Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

ANALYTICAL DATA PACKAGE

TABLE OF CONTENTS

HDR
APPLE VALLEY ROAD
SAMPLES RECEIVED: 5/22/15
WATER SAMPLES
SDG NO.: HDR013

DATA PACKAGE FOR CLIENT INFORMATION PURPOSES ONLY

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

I. NYS DEC SUMMARY FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: HDR013

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	MSVOA
MW2-2015-05-20	1505G38-001	X
MW5-2015-05-20	1505G38-002	X
MW8-2015-05-20	1505G38-003	X
MW9-2015-05-20	1505G38-004	X
MW10-2015-05-20	1505G38-005	X
MW11D-2015-05-20	1505G38-006	X
MW11M-2015-05-20	1505G38-007	X

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B
2005
AD 7/14/15

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
VOLATILE (VOA)
ANALYSES

SDG: HDR013

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1505G38-001A	MW2 DL	Potable Water	E524.2	20-May-15	22-May-15		03-Jun-15		100	LOW	
1505G38-001A	MW2	Potable Water	E524.2	20-May-15	22-May-15		02-Jun-15		1	LOW	
1505G38-002A	MW5	Potable Water	E524.2	21-May-15	22-May-15		03-Jun-15		1	LOW	
1505G38-003A	MW8	Potable Water	E524.2	21-May-15	22-May-15		03-Jun-15		1	LOW	
1505G38-004A	MW9	Potable Water	E524.2	21-May-15	22-May-15		03-Jun-15		1	LOW	
1505G38-005A	MW10	Potable Water	E524.2	20-May-15	22-May-15		03-Jun-15		1	LOW	
1505G38-006A	MW11D	Potable Water	E524.2	20-May-15	22-May-15		02-Jun-15		1	LOW	
1505G38-007A	MW11M DL	Potable Water	E524.2	20-May-15	22-May-15		03-Jun-15		10	LOW	
1505G38-007A	MW11M	Potable Water	E524.2	20-May-15	22-May-15		02-Jun-15		1	LOW	

7/1/15

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

II. SDG NARRATIVES

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

SDG NARRATIVE FOR VOLATILE ORGANICS ANALYSIS
SAMPLE(S) RECEIVED: 5/22/15
SDG#: HDR013

For Sample(s):

MW2-2015-05-20	MW10-2015-05-20
MW5-2015-05-20	MW11D-2015-05-20
MW8-2015-05-20	MW11M-2015-05-20
MW9-2015-05-20	

The above water sample(s) was/were analyzed for a select list of volatile organics by EPA method 524 and reported in accordance with the NYSDEC ASP, Rev. 7/2005, Category B.

All Q. C. data and calibrations met the requirements of the protocol, unless discussed below. No problems were encountered with sample analysis. The following should be noted:

No sample was submitted for matrix spike/ matrix spike duplicate (MS/MSD) analysis. Two lab fortified blanks (LFB) were analyzed. The recoveries for two analytes in LFB060215 and four analytes in LFB060315A did not meet the control limits. The samples were not reanalyzed, because no data are affected, since the analytes were not found in the samples analyzed in those batches above reporting limits.

Two samples were re-analyzed at dilutions due to concentrations of targeted analytes above the calibration ranges. Both sets of data are submitted.

In two continuing calibration verifications, on 6/1/15 and 6/2/15, the variability for two compounds was above 30%. Results for these analytes are flagged with a "Z" qualifier in the LFBs analyzed on those days, indicating that they are regarded estimated. These analytes were not found in the samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: July 1, 2015

****
* *
* *
****

Ursula Middel
Quality Analyst

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

III. CHAIN OF CUSTODY DOCUMENTATION

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

8062 7812 3967

Page: 1 of 1

1927110

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: HDR	Report To: Mike Lehtinen	Attention:
Address: 16 Corporate Woods Blvd Suite 204 Albany, NY 12211	Copy To:	Company Name:
Email To: Michael.Lehtinen@hdrinc.com	Purchase Order No.:	Address:
Phone: (518) 937-9500 Fax:	Project Name:	Pace Quote Reference:
Requested Due Date/TAT:	Project Number:	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: NY

HDR013

B05-70D

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	Analysis Test ↓ 524.2 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N ↓	N		
1	MW11M-2015-05-20	WT	WT	X	5/20/15	1010				2				X					X	X	1505638-007A
2	MW11D-2015-05-20			X	↓	1015				2				X					X	X	-006A
3	MW2-2015-05-20			X		1335				2				X					X	X	-001A
4	MW10-2015-05-20			X		1405				2				X					X	X	-005A
5	MW8-2015-05-20			X	5/21	0950				2				X					X	X	-003A
6	MW9-2015-05-20			X		0955				2				X					X	X	-004A
7	MW5-2015-05-20			X		1305				2				X					X	X	-002A
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Robert Cunningham YEG Inc. Fedex	5/21/15	1535	Fedex	5/21	1535				
					5/22	1030	1.9	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Robert Cunningham

SIGNATURE of SAMPLER: Robert Cunningham DATE Signed (MM/DD/YY): 05/21/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

HDR013

PACE ANALYTICAL
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.pacelabs.com

Sample Receipt Checklist

Client Name HDR-ALBANY

Date and Time Received: 5/22/2015 10:30:00 AM

Work Order Number: 1505G38 RcptNo: 1

Received by: Jamie Spero

Completed by:

Reviewed by:

Completed Date: 5/22/2015 10:47:18 AM

Reviewed Date: 6/2/2015 9:35:44 PM

Carrier name: FedEx

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Are matrices correctly identified on Chain of custody?	Yes	☑	No	☐		
Is it clear what analyses were requested?	Yes	☑	No	☐		
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
Samples in proper container/bottle?	Yes	☑	No	☐		
Were correct preservatives used and noted?	Yes	☑	No	☐	NA	☐
Preservative added to bottles:						
Sample Condition?	Intact	☑	Broken	☐	Leaking	☐
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
Were container labels complete (ID, Pres, Date)?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Was an attempt made to cool the samples?	Yes	☑	No	☐	NA	☐
All samples received at a temp. of > 0° C to 6.0° C?	Yes	☑	No	☐	NA	☐
Response when temperature is outside of range:						
Sample Temp. taken and recorded upon receipt?	Yes	☑	No	☐	To	1.9 °
Water - Were bubbles absent in VOC vials?	Yes	☑	No	☐	No Vials	☐
Water - Was there Chlorine Present?	Yes	☐	No	☐	NA	☑
Water - pH acceptable upon receipt?	Yes	☑	No	☐	No Water	☐
Are Samples considered acceptable?	Yes	☑	No	☐		
Custody Seals present?	Yes	☐	No	☑		
Airbill or Sticker?	Air Bill	☑	Sticker	☐	Not Present	☐
Airbill No:	806278123967					

Case Number: SDG: HDR013 SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☐ No ☑ NA Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: Contacted By:

Regarding:

Comments:

CorrectiveAction:

HDR013 A9

INTERNAL CHAIN OF CUSTODY

CLIENT: HDR-Albany DELIVERABLES: 8260-70D TURN AROUND TIME: 9 days

SDG: HDR013 CASE#: MATRIX: AQ pH CHECK Y or (N)

REMARKS:

RECEIVED BY: JS SIGNATURE: DATE: 5/22/15 TIME: 1030

	CLIENT SAMPLE ID	LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1.	MW2-2015-05-20	1505638-001A	5/20/15	D_H	2	524_DW
2.	MW5-2015-05-20	-002A	5/21/15			
3.	MW8-2015-05-20	-003A				
4.	MW9-2015-05-20	-004A				
5.	MW10-2015-05-20	-005A	5/20/15			
6.	MW11D-2015-05-20	-006A				
7.	MW11M-2015-05-20	-007A				
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

JS 5/22/15

CLIENT: HDR-Albany

SDG: HDR013

INTERNAL CHAIN OF CUSTODY

DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT.
5/22/15	1120			DH	Analysis	
6/3/15	1857			DH	ANALYSIS	

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

IV. ANALYTICAL DATA PACKAGE

A. VOLATILES

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

VOLATILE ORGANICS

TABLE OF CONTENTS

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

I. QC SUMMARY FOR VOLATILE ORGANICS

- A. SYSTEM MONITORING COMPOUND RECOVERY SUMMARY
- B. MS/MSD SUMMARY*
- C. MSB SUMMARY*
- D. LFB SUMMARY*
- E. DUPLICATE SUMMARY*
- F. METHOD BLANK SUMMARY
- G. GC/MS TUNING SUMMARY
- H. INTERNAL STANDARD AREA AND RT SUMMARY
- I. INSTRUMENT DETECTION LIMITS OR MDL

*IF REQUIRED

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

	EPA SAMPLE NO.	SMC1 DCB #	SMC2 BFB #		OTHER	TOT OUT
01	VBLK060215	88	101			0
02	LFB060215	115	111			0
03	MW2	116	107			0
04	MW11M	91	127			0
05	MW11D	94	118			0
06	VBLK060315	95	92			0
07	MW10	100	97			0
08	MW2	92	90			0
09	MW11M	95	89			0
10	MW5	96	93			0
11	MW8	98	95			0
12	MW9	93	93			0
13	LFB060315	108	104			0

QC Limit

SMC 1 DCB = 1,2-Dichlorobenzene-d4 (70-130)
SMC 2 BFB = 4-Bromofluorobenzene (70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: 10478 Case No.: HDR-AL SAS No.: SDG No.: HDR013

Sample ID LFB060215 Level: (low/med) LOW

Column ID R-624 0.18 Column Diam .18

Inst. ID HP5975-1 Init. Calib. Date(s): 05/03/15 14:26

Analysis Date: 06/02/15 10:22 05/03/15 17:52

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10	0	10.6	106	70-130
Chloromethane	10	0	8.93	89	70-130
Vinyl chloride	10	0	9.05	91	70-130
Bromomethane	10	0	5.22	52*	70-130
Chloroethane	10	0	7.82	78	70-130
Trichlorofluoromethane	10	0	10.3	103	70-130
1,1-Dichloroethene	10	0	7.15	72	70-130
Methylene chloride	10	0	6.78	68*	70-130
trans-1,2-Dichloroethene	10	0	7.88	79	70-130
1,1-Dichloroethane	10	0	8.59	86	70-130
2,2-Dichloropropane	10	0	9.54	95	70-130
cis-1,2-Dichloroethene	10	0	7.76	78	70-130
Bromochloromethane	10	0	8.47	85	70-130
Chloroform	10	0	8.98	90	70-130
1,1,1-Trichloroethane	10	0	9.94	99	70-130
Carbon tetrachloride	10	0	10.8	108	70-130
1,1-Dichloropropene	10	0	8.69	87	70-130
1,2-Dichloroethane	10	0	9.12	91	70-130
Benzene	10	0	7.49	75	70-130
Trichloroethene	10	0	8.34	83	70-130
1,2-Dichloropropane	10	0	7.93	79	70-130
Dibromomethane	10	0	7.48	75	70-130
Bromodichloromethane	10	0	9.16	92	70-130
cis-1,3-Dichloropropene	10	0	8.01	80	70-130
Toluene	10	0	8.18	82	70-130
trans-1,3-Dichloropropene	10	0	8.39	84	70-130
1,1,2-Trichloroethane	10	0	7.25	73	70-130
Tetrachloroethene	10	0	9.93	99	70-130
1,3-Dichloropropane	10	0	7.41	74	70-130
Dibromochloromethane	10	0	9.3	93	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 2 out of 57 outside limits

COMMENTS:

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: 10478 Case No.: HDR-AL SAS No.: SDG No.: HDR013

Sample ID LFB060215 Level:(low/med) LOW

Column ID R-624 0.18 Column Diam .18

Inst. ID HP5975-1 Init. Calib. Date(s): 05/03/15 14:26

Analysis Date: 06/02/15 10:22 05/03/15 17:52

Chlorobenzene	10	0	8.89	89	70-130
1,1,1,2-Tetrachloroethane	10	0	9.6	96	70-130
Ethylbenzene	10	0	8.97	90	70-130
m,p-Xylene	20	0	18.4	92	70-130
o-Xylene	10	0	9.23	92	70-130
Styrene	10	0	8.98	90	70-130
Bromoform	10	0	9.58	96	70-130
Isopropylbenzene	10	0	9.44	94	70-130
Bromobenzene	10	0	9.26	93	70-130
1,1,2,2-Tetrachloroethane	10	0	6.97	70	70-130
1,2,3-Trichloropropane	10	0	8.78	88	70-130
n-Propylbenzene	10	0	8.78	88	70-130
2/4-Chlorotoluene	20	0	17.5	88	70-130
1,3,5-Trimethylbenzene	10	0	9.45	95	70-130
tert-Butylbenzene	10	0	9.88	99	70-130
1,2,4-Trimethylbenzene	10	0	9.48	95	70-130
sec-Butylbenzene	10	0	9.36	94	70-130
n-Butylbenzene	10	0	9.63	96	70-130
1,3-Dichlorobenzene	10	0	9.28	93	70-130
1,4-Dichlorobenzene	10	0	9.35	94	70-130
4-Isopropyltoluene	10	0	9.76	98	70-130
1,2-Dichlorobenzene	10	0	10.6	106	70-130
1,2,4-Trichlorobenzene	10	0	9.45	95	70-130
Hexachlorobutadiene	10	0	10.3	103	70-130
1,2,3-Trichlorobenzene	10	0	9.52	95	70-130
Methyl tert-butyl ether	10	0	9.68	97	70-130
Total Trihalomethanes	40	0	37	93	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 2 out of 57 outside limits

COMMENTS:

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: 10478 Case No.: HDR-AL SAS No.: SDG No.: HDR013

Sample ID LFB060315 Level: (low/med) LOW

Column ID Rtx-624 Column Diam .18

Inst. ID HP5972-2 Init. Calib. Date(s): 02/25/15 17:09

Analysis Date: 06/04/15 5:33 02/25/15 19:29

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10	0	14.5	145*	70-130
Chloromethane	10	0	15.6	156*	70-130
Vinyl chloride	10	0	12	120	70-130
Bromomethane	10	0	13.7	137*	70-130
Chloroethane	10	0	12.9	129	70-130
Trichlorofluoromethane	10	0	11.7	117	70-130
1,1-Dichloroethene	10	0	8	80	70-130
Methylene chloride	10	0	9.04	90	70-130
trans-1,2-Dichloroethene	10	0	8.49	85	70-130
1,1-Dichloroethane	10	0	9.95	100	70-130
2,2-Dichloropropane	10	0	6.98	70	70-130
cis-1,2-Dichloroethene	10	0	8.4	84	70-130
Bromochloromethane	10	0	7.18	72	70-130
Chloroform	10	0	9.24	92	70-130
1,1,1-Trichloroethane	10	0	8.88	89	70-130
Carbon tetrachloride	10	0	8.28	83	70-130
1,1-Dichloropropene	10	0	9.33	93	70-130
1,2-Dichloroethane	10	0	9.77	98	70-130
Benzene	10	0	9.47	95	70-130
Trichloroethene	10	0	8.89	89	70-130
1,2-Dichloropropane	10	0	10.8	108	70-130
Dibromomethane	10	0	8.71	87	70-130
Bromodichloromethane	10	0	8.81	88	70-130
cis-1,3-Dichloropropene	10	0	9.55	96	70-130
Toluene	10	0	8.01	80	70-130
trans-1,3-Dichloropropene	10	0	8.7	87	70-130
1,1,2-Trichloroethane	10	0	10.2	102	70-130
Tetrachloroethene	10	0	8.38	84	70-130
1,3-Dichloropropane	10	0	10.3	103	70-130
Dibromochloromethane	10	0	7.14	71	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 4 out of 57 outside limits

COMMENTS:

3A

SYSTEM MONITORING SPIKE RECOVERY

Lab Name: PACE ANALYTICAL Contract:

Lab Code: 10478 Case No.: HDR-AL SAS No.: SDG No.: HDR013

Sample ID LFB060315 Level: (low/med) LOW

Column ID Rtx-624 Column Diam .18

Inst. ID HP5972-2 Init. Calib. Date(s): 02/25/15 17:09

Analysis Date: 06/04/15 5:33 02/25/15 19:29

Chlorobenzene	10	0	8.49	85	70-130
1,1,1,2-Tetrachloroethane	10	0	7.35	74	70-130
Ethylbenzene	10	0	9.31	93	70-130
m,p-Xylene	20	0	16.9	84	70-130
o-Xylene	10	0	8.57	86	70-130
Styrene	10	0	9.42	94	70-130
Bromoform	10	0	6.72	67*	70-130
Isopropylbenzene	10	0	8.8	88	70-130
Bromobenzene	10	0	8.32	83	70-130
1,1,2,2-Tetrachloroethane	10	0	9.76	98	70-130
1,2,3-Trichloropropane	10	0	8.34	83	70-130
n-Propylbenzene	10	0	9.38	94	70-130
2/4-Chlorotoluene	20	0	18.1	91	70-130
1,3,5-Trimethylbenzene	10	0	8.8	88	70-130
tert-Butylbenzene	10	0	8.13	81	70-130
1,2,4-Trimethylbenzene	10	0	8.87	89	70-130
sec-Butylbenzene	10	0	8.81	88	70-130
n-Butylbenzene	10	0	9.04	90	70-130
1,3-Dichlorobenzene	10	0	7.98	80	70-130
1,4-Dichlorobenzene	10	0	7.97	80	70-130
4-Isopropyltoluene	10	0	8.43	84	70-130
1,2-Dichlorobenzene	10	0	8.35	84	70-130
1,2,4-Trichlorobenzene	10	0	7.31	73	70-130
Hexachlorobutadiene	10	0	9.91	99	70-130
1,2,3-Trichlorobenzene	10	0	7.87	79	70-130
Methyl tert-butyl ether	10	0	8.64	86	70-130
Total Trihalomethanes	40	0	31.9	80	70-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 4 out of 57 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK060215

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: P1086.D Lab Sample ID: VBLK060215

Date Analyzed: 06/02/15 Time Analyzed: 9:08

GC Column: R-624 0 ID: .18 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5975-1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LFB060215	LFB060215	P1087.D	10:22
02	MW2	1505G38-001A	P1096.D	14:30
03	MW11M	1505G38-007A	P1102.D	16:59
04	MW11D	1505G38-006A	P1103.D	17:23

COMMENTS: _____

_____

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK060315

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: 315\G32996 Lab Sample ID: VBLK060315

Date Analyzed: 06/03/15 Time Analyzed: 20:40

GC Column: Rtx-624 ID: .18 (mm) Heated Purge: (Y/N) N

Instrument ID: HP5972-2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW10	1505G38-005A	315\G32997	21:06
02	MW2	1505G38-001A	315\G32998	21:31
03	MW11M	1505G38-007A	315\G32999	21:57
04	MW5	1505G38-002A	315\G33000	22:22
05	MW8	1505G38-003A	315\G33001	22:47
06	MW9	1505G38-004A	315\G33002	23:13
07	LFB060315	LFB060315	315\G33017	5:33

COMMENTS: _____

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: 5\G30671.D BFB Injection Date: 02/25/15

Instrument ID: HP5972-2 BFB Injection Time: 14:14

GC Column: Rtx-624 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.6
75	30.0 - 80.0% of mass 95	37.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	84.6
175	5.0 - 9.0% of mass 174	6.4 (7.5)1
176	95.0 - 101.0% of mass 174	82.3 (97.3)1
177	5.0 - 9.0% of mass 176	5.4 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.50	VSTD0.50	5\G30677.D	02/25/15	17:09
02	VSTD5.0	VSTD5.0	5\G30678.D	02/25/15	17:47
03	VSTD10.0	VSTD10.0	5\G30679.D	02/25/15	18:12
04	VSTD20.0	VSTD20.0	5\G30680.D	02/25/15	18:38
05	VSTD50	VSTD50	5\G30681.D	02/25/15	19:03
06	VSTD100	VSTD100	5\G30682.D	02/25/15	19:29

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: P0522.D BFB Injection Date: 05/03/15

Instrument ID: HP5975-1 BFB Injection Time: 10:48

GC Column: R-624 0 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 80.0% of mass 95	51.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	Greater than 50.0% of mass 95	73.1
175	5.0 - 9.0% of mass 174	5.7 (7.7)1
176	95.0 - 101.0% of mass 174	70.3 (96.2)1
177	5.0 - 9.0% of mass 176	4.5 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0.50	VSTD0.50	P0526.D	05/03/15	14:26
02	VSTD5.0	VSTD5.0	P0527.D	05/03/15	15:07
03	VSTD10.0	VSTD10.0	P0528.D	05/03/15	15:49
04	VSTD50	VSTD50	P0530.D	05/03/15	17:11
05	VSTD100	VSTD100	P0531.D	05/03/15	17:52

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: P1083.D BFB Injection Date: 06/02/15

Instrument ID: HP5975-1 BFB Injection Time: 6:19

GC Column: R-624 0 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.5
75	30.0 - 80.0% of mass 95	52.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.9 (1.1)1
174	Greater than 50.0% of mass 95	79.8
175	5.0 - 9.0% of mass 174	6.1 (7.7)1
176	95.0 - 101.0% of mass 174	78.0 (97.7)1
177	5.0 - 9.0% of mass 176	4.7 (6.0)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	P1084.D	06/02/15	6:49
02	VBLK060215	VBLK060215	P1086.D	06/02/15	9:08
03	LFB060215	LFB060215	P1087.D	06/02/15	10:22
04	MW2	1505G38-001A	P1096.D	06/02/15	14:30
05	MW11M	1505G38-007A	P1102.D	06/02/15	16:59
06	MW11D	1505G38-006A	P1103.D	06/02/15	17:23

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID: 5\G32993.D BFB Injection Date: 06/03/15

Instrument ID: HP5972-2 BFB Injection Time: 18:51

GC Column: Rtx-624 ID: .18 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.9
75	30.0 - 80.0% of mass 95	43.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	78.3
175	5.0 - 9.0% of mass 174	5.7 (7.3)1
176	95.0 - 101.0% of mass 174	77.1 (98.5)1
177	5.0 - 9.0% of mass 176	5.2 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	315\G32995	06/03/15	20:08
02	VBLK060315	VBLK060315	315\G32996	06/03/15	20:40
03	MW10	1505G38-005A	315\G32997	06/03/15	21:06
04	MW2	1505G38-001A	315\G32998	06/03/15	21:31
05	MW11M	1505G38-007A	315\G32999	06/03/15	21:57
06	MW5	1505G38-002A	315\G33000	06/03/15	22:22
07	MW8	1505G38-003A	315\G33001	06/03/15	22:47
08	MW9	1505G38-004A	315\G33002	06/03/15	23:13
09	LFB060315	LFB060315	315\G33017	06/04/15	5:33

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID (Standard): P1084.D Date Analyzed: 06/02/15

EPA Sample No.(VSTD050##): VSTD010 Time Analyzed: 6:49

Instrument ID: HP5975-1 Heated Purge: (Y/N) N

GC Column: R-624 0 ID: .18 (mm)

		IS1 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	103240	4.196	0	0	0	0
	UPPER LIMIT	206480	4.696	0	0.5	0	0.5
	LOWER LIMIT	51620	3.696	0	-0.5	0	-0.5
	EPA SAMPLE						
01	VBLK060215	93339	4.20				
02	LFB060215	99051	4.20				
03	MW2	91995	4.20				
04	MW11M	86561	4.20				
05	MW11D	85885	4.20				

IS1 = Fluorobenzene

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

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Lab File ID (Standard): 315\G32995 Date Analyzed: 06/03/15

EPA Sample No.(VSTD050##): VSTD010 Time Analyzed: 20:08

Instrument ID: HP5972-2 Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

		IS1 AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	118872	6.06	0	0	0	0
	UPPER LIMIT	237744	6.56	0	0.5	0	0.5
	LOWER LIMIT	59436	5.56	0	-0.5	0	-0.5
	EPA SAMPLE						
01	VBLK060315	113885	6.07				
02	MW10	111960	6.07				
03	MW2	117287	6.06				
04	MW11M	112770	6.06				
05	MW5	114323	6.06				
06	MW8	113742	6.07				
07	MW9	113784	6.07				
08	LFB060315	112330	6.06				

IS1 = Fluorobenzene

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

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

PACE ANALYTICAL

Date: 30-Jun-15

Test Code: 524_DW
Test Number: E524.2
Test Name: VOCS POTABLE
Matrix: Potable Water **Units:** µg/L

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
A	Dichlorodifluoromethane		0.10	0.50
A	Chloromethane		0.21	0.50
A	Vinyl chloride		0.09	0.50
A	Bromomethane		0.45	0.50
A	Chloroethane		0.45	0.50
A	Trichlorofluoromethane		0.11	0.50
A	1,1-Dichloroethene		0.17	0.50
A	Methylene chloride		0.16	0.50
A	trans-1,2-Dichloroethene		0.13	0.50
A	1,1-Dichloroethane		0.13	0.50
A	2,2-Dichloropropane		0.12	0.50
A	cis-1,2-Dichloroethene		0.18	0.50
A	Bromochloromethane		0.18	0.50
A	Chloroform		0.07	0.50
A	1,1,1-Trichloroethane		0.17	0.50
A	Carbon tetrachloride		0.08	0.50
A	1,1-Dichloropropene		0.15	0.50
A	1,2-Dichloroethane		0.05	0.50
A	Benzene		0.05	0.50
A	Trichloroethene		0.12	0.50
A	1,2-Dichloropropane		0.10	0.50
A	Dibromomethane		0.08	0.50
A	Bromodichloromethane		0.15	0.50
A	cis-1,3-Dichloropropene		0.12	0.50
A	Toluene		0.06	0.50
A	trans-1,3-Dichloropropene		0.06	0.50
A	1,1,2-Trichloroethane		0.17	0.50
A	Tetrachloroethene		0.09	0.50
A	1,3-Dichloropropane		0.11	0.50
A	Dibromochloromethane		0.16	0.50
A	Chlorobenzene		0.15	0.50
A	1,1,1,2-Tetrachloroethane		0.10	0.50
A	Ethylbenzene		0.13	0.50
A	m,p-Xylene		0.24	0.50
A	o-Xylene		0.13	0.50
A	Styrene		0.15	0.50
A	Bromoform		0.15	0.50
A	Isopropylbenzene		0.09	0.50
A	Bromobenzene		0.09	0.50
A	1,1,2,2-Tetrachloroethane		0.16	0.50
A	1,2,3-Trichloropropane		0.10	0.50
A	n-Propylbenzene		0.11	0.50
A	2/4-Chlorotoluene		0.21	0.50
A	1,3,5-Trimethylbenzene		0.07	0.50
A	tert-Butylbenzene		0.14	0.50
A	1,2,4-Trimethylbenzene		0.08	0.50

Test Code: 524_DW
Test Number: E524.2
Test Name: VOCS POTABLE
Matrix: Potable Water **Units:** µg/L

METHOD DETECTION / REPORTING LIMITS

Type	Analyte	Synonym	MDL	PQL
A	sec-Butylbenzene		0.06	0.50
A	n-Butylbenzene		0.09	0.50
A	1,3-Dichlorobenzene		0.12	0.50
A	1,4-Dichlorobenzene		0.14	0.50
A	4-Isopropyltoluene		0.11	0.50
A	1,2-Dichlorobenzene		0.12	0.50
A	1,2,4-Trichlorobenzene		0.25	0.50
A	Hexachlorobutadiene		0.23	0.50
A	1,2,3-Trichlorobenzene		0.27	0.50
A	Methyl tert-butyl ether		0.05	0.50
C	Total Trihalomethanes		0.19	0.50
I	Fluorobenzene		0	0
S	1,2-Dichlorobenzene-d4		0	0
S	4-Bromofluorobenzene		0	0
X	Freon-113		0	0.50
X	Chlorodifluoromethane		0.10	0.50
X	1,1,2-Trichloro-1,2,2-trifluoroethane		0.12	0.50
X	1,2-Dibromoethane		0.07	0.50
X	2-Chlorotoluene		0	0.50
X	4-Chlorotoluene		0	0.50
X	1,2-Dibromo-3-chloropropane		0.44	0.50
X	Naphthalene		0.14	0.50
X	tert-Butyl Alcohol		7.80	10.0
X	Butylated Hydroxytoluene		0	10.0
X	Xylene (total)		0	0

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

II. SAMPLE DATA PACKAGE FOR VOLATILE ORGANICS

A. REPORTS
B. RAW DATA

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

QUALIFIERS FOR REPORTING ORGANICS DATA

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(300\ U)}{D} \times df \text{ where } D = \frac{100\% moisture}{100}$$

and df - dilution factor

For example, at 24% moisture, $D = \frac{100 - 24}{100} = 0.76$

$$\frac{(300\ U)}{.76} \times 10 - 4300\ U$$ rounded to the appropriate number of significant figures

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 µg/L and a concentration of 3 µg/L is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported of Form I with a "P".

C - This flag applies to pesticide results when the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory defined flag, discussed below.

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

E - This flag identified compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration ranges in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g. a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceed 200 µg/L or the peak representing the two coeluting isomers on that GC column exceed 400 µg/L. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceed 400 µg/L.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, used the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU' or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are detected in the sample.

Y Suspected secondary contamination.

X Analyte is suspected column bleed

Z Analyte had a %D greater then 20% in the daily CCV

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

CODES FOR MANUAL CORRECTIONS

T: Transcription error

CE: Calculation error

CC: Changed per client request

SC: Sample cancelled

LB: Wrong spot in logbook

MP: Missed peak

MIP: Misintegrated peak

WI: Wrong isomer

TI: Total of isomers

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1096.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	8	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	7	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	350	E
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	290	E
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	2500	E
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1096.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1096.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

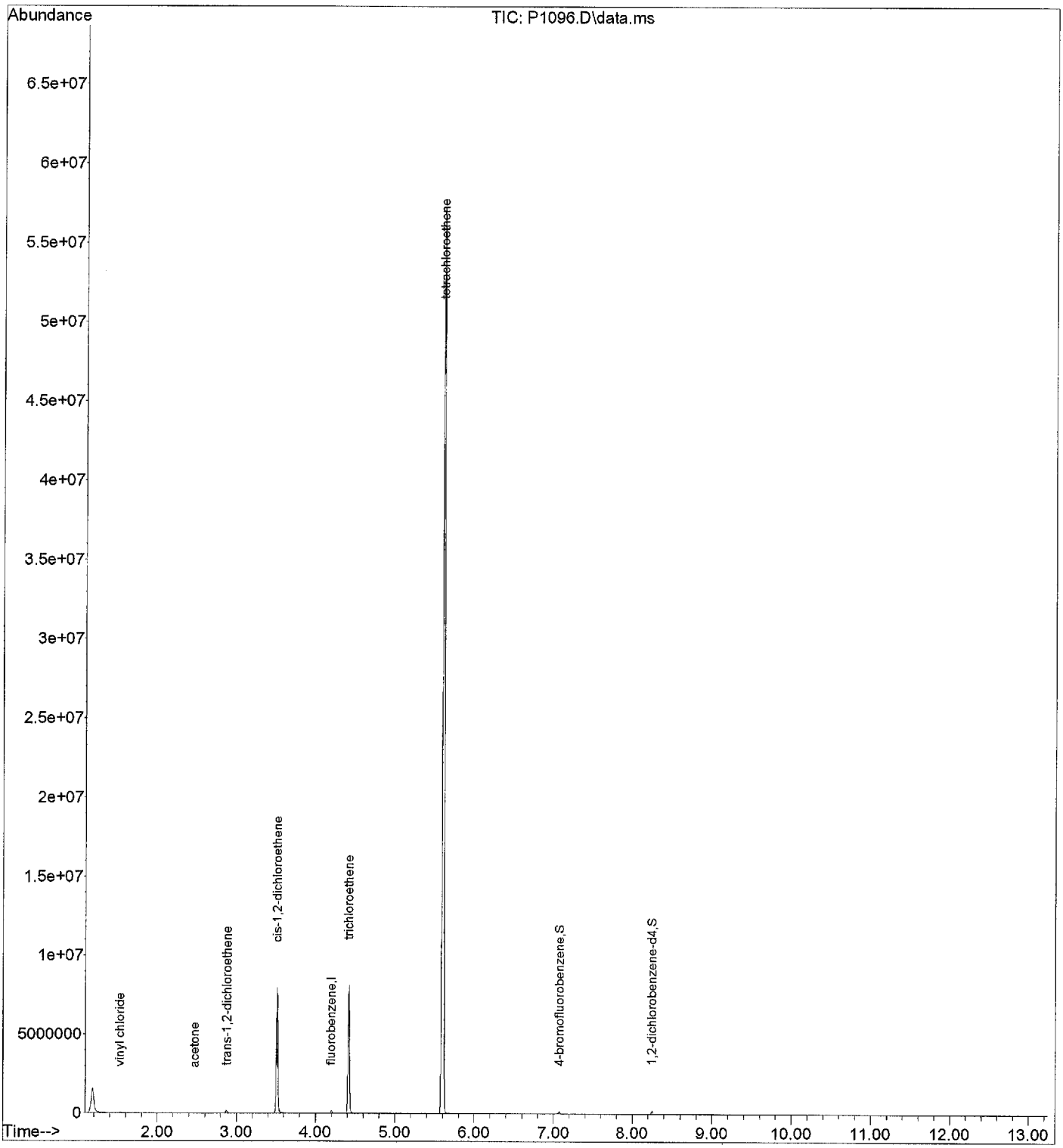
CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) µg/L

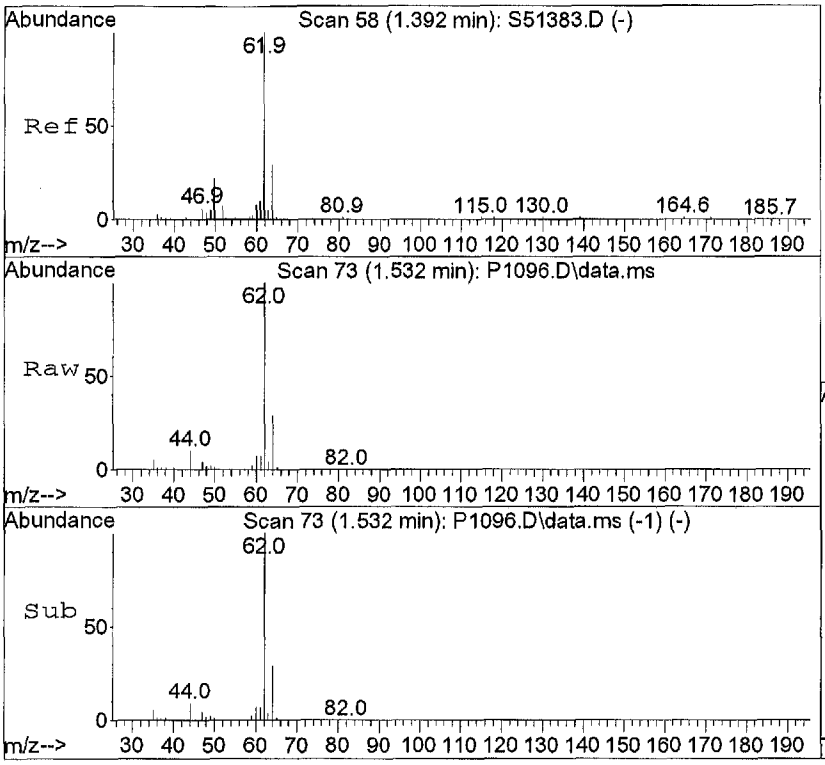
CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1096.D
Acq On : 2 Jun 2015 14:30
Operator : MN
Sample : 1505G38-001A
Misc : ,,,SAMP,,
ALS Vial : 21 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 14:43:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



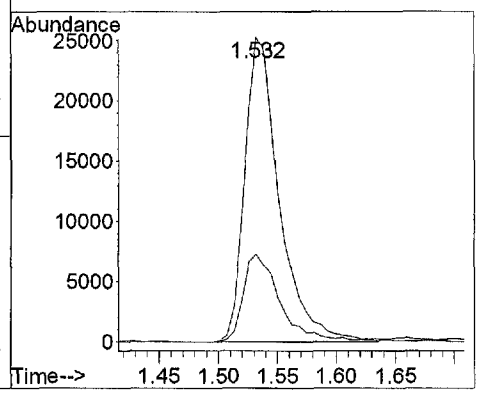
HDR013 V25

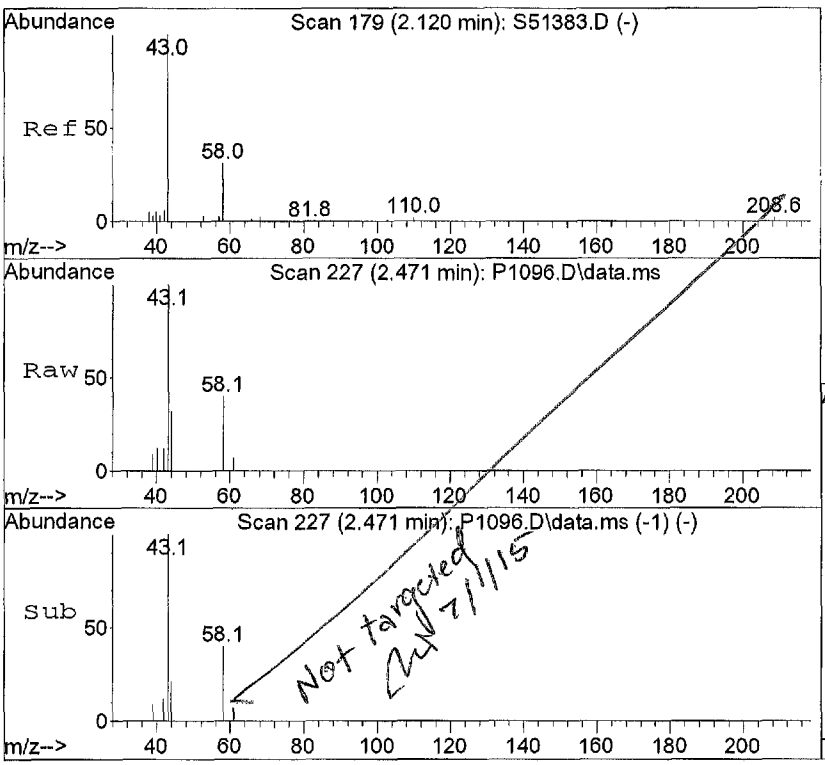


#5
vinyl chloride
Concen: 8.46 UG/L
RT: 1.532 min Scan# 73
Delta R.T. -0.000 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion: 62 Resp: 51257

Ion	Ratio	Lower	Upper
62	100		
64	30.2	10.3	50.3

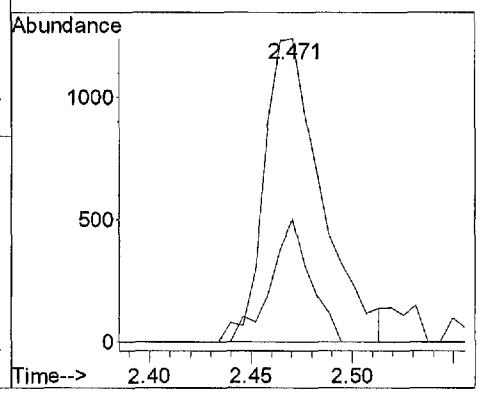




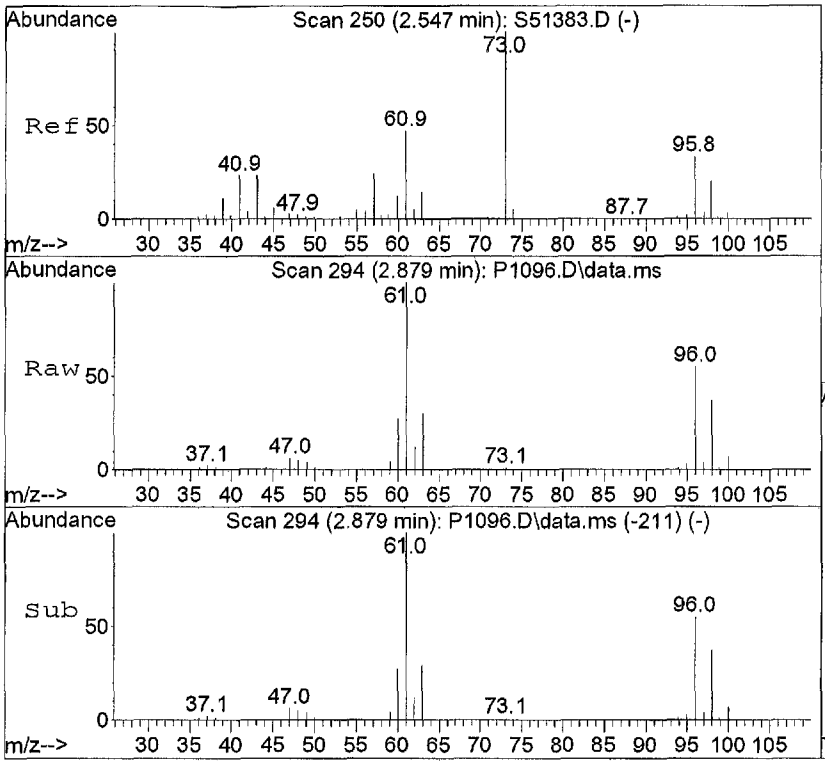
#19
acetone
Concen: 1.13 ug/l
RT: 2.471 min Scan# 227
Delta R.T. 0.006 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion: 43 Resp: 2437

Ion	Ratio	Lower	Upper
43	100		
58	28.2	25.6	38.4



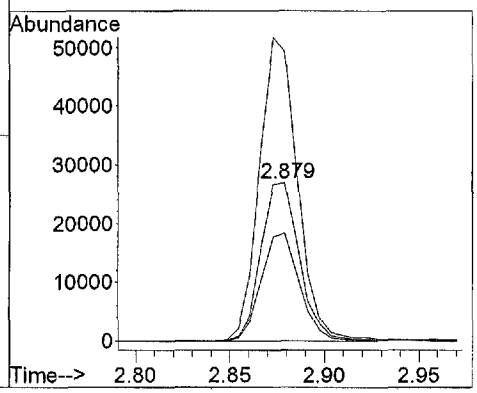
HDR013 V26

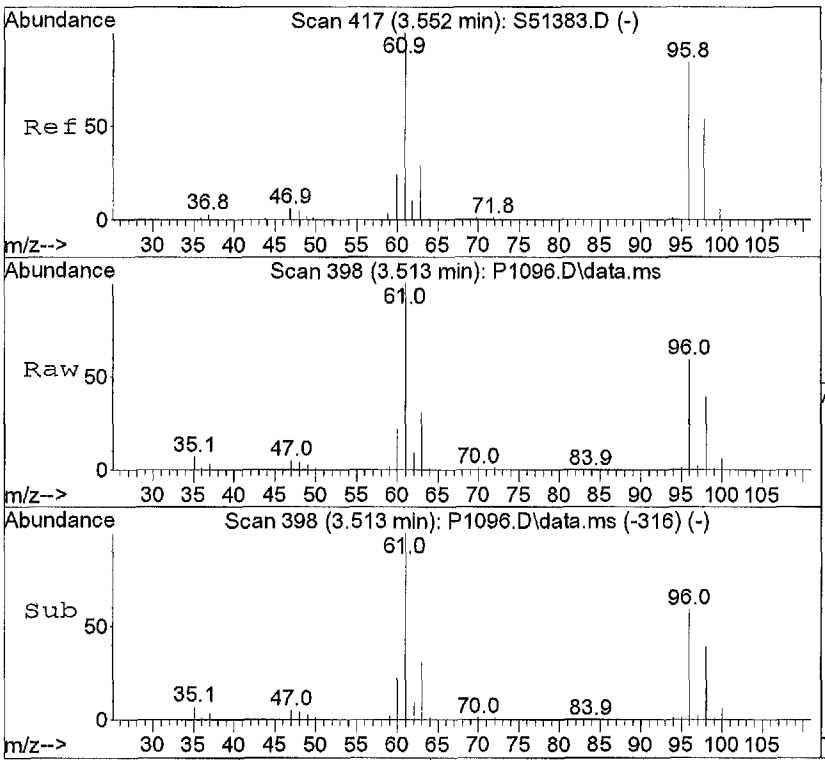


#20
trans-1,2-dichloroethene
Concen: 6.90 UG/L
RT: 2.879 min Scan# 294
Delta R.T. 0.006 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion: 96 Resp: 38019

Ion	Ratio	Lower	Upper
96	100		
61	189.8	140.1	180.1#
98	67.5	43.2	83.2

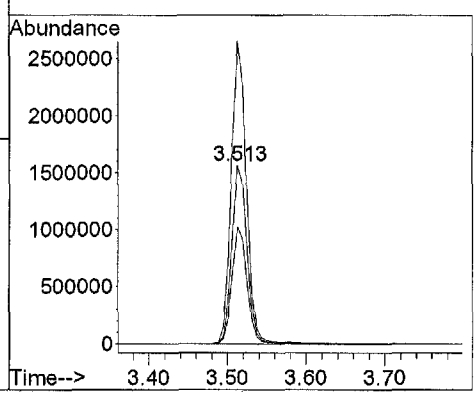




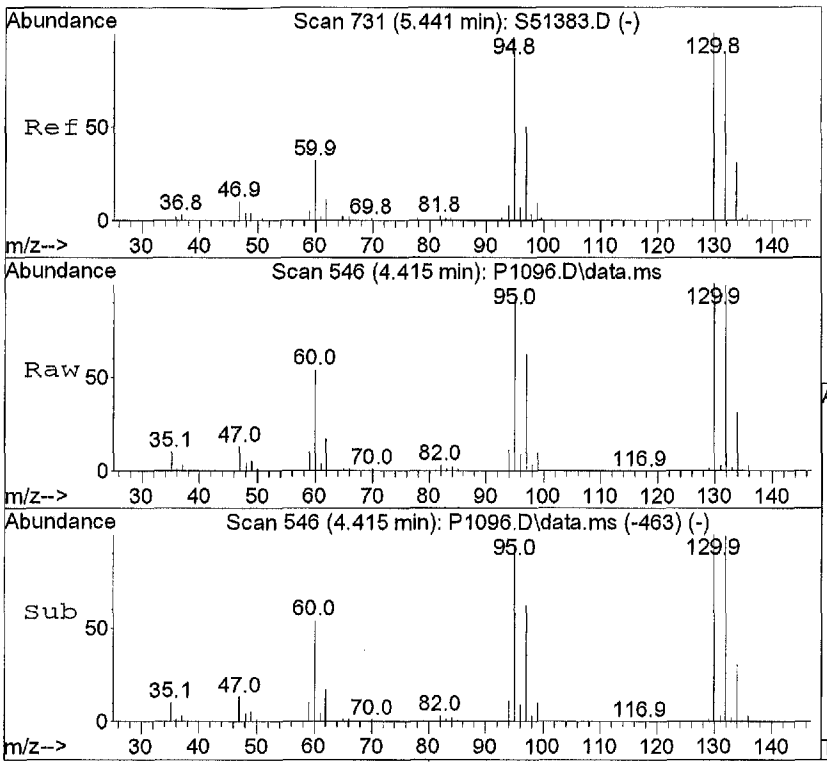
#24
cis-1,2-dichloroethene
Concen: 350.12 UG/L
RT: 3.513 min Scan# 398
Delta R.T. 0.000 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion: 96 Resp: 2104195

Ion	Ratio	Lower	Upper
96	100		
61	168.3	133.7	173.7
98	65.2	41.8	81.8



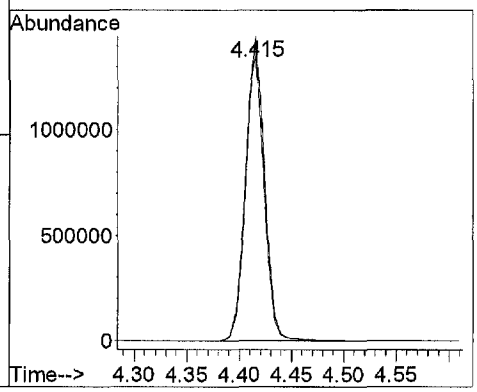
HDR013 V27

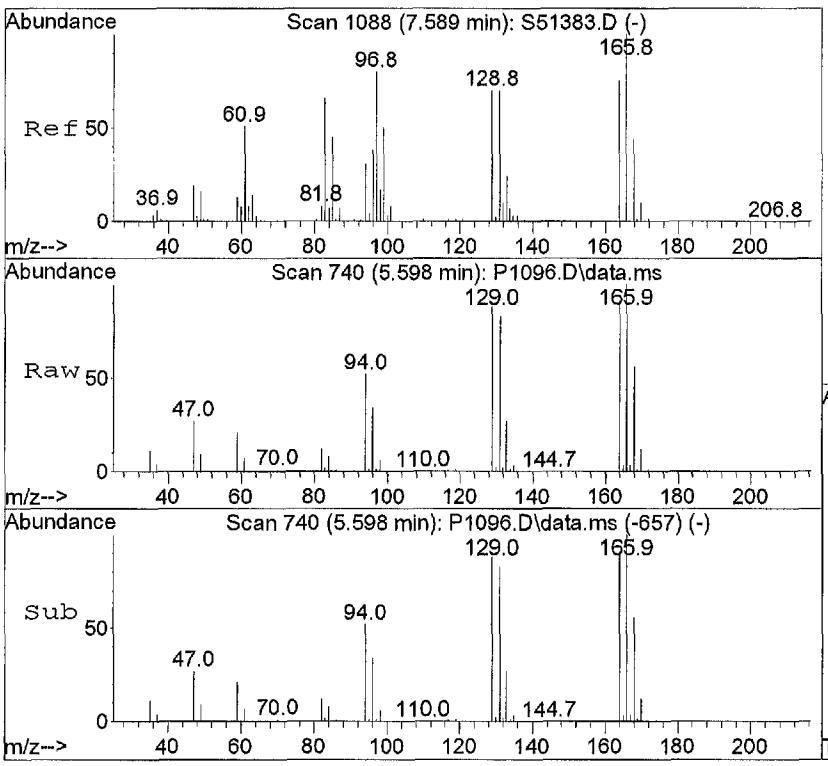


#41
trichloroethene
Concen: 294.81 UG/L
RT: 4.415 min Scan# 546
Delta R.T. 0.006 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion: 95 Resp: 1723833

Ion	Ratio	Lower	Upper
95	100		
130	105.2	58.8	98.8#
132	103.2	48.5	88.5#

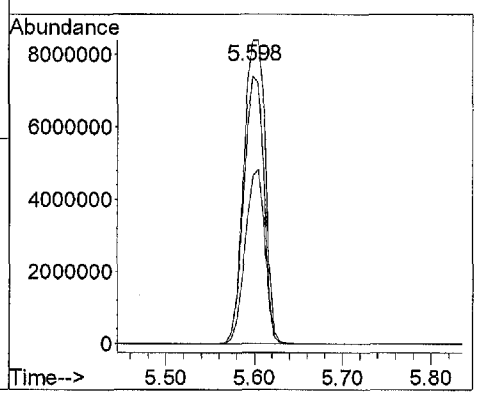




#56
tetrachloroethene
Concen: 2475.28 UG/L
RT: 5.598 min Scan# 740
Delta R.T. 0.006 min
Lab File: P1096.D
Acq: 2 Jun 2015 14:30

Tgt Ion:166 Resp:14350408

Ion	Ratio	Lower	Upper
166	100		
168	52.1	28.3	68.3
129	81.7	56.0	96.0



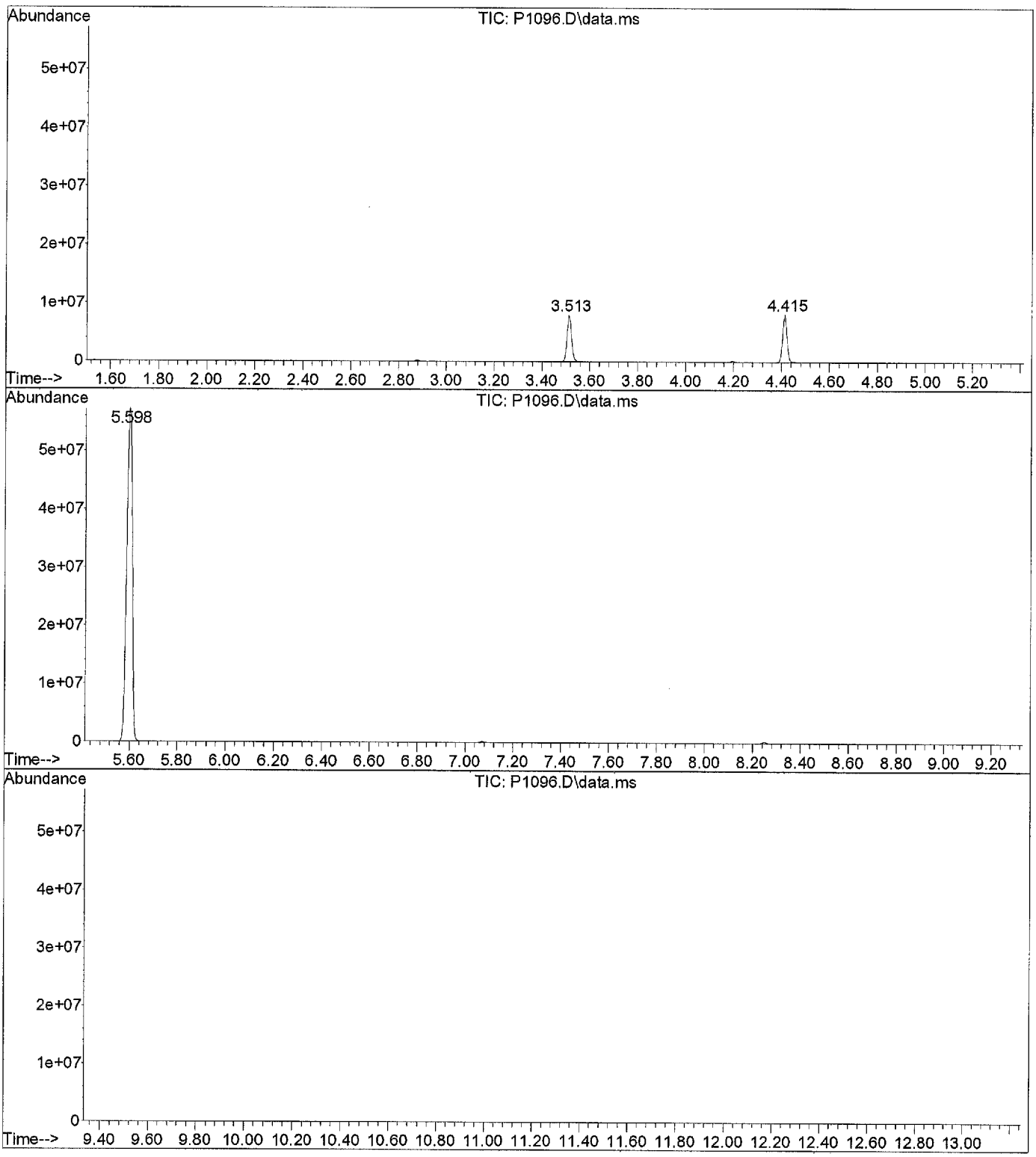
HDR013 V28

LSC Report - Integrated Chromatogram

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1096.D
Acq On : 2 Jun 2015 14:30
Operator : MN
Sample : 1505G38-001A
Misc : ,,,SAMP,,
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P



Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1096.D
Acq On : 2 Jun 2015 14:30
Operator : MN
Sample : 1505G38-001A
Misc : ,,,SAMP,,
ALS Vial : 21 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 14:43:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	91995	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	29340	5.33	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	106.60%			
87) 1,2-dichlorobenzene-d4	8.250	152	46082	5.82	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	116.40%			
Target Compounds							Qvalue
5) vinyl chloride MS 7/1/15	1.532	62	51257	8.46	UG/L		100
19) acetone not targeted	2.471	43	2437	1.13	ug/l		93
20) trans-1,2-dichloroethene	2.879	96	38019	6.90	UG/L	#	82
24) cis-1,2-dichloroethene	3.513	96	2104195	350.12	UG/L		91
41) trichloroethene	4.415	95	1723833	294.81	UG/L	#	64
56) tetrachloroethene	5.598	166	14350408	2475.28	UG/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Library Search Compound Report

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1096.D
Acq On : 2 Jun 2015 14:30
Operator : MN
Sample : 1505G38-001A
Misc : ,,,SAMP,,
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2 DL

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32998

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
594-20-7	2,2-Dichloropropane	50	U
156-59-2	cis-1,2-Dichloroethene	380	D
74-97-5	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon tetrachloride	50	U
563-58-6	1,1-Dichloropropene	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	320	D
78-87-5	1,2-Dichloropropane	50	U
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
127-18-4	Tetrachloroethene	2900	D
142-28-9	1,3-Dichloropropane	50	U
124-48-1	Dibromochloromethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
100-41-4	Ethylbenzene	50	U
179601-23-1	m,p-Xylene	50	U
95-47-6	o-Xylene	50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW2 DL

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32998

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
108-86-1	Bromobenzene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
96-18-4	1,2,3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
	2/4-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	50	U
135-98-8	sec-Butylbenzene	50	U
104-51-8	n-Butylbenzene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
1634-04-4	Methyl tert-butyl ether	50	U
	Total Trihalomethanes	50	U

1F

EPA SAMPLE NO.

MW2 DL

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-001A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32998

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 100.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

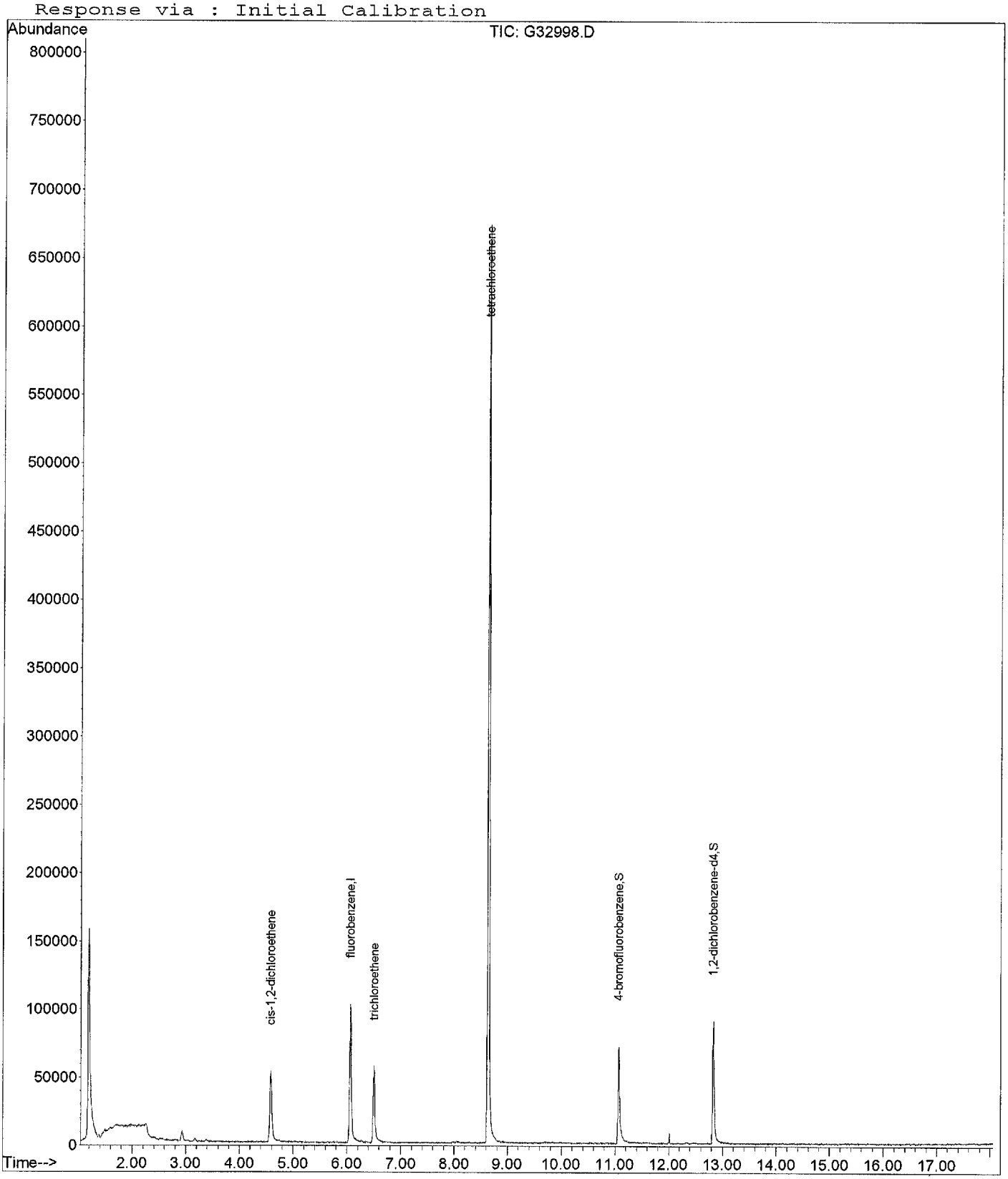
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

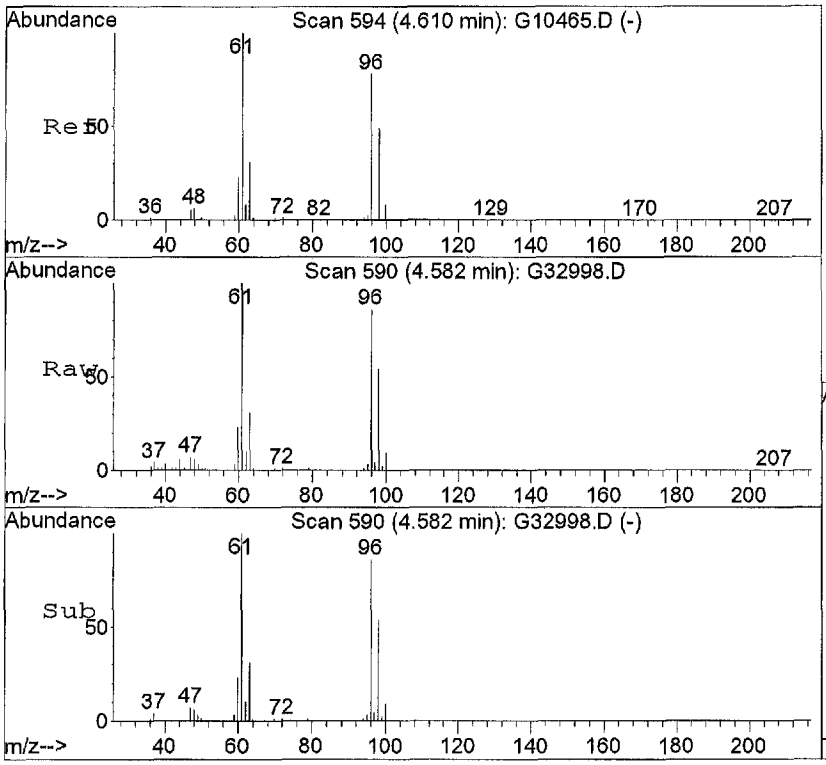
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G32998.D Vial: 29
Acq On : 3 Jun 2015 21:31 Operator: KGG
Sample : 1505G38-001A Inst : HP5972-2
Misc : HDR013,MW2,H2O,DL,,1:100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:46 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



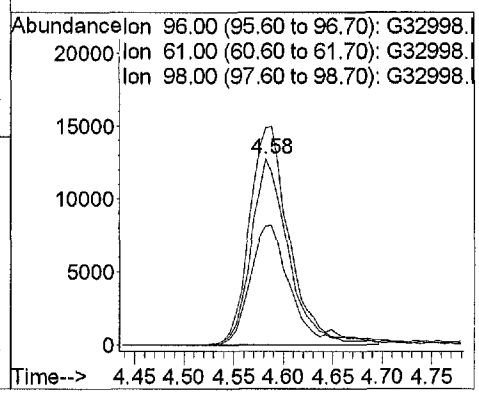
HDR013 V35

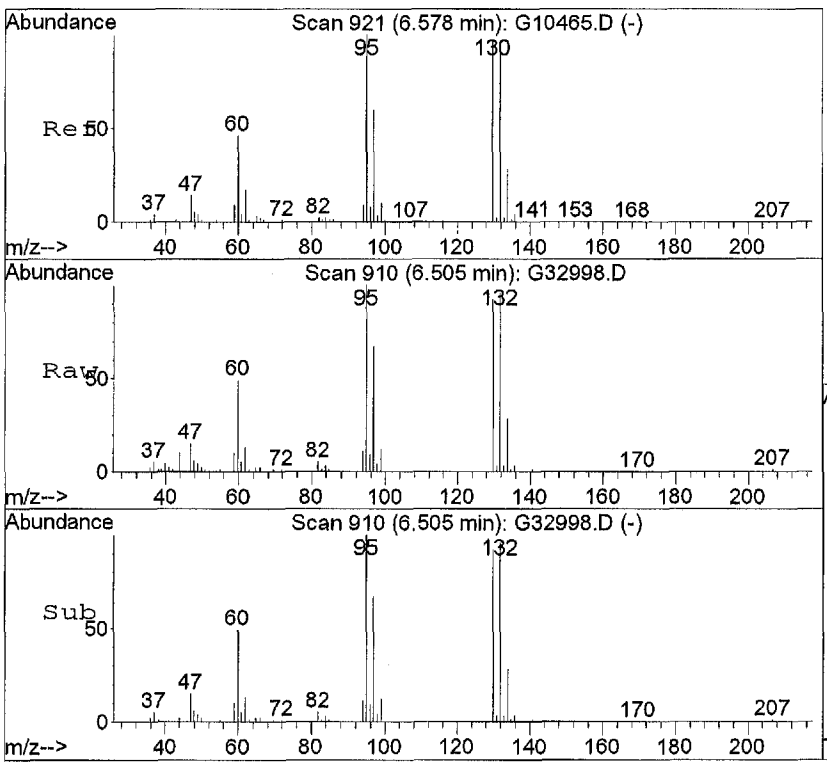


#18
cis-1,2-dichloroethene
Concen: 3.84 UG/L
RT: 4.58 min Scan# 590
Delta R.T. 0.07 min
Lab File: G32998.D
Acq: 3 Jun 2015 21:31

Tgt Ion: 96 Resp: 33870

Ion	Ratio	Lower	Upper
96	100		
61	126.5	93.1	133.1
98	67.6	46.6	86.6

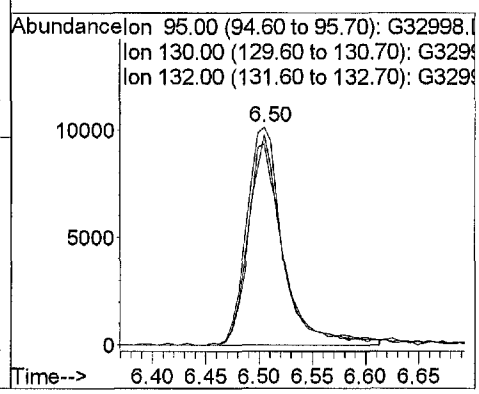




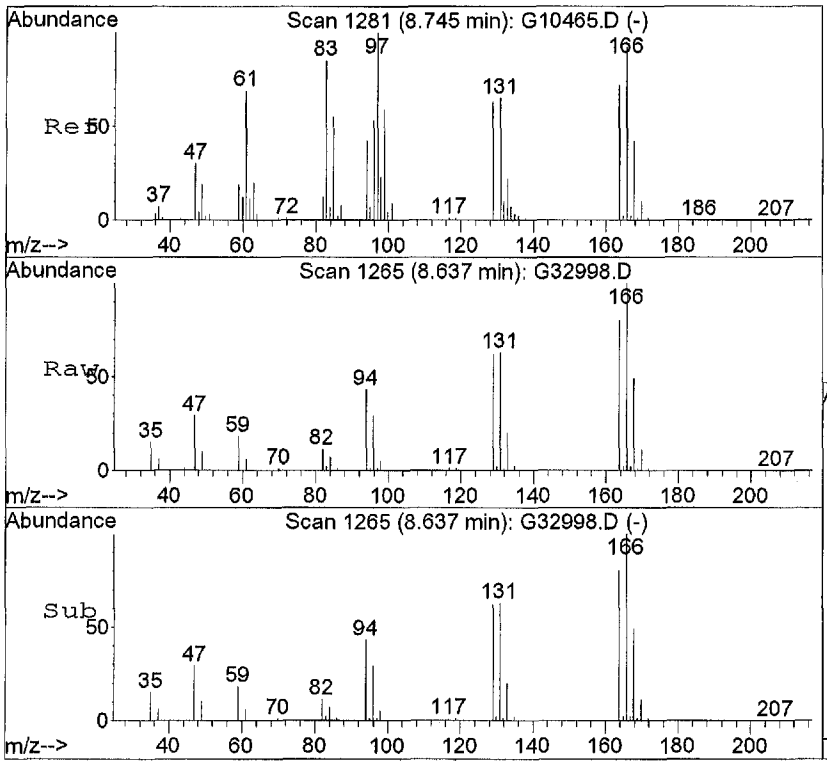
#27
trichloroethene
Concen: 3.16 UG/L
RT: 6.50 min Scan# 910
Delta R.T. 0.03 min
Lab File: G32998.D
Acq: 3 Jun 2015 21:31

Tgt Ion: 95 Resp: 24212

Ion	Ratio	Lower	Upper
95	100		
130	89.3	98.4	138.4#
132	89.1	97.9	137.9#



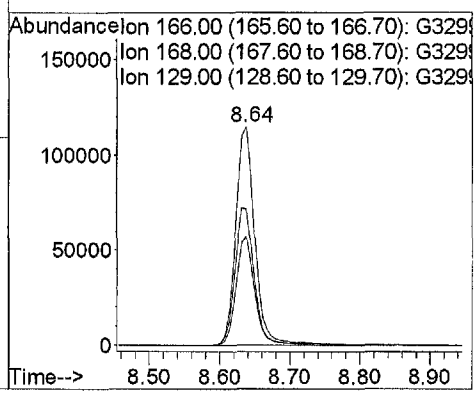
HDR013 V36



#36
tetrachloroethene
Concen: 28.53 UG/L
RT: 8.64 min Scan# 1265
Delta R.T. 0.00 min
Lab File: G32998.D
Acq: 3 Jun 2015 21:31

Tgt Ion:166 Resp: 219361

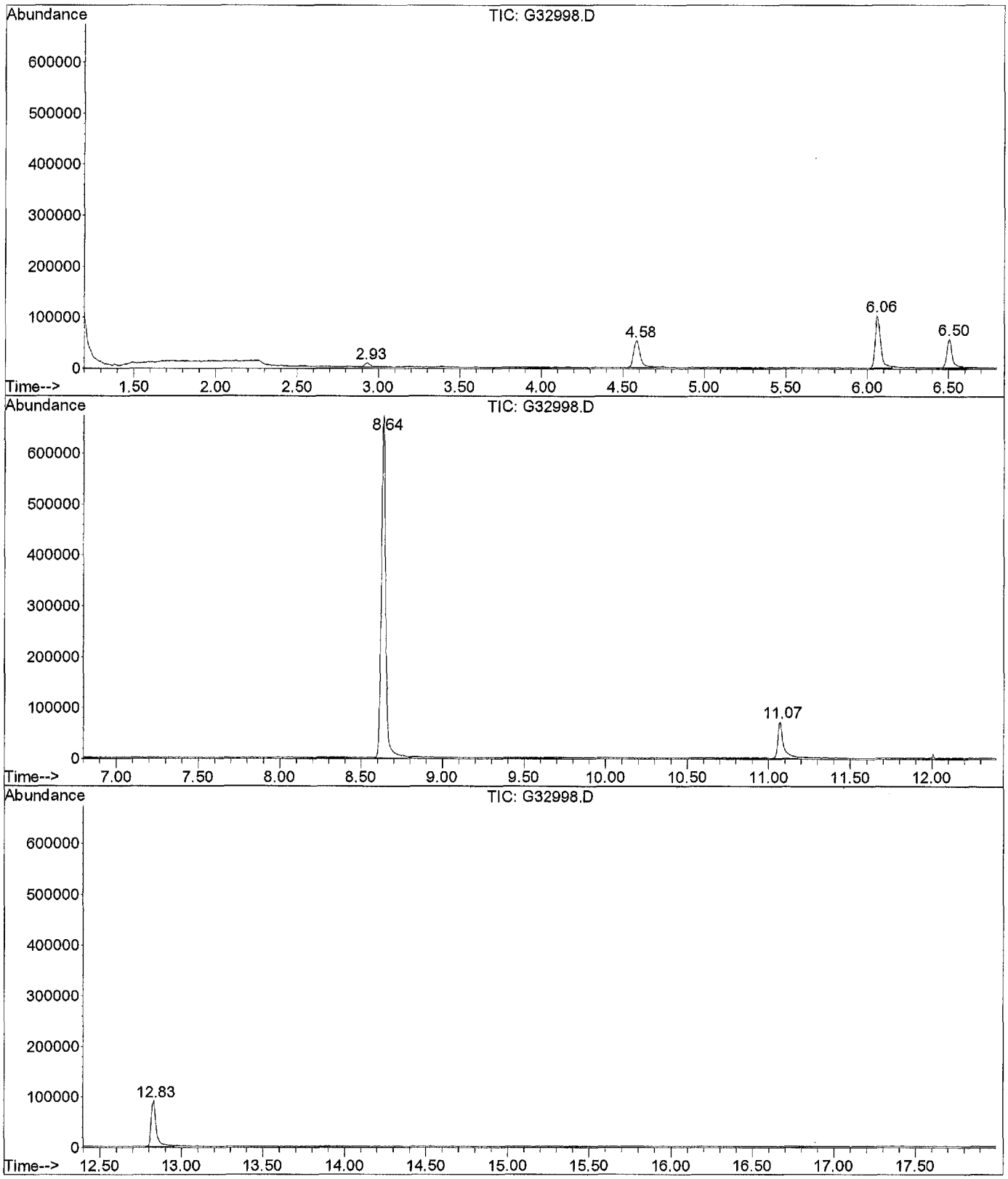
Ion	Ratio	Lower	Upper
166	100		
168	48.4	31.7	71.7
129	63.6	57.0	97.0



HDR013 V37

LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G32998.D
Operator : KGG
Acquired : 3 Jun 2015 21:31 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-001A
Misc Info : HDR013,MW2,H2O,DL,,1:100
Vial Number: 29
Quant File :524_0225.RES (RTE Integrator)



G32998.D 524_0225.M Tue Jun 30 14:43:37 2015 RPT1

HDR013 V38

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G32998.D Vial: 29
Acq On : 3 Jun 2015 21:31 Operator: KGG
Sample : 1505G38-001A Inst : HP5972-2
Misc : HDR013,MW2,H2O,DL,,1:100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:46 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.06	96	117287	5.00	UG/L	0.03
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	27674	4.52	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 90.40%			
62) 1,2-dichlorobenzene-d4	12.83	152	29606	4.58	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 91.60%			
Target Compounds						Qvalue
18) cis-1,2-dichloroethene	4.58	96	33870	3.84	UG/L	92
27) trichloroethene	6.50	95	24212	3.16	UG/L #	74
36) tetrachloroethene	8.64	166	219361	28.53	UG/L	89

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

HDR013 V39

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 21:31
Data File: C:\DATA\2015\JUNE15\060315\G32998.D
Name: 1505G38-001A
Misc: HDR013,MW2,H2O,DL,,1:100
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
G32998.D 524_0225.M	Tue Jun 30 14:43:37 2015				RPT1			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-002A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33000

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.9	
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	1	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-002A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33000

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.9	

1F

EPA SAMPLE NO.

MW5

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-002A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33000

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

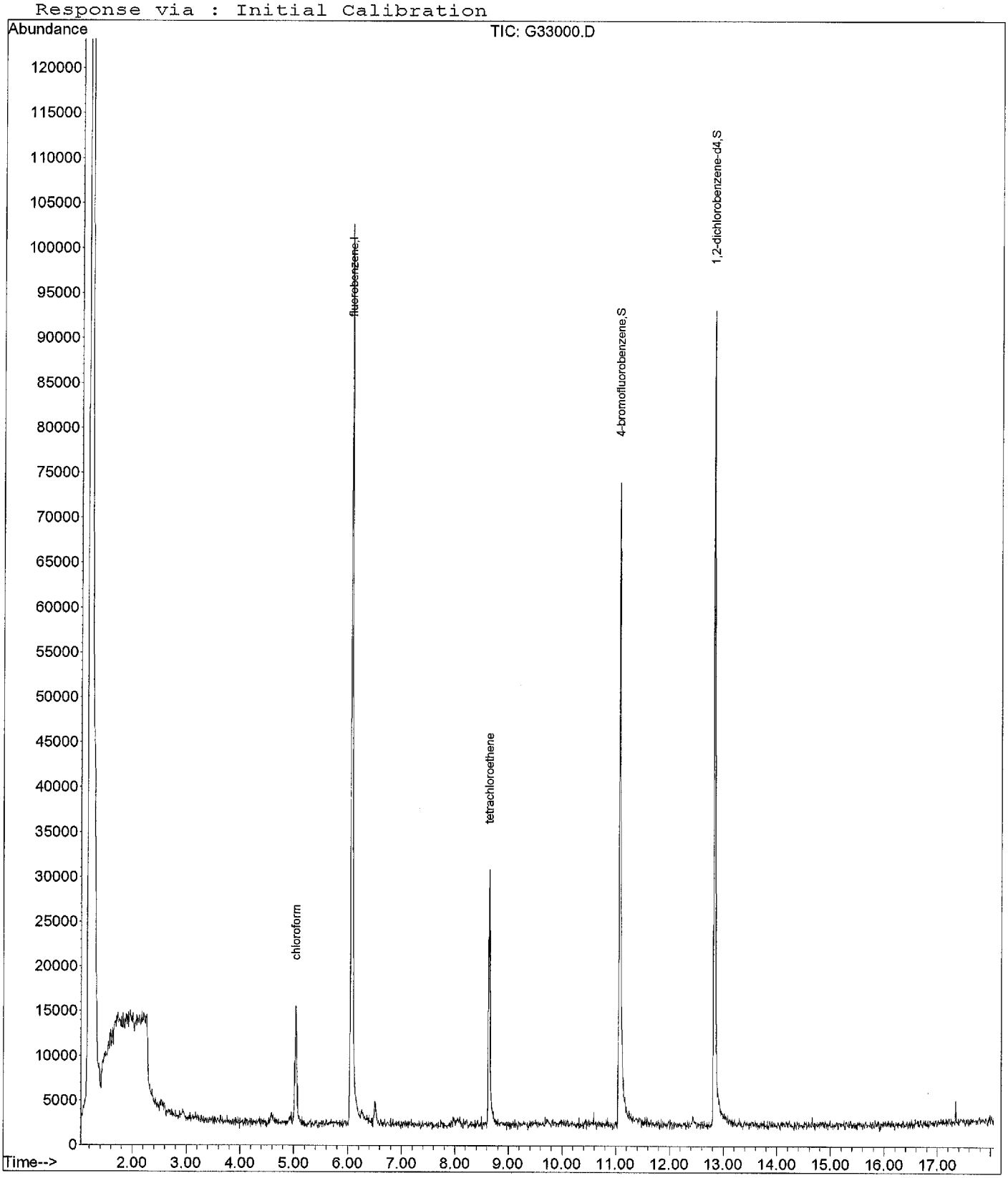
Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

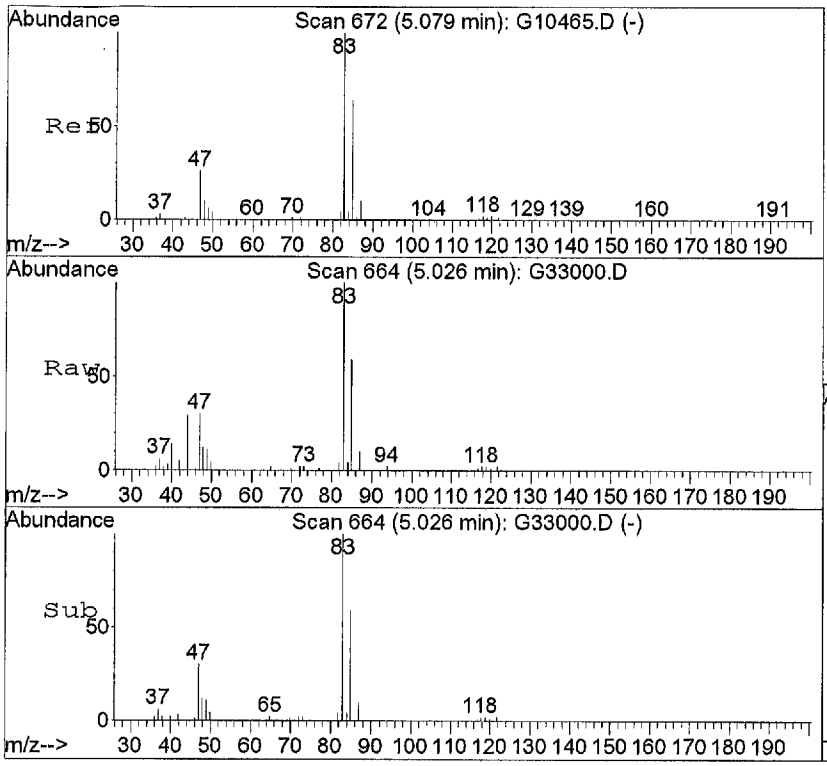
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G33000.D Vial: 31
Acq On : 3 Jun 2015 22:22 Operator: KGG
Sample : 1505G38-002A Inst : HP5972-2
Misc : HDR013,MW5,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:47 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



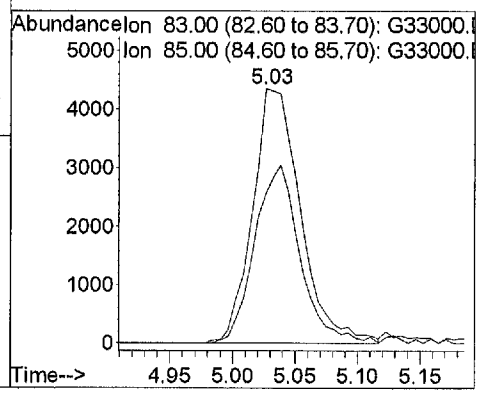
HDR013 V44

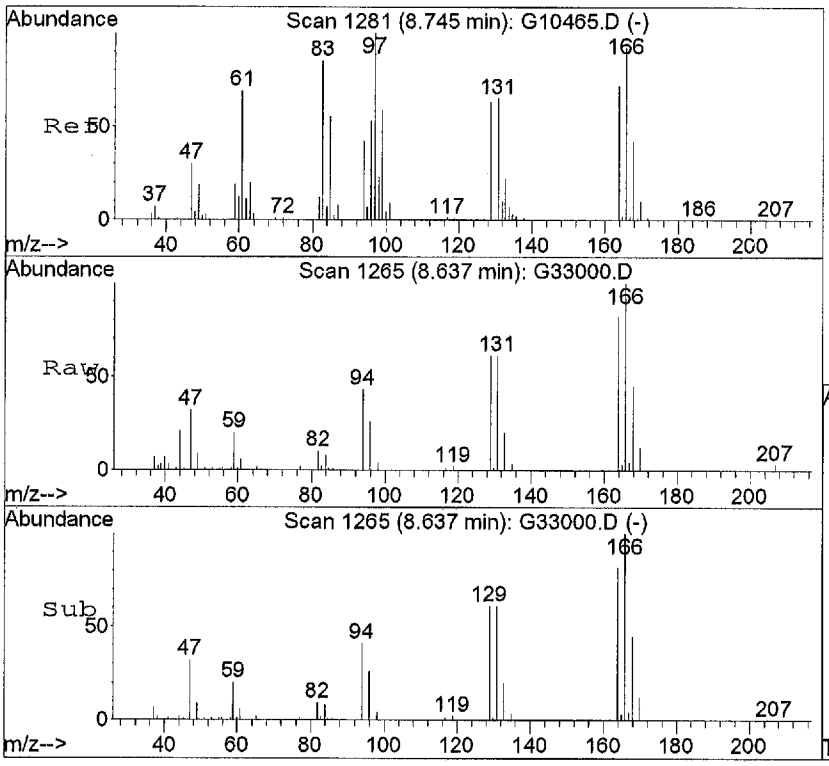


#21
chloroform
Concen: 0.92 UG/L
RT: 5.03 min Scan# 664
Delta R.T. 0.05 min
Lab File: G33000.D
Acq: 3 Jun 2015 22:22

Tgt Ion: 83 Resp: 11620

Ion	Ratio	Lower	Upper
83	100		
85	66.3	43.6	83.6

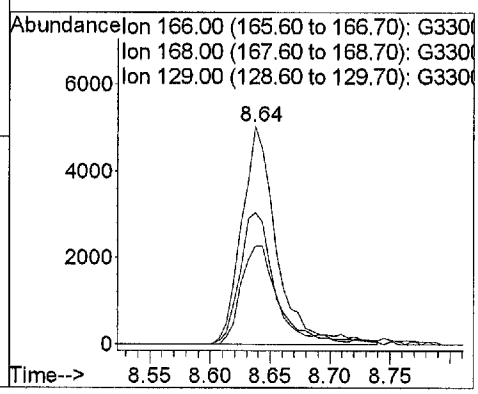




#36
tetrachloroethene
Concen: 1.38 UG/L
RT: 8.64 min Scan# 1265
Delta R.T. 0.00 min
Lab File: G33000.D
Acq: 3 Jun 2015 22:22

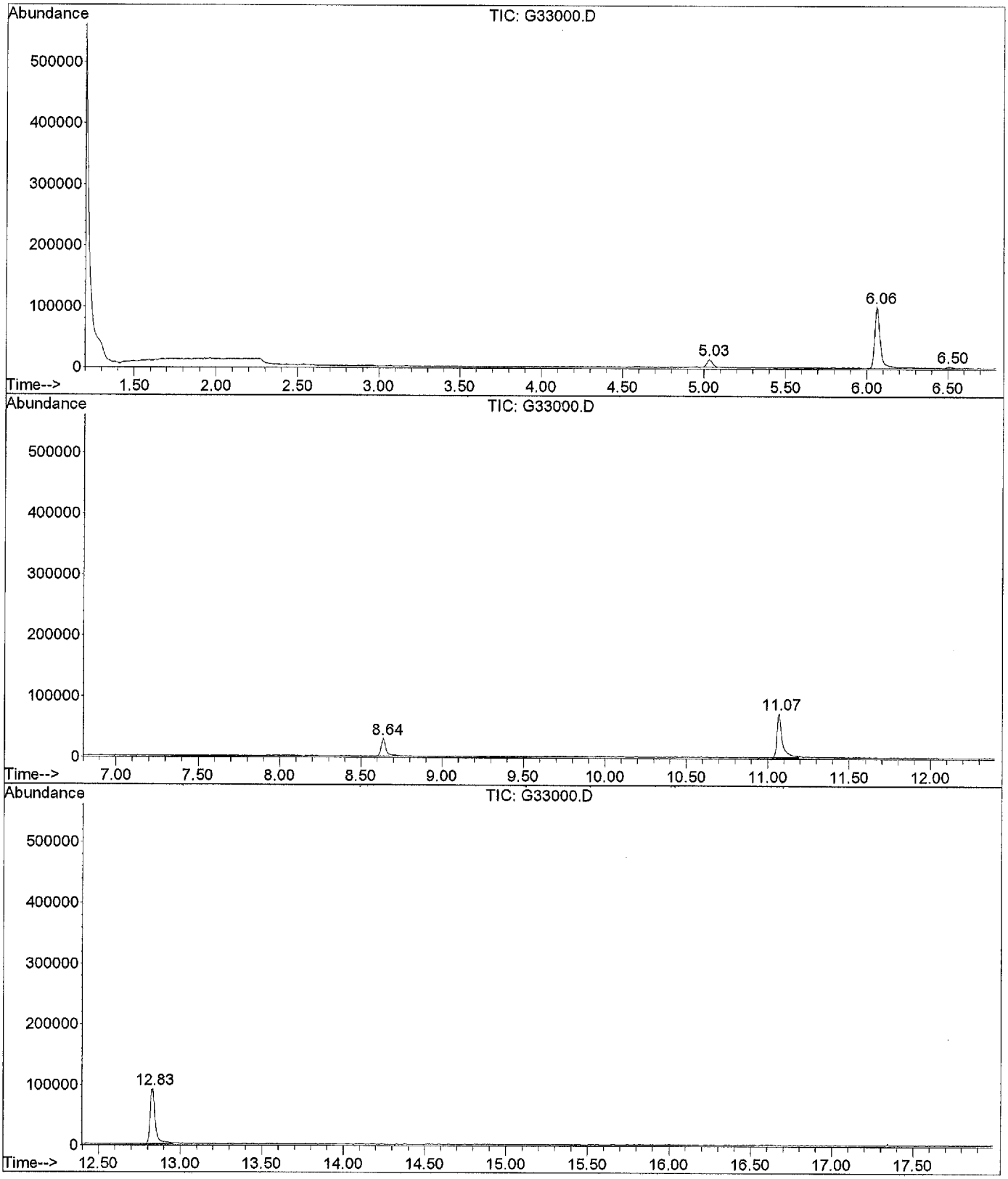
Tgt Ion:166 Resp: 10334

Ion	Ratio	Lower	Upper
166	100		
168	47.6	31.7	71.7
129	61.7	57.0	97.0



LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G33000.D
Operator : KGG
Acquired : 3 Jun 2015 22:22 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-002A
Misc Info : HDR013,MW5,H2O,SAMP,,
Vial Number: 31
Quant File :524_0225.RES (RTE Integrator)



G33000.D 524_0225.M Tue Jun 30 14:44:09 2015 RPT1

HDR013 V46

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G33000.D Vial: 31
Acq On : 3 Jun 2015 22:22 Operator: KGG
Sample : 1505G38-002A Inst : HP5972-2
Misc : HDR013,MW5,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:47 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.06	96	114323	5.00	UG/L	0.03
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	27823	4.66	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 93.20%			
62) 1,2-dichlorobenzene-d4	12.83	152	30216	4.79	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 95.80%			
Target Compounds						Qvalue
21) chloroform	5.03	83	11620	0.92	UG/L	97
36) tetrachloroethene	8.64	166	10334	1.38	UG/L	87

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

HDR013 V47

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 22:22
Data File: C:\DATA\2015\JUNE15\060315\G33000.D
Name: 1505G38-002A
Misc: HDR013,MW5,H2O,SAMP,,
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
G33000.D 524_0225.M	Tue Jun 30 14:44:09 2015				RPT1			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW8

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-003A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33001

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	1	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	1	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	3	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW8

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-003A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33001

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW8

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-003A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33001

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

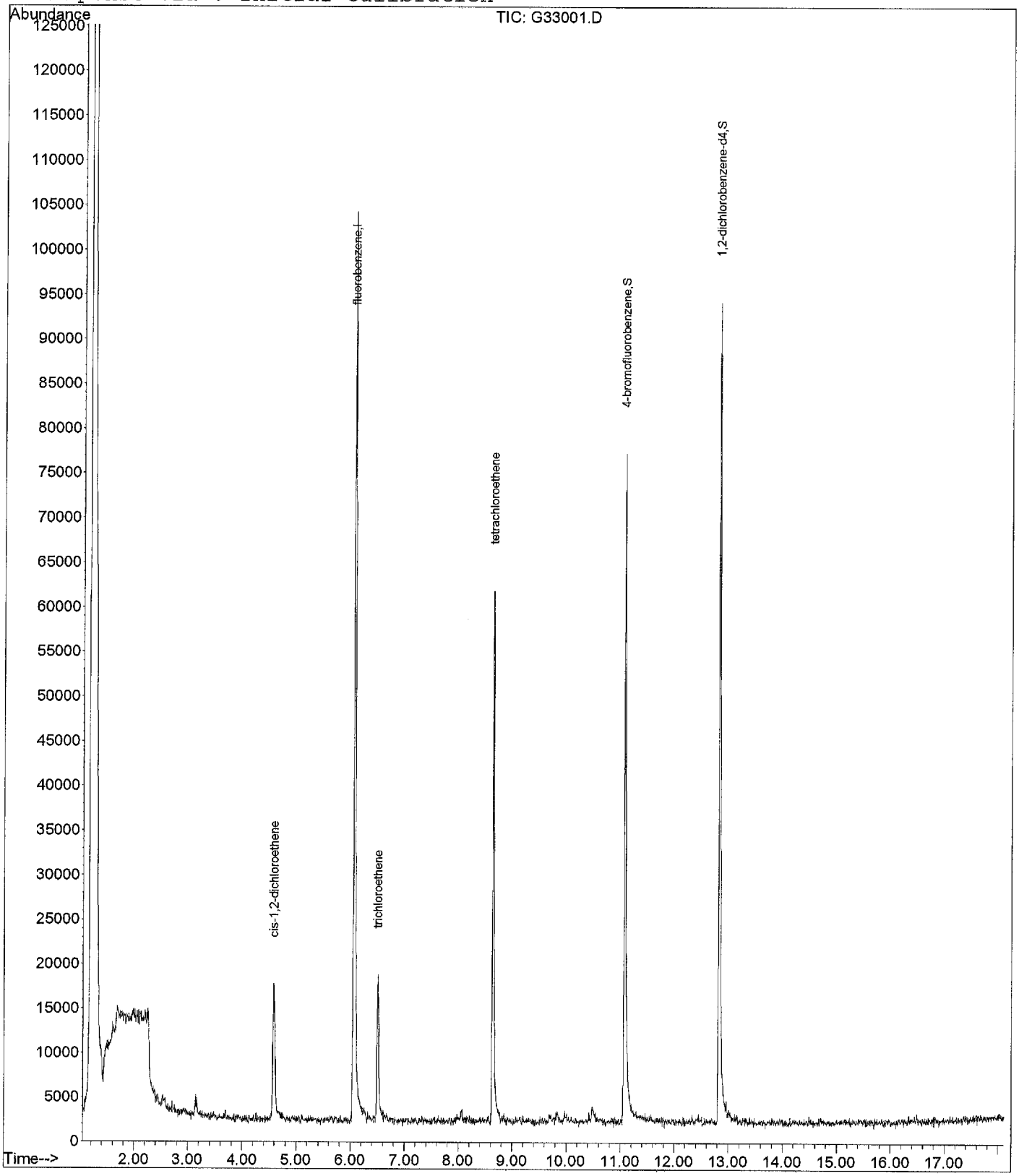
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

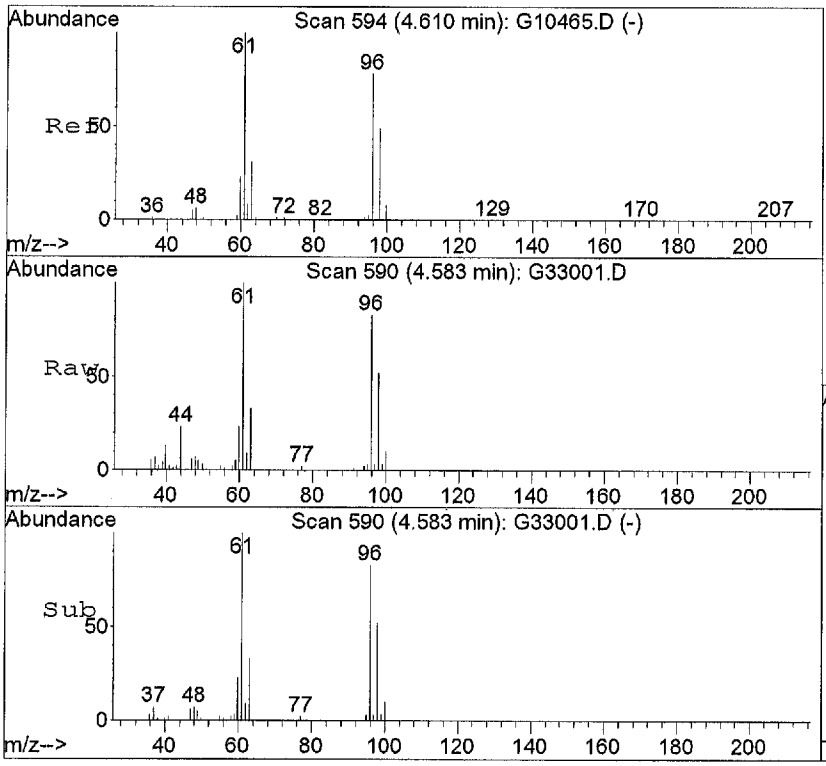
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G33001.D Vial: 32
Acq On : 3 Jun 2015 22:47 Operator: KGG
Sample : 1505G38-003A Inst : HP5972-2
Misc : HDR013,MW8,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:47 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



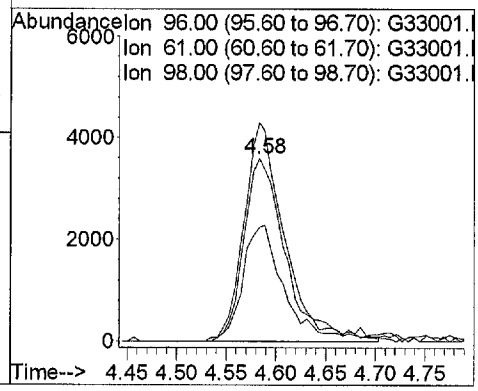
HDR013 V52

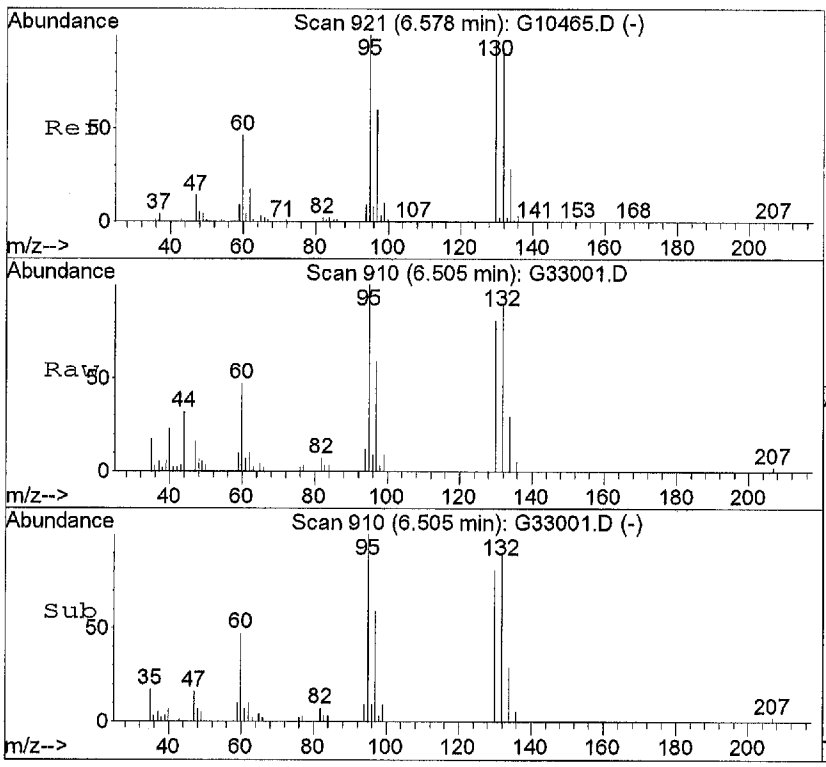


#18
cis-1,2-dichloroethene
Concen: 1.22 UG/L
RT: 4.58 min Scan# 590
Delta R.T. 0.07 min
Lab File: G33001.D
Acq: 3 Jun 2015 22:47

Tgt Ion: 96 Resp: 10471

Ion	Ratio	Lower	Upper
96	100		
61	115.0	93.1	133.1
98	64.2	46.6	86.6

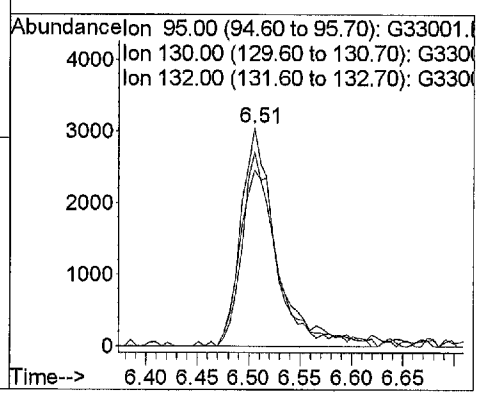


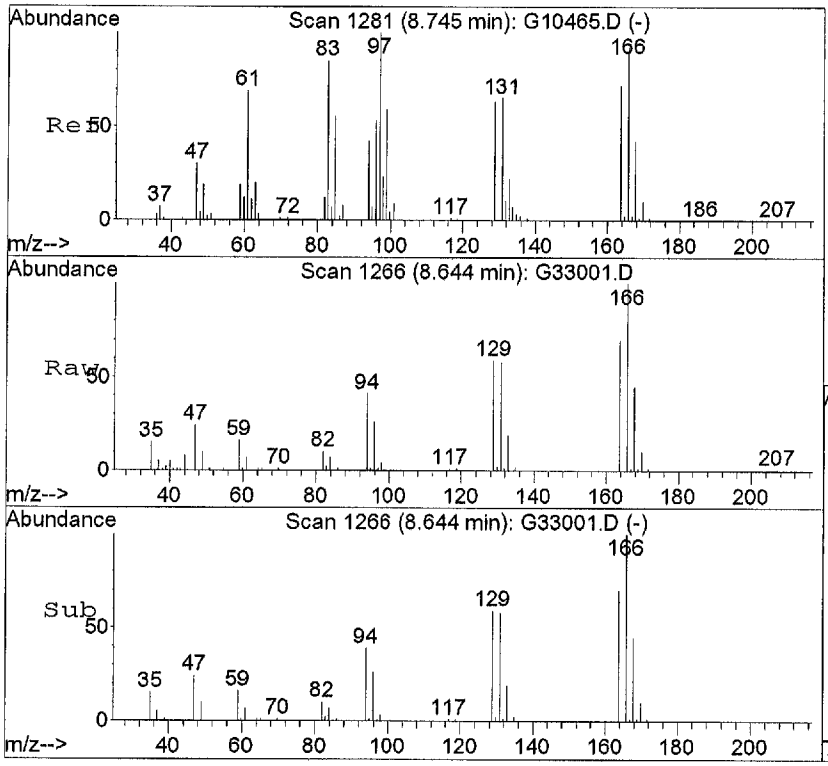


#27
trichloroethene
Concen: 1.00 UG/L
RT: 6.51 min Scan# 910
Delta R.T. 0.03 min
Lab File: G33001.D
Acq: 3 Jun 2015 22:47

Tgt Ion: 95 Resp: 7391

Ion	Ratio	Lower	Upper
95	100		
130	84.1	98.4	138.4#
132	83.4	97.9	137.9#

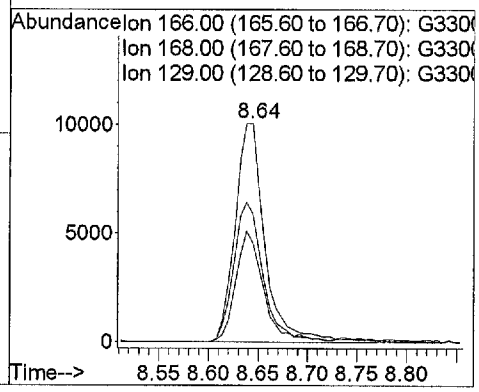




#36
tetrachloroethene
Concen: 2.85 UG/L
RT: 8.64 min Scan# 1266
Delta R.T. 0.01 min
Lab File: G33001.D
Acq: 3 Jun 2015 22:47

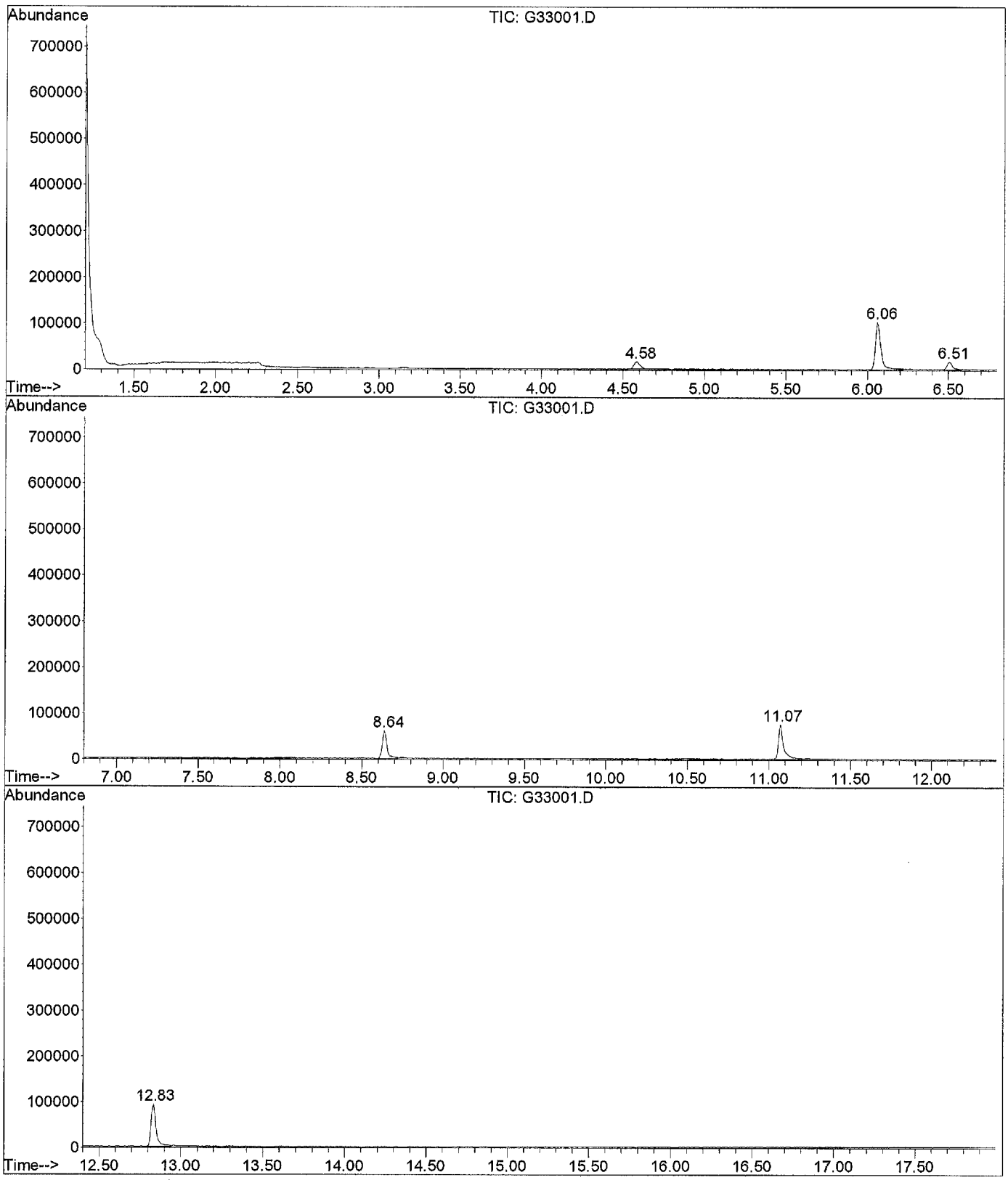
Tgt Ion:166 Resp: 21250

Ion	Ratio	Lower	Upper
166	100		
168	46.7	31.7	71.7
129	62.8	57.0	97.0



LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G33001.D
Operator : KGG
Acquired : 3 Jun 2015 22:47 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-003A
Misc Info : HDR013,MW8,H2O,SAMP,,
Vial Number: 32
Quant File :524_0225.RES (RTE Integrator)



G33001.D 524_0225.M Tue Jun 30 14:44:25 2015 RPT1

HDR013 V55

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G33001.D Vial: 32
Acq On : 3 Jun 2015 22:47 Operator: KGG
Sample : 1505G38-003A Inst : HP5972-2
Misc : HDR013,MW8,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:47 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.07	96	113742	5.00	UG/L	0.04
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	28307	4.77	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 95.40%			
62) 1,2-dichlorobenzene-d4	12.83	152	30626	4.88	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 97.60%			
Target Compounds						Qvalue
18) cis-1,2-dichloroethene	4.58	96	10471	1.22	UG/L	98
27) trichloroethene	6.51	95	7391	1.00	UG/L #	69
36) tetrachloroethene	8.64	166	21250	2.85	UG/L	87

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

HDR013 V56

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 22:47
Data File: C:\DATA\2015\JUNE15\060315\G33001.D
Name: 1505G38-003A
Misc: HDR013,MW8,H2O,SAMP,,
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
G33001.D 524_0225.M	Tue Jun 30 14:44:25 2015				RPT1			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-004A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33002

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.6	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	2	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW9

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-004A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33002

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW9

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-004A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33002

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

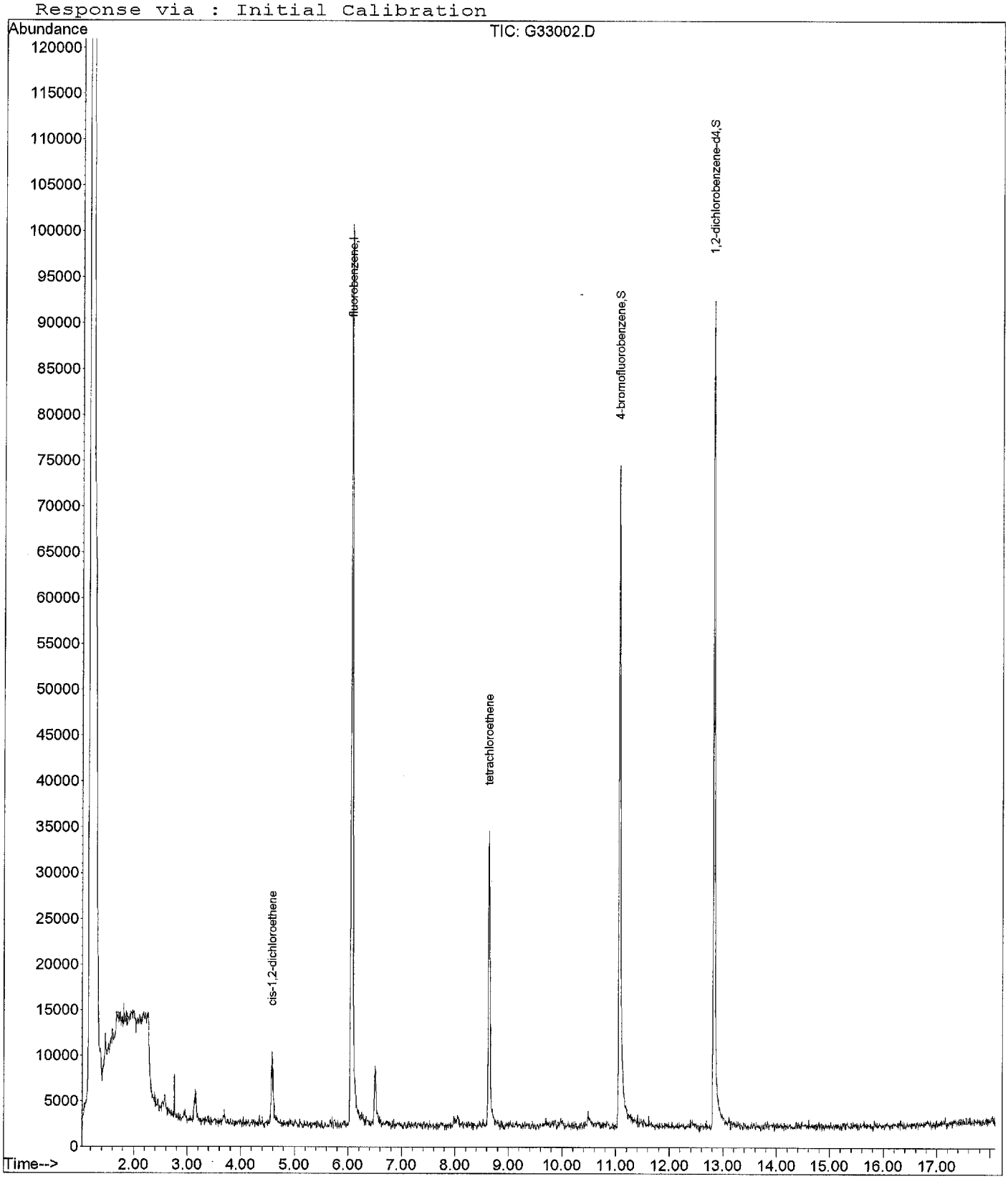
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

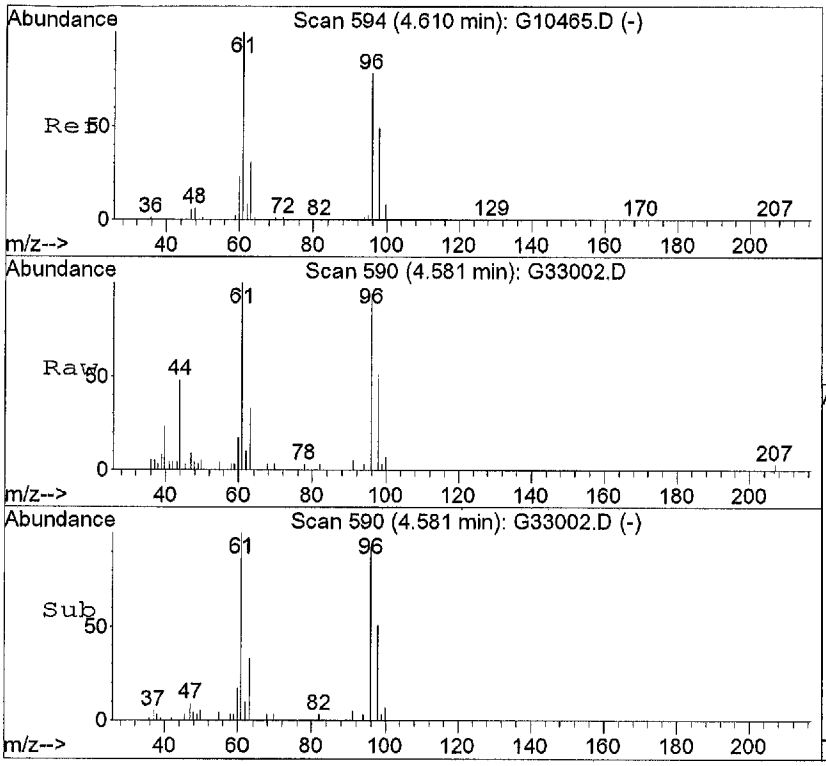
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G33002.D Vial: 33
Acq On : 3 Jun 2015 23:13 Operator: KGG
Sample : 1505G38-004A Inst : HP5972-2
Misc : HDR013,MW9,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:48 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



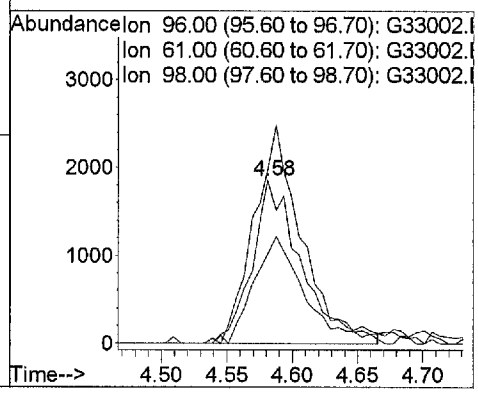
HDR013 V61

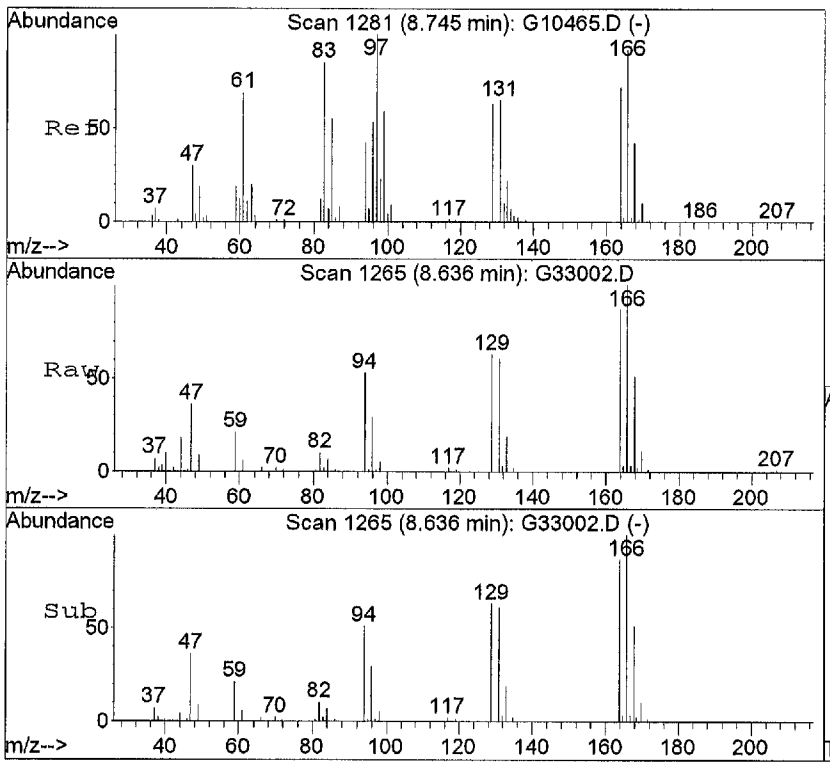


#18
cis-1,2-dichloroethene
Concen: 0.57 UG/L
RT: 4.58 min Scan# 590
Delta R.T. 0.07 min
Lab File: G33002.D
Acq: 3 Jun 2015 23:13

Tgt Ion: 96 Resp: 4865

Ion	Ratio	Lower	Upper
96	100		
61	130.6	93.1	133.1
98	67.3	46.6	86.6

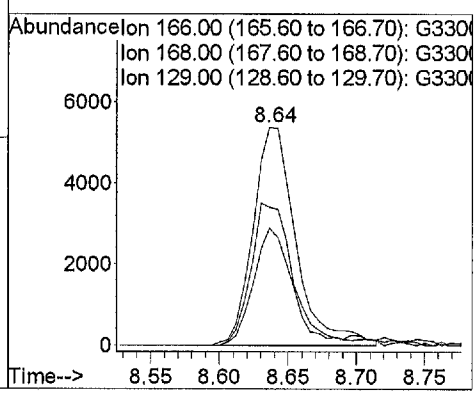




#36
tetrachloroethene
Concen: 1.57 UG/L
RT: 8.64 min Scan# 1265
Delta R.T. 0.00 min
Lab File: G33002.D
Acq: 3 Jun 2015 23:13

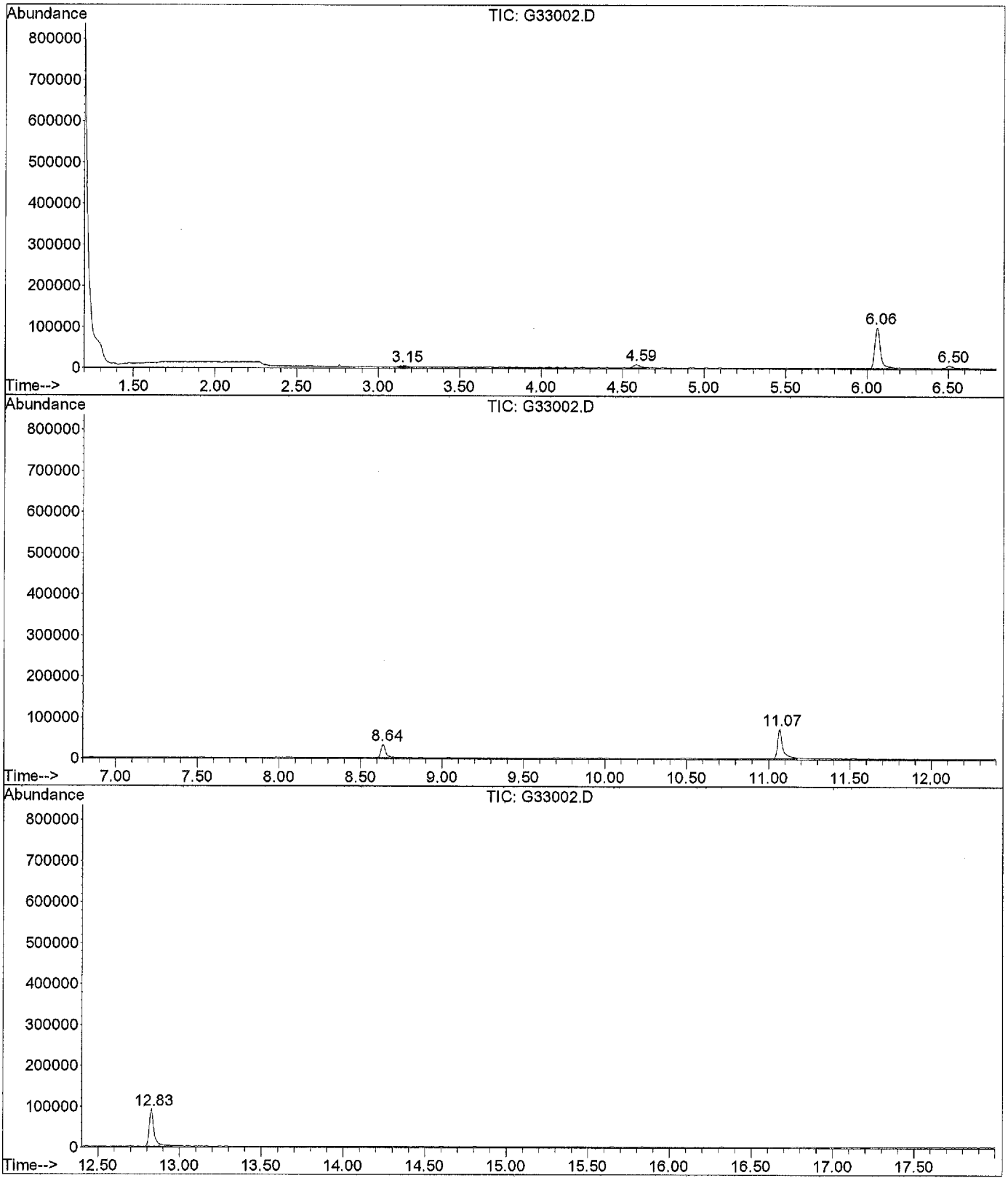
Tgt Ion:166 Resp: 11679

Ion	Ratio	Lower	Upper
166	100		
168	49.0	31.7	71.7
129	63.2	57.0	97.0



LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G33002.D
Operator : KGG
Acquired : 3 Jun 2015 23:13 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-004A
Misc Info : HDR013,MW9,H2O,SAMP,,
Vial Number: 33
Quant File :524_0225.RES (RTE Integrator)



G33002.D 524_0225.M Tue Jun 30 14:44:38 2015 RPT1

HDR013 V63

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G33002.D Vial: 33
Acq On : 3 Jun 2015 23:13 Operator: KGG
Sample : 1505G38-004A Inst : HP5972-2
Misc : HDR013,MW9,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:48 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.07	96	113784	5.00	UG/L	0.04
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	27712	4.67	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 93.40%			
62) 1,2-dichlorobenzene-d4	12.83	152	29065	4.63	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 92.60%			
Target Compounds						Qvalue
18) cis-1,2-dichloroethene	4.58	96	4865	0.57	UG/L	89
36) tetrachloroethene	8.64	166	11679	1.57	UG/L	89

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

HDR013 V64

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 23:13
Data File: C:\DATA\2015\JUNE15\060315\G33002.D
Name: 1505G38-004A
Misc: HDR013,MW9,H2O,SAMP,,
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
G33002.D 524_0225.M	Tue Jun 30 14:44:38 2015				RPT1			

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW10

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-005A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32997

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	2	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	21	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

EPA SAMPLE NO.

MW10

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-005A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32997

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW10

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-005A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32997

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

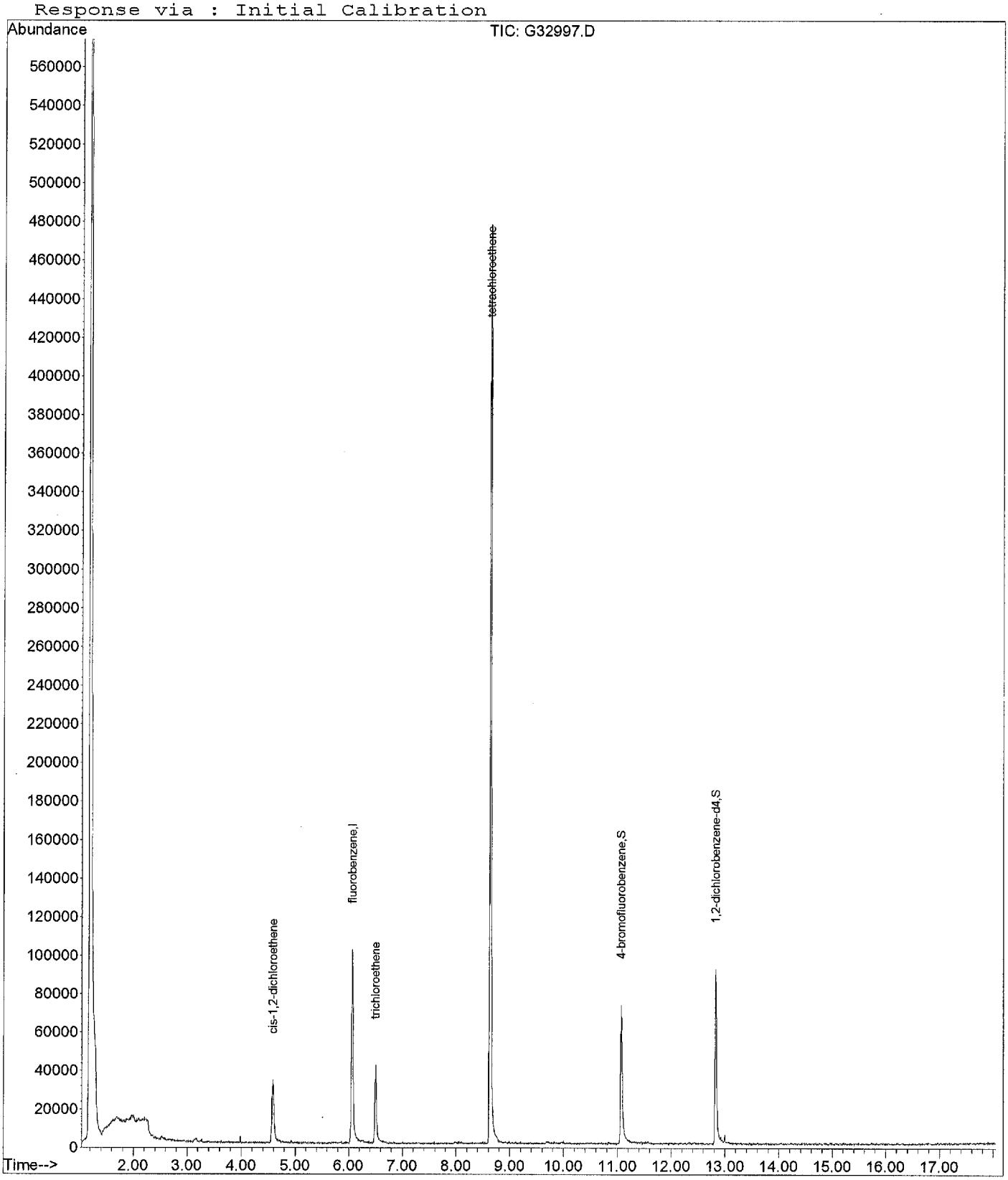
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

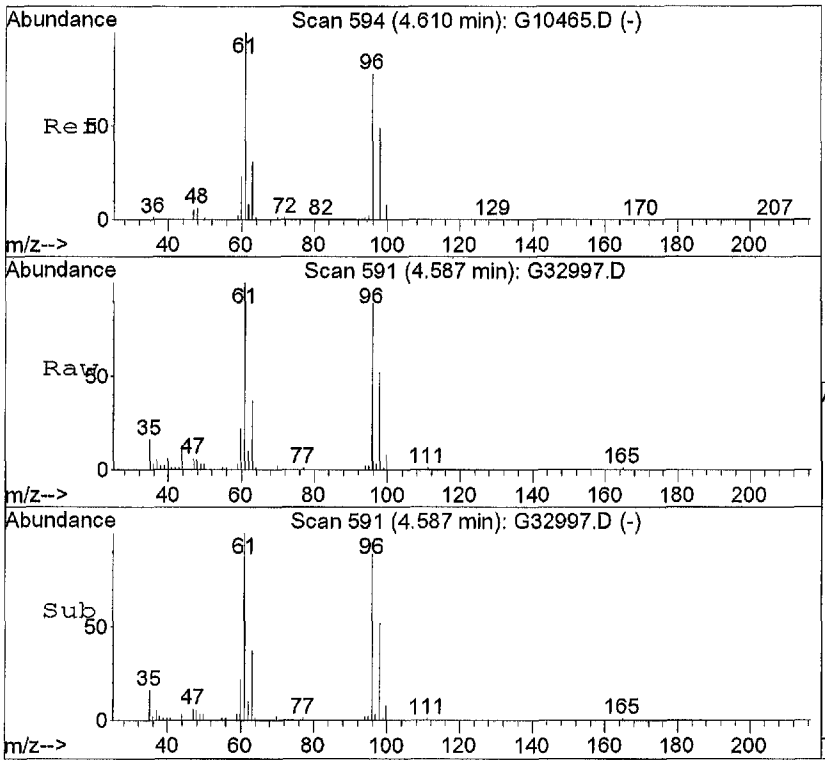
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G32997.D Vial: 28
Acq On : 3 Jun 2015 21:06 Operator: KGG
Sample : 1505G38-005A Inst : HP5972-2
Misc : HDR013,MW10,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:45 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



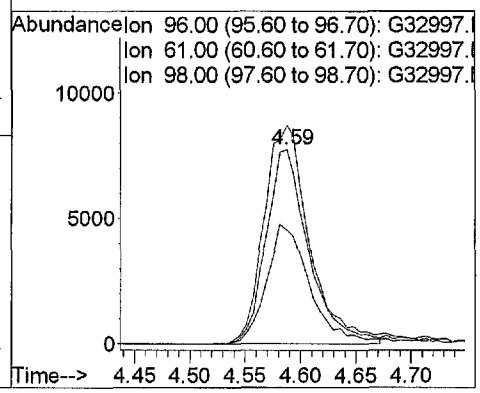
HDR013 V69

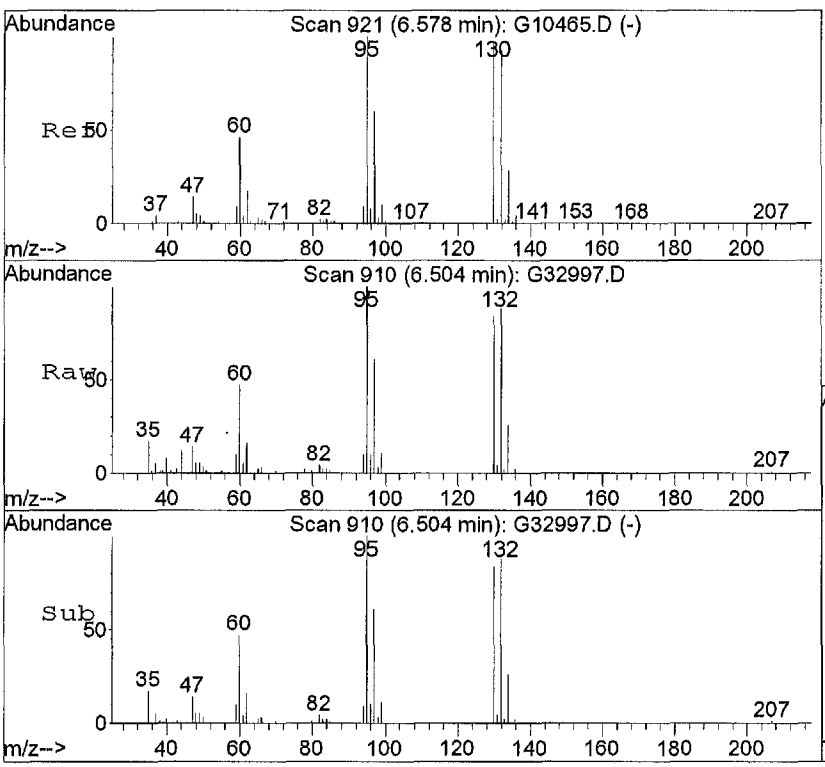


#18
cis-1,2-dichloroethene
Concen: 2.45 UG/L
RT: 4.59 min Scan# 591
Delta R.T. 0.07 min
Lab File: G32997.D
Acq: 3 Jun 2015 21:06

Tgt Ion: 96 Resp: 20668

Ion	Ratio	Lower	Upper
96	100		
61	122.6	93.1	133.1
98	63.5	46.6	86.6

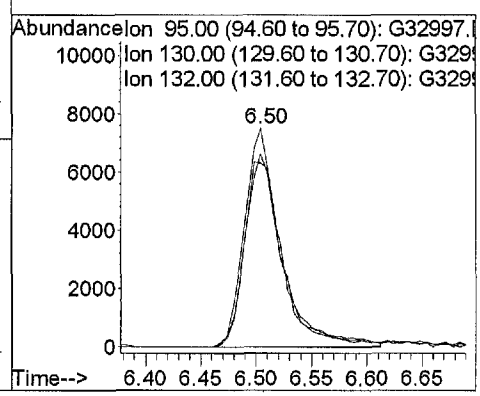


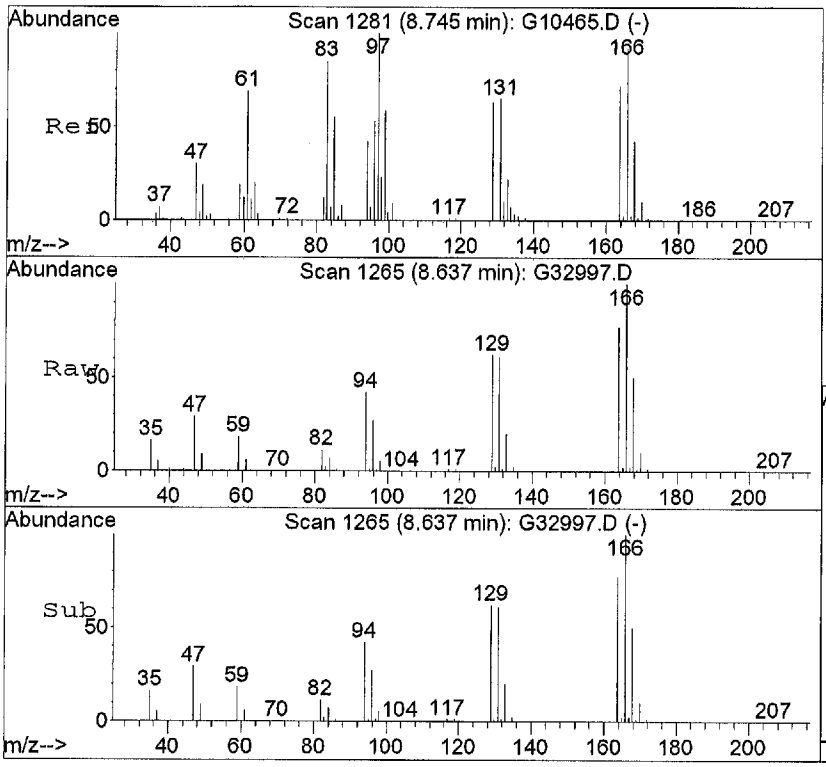


#27
trichloroethene
Concen: 2.33 UG/L
RT: 6.50 min Scan# 910
Delta R.T. 0.03 min
Lab File: G32997.D
Acq: 3 Jun 2015 21:06

Tgt Ion: 95 Resp: 17038

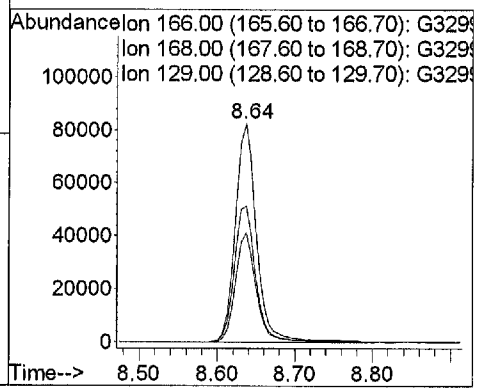
Ion	Ratio	Lower	Upper
95	100		
130	90.7	98.4	138.4#
132	87.8	97.9	137.9#





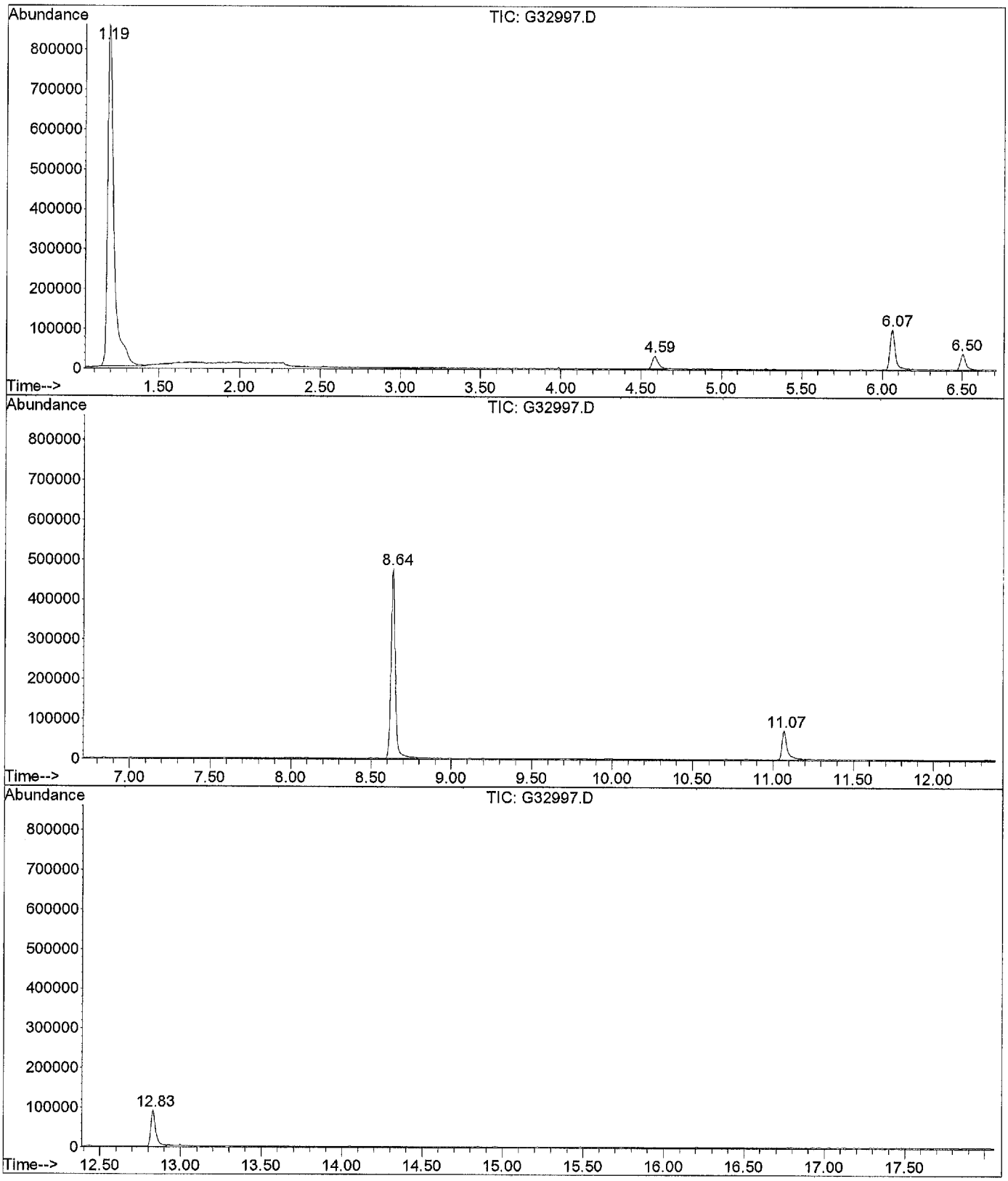
#36
tetrachloroethene
Concen: 21.28 UG/L
RT: 8.64 min Scan# 1265
Delta R.T. 0.00 min
Lab File: G32997.D
Acq: 3 Jun 2015 21:06

Tgt Ion:166	Resp:	156148	
Ion	Ratio	Lower	Upper
166	100		
168	48.9	31.7	71.7
129	63.4	57.0	97.0



LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G32997.D
Operator : KGG
Acquired : 3 Jun 2015 21:06 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-005A
Misc Info : HDR013,MW10,H2O,SAMP,,
Vial Number: 28
Quant File :524_0225.RES (RTE Integrator)



G32997.D 524_0225.M Tue Jun 30 14:42:54 2015 RPT1

HDR013 V72

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G32997.D Vial: 28
Acq On : 3 Jun 2015 21:06 Operator: KGG
Sample : 1505G38-005A Inst : HP5972-2
Misc : HDR013,MW10,H2O,SAMP,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:45 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.07	96	111960	5.00	UG/L	0.04
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	28489	4.87	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 97.40%			
62) 1,2-dichlorobenzene-d4	12.83	152	30770	4.98	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 99.60%			
Target Compounds						Qvalue
18) cis-1,2-dichloroethene	4.59	96	20668	2.45	UG/L	93
27) trichloroethene	6.50	95	17038	2.33	UG/L #	74
36) tetrachloroethene	8.64	166	156148	21.28	UG/L	89

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

HDR013 V73

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 21:06
Data File: C:\DATA\2015\JUNE15\060315\G32997.D
Name: 1505G38-005A
Misc: HDR013,MW10,H2O,SAMP,,
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

G32997.D 524_0225.M Tue Jun 30 14:43:16 2015 RPT1

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW11D

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-006A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1103.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	4	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	2	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	10	
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11D

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-006A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1103.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW11D

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-006A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1103.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

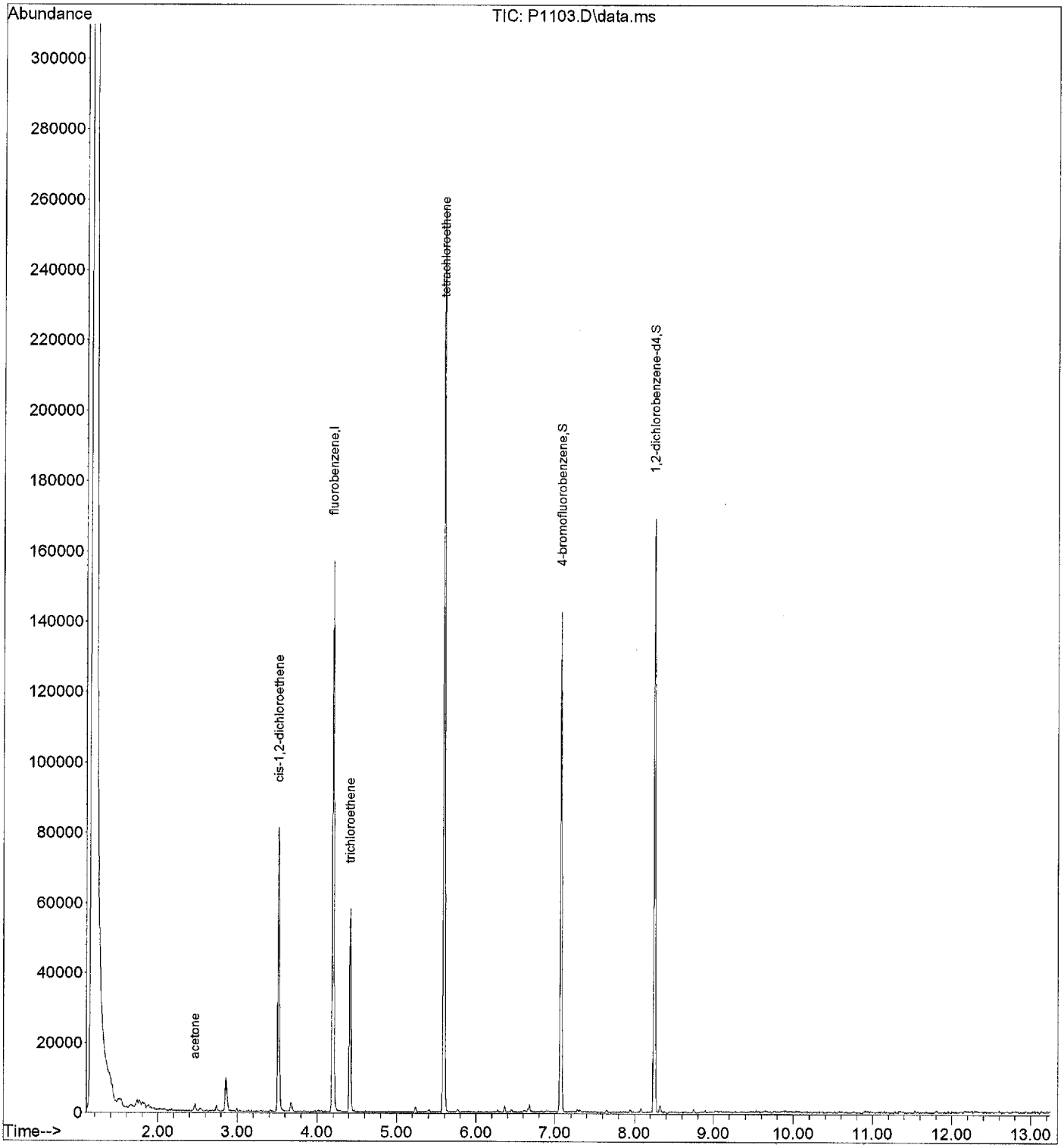
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

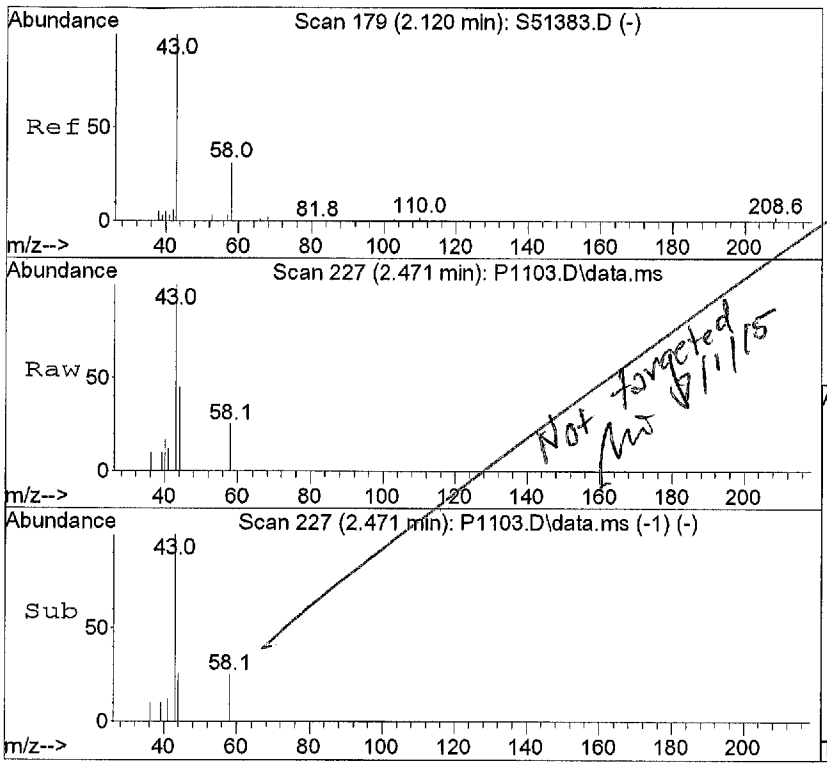
Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1103.D
Acq On : 2 Jun 2015 17:23
Operator : MN
Sample : 1505G38-006A
Misc : ,,,SAMP,,
ALS Vial : 28 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 18:22:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



HDR013 V78

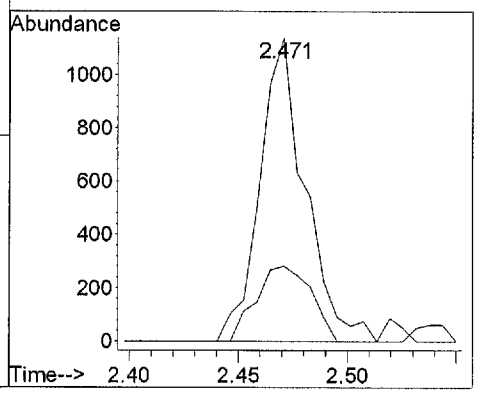


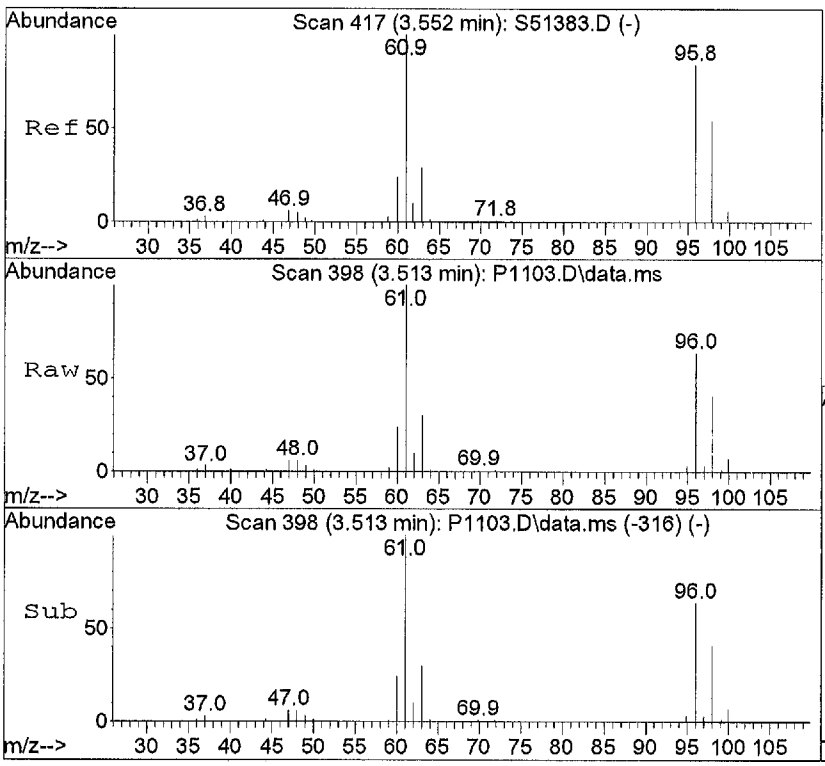
#19
acetone
Concen: 0.82 ug/l
RT: 2.471 min Scan# 227
Delta R.T. 0.006 min
Lab File: P1103.D
Acq: 2 Jun 2015 17:23

Tgt Ion: 43 Resp: 1645

Ion	Ratio	Lower	Upper
43	100		
58	30.2	25.6	38.4

Not targeted 6/11/15

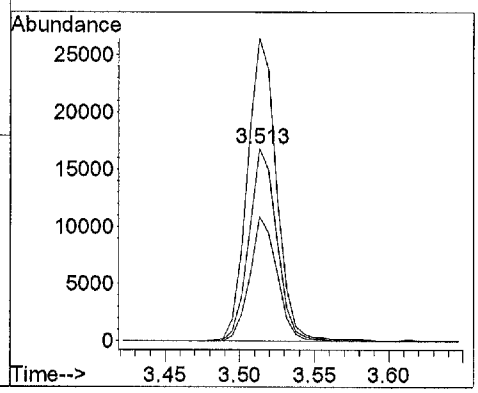




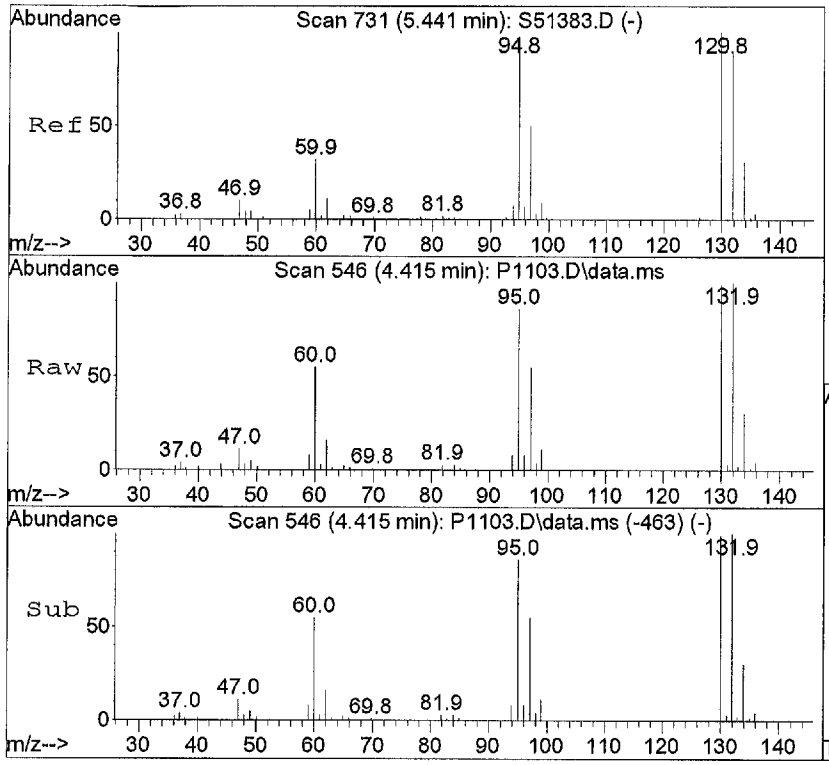
#24
cis-1,2-dichloroethene
Concen: 3.91 UG/L
RT: 3.513 min Scan# 398
Delta R.T. 0.000 min
Lab File: P1103.D
Acq: 2 Jun 2015 17:23

Tgt Ion: 96 Resp: 21963

Ion	Ratio	Lower	Upper
96	100		
61	164.5	133.7	173.7
98	63.1	41.8	81.8



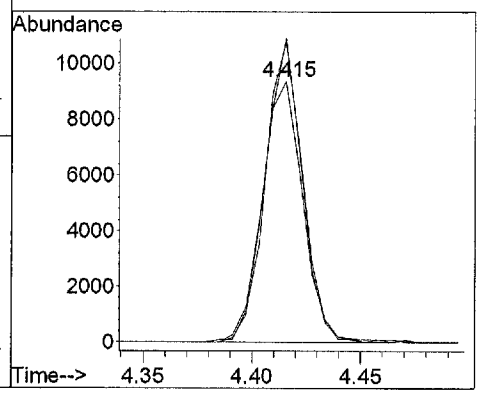
HDR013 V79

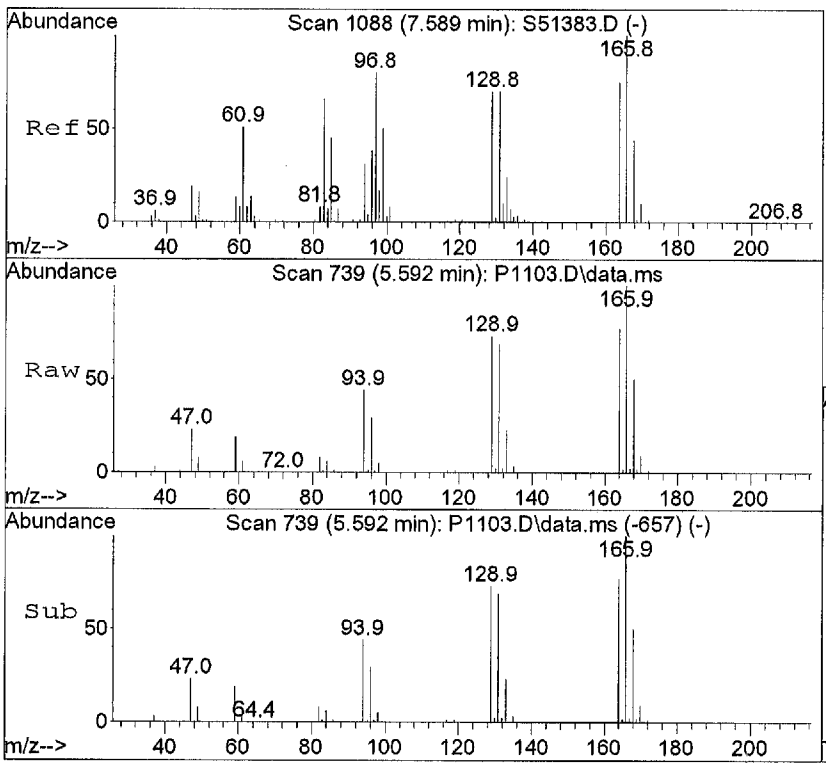


#41
trichloroethene
Concen: 2.24 UG/L
RT: 4.415 min Scan# 546
Delta R.T. 0.006 min
Lab File: P1103.D
Acq: 2 Jun 2015 17:23

Tgt Ion: 95 Resp: 12212

Ion	Ratio	Lower	Upper
95	100		
130	106.6	58.8	98.8#
132	106.3	48.5	88.5#

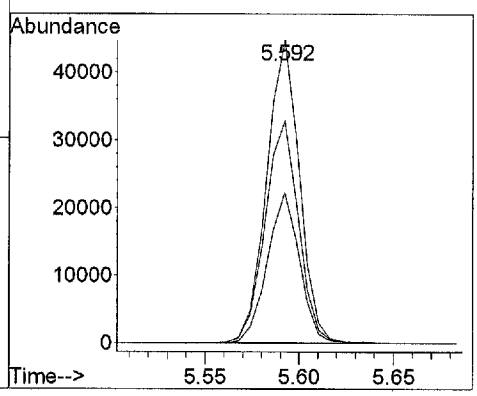




#56
tetrachloroethene
Concen: 10.05 UG/L
RT: 5.592 min Scan# 739
Delta R.T. 0.000 min
Lab File: P1103.D
Acq: 2 Jun 2015 17:23

Tgt Ion:166 Resp: 54386

Ion	Ratio	Lower	Upper
166	100		
168	48.7	28.3	68.3
129	75.0	56.0	96.0

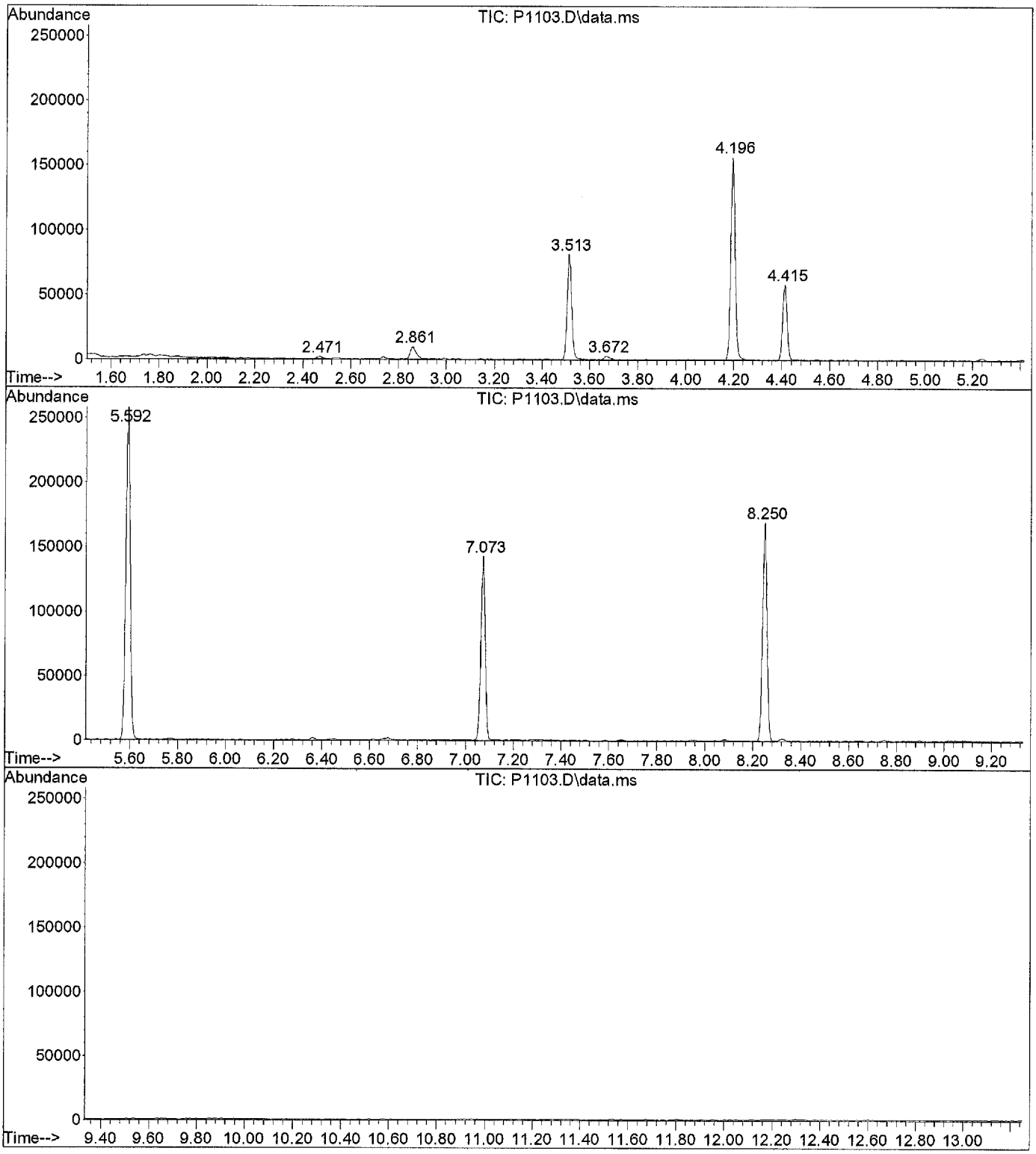


LSC Report - Integrated Chromatogram

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1103.D
Acq On : 2 Jun 2015 17:23
Operator : MN
Sample : 1505G38-006A
Misc : ,,,SAMP,,
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P



HDR013 V81

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1103.D
Acq On : 2 Jun 2015 17:23
Operator : MN
Sample : 1505G38-006A
Misc : ,,,SAMP,,
ALS Vial : 28 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 18:22:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	85885	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	30222	5.88	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 117.60%				
87) 1,2-dichlorobenzene-d4	8.250	152	34568	4.68	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 93.60%				
Target Compounds							Qvalue
19) acetone	2.471	43	1645	0.82	ug/l		97
24) cis-1,2-dichloroethene	3.513	96	21963	3.91	UG/L		94
41) trichloroethene	4.415	95	12212	2.24	UG/L	#	61
56) tetrachloroethene	5.592	166	54386	10.05	UG/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

HDR013 V82

Library Search Compound Report

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1103.D
Acq On : 2 Jun 2015 17:23
Operator : MN
Sample : 1505G38-006A
Misc : ,,,SAMP,,
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1102.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	3	
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	2	
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	96	
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	58	
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	220	E
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1102.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

MW11M

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1102.D

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

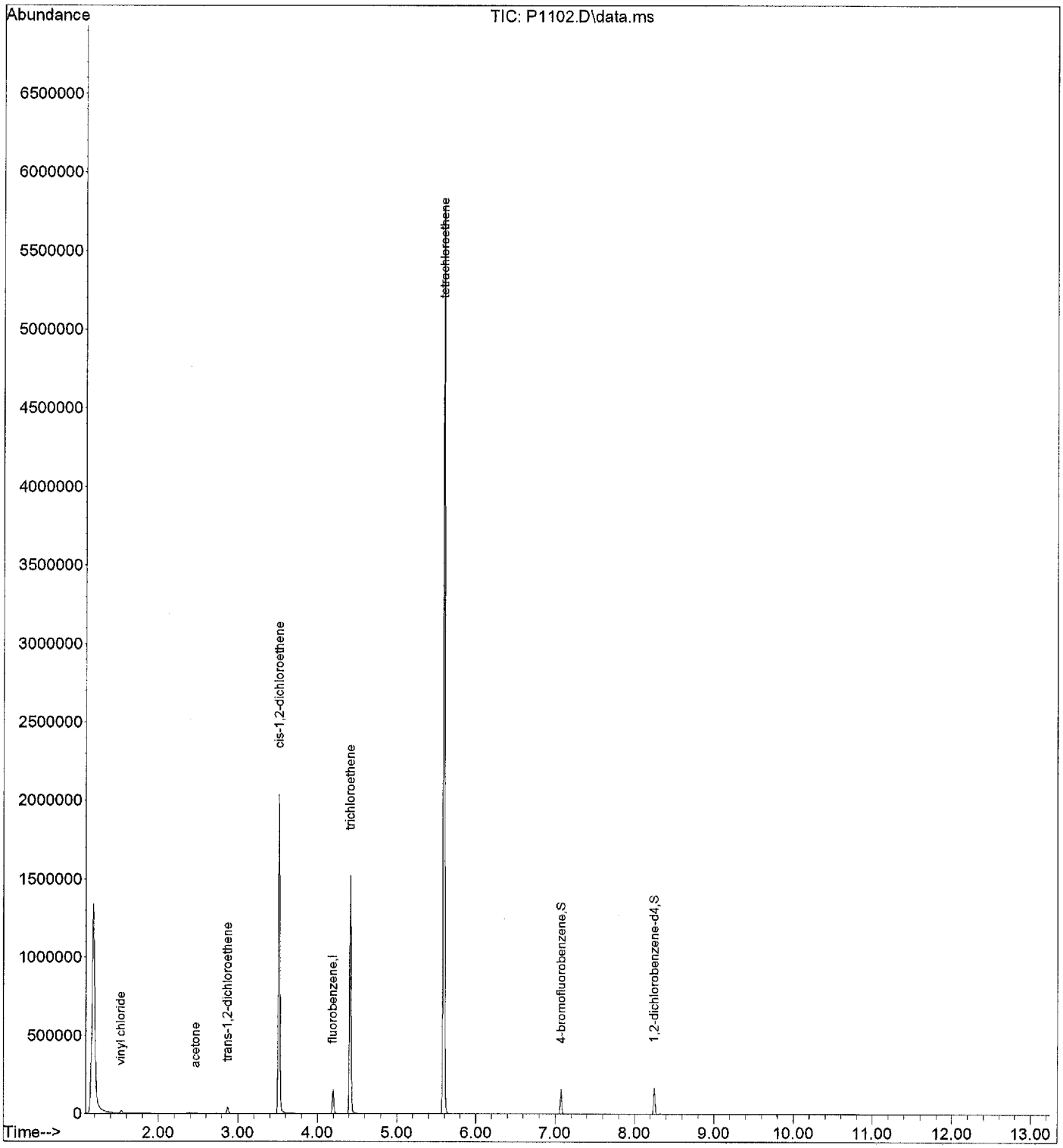
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

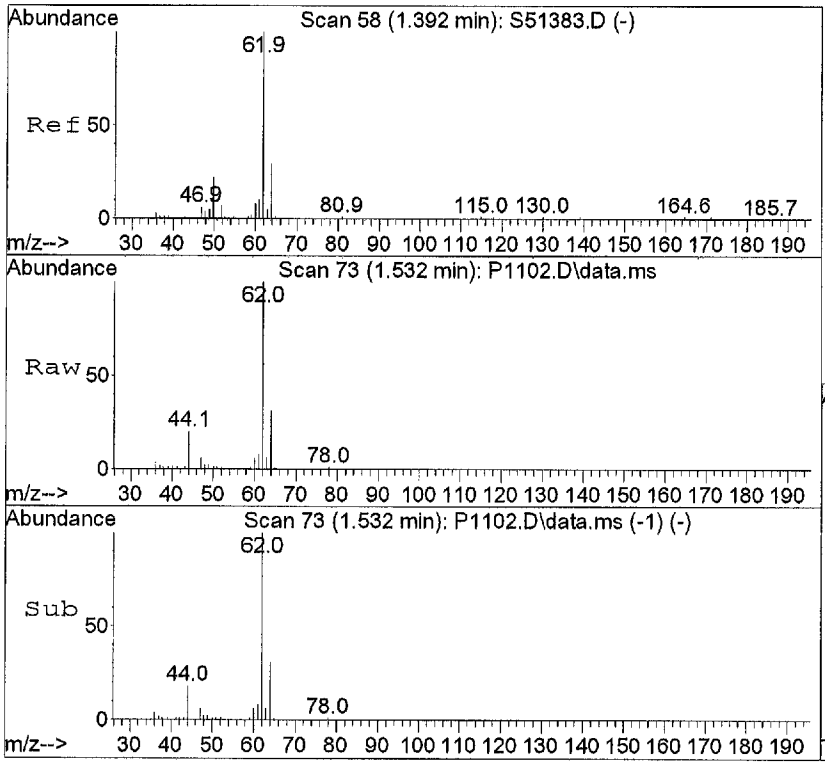
Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1102.D
Acq On : 2 Jun 2015 16:59
Operator : MN
Sample : 1505G38-007A
Misc : ,,,SAMP,,
ALS Vial : 27 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 17:12:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



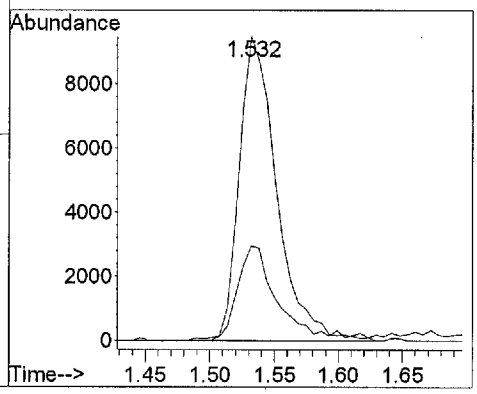
HDR013 V87

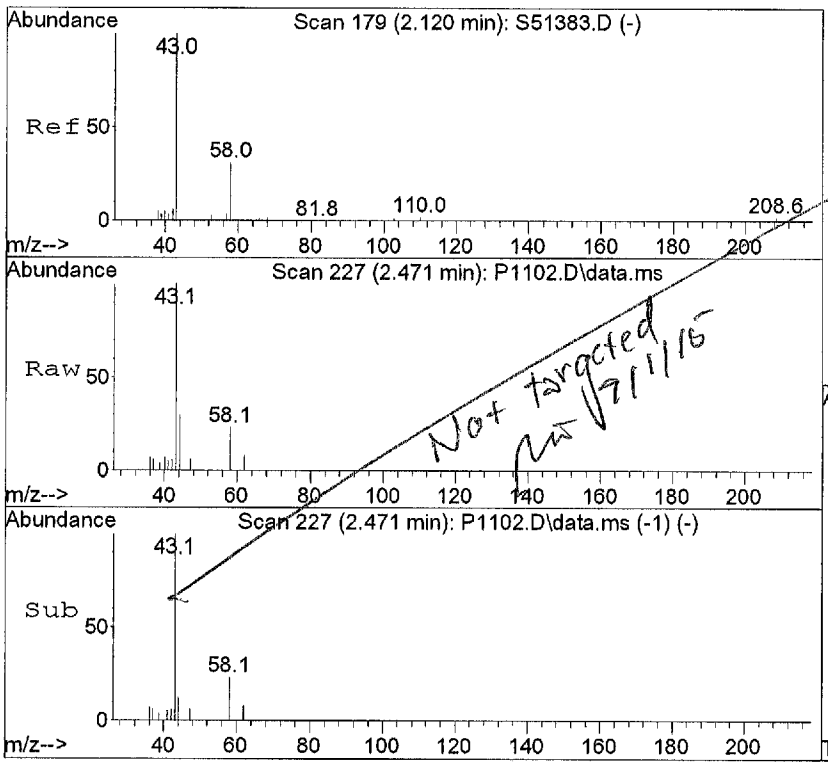


#5
vinyl chloride
Concen: 3.35 UG/L
RT: 1.532 min Scan# 73
Delta R.T. -0.000 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion: 62 Resp: 19101

Ion	Ratio	Lower	Upper
62	100		
64	33.5	10.3	50.3



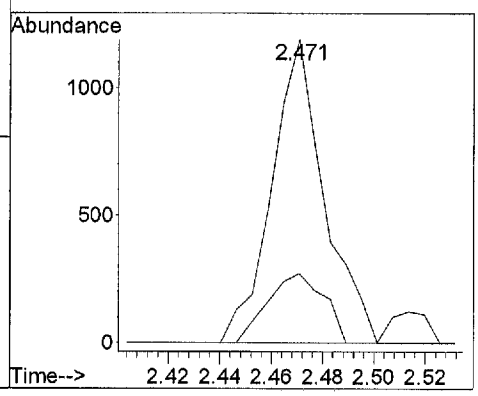


Not targeted
5/11/15

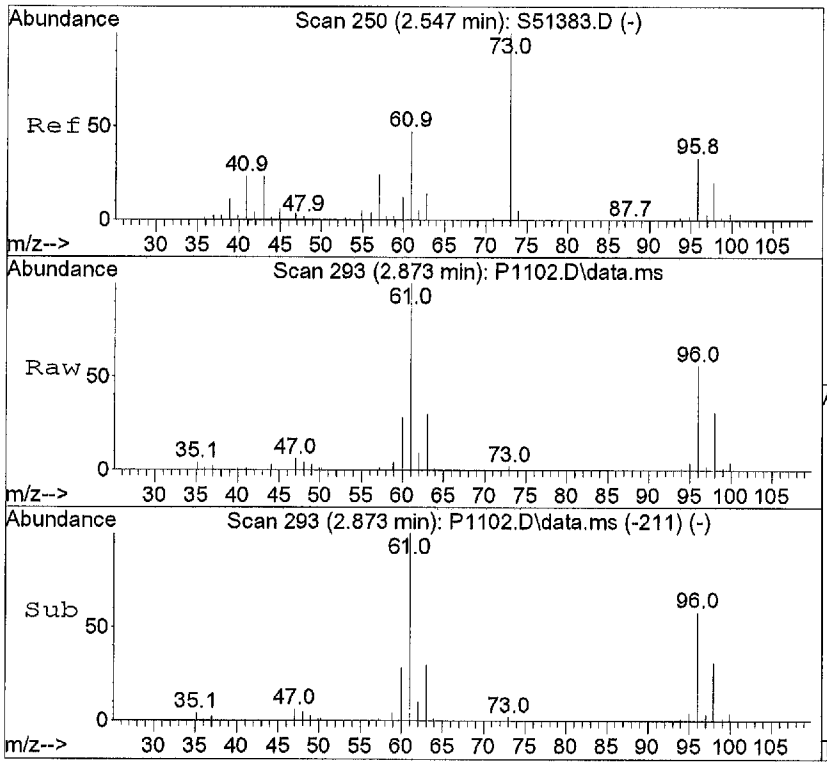
#19
acetone
Concen: 0.83 ug/l
RT: 2.471 min Scan# 227
Delta R.T. 0.006 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion: 43 Resp: 1689

Ion	Ratio	Lower	Upper
43	100		
58	24.5	25.6	38.4#



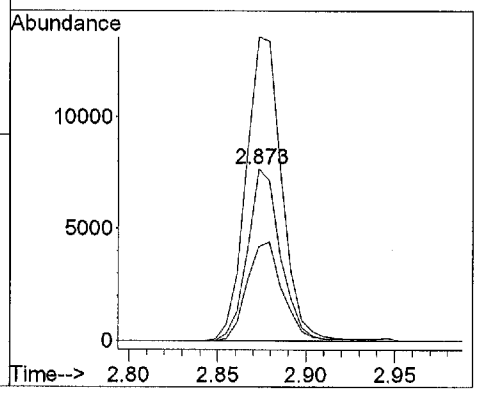
HDR013 V88

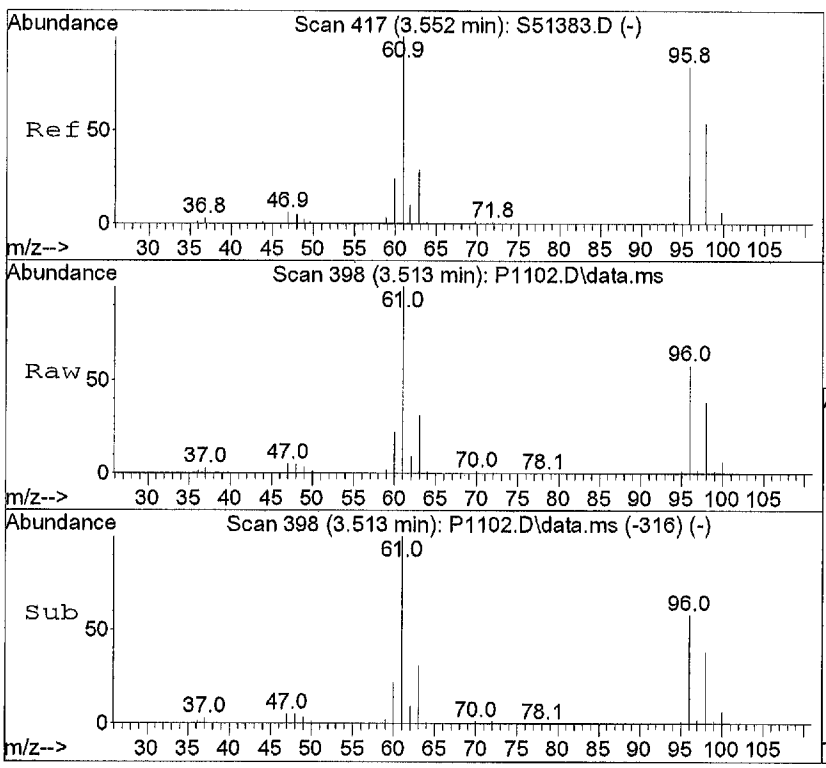


#20
trans-1,2-dichloroethene
Concen: 1.93 UG/L
RT: 2.873 min Scan# 293
Delta R.T. 0.000 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion: 96 Resp: 10004

Ion	Ratio	Lower	Upper
96	100		
61	190.3	140.1	180.1#
98	62.1	43.2	83.2

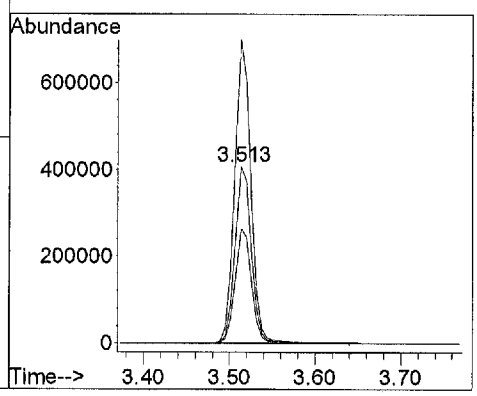


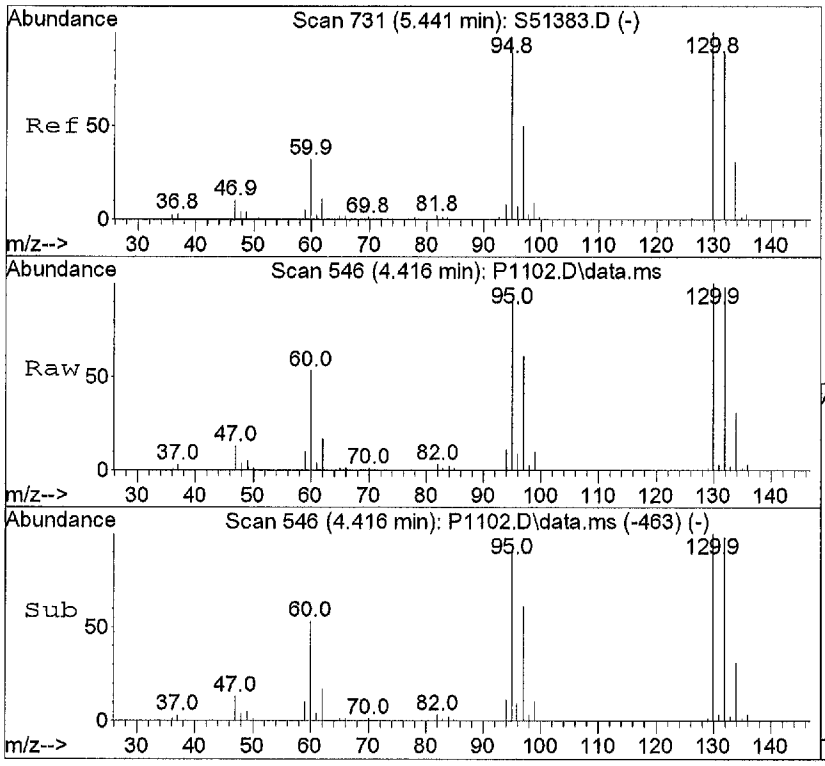


#24
cis-1,2-dichloroethene
Concen: 95.60 UG/L
RT: 3.513 min Scan# 398
Delta R.T. 0.000 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion: 96 Resp: 540606

Ion	Ratio	Lower	Upper
96	100		
61	169.5	133.7	173.7
98	64.9	41.8	81.8

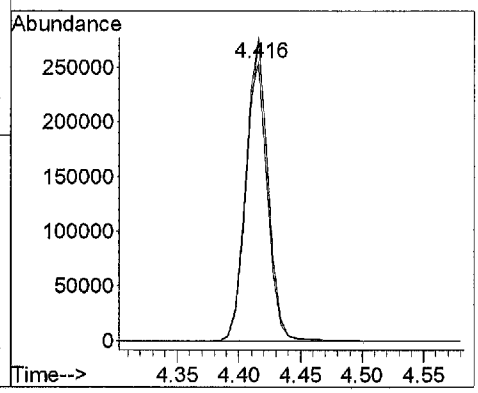


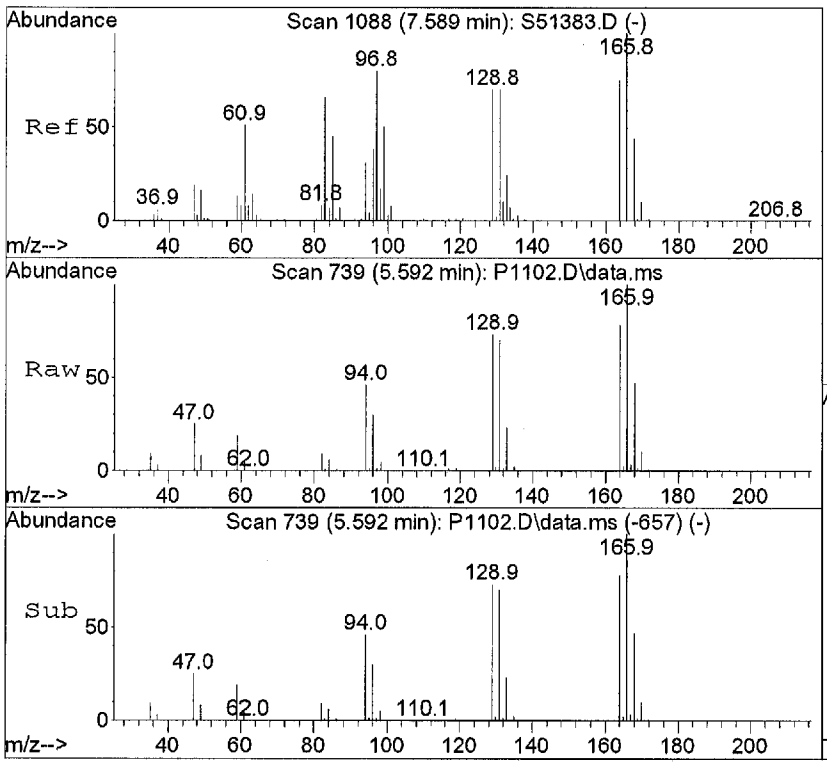


#41
trichloroethene
Concen: 57.92 UG/L
RT: 4.416 min Scan# 546
Delta R.T. 0.007 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion: 95 Resp: 318695

Ion	Ratio	Lower	Upper
95	100		
130	107.1	58.8	98.8#
132	104.4	48.5	88.5#

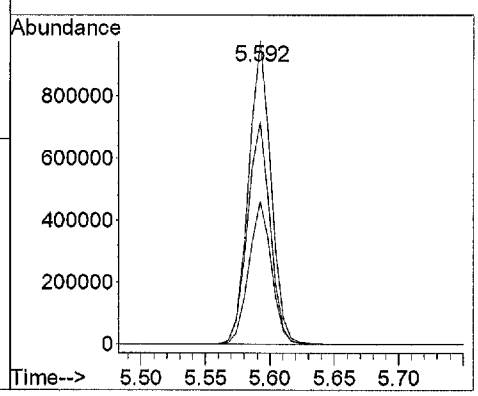




#56
tetrachloroethene
Concen: 216.97 UG/L
RT: 5.592 min Scan# 739
Delta R.T. 0.000 min
Lab File: P1102.D
Acq: 2 Jun 2015 16:59

Tgt Ion:166 Resp: 1183592

Ion	Ratio	Lower	Upper
166	100		
168	47.6	28.3	68.3
129	74.1	56.0	96.0

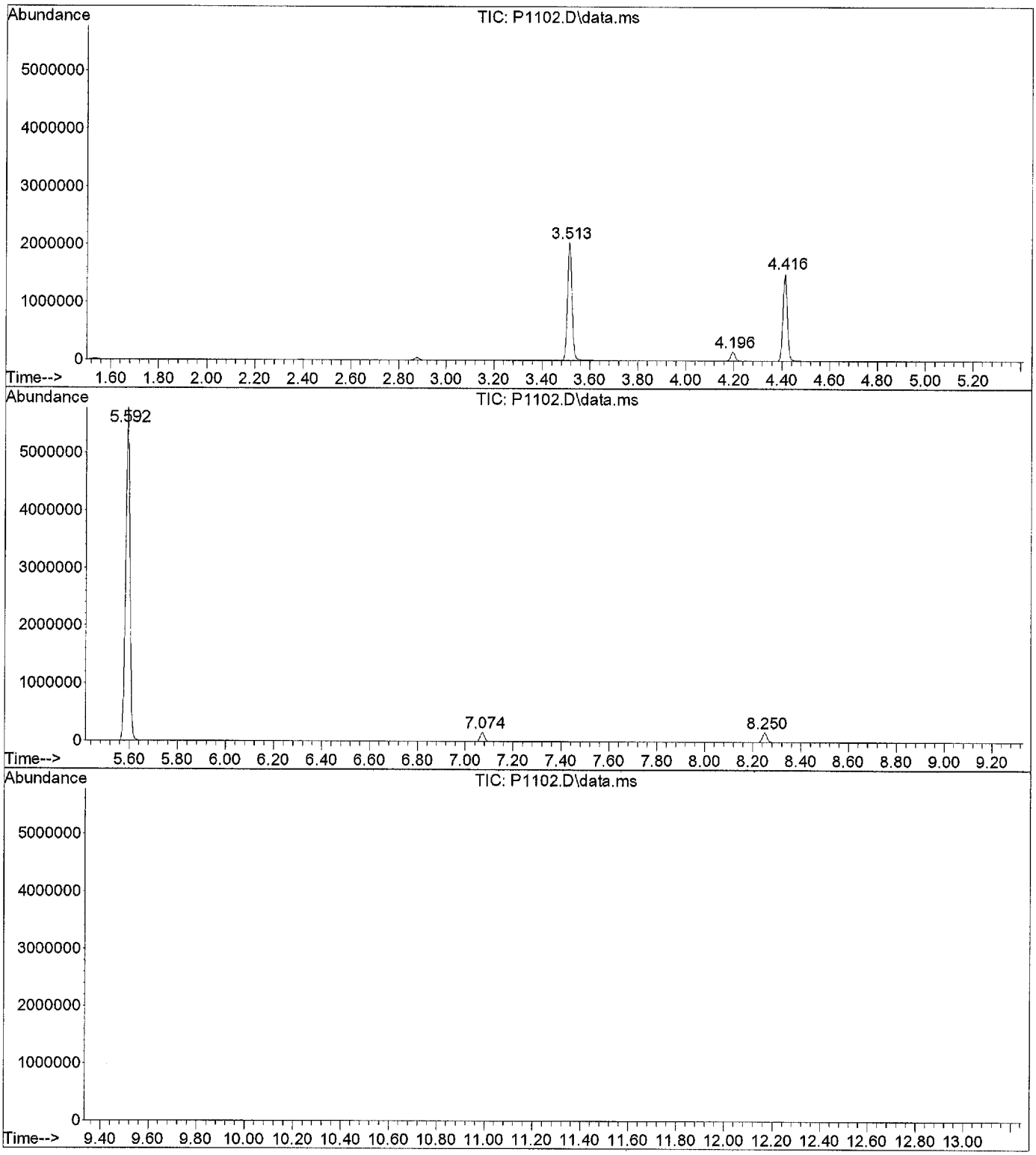


LSC Report - Integrated Chromatogram

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1102.D
Acq On : 2 Jun 2015 16:59
Operator : MN
Sample : 1505G38-007A
Misc : ,,,SAMP,,
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P



HDR013 V91

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1102.D
Acq On : 2 Jun 2015 16:59
Operator : MN
Sample : 1505G38-007A
Misc : ,,,SAMP,,
ALS Vial : 27 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 17:12:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	86561	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.074	174	32915	6.35	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 127.00%				
87) 1,2-dichlorobenzene-d4	8.250	152	34059	4.57	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 91.40%				
Target Compounds							Qvalue
5) vinyl chloride	1.532	62	19101	3.35	UG/L		94
19) acetone not targeted CK 7/1/15	2.471	43	1689	0.83	ug/l	#	86
20) trans-1,2-dichloroethene	2.873	96	10004	1.93	UG/L	#	83
24) cis-1,2-dichloroethene	3.513	96	540606	95.60	UG/L		90
41) trichloroethene	4.416	95	318695	57.92	UG/L	#	62
56) tetrachloroethene	5.592	166	1183592	216.97	UG/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

HDR013 V92

Library Search Compound Report

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1102.D
Acq On : 2 Jun 2015 16:59
Operator : MN
Sample : 1505G38-007A
Misc : ,,,SAMP,,
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M DL

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32999

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	5	U
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
594-20-7	2,2-Dichloropropane	5	U
156-59-2	cis-1,2-Dichloroethene	100	D
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
563-58-6	1,1-Dichloropropene	5	U
107-06-2	1,2-Dichloroethane	5	U
71-43-2	Benzene	5	U
79-01-6	Trichloroethene	58	D
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	170	D
142-28-9	1,3-Dichloropropane	5	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
100-41-4	Ethylbenzene	5	U
179601-23-1	m,p-Xylene	5	U
95-47-6	o-Xylene	5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW11M DL

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32999

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 10.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
98-82-8	Isopropylbenzene	5	U
108-86-1	Bromobenzene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
103-65-1	n-Propylbenzene	5	U
	2/4-Chlorotoluene	5	U
108-67-8	1,3,5-Trimethylbenzene	5	U
98-06-6	tert-Butylbenzene	5	U
95-63-6	1,2,4-Trimethylbenzene	5	U
135-98-8	sec-Butylbenzene	5	U
104-51-8	n-Butylbenzene	5	U
541-73-1	1,3-Dichlorobenzene	5	U
106-46-7	1,4-Dichlorobenzene	5	U
99-87-6	4-Isopropyltoluene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
120-82-1	1,2,4-Trichlorobenzene	5	U
87-68-3	Hexachlorobutadiene	5	U
87-61-6	1,2,3-Trichlorobenzene	5	U
1634-04-4	Methyl tert-butyl ether	5	U
	Total Trihalomethanes	5	U

1F

EPA SAMPLE NO.

MW11M DL

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: 1505G38-007A

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32999

Level: (low/med) LOW Date Received: 05/22/15

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 10.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

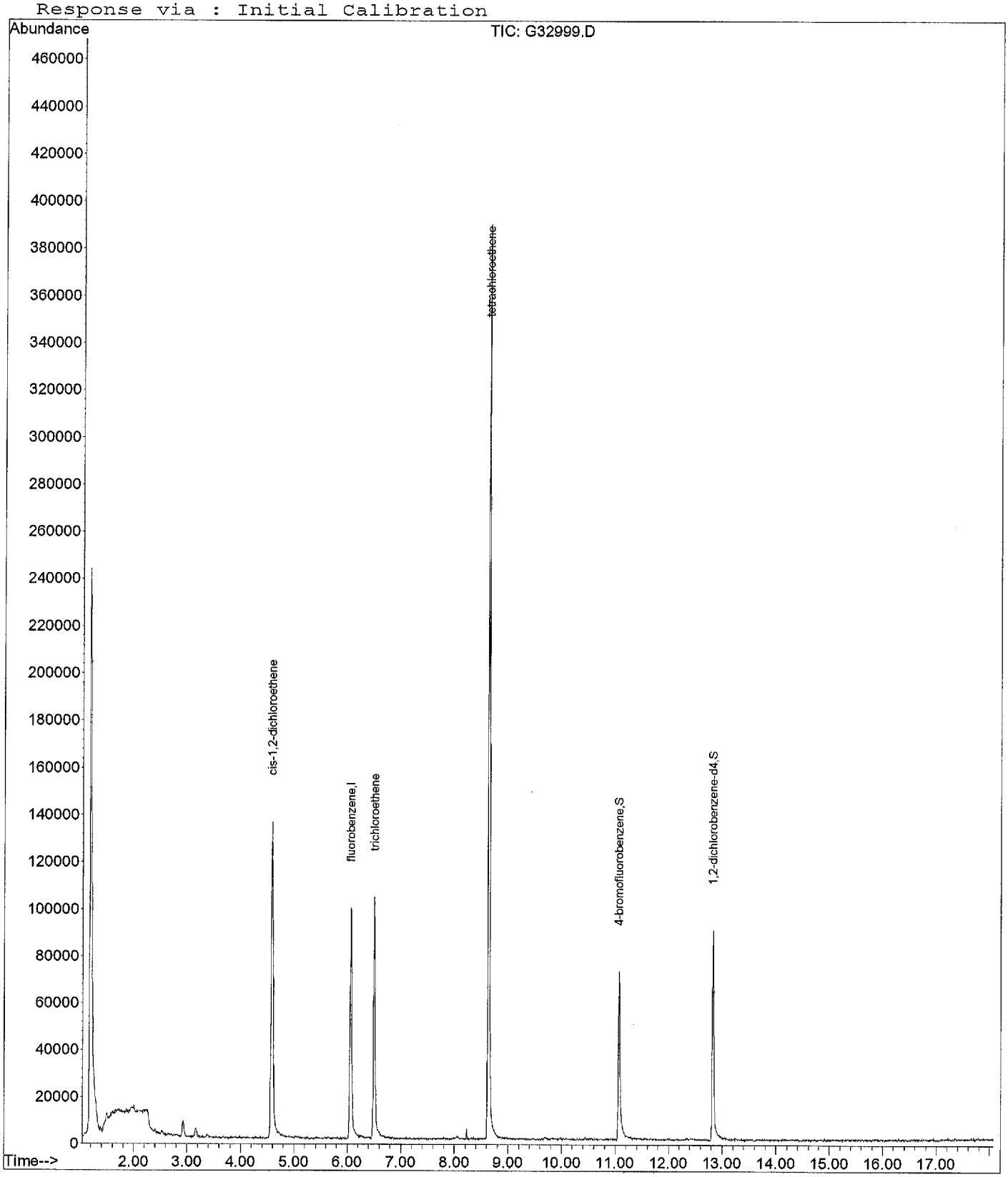
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

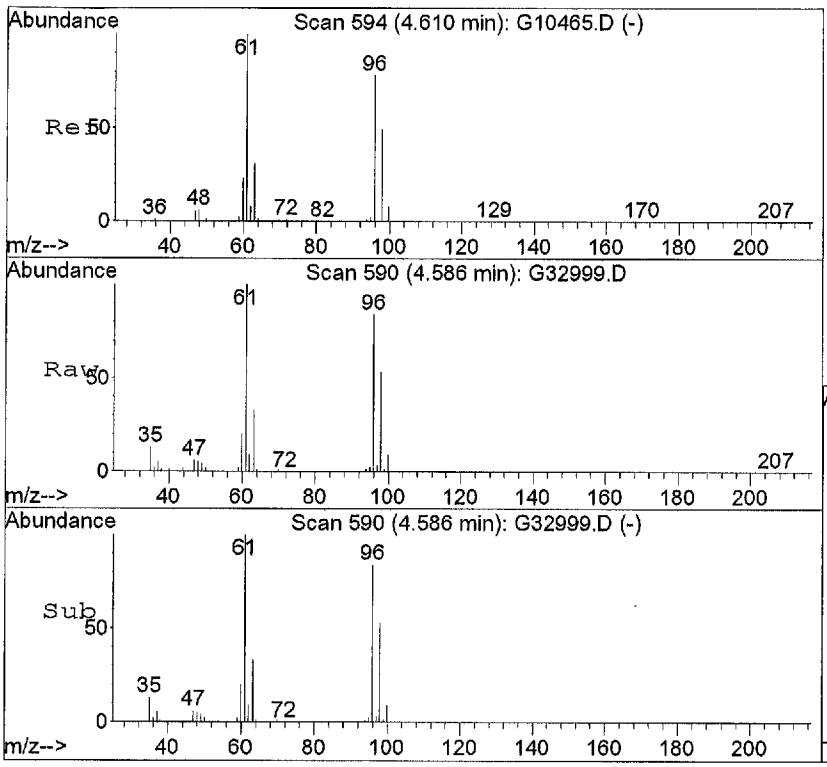
Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G32999.D Vial: 30
Acq On : 3 Jun 2015 21:57 Operator: KGG
Sample : 1505G38-007A Inst : HP5972-2
Misc : HDR013,MW11M,H2O,DL,,1:10 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:46 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



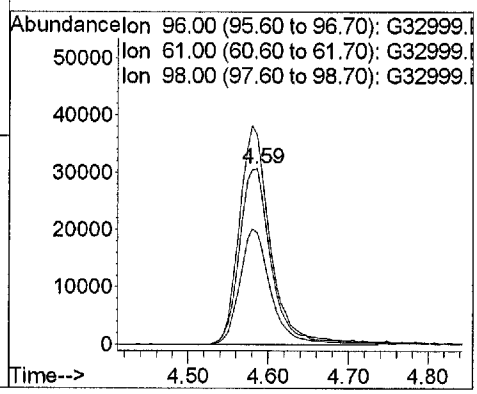
HDR013 V97

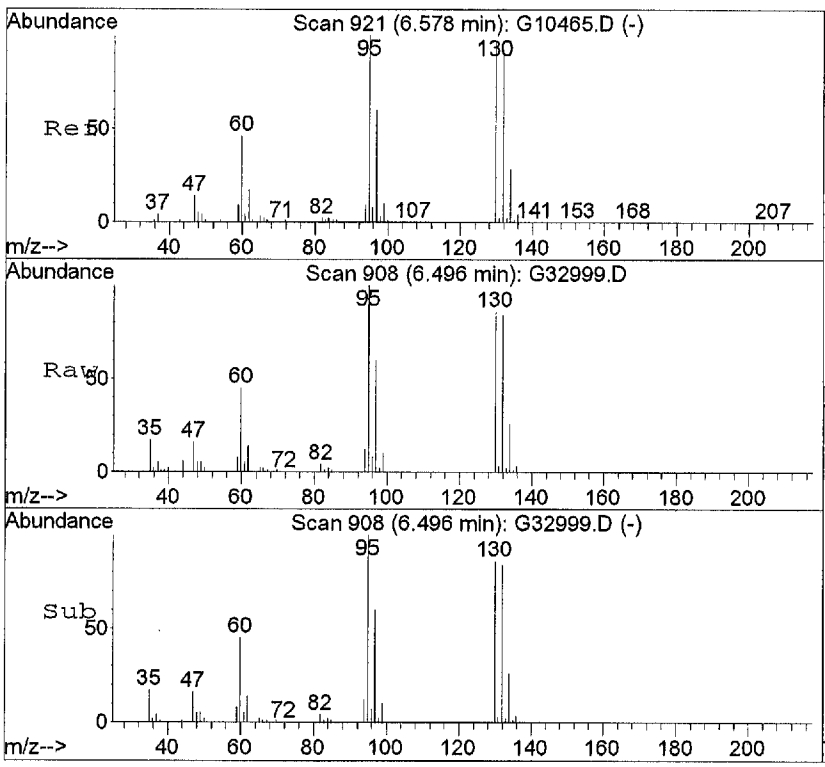


#18
cis-1,2-dichloroethene
Concen: 10.00 UG/L
RT: 4.59 min Scan# 590
Delta R.T. 0.07 min
Lab File: G32999.D
Acq: 3 Jun 2015 21:57

Tgt Ion: 96 Resp: 84856

Ion	Ratio	Lower	Upper
96	100		
61	121.3	93.1	133.1
98	63.9	46.6	86.6

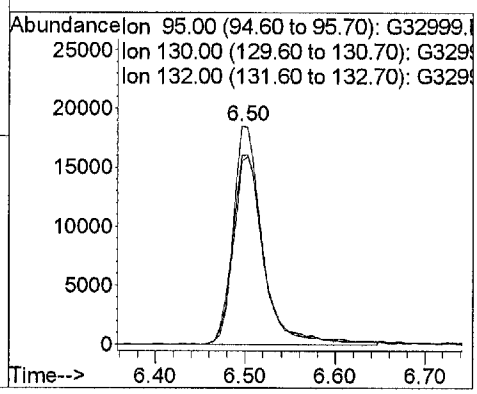


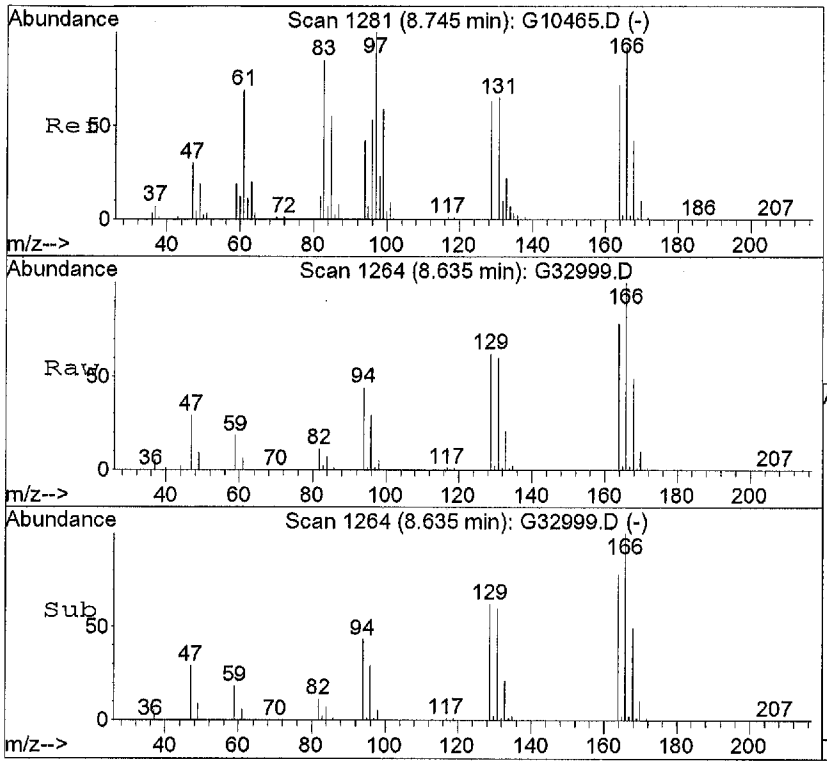


#27
trichloroethene
Concen: 5.81 UG/L
RT: 6.50 min Scan# 908
Delta R.T. 0.02 min
Lab File: G32999.D
Acq: 3 Jun 2015 21:57

Tgt Ion: 95 Resp: 42731

Ion	Ratio	Lower	Upper
95	100		
130	89.2	98.4	138.4#
132	88.9	97.9	137.9#

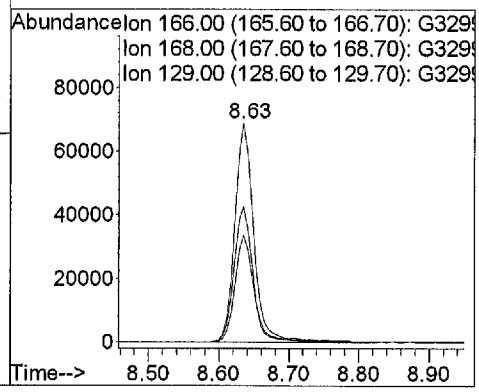




#36
tetrachloroethene
Concen: 17.48 UG/L
RT: 8.63 min Scan# 1264
Delta R.T. -0.00 min
Lab File: G32999.D
Acq: 3 Jun 2015 21:57

Tgt Ion:166 Resp: 129180

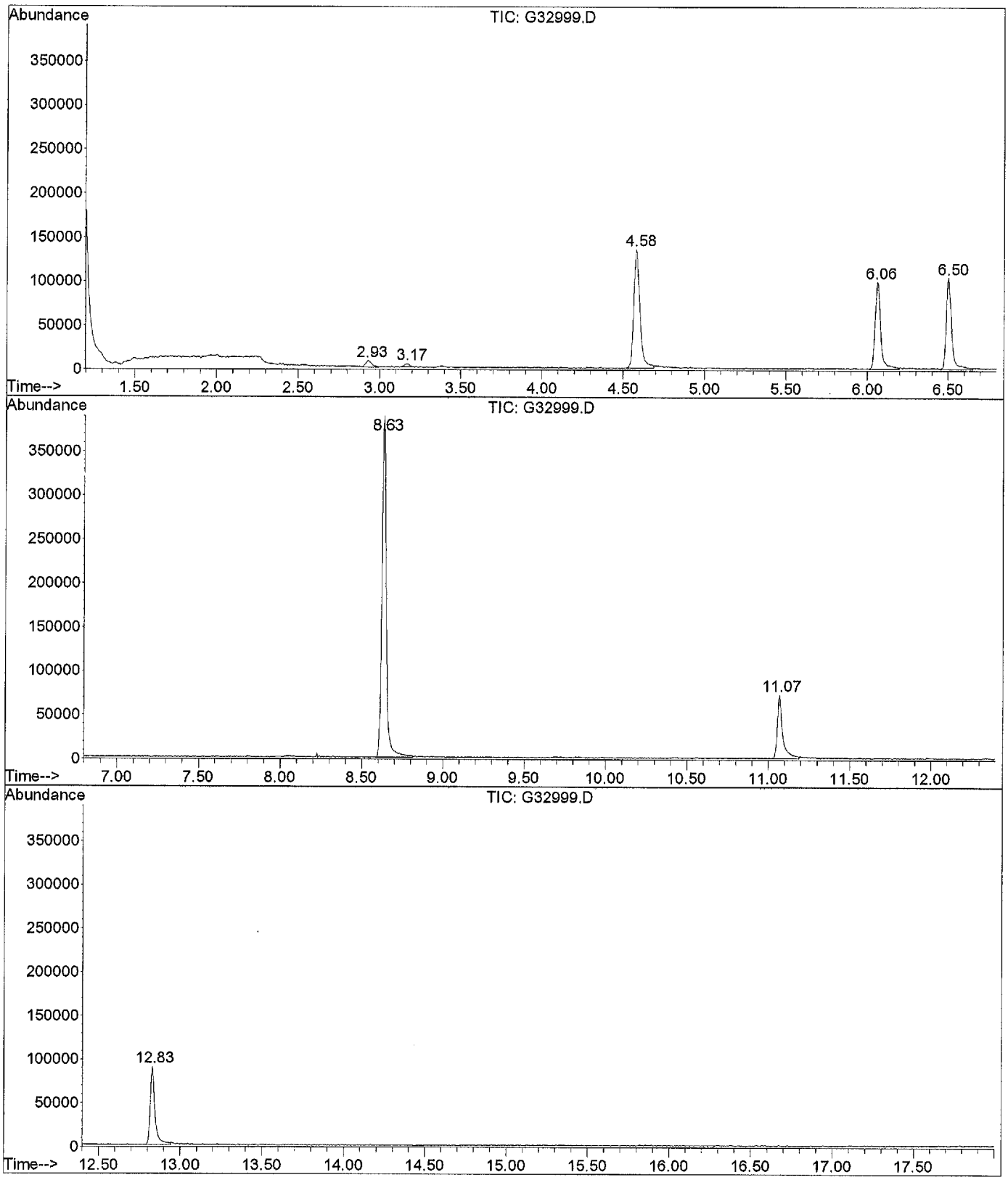
Ion	Ratio	Lower	Upper
166	100		
168	48.1	31.7	71.7
129	62.3	57.0	97.0



HDR013 V99

LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G32999.D
Operator : KGG
Acquired : 3 Jun 2015 21:57 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: 1505G38-007A
Misc Info : HDR013,MW11M,H2O,DL,,1:10
Vial Number: 30
Quant File :524_0225.RES (RTE Integrator)



G32999.D 524_0225.M Tue Jun 30 14:43:54 2015 RPT1

HDR013 V100

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G32999.D Vial: 30
Acq On : 3 Jun 2015 21:57 Operator: KGG
Sample : 1505G38-007A Inst : HP5972-2
Misc : HDR013,MW11M,H2O,DL,,1:10 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:46 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.06	96	112770	5.00	UG/L	0.03
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	26286	4.46	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 89.20%			
62) 1,2-dichlorobenzene-d4	12.83	152	29407	4.73	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 94.60%			
Target Compounds						Qvalue
18) cis-1,2-dichloroethene	4.59	96	84856	10.00	UG/L	94
27) trichloroethene	6.50	95	42731	5.81	UG/L #	74
36) tetrachloroethene	8.63	166	129180	17.48	UG/L	88

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

HDR013 V101

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 21:57
Data File: C:\DATA\2015\JUNE15\060315\G32999.D
Name: 1505G38-007A
Misc: HDR013,MW11M,H2O,DL,,1:10
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc
G32999.D 524_0225.M	Tue Jun 30 14:43:54 2015				RPT1			

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

III. STANDARD DATA PACKAGE FOR VOLATILE ORGANICS

A. INITIAL CALIBRATION FORM
B. STANDARD GC/MS CHROMATOGRAMS
C. DATA SYSTEM REPORT
D. CONTINUING CALIBRATION FORM
E. STANDARD GC/MS CHROMATOGRAMS
F. DATA SYSTEM REPORT

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Dates: 2/25/2015 2/25/2015

Heated Purge: (Y/N) N Calibration Times: 17:09 19:29

GC Column: Rtx-624 ID: .18 (mm)

LAB FILE ID: TD0.50= G30677.D STD5.0= G30678.D TD10.0= G30679.D TD20.0= G30680.D VSTD50= G30681.D

STD100= G30682.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD	R^2
2-Butanone	*	0	0.1759695	0.1707219	0.1688582	0.1864306	0.1859443	0.178	4.7	*
2-Hexanone	*	0	0.2142278	0.2121789	0.2341881	0.2464884	0.2428116	0.230	6.9	*
4-Methyl-2-pentanone	*	0.2861999	0.3737655	0.330516	0.3355193	0.3479102	0.333239	0.335	8.5	*
Acetone	*	0.2694775	0.1531869	0.1326235	0.1222948	0.1229710	0.1292058	0.155	36.9	*
Chlorodifluoromethane		0.3382861	0.3753276	0.3481565	0.3407649	0.3841107	0.3508111	0.356	5.3	
Dichlorodifluoromethane	*	0.2347534	0.2434294	0.2354142	0.2336999	0.2622842	0.2462373	0.243	4.5	*
Chloromethane	*	0.3073085	0.2359092	0.2434447	0.2347578	0.2419413	0.2279704	0.249	11.8	*
Vinyl chloride	*	0.2405103	0.2690715	0.2591508	0.2712306	0.2865977	0.2754444	0.267	5.9	*
Bromomethane	*	0.1971051	0.1750134	0.1723768	0.1740600	0.1769187	0.1249285	0.170	14.1	*
Chloroethane	*	0.1727982	0.1559696	0.1468166	0.1438384	0.1485443	0.1409479	0.151	7.7	*
1,1,2-Trichloro-1,2,2-trifluoroethane		0.3445913	0.3531169	0.3523448	0.3457747	0.3573336	0.3467955	0.350	1.4	
Trichlorofluoromethane	*	0.3583895	0.3675257	0.3636896	0.3523411	0.3793272	0.3636581	0.364	2.5	*
1,1-Dichloroethene	*	0.3377378	0.3223617	0.328728	0.3072257	0.3209694	0.3212616	0.323	3.1	*
Methylene chloride	*	0.5109929	0.3440261	0.332202	0.3365543	0.3684619	0.3727725	0.378	17.9	*
trans-1,2-Dichloroethene	*	0.4015206	0.3394081	0.3290918	0.3098986	0.3788919	0.3749431	0.356	9.8	*
1,1-Dichloroethane	*	0.5665515	0.4769912	0.4736191	0.4452093	0.5432053	0.5540148	0.510	9.9	*
2,2-Dichloropropane	*	0.4803809	0.4633251	0.4381383	0.4098005	0.4335288	0.4204476	0.441	6.0	*
cis-1,2-Dichloroethene	*	0.3651516	0.3730229	0.3747682	0.3629637	0.3924630	0.3900310	0.376	3.3	*
Bromochloromethane	*	0.8324652	0.2222431	0.2129775	0.197106	0.2152168	0.2150059	0.316	80.2	*
Chloroform	*	0.586655	0.5477119	0.5344558	0.5188979	0.565447	0.5582996	0.552	4.3	*
1,1,1-Trichloroethane	*	0.4650291	0.4532441	0.4379121	0.4380712	0.4595591	0.4516660	0.451	2.5	*
Carbon tetrachloride	*	0.3558309	0.3626089	0.3566618	0.3523954	0.3838066	0.3766890	0.365	3.5	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Dates: 2/25/2015 2/25/2015

Heated Purge: (Y/N) N Calibration Times: 17:09 19:29

GC Column: Rtx-624 ID: .18 (mm)

LAB FILE ID: TD0.50= G30677.D STD5.0= G30678.D TD10.0= G30679.D TD20.0= G30680.D VSTD50= G30681.D
STD100= G30682.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD	R^2
1,1-Dichloropropene	*	0.3780361	0.4014306	0.3977373	0.3726662	0.4122578	0.4123261	0.396	4.3	*
1,2-Dichloroethane	*	0.3971343	0.4308457	0.4306624	0.4210888	0.4322523	0.4284508	0.423	3.2	*
Benzene	*	1.1021255	1.1538186	1.0930032	1.0449652	1.1649449	1.1477269	1.118	4.1	*
Trichloroethene	*	0.3807775	0.3125283	0.3131949	0.3110128	0.3310761	0.3095225	0.326	8.5	*
1,2-Dichloropropane	*	0.2443482	0.2673643	0.2484006	0.2434795	0.2761635	0.2330856	0.252	6.4	*
Dibromomethane	*	0.2306413	0.2222516	0.2255956	0.2161249	0.2253477	0.2069718	0.221	3.8	*
Bromodichloromethane	*	0.3848895	0.4133213	0.4262922	0.4009515	0.4339891	0.4081763	0.411	4.3	*
cis-1,3-Dichloropropene	*	0.3302447	0.4612765	0.4676161	0.4531549	0.4581865	0.4327189	0.434	12.0	*
Toluene	*	1.0326772	0.8627071	0.7763033	0.764078	0.7855994	0.7147471	0.823	13.8	*
trans-1,3-Dichloropropene	*	0.375843	0.4521600	0.4362128	0.4473689	0.4386365	0.4315897	0.430	6.4	*
1,1,2-Trichloroethane	*	0.2383172	0.2423453	0.2262567	0.2369152	0.2144917	0.2067632	0.228	6.3	*
Tetrachloroethene	*	0.3309757	0.3508293	0.3150938	0.3341005	0.321469	0.3140782	0.328	4.2	*
1,3-Dichloropropane	*	0.4319499	0.4519893	0.4304849	0.4379126	0.4081117	0.4043705	0.427	4.2	*
1,2-Dibromoethane	*	0.3179999	0.3469198	0.3438484	0.3521804	0.3424785	0.3480831	0.342	3.6	*
Dibromochloromethane	*	0.3358188	0.3329208	0.3357469	0.3344135	0.3412847	0.3398115	0.337	1.0	*
Chlorobenzene	*	0.8508325	0.9133426	0.8795288	0.8622793	0.8868867	0.8833339	0.879	2.5	*
1,1,1,2-Tetrachloroethane	*	0.3225689	0.3087639	0.2965571	0.2907232	0.2945490	0.2867771	0.300	4.4	*
Ethylbenzene	*	1.2285030	1.331188	1.2866631	1.2544694	1.2795962	1.2462779	1.271	2.9	*
m,p-Xylene	*	0.546905	0.5451597	0.5344802	0.5181363	0.5208520	0.5121227	0.530	2.8	*
o-Xylene	*	0.568105	0.5418050	0.5327876	0.5210136	0.5270227	0.5167932	0.535	3.5	*
Styrene	*	0.7289325	0.7668735	0.9077643	0.8724179	0.8902225	0.8999306	0.844	9.1	*
Bromoform	*	0.1971965	0.2291231	0.2348196	0.2379460	0.2464725	0.2485171	0.232	8.0	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Dates: 2/25/2015 2/25/2015

Heated Purge: (Y/N) N Calibration Times: 17:09 19:29

GC Column: Rtx-624 ID: .18 (mm)

LAB FILE ID: TD0.50= G30677.D STD5.0= G30678.D TD10.0= G30679.D TD20.0= G30680.D VSTD50= G30681.D

STD100= G30682.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					RRF	% RSD	R^2
Isopropylbenzene	*	1.2378237	1.2281244	1.2155375	1.1710596	1.2052137	1.1860961					1.207	2.1	*
Bromobenzene	*	0.3382861	0.3480380	0.3416656	0.3349288	0.3434885	0.3390410					0.341	1.3	*
1,1,2,2-Tetrachloroethane	*	0.4086481	0.3622248	0.3744798	0.3527939	0.3487248	0.3289044					0.363	7.5	*
1,2,3-Trichloropropane	*	0.0803224	0.0812370	0.0845557	0.0779431	0.0776004	0.0773609					0.080	3.5	*
n-Propylbenzene	*	1.1531151	1.3248372	1.2955766	1.2502233	1.2770774	1.2346751					1.256	4.8	*
2/4-Chlorotoluene	*	0.9526747	0.9266929	0.9054683	0.8577776	0.8728582	0.8525406					0.895	4.5	*
1,3,5-Trimethylbenzene	*	0.8808962	0.9572091	0.9537025	0.9034616	0.93264	0.9197047					0.925	3.2	*
tert-Butylbenzene	*	0.739167	0.7483846	0.7352145	0.7211117	0.7424225	0.7237249					0.735	1.5	*
1,2,4-Trimethylbenzene	*	0.9381911	0.9908067	0.9591508	0.9211681	0.940857	0.9247287					0.946	2.7	*
sec-Butylbenzene	*	0.9907341	1.051455	1.0452371	1.0024037	1.0342631	0.9961930					1.020	2.6	*
1,2-Dibromo-3-chloropropane	*	0.0418517	0.0501404	0.0536537	0.0547949	0.0575199	0.0591533					0.053	11.8	*
n-Butylbenzene	*	0.6397463	0.6936176	0.6699011	0.6587719	0.6794032	0.6688150					0.668	2.7	*
1,3-Dichlorobenzene	*	0.5515653	0.5824449	0.5807312	0.5666152	0.5788911	0.5716705					0.572	2.0	*
1,4-Dichlorobenzene	*	0.5125464	0.6009168	0.5823816	0.5655072	0.5915558	0.5812000					0.572	5.5	*
4-Isopropyltoluene	*	0.7723377	0.8862494	0.8647766	0.8286817	0.8581498	0.8314935					0.840	4.7	*
1,2-Dichlorobenzene	*	0.5528446	0.5574088	0.5565819	0.5385469	0.5334645	0.5208431					0.543	2.7	*
1,2,4-Trichlorobenzene	*	0.1518724	0.2443342	0.2431741	0.2427242	0.2648764	0.289419					0.239	19.5	*
Hexachlorobutadiene	*	0.0727379	0.0823553	0.0755757	0.0713371	0.0694293	0.0776268					0.075	6.3	*
Naphthalene	*	0.3748378	0.6001912	0.6958250	0.7437153	0.8409856	0.8979774					0.692	27.1	*
1,2,3-Trichlorobenzene	*	0.1197069	0.2024481	0.2175385	0.2079748	0.2316166	0.2644888					0.207	23.3	*
Methyl tert-butyl ether	*	1.0694117	0.9591638	0.8053640	0.7647832	0.8735504	0.8539654					0.888	12.5	*
1,2-Dichlorobenzene-d4	*	0.2848658	0.2795111	0.2905275	0.2740558	0.2677126	0.2578932					0.276	4.3	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Dates: 2/25/2015 2/25/2015

Heated Purge: (Y/N) N Calibration Times: 17:09 19:29

GC Column: Rtx-624 ID: .18 (mm)

LAB FILE ID: TD0.50= G30677.D STD5.0= G30678.D TD10.0= G30679.D TD20.0= G30680.D VSTD50= G30681.D

STD100= G30682.D

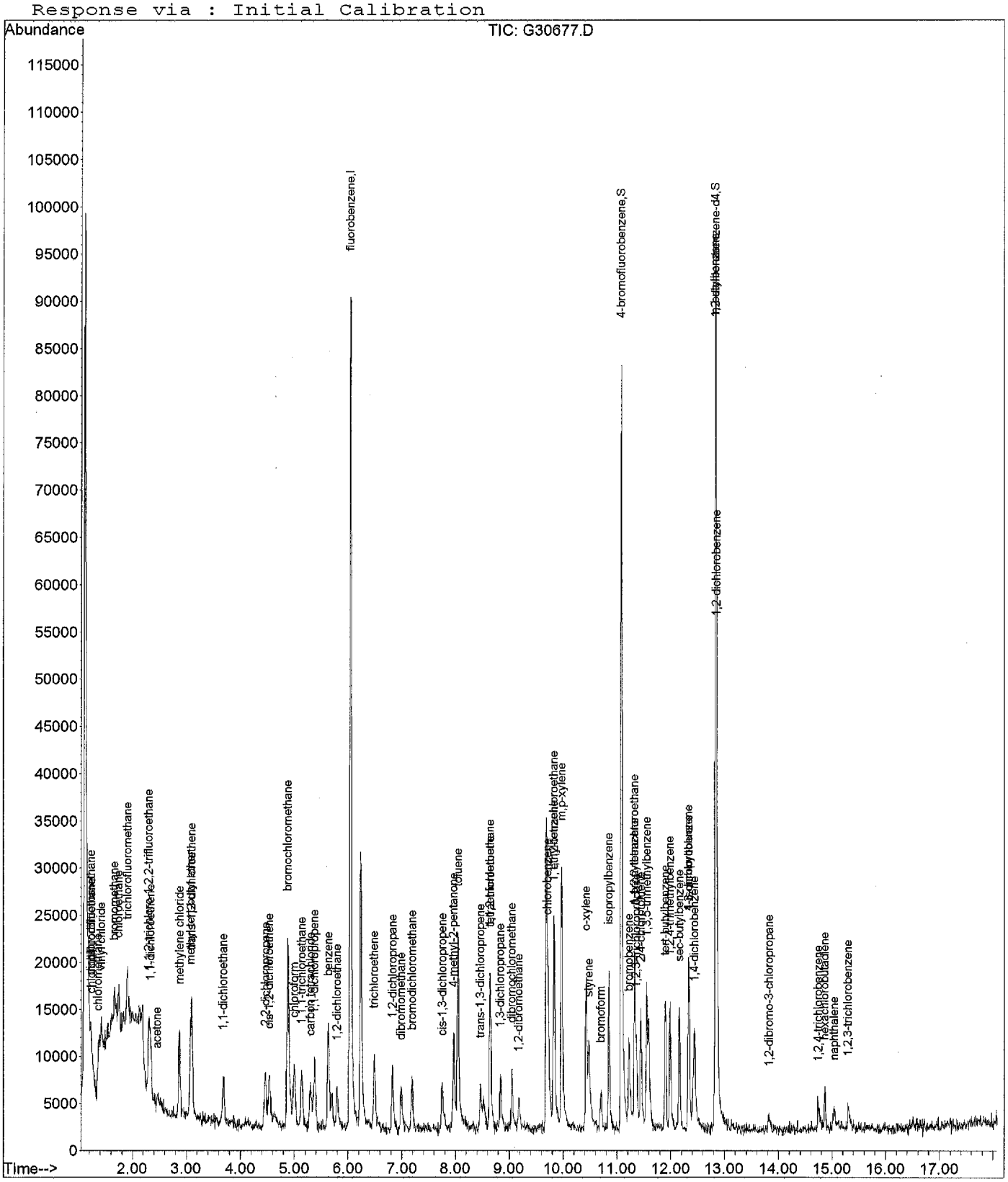
COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6					$\overline{RRF}$	% RSD	R^2
4-Bromofluorobenzene *	0.2848566	0.2595368	0.2617507	0.2540333	0.2540621	0.2519900					0.261	4.7	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report

Data File : C:\DATA\2015\FEB15\022515\G30677.D Vial: 19
Acq On : 25 Feb 2015 17:09 Operator: KGG
Sample : VSTD0.50 Inst : HP5972-2
Misc : ,,,ICAL_.0.50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:15 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



HDR013 V108

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30677.D Vial: 19
Acq On : 25 Feb 2015 17:09 Operator: KGG
Sample : VSTD0.50 Inst : HP5972-2
Misc : ,,,ICAL_.0.50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:15 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) fluorobenzene	6.05	96	109434	5.00	UG/L		0.02
System Monitoring Compounds							
49) 4-bromofluorobenzene	11.08	174	31173	3.68	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 73.60%				
62) 1,2-dichlorobenzene-d4	12.84	152	31174	4.10	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 82.00%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.24	51	3702m MP	0.48	ug/l		
3) dichlorodifluoromethane	1.22	85	2569 MP	0.47	UG/L		80
4) chloromethane	1.36	50	3363 06/30/15	0.92	UG/L		78
5) vinyl chloride	1.42	62	2632	0.56	UG/L		70
6) bromomethane	1.67	94	2157	0.89	UG/L		87
7) chloroethane	1.75	64	1891	0.75	UG/L		96
8) trichlorofluoromethane	1.90	101	3922	0.42	UG/L		93
9) 1,1,2-trichloro-1,2,2-trif	2.31	101	3771	0.57	UG/L		97
10) methyl tert-butyl ether	3.08	73	11703	0.68	UG/L		93
12) 1,1-dichloroethene	2.33	96	3696	0.60	UG/L	#	86
13) acetone	2.46	43	2949	1.35	ug/l	#	33
14) methylene chloride	2.87	84	5592	0.88	UG/L		91
15) trans-1,2-dichloroethene	3.10	96	4394	0.63	UG/L		89
16) 1,1-dichloroethane	3.69	63	6200	0.69	UG/L		93
17) 2,2-dichloropropane	4.46	77	5257	0.55	UG/L		96
18) cis-1,2-dichloroethene	4.54	96	3996	0.58	UG/L		94
20) bromochloromethane	4.88	128	9110	1.84	UG/L		97
21) chloroform	5.00	83	6420	0.56	UG/L		98
22) 1,1,1-trichloroethane	5.14	97	5089	0.50	UG/L		96
23) carbon tetrachloride	5.30	117	3894	0.43	UG/L		91
24) 1,1-dichloropropene	5.38	75	4137	0.54	UG/L		95
25) benzene	5.63	78	12061	0.63	UG/L		93
26) 1,2-dichloroethane	5.79	62	4346	0.51	UG/L		98
27) trichloroethene	6.49	95	4167	0.63	UG/L	#	72
28) 1,2-dichloropropane	6.83	63	2674	0.64	UG/L		88
29) dibromomethane	6.99	93	2524	0.61	UG/L		94
30) bromodichloromethane	7.19	83	4212	0.49	UG/L		98
31) cis-1,3-dichloropropene	7.75	75	3614	0.42	UG/L		91
32) 4-methyl-2-pentanone	7.96	43	3132	0.50	ug/l	#	1
33) toluene	8.04	92	11301	0.75	UG/L		85
34) trans-1,3-dichloropropene	8.47	75	4113	0.47	UG/L		97
35) 1,1,2-trichloroethane	8.64	83	2608	0.60	UG/L		98
36) tetrachloroethene	8.64	166	3622	0.49	UG/L		87
37) 1,3-dichloropropane	8.84	76	4727	0.55	UG/L		95
39) dibromochloromethane	9.06	129	3675	0.47	UG/L		94
40) 1,2-dibromoethane	9.18	107	3480	0.48	UG/L		97
41) chlorobenzene	9.72	112	9311	0.48	UG/L		91
42) 1,1,1,2-tetrachloroethane	9.84	131	3530	0.51	UG/L		93
43) ethylbenzene	9.83	91	13444	0.49	UG/L		99
44) m,p-xylene	9.97	106	11970	0.87	UG/L		89
45) o-xylene	10.43	106	6217	0.54	UG/L		89
46) styrene	10.48	104	7977	0.41	UG/L		97
47) bromoform	10.70	173	2158	0.40	UG/L		96
48) isopropylbenzene	10.85	105	13546	0.50	UG/L		98
50) bromobenzene	11.22	156	3702	0.48	UG/L		98
51) 1,1,2,2-tetrachloroethane	11.32	83	4472	0.66	UG/L		96

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

HDR013 V109

Data File : C:\DATA\2015\FEB15\022515\G30677.D Vial: 19
Acq On : 25 Feb 2015 17:09 Operator: KGG
Sample : VSTD0.50 Inst : HP5972-2
Misc : ,,,ICAL_.0.50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:15 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
52)	1,2,3-trichloropropane	11.36	112	879	0.50	UG/L	#	20
53)	n-propylbenzene	11.32	91	12619	0.47	UG/L		99
54)	2/4-chlorotoluene	11.45	91	20851m	1.09	UG/L		
55)	1,3,5-trimethylbenzene	11.55	105	9640	0.46	UG/L		94
56)	tert-butylbenzene	11.90	119	8089	0.48	UG/L		94
57)	1,2,4-trimethylbenzene	11.99	105	10267	0.49	UG/L		98
58)	sec-butylbenzene	12.16	105	10842	0.47	UG/L		96
59)	1,3-dichlorobenzene	12.33	146	6036	0.46	UG/L		97
60)	4-isopropyltoluene	12.34	119	8452	0.42	UG/L		91
61)	1,4-dichlorobenzene	12.44	146	5609	0.41	UG/L		89
63)	1,2-dichlorobenzene	12.87	146	6050	0.48	UG/L		92
64)	n-butylbenzene	12.83	91	7001	0.52	UG/L		91
65)	1,2-dibromo-3-chloropropan	13.82	75	458m	0.40	UG/L		
66)	1,2,4-trichlorobenzene	14.74	180	1662	0.36	UG/L		96
67)	hexachlorobutadiene	14.87	225	796	0.47	UG/L		100
68)	naphthalene	15.03	128	4102	0.31	UG/L		100
69)	1,2,3-trichlorobenzene	15.30	180	1310	0.33	UG/L		84

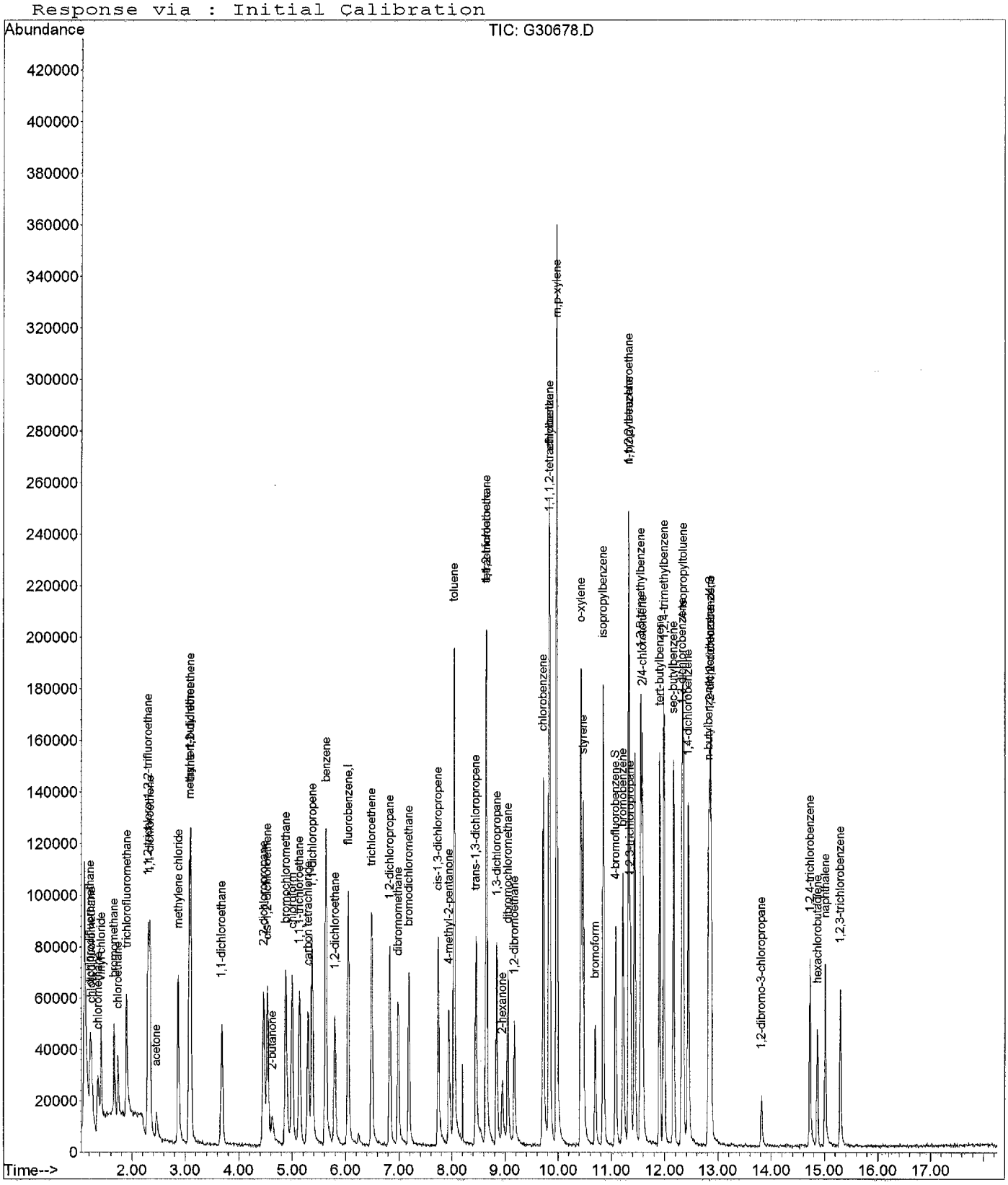
(#) = qualifier out of range (m) = manual integration

HDR013 V110

Quantitation Report

Data File : C:\DATA\2015\FEB15\022515\G30678.D Vial: 20
Acq On : 25 Feb 2015 17:47 Operator: KGG
Sample : VSTD5.0 Inst : HP5972-2
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:12 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



HDR013 V111

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30678.D Vial: 20
Acq On : 25 Feb 2015 17:47 Operator: KGG
Sample : VSTD5.0 Inst : HP5972-2
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:12 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) fluorobenzene	6.05	96	117151	5.00	UG/L		0.02
System Monitoring Compounds							
49) 4-bromofluorobenzene	11.08	174	30405	3.35	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 67.00%#				
62) 1,2-dichlorobenzene-d4	12.84	152	32745	4.03	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 80.60%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.25	51	43970	5.31	ug/l	#	98
3) dichlorodifluoromethane	1.22	85	28518	4.86	UG/L		93
4) chloromethane	1.36	50	27637	7.03	UG/L		89
5) vinyl chloride	1.42	62	31522	6.28	UG/L		99
6) bromomethane	1.66	94	20503	7.91	UG/L		92
7) chloroethane	1.74	64	18272	6.77	UG/L		100
8) trichlorofluoromethane	1.90	101	43056	4.33	UG/L		95
9) 1,1,2-trichloro-1,2,2-trif	2.30	101	41368	5.83	UG/L		99
10) methyl tert-butyl ether	3.08	73	112367	6.07	UG/L		99
12) 1,1-dichloroethene	2.34	96	37765	5.73	UG/L	#	86
13) acetone	2.46	43	17946	7.65	ug/l		96
14) methylene chloride	2.87	84	40303	5.92	UG/L		89
15) trans-1,2-dichloroethene	3.10	96	39762	5.35	UG/L		94
16) 1,1-dichloroethane	3.68	63	55880	5.84	UG/L		96
17) 2,2-dichloropropane	4.46	77	54279	5.30	UG/L		100
18) cis-1,2-dichloroethene	4.53	96	43700	5.92	UG/L		93
19) 2-butanone	4.63	43	20615	6.29	ug/l		96
20) bromochloromethane	4.88	128	26036	4.91	UG/L		90
21) chloroform	5.00	83	64165	5.27	UG/L		97
22) 1,1,1-trichloroethane	5.14	97	53098	4.90	UG/L		97
23) carbon tetrachloride	5.29	117	42480	4.33	UG/L		97
24) 1,1-dichloropropene	5.37	75	47028	5.75	UG/L		96
25) benzene	5.62	78	135171	6.58	UG/L		100
26) 1,2-dichloroethane	5.79	62	50474	5.57	UG/L		96
27) trichloroethene	6.49	95	36613	5.20	UG/L		95
28) 1,2-dichloropropane	6.83	63	31322	7.01	UG/L		100
29) dibromomethane	6.98	93	26037	5.85	UG/L		96
30) bromodichloromethane	7.18	83	48421	5.24	UG/L		99
31) cis-1,3-dichloropropene	7.74	75	54039	5.86	UG/L		92
32) 4-methyl-2-pentanone	7.94	43	43787	6.48	ug/l	#	92
33) toluene	8.04	92	101067	6.23	UG/L		96
34) trans-1,3-dichloropropene	8.45	75	52971	5.71	UG/L		100
35) 1,1,2-trichloroethane	8.65	83	28391	6.13	UG/L		93
36) tetrachloroethene	8.64	166	41100	5.23	UG/L		94
37) 1,3-dichloropropane	8.84	76	52951	5.79	UG/L		100
38) 2-hexanone	8.94	43	25097	5.57	ug/l		95
39) dibromochloromethane	9.05	129	39002	4.64	UG/L		98
40) 1,2-dibromoethane	9.18	107	40642	5.26	UG/L		95
41) chlorobenzene	9.72	112	106999	5.13	UG/L		96
42) 1,1,1,2-tetrachloroethane	9.84	131	36172	4.93	UG/L		96
43) ethylbenzene	9.82	91	155950	5.36	UG/L		98
44) m,p-xylene	9.96	106	127732	8.66	UG/L		99
45) o-xylene	10.43	106	63473	5.13	UG/L		99
46) styrene	10.47	104	89840	4.32	UG/L		97
47) bromoform	10.70	173	26842	4.63	UG/L		98
48) isopropylbenzene	10.85	105	143876	4.93	UG/L		97

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

HDR013 V112

Data File : C:\DATA\2015\FEB15\022515\G30678.D Vial: 20
Acq On : 25 Feb 2015 17:47 Operator: KGG
Sample : VSTD5.0 Inst : HP5972-2
Misc : ,,,ICAL_5.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:12 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.22	156	40773	4.99	UG/L		93
51)	1,1,2,2-tetrachloroethane	11.32	83	42435	5.83	UG/L		98
52)	1,2,3-trichloropropane	11.36	112	9517	5.07	UG/L	#	84
53)	n-propylbenzene	11.32	91	155206	5.44	UG/L		98
54)	2/4-chlorotoluene	11.58	91	217126m	10.65	UG/L		
55)	1,3,5-trimethylbenzene	11.55	105	112138	5.02	UG/L		100
56)	tert-butylbenzene	11.90	119	87674	4.87	UG/L		99
57)	1,2,4-trimethylbenzene	11.98	105	116074	5.15	UG/L		99
58)	sec-butylbenzene	12.16	105	123179	4.97	UG/L		97
59)	1,3-dichlorobenzene	12.32	146	68234	4.84	UG/L		99
60)	4-isopropyltoluene	12.34	119	103825	4.87	UG/L		98
61)	1,4-dichlorobenzene	12.44	146	70398	4.86	UG/L		98
63)	1,2-dichlorobenzene	12.87	146	65301	4.88	UG/L		99
64)	n-butylbenzene	12.82	91	81258	5.59	UG/L		98
65)	1,2-dibromo-3-chloropropan	13.82	75	5874	4.85	UG/L		93
66)	1,2,4-trichlorobenzene	14.73	180	28624	5.79	UG/L		96
67)	hexachlorobutadiene	14.86	225	9648	5.36	UG/L		96
68)	naphthalene	15.01	128	70313	5.01	UG/L		100
69)	1,2,3-trichlorobenzene	15.30	180	23717	5.64	UG/L		94

TIP
MRL 04/30/15

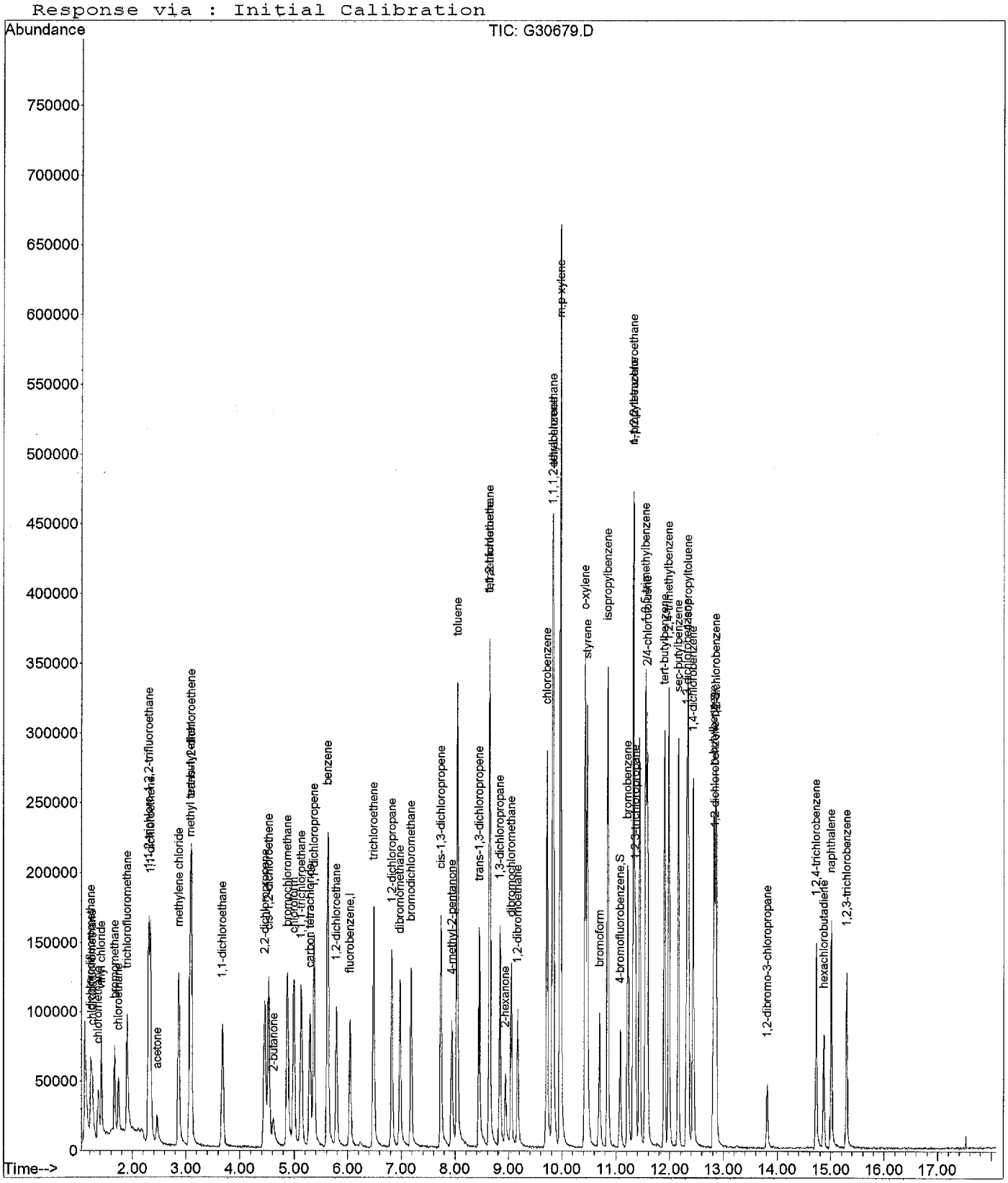
(#) = qualifier out of range (m) = manual integration

HDR013 V113

Data File : C:\DATA\2015\FEB15\022515\G30679.D Vial: 21
Acq On : 25 Feb 2015 18:12 Operator: KGG
Sample : VSTD10.0 Inst : HP5972-2
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:11 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V114



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30679.D Vial: 21
Acq On : 25 Feb 2015 18:12 Operator: KGG
Sample : VSTD10.0 Inst : HP5972-2
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:11 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) fluorobenzene	6.04	96	112695	5.00	UG/L		0.02
System Monitoring Compounds							
49) 4-bromofluorobenzene	11.08	174	29498	3.38	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 67.60%#				
62) 1,2-dichlorobenzene-d4	12.84	152	32741	4.18	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 83.60%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.25	51	78471	9.86	ug/l	#	100
3) dichlorodifluoromethane	1.22	85	53060	9.40	UG/L		92
4) chloromethane	1.36	50	54870	14.51	UG/L		95
5) vinyl chloride	1.42	62	58410	12.10	UG/L		97
6) bromomethane	1.66	94	38852	15.57	UG/L		96
7) chloroethane	1.74	64	33091	12.74	UG/L		94
8) trichlorofluoromethane	1.90	101	81972	8.57	UG/L		97
9) 1,1,2-trichloro-1,2,2-trif	2.30	101	79415	11.63	UG/L		98
10) methyl tert-butyl ether	3.07	73	181521	10.19	UG/L		98
12) 1,1-dichloroethene	2.33	96	74092	11.69	UG/L	#	84
13) acetone	2.46	43	29892	13.24	ug/l		92
14) methylene chloride	2.86	84	74875	11.44	UG/L		93
15) trans-1,2-dichloroethene	3.10	96	74174	10.38	UG/L		94
16) 1,1-dichloroethane	3.68	63	106749	11.60	UG/L		98
17) 2,2-dichloropropane	4.46	77	98752	10.02	UG/L		97
18) cis-1,2-dichloroethene	4.53	96	84469	11.90	UG/L		92
19) 2-butanone	4.62	43	38479	12.21	ug/l	#	92
20) bromochloromethane	4.87	128	48003	9.42	UG/L		93
21) chloroform	4.99	83	120461	10.29	UG/L		95
22) 1,1,1-trichloroethane	5.13	97	98701	9.46	UG/L		97
23) carbon tetrachloride	5.29	117	80388	8.53	UG/L		96
24) 1,1-dichloropropene	5.36	75	89646	11.38	UG/L		94
25) benzene	5.62	78	246352	12.47	UG/L		98
26) 1,2-dichloroethane	5.78	62	97067	11.14	UG/L		97
27) trichloroethene	6.49	95	70591	10.41	UG/L		92
28) 1,2-dichloropropane	6.82	63	55987	13.03	UG/L		100
29) dibromomethane	6.97	93	50847	11.87	UG/L		94
30) bromodichloromethane	7.18	83	96082	10.80	UG/L		98
31) cis-1,3-dichloropropene	7.73	75	105396	11.87	UG/L		92
32) 4-methyl-2-pentanone	7.94	43	74495	11.46	ug/l	#	93
33) toluene	8.04	92	174971	11.22	UG/L		97
34) trans-1,3-dichloropropene	8.44	75	98318	11.01	UG/L		97
35) 1,1,2-trichloroethane	8.64	83	50996	11.45	UG/L		96
36) tetrachloroethene	8.64	166	71019	9.39	UG/L		94
37) 1,3-dichloropropane	8.83	76	97027	11.03	UG/L		97
38) 2-hexanone	8.94	43	47823	11.04	ug/l	#	96
39) dibromochloromethane	9.04	129	75674	9.36	UG/L		99
40) 1,2-dibromoethane	9.17	107	77500	10.42	UG/L		96
41) chlorobenzene	9.71	112	198237	9.89	UG/L		97
42) 1,1,1,2-tetrachloroethane	9.83	131	66841	9.47	UG/L		98
43) ethylbenzene	9.82	91	290001	10.36	UG/L		98
44) m,p-xylene	9.97	106	240933	16.98	UG/L		97
45) o-xylene	10.42	106	120085	10.08	UG/L		96
46) styrene	10.47	104	204601	10.23	UG/L		96
47) bromoform	10.69	173	52926	9.49	UG/L		98
48) isopropylbenzene	10.84	105	273970	9.76	UG/L		97

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

HDR013 V115

Data File : C:\DATA\2015\FEB15\022515\G30679.D Vial: 21
Acq On : 25 Feb 2015 18:12 Operator: KGG
Sample : VSTD10.0 Inst : HP5972-2
Misc : ,,,ICAL_10.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:11 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.22	156	77008	9.80	UG/L		94
51)	1,1,2,2-tetrachloroethane	11.32	83	84404	12.05	UG/L		99
52)	1,2,3-trichloropropane	11.36	112	19058	10.55	UG/L	#	85
53)	n-propylbenzene	11.33	91	292010	10.65	UG/L		98
54)	2/4-chlorotoluene	11.58	91	408167m	20.81	UG/L		
55)	1,3,5-trimethylbenzene	11.55	105	214955	10.00	UG/L		100
56)	tert-butylbenzene	11.90	119	165710	9.57	UG/L		99
57)	1,2,4-trimethylbenzene	11.98	105	216183	9.97	UG/L		99
58)	sec-butylbenzene	12.16	105	235586	9.88	UG/L		97
59)	1,3-dichlorobenzene	12.31	146	130891	9.64	UG/L		99
60)	4-isopropyltoluene	12.34	119	194912	9.51	UG/L		99
61)	1,4-dichlorobenzene	12.43	146	131263	9.42	UG/L		99
63)	1,2-dichlorobenzene	12.86	146	125448	9.74	UG/L		97
64)	n-butylbenzene	12.81	91	150989	10.79	UG/L		97
65)	1,2-dibromo-3-chloropropan	13.81	75	12093	10.38	UG/L		87
66)	1,2,4-trichlorobenzene	14.72	180	54809	11.52	UG/L		99
67)	hexachlorobutadiene	14.86	225	17034	9.83	UG/L		99
68)	naphthalene	15.00	128	156832	11.61	UG/L		100
69)	1,2,3-trichlorobenzene	15.29	180	49031	12.12	UG/L		91

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

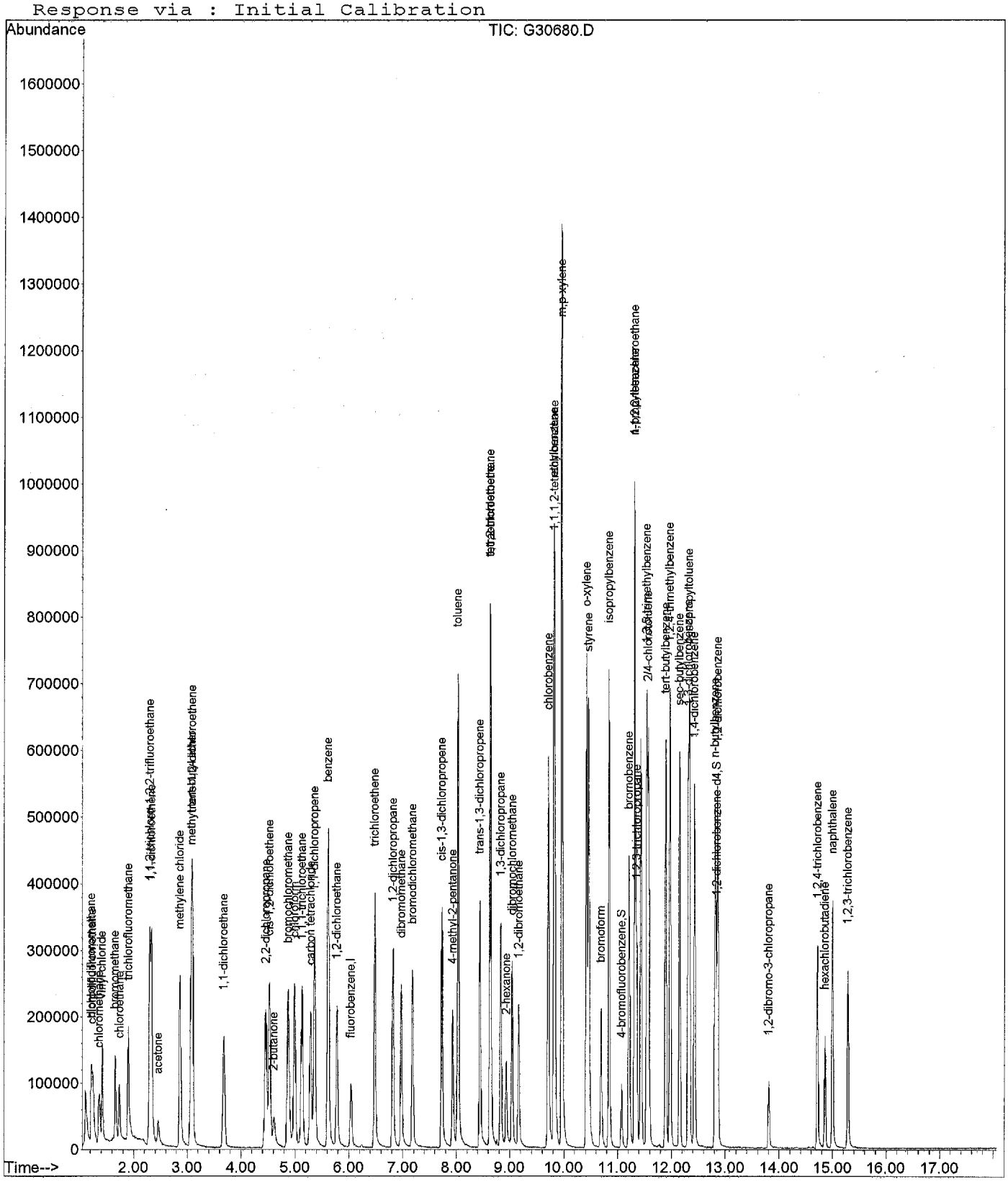
HDR013 V116

Quantitation Report

Data File : C:\DATA\2015\FEB15\022515\G30680.D Vial: 22
Acq On : 25 Feb 2015 18:38 Operator: KGG
Sample : VSTD20.0 Inst : HP5972-2
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:16 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V117



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30680.D Vial: 22
Acq On : 25 Feb 2015 18:38 Operator: KGG
Sample : VSTD20.0 Inst : HP5972-2
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:16 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.03	96	119815	5.00	UG/L	0.00
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	30437	3.28	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 65.60%#			
62) 1,2-dichlorobenzene-d4	12.84	152	32836	3.95	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 79.00%			
Target Compounds						Qvalue
2) chlorodifluoromethane	1.24	51	163315	19.30	ug/l #	99
3) dichlorodifluoromethane	1.22	85	112003	18.66	UG/L	91
4) chloromethane	1.36	50	112510	27.98	UG/L	94
5) vinyl chloride	1.42	62	129990	25.33	UG/L	99
6) bromomethane	1.66	94	83420	31.45	UG/L	94
7) chloroethane	1.74	64	68936	24.96	UG/L	95
8) trichlorofluoromethane	1.90	101	168863	16.60	UG/L	98
9) 1,1,2-trichloro-1,2,2-trif	2.30	101	165716	22.82	UG/L	97
10) methyl tert-butyl ether	3.07	73	366530	19.35	UG/L	98
12) 1,1-dichloroethene	2.33	96	147241	21.84	UG/L	87
13) acetone	2.46	43	58611	24.42	ug/l #	87
14) methylene chloride	2.86	84	161297	23.17	UG/L	92
15) trans-1,2-dichloroethene	3.10	96	148522	19.55	UG/L	94
16) 1,1-dichloroethane	3.67	63	213371	21.81	UG/L	99
17) 2,2-dichloropropane	4.46	77	196401	18.75	UG/L	98
18) cis-1,2-dichloroethene	4.53	96	173954	23.04	UG/L	91
19) 2-butanone	4.61	43	80927	24.15	ug/l #	92
20) bromochloromethane	4.87	128	94465	17.43	UG/L	93
21) chloroform	4.99	83	248687	19.98	UG/L	97
22) 1,1,1-trichloroethane	5.13	97	209950	18.93	UG/L	96
23) carbon tetrachloride	5.29	117	168889	16.85	UG/L	97
24) 1,1-dichloropropene	5.36	75	178604	21.33	UG/L	95
25) benzene	5.62	78	500810	23.84	UG/L	99
26) 1,2-dichloroethane	5.78	62	201811	21.79	UG/L	97
27) trichloroethene	6.48	95	149056	20.68	UG/L	92
28) 1,2-dichloropropane	6.82	63	116690	25.55	UG/L	100
29) dibromomethane	6.97	93	103580	22.75	UG/L	96
30) bromodichloromethane	7.18	83	192160	20.32	UG/L	99
31) cis-1,3-dichloropropene	7.73	75	217179	23.01	UG/L	92
32) 4-methyl-2-pentanone	7.93	43	160801	23.27	ug/l	95
33) toluene	8.03	92	366192	22.09	UG/L	96
34) trans-1,3-dichloropropene	8.44	75	214406	22.59	UG/L	99
35) 1,1,2-trichloroethane	8.64	83	113544	23.98	UG/L	96
36) tetrachloroethene	8.63	166	160121	19.92	UG/L	92
37) 1,3-dichloropropane	8.83	76	209874	22.43	UG/L	99
38) 2-hexanone	8.94	43	112237	24.37	ug/l	98
39) dibromochloromethane	9.04	129	160271	18.65	UG/L	99
40) 1,2-dibromoethane	9.16	107	168786	21.35	UG/L	93
41) chlorobenzene	9.71	112	413256	19.38	UG/L	97
42) 1,1,1,2-tetrachloroethane	9.83	131	139332	18.56	UG/L	99
43) ethylbenzene	9.81	91	601217	20.20	UG/L	98
44) m,p-xylene	9.96	106	496644	32.93	UG/L	100
45) o-xylene	10.42	106	249701	19.71	UG/L	96
46) styrene	10.46	104	418115	19.66	UG/L	96
47) bromoform	10.69	173	114038	19.23	UG/L	99
48) isopropylbenzene	10.84	105	561242	18.80	UG/L	98

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

HDR013 V118

Data File : C:\DATA\2015\FEB15\022515\G30680.D Vial: 22
Acq On : 25 Feb 2015 18:38 Operator: KGG
Sample : VSTD20.0 Inst : HP5972-2
Misc : ,,,ICAL_20.0,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:16 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.21	156	160518	19.20	UG/L		93
51)	1,1,2,2-tetrachloroethane	11.32	83	169080	22.71	UG/L		98
52)	1,2,3-trichloropropane	11.36	112	37355	19.45	UG/L	#	85
53)	n-propylbenzene	11.32	91	599182	20.55	UG/L		98
54)	2/4-chlorotoluene	11.58	91	822197m	39.43	UG/L		
55)	1,3,5-trimethylbenzene	11.55	105	432993	18.95	UG/L		99
56)	tert-butylbenzene	11.90	119	345600	18.77	UG/L		98
57)	1,2,4-trimethylbenzene	11.98	105	441479	19.16	UG/L		99
58)	sec-butylbenzene	12.16	105	480412	18.95	UG/L		98
59)	1,3-dichlorobenzene	12.31	146	271556	18.82	UG/L		98
60)	4-isopropyltoluene	12.34	119	397154	18.22	UG/L		99
61)	1,4-dichlorobenzene	12.43	146	271025	18.30	UG/L		98
63)	1,2-dichlorobenzene	12.86	146	258104	18.85	UG/L		96
64)	n-butylbenzene	12.81	91	315723	21.22	UG/L		98
65)	1,2-dibromo-3-chloropropan	13.81	75	26261	21.20	UG/L		90
66)	1,2,4-trichlorobenzene	14.72	180	116328	23.00	UG/L		99
67)	hexachlorobutadiene	14.86	225	34189	18.56	UG/L		99
68)	naphthalene	15.00	128	356433	24.82	UG/L		100
69)	1,2,3-trichlorobenzene	15.29	180	99674	23.18	UG/L		97

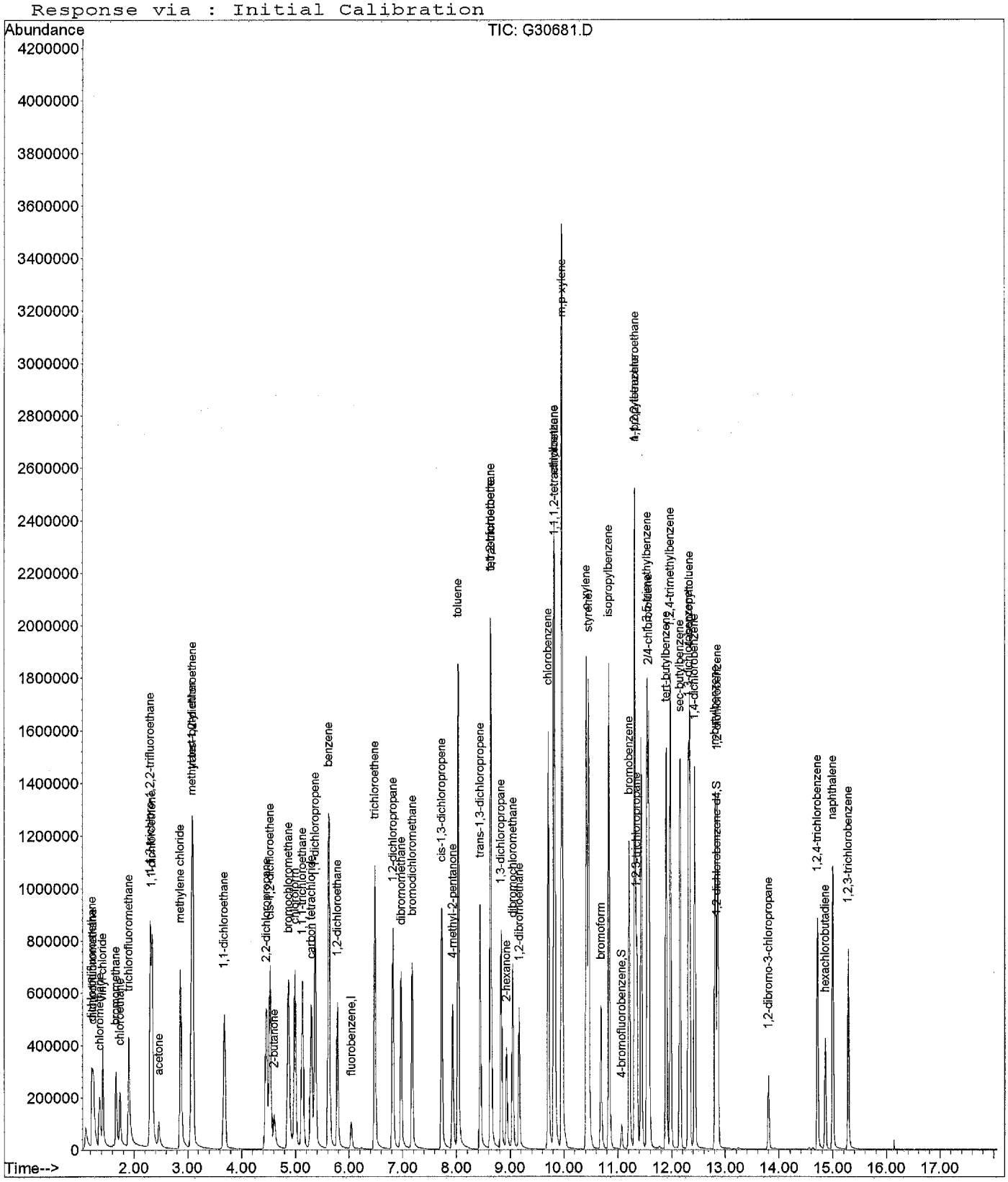
(#) = qualifier out of range (m) = manual integration

HDR013 V119

Data File : C:\DATA\2015\FEB15\022515\G30681.D Vial: 23
Acq On : 25 Feb 2015 19:03 Operator: KGG
Sample : VSTD50 Inst : HP5972-2
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:10 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V120



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30681.D Vial: 23
Acq On : 25 Feb 2015 19:03 Operator: KGG
Sample : VSTD50 Inst : HP5972-2
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:10 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.04	96	119703	5.00	UG/L	0.01
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	30412	3.28	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	65.60%#		
62) 1,2-dichlorobenzene-d4	12.84	152	32046	3.86	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	77.20%		
Target Compounds						Qvalue
2) chlorodifluoromethane	1.25	51	459792	54.39	ug/l #	98
3) dichlorodifluoromethane	1.22	85	313962	52.36	UG/L	92
4) chloromethane	1.37	50	289611	72.09	UG/L	92
5) vinyl chloride	1.43	62	343066	66.91	UG/L	99
6) bromomethane	1.66	94	211777	79.92	UG/L	96
7) chloroethane	1.74	64	177812	64.45	UG/L	95
8) trichlorofluoromethane	1.90	101	454066	44.69	UG/L	97
9) 1,1,2-trichloro-1,2,2-trif	2.30	101	427739	58.95	UG/L	100
10) methyl tert-butyl ether	3.08	73	1045666	55.25	UG/L	99
12) 1,1-dichloroethene	2.34	96	384210	57.05	UG/L	87
13) acetone	2.46	43	147200	61.40	ug/l #	88
14) methylene chloride	2.87	84	441060	63.43	UG/L	92
15) trans-1,2-dichloroethene	3.10	96	453545	59.76	UG/L	91
16) 1,1-dichloroethane	3.67	63	650233	66.51	UG/L	98
17) 2,2-dichloropropane	4.46	77	518947	49.58	UG/L	97
18) cis-1,2-dichloroethene	4.53	96	469790	62.29	UG/L	93
19) 2-butanone	4.61	43	223163	66.65	ug/l	93
20) bromochloromethane	4.87	128	257621	47.59	UG/L	92
21) chloroform	4.99	83	676857	54.43	UG/L	97
22) 1,1,1-trichloroethane	5.13	97	550106	49.64	UG/L	96
23) carbon tetrachloride	5.29	117	459428	45.87	UG/L	95
24) 1,1-dichloropropene	5.36	75	493485	59.00	UG/L	95
25) benzene	5.62	78	1394474	66.45	UG/L	99
26) 1,2-dichloroethane	5.78	62	517419	55.93	UG/L	97
27) trichloroethene	6.48	95	396308	55.04	UG/L	92
28) 1,2-dichloropropane	6.82	63	330576	72.46	UG/L	98
29) dibromomethane	6.97	93	269748	59.29	UG/L	96
30) bromodichloromethane	7.18	83	519498	54.99	UG/L	99
31) cis-1,3-dichloropropene	7.73	75	548463	58.18	UG/L	91
32) 4-methyl-2-pentanone	7.93	43	416459	60.33	ug/l	95
33) toluene	8.03	92	940386	56.77	UG/L	97
34) trans-1,3-dichloropropene	8.44	75	525061	55.37	UG/L	100
35) 1,1,2-trichloroethane	8.64	83	256753	54.27	UG/L	95
36) tetrachloroethene	8.63	166	384808	47.92	UG/L	94
37) 1,3-dichloropropane	8.83	76	488522	52.26	UG/L	99
38) 2-hexanone	8.93	43	295054	64.12	ug/l	99
39) dibromochloromethane	9.04	129	408528	47.60	UG/L	99
40) 1,2-dibromoethane	9.16	107	409957	51.91	UG/L	95
41) chlorobenzene	9.71	112	1061630	49.84	UG/L	97
42) 1,1,1,2-tetrachloroethane	9.83	131	352584	47.02	UG/L	99
43) ethylbenzene	9.81	91	1531715	51.52	UG/L	98
44) m,p-xylene	9.96	106	1246951	82.75	UG/L	99
45) o-xylene	10.42	106	630862	49.85	UG/L	99
46) styrene	10.46	104	1065623	50.16	UG/L	96
47) bromoform	10.69	173	295035	49.80	UG/L	99
48) isopropylbenzene	10.84	105	1442677	48.37	UG/L	97

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

HDR013 V121

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30681.D Vial: 23
Acq On : 25 Feb 2015 19:03 Operator: KGG
Sample : VSTD50 Inst : HP5972-2
Misc : ,,,ICAL_50,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:10 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.21	156	411166	49.24	UG/L		92
51)	1,1,2,2-tetrachloroethane	11.31	83	417434	56.11	UG/L		99
52)	1,2,3-trichloropropane	11.36	112	92890	48.40	UG/L	#	85
53)	n-propylbenzene	11.32	91	1528700 TR	52.47	UG/L		97
54)	2/4-chlorotoluene	11.57	91	2089675m	100.30	UG/L		
55)	1,3,5-trimethylbenzene	11.54	105	1116398 HV 049%	48.90	UG/L		100
56)	tert-butylbenzene	11.90	119	888702	48.31	UG/L		97
57)	1,2,4-trimethylbenzene	11.98	105	1126234	48.92	UG/L		99
58)	sec-butylbenzene	12.16	105	1238044	48.89	UG/L		97
59)	1,3-dichlorobenzene	12.31	146	692950	48.06	UG/L		98
60)	4-isopropyltoluene	12.34	119	1027231	47.18	UG/L		99
61)	1,4-dichlorobenzene	12.43	146	708110	47.85	UG/L		98
63)	1,2-dichlorobenzene	12.85	146	638573	46.68	UG/L		97
64)	n-butylbenzene	12.81	91	813266	54.71	UG/L		99
65)	1,2-dibromo-3-chloropropan	13.81	75	68853	55.62	UG/L		90
66)	1,2,4-trichlorobenzene	14.71	180	317065	62.75	UG/L		98
67)	hexachlorobutadiene	14.86	225	83109	45.16	UG/L		99
68)	naphthalene	15.00	128	1006685	70.16	UG/L		100
69)	1,2,3-trichlorobenzene	15.29	180	277252	64.55	UG/L		94

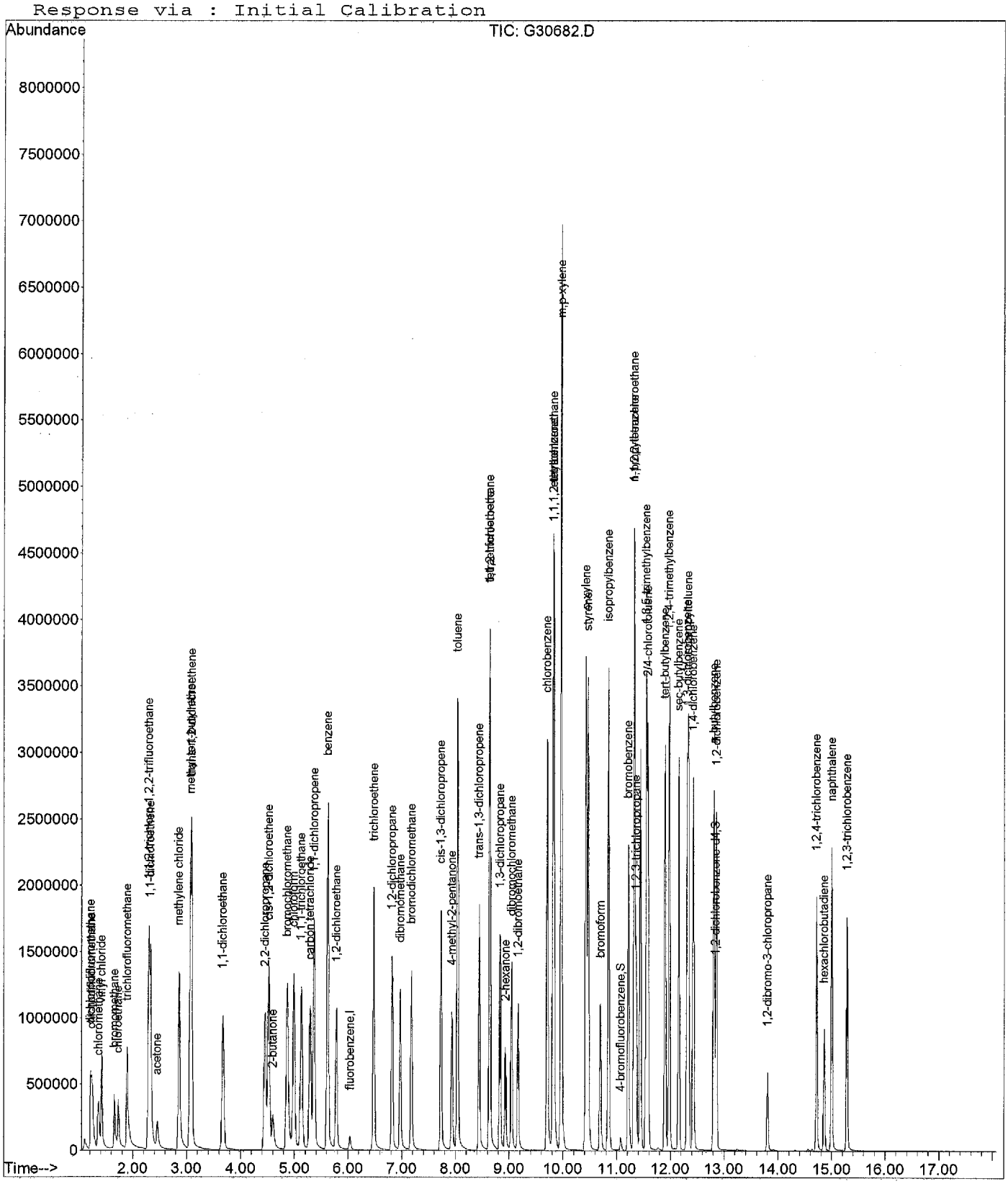
(#) = qualifier out of range (m) = manual integration

HDR013 V122

Data File : C:\DATA\2015\FEB15\022515\G30682.D Vial: 24
Acq On : 25 Feb 2015 19:29 Operator: KGG
Sample : VSTD100 Inst : HP5972-2
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:09 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V123



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\FEB15\022515\G30682.D Vial: 24
Acq On : 25 Feb 2015 19:29 Operator: KGG
Sample : VSTD100 Inst : HP5972-2
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:09 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.03	96	119596	5.00	UG/L	0.00
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.08	174	30137	3.26	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 65.20%#			
62) 1,2-dichlorobenzene-d4	12.84	152	30843	3.71	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 74.20%			
Target Compounds						Qvalue
2) chlorodifluoromethane	1.24	51	839112	99.34	ug/l #	99
3) dichlorodifluoromethane	1.22	85	588980	98.30	UG/L	92
4) chloromethane	1.36	50	545287	135.85	UG/L	94
5) vinyl chloride	1.42	62	658841	128.61	UG/L	99
6) bromomethane	1.65	94	298819	112.87	UG/L	95
7) chloroethane	1.72	64	337136	122.31	UG/L	95
8) trichlorofluoromethane	1.89	101	869841	85.68	UG/L	95
9) 1,1,2-trichloro-1,2,2-trif	2.30	101	829507	114.42	UG/L	99
10) methyl tert-butyl ether	3.07	73	2042617	108.03	UG/L	99
12) 1,1-dichloroethene	2.33	96	768432	114.20	UG/L	86
13) acetone	2.46	43	309050	129.02	ug/l #	89
14) methylene chloride	2.86	84	891642	128.34	UG/L	91
15) trans-1,2-dichloroethene	3.10	96	896834	118.28	UG/L	91
16) 1,1-dichloroethane	3.67	63	1325159	135.67	UG/L	99
17) 2,2-dichloropropane	4.46	77	1005677	96.17	UG/L	99
18) cis-1,2-dichloroethene	4.52	96	932923	123.82	UG/L	94
19) 2-butanone	4.60	43	444764	132.95	ug/l #	92
20) bromochloromethane	4.87	128	514277	95.09	UG/L	92
21) chloroform	4.99	83	1335408	107.49	UG/L	97
22) 1,1,1-trichloroethane	5.12	97	1080349	97.57	UG/L	96
23) carbon tetrachloride	5.29	117	901010	90.04	UG/L	96
24) 1,1-dichloropropene	5.36	75	986251	118.02	UG/L	94
25) benzene	5.62	78	2745271	130.93	UG/L	99
26) 1,2-dichloroethane	5.78	62	1024820	110.88	UG/L	98
27) trichloroethene	6.48	95	740353	102.91	UG/L	94
28) 1,2-dichloropropane	6.82	63	557522	122.31	UG/L	100
29) dibromomethane	6.97	93	495060	108.91	UG/L	97
30) bromodichloromethane	7.18	83	976325	103.43	UG/L	99
31) cis-1,3-dichloropropene	7.72	75	1035029	109.88	UG/L	92
32) 4-methyl-2-pentanone	7.93	43	797081	115.58	ug/l	97
33) toluene	8.03	92	1709618	103.30	UG/L	96
34) trans-1,3-dichloropropene	8.44	75	1032328	108.96	UG/L	99
35) 1,1,2-trichloroethane	8.64	83	494561	104.64	UG/L	94
36) tetrachloroethene	8.63	166	751250	93.63	UG/L	94
37) 1,3-dichloropropane	8.83	76	967222	103.56	UG/L	100
38) 2-hexanone	8.93	43	580786	126.33	ug/l	98
39) dibromochloromethane	9.04	129	812802	94.78	UG/L	99
40) 1,2-dibromoethane	9.16	107	832587	105.51	UG/L	92
41) chlorobenzene	9.71	112	2112864	99.28	UG/L	97
42) 1,1,1,2-tetrachloroethane	9.83	131	685948	91.56	UG/L	99
43) ethylbenzene	9.81	91	2980997	100.35	UG/L	98
44) m,p-xylene	9.96	106	2449913	162.73	UG/L	99
45) o-xylene	10.42	106	1236128	97.77	UG/L	98
46) styrene	10.46	104	2152562	101.42	UG/L	96
47) bromoform	10.69	173	594433	100.43	UG/L	98
48) isopropylbenzene	10.84	105	2837047	95.21	UG/L	97

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

HDR013 V124

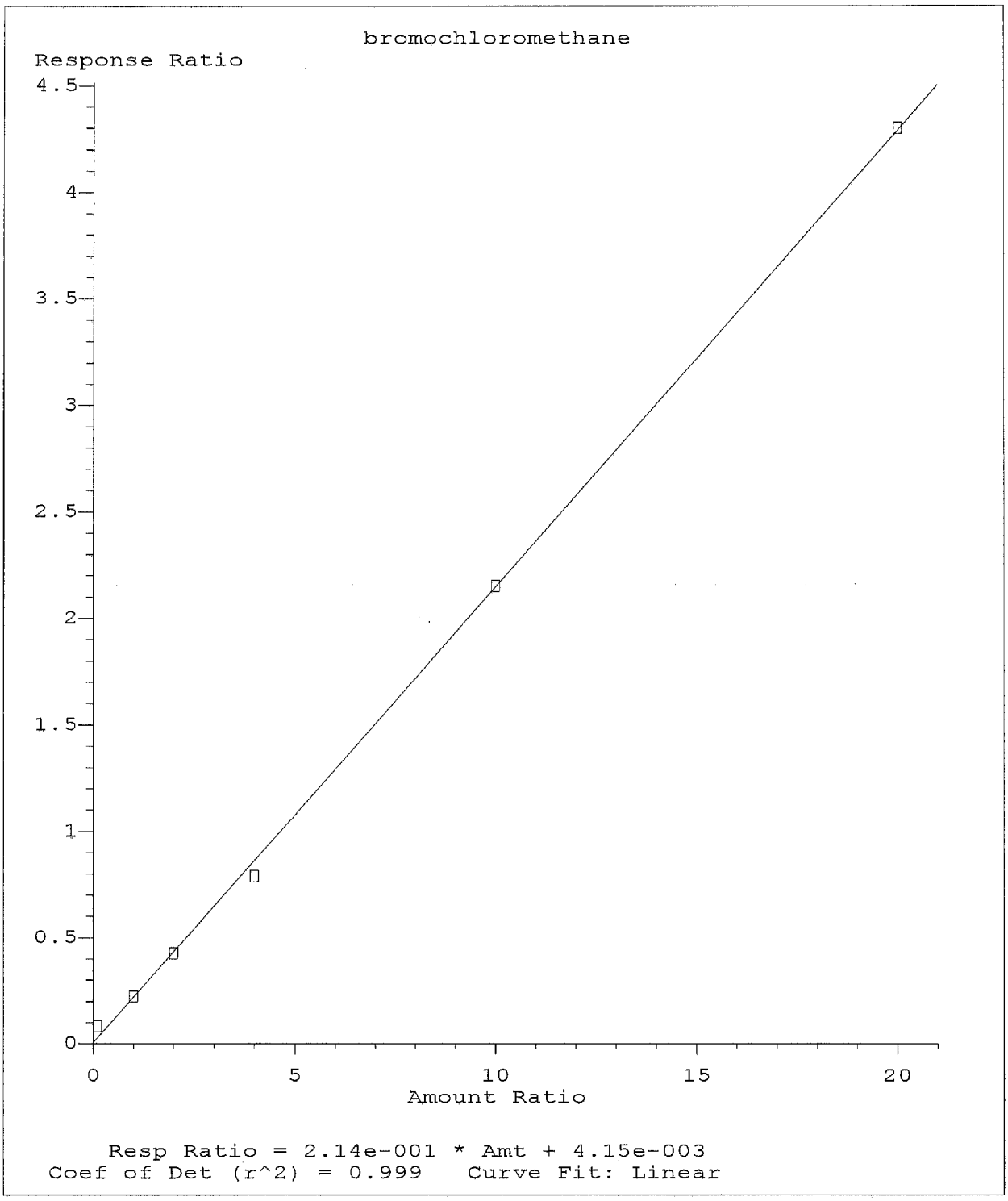
Data File : C:\DATA\2015\FEB15\022515\G30682.D Vial: 24
Acq On : 25 Feb 2015 19:29 Operator: KGG
Sample : VSTD100 Inst : HP5972-2
Misc : ,,,ICAL_100,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 26 8:09 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Wed Feb 25 15:48:12 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

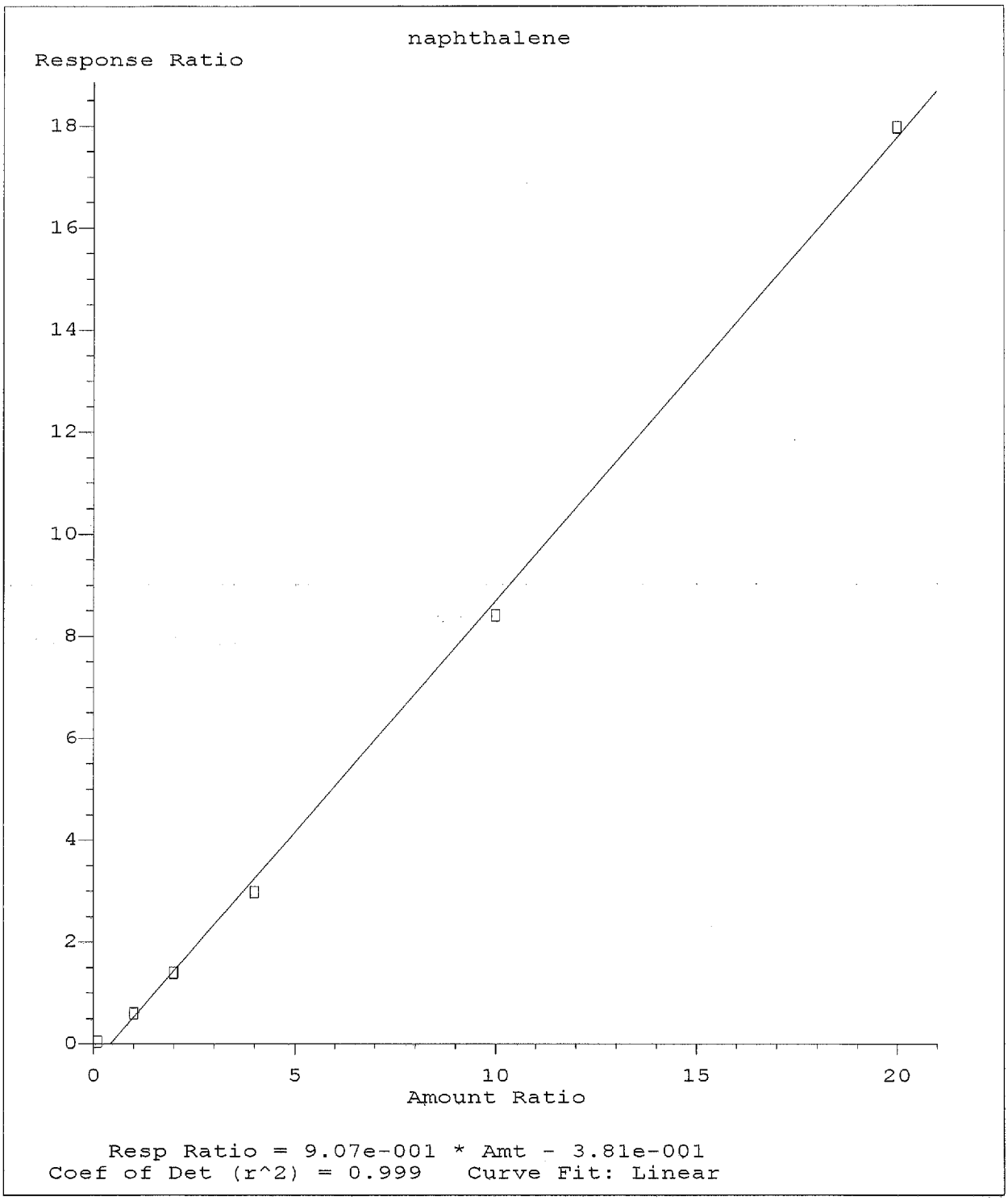
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.21	156	810959	97.20	UG/L		91
51)	1,1,2,2-tetrachloroethane	11.32	83	786713	105.84	UG/L		97
52)	1,2,3-trichloropropane	11.35	112	185041	96.50	UG/L	#	90
53)	n-propylbenzene	11.32	91	2953244	101.46	UG/L		97
54)	2/4-chlorotoluene	11.58	91	4078418m	195.92	UG/L		
55)	1,3,5-trimethylbenzene	11.55	105	2199860	96.45	UG/L		100
56)	tert-butylbenzene	11.90	119	1731092	94.19	UG/L		97
57)	1,2,4-trimethylbenzene	11.97	105	2211877	96.17	UG/L		98
58)	sec-butylbenzene	12.15	105	2382814	94.18	UG/L		97
59)	1,3-dichlorobenzene	12.31	146	1367390	94.92	UG/L		97
60)	4-isopropyltoluene	12.34	119	1988866	91.43	UG/L		99
61)	1,4-dichlorobenzene	12.43	146	1390184	94.02	UG/L		98
63)	1,2-dichlorobenzene	12.86	146	1245815	91.16	UG/L		97
64)	n-butylbenzene	12.81	91	1599752	107.71	UG/L		99
65)	1,2-dibromo-3-chloropropan	13.80	75	141490	114.41	UG/L		88
66)	1,2,4-trichlorobenzene	14.71	180	692267	137.13	UG/L		98
67)	hexachlorobutadiene	14.86	225	185677	100.98	UG/L		98
68)	naphthalene	15.00	128	2147890	149.83	UG/L		100
69)	1,2,3-trichlorobenzene	15.29	180	632636	147.42	UG/L		94

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

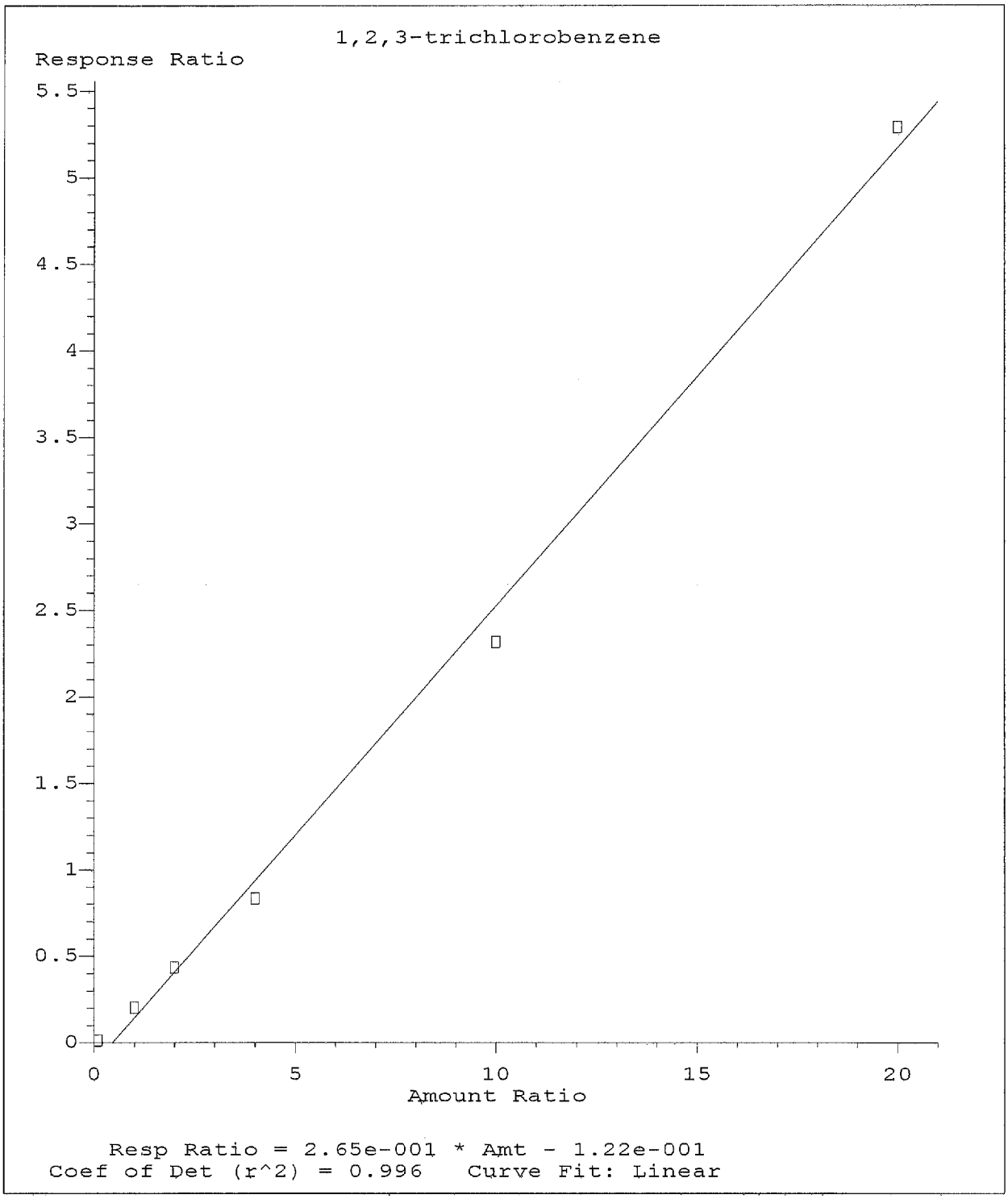
HDR013 V125



Method Name: C:\HPCHEM\1\METHODS\524_0225.M
Calibration Table Last Updated: Thu Feb 26 07:24:04 2015



Method Name: C:\HPCHEM\1\METHODS\524_0225.M
Calibration Table Last Updated: Thu Feb 26 07:24:04 2015



Method Name: C:\HPCHEM\1\METHODS\524_0225.M
Calibration Table Last Updated: Thu Feb 26 07:24:04 2015

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Dates: 5/3/2015 5/3/2015

Heated Purge: (Y/N) N Calibration Times: 14:26 17:52

GC Column: R-624 0.18 ID: .18 (mm)

LAB FILE ID: TD0.50= P0526.D STD5.0= P0527.D TD10.0= P0528.D VSTD50= P0530.D STD100= P0531.D

COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD	R^2
Pentachloroethane *	0	0	0	0	0	0.000	0.0	*
Propionitrile *	0	0	0	0	0	0.000	0.0	*
Tetrahydrofuran *	0	0	0	0	0	0.000	0.0	*
trans-1,4-Dichloro-2-butene *	0	0	0	0	0	0.000	0.0	*
Chlorodifluoromethane	0.5237203	0.4597185	0.4743123	0.4668812	0.4649600	0.478	5.5	
Dichlorodifluoromethane *	0.4215943	0.3519563	0.3593658	0.3645954	0.3542375	0.370	7.8	*
Chloromethane *	0.4634603	0.3727833	0.3810951	0.3630976	0.3534181	0.387	11.4	*
Vinyl chloride *	0.3438431	0.3077317	0.3241758	0.3364569	0.3339201	0.329	4.2	*
Bromomethane *	0.1560666	0.0889722	0.0947659	0.1030131	0.1111022	0.111	24.1	*
Chloroethane *	0.2975761	0.2245545	0.2204273	0.2151960	0.2048843	0.233	16.0	*
1,1,2-Trichloro-1,2,2-trifluoroethane	0	0	0	0	0	0.000	0.0	
Trichlorofluoromethane *	0.5784508	0.4978977	0.5126522	0.5040064	0.5019514	0.519	6.5	*
1,1-Dichloroethene *	0.2596597	0.2398370	0.262941	0.2812699	0.2892377	0.268	8.2	*
Methylene chloride *	0.5104044	0.3228726	0.326743	0.3084795	0.3127237	0.356	24.3	*
trans-1,2-Dichloroethene *	0.3086350	0.2802710	0.3000577	0.2991531	0.3091949	0.299	3.9	*
1,1-Dichloroethane *	0.6310373	0.5770664	0.6173824	0.623369	0.6352173	0.617	3.8	*
2,2-Dichloropropane *	0.3392164	0.3174480	0.3533074	0.3864868	0.3989117	0.359	9.3	*
cis-1,2-Dichloroethene *	0.3124718	0.3104985	0.3296462	0.336653	0.3439711	0.327	4.5	*
Bromochloromethane *	0.1639659	0.1487735	0.1661802	0.1570447	0.159447	0.159	4.3	*
Chloroform *	0.6072267	0.5352926	0.5714406	0.5477966	0.5516850	0.563	5.0	*
1,1,1-Trichloroethane *	0.4836598	0.4466363	0.4813839	0.5053817	0.5161949	0.487	5.5	*
Carbon tetrachloride *	0.3612214	0.3553876	0.3812369	0.4211669	0.4371367	0.391	9.3	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Dates: 5/3/2015 5/3/2015

Heated Purge: (Y/N) N Calibration Times: 14:26 17:52

GC Column: R-624 0.18 ID: .18 (mm)

LAB FILE ID: TD0.50= P0526.D STD5.0= P0527.D TD10.0= P0528.D VSTD50= P0530.D STD100= P0531.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5						RRF	% RSD	R^2
1,1-Dichloropropene	*	0.3559177	0.3698205	0.4035804	0.4466367	0.4540887						0.406	10.9	*
1,2-Dichloroethane	*	0.5672790	0.5439088	0.5648415	0.5138778	0.5123613						0.540	4.9	*
Benzene	*	1.2163718	1.1750033	1.2459471	1.2439044	1.2725126						1.231	3.0	*
Trichloroethene	*	0.3253363	0.2977430	0.3128832	0.3232622	0.3297972						0.318	4.0	*
1,2-Dichloropropane	*	0.3203710	0.2995294	0.3304441	0.3404448	0.3486280						0.328	5.8	*
Dibromomethane	*	0.2121513	0.1926496	0.2104263	0.2006996	0.2027405						0.204	3.9	*
Bromodichloromethane	*	0.3525323	0.3545924	0.3837831	0.4068353	0.4261184						0.385	8.4	*
cis-1,3-Dichloropropene	*	0.3261262	0.3474685	0.4141747	0.4784492	0.507592						0.415	19.1	*
Toluene	*	0.6622957	0.7376040	0.8153717	0.828689	0.8403887						0.777	9.7	*
trans-1,3-Dichloropropene	*	0.3101020	0.3354974	0.3940624	0.4593968	0.4865197						0.397	19.2	*
1,1,2-Trichloroethane	*	0.2155367	0.2415363	0.2537537	0.2483986	0.2498781						0.242	6.3	*
Tetrachloroethene	*	0.3034441	0.302928	0.3232990	0.3212866	0.3245293						0.315	3.5	*
1,3-Dichloropropane	*	0.5264286	0.5046294	0.5389542	0.5269022	0.5331284						0.526	2.5	*
1,2-Dibromoethane	*	0.2654148	0.2756743	0.3048352	0.3061246	0.3123959						0.293	7.1	*
Dibromochloromethane	*	0.2379931	0.2430286	0.2790739	0.3097600	0.3293332						0.280	14.4	*
Chlorobenzene	*	0.7340661	0.7722975	0.8623478	0.8789141	0.8935993						0.828	8.5	*
1,1,1,2-Tetrachloroethane	*	0.2548073	0.2542155	0.2801029	0.2952820	0.3016500						0.277	8.0	*
Ethylbenzene	*	1.0490205	1.340007	1.5385342	1.5867482	1.6009258						1.423	16.4	*
m,p-Xylene	*	0.3840164	0.5482985	0.6127467	0.5965630	0.5919287						0.547	17.2	*
o-Xylene	*	0.3896588	0.4922335	0.5562841	0.5769698	0.5846275						0.520	15.7	*
Styrene	*	0.6036156	0.8738617	0.9659544	0.9992948	1.0148727						0.892	19.1	*
Bromoform	*	0.108784	0.1358329	0.1535752	0.1809136	0.1984702						0.156	22.9	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Dates: 5/3/2015 5/3/2015

Heated Purge: (Y/N) N Calibration Times: 14:26 17:52

GC Column: R-624 0.18 ID: .18 (mm)

LAB FILE ID: TD0.50= P0526.D STD5.0= P0527.D TD10.0= P0528.D VSTD50= P0530.D STD100= P0531.D

COMPOUND		Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD	R^2
Isopropylbenzene	*	0.9589690	1.3437323	1.5108515	1.5971471	1.6157279	1.405	19.3	*
Bromobenzene	*	0.3383136	0.3398545	0.3708736	0.3634787	0.3641410	0.355	4.3	*
1,1,2,2-Tetrachloroethane	*	0.4009434	0.4107664	0.4247060	0.4135298	0.4111467	0.412	2.1	*
1,2,3-Trichloropropane	*	0.1332716	0.1424883	0.1524727	0.1480175	0.1459286	0.144	5.0	*
n-Propylbenzene	*	1.3355376	1.6618012	1.8327961	1.8951347	1.9023228	1.726	13.8	*
2/4-Chlorotoluene	*	0.9727363	1.1527275	1.2567067	1.2412839	1.2691034	1.179	10.5	*
2-Chlorotoluene	*	0.9222939	1.0513485	1.1476690	1.1465704	1.1672547	1.087	9.4	*
4-Chlorotoluene	*	0.9120249	1.1165853	1.2085941	1.1807313	1.2044874	1.124	11.1	*
1,3,5-Trimethylbenzene	*	0.8474768	1.2303168	1.3621535	1.384607	1.4134985	1.248	18.8	*
tert-Butylbenzene	*	0.7471563	1.0028430	1.1323289	1.1932466	1.2086358	1.057	18.1	*
1,2,4-Trimethylbenzene	*	0.8338223	1.2370267	1.3703381	1.3822503	1.4020102	1.245	19.2	*
sec-Butylbenzene	*	1.1000271	1.5188118	1.6698289	1.7476318	1.7575228	1.559	17.6	*
1,2-Dibromo-3-chloropropane	*	0	0	0	0	0	0.000	0.0	*
n-Butylbenzene	*	0.8085447	1.1057143	1.2749370	1.3806033	1.4015566	1.194	20.5	*
1,3-Dichlorobenzene	*	0.6440146	0.7070498	0.7608043	0.7094268	0.7045203	0.705	5.9	*
1,4-Dichlorobenzene	*	0.5968448	0.7030630	0.7552604	0.7212930	0.7301025	0.701	8.7	*
4-Isopropyltoluene	*	0.8646294	1.3238966	1.5097596	1.5562300	1.5521330	1.361	21.6	*
1,2-Dichlorobenzene	*	0.6731290	0.6715394	0.7086046	0.68201	0.6900558	0.685	2.2	*
1,2,4-Trichlorobenzene	*	0.2949806	0.3289617	0.375399	0.4384914	0.4574151	0.379	18.3	*
Hexachlorobutadiene	*	0.1504243	0.1517799	0.1660437	0.1957478	0.2060613	0.174	14.7	*
Naphthalene	*	0.6566534	0.9847283	1.2660962	1.4695214	1.5167346	1.179	30.5	*
1,2,3-Trichlorobenzene	*	0.2525503	0.3322622	0.3762547	0.4172379	0.4311337	0.362	20.0	*

Form 6

VOCS POTABLE INITIAL CALIBRATION DATA

Lab Name: PACE ANALYTICAL Contract: PACE ANALYTICAL

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Dates: 5/3/2015 5/3/2015

Heated Purge: (Y/N) N Calibration Times: 14:26 17:52

GC Column: R-624 0.18 ID: .18 (mm)

LAB FILE ID: TD0.50= P0526.D STD5.0= P0527.D TD10.0= P0528.D VSTD50= P0530.D STD100= P0531.D

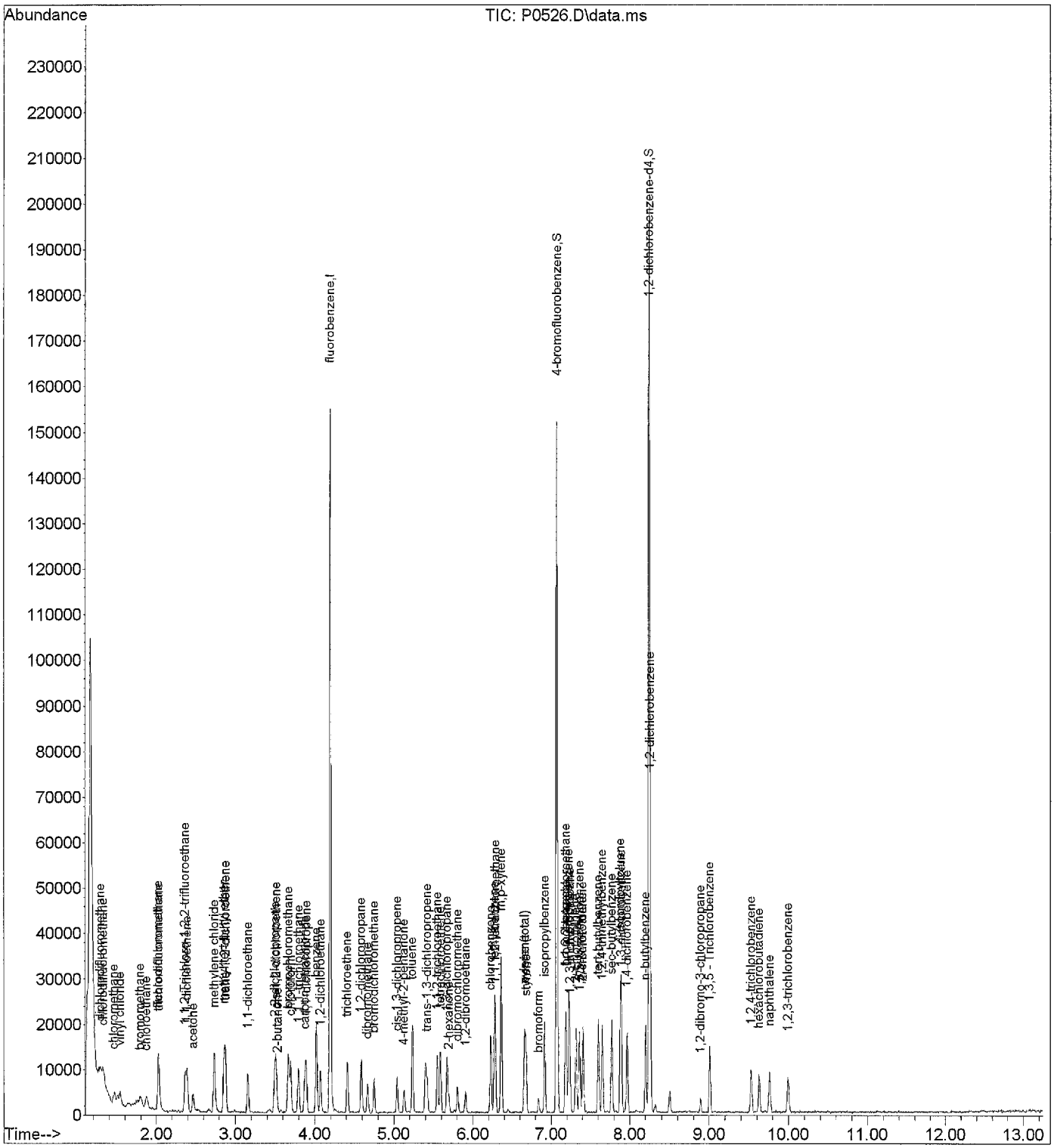
COMPOUND	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD	R^2
tert-Butyl Alcohol	0	0	0	0	0	0.000	0.0	
Methyl tert-butyl ether *	0.78338	0.7511111	0.8502782	0.9251816	0.9778674	0.858	11.1	*
Total Trihalomethanes	0	0	0	0	0	0.000	0.0	
Xylene (total)	0.3896588	0.4922335	0.5562841	0.5769698	0.5846275	0.520	15.7	
1,2-Dichlorobenzene-d4 *	0.4349892	0.442203	0.4429441	0.4274076	0.4046093	0.430	3.7	*
4-Bromofluorobenzene *	0.2723774	0.2866106	0.3029294	0.3153728	0.3197388	0.299	6.6	*

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0526.D
Acq On : 3 May 2015 14:26
Operator : KGG
Sample : VSTD0.50
Misc : ,,,ICAL_0.5,,
ALS Vial : 10 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:04:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration



HDR013 V133

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0526.D
Acq On : 3 May 2015 14:26
Operator : KGG
Sample : VSTD0.50
Misc : ,,,ICAL_0.5,,
ALS Vial : 10 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:04:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	88616	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	24137	4.36	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 87.20%				
87) 1,2-dichlorobenzene-d4	8.250	152	38547	5.07	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 101.40%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.324	51	4641	0.53	ug/l	#	82
3) dichlorodifluoromethane	1.288	85	3736	0.72	UG/L		94
4) chloromethane	1.459	50	4107	0.43	UG/L		95
5) vinyl chloride	1.538	62	3047	0.41	UG/L	#	20
6) bromomethane	1.794	94	1383	0.81	UG/L	#	75
7) chloroethane	1.873	64	2637	0.60	UG/L		96
8) fluorodichloromethane	2.026	67	5529	2.83	ug/l		92
9) trichlorofluoromethane	2.032	101	5126	0.68	UG/L		95
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	2991	0.55	UG/L		93
12) methyl tert-butyl ether	2.861	73	6942 MI	0.43	UG/L		93
16) 1,1-dichloroethene	2.391	96	2301m	0.45	UG/L		
17) methylene chloride	2.739	84	4523 MN 06/06/15	0.71	UG/L		94
19) acetone	2.471	43	4473	1.20	ug/l		95
20) trans-1,2-dichloroethene	2.873	96	2735	0.48	UG/L		99
22) 1,1-dichloroethane	3.159	63	5592	0.49	UG/L		98
23) 2,2-dichloropropane	3.501	77	3006	0.61	UG/L		97
24) cis-1,2-dichloroethene	3.513	96	2769	0.44	UG/L		92
29) bromochloromethane	3.665	128	1453	0.48	UG/L	#	89
32) chloroform	3.696	83	5381	0.56	UG/L		99
33) 2-butanone	3.531	43	1900	0.42	ug/l	#	53
34) 1,1,1-trichloroethane	3.793	97	4286	0.57	UG/L		98
35) carbon tetrachloride	3.873	117	3201	0.50	UG/L		92
37) 1,1-dichloropropene	3.891	75	3154	0.39	UG/L		98
38) benzene	4.019	78	10779	0.44	UG/L		97
40) 1,2-dichloroethane	4.074	62	5027	0.56	UG/L		99
41) trichloroethene	4.409	95	2883	0.51	UG/L		79
42) 1,2-dichloropropane	4.586	63	2839	0.42	UG/L		95
43) dibromomethane	4.665	93	1880	0.50	UG/L		97
46) bromodichloromethane	4.751	83	3124	0.43	UG/L		98
48) cis-1,3-dichloropropene	5.043	75	2890	0.35	UG/L		95
51) toluene	5.232	92	5869	0.34	UG/L		95
52) trans-1,3-dichloropropene	5.421	75	2748	0.40	UG/L		95
54) 1,1,2-trichloroethane	5.549	83	1910	0.40	UG/L		85
55) 4-methyl-2-pentanone	5.129	43	2451	0.29	ug/l		98
56) tetrachloroethene	5.592	166	2689	0.47	UG/L		94
57) 1,3-dichloropropane	5.671	76	4665	0.45	UG/L		98
58) dibromochloromethane	5.805	129	2109	0.39	UG/L		95
59) 1,2-dibromoethane	5.909	107	2352	0.42	UG/L		92
60) 2-hexanone	5.696	43	1695	0.28	ug/l	#	95
61) chlorobenzene	6.226	112	6505	0.40	UG/L		94
62) 1,1,1,2-tetrachloroethane	6.287	131	2258	0.45	UG/L		91
63) ethylbenzene	6.275	91	9296	0.32	UG/L		98
64) m,p-xylene	6.360	106	6806	0.61	UG/L		95
65) o-xylene	6.659	106	3453	0.32	UG/L		99

HDR013 V134

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0526.D
Acq On : 3 May 2015 14:26
Operator : KGG
Sample : VSTD0.50
Misc : ,,,ICAL_0.5,,
ALS Vial : 10 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:04:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	3453	0.32	UG/L		99
67) styrene	6.677	104	5349	0.29	UG/L		86
68) bromoform	6.836	173	964	0.29	UG/L		98
69) isopropylbenzene	6.915	105	8498	0.30	UG/L		97
71) bromobenzene	7.183	156	2998	0.45	UG/L	#	82
72) 1,1,2,2-tetrachloroethane	7.189	83	3553	0.44	UG/L		96
73) 1,2,3-trichloropropane	7.238	110	1181	0.46	UG/L	#	87
74) n-propylbenzene	7.226	91	11835	0.34	UG/L		99
76) 2-chlorotoluene	7.317	91	8173	0.39	UG/L		98
77) 4-chlorotoluene	7.403	91	8082	0.38	UG/L		98
78) 2/4-chlorotoluene	7.403	91	17240m	0.78	UG/L		
79) 1,3,5-trimethylbenzene	7.366	105	7510	0.31	UG/L		80
80) tert-butylbenzene	7.604	119	6621	0.32	UG/L		96
82) 1,2,4-trimethylbenzene	7.652	105	7389	0.31	UG/L		98
83) sec-butylbenzene	7.774	105	9748	0.32	UG/L		97
84) 1,3-dichlorobenzene	7.896	146	5707	0.44	UG/L		94
85) 4-isopropyltoluene	7.884	119	7662	0.29	UG/L		97
86) 1,4-dichlorobenzene	7.970	146	5289	0.40	UG/L		97
88) 1,2-dichlorobenzene	8.262	146	5965	0.48	UG/L		95
89) n-butylbenzene	8.201	91	7165	0.30	UG/L		98
91) 1,2-dibromo-3-chloropr...	8.890	75	518	0.39	UG/L		82
92) 1,3,5 - Trichlorobenzene	9.006	180	3304	0.40	ug/l		96
93) 1,2,4-trichlorobenzene	9.530	180	2614	0.37	UG/L		95
94) hexachlorobutadiene	9.628	225	1333	0.50	UG/L		93
95) naphthalene	9.762	128	5819	0.23	UG/L		100
96) 1,2,3-trichlorobenzene	9.994	180	2238	0.33	UG/L		99

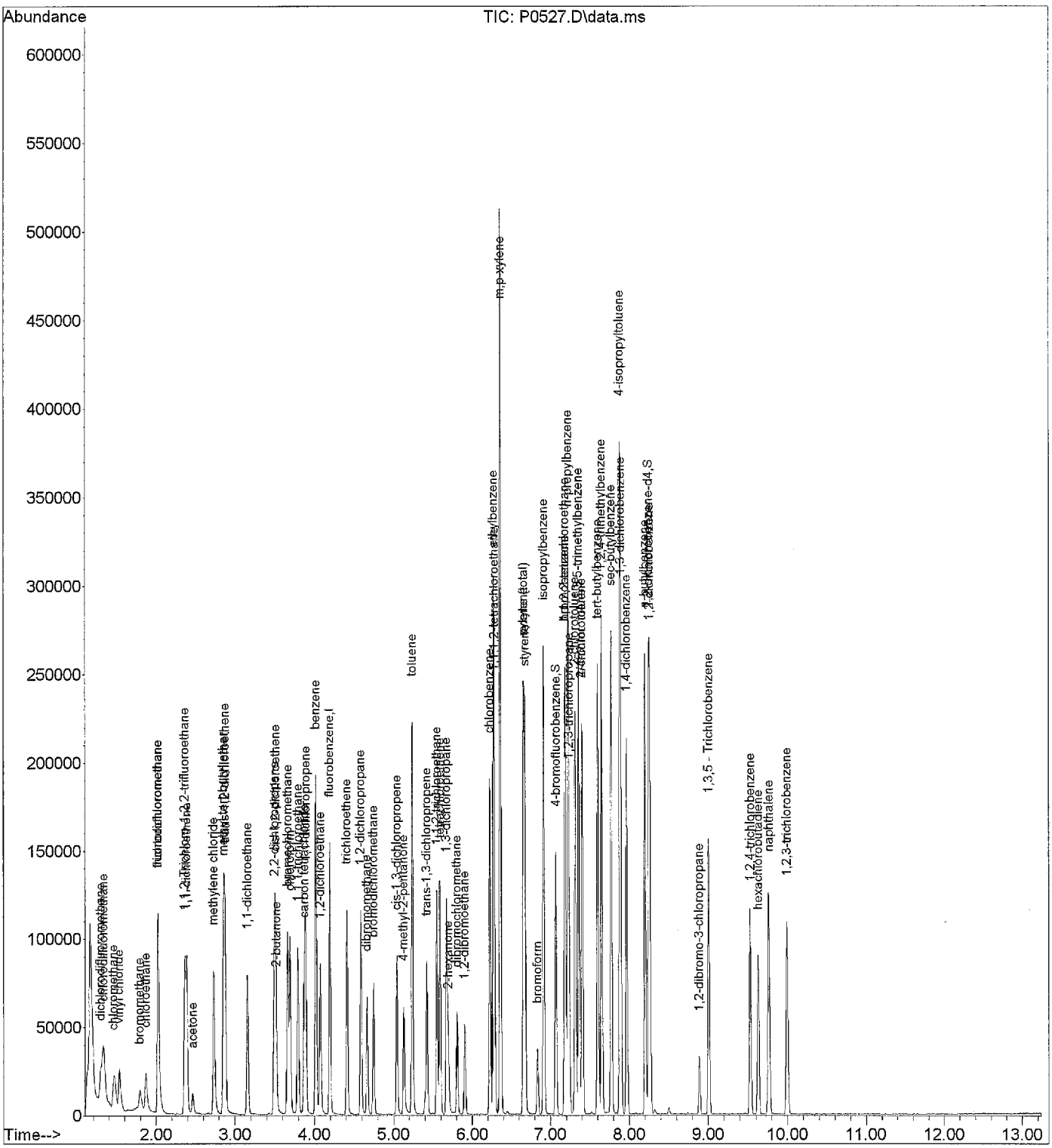
TIP HW 06/06/15

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0527.D
Acq On : 3 May 2015 15:07
Operator : KGG
Sample : VSTD5.0
Misc : ,,,ICAL_5.0,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:21:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

HDR013 V136



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0527.D
Acq On : 3 May 2015 15:07
Operator : KGG
Sample : VSTD5.0
Misc : ,,,ICAL_5.0,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:21:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	91804	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.074	174	26312	4.59	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 91.80%				
87) 1,2-dichlorobenzene-d4	8.250	152	40596	5.15	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 103.00%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.331	51	42204	4.64	ug/l	#	92
3) dichlorodifluoromethane	1.294	85	32311	5.98	UG/L		97
4) chloromethane	1.459	50	34223	3.48	UG/L		97
5) vinyl chloride	1.532	62	28251	3.67	UG/L		96
6) bromomethane	1.794	94	8168	4.63	UG/L		98
7) chloroethane	1.873	64	20615	4.55	UG/L		100
8) fluorodichloromethane	2.026	67	49994	24.71	ug/l		100
9) trichlorofluoromethane	2.026	101	45709	5.87	UG/L		98
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	27074	4.76	UG/L		95
12) methyl tert-butyl ether	2.855	73	68955	4.14	UG/L		97
16) 1,1-dichloroethene	2.392	96	22018	4.20	UG/L	#	80
17) methylene chloride	2.733	84	29641	4.51	UG/L		96
19) acetone	2.471	43	12401	3.22	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	25730	4.40	UG/L		99
22) 1,1-dichloroethane	3.160	63	52977	4.45	UG/L		99
23) 2,2-dichloropropane	3.501	77	29143	5.71	UG/L		96
24) cis-1,2-dichloroethene	3.513	96	28505	4.36	UG/L		94
29) bromochloromethane	3.666	128	13658	4.35	UG/L	#	84
32) chloroform	3.696	83	49142	4.97	UG/L		97
33) 2-butanone	3.525	43	17209	3.68	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	41003	5.23	UG/L		99
35) carbon tetrachloride	3.873	117	32626	4.91	UG/L		100
37) 1,1-dichloropropene	3.891	75	33951	4.05	UG/L		98
38) benzene	4.019	78	107870	4.23	UG/L		99
40) 1,2-dichloroethane	4.074	62	49933	5.38	UG/L		97
41) trichloroethene	4.409	95	27334	4.71	UG/L	#	73
42) 1,2-dichloropropane	4.586	63	27498	3.89	UG/L		100
43) dibromomethane	4.665	93	17686	4.57	UG/L		96
46) bromodichloromethane	4.751	83	32553	4.31	UG/L		98
48) cis-1,3-dichloropropene	5.043	75	31899	3.76	UG/L		98
51) toluene	5.239	92	67715	3.78	UG/L		99
52) trans-1,3-dichloropropene	5.421	75	30800	4.33	UG/L		98
54) 1,1,2-trichloroethane	5.549	83	22174	4.49	UG/L		98
55) 4-methyl-2-pentanone	5.129	43	30187	3.40	ug/l	#	98
56) tetrachloroethene	5.592	166	27810	4.73	UG/L		98
57) 1,3-dichloropropane	5.671	76	46327	4.34	UG/L		99
58) dibromochloromethane	5.806	129	22311	4.03	UG/L		98
59) 1,2-dibromoethane	5.903	107	25308	4.39	UG/L		99
60) 2-hexanone	5.696	43	21077	3.34	ug/l		97
61) chlorobenzene	6.226	112	70900	4.16	UG/L		94
62) 1,1,1,2-tetrachloroethane	6.287	131	23338	4.54	UG/L		97
63) ethylbenzene	6.275	91	123018	4.07	UG/L		99
64) m,p-xylene	6.360	106	100672	8.72	UG/L		96
65) o-xylene	6.659	106	45189	4.04	UG/L		97

HDR013 V137

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0527.D
Acq On : 3 May 2015 15:07
Operator : KGG
Sample : VSTD5.0
Misc : ,,,ICAL_5.0,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 15:21:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

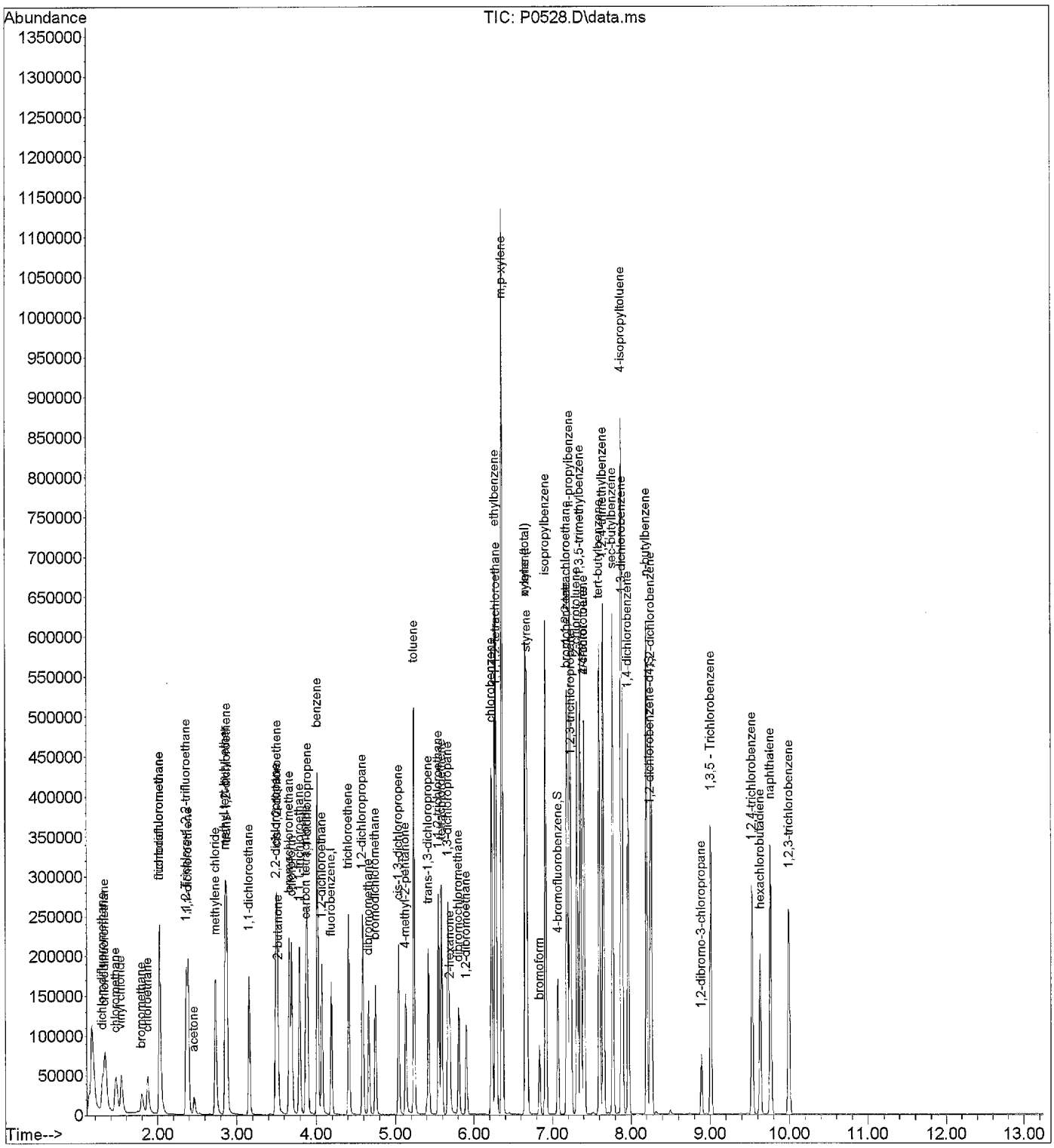
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	45189	4.04	UG/L		97
67) styrene	6.677	104	80224	4.23	UG/L		89
68) bromoform	6.836	173	12470	3.66	UG/L		99
69) isopropylbenzene	6.915	105	123360	4.23	UG/L		100
71) bromobenzene	7.189	156	31200	4.50	UG/L	#	82
72) 1,1,2,2-tetrachloroethane	7.189	83	37710	4.46	UG/L		98
73) 1,2,3-trichloropropane	7.238	110	13081	4.88	UG/L	#	85
74) n-propylbenzene	7.226	91	152560	4.29	UG/L		96
76) 2-chlorotoluene	7.317	91	96518	4.50	UG/L		100
77) 4-chlorotoluene	7.403	91	102507 TIP	4.67	UG/L		96
78) 2/4-chlorotoluene	7.403	91	211650m	9.19	UG/L		
79) 1,3,5-trimethylbenzene	7.360	105	112948 MP 06/06/15	4.56	UG/L	#	79
80) tert-butylbenzene	7.604	119	92065	4.30	UG/L		100
82) 1,2,4-trimethylbenzene	7.653	105	113564	4.61	UG/L		96
83) sec-butylbenzene	7.775	105	139433	4.38	UG/L		98
84) 1,3-dichlorobenzene	7.897	146	64910	4.81	UG/L		98
85) 4-isopropyltoluene	7.884	119	121539	4.51	UG/L		98
86) 1,4-dichlorobenzene	7.970	146	64544	4.74	UG/L		99
88) 1,2-dichlorobenzene	8.262	146	61650	4.74	UG/L		99
89) n-butylbenzene	8.201	91	101509	4.14	UG/L		100
91) 1,2-dibromo-3-chloropr...	8.890	75	5953	4.33	UG/L		88
92) 1,3,5 - Trichlorobenzene	9.012	180	39205	4.58	ug/l		99
93) 1,2,4-trichlorobenzene	9.537	180	30200	4.11	UG/L		99
94) hexachlorobutadiene	9.634	225	13934	5.08	UG/L		96
95) naphthalene	9.768	128	90402	3.52	UG/L		100
96) 1,2,3-trichlorobenzene	9.994	180	30503	4.36	UG/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0528.D
Acq On : 3 May 2015 15:49
Operator : KGG
Sample : VSTD10.0
Misc : ,,,ICAL_10.0,,
ALS Vial : 14 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration



HDR013 V139

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0528.D
Acq On : 3 May 2015 15:49
Operator : KGG
Sample : VSTD10.0
Misc : ,,,ICAL_10.0,,
ALS Vial : 14 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	95240	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	28851	4.85	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 97.00%				
87) 1,2-dichlorobenzene-d4	8.250	152	42186	5.16	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 103.20%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.325	51	90347	9.57	ug/l	#	94
3) dichlorodifluoromethane	1.294	85	68452	12.22	UG/L		97
4) chloromethane	1.465	50	72591	7.12	UG/L		100
5) vinyl chloride	1.532	62	61749	7.73	UG/L		98
6) bromomethane	1.794	94	18051	9.87	UG/L		97
7) chloroethane	1.873	64	41987	8.94	UG/L		97
8) fluorodichloromethane	2.026	67	106554	50.76	ug/l		98
9) trichlorofluoromethane	2.026	101	97650	12.08	UG/L		99
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	58194	9.87	UG/L		97
12) methyl tert-butyl ether	2.855	73	161961	9.38	UG/L		97
16) 1,1-dichloroethene	2.391	96	50085	9.20	UG/L	#	85
17) methylene chloride	2.739	84	62238	9.12	UG/L		98
19) acetone	2.465	43	23034	5.76	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	57155	9.41	UG/L		99
22) 1,1-dichloroethane	3.160	63	117599	9.52	UG/L		98
23) 2,2-dichloropropane	3.501	77	67298	12.70	UG/L		97
24) cis-1,2-dichloroethene	3.513	96	62791	9.27	UG/L		91
29) bromochloromethane	3.666	128	31654	9.71	UG/L		93
32) chloroform	3.696	83	108848	10.62	UG/L		99
33) 2-butanone	3.525	43	37517	7.74	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	91694	11.28	UG/L		99
35) carbon tetrachloride	3.873	117	72618	10.54	UG/L		100
37) 1,1-dichloropropene	3.891	75	76874	8.84	UG/L		100
38) benzene	4.019	78	237328	8.96	UG/L		99
40) 1,2-dichloroethane	4.074	62	107591	11.18	UG/L		97
41) trichloroethene	4.409	95	59598	9.89	UG/L	#	71
42) 1,2-dichloropropane	4.586	63	62943	8.58	UG/L		100
43) dibromomethane	4.665	93	40082	9.99	UG/L		97
46) bromodichloromethane	4.751	83	73103	9.33	UG/L		98
48) cis-1,3-dichloropropene	5.043	75	78892	8.96	UG/L		99
51) toluene	5.238	92	155312	8.36	UG/L		99
52) trans-1,3-dichloropropene	5.421	75	75061	10.18	UG/L		100
54) 1,1,2-trichloroethane	5.549	83	48335	9.44	UG/L		99
55) 4-methyl-2-pentanone	5.129	43	72430	7.86	ug/l	#	97
56) tetrachloroethene	5.592	166	61582	10.09	UG/L		98
57) 1,3-dichloropropane	5.671	76	102660	9.27	UG/L		99
58) dibromochloromethane	5.805	129	53158	9.24	UG/L		99
59) 1,2-dibromoethane	5.903	107	58065	9.70	UG/L		99
60) 2-hexanone	5.696	43	51550	7.86	ug/l		97
61) chlorobenzene	6.226	112	164260	9.29	UG/L		95
62) 1,1,1,2-tetrachloroethane	6.287	131	53354	10.00	UG/L		96
63) ethylbenzene	6.275	91	293060	9.34	UG/L		99
64) m,p-xylene	6.360	106	233432	19.50	UG/L		97
65) o-xylene	6.659	106	105961	9.13	UG/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0528.D
Acq On : 3 May 2015 15:49
Operator : KGG
Sample : VSTD10.0
Misc : ,,,ICAL_10.0,,
ALS Vial : 14 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

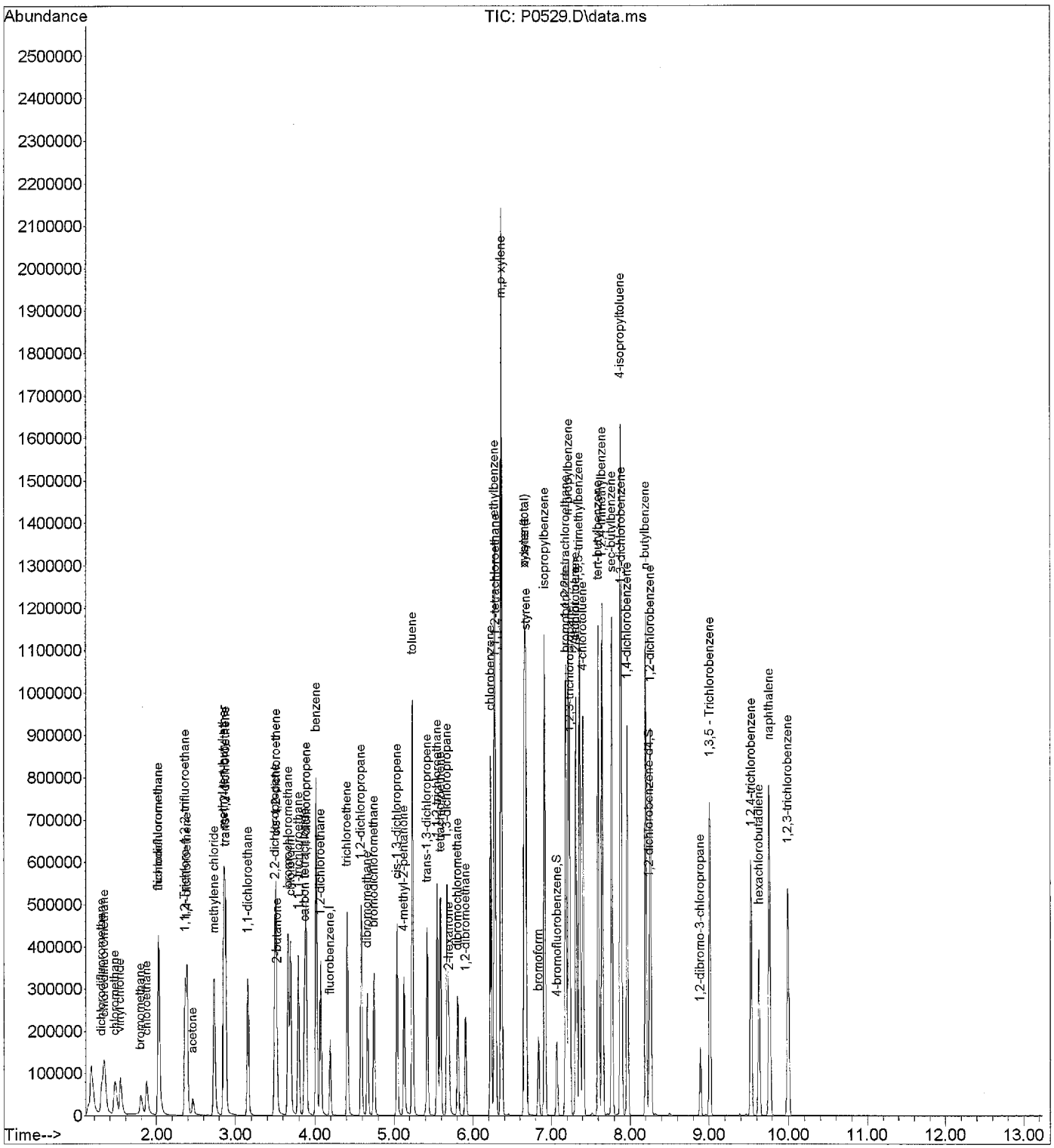
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	105961	9.13	UG/L		97
67) styrene	6.677	104	183995	9.34	UG/L		88
68) bromoform	6.836	173	29253	8.27	UG/L		100
69) isopropylbenzene	6.915	105	287787	9.51	UG/L		99
71) bromobenzene	7.183	156	70644	9.83	UG/L	#	82
72) 1,1,2,2-tetrachloroethane	7.189	83	80898	9.22	UG/L		98
73) 1,2,3-trichloropropane	7.238	110	29043	10.44	UG/L	#	81
74) n-propylbenzene	7.226	91	349111	9.46	UG/L		96
76) 2-chlorotoluene	7.317	91	218608	9.82	UG/L		99
77) 4-chlorotoluene	7.409	91	230213 TIP	10.10	UG/L		97
78) 2/4-chlorotoluene	7.409	91	478755m	20.03	UG/L		
79) 1,3,5-trimethylbenzene	7.360	105	259463 HW 06/04/15	10.11	UG/L	#	79
80) tert-butylbenzene	7.604	119	215686	9.71	UG/L		99
82) 1,2,4-trimethylbenzene	7.653	105	261022	10.21	UG/L		97
83) sec-butylbenzene	7.775	105	318069	9.64	UG/L		97
84) 1,3-dichlorobenzene	7.896	146	144918	10.35	UG/L		98
85) 4-isopropyltoluene	7.884	119	287579	10.28	UG/L		99
86) 1,4-dichlorobenzene	7.970	146	143862	10.18	UG/L		99
88) 1,2-dichlorobenzene	8.262	146	134975	10.01	UG/L		98
89) n-butylbenzene	8.201	91	242850	9.54	UG/L		99
91) 1,2-dibromo-3-chloropr...	8.890	75	14179	9.95	UG/L		87
92) 1,3,5 - Trichlorobenzene	9.012	180	87753	9.87	ug/l		100
93) 1,2,4-trichlorobenzene	9.530	180	71506	9.38	UG/L		97
94) hexachlorobutadiene	9.634	225	31628	11.11	UG/L		95
95) naphthalene	9.762	128	241166	9.05	UG/L		100
96) 1,2,3-trichlorobenzene	10.000	180	71669	9.88	UG/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0529.D
Acq On : 3 May 2015 16:30
Operator : KGG
Sample : VSTD20.0
Misc : ,,,ICAL_20.0,,
ALS Vial : 16 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:43:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

HDR013 V142



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0529.D
Acq On : 3 May 2015 16:30
Operator : KGG
Sample : VSTD20.0
Misc : ,,,ICAL_20.0,,
ALS Vial : 16 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:43:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	102276	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.074	174	31974	5.01	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 100.20%				
87) 1,2-dichlorobenzene-d4	8.250	152	44136	5.03	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 100.60%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.331	51	155899	15.38	ug/l	#	94
3) dichlorodifluoromethane	1.294	85	117901	19.60	UG/L		96
4) chloromethane	1.465	50	131112	11.97	UG/L		100
5) vinyl chloride	1.532	62	110104	12.84	UG/L		100
6) bromomethane	1.794	94	34169	17.39	UG/L		94
7) chloroethane	1.873	64	76516	15.17	UG/L		98
8) fluorodichloromethane	2.026	67	194166	86.13	ug/l		99
9) trichlorofluoromethane	2.026	101	168981	19.46	UG/L		99
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	103827	16.40	UG/L		98
12) methyl tert-butyl ether	2.855	73	343999	18.54	UG/L		96
16) 1,1-dichloroethene	2.392	96	89730	15.35	UG/L	#	81
17) methylene chloride	2.739	84	120456	16.44	UG/L		99
19) acetone	2.465	43	41159	9.58	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	106052	16.26	UG/L		100
22) 1,1-dichloroethane	3.160	63	221324	16.68	UG/L		99
23) 2,2-dichloropropane	3.501	77	126686	22.26	UG/L		95
24) cis-1,2-dichloroethene	3.513	96	123061	16.91	UG/L		92
29) bromochloromethane	3.666	128	61731	17.64	UG/L		93
32) chloroform	3.696	83	204593	18.59	UG/L		98
33) 2-butanone	3.525	43	73328	14.08	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	168324	19.27	UG/L		99
35) carbon tetrachloride	3.873	117	135713	18.35	UG/L		100
37) 1,1-dichloropropene	3.891	75	146725	15.72	UG/L		99
38) benzene	4.019	78	450480	15.84	UG/L		99
40) 1,2-dichloroethane	4.074	62	207764	20.11	UG/L		98
41) trichloroethene	4.409	95	111314	17.20	UG/L	#	70
42) 1,2-dichloropropane	4.586	63	125072	15.88	UG/L		99
43) dibromomethane	4.665	93	79411	18.43	UG/L		96
46) bromodichloromethane	4.751	83	148541	17.66	UG/L		98
48) cis-1,3-dichloropropene	5.043	75	170122	17.99	UG/L		99
51) toluene	5.239	92	299810	15.02	UG/L		100
52) trans-1,3-dichloropropene	5.421	75	162941	20.57	UG/L		100
54) 1,1,2-trichloroethane	5.549	83	98281	17.88	UG/L		98
55) 4-methyl-2-pentanone	5.129	43	157371	15.89	ug/l	#	95
56) tetrachloroethene	5.592	166	111806	17.07	UG/L		98
57) 1,3-dichloropropane	5.671	76	211803	17.81	UG/L		100
58) dibromochloromethane	5.806	129	112584	18.23	UG/L		98
59) 1,2-dibromoethane	5.909	107	119469	18.58	UG/L		99
60) 2-hexanone	5.696	43	110417	15.68	ug/l		98
61) chlorobenzene	6.226	112	326532	17.19	UG/L		94
62) 1,1,1,2-tetrachloroethane	6.287	131	108214	18.88	UG/L		97
63) ethylbenzene	6.275	91	568165	16.86	UG/L		99
64) m,p-xylene	6.360	106	438223	34.09	UG/L		96
65) o-xylene	6.659	106	210207	16.87	UG/L		96

HDR013 V143

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0529.D
Acq On : 3 May 2015 16:30
Operator : KGG
Sample : VSTD20.0
Misc : ,,,ICAL_20.0,,
ALS Vial : 16 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 16:43:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	210207	16.87	UG/L		96
67) styrene	6.677	104	370294	17.51	UG/L		88
68) bromoform	6.836	173	63962	16.84	UG/L		100
69) isopropylbenzene	6.915	105	560109	17.23	UG/L		100
71) bromobenzene	7.183	156	139808	18.11	UG/L	#	82
72) 1,1,2,2-tetrachloroethane	7.189	83	168803	17.92	UG/L		99
73) 1,2,3-trichloropropane	7.238	110	60417	20.22	UG/L	#	79
74) n-propylbenzene	7.226	91	666150	16.81	UG/L		97
76) 2-chlorotoluene	7.317	91	423789	17.72	UG/L		99
77) 4-chlorotoluene	7.409	91	445524	18.21	UG/L		98
78) 2/4-chlorotoluene	7.317	91	926787m	36.11	UG/L		
79) 1,3,5-trimethylbenzene	7.360	105	497189	18.03	UG/L	#	78
80) tert-butylbenzene	7.604	119	414752	17.40	UG/L		99
82) 1,2,4-trimethylbenzene	7.653	105	506694	18.46	UG/L		96
83) sec-butylbenzene	7.775	105	607407	17.14	UG/L		98
84) 1,3-dichlorobenzene	7.897	146	274810	18.27	UG/L		98
85) 4-isopropyltoluene	7.884	119	548538	18.27	UG/L		99
86) 1,4-dichlorobenzene	7.970	146	279258	18.40	UG/L		99
88) 1,2-dichlorobenzene	8.262	146	269779	18.62	UG/L		99
89) n-butylbenzene	8.201	91	470245	17.21	UG/L		99
91) 1,2-dibromo-3-chloropr...	8.890	75	30719	20.07	UG/L		86
92) 1,3,5 - Trichlorobenzene	9.012	180	178701	18.72	ug/l		98
93) 1,2,4-trichlorobenzene	9.537	180	156549	19.12	UG/L		100
94) hexachlorobutadiene	9.634	225	60364	19.75	UG/L		93
95) naphthalene	9.762	128	541162	18.91	UG/L		100
96) 1,2,3-trichlorobenzene	9.994	180	152385	19.57	UG/L		99

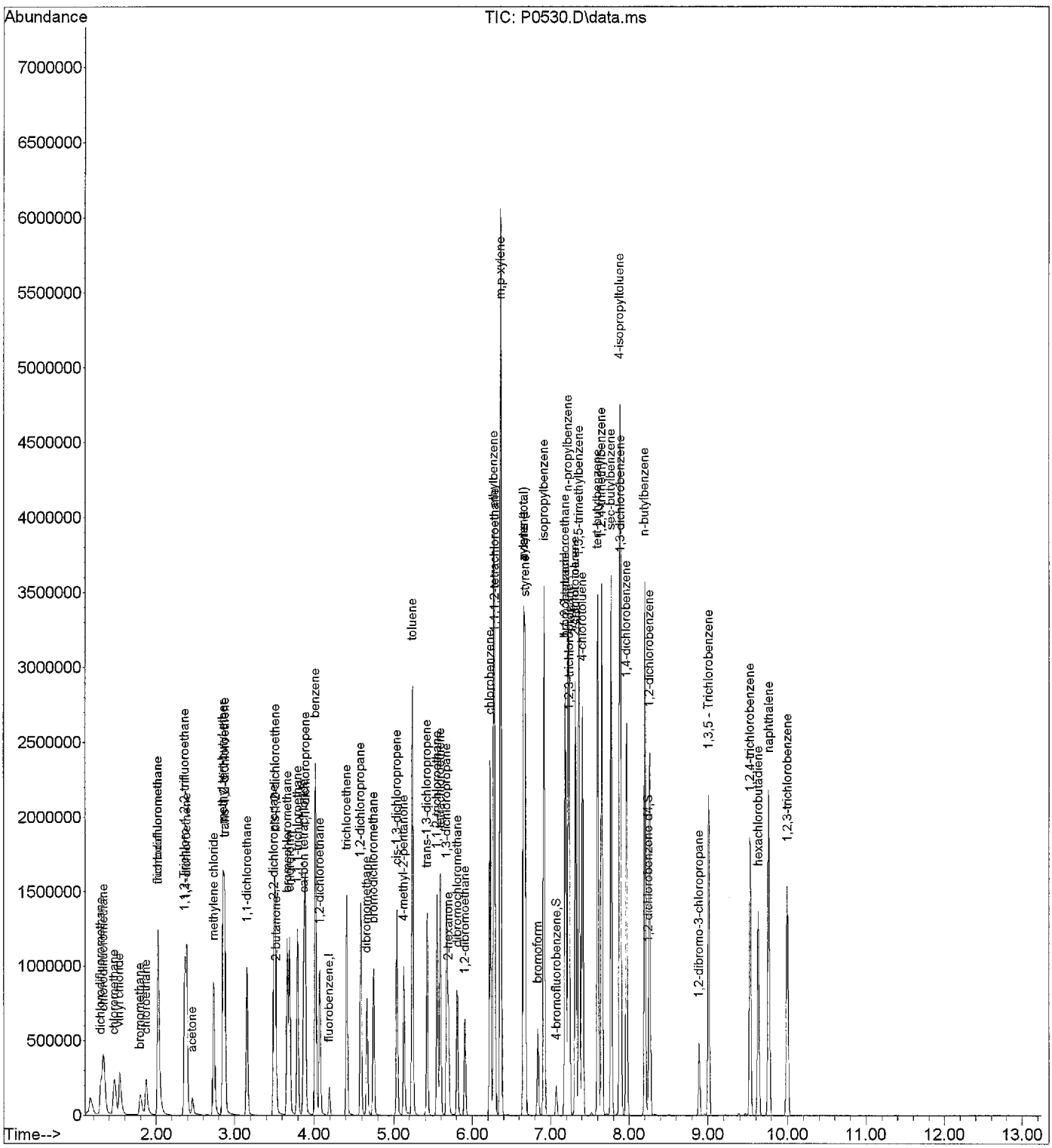
TIP HP 06/06/15

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0530.D
Acq On : 3 May 2015 17:11
Operator : KGG
Sample : VSTD50
Misc : ,,,ICAL_50,,
ALS Vial : 18 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 17:24:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

HDR013 V145



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0530.D
Acq On : 3 May 2015 17:11
Operator : KGG
Sample : VSTD50
Misc : ,,,ICAL_50,,
ALS Vial : 18 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 17:24:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	108627	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	34258	5.05	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 101.00%				
87) 1,2-dichlorobenzene-d4	8.250	152	46428	4.98	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 99.60%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.331	51	507159	47.11	ug/l	#	94
3) dichlorodifluoromethane	1.294	85	396049	61.99	UG/L		96
4) chloromethane	1.465	50	394422	33.91	UG/L		100
5) vinyl chloride	1.532	62	365483	40.14	UG/L		99
6) bromomethane	1.794	94	111900	53.64	UG/L		98
7) chloroethane	1.873	64	233761	43.63	UG/L		98
8) fluorodichloromethane	2.026	67	585678	244.62	ug/l		98
9) trichlorofluoromethane	2.026	101	547487	59.37	UG/L		100
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	338751	50.38	UG/L		98
12) methyl tert-butyl ether	2.855	73	1004997	51.01	UG/L		96
16) 1,1-dichloroethene	2.391	96	305535	49.21	UG/L		86
17) methylene chloride	2.739	84	335092	43.06	UG/L		98
19) acetone	2.465	43	114929	25.18	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	324961	46.91	UG/L		98
22) 1,1-dichloroethane	3.160	63	677147	48.04	UG/L		99
23) 2,2-dichloropropane	3.495	77	419829	69.46	UG/L		97
24) cis-1,2-dichloroethene	3.513	96	365696	47.33	UG/L		93
29) bromochloromethane	3.666	128	170593	45.90	UG/L		93
32) chloroform	3.696	83	595055	50.90	UG/L		98
33) 2-butanone	3.525	43	211755	38.29	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	548981	59.19	UG/L		97
35) carbon tetrachloride	3.873	117	457501	58.24	UG/L		100
37) 1,1-dichloropropene	3.891	75	485168	48.93	UG/L		99
38) benzene	4.019	78	1351216	44.74	UG/L		99
40) 1,2-dichloroethane	4.074	62	558210	50.88	UG/L		98
41) trichloroethene	4.415	95	351150	51.09	UG/L	#	71
42) 1,2-dichloropropane	4.586	63	369815	44.20	UG/L		99
43) dibromomethane	4.665	93	218014	47.64	UG/L		96
46) bromodichloromethane	4.751	83	441933	49.47	UG/L		98
48) cis-1,3-dichloropropene	5.043	75	519725	51.74	UG/L		99
51) toluene	5.238	92	900180	42.46	UG/L		98
52) trans-1,3-dichloropropene	5.421	75	499029	59.32	UG/L		100
54) 1,1,2-trichloroethane	5.549	83	269828	46.22	UG/L		99
55) 4-methyl-2-pentanone	5.129	43	465775	44.29	ug/l	#	95
56) tetrachloroethene	5.592	166	349004	50.16	UG/L		97
57) 1,3-dichloropropane	5.671	76	572358	45.30	UG/L		100
58) dibromochloromethane	5.811	129	336483	51.31	UG/L		100
59) 1,2-dibromoethane	5.909	107	332534	48.70	UG/L		99
60) 2-hexanone	5.696	43	331950	44.40	ug/l		98
61) chlorobenzene	6.226	112	954738	47.33	UG/L		94
62) 1,1,1,2-tetrachloroethane	6.287	131	320756	52.69	UG/L		96
63) ethylbenzene	6.275	91	1723637	48.16	UG/L		99
64) m,p-xylene	6.360	106	1296057	94.93	UG/L		95
65) o-xylene	6.659	106	626745	47.36	UG/L		96

HDR013 V146

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0530.D
Acq On : 3 May 2015 17:11
Operator : KGG
Sample : VSTD50
Misc : ,,,ICAL_50,,
ALS Vial : 18 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 17:24:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 15:04:42 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	626745	47.36	UG/L		96
67) styrene	6.677	104	1085504	48.32	UG/L		88
68) bromoform	6.836	173	196521	48.71	UG/L		99
69) isopropylbenzene	6.915	105	1734933	50.26	UG/L		100
71) bromobenzene	7.189	156	394836	48.16	UG/L	#	82
72) 1,1,2,2-tetrachloroethane	7.189	83	449205	44.90	UG/L		98
73) 1,2,3-trichloropropane	7.238	110	160787	50.66	UG/L	#	80
74) n-propylbenzene	7.226	91	2058628	48.90	UG/L		97
76) 2-chlorotoluene	7.317	91	1245485	49.04	UG/L		99
77) 4-chlorotoluene	7.409	91	1282593	49.35	UG/L		97
78) 2/4-chlorotoluene	7.317	91	2696739m	98.94	UG/L		
79) 1,3,5-trimethylbenzene	7.366	105	1504057	51.37	UG/L	#	78
80) tert-butylbenzene	7.604	119	1296188	51.19	UG/L		100
82) 1,2,4-trimethylbenzene	7.653	105	1501497	51.49	UG/L		96
83) sec-butylbenzene	7.774	105	1898400	50.43	UG/L		97
84) 1,3-dichlorobenzene	7.896	146	770629	48.23	UG/L		99
85) 4-isopropyltoluene	7.884	119	1690486	53.00	UG/L		99
86) 1,4-dichlorobenzene	7.970	146	783519	48.62	UG/L		100
88) 1,2-dichlorobenzene	8.262	146	740847	48.16	UG/L		99
89) n-butylbenzene	8.201	91	1499708	51.67	UG/L		100
91) 1,2-dibromo-3-chloropr...	8.890	75	93013	57.23	UG/L		91
92) 1,3,5 - Trichlorobenzene	9.012	180	517185	51.02	ug/l		99
93) 1,2,4-trichlorobenzene	9.530	180	476320	54.76	UG/L		98
94) hexachlorobutadiene	9.634	225	212635	65.49	UG/L		95
95) naphthalene	9.768	128	1596297	52.52	UG/L		100
96) 1,2,3-trichlorobenzene	10.000	180	453233	54.80	UG/L		99

TIP HH 06/04/15

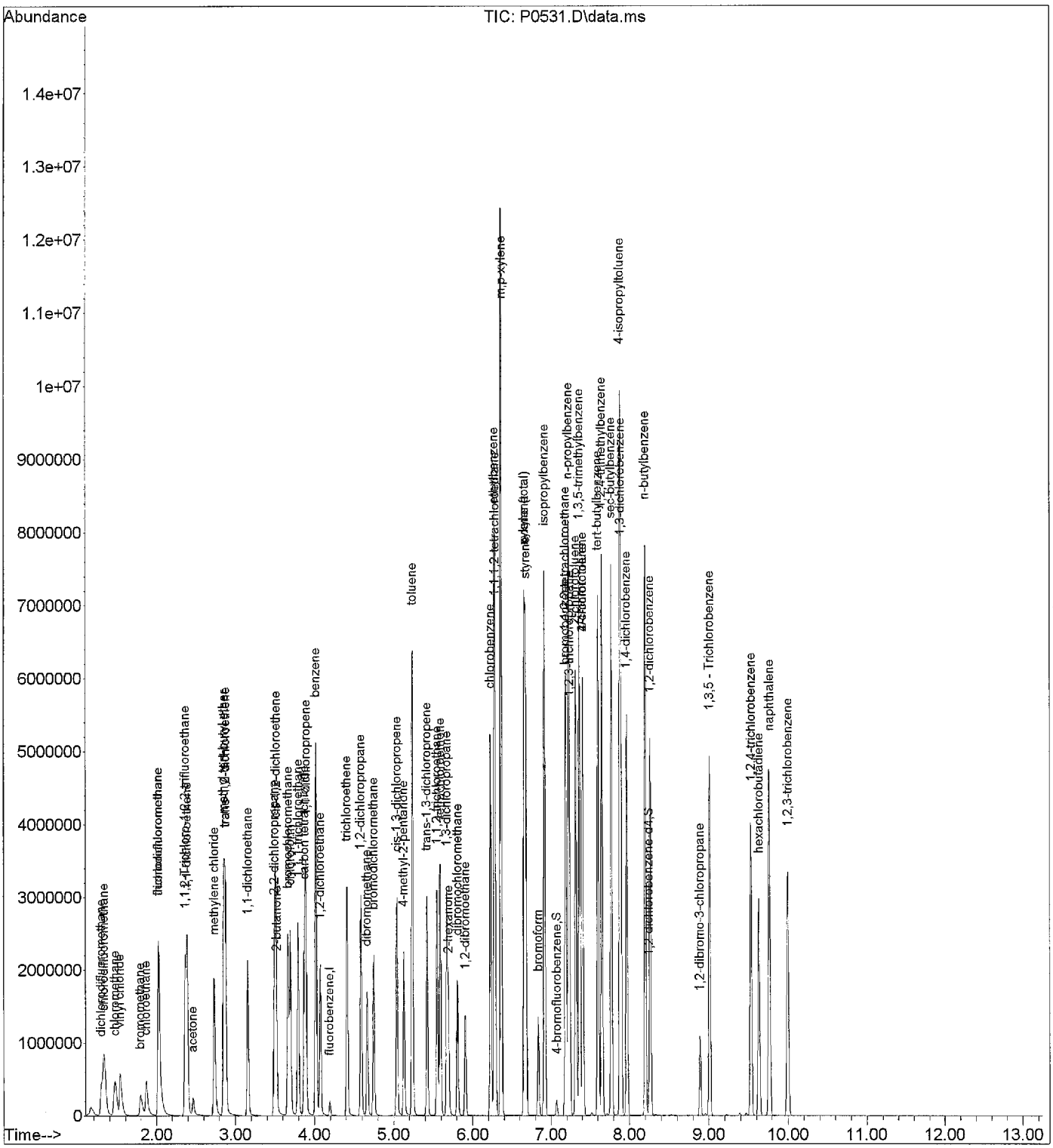
(#) = qualifier out of range (m) = manual integration (+) = signals summed

HDR013 V147

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0531.D
Acq On : 3 May 2015 17:52
Operator : KGG
Sample : VSTD100
Misc : ,,,ICAL_100,,
ALS Vial : 20 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 18:06:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 17:42:21 2015
Response via : Initial Calibration

HDR013 V148



Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0531.D
Acq On : 3 May 2015 17:52
Operator : KGG
Sample : VSTD100
Misc : ,,,ICAL_100,,
ALS Vial : 20 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 18:06:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 17:42:21 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	115635	5.00	UG/L	#	0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.074	174	36973	5.12	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 102.40%				
87) 1,2-dichlorobenzene-d4	8.250	152	46787	4.71	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 94.20%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.331	51	1075313	93.84	ug/l	#	94
3) dichlorodifluoromethane	1.294	85	819245	120.45	UG/L		97
4) chloromethane	1.471	50	817350	66.02	UG/L		100
5) vinyl chloride	1.532	62	772257	79.67	UG/L		98
6) bromomethane	1.794	94	256946	115.69	UG/L		99
7) chloroethane	1.867	64	473836	83.09	UG/L		98
8) fluorodichloromethane	2.026	67	1285806	504.50	ug/l		98
9) trichlorofluoromethane	2.026	101	1160863	118.27	UG/L		100
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	713035	99.61	UG/L		98
12) methyl tert-butyl ether	2.855	73	2261514	107.82	UG/L		95
16) 1,1-dichloroethene	2.391	96	668920	101.21	UG/L		87
17) methylene chloride	2.739	84	723236	87.30	UG/L		97
19) acetone	2.465	43	249488	51.36	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	715075	96.98	UG/L		100
22) 1,1-dichloroethane	3.160	63	1469067	97.91	UG/L		99
23) 2,2-dichloropropane	3.495	77	922563	143.38	UG/L		97
24) cis-1,2-dichloroethene	3.513	96	795502	96.71	UG/L		93
29) bromochloromethane	3.666	128	368753	93.20	UG/L		94
32) chloroform	3.696	83	1275882	102.51	UG/L		97
33) 2-butanone	3.525	43	449977	76.44	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	1193804	120.91	UG/L		97
35) carbon tetrachloride	3.873	117	1010966	120.90	UG/L		100
37) 1,1-dichloropropene	3.891	75	1050171	99.49	UG/L		99
38) benzene	4.019	78	2942940	91.53	UG/L		100
40) 1,2-dichloroethane	4.074	62	1184938	101.45	UG/L		99
41) trichloroethene	4.409	95	762722	104.25	UG/L	#	71
42) 1,2-dichloropropane	4.586	63	806272	90.52	UG/L		100
43) dibromomethane	4.665	93	468878	96.24	UG/L		97
46) bromodichloromethane	4.751	83	985484	103.63	UG/L		99
48) cis-1,3-dichloropropene	5.043	75	1173908	109.78	UG/L		100
51) toluene	5.238	92	1943567	86.12	UG/L		100
52) trans-1,3-dichloropropene	5.421	75	1125174	125.64	UG/L		100
54) 1,1,2-trichloroethane	5.549	83	577893	93.00	UG/L		99
55) 4-methyl-2-pentanone	5.129	43	1032014	92.19	ug/l	#	94
56) tetrachloroethene	5.592	166	750539	101.33	UG/L		97
57) 1,3-dichloropropane	5.671	76	1232966	91.68	UG/L		100
58) dibromochloromethane	5.812	129	761649	109.10	UG/L		100
59) 1,2-dibromoethane	5.909	107	722478	99.39	UG/L		100
60) 2-hexanone	5.696	43	727964	91.46	ug/l		97
61) chlorobenzene	6.226	112	2066627	96.24	UG/L		94
62) 1,1,1,2-tetrachloroethane	6.287	131	697626	107.66	UG/L		97
63) ethylbenzene	6.275	91	3702461	97.18	UG/L		99
64) m,p-xylene	6.366	106	2737907	188.38	UG/L		95
65) o-xylene	6.659	106	1352068	95.97	UG/L		98

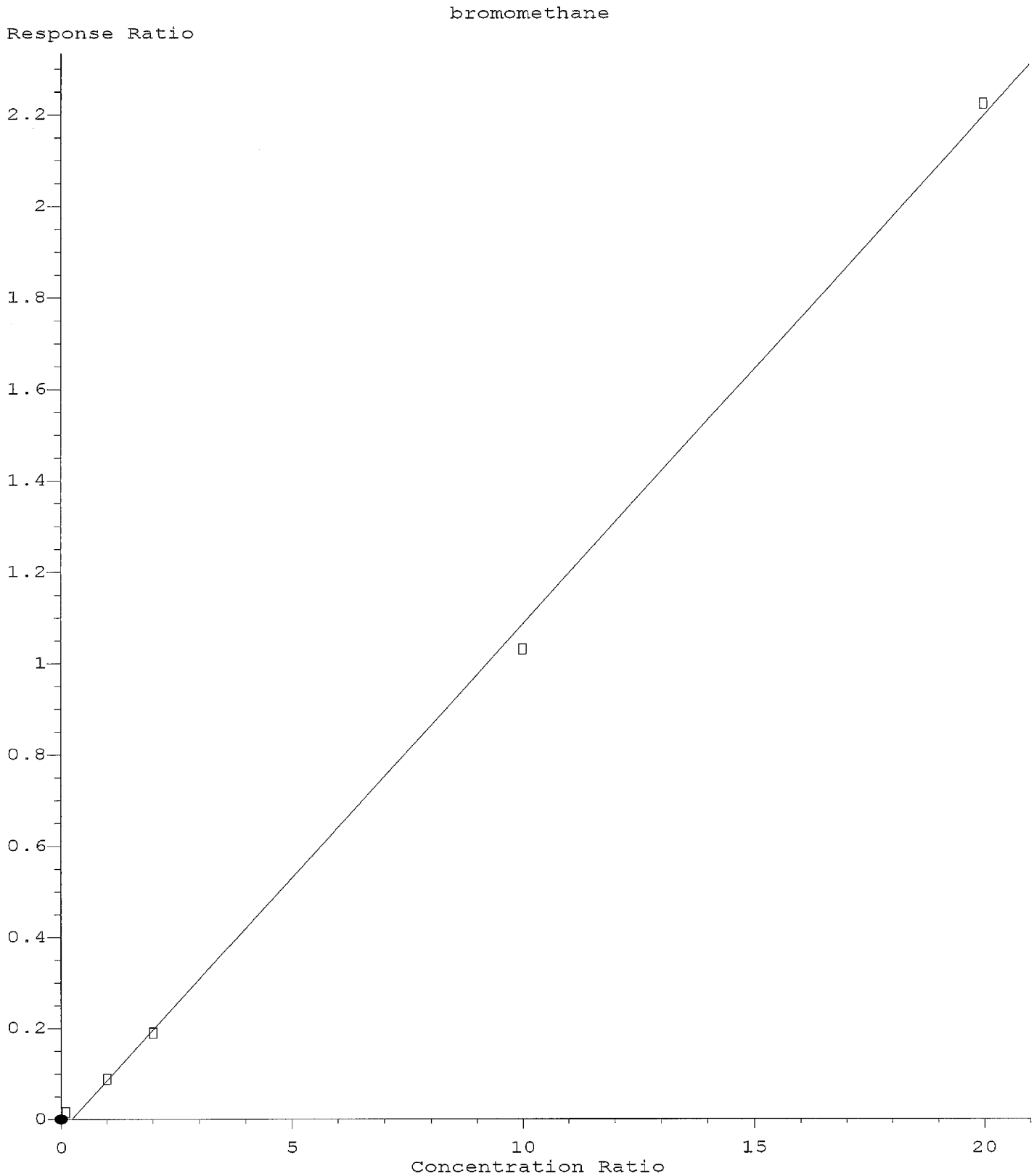
Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0531.D
Acq On : 3 May 2015 17:52
Operator : KGG
Sample : VSTD100
Misc : ,,,ICAL_100,,
ALS Vial : 20 Sample Multiplier: 1
InstName : HP5975

Quant Time: May 03 18:06:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Sun May 03 17:42:21 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66) xylene (total)	6.659	106	1352068	95.97	UG/L		98
67) styrene	6.677	104	2347096	98.15	UG/L		89
68) bromoform	6.836	173	459002	106.87	UG/L		99
69) isopropylbenzene	6.915	105	3736694	101.68	UG/L		100
71) bromobenzene	7.183	156	842149	96.49	UG/L	#	81
72) 1,1,2,2-tetrachloroethane	7.189	83	950859	89.27	UG/L		99
73) 1,2,3-trichloropropane	7.238	110	337489	99.88	UG/L	#	79
74) n-propylbenzene	7.226	91	4399502	98.17	UG/L		97
76) 2-chlorotoluene	7.317	91	2699510	99.85	UG/L		99
77) 4-chlorotoluene	7.409	91	2785618	100.68	UG/L		97
78) 2/4-chlorotoluene	7.409	91	5870111m	202.31	UG/L		
79) 1,3,5-trimethylbenzene	7.366	105	3268998	104.87	UG/L	#	78
80) tert-butylbenzene	7.604	119	2795212	103.69	UG/L		100
82) 1,2,4-trimethylbenzene	7.653	105	3242429	104.46	UG/L		96
83) sec-butylbenzene	7.775	105	4064623	101.42	UG/L		98
84) 1,3-dichlorobenzene	7.896	146	1629344	95.80	UG/L		99
85) 4-isopropyltoluene	7.884	119	3589618	105.73	UG/L		99
86) 1,4-dichlorobenzene	7.970	146	1688508	98.42	UG/L		99
88) 1,2-dichlorobenzene	8.262	146	1595892	97.45	UG/L		100
89) n-butylbenzene	8.201	91	3241380	104.91	UG/L		99
91) 1,2-dibromo-3-chloropr...	8.890	75	212207	122.65	UG/L		92
92) 1,3,5 - Trichlorobenzene	9.012	180	1184869	109.79	ug/l		100
93) 1,2,4-trichlorobenzene	9.536	180	1057864	114.25	UG/L		98
94) hexachlorobutadiene	9.634	225	476558	137.89	UG/L		95
95) naphthalene	9.768	128	3507752	108.42	UG/L		100
96) 1,2,3-trichlorobenzene	10.000	180	997083	113.25	UG/L		99

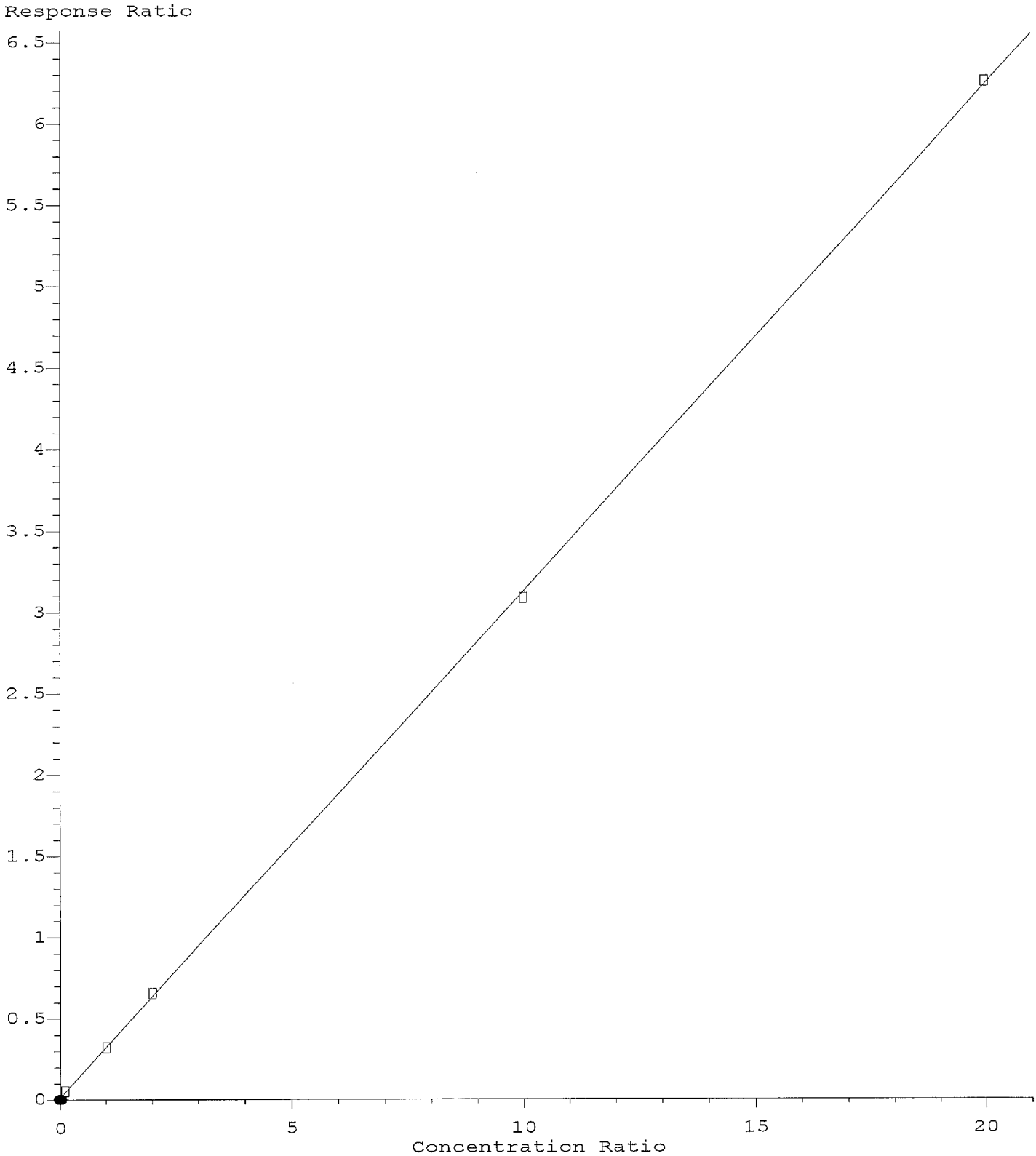
(#) = qualifier out of range (m) = manual integration (+) = signals summed



Response = 1.110e-001 * Amt - 2.560e-002
Coef of Det (r^2) = 0.999 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Mon May 04 07:36:48 2015

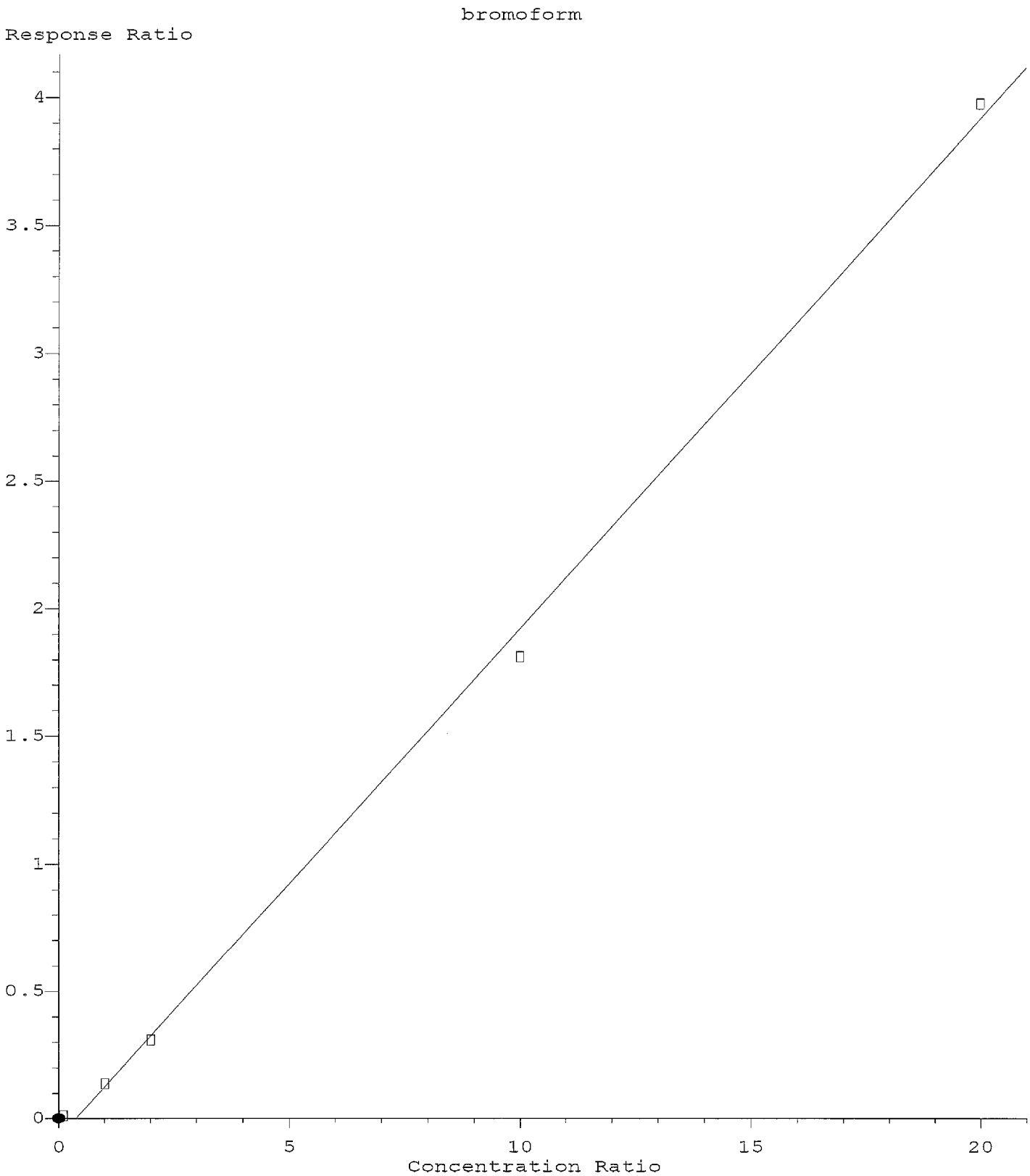
HDR013 V151

methylene chloride



Response = 3.111e-001 * Amt + 1.373e-002
Coef of Det (r^2) = 1.000 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Sat Jun 06 13:24:15 2015

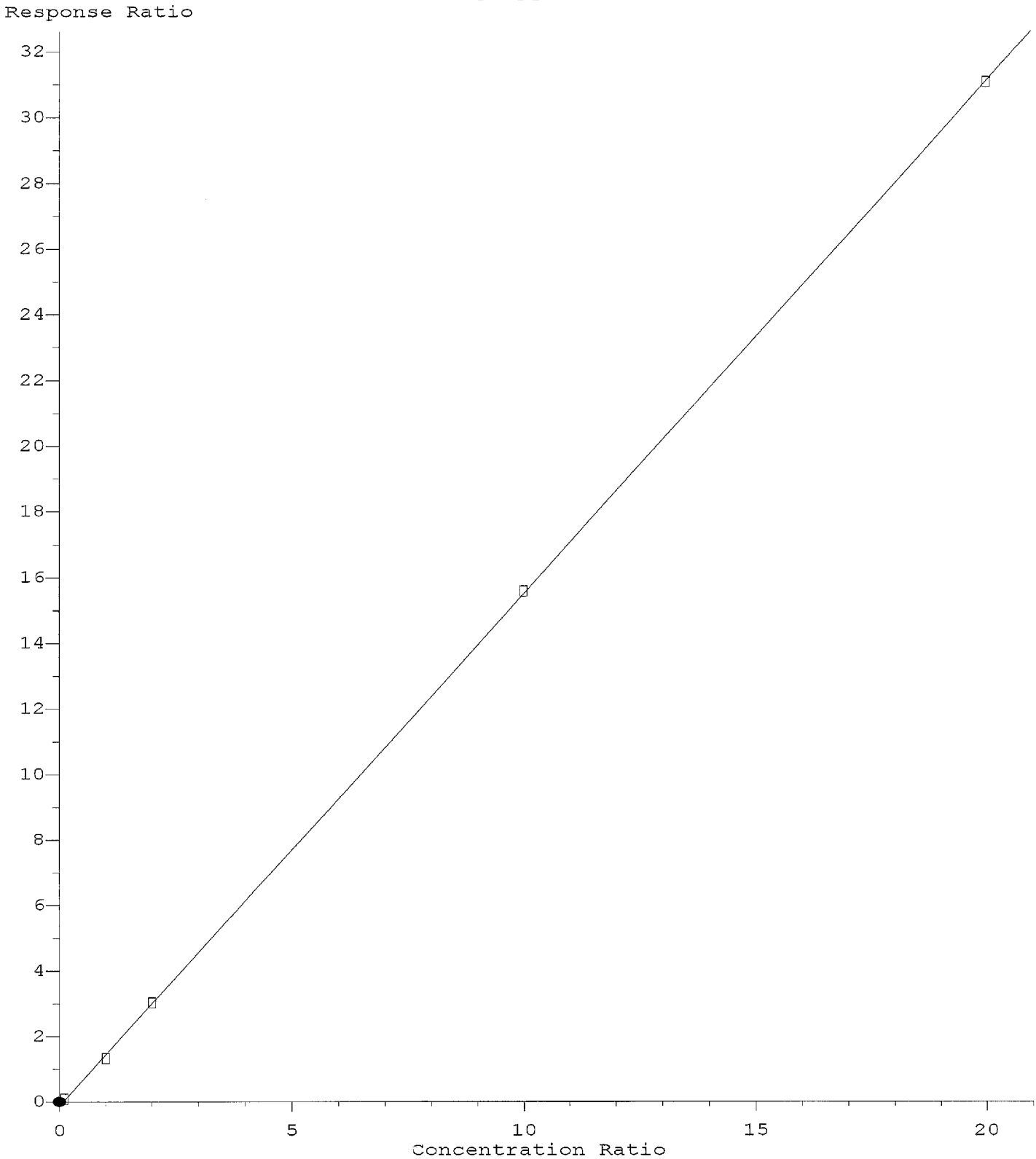
HDR013 V152



Response = 1.993e-001 * Amt - 7.276e-002
Coef of Det (r^2) = 0.998 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Sat Jun 06 13:24:15 2015

HDR013 V153

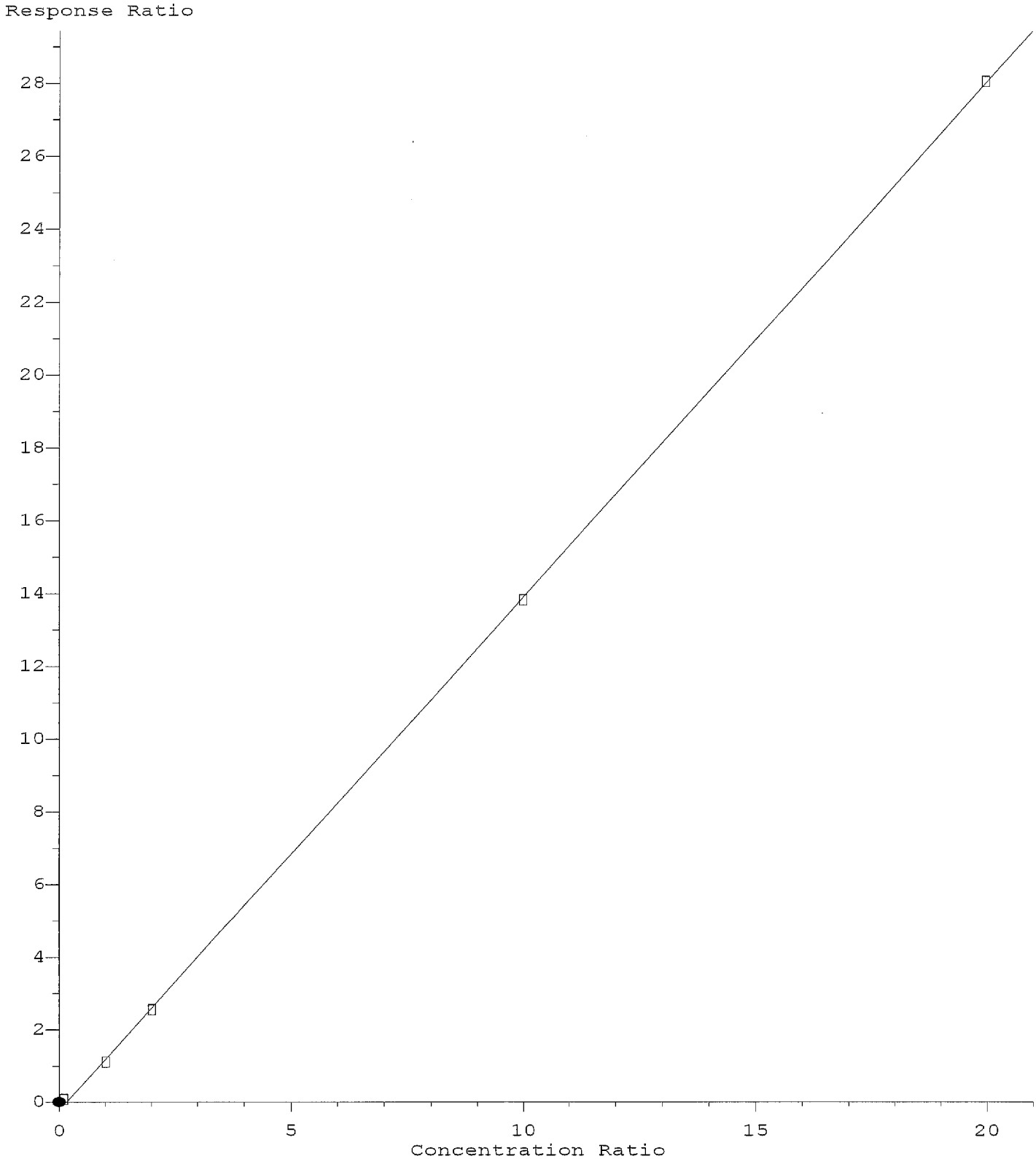
4-isopropyltoluene



Response = 1.560e+000 * Amt - 1.205e-001
Coef of Det (r^2) = 1.000 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Sat Jun 06 13:24:15 2015

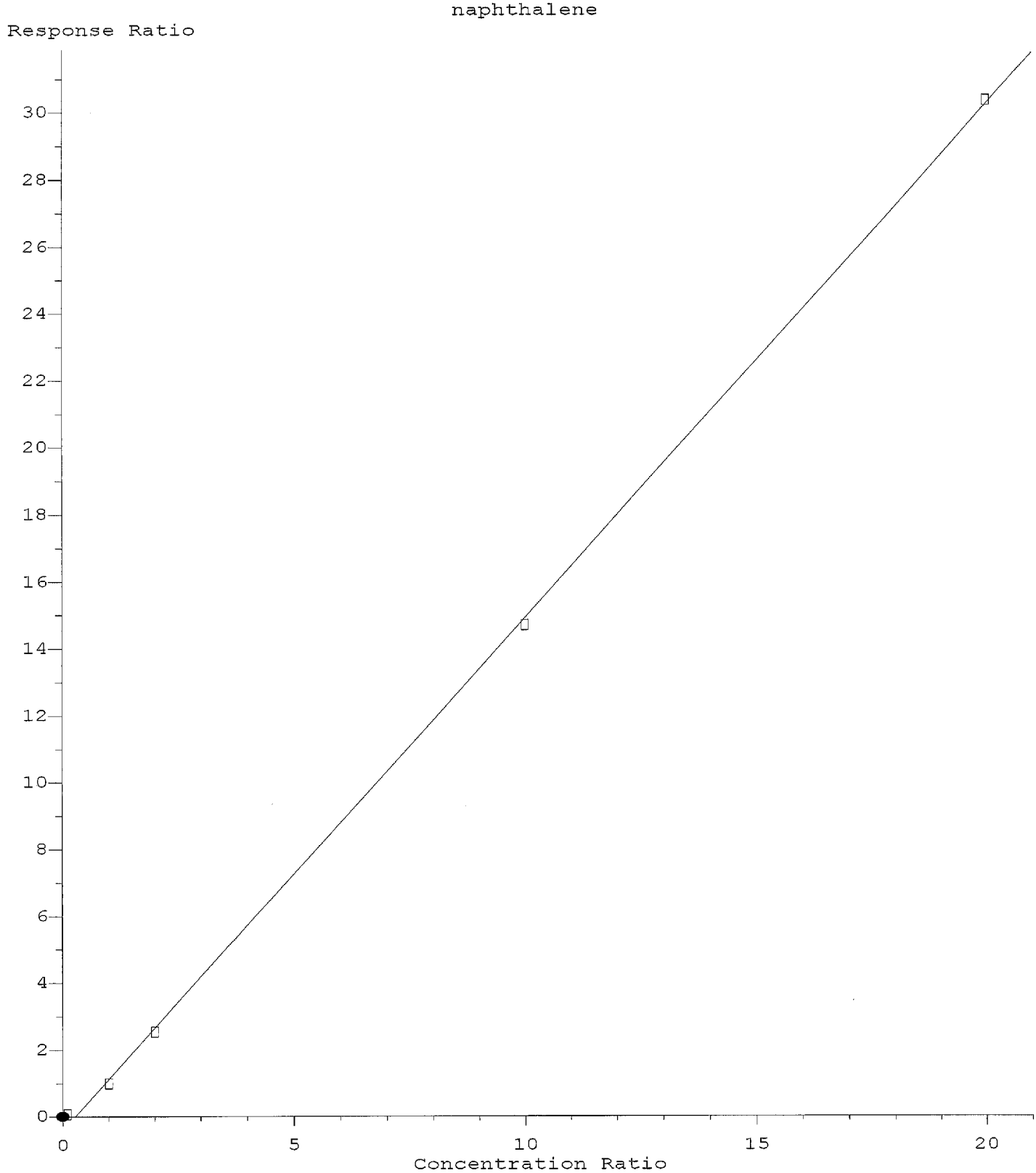
HDR013 V154

n-butylbenzene



Response = 1.410e+000 * Amt - 2.217e-001
Coef of Det (r^2) = 1.000 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Sat Jun 06 13:24:15 2015

HDR013 V155



Response = 1.532e+000 * Amt - 4.172e-001
Coef of Det (r^2) = 1.000 Curve Fit: Linear
Method Name: C:\msdchem\1\methods\524P_0503.M
Calibration Table Last Updated: Sat Jun 06 13:24:15 2015

HDR013 V156

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Date: 06/03/15 Time: 20:08

Lab File ID: 315\G32995 Init. Calib. Date(s): 02/25/15 02/25/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:09 19:29

Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	0.243	0.302		24.5	30.0	
Chloromethane	0.249	0.342		37.6	30.0	*
Vinyl chloride	0.267	0.303		13.5	30.0	
Bromomethane	0.170	0.228		34.1	30.0	*
Chloroethane	0.151	0.186		22.8	30.0	
Trichlorofluoromethane	0.364	0.386		6.0	30.0	
1,1-Dichloroethene	0.323	0.266		-17.7	30.0	
Methylene chloride	0.378	0.323		-14.4	30.0	
trans-1,2-Dichloroethene	0.356	0.300		-15.6	30.0	
1,1-Dichloroethane	0.510	0.508		-0.4	30.0	
2,2-Dichloropropane	0.441	0.372		-15.6	30.0	
cis-1,2-Dichloroethene	0.376	0.327		-13.1	30.0	
Bromochloromethane	0.316	0.154		-51.2	30.0	1.)
Chloroform	0.552	0.504		-8.7	30.0	
1,1,1-Trichloroethane	0.451	0.403		-10.6	30.0	
Carbon tetrachloride	0.365	0.305		-16.4	30.0	
1,1-Dichloropropene	0.396	0.351		-11.3	30.0	
1,2-Dichloroethane	0.423	0.404		-4.6	30.0	
Benzene	1.118	1.035		-7.4	30.0	
Trichloroethene	0.326	0.296		-9.3	30.0	
1,2-Dichloropropane	0.252	0.266		5.5	30.0	
Dibromomethane	0.221	0.197		-10.9	30.0	
Bromodichloromethane	0.411	0.369		-10.3	30.0	
cis-1,3-Dichloropropene	0.434	0.424		-2.3	30.0	
Toluene	0.823	0.682		-17.1	30.0	
trans-1,3-Dichloropropene	0.430	0.372		-13.5	30.0	
1,1,2-Trichloroethane	0.228	0.226		-0.7	30.0	
Tetrachloroethene	0.328	0.277		-15.5	30.0	
1,3-Dichloropropane	0.427	0.427		-0.1	30.0	
Dibromochloromethane	0.337	0.245		-27.2	30.0	
Chlorobenzene	0.879	0.734		-16.5	30.0	
1,1,1,2-Tetrachloroethane	0.300	0.228		-24.0	30.0	
Ethylbenzene	1.271	1.188		-6.5	30.0	
m,p-Xylene	0.530	0.451		-14.8	30.0	
o-Xylene	0.535	0.445		-16.8	30.0	

All other compounds must meet a minimum RRF of 0.010.

* exceeded

1.) % Drift: BMC = -29.1%

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Date: 06/03/15 Time: 20:08

Lab File ID: 315\G32995 Init. Calib. Date(s): 02/25/15 02/25/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:09 19:29

Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Styrene	0.844	0.782		-7.4	30.0
Bromoform	0.232	0.169		-27.3	30.0
Isopropylbenzene	1.207	1.049		-13.1	30.0
Bromobenzene	0.341	0.287		-15.8	30.0
1,1,2,2-Tetrachloroethane	0.363	0.351		-3.2	30.0
1,2,3-Trichloropropane	0.080	0.068		-14.8	30.0
n-Propylbenzene	1.256	1.174		-6.5	30.0
2/4-Chlorotoluene	0.895	0.825		-7.8	30.0
1,3,5-Trimethylbenzene	0.925	0.816		-11.7	30.0
tert-Butylbenzene	0.735	0.596		-18.9	30.0
1,2,4-Trimethylbenzene	0.946	0.837		-11.5	30.0
sec-Butylbenzene	1.020	0.895		-12.3	30.0
n-Butylbenzene	0.668	0.603		-9.8	30.0
1,3-Dichlorobenzene	0.572	0.466		-18.5	30.0
1,4-Dichlorobenzene	0.572	0.466		-18.6	30.0
4-Isopropyltoluene	0.840	0.714		-15.0	30.0
1,2-Dichlorobenzene	0.543	0.437		-19.6	30.0
1,2,4-Trichlorobenzene	0.239	0.200		-16.5	30.0
Hexachlorobutadiene	0.075	0.079		5.6	30.0
1,2,3-Trichlorobenzene	0.207	0.170		-18.0	30.0
Methyl tert-butyl ether	0.888	0.787		-11.3	30.0

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5972-2 Calibration Date: 06/03/15 Time: 20:08

Lab File ID: 315\G32995 Init. Calib. Date(s): 02/25/15 02/25/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 17:09 19:29

Heated Purge: (Y/N) N

GC Column: Rtx-624 ID: .18 (mm)

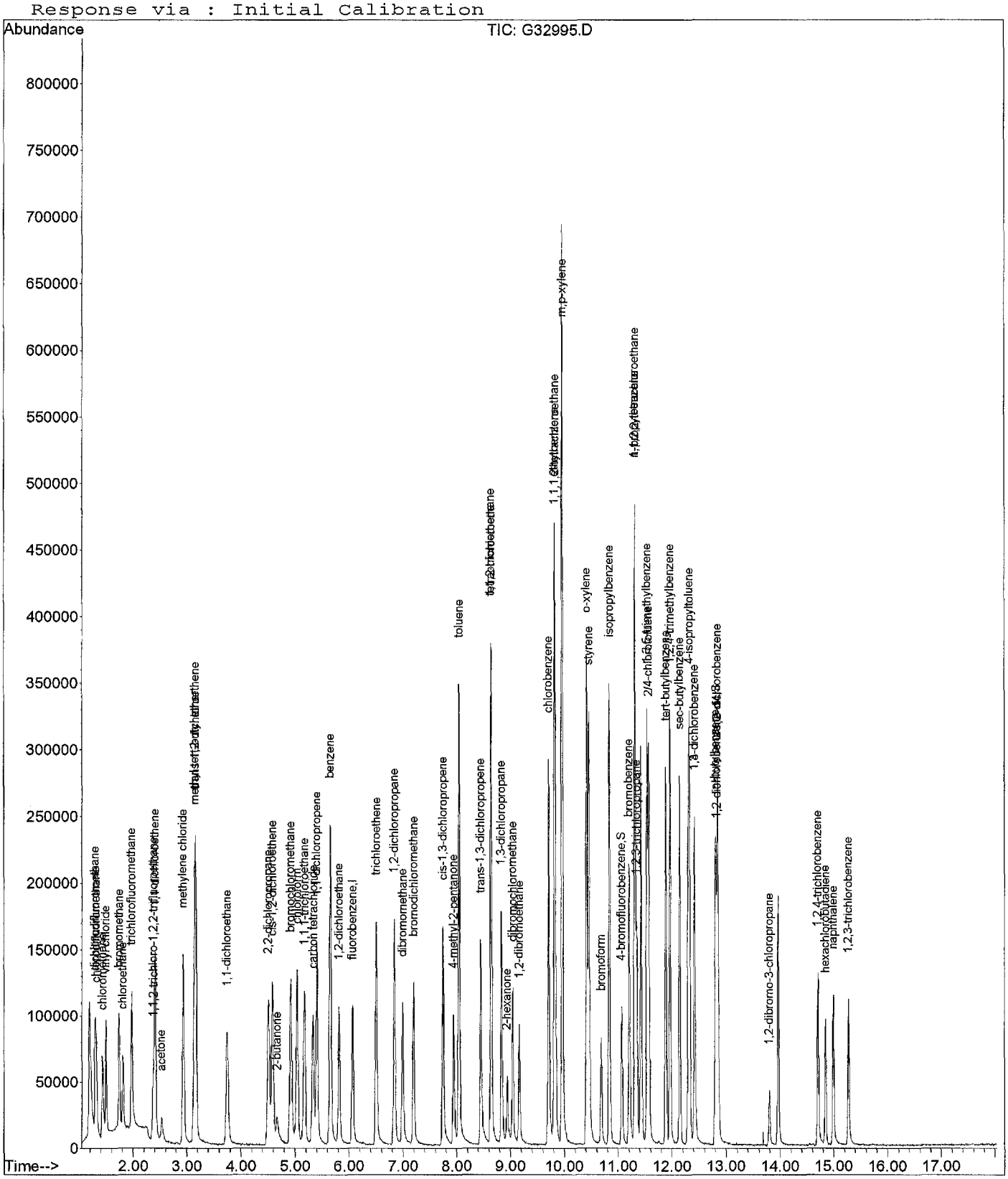
COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,2-Dichlorobenzene-d4	0.276	0.293		6.3	30.0
4-Bromofluorobenzene	0.261	0.268		2.7	30.0

All other compounds must meet a minimum RRF of 0.010.

Data File : C:\DATA\2015\JUNE15\060315\G32995.D Vial: 26
Acq On : 3 Jun 2015 20:08 Operator: KGG
Sample : VSTD010 Inst : HP5972-2
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:44 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V160



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G32995.D Vial: 26
Acq On : 3 Jun 2015 20:08 Operator: KGG
Sample : VSTD010 Inst : HP5972-2
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:44 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) fluorobenzene	6.06	96	118872	5.00	UG/L		0.04
System Monitoring Compounds							
49) 4-bromofluorobenzene	11.07	174	31837	5.13	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 102.60%				
62) 1,2-dichlorobenzene-d4	12.82	152	34883	5.32	UG/L		-0.02
Spiked Amount 5.000	Range 70 - 130		Recovery = 106.40%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.31	51	84245	9.95	ug/l	#	96
3) dichlorodifluoromethane	1.29	85	71798	12.45	UG/L		93
4) chloromethane	1.43	50	81246	13.75	UG/L		94
5) vinyl chloride	1.49	62	71936	11.33	UG/L		99
6) bromomethane	1.73	94	54103	13.38	UG/L		95
7) chloroethane	1.81	64	44224	12.28	UG/L		96
8) trichlorofluoromethane	1.97	101	91754	10.60	UG/L		92
9) 1,1,2-trichloro-1,2,2-trif	2.37	101	26781	3.22	UG/L		92
10) methyl tert-butyl ether	3.15	73	187024	8.86	UG/L		97
12) 1,1-dichloroethene	2.41	96	63141	8.22	UG/L		96
13) acetone	2.53	43	31108	9.91	ug/l		94
14) methylene chloride	2.93	84	76882	8.57	UG/L		90
15) trans-1,2-dichloroethene	3.16	96	71351	8.44	UG/L		95
16) 1,1-dichloroethane	3.74	63	120664	9.95	UG/L		99
17) 2,2-dichloropropane	4.51	77	88418	8.43	UG/L		95
18) cis-1,2-dichloroethene	4.59	96	77726	8.69	UG/L		94
19) 2-butanone	4.67	43	41062	9.73	ug/l		99
20) bromochloromethane	4.92	128	36608	7.09	UG/L	#	73
21) chloroform	5.03	83	119792	9.13	UG/L		97
22) 1,1,1-trichloroethane	5.17	97	95708	8.93	UG/L		96
23) carbon tetrachloride	5.33	117	72398	8.35	UG/L		95
24) 1,1-dichloropropene	5.40	75	83511	8.88	UG/L		93
25) benzene	5.65	78	246169	9.26	UG/L		99
26) 1,2-dichloroethane	5.81	62	96085	9.55	UG/L		100
27) trichloroethene	6.50	95	70370	9.07	UG/L	#	73
28) 1,2-dichloropropane	6.84	63	63261	10.55	UG/L		95
29) dibromomethane	6.99	93	46740	8.89	UG/L		97
30) bromodichloromethane	7.19	83	87773	8.98	UG/L		98
31) cis-1,3-dichloropropene	7.74	75	100880	9.78	UG/L		98
32) 4-methyl-2-pentanone	7.94	43	83494	10.50	ug/l		98
33) toluene	8.04	92	162166	8.29	UG/L		95
34) trans-1,3-dichloropropene	8.44	75	88494	8.65	UG/L		93
35) 1,1,2-trichloroethane	8.64	83	53698	9.93	UG/L		96
36) tetrachloroethene	8.64	166	65739	8.44	UG/L		88
37) 1,3-dichloropropane	8.83	76	101445	9.98	UG/L		97
38) 2-hexanone	8.94	43	55100	10.08	ug/l	#	92
39) dibromochloromethane	9.04	129	58179	7.27	UG/L		99
40) 1,2-dibromoethane	9.16	107	69466	8.55	UG/L		92
41) chlorobenzene	9.71	112	174515	8.35	UG/L		96
42) 1,1,1,2-tetrachloroethane	9.83	131	54255	7.61	UG/L		96
43) ethylbenzene	9.81	91	282492	9.35	UG/L		97
44) m,p-xylene	9.96	106	214568	17.04	UG/L		88
45) o-xylene	10.41	106	105799	8.32	UG/L		90
46) styrene	10.46	104	185816	9.26	UG/L		99
47) bromoform	10.68	173	40181	7.27	UG/L		99
48) isopropylbenzene	10.83	105	249341	8.69	UG/L		97

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

Data File : C:\DATA\2015\JUNE15\060315\G32995.D Vial: 26
Acq On : 3 Jun 2015 20:08 Operator: KGG
Sample : VSTD010 Inst : HP5972-2
Misc : ,,,CCV,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:44 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
50)	bromobenzene	11.21	156	68317	8.43	UG/L		95
51)	1,1,2,2-tetrachloroethane	11.31	83	83474	9.68	UG/L		98
52)	1,2,3-trichloropropane	11.35	112	16193	8.53	UG/L	#	67
53)	n-propylbenzene	11.31	91	279078	9.35	UG/L		95
54)	2/4-chlorotoluene	11.57	91	392319m	18.44	UG/L		
55)	1,3,5-trimethylbenzene	11.54	105	193886	8.82	UG/L		93
56)	tert-butylbenzene	11.89	119	141654	8.11	UG/L		91
57)	1,2,4-trimethylbenzene	11.96	105	198903	8.85	UG/L		93
58)	sec-butylbenzene	12.14	105	212705	8.77	UG/L		97
59)	1,3-dichlorobenzene	12.42	146	110848	8.15	UG/L		99
60)	4-isopropyltoluene	12.32	119	169732	8.50	UG/L		94
61)	1,4-dichlorobenzene	12.42	146	110848	8.15	UG/L		99
63)	1,2-dichlorobenzene	12.85	146	103966	8.05	UG/L		98
64)	n-butylbenzene	12.80	91	143325	9.02	UG/L		87
65)	1,2-dibromo-3-chloropropan	13.80	75	9953	7.92	UG/L		97
66)	1,2,4-trichlorobenzene	14.70	180	47461	8.34	UG/L		99
67)	hexachlorobutadiene	14.85	225	18737	10.53	UG/L		100
68)	naphthalene	14.99	128	103789	6.91	UG/L		100
69)	1,2,3-trichlorobenzene	15.27	180	40407	8.72	UG/L		93

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

HDR013 V162

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Date: 06/02/15 Time: 6:49

Lab File ID: P1084.D Init. Calib. Date(s): 05/03/15 05/03/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 14:26 17:52

Heated Purge: (Y/N) N

GC Column: R-624 0.18 ID: .18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.370	0.364		-1.7	30.0
Chloromethane	0.387	0.321		-17.0	30.0
Vinyl chloride	0.329	0.285		-13.4	30.0
Bromomethane	0.111	0.068		-38.6	30.0 *
Chloroethane	0.233	0.212		-8.8	30.0
Trichlorofluoromethane	0.519	0.535		3.1	30.0
1,1-Dichloroethene	0.268	0.230		-14.3	30.0
Methylene chloride	0.356	0.246		-30.9	30.0 *
trans-1,2-Dichloroethene	0.299	0.252		-15.8	30.0
1,1-Dichloroethane	0.617	0.551		-10.7	30.0
2,2-Dichloropropane	0.359	0.384		6.9	30.0
cis-1,2-Dichloroethene	0.327	0.276		-15.5	30.0
Bromochloromethane	0.159	0.144		-9.5	30.0
Chloroform	0.563	0.510		-9.4	30.0
1,1,1-Trichloroethane	0.487	0.510		4.8	30.0
Carbon tetrachloride	0.391	0.458		17.1	30.0
1,1-Dichloropropene	0.406	0.372		-8.4	30.0
1,2-Dichloroethane	0.540	0.516		-4.5	30.0
Benzene	1.231	0.975		-20.8	30.0
Trichloroethene	0.318	0.286		-10.0	30.0
1,2-Dichloropropane	0.328	0.270		-17.7	30.0
Dibromomethane	0.204	0.164		-19.5	30.0
Bromodichloromethane	0.385	0.370		-3.8	30.0
cis-1,3-Dichloropropene	0.415	0.365		-12.0	30.0
Toluene	0.777	0.671		-13.6	30.0
trans-1,3-Dichloropropene	0.397	0.357		-10.1	30.0
1,1,2-Trichloroethane	0.242	0.185		-23.5	30.0
Tetrachloroethene	0.315	0.338		7.3	30.0
1,3-Dichloropropane	0.526	0.400		-24.0	30.0
Dibromochloromethane	0.280	0.279		-0.3	30.0
Chlorobenzene	0.828	0.760		-8.2	30.0
1,1,1,2-Tetrachloroethane	0.277	0.294		6.1	30.0
Ethylbenzene	1.423	1.333		-6.3	30.0
m,p-Xylene	0.547	0.537		-1.8	30.0
o-Xylene	0.520	0.495		-4.8	30.0

All other compounds must meet a minimum RRF of 0.010.

* exceeded

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Date: 06/02/15 Time: 6:49

Lab File ID: P1084.D Init. Calib. Date(s): 05/03/15 05/03/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 14:26 17:52

Heated Purge: (Y/N) N

GC Column: R-624 0.18 ID: .18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Styrene	0.892	0.871		-2.3	30.0
Bromoform	0.156	0.166		6.7	30.0
Isopropylbenzene	1.405	1.433		2.0	30.0
Bromobenzene	0.355	0.355		-0.1	30.0
1,1,2,2-Tetrachloroethane	0.412	0.302		-26.7	30.0
1,2,3-Trichloropropane	0.144	0.135		-6.5	30.0
n-Propylbenzene	1.726	1.601		-7.2	30.0
2/4-Chlorotoluene	1.179	1.087		-7.8	30.0
1,3,5-Trimethylbenzene	1.248	1.266		1.5	30.0
tert-Butylbenzene	1.057	1.096		3.7	30.0
1,2,4-Trimethylbenzene	1.245	1.242		-0.2	30.0
sec-Butylbenzene	1.559	1.530		-1.8	30.0
n-Butylbenzene	1.194	1.286		7.7	30.0
1,3-Dichlorobenzene	0.705	0.707		0.3	30.0
1,4-Dichlorobenzene	0.701	0.694		-1.0	30.0
4-Isopropyltoluene	1.361	1.414		3.9	30.0
1,2-Dichlorobenzene	0.685	0.734		7.1	30.0
1,2,4-Trichlorobenzene	0.379	0.426		12.4	30.0
Hexachlorobutadiene	0.174	0.221		27.0	30.0
1,2,3-Trichlorobenzene	0.362	0.488		34.8	30.0
Methyl tert-butyl ether	0.858	0.879		2.5	30.0

All other compounds must meet a minimum RRF of 0.010.

7B

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBANY SAS No.: _____ SDG No.: HDR013

Instrument ID: HP5975-1 Calibration Date: 06/02/15 Time: 6:49

Lab File ID: P1084.D Init. Calib. Date(s): 05/03/15 05/03/15

EPA Sample No.(VSTD050##): VSTD010 Init. Calib. Times: 14:26 17:52

Heated Purge: (Y/N) N

GC Column: R-624 0.18 ID: .18 (mm)

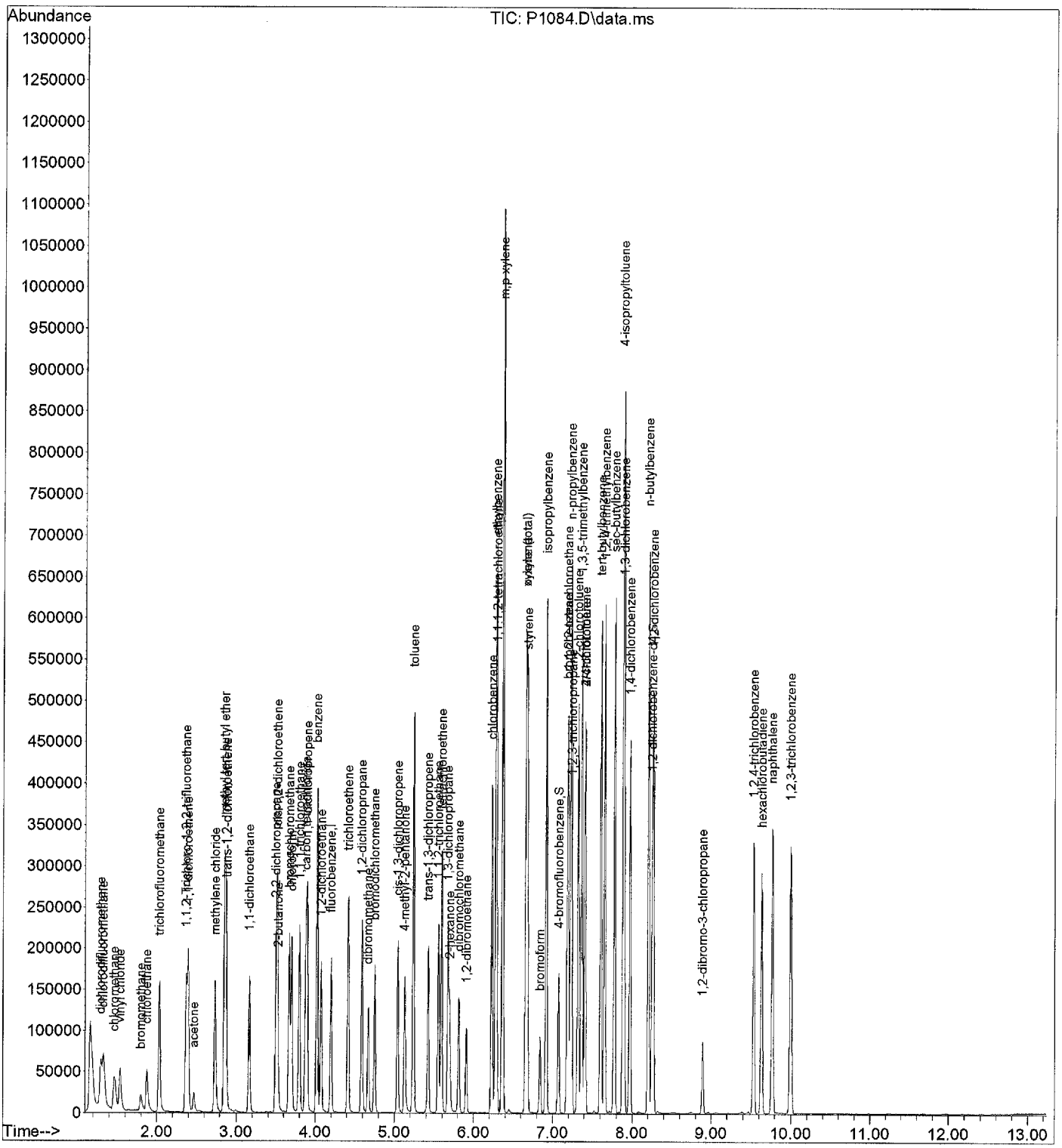
COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,2-Dichlorobenzene-d4	0.430	0.461		7.1	30.0
4-Bromofluorobenzene	0.299	0.343		14.6	30.0

All other compounds must meet a minimum RRF of 0.010.

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1084.D
Acq On : 2 Jun 2015 6:49
Operator : MN
Sample : VSTD010
Misc : ,,,CCV,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 09:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



HDR013 V166

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1084.D
Acq On : 2 Jun 2015 6:49
Operator : MN
Sample : VSTD010
Misc : ,,,CCV,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 09:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	103240	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	35393	5.73	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 114.60%				
87) 1,2-dichlorobenzene-d4	8.250	152	47609	5.36	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 107.20%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.325	51	77793	7.88	ug/l	#	94
3) dichlorodifluoromethane	1.294	85	75183	9.83	UG/L		98
4) chloromethane	1.465	50	66213	8.29	UG/L		98
5) vinyl chloride	1.538	62	58854	8.66	UG/L		98
6) bromomethane	1.800	94	14006	6.12	UG/L		99
7) chloroethane	1.873	64	43845	9.13	UG/L		97
9) trichlorofluoromethane	2.032	101	110473	10.31	UG/L		98
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	51734	8.04	UG/L		91
12) methyl tert-butyl ether	2.855	73	181542	10.25	UG/L		99
16) 1,1-dichloroethene	2.391	96	47496	7.96	UG/L	#	66
17) methylene chloride	2.739	84	50893	6.92	UG/L	#	81
19) acetone	2.471	43	25701	10.60	ug/l	#	43
20) trans-1,2-dichloroethene	2.879	96	52126	8.43	UG/L	#	86
22) 1,1-dichloroethane	3.160	63	113695	8.93	UG/L		97
23) 2,2-dichloropropane	3.495	77	79314	10.70	UG/L		100
24) cis-1,2-dichloroethene	3.513	96	56966	8.45	UG/L	#	80
29) bromochloromethane	3.666	128	29635	9.02	UG/L	#	86
32) chloroform	3.696	83	105322	9.07	UG/L		95
33) 2-butanone	3.525	43	40386	9.90	ug/l	#	53
34) 1,1,1-trichloroethane	3.794	97	105388	10.49	UG/L		97
35) carbon tetrachloride	3.873	117	94601	11.71	UG/L		99
37) 1,1-dichloropropene	3.891	75	76861	9.17	UG/L		98
38) benzene	4.019	78	201291	7.92	UG/L		100
40) 1,2-dichloroethane	4.074	62	106609	9.55	UG/L		93
41) trichloroethene	4.415	95	58981	8.99	UG/L	#	64
42) 1,2-dichloropropane	4.586	63	55716	8.23	UG/L		100
43) dibromomethane	4.665	93	33913	8.06	UG/L	#	86
46) bromodichloromethane	4.751	83	76499	9.63	UG/L		97
48) cis-1,3-dichloropropene	5.043	75	75273	8.79	UG/L		97
51) toluene	5.238	92	138512	8.63	UG/L		99
52) trans-1,3-dichloropropene	5.421	75	73694	8.99	UG/L		99
54) 1,1,2-trichloroethane	5.549	83	38282	7.67	UG/L		98
55) 4-methyl-2-pentanone	5.129	43	85841	11.17	ug/l		99
56) tetrachloroethene	5.592	166	69883	10.74	UG/L		98
57) 1,3-dichloropropane	5.671	76	82562	7.60	UG/L		100
58) dibromochloromethane	5.812	129	57684	9.98	UG/L		100
59) 1,2-dibromoethane	5.909	107	52064	8.61	UG/L		98
60) 2-hexanone	5.696	43	66559	11.51	ug/l		95
61) chlorobenzene	6.226	112	156957	9.18	UG/L		91
62) 1,1,1,2-tetrachloroethane	6.287	131	60743	10.61	UG/L		93
63) ethylbenzene	6.275	91	275258	9.37	UG/L		99
64) m,p-xylene	6.360	106	221819	19.65	UG/L		98
65) o-xylene	6.659	106	102200	9.52	UG/L		97
66) xylene (total)	6.659	106	102200	9.52	UG/L		97

HDR013 V167

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1084.D
Acq On : 2 Jun 2015 6:49
Operator : MN
Sample : VSTD010
Misc : ,,,CCV,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 09:02:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
67) styrene	6.677	104	179801	9.77	UG/L		87
68) bromoform	6.836	173	34249	10.67	UG/L		99
69) isopropylbenzene	6.915	105	295933	10.20	UG/L		100
71) bromobenzene	7.183	156	73365	10.00	UG/L		93
72) 1,1,2,2-tetrachloroethane	7.189	83	62456	7.34	UG/L		98
73) 1,2,3-trichloropropane	7.238	110	27938	9.37	UG/L	#	84
74) n-propylbenzene	7.226	91	330528	9.28	UG/L		94
76) 2-chlorotoluene	7.317	91	205025	9.13	UG/L		95
77) 4-chlorotoluene	7.409	91	214537	9.24	UG/L		96
78) 2/4-chlorotoluene	7.409	91	448881m	18.45	UG/L		
79) 1,3,5-trimethylbenzene	7.360	105	261454	10.15	UG/L	#	77
80) tert-butylbenzene	7.604	119	226240	10.37	UG/L		97
82) 1,2,4-trimethylbenzene	7.653	105	256421	9.97	UG/L		95
83) sec-butylbenzene	7.775	105	315814	9.81	UG/L		93
84) 1,3-dichlorobenzene	7.896	146	145881	10.02	UG/L		97
85) 4-isopropyltoluene	7.884	119	291899	10.38	UG/L		98
86) 1,4-dichlorobenzene	7.970	146	143252	9.89	UG/L		99
88) 1,2-dichlorobenzene	8.262	146	151617	10.72	UG/L		97
89) n-butylbenzene	8.201	91	265517	10.77	UG/L		91
91) 1,2-dibromo-3-chloropr...	8.890	75	16315	10.53	UG/L		96
93) 1,2,4-trichlorobenzene	9.530	180	88033	11.25	UG/L		98
94) hexachlorobutadiene	9.634	225	45695	12.72	UG/L		94
95) naphthalene	9.762	128	244670	10.05	UG/L		100
96) 1,2,3-trichlorobenzene	9.994	180	100857	13.50	UG/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

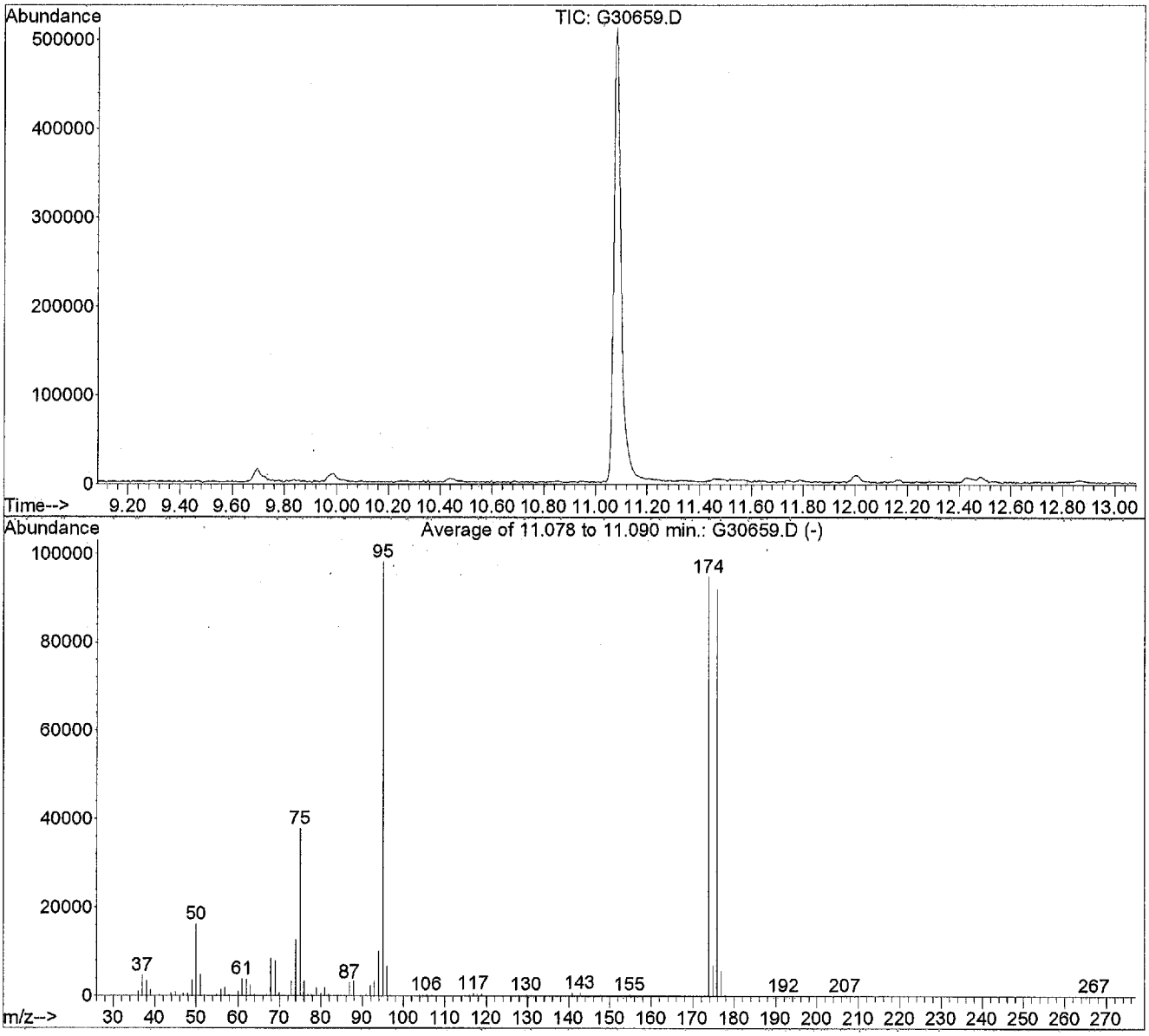
IV. RAW QC DATA PACKAGE FOR VOLATILE ORGANICS

A. TUNING
B. BLANK
C. SPIKE AND SPIKE DUPLICATE*
D. MATRIX SPIKE BLANK*
F. LFB*
G. DUPLICATE*
H. COPY OF CALCULATIONS

*IF REQUIRED

BFB

Data File : C:\DATA\2015\FEB15\022515\G30659.D Vial: 1
Acq On : 25 Feb 2015 7:13 Operator: KGG
Sample : BFB 25ng Inst : HP5972-2
Misc : ,,,TUNE,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics



AutoFind: Scans 1669, 1670, 1671; Background Corrected with Scan 1660

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.5	16154	PASS
75	95	30	80	38.5	37805	PASS
95	95	100	100	100.0	98168	PASS
96	95	5	9	6.7	6587	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	96.6	94856	PASS
175	174	5	9	7.2	6829	PASS
176	174	95	101	97.1	92069	PASS
177	176	5	9	6.2	5690	PASS

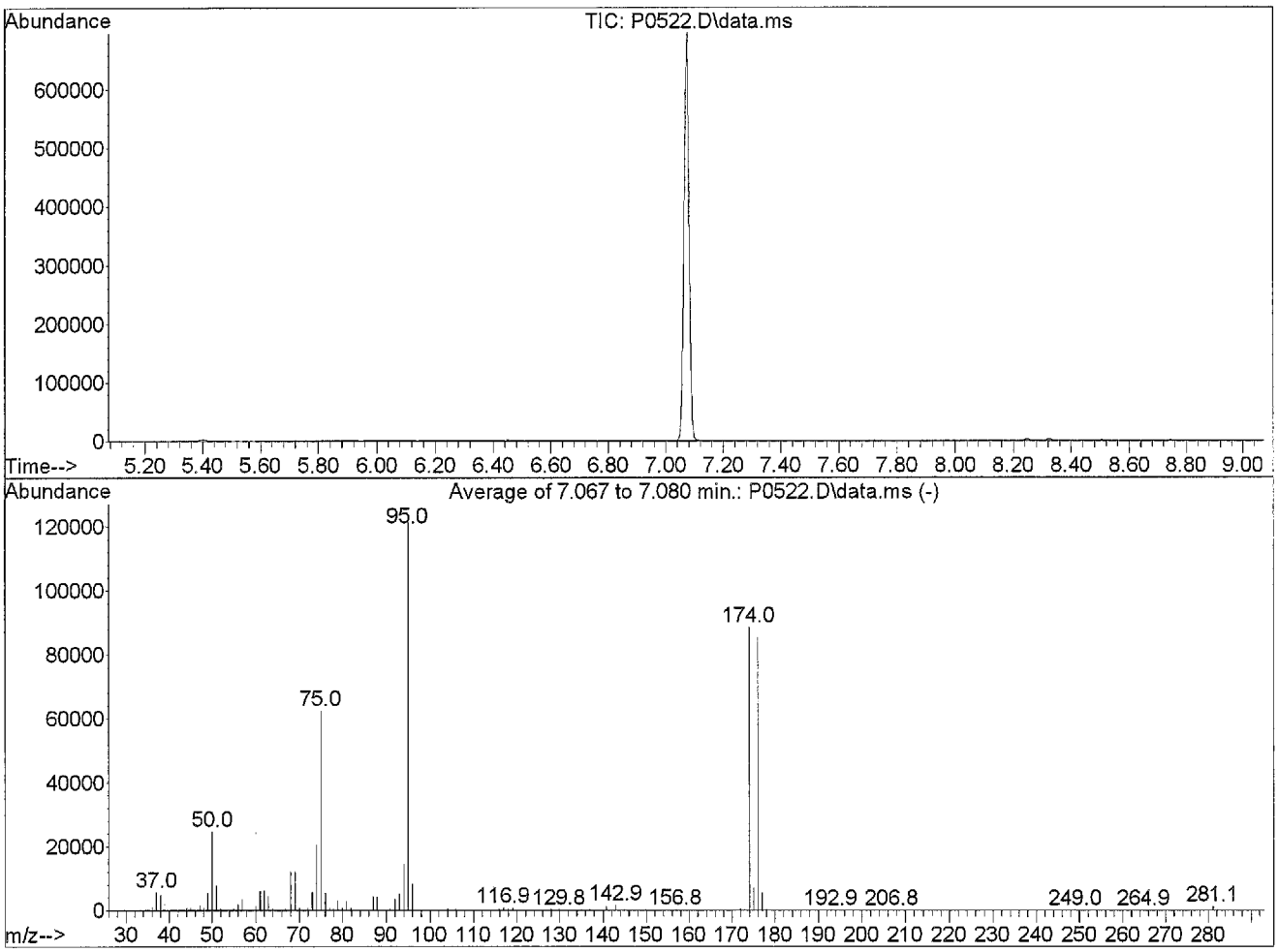
G30659.D 524_0225.M Tue Jun 30 15:52:08 2015 RPT1

HDR013 V170

Data Path : C:\DATA\2015\MAY15\050315\
Data File : P0522.D
Acq On : 3 May 2015 10:48
Operator : KGG
Sample : BFB 25ng
Misc : ,,,TUNE,,
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P
InstName : HP5975

Method : C:\msdchem\1\methods\524P_0503.M
Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
Last Update : Mon May 04 07:36:48 2015



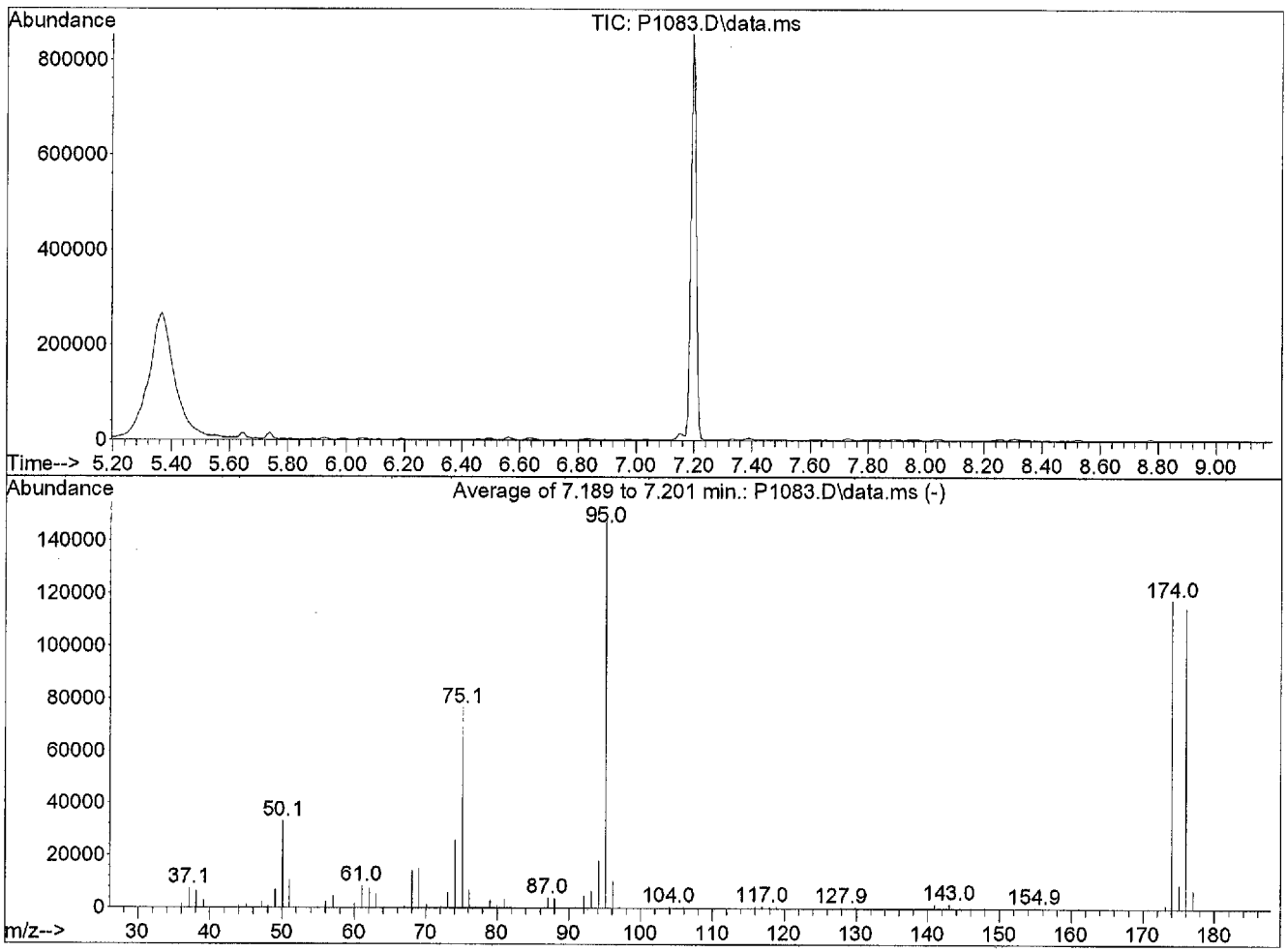
AutoFind: Scans 981, 982, 983; Background Corrected with Scan 974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.4	24662	PASS
75	95	30	80	51.6	62539	PASS
95	95	100	100	100.0	121101	PASS
96	95	5	9	6.8	8213	PASS
173	174	0.00	2	0.3	282	PASS
174	95	50	120	73.1	88467	PASS
175	174	5	9	7.7	6843	PASS
176	174	95	101	96.2	85099	PASS
177	176	5	9	6.5	5504	PASS

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1083.D
Acq On : 2 Jun 2015 6:19
Operator : MN
Sample : BFB 25ng
Misc : ,,,TUNE,,
ALS Vial : 11 Sample Multiplier: 1

Integration File: RTEINT.P
InstName : HP5975

Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
Last Update : Sat Jun 06 13:26:03 2015

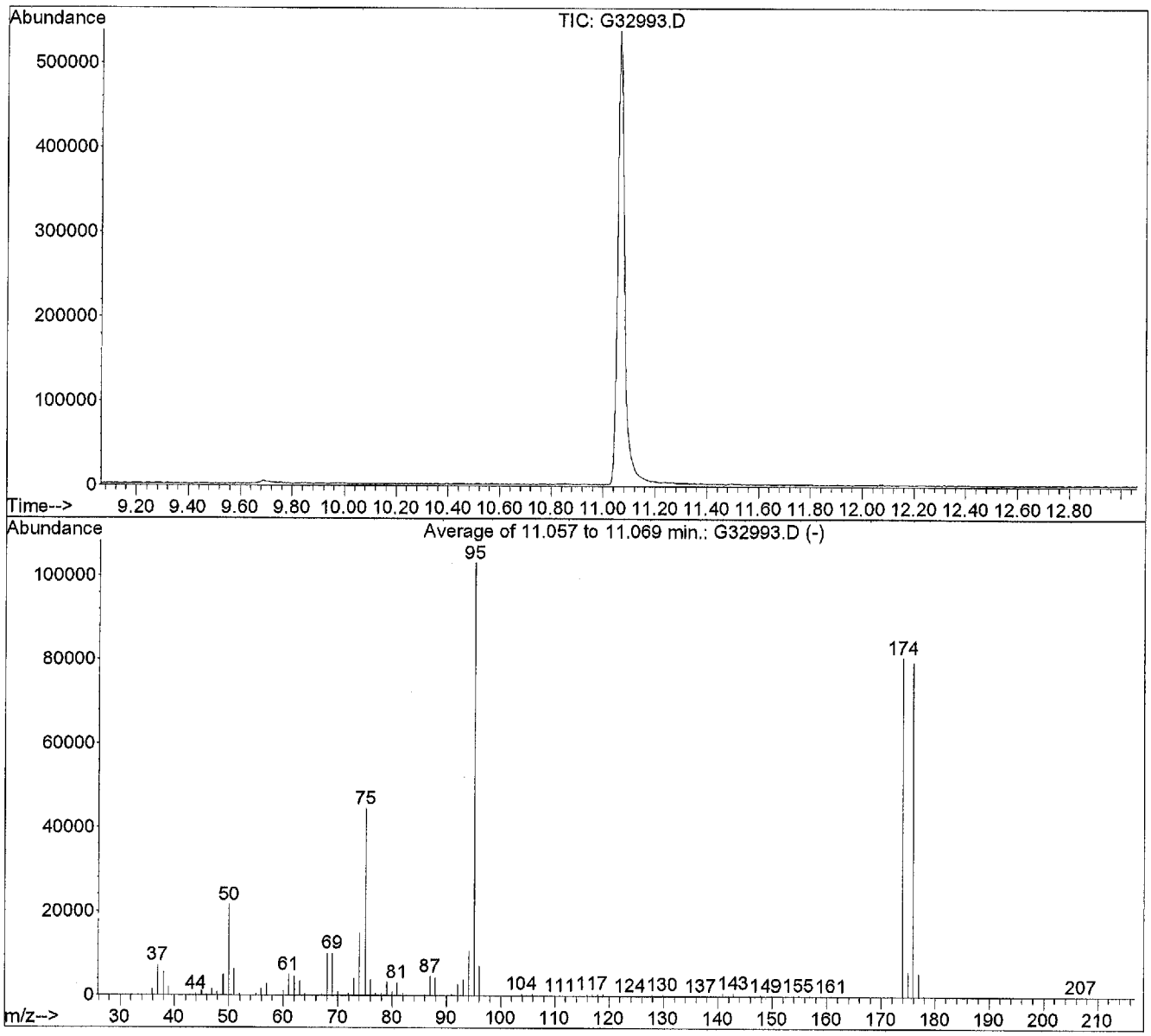


AutoFind: Scans 1001, 1002, 1003; Background Corrected with Scan 994

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5	33179	PASS
75	95	30	80	52.0	76566	PASS
95	95	100	100	100.0	147328	PASS
96	95	5	9	6.9	10121	PASS
173	174	0.00	2	1.1	1318	PASS
174	95	50	120	79.8	117624	PASS
175	174	5	9	7.7	9034	PASS
176	174	95	101	97.7	114965	PASS
177	176	5	9	6.0	6912	PASS

Data File : C:\DATA\2015\JUNE15\060315\G32993.D
Acq On : 3 Jun 2015 18:51
Sample : BFB 25NG
Misc : ,,,TUNE,,
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics

Vial: 24
Operator: KGG
Inst : HP5972-2
Multiplr: 1.00



AutoFind: Scans 1667, 1668, 1669; Background Corrected with Scan 1659

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	21549	PASS
75	95	30	80	43.1	44475	PASS
95	95	100	100	100.0	103157	PASS
96	95	5	9	6.9	7096	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	78.3	80733	PASS
175	174	5	9	7.3	5923	PASS
176	174	95	101	98.5	79531	PASS
177	176	5	9	6.8	5382	PASS

G32993.D 524_0225.M Tue Jun 30 14:26:00 2015 RPT1

EPA SAMPLE NO.

VBLK060215

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060215

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1086.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK060215

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060215

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1086.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

VBLK060215

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060215

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1086.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

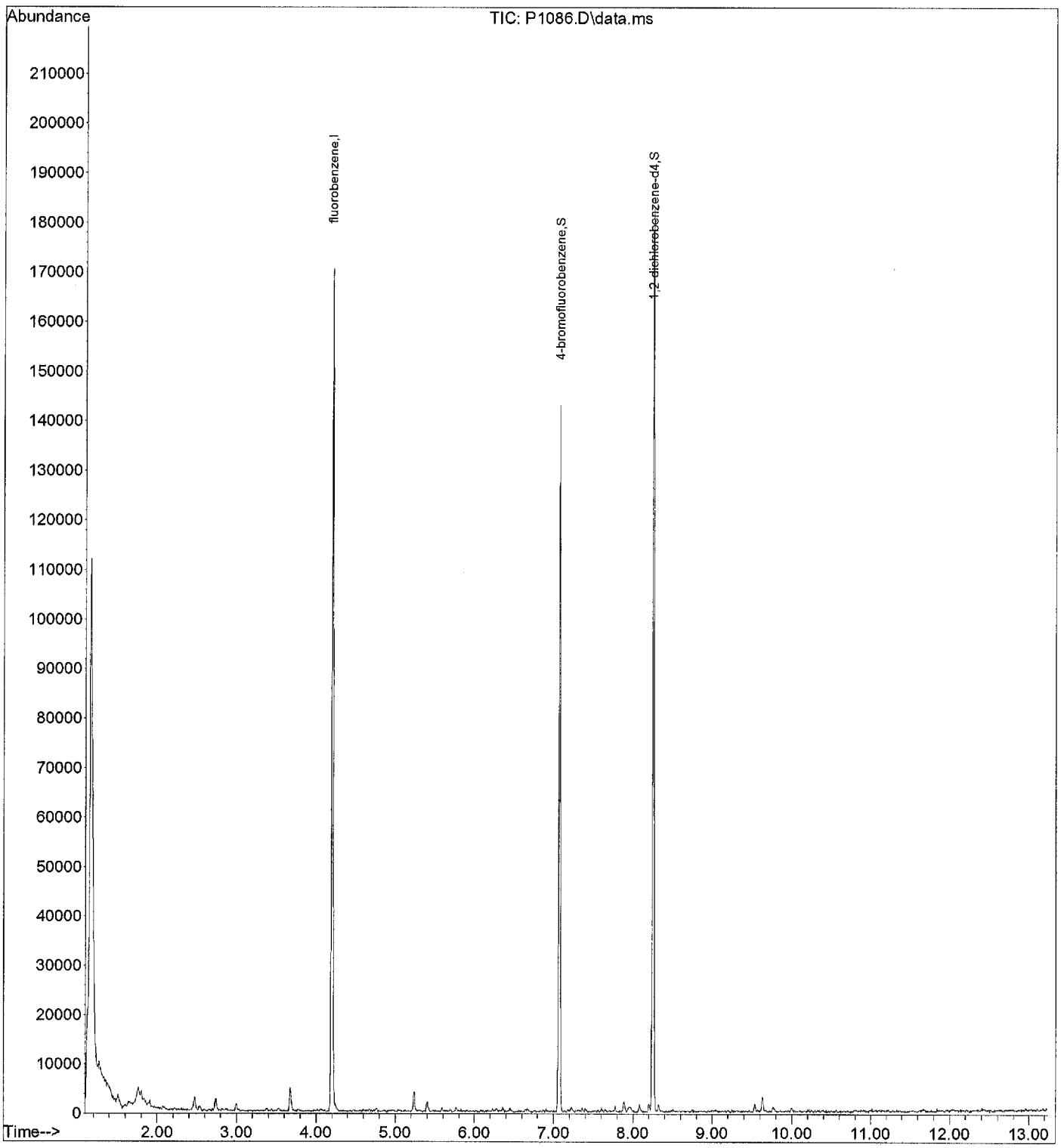
Number TICs found: 0 (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1086.D
Acq On : 2 Jun 2015 9:08
Operator : MN
Sample : VBLK060215
Misc : ,,,MBLK,,
ALS Vial : 11 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 09:22:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



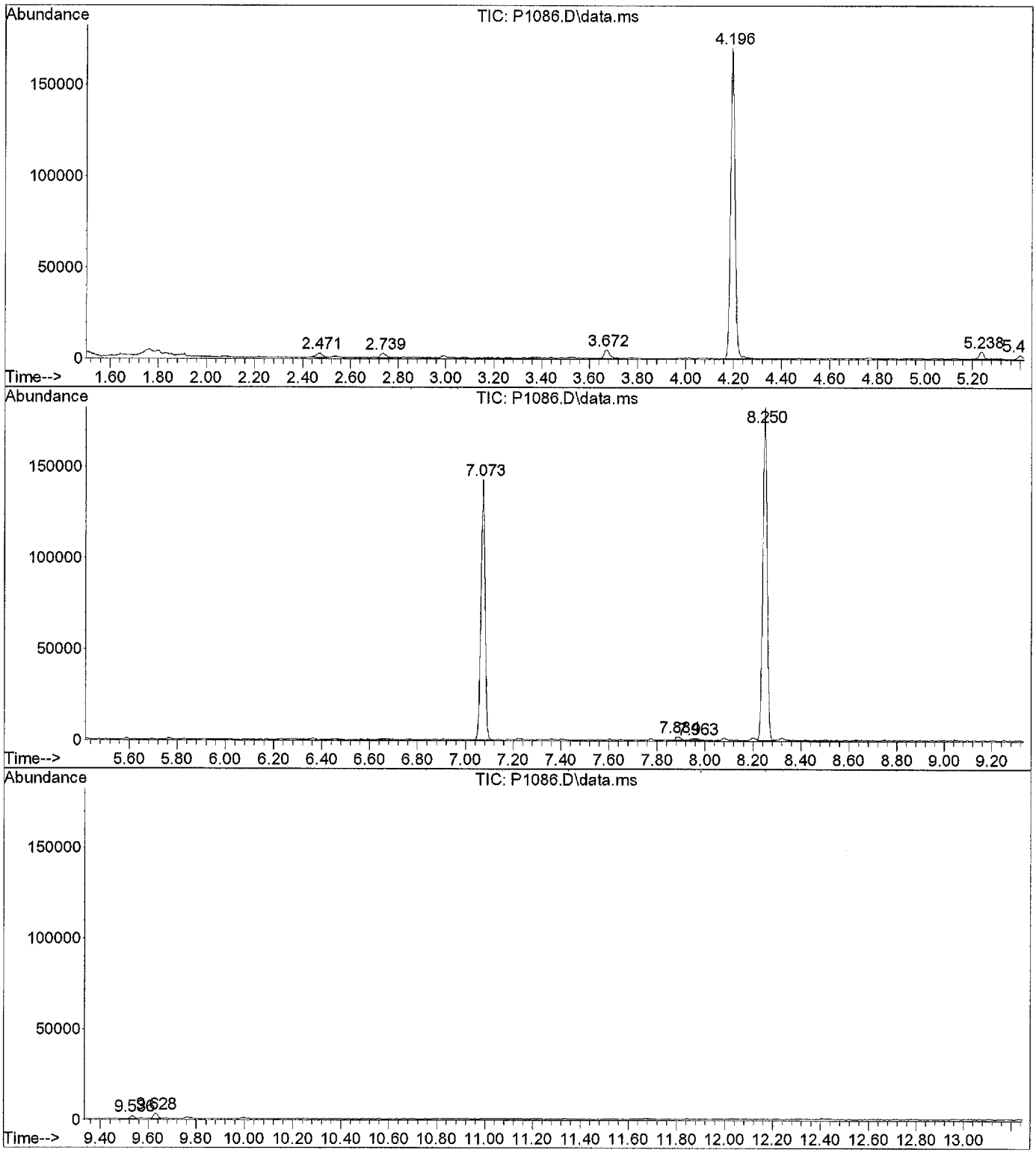
HDR013 V177

LSC Report - Integrated Chromatogram

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1086.D
Acq On : 2 Jun 2015 9:08
Operator : MN
Sample : VBLK060215
Misc : ,,,MBLK,,
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P



HDR013 V178

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1086.D
Acq On : 2 Jun 2015 9:08
Operator : MN
Sample : VBLK060215
Misc : ,,,MBLK,,
ALS Vial : 11 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 09:22:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) fluorobenzene	4.196	96	93339	5.00	UG/L	0.00
System Monitoring Compounds						
70) 4-bromofluorobenzene	7.073	174	28226	5.05	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 101.00%			
87) 1,2-dichlorobenzene-d4	8.250	152	35543	4.42	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 88.40%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

HDR013 V179

Library Search Compound Report

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1086.D
Acq On : 2 Jun 2015 9:08
Operator : MN
Sample : VBLK060215
Misc : ,,,MBLK,,
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938

TIC Library : C:\DATABASE\NIST08.L
TIC Integration Parameters: LSCINT.P

No Library Search Compounds Detected
****

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK060315

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060315

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32996

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	0.5	U
74-87-3	Chloromethane	0.5	U
75-01-4	Vinyl chloride	0.5	U
74-83-9	Bromomethane	0.5	U
75-00-3	Chloroethane	0.5	U
75-69-4	Trichlorofluoromethane	0.5	U
75-35-4	1,1-Dichloroethene	0.5	U
75-09-2	Methylene chloride	0.5	U
156-60-5	trans-1,2-Dichloroethene	0.5	U
75-34-3	1,1-Dichloroethane	0.5	U
594-20-7	2,2-Dichloropropane	0.5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
74-97-5	Bromochloromethane	0.5	U
67-66-3	Chloroform	0.5	U
71-55-6	1,1,1-Trichloroethane	0.5	U
56-23-5	Carbon tetrachloride	0.5	U
563-58-6	1,1-Dichloropropene	0.5	U
107-06-2	1,2-Dichloroethane	0.5	U
71-43-2	Benzene	0.5	U
79-01-6	Trichloroethene	0.5	U
78-87-5	1,2-Dichloropropane	0.5	U
74-95-3	Dibromomethane	0.5	U
75-27-4	Bromodichloromethane	0.5	U
10061-01-5	cis-1,3-Dichloropropene	0.5	U
108-88-3	Toluene	0.5	U
10061-02-6	trans-1,3-Dichloropropene	0.5	U
79-00-5	1,1,2-Trichloroethane	0.5	U
127-18-4	Tetrachloroethene	0.5	U
142-28-9	1,3-Dichloropropane	0.5	U
124-48-1	Dibromochloromethane	0.5	U
108-90-7	Chlorobenzene	0.5	U
630-20-6	1,1,1,2-Tetrachloroethane	0.5	U
100-41-4	Ethylbenzene	0.5	U
179601-23-1	m,p-Xylene	0.5	U
95-47-6	o-Xylene	0.5	U

EPA SAMPLE NO.

VBLK060315

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060315

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32996

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	0.5	U
75-25-2	Bromoform	0.5	U
98-82-8	Isopropylbenzene	0.5	U
108-86-1	Bromobenzene	0.5	U
79-34-5	1,1,2,2-Tetrachloroethane	0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	U
103-65-1	n-Propylbenzene	0.5	U
	2/4-Chlorotoluene	0.5	U
108-67-8	1,3,5-Trimethylbenzene	0.5	U
98-06-6	tert-Butylbenzene	0.5	U
95-63-6	1,2,4-Trimethylbenzene	0.5	U
135-98-8	sec-Butylbenzene	0.5	U
104-51-8	n-Butylbenzene	0.5	U
541-73-1	1,3-Dichlorobenzene	0.5	U
106-46-7	1,4-Dichlorobenzene	0.5	U
99-87-6	4-Isopropyltoluene	0.5	U
95-50-1	1,2-Dichlorobenzene	0.5	U
120-82-1	1,2,4-Trichlorobenzene	0.5	U
87-68-3	Hexachlorobutadiene	0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	U
1634-04-4	Methyl tert-butyl ether	0.5	U
	Total Trihalomethanes	0.5	U

1F

EPA SAMPLE NO.

VBLK060315

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBAN SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: VBLK060315

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G32996

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/03/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

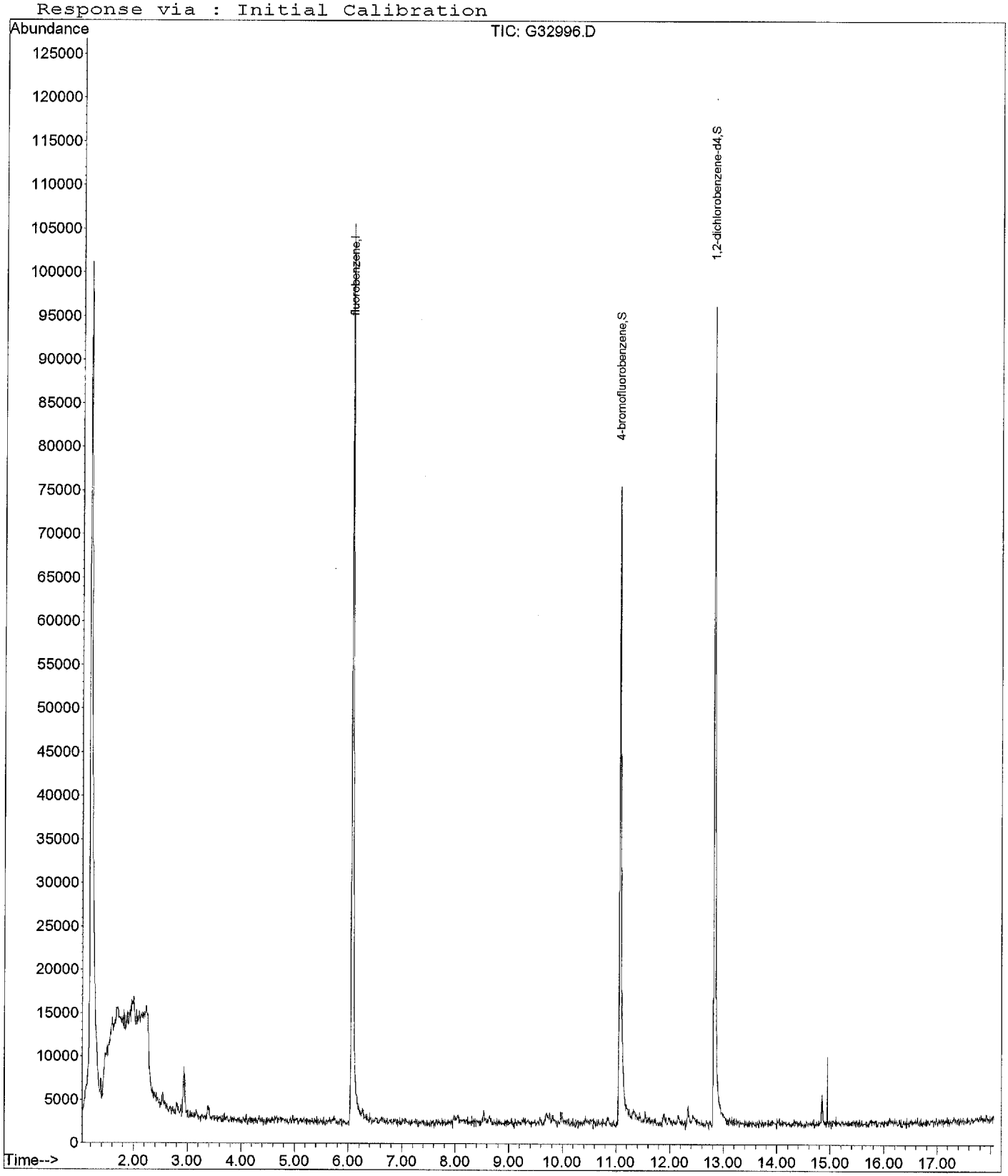
Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

Quantitation Report

Data File : C:\DATA\2015\JUNE15\060315\G32996.D Vial: 27
Acq On : 3 Jun 2015 20:40 Operator: KGG
Sample : VBLK060315 Inst : HP5972-2
Misc : ,,,MBLK,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:44 2015 Quant Results File: 524_0225.RES

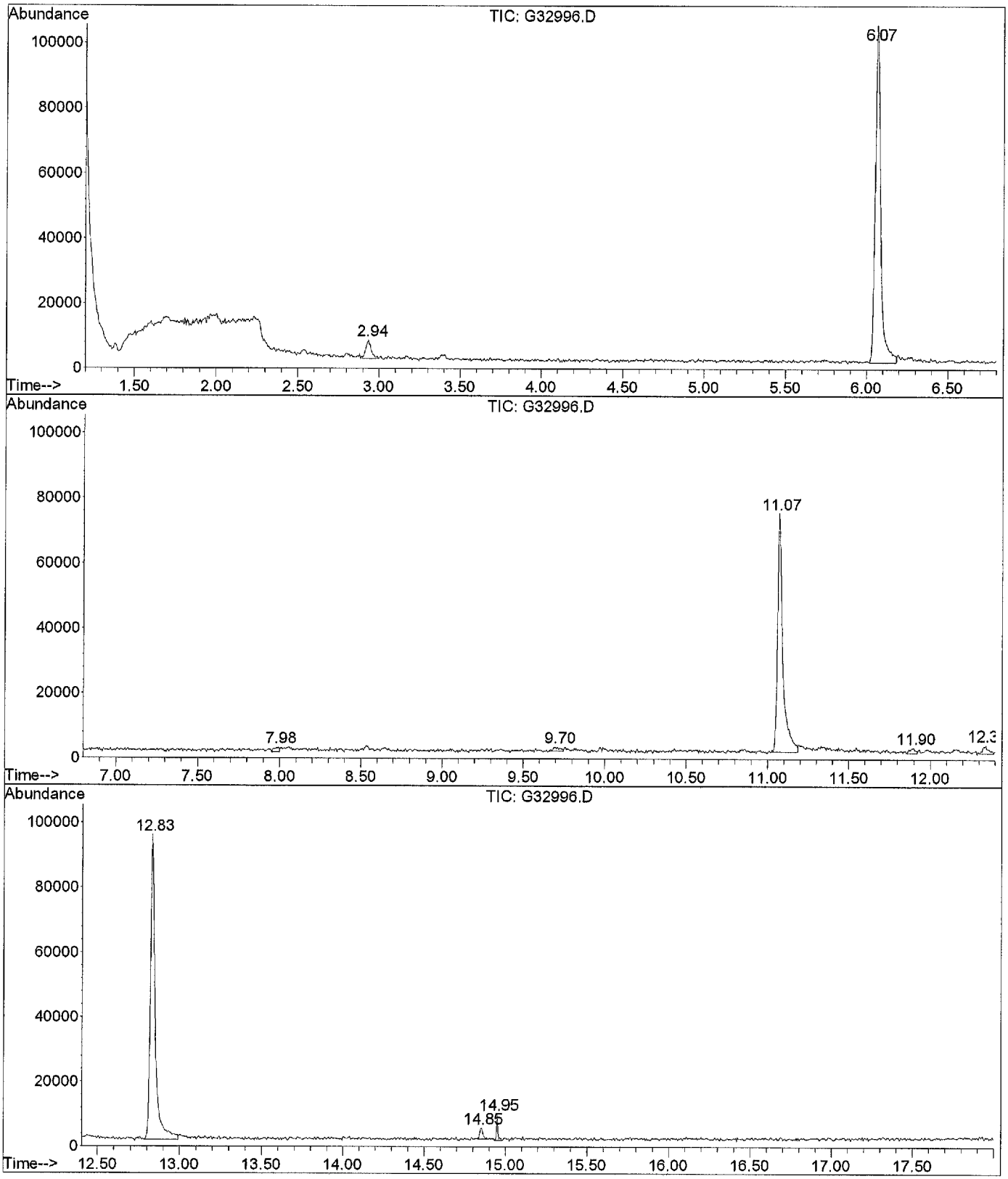
Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration



HDR013 V184

LSC Report - Integrated Chromatogram

File : C:\DATA\2015\JUNE15\060315\G32996.D
Operator : KGG
Acquired : 3 Jun 2015 20:40 using AcqMethod 524_0225
Instrument : HP5972-2
Sample Name: VBLK060315
Misc Info : ,,,MBLK,,
Vial Number: 27
Quant File :524_0225.RES (RTE Integrator)



G32996.D 524_0225.M Tue Jun 30 14:39:48 2015 RPT1

HDR013 V185

Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G32996.D Vial: 27
Acq On : 3 Jun 2015 20:40 Operator: KGG
Sample : VBLK060315 Inst : HP5972-2
Misc : ,,,MBLK,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 4 19:44 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) fluorobenzene	6.07	96	113885	5.00	UG/L	0.04
System Monitoring Compounds						
49) 4-bromofluorobenzene	11.07	174	27229	4.58	UG/L	0.00
Spiked Amount 5.000	Range 70 - 130		Recovery = 91.60%			
62) 1,2-dichlorobenzene-d4	12.83	152	29951	4.77	UG/L	-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 95.40%			

Target Compounds Qvalue

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

HDR013 V186

Tentatively Identified Compound (LSC) summary

Operator ID: KGG Date Acquired: 3 Jun 2015 20:40
Data File: C:\DATA\2015\JUNE15\060315\G32996.D
Name: VBLK060315
Misc: ,,,MBLK,,
Method: C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title: 524.2 Purgable Organics
Library Searched: C:\DATABASE\NIST08.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

G32996.D 524_0225.M Tue Jun 30 14:39:48 2015 RPT1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB060215

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: LFB060215

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1087.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	9	
75-01-4	Vinyl chloride	9	
74-83-9	Bromomethane	5	Z NN 06/30/15
75-00-3	Chloroethane	8	
75-69-4	Trichlorofluoromethane	10	
75-35-4	1,1-Dichloroethene	7	
75-09-2	Methylene chloride	7	Z NN 06/30/15
156-60-5	trans-1,2-Dichloroethene	8	
75-34-3	1,1-Dichloroethane	9	
594-20-7	2,2-Dichloropropane	10	
156-59-2	cis-1,2-Dichloroethene	8	
74-97-5	Bromochloromethane	8	
67-66-3	Chloroform	9	
71-55-6	1,1,1-Trichloroethane	10	
56-23-5	Carbon tetrachloride	11	
563-58-6	1,1-Dichloropropene	9	
107-06-2	1,2-Dichloroethane	9	
71-43-2	Benzene	7	
79-01-6	Trichloroethene	8	
78-87-5	1,2-Dichloropropane	8	
74-95-3	Dibromomethane	7	
75-27-4	Bromodichloromethane	9	
10061-01-5	cis-1,3-Dichloropropene	8	
108-88-3	Toluene	8	
10061-02-6	trans-1,3-Dichloropropene	8	
79-00-5	1,1,2-Trichloroethane	7	
127-18-4	Tetrachloroethene	10	
142-28-9	1,3-Dichloropropane	7	
124-48-1	Dibromochloromethane	9	
108-90-7	Chlorobenzene	9	
630-20-6	1,1,1,2-Tetrachloroethane	10	
100-41-4	Ethylbenzene	9	
179601-23-1	m,p-Xylene	18	
95-47-6	o-Xylene	9	

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB060215

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: LFB060215

Sample wt/vol: 5 (g/mL) mL Lab File ID: P1087.D

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/02/15

GC Column: R-624 0.18 ID: .18 (mm) Dilution Factor: 1.00

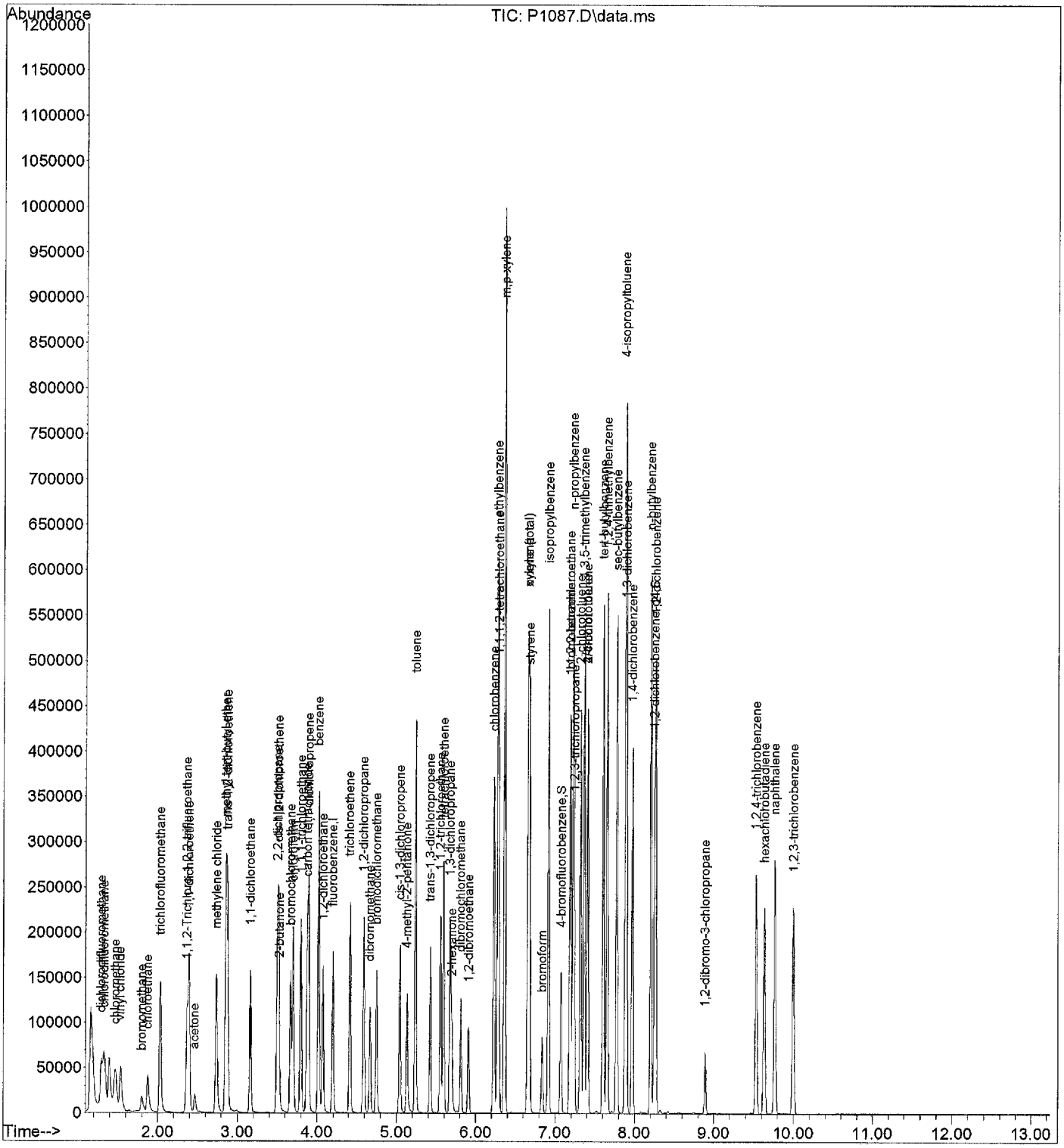
Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	9	
75-25-2	Bromoform	10	
98-82-8	Isopropylbenzene	9	
108-86-1	Bromobenzene	9	
79-34-5	1,1,2,2-Tetrachloroethane	7	
96-18-4	1,2,3-Trichloropropane	9	
103-65-1	n-Propylbenzene	9	
	2/4-Chlorotoluene	18	
108-67-8	1,3,5-Trimethylbenzene	9	
98-06-6	tert-Butylbenzene	10	
95-63-6	1,2,4-Trimethylbenzene	9	
135-98-8	sec-Butylbenzene	9	
104-51-8	n-Butylbenzene	10	
541-73-1	1,3-Dichlorobenzene	9	
106-46-7	1,4-Dichlorobenzene	9	
99-87-6	4-Isopropyltoluene	10	
95-50-1	1,2-Dichlorobenzene	11	
120-82-1	1,2,4-Trichlorobenzene	9	
87-68-3	Hexachlorobutadiene	10	
87-61-6	1,2,3-Trichlorobenzene	10	Z MN 06/30/15
1634-04-4	Methyl tert-butyl ether	10	
	Total Trihalomethanes	37	

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1087.D
Acq On : 2 Jun 2015 10:22
Operator : MN
Sample : LFB060215
Misc : ,,,LFB,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 10:35:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration



HDR013 V190

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1087.D
Acq On : 2 Jun 2015 10:22
Operator : MN
Sample : LFB060215
Misc : ,,,LFB,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 10:35:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) fluorobenzene	4.196	96	99051	5.00	UG/L		0.00
System Monitoring Compounds							
70) 4-bromofluorobenzene	7.073	174	32846	5.54	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	110.80%			
87) 1,2-dichlorobenzene-d4	8.250	152	48971	5.74	UG/L		0.00
Spiked Amount 5.000	Range 70 - 130		Recovery =	114.80%			
Target Compounds							Qvalue
2) chlorodifluoromethane	1.331	51	70490	7.45	ug/l	#	95
3) dichlorodifluoromethane	1.294	85	77451	10.56	UG/L		96
4) chloromethane	1.471	50	68440	8.93	UG/L		100
5) vinyl chloride	1.532	62	59055	9.05	UG/L		99
6) bromomethane	1.800	94	11457	5.22	UG/L		93
7) chloroethane	1.873	64	36042	7.82	UG/L		97
9) trichlorofluoromethane	2.032	101	106090	10.32	UG/L		99
11) 1,1,2-Trichloro-1,2,2-...	2.367	101	36183	5.86	UG/L	#	89
12) methyl tert-butyl ether	2.855	73	164480	9.68	UG/L		100
16) 1,1-dichloroethene	2.391	96	40940	7.15	UG/L	#	63
17) methylene chloride	2.739	84	47836	6.78	UG/L	#	79
19) acetone	2.465	43	21332	9.17	ug/l	#	43
20) trans-1,2-dichloroethene	2.873	96	46768	7.88	UG/L	#	85
22) 1,1-dichloroethane	3.160	63	104915	8.59	UG/L		97
23) 2,2-dichloropropane	3.501	77	67830	9.54	UG/L		99
24) cis-1,2-dichloroethene	3.513	96	50210	7.76	UG/L	#	77
29) bromochloromethane	3.666	128	26694	8.47	UG/L	#	84
32) chloroform	3.696	83	100108	8.98	UG/L		97
33) 2-butanone	3.525	43	36361	9.29	ug/l	#	90
34) 1,1,1-trichloroethane	3.794	97	95827	9.94	UG/L		96
35) carbon tetrachloride	3.873	117	84051	10.84	UG/L		98
37) 1,1-dichloropropene	3.891	75	69884	8.69	UG/L		98
38) benzene	4.019	78	182680	7.49	UG/L		99
40) 1,2-dichloroethane	4.074	62	97631	9.12	UG/L		93
41) trichloroethene	4.409	95	52503	8.34	UG/L	#	63
42) 1,2-dichloropropane	4.586	63	51531	7.93	UG/L		99
43) dibromomethane	4.665	93	30174	7.48	UG/L	#	85
46) bromodichloromethane	4.751	83	69801	9.16	UG/L		99
48) cis-1,3-dichloropropene	5.043	75	65831	8.01	UG/L		95
51) toluene	5.238	92	125922	8.18	UG/L		99
52) trans-1,3-dichloropropene	5.421	75	66009	8.39	UG/L		99
54) 1,1,2-trichloroethane	5.549	83	34716	7.25	UG/L		94
55) 4-methyl-2-pentanone	5.129	43	67258	9.12	ug/l		99
56) tetrachloroethene	5.592	166	61967	9.93	UG/L		98
57) 1,3-dichloropropane	5.671	76	77168	7.41	UG/L		100
58) dibromochloromethane	5.805	129	51558	9.30	UG/L		99
59) 1,2-dibromoethane	5.909	107	48008	8.27	UG/L		99
60) 2-hexanone	5.696	43	50229	9.05	ug/l		95
61) chlorobenzene	6.226	112	145918	8.89	UG/L		92
62) 1,1,1,2-tetrachloroethane	6.287	131	52725	9.60	UG/L		93
63) ethylbenzene	6.275	91	252901	8.97	UG/L		98
64) m,p-xylene	6.360	106	199211	18.39	UG/L		96
65) o-xylene	6.659	106	95044	9.23	UG/L		98
66) xylene (total)	6.659	106	95044	9.23	UG/L		98

HDR013 V191

Quantitation Report (QT Reviewed)

Data Path : C:\DATA\2015\JUNE15\060215\
Data File : P1087.D
Acq On : 2 Jun 2015 10:22
Operator : MN
Sample : LFB060215
Misc : ,,,LFB,,
ALS Vial : 12 Sample Multiplier: 1
InstName : HP5975

Quant Time: Jun 02 10:35:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\524P_0503.M
Quant Title : EPA524.2*A0100875/CL-2176/CK-0094/A0103959/A09938
QLast Update : Mon May 04 07:36:48 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
67) styrene	6.677	104	158600	8.98	UG/L		85
68) bromoform	6.836	173	29506	9.58	UG/L		100
69) isopropylbenzene	6.915	105	262859	9.44	UG/L		100
71) bromobenzene	7.183	156	65166	9.26	UG/L		92
72) 1,1,2,2-tetrachloroethane	7.189	83	56919	6.97	UG/L		98
73) 1,2,3-trichloropropane	7.238	110	25115	8.78	UG/L		87
74) n-propylbenzene	7.226	91	300039	8.78	UG/L		92
76) 2-chlorotoluene	7.317	91	183839	8.54	UG/L		97
77) 4-chlorotoluene	7.403	91	199164	8.94	UG/L		96
78) 2/4-chlorotoluene	7.403	91	408679m	17.50	UG/L		
79) 1,3,5-trimethylbenzene	7.360	105	233629	9.45	UG/L	#	76
80) tert-butylbenzene	7.604	119	206767	9.88	UG/L		98
82) 1,2,4-trimethylbenzene	7.653	105	233894	9.48	UG/L		96
83) sec-butylbenzene	7.774	105	288937	9.36	UG/L		94
84) 1,3-dichlorobenzene	7.896	146	129603	9.28	UG/L		96
85) 4-isopropyltoluene	7.884	119	263274	9.76	UG/L		98
86) 1,4-dichlorobenzene	7.970	146	129963	9.35	UG/L		98
88) 1,2-dichlorobenzene	8.262	146	144098	10.62	UG/L		98
89) n-butylbenzene	8.201	91	227778	9.63	UG/L		92
91) 1,2-dibromo-3-chloropr...	8.890	75	12574	8.46	UG/L		95
93) 1,2,4-trichlorobenzene	9.530	180	70938	9.45	UG/L		98
94) hexachlorobutadiene	9.634	225	35646	10.34	UG/L		98
95) naphthalene	9.762	128	197634	8.46	UG/L		100
96) 1,2,3-trichlorobenzene	10.000	180	68264	9.52	UG/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB060315

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: LFB060315

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33017

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/04/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
75-71-8	Dichlorodifluoromethane	15	
74-87-3	Chloromethane	16	
75-01-4	Vinyl chloride	12	
74-83-9	Bromomethane	14	Z MN 07/01/15
75-00-3	Chloroethane	13	
75-69-4	Trichlorofluoromethane	12	
75-35-4	1,1-Dichloroethene	8	
75-09-2	Methylene chloride	9	Z MN 07/01/15
156-60-5	trans-1,2-Dichloroethene	8	
75-34-3	1,1-Dichloroethane	10	
594-20-7	2,2-Dichloropropane	7	
156-59-2	cis-1,2-Dichloroethene	8	
74-97-5	Bromochloromethane	7	
67-66-3	Chloroform	9	
71-55-6	1,1,1-Trichloroethane	9	
56-23-5	Carbon tetrachloride	8	
563-58-6	1,1-Dichloropropene	9	
107-06-2	1,2-Dichloroethane	10	
71-43-2	Benzene	9	
79-01-6	Trichloroethene	9	
78-87-5	1,2-Dichloropropane	11	
74-95-3	Dibromomethane	9	
75-27-4	Bromodichloromethane	9	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	8	
10061-02-6	trans-1,3-Dichloropropene	9	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	8	
142-28-9	1,3-Dichloropropane	10	
124-48-1	Dibromochloromethane	7	
108-90-7	Chlorobenzene	8	
630-20-6	1,1,1,2-Tetrachloroethane	7	
100-41-4	Ethylbenzene	9	
179601-23-1	m,p-Xylene	17	
95-47-6	o-Xylene	9	

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LFB060315

Lab Name: PACE ANALYTICAL Contract: _____

Lab Code: 10478 Case No.: HDR-ALBA SAS No.: _____ SDG No.: HDR013

Matrix: (soil/water) WATER Lab Sample ID: LFB060315

Sample wt/vol: 5 (g/mL) mL Lab File ID: 315\G33017

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/04/15

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

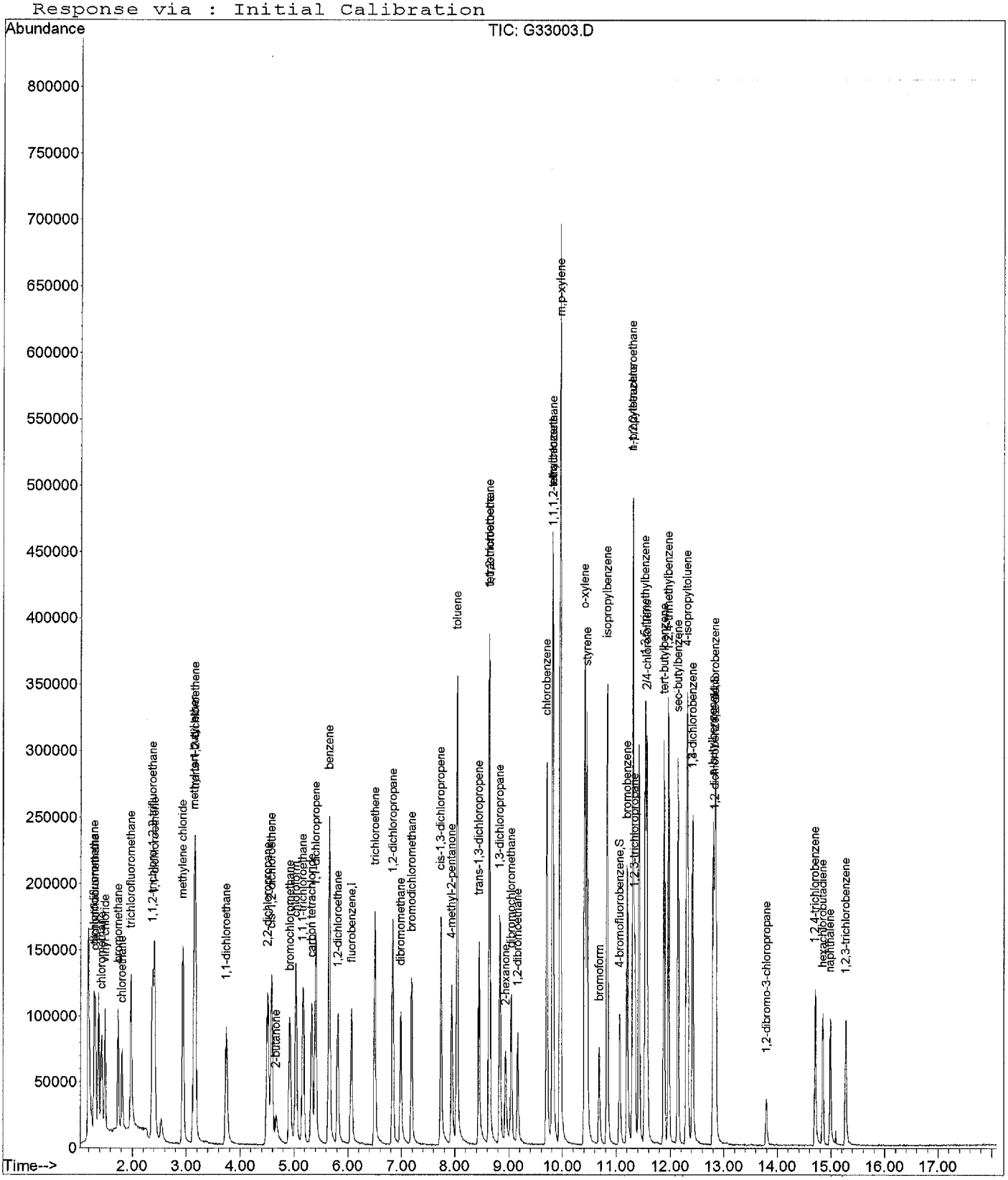
Soil Extract Volume: _____ (µL) Soil Aliquot Volume _____ (µL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (µg/L or µg/Kg) µg/L	Q
100-42-5	Styrene	9	
75-25-2	Bromoform	7	
98-82-8	Isopropylbenzene	9	
108-86-1	Bromobenzene	8	
79-34-5	1,1,2,2-Tetrachloroethane	10	
96-18-4	1,2,3-Trichloropropane	8	
103-65-1	n-Propylbenzene	9	
	2/4-Chlorotoluene	18	
108-67-8	1,3,5-Trimethylbenzene	9	
98-06-6	tert-Butylbenzene	8	
95-63-6	1,2,4-Trimethylbenzene	9	
135-98-8	sec-Butylbenzene	9	
104-51-8	n-Butylbenzene	9	
541-73-1	1,3-Dichlorobenzene	8	
106-46-7	1,4-Dichlorobenzene	8	
99-87-6	4-Isopropyltoluene	8	
95-50-1	1,2-Dichlorobenzene	8	
120-82-1	1,2,4-Trichlorobenzene	7	
87-68-3	Hexachlorobutadiene	10	
87-61-6	1,2,3-Trichlorobenzene	8	
1634-04-4	Methyl tert-butyl ether	9	
	Total Trihalomethanes	32	

Data File : C:\DATA\2015\JUNE15\060315\G33003.D Vial: 34
Acq On : 3 Jun 2015 23:38 Operator: KGG
Sample : LFB060315 Inst : HP5972-2
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 5 12:21 2015 Quant Results File: 524_0225.RES

Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration

HDR013 V195



Quantitation Report (QT Reviewed)

Data File : C:\DATA\2015\JUNE15\060315\G33003.D Vial: 34
Acq On : 3 Jun 2015 23:38 Operator: KGG
Sample : LFB060315 Inst : HP5972-2
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 5 12:21 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) fluorobenzene	6.06	96	113643	5.00	UG/L		0.03
System Monitoring Compounds							
49) 4-bromofluorobenzene	11.06	174	31469	5.30	UG/L		-0.01
Spiked Amount 5.000	Range 70 - 130		Recovery = 106.00%				
62) 1,2-dichlorobenzene-d4	12.82	152	34095	5.44	UG/L		-0.02
Spiked Amount 5.000	Range 70 - 130		Recovery = 108.80%				
Target Compounds							Qvalue
2) chlorodifluoromethane	1.32	51	112924	13.95	ug/l	#	94
3) dichlorodifluoromethane	1.29	85	88286	16.01	UG/L		93
4) chloromethane	1.43	50	93177	16.49	UG/L		92
5) vinyl chloride	1.50	62	80659	13.29	UG/L		99
6) bromomethane	1.74	94	57805	14.95	UG/L		99
7) chloroethane	1.81	64	47721	13.86	UG/L		94
8) trichlorofluoromethane	1.97	101	107260	12.96	UG/L		96
9) 1,1,2-trichloro-1,2,2-trif	2.37	101	62060	7.80	UG/L		97
10) methyl tert-butyl ether	3.14	73	175951	8.72	UG/L		96
12) 1,1-dichloroethene	2.41	96	64147	8.74	UG/L		90
14) methylene chloride	2.93	84	79011	9.21	UG/L	#	86
15) trans-1,2-dichloroethene	3.17	96	73917	9.14	UG/L		95
16) 1,1-dichloroethane	3.74	63	121056	10.44	UG/L		98
17) 2,2-dichloropropane	4.51	77	94403	9.42	UG/L		95
18) cis-1,2-dichloroethene	4.58	96	75100	8.78	UG/L		91
19) 2-butanone	4.66	43	44268	10.97	ug/l		100
20) bromochloromethane	4.92	128	35625	7.22	UG/L	#	73
21) chloroform	5.03	83	120619	9.62	UG/L		97
22) 1,1,1-trichloroethane	5.17	97	98908	9.65	UG/L		98
23) carbon tetrachloride	5.33	117	75934	9.16	UG/L		93
24) 1,1-dichloropropene	5.40	75	91383	10.16	UG/L		90
25) benzene	5.65	78	252013	9.92	UG/L		99
26) 1,2-dichloroethane	5.81	62	93540	9.72	UG/L		99
27) trichloroethene	6.50	95	72483	9.77	UG/L	#	71
28) 1,2-dichloropropane	6.84	63	64615	11.28	UG/L		95
29) dibromomethane	6.99	93	44086	8.77	UG/L		98
30) bromodichloromethane	7.19	83	86382	9.24	UG/L		99
31) cis-1,3-dichloropropene	7.73	75	99708	10.11	UG/L		97
32) 4-methyl-2-pentanone	7.94	43	104274	13.71	ug/l	#	96
33) toluene	8.04	92	161621	8.64	UG/L		93
34) trans-1,3-dichloropropene	8.44	75	86540	8.85	UG/L		91
35) 1,1,2-trichloroethane	8.64	83	52511	10.15	UG/L		97
36) tetrachloroethene	8.64	166	67387	9.05	UG/L		89
37) 1,3-dichloropropane	8.83	76	100840	10.38	UG/L		97
38) 2-hexanone	8.94	43	71837	13.74	ug/l	#	92
39) dibromochloromethane	9.04	129	55740	7.28	UG/L		98
40) 1,2-dibromoethane	9.16	107	67406	8.67	UG/L		89
41) chlorobenzene	9.70	112	174636	8.74	UG/L		94
42) 1,1,1,2-tetrachloroethane	9.83	131	51238	7.51	UG/L		94
43) ethylbenzene	9.81	91	288354	9.98	UG/L		97
44) m,p-xylene	9.96	106	214785	17.84	UG/L		87
45) o-xylene	10.41	106	107395	8.84	UG/L		87
46) styrene	10.46	104	187450	9.77	UG/L		98
47) bromoform	10.68	173	37088	7.02	UG/L		99
48) isopropylbenzene	10.83	105	255638	9.32	UG/L		98
50) bromobenzene	11.21	156	67095	8.66	UG/L		95

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

HDR013 V196

Data File : C:\DATA\2015\JUNE15\060315\G33003.D Vial: 34
Acq On : 3 Jun 2015 23:38 Operator: KGG
Sample : LFB060315 Inst : HP5972-2
Misc : ,,,LFB,, Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Jun 5 12:21 2015 Quant Results File: 524_0225.RES

Quant Method : C:\HPCHEM\1\METHODS\524_0225.M (RTE Integrator)
Title : 524.2 Purgable Organics
Last Update : Thu Feb 26 07:24:04 2015
Response via : Initial Calibration
DataAcq Meth : 524_0225

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
51)	1,1,2,2-tetrachloroethane	11.31	83	79197	9.61	UG/L		97
52)	1,2,3-trichloropropane	11.35	112	14908	8.22	UG/L	#	54
53)	n-propylbenzene	11.32	91	290725	10.18	UG/L		95
54)	2/4-chlorotoluene	11.57	91	390106m	19.18	UG/L		
55)	1,3,5-trimethylbenzene	11.54	105	200631	9.55	UG/L		93
56)	tert-butylbenzene	11.89	119	148159	8.87	UG/L		89
57)	1,2,4-trimethylbenzene	11.96	105	207726	9.66	UG/L		93
58)	sec-butylbenzene	12.14	105	223631	9.65	UG/L		96
59)	1,3-dichlorobenzene	12.42	146	111348	8.56	UG/L		98
60)	4-isopropyltoluene	12.32	119	176776	9.26	UG/L		94
61)	1,4-dichlorobenzene	12.42	146	111348	8.56	UG/L		98
63)	1,2-dichlorobenzene	12.85	146	106246	8.60	UG/L		99
64)	n-butylbenzene	12.80	91	151531	9.97	UG/L		87
65)	1,2-dibromo-3-chloropropan	13.80	75	9148	7.62	UG/L		91
66)	1,2,4-trichlorobenzene	14.70	180	41716	7.67	UG/L		98
67)	hexachlorobutadiene	14.85	225	19557	11.50	UG/L		99
68)	naphthalene	14.99	128	85492	6.25	UG/L		100
69)	1,2,3-trichlorobenzene	15.27	180	34288	8.00	UG/L		93

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

HDR013 V197

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

COMPUTATIONS FOR VOLATILE ORGANICS
PERFORMED BY RTE DATA SYSTEM OF HP

$$CONC = \frac{Ax}{Ais \times RRF} \cdot \frac{Is}{W}$$

WHERE:

CONC = Concentration in sample (µg/L or µg/kg)

Ax = Area of characteristic ion of compound

Ais = Area of characteristic ion of internal standard

RRF = Relative response factor as area per (ng) of compound, divided by area per ng of respective internal standard

Is = Amount of internal standard injected (ng)

W = Volume of sample in (mL) or dry weight (g)

Generally the amount of each internal standard injected is 250 ng.

Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

V. DOCUMENTATION FOR VOLATILE ORGANICS

A. LOG BOOK PAGES
B. DILUTION LOG*
C. REPORTING ANALYST SIGNATURE PAGE

*IF REQUIRED

Pace Long Island

GC/MS VOLATILE ANALYSIS

	Std. Log Pg.	Prep Date	Sol'n ID	Lot #
CAL	4/5	2/18-2/25	MXMS80/STD40	CL3605/212101129/215011121/CK0094/A014484
ICV			30603/30402	A0103959/214057A/A010584/CL3322
MS				
QC CHECK				
SURR.	9	2/24/15	Int/Sur	KG022415
I.S.				
BFB	1	12/29/14	BFB50ng	STS-110N

INSTRUMENT: HP5972-2
SCAN: VOA
COLUMN: RTX-624

Balance ID: NA
pH paper lot #: 224014
Cl strip lot #: C828141

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD 524.2	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
KG	02-25-15	G30663	LFB022515	NA	NA	0918	5ml	N	524-1201	≤2	0	✓		524DW	NA	
		64	VSTD0.50		↓	0955						✓				
		65	1502974-003B		2	1021						✓				
		66	1502A06-001A			1046						✓				
		67	1502A12-001B		↓	1112						✓				
		68	VBLK		NA	1142						✓				
		69	1502974-004B		2	1221						✓				
		70	VBLK			1326			↓	↓		✓				Δ-4-258-004 4114050
		71	BFB25ng			1414			524-0225	NA		✓	✓			
		72	VBLK			1445				<2		✓				
		73	VBLK			1510						✓				
		74	VSTD0.50			1536						✓				
		75	VBLK			1644						✓				
		76	VBLK			1709						✓				
		77	VSTD0.50			1747						✓	✓			Tcal # 5933
		78	VSTD 5.0			1812						✓	✓			
		79	VSTD 10.0			1838						✓	✓			
		80	VSTD 20.0			1903						✓	✓			
↓	↓	81	VSTD 50.0	↓		1929	↓	↓	↓	↓	↓	✓	✓	↓	↓	↓

Pace Long Island

GC/MS VOLATILE ANALYSIS

		Std. Log Pg.	Prep Date	Sol'n ID	Lot #
	CAL	4 / 5	2/18-2/25	DMS80/STS440	CL3405/212101129/21501121/CK0094/A01484
	ICV	↓	↓	30603/30402	A0103953/2140514/A0102584/CL3322
	MS	↓	↓	↓	↓
	QC CHECK	↓	↓	↓	↓
INSTRUMENT: HP5972-2	SURR.	9	02/24/15	Int/Surr	KG 02/24/2015
SCAN: VOA	LS.	↓	↓	↓	↓
COLUMN: RTX-624	BFB	1	12/29/14	BFB 50ng	STS-110 IV

Balance ID: ~~NA~~
pH paper lot #: 224014
Cl strip lot #: 0529 14B

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD 524.2	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
KG	02-25-15	G30682	VSTD 100	NA	NA	1929	5ml	N	524.0225	<2	6	✓	✓	~~NA~~	NA	A-4-258-004 4114050
↓	↓	83	VBLK	↓	↓	1954	↓	↓	↓	↓	↓	✓	✓	524 DW	↓	↓
		84	ICV 010			2020						✓	✓			
		85	VSTD 010			2045						✓	✓			
		86	VBLK 022515			2111						✓	✓			
		87	LFB 022515			2136						✓	✓			
		88	VSTD 0.50		↓	2202						✓	✓			↓
		89	1502974-003B		2	2227						✓	/			
		90	1502A06-001A		↓	2253						✓	✓			
		91	1502A12-001B			2318						✓	/			
		92	1502974-004B			2344						✓	✓			
↓	↓	93	1502A92-002A Dup		↓	0009				↓	↓	✓	✓	↓	↓	
MN	02-26-15	94	BFB 25ng		NA	0746				~~NA~~	6	✓	✓	524 DW	NA	
↓	↓	95	VSTD 010		↓	0813				<2	↓	✓	✓	↓	↓	A 4-258-004 4114050
		96	VBLK 022615			0848				↓		✓	✓			↓
		97	LFB 022615			0923						✓	/			
		98	LFB 022615			0959						✓	✓			
		G30698	VSTD 0.50		↓	1037						✓	✓			↓
↓	↓	G30700	1502A92-004A	↓	1	1102	↓	↓	↓	↓	↓	✓	✓	↓	↓	

Pace Long Island

GC/MS VOLATILE ANALYSIS

		Std. Log Pg.	Prep Date	Sol'n ID	Lot #
	CAL	10	5/3/15	DMM 580	CM1040/CK-0094/2140510 96/A0107061/212/01129/3
	ICV	10	↓	VOANix	~~A0107061~~ / ~~A0105270~~ / ~~A0107437~~ / CM-0423/2141016 1
	MS	10	↓		↓
	QC CHECK				
INSTRUMENT: HP5975-1	SURR.	10	5/3/15	524IS/Sur	A0104747
SCAN: VOA	I.S.	↓	↓	↓	↓
COLUMN: RTX-624	BFB	1 Int.	3/4/15	BFB	BFB 50ng

Balance ID: NA
pH paper lot #: 224014
Cl strip lot #: 125740

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD 524.2	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
KGG	05/1/15	10578	1504M10-002D	NA	2	1907	5ml	N	524P0325	K2	Ø	✓	✓	524DW	NA	
		19	1504M64-001A			1932						✓	✓			
		20	1504K24-006AD up		↓	1957						✓	✓			
	5/3/15	21	VBLK		NA	1006						✓	✓			
		22	BFB25ng			1048						✓	✓			
		23	VBLK			1153						✓				
		24	VBLK			—						✓				
		25	VBLK			1319						✓				
		26	VSTD 0.50			1426						✓	✓			
		27	VSTD 5.0			1507						✓	✓			
		28	VSTD 10			1549						✓	✓			
		29	VSTD 20			1630						✓				
		30	VSTD 50			1711						✓	✓			
		31	VSTD 100			1752						✓	✓			
		32	BFB25ng			1834						✓	✓			
		33	ICV 010			1912						✓	✓			
		34	VSTD010			1955						✓	✓			
		35	VBLK050315			2019						✓	✓			
↓	↓	36	QC 372	↓	↓	2044	↓	↓	↓	↓	↓	✓	✓	↓	↓	

Pace Long Island

GC/MS VOLATILE ANALYSIS

	Std. Log Pg.	Prep Date	Sol'n ID	Lot #		
CAL	10 / 12	5/3-5/22	DWM 580	CM 10640 / CN8034 / 214051896 / A0107061212 / 50129/3108		
ICV	10	5/3/15	VSA Mix	A0105270 / A0107437 / CN0423 / 214016		
MS						
QC CHECK						
SURR.			524 Int/Su	A0104747	Balance ID:	NA
I.S.					pH paper lot #:	224014
BFB	1 Tot	3/4/15	BFB	BFB 50ng	Cl strip lot #:	112574C

INSTRUMENT: HP5975-1
SCAN: VOA
COLUMN: RTX-624

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD 524.2	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
[signature]	06/01/15	P1072	1505F17-008A	MW12	2	2121	5ml	N	524 P0503	<2	ϕ	✓	✓	524DW	HDR012	
		73	-009A	MW13		2145						✓	✓			
		74	-010A	MW14		2210						✓	✓			
		75	-011A	MW64		2235						✓	✓			
		76	-002A	MWRC1		2300						✓	✓			
		77	-012A	RW1		2325						✓	✓			
		78	-013A	RW2		2350						✓	✓			
		79	-014A	RW3		0014						✓	✓			
		80	1505F17-010AMS	MW14		0039						✓	✓			
		81	-010AMSD	MW14		0104						✓	✓			
		82	1505F59-00[illegible]	NA	2	0129						✓	✓			
	06/02/15	83	BFB 25ng	NA	NA	0619				NA		✓	✓		NA	
		84	VSTD010			0649				<2		✓	✓			D#041315-3B2A
		85	VBLK060215			0718						✓	/			
		86	VBLK060215			0908						✓	✓			
		87	LFB060215			1022						✓	✓			
		88	VSTD0.50			1111						✓	✓			
		89	1505F13-001A		2	1136				7		✓	✓		~~HDR012~~ NA	
		90	-002A		2	1201				7		✓	✓			

① MN 06/02/2015

Pace Long Island

GC/MS VOLATILE ANALYSIS

	Std. Log Pg.	Prep Date	Sol'n ID	Lot #
CAL	10 / 12	5-3 / 5-22	DWMS80	CM10540 / CK08940 / 214057696 / A0107061 / 212157 29 / 158
ICV	10	5-3	VOA Mix	A0105270 / A0107437 1 / CM04931 / 214156
MS				
QC CHECK				
SURR.			524 Sol'n/Surr	A0104747
I.S.				
BFB	1 Int	3/4/15	BFB	BFB 50 ng

INSTRUMENT: HP5975-1
SCAN: VOA
COLUMN: RTX-624
Balance ID: NA
pH paper lot #: 224014
Cl strip lot #: 112514O

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
									524.2							
MN	06/02/15	P1091	1505F13-003A	NA	2	1226	5ml	N	524 P0503	≤2	0	✓	✓	524 DW	NA	
		92	-004A		2	1257				7		✓	✓			
		93	1505F45-001A		1	1315				≤2		✓	✓			
		94	-002A			1340						✓	✓			
		95	-003A			1405						✓	✓			
		96	1505G38-001A	MW2		1330						✓	✓		HDR013	need DL 1:50
		97	-002A	MW15		1454						✓	✓			
		98	-003A	MW18		1519						✓	✓			need to RR for CCV
		99	-004A	MW19		1544						✓	✓			
		P1100	-005A	MW10		1609						✓	✓			
		01	-006A	MW11D	2	1634						✓	✓			
		02	-007A	MW11M		1659						✓	✓			
		03	-006A	MW11D	1	1723						✓	✓			
		04	BFB 25ng	NA	NA	1748				NA		✓	✓			
		05	VSTD010			1813				≤2		✓	✓		NA	▷ 041315-3B2A
		06	VSTD010			1838						✓	✓			
		07	VSTD010			1903						✓	✓			
		08	VSTD010			1952						✓	✓			
		09	BFB 25ng			2114						✓	✓			

MN 06/02/15

Pace Long Island

GC/MS VOLATILE ANALYSIS

	Std. Log Pg.	Prep Date	Sol'n ID	Lot #
CAL	12	5/22/15	DMV 580/STS440	CM-1040/CK-0094/A0010706/212107129/2150/021
ICV	10	5/13/15	VCFAMEOH/TBME	A0107937/A0105270/CM-0923/2140116
MS	↓	↓	↓	↓
QC CHECK				
SURR.			30201	A0104747
I.S.	↓	↓	↓	↓
BFB	6	3/4/15	STB-110N	CH-32984

INSTRUMENT: HP5972-2

SCAN:

COLUMN: RTX-624

Balance ID: NA

pH paper lot #: HC413082

Cl strip lot #: 112574D

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
KGG	6/3/15	G32977	1505J73-007A	TRIP BLANK		1254	5mL	N	R8W0304		N/A	✓	✓	8260-W4-2	AECOM298	
		78	-001A	MW-11S		1315						✓	✓			
		79	-001AMS	-MS		1337						✓	✓			
		80	-001AMSD	-MSD		1358						✓	✓			
		81	VBLK			1420										
		82	1505J73-002A	MW-11D		1441						✓	✓			
		83	-003A	-12S		1503						✓	✓			
		84	-004A	-12D		1524						✓	✓			
		85	-006A	-61S		1546						✓	✓			
		86	-005A	-1D		1607						✓	✓			
		87	1505L06-006A	STORAGE BLANK		1633						✓	✓			
		88	-005A	TB		1655						✓	✓			
		89	-004A	NC-12		1716						✓	✓			
		90	-001A	MW-1S		1737						✓	✓			
		91	-002A	-13D		1759						✓	✓			
↓		92	-003A	-13S		1820	↓	↓	↓		↓	✓	✓	↓	↓	
KGG	6/3/15	G32993	BFB 25ng			1851	5mL	N	524_0225				✓			
		94	VSTD010			1931										
↓	↓	95	VSTD010			2008						✓	✓			

L018_r1

GC/MS VOLATILE ANALYSIS

Pace Long Island

	Std. Log Pg.	Prep Date	Sol'n ID	Lot #
CAL	12	5/22/15	DVM580/STS440	CM-1040/CK-0094/A0101078b/21210729/2150102/
ICV	10	5/3/15	VOANFOH/TTSME	A017937/ A0105270/ CM-0923/2140116/
MS				
QC CHECK				
SURR.			302011	A0104797
I.S.				
BFB	6	3/4/15	STS-110N	C01-32484

INSTRUMENT: HP5972-2
SCAN:
COLUMN: RTX-624

Balance ID: NA
pH paper lot #: HC413082
Cl strip lot #: 1125746

ANALYST'S SIGNATURE	DATE	RUN #	LAB SAMPLE ID	CLIENT SAMPLE ID	CONTAINER #	INJ TIME	VOL WT	HEAT. PURG. Y/N	METHOD	pH	Cl	QDEL	IMPORT	TEST CODE	SDG	COMMENTS
KGG	6/3/15	G332996	VBLK060315			2040	5ML	N	524-0225			✓	✓			
		97	1505G78-005A	MW-10		2106						✓	✓	524-DW	HDR013	
		98	-001A	MW12		2131						✓	✓			1:100
		99	-007A	MW11B1		2157						✓	✓			1:10
		G333000	-002A	MW5		2222						✓	✓			
		01	-003A	MW8		2247						✓	✓			
		02	-004A	MW9		2313						✓	✓			
		03	LFB060315			2338						✓	X			
		04	VSTD0.5			0004						✓	✓			
		05	1505F44-001A			0052						✓	✓			
		06	-002A			0054						✓	✓			
		07	-003A			0120						✓	✓			
		08	1505F83-001D			0145						✓	✓			
		09	1505F85-001D			0210						✓	✓			
		10	1505F88-001D			0236						✓	✓			
		11	1505F94-001D			0301						✓	✓			
		12	1505F97-001E			0327						✓	✓			
		13	1505G01-001A			0352						✓	✓			
		14	-003A			0417						✓	✓			
		15	1505H08-001D			0443						✓	✓			
		16	1505J22-001A			0508						✓	✓			

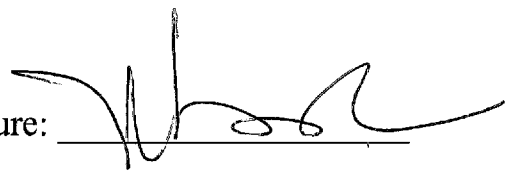
Pace Long Island

575 Broad Hollow Road
Melville, NY 11747

tel. 631.694.3040
fax. 631.420.8436

SDG: HDR013
SCAN: VOA

This data package was reported by the undersigned. This reporting includes data calculations, manual edits, if necessary, and compilation of raw data. The information presented is true and correct to the best of my knowledge.

Signature: 

Date: 06/30/2015