEV
08/14/2011 16:51	s3h1271.D	INSTRUMENTBLANK			1	61	JLD1	IB
08/14/2011 17:22	s3h1272.D	WBN110726-25	P2	ICAL	1	62	JLD1	USE
08/14/2011 17:47	s3h1273.D	WBN110726-24	P3	ICAL	1	63	JLD1	USE
08/14/2011 18:12	s3h1274.D	WBN110726-23.1	P4	ICAL	1	64	JLD1	USE
08/14/2011 18:36	s3h1275.D	WBN110726-22	P5	ICAL	1	65	JLD1	USE
08/14/2011 19:01	s3h1276.D	WBN110726-21	P6	ICAL	1	66	JLD1	USE
08/14/2011 19:26	s3h1277.D	WBN110726-20	P7	ICAL	1	67	JLD1	USE
08/14/2011 19:51	s3h1278.D	WBN110726-19	P8	ICAL	1	68	JLD1	USE
08/14/2011 20:15	s3h1279.D	WBN110726-26.1	PICV	ICV	1	69	JLD1	USE
08/14/2011 20:40	s3h1280.D	WBN110802-31	H2	ICAL	1	70	JLD1	USE
08/14/2011 21:05	s3h1281.D	WBN110802-32	H3	ICAL	1	71	JLD1	USE
08/14/2011 21:30	s3h1282.D	WBN110802-33.1	H4	ICAL	1	72	JLD1	USE
08/14/2011 21:55	s3h1283.D	WBN110802-34	H5	ICAL	1	73	JLD1	USE
08/14/2011 22:20	s3h1284.D	WBN110802-35	H6	ICAL	1	74	JLD1	USE
08/14/2011 22:44	s3h1285.D	WBN110802-36	H7	ICAL	1	75	JLD1	USE
08/14/2011 23:09	s3h1286.D	WBN110802-33.2	HCCV	CCV	1	76	JLD1	USE
08/14/2011 23:34	s3h1287.D	WBN110615-51	N2	ICAL	1	77	JLD1	USE
08/14/2011 23:59	s3h1288.D	WBN110615-52	N3	ICAL	1	78	JLD1	USE
08/15/2011 00:24	s3h1289.D	WBN110615-53	N4	ICAL	1	79	JLD1	USE
08/15/2011 00:49	s3h1290.D	WBN110615-54	N5	ICAL	1	80	JLD1	USE
08/15/2011 01:13	s3h1291.D	WBN110615-55	N6	ICAL	1	81	JLD1	USE
08/15/2011 01:38	s3h1292.D	WBN110615-56	N7	ICAL	1	82	JLD1	USE
08/15/2011 02:03	s3h1293.D	WBN110615-57	N8	ICAL	1	83	JLD1	USE
08/15/2011 02:28	s3h1294.D	WBN110615-58	NCCV	CCV	1	84	JLD1	USE

ORGANIC RUN LOG - INSTRUMENT ID#MSD3

GEL ORGANIC RUN LOG

DATE: 26-Aug-11 METHOD: See Data OPERATOR: JLD1 REVIEWED BY:

REVIEWED DATE:

Multiplier Voltage: 1424
Internal Std ID: UBN110329-01.4

Calibration & QC Information:

Solvent Lot: 1598647-D

Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP: GL-OA-E-009

Sequence Number: S082611.B

Analysis Date	Time	Data File	Lab Sample ID	Client	Batch #	Dil. Factor	AS Slot #	Analyst	Comments
08/26/2011	08:17	s3h2601.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	DUSE
08/26/2011	08:30	s3h2602.D	WBN110812-05.3	MCCV	CCV	1	2	JLD1	DUSE; MAINTENANCE
08/26/2011	09:04	s3h2603.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	DUSE
08/26/2011	09:22	s3h2604.D	WBN110724-01	DFTPP	DFTPP	1	1	JLD1	USE
08/26/2011	09:34	s3h2605.D	WBN110812-05.3	MCCV	CCV	1	2	JLD1	USE; 520022
08/26/2011	10:06	s3h2606.D	WBN110809-18.3	ACCV	CCV	1	3	JLD1	USE
08/26/2011	10:31	s3h2607.D	WBN110615-23.5	PCCV	CCV	1	4	JLD1	USE
08/26/2011	11:24	s3h2608.D	1202473715	MB	1135988	1	5	JLD1	USE
08/26/2011	11:49	s3h2609.D	1202473716	LCS	1135988	1	6	JLD1	USE
08/26/2011	12:17	s3h2610.D	1202474717	MB	1136357	1	7	JLD1	USE
08/26/2011	12:42	s3h2611.D	1202474718	LCS	1136357	1	8	JLD1	USE
08/26/2011	13:07	s3h2612.D	284538001	ECOL	1135988	1	9	JLD1	USE
08/26/2011	13:32	s3h2613.D	1202473717	MS	1135988	1	10	JLD1	DUSE; FAIL SPIKE AND SURR S3H2622 CONFIRM
08/26/2011	13:57	s3h2614.D	1202473718	MSD	1135988	1	11	JLD1	USE
08/26/2011	14:22	s3h2615.D	284583001	WSRB	1136357	1	12	JLD1	USE
08/26/2011	14:47	s3h2616.D	1202474719	MS	1136357	1	13	JLD1	USE
08/26/2011	15:12	s3h2617.D	1202474720	MSD	1136357	1	14	JLD1	USE
08/26/2011	15:38	s3h2618.D	284583002	WSRB	1136357	1	15	JLD1	USE
08/26/2011	16:03	s3h2619.D	284583003	WSRB	1136357	1	16	JLD1	USE
08/26/2011	16:28	s3h2620.D	284583004	WSRB	1136357	1	17	JLD1	USE
08/26/2011	16:53	s3h2621.D	284583005	WSRB	1136357	1	18	JLD1	USE
08/26/2011	17:18	s3h2622.D	1202473717	MS	1135988	1	19	JLD1	USE-STILL FAIL SPIKE/SURR
08/26/2011	17:43	s3h2623.D	284583004	WSRB	1136357	1	17	JLD1	DUSE-NOT NEEDED
08/26/2011	18:08	s3h2624.D	284583005	WSRB	1136357	1	18	JLD1	DUSE-NOT NEEDED

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
29-AUG-11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 3510C/8270D	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1135988	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. The MS(1202473717) recovered 2,4,6-Tribromophenol at 14%. The limits are 33%-126%.	1. The MB(1202473715), LCS(1202473716) and MSD(1202473718) satisfied surrogate recovery acceptance criteria. Also, all associated client samples displayed acceptable surrogate recoveries. Therefore, it was determined that the failure was limited to the MS sample only and re-extraction was considered un-necessary.
2. The MS(1202473717) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary for specific failures.	2. The LCS(1202473716) and MSD(1202473718) satisfied batch QC acceptance criteria (with the exception of 4-Nitrophenol in the MSD - see item #3 of this NCR). Therefore, it was determined that the failures were limited to the MS(1202473717) sample only and re-extraction was considered un-necessary.
3. The MSD(1202473718) recovered 4-Nitrophenol at 34%. The limits are 39%-96%.	3. 4-Nitrophenol was identified as poor responding analyte in the analytical method (EPA 8270 D). This may account for the low recovery it displayed in the MSD (as well as in the MS).
4. Multiple MS(1202473717)/MSD(1202473718) RPD values were outside of the established acceptance limits. Please see the QC Summary for specific failures.	4. The failures were attributed to the poor recoveries in the MS (see item #2 of this NCR).

Originator's Name:

Jennifer Dunagan Jones 29-AUG-11

Data Validator/Group Leader:

Daniel Beacham 13-SEP-11

GC Semivolatile Pesticide Analysis

Case Narrative

Pesticide Case Narrative
Ecology and Environment, Inc. Start-3 002233.2008 (ECOL)
SDG 284538

Method/Analysis Information

Procedure:	**Organochlorine Pesticides and Chlorinated Hydrocarbons**
Analytical Method:	SW846 3535A/8081B
Prep Method:	SW846 3535A
Analytical Batch Number:	1136049
Prep Batch Number:	1136047

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3535A/8081B:

Sample ID	Client ID
284538001	11080101
1202473924	Method Blank (MB)
1202473925	Laboratory Control Sample (LCS)
1202473926	284538001(11080101) Matrix Spike (MS)
1202473927	284538001(11080101) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-041 REV# 11.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y

axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All calibration verification standards (CVS, ICV, or CCV) requirements were met for this SDG. All analytes were within the established retention time windows for this method.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
QC samples 1202473926 (11080101MS) and 1202473927 (11080101MSD) did not meet the acceptance criteria for surrogate yields. As the MS and MSD exhibited similar surrogate yields, the non-compliances were attributed to sample matrix interference and the data were reported. See DER #992483 located in the Miscellaneous Data section of this package.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 284538001 (11080101) was selected for analysis as the matrix spike and matrix spike duplicate.

Matrix Spike (MS) Recovery Statement
The matrix spike (MS) recoveries for this SDG were not within the acceptance limits. The non-compliant spike recoveries were confirmed in the matrix spike duplicate (MSD) and were therefore attributed to sample matrix interference. See DER #992483 located in the Miscellaneous Data section of this package.

Matrix Spike Duplicate (MSD) Recovery Statement
The matrix spike duplicate (MSD) recoveries for this SDG were not within the acceptance limits. The non-compliant spike recoveries were confirmed in the matrix spike (MS) and were therefore attributed to sample matrix interference. See DER #992483 located in the Miscellaneous Data section of this package.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD values between the MS and MSD met the acceptance limits.

Technical Information:

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All reported analyte detections in client and quality control samples were within the established retention time windows. Reported target analyte concentrations were confirmed on a dissimilar column.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions were not required in this SDG.

Florisil
Florisil clean-up was not performed on client and quality control samples in this batch.

Miscellaneous Information:

Electronic Package Comment
This package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative.

Data Exception (DER) Documentation
Data Exception Reports (DERs) are for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. DER #992483 was generated for this SDG. A copy was included in the Miscellaneous Data section of this package.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this pesticide fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Prep 1136047 comment: Samples 284538001(11080101), 1202473926 (11080101MS), and 1202473927 (11080101MSD) were brown in color with suspended solids.

The higher of the results from either column have been chosen and reported in the data package for the client sample, MB, and LCS. The matrix QC results were reported from the same analytical column as the parent sample.

The data reported on the forms I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Due to software limitation, the Form VIIs will display the results either in the % difference or % drift depending on the type of the calibration curve. If the curve of all analytes is generated using an average response factor (RF), the Form VII will display results using the %difference calculation (RF). If the curve of one or more analytes is generated using a linear curve, the Form VII will display results using the % drift calculation (by concentration) for all analyte.

System Configuration

The Semi-Volatiles-Pesticide analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD3A.I_1	Agilent 6890 Gas Chromatograph/Dual ECD w/ 7683 Autosampler	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide)
ECD3A.I_2	Agilent 6890 Gas Chromatograph/Dual ECD w/ 7683 Autosampler	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Heather Au Hoy Date: 09/15/2011

Roadmap for ECOL 284538 PEST

This roadmap was analyzed by REB01393 on 09-01-2011, 15:21.
This roadmap was reviewed by jcb on 09-02-2011, 08:59.
This roadmap was packaged by hea01125 on 09-15-2011, 11:59.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd3a.i/083011P.B/016F1601.D	284538001	sample	30-AUG-2011	18:59	284538.sub	11080101	1.00000	1136049	

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd3a.i/083011P.B/016B1601.D	284538001	sample	30-AUG-2011	18:59	284538.sub	11080101	1.00000	1136049	USE. PASSING BOTH, UPLOAD HIGHER.

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd3a.i/083011P.B/014F1401.D	1202473924	mb	30-AUG-2011	18:28	284538.sub	PBLK01	1.00000	1136049	
☐	N	/chem/ecd3a.i/083011P.B/015F1501.D	1202473925	lcs	30-AUG-2011	18:43	284538.sub	PBLK01LCS	1.00000	1136049	
☐	N	/chem/ecd3a.i/083011P.B/017F1701.D	1202473926	ms	30-AUG-2011	19:15	284538.sub	11080101MS	1.00000	1136049	
☐	N	/chem/ecd3a.i/083011P.B/018F1801.D	1202473927	msd	30-AUG-2011	19:30	284538.sub	11080101MSD	1.00000	1136049	

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd3a.i/083011P.B/014B1401.D	1202473924	mb	30-AUG-2011	18:28	284538.sub	PBLK01	1.00000	1136049	USE. PASSING BOTH, UPLOAD HIGHER.
☐	N	/chem/ecd3a.i/083011P.B/015B1501.D	1202473925	lcs	30-AUG-2011	18:43	284538.sub	PBLK01LCS	1.00000	1136049	USE. PASSING BOTH, UPLOAD HIGHER.
☐	N	/chem/ecd3a.i/083011P.B/017B1701.D	1202473926	ms	30-AUG-2011	19:15	284538.sub	11080101MS	1.00000	1136049	USE. FAILURES CONFIRMED BY MSD.
☐	N	/chem/ecd3a.i/083011P.B/018B1801.D	1202473927	msd	30-AUG-2011	19:30	284538.sub	11080101MSD	1.00000	1136049	USE. FAILURES CONFIRMED BY MS.

Sample Data Summary

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report
for

ECOL008 Ecology and Environment, Inc. Start-3 002233.2008

Client SDG: 284538 GEL Work Order: 284538

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: Heather ann Joy **Name: Heather Joy**

Date: 15 SEP 2011 **Title: Data Validator**

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 18:59**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**5 mL**
Data File:	**016F1601.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	016B1601.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.00679	ug/L	0.00679	0.0204	1
58-89-9	gamma-BHC (Lindane)	U	0.00679	ug/L	0.00679	0.0204	1
319-85-7	beta-BHC	U	0.00679	ug/L	0.00679	0.0204	1
72-43-5	Methoxychlor	U	0.051	ug/L	0.051	0.204	1
319-86-8	delta-BHC	U	0.00679	ug/L	0.00679	0.0204	1
76-44-8	Heptachlor	U	0.00679	ug/L	0.00679	0.0204	1
309-00-2	Aldrin	U	0.00679	ug/L	0.00679	0.0204	1
1024-57-3	Heptachlor epoxide	U	0.00679	ug/L	0.00679	0.0204	1
959-98-8	Endosulfan I	U	0.00679	ug/L	0.00679	0.0204	1
72-55-9	4,4'-DDE	U	0.0102	ug/L	0.0102	0.0408	1
60-57-1	Dieldrin	U	0.0102	ug/L	0.0102	0.0408	1
72-20-8	Endrin	U	0.0102	ug/L	0.0102	0.0408	1
72-54-8	4,4'-DDD	U	0.0102	ug/L	0.0102	0.0408	1
33213-65-9	Endosulfan II	U	0.0102	ug/L	0.0102	0.0408	1
7421-93-4	Endrin aldehyde	U	0.00679	ug/L	0.00679	0.0408	1
50-29-3	4,4'-DDT	U	0.0102	ug/L	0.0102	0.0408	1
1031-07-8	Endosulfan sulfate	U	0.0102	ug/L	0.0102	0.0408	1
53494-70-5	Endrin ketone	U	0.0102	ug/L	0.0102	0.0408	1
57-74-9	Chlordane (tech.)	U	0.0781	ug/L	0.0781	0.255	1
8001-35-2	Toxaphene	U	0.153	ug/L	0.153	0.510	1

QC Summary

Surrogate Recovery Report

SDG Number: 284538

Matrix Type: LIQUID

CAP Column (1) : CLP-1 **CAP Column (2) : CLP-2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202473924	MB for batch 1136047	82	76	90	88
1202473925	LCS for batch 1136047	78	71	86	84
284538001	11080101	62	58	70	75
1202473926	11080101MS	41 *	40 *	30 *	35 *
1202473927	11080101MSD	43 *	41 *	30 *	35 *

Surrogate		Acceptance Limits
4CMX	= 4cmx	(50%-150%)
DCB	= Decachlorobiphenyl	(50%-150%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Laboratory Control Sample**
Client ID: **LCS for batch 1136047**
Matrix: **GROUND WATER**
Lab Sample ID: **1202473925**
Instrument: **ECD3A.I**
Analysis Date: **08/30/2011 18:43**
Dilution: **1**
Analyst: **RXE1**
Prep Batch ID **1136047**
Inj. Vol: **1 uL**
Batch ID: **1136049**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
319-84-6	LCS	alpha-BHC	0.500	0.0	0.511	102	70-130
58-89-9	LCS	gamma-BHC (Lindane)	0.500	0.0	0.516	103	70-130
319-85-7	LCS	beta-BHC	0.500	0.0	0.477	95	70-130
72-43-5	LCS	Methoxychlor	5.00	0.0	4.63	93	70-130
319-86-8	LCS	delta-BHC	0.500	0.0	0.512	102	70-130
76-44-8	LCS	Heptachlor	0.500	0.0	0.473	95	70-130
309-00-2	LCS	Aldrin	0.500	0.0	0.456	91	70-130
1024-57-3	LCS	Heptachlor epoxide	0.500	0.0	0.500	100	70-130
959-98-8	LCS	Endosulfan I	0.500	0.0	0.461	92	70-130
72-55-9	LCS	4,4'-DDE	1.25	0.0	1.09	87	70-130
60-57-1	LCS	Dieldrin	1.25	0.0	1.24	99	70-130
72-20-8	LCS	Endrin	1.25	0.0	1.23	98	70-130
72-54-8	LCS	4,4'-DDD	1.25	0.0	1.19	95	70-130
33213-65-9	LCS	Endosulfan II	1.25	0.0	1.20	96	70-130
7421-93-4	LCS	Endrin aldehyde	1.25	0.0	1.22	97	70-130
50-29-3	LCS	4,4'-DDT	1.25	0.0	1.21	97	70-130
1031-07-8	LCS	Endosulfan sulfate	1.25	0.0	1.32	106	70-130
53494-70-5	LCS	Endrin ketone	1.25	0.0	1.37	110	70-130

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Matrix Spike**
Client ID: **11080101MS**
Matrix: **GROUND WATER**
Lab Sample ID: **1202473926**
Instrument: **ECD3A.I**
Analysis Date: **08/30/2011 19:15**
Dilution: **1**
Analyst: **RXE1**
Prep Batch ID **1136047**
Inj. Vol: **1 uL**
Batch ID: **1136049**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
319-84-6	MS	alpha-BHC	0.510	0.00	U	0.433	85	50-150
58-89-9	MS	gamma-BHC (Lindane)	0.510	0.00	U	0.452	89	50-150
319-85-7	MS	beta-BHC	0.510	0.00	U	0.438	86	50-150
72-43-5	MS	Methoxychlor	5.10	0.00	U	2.54	50	50-150
319-86-8	MS	delta-BHC	0.510	0.00	U	0.437	86	50-150
76-44-8	MS	Heptachlor	0.510	0.00	U	0.277	54	50-150
309-00-2	MS	Aldrin	0.510	0.00	U	0.220	43 *	50-150
1024-57-3	MS	Heptachlor epoxide	0.510	0.00	U	0.357	70	50-150
959-98-8	MS	Endosulfan I	0.510	0.00	U	0.323	63	50-150
72-55-9	MS	4,4'-DDE	1.28	0.00	U	0.512	40 *	50-150
60-57-1	MS	Dieldrin	1.28	0.00	U	0.826	65	50-150
72-20-8	MS	Endrin	1.28	0.00	U	0.906	71	50-150
72-54-8	MS	4,4'-DDD	1.28	0.00	U	0.630	49 *	50-150
33213-65-9	MS	Endosulfan II	1.28	0.00	U	0.845	66	50-150
7421-93-4	MS	Endrin aldehyde	1.28	0.00	U	0.914	72	50-150
50-29-3	MS	4,4'-DDT	1.28	0.00	U	0.543	43 *	50-150
1031-07-8	MS	Endosulfan sulfate	1.28	0.00	U	1.00	78	50-150
53494-70-5	MS	Endrin ketone	1.28	0.00	U	1.16	91	50-150

Quality Control Summary
Spike Recovery Report

SDG Number: 284538
Sample Type: Matrix Spike Duplicate
Client ID: 11080101MSD
Matrix: GROUND WATER
Lab Sample ID: 1202473927
Instrument: ECD3A.I
Analysis Date: 08/30/2011 19:30
Dilution: 1
Analyst: RXE1
Prep Batch ID 1136047
Inj. Vol: 1 uL
Batch ID: 1136049

CAS No	Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
319-84-6	MSD alpha-BHC	0.510	0.00	U	0.447	88	50-150	3	0-30
58-89-9	MSD gamma-BHC (Lindane)	0.510	0.00	U	0.466	91	50-150	3	0-30
319-85-7	MSD beta-BHC	0.510	0.00	U	0.448	88	50-150	2	0-30
72-43-5	MSD Methoxychlor	5.10	0.00	U	2.53	50	50-150	0	0-30
319-86-8	MSD delta-BHC	0.510	0.00	U	0.446	87	50-150	2	0-30
76-44-8	MSD Heptachlor	0.510	0.00	U	0.283	55	50-150	2	0-30
309-00-2	MSD Aldrin	0.510	0.00	U	0.225	44 *	50-150	3	0-30
1024-57-3	MSD Heptachlor epoxide	0.510	0.00	U	0.363	71	50-150	2	0-30
959-98-8	MSD Endosulfan I	0.510	0.00	U	0.327	64	50-150	1	0-30
72-55-9	MSD 4,4'-DDE	1.28	0.00	U	0.516	40 *	50-150	1	0-30
60-57-1	MSD Dieldrin	1.28	0.00	U	0.834	65	50-150	1	0-30
72-20-8	MSD Endrin	1.28	0.00	U	0.913	72	50-150	1	0-30
72-54-8	MSD 4,4'-DDD	1.28	0.00	U	0.629	49 *	50-150	0	0-30
33213-65-9	MSD Endosulfan II	1.28	0.00	U	0.849	67	50-150	0	0-30
7421-93-4	MSD Endrin aldehyde	1.28	0.00	U	0.915	72	50-150	0	0-30
50-29-3	MSD 4,4'-DDT	1.28	0.00	U	0.540	42 *	50-150	1	0-30
1031-07-8	MSD Endosulfan sulfate	1.28	0.00	U	1.00	78	50-150	0	0-30
53494-70-5	MSD Endrin ketone	1.28	0.00	U	1.16	91	50-150	0	0-30

Method Blank Summary

SDG Number:	**284538**	**Client:**	**ECOL008**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 1136047**	**Instrument ID:**	**ECD3A.I_2** **ECD3A.I_1**	**Data File:**	**014B1401.D** **014F1401.D**
Lab Sample ID:	**1202473924**			**Analyzed:**	**08/30/11 18:28**
Column:	**CLP-2** **CLP-1**	**Prep Date:**	**08/25/2011 18:20**		
		Level:	**LOW**		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 1136047	**1202473925**	**015F1501.D** **015B1501.D**	**08/30/11**	**1843**
02 11080101	**284538001**	**016F1601.D** **016B1601.D**	**08/30/11**	**1859**
03 11080101MS	**1202473926**	**017F1701.D** **017B1701.D**	**08/30/11**	**1915**
04 11080101MSD	**1202473927**	**018F1801.D** **018B1801.D**	**08/30/11**	**1930**

Sample Data

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 18:59**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**5 mL**
Data File:	**016F1601.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	016B1601.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.00679	ug/L	0.00679	0.0204	1
58-89-9	gamma-BHC (Lindane)	U	0.00679	ug/L	0.00679	0.0204	1
319-85-7	beta-BHC	U	0.00679	ug/L	0.00679	0.0204	1
72-43-5	Methoxychlor	U	0.051	ug/L	0.051	0.204	1
319-86-8	delta-BHC	U	0.00679	ug/L	0.00679	0.0204	1
76-44-8	Heptachlor	U	0.00679	ug/L	0.00679	0.0204	1
309-00-2	Aldrin	U	0.00679	ug/L	0.00679	0.0204	1
1024-57-3	Heptachlor epoxide	U	0.00679	ug/L	0.00679	0.0204	1
959-98-8	Endosulfan I	U	0.00679	ug/L	0.00679	0.0204	1
72-55-9	4,4'-DDE	U	0.0102	ug/L	0.0102	0.0408	1
60-57-1	Dieldrin	U	0.0102	ug/L	0.0102	0.0408	1
72-20-8	Endrin	U	0.0102	ug/L	0.0102	0.0408	1
72-54-8	4,4'-DDD	U	0.0102	ug/L	0.0102	0.0408	1
33213-65-9	Endosulfan II	U	0.0102	ug/L	0.0102	0.0408	1
7421-93-4	Endrin aldehyde	U	0.00679	ug/L	0.00679	0.0408	1
50-29-3	4,4'-DDT	U	0.0102	ug/L	0.0102	0.0408	1
1031-07-8	Endosulfan sulfate	U	0.0102	ug/L	0.0102	0.0408	1
53494-70-5	Endrin ketone	U	0.0102	ug/L	0.0102	0.0408	1
57-74-9	Chlordane (tech.)	U	0.0781	ug/L	0.0781	0.255	1
8001-35-2	Toxaphene	U	0.153	ug/L	0.153	0.510	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/016F1601.D
Lab Smp Id: 284538001 Client Smp ID: 11080101
Inj Date : 30-AUG-2011 18:59
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |284538001|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|ECOL|GROUND WATER|11080101|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 4cmx						CAS #: 877-09-8	
2.455	2.452	0.003	12406293	123.912	0.632	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3	
7.422	7.423	-0.001	8596622	140.248	0.716	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/016F1601.D

Date : 30-AUG-2011 18:59

Client ID: 11080101

Instrument: ecd3a.i

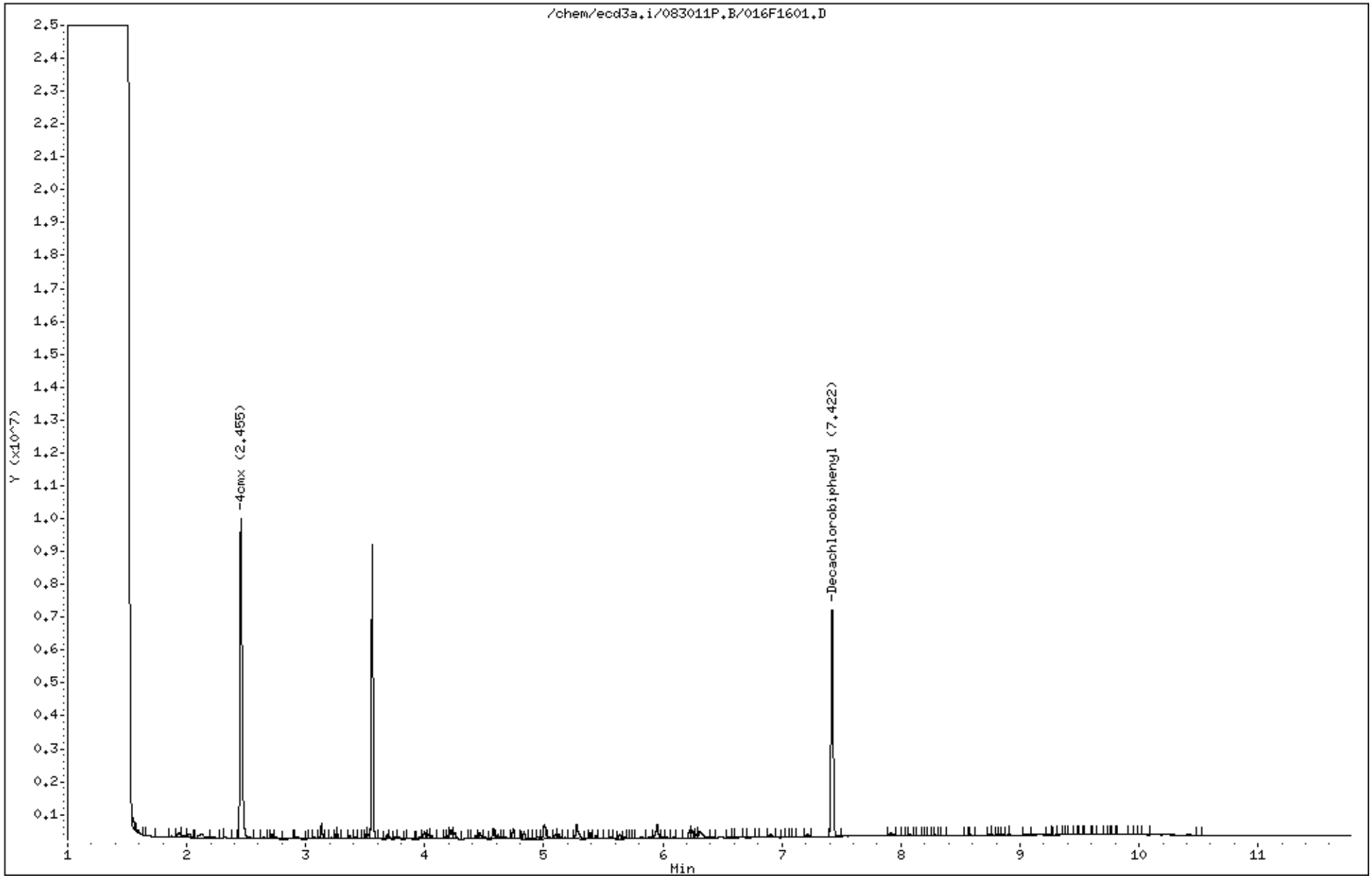
Sample Info: |28453800|1|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/016B1601.D
Lab Smp Id: 284538001 Client Smp ID: 11080101
Inj Date : 30-AUG-2011 18:59
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |284538001|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|ECOL|GROUND WATER|11080101|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

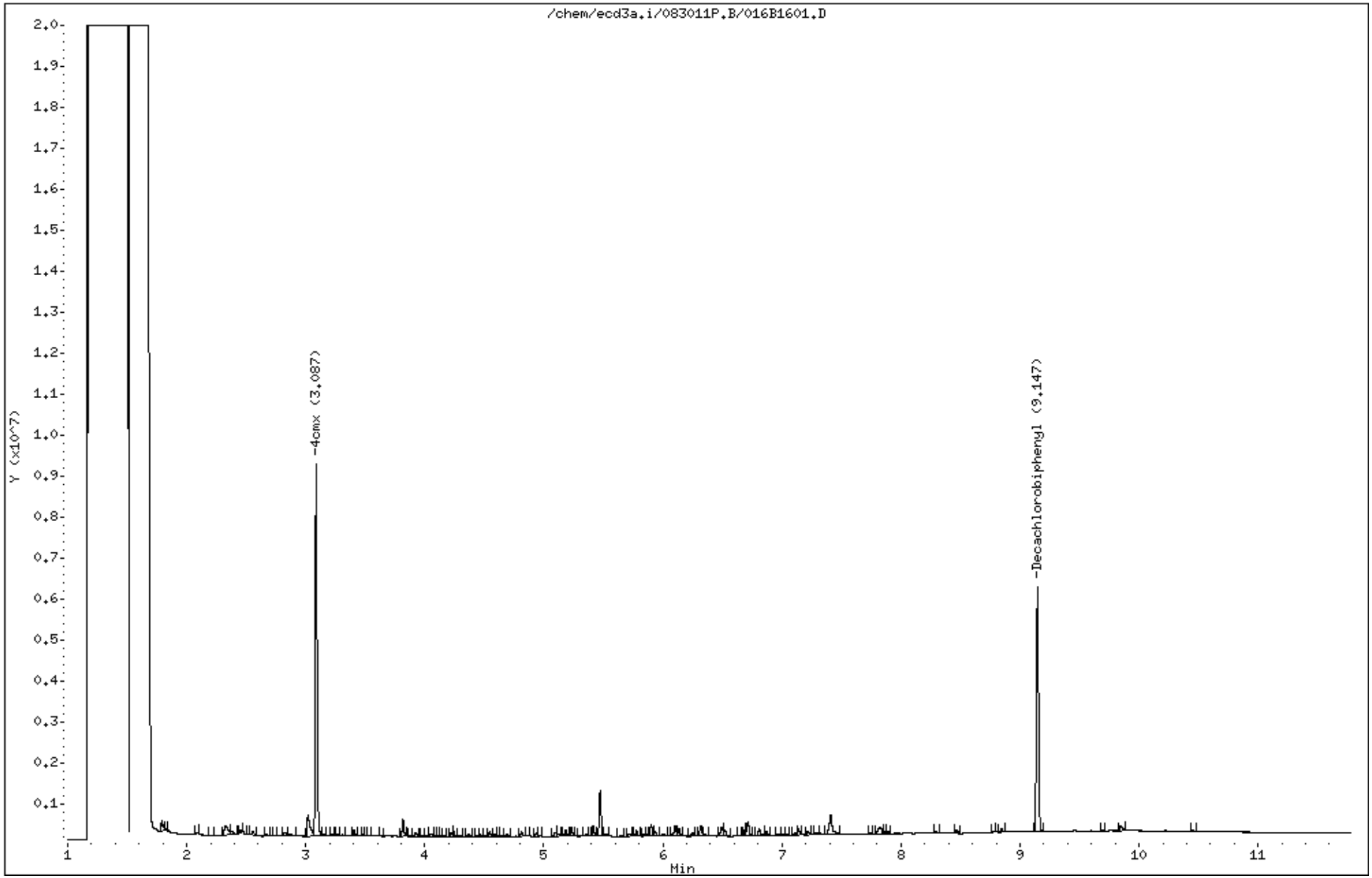
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 4cmx						CAS #: 877-09-8		
	3.087	3.086	0.001	9381774	116.278	0.593	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
	9.147	9.147	0.000	7204847	150.185	0.766	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/016B1601.D
Date : 30-AUG-2011 18:59
Client ID: 11080101
Sample Info: |28453800|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



Standard Data

SW846 8081

Calibration Standard Concentration Levels (ug/L)

	Level 1	Level 2	Level 3	Level 4	Level 5	CCV
Hexachlorobenzene	4	20	100	200	400	200
alpha-BHC	4	10	50	100	200	100
gamma-BHC (Lindane)	4	10	50	100	200	100
Heptachlor	4	10	50	100	200	100
Aldrin	4	10	50	100	200	100
beta-BHC	4	10	50	100	200	100
delta-BHC	4	10	50	100	200	100
Heptachlor epoxide	4	10	50	100	200	100
Endosulfan I	4	10	50	100	200	100
gamma-Chlordane	4	10	50	100	200	100
alpha-Chlordane	4	10	50	100	200	100
Mirex	4	10	50	100	200	100
c-Nonachlor	4	10	50	100	200	100
o-Chlordane	4	10	50	100	200	100
t-Nonachlor	4	10	50	100	200	100
2,4-DDD	4	10	50	100	200	100
2,4-DDE	4	10	50	100	200	100
2,4-DDT	4	10	50	100	200	100
4,4'-DDD	8	20	100	200	400	200
4,4'-DDE	8	20	100	200	400	200
4,4'-DDT	8	20	100	200	400	200
Dieldrin	8	20	100	200	400	200
Endrin	8	20	100	200	400	200
Endosulfan II	8	20	100	200	400	200
Endrin aldehyde	8	20	100	200	400	200
Endosulfan sulfate	8	20	100	200	400	200
Endrin ketone	8	20	100	200	400	200
4-CMX (surr)	8	20	100	200	400	200
DCB (surr)	8	20	100	200	400	200
1,2-Dichlorobenzene	20	50	100	150	200	150
Methoxychlor	40	100	500	1000	2000	1000
Chlordane (Technical)	50	100	500	1000	3000	1000
Aroclor 1016	100	250	500	1000	4000	1000
Aroclor 1221	100	250	500	1000	4000	1000
Aroclor 1232	100	250	500	1000	4000	1000
Aroclor 1242	100	250	500	1000	4000	1000
Aroclor 1248	100	250	500	1000	4000	1000
Aroclor 1254	100	250	500	1000	4000	1000
Aroclor 1260	100	250	500	1000	4000	1000

Aroclor 1262	100	250	500	1000	4000	1000		
Aroclor 1268	100	250	500	1000	4000	1000		
Toxaphene	100	500	1000	2000	3000	2000		

Report Date: 01-Sep-2011 15:13

Calibration History

Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Start Cal Date: 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2010 05:44	ar1254	/chem/ecd3a.i/112910pa-608.b/032f3201.d
24-JUL-2011 13:29	ar1660	/chem/ecd3a.i/072411p.b-608.b/013f1301.d
13-JUL-2011 10:26	gapa	/chem/ecd3a.i/071311p.b/010f1001.d
16-AUG-2011 15:45	chlor	/chem/ecd3a.i/081611P.B/019F1901.D
23-AUG-2011 14:29	tox	/chem/ecd3a.i/082311P.B/013F1301.D
30-AUG-2011 16:39	indab	/chem/ecd3a.i/083011P.B/007F0701.D
Cal Level: 2 , Cal Amount: 10.00000		
30-NOV-2010 06:00	ar1254	/chem/ecd3a.i/112910pa-608.b/033f3301.d
24-JUL-2011 13:44	ar1660	/chem/ecd3a.i/072411p.b-608.b/014f1401.d
13-JUL-2011 10:42	gapa	/chem/ecd3a.i/071311p.b/011f1101.d
16-AUG-2011 16:01	chlor	/chem/ecd3a.i/081611P.B/020F2001.D
23-AUG-2011 14:45	tox	/chem/ecd3a.i/082311P.B/014F1401.D
30-AUG-2011 16:55	indab	/chem/ecd3a.i/083011P.B/008F0801.D
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2010 06:15	ar1254	/chem/ecd3a.i/112910pa-608.b/034f3401.d
24-JUL-2011 14:00	ar1660	/chem/ecd3a.i/072411p.b-608.b/015f1501.d
13-JUL-2011 10:57	gapa	/chem/ecd3a.i/071311p.b/012f1201.d
16-AUG-2011 16:27	chlor	/chem/ecd3a.i/081611P.B/021F2101.D
23-AUG-2011 15:00	tox	/chem/ecd3a.i/082311P.B/015F1501.D
30-AUG-2011 17:10	indab	/chem/ecd3a.i/083011P.B/009F0901.D
Cal Level: 4 , Cal Amount: 100.00000		
15-JAN-2011 12:53	ar1268	/chem/ecd3a.i/011511p.b/018f1801.d
15-JAN-2011 12:37	ar1262	/chem/ecd3a.i/011511p.b/017f1701.d
30-SEP-2010 18:18	2,4,5-TCP	/chem/ecd3a.i/093010pa.b/011f1101.d
24-JUL-2011 15:02	ar1221	/chem/ecd3a.i/072411p.b-608.b/019f1901.d
24-JUL-2011 15:17	ar1232	/chem/ecd3a.i/072411p.b-608.b/020f2001.d
24-JUL-2011 15:48	ar1248	/chem/ecd3a.i/072411p.b-608.b/022f2201.d
24-JUL-2011 15:33	ar1242	/chem/ecd3a.i/072411p.b-608.b/021f2101.d
24-JUL-2011 16:04	ar1254	/chem/ecd3a.i/072411p.b-608.b/023f2301.d
24-JUL-2011 14:15	ar1660	/chem/ecd3a.i/072411p.b-608.b/016f1601.d
12-AUG-2011 09:28	gapa	/chem/ecd3a.i/081211P.B/007F0701.D
16-AUG-2011 16:42	chlor	/chem/ecd3a.i/081611P.B/022F2201.D
23-AUG-2011 15:16	tox	/chem/ecd3a.i/082311P.B/016F1601.D
30-AUG-2011 17:26	indab	/chem/ecd3a.i/083011P.B/010F1001.D
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2010 06:46	ar1254	/chem/ecd3a.i/112910pa-608.b/036f3601.d
24-JUL-2011 14:31	ar1660	/chem/ecd3a.i/072411p.b-608.b/017f1701.d
13-JUL-2011 11:28	gapa	/chem/ecd3a.i/071311p.b/014f1401.d
16-AUG-2011 16:58	chlor	/chem/ecd3a.i/081611P.B/023F2301.D
23-AUG-2011 15:31	tox	/chem/ecd3a.i/082311P.B/017F1701.D

30-AUG-2011 17:41	indab	/chem/ecd3a.i/083011P.B/011F1101.D

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
31-AUG-2011 04:49	indab	/chem/ecd3a.i/083011P.B/054F5401.D
Ccal Level: 4 , Ccal Amount: 100		
31-AUG-2011 02:29	indab	/chem/ecd3a.i/083011P.B/045F4501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 23:54	indab	/chem/ecd3a.i/083011P.B/035F3501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 22:05	indab	/chem/ecd3a.i/083011P.B/028F2801.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 19:46	indab	/chem/ecd3a.i/083011P.B/019F1901.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 17:57	indab	/chem/ecd3a.i/083011P.B/012F1201.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 17:26	indab	/chem/ecd3a.i/083011P.B/010F1001.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 16:24	gapa	/chem/ecd3a.i/083011P.B/006F0601.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 16:08	chlor	/chem/ecd3a.i/083011P.B/005F0501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:53	tox	/chem/ecd3a.i/083011P.B/004F0401.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:37	indab	/chem/ecd3a.i/083011P.B/003F0301.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:22	pem	/chem/ecd3a.i/083011P.B/002F0201.D

Report Date: 01-Sep-2011 15:12

Calibration History

Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Start Cal Date: 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 2.00000		
30-NOV-2010 05:44	ar1254	/chem/ecd3a.i/112910pa-608.b/032b3201.d
24-JUL-2011 13:29	ar1660	/chem/ecd3a.i/072411p.b-608.b/013b1301.d
13-JUL-2011 10:26	gapa	/chem/ecd3a.i/071311p.b/010b1001.d
16-AUG-2011 15:45	chlor	/chem/ecd3a.i/081611P.B/019B1901.D
23-AUG-2011 14:29	tox	/chem/ecd3a.i/082311P.B/013B1301.D
30-AUG-2011 16:39	indab	/chem/ecd3a.i/083011P.B/007B0701.D
Cal Level: 2 , Cal Amount: 10.00000		
21-DEC-2010 12:13	8081	/chem/ecd3a.i/122110p.b/013b1301.d
30-NOV-2010 06:00	ar1254	/chem/ecd3a.i/112910pa-608.b/033b3301.d
24-JUL-2011 13:44	ar1660	/chem/ecd3a.i/072411p.b-608.b/014b1401.d
13-JUL-2011 10:42	gapa	/chem/ecd3a.i/071311p.b/011b1101.d
16-AUG-2011 16:01	chlor	/chem/ecd3a.i/081611P.B/020B2001.D
23-AUG-2011 14:45	tox	/chem/ecd3a.i/082311P.B/014B1401.D
30-AUG-2011 16:55	indab	/chem/ecd3a.i/083011P.B/008B0801.D
Cal Level: 3 , Cal Amount: 50.00000		
30-NOV-2010 06:15	ar1254	/chem/ecd3a.i/112910pa-608.b/034b3401.d
24-JUL-2011 14:00	ar1660	/chem/ecd3a.i/072411p.b-608.b/015b1501.d
13-JUL-2011 10:57	gapa	/chem/ecd3a.i/071311p.b/012b1201.d
16-AUG-2011 16:27	chlor	/chem/ecd3a.i/081611P.B/021B2101.D
23-AUG-2011 15:00	tox	/chem/ecd3a.i/082311P.B/015B1501.D
30-AUG-2011 17:10	indab	/chem/ecd3a.i/083011P.B/009B0901.D
Cal Level: 4 , Cal Amount: 100.00000		
15-JAN-2011 12:53	ar1268	/chem/ecd3a.i/011511p.b/018b1801.d
15-JAN-2011 12:37	ar1262	/chem/ecd3a.i/011511p.b/017b1701.d
30-SEP-2010 18:18	2,4,5-TCP	/chem/ecd3a.i/093010pa.b/011b1101.d
24-JUL-2011 15:02	ar1221	/chem/ecd3a.i/072411p.b-608.b/019b1901.d
24-JUL-2011 15:17	ar1232	/chem/ecd3a.i/072411p.b-608.b/020b2001.d
24-JUL-2011 15:48	ar1248	/chem/ecd3a.i/072411p.b-608.b/022b2201.d
24-JUL-2011 15:33	ar1242	/chem/ecd3a.i/072411p.b-608.b/021b2101.d
24-JUL-2011 16:04	ar1254	/chem/ecd3a.i/072411p.b-608.b/023b2301.d
24-JUL-2011 14:15	ar1660	/chem/ecd3a.i/072411p.b-608.b/016b1601.d
12-AUG-2011 09:28	gapa	/chem/ecd3a.i/081211P.B/007B0701.D
16-AUG-2011 16:42	chlor	/chem/ecd3a.i/081611P.B/022B2201.D
23-AUG-2011 15:16	tox	/chem/ecd3a.i/082311P.B/016B1601.D
30-AUG-2011 17:26	indab	/chem/ecd3a.i/083011P.B/010B1001.D
Cal Level: 5 , Cal Amount: 200.00000		
30-NOV-2010 06:46	ar1254	/chem/ecd3a.i/112910pa-608.b/036b3601.d
24-JUL-2011 14:31	ar1660	/chem/ecd3a.i/072411p.b-608.b/017b1701.d
13-JUL-2011 11:28	gapa	/chem/ecd3a.i/071311p.b/014b1401.d
16-AUG-2011 16:58	chlor	/chem/ecd3a.i/081611P.B/023B2301.D

23-AUG-2011 15:31	tox	/chem/ecd3a.i/082311P.B/017B1701.D
30-AUG-2011 17:41	indab	/chem/ecd3a.i/083011P.B/011B1101.D

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 100		
31-AUG-2011 04:49	indab	/chem/ecd3a.i/083011P.B/054B5401.D
Ccal Level: 4 , Ccal Amount: 100		
31-AUG-2011 02:29	indab	/chem/ecd3a.i/083011P.B/045B4501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 23:54	indab	/chem/ecd3a.i/083011P.B/035B3501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 22:05	indab	/chem/ecd3a.i/083011P.B/028B2801.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 19:46	indab	/chem/ecd3a.i/083011P.B/019B1901.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 17:57	indab	/chem/ecd3a.i/083011P.B/012B1201.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 17:26	indab	/chem/ecd3a.i/083011P.B/010B1001.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 16:24	gapa	/chem/ecd3a.i/083011P.B/006B0601.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 16:08	chlor	/chem/ecd3a.i/083011P.B/005B0501.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:53	tox	/chem/ecd3a.i/083011P.B/004B0401.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:37	indab	/chem/ecd3a.i/083011P.B/003B0301.D
Ccal Level: 4 , Ccal Amount: 100		
30-AUG-2011 15:22	pem	/chem/ecd3a.i/083011P.B/002B0201.D

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Quant Method : ESTD Target Version : 3.50
Last Update : 31-Aug-2011 11:26 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	769.000000
Initial:End Threshold	384.500000
Initial:Area Threshold	7690.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	9.000000
Initial:Negative Peaks	OFF
Initial:Tension	1.000000

	Compound	RT	RT Window	RF
$ 1	4cmx	2.452	2.422-2.482	1.001e+05
63	2,4,5-Trichlorophenol	1.990	1.890-2.090	3.194e+04
59	Hexachlorobenzene	2.715	2.615-2.815	1.080e+05
2	Aroclor-1221	2.747	2.717-2.777	1.168e+03
		2.849	2.819-2.879	6.916e+02
		2.879	2.849-2.909	2.486e+03
3	Aroclor-1016	2.879	2.849-2.909	1.370e+03
		3.130	3.100-3.160	2.740e+03
		3.485	3.455-3.515	3.587e+03
		3.590	3.559-3.619	1.953e+03
		3.921	3.890-3.950	1.713e+03
4	Aroclor-1232	3.130	3.100-3.160	1.709e+03
		3.468	3.438-3.498	1.228e+03
		3.485	3.455-3.515	2.039e+03
		3.590	3.560-3.620	1.328e+03
		3.920	3.890-3.950	8.547e+02
5	alpha-BHC	2.828	2.798-2.858	1.187e+05
6	Aroclor-1242	2.879	2.779-2.979	1.570e+03
		3.468	3.368-3.568	2.289e+03
		3.485	3.385-3.585	3.702e+03
		3.590	3.490-3.690	2.502e+03
		3.921	3.821-4.021	1.773e+03
7	gamma-BHC (Lindane)	3.056	3.026-3.086	1.079e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	3.356	3.256-3.456	4.527e+03
	4.116	4.016-4.216	2.513e+03
	4.212	4.112-4.312	2.289e+03
	4.283	4.183-4.383	1.499e+04
	5.116	5.016-5.216	3.352e+03
9 Aroclor-1248	3.468	3.368-3.568	1.572e+03
	3.733	3.633-3.833	1.971e+03
	3.920	3.820-4.020	2.647e+03
	4.282	4.182-4.382	2.810e+03
	4.843	4.743-4.943	1.639e+03
10 Heptachlor	3.419	3.389-3.449	9.635e+04
11 Aldrin	3.662	3.632-3.692	1.160e+05
12 beta-BHC	3.117	3.087-3.147	4.965e+04
13 delta-BHC	3.255	3.225-3.285	9.836e+04
14 Heptachlor epoxide	4.171	4.141-4.201	9.998e+04
15 Aroclor-1254	4.244	4.214-4.274	2.714e+03
	4.471	4.441-4.501	4.670e+03
	4.842	4.812-4.872	4.883e+03
	5.105	5.075-5.135	3.590e+03
	5.559	5.529-5.589	4.837e+03
16 Endosulfan I	4.523	4.493-4.553	8.807e+04
17 gamma-Chlordane	4.282	4.252-4.312	1.001e+05
18 alpha-Chlordane	4.400	4.370-4.430	9.765e+04
19 4,4'-DDE	4.473	4.443-4.503	9.512e+04
20 Dieldrin	4.745	4.715-4.775	9.915e+04
21 Aroclor-1260	5.012	4.912-5.112	3.575e+03
	5.279	5.178-5.378	4.751e+03
	5.558	5.458-5.658	3.751e+03
	5.923	5.823-6.023	3.089e+03
	6.242	6.141-6.341	6.064e+03
22 Endrin	4.964	4.934-4.994	8.179e+04
23 Toxaphene	5.169	5.139-5.199	3.565e+03
	5.289	5.259-5.319	2.130e+03
	5.506	5.476-5.536	2.670e+03
	5.834	5.804-5.864	1.824e+03
	5.932	5.902-5.962	2.846e+03
24 Endosulfan II	5.179	5.149-5.209	7.192e+04
25 4,4'-DDD	5.035	5.005-5.065	7.042e+04
26 4,4'-DDT	5.308	5.278-5.338	6.542e+04
27 Endrin aldehyde	5.592	5.562-5.622	6.333e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	5.807	5.777-5.837	2.944e+04
	29 Endosulfan sulfate	6.033	6.003-6.063	6.822e+04
	30 Aroclor-1268	6.571	6.471-6.671	1.194e+04
		6.614	6.514-6.714	1.199e+04
		6.821	6.721-6.921	9.127e+03
		7.200	7.100-7.300	4.364e+03
		7.511	7.411-7.611	3.019e+04
	61 Aroclor-1262	5.012	4.912-5.112	4.307e+03
		5.276	5.176-5.376	5.868e+03
		5.669	5.569-5.769	7.406e+03
		6.237	6.137-6.337	1.491e+04
		6.572	6.472-6.672	5.745e+03
	31 Endrin ketone	6.323	6.293-6.353	7.007e+04
	51 Mirex	5.927	5.897-5.957	5.828e+04
	52 C-Nonachlor	4.998	4.968-5.028	9.340e+04
	53 O-Chlordane	4.083	4.053-4.113	7.544e+04
	54 T-Nonachlor	4.385	4.355-4.415	9.269e+04
	55 1,2-Dichlorobenzene	6.525	6.495-6.555	
	56 2,4-DDE	4.164	4.134-4.194	5.903e+04
	58 2,4-DDD	4.633	4.603-4.663	5.007e+04
	57 2,4-DDT	4.871	4.841-4.901	5.016e+04
$	32 Decachlorobiphenyl	7.423	7.393-7.453	6.130e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Quant Method : ESTD Target Version : 3.50
Last Update : 31-Aug-2011 11:22 Number of Cpnds : 43
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	1000.000000
Initial:End Threshold	500.000000
Initial:Area Threshold	10000.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	4.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000

	Compound	RT	RT Window	RF
$	1 4cmx	3.086	3.056-3.116	8.068e+04
	61 2,4,5-Trichlorophenol	2.358	2.258-2.458	4.980e+05
	59 Hexachlorobenzene	3.493	3.463-3.523	7.039e+04
	2 Aroclor-1221	3.410	3.380-3.440	7.162e+02
		3.529	3.499-3.559	4.777e+02
		3.583	3.553-3.613	1.802e+03
	3 Aroclor-1016	3.583	3.554-3.614	8.155e+02
		3.934	3.904-3.964	1.049e+03
		4.336	4.306-4.366	1.464e+03
		4.484	4.455-4.514	1.339e+03
		4.935	4.905-4.965	1.052e+03
	4 Aroclor-1232	3.583	3.553-3.613	1.289e+03
		3.934	3.904-3.964	7.993e+02
		4.336	4.306-4.366	9.841e+02
		4.358	4.328-4.388	1.323e+03
		4.485	4.455-4.515	9.101e+02
	5 alpha-BHC	3.607	3.577-3.637	1.179e+05
	6 Aroclor-1242	3.584	3.554-3.614	1.010e+03
		3.935	3.905-3.965	1.270e+03
		4.337	4.307-4.367	1.685e+03
		4.359	4.329-4.389	2.266e+03
		4.485	4.455-4.515	1.536e+03
	7 gamma-BHC (Lindane)	3.931	3.901-3.961	1.046e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Compound	RT	RT Window	RF
8 Chlordane (tech.)	4.218	4.188-4.248	3.486e+03
	5.207	5.177-5.237	2.083e+03
	5.444	5.414-5.474	9.660e+03
	5.594	5.564-5.624	8.168e+03
	6.555	6.525-6.585	2.563e+03
9 Aroclor-1248	4.337	4.307-4.367	1.182e+03
	4.664	4.634-4.694	1.413e+03
	4.935	4.905-4.965	1.826e+03
	5.311	5.281-5.341	1.943e+03
	5.361	5.331-5.391	2.235e+03
10 Heptachlor	4.359	4.329-4.389	8.080e+04
11 Aldrin	4.684	4.654-4.714	9.930e+04
12 beta-BHC	3.992	3.962-4.022	4.527e+04
13 delta-BHC	4.279	4.249-4.309	1.032e+05
14 Heptachlor epoxide	5.249	5.219-5.279	8.627e+04
15 Aroclor-1254	5.356	5.326-5.386	2.066e+03
	5.542	5.512-5.572	2.169e+03
	6.034	6.004-6.064	3.004e+03
	6.270	6.240-6.300	2.218e+03
	6.855	6.825-6.885	2.314e+03
16 Endosulfan I	5.661	5.631-5.691	7.799e+04
17 gamma-Chlordane	5.443	5.413-5.473	8.608e+04
18 alpha-Chlordane	5.593	5.563-5.623	8.419e+04
19 4,4'-DDE	5.747	5.717-5.777	7.884e+04
20 Dieldrin	5.948	5.918-5.978	8.043e+04
21 Aroclor-1260	6.239	6.209-6.269	1.684e+03
	6.454	6.424-6.484	2.034e+03
	6.949	6.919-6.979	1.539e+03
	7.282	7.252-7.312	1.620e+03
	7.551	7.521-7.581	3.407e+03
22 Endrin	6.276	6.246-6.306	6.476e+04
23 Toxaphene	6.440	6.410-6.470	1.422e+03
	6.488	6.458-6.518	2.318e+03
	6.591	6.561-6.621	3.977e+03
	6.869	6.839-6.899	2.103e+03
	7.443	7.413-7.473	2.401e+03
24 Endosulfan II	6.499	6.469-6.529	6.864e+04
25 4,4'-DDD	6.363	6.333-6.393	6.073e+04
26 4,4'-DDT	6.707	6.677-6.737	5.684e+04
27 Endrin aldehyde	6.862	6.832-6.892	5.661e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

	Compound	RT	RT Window	RF
	28 Methoxychlor	7.455	7.425-7.485	2.451e+04
	29 Endosulfan sulfate	7.165	7.135-7.195	5.861e+04
	30 Aroclor-1268	7.713	7.683-7.743	7.805e+04
		7.766	7.736-7.796	7.537e+04
		8.055	8.025-8.085	5.572e+04
		8.368	8.338-8.398	2.753e+04
		8.743	8.713-8.773	1.813e+05
	60 Aroclor-1262	6.013	5.913-6.113	3.007e+04
		6.228	6.128-6.328	3.673e+04
		7.042	6.942-7.142	4.881e+04
		7.311	7.211-7.411	1.025e+05
		7.716	7.616-7.816	6.886e+04
	31 Endrin ketone	7.772	7.742-7.802	7.056e+04
	51 Mirex	7.743	7.713-7.773	4.109e+04
	52 C-Nonachlor	6.353	6.323-6.383	6.415e+04
	53 O-Chlordane	5.156	5.126-5.186	5.372e+04
	54 T-Nonachlor	5.536	5.506-5.566	6.391e+04
	55 1,2-Dichlorobenzene	6.619	6.589-6.649	
	56 2,4-DDE	5.425	5.395-5.455	4.249e+04
	58 2,4-DDD	5.962	5.932-5.992	3.660e+04
	57 2,4-DDT	6.293	6.263-6.323	3.920e+04
$	32 Decachlorobiphenyl	9.147	9.117-9.177	4.797e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Cal Date : 31-Aug-2011 11:26 reb01393

Calibration File Names:
Level 1: /chem/ecd3a.i/112910pa-608.b/032f3201.d
Level 2: /chem/ecd3a.i/112910pa-608.b/033f3301.d
Level 3: /chem/ecd3a.i/112910pa-608.b/034f3401.d
Level 4: /chem/ecd3a.i/011511p.b/018f1801.d
Level 5: /chem/ecd3a.i/112910pa-608.b/036f3601.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
63 2,4,5-Trichlorophenol	+++++	+++++	+++++	31937	+++++	AVRG		31937		0.000e+00
59 Hexachlorobenzene	+++++	+++++	+++++	107956	+++++	AVRG		107956		0.000e+00
2 Aroclor-1221(1)	+++++	+++++	+++++	1168	+++++	AVRG		1168		0.000e+00
(2)	+++++	+++++	+++++	692	+++++	AVRG		692		0.000e+00
(3)	+++++	+++++	+++++	2486	+++++	AVRG		2486		0.000e+00
3 Aroclor-1016(1)	202760	450076	869109	1564921	5590357	LINR	-97.15977	1370		0.99938
(2)	399301	889246	1717576	3095826	11173823	LINR	-90.81843	2740		0.99950
(3)	454475	1028325	2057658	3868681	14503670	LINR	-51.79833	3587		0.99980
(4)	249873	572927	1113810	2080304	7900567	LINR	-50.24679	1953		0.99989
(5)	207864	487498	937607	1724344	6903830	LINR	-28.14136	1713		0.99991
4 Aroclor-1232(1)	+++++	+++++	+++++	1709	+++++	AVRG		1709		0.000e+00
(2)	+++++	+++++	+++++	1228	+++++	AVRG		1228		0.000e+00
(3)	+++++	+++++	+++++	2039	+++++	AVRG		2039		0.000e+00
(4)	+++++	+++++	+++++	1328	+++++	AVRG		1328		0.000e+00
(5)	+++++	+++++	+++++	855	+++++	AVRG		855		0.000e+00
5 alpha-BHC	103775	111125	120515	126778	131157	AVRG		118670		9.45774
6 Aroclor-1242(1)	+++++	+++++	+++++	1570	+++++	AVRG		1570		0.000e+00
(2)	+++++	+++++	+++++	2289	+++++	AVRG		2289		0.000e+00
(3)	+++++	+++++	+++++	3702	+++++	AVRG		3702		0.000e+00
(4)	+++++	+++++	+++++	2502	+++++	AVRG		2502		0.000e+00
(5)	+++++	+++++	+++++	1773	+++++	AVRG		1773		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Cal Date : 31-Aug-2011 11:26 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	96248	102784	108954	113839	117551	AVRG		107875		7.91319
8 Chlordane (tech.)(1)	4208	4327	4533	4763	4807	AVRG		4527		5.79796
(2)	2346	2392	2542	2647	2640	AVRG		2513		5.54080
(3)	1925	2060	2378	2506	2578	AVRG		2289		12.41724
(4)	13637	14340	15356	16055	15574	AVRG		14992		6.55401
(5)	3251	3369	3302	3460	3378	AVRG		3352		2.37629
9 Aroclor-1248(1)	+++++	+++++	+++++	1572	+++++	AVRG		1572		0.000e+00
(2)	+++++	+++++	+++++	1971	+++++	AVRG		1971		0.000e+00
(3)	+++++	+++++	+++++	2647	+++++	AVRG		2647		0.000e+00
(4)	+++++	+++++	+++++	2810	+++++	AVRG		2810		0.000e+00
(5)	+++++	+++++	+++++	1639	+++++	AVRG		1639		0.000e+00
10 Heptachlor	87891	93036	97081	100506	103218	AVRG		96346		6.30305
11 Aldrin	101598	110417	119024	123337	125457	AVRG		115967		8.52535
12 beta-BHC	51313	49608	47768	49112	50464	AVRG		49653		2.71346
13 delta-BHC	89315	91317	98705	103939	108542	AVRG		98364		8.29551
14 Heptachlor epoxide	92186	97213	101453	104157	104915	AVRG		99985		5.30112
15 Aroclor-1254(1)	+++++	+++++	+++++	2714	+++++	AVRG		2714		0.000e+00
(2)	+++++	+++++	+++++	4670	+++++	AVRG		4670		0.000e+00
(3)	+++++	+++++	+++++	4883	+++++	AVRG		4883		0.000e+00
(4)	+++++	+++++	+++++	3590	+++++	AVRG		3590		0.000e+00
(5)	+++++	+++++	+++++	4837	+++++	AVRG		4837		0.000e+00
16 Endosulfan I	82014	85993	89084	91351	91900	AVRG		88068		4.66248
17 gamma-Chlordane	89388	94339	100778	106172	109715	AVRG		100078		8.32606
18 alpha-Chlordane	88380	93494	98512	102297	105578	AVRG		97652		7.02774

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Cal Date : 31-Aug-2011 11:26 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	81708	91195	98299	101398	103015	AVRG		95123		9.21183
20 Dieldrin	87852	97198	102106	104000	104576	AVRG		99146		7.00891
21 Aroclor-1260(1)	3932	3597	3592	3316	3438	AVRG		3575		6.47016
(2)	5135	4840	4788	4468	4525	AVRG		4751		5.64375
(3)	3870	3730	3660	3624	3871	AVRG		3751		3.07473
(4)	3307	3084	3085	2926	3040	AVRG		3089		4.48455
(5)	6270	6059	6069	5800	6124	AVRG		6064		2.80650
22 Endrin	73875	79806	83759	85023	86494	AVRG		81791		6.20520
23 Toxaphene(1)	3822	3387	3428	3569	3619	AVRG		3565		4.84097
(2)	2051	2214	2107	2006	2272	AVRG		2130		5.20045
(3)	2728	2560	2581	2625	2853	AVRG		2670		4.54520
(4)	1964	1675	1724	1779	1976	AVRG		1824		7.60847
(5)	2946	2748	2708	2855	2970	AVRG		2846		4.08427
24 Endosulfan II	68691	71620	72252	73337	73703	AVRG		71921		2.76433
25 4,4'-DDD	63630	68045	71480	73854	75110	AVRG		70424		6.60924
26 4,4'-DDT	60876	64035	65831	67561	68791	AVRG		65419		4.75383
27 Endrin aldehyde	62487	64088	62909	63666	63517	AVRG		63333		1.00147
28 Methoxychlor	31565	31149	28020	27953	28496	AVRG		29437		6.01819
29 Endosulfan sulfate	64067	66135	68468	70364	72079	AVRG		68223		4.70154
30 Aroclor-1268(1)	+++++	+++++	+++++	11935	+++++	AVRG		11935		0.000e+00
(2)	+++++	+++++	+++++	11988	+++++	AVRG		11988		0.000e+00
(3)	+++++	+++++	+++++	9127	+++++	AVRG		9127		0.000e+00
(4)	+++++	+++++	+++++	4364	+++++	AVRG		4364		0.000e+00
(5)	+++++	+++++	+++++	30188	+++++	AVRG		30188		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Cal Date : 31-Aug-2011 11:26 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
61 Aroclor-1262(1)	+++++	+++++	+++++	4307	+++++	AVRG		4307		0.000e+00
(2)	+++++	+++++	+++++	5868	+++++	AVRG		5868		0.000e+00
(3)	+++++	+++++	+++++	7406	+++++	AVRG		7406		0.000e+00
(4)	+++++	+++++	+++++	14908	+++++	AVRG		14908		0.000e+00
(5)	+++++	+++++	+++++	5745	+++++	AVRG		5745		0.000e+00
31 Endrin ketone	70381	71679	69098	69571	69642	AVRG		70074		1.43773
51 Mirex	+++++	+++++	+++++	11656034	+++++	LINR	0.000e+00	58280		1.00000
52 C-Nonachlor	+++++	+++++	+++++	93396	+++++	AVRG		93396		0.000e+00
53 O-Chlordane	+++++	+++++	+++++	75439	+++++	AVRG		75439		0.000e+00
54 T-Nonachlor	+++++	+++++	+++++	92695	+++++	AVRG		92695		0.000e+00
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	+++++	+++++	+++++	59032	+++++	AVRG		59032		0.000e+00
58 2,4-DDD	+++++	+++++	+++++	50069	+++++	AVRG		50069		0.000e+00
57 2,4-DDT	+++++	+++++	+++++	10032320	+++++	LINR	0.000e+00	50162		1.00000
$ 1 4cmx	98012	99198	99780	101424	102194	AVRG		100122		1.68697
$ 32 Decachlorobiphenyl	63366	61972	58967	60332	61842	AVRG		61296		2.75306

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Cal Date : 31-Aug-2011 11:26 reb01393

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Cal Date : 31-Aug-2011 11:22 reb01393

Calibration File Names:
Level 1: /chem/ecd3a.i/112910pa-608.b/032b3201.d
Level 2: /chem/ecd3a.i/122110p.b/013b1301.d
Level 3: /chem/ecd3a.i/112910pa-608.b/034b3401.d
Level 4: /chem/ecd3a.i/011511p.b/018b1801.d
Level 5: /chem/ecd3a.i/112910pa-608.b/036b3601.d

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
61 2,4,5-Trichlorophenol	+++++	+++++	+++++	498020	+++++	AVRG		498020		0.000e+00
59 Hexachlorobenzene	+++++	+++++	+++++	14077175	+++++	LINR	0.000e+00	70386		1.00000
2 Aroclor-1221(1)	+++++	+++++	+++++	716	+++++	AVRG		716		0.000e+00
(2)	+++++	+++++	+++++	478	+++++	AVRG		478		0.000e+00
(3)	+++++	+++++	+++++	1802	+++++	AVRG		1802		0.000e+00
3 Aroclor-1016(1)	152631	327485	591236	1022928	3379779	LINR	-173	815		0.99829
(2)	195086	415902	758489	1327378	4346183	LINR	-172	1049		0.99807
(3)	258840	552221	1010061	1784986	6036091	LINR	-148	1464		0.99876
(4)	233486	508216	924897	1644230	5520636	LINR	-149	1339		0.99861
(5)	181142	396739	717109	1284249	4336196	LINR	-144	1052		0.99874
4 Aroclor-1232(1)	+++++	+++++	+++++	1289	+++++	AVRG		1289		0.000e+00
(2)	+++++	+++++	+++++	799	+++++	AVRG		799		0.000e+00
(3)	+++++	+++++	+++++	984	+++++	AVRG		984		0.000e+00
(4)	+++++	+++++	+++++	1323	+++++	AVRG		1323		0.000e+00
(5)	+++++	+++++	+++++	910	+++++	AVRG		910		0.000e+00
5 alpha-BHC	126682	124531	115205	112772	110278	AVRG		117894		6.18588
6 Aroclor-1242(1)	+++++	+++++	+++++	1010	+++++	AVRG		1010		0.000e+00
(2)	+++++	+++++	+++++	1270	+++++	AVRG		1270		0.000e+00
(3)	+++++	+++++	+++++	1685	+++++	AVRG		1685		0.000e+00
(4)	+++++	+++++	+++++	2266	+++++	AVRG		2266		0.000e+00
(5)	+++++	+++++	+++++	1536	+++++	AVRG		1536		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Cal Date : 31-Aug-2011 11:22 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
7 gamma-BHC (Lindane)	115398	111024	101203	98838	96763	AVRG		104645		7.76388
8 Chlordane (tech.)(1)	4049	3811	3317	3255	2996	AVRG		3486		12.37604
(2)	2412	2323	1916	2052	1712	AVRG		2083		13.84415
(3)	10784	10467	9308	9401	8342	AVRG		9660		10.14438
(4)	9362	9043	7713	7820	6901	AVRG		8168		12.43188
(5)	2964	2984	2377	2371	2119	AVRG		2563		15.19391
9 Aroclor-1248(1)	+++++	+++++	+++++	1182	+++++	AVRG		1182		0.000e+00
(2)	+++++	+++++	+++++	1413	+++++	AVRG		1413		0.000e+00
(3)	+++++	+++++	+++++	1826	+++++	AVRG		1826		0.000e+00
(4)	+++++	+++++	+++++	1943	+++++	AVRG		1943		0.000e+00
(5)	+++++	+++++	+++++	2235	+++++	AVRG		2235		0.000e+00
10 Heptachlor	90418	87588	77765	75042	73211	AVRG		80805		9.55657
11 Aldrin	111133	107117	96196	92804	89260	AVRG		99302		9.47044
12 beta-BHC	53636	49206	42479	41048	39957	AVRG		45265		13.03750
13 delta-BHC	111388	108739	100558	98365	96816	AVRG		103173		6.29683
14 Heptachlor epoxide	98417	93842	82799	79609	76696	AVRG		86273		10.88848
15 Aroclor-1254(1)	+++++	+++++	+++++	2066	+++++	AVRG		2066		0.000e+00
(2)	+++++	+++++	+++++	2169	+++++	AVRG		2169		0.000e+00
(3)	+++++	+++++	+++++	3004	+++++	AVRG		3004		0.000e+00
(4)	+++++	+++++	+++++	2218	+++++	AVRG		2218		0.000e+00
(5)	+++++	+++++	+++++	2314	+++++	AVRG		2314		0.000e+00
16 Endosulfan I	89303	85126	74768	71763	69006	AVRG		77993		11.26500
17 gamma-Chlordane	95434	92554	82622	81288	78513	AVRG		86082		8.64598
18 alpha-Chlordane	95701	91220	80345	77938	75730	AVRG		84187		10.41262

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Cal Date : 31-Aug-2011 11:22 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
19 4,4'-DDE	86893	85552	76678	73904	71165	AVRG		78838		8.92053
20 Dieldrin	90070	87648	77612	74677	72147	AVRG		80431		9.92073
21 Aroclor-1260(1)	303716	646083	1194992	2053433	6959151	LINR	-155	1684		0.99870
(2)	358159	776346	1431931	2466484	8397847	LINR	-150	2034		0.99875
(3)	272135	589465	1079031	1857678	6353598	LINR	-149	1539		0.99886
(4)	283143	620697	1132180	1953989	6685419	LINR	-148	1620		0.99885
(5)	576628	1257052	2297602	4000074	14014819	LINR	-130	3407		0.99924
22 Endrin	74043	70503	62087	59389	57797	AVRG		64764		11.01693
23 Toxaphene(1)	1723	1427	1341	1304	1314	AVRG		1422		12.32498
(2)	2789	2349	2168	2130	2155	AVRG		2318		11.94529
(3)	4658	4040	3777	3623	3787	AVRG		3977		10.29124
(4)	2532	2080	1931	1976	1995	AVRG		2103		11.69966
(5)	2891	2377	2272	2230	2234	AVRG		2401		11.68320
24 Endosulfan II	78343	75006	65396	63448	60985	AVRG		68636		11.06621
25 4,4'-DDD	67982	65513	58467	56638	55029	AVRG		60726		9.38190
26 4,4'-DDT	64382	61289	54088	52742	51686	AVRG		56837		9.93743
27 Endrin aldehyde	65616	62237	54050	51742	49403	AVRG		56609		12.33233
28 Methoxychlor	28920	26795	22831	22115	21889	AVRG		24510		12.91817
29 Endosulfan sulfate	66584	63374	55947	54273	52885	AVRG		58613		10.27078
30 Aroclor-1268(1)	+++++	+++++	+++++	78045	+++++	AVRG		78045		0.000e+00
(2)	+++++	+++++	+++++	75367	+++++	AVRG		75367		0.000e+00
(3)	+++++	+++++	+++++	55722	+++++	AVRG		55722		0.000e+00
(4)	+++++	+++++	+++++	27533	+++++	AVRG		27533		0.000e+00
(5)	+++++	+++++	+++++	181259	+++++	AVRG		181259		0.000e+00

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Cal Date : 31-Aug-2011 11:22 reb01393

Compound	2 Level 1	10 Level 2	50 Level 3	100 Level 4	200 Level 5	Curve	Coefficients b	m1	m2	%RSD or R^2
60 Aroclor-1262(1)	+++++	+++++	+++++	30071	+++++	AVRG		30071		0.000e+00
(2)	+++++	+++++	+++++	36725	+++++	AVRG		36725		0.000e+00
(3)	+++++	+++++	+++++	48807	+++++	AVRG		48807		0.000e+00
(4)	+++++	+++++	+++++	102538	+++++	AVRG		102538		0.000e+00
(5)	+++++	+++++	+++++	68862	+++++	AVRG		68862		0.000e+00
31 Endrin ketone	82387	77386	66376	64037	62623	AVRG		70562		12.46644
51 Mirex	+++++	+++++	+++++	8218644	+++++	LINR	0.000e+00	41093		1.00000
52 C-Nonachlor	+++++	+++++	+++++	12829030	+++++	LINR	0.000e+00	64145		1.00000
53 O-Chlordane	+++++	+++++	+++++	10744300	+++++	LINR	0.000e+00	53722		1.00000
54 T-Nonachlor	+++++	+++++	+++++	12782198	+++++	LINR	0.000e+00	63911		1.00000
55 1,2-Dichlorobenzene	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+00		0.000e+00
56 2,4-DDE	+++++	+++++	+++++	8497890	+++++	LINR	0.000e+00	42489		1.00000
58 2,4-DDD	+++++	+++++	+++++	7319986	+++++	LINR	0.000e+00	36600		1.00000
57 2,4-DDT	+++++	+++++	+++++	7840912	+++++	LINR	0.000e+00	39205		1.00000
$ 1 4cmx	92866	88106	77442	74044	70960	AVRG		80684		11.63711
$ 32 Decachlorobiphenyl	58526	52653	44085	42582	42020	AVRG		47973		15.20708

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 29-DEC-2009 17:34
End Cal Date : 30-AUG-2011 17:41
Quant Method : ESTD
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Cal Date : 31-Aug-2011 11:22 reb01393

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response

GEL Laboratories LLC

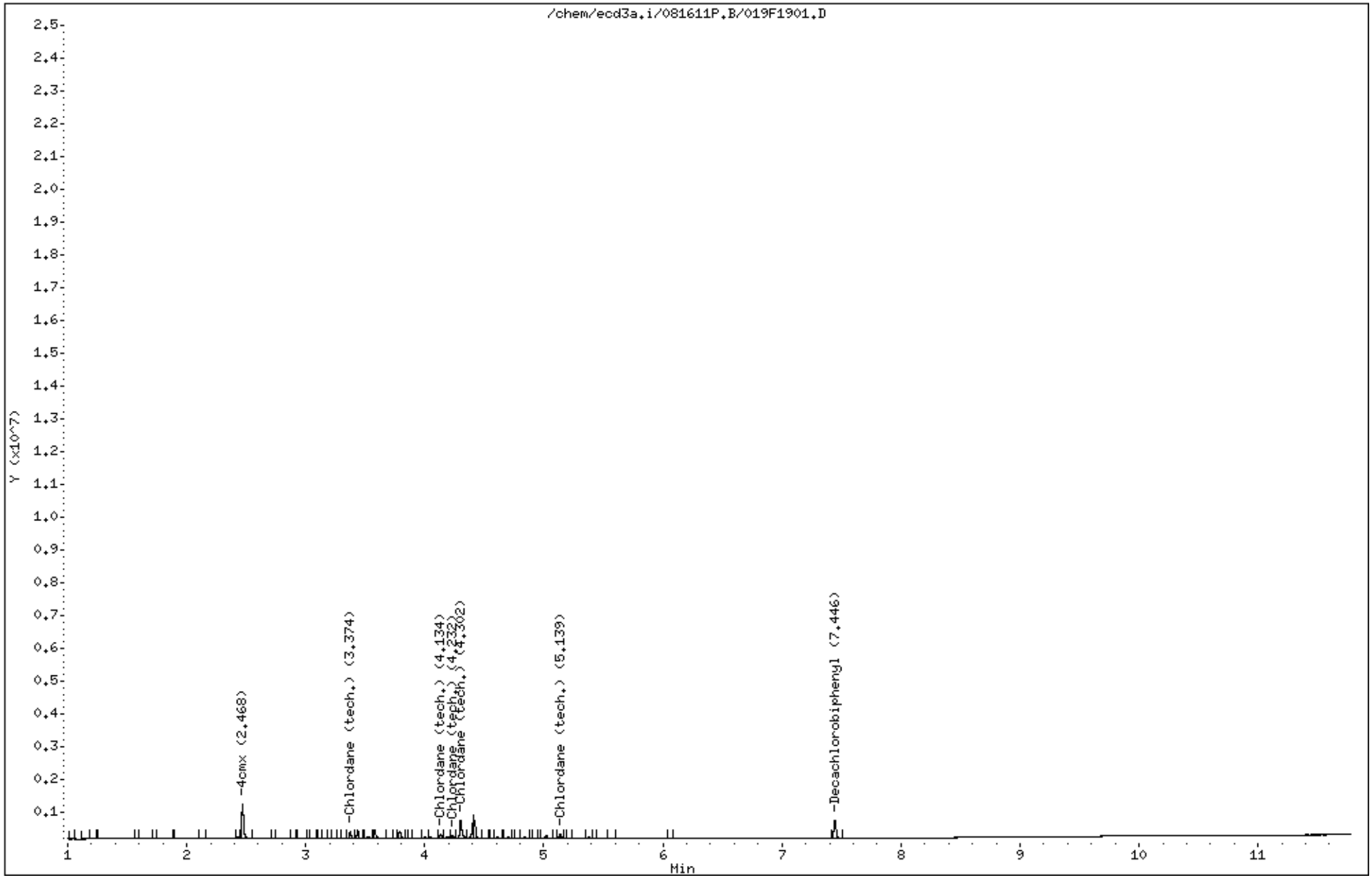
CLP-1

Data file : /chem/ecd3a.i/081611P.B/019F1901.D
Lab Smp Id: WPE110816-21CL Client Smp ID: CHLOR01
Inj Date : 16-AUG-2011 15:45
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-21CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-F-8081-081211p.m
Meth Date : 17-Aug-2011 11:52 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032f3201.d
Als bottle: 19 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.374	3.374	0.000	210389	50.0000	53.4	80.00- 120.00	100.00
4.134	4.134	0.000	117297	50.0000	52.6	36.66- 76.66	55.75
4.232	4.231	0.001	96258	50.0000	45.0	31.00- 71.00	45.75
4.302	4.302	0.000	681855	50.0000	52.2	312.07- 352.07	324.09
5.139	5.137	0.002	162553	50.0000	54.7	63.72- 103.72	77.26
Average of Peak Amounts =					51.6		
$ 1 4cmx					CAS #: 877-09-8		
2.468	2.468	0.000	1197184	8.00000	9.80	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.446	7.445	0.001	754566	8.00000	10.5	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/019F1901.D
Date : 16-AUG-2011 15:45
Client ID: CHLOR01
Sample Info: IWPE110816-21CL

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

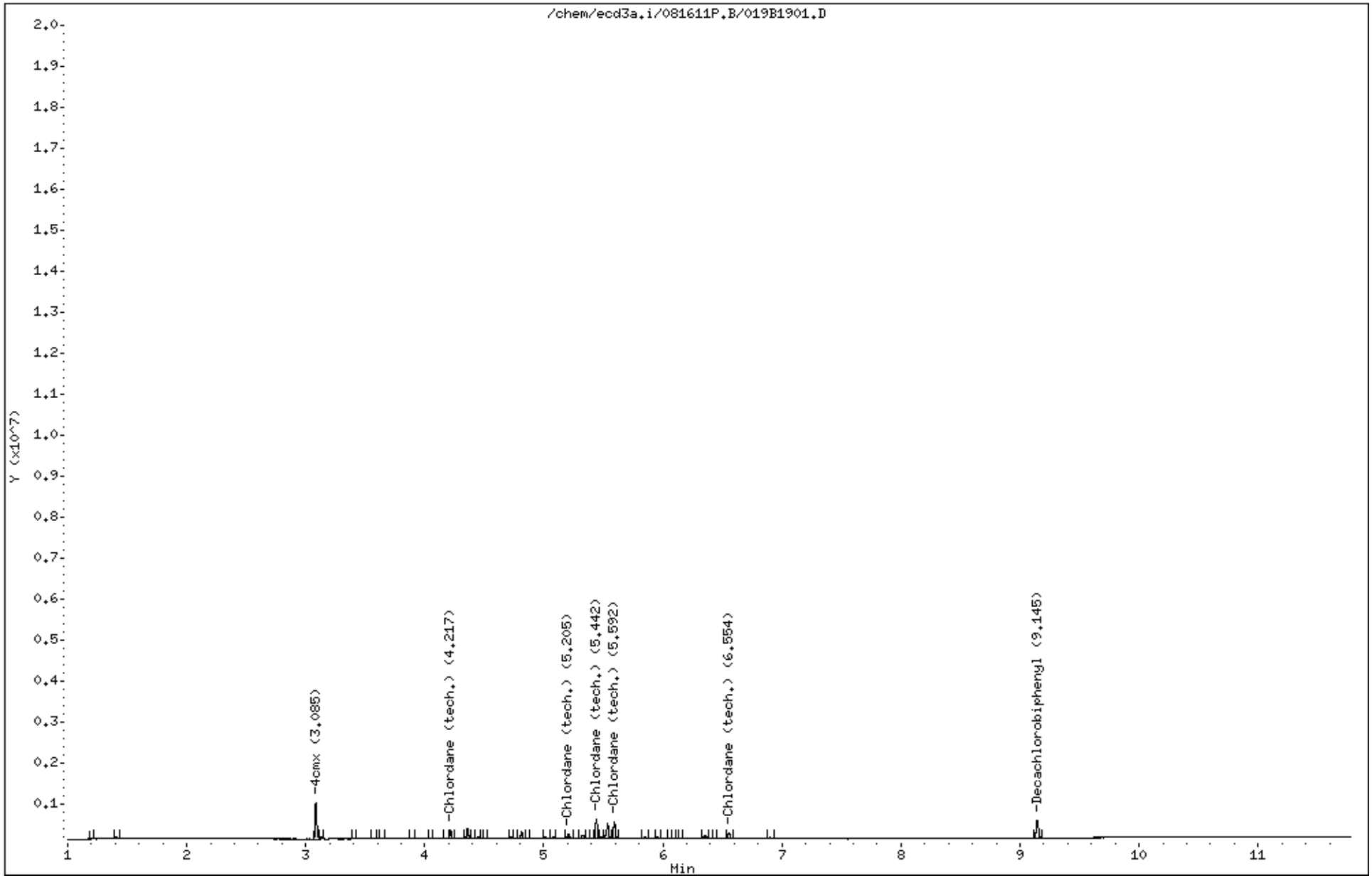
CLP-2

Data file : /chem/ecd3a.i/081611P.B/019B1901.D
Lab Smp Id: WPE110816-21CL Client Smp ID: CHLOR01
Inj Date : 16-AUG-2011 15:45
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-21CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-B-8081-081211p.m
Meth Date : 17-Aug-2011 11:50 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032b3201.d
Als bottle: 19 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.217	4.217	0.000	202450	50.0000	61.2	80.00- 120.00	100.00
5.205	5.206	-0.001	120610	50.0000	57.3	39.89- 79.89	59.58
5.442	5.442	0.000	539175	50.0000	58.8	260.35- 300.35	266.32
5.592	5.593	-0.001	468095	50.0000	60.3	216.12- 256.12	231.21
6.554	6.555	-0.001	148188	50.0000	59.3	62.69- 102.69	73.20
Average of Peak Amounts =					59.4		
$ 1 4cmx					CAS #: 877-09-8		
3.085	3.085	0.000	885717	8.00000	10.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.145	9.145	0.000	557623	8.00000	11.6	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/019B1901.D
Date : 16-AUG-2011 15:45
Client ID: CHLOR01
Sample Info: IWPE110816-21CL

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/081611P.B/020F2001.D
Lab Smp Id: WPE110816-22CL Client Smp ID: CHLOR02
Inj Date : 16-AUG-2011 16:01
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-22CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-F-8081-081211p.m
Meth Date : 17-Aug-2011 11:52 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:00 Cal File: 033f3301.d
Als bottle: 20 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.373	3.374	-0.001	432698	100.000	106	80.00- 120.00	100.00
4.134	4.134	0.000	239179	100.000	105	36.66- 76.66	55.28
4.231	4.231	0.000	205997	100.000	96.6	31.00- 71.00	47.61
4.302	4.302	0.000	1433951	100.000	106	312.07- 352.07	331.40
5.138	5.137	0.001	336926	100.000	110	63.72- 103.72	77.87
Average of Peak Amounts =					105		
$ 1 4cmx					CAS #: 877-09-8		
2.469	2.468	0.001	2445624	20.0000	20.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.447	7.445	0.002	1462931	20.0000	20.4	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/020F2001.D

Page 1

Date : 16-AUG-2011 16:01

Client ID: CHLOR02

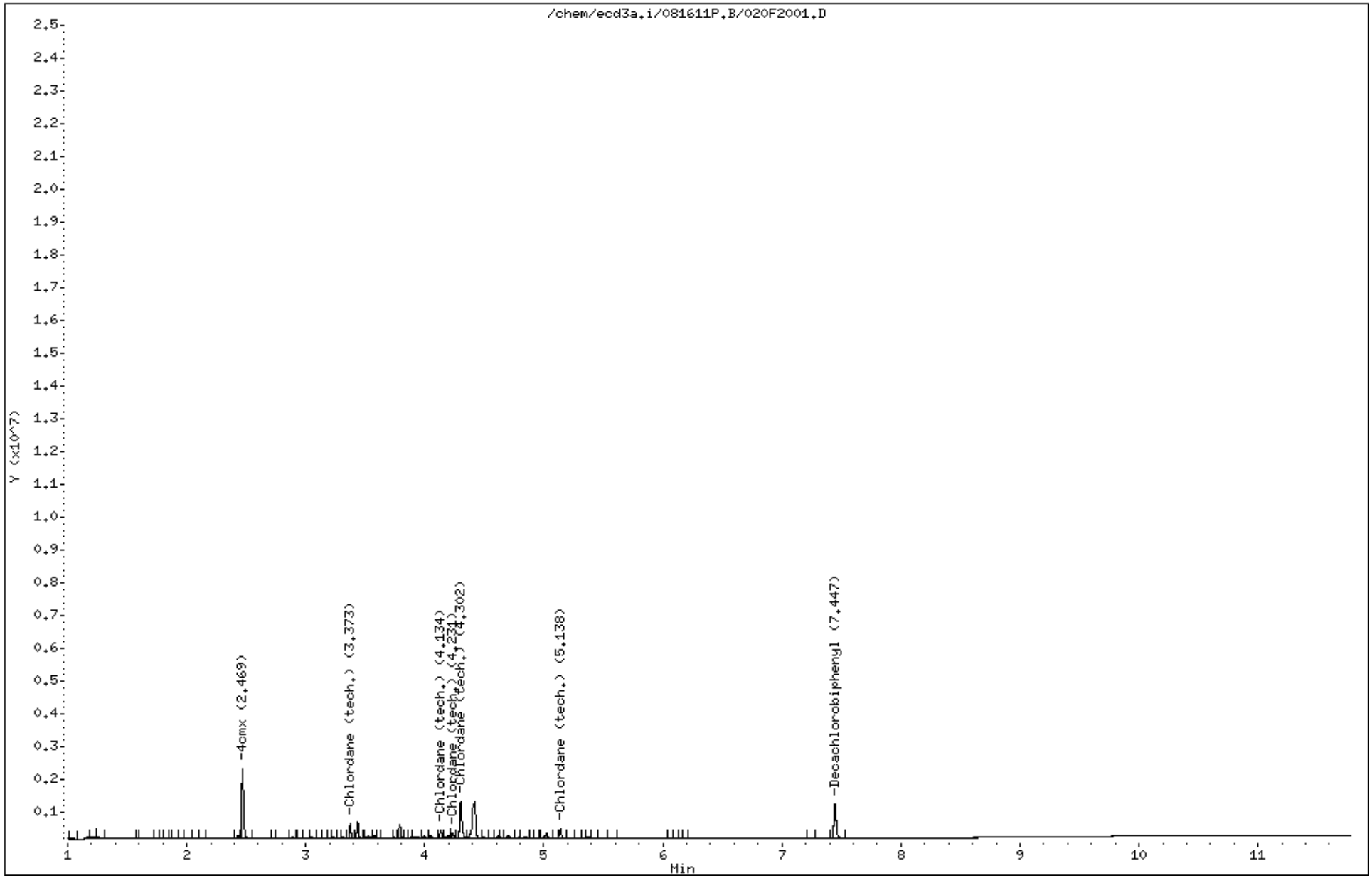
Instrument: ecd3a.i

Sample Info: IWPE110816-22CL

Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/081611P.B/020B2001.D
Lab Smp Id: WPE110816-22CL Client Smp ID: CHLOR02
Inj Date : 16-AUG-2011 16:01
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-22CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-B-8081-081211p.m
Meth Date : 17-Aug-2011 11:50 reb01393 Quant Type: ESTD
Cal Date : 21-DEC-2010 12:13 Cal File: 013b1301.d
Als bottle: 20 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.217	4.217	0.000	381132	100.000	113	80.00- 120.00	100.00
5.205	5.206	-0.001	232277	100.000	111	39.89- 79.89	60.94
5.441	5.442	-0.001	1046736	100.000	112	260.35- 300.35	274.64
5.592	5.593	-0.001	904279	100.000	114	216.12- 256.12	237.26
6.554	6.555	-0.001	298430	100.000	118	62.69- 102.69	78.30
Average of Peak Amounts =					114		
$ 1 4cmx					CAS #: 877-09-8		
3.085	3.085	0.000	1718318	20.0000	21.2	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.146	9.145	0.001	1016400	20.0000	21.1	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/020B2001.D

Date : 16-AUG-2011 16:01

Client ID: CHLOR02

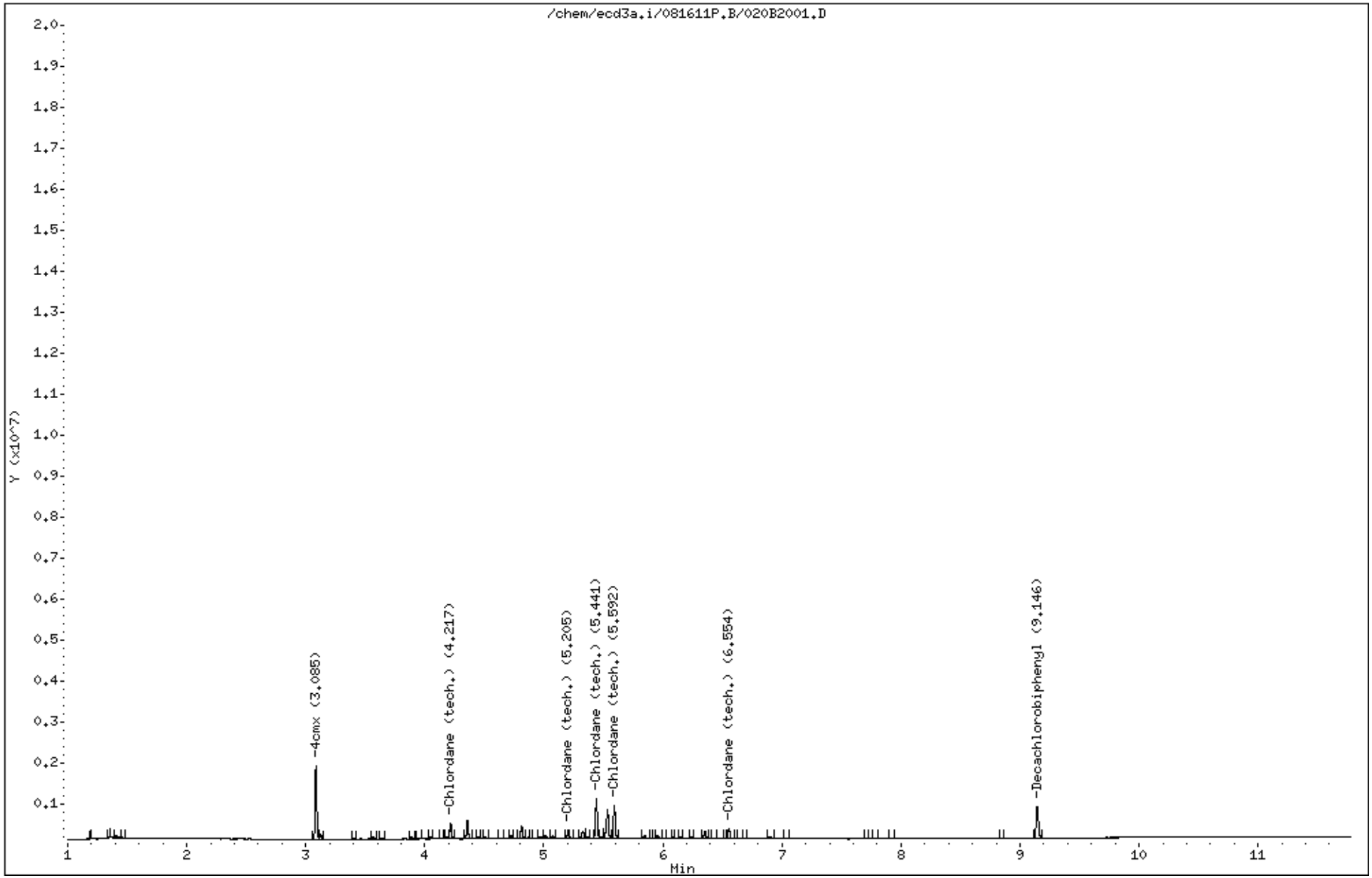
Instrument: ecd3a.i

Sample Info: IWPE110816-22CL

Operator: RXE1

Column phase: CLP-2

Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/081611P.B/021F2101.D
Lab Smp Id: WPE110816-23CL Client Smp ID: CHLOR03
Inj Date : 16-AUG-2011 16:27
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-23CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-F-8081-081211p.m
Meth Date : 17-Aug-2011 11:52 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034f3401.d
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.377	3.374	0.003	2266714	500.000	534	80.00- 120.00	100.00
4.139	4.134	0.005	1271230	500.000	539	36.66- 76.66	56.08
4.236	4.231	0.005	1189163	500.000	545	31.00- 71.00	52.46
4.307	4.302	0.005	7678070	500.000	548	312.07- 352.07	338.73
5.142	5.137	0.005	1651096	500.000	522	63.72- 103.72	72.84
Average of Peak Amounts =					538		
$ 1 4cmx					CAS #: 877-09-8		
2.470	2.468	0.002	12003353	100.000	98.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.451	7.445	0.006	6831667	100.000	95.5	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/021F2101.D

Date : 16-AUG-2011 16:27

Client ID: CHLOR03

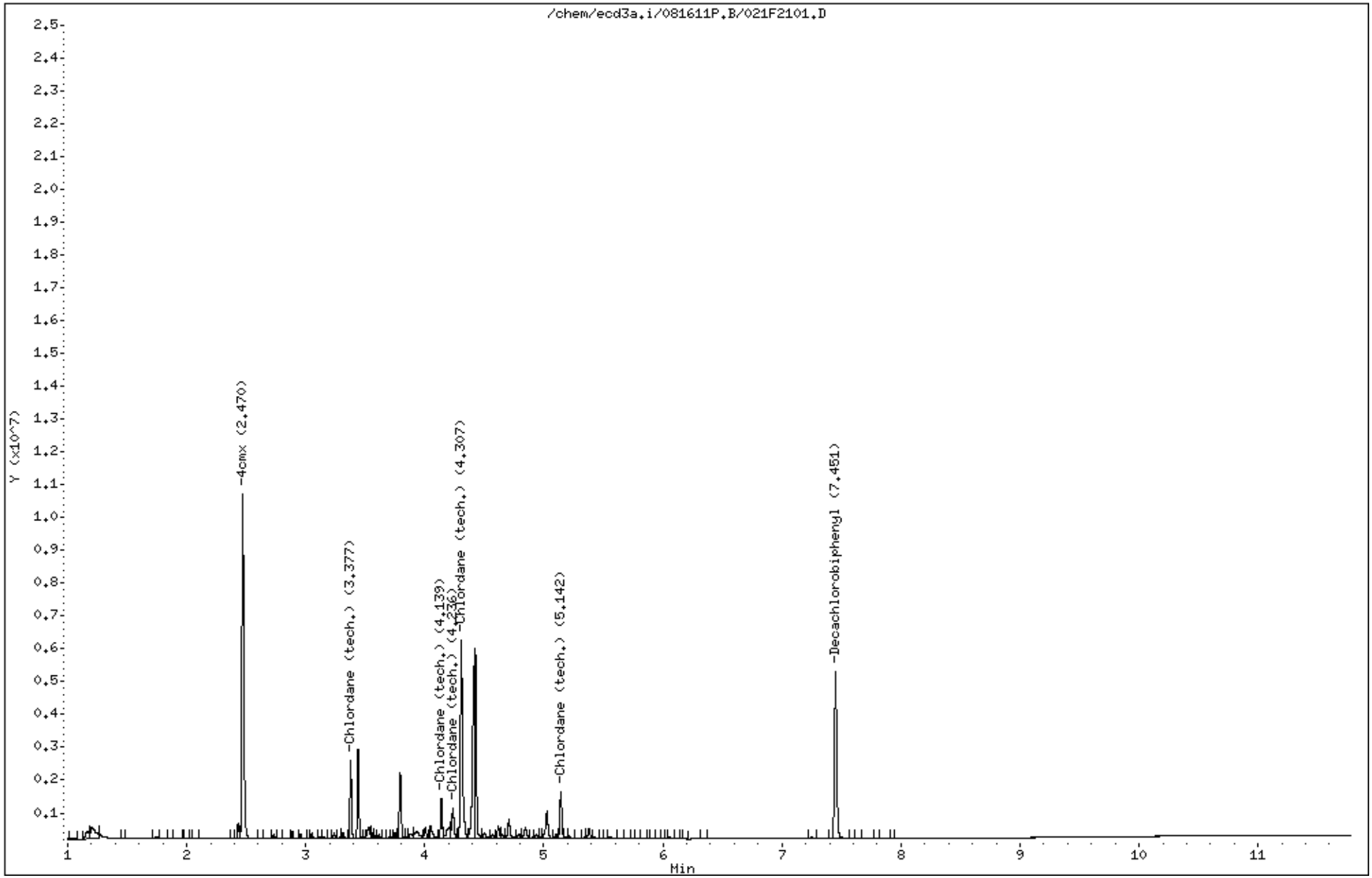
Sample Info: IWPE110816-23CL

Column phase: CLP-1

Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/081611P.B/021B2101.D
Lab Smp Id: WPE110816-23CL Client Smp ID: CHLOR03
Inj Date : 16-AUG-2011 16:27
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-23CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-B-8081-081211p.m
Meth Date : 17-Aug-2011 11:50 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034b3401.d
Als bottle: 21 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.221	4.217	0.004	1658508	500.000	487	80.00- 120.00	100.00
5.209	5.206	0.003	958046	500.000	461	39.89- 79.89	57.77
5.446	5.442	0.004	4653961	500.000	494	260.35- 300.35	280.61
5.597	5.593	0.004	3856591	500.000	484	216.12- 256.12	232.53
6.559	6.555	0.004	1188694	500.000	467	62.69- 102.69	71.67
Average of Peak Amounts =					479		
$ 1 4cmx					CAS #: 877-09-8		
3.088	3.085	0.003	7405801	100.000	91.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.150	9.145	0.005	4235382	100.000	88.0	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/021B2101.D

Page 1

Date : 16-AUG-2011 16:27

Client ID: CHLOR03

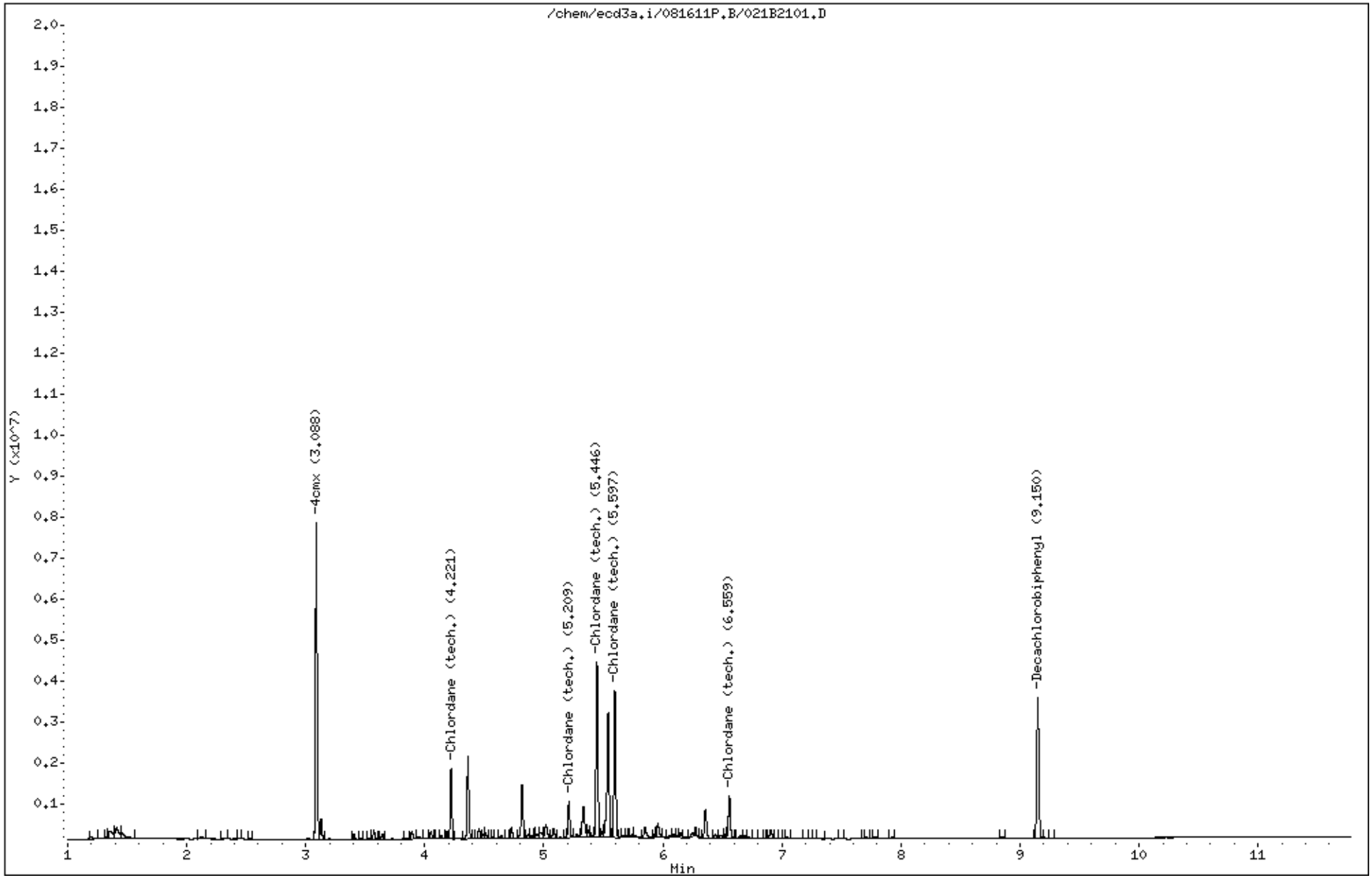
Instrument: ecd3a.i

Sample Info: IWPE110816-23CL

Operator: RXE1

Column phase: CLP-2

Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/081611P.B/022F2201.D
Lab Smp Id: WPE110816-24CL Client Smp ID: CHLOR04
Inj Date : 16-AUG-2011 16:42
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-24CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-F-8081-081211p.m
Meth Date : 17-Aug-2011 11:52 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018f1801.d
Als bottle: 22 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.374	3.374	0.000	4762686	1000.00	1080	80.00- 120.00	100.00
4.134	4.134	0.000	2646802	1000.00	1080	36.66- 76.66	55.57
4.231	4.231	0.000	2506296	1000.00	1120	31.00- 71.00	52.62
4.302	4.302	0.000	16054863	1000.00	1100	312.07- 352.07	337.10
5.138	5.137	0.001	3460417	1000.00	1050	63.72- 103.72	72.66
Average of Peak Amounts = 1.08e+03							
$ 1 4cmx					CAS #: 877-09-8		
2.468	2.468	0.000	23916263	200.000	196	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.446	7.445	0.001	13261903	200.000	185	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/022F2201.D

Date : 16-AUG-2011 16:42

Client ID: CHLOR04

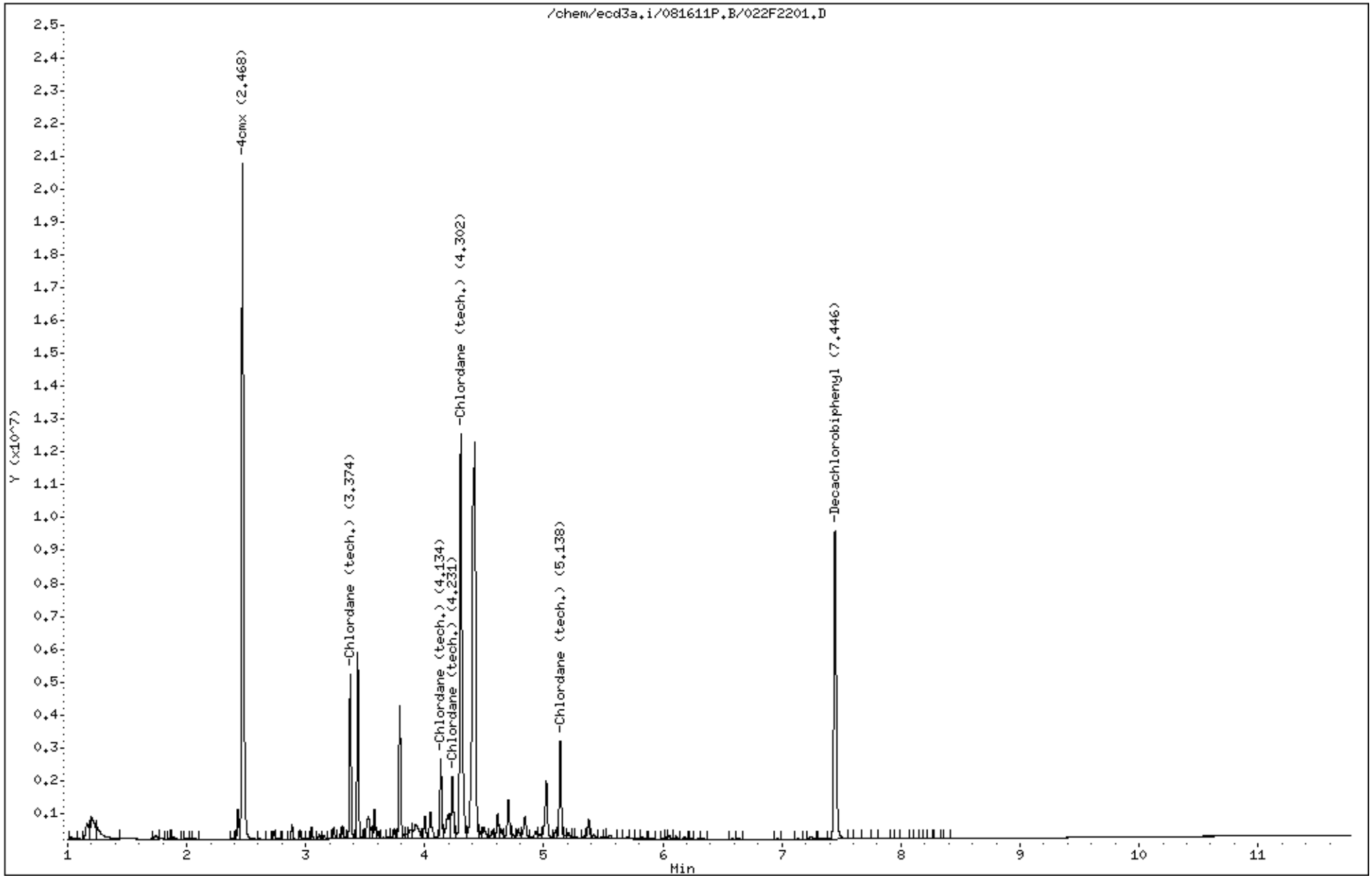
Sample Info: IWPE110816-24CL

Column phase: CLP-1

Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/081611P.B/022B2201.D
Lab Smp Id: WPE110816-24CL Client Smp ID: CHLOR04
Inj Date : 16-AUG-2011 16:42
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-24CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-B-8081-081211p.m
Meth Date : 17-Aug-2011 11:50 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018b1801.d
Als bottle: 22 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.217	4.217	0.000	3255378	1000.00	938	80.00- 120.00	100.00
5.206	5.206	0.000	2052246	1000.00	971	39.89- 79.89	63.04
5.442	5.442	0.000	9400940	1000.00	975	260.35- 300.35	288.78
5.592	5.593	-0.001	7819850	1000.00	958	216.12- 256.12	240.21
6.555	6.555	0.000	2371383	1000.00	918	62.69- 102.69	72.85
Average of Peak Amounts =					952		
$ 1 4cmx					CAS #: 877-09-8		
3.085	3.085	0.000	14155499	200.000	175	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.145	9.145	0.000	7937743	200.000	165	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/081611P.B/022B2201.D

Date : 16-AUG-2011 16:42

Client ID: CHLOR04

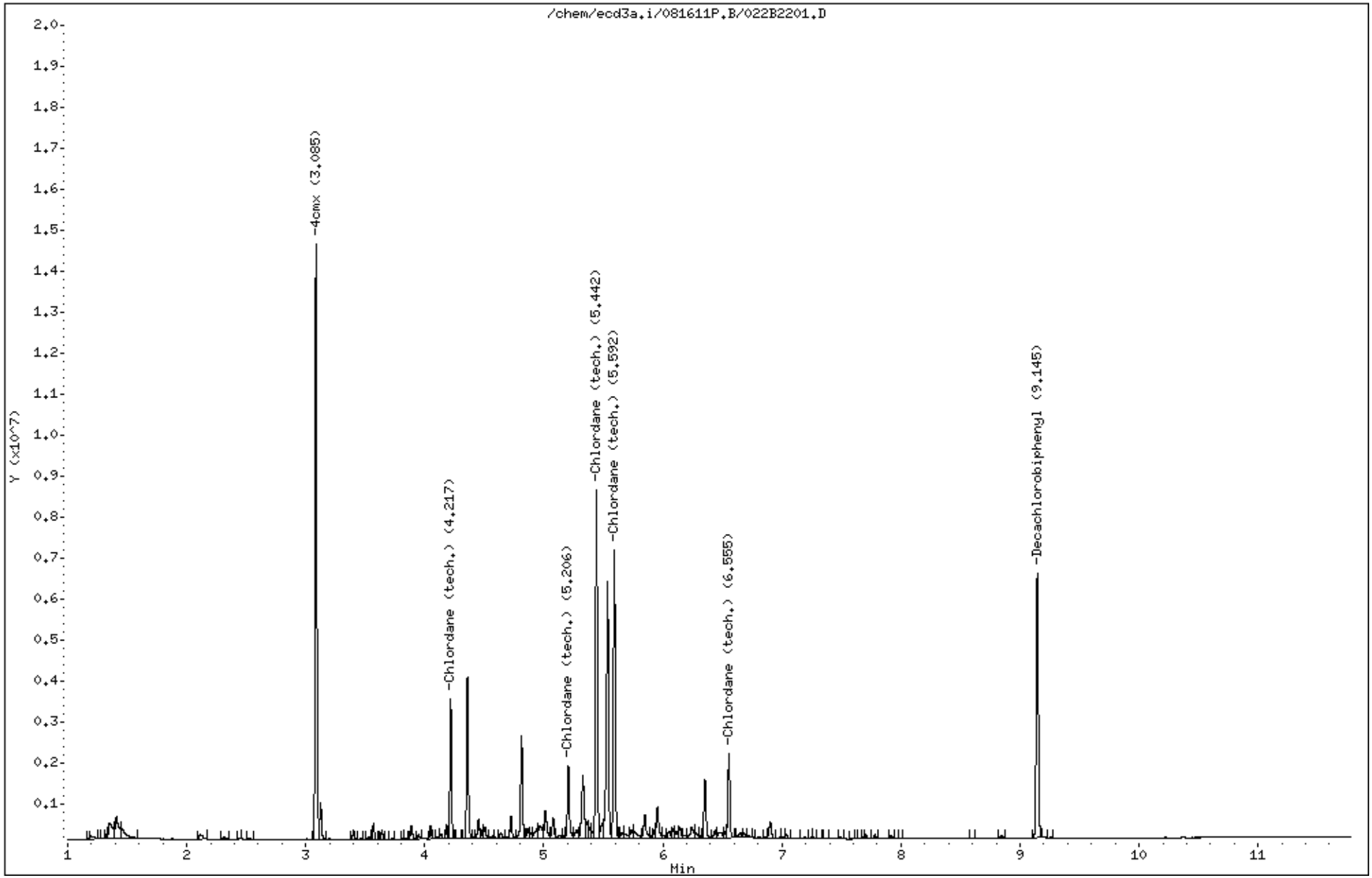
Sample Info: IWPE110816-24CL

Column phase: CLP-2

Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/081611P.B/023F2301.D
Lab Smp Id: IPE110616-06CL Client Smp ID: CHLOR05
Inj Date : 16-AUG-2011 16:58
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110616-06CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-F-8081-081211p.m
Meth Date : 17-Aug-2011 11:52 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 23 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.375	3.374	0.001	14419554	3000.00	3180	80.00- 120.00	100.00(A)
4.135	4.134	0.001	7920946	3000.00	3150	36.66- 76.66	54.93
4.231	4.231	0.000	7732576	3000.00	3380	31.00- 71.00	53.63
4.303	4.302	0.001	46720605	3000.00	3120	312.07- 352.07	324.01
5.138	5.137	0.001	10132980	3000.00	3020	63.72- 103.72	70.27
Average of Peak Amounts =				3.17e+03			
$ 1 4cmx					CAS #: 877-09-8		
2.470	2.468	0.002	68135592	400.000	558	80.00- 120.00	100.00(A)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.446	7.445	0.001	38302399	400.000	535	80.00- 120.00	100.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/ecd3a.i/081611P.B/023F2301.D

Date : 16-AUG-2011 16:58

Client ID: CHLOR05

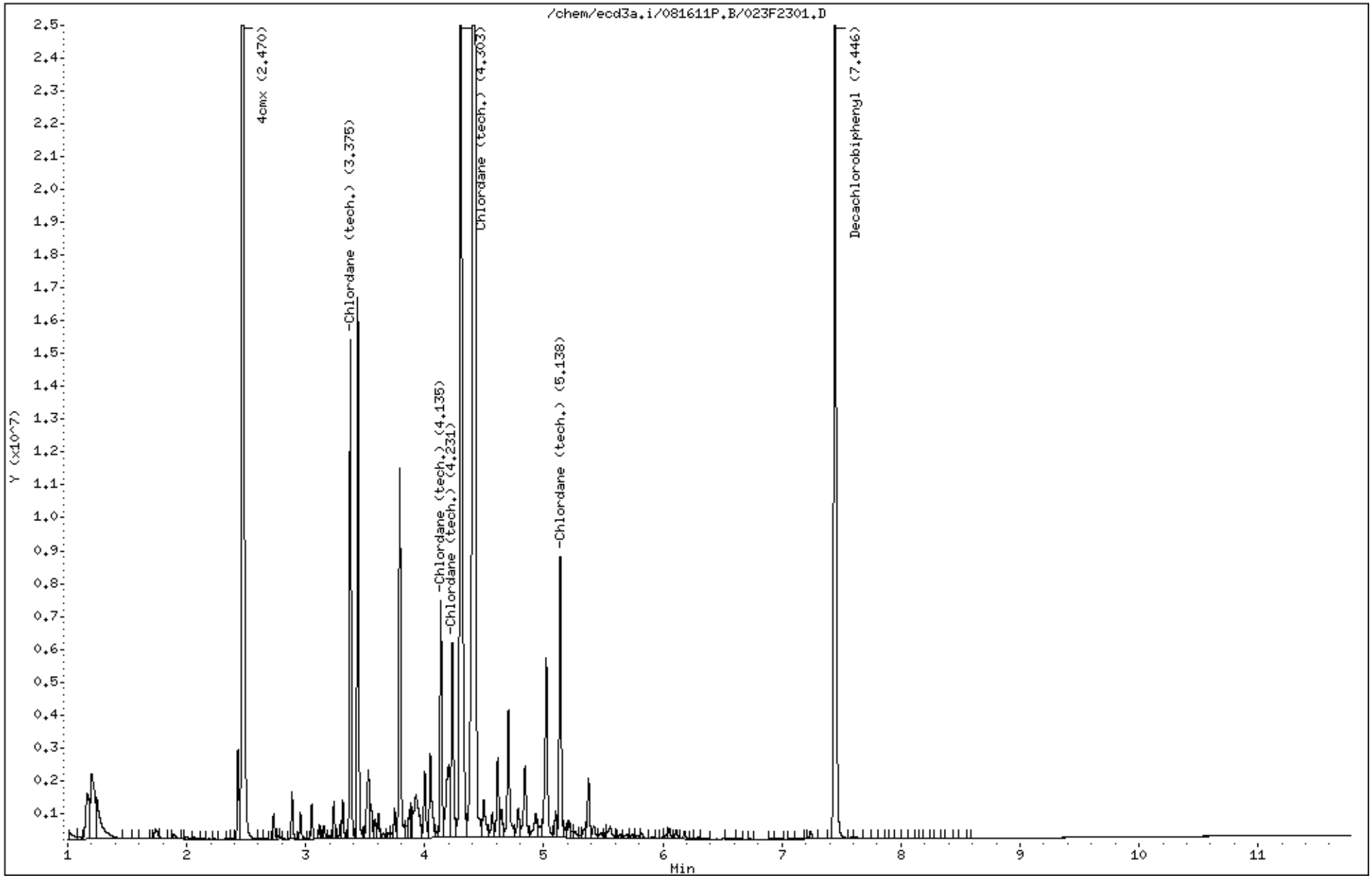
Sample Info: !IPE110616-06CL

Column phase: CLP-1

Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/081611P.B/023B2301.D
Lab Smp Id: IPE110616-06CL Client Smp ID: CHLOR05
Inj Date : 16-AUG-2011 16:58
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110616-06CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/081611P.B/ECD3-B-8081-081211p.m
Meth Date : 17-Aug-2011 11:50 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 23 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.218	4.217	0.001	8988651	3000.00	2580	80.00- 120.00	100.00
5.207	5.206	0.001	5134698	3000.00	2460	39.89- 79.89	57.12
5.443	5.442	0.001	25026879	3000.00	2590	260.35- 300.35	278.43
5.593	5.593	0.000	20702809	3000.00	2530	216.12- 256.12	230.32
6.554	6.555	-0.001	6356197	3000.00	2480	62.69- 102.69	70.71
Average of Peak Amounts =			2.53e+03				
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.085	0.001	38315403	400.000	473	80.00- 120.00	100.00(A)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.146	9.145	0.001	22447438	400.000	466	80.00- 120.00	100.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/ecd3a.i/081611P.B/023B2301.D

Date : 16-AUG-2011 16:58

Client ID: CHLOR05

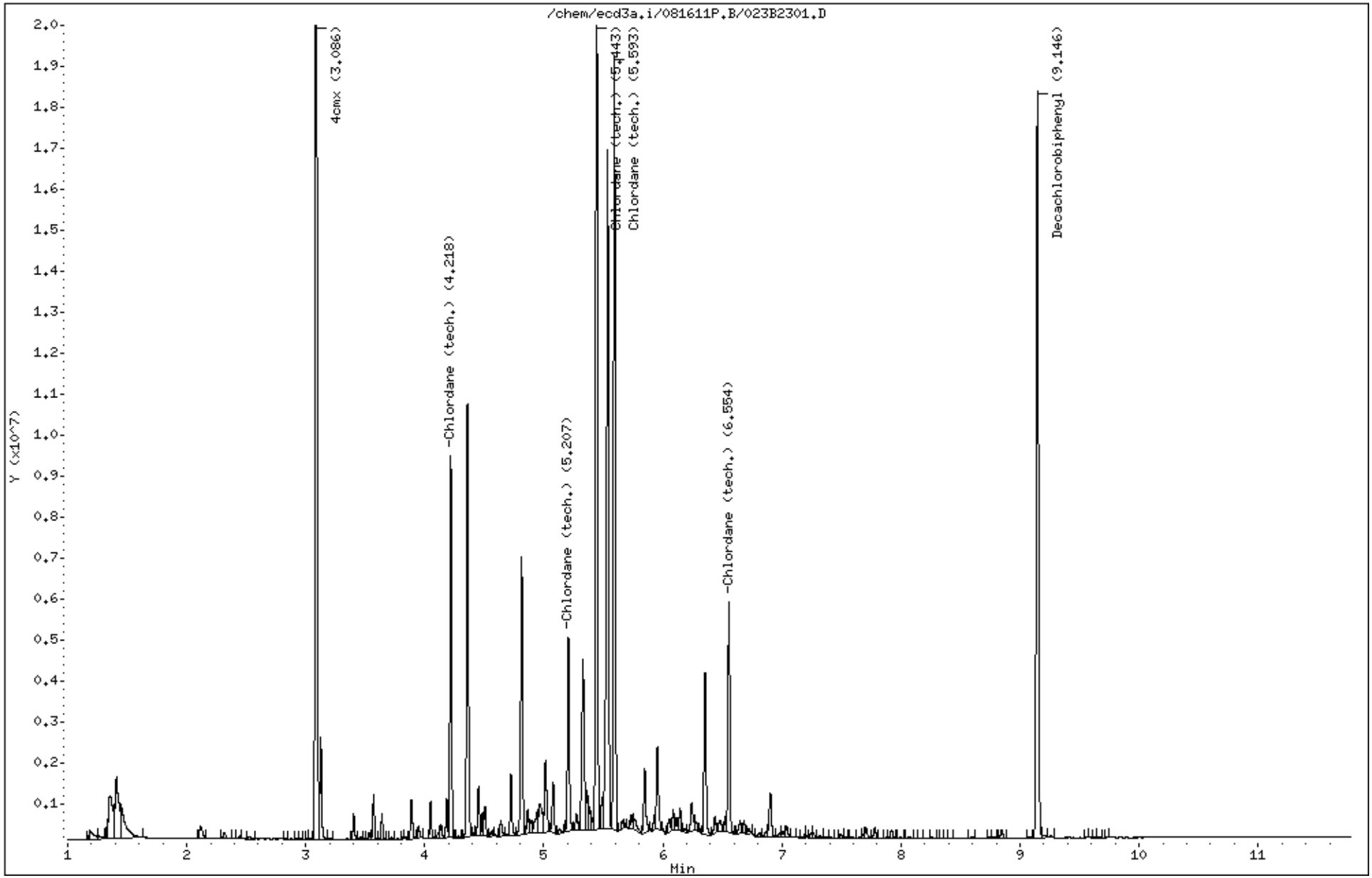
Instrument: ecd3a.i

Sample Info: IPE110616-06CL

Operator: RXE1

Column phase: CLP-2

Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/082311P.B/013F1301.D
Lab Smp Id: WPE110816-11TX Client Smp ID: TOXAPH01
Inj Date : 23-AUG-2011 14:29
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-11TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-F-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032f3201.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.174	5.172	0.002	382151	100.000	107	80.00- 120.00	100.00(M)
5.291	5.290	0.001	205124	100.000	96.3	36.25- 76.25	53.68
5.513	5.509	0.004	272777	100.000	102	55.59- 95.59	71.38
5.837	5.837	0.000	196395	100.000	108	30.01- 70.01	51.39
5.938	5.935	0.003	294631	100.000	104	59.02- 99.02	77.10
Average of Peak Amounts =					103		
$ 1 4cmx					CAS #: 877-09-8		
2.454	2.455	-0.001	1607578	8.00000	14.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.426	7.425	0.001	1126027	8.00000	16.2	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/013F1301.D

Page 1

Date : 23-AUG-2011 14:29

Client ID: TOXAPH01

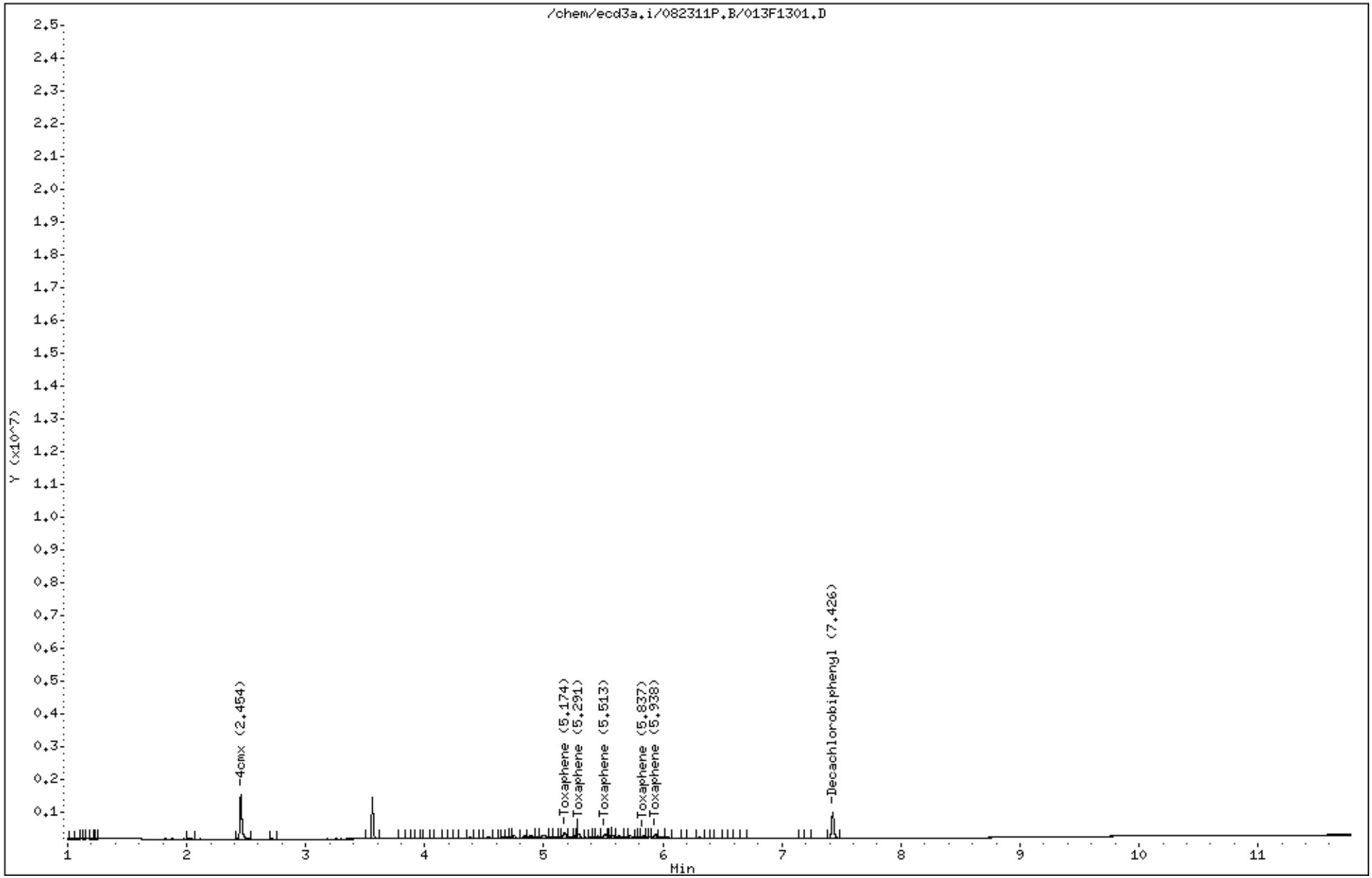
Instrument: ecd3a.i

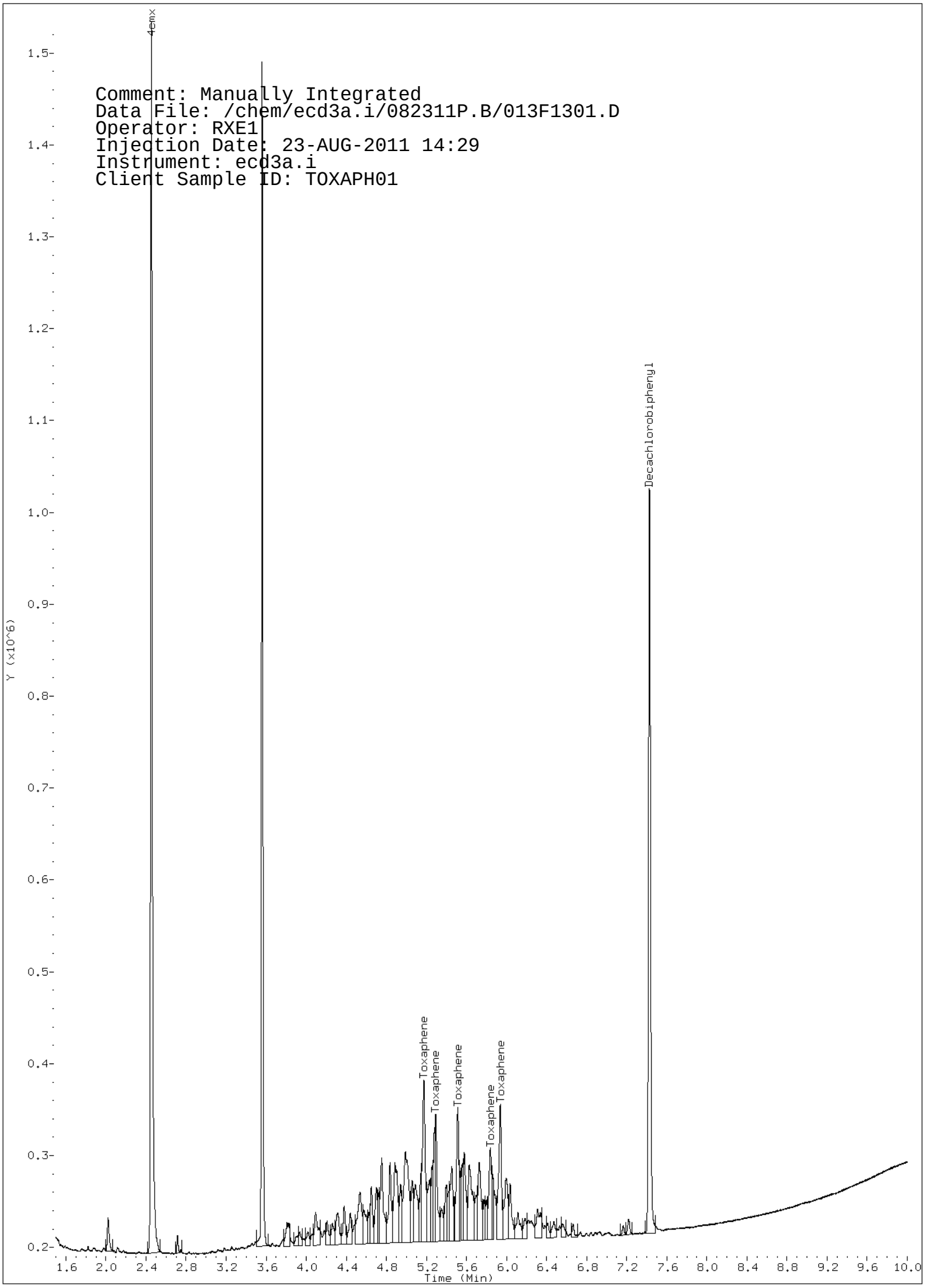
Sample Info: IWPE110816-11TX

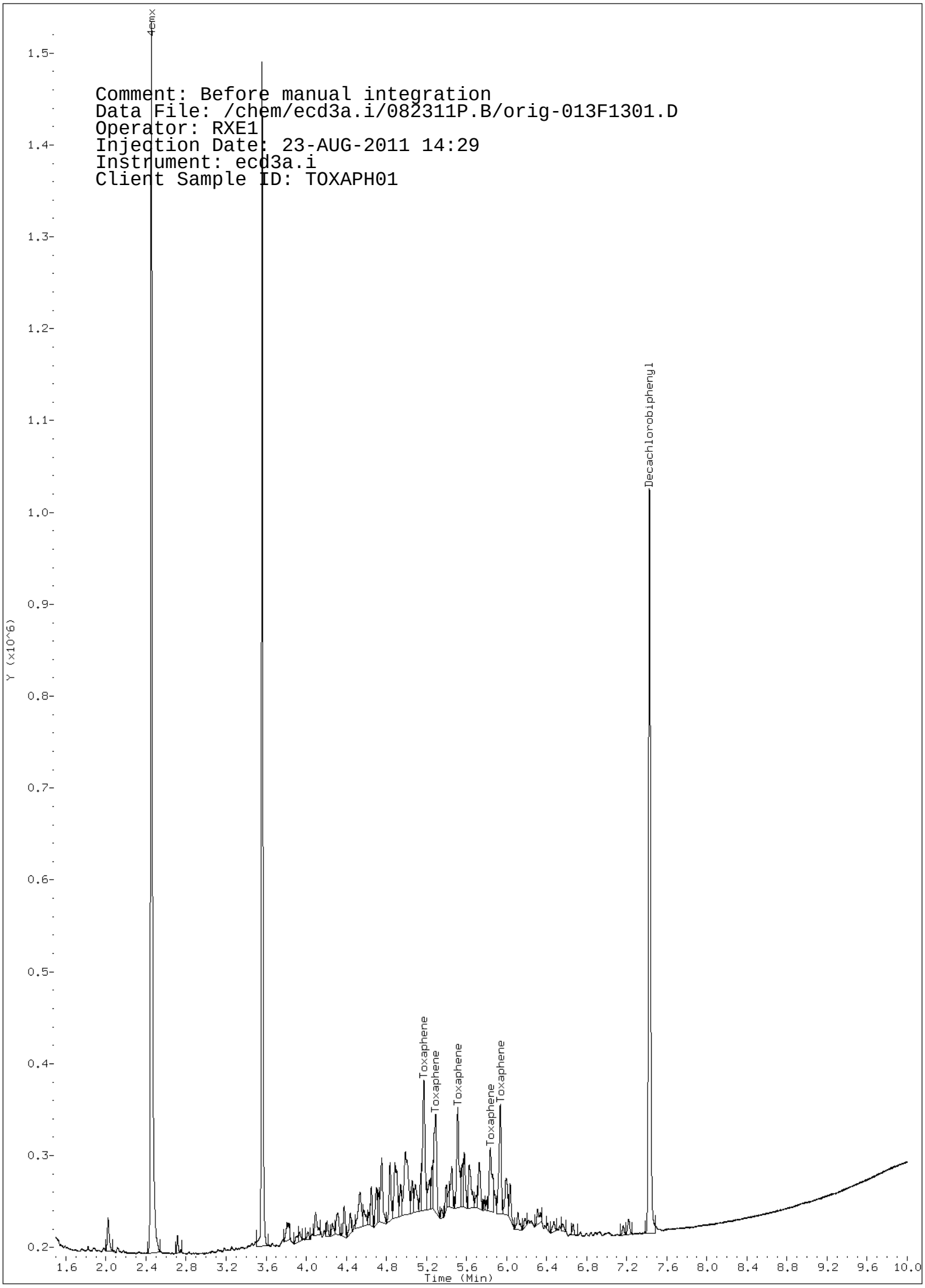
Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/013F1301.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:29
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-013F1301.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:29
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/082311P.B/013B1301.D
Lab Smp Id: WPE110816-11TX Client Smp ID: TOXAPH01
Inj Date : 23-AUG-2011 14:29
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-11TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-B-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032b3201.d
Als bottle: 13 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.442	6.443	-0.001	172315	100.000	121	80.00- 120.00	100.00(M)
6.489	6.489	0.000	278874	100.000	120	144.48- 184.48	161.84
6.593	6.591	0.002	465838	100.000	117	268.66- 308.66	270.34
6.871	6.870	0.001	253240	100.000	120	133.17- 173.17	146.96
7.447	7.445	0.002	289126	100.000	120	151.31- 191.31	167.79
Average of Peak Amounts =					120		
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	1274558	8.00000	15.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.149	9.148	0.001	856271	8.00000	17.7	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/013B1301.D

Date : 23-AUG-2011 14:29

Client ID: TOXAPH01

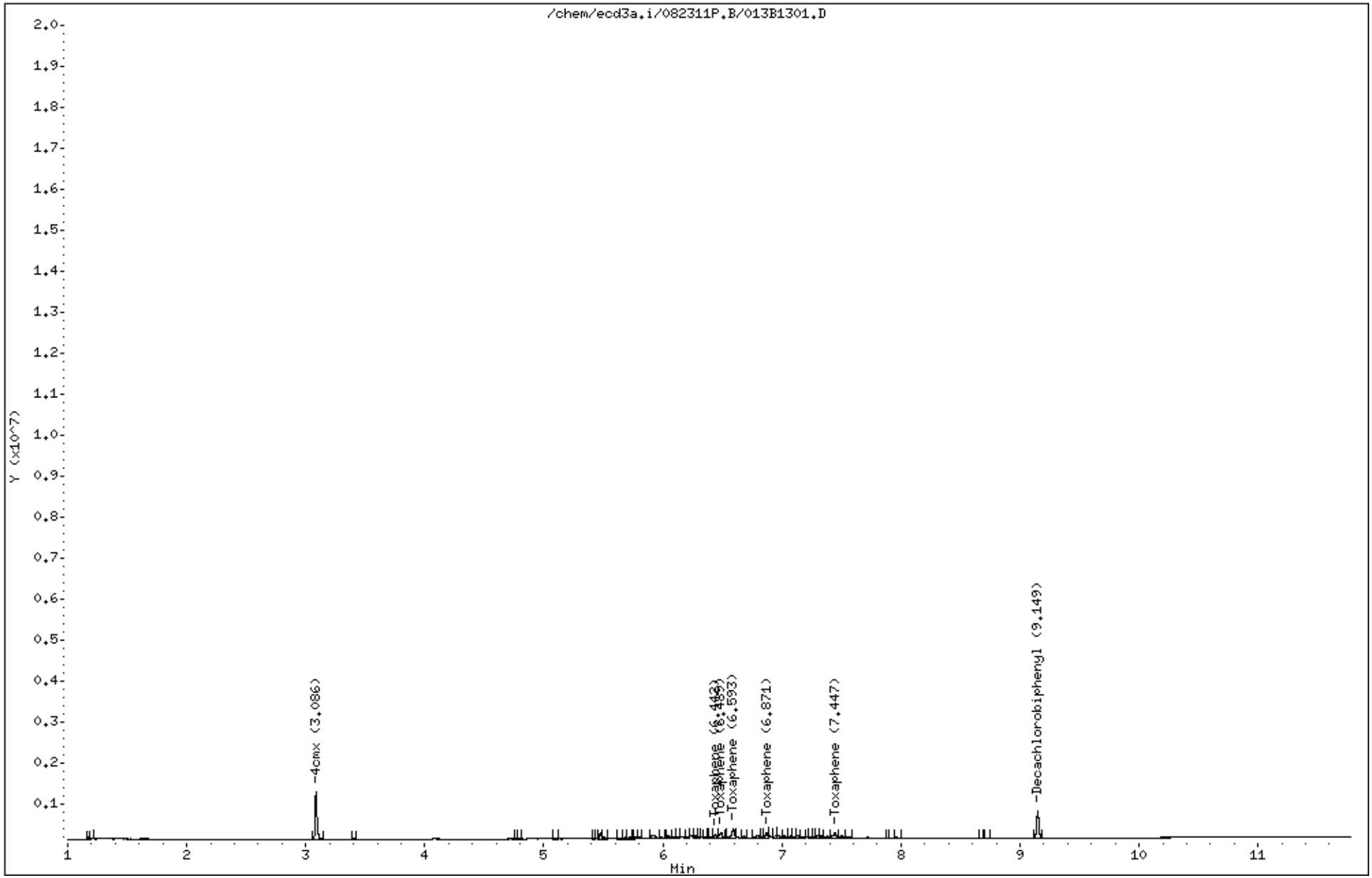
Sample Info: IWPE110816-11TX

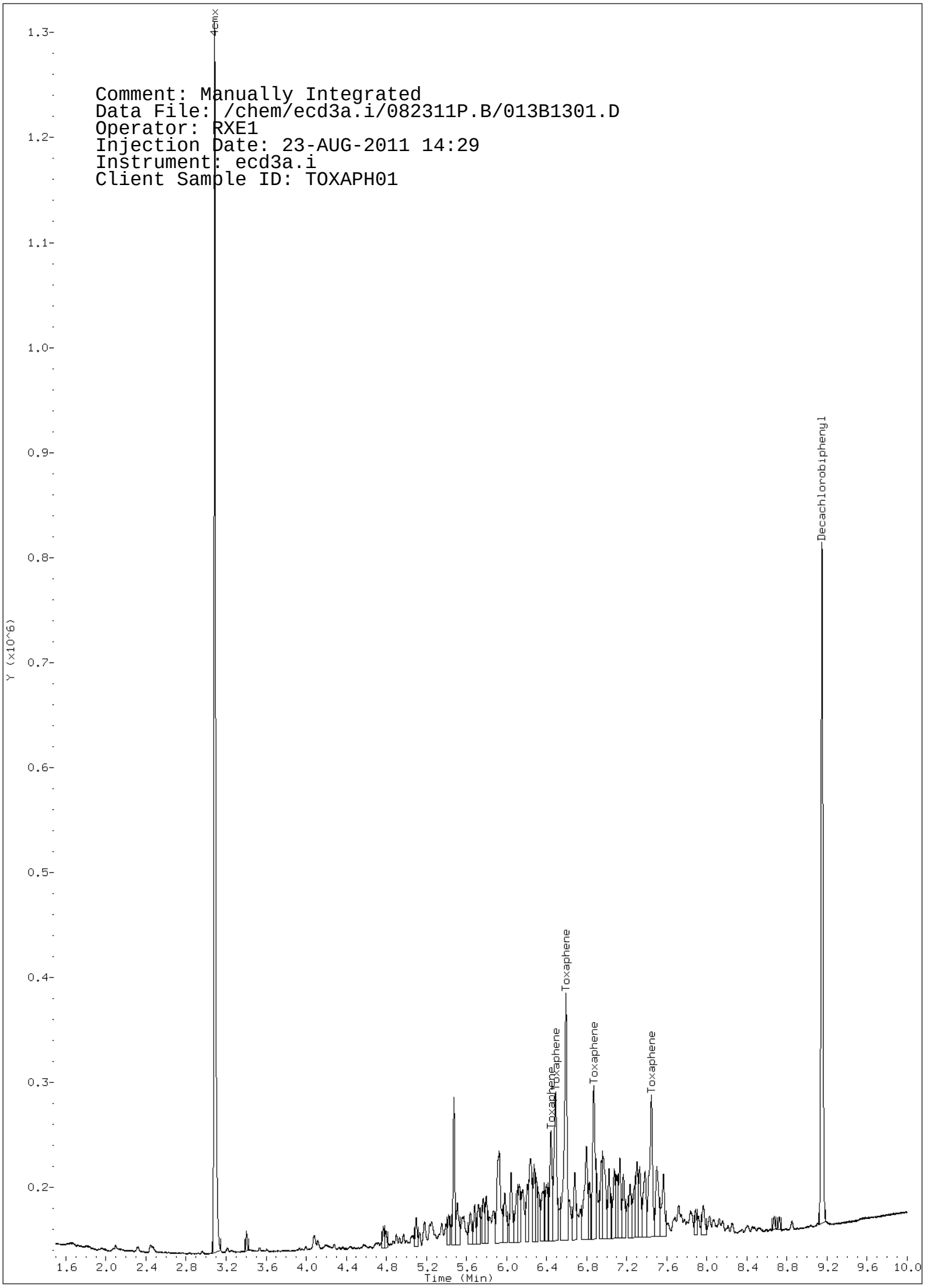
Column phase: CLP-2

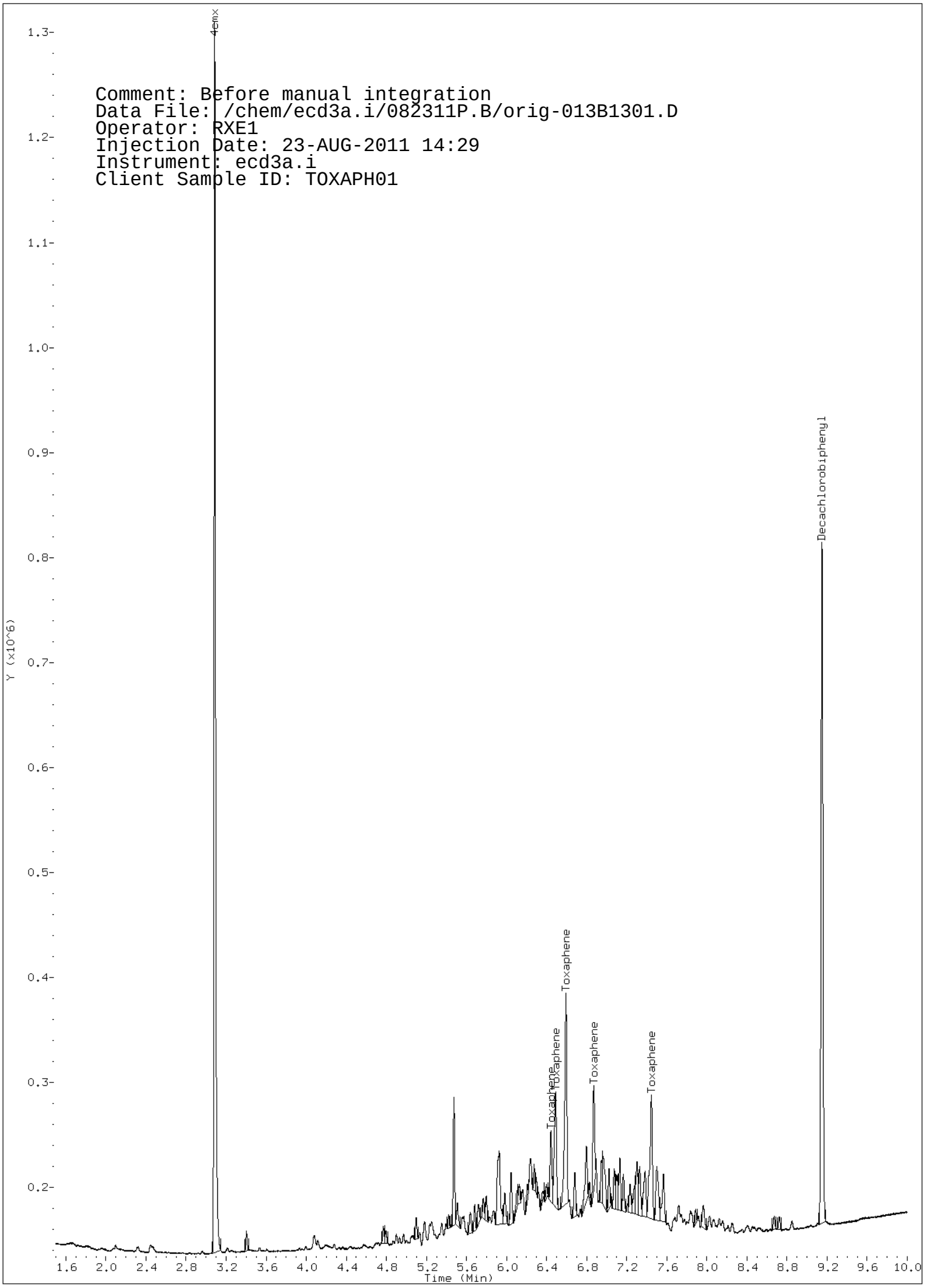
Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/013B1301.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:29
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-013B1301.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:29
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/082311P.B/014F1401.D
Lab Smp Id: WPE110816-12TX Client Smp ID: TOXAPH02
Inj Date : 23-AUG-2011 14:45
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-12TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-F-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:00 Cal File: 033f3301.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.173	5.172	0.001	1693384	500.000	475	80.00- 120.00	100.00(M)
5.292	5.290	0.002	1106773	500.000	520	36.25- 76.25	65.36
5.511	5.509	0.002	1280032	500.000	479	55.59- 95.59	75.59
5.839	5.837	0.002	837344	500.000	459	30.01- 70.01	49.45
5.937	5.935	0.002	1374002	500.000	483	59.02- 99.02	81.14
Average of Peak Amounts =					483		
$ 1 4cmx					CAS #: 877-09-8		
2.454	2.455	-0.001	7872021	20.0000	69.1	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.426	7.425	0.001	5012785	20.0000	72.3	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/014F1401.D

Page 1

Date : 23-AUG-2011 14:45

Client ID: TOXAPH02

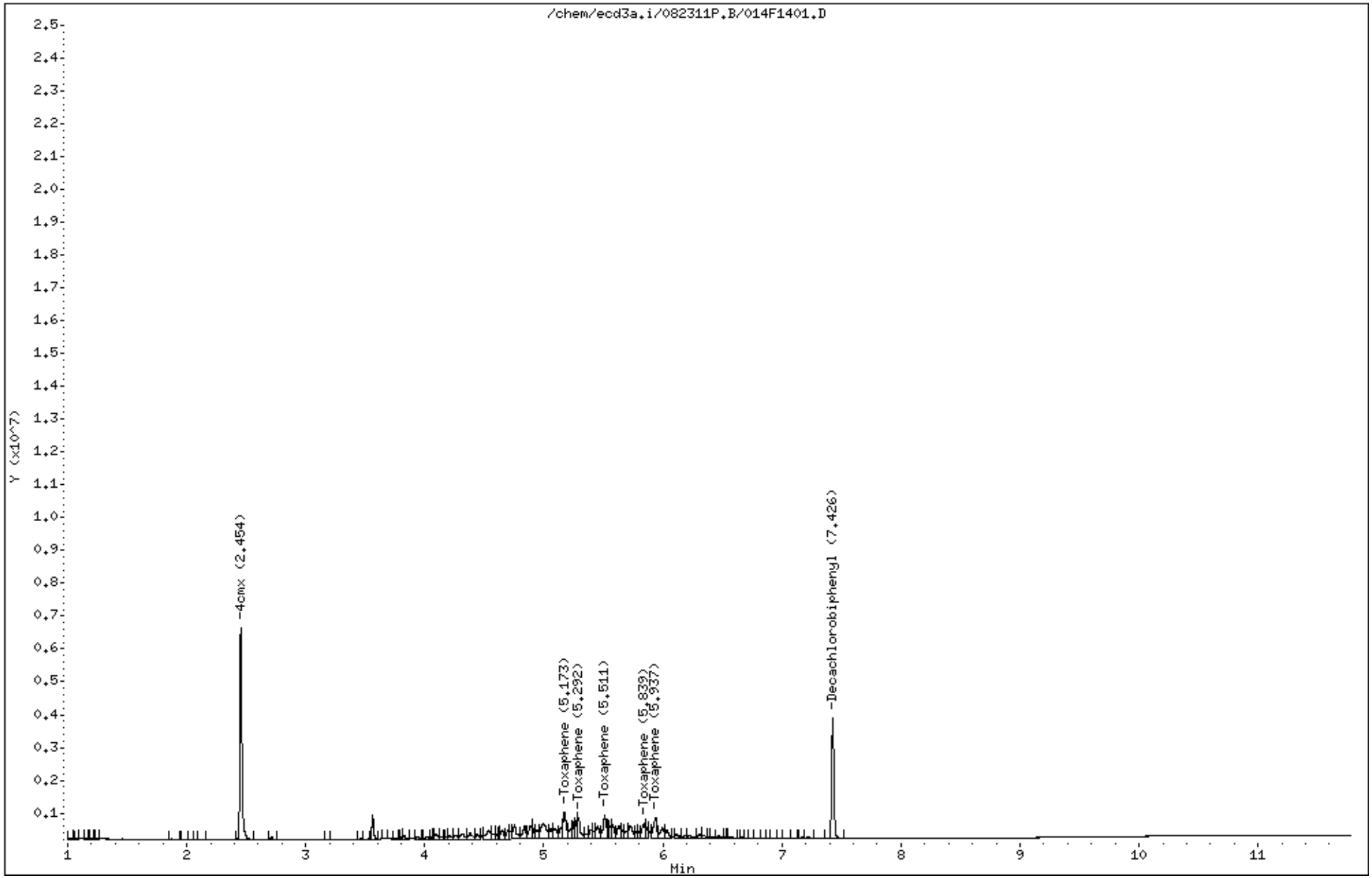
Instrument: ecd3a.i

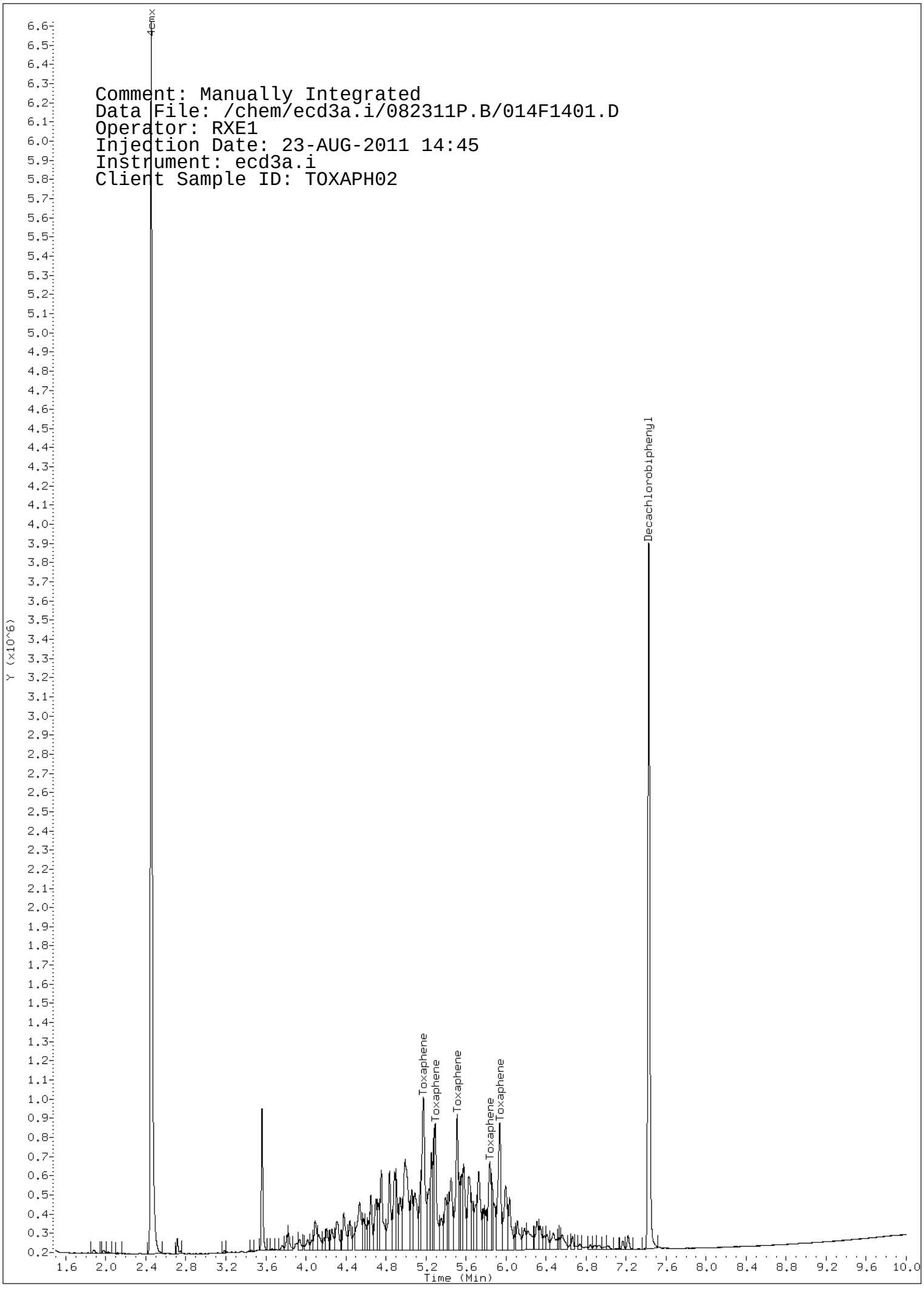
Sample Info: IWPE110816-12TX

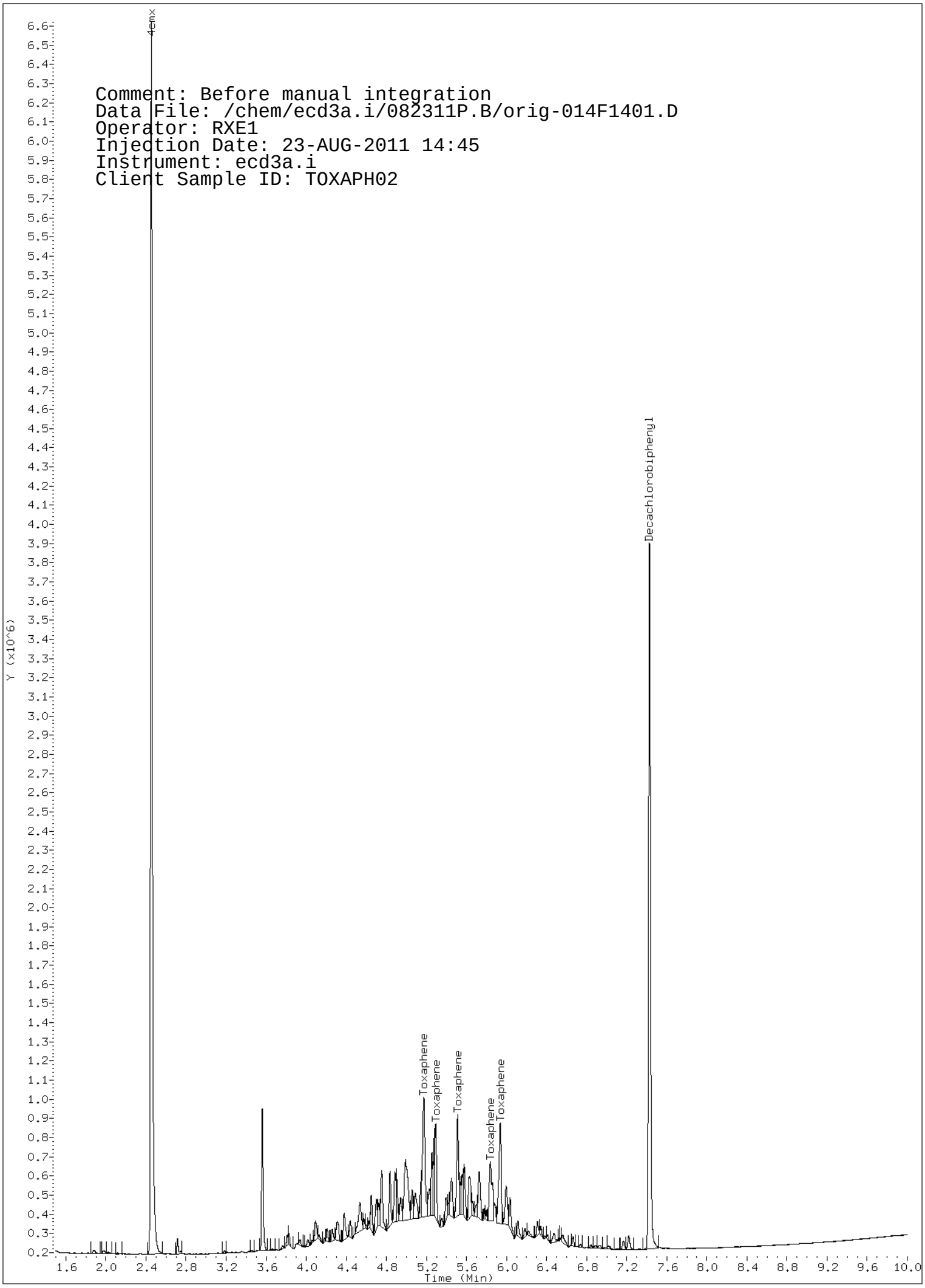
Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/014F1401.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:45
Instrument: ecd3a.i
Client Sample ID: TOXAPH02
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-014F1401.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:45
Instrument: ecd3a.i
Client Sample ID: TOXAPH02
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/082311P.B/014B1401.D
Lab Smp Id: WPE110816-12TX Client Smp ID: TOXAPH02
Inj Date : 23-AUG-2011 14:45
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-12TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-B-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 21-DEC-2010 12:13 Cal File: 013b1301.d
Als bottle: 14 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

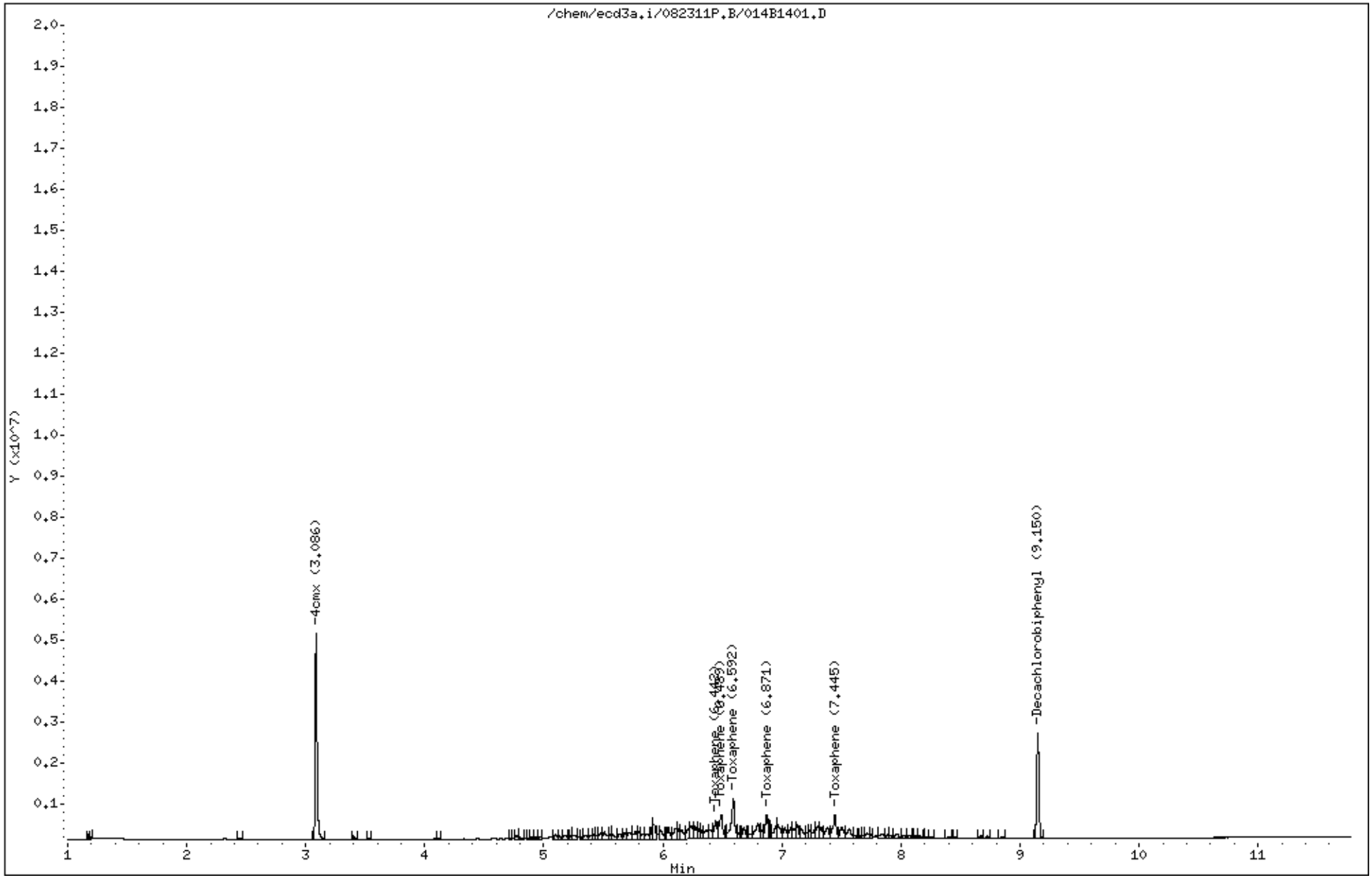
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.442	6.443	-0.001	713726	500.000	502	80.00- 120.00	100.00(M)
6.489	6.489	0.000	1174363	500.000	506	144.48- 184.48	164.54
6.592	6.591	0.001	2019901	500.000	508	268.66- 308.66	283.01
6.871	6.870	0.001	1040135	500.000	494	133.17- 173.17	145.73
7.445	7.445	0.000	1188741	500.000	495	151.31- 191.31	166.55
Average of Peak Amounts =					501		
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	5456368	20.0000	68.3	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.150	9.148	0.002	3351999	20.0000	69.4	80.00- 120.00	100.00

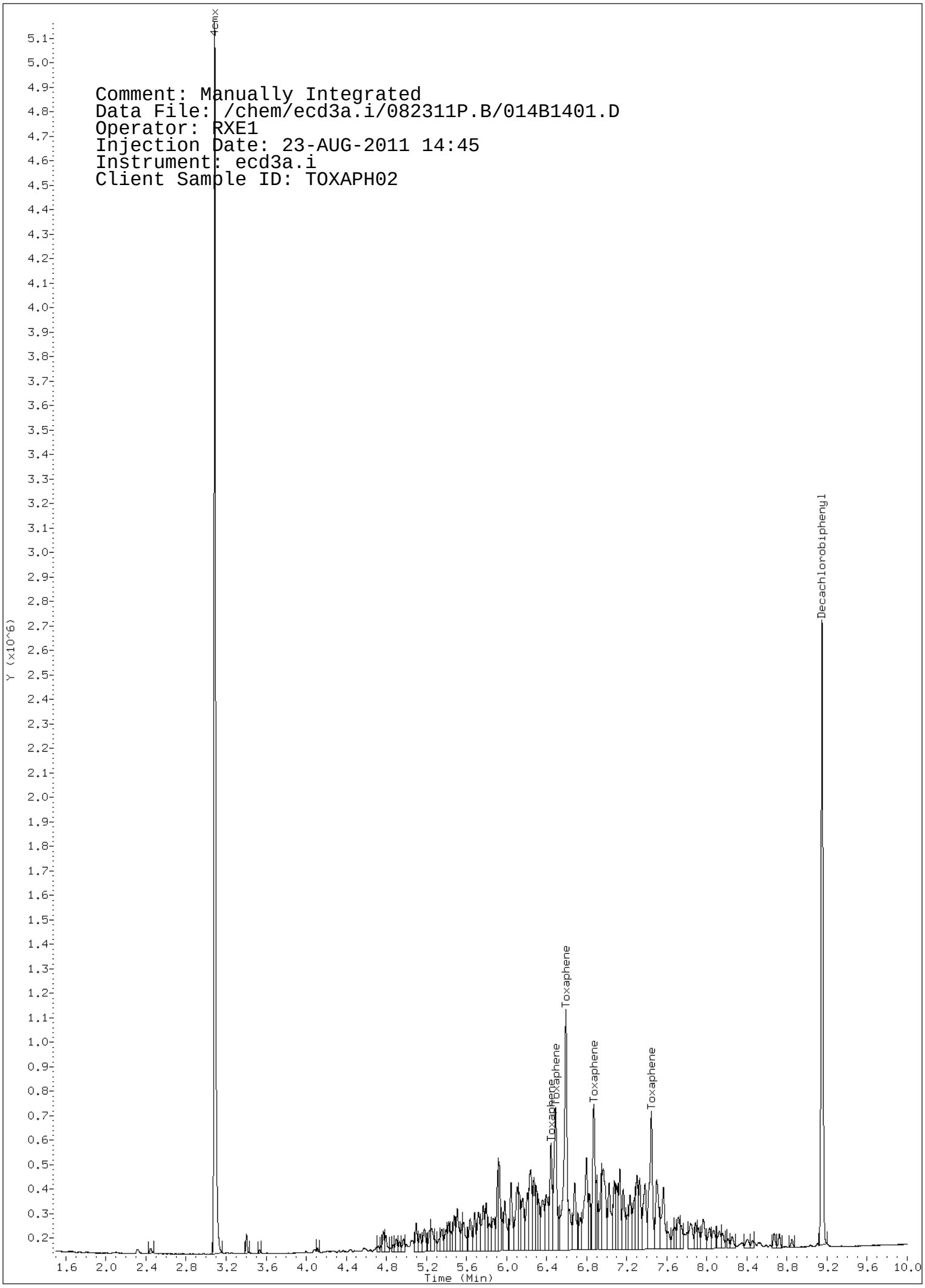
QC Flag Legend

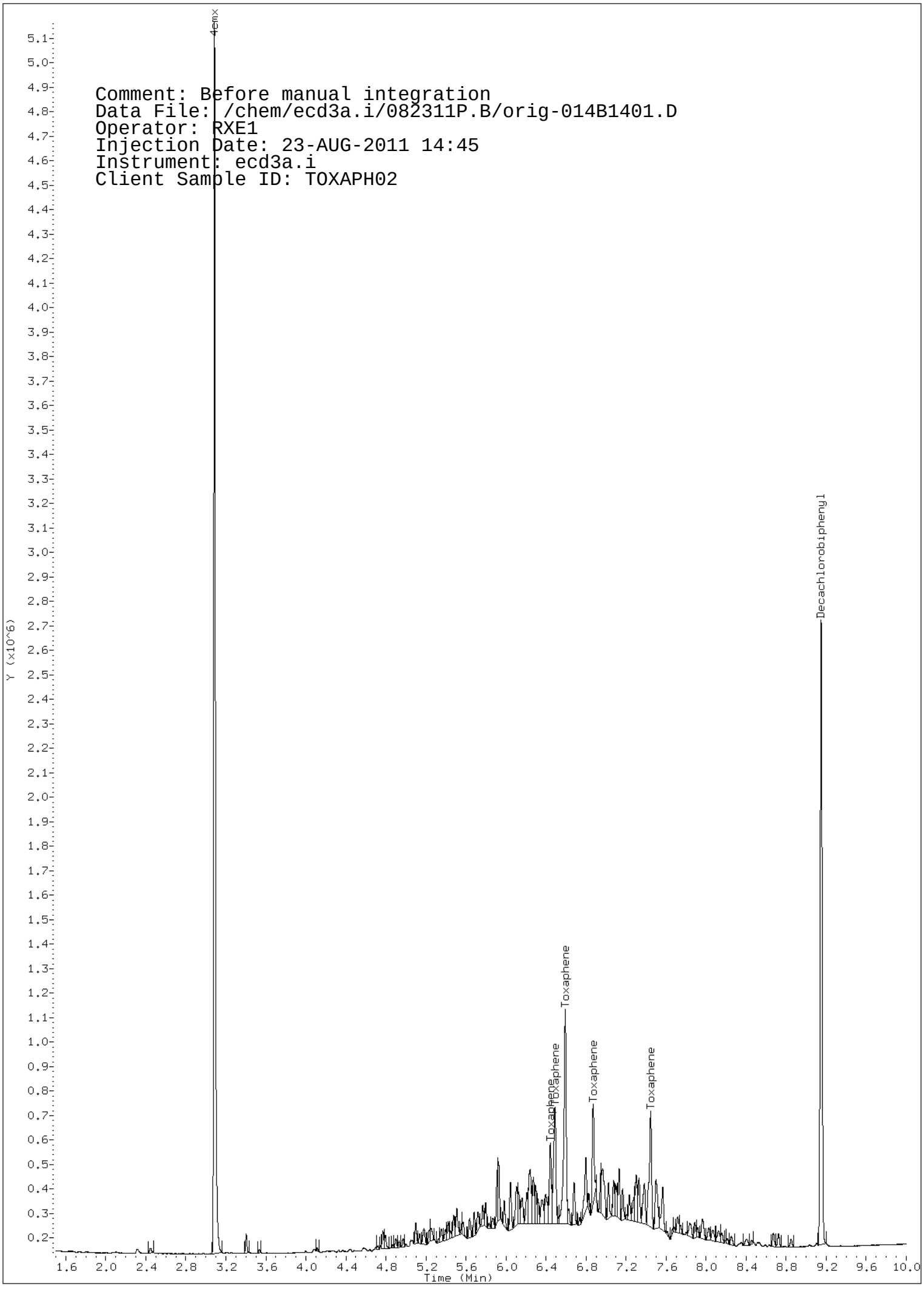
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/014B1401.D
Date : 23-AUG-2011 14:45
Client ID: TOXAPH02
Sample Info: IWPE110816-12TX

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/014B1401.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:45
Instrument: ecd3a.i
Client Sample ID: TOXAPH02
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-014B1401.D
Operator: RXE1
Injection Date: 23-AUG-2011 14:45
Instrument: ecd3a.i
Client Sample ID: TOXAPH02
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/082311P.B/015F1501.D
Lab Smp Id: WPE110816-13TX Client Smp ID: TOXAPH03
Inj Date : 23-AUG-2011 15:00
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-13TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-F-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034f3401.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.172	5.172	0.000	3428404	1000.00	962	80.00- 120.00	100.00(M)
5.290	5.290	0.000	2107327	1000.00	989	36.25- 76.25	61.47
5.510	5.509	0.001	2581277	1000.00	967	55.59- 95.59	75.29
5.836	5.837	-0.001	1724102	1000.00	945	30.01- 70.01	50.29
5.936	5.935	0.001	2708361	1000.00	952	59.02- 99.02	79.00
Average of Peak Amounts =					963		
$ 1 4cmx					CAS #: 877-09-8		
2.454	2.455	-0.001	15647776	100.000	137	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.426	7.425	0.001	9943567	100.000	144	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/015F1501.D

Page 1

Date : 23-AUG-2011 15:00

Client ID: TOXAPH03

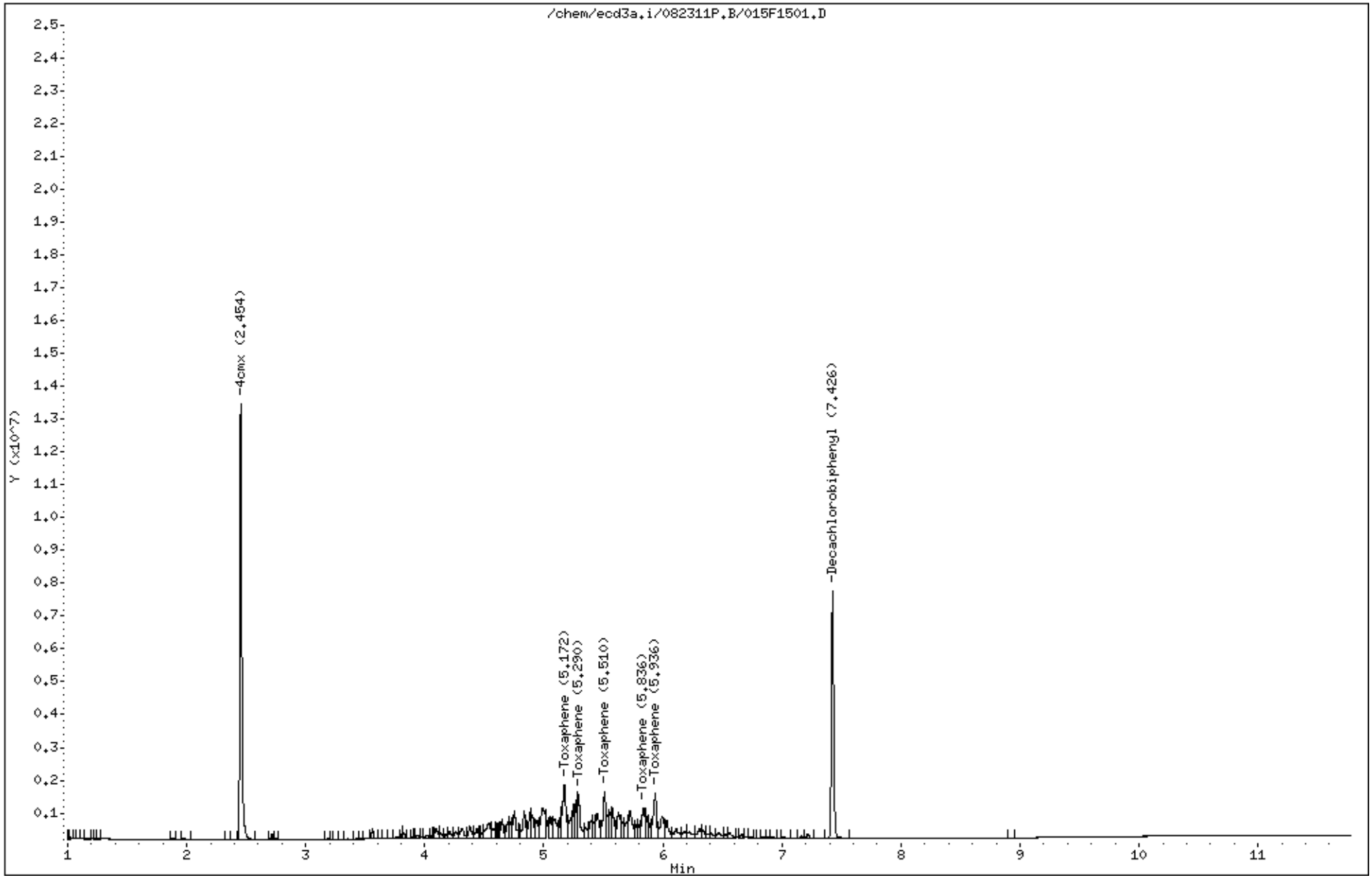
Instrument: ecd3a.i

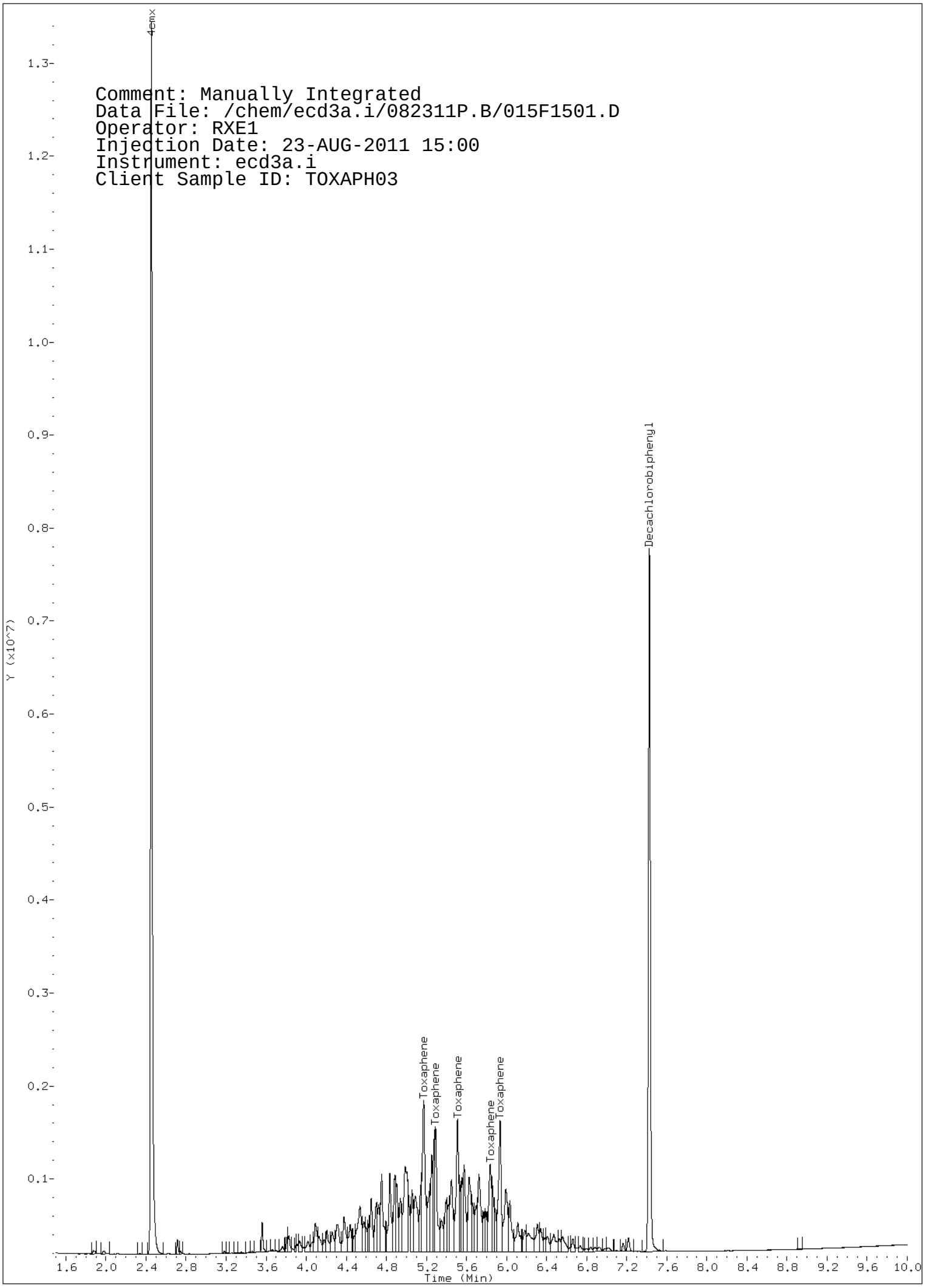
Sample Info: IWPE110816-13TX

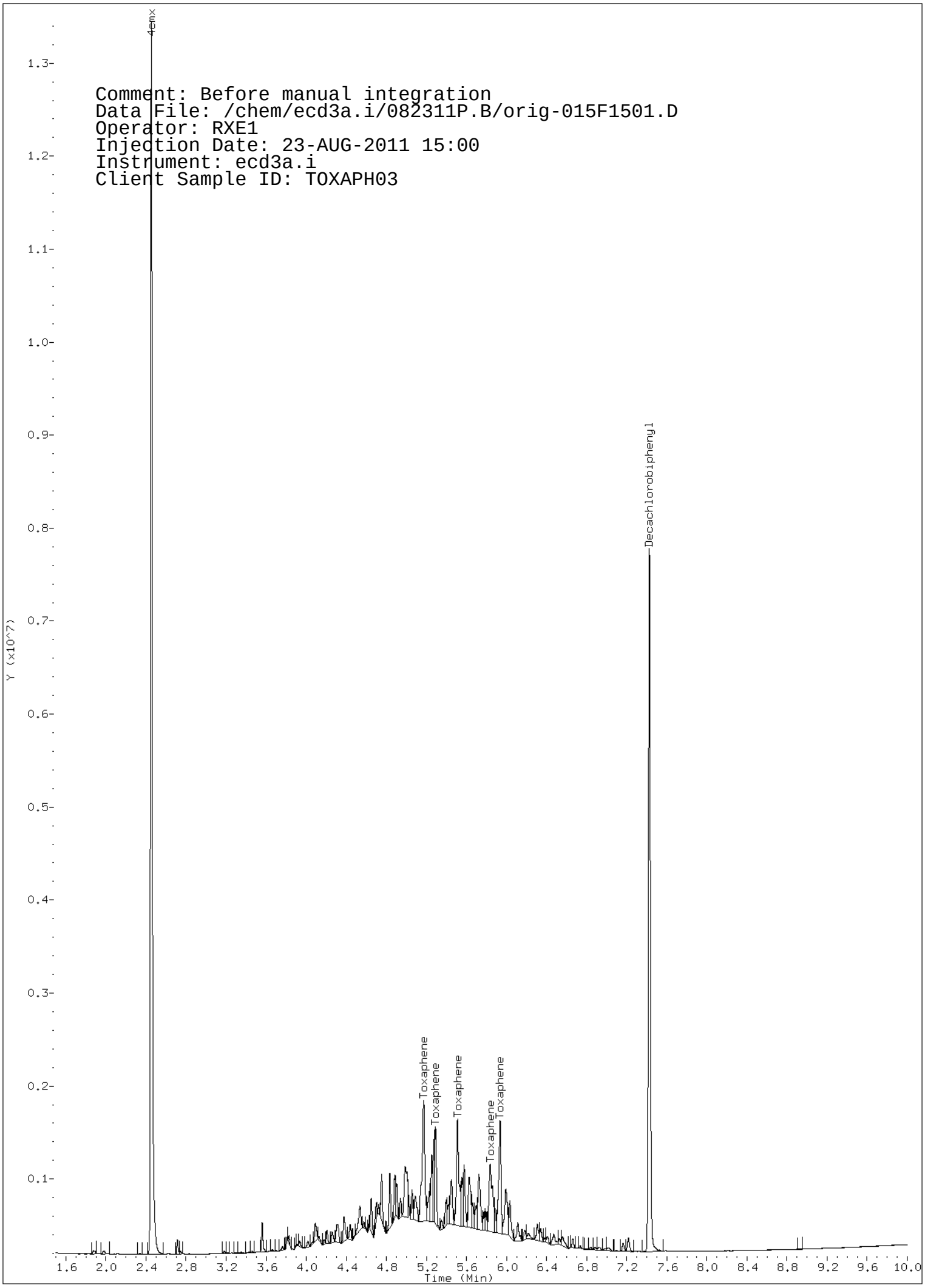
Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/015F1501.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:00
Instrument: ecd3a.i
Client Sample ID: TOXAPH03
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-015F1501.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:00
Instrument: ecd3a.i
Client Sample ID: TOXAPH03
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/082311P.B/015B1501.D
Lab Smp Id: WPE110816-13TX Client Smp ID: TOXAPH03
Inj Date : 23-AUG-2011 15:00
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-13TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-B-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034b3401.d
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

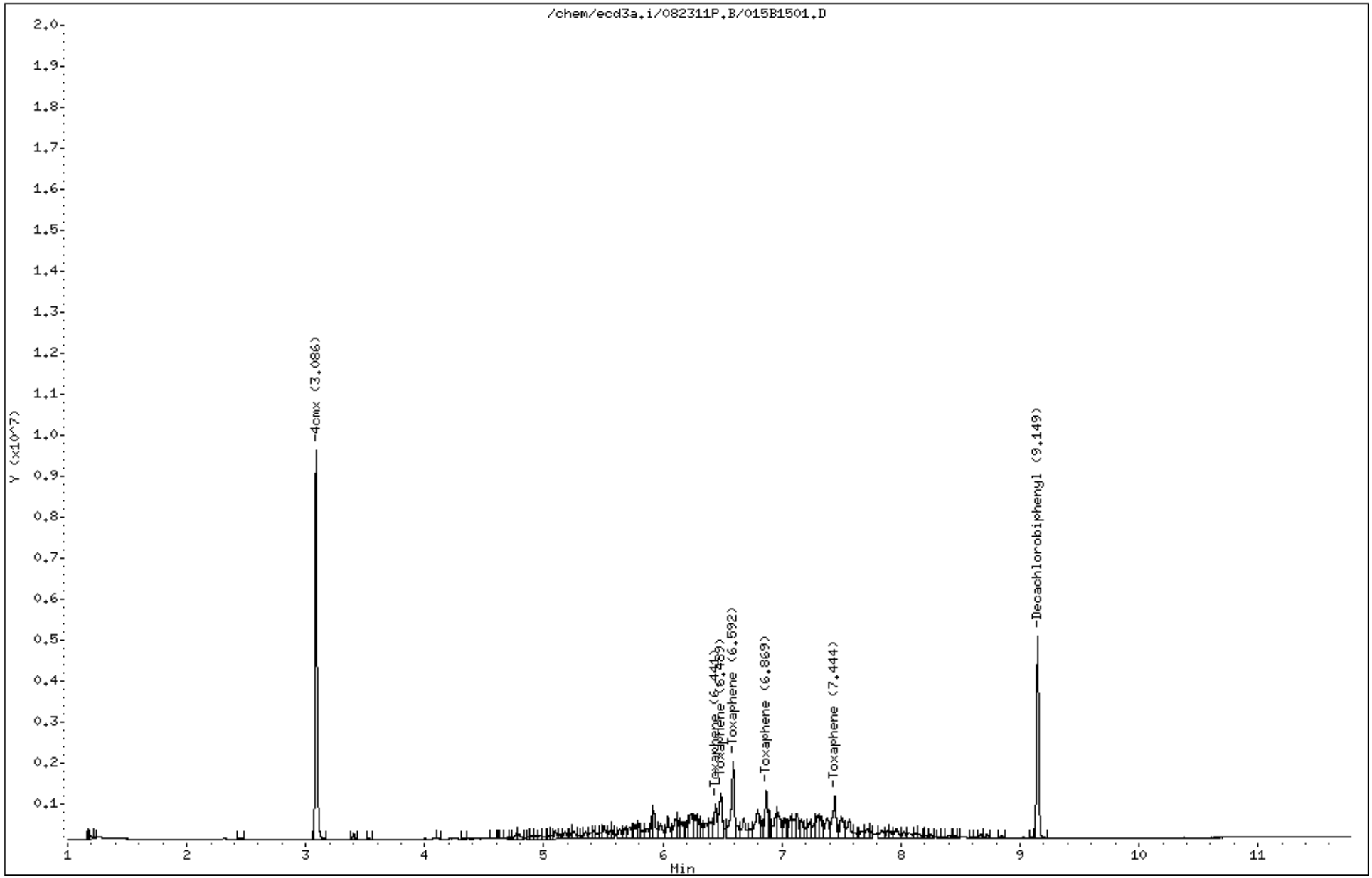
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.441	6.443	-0.002	1340568	1000.00	943	80.00- 120.00	100.00(M)
6.489	6.489	0.000	2168081	1000.00	935	144.48- 184.48	161.73
6.592	6.591	0.001	3776630	1000.00	950	268.66- 308.66	281.72
6.869	6.870	-0.001	1931391	1000.00	918	133.17- 173.17	144.07
7.444	7.445	-0.001	2271747	1000.00	946	151.31- 191.31	169.46
Average of Peak Amounts =					938		
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	10272222	100.000	128	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.149	9.148	0.001	6383055	100.000	132	80.00- 120.00	100.00

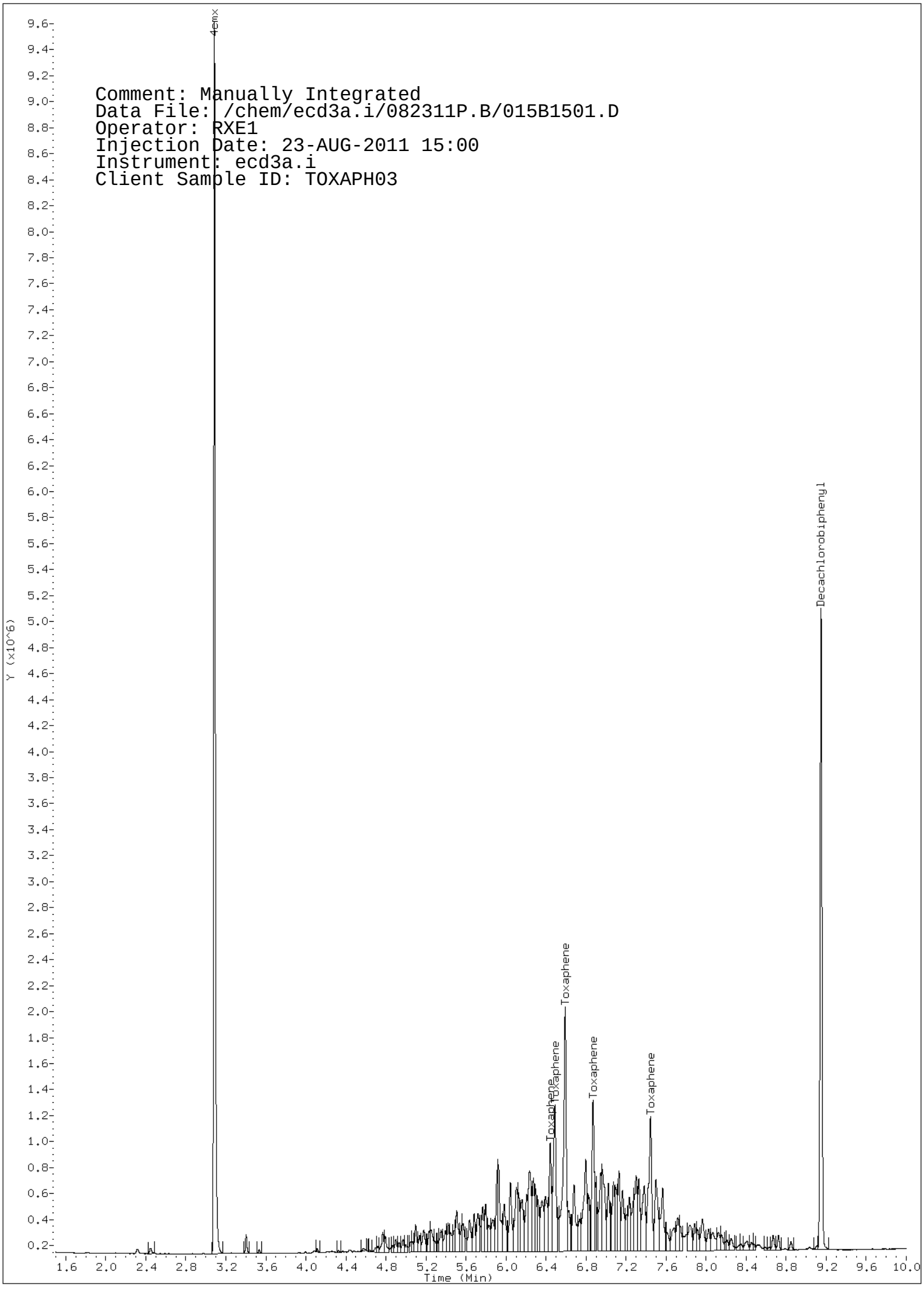
QC Flag Legend

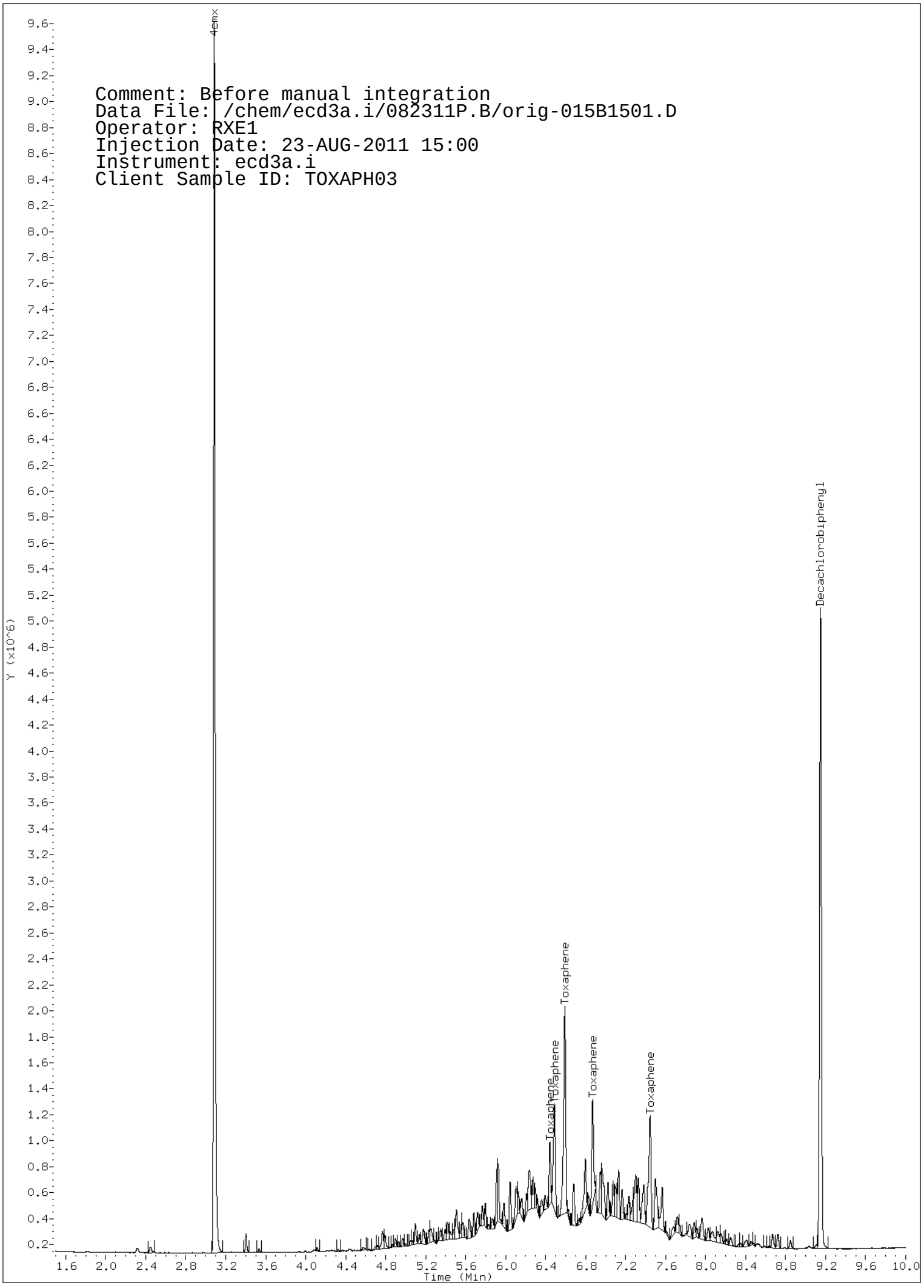
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/015B1501.D
Date : 23-AUG-2011 15:00
Client ID: TOXAPH03
Sample Info: IWPE110816-13TX

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/015B1501.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:00
Instrument: ecd3a.i
Client Sample ID: TOXAPH03
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-015B1501.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:00
Instrument: ecd3a.i
Client Sample ID: TOXAPH03
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^6)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/082311P.B/016F1601.D
Lab Smp Id: WPE110816-14TX Client Smp ID: TOXAPH04
Inj Date : 23-AUG-2011 15:16
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-14TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-F-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018f1801.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

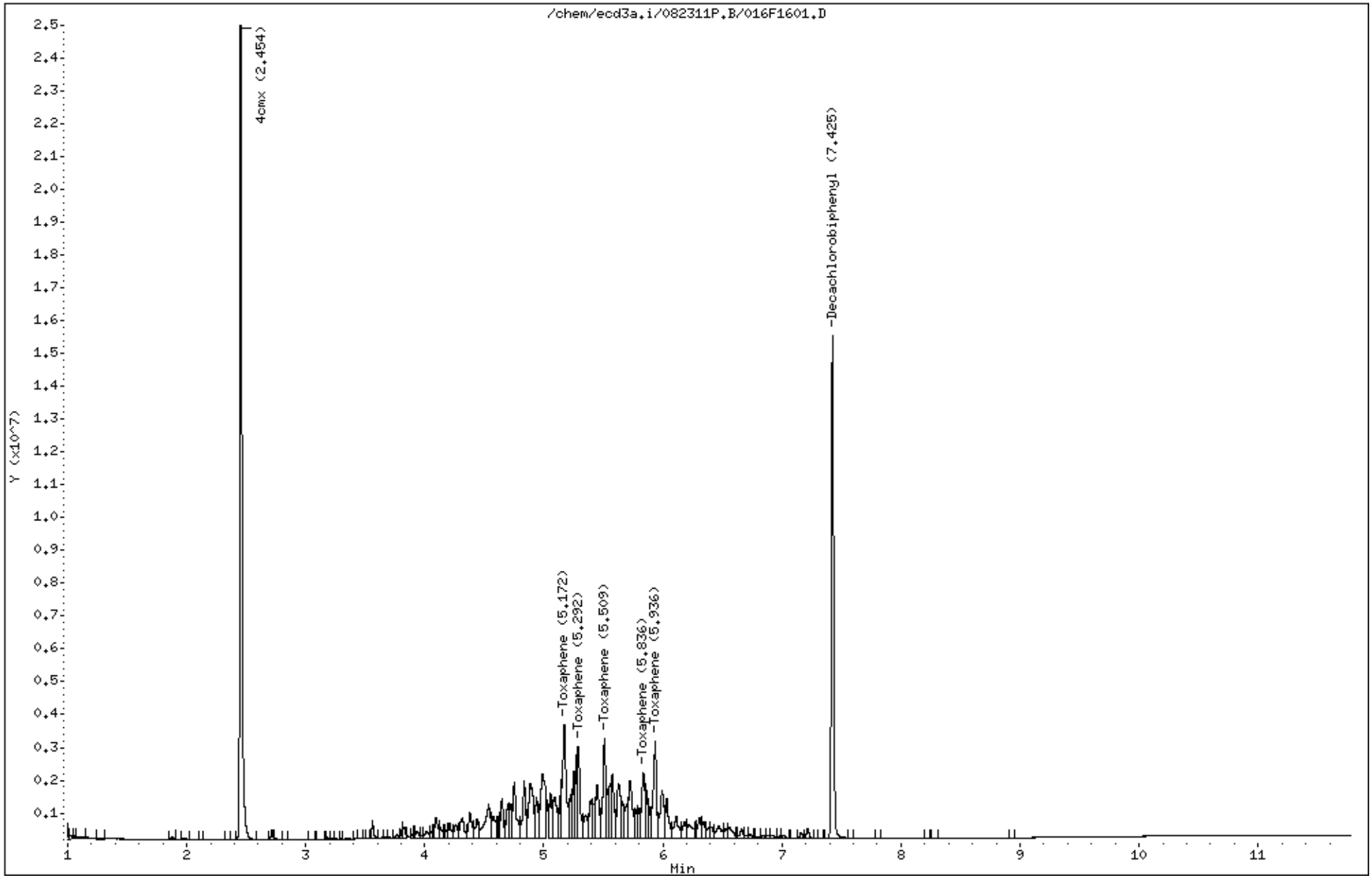
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.172	5.172	0.000	7138198	2000.00	2000	80.00- 120.00	100.00(M)
5.292	5.290	0.002	4012918	2000.00	1880	36.25- 76.25	56.22
5.509	5.509	0.000	5250973	2000.00	1970	55.59- 95.59	73.56
5.836	5.837	-0.001	3557914	2000.00	1950	30.01- 70.01	49.84
5.936	5.935	0.001	5710640	2000.00	2010	59.02- 99.02	80.00
Average of Peak Amounts =			1.96e+03				
$ 1 4cmx					CAS #: 877-09-8		
2.454	2.455	-0.001	31391962	200.000	276	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.425	7.425	0.000	20252186	200.000	292	80.00- 120.00	100.00

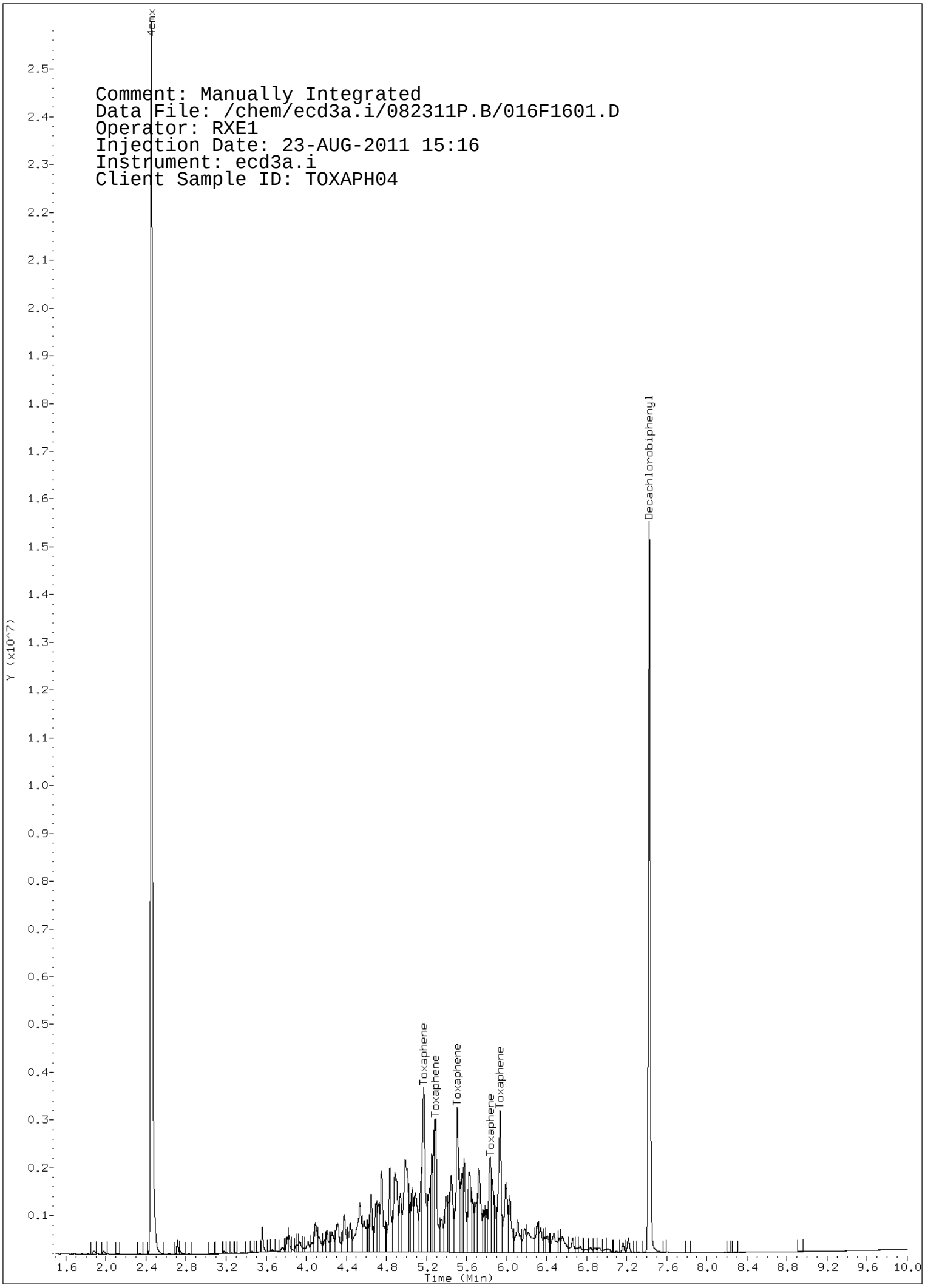
QC Flag Legend

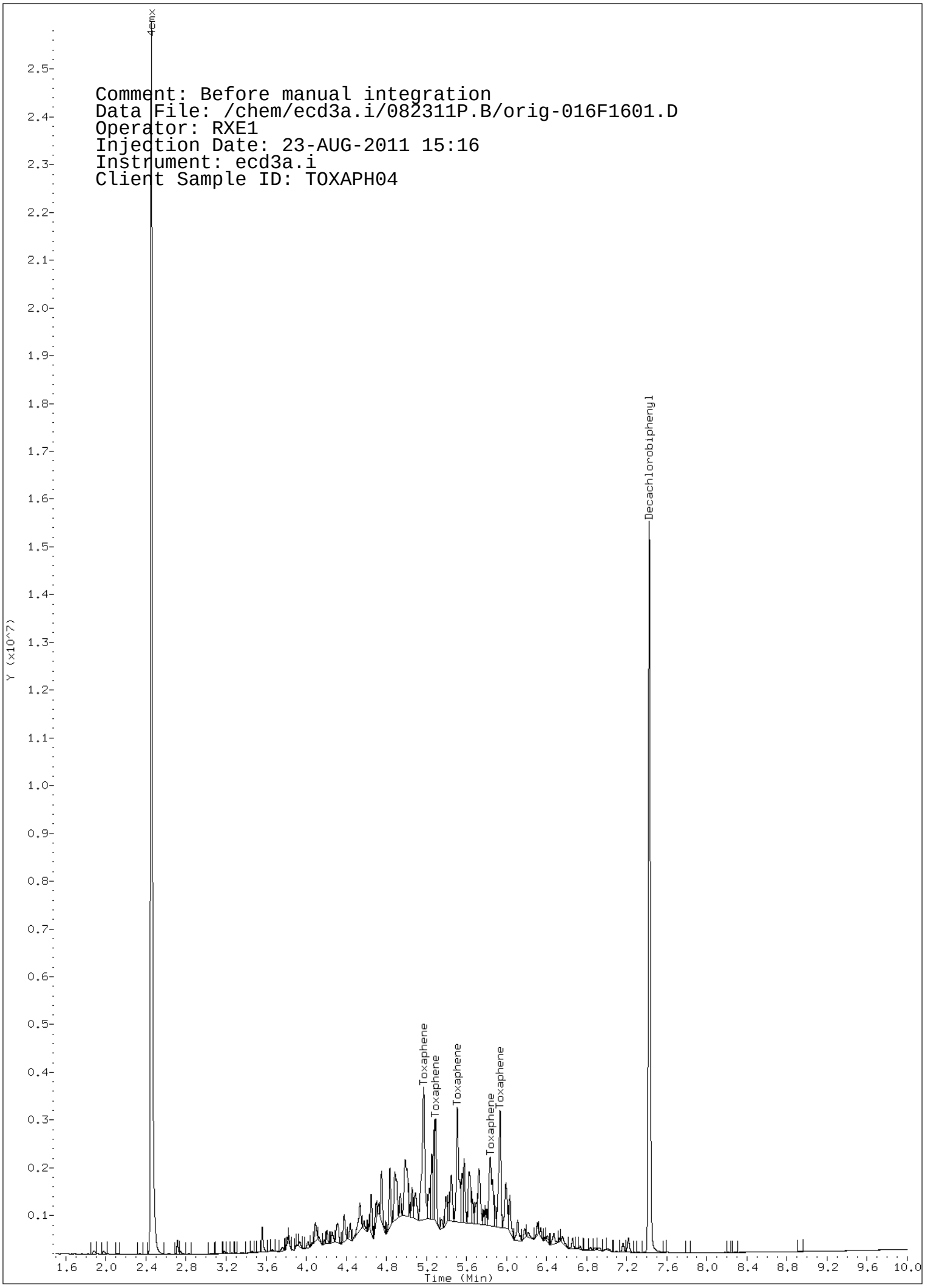
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/016F1601.D
Date : 23-AUG-2011 15:16
Client ID: TOXAPH04
Sample Info: IWPE110816-14TX

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/016F1601.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:16
Instrument: ecd3a.i
Client Sample ID: TOXAPH04
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-016F1601.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:16
Instrument: ecd3a.i
Client Sample ID: TOXAPH04
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/082311P.B/016B1601.D
Lab Smp Id: WPE110816-14TX Client Smp ID: TOXAPH04
Inj Date : 23-AUG-2011 15:16
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110816-14TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-B-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018b1801.d
Als bottle: 16 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.443	6.443	0.000	2608719	2000.00	1830	80.00- 120.00	100.00(M)
6.488	6.489	-0.001	4260591	2000.00	1840	144.48- 184.48	163.32
6.591	6.591	0.000	7245155	2000.00	1820	268.66- 308.66	277.73
6.869	6.870	-0.001	3952527	2000.00	1880	133.17- 173.17	151.51
7.444	7.445	-0.001	4459457	2000.00	1860	151.31- 191.31	170.94
Average of Peak Amounts =			1.85e+03				
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	19537887	200.000	244	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.148	9.148	0.000	12449655	200.000	258	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/016B1601.D

Page 1

Date : 23-AUG-2011 15:16

Client ID: TOXAPH04

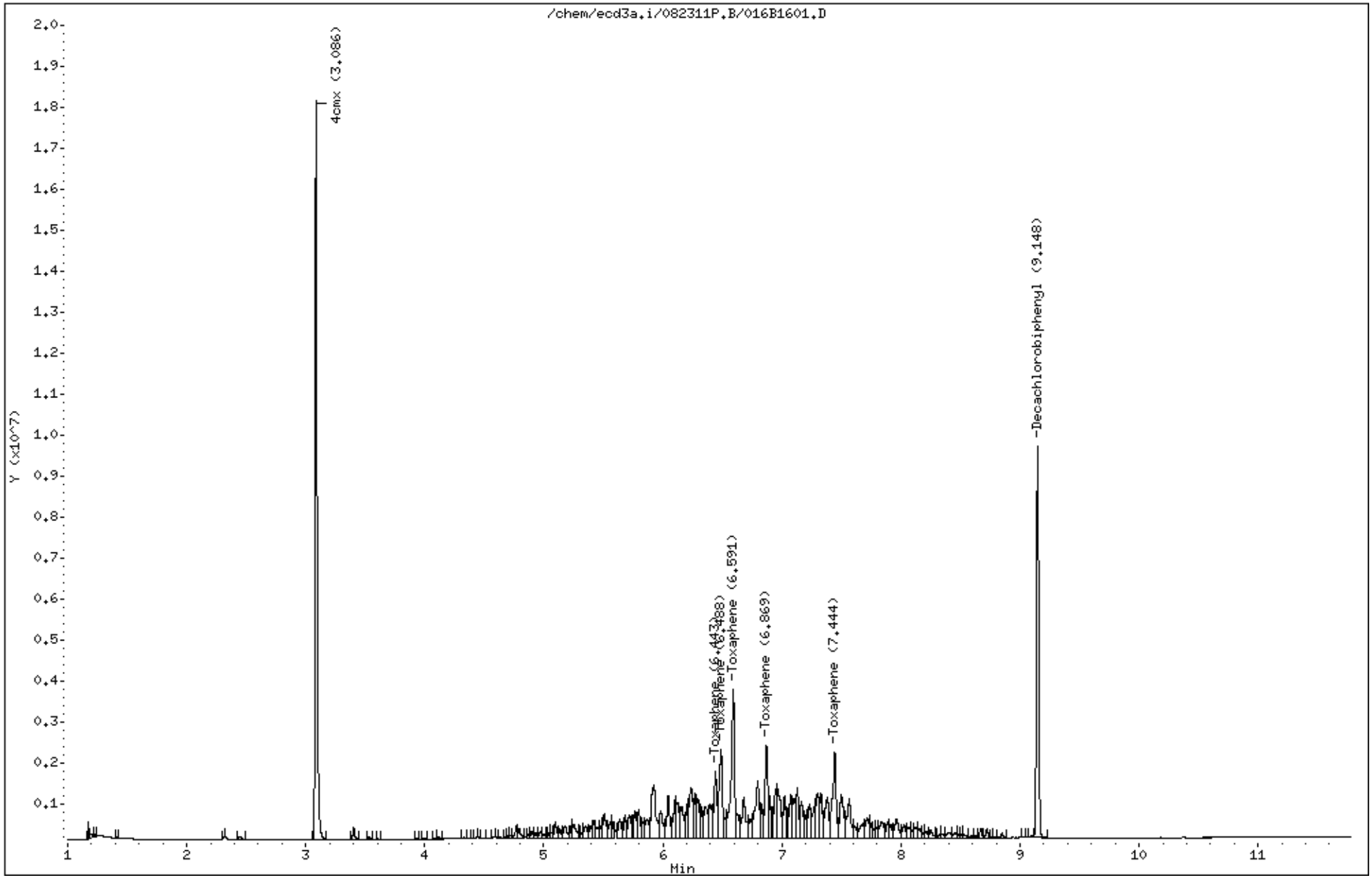
Instrument: ecd3a.i

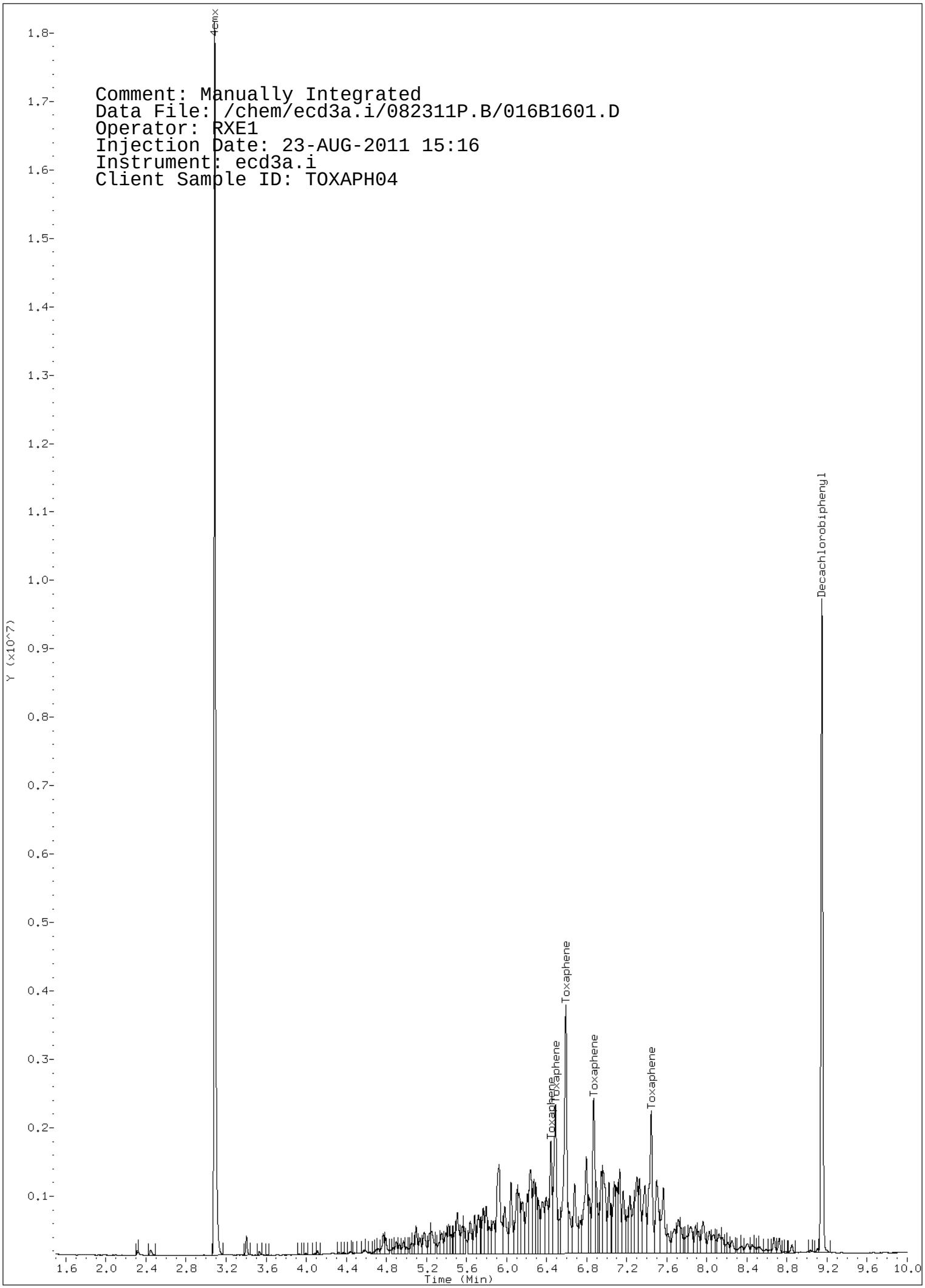
Sample Info: IWPE110816-14TX

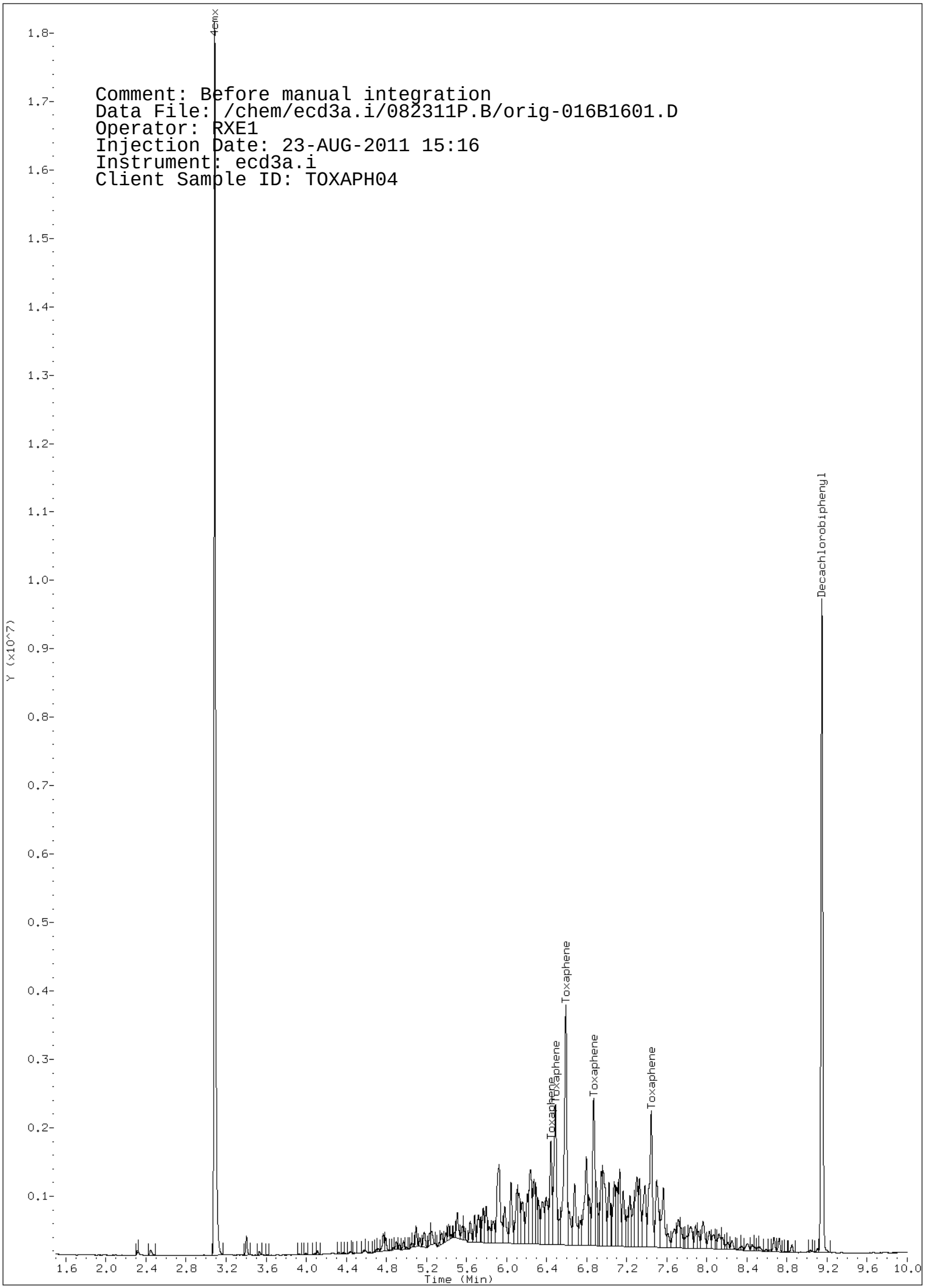
Operator: RXE1

Column phase: CLP-2

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/016B1601.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:16
Instrument: ecd3a.i
Client Sample ID: TOXAPH04
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-016B1601.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:16
Instrument: ecd3a.i
Client Sample ID: TOXAPH04
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/082311P.B/017F1701.D
Lab Smp Id: IPE110418-40TX Client Smp ID: TOXAPH05
Inj Date : 23-AUG-2011 15:31
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110418-40TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-F-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

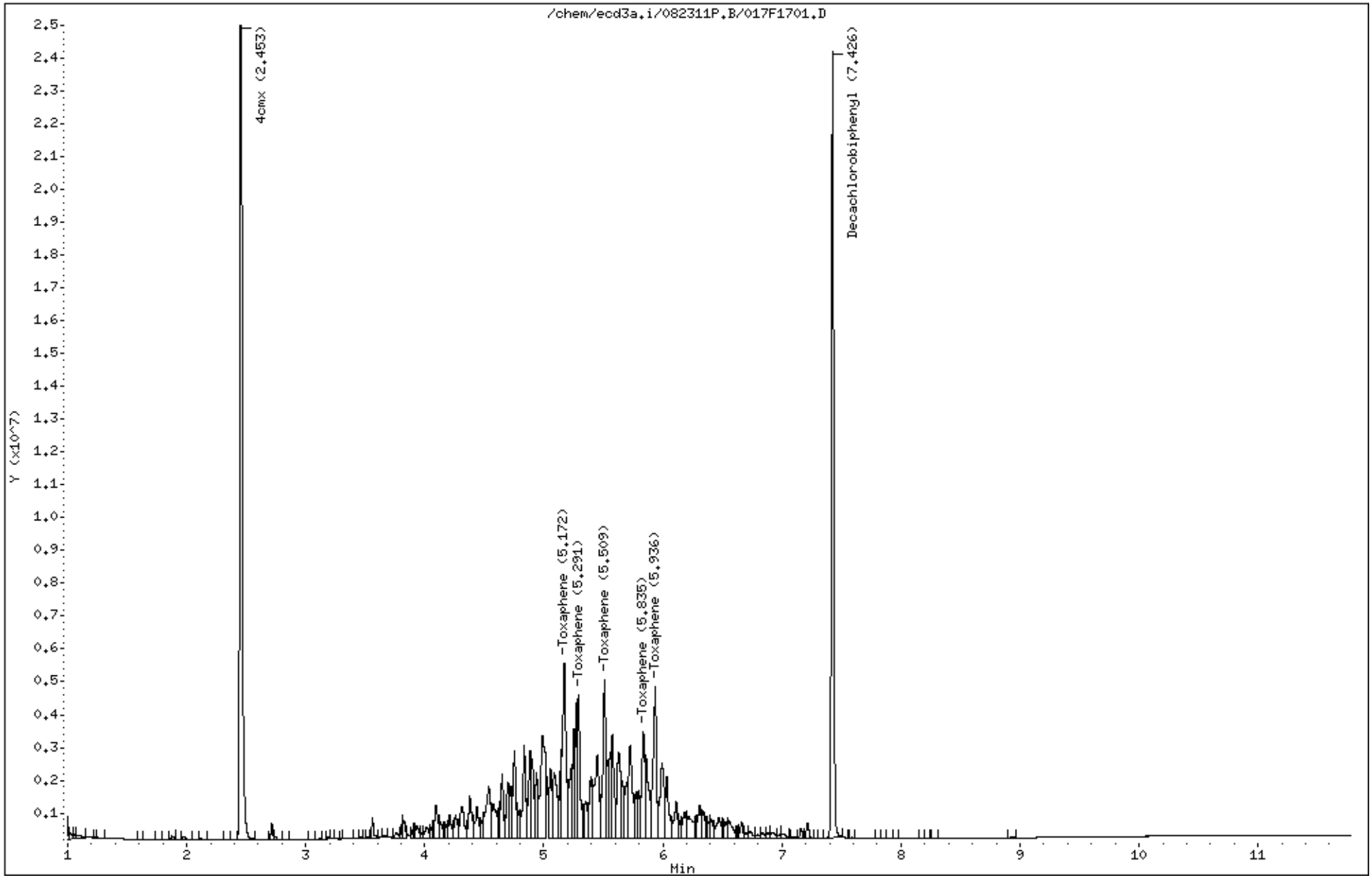
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.172	5.172	0.000	10856309	3000.00	3040	80.00- 120.00	100.00(AM)
5.291	5.290	0.001	6815578	3000.00	3200	36.25- 76.25	62.78
5.509	5.509	0.000	8560040	3000.00	3210	55.59- 95.59	78.85
5.835	5.837	-0.002	5928077	3000.00	3250	30.01- 70.01	54.60
5.936	5.935	0.001	8909481	3000.00	3130	59.02- 99.02	82.07
Average of Peak Amounts =					3.17e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.453	2.455	-0.002	48869734	400.000	429	80.00- 120.00	100.00(A)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.426	7.425	0.001	31221031	400.000	451	80.00- 120.00	100.00

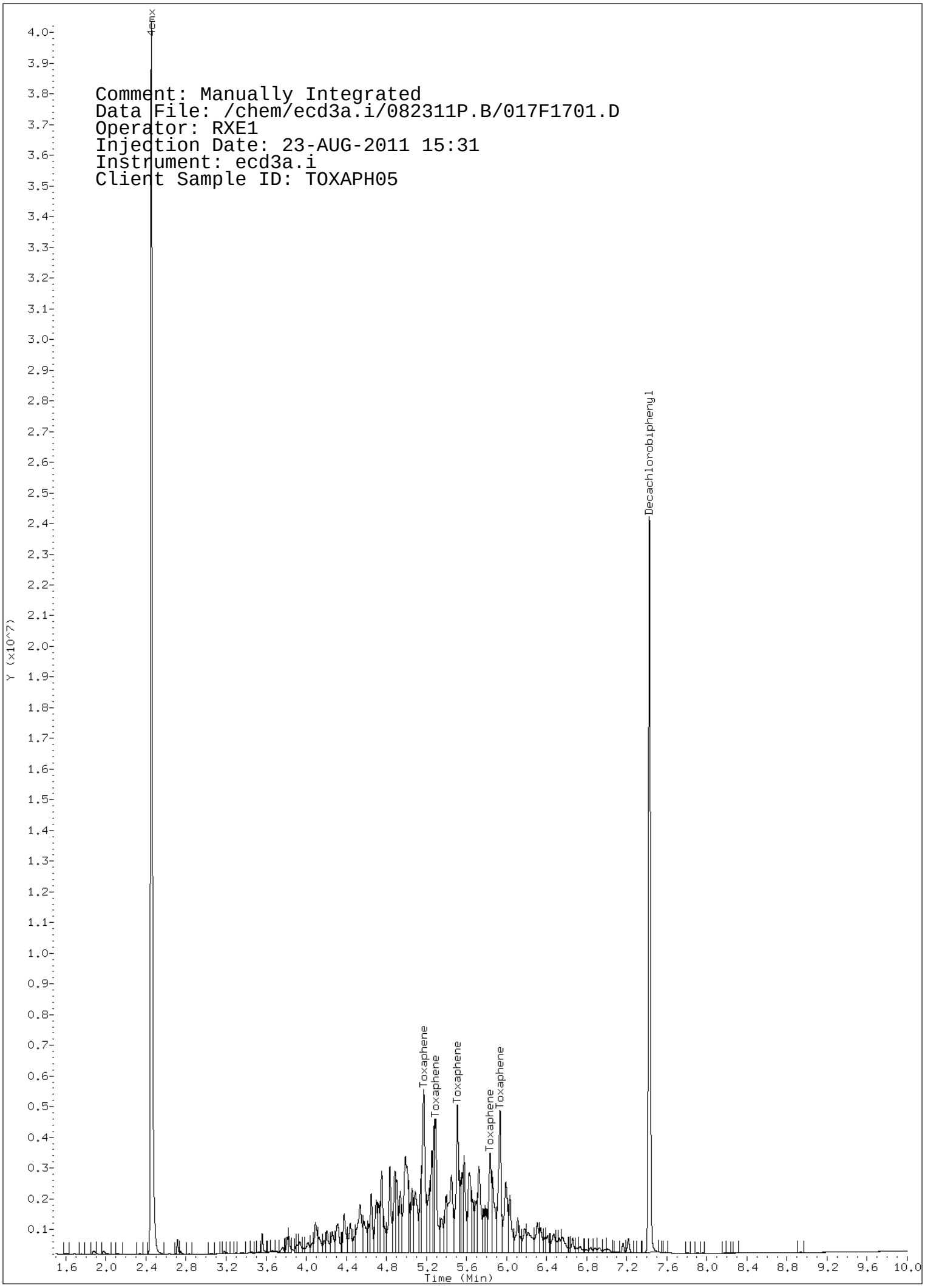
QC Flag Legend

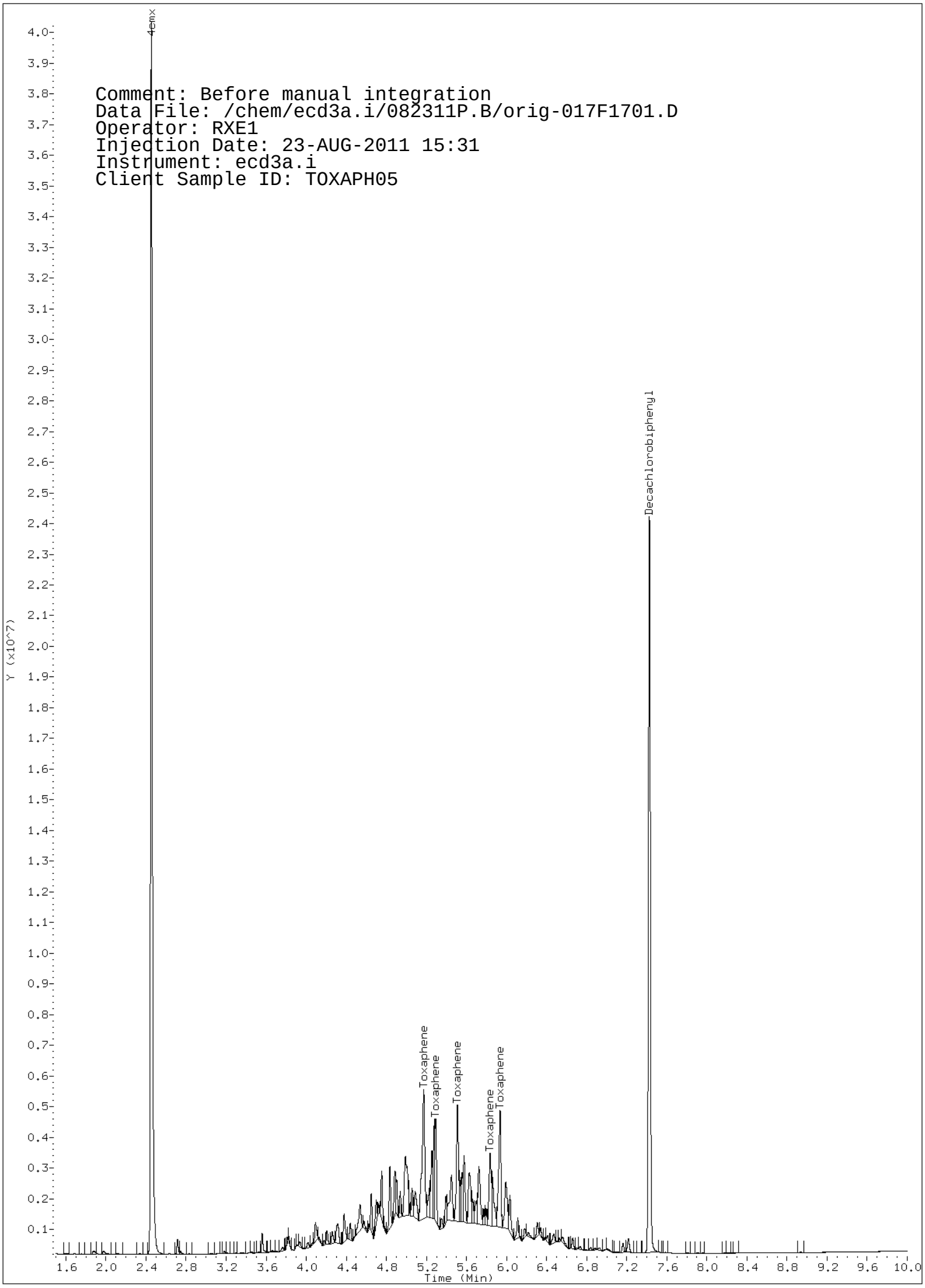
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/017F1701.D
Date : 23-AUG-2011 15:31
Client ID: TOXAPH05
Sample Info: IPE110418-40TX

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/017F1701.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:31
Instrument: ecd3a.i
Client Sample ID: TOXAPH05
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-017F1701.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:31
Instrument: ecd3a.i
Client Sample ID: TOXAPH05
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/082311P.B/017B1701.D
Lab Smp Id: IPE110418-40TX Client Smp ID: TOXAPH05
Inj Date : 23-AUG-2011 15:31
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110418-40TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/082311P.B/ECD3-B-8081-081211p.m
Meth Date : 24-Aug-2011 11:24 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.443	6.443	0.000	3942068	3000.00	2770	80.00- 120.00	100.00(M)
6.488	6.489	-0.001	6465768	3000.00	2790	144.48- 184.48	164.02
6.592	6.591	0.001	11361524	3000.00	2860	268.66- 308.66	288.21
6.870	6.870	0.000	5983988	3000.00	2840	133.17- 173.17	151.80
7.446	7.445	0.001	6702982	3000.00	2790	151.31- 191.31	170.04
Average of Peak Amounts =				2.81e+03			
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	29475840	400.000	369	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.149	9.148	0.001	18756044	400.000	388	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/082311P.B/017B1701.D

Date : 23-AUG-2011 15:31

Client ID: TOXAPH05

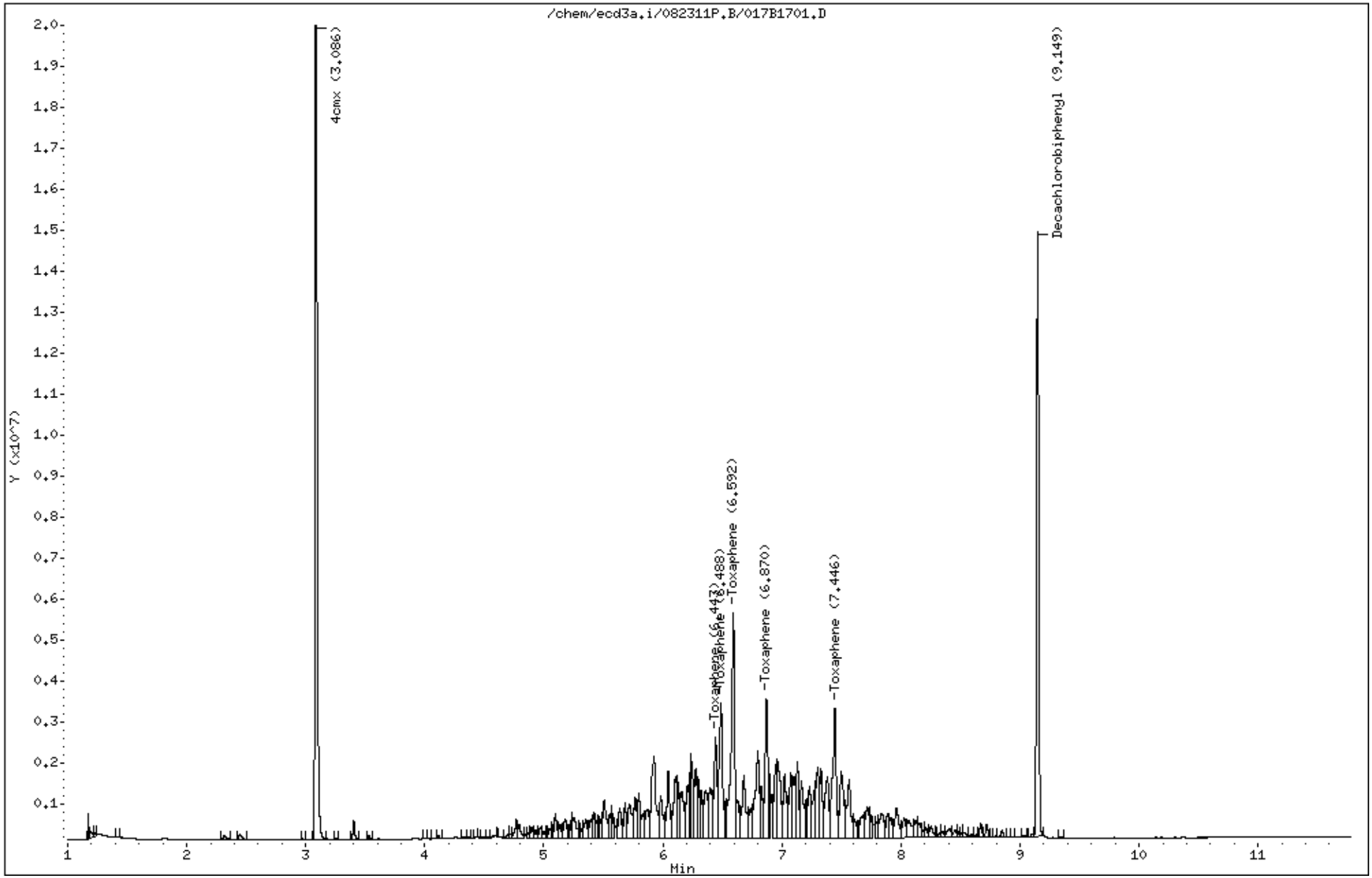
Sample Info: IPE110418-40TX

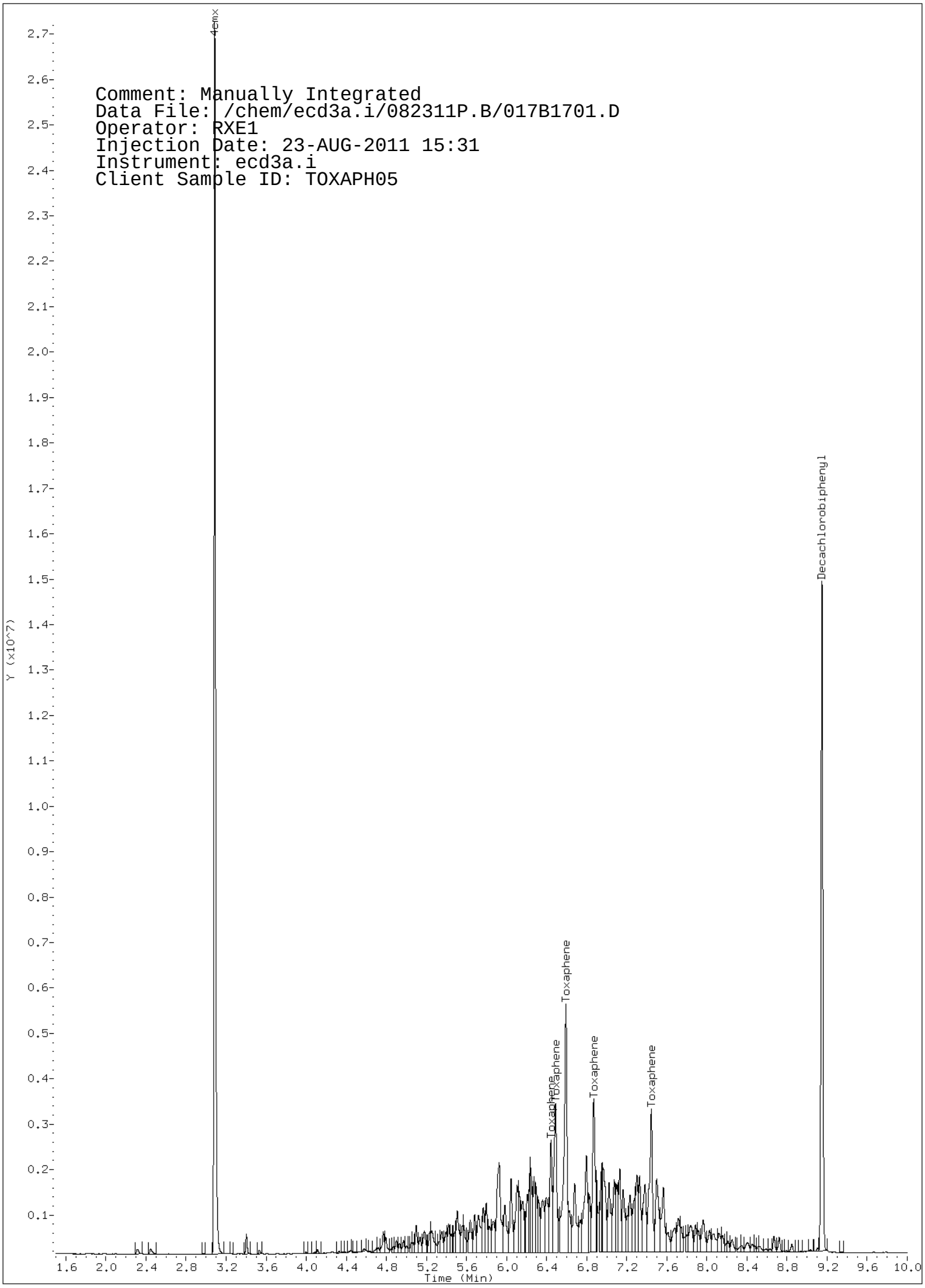
Instrument: ecd3a.i

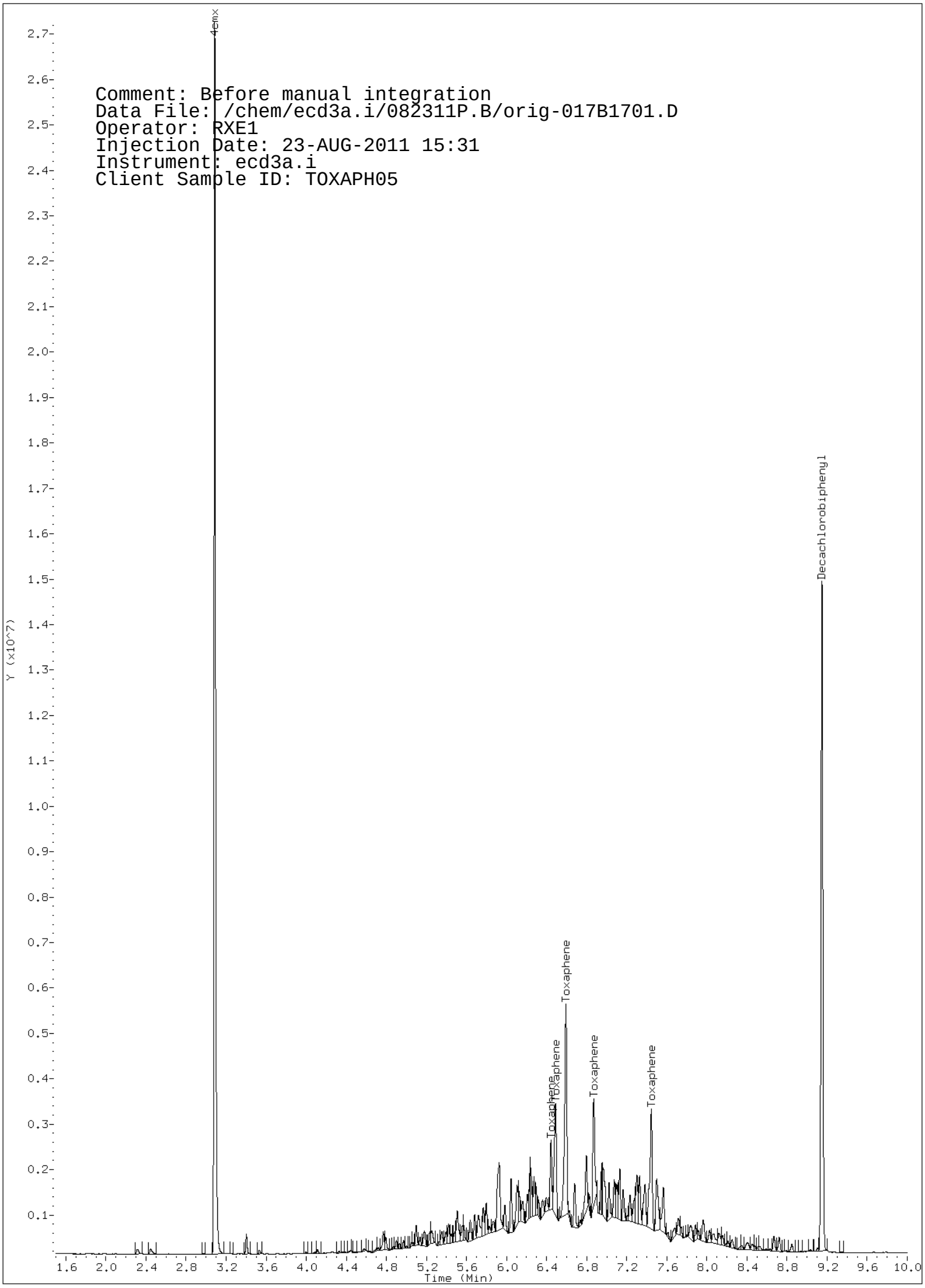
Operator: RXE1

Column phase: CLP-2

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/082311P.B/017B1701.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:31
Instrument: ecd3a.i
Client Sample ID: TOXAPH05
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/082311P.B/orig-017B1701.D
Operator: RXE1
Injection Date: 23-AUG-2011 15:31
Instrument: ecd3a.i
Client Sample ID: TOXAPH05
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

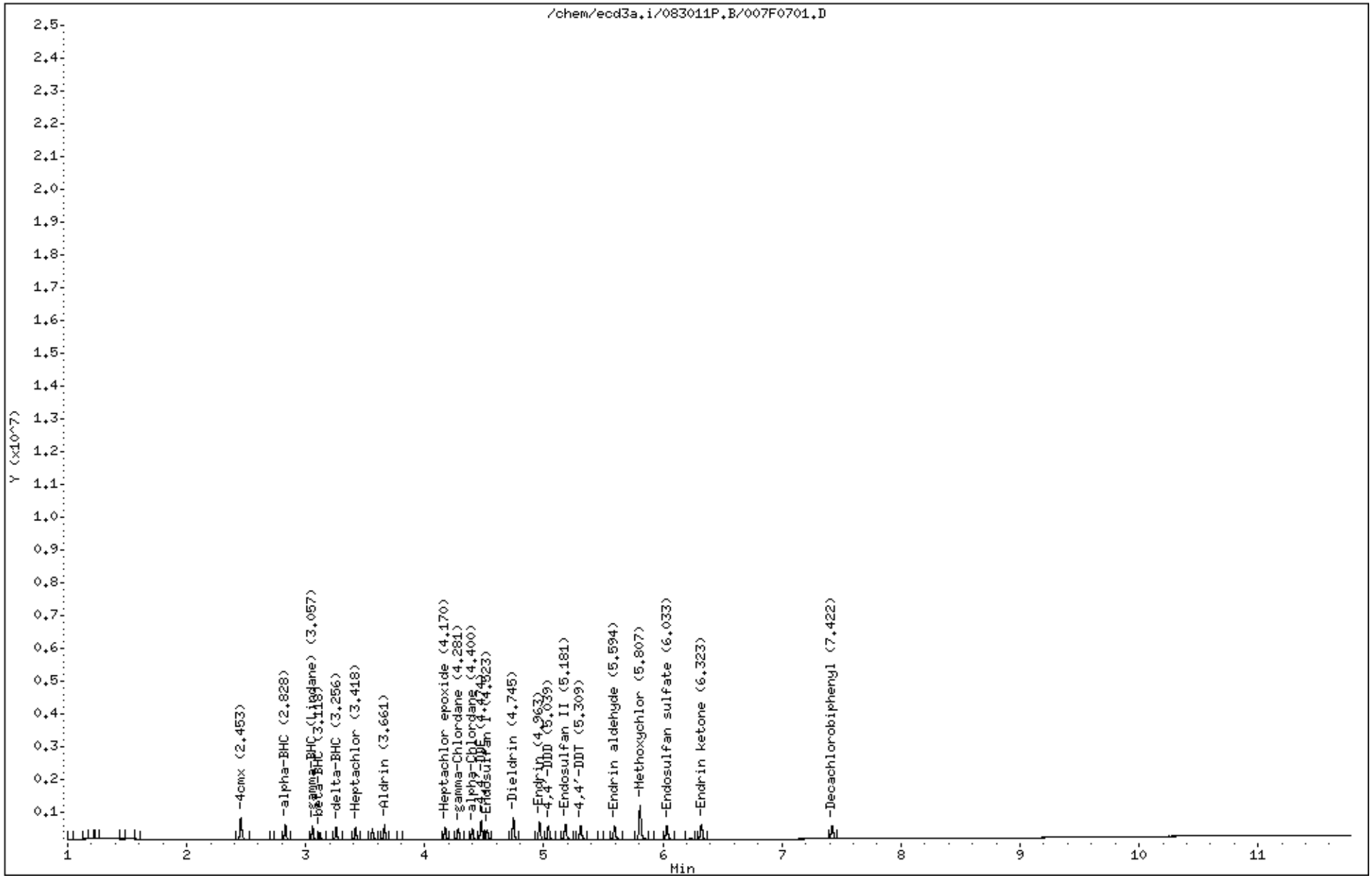
Data file : /chem/ecd3a.i/083011P.B/007F0701.D
Lab Smp Id: WPE110830-01AB Client Smp ID: INDAB01
Inj Date : 30-AUG-2011 16:39
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-01AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032f3201.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.828	2.828	0.000	415100	4.00000	2.72	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.057	3.056	0.001	384990	4.00000	2.80	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.118	3.117	0.001	205251	4.00000	3.30	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.418	3.419	-0.001	351564	4.00000	3.04	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.256	3.255	0.001	357260	4.00000	2.81	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.661	3.662	-0.001	406393	4.00000	2.80	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.170	4.171	-0.001	368745	4.00000	2.94	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.281	4.282	-0.001	357550	4.00000	2.83	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.400	4.400	0.000	353522	4.00000	3.06	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
16 Endosulfan I					CAS #: 959-98-8		
4.523	4.523	0.000	328058	4.00000	2.92	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.474	4.473	0.001	653667	8.00000	5.44	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.745	4.745	0.000	702814	8.00000	5.64	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.963	4.964	-0.001	591001	8.00000	5.85	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.039	5.035	0.004	509041	8.00000	5.75	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.181	5.179	0.002	549531	8.00000	5.96	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.594	5.592	0.002	499898	8.00000	6.38	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.309	5.308	0.001	487005	8.00000	5.92	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.033	6.033	0.000	512533	8.00000	6.28	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.807	5.807	0.000	1262607	40.0000	35.1	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.323	6.323	0.000	563045	8.00000	6.18	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.453	2.452	0.001	784099	8.00000	6.40	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.422	7.423	-0.001	506927	8.00000	6.77	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/007F0701.D
Date : 30-AUG-2011 16:39
Client ID: INDAB01
Sample Info: IWPE110830-01AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/007B0701.D
Lab Smp Id: WPE110830-01AB Client Smp ID: INDAB01
Inj Date : 30-AUG-2011 16:39
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-01AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 05:44 Cal File: 032b3201.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

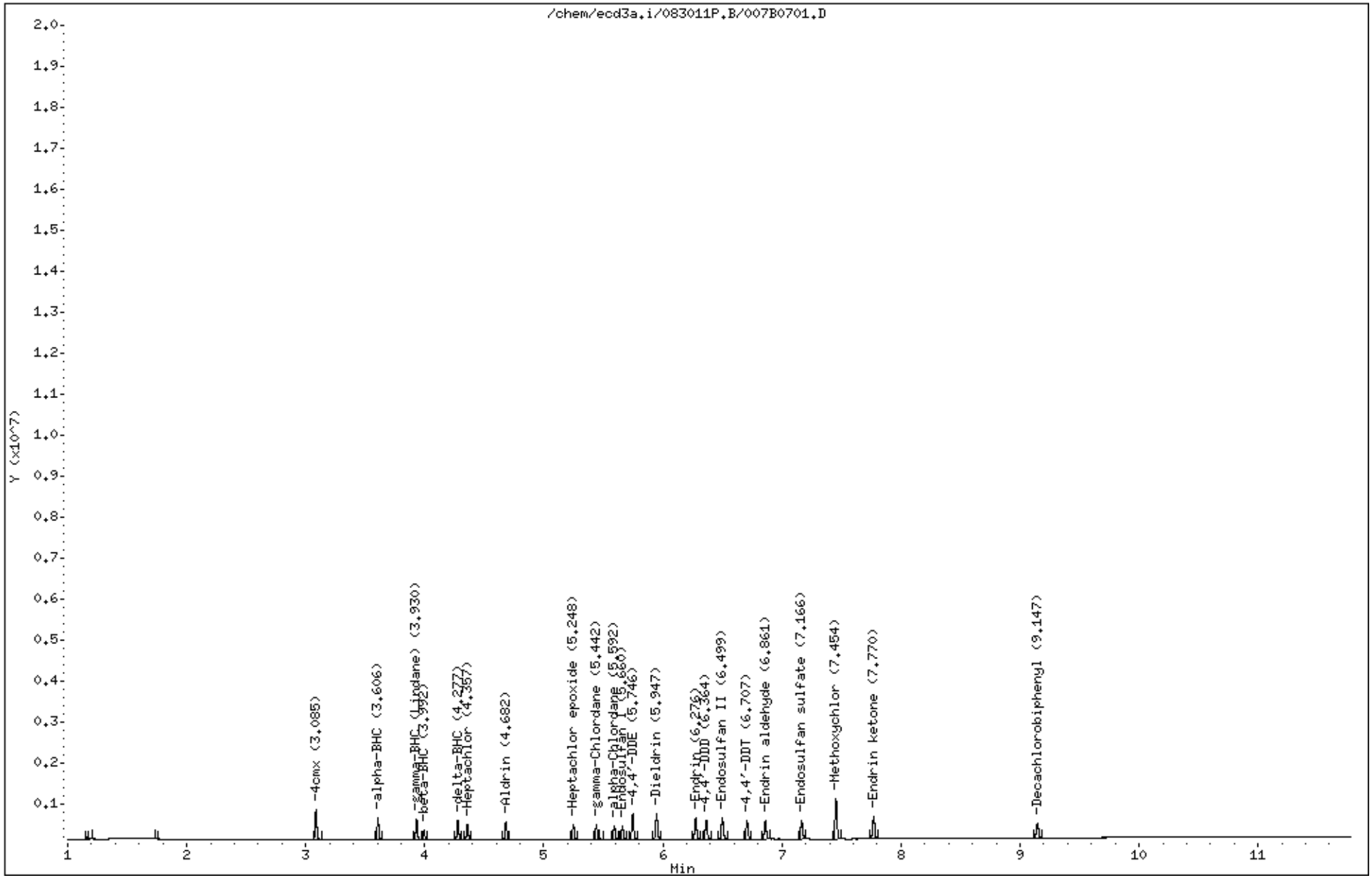
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC						CAS #: 319-84-6	
3.606	3.607	-0.001	506726	4.00000	4.01	80.00- 120.00	100.00
7 gamma-BHC (Lindane)						CAS #: 58-89-9	
3.930	3.931	-0.001	461594	4.00000	4.08	80.00- 120.00	100.00
12 beta-BHC						CAS #: 319-85-7	
3.992	3.992	0.000	214543	4.00000	4.40	80.00- 120.00	100.00
10 Heptachlor						CAS #: 76-44-8	
4.357	4.359	-0.002	361670	4.00000	3.98	80.00- 120.00	100.00
13 delta-BHC						CAS #: 319-86-8	
4.277	4.279	-0.002	445552	4.00000	3.99	80.00- 120.00	100.00
11 Aldrin						CAS #: 309-00-2	
4.682	4.684	-0.002	444533	4.00000	4.15	80.00- 120.00	100.00
14 Heptachlor epoxide						CAS #: 1024-57-3	
5.248	5.249	-0.001	393668	4.00000	4.16	80.00- 120.00	100.00
17 gamma-Chlordane						CAS #: 5103-74-2	
5.442	5.443	-0.001	381735	4.00000	4.09	80.00- 120.00	100.00
18 alpha-Chlordane						CAS #: 5103-71-9	
5.592	5.593	-0.001	382805	4.00000	4.18	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.660	5.661	-0.001	357212	4.00000	4.20	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.746	5.747	-0.001	695144	8.00000	8.07	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.947	5.948	-0.001	720558	8.00000	8.11	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	592341	8.00000	8.19	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.364	6.363	0.001	543854	8.00000	7.93	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	626745	8.00000	8.44	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.861	6.862	-0.001	524925	8.00000	8.45	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	515058	8.00000	7.96	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.166	7.165	0.001	532674	8.00000	8.16	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
7.454	7.455	-0.001	1156813	40.0000	41.4	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.770	7.772	-0.002	659095	8.00000	8.42	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.085	3.086	-0.001	742930	8.00000	8.69	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.147	9.147	0.000	468210	8.00000	9.13	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/007B0701.D
Date : 30-AUG-2011 16:39
Client ID: INDAB01
Sample Info: IWPE110830-01AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-2



GEL Laboratories LLC

CLP-1

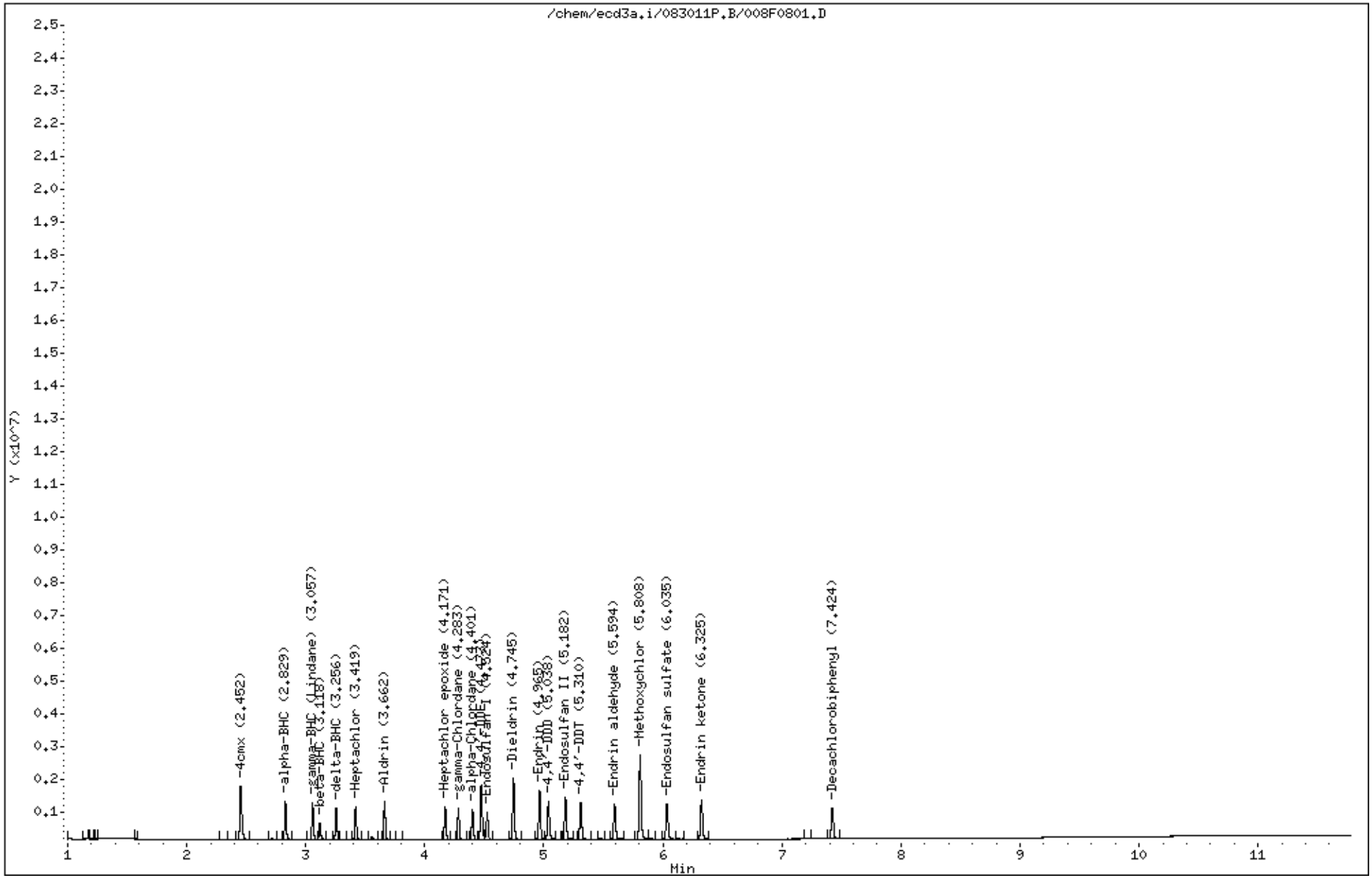
Data file : /chem/ecd3a.i/083011P.B/008F0801.D
Lab Smp Id: WPE110830-02AB Client Smp ID: INDAB02
Inj Date : 30-AUG-2011 16:55
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-02AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:00 Cal File: 033f3301.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.829	2.828	0.001	1111250	10.0000	7.63	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.057	3.056	0.001	1027842	10.0000	7.86	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.118	3.117	0.001	496080	10.0000	8.39	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.419	3.419	0.000	930357	10.0000	8.40	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.256	3.255	0.001	913171	10.0000	7.56	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	1104174	10.0000	7.97	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	972126	10.0000	8.14	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.283	4.282	0.001	943386	10.0000	7.80	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.401	4.400	0.001	934942	10.0000	8.37	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
16 Endosulfan I					CAS #: 959-98-8		
4.524	4.523	0.001	859929	10.0000	8.06	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.473	4.473	0.000	1823909	20.0000	15.9	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.745	4.745	0.000	1943970	20.0000	16.4	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.965	4.964	0.001	1596125	20.0000	16.5	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.038	5.035	0.003	1360896	20.0000	16.0	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.182	5.179	0.003	1432401	20.0000	16.4	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.594	5.592	0.002	1281753	20.0000	17.1	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.310	5.308	0.002	1280697	20.0000	16.4	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.035	6.033	0.002	1322699	20.0000	16.9	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.808	5.807	0.001	3114869	100.000	91.1	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.325	6.323	0.002	1433572	20.0000	16.7	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.452	2.452	0.000	1983954	20.0000	17.0	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.424	7.423	0.001	1239446	20.0000	17.4	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/008F0801.D
Date : 30-AUG-2011 16:55
Client ID: INDAB02
Sample Info: IWPE110830-02AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

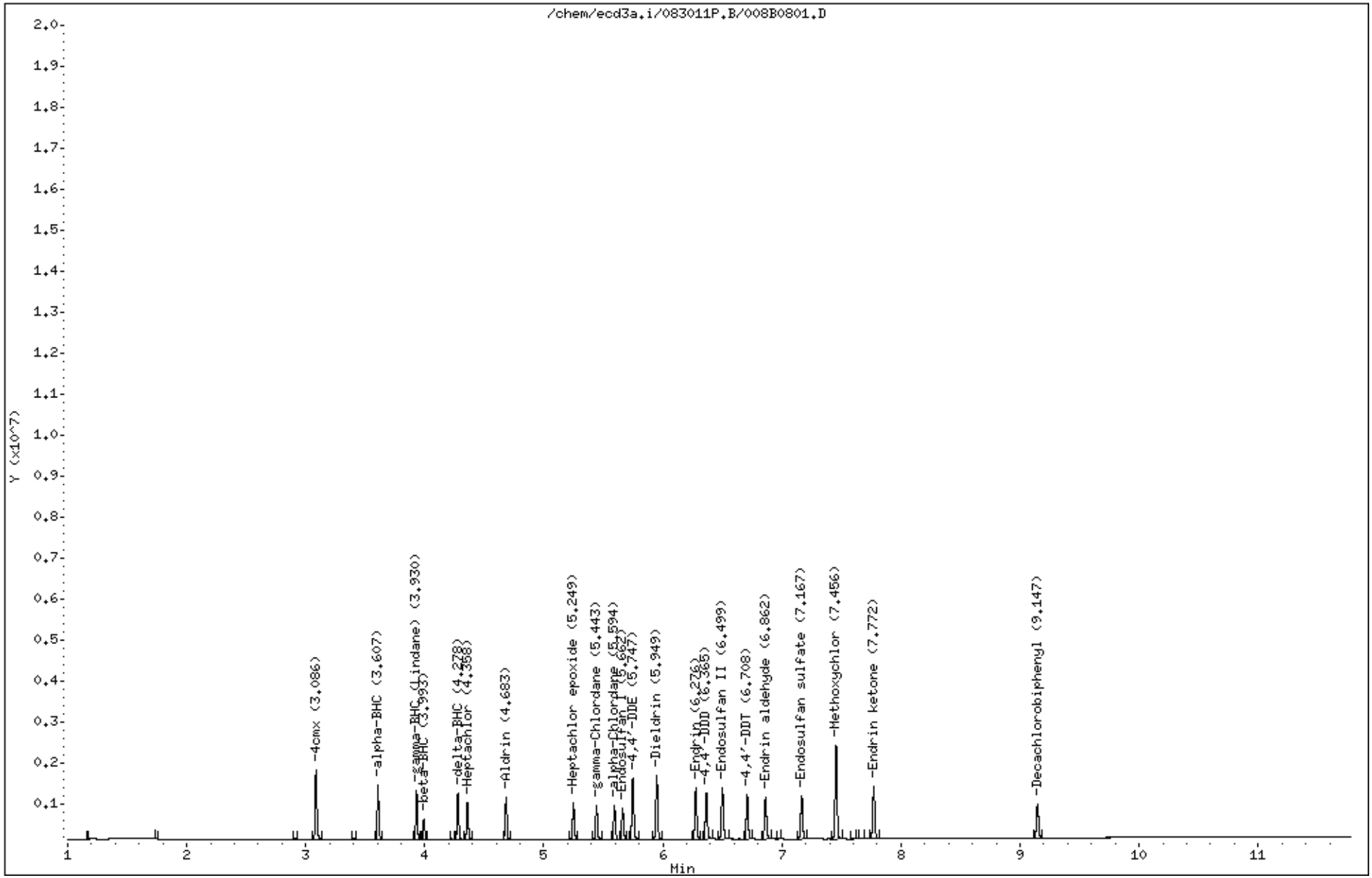
Data file : /chem/ecd3a.i/083011P.B/008B0801.D
Lab Smp Id: WPE110830-02AB Client Smp ID: INDAB02
Inj Date : 30-AUG-2011 16:55
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-02AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 21-DEC-2010 12:13 Cal File: 013b1301.d
Als bottle: 8 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC						CAS #: 319-84-6	
3.607	3.607	0.000	1245309	10.0000	10.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)						CAS #: 58-89-9	
3.930	3.931	-0.001	1110243	10.0000	10.0	80.00- 120.00	100.00
12 beta-BHC						CAS #: 319-85-7	
3.993	3.992	0.001	492056	10.0000	10.3	80.00- 120.00	100.00
10 Heptachlor						CAS #: 76-44-8	
4.358	4.359	-0.001	875884	10.0000	9.92	80.00- 120.00	100.00
13 delta-BHC						CAS #: 319-86-8	
4.278	4.279	-0.001	1087388	10.0000	9.92	80.00- 120.00	100.00
11 Aldrin						CAS #: 309-00-2	
4.683	4.684	-0.001	1071171	10.0000	10.2	80.00- 120.00	100.00
14 Heptachlor epoxide						CAS #: 1024-57-3	
5.249	5.249	0.000	938423	10.0000	10.2	80.00- 120.00	100.00
17 gamma-Chlordane						CAS #: 5103-74-2	
5.443	5.443	0.000	925542	10.0000	10.1	80.00- 120.00	100.00
18 alpha-Chlordane						CAS #: 5103-71-9	
5.594	5.593	0.001	912203	10.0000	10.1	80.00- 120.00	100.00

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
16 Endosulfan I					CAS #: 959-98-8		
5.662	5.661	0.001	851265	10.0000	10.2	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.747	5.747	0.000	1711035	20.0000	20.3	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.949	5.948	0.001	1752966	20.0000	20.2	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	1410066	20.0000	20.0	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.365	6.363	0.002	1310269	20.0000	19.6	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	1500122	20.0000	20.5	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.862	6.862	0.000	1244735	20.0000	20.5	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.708	6.707	0.001	1225779	20.0000	19.5	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.167	7.165	0.002	1267482	20.0000	19.9	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
7.456	7.455	0.001	2679535	100.000	99.0	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.772	7.772	0.000	1547713	20.0000	20.2	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	1762113	20.0000	20.9	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.147	9.147	0.000	1053054	20.0000	20.9	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/008B0801.D
Date : 30-AUG-2011 16:55
Client ID: INDAB02
Sample Info: IWPE110830-02AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25



GEL Laboratories LLC

CLP-1

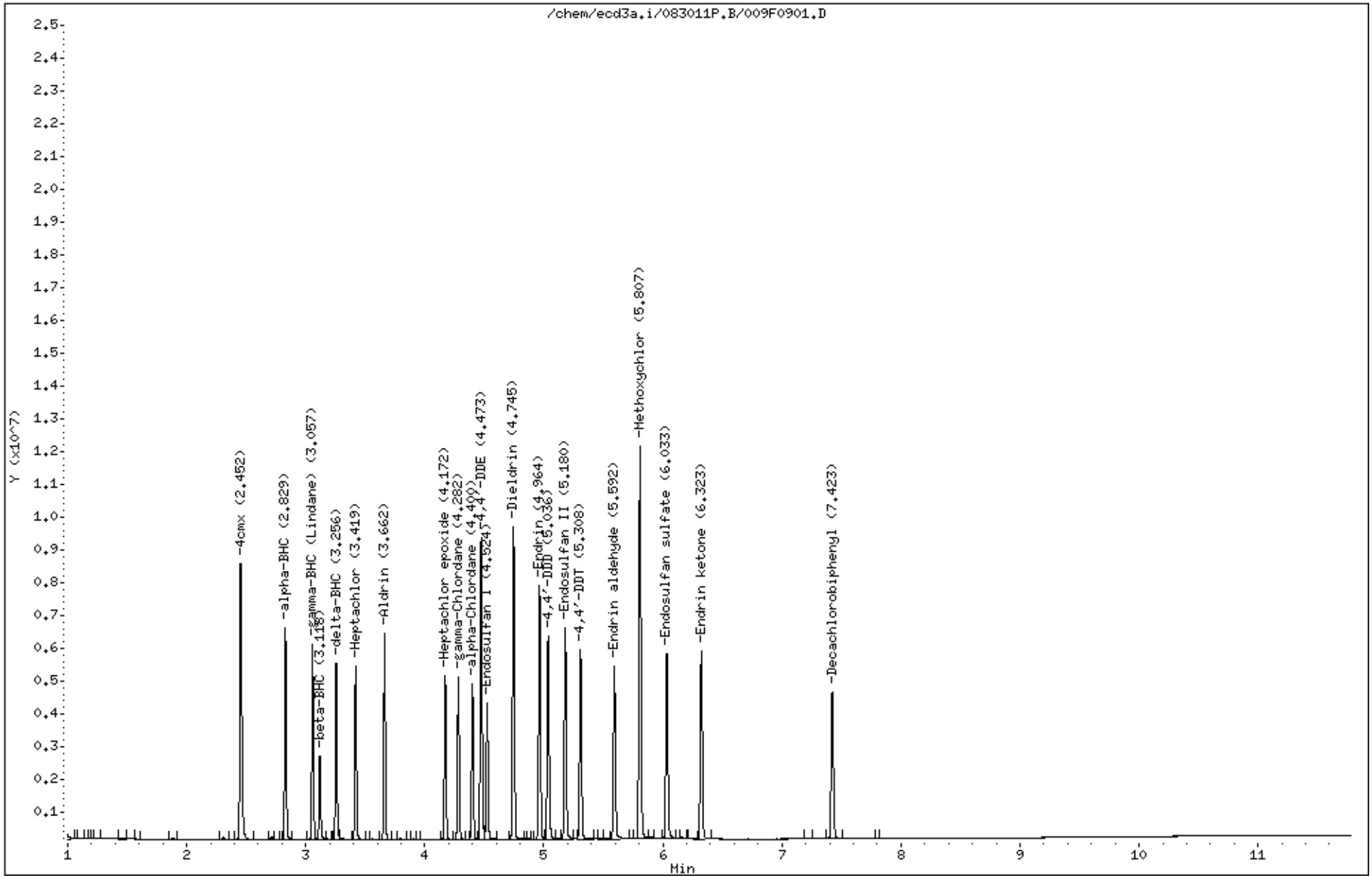
Data file : /chem/ecd3a.i/083011P.B/009F0901.D
Lab Smp Id: WPE110830-03AB Client Smp ID: INDAB03
Inj Date : 30-AUG-2011 17:10
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-03AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034f3401.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
5 alpha-BHC						CAS #: 319-84-6	
2.829	2.828	0.001	6025770	50.0000	44.0	80.00- 120.00	100.00
7 gamma-BHC (Lindane)						CAS #: 58-89-9	
3.057	3.056	0.001	5447707	50.0000	44.1	80.00- 120.00	100.00
12 beta-BHC						CAS #: 319-85-7	
3.118	3.117	0.001	2388404	50.0000	42.7	80.00- 120.00	100.00
10 Heptachlor						CAS #: 76-44-8	
3.419	3.419	0.000	4854031	50.0000	45.8	80.00- 120.00	100.00
13 delta-BHC						CAS #: 319-86-8	
3.256	3.255	0.001	4935256	50.0000	43.4	80.00- 120.00	100.00
11 Aldrin						CAS #: 309-00-2	
3.662	3.662	0.000	5951220	50.0000	45.4	80.00- 120.00	100.00
14 Heptachlor epoxide						CAS #: 1024-57-3	
4.172	4.171	0.001	5072641	50.0000	45.0	80.00- 120.00	100.00
17 gamma-Chlordane						CAS #: 5103-74-2	
4.282	4.282	0.000	5038914	50.0000	44.2	80.00- 120.00	100.00
18 alpha-Chlordane						CAS #: 5103-71-9	
4.400	4.400	0.000	4925592	50.0000	45.9	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
16 Endosulfan I					CAS #: 959-98-8		
4.524	4.523	0.001	4454207	50.0000	44.3	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.473	4.473	0.000	9829946	100.000	91.0	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.745	4.745	0.000	10210639	100.000	91.0	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.964	4.964	0.000	8375947	100.000	91.4	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.036	5.035	0.001	7147979	100.000	89.1	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.180	5.179	0.001	7225249	100.000	87.7	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.592	5.592	0.000	6290927	100.000	88.6	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.308	5.308	0.000	6583106	100.000	89.1	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.033	6.033	0.000	6846830	100.000	91.1	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.807	5.807	0.000	14010098	500.000	430	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.323	6.323	0.000	6909847	100.000	85.7	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.452	2.452	0.000	9977957	100.000	89.7	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.423	7.423	0.000	5896742	100.000	86.6	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/009F0901.D
Date : 30-AUG-2011 17:10
Client ID: INDAB03
Sample Info: IWPE110830-03AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

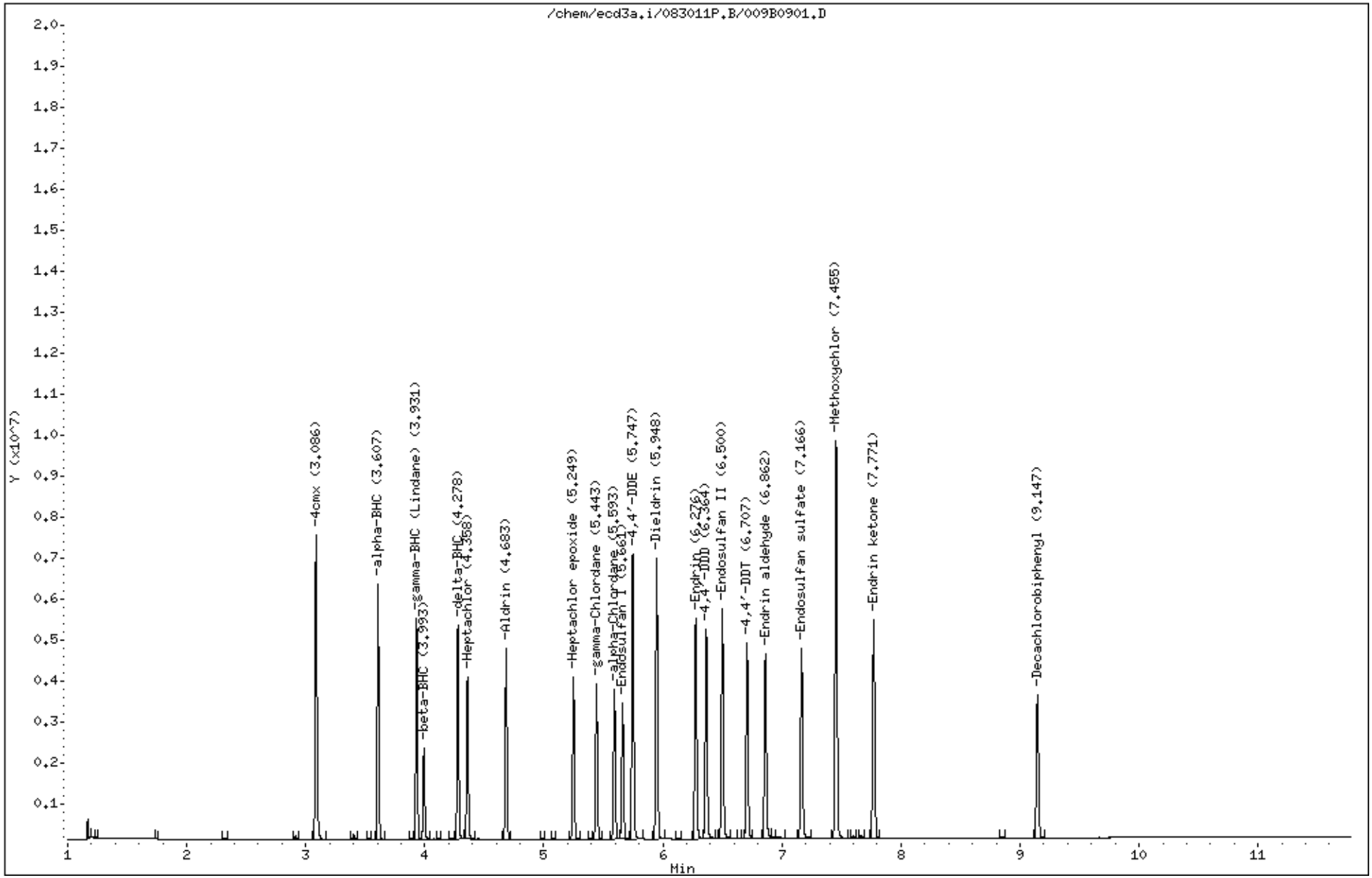
Data file : /chem/ecd3a.i/083011P.B/009B0901.D
Lab Smp Id: WPE110830-03AB Client Smp ID: INDAB03
Inj Date : 30-AUG-2011 17:10
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-03AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:15 Cal File: 034b3401.d
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC						CAS #: 319-84-6	
3.607	3.607	0.000	5760261	50.0000	47.2	80.00- 120.00	100.00
7 gamma-BHC (Lindane)						CAS #: 58-89-9	
3.931	3.931	0.000	5060138	50.0000	46.5	80.00- 120.00	100.00
12 beta-BHC						CAS #: 319-85-7	
3.993	3.992	0.001	2123965	50.0000	45.2	80.00- 120.00	100.00
10 Heptachlor						CAS #: 76-44-8	
4.358	4.359	-0.001	3888251	50.0000	45.4	80.00- 120.00	100.00
13 delta-BHC						CAS #: 319-86-8	
4.278	4.279	-0.001	5027919	50.0000	46.8	80.00- 120.00	100.00
11 Aldrin						CAS #: 309-00-2	
4.683	4.684	-0.001	4809785	50.0000	46.7	80.00- 120.00	100.00
14 Heptachlor epoxide						CAS #: 1024-57-3	
5.249	5.249	0.000	4139934	50.0000	45.8	80.00- 120.00	100.00
17 gamma-Chlordane						CAS #: 5103-74-2	
5.443	5.443	0.000	4131125	50.0000	46.0	80.00- 120.00	100.00
18 alpha-Chlordane						CAS #: 5103-71-9	
5.593	5.593	0.000	4017272	50.0000	45.7	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
16 Endosulfan I					CAS #: 959-98-8		
5.661	5.661	0.000	3738400	50.0000	45.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.747	5.747	0.000	7667835	100.000	93.0	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.948	5.948	0.000	7761171	100.000	91.7	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	6208741	100.000	90.5	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.364	6.363	0.001	5846668	100.000	90.3	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.500	6.499	0.001	6539565	100.000	91.4	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.862	6.862	0.000	5404964	100.000	91.0	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	5408783	100.000	89.0	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.166	7.165	0.001	5594709	100.000	90.3	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
7.455	7.455	0.000	11415256	500.000	435	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.771	7.772	-0.001	6637638	100.000	89.2	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	7744179	100.000	93.4	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.147	9.147	0.000	4408543	100.000	88.8	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/009B0901.D
Date : 30-AUG-2011 17:10
Client ID: INDAB03
Sample Info: IWPE110830-03AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25



GEL Laboratories LLC

CLP-1

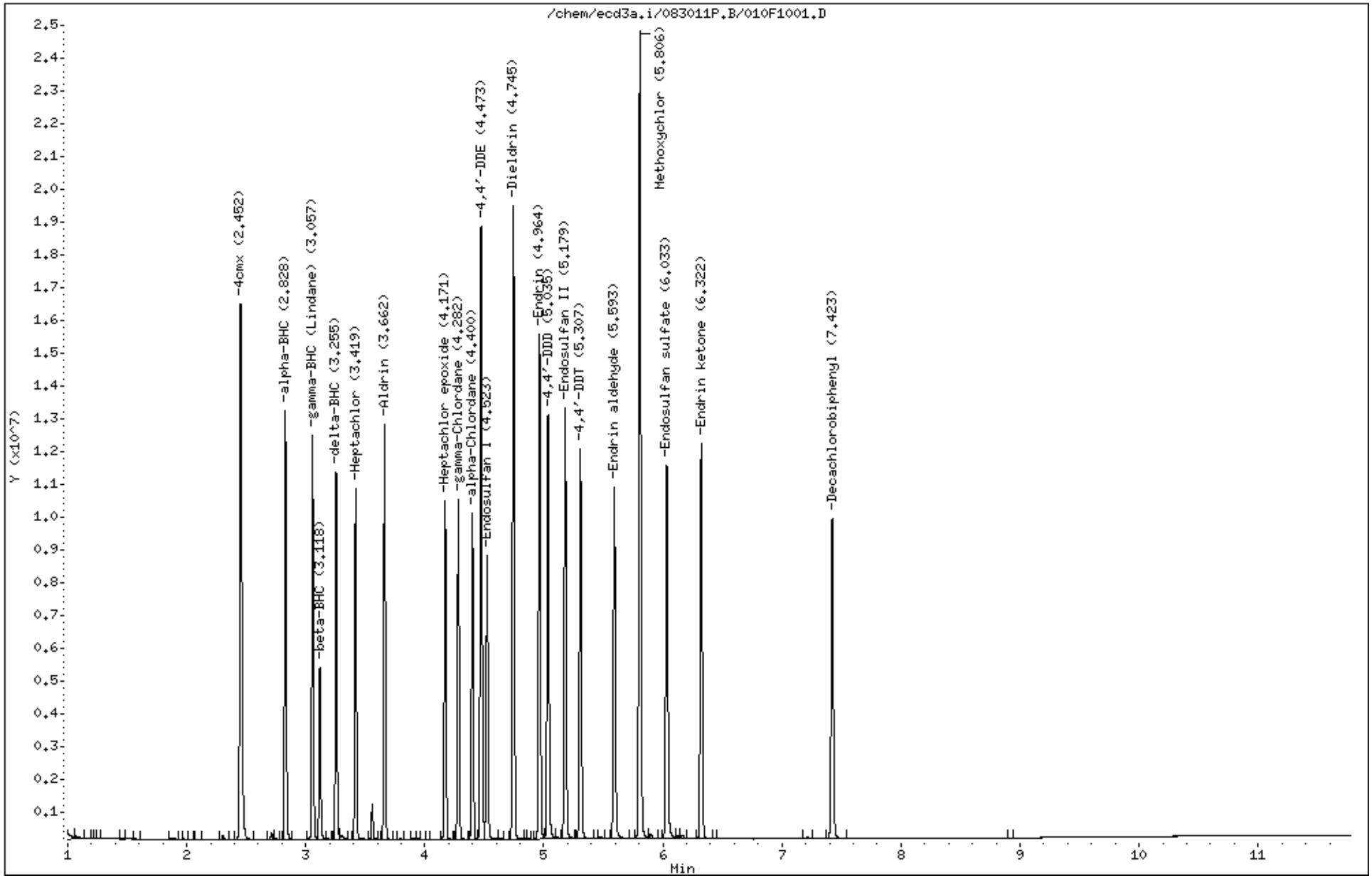
Data file : /chem/ecd3a.i/083011P.B/010F1001.D
Lab Smp Id: WPE110830-04AB Client Smp ID: INDAB04
Inj Date : 30-AUG-2011 17:26
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-04AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018f1801.d
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC						CAS #: 319-84-6	
2.828	2.828	0.000	12677787	100.000	98.5	80.00- 120.00	100.00
7 gamma-BHC (Lindane)						CAS #: 58-89-9	
3.057	3.056	0.001	11383910	100.000	97.7	80.00- 120.00	100.00
12 beta-BHC						CAS #: 319-85-7	
3.118	3.117	0.001	4911162	100.000	92.5	80.00- 120.00	100.00
10 Heptachlor						CAS #: 76-44-8	
3.419	3.419	0.000	10050612	100.000	98.8	80.00- 120.00	100.00
13 delta-BHC						CAS #: 319-86-8	
3.255	3.255	0.000	10393926	100.000	97.2	80.00- 120.00	100.00
11 Aldrin						CAS #: 309-00-2	
3.662	3.662	0.000	12333678	100.000	99.2	80.00- 120.00	100.00
14 Heptachlor epoxide						CAS #: 1024-57-3	
4.171	4.171	0.000	10415662	100.000	97.3	80.00- 120.00	100.00
17 gamma-Chlordane						CAS #: 5103-74-2	
4.282	4.282	0.000	10617220	100.000	98.4	80.00- 120.00	100.00
18 alpha-Chlordane						CAS #: 5103-71-9	
4.400	4.400	0.000	10229732	100.000	99.8	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
16 Endosulfan I						CAS #: 959-98-8		
4.523	4.523	0.000	9135090	100.000	96.2	80.00- 120.00		100.00
19 4,4'-DDE						CAS #: 72-55-9		
4.473	4.473	0.000	20279674	200.000	198	80.00- 120.00		100.00
20 Dieldrin						CAS #: 60-57-1		
4.745	4.745	0.000	20799918	200.000	196	80.00- 120.00		100.00
22 Endrin						CAS #: 72-20-8		
4.964	4.964	0.000	17004571	200.000	195	80.00- 120.00		100.00
25 4,4'-DDD						CAS #: 72-54-8		
5.035	5.035	0.000	14770896	200.000	195	80.00- 120.00		100.00
24 Endosulfan II						CAS #: 33213-65-9		
5.179	5.179	0.000	14667429	200.000	189	80.00- 120.00		100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
5.593	5.592	0.001	12733230	200.000	188	80.00- 120.00		100.00
26 4,4'-DDT						CAS #: 50-29-3		
5.307	5.308	-0.001	13512122	200.000	193	80.00- 120.00		100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
6.033	6.033	0.000	14072845	200.000	195	80.00- 120.00		100.00
28 Methoxychlor						CAS #: 72-43-5		
5.806	5.807	-0.001	27953312	1000.00	896	80.00- 120.00		100.00
31 Endrin ketone						CAS #: 53494-70-5		
6.322	6.323	-0.001	13914233	200.000	184	80.00- 120.00		100.00
$ 1 4cmx						CAS #: 877-09-8		
2.452	2.452	0.000	20284711	200.000	191	80.00- 120.00		100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
7.423	7.423	0.000	12066445	200.000	186	80.00- 120.00		100.00

Data File: /chem/ecd3a.i/083011P.B/010F1001.D
Date : 30-AUG-2011 17:26
Client ID: INDAB04
Sample Info: IWPE110830-04AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/010B1001.D
Lab Smp Id: WPE110830-04AB Client Smp ID: INDAB04
Inj Date : 30-AUG-2011 17:26
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110830-04AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 15-JAN-2011 12:53 Cal File: 018b1801.d
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

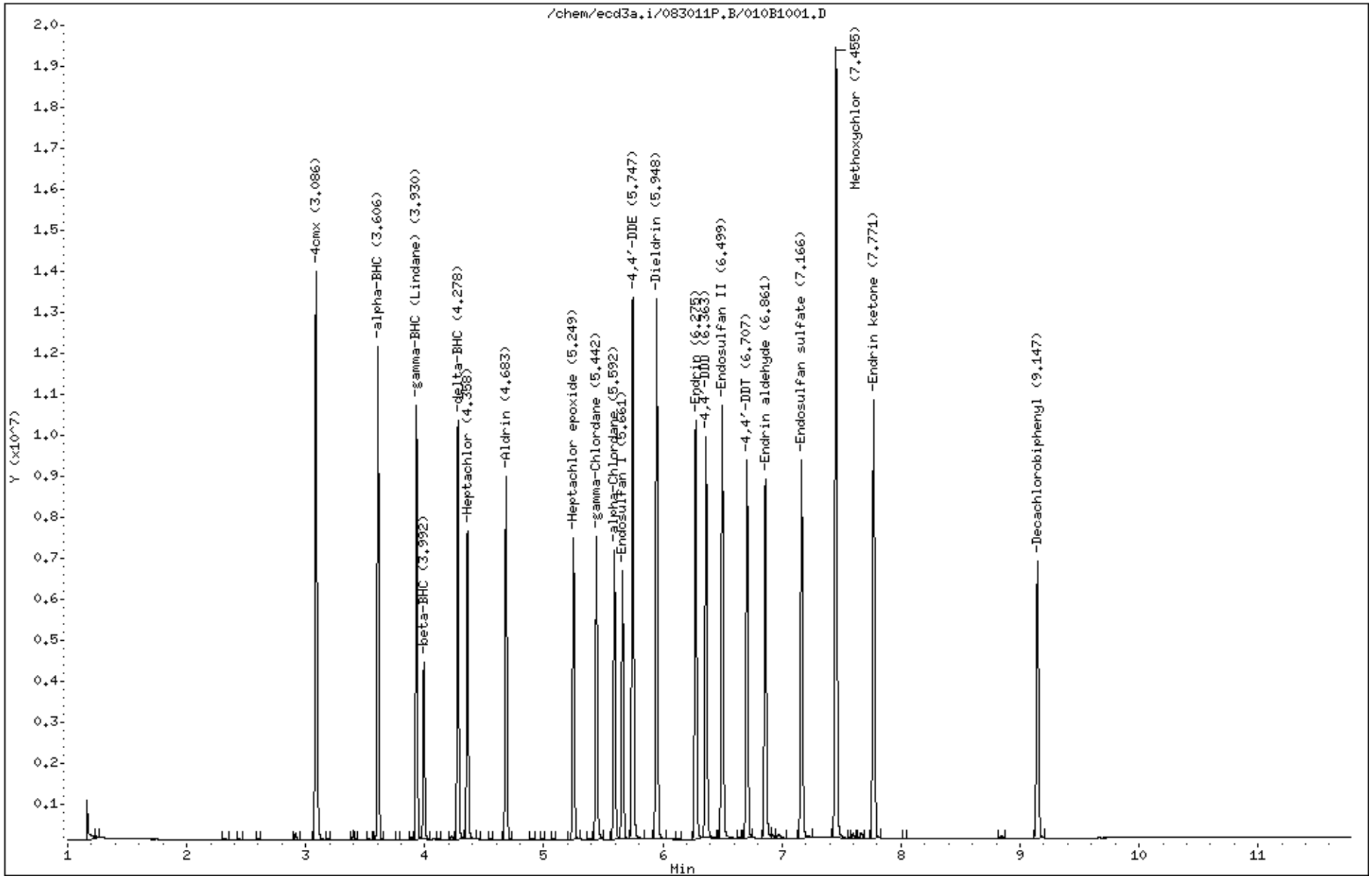
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.606	3.607	-0.001	11277189	100.000	93.7	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.930	3.931	-0.001	9883812	100.000	92.3	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.992	3.992	0.000	4104826	100.000	88.7	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.358	4.359	-0.001	7504240	100.000	89.8	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.278	4.279	-0.001	9836543	100.000	93.0	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.683	4.684	-0.001	9280375	100.000	91.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.249	5.249	0.000	7960948	100.000	89.8	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
5.442	5.443	-0.001	8128850	100.000	92.0	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.592	5.593	-0.001	7793828	100.000	90.2	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
	16 Endosulfan I				CAS #: 959-98-8		
5.661	5.661	0.000	7176337	100.000	89.6	80.00- 120.00	100.00
	19 4,4'-DDE				CAS #: 72-55-9		
5.747	5.747	0.000	14780900	200.000	182	80.00- 120.00	100.00
	20 Dieldrin				CAS #: 60-57-1		
5.948	5.948	0.000	14935415	200.000	180	80.00- 120.00	100.00
	22 Endrin				CAS #: 72-20-8		
6.275	6.276	-0.001	11877706	200.000	177	80.00- 120.00	100.00
	25 4,4'-DDD				CAS #: 72-54-8		
6.363	6.363	0.000	11327607	200.000	180	80.00- 120.00	100.00
	24 Endosulfan II				CAS #: 33213-65-9		
6.499	6.499	0.000	12689569	200.000	180	80.00- 120.00	100.00
	27 Endrin aldehyde				CAS #: 7421-93-4		
6.861	6.862	-0.001	10348387	200.000	178	80.00- 120.00	100.00
	26 4,4'-DDT				CAS #: 50-29-3		
6.707	6.707	0.000	10548482	200.000	178	80.00- 120.00	100.00
	29 Endosulfan sulfate				CAS #: 1031-07-8		
7.166	7.165	0.001	10854588	200.000	179	80.00- 120.00	100.00
	28 Methoxychlor				CAS #: 72-43-5		
7.455	7.455	0.000	22114854	1000.00	866	80.00- 120.00	100.00
	31 Endrin ketone				CAS #: 53494-70-5		
7.771	7.772	-0.001	12807420	200.000	176	80.00- 120.00	100.00
$	1 4cmx				CAS #: 877-09-8		
3.086	3.086	0.000	14808900	200.000	180	80.00- 120.00	100.00
$	32 Decachlorobiphenyl				CAS #: 2051-24-3		
9.147	9.147	0.000	8516397	200.000	174	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/010B1001.D
Date : 30-AUG-2011 17:26
Client ID: INDAB04
Sample Info: IWPE110830-04AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-2



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/011F1101.D
Lab Smp Id: IPE110801-02AB Client Smp ID: INDAB05
Inj Date : 30-AUG-2011 17:41
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110801-02AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
5 alpha-BHC					CAS #: 319-84-6		
2.829	2.828	0.001	26231498	200.000	221	80.00- 120.00	100.00(A)
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.057	3.056	0.001	23510240	200.000	218	80.00- 120.00	100.00(A)
12 beta-BHC					CAS #: 319-85-7		
3.118	3.117	0.001	10092858	200.000	203	80.00- 120.00	100.00(A)
10 Heptachlor					CAS #: 76-44-8		
3.419	3.419	0.000	20643565	200.000	214	80.00- 120.00	100.00(A)
13 delta-BHC					CAS #: 319-86-8		
3.255	3.255	0.000	21708322	200.000	221	80.00- 120.00	100.00(A)
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	25091360	200.000	216	80.00- 120.00	100.00(A)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	20983099	200.000	210	80.00- 120.00	100.00(A)
17 gamma-Chlordane					CAS #: 5103-74-2		
4.282	4.282	0.000	21942985	200.000	219	80.00- 120.00	100.00(A)
18 alpha-Chlordane					CAS #: 5103-71-9		
4.401	4.400	0.001	21115622	200.000	216	80.00- 120.00	100.00(A)

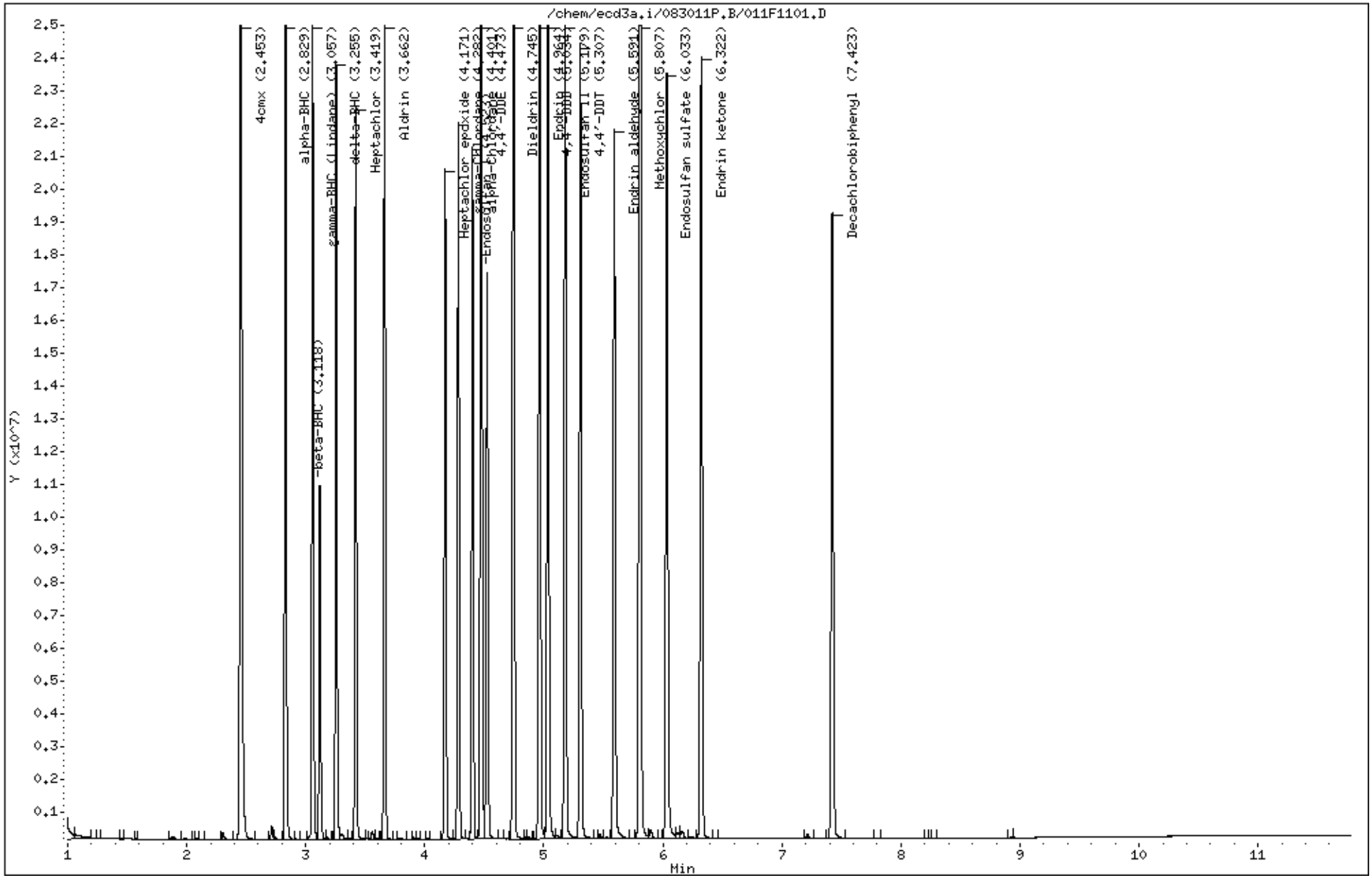
				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO	
16 Endosulfan I						CAS #: 959-98-8		
4.523	4.523	0.000	18379934	200.000	209	80.00- 120.00	100.00(A)	
19 4,4'-DDE						CAS #: 72-55-9		
4.473	4.473	0.000	41206035	400.000	433	80.00- 120.00	100.00(A)	
20 Dieldrin						CAS #: 60-57-1		
4.745	4.745	0.000	41830398	400.000	422	80.00- 120.00	100.00(A)	
22 Endrin						CAS #: 72-20-8		
4.964	4.964	0.000	34597493	400.000	423	80.00- 120.00	100.00(A)	
25 4,4'-DDD						CAS #: 72-54-8		
5.034	5.035	-0.001	30043911	400.000	427	80.00- 120.00	100.00(A)	
24 Endosulfan II						CAS #: 33213-65-9		
5.179	5.179	0.000	29481046	400.000	410	80.00- 120.00	100.00(A)	
27 Endrin aldehyde						CAS #: 7421-93-4		
5.591	5.592	-0.001	25406790	400.000	401	80.00- 120.00	100.00(A)	
26 4,4'-DDT						CAS #: 50-29-3		
5.307	5.308	-0.001	27516449	400.000	421	80.00- 120.00	100.00(A)	
29 Endosulfan sulfate						CAS #: 1031-07-8		
6.033	6.033	0.000	28831786	400.000	423	80.00- 120.00	100.00(A)	
28 Methoxychlor						CAS #: 72-43-5		
5.807	5.807	0.000	56991529	2000.00	1940	80.00- 120.00	100.00	
31 Endrin ketone						CAS #: 53494-70-5		
6.322	6.323	-0.001	27856739	400.000	398	80.00- 120.00	100.00	
$ 1 4cmx						CAS #: 877-09-8		
2.453	2.452	0.001	40877778	400.000	408	80.00- 120.00	100.00(A)	
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
7.423	7.423	0.000	24736732	400.000	404	80.00- 120.00	100.00(A)	

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/ecd3a.i/083011P.B/011F1101.D
Date : 30-AUG-2011 17:41
Client ID: INDAB05
Sample Info: IPE110801-02AB

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/011B1101.D
Lab Smp Id: IPE110801-02AB Client Smp ID: INDAB05
Inj Date : 30-AUG-2011 17:41
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |IPE110801-02AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

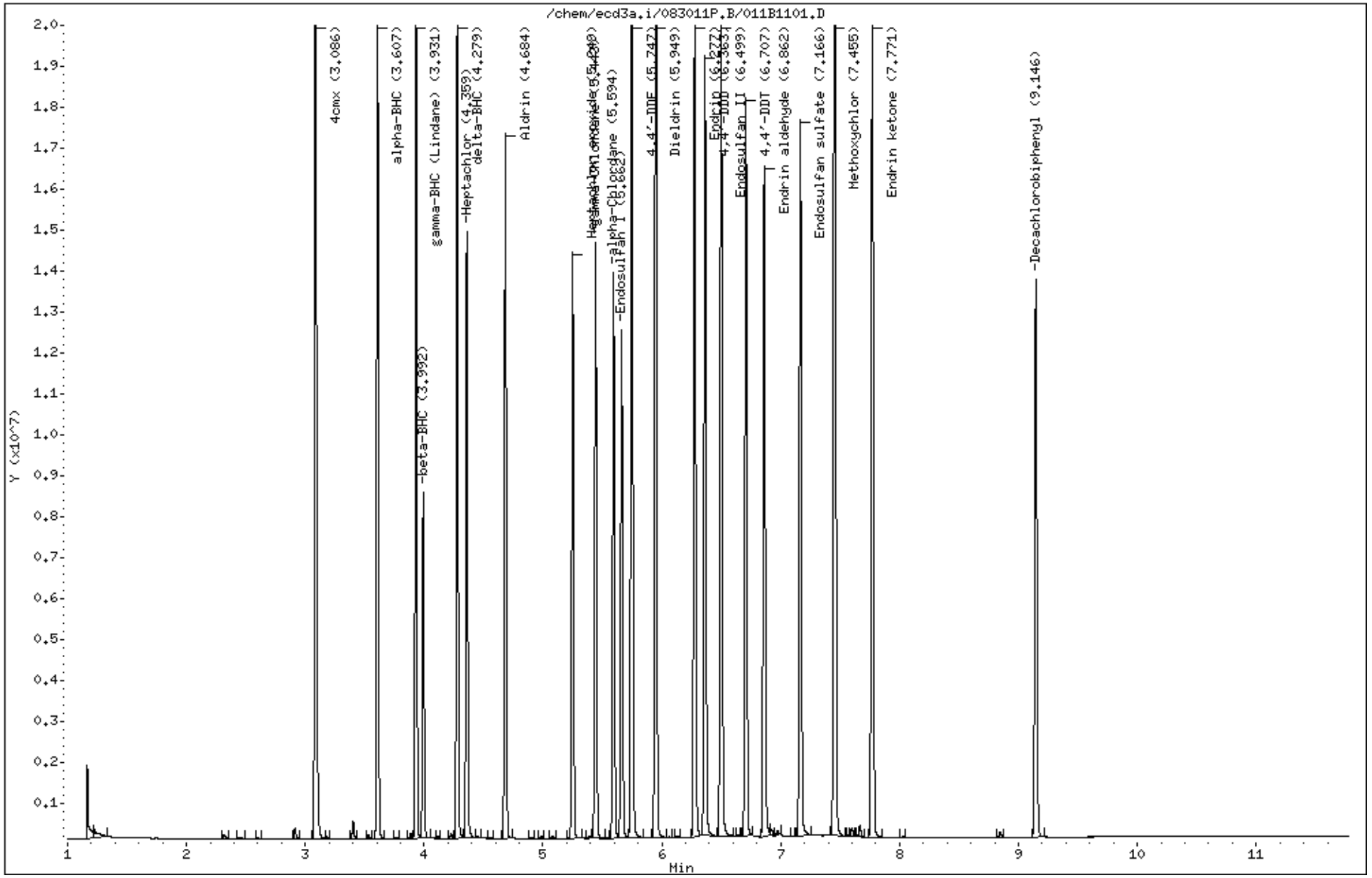
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.607	3.607	0.000	22055611	200.000	187	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.931	3.931	0.000	19352544	200.000	185	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.992	3.992	0.000	7991488	200.000	176	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.359	4.359	0.000	14642258	200.000	181	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.279	4.279	0.000	19363185	200.000	188	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.684	4.684	0.000	17852060	200.000	180	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.249	5.249	0.000	15339111	200.000	178	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
5.443	5.443	0.000	15702685	200.000	182	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.594	5.593	0.001	15145930	200.000	180	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
	16 Endosulfan I				CAS #: 959-98-8		
5.662	5.661	0.001	13801264	200.000	177	80.00- 120.00	100.00
	19 4,4'-DDE				CAS #: 72-55-9		
5.747	5.747	0.000	28465854	400.000	361	80.00- 120.00	100.00
	20 Dieldrin				CAS #: 60-57-1		
5.949	5.948	0.001	28858744	400.000	359	80.00- 120.00	100.00
	22 Endrin				CAS #: 72-20-8		
6.277	6.276	0.001	23118791	400.000	357	80.00- 120.00	100.00
	25 4,4'-DDD				CAS #: 72-54-8		
6.363	6.363	0.000	22011719	400.000	362	80.00- 120.00	100.00
	24 Endosulfan II				CAS #: 33213-65-9		
6.499	6.499	0.000	24394080	400.000	355	80.00- 120.00	100.00
	27 Endrin aldehyde				CAS #: 7421-93-4		
6.862	6.862	0.000	19761305	400.000	349	80.00- 120.00	100.00
	26 4,4'-DDT				CAS #: 50-29-3		
6.707	6.707	0.000	20674369	400.000	364	80.00- 120.00	100.00
	29 Endosulfan sulfate				CAS #: 1031-07-8		
7.166	7.165	0.001	21154044	400.000	361	80.00- 120.00	100.00
	28 Methoxychlor				CAS #: 72-43-5		
7.455	7.455	0.000	43778150	2000.00	1790	80.00- 120.00	100.00
	31 Endrin ketone				CAS #: 53494-70-5		
7.771	7.772	-0.001	25049073	400.000	355	80.00- 120.00	100.00
$	1 4cmx				CAS #: 877-09-8		
3.086	3.086	0.000	28384143	400.000	352	80.00- 120.00	100.00
$	32 Decachlorobiphenyl				CAS #: 2051-24-3		
9.146	9.147	-0.001	16807926	400.000	350	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/011B1101.D
Date : 30-AUG-2011 17:41
Client ID: INDAB05
Sample Info: IPE110801-02AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-2



Pesticide Breakdown Summary

Client SDG: 284538

Instrument ID: ECD3A.I_1

Injection Date: 30-AUG-11 15:22

Data File: /chem/ecd3a.i/083011P.B/002F0201.D

Init. Cal. Date(s): 16-AUG-11 15:45 - 30-AUG-11 17:41

Lab Sample ID WPE110628-99DG

Method: /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Client Sample ID:PEM01

Quant Type ESTD

Compound	RT	RT Window From	RT Window To	AMT CCV	Nominal	%D
Aldrin	0	3.63	3.69	0	100	-100
4,4'-DDE	4.47	4.44	4.5	0.45	0	
Endrin	4.96	4.93	4.99	105	100	5
4,4'-DDD	5.04	5.01	5.07	0.932	0	
4,4'-DDT	5.31	5.28	5.34	190	100	90
Endrin aldehyde	5.59	5.56	5.62	1.76	0	
Endrin ketone	6.32	6.29	6.35	1.57	0	

4,4'-DDT % Breakdown .86 Endin % Breakdown : 2.53 Combined % Breakdown 3.39

%D Calculation

%D =((AmtCCV - Nominal)/Nominal) X 100

Pesticide Breakdown Summary

Client SDG: 284538

Instrument ID: ECD3A.I_2

Injection Date: 30-AUG-11 15:22

Data File: /chem/ecd3a.i/083011P.B/002B0201.D

Init. Cal. Date(s): 16-AUG-11 15:45 - 30-AUG-11 17:41

Lab Sample ID WPE110628-99DG

Method: /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Client Sample ID:PEM01

Quant Type ESTD

Compound	RT	RT Window From	RT Window To	AMT CCV	Nominal	%D
Aldrin	0	4.65	4.71	0	100	-100
4,4'-DDE	5.75	5.72	5.78	0.906	0	
Endrin	6.28	6.25	6.31	107	100	7
4,4'-DDD	6.36	6.33	6.39	1.16	0	
4,4'-DDT	6.71	6.68	6.74	192	100	92
Endrin aldehyde	6.86	6.83	6.89	2.12	0	
Endrin ketone	7.77	7.74	7.8	1.87	0	

4,4'-DDT % Breakdown 1.29 Endin % Breakdown : 3.5 Combined % Breakdown 4.79

%D Calculation

%D =((AmtCCV - Nominal)/Nominal) X 100

Continuing Calibration Summary

Instrument ID: ECD3A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 15:53

Data File: /chem/ecd3a.i/083011P.B/004F0401.D

Init. Cal. Date(s): 23-AUG-11 14:29 - 23-AUG-11 15:31

Lab Sample ID WPE110630-52TX

Method: /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Column ID: CLP-1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	3564.91	3786.21	2000	6.21	20		Averaged
Toxaphene(2)	2130.09	1956.06	2000	-8.17	20		Averaged
Toxaphene(3)	2669.59	2322.85	2000	-12.99	20		Averaged
Toxaphene(4)	1823.54	1618.89	2000	-11.22	20		Averaged
Toxaphene(5)	2845.56	2421.06	2000	-14.92	20		Averaged
4cmx(Surr)	100121.53	101304.85	200	1.18	20		Averaged
Decachlorobiphenyl(Surr)	61295.93	61122.48	200	-0.28	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 15:53

Data File: /chem/ecd3a.i/083011P.B/004B0401.D

Init. Cal. Date(s): 23-AUG-11 14:29 - 23-AUG-11 15:31

Lab Sample ID WPE110630-52TX

Method: /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Column ID: CLP-2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Toxaphene	1421.91	1224.59	2000	-13.88	20		Averaged
Toxaphene(2)	2318.22	2001.96	2000	-13.64	20		Averaged
Toxaphene(3)	3976.91	3474.89	2000	-12.62	20		Averaged
Toxaphene(4)	2103	1871.54	2000	-11.01	20		Averaged
Toxaphene(5)	2400.91	2050.24	2000	-14.61	20		Averaged
4cmx(Surr)	80683.71	79682.44	200	-1.24	20		Averaged
Decachlorobiphenyl(Surr)	47973.24	46278.36	200	-3.53	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 16:08

Data File: /chem/ecd3a.i/083011P.B/005F0501.D

Init. Cal. Date(s): 16-AUG-11 15:45 - 16-AUG-11 16:58

Lab Sample ID WPE110724-00CL

Method: /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Column ID: CLP-1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Chlordane (tech.)	4527.48	3833.16	1000	-15.34	20		Averaged
Chlordane (tech.)(2)	2513.46	2141.64	1000	-14.79	20		Averaged
Chlordane (tech.)(3)	2289.46	1985.6	1000	-13.27	20		Averaged
Chlordane (tech.)(4)	14992.23	12596.86	1000	-15.98	20		Averaged
Chlordane (tech.)(5)	3352.12	3081.08	1000	-8.09	20		Averaged
4cmx(Surr)	100121.53	98267.87	200	-1.85	20		Averaged
Decachlorobiphenyl(Surr)	61295.93	59623.37	200	-2.73	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 16:08

Data File: /chem/ecd3a.i/083011P.B/005B0501.D

Init. Cal. Date(s): 16-AUG-11 15:45 - 16-AUG-11 16:58

Lab Sample ID WPE110724-00CL

Method: /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Column ID: CLP-2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Chlordane (tech.)	3485.79	3257.74	1000	-6.54	20		Averaged
Chlordane (tech.)(2)	2082.97	1892	1000	-9.17	20		Averaged
Chlordane (tech.)(3)	9660.4	9131.19	1000	-5.48	20		Averaged
Chlordane (tech.)(4)	8167.73	7705.72	1000	-5.66	20		Averaged
Chlordane (tech.)(5)	2563.11	2562.61	1000	-0.02	20		Averaged
4cmx(Surr)	80683.71	75566.71	200	-6.34	20		Averaged
Decachlorobiphenyl(Surr)	47973.24	44101.4	200	-8.07	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 17:57

Data File: /chem/ecd3a.i/083011P.B/012F1201.D

Init. Cal. Date(s): 30-AUG-11 16:39 - 30-AUG-11 17:41

Lab Sample ID WPE110711-10AB

Method: /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Column ID: CLP-1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
alpha-BHC	118670.15	134905.99	100	13.68	20		Averaged
gamma-BHC (Lindane)	107875.23	123849.32	100	14.81	20		Averaged
beta-BHC	49652.95	49977.32	100	0.65	20		Averaged
Methoxychlor	29436.63	28736.56	1000	-2.38	20		Averaged
delta-BHC	98363.62	109966.08	100	11.8	20		Averaged
Heptachlor	96346.25	105120.52	100	9.11	20		Averaged
Aldrin	115966.73	124473.63	100	7.34	20		Averaged
Heptachlor epoxide	99984.76	104646.23	100	4.66	20		Averaged
Endosulfan I	88068.42	94752.24	100	7.59	20		Averaged
4,4'-DDE	95123.35	104071.9	200	9.41	20		Averaged
Dieldrin	99146.45	107576.48	200	8.5	20		Averaged
Endrin	81791.49	92886.46	200	13.56	20		Averaged
4,4'-DDD	70423.79	75835.59	200	7.68	20		Averaged
Endosulfan II	71920.74	76606.61	200	6.52	20		Averaged
Endrin aldehyde	63333.46	65895.67	200	4.05	20		Averaged
4,4'-DDT	65418.65	71258.39	200	8.93	20		Averaged
Endosulfan sulfate	68222.71	72750.33	200	6.64	20		Averaged
Endrin ketone	70074.14	71547.06	200	2.1	20		Averaged
4cmx(Surr)	100121.53	106108.33	200	5.98	20		Averaged
Decachlorobiphenyl(Surr)	61295.93	63065.02	200	2.89	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 17:57

Data File: /chem/ecd3a.i/083011P.B/012B1201.D

Init. Cal. Date(s): 30-AUG-11 16:39 - 30-AUG-11 17:41

Lab Sample ID WPE110711-10AB

Method: /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Column ID: CLP-2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
alpha-BHC	117893.51	117398.64	100	-0.42	20		Averaged
gamma-BHC (Lindane)	104645.28	105301.12	100	0.63	20		Averaged
beta-BHC	45265.27	40857.16	100	-9.74	20		Averaged
Methoxychlor	24510.02	22376.43	1000	-8.7	20		Averaged
delta-BHC	103173.31	101229.87	100	-1.88	20		Averaged
Heptachlor	80804.92	76578.18	100	-5.23	20		Averaged
Aldrin	99302.02	91710.76	100	-7.64	20		Averaged
Heptachlor epoxide	86272.6	79019.64	100	-8.41	20		Averaged
Endosulfan I	77993.44	73073.79	100	-6.31	20		Averaged
4,4'-DDE	78838.45	74169.04	200	-5.92	20		Averaged
Dieldrin	80430.74	76743.6	200	-4.58	20		Averaged
Endrin	64763.77	63879.71	200	-1.37	20		Averaged
4,4'-DDD	60725.84	56956.83	200	-6.21	20		Averaged
Endosulfan II	68635.58	64929.7	200	-5.4	20		Averaged
Endrin aldehyde	56609.44	52652.93	200	-6.99	20		Averaged
4,4'-DDT	56837.47	54829.66	200	-3.53	20		Averaged
Endosulfan sulfate	58612.7	55049.57	200	-6.08	20		Averaged
Endrin ketone	70561.74	64775.68	200	-8.2	20		Averaged
4cmx(Surr)	80683.71	75686.16	200	-6.19	20		Averaged
Decachlorobiphenyl(Surr)	47973.24	43792.88	200	-8.71	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 19:46

Data File: /chem/ecd3a.i/083011P.B/019F1901.D

Init. Cal. Date(s): 30-AUG-11 16:39 - 30-AUG-11 17:41

Lab Sample ID WPE110812-10AB

Method: /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m

Column ID: CLP-1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
alpha-BHC	118670.15	134992.28	100	13.75	20		Averaged
gamma-BHC (Lindane)	107875.23	122454.94	100	13.52	20		Averaged
beta-BHC	49652.95	49087.92	100	-1.14	20		Averaged
Methoxychlor	29436.63	29267.47	1000	-0.57	20		Averaged
delta-BHC	98363.62	109799.79	100	11.63	20		Averaged
Heptachlor	96346.25	108264.71	100	12.37	20		Averaged
Aldrin	115966.73	122427.2	100	5.57	20		Averaged
Heptachlor epoxide	99984.76	103901.12	100	3.92	20		Averaged
Endosulfan I	88068.42	94662.69	100	7.49	20		Averaged
4,4'-DDE	95123.35	104577.47	200	9.94	20		Averaged
Dieldrin	99146.45	107352.64	200	8.28	20		Averaged
Endrin	81791.49	95101.1	200	16.27	20		Averaged
4,4'-DDD	70423.79	77230.87	200	9.67	20		Averaged
Endosulfan II	71920.74	78009.65	200	8.47	20		Averaged
Endrin aldehyde	63333.46	65991.98	200	4.2	20		Averaged
4,4'-DDT	65418.65	72200.83	200	10.37	20		Averaged
Endosulfan sulfate	68222.71	73778.48	200	8.14	20		Averaged
Endrin ketone	70074.14	74026.22	200	5.64	20		Averaged
4cmx(Surr)	100121.53	104170.2	200	4.04	20		Averaged
Decachlorobiphenyl(Surr)	61295.93	62689.12	200	2.27	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD3A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 19:46

Data File: /chem/ecd3a.i/083011P.B/019B1901.D

Init. Cal. Date(s): 30-AUG-11 16:39 - 30-AUG-11 17:41

Lab Sample ID WPE110812-10AB

Method: /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m

Column ID: CLP-2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
alpha-BHC	117893.51	111275.88	100	-5.61	20		Averaged
gamma-BHC (Lindane)	104645.28	100008.18	100	-4.43	20		Averaged
beta-BHC	45265.27	38433.45	100	-15.09	20		Averaged
Methoxychlor	24510.02	22103.67	1000	-9.82	20		Averaged
delta-BHC	103173.31	96692.43	100	-6.28	20		Averaged
Heptachlor	80804.92	77540.37	100	-4.04	20		Averaged
Aldrin	99302.02	87198.22	100	-12.19	20		Averaged
Heptachlor epoxide	86272.6	75961.9	100	-11.95	20		Averaged
Endosulfan I	77993.44	70092.46	100	-10.13	20		Averaged
4,4'-DDE	78838.45	71845.94	200	-8.87	20		Averaged
Dieldrin	80430.74	74192.83	200	-7.76	20		Averaged
Endrin	64763.77	63392.94	200	-2.12	20		Averaged
4,4'-DDD	60725.84	55582.48	200	-8.47	20		Averaged
Endosulfan II	68635.58	62353.54	200	-9.15	20		Averaged
Endrin aldehyde	56609.44	50512.38	200	-10.77	20		Averaged
4,4'-DDT	56837.47	53941.79	200	-5.09	20		Averaged
Endosulfan sulfate	58612.7	54101.81	200	-7.7	20		Averaged
Endrin ketone	70561.74	63271.67	200	-10.33	20		Averaged
4cmx(Surr)	80683.71	72119.15	200	-10.61	20		Averaged
Decachlorobiphenyl(Surr)	47973.24	41785.06	200	-12.9	20		Averaged

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/002F0201.D
Lab Smp Id: WPE110628-99DG Client Smp ID: PEM01
Inj Date : 30-AUG-2011 15:22
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110628-99DG
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
19 4,4'-DDE					CAS #: 72-55-9		
4.474	4.473	0.001	42806	0.45001	0.450	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.964	4.964	0.000	8550763	104.543	104	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.036	5.035	0.001	65642	0.93210	0.932	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.594	5.592	0.002	111448	1.75970	1.76	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.307	5.308	-0.001	12453004	190.359	190	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.322	6.323	-0.001	110363	1.57495	1.57	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.452	2.452	0.000	18313663	182.914	183	80.00- 120.00	100.00(R)
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.422	7.423	-0.001	11067075	180.552	180	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/002F0201.D

Page 1

Date : 30-AUG-2011 15:22

Client ID: PEM01

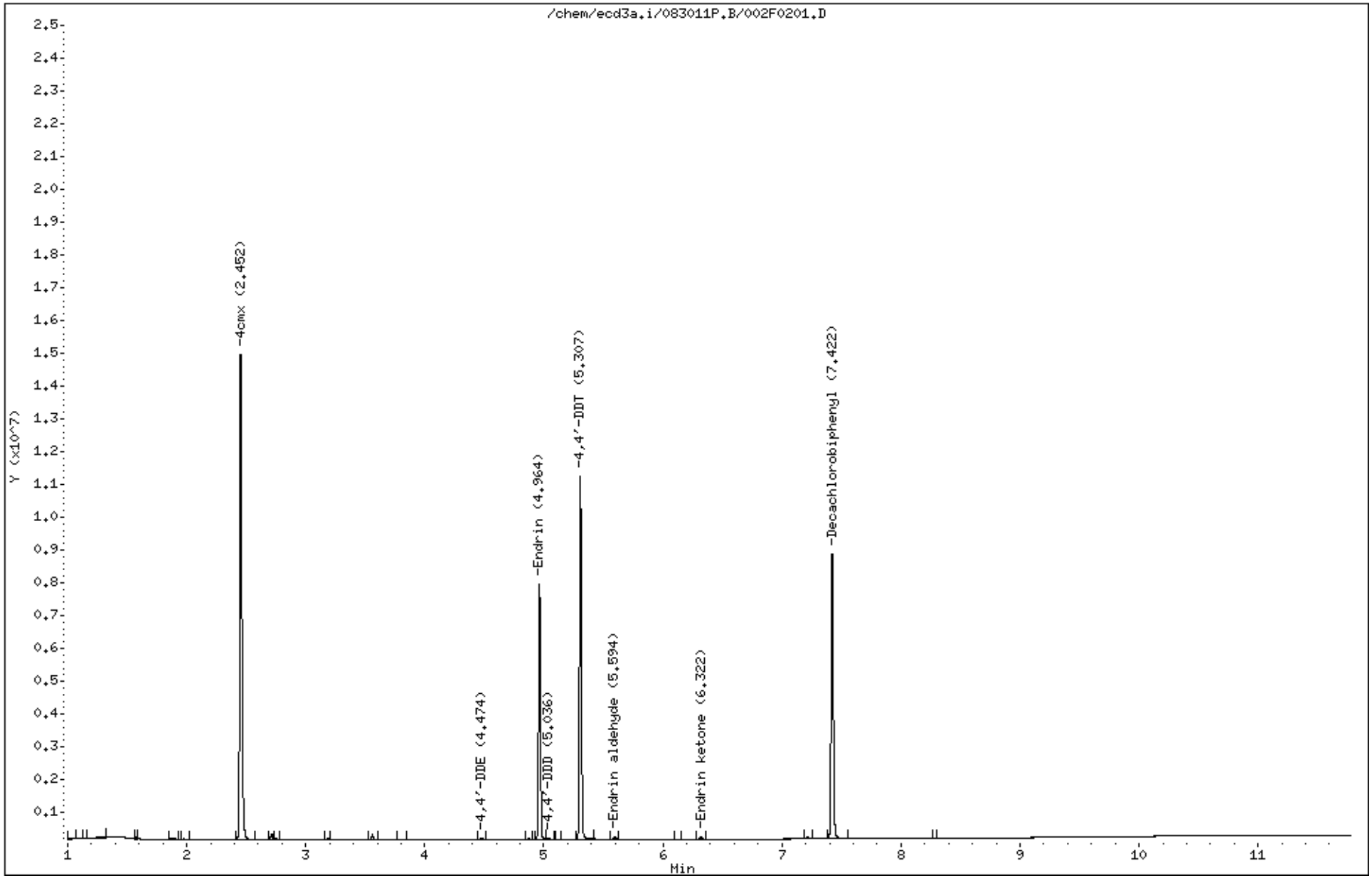
Instrument: ecd3a.i

Sample Info: IWPE110628-99DG

Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/002B0201.D
Lab Smp Id: WPE110628-99DG Client Smp ID: PEM01
Inj Date : 30-AUG-2011 15:22
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110628-99DG
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 2 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 3.50 Sample Matrix: None

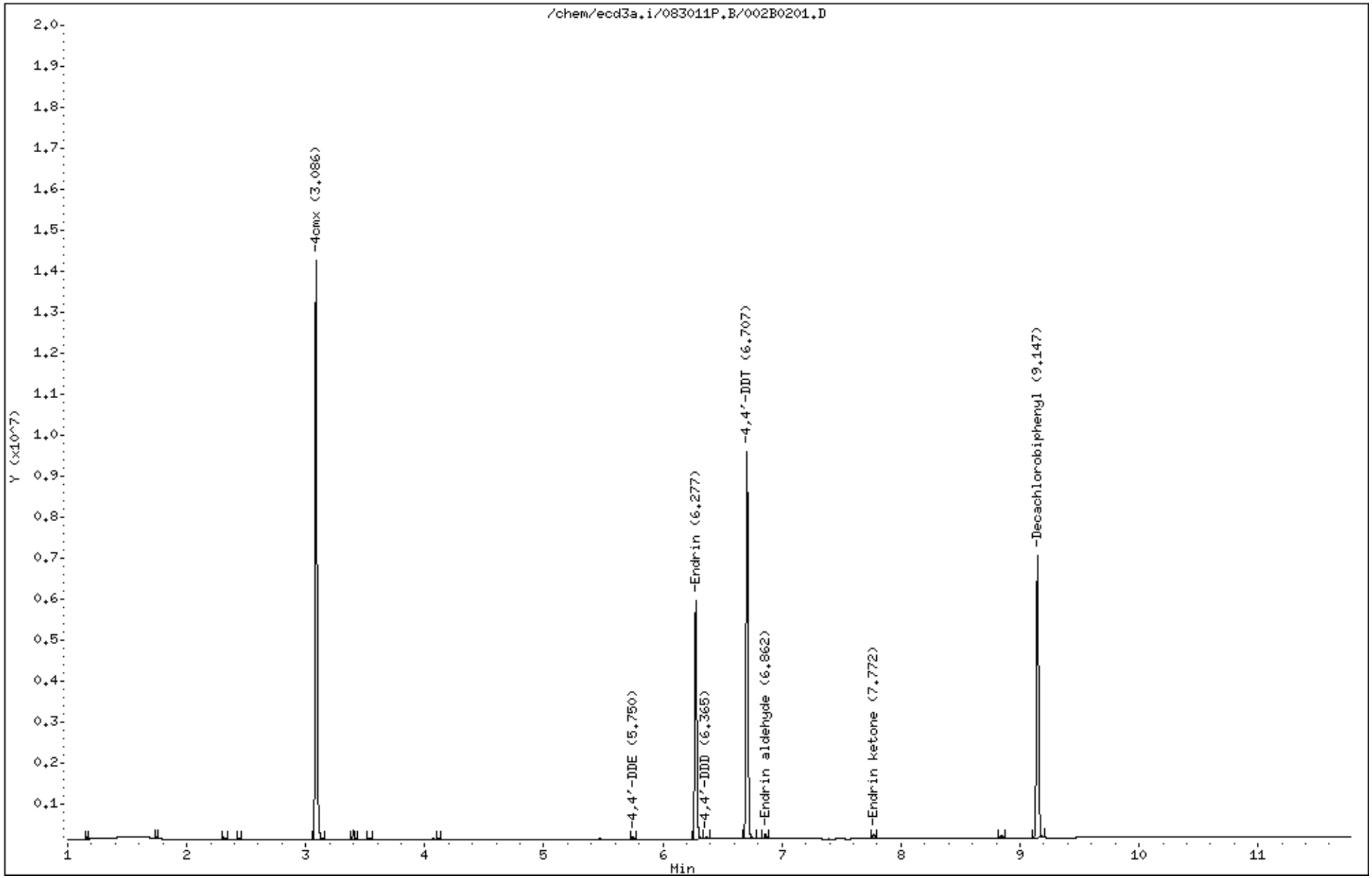
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
	19 4,4'-DDE					CAS #: 72-55-9		
	5.750	5.747	0.003	71430	0.90603	0.906	80.00- 120.00	100.00
	22 Endrin					CAS #: 72-20-8		
	6.277	6.276	0.001	6959363	107.458	107	80.00- 120.00	100.00
	25 4,4'-DDD					CAS #: 72-54-8		
	6.365	6.363	0.002	70731	1.16476	1.16	80.00- 120.00	100.00
	27 Endrin aldehyde					CAS #: 7421-93-4		
	6.862	6.862	0.000	120046	2.12060	2.12	80.00- 120.00	100.00
	26 4,4'-DDT					CAS #: 50-29-3		
	6.707	6.707	0.000	10887200	191.550	192	80.00- 120.00	100.00
	31 Endrin ketone					CAS #: 53494-70-5		
	7.772	7.772	0.000	132014	1.87090	1.87	80.00- 120.00	100.00
$	1 4cmx					CAS #: 877-09-8		
	3.086	3.086	0.000	14934814	185.103	185	80.00- 120.00	100.00(R)
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	9.147	9.147	0.000	8573380	178.712	179	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/002B0201.D
Date : 30-AUG-2011 15:22
Client ID: PEM01
Sample Info: IWPE110628-99DG

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/004F0401.D
Lab Smp Id: WPE110630-52TX Client Smp ID: TOXAPH01
Inj Date : 30-AUG-2011 15:53
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110630-52TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
5.169	5.169	0.000	7572421	2000.00	2120	80.00- 120.00	100.00(M)
5.289	5.289	0.000	3912110	2000.00	1840	31.66- 71.66	51.66
5.506	5.506	0.000	4645696	2000.00	1740	41.35- 81.35	61.35
5.834	5.834	0.000	3237775	2000.00	1780	22.76- 62.76	42.76
5.932	5.932	0.000	4842116	2000.00	1700	43.94- 83.94	63.94
Average of Peak Amounts =					1.84e+03		
$ 1 4cmx					CAS #: 877-09-8		
2.452	2.452	0.000	20260969	200.000	159	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.423	7.423	0.000	12224496	200.000	154	80.00- 120.00	100.00

QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/ecd3a.i/083011P.B/004F0401.D

Date : 30-AUG-2011 15:53

Client ID: TOXAPH01

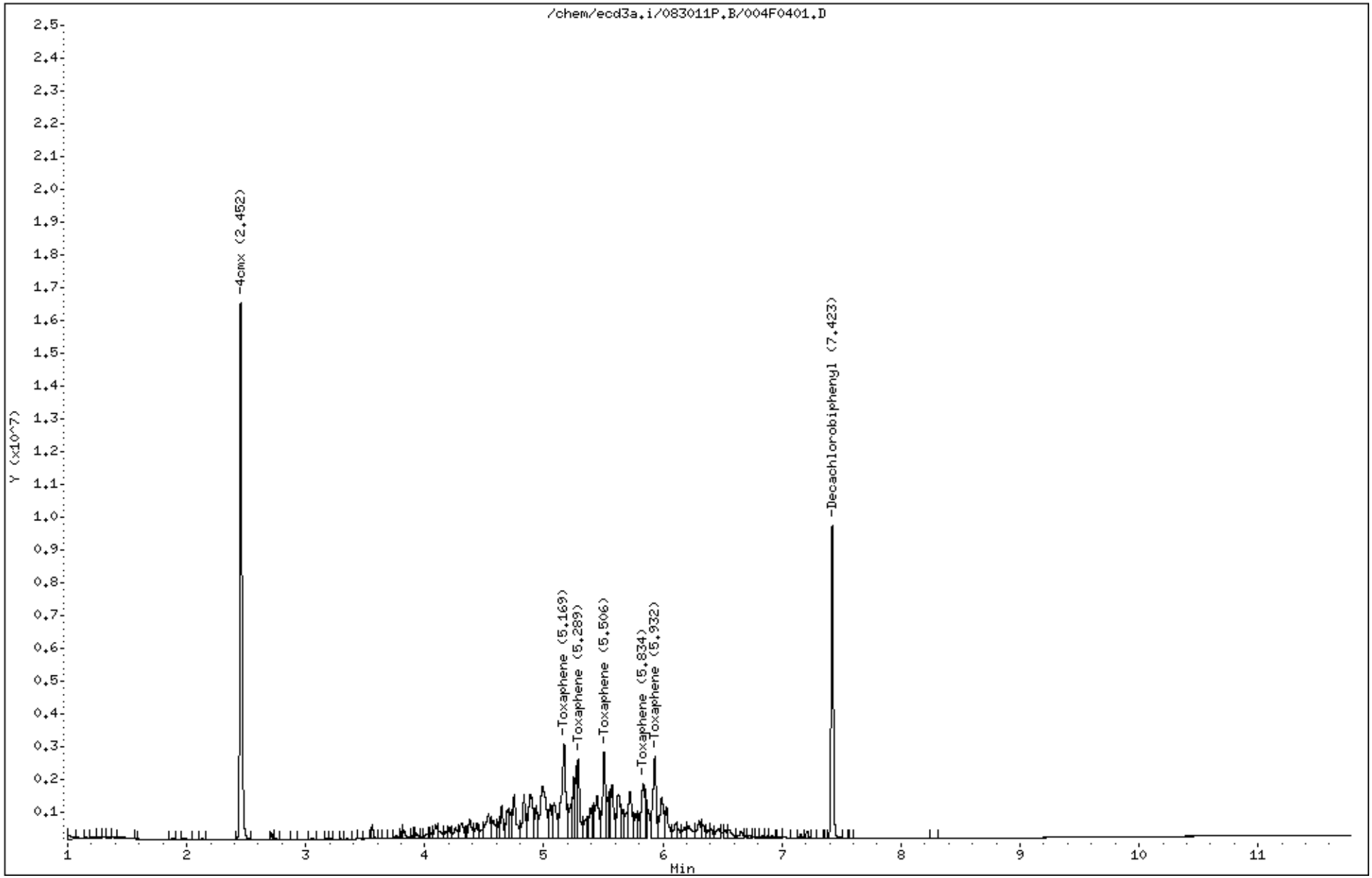
Sample Info: IWPE110630-52TX

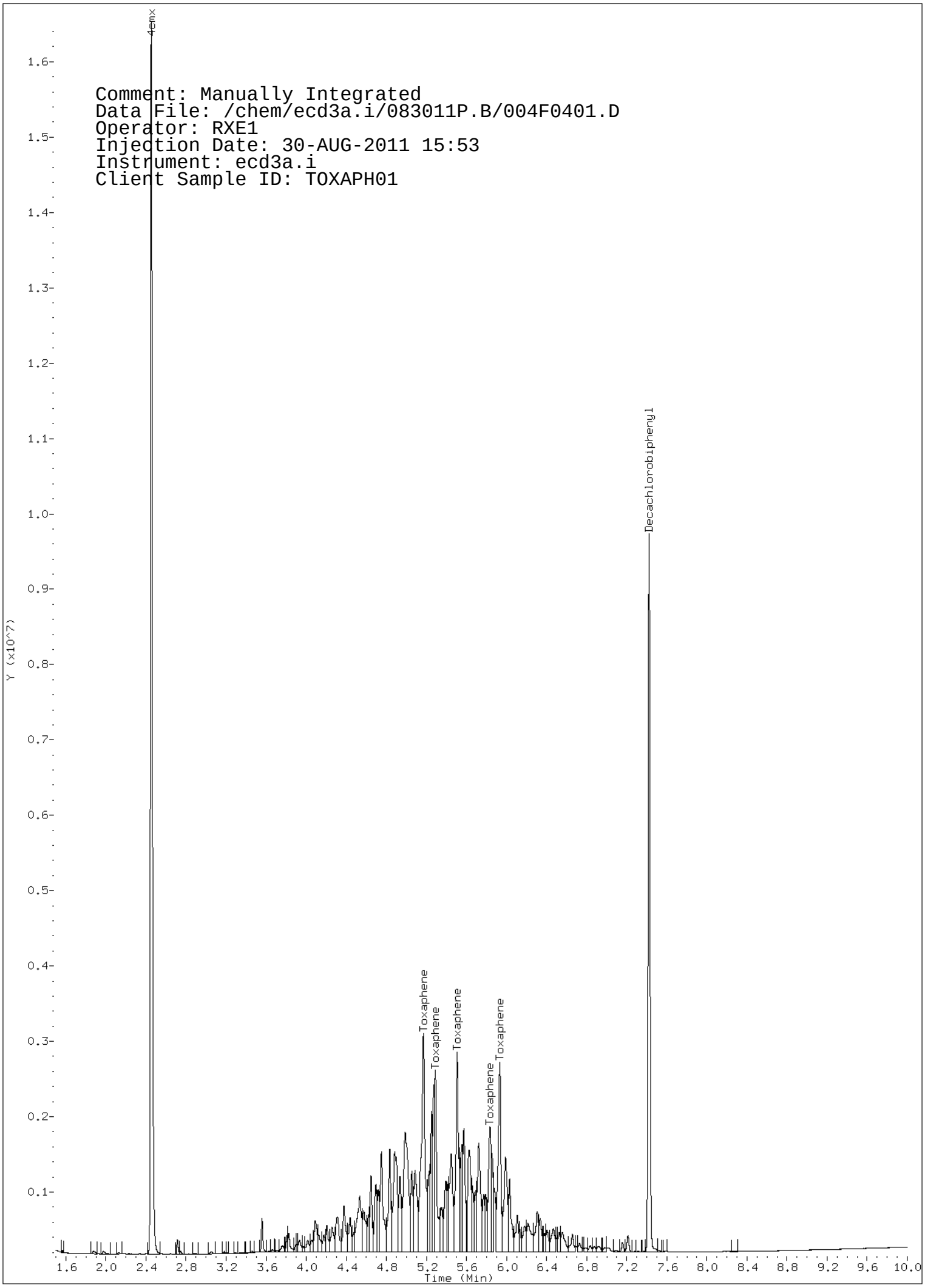
Column phase: CLP-1

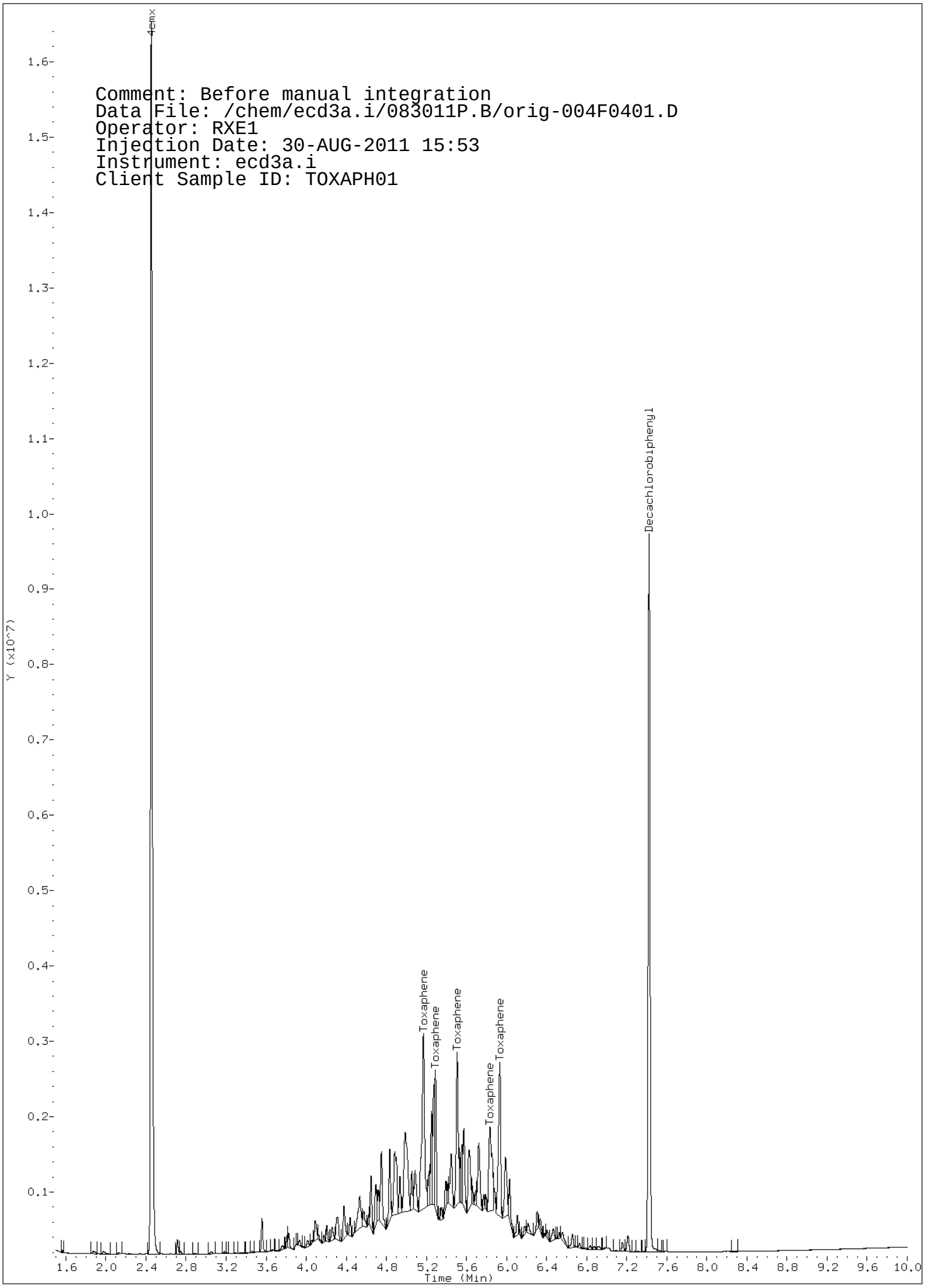
Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/083011P.B/004F0401.D
Operator: RXE1
Injection Date: 30-AUG-2011 15:53
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/083011P.B/orig-004F0401.D
Operator: RXE1
Injection Date: 30-AUG-2011 15:53
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Decachlorobiphenyl
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/004B0401.D
Lab Smp Id: WPE110630-52TX Client Smp ID: TOXAPH01
Inj Date : 30-AUG-2011 15:53
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110630-52TX
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: tox.sub
Target Version: 3.50 Sample Matrix: None

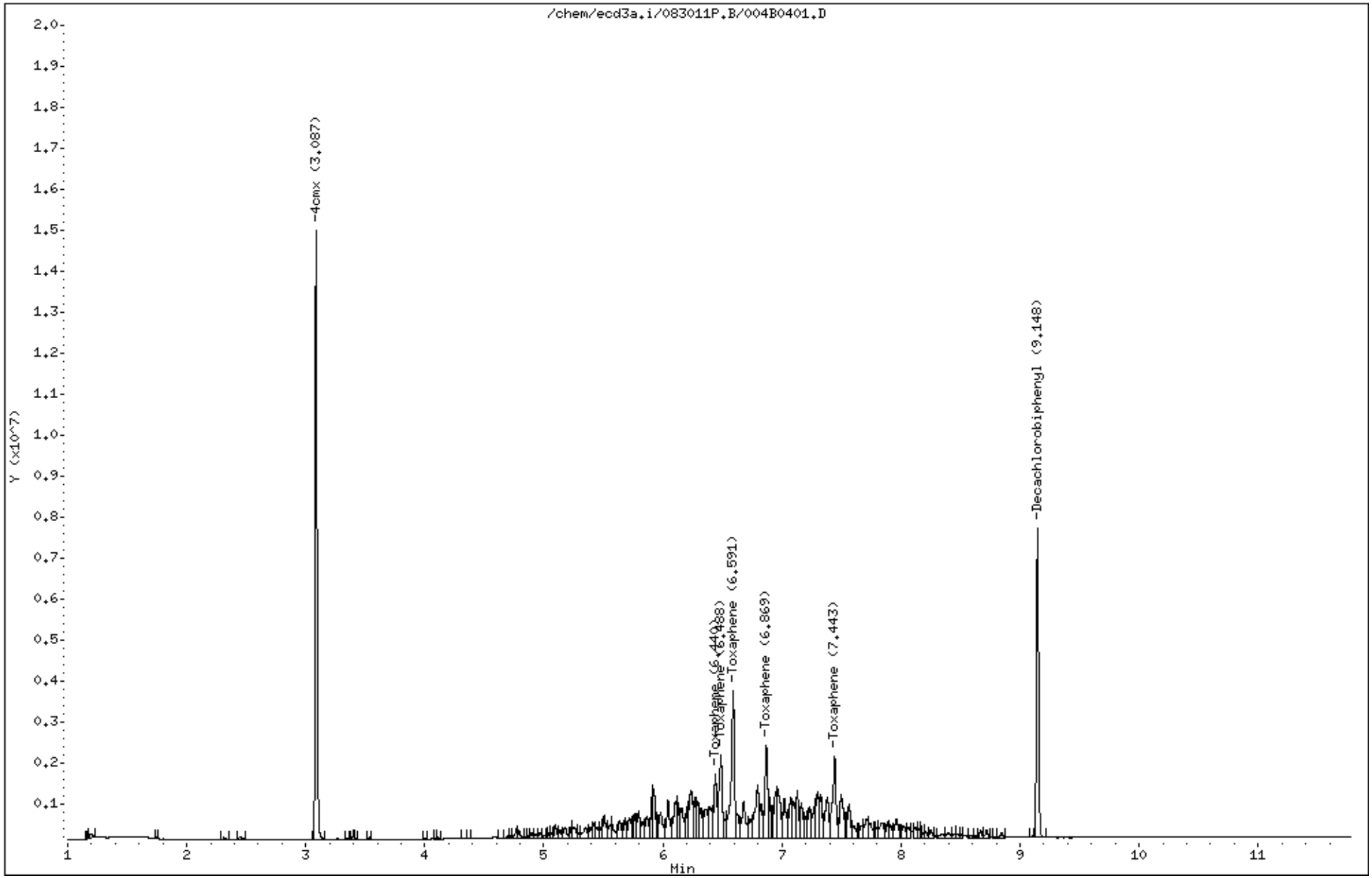
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
23 Toxaphene					CAS #: 8001-35-2		
6.440	6.440	0.000	2449181	2000.00	1720	80.00- 120.00	100.00(M)
6.488	6.488	0.000	4003922	2000.00	1730	143.48- 183.48	163.48
6.591	6.591	0.000	6949775	2000.00	1750	263.76- 303.76	283.76
6.869	6.869	0.000	3743089	2000.00	1780	132.83- 172.83	152.83
7.443	7.443	0.000	4100476	2000.00	1710	147.42- 187.42	167.42
Average of Peak Amounts =			1.74e+03				
$ 1 4cmx					CAS #: 877-09-8		
3.087	3.086	0.001	15936488	200.000	184	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.148	9.147	0.001	9255671	200.000	176	80.00- 120.00	100.00

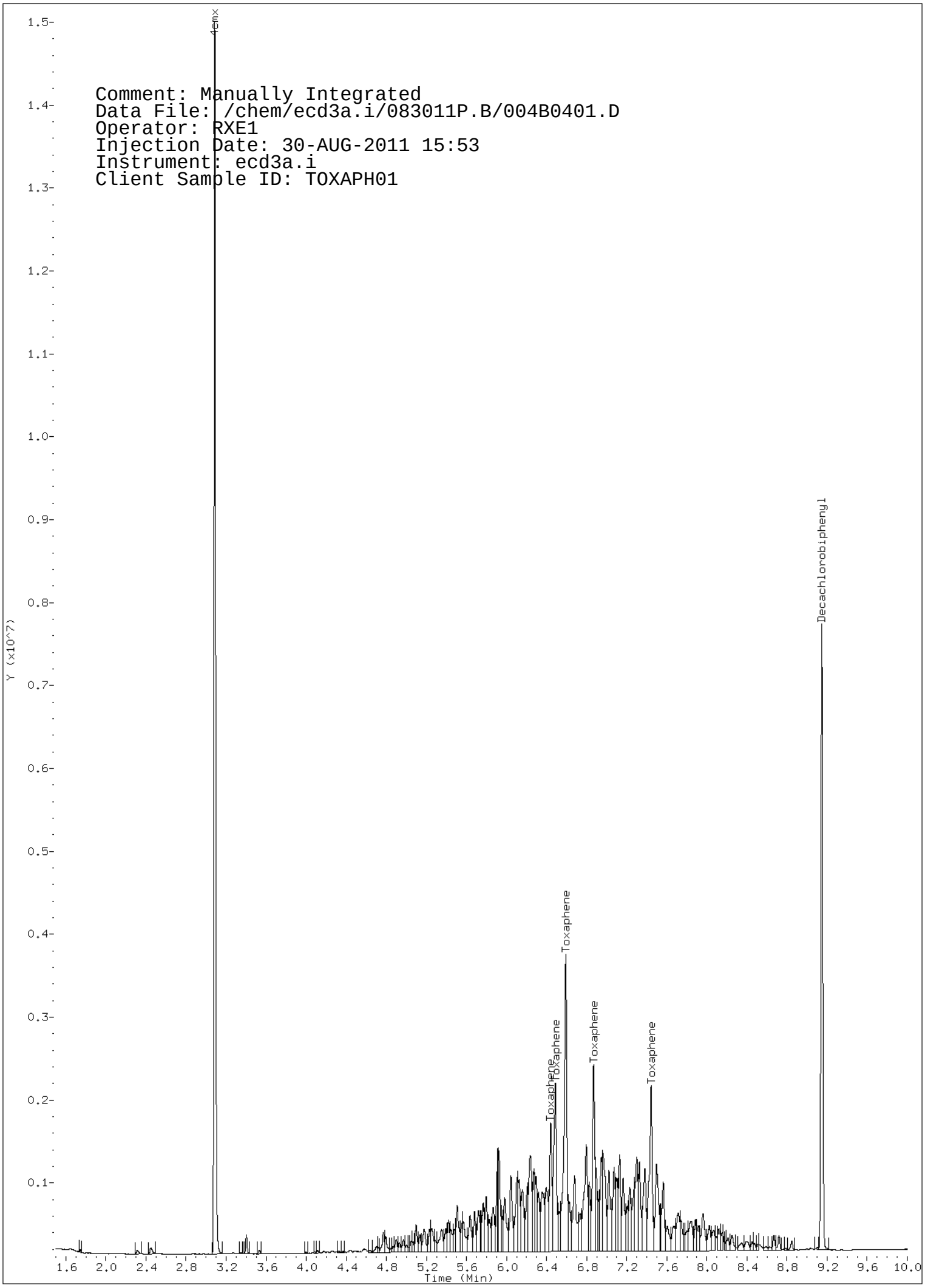
QC Flag Legend

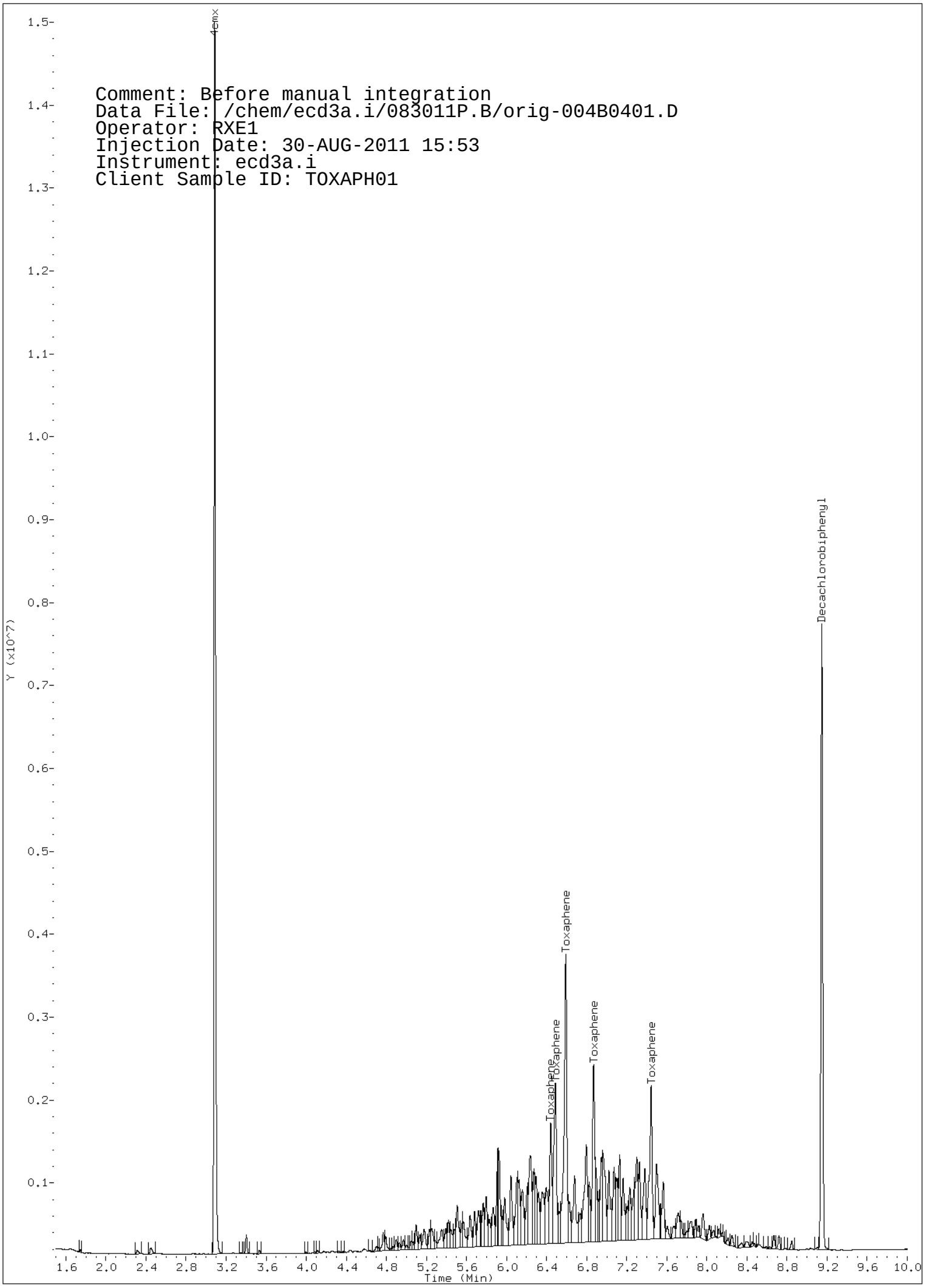
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/083011P.B/004B0401.D
Date : 30-AUG-2011 15:53
Client ID: TOXAPH01
Sample Info: IWPE110630-52TX

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/083011P.B/004B0401.D
Operator: RXE1
Injection Date: 30-AUG-2011 15:53
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/083011P.B/orig-004B0401.D
Operator: RXE1
Injection Date: 30-AUG-2011 15:53
Instrument: ecd3a.i
Client Sample ID: TOXAPH01
4emx
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Toxaphene
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/005F0501.D
Lab Smp Id: WPE110724-00CL Client Smp ID: CHLOR01
Inj Date : 30-AUG-2011 16:08
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110724-00CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

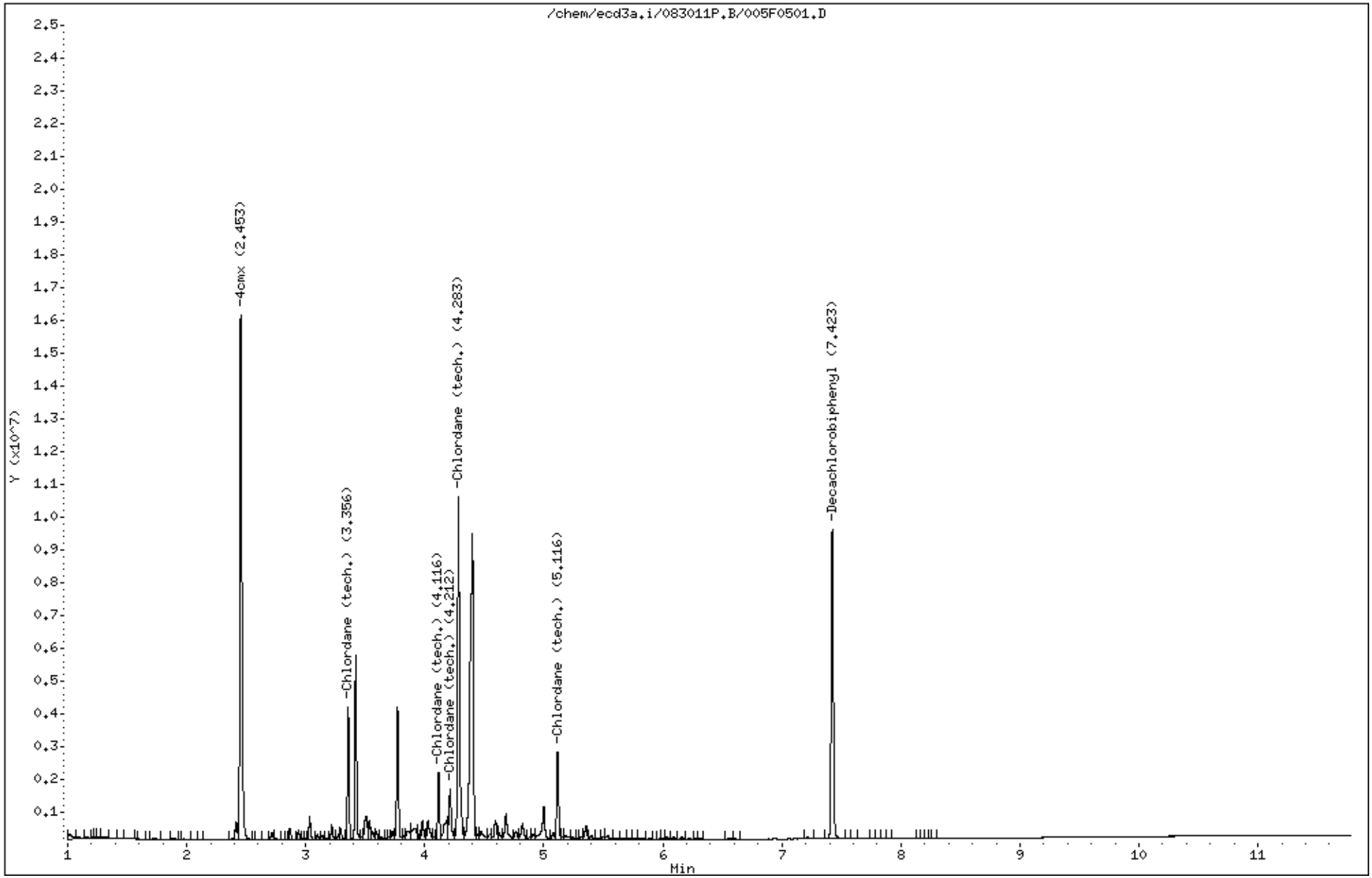
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
3.356	3.356	0.000	3833159	1000.00	847	80.00- 120.00	100.00(M)
4.116	4.116	0.000	2141635	1000.00	852	35.87- 75.87	55.87
4.212	4.212	0.000	1985601	1000.00	867	31.80- 71.80	51.80
4.283	4.283	0.000	12596864	1000.00	840	308.63- 348.63	328.63
5.116	5.116	0.000	3081080	1000.00	919	60.38- 100.38	80.38
Average of Peak Amounts =					865		
$ 1 4cmx					CAS #: 877-09-8		
2.453	2.452	0.001	19653573	200.000	154	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.423	7.423	0.000	11924674	200.000	150	80.00- 120.00	100.00

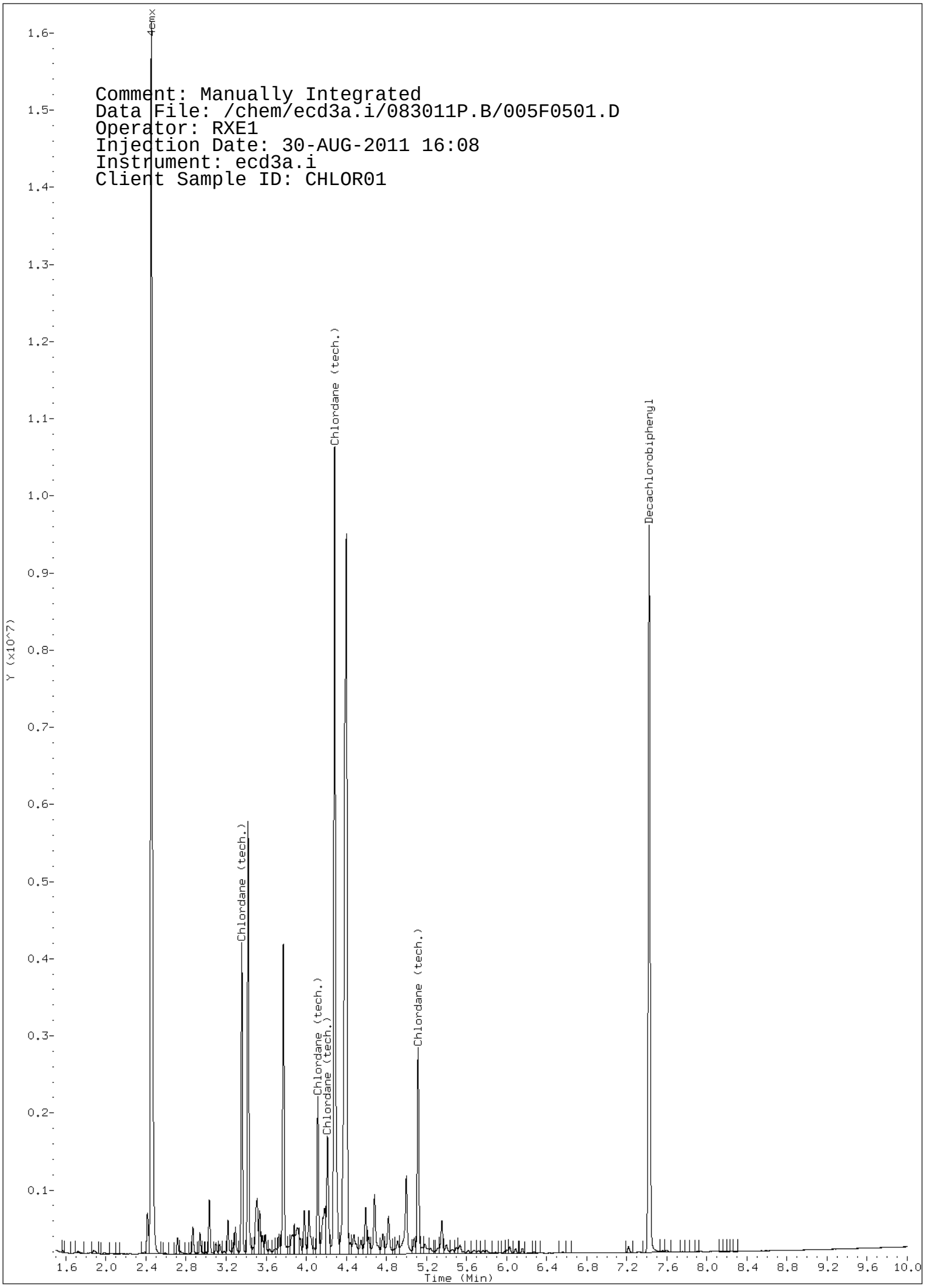
QC Flag Legend

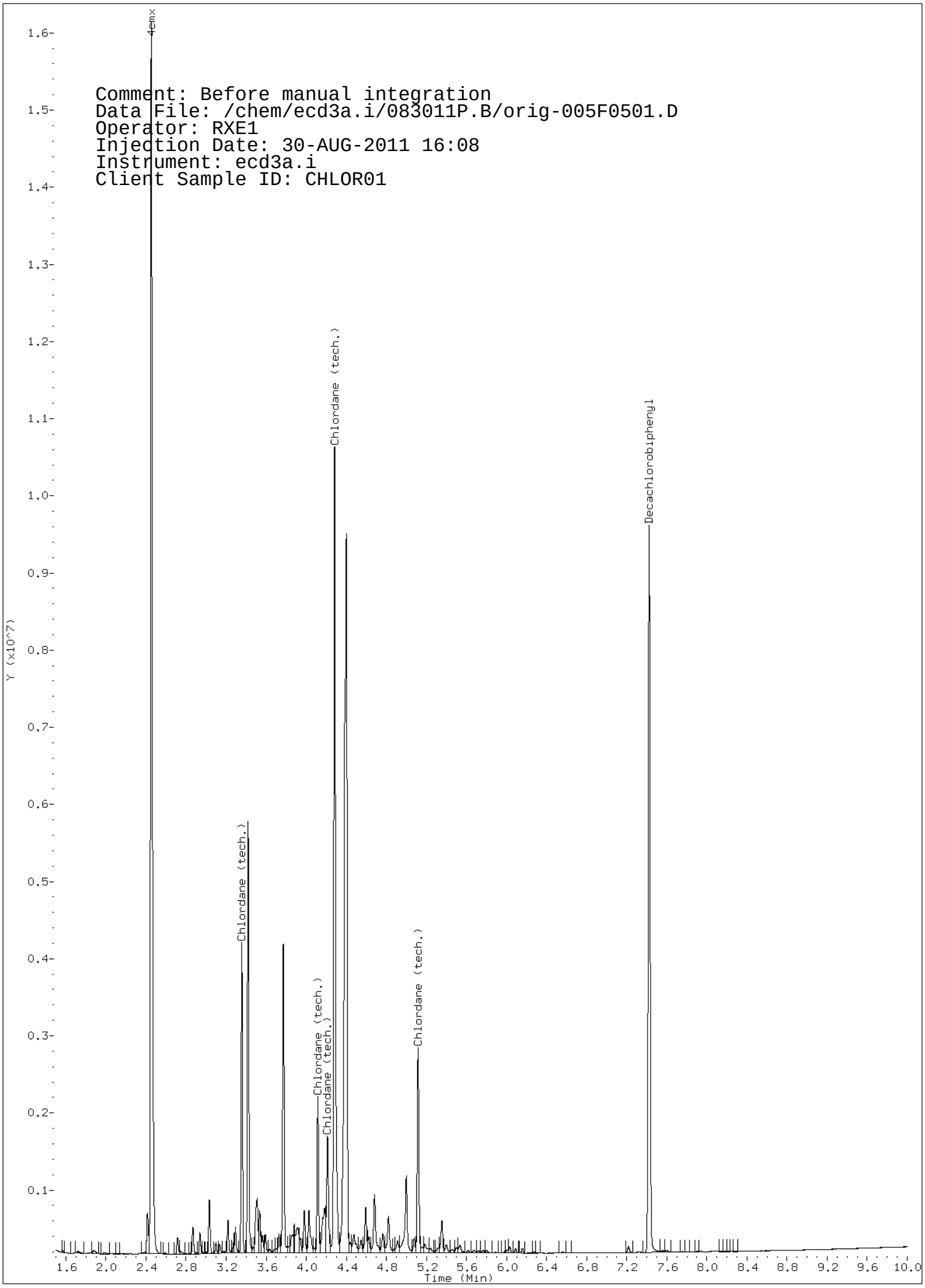
M - Compound response manually integrated.

Data File: /chem/ecd3a.i/083011P.B/005F0501.D
Date : 30-AUG-2011 16:08
Client ID: CHLOR01
Sample Info: IWPE110724-00CL

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd3a.i/083011P.B/005F0501.D
Operator: RXE1
Injection Date: 30-AUG-2011 16:08
Instrument: ecd3a.i
Client Sample ID: CHLOR01
4emx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd3a.i/083011P.B/orig-005F0501.D
Operator: RXE1
Injection Date: 30-AUG-2011 16:08
Instrument: ecd3a.i
Client Sample ID: CHLOR01
4emx
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Chlordane (tech.)
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

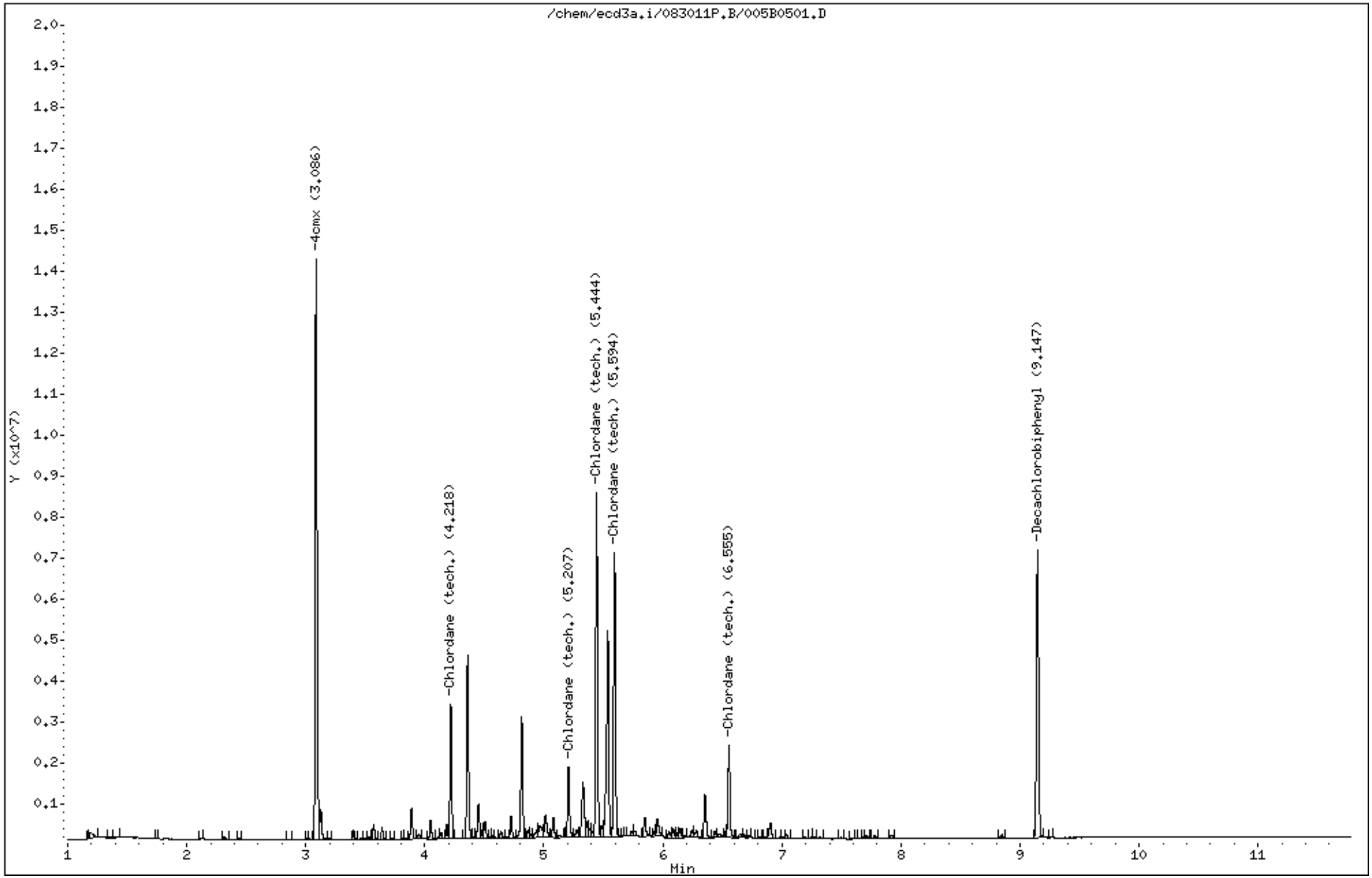
CLP-2

Data file : /chem/ecd3a.i/083011P.B/005B0501.D
Lab Smp Id: WPE110724-00CL Client Smp ID: CHLOR01
Inj Date : 30-AUG-2011 16:08
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110724-00CL
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: chlor.sub
Target Version: 3.50 Sample Matrix: None

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
8 Chlordane (tech.)					CAS #: 12789-03-6		
4.218	4.218	0.000	3257737	1000.00	934	80.00- 120.00	100.00
5.207	5.207	0.000	1891996	1000.00	908	38.08- 78.08	58.08
5.444	5.444	0.000	9131193	1000.00	945	260.29- 300.29	280.29
5.594	5.594	0.000	7705723	1000.00	943	216.54- 256.54	236.54
6.555	6.555	0.000	2562613	1000.00	1000	58.66- 98.66	78.66
Average of Peak Amounts =					946		
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	15113341	200.000	174	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.147	9.147	0.000	8820279	200.000	168	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/005B0501.D
Date : 30-AUG-2011 16:08
Client ID: CHLOR01
Sample Info: IWPE110724-00CL

Instrument: ecd3a.i
Operator: RXE1
Column phase: CLP-2
Column diameter: 0.25



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/012F1201.D
Lab Smp Id: WPE110711-10AB Client Smp ID: INDAB01
Inj Date : 30-AUG-2011 17:57
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110711-10AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

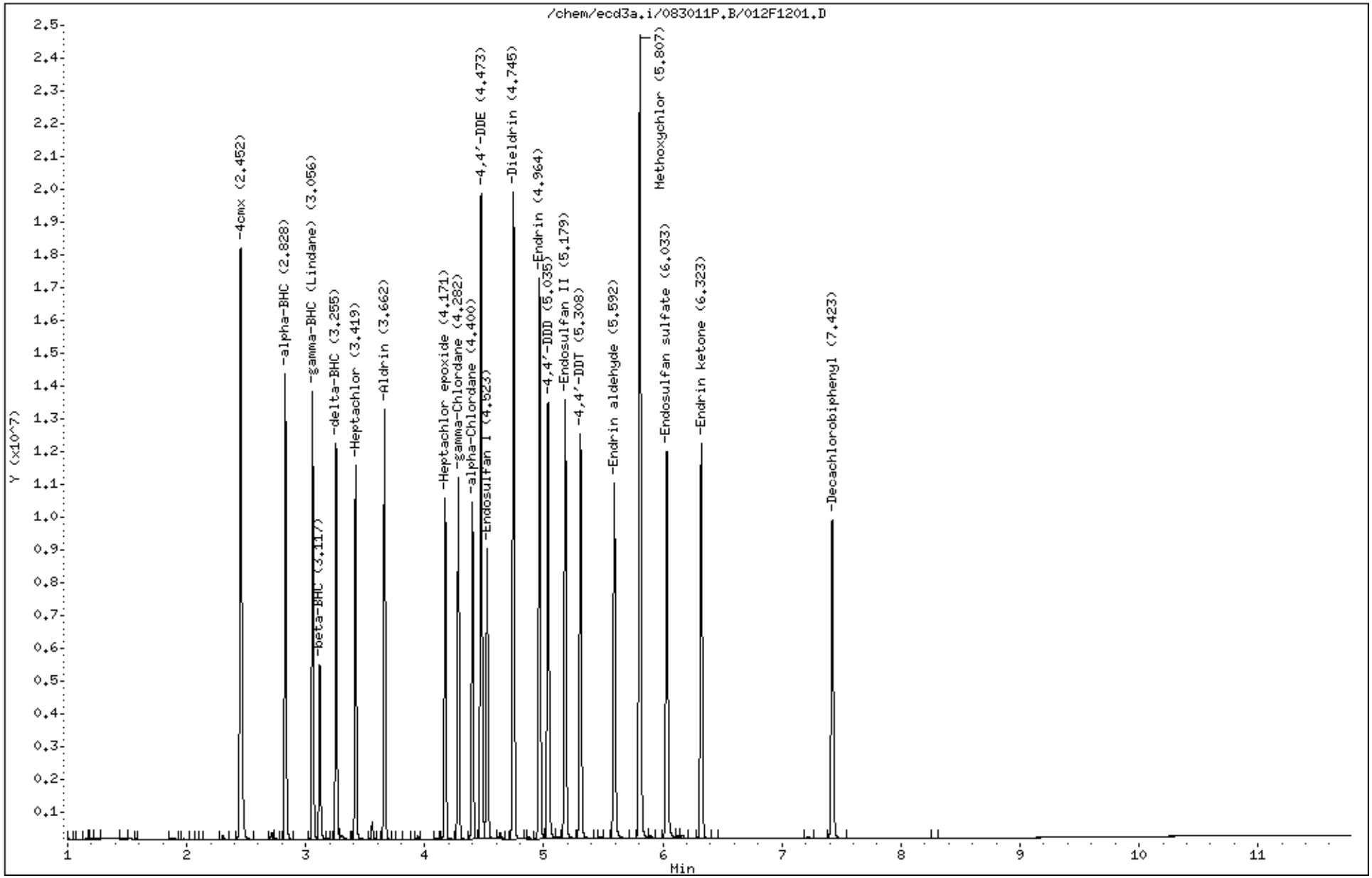
			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.828	2.828	0.000	13490599	100.000	114	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.056	3.056	0.000	12384932	100.000	115	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.117	3.117	0.000	4997732	100.000	101	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.419	3.419	0.000	10512052	100.000	109	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.255	3.255	0.000	10996608	100.000	112	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	12447363	100.000	107	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	10464623	100.000	105	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.282	4.282	0.000	11169357	100.000	112	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.400	4.400	0.000	10533361	100.000	108	80.00- 120.00	100.00

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
16 Endosulfan I						CAS #: 959-98-8		
4.523	4.523	0.000	9475224	100.000	108	80.00- 120.00		100.00
19 4,4'-DDE						CAS #: 72-55-9		
4.473	4.473	0.000	20814379	200.000	219	80.00- 120.00		100.00
20 Dieldrin						CAS #: 60-57-1		
4.745	4.745	0.000	21515295	200.000	217	80.00- 120.00		100.00
22 Endrin						CAS #: 72-20-8		
4.964	4.964	0.000	18577291	200.000	227	80.00- 120.00		100.00
25 4,4'-DDD						CAS #: 72-54-8		
5.035	5.035	0.000	15167118	200.000	215	80.00- 120.00		100.00
24 Endosulfan II						CAS #: 33213-65-9		
5.179	5.179	0.000	15321322	200.000	213	80.00- 120.00		100.00
27 Endrin aldehyde						CAS #: 7421-93-4		
5.592	5.592	0.000	13179134	200.000	208	80.00- 120.00		100.00
26 4,4'-DDT						CAS #: 50-29-3		
5.308	5.308	0.000	14251678	200.000	218	80.00- 120.00		100.00
29 Endosulfan sulfate						CAS #: 1031-07-8		
6.033	6.033	0.000	14550066	200.000	213	80.00- 120.00		100.00
28 Methoxychlor						CAS #: 72-43-5		
5.807	5.807	0.000	28736559	1000.00	976	80.00- 120.00		100.00
31 Endrin ketone						CAS #: 53494-70-5		
6.323	6.323	0.000	14309411	200.000	204	80.00- 120.00		100.00
$ 1 4cmx						CAS #: 877-09-8		
2.452	2.452	0.000	21221666	200.000	212	80.00- 120.00		100.00
$ 32 Decachlorobiphenyl						CAS #: 2051-24-3		
7.423	7.423	0.000	12613003	200.000	206	80.00- 120.00		100.00

Data File: /chem/ecd3a.i/083011P.B/012F1201.D
Date : 30-AUG-2011 17:57
Client ID: INDAB01
Sample Info: IWPE110711-10AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-1



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/012B1201.D
Lab Smp Id: WPE110711-10AB Client Smp ID: INDAB01
Inj Date : 30-AUG-2011 17:57
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110711-10AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

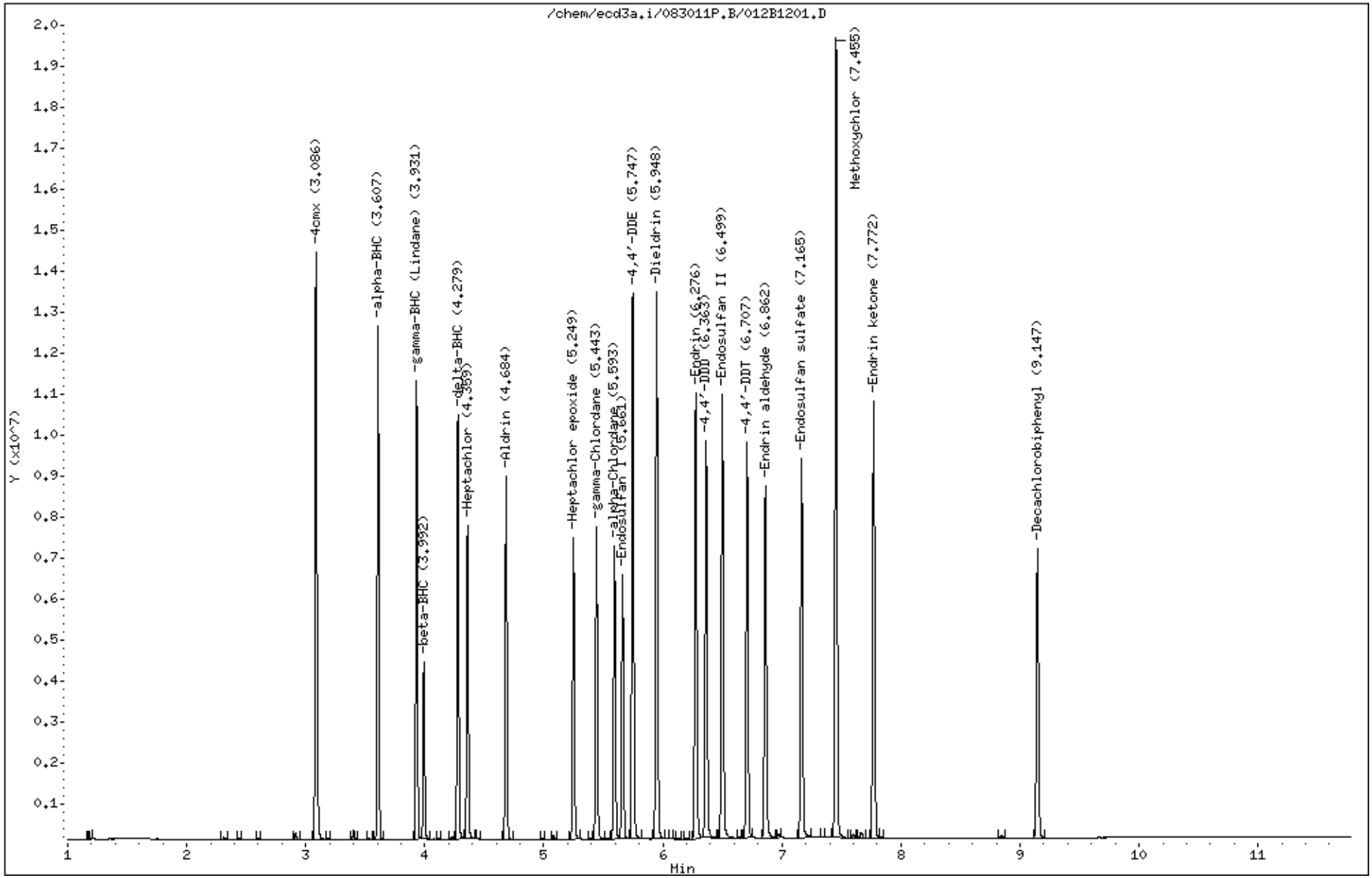
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.607	3.607	0.000	11739864	100.000	99.6	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.931	3.931	0.000	10530112	100.000	101	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.992	3.992	0.000	4085716	100.000	90.3	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.359	4.359	0.000	7657818	100.000	94.8	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.279	4.279	0.000	10122987	100.000	98.1	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.684	4.684	0.000	9171076	100.000	92.4	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.249	5.249	0.000	7901964	100.000	91.6	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
5.443	5.443	0.000	8343029	100.000	96.9	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.593	5.593	0.000	7890161	100.000	93.7	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
16 Endosulfan I					CAS #: 959-98-8		
5.661	5.661	0.000	7307379	100.000	93.7	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.747	5.747	0.000	14833807	200.000	188	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.948	5.948	0.000	15348719	200.000	191	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	12775942	200.000	197	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.363	6.363	0.000	11391366	200.000	188	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	12985939	200.000	189	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.862	6.862	0.000	10530585	200.000	186	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	10965931	200.000	193	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.165	7.165	0.000	11009913	200.000	188	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
7.455	7.455	0.000	22376434	1000.00	913	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.772	7.772	0.000	12955135	200.000	184	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	15137231	200.000	188	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.147	9.147	0.000	8758575	200.000	182	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/012B1201.D
Date : 30-AUG-2011 17:57
Client ID: INDAB01
Sample Info: IWPE110711-10AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-2



GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/019F1901.D
Lab Smp Id: WPE110812-10AB Client Smp ID: INDAB02
Inj Date : 30-AUG-2011 19:46
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110812-10AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

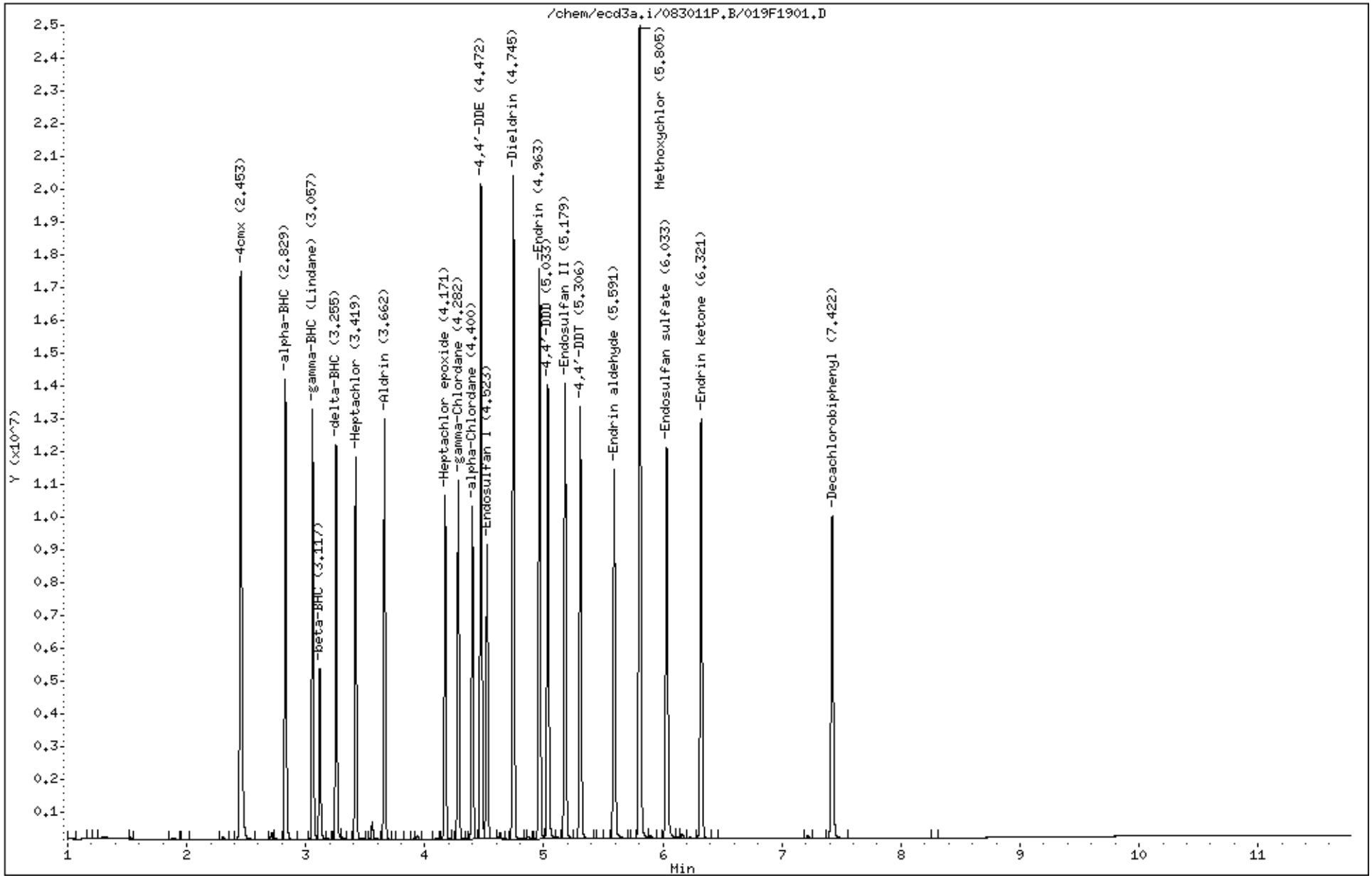
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
2.829	2.828	0.001	13499228	100.000	114	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.057	3.056	0.001	12245494	100.000	114	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.117	3.117	0.000	4908792	100.000	98.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.419	3.419	0.000	10826471	100.000	112	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.255	3.255	0.000	10979979	100.000	112	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	12242720	100.000	106	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	10390112	100.000	104	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
4.282	4.282	0.000	10990407	100.000	110	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
4.400	4.400	0.000	10338168	100.000	106	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
16 Endosulfan I					CAS #: 959-98-8		
4.523	4.523	0.000	9466269	100.000	107	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.472	4.473	-0.001	20915493	200.000	220	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.745	4.745	0.000	21470528	200.000	216	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.963	4.964	-0.001	19020219	200.000	232	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.033	5.035	-0.002	15446173	200.000	219	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.179	5.179	0.000	15601929	200.000	217	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.591	5.592	-0.001	13198396	200.000	208	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.306	5.308	-0.002	14440166	200.000	221	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.033	6.033	0.000	14755695	200.000	216	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
5.805	5.807	-0.002	29267471	1000.00	994	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.321	6.323	-0.002	14805243	200.000	211	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
2.453	2.452	0.001	20834039	200.000	208	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.422	7.423	-0.001	12537824	200.000	204	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/019F1901.D
Date : 30-AUG-2011 19:46
Client ID: INDAB02
Sample Info: IWPE110812-10AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-1



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/019B1901.D
Lab Smp Id: WPE110812-10AB Client Smp ID: INDAB02
Inj Date : 30-AUG-2011 19:46
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |WPE110812-10AB
Misc Info :
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 19 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: indab.sub
Target Version: 3.50 Sample Matrix: None

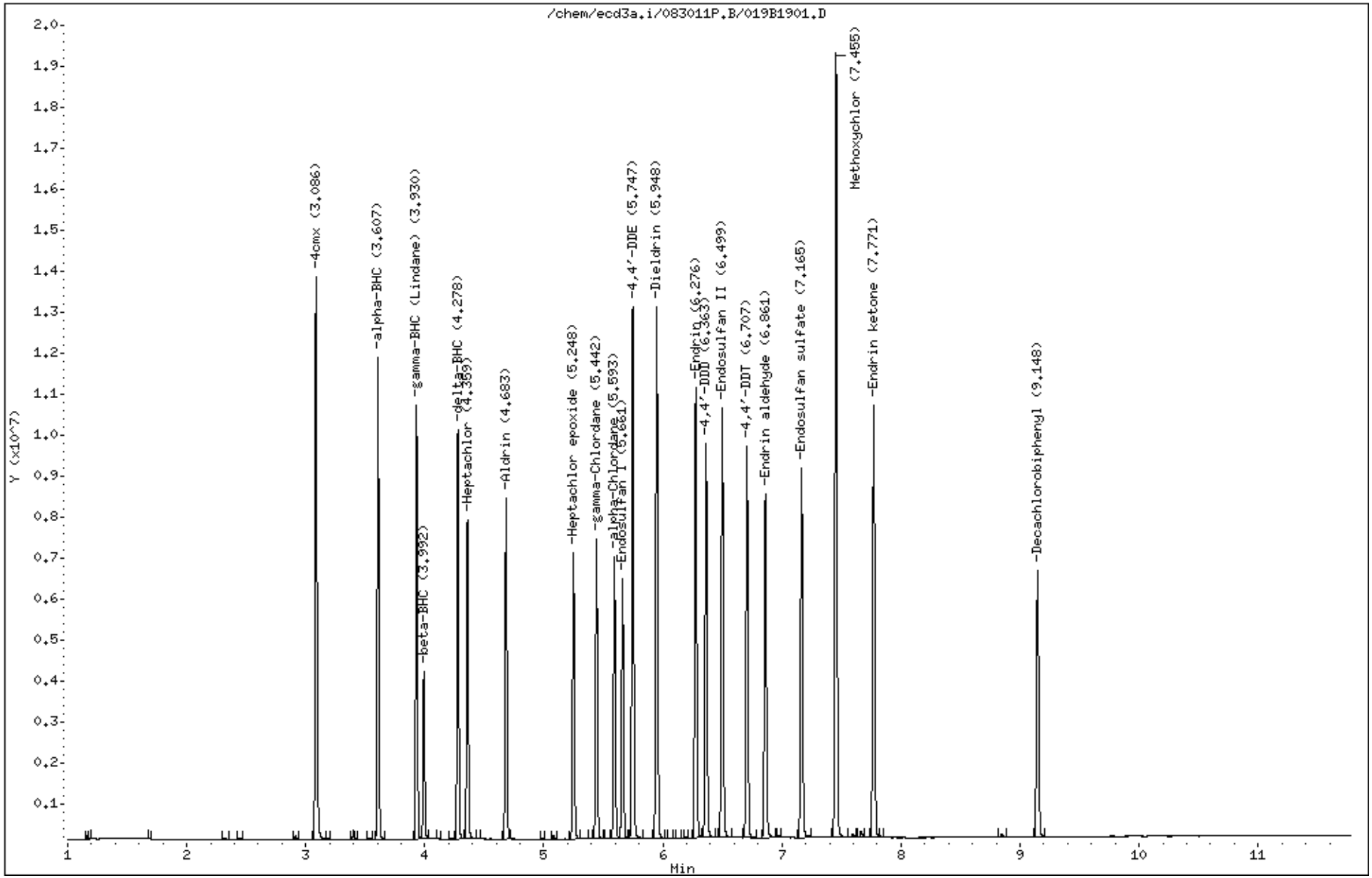
				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
5 alpha-BHC					CAS #: 319-84-6		
3.607	3.607	0.000	11127588	100.000	94.4	80.00- 120.00	100.00
7 gamma-BHC (Lindane)					CAS #: 58-89-9		
3.930	3.931	-0.001	10000818	100.000	95.6	80.00- 120.00	100.00
12 beta-BHC					CAS #: 319-85-7		
3.992	3.992	0.000	3843345	100.000	84.9	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.359	4.359	0.000	7754037	100.000	96.0	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.278	4.279	-0.001	9669243	100.000	93.7	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.683	4.684	-0.001	8719822	100.000	87.8	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.248	5.249	-0.001	7596190	100.000	88.0	80.00- 120.00	100.00
17 gamma-Chlordane					CAS #: 5103-74-2		
5.442	5.443	-0.001	7898588	100.000	91.8	80.00- 120.00	100.00
18 alpha-Chlordane					CAS #: 5103-71-9		
5.593	5.593	0.000	7511926	100.000	89.2	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
16 Endosulfan I					CAS #: 959-98-8		
5.661	5.661	0.000	7009246	100.000	89.9	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.747	5.747	0.000	14369188	200.000	182	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.948	5.948	0.000	14838565	200.000	184	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	12678588	200.000	196	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.363	6.363	0.000	11116496	200.000	183	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	12470708	200.000	182	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.861	6.862	-0.001	10102475	200.000	178	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	10788358	200.000	190	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.165	7.165	0.000	10820362	200.000	185	80.00- 120.00	100.00
28 Methoxychlor					CAS #: 72-43-5		
7.455	7.455	0.000	22103668	1000.00	902	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.771	7.772	-0.001	12654333	200.000	179	80.00- 120.00	100.00
$ 1 4cmx					CAS #: 877-09-8		
3.086	3.086	0.000	14423830	200.000	179	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.148	9.147	0.001	8357011	200.000	174	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/019B1901.D
Date : 30-AUG-2011 19:46
Client ID: INDAB02
Sample Info: IWPE110812-10AB

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25

Column phase: CLP-2



Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-1

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
019F1901.D	CHLOR01	WPE110816-21CL	16-AUG-11 15:45	2.47	7.45
020F2001.D	CHLOR02	WPE110816-22CL	16-AUG-11 16:01	2.47	7.45
021F2101.D	CHLOR03	WPE110816-23CL	16-AUG-11 16:27	2.47	7.45
022F2201.D	CHLOR04	WPE110816-24CL	16-AUG-11 16:42	2.47	7.45
023F2301.D	CHLOR05	IPE110616-06CL	16-AUG-11 16:58	2.47	7.45

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-2

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
019B1901.D	CHLOR01	WPE110816-21CL	16-AUG-11 15:45	3.08	9.15
020B2001.D	CHLOR02	WPE110816-22CL	16-AUG-11 16:01	3.09	9.15
021B2101.D	CHLOR03	WPE110816-23CL	16-AUG-11 16:27	3.09	9.15
022B2201.D	CHLOR04	WPE110816-24CL	16-AUG-11 16:42	3.09	9.15
023B2301.D	CHLOR05	IPE110616-06CL	16-AUG-11 16:58	3.09	9.15

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-1

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
013F1301.D	TOXAPH01	WPE110816-11TX	23-AUG-11 14:29	2.45	7.43
014F1401.D	TOXAPH02	WPE110816-12TX	23-AUG-11 14:45	2.45	7.43
015F1501.D	TOXAPH03	WPE110816-13TX	23-AUG-11 15:00	2.45	7.43
016F1601.D	TOXAPH04	WPE110816-14TX	23-AUG-11 15:16	2.45	7.42
017F1701.D	TOXAPH05	IPE110418-40TX	23-AUG-11 15:31	2.45	7.43

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-2

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
013B1301.D	TOXAPH01	WPE110816-11TX	23-AUG-11 14:29	3.09	9.15
014B1401.D	TOXAPH02	WPE110816-12TX	23-AUG-11 14:45	3.09	9.15
015B1501.D	TOXAPH03	WPE110816-13TX	23-AUG-11 15:00	3.09	9.15
016B1601.D	TOXAPH04	WPE110816-14TX	23-AUG-11 15:16	3.09	9.15
017B1701.D	TOXAPH05	IPE110418-40TX	23-AUG-11 15:31	3.09	9.15

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-1

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.45	7.42
RT Range Based on Calibration Verification:				2.42 2.48 #	7.39 7.45 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
001F0101.D	PIBLK01	WAR110724-99IB	30-AUG-11 15:06	2.45	7.42
002F0201.D	PEM01	WPE110628-99DG	30-AUG-11 15:22	2.45	7.42
003F0301.D	ZZZZZZZ	ZZZZZZZ	30-AUG-11 15:37	2.45	7.42
004F0401.D	TOXAPH01	WPE110630-52TX	30-AUG-11 15:53	2.45	7.42
005F0501.D	CHLOR01	WPE110724-00CL	30-AUG-11 16:08	2.45	7.42
006F0601.D	GAPA01	WPE110809-05GA	30-AUG-11 16:24	2.45	7.42
007F0701.D	INDAB01	WPE110830-01AB	30-AUG-11 16:39	2.45	7.42
008F0801.D	INDAB02	WPE110830-02AB	30-AUG-11 16:55	2.45	7.42
009F0901.D	INDAB03	WPE110830-03AB	30-AUG-11 17:10	2.45	7.42
010F1001.D	INDAB04	WPE110830-04AB	30-AUG-11 17:26	2.45	7.42
011F1101.D	INDAB05	IPE110801-02AB	30-AUG-11 17:41	2.45	7.42
012F1201.D	INDAB01	WPE110711-10AB	30-AUG-11 17:57	2.45	7.42
013F1301.D	PIBLK02	WAR110724-99IB	30-AUG-11 18:12	2.45	7.42
014F1401.D	PBLK01	1202473924	30-AUG-11 18:28	2.45	7.42
015F1501.D	BLK01LCS	1202473925	30-AUG-11 18:43	2.45	7.42
016F1601.D	11080101	284538001	30-AUG-11 18:59	2.46	7.42
017F1701.D	11080101MS	1202473926	30-AUG-11 19:15	2.45	7.42
018F1801.D	11080101MSD	1202473927	30-AUG-11 19:30	2.45	7.42
019F1901.D	INDAB02	WPE110812-10AB	30-AUG-11 19:46	2.45	7.42
020F2001.D	PIBLK03	WAR110724-99IB	30-AUG-11 20:01	2.45	7.42

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP-2

Instrument ID: ECD3A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				3.09	9.15
RT Range Based on Calibration Verification:				3.06 3.12 #	9.12 9.18 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
001B0101.D	PIBLK01	WAR110724-99IB	30-AUG-11 15:06	3.08	9.15
002B0201.D	PEM01	WPE110628-99DG	30-AUG-11 15:22	3.09	9.15
003B0301.D	ZZZZZZZ	ZZZZZZZ	30-AUG-11 15:37	3.09	9.15
004B0401.D	TOXAPH01	WPE110630-52TX	30-AUG-11 15:53	3.09	9.15
005B0501.D	CHLOR01	WPE110724-00CL	30-AUG-11 16:08	3.09	9.15
006B0601.D	GAPA01	WPE110809-05GA	30-AUG-11 16:24	3.09	9.15
007B0701.D	INDAB01	WPE110830-01AB	30-AUG-11 16:39	3.09	9.15
008B0801.D	INDAB02	WPE110830-02AB	30-AUG-11 16:55	3.09	9.15
009B0901.D	INDAB03	WPE110830-03AB	30-AUG-11 17:10	3.09	9.15
010B1001.D	INDAB04	WPE110830-04AB	30-AUG-11 17:26	3.09	9.15
011B1101.D	INDAB05	IPE110801-02AB	30-AUG-11 17:41	3.09	9.15
012B1201.D	INDAB01	WPE110711-10AB	30-AUG-11 17:57	3.09	9.15
013B1301.D	PIBLK02	WAR110724-99IB	30-AUG-11 18:12	3.09	9.15
014B1401.D	PBLK01	1202473924	30-AUG-11 18:28	3.09	9.15
015B1501.D	BLK01LCS	1202473925	30-AUG-11 18:43	3.09	9.15
016B1601.D	11080101	284538001	30-AUG-11 18:59	3.09	9.15
017B1701.D	11080101MS	1202473926	30-AUG-11 19:15	3.09	9.15
018B1801.D	11080101MSD	1202473927	30-AUG-11 19:30	3.09	9.15
019B1901.D	INDAB02	WPE110812-10AB	30-AUG-11 19:46	3.09	9.15
020B2001.D	PIBLK03	WAR110724-99IB	30-AUG-11 20:01	3.09	9.15

Column used to flag retention time values with an asterisk.

Identification Summary

SDG Number: 284538 **Client ID:** LCS for batch 1136047

Lab Sample ID: 1202473925

Data File:	015F1501.d	**Data File:**	015B1501.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 18:43	**Analyzed:**	30-AUG-11 18:43

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							15
Column 1	1	2.83	2.8 - 2.86	.511		ug/L	
Column 2	1	3.61	3.58 - 3.64	.44		ug/L	
gamma-BHC (Lindane)							14.2
Column 1	1	3.06	3.03 - 3.09	.516		ug/L	
Column 2	1	3.93	3.9 - 3.96	.448		ug/L	
beta-BHC							12.8
Column 1	1	3.12	3.09 - 3.15	.477		ug/L	
Column 2	1	3.99	3.96 - 4.02	.42		ug/L	
Methoxychlor							5.24
Column 1	1	5.81	5.78 - 5.84	4.63		ug/L	
Column 2	1	7.45	7.43 - 7.49	4.39		ug/L	
delta-BHC							14
Column 1	1	3.26	3.22 - 3.28	.512		ug/L	
Column 2	1	4.28	4.25 - 4.31	.445		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** LCS for batch 1136047

Lab Sample ID: 1202473925

Data File:	015F1501.d	**Data File:**	015B1501.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 18:43	**Analyzed:**	30-AUG-11 18:43

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Heptachlor							13.8
Column 1	1	3.42	3.39 - 3.45	.473		ug/L	
Column 2	1	4.36	4.33 - 4.39	.412		ug/L	
Aldrin							16.2
Column 1	1	3.66	3.63 - 3.69	.456		ug/L	
Column 2	1	4.68	4.65 - 4.71	.388		ug/L	
Heptachlor epoxide							15.6
Column 1	1	4.17	4.14 - 4.2	.5		ug/L	
Column 2	1	5.25	5.22 - 5.28	.428		ug/L	
Endosulfan I							13.6
Column 1	1	4.52	4.49 - 4.55	.461		ug/L	
Column 2	1	5.66	5.63 - 5.69	.403		ug/L	
4,4'-DDE							16.5
Column 1	1	4.47	4.44 - 4.5	1.09		ug/L	
Column 2	1	5.75	5.72 - 5.78	.921		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** LCS for batch 1136047

Lab Sample ID: 1202473925

Data File:	015F1501.d	**Data File:**	015B1501.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 18:43	**Analyzed:**	30-AUG-11 18:43

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dieldrin							14
Column 1	1	4.74	4.72 - 4.78	1.24		ug/L	
Column 2	1	5.95	5.92 - 5.98	1.08		ug/L	
Endrin							15.8
Column 1	1	4.96	4.93 - 4.99	1.23		ug/L	
Column 2	1	6.28	6.25 - 6.31	1.05		ug/L	
4,4'-DDD							15.5
Column 1	1	5.03	5.01 - 5.07	1.19		ug/L	
Column 2	1	6.36	6.33 - 6.39	1.02		ug/L	
Endosulfan II							14.9
Column 1	1	5.18	5.15 - 5.21	1.2		ug/L	
Column 2	1	6.5	6.47 - 6.53	1.03		ug/L	
Endrin aldehyde							12.1
Column 1	1	5.59	5.56 - 5.62	1.22		ug/L	
Column 2	1	6.86	6.83 - 6.89	1.08		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** LCS for batch 1136047

Lab Sample ID: 1202473925

Data File:	015F1501.d	**Data File:**	015B1501.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 18:43	**Analyzed:**	30-AUG-11 18:43

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							16.5
Column 1	1	5.31	5.28 - 5.34	1.21		ug/L	
Column 2	1	6.71	6.68 - 6.74	1.02		ug/L	
Endosulfan sulfate							18.3
Column 1	1	6.03	6 - 6.06	1.32		ug/L	
Column 2	1	7.17	7.14 - 7.2	1.1		ug/L	
Endrin ketone							14.3
Column 1	1	6.32	6.29 - 6.35	1.37		ug/L	
Column 2	1	7.77	7.74 - 7.8	1.19		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MS

Lab Sample ID: 1202473926

Data File:	017F1701.d	**Data File:**	017B1701.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 19:15	**Analyzed:**	30-AUG-11 19:15

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							9.69
Column 1	1	2.83	2.8 - 2.86	.433		ug/L	
Column 2	1	3.61	3.58 - 3.64	.393		ug/L	
gamma-BHC (Lindane)							11.4
Column 1	1	3.06	3.03 - 3.09	.452		ug/L	
Column 2	1	3.93	3.9 - 3.96	.403		ug/L	
beta-BHC							16
Column 1	1	3.12	3.09 - 3.15	.438		ug/L	
Column 2	1	3.99	3.96 - 4.02	.373		ug/L	
Methoxychlor							.547
Column 1	1	5.81	5.78 - 5.84	2.54		ug/L	
Column 2	1	7.45	7.43 - 7.49	2.53		ug/L	
delta-BHC							12.6
Column 1	1	3.26	3.22 - 3.28	.437		ug/L	
Column 2	1	4.28	4.25 - 4.31	.385		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MS

Lab Sample ID: 1202473926

Data File:	017F1701.d	**Data File:**	017B1701.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 19:15	**Analyzed:**	30-AUG-11 19:15

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Heptachlor							9.81
Column 1	1	3.42	3.39 - 3.45	.277		ug/L	
Column 2	1	4.36	4.33 - 4.39	.251		ug/L	
Aldrin							8.84
Column 1	1	3.66	3.63 - 3.69	.219		ug/L	
Column 2	1	4.68	4.65 - 4.71	.201		ug/L	
Heptachlor epoxide							13.2
Column 1	1	4.17	4.14 - 4.2	.357		ug/L	
Column 2	1	5.25	5.22 - 5.28	.313		ug/L	
Endosulfan I							9.65
Column 1	1	4.52	4.49 - 4.55	.323		ug/L	
Column 2	1	5.66	5.63 - 5.69	.293		ug/L	
4,4'-DDE							10.2
Column 1	1	4.47	4.44 - 4.5	.512		ug/L	
Column 2	1	5.75	5.72 - 5.78	.463		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MS

Lab Sample ID: 1202473926

Data File:	017F1701.d	**Data File:**	017B1701.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 19:15	**Analyzed:**	30-AUG-11 19:15

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dieldrin							9.82
Column 1	1	4.74	4.72 - 4.78	.826		ug/L	
Column 2	1	5.95	5.92 - 5.98	.749		ug/L	
Endrin							13.2
Column 1	1	4.96	4.93 - 4.99	.905		ug/L	
Column 2	1	6.28	6.25 - 6.31	.793		ug/L	
4,4'-DDD							13.2
Column 1	1	5.03	5.01 - 5.07	.629		ug/L	
Column 2	1	6.36	6.33 - 6.39	.552		ug/L	
Endosulfan II							14.1
Column 1	1	5.18	5.15 - 5.21	.845		ug/L	
Column 2	1	6.5	6.47 - 6.53	.733		ug/L	
Endrin aldehyde							.524
Column 1	1	5.59	5.56 - 5.62	.914		ug/L	
Column 2	1	6.86	6.83 - 6.89	.918		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MS

Lab Sample ID: 1202473926

Data File:	**017F1701.d**	**Data File:**	**017B1701.d**
Inst:	**ECD3A.I_1**	**Inst:**	**ECD3A.I_2**
Column:	**CLP-1**	**Column:**	**CLP-2**
Analyzed:	**30-AUG-11 19:15**	**Analyzed:**	**30-AUG-11 19:15**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							11.8
Column 1	1	5.31	5.28 - 5.34	.543		ug/L	
Column 2	1	6.71	6.68 - 6.74	.482		ug/L	
Endosulfan sulfate							13.6
Column 1	1	6.03	6 - 6.06	1		ug/L	
Column 2	1	7.17	7.14 - 7.2	.873		ug/L	
Endrin ketone							15.4
Column 1	1	6.32	6.29 - 6.35	1.16		ug/L	
Column 2	1	7.77	7.74 - 7.8	.993		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MSD

Lab Sample ID: 1202473927

Data File:	018F1801.d	**Data File:**	018B1801.d
Inst:	ECD3A.I_1	**Inst:**	ECD3A.I_2
Column:	CLP-1	**Column:**	CLP-2
Analyzed:	30-AUG-11 19:30	**Analyzed:**	30-AUG-11 19:30

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
alpha-BHC							10.8
Column 1	1	2.83	2.8 - 2.86	.447		ug/L	
Column 2	1	3.61	3.58 - 3.64	.401		ug/L	
gamma-BHC (Lindane)							12.6
Column 1	1	3.06	3.03 - 3.09	.466		ug/L	
Column 2	1	3.93	3.9 - 3.96	.411		ug/L	
beta-BHC							16.8
Column 1	1	3.12	3.09 - 3.15	.448		ug/L	
Column 2	1	3.99	3.96 - 4.02	.378		ug/L	
Methoxychlor							.587
Column 1	1	5.8	5.78 - 5.84	2.53		ug/L	
Column 2	1	7.45	7.43 - 7.49	2.51		ug/L	
delta-BHC							13.6
Column 1	1	3.26	3.22 - 3.28	.446		ug/L	
Column 2	1	4.28	4.25 - 4.31	.389		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MSD

Lab Sample ID: 1202473927

Data File:	**018F1801.d**	**Data File:**	**018B1801.d**
Inst:	**ECD3A.I_1**	**Inst:**	**ECD3A.I_2**
Column:	**CLP-1**	**Column:**	**CLP-2**
Analyzed:	**30-AUG-11 19:30**	**Analyzed:**	**30-AUG-11 19:30**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Heptachlor							9.75
Column 1	1	3.42	3.39 - 3.45	.283		ug/L	
Column 2	1	4.36	4.33 - 4.39	.256		ug/L	
Aldrin							10.1
Column 1	1	3.66	3.63 - 3.69	.225		ug/L	
Column 2	1	4.68	4.65 - 4.71	.204		ug/L	
Heptachlor epoxide							14.1
Column 1	1	4.17	4.14 - 4.2	.363		ug/L	
Column 2	1	5.25	5.22 - 5.28	.316		ug/L	
Endosulfan I							10.3
Column 1	1	4.52	4.49 - 4.55	.327		ug/L	
Column 2	1	5.66	5.63 - 5.69	.295		ug/L	
4,4'-DDE							10.8
Column 1	1	4.47	4.44 - 4.5	.515		ug/L	
Column 2	1	5.75	5.72 - 5.78	.462		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MSD

Lab Sample ID: 1202473927

Data File:	**018F1801.d**	**Data File:**	**018B1801.d**
Inst:	**ECD3A.I_1**	**Inst:**	**ECD3A.I_2**
Column:	**CLP-1**	**Column:**	**CLP-2**
Analyzed:	**30-AUG-11 19:30**	**Analyzed:**	**30-AUG-11 19:30**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Dieldrin							10.2
Column 1	1	4.74	4.72 - 4.78	.834		ug/L	
Column 2	1	5.95	5.92 - 5.98	.753		ug/L	
Endrin							13.4
Column 1	1	4.96	4.93 - 4.99	.913		ug/L	
Column 2	1	6.28	6.25 - 6.31	.798		ug/L	
4,4'-DDD							12.6
Column 1	1	5.03	5.01 - 5.07	.628		ug/L	
Column 2	1	6.36	6.33 - 6.39	.554		ug/L	
Endosulfan II							14.8
Column 1	1	5.18	5.15 - 5.21	.849		ug/L	
Column 2	1	6.5	6.47 - 6.53	.732		ug/L	
Endrin aldehyde							.115
Column 1	1	5.59	5.56 - 5.62	.915		ug/L	
Column 2	1	6.86	6.83 - 6.89	.916		ug/L	

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MSD

Lab Sample ID: 1202473927

Data File:	**018F1801.d**	**Data File:**	**018B1801.d**
Inst:	**ECD3A.I_1**	**Inst:**	**ECD3A.I_2**
Column:	**CLP-1**	**Column:**	**CLP-2**
Analyzed:	**30-AUG-11 19:30**	**Analyzed:**	**30-AUG-11 19:30**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
4,4'-DDT							11.8
Column 1	1	5.3	5.28 - 5.34	.54		ug/L	
Column 2	1	6.71	6.68 - 6.74	.479		ug/L	
Endosulfan sulfate							14.6
Column 1	1	6.03	6 - 6.06	.999		ug/L	
Column 2	1	7.16	7.14 - 7.2	.863		ug/L	
Endrin ketone							15.9
Column 1	1	6.32	6.29 - 6.35	1.16		ug/L	
Column 2	1	7.77	7.74 - 7.8	.992		ug/L	

QC Data

Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473924**				
Client Sample:	**QC for batch 1136047**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1136047**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 18:28**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**014F1401.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	014B1401.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC	U	0.00665	ug/L	0.00665	0.020	1
58-89-9	gamma-BHC (Lindane)	U	0.00665	ug/L	0.00665	0.020	1
319-85-7	beta-BHC	U	0.00665	ug/L	0.00665	0.020	1
72-43-5	Methoxychlor	U	0.050	ug/L	0.050	0.200	1
319-86-8	delta-BHC	U	0.00665	ug/L	0.00665	0.020	1
76-44-8	Heptachlor	U	0.00665	ug/L	0.00665	0.020	1
309-00-2	Aldrin	U	0.00665	ug/L	0.00665	0.020	1
1024-57-3	Heptachlor epoxide	U	0.00665	ug/L	0.00665	0.020	1
959-98-8	Endosulfan I	U	0.00665	ug/L	0.00665	0.020	1
72-55-9	4,4'-DDE	U	0.010	ug/L	0.010	0.040	1
60-57-1	Dieldrin	U	0.010	ug/L	0.010	0.040	1
72-20-8	Endrin	U	0.010	ug/L	0.010	0.040	1
72-54-8	4,4'-DDD	U	0.010	ug/L	0.010	0.040	1
33213-65-9	Endosulfan II	U	0.010	ug/L	0.010	0.040	1
7421-93-4	Endrin aldehyde	U	0.00665	ug/L	0.00665	0.040	1
50-29-3	4,4'-DDT	U	0.010	ug/L	0.010	0.040	1
1031-07-8	Endosulfan sulfate	U	0.010	ug/L	0.010	0.040	1
53494-70-5	Endrin ketone	U	0.010	ug/L	0.010	0.040	1
57-74-9	Chlordane (tech.)	U	0.0765	ug/L	0.0765	0.250	1
8001-35-2	Toxaphene	U	0.150	ug/L	0.150	0.500	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/014F1401.D
Lab Smp Id: 1202473924 Client Smp ID: PBLK01
Inj Date : 30-AUG-2011 18:28
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473924|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MB|GROUND WATER|MB|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

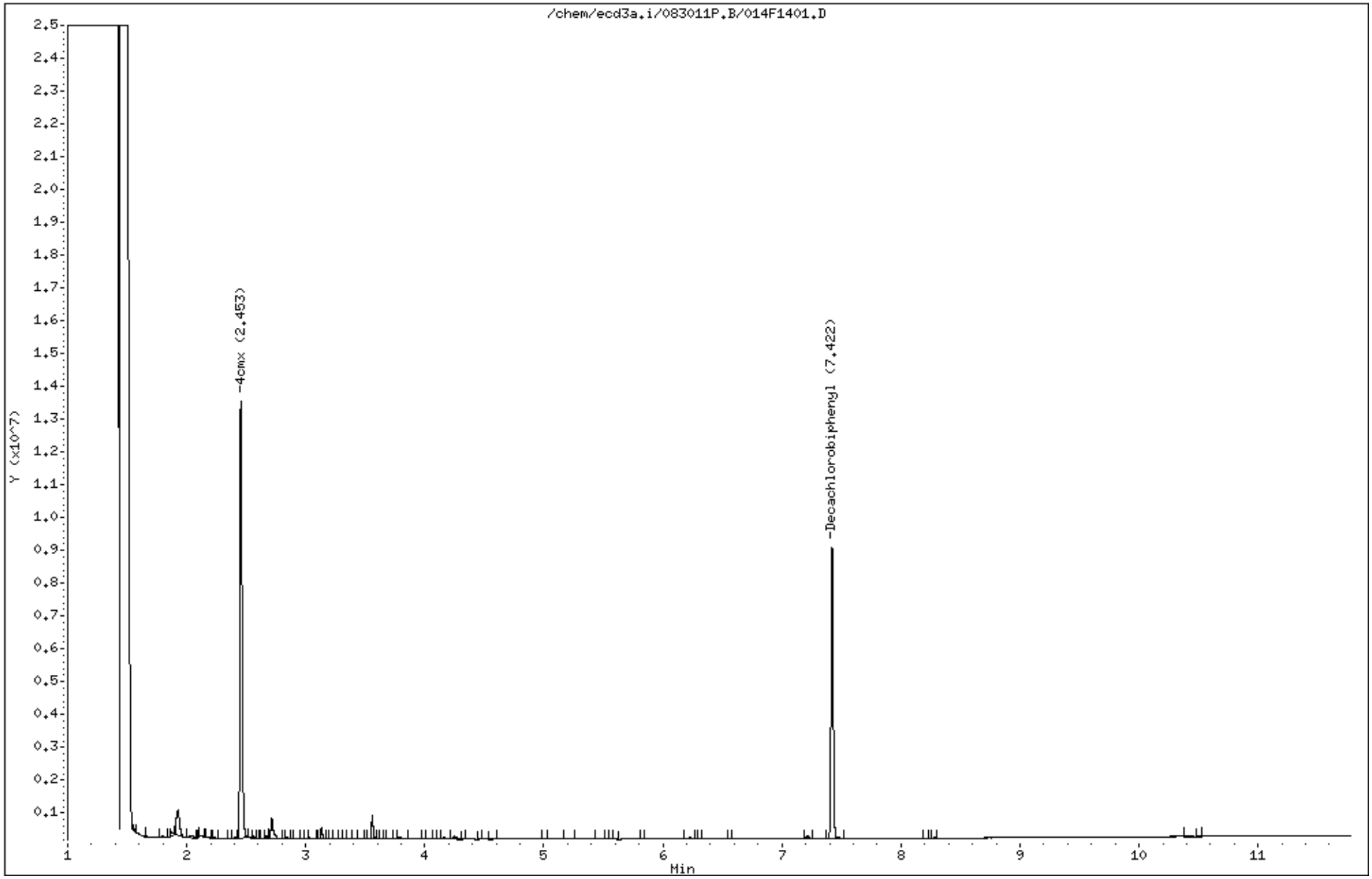
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
2.453	2.452	0.001	16446379	164.264	0.821	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
7.422	7.423	-0.001	11074152	180.667	0.903	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/014F1401.D
Date : 30-AUG-2011 18:28
Client ID: PBLK01
Sample Info: |120247392|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/014B1401.D
Lab Smp Id: 1202473924 Client Smp ID: PBLK01
Inj Date : 30-AUG-2011 18:28
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473924|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MB|GROUND WATER|MB|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

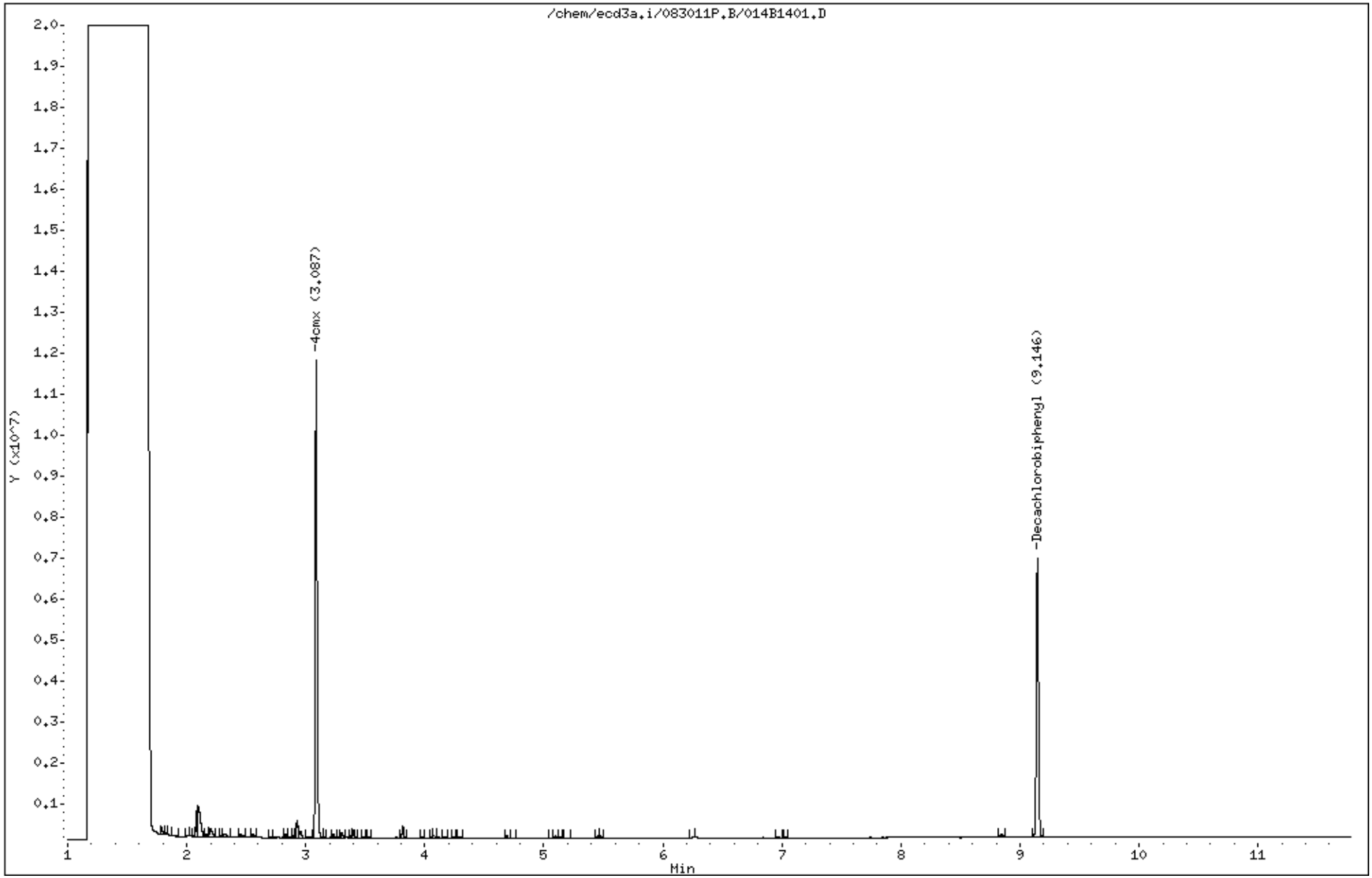
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	RESPONSE			TARGET RANGE	RATIO
$ 1 4cmx					CAS #: 877-09-8		
3.087	3.086	0.001	12324112	152.746	0.764	80.00- 120.00	100.00
$ 32 Decachlorobiphenyl					CAS #: 2051-24-3		
9.146	9.147	-0.001	8411095	175.329	0.877	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/014B1401.D
Date : 30-AUG-2011 18:28
Client ID: PBLK01
Sample Info: |120247392|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473925**				
Client Sample:	**QC for batch 1136047**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1136047**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 18:43**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**5 mL**
Data File:	**015F1501.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	015B1501.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		0.511	ug/L	0.00665	0.020	1
58-89-9	gamma-BHC (Lindane)		0.516	ug/L	0.00665	0.020	1
319-85-7	beta-BHC		0.477	ug/L	0.00665	0.020	1
72-43-5	Methoxychlor		4.63	ug/L	0.050	0.200	1
319-86-8	delta-BHC		0.512	ug/L	0.00665	0.020	1
76-44-8	Heptachlor		0.473	ug/L	0.00665	0.020	1
309-00-2	Aldrin		0.456	ug/L	0.00665	0.020	1
1024-57-3	Heptachlor epoxide		0.500	ug/L	0.00665	0.020	1
959-98-8	Endosulfan I		0.461	ug/L	0.00665	0.020	1
72-55-9	4,4'-DDE		1.09	ug/L	0.010	0.040	1
60-57-1	Dieldrin		1.24	ug/L	0.010	0.040	1
72-20-8	Endrin		1.23	ug/L	0.010	0.040	1
72-54-8	4,4'-DDD		1.19	ug/L	0.010	0.040	1
33213-65-9	Endosulfan II		1.20	ug/L	0.010	0.040	1
7421-93-4	Endrin aldehyde		1.22	ug/L	0.00665	0.040	1
50-29-3	4,4'-DDT		1.21	ug/L	0.010	0.040	1
1031-07-8	Endosulfan sulfate		1.32	ug/L	0.010	0.040	1
53494-70-5	Endrin ketone		1.37	ug/L	0.010	0.040	1
57-74-9	Chlordane (tech.)	U	0.0765	ug/L	0.0765	0.250	1
8001-35-2	Toxaphene	U	0.150	ug/L	0.150	0.500	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/015F1501.D
Lab Smp Id: 1202473925 Client Smp ID: PBLK01LCS
Inj Date : 30-AUG-2011 18:43
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473925|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|LCS|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	2.454	2.452	0.002	15593899	155.750	0.779	80.00- 120.00	100.00
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	7.422	7.423	-0.001	10582850	172.652	0.863	80.00- 120.00	100.00
	5 alpha-BHC					CAS #: 319-84-6		
	2.829	2.828	0.001	12132281	102.235	0.511	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.058	3.056	0.002	11141479	103.281	0.516	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.118	3.117	0.001	4739520	95.4529	0.477	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.806	5.807	-0.001	27244936	925.545	4.63	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
3.256	3.255	0.001	10071032	102.386	0.512	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.420	3.419	0.001	9115238	94.6092	0.473	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	10584310	91.2702	0.456	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	10003999	100.055	0.500	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.524	4.523	0.001	8127772	92.2893	0.461	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.472	4.473	-0.001	20691086	217.518	1.09	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.745	4.745	0.000	24550509	247.619	1.24	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.964	4.964	0.000	20045957	245.086	1.22	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.033	5.035	-0.002	16737413	237.667	1.19	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.179	5.179	0.000	17278375	240.242	1.20	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.591	5.592	-0.001	15422316	243.510	1.22	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.306	5.308	-0.002	15815187	241.753	1.21	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.033	6.033	0.000	18042395	264.463	1.32	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.321	6.323	-0.002	19261596	274.875	1.37	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/015F1501.D

Page 1

Date : 30-AUG-2011 18:43

Client ID: PBLK01LCS

Instrument: ecd3a.i

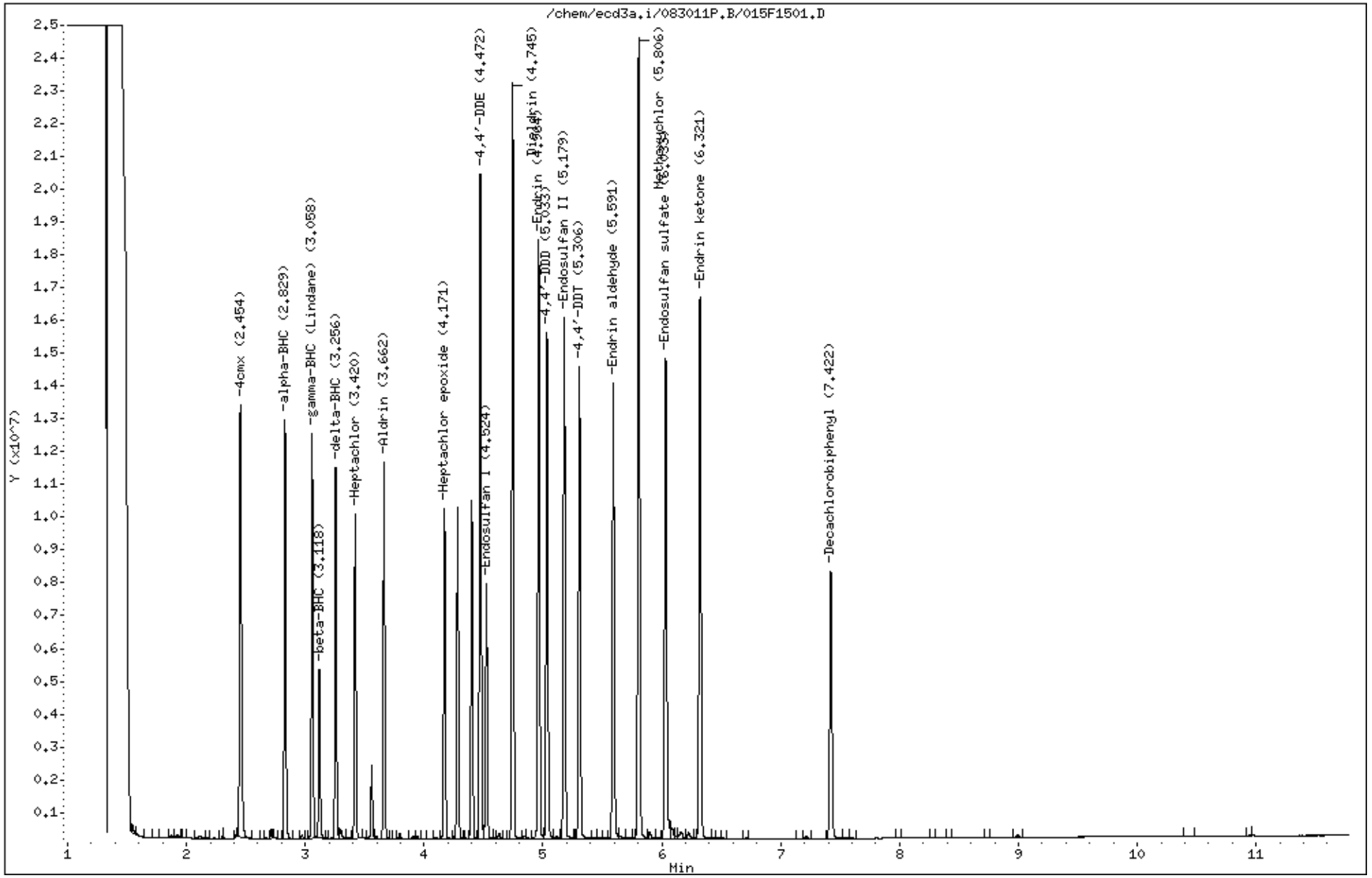
Sample Info: |120247392511|

Volume Injected (uL): 1.0

Operator: RXE1

Column phase: CLP-1

Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/015B1501.D
Lab Smp Id: 1202473925 Client Smp ID: PBLK01LCS
Inj Date : 30-AUG-2011 18:43
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473925|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|LCS|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	3.086	3.086	0.000	11501915	142.556	0.713	80.00- 120.00	100.00
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	9.147	9.147	0.000	8099930	168.843	0.844	80.00- 120.00	100.00
	5 alpha-BHC					CAS #: 319-84-6		
	3.607	3.607	0.000	10376024	88.0118	0.440	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.931	3.931	0.000	9373306	89.5722	0.448	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.993	3.992	0.001	3802207	83.9983	0.420	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
7.454	7.455	-0.001	21527594	878.318	4.39	80.00- 120.00	100.00
13 delta-BHC					CAS #: 319-86-8		
4.278	4.279	-0.001	9179803	88.9746	0.445	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.359	4.359	0.000	6659307	82.4121	0.412	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.684	4.684	0.000	7707259	77.6143	0.388	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.249	5.249	0.000	7383185	85.5797	0.428	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
5.661	5.661	0.000	6280643	80.5278	0.403	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.746	5.747	-0.001	14529658	184.297	0.921	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.948	5.948	0.000	17311177	215.231	1.08	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.275	6.276	-0.001	13543318	209.119	1.04	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.363	6.363	0.000	12356124	203.474	1.02	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	14199729	206.886	1.03	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.861	6.862	-0.001	12211950	215.723	1.08	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.706	6.707	-0.001	11651583	204.998	1.02	80.00- 120.00	100.00
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.165	7.165	0.000	12903819	220.154	1.10	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.771	7.772	-0.001	16801573	238.112	1.19	80.00- 120.00	100.00

Data File: /chem/ecd3a.i/083011P.B/015B1501.D

Date : 30-AUG-2011 18:43

Client ID: PBLK01LCS

Sample Info: |120247392511|

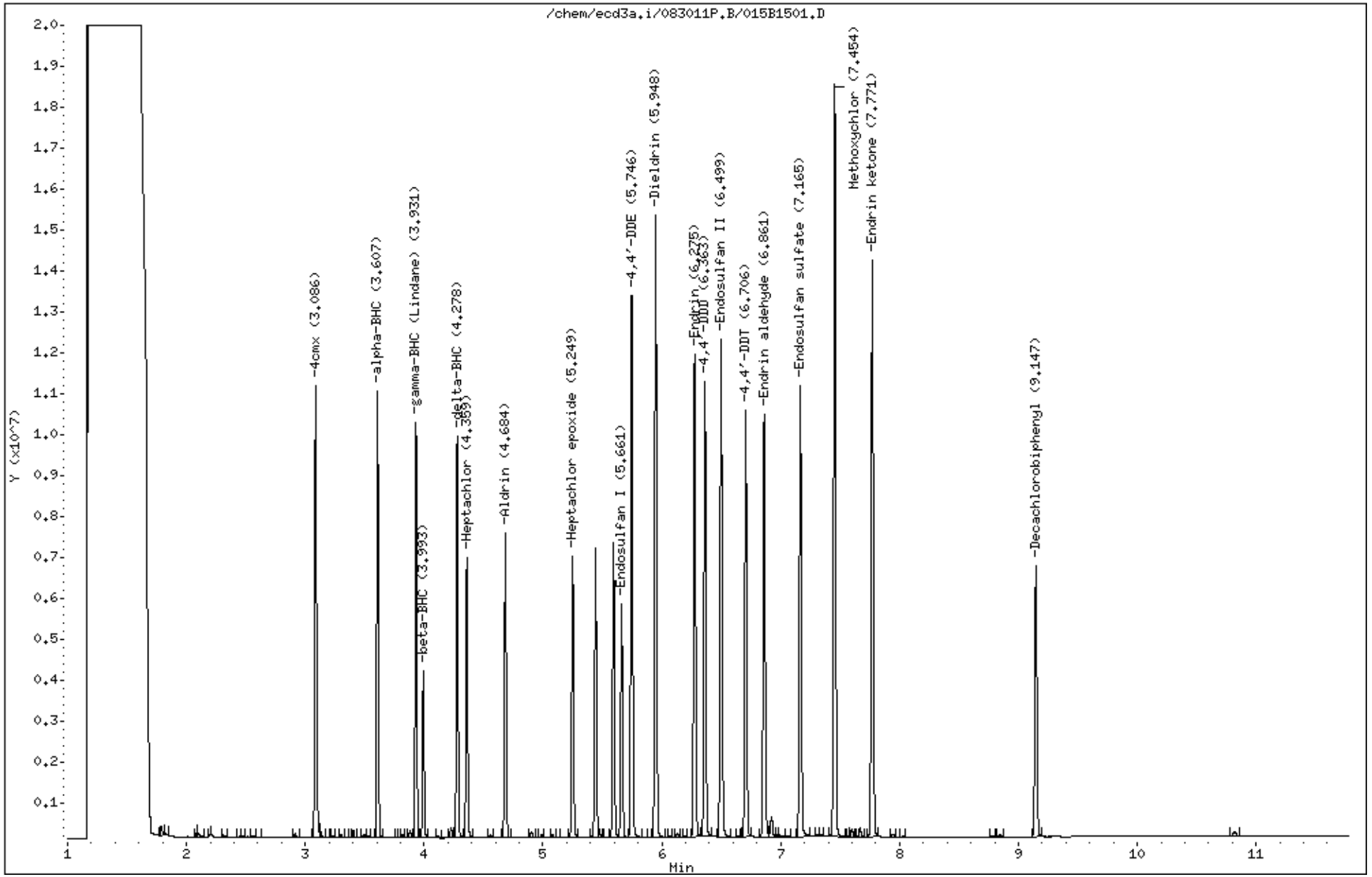
Volume Injected (uL): 1.0

Column phase: CLP-2

Instrument: ecd3a.i

Operator: RXE1

Column diameter: 0.25



Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473926**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1136047**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MS**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 19:15**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**5 mL**
Data File:	**017F1701.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	017B1701.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		0.433	ug/L	0.00679	0.0204	1
58-89-9	gamma-BHC (Lindane)		0.452	ug/L	0.00679	0.0204	1
319-85-7	beta-BHC		0.438	ug/L	0.00679	0.0204	1
72-43-5	Methoxychlor		2.54	ug/L	0.051	0.204	1
319-86-8	delta-BHC		0.437	ug/L	0.00679	0.0204	1
76-44-8	Heptachlor		0.277	ug/L	0.00679	0.0204	1
309-00-2	Aldrin		0.220	ug/L	0.00679	0.0204	1
1024-57-3	Heptachlor epoxide		0.357	ug/L	0.00679	0.0204	1
959-98-8	Endosulfan I		0.323	ug/L	0.00679	0.0204	1
72-55-9	4,4'-DDE		0.512	ug/L	0.0102	0.0408	1
60-57-1	Dieldrin		0.826	ug/L	0.0102	0.0408	1
72-20-8	Endrin		0.906	ug/L	0.0102	0.0408	1
72-54-8	4,4'-DDD		0.630	ug/L	0.0102	0.0408	1
33213-65-9	Endosulfan II		0.845	ug/L	0.0102	0.0408	1
7421-93-4	Endrin aldehyde		0.914	ug/L	0.00679	0.0408	1
50-29-3	4,4'-DDT		0.543	ug/L	0.0102	0.0408	1
1031-07-8	Endosulfan sulfate		1.00	ug/L	0.0102	0.0408	1
53494-70-5	Endrin ketone		1.16	ug/L	0.0102	0.0408	1
57-74-9	Chlordane (tech.)	U	0.0781	ug/L	0.0781	0.255	1
8001-35-2	Toxaphene	U	0.153	ug/L	0.153	0.510	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/017F1701.D
Lab Smp Id: 1202473926 Client Smp ID: 11080101MS
Inj Date : 30-AUG-2011 19:15
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473926|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MS|GROUND WATER|MS|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	2.454	2.452	0.002	8245549	82.3554	0.420	80.00- 120.00	100.00(R)
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	7.422	7.423	-0.001	3666351	59.8139	0.305	80.00- 120.00	100.00(R)
	5 alpha-BHC					CAS #: 319-84-6		
	2.831	2.828	0.003	10072500	84.8781	0.433	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.059	3.056	0.003	9560125	88.6221	0.452	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.119	3.117	0.002	4261911	85.8340	0.438	80.00- 120.00	100.00

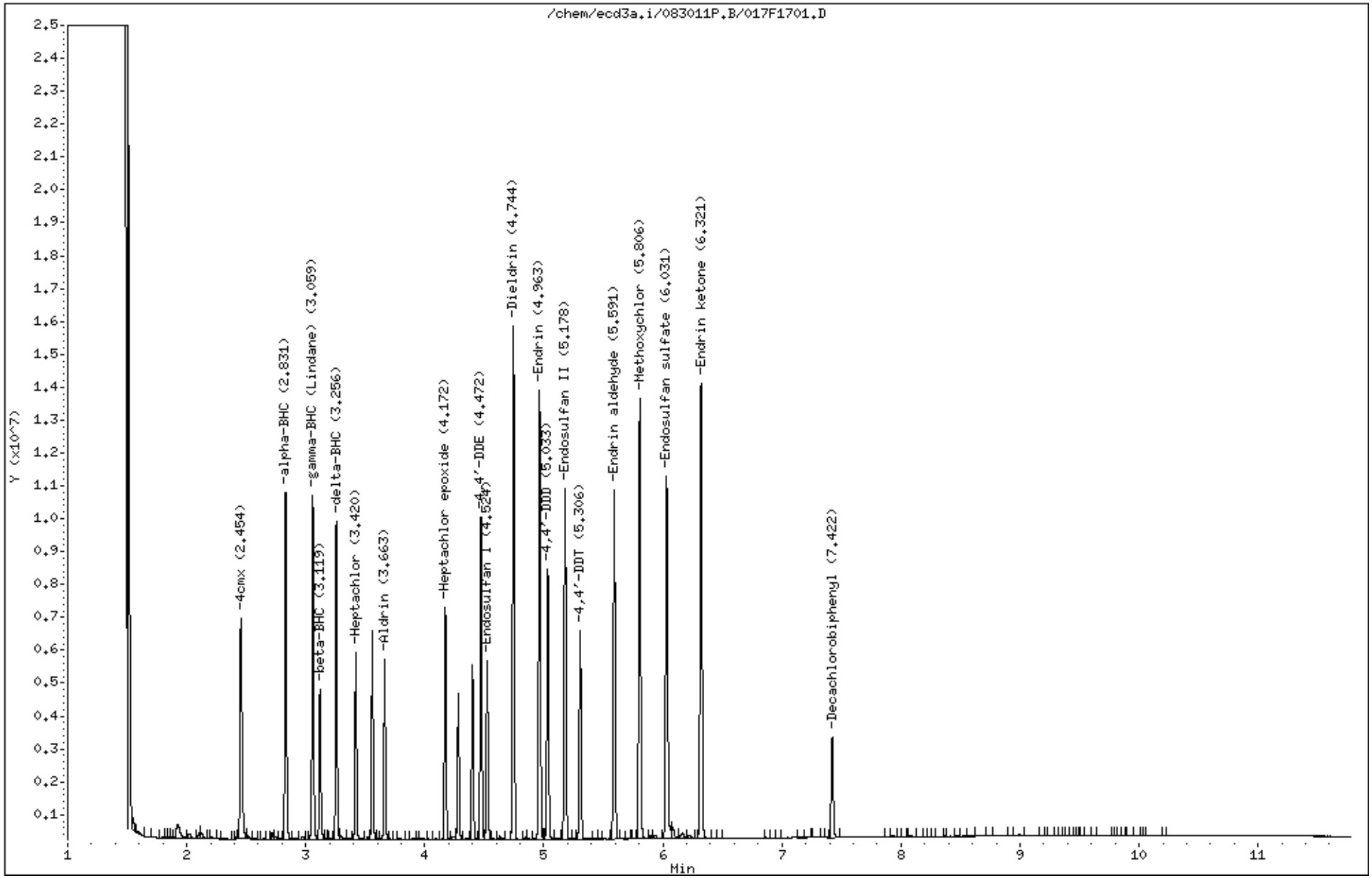
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.806	5.807	-0.001	14663519	498.139	2.54	80.00- 120.00	100.00(R)
13 delta-BHC					CAS #: 319-86-8		
3.256	3.255	0.001	8426531	85.6672	0.437	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.420	3.419	0.001	5232828	54.3127	0.277	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.663	3.662	0.001	4989920	43.0289	0.220	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.172	4.171	0.001	6998902	69.9997	0.357	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.524	4.523	0.001	5572053	63.2696	0.323	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.472	4.473	-0.001	9554883	100.447	0.512	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
4.744	4.745	-0.001	16056581	161.948	0.826	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.963	4.964	-0.001	14519026	177.513	0.906	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.033	5.035	-0.002	8691575	123.418	0.630	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
5.178	5.179	-0.001	11913483	165.647	0.845	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.591	5.592	-0.001	11344923	179.130	0.914	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.306	5.308	-0.002	6959782	106.388	0.543	80.00- 120.00	100.00(R)
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.031	6.033	-0.002	13386049	196.211	1.00	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.321	6.323	-0.002	15914569	227.110	1.16	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/017F1701.D
Date : 30-AUG-2011 19:15
Client ID: 11080101MS
Sample Info: |120247392|1|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/017B1701.D
Lab Smp Id: 1202473926 Client Smp ID: 11080101MS
Inj Date : 30-AUG-2011 19:15
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473926|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MS|GROUND WATER|MS|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 17 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	3.087	3.086	0.001	6493915	80.4861	0.411	80.00- 120.00	100.00(R)
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	9.148	9.147	0.001	3323134	69.2706	0.353	80.00- 120.00	100.00(R)
	5 alpha-BHC					CAS #: 319-84-6		
	3.608	3.607	0.001	9082176	77.0371	0.393	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.932	3.931	0.001	8272755	79.0552	0.403	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.994	3.992	0.002	3309460	73.1126	0.373	80.00- 120.00	100.00

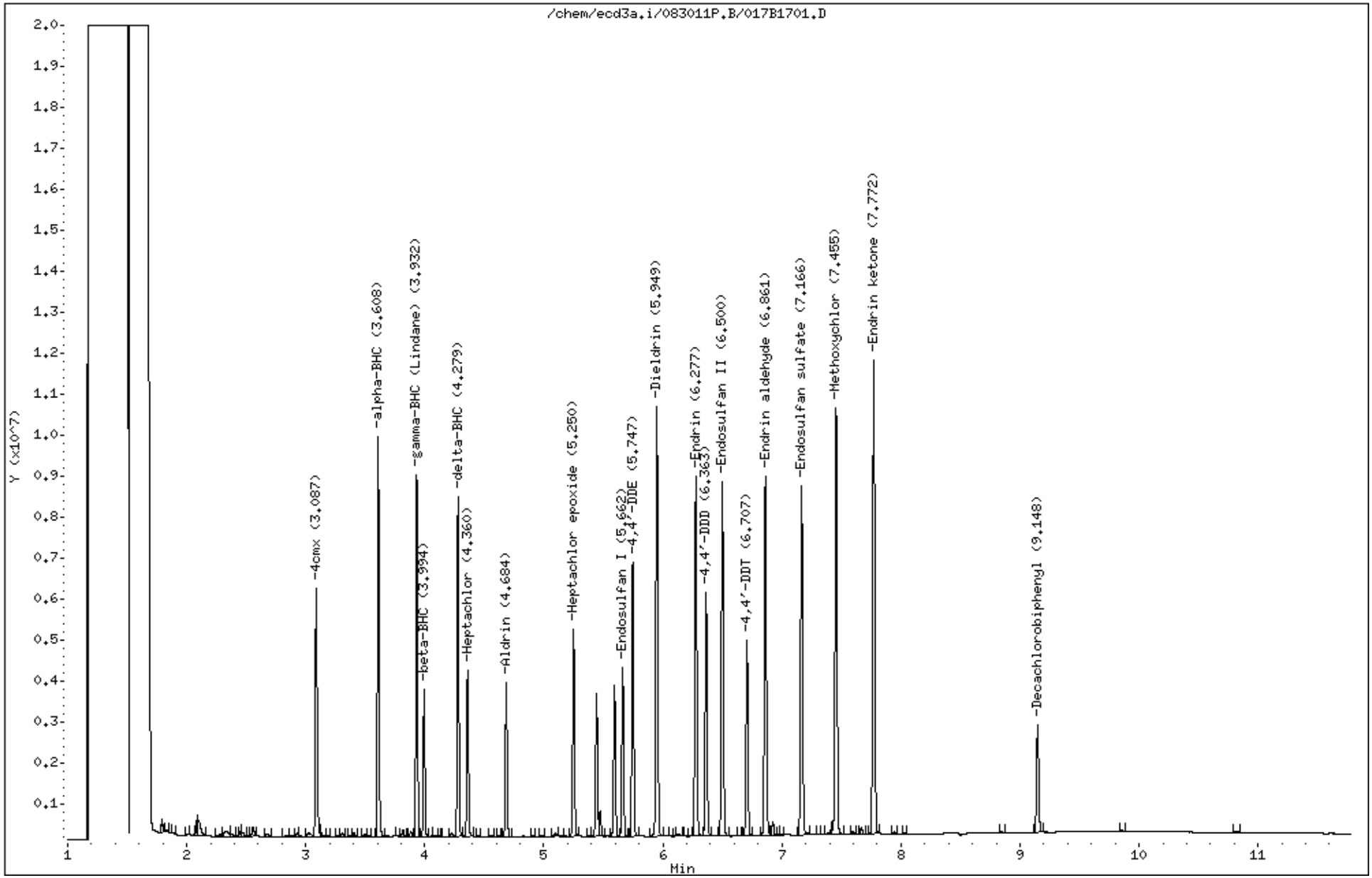
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
7.455	7.455	0.000	12142837	495.423	2.53	80.00- 120.00	100.00(R)
13 delta-BHC					CAS #: 319-86-8		
4.279	4.279	0.000	7794583	75.5485	0.385	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.360	4.359	0.001	3978369	49.2342	0.251	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.684	4.684	0.000	3911046	39.3854	0.201	80.00- 120.00	100.00
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.250	5.249	0.001	5290453	61.3225	0.313	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
5.662	5.661	0.001	4480408	57.4460	0.293	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.747	5.747	0.000	7153181	90.7322	0.463	80.00- 120.00	100.00
20 Dieldrin					CAS #: 60-57-1		
5.949	5.948	0.001	11805810	146.782	0.749	80.00- 120.00	100.00(R)
22 Endrin					CAS #: 72-20-8		
6.277	6.276	0.001	10072264	155.523	0.793	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.363	6.363	0.000	6567009	108.142	0.552	80.00- 120.00	100.00
24 Endosulfan II					CAS #: 33213-65-9		
6.500	6.499	0.001	9870175	143.806	0.734	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.861	6.862	-0.001	10193723	180.071	0.919	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	5371271	94.5023	0.482	80.00- 120.00	100.00(R)
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.166	7.165	0.001	10037282	171.248	0.874	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.772	7.772	0.000	13737518	194.688	0.993	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/017B1701.D
Date : 30-AUG-2011 19:15
Client ID: 11080101MS
Sample Info: |120247392|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



Pesticide
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202473927**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1136047**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MSD**	**Method:**	**SW846 3535A/8081B**	**SOP Ref:**	**GL-OA-E-041**
Batch ID:	**1136049**	**Inst:**	**ECD3A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 19:30**	**Analyst:**	**RXE1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/25/2011 18:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**5 mL**
Data File:	**018F1801.D**	**Column:**	**1 CLP-1**	**Level:**	**LOW**
	018B1801.D		**2 CLP-2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
319-84-6	alpha-BHC		0.447	ug/L	0.00679	0.0204	1
58-89-9	gamma-BHC (Lindane)		0.466	ug/L	0.00679	0.0204	1
319-85-7	beta-BHC		0.448	ug/L	0.00679	0.0204	1
72-43-5	Methoxychlor		2.53	ug/L	0.051	0.204	1
319-86-8	delta-BHC		0.446	ug/L	0.00679	0.0204	1
76-44-8	Heptachlor		0.283	ug/L	0.00679	0.0204	1
309-00-2	Aldrin		0.225	ug/L	0.00679	0.0204	1
1024-57-3	Heptachlor epoxide		0.363	ug/L	0.00679	0.0204	1
959-98-8	Endosulfan I		0.327	ug/L	0.00679	0.0204	1
72-55-9	4,4'-DDE		0.516	ug/L	0.0102	0.0408	1
60-57-1	Dieldrin		0.834	ug/L	0.0102	0.0408	1
72-20-8	Endrin		0.913	ug/L	0.0102	0.0408	1
72-54-8	4,4'-DDD		0.629	ug/L	0.0102	0.0408	1
33213-65-9	Endosulfan II		0.849	ug/L	0.0102	0.0408	1
7421-93-4	Endrin aldehyde		0.915	ug/L	0.00679	0.0408	1
50-29-3	4,4'-DDT		0.540	ug/L	0.0102	0.0408	1
1031-07-8	Endosulfan sulfate		1.00	ug/L	0.0102	0.0408	1
53494-70-5	Endrin ketone		1.16	ug/L	0.0102	0.0408	1
57-74-9	Chlordane (tech.)	U	0.0781	ug/L	0.0781	0.255	1
8001-35-2	Toxaphene	U	0.153	ug/L	0.153	0.510	1

GEL Laboratories LLC

CLP-1

Data file : /chem/ecd3a.i/083011P.B/018F1801.D
Lab Smp Id: 1202473927 Client Smp ID: 11080101MSD
Inj Date : 30-AUG-2011 19:30
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473927|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MSD|GROUND WATER|MSD|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-F-8081-081211p.m
Meth Date : 31-Aug-2011 11:26 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036f3601.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	2.452	2.452	0.000	8546551	85.3618	0.436	80.00- 120.00	100.00(R)
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	7.423	7.423	0.000	3721767	60.7180	0.310	80.00- 120.00	100.00(R)
	5 alpha-BHC					CAS #: 319-84-6		
	2.830	2.828	0.002	10404253	87.6737	0.447	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.058	3.056	0.002	9861636	91.4171	0.466	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.119	3.117	0.002	4357389	87.7569	0.448	80.00- 120.00	100.00

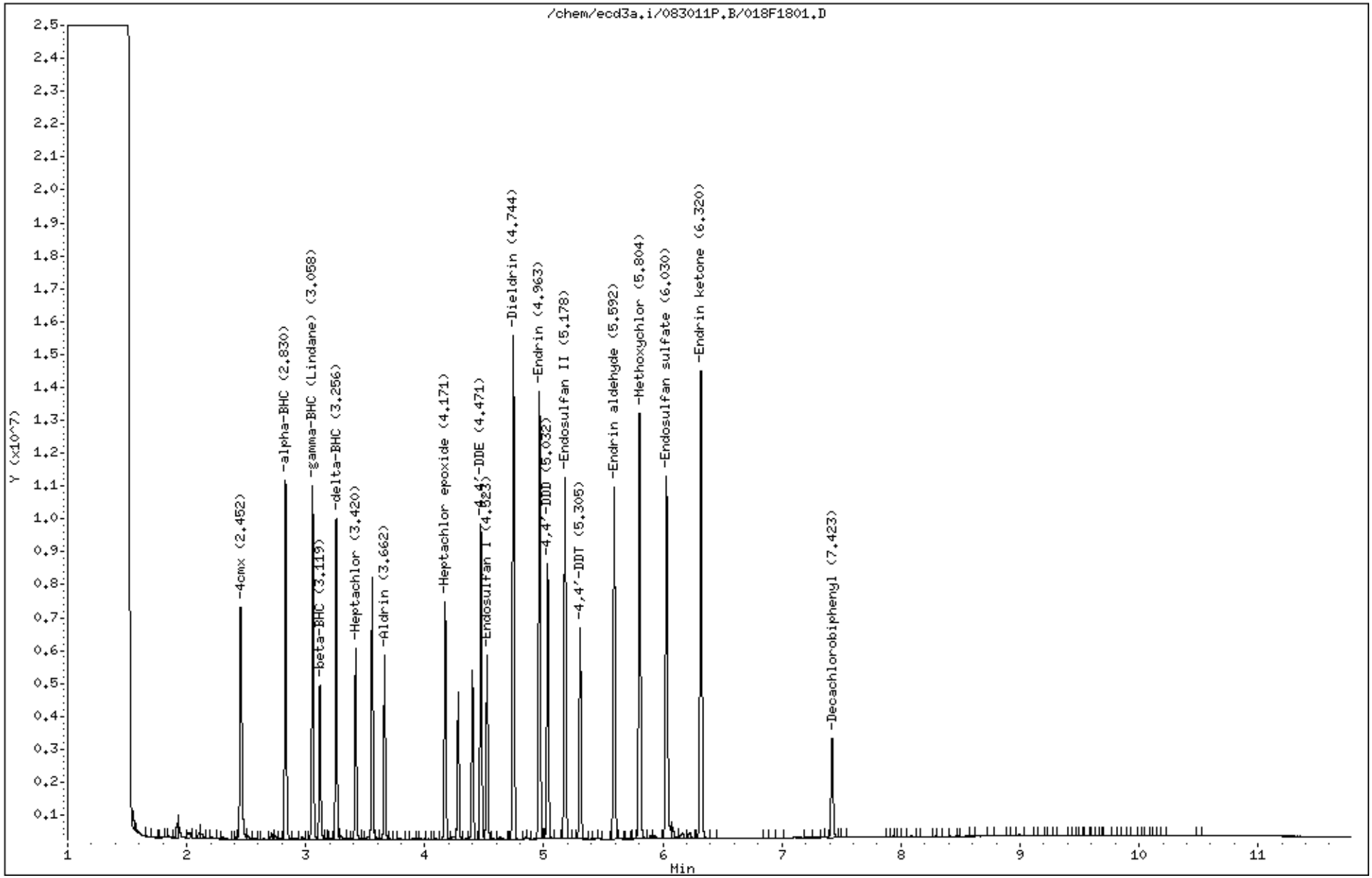
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
5.804	5.807	-0.003	14595186	495.817	2.53	80.00- 120.00	100.00(R)
13 delta-BHC					CAS #: 319-86-8		
3.256	3.255	0.001	8593503	87.3646	0.446	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
3.420	3.419	0.001	5338729	55.4119	0.283	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
3.662	3.662	0.000	5120344	44.1536	0.225	80.00- 120.00	100.00(R)
14 Heptachlor epoxide					CAS #: 1024-57-3		
4.171	4.171	0.000	7123066	71.2415	0.363	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
4.523	4.523	0.000	5639842	64.0393	0.327	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
4.471	4.473	-0.002	9611983	101.048	0.516	80.00- 120.00	100.00(R)
20 Dieldrin					CAS #: 60-57-1		
4.744	4.745	-0.001	16204932	163.444	0.834	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
4.963	4.964	-0.001	14635824	178.941	0.913	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
5.032	5.035	-0.003	8676763	123.208	0.629	80.00- 120.00	100.00(R)
24 Endosulfan II					CAS #: 33213-65-9		
5.178	5.179	-0.001	11970979	166.447	0.849	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
5.592	5.592	0.000	11360024	179.368	0.915	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
5.305	5.308	-0.003	6920412	105.787	0.540	80.00- 120.00	100.00(R)
29 Endosulfan sulfate					CAS #: 1031-07-8		
6.030	6.033	-0.003	13366031	195.918	1.00	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
6.320	6.323	-0.003	15978534	228.023	1.16	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/018F1801.D
Date : 30-AUG-2011 19:30
Client ID: 11080101MSD
Sample Info: |120247392711|
Volume Injected (uL): 1.0
Column phase: CLP-1

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



GEL Laboratories LLC

CLP-2

Data file : /chem/ecd3a.i/083011P.B/018B1801.D
Lab Smp Id: 1202473927 Client Smp ID: 11080101MSD
Inj Date : 30-AUG-2011 19:30
Operator : RXE1 Inst ID: ecd3a.i
Smp Info : |1202473927|1|
Misc Info : |ECD5A1B_1L|1136049|SVP|MSD|GROUND WATER|MSD|||
Comment :
Method : /chem/ecd3a.i/083011P.B/ECD3-B-8081-081211p.m
Meth Date : 31-Aug-2011 11:22 reb01393 Quant Type: ESTD
Cal Date : 30-NOV-2010 06:46 Cal File: 036b3601.d
Als bottle: 18 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	5.00000	Volume of final extract (mL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$	1 4cmx					CAS #: 877-09-8		
	3.086	3.086	0.000	6617049	82.0122	0.418	80.00- 120.00	100.00(R)
$	32 Decachlorobiphenyl					CAS #: 2051-24-3		
	9.146	9.147	-0.001	3349031	69.8104	0.356	80.00- 120.00	100.00(R)
	5 alpha-BHC					CAS #: 319-84-6		
	3.608	3.607	0.001	9274770	78.6707	0.401	80.00- 120.00	100.00
	7 gamma-BHC (Lindane)					CAS #: 58-89-9		
	3.931	3.931	0.000	8432106	80.5780	0.411	80.00- 120.00	100.00
	12 beta-BHC					CAS #: 319-85-7		
	3.993	3.992	0.001	3355617	74.1323	0.378	80.00- 120.00	100.00

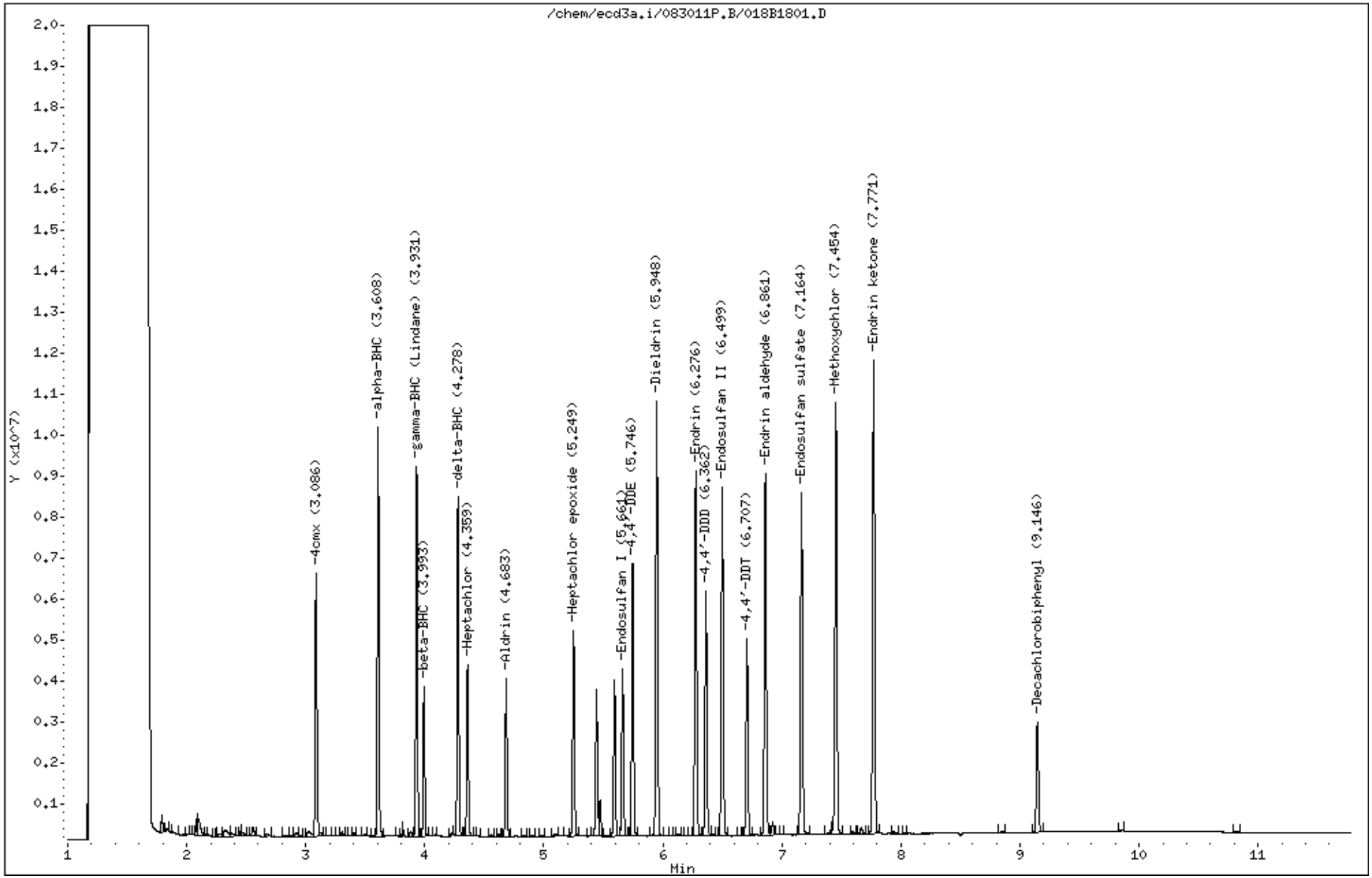
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
28 Methoxychlor					CAS #: 72-43-5		
7.454	7.455	-0.001	12081411	492.917	2.51	80.00- 120.00	100.00(R)
13 delta-BHC					CAS #: 319-86-8		
4.278	4.279	-0.001	7867886	76.2589	0.389	80.00- 120.00	100.00
10 Heptachlor					CAS #: 76-44-8		
4.359	4.359	0.000	4061176	50.2590	0.256	80.00- 120.00	100.00
11 Aldrin					CAS #: 309-00-2		
4.683	4.684	-0.001	3963839	39.9170	0.204	80.00- 120.00	100.00(R)
14 Heptachlor epoxide					CAS #: 1024-57-3		
5.249	5.249	0.000	5338917	61.8843	0.316	80.00- 120.00	100.00
16 Endosulfan I					CAS #: 959-98-8		
5.661	5.661	0.000	4506654	57.7825	0.295	80.00- 120.00	100.00
19 4,4'-DDE					CAS #: 72-55-9		
5.746	5.747	-0.001	7147323	90.6578	0.462	80.00- 120.00	100.00(R)
20 Dieldrin					CAS #: 60-57-1		
5.948	5.948	0.000	11867510	147.549	0.753	80.00- 120.00	100.00
22 Endrin					CAS #: 72-20-8		
6.276	6.276	0.000	10135579	156.501	0.798	80.00- 120.00	100.00
25 4,4'-DDD					CAS #: 72-54-8		
6.362	6.363	-0.001	6593200	108.573	0.554	80.00- 120.00	100.00(R)
24 Endosulfan II					CAS #: 33213-65-9		
6.499	6.499	0.000	9848837	143.495	0.732	80.00- 120.00	100.00
27 Endrin aldehyde					CAS #: 7421-93-4		
6.861	6.862	-0.001	10165649	179.575	0.916	80.00- 120.00	100.00
26 4,4'-DDT					CAS #: 50-29-3		
6.707	6.707	0.000	5342538	93.9968	0.480	80.00- 120.00	100.00(R)
29 Endosulfan sulfate					CAS #: 1031-07-8		
7.164	7.165	-0.001	9922909	169.296	0.864	80.00- 120.00	100.00
31 Endrin ketone					CAS #: 53494-70-5		
7.771	7.772	-0.001	13725188	194.513	0.992	80.00- 120.00	100.00

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd3a.i/083011P.B/018B1801.D
Date : 30-AUG-2011 19:30
Client ID: 11080101MSD
Sample Info: |120247392|1|
Volume Injected (uL): 1.0
Column phase: CLP-2

Instrument: ecd3a.i
Operator: RXE1
Column diameter: 0.25



Miscellaneous Data

Prep Logbook

Solid-Phase Extraction

Batch ID: 1136047 **Verified by:** _____
Analyst: Tiffany Adams
Method: SW846 3535A

Lab SOP: GL-OA-E-070 REV# 3
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Ph 1	Ph 2	Final Volume (mL)	Prepped Factor (mL/mL)
1202473924 MB	25-AUG-2011 18:20:00	1000	5	1	5	0.005
1202473925 LCS	25-AUG-2011 18:20:00	1000	5	1	5	0.005
284538001	25-AUG-2011 18:20:00	980	5	1	5	0.0051
1202473926 MS (284538001)	25-AUG-2011 18:20:00	980	5	1	5	0.0051
1202473927 MSD (284538001)	25-AUG-2011 18:20:00	980	5	1	5	0.0051

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202473925	PESTSPIKE	UE110817-04	1	mL
MS	1202473926	PESTSPIKE	UE110817-04	1	mL
MSD	1202473927	PESTSPIKE	UE110817-04	1	mL
SURR	All	PEST SURROGATE 1000 UG/L	UE110620-08	1	mL
REGNT	All	Hexane	1541543-B4	5	mL
REGNT	All	Methanol	1581666-C	10	mL
REGNT	All	Acetone	1601189-B1	5	mL
REGNT	All	Methylene Chloride	1605750-D	50	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1607507	15	L
SOURC	All	SODIUM SULFATE	1594298	30	g

Comments:

Final Solvent: Hexane
Verified By: VAQ

Int Ext pH: 1
Lot #91824-TL

Samples 8001, MS 8001, and MSD 8001 were brown in color with suspended solids.

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD3

DATE: 09/09/2011 METHOD: ECD3-B-8081-081211p.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-041
EPA Method: 8081
8081A
Sequence Number: 081611P.B Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001B0101.D	WAR110724-99IB	RXE1	16-AUG-2011 11:06	081611P		1.0		
002B0201.D	WPE110628-99DG	RXE1	16-AUG-2011 11:22	081611P		1.0		
003B0301.D	WPE110711-10AB	RXE1	16-AUG-2011 11:37	081611P		1.0		
004B0401.D	WPE110630-52TX	RXE1	16-AUG-2011 11:52	081611P		1.0		
005B0501.D	WPE110724-00CL	RXE1	16-AUG-2011 12:08	081611P		1.0		
006B0601.D	WPE110809-05GA	RXE1	16-AUG-2011 12:24	081611P		1.0		
007B0701.D	WPE110809-01AB	RXE1	16-AUG-2011 12:39	081611P		1.0		
008B0801.D	WPE110809-02AB	RXE1	16-AUG-2011 12:55	081611P		1.0		
009B0901.D	WPE110809-03AB	RXE1	16-AUG-2011 13:10	081611P		1.0		
010B1001.D	WPE110809-04AB	RXE1	16-AUG-2011 13:26	081611P		1.0		
011B1101.D	IPE110801-02AB	RXE1	16-AUG-2011 13:41	081611P		1.0		
012B1201.D	WPE110711-10AB	RXE1	16-AUG-2011 13:57	081611P		1.0		
013B1301.D	WPE110816-11TX	RXE1	16-AUG-2011 14:12	081611P		1.0		
014B1401.D	WPE110816-12TX	RXE1	16-AUG-2011 14:28	081611P		1.0		
015B1501.D	WPE110816-13TX	RXE1	16-AUG-2011 14:43	081611P		1.0		

Instrument Batch: /chem/ecd3a.i/081611P.B Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016B1601.D	WPE110816-14TX	RXE1	16-AUG-2011 14:59	081611P		1.0		

017B1701.D	IPE110418-40TX	RXE1	16-AUG-2011 15:14		081611P	1.0		
018B1801.D	WPE110630-52TX	RXE1	16-AUG-2011 15:30		081611P	1.0		
019B1901.D	WPE110816-21CL	RXE1	16-AUG-2011 15:45		081611P	1.0	CHLOR ICAL level 1	
020B2001.D	WPE110816-22CL	RXE1	16-AUG-2011 16:01		081611P	1.0	CHLOR ICAL level 2	
021B2101.D	WPE110816-23CL	RXE1	16-AUG-2011 16:27		081611P	1.0	CHLOR ICAL level 3	
022B2201.D	WPE110816-24CL	RXE1	16-AUG-2011 16:42		081611P	1.0	CHLOR ICAL level 4	
023B2301.D	IPE110616-06CL	RXE1	16-AUG-2011 16:58		081611P	1.0	CHLOR ICAL level 5	
024B2401.D	WPE110724-00CL	RXE1	16-AUG-2011 17:13		081611P	1.0		
025B2501.D	WAR110724-99IB	RXE1	16-AUG-2011 17:29		081611P	1.0		
026B2601.D	1202465177	RXE1	16-AUG-2011 17:44	1132355	283865	1.0	MB	
027B2701.D	1202465178	RXE1	16-AUG-2011 18:00	1132355	283865	1.0	LCS	
028B2801.D	283865001	RXE1	16-AUG-2011 18:15	1132355	283865	5.0	ENRG	
029B2901.D	283865002	RXE1	16-AUG-2011 18:31	1132355	283865	20.0	ENRG	
030B3001.D	283865003	RXE1	16-AUG-2011 18:46	1132355	283865	20.0	ENRG	
031B3101.D	1202465438	RXE1	16-AUG-2011 19:02	1132355	283865	20.0	MS	
032B3201.D	1202465439	RXE1	16-AUG-2011 19:17	1132355	283865	20.0	MSD	
033B3301.D	283865004	RXE1	16-AUG-2011 19:33	1132355	283865	5.0	ENRG	
034B3401.D	WAR110724-99IB	RXE1	16-AUG-2011 19:48		081611P	1.0		
035B3501.D	WPE110812-10AB	RXE1	16-AUG-2011 20:04		081611P	1.0		

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036B3601.D	WAR110724-99IB	RXE1	16-AUG-2011 20:19		081611P	1.0		

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD3

DATE: 08/31/2011 METHOD: ECD3-F-8081-081211p.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DE354

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-041
EPA Method: 8081
8081A
Sequence Number: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001F0101.D	WAR110724-99IB	RXE1	23-AUG-2011 11:23	082311P		1.0		CLEAN
002F0201.D	WPE110628-99DG	RXE1	23-AUG-2011 11:39	082311P		1.0		
003F0301.D	WPE110711-10AB	RXE1	23-AUG-2011 11:54	082311P		1.0		DUSE
004F0401.D	WPE110630-52TX	RXE1	23-AUG-2011 12:10	082311P		1.0		DUSE
005F0501.D	WPE110724-00CL	RXE1	23-AUG-2011 12:25	082311P		1.0		USE. PASSING ALL.
006F0601.D	WPE110809-05GA	RXE1	23-AUG-2011 12:41	082311P		1.0		PATTERN ONLY.
007F0701.D	WPE110809-01AB	RXE1	23-AUG-2011 12:56	082311P		1.0		INDAB ICAL 1
008F0801.D	WPE110809-02AB	RXE1	23-AUG-2011 13:12	082311P		1.0		INDAB ICAL 2
009F0901.D	WPE110809-03AB	RXE1	23-AUG-2011 13:27	082311P		1.0		INDAB ICAL 3
010F1001.D	WPE110809-04AB	RXE1	23-AUG-2011 13:43	082311P		1.0		INDAB ICAL 4
011F1101.D	IPE110801-02AB	RXE1	23-AUG-2011 13:58	082311P		1.0		INDAB ICAL 5
012F1201.D	WPE110711-10AB	RXE1	23-AUG-2011 14:14	082311P		1.0		USE. PASSING ALL.
013F1301.D	WPE110816-11TX	RXE1	23-AUG-2011 14:29	082311P		1.0		TOXAPH ICAL 1
014F1401.D	WPE110816-12TX	RXE1	23-AUG-2011 14:45	082311P		1.0		TOXAPH ICAL 2
015F1501.D	WPE110816-13TX	RXE1	23-AUG-2011 15:00	082311P		1.0		TOXAPH ICAL 3

Instrument Batch: /chem/ecd3a.i/082311P.B Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016F1601.D	WPE110816-14TX	RXE1	23-AUG-2011 15:16	082311P		1.0		TOXAPH ICAL 4

017F1701.D	IPE110418-40TX	RXE1	23-AUG-2011 15:31		082311P	1.0		TOXAPH ICAL 5	
018F1801.D	WPE110630-52TX	RXE1	23-AUG-2011 15:47		082311P	1.0		USE. PASSING AVG.	
019F1901.D	WAR110724-99IB	RXE1	23-AUG-2011 16:02		082311P	1.0		CLEAN	
020F2001.D	1202468426	RXE1	23-AUG-2011 16:18	1133709	284086	1.0	MB	DUSE.	
021F2101.D	1202468427	RXE1	23-AUG-2011 16:33	1133709	284086	1.0	LCS	DUSE.	
022F2201.D	1202468428	RXE1	23-AUG-2011 16:49	1133709	284086	1.0	LCSD	DUSE.	
023F2301.D	284086001	RXE1	23-AUG-2011 17:04	1133709	284086	2.0	ENRG	DUSE.	
024F2401.D	284086002	RXE1	23-AUG-2011 17:20	1133709	284086	2.0	ENRG	DUSE.	
025F2501.D	284086003	RXE1	23-AUG-2011 17:35	1133709	284086	2.0	ENRG	DUSE.	
026F2601.D	WAR110724-99IB	RXE1	23-AUG-2011 17:51		082311P	1.0		CLEAN	
027F2701.D	WPE110812-10AB	RXE1	23-AUG-2011 18:06		082311P	1.0		DUSE.	
028F2801.D	WAR110724-99IB	RXE1	23-AUG-2011 18:22		082311P	1.0		CLEAN	
029F2901.D	1202466688	RXE1	23-AUG-2011 18:37	1132923	11-3023	1.0	MB	DUSE.	
030F3001.D	1202466689	RXE1	23-AUG-2011 18:53	1132923	11-3023	1.0	LCS	DUSE.	
031F3101.D	1202466692	RXE1	23-AUG-2011 19:08	1132923	11-3023	1.0	TLCS	DUSE.	
032F3201.D	283460001	RXE1	23-AUG-2011 19:24	1132923	11-3023	10.0	ARSL	DUSE.	
033F3301.D	1202466690	RXE1	23-AUG-2011 19:40	1132923	11-3023	10.0	MS	DUSE.	
034F3401.D	1202466691	RXE1	23-AUG-2011 19:55	1132923	11-3023	10.0	MSD	DUSE.	
035F3501.D	283460002	RXE1	23-AUG-2011 20:11	1132923	11-3023	10.0	ARSL	DUSE.	

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036F3601.D	WAR110724-99IB	RXE1	23-AUG-2011 20:26		082311P	1.0		CLEAN
037F3701.D	WPE110812-10AB	RXE1	23-AUG-2011 20:42		082311P	1.0		DUSE - CONFIRMS CHECK FAILURE.

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD3

DATE: 09/01/2011 METHOD: ECD3-B-8081-081211p.m OPERATOR:RXE1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DE354

Calibration & QC Information
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-041
EPA Method: 8081
8081A
Sequence Number: Injection Volume: 1.0 uL

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001B0101.D	WAR110724-99IB	RXE1	30-AUG-2011 15:06		083011P	1.0		CLEAN
002B0201.D	WPE110628-99DG	RXE1	30-AUG-2011 15:22		083011P	1.0		(B)DDT:1.3, ENDRIN:3.5 (F)DDT:0.86, ENDRIN:2.5
003B0301.D	WPE110711-10AB	RXE1	30-AUG-2011 15:37		083011P	1.0		DUSE
004B0401.D	WPE110630-52TX	RXE1	30-AUG-2011 15:53		083011P	1.0		USE. PASSING ALL.
005B0501.D	WPE110724-00CL	RXE1	30-AUG-2011 16:08		083011P	1.0		USE. PASSING ALL B METHOD.
006B0601.D	WPE110809-05GA	RXE1	30-AUG-2011 16:24		083011P	1.0		PATTERN ONLY.
007B0701.D	WPE110830-01AB	RXE1	30-AUG-2011 16:39		083011P	1.0		INDAB ICAL 1
008B0801.D	WPE110830-02AB	RXE1	30-AUG-2011 16:55		083011P	1.0		INDAB ICAL 2
009B0901.D	WPE110830-03AB	RXE1	30-AUG-2011 17:10		083011P	1.0		INDAB ICAL 3
010B1001.D	WPE110830-04AB	RXE1	30-AUG-2011 17:26		083011P	1.0		INDAB ICAL 4
011B1101.D	IPE110801-02AB	RXE1	30-AUG-2011 17:41		083011P	1.0		INDAB ICAL 5
012B1201.D	WPE110711-10AB	RXE1	30-AUG-2011 17:57		083011P	1.0		USE. PASSING ALL.
013B1301.D	WAR110724-99IB	RXE1	30-AUG-2011 18:12		083011P	1.0		CLEAN
014B1401.D	1202473924	RXE1	30-AUG-2011 18:28	1136049	284538	1.0	MB	USE. PASSING BOTH, UPLOAD HIGHER.
015B1501.D	1202473925	RXE1	30-AUG-2011 18:43	1136049	284538	1.0	LCS	USE. PASSING BOTH, UPLOAD HIGHER.

Instrument Batch: /chem/ecd3a.i/083011P.B Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016B1601.D	284538001	RXE1	30-AUG-2011 18:59	1136049	284538	1.0	ECOL	USE. PASSING BOTH, UPLOAD HIGHER.

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
017B1701.D	1202473926	RXE1	30-AUG-2011 19:15	1136049	284538	1.0	MS	USE. FAILURES CONFIRMED BY MSD.
018B1801.D	1202473927	RXE1	30-AUG-2011 19:30	1136049	284538	1.0	MSD	USE. FAILURES CONFIRMED BY MS.
019B1901.D	WPE110812-10AB	RXE1	30-AUG-2011 19:46		083011P	1.0		USE. PASSING ALL B METHOD.
020B2001.D	WAR110724-99IB	RXE1	30-AUG-2011 20:01		083011P	1.0		CLEAN
021B2101.D	1202472051	RXE1	30-AUG-2011 20:16	1135299	EUI-8463	1.0	MB	USE. PASSING BOTH, UPLOAD HIGHER.
022B2201.D	1202472052	RXE1	30-AUG-2011 20:32	1135299	EUI-8463	1.0	LCS	USE. PASSING BOTH, UPLOAD HIGHER.
023B2301.D	284350001	RXE1	30-AUG-2011 20:47	1135299	EUI-8463	1.0	CARE	USE. PASSING BOTH, UPLOAD HIGHER.
024B2401.D	1202472053	RXE1	30-AUG-2011 21:03	1135299	EUI-8463	1.0	MS	USE. FAILURES CONFIRMED BY MSD.
025B2501.D	1202472054	RXE1	30-AUG-2011 21:19	1135299	EUI-8463	1.0	MSD	USE. FAILURES CONFIRMED BY MS.
026B2601.D	284351001	RXE1	30-AUG-2011 21:34	1135299	EUI-8464	1.0	CARE	USE. PASSING BOTH, UPLOAD HIGHER.
027B2701.D	WAR110724-99IB	RXE1	30-AUG-2011 21:50		083011P	1.0		CLEAN
028B2801.D	WPE110812-10AB	RXE1	30-AUG-2011 22:05		083011P	1.0		USE. MULTIPLE ANALYTES HI (F), PASSING (B).
029B2901.D	WAR110724-99IB	RXE1	30-AUG-2011 22:21		083011P	1.0		CLEAN
030B3001.D	1202476091	RXE1	30-AUG-2011 22:36	1136950	EUI-8472	1.0	MB	USE. PASSING BOTH, UPLOAD HIGHER.
031B3101.D	1202473061	RXE1	30-AUG-2011 22:52	1136950	EUI-8472	1.0	TB	USE. PASSING BOTH, UPLOAD HIGHER.
032B3201.D	1202476098	RXE1	30-AUG-2011 23:07	1136950	EUI-8472	1.0	LCS	USE. PASSING BOTH, UPLOAD HIGHER.
033B3301.D	1202476099	RXE1	30-AUG-2011 23:23	1136950	EUI-8472	1.0	TLCS	USE. PASSING BOTH, UPLOAD HIGHER.
034B3401.D	1202476100	RXE1	30-AUG-2011 23:38	1136950	EUI-8472	1.0	CLCS	USE. $ LOW BOTH, SPIKE PASSING BOTH.
035B3501.D	WPE110812-10AB	RXE1	30-AUG-2011 23:54		083011P	1.0		USE. MULTIPLE ANALYTES HI (F), PASSING (B).

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036B3601.D	WAR110724-99IB	RXE1	31-AUG-2011 00:09		083011P	1.0		CLEAN
037B3701.D	284607001	RXE1	31-AUG-2011 00:25	1136950	EUI-8472	1.0	CARE	USE. PASSING BOTH, UPLOAD HIGHER.
038B3801.D	1202476092	RXE1	31-AUG-2011 00:40	1136950	EUI-8472	1.0	MS	USE. PASSING BOTH, UPLOAD HIGHER.
039B3901.D	1202476095	RXE1	31-AUG-2011 00:56	1136950	EUI-8472	1.0	MSD	USE. PASSING BOTH, UPLOAD HIGHER.
040B4001.D	1202476093	RXE1	31-AUG-2011 01:11	1136950	EUI-8472	1.0	TMS	USE. PASSING BOTH, UPLOAD HIGHER.
041B4101.D	1202476096	RXE1	31-AUG-2011 01:27	1136950	EUI-8472	1.0	TMSD	USE. PASSING BOTH, UPLOAD HIGHER.

042B4201.D	1202476094	RXE1	31-AUG-2011 01:42	1136950	EUI-8472		1.0	CMS	USE. PASSING BOTH, UPLOAD HIGHER.
043B4301.D	1202476097	RXE1	31-AUG-2011 01:58	1136950	EUI-8472		1.0	CMSD	USE. PASSING BOTH, UPLOAD HIGHER.
044B4401.D	WAR110724-99IB	RXE1	31-AUG-2011 02:13		083011P		1.0		CLEAN
045B4501.D	WPE110812-10AB	RXE1	31-AUG-2011 02:29		083011P		1.0		USE. MULTIPLE ANALYTES HI (F), PASSING (B).
046B4601.D	WAR110724-99IB	RXE1	31-AUG-2011 02:44		083011P		1.0		CLEAN
047B4701.D	1202476693	RXE1	31-AUG-2011 03:00	1137173	EUI-8476		1.0	MB	USE. PASSING BOTH, UPLOAD HIGHER.
048B4801.D	1202476694	RXE1	31-AUG-2011 03:15	1137173	EUI-8476		1.0	LCS	USE. GAMMA-BHC HI (F), PASSING (B).
049B4901.D	284646001	RXE1	31-AUG-2011 03:31	1137173	EUI-8475		10.0	CARE	USE. PASSING BOTH, UPLOAD HIGHER.
050B5001.D	284793001	RXE1	31-AUG-2011 03:46	1137173	EUI-8476		1.0	CARE	USE. FCMX LOW (B), CONFIRMED BY MS/MSD.
051B5101.D	1202476695	RXE1	31-AUG-2011 04:02	1137173	EUI-8476		1.0	MS	USE. FAILURES CONFIRMED BY MSD.
052B5201.D	1202476696	RXE1	31-AUG-2011 04:17	1137173	EUI-8476		1.0	MSD	USE. FAILURES CONFIRMED BY MS.
053B5301.D	WAR110724-99IB	RXE1	31-AUG-2011 04:33		083011P		1.0		CLEAN
054B5401.D	WPE110812-10AB	RXE1	31-AUG-2011 04:49		083011P		1.0		USE. MULTIPLE ANALYTES HI (F), PASSING (B).
055B5501.D	WAR110724-99IB	RXE1	31-AUG-2011 05:04		083011P		1.0		CLEAN

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
01-SEP-11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 3535A/8081B	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1136049	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. QC samples 1202473926(MS) and 1202473927(MSD) were outside of the spike recovery acceptance limits. 2. QC samples 1202473926(MS) and 1202473927(MSD) were outside of the acceptance criteria for surrogate yields.	1. and 2. As the MS and MSD exhibited similar spike and surrogate recoveries, the non-compliances were attributed to sample matrix interference and the data were reported.

Originator's Name:

Rebecca Enzor 01-SEP-11

Data Validator/Group Leader:

Heather Joy 15-SEP-11

GC Semivolatile PCB Analysis

PCB Case Narrative
Ecology and Environment, Inc. Start-3 002233.2008 (ECOL)
SDG 284538

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 3535A/8082A
Prep Method:	SW846 3535A
Analytical Batch Number:	1136663
Prep Batch Number:	1136662

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3535A/8082A:

Sample ID	Client ID
284538001	11080101
1202475427	Method Blank (MB)
1202475428	Laboratory Control Sample (LCS)
1202475429	284538001(11080101) Matrix Spike (MS)
1202475430	284538001(11080101) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-040 REV# 16.

Raw data reports are processed and reviewed by the analyst using the Target software package. False positives have been removed from the Target quantitation reports per standard operating procedures (SOP) section 23.0.

Calibration Information

Please note that the 'Cal Date' indicated on each quantitation report reflects the date and time of the most recent calibrated analyte(s) in the Target processing method. Since the laboratory may calibrate with multiple solutions on different days using the same processing method, the Target software will update the 'Cal Date' to the last calibration file, date and time. The correct dates and times for all calibration files are located on the Calibration History report in the Standard Data section in the data package.

Due to software limitations, the Calibration Summary Form 6 may not indicate all the calibration files comprising the initial calibration. A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package.

Initial Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

The linear equation used in Target and indicated on the initial calibration summary form is not a conventional linear equation (slope intercept formula) and does not match the equation found in SW-846 method 8000B. The x and y axes are inversed in Target, so that the instrument response is treated as the independent variable (x) and the concentration ratio is treated as the dependent variable (y). The equation used in Target to calculate sample results is adjusted to account for the linear equation inversion and reciprocal slope. The adjusted calculation has been independently verified to produce valid results.

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria. All analytes were within the established retention time windows for this method.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG did not meet the acceptance criteria. The MB was contaminated with Aroclor-1242, Aroclor-1254 and Aroclor-1260 during sample preparation. This non-compliance had no adverse effects on the data as the associated ECOL sample was not detected with any Aroclors. See DER #991280 in the Miscellaneous Data section.

Surrogate Recoveries
Samples 1202475429 (11080101MS), 1202475430 (11080101MSD) and 284538001 (11080101) failed to meet acceptance criteria for surrogate recovery due to sample matrix interference as the MS, MSD and the parent sample failed surrogate recovery in the same manner. See DER #991280 in the Miscellaneous Data section.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 284538001 (11080101) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recovery for this SDG was not within the established acceptance limits due to sample matrix interference. See DER #992128 in the Miscellaneous Data section.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovery for this SDG was not within the established acceptance limits due to sample matrix interference. See DER #991280 in the Miscellaneous Data section.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD between the MS and MSD met the acceptance limits.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP. All reported analyte detections in client and quality control samples were within the established retention time windows. Reported analyte concentrations were confirmed on dissimilar columns.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Electronic Package Comment

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the analyst, reviewer, and report specialist names associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data Exception Report (DER) is for documentation of any procedural anomalies that may deviate from referenced SOP or contractual document. DER #991280 was generated for this batch. A copy is included in the Miscellaneous Data section of this package.

Manual Integrations
Certain standards and samples may have required manual integration to correctly position the baseline as set in the calibration standard injections. If manual integration was performed, copies of all manual integration peak profiles are included in the raw data section of this PCB fraction.

Additional Comments
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

The higher results from either column have been chosen and reported in the data package for the client samples, MB and LCS. The data reported for the MS and MSD are from the same analytical column as the parent sample.

The data reported on the form I and III may differ slightly from the data reported on the form X. This is due to software limitations in rounding differences between the forms.

Aroclors quantitated on the raw data report by the Target data system do not necessarily represent positive Aroclor identification. In order for positive identification to be made, the Aroclor must match in pattern and retention time; as well as quantitate relatively close between the primary and confirmation columns, as specified in SW846 method 8000. When these conditions are not met, the Aroclor is reported as a non-

detect on the data report. These situations will be noted on the raw data as DMP, representing does not match pattern, or DNC does not confirm.

System Configuration

The Semi-Volatiles-PCB analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
ECD8A.I_1	Agilent 6890 Gas Chromatograph/Dual ECD w/ 7683 Autosampler	HP6890 Series ECD	Rtx-CLP I	30m x 0.25mm, 0.25um (Rtx-CLPesticide I)
ECD8A.I_2	Agilent 6890 Gas Chromatograph/Dual ECD w/ 7683 Autosampler	HP6890 Series ECD	Rtx-CLP II	30m x 0.25mm, 0.20um (Rtx-CLPesticide II)

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer: Jimmi Cao Date: 9/15/11

Roadmap for ECOL 284538 PCB

This roadmap was analyzed by YIP00818 on 08-30-2011, 10:58.
This roadmap was reviewed by YIP00818 on 08-30-2011, 12:30.
This roadmap was packaged by jim01140 on 09-15-2011, 09:40.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd8a.i/083011.b/014f1401.d	284538001	sample	30-AUG-2011	09:41	284538.sub	11080101	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd8a.i/083011.b/014b1401.d	284538001	sample	30-AUG-2011	09:41	284538.sub	11080101	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd8a.i/083011.b/012f1201.d	1202475427	mb	30-AUG-2011	09:17	284538.sub	PBLK01	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/013f1301.d	1202475428	lcs	30-AUG-2011	09:29	284538.sub	PBLK01LCS	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/015f1501.d	1202475429	ms	30-AUG-2011	09:52	284538.sub	11080101MS	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/016f1601.d	1202475430	msd	30-AUG-2011	10:04	284538.sub	11080101MSD	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
☐	N	/chem/ecd8a.i/083011.b/012b1201.d	1202475427	mb	30-AUG-2011	09:17	284538.sub	PBLK01	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/013b1301.d	1202475428	lcs	30-AUG-2011	09:29	284538.sub	PBLK01LCS	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/015b1501.d	1202475429	ms	30-AUG-2011	09:52	PCB.sub	11080101MS	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER
☐	N	/chem/ecd8a.i/083011.b/016b1601.d	1202475430	msd	30-AUG-2011	10:04	284538.sub	11080101MSD	1.00000	1136663	UPLOAD BOTH COLUMNS, USE HIGHER

Sample Data Summary

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 09:41**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**1 mL**
Data File:	**014f1401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	014b1401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.034	ug/L	0.034	0.102	1
11104-28-2	Aroclor-1221	U	0.034	ug/L	0.034	0.102	1
11141-16-5	Aroclor-1232	U	0.034	ug/L	0.034	0.102	1
53469-21-9	Aroclor-1242	U	0.034	ug/L	0.034	0.102	1
12672-29-6	Aroclor-1248	U	0.034	ug/L	0.034	0.102	1
11097-69-1	Aroclor-1254	U	0.034	ug/L	0.034	0.102	1
11096-82-5	Aroclor-1260	U	0.034	ug/L	0.034	0.102	1

QC Summary

Surrogate Recovery Report

SDG Number: 284538

Matrix Type: LIQUID

CAP Column (1) : CLP1 **CAP Column (2) : CLP2**

Sample ID	Client ID	4CMX 1 %REC #	4CMX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #
1202475427	MB for batch 1136662	64	61	66	72
1202475428	LCS for batch 1136662	64	60	64	70
284538001	11080101	12 *	12 *	10 *	14 *
1202475429	11080101MS	16 *	16 *	22 *	26 *
1202475430	11080101MSD	18 *	17 *	22 *	26 *

Surrogate		Acceptance Limits
4CMX	= 4cmx	(50%-150%)
DCB	= Decachlorobiphenyl	(50%-150%)

* Recovery outside Acceptance Limits

Column to be used to flag recovery values

D Sample Diluted

Quality Control Summary
Spike Recovery Report

SDG Number: 284538
Sample Type: Laboratory Control Sample
Client ID: LCS for batch 1136662
Matrix: GROUND WATER
Lab Sample ID: 1202475428
Instrument: ECD8A.I
Analysis Date: 08/30/2011 09:29
Dilution: 1
Analyst: YS1
Prep Batch ID 1136662
Inj. Vol: 1 uL
Batch ID: 1136663

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L	Spike Conc. ug/L	Recovery %	Acceptance Limits
12674-11-2	LCS	Aroclor-1016	1.00	0.0	0.660	66	48-97
11096-82-5	LCS	Aroclor-1260	1.00	0.0	0.700	70	50-94

Quality Control Summary
Spike Recovery Report

SDG Number: **284538**
Sample Type: **Matrix Spike**
Client ID: **11080101MS**
Matrix: **GROUND WATER**
Lab Sample ID: **1202475429**
Instrument: **ECD8A.I**
Analysis Date: **08/30/2011 09:52**
Dilution: **1**
Analyst: **YS1**
Prep Batch ID: **1136662**
Inj. Vol: **1 uL**
Batch ID: **1136663**

CAS No		Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	1.00	0.00	U	0.180	18 *	29-142
11096-82-5	MS	Aroclor-1260	1.00	0.00	U	0.250	25 *	48-119

Quality Control Summary
Spike Recovery Report

SDG Number: 284538
Sample Type: Matrix Spike Duplicate
Client ID: 11080101MSD
Matrix: GROUND WATER
Lab Sample ID: 1202475430
Instrument: ECD8A.I
Analysis Date: 08/30/2011 10:04
Dilution: 1
Analyst: YS1
Prep Batch ID: 1136662
Inj. Vol: 1 uL
Batch ID: 1136663

CAS No	Parmname	Amount Added ug/L	Sample Conc. ug/L		Spike Conc. ug/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	1.00	0.00	U	0.220	22 *	29-142	20	0-30
11096-82-5	MSD Aroclor-1260	1.00	0.00	U	0.290	29 *	48-119	15	0-30

Method Blank Summary

SDG Number:	**284538**	**Client:**	**ECOL008**	**Matrix:**	**GROUND WATER**
Client ID:	**MB for batch 1136662**	**Instrument ID:**	**ECD8A.I_2** **ECD8A.I_1**	**Data File:**	**012b1201.d** **012f1201.d**
Lab Sample ID:	**1202475427**			**Analyzed:**	**08/30/11 09:17**
Column:	**CLP2** **CLP1**	**Prep Date:**	**08/29/2011 08:20**		
		Level:	**LOW**		

This method blank applies to the following samples and quality control samples:

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01 LCS for batch 1136662	**1202475428**	**013f1301.d** **013b1301.d**	**08/30/11**	**0929**
02 11080101	**284538001**	**014f1401.d** **014b1401.d**	**08/30/11**	**0941**
03 11080101MS	**1202475429**	**015f1501.d** **015b1501.d**	**08/30/11**	**0952**
04 11080101MSD	**1202475430**	**016f1601.d** **016b1601.d**	**08/30/11**	**1004**

Sample Data

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**284538001**	**Date Received:**	**08/23/2011 08:50**		
		Client:	**ECOL008**	**Project:**	**ECOL00111**
Client ID:	**11080101**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 09:41**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**980 mL**	**Final Volume:**	**1 mL**
Data File:	**014f1401.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	014b1401.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.034	ug/L	0.034	0.102	1
11104-28-2	Aroclor-1221	U	0.034	ug/L	0.034	0.102	1
11141-16-5	Aroclor-1232	U	0.034	ug/L	0.034	0.102	1
53469-21-9	Aroclor-1242	U	0.034	ug/L	0.034	0.102	1
12672-29-6	Aroclor-1248	U	0.034	ug/L	0.034	0.102	1
11097-69-1	Aroclor-1254	U	0.034	ug/L	0.034	0.102	1
11096-82-5	Aroclor-1260	U	0.034	ug/L	0.034	0.102	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/014f1401.d
Lab Smp Id: 284538001 Client Smp ID: 11080101
Inj Date : 30-AUG-2011 09:41
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |284538001|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|ECOL|GROUND WATER|11080101|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

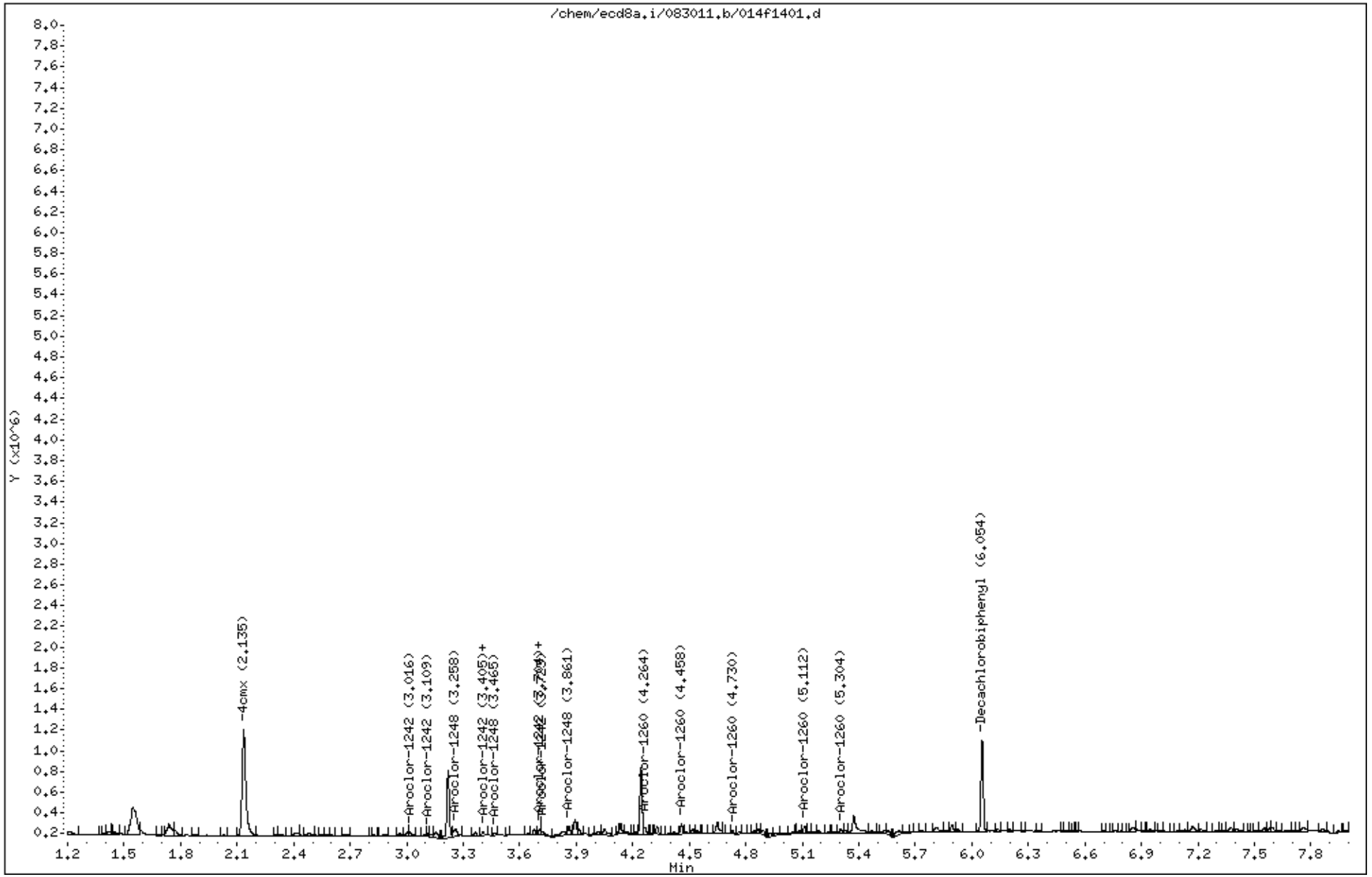
				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.135	2.135	0.000	1396533	24.5782	0.025	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.054	6.054	0.000	764132	20.4069	0.021	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/014f1401.d
Date : 30-AUG-2011 09:41
Client ID: 11080101
Sample Info: |28453800|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/014b1401.d
Lab Smp Id: 284538001 Client Smp ID: 11080101
Inj Date : 30-AUG-2011 09:41
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |284538001|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|ECOL|GROUND WATER|11080101|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	980.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

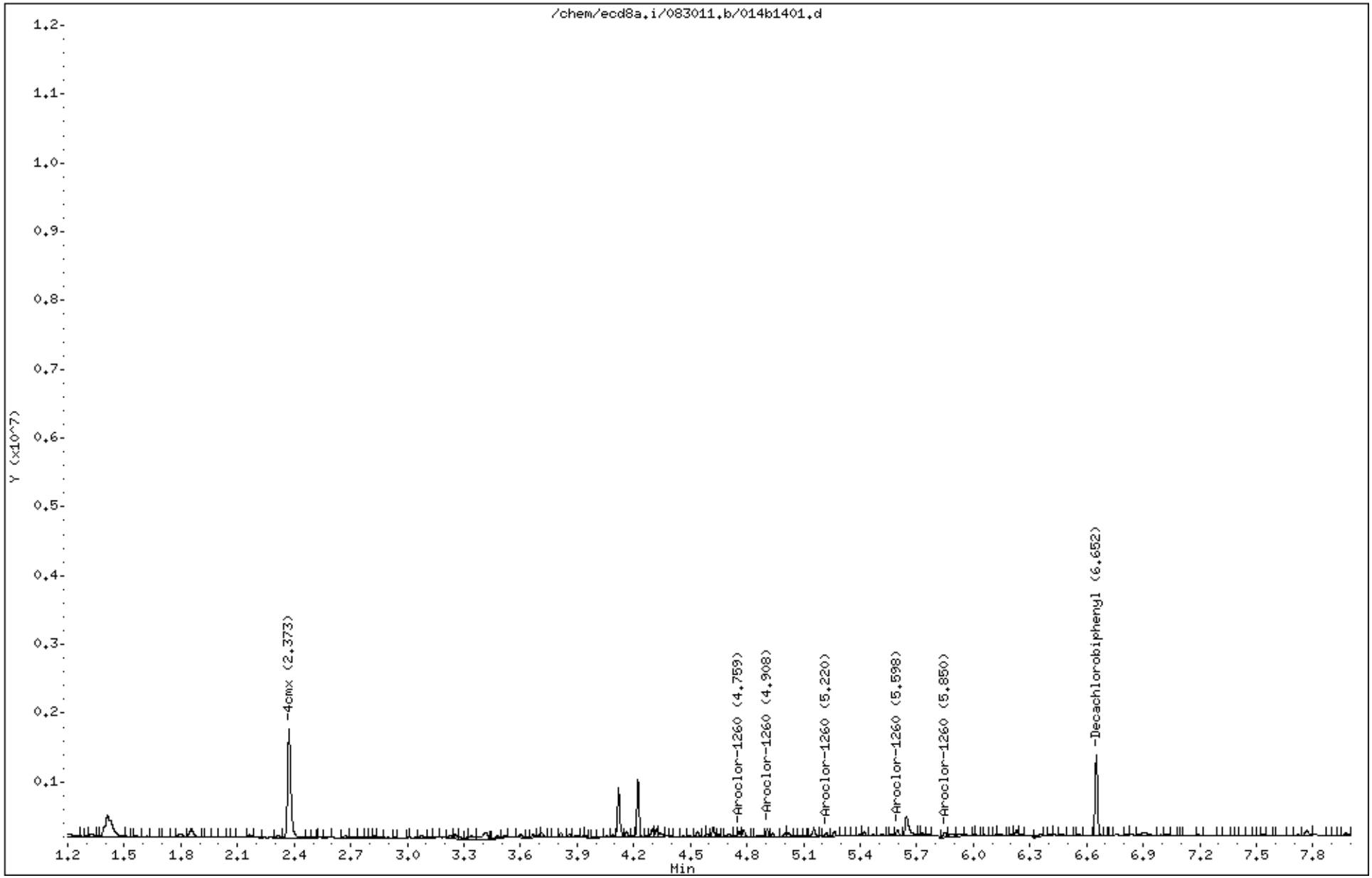
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	1901044	24.8627	0.025	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.652	6.651	0.001	1056425	27.9180	0.028	80.00- 120.00	100.00(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/014b1401.d
Date : 30-AUG-2011 09:41
Client ID: 11080101
Sample Info: |28453800|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



Standard Data

Report Date: 30-Aug-2011 10:55

Calibration History

Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Start Cal Date: 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
17-AUG-2011 16:36	AR1248	/chem/ecd8a.i/081711.b/029f2901.d
17-AUG-2011 15:26	AR1242	/chem/ecd8a.i/081711.b/023f2301.d
17-AUG-2011 14:16	AR1254	/chem/ecd8a.i/081711.b/017f1701.d
17-AUG-2011 13:06	AR1660	/chem/ecd8a.i/081711.b/011f1101.d
Cal Level: 2 , Cal Amount: 250.00000		
17-AUG-2011 16:47	AR1248	/chem/ecd8a.i/081711.b/030f3001.d
17-AUG-2011 15:38	AR1242	/chem/ecd8a.i/081711.b/024f2401.d
17-AUG-2011 14:28	AR1254	/chem/ecd8a.i/081711.b/018f1801.d
17-AUG-2011 13:18	AR1660	/chem/ecd8a.i/081711.b/012f1201.d
Cal Level: 3 , Cal Amount: 500.00000		
17-AUG-2011 16:59	AR1248	/chem/ecd8a.i/081711.b/031f3101.d
17-AUG-2011 15:49	AR1242	/chem/ecd8a.i/081711.b/025f2501.d
17-AUG-2011 14:39	AR1254	/chem/ecd8a.i/081711.b/019f1901.d
17-AUG-2011 13:29	AR1660	/chem/ecd8a.i/081711.b/013f1301.d
Cal Level: 4 , Cal Amount: 1000.00000		
17-AUG-2011 12:55	DDTANALOGSTD	/chem/ecd8a.i/081711.b/010f1001.d
17-AUG-2011 12:43	AR1268	/chem/ecd8a.i/081711.b/009f0901.d
17-AUG-2011 12:31	AR1262	/chem/ecd8a.i/081711.b/008f0801.d
17-AUG-2011 12:20	AR1221	/chem/ecd8a.i/081711.b/007f0701.d
17-AUG-2011 12:01	AR1232	/chem/ecd8a.i/081711.b/006f0601.d
17-AUG-2011 17:11	AR1248	/chem/ecd8a.i/081711.b/032f3201.d
17-AUG-2011 16:01	AR1242	/chem/ecd8a.i/081711.b/026f2601.d
17-AUG-2011 14:51	AR1254	/chem/ecd8a.i/081711.b/020f2001.d
17-AUG-2011 13:41	AR1660	/chem/ecd8a.i/081711.b/014f1401.d
Cal Level: 5 , Cal Amount: 4000.00000		
17-AUG-2011 17:22	AR1248	/chem/ecd8a.i/081711.b/033f3301.d
17-AUG-2011 16:12	AR1242	/chem/ecd8a.i/081711.b/027f2701.d
17-AUG-2011 15:03	AR1254	/chem/ecd8a.i/081711.b/021f2101.d
17-AUG-2011 13:53	AR1660	/chem/ecd8a.i/081711.b/015f1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 10:18	AR1660	/chem/ecd8a.i/083011.b/017f1701.d
Ccal Level: 4 , Ccal Amount: 1000		

30-AUG-2011 08:43	AR1268	/chem/ecd8a.i/083011.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:31	AR1262	/chem/ecd8a.i/083011.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:19	AR1221	/chem/ecd8a.i/083011.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:08	AR1232	/chem/ecd8a.i/083011.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:56	AR1248	/chem/ecd8a.i/083011.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:44	AR1242	/chem/ecd8a.i/083011.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:33	AR1254	/chem/ecd8a.i/083011.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:21	AR1660	/chem/ecd8a.i/083011.b/002f0201.d

Report Date: 30-Aug-2011 10:55

Calibration History

Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Start Cal Date: 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
17-AUG-2011 16:36	AR1248	/chem/ecd8a.i/081711.b/029b2901.d
17-AUG-2011 15:26	AR1242	/chem/ecd8a.i/081711.b/023b2301.d
17-AUG-2011 14:16	AR1254	/chem/ecd8a.i/081711.b/017b1701.d
17-AUG-2011 13:06	AR1660	/chem/ecd8a.i/081711.b/011b1101.d
Cal Level: 2 , Cal Amount: 250.00000		
17-AUG-2011 16:47	AR1248	/chem/ecd8a.i/081711.b/030b3001.d
17-AUG-2011 15:38	AR1242	/chem/ecd8a.i/081711.b/024b2401.d
17-AUG-2011 14:28	AR1254	/chem/ecd8a.i/081711.b/018b1801.d
17-AUG-2011 13:18	AR1660	/chem/ecd8a.i/081711.b/012b1201.d
Cal Level: 3 , Cal Amount: 500.00000		
17-AUG-2011 16:59	AR1248	/chem/ecd8a.i/081711.b/031b3101.d
17-AUG-2011 15:49	AR1242	/chem/ecd8a.i/081711.b/025b2501.d
17-AUG-2011 14:39	AR1254	/chem/ecd8a.i/081711.b/019b1901.d
17-AUG-2011 13:29	AR1660	/chem/ecd8a.i/081711.b/013b1301.d
Cal Level: 4 , Cal Amount: 1000.00000		
17-AUG-2011 12:55	DDTANALOGSTD	/chem/ecd8a.i/081711.b/010b1001.d
17-AUG-2011 12:43	AR1268	/chem/ecd8a.i/081711.b/009b0901.d
17-AUG-2011 12:31	AR1262	/chem/ecd8a.i/081711.b/008b0801.d
17-AUG-2011 12:20	AR1221	/chem/ecd8a.i/081711.b/007b0701.d
17-AUG-2011 12:01	AR1232	/chem/ecd8a.i/081711.b/006b0601.d
17-AUG-2011 17:11	AR1248	/chem/ecd8a.i/081711.b/032b3201.d
17-AUG-2011 16:01	AR1242	/chem/ecd8a.i/081711.b/026b2601.d
17-AUG-2011 14:51	AR1254	/chem/ecd8a.i/081711.b/020b2001.d
17-AUG-2011 13:41	AR1660	/chem/ecd8a.i/081711.b/014b1401.d
Cal Level: 5 , Cal Amount: 4000.00000		
17-AUG-2011 17:22	AR1248	/chem/ecd8a.i/081711.b/033b3301.d
17-AUG-2011 16:12	AR1242	/chem/ecd8a.i/081711.b/027b2701.d
17-AUG-2011 15:03	AR1254	/chem/ecd8a.i/081711.b/021b2101.d
17-AUG-2011 13:53	AR1660	/chem/ecd8a.i/081711.b/015b1501.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 10:18	AR1660	/chem/ecd8a.i/083011.b/017b1701.d
Ccal Level: 4 , Ccal Amount: 1000		

30-AUG-2011 08:43	AR1268	/chem/ecd8a.i/083011.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:31	AR1262	/chem/ecd8a.i/083011.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:19	AR1221	/chem/ecd8a.i/083011.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 08:08	AR1232	/chem/ecd8a.i/083011.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:56	AR1248	/chem/ecd8a.i/083011.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:44	AR1242	/chem/ecd8a.i/083011.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:33	AR1254	/chem/ecd8a.i/083011.b/003b0301.d
Ccal Level: 4 , Ccal Amount: 1000		
30-AUG-2011 07:21	AR1660	/chem/ecd8a.i/083011.b/002b0201.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Aug-2011 10:33 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	758.000000
Initial:End Threshold	379.000000
Initial:Area Threshold	734.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	1.500000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	2.674	2.644-2.704	2.070e+03
	3.015	2.985-3.045	2.481e+03
	3.154	3.124-3.184	9.946e+02
	3.246	3.216-3.276	9.212e+02
	3.404	3.374-3.434	1.312e+03
2 Aroclor-1221	2.272	2.242-2.302	6.188e+02
	2.382	2.352-2.412	3.384e+02
	2.412	2.382-2.442	1.671e+03
3 Aroclor-1232	2.676	2.646-2.706	1.032e+03
	3.016	2.986-3.046	1.230e+03
	3.111	3.081-3.141	8.594e+02
	3.405	3.375-3.435	6.293e+02
	3.705	3.675-3.735	5.902e+02
4 Aroclor-1242	3.015	2.985-3.045	1.996e+03
	3.110	3.080-3.140	1.406e+03
	3.405	3.375-3.435	1.108e+03
	3.705	3.675-3.735	1.101e+03
	3.724	3.694-3.754	1.077e+03
5 Aroclor-1248	3.247	3.217-3.277	1.484e+03
	3.405	3.375-3.435	1.860e+03
	3.465	3.435-3.495	1.219e+03
	3.705	3.675-3.735	2.131e+03
	3.860	3.830-3.890	1.761e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	3.675	3.645-3.705	1.702e+03
		3.860	3.830-3.890	2.239e+03
		4.135	4.105-4.165	2.845e+03
		4.328	4.298-4.358	2.148e+03
		4.458	4.428-4.488	2.067e+03
	7 Aroclor-1260	4.264	4.234-4.294	2.492e+03
		4.456	4.426-4.486	3.633e+03
		4.729	4.699-4.759	2.206e+03
		5.111	5.081-5.141	4.769e+03
		5.302	5.272-5.332	2.413e+03
	8 Aroclor-1262	4.457	4.427-4.487	2.873e+03
		4.730	4.700-4.760	3.546e+03
		4.899	4.869-4.929	3.204e+03
		5.111	5.081-5.141	6.244e+03
		5.330	5.300-5.360	2.536e+03
	9 Aroclor-1268	5.331	5.301-5.361	6.408e+03
		5.356	5.326-5.386	5.988e+03
		5.490	5.460-5.520	4.835e+03
		5.730	5.700-5.760	2.398e+03
		5.926	5.896-5.956	1.383e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.135	2.105-2.165	5.682e+04
$	12 Decachlorobiphenyl	6.054	6.024-6.084	3.744e+04
	13 4,4'-DDT	4.679	4.659-4.699	1.512e+04
	14 4,4'-DDD	4.486	4.466-4.506	2.756e+04
	15 4,4'-DDE	4.072	4.052-4.092	4.599e+04

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Quant Method : ESTD Target Version : 3.50
Last Update : 30-Aug-2011 10:32 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	733.000000
Initial:End Threshold	366.500000
Initial:Area Threshold	522.000000
Initial:P-P Resolution	0.000000
Initial:Bunch Factor	1.500000
Initial:Negative Peaks	OFF
Initial:Tension	2.000000

Compound	RT	RT Window	RF
1 Aroclor-1016	3.073	3.043-3.103	2.971e+03
	3.419	3.389-3.449	3.213e+03
	3.516	3.486-3.546	2.271e+03
	3.590	3.560-3.620	1.357e+03
	3.666	3.636-3.696	1.418e+03
2 Aroclor-1221	2.607	2.577-2.637	8.719e+02
	2.716	2.686-2.746	5.609e+02
	2.762	2.732-2.792	2.137e+03
3 Aroclor-1232	3.074	3.043-3.103	1.542e+03
	3.419	3.389-3.449	1.659e+03
	3.517	3.487-3.547	1.130e+03
	3.858	3.828-3.889	8.793e+02
	4.133	4.104-4.163	8.967e+02
4 Aroclor-1242	3.419	3.389-3.449	2.665e+03
	3.516	3.486-3.546	1.896e+03
	3.590	3.560-3.620	1.121e+03
	3.858	3.828-3.888	1.500e+03
	4.133	4.103-4.163	1.549e+03
5 Aroclor-1248	3.666	3.636-3.696	2.205e+03
	3.858	3.828-3.888	2.616e+03
	3.946	3.916-3.976	2.790e+03
	4.133	4.103-4.163	2.905e+03
	4.164	4.134-4.194	3.232e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m

	Compound	RT	RT Window	RF
	6 Aroclor-1254	4.160	4.130-4.190	2.629e+03
		4.300	4.270-4.330	2.873e+03
		4.621	4.591-4.651	3.774e+03
		4.782	4.752-4.812	2.658e+03
		4.908	4.878-4.938	1.743e+03
	7 Aroclor-1260	4.758	4.728-4.788	3.278e+03
		4.907	4.877-4.937	3.813e+03
		5.219	5.189-5.249	2.821e+03
		5.597	5.567-5.627	5.709e+03
		5.848	5.818-5.878	3.978e+03
	8 Aroclor-1262	4.908	4.878-4.938	3.128e+03
		5.220	5.190-5.250	4.227e+03
		5.422	5.392-5.452	3.719e+03
		5.597	5.567-5.627	6.901e+03
		5.847	5.817-5.877	4.903e+03
	9 Aroclor-1268	5.846	5.816-5.876	7.001e+03
		5.876	5.846-5.906	6.207e+03
		6.052	6.022-6.082	4.963e+03
		6.248	6.218-6.278	2.470e+03
		6.474	6.444-6.504	1.298e+04
M	10 Aroclor-Total	1.000	0.980-1.020	
$	11 4cmx	2.373	2.343-2.403	7.646e+04
$	12 Decachlorobiphenyl	6.651	6.621-6.681	3.784e+04
	13 4,4'-DDT	5.166	5.146-5.186	1.884e+04
	14 4,4'-DDD	4.948	4.928-4.968	3.314e+04
	15 4,4'-DDE	4.542	4.522-4.562	5.011e+04

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Cal Date : 30-Aug-2011 10:33 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd8a.i/081711.b/029f2901.d
Level 2: /chem/ecd8a.i/081711.b/030f3001.d
Level 3: /chem/ecd8a.i/081711.b/031f3101.d
Level 4: /chem/ecd8a.i/081711.b/010f1001.d
Level 5: /chem/ecd8a.i/081711.b/033f3301.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	___ RRF	% RSD
1 Aroclor-1016(1)	2462	2231	2001	1962	1695	2070	14.022
(2)	2833	2649	2445	2390	2089	2481	11.317
(3)	1130	1053	969	936	885	995	9.784
(4)	1107	1002	884	840	772	921	14.499
(5)	1560	1377	1269	1227	1127	1312	12.579
2 Aroclor-1221(1)	+++++	+++++	+++++	619	+++++	619	0.000
(2)	+++++	+++++	+++++	338	+++++	338	0.000
(3)	+++++	+++++	+++++	1671	+++++	1671	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1032	+++++	1032	0.000
(2)	+++++	+++++	+++++	1230	+++++	1230	0.000
(3)	+++++	+++++	+++++	859	+++++	859	0.000
(4)	+++++	+++++	+++++	629	+++++	629	0.000
(5)	+++++	+++++	+++++	590	+++++	590	0.000
4 Aroclor-1242(1)	2234	2098	1961	1957	1728	1996	9.428
(2)	1621	1526	1372	1317	1196	1406	11.993
(3)	1340	1185	1050	1016	946	1108	14.114
(4)	1353	1172	1029	1009	940	1101	14.931
(5)	1221	1137	1047	1023	960	1077	9.482
5 Aroclor-1248(1)	1812	1535	1500	1402	1172	1484	15.597
(2)	2159	1938	1912	1792	1497	1860	13.030
(3)	1380	1255	1252	1185	1024	1219	10.656
(4)	2443	2183	2206	2091	1733	2131	12.094
(5)	2202	1765	1762	1654	1419	1761	16.144
6 Aroclor-1254(1)	1928	1749	1738	1601	1496	1702	9.609
(2)	2505	2304	2295	2115	1973	2239	9.048
(3)	3137	2909	2951	2717	2511	2845	8.402
(4)	2384	2184	2215	2039	1919	2148	8.244
(5)	2382	2149	2084	1913	1808	2067	10.736

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Cal Date : 30-Aug-2011 10:33 yip00818
Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
7 Aroclor-1260(1)	2848	2615	2423	2395	2177	2492	10.139
(2)	4169	3825	3565	3493	3115	3633	10.808
(3)	2544	2297	2135	2102	1950	2206	10.238
(4)	5393	5029	4715	4598	4110	4769	10.074
(5)	2750	2503	2335	2314	2162	2413	9.282
8 Aroclor-1262(1)	+++++	+++++	+++++	2873	+++++	2873	0.000
(2)	+++++	+++++	+++++	3546	+++++	3546	0.000
(3)	+++++	+++++	+++++	3204	+++++	3204	0.000
(4)	+++++	+++++	+++++	6244	+++++	6244	0.000
(5)	+++++	+++++	+++++	2536	+++++	2536	0.000
9 Aroclor-1268(1)	+++++	+++++	+++++	6408	+++++	6408	0.000
(2)	+++++	+++++	+++++	5988	+++++	5988	0.000
(3)	+++++	+++++	+++++	4835	+++++	4835	0.000
(4)	+++++	+++++	+++++	2398	+++++	2398	0.000
(5)	+++++	+++++	+++++	13826	+++++	13826	0.000
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	15124	+++++	15124	0.000
14 4,4'-DDD	+++++	+++++	+++++	27558	+++++	27558	0.000
15 4,4'-DDE	+++++	+++++	+++++	45991	+++++	45991	0.000
$ 11 4cmx	60821	59860	57119	55952	50348	56820	7.255
$ 12 Decachlorobiphenyl	42849	39006	36294	35772	33304	37445	9.713

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Cal Date : 30-Aug-2011 10:32 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd8a.i/081711.b/029b2901.d
Level 2: /chem/ecd8a.i/081711.b/030b3001.d
Level 3: /chem/ecd8a.i/081711.b/031b3101.d
Level 4: /chem/ecd8a.i/081711.b/010b1001.d
Level 5: /chem/ecd8a.i/081711.b/033b3301.d

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	___ RRF	% RSD
1 Aroclor-1016(1)	3710	3240	2916	2695	2293	2971	18.108
(2)	3652	3487	3209	3024	2690	3213	11.822
(3)	2779	2446	2222	2084	1822	2271	15.995
(4)	1636	1451	1307	1248	1144	1357	14.080
(5)	1791	1537	1364	1271	1128	1418	18.052
2 Aroclor-1221(1)	+++++	+++++	+++++	872	+++++	872	0.000
(2)	+++++	+++++	+++++	561	+++++	561	0.000
(3)	+++++	+++++	+++++	2137	+++++	2137	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	1542	+++++	1542	0.000
(2)	+++++	+++++	+++++	1659	+++++	1659	0.000
(3)	+++++	+++++	+++++	1130	+++++	1130	0.000
(4)	+++++	+++++	+++++	879	+++++	879	0.000
(5)	+++++	+++++	+++++	897	+++++	897	0.000
4 Aroclor-1242(1)	3098	2867	2610	2579	2170	2665	13.040
(2)	2286	2069	1841	1757	1525	1896	15.430
(3)	1322	1212	1080	1043	948	1121	13.111
(4)	1624	1696	1497	1431	1251	1500	11.581
(5)	1937	1652	1479	1419	1258	1549	16.696
5 Aroclor-1248(1)	2768	2332	2238	2043	1642	2205	18.660
(2)	3124	2768	2700	2486	2001	2616	15.792
(3)	3280	2950	2873	2656	2188	2790	14.490
(4)	3456	3054	3000	2776	2238	2905	15.364
(5)	3976	3367	3307	3050	2461	3232	16.982
6 Aroclor-1254(1)	3118	2752	2692	2435	2151	2629	13.769
(2)	3387	3022	2950	2664	2343	2873	13.661
(3)	4343	3945	3925	3553	3105	3774	12.378
(4)	3078	2760	2733	2488	2228	2658	11.993
(5)	2091	1828	1767	1583	1445	1743	14.153

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 28-JUL-2011 21:37
End Cal Date : 17-AUG-2011 17:22
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Cal Date : 30-Aug-2011 10:32 yip00818
Curve Type : Average

	100.000	250.000	500.000	1000.000	4000.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
7 Aroclor-1260(1)	3985	3497	3201	3056	2649	3278	15.246
(2)	4611	4091	3745	3557	3061	3813	15.235
(3)	3423	3003	2738	2620	2323	2821	14.730
(4)	6760	6101	5628	5386	4668	5709	13.717
(5)	4768	4210	3865	3710	3340	3978	13.592
8 Aroclor-1262(1)	+++++	+++++	+++++	3128	+++++	3128	0.000
(2)	+++++	+++++	+++++	4227	+++++	4227	0.000
(3)	+++++	+++++	+++++	3719	+++++	3719	0.000
(4)	+++++	+++++	+++++	6901	+++++	6901	0.000
(5)	+++++	+++++	+++++	4903	+++++	4903	0.000
9 Aroclor-1268(1)	+++++	+++++	+++++	7001	+++++	7001	0.000
(2)	+++++	+++++	+++++	6207	+++++	6207	0.000
(3)	+++++	+++++	+++++	4963	+++++	4963	0.000
(4)	+++++	+++++	+++++	2470	+++++	2470	0.000
(5)	+++++	+++++	+++++	12980	+++++	12980	0.000
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 4,4'-DDT	+++++	+++++	+++++	18837	+++++	18837	0.000
14 4,4'-DDD	+++++	+++++	+++++	33135	+++++	33135	0.000
15 4,4'-DDE	+++++	+++++	+++++	50114	+++++	50114	0.000
$ 11 4cmx	85039	81144	76722	74346	65058	76462	9.919
$ 12 Decachlorobiphenyl	46677	40127	36468	34866	31064	37840	15.632

GEL Laboratories LLC

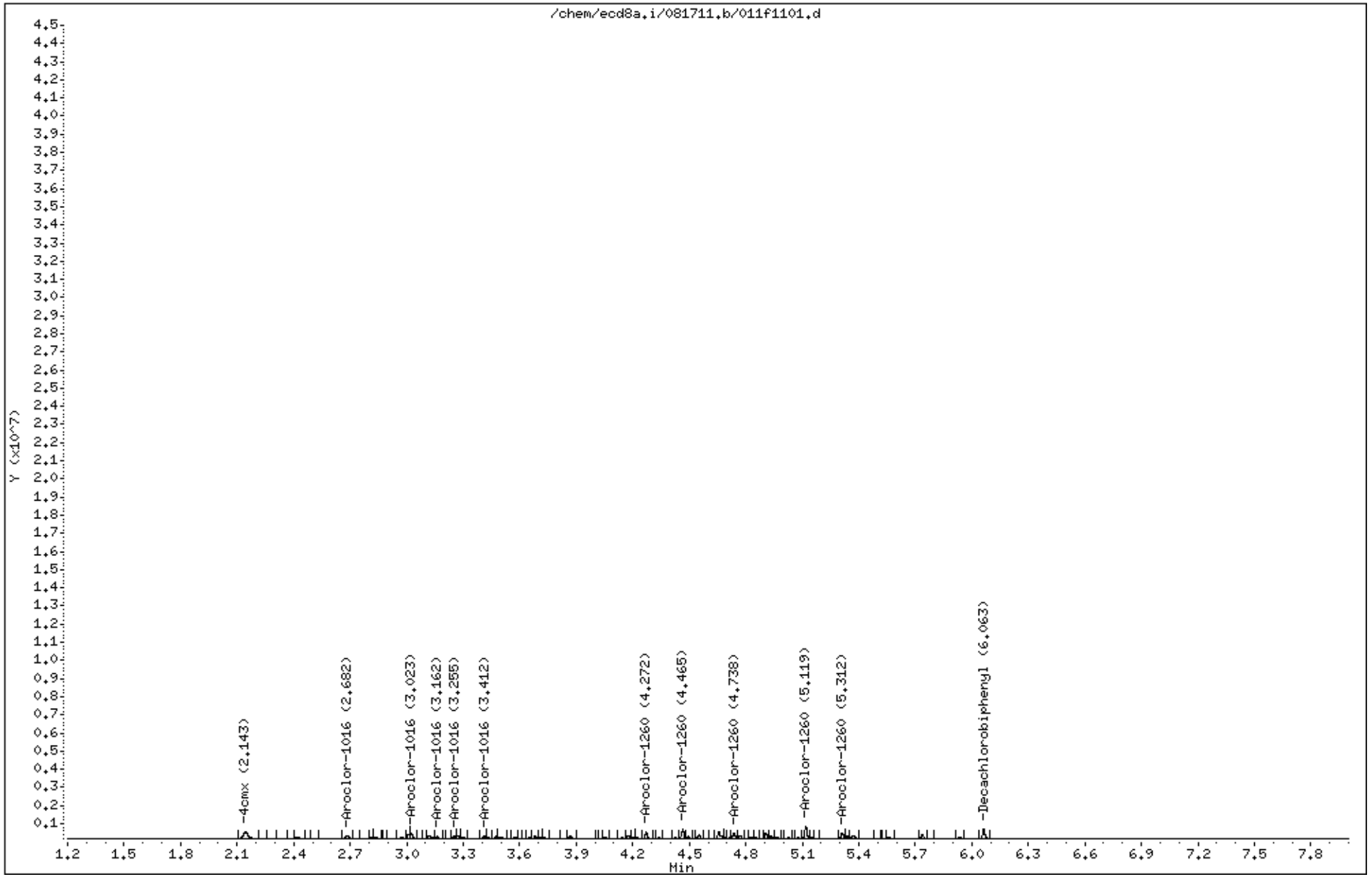
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/011f1101.d
Lab Smp Id: WAR110817-01 Client Smp ID: AR166001
Inj Date : 17-AUG-2011 13:06
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029f2901.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.143	2.143	0.000	608214	10.0000	10.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.063	6.062	0.001	428486	10.0000	11.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.682	2.682	0.000	246229	100.000	119	80.00- 120.00	100.00
3.023	3.023	0.000	283269	100.000	114	95.04- 135.04	115.04
3.162	3.162	0.000	113041	100.000	114	25.91- 65.91	45.91
3.255	3.255	0.000	110724	100.000	120	24.97- 64.97	44.97
3.412	3.412	0.000	155968	100.000	119	43.34- 83.34	63.34
Average of Peak Amounts =					117		
7 Aroclor-1260					CAS #: 11096-82-5		
4.272	4.272	0.000	284774	100.000	114	80.00- 120.00	100.00
4.465	4.465	0.000	416923	100.000	115	126.40- 166.40	146.40
4.738	4.738	0.000	254407	100.000	115	69.34- 109.34	89.34
5.119	5.119	0.000	539281	100.000	113	169.37- 209.37	189.37
5.312	5.312	0.000	275027	100.000	114	76.58- 116.58	96.58
Average of Peak Amounts =					114		

Data File: /chem/ecd8a.i/081711.b/011f1101.d
Date : 17-AUG-2011 13:06
Client ID: AR166001
Sample Info: IWAR110817-01

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/011b1101.d
Lab Smp Id: WAR110817-01 Client Smp ID: AR166001
Inj Date : 17-AUG-2011 13:06
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029b2901.d
Als bottle: 11 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.386	2.384	0.002	850390	10.0000	11.1	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	466767	10.0000	12.3	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 2051-24-3		
3.086	3.086	0.000	371028	100.000	125	80.00- 120.00		100.00
3.432	3.432	0.000	365235	100.000	114	78.44- 118.44		98.44
3.529	3.529	0.000	277945	100.000	122	54.91- 94.91		74.91
3.603	3.603	0.000	163595	100.000	120	24.09- 64.09		44.09
3.678	3.678	0.000	179097	100.000	126	28.27- 68.27		48.27
Average of Peak Amounts =					122			
7 Aroclor-1260						CAS #: 11096-82-5		
4.772	4.772	0.000	398526	100.000	122	80.00- 120.00		100.00
4.920	4.920	0.000	461078	100.000	121	95.70- 135.70		115.70
5.232	5.232	0.000	342266	100.000	121	65.88- 105.88		85.88
5.611	5.611	0.000	676016	100.000	118	149.63- 189.63		169.63
5.862	5.862	0.000	476783	100.000	120	99.64- 139.64		119.64
Average of Peak Amounts =					120			

Data File: /chem/ecd8a.i/081711.b/011b1101.d

Page 1

Date : 17-AUG-2011 13:06

Client ID: AR166001

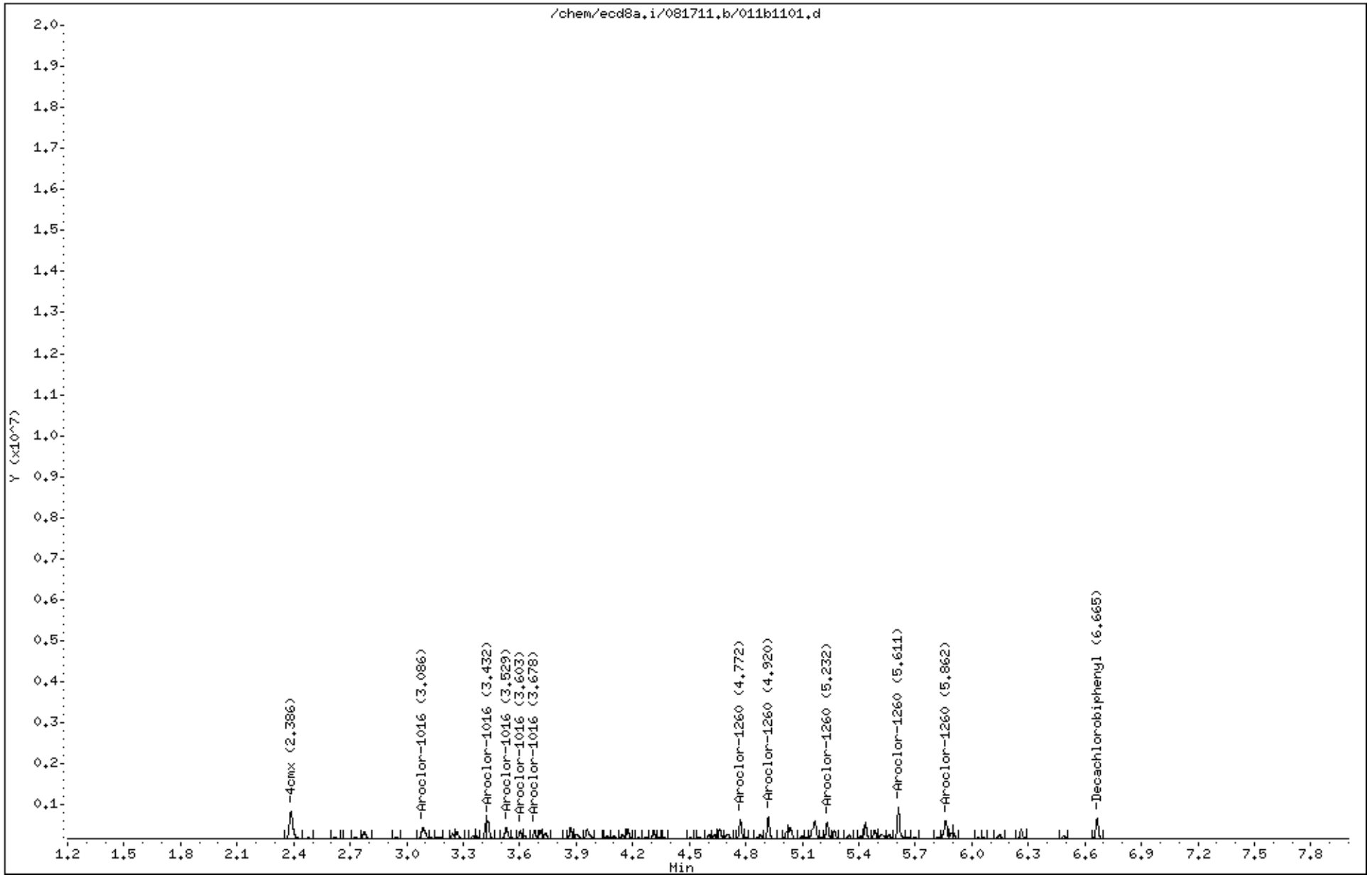
Instrument: ecd8a.i

Sample Info: IWAR110817-01

Operator: YS1

Column phase: CLP2

Column diameter: 0.25



GEL Laboratories LLC

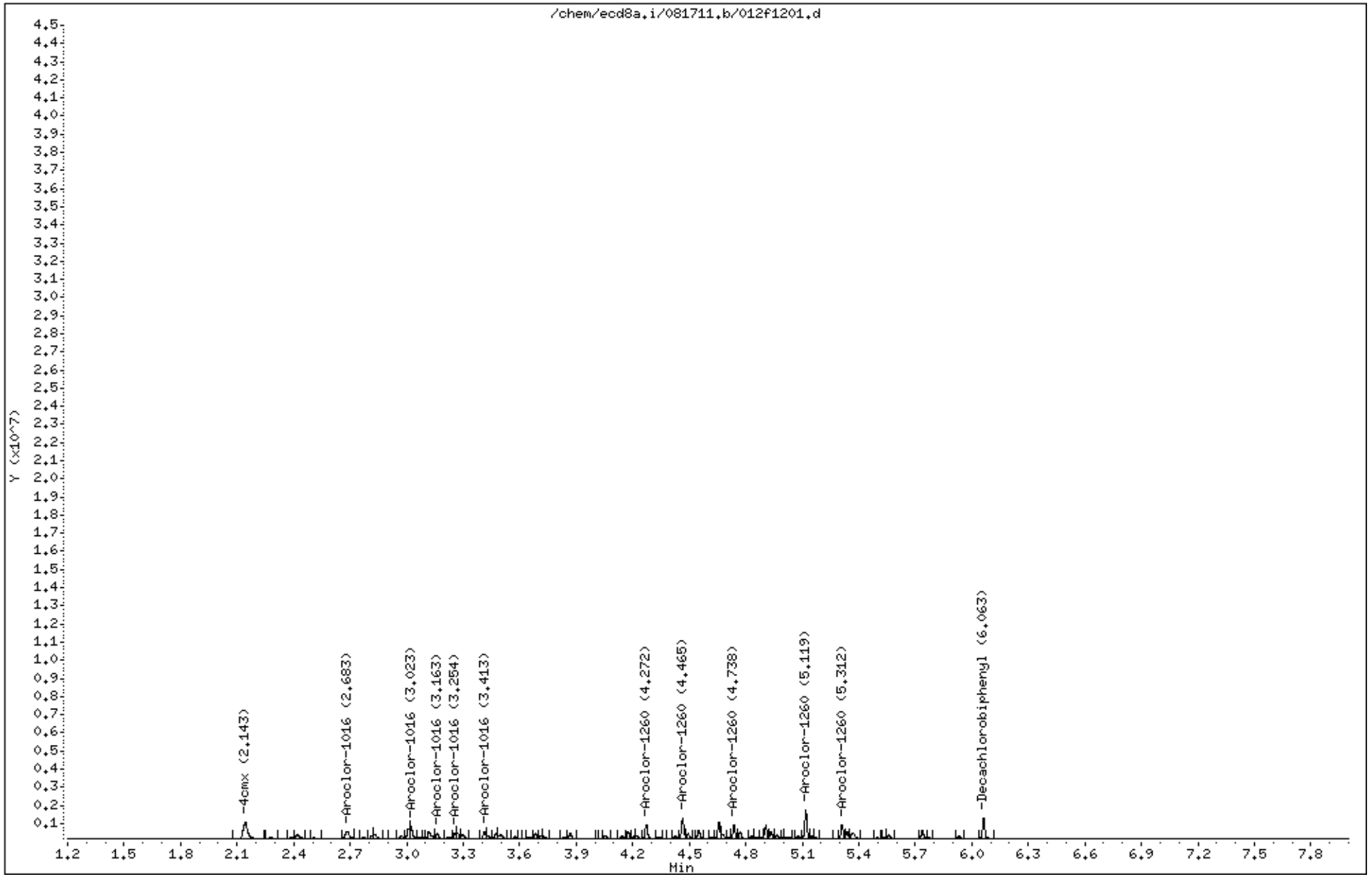
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/012f1201.d
Lab Smp Id: WAR110817-02 Client Smp ID: AR166002
Inj Date : 17-AUG-2011 13:18
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-02
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030f3001.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.143	2.143	0.000	1496491	25.0000	26.3	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.063	6.062	0.001	975147	25.0000	26.0	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 12674-11-2		
2.683	2.683	0.000	557848	250.000	269	80.00- 120.00		100.00
3.023	3.023	0.000	662302	250.000	267	98.72- 138.72		118.72
3.163	3.163	0.000	263177	250.000	264	27.18- 67.18		47.18
3.254	3.254	0.000	250568	250.000	272	24.92- 64.92		44.92
3.413	3.413	0.000	344145	250.000	262	41.69- 81.69		61.69
Average of Peak Amounts =					267			
7 Aroclor-1260						CAS #: 11096-82-5		
4.272	4.272	0.000	653805	250.000	262	80.00- 120.00		100.00
4.465	4.465	0.000	956137	250.000	263	126.24- 166.24		146.24
4.738	4.738	0.000	574253	250.000	260	67.83- 107.83		87.83
5.119	5.119	0.000	1257202	250.000	264	172.29- 212.29		192.29
5.312	5.312	0.000	625858	250.000	259	75.73- 115.73		95.73
Average of Peak Amounts =					262			

Data File: /chem/ecd8a.i/081711.b/012f1201.d
Date : 17-AUG-2011 13:18
Client ID: AR166002
Sample Info: IWAR110817-02

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

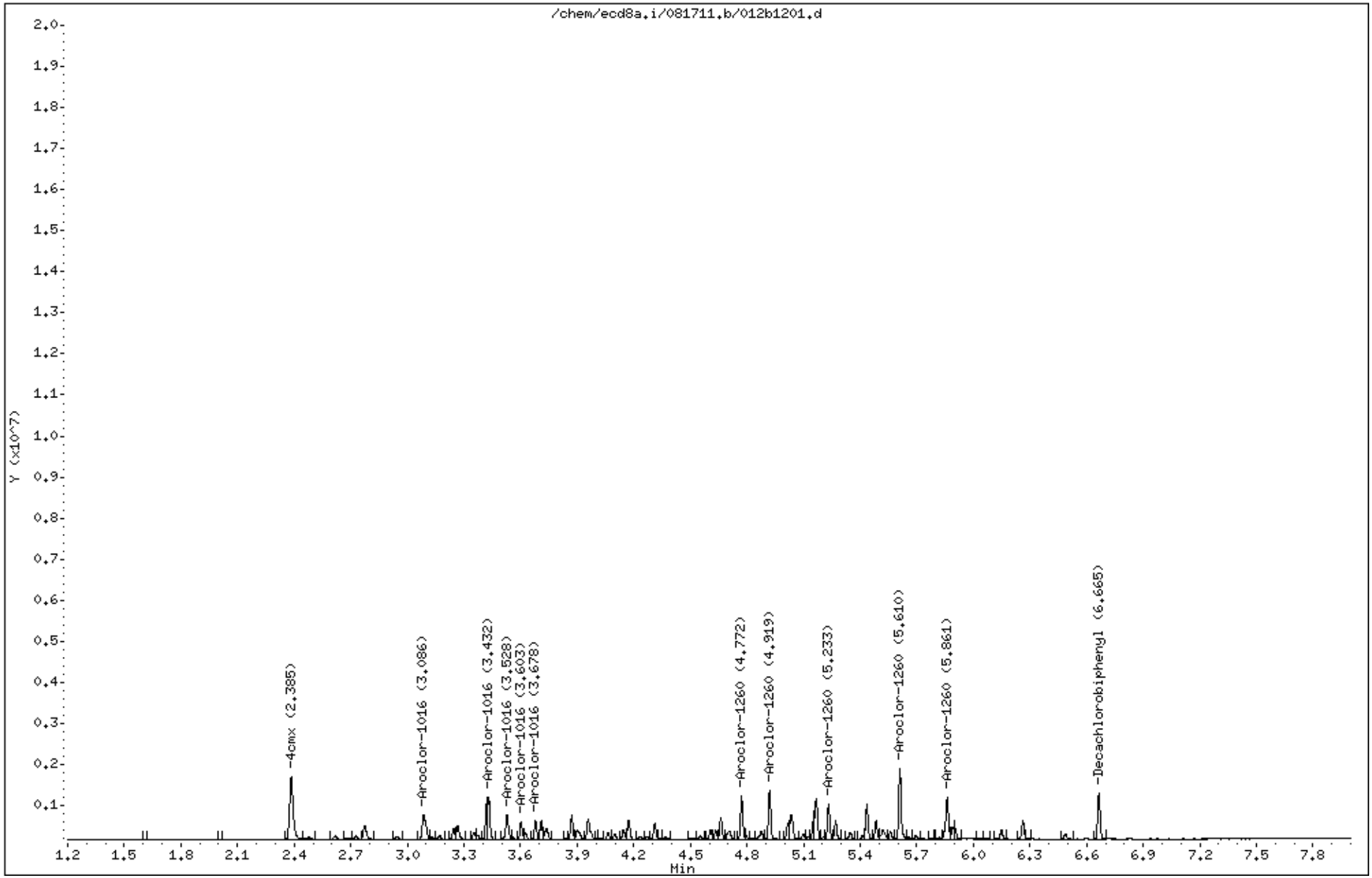
Data file : /chem/ecd8a.i/081711.b/012b1201.d
Lab Smp Id: WAR110817-02 Client Smp ID: AR166002
Inj Date : 17-AUG-2011 13:18
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-02
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030b3001.d
Als bottle: 12 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.385	2.384	0.001	2028588	25.0000	26.5	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	1003166	25.0000	26.5	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 2051-24-3		
3.086	3.086	0.000	810017	250.000	273	80.00- 120.00		100.00
3.432	3.432	0.000	871771	250.000	271	87.62- 127.62		107.62
3.528	3.528	0.000	611451	250.000	269	55.49- 95.49		75.49
3.603	3.603	0.000	362648	250.000	267	24.77- 64.77		44.77
3.678	3.678	0.000	384251	250.000	271	27.44- 67.44		47.44
Average of Peak Amounts =					270			
7 Aroclor-1260						CAS #: 11096-82-5		
4.772	4.772	0.000	874355	250.000	267	80.00- 120.00		100.00
4.919	4.919	0.000	1022816	250.000	268	96.98- 136.98		116.98
5.233	5.233	0.000	750677	250.000	266	65.85- 105.85		85.85
5.610	5.610	0.000	1525309	250.000	267	154.45- 194.45		174.45
5.861	5.861	0.000	1052531	250.000	264	100.38- 140.38		120.38
Average of Peak Amounts =					267			

Data File: /chem/ecd8a.i/081711.b/012b1201.d
Date : 17-AUG-2011 13:18
Client ID: AR166002
Sample Info: IWAR110817-02

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/013f1301.d
Lab Smp Id: WAR110817-03 Client Smp ID: AR166003
Inj Date : 17-AUG-2011 13:29
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-03
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031f3101.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.142	2.143	-0.001	2855930	50.0000	50.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.062	6.062	0.000	1814685	50.0000	48.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.682	2.682	0.000	1000537	500.000	483	80.00- 120.00	100.00
3.022	3.022	0.000	1222310	500.000	493	102.17- 142.17	122.17
3.162	3.162	0.000	484510	500.000	487	28.42- 68.42	48.42
3.254	3.254	0.000	442017	500.000	480	24.18- 64.18	44.18
3.411	3.411	0.000	634718	500.000	484	43.44- 83.44	63.44
Average of Peak Amounts =					485		
7 Aroclor-1260					CAS #: 11096-82-5		
4.271	4.271	0.000	1211534	500.000	486	80.00- 120.00	100.00
4.465	4.465	0.000	1782381	500.000	490	127.12- 167.12	147.12
4.737	4.737	0.000	1067446	500.000	484	68.11- 108.11	88.11
5.119	5.119	0.000	2357404	500.000	494	174.58- 214.58	194.58
5.311	5.311	0.000	1167283	500.000	484	76.35- 116.35	96.35
Average of Peak Amounts =					488		

Data File: /chem/ecd8a.i/081711.b/013f1301.d

Date : 17-AUG-2011 13:29

Client ID: AR166003

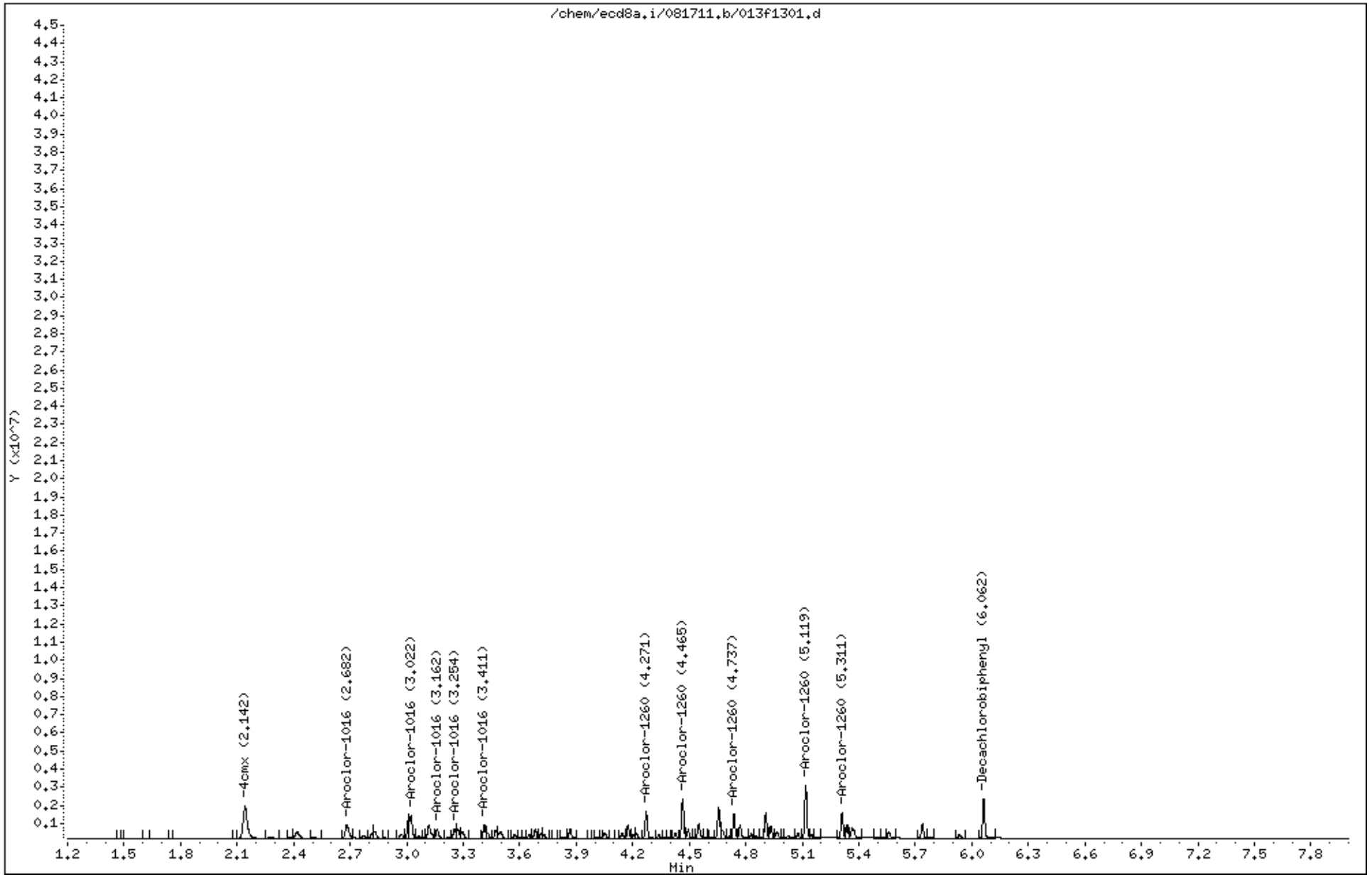
Sample Info: IWAR110817-03

Column phase: CLP1

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

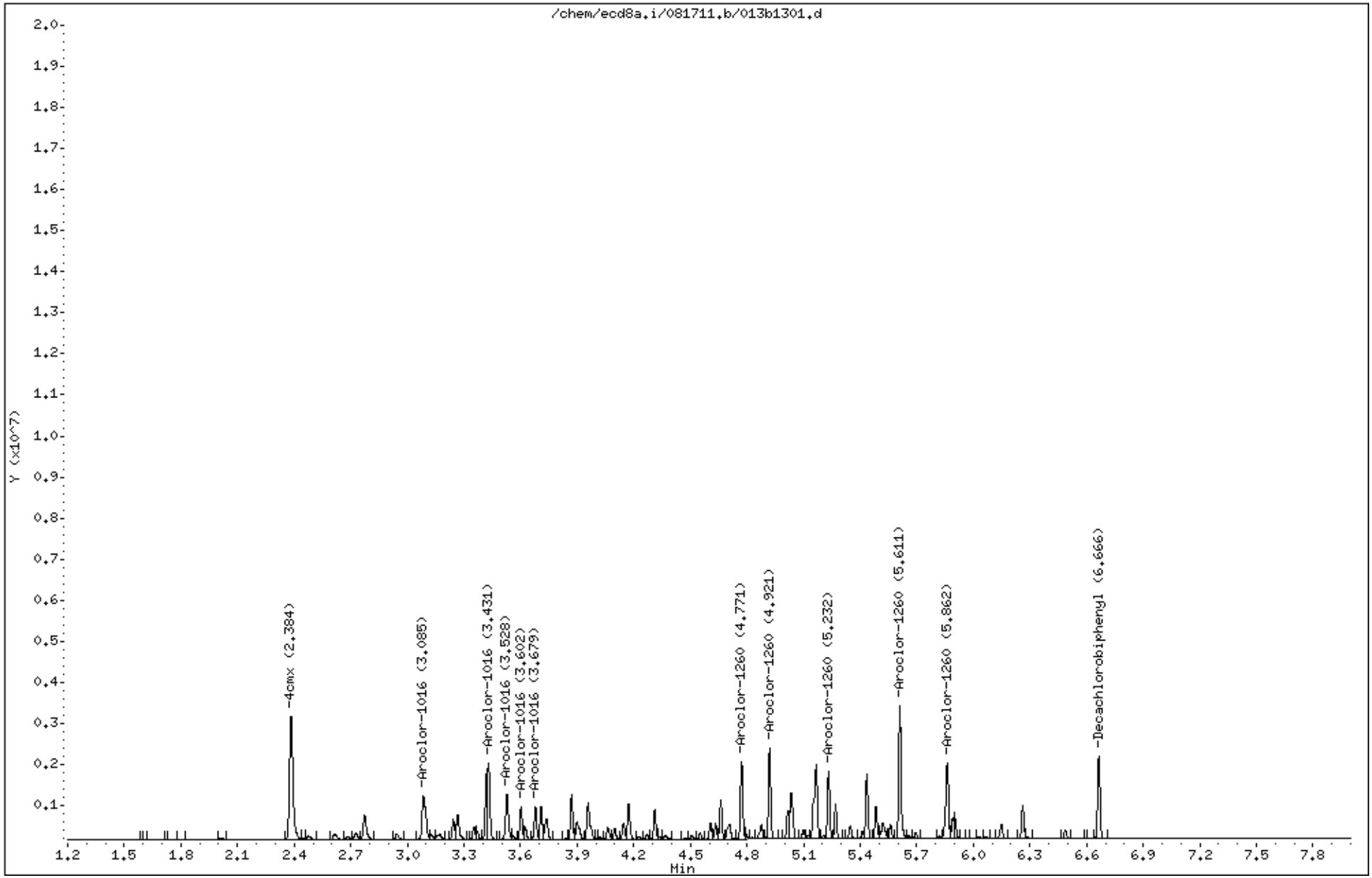
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/013b1301.d
Lab Smp Id: WAR110817-03 Client Smp ID: AR166003
Inj Date : 17-AUG-2011 13:29
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-03
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031b3101.d
Als bottle: 13 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.384	2.384	0.000	3836125	50.0000	50.2	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.666	6.665	0.001	1823425	50.0000	48.2	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 2051-24-3		
3.085	3.085	0.000	1457838	500.000	491	80.00- 120.00		100.00
3.431	3.431	0.000	1604414	500.000	499	90.05- 130.05		110.05
3.528	3.528	0.000	1110853	500.000	489	56.20- 96.20		76.20
3.602	3.602	0.000	653582	500.000	482	24.83- 64.83		44.83
3.679	3.679	0.000	681795	500.000	481	26.77- 66.77		46.77
Average of Peak Amounts =					488			
7 Aroclor-1260						CAS #: 11096-82-5		
4.771	4.771	0.000	1600594	500.000	488	80.00- 120.00		100.00
4.921	4.921	0.000	1872406	500.000	491	96.98- 136.98		116.98
5.232	5.232	0.000	1369197	500.000	485	65.54- 105.54		85.54
5.611	5.611	0.000	2813779	500.000	493	155.80- 195.80		175.80
5.862	5.862	0.000	1932282	500.000	486	100.72- 140.72		120.72
Average of Peak Amounts =					489			

Data File: /chem/ecd8a.i/081711.b/013b1301.d
Date : 17-AUG-2011 13:29
Client ID: AR166003
Sample Info: IWAR110817-03

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

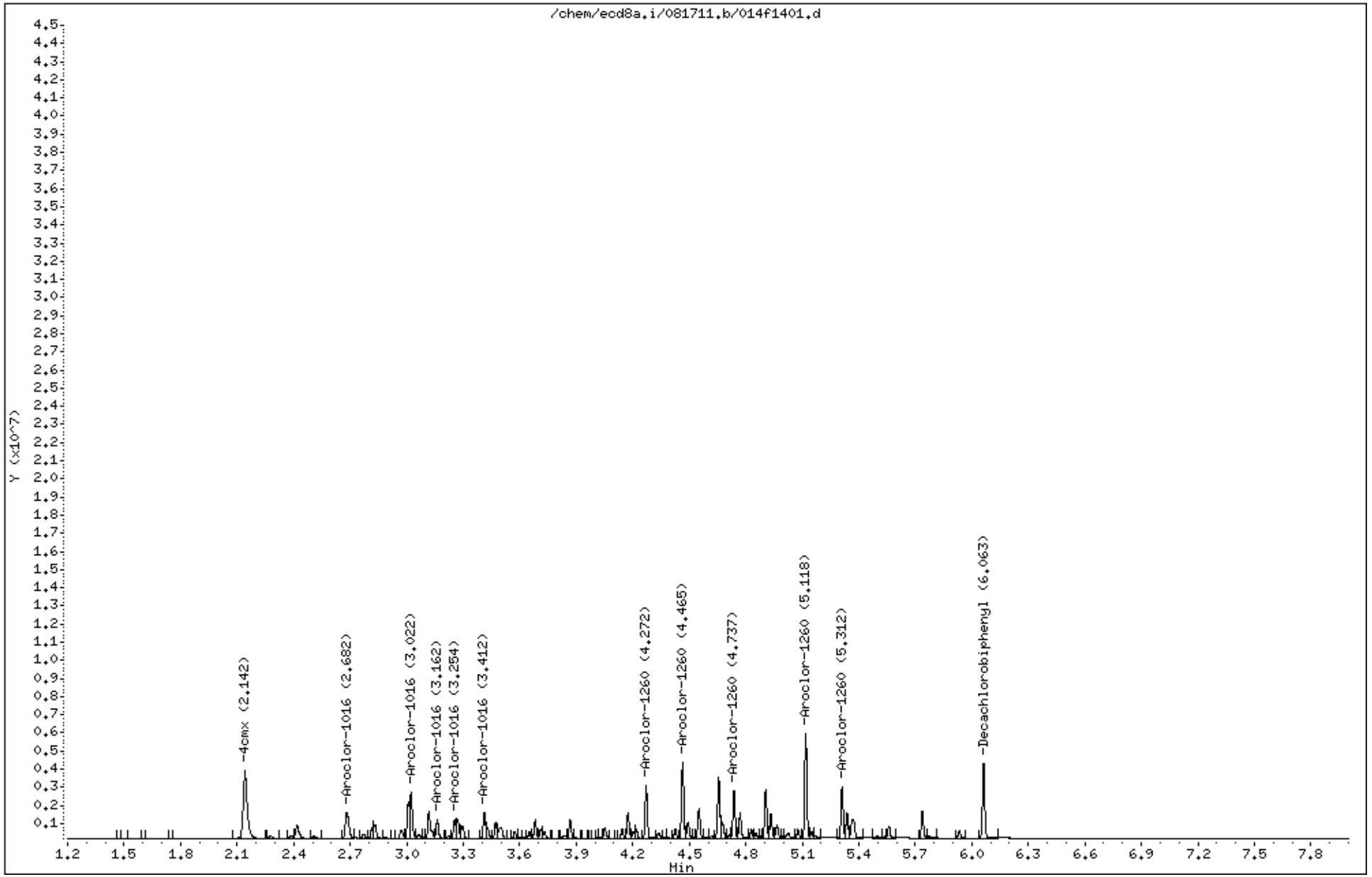
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/014f1401.d
Lab Smp Id: WAR110817-04 Client Smp ID: AR166004
Inj Date : 17-AUG-2011 13:41
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-04
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010f1001.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	5595205	100.000	98.5	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.063	6.062	0.001	3577221	100.000	95.5	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 12674-11-2		
2.682	2.682	0.000	1962264	1000.00	948	80.00- 120.00		100.00
3.022	3.022	0.000	2389684	1000.00	963	101.78- 141.78		121.78
3.162	3.162	0.000	935731	1000.00	941	27.69- 67.69		47.69
3.254	3.254	0.000	840057	1000.00	912	22.81- 62.81		42.81
3.412	3.412	0.000	1226553	1000.00	935	42.51- 82.51		62.51
Average of Peak Amounts =					940			
7 Aroclor-1260						CAS #: 11096-82-5		
4.272	4.272	0.000	2394728	1000.00	961	80.00- 120.00		100.00
4.465	4.465	0.000	3493120	1000.00	961	125.87- 165.87		145.87
4.737	4.737	0.000	2101913	1000.00	953	67.77- 107.77		87.77
5.118	5.118	0.000	4598258	1000.00	964	172.02- 212.02		192.02
5.312	5.312	0.000	2314147	1000.00	959	76.64- 116.64		96.64
Average of Peak Amounts =					960			

Data File: /chem/ecd8a.i/081711.b/014f1401.d
Date : 17-AUG-2011 13:41
Client ID: AR166004
Sample Info: IWAR110817-04

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/014b1401.d
Lab Smp Id: WAR110817-04 Client Smp ID: AR166004
Inj Date : 17-AUG-2011 13:41
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-04
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:02 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010b1001.d
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.384	2.384	0.000	7434569	100.000	97.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.666	6.665	0.001	3486606	100.000	92.1	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 2051-24-3		
3.085	3.085	0.000	2695061	1000.00	907	80.00- 120.00	100.00
3.431	3.431	0.000	3023976	1000.00	941	92.20- 132.20	112.20
3.528	3.528	0.000	2084255	1000.00	918	57.34- 97.34	77.34
3.602	3.602	0.000	1248142	1000.00	920	26.31- 66.31	46.31
3.678	3.678	0.000	1271274	1000.00	896	27.17- 67.17	47.17
Average of Peak Amounts =					916		
7 Aroclor-1260					CAS #: 11096-82-5		
4.772	4.772	0.000	3056281	1000.00	932	80.00- 120.00	100.00
4.920	4.920	0.000	3556674	1000.00	933	96.37- 136.37	116.37
5.232	5.232	0.000	2619725	1000.00	928	65.72- 105.72	85.72
5.610	5.610	0.000	5385729	1000.00	943	156.22- 196.22	176.22
5.862	5.862	0.000	3710129	1000.00	932	101.39- 141.39	121.39
Average of Peak Amounts =					934		

Data File: /chem/ecd8a.i/081711.b/014b1401.d

Date : 17-AUG-2011 13:41

Client ID: AR166004

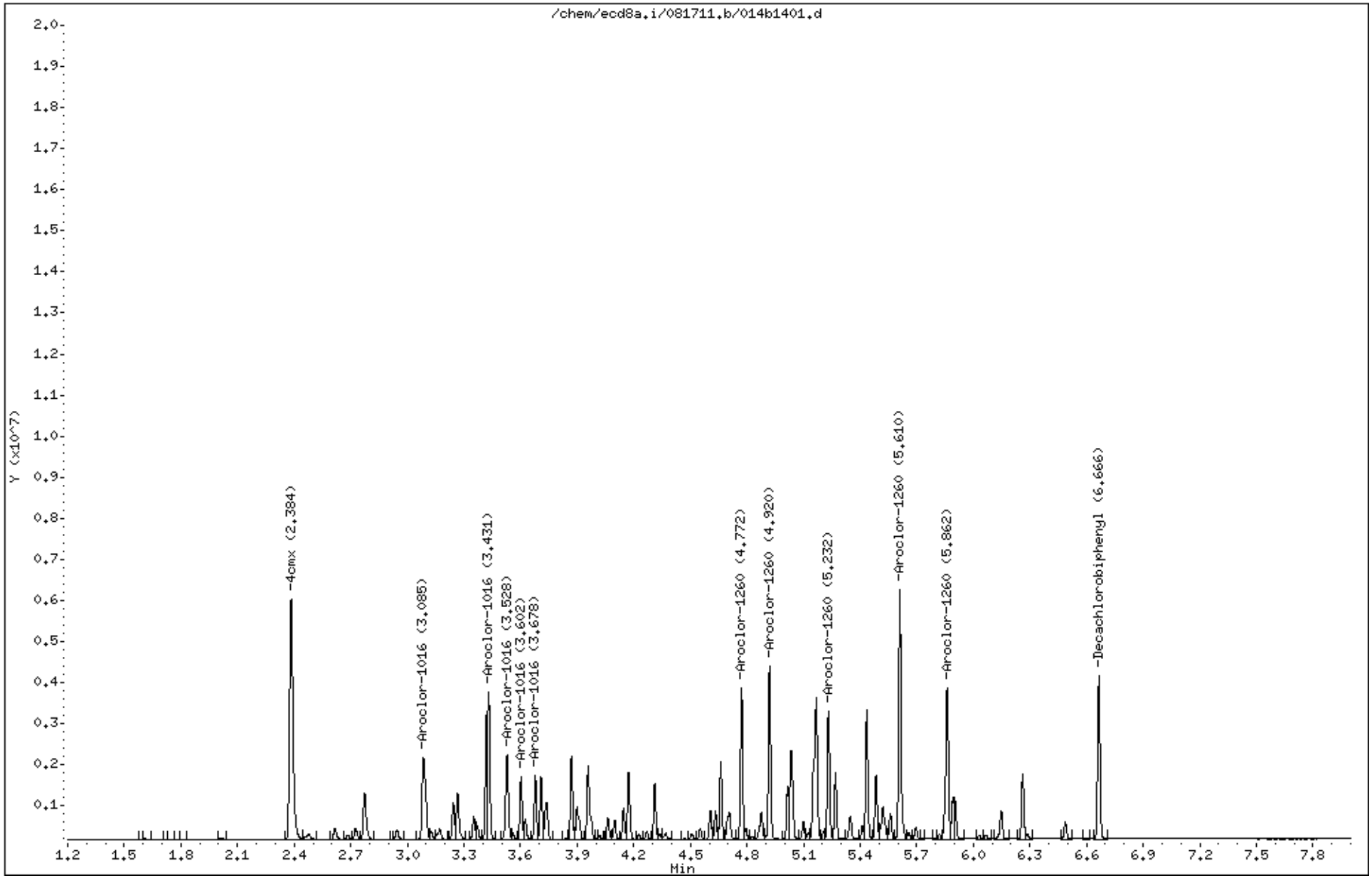
Sample Info: IWAR110817-04

Column phase: CLP2

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

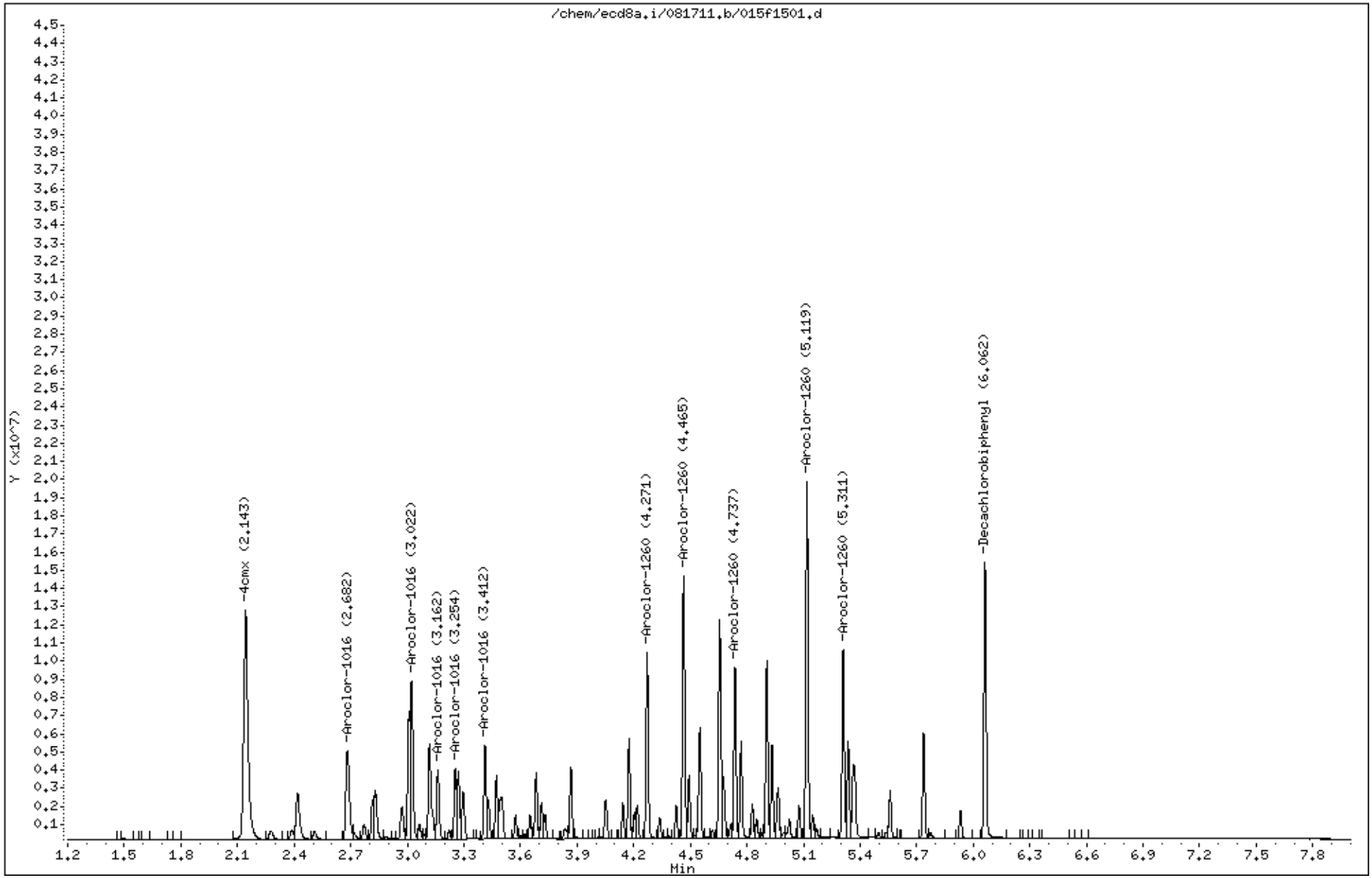
Data file : /chem/ecd8a.i/081711.b/015f1501.d
Lab Smp Id: IAR110815-01 Client Smp ID: AR166005
Inj Date : 17-AUG-2011 13:53
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR110815-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.143	2.143	0.000	20139265	400.000	354	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.062	6.062	0.000	13321457	400.000	356	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.682	2.682	0.000	6779040	4000.00	3270	80.00- 120.00	100.00
3.022	3.022	0.000	8355774	4000.00	3370	103.26- 143.26	123.26
3.162	3.162	0.000	3541249	4000.00	3560	32.24- 72.24	52.24
3.254	3.254	0.000	3088795	4000.00	3350	25.56- 65.56	45.56
3.412	3.412	0.000	4507318	4000.00	3440	46.49- 86.49	66.49
Average of Peak Amounts =					3.4e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
4.271	4.271	0.000	8707317	4000.00	3490	80.00- 120.00	100.00
4.465	4.465	0.000	12459705	4000.00	3430	123.09- 163.09	143.09
4.737	4.737	0.000	7800288	4000.00	3540	69.58- 109.58	89.58
5.119	5.119	0.000	16439567	4000.00	3450	168.80- 208.80	188.80
5.311	5.311	0.000	8649562	4000.00	3580	79.34- 119.34	99.34
Average of Peak Amounts =					3.5e+03		

Data File: /chem/ecd8a.i/081711.b/015f1501.d
Date : 17-AUG-2011 13:53
Client ID: AR166005
Sample Info: !IAR110815-01

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/015b1501.d
Lab Smp Id: IAR110815-01 Client Smp ID: AR166005
Inj Date : 17-AUG-2011 13:53
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR110815-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 15 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.385	2.384	0.001	26023363	400.000	340	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	12425418	400.000	328	80.00- 120.00		100.00
1 Aroclor-1016						CAS #: 2051-24-3		
3.086	3.086	0.000	9172684	4000.00	3090	80.00- 120.00		100.00
3.431	3.431	0.000	10761681	4000.00	3350	97.32- 137.32		117.32
3.528	3.528	0.000	7289552	4000.00	3210	59.47- 99.47		79.47
3.603	3.603	0.000	4577770	4000.00	3370	29.91- 69.91		49.91
3.679	3.679	0.000	4510201	4000.00	3180	29.17- 69.17		49.17
Average of Peak Amounts =			3.24e+03					
7 Aroclor-1260						CAS #: 11096-82-5		
4.771	4.771	0.000	10596333	4000.00	3230	80.00- 120.00		100.00
4.920	4.920	0.000	12243827	4000.00	3210	95.55- 135.55		115.55
5.232	5.232	0.000	9290374	4000.00	3290	67.68- 107.68		87.68
5.610	5.610	0.000	18673630	4000.00	3270	156.23- 196.23		176.23
5.861	5.861	0.000	13359135	4000.00	3360	106.07- 146.07		126.07
Average of Peak Amounts =			3.27e+03					

Data File: /chem/ecd8a.i/081711.b/015b1501.d

Date : 17-AUG-2011 13:53

Client ID: AR166005

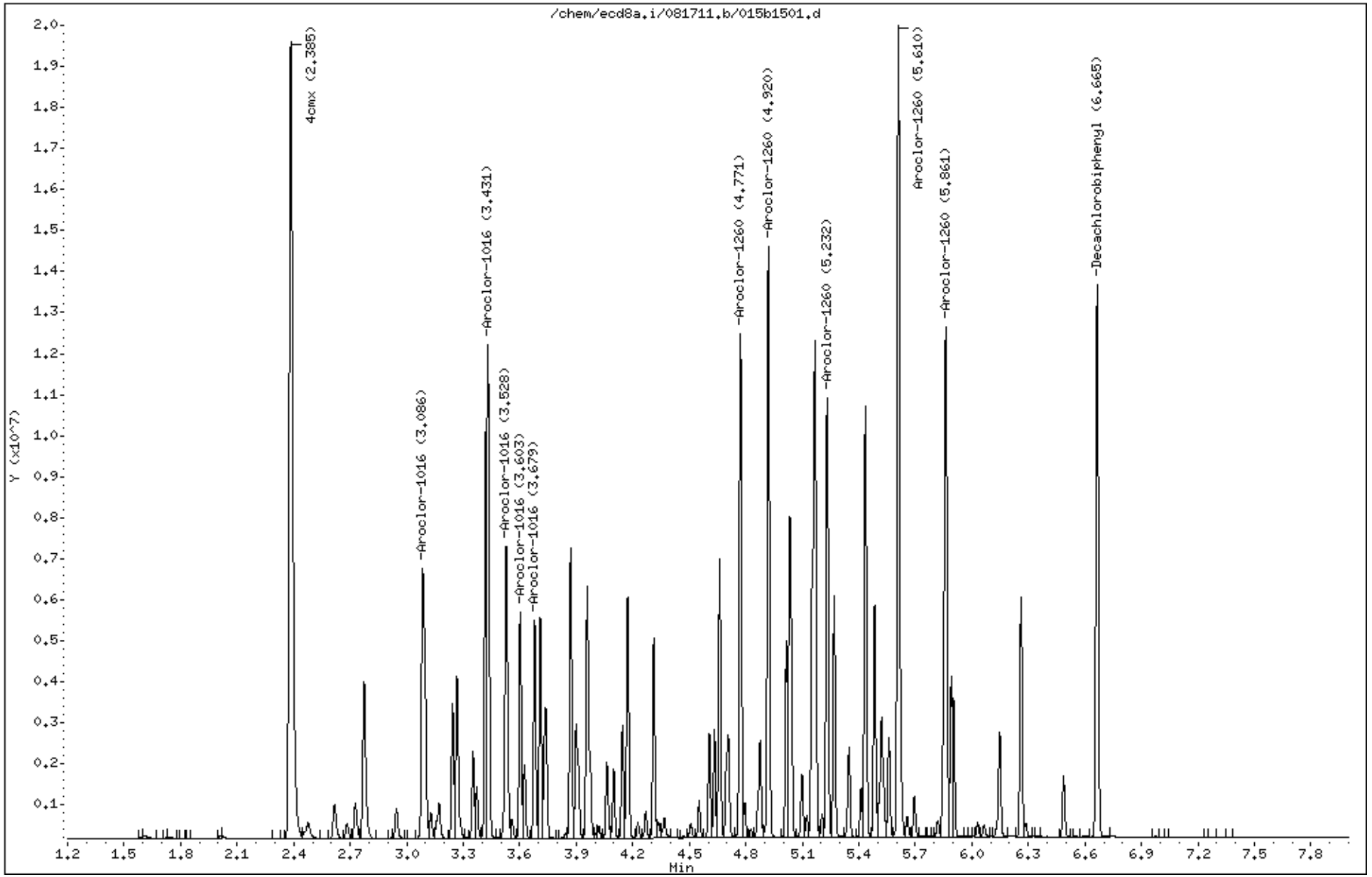
Sample Info: !IAR110815-01

Column phase: CLP2

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/017f1701.d
Lab Smp Id: WAR110815-05 Client Smp ID: AR125401
Inj Date : 17-AUG-2011 14:16
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-05
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029f2901.d
Als bottle: 17 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	564857	10.0000	9.9	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.063	6.062	0.001	391979	10.0000	10.5	80.00- 120.00		100.00
6 Aroclor-1254						CAS #: 11097-69-1		
3.683	3.683	0.000	192750	100.000	113	80.00- 120.00		100.00
3.867	3.867	0.000	250496	100.000	112	109.96- 149.96		129.96
4.143	4.143	0.000	313682	100.000	110	142.74- 182.74		162.74
4.337	4.337	0.000	238371	100.000	111	103.67- 143.67		123.67
4.466	4.466	0.000	238223	100.000	115	103.59- 143.59		123.59
		Average of Peak Amounts =			112			

Data File: /chem/ecd8a.i/081711.b/017f1701.d

Date : 17-AUG-2011 14:16

Client ID: AR125401

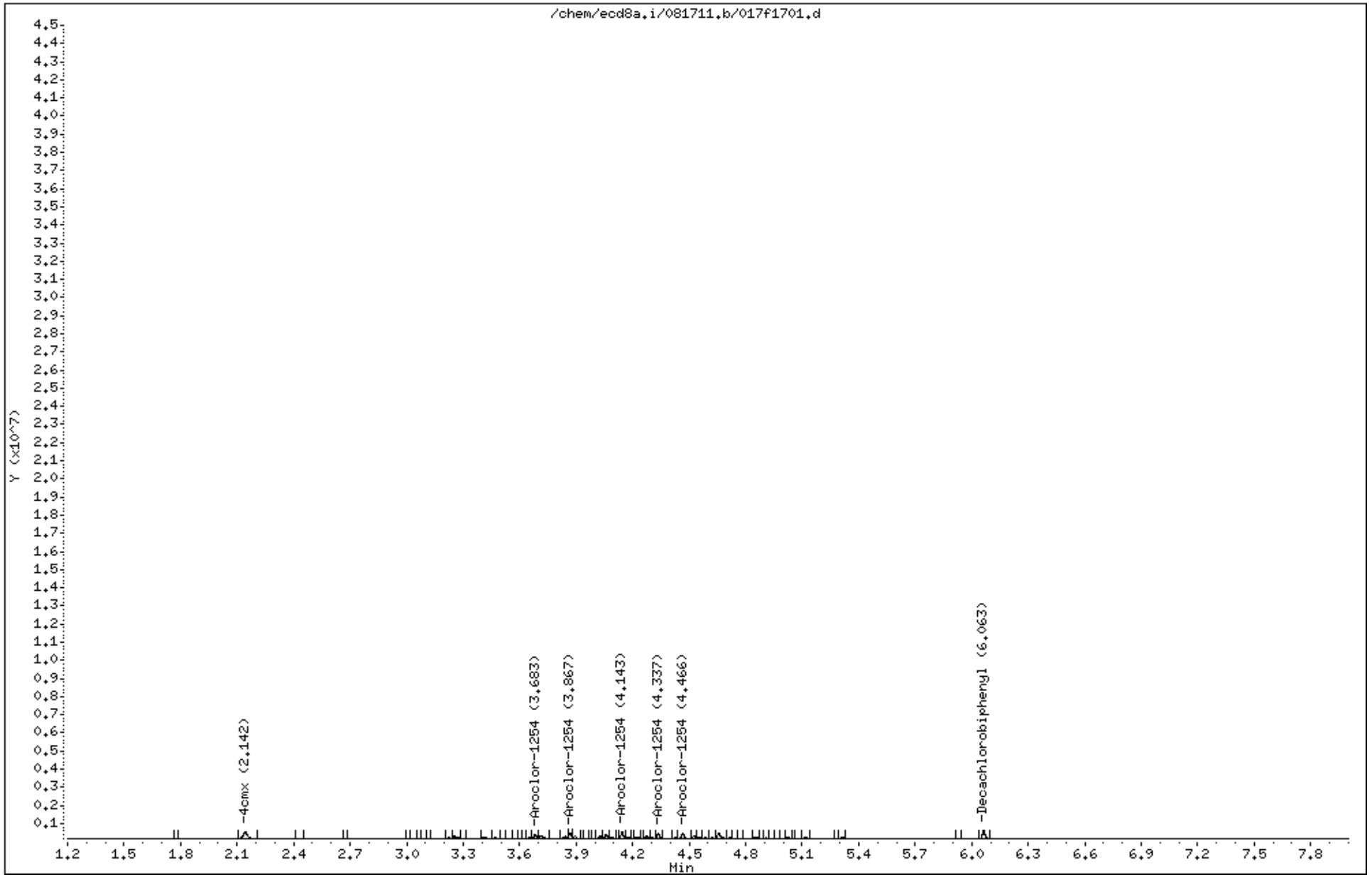
Instrument: ecd8a.i

Sample Info: IWAR110815-05

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

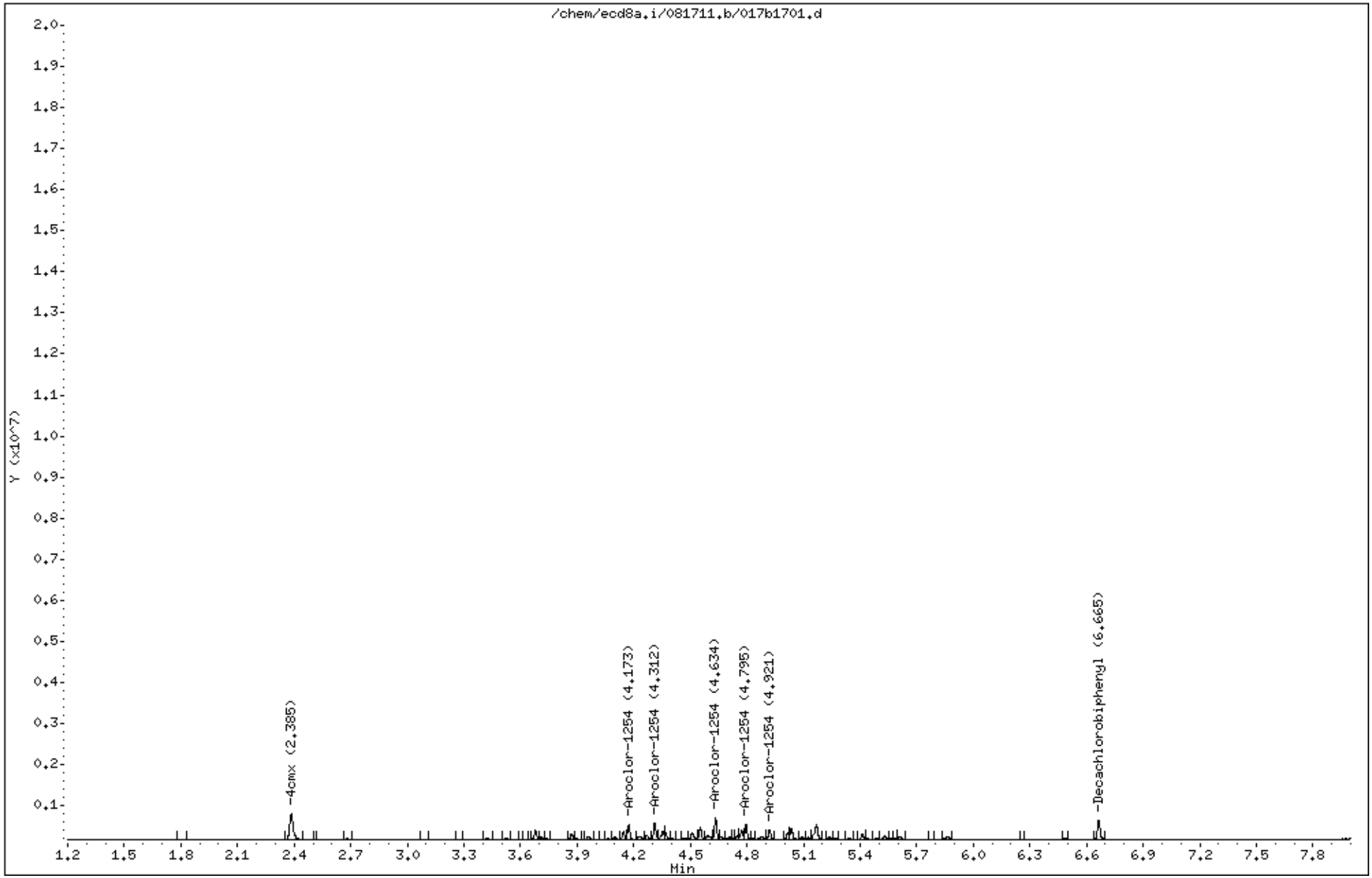
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/017b1701.d
Lab Smp Id: WAR110815-05 Client Smp ID: AR125401
Inj Date : 17-AUG-2011 14:16
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-05
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029b2901.d
Als bottle: 17 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.385	2.384	0.001	795824	10.0000	10.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.665	6.665	0.000	426093	10.0000	11.3	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.173	4.173	0.000	311756	100.000	118	80.00- 120.00	100.00
4.312	4.312	0.000	338654	100.000	118	88.63- 128.63	108.63
4.634	4.634	0.000	434346	100.000	115	119.32- 159.32	139.32
4.795	4.795	0.000	307818	100.000	116	78.74- 118.74	98.74
4.921	4.921	0.000	209071	100.000	120	47.06- 87.06	67.06
		Average of Peak Amounts =			117		

Data File: /chem/ecd8a.i/081711.b/017b1701.d
Date : 17-AUG-2011 14:16
Client ID: AR125401
Sample Info: IWAR110815-05

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/018f1801.d
Lab Smp Id: WAR110817-06 Client Smp ID: AR125402
Inj Date : 17-AUG-2011 14:28
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-06
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030f3001.d
Als bottle: 18 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.141	2.143	-0.002	1367901	25.0000	24.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.063	6.062	0.001	885899	25.0000	23.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
3.683	3.683	0.000	437269	250.000	257	80.00- 120.00	100.00
3.867	3.867	0.000	576035	250.000	257	111.73- 151.73	131.73
4.144	4.144	0.000	727205	250.000	256	146.31- 186.31	166.31
4.336	4.336	0.000	545884	250.000	254	104.84- 144.84	124.84
4.466	4.466	0.000	537261	250.000	260	102.87- 142.87	122.87
Average of Peak Amounts =					257		

Data File: /chem/ecd8a.i/081711.b/018f1801.d

Date : 17-AUG-2011 14:28

Client ID: AR125402

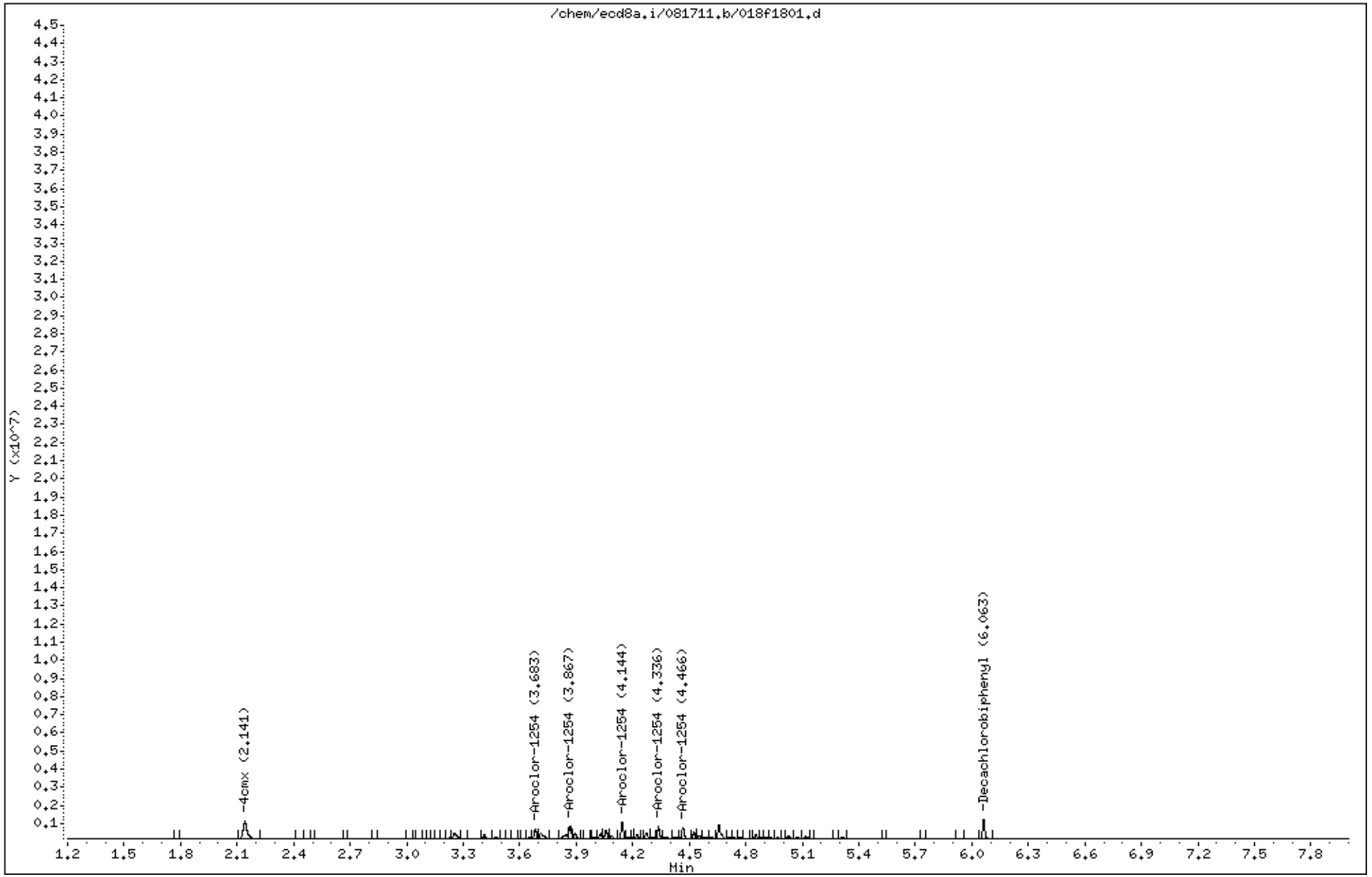
Instrument: ecd8a.i

Sample Info: IWAR110817-06

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

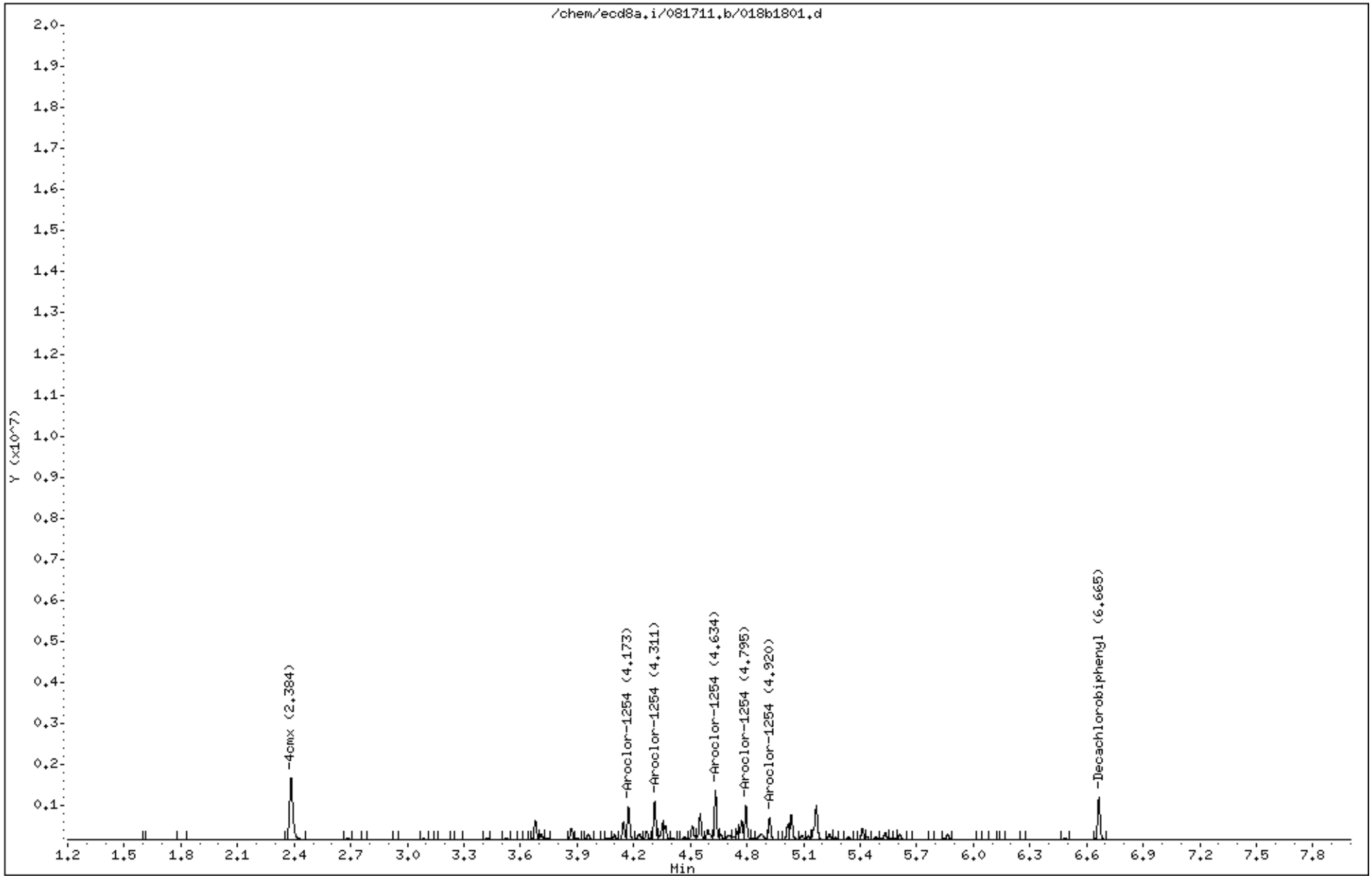
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/018b1801.d
Lab Smp Id: WAR110817-06 Client Smp ID: AR125402
Inj Date : 17-AUG-2011 14:28
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-06
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030b3001.d
Als bottle: 18 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.384	2.384	0.000	1893012	25.0000	24.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.665	6.665	0.000	927853	25.0000	24.5	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.173	4.173	0.000	687978	250.000	262	80.00- 120.00	100.00
4.311	4.311	0.000	755384	250.000	263	89.80- 129.80	109.80
4.634	4.634	0.000	986207	250.000	261	123.35- 163.35	143.35
4.795	4.795	0.000	690081	250.000	260	80.31- 120.31	100.31
4.920	4.920	0.000	457034	250.000	262	46.43- 86.43	66.43
Average of Peak Amounts =					262		

Data File: /chem/ecd8a.i/081711.b/018b1801.d
Date : 17-AUG-2011 14:28
Client ID: AR125402
Sample Info: IWAR110817-06

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

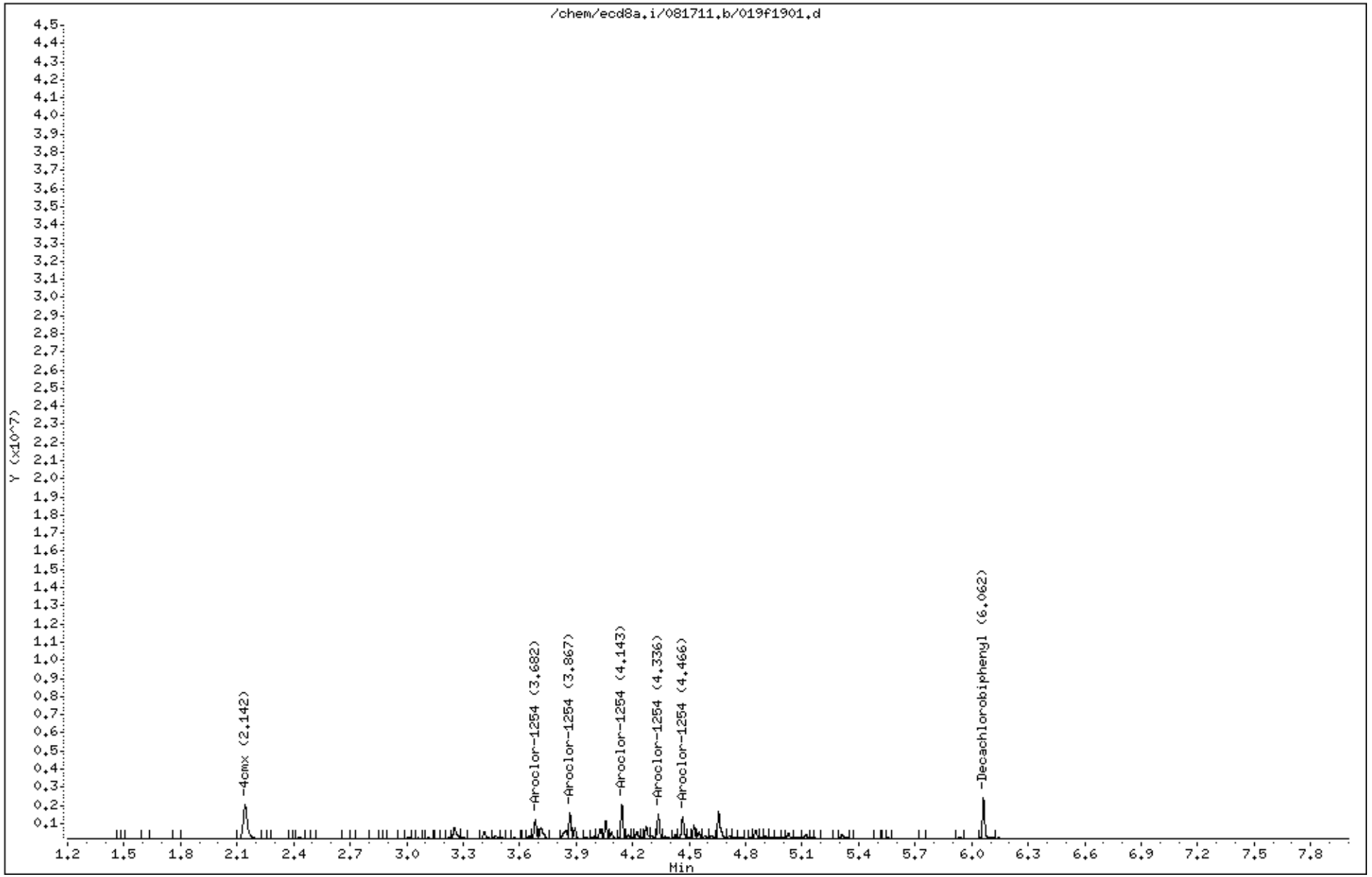
Data file : /chem/ecd8a.i/081711.b/019f1901.d
Lab Smp Id: WAR110817-07 Client Smp ID: AR125403
Inj Date : 17-AUG-2011 14:39
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-07
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031f3101.d
Als bottle: 19 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	2785192	50.0000	49.0	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.062	6.062	0.000	1817594	50.0000	48.5	80.00- 120.00		100.00
6 Aroclor-1254						CAS #: 11097-69-1		
3.682	3.682	0.000	868773	500.000	510	80.00- 120.00		100.00
3.867	3.867	0.000	1147522	500.000	513	112.09- 152.09		132.09
4.143	4.143	0.000	1475552	500.000	519	149.84- 189.84		169.84
4.336	4.336	0.000	1107267	500.000	515	107.45- 147.45		127.45
4.466	4.466	0.000	1041973	500.000	504	99.94- 139.94		119.94
Average of Peak Amounts =					512			

Data File: /chem/ecd8a.i/081711.b/019f1901.d
Date : 17-AUG-2011 14:39
Client ID: AR125403
Sample Info: IWAR110817-07

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

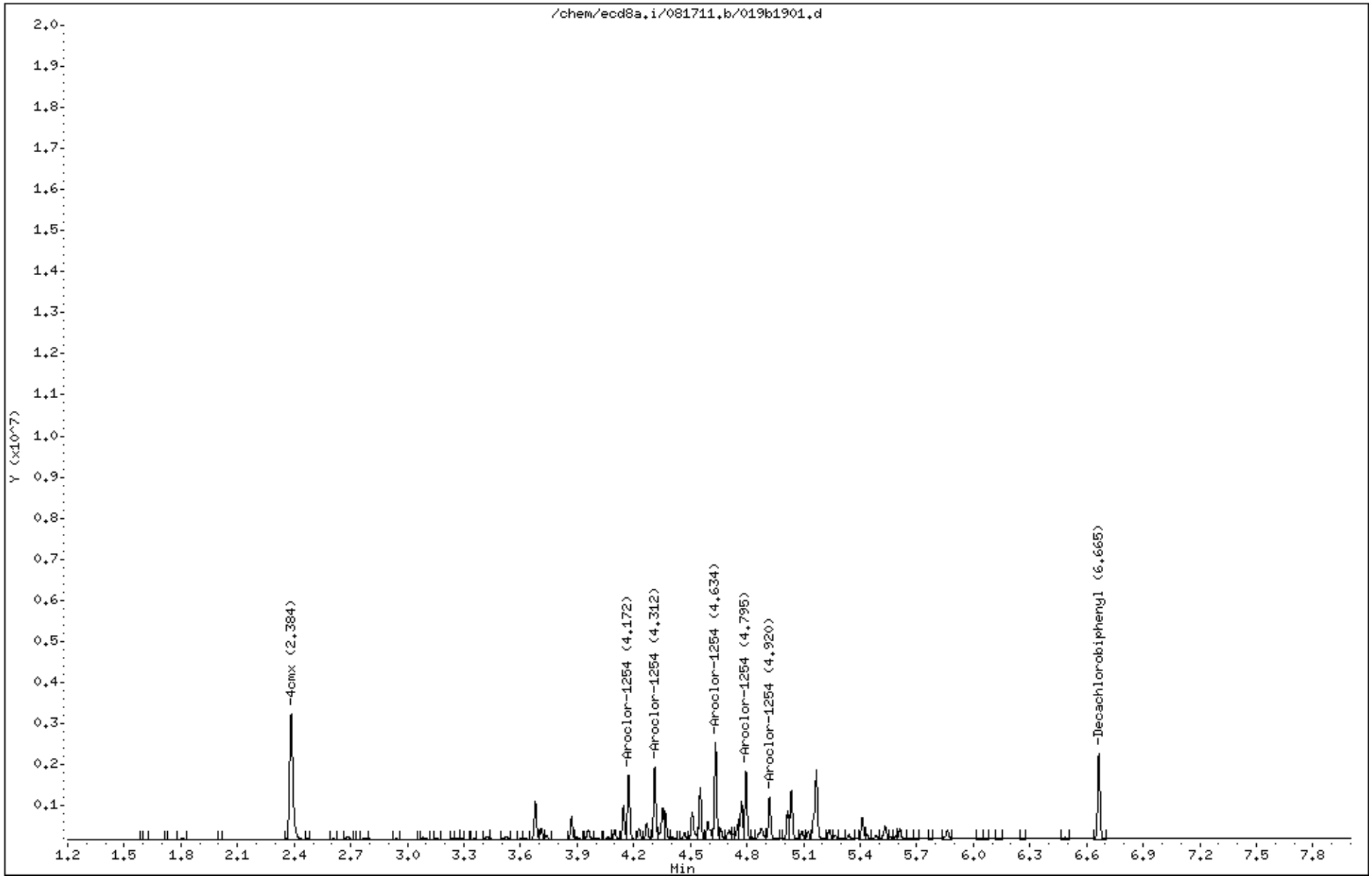
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/019b1901.d
Lab Smp Id: WAR110817-07 Client Smp ID: AR125403
Inj Date : 17-AUG-2011 14:39
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-07
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031b3101.d
Als bottle: 19 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.384	2.384	0.000	3780593	50.0000	49.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.665	6.665	0.000	1845325	50.0000	48.8	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.172	4.172	0.000	1345946	500.000	512	80.00- 120.00	100.00
4.312	4.312	0.000	1474808	500.000	513	89.57- 129.57	109.57
4.634	4.634	0.000	1962311	500.000	520	125.79- 165.79	145.79
4.795	4.795	0.000	1366557	500.000	514	81.53- 121.53	101.53
4.920	4.920	0.000	883492	500.000	507	45.64- 85.64	65.64
Average of Peak Amounts =					513		

Data File: /chem/ecd8a.i/081711.b/019b1901.d
Date : 17-AUG-2011 14:39
Client ID: AR125403
Sample Info: IWAR110817-07

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

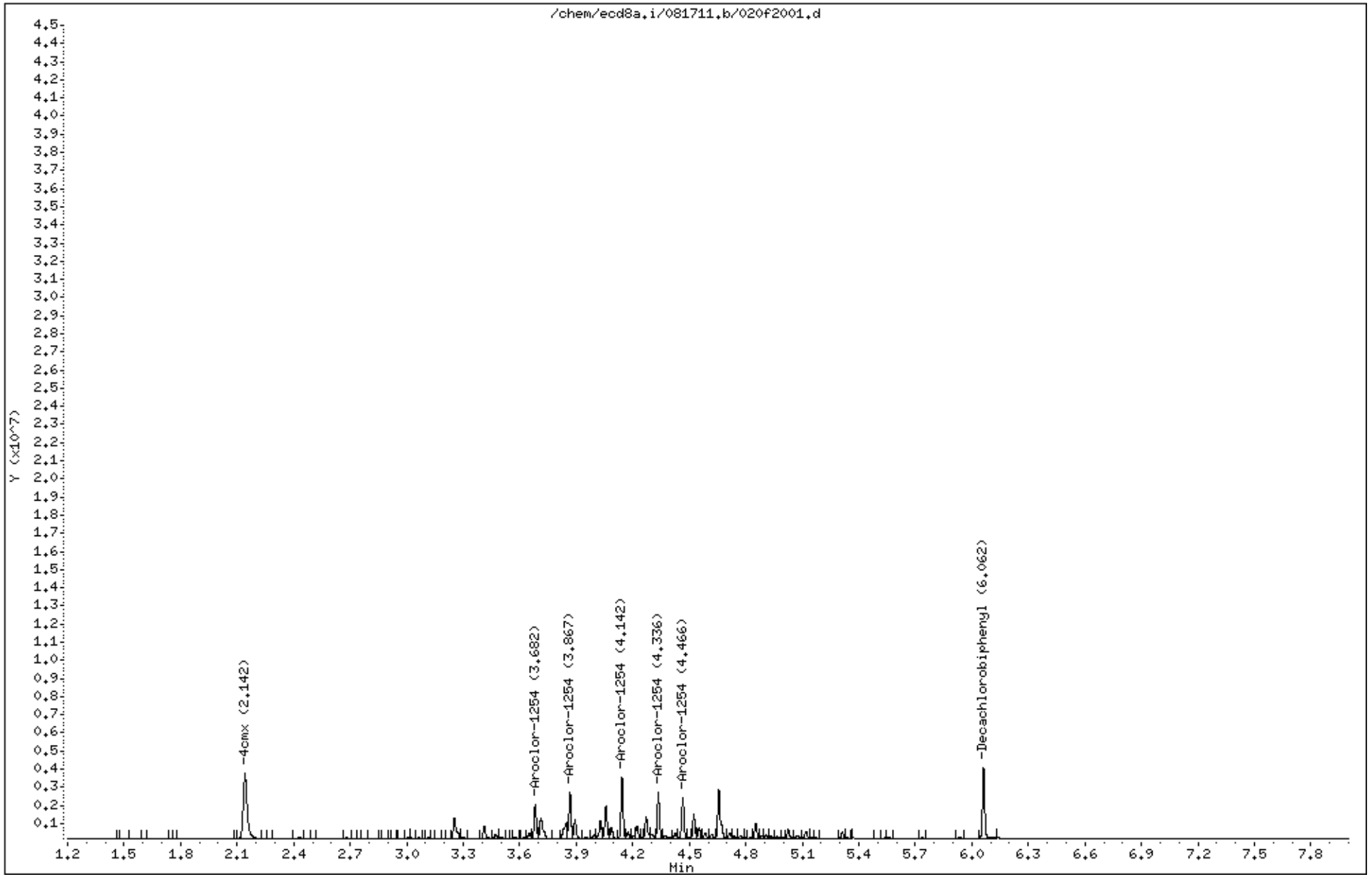
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/020f2001.d
Lab Smp Id: WAR110815-08 Client Smp ID: AR125404
Inj Date : 17-AUG-2011 14:51
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-08
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010f1001.d
Als bottle: 20 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx					CAS #: 877-09-8			
2.142	2.143	-0.001	5278850	100.000	92.9	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.062	6.062	0.000	3279568	100.000	87.6	80.00- 120.00		100.00
6 Aroclor-1254					CAS #: 11097-69-1			
3.682	3.682	0.000	1600735	1000.00	940	80.00- 120.00		100.00
3.867	3.867	0.000	2115238	1000.00	945	112.14- 152.14		132.14
4.142	4.142	0.000	2717291	1000.00	955	149.75- 189.75		169.75
4.336	4.336	0.000	2038734	1000.00	949	107.36- 147.36		127.36
4.466	4.466	0.000	1913444	1000.00	926	99.54- 139.54		119.54
Average of Peak Amounts =					943			

Data File: /chem/ecd8a.i/081711.b/020f2001.d
Date : 17-AUG-2011 14:51
Client ID: AR125404
Sample Info: IWAR110815-08

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

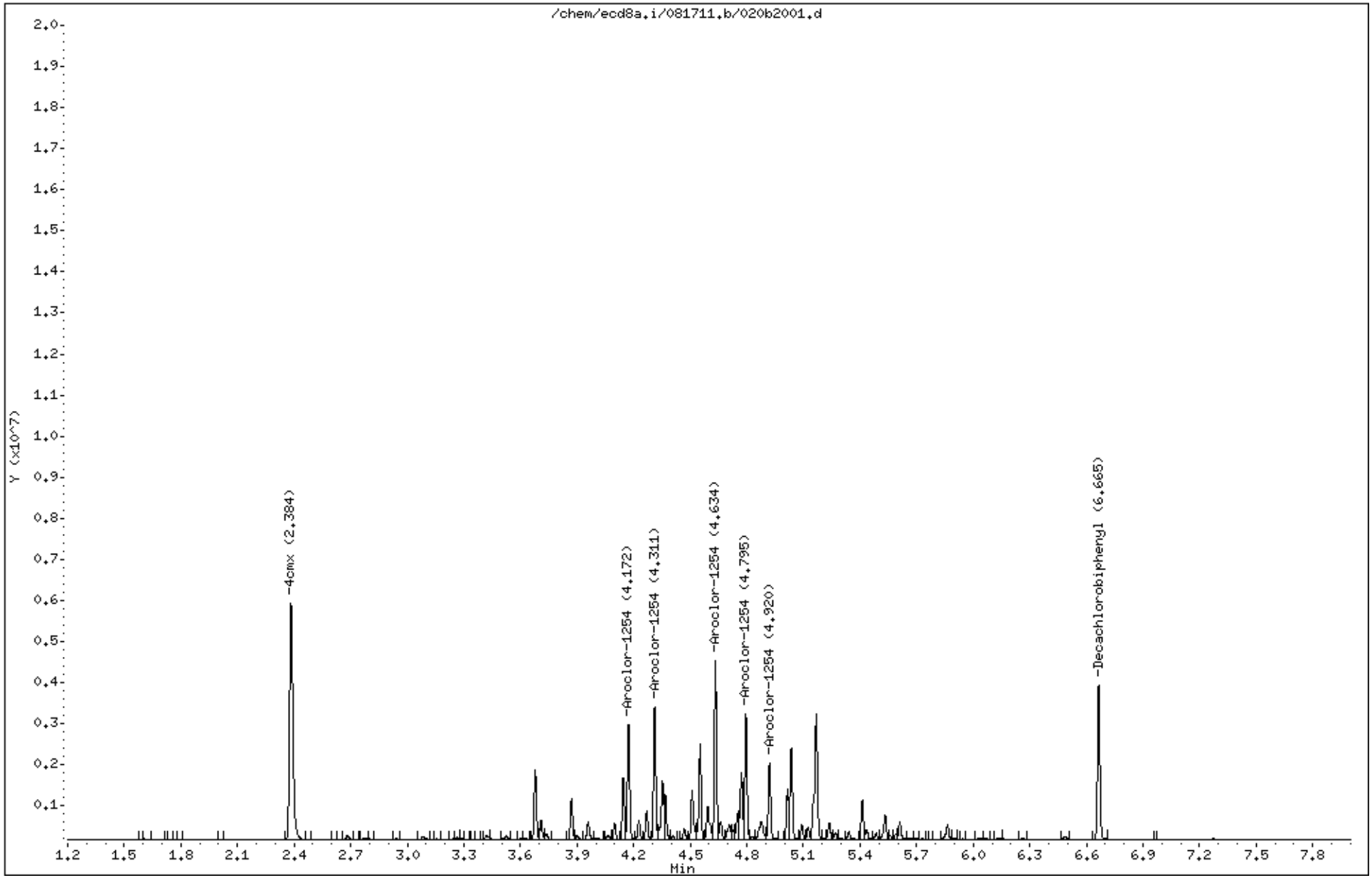
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/020b2001.d
Lab Smp Id: WAR110815-08 Client Smp ID: AR125404
Inj Date : 17-AUG-2011 14:51
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-08
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010b1001.d
Als bottle: 20 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.384	2.384	0.000	7149343	100.000	93.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.665	6.665	0.000	3276710	100.000	86.6	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.172	4.172	0.000	2435059	1000.00	926	80.00- 120.00	100.00
4.311	4.311	0.000	2663679	1000.00	927	89.39- 129.39	109.39
4.634	4.634	0.000	3553125	1000.00	941	125.92- 165.92	145.92
4.795	4.795	0.000	2488405	1000.00	936	82.19- 122.19	102.19
4.920	4.920	0.000	1583153	1000.00	908	45.01- 85.01	65.01
Average of Peak Amounts =					928		

Data File: /chem/ecd8a.i/081711.b/020b2001.d
Date : 17-AUG-2011 14:51
Client ID: AR125404
Sample Info: IWAR110815-08

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

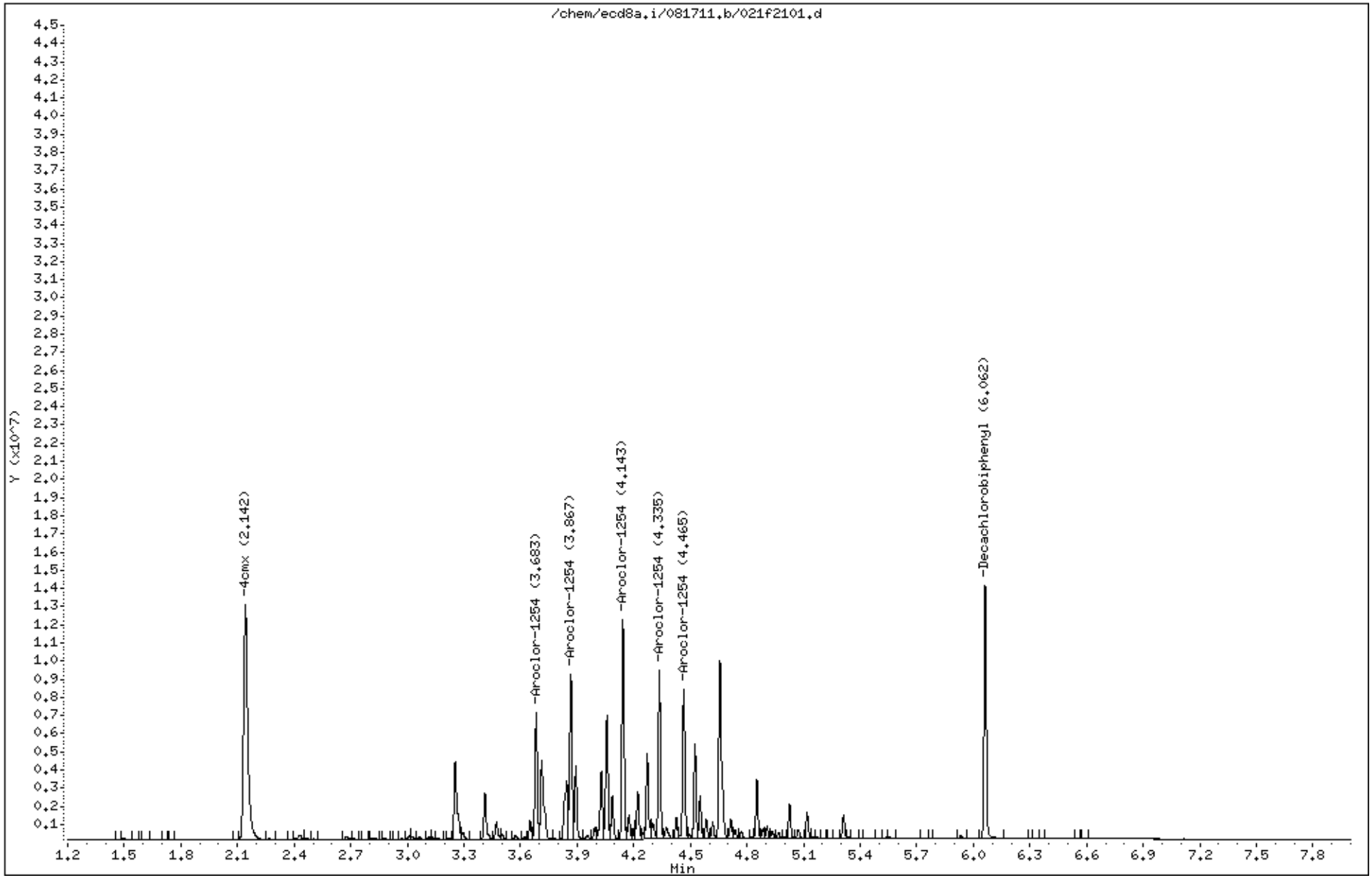
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/021f2101.d
Lab Smp Id: IAR110811-01 Client Smp ID: AR125405
Inj Date : 17-AUG-2011 15:03
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR110811-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 21 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	19833530	400.000	349	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.062	6.062	0.000	12352912	400.000	330	80.00- 120.00		100.00
6 Aroclor-1254						CAS #: 11097-69-1		
3.683	3.683	0.000	5984188	4000.00	3520	80.00- 120.00		100.00
3.867	3.867	0.000	7892769	4000.00	3520	111.89- 151.89		131.89
4.143	4.143	0.000	10042835	4000.00	3530	147.82- 187.82		167.82
4.335	4.335	0.000	7677799	4000.00	3570	108.30- 148.30		128.30
4.465	4.465	0.000	7232045	4000.00	3500	100.85- 140.85		120.85
Average of Peak Amounts =			3.53e+03					

Data File: /chem/ecd8a.i/081711.b/021f2101.d
Date : 17-AUG-2011 15:03
Client ID: AR125405
Sample Info: !IAR110811-01

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

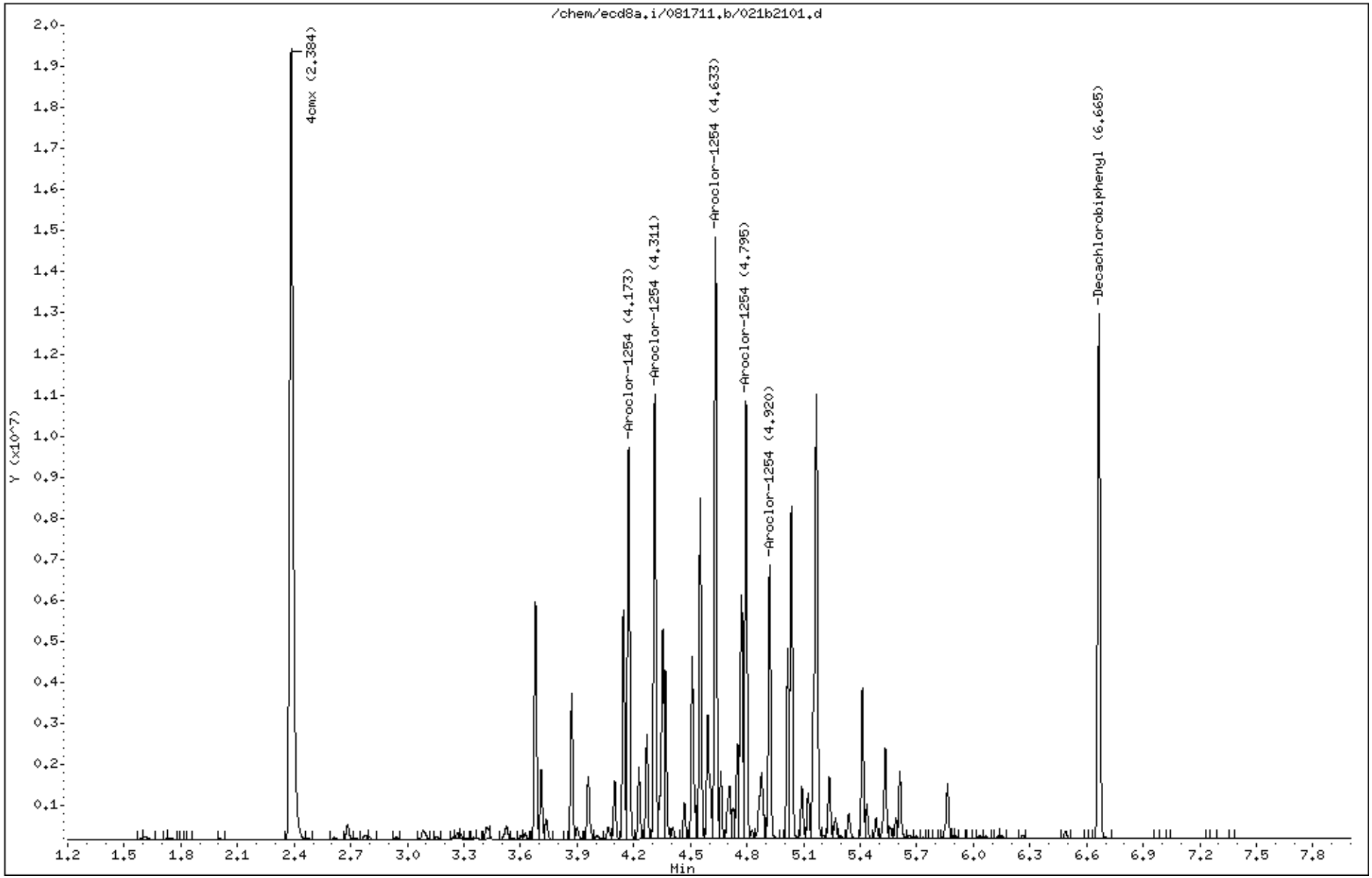
Data file : /chem/ecd8a.i/081711.b/021b2101.d
Lab Smp Id: IAR110811-01 Client Smp ID: AR125405
Inj Date : 17-AUG-2011 15:03
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR110811-01
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:03 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 21 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.384	2.384	0.000	25501382	400.000	334	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.665	6.665	0.000	11841781	400.000	313	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.173	4.173	0.000	8602252	4000.00	3270	80.00- 120.00	100.00
4.311	4.311	0.000	9372917	4000.00	3260	88.96- 128.96	108.96
4.633	4.633	0.000	12418712	4000.00	3290	124.37- 164.37	144.37
4.795	4.795	0.000	8911796	4000.00	3350	83.60- 123.60	103.60
4.920	4.920	0.000	5778344	4000.00	3320	47.17- 87.17	67.17
Average of Peak Amounts =					3.3e+03		

Data File: /chem/ecd8a.i/081711.b/021b2101.d
Date : 17-AUG-2011 15:03
Client ID: AR125405
Sample Info: IAR110811-01

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



GEL Laboratories LLC

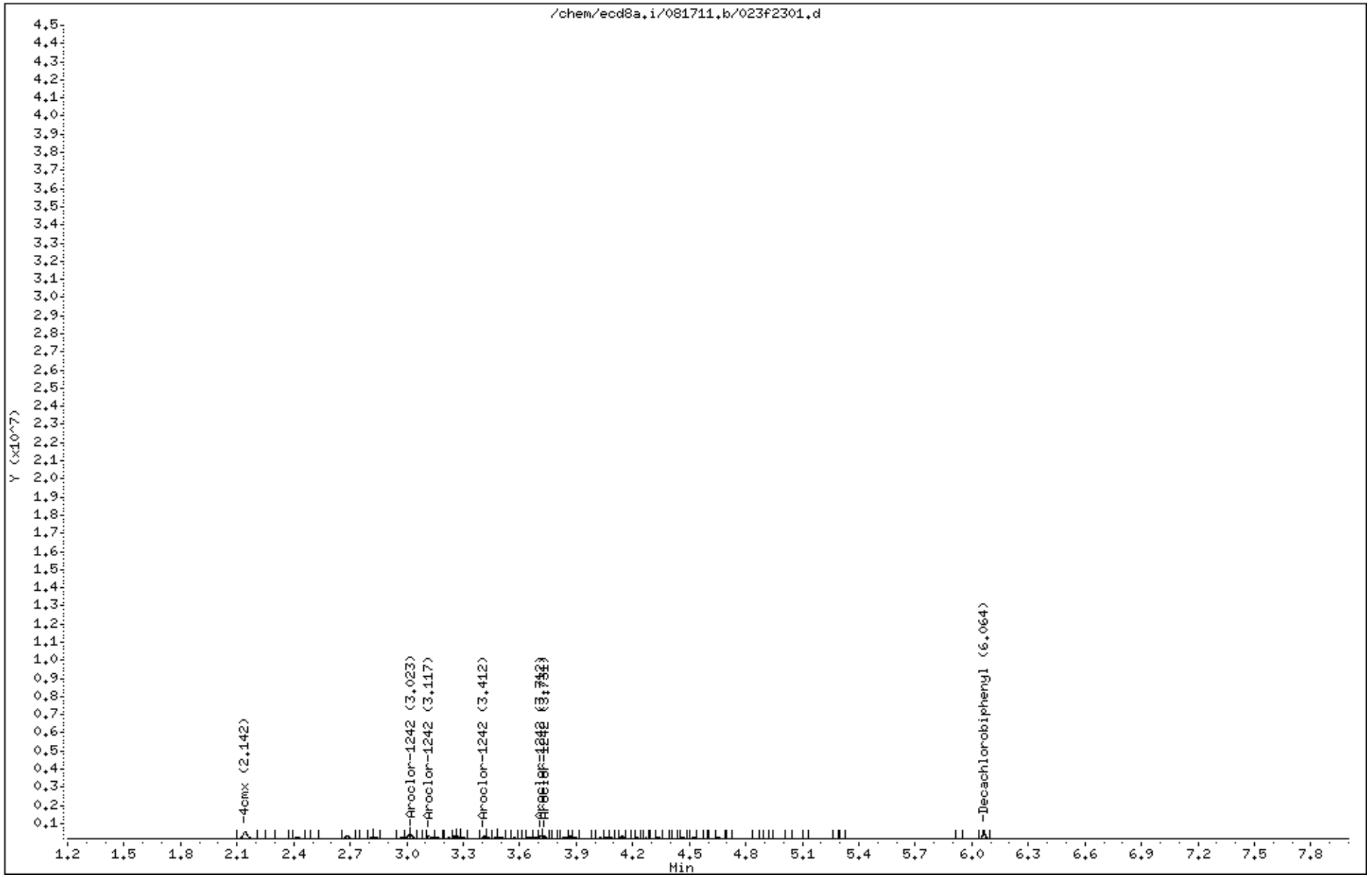
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/023f2301.d
Lab Smp Id: WAR110817-09 Client Smp ID: AR124201
Inj Date : 17-AUG-2011 15:26
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-09
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029f2901.d
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	588708	10.0000	10.4	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.064	6.062	0.002	389597	10.0000	10.4	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.023	3.023	0.000	223351	100.000	112	80.00- 120.00		100.00
3.117	3.117	0.000	162061	100.000	115	52.56- 92.56		72.56
3.412	3.412	0.000	134022	100.000	121	40.01- 80.01		60.01
3.712	3.712	0.000	135268	100.000	123	40.56- 80.56		60.56
3.731	3.731	0.000	122066	100.000	113	34.65- 74.65		54.65
		Average of Peak Amounts =			117			

Data File: /chem/ecd8a.i/081711.b/023f2301.d
Date : 17-AUG-2011 15:26
Client ID: AR124201
Sample Info: IWAR110817-09

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/023b2301.d
Lab Smp Id: WAR110817-09 Client Smp ID: AR124201
Inj Date : 17-AUG-2011 15:26
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-09
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:36 Cal File: 029b2901.d
Als bottle: 23 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.384	2.384	0.000	832188	10.0000	10.9	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.664	6.665	-0.001	430100	10.0000	11.4	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.431	3.431	0.000	309772	100.000	116	80.00- 120.00		100.00
3.529	3.529	0.000	228619	100.000	120	53.80- 93.80		73.80
3.602	3.602	0.000	132197	100.000	118	22.68- 62.68		42.68
3.679	3.679	0.000	162399	100.000	108	32.43- 72.43		52.43
3.870	3.870	0.000	193719	100.000	125	42.54- 82.54		62.54
		Average of Peak Amounts =			118			

Data File: /chem/ecd8a.i/081711.b/023b2301.d

Page 1

Date : 17-AUG-2011 15:26

Client ID: AR124201

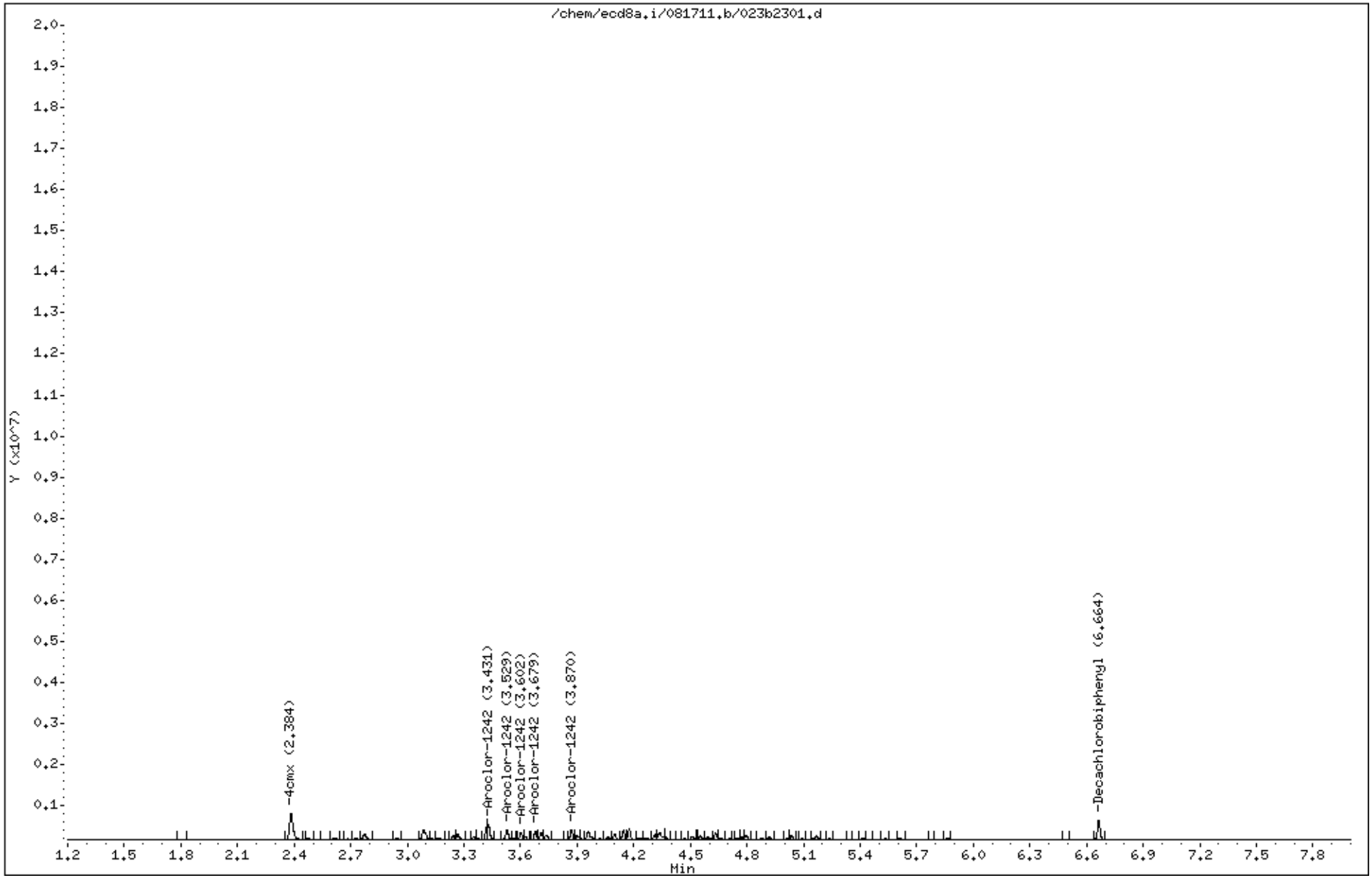
Instrument: ecd8a.i

Sample Info: IWAR110817-09

Operator: YS1

Column phase: CLP2

Column diameter: 0.25



GEL Laboratories LLC

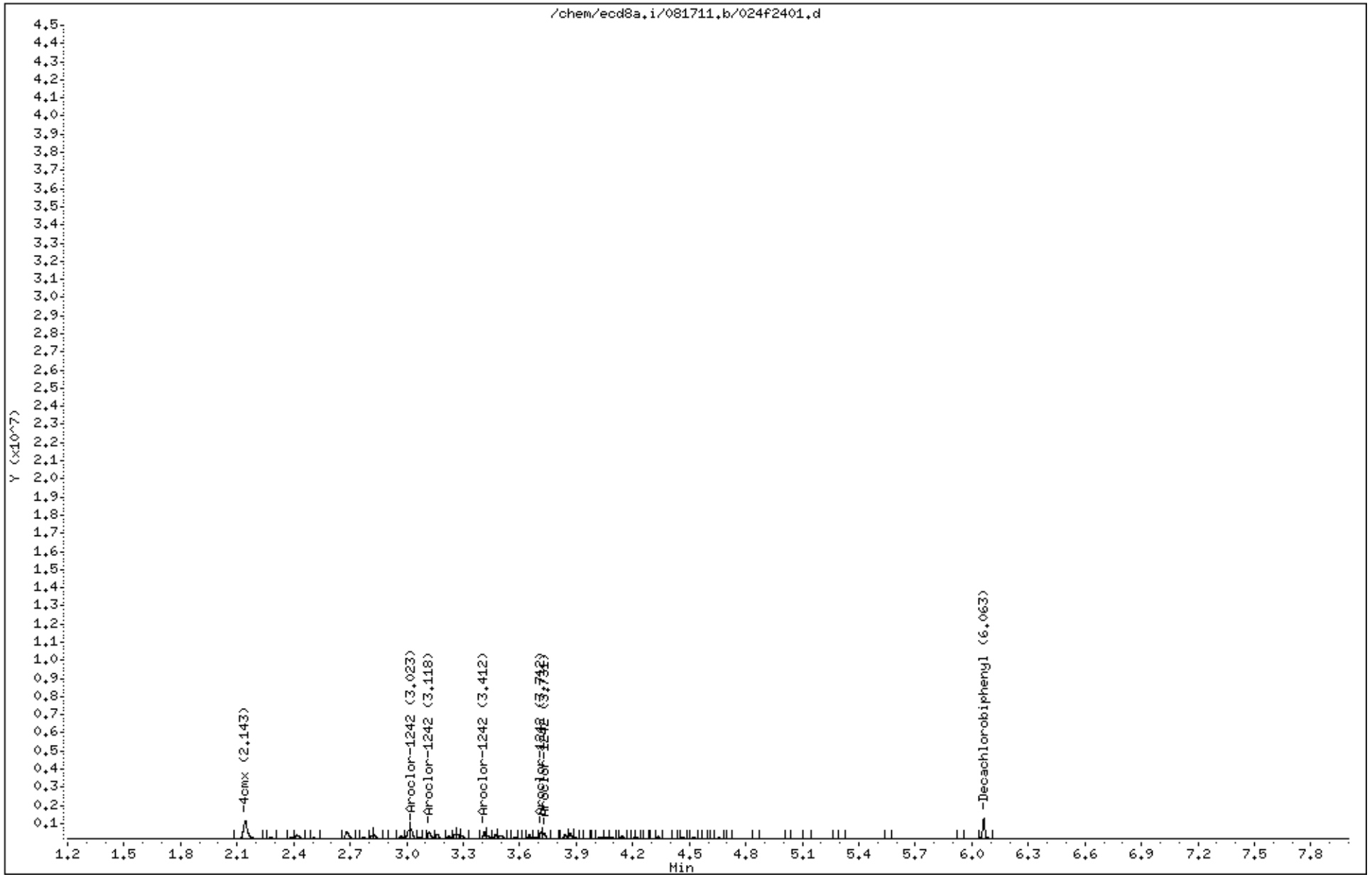
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/024f2401.d
Lab Smp Id: WAR110817-10 Client Smp ID: AR124202
Inj Date : 17-AUG-2011 15:38
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-10
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030f3001.d
Als bottle: 24 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.143	2.143	0.000	1468366	25.0000	25.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.063	6.062	0.001	942473	25.0000	25.2	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.023	3.023	0.000	524588	250.000	263	80.00- 120.00	100.00
3.118	3.118	0.000	381574	250.000	271	52.74- 92.74	72.74
3.412	3.412	0.000	296326	250.000	268	36.49- 76.49	56.49
3.712	3.712	0.000	293021	250.000	266	35.86- 75.86	55.86
3.731	3.731	0.000	284144	250.000	264	34.17- 74.17	54.17
Average of Peak Amounts =					266		

Data File: /chem/ecd8a.i/081711.b/024f2401.d
Date : 17-AUG-2011 15:38
Client ID: AR124202
Sample Info: IWAR110817-10

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/024b2401.d
Lab Smp Id: WAR110817-10 Client Smp ID: AR124202
Inj Date : 17-AUG-2011 15:38
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-10
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:47 Cal File: 030b3001.d
Als bottle: 24 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.384	2.384	0.000	1998684	25.0000	26.1	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	998365	25.0000	26.4	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.431	3.431	0.000	716626	250.000	269	80.00- 120.00		100.00
3.528	3.528	0.000	517317	250.000	273	52.19- 92.19		72.19
3.603	3.603	0.000	303017	250.000	270	22.28- 62.28		42.28
3.870	3.870	0.000	424101	250.000	283	39.18- 79.18		59.18
4.145	4.145	0.000	412894	250.000	266	37.62- 77.62		57.62
		Average of Peak Amounts =			272			

Data File: /chem/ecd8a.i/081711.b/024b2401.d

Page 1

Date : 17-AUG-2011 15:38

Client ID: AR124202

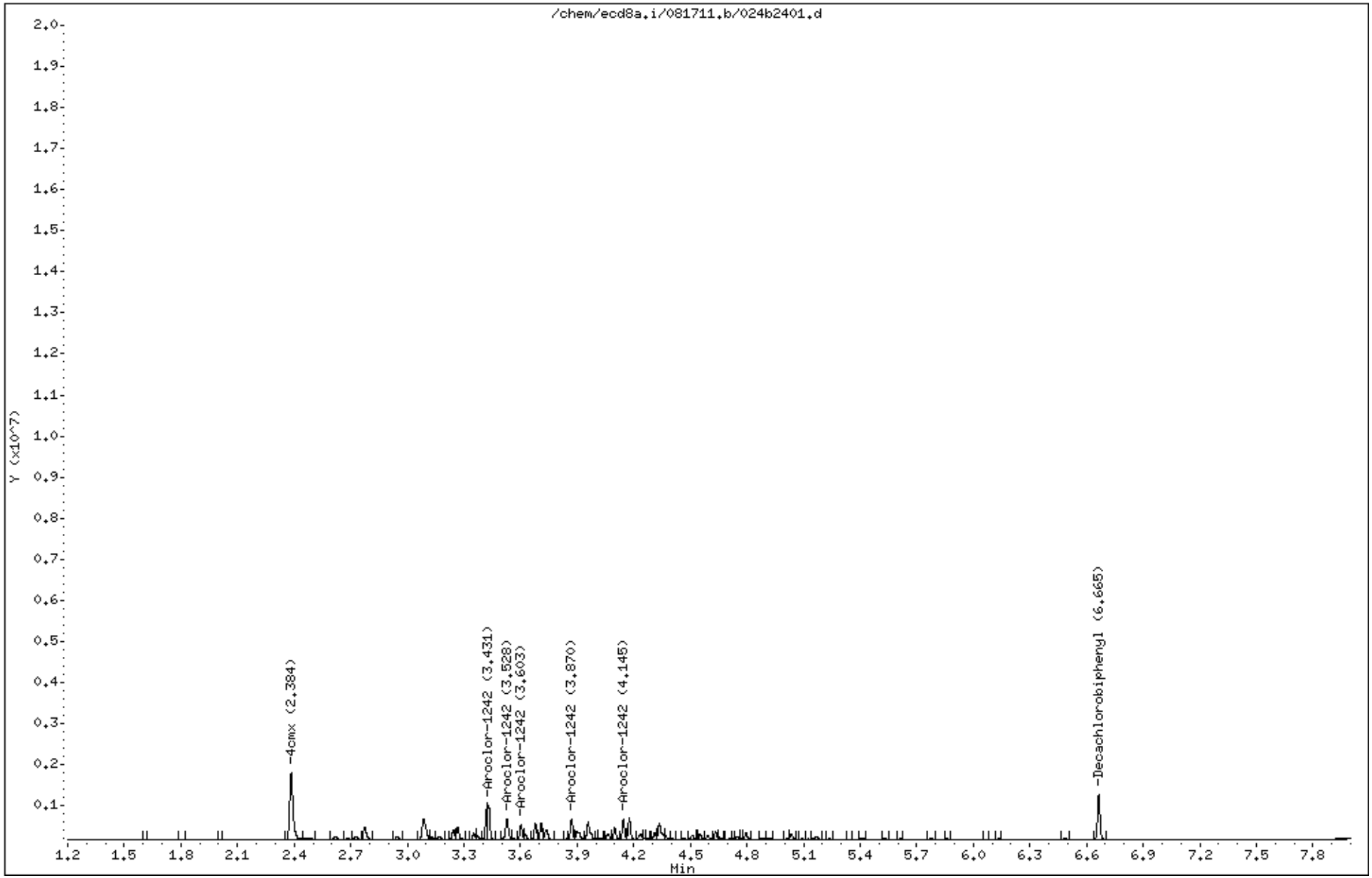
Instrument: ecd8a.i

Sample Info: IWAR110817-10

Operator: YS1

Column phase: CLP2

Column diameter: 0.25



GEL Laboratories LLC

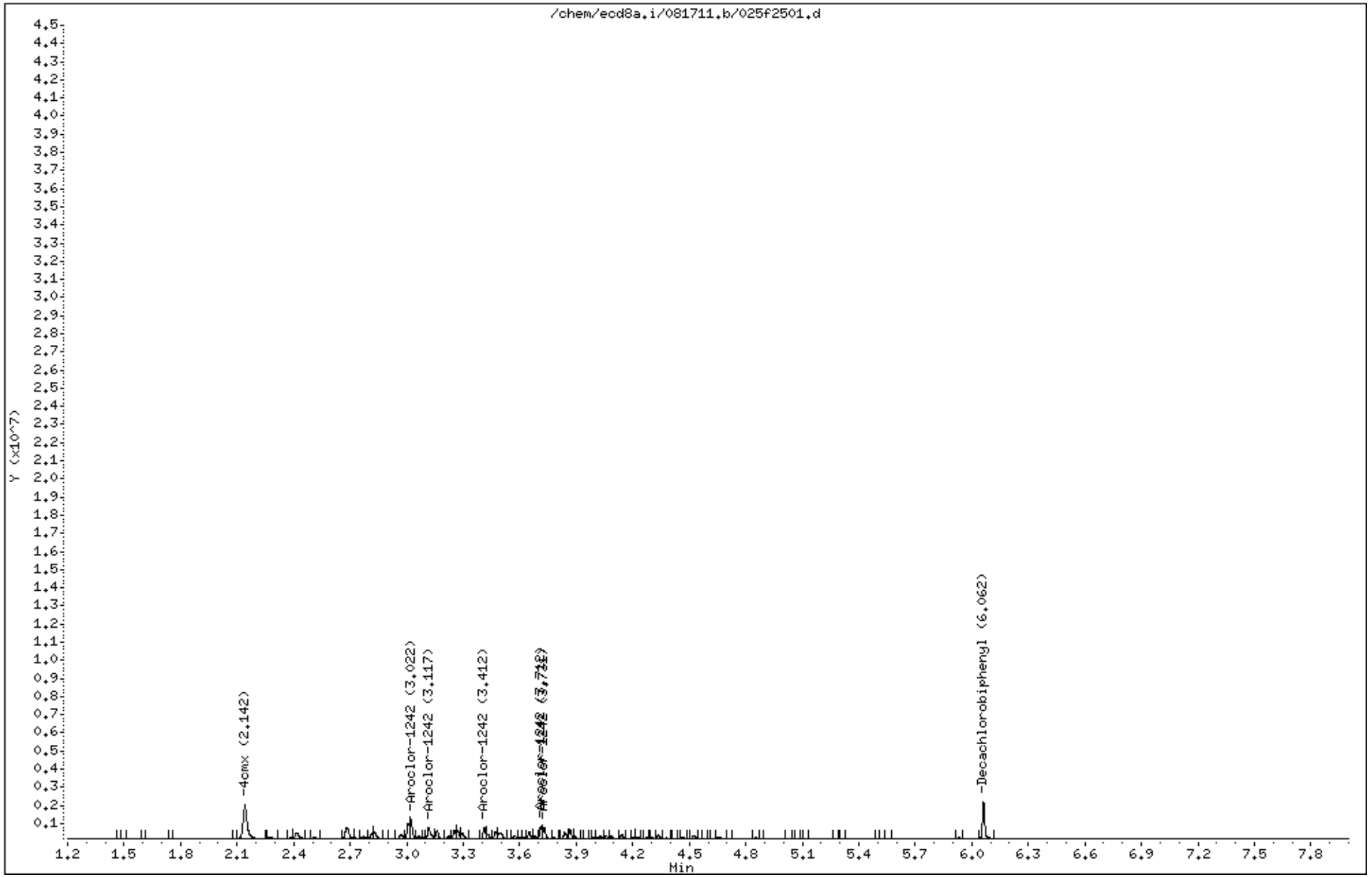
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/025f2501.d
Lab Smp Id: WAR110817-11 Client Smp ID: AR124203
Inj Date : 17-AUG-2011 15:49
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-11
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031f3101.d
Als bottle: 25 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	2785609	50.0000	49.0	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.062	6.062	0.000	1698511	50.0000	45.4	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.022	3.022	0.000	980701	500.000	491	80.00- 120.00		100.00
3.117	3.117	0.000	686193	500.000	488	49.97- 89.97		69.97
3.412	3.412	0.000	525123	500.000	474	33.55- 73.55		53.55
3.712	3.712	0.000	514648	500.000	468	32.48- 72.48		52.48
3.731	3.731	0.000	523275	500.000	486	33.36- 73.36		53.36
		Average of Peak Amounts =			481			

Data File: /chem/ecd8a.i/081711.b/025f2501.d
Date : 17-AUG-2011 15:49
Client ID: AR124203
Sample Info: IWAR110817-11

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

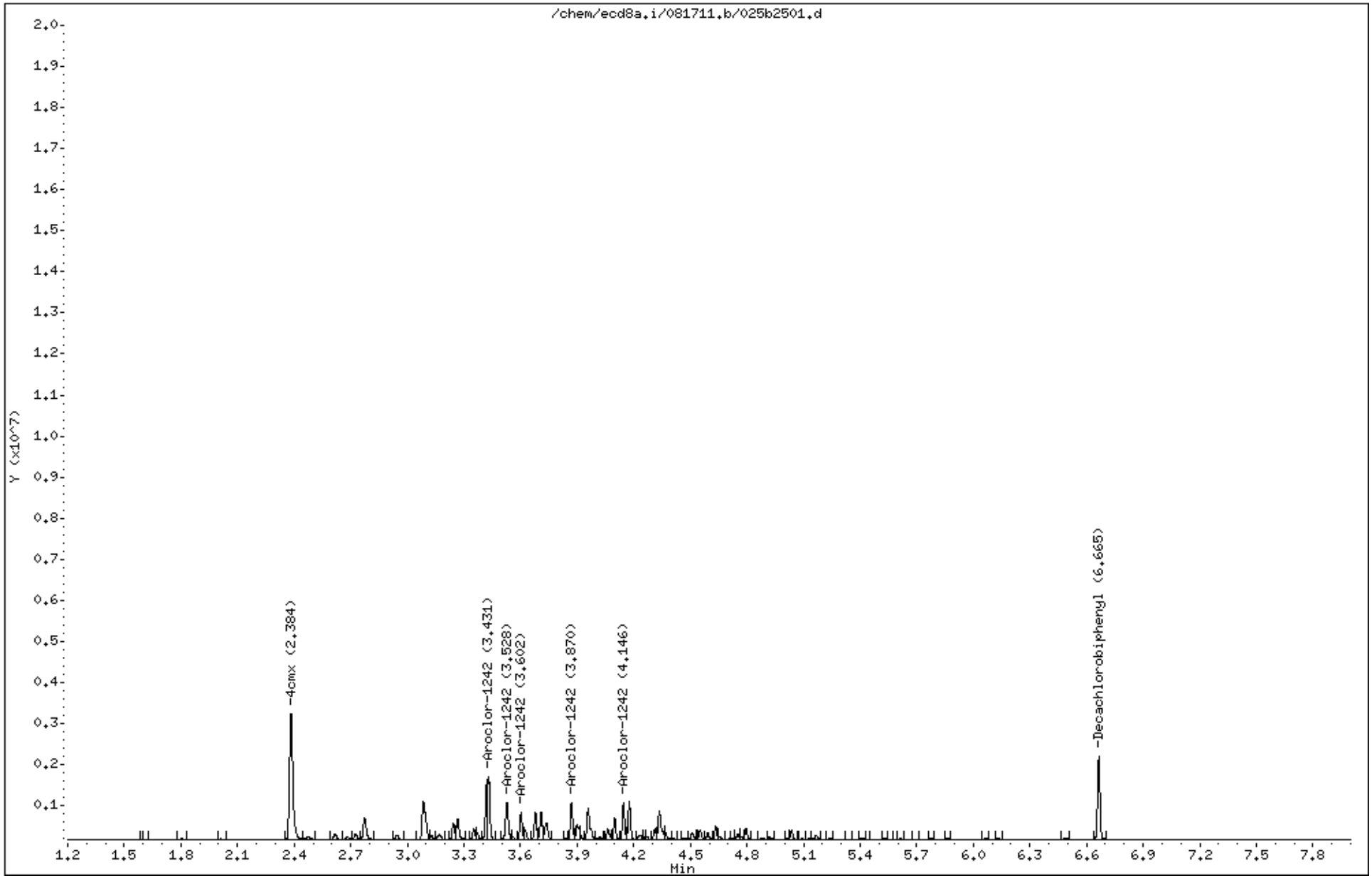
Data file : /chem/ecd8a.i/081711.b/025b2501.d
Lab Smp Id: WAR110817-11 Client Smp ID: AR124203
Inj Date : 17-AUG-2011 15:49
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110817-11
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 16:59 Cal File: 031b3101.d
Als bottle: 25 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx					CAS #: 877-09-8			
2.384	2.384	0.000	3786030	50.0000	49.5	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.665	6.665	0.000	1757233	50.0000	46.4	80.00- 120.00		100.00
4 Aroclor-1242					CAS #: 53469-21-9			
3.431	3.431	0.000	1304902	500.000	490	80.00- 120.00		100.00
3.528	3.528	0.000	920735	500.000	486	50.56- 90.56		70.56
3.602	3.602	0.000	539890	500.000	482	21.37- 61.37		41.37
3.870	3.870	0.000	748456	500.000	499	37.36- 77.36		57.36
4.146	4.146	0.000	739545	500.000	477	36.67- 76.67		56.67
		Average of Peak Amounts =			487			

Data File: /chem/ecd8a.i/081711.b/025b2501.d
Date : 17-AUG-2011 15:49
Client ID: AR124203
Sample Info: IWAR110817-11

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



GEL Laboratories LLC

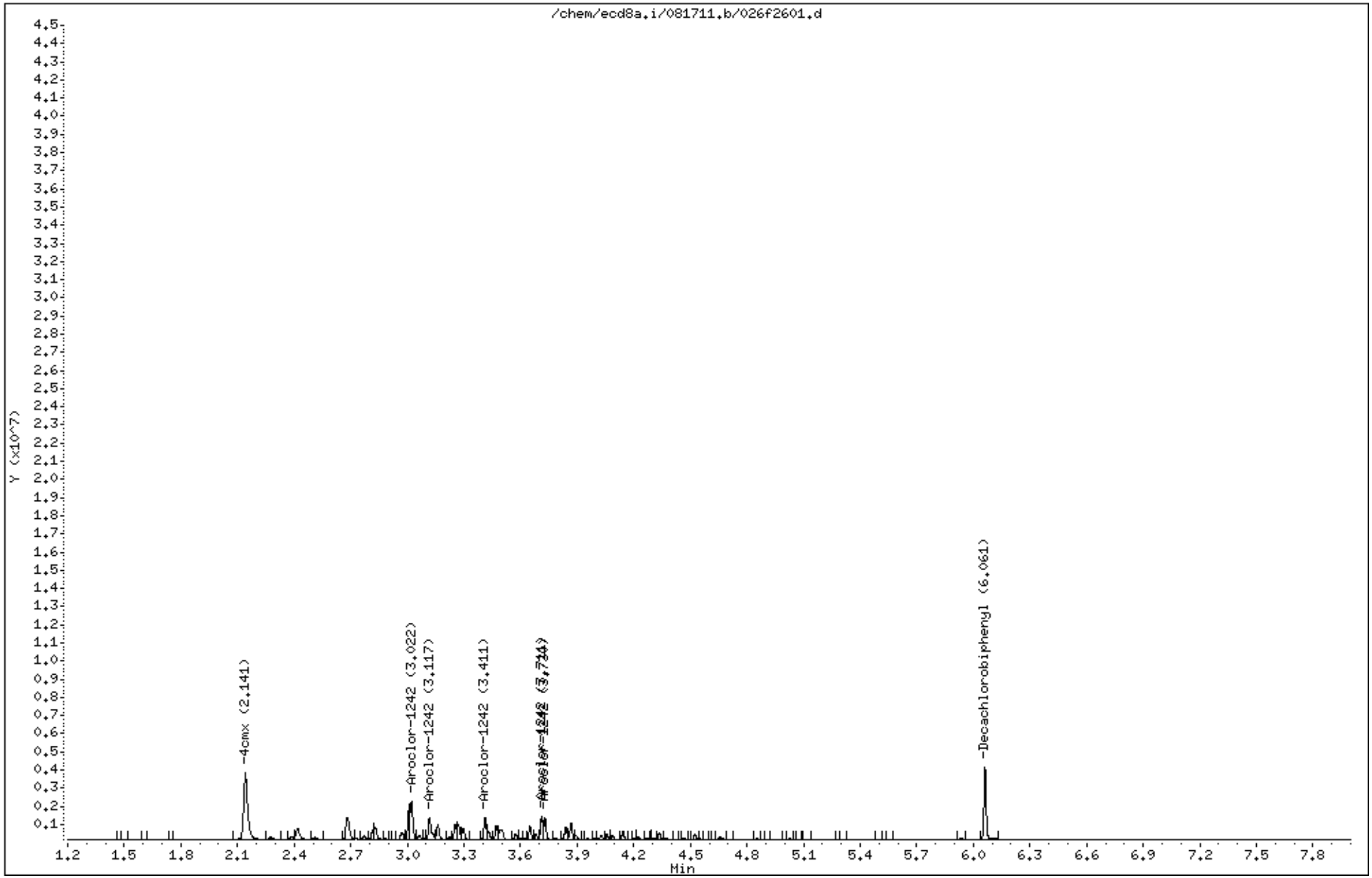
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/026f2601.d
Lab Smp Id: WAR111817-12 Client Smp ID: AR124204
Inj Date : 17-AUG-2011 16:01
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR111817-12
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010f1001.d
Als bottle: 26 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx					CAS #: 877-09-8			
2.141	2.143	-0.002	5495544	100.000	96.7	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.061	6.062	-0.001	3357970	100.000	89.7	80.00- 120.00		100.00
4 Aroclor-1242					CAS #: 53469-21-9			
3.022	3.022	0.000	1956781	1000.00	980	80.00- 120.00		100.00
3.117	3.117	0.000	1316648	1000.00	936	47.29- 87.29		67.29
3.411	3.411	0.000	1016483	1000.00	918	31.95- 71.95		51.95
3.711	3.711	0.000	1008603	1000.00	916	31.54- 71.54		51.54
3.730	3.730	0.000	1023455	1000.00	950	32.30- 72.30		52.30
Average of Peak Amounts =					940			

Data File: /chem/ecd8a.i/081711.b/026f2601.d
Date : 17-AUG-2011 16:01
Client ID: AR124204
Sample Info: IWAR111817-12

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/026b2601.d
Lab Smp Id: WAR111817-12 Client Smp ID: AR124204
Inj Date : 17-AUG-2011 16:01
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR111817-12
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:04 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 12:55 Cal File: 010b1001.d
Als bottle: 26 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.384	2.384	0.000	7367264	100.000	96.4	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	3404116	100.000	90.0	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.431	3.431	0.000	2578507	1000.00	968	80.00- 120.00		100.00
3.528	3.528	0.000	1757096	1000.00	927	48.14- 88.14		68.14
3.602	3.602	0.000	1042922	1000.00	930	20.45- 60.45		40.45
3.870	3.870	0.000	1430809	1000.00	954	35.49- 75.49		55.49
4.145	4.145	0.000	1419112	1000.00	916	35.04- 75.04		55.04
		Average of Peak Amounts =			939			

Data File: /chem/ecd8a.i/081711.b/026b2601.d

Date : 17-AUG-2011 16:01

Client ID: AR124204

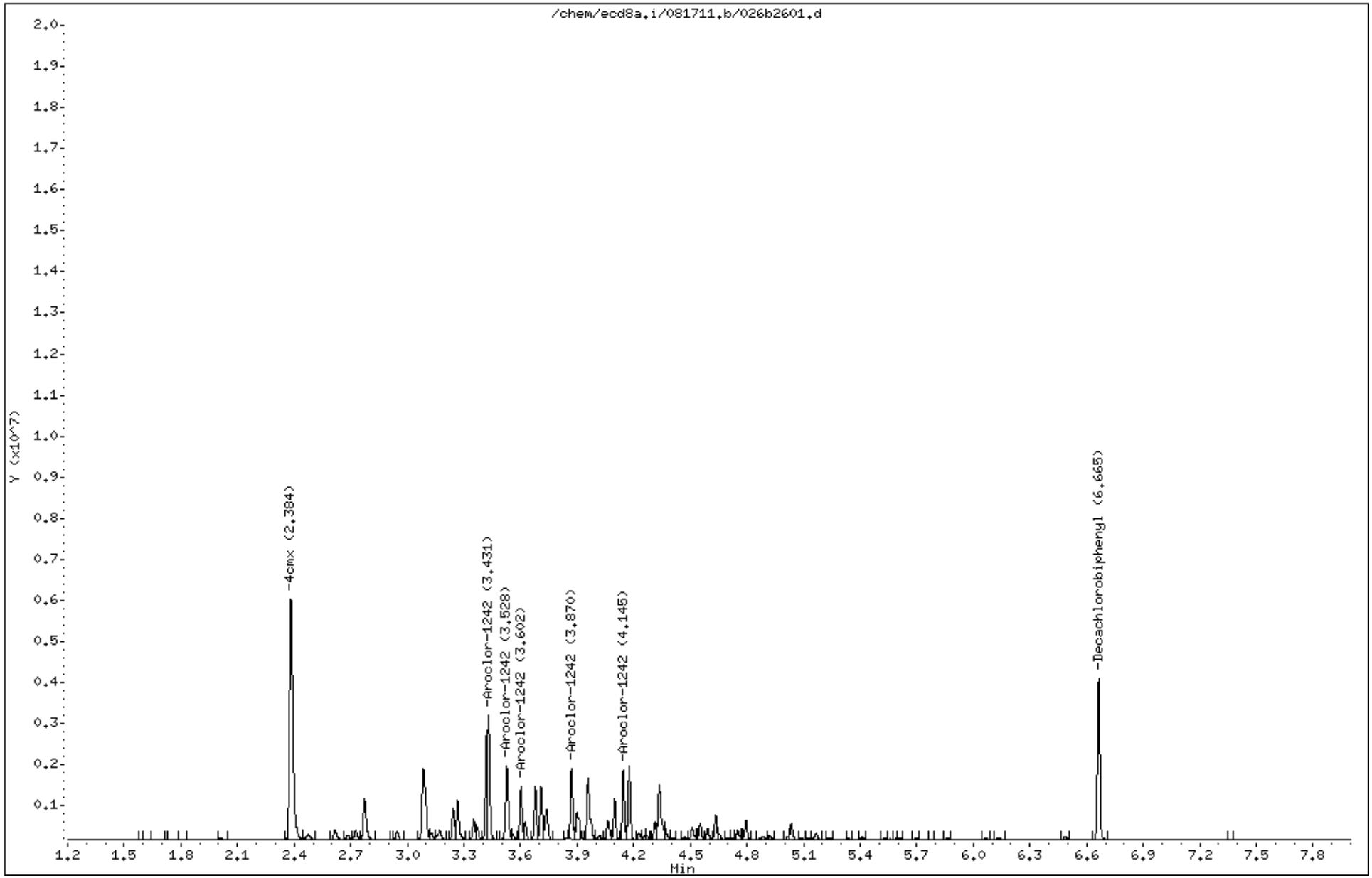
Sample Info: IWAR111817-12

Column phase: CLP2

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/027f2701.d
Lab Smp Id: IAR11623-02 Client Smp ID: AR124205
Inj Date : 17-AUG-2011 16:12
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR11623-02
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-F-8082-081711.m
Meth Date : 18-Aug-2011 09:05 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 27 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.142	2.143	-0.001	19682184	400.000	346	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.063	6.062	0.001	12074429	400.000	322	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.023	3.023	0.000	6910909	4000.00	3460	80.00- 120.00		100.00
3.118	3.118	0.000	4783583	4000.00	3400	49.22- 89.22		69.22
3.412	3.412	0.000	3785056	4000.00	3420	34.77- 74.77		54.77
3.712	3.712	0.000	3759877	4000.00	3420	34.40- 74.40		54.40
3.731	3.731	0.000	3838783	4000.00	3560	35.55- 75.55		55.55
Average of Peak Amounts =				3.45e+03				

Data File: /chem/ecd8a.i/081711.b/027f2701.d

Page 1

Date : 17-AUG-2011 16:12

Client ID: AR124205

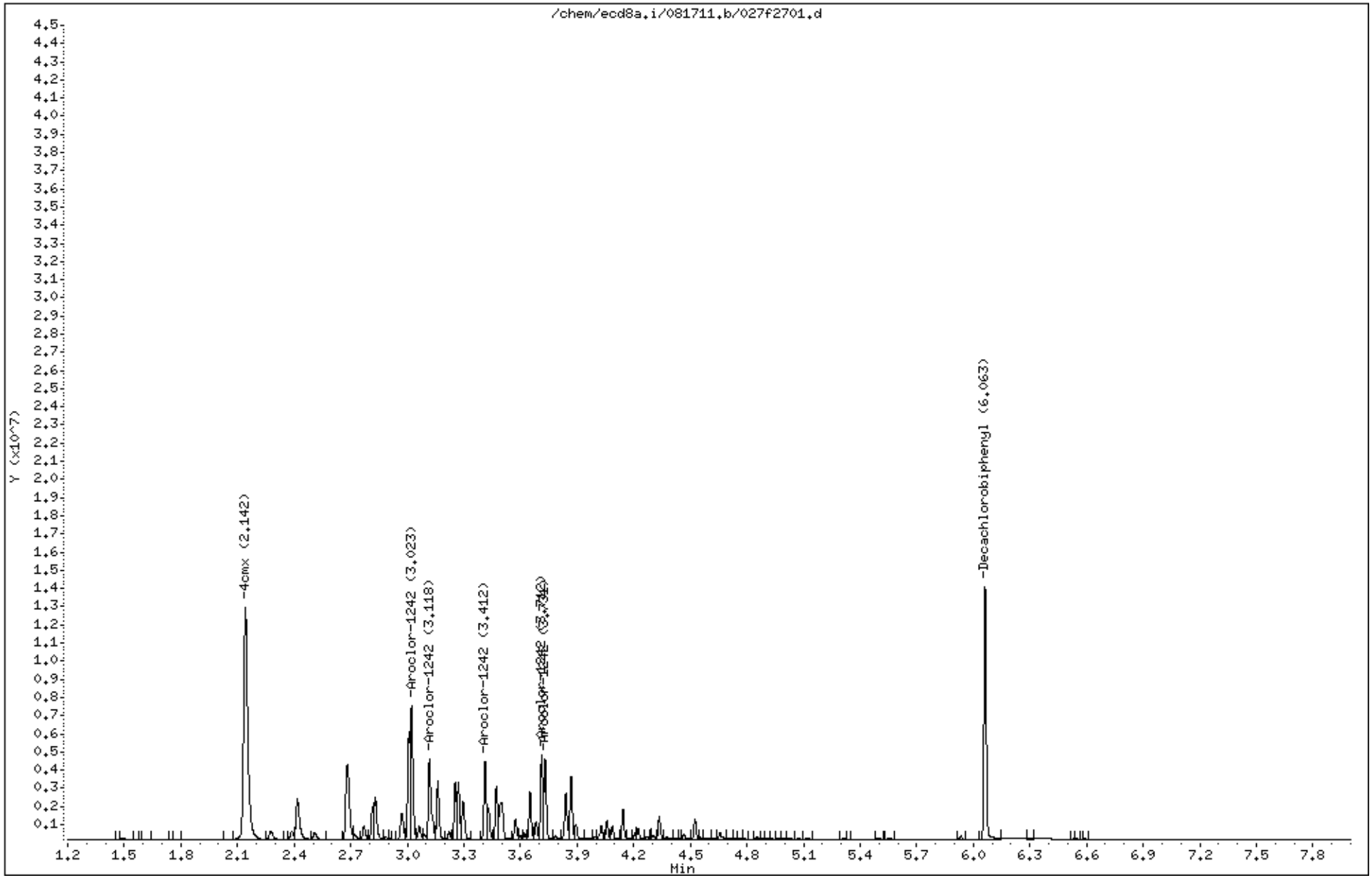
Instrument: ecd8a.i

Sample Info: IIAR11623-02

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/081711.b/027b2701.d
Lab Smp Id: IAR11623-02 Client Smp ID: AR124205
Inj Date : 17-AUG-2011 16:12
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |IAR11623-02
Misc Info :
Comment :
Method : /chem/ecd8a.i/081711.b/ECD8-B-8082-081711.m
Meth Date : 18-Aug-2011 09:05 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 27 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.384	2.384	0.000	25546133	400.000	334	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.665	6.665	0.000	11741210	400.000	310	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.431	3.431	0.000	8681908	4000.00	3260	80.00- 120.00		100.00
3.529	3.529	0.000	6099565	4000.00	3220	50.26- 90.26		70.26
3.603	3.603	0.000	3792086	4000.00	3380	23.68- 63.68		43.68
3.871	3.871	0.000	5004440	4000.00	3340	37.64- 77.64		57.64
4.145	4.145	0.000	5032700	4000.00	3250	37.97- 77.97		57.97
		Average of Peak Amounts =		3.29e+03				

Data File: /chem/ecd8a.i/081711.b/027b2701.d

Date : 17-AUG-2011 16:12

Client ID: AR124205

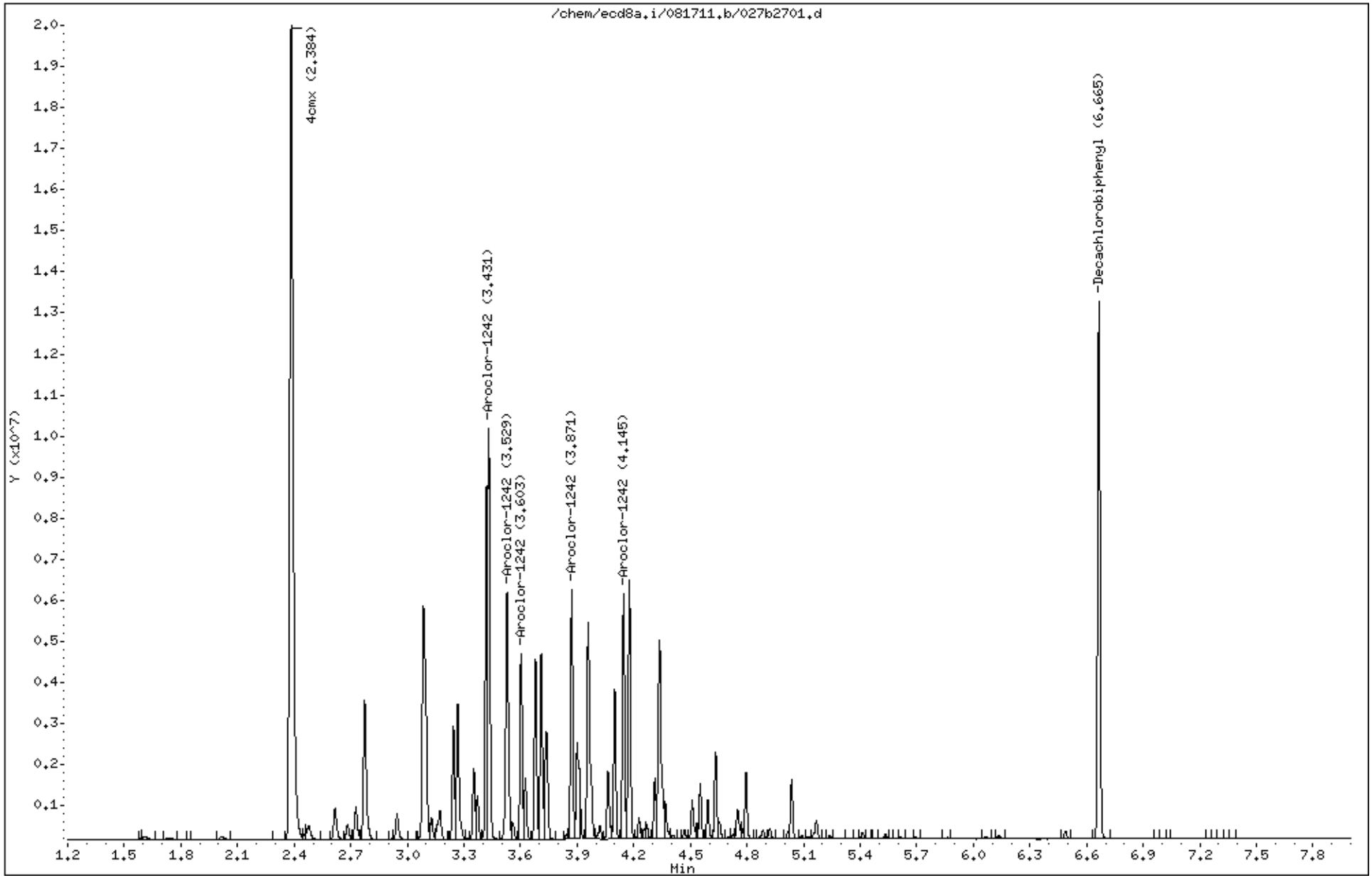
Sample Info: IIAR11623-02

Column phase: CLP2

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



Continuing Calibration Summary

Client SDG: 284538

Instrument ID: ECD8A.I_1

Injection Date: 30-AUG-11 07:21

Data File: /chem/ecd8a.i/083011.b/002f0201.d

Init. Cal. Date(s): 17-AUG-11 13:06 - 17-AUG-11 13:53

Lab Sample ID WAR110815-60

Method: /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m

Column ID: CLP1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	2070.36	2009.5	1000	-2.94	20		Averaged
Aroclor-1016(2)	2481.03	2617.78	1000	5.51	20		Averaged
Aroclor-1016(3)	994.64	1019.6	1000	2.51	20		Averaged
Aroclor-1016(4)	921.16	915.88	1000	-0.57	20		Averaged
Aroclor-1016(5)	1311.82	1316.52	1000	0.36	20		Averaged
Aroclor-1260	2491.52	2597.56	1000	4.26	20		Averaged
Aroclor-1260(2)	3633.32	3903.62	1000	7.44	20		Averaged
Aroclor-1260(3)	2205.59	2339.9	1000	6.09	20		Averaged
Aroclor-1260(4)	4768.92	5266	1000	10.42	20		Averaged
Aroclor-1260(5)	2412.96	2637.85	1000	9.32	20		Averaged
4cmx(Surr)	56819.97	57566.36	100	1.31	20		Averaged
Decachlorobiphenyl(Surr)	37444.81	38862.01	100	3.78	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 07:21

Data File: /chem/ecd8a.i/083011.b/002b0201.d

Init. Cal. Date(s): 17-AUG-11 13:06 - 17-AUG-11 13:53

Lab Sample ID WAR110815-60

Method: /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m

Column ID: CLP2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	2970.85	2724.58	1000	-8.29	20		Averaged
Aroclor-1016(2)	3212.53	3230.92	1000	0.57	20		Averaged
Aroclor-1016(3)	2270.72	2100.3	1000	-7.51	20		Averaged
Aroclor-1016(4)	1357.26	1271.86	1000	-6.29	20		Averaged
Aroclor-1016(5)	1418.08	1314.28	1000	-7.32	20		Averaged
Aroclor-1260	3277.85	3208.58	1000	-2.11	20		Averaged
Aroclor-1260(2)	3812.9	3754.31	1000	-1.54	20		Averaged
Aroclor-1260(3)	2821.22	2854.72	1000	1.19	20		Averaged
Aroclor-1260(4)	5708.62	5943.73	1000	4.12	20		Averaged
Aroclor-1260(5)	3978.49	4165.28	1000	4.69	20		Averaged
4cmx(Surr)	76461.82	72342.46	100	-5.39	20		Averaged
Decachlorobiphenyl(Surr)	37840.29	40137.92	100	6.07	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 07:33

Data File: /chem/ecd8a.i/083011.b/003f0301.d

Init. Cal. Date(s): 17-AUG-11 14:16 - 17-AUG-11 15:03

Lab Sample ID WAR110614-54

Method: /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m

Column ID: CLP1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1254	1702.18	1895.95	1000	11.38	20		Averaged
Aroclor-1254(2)	2238.51	2550.58	1000	13.94	20		Averaged
Aroclor-1254(3)	2844.95	3323.78	1000	16.83	20		Averaged
Aroclor-1254(4)	2147.99	2501.49	1000	16.46	20		Averaged
Aroclor-1254(5)	2067.34	2341.03	1000	13.24	20		Averaged
4cmx(Surr)	56819.97	54968.52	100	-3.26	20		Averaged
Decachlorobiphenyl(Surr)	37444.81	36511.03	100	-2.49	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 07:33

Data File: /chem/ecd8a.i/083011.b/003b0301.d

Init. Cal. Date(s): 17-AUG-11 14:16 - 17-AUG-11 15:03

Lab Sample ID WAR110614-54

Method: /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m

Column ID: CLP2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1254	2629.4	2752.16	1000	4.67	20		Averaged
Aroclor-1254(2)	2872.92	3030.12	1000	5.47	20		Averaged
Aroclor-1254(3)	3774.14	4012.65	1000	6.32	20		Averaged
Aroclor-1254(4)	2657.59	2818.79	1000	6.07	20		Averaged
Aroclor-1254(5)	1742.71	1828.12	1000	4.9	20		Averaged
4cmx(Surr)	76461.82	70228.42	100	-8.15	20		Averaged
Decachlorobiphenyl(Surr)	37840.29	38108.98	100	0.71	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 07:44

Data File: /chem/ecd8a.i/083011.b/004f0401.d

Init. Cal. Date(s): 17-AUG-11 15:26 - 17-AUG-11 16:12

Lab Sample ID WAR110726-42

Method: /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m

Column ID: CLP1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1242	1995.55	2021.45	1000	1.3	20		Averaged
Aroclor-1242(2)	1406.37	1333.2	1000	-5.2	20		Averaged
Aroclor-1242(3)	1107.7	1046.1	1000	-5.56	20		Averaged
Aroclor-1242(4)	1100.53	1060.04	1000	-3.68	20		Averaged
Aroclor-1242(5)	1077.39	1043.46	1000	-3.15	20		Averaged
4cmx(Surr)	56819.97	58682.23	100	3.28	20		Averaged
Decachlorobiphenyl(Surr)	37444.81	38399.27	100	2.55	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 07:44

Data File: /chem/ecd8a.i/083011.b/004b0401.d

Init. Cal. Date(s): 17-AUG-11 15:26 - 17-AUG-11 16:12

Lab Sample ID WAR110726-42

Method: /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m

Column ID: CLP2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1242	2664.6	2479.19	1000	-6.96	20		Averaged
Aroclor-1242(2)	1895.78	1669.42	1000	-11.94	20		Averaged
Aroclor-1242(3)	1120.95	1005.46	1000	-10.3	20		Averaged
Aroclor-1242(4)	1499.85	1384.3	1000	-7.7	20		Averaged
Aroclor-1242(5)	1549.03	1379.6	1000	-10.94	20		Averaged
4cmx(Surr)	76461.82	74649.78	100	-2.37	20		Averaged
Decachlorobiphenyl(Surr)	37840.29	39867	100	5.36	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_1

Client SDG: 284538

Injection Date: 30-AUG-11 10:18

Data File: /chem/ecd8a.i/083011.b/017f1701.d

Init. Cal. Date(s): 17-AUG-11 13:06 - 17-AUG-11 13:53

Lab Sample ID WAR110815-60

Method: /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m

Column ID: CLP1

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	2070.36	1913.99	1000	-7.55	20		Averaged
Aroclor-1016(2)	2481.03	2506.45	1000	1.02	20		Averaged
Aroclor-1016(3)	994.64	982.92	1000	-1.18	20		Averaged
Aroclor-1016(4)	921.16	866.55	1000	-5.93	20		Averaged
Aroclor-1016(5)	1311.82	1281.71	1000	-2.3	20		Averaged
Aroclor-1260	2491.52	2445.76	1000	-1.84	20		Averaged
Aroclor-1260(2)	3633.32	3609.92	1000	-0.64	20		Averaged
Aroclor-1260(3)	2205.59	2172.39	1000	-1.51	20		Averaged
Aroclor-1260(4)	4768.92	5081.95	1000	6.56	20		Averaged
Aroclor-1260(5)	2412.96	2564.97	1000	6.3	20		Averaged
4cmx(Surr)	56819.97	55413.51	100	-2.48	20		Averaged
Decachlorobiphenyl(Surr)	37444.81	37574.61	100	0.35	20		Averaged

Continuing Calibration Summary

Instrument ID: ECD8A.I_2

Client SDG: 284538

Injection Date: 30-AUG-11 10:18

Data File: /chem/ecd8a.i/083011.b/017b1701.d

Init. Cal. Date(s): 17-AUG-11 13:06 - 17-AUG-11 13:53

Lab Sample ID WAR110815-60

Method: /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m

Column ID: CLP2

Quant Type: ESTD

Compound	AVECF / Amount	CF CCV	Nominal CCV	%D / %Drift	Max	Drift Q	Curve Type
Aroclor-1016	2970.85	2614.2	1000	-12	20		Averaged
Aroclor-1016(2)	3212.53	3192.66	1000	-0.62	20		Averaged
Aroclor-1016(3)	2270.72	2051.32	1000	-9.66	20		Averaged
Aroclor-1016(4)	1357.26	1260.17	1000	-7.15	20		Averaged
Aroclor-1016(5)	1418.08	1255.44	1000	-11.47	20		Averaged
Aroclor-1260	3277.85	3055.1	1000	-6.8	20		Averaged
Aroclor-1260(2)	3812.9	3633.97	1000	-4.69	20		Averaged
Aroclor-1260(3)	2821.22	2718.32	1000	-3.65	20		Averaged
Aroclor-1260(4)	5708.62	5755.16	1000	0.82	20		Averaged
Aroclor-1260(5)	3978.49	4068.56	1000	2.26	20		Averaged
4cmx(Surr)	76461.82	69778.5	100	-8.74	20		Averaged
Decachlorobiphenyl(Surr)	37840.29	38233.72	100	1.04	20		Averaged

GEL Laboratories LLC

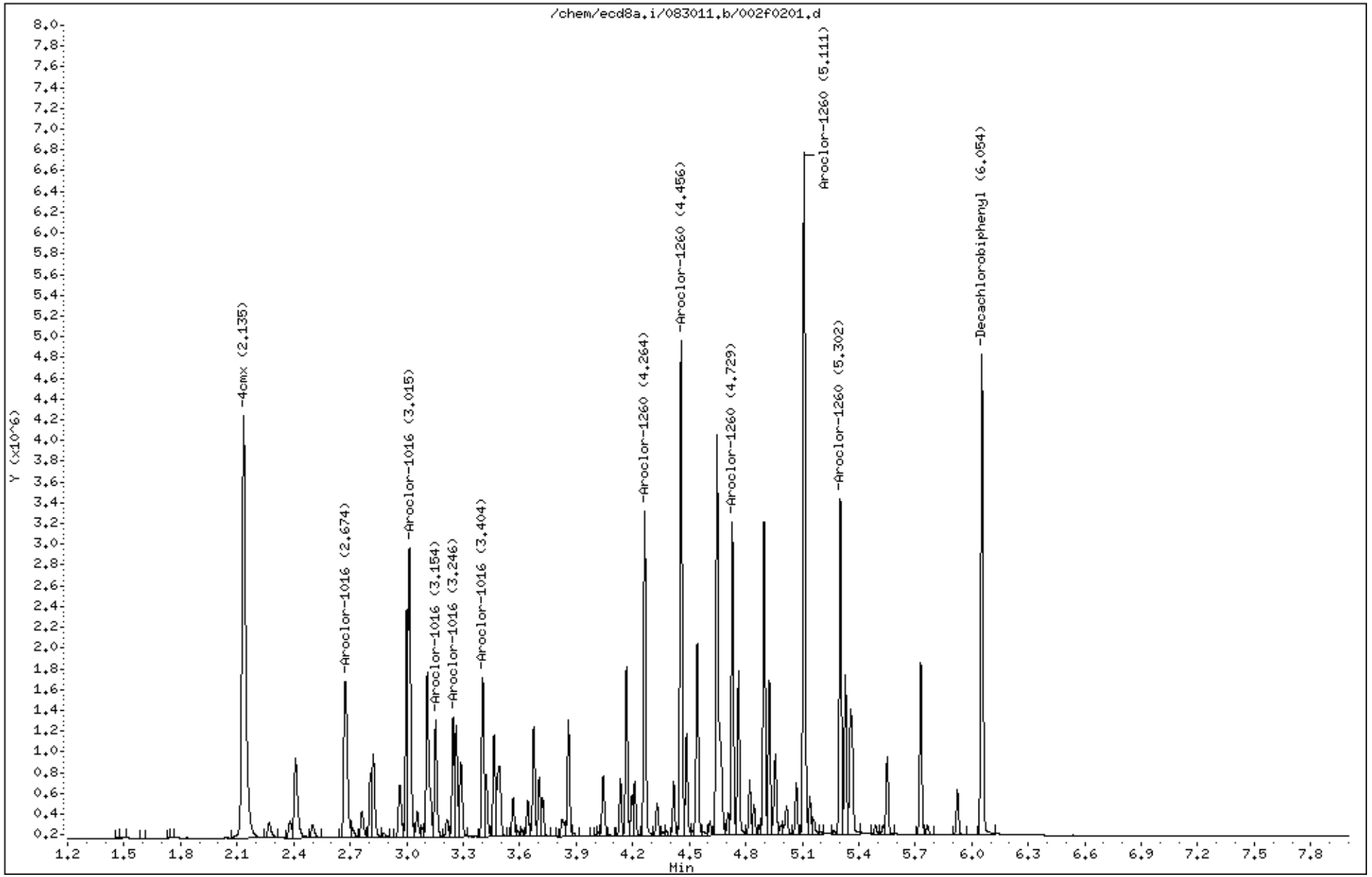
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/002f0201.d
Lab Smp Id: WAR110815-60 Client Smp ID: AR166001
Inj Date : 30-AUG-2011 07:21
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-60
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.135	2.135	0.000	5756636	100.000	101	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.054	6.054	0.000	3886201	100.000	104	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.674	2.674	0.000	2009503	1000.00	971	80.00- 120.00	100.00
3.015	3.015	0.000	2617784	1000.00	1060	110.27- 150.27	130.27
3.154	3.154	0.000	1019595	1000.00	1020	30.74- 70.74	50.74
3.246	3.246	0.000	915879	1000.00	994	25.58- 65.58	45.58
3.404	3.404	0.000	1316518	1000.00	1000	45.51- 85.51	65.51
Average of Peak Amounts =				1.01e+03			
7 Aroclor-1260					CAS #: 11096-82-5		
4.264	4.264	0.000	2597557	1000.00	1040	80.00- 120.00	100.00
4.456	4.456	0.000	3903624	1000.00	1070	130.28- 170.28	150.28
4.729	4.729	0.000	2339899	1000.00	1060	70.08- 110.08	90.08
5.111	5.111	0.000	5265996	1000.00	1100	182.73- 222.73	202.73
5.302	5.302	0.000	2637846	1000.00	1090	81.55- 121.55	101.55
Average of Peak Amounts =				1.08e+03			

Data File: /chem/ecd8a.i/083011.b/002f0201.d
Date : 30-AUG-2011 07:21
Client ID: AR166001
Sample Info: IWAR110815-60

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

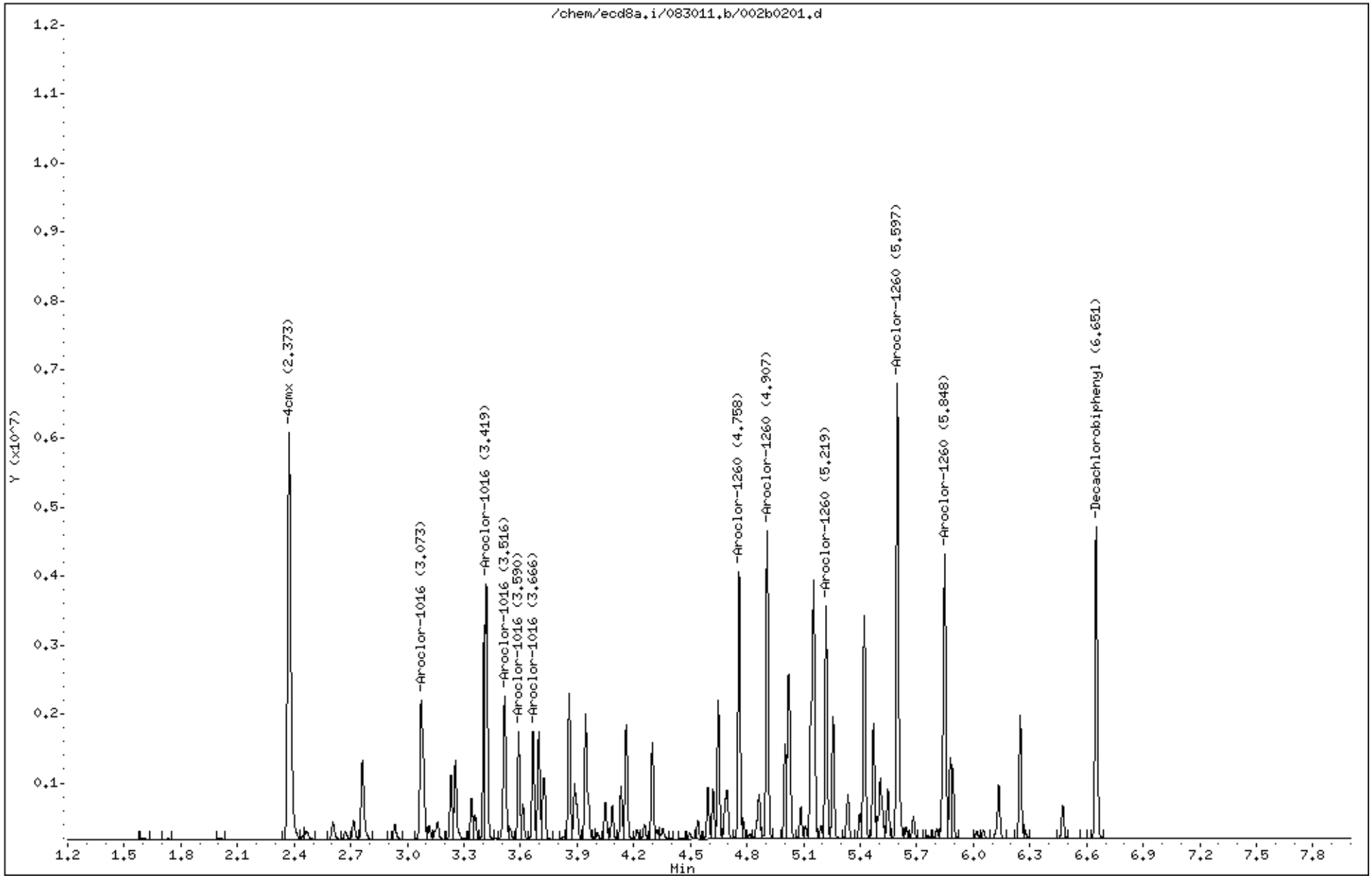
Data file : /chem/ecd8a.i/083011.b/002b0201.d
Lab Smp Id: WAR110815-60 Client Smp ID: AR166001
Inj Date : 30-AUG-2011 07:21
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-60
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	7234246	100.000	94.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.651	6.651	0.000	4013792	100.000	106	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 2051-24-3		
3.073	3.073	0.000	2724578	1000.00	917	80.00- 120.00	100.00
3.419	3.419	0.000	3230922	1000.00	1000	98.58- 138.58	118.58
3.516	3.516	0.000	2100298	1000.00	925	57.09- 97.09	77.09
3.590	3.590	0.000	1271864	1000.00	937	26.68- 66.68	46.68
3.666	3.666	0.000	1314276	1000.00	927	28.24- 68.24	48.24
Average of Peak Amounts =					942		
7 Aroclor-1260					CAS #: 11096-82-5		
4.758	4.758	0.000	3208584	1000.00	979	80.00- 120.00	100.00
4.907	4.907	0.000	3754310	1000.00	985	97.01- 137.01	117.01
5.219	5.219	0.000	2854722	1000.00	1010	68.97- 108.97	88.97
5.597	5.597	0.000	5943728	1000.00	1040	165.24- 205.24	185.24
5.848	5.848	0.000	4165283	1000.00	1050	109.82- 149.82	129.82
Average of Peak Amounts =					1.01e+03		

Data File: /chem/ecd8a.i/083011.b/002b0201.d
Date : 30-AUG-2011 07:21
Client ID: AR166001
Sample Info: IWAR110815-60

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



GEL Laboratories LLC

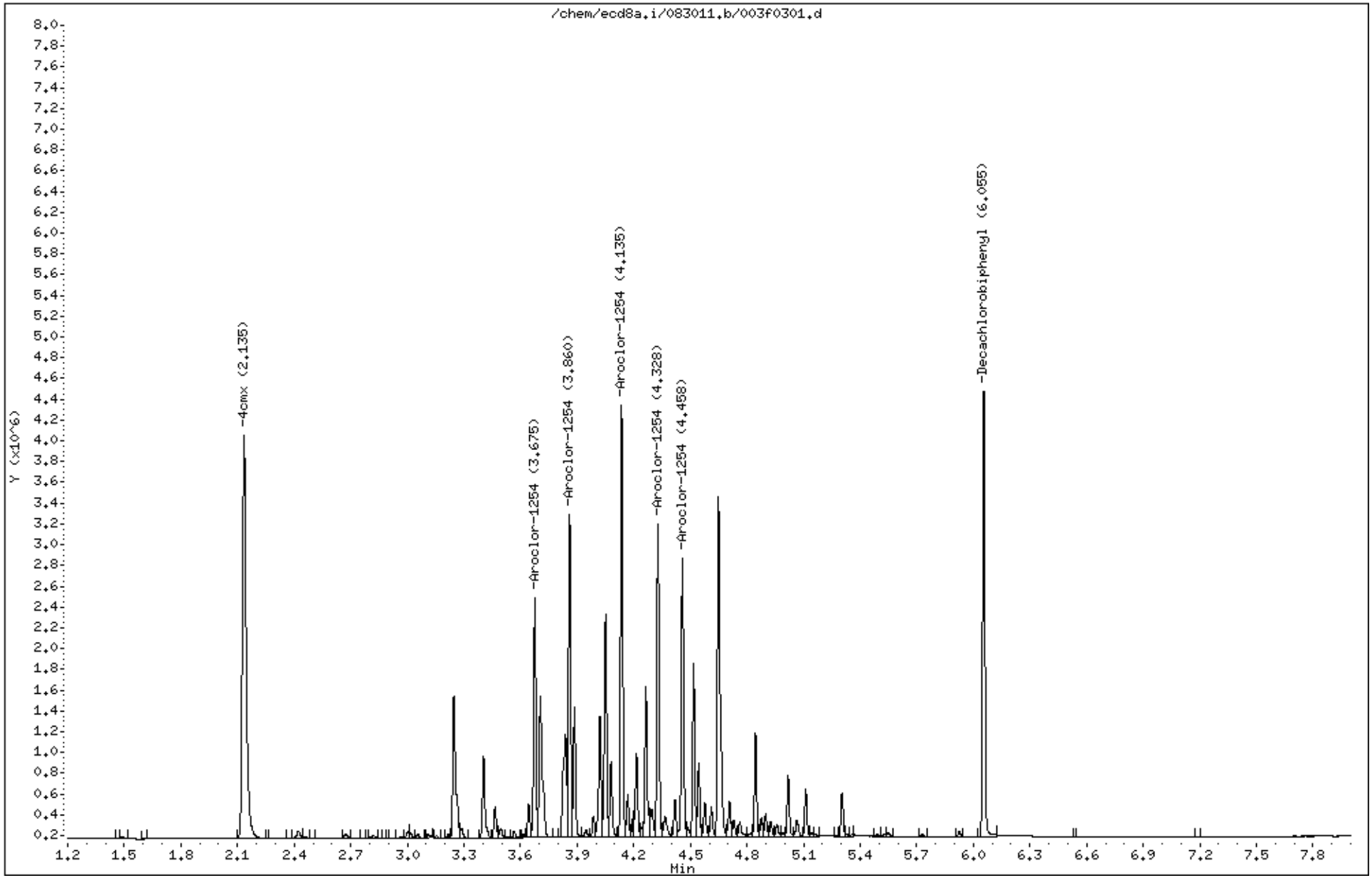
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/003f0301.d
Lab Smp Id: WAR110614-54 Client Smp ID: AR125401
Inj Date : 30-AUG-2011 07:33
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110614-54
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.135	2.135	0.000	5496852	100.000	96.7	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.055	6.054	0.001	3651103	100.000	97.5	80.00- 120.00		100.00
6 Aroclor-1254						CAS #: 11097-69-1		
3.675	3.675	0.000	1895947	1000.00	1110	80.00- 120.00		100.00
3.860	3.860	0.000	2550581	1000.00	1140	114.53- 154.53		134.53
4.135	4.135	0.000	3323781	1000.00	1170	155.31- 195.31		175.31
4.328	4.328	0.000	2501486	1000.00	1160	111.94- 151.94		131.94
4.458	4.458	0.000	2341032	1000.00	1130	103.48- 143.48		123.48
Average of Peak Amounts =			1.14e+03					

Data File: /chem/ecd8a.i/083011.b/003f0301.d
Date : 30-AUG-2011 07:33
Client ID: AR125401
Sample Info: IWAR110614-54

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

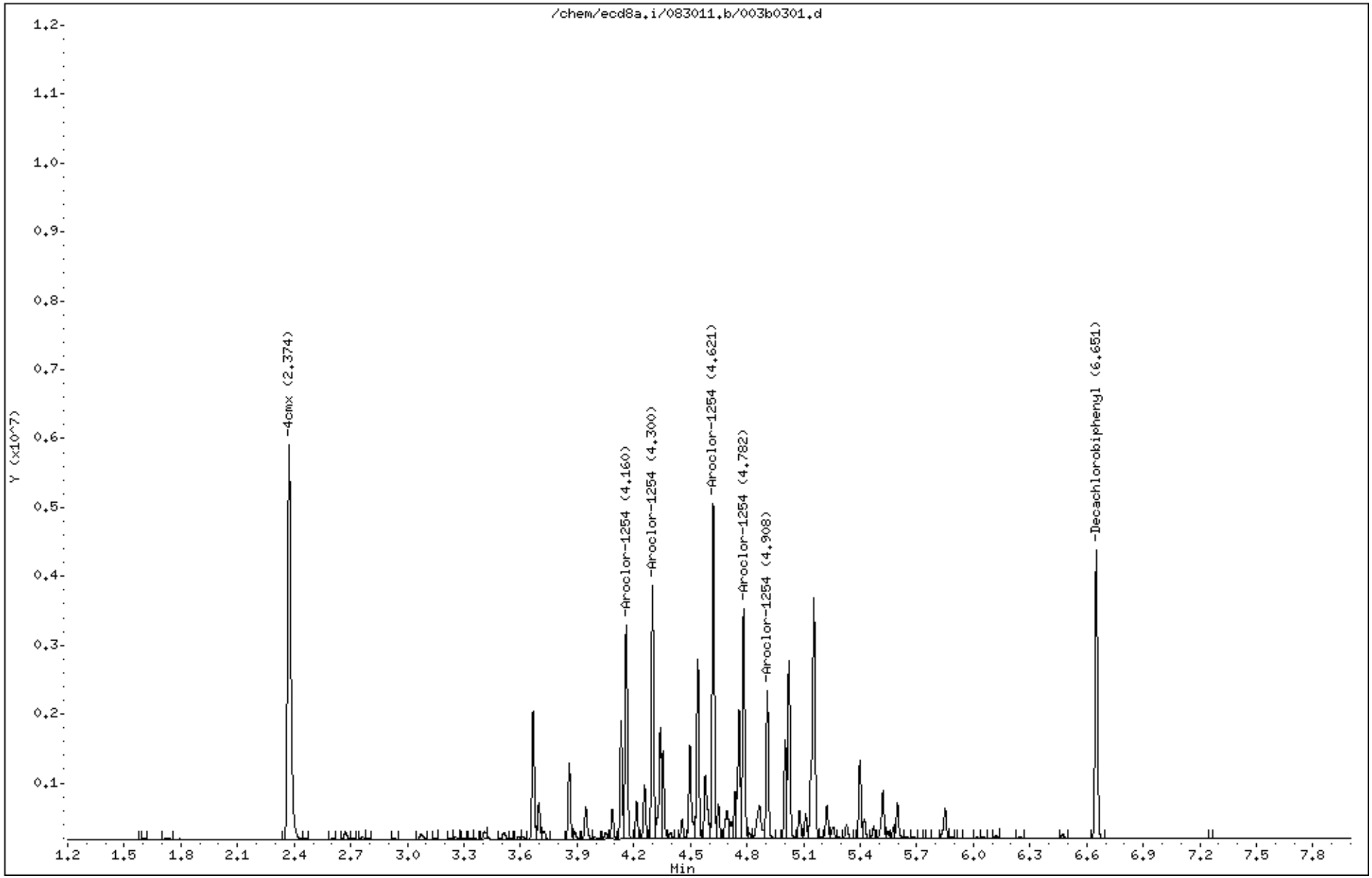
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/003b0301.d
Lab Smp Id: WAR110614-54 Client Smp ID: AR125401
Inj Date : 30-AUG-2011 07:33
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110614-54
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.374	2.373	0.001	7022842	100.000	91.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.651	6.651	0.000	3810898	100.000	101	80.00- 120.00	100.00
6 Aroclor-1254					CAS #: 11097-69-1		
4.160	4.160	0.000	2752156	1000.00	1050	80.00- 120.00	100.00
4.300	4.300	0.000	3030122	1000.00	1050	90.10- 130.10	110.10
4.621	4.621	0.000	4012647	1000.00	1060	125.80- 165.80	145.80
4.782	4.782	0.000	2818788	1000.00	1060	82.42- 122.42	102.42
4.908	4.908	0.000	1828115	1000.00	1050	46.42- 86.42	66.42
Average of Peak Amounts =				1.05e+03			

Data File: /chem/ecd8a.i/083011.b/003b0301.d
Date : 30-AUG-2011 07:33
Client ID: AR125401
Sample Info: IWAR110614-54

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/004f0401.d
Lab Smp Id: WAR110726-42 Client Smp ID: AR124201
Inj Date : 30-AUG-2011 07:44
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110726-42
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.135	2.135	0.000	5868223	100.000	103	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.055	6.054	0.001	3839927	100.000	102	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.015	3.015	0.000	2021451	1000.00	1010	80.00- 120.00		100.00
3.110	3.110	0.000	1333204	1000.00	948	45.95-	85.95	65.95
3.405	3.405	0.000	1046096	1000.00	944	31.75-	71.75	51.75
3.705	3.705	0.000	1060039	1000.00	963	32.44-	72.44	52.44
3.724	3.724	0.000	1043457	1000.00	968	31.62-	71.62	51.62
Average of Peak Amounts =					967			

Data File: /chem/ecd8a.i/083011.b/004f0401.d

Date : 30-AUG-2011 07:44

Client ID: AR124201

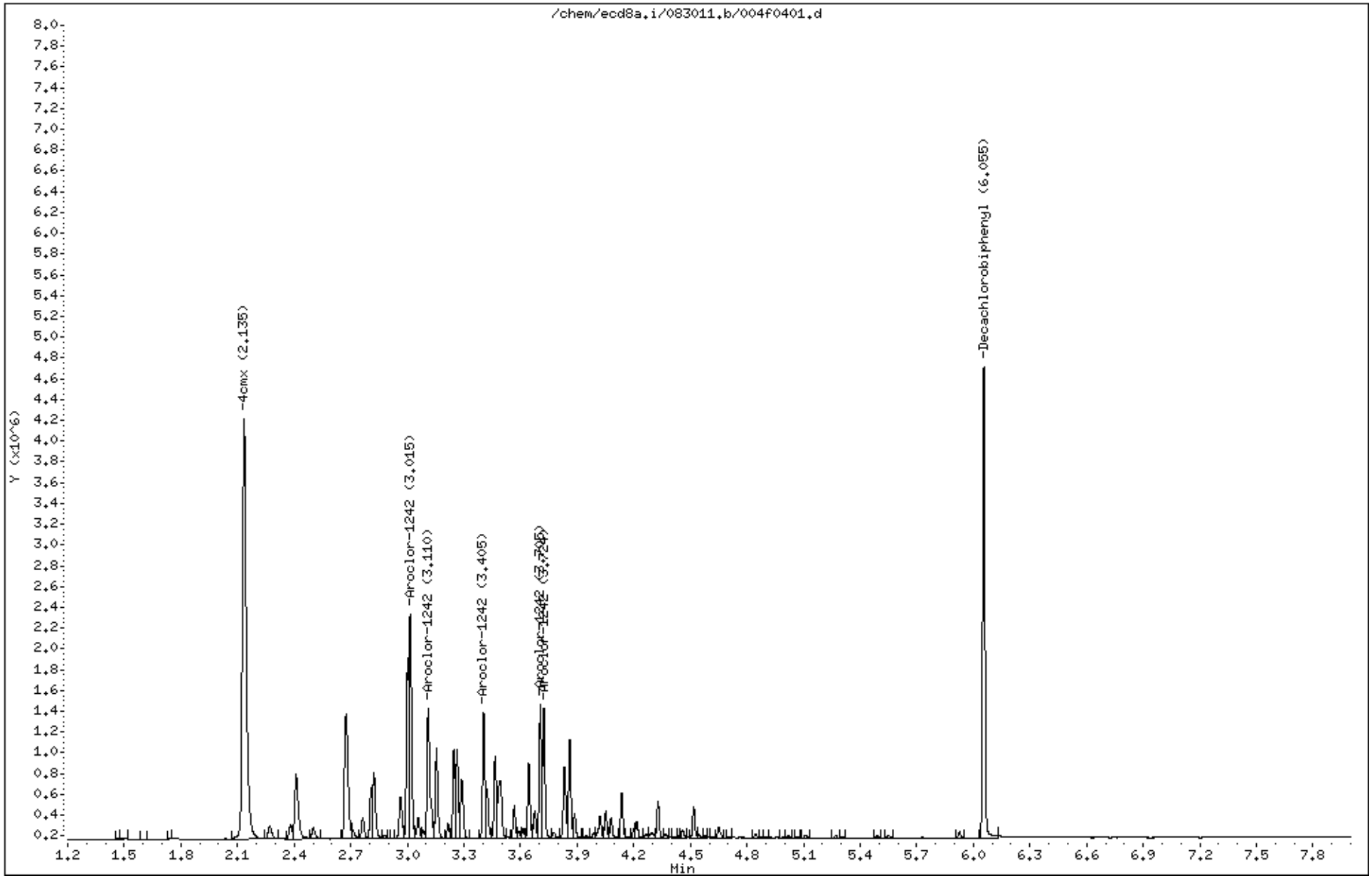
Sample Info: IWAR110726-42

Column phase: CLP1

Instrument: ecd8a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

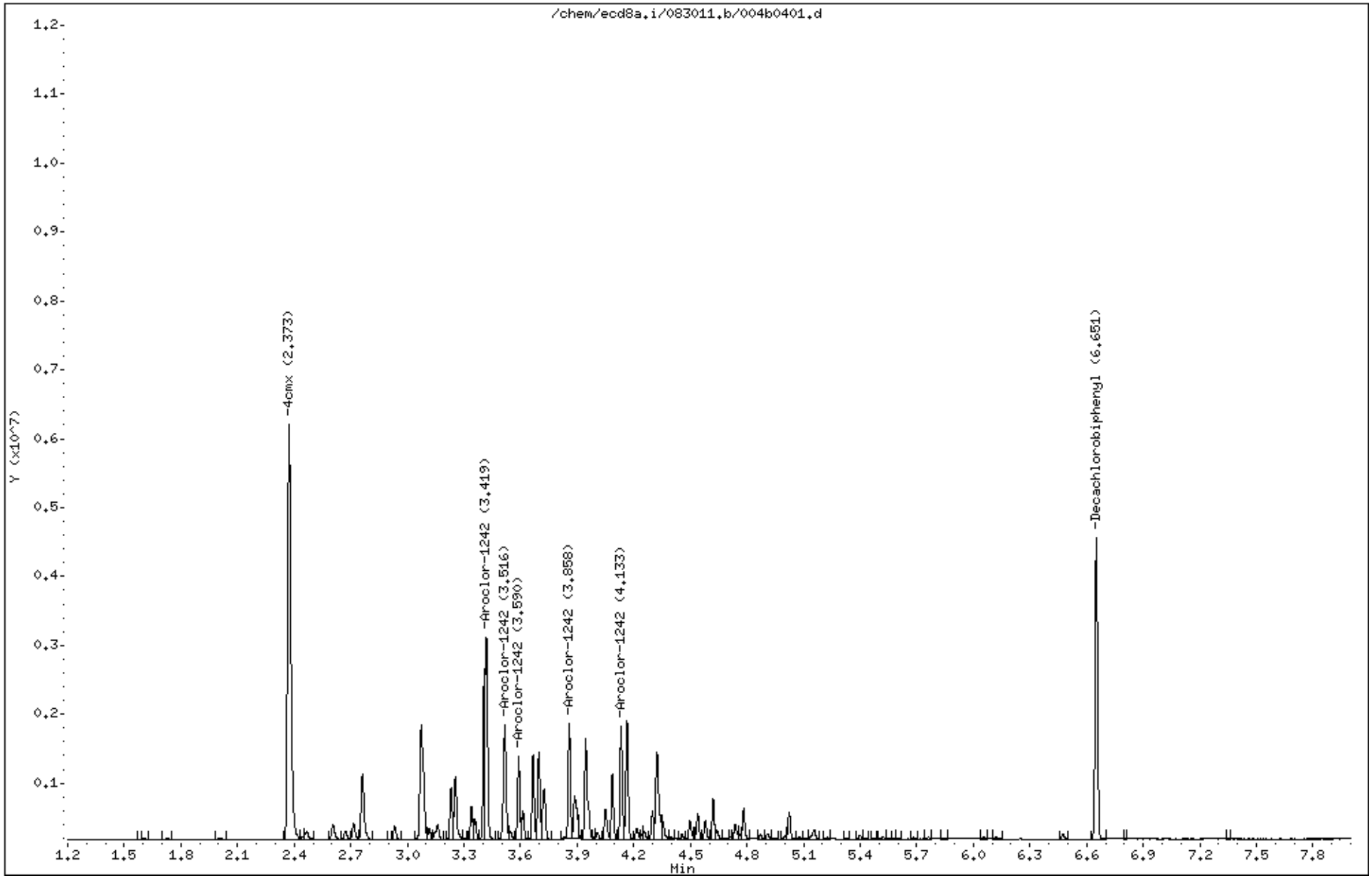
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/004b0401.d
Lab Smp Id: WAR110726-42 Client Smp ID: AR124201
Inj Date : 30-AUG-2011 07:44
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110726-42
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:01 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.373	2.373	0.000	7464978	100.000	97.6	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.651	6.651	0.000	3986700	100.000	105	80.00- 120.00		100.00
4 Aroclor-1242						CAS #: 53469-21-9		
3.419	3.419	0.000	2479192	1000.00	930	80.00- 120.00		100.00
3.516	3.516	0.000	1669415	1000.00	880	47.34- 87.34		67.34
3.590	3.590	0.000	1005457	1000.00	897	20.56- 60.56		40.56
3.858	3.858	0.000	1384298	1000.00	923	35.84- 75.84		55.84
4.133	4.133	0.000	1379597	1000.00	891	35.65- 75.65		55.65
		Average of Peak Amounts =			904			

Data File: /chem/ecd8a.i/083011.b/004b0401.d
Date : 30-AUG-2011 07:44
Client ID: AR124201
Sample Info: IWAR110726-42

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

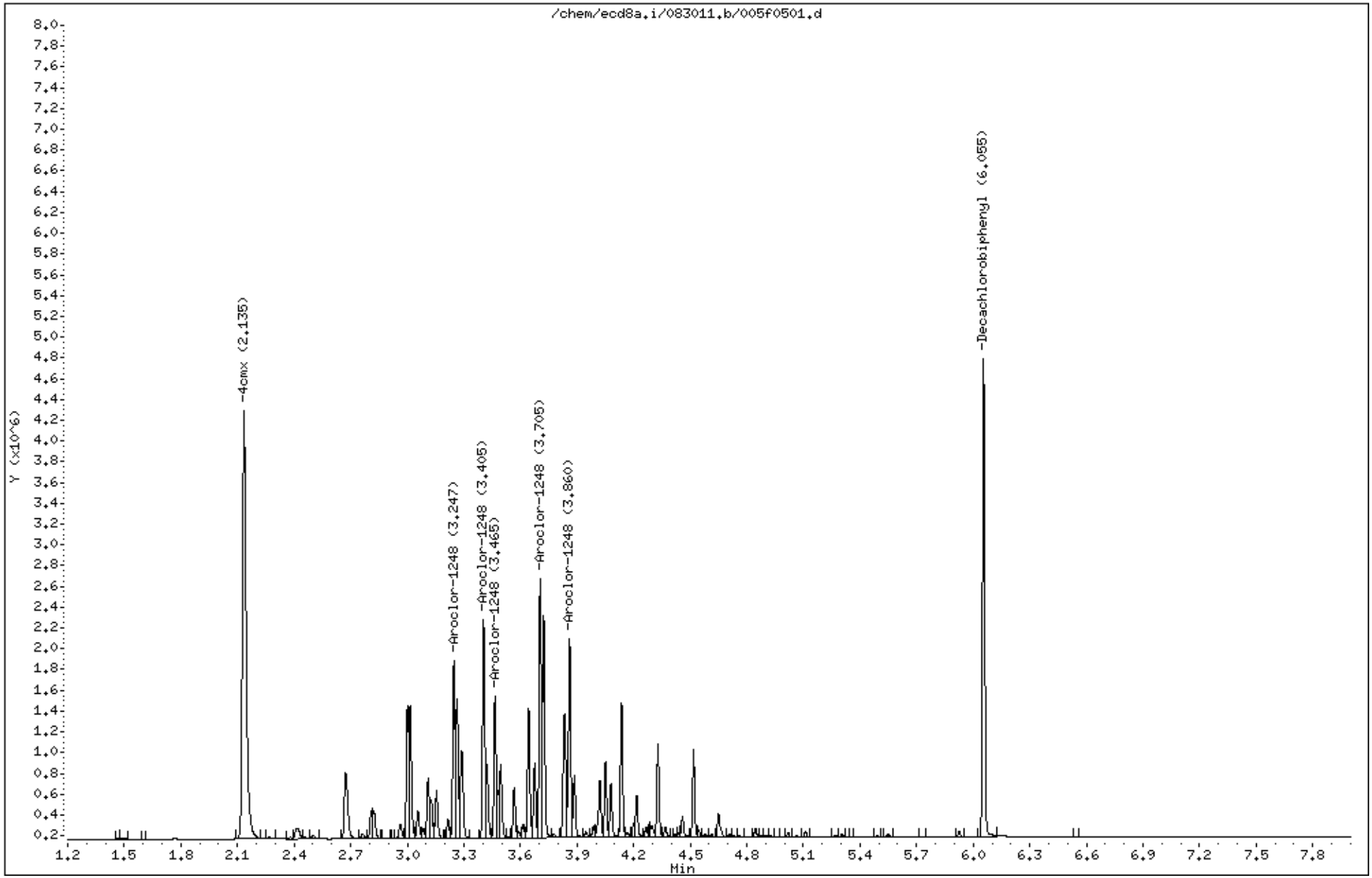
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/005f0501.d
Lab Smp Id: WAR110726-48 Client Smp ID: AR124801
Inj Date : 30-AUG-2011 07:56
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110726-48
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:08 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.135	2.135	0.000	5784811	100.000	102	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.055	6.054	0.001	3815084	100.000	102	80.00- 120.00		100.00
5 Aroclor-1248						CAS #: 12672-29-6		
3.247	3.247	0.000	1388785	1000.00	936	80.00- 120.00		100.00
3.405	3.405	0.000	1784106	1000.00	959	108.47- 148.47		128.47
3.465	3.465	0.000	1153048	1000.00	946	63.03- 103.03		83.03
3.705	3.705	0.000	2069970	1000.00	971	129.05- 169.05		149.05
3.860	3.860	0.000	1623685	1000.00	922	96.91- 136.91		116.91
Average of Peak Amounts =					947			

Data File: /chem/ecd8a.i/083011.b/005f0501.d
Date : 30-AUG-2011 07:56
Client ID: AR124801
Sample Info: IWAR110726-48

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

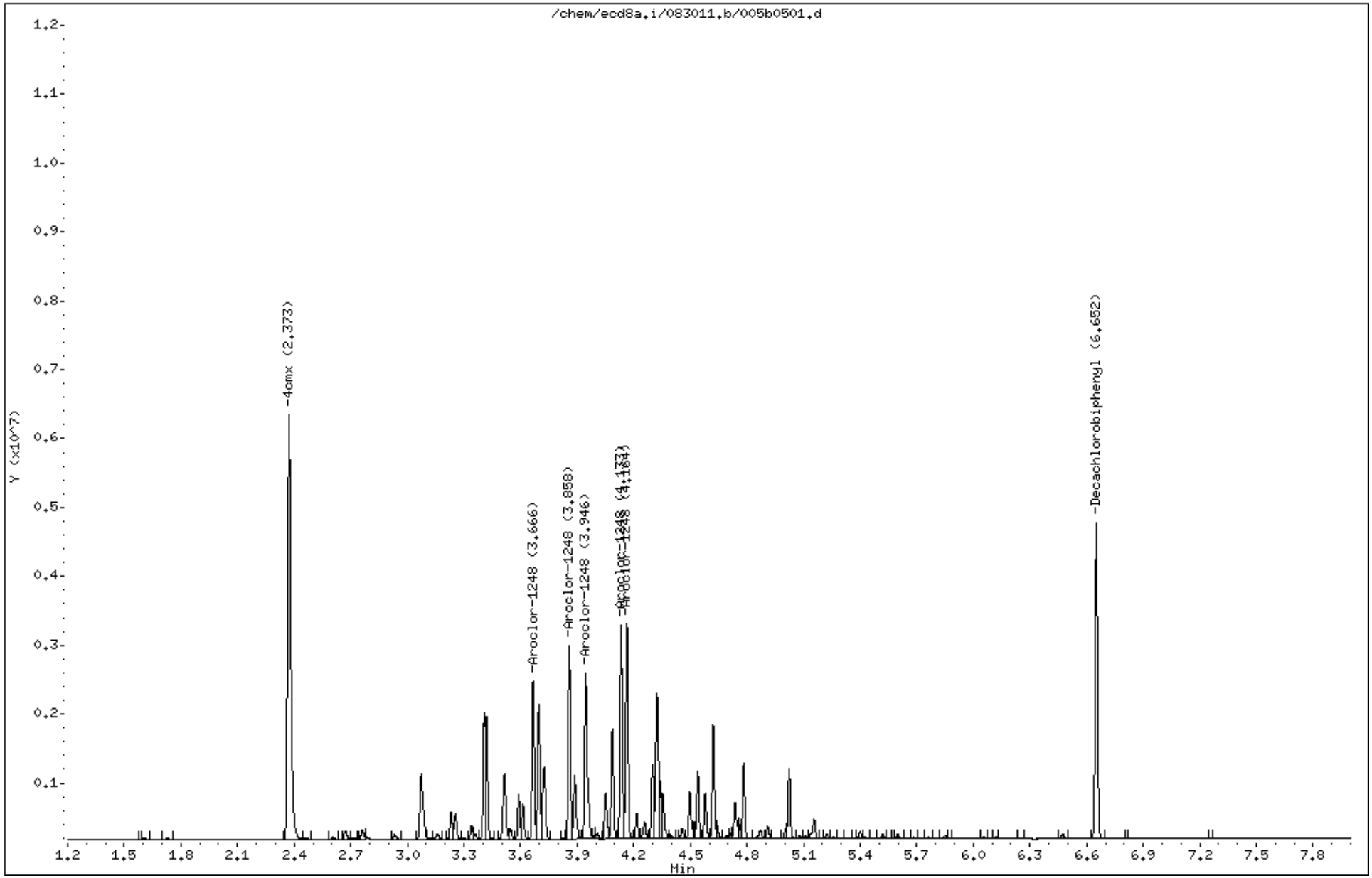
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/005b0501.d
Lab Smp Id: WAR110726-48 Client Smp ID: AR124801
Inj Date : 30-AUG-2011 07:56
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110726-48
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:09 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	7474458	100.000	97.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.652	6.651	0.001	4020806	100.000	106	80.00- 120.00	100.00
5 Aroclor-1248					CAS #: 12672-29-6		
3.666	3.666	0.000	1921839	1000.00	872	80.00- 120.00	100.00
3.858	3.858	0.000	2327152	1000.00	890	101.09- 141.09	121.09
3.946	3.946	0.000	2475354	1000.00	887	108.80- 148.80	128.80
4.133	4.133	0.000	2565270	1000.00	883	113.48- 153.48	133.48
4.164	4.164	0.000	2825640	1000.00	874	127.03- 167.03	147.03
Average of Peak Amounts =					881		

Data File: /chem/ecd8a.i/083011.b/005b0501.d
Date : 30-AUG-2011 07:56
Client ID: AR124801
Sample Info: IWAR110726-48

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

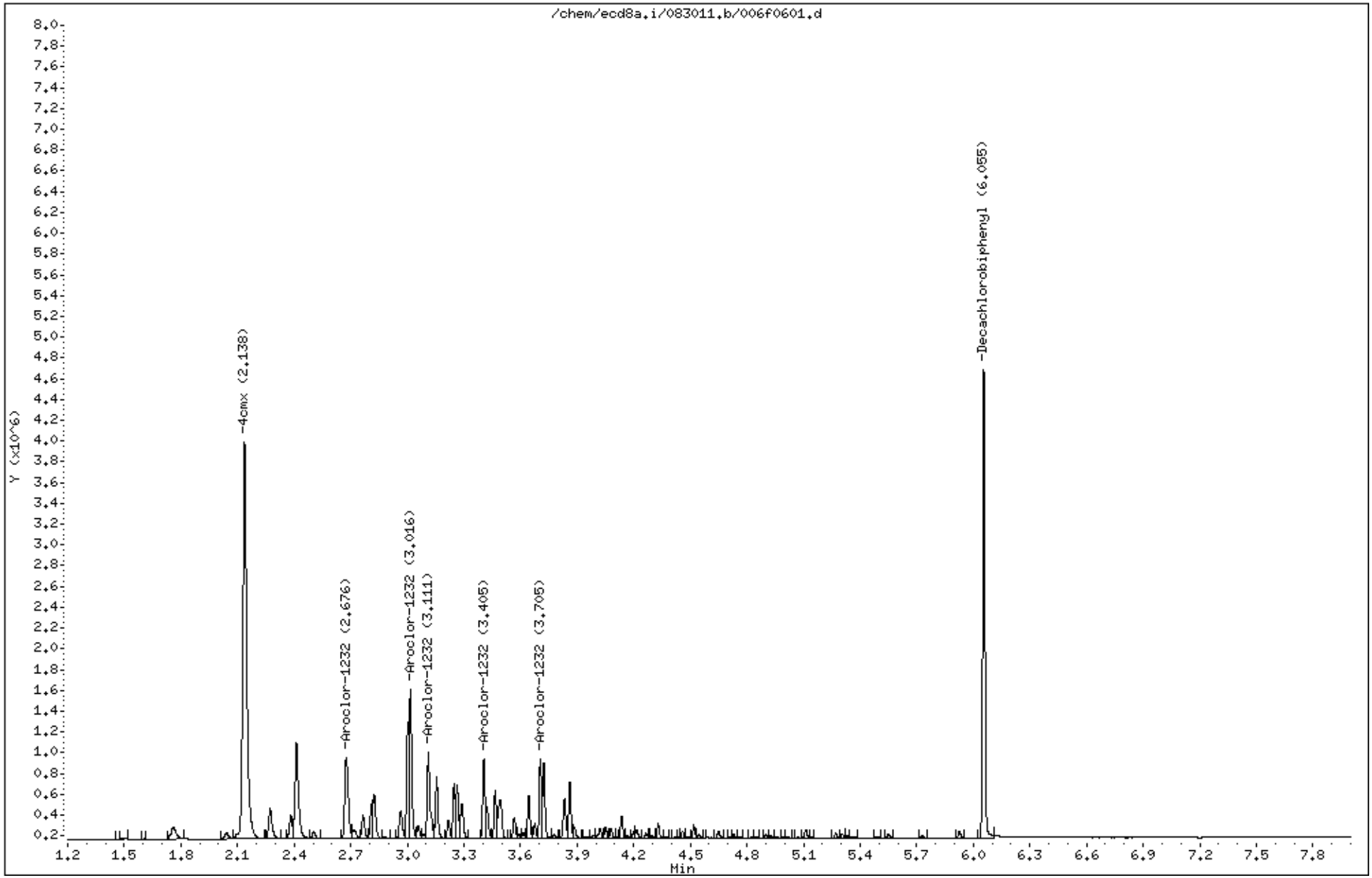
Data file : /chem/ecd8a.i/083011.b/006f0601.d
Lab Smp Id: WAR110701-32 Client Smp ID: AR123201
Inj Date : 30-AUG-2011 08:08
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110701-32
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:33 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.138	2.135	0.003	5522140	100.000	97.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.055	6.054	0.001	3813713	100.000	102	80.00- 120.00	100.00
3 Aroclor-1232					CAS #: 11141-16-5		
2.676	2.676	0.000	1046106	1000.00	1010	80.00- 120.00	100.00
3.016	3.016	0.000	1318212	1000.00	1070	106.01- 146.01	126.01
3.111	3.111	0.000	885785	1000.00	1030	64.67- 104.67	84.67
3.405	3.405	0.000	662225	1000.00	1050	43.30- 83.30	63.30
3.705	3.705	0.000	621838	1000.00	1050	39.44- 79.44	59.44
Average of Peak Amounts = 1.04e+03							

Data File: /chem/ecd8a.i/083011.b/006f0601.d
Date : 30-AUG-2011 08:08
Client ID: AR123201
Sample Info: IWAR110701-32

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

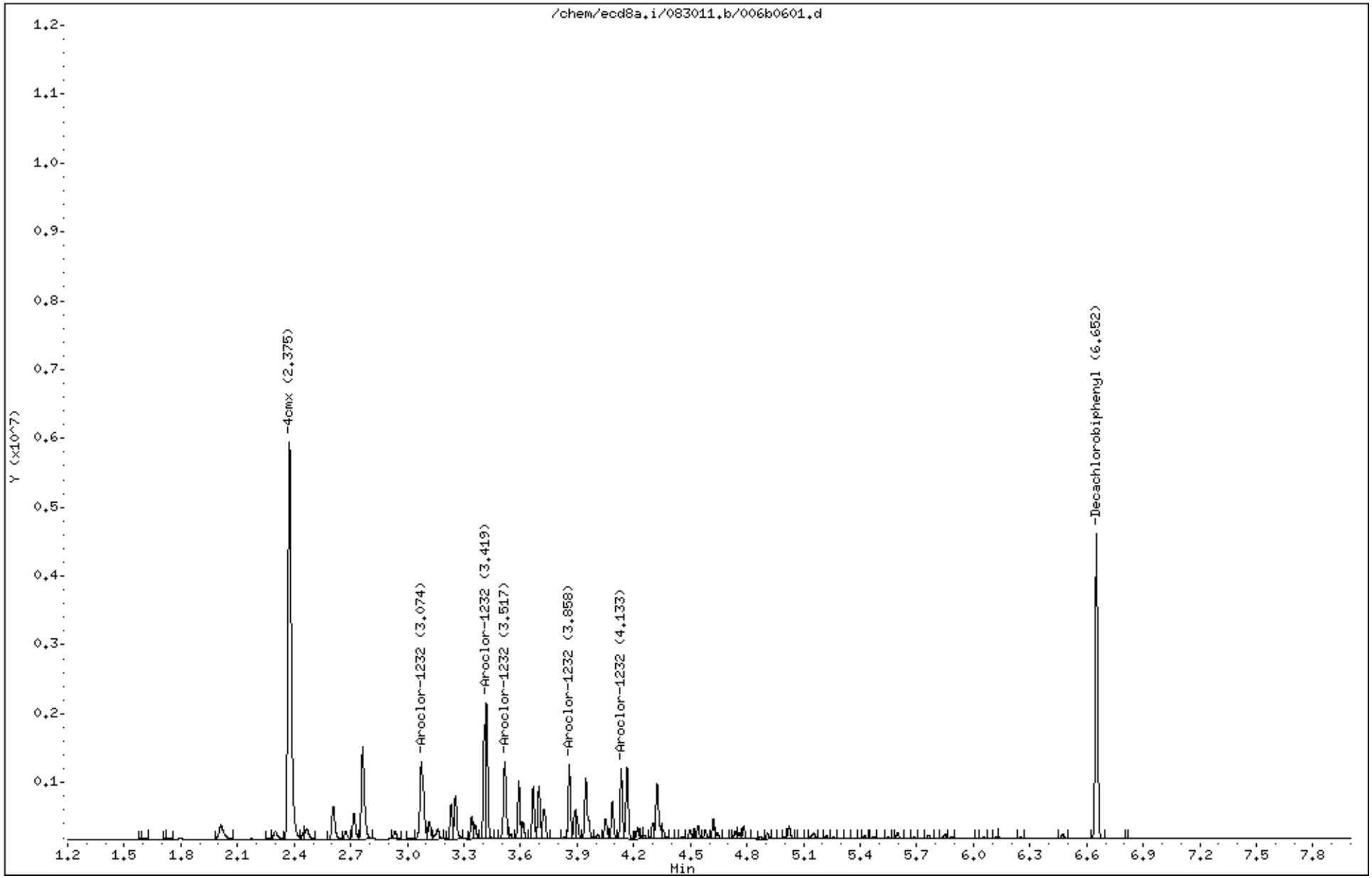
Data file : /chem/ecd8a.i/083011.b/006b0601.d
Lab Smp Id: WAR110701-32 Client Smp ID: AR123201
Inj Date : 30-AUG-2011 08:08
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110701-32
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:33 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.375	2.373	0.002	7045662	100.000	92.1	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.652	6.651	0.001	3937666	100.000	104	80.00- 120.00		100.00
3 Aroclor-1232						CAS #: 11141-16-5		
3.074	3.074	0.000	1554217	1000.00	1010	80.00- 120.00		100.00
3.419	3.419	0.000	1675104	1000.00	1010	87.78- 127.78		107.78
3.517	3.517	0.000	1142103	1000.00	1010	53.48- 93.48		73.48
3.858	3.858	0.000	904998	1000.00	1030	38.23- 78.23		58.23
4.133	4.133	0.000	854317	1000.00	953	34.97- 74.97		54.97
Average of Peak Amounts =					1e+03			

Data File: /chem/ecd8a.i/083011.b/006b0601.d
Date : 30-AUG-2011 08:08
Client ID: AR123201
Sample Info: IWAR110701-32

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP2



GEL Laboratories LLC

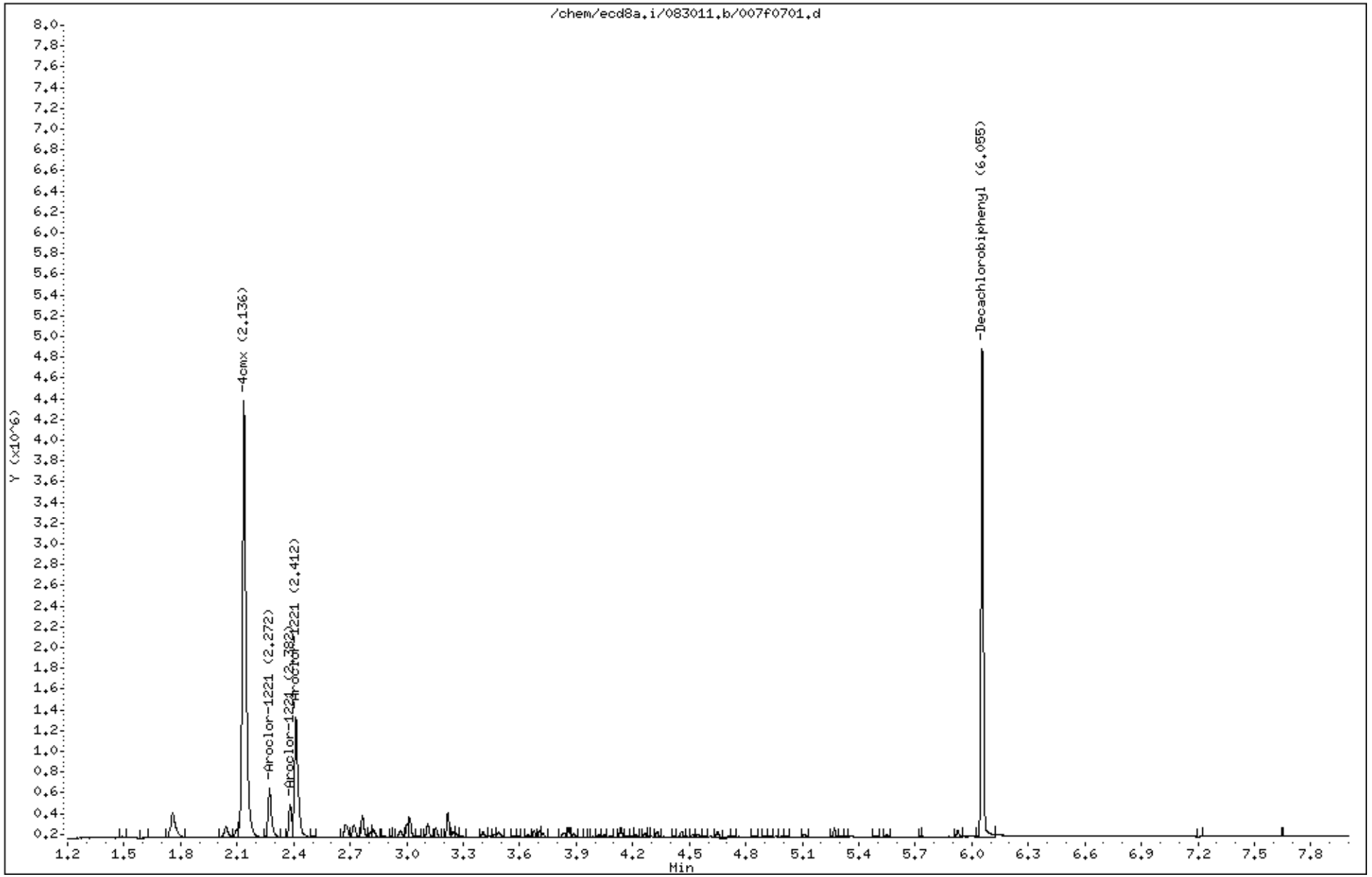
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/007f0701.d
Lab Smp Id: WAR110829-21 Client Smp ID: AR122101
Inj Date : 30-AUG-2011 08:19
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110829-21
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 08:33 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx						CAS #: 877-09-8		
2.136	2.135	0.001	5725128	100.000	101	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl						CAS #: 2051-24-3		
6.055	6.054	0.001	3952320	100.000	106	80.00- 120.00		100.00
2 Aroclor-1221						CAS #: 11104-28-2		
2.272	2.272	0.000	589309	1000.00	952	80.00- 120.00		100.00
2.382	2.382	0.000	331052	1000.00	978	36.18- 76.18		56.18
2.412	2.412	0.000	1597994	1000.00	956	251.16- 291.16		271.16
Average of Peak Amounts =					962			

Data File: /chem/ecd8a.i/083011.b/007f0701.d
Date : 30-AUG-2011 08:19
Client ID: AR122101
Sample Info: IWAR110829-21

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP1
Column diameter: 0.25



GEL Laboratories LLC

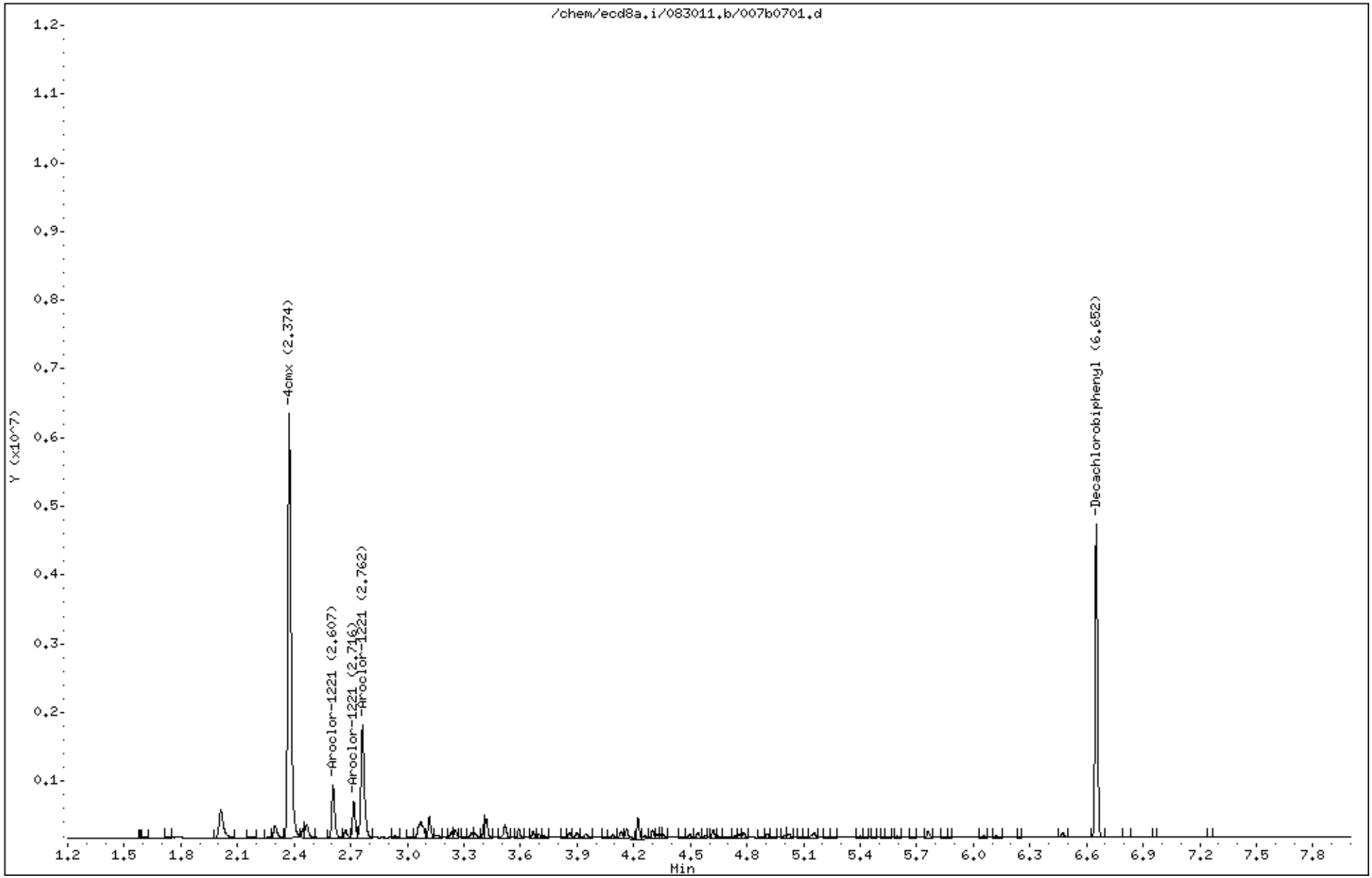
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/007b0701.d
Lab Smp Id: WAR110829-21 Client Smp ID: AR122101
Inj Date : 30-AUG-2011 08:19
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110829-21
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 08:33 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
$ 11 4cmx					CAS #: 877-09-8			
2.374	2.373	0.001	7283945	100.000	95.3	80.00- 120.00		100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3			
6.652	6.651	0.001	4141218	100.000	109	80.00- 120.00		100.00
2 Aroclor-1221					CAS #: 11104-28-2			
2.607	2.607	0.000	833952	1000.00	956	80.00- 120.00		100.00
2.716	2.716	0.000	534318	1000.00	953	44.07- 84.07		64.07
2.762	2.762	0.000	2027777	1000.00	949	223.15- 263.15		243.15
Average of Peak Amounts =					953			

Data File: /chem/ecd8a.i/083011.b/007b0701.d
Date : 30-AUG-2011 08:19
Client ID: AR122101
Sample Info: IWAR110829-21

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

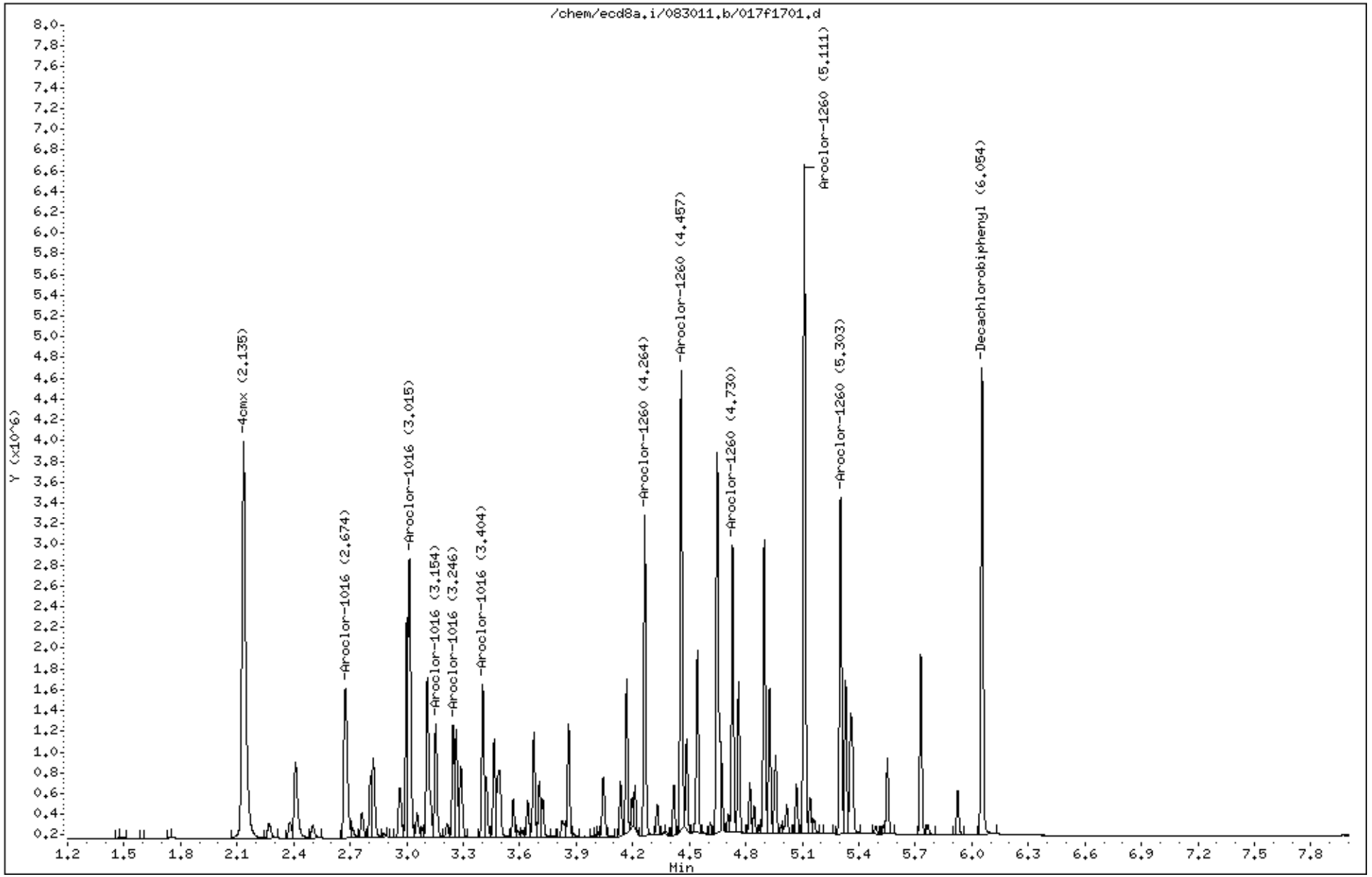
Data file : /chem/ecd8a.i/083011.b/017f1701.d
Lab Smp Id: WAR110815-60 Client Smp ID: AR166002
Inj Date : 30-AUG-2011 10:18
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-60
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 10:33 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.135	2.135	0.000	5541351	100.000	97.5	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.054	6.054	0.000	3757461	100.000	100	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.674	2.674	0.000	1913994	1000.00	924	80.00- 120.00	100.00
3.015	3.015	0.000	2506451	1000.00	1010	110.95- 150.95	130.95
3.154	3.154	0.000	982920	1000.00	988	31.35- 71.35	51.35
3.246	3.246	0.000	866547	1000.00	941	25.27- 65.27	45.27
3.404	3.404	0.000	1281705	1000.00	977	46.96- 86.96	66.96
Average of Peak Amounts =					968		
7 Aroclor-1260					CAS #: 11096-82-5		
4.264	4.264	0.000	2445757	1000.00	982	80.00- 120.00	100.00
4.457	4.456	0.001	3609918	1000.00	994	127.60- 167.60	147.60
4.730	4.729	0.001	2172388	1000.00	985	68.82- 108.82	88.82
5.111	5.111	0.000	5081949	1000.00	1060	187.79- 227.79	207.79
5.303	5.302	0.001	2564972	1000.00	1060	84.87- 124.87	104.87
Average of Peak Amounts =					1.02e+03		

Data File: /chem/ecd8a.i/083011.b/017f1701.d
Date : 30-AUG-2011 10:18
Client ID: AR166002
Sample Info: IWAR110815-60

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25

Column phase: CLP1



GEL Laboratories LLC

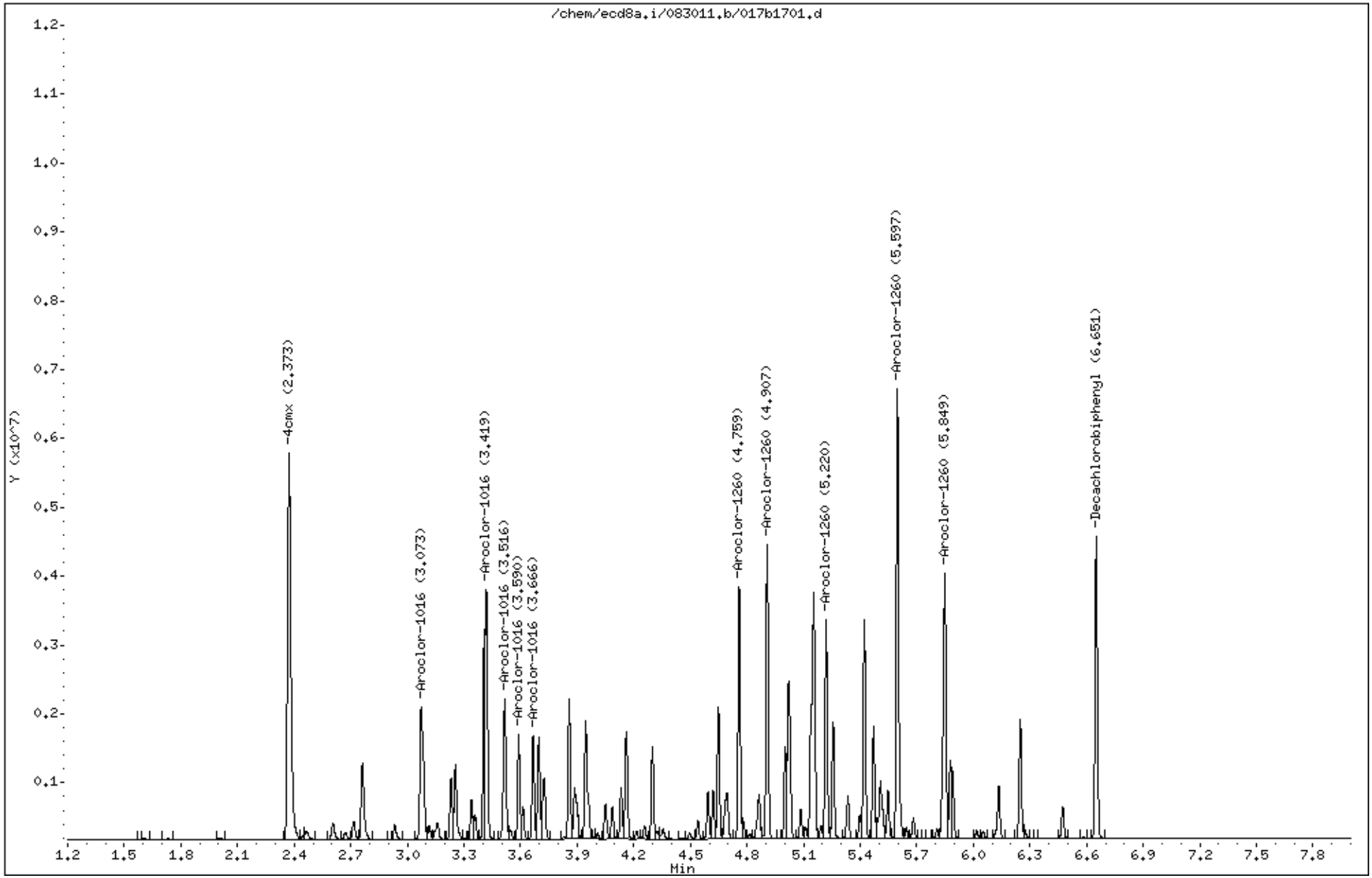
RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/017b1701.d
Lab Smp Id: WAR110815-60 Client Smp ID: AR166002
Inj Date : 30-AUG-2011 10:18
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |WAR110815-60
Misc Info :
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 10:32 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	6977850	100.000	91.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.651	6.651	0.000	3823372	100.000	101	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 2051-24-3		
3.073	3.073	0.000	2614196	1000.00	880	80.00- 120.00	100.00
3.419	3.419	0.000	3192664	1000.00	994	102.13- 142.13	122.13
3.516	3.516	0.000	2051319	1000.00	903	58.47- 98.47	78.47
3.590	3.590	0.000	1260170	1000.00	928	28.20- 68.20	48.20
3.666	3.666	0.000	1255444	1000.00	885	28.02- 68.02	48.02
Average of Peak Amounts =					918		
7 Aroclor-1260					CAS #: 11096-82-5		
4.759	4.758	0.001	3055098	1000.00	932	80.00- 120.00	100.00
4.907	4.907	0.000	3633969	1000.00	953	98.95- 138.95	118.95
5.220	5.219	0.001	2718324	1000.00	964	68.98- 108.98	88.98
5.597	5.597	0.000	5755155	1000.00	1010	168.38- 208.38	188.38
5.849	5.848	0.001	4068562	1000.00	1020	113.17- 153.17	133.17
Average of Peak Amounts =					976		

Data File: /chem/ecd8a.i/083011.b/017b1701.d
Date : 30-AUG-2011 10:18
Client ID: AR166002
Sample Info: IWAR110815-60

Instrument: ecd8a.i
Operator: YS1
Column phase: CLP2
Column diameter: 0.25



Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP1

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
011f1101.d	AR166001	WAR110817-01	17-AUG-11 13:06	2.14	6.06
012f1201.d	AR166002	WAR110817-02	17-AUG-11 13:18	2.14	6.06
013f1301.d	AR166003	WAR110817-03	17-AUG-11 13:29	2.14	6.06
014f1401.d	AR166004	WAR110817-04	17-AUG-11 13:41	2.14	6.06
015f1501.d	AR166005	IAR110815-01	17-AUG-11 13:53	2.14	6.06
016f1601.d	AR166001	WAR110815-60 01	17-AUG-11 14:04	2.14	6.06
017f1701.d	AR125401	WAR110815-05	17-AUG-11 14:16	2.14	6.06
018f1801.d	AR125402	WAR110817-06	17-AUG-11 14:28	2.14	6.06
019f1901.d	AR125403	WAR110817-07	17-AUG-11 14:39	2.14	6.06
020f2001.d	AR125404	WAR110815-08	17-AUG-11 14:51	2.14	6.06
021f2101.d	AR125405	IAR110811-01	17-AUG-11 15:03	2.14	6.06
022f2201.d	AR125401	WAR100714-54	17-AUG-11 15:14	2.14	6.06
023f2301.d	AR124201	WAR110817-09	17-AUG-11 15:26	2.14	6.06
024f2401.d	AR124202	WAR110817-10	17-AUG-11 15:38	2.14	6.06
025f2501.d	AR124203	WAR110817-11	17-AUG-11 15:49	2.14	6.06
026f2601.d	AR124204	WAR111817-12	17-AUG-11 16:01	2.14	6.06
027f2701.d	AR124205	IAR11623-02	17-AUG-11 16:12	2.14	6.06

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP2

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration: RT Range Based on Calibration Verification:				#	#
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
011b1101.d	AR166001	WAR110817-01	17-AUG-11 13:06	2.39	6.66
012b1201.d	AR166002	WAR110817-02	17-AUG-11 13:18	2.39	6.67
013b1301.d	AR166003	WAR110817-03	17-AUG-11 13:29	2.38	6.67
014b1401.d	AR166004	WAR110817-04	17-AUG-11 13:41	2.38	6.67
015b1501.d	AR166005	IAR110815-01	17-AUG-11 13:53	2.38	6.67
016b1601.d	AR166001	WAR110815-60 01	17-AUG-11 14:04	2.38	6.67
017b1701.d	AR125401	WAR110815-05	17-AUG-11 14:16	2.38	6.66
018b1801.d	AR125402	WAR110817-06	17-AUG-11 14:28	2.38	6.67
019b1901.d	AR125403	WAR110817-07	17-AUG-11 14:39	2.38	6.66
020b2001.d	AR125404	WAR110815-08	17-AUG-11 14:51	2.38	6.66
021b2101.d	AR125405	IAR110811-01	17-AUG-11 15:03	2.38	6.67
022b2201.d	AR125401	WAR100714-54	17-AUG-11 15:14	2.39	6.67
023b2301.d	AR124201	WAR110817-09	17-AUG-11 15:26	2.38	6.66
024b2401.d	AR124202	WAR110817-10	17-AUG-11 15:38	2.38	6.67
025b2501.d	AR124203	WAR110817-11	17-AUG-11 15:49	2.38	6.66
026b2601.d	AR124204	WAR111817-12	17-AUG-11 16:01	2.38	6.66
027b2701.d	AR124205	IAR11623-02	17-AUG-11 16:12	2.38	6.67

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP1

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

				2.13 2.11 2.17 #	6.05 6.02 6.08 #
Mean Surrogate RT From Initial Calibration: **RT Range Based on Calibration Verification:**					
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
001f0101.d	PIBLK01	WAR110802-99 01	30-AUG-11 07:09	2.13	6.05
002f0201.d	AR166001	WAR110815-60	30-AUG-11 07:21	2.13	6.05
003f0301.d	AR125401	WAR110614-54	30-AUG-11 07:33	2.13	6.05
004f0401.d	AR124201	WAR110726-42	30-AUG-11 07:44	2.14	6.06
005f0501.d	AR124801	WAR110726-48	30-AUG-11 07:56	2.14	6.06
006f0601.d	AR123201	WAR110701-32	30-AUG-11 08:08	2.14	6.06
007f0701.d	AR122101	WAR110829-21	30-AUG-11 08:19	2.14	6.05
008f0801.d	AR126201	WAR110829-62	30-AUG-11 08:31	2.14	6.05
009f0901.d	AR126801	WAR110809-68	30-AUG-11 08:43	2.14	6.06
010f1001.d	DDTANALOGSTD	WAR110609-DDT	30-AUG-11 08:54	NA	NA
011f1101.d	PIBLK02	WAR110802-99 02	30-AUG-11 09:06	2.14	6.06
012f1201.d	PBLK01	1202475427	30-AUG-11 09:17	2.13	6.05
013f1301.d	BLK01LCS	1202475428	30-AUG-11 09:29	2.13	6.05
014f1401.d	11080101	284538001	30-AUG-11 09:41	2.14	6.05
015f1501.d	11080101MS	1202475429	30-AUG-11 09:52	2.13	6.05
016f1601.d	11080101MSD	1202475430	30-AUG-11 10:04	2.14	6.05
017f1701.d	AR166002	WAR110815-60	30-AUG-11 10:18	2.13	6.05
018f1801.d	PIBLK03	WAR110802-99 01	30-AUG-11 10:33	2.14	6.06

Column used to flag retention time values with an asterisk.

Lab Name: GEL Laboratories LLC **Client SDG:** 284538

GC Column: CLP2

Instrument ID: ECD8A.

Analytical Sequence for Performance Evaluation Mixtures, Blanks, Samples, and Standards is given below:

Mean Surrogate RT From Initial Calibration:				2.37	6.65
RT Range Based on Calibration Verification:				2.34 2.4 #	6.62 6.68 #
File	**Sample Number**	**Lab Sample ID**	**Analysis Date**	**4cmx**	**Decachlorobiphenyl**
001b0101.d	PIBLK01	WAR110802-99 01	30-AUG-11 07:09	2.37	6.65
002b0201.d	AR166001	WAR110815-60	30-AUG-11 07:21	2.37	6.65
003b0301.d	AR125401	WAR110614-54	30-AUG-11 07:33	2.37	6.65
004b0401.d	AR124201	WAR110726-42	30-AUG-11 07:44	2.37	6.65
005b0501.d	AR124801	WAR110726-48	30-AUG-11 07:56	2.37	6.65
006b0601.d	AR123201	WAR110701-32	30-AUG-11 08:08	2.38	6.65
007b0701.d	AR122101	WAR110829-21	30-AUG-11 08:19	2.37	6.65
008b0801.d	AR126201	WAR110829-62	30-AUG-11 08:31	2.37	6.65
009b0901.d	AR126801	WAR110809-68	30-AUG-11 08:43	2.38	6.65
010b1001.d	DDTANALOGSTD	WAR110609-DDT	30-AUG-11 08:54	NA	NA
011b1101.d	PIBLK02	WAR110802-99 02	30-AUG-11 09:06	2.37	6.65
012b1201.d	PBLK01	1202475427	30-AUG-11 09:17	2.37	6.65
013b1301.d	BLK01LCS	1202475428	30-AUG-11 09:29	2.37	6.65
014b1401.d	11080101	284538001	30-AUG-11 09:41	2.37	6.65
015b1501.d	11080101MS	1202475429	30-AUG-11 09:52	2.37	6.65
016b1601.d	11080101MSD	1202475430	30-AUG-11 10:04	2.38	6.65
017b1701.d	AR166002	WAR110815-60	30-AUG-11 10:18	2.37	6.65
018b1801.d	PIBLK03	WAR110802-99 01	30-AUG-11 10:33	2.37	6.65

Column used to flag retention time values with an asterisk.

Identification Summary

SDG Number: 284538 **Client ID:** MB for batch 1136662

Lab Sample ID: 1202475427

Data File:	**012f1201.d**	**Data File:**	**012b1201.d**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**CLP1**	**Column:**	**CLP2**
Analyzed:	**30-AUG-11 09:17**	**Analyzed:**	**30-AUG-11 09:17**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1242							52.7
Column 1	1	3.02	2.99 - 3.05	.0638		ug/L	
	2	3.11	3.08 - 3.14	.0926		ug/L	
	3	3.4	3.37 - 3.43	.0871		ug/L	
	4	3.7	3.67 - 3.73	.127		ug/L	
	5	3.72	3.69 - 3.75	.0895		ug/L	
					.092		
Column 2	1	3.42	3.39 - 3.45	.0646		ug/L	
	2	3.52	3.49 - 3.55	.0659		ug/L	
	3	3.59	3.56 - 3.62	.12		ug/L	
	4	3.86	3.83 - 3.89	.0913		ug/L	
	5	4.12	4.1 - 4.16	.447		ug/L	
					.158		
Aroclor-1254							12.4
Column 1	1	3.68	3.65 - 3.71	.114		ug/L	
	2	3.86	3.83 - 3.89	.134		ug/L	
	3	4.14	4.11 - 4.17	.0993		ug/L	
	4	4.33	4.3 - 4.36	.0965		ug/L	
	5	4.46	4.43 - 4.49	.315		ug/L	
					.152		
Column 2	1	4.16	4.13 - 4.19	.121		ug/L	
	2	4.3	4.27 - 4.33	.142		ug/L	
	3	4.62	4.59 - 4.65	.102		ug/L	
	4	4.78	4.75 - 4.81	.0976		ug/L	
	5	4.91	4.88 - 4.94	.395		ug/L	
					.172		

Identification Summary

SDG Number: 284538 **Client ID:** MB for batch 1136662

Lab Sample ID: 1202475427

Data File:	**012f1201.d**	**Data File:**	**012b1201.d**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**CLP1**	**Column:**	**CLP2**
Analyzed:	**30-AUG-11 09:17**	**Analyzed:**	**30-AUG-11 09:17**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1260							3.62
Column 1	1	4.26	4.23 - 4.29	.162		ug/L	
	2	4.46	4.43 - 4.49	.179		ug/L	
	3	4.73	4.7 - 4.76	.142		ug/L	
	4	5.11	5.08 - 5.14	.155		ug/L	
	5	5.3	5.27 - 5.33	.153		ug/L	
					.158		
Column 2	1	4.76	4.73 - 4.79	.167		ug/L	
	2	4.91	4.88 - 4.94	.181		ug/L	
	3	5.22	5.19 - 5.25	.158		ug/L	
	4	5.6	5.57 - 5.63	.162		ug/L	
	5	5.85	5.82 - 5.88	.153		ug/L	
					.164		

Identification Summary

SDG Number: 284538 **Client ID:** LCS for batch 1136662

Lab Sample ID: 1202475428

Data File:	**013f1301.d**	**Data File:**	**013b1301.d**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**CLP1**	**Column:**	**CLP2**
Analyzed:	**30-AUG-11 09:29**	**Analyzed:**	**30-AUG-11 09:29**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							6.07
Column 1	1	2.67	2.64 - 2.7	.641		ug/L	
	2	3.02	2.98 - 3.04	.706		ug/L	
	3	3.15	3.12 - 3.18	.684		ug/L	
	4	3.25	3.22 - 3.28	.65		ug/L	
	5	3.4	3.37 - 3.43	.653		ug/L	
					.667		
Column 2	1	3.07	3.04 - 3.1	.614		ug/L	
	2	3.42	3.39 - 3.45	.663		ug/L	
	3	3.52	3.49 - 3.55	.616		ug/L	
	4	3.59	3.56 - 3.62	.634		ug/L	
	5	3.67	3.64 - 3.7	.608		ug/L	
					.627		
Aroclor-1260							6.27
Column 1	1	4.26	4.23 - 4.29	.687		ug/L	
	2	4.46	4.43 - 4.49	.682		ug/L	
	3	4.73	4.7 - 4.76	.674		ug/L	
	4	5.11	5.08 - 5.14	.726		ug/L	
	5	5.3	5.27 - 5.33	.724		ug/L	
					.699		
Column 2	1	4.76	4.73 - 4.79	.639		ug/L	
	2	4.91	4.88 - 4.94	.642		ug/L	
	3	5.22	5.19 - 5.25	.643		ug/L	
	4	5.6	5.57 - 5.63	.677		ug/L	
	5	5.85	5.82 - 5.88	.678		ug/L	
					.656		

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MS

Lab Sample ID: 1202475429

Data File:	**015f1501.d**	**Data File:**	**015b1501.d**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**CLP1**	**Column:**	**CLP2**
Analyzed:	**30-AUG-11 09:52**	**Analyzed:**	**30-AUG-11 09:52**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							1.32
Column 1	1	2.67	2.64 - 2.7	.172		ug/L	
	2	3.02	2.98 - 3.04	.186		ug/L	
	3	3.15	3.12 - 3.18	.199		ug/L	
	4	3.25	3.22 - 3.28	.194		ug/L	
	5	3.4	3.37 - 3.43	.181		ug/L	
					.186		
Column 2	1	3.07	3.04 - 3.1	.171		ug/L	
	2	3.42	3.39 - 3.45	.191		ug/L	
	3	3.52	3.49 - 3.55	.187		ug/L	
	4	3.59	3.56 - 3.62	.195		ug/L	
	5	3.67	3.64 - 3.7	.2		ug/L	
					.189		
Aroclor-1260							2.53
Column 1	1	4.26	4.23 - 4.29	.234		ug/L	
	2	4.46	4.43 - 4.49	.225		ug/L	
	3	4.73	4.7 - 4.76	.236		ug/L	
	4	5.11	5.08 - 5.14	.272		ug/L	
	5	5.3	5.27 - 5.33	.274		ug/L	
					.248		
Column 2	1	4.76	4.73 - 4.79	.218		ug/L	
	2	4.91	4.88 - 4.94	.227		ug/L	
	3	5.22	5.19 - 5.25	.239		ug/L	
	4	5.6	5.57 - 5.63	.264		ug/L	
	5	5.85	5.82 - 5.88	.262		ug/L	
					.242		

Identification Summary

SDG Number: 284538 **Client ID:** 11080101MSD

Lab Sample ID: 1202475430

Data File:	**016f1601.d**	**Data File:**	**016b1601.d**
Inst:	**ECD8A.I_1**	**Inst:**	**ECD8A.I_2**
Column:	**CLP1**	**Column:**	**CLP2**
Analyzed:	**30-AUG-11 10:04**	**Analyzed:**	**30-AUG-11 10:04**

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							4.63
Column 1	1	2.68	2.64 - 2.7	.193		ug/L	
	2	3.02	2.98 - 3.04	.214		ug/L	
	3	3.16	3.12 - 3.18	.229		ug/L	
	4	3.25	3.22 - 3.28	.24		ug/L	
	5	3.41	3.37 - 3.43	.229		ug/L	
					.221		
Column 2	1	3.08	3.04 - 3.1	.194		ug/L	
	2	3.42	3.39 - 3.45	.223		ug/L	
	3	3.52	3.49 - 3.55	.206		ug/L	
	4	3.59	3.56 - 3.62	.205		ug/L	
	5	3.67	3.64 - 3.7	.226		ug/L	
					.211		
Aroclor-1260							.0437
Column 1	1	4.27	4.23 - 4.29	.287		ug/L	
	2	4.46	4.43 - 4.49	.283		ug/L	
	3	4.73	4.7 - 4.76	.279		ug/L	
	4	5.11	5.08 - 5.14	.313		ug/L	
	5	5.3	5.27 - 5.33	.309		ug/L	
					.294		
Column 2	1	4.76	4.73 - 4.79	.281		ug/L	
	2	4.91	4.88 - 4.94	.287		ug/L	
	3	5.22	5.19 - 5.25	.282		ug/L	
	4	5.6	5.57 - 5.63	.302		ug/L	
	5	5.85	5.82 - 5.88	.319		ug/L	
					.294		

QC Data

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202475427**				
Client Sample:	**QC for batch 1136662**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**MB for batch 1136662**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 09:17**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**012f1201.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	012b1201.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	0.0333	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	P	0.160	ug/L	0.0333	0.100	2
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254		0.170	ug/L	0.0333	0.100	2
11096-82-5	Aroclor-1260		0.160	ug/L	0.0333	0.100	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/012f1201.d
Lab Smp Id: 1202475427 Client Smp ID: PBLK01
Inj Date : 30-AUG-2011 09:17
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475427|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MB|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.134	2.135	-0.001	7279703	128.119	0.13	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.054	6.054	0.000	4970156	132.733	0.13	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.015	3.015	0.000	127345	63.8143	0.064	80.00- 120.00	100.00(a)
3.110	3.110	0.000	130291	92.6437	0.093	45.95- 85.95	102.31
3.404	3.405	-0.001	96514	87.1298	0.087	31.75- 71.75	75.79
3.704	3.705	-0.001	139705	126.944	0.13	32.44- 72.44	109.71
3.724	3.724	0.000	96474	89.5444	0.090	31.62- 71.62	75.76
Average of Peak Concentrations =					0.093		

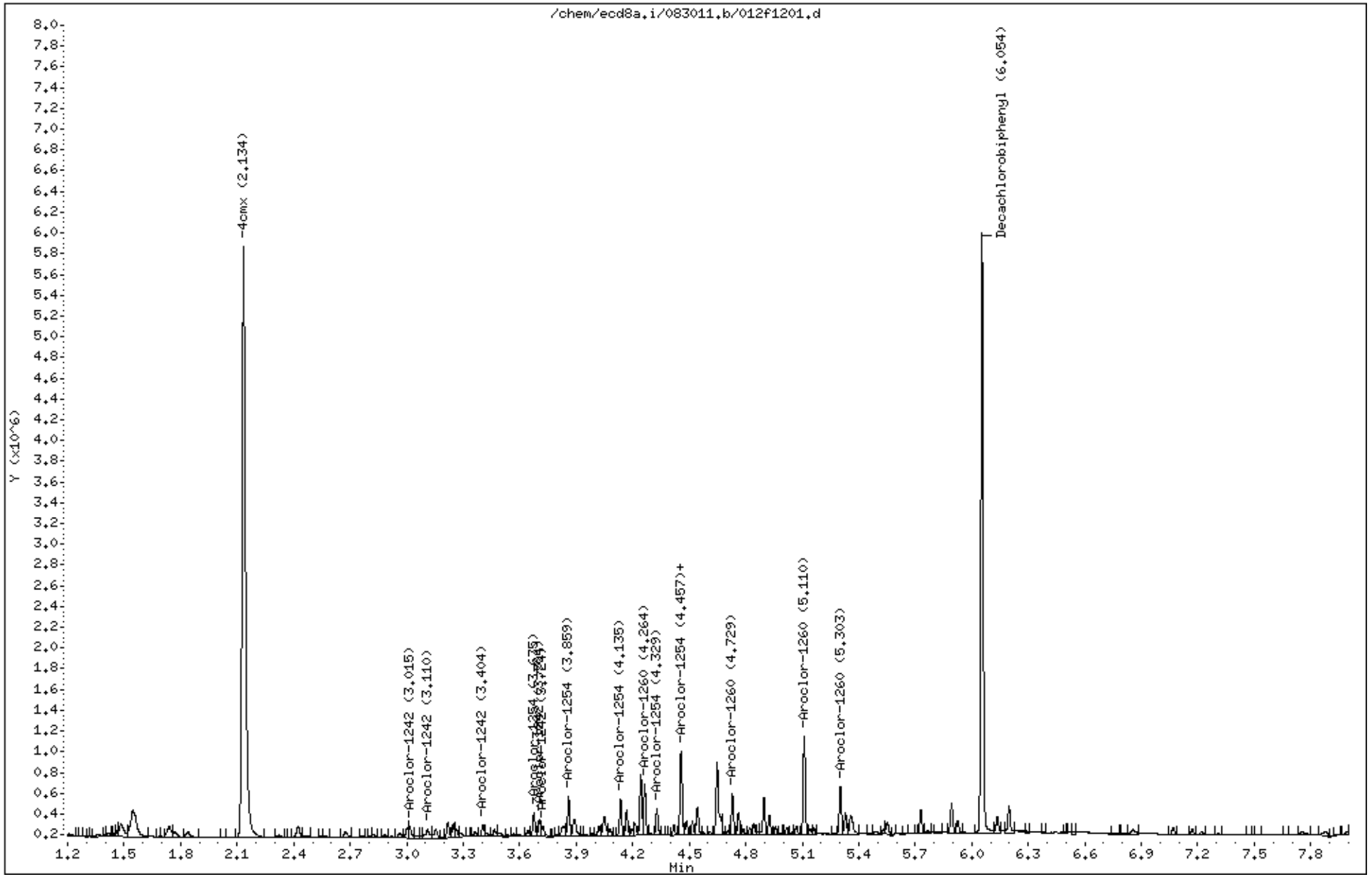
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.675	3.675	0.000	193724	113.809	0.11	80.00- 120.00	100.00
3.859	3.860	-0.001	299932	133.987	0.13	114.53- 154.53	154.82
4.135	4.135	0.000	282609	99.3371	0.099	155.31- 195.31	145.88
4.329	4.328	0.001	207315	96.5157	0.096	111.94- 151.94	107.02
4.457	4.458	-0.001	650331	314.575	0.31	103.48- 143.48	335.70
Average of Peak Concentrations =					0.15		
7 Aroclor-1260					CAS #: 11096-82-5		
4.264	4.264	0.000	403541	161.966	0.16	80.00- 120.00	100.00
4.457	4.456	0.001	650331	178.991	0.18	130.28- 170.28	161.16
4.729	4.729	0.000	314208	142.460	0.14	70.08- 110.08	77.86
5.110	5.111	-0.001	739697	155.108	0.16	182.73- 222.73	183.30
5.303	5.302	0.001	368218	152.600	0.15	81.55- 121.55	91.25
Average of Peak Concentrations =					0.16		

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/ecd8a.i/083011.b/012f1201.d
Date : 30-AUG-2011 09:17
Client ID: PBLK01
Sample Info: |120247542|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/012b1201.d
Lab Smp Id: 1202475427 Client Smp ID: PBLK01
Inj Date : 30-AUG-2011 09:17
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475427|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MB|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 12 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

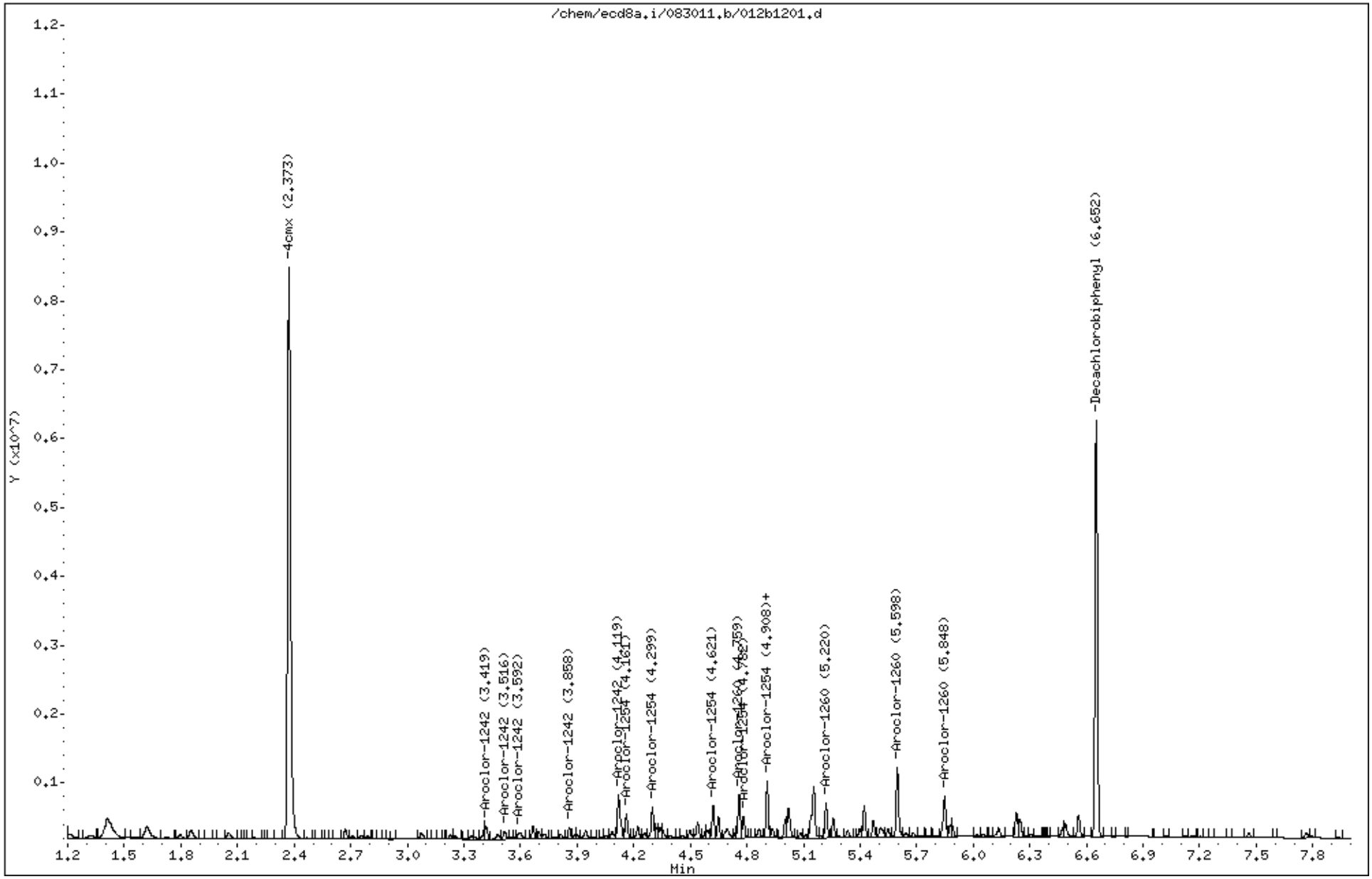
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	9304773	121.692	0.12	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.652	6.651	0.001	5479808	144.814	0.14	80.00- 120.00	100.00
4 Aroclor-1242					CAS #: 53469-21-9		
3.419	3.419	0.000	172219	64.6322	0.065	80.00- 120.00	100.00
3.516	3.516	0.000	124982	65.9263	0.066	47.34- 87.34	72.57
3.592	3.590	0.002	134971	120.407	0.12	20.56- 60.56	78.37
3.858	3.858	0.000	136904	91.2788	0.091	35.84- 75.84	79.49
4.119	4.133	-0.014	692709	447.189	0.45	35.65- 75.65	402.23
Average of Peak Concentrations =					0.16		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
4.161	4.160	0.001	318634	121.181	0.12	80.00- 120.00	100.00
4.299	4.300	-0.001	409037	142.377	0.14	90.10- 130.10	128.37
4.621	4.621	0.000	384844	101.969	0.10	125.80- 165.80	120.78
4.782	4.782	0.000	259332	97.5815	0.098	82.42- 122.42	81.39
4.908	4.908	0.000	688820	395.257	0.40	46.42- 86.42	216.18
		Average of Peak Concentrations =			0.17		
7 Aroclor-1260					CAS #: 11096-82-5		
4.759	4.758	0.001	548212	167.248	0.17	80.00- 120.00	100.00
4.908	4.907	0.001	688820	180.655	0.18	97.01- 137.01	125.65
5.220	5.219	0.001	444718	157.633	0.16	68.97- 108.97	81.12
5.598	5.597	0.001	924812	162.003	0.16	165.24- 205.24	168.70
5.848	5.848	0.000	607637	152.731	0.15	109.82- 149.82	110.84
		Average of Peak Concentrations =			0.16		

Data File: /chem/ecd8a.i/083011.b/012b1201.d
Date : 30-AUG-2011 09:17
Client ID: PBLK01
Sample Info: |120247542711|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**			**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202475428**				
Client Sample:	**QC for batch 1136662**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**LCS for batch 1136662**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 09:29**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**013f1301.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	013b1301.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		0.660	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	U	0.0333	ug/L	0.0333	0.100	1
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254	U	0.0333	ug/L	0.0333	0.100	1
11096-82-5	Aroclor-1260	B	0.700	ug/L	0.0333	0.100	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/013f1301.d
Lab Smp Id: 1202475428 Client Smp ID: PBLK01LCS
Inj Date : 30-AUG-2011 09:29
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475428|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 11	4cmx					CAS #: 877-09-8		
	2.135	2.135	0.000	7290466	128.308	0.13	80.00- 120.00	100.00
$ 12	Decachlorobiphenyl					CAS #: 2051-24-3		
	6.055	6.054	0.001	4769734	127.380	0.13	80.00- 120.00	100.00
1	Aroclor-1016					CAS #: 12674-11-2		
	2.675	2.674	0.001	1326135	640.535	0.64	80.00- 120.00	100.00
	3.015	3.015	0.000	1751544	705.975	0.70	110.27- 150.27	132.08
	3.155	3.154	0.001	679958	683.625	0.68	30.74- 70.74	51.27
	3.247	3.246	0.001	598535	649.762	0.65	25.58- 65.58	45.13
	3.405	3.404	0.001	856678	653.048	0.65	45.51- 85.51	64.60
				Average of Peak Concentrations =		0.66		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.265	4.264	0.001	1711116	686.777	0.69	80.00- 120.00	100.00
4.457	4.456	0.001	2479526	682.441	0.68	130.28- 170.28	144.91
4.730	4.729	0.001	1485874	673.685	0.67	70.08- 110.08	86.84
5.111	5.111	0.000	3462795	726.118	0.73	182.73- 222.73	202.37
5.304	5.302	0.002	1745809	723.513	0.72	81.55- 121.55	102.03
			Average of Peak Concentrations =		0.70		

Data File: /chem/ecd8a.i/083011.b/013f1301.d

Page 1

Date : 30-AUG-2011 09:29

Client ID: PBLK01LCS

Instrument: ecd8a.i

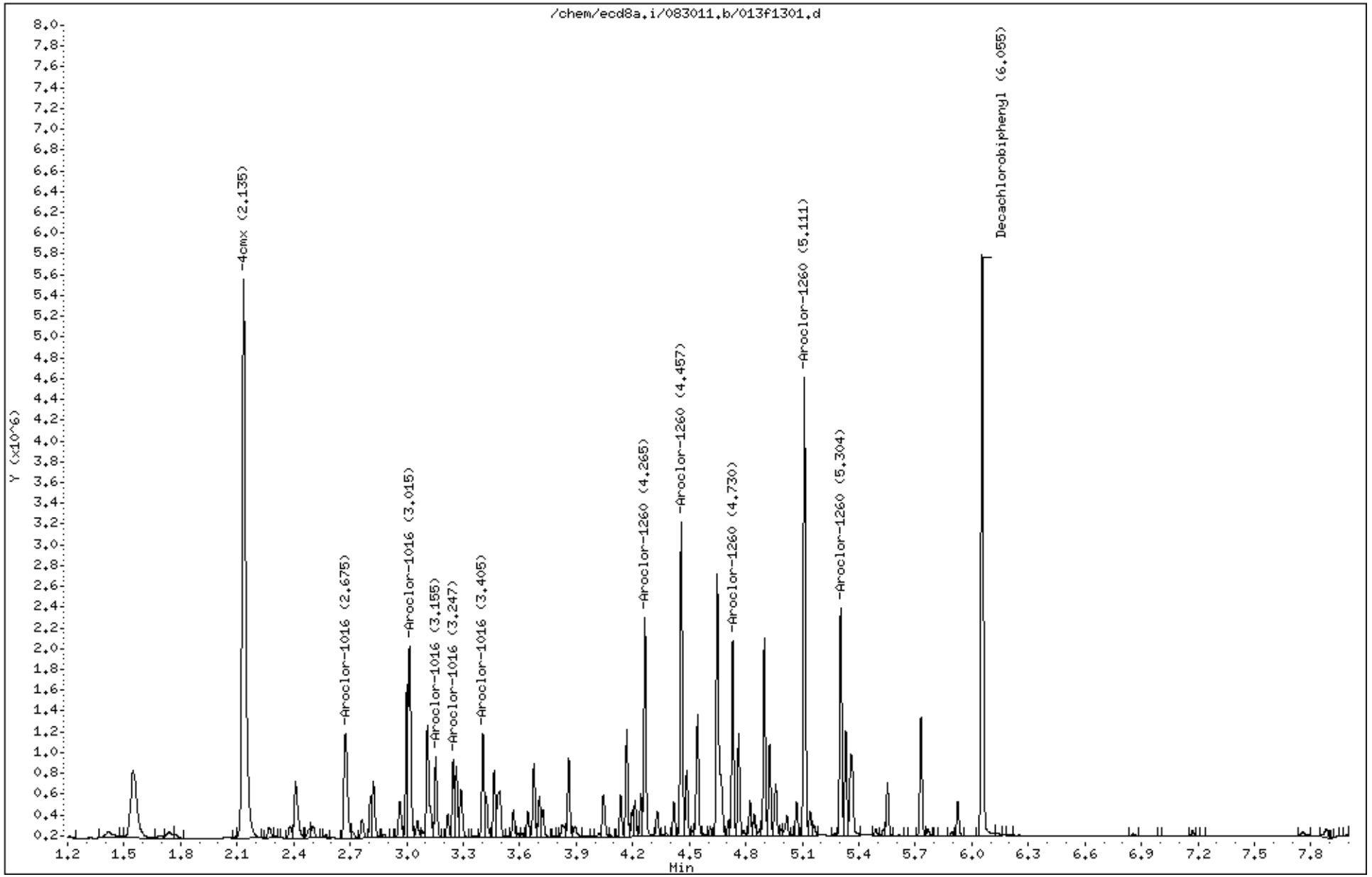
Sample Info: |120247542811|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/013b1301.d
Lab Smp Id: 1202475428 Client Smp ID: PBLK01LCS
Inj Date : 30-AUG-2011 09:29
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475428|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|LCS|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 10:32 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

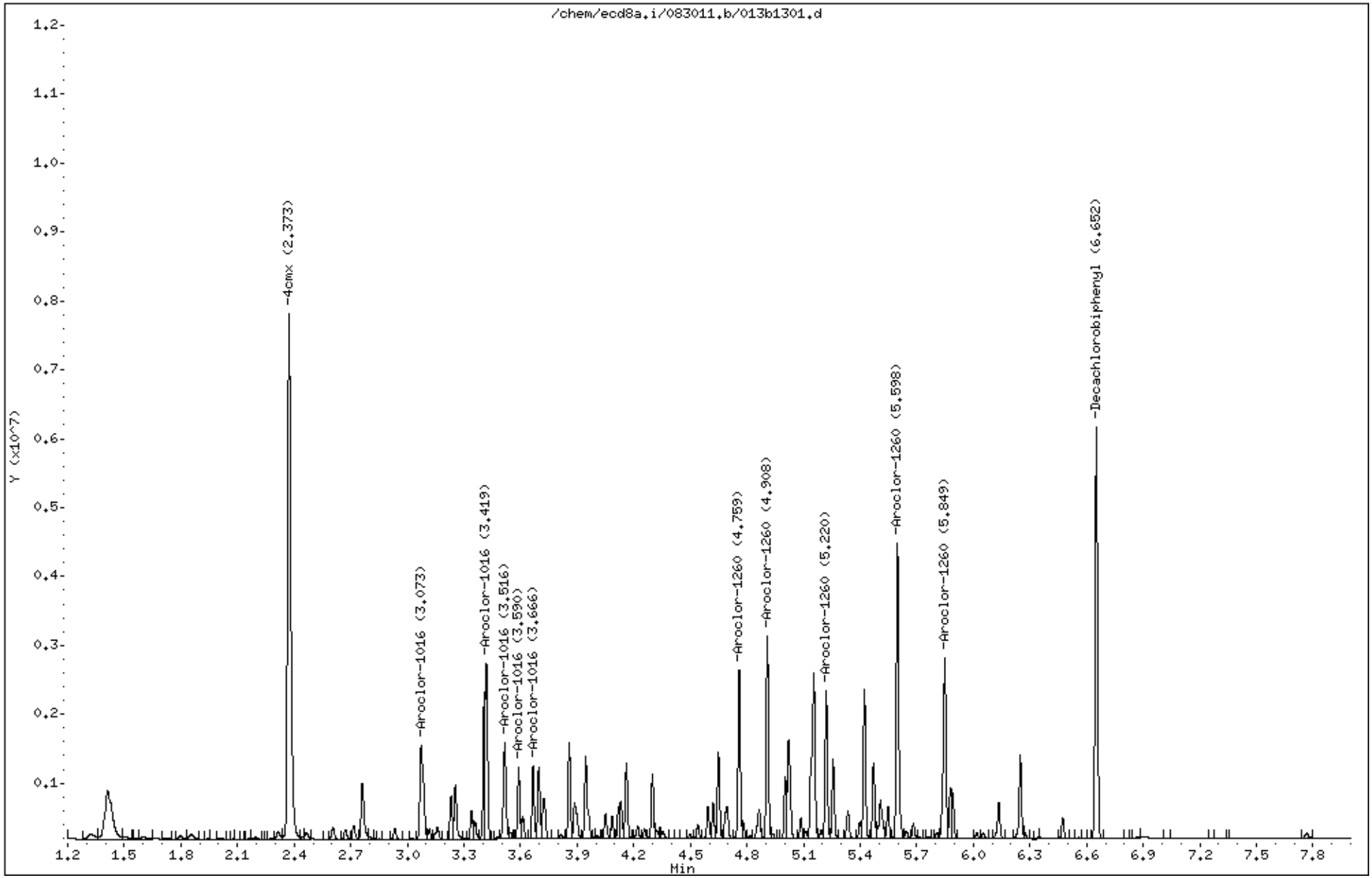
Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.373	2.373	0.000	9211985	120.478	0.12	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.652	6.651	0.001	5281737	139.580	0.14	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 2051-24-3		
3.073	3.073	0.000	1825319	614.409	0.61	80.00- 120.00	100.00
3.419	3.419	0.000	2131143	663.384	0.66	102.13- 142.13	116.75
3.516	3.516	0.000	1399607	616.371	0.62	58.47- 98.47	76.68
3.590	3.590	0.000	860468	633.975	0.63	28.20- 68.20	47.14
3.666	3.666	0.000	862855	608.468	0.61	28.02- 68.02	47.27
Average of Peak Concentrations =					0.63		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.759	4.758	0.001	2095904	639.415	0.64	80.00- 120.00	100.00
4.908	4.907	0.001	2448947	642.280	0.64	98.95- 138.95	116.84
5.220	5.219	0.001	1815058	643.360	0.64	68.98- 108.98	86.60
5.598	5.597	0.001	3863390	676.764	0.68	168.38- 208.38	184.33
5.849	5.848	0.001	2698329	678.230	0.68	113.17- 153.17	128.74
			Average of Peak Concentrations =		0.66		

Data File: /chem/ecd8a.i/083011.b/013b1301.d
Date : 30-AUG-2011 09:29
Client ID: PBLK01LCS
Sample Info: |120247542811|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202475429**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1136662**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MS**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 09:52**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**015f1501.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	015b1501.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		0.180	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	U	0.0333	ug/L	0.0333	0.100	1
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254	U	0.0333	ug/L	0.0333	0.100	1
11096-82-5	Aroclor-1260	B	0.250	ug/L	0.0333	0.100	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/015f1501.d
Lab Smp Id: 1202475429 Client Smp ID: 11080101MS
Inj Date : 30-AUG-2011 09:52
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475429|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MS|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.134	2.135	-0.001	1803761	31.7452	0.032	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.053	6.054	-0.001	1634789	43.6586	0.044	80.00- 120.00	100.00(R)
1 Aroclor-1016					CAS #: 12674-11-2		
2.674	2.674	0.000	356485	172.185	0.17	80.00- 120.00	100.00(R)
3.016	3.015	0.001	460768	185.716	0.18	110.27- 150.27	129.25
3.155	3.154	0.001	197719	198.785	0.20	30.74- 70.74	55.46
3.247	3.246	0.001	179003	194.323	0.19	25.58- 65.58	50.21
3.405	3.404	0.001	236998	180.664	0.18	45.51- 85.51	66.48
Average of Peak Concentrations =					0.18		

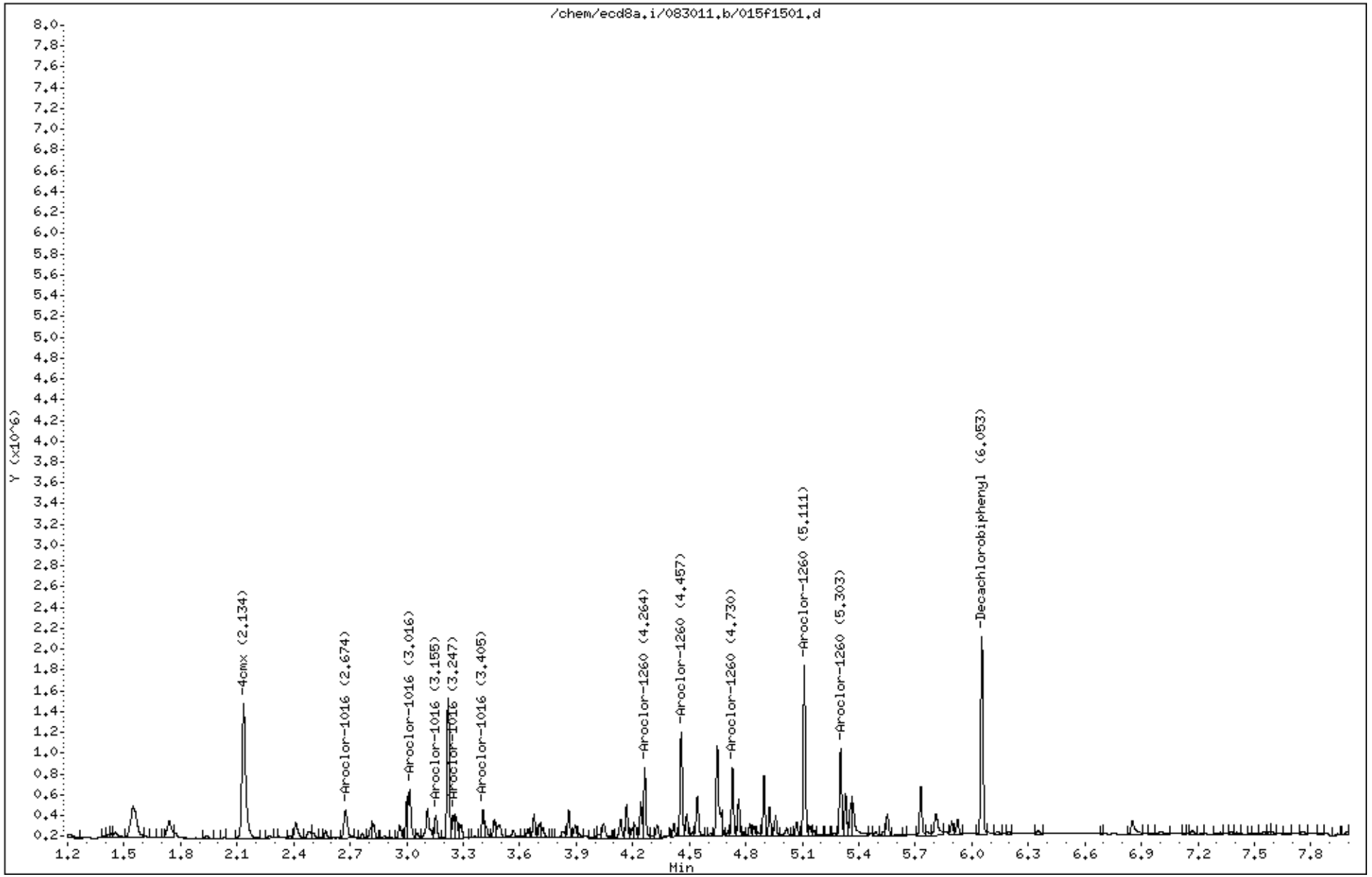
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.264	4.264	0.000	582048	233.612	0.23	80.00- 120.00	100.00(R)
4.457	4.456	0.001	818776	225.352	0.22	130.28- 170.28	140.67
4.730	4.729	0.001	520986	236.211	0.24	70.08- 110.08	89.51
5.111	5.111	0.000	1298075	272.195	0.27	182.73- 222.73	223.02
5.303	5.302	0.001	661800	274.269	0.27	81.55- 121.55	113.70
			Average of Peak Concentrations =		0.25		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/015f1501.d
Date : 30-AUG-2011 09:52
Client ID: 11080101MS
Sample Info: |120247542911|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/015b1501.d
Lab Smp Id: 1202475429 Client Smp ID: 11080101MS
Inj Date : 30-AUG-2011 09:52
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475429|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MS|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 15 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.372	2.373	-0.001	2407000	31.4798	0.031	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.651	6.651	0.000	2001725	52.8993	0.053	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 2051-24-3		
3.073	3.073	0.000	507436	170.805	0.17	80.00- 120.00	100.00(R)
3.419	3.419	0.000	612974	190.807	0.19	98.58- 138.58	120.80
3.516	3.516	0.000	424215	186.820	0.19	57.09- 97.09	83.60
3.590	3.590	0.000	265036	195.273	0.20	26.68- 66.68	52.23
3.667	3.666	0.001	284148	200.375	0.20	28.24- 68.24	56.00
Average of Peak Concentrations =					0.19		

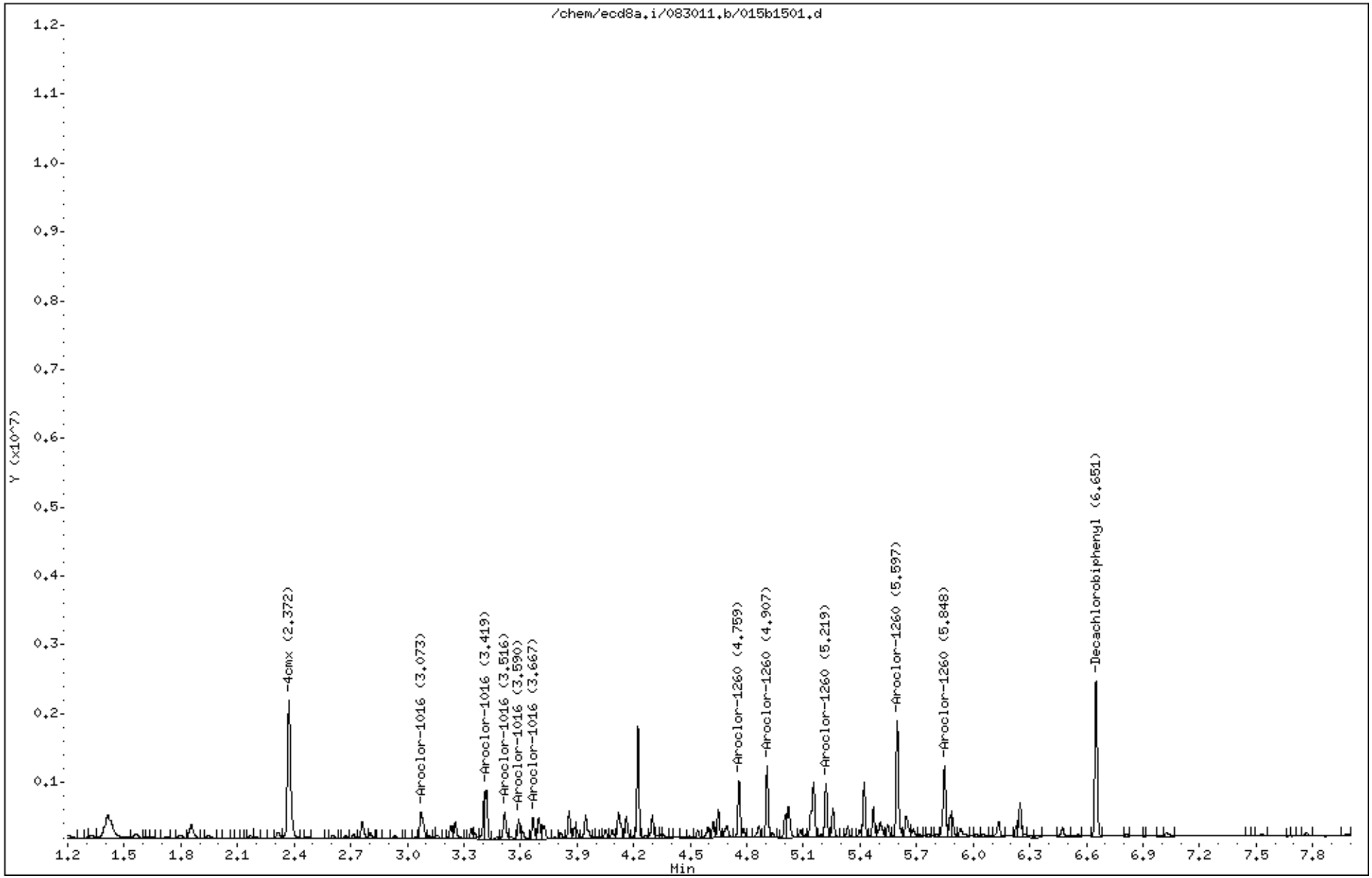
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.759	4.758	0.001	713934	217.806	0.22	80.00- 120.00	100.00(R)
4.907	4.907	0.000	864028	226.607	0.23	97.01- 137.01	121.02
5.219	5.219	0.000	675666	239.495	0.24	68.97- 108.97	94.64
5.597	5.597	0.000	1508271	264.209	0.26	165.24- 205.24	211.26
5.848	5.848	0.000	1044133	262.445	0.26	109.82- 149.82	146.25
Average of Peak Concentrations =					0.24		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/015b1501.d
Date : 30-AUG-2011 09:52
Client ID: 11080101MS
Sample Info: |120247542911|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	**284538**	**Date Collected:**	**08/18/2011 12:00**	**Matrix:**	**GROUND WATER**
Lab Sample ID:	**1202475430**	**Date Received:**	**08/23/2011 08:50**		
Client Sample:	**QC for batch 1136662**	**Client:**	**ECOL008**	**Project:**	**QC**
Client ID:	**11080101MSD**	**Method:**	**SW846 3535A/8082A**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**1136663**	**Inst:**	**ECD8A.I**	**Dilution:**	**1**
Run Date:	**08/30/2011 10:04**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**08/29/2011 08:20**	**Aliquot:**	**1000 mL**	**Final Volume:**	**1 mL**
Data File:	**016f1601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	016b1601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		0.220	ug/L	0.0333	0.100	1
11104-28-2	Aroclor-1221	U	0.0333	ug/L	0.0333	0.100	1
11141-16-5	Aroclor-1232	U	0.0333	ug/L	0.0333	0.100	1
53469-21-9	Aroclor-1242	U	0.0333	ug/L	0.0333	0.100	1
12672-29-6	Aroclor-1248	U	0.0333	ug/L	0.0333	0.100	1
11097-69-1	Aroclor-1254	U	0.0333	ug/L	0.0333	0.100	1
11096-82-5	Aroclor-1260	B	0.290	ug/L	0.0333	0.100	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/016f1601.d
Lab Smp Id: 1202475430 Client Smp ID: 11080101MSD
Inj Date : 30-AUG-2011 10:04
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475430|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MSD|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-F-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033f3301.d
Als bottle: 16 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.138	2.135	0.003	2009726	35.3701	0.035	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.053	6.054	-0.001	1618608	43.2265	0.043	80.00- 120.00	100.00(R)
1 Aroclor-1016					CAS #: 12674-11-2		
2.677	2.674	0.003	398573	192.514	0.19	80.00- 120.00	100.00
3.017	3.015	0.002	531075	214.054	0.21	110.27- 150.27	133.24
3.156	3.154	0.002	227988	229.217	0.23	30.74- 70.74	57.20
3.248	3.246	0.002	221328	240.271	0.24	25.58- 65.58	55.53
3.406	3.404	0.002	299907	228.620	0.23	45.51- 85.51	75.25
			Average of Peak Concentrations =		0.22		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.265	4.264	0.001	715125	287.024	0.29	80.00- 120.00	100.00
4.458	4.456	0.002	1029960	283.476	0.28	130.28- 170.28	144.03
4.731	4.729	0.002	614431	278.579	0.28	70.08- 110.08	85.92
5.112	5.111	0.001	1490928	312.635	0.31	182.73- 222.73	208.48
5.304	5.302	0.002	746303	309.289	0.31	81.55- 121.55	104.36
Average of Peak Concentrations =					0.29		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/016f1601.d

Page 1

Date : 30-AUG-2011 10:04

Client ID: 11080101MSD

Instrument: ecd8a.i

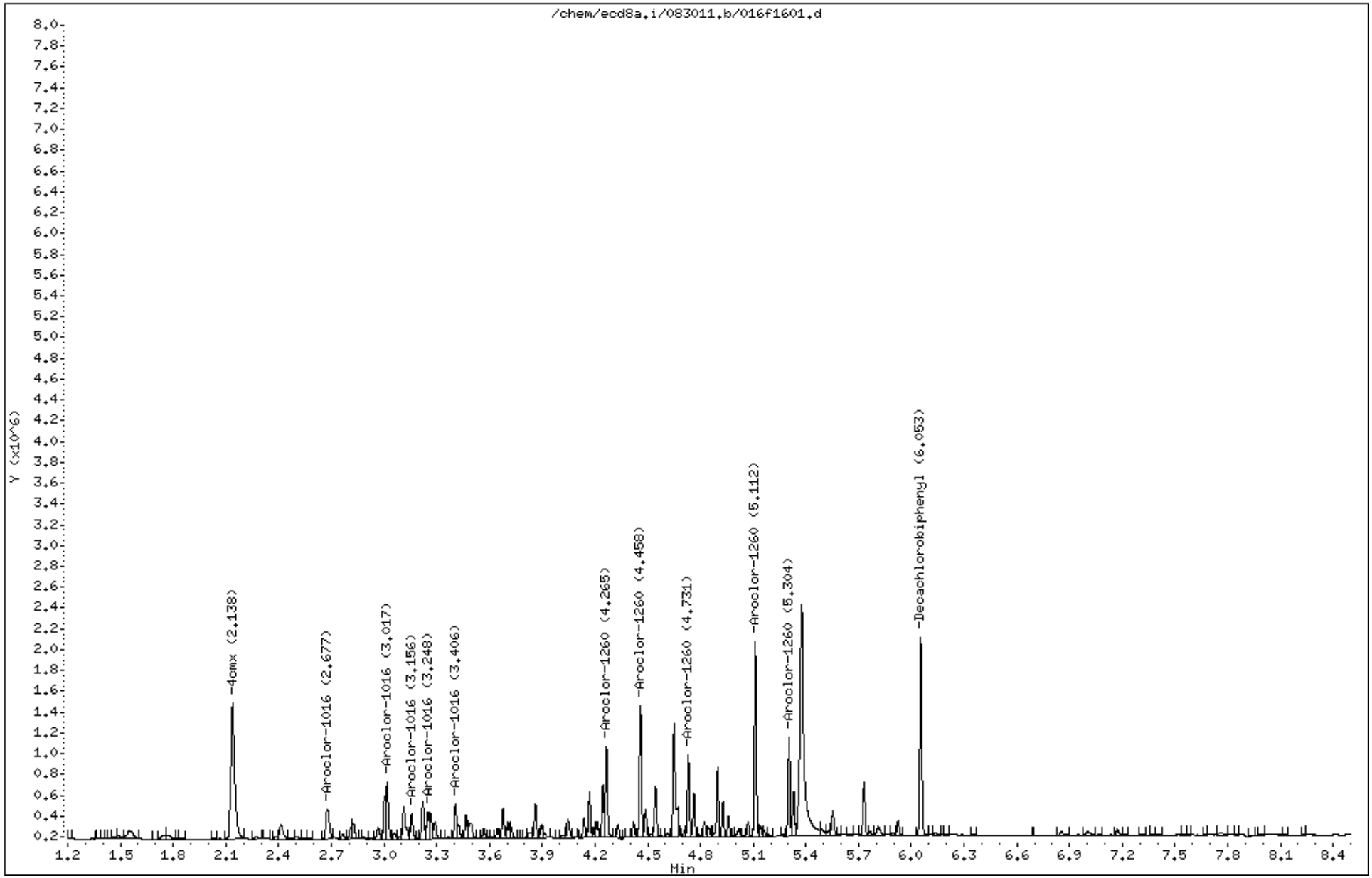
Sample Info: |120247543011|

Volume Injected (uL): 1.0

Operator: YS1

Column phase: CLP1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd8a.i/083011.b/016b1601.d
Lab Smp Id: 1202475430 Client Smp ID: 11080101MSD
Inj Date : 30-AUG-2011 10:04
Operator : YS1 Inst ID: ecd8a.i
Smp Info : |1202475430|1|
Misc Info : |ECD5A2A_1L|1136663|SVA|QC A|GROUND WATER|MSD|||
Comment :
Method : /chem/ecd8a.i/083011.b/ECD8-B-8082-081711.m
Meth Date : 30-Aug-2011 09:17 yip00818 Quant Type: ESTD
Cal Date : 17-AUG-2011 17:22 Cal File: 033b3301.d
Als bottle: 16 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 284538.sub
Target Version: 3.50 Sample Matrix: Ground Water
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.376	2.373	0.003	2660179	34.7909	0.035	80.00- 120.00	100.00(R)
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
6.652	6.651	0.001	1953958	51.6370	0.052	80.00- 120.00	100.00(R)
1 Aroclor-1016					CAS #: 2051-24-3		
3.075	3.073	0.002	576934	194.198	0.19	80.00- 120.00	100.00(R)
3.420	3.419	0.001	716292	222.968	0.22	98.58- 138.58	124.15
3.517	3.516	0.001	468804	206.456	0.21	57.09- 97.09	81.26
3.592	3.590	0.002	278023	204.842	0.20	26.68- 66.68	48.19
3.668	3.666	0.002	320784	226.210	0.23	28.24- 68.24	55.60
Average of Peak Concentrations =					0.21		

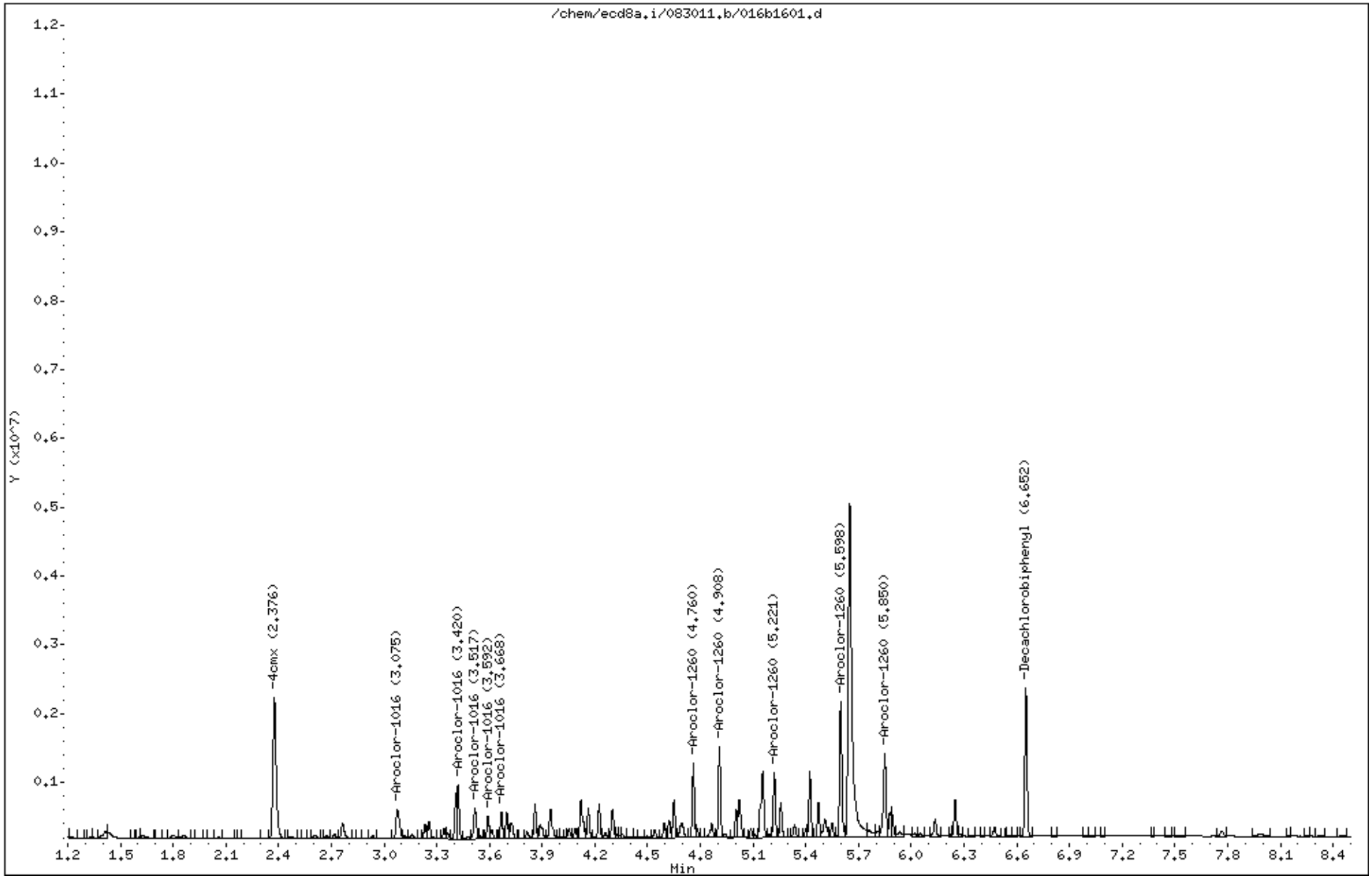
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
7 Aroclor-1260					CAS #: 11096-82-5		
4.760	4.758	0.002	920793	280.914	0.28	80.00- 120.00	100.00(R)
4.908	4.907	0.001	1092547	286.540	0.29	97.01- 137.01	118.65
5.221	5.219	0.002	794991	281.790	0.28	68.97- 108.97	86.34
5.598	5.597	0.001	1722634	301.760	0.30	165.24- 205.24	187.08
5.850	5.848	0.002	1270552	319.356	0.32	109.82- 149.82	137.98
			Average of Peak Concentrations =		0.29		

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/ecd8a.i/083011.b/016b1601.d
Date : 30-AUG-2011 10:04
Client ID: 11080101MSD
Sample Info: |120247543011|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd8a.i
Operator: YS1
Column diameter: 0.25



Miscellaneous Data

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD8

DATE: 08/18/2011 METHOD: ECD8-F-8082-081711.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DE354
ALUMINA LOT
Calibration & QC Information COPPER LOT
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: /chem/ecd8a.i/081711.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR110802-99 01	YS1	17-AUG-2011 11:03	081711		1.0		CLEAN
002f0201.d	WAR110815-60	YS1	17-AUG-2011 11:14	081711		1.0		DUSE
003f0301.d	WAR110614-54	YS1	17-AUG-2011 11:26	081711		1.0		DUSE
004f0401.d	WAR110726-42	YS1	17-AUG-2011 11:38	081711		1.0		DUSE
005f0501.d	WAR110726-48	YS1	17-AUG-2011 11:49	081711		1.0		DUSE
006f0601.d	WAR110701-32	YS1	17-AUG-2011 12:01	081711		1.0		PATTERN ONLY
007f0701.d	WAR110516-21	YS1	17-AUG-2011 12:20	081711		1.0		PATTERN ONLY
008f0801.d	WAR110504-62	YS1	17-AUG-2011 12:31	081711		1.0		PATTERN ONLY
009f0901.d	WAR110809-68	YS1	17-AUG-2011 12:43	081711		1.0		PATTERN ONLY
010f1001.d	WAR110609-DDT	YS1	17-AUG-2011 12:55	081711		1.0		DDT ANALOG
011f1101.d	WAR110817-01	YS1	17-AUG-2011 13:06	081711		1.0		AR1660 I-CAL LEVEL 1
012f1201.d	WAR110817-02	YS1	17-AUG-2011 13:18	081711		1.0		AR1660 I-CAL LEVEL 2
013f1301.d	WAR110817-03	YS1	17-AUG-2011 13:29	081711		1.0		AR1660 I-CAL LEVEL 3
014f1401.d	WAR110817-04	YS1	17-AUG-2011 13:41	081711		1.0		AR1660 I-CAL LEVEL 4
015f1501.d	IAR110815-01	YS1	17-AUG-2011 13:53	081711		1.0		AR1660 I-CAL LEVEL 5

Instrument Batch: /chem/ecd8a.i/081711.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	WAR110815-60 01	YS1	17-AUG-2011 14:04	081711		1.0		PASSED ON BOTH COLUMNS
017f1701.d	WAR110815-05	YS1	17-AUG-2011 14:16	081711		1.0		AR1254 I-CAL LEVEL 1

018f1801.d	WAR110817-06	YS1	17-AUG-2011 14:28		081711	1.0	AR1254 I-CAL LEVEL 2
019f1901.d	WAR110817-07	YS1	17-AUG-2011 14:39		081711	1.0	AR1254 I-CAL LEVEL 3
020f2001.d	WAR110815-08	YS1	17-AUG-2011 14:51		081711	1.0	AR1254 I-CAL LEVEL 4
021f2101.d	IAR110811-01	YS1	17-AUG-2011 15:03		081711	1.0	AR1254 I-CAL LEVEL 5
022f2201.d	WAR100714-54	YS1	17-AUG-2011 15:14		081711	1.0	PASSED ON BOTH COLUMNS
023f2301.d	WAR110817-09	YS1	17-AUG-2011 15:26		081711	1.0	AR1242 I-CAL LEVEL 1
024f2401.d	WAR110817-10	YS1	17-AUG-2011 15:38		081711	1.0	AR1242 I-CAL LEVEL 2
025f2501.d	WAR110817-11	YS1	17-AUG-2011 15:49		081711	1.0	AR1242 I-CAL LEVEL 3
026f2601.d	WAR111817-12	YS1	17-AUG-2011 16:01		081711	1.0	AR1242 I-CAL LEVEL 4
027f2701.d	IAR11623-02	YS1	17-AUG-2011 16:12		081711	1.0	AR1242 I-CAL LEVEL 5
028f2801.d	WAR110726-42	YS1	17-AUG-2011 16:24		081711	1.0	PASSED ON BOTH COLUMNS
029f2901.d	WAR110817-13	YS1	17-AUG-2011 16:36		081711	1.0	AR1248 I-CAL LEVEL 1
030f3001.d	WAR110817-14	YS1	17-AUG-2011 16:47		081711	1.0	AR1248 I-CAL LEVEL 2
031f3101.d	WAR110817-15	YS1	17-AUG-2011 16:59		081711	1.0	AR1248 I-CAL LEVEL 3
032f3201.d	WAR110817-16	YS1	17-AUG-2011 17:11		081711	1.0	AR1248 I-CAL LEVEL 4
033f3301.d	IAR110623-01	YS1	17-AUG-2011 17:22		081711	1.0	AR1248 I-CAL LEVEL 5
034f3401.d	WAR110726-48	YS1	17-AUG-2011 17:34		081711	1.0	PASSED ON BOTH COLUMNS
035f3501.d	WAR110802-99 02	YS1	17-AUG-2011 17:46		081711	1.0	CLEAN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD8

DATE: 08/30/2011 METHOD: ECD8-F-8082-081711.m OPERATOR:YS1 REVIEWED BY:_____
DATE:_____

HARDWARE CONFIGURATION & METHOD SUMMARY: No. 1 on pg. 1 SOLVENT LOT DE354
ALUMINA LOT
Calibration & QC Information COPPER LOT
Initial Calibration Dates: See Calibration History and Standards Log
Initial Calibration Std ID's: See Calibration History and Standards Log
GEL SOP GL-OA-E-040
EPA Method: 8082 Polychlorinated Biphenyls PCBs by Gas Chromatography
Sequence Number: /chem/ecd8a.i/083011.b Injection Volume: 1.0 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR110802-99 01	YS1	30-AUG-2011 07:09		083011	1.0		CLEAN
002f0201.d	WAR110815-60	YS1	30-AUG-2011 07:21		083011	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR110614-54	YS1	30-AUG-2011 07:33		083011	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR110726-42	YS1	30-AUG-2011 07:44		083011	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR110726-48	YS1	30-AUG-2011 07:56		083011	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR110701-32	YS1	30-AUG-2011 08:08		083011	1.0		PATTERN ONLY
007f0701.d	WAR110829-21	YS1	30-AUG-2011 08:19		083011	1.0		PATTERN ONLY
008f0801.d	WAR110829-62	YS1	30-AUG-2011 08:31		083011	1.0		PATTERN ONLY
009f0901.d	WAR110809-68	YS1	30-AUG-2011 08:43		083011	1.0		PATTERN ONLY
010f1001.d	WAR110609-DDT	YS1	30-AUG-2011 08:54		083011	1.0		DDT ANALOG
011f1101.d	WAR110802-99 02	YS1	30-AUG-2011 09:06		083011	1.0		CLEAN
012f1201.d	1202475427	YS1	30-AUG-2011 09:17	1136663	284538	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
013f1301.d	1202475428	YS1	30-AUG-2011 09:29	1136663	284538	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
014f1401.d	284538001	YS1	30-AUG-2011 09:41	1136663	284538	1.0	ECOL	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	1202475429	YS1	30-AUG-2011 09:52	1136663	284538	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd8a.i/083011.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
016f1601.d	1202475430	YS1	30-AUG-2011 10:04	1136663	284538	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	WAR110815-60	YS1	30-AUG-2011 10:18		083011	1.0		PASSED ON BOTH COLUMNS

018f1801.d	WAR110802-99 01	YS1	30-AUG-2011 10:33		083011	1.0	CLEAN

Prep Logbook

Solid-Phase Extraction

Batch ID: 1136662 **Verified by:** _____
Analyst: Sophia Gathers
Method: SW846 3535A

Lab SOP: GL-OA-E-070 REV# 4
Instrument: Semi-Volatiles Manual

Sample ID	Run Date	Initial Volume (mL)	Ph 1	Ph 2	Clean Up	Amount 1 (mL)	Amount 2 (mL)	Amount 3 (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202475427 MB	29-AUG-2011 08:20:00	1000	5	1	H2SO4/KMnO4	2	2	8	1	0.001
1202475428 LCS	29-AUG-2011 08:20:00	1000	5	1	H2SO4/KMnO4	2	2	8	1	0.001
284538001	29-AUG-2011 08:20:00	980	6	1	H2SO4/KMnO4	2	2	8	1	0.00102
1202475429 MS (284538001)	29-AUG-2011 08:20:00	1000	6	1	H2SO4/KMnO4	2	2	8	1	0.001
1202475430 MSD (284538001)	29-AUG-2011 08:20:00	1000	6	1	H2SO4/KMnO4	2	2	8	1	0.001

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202475428	PCB Laboratory Control	WE110727-06	1	mL
MS	1202475429	PCB Laboratory Control	WE110727-06	1	mL
MSD	1202475430	PCB Laboratory Control	WE110727-06	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE110822-01	1	mL
REGNT	All	50g KMnO4 per 1L DI H2O	1598033	5	mL
REGNT	All	Acetone	1601189-B1	5	mL
REGNT	All	Hexane	1605285-B4	5	mL
REGNT	All	Methylene Chloride	1605750-D	50	mL
REGNT	All	Sulfuric Acid Sol., 1:1	1608510	20	mL
SOURC	All	SODIUM SULFATE	1594298	30	g

Comments:

Final Solvent: Hexane
Verified By: JAC
Clean Up Initials: SCG
Clean Up Date: 08/29/11
Cart Lot #: 91824-TL
PH2:1

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
30-AUG-11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 3535A/8082A	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1136663	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Method Blank contamination

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. The MS(1202475429) and MSD(1202475430) did not meet the spike recovery acceptance criteria. 2. The MB(1202475427) was contaminated with target analytes. 3. Sample 284583001 and the MS(1202475429) and MSD(1202475430) did not meet the surrogate recovery acceptance criteria.	1., 3. As the sample, MS and MSD displayed similar recoveries, the failures were attributed to matrix interference and the data were reported. 2. The sample did not have target analytes detected. The data was reported.

Originator's Name:

Yiping Shi 30-AUG-11

Data Validator/Group Leader:

Cameron Bearden 30-AUG-11

Metals Analysis

Case Narrative

Metals Fractional Narrative
Ecology and Environment, Inc. Start-3 002233.2008 (ECOL)
SDG 284538

Sample Analysis

Sample ID	Client ID
284538001	11080101
1202472433	Method Blank (MB) **ICP-MS**
1202472434	Laboratory Control Sample (LCS)
1202472437	284538001(11080101L) Serial Dilution (SD)
1202472435	284538001(11080101S) Matrix Spike (MS)
1202472436	284538001(11080101SD) Matrix Spike Duplicate (MSD)
1202472317	Method Blank (MB) **CVAA**
1202472318	Laboratory Control Sample (LCS)
1202472321	284538001(11080101L) Serial Dilution (SD)
1202472319	284538001(11080101D) Sample Duplicate (DUP)
1202472320	284538001(11080101S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	1135453 and 1135404
Prep Batch :	1135452 and 1135403
Standard Operating Procedures:	GL-MA-E-014 REV# 23, GL-MA-E-006 REV# 9 and GL-MA-E-010 REV# 25
Analytical Method:	SW846 3005A/6020A and SW846 7470A
Prep Method :	SW846 3005A and SW846 7470A Prep

Preparation/Analytical Method Verification

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

System Configuration

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadruple mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

Calibration Information

Instrument Calibration
All initial calibration requirements have been met for this sample delivery group (SDG).

CRDL Requirements
All CRDL standard(s) met the referenced advisory control limits.

ICSA/ICSAB Statement
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

Continuing Calibration Blank (CCB) Requirements
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The MBs analyzed with this SDG met the acceptance criteria.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Quality Control (QC) Sample Statement
The following sample was selected as the quality control (QC) sample for this SDG:

284538001 (11080101).

Matrix Spike (MS) Recovery Statement
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable elements met the acceptance criteria.

Matrix Spike Duplicate (MSD) Recovery Statement
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four time (4X) the spike concentration added. All applicable elements met the acceptance criteria.

MS/MSD Relative Percent Difference (RPD) Statement
The RPD(s) between the MS and MSD met the acceptance limits.

Serial Dilution % Difference Statement
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations that are 25X the IDL/MDL for CVAA, 50X the IDL/MDL for ICP, and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the acceptance criteria of less than 10% difference (%D).

Duplicate Relative Percent Difference (RPD) Statement
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

Technical Information

Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The samples in this SDG did not require dilutions.

Preparation Information
The samples in this SDG were prepared exactly according to the cited SOP.

Miscellaneous Information

Electronic Packaging Comment
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Data Exception (DER) Documentation
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

Additional Comments
Additional comments were not required for this SDG.

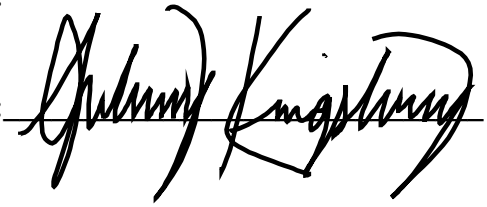
Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer:  **Date:** 9/14/11

Sample Data Summary

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis Report
for

ECOL008 Ecology and Environment, Inc. Start-3 002233.2008

Client SDG: 284538 GEL Work Order: 284538

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

B Metals--Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL

E Organics--Concentration of the target analyte exceeds the instrument calibration range

J Value is estimated

P Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the RL or LOQ.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Jake Crook.

Reviewed By: _____ 9/14/11

METALS
−1−
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 284538 **METHOD TYPE:** SW846

SAMPLE ID: 284538001 **CLIENT ID:** 11080101

CONTRACT: ECOL00111

MATRIX: Ground Water **DATE RECEIVED** 23−AUG−11 **LEVEL:** Low **%SOLIDS:**

CAS No	Analyte	Result	Units	C	Qual	M*	MDL	DF	Inst ID	Analytical Run
7429−90−5	Aluminum	8170	ug/L			MS	15	1	ICPMS7	110824−1
7440−36−0	Antimony	1	ug/L	U		MS	1	1	ICPMS7	110824−1
7440−38−2	Arsenic	2	ug/L	B		MS	1.7	1	ICPMS7	110829−2
7440−39−3	Barium	112	ug/L			MS	0.6	1	ICPMS7	110824−1
7440−41−7	Beryllium	0.209	ug/L	B		MS	0.2	1	ICPMS7	110824−1
7440−43−9	Cadmium	0.11	ug/L	U		MS	0.11	1	ICPMS7	110824−1
7440−70−2	Calcium	4930	ug/L			MS	60	1	ICPMS7	110824−1
7440−47−3	Chromium	14.5	ug/L			MS	2	1	ICPMS7	110824−1
7440−48−4	Cobalt	5.14	ug/L			MS	0.1	1	ICPMS7	110824−1
7440−50−8	Copper	10	ug/L			MS	0.35	1	ICPMS7	110824−1
7439−89−6	Iron	6850	ug/L			MS	33	1	ICPMS7	110824−1
7439−92−1	Lead	3.58	ug/L			MS	0.5	1	ICPMS7	110824−1
7439−95−4	Magnesium	2590	ug/L			MS	10	1	ICPMS7	110824−1
7439−96−5	Manganese	275	ug/L			MS	1	1	ICPMS7	110824−1
7439−97−6	Mercury	0.066	ug/L	U		AV	0.066	1	HG3	082411W1−3
7440−02−0	Nickel	16.4	ug/L			MS	0.5	1	ICPMS7	110824−1
7440−09−7	Potassium	907	ug/L			MS	80	1	ICPMS7	110824−1
7782−49−2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS7	110829−2
7440−22−4	Silver	0.2	ug/L	U		MS	0.2	1	ICPMS7	110829−2
7440−23−5	Sodium	3590	ug/L			MS	80	1	ICPMS7	110824−1
7440−28−0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS7	110824−1
7440−66−6	Zinc	14.9	ug/L			MS	3.5	1	ICPMS7	110824−1

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Quality Control Summary

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
ICV01										
	Mercury	4.97	ug/L	5	ug/L	99.4	90.0 − 110.0	AV	24−AUG−11 17:06	082411W1−3
	Aluminum	5130	ug/L	5050	ug/L	101.6	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Antimony	45.4	ug/L	50	ug/L	90.8	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Barium	49.8	ug/L	50	ug/L	99.6	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Cadmium	50.3	ug/L	50	ug/L	100.7	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Chromium	49.6	ug/L	50	ug/L	99.2	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Cobalt	51	ug/L	50	ug/L	102.1	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Copper	50.1	ug/L	50	ug/L	100.2	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Iron	5040	ug/L	5000	ug/L	100.8	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Lead	50.8	ug/L	50	ug/L	101.5	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Magnesium	5010	ug/L	5000	ug/L	100.3	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Manganese	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Nickel	51	ug/L	50	ug/L	102	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Potassium	4910	ug/L	5000	ug/L	98.2	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Sodium	4990	ug/L	5000	ug/L	99.9	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Thallium	49.3	ug/L	50	ug/L	98.6	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Zinc	49.7	ug/L	50	ug/L	99.4	90.0 − 110.0	MS	25−AUG−11 06:42	110824−1
	Arsenic	51.4	ug/L	50	ug/L	102.8	90.0 − 110.0	MS	29−AUG−11 12:14	110829−2
	Selenium	51.3	ug/L	50	ug/L	102.5	90.0 − 110.0	MS	29−AUG−11 12:14	110829−2
	Silver	50.1	ug/L	50	ug/L	100.2	90.0 − 110.0	MS	29−AUG−11 12:14	110829−2
CCV01										
	Mercury	5.02	ug/L	5	ug/L	100.4	80.0 − 120.0	AV	24−AUG−11 17:11	082411W1−3
	Aluminum	5250	ug/L	5050	ug/L	103.9	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Antimony	48.3	ug/L	50	ug/L	96.7	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Barium	49.6	ug/L	50	ug/L	99.3	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Beryllium	48.9	ug/L	50	ug/L	97.9	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Cadmium	50.8	ug/L	50	ug/L	101.6	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Calcium	5050	ug/L	5000	ug/L	100.9	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Chromium	48.3	ug/L	50	ug/L	96.6	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Cobalt	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Copper	49.8	ug/L	50	ug/L	99.6	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Lead	50.2	ug/L	50	ug/L	100.3	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Manganese	50.5	ug/L	50	ug/L	100.9	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Nickel	50.8	ug/L	50	ug/L	101.5	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Potassium	5020	ug/L	5000	ug/L	100.5	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Sodium	5190	ug/L	5000	ug/L	103.8	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Thallium	47.7	ug/L	50	ug/L	95.5	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Zinc	49.3	ug/L	50	ug/L	98.7	90.0 − 110.0	MS	25−AUG−11 07:23	110824−1
	Arsenic	50.4	ug/L	50	ug/L	100.9	90.0 − 110.0	MS	29−AUG−11 12:31	110829−2
	Selenium	51.3	ug/L	50	ug/L	102.5	90.0 − 110.0	MS	29−AUG−11 12:31	110829−2
	Silver	49.3	ug/L	50	ug/L	98.6	90.0 − 110.0	MS	29−AUG−11 12:31	110829−2
CCV02										
	Mercury	4.99	ug/L	5	ug/L	99.7	80.0 − 120.0	AV	24−AUG−11 17:31	082411W1−3
	Aluminum	5150	ug/L	5050	ug/L	102	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Antimony	51.5	ug/L	50	ug/L	103	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Barium	50.1	ug/L	50	ug/L	100.1	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Beryllium	49.6	ug/L	50	ug/L	99.2	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Cadmium	51.5	ug/L	50	ug/L	103	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Chromium	48.7	ug/L	50	ug/L	97.5	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Cobalt	51.6	ug/L	50	ug/L	103.2	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Copper	52	ug/L	50	ug/L	104	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Iron	5030	ug/L	5000	ug/L	100.7	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Lead	52	ug/L	50	ug/L	104	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Manganese	50.7	ug/L	50	ug/L	101.3	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Nickel	52.6	ug/L	50	ug/L	105.2	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Potassium	4980	ug/L	5000	ug/L	99.6	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Sodium	5120	ug/L	5000	ug/L	102.3	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Thallium	50	ug/L	50	ug/L	99.9	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Zinc	49.8	ug/L	50	ug/L	99.5	90.0 − 110.0	MS	25−AUG−11 07:48	110824−1
	Arsenic	50.7	ug/L	50	ug/L	101.4	90.0 − 110.0	MS	29−AUG−11 13:00	110829−2
	Selenium	51.1	ug/L	50	ug/L	102.3	90.0 − 110.0	MS	29−AUG−11 13:00	110829−2
	Silver	49	ug/L	50	ug/L	98	90.0 − 110.0	MS	29−AUG−11 13:00	110829−2
CCV03										
	Aluminum	5150	ug/L	5050	ug/L	101.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Antimony	48.4	ug/L	50	ug/L	96.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Barium	49.5	ug/L	50	ug/L	98.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Beryllium	48.1	ug/L	50	ug/L	96.2	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Cadmium	51.2	ug/L	50	ug/L	102.4	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Calcium	5030	ug/L	5000	ug/L	100.6	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Chromium	48	ug/L	50	ug/L	95.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Cobalt	50.1	ug/L	50	ug/L	100.2	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Copper	49.9	ug/L	50	ug/L	99.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Iron	4910	ug/L	5000	ug/L	98.2	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Lead	50.9	ug/L	50	ug/L	101.8	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Magnesium	5040	ug/L	5000	ug/L	100.9	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Manganese	49.9	ug/L	50	ug/L	99.8	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Nickel	50.8	ug/L	50	ug/L	101.6	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Potassium	4930	ug/L	5000	ug/L	98.6	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Sodium	5030	ug/L	5000	ug/L	100.7	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Thallium	48.7	ug/L	50	ug/L	97.4	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
	Zinc	49.2	ug/L	50	ug/L	98.4	90.0 − 110.0	MS	25−AUG−11 08:22	110824−1
CCV04										
	Aluminum	5360	ug/L	5050	ug/L	106.2	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Antimony	47.3	ug/L	50	ug/L	94.6	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1

METALS
−2a−
Initial and Continuing Calibration Verification

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M*	Analysis Date/Time	Run Number
	Barium	46.5	ug/L	50	ug/L	93	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Beryllium	54.7	ug/L	50	ug/L	109.4	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Cadmium	50.4	ug/L	50	ug/L	100.8	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Chromium	47	ug/L	50	ug/L	94	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Cobalt	48.1	ug/L	50	ug/L	96.2	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Copper	46.4	ug/L	50	ug/L	92.8	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Iron	4830	ug/L	5000	ug/L	96.6	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Lead	48	ug/L	50	ug/L	95.9	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Manganese	50.4	ug/L	50	ug/L	100.7	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Nickel	47.5	ug/L	50	ug/L	94.9	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Sodium	5400	ug/L	5000	ug/L	107.9	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Thallium	45.6	ug/L	50	ug/L	91.2	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1
	Zinc	49.6	ug/L	50	ug/L	99.3	90.0 − 110.0	MS	25−AUG−11 09:21	110824−1

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−2b−
CRDL Standard for AA & ICP

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.208	ug/L	.2	ug/L	104	70.0 − 130.0	AV	24−AUG−11 17:10	082411W1−3
	Aluminum	51.1	ug/L	50	ug/L	102.2	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Antimony	3.27	ug/L	3	ug/L	108.9	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Barium	2.07	ug/L	2	ug/L	103.3	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Beryllium	.509	ug/L	.5	ug/L	101.8	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Cadmium	1.07	ug/L	1	ug/L	107.1	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Calcium	220	ug/L	200	ug/L	110	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Chromium	10.4	ug/L	10	ug/L	104.3	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Cobalt	1.06	ug/L	1	ug/L	105.7	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Copper	1.08	ug/L	1	ug/L	107.8	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Iron	105	ug/L	100	ug/L	104.8	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Lead	2.15	ug/L	2	ug/L	107.5	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Magnesium	29.9	ug/L	30	ug/L	99.6	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Manganese	5.23	ug/L	5	ug/L	104.5	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Nickel	2.19	ug/L	2	ug/L	109.7	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Potassium	306	ug/L	300	ug/L	102	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Sodium	256	ug/L	250	ug/L	102.4	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Thallium	2.06	ug/L	2	ug/L	103.2	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Zinc	10.7	ug/L	10	ug/L	107.1	70.0 − 130.0	MS	25−AUG−11 06:59	110824−1
	Arsenic	5.61	ug/L	5	ug/L	112.2	70.0 − 130.0	MS	29−AUG−11 12:21	110829−2
	Selenium	5.92	ug/L	5	ug/L	118.4	70.0 − 130.0	MS	29−AUG−11 12:21	110829−2
	Silver	1.05	ug/L	1	ug/L	105.2	70.0 − 130.0	MS	29−AUG−11 12:21	110829−2
CRDL02										
	Aluminum	52.9	ug/L	50	ug/L	105.8	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Antimony	3.21	ug/L	3	ug/L	107	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Barium	1.91	ug/L	2	ug/L	95.5	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Beryllium	.567	ug/L	.5	ug/L	113.4	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Cadmium	1.03	ug/L	1	ug/L	103.1	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Calcium	196	ug/L	200	ug/L	98	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Chromium	9.17	ug/L	10	ug/L	91.7	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1

METALS
−2b−
CRDL Standard for AA & ICP

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M*	Analysis Date/Time	Run Number
	Cobalt	.965	ug/L	1	ug/L	96.5	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Copper	.967	ug/L	1	ug/L	96.7	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Iron	96.6	ug/L	100	ug/L	96.6	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Lead	2.02	ug/L	2	ug/L	101.1	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Magnesium	31.3	ug/L	30	ug/L	104.4	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Manganese	5.03	ug/L	5	ug/L	100.5	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Nickel	1.93	ug/L	2	ug/L	96.7	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Potassium	275	ug/L	300	ug/L	91.7	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Sodium	265	ug/L	250	ug/L	106	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Thallium	2.3	ug/L	2	ug/L	114.8	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Zinc	10.5	ug/L	10	ug/L	104.9	70.0 − 130.0	MS	25−AUG−11 09:29	110824−1
	Arsenic	6.37	ug/L	5	ug/L	127.4	70.0 − 130.0	MS	29−AUG−11 13:04	110829−2
	Selenium	4.88	ug/L	5	ug/L	97.6	70.0 − 130.0	MS	29−AUG−11 13:04	110829−2
	Silver	1.03	ug/L	1	ug/L	103.2	70.0 − 130.0	MS	29−AUG−11 13:04	110829−2

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 284538

Contract: ECOL00111

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/−.2	U	0.066	0.2	LIQ	AV	24−AUG−11 17:08	082411W1−3
	Aluminum	15.0	+/−50	U	15.0	50.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Barium	0.6	+/−2	U	0.6	2.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	25−AUG−11 06:50	110824−1
	Cadmium	0.11	+/−1	U	0.11	1.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Calcium	60.0	+/−200	U	60.0	200	LIQ	MS	25−AUG−11 06:50	110824−1
	Chromium	2.0	+/−10	U	2.0	10.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Cobalt	0.1	+/−1	U	0.1	1.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Copper	0.35	+/−1	U	0.35	1.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Iron	33.0	+/−100	U	33.0	100	LIQ	MS	25−AUG−11 06:50	110824−1
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Magnesium	10.0	+/−30	U	10.0	30.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Manganese	1.0	+/−5	U	1.0	5.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Nickel	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Potassium	80.0	+/−300	U	80.0	300	LIQ	MS	25−AUG−11 06:50	110824−1
	Sodium	80.0	+/−250	U	80.0	250	LIQ	MS	25−AUG−11 06:50	110824−1
	Thallium	0.45	+/−2	U	0.45	2.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Zinc	3.5	+/−10	U	3.5	10.0	LIQ	MS	25−AUG−11 06:50	110824−1
	Arsenic	1.7	+/−5	U	1.7	5.0	LIQ	MS	29−AUG−11 12:18	110829−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	29−AUG−11 12:18	110829−2
	Silver	0.2	+/−1	U	0.2	1.0	LIQ	MS	29−AUG−11 12:18	110829−2
CCB01										
	Mercury	0.066	+/−.2	U	0.066	0.2	LIQ	AV	24−AUG−11 17:13	082411W1−3
	Aluminum	15.0	+/−50	U	15.0	50.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Barium	0.6	+/−2	U	0.6	2.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	25−AUG−11 07:32	110824−1
	Cadmium	0.11	+/−1	U	0.11	1.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Calcium	60.0	+/−200	U	60.0	200	LIQ	MS	25−AUG−11 07:32	110824−1
	Chromium	2.0	+/−10	U	2.0	10.0	LIQ	MS	25−AUG−11 07:32	110824−1

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 284538

Contract: ECOL00111

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Cobalt	0.1	+/−1	U	0.1	1.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Copper	0.35	+/−1	U	0.35	1.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Iron	33.0	+/−100	U	33.0	100	LIQ	MS	25−AUG−11 07:32	110824−1
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Magnesium	10.0	+/−30	U	10.0	30.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Manganese	1.0	+/−5	U	1.0	5.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Nickel	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Potassium	80.0	+/−300	U	80.0	300	LIQ	MS	25−AUG−11 07:32	110824−1
	Sodium	80.0	+/−250	U	80.0	250	LIQ	MS	25−AUG−11 07:32	110824−1
	Thallium	0.45	+/−2	U	0.45	2.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Zinc	3.5	+/−10	U	3.5	10.0	LIQ	MS	25−AUG−11 07:32	110824−1
	Arsenic	1.7	+/−5	U	1.7	5.0	LIQ	MS	29−AUG−11 12:34	110829−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	29−AUG−11 12:34	110829−2
	Silver	0.2	+/−1	U	0.2	1.0	LIQ	MS	29−AUG−11 12:34	110829−2
CCB02										
	Mercury	0.066	+/−.2	U	0.066	0.2	LIQ	AV	24−AUG−11 17:32	082411W1−3
	Aluminum	15.0	+/−50	U	15.0	50.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Barium	0.6	+/−2	U	0.6	2.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	25−AUG−11 07:57	110824−1
	Cadmium	0.11	+/−1	U	0.11	1.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Calcium	60.0	+/−200	U	60.0	200	LIQ	MS	25−AUG−11 07:57	110824−1
	Chromium	2.0	+/−10	U	2.0	10.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Cobalt	0.1	+/−1	U	0.1	1.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Copper	0.35	+/−1	U	0.35	1.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Iron	33.0	+/−100	U	33.0	100	LIQ	MS	25−AUG−11 07:57	110824−1
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Magnesium	10.0	+/−30	U	10.0	30.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Manganese	1.0	+/−5	U	1.0	5.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Nickel	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Potassium	80.0	+/−300	U	80.0	300	LIQ	MS	25−AUG−11 07:57	110824−1

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 284538

Contract: ECOL00111

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Sodium	80.0	+/−250	U	80.0	250	LIQ	MS	25−AUG−11 07:57	110824−1
	Thallium	0.524	+/−2	B	0.45	2.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Zinc	3.5	+/−10	U	3.5	10.0	LIQ	MS	25−AUG−11 07:57	110824−1
	Arsenic	1.7	+/−5	U	1.7	5.0	LIQ	MS	29−AUG−11 13:07	110829−2
	Selenium	1.5	+/−5	U	1.5	5.0	LIQ	MS	29−AUG−11 13:07	110829−2
	Silver	0.2	+/−1	U	0.2	1.0	LIQ	MS	29−AUG−11 13:07	110829−2
CCB03										
	Aluminum	15.0	+/−50	U	15.0	50.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Barium	0.6	+/−2	U	0.6	2.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	25−AUG−11 08:31	110824−1
	Cadmium	0.11	+/−1	U	0.11	1.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Calcium	60.0	+/−200	U	60.0	200	LIQ	MS	25−AUG−11 08:31	110824−1
	Chromium	2.0	+/−10	U	2.0	10.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Cobalt	0.1	+/−1	U	0.1	1.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Copper	0.35	+/−1	U	0.35	1.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Iron	33.0	+/−100	U	33.0	100	LIQ	MS	25−AUG−11 08:31	110824−1
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Magnesium	10.0	+/−30	U	10.0	30.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Manganese	1.0	+/−5	U	1.0	5.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Nickel	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Potassium	80.0	+/−300	U	80.0	300	LIQ	MS	25−AUG−11 08:31	110824−1
	Sodium	80.0	+/−250	U	80.0	250	LIQ	MS	25−AUG−11 08:31	110824−1
	Thallium	0.531	+/−2	B	0.45	2.0	LIQ	MS	25−AUG−11 08:31	110824−1
	Zinc	3.5	+/−10	U	3.5	10.0	LIQ	MS	25−AUG−11 08:31	110824−1
CCB04										
	Aluminum	15.0	+/−50	U	15.0	50.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Antimony	1.0	+/−3	U	1.0	3.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Barium	0.6	+/−2	U	0.6	2.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Beryllium	0.2	+/−.5	U	0.2	0.5	LIQ	MS	25−AUG−11 09:38	110824−1
	Cadmium	0.11	+/−1	U	0.11	1.0	LIQ	MS	25−AUG−11 09:38	110824−1

Metals
−3a−
Initial and Continuing Calibration Blank Summary

SDG No.: 284538

Contract: ECOL00111

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M*	Analysis Date/Time	Run
	Calcium	60.0	+/−200	U	60.0	200	LIQ	MS	25−AUG−11 09:38	110824−1
	Chromium	2.0	+/−10	U	2.0	10.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Cobalt	0.1	+/−1	U	0.1	1.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Copper	0.35	+/−1	U	0.35	1.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Iron	33.0	+/−100	U	33.0	100	LIQ	MS	25−AUG−11 09:38	110824−1
	Lead	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Magnesium	10.0	+/−30	U	10.0	30.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Manganese	1.0	+/−5	U	1.0	5.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Nickel	0.5	+/−2	U	0.5	2.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Potassium	80.0	+/−300	U	80.0	300	LIQ	MS	25−AUG−11 09:38	110824−1
	Sodium	80.0	+/−250	U	80.0	250	LIQ	MS	25−AUG−11 09:38	110824−1
	Thallium	0.45	+/−2	U	0.45	2.0	LIQ	MS	25−AUG−11 09:38	110824−1
	Zinc	3.5	+/−10	U	3.5	10.0	LIQ	MS	25−AUG−11 09:38	110824−1

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−3b−
PREPARATION BLANK SUMMARY

SDG NO. 284538
Contract: ECOL00111
Matrix: Ground Water

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M*	MDL	RDL
1202472317								
	Mercury	0.066	ug/L	+/−0.2	U	AV	0.066	0.2
1202472433								
	Aluminum	15	ug/L	+/−50	U	MS	15	50
	Antimony	1	ug/L	+/−3	U	MS	1	3
	Arsenic	1.7	ug/L	+/−5	U	MS	1.7	5
	Barium	0.6	ug/L	+/−2	U	MS	0.6	2
	Beryllium	0.2	ug/L	+/−0.5	U	MS	0.2	0.5
	Cadmium	0.11	ug/L	+/−1	U	MS	0.11	1
	Calcium	60	ug/L	+/−200	U	MS	60	200
	Chromium	2	ug/L	+/−10	U	MS	2	10
	Cobalt	0.1	ug/L	+/−1	U	MS	0.1	1
	Copper	0.35	ug/L	+/−1	U	MS	0.35	1
	Iron	33	ug/L	+/−100	U	MS	33	100
	Lead	0.5	ug/L	+/−2	U	MS	0.5	2
	Magnesium	10	ug/L	+/−30	U	MS	10	30
	Manganese	1	ug/L	+/−5	U	MS	1	5
	Nickel	0.5	ug/L	+/−2	U	MS	0.5	2
	Potassium	80	ug/L	+/−300	U	MS	80	300
	Selenium	1.5	ug/L	+/−5	U	MS	1.5	5
	Silver	0.2	ug/L	+/−1	U	MS	0.2	1
	Sodium	80	ug/L	+/−250	U	MS	80	250
	Thallium	0.45	ug/L	+/−2	U	MS	0.45	2
	Zinc	3.5	ug/L	+/−10	U	MS	3.5	10

***Analytical Methods:**
P SW846 6010B
MS SW846 6020
AV SW846 7470A/7471A
AF EPA 1631E

METALS
−4−
Interference Check Sample

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	108000	ug/L	100000	ug/L	108	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Antimony	0.343	ug/L					25−AUG−11 07:07	110824−1
	Barium	0.326	ug/L					25−AUG−11 07:07	110824−1
	Beryllium	0.023	ug/L					25−AUG−11 07:07	110824−1
	Cadmium	0.723	ug/L					25−AUG−11 07:07	110824−1
	Calcium	104000	ug/L	100000	ug/L	104	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Chromium	2.24	ug/L					25−AUG−11 07:07	110824−1
	Cobalt	0.185	ug/L					25−AUG−11 07:07	110824−1
	Copper	2.47	ug/L					25−AUG−11 07:07	110824−1
	Iron	100000	ug/L	100000	ug/L	100	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Lead	0.101	ug/L					25−AUG−11 07:07	110824−1
	Magnesium	106000	ug/L	100000	ug/L	106	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Manganese	1.97	ug/L					25−AUG−11 07:07	110824−1
	Nickel	2.96	ug/L					25−AUG−11 07:07	110824−1
	Potassium	105000	ug/L	100000	ug/L	105	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Sodium	109000	ug/L	100000	ug/L	109	80.0 − 120.0	25−AUG−11 07:07	110824−1
	Thallium	0.014	ug/L					25−AUG−11 07:07	110824−1
	Zinc	6.46	ug/L					25−AUG−11 07:07	110824−1
ICSAB01									
	Aluminum	108000	ug/L	100000	ug/L	108	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Antimony	21.1	ug/L	20	ug/L	106	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Barium	21.2	ug/L	20.51	ug/L	103	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Beryllium	20.5	ug/L	20	ug/L	102	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Cadmium	21.6	ug/L	20.68	ug/L	104	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Calcium	104000	ug/L	100000	ug/L	104	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Chromium	22.6	ug/L	22.88	ug/L	98.6	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Cobalt	20.2	ug/L	20.21	ug/L	99.8	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Copper	21.6	ug/L	22.41	ug/L	96.4	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Iron	100000	ug/L	100000	ug/L	100	80.0 − 120.0	25−AUG−11 07:15	110824−1

METALS
−4−
Interference Check Sample

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Lead	20.7	ug/L	20.12	ug/L	103	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Magnesium	106000	ug/L	100000	ug/L	106	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Manganese	22.3	ug/L	21.95	ug/L	102	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Nickel	22.8	ug/L	22.78	ug/L	100	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Potassium	105000	ug/L	100000	ug/L	105	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Sodium	108000	ug/L	100000	ug/L	108	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Thallium	19.6	ug/L	20	ug/L	98	80.0 − 120.0	25−AUG−11 07:15	110824−1
	Zinc	26.3	ug/L	25.79	ug/L	102	80.0 − 120.0	25−AUG−11 07:15	110824−1

METALS
−4−
Interference Check Sample

SDG No: 284538

Contract: ECOL00111 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS7

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	−0.262	ug/L					29−AUG−11 12:24	110829−2
	Selenium	−0.625	ug/L					29−AUG−11 12:24	110829−2
	Silver	0.09	ug/L					29−AUG−11 12:24	110829−2
ICSAB01									
	Arsenic	21.1	ug/L	20	ug/L	105	80.0 − 120.0	29−AUG−11 12:27	110829−2
	Selenium	21.2	ug/L	20	ug/L	106	80.0 − 120.0	29−AUG−11 12:27	110829−2
	Silver	18.9	ug/L	20	ug/L	94.6	80.0 − 120.0	29−AUG−11 12:27	110829−2

METALS
−5a−

Matrix Spike Summary

SDG NO. 284538 **Client ID** 11080101S

Contract: ECOL00111 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 284538001 **Spike ID:** 1202472320

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Mercury	ug/L	75−125	2.01		0.066	U	2	99.8		AV

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−5a−

Matrix Spike Summary

SDG NO. 284538 **Client ID** 11080101S

Contract: ECOL00111 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 284538001 **Spike ID:** 1202472435

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Aluminum	ug/L		10700		8170		2000	126	N/A	MS
Antimony	ug/L	75−125	47.5		1	U	50	94.1		MS
Arsenic	ug/L	75−125	51.8		2	B	50	99.5		MS
Barium	ug/L	75−125	156		112		50	88.2		MS
Beryllium	ug/L	75−125	52.3		0.209	B	50	104		MS
Cadmium	ug/L	75−125	49.9		0.11	U	50	99.7		MS
Calcium	ug/L	75−125	6950		4930		2000	101		MS
Chromium	ug/L	75−125	60.7		14.5		50	92.3		MS
Cobalt	ug/L	75−125	52.4		5.14		50	94.5		MS
Copper	ug/L	75−125	56.1		10		50	92.1		MS
Iron	ug/L	75−125	8810		6850		2000	98.2		MS
Lead	ug/L	75−125	51.2		3.58		50	95.2		MS
Magnesium	ug/L	75−125	4650		2590		2000	103		MS
Manganese	ug/L		326		275		50	102	N/A	MS
Nickel	ug/L	75−125	62.5		16.4		50	92.2		MS
Potassium	ug/L	75−125	2790		907		2000	94.1		MS
Selenium	ug/L	75−125	53.5		1.5	U	50	107		MS
Silver	ug/L	75−125	48.7		0.2	U	50	97.2		MS
Sodium	ug/L	75−125	5730		3590		2000	107		MS
Thallium	ug/L	75−125	44.8		0.45	U	50	89.3		MS
Zinc	ug/L	75−125	63.8		14.9		50	97.8		MS

METALS
−5a−

Matrix Spike Summary

SDG NO. 284538 **Client ID** 11080101S

Contract: ECOL00111 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 284538001 **Spike ID:** 1202472435

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−5a−

Matrix Spike Duplicate Summary

SDG NO. 284538 **Client ID** 11080101SD

Contract: ECOL00111 **Level:** Low

Matrix: GROUND WATER **% Solids:**

Sample ID: 284538001 **Spike ID:** 1202472436

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*
Aluminum	ug/L		10800		8170		2000	131	N/A	MS
Antimony	ug/L	75−125	48.1		1	U	50	95.4		MS
Arsenic	ug/L	75−125	53.5		2	B	50	103		MS
Barium	ug/L	75−125	151		112		50	78.1		MS
Beryllium	ug/L	75−125	58.1		0.209	B	50	116		MS
Cadmium	ug/L	75−125	50.8		0.11	U	50	102		MS
Calcium	ug/L	75−125	6860		4930		2000	96.3		MS
Chromium	ug/L	75−125	61		14.5		50	92.9		MS
Cobalt	ug/L	75−125	51		5.14		50	91.8		MS
Copper	ug/L	75−125	54.8		10		50	89.6		MS
Iron	ug/L	75−125	8770		6850		2000	96.3		MS
Lead	ug/L	75−125	50.3		3.58		50	93.5		MS
Magnesium	ug/L	75−125	4670		2590		2000	104		MS
Manganese	ug/L		319		275		50	88.1	N/A	MS
Nickel	ug/L	75−125	61.7		16.4		50	90.7		MS
Potassium	ug/L	75−125	2760		907		2000	92.8		MS
Selenium	ug/L	75−125	55.7		1.5	U	50	111		MS
Silver	ug/L	75−125	50.1		0.2	U	50	100		MS
Sodium	ug/L	75−125	5760		3590		2000	109		MS
Thallium	ug/L	75−125	44.4		0.45	U	50	88.5		MS
Zinc	ug/L	75−125	64.6		14.9		50	99.3		MS

METALS
−5a−

Matrix Spike Duplicate Summary

SDG NO.	284538	**Client ID**	11080101SD
Contract:	ECOL00111	**Level:**	Low
Matrix:	GROUND WATER	**% Solids:**	
Sample ID:	284538001	**Spike ID:**	1202472436

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M*

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Metals
−6−
Duplicate Sample Summary

SDG No.: 284538

Contract: ECOL00111 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** 11080101D

Sample ID: 284538001 **Duplicate ID:** 1202472319 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Mercury	ug/L		0.066	U	0.066	U			AV

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Metals
−6−
Duplicate Sample Summary

SDG No.: 284538

Contract: ECOL00111 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** 11080101SD

Sample ID: 1202472435 **Duplicate ID:** 1202472436 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*
Aluminum	ug/L	+/−20	10700		10800		.842		MS
Antimony	ug/L	+/−20	47.5		48.1		1.37		MS
Arsenic	ug/L	+/−20	51.8		53.5		3.34		MS
Barium	ug/L	+/−20	156		151		3.3		MS
Beryllium	ug/L	+/−20	52.3		58.1		10.6		MS
Cadmium	ug/L	+/−20	49.9		50.8		1.82		MS
Calcium	ug/L	+/−20	6950		6860		1.34		MS
Chromium	ug/L	+/−20	60.7		61		.544		MS
Cobalt	ug/L	+/−20	52.4		51		2.59		MS
Copper	ug/L	+/−20	56.1		54.8		2.25		MS
Iron	ug/L	+/−20	8810		8770		.425		MS
Lead	ug/L	+/−20	51.2		50.3		1.67		MS
Magnesium	ug/L	+/−20	4650		4670		.243		MS
Manganese	ug/L	+/−20	326		319		2.22		MS
Nickel	ug/L	+/−20	62.5		61.7		1.24		MS
Potassium	ug/L	+/−20	2790		2760		.903		MS
Selenium	ug/L	+/−20	53.5		55.7		4.13		MS
Silver	ug/L	+/−20	48.7		50.1		2.8		MS
Sodium	ug/L	+/−20	5730		5760		.442		MS
Thallium	ug/L	+/−20	44.8		44.4		.82		MS
Zinc	ug/L	+/−20	63.8		64.6		1.15		MS

Metals
−6−
Duplicate Sample Summary

SDG No.: 284538

Contract: ECOL00111 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** 11080101SD

Sample ID: 1202472435 **Duplicate ID:** 1202472436 **Percent Solids for Dup:** N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M*

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 284538

Contract: ECOL00111

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1202472318								
	Mercury	ug/L	2	2.04		102	80−120	AV

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−7−
Laboratory Control Sample Summary

SDG NO. 284538

Contract: ECOL00111

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M*
1202472434								
	Copper	ug/L	50	49.7		99.5	80−120	MS
	Iron	ug/L	2000	1890		94.6	80−120	MS
	Lead	ug/L	50	49.1		98.2	80−120	MS
	Magnesium	ug/L	2000	1860		93.1	80−120	MS
	Manganese	ug/L	50	47.1		94.3	80−120	MS
	Nickel	ug/L	50	49.2		98.4	80−120	MS
	Potassium	ug/L	2000	1890		94.3	80−120	MS
	Selenium	ug/L	50	49.3		98.6	80−120	MS
	Silver	ug/L	50	44.6		89.2	80−120	MS
	Sodium	ug/L	2000	1990		99.5	80−120	MS
	Thallium	ug/L	50	46		91.9	80−120	MS
	Zinc	ug/L	50	51.1		102	80−120	MS
	Cobalt	ug/L	50	48.7		97.3	80−120	MS
	Aluminum	ug/L	2000	1940		97.2	80−120	MS
	Antimony	ug/L	50	47.7		95.3	80−120	MS
	Arsenic	ug/L	50	46.3		92.6	80−120	MS
	Barium	ug/L	50	48		96	80−120	MS
	Beryllium	ug/L	50	49.8		99.6	80−120	MS
	Cadmium	ug/L	50	49.3		98.6	80−120	MS
	Calcium	ug/L	2000	1960		97.8	80−120	MS
	Chromium	ug/L	50	46.7		93.5	80−120	MS

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 284538 **Client ID** 11080101L

Contract: ECOL00111

Matrix: LIQUID **Level:** Low

Sample ID: 284538001 **Serial Dilution ID:** 1202472321

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Mercury	.066	U	.33	U				AV

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

METALS
−9−
Serial Dilution Sample Summary

SDG NO. 284538 **Client ID** 11080101L

Contract: ECOL00111

Matrix: LIQUID **Level:** Low

Sample ID: 284538001 **Serial Dilution ID:** 1202472437

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M*
Aluminum	8170		8950		9.56		10	MS
Antimony	1	U	5	U				MS
Arsenic	2	B	8.5	U	100			MS
Barium	112		111		.442		10	MS
Beryllium	.209	B	1	U	100			MS
Cadmium	.11	U	.55	U				MS
Calcium	4930		5400		9.4			MS
Chromium	14.5		10.6	B	27.2			MS
Cobalt	5.14		5.22		1.52			MS
Copper	10		10.2		1.41			MS
Iron	6850		7180		4.8		10	MS
Lead	3.58		3.48	B	2.96			MS
Magnesium	2590		2690		3.65		10	MS
Manganese	275		290		5.71		10	MS
Nickel	16.4		16.2		1.39			MS
Potassium	907		770	B	15.2			MS
Selenium	1.5	U	7.5	U				MS
Silver	.2	U	1	U				MS
Sodium	3590		3810		6.12			MS
Thallium	.45	U	2.25	U				MS
Zinc	14.9		17.5	U	100			MS

***Analytical Methods:**
P SW846 6010B
MS SW846 6020
AV SW846 7470A/7471A
AF EPA 1631E

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 284538 **Method Type:** MS

Contract: ECOL00111 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 1135452							
1202472433	MB for batch 1135452	MB	G	24−AUG−11	50mL	50mL	
1202472434	LCS for batch 1135452	LCS	G	24−AUG−11	50mL	50mL	
1202472435	11080101S	MS	G	24−AUG−11	50mL	50mL	
1202472436	11080101SD	MSD	G	24−AUG−11	50mL	50mL	
284538001	11080101	SAMPLE	G	24−AUG−11	50mL	50mL	

METALS
−13−
SAMPLE PREPARATION SUMMARY

SDG No: 284538 **Method Type:** AV

Contract: ECOL00111 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 1135403							
1202472317	MB for batch 1135403	MB	G	24−AUG−11	20mL	20mL	
1202472318	LCS for batch 1135403	LCS	G	24−AUG−11	20mL	20mL	
1202472320	11080101S	MS	G	24−AUG−11	20mL	20mL	
1202472319	11080101D	DUP	G	24−AUG−11	20mL	20mL	
284538001	11080101	SAMPLE	G	24−AUG−11	20mL	20mL	

Metals
−14−
Analysis Run Log

Contract: ECOL00111
Lab Code: GEL
Inst Name: HG3
Start Date: 24−AUG−11
End Date: 24−AUG−11
Client Sdg: 284538
Method*: AV
Data File: 082411W1−3

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	Zn
S0.0	1	16:57:00															X							
S0.2	1	16:58:00															X							
S0.5	1	17:00:00															X							
S2.0	1	17:01:00															X							
S5.0	1	17:03:00															X							
S10.0	1	17:05:00															X							
ICV01	1	17:06:00															X							
ICB01	1	17:08:00															X							
CRDL01	1	17:10:00															X							
CCV01	1	17:11:00															X							
CCB01	1	17:13:00															X							
1202472317	1	17:14:00															X							
1202472318	1	17:16:00															X							
284538001	1	17:18:00															X							
1202472319	1	17:19:00															X							
1202472320	1	17:21:00															X							
1202472321	5	17:22:00															X							
ZZZZZZ	1	17:24:00																						
ZZZZZZ	1	17:26:00																						
ZZZZZZ	1	17:27:00																						
ZZZZZZ	1	17:29:00																						
CCV02	1	17:31:00															X							
CCB02	1	17:32:00															X							

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Metals
−14−
Analysis Run Log

Contract: ECOL00111
Lab Code: GEL
Inst Name: ICPMS7
Start Date: 25−AUG−11
End Date: 25−AUG−11
Client Sdg: 284538
Method*: MS
Data File: 110824−1

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	Zn
S0.0	1	06:17:27	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
S10	1	06:25:46	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
S100	1	06:34:03	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
ICV01	1	06:42:20	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
ICB01	1	06:50:40	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CRDL01	1	06:59:00	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
ICSA01	1	07:07:18	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
ICSAB01	1	07:15:37	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCV01	1	07:23:57	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCB01	1	07:32:17	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
LR01	1	07:40:37	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCV02	1	07:48:55	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCB02	1	07:57:15	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
1202472433	1	08:05:37	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
1202472434	1	08:14:15	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCV03	1	08:22:36	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCB03	1	08:31:13	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
284538001	1	08:39:52	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
1202472435	1	08:48:13	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
1202472436	1	08:56:34	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
ZZZZZZ	1	09:04:56																						
1202472437	5	09:13:17	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCV04	1	09:21:38	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CRDL02	1	09:29:57	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X
CCB04	1	09:38:16	X	X		X	X	X	X	X	X	X	X	X	X	X		X	X			X	X	X

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Metals
−14−
Analysis Run Log

Contract: ECOL00111
Lab Code: GEL
Inst Name: ICPMS7
Start Date: 29−AUG−11
End Date: 29−AUG−11
Client Sdg: 284538
Method*: MS
Data File: 110829−2

Samp No.	D/F	Run Time	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	Zn
S0.0	1	12:04:55			X															X	X			
S10	1	12:08:12			X															X	X			
S100	1	12:11:28			X															X	X			
ICV01	1	12:14:44			X															X	X			
ICB01	1	12:18:03			X															X	X			
CRDL01	1	12:21:22			X															X	X			
ICSA01	1	12:24:39			X															X	X			
ICSAB01	1	12:27:56			X															X	X			
CCV01	1	12:31:14			X															X	X			
CCB01	1	12:34:34			X															X	X			
1202472433	1	12:37:52			X															X	X			
1202472434	1	12:41:09			X															X	X			
284538001	1	12:44:26			X															X	X			
1202472435	1	12:47:43			X															X	X			
1202472436	1	12:51:00			X															X	X			
ZZZZZZ	1	12:54:17																						
1202472437	5	12:57:35			X															X	X			
CCV02	1	13:00:54			X															X	X			
CRDL02	1	13:04:11			X															X	X			
CCB02	1	13:07:30			X															X	X			

***Analytical Methods:**

P	SW846 6010B
MS	SW846 6020
AV	SW846 7470A/7471A
AF	EPA 1631E

Standards

METALS
−10−
Instrument Detection Limits

SDG NO. 284538

Contract: ECOL00111 **Lab Code: GEL** **MDL Effective Date:** 16−JAN−11

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Aluminum		15.0	50
	Antimony		1.0	3
	Arsenic		1.7	5
	Barium		0.6	2
	Beryllium		0.2	.5
	Cadmium		0.11	1
	Calcium		60.0	200
	Chromium		2.0	10
	Cobalt		0.1	1
	Copper		0.35	1
	Iron		33.0	100
	Lead		0.5	2
	Magnesium		10.0	30
	Manganese		1.0	5
	Nickel		0.5	2
	Potassium		80.0	300
	Selenium		1.5	5
	Silver		0.2	1
	Sodium		80.0	250
	Thallium		0.45	2
	Zinc		3.5	10

METALS
−10−
Instrument Detection Limits

SDG NO. 284538

Contract: ECOL00111 **Lab Code: GEL** **MDL Effective Date:** 17−JAN−11

	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
−12−
Linear Ranges

SDG NO. 284538

Contract: ECOL00111 **Lab Code: GEL**

Instrument ID ICPMS7

Analyte	Integration Time (msec)	LDR	Units	Effective Date
Aluminum	1	50000	ug/L	01−AUG−11
Antimony	1000	250	ug/L	01−AUG−11
Arsenic	1000	1000	ug/L	01−AUG−11
Barium	1000	1000	ug/L	01−AUG−11
Beryllium	1000	1000	ug/L	01−AUG−11
Cadmium	1000	1000	ug/L	01−AUG−11
Calcium	500	50000	ug/L	01−AUG−11
Chromium	1000	1000	ug/L	01−AUG−11
Cobalt	1000	1000	ug/L	01−AUG−11
Copper	1000	1000	ug/L	01−AUG−11
Iron	500	50000	ug/L	01−AUG−11
Lead	1000	5000	ug/L	01−AUG−11
Magnesium	1	50000	ug/L	01−AUG−11
Manganese	1000	1000	ug/L	01−AUG−11
Nickel	1000	1000	ug/L	01−AUG−11
Potassium	1	50000	ug/L	01−AUG−11
Selenium	1000	500	ug/L	01−AUG−11
Silver	1000	250	ug/L	01−AUG−11
Sodium	1	50000	ug/L	01−AUG−11
Thallium	1000	500	ug/L	01−AUG−11
Zinc	1000	2500	ug/L	01−AUG−11

Raw Data

ICPMS #7 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Wednesday, August 24, 2011 10:01:15
Sample Description:
Method File: C:\elandata\Method\daily2.mth
Dataset File: C:\elandata\Dataset\default\Sample.3517
Tuning File: C:\elandata\Tuning\default2.tun
Optimization File: C:\elandata\Optimize\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 80
Current Dead Time (ns): 80

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	1852.7	1852.675	47.264	2.6
	Mg	24.0	19719.1	19719.060	140.652	0.7
	Co	58.9	52920.3	52920.323	604.577	1.1
	Rh	102.9	102673.3	102673.344	1053.573	1.0
	In	114.9	134933.1	134933.089	1200.095	0.9
	Pb	208.0	103719.0	103718.971	828.011	0.8
⌈>	Ba	137.9	118927.6	118927.585	1308.615	1.1
⌊	Ba++	69.0	1274.9	0.011	0.000	3.7
⌈>	Ce	139.9	144427.5	144427.528	844.584	0.6
⌊	CeO	155.9	3764.9	0.026	0.001	2.7
	Bkgd	220.0	6.6	6.600	2.043	31.0

Current Optimization File Data

Current Value	Description
0.94	Nebulizer Gas Flow
7.00	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-3.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	6.5	3555.0
Co	59	21	7.3	71561.4
In	115	21	8.5	176754.5

Instrument #7 Tuning Report

File Name: Default2.tun
File Path: C:\elandata\Tuning\Default2.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	584	2060	0.624
Be	9.0	9.0	2022	2050	0.640
Mg	24.0	24.0	5699	2100	0.485
Mg	25.0	25.0	5903	2100	0.434
Mg	26.0	26.0	6193	2090	0.477
Co	58.9	58.9	14164	2030	0.662
Rh	102.9	102.9	24879	2020	0.669
In	114.9	114.9	27800	2020	0.669
Ce	139.9	139.9	33884	2010	0.671
Pb	206.0	206.0	49956	1980	0.654
Pb	207.0	207.0	50224	2000	0.671
Pb	208.0	208.0	50434	1980	0.660
U	238.1	238.0	57746	1980	0.685

ICPMS#7 - Summary Report

Sample ID: Blank
Sample Date/Time: Thursday, August 25, 2011 06:17:27
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\Blank.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7		**ug/L**		36	
	Be	9		**ug/L**		6	
	B	11		**ug/L**		371	
	Na	23		**ug/L**		11810	
	Mg	24		**ug/L**		1649	
	Al	27		**ug/L**		3009	
	P	31		**ug/L**		2090	
	K	39		**ug/L**		283253	
	Ca	43		**ug/L**		187	
>	Sc	45		**ug/L**		435191	
	Ti	47		**ug/L**		100	
	Cr	52		**ug/L**		8212	
	Cr	53		**ug/L**		109742	
	Mn	55		**ug/L**		730	
	Fe	57		**ug/L**		3323	
	Co	59		**ug/L**		73	
	Ni	60		**ug/L**		47	
	Cu	63		**ug/L**		78	
	Cu	65		**ug/L**		49	
	Zn	66		**ug/L**		113	
	Zn	67		**ug/L**		3203	
	Zn	68		**ug/L**		289	
>	Ge	74		**ug/L**		163883	
	As	75		**ug/L**		17268	
	Se	77		**ug/L**		10318	
	Se	82		**ug/L**		-278	
	Kr	83		**ug/L**		6872	
	Sr	88		**ug/L**		226	
	Zr	90		**ug/L**		79	
	Mo	98		**ug/L**		63	
	Ag	107		**ug/L**		29	
	Cd	111		**ug/L**		24	
	Cd	114		**ug/L**		48	
>	In	115		**ug/L**		104919	
	Sn	120		**ug/L**		139	
	Sb	121		**ug/L**		148	
	Sb	123		**ug/L**		118	
	Ba	135		**ug/L**		44	
	Ba	137		**ug/L**		55	
>	Lu	175		**ug/L**		186824	
	Tl	205		**ug/L**		1054	
	Pb	208		**ug/L**		446	
	Th	232		**ug/L**		378	
	U	238		**ug/L**		576	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9991
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
| >	Sc	45					
|	Ti	47					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Thursday, August 25, 2011 06:25:46
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\Standard 1.205

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**10.000**	**ug/L**	1.749	3503	0.008
	Be	9	**10.000**	**ug/L**	2.687	967	0.002
	B	11	**20.000**	**ug/L**	2.549	2380	0.005
	Na	23	**1000.000**	**ug/L**	1.533	1094224	2.467
	Mg	24	**1000.000**	**ug/L**	1.068	760316	1.729
	Al	27	**1000.000**	**ug/L**	1.787	1155179	2.626
	P	31	**1000.000**	**ug/L**	0.604	76933	0.171
	K	39	**1000.000**	**ug/L**	1.391	2386728	4.788
	Ca	43	**1000.000**	**ug/L**	3.398	4190	0.009
>	Sc	45		**ug/L**		438833	438833.292
	Ti	47	**10.000**	**ug/L**	0.480	2272	0.005
	Cr	52	**10.000**	**ug/L**	1.650	31273	0.052
	Cr	53		**ug/L**		114134	0.008
	Mn	55	**10.000**	**ug/L**	1.206	35423	0.079
	Fe	57	**1000.000**	**ug/L**	1.711	75143	0.164
	Co	59	**10.000**	**ug/L**	2.473	29102	0.066
	Ni	60	**10.000**	**ug/L**	0.767	6117	0.014
	Cu	63		**ug/L**		13320	0.030
	Cu	65	**10.000**	**ug/L**	1.686	6390	0.014
	Zn	66	**10.000**	**ug/L**	1.102	3485	0.021
	Zn	67		**ug/L**		3920	0.004
	Zn	68		**ug/L**		2802	0.015
>	Ge	74		**ug/L**		163723	163723.296
	As	75	**10.000**	**ug/L**	7.608	22614	0.033
	Se	77		**ug/L**		11204	0.005
	Se	82	**10.000**	**ug/L**	28.434	182	0.003
	Kr	83		**ug/L**		6840	-0.000
	Sr	88	**10.000**	**ug/L**	0.688	52934	0.508
	Zr	90	**10.000**	**ug/L**	5.902	24921	0.239
	Mo	98	**10.000**	**ug/L**	0.585	12725	0.122
	Ag	107	**10.000**	**ug/L**	1.318	21192	0.204
	Cd	111	**10.000**	**ug/L**	1.082	4814	0.046
	Cd	114		**ug/L**		11674	0.112
>	In	115		**ug/L**		103858	103857.827
	Sn	120	**10.000**	**ug/L**	1.213	22672	0.217
	Sb	121	**10.000**	**ug/L**	0.598	17992	0.172
	Sb	123		**ug/L**		13842	0.132
	Ba	135		**ug/L**		5649	0.030
	Ba	137	**10.000**	**ug/L**	1.875	9763	0.052
>	Lu	175		**ug/L**		186640	186640.352
	Tl	205	**10.000**	**ug/L**	2.500	76546	0.405
	Pb	208	**10.000**	**ug/L**	1.843	98948	0.528
	Th	232	**10.000**	**ug/L**	2.934	112723	0.602
	U	238	**10.000**	**ug/L**	2.362	121459	0.648

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	1.0000
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
| >	Sc	45					
|	Ti	47					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Thursday, August 25, 2011 06:34:03
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\Standard 2.206

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**99.938**	**ug/L**	1.839	32592	0.074
|	Be	9	**99.979**	**ug/L**	2.261	9392	0.021
|	B	11	**199.979**	**ug/L**	3.241	20191	0.045
|	Na	23	**10001.974**	**ug/L**	1.698	11036358	25.168
|	Mg	24	**10000.609**	**ug/L**	0.492	7621798	17.396
|	Al	27	**10000.549**	**ug/L**	0.601	11569407	26.404
|	P	31	**9998.775**	**ug/L**	0.251	739918	1.684
|	K	39	**9999.333**	**ug/L**	1.298	21120020	47.564
|	Ca	43	**9998.290**	**ug/L**	0.018	39455	0.090
|	> Sc	45		**ug/L**		438053	438052.945
|	Ti	47	**100.001**	**ug/L**	0.183	21803	0.050
|	Cr	52	**99.939**	**ug/L**	1.033	224543	0.494
|	Cr	53		**ug/L**		119111	0.020
|	Mn	55	**99.977**	**ug/L**	0.484	339011	0.772
|	Fe	57	**9997.161**	**ug/L**	0.236	700112	1.591
|	Co	59	**99.954**	**ug/L**	1.340	277034	0.632
|	Ni	60	**99.946**	**ug/L**	0.583	57475	0.131
|	Cu	63		**ug/L**		126612	0.289
⌞	Cu	65	**99.955**	**ug/L**	0.580	60580	0.138
⌜	Zn	66	**99.959**	**ug/L**	0.154	32052	0.198
|	Zn	67		**ug/L**		8499	0.033
|	Zn	68		**ug/L**		23800	0.146
|	> Ge	74		**ug/L**		161427	161426.880
|	As	75	**99.688**	**ug/L**	1.433	57195	0.249
|	Se	77		**ug/L**		11761	0.010
|	Se	82	**99.847**	**ug/L**	6.822	3641	0.024
⌞	Kr	83		**ug/L**		6787	0.000
⌜	Sr	88	**99.994**	**ug/L**	1.795	515488	5.043
|	Zr	90	**100.136**	**ug/L**	0.966	283371	2.773
|	Mo	98	**99.997**	**ug/L**	0.594	124307	1.216
|	Ag	107	**99.980**	**ug/L**	1.145	204030	1.997
|	Cd	111	**99.975**	**ug/L**	2.019	46005	0.450
|	Cd	114		**ug/L**		113320	1.109
|	> In	115		**ug/L**		102184	102183.527
|	Sn	120	**99.993**	**ug/L**	0.873	220224	2.154
|	Sb	121	**99.988**	**ug/L**	1.144	173545	1.697
⌞	Sb	123		**ug/L**		135853	1.328
⌜	Ba	135		**ug/L**		54836	0.295
|	Ba	137	**99.988**	**ug/L**	1.537	95523	0.514
|	> Lu	175		**ug/L**		185693	185693.035
|	Tl	205	**99.987**	**ug/L**	0.858	742442	3.993
|	Pb	208	**99.972**	**ug/L**	0.718	953970	5.135
|	Th	232	**99.990**	**ug/L**	1.483	1106727	5.959
⌞	U	238	**99.989**	**ug/L**	1.159	1189776	6.405

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
| >	Sc	45					
|	Ti	47					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115					
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175					
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Thursday, August 25, 2011 06:42:20
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 1.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.505**	**ug/L**	1.875	16756	0.038
	Be	9	**49.192**	**ug/L**	1.331	4699	0.011
	B	11	**104.111**	**ug/L**	1.678	10865	0.024
	Na	23	**4992.661**	**ug/L**	1.159	5604521	12.563
	Mg	24	**5014.372**	**ug/L**	1.355	3884390	8.722
	Al	27	**5129.847**	**ug/L**	0.623	6032353	13.544
	P	31	**4944.490**	**ug/L**	0.270	372909	0.833
	K	39	**4909.740**	**ug/L**	1.596	10685670	23.354
	Ca	43	**4959.802**	**ug/L**	0.140	19986	0.044
>	Sc	45		**ug/L**		445155	445154.931
	Ti	47	**49.052**	**ug/L**	0.674	10920	0.024
	Cr	52	**49.599**	**ug/L**	1.109	117474	0.245
	Cr	53		**ug/L**		103854	-0.019
	Mn	55	**50.884**	**ug/L**	0.919	175702	0.393
	Fe	57	**5038.691**	**ug/L**	0.908	360270	0.802
	Co	59	**51.035**	**ug/L**	0.804	143778	0.323
	Ni	60	**51.021**	**ug/L**	0.260	29840	0.067
	Cu	63		**ug/L**		65267	0.146
	Cu	65	**50.104**	**ug/L**	0.845	30885	0.069
	Zn	66	**49.719**	**ug/L**	0.864	16195	0.098
	Zn	67		**ug/L**		5893	0.017
	Zn	68		**ug/L**		12079	0.072
>	Ge	74		**ug/L**		163408	163408.126
	As	75	**50.553**	**ug/L**	2.818	37846	0.126
	Se	77		**ug/L**		9839	-0.003
	Se	82	**51.072**	**ug/L**	2.319	1751	0.012
	Kr	83		**ug/L**		6926	0.000
	Sr	88	**51.170**	**ug/L**	0.895	267987	2.581
	Zr	90	**51.197**	**ug/L**	2.559	147142	1.418
	Mo	98	**49.461**	**ug/L**	1.026	62464	0.601
	Ag	107	**41.493**	**ug/L**	0.852	86002	0.829
	Cd	111	**50.328**	**ug/L**	1.086	23532	0.227
	Cd	114		**ug/L**		59059	0.569
>	In	115		**ug/L**		103761	103761.160
	Sn	120	**50.059**	**ug/L**	0.480	112031	1.078
	Sb	121	**45.418**	**ug/L**	2.578	80145	0.771
	Sb	123		**ug/L**		62214	0.598
	Ba	135		**ug/L**		27321	0.146
	Ba	137	**49.804**	**ug/L**	2.111	48058	0.256
>	Lu	175		**ug/L**		187454	187453.850
	Tl	205	**49.300**	**ug/L**	1.938	370037	1.969
	Pb	208	**50.762**	**ug/L**	0.845	489205	2.608
	Th	232	**50.459**	**ug/L**	1.253	564009	3.007
	U	238	**52.842**	**ug/L**	1.284	635005	3.385

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.011				
	Be	9	98.383				
	B	11	104.111				
	Na	23	99.853				
	Mg	24	100.287				
	Al	27	101.581				
	P	31	98.890				
	K	39	98.195				
	Ca	43	99.196				
>	Sc	45		102.3			
	Ti	47	98.103				
	Cr	52	99.197				
	Cr	53					
	Mn	55	101.767				
	Fe	57	100.774				
	Co	59	102.070				
	Ni	60	102.043				
	Cu	63					
	Cu	65	100.208				
	Zn	66	99.439				
	Zn	67					
	Zn	68					
>	Ge	74		99.7			
	As	75	101.106				
	Se	77					
	Se	82	102.144				
	Kr	83					
	Sr	88	102.339				
	Zr	90	102.394				
	Mo	98	98.923				
	Ag	107	82.985				
	Cd	111	100.657				
	Cd	114					
>	In	115		98.9			
	Sn	120	100.119				
	Sb	121	90.836				
	Sb	123					
	Ba	135					
	Ba	137	99.609				
>	Lu	175		100.3			
	Tl	205	98.600				
	Pb	208	101.525				
	Th	232	100.918				
	U	238	105.685				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Ag	107	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Thursday, August 25, 2011 06:50:40
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 2.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.027**	**ug/L**	63.359	28	-0.000
	Be	9	**0.030**	**ug/L**	17.496	9	0.000
	B	11	**5.048**	**ug/L**	19.516	873	0.001
	Na	23	**-0.990**	**ug/L**	21.450	10779	-0.002
	Mg	24	**0.361**	**ug/L**	43.257	1932	0.001
	Al	27	**0.392**	**ug/L**	33.644	3476	0.001
	P	31	**1.478**	**ug/L**	51.289	2210	0.000
	K	39	**-1.186**	**ug/L**	18.492	282214	-0.006
	Ca	43	**6.820**	**ug/L**	9.937	215	0.000
>	Sc	45		**ug/L**		437386	437386.030
	Ti	47	**-0.029**	**ug/L**	146.071	94	-0.000
	Cr	52	**-0.398**	**ug/L**	21.026	7392	-0.002
	Cr	53		**ug/L**		90631	-0.045
	Mn	55	**-0.021**	**ug/L**	16.916	662	-0.000
	Fe	57	**0.347**	**ug/L**	225.291	3364	0.000
	Co	59	**0.005**	**ug/L**	34.464	87	0.000
	Ni	60	**0.004**	**ug/L**	143.799	49	0.000
	Cu	63		**ug/L**		87	0.000
	Cu	65	**0.011**	**ug/L**	47.932	55	0.000
	Zn	66	**0.016**	**ug/L**	53.082	119	0.000
	Zn	67		**ug/L**		3108	-0.001
	Zn	68		**ug/L**		287	-0.000
>	Ge	74		**ug/L**		164444	164444.316
	As	75	**0.619**	**ug/L**	248.998	17582	0.002
	Se	77		**ug/L**		8241	-0.013
	Se	82	**1.510**	**ug/L**	248.917	-218	0.000
	Kr	83		**ug/L**		6864	-0.000
	Sr	88	**0.000**	**ug/L**	227.650	229	0.000
	Zr	90	**0.014**	**ug/L**	31.809	120	0.000
	Mo	98	**0.074**	**ug/L**	19.153	158	0.001
	Ag	107	**0.008**	**ug/L**	26.730	46	0.000
	Cd	111	**-0.007**	**ug/L**	144.954	20	-0.000
	Cd	114		**ug/L**		60	0.000
>	In	115		**ug/L**		105169	105168.861
	Sn	120	**0.029**	**ug/L**	17.304	206	0.001
	Sb	121	**0.447**	**ug/L**	16.893	947	0.008
	Sb	123		**ug/L**		733	0.006
	Ba	135		**ug/L**		46	0.000
	Ba	137	**0.007**	**ug/L**	88.220	62	0.000
>	Lu	175		**ug/L**		187246	187246.333
	Tl	205	**0.177**	**ug/L**	26.450	2379	0.007
	Pb	208	**0.003**	**ug/L**	97.987	473	0.000
	Th	232	**0.060**	**ug/L**	14.684	1046	0.004
	U	238	**0.009**	**ug/L**	25.531	682	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			100.5		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			100.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			100.2		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Thursday, August 25, 2011 06:59:00
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 3.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**10.669**	**ug/L**	3.404	3534	0.008
|	Be	9	**0.509**	**ug/L**	10.077	54	0.000
|	B	11	**17.531**	**ug/L**	3.134	2124	0.004
|	Na	23	**255.903**	**ug/L**	0.262	295781	0.644
|	Mg	24	**29.886**	**ug/L**	0.789	24583	0.052
|	Al	27	**51.108**	**ug/L**	1.134	62524	0.135
|	P	31	**52.431**	**ug/L**	0.740	6010	0.009
|	K	39	**306.115**	**ug/L**	0.262	928676	1.456
|	Ca	43	**219.908**	**ug/L**	0.482	1059	0.002
|	> Sc	45		**ug/L**		440768	440767.787
|	Ti	47	**9.094**	**ug/L**	1.893	2087	0.005
|	Cr	52	**10.425**	**ug/L**	0.223	31017	0.052
|	Cr	53		**ug/L**		96797	-0.033
|	Mn	55	**5.226**	**ug/L**	2.005	18529	0.040
|	Fe	57	**104.753**	**ug/L**	1.121	10712	0.017
|	Co	59	**1.057**	**ug/L**	2.118	3020	0.007
|	Ni	60	**2.194**	**ug/L**	0.975	1315	0.003
|	Cu	63		**ug/L**		1511	0.003
⌞	Cu	65	**1.078**	**ug/L**	4.330	706	0.001
⌜	Zn	66	**10.708**	**ug/L**	1.474	3594	0.021
|	Zn	67		**ug/L**		3778	0.003
|	Zn	68		**ug/L**		2825	0.015
|	> Ge	74		**ug/L**		164225	164224.666
|	As	75	**8.238**	**ug/L**	15.098	20680	0.021
|	Se	77		**ug/L**		8658	-0.010
|	Se	82	**6.914**	**ug/L**	46.576	-3	0.002
⌞	Kr	83		**ug/L**		6927	0.000
⌜	Sr	88	**10.382**	**ug/L**	1.038	55501	0.524
|	Zr	90	**1.659**	**ug/L**	7.059	4930	0.046
|	Mo	98	**0.514**	**ug/L**	2.529	723	0.006
|	Ag	107	**1.049**	**ug/L**	1.333	2241	0.021
|	Cd	111	**1.071**	**ug/L**	1.736	533	0.005
|	Cd	114		**ug/L**		1266	0.012
|	> In	115		**ug/L**		105562	105561.911
|	Sn	120	**5.057**	**ug/L**	0.495	11639	0.109
|	Sb	121	**3.267**	**ug/L**	0.210	6003	0.055
⌞	Sb	123		**ug/L**		4662	0.043
⌜	Ba	135		**ug/L**		1197	0.006
|	Ba	137	**2.065**	**ug/L**	2.756	2031	0.011
|	> Lu	175		**ug/L**		186109	186109.332
|	Tl	205	**2.063**	**ug/L**	0.140	16379	0.082
|	Pb	208	**2.150**	**ug/L**	1.135	20994	0.110
|	Th	232	**2.038**	**ug/L**	5.001	22977	0.121
⌞	U	238	**0.188**	**ug/L**	1.555	2812	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	106.690				
	Be	9	101.859				
	B	11	116.872				
	Na	23	102.361				
	Mg	24	99.618				
	Al	27	102.215				
	P	31	104.863				
	K	39	102.038				
	Ca	43	109.954				
>	Sc	45		101.3			
	Ti	47	90.936				
	Cr	52	104.247				
	Cr	53					
	Mn	55	104.513				
	Fe	57	104.753				
	Co	59	105.658				
	Ni	60	109.679				
	Cu	63					
	Cu	65	107.779				
	Zn	66	107.082				
	Zn	67					
	Zn	68					
>	Ge	74		100.2			
	As	75	164.767				
	Se	77					
	Se	82	138.276				
	Kr	83					
	Sr	88	103.820				
	Zr	90	82.974				
	Mo	98	102.798				
	Ag	107	104.919				
	Cd	111	107.090				
	Cd	114					
>	In	115		100.6			
	Sn	120	101.136				
	Sb	121	108.913				
	Sb	123					
	Ba	135					
	Ba	137	103.272				
>	Lu	175		99.6			
	Tl	205	103.132				
	Pb	208	107.484				
	Th	232	101.880				
	U	238	93.905				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	As	75	CRDL is out of limits
QC Std 3	Se	82	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Thursday, August 25, 2011 07:07:18
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 4.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.058**	**ug/L**	25.565	52	0.000
	Be	9	**0.023**	**ug/L**	90.578	8	0.000
	B	11	**4.745**	**ug/L**	13.756	793	0.001
	Na	23	**108539.893**	**ug/L**	1.372	112419047	273.118
	Mg	24	**106237.886**	**ug/L**	1.305	76060274	184.797
	Al	27	**107673.748**	**ug/L**	1.141	117014196	284.291
	P	31	**84857.346**	**ug/L**	0.574	5885474	14.294
	K	39	**104940.405**	**ug/L**	1.435	205715706	499.168
	Ca	43	**104137.515**	**ug/L**	0.975	384447	0.934
>	Sc	45		**ug/L**		411607	411606.577
	Ti	47	**1848.217**	**ug/L**	0.803	376986	0.916
	Cr	52	**2.242**	**ug/L**	4.428	12326	0.011
	Cr	53		**ug/L**		69911	-0.082
	Mn	55	**1.971**	**ug/L**	1.387	6958	0.015
	Fe	57	**99975.608**	**ug/L**	0.898	6550164	15.907
	Co	59	**0.185**	**ug/L**	4.457	552	0.001
	Ni	60	**2.964**	**ug/L**	1.113	1644	0.004
	Cu	63		**ug/L**		2064	0.005
	Cu	65	**2.468**	**ug/L**	2.162	1450	0.003
	Zn	66	**6.463**	**ug/L**	0.840	1941	0.013
	Zn	67		**ug/L**		3380	0.004
	Zn	68		**ug/L**		890	0.004
>	Ge	74		**ug/L**		143956	143955.528
	As	75	**7.745**	**ug/L**	14.431	17951	0.019
	Se	77		**ug/L**		7128	-0.013
	Se	82	**0.086**	**ug/L**	1853.952	-241	0.000
	Kr	83		**ug/L**		6740	0.005
	Sr	88	**2.145**	**ug/L**	0.864	10209	0.108
	Zr	90	**0.598**	**ug/L**	43.969	1599	0.017
	Mo	98	**2209.660**	**ug/L**	0.271	2486284	26.869
	Ag	107	**0.085**	**ug/L**	7.942	184	0.002
	Cd	111	**0.723**	**ug/L**	12.285	322	0.003
	Cd	114		**ug/L**		3476	0.037
>	In	115		**ug/L**		92534	92533.755
	Sn	120	**0.275**	**ug/L**	4.216	671	0.006
	Sb	121	**0.343**	**ug/L**	6.399	669	0.006
	Sb	123		**ug/L**		508	0.004
	Ba	135		**ug/L**		221	0.001
	Ba	137	**0.326**	**ug/L**	5.568	336	0.002
>	Lu	175		**ug/L**		170663	170663.276
	Tl	205	**0.014**	**ug/L**	41.693	1056	0.001
	Pb	208	**0.101**	**ug/L**	4.210	1292	0.005
	Th	232	**0.123**	**ug/L**	51.064	1594	0.007
	U	238	**0.201**	**ug/L**	2.658	2722	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23	108.540				
	Mg	24	106.238				
	Al	27	107.674				
	P	31	84.857				
	K	39	104.940				
	Ca	43	104.138				
>	Sc	45			94.6		
	Ti	47	92.411				
	Cr	52	77.862				
	Cr	53					
	Mn	55	101.078				
	Fe	57	99.976				
	Co	59	88.286				
	Ni	60	106.623				
	Cu	63					
	Cu	65	102.237				
	Zn	66	111.644				
	Zn	67					
	Zn	68					
>	Ge	74			87.8		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88	102.336				
	Zr	90					
	Mo	98	110.483				
	Ag	107					
	Cd	111	106.604				
	Cd	114					
>	In	115			88.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137	64.254				
>	Lu	175			91.3		
	Tl	205					
	Pb	208	87.844				
	Th	232					
	U	238	97.981				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Thursday, August 25, 2011 07:15:37
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 5.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**20.624**	**ug/L**	0.455	6425	0.015
	Be	9	**20.447**	**ug/L**	2.877	1832	0.004
	B	11	**23.875**	**ug/L**	2.141	2606	0.005
	Na	23	**108374.279**	**ug/L**	1.268	113638327	272.702
	Mg	24	**105763.973**	**ug/L**	1.037	76656524	183.972
	Al	27	**108109.749**	**ug/L**	0.232	118941340	285.442
	P	31	**85224.915**	**ug/L**	1.126	5983699	14.356
	K	39	**105380.287**	**ug/L**	0.555	209136753	501.260
	Ca	43	**103641.012**	**ug/L**	0.664	387345	0.929
>	Sc	45		**ug/L**		416684	416684.189
	Ti	47	**1841.096**	**ug/L**	0.274	380177	0.912
	Cr	52	**22.562**	**ug/L**	0.481	54308	0.111
	Cr	53		**ug/L**		71121	-0.082
	Mn	55	**22.293**	**ug/L**	0.014	72449	0.172
	Fe	57	**100384.914**	**ug/L**	0.801	6658597	15.972
	Co	59	**20.165**	**ug/L**	0.315	53217	0.128
	Ni	60	**22.825**	**ug/L**	1.780	12519	0.030
	Cu	63		**ug/L**		25279	0.060
	Cu	65	**21.596**	**ug/L**	0.186	12487	0.030
	Zn	66	**26.327**	**ug/L**	1.527	7572	0.052
	Zn	67		**ug/L**		4288	0.010
	Zn	68		**ug/L**		4947	0.033
>	Ge	74		**ug/L**		143421	143421.212
	As	75	**26.646**	**ug/L**	5.246	24652	0.067
	Se	77		**ug/L**		7118	-0.013
	Se	82	**20.685**	**ug/L**	11.491	478	0.005
	Kr	83		**ug/L**		6680	0.005
	Sr	88	**23.698**	**ug/L**	1.475	110166	1.195
	Zr	90	**22.357**	**ug/L**	0.631	57022	0.619
	Mo	98	**2240.365**	**ug/L**	0.533	2506482	27.242
	Ag	107	**19.981**	**ug/L**	0.480	36738	0.399
	Cd	111	**21.549**	**ug/L**	1.057	8946	0.097
	Cd	114		**ug/L**		24525	0.266
>	In	115		**ug/L**		92007	92007.077
	Sn	120	**31.973**	**ug/L**	31.368	63523	0.689
	Sb	121	**21.129**	**ug/L**	1.290	33125	0.359
	Sb	123		**ug/L**		25754	0.279
	Ba	135		**ug/L**		10643	0.063
	Ba	137	**21.153**	**ug/L**	0.346	18353	0.109
>	Lu	175		**ug/L**		168262	168261.652
	Tl	205	**19.604**	**ug/L**	2.440	132653	0.783
	Pb	208	**20.706**	**ug/L**	1.712	179353	1.064
	Th	232	**21.637**	**ug/L**	0.789	217298	1.289
	U	238	**22.044**	**ug/L**	1.196	238096	1.412

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	103.121				
	Be	9	102.236				
	B	11	119.374				
	Na	23	108.374				
	Mg	24	105.764				
	Al	27	108.110				
	P	31	85.225				
	K	39	105.380				
	Ca	43	103.641				
>	Sc	45			95.7		
	Ti	47	92.055				
	Cr	52	98.616				
	Cr	53					
	Mn	55	101.564				
	Fe	57	100.385				
	Co	59	99.775				
	Ni	60	100.197				
	Cu	63					
	Cu	65	96.350				
	Zn	66	102.087				
	Zn	67					
	Zn	68					
>	Ge	74			87.5		
	As	75	133.231				
	Se	77					
	Se	82	103.425				
	Kr	83					
	Sr	88	107.250				
	Zr	90	111.784				
	Mo	98	112.018				
	Ag	107	99.905				
	Cd	111	104.211				
	Cd	114					
>	In	115			87.7		
	Sn	120	159.865				
	Sb	121	105.646				
	Sb	123					
	Ba	135					
	Ba	137	103.144				
>	Lu	175			90.1		
	Tl	205	98.018				
	Pb	208	102.937				
	Th	232	108.187				
	U	238	109.103				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 5	As	75ICSAB is out of limits
QC Std 5	Sn	120ICSAB is out of limits

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Thursday, August 25, 2011 07:23:57
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 6.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.259**	**ug/L**	2.524	17258	0.038
	Be	9	**48.942**	**ug/L**	1.649	4745	0.010
	B	11	**100.123**	**ug/L**	1.256	10620	0.023
	Na	23	**5190.824**	**ug/L**	0.431	5913758	13.062
	Mg	24	**5139.934**	**ug/L**	0.486	4041288	8.941
	Al	27	**5247.445**	**ug/L**	0.857	6262865	13.855
	P	31	**4967.903**	**ug/L**	0.335	380275	0.837
	K	39	**5023.179**	**ug/L**	0.536	11089689	23.894
	Ca	43	**5046.002**	**ug/L**	1.519	20634	0.045
>	Sc	45		**ug/L**		451827	451827.049
	Ti	47	**50.717**	**ug/L**	1.099	11457	0.025
	Cr	52	**48.274**	**ug/L**	0.694	116277	0.238
	Cr	53		**ug/L**		84213	-0.066
	Mn	55	**50.450**	**ug/L**	0.887	176815	0.390
	Fe	57	**5037.132**	**ug/L**	0.598	365557	0.801
	Co	59	**50.898**	**ug/L**	1.097	145534	0.322
	Ni	60	**50.756**	**ug/L**	1.406	30128	0.067
	Cu	63		**ug/L**		65373	0.145
	Cu	65	**49.774**	**ug/L**	0.465	31141	0.069
	Zn	66	**49.339**	**ug/L**	0.456	16325	0.098
	Zn	67		**ug/L**		5589	0.014
	Zn	68		**ug/L**		12068	0.071
>	Ge	74		**ug/L**		165986	165986.248
	As	75	**48.438**	**ug/L**	3.032	37566	0.121
	Se	77		**ug/L**		7595	-0.017
	Se	82	**49.511**	**ug/L**	5.465	1715	0.012
	Kr	83		**ug/L**		6852	-0.001
	Sr	88	**50.802**	**ug/L**	1.254	271533	2.562
	Zr	90	**49.015**	**ug/L**	1.743	143780	1.357
	Mo	98	**48.299**	**ug/L**	0.971	62250	0.587
	Ag	107	**41.193**	**ug/L**	1.629	87134	0.823
	Cd	111	**50.800**	**ug/L**	0.447	24239	0.229
	Cd	114		**ug/L**		59349	0.560
>	In	115		**ug/L**		105889	105889.483
	Sn	120	**49.529**	**ug/L**	0.771	113112	1.067
	Sb	121	**48.341**	**ug/L**	1.106	87029	0.820
	Sb	123		**ug/L**		68252	0.643
	Ba	135		**ug/L**		27577	0.146
	Ba	137	**49.641**	**ug/L**	0.696	48360	0.255
>	Lu	175		**ug/L**		189218	189217.734
	Tl	205	**47.733**	**ug/L**	2.278	361749	1.906
	Pb	208	**50.163**	**ug/L**	0.193	488019	2.577
	Th	232	**49.754**	**ug/L**	0.925	561422	2.965
	U	238	**51.210**	**ug/L**	0.364	621266	3.280

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.518				
	Be	9	97.885				
	B	11	100.123				
	Na	23	103.816				
	Mg	24	102.799				
	Al	27	103.910				
	P	31	99.358				
	K	39	100.464				
	Ca	43	100.920				
>	Sc	45		103.8			
	Ti	47	101.434				
	Cr	52	96.547				
	Cr	53					
	Mn	55	100.899				
	Fe	57	100.743				
	Co	59	101.796				
	Ni	60	101.513				
	Cu	63					
	Cu	65	99.547				
	Zn	66	98.677				
	Zn	67					
	Zn	68					
>	Ge	74		101.3			
	As	75	96.876				
	Se	77					
	Se	82	99.021				
	Kr	83					
	Sr	88	101.603				
	Zr	90	98.030				
	Mo	98	96.598				
	Ag	107	82.386				
	Cd	111	101.599				
	Cd	114					
>	In	115		100.9			
	Sn	120	99.057				
	Sb	121	96.683				
	Sb	123					
	Ba	135					
	Ba	137	99.281				
>	Lu	175		101.3			
	Tl	205	95.465				
	Pb	208	100.327				
	Th	232	99.508				
	U	238	102.421				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Ag	107	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Thursday, August 25, 2011 07:32:17
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 7.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**-0.009**	**ug/L**	157.969	34	-0.000
	Be	9	**0.005**	**ug/L**	734.643	7	0.000
	B	11	**1.903**	**ug/L**	41.271	575	0.000
	Na	23	**0.302**	**ug/L**	159.264	12494	0.001
	Mg	24	**1.601**	**ug/L**	49.731	2944	0.003
	Al	27	**1.771**	**ug/L**	23.432	5190	0.005
	P	31	**3.099**	**ug/L**	13.020	2384	0.001
	K	39	**-1.156**	**ug/L**	65.505	289012	-0.006
	Ca	43	**1.137**	**ug/L**	9.250	197	0.000
>	Sc	45		**ug/L**		447819	447819.310
	Ti	47	**0.040**	**ug/L**	61.128	111	0.000
	Cr	52	**-1.264**	**ug/L**	5.798	5654	-0.006
	Cr	53		**ug/L**		73225	-0.089
	Mn	55	**-0.055**	**ug/L**	8.026	560	-0.000
	Fe	57	**3.966**	**ug/L**	59.754	3702	0.001
	Co	59	**0.004**	**ug/L**	13.395	88	0.000
	Ni	60	**0.005**	**ug/L**	164.821	51	0.000
	Cu	63		**ug/L**		89	0.000
	Cu	65	**0.003**	**ug/L**	264.963	52	0.000
	Zn	66	**0.021**	**ug/L**	108.399	121	0.000
	Zn	67		**ug/L**		2903	-0.002
	Zn	68		**ug/L**		271	-0.000
>	Ge	74		**ug/L**		164653	164653.012
	As	75	**0.636**	**ug/L**	157.757	17611	0.002
	Se	77		**ug/L**		6106	-0.026
	Se	82	**1.450**	**ug/L**	147.759	-221	0.000
	Kr	83		**ug/L**		6888	-0.000
	Sr	88	**-0.001**	**ug/L**	348.337	222	-0.000
	Zr	90	**0.011**	**ug/L**	43.591	112	0.000
	Mo	98	**0.130**	**ug/L**	15.926	229	0.002
	Ag	107	**0.004**	**ug/L**	27.673	38	0.000
	Cd	111	**-0.006**	**ug/L**	130.500	21	-0.000
	Cd	114		**ug/L**		57	0.000
>	In	115		**ug/L**		104990	104990.085
	Sn	120	**0.022**	**ug/L**	44.834	189	0.000
	Sb	121	**0.114**	**ug/L**	11.617	352	0.002
	Sb	123		**ug/L**		275	0.001
	Ba	135		**ug/L**		50	0.000
	Ba	137	**0.010**	**ug/L**	25.817	63	0.000
>	Lu	175		**ug/L**		184768	184767.902
	Tl	205	**0.383**	**ug/L**	33.151	3870	0.015
	Pb	208	**0.003**	**ug/L**	60.945	474	0.000
	Th	232	**0.043**	**ug/L**	18.909	842	0.003
	U	238	**0.008**	**ug/L**	50.473	660	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45		102.9			
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74		100.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115		100.1			
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175		98.9			
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Thursday, August 25, 2011 07:40:37
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 10.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**1017.046**	**ug/L**	1.187	290010	0.756
|	Be	9	**999.967**	**ug/L**	1.492	82160	0.214
|	B	11	**0.264**	**ug/L**	77.210	350	0.000
|	Na	23	**52008.306**	**ug/L**	1.057	50166802	130.868
|	Mg	24	**51100.738**	**ug/L**	0.450	34070336	88.888
|	Al	27	**51827.900**	**ug/L**	0.822	52471844	136.841
|	P	31	**24843.569**	**ug/L**	1.138	1605395	4.185
|	K	39	**50578.935**	**ug/L**	1.181	92436621	240.588
|	Ca	43	**50333.088**	**ug/L**	0.651	173138	0.451
|	> Sc	45		**ug/L**		383322	383322.310
|	Ti	47	**40.254**	**ug/L**	2.494	7731	0.020
|	Cr	52	**1023.724**	**ug/L**	3.060	1947076	5.057
|	Cr	53		**ug/L**		280722	0.480
|	Mn	55	**1050.147**	**ug/L**	2.110	3108492	8.111
|	Fe	57	**49133.926**	**ug/L**	1.924	2997802	7.817
|	Co	59	**1082.758**	**ug/L**	2.399	2623104	6.849
|	Ni	60	**1000.794**	**ug/L**	1.323	503010	1.313
|	Cu	63		**ug/L**		1079083	2.817
⌞	Cu	65	**965.189**	**ug/L**	1.633	511240	1.334
⌜	Zn	66	**2350.799**	**ug/L**	1.504	653128	4.653
|	Zn	67		**ug/L**		105051	0.729
|	Zn	68		**ug/L**		468296	3.336
|	> Ge	74		**ug/L**		140317	140316.562
|	As	75	**955.482**	**ug/L**	1.451	349501	2.386
|	Se	77		**ug/L**		17492	0.062
|	Se	82	**490.968**	**ug/L**	1.889	16495	0.119
⌞	Kr	83		**ug/L**		6201	0.002
⌜	Sr	88	**1074.900**	**ug/L**	0.693	4809828	54.212
|	Zr	90	**527.330**	**ug/L**	0.483	1295526	14.601
|	Mo	98	**1050.296**	**ug/L**	1.402	1133028	12.771
|	Ag	107	**249.009**	**ug/L**	1.080	441176	4.973
|	Cd	111	**1038.842**	**ug/L**	0.538	414953	4.676
|	Cd	114		**ug/L**		1008124	11.362
|	> In	115		**ug/L**		88732	88732.135
|	Sn	120	**1055.176**	**ug/L**	2.084	2017891	22.730
|	Sb	121	**234.536**	**ug/L**	1.950	353200	3.981
⌞	Sb	123		**ug/L**		275069	3.100
⌜	Ba	135		**ug/L**		488875	2.935
|	Ba	137	**989.052**	**ug/L**	0.830	847193	5.086
|	> Lu	175		**ug/L**		166568	166568.153
|	Tl	205	**500.276**	**ug/L**	1.181	3328142	19.977
|	Pb	208	**5129.980**	**ug/L**	0.835	43889105	263.513
|	Th	232	**2675.752**	**ug/L**	0.911	26558465	159.459
⌞	U	238	**5453.922**	**ug/L**	0.992	58184343	349.349

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	101.705				
	Be	9	99.997				
	B	11					
	Na	23	104.017				
	Mg	24	102.201				
	Al	27	103.656				
	P	31	99.374				
	K	39	101.158				
	Ca	43	100.666				
>	Sc	45			88.1		
	Ti	47					
	Cr	52	102.372				
	Cr	53					
	Mn	55	105.015				
	Fe	57	98.268				
	Co	59	108.276				
	Ni	60	100.079				
	Cu	63					
	Cu	65	96.519				
	Zn	66	94.032				
	Zn	67					
	Zn	68					
>	Ge	74			85.6		
	As	75	95.548				
	Se	77					
	Se	82	98.194				
	Kr	83					
	Sr	88	107.490				
	Zr	90	105.466				
	Mo	98	105.030				
	Ag	107	99.604				
	Cd	111	103.884				
	Cd	114					
>	In	115			84.6		
	Sn	120	105.518				
	Sb	121	93.814				
	Sb	123					
	Ba	135					
	Ba	137	98.905				
>	Lu	175			89.2		
	Tl	205	100.055				
	Pb	208	102.600				
	Th	232	107.030				
	U	238	109.078				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Thursday, August 25, 2011 07:48:55
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 11.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**51.377**	**ug/L**	0.940	15414	0.038
	Be	9	**49.620**	**ug/L**	0.280	4287	0.011
	B	11	**96.392**	**ug/L**	2.034	9123	0.022
	Na	23	**5115.357**	**ug/L**	0.786	5193010	12.872
	Mg	24	**5138.495**	**ug/L**	0.902	3600014	8.938
	Al	27	**5149.813**	**ug/L**	2.163	5476985	13.597
	P	31	**4935.666**	**ug/L**	0.792	336648	0.831
	K	39	**4979.640**	**ug/L**	1.101	9798093	23.687
	Ca	43	**5039.569**	**ug/L**	1.614	18363	0.045
>	Sc	45		**ug/L**		402590	402590.390
	Ti	47	**49.782**	**ug/L**	0.245	10022	0.025
	Cr	52	**48.743**	**ug/L**	1.232	104541	0.241
	Cr	53		**ug/L**		76861	-0.061
	Mn	55	**50.672**	**ug/L**	1.232	158246	0.391
	Fe	57	**5032.840**	**ug/L**	0.529	325447	0.801
	Co	59	**51.583**	**ug/L**	0.967	131428	0.326
	Ni	60	**52.574**	**ug/L**	0.795	27807	0.069
	Cu	63		**ug/L**		60413	0.150
	Cu	65	**51.986**	**ug/L**	0.403	28979	0.072
	Zn	66	**49.761**	**ug/L**	0.326	14886	0.099
	Zn	67		**ug/L**		5339	0.016
	Zn	68		**ug/L**		11109	0.072
>	Ge	74		**ug/L**		150070	150069.613
	As	75	**50.879**	**ug/L**	1.825	34880	0.127
	Se	77		**ug/L**		6550	-0.019
	Se	82	**53.066**	**ug/L**	7.529	1680	0.013
	Kr	83		**ug/L**		6342	0.000
	Sr	88	**49.839**	**ug/L**	0.821	244797	2.514
	Zr	90	**49.546**	**ug/L**	0.998	133552	1.372
	Mo	98	**49.168**	**ug/L**	0.280	58232	0.598
	Ag	107	**41.468**	**ug/L**	0.630	80603	0.828
	Cd	111	**51.506**	**ug/L**	0.355	22583	0.232
	Cd	114		**ug/L**		54841	0.563
>	In	115		**ug/L**		97304	97303.676
	Sn	120	**50.600**	**ug/L**	0.332	106190	1.090
	Sb	121	**51.502**	**ug/L**	0.906	85189	0.874
	Sb	123		**ug/L**		66047	0.678
	Ba	135		**ug/L**		26129	0.150
	Ba	137	**50.064**	**ug/L**	0.755	44830	0.257
>	Lu	175		**ug/L**		173922	173921.765
	Tl	205	**49.968**	**ug/L**	1.096	348036	1.995
	Pb	208	**51.991**	**ug/L**	0.780	464898	2.671
	Th	232	**53.267**	**ug/L**	0.338	552445	3.174
	U	238	**53.827**	**ug/L**	0.720	600189	3.448

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	102.754				
	Be	9	99.240				
	B	11	96.392				
	Na	23	102.307				
	Mg	24	102.770				
	Al	27	101.977				
	P	31	98.713				
	K	39	99.593				
	Ca	43	100.791				
>	Sc	45			92.5		
	Ti	47	99.564				
	Cr	52	97.486				
	Cr	53					
	Mn	55	101.345				
	Fe	57	100.657				
	Co	59	103.165				
	Ni	60	105.147				
	Cu	63					
	Cu	65	103.972				
	Zn	66	99.522				
	Zn	67					
	Zn	68					
>	Ge	74			91.6		
	As	75	101.759				
	Se	77					
	Se	82	106.133				
	Kr	83					
	Sr	88	99.679				
	Zr	90	99.092				
	Mo	98	98.336				
	Ag	107	82.935				
	Cd	111	103.011				
	Cd	114					
>	In	115			92.7		
	Sn	120	101.199				
	Sb	121	103.003				
	Sb	123					
	Ba	135					
	Ba	137	100.127				
>	Lu	175			93.1		
	Tl	205	99.936				
	Pb	208	103.982				
	Th	232	106.535				
	U	238	107.654				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Ag	107	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Thursday, August 25, 2011 07:57:15
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 12.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.033**	**ug/L**	41.073	45	0.000
	Be	9	**0.047**	**ug/L**	80.584	10	0.000
	B	11	**1.374**	**ug/L**	56.027	488	0.000
	Na	23	**-0.566**	**ug/L**	41.173	10777	-0.001
	Mg	24	**1.341**	**ug/L**	37.140	2565	0.002
	Al	27	**1.353**	**ug/L**	34.423	4393	0.004
	P	31	**2.660**	**ug/L**	81.477	2200	0.000
	K	39	**1.561**	**ug/L**	75.784	275942	0.007
	Ca	43	**1.174**	**ug/L**	734.477	185	0.000
>	Sc	45		**ug/L**		419175	419175.470
	Ti	47	**-0.036**	**ug/L**	51.662	88	-0.000
	Cr	52	**-1.201**	**ug/L**	7.509	5423	-0.006
	Cr	53		**ug/L**		65103	-0.097
	Mn	55	**-0.044**	**ug/L**	7.252	562	-0.000
	Fe	57	**1.939**	**ug/L**	53.485	3330	0.000
	Co	59	**0.022**	**ug/L**	14.801	130	0.000
	Ni	60	**0.018**	**ug/L**	54.485	55	0.000
	Cu	63		**ug/L**		123	0.000
	Cu	65	**0.032**	**ug/L**	39.738	65	0.000
	Zn	66	**0.015**	**ug/L**	134.664	112	0.000
	Zn	67		**ug/L**		2781	-0.002
	Zn	68		**ug/L**		284	0.000
>	Ge	74		**ug/L**		156007	156006.909
	As	75	**0.821**	**ug/L**	49.263	16758	0.002
	Se	77		**ug/L**		5364	-0.029
	Se	82	**3.848**	**ug/L**	32.526	-118	0.001
	Kr	83		**ug/L**		6507	-0.000
	Sr	88	**0.010**	**ug/L**	66.239	265	0.000
	Zr	90	**0.019**	**ug/L**	32.385	129	0.001
	Mo	98	**0.217**	**ug/L**	8.599	325	0.003
	Ag	107	**0.009**	**ug/L**	22.198	46	0.000
	Cd	111	**0.007**	**ug/L**	213.626	26	0.000
	Cd	114		**ug/L**		67	0.000
>	In	115		**ug/L**		100403	100403.035
	Sn	120	**0.141**	**ug/L**	10.866	439	0.003
	Sb	121	**0.846**	**ug/L**	6.810	1584	0.014
	Sb	123		**ug/L**		1255	0.011
	Ba	135		**ug/L**		52	0.000
	Ba	137	**0.023**	**ug/L**	40.861	73	0.000
>	Lu	175		**ug/L**		177448	177447.969
	Tl	205	**0.524**	**ug/L**	26.949	4714	0.021
	Pb	208	**0.060**	**ug/L**	35.688	974	0.003
	Th	232	**0.102**	**ug/L**	14.800	1433	0.006
	U	238	**0.075**	**ug/L**	26.203	1396	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			96.3		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			95.2		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			95.7		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			95.0		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472433
Sample Date/Time: Thursday, August 25, 2011 08:05:37
Sample Type: Sample
Sample Description: ECOL 0520 MB
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\1202472433.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.039**	**ug/L**	72.868	48	0.000
|	Be	9	**0.023**	**ug/L**	50.726	8	0.000
|	B	11	**-0.181**	**ug/L**	194.736	346	-0.000
|	Na	23	**6.113**	**ug/L**	22.506	18114	0.015
|	Mg	24	**-0.360**	**ug/L**	341.807	1341	-0.001
|	Al	27	**0.892**	**ug/L**	129.020	3941	0.002
|	P	31	**-7.958**	**ug/L**	2.589	1476	-0.001
|	K	39	**1.261**	**ug/L**	216.971	279959	0.006
|	Ca	43	**8.304**	**ug/L**	98.311	215	0.000
| >	Sc	45		**ug/L**		426272	426271.735
|	Ti	47	**0.020**	**ug/L**	68.124	102	0.000
|	Cr	52	**-0.315**	**ug/L**	15.767	7382	-0.002
|	Cr	53		**ug/L**		100969	-0.015
|	Mn	55	**0.029**	**ug/L**	83.060	810	0.000
|	Fe	57	**2.003**	**ug/L**	71.003	3390	0.000
|	Co	59	**0.010**	**ug/L**	203.101	100	0.000
|	Ni	60	**0.051**	**ug/L**	61.677	74	0.000
|	Cu	63		**ug/L**		195	0.000
⌊	Cu	65	**0.092**	**ug/L**	20.582	102	0.000
⌈	Zn	66	**0.618**	**ug/L**	11.926	302	0.001
|	Zn	67		**ug/L**		4252	0.007
|	Zn	68		**ug/L**		471	0.001
| >	Ge	74		**ug/L**		157828	157827.966
|	As	75	**3.439**	**ug/L**	15.161	17985	0.009
|	Se	77		**ug/L**		9002	-0.006
|	Se	82	**3.323**	**ug/L**	94.817	-140	0.001
⌊	Kr	83		**ug/L**		6591	-0.000
⌈	Sr	88	**0.009**	**ug/L**	220.861	267	0.000
|	Zr	90	**0.016**	**ug/L**	49.765	124	0.000
|	Mo	98	**0.077**	**ug/L**	34.914	157	0.001
|	Ag	107	**0.002**	**ug/L**	410.503	32	0.000
|	Cd	111	**0.004**	**ug/L**	614.929	25	0.000
|	Cd	114		**ug/L**		54	0.000
| >	In	115		**ug/L**		102410	102409.812
|	Sn	120	**0.112**	**ug/L**	15.972	382	0.002
|	Sb	121	**0.517**	**ug/L**	7.224	1044	0.009
⌊	Sb	123		**ug/L**		826	0.007
⌈	Ba	135		**ug/L**		112	0.000
|	Ba	137	**0.136**	**ug/L**	19.595	178	0.001
| >	Lu	175		**ug/L**		179687	179686.572
|	Tl	205	**0.111**	**ug/L**	18.145	1810	0.004
|	Pb	208	**0.072**	**ug/L**	114.199	1094	0.004
|	Th	232	**0.030**	**ug/L**	80.588	681	0.002
⌊	U	238	**0.058**	**ug/L**	139.029	1217	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7					
|	Be	9					
|	B	11					
|	Na	23					
|	Mg	24					
|	Al	27					
|	P	31					
|	K	39					
|	Ca	43					
| >	Sc	45			98.0		
|	Ti	47					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Fe	57					
|	Co	59					
|	Ni	60					
|	Cu	63					
⌊	Cu	65					
⌈	Zn	66					
|	Zn	67					
|	Zn	68					
| >	Ge	74			96.3		
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈	Sr	88					
|	Zr	90					
|	Mo	98					
|	Ag	107					
|	Cd	111					
|	Cd	114					
| >	In	115			97.6		
|	Sn	120					
|	Sb	121					
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137					
| >	Lu	175			96.2		
|	Tl	205					
|	Pb	208					
|	Th	232					
⌊	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472434
Sample Date/Time: Thursday, August 25, 2011 08:14:15
Sample Type: Sample
Sample Description: ECOL 0520 LCS
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\1202472434.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**50.555**	**ug/L**	4.631	16366	0.038
|	Be	9	**49.798**	**ug/L**	3.537	4642	0.011
|	B	11	**94.997**	**ug/L**	2.330	9706	0.021
|	Na	23	**1990.659**	**ug/L**	0.645	2187430	5.009
|	Mg	24	**1862.093**	**ug/L**	0.056	1408479	3.239
|	Al	27	**1944.433**	**ug/L**	1.378	2232776	5.134
|	P	31	**1910.190**	**ug/L**	0.665	141842	0.322
|	K	39	**1886.538**	**ug/L**	0.743	4180359	8.974
|	Ca	43	**1955.688**	**ug/L**	1.030	7802	0.018
|	> Sc	45		**ug/L**		434336	434335.866
|	Ti	47	**40.801**	**ug/L**	1.818	8879	0.020
|	Cr	52	**46.748**	**ug/L**	0.996	108506	0.231
|	Cr	53		**ug/L**		105614	-0.009
|	Mn	55	**47.146**	**ug/L**	0.324	158893	0.364
|	Fe	57	**1891.792**	**ug/L**	1.223	134050	0.301
|	Co	59	**48.668**	**ug/L**	0.261	133781	0.308
|	Ni	60	**49.205**	**ug/L**	0.810	28079	0.065
|	Cu	63		**ug/L**		62653	0.144
⌊	Cu	65	**49.731**	**ug/L**	1.559	29911	0.069
⌜	Zn	66	**51.125**	**ug/L**	0.211	16207	0.101
|	Zn	67		**ug/L**		6853	0.024
|	Zn	68		**ug/L**		12019	0.074
|	> Ge	74		**ug/L**		159065	159065.253
|	As	75	**47.632**	**ug/L**	4.659	35676	0.119
|	Se	77		**ug/L**		9517	-0.003
|	Se	82	**52.692**	**ug/L**	2.484	1767	0.013
⌊	Kr	83		**ug/L**		6607	-0.000
⌜	Sr	88	**46.474**	**ug/L**	0.656	240681	2.344
|	Zr	90	**46.390**	**ug/L**	0.796	131845	1.284
|	Mo	98	**45.812**	**ug/L**	0.599	57208	0.557
|	Ag	107	**47.759**	**ug/L**	0.659	97870	0.954
|	Cd	111	**49.291**	**ug/L**	0.447	22786	0.222
|	Cd	114		**ug/L**		56008	0.545
|	> In	115		**ug/L**		102591	102590.672
|	Sn	120	**46.864**	**ug/L**	0.979	103699	1.010
|	Sb	121	**47.671**	**ug/L**	0.592	83152	0.809
⌊	Sb	123		**ug/L**		64382	0.626
⌜	Ba	135		**ug/L**		25887	0.143
|	Ba	137	**47.984**	**ug/L**	2.362	44677	0.247
|	> Lu	175		**ug/L**		180901	180901.202
|	Tl	205	**45.971**	**ug/L**	3.519	332937	1.836
|	Pb	208	**49.083**	**ug/L**	1.986	456396	2.521
|	Th	232	**48.511**	**ug/L**	2.755	523124	2.891
⌊	U	238	**50.387**	**ug/L**	1.991	584247	3.228

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.8		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			97.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			97.8		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			96.8		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 13
Sample Date/Time: Thursday, August 25, 2011 08:22:36
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 13.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**50.650**	**ug/L**	2.415	16151	0.038
	Be	9	**48.105**	**ug/L**	1.982	4417	0.010
	B	11	**101.577**	**ug/L**	1.026	10198	0.023
	Na	23	**5032.353**	**ug/L**	0.661	5430020	12.663
	Mg	24	**5044.881**	**ug/L**	0.328	3756580	8.775
	Al	27	**5145.660**	**ug/L**	0.600	5816308	13.586
	P	31	**4926.490**	**ug/L**	1.083	357153	0.830
	K	39	**4928.106**	**ug/L**	1.170	10308730	23.441
	Ca	43	**5030.719**	**ug/L**	0.883	19485	0.045
>	Sc	45		**ug/L**		427904	427903.547
	Ti	47	**49.233**	**ug/L**	0.940	10535	0.024
	Cr	52	**47.945**	**ug/L**	0.244	109426	0.237
	Cr	53		**ug/L**		85068	-0.053
	Mn	55	**49.885**	**ug/L**	0.281	165591	0.385
	Fe	57	**4911.503**	**ug/L**	0.585	337642	0.781
	Co	59	**50.091**	**ug/L**	0.601	135651	0.317
	Ni	60	**50.781**	**ug/L**	1.618	28549	0.067
	Cu	63		**ug/L**		62652	0.146
	Cu	65	**49.936**	**ug/L**	0.481	29587	0.069
	Zn	66	**49.184**	**ug/L**	1.053	15430	0.097
	Zn	67		**ug/L**		5553	0.016
	Zn	68		**ug/L**		11502	0.071
>	Ge	74		**ug/L**		157373	157372.563
	As	75	**48.080**	**ug/L**	3.347	35474	0.120
	Se	77		**ug/L**		7232	-0.017
	Se	82	**55.356**	**ug/L**	5.070	1850	0.013
	Kr	83		**ug/L**		6490	-0.001
	Sr	88	**50.057**	**ug/L**	1.208	254914	2.525
	Zr	90	**49.287**	**ug/L**	2.732	137737	1.365
	Mo	98	**48.195**	**ug/L**	0.994	59183	0.586
	Ag	107	**40.983**	**ug/L**	0.266	82600	0.818
	Cd	111	**51.183**	**ug/L**	0.845	23268	0.230
	Cd	114		**ug/L**		56808	0.563
>	In	115		**ug/L**		100893	100892.682
	Sn	120	**49.302**	**ug/L**	0.187	107285	1.062
	Sb	121	**48.429**	**ug/L**	0.605	83073	0.822
	Sb	123		**ug/L**		64969	0.643
	Ba	135		**ug/L**		26446	0.147
	Ba	137	**49.462**	**ug/L**	0.661	45759	0.254
>	Lu	175		**ug/L**		179690	179689.952
	Tl	205	**48.687**	**ug/L**	0.394	350370	1.944
	Pb	208	**50.921**	**ug/L**	0.356	470431	2.616
	Th	232	**50.974**	**ug/L**	1.207	546233	3.038
	U	238	**52.409**	**ug/L**	0.131	603784	3.357

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	7	101.300				
|	Be	9	96.211				
|	B	11	101.577				
|	Na	23	100.647				
|	Mg	24	100.898				
|	Al	27	101.894				
|	P	31	98.530				
|	K	39	98.562				
|	Ca	43	100.614				
| >	Sc	45			98.3		
|	Ti	47	98.466				
|	Cr	52	95.889				
|	Cr	53					
|	Mn	55	99.769				
|	Fe	57	98.230				
|	Co	59	100.181				
|	Ni	60	101.562				
|	Cu	63					
⌊	Cu	65	99.871				
⌈	Zn	66	98.369				
|	Zn	67					
|	Zn	68					
| >	Ge	74			96.0		
|	As	75	96.160				
|	Se	77					
|	Se	82	110.711				
⌊	Kr	83					
⌈	Sr	88	100.114				
|	Zr	90	98.573				
|	Mo	98	96.390				
|	Ag	107	81.966				
|	Cd	111	102.367				
|	Cd	114					
| >	In	115			96.2		
|	Sn	120	98.605				
|	Sb	121	96.857				
⌊	Sb	123					
⌈	Ba	135					
|	Ba	137	98.925				
| >	Lu	175			96.2		
|	Tl	205	97.373				
|	Pb	208	101.842				
|	Th	232	101.949				
⌊	U	238	104.818				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 13	Se	82	CCV is out of limits (+/- 10%)
QC Std 13	Ag	107	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 15
Sample Date/Time: Thursday, August 25, 2011 08:31:13
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 15.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**0.003**	**ug/L**	179.201	37	0.000
|	Be	9	**0.015**	**ug/L**	233.611	8	0.000
|	B	11	**2.531**	**ug/L**	23.439	620	0.001
|	Na	23	**-2.113**	**ug/L**	5.009	9487	-0.005
|	Mg	24	**1.126**	**ug/L**	11.399	2498	0.002
|	Al	27	**1.113**	**ug/L**	8.644	4283	0.003
|	P	31	**-0.565**	**ug/L**	115.805	2047	-0.000
|	K	39	**-4.787**	**ug/L**	23.812	273073	-0.023
|	Ca	43	**-7.239**	**ug/L**	57.699	159	-0.000
|	> Sc	45		**ug/L**		434744	434743.737
|	Ti	47	**-0.027**	**ug/L**	117.058	94	-0.000
|	Cr	52	**-1.348**	**ug/L**	5.034	5309	-0.007
|	Cr	53		**ug/L**		69718	-0.092
|	Mn	55	**-0.045**	**ug/L**	10.552	578	-0.000
|	Fe	57	**1.817**	**ug/L**	30.301	3445	0.000
|	Co	59	**0.014**	**ug/L**	13.513	113	0.000
|	Ni	60	**0.013**	**ug/L**	70.431	54	0.000
|	Cu	63		**ug/L**		97	0.000
⌊	Cu	65	**0.019**	**ug/L**	7.703	60	0.000
⌈	Zn	66	**0.051**	**ug/L**	23.521	127	0.000
|	Zn	67		**ug/L**		2780	-0.002
|	Zn	68		**ug/L**		265	-0.000
|	> Ge	74		**ug/L**		160545	160545.348
|	As	75	**0.945**	**ug/L**	93.941	17295	0.002
|	Se	77		**ug/L**		5655	-0.028
|	Se	82	**-1.711**	**ug/L**	122.506	-339	-0.000
⌊	Kr	83		**ug/L**		6694	-0.000
⌈	Sr	88	**0.005**	**ug/L**	32.147	250	0.000
|	Zr	90	**0.016**	**ug/L**	13.456	125	0.000
|	Mo	98	**0.086**	**ug/L**	9.088	171	0.001
|	Ag	107	**0.008**	**ug/L**	36.789	46	0.000
|	Cd	111	**0.004**	**ug/L**	273.244	25	0.000
|	Cd	114		**ug/L**		65	0.000
|	> In	115		**ug/L**		104052	104051.984
|	Sn	120	**0.041**	**ug/L**	17.946	229	0.001
|	Sb	121	**0.277**	**ug/L**	6.582	636	0.005
⌊	Sb	123		**ug/L**		527	0.004
⌈	Ba	135		**ug/L**		54	0.000
|	Ba	137	**0.009**	**ug/L**	41.513	62	0.000
|	> Lu	175		**ug/L**		183380	183379.994
|	Tl	205	**0.531**	**ug/L**	20.688	4923	0.021
|	Pb	208	**0.033**	**ug/L**	11.453	748	0.002
|	Th	232	**0.066**	**ug/L**	7.484	1094	0.004
⌊	U	238	**0.038**	**ug/L**	2.807	1007	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			99.9		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			98.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			99.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			98.2		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 284538001
Sample Date/Time: Thursday, August 25, 2011 08:39:52
Sample Type: Sample
Sample Description: ECOL 0520
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\284538001.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**1.738**	**ug/L**	5.896	650	0.001
|	Be	9	**0.209**	**ug/L**	6.983	28	0.000
|	B	11	**12.960**	**ug/L**	3.722	1789	0.003
|	Na	23	**3586.289**	**ug/L**	0.502	4279730	9.024
|	Mg	24	**2590.439**	**ug/L**	0.157	2132270	4.506
|	Al	27	**8171.490**	**ug/L**	0.534	10203948	21.575
|	P	31	**285.390**	**ug/L**	1.439	25000	0.048
|	K	39	**907.245**	**ug/L**	0.182	2348111	4.315
|	Ca	43	**4933.735**	**ug/L**	0.840	21117	0.044
|	> Sc	45		**ug/L**		472810	472810.238
|	Ti	47	**269.400**	**ug/L**	0.840	63211	0.133
|	Cr	52	**14.515**	**ug/L**	2.173	42820	0.072
|	Cr	53		**ug/L**		95889	-0.049
|	Mn	55	**274.511**	**ug/L**	0.736	1003334	2.120
|	Fe	57	**6846.841**	**ug/L**	1.661	518631	1.089
|	Co	59	**5.142**	**ug/L**	0.445	15457	0.033
|	Ni	60	**16.378**	**ug/L**	1.893	10208	0.021
|	Cu	63		**ug/L**		13948	0.029
⌊	Cu	65	**10.038**	**ug/L**	1.336	6613	0.014
⌈	Zn	66	**14.925**	**ug/L**	1.718	5010	0.030
|	Zn	67		**ug/L**		4398	0.007
|	Zn	68		**ug/L**		4425	0.025
|	> Ge	74		**ug/L**		165693	165692.952
|	As	75	**1.608**	**ug/L**	68.809	18125	0.004
|	Se	77		**ug/L**		8161	-0.014
|	Se	82	**-1.065**	**ug/L**	158.453	-323	-0.000
⌊	Kr	83		**ug/L**		6707	-0.001
⌈	Sr	88	**38.980**	**ug/L**	1.747	208248	1.966
|	Zr	90	**5.684**	**ug/L**	2.654	16729	0.157
|	Mo	98	**2.103**	**ug/L**	1.534	2769	0.026
|	Ag	107	**0.101**	**ug/L**	1.130	242	0.002
|	Cd	111	**0.060**	**ug/L**	19.483	53	0.000
|	Cd	114		**ug/L**		100	0.000
|	> In	115		**ug/L**		105822	105821.601
|	Sn	120	**0.190**	**ug/L**	0.826	574	0.004
|	Sb	121	**0.433**	**ug/L**	1.586	928	0.007
⌊	Sb	123		**ug/L**		752	0.006
⌈	Ba	135		**ug/L**		64226	0.332
|	Ba	137	**111.639**	**ug/L**	1.908	111075	0.574
|	> Lu	175		**ug/L**		193397	193397.323
|	Tl	205	**0.167**	**ug/L**	9.690	2384	0.007
|	Pb	208	**3.581**	**ug/L**	0.959	36032	0.184
|	Th	232	**0.144**	**ug/L**	1.028	2050	0.009
⌊	U	238	**0.163**	**ug/L**	3.079	2617	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			108.6		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			101.1		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			100.9		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			103.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472435
Sample Date/Time: Thursday, August 25, 2011 08:48:13
Sample Type: Sample
Sample Description: ECOL 0520 MS
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\1202472435.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**59.477**	**ug/L**	1.120	21630	0.044
|	Be	9	**52.267**	**ug/L**	0.288	5474	0.011
|	B	11	**116.478**	**ug/L**	0.526	13280	0.026
|	Na	23	**5732.461**	**ug/L**	1.410	7054504	14.425
|	Mg	24	**4654.306**	**ug/L**	0.886	3953828	8.096
|	Al	27	**10692.658**	**ug/L**	0.566	13784414	28.232
|	P	31	**2130.760**	**ug/L**	0.564	177550	0.359
|	K	39	**2788.840**	**ug/L**	0.114	6793144	13.266
|	Ca	43	**6951.318**	**ug/L**	0.193	30632	0.062
|	> Sc	45		**ug/L**		488136	488135.914
|	Ti	47	**332.646**	**ug/L**	0.379	80560	0.165
|	Cr	52	**60.651**	**ug/L**	0.269	155472	0.300
|	Cr	53		**ug/L**		96812	-0.054
|	Mn	55	**325.719**	**ug/L**	1.017	1228907	2.516
|	Fe	57	**8810.420**	**ug/L**	0.507	687988	1.402
|	Co	59	**52.376**	**ug/L**	0.766	161803	0.331
|	Ni	60	**62.489**	**ug/L**	0.435	40064	0.082
|	Cu	63		**ug/L**		79469	0.163
⌊	Cu	65	**56.068**	**ug/L**	0.065	37892	0.078
⌈	Zn	66	**63.816**	**ug/L**	0.827	21302	0.126
|	Zn	67		**ug/L**		6898	0.022
|	Zn	68		**ug/L**		16310	0.095
|	> Ge	74		**ug/L**		167709	167709.174
|	As	75	**47.564**	**ug/L**	3.270	37592	0.119
|	Se	77		**ug/L**		9213	-0.008
|	Se	82	**56.075**	**ug/L**	5.312	2001	0.014
⌊	Kr	83		**ug/L**		6695	-0.002
⌈	Sr	88	**88.808**	**ug/L**	1.492	485108	4.479
|	Zr	90	**33.242**	**ug/L**	1.062	99734	0.920
|	Mo	98	**48.850**	**ug/L**	0.632	64374	0.594
|	Ag	107	**47.594**	**ug/L**	1.013	102925	0.950
|	Cd	111	**49.931**	**ug/L**	1.287	24359	0.225
|	Cd	114		**ug/L**		59445	0.549
|	> In	115		**ug/L**		108265	108264.998
|	Sn	120	**48.570**	**ug/L**	0.532	113420	1.046
|	Sb	121	**47.468**	**ug/L**	0.464	87376	0.806
⌊	Sb	123		**ug/L**		67429	0.622
⌈	Ba	135		**ug/L**		92028	0.458
|	Ba	137	**155.745**	**ug/L**	1.916	160819	0.801
|	> Lu	175		**ug/L**		200761	200760.734
|	Tl	205	**44.803**	**ug/L**	1.920	360399	1.789
|	Pb	208	**51.172**	**ug/L**	0.587	528162	2.629
|	Th	232	**42.236**	**ug/L**	1.011	505672	2.517
⌊	U	238	**48.217**	**ug/L**	1.039	620600	3.089

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			112.2		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			102.3		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			103.2		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			107.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472436
Sample Date/Time: Thursday, August 25, 2011 08:56:34
Sample Type: Sample
Sample Description: ECOL 0520 MSD
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\1202472436.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Li	7	**67.597**	**ug/L**	2.447	24457	0.050
|	Be	9	**58.096**	**ug/L**	0.344	6055	0.012
|	B	11	**137.084**	**ug/L**	2.821	15485	0.031
|	Na	23	**5757.860**	**ug/L**	1.203	7051231	14.488
|	Mg	24	**4665.620**	**ug/L**	0.739	3944296	8.116
|	Al	27	**10783.124**	**ug/L**	0.195	13833706	28.471
|	P	31	**2158.332**	**ug/L**	0.867	178951	0.364
|	K	39	**2763.774**	**ug/L**	0.735	6702333	13.146
|	Ca	43	**6858.909**	**ug/L**	0.149	30081	0.061
| >	Sc	45		**ug/L**		485783	485782.962
|	Ti	47	**332.472**	**ug/L**	1.531	80117	0.165
|	Cr	52	**60.982**	**ug/L**	1.637	155492	0.301
|	Cr	53		**ug/L**		122782	0.001
|	Mn	55	**318.552**	**ug/L**	1.491	1195886	2.460
|	Fe	57	**8773.038**	**ug/L**	0.817	681723	1.396
|	Co	59	**51.035**	**ug/L**	1.035	156882	0.323
|	Ni	60	**61.718**	**ug/L**	1.228	39375	0.081
|	Cu	63		**ug/L**		77185	0.159
⌊	Cu	65	**54.823**	**ug/L**	0.616	36870	0.076
⌈	Zn	66	**64.555**	**ug/L**	0.662	21410	0.128
|	Zn	67		**ug/L**		8344	0.031
|	Zn	68		**ug/L**		16270	0.096
| >	Ge	74		**ug/L**		166637	166636.613
|	As	75	**45.548**	**ug/L**	5.315	36520	0.114
|	Se	77		**ug/L**		12334	0.011
|	Se	82	**55.861**	**ug/L**	5.196	1980	0.014
⌊	Kr	83		**ug/L**		6113	-0.005
⌈	Sr	88	**89.038**	**ug/L**	0.427	483473	4.491
|	Zr	90	**36.944**	**ug/L**	0.368	110160	1.023
|	Mo	98	**49.216**	**ug/L**	0.678	64466	0.598
|	Ag	107	**48.103**	**ug/L**	0.725	103404	0.961
|	Cd	111	**50.847**	**ug/L**	0.600	24656	0.229
|	Cd	114		**ug/L**		59982	0.557
| >	In	115		**ug/L**		107613	107613.254
|	Sn	120	**49.665**	**ug/L**	1.389	115267	1.070
|	Sb	121	**48.123**	**ug/L**	0.847	88044	0.817
⌊	Sb	123		**ug/L**		68310	0.634
⌈	Ba	135		**ug/L**		90677	0.447
|	Ba	137	**150.688**	**ug/L**	0.106	157125	0.775
| >	Lu	175		**ug/L**		202686	202685.560
|	Tl	205	**44.437**	**ug/L**	2.049	360809	1.774
|	Pb	208	**50.324**	**ug/L**	1.389	524407	2.585
|	Th	232	**41.782**	**ug/L**	1.238	505059	2.490
⌊	U	238	**46.908**	**ug/L**	0.518	609607	3.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			111.6		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			101.7		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			102.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			108.5		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Ti 47 Upper, S, EEE	Ti	47	Sample is out of limits (over linear range)_

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472437
Sample Date/Time: Thursday, August 25, 2011 09:13:17
Sample Type: Sample
Sample Description: ECOL 0520 SDILT
Number of Replicates: 3
Batch ID: 1135453|5|prb
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\1202472437.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**0.464**	**ug/L**	7.659	211	0.000
	Be	9	**0.036**	**ug/L**	67.252	11	0.000
	B	11	**8.732**	**ug/L**	9.211	1396	0.002
	Na	23	**761.150**	**ug/L**	1.432	958688	1.915
	Mg	24	**537.020**	**ug/L**	0.747	462914	0.934
	Al	27	**1790.492**	**ug/L**	0.819	2336670	4.727
	P	31	**58.127**	**ug/L**	3.878	7203	0.010
	K	39	**153.908**	**ug/L**	1.988	682574	0.732
	Ca	43	**1079.525**	**ug/L**	0.598	4989	0.010
>	Sc	45		**ug/L**		493568	493567.672
	Ti	47	**56.196**	**ug/L**	0.815	13855	0.028
	Cr	52	**2.112**	**ug/L**	2.363	14464	0.010
	Cr	53		**ug/L**		72229	-0.106
	Mn	55	**58.038**	**ug/L**	1.256	222079	0.448
	Fe	57	**1435.064**	**ug/L**	2.181	116455	0.228
	Co	59	**1.044**	**ug/L**	1.675	3341	0.007
	Ni	60	**3.230**	**ug/L**	0.613	2144	0.004
	Cu	63		**ug/L**		2915	0.006
	Cu	65	**2.036**	**ug/L**	2.480	1444	0.003
	Zn	66	**3.196**	**ug/L**	4.612	1212	0.006
	Zn	67		**ug/L**		2953	-0.002
	Zn	68		**ug/L**		1117	0.005
>	Ge	74		**ug/L**		172831	172830.629
	As	75	**-1.282**	**ug/L**	106.436	17660	-0.003
	Se	77		**ug/L**		6643	-0.025
	Se	82	**3.202**	**ug/L**	80.636	-159	0.001
	Kr	83		**ug/L**		6697	-0.003
	Sr	88	**7.963**	**ug/L**	0.542	46015	0.402
	Zr	90	**0.548**	**ug/L**	11.508	1815	0.015
	Mo	98	**0.452**	**ug/L**	3.487	695	0.005
	Ag	107	**0.015**	**ug/L**	10.232	66	0.000
	Cd	111	**-0.014**	**ug/L**	71.816	18	-0.000
	Cd	114		**ug/L**		42	-0.000
>	In	115		**ug/L**		113971	113970.709
	Sn	120	**0.045**	**ug/L**	13.706	261	0.001
	Sb	121	**0.599**	**ug/L**	18.414	1318	0.010
	Sb	123		**ug/L**		1021	0.008
	Ba	135		**ug/L**		13942	0.066
	Ba	137	**22.229**	**ug/L**	1.018	24250	0.114
>	Lu	175		**ug/L**		211609	211608.940
	Tl	205	**0.282**	**ug/L**	20.121	3580	0.011
	Pb	208	**0.695**	**ug/L**	1.640	8060	0.036
	Th	232	**0.095**	**ug/L**	18.597	1627	0.006
	U	238	**0.003**	**ug/L**	58.097	692	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			113.4		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			105.5		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			108.6		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			113.3		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 13
Sample Date/Time: Thursday, August 25, 2011 09:21:38
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 13.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**64.970**	**ug/L**	3.487	23672	0.048
|	Be	9	**54.722**	**ug/L**	2.540	5743	0.012
|	B	11	**121.459**	**ug/L**	2.283	13864	0.027
|	Na	23	**5397.010**	**ug/L**	0.704	6657586	13.580
|	Mg	24	**5322.255**	**ug/L**	0.742	4531042	9.258
|	Al	27	**5364.042**	**ug/L**	0.684	6932127	14.163
|	P	31	**4996.000**	**ug/L**	1.484	414047	0.842
|	K	39	**4988.732**	**ug/L**	0.652	11927820	23.730
|	Ca	43	**5037.396**	**ug/L**	0.531	22307	0.045
|	> Sc	45		**ug/L**		489250	489250.089
|	Ti	47	**46.750**	**ug/L**	1.882	11444	0.023
|	Cr	52	**46.992**	**ug/L**	0.749	122808	0.232
|	Cr	53		**ug/L**		80924	-0.087
|	Mn	55	**50.358**	**ug/L**	0.553	191127	0.389
|	Fe	57	**4829.013**	**ug/L**	1.195	379665	0.768
|	Co	59	**48.079**	**ug/L**	0.375	148875	0.304
|	Ni	60	**47.464**	**ug/L**	0.481	30513	0.062
|	Cu	63		**ug/L**		65438	0.134
⌞	Cu	65	**46.389**	**ug/L**	0.193	31432	0.064
⌜	Zn	66	**49.641**	**ug/L**	0.253	17094	0.098
|	Zn	67		**ug/L**		5277	0.011
|	Zn	68		**ug/L**		12843	0.073
|	> Ge	74		**ug/L**		172748	172747.565
|	As	75	**44.001**	**ug/L**	2.154	37181	0.110
|	Se	77		**ug/L**		8043	-0.016
|	Se	82	**49.575**	**ug/L**	5.051	1788	0.012
⌞	Kr	83		**ug/L**		6784	-0.003
⌜	Sr	88	**50.974**	**ug/L**	1.032	290133	2.571
|	Zr	90	**48.873**	**ug/L**	1.196	152666	1.353
|	Mo	98	**46.759**	**ug/L**	0.574	64181	0.569
|	Ag	107	**39.835**	**ug/L**	0.242	89733	0.795
|	Cd	111	**50.404**	**ug/L**	1.121	25610	0.227
|	Cd	114		**ug/L**		62634	0.555
|	> In	115		**ug/L**		112765	112765.130
|	Sn	120	**49.069**	**ug/L**	0.726	119339	1.057
|	Sb	121	**47.273**	**ug/L**	0.964	90642	0.802
⌞	Sb	123		**ug/L**		70719	0.626
⌜	Ba	135		**ug/L**		28903	0.137
|	Ba	137	**46.522**	**ug/L**	1.014	50384	0.239
|	> Lu	175		**ug/L**		210342	210342.158
|	Tl	205	**45.592**	**ug/L**	2.498	384128	1.821
|	Pb	208	**47.971**	**ug/L**	0.396	518802	2.464
|	Th	232	**46.122**	**ug/L**	1.169	578555	2.749
⌞	U	238	**47.790**	**ug/L**	1.450	644525	3.061

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	129.941				
	Be	9	109.444				
	B	11	121.459				
	Na	23	107.940				
	Mg	24	106.445				
	Al	27	106.219				
	P	31	99.920				
	K	39	99.775				
	Ca	43	100.748				
>	Sc	45			112.4		
	Ti	47	93.500				
	Cr	52	93.985				
	Cr	53					
	Mn	55	100.716				
	Fe	57	96.580				
	Co	59	96.157				
	Ni	60	94.928				
	Cu	63					
	Cu	65	92.779				
	Zn	66	99.281				
	Zn	67					
	Zn	68					
>	Ge	74			105.4		
	As	75	88.001				
	Se	77					
	Se	82	99.150				
	Kr	83					
	Sr	88	101.947				
	Zr	90	97.746				
	Mo	98	93.517				
	Ag	107	79.669				
	Cd	111	100.808				
	Cd	114					
>	In	115			107.5		
	Sn	120	98.137				
	Sb	121	94.545				
	Sb	123					
	Ba	135					
	Ba	137	93.043				
>	Lu	175			112.6		
	Tl	205	91.183				
	Pb	208	95.941				
	Th	232	92.244				
	U	238	95.580				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 13	Li	7	CCV is out of limits (+/- 10%)
QC Std 13	B	11	CCV is out of limits (+/- 10%)
QC Std 13	As	75	CCV is out of limits (+/- 10%)
QC Std 13	Ag	107	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 14
Sample Date/Time: Thursday, August 25, 2011 09:29:57
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 14.227

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Li	7	**13.458**	**ug/L**	4.882	5035	0.010
	Be	9	**0.567**	**ug/L**	7.613	68	0.000
	B	11	**22.300**	**ug/L**	6.851	2943	0.005
	Na	23	**265.089**	**ug/L**	0.722	346478	0.667
	Mg	24	**31.310**	**ug/L**	1.739	29074	0.054
	Al	27	**52.906**	**ug/L**	1.439	73172	0.140
	P	31	**50.492**	**ug/L**	5.699	6642	0.009
	K	39	**275.107**	**ug/L**	2.415	977917	1.309
	Ca	43	**195.967**	**ug/L**	4.473	1092	0.002
>	Sc	45		**ug/L**		499136	499136.323
	Ti	47	**8.447**	**ug/L**	2.356	2203	0.004
	Cr	52	**9.166**	**ug/L**	1.442	32019	0.045
	Cr	53		**ug/L**		68858	-0.114
	Mn	55	**5.026**	**ug/L**	0.901	20213	0.039
	Fe	57	**96.552**	**ug/L**	0.944	11479	0.015
	Co	59	**0.965**	**ug/L**	1.468	3131	0.006
	Ni	60	**1.934**	**ug/L**	2.762	1320	0.003
	Cu	63		**ug/L**		1501	0.003
	Cu	65	**0.967**	**ug/L**	4.007	723	0.001
	Zn	66	**10.489**	**ug/L**	1.942	3805	0.021
	Zn	67		**ug/L**		3032	-0.002
	Zn	68		**ug/L**		2927	0.015
>	Ge	74		**ug/L**		177342	177342.217
	As	75	**2.526**	**ug/L**	30.511	19806	0.006
	Se	77		**ug/L**		6391	-0.027
	Se	82	**6.380**	**ug/L**	20.431	-26	0.002
	Kr	83		**ug/L**		6832	-0.003
	Sr	88	**10.286**	**ug/L**	0.405	60649	0.519
	Zr	90	**1.620**	**ug/L**	6.398	5310	0.045
	Mo	98	**0.525**	**ug/L**	1.965	812	0.006
	Ag	107	**1.004**	**ug/L**	0.806	2368	0.020
	Cd	111	**1.031**	**ug/L**	3.717	567	0.005
	Cd	114		**ug/L**		1365	0.011
>	In	115		**ug/L**		116423	116423.263
	Sn	120	**4.916**	**ug/L**	1.258	12484	0.106
	Sb	121	**3.209**	**ug/L**	0.976	6505	0.054
	Sb	123		**ug/L**		5032	0.042
	Ba	135		**ug/L**		1248	0.006
	Ba	137	**1.910**	**ug/L**	1.884	2141	0.010
>	Lu	175		**ug/L**		211677	211676.521
	Tl	205	**2.295**	**ug/L**	3.444	20594	0.092
	Pb	208	**2.022**	**ug/L**	0.890	22488	0.104
	Th	232	**1.870**	**ug/L**	3.455	24014	0.111
	U	238	**0.178**	**ug/L**	3.317	3070	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7	134.582				
	Be	9	113.311				
	B	11	148.664				
	Na	23	106.035				
	Mg	24	104.365				
	Al	27	105.812				
	P	31	100.984				
	K	39	91.702				
	Ca	43	97.984				
>	Sc	45		114.7			
	Ti	47	84.475				
	Cr	52	91.661				
	Cr	53					
	Mn	55	100.520				
	Fe	57	96.552				
	Co	59	96.506				
	Ni	60	96.709				
	Cu	63					
	Cu	65	96.702				
	Zn	66	104.890				
	Zn	67					
	Zn	68					
>	Ge	74		108.2			
	As	75	50.518				
	Se	77					
	Se	82	127.610				
	Kr	83					
	Sr	88	102.862				
	Zr	90	81.014				
	Mo	98	104.923				
	Ag	107	100.444				
	Cd	111	103.106				
	Cd	114					
>	In	115		111.0			
	Sn	120	98.328				
	Sb	121	106.961				
	Sb	123					
	Ba	135					
	Ba	137	95.480				
>	Lu	175		113.3			
	Tl	205	114.761				
	Pb	208	101.095				
	Th	232	93.493				
	U	238	89.133				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 14	Li	7	CRDL is out of limits
QC Std 14	B	11	CRDL is out of limits
QC Std 14	As	75	CRDL is out of limits

QC Action

QC Action Line: Continue

ICPMS#7 - Summary Report

Sample ID: QC Std 15
Sample Date/Time: Thursday, August 25, 2011 09:38:16
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a.mth
Dataset File: C:\Elandata\DataSet\110824\QC Std 15.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌜	Li	7	**0.007**	**ug/L**	46.381	44	0.000
|	Be	9	**-0.000**	**ug/L**	2619.415	7	-0.000
|	B	11	**2.093**	**ug/L**	15.753	659	0.000
|	Na	23	**-2.899**	**ug/L**	2.789	9866	-0.007
|	Mg	24	**0.701**	**ug/L**	8.570	2490	0.001
|	Al	27	**0.820**	**ug/L**	9.803	4515	0.002
|	P	31	**0.741**	**ug/L**	301.449	2450	0.000
|	K	39	**-32.314**	**ug/L**	6.512	247197	-0.154
|	Ca	43	**-18.848**	**ug/L**	9.071	130	-0.000
| >	Sc	45		**ug/L**		497217	497216.746
|	Ti	47	**-0.106**	**ug/L**	13.384	88	-0.000
|	Cr	52	**-0.860**	**ug/L**	9.631	7270	-0.004
|	Cr	53		**ug/L**		65222	-0.121
|	Mn	55	**-0.063**	**ug/L**	3.293	592	-0.000
|	Fe	57	**-2.026**	**ug/L**	35.173	3636	-0.000
|	Co	59	**0.005**	**ug/L**	59.647	98	0.000
|	Ni	60	**-0.001**	**ug/L**	593.309	53	-0.000
|	Cu	63		**ug/L**		87	-0.000
⌊	Cu	65	**-0.012**	**ug/L**	53.499	47	-0.000
⌜	Zn	66	**0.033**	**ug/L**	82.316	132	0.000
|	Zn	67		**ug/L**		2386	-0.006
|	Zn	68		**ug/L**		229	-0.000
| >	Ge	74		**ug/L**		175333	175333.276
|	As	75	**-0.408**	**ug/L**	110.214	18297	-0.001
|	Se	77		**ug/L**		6240	-0.027
|	Se	82	**2.572**	**ug/L**	121.462	-187	0.001
⌊	Kr	83		**ug/L**		6930	-0.002
⌜	Sr	88	**-0.000**	**ug/L**	505.535	248	-0.000
|	Zr	90	**0.050**	**ug/L**	10.180	248	0.001
|	Mo	98	**0.027**	**ug/L**	10.015	107	0.000
|	Ag	107	**0.005**	**ug/L**	66.690	44	0.000
|	Cd	111	**0.002**	**ug/L**	299.537	27	0.000
|	Cd	114		**ug/L**		59	0.000
| >	In	115		**ug/L**		115452	115452.394
|	Sn	120	**0.012**	**ug/L**	20.362	183	0.000
|	Sb	121	**0.132**	**ug/L**	8.288	421	0.002
⌊	Sb	123		**ug/L**		329	0.002
⌜	Ba	135		**ug/L**		49	-0.000
|	Ba	137	**0.004**	**ug/L**	43.580	66	0.000
| >	Lu	175		**ug/L**		210679	210678.829
|	Tl	205	**0.130**	**ug/L**	10.585	2283	0.005
|	Pb	208	**0.012**	**ug/L**	11.666	630	0.001
|	Th	232	**0.037**	**ug/L**	5.508	894	0.002
⌊	U	238	**0.011**	**ug/L**	6.352	801	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Li	7	Linear Thru Zero	1.0000
Be	9	Linear Thru Zero	1.0000
B	11	Linear Thru Zero	1.0000
Na	23	Linear Thru Zero	1.0000
Mg	24	Linear Thru Zero	1.0000
Al	27	Linear Thru Zero	1.0000
P	31	Linear Thru Zero	1.0000
K	39	Linear Thru Zero	1.0000
Ca	43	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ti	47	Linear Thru Zero	1.0000
Cr	52	Linear Thru Zero	1.0000
Cr	53	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Fe	57	Linear Thru Zero	1.0000
Co	59	Linear Thru Zero	1.0000
Ni	60	Linear Thru Zero	1.0000
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	0.9995
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	0.9999
Kr	83	Linear Thru Zero	
Sr	88	Linear Thru Zero	1.0000
Zr	90	Linear Thru Zero	0.9999
Mo	98	Linear Thru Zero	1.0000
Ag	107	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sn	120	Linear Thru Zero	1.0000
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Ba	135	Linear Thru Zero	
Ba	137	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
Th	232	Linear Thru Zero	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	7					
	Be	9					
	B	11					
	Na	23					
	Mg	24					
	Al	27					
	P	31					
	K	39					
	Ca	43					
>	Sc	45			114.3		
	Ti	47					
	Cr	52					
	Cr	53					
	Mn	55					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	Zn	67					
	Zn	68					
>	Ge	74			107.0		
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Sr	88					
	Zr	90					
	Mo	98					
	Ag	107					
	Cd	111					
	Cd	114					
>	In	115			110.0		
	Sn	120					
	Sb	121					
	Sb	123					
	Ba	135					
	Ba	137					
>	Lu	175			112.8		
	Tl	205					
	Pb	208					
	Th	232					
	U	238					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS #7 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, August 29, 2011 10:31:00
Sample Description:
Method File: C:\elandata\Method\daily2.mth
Dataset File: C:\elandata\Dataset\default\Sample.3611
Tuning File: C:\elandata\Tuning\default2.tun
Optimization File: C:\elandata\Optimize\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time(ns): 80
Current Dead Time (ns): 80

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	2398.1	2398.060	53.031	2.2
	Mg	24.0	30059.7	30059.727	465.466	1.5
	Co	58.9	69893.7	69893.653	507.484	0.7
	Rh	102.9	132610.2	132610.175	1308.257	1.0
	In	114.9	172695.1	172695.102	1441.428	0.8
	Pb	208.0	140053.4	140053.434	1901.336	1.4
⌈>	Ba	137.9	160193.3	160193.266	1227.913	0.8
⌊	Ba++	69.0	1471.4	0.009	0.000	2.5
⌈>	Ce	139.9	191070.0	191069.990	2365.684	1.2
⌊	CeO	155.9	5354.5	0.028	0.001	4.0
	Bkgd	220.0	4.1	4.100	1.432	34.9

Current Optimization File Data

Current Value	Description
0.92	Nebulizer Gas Flow
7.00	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
70.00	Discriminator Threshold
-3.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	3580.0
Co	59	21	8.0	74988.2
In	115	21	9.3	186080.4

Instrument #7 Tuning Report

File Name: Default2.tun
File Path: C:\elandata\Tuning\Default2.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	572	2060	0.639
Be	9.0	9.1	2035	2050	0.643
Mg	24.0	24.0	5681	2100	0.473
Mg	25.0	25.0	5921	2100	0.448
Mg	26.0	26.0	6181	2090	0.469
Co	58.9	58.9	14163	2030	0.665
Rh	102.9	102.9	24879	2020	0.672
In	114.9	114.9	27791	2020	0.679
Ce	139.9	139.9	33884	2010	0.674
Pb	206.0	205.9	49942	1980	0.695
Pb	207.0	207.0	50206	2000	0.674
Pb	208.0	208.0	50452	1980	0.668
U	238.1	238.1	57768	1980	0.687

ICPMS#7 - Summary Report

Sample ID: Blank
Sample Date/Time: Monday, August 29, 2011 12:04:55
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\Blank.241

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		213791	
	As	75		**ug/L**		569	
	Se	77		**ug/L**		4226	
	Se	82		**ug/L**		-3	
	Kr	83		**ug/L**		178	
	Ag	107		**ug/L**		21	
>	In	115		**ug/L**		151849	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Monday, August 29, 2011 12:08:12
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\Standard 1.242

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		197891	197891.260
	As	75	**10.000**	**ug/L**	6.836	6389	0.030
	Se	77		**ug/L**		7288	0.017
	Se	82	**10.000**	**ug/L**	4.940	608	0.003
	Kr	83		**ug/L**		179	0.000
	Ag	107	**10.000**	**ug/L**	0.768	32871	0.235
>	In	115		**ug/L**		140083	140082.711

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Monday, August 29, 2011 12:11:28
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\Standard 2.243

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		193486	193486.327
	As	75	**99.962**	**ug/L**	1.155	55727	0.285
	Se	77		**ug/L**		10552	0.035
	Se	82	**99.971**	**ug/L**	1.038	5803	0.030
	Kr	83		**ug/L**		264	0.001
	Ag	107	**99.990**	**ug/L**	1.206	313774	2.321
>	In	115		**ug/L**		135164	135163.923

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Monday, August 29, 2011 12:14:44
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 1.244

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		194612	194612.229
	As	75	**51.414**	**ug/L**	3.725	29069	0.147
	Se	77		**ug/L**		8530	0.024
	Se	82	**51.248**	**ug/L**	2.668	2990	0.015
	Kr	83		**ug/L**		581	0.002
	Ag	107	**50.087**	**ug/L**	2.233	158354	1.163
>	In	115		**ug/L**		136184	136184.101

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		91.0			
	As	75	102.829				
	Se	77					
	Se	82	102.496				
	Kr	83					
	Ag	107	100.174				
>	In	115		89.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Monday, August 29, 2011 12:18:03
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 2.245

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		216292	216291.543
	As	75	**0.773**	**ug/L**	31.819	1054	0.002
	Se	77		**ug/L**		4316	0.000
	Se	82	**-0.121**	**ug/L**	102.576	-11	-0.000
	Kr	83		**ug/L**		431	0.001
	Ag	107	**0.006**	**ug/L**	15.439	41	0.000
>	In	115		**ug/L**		153339	153339.278

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		101.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		101.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Monday, August 29, 2011 12:21:22
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 3.246

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		199418	199417.521
	As	75	**5.608**	ug/L	24.785	3726	0.016
	Se	77		ug/L		6530	0.013
	Se	82	**5.922**	ug/L	7.786	351	0.002
	Kr	83		ug/L		255	0.000
	Ag	107	**1.052**	ug/L	1.343	3469	0.024
>	In	115		ug/L		141207	141206.955

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		93.3			
	As	75	112.152				
	Se	77					
	Se	82	118.446				
	Kr	83					
	Ag	107	105.235				
>	In	115		93.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Monday, August 29, 2011 12:24:39
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 4.247

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		177674	177673.574
	As	75	**-0.262**	ug/L	147.988	339	-0.001
	Se	77		ug/L		6271	0.016
	Se	82	**-0.625**	ug/L	119.710	-36	-0.000
	Kr	83		ug/L		322	0.001
	Ag	107	**0.090**	ug/L	7.724	284	0.002
>	In	115		ug/L		128047	128046.580

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		83.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		84.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Monday, August 29, 2011 12:27:56
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 5.248

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		180219	180219.439
	As	75	**21.076**	ug/L	0.631	11323	0.060
	Se	77		ug/L		6957	0.019
	Se	82	**21.211**	ug/L	2.612	1144	0.006
	Kr	83		ug/L		329	0.001
	Ag	107	**18.912**	ug/L	0.853	56405	0.439
>	In	115		ug/L		128439	128438.736

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		84.3			
	As	75	105.379				
	Se	77					
	Se	82	106.054				
	Kr	83					
	Ag	107	94.558				
>	In	115		84.6			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Monday, August 29, 2011 12:31:14
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 6.249

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		194237	194236.919
	As	75	**50.427**	**ug/L**	1.661	28479	0.144
	Se	77		**ug/L**		8272	0.023
	Se	82	**51.261**	**ug/L**	1.738	2986	0.015
	Kr	83		**ug/L**		250	0.000
	Ag	107	**49.316**	**ug/L**	0.743	155891	1.145
>	In	115		**ug/L**		136149	136148.579

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		90.9			
	As	75	100.853				
	Se	77					
	Se	82	102.522				
	Kr	83					
	Ag	107	98.633				
>	In	115		89.7			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Monday, August 29, 2011 12:34:34
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 7.250

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		217958	217958.151
	As	75	**0.164**	ug/L	272.702	683	0.000
	Se	77		ug/L		4288	-0.000
	Se	82	**-0.166**	ug/L	167.733	-14	-0.000
	Kr	83		ug/L		293	0.001
	Ag	107	**0.007**	ug/L	18.132	46	0.000
>	In	115		ug/L		155188	155188.241

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		101.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		102.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472433
Sample Date/Time: Monday, August 29, 2011 12:37:52
Sample Type: Sample
Sample Description: ECOL 0520 MB
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\1202472433.251

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		207452	207451.692
	As	75	**0.904**	**ug/L**	22.935	1089	0.003
	Se	77		**ug/L**		8900	0.023
	Se	82	**-0.024**	**ug/L**	182.194	-5	-0.000
	Kr	83		**ug/L**		258	0.000
	Ag	107	**0.002**	**ug/L**	57.945	28	0.000
>	In	115		**ug/L**		147314	147314.352

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		97.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		97.0			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472434
Sample Date/Time: Monday, August 29, 2011 12:41:09
Sample Type: Sample
Sample Description: ECOL 0520 LCS
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\1202472434.252

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		209765	209765.413
	As	75	**46.293**	**ug/L**	3.945	28272	0.132
	Se	77		**ug/L**		10572	0.031
	Se	82	**49.296**	**ug/L**	2.327	3100	0.015
	Kr	83		**ug/L**		278	0.000
	Ag	107	**44.608**	**ug/L**	0.947	154886	1.036
>	In	115		**ug/L**		149546	149545.798

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		98.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		98.5			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 284538001
Sample Date/Time: Monday, August 29, 2011 12:44:26
Sample Type: Sample
Sample Description: ECOL 0520
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\284538001.253

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		202233	202232.534
	As	75	**1.996**	ug/L	29.205	1689	0.006
	Se	77		ug/L		7614	0.018
	Se	82	**-0.046**	ug/L	90.400	-6	-0.000
	Kr	83		ug/L		251	0.000
	Ag	107	**0.102**	ug/L	1.749	354	0.002
>	In	115		ug/L		141813	141812.660

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		94.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		93.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472435
Sample Date/Time: Monday, August 29, 2011 12:47:43
Sample Type: Sample
Sample Description: ECOL 0520 MS
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\1202472435.254

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		192254	192254.204
	As	75	**51.763**	**ug/L**	1.907	28916	0.148
	Se	77		**ug/L**		9098	0.028
	Se	82	**53.488**	**ug/L**	2.031	3083	0.016
	Kr	83		**ug/L**		296	0.001
	Ag	107	**48.720**	**ug/L**	1.847	154704	1.131
>	In	115		**ug/L**		136773	136772.653

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		89.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		90.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472436
Sample Date/Time: Monday, August 29, 2011 12:51:00
Sample Type: Sample
Sample Description: ECOL 0520 MSD
Number of Replicates: 3
Batch ID: 1135453|1|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\1202472436.255

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		186248	186247.821
	As	75	**53.521**	**ug/L**	1.598	28955	0.153
	Se	77		**ug/L**		12178	0.046
	Se	82	**55.741**	**ug/L**	0.879	3113	0.017
	Kr	83		**ug/L**		303	0.001
	Ag	107	**50.106**	**ug/L**	1.544	153941	1.163
>	In	115		**ug/L**		132335	132334.981

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		87.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		87.1			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: 1202472437
Sample Date/Time: Monday, August 29, 2011 12:57:35
Sample Type: Sample
Sample Description: ECOL 0520 SDILT
Number of Replicates: 3
Batch ID: 1135453|5|prb
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\1202472437.257

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		180958	180958.089
	As	75	**0.556**	ug/L	75.782	768	0.002
	Se	77		ug/L		5504	0.011
	Se	82	**0.240**	ug/L	138.481	10	0.000
	Kr	83		ug/L		219	0.000
	Ag	107	**0.024**	ug/L	15.487	92	0.001
>	In	115		ug/L		131149	131149.082

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		84.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		86.4			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 13
Sample Date/Time: Monday, August 29, 2011 13:00:54
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 13.258

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		182510	182509.944
	As	75	**50.679**	**ug/L**	1.057	26890	0.145
	Se	77		**ug/L**		8064	0.024
	Se	82	**51.125**	**ug/L**	0.973	2798	0.015
	Kr	83		**ug/L**		221	0.000
	Ag	107	**49.000**	**ug/L**	1.457	147297	1.138
>	In	115		**ug/L**		129463	129462.969

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		85.4			
	As	75	101.359				
	Se	77					
	Se	82	102.249				
	Kr	83					
	Ag	107	97.999				
>	In	115		85.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 14
Sample Date/Time: Monday, August 29, 2011 13:04:11
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 14.259

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		**ug/L**		184170	184170.398
	As	75	**6.369**	**ug/L**	21.576	3837	0.018
	Se	77		**ug/L**		6061	0.013
	Se	82	**4.882**	**ug/L**	13.880	267	0.001
	Kr	83		**ug/L**		344	0.001
	Ag	107	**1.032**	**ug/L**	3.800	3152	0.024
>	In	115		**ug/L**		130930	130930.350

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		86.1			
	As	75	127.390				
	Se	77					
	Se	82	97.637				
	Kr	83					
	Ag	107	103.156				
>	In	115		86.2			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#7 - Summary Report

Sample ID: QC Std 15
Sample Date/Time: Monday, August 29, 2011 13:07:30
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\elandata\Method\6020a misc.mth
Dataset File: C:\Elandata\DataSet\110826\QC Std 15.260

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Ge	74		ug/L		201809	201809.209
	As	75	**0.402**	ug/L	166.427	768	0.001
	Se	77		ug/L		4047	0.000
	Se	82	**0.111**	ug/L	132.787	3	0.000
	Kr	83		ug/L		231	0.000
	Ag	107	**0.003**	ug/L	52.623	31	0.000
>	In	115		ug/L		141740	141739.699

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Ag	107	Linear Thru Zero	1.0000
In	115	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Ge	74		94.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
	Ag	107					
>	In	115		93.3			

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

==========

Analysis Begun

Logged In Analyst: Administrator **Technique: AA FIMS-MHS**
Spectrometer Model: FIMS-100, S/N B050-9550 **Autosampler Model: S10**

Sample Information File: C:\data-AA\Administrator\Sample Information\082411W1.SIF
Batch ID:
Results Data Set: 082411W1
Results Library: C:\data-AA\Administrator\Results\Results.mdb

==========

Method Loaded
Method Name: WATER **Method Last Saved: 1/27/2011 16:34:14**
Method Description: 7470A, 245.2, ILM04 ANALYST JXL

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: Calib Blank **Date Collected: 8/24/2011 16:55:46**
Analyst: **Data Type: Original**

Replicate Data: Calib Blank

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.00]	0.0007	0.0025	0.0007	16:56:35	Yes
2		[0.00]	0.0007	0.0025	0.0007	16:57:03	Yes
Mean:		[0.00]	0.0007				
SD:		0.00	0.0000				
%RSD:		0.00	3.27				

Auto-zero performed.

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S0.2 **Date Collected: 8/24/2011 16:57:22**
Analyst: **Data Type: Original**

Replicate Data: S0.2

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.2]	0.0022	0.0128	0.0029	16:58:11	Yes
2		[0.2]	0.0021	0.0114	0.0028	16:58:40	Yes
Mean:		[0.2]	0.0021				
SD:		0.0	0.0000				
%RSD:		0.0	2.03				

Standard number 1 applied. [0.2]
Correlation Coef.: 1.000000 Slope: 0.01061 Intercept: 0.00000

==========

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S0.5 **Date Collected: 8/24/2011 16:58:58**
Analyst: **Data Type: Original**

Replicate Data: S0.5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[0.5]	0.0052	0.0245	0.0060	16:59:48	Yes
2		[0.5]	0.0052	0.0255	0.0059	17:00:17	Yes
Mean:		[0.5]	0.0052				
SD:		0.0	0.0000				
%RSD:		0.0	0.58				

Standard number 2 applied. [0.5]
Correlation Coef.: 0.999962 Slope: 0.01040 Intercept: 0.00002

==========

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S2.0 **Date Collected: 8/24/2011 17:00:36**
Analyst: **Data Type: Original**

Replicate Data: S2.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0210	0.0937	0.0217	17:01:26	Yes
2		[2.0]	0.0207	0.0911	0.0215	17:01:55	Yes
Mean:		[2.0]	0.0209				
SD:		0.0	0.0002				
%RSD:		0.0	0.92				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999998 Slope: 0.01042 Intercept: 0.00001

==========

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S5.0 **Date Collected: 8/24/2011 17:02:14**
Analyst: **Data Type: Original**

Replicate Data: S5.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0517	0.2283	0.0525	17:03:04	Yes
2		[5.0]	0.0512	0.2236	0.0520	17:03:32	Yes
Mean:		[5.0]	0.0515				
SD:		0.0	0.0004				
%RSD:		0.0	0.69				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999988 Slope: 0.01030 Intercept: 0.00008

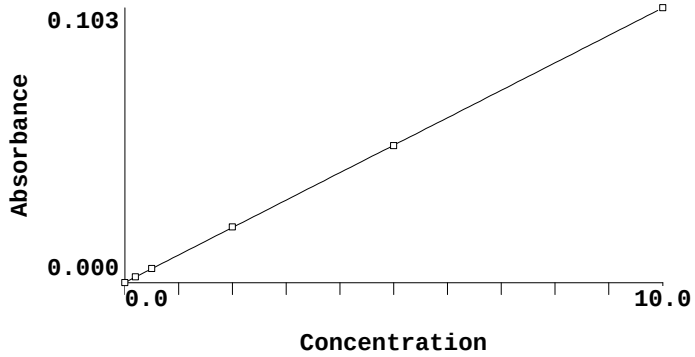
==========

Sequence No.: 6 **Autosampler Location: 6**
Sample ID: S10.0 **Date Collected: 8/24/2011 17:03:52**
Analyst: **Data Type: Original**

Replicate Data: S10.0

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1036	0.4538	0.1043	17:04:41	Yes
2		[10.0]	0.1034	0.4546	0.1041	17:05:09	Yes
Mean:		[10.0]	0.1035				
SD:		0.0	0.0002				
%RSD:		0.0	0.16				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999995 Slope: 0.01034 Intercept: 0.00003



Calibration data for Hg 253.7 **Equation: Linear, Calculated Intercept**

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.003	0.00	3.3
S0.2	0.0021	0.2	0.202	0.00	2.0
S0.5	0.0052	0.5	0.501	0.00	0.6
S2.0	0.0209	2.0	2.014	0.00	0.9

S5.0	0.0515	5.0	4.978	0.00	0.7
S10.0	0.1035	10.0	10.008	0.00	0.2

Correlation Coef.: 0.999995 Slope: 0.01034 Intercept: 0.00003

==========

Sequence No.: 7 **Autosampler Location: 9**
Sample ID: ICV **Date Collected: 8/24/2011 17:05:28**
Analyst: **Data Type: Original**

Replicate Data: ICV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.965	4.965	0.0514	0.2248	0.0521	17:06:17	Yes
2	4.970	4.970	0.0514	0.2250	0.0521	17:06:46	Yes
Mean:	4.968	4.968	0.0514				
SD:	0.003	0.003	0.0000				
%RSD:	0.069	0.069	0.07				

QC value within limits for Hg 253.7 Recovery = 99.35%
All analyte(s) passed QC.

==========

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: ICB **Date Collected: 8/24/2011 17:07:05**
Analyst: **Data Type: Original**

Replicate Data: ICB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	0.0014	0.0006	17:07:55	Yes
2	0.022	0.022	0.0003	0.0026	0.0010	17:08:23	Yes
Mean:	0.005	0.005	0.0001				
SD:	0.025	0.025	0.0003				
%RSD:	498.5	498.5	303.19				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 9 **Autosampler Location: 11**
Sample ID: CRDL **Date Collected: 8/24/2011 17:08:43**
Analyst: **Data Type: Original**

Replicate Data: CRDL

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.204	0.204	0.0021	0.0130	0.0029	17:09:33	Yes
2	0.212	0.212	0.0022	0.0120	0.0030	17:10:01	Yes
Mean:	0.208	0.208	0.0022				
SD:	0.005	0.005	0.0001				
%RSD:	2.570	2.570	2.53				

QC value within limits for Hg 253.7 Recovery = 104.05%
All analyte(s) passed QC.

==========

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 8/24/2011 17:10:21**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.042	5.042	0.0522	0.2297	0.0529	17:11:10	Yes
2	4.994	4.994	0.0517	0.2262	0.0524	17:11:39	Yes
Mean:	5.018	5.018	0.0519				
SD:	0.033	0.033	0.0003				
%RSD:	0.667	0.667	0.67				

QC value within limits for Hg 253.7 Recovery = 100.36%
All analyte(s) passed QC.

==========

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 8/24/2011 17:11:57**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0001	0.0017	0.0006	17:12:47	Yes
2	-0.004	-0.004	-0.0000	0.0023	0.0007	17:13:15	Yes
Mean:	-0.010	-0.010	-0.0001				
SD:	0.009	0.009	0.0001				
%RSD:	87.64	87.64	129.75				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 12 **Autosampler Location: 12**
Sample ID: 1202472317|1135404|1 **Date Collected: 8/24/2011 17:13:34**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472317|1135404|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.013	-0.013	-0.0001	0.0018	0.0006	17:14:24	Yes
2	-0.003	-0.003	0.0000	0.0025	0.0007	17:14:53	Yes
Mean:	-0.008	-0.008	-0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	93.25	93.25	159.14				

==========

Sequence No.: 13 **Autosampler Location: 13**
Sample ID: 1202472318|1135404|1 **Date Collected: 8/24/2011 17:15:13**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472318|1135404|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.050	2.050	0.0212	0.0940	0.0220	17:16:03	Yes
2	2.038	2.038	0.0211	0.0932	0.0218	17:16:32	Yes
Mean:	2.044	2.044	0.0212				
SD:	0.009	0.009	0.0001				
%RSD:	0.442	0.442	0.44				

==========

Sequence No.: 14 **Autosampler Location: 14**
Sample ID: 284538001|1135404|1 **Date Collected: 8/24/2011 17:16:52**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 284538001|1135404|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0002	0.0029	0.0009	17:17:41	Yes
2	0.012	0.012	0.0002	0.0032	0.0009	17:18:09	Yes
Mean:	0.014	0.014	0.0002				
SD:	0.002	0.002	0.0000				
%RSD:	12.54	12.54	10.18				

==========

Sequence No.: 15 **Autosampler Location: 15**
Sample ID: 1202472319|1135404|1 **Date Collected: 8/24/2011 17:18:28**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472319|1135404|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored

#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.003	0.003	0.0001	0.0026	0.0008	17:19:17	Yes
2	0.014	0.014	0.0002	0.0038	0.0009	17:19:45	Yes
Mean:	0.009	0.009	0.0001				
SD:	0.008	0.008	0.0001				
%RSD:	94.98	94.98	69.19				

==========

Sequence No.: 16 **Autosampler Location: 16**
Sample ID: 1202472320|1135404|1 **Date Collected: 8/24/2011 17:20:04**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472320|1135404|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.022	2.022	0.0209	0.0942	0.0217	17:20:53	Yes
2	1.996	1.996	0.0207	0.0910	0.0214	17:21:21	Yes
Mean:	2.009	2.009	0.0208				
SD:	0.019	0.019	0.0002				
%RSD:	0.925	0.925	0.92				

==========

Sequence No.: 17 **Autosampler Location: 17**
Sample ID: 1202472321|1135404|5 **Date Collected: 8/24/2011 17:21:40**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472321|1135404|5

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.008	-0.008	-0.0000	0.0016	0.0007	17:22:29	Yes
2	-0.015	-0.015	-0.0001	0.0020	0.0006	17:22:58	Yes
Mean:	-0.011	-0.011	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	44.23	44.23	61.54				

==========

Sequence No.: 18 **Autosampler Location: 18**
Sample ID: 1202472312|1135401|1 **Date Collected: 8/24/2011 17:23:17**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472312|1135401|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	-0.0001	0.0023	0.0006	17:24:06	Yes
2	-0.001	-0.001	0.0000	0.0027	0.0007	17:24:34	Yes
Mean:	-0.006	-0.006	-0.0000				
SD:	0.007	0.007	0.0001				
%RSD:	107.6	107.6	218.54				

==========

Sequence No.: 19 **Autosampler Location: 19**
Sample ID: 1202472313|1135401|1 **Date Collected: 8/24/2011 17:24:53**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472313|1135401|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.031	2.031	0.0210	0.0940	0.0218	17:25:42	Yes
2	2.059	2.059	0.0213	0.0958	0.0220	17:26:10	Yes
Mean:	2.045	2.045	0.0212				
SD:	0.019	0.019	0.0002				
%RSD:	0.952	0.952	0.95				

==========

Sequence No.: 20 **Autosampler Location: 20**
Sample ID: 284537001|1135401|1 **Date Collected: 8/24/2011 17:26:29**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 284537001|1135401|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0002	0.0034	0.0009	17:27:19	Yes
2	0.034	0.034	0.0004	0.0057	0.0011	17:27:48	Yes
Mean:	0.024	0.024	0.0003				
SD:	0.014	0.014	0.0001				
%RSD:	58.57	58.57	51.78				

==========

Sequence No.: 21 **Autosampler Location: 21**
Sample ID: 1202472314|1135401|1 **Date Collected: 8/24/2011 17:28:07**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472314|1135401|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.021	0.021	0.0002	0.0034	0.0010	17:28:56	Yes
2	0.024	0.024	0.0003	0.0042	0.0010	17:29:24	Yes
Mean:	0.022	0.022	0.0003				
SD:	0.002	0.002	0.0000				
%RSD:	8.992	8.992	7.87				

==========

Sequence No.: 22 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 8/24/2011 17:29:44**
Analyst: **Data Type: Original**

Replicate Data: CCV

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.002	5.002	0.0517	0.2276	0.0525	17:30:33	Yes
2	4.969	4.969	0.0514	0.2277	0.0521	17:31:01	Yes
Mean:	4.985	4.985	0.0516				
SD:	0.023	0.023	0.0002				
%RSD:	0.462	0.462	0.46				

QC value within limits for Hg 253.7 Recovery = 99.71%
All analyte(s) passed QC.

==========

Sequence No.: 23 **Autosampler Location: 8**
Sample ID: CCB **Date Collected: 8/24/2011 17:31:20**
Analyst: **Data Type: Original**

Replicate Data: CCB

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.002	-0.002	0.0000	0.0022	0.0007	17:32:10	Yes
2	0.000	0.000	0.0000	0.0022	0.0008	17:32:39	Yes
Mean:	-0.001	-0.001	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	97.26	97.26	73.70				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

==========

Sequence No.: 24 **Autosampler Location: 22**
Sample ID: 1202472315|1135401|1 **Date Collected: 8/24/2011 17:32:58**
Analyst: JXL1 **Data Type: Original**

Replicate Data: 1202472315|1135401|1

Repl #	SampleConc ug/L	StndConc ug/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.027	2.027	0.0210	0.0952	0.0217	17:33:47	Yes
2	2.030	2.030	0.0210	0.0945	0.0218	17:34:16	Yes

Miscellaneous

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: **1135452.0** Verified by: _____

Analyst: Anthony Green

Method: SW846 3005A

Lab SOP: GL-MA-E-006 REV# 9

Instrument: NO_INSTRUMENT

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202472434	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI1589187-A	.5	mL
LCS	1202472434	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI1589189-B	.5	mL
MS	1202472435	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI1589187-A	.5	mL
MS	1202472435	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI1589189-B	.5	mL
MSD	1202472436	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI1589187-A	.5	mL
MSD	1202472436	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI1589189-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202472433 MB	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2
1202472434 LCS	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2
284538001	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2
1202472435 MS (284538001)	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2
1202472436 MSD (284538001)	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2
1202472437 SDILT (284538001)	24-AUG-2011 07:30:00	Ground Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1586906	HYDROCHLORIC ACID	2.5 mL
1604895	Concentrated Nitric Acid	1 mL

Comments:

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **1135403.0** Verified by: _____

Analyst: Tara Griffin

Method: SW846 7470A Prep

Lab SOP: GL-MA-E-010 REV# 25

Instrument: NO_INSTRUMENT

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202472318	Mercury working intermediate standard for LCS/MS	WHG110824-13	.2	mL
MS	1202472320	Mercury working intermediate standard for LCS/MS	WHG110824-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202472317 MB	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2
1202472318 LCS	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2
284538001	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2
1202472319 DUP (284538001)	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2
1202472320 MS (284538001)	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2
1202472321 SDILT (284538001)	24-AUG-2011 10:00:00	Ground Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount
1522928	Sulfuric Acid, Concentrated	1 mL
1588420-C	5% KMnO4 solution	3 mL
1596475-1	NITRIC ACID	.5 mL
1596553-C	Hg reducing agent	1 mL
1601203-C	5% Potassium Persulfate	1.5 mL
WHG110824-01a	Mercury Working 1st Source CAL 0.2/CRA	20 uL
WHG110824-02	Mercury Working 1st Source CAL 0.5	50 uL
WHG110824-03	Mercury Working 1st Source CAL 2.0	200 uL
WHG110824-04	Mercury Working 1st Source CAL 5.0/CCV	500 uL
WHG110824-05	Mercury Working 1st Source CAL 10.0	1 mL
WHG110824-06	Mercury Working 2nd Source 5.0/ICV	500 uL

Comments:

Digestion Start Date: 24-AUG-11 10:00

Digestion End Date: 24-AUG-11 12:00

Hot Block ID: 12

Thermometer ID: 10461

Block Temperature: 95 C

Standard Logbook

Serial ID: UHG1576853-02 **Opened:** 13-JUN-11 **Amount :** 100 mL
Name: MHGSTOCK2 **Received:** 13-JUN-11 **Catalog Number :** AHG1KN-100
Type: Source Material **Expires:** 13-JUN-12 **Lot Number :** 4105720
Employee: Tara Griffin **Verified:** 10-JUN-11 **Solvent :** 3% HNO3
Supplier: Ricca Chemical Company
Description: Mercury Source Standard #2 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	999.7 mg/L		

Serial ID: UHG1576854-01 **Opened:** 13-JUN-11 **Amount :** 125 mL
Name: MHGSTOCK1 **Received:** 13-JUN-11 **Catalog Number :** PLHG4-2Y
Type: Source Material **Expires:** 13-JUN-12 **Lot Number :** 16-81HG
Employee: Tara Griffin **Verified:** 10-JUN-11 **Solvent :** 10% HNO3
Supplier: Spex
Description: Mercury Source Standard #1 1,000 mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Mercury	1000 mg/L		

Serial ID: UI110222-10 **Opened:** 22-FEB-11 **Amount :** 250 mL
Name: ICP-MS CRDL Master #2 **Received:** 22-FEB-11 **Catalog Number :** 160044-11-02
Type: Source Material **Expires:** 22-FEB-12 **Lot Number :** 1024009
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Soln #2
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	3 mg/L	Molybdenum	.5 mg/L
Silver	1 mg/L	Tin	5 mg/L
Titanium	10 mg/L	Tungsten	5 mg/L
Zirconium	2 mg/L		

Serial ID: UI110411-03 **Opened:** 11-APR-11 **Catalog Number :** 060074-05-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 11-APR-11 **Lot Number :** 1025015
Type: Source Material **Expires:** 11-APR-12 **Solvent :** 2% HNO3
Employee: Paul Boyd
Supplier: O2SI
Description: ICPMS Tungsten standard SPIKE - 10mg/L
Comments: None

Analyte	Concentration	Analyte	Concentration
Tungsten	10 mg/L		

Serial ID: UI110503-11 **Opened:** 03-MAY-11 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 03-MAY-11 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 03-MAY-12 **Lot Number :** 1024844
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Serial ID: UI110602-09 **Opened:** 02-JUN-11 **Amount :** 250 mL
Name: ICP-MS CRDL Master #1 **Received:** 02-JUN-11 **Catalog Number :** 160044-13-02
Type: Source Material **Expires:** 02-JUN-12 **Lot Number :** 1026190
Employee: Paul Boyd **Solvent :** +/- 0.5% IN 2% HNO3
Supplier: 02SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	50 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	200 mg/L	Chromium	30 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
Iron	100 mg/L	Lead	2 mg/L
Lithium	10 mg/L	Magnesium	30 mg/L
Manganese	5 mg/L	Nickel	2 mg/L
Phosphorous	50 mg/L	Potassium	300 mg/L
Selenium	5 mg/L	Sodium	250 mg/L
Strontium	10 mg/L	Thallium	2 mg/L
Thorium	2 mg/L	Uranium	.2 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UI110720-12 **Opened:** 20-JUL-11 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 20-JUL-11 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 01-MAY-12 **Lot Number :** 1024788
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master B

Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	2 mg/L	Barium	2 mg/L
Beryllium	2 mg/L	Boron	2 mg/L
Cadmium	2 mg/L	Chromium	2 mg/L
Cobalt	2 mg/L	Copper	2 mg/L
Lead	2 mg/L	Lithium	2 mg/L
Manganese	2 mg/L	Nickel	2 mg/L
Selenium	2 mg/L	Strontium	2 mg/L
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI110720-13 **Opened:** 20-JUL-11 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 20-JUL-11 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 01-MAY-12 **Lot Number :** 1024789
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI
Description: ICPMS ICSAB Master C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	2 mg/L	Silver	2 mg/L
Tin	2 mg/L	Tungsten	2 mg/L
Zirconium	2 mg/L		

Serial ID: UI110817-07 **Opened:** 17-AUG-11 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-AUG-11 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-AUG-12 **Lot Number :** 1027953
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln B - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Serial ID: UI110817-08 **Opened:** 17-AUG-11 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-AUG-11 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 29-AUG-11 **Lot Number :** 1027961
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI110817-09 **Opened:** 17-AUG-11 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-AUG-11 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-AUG-12 **Lot Number :** 1027978
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV SOLN A - 2000ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI110824-11 **Opened:** 24-AUG-11 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 24-AUG-11 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 24-AUG-12 **Lot Number :** 1026046
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: 02SI
Description: ICP-MS ICSA Master A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Carbon	2000 mg/L	Chloride	10000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Molybdenum	20 mg/L	Phosphorous	1000 mg/L
Potassium	1000 mg/L	Sodium	1000 mg/L
Sulfur	1000 mg/L	Titanium	20 mg/L

Standard Logbook

Serial ID: UI110824-60 **Opened:** 24-AUG-11 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 24-AUG-11 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 01-AUG-12 **Lot Number :** 1027453
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Arsenic	100 mg/L
Barium	250 mg/L	Beryllium	100 mg/L
Cadmium	100 mg/L	Calcium	5000 mg/L
Chromium	100 mg/L	Cobalt	100 mg/L
Copper	100 mg/L	Iron	5000 mg/L
Lead	500 mg/L	Lithium	100 mg/L
Magnesium	5000 mg/L	Manganese	100 mg/L
Nickel	100 mg/L	Phosphorous	2500 mg/L
Potassium	5000 mg/L	Selenium	50 mg/L
Sodium	5000 mg/L	Strontium	100 mg/L
Thallium	50 mg/L	Thorium	250 mg/L
Uranium	500 mg/L	Vanadium	100 mg/L
Zinc	250 mg/L		

Serial ID: UI110824-61 **Opened:** 24-AUG-11 **Amount :** .5 mL
Name: ICPMS High Range Standar **Received:** 24-AUG-11 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 01-AUG-12 **Lot Number :** 1027453
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: O2SI
Description: Linear Range Standard B
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	25 mg/L	Molybdenum	100 mg/L
Silver	25 mg/L	Tin	100 mg/L
Tungsten	100 mg/L	Zirconium	50 mg/L

Serial ID: UI110829-08 **Opened:** 29-AUG-11 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 29-AUG-11 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 01-AUG-12 **Lot Number :** 1027375
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS ICV/CCV Soln C - 20ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	20 mg/L	Molybdenum	20 mg/L

Analyte	Concentration	Analyte	Concentration
Silver	20 mg/L	Tin	20 mg/L
Titanium	20 mg/L	Tungsten	20 mg/L
Zirconium	20 mg/L		

Serial ID: UI1589187-A **Opened:** 11-JUL-11 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-JUL-11 **Lot Number :** 1027275
Type: Source Material **Expires:** 11-JUL-12
Employee: Anthony Green
Supplier: O2si
Description: ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	200 mg/L	Arsenic	5 mg/L
Barium	5 mg/L	Beryllium	5 mg/L
Bismuth	5 mg/L	Boron	10 mg/L
Cadmium	5 mg/L	Calcium	200 mg/L
Cesium	5 mg/L	Chromium	5 mg/L
Cobalt	5 mg/L	Copper	5 mg/L
Iron	200 mg/L	Lead	5 mg/L
Lithium	5 mg/L	Magnesium	200 mg/L
Manganese	5 mg/L	Nickel	5 mg/L
Phosphorous	200 mg/L	Potassium	200 mg/L
Selenium	5 mg/L	Sodium	200 mg/L
Strontium	5 mg/L	Thallium	5 mg/L
Thorium	5 mg/L	Uranium	5 mg/L
Uranium-235	.036 mg/L	Uranium-238	4.964 mg/L
Vanadium	5 mg/L	Zinc	5 mg/L

Serial ID: UI1589189-B **Opened:** 11-JUL-11 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 11-JUL-11 **Lot Number :** 1027275
Type: Source Material **Expires:** 11-JUL-12
Employee: Anthony Green
Supplier: O2si
Description: MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	5 mg/L	Molybdenum	5 mg/L
Silver	5 mg/L	Tin	5 mg/L
Titanium	5 mg/L	Zirconium	5 mg/L

Serial ID: UMS110812-01 **Opened:** 12-AUG-11 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 12-AUG-11 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 12-AUG-12 **Lot Number :** 8-095CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution B
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	10 mg/L	Barium	10 mg/L
Beryllium	10 mg/L	Boron	20 mg/L
Cadmium	10 mg/L	Chromium	10 mg/L
Cobalt	10 mg/L	Copper	10 mg/L
Lead	10 mg/L	Lithium	10 mg/L
Manganese	10 mg/L	Nickel	10 mg/L
Selenium	10 mg/L	Silver	10 mg/L
Strontium	10 mg/L	Thallium	10 mg/L
Thorium	10 mg/L	Uranium	10 mg/L
Vanadium	10 mg/L	Zinc	10 mg/L

Serial ID: UMS110812-02 **Opened:** 12-AUG-11 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 12-AUG-11 **Lot Number :** 8-097CR
Type: Source Material **Expires:** 12-AUG-12
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution A
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	1000 mg/L	Calcium	1000 mg/L
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS110812-03 **Opened:** 12-AUG-11 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 12-AUG-11 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 12-AUG-12 **Lot Number :** 8-096CR
Employee: Paul Boyd
Supplier: SPEX
Description: ICPMS Calibration Standard Solution C
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10 mg/L	Molybdenum	10 mg/L
Tin	10 mg/L	Titanium	10 mg/L
Zirconium	10 mg/L		

Standard Logbook

Serial ID: IHG110823-01 **Opened:** 23-AUG-11 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 23-AUG-11 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 24-AUG-11 **Solvent :** 1mL HNO3 + TypeI H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1576854-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG110823-02 **Opened:** 23-AUG-11 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Intermediate **Expires:** 24-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1576853-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG110824-01 **Opened:** 24-AUG-11 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-AUG-11 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-AUG-11 **Solvent :** 1mL HNO3 + TypeI H2O
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 1st Source 200 ug/L
Comments: Prepare fresh daily

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1576854-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: IHG110824-02 **Opened:** 24-AUG-11 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Intermediate **Expires:** 25-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Intermediate 2nd Source 200 ug/L
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1576853-02	Mercury	999.7 mg/L	.05 mL	250 mL	200 ug/L

Standard Logbook

Serial ID: WHG110823-01a **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG110823-02 **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG110823-03 **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG110823-04 **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG110823-05 **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG110823-06 **Opened:** 23-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 23-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 30-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110823-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG110824-01a **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.2/CRA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG110824-02 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 0.5
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG110824-03 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG110824-04 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 5.0/CCV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG110824-05 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 1st Source CAL 10.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG110824-06 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury Working 2nd Source 5.0/ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG110824-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG110824-13 **Opened:** 24-AUG-11 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 24-AUG-11 **Solvent :** 2% HNO3-1596475
Type: Working **Expires:** 31-AUG-11
Employee: Tara Griffin
Supplier: GEL
Description: Mercury working intermediate standard for LCS/MS
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UHG1576854-01	Mercury	1000 mg/L	.05 mL	250 mL	200 ug/L

Serial ID: WMS110824-04 **Opened:** 24-AUG-11 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 24-AUG-11 **Balance Id :** 4025216
Type: Working **Expires:** 25-AUG-11 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1605968
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110411-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS110812-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS110812-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS110824-04A **Opened:** 24-AUG-11 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 24-AUG-11 **Pipet Id :** 3541598
Type: Working **Expires:** 25-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1605968
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS110824-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS110824-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110824-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Tungsten	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS110824-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS110824-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS110824-05 **Opened:** 24-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 24-AUG-11 **Pipet Id :** 3541598
Type: Working **Expires:** 25-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1605968
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110817-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI110817-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-09	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI110817-09	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110817-09	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Serial ID: WMS110824-06 **Opened:** 24-AUG-11 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 24-AUG-11 **Pipet Id :** 3820544
Type: Working **Expires:** 25-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1605968
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110222-10	Antimony	3 mg/L	.05 mL	50 mL	3 ug/L
UI110222-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI110222-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI110222-10	Tin	5 mg/L	.05 mL	50 mL	5 ug/L
UI110222-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110222-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI110222-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Aluminum	50 mg/L	.05 mL	50 mL	30 ug/L
UI110602-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI110602-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI110602-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Calcium	200 mg/L	.05 mL	50 mL	200 ug/L
UI110602-09	Chromium	30 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Iron	100 mg/L	.05 mL	50 mL	100 ug/L
UI110602-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Magnesium	30 mg/L	.05 mL	50 mL	15 ug/L
UI110602-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI110602-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI110602-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI110602-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Thallium	2 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Thorium	2 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI110602-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Serial ID: WMS110824-07 **Opened:** 24-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 24-AUG-11 **Lot Number :** 1010773
Type: Working **Expires:** 25-AUG-11 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1605968
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110824-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI110824-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI110824-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI110824-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS110824-08 **Opened:** 24-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 24-AUG-11 **Pipet Id :** 1758088
Type: Working **Expires:** 25-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1605968
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110503-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI110503-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI110503-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI110503-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110503-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI110720-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110720-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI110720-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI110720-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI110720-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI110720-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI110720-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI110720-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI110720-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI110720-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS110824-70 **Opened:** 24-AUG-11 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 24-AUG-11 **Pipet Id :** 1758088
Type: Working **Expires:** 25-AUG-11 **Solvent :** 2%HNO3/1%HCl-1605968
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110824-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI110824-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI110824-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110824-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI110824-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI110824-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI110824-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI110824-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI110824-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI110824-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI110824-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI110824-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI110824-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI110824-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Serial ID: WMS110829-04 **Opened:** 29-AUG-11 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 29-AUG-11 **Balance Id :** 4025216
Type: Working **Expires:** 30-AUG-11 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1608947
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110411-03	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS110812-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS110812-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS110812-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS110812-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS110829-04A **Opened:** 29-AUG-11 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 29-AUG-11 **Pipet Id :** 3541598
Type: Working **Expires:** 30-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1608947
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS110829-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS110829-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS110829-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS110829-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Tungsten	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS110829-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS110829-05 **Opened:** 29-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 29-AUG-11 **Pipet Id :** 3541598
Type: Working **Expires:** 30-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1608947
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110817-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI110817-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI110817-09	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI110817-09	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110817-09	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110817-09	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI110829-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI110829-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS110829-06 **Opened:** 29-AUG-11 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 29-AUG-11 **Pipet Id :** 3820544
Type: Working **Expires:** 30-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1608947
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110222-10	Antimony	3 mg/L	.05 mL	50 mL	3 ug/L
UI110222-10	Molybdenum	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI110222-10	Silver	1 mg/L	.05 mL	50 mL	1 ug/L
UI110222-10	Tin	5 mg/L	.05 mL	50 mL	5 ug/L
UI110222-10	Titanium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110222-10	Tungsten	5 mg/L	.05 mL	50 mL	5 ug/L
UI110222-10	Zirconium	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Aluminum	50 mg/L	.05 mL	50 mL	30 ug/L
UI110602-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI110602-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI110602-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Calcium	200 mg/L	.05 mL	50 mL	200 ug/L
UI110602-09	Chromium	30 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Iron	100 mg/L	.05 mL	50 mL	100 ug/L
UI110602-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Magnesium	30 mg/L	.05 mL	50 mL	15 ug/L
UI110602-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI110602-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI110602-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110602-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI110602-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI110602-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Thallium	2 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Thorium	2 mg/L	.05 mL	50 mL	1 ug/L
UI110602-09	Uranium	.2 mg/L	.05 mL	50 mL	.2 ug/L
UI110602-09	Vanadium	10 mg/L	.05 mL	50 mL	10 ug/L
UI110602-09	Zinc	10 mg/L	.05 mL	50 mL	10 ug/L

Serial ID: WMS110829-07 **Opened:** 29-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 29-AUG-11 **Lot Number :** 1010773
Type: Working **Expires:** 30-AUG-11 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1608947
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110824-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI110824-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI110824-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI110824-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS110829-08 **Opened:** 29-AUG-11 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 29-AUG-11 **Pipet Id :** 1758088
Type: Working **Expires:** 30-AUG-11 **Solvent :** 2%HNO3/1%HCl - 1608947
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110720-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI110720-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI110720-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI110720-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI110720-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI110720-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI110720-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI110720-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI110720-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI110720-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI110824-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Carbon	2000 mg/L	5 mL	50 mL	200000 ug/L
UI110824-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI110824-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI110824-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI110824-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: 110622-tclp **Opened:** 22-JUN-11 **Lot Number :** K11061
Name: I-HNO3 **Received:** 22-JUN-11
Type: Reagent/Solvent **Expires:** 22-JUN-12
Employee: Edmund Frampton
Supplier: Macron Chemicals
Description: Concentrated Nitric Acid
Comments: None

Standard Logbook

Serial ID: 1305056 **Opened:** 21-APR-10 **Lot Number :** 200924601
Name: I-HCL **Received:** 21-APR-10
Type: Reagent/Solvent **Expires:** 21-APR-12
Employee: Edmund Frampton
Supplier: VWR
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1344209-A **Opened:** 26-MAY-10 **Lot Number :** G37587
Name: B-NaCl-MER **Received:** 26-MAY-10
Type: Reagent/Solvent **Expires:** 26-MAY-12
Employee: Tara Griffin
Supplier: VWR
Description: Sodium Chloride
Comments: None

Serial ID: 1499766-A **Opened:** 15-DEC-10 **Lot Number :** 1850C368
Name: B-NH2OH.HCl-MER **Received:** 15-DEC-10
Type: Reagent/Solvent **Expires:** 15-DEC-12
Employee: Tara Griffin
Supplier: EMD
Description: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1522928 **Opened:** 10-FEB-11 **Lot Number :** J51J06
Name: B-H2SO4-MER **Received:** 10-FEB-11
Type: Reagent/Solvent **Expires:** 10-FEB-12
Employee: Tara Griffin
Supplier: Mallinckrodt
Description: Sulfuric Acid, Concentrated
Comments: None

Serial ID: 1543794-A **Opened:** 28-MAR-11 **Lot Number :** TB09AZEMS
Name: B-KMnO4(VWR)-MER **Received:** 28-MAR-11
Type: Reagent/Solvent **Expires:** 28-MAR-12
Employee: Tara Griffin
Supplier: EMD
Description: Potassium Permanganate
Comments: None

Serial ID: 1586906 **Opened:** 05-JUL-11 **Lot Number :** K14068
Name: I-HCL **Received:** 05-JUL-11 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 05-JUL-12
Employee: Anthony Green
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1588420-C **Opened:** 08-JUL-11 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 08-JUL-11
Type: Reagent/Solvent **Expires:** 08-JAN-12
Employee: Tara Griffin
Supplier: GEL
Description: 5% KMnO4 solution
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1543794-A	B-KMnO4(VWR)-MER	Crystals	50 g	1000 mL	5%

Serial ID: 1596475-1 **Opened:** 28-JUL-11 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 28-JUL-11 **Lot Number :** K15030
Type: Reagent/Solvent **Expires:** 28-JUL-12
Employee: Tara Griffin
Supplier: J T Baker
Description: NITRIC ACID
Comments: None

Serial ID: 1596503 **Opened:** 28-JUL-11 **Lot Number :** K10H00
Name: B-K2S2O8S-MER **Received:** 28-JUL-11
Type: Reagent/Solvent **Expires:** 28-JUL-12
Employee: Tara Griffin
Supplier: J.T BAKER
Description: Potassium Persulfate Concentrate.
Comments: None

Serial ID: 1596553-C **Opened:** 28-JUL-11 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 28-JUL-11
Type: Reagent/Solvent **Expires:** 28-JAN-12
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1344209-A	B-NaCl-MER	N/A	120 g	1000 mL	N/A
1499766-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 1601203-C **Opened:** 09-AUG-11 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 09-AUG-11
Type: Reagent/Solvent **Expires:** 09-FEB-12
Employee: Tara Griffin
Supplier: GEL
Description: 5% Potassium Persulfate
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1596503	B-K2S2O8S-MER	N/A		1000 mL	N/A

Serial ID: 1604895 **Opened:** 18-AUG-11 **Lot Number :** K26028
Name: I-HNO3 **Received:** 18-AUG-11
Type: Reagent/Solvent **Expires:** 18-AUG-12
Employee: Anthony Green
Supplier: Macron Chemicals
Description: Concentrated Nitric Acid
Comments: None

Serial ID: 1605968 **Opened:** 22-AUG-11 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 22-AUG-11
Type: Reagent/Solvent **Expires:** 29-AUG-11
Employee: Dale Mori
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
110622-tclp	I-HNO3	68.0-70.0%	160 mL	8 l	N/A
1305056	I-HCL	36.5-38.0	80 mL	8 l	N/A

Serial ID: 1608947 **Opened:** 29-AUG-11 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 29-AUG-11
Type: Reagent/Solvent **Expires:** 05-SEP-11
Employee: Dale Mori
Supplier: GEL
Description: 2%HNO3/1%HCl Solution (Type I Water)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
110622-tclp	I-HNO3	68.0-70.0%	160 mL	8 l	N/A

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1586906	I-HCL	36.5-38.0	80 mL	8 l	N/A

Table 2-1

HART CROWSER 2000 SURFACE SOIL SAMPLES ANALYTICAL RESULTS SUMMARY
GORST CREEK - BREMERTON AUTO WRECKING LANDFILL INTEGRATED ASSESSMENT
PORT ORCHARD, WASHINGTON

Sample ID	GL-SS-01	GL-SS-02	GL-SS-03	GL-SS-04	GL-SS-05	GL-SS-06	GL-SS-07	GL-SS-08
Sample Date	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000
Description	Background	Discrete Grab			Composite			Field Duplicate
Pesticides/PCBs (mg/kg)								
Aroclor 1248	0.044 U	0.039 U	**0.23**	**0.44**	0.036 U	0.04 U	0.04 U	0.04 U
Aroclor 1254	0.044 U	0.039 U	0.039 U	0.038 U	**0.14**	0.04 U	0.04 U	0.04 U
Aroclor 1260	0.044 U	**0.042**	**0.14**	**0.12**	0.036 U	0.04 U	0.04 U	0.04 U
Total PCBs	0.044 U	**0.042**	**0.37**	**0.56**	**0.14**	0.04 U	0.04 U	0.04 U
4,4'-DDD	0.0044 U	0.004 U	0.004 U	**0.037 J**	0.0036 U	0.004 U	0.004 U	0.004 U
4,4'-DDE	0.0044 U	0.004 U	**0.016 J**	**0.026 J**	**0.03 J**	0.004 U	0.004 U	0.004 U
4,4'-DDT	0.0044 U	**0.015 J**	**0.03 J**	**0.04 J**	**0.058**	0.004 U	0.004 U	0.004 U
Alpha-Chlordane	0.0022 U	**0.011 J**	0.002 U	0.0019 U	0.0018 U	0.002 U	0.002 U	0.002 U
Dieldrin	0.0044 U	0.004 U	**0.017**	**0.029 J**	**0.038 J**	0.004 U	0.004 U	0.004 U
Endosulfan I	0.0022 U	0.002 U	0.002 U	0.0019 U	**0.01 J**	0.002 U	0.002 U	0.002 U
Endosulfan II	0.0044 U	0.004 U	0.004 U	0.0038 U	**0.0095 J**	0.004 U	0.004 U	0.004 U
Endosulfan Sulfate	0.0044 U	**0.009**	0.004 U	0.0038 U	0.0036 U	0.004 U	0.004 U	0.004 U
Endrin	0.0044 U	0.004 U	0.004 U	0.0038 U	**0.0077 J**	0.004 U	0.004 U	0.004 U
Endrin Ketone	0.0044 U	0.004 U	**0.005**	0.0038 U	0.0036 U	0.004 U	0.004 U	0.004 U
Gamma-Chlordane	0.0022 U	**0.008**	**0.009 J**	**0.015 J**	**0.02 J**	0.002 U	0.002 U	0.002 U
Heptachlor Epoxide	0.0022 U	0.002 U	**0.007 J**	0.0019 U	**0.0087 J**	0.002 U	0.002 U	0.002 U
SVOCs (mg/kg)								
2-Methylnaphthalene	0.44 U	**0.013 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Acenaphthene	0.44 U	**0.026 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Acenaphthylene	0.44 U	**0.014 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Anthracene	0.44 U	**0.067 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Benz(a)anthracene	0.44 U	**0.15 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Benzo(a)pyrene	0.44 U	**0.14 J**	**0.016 J**	0.37 U	**0.015 J**	0.4 U	0.4 U	0.4 U
Benzo(b)fluoranthene	0.44 U	**0.12**	**0.009 J**	**0.006 J**	0.36 U	0.4 U	**0.4**	0.4 U
Benzo(g,h,i)perylene	0.44 U	**0.096 J**	**0.011 J**	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Benzo(k)fluoranthene	0.44 U	**0.1**	**0.005 J**	**0.003 J**	0.36 U	0.4 U	**0.4**	0.4 U
Butylbenzylphthalate	0.016 J	**0.15 J**	**0.048 J**	**0.031 J**	**0.024 J**	**0.009 J**	0.4 U	**0.009 J**
Carbazole	0.44 U	**0.034 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Chrysene	0.44 U	**0.18 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Dibenz(a,h)anthracene	0.44 U	**0.03 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Dibenzofuran	0.44 U	**0.013 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Dimethylphthalate	0.44 U	**0.089 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Di-n-butylphthalate	0.44 U	0.39 U	0.39 U	**0.028 J**	0.36 U	0.4 U	0.4 U	0.4 U
Fluoranthene	0.44 U	**0.28 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Fluorene	0.44 U	**0.032 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Indeno(1,2,3-cd)pyrene	0.44 U	**0.088J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Naphthalene	0.44 U	**0.032 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Phenanthrene	0.44 U	**0.28 J**	0.39 U	0.37 U	0.36 U	0.4 U	0.4 U	0.4 U
Pyrene	0.44 U	**0.29 J**	**0.009 J**	**0.009 J**	0.36 U	0.4 U	0.4 U	0.4 U

Table 2-1

HART CROWSER 2000 SURFACE SOIL SAMPLES ANALYTICAL RESULTS SUMMARY
GORST CREEK - BREMERTON AUTO WRECKING LANDFILL INTEGRATED ASSESSMENT
PORT ORCHARD, WASHINGTON

Sample ID	GL-SS-01	GL-SS-02	GL-SS-03	GL-SS-04	GL-SS-05	GL-SS-06	GL-SS-07	GL-SS-08
Sample Date	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000	1/10/2000
Description	Background	Discrete Grab			Composite			Field Duplicate
TAL Metals (mg/kg)								
Antimony	3.6 U	3.0 U	**5.9**	3.1 U	**4.7**	3.2 U	3.3 U	3.2 U
Arsenic	**2.3**	**5.2**	**1.7**	**1.2**	**0.91**	**1.6**	**1.6**	**1.4**
Cadmium	0.36 U	**1**	**0.83**	0.31 U	0.3 U	0.32 U	0.33 U	0.32 U
Chromium	**23**	**28**	**30.3**	**25.2**	**22.4**	**19**	**27.9**	**19.8**
Copper	**12.5**	**34.1**	**64.8**	**30.7**	**22.3**	**10**	**13**	**11.7**
Lead	**10**	**235**	**57.9**	**32.8**	**17.8**	**12.7**	**16.3**	**10.6**
Mercury	0.045 U	**0.1**	**0.25**	**0.094**	**0.046**	0.046 U	0.047 U	0.049 U
Nickel	**32.1**	**35.7**	**44**	**28.5**	**34.3**	**24.4**	**35.4**	**32.1**
Zinc	**31.5**	**178**	**235**	**105**	**77.4**	**27.7**	**44.5**	**40.3**

Source: Hart Crowser 2000.

Note: Bold type indicates the sample results is above the instrument detection limit.

Key:

DDD = Dichlorodiphenyldichloroethane.
DDE = Dichlorodiphenyldichloroethylene.
DDT = Dichlorodiphenyltrichloroethane.
ID = Identification.
J = Estimated value.
mg/kg = Milligrams per kilogram.
PCBs = Polychlorinated biphenyls.
SVOCs = Semivolatile organic compounds.
TAL = Target Analyte List.
U = Not detected at indicated detection limit.

Table 2-2

HART CROWSER 2000
SEDIMENT SAMPLES ANALYTICAL RESULTS SUMMARY
GORST CREEK - BREMERTON AUTO WRECKING LANDFILL
INTEGRATED ASSESSMENT
PORT ORCHARD, WASHINGTON

Sample ID	GL-SED-01	GL-SED-02	GL-SED-03	GL-SED-04
Sample Date	1/10/2000	1/11/2000	1/11/2000	1/11/2000
Description	Background	Composite		
Pesticides/PCBs (mg/kg)				
4,4'-DDT	0.0043 U	**0.012 J**	0.0041 U	0.0041 U
SVOCs (mg/kg)				
4-Methylphenol	0.43 U	**0.017 J**	0.4 U	0.4 U
Benzo(a)anthracene	0.43 U	**0.045 J**	0.4 U	0.4 U
Benzo(a)anthracene	0.43 U	**0.045 J**	0.4 U	0.4 U
Benzo(b)fluoranthene	**0.43**	**0.058 J**	0.4 U	0.4 U
Benzo(k)fluoranthene	**0.43**	**0.042 J**	0.4 U	0.4 U
Butylbenzylphthalate	0.43 U	**0.095 J**	0.4 U	0.4 U
Chrysene	0.43 U	**0.073 J**	0.4 U	0.4 U
Di-n-butylphthalate	0.43 U	**0.03 J**	0.4 U	0.4 U
Di-n-octylphthalate	0.43 U	**0.027 J**	0.4 U	0.4 U
Fluoranthene	0.43 U	**0.097 J**	0.4 U	0.4 U
Indeno(1,2,3-cd)pyrene	0.43 U	**0.045 J**	0.4 U	0.4 U
Pentachlorophenol	1.1 U	**0.036 J**	1 U	1 U
Phenanthrene	0.43 U	**0.06 J**	0.4 U	0.4 U
Pyrene	0.43 U	**0.097 J**	0.4 U	0.4 U
TAL Metals (mg/kg)				
Antimony	3.4 U	**7.6**	3.2 U	3.2 U
Arsenic	**2**	**3.5**	**27.7**	**2.1**
Chromium	**35.7**	**30.5**	**17.3**	**30.3**
Copper	**11.3**	**159**	**12.7**	**19.7**
Lead	**4.2**	**113**	**16.6**	**12.4**
Nickel	**54**	**53.2**	**23.1**	**32.1**
Zinc	**45.4**	**108**	**76.4**	**97.3**

Source: Hart Crowser 2000.

Note: Bold type indicates the sample result is above the detection limit.

Key:

DDT = Dichlorodiphenyltrichloroethane.
ID = Identification.
J = Estimated value.
mg/kg = Milligrams per kilogram.
PCBs = Polychlorinated biphenyl.
SVOCs = Semivolatile organic compounds.
TAL = Target Analyte List.
U = Not detected at indicated detection limit.

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

Certificate of Analysis Report
for

ECOL008 Ecology and Environment, Inc. Start−3 002233.2008

Client SDG: 284538 GEL Work Order: 284538

The Qualifiers in this report are defined as follows:

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

E Organics−−Concentration of the target analyte exceeds the instrument calibration range

J Value is estimated

P Organics−−The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Jake Crook.

Reviewed by Jacob W Crook

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101
Sample ID: 284538001
Matrix: Ground Water
Collect Date: 18-AUG-11 12:00
Receive Date: 23-AUG-11
Collector: Client

Project: ECOL00111
Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	1	JXL1	08/24/11	1718	1135404	1
Metals Analysis-ICP-MS											
SW846 3005A/6020A Liquid "As Received"											
Aluminum		8170	15.0	50.0	ug/L	1	PRB	08/25/11	0839	1135453	2
Antimony	U	ND	1.00	3.00	ug/L	1					
Barium		112	0.600	2.00	ug/L	1					
Beryllium	J	0.209	0.200	0.500	ug/L	1					
Cadmium	U	ND	0.110	1.00	ug/L	1					
Calcium		4930	60.0	200	ug/L	1					
Chromium		14.5	2.00	10.0	ug/L	1					
Cobalt		5.14	0.100	1.00	ug/L	1					
Copper		10.0	0.350	1.00	ug/L	1					
Iron		6850	33.0	100	ug/L	1					
Lead		3.58	0.500	2.00	ug/L	1					
Magnesium		2590	10.0	30.0	ug/L	1					
Manganese		275	1.00	5.00	ug/L	1					
Nickel		16.4	0.500	2.00	ug/L	1					
Potassium		907	80.0	300	ug/L	1					
Sodium		3590	80.0	250	ug/L	1					
Thallium	U	ND	0.450	2.00	ug/L	1					
Zinc		14.9	3.50	10.0	ug/L	1					
Arsenic	J	2.00	1.70	5.00	ug/L	1	PRB	08/29/11	1244	1135453	3
Selenium	U	ND	1.50	5.00	ug/L	1					
Silver	U	ND	0.200	1.00	ug/L	1					
Semi-Volatile-GC/MS											
SW846 3510C/8270D Semivolatile Analysis "As Received"											
1,1'-Biphenyl	U	ND	3.00	10.0	ug/L	1	JLD1	08/26/11	1307	1135988	4
1,2,4,5-Tetrachlorobenzene	U	ND	3.00	10.0	ug/L	1					
2,3,4,6-Tetrachlorophenol	U	ND	3.00	10.0	ug/L	1					
2,4,5-Trichlorophenol	U	ND	3.00	10.0	ug/L	1					
2,4,6-Trichlorophenol	U	ND	3.00	10.0	ug/L	1					
2,4-Dichlorophenol	U	ND	3.00	10.0	ug/L	1					
2,4-Dimethylphenol	U	ND	3.00	10.0	ug/L	1					
2,4-Dinitrophenol	U	ND	5.00	20.0	ug/L	1					
2,4-Dinitrotoluene	U	ND	3.00	10.0	ug/L	1					
2,6-Dinitrotoluene	U	ND	3.00	10.0	ug/L	1					
2-Chloronaphthalene	U	ND	0.300	1.00	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-Volatile-GC/MS											
SW846 3510C/8270D Semivolatile Analysis "As Received"											
2-Chlorophenol	U	ND	3.00	10.0	ug/L	1					
2-Methyl-4,6-dinitrophenol	U	ND	3.00	10.0	ug/L	1					
2-Methylnaphthalene	U	ND	0.300	1.00	ug/L	1					
2-Nitrophenol	U	ND	3.00	10.0	ug/L	1					
3,3'-Dichlorobenzidine	U	ND	3.00	10.0	ug/L	1					
4-Bromophenylphenylether	U	ND	3.00	10.0	ug/L	1					
4-Chloro-3-methylphenol	U	ND	3.00	10.0	ug/L	1					
4-Chloroaniline	U	ND	3.00	10.0	ug/L	1					
4-Chlorophenylphenylether	U	ND	3.00	10.0	ug/L	1					
4-Nitrophenol	U	ND	3.00	10.0	ug/L	1					
Acenaphthene	U	ND	0.300	1.00	ug/L	1					
Acenaphthylene	U	ND	0.300	1.00	ug/L	1					
Acetophenone	U	ND	3.00	10.0	ug/L	1					
Anthracene	U	ND	0.300	1.00	ug/L	1					
Atrazine	U	ND	3.00	10.0	ug/L	1					
Benzaldehyde	U	ND	3.00	10.0	ug/L	1					
Benzo(a)anthracene	U	ND	0.300	1.00	ug/L	1					
Benzo(a)pyrene	U	ND	0.300	1.00	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.300	1.00	ug/L	1					
Benzo(ghi)perylene	U	ND	0.300	1.00	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.300	1.00	ug/L	1					
Butylbenzylphthalate	U	ND	3.00	10.0	ug/L	1					
Caprolactam	U	ND	3.00	10.0	ug/L	1					
Carbazole	U	ND	0.300	1.00	ug/L	1					
Chrysene	U	ND	0.300	1.00	ug/L	1					
Di-n-butylphthalate	U	ND	3.00	10.0	ug/L	1					
Di-n-octylphthalate	U	ND	3.00	10.0	ug/L	1					
Dibenzo(a,h)anthracene	U	ND	0.300	1.00	ug/L	1					
Dibenzofuran	U	ND	3.00	10.0	ug/L	1					
Diethylphthalate	U	ND	3.00	10.0	ug/L	1					
Dimethylphthalate	U	ND	3.00	10.0	ug/L	1					
Diphenylamine	U	ND	3.00	10.0	ug/L	1					
Fluoranthene	U	ND	0.300	1.00	ug/L	1					
Fluorene	U	ND	0.300	1.00	ug/L	1					
Hexachlorobenzene	U	ND	3.00	10.0	ug/L	1					
Hexachlorobutadiene	U	ND	3.00	10.0	ug/L	1					
Hexachlorocyclopentadiene	U	ND	3.00	10.0	ug/L	1					
Hexachloroethane	U	ND	3.00	10.0	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-Volatile-GC/MS											
SW846 3510C/8270D Semivolatile Analysis "As Received"											
Indeno(1,2,3-cd)pyrene	U	ND	0.300	1.00	ug/L	1					
Isophorone	U	ND	3.00	10.0	ug/L	1					
N-Nitrosodipropylamine	U	ND	3.00	10.0	ug/L	1					
Naphthalene	U	ND	0.300	1.00	ug/L	1					
Nitrobenzene	U	ND	3.00	10.0	ug/L	1					
Pentachlorophenol	U	ND	3.00	10.0	ug/L	1					
Phenanthrene	U	ND	0.300	1.00	ug/L	1					
Phenol	U	ND	3.00	10.0	ug/L	1					
Pyrene	U	ND	0.300	1.00	ug/L	1					
bis(2-Chloroethoxy)methane	U	ND	3.00	10.0	ug/L	1					
bis(2-Chloroethyl) ether	U	ND	3.00	10.0	ug/L	1					
bis(2-Chloroisopropyl)ether	U	ND	3.00	10.0	ug/L	1					
bis(2-Ethylhexyl)phthalate	J	4.56	3.00	10.0	ug/L	1					
m,p-Cresols	U	ND	3.00	10.0	ug/L	1					
m-Nitroaniline	U	ND	3.00	10.0	ug/L	1					
o-Cresol	U	ND	3.00	10.0	ug/L	1					
o-Nitroaniline	U	ND	3.00	10.0	ug/L	1					
p-Nitroaniline	U	ND	3.00	10.0	ug/L	1					
Semi-Volatiles-PCB											
SW846 3535A/8082A PCB Liquids "As Received"											
Aroclor-1016	U	ND	0.034	0.102	ug/L	1	YS1	08/30/11	0941	1136663	5
Aroclor-1221	U	ND	0.034	0.102	ug/L	1					
Aroclor-1232	U	ND	0.034	0.102	ug/L	1					
Aroclor-1242	U	ND	0.034	0.102	ug/L	1					
Aroclor-1248	U	ND	0.034	0.102	ug/L	1					
Aroclor-1254	U	ND	0.034	0.102	ug/L	1					
Aroclor-1260	U	ND	0.034	0.102	ug/L	1					
Semi-Volatiles-Pesticide											
SW846 3535A/8081B Liquid "As Received"											
4,4'-DDD	U	ND	0.0102	0.0408	ug/L	1	RXE1	08/30/11	1859	1136049	7
4,4'-DDE	U	ND	0.0102	0.0408	ug/L	1					
4,4'-DDT	U	ND	0.0102	0.0408	ug/L	1					
Aldrin	U	ND	0.00679	0.0204	ug/L	1					
Chlordane (tech.)	U	ND	0.0781	0.255	ug/L	1					
Dieldrin	U	ND	0.0102	0.0408	ug/L	1					
Endosulfan I	U	ND	0.00679	0.0204	ug/L	1					
Endosulfan II	U	ND	0.0102	0.0408	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Semi-Volatiles-Pesticide											
SW846 3535A/8081B Liquid "As Received"											
Endosulfan sulfate	U	ND	0.0102	0.0408	ug/L	1					
Endrin	U	ND	0.0102	0.0408	ug/L	1					
Endrin aldehyde	U	ND	0.00679	0.0408	ug/L	1					
Endrin ketone	U	ND	0.0102	0.0408	ug/L	1					
Heptachlor	U	ND	0.00679	0.0204	ug/L	1					
Heptachlor epoxide	U	ND	0.00679	0.0204	ug/L	1					
Methoxychlor	U	ND	0.051	0.204	ug/L	1					
Toxaphene	U	ND	0.153	0.510	ug/L	1					
alpha-BHC	U	ND	0.00679	0.0204	ug/L	1					
beta-BHC	U	ND	0.00679	0.0204	ug/L	1					
delta-BHC	U	ND	0.00679	0.0204	ug/L	1					
gamma-BHC (Lindane)	U	ND	0.00679	0.0204	ug/L	1					
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/L	1	SYK1	08/30/11	2328	1137563	9
1,1,1-Trichloroethane	U	ND	0.325	1.00	ug/L	1					
1,1,2,2-Tetrachloroethane	U	ND	0.250	1.00	ug/L	1					
1,1,2-Trichloroethane	U	ND	0.250	1.00	ug/L	1					
1,1-Dichloroethane	U	ND	0.300	1.00	ug/L	1					
1,1-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
1,1-Dichloropropene	U	ND	0.250	1.00	ug/L	1					
1,2,3-Trichlorobenzene	U	ND	0.332	1.00	ug/L	1					
1,2,3-Trichloropropane	U	ND	0.300	1.00	ug/L	1					
1,2,4-Trichlorobenzene	U	ND	0.300	1.00	ug/L	1					
1,2,4-Trimethylbenzene	U	ND	0.250	1.00	ug/L	1					
1,2-Dibromo-3-chloropropane	U	ND	0.300	1.00	ug/L	1					
1,2-Dibromoethane	U	ND	0.250	1.00	ug/L	1					
1,2-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloroethane	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloroethylene (total)	U	ND	0.300	1.00	ug/L	1					
1,2-Dichloropropane	U	ND	0.250	1.00	ug/L	1					
1,3,5-Trimethylbenzene	U	ND	0.250	1.00	ug/L	1					
1,3-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,3-Dichloropropane	U	ND	0.300	1.00	ug/L	1					
1,4-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
2,2-Dichloropropane	U	ND	0.300	1.00	ug/L	1					
2-Butanone	U	ND	1.25	5.00	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
2-Chloro-1,3-butadiene	U	ND	0.300	1.00	ug/L	1					
2-Chloroethylvinyl ether	U	ND	1.50	5.00	ug/L	1					
2-Chlorotoluene	U	ND	0.250	1.00	ug/L	1					
2-Hexanone	U	ND	1.25	5.00	ug/L	1					
2-Nitropropane	U	ND	1.00	5.00	ug/L	1					
4-Chlorotoluene	U	ND	0.250	1.00	ug/L	1					
4-Isopropyltoluene	U	ND	0.250	1.00	ug/L	1					
4-Methyl-2-pentanone	U	ND	1.25	5.00	ug/L	1					
Acetone	U	ND	1.50	5.00	ug/L	1					
Acetonitrile	U	ND	6.25	25.0	ug/L	1					
Acrolein	U	ND	1.25	5.00	ug/L	1					
Acrylonitrile	U	ND	1.00	5.00	ug/L	1					
Allyl chloride	U	ND	1.50	5.00	ug/L	1					
Benzene	U	ND	0.300	1.00	ug/L	1					
Benzyl chloride	U	ND	1.30	5.00	ug/L	1					
Bromobenzene	U	ND	0.250	1.00	ug/L	1					
Bromochloromethane	U	ND	0.300	1.00	ug/L	1					
Bromodichloromethane	U	ND	0.250	1.00	ug/L	1					
Bromoform	U	ND	0.250	1.00	ug/L	1					
Bromomethane	U	ND	0.300	1.00	ug/L	1					
Carbon disulfide	U	ND	1.25	5.00	ug/L	1					
Carbon tetrachloride	U	ND	0.300	1.00	ug/L	1					
Chlorobenzene	U	ND	0.250	1.00	ug/L	1					
Chloroethane	U	ND	0.300	1.00	ug/L	1					
Chloroform	U	ND	0.250	1.00	ug/L	1					
Chloromethane	U	ND	0.300	1.00	ug/L	1					
Cyclohexane	U	ND	0.300	1.00	ug/L	1					
Cyclohexanone	U	ND	15.0	50.0	ug/L	1					
Dibromochloromethane	U	ND	0.300	1.00	ug/L	1					
Dibromomethane	U	ND	0.300	1.00	ug/L	1					
Dichlorodifluoromethane	U	ND	0.300	1.00	ug/L	1					
Ethyl ether	U	ND	0.300	1.00	ug/L	1					
Ethyl methacrylate	U	ND	1.00	5.00	ug/L	1					
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Hexachlorobutadiene	U	ND	0.300	1.00	ug/L	1					
Iodomethane	U	ND	1.25	5.00	ug/L	1					
Isobutyl alcohol	U	ND	12.5	50.0	ug/L	1					
Isopropylbenzene	U	ND	0.250	1.00	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
Methacrylonitrile	U	ND	1.00	5.00	ug/L	1					
Methyl acetate	U	ND	1.25	5.00	ug/L	1					
Methyl methacrylate	U	ND	1.00	5.00	ug/L	1					
Methylcyclohexane	U	ND	0.250	1.00	ug/L	1					
Methylene chloride	U	ND	2.00	5.00	ug/L	1					
Naphthalene	U	ND	0.250	1.00	ug/L	1					
Pentachloroethane	U	ND	1.00	5.00	ug/L	1					
Propionitrile	U	ND	1.50	5.00	ug/L	1					
Styrene	U	ND	0.250	1.00	ug/L	1					
Tetrachloroethylene	U	ND	0.300	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Trichloroethylene	U	ND	0.250	1.00	ug/L	1					
Trichlorofluoromethane	U	ND	0.300	1.00	ug/L	1					
Trichlorotrifluoroethane	U	ND	1.00	5.00	ug/L	1					
Vinyl acetate	U	ND	1.50	5.00	ug/L	1					
Vinyl chloride	U	ND	0.500	1.00	ug/L	1					
Xylenes (total)	U	ND	0.300	1.00	ug/L	1					
bis(2-Chloroisopropyl)ether	U	ND	1.50	5.00	ug/L	1					
cis-1,2-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
cis-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					
cis-1,4-Dichloro-2-butene	U	ND	1.00	5.00	ug/L	1					
m,p-Xylenes	U	ND	0.500	2.00	ug/L	1					
n-Butyl alcohol	U	ND	15.0	50.0	ug/L	1					
n-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
n-Propylbenzene	U	ND	0.250	1.00	ug/L	1					
o-Xylene	U	ND	0.300	1.00	ug/L	1					
sec-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
tert-Butyl methyl ether	U	ND	0.250	1.00	ug/L	1					
tert-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
trans-1,2-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
trans-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					
trans-1,4-Dichloro-2-butene	U	ND	1.00	5.00	ug/L	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	AXG2	08/24/11	0730	1135452
SW846 3510C	SW846 3510C Prep Semivolatiles 8270D	AXW1	08/25/11	1855	1135986
SW846 3535A	SW3535A PCB SPE Extraction	SXC2	08/29/11	0820	1136662

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080101 Project: ECOL00111
Sample ID: 284538001 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
SW846 3535A	SW3535A Pesticides SPE Extraction		TXA2		08/25/11	1820	1136047				
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid		TXB3		08/24/11	1000	1135403				

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 7470A	
2	SW846 3005A/6020A	
3	SW846 3005A/6020A	
4	SW846 3510C/8270D	
5	SW846 3535A/8082A	
6	SW846 3535A/8082A	
7	SW846 3535A/8081B	
8	SW846 3535A/8081B	
9	SW846 8260B	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
2,4,6-Tribromophenol	SW846 3510C/8270D Semivolatile Analysis "As Received"	89.8 ug/L	100	89.8	(33%-126%)
2-Fluorophenol	SW846 3510C/8270D Semivolatile Analysis "As Received"	41.1 ug/L	100	41.1	(14%-78%)
Phenol-d5	SW846 3510C/8270D Semivolatile Analysis "As Received"	24.4 ug/L	100	24.4	(14%-80%)
2-Fluorobiphenyl	SW846 3510C/8270D Semivolatile Analysis "As Received"	36.0 ug/L	50.0	71.9	(37%-102%)
Nitrobenzene-d5	SW846 3510C/8270D Semivolatile Analysis "As Received"	37.5 ug/L	50.0	74.9	(40%-117%)
p-Terphenyl-d14	SW846 3510C/8270D Semivolatile Analysis "As Received"	29.9 ug/L	50.0	59.7	(44%-134%)
4cmx	SW846 3535A/8082A PCB Liquids "As Received"	0.0254 ug/L	0.204	12.4*	(50%-150%)
Decachlorobiphenyl	SW846 3535A/8082A PCB Liquids "As Received"	0.0285 ug/L	0.204	14.0*	(50%-150%)
4cmx	SW846 3535A/8081B Liquid "As Received"	0.632 ug/L	1.02	62.0	(50%-150%)
Decachlorobiphenyl	SW846 3535A/8081B Liquid "As Received"	0.766 ug/L	1.02	75.1	(50%-150%)
1,2-Dichloroethane-d4	GEL 8260B Method List Liquid "As Received"	47.8 ug/L	50.0	95.7	(79%-124%)
Bromofluorobenzene	GEL 8260B Method List Liquid "As Received"	50.9 ug/L	50.0	102	(80%-120%)
Toluene-d8	GEL 8260B Method List Liquid "As Received"	49.7 ug/L	50.0	99.3	(80%-120%)

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106
Sample ID: 284538002
Matrix: Water
Collect Date: 18-AUG-11 12:00
Receive Date: 23-AUG-11
Collector: Client

Project: ECOL00111
Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
1,1,1,2-Tetrachloroethane	U	ND	0.300	1.00	ug/L	1	SYK1	08/30/11	2258	1137563	1
1,1,1-Trichloroethane	U	ND	0.325	1.00	ug/L	1					
1,1,2,2-Tetrachloroethane	U	ND	0.250	1.00	ug/L	1					
1,1,2-Trichloroethane	U	ND	0.250	1.00	ug/L	1					
1,1-Dichloroethane	U	ND	0.300	1.00	ug/L	1					
1,1-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
1,1-Dichloropropene	U	ND	0.250	1.00	ug/L	1					
1,2,3-Trichlorobenzene	U	ND	0.332	1.00	ug/L	1					
1,2,3-Trichloropropane	U	ND	0.300	1.00	ug/L	1					
1,2,4-Trichlorobenzene	U	ND	0.300	1.00	ug/L	1					
1,2,4-Trimethylbenzene	U	ND	0.250	1.00	ug/L	1					
1,2-Dibromo-3-chloropropane	U	ND	0.300	1.00	ug/L	1					
1,2-Dibromoethane	U	ND	0.250	1.00	ug/L	1					
1,2-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloroethane	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloroethylene (total)	U	ND	0.300	1.00	ug/L	1					
1,2-Dichloropropane	U	ND	0.250	1.00	ug/L	1					
1,3,5-Trimethylbenzene		2.90	0.250	1.00	ug/L	1					
1,3-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,3-Dichloropropane	U	ND	0.300	1.00	ug/L	1					
1,4-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
2,2-Dichloropropane	U	ND	0.300	1.00	ug/L	1					
2-Butanone		12.1	1.25	5.00	ug/L	1					
2-Chloro-1,3-butadiene	U	ND	0.300	1.00	ug/L	1					
2-Chloroethylvinyl ether	U	ND	1.50	5.00	ug/L	1					
2-Chlorotoluene	U	ND	0.250	1.00	ug/L	1					
2-Hexanone	U	ND	1.25	5.00	ug/L	1					
2-Nitropropane	U	ND	1.00	5.00	ug/L	1					
4-Chlorotoluene	U	ND	0.250	1.00	ug/L	1					
4-Isopropyltoluene	U	ND	0.250	1.00	ug/L	1					
4-Methyl-2-pentanone		7.81	1.25	5.00	ug/L	1					
Acetone	E	1040	1.50	5.00	ug/L	1					
Acetonitrile	U	ND	6.25	25.0	ug/L	1					
Acrolein	U	ND	1.25	5.00	ug/L	1					
Acrylonitrile	U	ND	1.00	5.00	ug/L	1					
Allyl chloride	U	ND	1.50	5.00	ug/L	1					
Benzene	U	ND	0.300	1.00	ug/L	1					
Benzyl chloride	U	ND	1.30	5.00	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106 Project: ECOL00111
Sample ID: 284538002 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
Bromobenzene	U	ND	0.250	1.00	ug/L	1					
Bromochloromethane	U	ND	0.300	1.00	ug/L	1					
Bromodichloromethane	U	ND	0.250	1.00	ug/L	1					
Bromoform	U	ND	0.250	1.00	ug/L	1					
Bromomethane	U	ND	0.300	1.00	ug/L	1					
Carbon disulfide	U	ND	1.25	5.00	ug/L	1					
Carbon tetrachloride	U	ND	0.300	1.00	ug/L	1					
Chlorobenzene	U	ND	0.250	1.00	ug/L	1					
Chloroethane	U	ND	0.300	1.00	ug/L	1					
Chloroform	J	0.430	0.250	1.00	ug/L	1					
Chloromethane	U	ND	0.300	1.00	ug/L	1					
Cyclohexane	U	ND	0.300	1.00	ug/L	1					
Cyclohexanone	U	ND	15.0	50.0	ug/L	1					
Dibromochloromethane	U	ND	0.300	1.00	ug/L	1					
Dibromomethane	U	ND	0.300	1.00	ug/L	1					
Dichlorodifluoromethane	U	ND	0.300	1.00	ug/L	1					
Ethyl ether	U	ND	0.300	1.00	ug/L	1					
Ethyl methacrylate	U	ND	1.00	5.00	ug/L	1					
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Hexachlorobutadiene	U	ND	0.300	1.00	ug/L	1					
Iodomethane	U	ND	1.25	5.00	ug/L	1					
Isobutyl alcohol	U	ND	12.5	50.0	ug/L	1					
Isopropylbenzene	U	ND	0.250	1.00	ug/L	1					
Methacrylonitrile	U	ND	1.00	5.00	ug/L	1					
Methyl acetate	U	ND	1.25	5.00	ug/L	1					
Methyl methacrylate	U	ND	1.00	5.00	ug/L	1					
Methylcyclohexane	U	ND	0.250	1.00	ug/L	1					
Methylene chloride	U	ND	2.00	5.00	ug/L	1					
Naphthalene	U	ND	0.250	1.00	ug/L	1					
Pentachloroethane	U	ND	1.00	5.00	ug/L	1					
Propionitrile	U	ND	1.50	5.00	ug/L	1					
Styrene	U	ND	0.250	1.00	ug/L	1					
Tetrachloroethylene	U	ND	0.300	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Trichloroethylene	U	ND	0.250	1.00	ug/L	1					
Trichlorofluoromethane	U	ND	0.300	1.00	ug/L	1					
Trichlorotrifluoroethane	U	ND	1.00	5.00	ug/L	1					
Vinyl acetate	U	ND	1.50	5.00	ug/L	1					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106 Project: ECOL00111
Sample ID: 284538002 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
Vinyl chloride	U	ND	0.500	1.00	ug/L	1					
Xylenes (total)	U	ND	0.300	1.00	ug/L	1					
bis(2-Chloroisopropyl)ether	U	ND	1.50	5.00	ug/L	1					
cis-1,2-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
cis-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					
cis-1,4-Dichloro-2-butene	U	ND	1.00	5.00	ug/L	1					
m,p-Xylenes	U	ND	0.500	2.00	ug/L	1					
n-Butyl alcohol	U	ND	15.0	50.0	ug/L	1					
n-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
n-Propylbenzene	U	ND	0.250	1.00	ug/L	1					
o-Xylene	U	ND	0.300	1.00	ug/L	1					
sec-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
tert-Butyl methyl ether		55.0	0.250	1.00	ug/L	1					
tert-Butylbenzene	U	ND	0.250	1.00	ug/L	1					
trans-1,2-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
trans-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					
trans-1,4-Dichloro-2-butene	U	ND	1.00	5.00	ug/L	1					
1,1,1,2-Tetrachloroethane	U	ND	1.50	5.00	ug/L	5	SYK1	08/31/11	1054	1137563	2
1,1,1-Trichloroethane	U	ND	1.63	5.00	ug/L	5					
1,1,2,2-Tetrachloroethane	U	ND	1.25	5.00	ug/L	5					
1,1,2-Trichloroethane	U	ND	1.25	5.00	ug/L	5					
1,1-Dichloroethane	U	ND	1.50	5.00	ug/L	5					
1,1-Dichloroethylene	U	ND	1.50	5.00	ug/L	5					
1,1-Dichloropropene	U	ND	1.25	5.00	ug/L	5					
1,2,3-Trichlorobenzene	U	ND	1.66	5.00	ug/L	5					
1,2,3-Trichloropropane	U	ND	1.50	5.00	ug/L	5					
1,2,4-Trichlorobenzene	U	ND	1.50	5.00	ug/L	5					
1,2,4-Trimethylbenzene	U	ND	1.25	5.00	ug/L	5					
1,2-Dibromo-3-chloropropane	U	ND	1.50	5.00	ug/L	5					
1,2-Dibromoethane	U	ND	1.25	5.00	ug/L	5					
1,2-Dichlorobenzene	U	ND	1.25	5.00	ug/L	5					
1,2-Dichloroethane	U	ND	1.25	5.00	ug/L	5					
1,2-Dichloroethylene (total)	U	ND	1.50	5.00	ug/L	5					
1,2-Dichloropropane	U	ND	1.25	5.00	ug/L	5					
1,3,5-Trimethylbenzene	J	2.80	1.25	5.00	ug/L	5					
1,3-Dichlorobenzene	U	ND	1.25	5.00	ug/L	5					
1,3-Dichloropropane	U	ND	1.50	5.00	ug/L	5					
1,4-Dichlorobenzene	U	ND	1.25	5.00	ug/L	5					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106 Project: ECOL00111
Sample ID: 284538002 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
2,2-Dichloropropane	U	ND	1.50	5.00	ug/L	5					
2-Butanone		32.6	6.25	25.0	ug/L	5					
2-Chloro-1,3-butadiene	U	ND	1.50	5.00	ug/L	5					
2-Chloroethylvinyl ether	U	ND	7.50	25.0	ug/L	5					
2-Chlorotoluene	U	ND	1.25	5.00	ug/L	5					
2-Hexanone	U	ND	6.25	25.0	ug/L	5					
2-Nitropropane	U	ND	5.00	25.0	ug/L	5					
4-Chlorotoluene	U	ND	1.25	5.00	ug/L	5					
4-Isopropyltoluene	U	ND	1.25	5.00	ug/L	5					
4-Methyl-2-pentanone		35.1	6.25	25.0	ug/L	5					
Acetone		959	7.50	25.0	ug/L	5					
Acetonitrile	U	ND	31.3	125	ug/L	5					
Acrolein	U	ND	6.25	25.0	ug/L	5					
Acrylonitrile	U	ND	5.00	25.0	ug/L	5					
Allyl chloride	U	ND	7.50	25.0	ug/L	5					
Benzene	U	ND	1.50	5.00	ug/L	5					
Benzyl chloride	U	ND	6.50	25.0	ug/L	5					
Bromobenzene	U	ND	1.25	5.00	ug/L	5					
Bromochloromethane	U	ND	1.50	5.00	ug/L	5					
Bromodichloromethane	U	ND	1.25	5.00	ug/L	5					
Bromoform	U	ND	1.25	5.00	ug/L	5					
Bromomethane	U	ND	1.50	5.00	ug/L	5					
Carbon disulfide	U	ND	6.25	25.0	ug/L	5					
Carbon tetrachloride	U	ND	1.50	5.00	ug/L	5					
Chlorobenzene	U	ND	1.25	5.00	ug/L	5					
Chloroethane	U	ND	1.50	5.00	ug/L	5					
Chloroform	U	ND	1.25	5.00	ug/L	5					
Chloromethane	U	ND	1.50	5.00	ug/L	5					
Cyclohexane	U	ND	1.50	5.00	ug/L	5					
Cyclohexanone	U	ND	75.0	250	ug/L	5					
Dibromochloromethane	U	ND	1.50	5.00	ug/L	5					
Dibromomethane	U	ND	1.50	5.00	ug/L	5					
Dichlorodifluoromethane	U	ND	1.50	5.00	ug/L	5					
Ethyl ether	U	ND	1.50	5.00	ug/L	5					
Ethyl methacrylate	U	ND	5.00	25.0	ug/L	5					
Ethylbenzene	U	ND	1.25	5.00	ug/L	5					
Hexachlorobutadiene	U	ND	1.50	5.00	ug/L	5					
Iodomethane	U	ND	6.25	25.0	ug/L	5					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106 Project: ECOL00111
Sample ID: 284538002 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Volatile Organics											
GEL 8260B Method List Liquid "As Received"											
Isobutyl alcohol	U	ND	62.5	250	ug/L	5					
Isopropylbenzene	U	ND	1.25	5.00	ug/L	5					
Methacrylonitrile	U	ND	5.00	25.0	ug/L	5					
Methyl acetate	U	ND	6.25	25.0	ug/L	5					
Methyl methacrylate	U	ND	5.00	25.0	ug/L	5					
Methylcyclohexane	U	ND	1.25	5.00	ug/L	5					
Methylene chloride	U	ND	10.0	25.0	ug/L	5					
Naphthalene	U	ND	1.25	5.00	ug/L	5					
Pentachloroethane	U	ND	5.00	25.0	ug/L	5					
Propionitrile	U	ND	7.50	25.0	ug/L	5					
Styrene	U	ND	1.25	5.00	ug/L	5					
Tetrachloroethylene	U	ND	1.50	5.00	ug/L	5					
Toluene	U	ND	1.25	5.00	ug/L	5					
Trichloroethylene	U	ND	1.25	5.00	ug/L	5					
Trichlorofluoromethane	U	ND	1.50	5.00	ug/L	5					
Trichlorotrifluoroethane	U	ND	5.00	25.0	ug/L	5					
Vinyl acetate	U	ND	7.50	25.0	ug/L	5					
Vinyl chloride	U	ND	2.50	5.00	ug/L	5					
Xylenes (total)	U	ND	1.50	5.00	ug/L	5					
bis(2-Chloroisopropyl)ether	U	ND	7.50	25.0	ug/L	5					
cis-1,2-Dichloroethylene	U	ND	1.50	5.00	ug/L	5					
cis-1,3-Dichloropropylene	U	ND	1.25	5.00	ug/L	5					
cis-1,4-Dichloro-2-butene	U	ND	5.00	25.0	ug/L	5					
m,p-Xylenes	U	ND	2.50	10.0	ug/L	5					
n-Butyl alcohol	U	ND	75.0	250	ug/L	5					
n-Butylbenzene	U	ND	1.25	5.00	ug/L	5					
n-Propylbenzene	U	ND	1.25	5.00	ug/L	5					
o-Xylene	U	ND	1.50	5.00	ug/L	5					
sec-Butylbenzene	U	ND	1.25	5.00	ug/L	5					
tert-Butyl methyl ether		69.0	1.25	5.00	ug/L	5					
tert-Butylbenzene	U	ND	1.25	5.00	ug/L	5					
trans-1,2-Dichloroethylene	U	ND	1.50	5.00	ug/L	5					
trans-1,3-Dichloropropylene	U	ND	1.25	5.00	ug/L	5					
trans-1,4-Dichloro-2-butene	U	ND	5.00	25.0	ug/L	5					

GEL LABORATORIES LLC
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: September 7, 2011

Company : US EPA Equipment Warehouse
Address : 1620 S. 92nd Place, Unit B

Seattle, Washington 98108
Contact: Mr.Steve Hall
Project: Project No. 002233.0599.01SF

Client Sample ID: 11080106 Project: ECOL00111
Sample ID: 284538002 Client ID: ECOL008

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8260B	
2	SW846 8260B	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1,2-Dichloroethane-d4	GEL 8260B Method List Liquid "As Received"	44.8 ug/L	50.0	89.5	(79%-124%)
Bromofluorobenzene	GEL 8260B Method List Liquid "As Received"	50.5 ug/L	50.0	101	(80%-120%)
Toluene-d8	GEL 8260B Method List Liquid "As Received"	48.1 ug/L	50.0	96.2	(80%-120%)
1,2-Dichloroethane-d4	GEL 8260B Method List Liquid "As Received"	235 ug/L	50.0	93.9	(79%-124%)
Bromofluorobenzene	GEL 8260B Method List Liquid "As Received"	252 ug/L	50.0	101	(80%-120%)
Toluene-d8	GEL 8260B Method List Liquid "As Received"	240 ug/L	50.0	96.2	(80%-120%)

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

US EPA Equipment Warehouse
1620 S. 92nd Place, Unit B
Seattle, Washington

Contact: **Mr.Steve Hall**

Workorder: **284538**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS										
Batch 1135453										
QC1202472434 LCS										
Aluminum	2000			1940	ug/L		97.2	(80%-120%)	PRB	08/25/11 08:14
Antimony	50.0			47.7	ug/L		95.3	(80%-120%)		
Arsenic	50.0			46.3	ug/L		92.6	(80%-120%)		08/29/11 12:41
Barium	50.0			48.0	ug/L		96	(80%-120%)		08/25/11 08:14
Beryllium	50.0			49.8	ug/L		99.6	(80%-120%)		
Cadmium	50.0			49.3	ug/L		98.6	(80%-120%)		
Calcium	2000			1960	ug/L		97.8	(80%-120%)		
Chromium	50.0			46.7	ug/L		93.5	(80%-120%)		
Cobalt	50.0			48.7	ug/L		97.3	(80%-120%)		
Copper	50.0			49.7	ug/L		99.5	(80%-120%)		
Iron	2000			1890	ug/L		94.6	(80%-120%)		
Lead	50.0			49.1	ug/L		98.2	(80%-120%)		
Magnesium	2000			1860	ug/L		93.1	(80%-120%)		
Manganese	50.0			47.1	ug/L		94.3	(80%-120%)		
Nickel	50.0			49.2	ug/L		98.4	(80%-120%)		
Potassium	2000			1890	ug/L		94.3	(80%-120%)		
Selenium	50.0			49.3	ug/L		98.6	(80%-120%)		08/29/11 12:41
Silver	50.0			44.6	ug/L		89.2	(80%-120%)		
Sodium	2000			1990	ug/L		99.5	(80%-120%)		08/25/11 08:14
Thallium	50.0			46.0	ug/L		91.9	(80%-120%)		
Zinc	50.0			51.1	ug/L		102	(80%-120%)		
QC1202472433 MB										
Aluminum			U	ND	ug/L					08/25/11 08:05
Antimony			U	ND	ug/L					
Arsenic			U	ND	ug/L					08/29/11 12:37
Barium			U	ND	ug/L					08/25/11 08:05
Beryllium			U	ND	ug/L					
Cadmium			U	ND	ug/L					
Calcium			U	ND	ug/L					
Chromium			U	ND	ug/L					
Cobalt			U	ND	ug/L					
Copper			U	ND	ug/L					
Iron			U	ND	ug/L					
Lead			U	ND	ug/L					
Magnesium			U	ND	ug/L					
Manganese			U	ND	ug/L					
Nickel			U	ND	ug/L					

QC Summary

Workorder: 284538

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 1135453											
Potassium				U	ND	ug/L					
Selenium				U	ND	ug/L				PRB	08/29/11 12:37
Silver				U	ND	ug/L					
Sodium				U	ND	ug/L					08/25/11 08:05
Thallium				U	ND	ug/L					
Zinc				U	ND	ug/L					
QC1202472435 284538001 MS											
Aluminum	2000		8170		10700	ug/L		N/A	(75%-125%)		08/25/11 08:48
Antimony	50.0	U	ND		47.5	ug/L		94.1	(75%-125%)		
Arsenic	50.0	J	2.00		51.8	ug/L		99.5	(75%-125%)		08/29/11 12:47
Barium	50.0		112		156	ug/L		88.2	(75%-125%)		08/25/11 08:48
Beryllium	50.0	J	0.209		52.3	ug/L		104	(75%-125%)		
Cadmium	50.0	U	ND		49.9	ug/L		99.7	(75%-125%)		
Calcium	2000		4930		6950	ug/L		101	(75%-125%)		
Chromium	50.0		14.5		60.7	ug/L		92.3	(75%-125%)		
Cobalt	50.0		5.14		52.4	ug/L		94.5	(75%-125%)		
Copper	50.0		10.0		56.1	ug/L		92.1	(75%-125%)		
Iron	2000		6850		8810	ug/L		98.2	(75%-125%)		
Lead	50.0		3.58		51.2	ug/L		95.2	(75%-125%)		
Magnesium	2000		2590		4650	ug/L		103	(75%-125%)		
Manganese	50.0		275		326	ug/L		N/A	(75%-125%)		
Nickel	50.0		16.4		62.5	ug/L		92.2	(75%-125%)		
Potassium	2000		907		2790	ug/L		94.1	(75%-125%)		
Selenium	50.0	U	ND		53.5	ug/L		107	(75%-125%)		08/29/11 12:47
Silver	50.0	U	ND		48.7	ug/L		97.2	(75%-125%)		
Sodium	2000		3590		5730	ug/L		107	(75%-125%)		08/25/11 08:48
Thallium	50.0	U	ND		44.8	ug/L		89.3	(75%-125%)		
Zinc	50.0		14.9		63.8	ug/L		97.8	(75%-125%)		
QC1202472436 284538001 MSD											
Aluminum	2000		8170		10800	ug/L	0.842	N/A	(0%-20%)		08/25/11 08:56
Antimony	50.0	U	ND		48.1	ug/L	1.37	95.4	(0%-20%)		
Arsenic	50.0	J	2.00		53.5	ug/L	3.34	103	(0%-20%)		08/29/11 12:51
Barium	50.0		112		151	ug/L	3.30	78.1	(0%-20%)		08/25/11 08:56
Beryllium	50.0	J	0.209		58.1	ug/L	10.6	116	(0%-20%)		
Cadmium	50.0	U	ND		50.8	ug/L	1.82	102	(0%-20%)		
Calcium	2000		4930		6860	ug/L	1.34	96.3	(0%-20%)		
Chromium	50.0		14.5		61.0	ug/L	0.544	92.9	(0%-20%)		
Cobalt	50.0		5.14		51.0	ug/L	2.59	91.8	(0%-20%)		
Copper	50.0		10.0		54.8	ug/L	2.25	89.6	(0%-20%)		
Iron	2000		6850		8770	ug/L	0.425	96.3	(0%-20%)		
Lead	50.0		3.58		50.3	ug/L	1.67	93.5	(0%-20%)		
Magnesium	2000		2590		4670	ug/L	0.243	104	(0%-20%)		

QC Summary

Workorder: 284538

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Metals Analysis - ICPMS											
Batch 1135453											
Manganese	50.0		275		319	ug/L	2.22	N/A	(0%-20%)		
Nickel	50.0		16.4		61.7	ug/L	1.24	90.7	(0%-20%)	PRB	08/25/11 08:56
Potassium	2000		907		2760	ug/L	0.903	92.8	(0%-20%)		
Selenium	50.0	U	ND		55.7	ug/L	4.13	111	(0%-20%)		08/29/11 12:51
Silver	50.0	U	ND		50.1	ug/L	2.80	100	(0%-20%)		
Sodium	2000		3590		5760	ug/L	0.442	109	(0%-20%)		08/25/11 08:56
Thallium	50.0	U	ND		44.4	ug/L	0.820	88.5	(0%-20%)		
Zinc	50.0		14.9		64.6	ug/L	1.15	99.3	(0%-20%)		
QC1202472437 284538001 SDILT											
Aluminum			8170		1790	ug/L	9.56		(0%-10%)		08/25/11 09:13
Antimony		U	ND	U	ND	ug/L	N/A		(0%-10%)		
Arsenic		J	2.00	U	ND	ug/L	N/A		(0%-10%)		08/29/11 12:57
Barium			112		22.2	ug/L	.442		(0%-10%)		08/25/11 09:13
Beryllium		J	0.209	U	ND	ug/L	N/A		(0%-10%)		
Cadmium		U	ND	U	ND	ug/L	N/A		(0%-10%)		
Calcium			4930		1080	ug/L	9.4		(0%-10%)		
Chromium			14.5	J	2.11	ug/L	27.2		(0%-10%)		
Cobalt			5.14		1.04	ug/L	1.52		(0%-10%)		
Copper			10.0		2.04	ug/L	1.41		(0%-10%)		
Iron			6850		1440	ug/L	4.8		(0%-10%)		
Lead			3.58	J	0.695	ug/L	2.96		(0%-10%)		
Magnesium			2590		537	ug/L	3.65		(0%-10%)		
Manganese			275		58.0	ug/L	5.71		(0%-10%)		
Nickel			16.4		3.23	ug/L	1.39		(0%-10%)		
Potassium			907	J	154	ug/L	15.2		(0%-10%)		
Selenium		U	ND	U	ND	ug/L	N/A		(0%-10%)		08/29/11 12:57
Silver		U	ND	U	ND	ug/L	N/A		(0%-10%)		
Sodium			3590		761	ug/L	6.12		(0%-10%)		08/25/11 09:13
Thallium		U	ND	U	ND	ug/L	N/A		(0%-10%)		
Zinc			14.9	U	ND	ug/L	N/A		(0%-10%)		
Metals Analysis-Mercury											
Batch 1135404											
QC1202472319 284538001 DUP											
Mercury		U	ND	U	ND	ug/L	N/A			JXL1	08/24/11 17:19
QC1202472318 LCS											
Mercury	2.00				2.04	ug/L		102	(80%-120%)		08/24/11 17:16
QC1202472317 MB											
Mercury				U	ND	ug/L					08/24/11 17:14
QC1202472320 284538001 MS											
Mercury	2.00	U	ND		2.01	ug/L		99.8	(75%-125%)		08/24/11 17:21
QC1202472321 284538001 SDILT											
Mercury		U	ND	U	ND	ug/L	N/A		(0%-10%)		08/24/11 17:22
Semi-Volatile-GC/MS											

QC Summary

Workorder: **284538**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Semi-Volatile-GC/MS										
Batch 1135988										
QC1202473716 LCS										
2,4-Dinitrotoluene	50.0			57.8	ug/L		116	(58%-118%)	JLD1	08/26/11 11:49
2-Chlorophenol	50.0			40.3	ug/L		80.6	(49%-98%)		
4-Chloro-3-methylphenol	50.0			43.2	ug/L		86.3	(55%-107%)		
4-Nitrophenol	50.0			17.3	ug/L		34.5	(15%-103%)		
Acenaphthene	50.0			39.0	ug/L		78	(50%-96%)		
N-Nitrosodipropylamine	50.0			37.0	ug/L		74.1	(50%-114%)		
Pentachlorophenol	50.0			44.6	ug/L		89.2	(40%-107%)		
Phenol	50.0			15.0	ug/L		29.9	(15%-103%)		
Pyrene	50.0			41.2	ug/L		82.4	(53%-113%)		
**2,4,6-Tribromophenol	100			107	ug/L		107	(33%-126%)		
**2-Fluorobiphenyl	50.0			42.3	ug/L		84.6	(37%-102%)		
**2-Fluorophenol	100			50.0	ug/L		50	(14%-78%)		
**Nitrobenzene-d5	50.0			38.9	ug/L		77.7	(40%-117%)		
**Phenol-d5	100			28.8	ug/L		28.8	(14%-80%)		
**p-Terphenyl-d14	50.0			44.2	ug/L		88.5	(44%-134%)		
QC1202473715 MB										
1,1'-Biphenyl			U	ND	ug/L					08/26/11 11:24
1,2,4,5-Tetrachlorobenzene			U	ND	ug/L					
2,3,4,6-Tetrachlorophenol			U	ND	ug/L					
2,4,5-Trichlorophenol			U	ND	ug/L					
2,4,6-Trichlorophenol			U	ND	ug/L					
2,4-Dichlorophenol			U	ND	ug/L					
2,4-Dimethylphenol			U	ND	ug/L					
2,4-Dinitrophenol			U	ND	ug/L					
2,4-Dinitrotoluene			U	ND	ug/L					
2,6-Dinitrotoluene			U	ND	ug/L					
2-Chloronaphthalene			U	ND	ug/L					
2-Chlorophenol			U	ND	ug/L					
2-Methyl-4,6-dinitrophenol			U	ND	ug/L					
2-Methylnaphthalene			U	ND	ug/L					
2-Nitrophenol			U	ND	ug/L					
3,3'-Dichlorobenzidine			U	ND	ug/L					
4-Bromophenylphenylether			U	ND	ug/L					
4-Chloro-3-methylphenol			U	ND	ug/L					
4-Chloroaniline			U	ND	ug/L					
4-Chlorophenylphenylether			U	ND	ug/L					
4-Nitrophenol			U	ND	ug/L					
Acenaphthene			U	ND	ug/L					
Acenaphthylene			U	ND	ug/L					
Acetophenone			U	ND	ug/L					
Anthracene			U	ND	ug/L					

QC Summary

Workorder: **284538**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Semi-Volatile-GC/MS											
Batch 1135988											
Atrazine			U	ND	ug/L						
Benzaldehyde			U	ND	ug/L				JLD1	08/26/11	11:24
Benzo(a)anthracene			U	ND	ug/L						
Benzo(a)pyrene			U	ND	ug/L						
Benzo(b)fluoranthene			U	ND	ug/L						
Benzo(ghi)perylene			U	ND	ug/L						
Benzo(k)fluoranthene			U	ND	ug/L						
Butylbenzylphthalate			U	ND	ug/L						
Caprolactam			U	ND	ug/L						
Carbazole			U	ND	ug/L						
Chrysene			U	ND	ug/L						
Di-n-butylphthalate			U	ND	ug/L						
Di-n-octylphthalate			U	ND	ug/L						
Dibenzo(a,h)anthracene			U	ND	ug/L						
Dibenzofuran			U	ND	ug/L						
Diethylphthalate			U	ND	ug/L						
Dimethylphthalate			U	ND	ug/L						
Diphenylamine			U	ND	ug/L						
Fluoranthene			U	ND	ug/L						
Fluorene			U	ND	ug/L						
Hexachlorobenzene			U	ND	ug/L						
Hexachlorobutadiene			U	ND	ug/L						
Hexachlorocyclopentadiene			U	ND	ug/L						
Hexachloroethane			U	ND	ug/L						
Indeno(1,2,3-cd)pyrene			U	ND	ug/L						
Isophorone			U	ND	ug/L						
N-Nitrosodipropylamine			U	ND	ug/L						
Naphthalene			U	ND	ug/L						
Nitrobenzene			U	ND	ug/L						
Pentachlorophenol			U	ND	ug/L						
Phenanthrene			U	ND	ug/L						
Phenol			U	ND	ug/L						
Pyrene			U	ND	ug/L						
bis(2-Chloroethoxy)methane			U	ND	ug/L						
bis(2-Chloroethyl) ether			U	ND	ug/L						
bis(2-Chloroisopropyl)ether			U	ND	ug/L						
bis(2-Ethylhexyl)phthalate			U	ND	ug/L						
m,p-Cresols			U	ND	ug/L						
m-Nitroaniline			U	ND	ug/L						
o-Cresol			U	ND	ug/L						
o-Nitroaniline			U	ND	ug/L						
			U	ND							

QC Summary

Workorder: 284538

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Semi-Volatile-GC/MS											
Batch 1135988											
p-Nitroaniline						ug/L					
**2,4,6-Tribromophenol	100				102	ug/L		102	(33%-126%)	JLD1	08/26/11 11:24
**2-Fluorobiphenyl	50.0				44.0	ug/L		87.9	(37%-102%)		
**2-Fluorophenol	100				48.8	ug/L		48.8	(14%-78%)		
**Nitrobenzene-d5	50.0				43.9	ug/L		87.8	(40%-117%)		
**Phenol-d5	100				27.5	ug/L		27.5	(14%-80%)		
**p-Terphenyl-d14	50.0				56.1	ug/L		112	(44%-134%)		
QC1202473717 284538001 MS											
2,4-Dinitrotoluene	100	U	ND		85.5	ug/L		85.5	(52%-117%)		08/26/11 17:18
2-Chlorophenol	100	U	ND		24.4	ug/L		24.4 *	(43%-106%)		
4-Chloro-3-methylphenol	100	U	ND		40.2	ug/L		40.2 *	(47%-117%)		
4-Nitrophenol	100	U	ND		29.0	ug/L		29 *	(39%-96%)		
Acenaphthene	100	U	ND		67.4	ug/L		67.4	(45%-103%)		
N-Nitrosodipropylamine	100	U	ND		60.9	ug/L		60.9	(45%-120%)		
Pentachlorophenol	100	U	ND	J	9.42	ug/L		9.42 *	(35%-116%)		
Phenol	100	U	ND		26.7	ug/L		26.7 *	(31%-137%)		
Pyrene	100	U	ND		68.2	ug/L		68.2	(42%-125%)		
**2,4,6-Tribromophenol	200		89.8		28.5	ug/L		14.3 *	(33%-126%)		
**2-Fluorobiphenyl	100		36.0		74.2	ug/L		74.2	(37%-102%)		
**2-Fluorophenol	200		41.1		62.6	ug/L		31.3	(14%-78%)		
**Nitrobenzene-d5	100		37.5		67.9	ug/L		67.9	(40%-117%)		
**Phenol-d5	200		24.4		52.7	ug/L		26.3	(14%-80%)		
**p-Terphenyl-d14	100		29.9		63.4	ug/L		63.4	(44%-134%)		
QC1202473718 284538001 MSD											
2,4-Dinitrotoluene	100	U	ND		96.5	ug/L	12.1	96.5	(0%-23%)		08/26/11 13:57
2-Chlorophenol	100	U	ND		57.3	ug/L	80.5*	57.3	(0%-25%)		
4-Chloro-3-methylphenol	100	U	ND		71.3	ug/L	55.8*	71.3	(0%-25%)		
4-Nitrophenol	100	U	ND		33.9	ug/L	15.8	33.9 *	(0%-25%)		
Acenaphthene	100	U	ND		67.4	ug/L	0.0593	67.4	(0%-29%)		
N-Nitrosodipropylamine	100	U	ND		61.6	ug/L	1.17	61.6	(0%-28%)		
Pentachlorophenol	100	U	ND		36.4	ug/L	118*	36.4	(0%-25%)		
Phenol	100	U	ND		35.8	ug/L	29.0*	35.8	(0%-25%)		
Pyrene	100	U	ND		67.9	ug/L	0.470	67.9	(0%-25%)		
**2,4,6-Tribromophenol	200		89.8		118	ug/L		58.8	(33%-126%)		
**2-Fluorobiphenyl	100		36.0		68.9	ug/L		68.9	(37%-102%)		
**2-Fluorophenol	200		41.1		90.1	ug/L		45.1	(14%-78%)		
**Nitrobenzene-d5	100		37.5		66.4	ug/L		66.4	(40%-117%)		
**Phenol-d5	200		24.4		69.0	ug/L		34.5	(14%-80%)		
**p-Terphenyl-d14	100		29.9		62.3	ug/L		62.3	(44%-134%)		
Semi-Volatiles-PCB											
Batch 1136663											
QC1202475428 LCS											

QC Summary

Workorder: 284538

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Semi-Volatiles-PCB											
Batch 1136663											
Aroclor-1016	1.00				0.660	ug/L		66	(48%-97%)	YS1	08/30/11 09:29
Aroclor-1260	1.00				0.700	ug/L		70	(50%-94%)		
**4cmx	0.200				0.128	ug/L		64.2	(50%-150%)		
**Decachlorobiphenyl	0.200				0.140	ug/L		69.8	(50%-150%)		
QC1202475427 MB											
Aroclor-1016				U	ND	ug/L					08/30/11 09:17
Aroclor-1221				U	ND	ug/L					
Aroclor-1232				U	ND	ug/L					
Aroclor-1242				P	0.160	ug/L					
Aroclor-1248				U	ND	ug/L					
Aroclor-1254					0.170	ug/L					
Aroclor-1260					0.160	ug/L					
**4cmx	0.200				0.128	ug/L		64.1	(50%-150%)		
**Decachlorobiphenyl	0.200				0.145	ug/L		72.4	(50%-150%)		
QC1202475429 284538001 MS											
Aroclor-1016	1.00	U	ND		0.180	ug/L		18*	(29%-142%)		08/30/11 09:52
Aroclor-1260	1.00	U	ND		0.250	ug/L		25*	(48%-119%)		
**4cmx	0.200		0.0254		0.0315	ug/L		15.7*	(50%-150%)		
**Decachlorobiphenyl	0.200		0.0285		0.0529	ug/L		26.4*	(50%-150%)		
QC1202475430 284538001 MSD											
Aroclor-1016	1.00	U	ND		0.220	ug/L	20.0	22*	(0%-30%)		08/30/11 10:04
Aroclor-1260	1.00	U	ND		0.290	ug/L	14.8	29*	(0%-30%)		
**4cmx	0.200		0.0254		0.0348	ug/L		17.4*	(50%-150%)		
**Decachlorobiphenyl	0.200		0.0285		0.0516	ug/L		25.8*	(50%-150%)		
Semi-Volatiles-Pesticide											
Batch 1136049											
QC1202473925 LCS											
4,4'-DDD	1.25				1.19	ug/L		95.1	(70%-130%)	RXE1	08/30/11 18:43
4,4'-DDE	1.25				1.09	ug/L		87	(70%-130%)		
4,4'-DDT	1.25				1.21	ug/L		96.7	(70%-130%)		
Aldrin	0.500				0.456	ug/L		91.3	(70%-130%)		
Chlordane (tech.)				U	ND	ug/L			(33%-134%)		
Dieldrin	1.25				1.24	ug/L		99	(70%-130%)		
Endosulfan I	0.500				0.461	ug/L		92.3	(70%-130%)		
Endosulfan II	1.25				1.20	ug/L		96.1	(70%-130%)		
Endosulfan sulfate	1.25				1.32	ug/L		106	(70%-130%)		
Endrin	1.25				1.23	ug/L		98	(70%-130%)		
Endrin aldehyde	1.25				1.22	ug/L		97.4	(70%-130%)		
Endrin ketone	1.25				1.37	ug/L		110	(70%-130%)		
Heptachlor	0.500				0.473	ug/L		94.6	(70%-130%)		
Heptachlor epoxide	0.500				0.500	ug/L		100	(70%-130%)		
Methoxychlor	5.00				4.63	ug/L		92.6	(70%-130%)		
Toxaphene				U	ND	ug/L			(39%-144%)		

QC Summary

Workorder: 284538

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Semi-Volatiles-Pesticide										
Batch 1136049										
alpha-BHC	0.500			0.511	ug/L		102	(70%-130%)		
beta-BHC	0.500			0.477	ug/L		95.5	(70%-130%)	RXE1	08/30/11 18:43
delta-BHC	0.500			0.512	ug/L		102	(70%-130%)		
gamma-BHC (Lindane)	0.500			0.516	ug/L		103	(70%-130%)		
**4cmx	1.00			0.779	ug/L		77.9	(50%-150%)		
**Decachlorobiphenyl	1.00			0.863	ug/L		86.3	(50%-150%)		
QC1202473924 MB										
4,4'-DDD			U	ND	ug/L					08/30/11 18:28
4,4'-DDE			U	ND	ug/L					
4,4'-DDT			U	ND	ug/L					
Aldrin			U	ND	ug/L					
Chlordane (tech.)			U	ND	ug/L					
Dieldrin			U	ND	ug/L					
Endosulfan I			U	ND	ug/L					
Endosulfan II			U	ND	ug/L					
Endosulfan sulfate			U	ND	ug/L					
Endrin			U	ND	ug/L					
Endrin aldehyde			U	ND	ug/L					
Endrin ketone			U	ND	ug/L					
Heptachlor			U	ND	ug/L					
Heptachlor epoxide			U	ND	ug/L					
Methoxychlor			U	ND	ug/L					
Toxaphene			U	ND	ug/L					
alpha-BHC			U	ND	ug/L					
beta-BHC			U	ND	ug/L					
delta-BHC			U	ND	ug/L					
gamma-BHC (Lindane)			U	ND	ug/L					
**4cmx	1.00			0.821	ug/L		82.1	(50%-150%)		
**Decachlorobiphenyl	1.00			0.903	ug/L		90.3	(50%-150%)		
QC1202473926 284538001 MS										
4,4'-DDD	1.28	U	ND	0.630	ug/L		49.4*	(50%-150%)		08/30/11 19:15
4,4'-DDE	1.28	U	ND	0.512	ug/L		40.2*	(50%-150%)		
4,4'-DDT	1.28	U	ND	0.543	ug/L		42.6*	(50%-150%)		
Aldrin	0.510	U	ND	0.220	ug/L		43*	(50%-150%)		
Chlordane (tech.)		U	ND	U ND	ug/L			(35%-121%)		
Dieldrin	1.28	U	ND	0.826	ug/L		64.8	(50%-150%)		
Endosulfan I	0.510	U	ND	0.323	ug/L		63.3	(50%-150%)		
Endosulfan II	1.28	U	ND	0.845	ug/L		66.3	(50%-150%)		
Endosulfan sulfate	1.28	U	ND	1.00	ug/L		78.5	(50%-150%)		
Endrin	1.28	U	ND	0.906	ug/L		71	(50%-150%)		
Endrin aldehyde	1.28	U	ND	0.914	ug/L		71.7	(50%-150%)		
Endrin ketone	1.28	U	ND	1.16	ug/L		90.8	(50%-150%)		

QC Summary

Workorder: 284538

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Semi-Volatiles-Pesticide											
Batch 1136049											
Heptachlor	0.510	U	ND		0.277	ug/L		54.3	(50%-150%)		
Heptachlor epoxide	0.510	U	ND		0.357	ug/L		70	(50%-150%)	RXE1	08/30/11 19:15
Methoxychlor	5.10	U	ND		2.54	ug/L		49.8*	(50%-150%)		
Toxaphene		U	ND	U	ND	ug/L			(36%-138%)		
alpha-BHC	0.510	U	ND		0.433	ug/L		84.9	(50%-150%)		
beta-BHC	0.510	U	ND		0.438	ug/L		85.8	(50%-150%)		
delta-BHC	0.510	U	ND		0.437	ug/L		85.7	(50%-150%)		
gamma-BHC (Lindane)	0.510	U	ND		0.452	ug/L		88.6	(50%-150%)		
**4cmx	1.02		0.632		0.420	ug/L		41.2*	(50%-150%)		
**Decachlorobiphenyl	1.02		0.766		0.353	ug/L		34.6*	(50%-150%)		
QC1202473927 284538001 MSD											
4,4'-DDD	1.28	U	ND		0.629	ug/L	0.170	49.3*	(0%-30%)		08/30/11 19:30
4,4'-DDE	1.28	U	ND		0.516	ug/L	0.597	40.4*	(0%-30%)		
4,4'-DDT	1.28	U	ND		0.540	ug/L	0.567	42.3*	(0%-30%)		
Aldrin	0.510	U	ND		0.225	ug/L	2.58	44.2*	(0%-30%)		
Chlordane (tech.)		U	ND	U	ND	ug/L	N/A		(0%-20%)		
Dieldrin	1.28	U	ND		0.834	ug/L	0.920	65.4	(0%-30%)		
Endosulfan I	0.510	U	ND		0.327	ug/L	1.21	64	(0%-30%)		
Endosulfan II	1.28	U	ND		0.849	ug/L	0.482	66.6	(0%-30%)		
Endosulfan sulfate	1.28	U	ND		1.00	ug/L	0.149	78.4	(0%-30%)		
Endrin	1.28	U	ND		0.913	ug/L	0.801	71.6	(0%-30%)		
Endrin aldehyde	1.28	U	ND		0.915	ug/L	0.133	71.7	(0%-30%)		
Endrin ketone	1.28	U	ND		1.16	ug/L	0.401	91.2	(0%-30%)		
Heptachlor	0.510	U	ND		0.283	ug/L	2.00	55.4	(0%-30%)		
Heptachlor epoxide	0.510	U	ND		0.363	ug/L	1.76	71.2	(0%-30%)		
Methoxychlor	5.10	U	ND		2.53	ug/L	0.467	49.6*	(0%-30%)		
Toxaphene		U	ND	U	ND	ug/L	N/A		(0%-20%)		
alpha-BHC	0.510	U	ND		0.447	ug/L	3.24	87.7	(0%-30%)		
beta-BHC	0.510	U	ND		0.448	ug/L	2.22	87.8	(0%-30%)		
delta-BHC	0.510	U	ND		0.446	ug/L	1.96	87.4	(0%-30%)		
gamma-BHC (Lindane)	0.510	U	ND		0.466	ug/L	3.10	91.4	(0%-30%)		
**4cmx	1.02		0.632		0.436	ug/L		42.7*	(50%-150%)		
**Decachlorobiphenyl	1.02		0.766		0.356	ug/L		34.9*	(50%-150%)		
Volatile-GC/MS											
Batch 1137563											
QC1202477760 LCS											
1,1-Dichloroethylene	50.0				43.3	ug/L		86.6	(73%-125%)	SYK1	08/30/11 21:28
Benzene	50.0				45.2	ug/L		90.4	(80%-120%)		
Chlorobenzene	50.0				45.9	ug/L		91.8	(80%-120%)		
Toluene	50.0				44.2	ug/L		88.3	(77%-120%)		
Trichloroethylene	50.0				44.9	ug/L		89.9	(80%-120%)		
**1,2-Dichloroethane-d4	50.0				49.5	ug/L		99	(79%-124%)		

QC Summary

Workorder: 284538

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatile-GC/MS										
Batch 1137563										
**Bromofluorobenzene	50.0			50.6	ug/L		101	(80%-120%)		
**Toluene-d8	50.0			47.7	ug/L		95.4	(80%-120%)	SYK1	08/30/11 21:28
QC1202478371 LCS										
1,1-Dichloroethylene	50.0			45.4	ug/L		90.8	(73%-125%)		08/31/11 07:53
Benzene	50.0			45.2	ug/L		90.4	(80%-120%)		
Chlorobenzene	50.0			46.0	ug/L		92.1	(80%-120%)		
Toluene	50.0			45.4	ug/L		90.9	(77%-120%)		
Trichloroethylene	50.0			45.9	ug/L		91.8	(80%-120%)		
**1,2-Dichloroethane-d4	50.0			48.3	ug/L		96.6	(79%-124%)		
**Bromofluorobenzene	50.0			50.1	ug/L		100	(80%-120%)		
**Toluene-d8	50.0			48.3	ug/L		96.6	(80%-120%)		
QC1202477757 MB										
1,1,1,2-Tetrachloroethane			U	ND	ug/L					08/30/11 22:28
1,1,1-Trichloroethane			U	ND	ug/L					
1,1,2,2-Tetrachloroethane			U	ND	ug/L					
1,1,2-Trichloroethane			U	ND	ug/L					
1,1-Dichloroethane			U	ND	ug/L					
1,1-Dichloroethylene			U	ND	ug/L					
1,1-Dichloropropene			U	ND	ug/L					
1,2,3-Trichlorobenzene			U	ND	ug/L					
1,2,3-Trichloropropane			U	ND	ug/L					
1,2,4-Trichlorobenzene			U	ND	ug/L					
1,2,4-Trimethylbenzene			U	ND	ug/L					
1,2-Dibromo-3-chloropropane			U	ND	ug/L					
1,2-Dibromoethane			U	ND	ug/L					
1,2-Dichlorobenzene			U	ND	ug/L					
1,2-Dichloroethane			U	ND	ug/L					
1,2-Dichloroethylene (total)			U	ND	ug/L					
1,2-Dichloropropane			U	ND	ug/L					
1,3,5-Trimethylbenzene			U	ND	ug/L					
1,3-Dichlorobenzene			U	ND	ug/L					
1,3-Dichloropropane			U	ND	ug/L					
1,4-Dichlorobenzene			U	ND	ug/L					
2,2-Dichloropropane			U	ND	ug/L					
2-Butanone			U	ND	ug/L					
2-Chloro-1,3-butadiene			U	ND	ug/L					
2-Chloroethylvinyl ether			U	ND	ug/L					
2-Chlorotoluene			U	ND	ug/L					
2-Hexanone			U	ND	ug/L					
2-Nitropropane			U	ND	ug/L					
4-Chlorotoluene			U	ND	ug/L					
4-Isopropyltoluene			U	ND	ug/L					

QC Summary

Workorder: **284538**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatile-GC/MS										
Batch 1137563										
4-Methyl-2-pentanone			U	ND	ug/L					
Acetone			U	ND	ug/L				SYK1	08/30/11 22:28
Acetonitrile			U	ND	ug/L					
Acrolein			U	ND	ug/L					
Acrylonitrile			U	ND	ug/L					
Allyl chloride			U	ND	ug/L					
Benzene			U	ND	ug/L					
Benzyl chloride			U	ND	ug/L					
Bromobenzene			U	ND	ug/L					
Bromochloromethane			U	ND	ug/L					
Bromodichloromethane			U	ND	ug/L					
Bromoform			U	ND	ug/L					
Bromomethane			U	ND	ug/L					
Carbon disulfide			U	ND	ug/L					
Carbon tetrachloride			U	ND	ug/L					
Chlorobenzene			U	ND	ug/L					
Chloroethane			U	ND	ug/L					
Chloroform			U	ND	ug/L					
Chloromethane			U	ND	ug/L					
Cyclohexane			U	ND	ug/L					
Cyclohexanone			U	ND	ug/L					
Dibromochloromethane			U	ND	ug/L					
Dibromomethane			U	ND	ug/L					
Dichlorodifluoromethane			U	ND	ug/L					
Ethyl ether			U	ND	ug/L					
Ethyl methacrylate			U	ND	ug/L					
Ethylbenzene			U	ND	ug/L					
Hexachlorobutadiene			U	ND	ug/L					
Iodomethane			U	ND	ug/L					
Isobutyl alcohol			U	ND	ug/L					
Isopropylbenzene			U	ND	ug/L					
Methacrylonitrile			U	ND	ug/L					
Methyl acetate			U	ND	ug/L					
Methyl methacrylate			U	ND	ug/L					
Methylcyclohexane			U	ND	ug/L					
Methylene chloride			U	ND	ug/L					
Naphthalene			U	ND	ug/L					
Pentachloroethane			U	ND	ug/L					
Propionitrile			U	ND	ug/L					
Styrene			U	ND	ug/L					
Tetrachloroethylene			U	ND	ug/L					
			U	ND						

QC Summary

Workorder: 284538

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatile-GC/MS										
Batch 1137563										
Toluene					ug/L					
Trichloroethylene			U	ND	ug/L				SYK1	08/30/11 22:28
Trichlorofluoromethane			U	ND	ug/L					
Trichlorotrifluoroethane			U	ND	ug/L					
Vinyl acetate			U	ND	ug/L					
Vinyl chloride			U	ND	ug/L					
Xylenes (total)			U	ND	ug/L					
bis(2-Chloroisopropyl)ether			U	ND	ug/L					
cis-1,2-Dichloroethylene			U	ND	ug/L					
cis-1,3-Dichloropropylene			U	ND	ug/L					
cis-1,4-Dichloro-2-butene			U	ND	ug/L					
m,p-Xylenes			U	ND	ug/L					
n-Butyl alcohol			U	ND	ug/L					
n-Butylbenzene			U	ND	ug/L					
n-Propylbenzene			U	ND	ug/L					
o-Xylene			U	ND	ug/L					
sec-Butylbenzene			U	ND	ug/L					
tert-Butyl methyl ether			U	ND	ug/L					
tert-Butylbenzene			U	ND	ug/L					
trans-1,2-Dichloroethylene			U	ND	ug/L					
trans-1,3-Dichloropropylene			U	ND	ug/L					
trans-1,4-Dichloro-2-butene			U	ND	ug/L					
**1,2-Dichloroethane-d4	50.0			50.1	ug/L		100	(79%-124%)		
**Bromofluorobenzene	50.0			51.4	ug/L		103	(80%-120%)		
**Toluene-d8	50.0			50.6	ug/L		101	(80%-120%)		
QC1202478370 MB										
1,1,1,2-Tetrachloroethane			U	ND	ug/L					08/31/11 10:24
1,1,1-Trichloroethane			U	ND	ug/L					
1,1,2,2-Tetrachloroethane			U	ND	ug/L					
1,1,2-Trichloroethane			U	ND	ug/L					
1,1-Dichloroethane			U	ND	ug/L					
1,1-Dichloroethylene			U	ND	ug/L					
1,1-Dichloropropene			U	ND	ug/L					
1,2,3-Trichlorobenzene			U	ND	ug/L					
1,2,3-Trichloropropane			U	ND	ug/L					
1,2,4-Trichlorobenzene			U	ND	ug/L					
1,2,4-Trimethylbenzene			U	ND	ug/L					
1,2-Dibromo-3-chloropropane			U	ND	ug/L					
1,2-Dibromoethane			U	ND	ug/L					
1,2-Dichlorobenzene			U	ND	ug/L					
1,2-Dichloroethane			U	ND	ug/L					
1,2-Dichloroethylene (total)			U	ND	ug/L					

QC Summary

Workorder: 284538

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Volatile-GC/MS											
Batch 1137563											
1,2-Dichloropropane			U	ND	ug/L						
1,3,5-Trimethylbenzene			U	ND	ug/L				SYK1	08/31/11	10:24
1,3-Dichlorobenzene			U	ND	ug/L						
1,3-Dichloropropane			U	ND	ug/L						
1,4-Dichlorobenzene			U	ND	ug/L						
2,2-Dichloropropane			U	ND	ug/L						
2-Butanone			U	ND	ug/L						
2-Chloro-1,3-butadiene			U	ND	ug/L						
2-Chloroethylvinyl ether			U	ND	ug/L						
2-Chlorotoluene			U	ND	ug/L						
2-Hexanone			U	ND	ug/L						
2-Nitropropane			U	ND	ug/L						
4-Chlorotoluene			U	ND	ug/L						
4-Isopropyltoluene			U	ND	ug/L						
4-Methyl-2-pentanone			U	ND	ug/L						
Acetone			U	ND	ug/L						
Acetonitrile			U	ND	ug/L						
Acrolein			U	ND	ug/L						
Acrylonitrile			U	ND	ug/L						
Allyl chloride			U	ND	ug/L						
Benzene			U	ND	ug/L						
Benzyl chloride			U	ND	ug/L						
Bromobenzene			U	ND	ug/L						
Bromochloromethane			U	ND	ug/L						
Bromodichloromethane			U	ND	ug/L						
Bromoform			U	ND	ug/L						
Bromomethane			U	ND	ug/L						
Carbon disulfide			U	ND	ug/L						
Carbon tetrachloride			U	ND	ug/L						
Chlorobenzene			U	ND	ug/L						
Chloroethane			U	ND	ug/L						
Chloroform			U	ND	ug/L						
Chloromethane			U	ND	ug/L						
Cyclohexane			U	ND	ug/L						
Cyclohexanone			U	ND	ug/L						
Dibromochloromethane			U	ND	ug/L						
Dibromomethane			U	ND	ug/L						
Dichlorodifluoromethane			U	ND	ug/L						
Ethyl ether			U	ND	ug/L						
Ethyl methacrylate			U	ND	ug/L						
Ethylbenzene			U	ND	ug/L						
			U	ND							

QC Summary

Workorder: 284538

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatile-GC/MS										
Batch 1137563										
Hexachlorobutadiene					ug/L					
Iodomethane			U	ND	ug/L				SYK1	08/31/11 10:24
Isobutyl alcohol			U	ND	ug/L					
Isopropylbenzene			U	ND	ug/L					
Methacrylonitrile			U	ND	ug/L					
Methyl acetate			U	ND	ug/L					
Methyl methacrylate			U	ND	ug/L					
Methylcyclohexane			U	ND	ug/L					
Methylene chloride			U	ND	ug/L					
Naphthalene			U	ND	ug/L					
Pentachloroethane			U	ND	ug/L					
Propionitrile			U	ND	ug/L					
Styrene			U	ND	ug/L					
Tetrachloroethylene			U	ND	ug/L					
Toluene			U	ND	ug/L					
Trichloroethylene			U	ND	ug/L					
Trichlorofluoromethane			U	ND	ug/L					
Trichlorotrifluoroethane			U	ND	ug/L					
Vinyl acetate			U	ND	ug/L					
Vinyl chloride			U	ND	ug/L					
Xylenes (total)			U	ND	ug/L					
bis(2-Chloroisopropyl)ether			U	ND	ug/L					
cis-1,2-Dichloroethylene			U	ND	ug/L					
cis-1,3-Dichloropropylene			U	ND	ug/L					
cis-1,4-Dichloro-2-butene			U	ND	ug/L					
m,p-Xylenes			U	ND	ug/L					
n-Butyl alcohol			U	ND	ug/L					
n-Butylbenzene			U	ND	ug/L					
n-Propylbenzene			U	ND	ug/L					
o-Xylene			U	ND	ug/L					
sec-Butylbenzene			U	ND	ug/L					
tert-Butyl methyl ether			U	ND	ug/L					
tert-Butylbenzene			U	ND	ug/L					
trans-1,2-Dichloroethylene			U	ND	ug/L					
trans-1,3-Dichloropropylene			U	ND	ug/L					
trans-1,4-Dichloro-2-butene			U	ND	ug/L					
**1,2-Dichloroethane-d4	50.0			50.3	ug/L		101	(79%-124%)		
**Bromofluorobenzene	50.0			50.1	ug/L		100	(80%-120%)		
**Toluene-d8	50.0			49.9	ug/L		99.9	(80%-120%)		
QC1202477758 284538001 PS										
1,1-Dichloroethylene	50.0	U	ND	42.5	ug/L		85	(64%-127%)		08/31/11 00:28
Benzene	50.0	U	ND	44.3	ug/L		88.7	(75%-118%)		

QC Summary

Workorder: **284538**

Parmname	NOM		Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Volatile-GC/MS											
Batch 1137563											
Chlorobenzene	50.0	U	ND		44.1	ug/L		88.3	(73%-123%)		
Toluene	50.0	U	ND		43.5	ug/L		87	(67%-119%)	SYK1	08/31/11 00:28
Trichloroethylene	50.0	U	ND		43.5	ug/L		87	(69%-128%)		
**1,2-Dichloroethane-d4	50.0		47.8		47.9	ug/L		95.7	(79%-124%)		
**Bromofluorobenzene	50.0		50.9		51.5	ug/L		103	(80%-120%)		
**Toluene-d8	50.0		49.7		48.7	ug/L		97.4	(80%-120%)		
QC1202477759 284538001 PSD											
1,1-Dichloroethylene	50.0	U	ND		42.1	ug/L	1.02	84.1	(0%-20%)		08/31/11 00:58
Benzene	50.0	U	ND		43.3	ug/L	2.42	86.5	(0%-20%)		
Chlorobenzene	50.0	U	ND		44.0	ug/L	0.272	88	(0%-20%)		
Toluene	50.0	U	ND		43.6	ug/L	0.184	87.2	(0%-20%)		
Trichloroethylene	50.0	U	ND		42.3	ug/L	2.94	84.5	(0%-20%)		
**1,2-Dichloroethane-d4	50.0		47.8		48.4	ug/L		96.8	(79%-124%)		
**Bromofluorobenzene	50.0		50.9		51.1	ug/L		102	(80%-120%)		
**Toluene-d8	50.0		49.7		49.5	ug/L		98.9	(80%-120%)		

Notes:
The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- E Metals--%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
- E Organics--Concentration of the target analyte exceeds the instrument calibration range
- F Estimated Value
- FB Mercury was found present at quantifiable concentrations in field blanks received with these samples. Data associated with the blank are deemed invalid for reporting to regulatory agencies
- H Analytical holding time was exceeded
- J Value is estimated
- JNX Non Calibrated Compound
- M Matrix Related Failure
- N Metals--The Matrix spike sample recovery is not within specified control limits
- N Organics--Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit

QC Summary

Workorder: **284538**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time

NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%
Q	One or more quality control criteria have not been met. Refer to the applicable narrative or DER.
R	Sample results are rejected
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
UJ	Compound cannot be extracted
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.
h	Preparation or preservation holding time was exceeded

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
29−AUG−11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
SEMIVOA GC/MS	SW846 3510C/8270D	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1135988	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

Failed Yield for Surrogates

Specification and Requirements Exception Description:	**DER Disposition:**
1. The MS(1202473717(11080101)) recovered 2,4,6−Tribromophenol at 14%. The limits are 33%−126%.	1. The MB(1202473715), LCS(1202473716) and MSD(1202473718) satisfied batch QC acceptance criteria. Also, all associated client samples displayed acceptable surrogate recoveries. Therefore, it was determined that the failure was limited to the MS sample only and re−extraction was considered un−necessary. The data were reported.
2. The MS(1202473717(11080101)) recovered multiple spike analytes outside of the established acceptance limits. Please see the QC Summary for specific failures.	2. The MB(1202473715), LCS(1202473716) and MSD(1202473718) satisfied batch QC acceptance criteria. Therefore, it was determined that the failures were limited to the MS(1202473717) sample only and re−extraction was considered un−necessary. The data were reported.
3. The MSD(1202473718(11080101)) recovered 4−Nitrophenol at 34%. The limits are 39%−96%.	3. 4−Nitrophenol was identified as poor responding analyte in the analytical method (EPA 8270 D). This may account for the low recovery it displayed in the MSD (as well as in the MS). The data were reported.
4. Multiple MS(1202473717(11080101))/MSD(1202473718(11080101)) RPD values were outside of the established acceptance limits. Please see the QC Summary for specific failures.	4. The MB(1202473715), LCS(1202473716) and MSD(1202473718) satisfied batch QC acceptance criteria. Therefore, it was determined that the failures were limited to the MS(1202473717) sample only and re−extraction was considered un−necessary. The data were reported.

Originator's Name:

Jennifer Dunagan Jones 29−AUG−11

Data Validator/Group Leader:

Barbara Bailey 30−AUG−11

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
30−AUG−11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 3535A/8082A	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1136663	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Method Blank contamination

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. The MS(1202475429(11080101)) and MSD(1202475430(11080101)) did not meet the spike recovery acceptance criteria. 2. The MB(1202475427) was contaminated with target analytes. 3. Sample 284583001 and the MS(1202475429(11080101)) and MSD(1202475430(11080101)) did not meet the surrogate recovery acceptance criteria.	1., 3. As the sample, MS and MSD displayed similar recoveries, the failures were attributed to matrix interference and the data were reported. 2. The sample did not have target analytes detected. The data was reported.

Originator's Name:

Yiping Shi 30−AUG−11

Data Validator/Group Leader:

Cameron Bearden 30−AUG−11

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
01−SEP−11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
VOA GC/MS	SW846 8260B	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1137563	1202477758, 1202477759		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. The recoveries for 2−Chloroethylvinyl ether were below acceptance limits for 1202477758(11080101) (MS) and 1202477759(11080101) (MSD). 2−Chloroethylvinyl ether: MS, 0.0%; MSD, 0.0%; limits, 52.0%−125.0%	1. Preservation by acidification causes degradation of 2−Chloroethylvinyl ether, resulting in the low recoveries observed in these samples.

Originator's Name:

Suzanne Kacenas 01−SEP−11

Data Validator/Group Leader:

Erin Haubert 02−SEP−11

DATA EXCEPTION REPORT

Mo.Day Yr.	**Division:**	**Quality Criteria:**	**Type:**
01−SEP−11	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
GC/ECD	SW846 3535A/8081B	Liquid	ECOL
Batch ID:	**Sample Numbers:**		
1136049	See Below		

Potentially affected work order(s)(SDG): 284538

Application Issues:

Failed Recovery for MS/PS

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	**DER Disposition:**
1. The MS(1202473926(11080101)) and MSD(1202473927(11080101)) recovered outside of the acceptance limits. 2. Surrogates recovered outside of the acceptance limits in the MS(1202473926(11080101)) and MSD(1202473927(11080101)).	1., 2. As the MS/MSD exhibited similar recoveries, the failures were attributed to matrix interference and the data were reported.

Originator's Name:

Rebecca Enzor 01−SEP−11

Data Validator/Group Leader:

Cameron Bearden 02−SEP−11

Report

of

Test No. 826-1

Toxicity of freshwater sediments collected from Kitsap County, WA using a 28-day amphipod, *Hyalella azteca*, sediment bioassay as part of Project No. 002233.0599.01SF, TDD No. 10-08-0011.

Submitted to

Ecology and Environment, Inc.
720 Third Ave.
Suite 1700
Seattle, WA 98104

Prepared by

Northwestern Aquatic Sciences
3814 Yaquina Bay Road
P.O. Box 1437
Newport, OR 97365

October 7, 2011

TOXICITY TEST REPORT

TEST IDENTIFICATION

Test No.: 826-1

Title: Toxicity of freshwater sediments collected from Kitsap County, WA using a 28-day amphipod, *Hyalella azteca*, sediment bioassay as part of Project No. 002233.0599.01SF, TDD No. 10-08-0011.

Protocol No.: NAS-XXX-HA4c, February 11, 2000. Revision 3 (4-26-05). Based on ASTM 2001 (Standard test methods for measuring the toxicity of sediment-associated contaminants with fresh water invertebrates, E1706-00), Am. Soc. Test. Mat., Phila., PA, and EPA Method 100.1 (Methods for measuring the toxicity and bioaccumulation of sediment-associated contaminants with freshwater invertebrates, EPA/600/R-99/064).

STUDY MANAGEMENT

Study Sponsor: Ecology and Environment, Inc., 720 Third Ave., Suite 1700, Seattle, WA 98104

Sponsor's Study Monitor: Mr. Mark Woodke

Testing Laboratory: Northwestern Aquatic Sciences, P.O. Box 1437, Newport, OR 97365

Test Location: Newport laboratory

Laboratory's Study Personnel: G.J. Irissarri, B.S., Proj. Man./Study Dir.; L.K. Nemeth, B.A., M.B.A., QA Officer; R.S. Caldwell, PhD, Sr. Aq. Toxicologist; G.A. Buhler, B.S., Aq. Toxicologist; L.P. Sandoval, B.S., Tech.; Y. Nakahama, Tech., B. Hurst, M.S., Tech.

Study Schedule:

Test Beginning: 8-26-11, 1005 hrs.

Test Ending: 9-23-11, 0930 hrs.

Disposition of Study Records: All raw data, reports and other study records are stored at Northwestern Aquatic Sciences, 3814 Yaquina Bay Rd., Newport, OR 97365.

Statement of Quality Assurance: The test data were reviewed by the Quality Assurance Unit to assure that the study was performed in accordance with the protocol and standard operating procedures. This report is an accurate reflection of the raw data.

TEST MATERIAL

Test Sediments: Freshwater test sediments collected from Kitsap County, WA. as part of Project No. 002233.0599.01SF, TDD No. 10-08-0011. Details are as follows:

NAS Sample No.	3838G	3839G	3840G	3841G
Description	11070001	11070002	11070003	11070004
Collection Date	7/27/11	7/27/11	7/27/11	7/27/11
Receipt Date	8/14/11	8/24/11	8/24/11	8/24/11

Control Sediment: The negative control sediment (NAS#3820G) was collected on 8-14-11 from an area approximately one mile east of the Hwy. 101 bridge at Beaver Creek, approx. 8 miles south of Newport, OR.

Treatments: Homogenized at test set up by mixing using stainless steel implements.

Storage: All test and control sediments were stored at 4°C in the dark in sealed containers until used.

TEST WATER

Source: Dechlorinated municipal tap water.

Date of Preparation: Four batches of test water were collected on: 8/17/11, 8/25/11, 8/26/11, 9/7/11.

Water Quality (mean ± S.D.):

pH: 7.5 ± 0.1 (n=4)

conductivity: 141 ± 4 µmhos/cm (n=4)

hardness: 43 ± 0 mg/L as $CaCO_3$ (n=4)

alkalinity: 30 ± 0 mg/L as $CaCO_3$. (n=4)

total chlorine: All batches were < 0.02 mg/L (n=4)

Pretreatment: Dechlorinated and aerated ≥24 hr.

TEST ORGANISMS

Species: *Hyalella azteca,* amphipod.
Age/Size: 7-8 days old
Source: Chesapeake Cultures, Hayes, VA; received 8-24-11
Acclimation: Holding conditions for the three days prior to testing averaged: Temperature, 22.9 ± 0.3 °C; dissolved oxygen, 10.3 ± 4.1 mg/L; pH, 7.7 ± 0.7; conductivity, 351 ± 115 µmhos/cm; hardness, 137 ± 54 mg/L as $CaCO_3$; and alkalinity, 120 ± 46 mg/L as $CaCO_3$. Photoperiod, 16:8, L:D. Half of the water was replaced daily with dechlorinated municipal tap water during holding. Animals were fed YTC daily during holding.

TEST PROCEDURES AND CONDITIONS

The following is an abbreviated statement of the test procedures and a statement of the test conditions actually employed. See the test protocol (Appendix I) for a more detailed description of the test procedures used in this study.

Test Chambers: 300 ml high-form glass beakers
Test Volumes: 100 ml sediment layer; 175 ml test water.
Replicates/Treatment: 8
Organisms/Treatment: 80
Water Volume Changes: 2 water volumes per day
Aeration: None.
Feeding: Animals are fed 1.0 ml of YTC suspension per beaker daily.
Effects Criteria: 1) survival after 28 days, and 2) average individual dry weight after 28 days. Death is defined as no visible movement or response to tactile stimulation. Missing organisms were considered to be dead.
Water Quality and Other Test Conditions: The temperature, dissolved oxygen, conductivity, pH, hardness, alkalinity, and ammonia-nitrogen were measured in the overlying water of one replicate test container per treatment on days 0 and 28 of the test. Temperature was measured daily, pH and dissolved oxygen three times per week, and conductivity weekly, in the overlying water of one replicate test container per treatment. Hardness and alkalinity were measured with titrimetric methods. Ammonia-N was measured using Hach reagents based on the salicylate (Clin. Chim. Acta 14:403, 1996) colorimetric method; samples were not distilled prior to analysis. The photoperiod was 16:8, L:D.

DATA ANALYSIS METHODS

Survival, mortality and average individual dry weight were calculated for each replicate as follows:

percent survival = 100 x (number surviving/initial number tested)
percent mortality = 100 x (number dead/initial number tested)

average individual dry weight = (final wt. - tare wt.)/number weighed,
where:
final wt. = tare wt. + dry weight of organisms recovered on day 28, in mg

Means and standard deviations for the biological endpoints described above, and for water quality data, were computed using Microsoft Excel 2000.

PROTOCOL DEVIATIONS

None

REFERENCE TOXICANT TEST

The reference toxicant test is a multi-concentration toxicity test using potassium chloride, to evaluate the performance of the test organisms used in the sediment toxicity test. The performance is evaluated by comparing the results of this test with historical results obtained at the laboratory. A summary of the reference toxicant test result is given below. The reference toxicant test raw data are found in Appendix III.

Test No.: 999-2930
Reference Toxicant and Source: Potassium Chloride (KCl), Fisher Lot #073280.
Test Date: 8-26-11.
Dilution Water Used: Moderately hard synthetic water prepared from Milli-Q® deionized water.
Result: 96-hr LC50, 0.45 g/L. This result is within the laboratory's control chart warning limits (0.31 – 0.47 g/L).

TEST RESULTS

Observations of water quality in the overlying water throughout the test are summarized in Table 1. A detailed tabulation of the water quality results by sample and test day can be found in Appendix II. The means and standard deviations of percent mortality and average dry weight of *Hyalella* exposed for 28 days to sediments are summarized in Tables 2 and 3. Detailed data organized by sample and replicate, and summary statistics for these observations, are given in Appendix II.

Except as noted above, all other water quality observations of overlying water temperature and dissolved oxygen were within the protocol specified ranges. Ammonia-N in the overlying water ranged between <0.1 and 0.2 mg/L for all day 0 and day 28 measurements.

The test met the survival and weight acceptability criteria specified in the test protocol with 5.0% mean control mortality (≤20% required) and a control individual mean dry weight of 0.50 mg per amphipod. The reference toxicant (positive control) LC50 result was within the laboratory's control chart limits (0.41 g/L; control chart mean ± 2 S.D. = 0.39 ± 0.08). It is concluded, therefore, that the test has developed fully acceptable data for use in making management decisions.

The percent mortality of all test sediments was not significantly greater than that of the control. The average individual biomass of test sediments 11070002 and 11070004 was significantly less than that of the control at the 0.05 level of significance.

STUDY APPROVAL

Gerald Ghissari 10-7-11
Project Manager/Study Director Date

Lyndia K. Nemeth 10/6/11
Quality Assurance Unit Date

Richard S. Caldwell 10/7/11
Laboratory Director Date

Table 1. Summary of water quality conditions during tests of the amphipod, *Hyalella azteca*, exposed to freshwater sediments.

Water Quality Parameter	Mean ± S.D.	Minimum	Maximum	N
Temperature (°C)	23.1 ± 0.5	22.0	23.8	145
Dissolved oxygen (mg/L)	7.4 ± 0.7	6.0	9.5	65
Conductivity (µmhos/cm)	155 ± 8	142	175	30
pH	7.0 ± 0.3	6.4	7.8	65
Hardness (mg/L as $CaCO_3$)	45 ± 6	34	51	10
Alkalinity (mg/L as $CaCO_3$)	30 ± 0	30	30	10
Total ammonia (mg/L)	---	<0.1	0.2	10

Table 2. Mortality results of *Hyalella* toxicity test.

Sample description	Percent mortality (Mean ± SD)	Statistically significantly different than that of the control?
Control (NAS# 3820G)	5.0 ± 10.7	---
11070001 (NAS# 3838G)	3.8 ± 5.2	No
11070002 (NAS# 3839G)	11.3 ± 9.9	No
11070003 (NAS# 3840G)	6.3 ± 7.4	No
11070004 (NAS# 3841G)	3.8 ± 5.2	No

Table 3. Growth results of *Hyalella* toxicity test.

Sample description	Dry wt/amphipod (mg) (Mean ± SD)	Statistically significantly different than that of the control?
Control (NAS# 3820G)	0.50 ± 0.08	---
11070001 (NAS# 3838G)	0.52 ± 0.07	No
11070002 (NAS# 3839G)	0.40 ± 0.06	Yes
11070003 (NAS# 3840G)	0.50 ± 0.12	No
11070004 (NAS# 3841G)	0.33 ± 0.04	Yes

APPENDIX I

PROTOCOL

TEST PROTOCOL

FRESHWATER AMPHIPOD, *HYALELLA AZTECA*, 28-DAY SEDIMENT SURVIVAL AND GROWTH TEST

1. INTRODUCTION

1.1 Purpose of Study: The purpose of this study is to characterize the chronic toxicity of freshwater sediments using a 28-day exposure and survival and growth endpoints with the amphipod, *Hyalella azteca*.

1.2 Referenced Method: This protocol is based on ASTM Method E 1706-00 (ASTM 2001) and EPA Method 100.1 (EPA/600/R-99/064)

1.3 Summary of Method: A summary of test conditions for the amphipod 28-day sediment survival and growth test is tabulated below. The test with *Hyalella azteca* is conducted at 23 ± 1°C with a 16L:8D photoperiod at an illuminance of about 100-1000 lux. Test chambers are 300-mL high-form lipless beakers containing 100 mL of sediment and 175 mL of overlying water. Ten 7-8day old amphipods are used in each replicate. The number of replicates/treatment depends on the objective of the test. Eight replicates are recommended for routine testing. Amphipods in each test chamber are fed 1.0 mL of YCT food daily. Each chamber receives two volume additions per day of overlying water. Test endpoints include survival and growth.

2. STUDY MANAGEMENT

2.1 Sponsor's Name and Address:

_____
_____
_____
_____

2.2 Sponsor's Study Monitor:

_____

2.3 Name of Testing Laboratory:
Northwestern Aquatic Sciences
3814 Yaquina Bay Road, P.O. Box 1437
Newport, OR 97365.

2.4 Test Location:

_____

2.5 Laboratory's Personnel to be Assigned to the Study:
Study Director: _____
Quality Assurance Unit: _____
Aquatic Toxicologist: _____
Aquatic Toxicologist: _____

2.6 Proposed Testing Schedule: Tests are normally begun within 14 days of sample collection. Reference toxicant test to be run concurrently.

2.7 Good Laboratory Practices: The test is conducted following the principles of Good Laboratory Practices (GLP) as defined in the EPA/TSCA Good Laboratory Practice regulations revised August 17, 1989 (40 CFR Part 792).

3. TEST MATERIAL

The test materials are freshwater sediments. The control, reference, and test sediments are placed in solvent cleaned 1 L glass jars fitted with PTFE-lined screw caps. At the laboratory the samples are stored at 4°C in the dark. The original sealed containers may be stored for up to 8 weeks prior to testing, depending on the testing requirements. If jars are not not full when received or if sediment is removed for testing, headspaces should be filled with nitrogen to retard deterioration. A negative control sediment is collected from a clean site. In addition, a reference sediment, a clean sediment with physical characteristics similar to the test sediments, may be employed as a comparison station.

4. TEST WATER

Test water (overlying water) at NAS is normally dechlorinated tap water or moderately hard synthetic water. Synthetic dilution water is prepared from Milli-Q reagent grade water and reagent grade chemicals. Test water may also be well water, surface water, site water, or other water depending on the study design. The hardness or other water quality parameters of the dilution water may need to be adjusted to meet the study design.

5. TEST ORGANISMS

5.1 Species: amphipod, *Hyalella azteca*.

5.2 Source: Cultured at NAS. Alternatively, animals may be purchased from a reputable commercial supplier.

5.3 Age: 7-8 days old at start of test

5.4 Acclimation and Pretest Observation: Cultures are maintained at 23 ± 1°C under a 16:8 L:D photoperiod. Cultured amphipods are fed dried maple leaves with YTC. Rabbit chow, Tetramin® or TetraFin® flakes may also be used. Acclimation of test organisms to the test water may be desirable, depending on culture water, but it is not required. If test organisms are to be acclimated, fifty percent of the holding water is changed daily with the addition of test water.

6. DESCRIPTION OF TEST SYSTEM

6.1 Test Chambers and Environmental Control: Test chambers used in the toxicity test are 300-mL high-form lipless glass beakers. Test chambers are maintained at constant temperature by partial immersion in a temperature-controlled water bath or by placement in a temperature-controlled room. Aeration is not empolyed unless dissolved oxygen drops below 2.5 mg/L. The test is conducted under an illuminance of 100-1000 lux with a 16L:8D photoperiod.

6.2 Cleaning: All laboratory glassware, including test chambers, is cleaned as described in EPA/600/4-90/027F. New glassware and test systems are soaked 15 minutes in tap water and scrubbed with detergent (or cleaned in automatic dishwasher); rinsed twice with tap water; carefully rinsed once with fresh, dilute (10%, V:V) hydrochloric or nitric acid to remove scale, metals, and bases; rinsed twice with deionized water; rinsed once with acetone to remove organic compounds (using a fume hood or canopy); and rinsed three times with deionized water. Test systems and chambers are rinsed again with dilution water just before use.

7. EXPERIMENTAL DESIGN AND TEST PROCEDURES

7.1 Experimental Design: The test involves exposure of amphipods to test, control, and reference sediments. The sediments are placed on the bottom of the test containers and are overlain with test water. The test exposure is for 28 days. The renewal of overlying water consists of two volume additions per day, either continuous or intermittent. Each treatment consists of eight replicate test containers, each containing 10 organisms. Test chamber positions are completely randomized. Test organisms are randomly distributed to the test chambers. Blind testing is normally used.

7.2 Setup of Test Containers: Sediments are homogenized and placed in test chambers on the day before addition of test organisms. Sediment (100 ml) is placed into each of eight replicate beakers. After addition of the sediment, 175 ml of test water is gently added to each beaker in a manner to prevent resuspension. The overlying water is replaced twice daily. The test begins when amphipods are introduced to the test chambers. Initial water quality measurements are taken prior to the addition of test organisms.

7.3 Effect Criterion: The effect criteria used in the 28-day amphipod bioassay are mortality and growth. Death is defined as the lack of movement of body or appendages on response to tactile stimulation. Growth is measured as change in dry weight.

7.4 Test Conditions: No aeration is employed unless dissoved oxygen falls below 2.5 mg/L. The test temperature employed is 23 ± 1°C. A 16:8, L:D photoperiod is used. Illumination is supplied by daylight fluorescent lamps at 100-1000lux. The overlying water is replaced twice daily.

7.5 Beginning the Test: On the day the test begins, amphipods are impartially counted into small containers of test water (10/container). The test is begun by rinsing test organisms into the equilibrated test containers. For the growth endpoint, time-zero weight data should be collected.

7.6 Feeding: Amphipods are fed 1.0 mL of YCT daily per test chamber. A feeding may be skipped if there is a build up of excess food. However, all beakers must be treated similarly.

7.7 Test Duration, Type and Frequency of Observations, and Methods: The duration of the toxicity test is 28 days. The type and frequency of observations to be made are summarized as follows:

TYPE OF OBSERVATION	TIMES OF OBSERVATION
BIOLOGICAL DATA	
Survival, growth	Day 28
PHYSICAL AND CHEMICAL DATA	
Hardness, alkalinity, conductivity, and ammonia-N	Beginning and end of test in overlying water of one replicate beaker from each treatment.
Temperature	Daily in overlying water of one replicate beaker from each treatment.
Conductivity	Weekly
Dissolved oxygen and pH	3X/week
Optional pore water ammonia and/or sulfide	In test sediments prior to initiating the tests. Optionally in sediments from sacrificial test chambers at test beginning and/or end.

Dissolved oxygen is measured using a polarographic oxygen probe calibrated according to the manufacturer's recommendations. The pH is measured using a pH probe and a properly calibrated meter with scale divisions of 0.1 pH units. Temperature is measured with a calibrated mercury thermometer or telethermometer. Conductivity is measured with a conductivity meter. Hardness and alkalinity are measured using titrometric methods. Total soluble sulfide and total ammonia-N were

measured using Hach test kits based on the methylene blue (EPA Method 376.2) and salicylate (Clin. Chim. Acta 14:403, 1996) colorimetric methods, respectively; samples were not distilled prior to analysis.

Overlying water should be sampled just before water renewal from about 1 to 2 cm above the sediment surface using a pipet. It may be necessay to pool water samples from individual replicates. The pipet should be checked to make sure no organisms are removed during sampling of overlying water.

7.8 Test Termination: At test termination, the contents of each test container are sieved through a #35 (500 µm mesh) sieve to recover the amphipods. Amphipods from each replicate are put into a 30 mL plastic cup, rinsed with DI water, gently blotted and place into the appropriate tared aluminum weighing pan. The number of survivors for each container is recorded on the datasheet.

7.9 Growth Measurement: Growth is measured as average dry weight of animals in a test replicate at the end of the test on day 28. Pooled animals from each test replicate are gently blotted and placed into tared aluminum weigh pans. The pans are dried at 60-90°C to constant weight. The dried amphipods are placed into a dessicator and weighed as soon as possible to the nearest 0.01 mg (desirable to use 0.001 mg). The total weight of the dried amphipods in each pan is divided by the number of amphipods weighed to obtain an average dry weight per surviving amphipod per replicate.

8. CRITERIA OF TEST ACCEPTANCE

The test results are acceptable if the minimum survival of organisms in the control treatment at the end of the test is at least 80%.

9. DATA ANALYSIS

The endpoints of the toxicity test are survival and growth. Survival is obtained as a direct count of living organisms in each test container at the end of the test. Average amphipod dry weight, also measured at the end of the test, may be used to compare growth between treatment sediments and the control or reference sediment. Ordinarily the following data analysis is performed. Due to special requirements, alternative methods may be used. The means and standard deviations are calculated for each treatment level. Identification of toxic sediments is established by statistical comparison of test endpoints between test and control or reference sediments. Between treatment comparisons may be made using a Student's t-test or Wilcoxon's Two-Sample test, where each treatment is compared to the control or the reference sediment. An arcsine-square root transformation of proportional data, and tests for normality and heterogeneity of variances, are performed prior to statistical comparisons.

10. REPORTING

The final report of the test results must include all of the following standard information at a minimum: name and identification of the test; the investigator and laboratory; date and time of test beginning and end; information on the test material; information on the source and quality of the overlying/test water; detailed information about the test organisms including acclimation conditions; a description of the experimental design and test chambers and other test conditions including feeding, if any, and water quality; definition of the effect criteria and other observations; responses, if any, in the control treatment; tabulation and statistical analysis of measured responses and a summary table of endpoints; a description of the statistical methods used; any unusual information about the test or deviations from procedures; reference toxicant testing information.

11. STUDY DESIGN ALTERATION

Amendments made to the protocol must be approved by the sponsor and study director and should include a description of the change, the reason for the change, the date the change took effect and the dated signatures of the study director and sponsor. Any deviations in the protocol must be described and recorded in the study raw data.

12. REFERENCE TOXICANT

The reference toxicant test is a standard multi-concentration toxicity test using a specified chemical toxicant to evaluate the performance of test organisms used in the study. Reference toxicant tests are 96-hour, water only exposures, not 28-day sediment exposures. The reference toxicant test is run concurrently. Performance is evaluated by comparing the results of the reference toxicant test with historical results (e.g., control charts) obtained at the laboratory.

13. REFERENCED GUIDELINES

ASTM. 2001. Standard Test Methods for Measuring the Toxicity of Sediment-Associated Contaminants with Fresh Water Invertebrates. ASTM Standard Method No. E 1706-00. Am. Soc. Test. Mat., Philadelphia, PA.

U.S. EPA. 2000. Section 11, Test Method 100.1, *Hyalella azteca* 10-d Survival and Growth Test for Sediments, pp. 47-54 In: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates (Second Edition). EPA/600/R-99/064.

Weber, C.I. (Ed.) 1993. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fourth Edition). EPA/600/4-90/027F.

14. APPROVALS

_____ for _____
Name Date

_____ for **Northwestern Aquatic Sciences**
Name Date

Appendix A
Test Conditions Summary

1. Test type	whole sediment toxicity test with renewal of overlying water
2. Test duration	28 days
3. Temperature	23 ± 1°C
4. Light quality	daylight fluorescent light
5. Illuminance	100-1000 lux
6. Photoperiod	16L:8D
7. Test chamber size	300-mL high-form lipless beakers, (Pyrex® 1040 or equivalent)
8. Sediment volume	100 mL
9. Overlying water volume	175 mL
10. Renewal overlying water	2 volume additions/day (continuous or intermittent)
11. Age of test organisms	7-8 days old at test initiation
12. Organisms per test chamber	10
13. Replicates per treatment	8 recommended for routine testing (depends on design)
14. Organisms per treatment	80
15. Feeding regime	YCT food, fed 1.0 mL daily/chamber
16. Cleaning	if screens are used, clean as needed
17. Aeration	None, unless DO falls below 2.5 mg/L
18. Overlying (test) water	Dechlorinated tap water, culture water, well water, surface water, site water or reconstituted water, depending on study design.
19. Water quality	Hardness, alkalinity, conductivity, ammonia-N beginning and end; temperature daily; conductivity weekly; DO & pH 3X/wk
20. Endpoints	Survival & growth (based on weight)
21. Test acceptability criteria	Minimum control survival of 80%
22. Sample holding	14 days at 4°C in the dark (recommended)
23. Sample volume required	1L (800 mL per sediment)
24. Reference toxicant	Concurrent testing required

APPENDIX II

RAW DATA

TEST DESCRIPTION, MONITORING, AND RESULTS BENCHSHEETS

REVIEWED PAGES 1-41 GJI

Test No. 826-1 Client Ecology & Environment Investigator

STUDY MANAGEMENT

Client: Ecology & Environment, Inc., 720 Third Ave., Suite 1700, Seattle, WA 98104
Client's Study Monitor: Mark Woodke
Testing Laboratory: Northwestern Aquatic Sciences
Test Location: Newport Laboratory
Laboratory's Study Personnel:
Proj. Man./Study Dir. G.J. Irissarri GJI
QA Officer L.K. Nemeth

1. GA Buhler GB
2. Wes Nakahama Jr
3. Lidia P. Sandoval LB
4. Brian Hurst BH
5. [illegible]
6.
7.
8.

Study Schedule:
Test Beginning: 8-26-11 1005
Test Ending: 9-23-11 0930

TEST MATERIAL

General description (see sample logbook/chain-of-custody for details):

NAS Sample No.:	3820G	3838G	3839G	3840G	3841G
Description:	Control	11070001	11070002	11070003	11070004
Collection Date:	8/14/11	7/27/11	7/27/11	7/27/11	7/27/11
Receipt Date:	8/14/11	8/24/11	8/24/11	8/24/11	8/24/11
____:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
____:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
____:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
____:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
____:					

Error codes: 1) correction of handwriting error
2) written in wrong location; entry deleted
3) wrong date deleted, replaced with correct date
4) error found in measurement; measurement repeated

NORTHWESTERN AQUATIC SCIENCES 28 631 PROTOCOL NO. NAS-XXX-HA4b c. 631
HYALELLA AZTECA 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-1 Client Ecology & Environment Investigator

SEDIMENT DESCRIPTIONS -- SUPPLEMENTAL NOTES

Sample No.	Description
3820G	dark brown fine mud
3838G	BROWN SAND, PEBBLES, SOME PLANT DEBRIS, DRY
3839G	brown sand, dry, pebbles, some plant debris
3840G	BROWN DRY SAND, SOME PLANT DEBRIS
3841G	brown dry sand, few plant debris

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-1 Client Ecology & Environment Investigator

TEST WATER

Source: Dechlorinated Newport, OR tap water

Date of Collection/Preparation: 8-17-11, 8-25-11, 8-26-11, 9-7-11

pH 7.6, 7.6, 7.5, 7.3 $\bar{X}$ = 7.5 ± 0.1

Cond (umhos/cm2) 145, 136, 143, 140 $\bar{X}$ = 141 ± 4

Hardness (mg/La0 43, 43, 43, 43 $\bar{X}$ = 43 ± 0

Alkalinity (mg/L) 30, 30, 30, 30 $\bar{X}$ = 30 ± 0

Total Chlorine (mg/l)

Treatments: Aerated ≥ 24 hrs

TEST ORGANISMS

Species: *Hyalella azteca* Age: 7-8 DAYS Date received: 8-24-11

Source: Chesapeake Cultures, Hayes, VA

Acclimation Data:

Date	Temp. (deg.C)	pH	DO (mg/L)	Cond umhos/cm	Feeding amount	Feeding description	Water changes	Hardness	Alkalinity (mg/L)
8-24-11	22.6	7.0 ~~8.3~~	~~7.3~~	473	10 mL	YTC	YES	197	190
8-25-11	22.8	8.3 ~~7.9~~	~~3.4~~	334	"	"	YES	120	110
8-26-11	23.2	7.7 ~~7.9~~	~~2.5~~	245	—	—	—	94	80
		9-12-11 6.2							
Mean	22.9	7.7	10.3	351				137	120
S.D.	0.3	0.7	4.1	115				54	46
(N)	3	3	3	3				3	3

Photoperiod during acclimation: 16:8, L:D

TEST PROCEDURES AND CONDITIONS

Test chambers: 300 ml glass beakers

Test volumes: 100 ml of test sediment; 275 ml total volume

Replicates/treatment: (8) 8 Organisms/treatment: (80) 80 (10/REP)

Test water changes: Twice daily

Aeration: only if DO falls below 2.5 mg/L

Feeding: everyday beginning with day zero

Test temperature (deg.C): 23

Beaker placement: Total randomization

Photoperiod: 16:8, L:D

Control Sediment:

Source: From an area approximately one mile east of the Hwy. 101 bridge at Beaver Creek, approx. 8 miles south of Newport, OR.

Date collected: 8/14/11

Sieved through 0.5 -mm screen

Storage: 4°C in the dark in closed containers. NAS# 3820G

MISCELLANEOUS NOTES

Light Intensity:

Date	Location	Light Intensity (ft-candles*)	Initials
8-30-11	BEAKER #18	88.3	GJL

*To convert ft-candles to lux multipy by 10.76

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator ______

Test conducted in (circle one): (room 1) room 2 trailer water bath other: ______

Randomization chart: TOP SHELF

5	10	15	20	25	30	35	40		
4	9	14	19	24	29	34	39		
3	8	13	18	23	28	33	38		
2	7	12	17	22	27	32	37		
1	6	11	16	21	26	31	36		

Randomization chart:

Randomization chart:

Randomization chart:

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 0 (8/26/11) YM/GB

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness* (mg/L)	Alkalinity* (mg/L)	NH3* (ppm)	Comments
4	23.5	8.4	145	7.2	43	30		Each beaker fed 1.0 ml
5	23.7	8.3	143	7.1	43	30		YTC suspension
11	23.4	8.2	147	7.1	43	30		Initials: GB
30	23.7	7.2	156	7.0	34	30		
33	23.4	7.6	142	6.9	43	30		
								Water changed in all
								beakers.
								Time: 0605
								Initials: GB
								Water changed in all
								beakers.
								Time: 1715
								Initials: LPS

*Water quality measurements to be taken.

Day 1 (8/27/11) GJL

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.0							Each beaker fed 1.0 ml
5	23.1							YTC suspension
11	22.9							Initials: GB
30	23.0							
33	22.9							
								Water changed in all
								beakers.
								Time: 0600
								Initials: GB
								Water changed in all
								beakers.
								Time: 1725
								Initials: LPS

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 2 (8 /28 /11) GJ

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.0							Each beaker fed 1.0 ml
5	23.0							YTC suspension
11	22.8							Initials: GJ
30	23.0							
33	22.8							
								Water changed in all
								beakers.
								Time: 0555
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1700
								Initials: YC

*Water quality measurements to be taken.

Day 3 (8 /29 /11) GJ

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.8	7.5		7.1				Each beaker fed 1.0 ml
5	22.9	7.3		7.1				YTC suspension
11	22.7	7.6		7.2				Initials: GJ
30	22.8	7.2		7.0				
33	22.7	7.2		6.9				
								Water changed in all
								beakers.
								Time: 0550
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1695
								Initials: YC

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 4 (8/30/11) GJ

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.1							Each beaker fed 1.0 ml
5	23.2							YTC suspension
11	23.0							Initials: GJ
30	23.1							
33	22.9							
								Water changed in all
								beakers.
								Time: 0555
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1715
								Initials: BH

*Water quality measurements to be taken.

Day 5 (8/31/11) BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.6	6.2	146	6.7				Each beaker fed 1.0 ml
5	22.8	6.4	151	6.7				YTC suspension
11	22.4	6.4	149	7.0				Initials: GJ
30	22.7	6.1	156	6.8				
33	22.4	6.0	150	6.8				
								Water changed in all
								beakers.
								Time: 0540
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1830
								Initials: BH

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 6 (9/1/11) LPS

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.0							Each beaker fed 1.0 ml
5	22.2							YTC suspension
11	22.0							Initials: GJL
30	22.1							
33	22.0							
								Water changed in all
								beakers.
								Time: 0545
								Initials: GJL
								Water changed in all
								beakers. 09/1-11
								Time: 1745
								Initials: CD

*Water quality measurements to be taken.

Day 7 (9/2/11) LPS

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.3	7.5		6.6				Each beaker fed 1.0 ml
5	22.5	7.6		6.7				YTC suspension
11	22.1	7.5		6.8				Initials: GJL
30	22.3	7.2		6.8				
33	22.0	7.1		6.7				
								Water changed in all
								beakers.
								Time: 0545
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1615
								Initials: Y

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 8 (9/3/11) GS

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.2							Each beaker fed 1.0 ml
5	22.5							YTC suspension
11	22.5							Initials: GS
30	22.2							
33	22.2							
								Water changed in all
								beakers.
								Time: 0530
								Initials: JS
								Water changed in all
								beakers.
								Time: 1710
								Initials: RSC

*Water quality measurements to be taken.

Day 9 (9/4/11) GJ

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.2							Each beaker fed 1.0 ml
5	22.5							YTC suspension
11	22.0							Initials: GJ
30	22.3							
33	22.1							
								Water changed in all
								beakers.
								Time: 0545
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1705
								Initials: UR

*Water quality measurements to be taken.

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 10 (9/5/11) GJL

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.0	7.1		6.6				Each beaker fed 1.0 ml
5	23.4	6.7		6.6				YTC suspension
11	22.7	7.2		6.8				Initials: GJL
30	23.0	7.0		6.7				
33	22.5	7.0		6.7				
								Water changed in all
								beakers.
								Time: 0540
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1720
								Initials: YF

*Water quality measurements to be taken.

Day 11 (9/6/11) LPS

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.1							Each beaker fed 1.0 ml
5	23.5							YTC suspension
11	22.9							Initials: GJL
30	23.2							
33	23.6							
								Water changed in all
								beakers.
								Time: 0640
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1705
								Initials: LPS

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 12 (9/7/11) Yr

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	22.9	7.5	146	7.0				Each beaker fed 1.0 ml
5	23.3	7.1	151	6.9				YTC suspension
11	22.8	7.3	147	7.0				Initials: GSI
30	23.0	7.1	153	7.0				
33	23.3	7.3	151	6.9				
								Water changed in all
								beakers.
								Time: 0540
								Initials: GSI
								Water changed in all
								beakers.
								Time: 1645
								Initials: Yr

*Water quality measurements to be taken.

Day 13 (9/8/11) Yr

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.0							Each beaker fed 1.0 ml
5	23.1							YTC suspension
11	23.5							Initials: GB
30	23.2							
33	23.2							
								Water changed in all
								beakers.
								Time: 0605
								Initials: Yr
								Water changed in all
								beakers.
								Time: 1745
								Initials: UPS

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 14 (9/9/11) YV

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3	7.5		6.7				Each beaker fed 1.0 ml
5	23.7	7.1		6.7				YTC suspension
11	23.2	7.3		6.8				Initials: GJL
30	23.5	7.3		6.8				
33	23.7	7.3		6.7				
								Water changed in all
								beakers.
								Time: 0605
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1710
								Initials: BAS

*Water quality measurements to be taken.

Day 15 (9/10/11) GJL

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.4							Each beaker fed 1.0 ml
5	23.7							YTC suspension
11	23.2							Initials: GJL
30	23.6							
33	23.8							
								Water changed in all
								beakers.
								Time: 0540
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1710
								Initials: YV

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 16 (9 / 11 / 11) GB

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3							Each beaker fed 1.0 ml
5	23.6							YTC suspension
11	23.0							Initials: GB
30	23.4							
33	23.4							
								Water changed in all
								beakers.
								Time: 0640
								Initials: GB
								Water changed in all
								beakers.
								Time: 1730
								Initials:

*Water quality measurements to be taken.

Day 17 (9 / 12 / 11) YF

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3	6.7		7.0				Each beaker fed 1.0 ml
5	23.5	6.3		6.8				YTC suspension
11	23.0	6.7		7.0				Initials: GSL
30	23.4	6.9		7.1				
33	23.5	7.1		6.9				
								Water changed in all
								beakers.
								Time: 0535
								Initials: GSL
								Water changed in all
								beakers.
								Time: 1640
								Initials: YF

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 18 (9/13/11) YR

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3							Each beaker fed 1.0 ml
5	23.5							YTC suspension
11	23.4							Initials: YR
30	23.5							
33	23.6							
								Water changed in all
								beakers.
								Time: 0545
								Initials: YR
								Water changed in all
								beakers.
								Time: 1640
								Initials: EPS

*Water quality measurements to be taken.

Day 19 (9/14/11) GMS/BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.2	7.7	151	6.9				Each beaker fed 1.0 ml
5	23.4	6.8	158	6.8				YTC suspension
11	22.8	8.0	156	7.2				Initials: GMS
30	23.4	6.8	162	7.0				
33	23.4	8.0	159	7.0				
								Water changed in all
								beakers.
								Time: 0550
								Initials: GMS
								Water changed in all
								beakers.
								Time: 1700
								Initials: YR

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 20 (9/15/11) YV/UPS

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.7							Each beaker fed 1.0 ml
5	23.8							YTC suspension
11	23.8							Initials: YV
30	23.8							
33	23.7							
								Water changed in all
								beakers.
								Time: 0610
								Initials: YV
								Water changed in all
								beakers.
								Time: 1640
								Initials: UPS

*Water quality measurements to be taken.

Day 21 (9/16/11) BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.6	7.0		7.0				Each beaker fed 1.0 ml
5	23.8	~~5.96~~ 6.1		6.9				YTC suspension
11	22.9	7.6		7.3				Initials: GB
30	23.4	7.0		7.2				
33	23.6	7.3		7.0				
								Water changed in all
								beakers.
								Time: 0530
								Initials: GB
								Water changed in all
								beakers.
								Time: 1645
								Initials: YV

*Water quality measurements to be taken.

D BH 9/16/11

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 22 (9/17/11) CM

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.2							Each beaker fed 1.0 ml
5	23.1							YTC suspension
11	22.9							Initials: CM
30	23.3							
33	23.3							
								Water changed in all
								beakers.
								Time: 0600
								Initials: CM
								Water changed in all
								beakers.
								Time: 1715
								Initials: CPS

*Water quality measurements to be taken.

Day 23 (9/18/11) V

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3							Each beaker fed 1.0 ml
5	23.6							YTC suspension
11	23.1							Initials: V
30	23.6							
33	23.5							
								Water changed in all
								beakers.
								Time: 0620
								Initials: V
								Water changed in all
								beakers.
								Time: 1715
								Initials: CPS

*Water quality measurements to be taken.

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 24 (9/19/11) GB/BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3	7.6		6.6				Each beaker fed 1.0 ml
5	23.6	6.8		6.7				YTC suspension
11	22.9	9.1		7.8				Initials: GB
30	23.5	7.8		7.5				
33	23.4	8.4		7.2				
								Water changed in all
								beakers.
								Time: 0550
								Initials: GB
								Water changed in all
								beakers.
								Time: 1650
								Initials: BH

*Water quality measurements to be taken.

Day 25 (9/20/11) YP

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3							Each beaker fed 1.0 ml
5	23.5							YTC suspension
11	23.0							Initials: YP
30	23.5							
33	23.5							
								Water changed in all
								beakers.
								Time: 0600
								Initials: YP
								Water changed in all
								beakers.
								Time: 1640
								Initials: YP

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 26 (9/21/11) YR/BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.2	~~6.769~~	165	6.7				Each beaker fed 1.0 ml
5	23.5	~~6.873~~	168	6.8				YTC suspension
11	23.0	9.5	165	7.7				Initials: YR
30	23.6	8.4	175	7.5				
33	23.5	8.7	170	7.3				
								Water changed in all
								beakers.
								Time: 0615
								Initials: YR
								Water changed in all
								beakers.
								Time: 1640
								Initials: (PS

*Water quality measurements to be taken.

BH @ 9/21/11

BH @ 9/21/11

Day 27 (9/22/11) YR

Beaker No.	Temp.* (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
4	23.3							Each beaker fed 1.0 ml
5	23.6							YTC suspension
11	23.1							Initials: YR
30	23.5							
33	23.5							
								Water changed in all
								beakers.
								Time: 0540
								Initials: YR
								Water changed in all
								beakers.
								Time: 1640
								Initials: YR

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No 826-1 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 28 (9/23/11) YR/UPS

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness* (mg/L)	Alkalinity* (mg/L)	NH3* (ppm)	Comments
4	23.2	7.0	159	6.8	51	30		Each beaker fed 1.0 ml
5	23.6	7.7	160	6.8	43	30		YTC suspension
11	23.2	9.5	150	7.8	51	30		Initials: —
30	23.8	8.3	159	7.3	51	30		
33	23.7	8.3	151	7.0	51	30		
								Water changed in all
								beakers.
								Time: 0545
								Initials: KB
								Water changed in all
								beakers.
								Time:
								Initials:

*Water quality measurements to be taken.

Day _____(/ /)

Beaker No.	Temp. (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
								Each beaker fed 1.0 ml
								YTC suspension
								Initials:
								Water changed in all
								beakers.
								Time:
								Initials:
								Water changed in all
								beakers.
								Time:
								Initials:

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-1 Client Ecology & Environment Investigator _____

DAY 28 TEST TERMINATION SHEET

Beaker No.	Number of survivors	Initials
1	8	GB
2	9	GB
3	9	GB
4	9	GB
5	9	YV
6	10	GB
7	10	GB
8	10	YV
9	7	YV
10	10	GB
11	10	GB
12	10	GB
13	7	GB
14	10	YV
15	10	YV
16	9	GB
17	10	GB
18	9	YV
19	10	YV
20	10	GB
21	10	GB
22	9	GB
23	9	GB
24	10	YV
25	10	YV
26	10	GB
27	10	GB
28	10	GB
29	9	GB
30	10	YV
31	8	YV
32	10	GB
33	10	GB
34	9	GB
35	9	GB
36	9	YV
37	9	YV
38	9	GB
39	10	GB
40	10	GB
41		
42		
43		
44		
45		

Beaker No.	Number of survivors	Initials
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		

Test No. 826-1 Client Ecology & Environment Investigator _____

ZERO-TIME WEIGHING DATA SHEET

Tare: Date 8-24-11 Oven temp (C.) 62 Drying time (hr.) 24 Initials GJL
Standard Weights: 10 mg: 10.009 100mg: 100.017

Final: Date 8-28-11 Oven temp (C.) 63 Drying time (hr.) 24 Initials GJL
Standard Weights: 10 mg: 10.007 100mg: 100.017

Equip. used: Oven: BLUE M #1 Balance: SARTORIUS M3P

(Dry overnight at 60-90 degrees C)

Pan #	Tare wt. (mg)	Total wt. (mg)	#weighed	Comments
1	37.323	37.947	10	
2	37.386	38.138	10	
3	34.710	35.401	10	
4	33.055	33.730	10	
5	33.431	34.181	10	

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-1 Client Ecology & Environment Investigator

WEIGHING DATA SHEET

Tare: Date 8-29-11 Oven temp (C.) 63 Drying time (hr.) 24 Initials GJ
Standard Weights: 10 mg: 10.007 100mg: 100.017

Final #1: Date 9-26-11 Oven temp (C.) 65 Drying time (hr.) 24 Initials UP
Standard Weights: 10 mg: 10.007 100mg: 100.015

Final #2: Date 9-27-11 Oven temp (C.) 58 Drying time (hr.) 24 Initials JRF
Standard Weights: 10 mg: 10.005 100mg: 100.015

Equip. used: Oven BLUE M #1 Balance SARTORWS M3P
(Dry overnight at 60-90 degrees C)

Bkr. #	Pan #	Tare wt. (mg)	Total wt. (mg) 1	Total wt. (mg) 2	no. weighed	put into pans-initials	Comments
1	1	35.381	41.580	41.492	8	UPS	
2	2	35.832	40.103	40.050	9	UPS	
3	3	35.854	39.902	39.850	9	UPS	
4	4	35.551	39.104	39.064	9	UPS	
5	5	33.871	38.127	38.076	9	UPS	
6	6	36.242	40.701	40.658	10	UPS	
7	7	36.373	40.967	40.924	10	UPS	
8	8	34.983	40.524	40.484	10	UPS	
9	9	33.684	37.679	37.654	7	UPS	
10	10	33.932	38.586	38.569	10	UPS	
11	11	32.911	36.106	36.109	10	UPS	
12	12	35.716	39.258	39.268	10	UPS	
13	13	32.849	35.560	35.564	7	UPS	
14	14	34.374	39.164	39.156	10	UPS	
15	15	34.874	37.543	37.549	10	UPS	
16	16	35.338	38.988	38.990	9	UPS	
17	17	35.637	40.845	40.847	10	UPS	
18	18	33.523	36.000	36.015	9	UPS	
19	19	35.874	39.633	39.640	10	UPS	
20	20	34.395	~~36.337~~ 37.342	37.266	10	UPS	
21	21	32.832	~~37.657~~ 36.397	36.432	10	UPS	
22	22	34.775	37.657	37.699	9	UPS	
23	23	35.091	38.846	38.884	9	UPS	
24	24	32.858	38.551	38.597	10	UPS	
25	25	35.691	40.948	40.988	10	UPS	
26	26	32.448	36.016	36.052	10	UPS	
27	27	35.169	39.569	39.609	10	UPS	
28	28	36.194	40.909	40.957	10	UPS	
29	29	35.976	41.333	41.371	9	UPS	
30	30	34.610	39.676	39.733	10	UPS	
31	31	33.858	36.796	36.821	8	UPS	
32	32	36.179	41.411	41.454	10	UPS	
33	33	34.109	39.012	39.045	10	UPS	

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-HA4c

HYALELLA AZTECA 28-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-1 Client Ecology & Environment Investigator _____

WEIGHING DATA SHEET

See page 22 for information on drying times and temperatures, standard weights,etc.

Bkr. #	Pan #	Tare wt. (mg)	Total wt. (mg) 1	Total wt. (mg) 2	no. weighed	put into pans-initials	Comments
34	34	33.749	36.933	36.951	9	UPS	
35	35	33.882	39.572	39.612	9	UPS	
36	36	35.645	40.595	40.626	9	UPS	
37	37	33.745	37.641	37.655	9	UPS	
38	38	36.947	40.123	40.135	9	UPS	
39	39	34.184	38.664	38.688	10	UPS	
40	40	33.317	38.191	38.216	10	UPS	
41	41						
42	42						
43	43						
44	44						
45	45						
46	46						
47	47						
48	48						
49	49						
50	50						
51	51						
52	52						
53	53						
54	54						
55	55						
56	56						
57	57						
58	58						
59	59						
60	60						
61	61						
62	62						
63	63						
64	64						
65	65						
66	66						
67	67						
68	68						
69	69						
70	70						
71	71						
72	72						
73	73						
74	74						
75	75						
76	76						

TAP WATER RECORD

(Dechlorinated Newport, OR city water)

BATCH #	DATE	LOCATION	VOL (gals)	CHLORINE (mg/L)	HARD (mg/L)	ALK (mg/L)	COND µmhos/cm	pH	Init.
314	7-25-11	200M#	200	<0.02	43	30	154	7.2	YR
315	8-2-11	"	100	<0.02	43	40	160	7.9	YR/GJ
316	8-3-11	"	"	<0.02	43	30	154	7.9	GJ
317	8-5-11	"	"	<0.02	43	30	160	7.8	GJ
318	8-9-11	"	"	<0.02	43	30	152	7.8	YR/LB
319	8-12-11	"	"	<0.02	51	30	145	7.8	YR/LB
320	8-15-11	"	"	<0.02	43	30	141	7.7	BHF/YR
321	8-17-11	"	200	<0.02	43	30	145	7.6	YR
322	8-25-11	"	100	<0.02	43	30	136	7.6	GJ
323	8-26-11	"	"	<0.02	43	30	143	7.5	GJ
324	9-7-11	"	80	<0.02	43	30	140	7.3	YR

REC'D
8-24-11 CS

Chesapeake Cultures

P.O. Box 507 Hayes, VA 23072 (804)693-4046 (804)694-4704 fax
www.c-cultures.com
growfish@c-cultures.com

NAS

Shipment Information

Species Hyalella azteca Date 8/23/11

Age/Size 4-5 d; 1.5 mm P.O. No. verbal

Quantity 620+ Invoice No. 7312

Temperature 24°C Salinity — pH 7.93

Notes Thanks!

RECEIVED 8-24-11
-GSL

Biologist

** Please inspect shipment and report any problem immediately **

TEST DATA ANALYSIS RECORDS

Endpoints Data Entry and Calculations File

BKR=beaker number
INIT=initial number
SURV=number survivors
MORT=number dead=INIT-SURV
PSURV=%survival=100(SURV/INIT)
PMORT=%mortality=100(MORT/INIT)

TARE WT= ashed weight of pan used for that replicate at test termination (mg), or
dry weight of pan if ash-free dry weight is not an endpoint
WT COUNT= number of test organisms weighed at test end
DRY WT= TARE WT + dry weight of test organisms recovered at test termination (mg)
TWT=total biomass=DRY WT-TARE WT
WT=average individual biomass=TWT/WT COUNT

INITIAL WEIGHT				
pan #	tare wt (mg)	final wt (mg)	wt count	avg. wt/ organism
1	37.323	37.947	10	0.062
2	37.386	38.138	10	0.075
3	34.71	35.401	10	0.069
4	33.055	33.73	10	0.067
5	33.431	34.181	10	0.075
			avg.	0.070

INDEX	BKR	NAS SMPL	CLIENT DESCRIP	REPL		INIT	SURV	MORT	PSURV	PMORT	TARE WT (mg)	WT COUNT	DRY WT (mg)	TWT (mg)	WT (mg)		SURV	MORT	PSURV	PMORT	WT
1	9	3820G	Contol	1		10	7	3	70.0	30.0	33.684	7	37.654	3.970	0.567						
2	25	3820G	Contol	2		10	10	0	100.0	0.0	35.691	10	40.988	5.297	0.530						
3	29	3820G	Contol	3		10	9	1	90.0	10.0	35.976	9	41.371	5.395	0.599						
4	28	3820G	Contol	4		10	10	0	100.0	0.0	36.194	10	40.957	4.763	0.476						
5	12	3820G	Contol	5		10	10	0	100.0	0.0	35.716	10	39.268	3.552	0.355	Mean	9.5	0.5	95.0	5.0	0.50
6	27	3820G	Contol	6		10	10	0	100.0	0.0	35.169	10	39.609	4.440	0.444	SD	1.1	1.1	10.7	10.7	0.08
7	14	3820G	Contol	7		10	10	0	100.0	0.0	34.374	10	39.156	4.782	0.478	n	8	8	8	8	8
8	30	3820G	Contol	8	wq replicate	10	10	0	100.0	0.0	34.610	10	39.733	5.123	0.512						
9	24	3838G	11070001	1		10	10	0	100.0	0.0	32.858	10	38.597	5.739	0.574						
10	17	3838G	11070001	2		10	10	0	100.0	0.0	35.637	10	40.847	5.210	0.521						
11	3	3838G	11070001	3		10	9	1	90.0	10.0	35.854	9	39.850	3.996	0.444						
12	36	3838G	11070001	4		10	9	1	90.0	10.0	35.645	9	40.626	4.981	0.553						
13	10	3838G	11070001	5		10	10	0	100.0	0.0	33.932	10	38.569	4.637	0.464	Mean	9.6	0.4	96.3	3.8	0.52
14	7	3838G	11070001	6		10	10	0	100.0	0.0	36.373	10	40.924	4.551	0.455	SD	0.5	0.5	5.2	5.2	0.07
15	35	3838G	11070001	7		10	9	1	90.0	10.0	33.882	9	39.612	5.730	0.637	n	8	8	8	8	8
16	33	3838G	11070001	8	wq replicate	10	10	0	100.0	0.0	34.109	10	39.045	4.936	0.494						
17	23	3839G	11070002	1		10	9	1	90.0	10.0	35.091	9	38.884	3.793	0.421						
18	18	3839G	11070002	2		10	9	1	90.0	10.0	33.523	9	36.015	2.492	0.277						
19	40	3839G	11070002	3		10	10	0	100.0	0.0	33.317	10	38.216	4.899	0.490						
20	39	3839G	11070002	4		10	10	0	100.0	0.0	34.184	10	38.688	4.504	0.450						
21	31	3839G	11070002	5		10	8	2	80.0	20.0	33.858	8	36.821	2.963	0.370	Mean	8.9	1.1	88.8	11.3	0.40
22	13	3839G	11070002	6		10	7	3	70.0	30.0	32.849	7	35.564	2.715	0.388	SD	1.0	1.0	9.9	9.9	0.06
23	16	3839G	11070002	7		10	9	1	90.0	10.0	35.338	9	38.990	3.652	0.406	n	8	8	8	8	8
24	4	3839G	11070002	8	wq replicate	10	9	1	90.0	10.0	35.551	9	39.064	3.513	0.390						
25	32	3840G	11070003	1		10	10	0	100.0	0.0	36.179	10	41.454	5.275	0.528						
26	2	3840G	11070003	2		10	9	1	90.0	10.0	35.832	9	40.050	4.218	0.469						
27	37	3840G	11070003	3		10	9	1	90.0	10.0	33.745	9	37.655	3.910	0.434						
28	19	3840G	11070003	4		10	10	0	100.0	0.0	35.874	10	39.640	3.766	0.377						
29	1	3840G	11070003	5		10	8	2	80.0	20.0	35.381	8	41.492	6.111	0.764	Mean	9.4	0.6	93.8	6.3	0.50
30	6	3840G	11070003	6		10	10	0	100.0	0.0	36.242	10	40.658	4.416	0.442	SD	0.7	0.7	7.4	7.4	0.12
31	8	3840G	11070003	7		10	10	0	100.0	0.0	34.983	10	40.484	5.501	0.550	n	8	8	8	8	8
32	5	3840G	11070003	8	wq replicate	10	9	1	90.0	10.0	33.871	9	38.076	4.205	0.467						
33	22	3841G	11070004	1		10	9	1	90.0	10.0	34.775	9	37.699	2.924	0.325						
34	38	3841G	11070004	2		10	9	1	90.0	10.0	36.947	9	40.135	3.188	0.354						
35	21	3841G	11070004	3		10	10	0	100.0	0.0	32.832	10	36.432	3.600	0.360						
36	34	3841G	11070004	4		10	9	1	90.0	10.0	33.749	9	36.951	3.202	0.356						
37	26	3841G	11070004	5		10	10	0	100.0	0.0	32.448	10	36.052	3.604	0.360	Mean	9.6	0.4	96.3	3.8	0.33
38	20	3841G	11070004	6		10	10	0	100.0	0.0	34.395	10	37.266	2.871	0.287	SD	0.5	0.5	5.2	5.2	0.04
39	15	3841G	11070004	7		10	10	0	100.0	0.0	34.874	10	37.549	2.675	0.268	n	8	8	8	8	8
40	11	3841G	11070004	8	wq replicate	10	10	0	100.0	0.0	32.911	10	36.109	3.198	0.320						

Project Name: P826-1 Hyalella 28-day; % Mortality

Sample:	x1
Samp ID:	11070001
Alias:	NAS# 3838G - X1
Replicates:	8
Mean:	3.75
SD:	5.175
Tr Mean:	6.913
Trans SD:	9.541

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	5
SD:	10.69
Tr Mean:	6.456
Trans SD:	12.589

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	9.588
SS:	1746.606
K:	8
b:	34.128
Alpha Level:	0.05
Calculated Value:	0.6668
Critical Value:	<= 0.887
Normally Distributed:	No
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	8.641
Test Residual SD:	2.385
Ref. Residual Mean:	9.684
Ref. Residual SD:	7.164
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.3904
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Mann-Whitney
Balanced Design:	Yes
Transformation:	rank-order
Experimental Hypothesis	
Null:	x1 <= x2
Alternate:	x1 > x2
Mann-Whitney N1:	8
Mann-Whitney N2:	8
Degrees of Freedom:	
Experimental Alpha Level:	0.05
Calculated Value:	34.5
Critical Value:	>= 49.0
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Ranks	Shipiro-Wilk Residuals
1	0	6	30	16	6.913	26.755	0		-6.913
2	0	6	0	6	6.913	6.456	0		-6.913
3	10	13.5	10	13.5	11.522	11.979	0		-6.913
4	10	13.5	0	6	11.522	6.456	0		-6.913
5	0	6	0	6	6.913	6.456	0		-6.913
6	0	6	0	6	6.913	6.456	0		-6.456
7	10	13.5	0	6	11.522	6.456	0		-6.456
8	0	6	0	6	6.913	6.456	0		-6.456
9							0		-6.456
10							0		-6.456
11							0		-6.456
12							18.435		11.522
13							18.435		11.522
14							18.435		11.522
15							18.435		11.979
16							33.211		26.755

THE % MORTALITY OF 11070001 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

-GJ

Project Name: P826-1 Hyalella 28-day; % Mortality

Sample:	x1
Samp ID:	11070002
Alias:	NAS# 3839G - X1
Replicates:	8
Mean:	11.25
SD:	9.91
Tr Mean:	16.689
Trans SD:	11.587

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	5
SD:	10.69
Tr Mean:	6.456
Trans SD:	12.589

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	10.385
SS:	2049.139
K:	8
b:	43.364
Alpha Level:	0.05
Calculated Value:	0.9177
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	8.345
Test Residual SD:	7.394
Ref. Residual Mean:	9.684
Ref. Residual SD:	7.164
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.3678
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	ArcSin
Experimental Hypothesis	
Null:	x1 <= x2
Alternate:	x1 > x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	1.6918
Critical Value:	>= 1.761
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	10	18.435	30	33.211	1.745	26.755			-16.689
2	10	18.435	0	0	1.745	6.456			-16.689
3	0	0	10	18.435	16.689	11.979			-6.456
4	0	0	0	0	16.689	6.456			-6.456
5	20	26.565	0	0	9.876	6.456			-6.456
6	30	33.211	0	0	16.521	6.456			-6.456
7	10	18.435	0	0	1.745	6.456			-6.456
8	10	18.435	0	0	1.745	6.456			-6.456
9									1.745
10									1.745
11									1.745
12									1.745
13									9.876
14									11.979
15									16.521
16									26.755

THE % MORTALITY OF 11070002 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

-6.5.L

Project Name: P826-1 Hyalella 28-day; % Mortality

Sample:	x1
Samp ID:	11070003
Alias:	NAS# 3840G - X1
Replicates:	8
Mean:	6.25
SD:	7.44
Tr Mean:	10.234
Trans SD:	11.259

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	5
SD:	10.69
Tr Mean:	6.456
Trans SD:	12.589

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	10.252
SS:	1996.8
K:	8
b:	40.21
Alpha Level:	0.05
Calculated Value:	0.8097
Critical Value:	<= 0.887
Normally Distributed:	No
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	10.234
Test Residual SD:	2.661
Ref. Residual Mean:	9.684
Ref. Residual SD:	7.164
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.2036
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Mann-Whitney
Balanced Design:	Yes
Transformation:	rank-order
Experimental Hypothesis	
Null:	x1 <= x2
Alternate:	x1 > x2
Mann-Whitney N1:	8
Mann-Whitney N2:	8
Degrees of Freedom:	
Experimental Alpha Level:	0.05
Calculated Value:	38.5
Critical Value:	>= 49.0
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0	5.5	30	16	10.234	26.755	0		-10.234
2	10	12.5	0	5.5	8.201	6.456	0		-10.234
3	10	12.5	10	12.5	8.201	11.979	0		-10.234
4	0	5.5	0	5.5	10.234	6.456	0		-10.234
5	20	15	0	5.5	16.331	6.456	0		-6.456
6	0	5.5	0	5.5	10.234	6.456	0		-6.456
7	0	5.5	0	5.5	10.234	6.456	0		-6.456
8	10	12.5	0	5.5	8.201	6.456	0		-6.456
9							0		-6.456
10							0		-6.456
11							18.435		8.201
12							18.435		8.201
13							18.435		8.201
14							18.435		11.979
15							26.565		16.331
16							33.211		26.755

THE % MORTALITY OF 11070001 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-6.31

Project Name: P826-1 Hyalella 28-day; % Mortality

Sample:	x1
Samp ID:	11070004
Alias:	NAS# 3841G - X1
Replicates:	8
Mean:	3.75
SD:	5.175
Tr Mean:	6.913
Trans SD:	9.541

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	5
SD:	10.69
Tr Mean:	6.456
Trans SD:	12.589

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	9.588
SS:	1746.606
K:	8
b:	34.128
Alpha Level:	0.05
Calculated Value:	0.6668
Critical Value:	<= 0.887
Normally Distributed:	No
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	8.641
Test Residual SD:	2.385
Ref. Residual Mean:	9.684
Ref. Residual SD:	7.164
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.3904
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Mann-Whitney
Balanced Design:	Yes
Transformation:	rank-order

Experimental Hypothesis

Null:	x1 <= x2
Alternate:	x1 > x2
Mann-Whitney N1:	8
Mann-Whitney N2:	8
Degrees of Freedom:	
Experimental Alpha Level:	0.05
Calculated Value:	34.5
Critical Value:	>= 49.0
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	10	13.5	30	16	11.522	26.755	0		-6.913
2	10	13.5	0	6	11.522	6.456	0		-6.913
3	0	6	10	13.5	6.913	11.979	0		-6.913
4	10	13.5	0	6	11.522	6.456	0		-6.913
5	0	6	0	6	6.913	6.456	0		-6.913
6	0	6	0	6	6.913	6.456	0		-6.456
7	0	6	0	6	6.913	6.456	0		-6.456
8	0	6	0	6	6.913	6.456	0		-6.456
9							0		-6.456
10							0		-6.456
11							0		-6.456
12							18.435		11.522
13							18.435		11.522
14							18.435		11.522
15							18.435		11.979
16							33.211		26.755

THE % MORTALITY OF 11070001 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-6.12

Project Name: P826-1 Hyalella 28-day; Ind. dry wt.

Sample:	x1
Samp ID:	11070001
Alias:	NAS# 3838G - X1
Replicates:	8
Mean:	0.518
SD:	0.067
Tr Mean:	0.518
Trans SD:	0.067

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.495
SD:	0.076
Tr Mean:	0.495
Trans SD:	0.076

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.061
SS:	0.072
K:	8
b:	0.266
Alpha Level:	0.05
Calculated Value:	0.9833
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.054
Test Residual SD:	0.035
Ref. Residual Mean:	0.057
Ref. Residual SD:	0.045
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.1663
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	-0.6317
Critical Value:	>= 1.761
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	RankIts	Shipiro-Wilk Residuals
1	0.574	0.574	0.567	0.567	0.056	0.072			-0.14
2	0.521	0.521	0.53	0.53	0.003	0.035			-0.074
3	0.444	0.444	0.599	0.599	0.074	0.104			-0.063
4	0.553	0.553	0.476	0.476	0.035	0.019			-0.054
5	0.464	0.464	0.355	0.355	0.054	0.14			-0.051
6	0.455	0.455	0.444	0.444	0.063	0.051			-0.024
7	0.637	0.637	0.478	0.478	0.119	0.017			-0.019
8	0.494	0.494	0.512	0.512	0.024	0.017			-0.017
9									0.003
10									0.017
11									0.035
12									0.035
13									0.056
14									0.072
15									0.104
16									0.119

THE MEAN INDIVIDUAL DRY WT OF 11070001 WAS NOT SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-6.51

Project Name: P826-1 Hyalella 28-day; Ind. dry wt.

Sample:	x1
Samp ID:	11070002
Alias:	NAS# 3839G - X1
Replicates:	8
Mean:	0.399
SD:	0.062
Tr Mean:	0.399
Trans SD:	0.062

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.495
SD:	0.076
Tr Mean:	0.495
Trans SD:	0.076

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.06
SS:	0.068
K:	8
b:	0.254
Alpha Level:	0.05
Calculated Value:	0.9504
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.043
Test Residual SD:	0.043
Ref. Residual Mean:	0.057
Ref. Residual SD:	0.045
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.6408
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	2.7645
Critical Value:	>= 1.761
Accept Null Hypothesis:	No
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0.421	0.421	0.567	0.567	0.022	0.072			-0.14
2	0.277	0.277	0.53	0.53	0.122	0.035			-0.122
3	0.49	0.49	0.599	0.599	0.091	0.104			-0.051
4	0.45	0.45	0.476	0.476	0.051	0.019			-0.029
5	0.37	0.37	0.355	0.355	0.029	0.14			-0.019
6	0.388	0.388	0.444	0.444	0.011	0.051			-0.017
7	0.406	0.406	0.478	0.478	0.007	0.017			-0.011
8	0.39	0.39	0.512	0.512	0.009	0.017			-0.009
9									0.007
10									0.017
11									0.022
12									0.035
13									0.051
14									0.072
15									0.091
16									0.104

THE MEAN INDIVIDUAL DRY WT OF 11070002 WAS SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-632

Project Name: P826-1 Hyalella 28-day; Ind. dry wt.

Sample:	x1
Samp ID:	11070003
Alias:	NAS# 3840G - X1
Replicates:	8
Mean:	0.504
SD:	0.118
Tr Mean:	0.504
Trans SD:	0.118

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.495
SD:	0.076
Tr Mean:	0.495
Trans SD:	0.076

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.085
SS:	0.138
K:	8
b:	0.357
Alpha Level:	0.05
Calculated Value:	0.9209
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.083
Test Residual SD:	0.079
Ref. Residual Mean:	0.057
Ref. Residual SD:	0.045
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.8014
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	-0.1762
Critical Value:	>= 1.761
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shiplro-Wilk Residuals
1	0.528	0.528	0.567	0.567	0.024	0.072			-0.14
2	0.469	0.469	0.53	0.53	0.035	0.035			-0.127
3	0.434	0.434	0.599	0.599	0.07	0.104			-0.07
4	0.377	0.377	0.476	0.476	0.127	0.019			-0.062
5	0.764	0.764	0.355	0.355	0.26	0.14			-0.051
6	0.442	0.442	0.444	0.444	0.062	0.051			-0.037
7	0.55	0.55	0.478	0.478	0.046	0.017			-0.035
8	0.467	0.467	0.512	0.512	0.037	0.017			-0.019
9									-0.017
10									0.017
11									0.024
12									0.035
13									0.046
14									0.072
15									0.104
16									0.26

THE MEAN INDIVIDUAL DRY WT OF 11070003 WAS NOT SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-611

Project Name: P826-1 Hyalella 28-day; ind. dry wt.

Sample:	x1
Samp ID:	11070004
Alias:	NAS# 3841G - X1
Replicates:	8
Mean:	0.329
SD:	0.036
Tr Mean:	0.329
Trans SD:	0.036

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.495
SD:	0.076
Tr Mean:	0.495
Trans SD:	0.076

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.051
SS:	0.049
K:	8
b:	0.217
Alpha Level:	0.05
Calculated Value:	0.9567
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.029
Test Residual SD:	0.018
Ref. Residual Mean:	0.057
Ref. Residual SD:	0.045
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	1.6271
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	5.6118
Critical Value:	>= 1.761
Accept Null Hypothesis:	No
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Ranks	Shipiro-Wilk Residuals
1	0.325	0.325	0.567	0.567	0.004	0.072			-0.14
2	0.354	0.354	0.53	0.53	0.025	0.035			-0.061
3	0.36	0.36	0.599	0.599	0.031	0.104			-0.051
4	0.356	0.356	0.476	0.476	0.027	0.019			-0.042
5	0.36	0.36	0.355	0.355	0.031	0.14			-0.019
6	0.287	0.287	0.444	0.444	0.042	0.051			-0.017
7	0.268	0.268	0.478	0.478	0.061	0.017			-0.009
8	0.32	0.32	0.512	0.512	0.009	0.017			-0.004
9									0.017
10									0.025
11									0.027
12									0.031
13									0.031
14									0.035
15									0.072
16									0.104

THE MEAN INDIVIDUAL DRY WT OF 11070004 WAS SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-6J1

Water Quality Data

BKR	NAS SMPL	CLIENT DESCRIP	REPL	DAY	Overlying water TEMP	DO	COND	pH	NH3	HARD	ALK
4	3839G	11070002	8	0	23.5	8.4	145	7.2	<0.1	43	30
5	3840G	11070003	8	0	23.7	8.3	143	7.1	<0.1	43	30
11	3841G	11070004	8	0	23.4	8.2	147	7.1	0.1	43	30
30	3820G	Control	8	0	23.7	7.2	156	7.0	0.2	34	30
33	3838G	11070001	8	0	23.4	7.6	142	6.9	0.1	43	30
4	3839G	11070002	8	1	23.0						
5	3840G	11070003	8	1	23.1						
11	3841G	11070004	8	1	22.9						
30	3820G	Control	8	1	23.0						
33	3838G	11070001	8	1	22.9						
4	3839G	11070002	8	2	23.0						
5	3840G	11070003	8	2	23.0						
11	3841G	11070004	8	2	22.8						
30	3820G	Control	8	2	23.0						
33	3838G	11070001	8	2	22.8						
4	3839G	11070002	8	3	22.8	7.5		7.1			
5	3840G	11070003	8	3	22.9	7.3		7.1			
11	3841G	11070004	8	3	22.7	7.6		7.2			
30	3820G	Control	8	3	22.8	7.2		7.0			
33	3838G	11070001	8	3	22.7	7.2		6.9			
4	3839G	11070002	8	4	23.1						
5	3840G	11070003	8	4	23.2						
11	3841G	11070004	8	4	23.0						
30	3820G	Control	8	4	23.1						
33	3838G	11070001	8	4	22.9						
4	3839G	11070002	8	5	22.6	6.2	146	6.7			
5	3840G	11070003	8	5	22.8	6.4	151	6.7			
11	3841G	11070004	8	5	22.4	6.4	149	7.0			
30	3820G	Control	8	5	22.7	6.1	156	6.8			
33	3838G	11070001	8	5	22.4	6.0	150	6.8			
4	3839G	11070002	8	6	22.0						
5	3840G	11070003	8	6	22.2						
11	3841G	11070004	8	6	22.0						
30	3820G	Control	8	6	22.1						
33	3838G	11070001	8	6	22.0						
4	3839G	11070002	8	7	22.3	7.5		6.6			
5	3840G	11070003	8	7	22.5	7.6		6.7			
11	3841G	11070004	8	7	22.1	7.5		6.8			
30	3820G	Control	8	7	22.3	7.2		6.8			
33	3838G	11070001	8	7	22.0	7.1		6.7			
4	3839G	11070002	8	8	22.2						
5	3840G	11070003	8	8	22.5						
11	3841G	11070004	8	8	22.5						
30	3820G	Control	8	8	22.2						
33	3838G	11070001	8	8	22.2						
4	3839G	11070002	8	9	22.2						
5	3840G	11070003	8	9	22.5						

11	3841G	11070004	8	9	22.0			
30	3820G	Control	8	9	22.3			
33	3838G	11070001	8	9	22.1			
4	3839G	11070002	8	10	23.0	7.1		6.6
5	3840G	11070003	8	10	23.4	6.7		6.6
11	3841G	11070004	8	10	22.7	7.2		6.8
30	3820G	Control	8	10	23.0	7.0		6.7
33	3838G	11070001	8	10	22.5	7.0		6.7
4	3839G	11070002	8	11	23.1			
5	3840G	11070003	8	11	23.5			
11	3841G	11070004	8	11	22.9			
30	3820G	Control	8	11	23.2			
33	3838G	11070001	8	11	23.6			
4	3839G	11070002	8	12	22.9	7.5	146	7.0
5	3840G	11070003	8	12	23.3	7.1	151	6.9
11	3841G	11070004	8	12	22.8	7.3	147	7.0
30	3820G	Control	8	12	23.0	7.1	153	7.0
33	3838G	11070001	8	12	23.3	7.3	151	6.9
4	3839G	11070002	8	13	23.0			
5	3840G	11070003	8	13	23.1			
11	3841G	11070004	8	13	23.5			
30	3820G	Control	8	13	23.2			
33	3838G	11070001	8	13	23.2			
4	3839G	11070002	8	14	23.3	7.5		6.7
5	3840G	11070003	8	14	23.7	7.1		6.7
11	3841G	11070004	8	14	23.2	7.3		6.8
30	3820G	Control	8	14	23.5	7.3		6.8
33	3838G	11070001	8	14	23.7	7.3		6.7
4	3839G	11070002	8	15	23.4			
5	3840G	11070003	8	15	23.7			
11	3841G	11070004	8	15	23.2			
30	3820G	Control	8	15	23.6			
33	3838G	11070001	8	15	23.8			
4	3839G	11070002	8	16	23.3			
5	3840G	11070003	8	16	23.6			
11	3841G	11070004	8	16	23.0			
30	3820G	Control	8	16	23.4			
33	3838G	11070001	8	16	23.4			
4	3839G	11070002	8	17	23.3	6.7		7.0
5	3840G	11070003	8	17	23.5	6.3		6.8
11	3841G	11070004	8	17	23.0	6.7		7.0
30	3820G	Control	8	17	23.4	6.9		7.1
33	3838G	11070001	8	17	23.5	7.1		6.9
4	3839G	11070002	8	18	23.3			
5	3840G	11070003	8	18	23.5			
11	3841G	11070004	8	18	23.4			
30	3820G	Control	8	18	23.5			
33	3838G	11070001	8	18	23.6			
4	3839G	11070002	8	19	23.2	7.7	151	6.4
5	3840G	11070003	8	19	23.4	6.8	158	6.8
11	3841G	11070004	8	19	22.8	8.0	156	7.2
30	3820G	Control	8	19	23.4	6.8	162	7.0

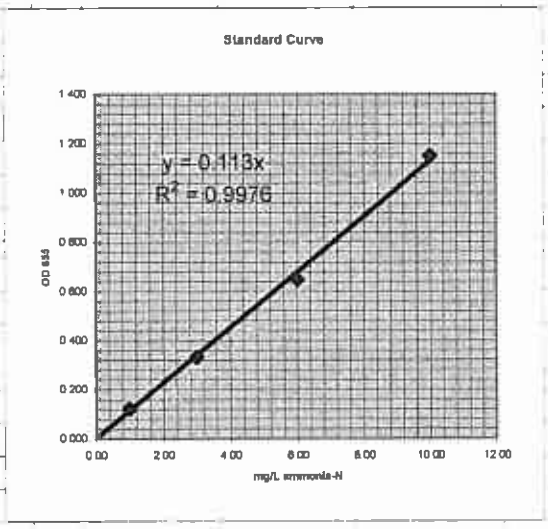
33	3838G	11070001	8	19	23.4	8.0	159	7.0				
4	3839G	11070002	8	20	23.7							
5	3840G	11070003	8	20	23.8							
11	3841G	11070004	8	20	23.8							
30	3820G	Control	8	20	23.8							
33	3838G	11070001	8	20	23.7							
4	3839G	11070002	8	21	23.6	7.0		7.0				
5	3840G	11070003	8	21	23.8	6.1		6.9				
11	3841G	11070004	8	21	22.9	7.6		7.3				
30	3820G	Control	8	21	23.4	7.0		7.2				
33	3838G	11070001	8	21	23.6	7.3		7.0				
4	3839G	11070002	8	22	23.2							
5	3840G	11070003	8	22	23.1							
11	3841G	11070004	8	22	22.9							
30	3820G	Control	8	22	23.3							
33	3838G	11070001	8	22	23.3							
4	3839G	11070002	8	23	23.3							
5	3840G	11070003	8	23	23.6							
11	3841G	11070004	8	23	23.1							
30	3820G	Control	8	23	23.6							
33	3838G	11070001	8	23	23.5							
4	3839G	11070002	8	24	23.3	7.6		6.6				
5	3840G	11070003	8	24	23.6	6.8		6.7				
11	3841G	11070004	8	24	22.9	9.1		7.8				
30	3820G	Control	8	24	23.5	7.8		7.5				
33	3838G	11070001	8	24	23.4	8.4		7.2				
4	3839G	11070002	8	25	23.3							
5	3840G	11070003	8	25	23.5							
11	3841G	11070004	8	25	23.0							
30	3820G	Control	8	25	23.5							
33	3838G	11070001	8	25	23.5							
4	3839G	11070002	8	26	23.2	6.9	168	6.7				
5	3840G	11070003	8	26	23.5	7.3	168	6.8				
11	3841G	11070004	8	26	23.0	9.5	165	7.7				
30	3820G	Control	8	26	23.6	8.4	175	7.5				
33	3838G	11070001	8	26	23.5	8.7	170	7.3				
4	3839G	11070002	8	27	23.3							
5	3840G	11070003	8	27	23.6							
11	3841G	11070004	8	27	23.1							
30	3820G	Control	8	27	23.5							
33	3838G	11070001	8	27	23.5							
4	3839G	11070002	8	28	23.2	7.0	159	6.8	<0.1	51	30	
5	3840G	11070003	8	28	23.6	7.7	160	6.8	<0.1	43	30	
11	3841G	11070004	8	28	23.2	9.5	150	7.8	<0.1	51	30	
30	3820G	Control	8	28	23.8	8.3	159	7.3	<0.1	51	30	
33	3838G	11070001	8	28	23.7	8.3	151	7.0	0.1	51	30	
				Mean	23.1	7.4	155	7.0	---	45	30	
				SD	0.5	0.7	8	0.3	—	6	0	
				n	145	65	30	65	10	10	10	
				Min	22.0	6.0	142	6.4	<0.1	34	30	
				Max	23.8	9.5	175	7.8	0.2	51	30	

AMMONIA EXPOSURE BENCHSHEETS AND ANALYSIS

Total Ammonia-N in Water: Computation Worksheet
Salicylate Method (SOP #5492)

Result

	Sample description	Dilution factor	OD_{655}	NH_3-N (mg/L)
	Blank	-----	-----	-----
	1.0 mg/L NH_3-N Std.	-----	0.121	1.00
	3.0 mg/L NH_3-N Std.	-----	0.331	3.00
	6.0 mg/L NH_3-N Std.	-----	0.648	6.00
	10.0 mg/L NH_3-N Std.	-----	1.150	10.00
	3.0 mg/L spike	-----	0.339	3.00
	3.0 mg/L spike dupl.	-----	0.338	2.99
	5.0 mg/L 2nd source	-----	0.560	4.95
1.	Day 0 (8-16-11)	######		
2.	4	1	0.008	ND
3.	5	1	0.010	ND
4.	11	1	0.014	0.12
5.	30	1	0.027	0.24
6.	33	1	0.012	0.11
7.	Day 28 (9-23-11)	######		
8.	4	1	0.008	ND
9.	5	1	0.001	ND
10.	11	1	0.006	ND
11.	30	1	0.010	ND
12.	33	1	0.012	0.11
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				
35.				
36.				



Reporting limit (mg/L) =	0.1
Recovery (%) =	99.8
Precision (RPD) =	0.30
2nd source (%) =	99.0
Sample volume (ml):	0.50
Dilution factor	1

Sample Set Description:
Test No.: 826-1
Test Day: 0&28
Species: *Hyalella*

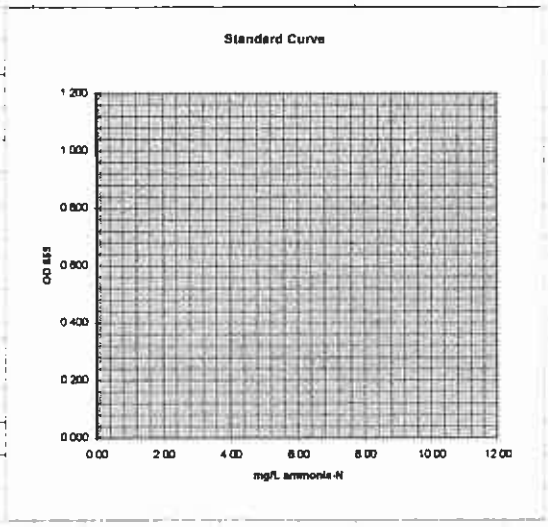
Overlying water

Analyst: RSC
Date analysed: 10/4/2011

Total Ammonia-N in Water: Computation Worksheet
Salicylate Method (SOP #5492)

Result

	Sample description	Dilution factor	OD655	NH3-N (mg/L)
	Blank	-----	-----	----
	1.0 mg/L NH3-N Std.	-----	.121	1.00
	3.0 mg/L NH3-N Std.	-----	.331	3.00
	6.0 mg/L NH3-N Std.	-----	.648	6.00
	10.0 mg/L NH3-N Std.	-----	1.15	10.00
	3.0 mg/L spike	-----	.339	
	3.0 mg/L spike dupl.	-----	.338	
	5.0 mg/L 2nd source	-----	.560	
1.	Day 0 (8-16-11)	######		
2.	4	1	.008	
3.	5	1	.010	
4.	11	1	.014	
5.	30	1	.027	
6.	33	1	.012	
7.	Day 28 (9-23-11)	######		
8.	4	1	.008	
9.	5	1	.001	
10.	11	1	.006	
11.	30	1	.010	
12.	33	1	.012	
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				
35.				
36.				



Reporting limit (mg/L) =	0.1
Recovery (%) =	#VALUE!
Precision (RPD) =	#VALUE!
2nd source (%) =	#VALUE!
Sample volume (ml):	0.50
Dilution factor	1

Sample Set Description:

Test No.: 826-1
Test Day: 0&28
Species: *Hyalella*

Overlying water

Analyst: RSC
Date analysed: 10/4/2011

CHAIN-OF-CUSTODY RECORDS

USEPA
DateShipped: 8/23/2011
CarrierName: FedEx
AirbillNo:

CHAIN OF CUSTODY RECORD
10GL
Contact Name: Mark Woodke
Contact Phone: (206) 624 9537

No: 10-082311-124153-0001
Cooler #: 1
Lab: Northwest Aquatic Sciences
Lab Phone: 5412657225

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
3838G	11070001	GC02	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
3839G	11070002	GC01	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
3840G	11070003	GC03	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
3841G	11070004	GC04	Sediment Toxicity EPA 100 1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N

Special Instructions: INTERNAL TEMP OF COOLER UPON RECEIPT: 4.5 °C

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Shipping	[signature]	8-23-11	[signature]	8-24-11	1000						

P826
ECOLOGY & ENV
8-24-11

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION

CUSTODY SEAL

Date: 8-23-11

Signature: Bryan Vu...

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

CUSTODY SEAL

Date: 8-23-11

Signature:

UNITED STATES ENVIRONMENTAL PROTECTION

FedEx Express

NEW Package US Airbill

FedEx Tracking Number 8762 5167 3792

Form ID No. 0200

Recipient's Copy

From

Date [redacted]

Sender's Name

Phone

Company

Address

Dept./Floor/Suite/Room

City State ZIP

Your Internal Billing Reference

To

Recipient's Name Phone

Company

Address

We cannot deliver to P.O. boxes or P.O. ZIP codes

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City State ZIP

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

8762 5167 3792

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [x] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ___ x ___ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No.

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages | Total Weight | Total Declared Value† | Credit Card Auth.

lbs. $ .00

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

Rev. Date 11/10 • Part #163134 • ©1994-2010 FedEx • PRINTED IN U.S.A. SRY

APPENDIX III

RAW DATA – REFERENCE TOXICANT TEST

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS- _____

ACUTE TOXICITY TEST (ALL SPECIES)

REVIEWED PAGES 1-7 -GJI

Test No. 999-2930 Client: QC Test Investigator _____

Test Type (rangefinding/definitive) _____ Test Length (hr) 96

Species *Hyalella azteca*

STUDY MANAGEMENT

Client: QC test

Client's Study Monitor: QC test

Testing Laboratory: Northwestern Aquatic Sciences

Test Location: Newport Laboratory

Laboratory's Study Personnel:

Proj. Man./Study Dir. G.J. Irissarri GJI

QA Officer L. K. Nemeth

1. GA Butler OTS 2. _____

3. _____ 4. _____

Test Beginning: 8-26-11 0950 Test Ending: 8-30-11 1050

TEST MATERIAL

Description: Potassium Chloride Crystals - Lot No.: FISHER 073280

NAS Sample No.				
Date of Collection:				
Date of Receipt:				
Temperature (deg C):				
Dissolved oxygen (mg/L):				
pH:				
Conductivity (umhos/cm):				
Hardness (mg/L):				
Alkalinity (mg/L):				
Salinity (ppt):				
Total chlorine (mg/L):				
Total ammonia-N (mg/L):				
_____:				

DILUTION WATER

Description: Moderately hard synthetic water

Date of Preparation/Collection: 8-22-11

Water Quality: Cond. (umhos/cm): 256 Salinity (ppt) _____ pH 7.9

Hardness (mg/L as $CaCO_3$): 96 Alkalinity (mg/L as $CaCO_3$): 70

Treatments: Aerated ≥ 24 hrs

TEST LOCATION

Test conducted in (circle one): (room 1) room 2 trailer water bath other: _____

Randomization chart:

REP										
B	0.063	1	0.125	ø	0.25	0.5				
A	0.25	0.5	0.063	0.125	1	ø				

Error codes: 1) Correction of handwriting error
2) Written in wrong location; entry deleted
3) Wrong date deleted; replaced with correct date
4) Error found in measurement; measurement repeated

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-_____

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2930 Client QC Test Investigator _____

TEST ORGANISMS

Species: *Hyalella azteca* Age: 7-8 DAYS Size: _____

Source: Chesapeake Cultures, Hayes, VA Date received: 8-24-11

Acclimation Data:

Date	Temp. (deg.C)	pH	Cond. umhos/cm	DO (mg/L)	Hardness (mg/L)	Alkalinity (mg/L)	Feeding Amount	Feeding description	Water changes
8-24-11	22.6	7.0	473	>15.0	197	170	10 mL	YTC	YES
8-25-11	22.8	8.3	334	7.9	120	110	"	"	YES
8-26-11	23.2	7.7	245	7.9	94	80	—	—	—
Mean	22.9	7.7	351	10.3	137	120			
S.D.	0.3	0.7	115	4.1	54	46			
(N)	3	3	3	3	3	3			

Photoperiod during acclimation: 16:8, L:D

TEST PROCEDURES AND CONDITIONS

Test concentrations (50% series recommended): 1, 0.5, 0.25, 0.125, 0.063 0 g/L

Test chamber: 250 ml glass beakers Test volume: 100 ml

Replicates/treatment: 2 Organisms/treatment: 20 (10/rep)

Test water changes: None Aeration during test: None

Feeding: 0.5 ml YTC suspension per beaker on days 0 and 2

Duration: 24-hr, 48-hr, (96-hr) Test temperature (deg.C): (23 ± 1) or 20 ± 1

Beaker placement: Stratified randomization Photoperiod: 16:8, L:D

MISCELLANEOUS NOTES

Test solution preparation:

Working stock: Dissolve 0.5g KCl crystals in dilution water and dilute to 500 mL.
Final conc.: 1.0 g/L.

Test concentration (g/L)	KCl working stock (ml/200ml)	Dilution water
1	200	Brought up to final volume of 200 ml with dilution water and distributed evenly between two replicates
0.5	100	
0.25	50	
0.125	25	
0.063	12.5	
0	0	

8-26-11 621

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-_____

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2930 Client QC Test

DAILY RECORD SHEET

Day 0 (8/26/11) GJL

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Survivors A	Survivors B
1. 1	23.6	7.9	1874	8.2	86	80	10	10
2. 0.5	23.6	7.9	1075	8.2			10	10
3. 0.25	23.6	7.8	664	8.2			10	10
4. 0.125	23.6	7.8	456	8.4			10	10
5. 0.063	23.7	7.8	360	8.3			10	10
6. 0	23.7	7.9	256	8.3	86	70	10	10

All animals fed 0.5 ml YTC suspension. Initials: GJL

Day 1 (8/27/11) GJL

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Survivors A	Survivors B
1. 1	23.3	7.8	1842	7.7			Ø (1D)	Ø (1D)
2. 0.5	23.3	7.8	1065	7.7			8 (2D)	6 (4D)
3. 0.25	23.3	7.8	670	7.6			10	10
4. 0.125	23.3	7.8	473	7.8			10	10
5. 0.063	23.2	7.7	372	7.8			10	10
6. 0	23.2	7.7	263	7.8			10	10

Day 2 (8/28/11) GJL

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Survivors A	Survivors B
1. 1	–	–	–	–			Ø	Ø
2. 0.5	23.5	7.7	1061	7.7			3 (5D)	5 (1D)
3. 0.25	23.5	7.6	668	7.7			10	10
4. 0.125	23.4	7.6	470	7.7			10	10
5. 0.063	23.4	7.8	371	7.8			10	10
6. 0	23.4	7.7	265	7.8			10	10

All animals fed 0.5 ml YTC suspension. Initials: GJL

Day 3 (8/29/11) GJL

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Survivors A	Survivors B
1. 1	–	–	–	–			Ø	Ø
2. 0.5	23.4	7.8	1078	7.6			3	5
3. 0.25	23.4	7.8	676	7.5			10	10
4. 0.125	23.4	7.8	468	7.6			10	10
5. 0.063	23.4	7.8	383	7.7			10	10
6. 0	23.5	7.7	269	7.6			10	10

Day 4 (8/30/11) GJL

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Survivors A	Survivors B
1. 1	–	–	–	–	–	–	Ø	Ø
2. 0.5	23.5	7.8	1087	7.9			2 (1D)	5
3. 0.25	23.6	7.8	682	7.7			10	10
4. 0.125	23.6	7.8	489	7.8			10	10
5. 0.063	23.6	7.9	385	7.9			10	10
6. 0	23.6	7.7	273	7.8	86	70	10	9 (1D)
Mean	23.5	7.8	Ø 100%	7.8	86	73		
SD	0.1	0.1	265 1859	0.3	0	6		
n	27	27	6 –	27	3	3		
			5 2					

REC'D
8.24-11 CS

Chesapeake Cultures

P.O. Box 507 Hayes, VA 23072 (804)693-4046 (804)694-4704 fax
www.c-cultures.com
growfish@c-cultures.com

NAS
Shipment Information

Species Hyalella azteca Date 8/23/11

Age/Size ~4-5 d; 1.5 mm P.O. No. verbal

Quantity 620+ Invoice No. 7312

Temperature 24°C Salinity — pH 7.93

Notes Thanks!

RECEIVED 8-24-11
-GS

Biologist

** Please inspect shipment and report any problem immediately **

Acute 96-hr Toxicity Test-96 Hr Survival

Start Date:	8/26/2011 09:50	Test ID:	999-2930	Sample ID:	REF-Ref Toxicant
End Date:	8/30/2011 10:50	Lab ID:	ORNAS-Northwestern Aquati	Sample Type:	KCL-Potassium chloride
Sample Date:		Protocol:	EPAA 91-EPA Acute	Test Species:	HA-Hyalella azteca
Comments:					

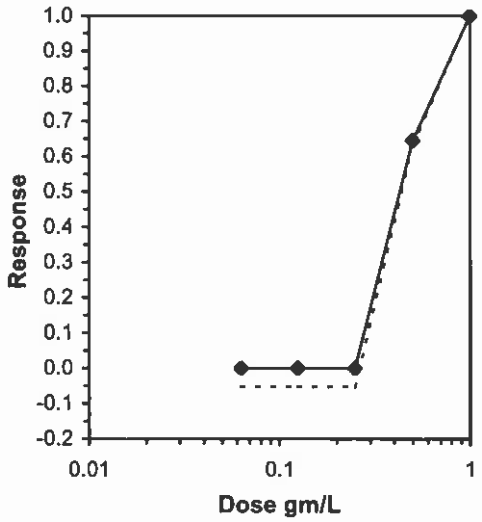
Conc-gm/L	1	2
D-Control	1.0000	0.9000
0.063	1.0000	1.0000
0.125	1.0000	1.0000
0.25	1.0000	1.0000
0.5	0.2000	0.5000
1	0.0000	0.0000

			Transform: Arcsin Square Root					Number	Total
Conc-gm/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp	Number
D-Control	0.9500	1.0000	1.3305	1.2490	1.4120	8.661	2	1	20
0.063	1.0000	1.0526	1.4120	1.4120	1.4120	0.000	2	0	20
0.125	1.0000	1.0526	1.4120	1.4120	1.4120	0.000	2	0	20
0.25	1.0000	1.0526	1.4120	1.4120	1.4120	0.000	2	0	20
0.5	0.3500	0.3684	0.6245	0.4636	0.7854	36.430	2	13	20
1	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Trimmed Spearman-Karber

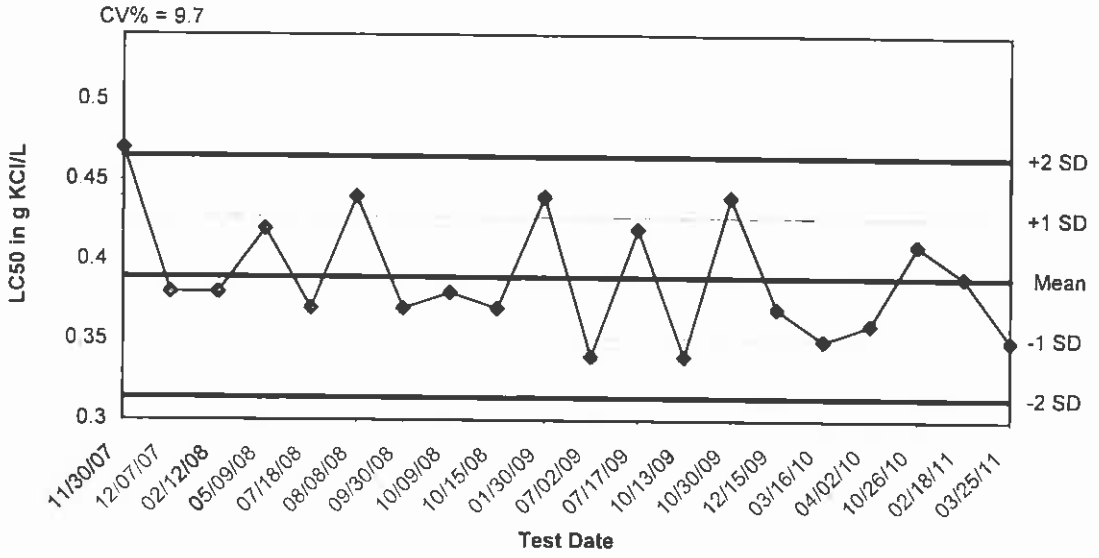
Trim Level	EC50	95% CL	
0.0%	0.4520	0.3897	0.5243
5.0%	0.4475	0.3800	0.5271
10.0%	0.4432	0.3701	0.5307
20.0%	0.4352	0.3494	0.5421
Auto-0.0%	0.4520	0.3897	0.5243



Test: AT-Acute 96-hr Toxicity Test						Test ID: 999-2930			
Species: HA-Hyalella azteca						Protocol: EPAA 91-EPA Acute			
Sample ID: REF-Ref Toxicant						Sample Type: KCL-Potassium chloride			
Start Date: 8/26/2011 09:50			End Date: 8/30/2011 10:5			Lab ID: ORNAS-Northwestern Aquatic Sciences			
Pos	ID	Rep	Group	Start	24 Hr	48 Hr	72 Hr	96 Hr	Notes
	1	1	D-Control	10	10	10	10	10	
	2	2	D-Control	10	10	10	10	9	
	3	1	0.063	10	10	10	10	10	
	4	2	0.063	10	10	10	10	10	
	5	1	0.125	10	10	10	10	10	
	6	2	0.125	10	10	10	10	10	
	7	1	0.250	10	10	10	10	10	
	8	2	0.250	10	10	10	10	10	
	9	1	0.500	10	8	3	3	2	
	10	2	0.500	10	6	5	5	5	
	11	1	1.000	10	0	0	0	0	
	12	2	1.000	10	0	0	0	0	

Comments:

Amphipod, Hyalella azteca, acute reference toxicant test



Dates	Values	Mean	-1 SD	-2 SD	+1 SD	+2 SD
11/30/07	0.4700	0.3895	0.3517	0.3140	0.4273	0.4650
12/07/07	0.3800	0.3895	0.3517	0.3140	0.4273	0.4650
02/12/08	0.3800	0.3895	0.3517	0.3140	0.4273	0.4650
05/09/08	0.4200	0.3895	0.3517	0.3140	0.4273	0.4650
07/18/08	0.3700	0.3895	0.3517	0.3140	0.4273	0.4650
08/08/08	0.4400	0.3895	0.3517	0.3140	0.4273	0.4650
09/30/08	0.3700	0.3895	0.3517	0.3140	0.4273	0.4650
10/09/08	0.3800	0.3895	0.3517	0.3140	0.4273	0.4650
10/15/08	0.3700	0.3895	0.3517	0.3140	0.4273	0.4650
01/30/09	0.4400	0.3895	0.3517	0.3140	0.4273	0.4650
07/02/09	0.3400	0.3895	0.3517	0.3140	0.4273	0.4650
07/17/09	0.4200	0.3895	0.3517	0.3140	0.4273	0.4650
10/13/09	0.3400	0.3895	0.3517	0.3140	0.4273	0.4650
10/30/09	0.4400	0.3895	0.3517	0.3140	0.4273	0.4650
12/15/09	0.3700	0.3895	0.3517	0.3140	0.4273	0.4650
03/16/10	0.3500	0.3895	0.3517	0.3140	0.4273	0.4650
04/02/10	0.3600	0.3895	0.3517	0.3140	0.4273	0.4650
10/26/10	0.4100	0.3895	0.3517	0.3140	0.4273	0.4650
02/18/11	0.3900	0.3895	0.3517	0.3140	0.4273	0.4650
03/25/11	0.3500	0.3895	0.3517	0.3140	0.4273	0.4650

MSP
4-15-11

Report

of

Test No. 826-2

Toxicity of freshwater sediments collected from Kitsap County, WA using a 10-day midge, *Chironomus dilutus* (formerly *C. tentans*), sediment bioassay as part of Project No. 002233.0599.01SF, TDD No. 10-08-0011.

Submitted to

Ecology and Environment, Inc.
720 Third Ave.
Suite 1700
Seattle, WA 98104

Submitted to

Northwestern Aquatic Sciences
3814 Yaquina Bay Road
P.O. Box 1437
Newport, OR 97365

September 13, 2011

TOXICITY TEST REPORT

TEST IDENTIFICATION

Test No.: 826-2

Title: Toxicity of freshwater sediments collected from Kitsap County, WA using a 10-day midge, *Chironomus dilutus* (formerly *C. tentans*), sediment bioassay as part of Project No. 002233.0599.01SF, TDD No. 10-08-0011.

Protocol No.: NAS-XXX-CT4b, April 7, 1998. Revision 1 (10-28-03). Based on ASTM 2001 (Standard test methods for measuring the toxicity of sediment-associated contaminants with fresh water invertebrates, E1706-00), Am. Soc. Test. Mat., Phila., PA, and EPA Method 100.2 (Methods for measuring the toxicity and bioaccumulation of sediment-associated contaminants with freshwater invertebrates, EPA/600/R-99/064).

STUDY MANAGEMENT

Study Sponsor: Ecology and Environment, Inc., 720 Third Ave., Suite 1700, Seattle, WA 98104
Sponsor's Study Monitor: Mr. Mark Woodke
Testing Laboratory: Northwestern Aquatic Sciences, P.O. Box 1437, Newport, OR 97365
Test Location: Newport laboratory
Laboratory's Study Personnel: G.J. Irissarri, B.S., Proj. Man./Study Dir.; L.K. Nemeth, B.A., M.B.A., QA Officer; R.S. Caldwell, PhD, Sr. Aq. Toxicologist; G.A. Buhler, B.S., Aq. Toxicologist; L.P. Sandoval, B.S., Tech.; Y. Nakahama, Tech., B. Hurst, M.S., Tech.
Study Schedule:
Test Beginning: 8-26-11, 1155 hrs.
Test Ending: 9-5-11, 1330 hrs.
Disposition of Study Records: All raw data, reports and other study records are stored at Northwestern Aquatic Sciences, 3814 Yaquina Bay Rd., Newport, OR 97365.
Statement of Quality Assurance: The test data were reviewed by the Quality Assurance Unit to assure that the study was performed in accordance with the protocol and standard operating procedures. This report is an accurate reflection of the raw data.

TEST MATERIAL

Test Sediments: Freshwater test sediments collected as part the characterization of Terminal 5 for the Port of Portland. Details are as follows:

NAS Sample No.	3838G	3839G	3840G	3841G
Description	11070001	11070002	11070003	11070004
Collection Date	7/27/11	7/27/11	7/27/11	7/27/11
Receipt Date	8/14/11	8/24/11	8/24/11	8/24/11

Control Sediment: The negative control sediment (NAS#3820G) was collected on 8-14-11 from an area approximately one mile east of the Hwy. 101 bridge at Beaver Creek, approx. 8 miles south of Newport, OR.
Treatments: Homogenized at test set up by mixing using stainless steel implements.
Storage: All test and control sediments were stored at 4°C in the dark in sealed containers until used.

TEST WATER

Source: Dechlorinated municipal tap water.
Date of Preparation: 8-25-11, 8-26-11
Water Quality:
pH: 7.6, 7.5
conductivity: 136, 143 µmhos/cm
hardness: 43, 43 mg/L as $CaCO_3$
alkalinity: 30, 30 mg/L as $CaCO_3$.
total chlorine: both collections were below 0.02 mg/L
Pretreatment: Dechlorinated and aerated ≥24 hr.

TEST ORGANISMS

Species: *Chironomus dilutus* (formerly *C. tentans*), midge.
Size: 3rd instar, mean initial wt: 0.14 ± 0.01 mg
Source: NAS cultures, originally obtained from EPA, Duluth, MN.
Acclimation: Holding conditions prior to testing averaged: Temperature, 21.9 ± 0.5°C; dissolved oxygen, 8.1 ± 0.3 mg/L; pH, 7.4 ± 0.3; conductivity, 161 ± 3 µmhos/cm; hardness, 52 mg/L as $CaCO_3$; and alkalinity, 30 mg/L as $CaCO_3$. Photoperiod was 16:8, L:D. Half of the water in culture tanks was replaced twice weekly with dechlorinated municipal tap water during holding. Animals were fed Tetra Fin suspension and *Selenastrum.*

TEST PROCEDURES AND CONDITIONS

The following is an abbreviated statement of the test procedures and a statement of the test conditions actually employed. See the test protocol (Appendix I) for a more detailed description of the test procedures used in this study.

Test Chambers: 300 ml high-form glass beakers
Test Volumes: 100 ml sediment layer; 175 ml test water.
Replicates/Treatment: 8 (plus one additional WQ beaker for the four test sediments)
Organisms/Treatment: 80
Water Volume Changes: 2 water volumes per day
Aeration: None.
Feeding: Animals were fed 1.5 ml of Tetra Fin suspension (1.5 ml contains 6 mg dry solids) per beaker daily.
Effects Criteria: 1) survival after 10 days, and 2) average individual biomass (based on ash-free dry weight) after 10 days. Death is defined as no visible movement or response to tactile stimulation. Missing organisms were considered to be dead.
Water Quality and Other Test Conditions: The temperature, dissolved oxygen, conductivity, pH, hardness, alkalinity and ammonia-nitrogen were measured in the overlying water of one replicate test container per treatment on days 0 and 10 of the test. Temperature and dissolved oxygen were measured daily in the overlying water of one replicate test container per treatment. Hardness and alkalinity were measured with titrimetric methods. Ammonia-N was measured using Hach reagents based on the salicylate (Clin. Chim. Acta 14:403, 1996) colorimetric method; samples were not distilled prior to analysis. The photoperiod was 16:8, L:D.

DATA ANALYSIS METHODS

Survival and individual biomass were calculated for each replicate as follows:

percent survival = 100 x (number surviving/initial number tested)
average individual ash-free dry wt. = (ash-free dry wt.)/number weighed,
where:
ash-free dry wt. = dry weight of organisms recovered on day 10 – ashed dry weight, in mg

Means and standard deviations for the biological endpoints described above, and for water quality data, were computed using Microsoft Excel 2000. The values for percent mortality and individual ash-free dry wt for each test sediment were statistically compared against the reference sediment. Where appropriate, an arcsine square root transformation was performed on proportional mortality data before analysis. Following determination of normality and homogeneity of variances, a one-tailed Student T-test, Mann-Whitney or Approximate T test was conducted at the 0.05 level of significance. The statistical software used was BioStat (Beta v.4.1 (EXCEL)) bioassay software developed by the U.S. Army Corps of Engineers, Seattle District.

PROTOCOL DEVIATIONS

None

REFERENCE TOXICANT TEST

The reference toxicant test is a multi-concentration toxicity test using potassium chloride, to evaluate the performance of the test organisms used in the sediment toxicity test. The performance is evaluated by

comparing the results of this test with historical results obtained at the laboratory. A summary of the reference toxicant test result is given below. The reference toxicant test raw data are found in Appendix III.

Test No.: 999-2931
Reference Toxicant and Source: Potassium Chloride (KCl), Fisher Lot #073280.
Test Date: 8-26-11.
Dilution Water Used: Moderately hard synthetic water prepared from Milli-Q® deionized water.
Result: 96-hr LC50, 6.27. This result is within the laboratory's control chart warning limits (3.01– 7.76 g/L).

TEST RESULTS

Observations of water quality in the overlying water throughout the test are summarized in Table 1. A detailed tabulation of the water quality results by sample and test day can be found in Appendix II. The means and standard deviations of percent mortality and growth (ash-free dry wt.) of midges exposed for 10 days to sediments are summarized in Tables 2 and 3. Detailed data organized by sample and replicate, and summary statistics for these observations, are given in Appendix II.

All water quality observations of overlying water were within the protocol specified ranges. Ammonia-N in the overlying water ranged between <0.1 and 1.5 mg/L for all day 0 and day 10 measurements.

The test met the survival and weight acceptability criteria specified in the test protocol with 15.0% mean control mortality (≤30% required) and a control individual mean ash-free dry weight of 0.85 mg per larvae (≥0.48 mg required). The reference toxicant (positive control) result was within the laboratory's control chart limits (6.27 g/L; control chart mean ± 2 S.D. = 5.38 ± 2.37). It is concluded, therefore, that the test has developed fully acceptable data for use in making management decisions.

The percent mortality of all test sediments was not significantly greater than that of the control. The average individual biomass of test sediments 11070002, 11070003, and 11070004 was significantly less than that of the control at the 0.05 level of significance.

STUDY APPROVAL

Gerald Russomi 9-12-11
Project Manager/Study Director Date

Richard D. Caldwell 9-12-11
Laboratory Director Date

Julie R. Fiore for Linda Nemeth 9-12-11
Quality Assurance Unit Date

Table 1. Summary of water quality conditions during tests of the midge, *Chironomus dilutus*, exposed to freshwater sediments.

Water Quality Parameter	Mean ± S.D.	Minimum	Maximum	N
Temperature (°C)	22.6 ± 0.4	21.9	23.4	55
Dissolved oxygen (mg/L)	6.6 ± 0.9	3.9	8.4	55
Conductivity (µmhos/cm)	149 ± 5	141	157	10
pH	6.9 ± 0.1	6.7	7.0	10
Hardness (mg/L as $CaCO_3$)	43 ± 4	34	51	10
Alkalinity (mg/L as $CaCO_3$)	32 ± 4	30	40	10
Total ammonia (mg/L)	---	<0.1	1.5	10

Table 2. Mortality results of *Chironomus* toxicity test.

Sample description	Percent mortality (Mean ± SD)	Statistically significantly different than that of the control?
Control (NAS# 3820G)	15.0 ± 5.3	---
11070001 (NAS# 3838G)	28.8 ± 19.6	No
11070002 (NAS# 3839G)	16.3 ± 5.2	No
11070003 (NAS# 3840G)	13.8 ± 11.9	No
11070004 (NAS# 3841G)	11.3 ± 6.4	No

Table 3. Growth results of *Chironomus* toxicity test.

Sample description	Average ash-free dry wt/midge (mg)* (Mean ± SD)	Statistically significantly different than that of the control?
Control (NAS# 3820G)	0.85 ± 0.13	---
11070001 (NAS# 3838G)	0.81 ± 0.18	No
11070002 (NAS# 3839G)	0.73 ± 0.11	Yes
11070003 (NAS# 3840G)	0.71 ± 0.09	Yes
11070004 (NAS# 3841G)	0.59 ± 0.10	Yes

* Pupae were not included in the sample to estimate ash-free dry weight (as per EPA/600/R-99/064, p. 59, section 12.3.8.2)

APPENDIX I

PROTOCOL

TEST PROTOCOL

FRESHWATER MIDGE, *CHIRONOMUS TENTANS*, 10-DAY SEDIMENT TOXICITY TEST

1. INTRODUCTION

1.1 Purpose of Study: The purpose of this study is to characterize the toxicity of freshwater sediments based on midge survival and growth using the midge, *Chironomus tentans*.

1.2 Referenced Method: This protocol is based on EPA Method 100.2 (EPA/600/R-99/064) and ASTM Method E 1706-00 (ASTM 2001).

1.3 Summary of Method: A summary of test conditions for the midge 10-day sediment toxicity test is tabulated below. The 10-day sediment toxicity test with *Chironomus tentans* is conducted at 23°C with a 16L:8D photoperiod at an illuminance of about100-1000 lux. Test chambers are 300-mL high-form lipless beakers containing 100 mL of sediment and 175 mL of overlying water. Ten second to third-instar midges are used in each replicate (all organisms must be third instar or younger and at least 50% of the larvae must be third instar). The number of replicates/treatment depends on the objective of the test. Eight replicates are recommended for routine testing. Midges in each test chamber are fed 1.5 mL of a 4 g/L fish food flakes suspension daily. Each chamber receives two volume additions per day of overlying water. Overlying water can be culture water, well water, surface water, site water, or reconstituted water. Test endpoints include survival and/or growth.

2. STUDY MANAGEMENT

2.1 Sponsor's Name and Address:

_____
_____
_____
_____

2.2 Sponsor's Study Monitor:

_____

2.3 Name of Testing Laboratory:
Northwestern Aquatic Sciences
3814 Yaquina Bay Road, P.O. Box 1437
Newport, OR 97365.

2.4 Test Location: _____

2.5 Laboratory's Personnel to be Assigned to the Study:
Study Director: _____
Quality Assurance Unit: _____
Aquatic Toxicologist: _____
Aquatic Toxicologist: _____

2.6 Proposed Testing Schedule: Tests are to begin within 14 days of sample collection. Eight week holding times may apply in some circumstances. Reference toxicant test to be run concurrently.

2.7 Good Laboratory Practices: The test is conducted following the principles of Good Laboratory Practices (GLP) as defined in the EPA/TSCA Good Laboratory Practice regulations revised August 17, 1989 (40 CFR Part 792).

3. TEST MATERIAL

The test materials are freshwater sediments. The control, reference, and test sediments are placed in solvent cleaned 1 L glass jars fitted with PTFE-lined screw caps. At the laboratory the samples are stored at 4°C in the dark. The original sealed containers may be stored for up to 14 days prior to testing. Eight week holding times may apply in some circumstances. If jars are not full when received or if sediment is removed for testing, headspaces should be filled with nitrogen to retard deterioration. A negative control sediment is collected from a clean site. In addition, a reference sediment, a clean sediment with physical characteristics similar to the test sediments, may be employed as a comparison station.

4. TEST WATER

Test water (overlying water) at NAS is normally *C. tentans* culture water, which is moderately hard synthetic water at a hardness of 80-100 mg/L as $CaCO_3$ and alkalinity of 60-70 mg/L as $CaCO_3$. Dilution water is prepared from Milli-Q reagent grade water and reagent grade chemicals. Test water may also be well water, surface water or site water depending on the study design.

5. TEST ORGANISMS

5.1 Species: midge, *Chironomus tentans*.

5.2 Source: Cultured at NAS (Originally obtained from U.S. EPA Environmental Research Lab, Duluth, MN) or purchased from a reputable commercial supplier.

5.3 Age: Third instar or younger larvae (at least 50% of the larvae must be in the third instar at the start of the test). Third instar is normally 9 to 11 days after hatching; head capsule widths range from 0.33 to 0.45 mm; or length ranges from 4-6 mm; or dry weight ranges 0.08 to 0.23 mg/individual.

5.4 Acclimation and Pretest Observation: Cultures are maintained at 23 ± 1°C under a 16:8 L:D photoperiod. The culture water is moderately hard synthetic water. Midge are fed finely ground Tetrafin flakes in suspension (10g Tetrafin in 100 mL Milli-Q water). Mortality during the 48-hr prior to testing should not be excessive.

6. DESCRIPTION OF TEST SYSTEM

6.1 Test Chambers and Environmental Control: Test chambers used in the toxicity test are 300-mL high-form lipless glass beakers (Pyrex® 1040 or equivalent). Test chambers are maintained at constant temperature by partial immersion in a temperature-controlled water bath or by placement in a temperature-controlled room. Aeration is not empolyed unless dissolved oxygen drops below 2.5 mg/L. The test is conducted under an illuminance of 100 to 1000 lux with a 16L:8D photoperiod.

6.2 Cleaning: All laboratory glassware, including test chambers, is cleaned as described in EPA/600/4-90/027F. New glassware and test systems are soaked 15 minutes in tap water and scrubbed with detergent (or cleaned in automatic dishwasher); rinsed twice with tap water; carefully rinsed once with fresh, dilute (10%, V:V) hydrochloric or nitric acid to remove scale, metals, and bases; rinsed twice with deionized water; rinsed once with acetone to remove organic compounds (using a fume hood or canopy); and rinsed three times with deionized water. Test systems and chambers are rinsed again with dilution water just before use.

7. EXPERIMENTAL DESIGN AND TEST PROCEDURES

7.1 Experimental Design: The test involves exposure of midge larvae to test, control, and reference sediments. The sediments are placed on the bottom of the test containers and are overlain with test water. The test exposure is

for 10 days. The renewal of overlying water consists of two volume additions per day, either continuous or intermittent. Each treatment consists of eight replicate test containers, each containing 10 organisms. Test chamber positions are completely randomized. Test organisms are randomly distributed to the test chambers. Blind testing is normally used.

7.2 Setup of Test Containers: Sediments are homogenized and placed in test chambers on the day before addition of test organisms. Sediment (100 ml) is placed into each of eight replicate beakers. After addition of the sediment, 175 ml of test water is gently added to each beaker in a manner to prevent resuspension. The overlying water is replaced twice daily. The test begins when midges are introduced to the test chambers. Initial water quality measurements are taken prior to the addition of test organisms.

7.3 Effect Criterion: The acute effect criterion used in the midge bioassay is mortality, defined as the lack of movement of body or appendages on response to tactile stimulation. The optional chronic effect criterion is growth which is determined by using dry weight measurements.

7.4 Test Conditions: No aeration is employed unless dissoved oxygen falls below 2.5 mg/L. The test temperature employed is 23°C (range of ± 1°C). A 16:8, L:D photoperiod is used. Illumination is supplied by daylight fluorescent lamps at 100-1000 lux. The overlying water is replaced twice daily.

7.5 Beginning the Test: The test is begun by adding the organisms to the equilibrated test containers as previously described. Three extra replicates of midge larvae should be counted out and randomly selected for drying to determine initial average weight and instar data.

7.6 Feeding: Midge larvae are fed 1.5 mL daily per test chamber (1.5 mL contains 6.0 mg of dry solids). A feeding may be skipped if there is a build up of excess food. However, all beakers must be treated similarly.

7.7 Test Duration, Type and Frequency of Observations, and Methods: The duration of the acute toxicity test is 10 days. The type and frequency of observations to be made are summarized as follows:

Type Of Observation	Times Of Observation
Biological Data	
Survival, growth	Day 10
Physical And Chemical Data	
Hardness, alkalinity, ammonia-N, conductivity, pH, dissolved oxygen, and temperature	Beginning and end of test in overlying water of one replicate beaker from each treatment.
Dissolved oxygen, temperature	Daily in overlying water of one replicate beaker from each treatment.

Dissolved oxygen is measured using a polarographic oxygen probe calibrated according to the manufacturer's recommendations. The pH is measured using a pH probe and a properly calibrated meter with scale divisions of 0.1 pH units. Temperature is measured with a calibrated mercury thermometer or telethermometer. Conductivity is measured with a conductivity meter. Hardness and alkalinity are measured using titrometric methods. Ammonia-nitrogen is measured using the salicylate colerimetric method (Clin. Chim. Acta 14:403, 1996).

7.8 Growth Measurement: Growth is measured as ash-free dry weight (AFDW) of animals in a test replicate at the end of the test on day 10. Pooled animals from each test replicate are rinsed with deionized water, gently blotted and placed into tared aluminum weigh pans. The pans are dried at 60-90°C to constant weight. The dried organisms are placed into a dessicator and weighed as soon as possible to the nearest 0.01 mg (desirable to use 0.001 mg). The total weight of the dried midge in each pan is divided by the number of midge weighed to obtain an average dry weight per midge. The dried larvae in the pan are then ashed at 550°C for two hours. The pan with the ashed larvae is then reweighed and the tissue mass of the larvae is determined as the difference between the weight

of the dried larvae plus pan and the weight of the ashed larvae plus pan. Pupae or adult organisms are not included in the sample to estimate AFDW.

8. CRITERIA OF TEST ACCEPTANCE:

The test results are acceptable if the minimum survival of organisms in the control treatment at the end of the test is at least 70% and the average ash-free dry weight of *C. tentans* in the surviving controls is at least 0.48 mg.

9. DATA ANALYSIS

The endpoints of the toxicity test are survival and growth. Survival is obtained as a direct count of living organisms in each test container at the end of the test. Average midge ash-free dry weight, also measured at the end of the test, may be used to compare growth between treatment sediments and the control or reference sediment. Ordinarily the following data analysis is performed. Due to special requirements, alternative methods may be used. The means and standard deviations are calculated for each treatment level. Identification of toxic sediments is established by statistical comparison of test endpoints between test and control or reference sediments. Between treatment comparisons may be made using a Student's t-test or Wilcoxon's Two-Sample test, where each treatment is compared to the control or the reference sediment. An arcsine-square root transformation of proportional data, and tests for normality and heterogeneity of variances, are performed prior to statistical comparisons.

10. REPORTING

The final report of the test results must include all of the following standard information at a minimum: name and identification of the test; the investigator and laboratory; date and time of test beginning and end; information on the test material; information on the source and quality of the overlying/test water; detailed information about the test organisms including acclimation conditions; a description of the experimental design and test chambers and other test conditions including feeding, if any, and water quality; definition of the effect criteria and other observations; responses, if any, in the control treatment; tabulation and statistical analysis of measured responses and a summary table of endpoints; a description of the statistical methods used; any unusual information about the test or deviations from procedures; reference toxicant testing information.

11. STUDY DESIGN ALTERATION

Amendments made to the protocol must be approved by the sponsor and study director and should include a description of the change, the reason for the change, the date the change took effect and the dated signatures of the study director and sponsor. Any deviations in the protocol must be described and recorded in the study raw data.

12. REFERENCE TOXICANT

The reference toxicant test is a standard multi-concentration toxicity test using a specified chemical toxicant to evaluate the performance of test organisms used in the study. Reference toxicant tests are 96-hour, water only exposures, not 10-day sediment exposures. The reference toxicant test is run concurrently. Performance is evaluated by comparing the results of the reference toxicant test with historical results (e.g., control charts) obtained at the laboratory.

13. REFERENCED GUIDELINES

ASTM. 2001. Standard Test Methods for Measuring the Toxicity of Sediment-associated Contaminants with Fresh water Invertebrates. ASTM Standard Method No. E 1706-00. Am. Soc. Test. Mat., Philadelphia, PA.

U.S. EPA. 2000. Section 12, Test Method 100.2, *Chironomus tentans* 10-d Survival and Gowth Test for Sediments, pp. 55-62. In: Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates (Second Edition). EPA/600/R-99/064.

Weber, C.I. (Ed.) 1993. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fourth Edition). EPA/600/4-90/027F.

14. APPROVALS

_____ for _____
Name Date

_____ for **Northwestern Aquatic Sciences**
Name Date

Appendix A
Test Conditions Summary

1. Test type	whole sediment toxicity test with renewal of overlying water
2. Test duration	10 days
3. Temperature	23 ± 1°C
4. Light quality	daylight flourescent light
5. Illuminance	100-1000 lux
6. Photoperiod	16L:8D
7. Test chamber size	300-mL high-form lipless beakers (Pyrex® 1040 or equivalent)
8. Sediment volume	100 mL
9. Overlying water volume	175 mL
10. Renewal overlying water	2 volume additions/day (continuous or intermittent)
11. Age of test organisms	2nd to 3rd instar or younger larvae (≥ 50% of organisms must be 3rd instar)
12. Organisms per test chamber	10
13. Replicates per treatment	8 recommended for routine (depends on design)
14. Organisms per treatment	80
15. Feeding regime	Fish food flakes, fed 1.5 mL chamber (1.5 mL contains 6.0 mg of dry solids) daily on days 0 - 9.
16. Aeration	None, unless DO falls below 2.5 mg/L.
17. Overlying (test) water	**Culture water**, well water, surface water, site water or reconstituted water
18. Water quality	Hardness, alkalinity, conductivity, pH, ammonia-N beginning and end; temperature and DO daily
19. Endpoints	Survival and growth (dry weight)
20. Test acceptability criteria	Minimum control survival of 70%; mean weight of surviving control organisms 0.48 mg AFDW
21. Sample holding	≤14 days at 4°C in the dark Longer under certain conditions
22. Sample volume required	1L (800 mL per sediment)
23. Reference toxicant	Concurrent testing required

APPENDIX II

RAW DATA

TEST DESCRIPTION, MONITORING, AND RESULTS BENCHSHEETS

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

REVIEWED PAGE 1-28 GJI

Test No. 826-2 Client Ecology & Environment Investigator ______

STUDY MANAGEMENT

Client: Ecology & Environment, Inc., 720 Third Ave., Suite 1700, Seattle, WA 98104

Client's Study Monitor: Mark Woodke

Testing Laboratory: Northwestern Aquatic Sciences

Test Location: Newport Laboratory

Laboratory's Study Personnel:

Proj. Man./Study Dir. G.J. Irissarri GJI

QA Officer L.K. Nemeth

1. G. A. Buhler GAB
2. Tyler Nakahama TN
3. Brian Horst BH
4. Lidia P. Sandoval LPS
5. R.S. Caldwell RSC
6.
7.
8.

Study Schedule:

Test Beginning: 8-26-11 1155 Test Ending: 9-5-11 1330

TEST MATERIAL

General description (see sample logbook/chain-of-custody for details):

NAS Sample No.:	3820G	3838G	3839G	3840G	3841G
Description:	Control	11070001	11070002	11070003	11070004
Collection Date:	8/14/11	7/27/11	7/27/11	7/27/11	7/27/11
Receipt Date:	8/14/11	8/24/11	8/24/11	8/24/11	8/24/11
______:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
______:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
______:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
______:					

NAS Sample No.:					
Description:					
Collection Date:					
Receipt Date:					
______:					

Error codes: 1) correction of handwriting error
2) written in wrong location; entry deleted
3) wrong date deleted, replaced with correct date
4) error found in measurement; measurement repeated

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

SEDIMENT DESCRIPTIONS – SUPPLEMENTAL NOTES

Sample No.	Description
3820G	dark brown fine mud
3838G	BROWN SAND, PEBBLES, SOME PLANT DEBRIS, DRY
3839G	dry brow sand, pebber, some plant debris
3840G	BROWN DRY SAND, SOME PLANT DEBRIS
3841G	brown dry sand, few plant debris

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

TEST WATER

Source: Dechlorinated municipal tap water

Date of Collection: 8-25-11, 8-26-11

pH 7.6, 7.5

Cond (umhos/cm2) 136, 143

Hardness (mg/L) 43, 43

Alkalinity (mg/L) 30, 30

Total Chlorine (mg/L)

Treatments: Dechlorinated, aerated

TEST ORGANISMS

Species: *Chironomus dilutus* Age: 3rd instar

Source: NAS cultures Date received: N/A

Acclimation Data:

Date	Temp. (deg.C)	pH	DO (mg/L)	Cond. umhos/cm	Hardness (mg/L)	Alkalinity (mg/L)	Feeding	Water changes
8-15-11	21.4	7.4	8.0	163	—	—	Animals fed Tetra Fin	yes
8-17-11	21.7	7.6	8.5	158	43	30	and *Selenastrum*	1
8-19-11	21.8	7.6	8.6	157	—	—	Details recorded on	—
8-22-11	22.4	7.4	9.0	164	—	—	Chironomid culture	yes
8-24-11	22.6	7.0	7.0	159	60	30	data sheets	—
8-26-11	21.6	7.1	7.4	163	—	—		yes
Mean	21.9	7.4	8.1	161	52	30		
S.D.	0.5	0.3	0.9	3	—	—		
(N)	6	6	6	6	2	2		

Photoperiod during acclimation: 16:8, L:D

TEST PROCEDURES AND CONDITIONS

Test chambers: 300 ml glass beakers

Test volumes: 100 ml of test sediment; 275 ml total volume

Replicates/treatment: (8) 8 Organisms/treatment: (80) 80 (10/REP)

Test water changes: Twice daily

Aeration: only if DO falls below 2.5 mg/L

Feeding: everyday beginning with day zero

Test temperature (°C): 23 ± 1

Beaker placement: Total randomization

Photoperiod: 16:8, L:D

Control Sediment:

Source: From an area approximately one mile east of the Hwy. 101 bridge at Beaver Creek, approx. 8 miles south of Newport, OR.

Date collected: 0.5 8/14/11

Sieved through _____-mm screen

Storage: darkness at 4°C, in sealed containers NAS# 3820G

MISCELLANEOUS NOTES

Light intensity:

Date	Location	Light Intensity (ft-candles*)	Initials
8-30-11	BEAKER #23	84.7	GSL

*To convert ft-candles to lux multipy by 10.76

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

Test conducted in (circle one): (room 1) room 2 trailer water bath other:_____

Randomization chart: TOP SHELF

6	12	18	24	30	36				
5	11	17	23	29	35				
4	10	16	22	28	34	40			
3	9	15	21	27	33	39			
2	8	14	20	26	32	38			
1	7	13	19	25	31	37			

Randomization chart:

Randomization chart:

Test No. 826-2 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 0 (8/26/11) YP/OS

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness* (mg/L)	Alkalinity* (mg/L)	NH3* (ppm)	Comments
1	23.4	8.3	144	6.9	43	30		Each beaker fed 1.5 ml
7	23.4	7.4	157	7.0	43	30		Tetra Fin suspension
8	23.4	8.2	143	7.0	43	30		Initials: GSI
10	23.4	8.4	144	7.0	43	30		
22	23.4	7.7	141	7.0	43	30		
								Water changed in all beakers.
								Time: 0605
								Initials: GSI
								Water changed in all beakers.
								Time: 1715
								Initials: UPS

*Water quality measurements to be taken.

Day 1 (8/27/11) GSI

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.9	7.7						Each beaker fed 1.5 ml
7	22.8	7.1						Tetra Fin suspension
8	22.8	7.6						Initials: KB
10	22.9	7.6						
22	22.9	7.7						
								Water changed in all beakers.
								Time: 0610
								Initials: OM
								Water changed in all beakers.
								Time: 1725
								Initials: UPS

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 2 (8/28/11) GJL

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.9	6.5						Each beaker fed 1.5 ml
7	22.8	6.4						Tetra Fin suspension
8	22.8	6.5						Initials: GJL
10	22.8	6.6						
22	22.8	6.0						
								Water changed in all
								beakers.
								Time: 0555
								Initials: GJL
								Water changed in all
								beakers.
								Time: 1700
								Initials: YN

*Water quality measurements to be taken.

Day 3 (8/29/11) GJL

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.7	6.4						Each beaker fed 1.5 ml
7	22.7	6.5						Tetra Fin suspension
8	22.7	6.4						Initials: GJ
10	22.7	6.7						
22	22.7	6.2						
								Water changed in all
								beakers.
								Time: 0550
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1645
								Initials: YN

*Water quality measurements to be taken.

Test No. 826-2 Client Ecology & Environment Investigator

DAILY RECORD SHEET

Day 4 (8 / 30 / 11) GJ

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	23.0	6.2						Each beaker fed 1.5 ml
7	22.9	6.5						Tetra Fin suspension
8	22.9	6.3						Initials: GJ
10	22.9	6.3						
22	22.8	6.1						
								Water changed in all
								beakers.
								Time: 0555
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1715
								Initials: UPC

*Water quality measurements to be taken.

Day 5 (8 / 31 / 11) BH

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.5	5.3						Each beaker fed 1.5 ml
7	22.5	5.2						Tetra Fin suspension
8	22.4	4.8						Initials: GJ
10	22.5	4.8						
22	22.5	3.9						
								Water changed in all
								beakers.
								Time: 0540
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1830
								Initials: BH

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 6 (9/1/11) UPJ

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.0	7.2						Each beaker fed 1.5 ml
7	22.0	7.2						Tetra Fin suspension
8	22.1	6.7						Initials: GJ
10	22.1	6.8						
22	21.9	5.9						
								Water changed in all
								beakers.
								Time: 0545
								Initials: GJ
								Water changed in all
								beakers. 1745 DM 9-1-11
								Time: 0545
								Initials: GP

*Water quality measurements to be taken.

Day 7 (9/2/11) UPJ

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.1	7.0						Each beaker fed 1.5 ml
7	22.0	7.0						Tetra Fin suspension
8	22.0	6.7						Initials: GJ
10	22.0	6.2						
22	22.0	5.8						
								Water changed in all
								beakers.
								Time: 0545
								Initials: GJ
								Water changed in all
								beakers.
								Time: 1605
								Initials: YC

*Water quality measurements to be taken.

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 8 (9/3/11) DB

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.2	6.9						Each beaker fed 1.5 ml
7	22.2	6.4						Tetra Fin suspension
8	22.2	6.8						Initials: DB
10	22.1	6.5						
22	22.0	5.9						
								Water changed in all
								beakers.
								Time: 0530
								Initials: DB
								Water changed in all
								beakers.
								Time: 1710
								Initials: DSE

*Water quality measurements to be taken.

Day 9 (9/4/11) GSL

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1	22.2	6.6						Each beaker fed 1.5 ml
7	22.2	6.2						Tetra Fin suspension
8	22.2	6.5						Initials: GSL
10	22.2	6.0						
22	22.1	5.2						
								Water changed in all
								beakers.
								Time: 0545
								Initials: GSL
								Water changed in all
								beakers.
								Time: 1705
								Initials: UB

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

DAILY RECORD SHEET

Day 10 (9 / 5 /11) GJL

Beaker No.	Temp.* (deg.C)	DO* (ppm)	Cond.* (umhos/cm)	pH*	Hardness* (mg/L)	Alkalinity* (mg/L)	NH3* (ppm)	Comments
1	22.7	7.4	149	6.8	43	40		Each beaker fed 1.5 ml
7	22.7	6.9	153	6.8	34	40		Tetra Fin suspension
8	22.6	7.1	151	6.8	51	30		Initials: —
10	22.7	6.6	153	6.8	43	30		
22	22.7	6.0	151	6.7	43	30		
								Water changed in all
								beakers.
								Time: 0540
								Initials: GJL
								Water changed in all
								beakers.
								Time: —
								Initials: —

*Water quality measurements to be taken.

Day _____(/ /)

Beaker No.	Temp. (deg.C)	DO (ppm)	Cond. (umhos/cm)	pH	Hardness (mg/L)	Alkalinity (mg/L)	NH3 (ppm)	Comments
1								Each beaker fed 1.5 ml
7								Tetra Fin suspension
8								Initials:
10								
22								
								Water changed in all
								beakers.
								Time:
								Initials:
								Water changed in all
								beakers.
								Time:
								Initials:

*Water quality measurements to be taken.

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

DAY 10 TEST TERMINATION SHEET

Beaker No.	Number of survivors	Initials
1	10	GJL
2	10	GJL
3	10	GJL
4	8	GJL
5	9	GJL
6	8	GJL
7	8	GJL
8	9	GJL
9	9	GJL
10	8	GJL
11	9-8-11 9 10	GJL
12	8	GJL
13	10	GJL
14	9	GJL
15	9	GJL
16	9	GJL
17	9	GJL
18	7	GJL
19	8	GJL
20	9	GJL
21	8	GJL
22	5	GJL
23	5	GJL
24	10	GJL
25	8	GJL
26	8	GJL
27	7	GJL
28	9-5-11 10 9 GJL	GJL
29	8	GJL
30	9	GJL
31	9	GJL
32	6	GJL
33	8	GJL
34	7	GJL
35	7	GJL
36	8	GJL
37	8	GJL
38	8	GJL
39	9	GJL
40	8	GJL
41		
42		
43		
44		
45		

Beaker No.	Number of survivors	Initials
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator _____

Tare: Date 8-24-11 Oven temp (C.) 62 Drying time (hr.) 24 Initials GJL
Standard Weights: 10 mg: 10.009 100mg: 100.017

Final #1 Date 8-28-11 Oven temp (C.) 63 Drying time (hr.) 24 Initials GJL
Standard Weights: 10 mg: 10.007 100mg: 100.017

Final: #2 Date 8-29-11 Oven temp (C.) 65 Drying time (hr.) 24 Initials GJL
Standard Weights: 10 mg: 10.007 100mg: 100.017

Equip. used: Oven: BLUE M #1 Balance: SARTORIUS M3P

(Dry overnight at 60-90 degrees C)

Pan #	Tare wt. (mg)	Total wt. (mg) 1	Total wt. (mg) 2	#weighed	
1	83.93	85.31 GJL	85.27	10	
2	86.56	87.99	87.96	10	
3	85.27	86.65	86.63	10	
4	85.03	86.60	86.57	10	
5	78.45	80.01	79.98	10	

NORTHWESTERN AQUATIC SCIENCES — PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator

WEIGHING DATA SHEET

Tare:	Date 8-29-11	Oven temp (C.) 550	Drying time (hr.) 2	Initials GJ
	Standard Weights:	10 mg: 10,007	100mg: 100.017	
Final #1:	Date 9-6-11	Oven temp (C.) 62	Drying time (hr.) 23.5	Initials GJ
	Standard Weights:	10 mg: 10.007	100mg: 100.016	
Final #2:	Date 9-7-11	Oven temp (C.) 62	Drying time (hr.) 24	Initials GJ
	Standard Weights:	10 mg: 10,007	100mg: 100.015	
Final #3:	Date 9-10-11	Oven temp (C.) 550	Drying time (hr.) 2	Initials GJ
	Standard Weights:	10 mg: 10,008	100mg: 100.014	

Equip. used: Oven BLUE M #1, FISHER ISOTEMP MUFFLE FURNACE Balance SARTORIUS M3P

(Dry overnight at 60-90 degrees C) **(Final ashing is at 550 degrees C for 2 hours)**

Bkr. #	Pan #	Tare wt. (mg)	Dry total wt. (mg) 1	Dry total wt. (mg) 2	no. weighed	put into pans-initials	Ash weight (mg)	Comments
1	1	74.66	81.33	81.28	10	YV	75.22	
2	2	80.73	89.09	89.01	10	YV	81.71	
3	3	83.84	91.76	91.68	10	YV	84.68	
4	4	84.26	90.64	90.57	8	YV	84.83	
5	5	82.18	88.88	88.82	9	YV	82.86	
6	6	79.63	87.06	86.97	8	YV	80.20	
7	7	81.46	90.76	90.65	8	YV	82.38	
8	8	79.09	85.84	85.74	9	YV	79.62	
9	9	74.33	84.99	84.84	9	YV	75.91	
10	10	77.60	83.49	83.41	8	YV	78.13	
11	11	82.03	89.76	89.63	10	YV	82.69	
12	12	74.84	83.69	83.55	8	YV	76.25	
13	13	79.16	86.34	86.23	10	YV	79.73	
14	14	77.07	83.08	83.01	9	YV	77.65	
15	15	81.44	89.77	89.60	9	YV	82.58	
16	16	79.63	88.95	88.72	9	YV	81.21	
17	17	81.72	88.08	87.94	9	YV	82.31	
18	18	78.39	85.58	85.42	7	YV	79.03	
19	19	76.78	84.10	83.94	8	YV	77.85	
20	20	77.18	82.30	82.21	9	YV	78.00	
21	21	80.33	86.23	86.16	8	YV	81.12	
22	22	80.52	86.97	86.87	5	YV	81.55	
23	23	80.27	83.84	83.81	5	YV	80.78	
24	24	77.29	84.87	84.86	10	YV	78.25	
25	25	82.04	87.47	87.46	8	YV	82.67	
26	26	75.04	83.29	83.28	8	YV	75.79	
27	27	90.49	97.61	97.58	7	YV	91.73	
28	28	83.68	91.04	91.00	9	YV	84.59	
29	29	82.42	89.12	89.08	8	YV	83.24	
30	30	79.54	87.00	86.97	9	YV	80.48	
31	31	73.07	82.29	82.25	9	YV	74.70	
32	32	76.29	84.09	84.05	6	YV	77.45	
33	33	79.77	86.21	86.17	8	YV	80.68	

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-XXX-CT4b

CHIRONOMUS DILUTUS 10-DAY SOLID PHASE SEDIMENT TEST

Test No. 826-2 Client Ecology & Environment Investigator

WEIGHING DATA SHEET

See page _____ for information on drying times and temperatures, standard weights,etc.

Bkr. #	Pan #	Tare wt. (mg)	Dry total wt. (mg) 1	Dry total wt. (mg) 2	no. weighed	put into pans-initials	Ash weight (mg)	
34	34	77.87	84.09	84.06	7	YY	78.97	
35	35	81.35	87.67	87.64	7	YY	82.53	
36	36	75.93	83.05	83.01	8	YY	76.84	
37	37	77.68	84.20	84.17	8	YY	78.72	
38	38	78.77	84.84	84.81	8	YY	80.18	
39	39	75.09	79.79	79.77	9	YY	75.98	
40	40	80.36	86.80	86.77	8	YY	81.39	
41	41	~~83.05~~ 9-6"						
42	42	84.83						
43	43							
44	44							
45	45							
46	46							
47	47							
48	48							
49	49							
50	50							
51	51							
52	52							
53	53							
54	54							
55	55							
56	56							
57	57							
58	58							
59	59							
60	60							
61	61							
62	62							
63	63							
64	64							
65	65							
66	66							
67	67							
68	68							
69	69							
70	70							
71	71							
72	72							
73	73							
74	74							
75	75							
76	76							

TEST DATA ANALYSIS RECORDS

Test Number: 826-2

Freshwater Sediment Test
10-Day Chironomus dilutus

Endpoints Data Entry and Calculations File

BKR=beaker number
INIT=initial number
SURV=number survivors
MORT=number dead=INIT-SURV
PSURV=%survival=100(SURV/INIT)
PMORT=%mortality=100(MORT/INIT)

TARE WT= ashed weight of pan used for that replicate at test termination (mg), or dry weight of pan if ash-free dry weight is not an endpoint
WT COUNT= number of test organisms weighed at test end
DRY WT= TARE WT + dry weight of test organisms recovered at test termination (mg)
TWT=total biomass=DRY WT-TARE WT
WT=average individual biomass=TWT/WT COUNT

ASHED DRY WT= weight of ashed pan + weight of ashed test organisms recovered at test termination
TAFDW=DRY WT - ASHED DRY WT= total ash-free organism weight for given replicate
AFDW=average individual ash-free biomass=TAFDW/WT COUNT

INITIAL WEIGHT

pan #	tare wt (mg)	final wt (mg)	wt count	avg. wt/ organism
1	83.93	85.27	10	0.13
2	86.56	87.96	10	0.14
3	85.27	86.63	10	0.14
4	85.03	86.57	10	0.15
5	78.45	79.98	10	0.15
			avg.	0.14

INDEX	BKR	NAS SMPL	CLIENT DESCRIP	REPL		INIT	SURV	MORT	PSURV	PMORT	TARE WT (mg)	WT COUNT	DRY WT (mg)	ASHED DRY WT (mg)	TWT (mg)	WT (mg)	TAFDW (mg)	AFDW (mg)
1	18	3820G	Contol	1		10	9	1	90.0	10.0	79.63	9	88.72	81.21	9.09	1.01	7.51	0.83
2	9	3820G	Contol	2		10	9	1	90.0	10.0	74.33	9	84.84	75.91	10.51	1.17	8.93	0.99
3	19	3820G	Contol	3		10	8	2	80.0	20.0	76.78	8	83.94	77.85	7.16	0.90	6.09	0.76
4	12	3820G	Contol	4		10	8	2	80.0	20.0	74.84	8	83.55	76.25	8.71	1.09	7.30	0.91
5	15	3820G	Contol	5		10	9	1	90.0	10.0	81.44	9	89.60	82.58	8.16	0.91	7.02	0.78
6	21	3820G	Contol	6		10	8	2	80.0	20.0	80.33	8	86.16	81.12	5.83	0.73	5.04	0.63
7	31	3820G	Contol	7		10	9	1	90.0	10.0	73.07	9	82.25	74.70	9.18	1.02	7.55	0.84
8	7	3820G	Contol	8	wq replicate	10	8	2	80.0	20.0	81.46	8	90.65	82.38	9.19	1.15	8.27	1.03
9	23	3838G	11070001	1		10	5	5	50.0	50.0	80.27	5	83.81	80.78	3.54	0.71	3.03	0.61
10	27	3838G	11070001	2		10	7	3	70.0	30.0	90.49	7	97.58	91.73	7.09	1.01	5.85	0.84
11	3	3838G	11070001	3		10	10	0	100.0	0.0	83.84	10	91.68	84.68	7.84	0.78	7.00	0.70
12	35	3838G	11070001	4		10	7	3	70.0	30.0	81.35	7	87.84	82.53	6.29	0.90	5.11	0.73
13	2	3838G	11070001	5		10	10	0	100.0	0.0	80.73	10	89.01	81.71	8.28	0.83	7.30	0.73
14	34	3838G	11070001	6		10	7	3	70.0	30.0	77.87	7	84.06	78.87	6.19	0.88	5.09	0.73
15	32	3838G	11070001	7		10	6	4	60.0	40.0	76.29	6	84.05	77.45	7.76	1.29	6.60	1.10
16	22	3838G	11070001	8	wq replicate	10	5	5	50.0	50.0	80.52	5	86.87	81.55	6.35	1.27	5.32	1.06
17	4	3839G	11070002	1		10	8	2	80.0	20.0	84.26	8	90.57	84.83	6.31	0.79	5.74	0.72
18	26	3839G	11070002	2		10	8	2	80.0	20.0	75.04	8	83.26	75.79	8.24	1.03	7.49	0.94
19	33	3839G	11070002	3		10	8	2	80.0	20.0	79.77	8	86.17	80.68	6.40	0.80	5.49	0.69
20	5	3839G	11070002	4		10	9	1	90.0	10.0	82.18	9	88.82	82.88	6.64	0.74	5.96	0.66
21	38	3839G	11070002	5		10	8	2	80.0	20.0	78.77	8	84.81	80.18	6.04	0.76	4.63	0.58
22	28	3839G	11070002	6		10	9	1	90.0	10.0	83.68	9	91.00	84.59	7.32	0.81	6.41	0.71
23	6	3839G	11070002	7		10	8	2	80.0	20.0	79.63	8	88.97	80.20	7.34	0.92	6.77	0.85
24	8	3839G	11070002	8	wq replicate	10	9	1	90.0	10.0	79.09	9	85.74	79.62	6.65	0.74	6.12	0.68
25	36	3840G	11070003	1		10	8	2	80.0	20.0	75.93	8	83.01	76.84	7.08	0.89	6.17	0.77
26	11	3840G	11070003	2		10	10	0	100.0	0.0	82.03	10	89.63	82.69	7.60	0.76	6.94	0.69
27	37	3840G	11070003	3		10	8	2	80.0	20.0	77.68	8	84.17	78.72	6.49	0.81	5.45	0.68
28	40	3840G	11070003	4		10	8	2	80.0	20.0	80.38	8	86.77	81.39	6.41	0.80	5.38	0.67
29	13	3840G	11070003	5		10	10	0	100.0	0.0	79.18	10	86.23	79.73	7.07	0.71	6.50	0.65
30	29	3840G	11070003	6		10	8	2	80.0	20.0	82.42	8	89.08	83.24	6.66	0.83	5.84	0.73
31	18	3840G	11070003	7		10	7	3	70.0	30.0	78.39	7	85.42	79.03	7.03	1.00	6.39	0.91
32	1	3840G	11070003	8	wq replicate	10	10	0	100.0	0.0	74.66	10	81.28	75.22	6.62	0.66	6.06	0.61
33	20	3841G	11070004	1		10	9	1	90.0	10.0	77.18	9	82.21	78.00	5.03	0.56	4.21	0.47
34	14	3841G	11070004	2		10	9	1	90.0	10.0	77.07	9	83.01	77.65	5.94	0.66	5.36	0.60
35	39	3841G	11070004	3		10	9	1	90.0	10.0	75.09	9	79.77	75.98	4.68	0.52	3.79	0.42
36	25	3841G	11070004	4		10	8	2	80.0	20.0	82.04	8	87.48	82.67	5.42	0.68	4.79	0.60
37	30	3841G	11070004	5		10	9	1	90.0	10.0	79.54	9	86.97	80.48	7.43	0.83	6.49	0.72
38	17	3841G	11070004	6		10	9	1	90.0	10.0	81.72	9	87.94	82.31	6.22	0.69	5.63	0.63
39	24	3841G	11070004	7		10	10	0	100.0	0.0	77.29	10	84.86	78.25	7.57	0.78	6.81	0.86
40	10	3841G	11070004	8	wq replicate	10	8	2	80.0	20.0	77.60	8	83.41	78.13	5.81	0.73	5.28	0.66

	SURV	MORT	PSURV	PMORT	WT	AFDW
Mean	8.5	1.5	85.0	15.0	1.00	0.85
SD	0.5	0.5	5.3	5.3	0.15	0.13
n	8	8	8	8	8	8
Mean	7.1	2.9	71.3	28.8	0.96	0.81
SD	2.0	2.0	19.6	19.6	0.22	0.18
n	8	8	8	8	8	8
Mean	8.4	1.6	83.8	16.3	0.82	0.73
SD	0.5	0.5	5.2	5.2	0.10	0.11
n	8	8	8	8	8	8
Mean	8.6	1.4	86.3	13.8	0.81	0.71
SD	1.2	1.2	11.9	11.9	0.11	0.09
n	8	8	8	8	8	8
Mean	8.9	1.1	88.8	11.3	0.68	0.59
SD	0.6	0.6	6.4	6.4	0.10	0.10
n	8	8	8	8	8	8

PAGE 1 OF 2

Project Name: P826-2 Chironomus 10-day; % Mortallty

Sample:	x1
Samp ID:	11070001
Alias:	NAS# 3838G - X1
Replicates:	8
Mean:	28.75
SD:	19.594
Tr Mean:	0.34
Trans SD:	1.217

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	15
SD:	5.345
Tr Mean:	-0.34
Trans SD:	0.363

Shapiro-Wilk Results:

Residual Mean:	
Residual SD:	
SS:	
K:	
b:	
Alpha Level:	N/A
Calculated Value:	N/A
Critical Value:	N/A
Normally Distributed:	N/A
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	0.933
Test Residual SD:	0.697
Ref. Residual Mean:	0.34
Ref. Residual SD:	0
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	2.4052
Critical Value:	>= 1.761
Variances Homogeneous:	No

Test Results:

Statistic:	Approximate t
Balanced Design:	Yes
Transformation:	Rankits

Experimental Hypothesis

Null:	x1 <= x2
Alternate:	x1 > x2
Degrees of Freedom:	8
Experimental Alpha Level:	0.05
Calculated Value:	1.5142
Critical Value:	>= 1.86
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	50	1.526	10	-0.68	1.186	0.34		0	
2	30	0.576	10	-0.68	0.236	0.34		0	
3	0	-1.526	20	0	1.865	0.34		10	
4	30	0.576	20	0	0.236	0.34		10	
5	0	-1.526	10	-0.68	1.865	0.34		10	
6	30	0.576	20	0	0.236	0.34		10	
7	40	0.99	10	-0.68	0.65	0.34		20	
8	50	1.526	20	0	1.186	0.34		20	
9								20	
10								20	
11								30	
12								30	
13								30	
14								40	
15								50	
16								50	

THE % MORTALITY OF 11070001 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

Project Name: P826-2 Chironomus 10-day; % Mortality

Sample:	x1
Samp ID:	11070002
Alias:	NAS# 3839G - X1
Replicates:	8
Mean:	16.25
SD:	5.175
Tr Mean:	23.516
Trans SD:	4.208

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	15
SD:	5.345
Tr Mean:	22.5
Trans SD:	4.346

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	3.672
SS:	256.131
K:	8
b:	13.682
Alpha Level:	0.05
Calculated Value:	0.7309
Critical Value:	<= 0.887
Normally Distributed:	No
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	3.811
Test Residual SD:	1.052
Ref. Residual Mean:	4.065
Ref. Residual SD:	0
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.6831
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Mann-Whitney
Balanced Design:	Yes
Transformation:	rank-order
Experimental Hypothesis	
Null:	x1 <= x2
Alternate:	x1 > x2
Mann-Whitney N1:	8
Mann-Whitney N2:	8
Degrees of Freedom:	
Experimental Alpha Level:	0.05
Calculated Value:	36
Critical Value:	>= 49.0
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	20	12	10	4	3.049	4.065	18.435		-5.081
2	20	12	10	4	3.049	4.065	18.435		-5.081
3	20	12	20	12	3.049	4.065	18.435		-5.081
4	10	4	20	12	5.081	4.065	18.435		-4.065
5	20	12	10	4	3.049	4.065	18.435		-4.065
6	10	4	20	12	5.081	4.065	18.435		-4.065
7	20	12	10	4	3.049	4.065	18.435		-4.065
8	10	4	20	12	5.081	4.065	26.565		3.049
9							26.565		3.049
10							26.565		3.049
11							26.565		3.049
12							26.565		3.049
13							26.565		4.065
14							26.565		4.065
15							26.565		4.065
16							26.565		4.065

THE % MORTALITY OF 11070002 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

-657

Project Name: P826-2 Chironomus 10-day; % Mortality

Sample:	x1
Samp ID:	11070003
Alias:	NAS# 3840G - X1
Replicates:	8
Mean:	13.75
SD:	11.877
Tr Mean:	17.434
Trans SD:	14.61

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	15
SD:	5.345
Tr Mean:	22.5
Trans SD:	4.346

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	9.252
SS:	1626.438
K:	8
b:	37.996
Alpha Level:	0.05
Calculated Value:	0.8876
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	13.075
Test Residual SD:	4.251
Ref. Residual Mean:	4.065
Ref. Residual SD:	0
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	5.9946
Critical Value:	>= 1.761
Variances Homogeneous:	No

Test Results:

Statistic:	Approximate t
Balanced Design:	Yes
Transformation:	ArcSin

Experimental Hypothesis

Null:	x1 <= x2
Alternate:	x1 > x2
Degrees of Freedom:	8
Experimental Alpha Level:	0.05
Calculated Value:	-0.94
Critical Value:	>= 1.86
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	20	26.565	10	18.435	9.131	4.065			-17.434
2	0	0	10	18.435	17.434	4.065			-17.434
3	20	26.565	20	26.565	9.131	4.065			-17.434
4	20	26.565	20	26.565	9.131	4.065			-4.065
5	0	0	10	18.435	17.434	4.065			-4.065
6	20	26.565	20	26.565	9.131	4.065			-4.065
7	30	33.211	10	18.435	15.777	4.065			-4.065
8	0	0	20	26.565	17.434	4.065			4.065
9									4.065
10									4.065
11									4.065
12									9.131
13									9.131
14									9.131
15									9.131
16									15.777

THE % MORTALITY OF 11070003 WAS NOT SIGNFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-GJZ

Project Name: P826-2 Chironomus 10-day; % Mortality

Sample:	x1
Samp ID:	11070004
Alias:	NAS# 3841G - X1
Replicates:	8
Mean:	11.25
SD:	6.409
Tr Mean:	18.163
Trans SD:	8.207

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	15
SD:	5.345
Tr Mean:	22.5
Trans SD:	4.346

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	5.637
SS:	603.648
K:	8
b:	22.717
Alpha Level:	0.05
Calculated Value:	0.8549
Critical Value:	<= 0.887
Normally Distributed:	No
Override Option:	Not Invoked

Levene's Results:

Test Residual Mean:	4.541
Test Residual SD:	6.617
Ref. Residual Mean:	4.065
Ref. Residual SD:	0
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.2033
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Mann-Whitney
Balanced Design:	Yes
Transformation:	rank-order
Experimental Hypothesis	
Null:	x1 <= x2
Alternate:	x1 > x2
Mann-Whitney N1:	8
Mann-Whitney N2:	8
Degrees of Freedom:	
Experimental Alpha Level:	0.05
Calculated Value:	22
Critical Value:	>= 49.0
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	10	6	10	6	0.272	4.065	0		-18.163
2	10	6	10	6	0.272	4.065	18.435		-4.065
3	10	6	20	13.5	0.272	4.065	18.435		-4.065
4	20	13.5	20	13.5	8.402	4.065	18.435		-4.065
5	10	6	10	6	0.272	4.065	18.435		-4.065
6	10	6	20	13.5	0.272	4.065	18.435		0.272
7	0	1	10	6	18.163	4.065	18.435		0.272
8	20	13.5	20	13.5	8.402	4.065	18.435		0.272
9							18.435		0.272
10							18.435		0.272
11							26.565		4.065
12							26.565		4.065
13							26.565		4.065
14							26.565		4.065
15							26.565		8.402
16							26.565		8.402

THE % MORTALITY OF 11070004 WAS NOT SIGNIFICANTLY GREATER THAN THAT OF THE CONTROL AT $\alpha = 0.05$.
-GJ

Project Name: P826-2 Midge 10-d; ind.biomass (ash-free dry wt)

Sample:	x1
Samp ID:	11070001
Alias:	NAS# 3838G - X1
Replicates:	8
Mean:	0.813
SD:	0.177
Tr Mean:	0.813
Trans SD:	0.177

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.846
SD:	0.129
Tr Mean:	0.846
Trans SD:	0.129

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.133
SS:	0.336
K:	8
b:	0.56
Alpha Level:	0.05
Calculated Value:	0.9321
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.141
Test Residual SD:	0.093
Ref. Residual Mean:	0.098
Ref. Residual SD:	0.076
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	1.0061
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	0.4356
Critical Value:	>= 1.761
Accept Null Hypothesis:	Yes
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0.61	0.61	0.83	0.83	0.203	0.016			-0.216
2	0.84	0.84	0.99	0.99	0.028	0.144			-0.203
3	0.7	0.7	0.76	0.76	0.113	0.086			-0.113
4	0.73	0.73	0.91	0.91	0.083	0.064			-0.086
5	0.73	0.73	0.78	0.78	0.083	0.066			-0.083
6	0.73	0.73	0.63	0.63	0.083	0.216			-0.083
7	1.1	1.1	0.84	0.84	0.288	0.006			-0.083
8	1.06	1.06	1.03	1.03	0.248	0.184			-0.066
9									-0.016
10									-0.006
11									0.028
12									0.064
13									0.144
14									0.184
15									0.248
16									0.288

THE MEAN INDIVIDUAL ASH-FREE DRY WT OF 11070001 WAS NOT SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

-GSL

Project Name: P826-2 Midge 10-d; ind.biomass (ash-free dry wt)

Sample:	x1
Samp ID:	11070002
Alias:	NAS# 3839G - X1
Replicates:	8
Mean:	0.729
SD:	0.114
Tr Mean:	0.729
Trans SD:	0.114

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.846
SD:	0.129
Tr Mean:	0.846
Trans SD:	0.129

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.105
SS:	0.208
K:	8
b:	0.445
Alpha Level:	0.05
Calculated Value:	0.9538
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.083
Test Residual SD:	0.071
Ref. Residual Mean:	0.098
Ref. Residual SD:	0.076
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.3985
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	1.9285
Critical Value:	>= 1.761
Accept Null Hypothesis:	No
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0.72	0.72	0.83	0.83	0.009	0.016			-0.216
2	0.94	0.94	0.99	0.99	0.211	0.144			-0.149
3	0.69	0.69	0.76	0.76	0.039	0.086			-0.086
4	0.66	0.66	0.91	0.91	0.069	0.064			-0.069
5	0.58	0.58	0.78	0.78	0.149	0.066			-0.066
6	0.71	0.71	0.63	0.63	0.019	0.216			-0.049
7	0.85	0.85	0.84	0.84	0.121	0.006			-0.039
8	0.68	0.68	1.03	1.03	0.049	0.184			-0.019
9									-0.016
10									-0.009
11									-0.006
12									0.064
13									0.121
14									0.144
15									0.184
16									0.211

THE MEAN INDIVIDUAL ASH-FREE DRY WT OF 11070002 WAS SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$.

-GJ

Project Name: P826-2 Midge 10-d; ind.biomass (ash-free dry wt)

Sample:	x1
Samp ID:	11070003
Alias:	NAS# 3840G - X1
Replicates:	8
Mean:	0.714
SD:	0.093
Tr Mean:	0.714
Trans SD:	0.093

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.846
SD:	0.129
Tr Mean:	0.846
Trans SD:	0.129

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.097
SS:	0.178
K:	8
b:	0.412
Alpha Level:	0.05
Calculated Value:	0.9526
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.067
Test Residual SD:	0.059
Ref. Residual Mean:	0.098
Ref. Residual SD:	0.076
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.8981
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	2.3517
Critical Value:	>= 1.761
Accept Null Hypothesis:	No
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0.77	0.77	0.83	0.83	0.056	0.016			-0.216
2	0.69	0.69	0.99	0.99	0.024	0.144			-0.104
3	0.68	0.68	0.76	0.76	0.034	0.086			-0.086
4	0.67	0.67	0.91	0.91	0.044	0.064			-0.066
5	0.65	0.65	0.78	0.78	0.064	0.066			-0.064
6	0.73	0.73	0.63	0.63	0.016	0.216			-0.044
7	0.91	0.91	0.84	0.84	0.196	0.006			-0.034
8	0.61	0.61	1.03	1.03	0.104	0.184			-0.024
9									-0.016
10									-0.006
11									0.016
12									0.056
13									0.064
14									0.144
15									0.184
16									0.196

THE MEAN INDIVIDUAL ASH-FREE DRY WT OF 11070003 WAS SIGNIFICANTLY LESS THAN THAT OF THE CONTROL AT $\alpha = 0.05$

-651

Project Name: P826-2 Midge 10-d; ind.biomass (ash-free dry wt)

Sample:	x1
Samp ID:	11070004
Alias:	NAS# 3841G - X1
Replicates:	8
Mean:	0.595
SD:	0.101
Tr Mean:	0.595
Trans SD:	0.101

Ref Samp:	x2
Ref ID:	Control
Alias:	NAS# 3820G - X2
Replicates:	8
Mean:	0.846
SD:	0.129
Tr Mean:	0.846
Trans SD:	0.129

Shapiro-Wilk Results:

Residual Mean:	0
Residual SD:	0.1
SS:	0.189
K:	8
b:	0.429
Alpha Level:	0.05
Calculated Value:	0.9735
Critical Value:	<= 0.887
Normally Distributed:	Yes
Override Option:	N/A

Levene's Results:

Test Residual Mean:	0.075
Test Residual SD:	0.062
Ref. Residual Mean:	0.098
Ref. Residual SD:	0.076
Deg. of Freedom:	14
Alpha Level:	0.1
Calculated Value:	0.6573
Critical Value:	>= 1.761
Variances Homogeneous:	Yes

Test Results:

Statistic:	Student's t
Balanced Design:	Yes
Transformation:	No Transformation

Experimental Hypothesis

Null:	x1 >= x2
Alternate:	x1 < x2
Degrees of Freedom:	14
Experimental Alpha Level:	0.05
Calculated Value:	4.325
Critical Value:	>= 1.761
Accept Null Hypothesis:	No
Power:	
Min. Difference for Power:	

Replicate Number	Test Data	Trans. Test Data	Reference Data	Trans. Reference Data	Levene's Test Residuals	Levene's Reference Residuals	Mann-Whitney Ranks	Rankits	Shipiro-Wilk Residuals
1	0.47	0.47	0.83	0.83	0.125	0.016			-0.216
2	0.6	0.6	0.99	0.99	0.005	0.144			-0.175
3	0.42	0.42	0.76	0.76	0.175	0.086			-0.125
4	0.6	0.6	0.91	0.91	0.005	0.064			-0.086
5	0.72	0.72	0.78	0.78	0.125	0.066			-0.066
6	0.63	0.63	0.63	0.63	0.035	0.216			-0.016
7	0.66	0.66	0.84	0.84	0.065	0.006			-0.006
8	0.66	0.66	1.03	1.03	0.065	0.184			0.005
9									0.005
10									0.035
11									0.064
12									0.065
13									0.065
14									0.125
15									0.144
16									0.184

THE MEAN INDIVIDUAL ASH-FREE DRY WT OF 11070004 WAS SIGNIFICANTLY LESS THAN THAT OF THE CONTROL A $\alpha = 0,05$.

- 6 JJ

Water Quality Data

BKR	NAS SMPL	CLIENT DESCRIP	REPL	DAY	Overlying water TEMP	DO	COND	pH	NH3	HARD	ALK
1	3840G	11070003	8	0	23.4	8.3	144	6.9	<0.1	43	30
7	3820G	Contol	8	0	23.4	7.4	157	7.0	0.2	43	30
8	3839G	11070002	8	0	23.4	8.2	143	7.0	<0.1	43	30
10	3841G	11070004	8	0	23.4	8.4	144	7.0	<0.1	43	30
22	3838G	11070001	8	0	23.4	7.7	141	7.0	<0.1	43	30
1	3840G	11070003	8	1	22.9	7.7					
7	3820G	Contol	8	1	22.8	7.1					
8	3839G	11070002	8	1	22.8	7.6					
10	3841G	11070004	8	1	22.9	7.6					
22	3838G	11070001	8	1	22.9	7.7					
1	3840G	11070003	8	2	22.9	6.5					
7	3820G	Contol	8	2	22.8	6.4					
8	3839G	11070002	8	2	22.8	6.5					
10	3841G	11070004	8	2	22.8	6.6					
22	3838G	11070001	8	2	22.8	6.0					
1	3840G	11070003	8	3	22.7	6.4					
7	3820G	Contol	8	3	22.7	6.5					
8	3839G	11070002	8	3	22.7	6.4					
10	3841G	11070004	8	3	22.7	6.7					
22	3838G	11070001	8	3	22.7	6.2					
1	3840G	11070003	8	4	23.0	6.2					
7	3820G	Contol	8	4	22.9	6.5					
8	3839G	11070002	8	4	22.9	6.3					
10	3841G	11070004	8	4	22.9	6.3					
22	3838G	11070001	8	4	22.8	6.1					
1	3840G	11070003	8	5	22.5	5.3					
7	3820G	Contol	8	5	22.5	5.2					
8	3839G	11070002	8	5	22.4	4.8					
10	3841G	11070004	8	5	22.5	4.8					
22	3838G	11070001	8	5	22.5	3.9					
1	3840G	11070003	8	6	22.0	7.2					
7	3820G	Contol	8	6	22.0	7.2					
8	3839G	11070002	8	6	22.1	6.7					
10	3841G	11070004	8	6	22.1	6.8					
22	3838G	11070001	8	6	21.9	5.9					
1	3840G	11070003	8	7	22.1	7.0					
7	3820G	Contol	8	7	22.0	7.0					
8	3839G	11070002	8	7	22.0	6.7					
10	3841G	11070004	8	7	22.0	6.2					
22	3838G	11070001	8	7	22.0	5.8					
1	3840G	11070003	8	8	22.2	6.9					
7	3820G	Contol	8	8	22.2	6.4					
8	3839G	11070002	8	8	22.2	6.8					
10	3841G	11070004	8	8	22.1	6.5					
22	3838G	11070001	8	8	22.0	5.9					
1	3840G	11070003	8	9	22.2	6.6					
7	3820G	Contol	8	9	22.2	6.2					

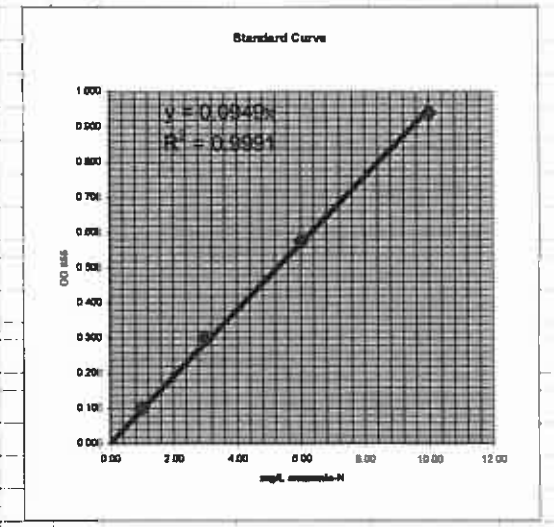
8	3839G	11070002	8	9	22.2	6.5						
10	3841G	11070004	8	9	22.2	6.0						
22	3838G	11070001	8	9	22.1	5.2						
1	3840G	11070003	8	10	22.7	7.4	149	6.8	<0.1	43	40
7	3820G	Contol	8	10	22.7	6.9	153	6.8	<0.1	34	40
8	3839G	11070002	8	10	22.6	7.1	151	6.8	<0.1	51	30
10	3841G	11070004	8	10	22.7	6.6	153	6.8	1.5	43	30
22	3838G	11070001	8	10	22.7	6.0	151	6.7	0.1	43	30
				Mean	22.6	6.6	149	6.9	---	43	32
				SD	0.4	0.9	5	0.1	---	4	4
				n	55	55	10	10	10	10	10
				Min	21.9	3.9	141	6.7	<0.1	34	30
				Max	23.4	8.4	157	7.0	1.5	51	40

AMMONIA EXPOSURE BENCHSHEETS AND ANALYSIS

Total Ammonia-N in Water: Computation Worksheet
Salicylate Method (SOP #5492)

Result

	Sample description	Dilution factor	OD_{655}	NH_3-N (mg/L)
	Blank	—	—	—
	1.0 mg/L NH_3-N Std.	-----	0.100	1.00
	3.0 mg/L NH_3-N Std.	—	0.300	3.00
	6.0 mg/L NH_3-N Std.	—	0.575	6.00
	10.0 mg/L NH_3-N Std.	-----	0.940	10.00
	3.0 mg/L spike	—	0.319	3.36
	3.0 mg/L spike dupl.	—	0.329	3.47
	5.0 mg/L 2nd source	-----	0.490	5.16
1.	Day 0			
2.	1	1	0.000	ND
3.	7	1	0.022	0.23
4.	8	1	0.000	ND
5.	10	1	0.000	ND
6.	22	1	0.000	ND
7.				
8.	Day 10			
9.	1	1	0.000	ND
10.	7	1	0.000	ND
11.	8	1	0.000	ND
12.	10	1	0.145	1.53
13.	22	1	0.010	0.11
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				
35.				
36.				



Reporting limit (mg/L) =	0.1
Recovery (%) =	113.8
Precision (RPD) =	-3.09
2nd source (%) =	103.3
Sample volume (ml):	0.50
Dilution factor	1

Sample Set Description:
Test No.: P826-2
Species: *Chironomus dilutus*
Overlying water

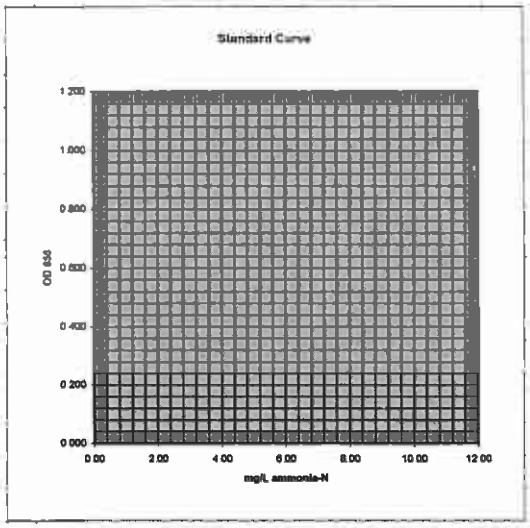
Days 0 & 10

Analyst: GJI
Date analysed: 09/08/11

Total Ammonia-N in Water: Computation Worksheet
Salicylate Method (SOP #5492)

Result

	Sample description	Dilution factor	OD655	NH_3-N (mg/L)
	Blank	----	----	----
	1.0 mg/L NH_3-N Std.	----	0.100	1.00
	3.0 mg/L NH_3-N Std.	----	0.300	3.00
	6.0 mg/L NH_3-N Std.	----	0.575	6.00
	10.0 mg/L NH_3-N Std.	----	0.940	10.00
	3.0 mg/L spike	----	0.319	
	3.0 mg/L spike dupl.	----	0.329	
	5.0 mg/L 2nd source	----	0.490	
1.	Day 0			
2.	1	1	0.000	
3.	7	1	0.022	
4.	8	1	0.000	
5.	10	1	0.000	
6.	22	1	0.000	
7.				
8.	Day 10			
9.	1	1	0.000	
10.	7	1	0.000	
11.	8	1	0.000	
12.	10	1	0.145	
13.	22	1	0.010	
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				
31.				
32.				
33.				
34.				
35.				
36.				



Reporting limit (mg/L) =	0.1
Recovery (%) =	#VALUE!
Precision (RPD) =	#VALUE!
2nd source (%) =	#VALUE!
Sample volume (ml):	0.50
Dilution factor	1

Sample Set Description:

Test No.: P826-2
Species: *Chironomus dilutus*
Overlying water

Days 0 & 10

Analyst:	GJI
Date analysed:	09/08/11

CHAIN-OF-CUSTODY RECORDS

USEPA
DateShipped: 8/23/2011
CarrierName: FedEx
AirbillNo: .

CHAIN OF CUSTODY RECORD
10GL
Contact Name: Mark Woolke
Contact Phone: (206) 624 9537

No: 10-082311-124153-0001
Cooler #: 1
Lab: Northwest Aquatic Sciences
Lab Phone: 5412657225

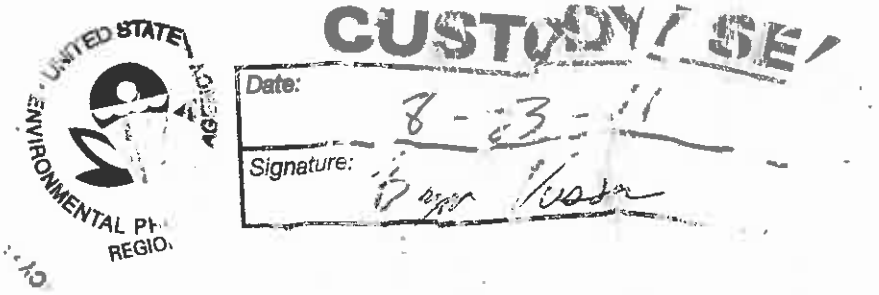
Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	MS/MSD
38386	11070001	GC02	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
38396	11070002	GC01	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
38406	11070003	GC03	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N
38416	11070004	GC04	Sediment Toxicity EPA 100.1 and 100.2		7/27/2011	1	1 gallon glass jar	4 C	N

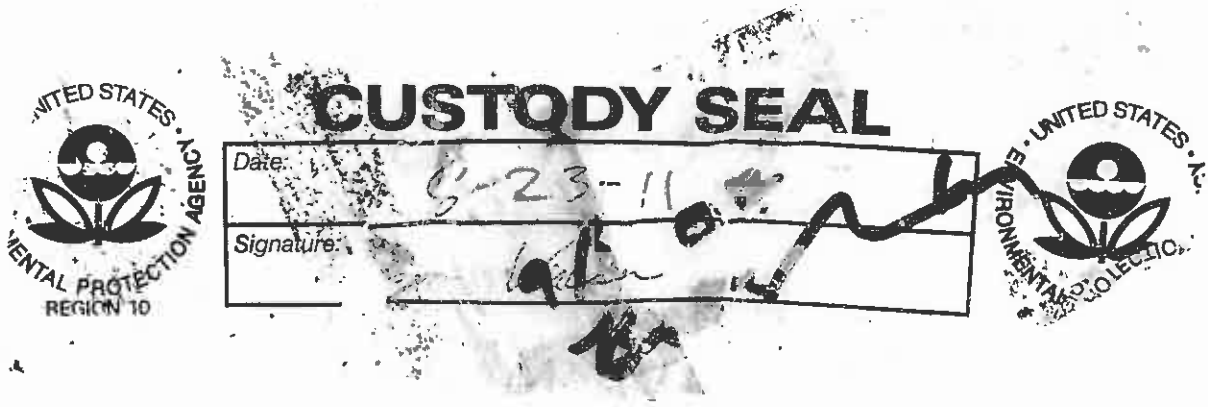
Special Instructions: INTERNAL TEMP OF COOLER UPON RECEIPT: 4.5°C

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Shipping	Bryan Vessa	8-23-11	Gerald Driscoll	8-24-11	1000						

P826
Ecology & ENV
8-24-11





FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8762 5167 3792

Form ID No. 0200

Recipient's Copy

From

Date

Sender's Name _____ Phone _____

Company _____

Address _____ Dept./Floor/Suite/Room

City _____ State _____ ZIP _____

Your Internal Billing Reference

To

Recipient's Name _____ Phone _____

Company _____

Address _____ Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address _____

Use this line for the HOLD location address or for continuation of your shipping address.

City _____ State _____ ZIP _____

HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☑ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver

☑ No Signature Required — Package may be left without obtaining a signature for delivery.
☐ Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☑ No ☐ Yes — As per attached Shipper's Declaration ☐ Yes — Shipper's Declaration not required ☐ Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. ☐ Obtain recip Acct. No.

☑ Sender — Acct. No. in Section 1 will be billed ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages _____ Total Weight _____ lbs. Total Declared Value† $ _____ .00 Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

Rev. Date 10/10 • Part #163138 • ©1994-2010 FedEx • PRINTED IN U.S.A. SRY

8762 5167 3792

APPENDIX III

RAW DATA – REFERENCE TOXICANT TEST

REVIEWED PAGES 1-7 -GJI

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS- ______

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2931 Client: QC Test Investigator ______

Test Type (rangefinding/definitive) ______ Test Length (hr) 96

Species *Chironomus dilutus*

STUDY MANAGEMENT

Client: QC test

Client's Study Monitor: QC test

Testing Laboratory: Northwestern Aquatic Sciences

Test Location: Newport Laboratory

Laboratory's Study Personnel:

Proj. Man./Study Dir. G.J. Irissarri GJI

QA Officer L. K. Nemeth

1. GA Buhler GAB 2. ______

3. ______ 4. ______

Study Schedule:

Test Beginning: 8-26-11 1235 Test Ending: 8-30-11 1130

TEST MATERIAL

Description: Potassium Chloride Crystals - Lot No.: FISHER 073280

NAS Sample No.:

Date of Collection:

Date of Receipt:

Temperature (deg C):

Dissolved oxygen (mg/L):

pH:

Conductivity (umhos/cm):

Hardness (mg/L):

Alkalinity (mg/L):

Salinity (ppt):

Total chlorine (mg/L):

Total ammonia-N (mg/L):

______:

DILUTION WATER

Description: Moderately hard synthetic water

Date of Preparation/Collection: 8-22-11

Water Quality: Cond. (umhos/cm): 256 Salinity (ppt) pH 7.9

Hardness (mg/L as $CaCO_3$): 86 Alkalinity (mg/L as $CaCO_3$): 70

Treatments: Aerated ≥ 24 hrs

TEST LOCATION

Test conducted in (circle one): room 1 (circled) room 2 trailer water bath other: ______

Randomization chart:

1.25	Ø	20	1.25	20	Ø	20	10	Ø	5
Ø	20	2.5	Ø	1.25	20	2.5	1.25	5	20
10	5	1.25	5	2.5	5	1.25	2.5	20	1.25
5	10	Ø	2.5	10	1.25	Ø	20	2.5	10
10	2.5	5	10	5	2.5	5	Ø	10	2.5
2.5	1.25	10	20	Ø	20	10	5	1.25	Ø

Error codes: 1) Correction of handwriting error
2) Written in wrong location; entry deleted
3) Wrong date deleted; replaced with correct date
4) Error found in measurement; measurement repeated

Revised 12-5-01

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-_____

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2931 Client QC Test Investigator _____

TEST ORGANISMS

Species: *Chironomus dilutus* Age: 3rd instar

Source: NAS cultures Date received: N/A

Acclimation Data:

Date	Temp. (deg.C)	pH	DO (mg/L)	Cond. umhos/cm	Hardness (mg/L)	Alkalinity (mg/L)	Feeding	Water changes
8-15-11	21.4	7.4	8.0	163	—	—	Animals fed Tetra Fin	YES
8-17-11	21.7	7.6	8.5	158	43	30	and *Selenastrum*	—
8-19-11	21.8	7.6	8.6	157	—	—	Details recorded on	—
8-22-11	22.4	7.4	9.0	164	—	—	Chironomid culture	YES
8-24-11	22.6	7.0	7.0	159	60	30	data sheets	—
8-26-11	21.6	7.1	7.4	163	—	—		YES
Mean	21.9	7.4	8.1	161	52	30		
S.D.	0.5	0.3	0.8	3	—	—		
(N)	6	6	6	6	2	2		

Photoperiod during acclimation: 16:8, L:D

TEST PROCEDURES AND CONDITIONS

Test concentrations (50% series recommended): 20, 10, 5, 2.5, 1.25, 0 g/L

Test chamber: 30 ml plastic cups Test volume: 20 ml

Replicates/treatment: 10 Organisms/treatment: 10 (1/rep)

Test water changes: None Aeration during test: None

Feeding: 0.25 ml Prime Tropical Flakes (4g/L) suspension per cup on days 0 and 2

Duration: 24-hr, 48-hr, (96-hr) Test temperature (deg.C): 23 ± 1

Beaker placement: Stratified randomization Photoperiod: 16:8, L:D

MISCELLANEOUS NOTES

Test solution preparation:

Working stock: Dissolve 10g KCl crystals in dilution water and dilute to 500 mL.

Final conc.: 20 g/L.

Test concentration (g/L)	KCl working stock (ml/200ml)	ml of dilution water per 200 ml
20	200	0
10	100	100
5	50	150
2.5	25	175
1.25	12.5	187.5
0	0	0

8-25-11 602

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-_____

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2931 Client _____ QC Test

DAILY RECORD SHEET

Day 0 (8/26/11) CB Temp Beaker (°C): 23.7

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Comments
1. 20	23.5	8.0	13620	8.0	86	70	
2. 10	23.5	8.0	11000	8.1			
3. 5	23.6	7.9	7220	8.2			
4. 2.5	23.6	7.9	3940	8.2			
5. 1.25	23.6	7.9	2140	8.4			
6. 0	23.6	8.0	258	8.3	86	70	
All animals fed 0.25 ml Tetra Fin suspension. Initials: GJL							

Day 1 (8/27/11) GJL Temp Beaker (°C): 23.2

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Comments
1. 20							
2. 10							
3. 5							
4. 2.5							
5. 1.25							
6. 0							

Day 2 (8/28/11) GJL Temp Beaker (°C): 23.4

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Comments
1. 20							
2. 10							
3. 5							
4. 2.5							
5. 1.25							
6. 0							
All animals fed 0.25 ml Tetra Fin suspension. Initials: GJL							

Day 3 (8/29/11) GJL Temp Beaker (°C): 23.5

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Comments
1. 20							
2. 10							
3. 5							
4. 2.5							
5. 1.25							
6. 0							

Day 4 (8/30/11) GJL Temp Beaker (°C): 23.6

Conc. (g/L)	Temp. (deg.C)	pH	Cond. (umhos/cm)	DO (ppm)	Hardness (mg/L)	Alkalinity (mg/L)	Comments
1. 20	—	—	—	—	—	—	
2. 10	—	—	—	—			
3. 5	23.3	7.8	7650	7.6			
4. 2.5	23.3	7.8	4140	7.6			
5. 1.25	23.3	7.8	2340	7.7			
6. 0	23.3	7.8	313	7.7	94	80	
Mean	23.5	7.9	CONTROL 286	8.0	89	73	
SD	0.1	0.1	& —	0.3	5	6	
n	10	10	2	10	3	3	

NORTHWESTERN AQUATIC SCIENCES PROTOCOL NO. NAS-_____

ACUTE TOXICITY TEST (ALL SPECIES)

Test No. 999-2931 Client QC Test Investigator _____

DAILY RECORD SHEET - Survivors

Day 0 (8 /26 /11) GJL

Conc. (g/L)	Survivors in Replicate: 1	2	3	4	5	6	7	8	9	10	Total
1. 20	1	1	1	1	1	1	1	1	1	1	10
2. 10	1	1	1	1	1	1	1	1	1	1	10
3. 5	1	1	1	1	1	1	1	1	1	1	10
4. 2.5	1	1	1	1	1	1	1	1	1	1	10
5. 1.25	1	1	1	1	1	1	1	1	1	1	10
6. 0	1	1	1	1	1	1	1	1	1	1	10

Day 1 (8 /27/ 11) GJL

Conc. (g/L)	Survivors in Replicate: 1	2	3	4	5	6	7	8	9	10	Total
1. 20	0	0	0	0	0	0	0	0	0	0	0 (10)
2. 10	1	0	0	0	0	0	0	0	1	0	2 (8)
3. 5	1	1	1	1	1	1	1	1	1	1	10
4. 2.5	1	1	1	1	1	1	1	1	1	1	10
5. 1.25	1	1	1	1	1	1	1	1	1	1	10
6. 0	1	1	1	1	1	1	1	1	1	1	10

Day 2 (8 /28/11) GJL

Conc. (g/L)	Survivors in Replicate: 1	2	3	4	5	6	7	8	9	10	Total
1. 20	0	0	0	0	0	0	0	0	0	0	0
2. 10	0	0	0	0	0	0	0	0	0	0	0 (20)
3. 5	1	1	1	1	1	1	1	1	1	1	10
4. 2.5	1	1	1	1	1	1	1	1	1	1	10
5. 1.25	1	1	1	1	1	1	1	1	1	1	10
6. 0	1	1	1	1	1	1	1	1	1	1	10

Day 3 (8 /29/11) GJL

Conc. (g/L)	Survivors in Replicate: 1	2	3	4	5	6	7	8	9	10	Total
1. 20	0	0	0	0	0	0	0	0	0	0	0
2. 10	0	0	0	0	0	0	0	0	0	0	0
3. 5	1	1	1	1	1	1	1	1	1	0	9 (10)
4. 2.5	1	1	1	1	1	1	1	1	1	1	10
5. 1.25	1	1	1	1	1	1	1	1	1	1	10
6. 0	1	1	1	1	1	1	1	1	1	1	10

Day 4 (8 /30/11)

Conc. (g/L)	Survivors in Replicate: 1	2	3	4	5	6	7	8	9	10	Total
1. 20	0	0	0	0	0	0	0	0	0	0	0
2. 10	0	0	0	0	0	0	0	0	0	0	0
3. 5	1	1	1	1	1	1	1	0	1	0	8 (10)
4. 2.5	1	1	1	1	1	1	1	1	1	1	10
5. 1.25	1	1	1	1	1	1	1	1	1	1	10
6. 0	1	0	1	1	1	1	1	1	1	1	9 (10)

Acute 96-hr Toxicity Test-96 Hr Survival

Start Date:	8/26/2011 12:35	Test ID:	999-2931	Sample ID:	REF-Ref Toxicant
End Date:	8/30/2011 11:30	Lab ID:	ORNAS-Northwestern Aquati	Sample Type:	KCL-Potassium chloride
Sample Date:		Protocol:	EPAF 91-EPA Freshwater	Test Species:	CT-Chironomus dilutus
Comments:					

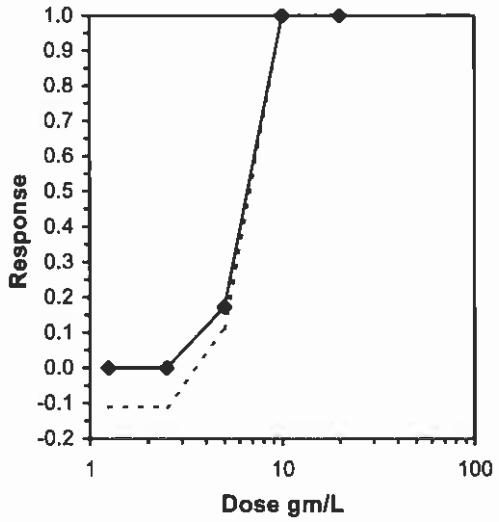
Conc-gm/L	1
D-Control	0.9000
1.25	1.0000
2.5	1.0000
5	0.8000
10	0.0000
20	0.0000

Conc-gm/L	Mean	N-Mean	Resp	Not Resp	Total	N	Fisher's Exact P	1-Tailed Critical	Number Resp	Total Number
D-Control	0.9000	1.0000	1	9	10	1			1	10
1.25	1.0000	1.1111	0	10	10	1	0.5000	0.0500	0	10
2.5	1.0000	1.1111	0	10	10	1	0.5000	0.0500	0	10
5	0.8000	0.8889	2	8	10	1	0.5000	0.0500	2	10
*10	0.0000	0.0000	10	0	10	1	0.0001	0.0500	10	10
*20	0.0000	0.0000	10	0	10	1	0.0001	0.0500	10	10

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Fisher's Exact Test	5	10	7.07107	

Trimmed Spearman-Karber

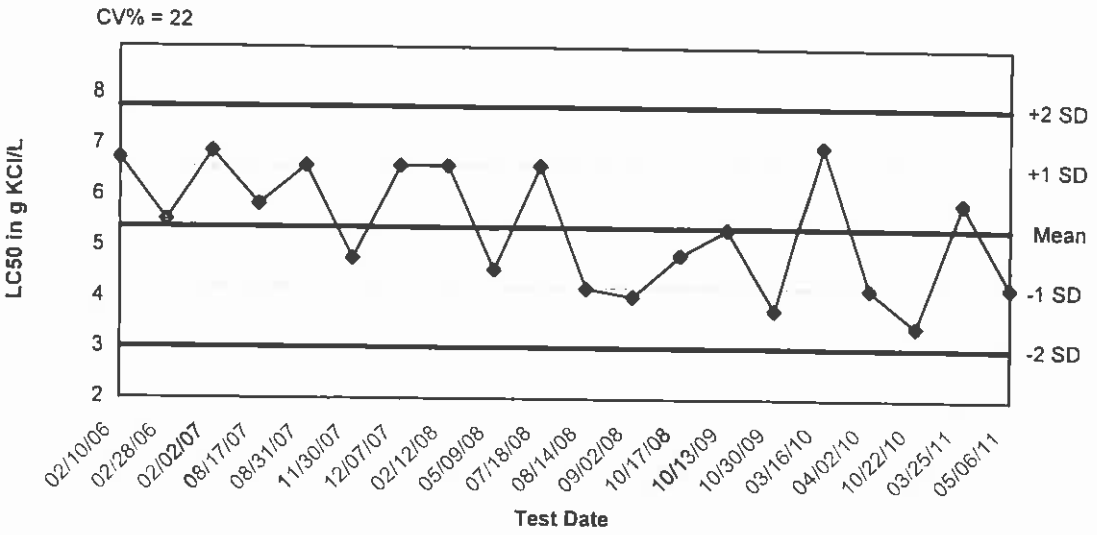
Trim Level	EC50	95% CL	
0.0%	6.2746	5.3170	7.4046
5.0%	6.4065	5.2905	7.7579
10.0%	6.5102	5.1196	8.2786
20.0%	6.5785	5.8294	7.4239
Auto-0.0%	6.2746	5.3170	7.4046



Test: AT-Acute 96-hr Toxicity Test						Test ID: 999-2931			
Species: CT-Chironomus dilutus						Protocol: EPAF 91-EPA Freshwater			
Sample ID: REF-Ref Toxicant						Sample Type: KCL-Potassium chloride			
Start Date: 8/26/2011 12:35				End Date: 8/30/2011 11:3		Lab ID: ORNAS-Northwestern Aquatic Sciences			
Pos	ID	Rep	Group	Start	24 Hr	48 Hr	72 Hr	96 Hr	Notes
	1	1	D-Control	10	10	10	10	9	
	2	1	1.250	10	10	10	10	10	
	3	1	2.500	10	10	10	10	10	
	4	1	5.000	10	10	10	9	8	
	5	1	10.000	10	2	0	0	0	
	6	1	20.000	10	0	0	0	0	

Comments:

Midge, Chironomus dilutus, 3rd instar larvae acute reference toxicant test



Dates	Values	Mean	-1 SD	-2 SD	+1 SD	+2 SD
02/10/06	6.7400	5.3840	4.1978	3.0115	6.5702	7.7565
02/28/06	5.5300	5.3840	4.1978	3.0115	6.5702	7.7565
02/02/07	6.8800	5.3840	4.1978	3.0115	6.5702	7.7565
08/17/07	5.8400	5.3840	4.1978	3.0115	6.5702	7.7565
08/31/07	6.6000	5.3840	4.1978	3.0115	6.5702	7.7565
11/30/07	4.7700	5.3840	4.1978	3.0115	6.5702	7.7565
12/07/07	6.6000	5.3840	4.1978	3.0115	6.5702	7.7565
02/12/08	6.6000	5.3840	4.1978	3.0115	6.5702	7.7565
05/09/08	4.5600	5.3840	4.1978	3.0115	6.5702	7.7565
07/18/08	6.6000	5.3840	4.1978	3.0115	6.5702	7.7565
08/14/08	4.1900	5.3840	4.1978	3.0115	6.5702	7.7565
09/02/08	4.0300	5.3840	4.1978	3.0115	6.5702	7.7565
10/17/08	4.8500	5.3840	4.1978	3.0115	6.5702	7.7565
10/13/09	5.3600	5.3840	4.1978	3.0115	6.5702	7.7565
10/30/09	3.7700	5.3840	4.1978	3.0115	6.5702	7.7565
03/16/10	6.9900	5.3840	4.1978	3.0115	6.5702	7.7565
04/02/10	4.1900	5.3840	4.1978	3.0115	6.5702	7.7565
10/22/10	3.4500	5.3840	4.1978	3.0115	6.5702	7.7565
03/25/11	5.8900	5.3840	4.1978	3.0115	6.5702	7.7565
05/06/11	4.2400	5.3840	4.1978	3.0115	6.5702	7.7565

MR
6.6.11

This page intentionally left blank.