GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 11/14/2011

GCAL Report 211110421

Deliver To	Appl, Inc. 908 North Temperance Ave Clovis, CA 93611 559-275-2175
Attn	Cynthia Clark

Project Appl, Inc.

CASE NARRATIVE

Client: Environet, Inc. **Report:** 211110421

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

No anomalies were found for the analyzed sample(s).

Sample Test Summary Report: 211110421

Lab Sample ID	Cust. Sample ID	Matrix	Proc. Desc.	
21111042101	ES057	W	EPH Water	
21111042101	ES057	W	VPH Water	
21111042101	ES057	W	EPH Water Prep	

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates the result is between the MDL and RDL
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Robyn Migues
Technical Director
GCAL REPORT 211110421

THIS REPORT CONTAINS 268 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21111042101	ES057	Water	11/02/2011 11:05	11/04/2011 08:40

2E

WATER ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211110421

GC Column (1): ID: (mm) GC Cloumn (2): ID: (mm)

Method: MASSVPH

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC1 1-(2)	Lo	Hi	F	SMC2 2-(1)	Lo	Hi	F	SMC2 2-(2)	Lo	Hi	F	TOT OUT
1.	ES057	116	70	130						114	70	130						0
2.	MB1003187	100	70	130						96	70	130						0
3.	LCS1003188	104	70	130						98	70	130						0

SMC 1 : 2,5-Dibromotoluene (PID) SMC 2 : 2,5-Dibromotoluene (FID)

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211110421

Contract: Method: MASSVPH

Prep Batch: Analytical Batch: 468512

SAMPLE NO : 1003188

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*LCS % REC FLAG*	*QC. LIMITS*
C5-C8 Aliphatic	ug/L	200	0	152	76		60 - 140
C9-C10 Aromatic	ug/L	50	0	54.4	109		60 - 140
C9-C12 Aliphatic	ug/L	100	0	105	105		60 - 140

RPD : 0 out of 0 outside limits

Spike Recovery: 0 out of 3 outside limits

FORM III ORG-1

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL | Sample ID: MB1003187

Lab Code: LA024 | Case No.: | Contract:

Lab Sample ID: 1003187 | SAS No.: | SDG No.: 211110421

Matrix: Water | Sulfur Cleanup: (Y/N) N | Date Extracted:

Date Analyzed (1): 11/07/11 | Time (1): 1221 | Date Analyzed (2): | Time (2):

Instrument ID (1): GCV5B | Instrument ID (2):

GC Column (1): | ID: (mm) | GC Column (2): | ID: (mm)

Method: MASSVPH | Prep Batch: | Analytical Batch: 468512

Lab File ID: 2111107/v5003

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS1003188	1003188	11/07/11	1151	GCV5B
2.	ES057	21111042101	11/08/11	0120	GCV5B

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: ES057

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 211110421

Sample wt/vol: 5 | Units: mL | Lab Sample ID: 21111042101

Level: (low/med) | Date Collected: 11/02/11 | Time: 1105

% Moisture: | decanted: (Y/N) | Date Received: 11/04/11

GC Column: | ID: | (mm) | Date Extracted:

Concentrated Extract Volume: 5000 | (µL) | Date Analyzed: 11/08/11 | Time: 0120

Soil Aliquot Volume: | (µL) | Dilution Factor: 1 | Analyst: JAR

Injection Volume: 1 | (µL) | Prep Method:

GPC Cleanup: (Y/N) N | pH: | Analytical Method: MASSVPH

Prep Batch: | Analytical Batch: 468512 | Sulfur Cleanup: (Y/N) N | Instrument ID: GCV5B

CONCENTRATION UNITS: *ug/L* | Lab File ID: 2111107/v5025

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCV-00-4	C5-C8 Aliphatic	15.0	U	3.31	15.0	30.0
GCV-00-6	C9-C10 Aromatic	20.6		1.24	5.00	10.0
GCV-00-5	C9-C12 Aliphatic	69.9		3.20	10.0	20.0

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5025.d
Lab Smp Id: 21111042101 Client Smp ID: 21111042101
Inj Date : 08-NOV-2011 01:20
Operator : JAR Inst ID: gcv5b.i
Smp Info : 21111042101
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:39 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
7	1,2,4-Trimethylbenzene	18.405	16.983	1.422	247907	20.6092	20.6(M1)
M 9	C9-C10				247907	20.6092	20.6
$ 10	2,5-Dibromotoluene	21.779	21.781	-0.002	406326	58.1125	58.1

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /var/chem/gcv5b.i/2111107.b/v5025.d

Page 1

Date : 08-NOV-2011 01:20

Client ID: 21111042101

Instrument: gcv5b.i

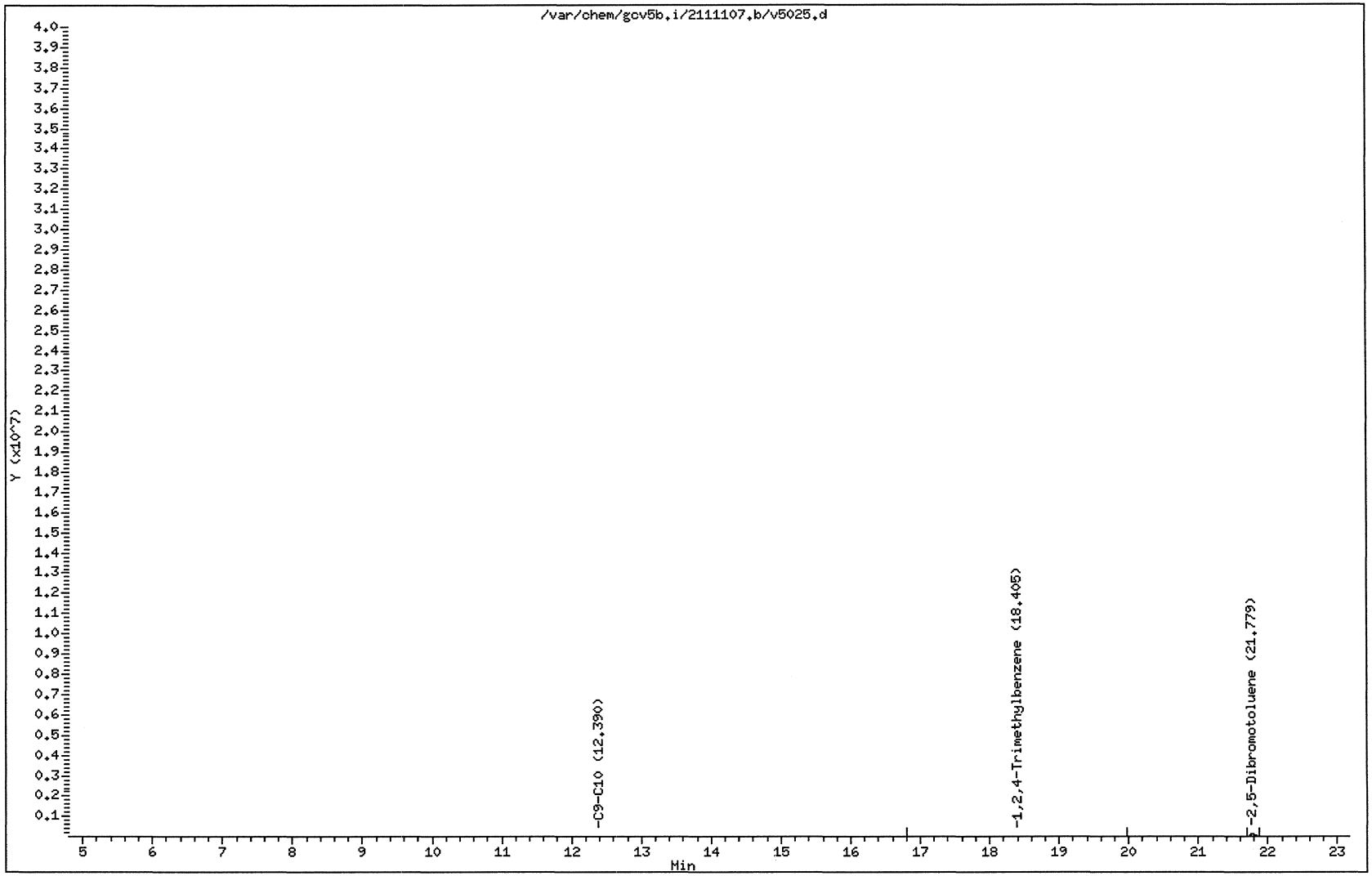
Sample Info: 21111042101

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

Column diameter: 0.53



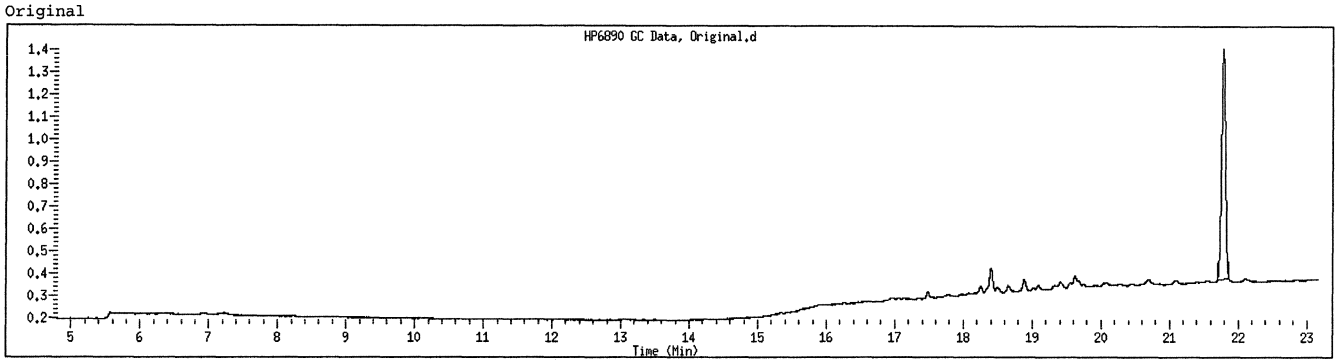
211110421 11

Data file : /var/chem/gcv5b.i/2111107.b/v5025.d Page: 1
Report Date: 11/08/2011 13:41

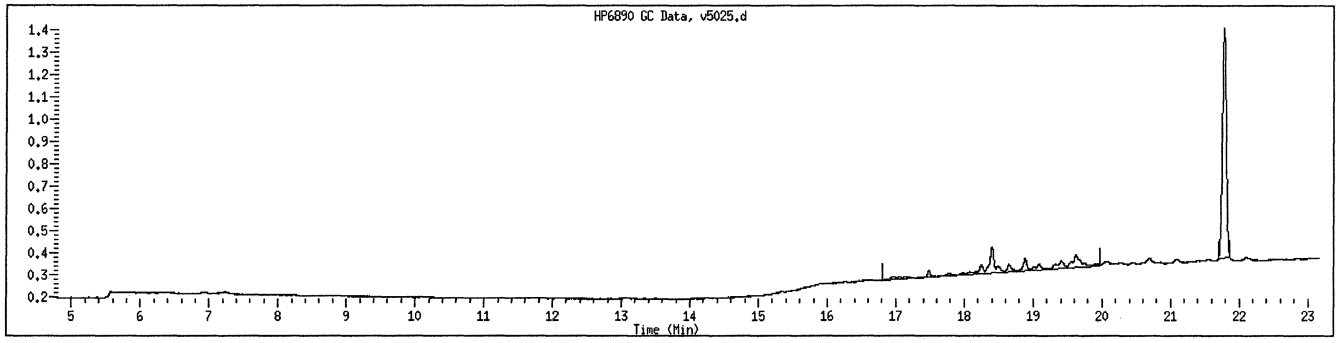
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 21111042101	SampleType	: SAMPLE
Injection Date	: 11/08/2011 01:20	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: 21111042101		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5025.d
Lab Smp Id: 21111042101 Client Smp ID: 21111042101
Inj Date : 08-NOV-2011 01:20
Operator : JAR Inst ID: gcv5a.i
Smp Info : 21111042101
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 08-Nov-2011 10:11 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

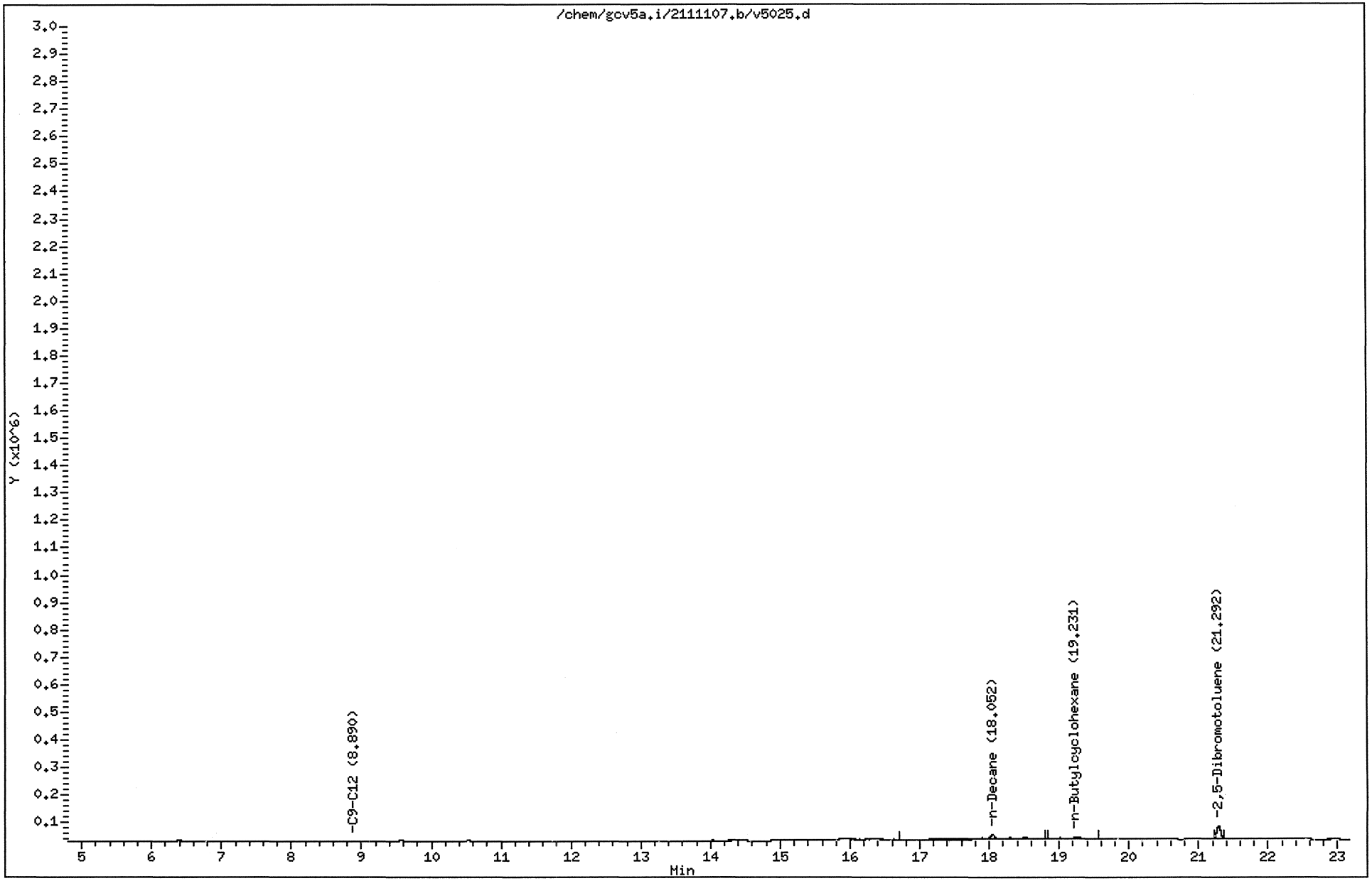
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	13 n-Decane	18.052	15.963	2.089	300927	54.1731	54.2(M1)
	15 n-Butylcyclohexane	19.231	16.746	2.485	93759	15.7355	15.7(M1)
M	5 C9-C12				394686	69.9086	69.9
$	17 2,5-Dibromotoluene	21.292	21.301	-0.009	170966	57.1859	57.2

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5025.d
Date : 08-NOV-2011 01:20
Client ID: 21111042101
Sample Info: 21111042101
Volume Injected (uL): 1.0
Column phase: DB-624-30

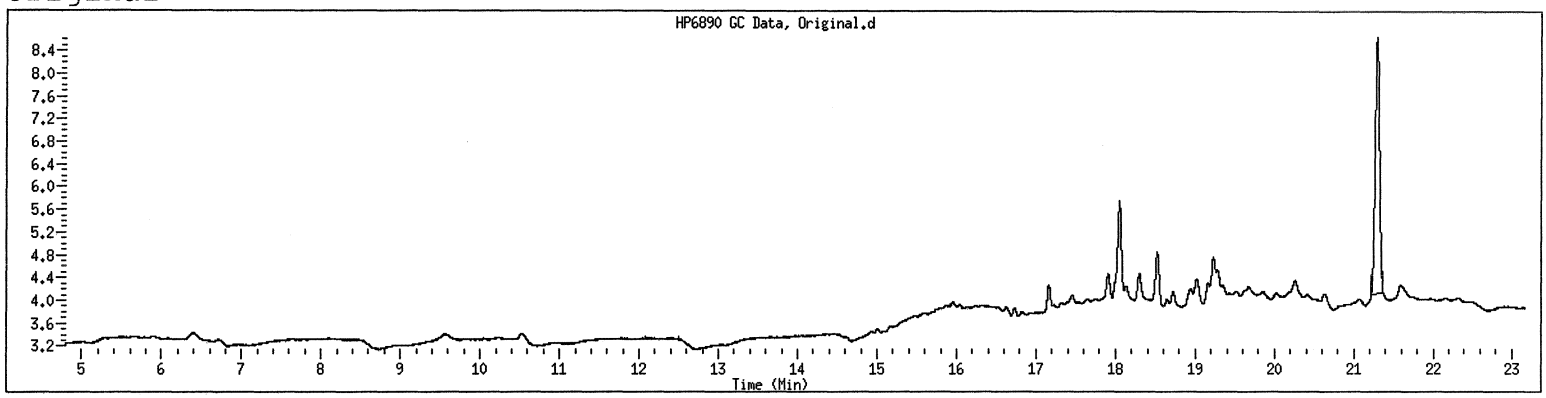
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



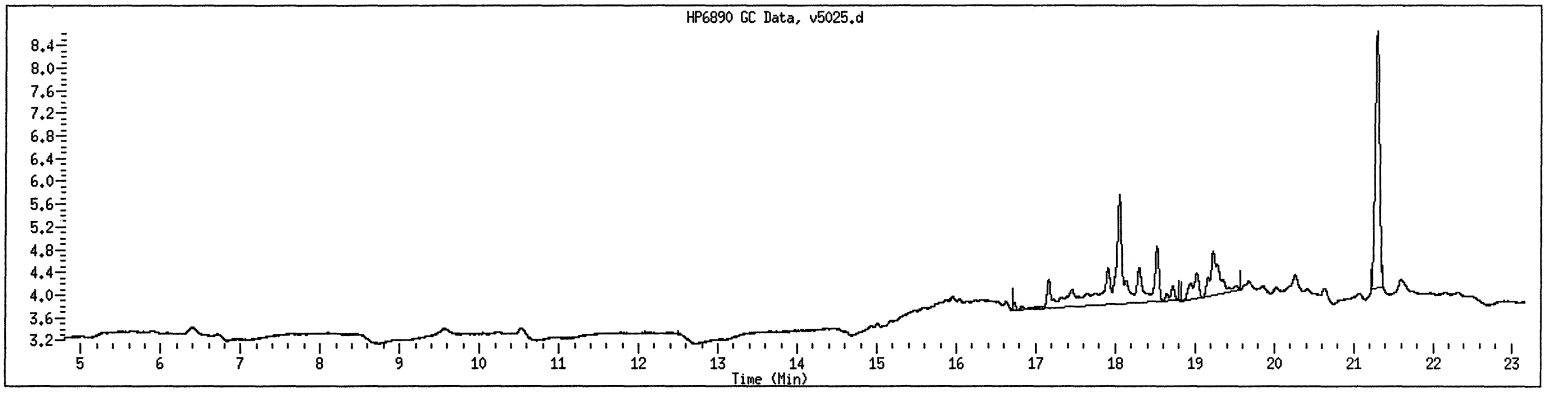
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 21111042101	SampleType	: SAMPLE
Injection Date	: 11/08/2011 01:20	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: 21111042101		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-2011 17:26
End Cal Date : 05-NOV-2011 01:52
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Cal Date : 08-Nov-2011 15:58 jar
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcv5b.i/2111104P.b/v5003.d
Level 2: /var/chem/gcv5b.i/2111104P.b/v5005.d
Level 3: /var/chem/gcv5b.i/2111104P.b/v5007.d
Level 4: /var/chem/gcv5b.i/2111104P.b/v5009.d
Level 5: /var/chem/gcv5b.i/2111104P.b/v5011.d
Level 6: /var/chem/gcv5b.i/2111104P.b/v5001.d

		10.000	20.000	50.000	80.000	100.000	5.000	___	
	Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
	1 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	2 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	3 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	4 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	5 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	6 o-Xylene	14195	13955	13772	12590	12083	14822	13570	7.600
	7 1,2,4-Trimethylbenzene	12356	12603	12435	11425	10922	12432	12029	5.703
	8 Naphthalene	10595	10426	10486	9839	9920	9852	10186	3.453
M	9 C9-C10	12356	12603	12435	11425	10922	12432	12029	5.703
$	10 2,5-Dibromotoluene	7122	6944	7032	6909	6886	7060	6992	1.337

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5001.d
Lab Smp Id: VPH05/6/12/4
Inj Date : 04-NOV-2011 20:57
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH05/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 20:57 Cal File: v5001.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

			RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6	o-Xylene	15.776	15.776	0.000	74110	5.00000	7.8
	7	1,2,4-Trimethylbenzene	16.982	16.982	0.000	62160	5.00000	7.0
M	9	C9-C10				62160	5.00000	7.0
	8	Naphthalene	20.032	20.032	0.000	49258	5.00000	6.2
$	10	2,5-Dibromotoluene	21.783	21.783	0.000	353009	50.0000	68.8

Data File: /chem/gcv5b.i/2111104P.b/v5001.d

Date : 04-NOV-2011 20:57

Client ID:

Instrument: gcv5b.i

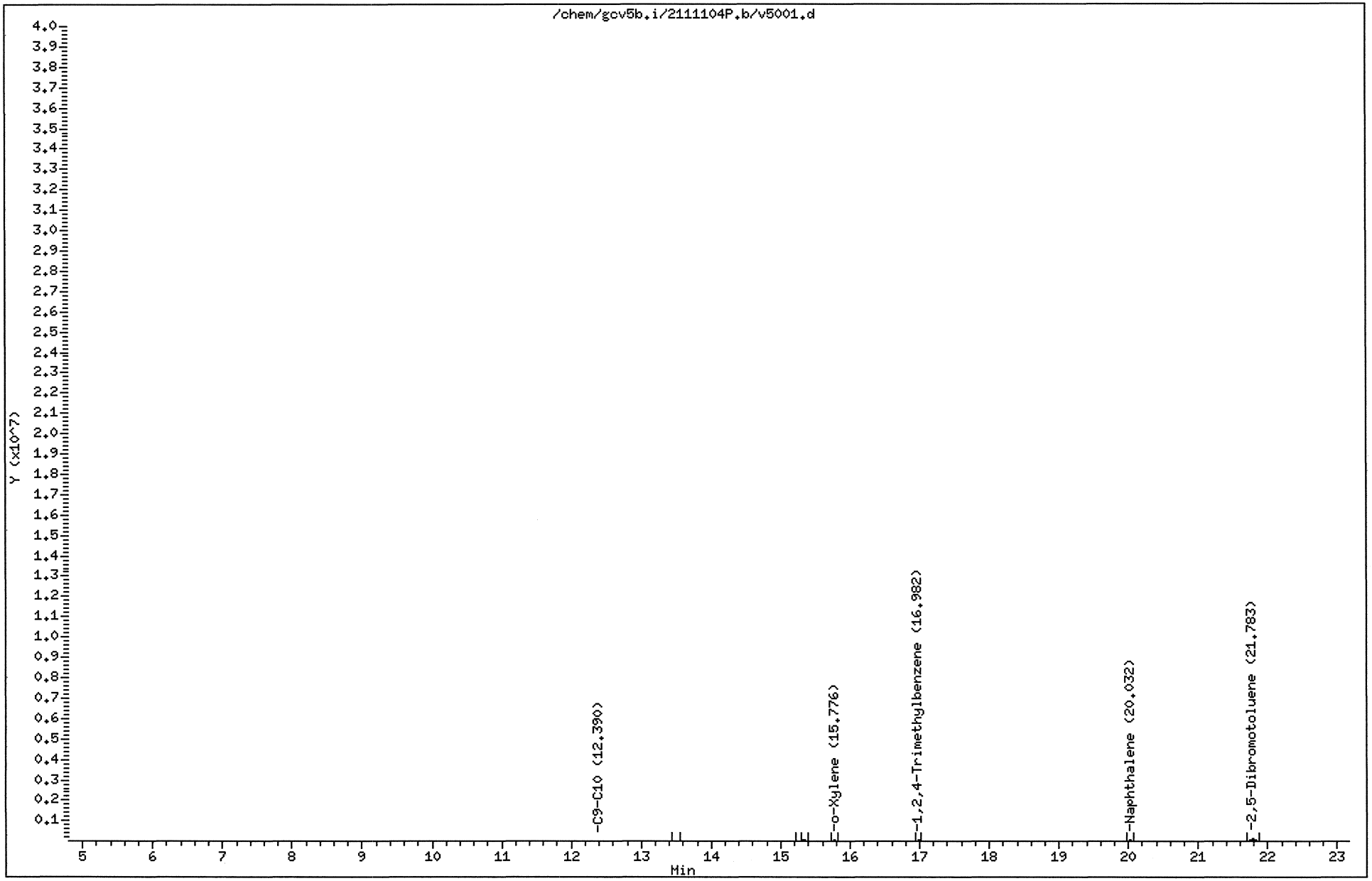
Sample Info: VPH05/6/12/4

Volume Injected (uL): 1.0

Operator: JAR

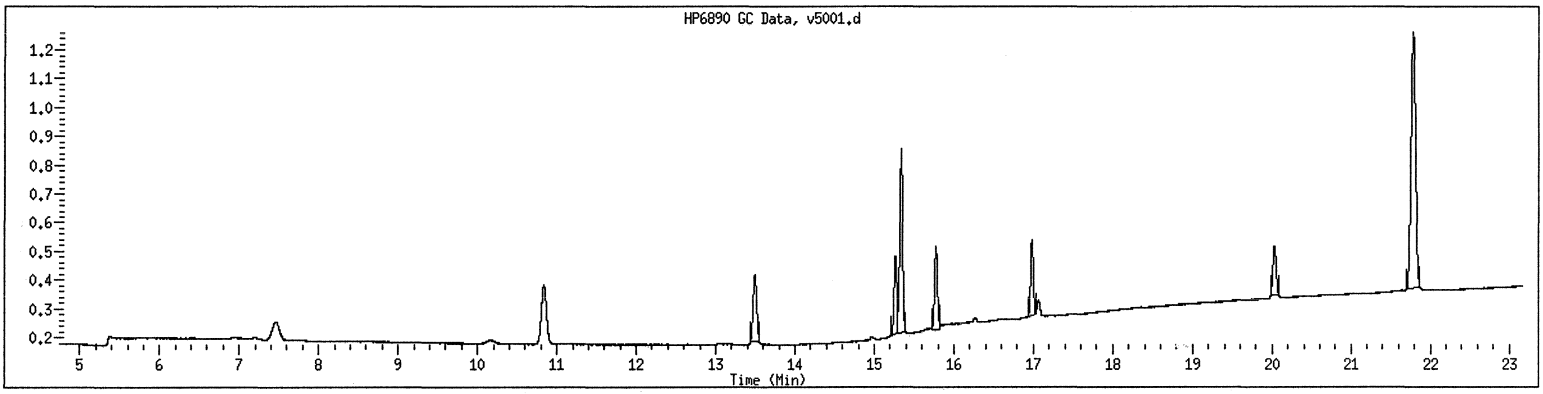
Column phase: DB-624-30

Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH05/6/12/4	SampleType	: CALIB_6
Injection Date	: 11/04/2011 20:57	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH05/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5003.d
Lab Smp Id: VPH10/6/12/4
Inj Date : 04-NOV-2011 21:56
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH10/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 21:56 Cal File: v5003.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

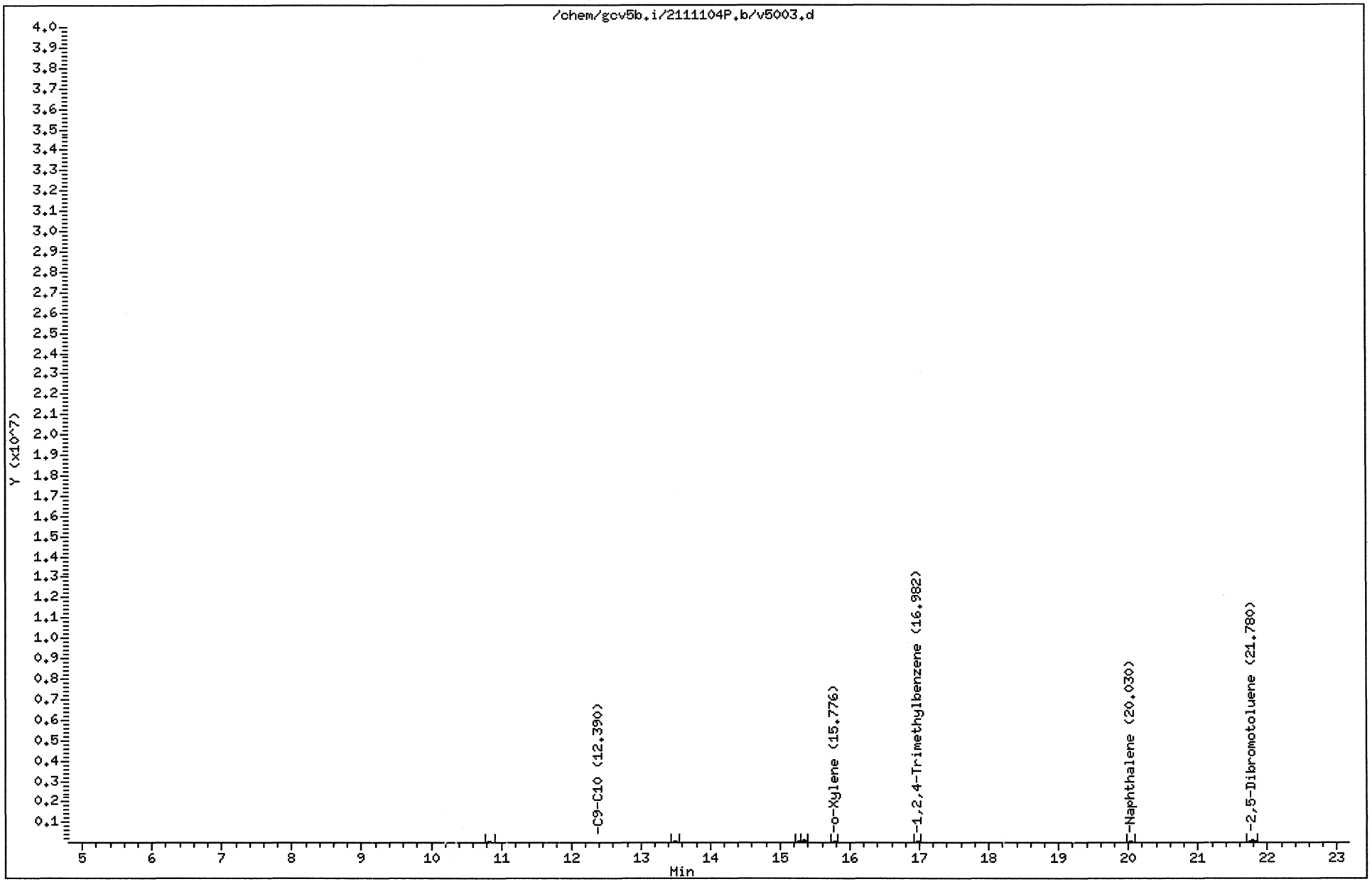
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6 o-Xylene	15.776	15.776	0.000	141953	10.0000	13.9
	7 1,2,4-Trimethylbenzene	16.982	16.982	0.000	123561	10.0000	13.4
M	9 C9-C10				123561	10.0000	13.4
	8 Naphthalene	20.030	20.030	0.000	105949	10.0000	13.0
$	10 2,5-Dibromotoluene	21.780	21.780	0.000	356100	50.0000	64.4

Data File: /chem/gcv5b.i/2111104P.b/v5003.d
Date : 04-NOV-2011 21:56
Client ID:
Sample Info: VPH10/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

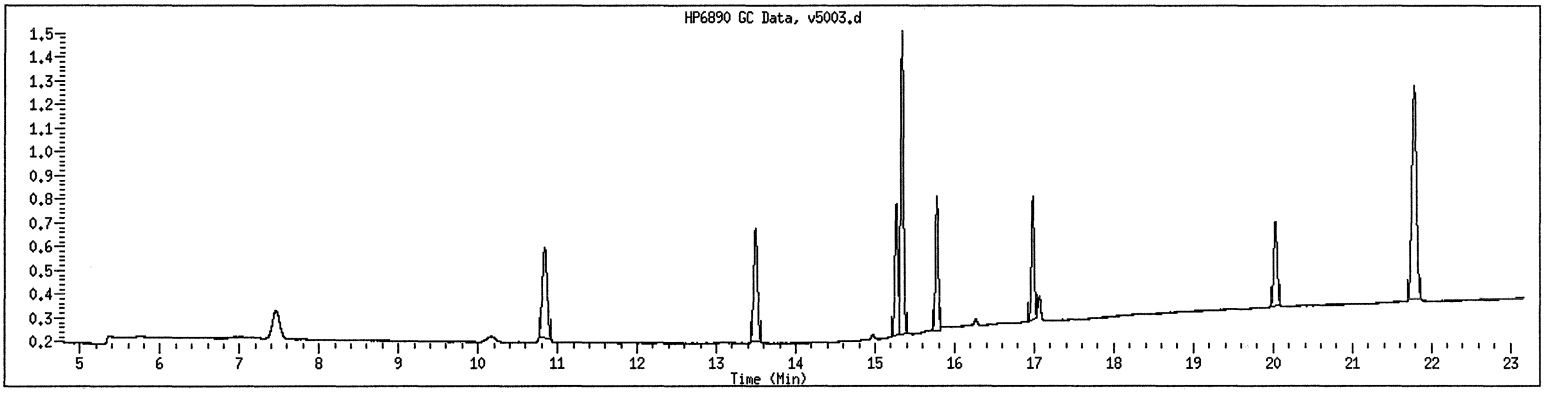
Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



Report Date: 11/07/2011 10:04

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH10/6/12/4	SampleType	: CALIB_1
Injection Date	: 11/04/2011 21:56	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH10/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5005.d
Lab Smp Id: VPH20/6/12/4
Inj Date : 04-NOV-2011 22:55
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH20/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 22:55 Cal File: v5005.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariab

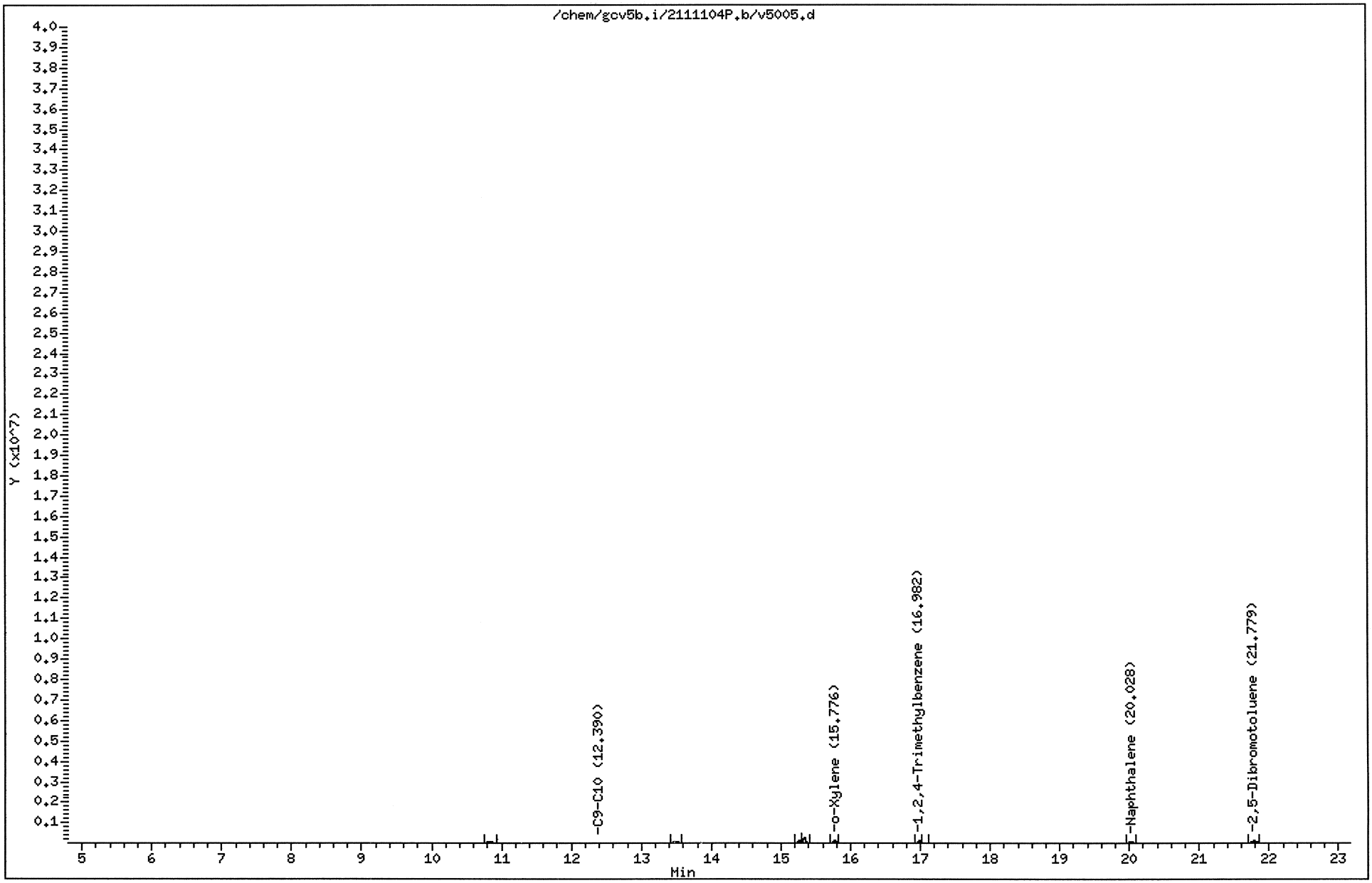
Name	Value	Description
DF	50.00000	Dilution Factor
Uf	5.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)(1000 low, 2
Vi	1.00000	Volume injected (uL)
Ws	5.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6 o-Xylene	15.776	15.776	0.000	279105	20.0000	25.3
	7 1,2,4-Trimethylbenzene	16.982	16.982	0.000	252061	20.0000	25.5
M	9 C9-C10				252061	20.0000	25.5
	8 Naphthalene	20.028	20.028	0.000	208523	20.0000	24.6
$	10 2,5-Dibromotoluene	21.779	21.779	0.000	347190	50.0000	58.7

Data File: /chem/gcv5b.i/2111104P.b/v5005.d
Date : 04-NOV-2011 22:55
Client ID:
Sample Info: VPH20/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

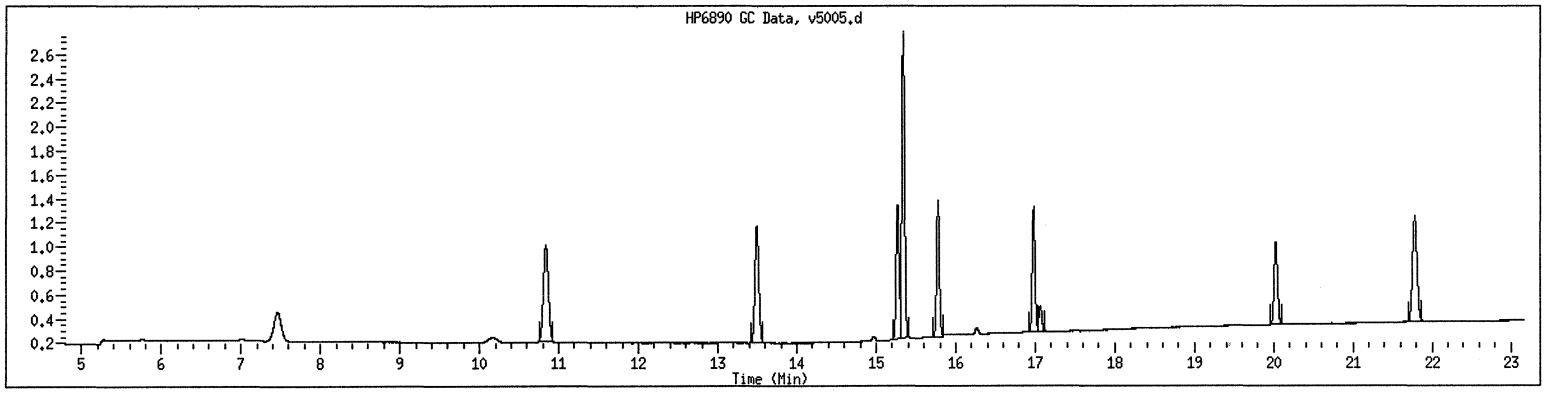
Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



Report Date: 11/07/2011 10:04

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH20/6/12/4	SampleType	: CALIB_2
Injection Date	: 11/04/2011 22:55	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH20/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 50.0		
Matrix	: SOIL		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5007.d
Lab Smp Id: VPH50/6/12/4
Inj Date : 04-NOV-2011 23:54
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH50/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 23:54 Cal File: v5007.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

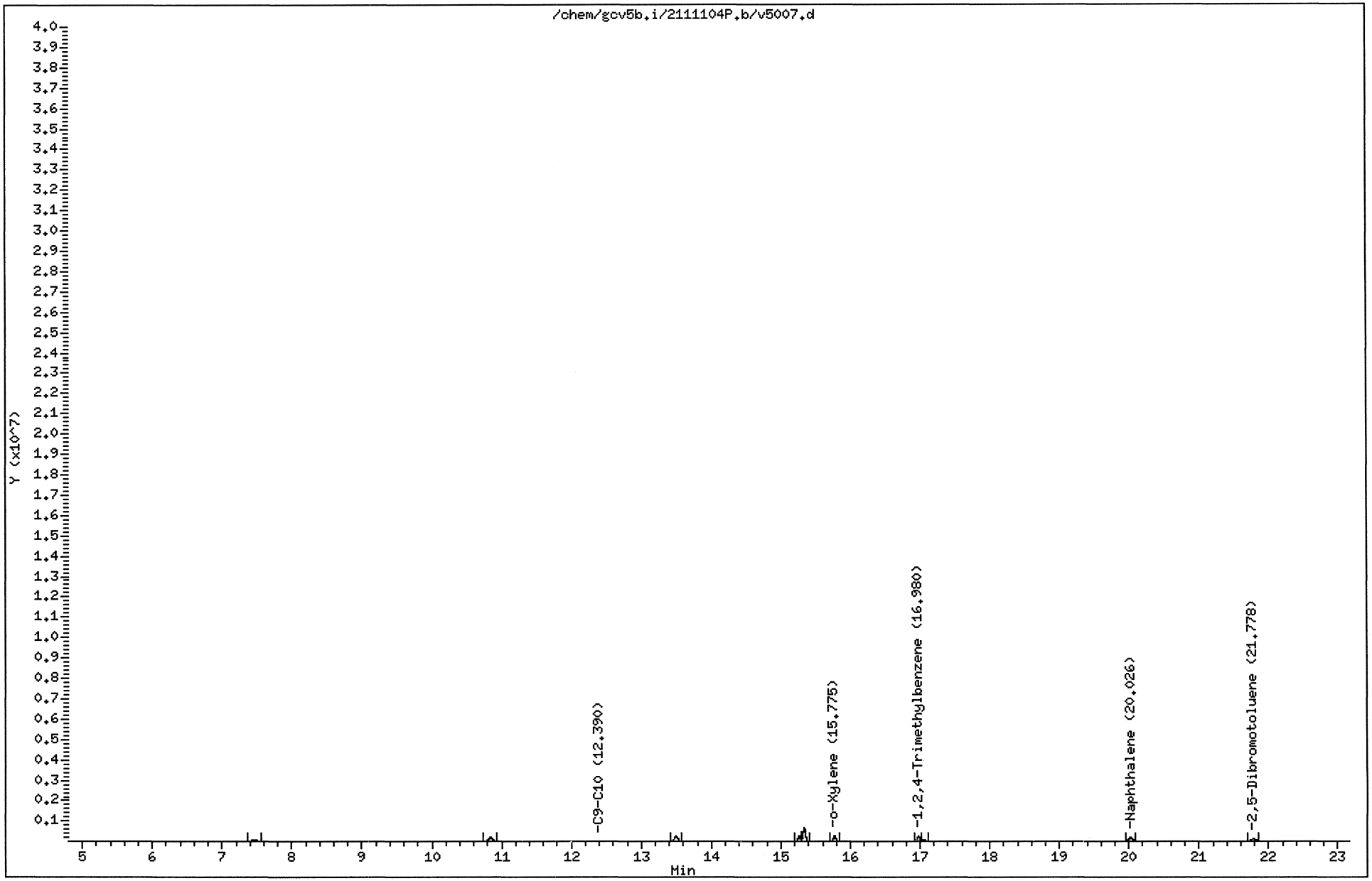
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
	6 o-Xylene	15.775	15.775	0.000	688621	50.0000	56.8
	7 1,2,4-Trimethylbenzene	16.980	16.980	0.000	621749	50.0000	57.5
M	9 C9-C10				621749	50.0000	57.5
	8 Naphthalene	20.026	20.026	0.000	524320	50.0000	57.1
$	10 2,5-Dibromotoluene	21.778	21.778	0.000	351593	50.0000	56.0

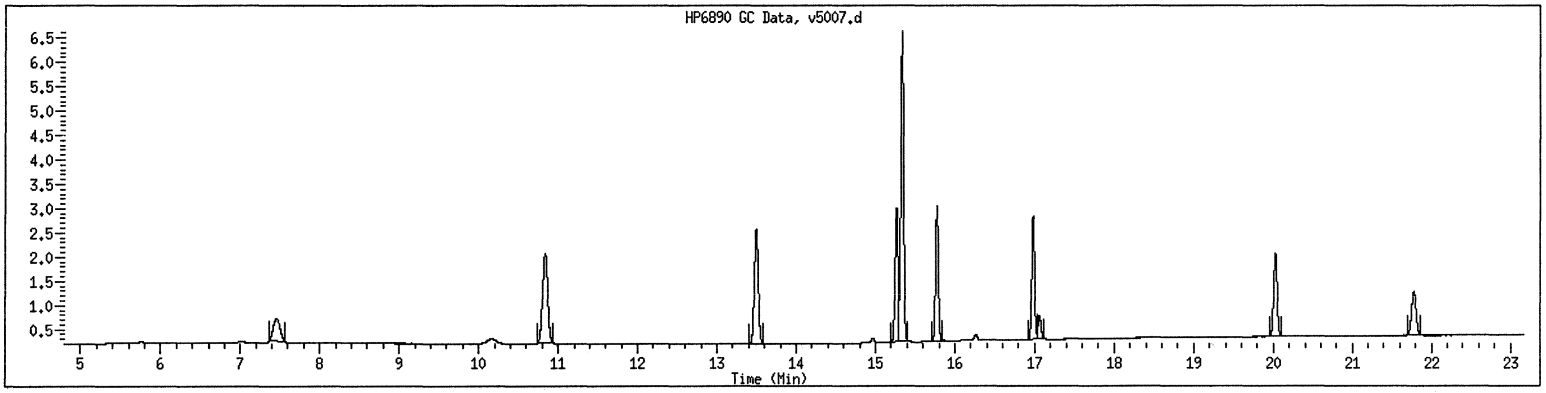
Data File: /chem/gcv5b.i/2111104P.b/v5007.d
Date : 04-NOV-2011 23:54
Client ID:
Sample Info: VPH50/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH50/6/12/4	SampleType	: CALIB_3
Injection Date	: 11/04/2011 23:54	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH50/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5009.d
Lab Smp Id: VPH80/6/12/4
Inj Date : 05-NOV-2011 00:53
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH80/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 00:53 Cal File: v5009.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

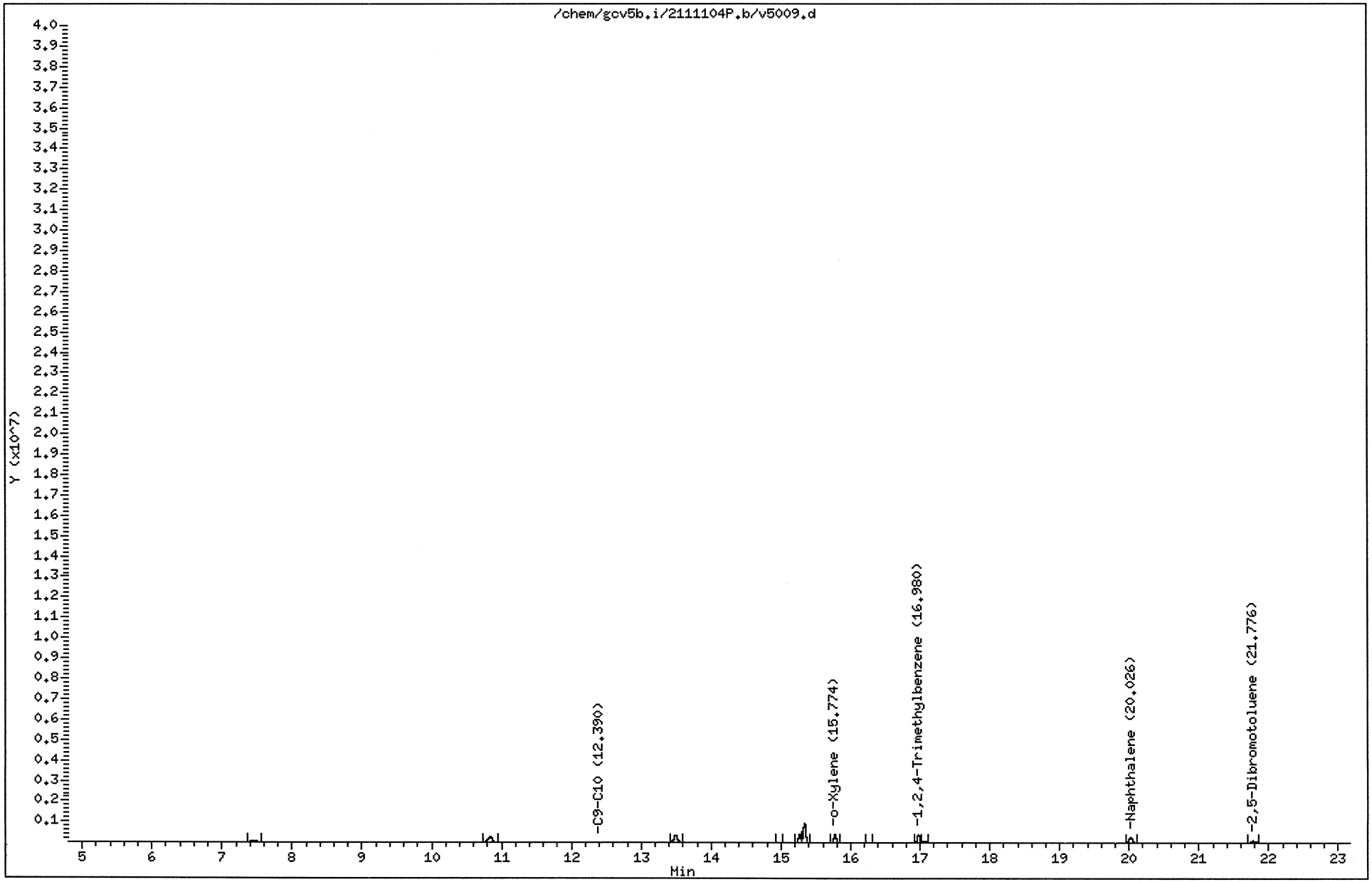
Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6 o-Xylene	15.774	15.774	0.000	1007189	80.0000	78.2
	7 1,2,4-Trimethylbenzene	16.980	16.980	0.000	914021	80.0000	79.8
M	9 C9-C10				914021	80.0000	79.8
	8 Naphthalene	20.026	20.026	0.000	787100	80.0000	81.3
$	10 2,5-Dibromotoluene	21.776	21.776	0.000	345440	50.0000	52.0

Data File: /chem/gcv5b.i/2111104P.b/v5009.d
Date : 05-NOV-2011 00:53
Client ID:
Sample Info: VPH80/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53

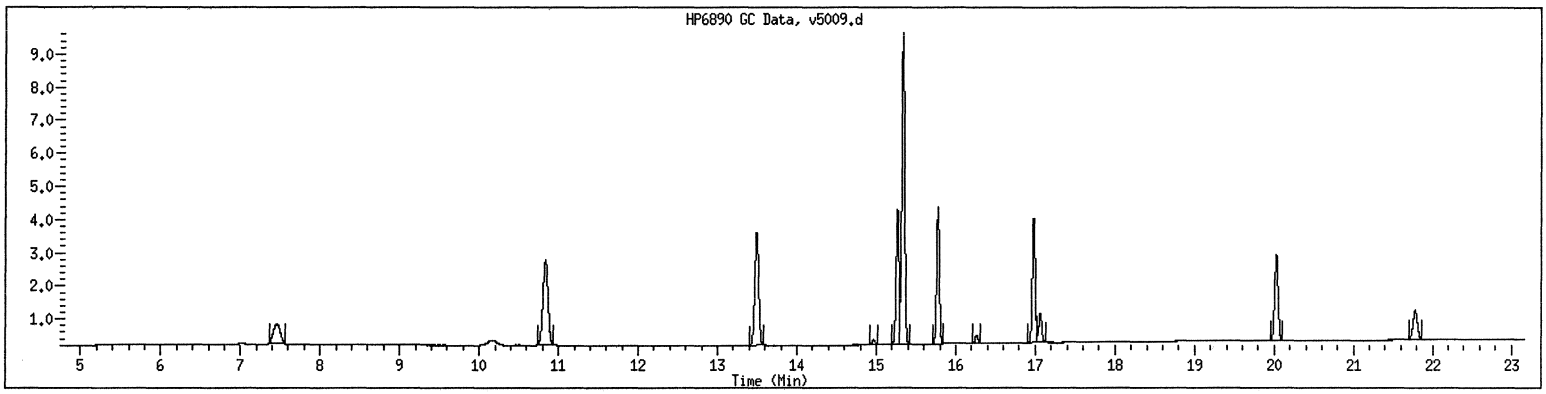
211110421 30



Report Date: 11/07/2011 10:04

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH80/6/12/4	SampleType	: CALIB_4
Injection Date	: 11/05/2011 00:53	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH80/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5011.d
Lab Smp Id: VPH100/6/12/4
Inj Date : 05-NOV-2011 01:52
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH100/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

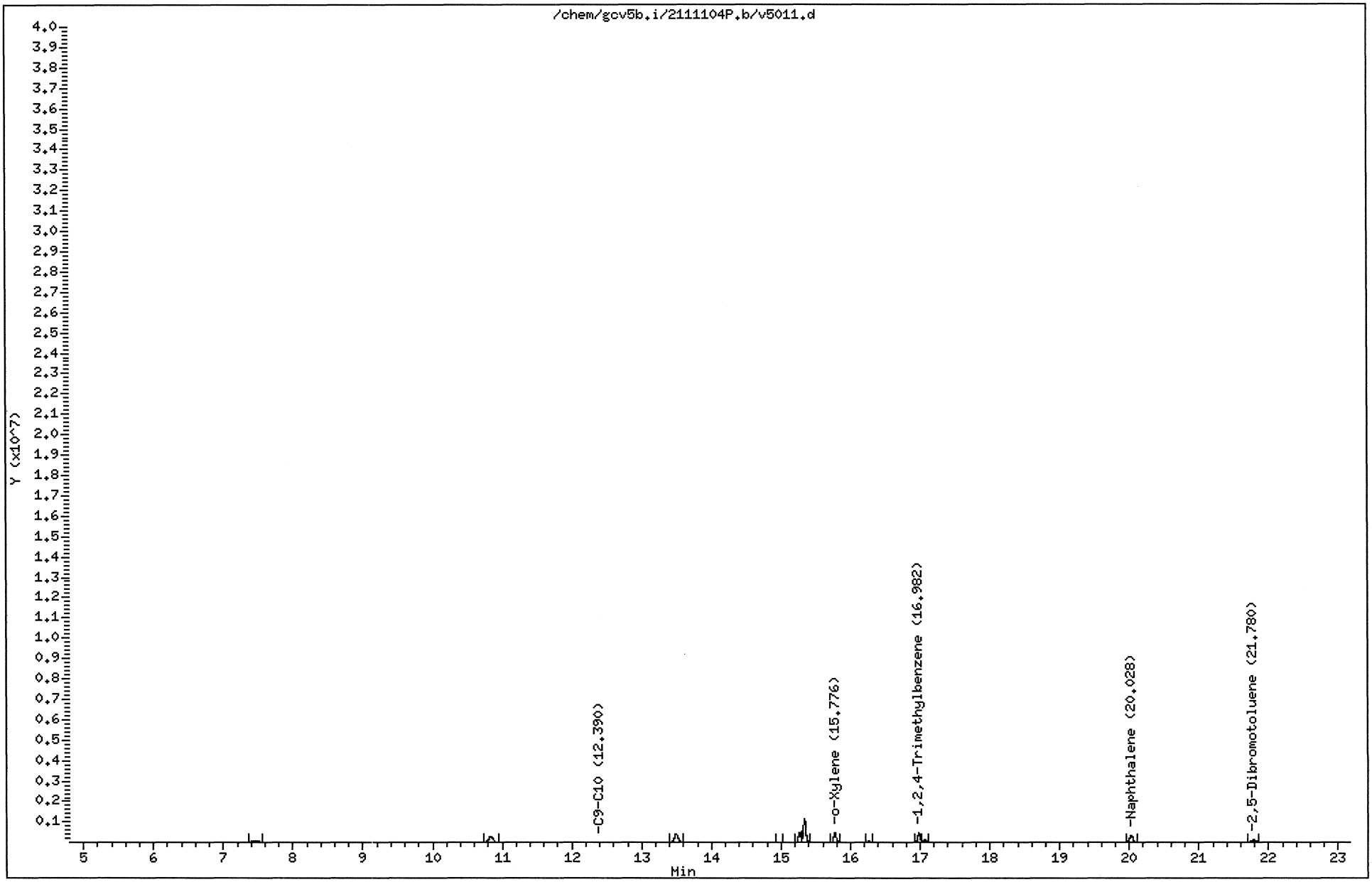
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6	o-Xylene	15.776	15.776	0.000	1208340	100.000	89.0
	7	1,2,4-Trimethylbenzene	16.982	16.982	0.000	1092238	100.000	90.8
M	9	C9-C10				1092238	100.000	90.8
	8	Naphthalene	20.028	20.028	0.000	991962	100.000	97.4
$	10	2,5-Dibromotoluene	21.780	21.780	0.000	344287	50.0000	49.2

Data File: /chem/gcv5b.i/2111104P.b/v5011.d
Date : 05-NOV-2011 01:52
Client ID:
Sample Info: VPH100/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

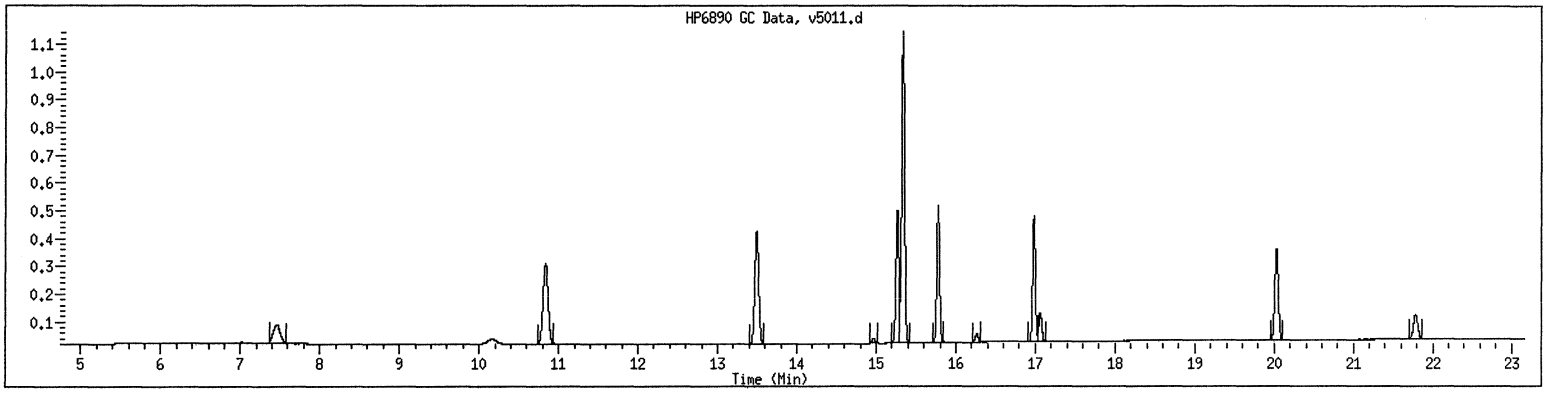
Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



Data file : /var/chem/gcv5b.i/2111104P.b/v5011.d
Report Date: 11/07/2011 10:04

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH100/6/12/4	SampleType	: CALIB_5
Injection Date	: 11/05/2011 01:52	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH100/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2111104P
Sample Matrix: SOLID Fraction: VOA
Lab Smp Id: ICV6/12/5
Level: MED Operator: JAR
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: aromatic1.spk Quant Type: ESTD
Sublist File: aromatic.sub
Method File: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Misc Info:

	SPIKE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
	6 o-Xylene	50.0	51.2	102.42	70-130
	7 1,2,4-Trimethylbenzene	50.0	52.8	105.56	70-130
M	9 C9-C10	50.0	52.8	105.56	70-130

	SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$	10 2,5-Dibromotoluene	50.0	51.3	102.55	60-140

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111104P.b/v5013.d
Lab Smp Id: ICV6/12/5
Inj Date : 05-NOV-2011 02:51
Operator : JAR Inst ID: gcv5b.i
Smp Info : ICV6/12/5
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Meth Date : 07-Nov-2011 10:04 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariab

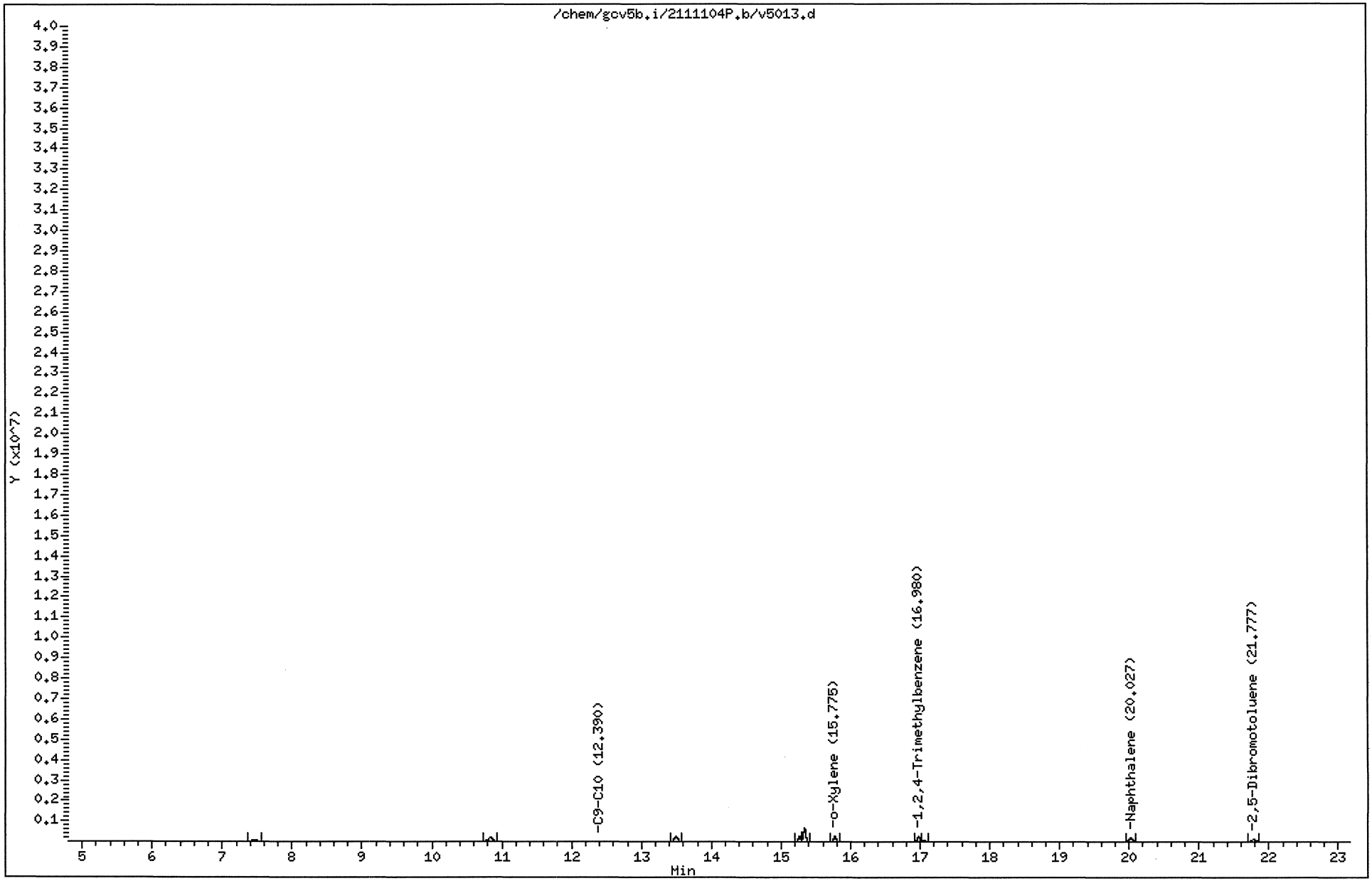
Name	Value	Description
DF	50.00000	Dilution Factor
Uf	5.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)(1000 low, 2
Vi	1.00000	Volume injected (uL)
Ws	5.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
	6 o-Xylene	15.775	15.776	-0.001	694928	51.2117	2560
	7 1,2,4-Trimethylbenzene	16.980	16.982	-0.002	634872	52.7787	2640
M	9 C9-C10				634872	52.7787	2640
	8 Naphthalene	20.027	20.028	-0.001	569432	55.9022	2800
$	10 2,5-Dibromotoluene	21.777	21.780	-0.003	358526	51.2761	2560

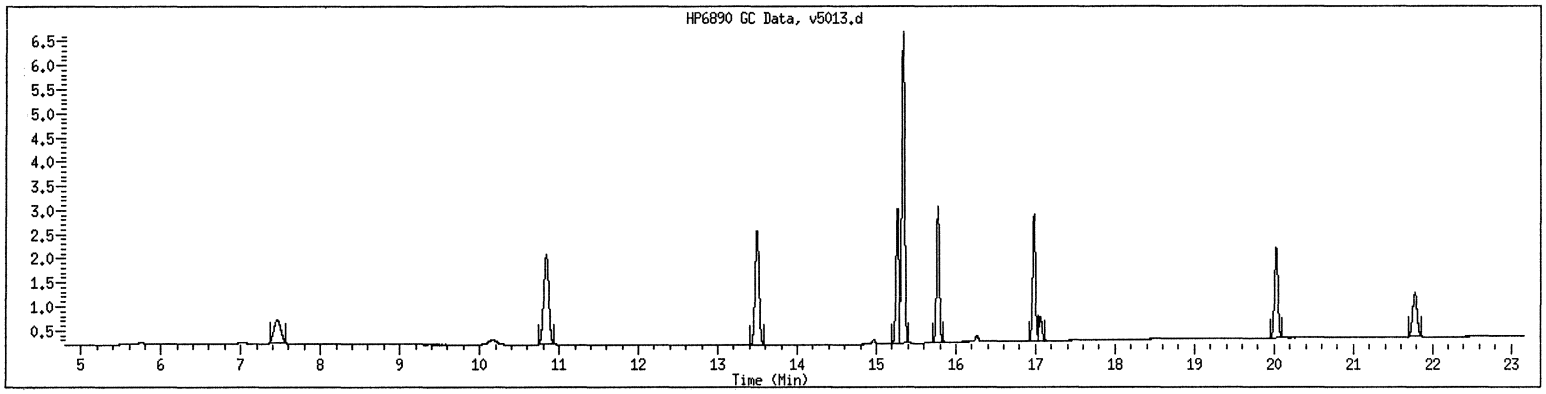
Data File: /chem/gcv5b.i/2111104P.b/v5013.d
Date : 05-NOV-2011 02:51
Client ID:
Sample Info: ICV6/12/5
Volume Injected (uL): 1.0
Column phase: DB-624-30

Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: ICV6/12/5	SampleType	: LCS
Injection Date	: 11/05/2011 02:51	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: ICV6/12/5		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m		
Dilution	: 50.0		
Matrix	: SOIL		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5b.i Injection Date: 07-NOV-2011 11:22
Lab File ID: v5001.d Init. Cal. Date(s): 05-OCT-2011 05-NOV-2011
Analysis Type: SOIL Init. Cal. Times: 17:26 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
6 o-Xylene	13570	14032	0.010	-3.40445	25.00000	Averaged
7 1,2,4-Trimethylbenzene	12029	12938	0.010	-7.55906	25.00000	Averaged
M 9 C9-C10	12029	12938	0.010	-7.55906	25.00000	Averaged
8 Naphthalene	10186	10852	0.010	-6.53786	25.00000	Averaged
$ 10 2,5-Dibromotoluene	6992	7243	0.010	-3.59117	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.73032
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5001.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 11:22
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:26 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariab

Name	Value	Description
DF	50.00000	Dilution Factor
Uf	5.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)(1000 low, 2
Vi	1.00000	Volume injected (uL)
Ws	5.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6 o-Xylene	15.775	15.775	0.000	701584	50.0000	51.7
	7 1,2,4-Trimethylbenzene	16.981	16.981	0.000	646912	50.0000	53.8
M	9 C9-C10				646912	50.0000	53.8
	8 Naphthalene	20.027	20.027	0.000	542610	50.0000	53.3
$	10 2,5-Dibromotoluene	21.778	21.778	0.000	362158	50.0000	51.8

Data File: /chem/gcv5b.i/2111107.b/v5001.d

Page 1

Date : 07-NOV-2011 11:22

Client ID:

Instrument: gcv5b.i

Sample Info: VPH6/12/4

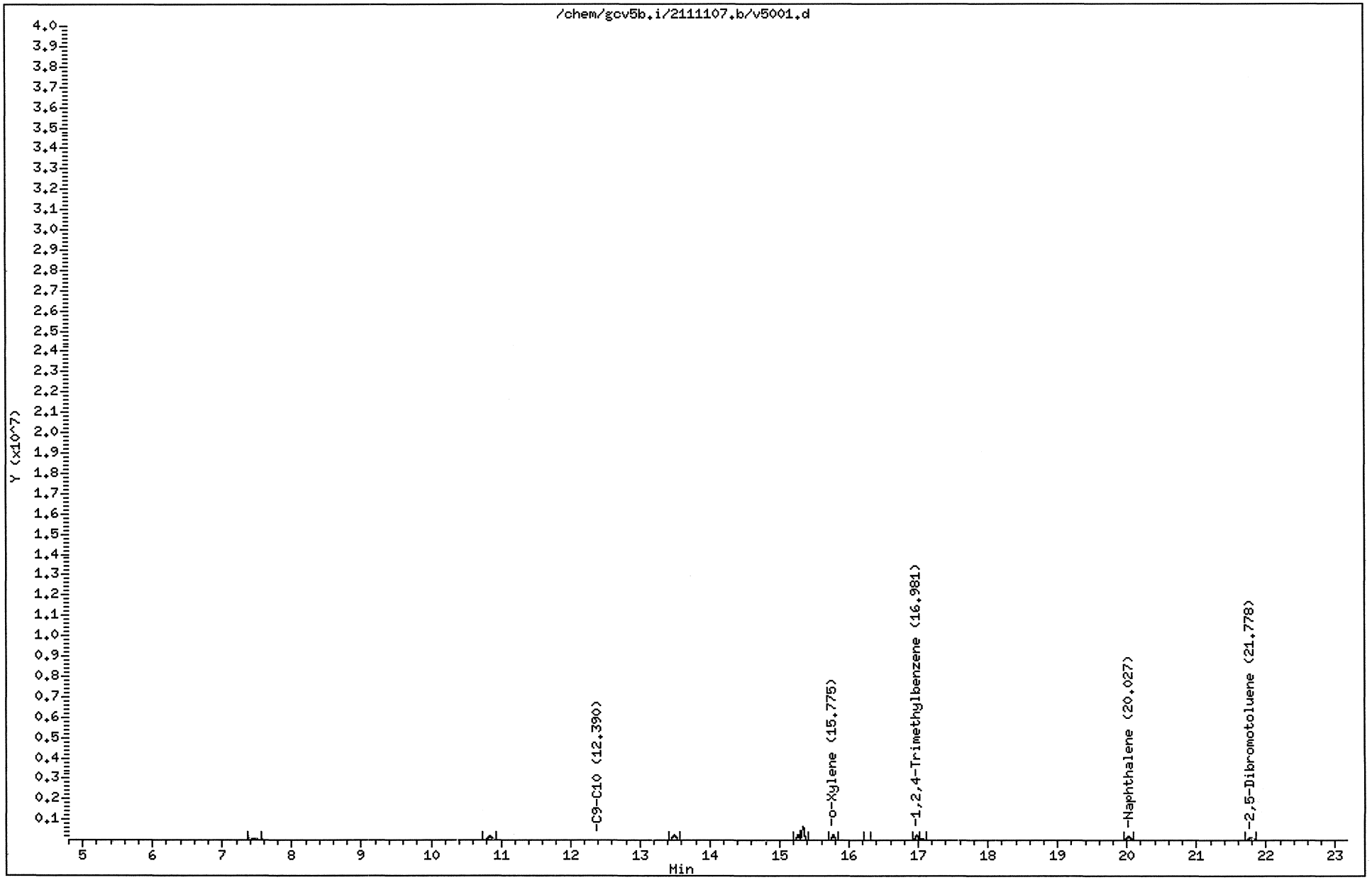
Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

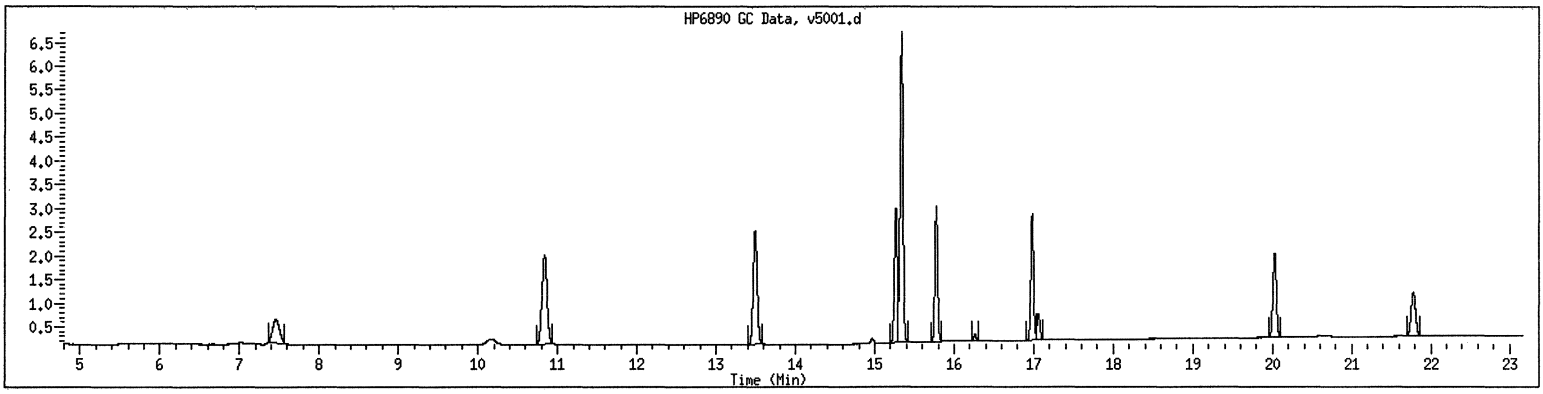
Column diameter: 0.53

211110121 41



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 11:22	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m		
Dilution	: 50.0		
Matrix	: SOIL		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5b.i Injection Date: 07-NOV-2011 16:16
Lab File ID: v5011.d Init. Cal. Date(s): 05-OCT-2011 05-NOV-2011
Analysis Type: SOIL Init. Cal. Times: 17:26 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
6 o-Xylene	13570	13412	0.010	1.16027	25.00000	Averaged
7 1,2,4-Trimethylbenzene	12029	13121	0.010	-9.07507	25.00000	Averaged
M 9 C9-C10	12029	13121	0.010	-9.07507	25.00000	Averaged
8 Naphthalene	10186	10461	0.010	-2.69817	25.00000	Averaged
$ 10 2,5-Dibromotoluene	6992	7139	0.010	-2.10262	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 4.82224
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5011.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 16:16
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:32 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariab

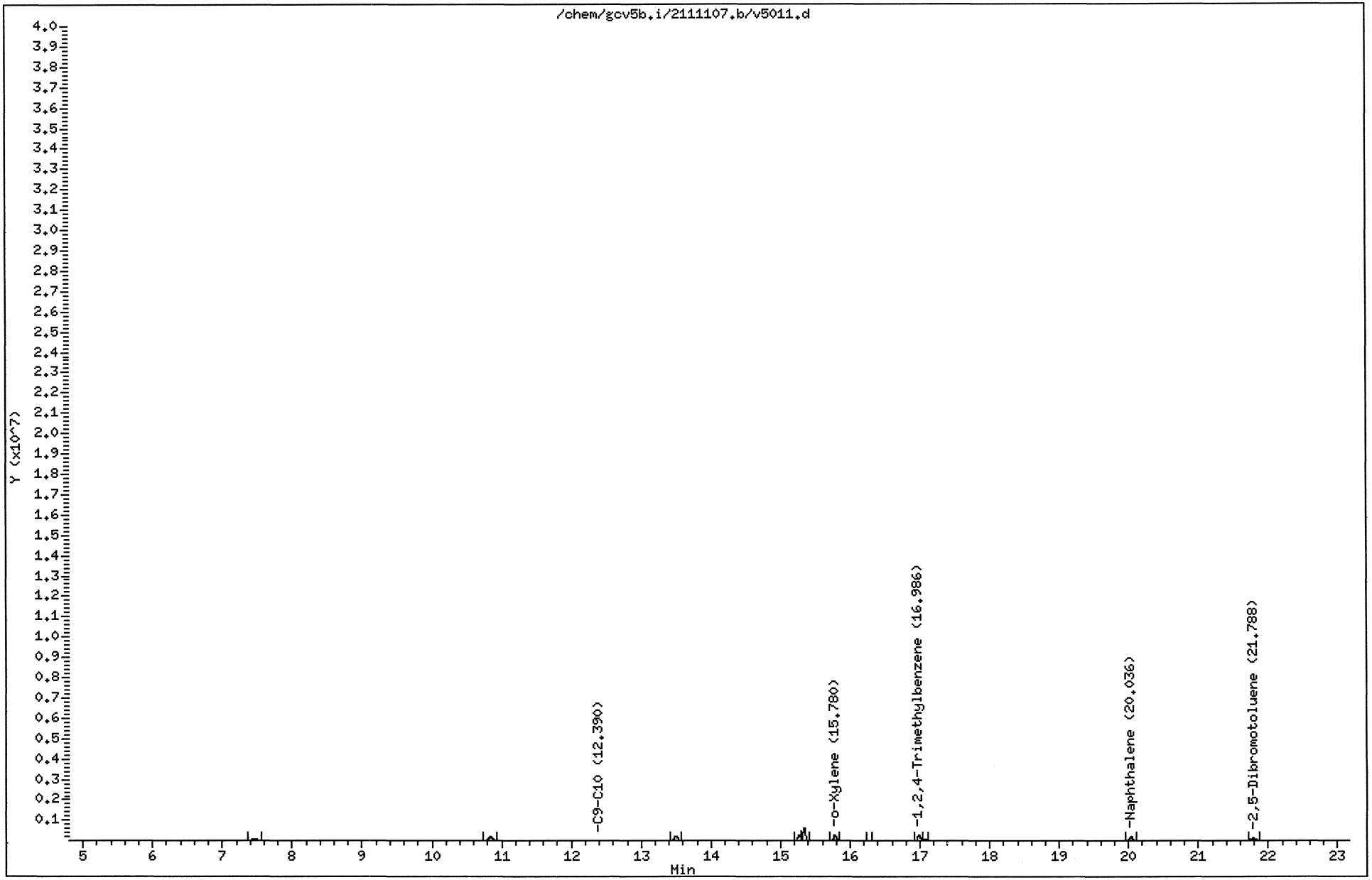
Name	Value	Description
DF	50.00000	Dilution Factor
Uf	5.00000	Correction factor
Vt	1.00000	Volume of final extract (uL)(1000 low, 2
Vi	1.00000	Volume injected (uL)
Ws	5.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6 o-Xylene	15.780	15.780	0.000	670613	50.0000	49.4
	7 1,2,4-Trimethylbenzene	16.986	16.986	0.000	656030	50.0000	54.5
M	9 C9-C10				656030	50.0000	54.5
	8 Naphthalene	20.036	20.036	0.000	523054	50.0000	51.3
$	10 2,5-Dibromotoluene	21.788	21.788	0.000	356954	50.0000	51.0

Data File: /chem/gcv5b.i/2111107.b/v5011.d
Date : 07-NOV-2011 16:16
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

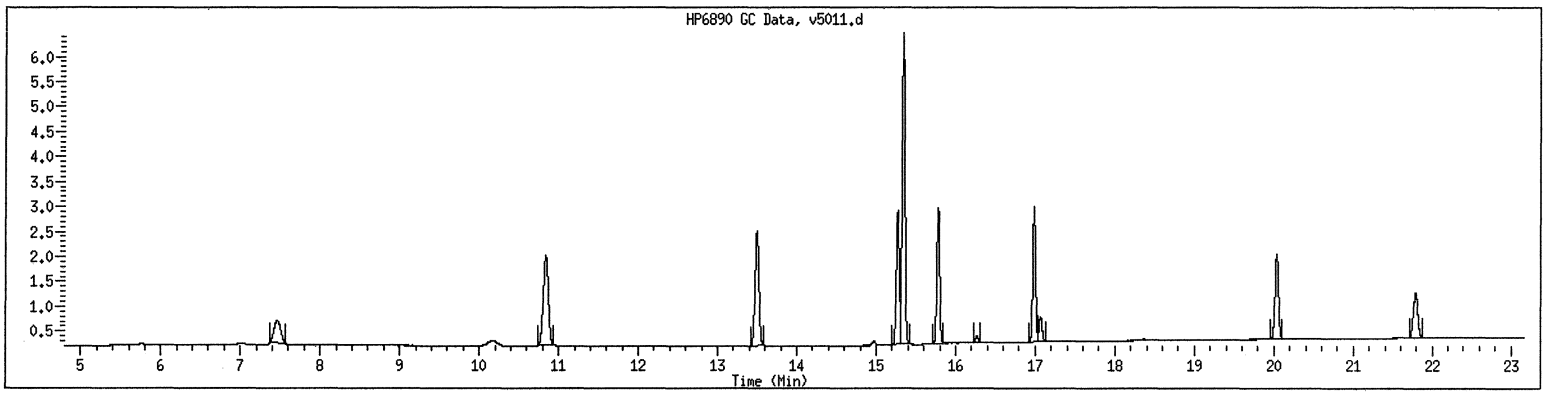
Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



Report Date: 11/08/2011 13:32

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 16:16	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m		
Dilution	: 50.0		
Matrix	: SOIL		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5b.i Injection Date: 07-NOV-2011 23:22
Lab File ID: v5021.d Init. Cal. Date(s): 05-OCT-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 17:26 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
6 o-Xylene	13570	13889	0.010	-2.35270	25.00000	Averaged
7 1,2,4-Trimethylbenzene	12029	12645	0.010	-5.11962	25.00000	Averaged
M 9 C9-C10	12029	12645	0.010	-5.11962	25.00000	Averaged
8 Naphthalene	10186	11058	0.010	-8.56157	25.00000	Averaged
$ 10 2,5-Dibromotoluene	6992	7984	0.010	-14.18718	30.00000	Averaged

Average %D / Drift Results.	
Calculated Average %D/Drift =	7.06814
Maximun Average %D/Drift =	25.00000
* Passed Average %D/Drift Test.	

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5021.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 23:22
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:32 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

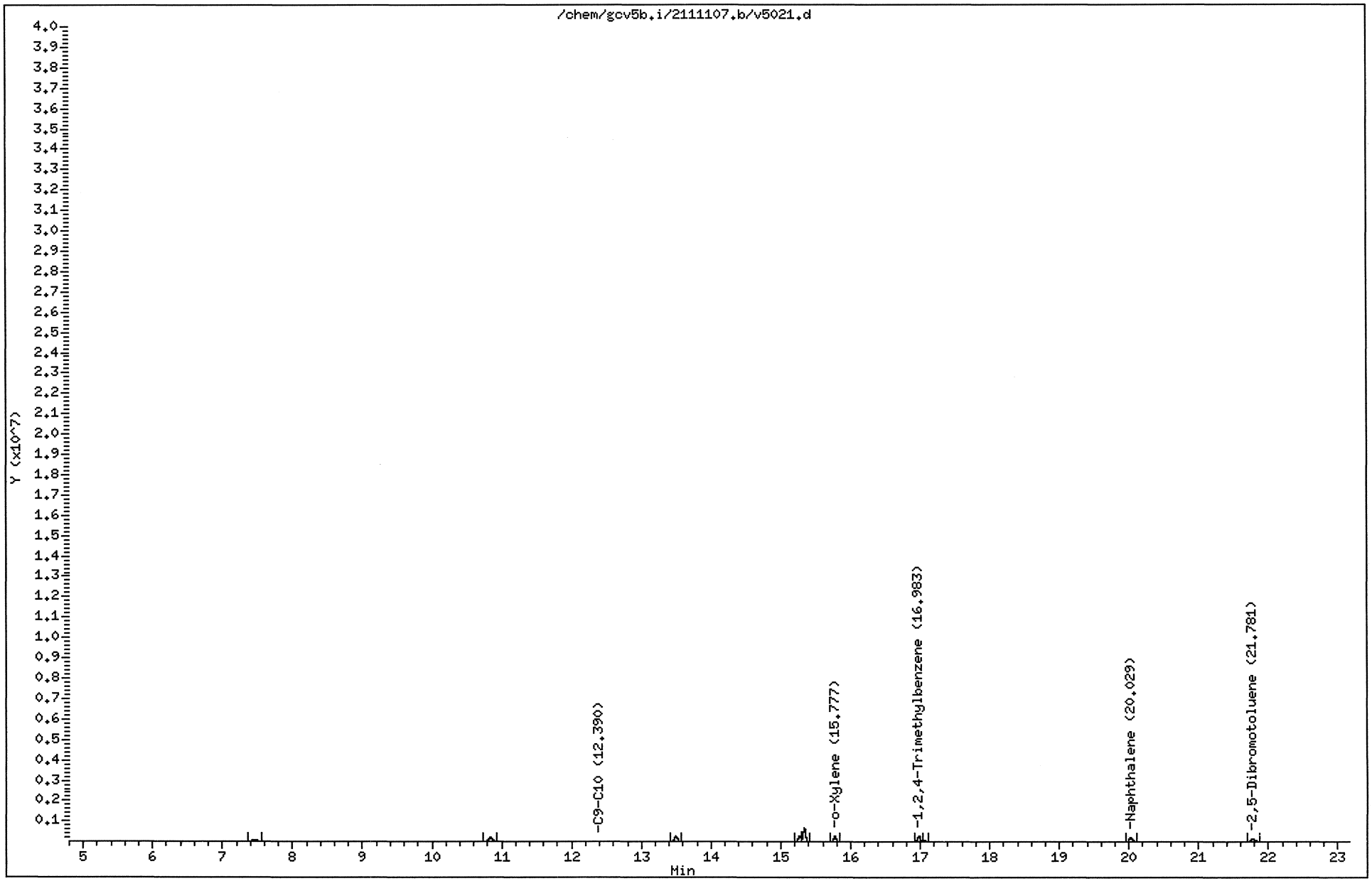
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	6	o-Xylene	15.777	15.777	0.000	694448	50.0000	51.2
	7	1,2,4-Trimethylbenzene	16.983	16.983	0.000	632240	50.0000	52.6
M	9	C9-C10				632240	50.0000	52.6
	8	Naphthalene	20.029	20.029	0.000	552917	50.0000	54.3
$	10	2,5-Dibromotoluene	21.781	21.781	0.000	399202	50.0000	57.1

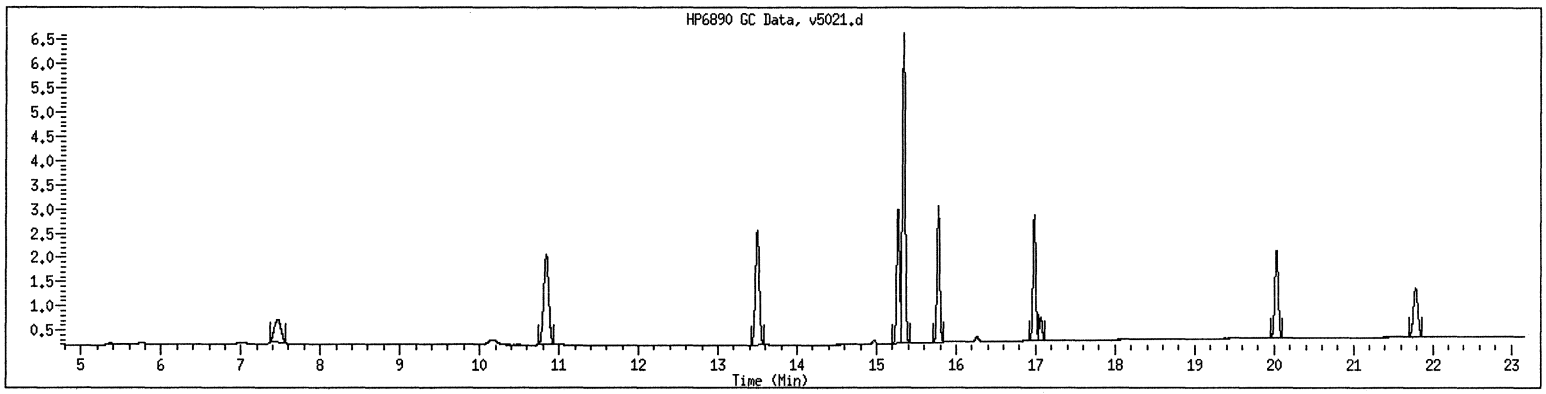
Data File: /chem/gcv5b.i/2111107.b/v5021.d
Date : 07-NOV-2011 23:22
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 23:22	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5b.i Injection Date: 08-NOV-2011 01:49
Lab File ID: v5026.d Init. Cal. Date(s): 05-OCT-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 17:26 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
6 o-Xylene	13570	15457	0.010	-13.90535	25.00000	Averaged
7 1,2,4-Trimethylbenzene	12029	14145	0.010	-17.58869	25.00000	Averaged
M 9 C9-C10	12029	14145	0.010	-17.58869	25.00000	Averaged
8 Naphthalene	10186	11684	0.010	-14.70319	25.00000	Averaged
$ 10 2,5-Dibromotoluene	6992	8054	0.010	-15.19175	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 15.79553
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5026.d
Lab Smp Id: VPH6/12/4
Inj Date : 08-NOV-2011 01:49
Operator : JAR Inst ID: gcv5b.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:32 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
	6 o-Xylene	15.777	15.777	0.000	772831	50.0000	57.0
	7 1,2,4-Trimethylbenzene	16.983	16.983	0.000	707235	50.0000	58.8
M	9 C9-C10				707235	50.0000	58.8
	8 Naphthalene	20.028	20.028	0.000	584197	50.0000	57.4
$	10 2,5-Dibromotoluene	21.781	21.781	0.000	402714	50.0000	57.6

Data File: /chem/gcv5b.i/2111107.b/v5026.d

Date : 08-NOV-2011 01:49

Client ID:

Sample Info: VPH6/12/4

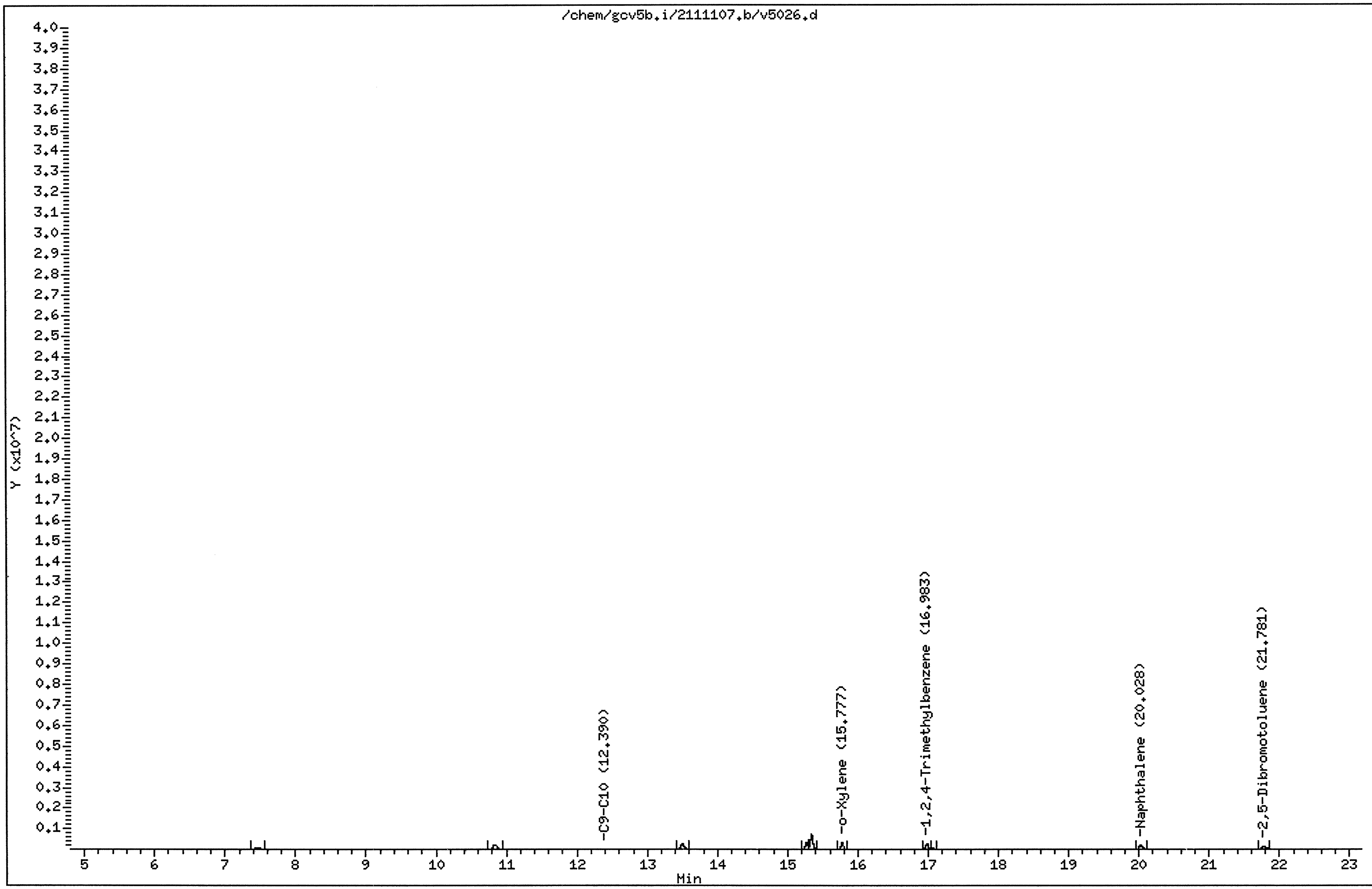
Volume Injected (uL): 1.0

Column phase: DB-624-30

Instrument: gcv5b.i

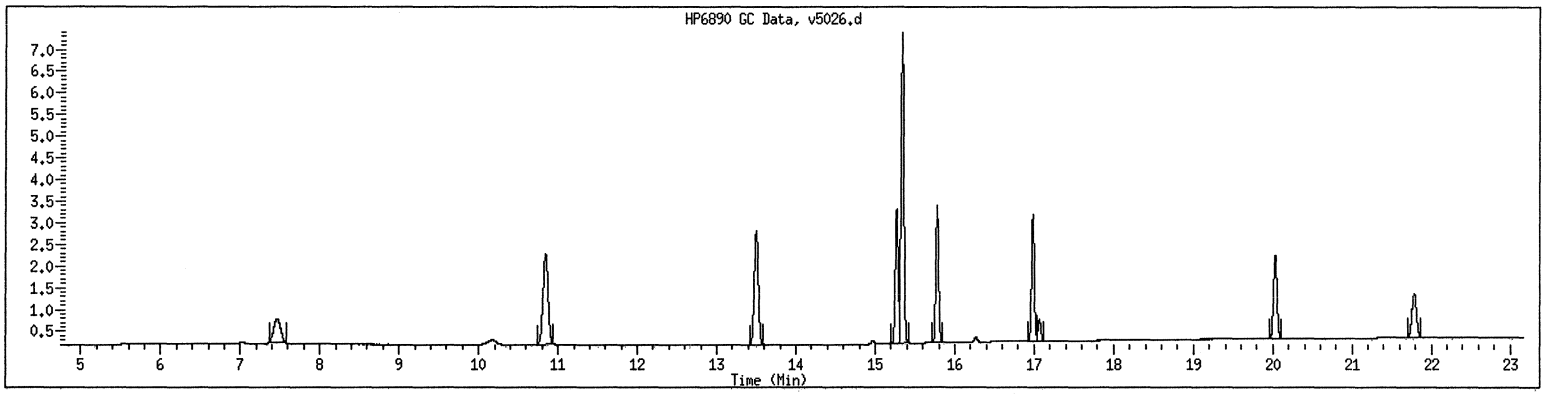
Operator: JAR

Column diameter: 0.53



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/08/2011 01:49	Instrument	: gcv5b.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 04-NOV-2011 20:57
End Cal Date : 05-NOV-2011 01:52
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Cal Date : 18-Nov-2011 14:24 bmr
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcv5a.i/2111104p.b/v5003.d
Level 2: /var/chem/gcv5a.i/2111104p.b/v5005.d
Level 3: /var/chem/gcv5a.i/2111104p.b/v5007.d
Level 4: /var/chem/gcv5a.i/2111104p.b/v5009.d
Level 5: /var/chem/gcv5a.i/2111104p.b/v5011.d
Level 6: /var/chem/gcv5a.i/2111104p.b/v5001.d

		10.000	20.000	50.000	80.000	100.000	5.000	___	
	Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	% RSD
	1 n-Pentane	10671	10211	8851	7571	6259	10437	9000	19.814
M	2 C5-C8	10727	11023	9557	8858	7420	11346	9822	15.343
	3 2-Methyl Pentane	10850	12110	10178	9578	7894	12016	10438	15.288
	4 MTBE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	5 C9-C12	5516	5527	5414	6329	6009	3831	5437	15.859
	6 Isooctane	10661	10749	9640	9426	8105	11583	10027	12.254
	7 Benzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	8 Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	9 n-Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	10 Ethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	11 m,p-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	12 o-Xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	13 n-Decane	5176	5085	5107	6409	6110	5443	5555	10.232
	14 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
	15 n-Butylcyclohexane	5856	5968	5721	6249	5908	6049	5958	3.021
	16 Naphthalene	9352	9011	8945	8433	8525	+++++	8853	4.247
$	17 2,5-Dibromotoluene	3190	3009	3100	2787	2825	3028	2990	5.238

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5001.d
Lab Smp Id: VPH05/6/12/4
Inj Date : 04-NOV-2011 20:57
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH05/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 20:57 Cal File: v5001.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

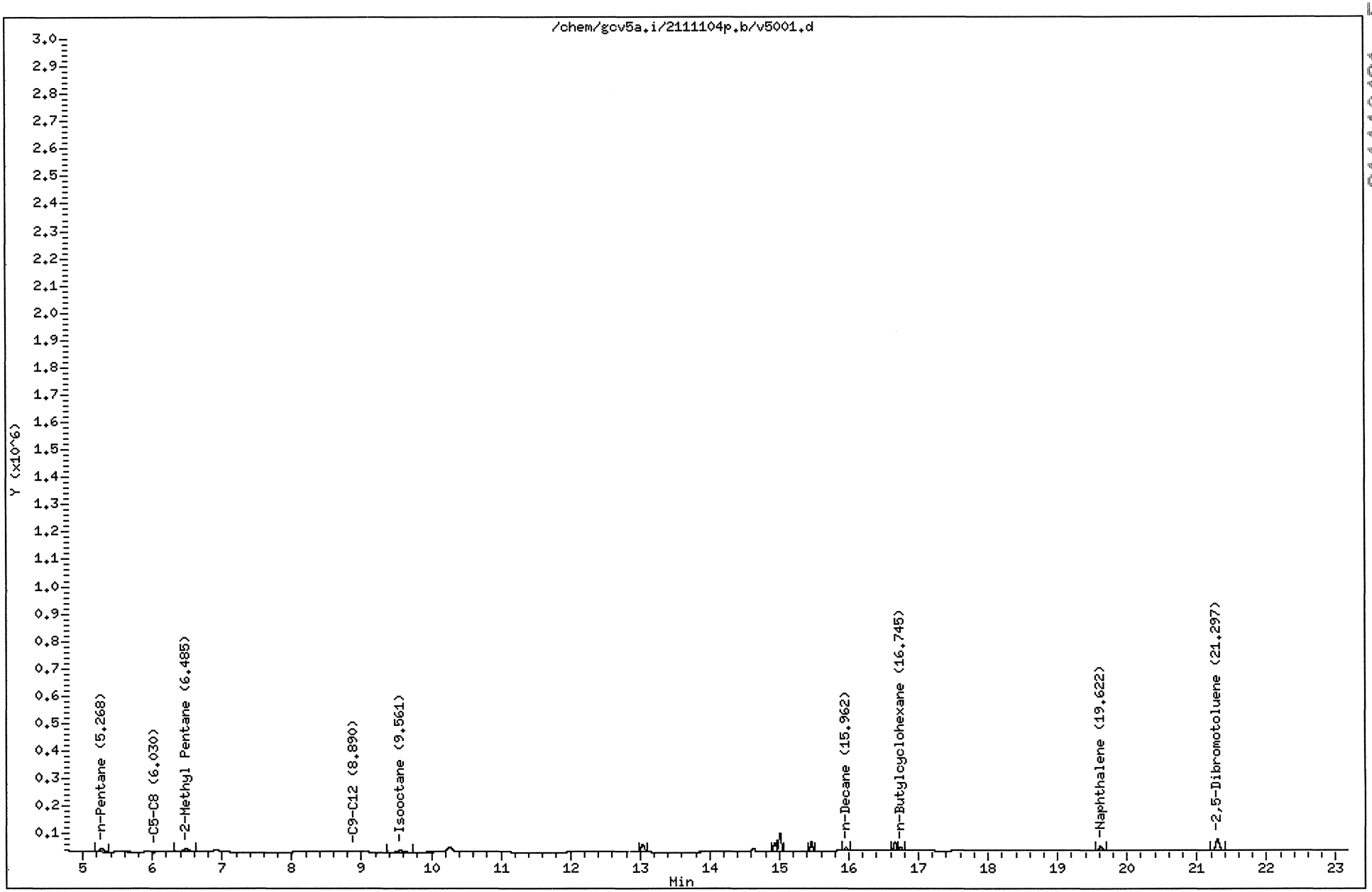
						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				170184	15.0000	16.3
	1 n-Pentane	5.268	5.268	0.000	52185	5.00000	5.4(M1)
	3 2-Methyl Pentane	6.485	6.485	0.000	60082	5.00000	5.4(M1)
	6 Isooctane	9.561	9.561	0.000	57917	5.00000	5.4(M1)
	13 n-Decane	15.962	15.962	0.000	27213	5.00000	5.2(M1)
	15 n-Butylcyclohexane	16.745	16.745	0.000	30246	5.00000	5.1(M1)
	16 Naphthalene	19.622	19.622	0.000	47160	5.00000	5.3(M1)
M	5 C9-C12				57459	15.0000	10.3
$	17 2,5-Dibromotoluene	21.297	21.297	0.000	151381	50.0000	49.4(M1)

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5001.d
Date : 04-NOV-2011 20:57
Client ID:
Sample Info: VPH05/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

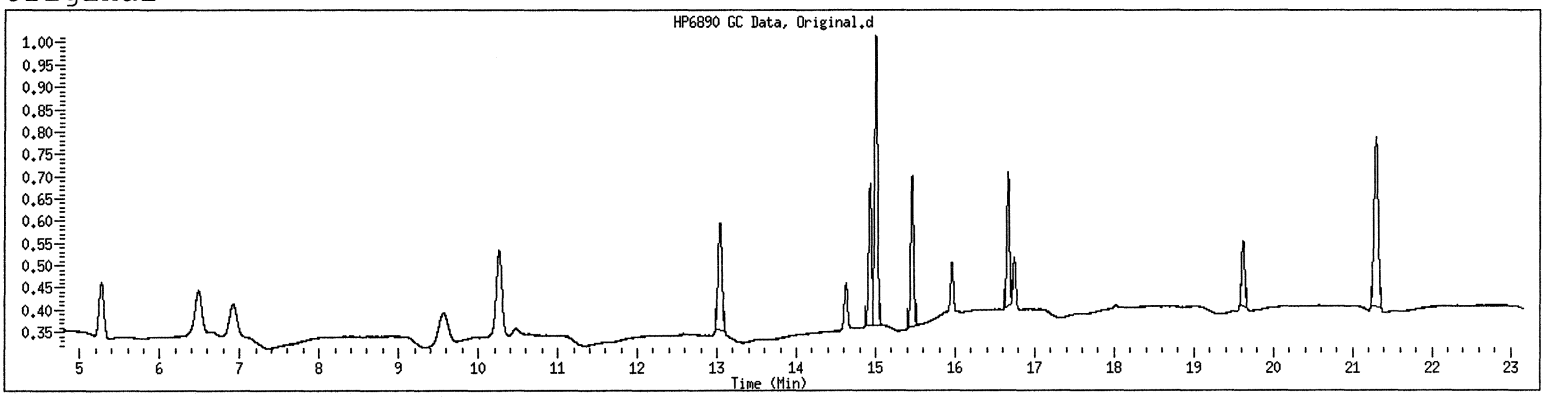
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



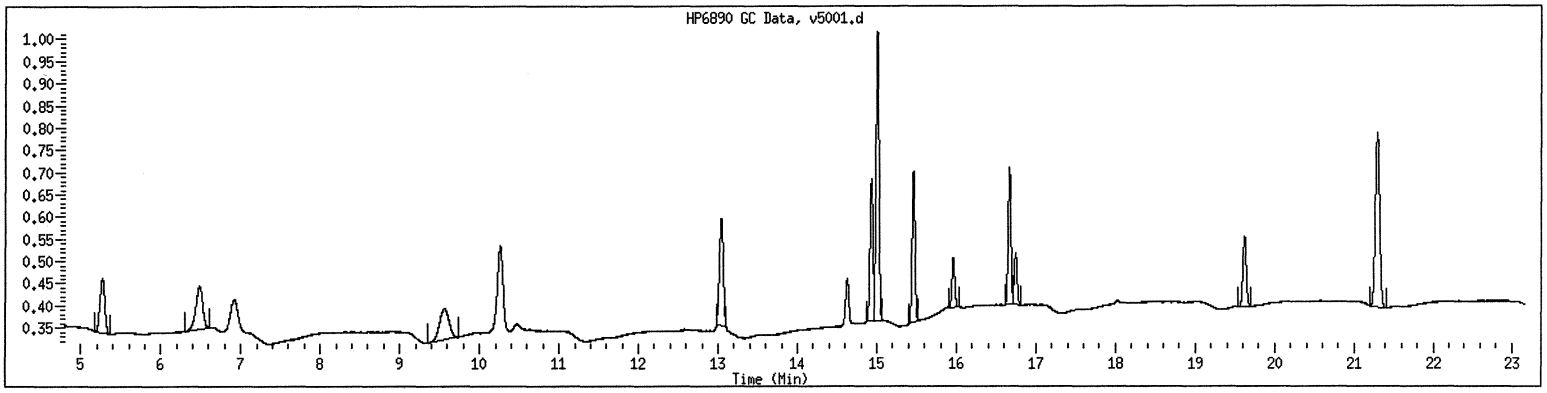
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH05/6/12/4	SampleType	: CALIB_6
Injection Date	: 11/04/2011 20:57	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH05/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5003.d
Lab Smp Id: VPH10/6/12/4
Inj Date : 04-NOV-2011 21:56
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH10/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 21:56 Cal File: v5003.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

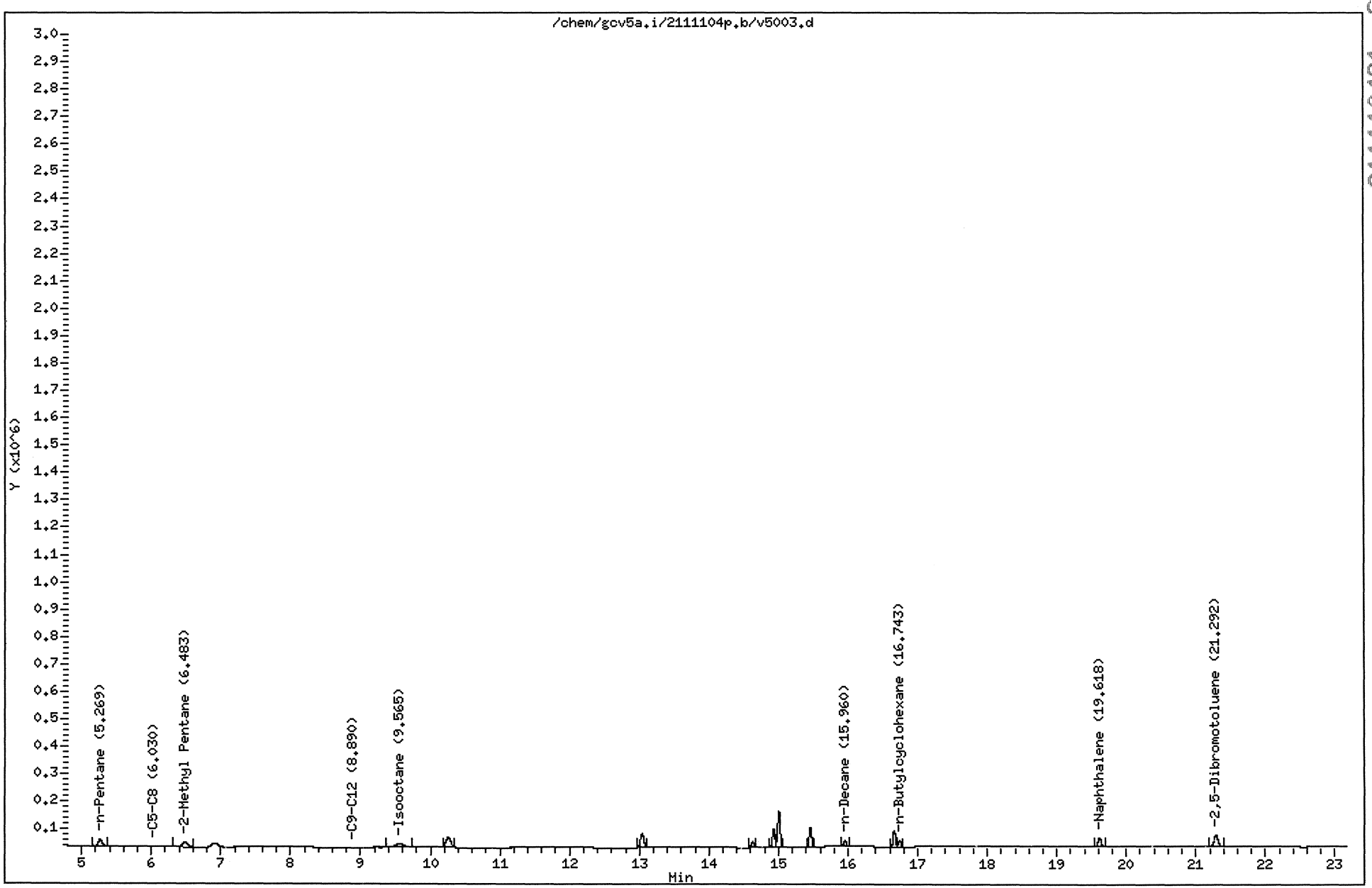
			RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M	2	C5-C8				321816	30.0000	30.6
	1	n-Pentane	5.269	5.269	0.000	106713	10.0000	10.7(M1)
	3	2-Methyl Pentane	6.483	6.483	0.000	108495	10.0000	9.8(M1)
	6	Isooctane	9.565	9.565	0.000	106608	10.0000	10.0(M1)
	13	n-Decane	15.960	15.960	0.000	51759	10.0000	9.9(M1)
	15	n-Butylcyclohexane	16.743	16.743	0.000	58555	10.0000	10(M1)
	16	Naphthalene	19.618	19.618	0.000	93516	10.0000	10.2(M1)
M	5	C9-C12				110314	20.0000	19.8
$	17	2,5-Dibromotoluene	21.292	21.292	0.000	159522	50.0000	51.4(M1)

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5003.d
Date : 04-NOV-2011 21:56
Client ID:
Sample Info: VPH10/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

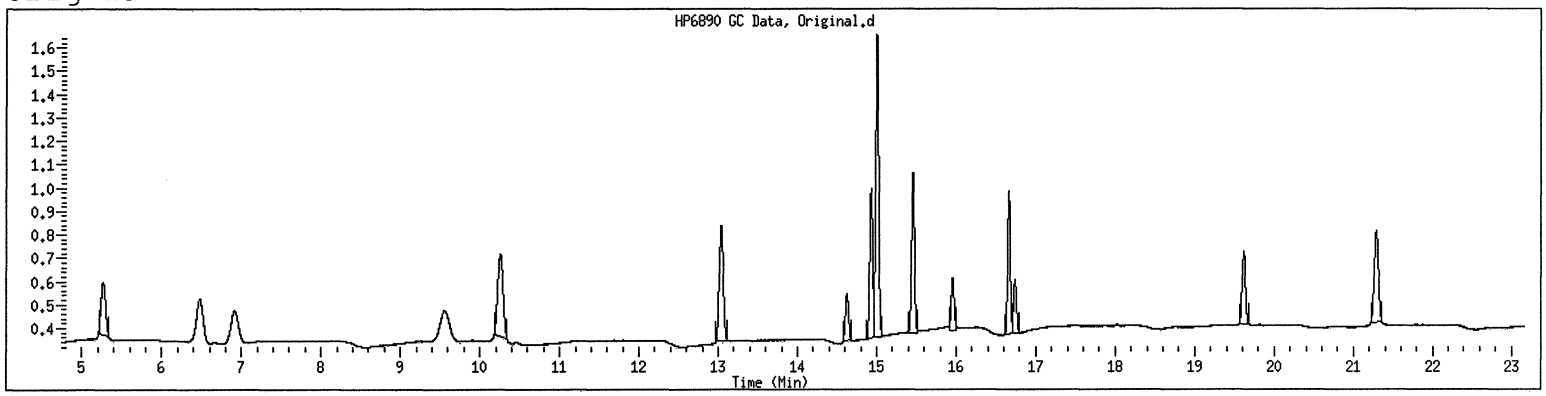
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



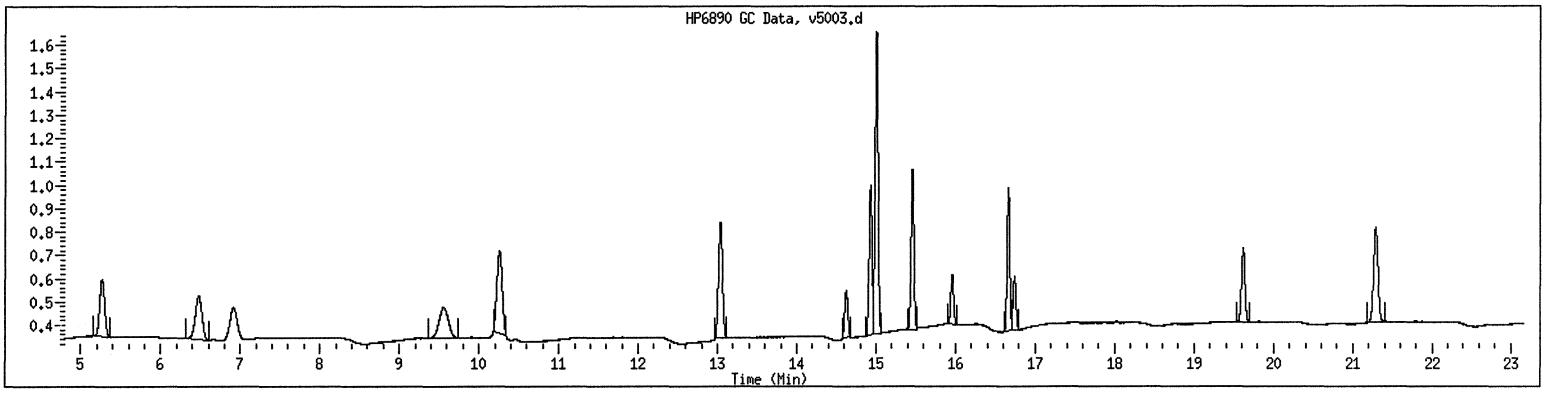
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH10/6/12/4	SampleType	: CALIB_1
Injection Date	: 11/04/2011 21:56	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH10/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5005.d
Lab Smp Id: VPH20/6/12/4
Inj Date : 04-NOV-2011 22:55
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH20/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 22:55 Cal File: v5005.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
M	2 C5-C8				661397	60.0000	62.0
	1 n-Pentane	5.267	5.267	0.000	204224	20.0000	20.3(M1)
	3 2-Methyl Pentane	6.482	6.482	0.000	242197	20.0000	21.4(M1)
	6 Isooctane	9.563	9.563	0.000	214976	20.0000	20.2(M1)
	13 n-Decane	15.959	15.959	0.000	101700	20.0000	19.5(M1)
	15 n-Butylcyclohexane	16.742	16.742	0.000	119364	20.0000	20.2(M1)
	16 Naphthalene	19.617	19.617	0.000	180224	20.0000	19.8(M1)
M	5 C9-C12				221064	40.0000	39.8
$	17 2,5-Dibromotoluene	21.291	21.291	0.000	150438	50.0000	48.8(M1)

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5005.d

Date : 04-NOV-2011 22:55

Client ID:

Instrument: gcv5a.i

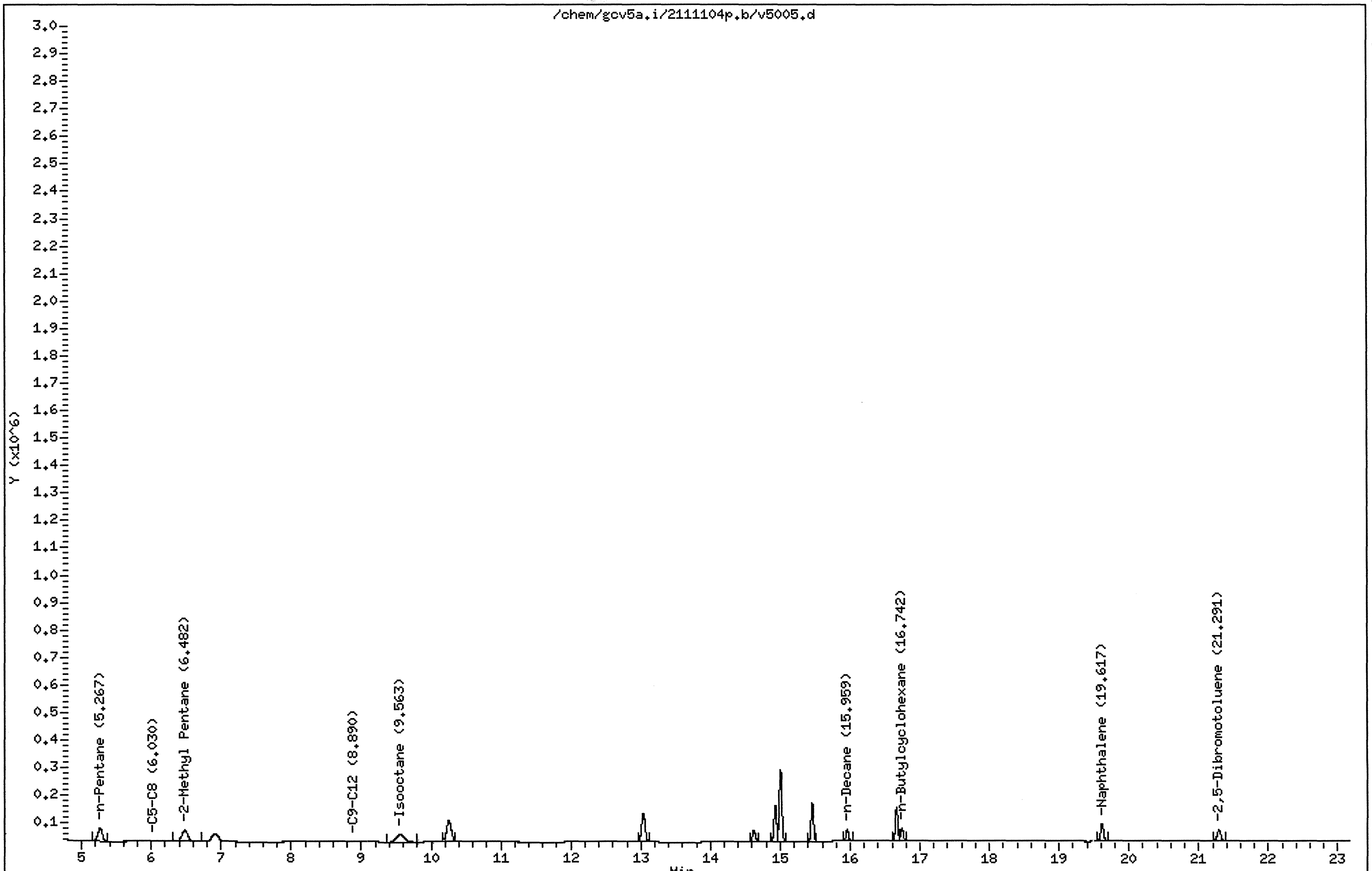
Sample Info: VPH20/6/12/4

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

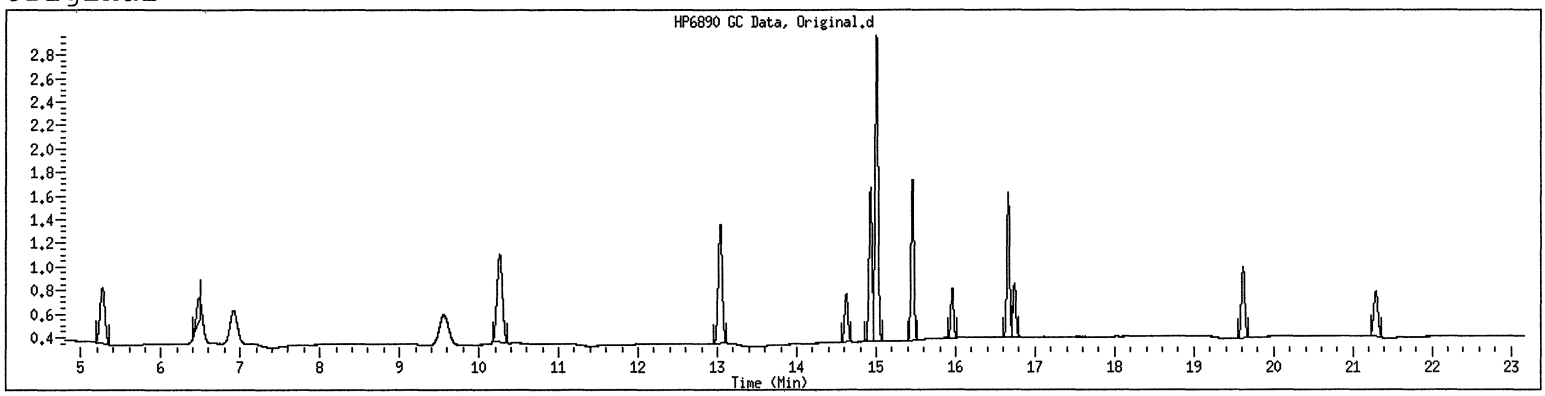
Column diameter: 0.53



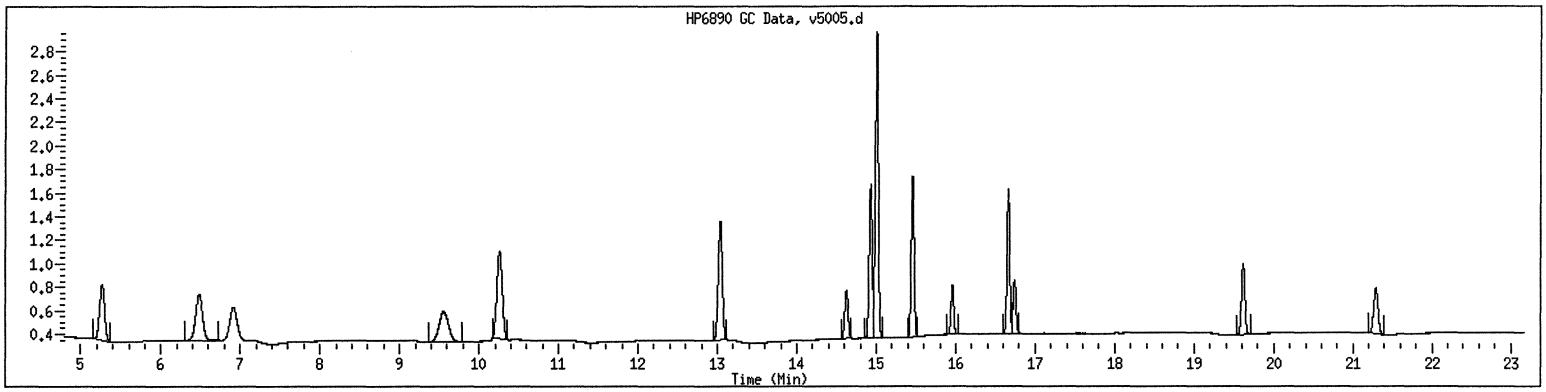
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH20/6/12/4	SampleType	: CALIB_2
Injection Date	: 11/04/2011 22:55	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH20/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5007.d
Lab Smp Id: VPH50/6/12/4
Inj Date : 04-NOV-2011 23:54
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH50/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 04-NOV-2011 23:54 Cal File: v5007.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

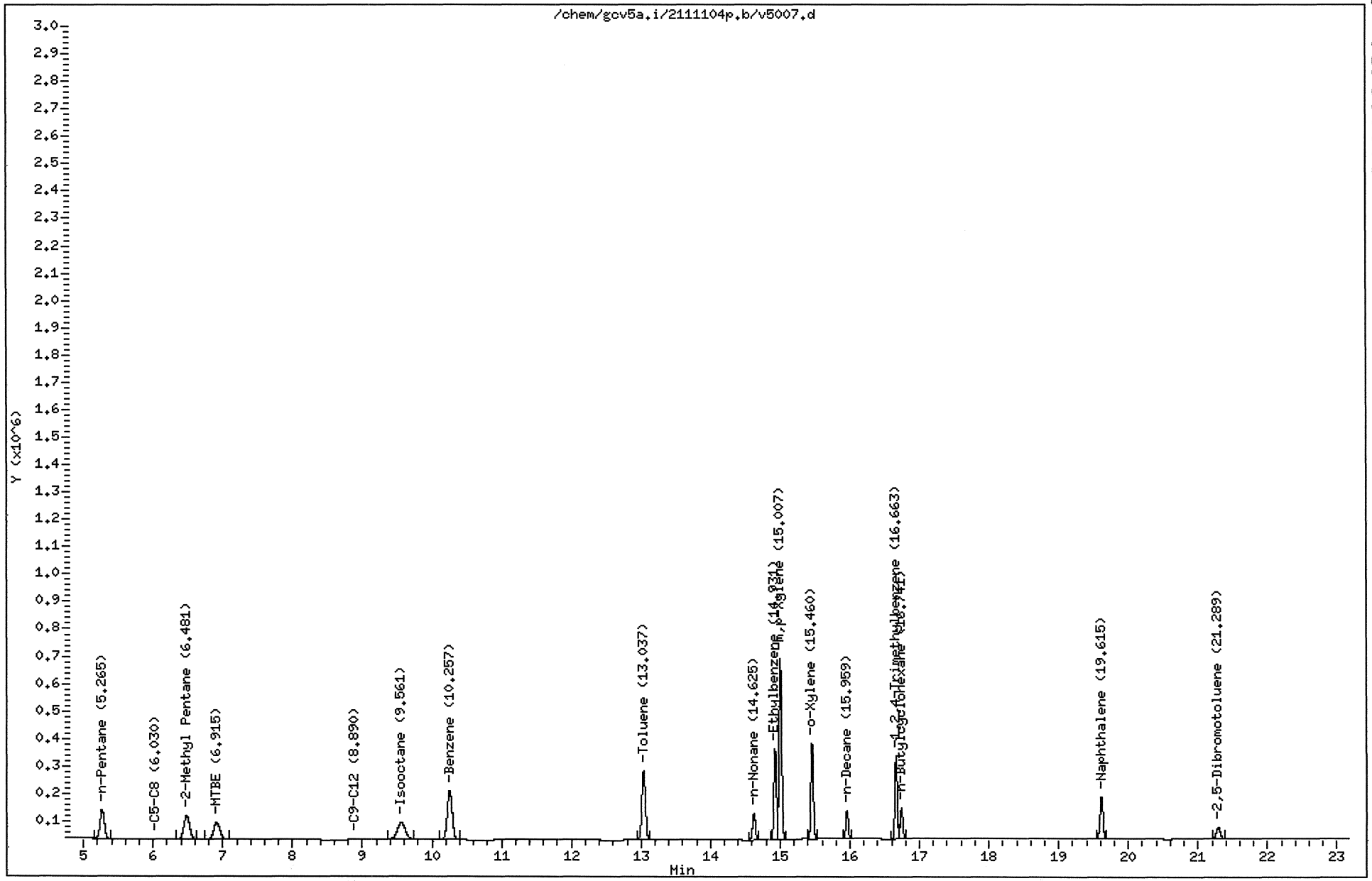
						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				1433487	150.000	150
	1 n-Pentane	5.265	5.265	0.000	442559	50.0000	50.0(M1)
	3 2-Methyl Pentane	6.481	6.481	0.000	508906	50.0000	50.0(M1)
	6 Isooctane	9.561	9.561	0.000	482022	50.0000	50.0(M1)
	13 n-Decane	15.959	15.959	0.000	255356	50.0000	50.0
	15 n-Butylcyclohexane	16.741	16.741	0.000	286054	50.0000	50.0(M1)
	16 Naphthalene	19.615	19.615	0.000	447259	50.0000	50.0
M	5 C9-C12				541410	100.000	100
$	17 2,5-Dibromotoluene	21.289	21.289	0.000	154983	50.0000	50.0(M1)

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5007.d
Date : 04-NOV-2011 23:54
Client ID:
Sample Info: VPH50/6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

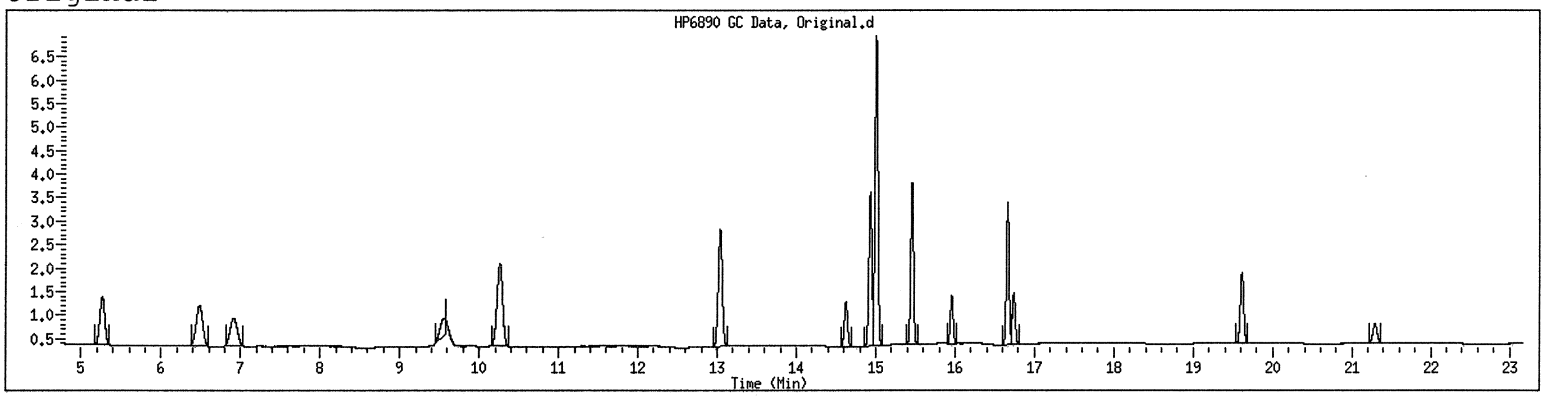
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



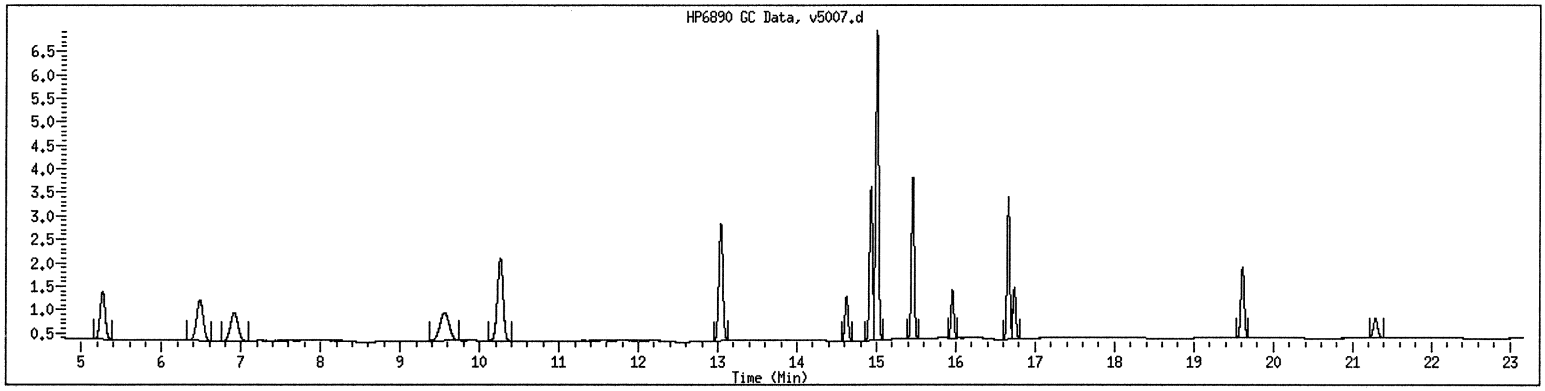
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH50/6/12/4	SampleType	: CALIB_3
Injection Date	: 11/04/2011 23:54	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH50/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5009.d
Lab Smp Id: VPH80/6/12/4
Inj Date : 05-NOV-2011 00:53
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH80/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 00:53 Cal File: v5009.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				2126034	240.000	206
	1 n-Pentane	5.264	5.264	0.000	605714	80.0000	63.4
	3 2-Methyl Pentane	6.481	6.481	0.000	766261	80.0000	70.0(M1)
	6 Isooctane	9.559	9.559	0.000	754059	80.0000	72.4(M1)
	13 n-Decane	15.958	15.958	0.000	512745	80.0000	94.2
	15 n-Butylcyclohexane	16.740	16.740	0.000	499891	80.0000	83.8(M1)
	16 Naphthalene	19.614	19.614	0.000	674677	80.0000	75.5
M	5 C9-C12				1012636	160.000	178
$	17 2,5-Dibromotoluene	21.288	21.288	0.000	139338	50.0000	46.1

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5009.d

Page 1

Date : 05-NOV-2011 00:53

Client ID:

Instrument: gcv5a.i

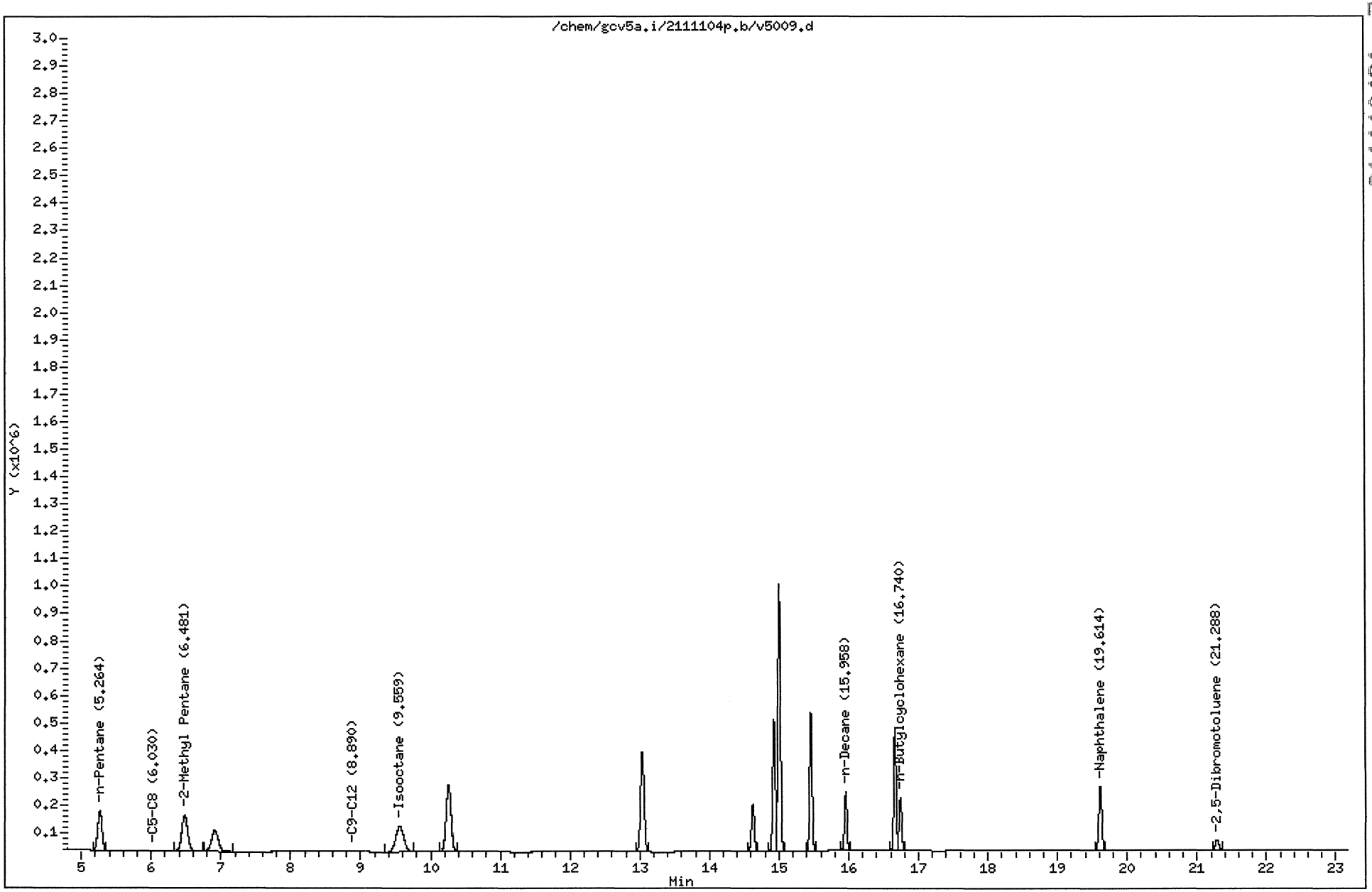
Sample Info: VPH80/6/12/4

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

Column diameter: 0.53

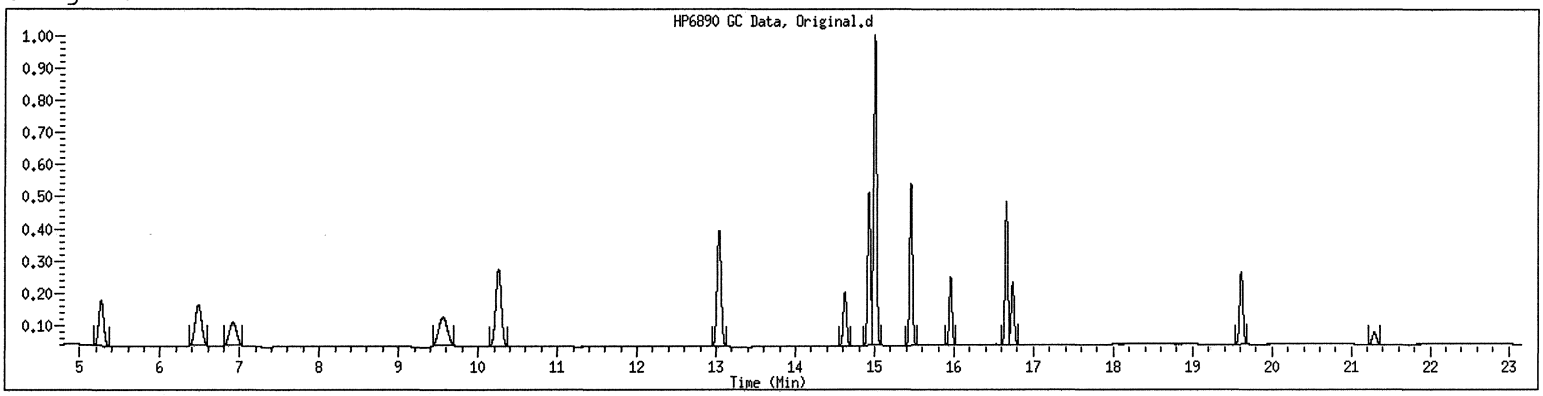


2111104p4

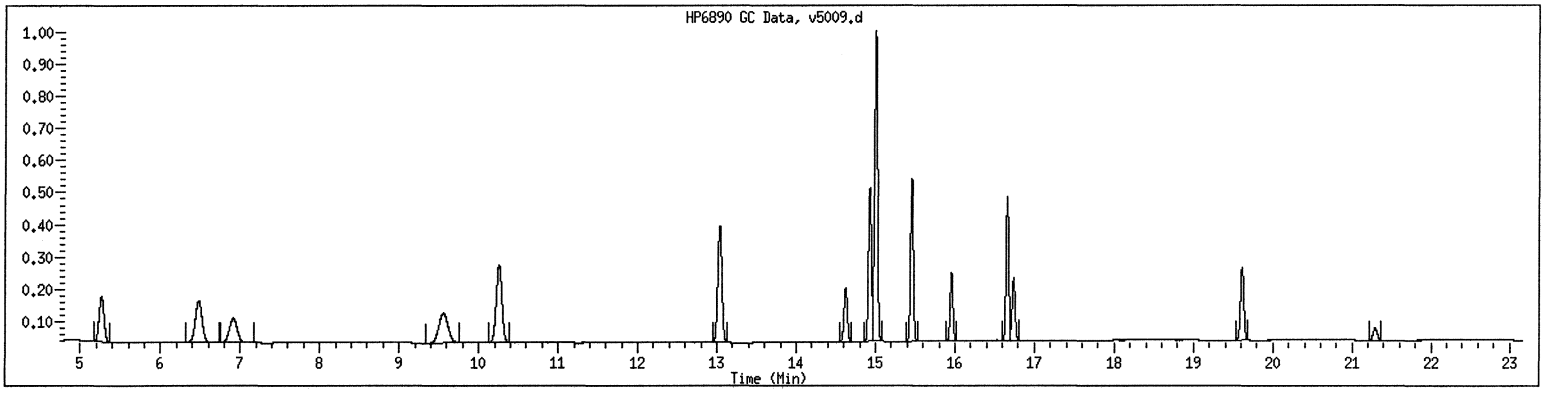
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH80/6/12/4	SampleType	: CALIB_4
Injection Date	: 11/05/2011 00:53	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH80/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5011.d
Lab Smp Id: VPH100/6/12/4
Inj Date : 05-NOV-2011 01:52
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH100/6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				2225866	300.000	226
	1 n-Pentane	5.263	5.263	0.000	625897	100.000	69.5(M1)
	3 2-Methyl Pentane	6.480	6.480	0.000	789446	100.000	75.6(M1)
	6 Isooctane	9.557	9.557	0.000	810523	100.000	80.8(M1)
	13 n-Decane	15.959	15.959	0.000	610961	100.000	110(A)
	15 n-Butylcyclohexane	16.742	16.742	0.000	590825	100.000	99.2(M1)
	16 Naphthalene	19.617	19.617	0.000	852519	100.000	96.3
M	5 C9-C12				1201786	200.000	209
$	17 2,5-Dibromotoluene	21.294	21.294	0.000	141234	50.0000	47.2

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M1- Compound response manually integrated because Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5011.d

Page 1

Date : 05-NOV-2011 01:52

Client ID:

Instrument: gcv5a.i

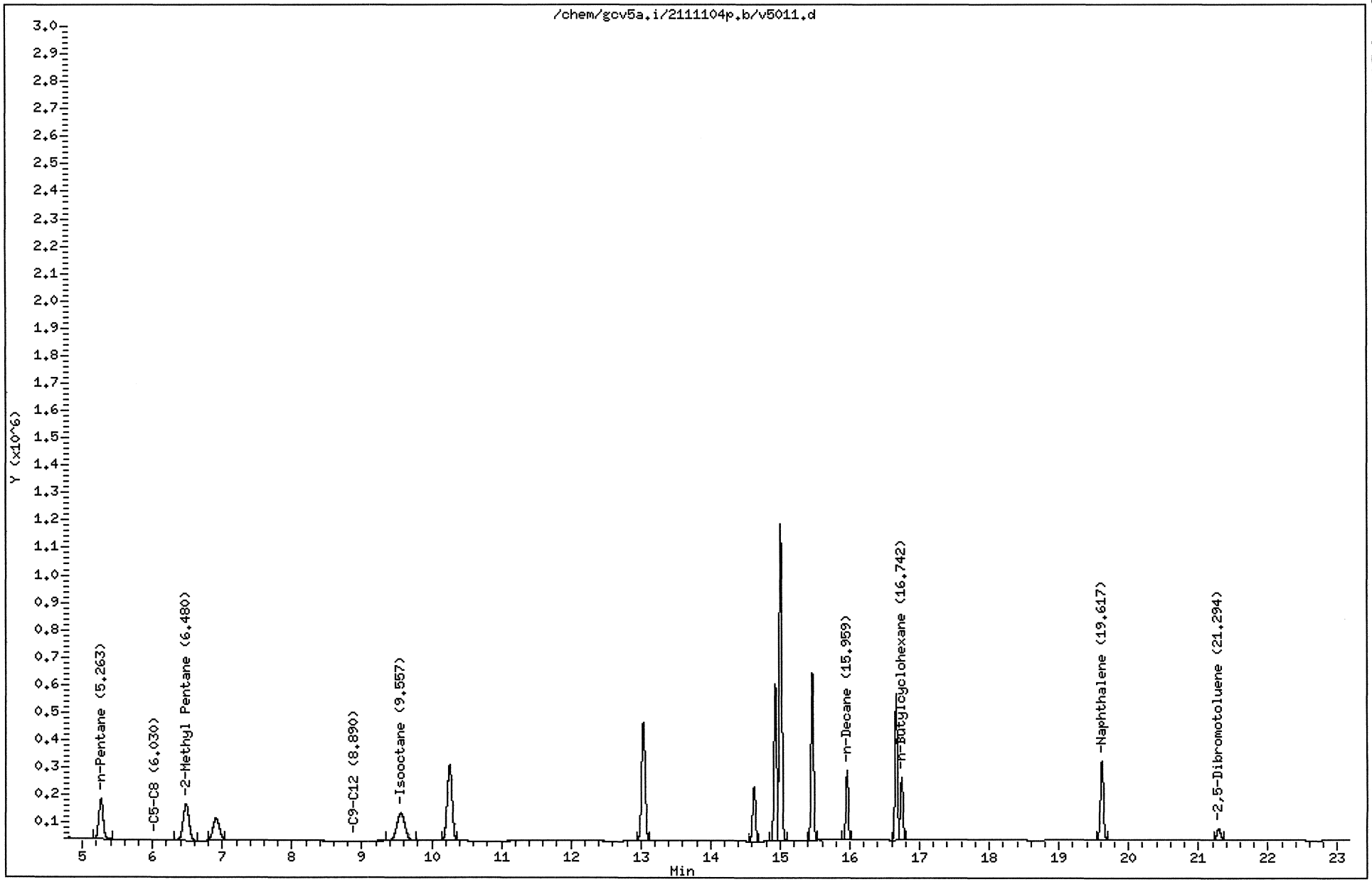
Sample Info: VPH100/6/12/4

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

Column diameter: 0.53



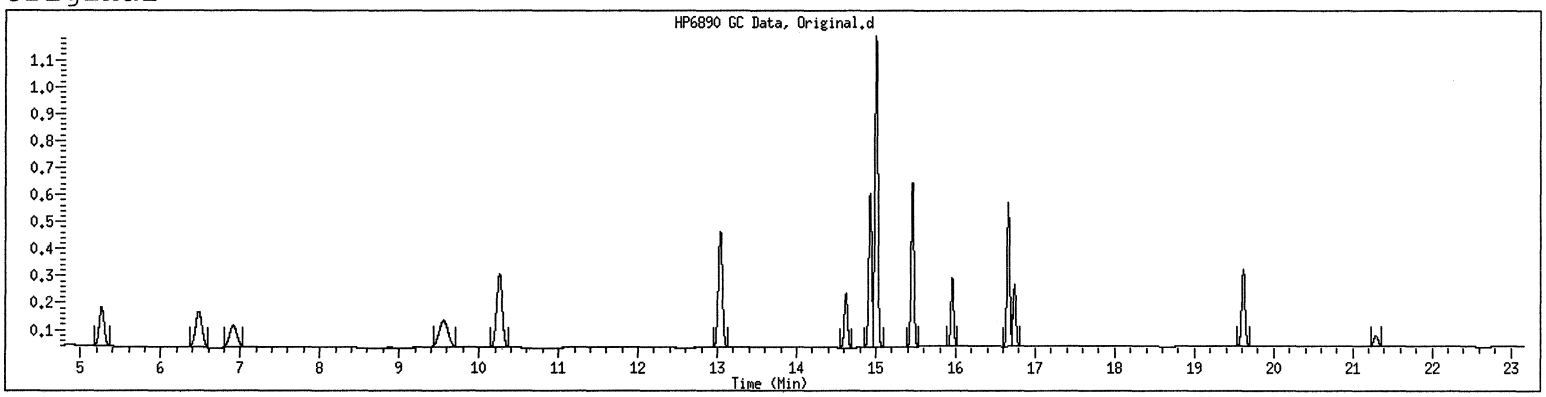
2111104a1 78

Data file : /var/chem/gcv5a.i/2111104p.b/v5011.d
Report Date: 11/07/2011 10:29

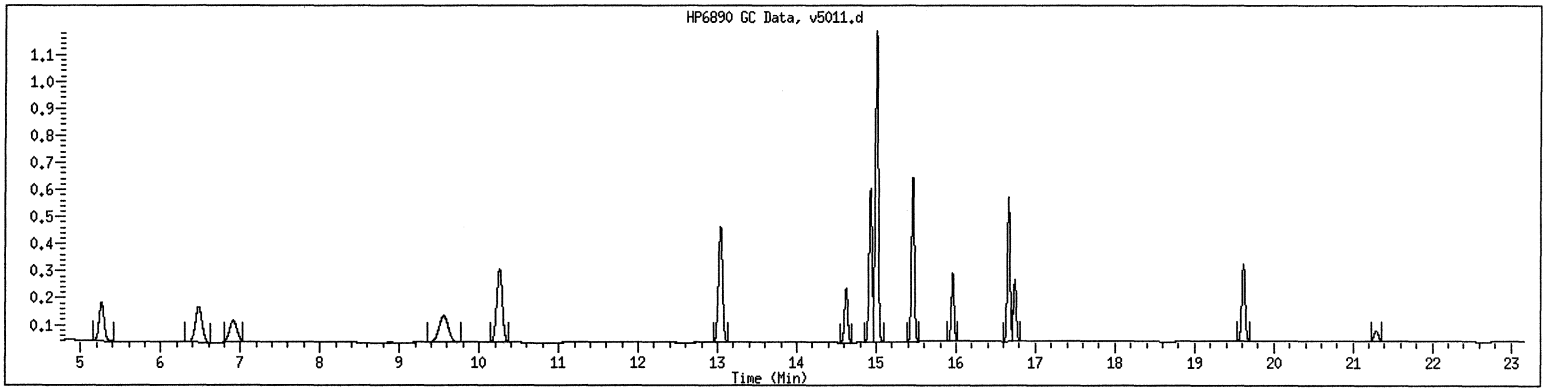
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH100/6/12/4	SampleType	: CALIB_5
Injection Date	: 11/05/2011 01:52	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH100/6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2111104p
Sample Matrix: LIQUID Fraction: VOA
Lab Smp Id: ICV6/12/5
Level: LOW Operator: JAR
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: aliphatic1.spk Quant Type: ESTD
Sublist File: aliphatic1+surr.sub
Method File: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Misc Info:

	SPIKE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
	1 n-Pentane	50.0	46.6	93.10	70-130
M	2 C5-C8	150	139	92.95	70-130
	3 2-Methyl Pentane	50.0	48.5	96.95	70-130
M	5 C9-C12	100	92.4	92.37	70-130
	6 Isooctane	50.0	44.4	88.79	70-130
	13 n-Decane	50.0	44.9	89.88	70-130
	15 n-Butylcyclohexane	50.0	47.4	94.86	70-130
	16 Naphthalene	50.0	54.8	109.51	70-130

	SURROGATE COMPOUND	AMOUNT ADDED ug/L	AMOUNT RECOVERED ug/L	% RECOVERED	LIMITS
$	17 2,5-Dibromotoluene	50.0	49.5	99.05	70-130

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111104p.b/v5013.d
Lab Smp Id: ICV6/12/5
Inj Date : 05-NOV-2011 02:51
Operator : JAR Inst ID: gcv5a.i
Smp Info : ICV6/12/5
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:22 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

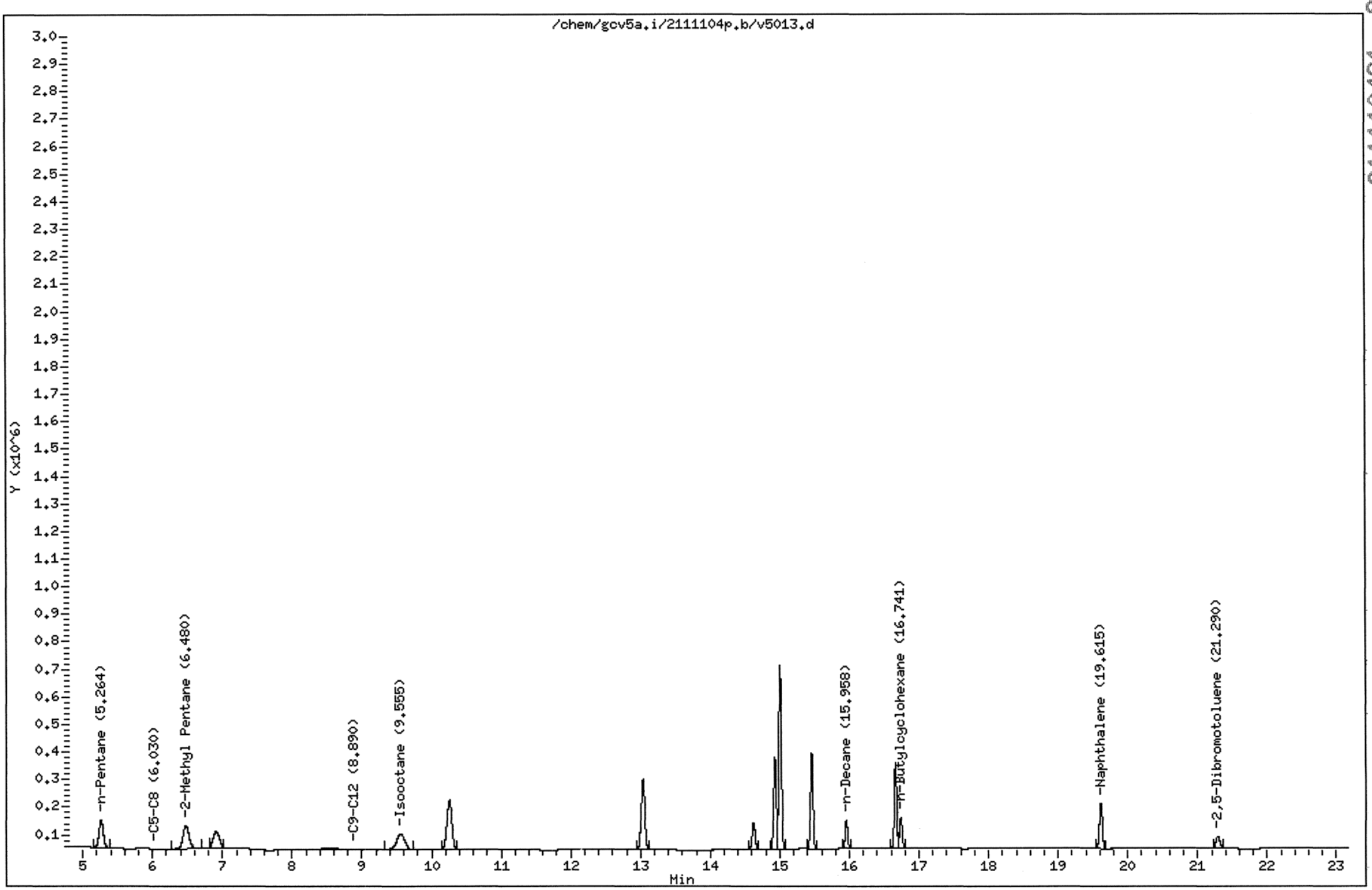
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
M	2 C5-C8				1370151	139.426	139
	1 n-Pentane	5.264	5.263	0.001	418980	46.5524	46.6(M1)
	3 2-Methyl Pentane	6.480	6.480	0.000	505982	48.4762	48.5(M1)
	6 Isooctane	9.555	9.557	-0.002	445188	44.3972	44.4(M1)
	13 n-Decane	15.958	15.959	-0.001	249629	44.9383	44.9
	15 n-Butylcyclohexane	16.741	16.742	-0.001	282608	47.4296	47.4
	16 Naphthalene	19.615	19.617	-0.002	484765	54.7551	54.8
M	5 C9-C12				532237	92.3679	92.4
$	17 2,5-Dibromotoluene	21.290	21.294	-0.004	148060	49.5241	49.5

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111104p.b/v5013.d
Date : 05-NOV-2011 02:51
Client ID:
Sample Info: ICV6/12/5
Volume Injected (uL): 1.0
Column phase: DB-624-30

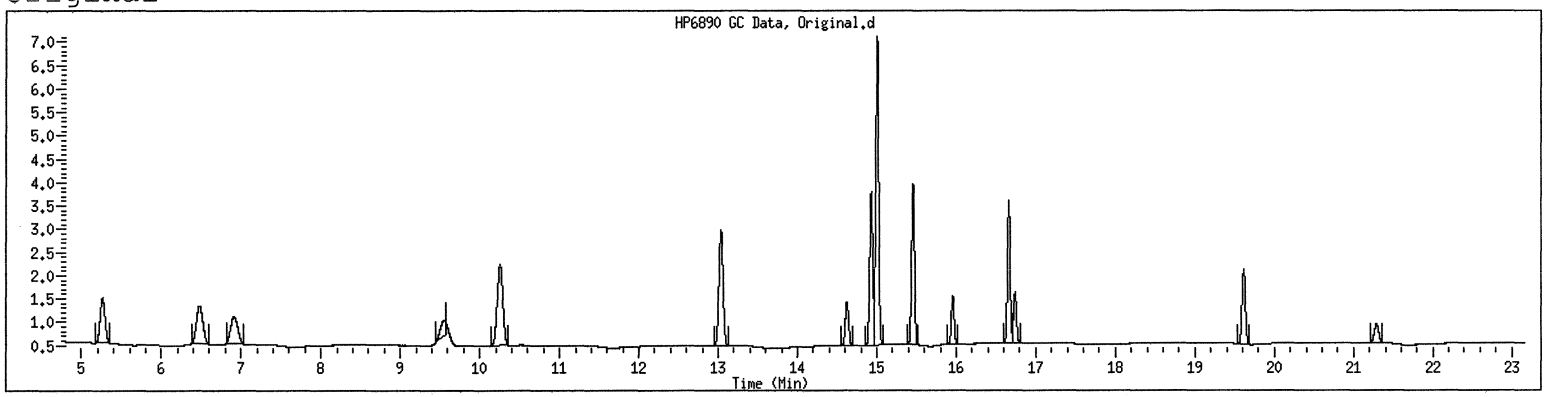
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



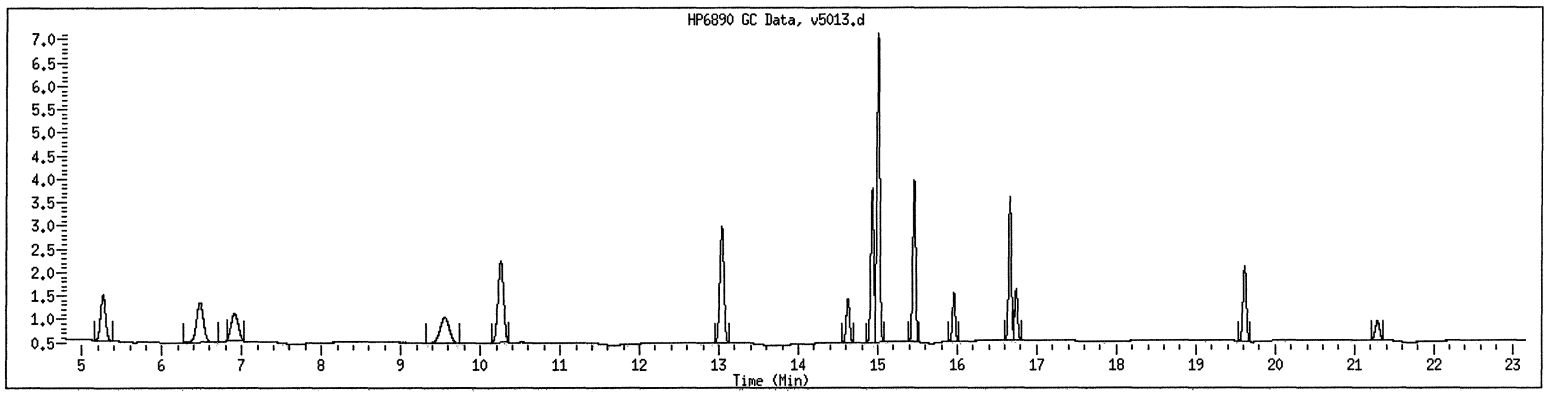
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: ICV6/12/5	SampleType	: LCS
Injection Date	: 11/05/2011 02:51	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: ICV6/12/5		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5a.i Injection Date: 07-NOV-2011 11:22
Lab File ID: v5001.d Init. Cal. Date(s): 04-NOV-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 20:57 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 2 C5-C8	9822	10063	0.010	-2.45242	25.00000	Averaged
1 n-Pentane	9000	9099	0.010	-1.09665	25.00000	Averaged
3 2-Methyl Pentane	10438	10571	0.010	-1.27340	25.00000	Averaged
6 Isooctane	10027	10518	0.010	-4.89657	25.00000	Averaged
13 n-Decane	5555	5515	0.010	0.72519	25.00000	Averaged
15 n-Butylcyclohexane	5958	6214	0.010	-4.28469	25.00000	Averaged
16 Naphthalene	8853	9172	0.010	-3.60219	25.00000	Averaged
M 5 C9-C12	5437	5864	0.010	-7.84785	25.00000	Averaged
$ 17 2,5-Dibromotoluene	2990	2988	0.010	0.04259	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.91351
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5001.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 11:22
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 08-Nov-2011 13:07 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

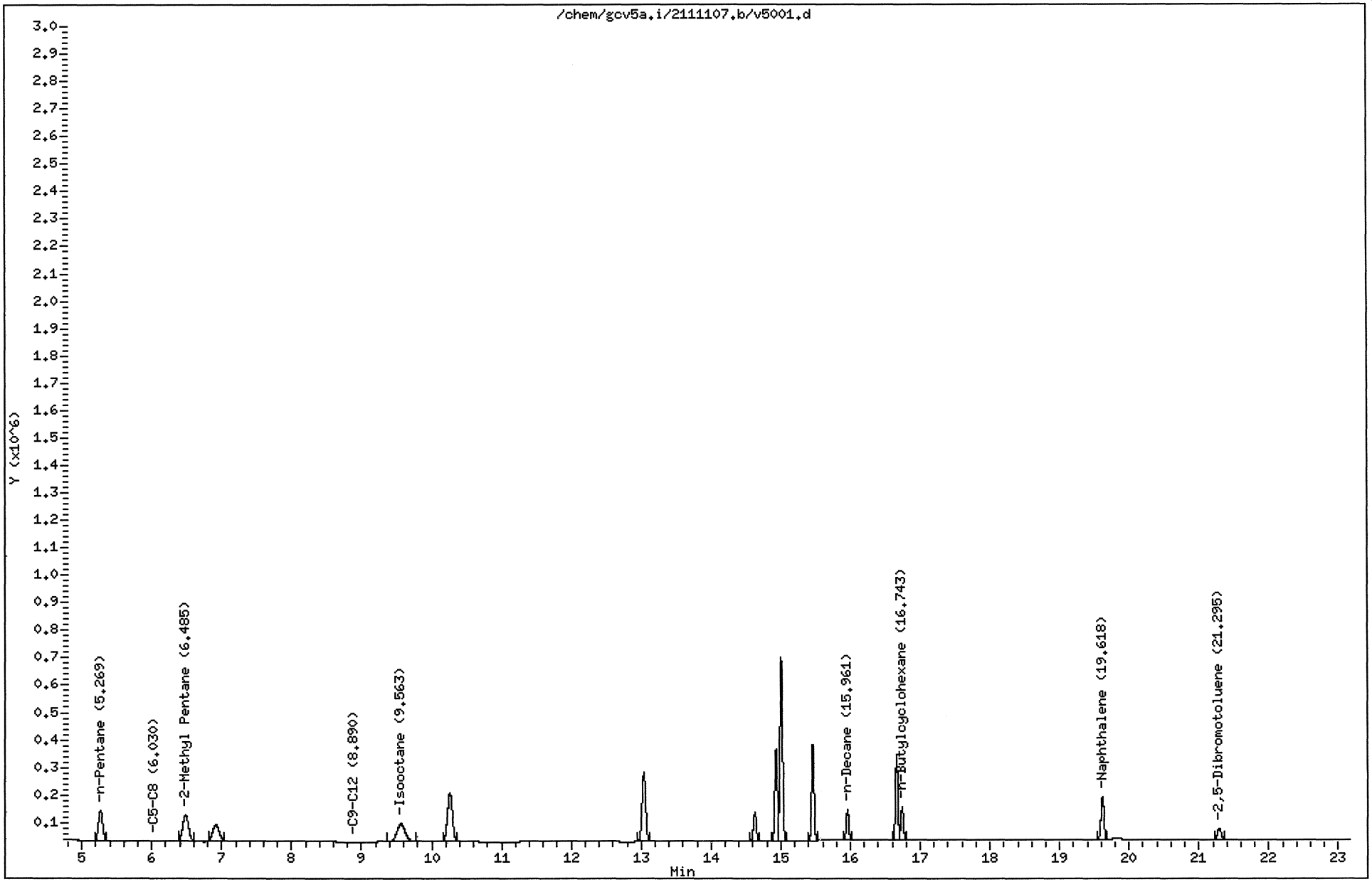
						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				1509398	150.000	154
	1 n-Pentane	5.269	5.269	0.000	454944	50.0000	50.5
	3 2-Methyl Pentane	6.485	6.485	0.000	528534	50.0000	50.6
	6 Isooctane	9.563	9.563	0.000	525920	50.0000	52.4(M1)
	13 n-Decane	15.961	15.961	0.000	275732	50.0000	49.6
	15 n-Butylcyclohexane	16.743	16.743	0.000	310689	50.0000	52.1
	16 Naphthalene	19.618	19.618	0.000	458612	50.0000	51.8
M	5 C9-C12				586421	100.000	102
$	17 2,5-Dibromotoluene	21.295	21.295	0.000	149419	50.0000	50.0

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5001.d
Date : 07-NOV-2011 11:22
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

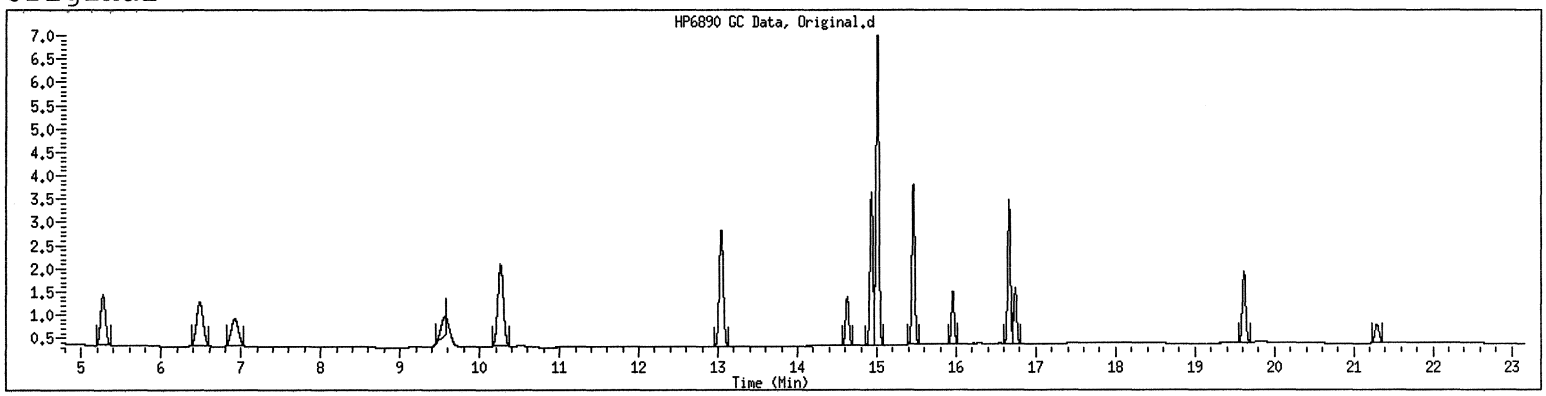
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



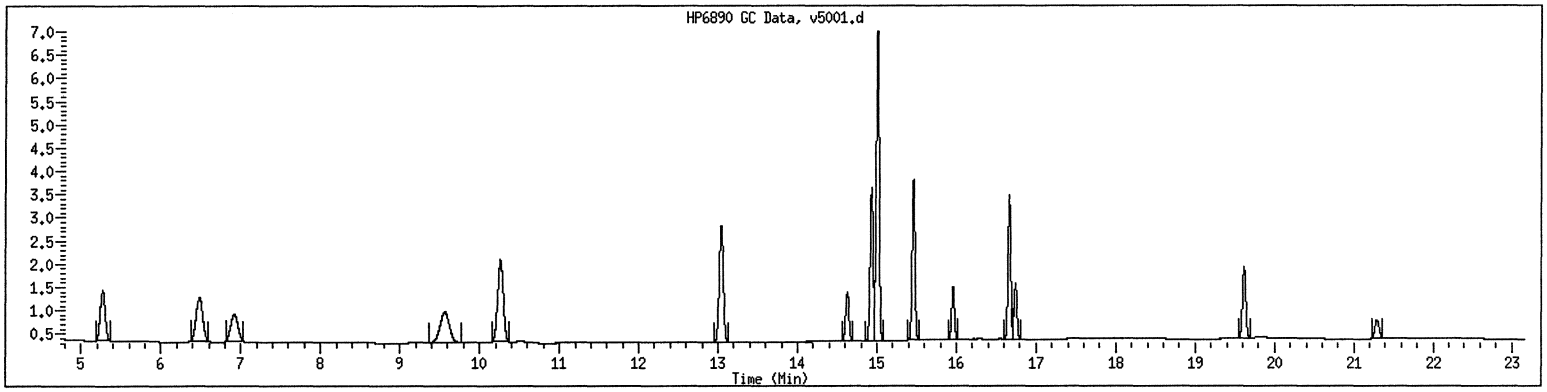
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 11:22	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5a.i Injection Date: 07-NOV-2011 16:16
Lab File ID: v5011.d Init. Cal. Date(s): 04-NOV-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 20:57 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 2 C5-C8	9822	9001	0.010	8.35987	25.00000	Averaged
1 n-Pentane	9000	8133	0.010	9.63580	25.00000	Averaged
3 2-Methyl Pentane	10438	9389	0.010	10.04971	25.00000	Averaged
6 Isooctane	10027	9480	0.010	5.45566	25.00000	Averaged
13 n-Decane	5555	5714	0.010	-2.86154	25.00000	Averaged
15 n-Butylcyclohexane	5958	5735	0.010	3.75193	25.00000	Averaged
16 Naphthalene	8853	8972	0.010	-1.34067	25.00000	Averaged
M 5 C9-C12	5437	5724	0.010	-5.27663	25.00000	Averaged
$ 17 2,5-Dibromotoluene	2990	2912	0.010	2.61212	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 5.48266
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5011.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 16:16
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 07-Nov-2011 17:08 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

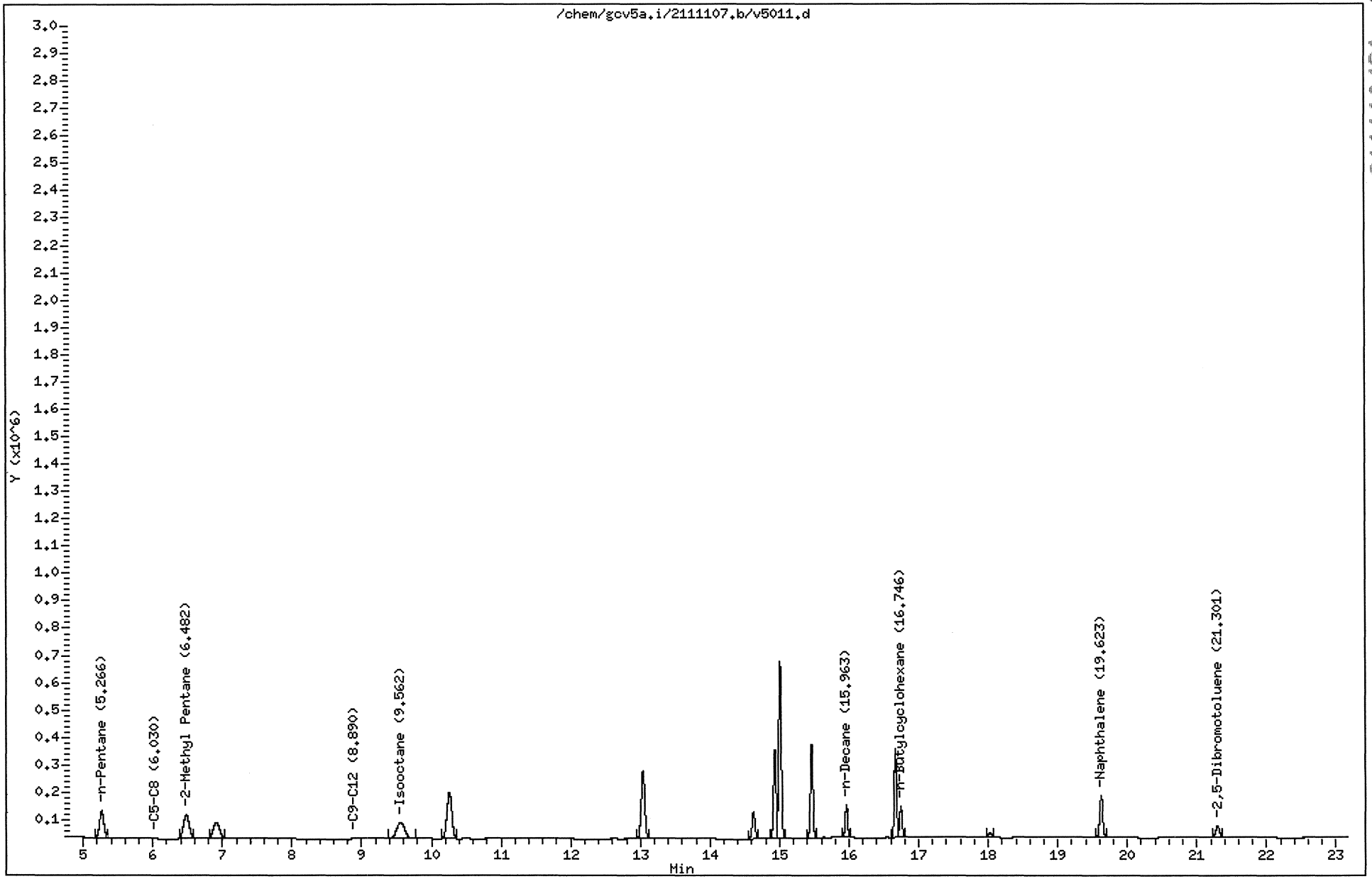
		Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
M	2	C5-C8				1350104	150.000	137
	1	n-Pentane	5.266	5.266	0.000	406647	50.0000	45.2
	3	2-Methyl Pentane	6.482	6.482	0.000	469440	50.0000	45.0
	6	Isooctane	9.562	9.562	0.000	474017	50.0000	47.3(M1)
	13	n-Decane	15.963	15.963	0.000	285694	50.0000	51.4
	15	n-Butylcyclohexane	16.746	16.746	0.000	286746	50.0000	48.1
	16	Naphthalene	19.623	19.623	0.000	448601	50.0000	50.7
M	5	C9-C12				572440	100.000	99.6
$	17	2,5-Dibromotoluene	21.301	21.301	0.000	145578	50.0000	48.7

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5011.d
Date : 07-NOV-2011 16:16
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

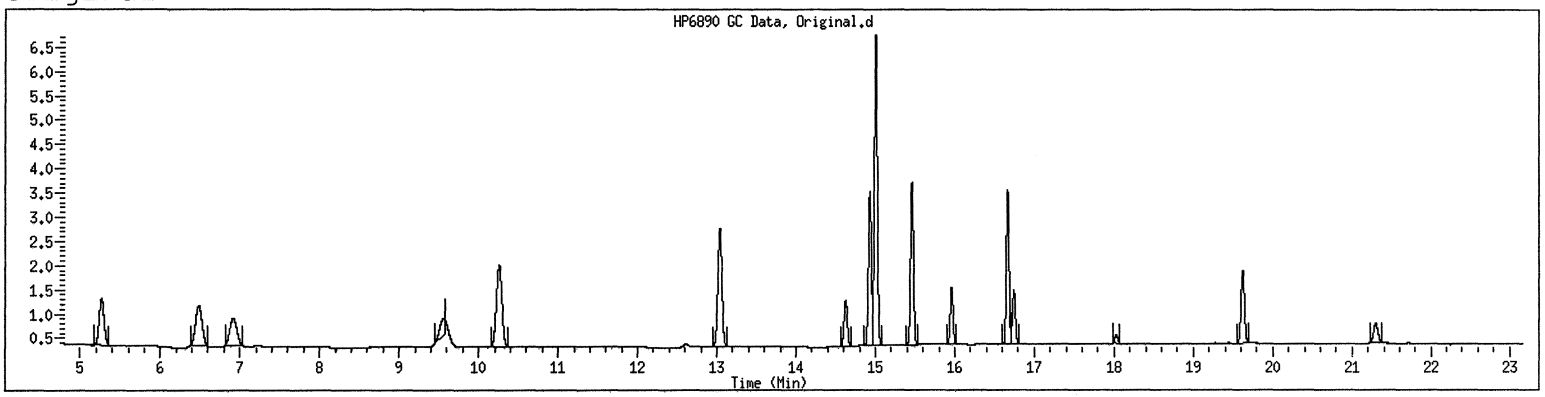
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



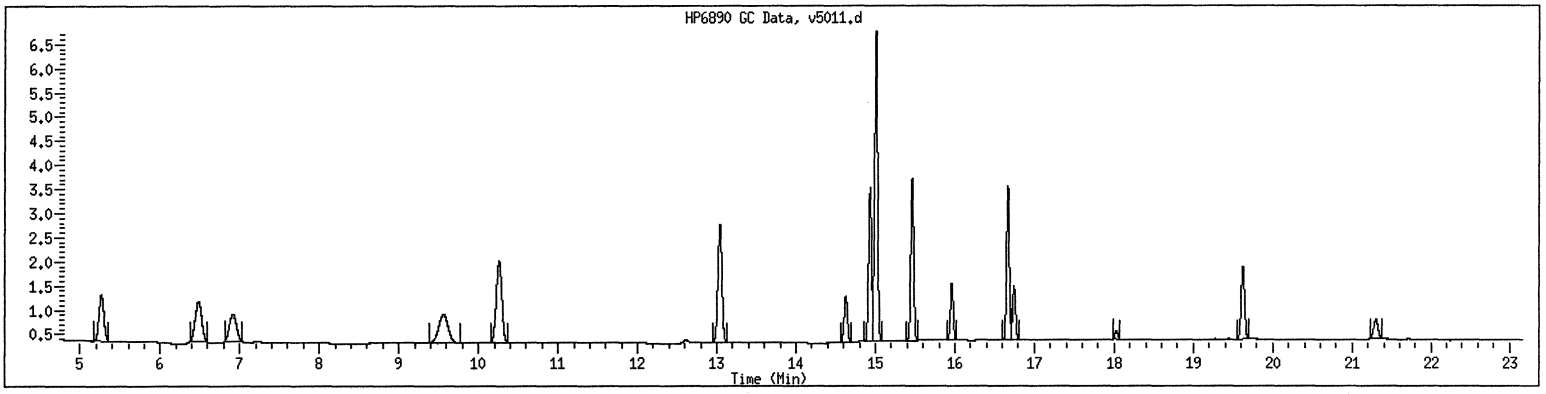
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 16:16	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5a.i Injection Date: 07-NOV-2011 23:22
Lab File ID: v5021.d Init. Cal. Date(s): 04-NOV-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 20:57 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 2 C5-C8	9822	9028	0.010	8.07690	25.00000	Averaged
1 n-Pentane	9000	8035	0.010	10.72067	25.00000	Averaged
3 2-Methyl Pentane	10438	9486	0.010	9.12269	25.00000	Averaged
6 Isooctane	10027	9565	0.010	4.61537	25.00000	Averaged
13 n-Decane	5555	4698	0.010	15.42674	25.00000	Averaged
15 n-Butylcyclohexane	5958	5459	0.010	8.38734	25.00000	Averaged
16 Naphthalene	8853	9479	0.010	-7.06687	25.00000	Averaged
M 5 C9-C12	5437	5078	0.010	6.60479	25.00000	Averaged
$ 17 2,5-Dibromotoluene	2990	3336	0.010	-11.58685	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 9.06758
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5021.d
Lab Smp Id: VPH6/12/4
Inj Date : 07-NOV-2011 23:22
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 18-Nov-2011 14:24 bmr Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

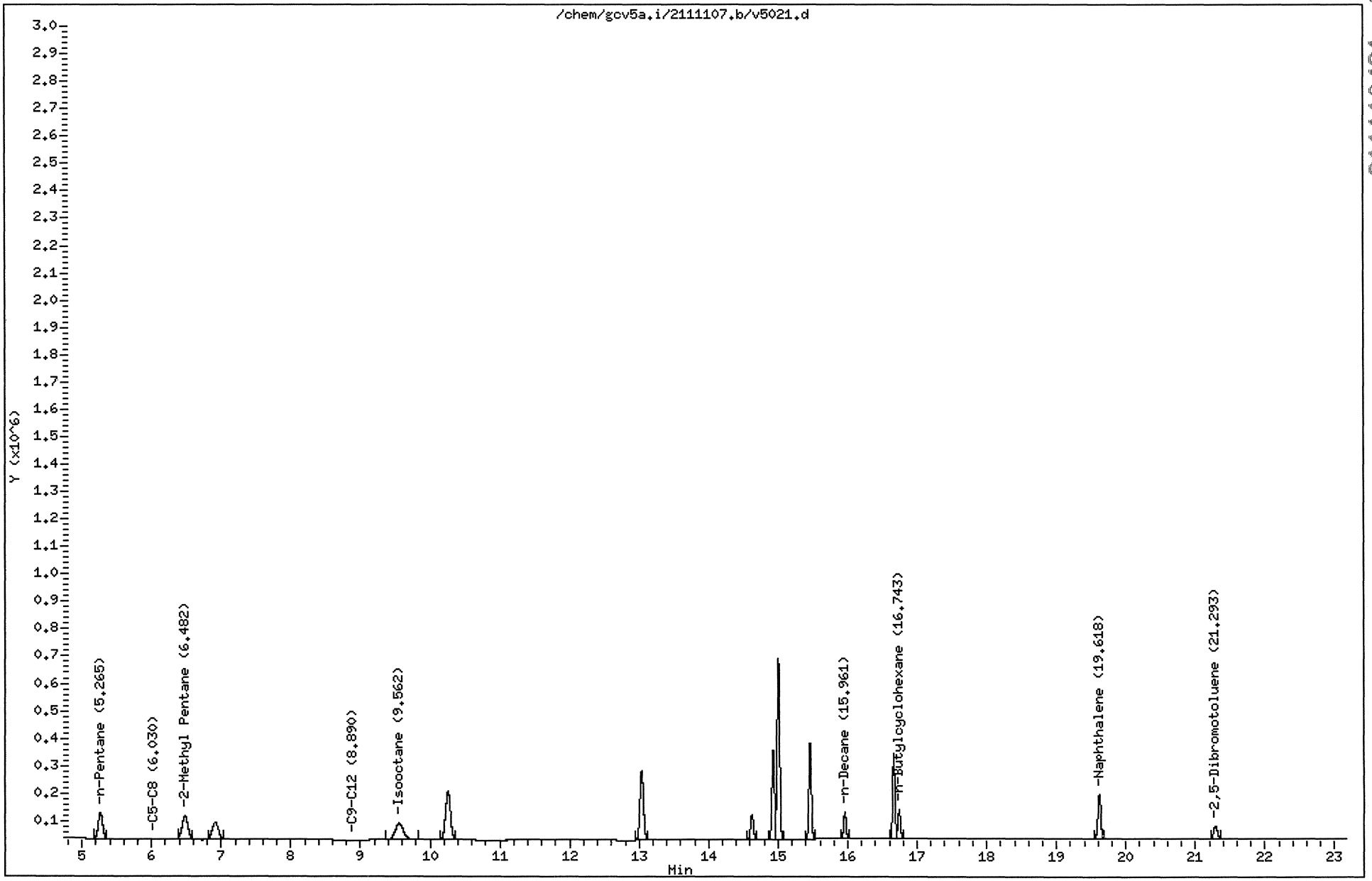
						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
M	2 C5-C8				1354273	150.000	138
	1 n-Pentane	5.265	5.265	0.000	401765	50.0000	44.6
	3 2-Methyl Pentane	6.482	6.482	0.000	474278	50.0000	45.4
	6 Isooctane	9.562	9.562	0.000	478230	50.0000	47.7(M1)
	13 n-Decane	15.961	15.961	0.000	234899	50.0000	42.3
	15 n-Butylcyclohexane	16.743	16.743	0.000	272936	50.0000	45.8
	16 Naphthalene	19.618	19.618	0.000	473949	50.0000	53.5
M	5 C9-C12				507835	100.000	88.1
$	17 2,5-Dibromotoluene	21.293	21.293	0.000	166803	50.0000	55.8

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5021.d
Date : 07-NOV-2011 23:22
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

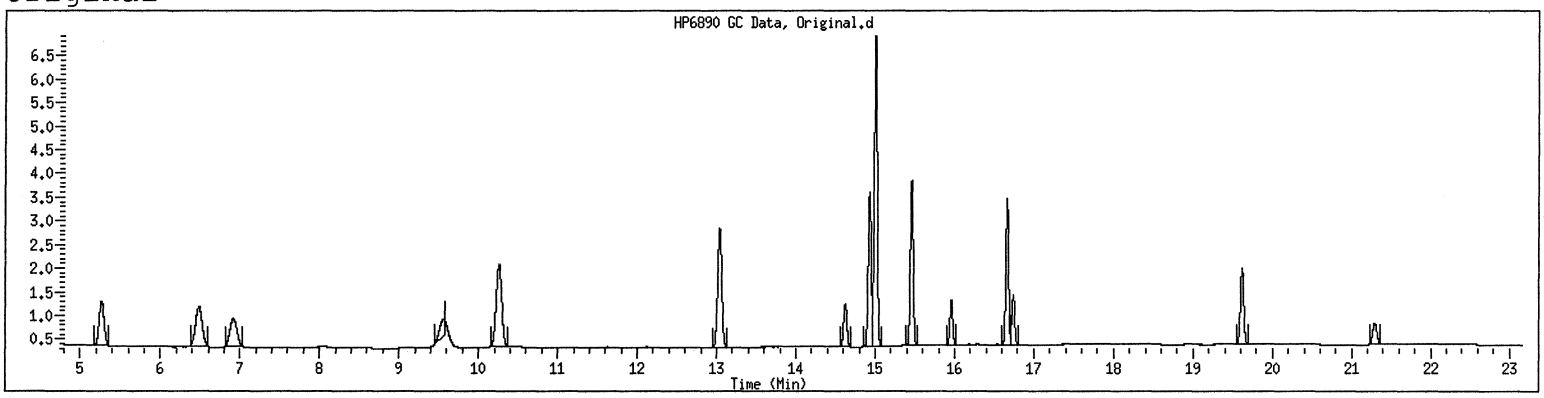
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



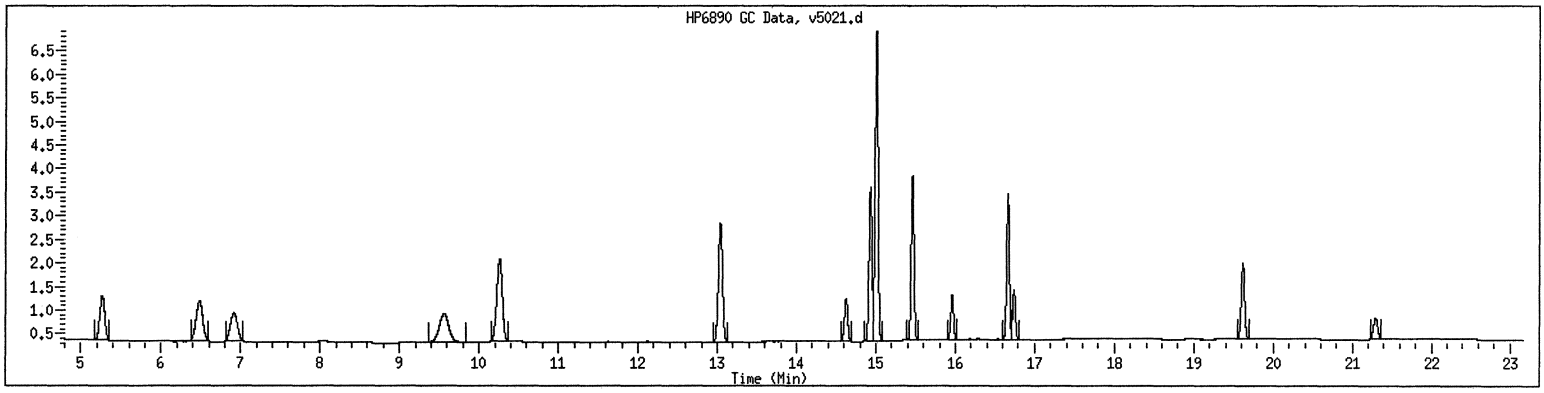
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/07/2011 23:22	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcv5a.i Injection Date: 08-NOV-2011 01:49
Lab File ID: v5026.d Init. Cal. Date(s): 04-NOV-2011 05-NOV-2011
Analysis Type: WATER Init. Cal. Times: 20:57 01:52
Lab Sample ID: VPH6/12/4 Quant Type: ESTD
Method: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	MIN %D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
M 2 C5-C8	9822	9226	0.010	6.06878	25.00000	Averaged
1 n-Pentane	9000	8302	0.010	7.75673	25.00000	Averaged
3 2-Methyl Pentane	10438	9667	0.010	7.38401	25.00000	Averaged
6 Isooctane	10027	9708	0.010	3.18469	25.00000	Averaged
13 n-Decane	5555	4605	0.010	17.10129	25.00000	Averaged
15 n-Butylcyclohexane	5958	5545	0.010	6.94738	25.00000	Averaged
16 Naphthalene	8853	10068	0.010	-13.72177	25.00000	Averaged
M 5 C9-C12	5437	5075	0.010	6.67118	25.00000	Averaged
$ 17 2,5-Dibromotoluene	2990	3325	0.010	-11.22962	30.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 8.89616
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5026.d
Lab Smp Id: VPH6/12/4
Inj Date : 08-NOV-2011 01:49
Operator : JAR Inst ID: gcv5a.i
Smp Info : VPH6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 17-Nov-2011 15:51 bmr Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

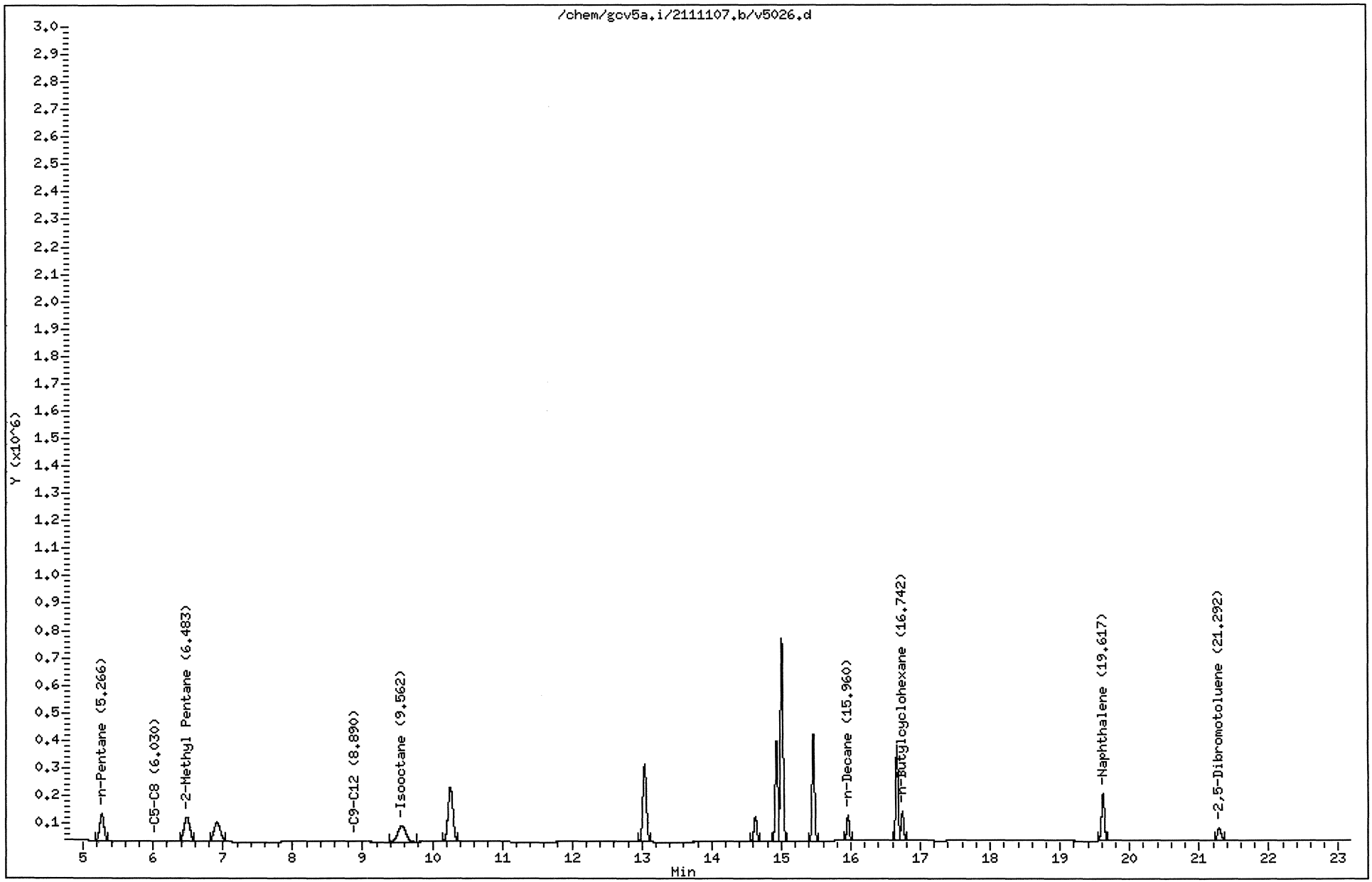
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
M	2 C5-C8				1383858	150.000	141
	1 n-Pentane	5.266	5.266	0.000	415103	50.0000	46.1
	3 2-Methyl Pentane	6.483	6.483	0.000	483352	50.0000	46.3
	6 Isooctane	9.562	9.562	0.000	485403	50.0000	48.4(M1)
	13 n-Decane	15.960	15.960	0.000	230248	50.0000	41.4
	15 n-Butylcyclohexane	16.742	16.742	0.000	277226	50.0000	46.5
	16 Naphthalene	19.617	19.617	0.000	503408	50.0000	56.9
M	5 C9-C12				507474	100.000	88.0
$	17 2,5-Dibromotoluene	21.292	21.292	0.000	166269	50.0000	55.6

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5026.d
Date : 08-NOV-2011 01:49
Client ID:
Sample Info: VPH6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53

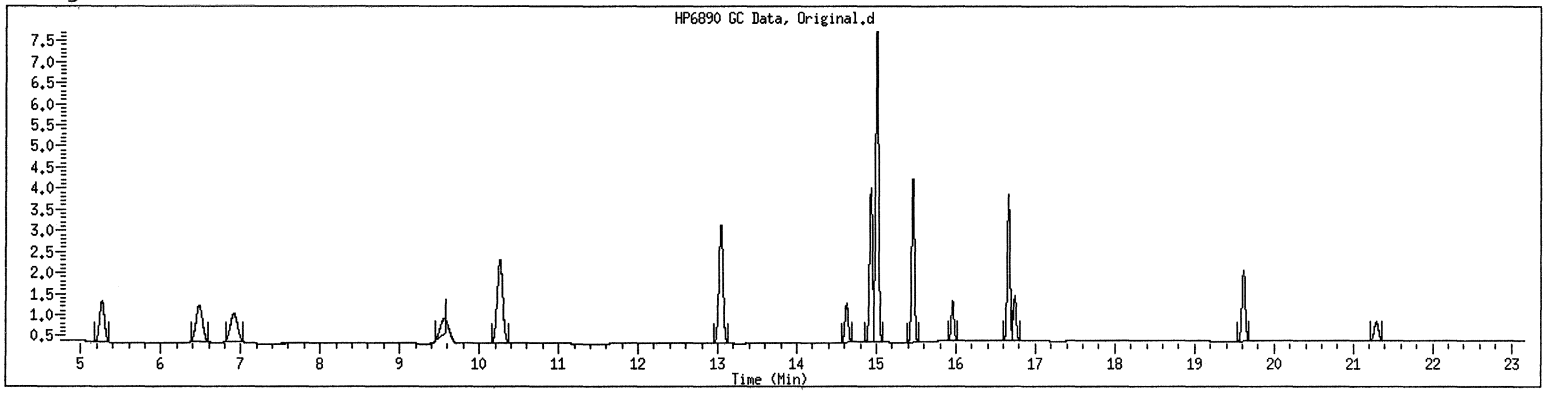


Report Date: 11/17/2011 15:51

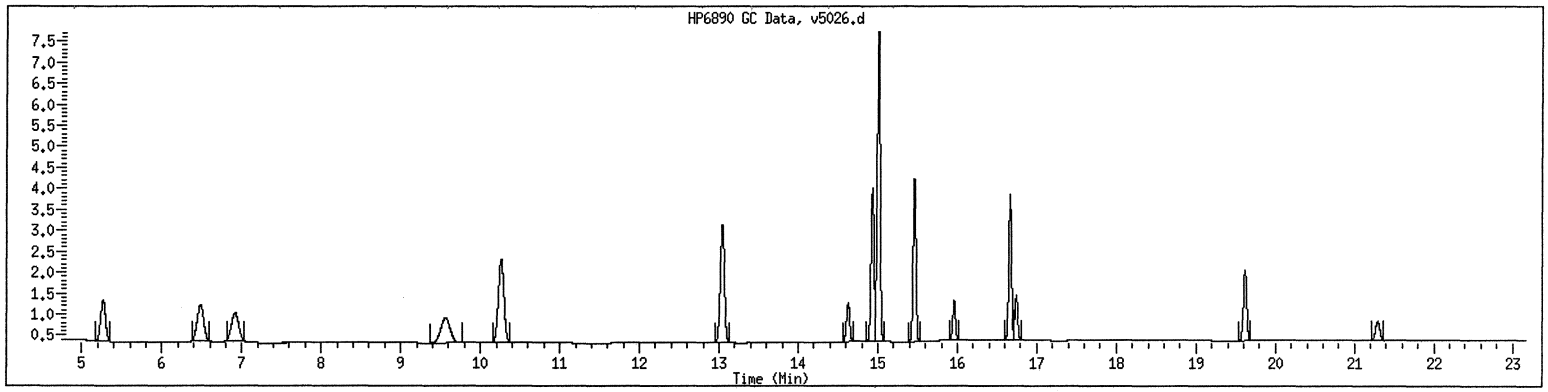
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: VPH6/12/4	SampleType	: CCALIB_3
Injection Date	: 11/08/2011 01:49	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: VPH6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



1D

ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	MB1003187
Lab Code:	LA024 Case No.:	Contract:	
Matrix:	Water	SAS No.:	SDG No.: 211110421
Sample wt/vol:	5 Units: mL	Lab Sample ID:	1003187
Level: (low/med)		Date Collected:	Time:
% Moisture:	decanted: (Y/N)	Date Received:	
GC Column:	ID: (mm)	Date Extracted:	
Concentrated Extract Volume:	5000 (µL)	Date Analyzed:	11/07/11 Time: 1221
Soil Aliquot Volume:	(µL)	Dilution Factor:	1 Analyst: JAR
Injection Volume:	1 (µL)	Prep Method:	
GPC Cleanup: (Y/N)	N pH:	Analytical Method:	MASSVPH
Prep Batch:	Analytical Batch: 468512	Sulfur Cleanup: (Y/N)	N Instrument ID: GCV5B
CONCENTRATION UNITS:	*ug/L*	Lab File ID:	2111107/v5003

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCV-00-4	C5-C8 Aliphatic	15.0	U	3.31	15.0	30.0
GCV-00-5	C9-C12 Aliphatic	10.0	U	3.20	10.0	20.0
GCV-00-6	C9-C10 Aromatic	5.00	U	1.24	5.00	10.0

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5003.d
Lab Smp Id: 1003187 Client Smp ID: 1003187
Inj Date : 07-NOV-2011 12:21
Operator : JAR Inst ID: gcv5b.i
Smp Info : 1003187
Misc Info :
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:39 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
$ 10 2,5-Dibromotoluene	21.786	21.781	0.005	350170	50.0811	50.1

Data File: /var/chem/gcv5b.i/2111107.b/v5003.d

Page 1

Date : 07-NOV-2011 12:21

Client ID: 1003187

Instrument: gcv5b.i

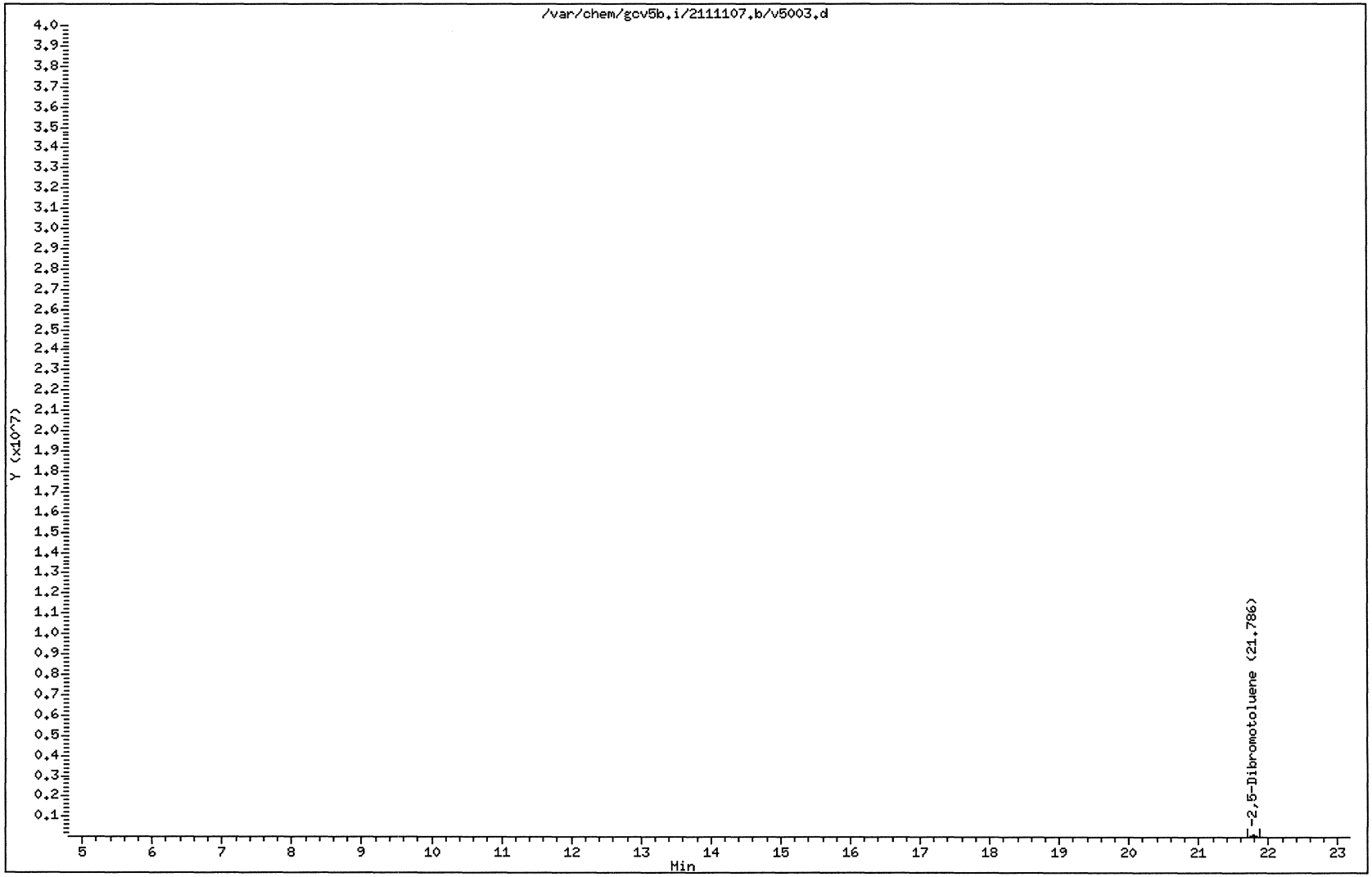
Sample Info: 1003187

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

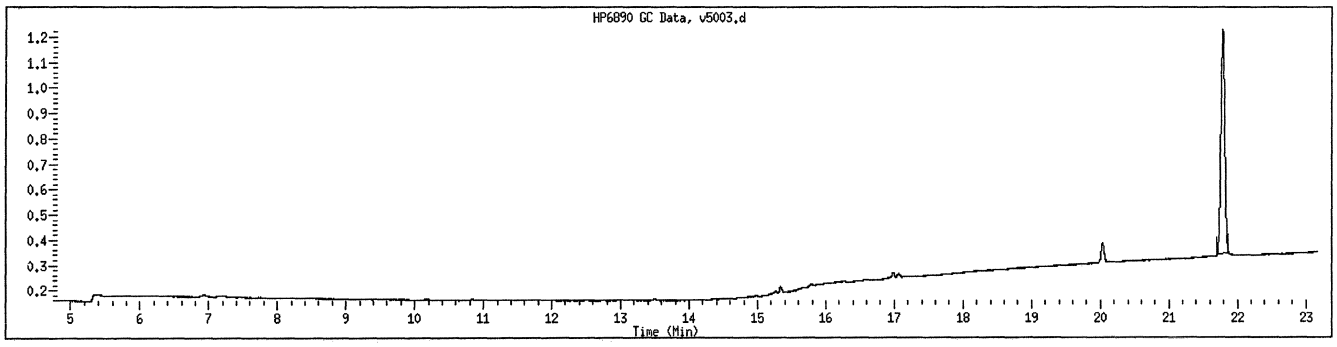
Column diameter: 0.53



Data file : /var/chem/gcv5b.i/2111107.b/v5003.d Page: 1
Report Date: 11/08/2011 13:41

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1003187 SampleType : SAMPLE
Injection Date: 11/07/2011 12:21 Instrument : gcv5b.i
Operator : JAR
Sample Info : 1003187
Misc Info :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Dilution : 1.0
Matrix : WATER
Integrator : Falcon Compound Sublist: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5003.d
Lab Smp Id: BLK
Inj Date : 07-NOV-2011 12:21
Operator : JAR Inst ID: gcv5a.i
Smp Info : BLK
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
$ 17 2,5-Dibromotoluene	21.297	21.294	0.003	143488	47.9950	48.0

Data File: /chem/gcv5a.i/2111107.b/v5003.d

Page 1

Date : 07-NOV-2011 12:21

Client ID:

Instrument: gcv5a.i

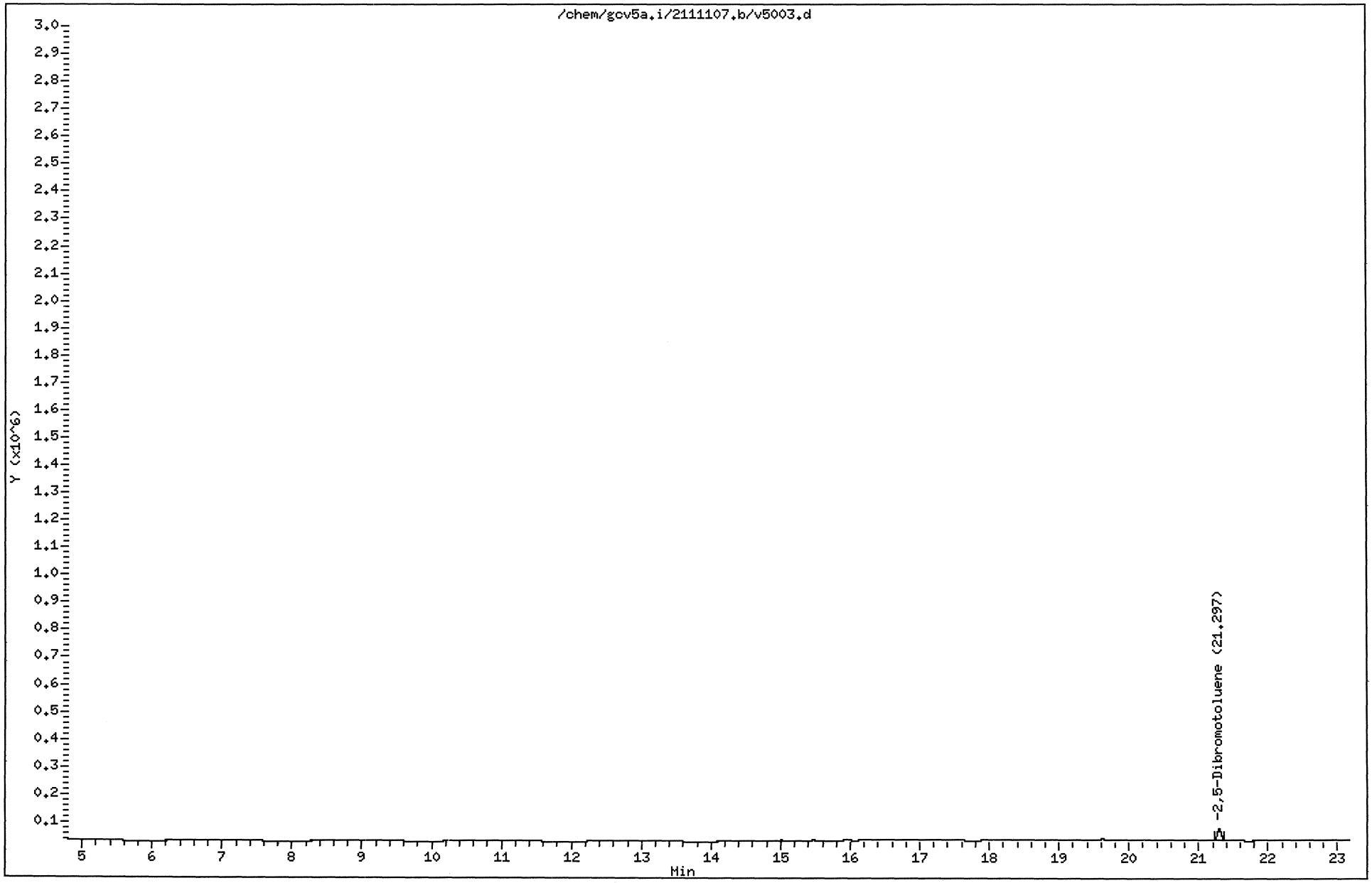
Sample Info: BLK

Volume Injected (uL): 1.0

Operator: JAR

Column phase: DB-624-30

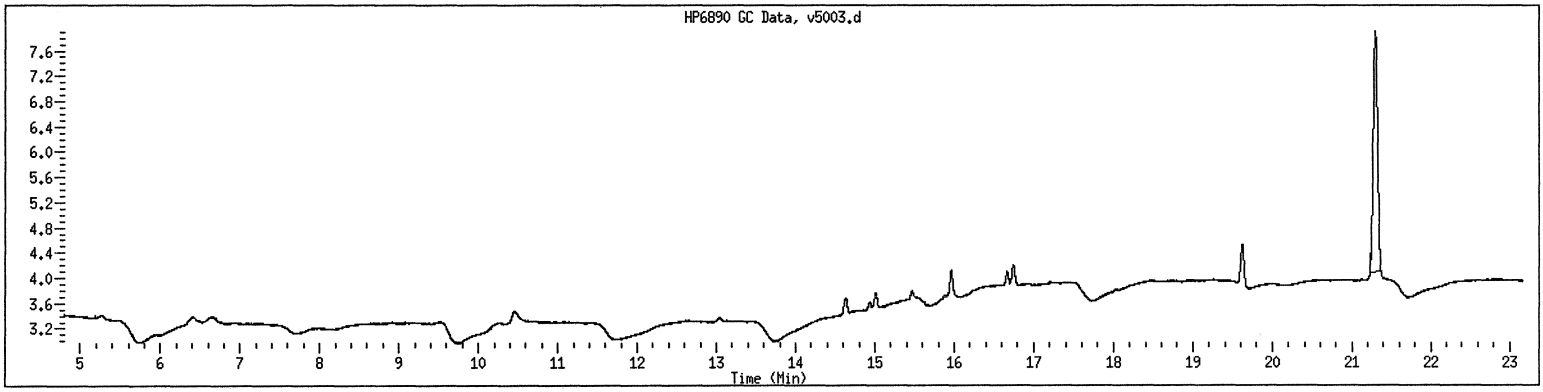
Column diameter: 0.53



211110421 110

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: BLK	SampleType	: SAMPLE
Injection Date	: 11/07/2011 12:21	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: BLK		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	LCS1003188
Lab Code:	LA024 Case No.:	Contract:	
Matrix:	Water	SAS No.:	SDG No.: 211110421
Sample wt/vol:	5 Units: mL	Lab Sample ID:	1003188
Level: (low/med)		Date Collected:	Time:
% Moisture:	decanted: (Y/N)	Date Received:	
GC Column:	ID: (mm)	Date Extracted:	
Concentrated Extract Volume:	5000 (µL)	Date Analyzed:	11/07/11 Time: 1151
Soil Aliquot Volume:	(µL)	Dilution Factor:	1 Analyst: JAR
Injection Volume:	1 (µL)	Prep Method:	
GPC Cleanup: (Y/N)	N pH:	Analytical Method:	MASSVPH
Prep Batch:	Analytical Batch: 468512	Sulfur Cleanup: (Y/N)	N Instrument ID: GCV5B
CONCENTRATION UNITS:	*ug/L*	Lab File ID:	2111107/v5002

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCV-00-4	C5-C8 Aliphatic	152		3.31	15.0	30.0
GCV-00-5	C9-C12 Aliphatic	105		3.20	10.0	20.0
GCV-00-6	C9-C10 Aromatic	54.4		1.24	5.00	10.0

FORM I ORG-1

GCAL, Inc.

Data file : /var/chem/gcv5b.i/2111107.b/v5002.d
Lab Smp Id: 1003188 Client Smp ID: 1003188
Inj Date : 07-NOV-2011 11:51
Operator : JAR Inst ID: gcv5b.i
Smp Info : 1003188
Misc Info : lcs6/12/4
Comment :
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Meth Date : 08-Nov-2011 13:39 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aromatic.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

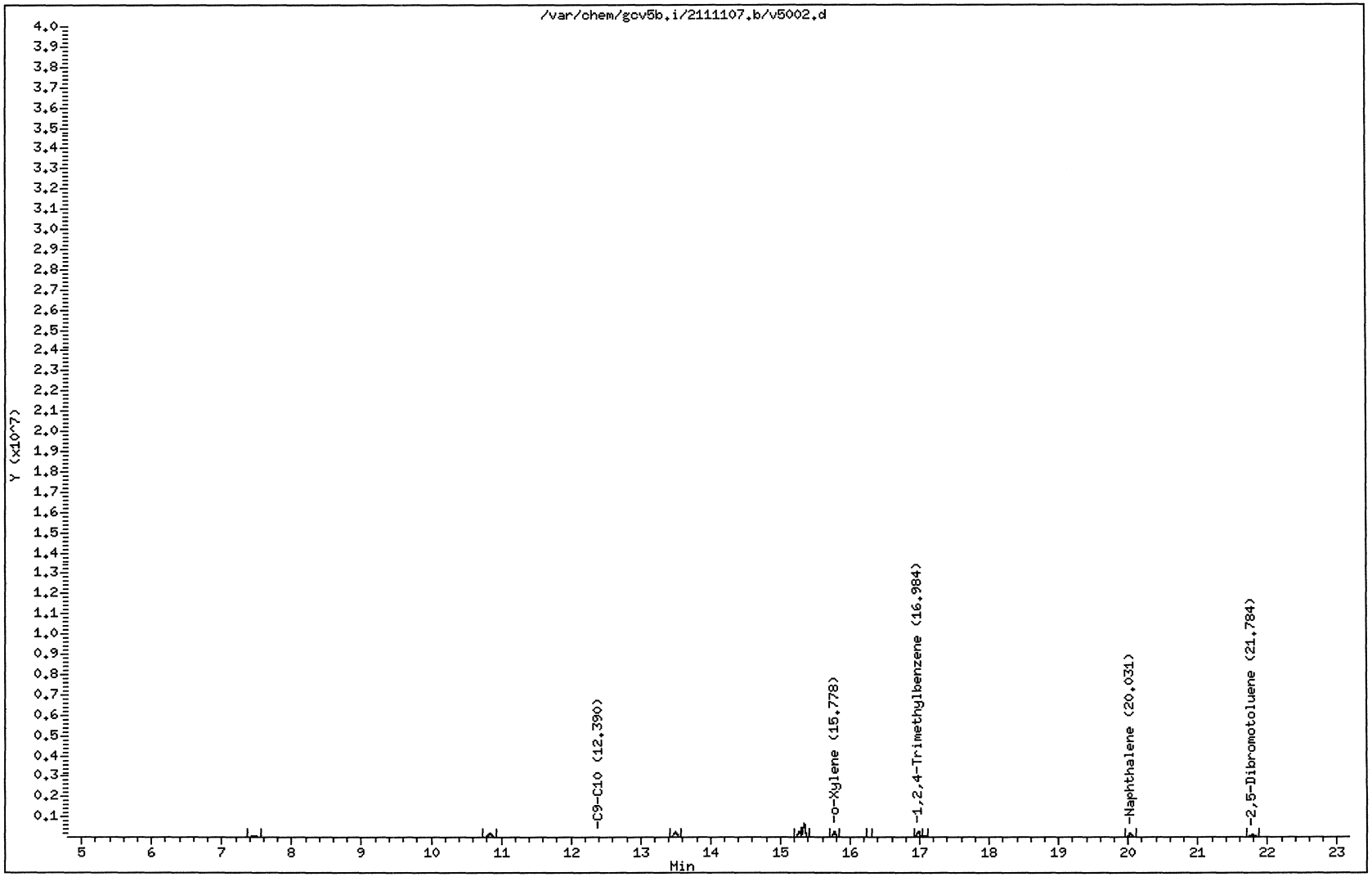
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	6	o-Xylene	15.778	15.777	0.001	709878	52.3134	52.3
	7	1,2,4-Trimethylbenzene	16.984	16.983	0.001	655039	54.4552	54.4
M	9	C9-C10				655039	54.4552	54.4
	8	Naphthalene	20.031	20.028	0.003	556525	54.6350	54.6
$	10	2,5-Dibromotoluene	21.784	21.781	0.003	365094	52.2155	52.2

Data File: /var/chem/gcv5b.i/2111107.b/v5002.d
Date : 07-NOV-2011 11:51
Client ID: 1003188
Sample Info: 1003188
Volume Injected (uL): 1.0
Column phase: DB-624-30

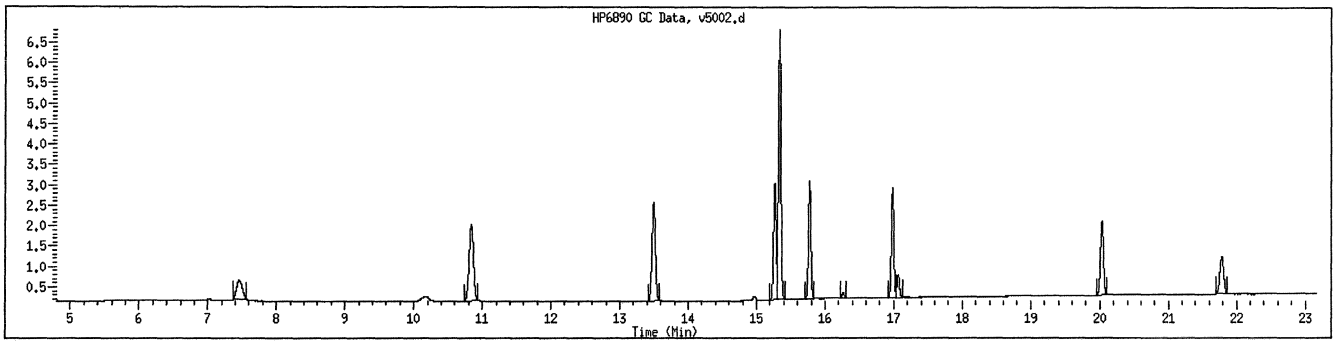
Instrument: gcv5b.i
Operator: JAR
Column diameter: 0.53



Data file : /var/chem/gcv5b.i/2111107.b/v5002.d Page: 1
Report Date: 11/08/2011 13:41

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1003188 SampleType : LCS
Injection Date: 11/07/2011 11:51 Instrument : gcv5b.i
Operator : JAR
Sample Info : 1003188
Misc Info : lcs6/12/4
Method : /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Dilution : 1.0
Matrix : WATER
Integrator : Falcon Compound Sublist: aromatic



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcv5a.i/2111107.b/v5002.d
Lab Smp Id: lcs6/12/4
Inj Date : 07-NOV-2011 11:51
Operator : JAR Inst ID: gcv5a.i
Smp Info : lcs6/12/4
Misc Info :
Comment :
Method : /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Meth Date : 07-Nov-2011 10:29 jar Quant Type: ESTD
Cal Date : 05-NOV-2011 01:52 Cal File: v5011.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: aliphatic1+surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vo	1.00000	Volume of sample extracted (mL)
Vi	1.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

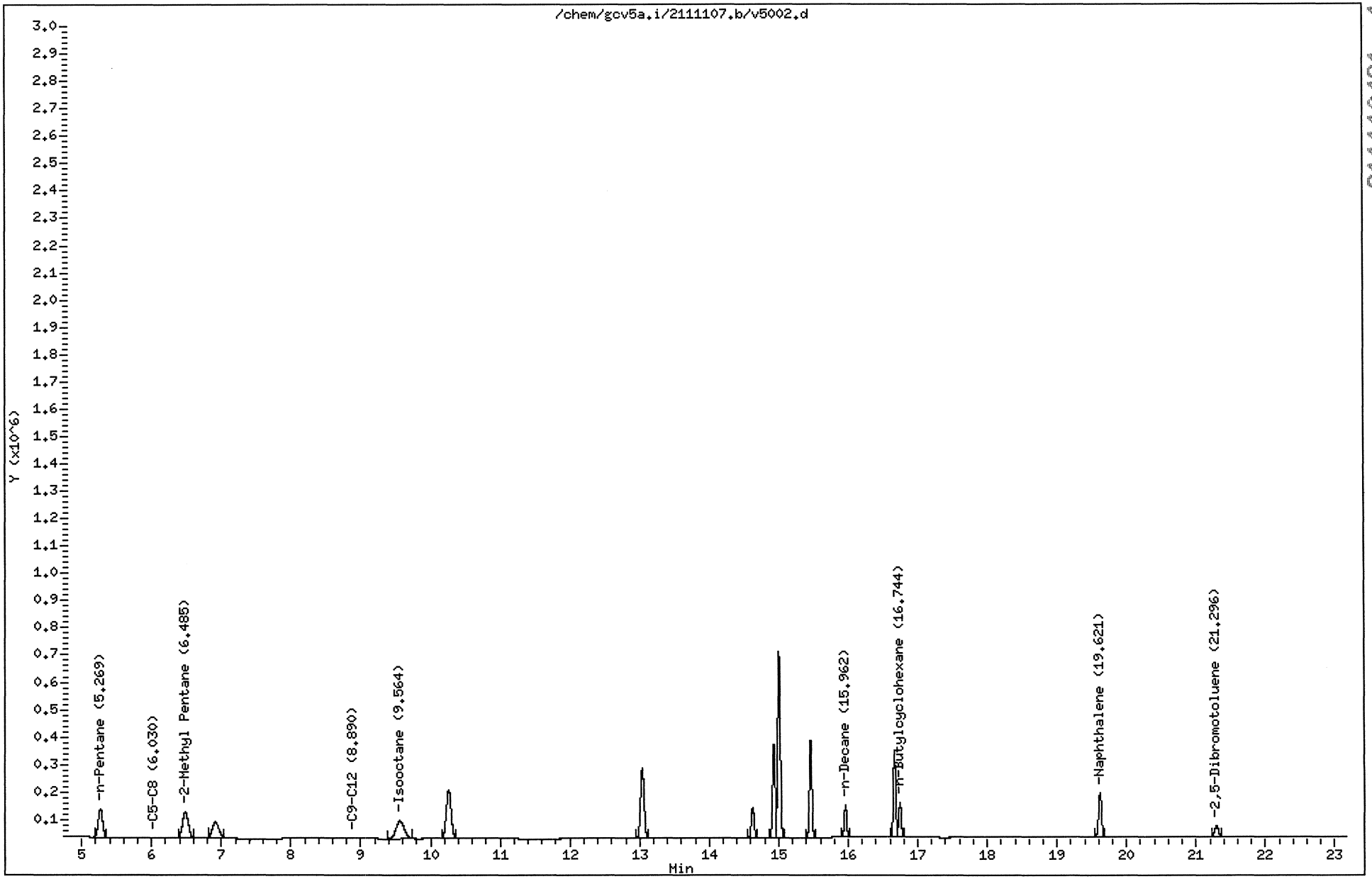
		Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
M	2	C5-C8				1496403	152.268	152
	1	n-Pentane	5.269	5.263	0.006	446597	49.6209	49.6
	3	2-Methyl Pentane	6.485	6.480	0.005	522005	50.0112	50.0
	6	Isooctane	9.564	9.557	0.007	527801	52.6359	52.6(M1)
	13	n-Decane	15.962	15.959	0.003	281892	50.7463	50.7
	15	n-Butylcyclohexane	16.744	16.742	0.002	324847	54.5185	54.5
	16	Naphthalene	19.621	19.617	0.004	473106	53.4382	53.4
M	5	C9-C12				606739	105.265	105
$	17	2,5-Dibromotoluene	21.296	21.294	0.002	146985	49.1646	49.2

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /chem/gcv5a.i/2111107.b/v5002.d
Date : 07-NOV-2011 11:51
Client ID:
Sample Info: lcs6/12/4
Volume Injected (uL): 1.0
Column phase: DB-624-30

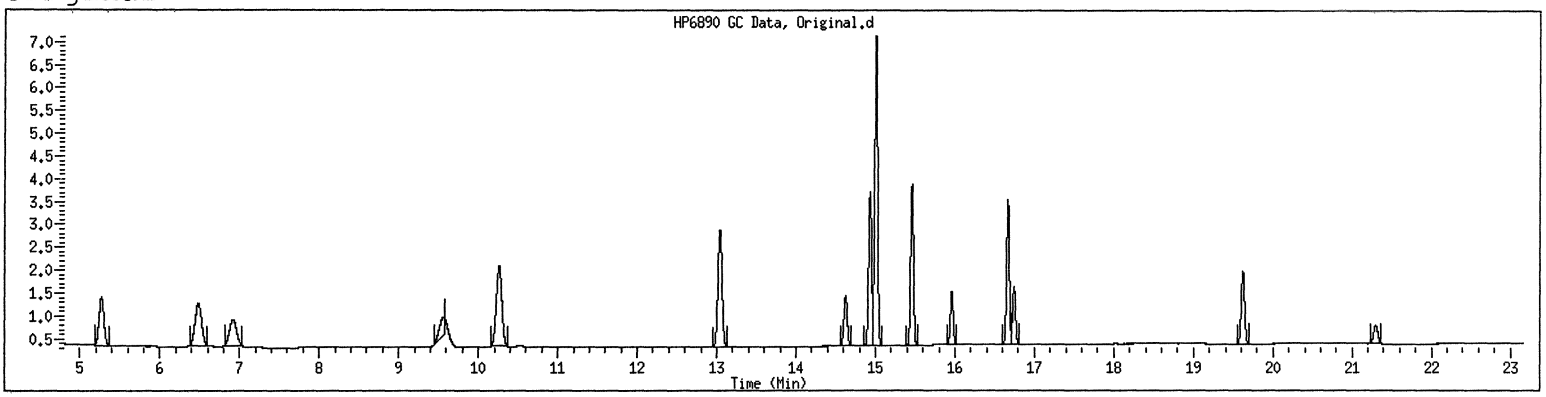
Instrument: gcv5a.i
Operator: JAR
Column diameter: 0.53



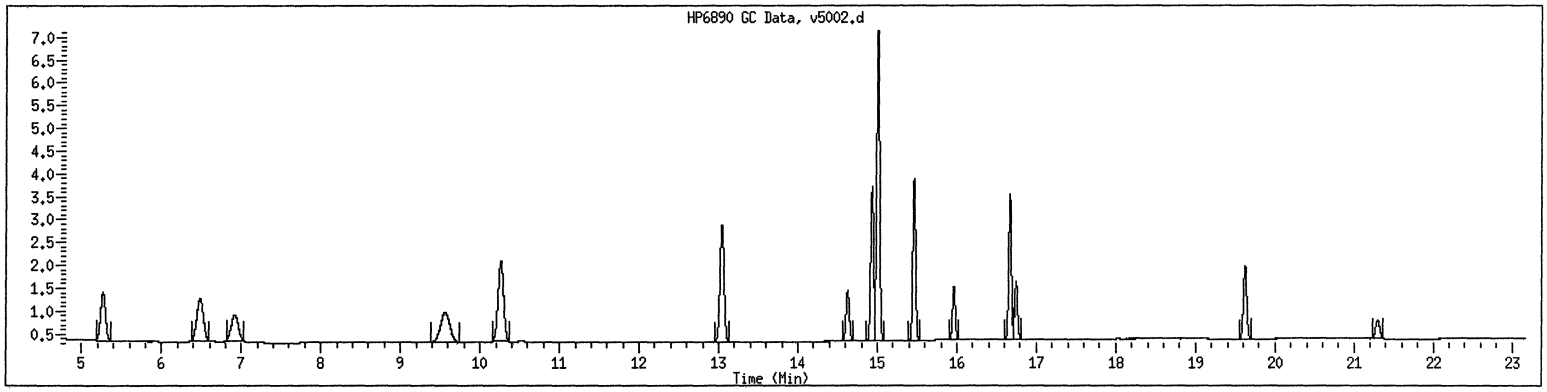
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: lcs6/12/4	SampleType	: LCS
Injection Date	: 11/07/2011 11:51	Instrument	: gcv5a.i
Operator	: JAR		
Sample Info	: lcs6/12/4		
Misc Info	:		
Method	: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m		
Dilution	: 1.0		
Matrix	: WATER		
Integrator	: Falcon	Compound Sublist	: aliphatic1+surr

Original



Final



LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 11/17/2011
Instrument: gcv5b.i
Method File: /var/chem/gcv5b.i/2111104P.b/PIDMVPH.m
Batch: /chem/gcv5b.i/2111104P.b
Column-Detector: DB-624-30

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
VPH05/6/12/4		v5001.d	1.00 ml	04-NOV-2011 20:57	1.000	JAR	1	aromatic
VPH10/6/12/4		v5003.d	1.00 ml	04-NOV-2011 21:56	1.000	JAR	1	aromatic
VPH20/6/12/4		v5005.d	5.00 g	04-NOV-2011 22:55	50.000	JAR	1	aromatic
VPH50/6/12/4		v5007.d	1.00 ml	04-NOV-2011 23:54	1.000	JAR	1	aromatic
VPH80/6/12/4		v5009.d	1.00 ml	05-NOV-2011 00:53	1.000	JAR	1	aromatic
VPH100/6/12/4		v5011.d	1.00 ml	05-NOV-2011 01:52	1.000	JAR	1	aromatic
ICV6/12/5		v5013.d	5.00 g	05-NOV-2011 02:51	50.000	JAR	1	aromatic

LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 11/08/2011
Instrument: gcv5b.i
Method File: /var/chem/gcv5b.i/2111107.b/PIDMVPH.m
Batch: /var/chem/gcv5b.i/2111107.b
Column-Detector: DB-624-30

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
VPH6/12/4		v5001.d	5.00 g	07-NOV-2011 11:22	50.000	JAR	1	aromatic
1003188		v5002.d	1.00 ml	07-NOV-2011 11:51	1.000	JAR	1	aromatic
1003187		v5003.d	1.00 ml	07-NOV-2011 12:21	1.000	JAR	1	aromatic
BLK		v5004.d	5.00 g	07-NOV-2011 12:50	50.000	JAR	1	aromatic
21110202112		v5005.d	1.00 ml	07-NOV-2011 13:19	50.000	JAR	1	aromatic
21110202112		v5006.d	1.00 ml	07-NOV-2011 13:49	50.000	JAR	1	aromatic
21110202105		v5007.d	5.00 g	07-NOV-2011 14:18	10000.000	JAR	1	aromatic
21110202105		v5008.d	5.00 g	07-NOV-2011 14:48	10000.000	JAR	1	aromatic
21110202112		v5009.d	5.00 g	07-NOV-2011 15:17	50.000	JAR	1	aromatic
21110202112		v5010.d	1.00 ml	07-NOV-2011 15:47	50.000	JAR	1	aromatic
VPH6/12/4		v5011.d	5.00 g	07-NOV-2011 16:16	50.000	JAR	1	aromatic
21110312401		v5012.d	1.00 ml	07-NOV-2011 18:26	10.000	JAR	1	aromatic
21110312402		v5013.d	1.00 ml	07-NOV-2011 18:55	10.000	JAR	1	aromatic
21110312403		v5014.d	1.00 ml	07-NOV-2011 19:25	10.000	JAR	1	aromatic
21110312404		v5015.d	1.00 ml	07-NOV-2011 19:55	10.000	JAR	1	aromatic
21110312408		v5016.d	1.00 ml	07-NOV-2011 21:53	1.000	JAR	1	aromatic
21110312406		v5017.d	1.00 ml	07-NOV-2011 20:54	1.000	JAR	1	aromatic
21110312407		v5018.d	1.00 ml	07-NOV-2011 21:23	1.000	JAR	1	aromatic
21110312409		v5019.d	1.00 ml	07-NOV-2011 22:22	1.000	JAR	1	aromatic
21110312410		v5020.d	1.00 ml	07-NOV-2011 22:52	1.000	JAR	1	aromatic
VPH6/12/4		v5021.d	1.00 ml	07-NOV-2011 23:22	1.000	JAR	1	aromatic
VPH6/12/4		v5022.d	1.00 ml	07-NOV-2011 23:51	1.000	JAR	1	aromatic
21110312411		v5023.d	1.00 ml	08-NOV-2011 00:21	1.000	JAR	1	aromatic
21110312412		v5024.d	1.00 ml	08-NOV-2011 00:50	1.000	JAR	1	aromatic
21111042101		v5025.d	1.00 ml	08-NOV-2011 01:20	1.000	JAR	1	aromatic
VPH6/12/4		v5026.d	1.00 ml	08-NOV-2011 01:49	1.000	JAR	1	aromatic
21110312405		v5028.d	1.00 ml	08-NOV-2011 11:23	1.000	JAR	1	aromatic
21110312409		v5029.d	1.00 ml	08-NOV-2011 11:52	1.000	JAR	1	aromatic
21110312410		v5030.d	1.00 ml	08-NOV-2011 12:22	1.000	JAR	1	aromatic
vph6/12/4		v5031.d	1.00 ml	08-NOV-2011 12:51	1.000	JAR	1	aromatic

LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 11/17/2011
Instrument: gcv5a.i
Method File: /var/chem/gcv5a.i/2111104p.b/FIDMVPH.m
Batch: /chem/gcv5a.i/2111104p.b
Column-Detector: DB-624-30

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
VPH05/6/12/4		v5001.d	1.00 ml	04-NOV-2011 20:57	1.000	JAR	1	aliphatic1+surr
VPH10/6/12/4		v5003.d	1.00 ml	04-NOV-2011 21:56	1.000	JAR	1	aliphatic1+surr
VPH20/6/12/4		v5005.d	1.00 ml	04-NOV-2011 22:55	1.000	JAR	1	aliphatic1+surr
VPH50/6/12/4		v5007.d	1.00 ml	04-NOV-2011 23:54	1.000	JAR	1	aliphatic1+surr
VPH80/6/12/4		v5009.d	1.00 ml	05-NOV-2011 00:53	1.000	JAR	1	aliphatic1+surr
VPH100/6/12/4		v5011.d	1.00 ml	05-NOV-2011 01:52	1.000	JAR	1	aliphatic1+surr
ICV6/12/5		v5013.d	1.00 ml	05-NOV-2011 02:51	1.000	JAR	1	aliphatic1+surr

LABORATORY CHRONICLE: GCV DEPARTMENT

Date: 11/08/2011
Instrument: gcv5a.i
Method File: /var/chem/gcv5a.i/2111107.b/FIDMVPH.m
Batch: /var/chem/gcv5a.i/2111107.b
Column-Detector: DB-624-30

Sample ID	ClientName	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
VPH6/12/4		v5001.d	1.00 ml	07-NOV-2011 11:22	1.000	JAR	1	aliphatic1+surr
lcs6/12/4		v5002.d	1.00 ml	07-NOV-2011 11:51	1.000	JAR	1	aliphatic1+surr
BLK		v5003.d	1.00 ml	07-NOV-2011 12:21	1.000	JAR	1	aliphatic1+surr
BLK		v5004.d	1.00 ml	07-NOV-2011 12:50	1.000	JAR	1	aliphatic1+surr
21110202112		v5005.d	1.00 ml	07-NOV-2011 13:19	100.000	JAR	1	aliphatic1+surr
21110202112		v5006.d	1.00 ml	07-NOV-2011 13:49	100.000	JAR	1	aliphatic1+surr
21110270701		v5007.d	5.00 g	07-NOV-2011 14:18	10000.000	JAR	1	aliphatic1+surr
21110270701		v5008.d	5.00 g	07-NOV-2011 14:48	10000.000	JAR	1	aliphatic1+surr
21110202112		v5009.d	1.00 ml	07-NOV-2011 15:17	50.000	JAR	1	aliphatic1+surr
21110202112		v5010.d	1.00 ml	07-NOV-2011 15:47	50.000	JAR	1	aliphatic1+surr
VPH6/12/4		v5011.d	1.00 ml	07-NOV-2011 16:16	1.000	JAR	1	aliphatic1+surr
21110312401		v5012.d	1.00 ml	07-NOV-2011 18:26	10.000	JAR	1	aliphatic1+surr
21110312402		v5013.d	1.00 ml	07-NOV-2011 18:55	10.000	JAR	1	aliphatic1+surr
21110312403		v5014.d	1.00 ml	07-NOV-2011 19:25	10.000	JAR	1	aliphatic1+surr
21110312404		v5015.d	1.00 ml	07-NOV-2011 19:55	10.000	JAR	1	aliphatic1+surr
21110312408		v5016.d	1.00 ml	07-NOV-2011 21:53	1.000	JAR	1	aliphatic1+surr
21110312406		v5017.d	1.00 ml	07-NOV-2011 20:54	1.000	JAR	1	aliphatic1+surr
21110312407		v5018.d	1.00 ml	07-NOV-2011 21:23	1.000	JAR	1	aliphatic1+surr
21110312409		v5019.d	1.00 ml	07-NOV-2011 22:22	1.000	JAR	1	aliphatic1+surr
21110312410		v5020.d	1.00 ml	07-NOV-2011 22:52	1.000	JAR	1	aliphatic1+surr
VPH6/12/4		v5021.d	1.00 ml	07-NOV-2011 23:22	1.000	JAR	1	aliphatic1+surr
VPH6/12/4		v5022.d	1.00 ml	07-NOV-2011 23:51	1.000	JAR	1	aliphatic1+surr
21110312411		v5023.d	1.00 ml	08-NOV-2011 00:21	1.000	JAR	1	aliphatic1+surr
21110312412		v5024.d	1.00 ml	08-NOV-2011 00:50	1.000	JAR	1	aliphatic1+surr
21111042101		v5025.d	1.00 ml	08-NOV-2011 01:20	1.000	JAR	1	aliphatic1+surr
VPH6/12/4		v5026.d	1.00 ml	08-NOV-2011 01:49	1.000	JAR	1	aliphatic1+surr
21110312405		v5028.d	1.00 ml	08-NOV-2011 11:23	1.000	JAR	1	aliphatic1+surr
21110312409		v5029.d	1.00 ml	08-NOV-2011 11:52	1.000	JAR	1	aliphatic1+surr
21110312410		v5030.d	1.00 ml	08-NOV-2011 12:22	1.000	JAR	1	aliphatic1+surr
vph6/12/4		v5031.d	1.00 ml	08-NOV-2011 12:51	1.000	JAR	1	aliphatic1+surr

2E

WATER ORGANIC SURROGATE RECOVERY

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211110421

GC Column (1): DB-5MS-30M ID: .25 (mm) GC Cloumn (2): ID: (mm)

Method: MASSEPH

	EPA SAMPLE NO.	SMC1 1-(1)	Lo	Hi	F	SMC1 1-(2)	Lo	Hi	F	SMC2 2-(1)	Lo	Hi	F	SMC2 2-(2)	Lo	Hi	F	TOT OUT
1.	ES057	85	40	140						68	40	140						0
2.	LCS1004105	98	40	140						82	40	140						0
3.	LCSD1004106	100	40	140						84	40	140						0
4.	MB1004104	92	40	140						80	40	140						0

SMC 1 : 1-Chlorooctadecane SMC 2 : O-Terphenyl

Column to be used to flag recovery limits

* Value outside of contract required limits

D Surrogate diluted out

3E

WATER ORGANICS LCS/LCSD RECOVERY

Lab Name: GCAL

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211110421

Contract: Method: MASSEPH

Prep Batch: 468721 Analytical Batch: 469140

SAMPLE NO : 1004105

COMPOUND	*UNITS*	*SPIKE ADDED*	*SAMPLE CONCENTRATION*	*LCS CONCENTRATION*	*LCS % REC*	*LCS % REC FLAG*	*QC. LIMITS*
C11-C22 Aromatics	ug/L	250	0	188	75		40 - 140
C19-C36 Aliphatic Hydrocarbons	ug/L	150	0	101	67		40 - 140
C9-C18 Aliphatic Hydrocarbons	ug/L	100	0	51.9	52		40 - 140

SAMPLE NO : 1004106

COMPOUND	*UNITS*	*SPIKE ADDED*	*LCSD CONC.*	*LCSD % REC*	*REC FLAG*	*% RPD*	*RPD FLAG*	*QC. LIMITS REC*	*RPD*
C11-C22 Aromatics	ug/L	250	191	76		2		40 - 140	0 - 40
C19-C36 Aliphatic Hydrocarbons	ug/L	150	94.2	63		7		40 - 140	0 - 40
C9-C18 Aliphatic Hydrocarbons	ug/L	100	52.8	53		2		40 - 140	0 - 40

RPD : 0 out of 3 outside limits

Spike Recovery: 0 out of 6 outside limits

FORM III ORG-1

4C

ORGANIC METHOD BLANK SUMMARY

Lab Name: GCAL | Sample ID: MB1004104

Lab Code: LA024 | Case No.: | Contract:

Lab Sample ID: 1004104 | SAS No.: | SDG No.: 211110421

Matrix: Water | Sulfur Cleanup: (Y/N) N | Date Extracted: 11/08/11

Date Analyzed (1): 11/10/11 | Time (1): 1515 | Date Analyzed (2): | Time (2):

Instrument ID (1): GCS19B | Instrument ID (2):

GC Column (1): DB-5MS-30M | ID: .25 (mm) | GC Column (2): | ID: (mm)

Method: MASSEPH | Prep Batch: 468721 | Analytical Batch: 469140

Lab File ID: 2111110/sv19b0

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES

	SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	INSTRUMENT ID
1.	LCS1004105	1004105	11/10/11	1603	GCS19B
2.	LCSD1004106	1004106	11/10/11	1651	GCS19B
3.	ES057	21111042101	11/10/11	2229	GCS19B

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	ES057
Lab Code:	LA024 Case No.:	Contract:	
Matrix:	Water	SAS No.:	SDG No.: 211110421
Sample wt/vol:	990 Units: mL	Lab Sample ID:	21111042101
Level: (low/med)	LOW	Date Collected:	11/02/11 Time: 1105
% Moisture:	decanted: (Y/N)	Date Received:	11/04/11
GC Column:	DB-5MS-30M ID: .25 (mm)	Date Extracted:	11/08/11
Concentrated Extract Volume:	2000 (µL)	Date Analyzed:	11/10/11 Time: 2229
Soil Aliquot Volume:	(µL)	Dilution Factor:	1 Analyst: SMH
Injection Volume:	1 (µL)	Prep Method:	MASS EPH
GPC Cleanup: (Y/N)	N pH:	Analytical Method:	MASSEPH
Prep Batch:	468721 Analytical Batch: 469140	Sulfur Cleanup: (Y/N)	N Instrument ID: GCS19B
CONCENTRATION UNITS:	*ug/L*	Lab File ID:	2111110/sv19b072

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCSV-02-22	C11-C22 Aromatics	50.5	J	42.5	42.5	101
GCSV-02-24	C19-C36 Aliphatic Hydrocarbons	60.6	U	31.6	60.6	101
GCSV-02-23	C9-C18 Aliphatic Hydrocarbons	22.0	U	22.0	22.0	101

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b072.d
Lab Smp Id: 21111042101 Client Smp ID: 1
Inj Date : 10-NOV-2011 22:29
Operator : smh Inst ID: gcsv19b.i
Smp Info : 21111042101*1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 15:43 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	990.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
21 Benzo(g,h,i)Perylene	9.811	13.997	-4.186	201767410	72.6306	147(M1)
M 22 Arom C11-C22				201767410	72.6306	147

QC Flag Legend

M1- Compound response manually integrated because
Target system did not integrate.

Data File: /var/chem/gcsv19b.i/2111110.b/sv19b072.d

Page 1

Date : 10-NOV-2011 22:29

Client ID: 1

Instrument: gcsv19b.i

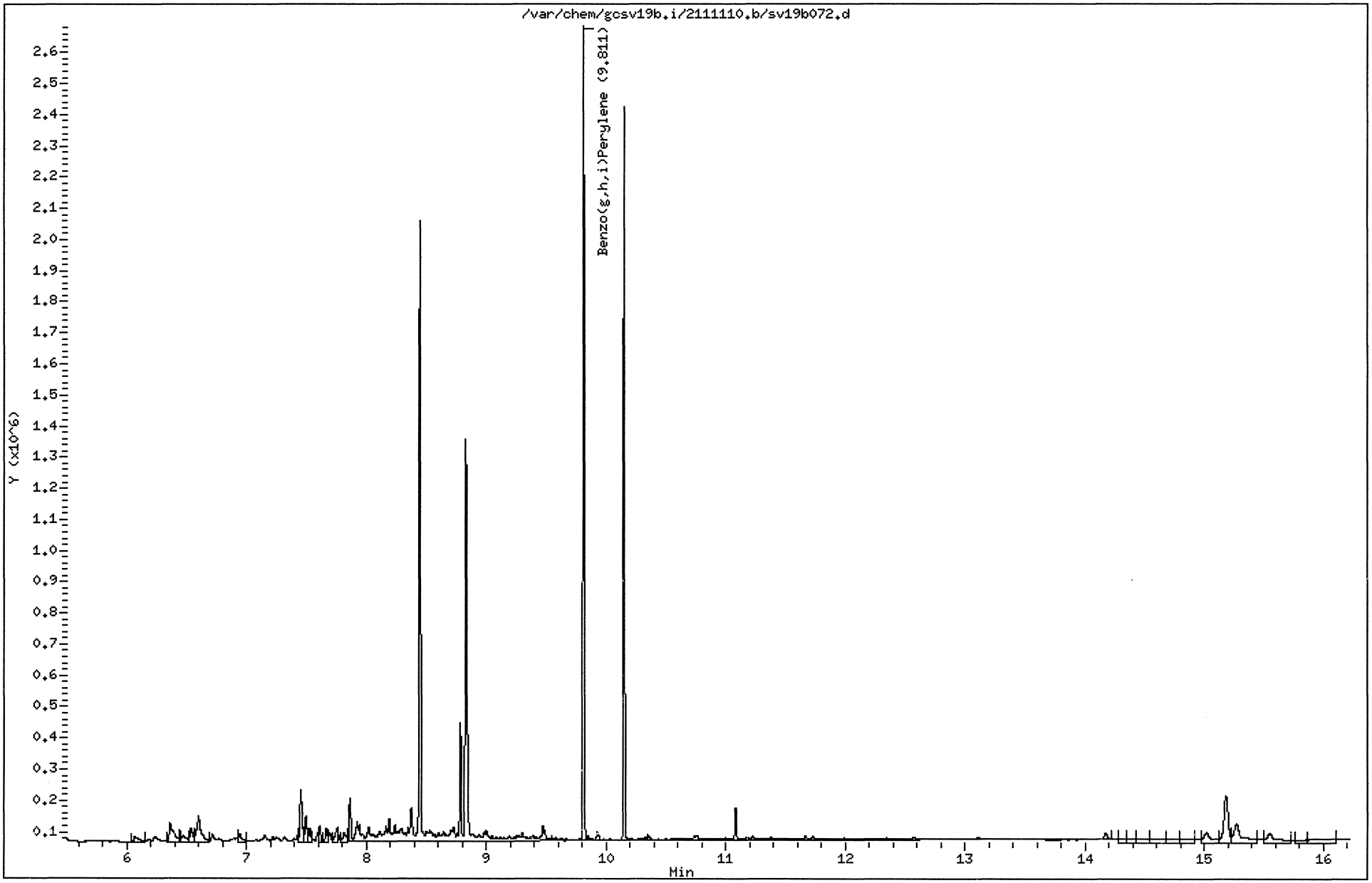
Sample Info: 21111042101*1

Volume Injected (uL): 1.0

Operator: smh

Column phase: DB-5MS-30M

Column diameter: 0.25

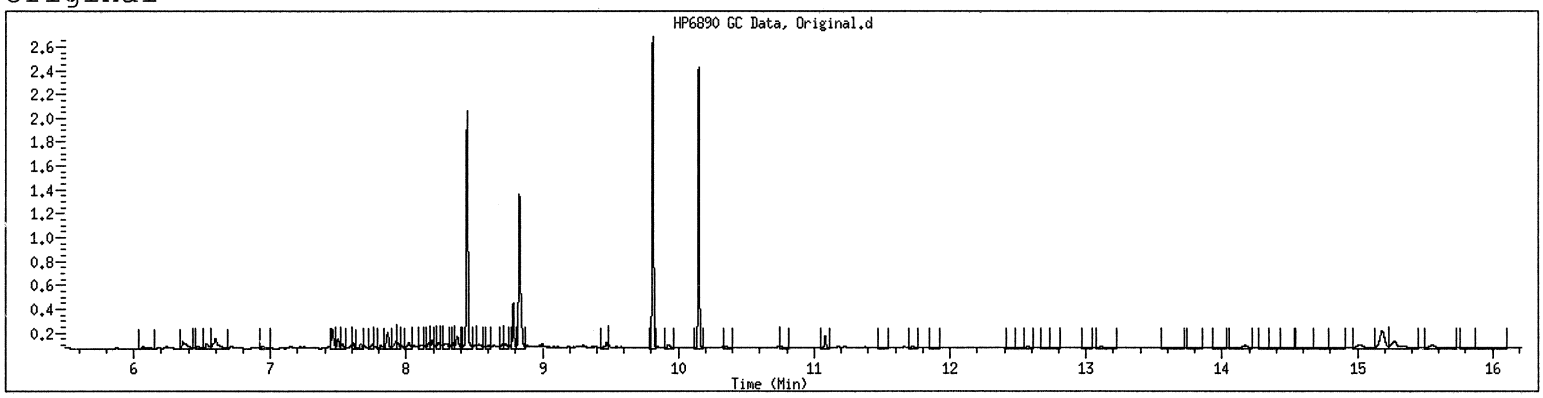


211110421 129

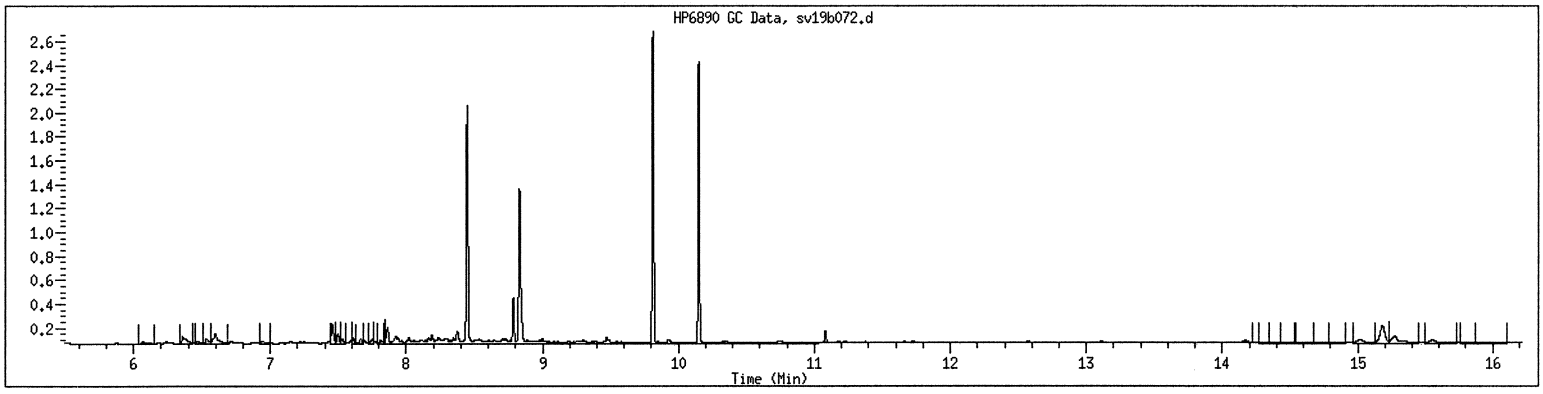
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 21111042101	SampleType	: SAMPLE
Injection Date	: 11/10/2011 22:29	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 21111042101*1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: all

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b072s.d
Lab Smp Id: 21111042101 Client Smp ID: 1
Inj Date : 10-NOV-2011 22:29
Operator : smh Inst ID: gcsv19b.i
Smp Info : 21111042101*1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 15:43 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 72
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: surr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	990.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 3 2-Fluorobiphenyl	8.446	8.454	-0.008	33895572	13.7928	27.9
$ 5 2-Bromonaphthalene	8.830	8.838	-0.008	26845557	17.1124	34.6
$ 10 O-Terphenyl	9.811	9.822	-0.011	39779501	13.4901	27.3
$ 11 Chloro-octadecane	10.149	10.158	-0.009	32440638	11.8418	23.9
M 113 Total Surrogate Area				132961268		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/gcsv19b.i/2111110.b/sv19b072s.d

Date : 10-NOV-2011 22:29

Client ID: 1

Sample Info: 21111042101*1

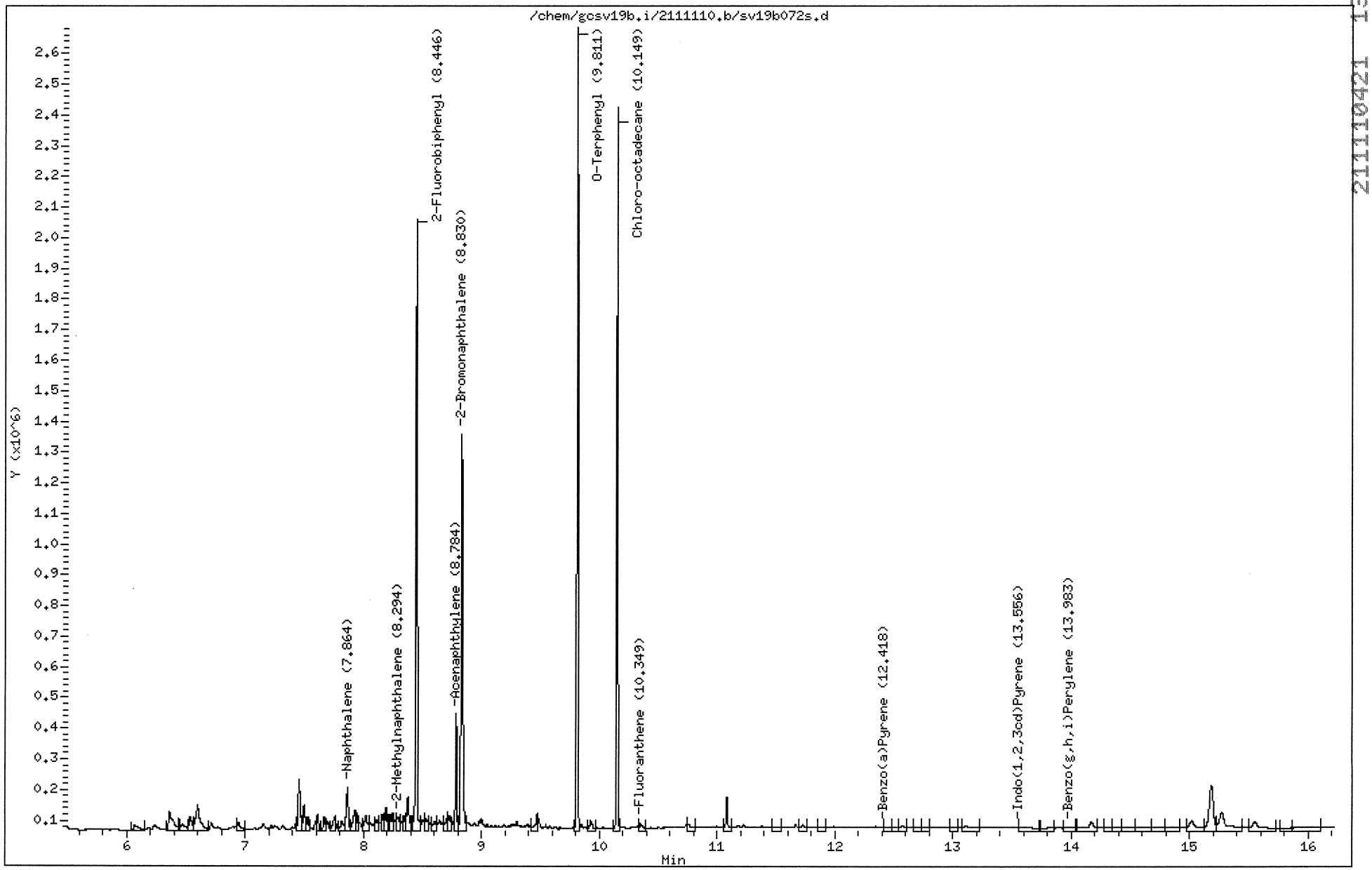
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

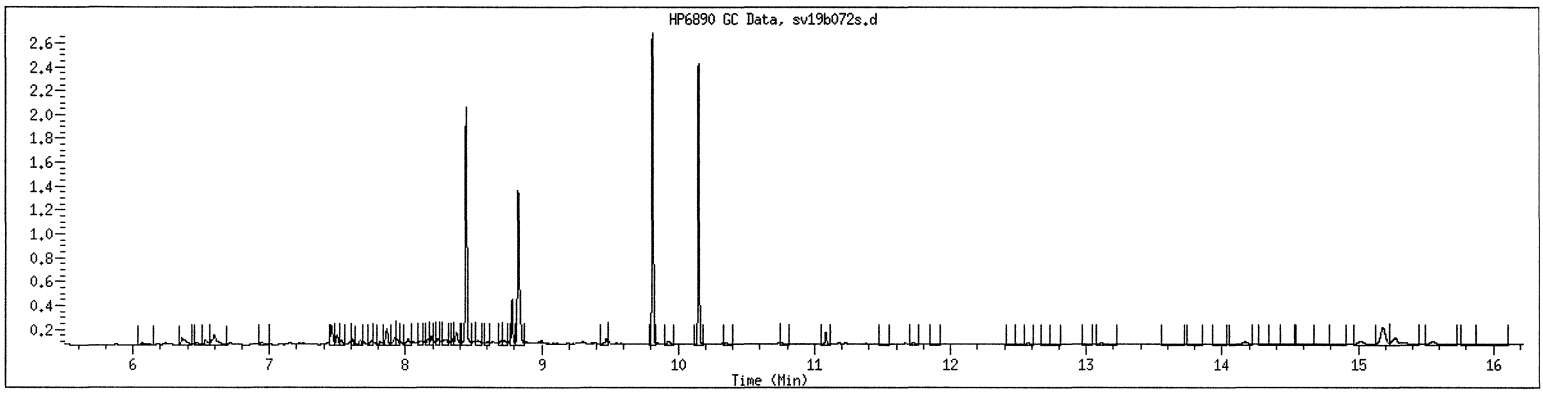
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 21111042101	SampleType	: SAMPLE
Injection Date	: 11/10/2011 22:29	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 21111042101*1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: surr



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b073.d
Lab Smp Id: 21111042101 Client Smp ID: 1
Inj Date : 10-NOV-2011 22:53
Operator : smh Inst ID: gcsv19b.i
Smp Info : 21111042101*1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 11-Nov-2011 15:05 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 73
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	990.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
$ 15 Chlorooctadecane	10.150	10.215	-0.065	14208645	5.18643	10.5(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /var/chem/gcsv19b.i/2111110.b/sv19b073.d

Date : 10-NOV-2011 22:53

Client ID: 1

Sample Info: 21111042101*1

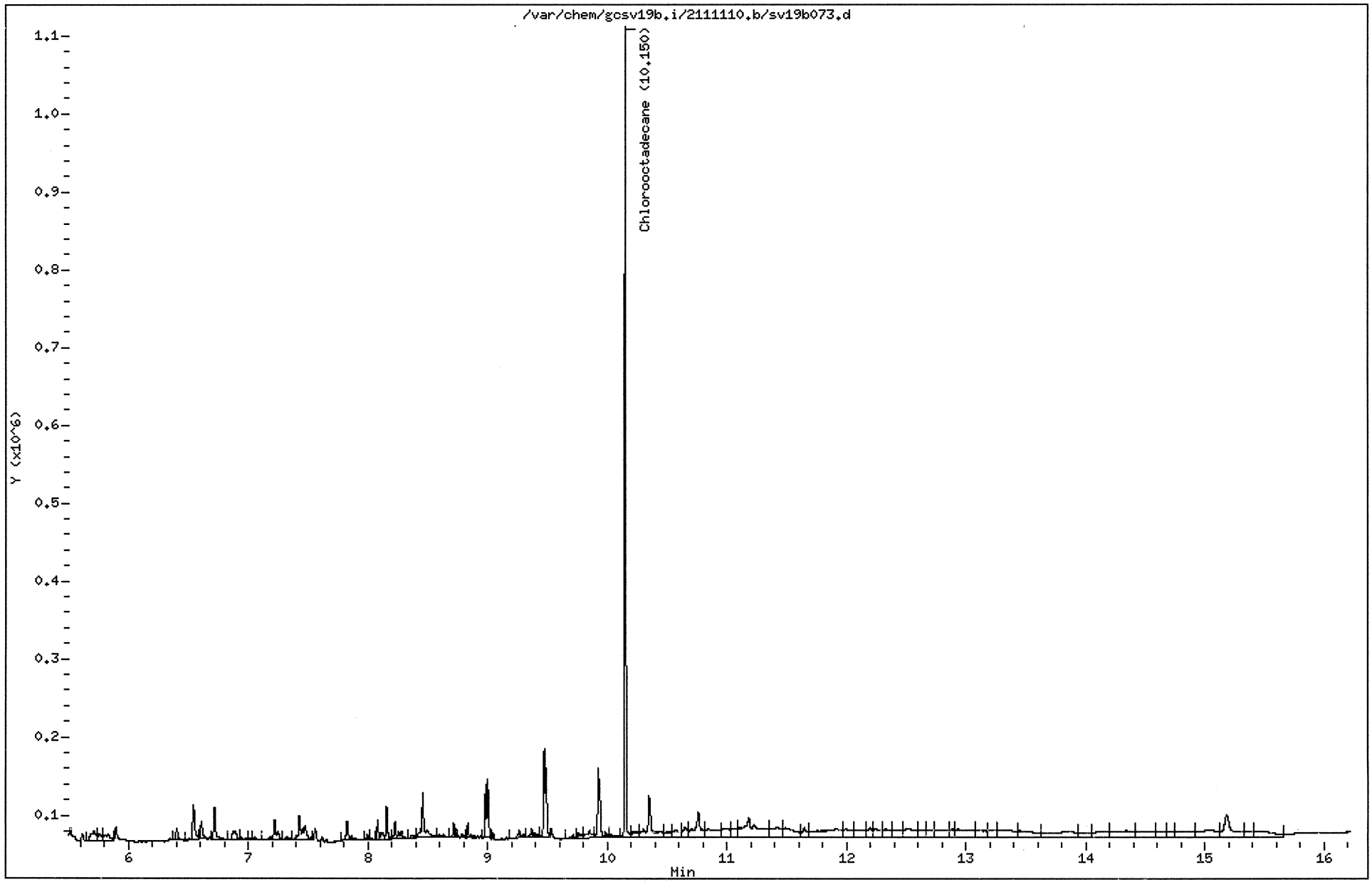
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

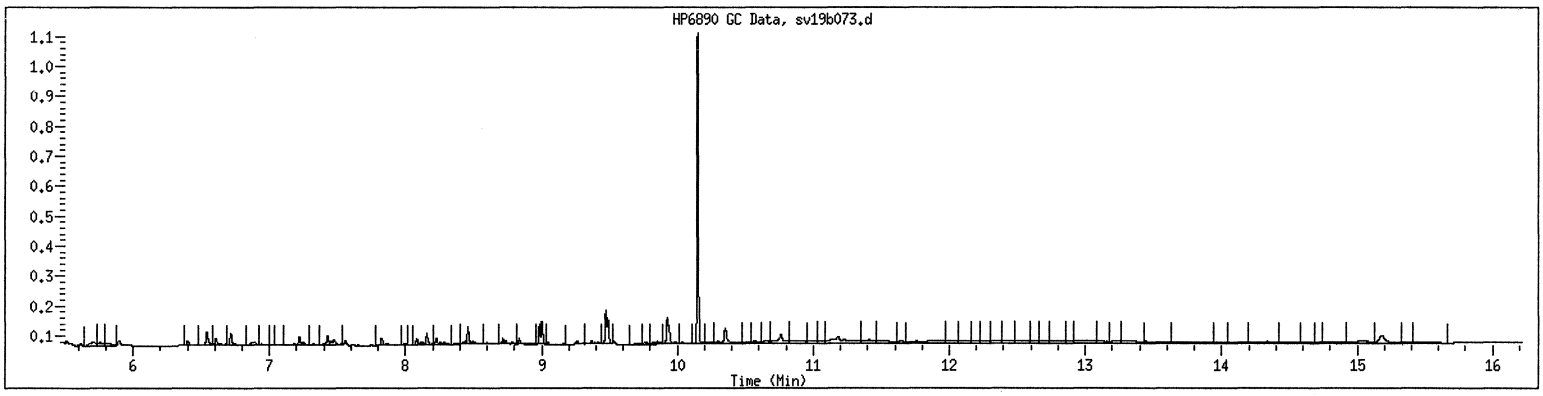
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 21111042101	SampleType	: SAMPLE
Injection Date	: 11/10/2011 22:53	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 21111042101*1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-NOV-2011 12:55
End Cal Date : 03-NOV-2011 14:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Cal Date : 17-Nov-2011 12:26 smh
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcsv19b.i/2111103.b/sv19b052.d
Level 2: /var/chem/gcsv19b.i/2111103.b/sv19b053.d
Level 3: /var/chem/gcsv19b.i/2111103.b/sv19b054.d
Level 4: /var/chem/gcsv19b.i/2111103.b/sv19b055.d
Level 5: /var/chem/gcsv19b.i/2111103.b/sv19b056.d

	1.000	10.000	50.000	100.000	200.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 C-9	2907155	2795641	2675594	2679051	2539259	2719340	5.104
2 C-10	2799368	2826425	2717674	2752582	2600027	2739215	3.226
3 C-11	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 C-12	2927391	2898654	2764473	2774841	2641941	2801460	4.102
5 C-13	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 C-14	2986461	2962295	2862352	2862981	2716594	2878136	3.701
7 C-15	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8 C-16	3076201	3075973	2956170	2972906	2834259	2983102	3.364
9 C-17	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10 C-18	3132014	3109313	2986762	3012326	2866031	3021289	3.526
M 11 Alip C9-C18	2971432	2944717	2827171	2842448	2699685	2857090	3.779
12 C-19	3105166	3106510	2982171	3015246	2877102	3017239	3.169
13 C-20	3095123	3146395	3018289	3051261	2915502	3045314	2.859
14 C-21	+++++	+++++	+++++	+++++	+++++	+++++	+++++
16 C-22	3086197	3160319	3040998	3073189	2942532	3060647	2.587
17 C-23	+++++	+++++	+++++	+++++	+++++	+++++	+++++
18 C-24	3088147	3182819	3098256	3124206	2998582	3098402	2.157
19 C-25	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 C-26	3093703	3199157	3120962	3153549	3033072	3120089	2.004
21 C-27	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 C-28	3086943	3160312	3086851	3125844	3019987	3095987	1.692
115 C-30	3100257	3187831	3112669	3153703	3047243	3120341	1.716

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-NOV-2011 12:55
End Cal Date : 03-NOV-2011 14:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Cal Date : 17-Nov-2011 12:26 smh
Curve Type : Average

	1.000	10.000	50.000	100.000	200.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
23 C-35	+++++	+++++	+++++	+++++	+++++	+++++	+++++
114 C-36	2886196	3002979	2951503	2961566	2825927	2925634	2.383
M 24 Alip C19-C36	3067716	3143290	3051462	3082321	2957493	3060457	2.196
$ 15 Chlorooctadecane	2745086	2791763	2723572	2771406	2666079	2739581	1.772

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b052.d
Lab Smp Id: 1201 Client Smp ID: 1 84-15-4
Inj Date : 03-NOV-2011 12:55
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1201*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 08-Nov-2011 09:16 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 12:55 Cal File: sv19b052.d
Als bottle: 52 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.222	6.232	-0.010	2907155	1.00000	1.00(M2)
	2 C-10	6.925	6.929	-0.004	2799368	1.00000	1.00(M2)
	4 C-12	7.823	7.833	-0.010	2927391	1.00000	1.00(M2)
	6 C-14	8.462	8.471	-0.009	2986461	1.00000	1.00(M2)
	8 C-16	9.008	9.014	-0.006	3076201	1.00000	1.00(M2)
	10 C-18	9.502	9.504	-0.002	3132014	1.00000	1.00(M2)
M	11 Alip C9-C18				17828590	6.00000	6.00
	12 C-19	9.738	9.774	-0.036	3105166	1.00000	1.00(M2)
	13 C-20	9.965	9.957	0.008	3095123	1.00000	1.00(M2)
$	15 Chlorooctadecane	10.185	10.217	-0.032	2745086	1.00000	1.00(M2)
	16 C-22	10.403	10.384	0.019	3086197	1.00000	1.00(M2)
	18 C-24	10.826	10.796	0.030	3088147	1.00000	1.00(M2)
	20 C-26	11.263	11.223	0.040	3093703	1.00000	1.00(M2)

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
22 C-28	11.738	11.724	0.014	3086943	1.00000	1.00(M2)
115 C-30	12.298	12.250	0.048	3100257	1.00000	1.00(AM2)
114 C-36	15.181	15.144	0.037	2886196	1.00000	1.00(AM2)
M 24 Alip C19-C36				24541732	8.00000	8.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111103.b/sv19b052.d

Date : 03-NOV-2011 12:55

Client ID: 1 84-15-4

Sample Info: 1201*1 84-16-1

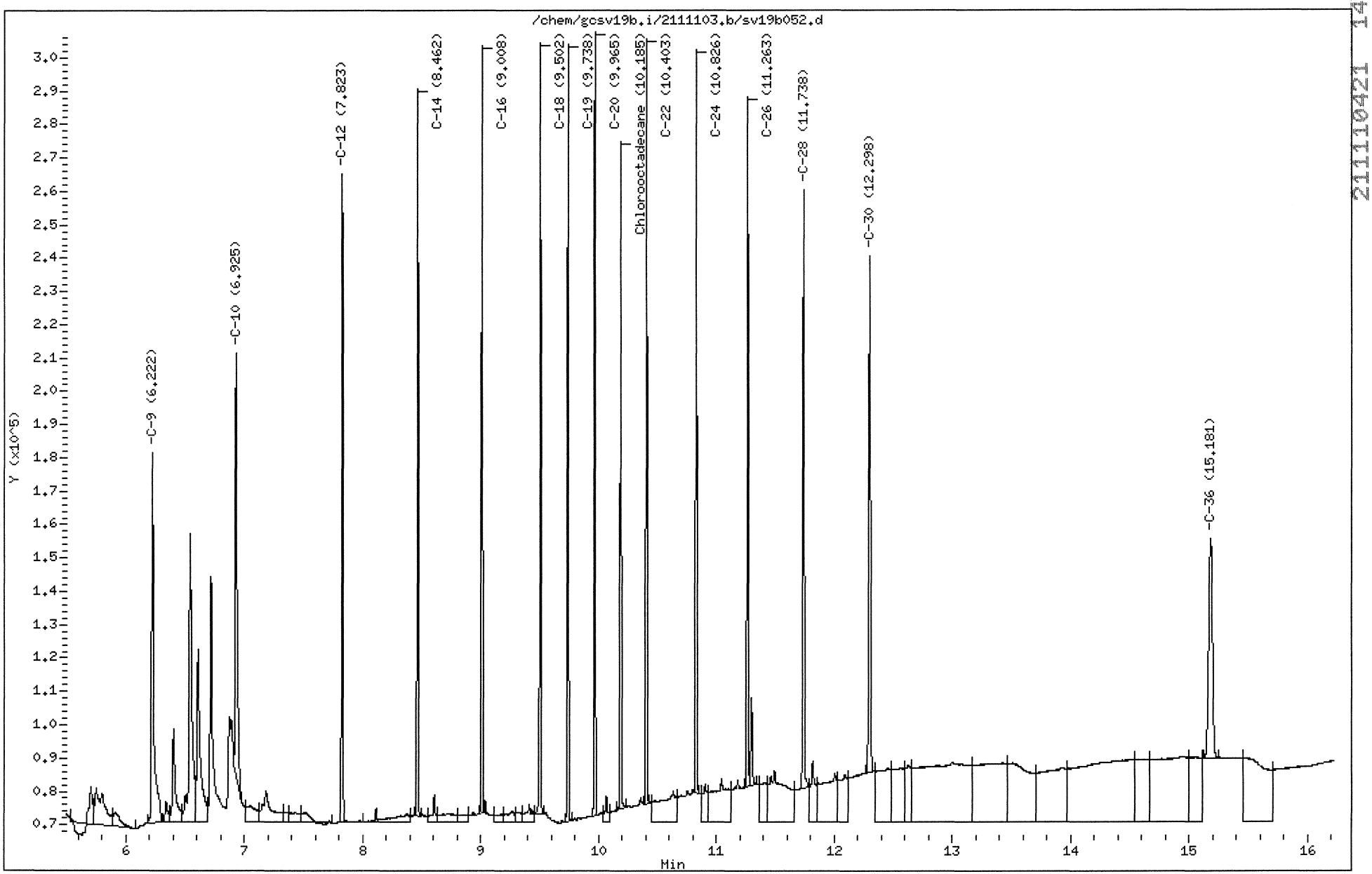
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

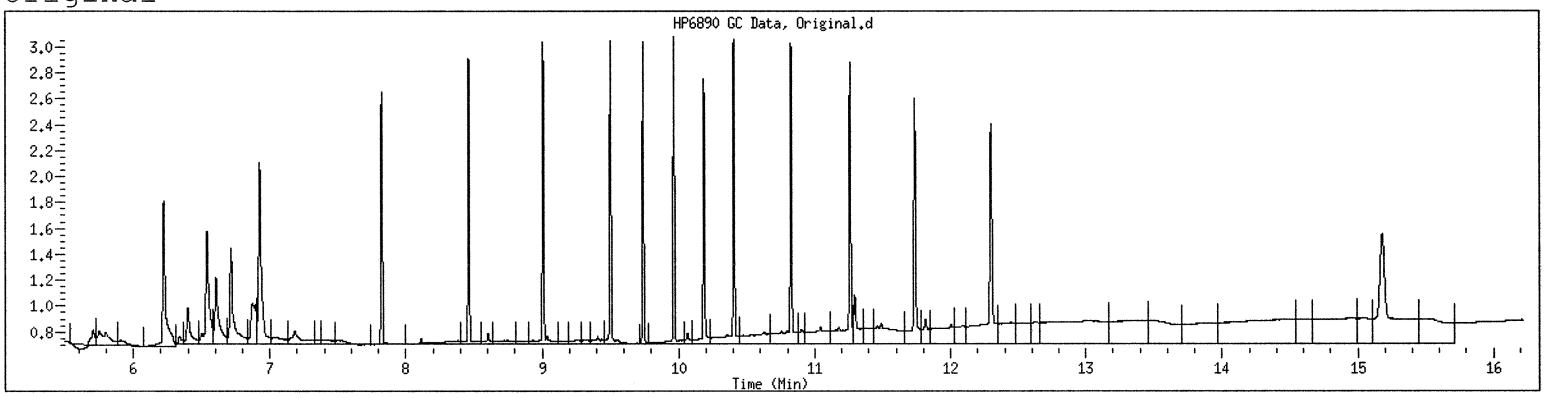
Column diameter: 0.25



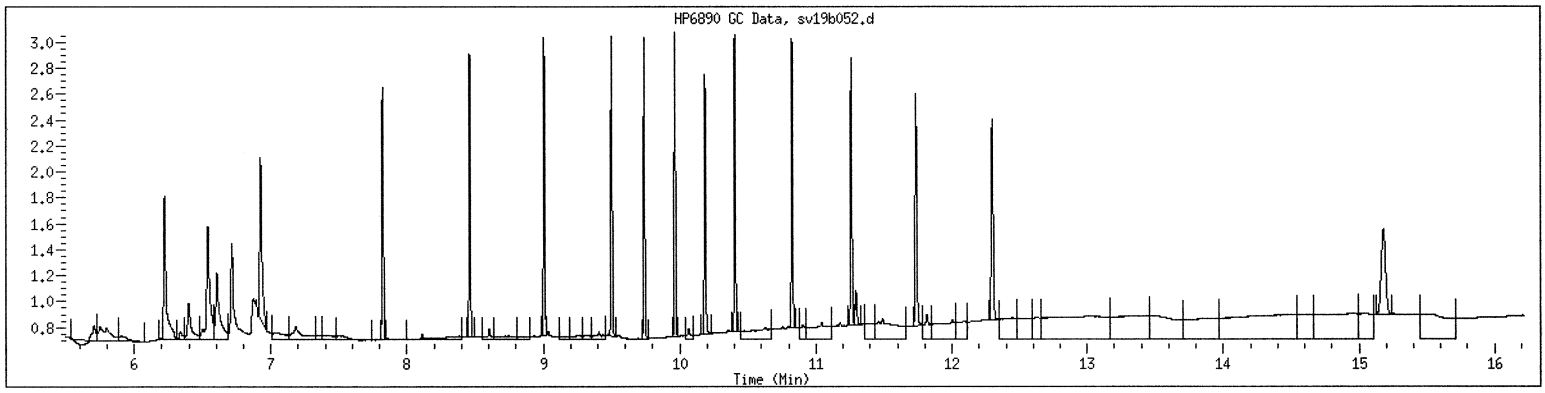
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1201	SampleType	: CALIB_1
Injection Date	: 11/03/2011 12:55	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1201*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b053.d
Lab Smp Id: 1202 Client Smp ID: 1 84-15-4
Inj Date : 03-NOV-2011 13:18
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1202*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 08-Nov-2011 09:16 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053.d
Als bottle: 53 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
1	C-9	6.225	6.232	-0.007	27956412	10.0000	9.80(M2)
2	C-10	6.929	6.929	0.000	28264251	10.0000	10.0(M2)
4	C-12	7.825	7.833	-0.008	28986541	10.0000	9.95(M2)
6	C-14	8.463	8.471	-0.008	29622947	10.0000	9.96(M2)
8	C-16	9.005	9.014	-0.009	30759729	10.0000	10.0(M2)
10	C-18	9.495	9.504	-0.009	31093127	10.0000	9.96(M2)
M 11	Alip C9-C18				176683007	60.0000	59.7
12	C-19	9.726	9.774	-0.048	31065095	10.0000	10.0(M2)
13	C-20	9.950	9.957	-0.007	31463953	10.0000	10.1(M2)
$ 15	Chlorooctadecane	10.165	10.217	-0.052	27917627	10.0000	10.1(M2)
16	C-22	10.379	10.384	-0.005	31603189	10.0000	10.1(M2)
18	C-24	10.792	10.796	-0.004	31828188	10.0000	10.2(M2)
20	C-26	11.219	11.223	-0.004	31991568	10.0000	10.2(M2)

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
22 C-28	11.688	11.724	-0.036	31603121	10.0000	10.1(M2)
115 C-30	12.243	12.250	-0.007	31878310	10.0000	10.1(AM2)
114 C-36	15.117	15.144	-0.027	30029788	10.0000	10.2(AM2)
M 24 Alip C19-C36				251463212	80.0000	81.0

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111103.b/sv19b053.d

Date : 03-NOV-2011 13:18

Client ID: 1 84-15-4

Sample Info: 1202*1 84-16-1

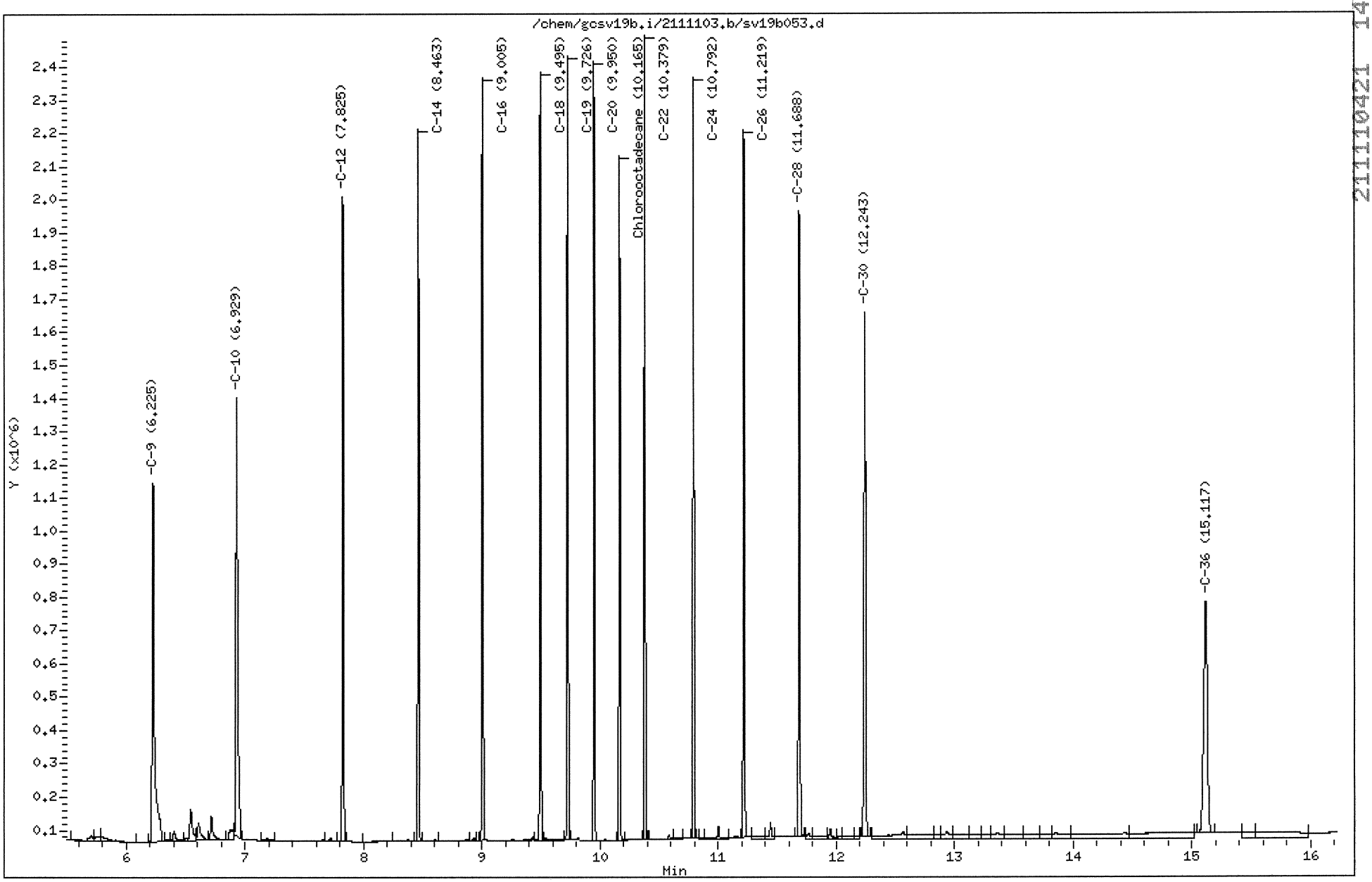
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

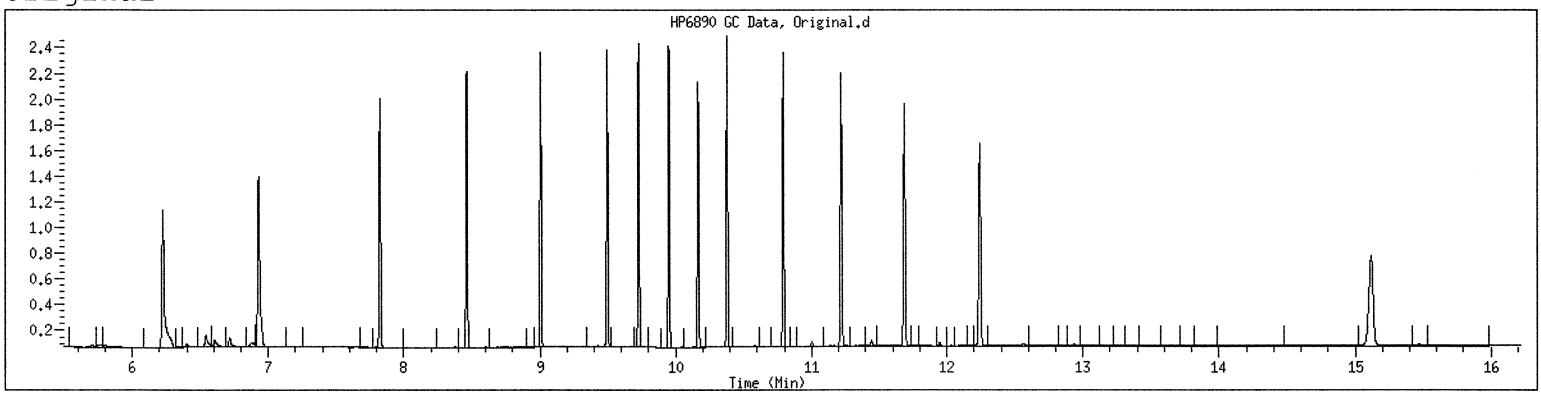
Column diameter: 0.25



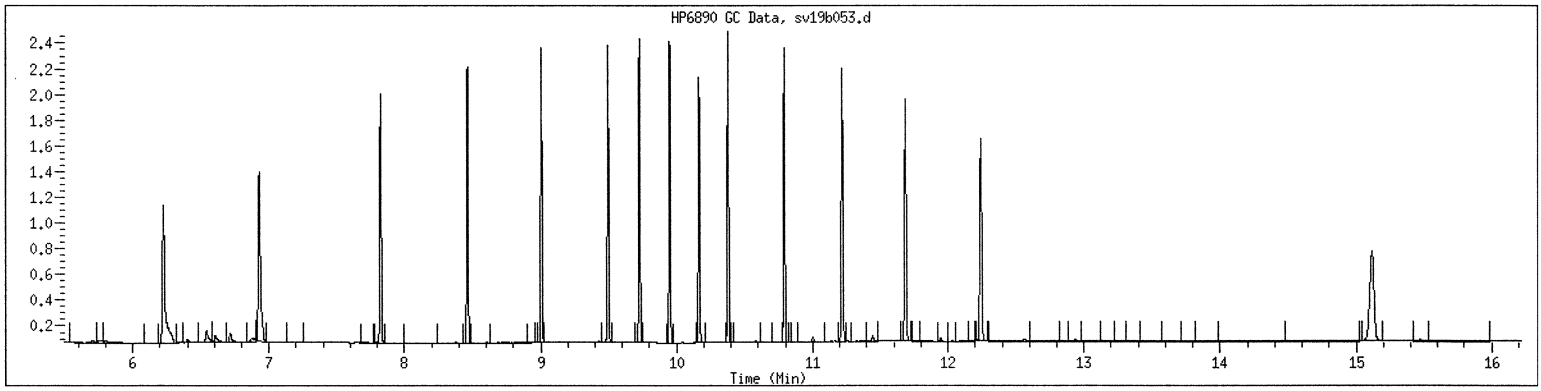
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1202	SampleType	: CALIB_2
Injection Date	: 11/03/2011 13:18	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1202*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b054.d
Lab Smp Id: 1203 Client Smp ID: 1 84-15-4
Inj Date : 03-NOV-2011 13:42
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1203*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 08-Nov-2011 09:16 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:42 Cal File: sv19b054.d
Als bottle: 54 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.230	6.232	-0.002	133779709	50.0000	47.9
	2 C-10	6.931	6.929	0.002	135883716	50.0000	48.9
	4 C-12	7.828	7.833	-0.005	138223627	50.0000	48.3
	6 C-14	8.466	8.471	-0.005	143117588	50.0000	48.7
	8 C-16	9.008	9.014	-0.006	147808492	50.0000	48.7
	10 C-18	9.497	9.504	-0.007	149338101	50.0000	48.5
M	11 Alip C9-C18				848151233	300.000	291
	12 C-19	9.729	9.774	-0.045	149108539	50.0000	48.7
	13 C-20	9.951	9.957	-0.006	150914449	50.0000	48.9
$	15 Chlorooctadecane	10.165	10.217	-0.052	136178585	50.0000	49.5
	16 C-22	10.378	10.384	-0.006	152049887	50.0000	49.1
	18 C-24	10.789	10.796	-0.007	154912784	50.0000	49.6
	20 C-26	11.216	11.223	-0.007	156048078	50.0000	49.7

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
22 C-28	11.684	11.724	-0.040	154342550	50.0000	49.6
115 C-30	12.240	12.250	-0.010	155633447	50.0000	49.7(A)
114 C-36	15.131	15.144	-0.013	147575152	50.0000	50.1(A)
M 24 Alip C19-C36				1220584886	400.000	395

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b054.d

Date : 03-NOV-2011 13:42

Client ID: 1 84-15-4

Sample Info: 1203x1 84-16-1

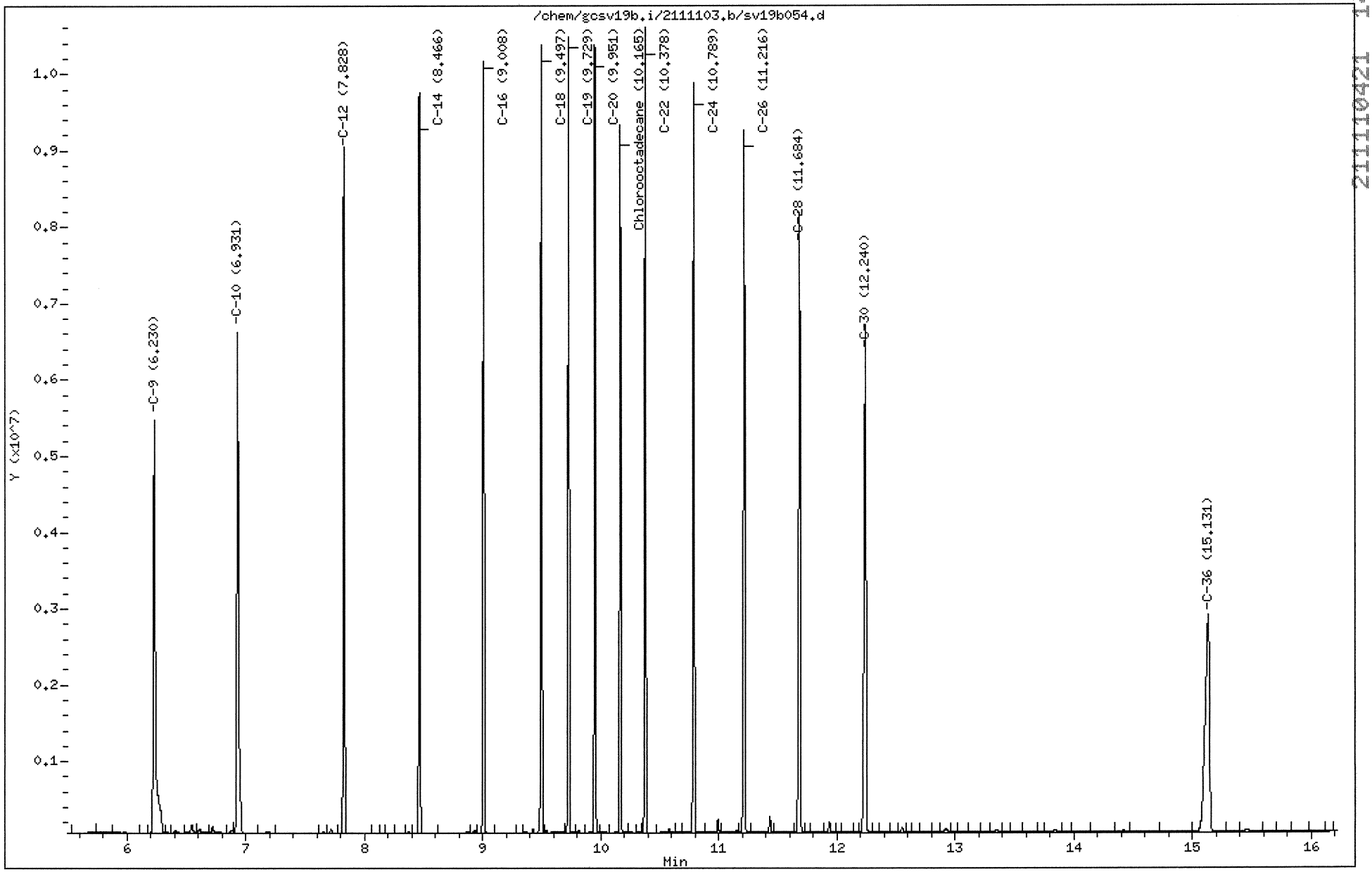
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

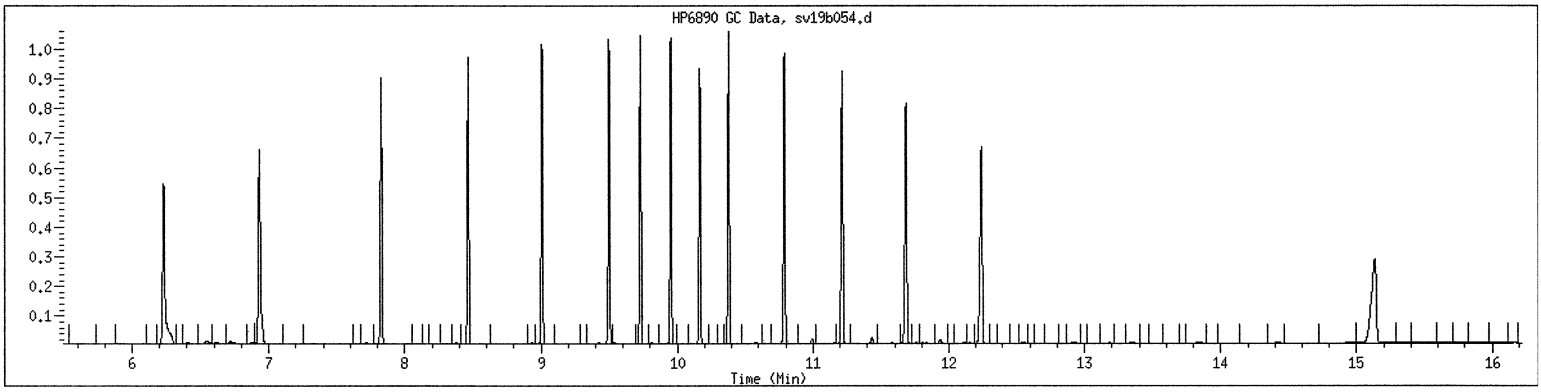
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1203	SampleType	: CALIB_3
Injection Date	: 11/03/2011 13:42	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1203*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b055.d
Lab Smp Id: 1204 Client Smp ID: 1 84-15-4
Inj Date : 03-NOV-2011 14:06
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1204*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 08-Nov-2011 09:16 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:06 Cal File: sv19b055.d
Als bottle: 55 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
1	C-9	6.234	6.232	0.002	267905092	100.000	96.9
2	C-10	6.936	6.929	0.007	275258180	100.000	99.2
4	C-12	7.831	7.833	-0.002	277484130	100.000	97.7
6	C-14	8.469	8.471	-0.002	286298081	100.000	98.1
8	C-16	9.012	9.014	-0.002	297290630	100.000	98.4
10	C-18	9.502	9.504	-0.002	301232611	100.000	98.4
M 11	Alip C9-C18				1705468724	600.000	589
12	C-19	9.733	9.774	-0.041	301524643	100.000	98.8
13	C-20	9.957	9.957	0.000	305126115	100.000	99.1
$ 15	Chlorooctadecane	10.172	10.217	-0.045	277140629	100.000	100
16	C-22	10.385	10.384	0.001	307318934	100.000	99.5
18	C-24	10.798	10.796	0.002	312420640	100.000	100
20	C-26	11.227	11.223	0.004	315354910	100.000	100

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
22 C-28	11.697	11.724	-0.027	312584380	100.000	100
115 C-30	12.256	12.250	0.006	315370277	100.000	100(A)
114 C-36	15.168	15.144	0.024	296156565	100.000	100(A)
M 24 Alip C19-C36				2465856464	800.000	799

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b055.d

Date : 03-NOV-2011 14:06

Client ID: 1 84-15-4

Sample Info: 1204*1 84-16-1

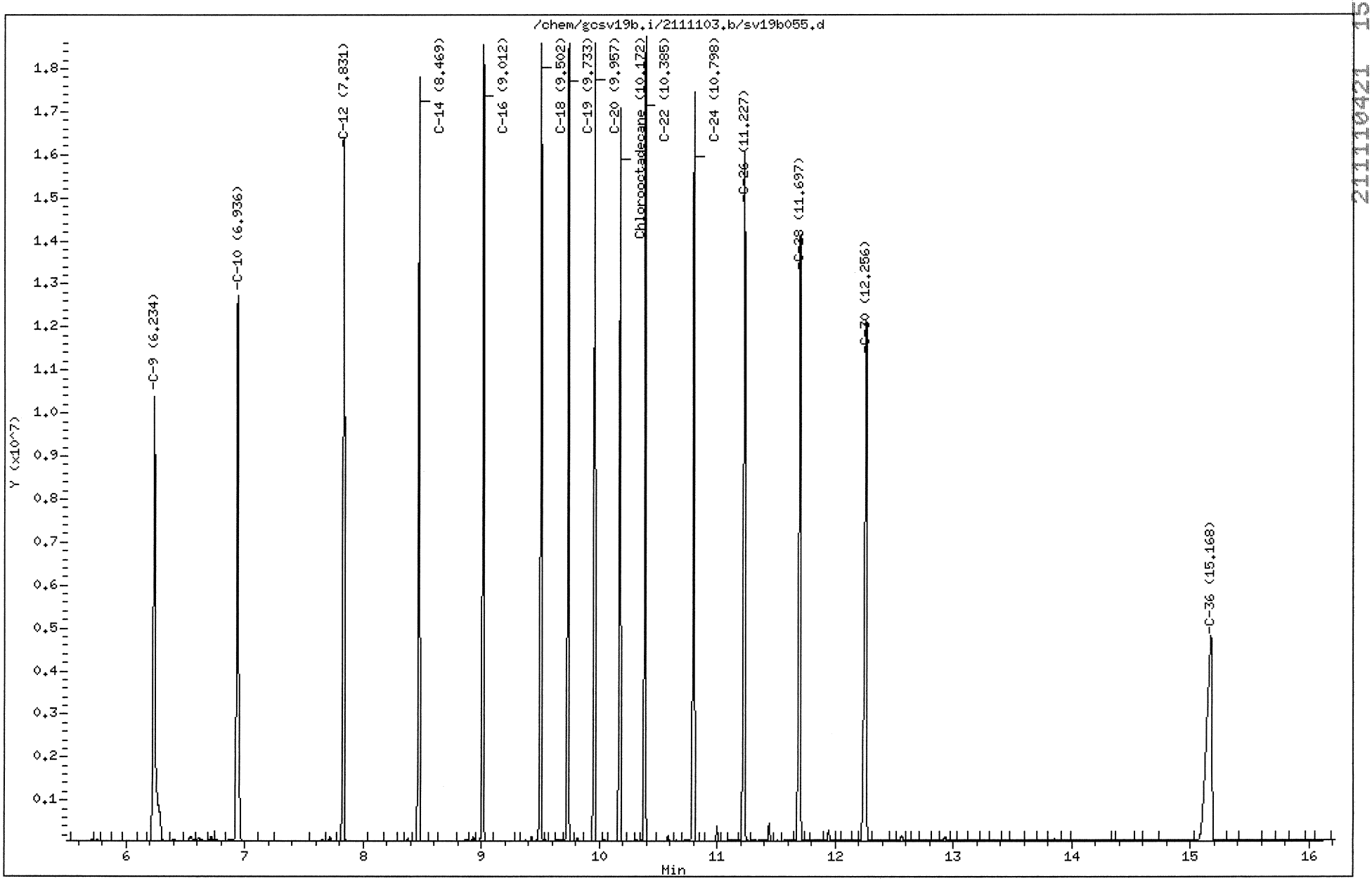
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

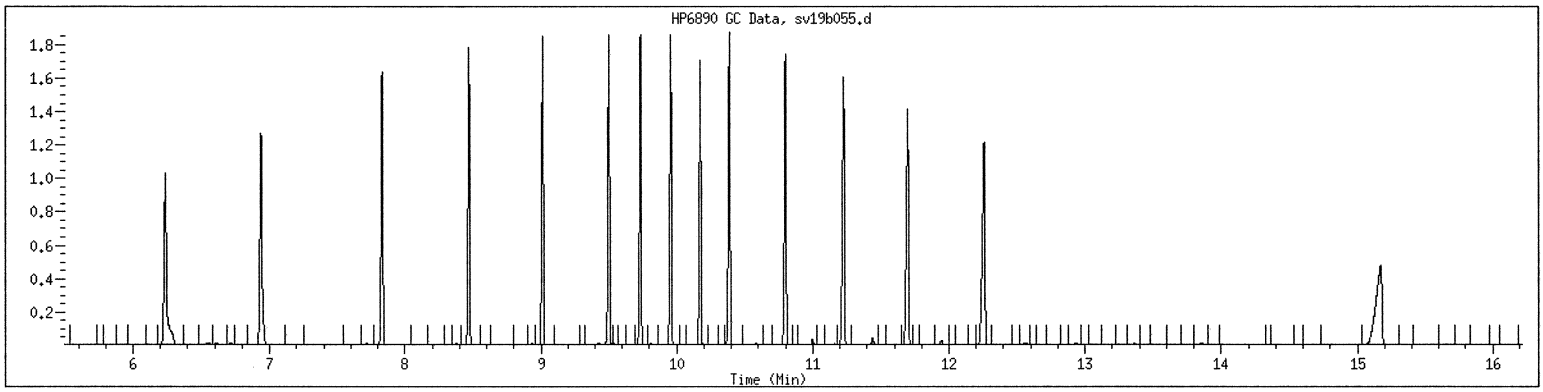
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 11/03/2011 14:06	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1204*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b056.d
Lab Smp Id: 1205 Client Smp ID: 1 84-15-4
Inj Date : 03-NOV-2011 14:30
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1205*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 08-Nov-2011 09:16 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 56 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.235	6.232	0.003	507851786	200.000	187
	2 C-10	6.940	6.929	0.011	520005449	200.000	190
	4 C-12	7.836	7.833	0.003	528388238	200.000	189
	6 C-14	8.473	8.471	0.002	543318717	200.000	189
	8 C-16	9.016	9.014	0.002	566851761	200.000	190
	10 C-18	9.505	9.504	0.001	573206156	200.000	190
M	11 Alip C9-C18				3239622107	1200.00	1130
	12 C-19	9.736	9.774	-0.038	575420346	200.000	191
	13 C-20	9.959	9.957	0.002	583100339	200.000	191
$	15 Chlorooctadecane	10.174	10.217	-0.043	533215722	200.000	195
	16 C-22	10.386	10.384	0.002	588506366	200.000	192
	18 C-24	10.798	10.796	0.002	599716399	200.000	194
	20 C-26	11.226	11.223	0.003	606614444	200.000	194

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
22 C-28	11.698	11.724	-0.026	603997432	200.000	195
115 C-30	12.259	12.250	0.009	609448655	200.000	195(A)
114 C-36	15.188	15.144	0.044	565185453	200.000	193(A)
M 24 Alip C19-C36				4731989434	1600.00	1550

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b056.d

Date : 03-NOV-2011 14:30

Client ID: 1 84-15-4

Sample Info: 1205*1 84-16-1

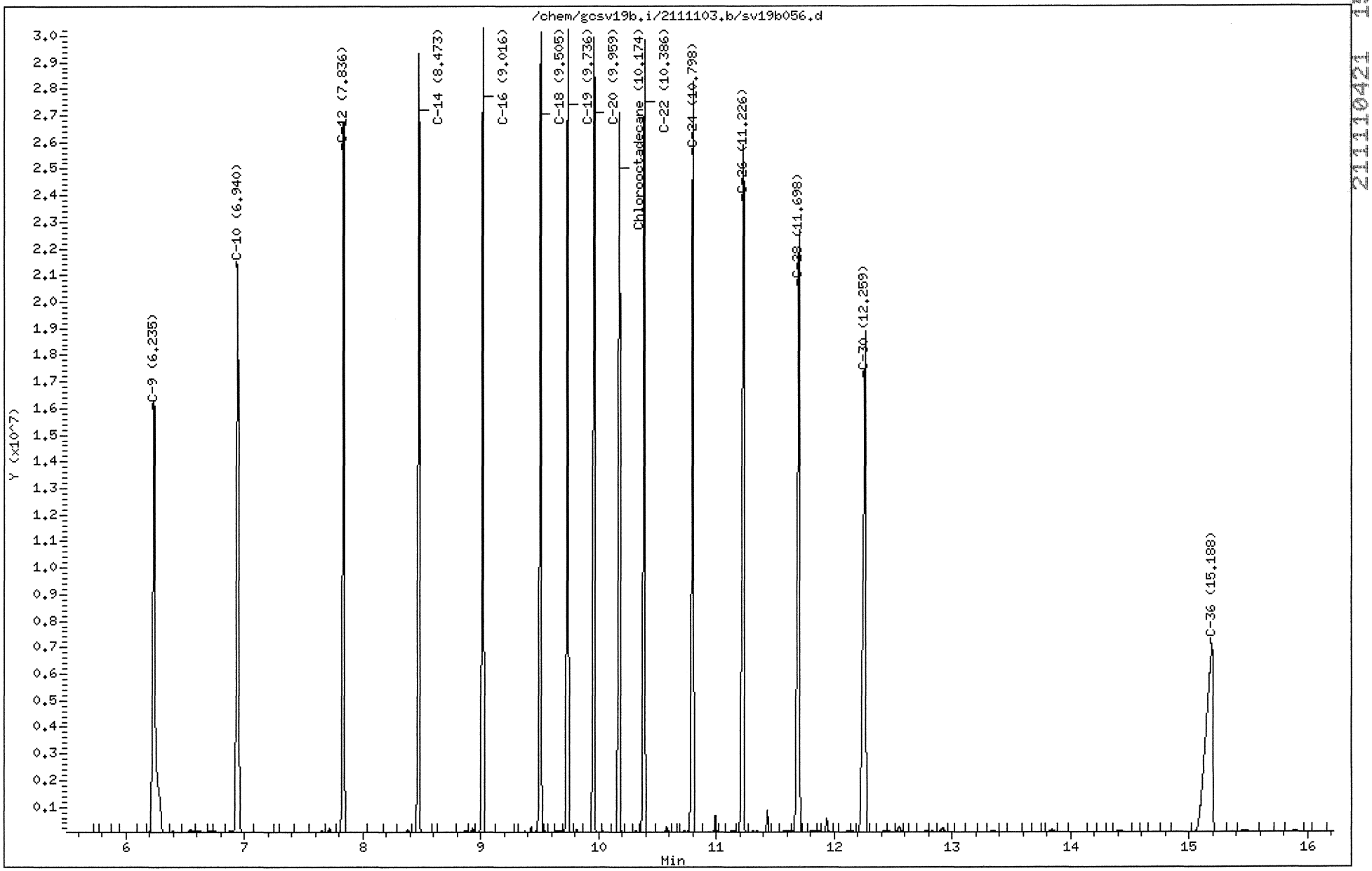
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

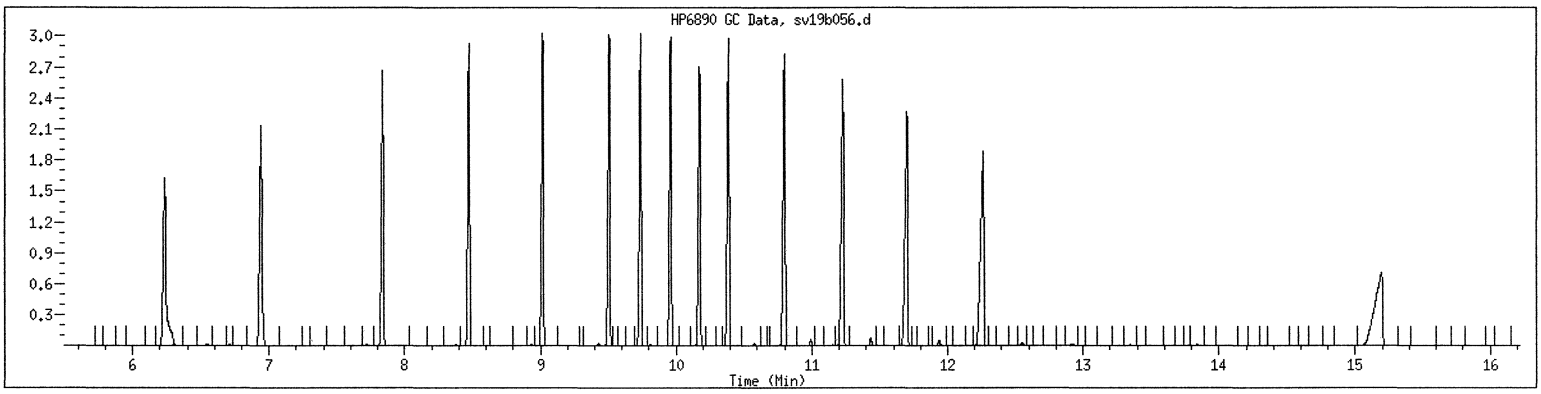
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1205	SampleType	: CALIB_5
Injection Date	: 11/03/2011 14:30	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1205*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

Report Date: 08-Nov-2011 08:46

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2111103
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: 1600 Client Smp ID: 1 84-16-2
Level: LOW Operator: smh
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: alphicv-new.spk Quant Type: ESTD
Sublist File: ALmasseph.sub
Method File: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 C-9	50.0	46.8	93.57	75-125
2 C-10	50.0	48.1	96.14	75-125
4 C-12	50.0	47.6	95.30	75-125
6 C-14	50.0	47.2	94.33	75-125
8 C-16	50.0	47.1	94.27	75-125
10 C-18	50.0	48.3	96.60	75-125
12 C-19	50.0	49.1	98.26	75-125
13 C-20	50.0	49.1	98.17	75-125
16 C-22	50.0	49.5	98.94	75-125
18 C-24	50.0	49.0	97.98	75-125
20 C-26	50.0	49.0	97.97	75-125
22 C-28	50.0	48.7	97.32	75-125
114 C-36	50.0	50.0	100.09	75-125

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 15 Chlorooctadecane	40000	0.00	*	40-140

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b057.d
Lab Smp Id: 1600 Client Smp ID: 1 84-16-2
Inj Date : 03-NOV-2011 14:54
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1600*1 84-16-2
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m
Meth Date : 04-Nov-2011 09:50 smh Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 57 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1.00000	Volume of sample extracted (mL)
Vt	1.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
1	C-9	6.229	6.232	-0.003	127218912	46.7830	46.8
2	C-10	6.931	6.929	0.002	131668495	48.0680	48.1
4	C-12	7.828	7.833	-0.005	133484208	47.6481	47.6
6	C-14	8.466	8.471	-0.005	135740381	47.1626	47.2
8	C-16	9.008	9.014	-0.006	140615142	47.1372	47.1
10	C-18	9.497	9.504	-0.007	145930395	48.3007	48.3
M 11	Alip C9-C18				814657533	285.135	285
12	C-19	9.728	9.774	-0.046	148243248	49.1321	49.1
13	C-20	9.950	9.957	-0.007	149480953	49.0856	49.1
16	C-22	10.377	10.384	-0.007	151407787	49.4692	49.5
18	C-24	10.788	10.796	-0.008	151784501	48.9880	49.0
20	C-26	11.213	11.223	-0.010	152831618	48.9831	49.0
22	C-28	11.681	11.724	-0.043	150648000	48.6591	48.7

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
115 C-30	12.224	12.250	-0.026	863815	0.27683	0.277(A)
114 C-36	15.130	15.144	-0.014	146419842	50.0472	50.0(A)
M 24 Alip C19-C36				1051679764	343.635	344

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b057.d

Date : 03-NOV-2011 14:54

Client ID: 1 84-16-2

Sample Info: 1600*1 84-16-2

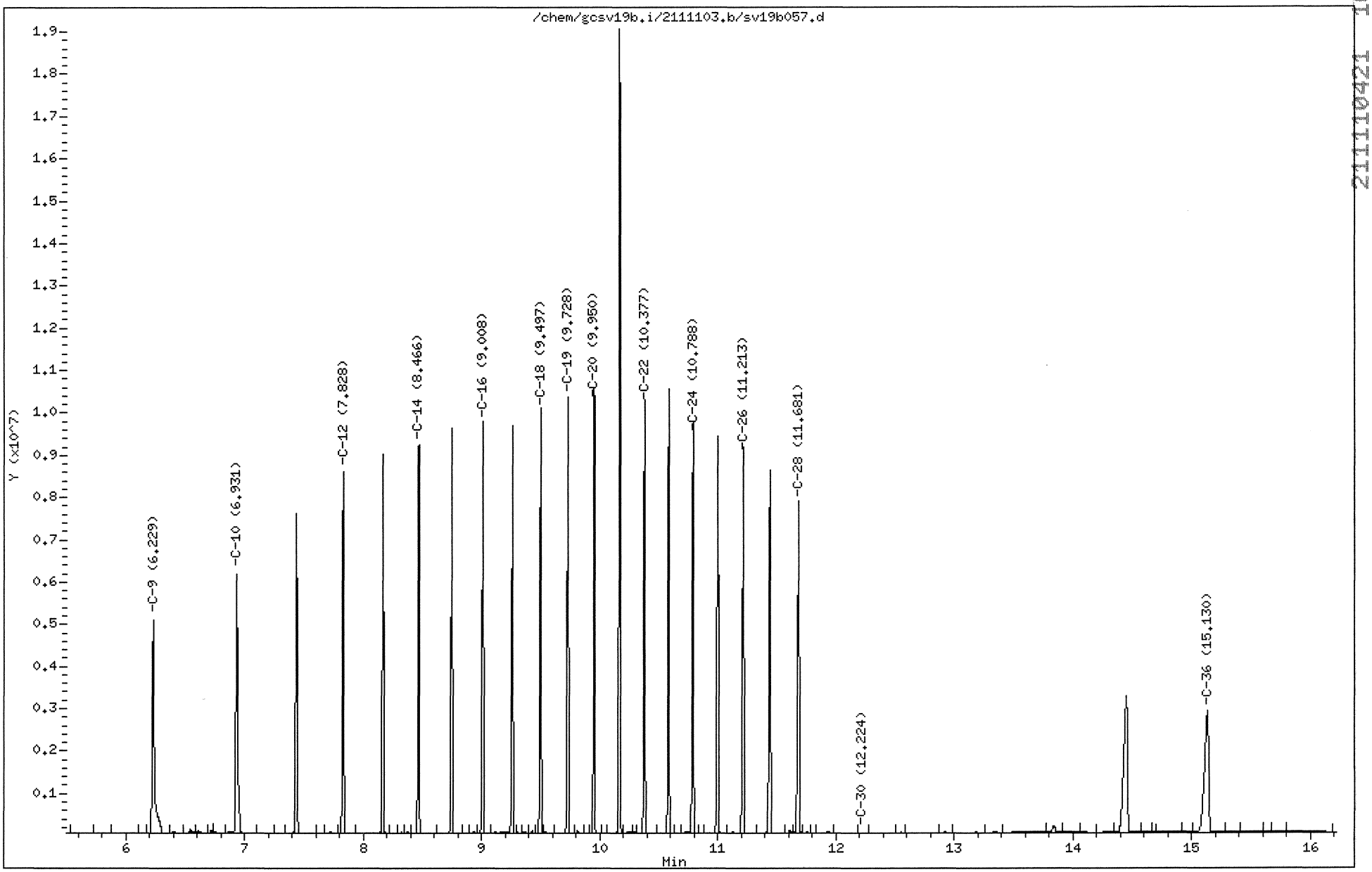
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

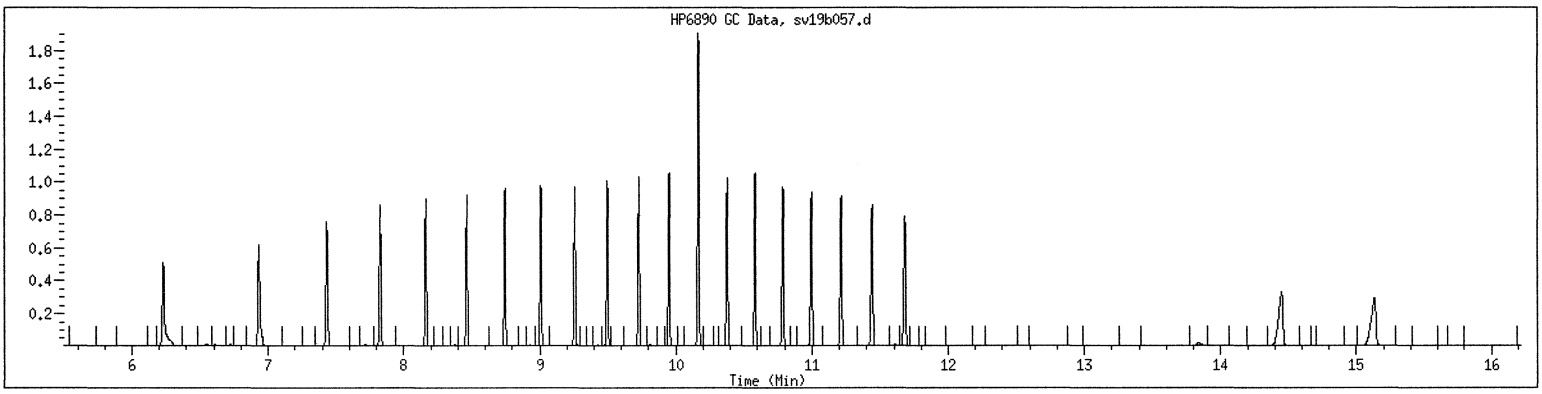
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1600	SampleType	: LCS
Injection Date	: 11/03/2011 14:54	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1600*1 84-16-2		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 15:55
End Cal Date : 03-NOV-2011 14:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Cal Date : 11-Nov-2011 16:02 dlb
Curve Type : Average

Calibration File Names:
Level 1: /var/chem/gcsv19b.i/2111103.b/sv19b052s.d
Level 2: /var/chem/gcsv19b.i/2111103.b/sv19b053s.d
Level 3: /var/chem/gcsv19b.i/2111103.b/sv19b054s.d
Level 4: /var/chem/gcsv19b.i/2111103.b/sv19b055s.d
Level 5: /var/chem/gcsv19b.i/2111103.b/sv19b056s.d

	Compound	1.000 Level 1	10.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	___ RRF	% RSD
	1 Naphthalene	2871371	2880452	2795766	2859339	2803867	2842159	1.389
	2 2-Methylnaphthalene	2390073	2394998	2345540	2406153	2358179	2378988	1.086
	4 Acenaphthylene	2742978	2787580	2735871	2801782	2748122	2763267	1.065
	6 Acenaphthene	2939138	2974500	2797376	2847632	2992117	2910153	2.892
	7 Fluorene	2698627	2763527	2759247	2833327	2801195	2771184	1.825
	8 Phenanthrene	2595622	2723658	2778901	2849934	2855307	2760684	3.879
	9 Anthracene	2513243	2630537	2655916	2746767	2723523	2653997	3.464
	12 Fluoranthene	2615148	2778457	2865217	2923634	2923247	2821141	4.592
	13 Pyrene	2622128	2808614	2905331	2966543	2974785	2855480	5.126
	14 Benzo(a)Anthracene	2463921	2659230	2834632	2942403	2985058	2777049	7.762
	15 Chrysene	2577178	2691296	2772251	2844436	2855699	2748172	4.223
	16 Benzo(b)Fluoranthene	2542088	2741276	2869331	2969808	2944332	2813367	6.247
	17 Benzo(k)Fluoranthene	2542088	2741276	2869331	2969808	2944332	2813367	6.247
	18 Benzo(a)Pyrene	2459311	2662945	2905156	2960554	2875461	2772685	7.515
	19 Indo(1,2,3cd)Pyrene	2354342	2617747	2836757	2866551	2719863	2679052	7.715
	20 Dibenzo(a,h)Anthracene	2354342	2617747	2836757	2866551	2719863	2679052	7.715
	21 Benzo(g,h,i)Perylene	2487409	2704307	2942094	3003707	2752450	2777993	7.386
M	22 Arom C11-C22	2574648	2716361	2794440	2862290	2822200	2753988	4.124
	23 Unadjusted Arom C11-C22	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M	113 Total Surrogate Area	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$	3 2-Fluorobiphenyl	2473008	2477779	2421128	2479969	2435554	2457488	1.107

GCAL, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 02-NOV-2011 15:55
End Cal Date : 03-NOV-2011 14:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Cal Date : 11-Nov-2011 16:02 dlb
Curve Type : Average

	1.000	10.000	50.000	100.000	200.000	___	
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
$ 5 2-Bromonaphthalene	1570168	1562462	1600777	1661330	1449154	1568778	4.932
$ 10 O-Terphenyl	2900971	2972915	2936779	2979088	2954226	2948796	1.067
$ 11 Chloro-octadecane	2731973	2792662	2730816	2775185	2666865	2739500	1.780

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b052.d
Lab Smp Id: 1201 Client Smp ID: 1 84-12-8
Inj Date : 02-NOV-2011 15:55
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1201*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:35 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 15:55 Cal File: sv19b052.d
Als bottle: 52 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.877	7.878	-0.001	2871371	1.00000	1.00(M2)
	2 2-Methylnaphthalene	8.263	8.261	0.002	2390073	1.00000	1.00(M2)
$	3 2-Fluorobiphenyl	8.450	8.450	0.000	2473008	1.00000	1.00(M2)
	4 Acenaphthylene	8.761	8.760	0.001	2742978	1.00000	1.00(M2)
$	5 2-Bromonaphthalene	8.833	8.832	0.001	1570168	1.00000	1.00(M2)
	6 Acenaphthene	8.851	8.850	0.001	2939138	1.00000	1.00(M2)
	7 Fluorene	9.126	9.128	-0.002	2698627	1.00000	1.00(M2)
	8 Phenanthrene	9.653	9.652	0.001	2595622	1.00000	1.00(M2)
	9 Anthracene	9.681	9.680	0.001	2513243	1.00000	1.00(M2)
$	10 O-Terphenyl	9.818	9.819	-0.001	2900971	1.00000	1.00(M2)
	12 Fluoranthene	10.323	10.322	0.001	2615148	1.00000	1.00(M2)
	13 Pyrene	10.463	10.461	0.002	2622128	1.00000	1.00(M2)
	14 Benzo(a)Anthracene	11.206	11.208	-0.002	2463921	1.00000	1.00(M2)

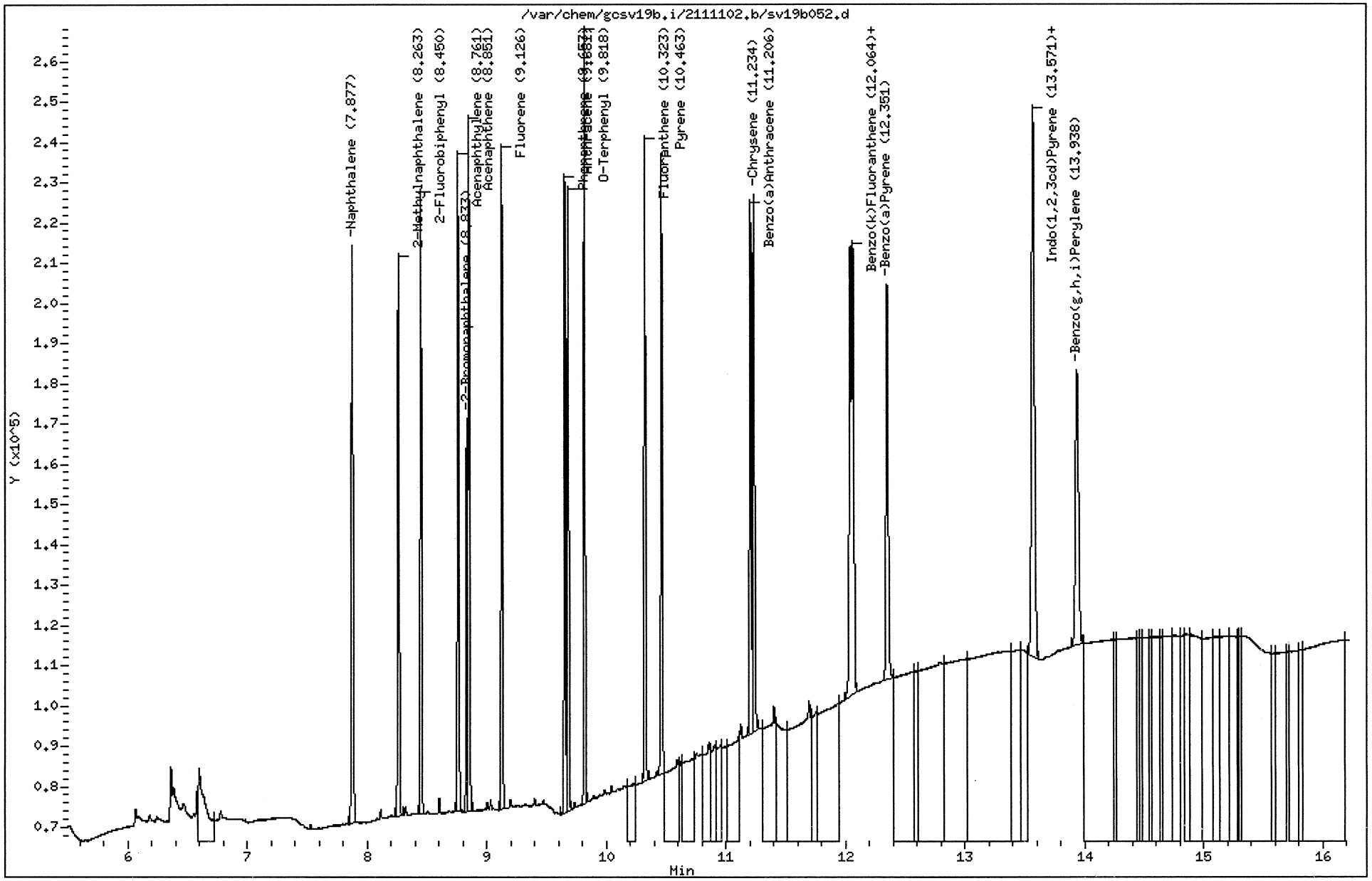
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
15	Chrysene	11.234	11.232	0.002	2577178	1.00000	1.00 (M2)
16	Benzo(b)Fluoranthene	12.064	12.062	0.002	5084176	2.00000	2.00 (M2)
17	Benzo(k)Fluoranthene	12.064	12.062	0.002	5084176	2.00000	2.00 (M2)
18	Benzo(a)Pyrene	12.351	12.350	0.001	2459311	1.00000	1.00 (M2)
19	Indo(1,2,3cd)Pyrene	13.571	13.570	0.001	4708685	2.00000	2.00 (M2)
20	Dibenzo(a,h)Anthracene	13.571	13.570	0.001	4708685	2.00000	2.00 (M2)
21	Benzo(g,h,i)Perylene	13.938	13.939	-0.001	2487409	1.00000	1.00 (M2)
M 22	Arom C11-C22				43769008	17.0000	17.0
M 113	Total Surrogate Area				6944147	0.00000	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b052.d
Date : 02-NOV-2011 15:55
Client ID: 1 84-12-8
Sample Info: 1201*1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

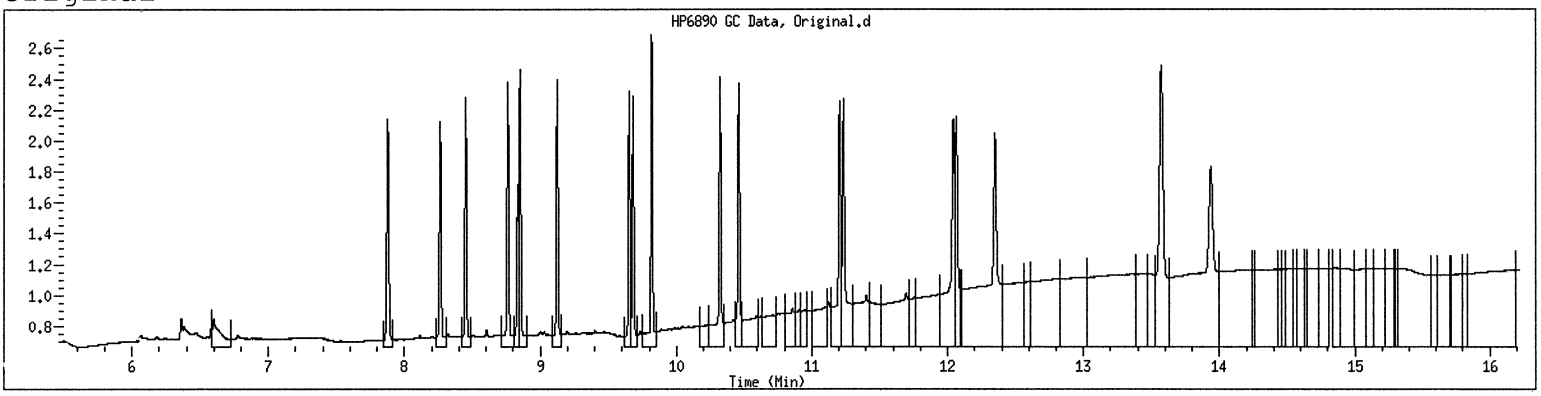
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



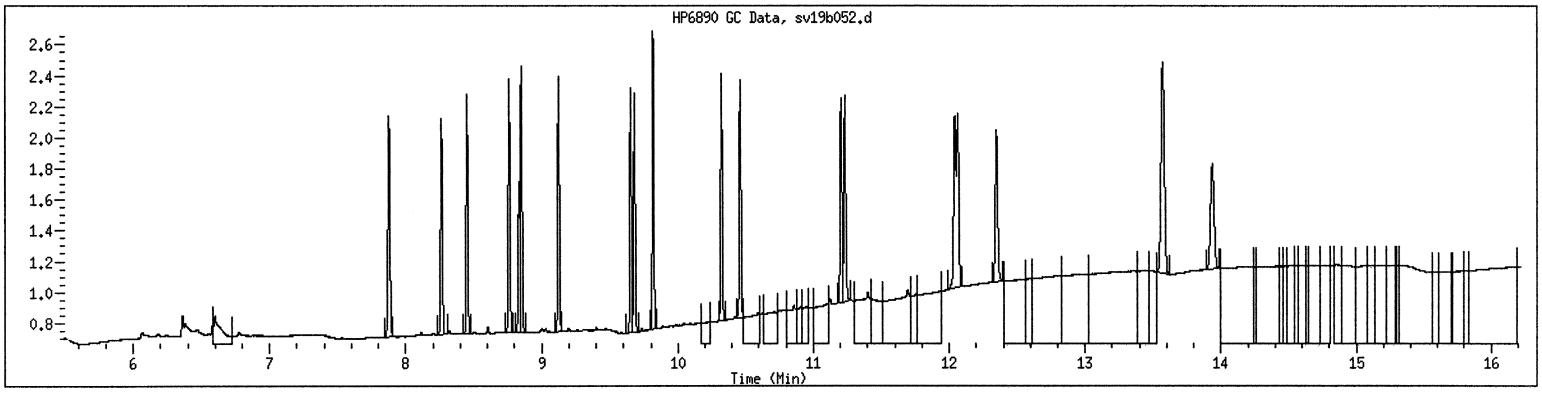
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1201	SampleType	: CALIB_1
Injection Date	: 11/02/2011 15:55	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1201*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: all

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b053.d
Lab Smp Id: 1202 Client Smp ID: 1 84-12-8
Inj Date : 02-NOV-2011 16:19
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1202*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:35 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 16:19 Cal File: sv19b053.d
Als bottle: 53 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.876	7.878	-0.002	28804515	10.0000	10.0(M2)
	2 2-Methylnaphthalene	8.262	8.261	0.001	23949975	10.0000	10.0(M2)
$	3 2-Fluorobiphenyl	8.450	8.450	0.000	24777794	10.0000	10.0(M2)
	4 Acenaphthylene	8.761	8.761	0.000	27875803	10.0000	10.1(M2)
$	5 2-Bromonaphthalene	8.835	8.832	0.003	15624622	10.0000	9.98(M2)
	6 Acenaphthene	8.852	8.851	0.001	29745005	10.0000	10.1(M2)
	7 Fluorene	9.126	9.128	-0.002	27635268	10.0000	10.1(M2)
	8 Phenanthrene	9.654	9.652	0.002	27236585	10.0000	10.2(M2)
	9 Anthracene	9.682	9.681	0.001	26305372	10.0000	10.2(M2)
$	10 O-Terphenyl	9.818	9.819	-0.001	29729146	10.0000	10.1(M2)
	12 Fluoranthene	10.324	10.322	0.002	27784568	10.0000	10.3(M2)
	13 Pyrene	10.463	10.461	0.002	28086137	10.0000	10.3(M2)
	14 Benzo(a)Anthracene	11.206	11.208	-0.002	26592300	10.0000	10.4(M2)

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
15 Chrysene	11.235	11.235	0.000	26912958	10.0000	10.2 (M2)
16 Benzo(b)Fluoranthene	12.068	12.066	0.002	54825513	20.0000	20.8 (M2)
17 Benzo(k)Fluoranthene	12.068	12.066	0.002	54825513	20.0000	20.8 (M2)
18 Benzo(a)Pyrene	12.353	12.351	0.002	26629448	10.0000	10.4 (M2)
19 Indo(1,2,3cd)Pyrene	13.584	13.576	0.008	52354931	20.0000	21.1 (M2)
20 Dibenzo(a,h)Anthracene	13.584	13.576	0.008	52354931	20.0000	21.1 (M2)
21 Benzo(g,h,i)Perylene	13.951	13.945	0.006	27043066	10.0000	10.4 (M2)
M 22 Arom C11-C22				461781444	170.000	175
M 113 Total Surrogate Area				70131562	0.00000	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b053.d

Page 1

Date : 02-NOV-2011 16:19

Client ID: 1 84-12-8

Instrument: gcsv19b.i

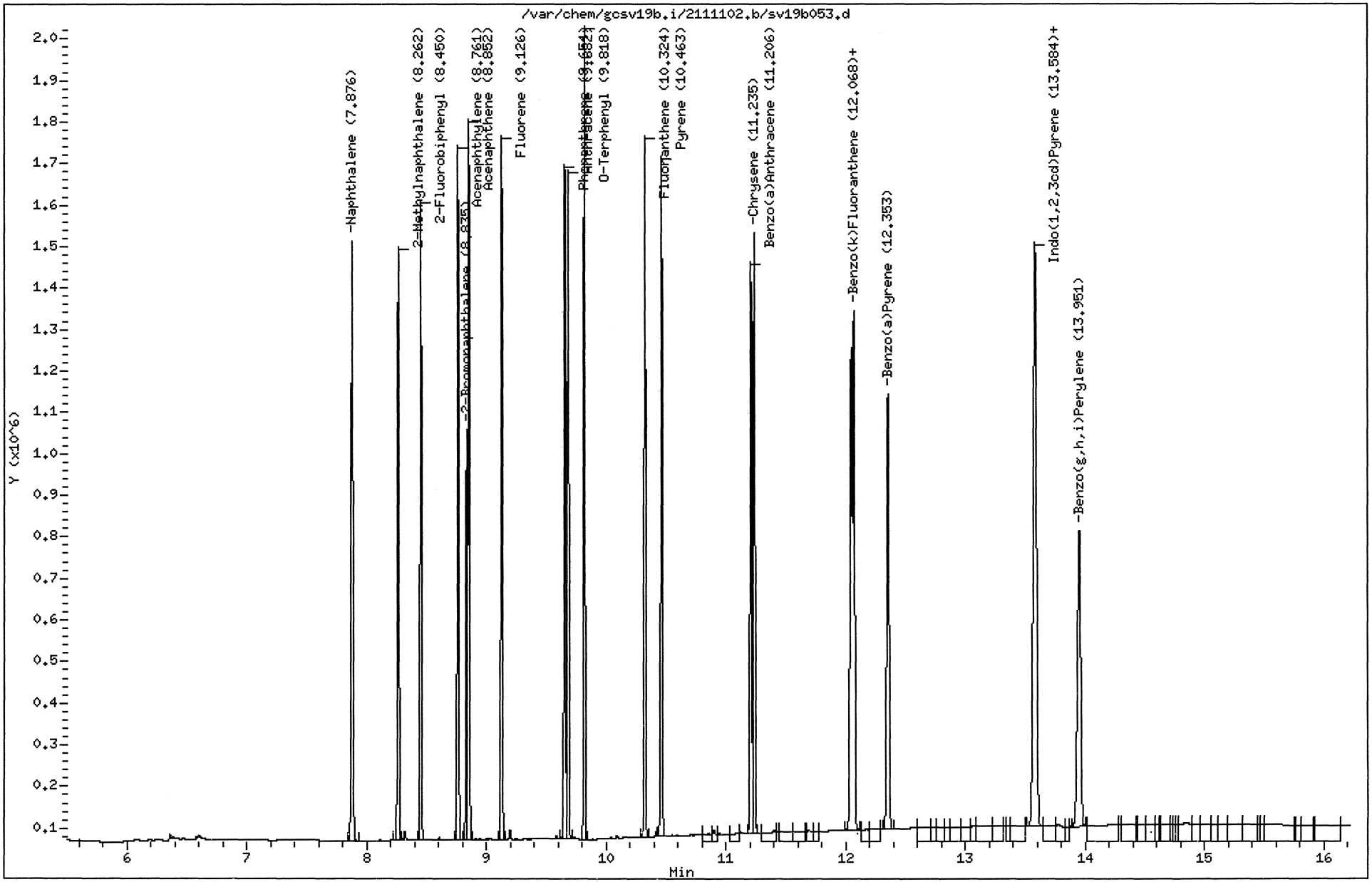
Sample Info: 1202*1 84-12-8

Volume Injected (uL): 1.0

Operator: smh

Column phase: DB-5MS-30M

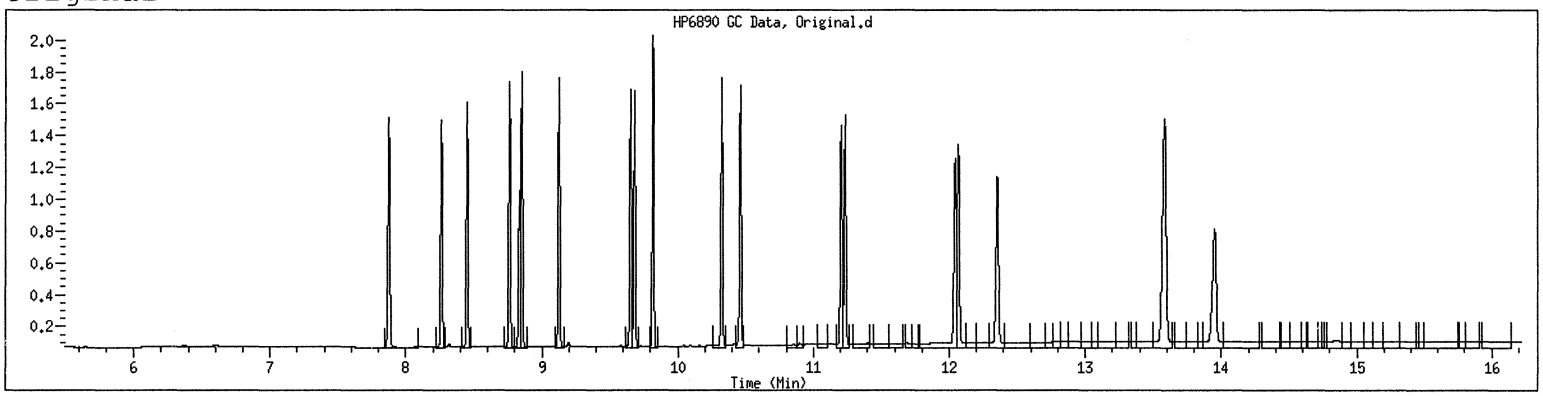
Column diameter: 0.25



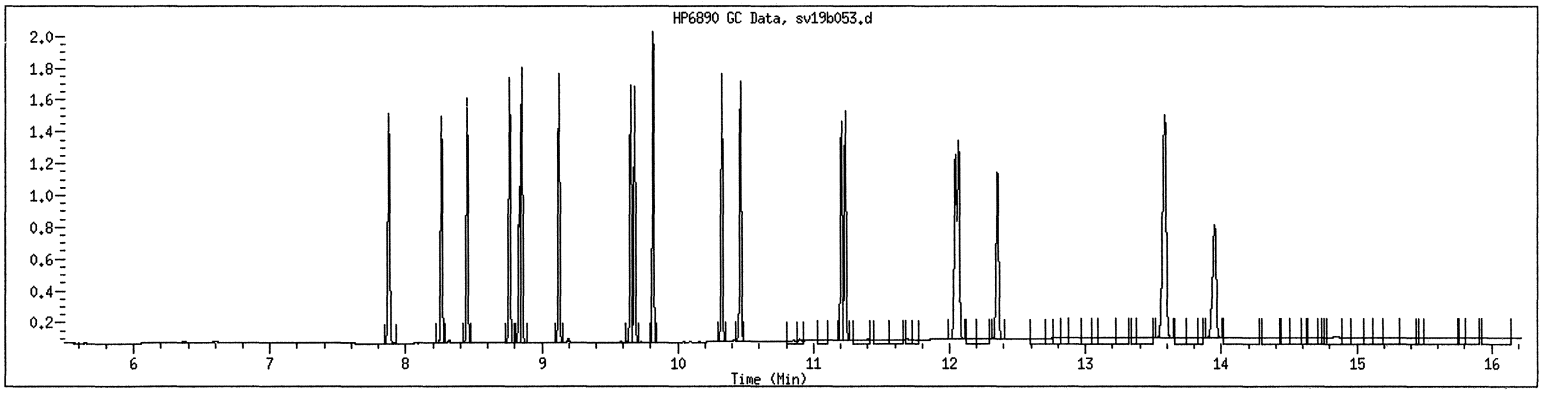
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1202	SampleType	: CALIB_2
Injection Date	: 11/02/2011 16:19	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1202*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: all

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b054.d
Lab Smp Id: 1203 Client Smp ID: 1 84-12-8
Inj Date : 02-NOV-2011 16:42
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1203*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:35 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 16:42 Cal File: sv19b054.d
Als bottle: 54 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.879	7.879	0.000	139788310	50.0000	49.1
	2 2-Methylnaphthalene	8.265	8.263	0.002	117276990	50.0000	49.3
$	3 2-Fluorobiphenyl	8.453	8.451	0.002	121056403	50.0000	49.3
	4 Acenaphthylene	8.765	8.762	0.003	136793555	50.0000	49.6
$	5 2-Bromonaphthalene	8.838	8.834	0.004	80038867	50.0000	50.7
	6 Acenaphthene	8.857	8.853	0.004	139868814	50.0000	48.2
	7 Fluorene	9.130	9.129	0.001	137962328	50.0000	50.3
	8 Phenanthrene	9.657	9.654	0.003	138945044	50.0000	51.5
	9 Anthracene	9.687	9.683	0.004	132795791	50.0000	51.1
$	10 O-Terphenyl	9.820	9.819	0.001	146838940	50.0000	50.0
	12 Fluoranthene	10.325	10.323	0.002	143260836	50.0000	52.0
	13 Pyrene	10.465	10.463	0.002	145266555	50.0000	52.3
	14 Benzo(a)Anthracene	11.207	11.208	-0.001	141731614	50.0000	53.4

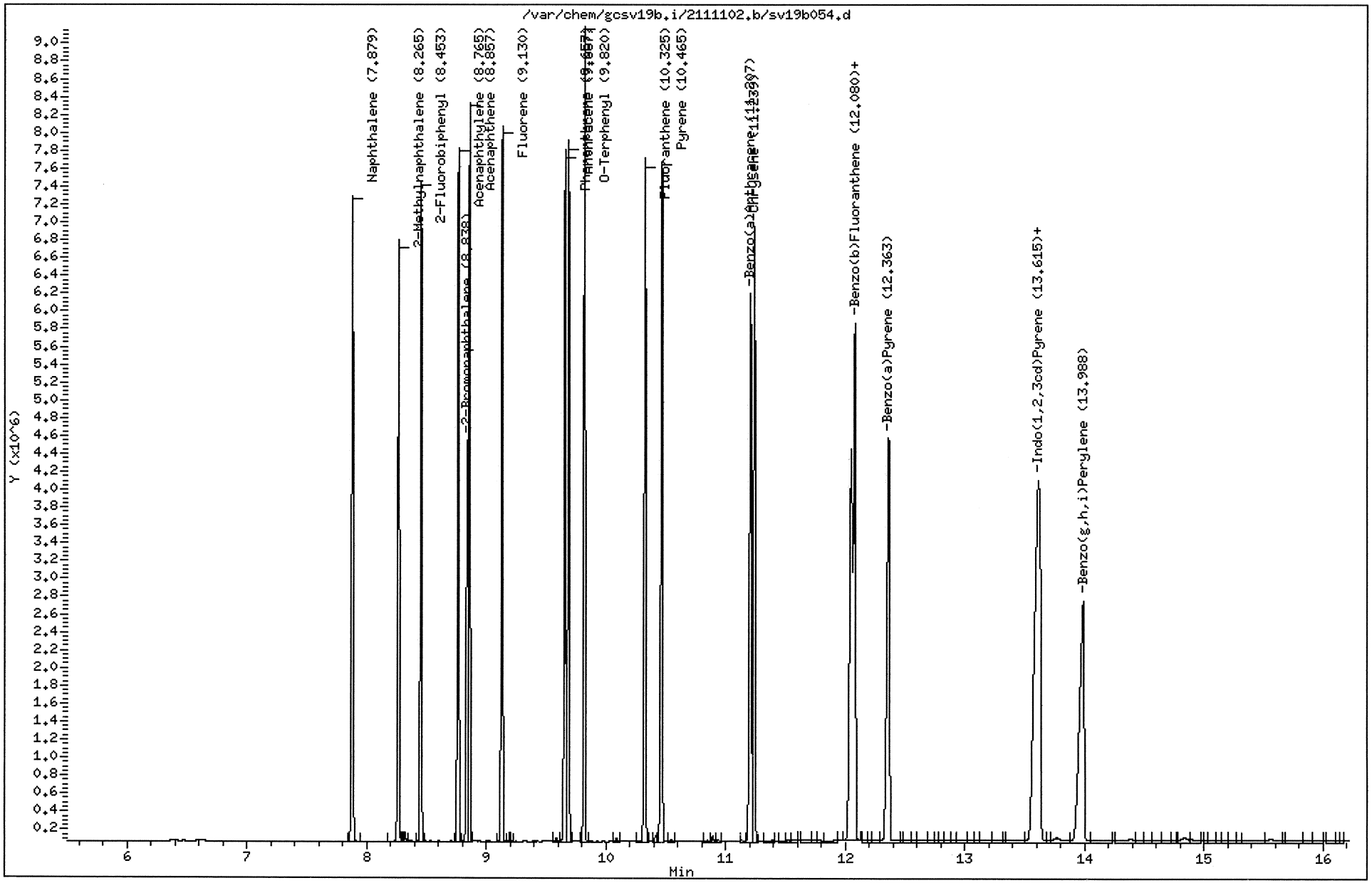
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
15	Chrysene	11.239	11.236	0.003	138612563	50.0000	51.7
16	Benzo(b)Fluoranthene	12.080	12.070	0.010	286933061	100.000	106(M2)
17	Benzo(k)Fluoranthene	12.080	12.070	0.010	286933061	100.000	106(M2)
18	Benzo(a)Pyrene	12.363	12.355	0.008	145257809	50.0000	54.3
19	Indo(1,2,3cd)Pyrene	13.615	13.589	0.026	283675684	100.000	109
20	Dibenzo(a,h)Anthracene	13.615	13.589	0.026	283675684	100.000	109(M1)
21	Benzo(g,h,i)Perylene	13.988	13.959	0.029	147104717	50.0000	54.3
M 22	Arom C11-C22				2375273671	850.000	882
M 113	Total Surrogate Area				347934210	0.00000	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M1- Compound response manually integrated because
Target system did not integrate.
M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b054.d
Date : 02-NOV-2011 16:42
Client ID: 1 84-12-8
Sample Info: 1203*1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

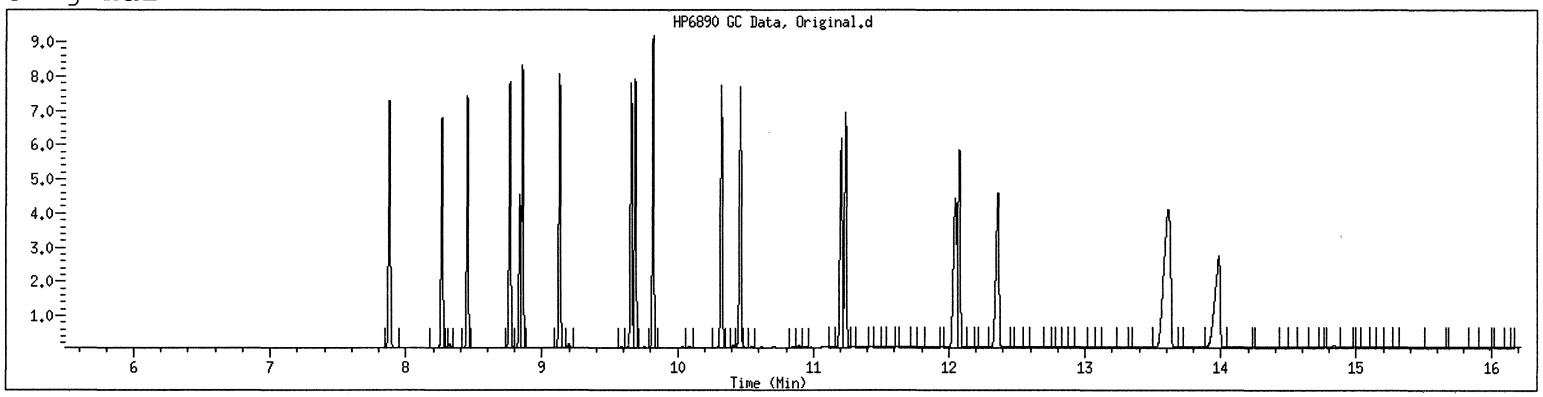
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



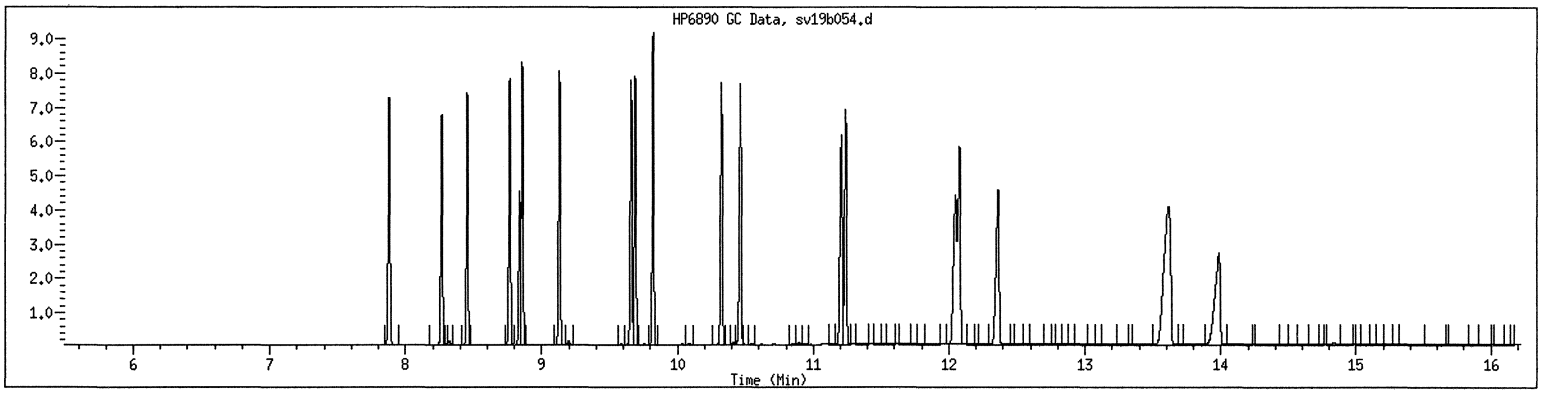
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1203	SampleType	: CALIB_3
Injection Date	: 11/02/2011 16:42	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1203*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist: all	

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b055.d
Lab Smp Id: 1204 Client Smp ID: 1 84-12-8
Inj Date : 02-NOV-2011 17:07
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1204*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:35 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 17:07 Cal File: sv19b055.d
Als bottle: 55 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.882	7.879	0.003	285933881	100.000	100
	2 2-Methylnaphthalene	8.269	8.264	0.005	240615323	100.000	101
$	3 2-Fluorobiphenyl	8.457	8.453	0.004	247996907	100.000	101
	4 Acenaphthylene	8.769	8.764	0.005	280178162	100.000	101
$	5 2-Bromonaphthalene	8.843	8.836	0.007	166132975	100.000	104
	6 Acenaphthene	8.864	8.855	0.009	284763163	100.000	98.5
	7 Fluorene	9.136	9.131	0.005	283332686	100.000	103
	8 Phenanthrene	9.663	9.656	0.007	284993363	100.000	104
	9 Anthracene	9.695	9.685	0.010	274676746	100.000	104
$	10 O-Terphenyl	9.826	9.821	0.005	297908777	100.000	101
	12 Fluoranthene	10.334	10.325	0.009	292363394	100.000	105
	13 Pyrene	10.475	10.465	0.010	296654255	100.000	105
	14 Benzo(a)Anthracene	11.219	11.211	0.008	294240261	100.000	108

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
15 Chrysene	11.255	11.240	0.015	284443626	100.000	105
16 Benzo(b)Fluoranthene	12.103	12.078	0.025	593961569	200.000	214(AM2)
17 Benzo(k)Fluoranthene	12.103	12.078	0.025	593961569	200.000	214(AM2)
18 Benzo(a)Pyrene	12.387	12.363	0.024	296055391	100.000	108
19 Indo(1,2,3cd)Pyrene	13.675	13.610	0.065	573310212	200.000	215(AM2)
20 Dibenzo(a,h)Anthracene	13.675	13.610	0.065	573310212	200.000	215(AM2)
21 Benzo(g,h,i)Perylene	14.036	13.979	0.057	300370678	100.000	108
M 22 Arom C11-C22				4865892710	1700.00	1780
M 113 Total Surrogate Area				712038659	0.00000	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b055.d

Date : 02-NOV-2011 17:07

Client ID: 1 84-12-8

Sample Info: 1204*1 84-12-8

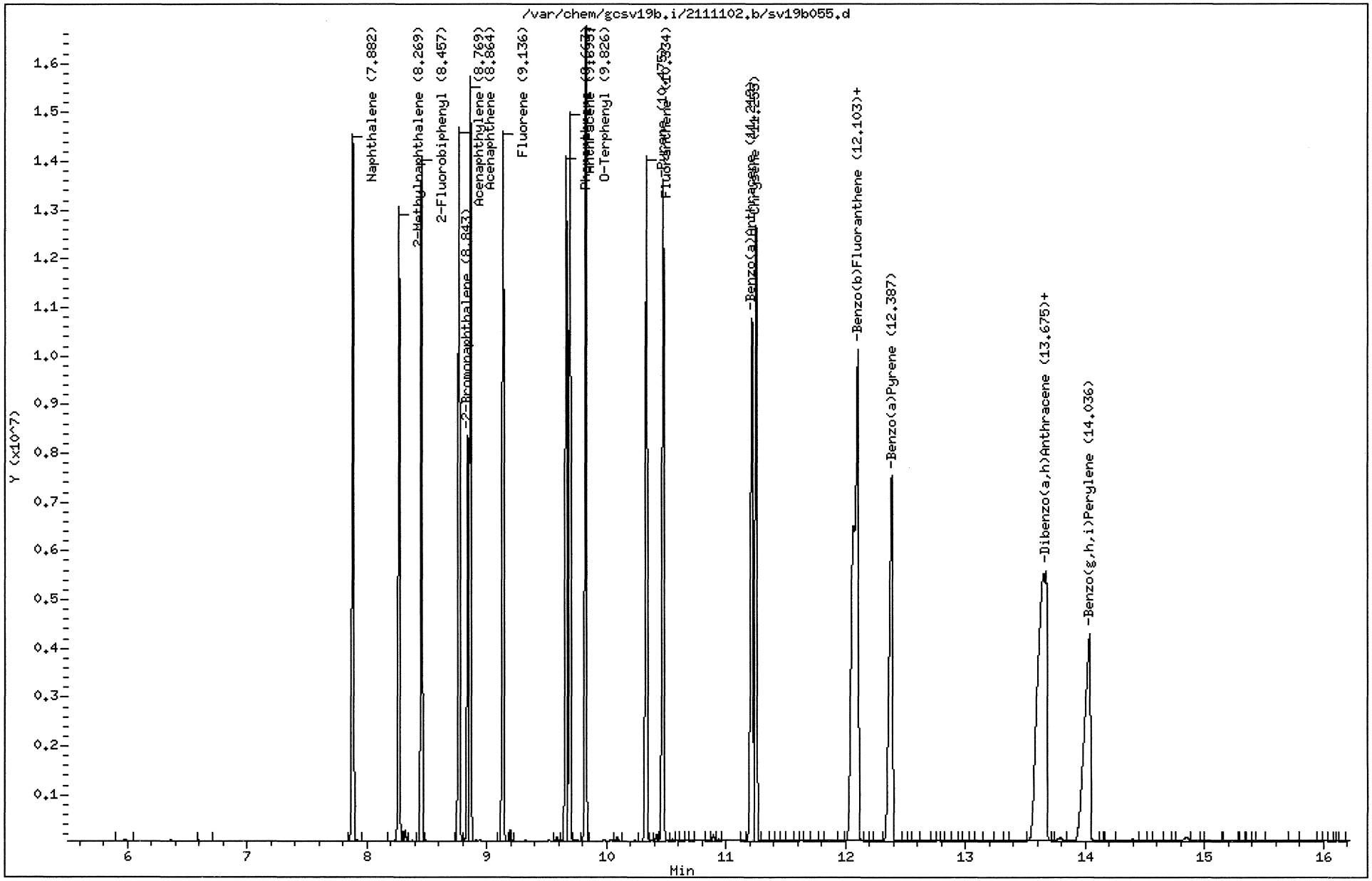
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

Column diameter: 0.25

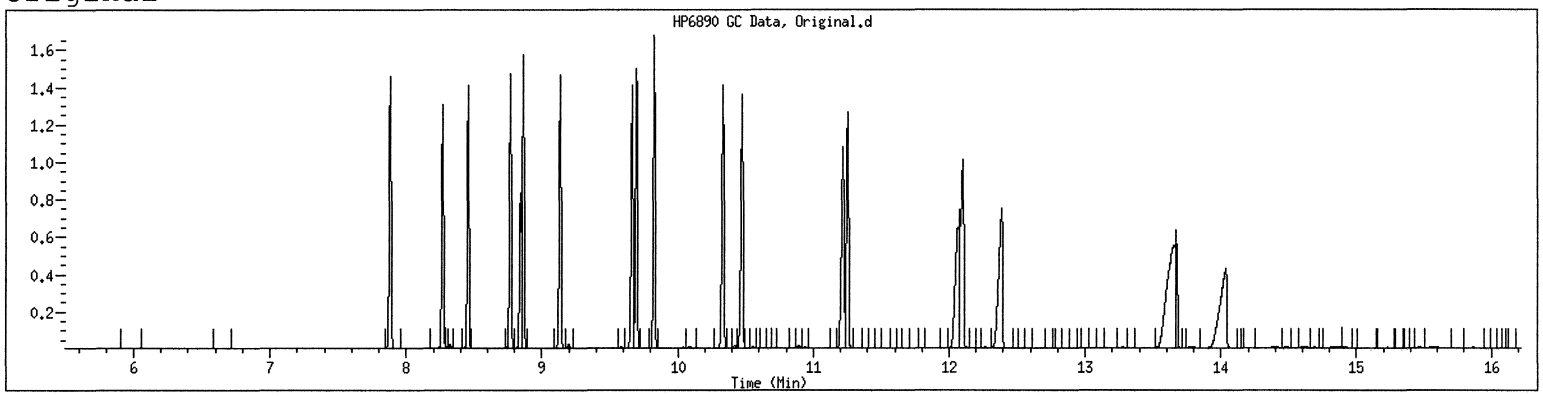


211110421 180

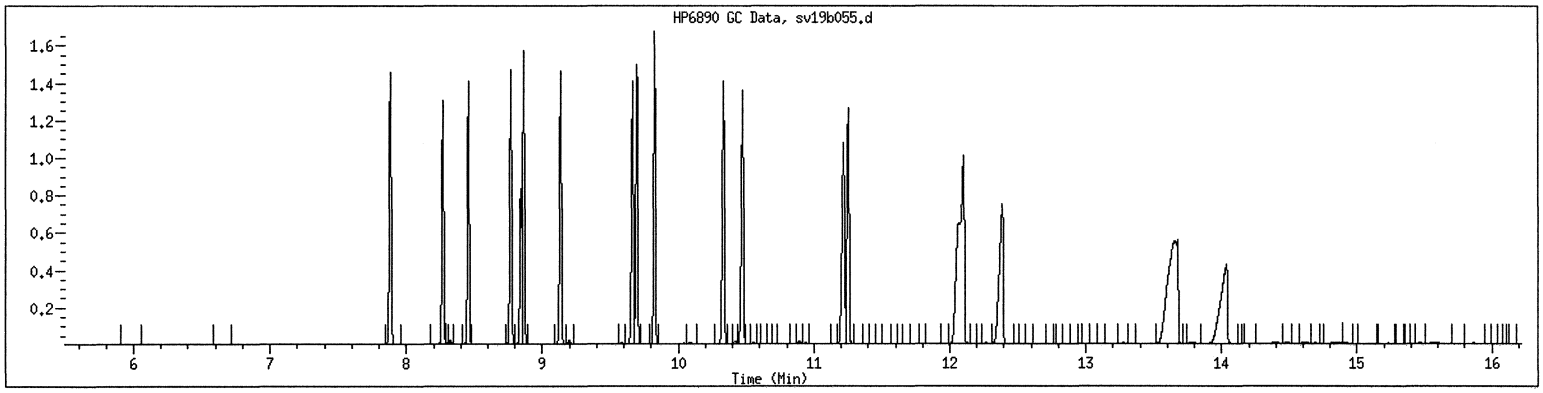
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 11/02/2011 17:07	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1204*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist:	all

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b056.d
Lab Smp Id: 1205 Client Smp ID: 1 84-12-8
Inj Date : 02-NOV-2011 17:30
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1205*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:35 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 17:30 Cal File: sv19b056.d
Als bottle: 56 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.888	7.881	0.007	560773309	200.000	197
	2 2-Methylnaphthalene	8.274	8.266	0.008	471635711	200.000	198
$	3 2-Fluorobiphenyl	8.462	8.454	0.008	487110868	200.000	198
	4 Acenaphthylene	8.776	8.767	0.009	549624381	200.000	199
$	5 2-Bromonaphthalene	8.853	8.839	0.014	289830833	200.000	185
	6 Acenaphthene	8.872	8.858	0.014	598423437	200.000	206(A)
	7 Fluorene	9.143	9.133	0.010	560238934	200.000	202(A)
	8 Phenanthrene	9.671	9.658	0.013	571061474	200.000	207(A)
	9 Anthracene	9.705	9.689	0.016	544704598	200.000	205(A)
$	10 O-Terphenyl	9.832	9.823	0.009	590845256	200.000	200(A)
	12 Fluoranthene	10.343	10.329	0.014	584649476	200.000	207(A)
	13 Pyrene	10.485	10.468	0.017	594957073	200.000	208(A)
	14 Benzo(a)Anthracene	11.230	11.215	0.015	597011528	200.000	215(A)

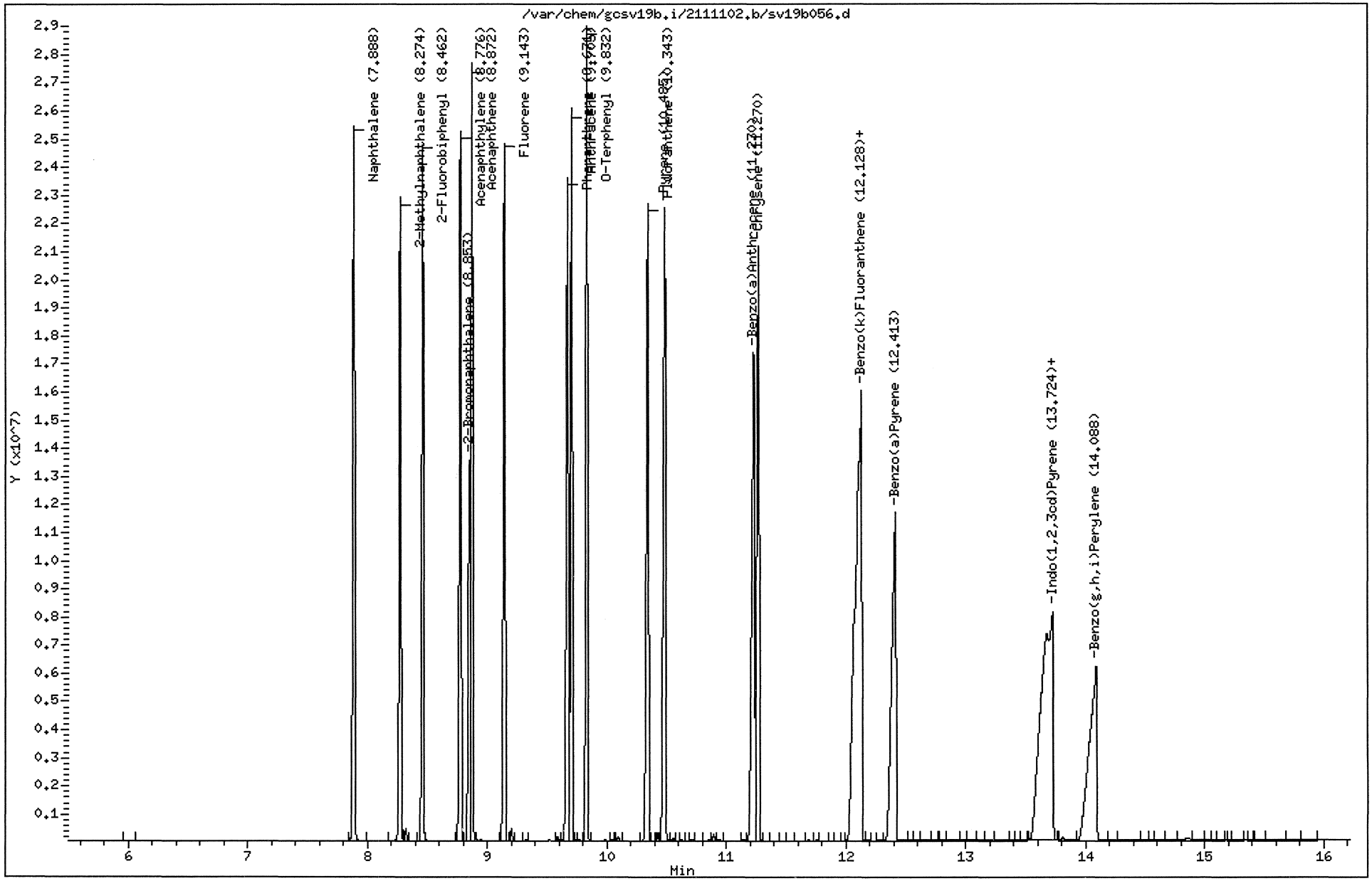
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	15 Chrysene	11.270	11.246	0.024	571139866	200.000	208(A)
	16 Benzo(b)Fluoranthene	12.128	12.088	0.040	1177732644	400.000	419(AM1)
	17 Benzo(k)Fluoranthene	12.128	12.088	0.040	1177732644	400.000	419(A)
	18 Benzo(a)Pyrene	12.413	12.373	0.040	575092148	200.000	207(A)
	19 Indo(1,2,3cd)Pyrene	13.724	13.632	0.092	1087945178	400.000	406(AM2)
	20 Dibenzo(a,h)Anthracene	13.724	13.632	0.092	1087945178	400.000	406(AM2)
	21 Benzo(g,h,i)Perylene	14.088	14.001	0.087	550489918	200.000	198
M	22 Arom C11-C22				9595479675	3400.00	3480
M	113 Total Surrogate Area				1367786957	0.00000	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
M1- Compound response manually integrated because Target system did not integrate.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b056.d
Date : 02-NOV-2011 17:30
Client ID: 1 84-12-8
Sample Info: 1205*1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

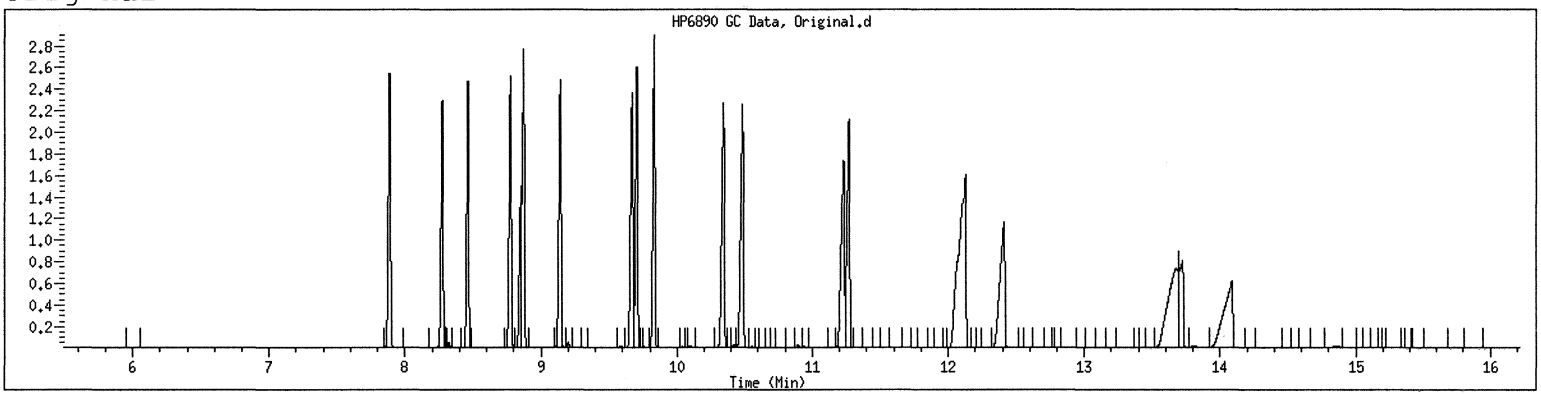
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



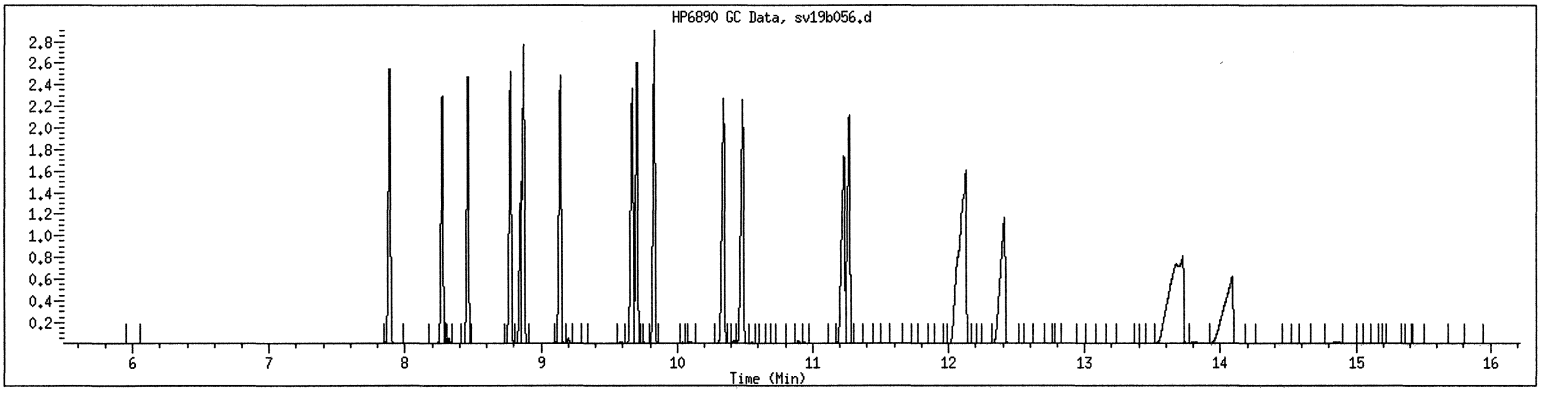
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1205	SampleType	: CALIB_5
Injection Date	: 11/02/2011 17:30	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1205*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: all

Original



Final



Report Date: 08-Nov-2011 08:49

GCAL, Inc.

RECOVERY REPORT

Client Name: Client SDG: 2111102
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: 1600 Client Smp ID: 1 84-7-10
Level: LOW Operator: smh
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: AROMICV.spk Quant Type: ESTD
Sublist File: all.sub
Method File: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 Naphthalene	50.0	49.0	98.05	75-125
2 2-Methylnaphthalene	50.0	55.6	111.25	75-125
4 Acenaphthylene	50.0	49.5	98.98	75-125
6 Acenaphthene	50.0	47.9	95.74	75-125
7 Fluorene	50.0	50.0	100.07	75-125
8 Phenanthrene	50.0	50.4	100.72	75-125
9 Anthracene	50.0	50.5	100.97	75-125
12 Fluoranthene	50.0	49.6	99.22	75-125
13 Pyrene	50.0	51.1	102.27	75-125
14 Benzo(a)Anthracene	50.0	50.4	100.89	75-125
15 Chrysene	50.0	49.9	99.75	75-125
16 Benzo(b)Fluoranthene	100	101	101.11	75-125
17 Benzo(k)Fluoranthene	100	101	101.11	75-125
18 Benzo(a)Pyrene	50.0	50.9	101.88	75-125
19 Indo(1,2,3cd)Pyrene	100	104	104.37	75-125
20 Dibenzo(a,h)Anthracene	100	104	104.37	75-125
21 Benzo(g,h,i)Perylene	50.0	52.5	105.06	75-125

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 2-Fluorobiphenyl	50.0	51.5	102.93	40-140
$ 5 2-Bromonaphthalene	50.0	54.4	108.75	40-140
$ 10 O-Terphenyl	50.0	55.1	110.13	40-140
$ 11 Chloro-octadecane	50.0	0.00	*	40-140

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111102.b/sv19b057.d
Lab Smp Id: 1600 Client Smp ID: 1 84-7-10
Inj Date : 02-NOV-2011 17:55
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1600*1 84-7-10
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m
Meth Date : 08-Nov-2011 08:36 dlb Quant Type: ESTD
Cal Date : 02-NOV-2011 17:30 Cal File: sv19b056.d
Als bottle: 57 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1.00000	Volume of sample extracted (mL)
Vt	1.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
	1 Naphthalene	7.879	7.881	-0.002	139338681	49.0256	49.0
	2 2-Methylnaphthalene	8.266	8.266	0.000	132335257	55.6267	55.6
$	3 2-Fluorobiphenyl	8.453	8.454	-0.001	126473294	51.4645	51.5
	4 Acenaphthylene	8.765	8.767	-0.002	136751456	49.4891	49.5
$	5 2-Bromonaphthalene	8.838	8.839	-0.001	85304529	54.3764	54.4
	6 Acenaphthene	8.858	8.858	0.000	139305778	47.8689	47.9
	7 Fluorene	9.131	9.133	-0.002	138659834	50.0363	50.0
	8 Phenanthrene	9.658	9.658	0.000	139031327	50.3612	50.4
	9 Anthracene	9.688	9.689	-0.001	133992045	50.4869	50.5
$	10 O-Terphenyl	9.822	9.823	-0.001	162371730	55.0637	55.1
	12 Fluoranthene	10.327	10.329	-0.002	139951783	49.6082	49.6
	13 Pyrene	10.467	10.468	-0.001	146018326	51.1362	51.1
	14 Benzo(a)Anthracene	11.209	11.215	-0.006	140091684	50.4462	50.4

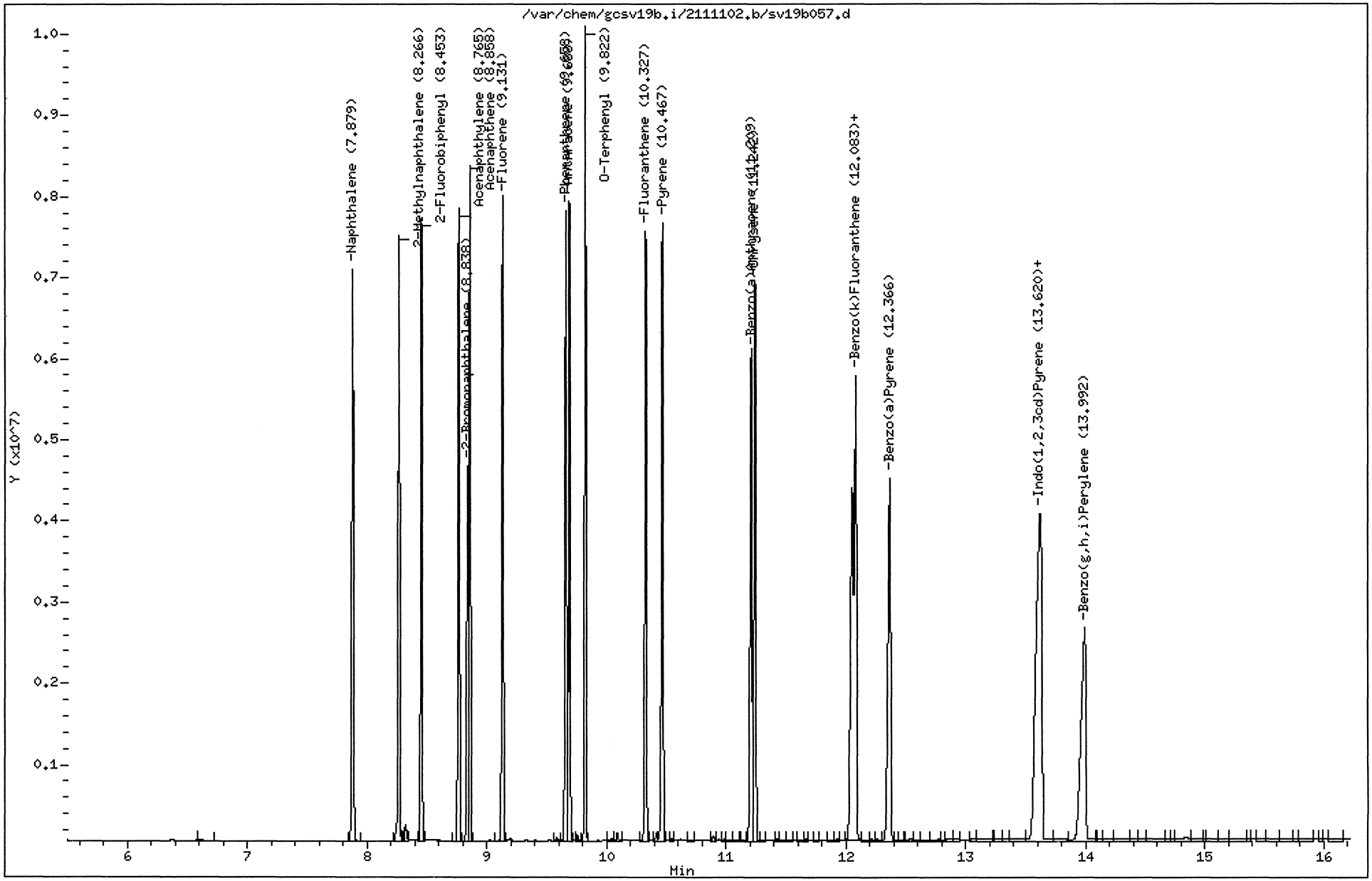
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
15	Chrysene	11.242	11.246	-0.004	137066815	49.8756	49.9
16	Benzo(b)Fluoranthene	12.083	12.088	-0.005	284470342	101.114	101(M2)
17	Benzo(k)Fluoranthene	12.083	12.088	-0.005	284470342	101.114	101(M2)
18	Benzo(a)Pyrene	12.366	12.373	-0.007	141233811	50.9376	50.9
19	Indo(1,2,3cd)Pyrene	13.620	13.632	-0.012	279620012	104.373	104
20	Dibenzo(a,h)Anthracene	13.620	13.632	-0.012	279620012	104.373	104(M1)
21	Benzo(g,h,i)Perylene	13.992	14.001	-0.009	145927664	52.5299	52.5
M 22	Arom C11-C22				2373794815	862.915	863
M 113	Total Surrogate Area				374149553		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M1- Compound response manually integrated because
Target system did not integrate.
M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /var/chem/gcsv19b.i/2111102.b/sv19b057.d
Date : 02-NOV-2011 17:55
Client ID: 1 84-7-10
Sample Info: 1600*1 84-7-10
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

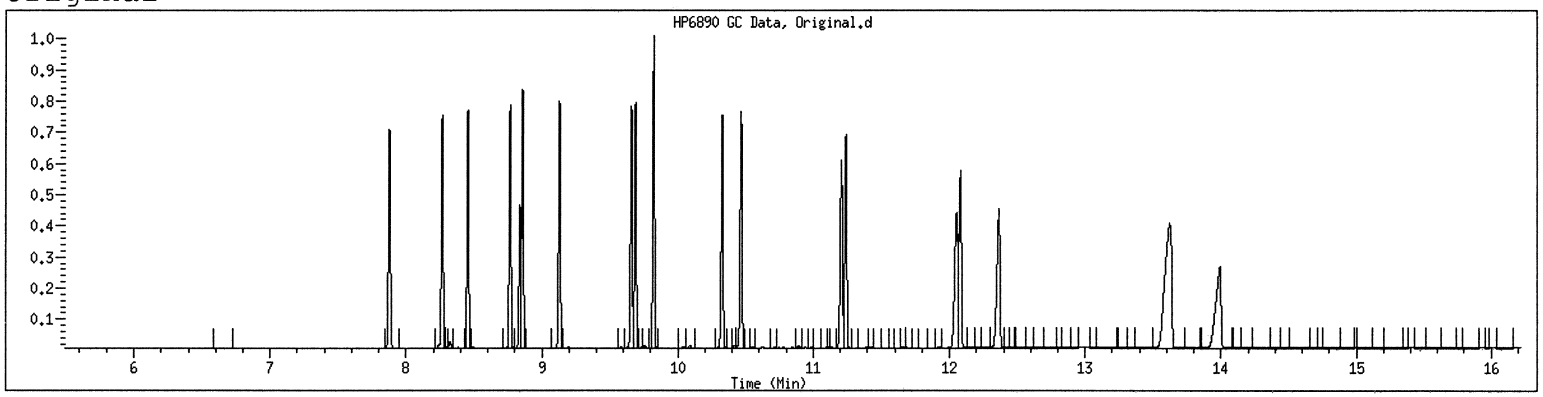
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



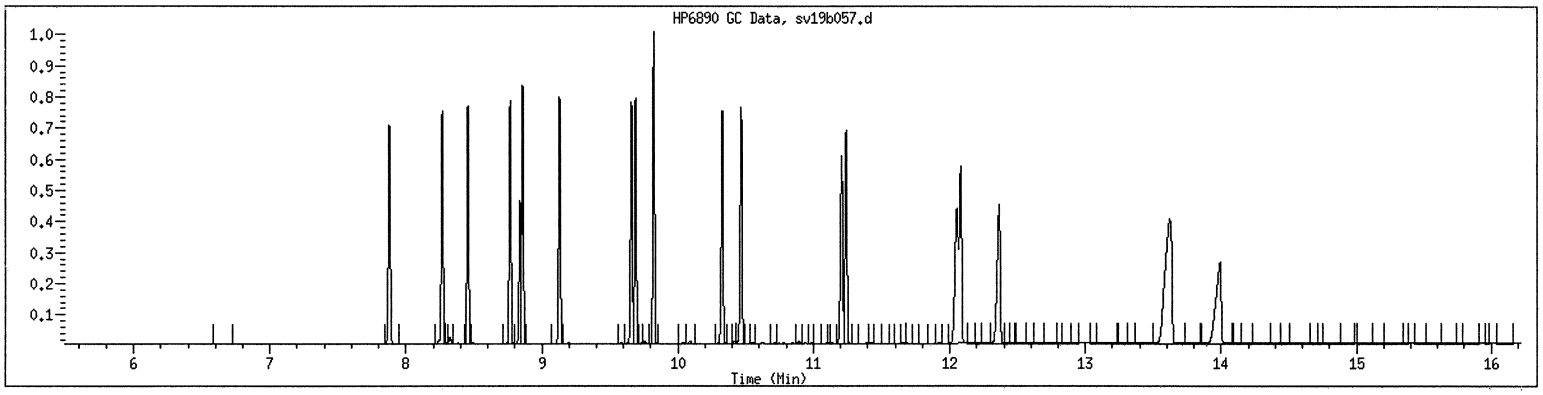
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1600	SampleType	: LCS
Injection Date	: 11/02/2011 17:55	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1600*1 84-7-10		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111102.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: all

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b052s.d
Lab Smp Id: 1201 Client Smp ID: 1 84-16-1
Inj Date : 03-NOV-2011 12:55
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1201*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/AROEPH.m
Meth Date : 08-Nov-2011 08:52 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 12:55 Cal File: sv19b052s.d
Als bottle: 52 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: chlosurr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
$ 14 Chloro-octadecane	10.185	10.305	-0.120	2731973	2.00000	2.0000(M2)

QC Flag Legend

M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111103.b/sv19b052s.d

Date : 03-NOV-2011 12:55

Client ID: 1 84-16-1

Sample Info: 1201*1 84-16-1

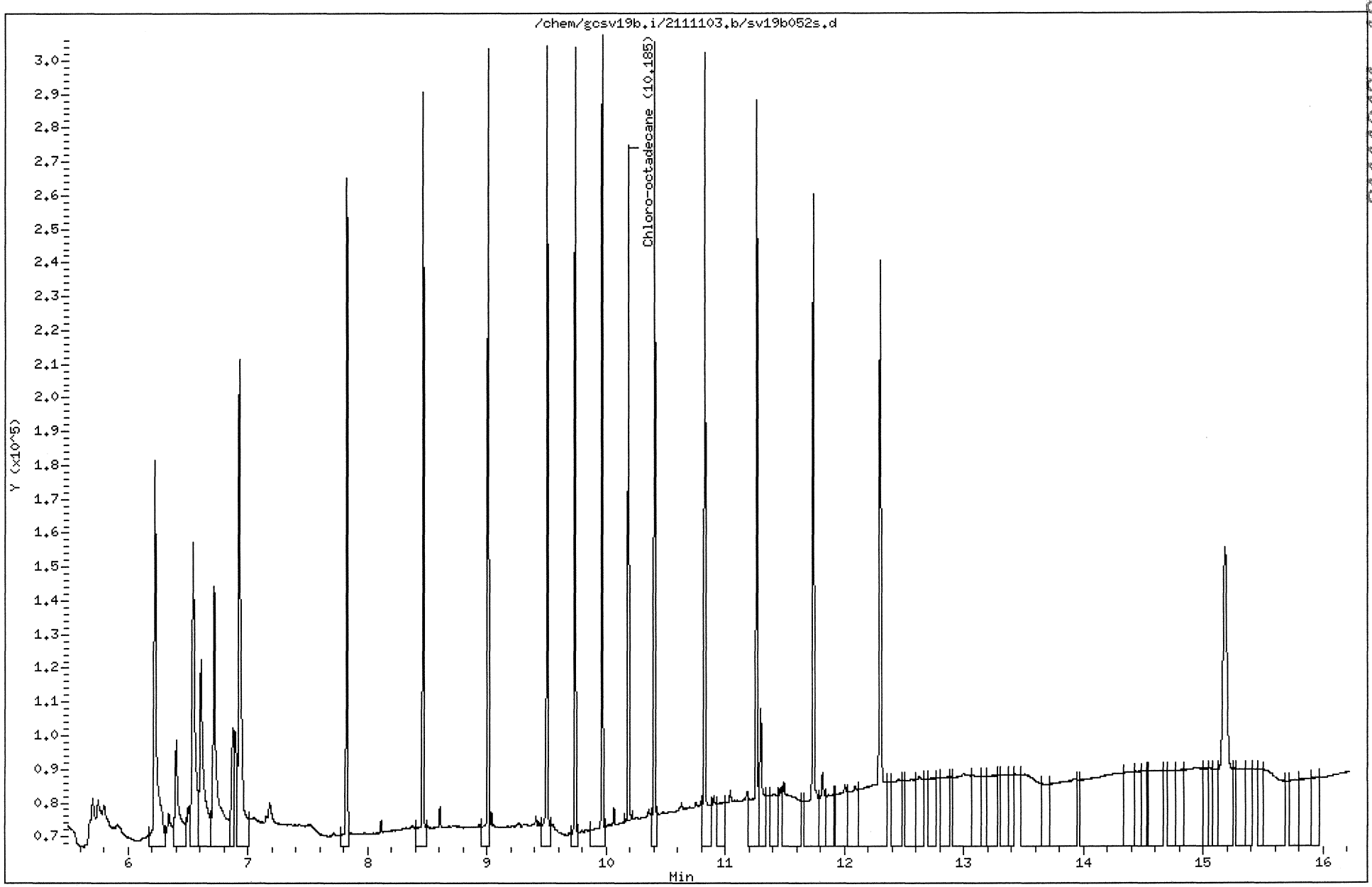
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

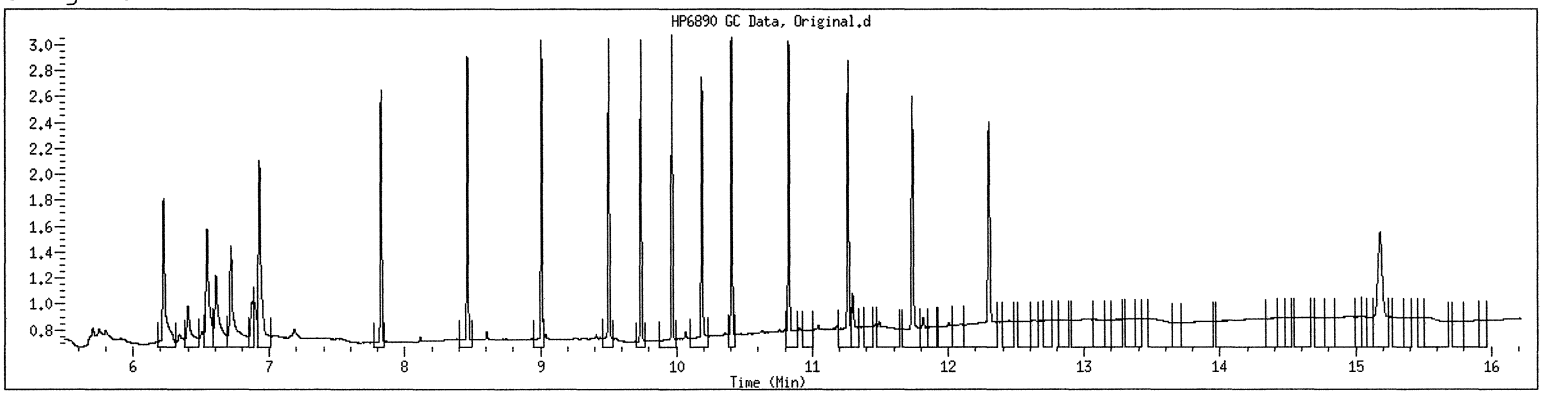
Column diameter: 0.25



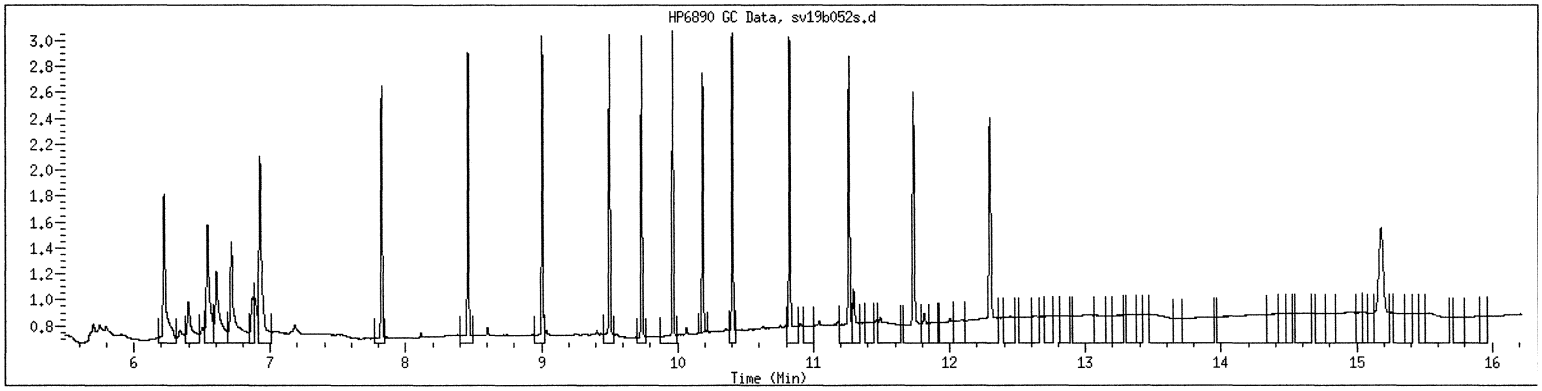
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1201	SampleType	: CALIB_1
Injection Date	: 11/03/2011 12:55	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1201*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/AROEPH.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: chlosurr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b053s.d
Lab Smp Id: 1202 Client Smp ID: 1 84-16-1
Inj Date : 03-NOV-2011 13:18
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1202*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/AROEPH.m
Meth Date : 08-Nov-2011 08:52 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 53 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: chlosurr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(UG/ML)	(UG/ML)
$ 14 Chloro-octadecane	10.165	10.305	-0.140	27926615	20.0000	20.2197(M2)

QC Flag Legend

M2- Compound response manually integrated because
Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111103.b/sv19b053s.d

Date : 03-NOV-2011 13:18

Client ID: 1 84-16-1

Sample Info: 1202x1 84-16-1

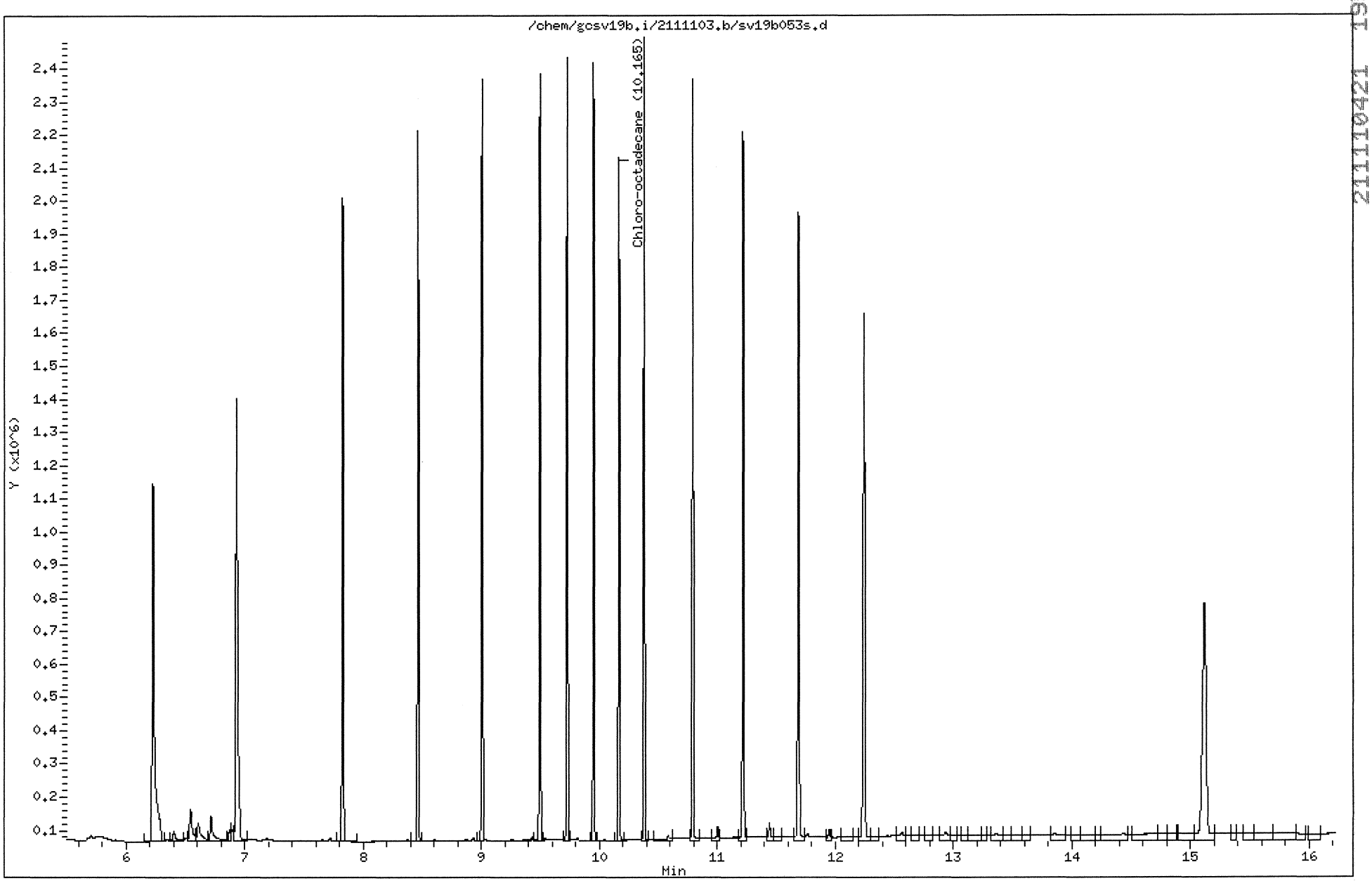
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

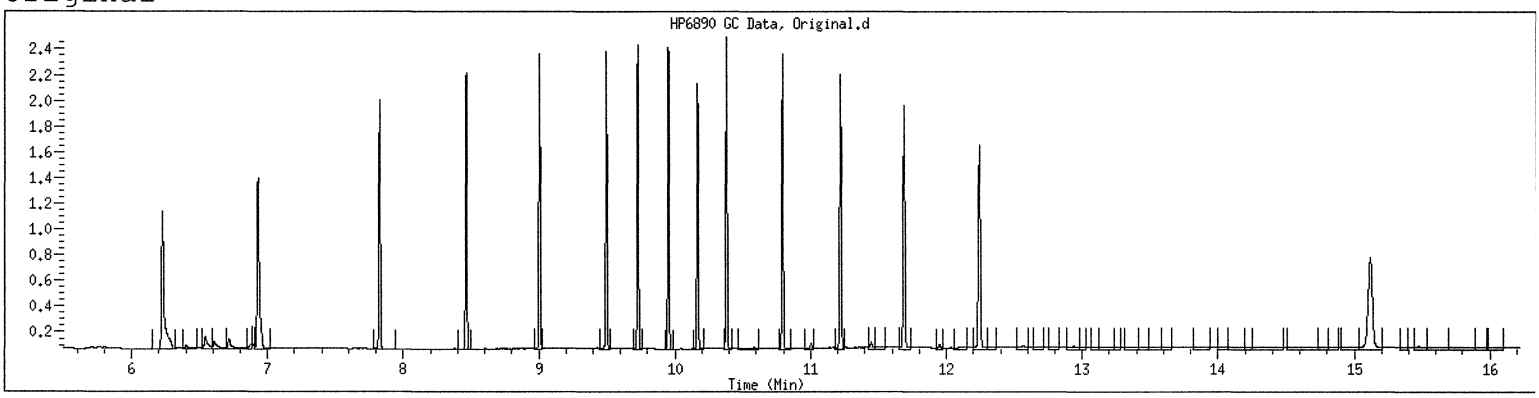
Column diameter: 0.25



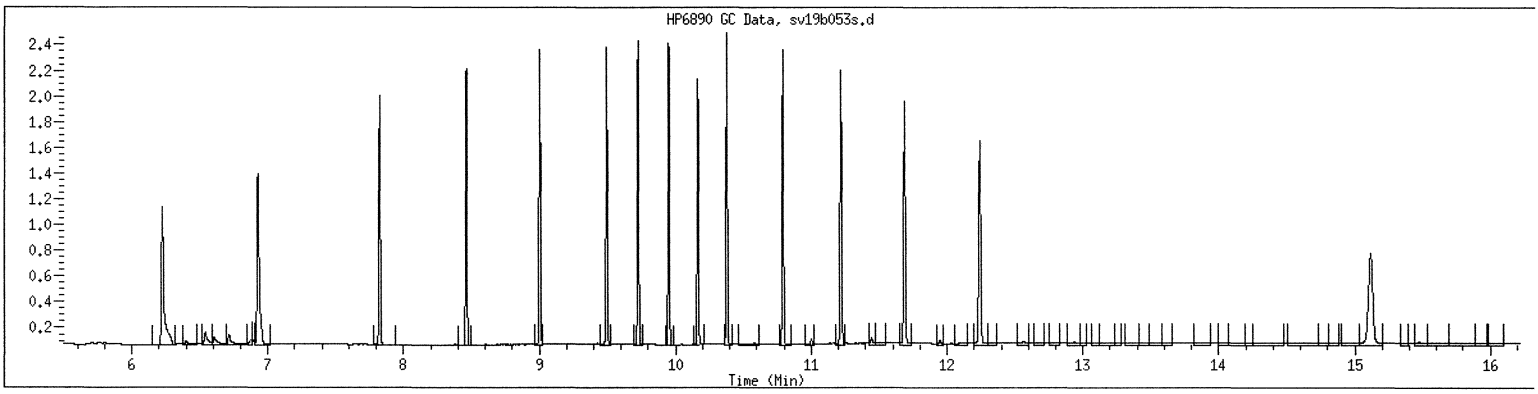
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1202	SampleType	: CALIB_2
Injection Date	: 11/03/2011 13:18	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1202*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/AROEPH.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: chlosurr

Original



Final



GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b054s.d
Lab Smp Id: 1203 Client Smp ID: 1 84-16-1
Inj Date : 03-NOV-2011 13:42
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1203*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/AROEPH.m
Meth Date : 08-Nov-2011 08:52 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:42 Cal File: sv19b054s.d
Als bottle: 54 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: chlosurr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(UG/ML)	(UG/ML)
$ 14 Chloro-octadecane	10.166	10.259	-0.093	136540779	100.000	99.2368

Data File: /chem/gcsv19b.i/2111103.b/sv19b054s.d

Date : 03-NOV-2011 13:42

Client ID: 1 84-16-1

Sample Info: 1203*1 84-16-1

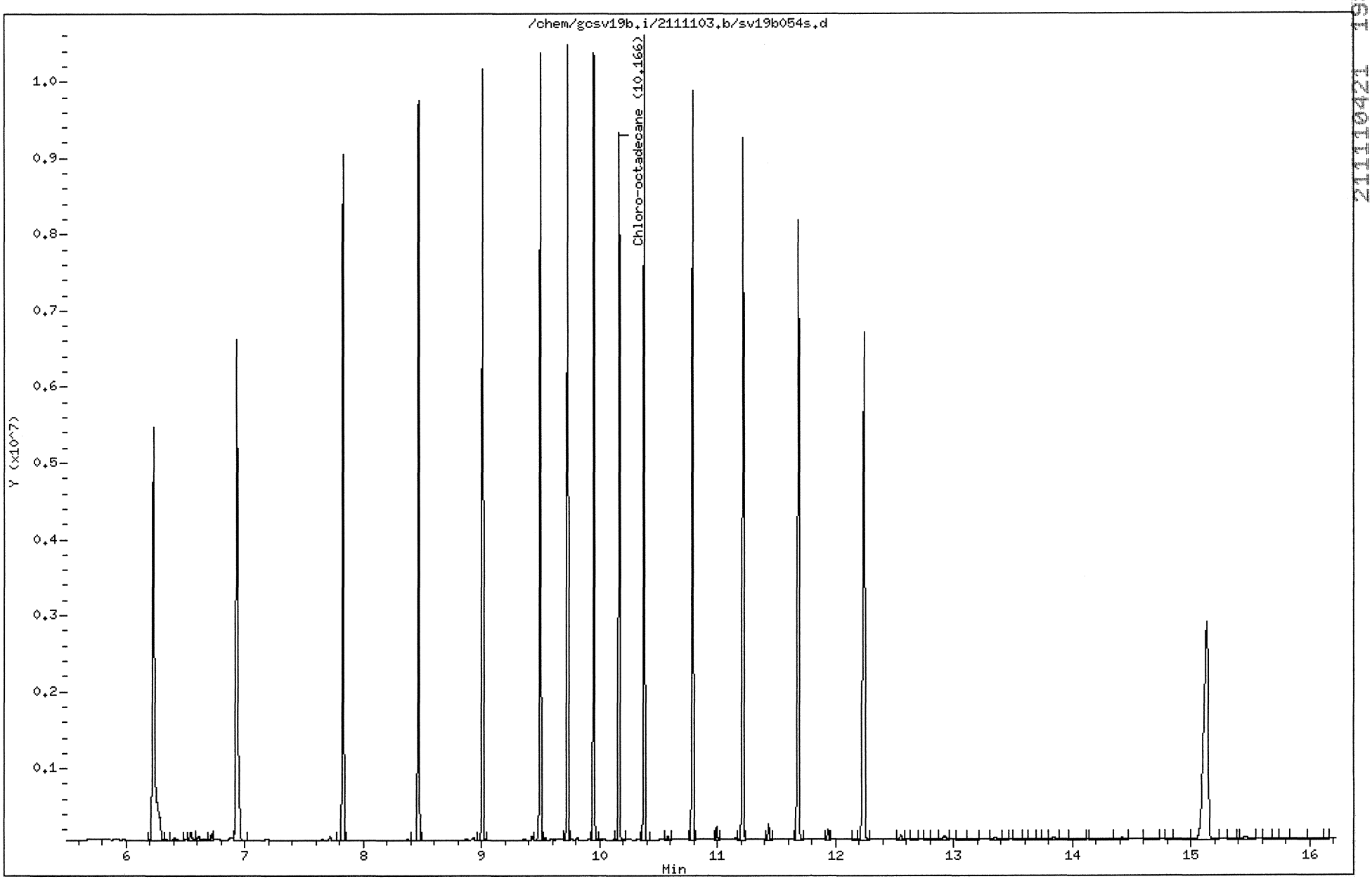
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

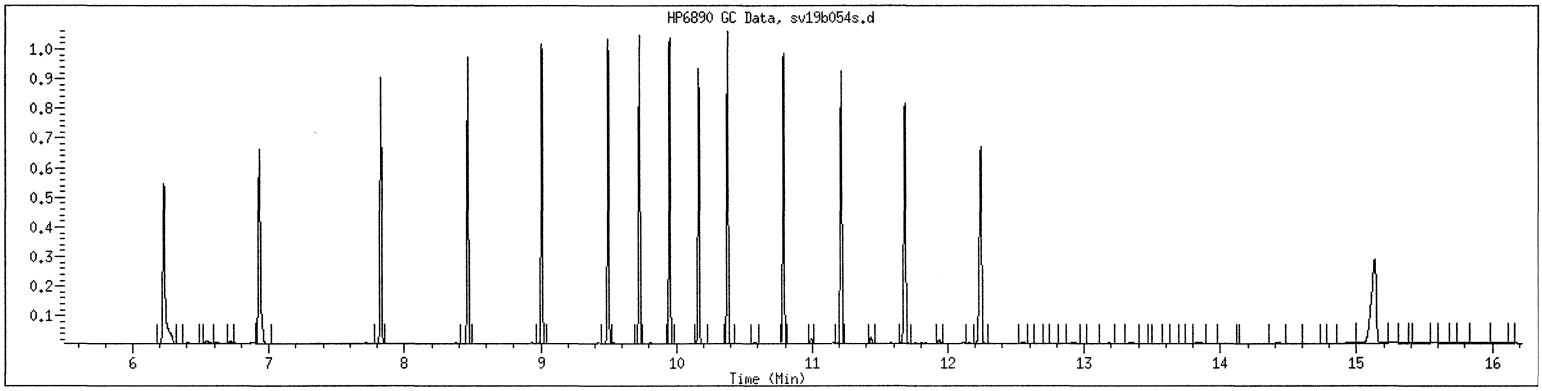
Operator: smh

Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1203	SampleType	: CALIB_3
Injection Date	: 11/03/2011 13:42	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1203*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/AROEPH.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: chlosurr



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b055s.d
Lab Smp Id: 1204 Client Smp ID: 1 84-16-1
Inj Date : 03-NOV-2011 14:06
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1204*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/AROEPH.m
Meth Date : 08-Nov-2011 08:52 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:06 Cal File: sv19b055s.d
Als bottle: 55 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: chlosurr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(UG/ML)	(UG/ML)
$ 14 Chloro-octadecane	10.173	10.259	-0.086	277518519	200.000	201.2711(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b055s.d

Page 1

Date : 03-NOV-2011 14:06

Client ID: 1 84-16-1

Instrument: gcsv19b.i

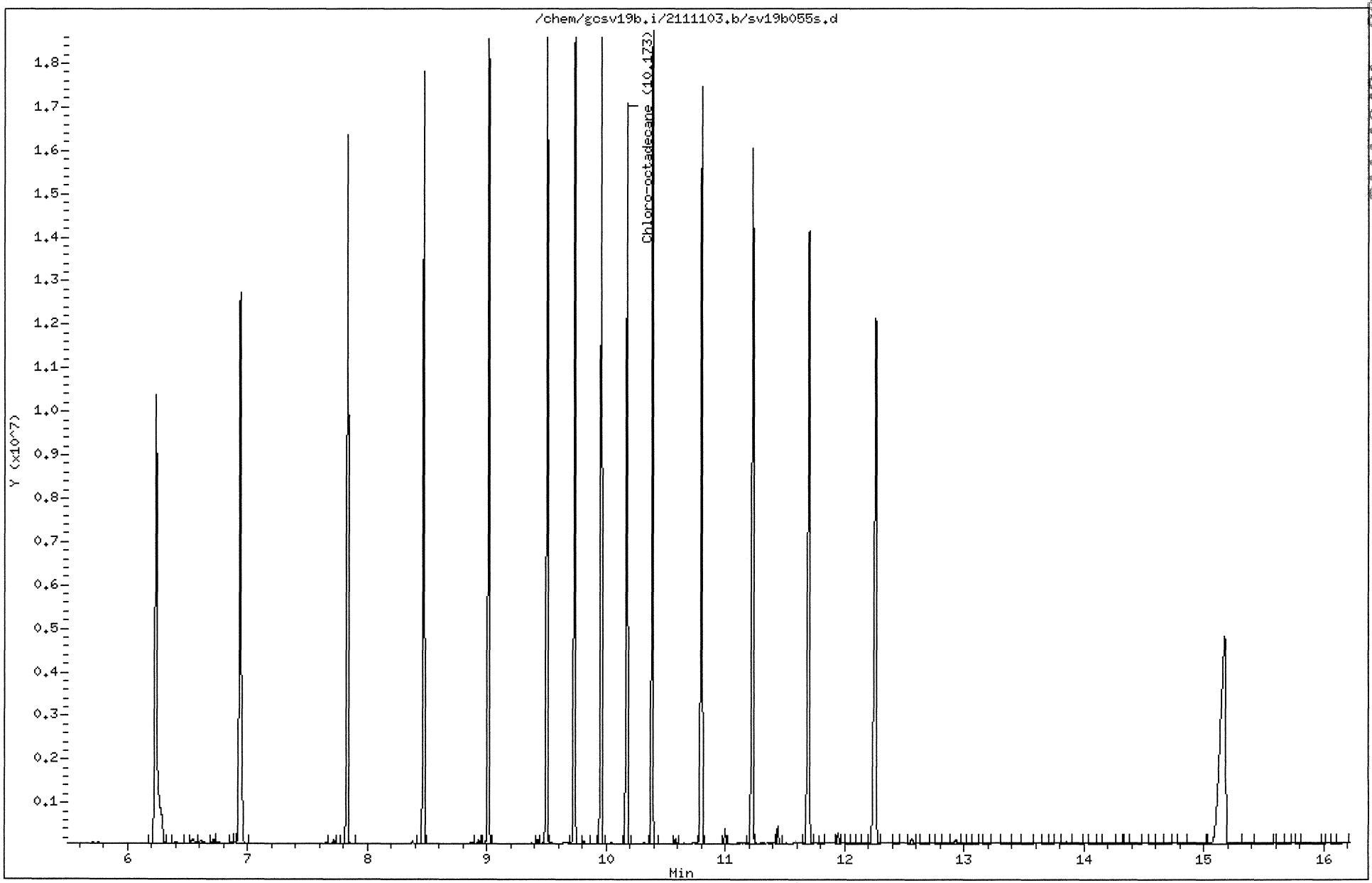
Sample Info: 1204*1 84-16-1

Volume Injected (uL): 1.0

Operator: smh

Column phase: DB-5MS-30M

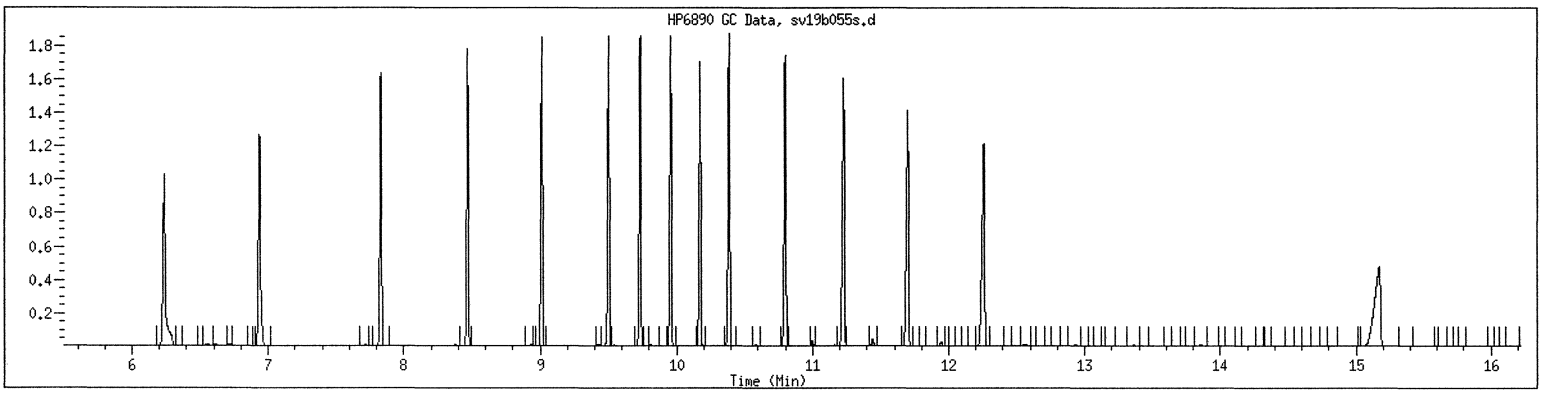
Column diameter: 0.25



211110421 201

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1204	SampleType	: CALIB_4
Injection Date	: 11/03/2011 14:06	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1204*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/AROEPH.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: chlosurr



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111103.b/sv19b056s.d
Lab Smp Id: 1205 Client Smp ID: 1 84-16-1
Inj Date : 03-NOV-2011 14:30
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1205*1 84-16-1
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111103.b/AROEPH.m
Meth Date : 08-Nov-2011 08:52 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056s.d
Als bottle: 56 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: chlosurr.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(UG/ML)	(UG/ML)
$ 14 Chloro-octadecane	10.176	10.259	-0.083	533373016	400.000	389.3944(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111103.b/sv19b056s.d

Date : 03-NOV-2011 14:30

Client ID: 1 84-16-1

Sample Info: 1205*1 84-16-1

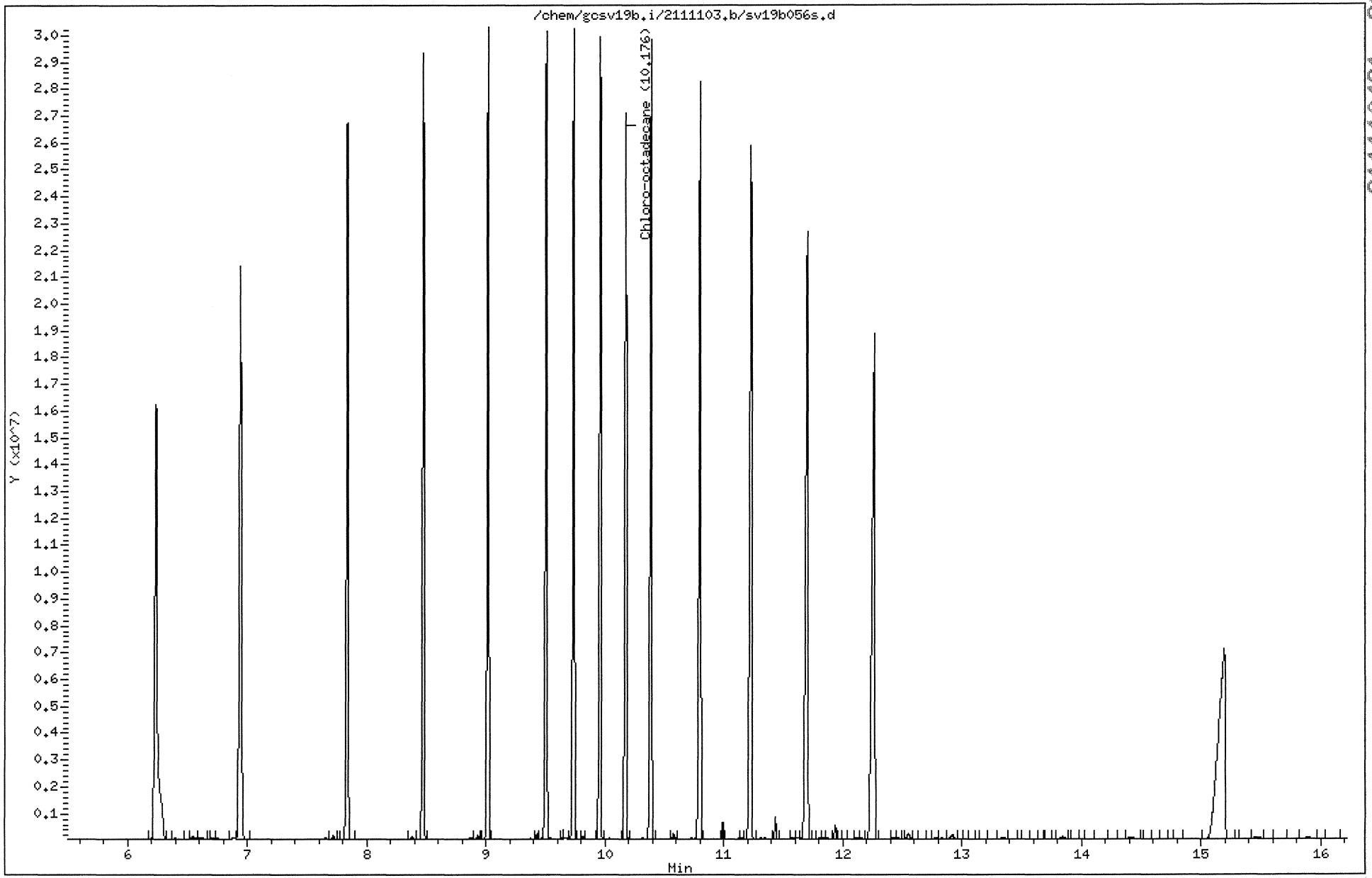
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

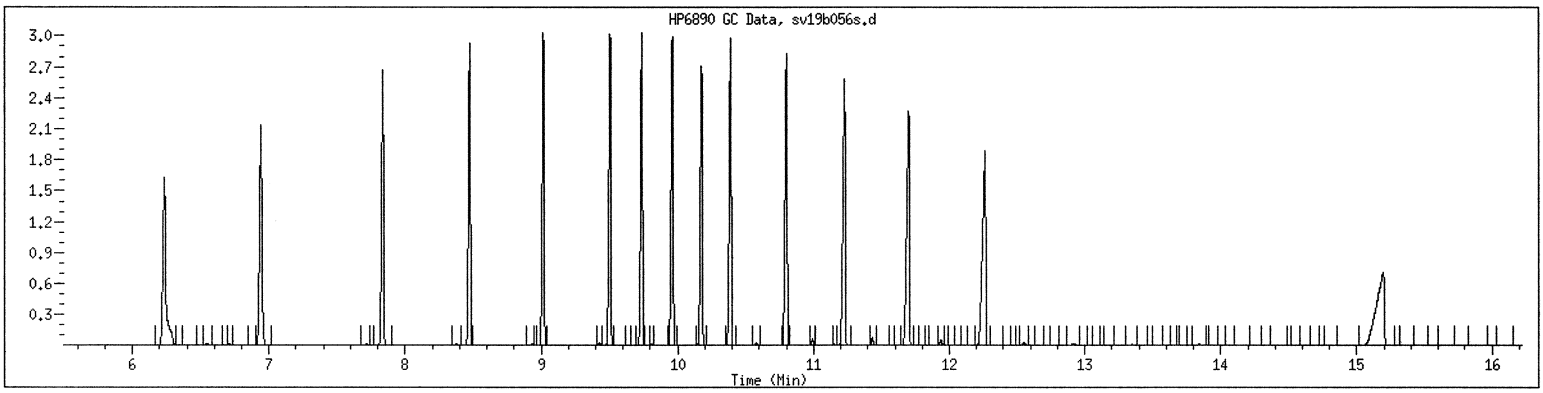
Column diameter: 0.25



Report Date: 11/08/2011 08:52

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1205	SampleType	: CALIB_5
Injection Date	: 11/03/2011 14:30	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1205*1 84-16-1		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111103.b/AROEPH.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: chlosurr



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 14:13
Lab File ID: sv19b052.d Init. Cal. Date(s): 02-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 15:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	2842159	2643972	0.010	6.97310	25.00000	Averaged
2 2-Methylnaphthalene	2378988	2214133	0.010	6.92963	25.00000	Averaged
$ 3 2-Fluorobiphenyl	2457488	2316259	0.010	5.74686	25.00000	Averaged
4 Acenaphthylene	2763267	2583096	0.010	6.52022	25.00000	Averaged
$ 5 2-Bromonaphthalene	1568778	1433504	0.010	8.62289	25.00000	Averaged
6 Acenaphthene	2910153	2768868	0.010	4.85490	25.00000	Averaged
7 Fluorene	2771184	2631823	0.010	5.02896	25.00000	Averaged
8 Phenanthrene	2760684	2518615	0.010	8.76847	25.00000	Averaged
9 Anthracene	2653997	2517693	0.010	5.13583	25.00000	Averaged
$ 10 O-Terphenyl	2948796	2752788	0.010	6.64704	25.00000	Averaged
12 Fluoranthene	2821141	2509422	0.010	11.04940	25.00000	Averaged
13 Pyrene	2855480	2647674	0.010	7.27747	25.00000	Averaged
14 Benzo(a)Anthracene	2777049	2260450	0.010	18.60244	25.00000	Averaged
15 Chrysene	2748172	2735898	0.010	0.44664	25.00000	Averaged
16 Benzo(b)Fluoranthene	2813367	2461671	0.010	12.50087	25.00000	Averaged
17 Benzo(k)Fluoranthene	2813367	2461671	0.010	12.50087	25.00000	Averaged
18 Benzo(a)Pyrene	2772685	2613952	0.010	5.72490	25.00000	Averaged
19 Indo(1,2,3cd)Pyrene	2679052	2407432	0.010	10.13865	25.00000	Averaged
20 Dibenzo(a,h)Anthracene	2679052	2407432	0.010	10.13865	25.00000	Averaged
21 Benzo(g,h,i)Perylene	2777993	2693272	0.010	3.04975	25.00000	Averaged
M 22 Arom C11-C22	2753988	2533945	0.010	7.98995	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.93784
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b052.d
Lab Smp Id: 1400 Client Smp ID: 1 84-12-8
Inj Date : 10-NOV-2011 14:13
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 16:02 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 52 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: cal.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.875	7.880	-0.005	132198609	50.0000	46.5
	2 2-Methylnaphthalene	8.262	8.265	-0.003	110706672	50.0000	46.5
$	3 2-Fluorobiphenyl	8.450	8.454	-0.004	115812971	50.0000	47.1
	4 Acenaphthylene	8.763	8.766	-0.003	129154777	50.0000	46.7
$	5 2-Bromonaphthalene	8.836	8.838	-0.002	71675211	50.0000	45.7
	6 Acenaphthene	8.855	8.858	-0.003	138443389	50.0000	47.6
	7 Fluorene	9.129	9.132	-0.003	131591129	50.0000	47.5
	8 Phenanthrene	9.659	9.657	0.002	125930741	50.0000	45.6
	9 Anthracene	9.689	9.688	0.001	125884626	50.0000	47.4
$	10 O-Terphenyl	9.823	9.822	0.001	137639397	50.0000	46.7
	12 Fluoranthene	10.333	10.327	0.006	125471080	50.0000	44.5
	13 Pyrene	10.475	10.467	0.008	132383678	50.0000	46.4
	14 Benzo(a)Anthracene	11.223	11.223	0.000	113022488	50.0000	40.7
	15 Chrysene	11.255	11.250	0.005	136794887	50.0000	49.8

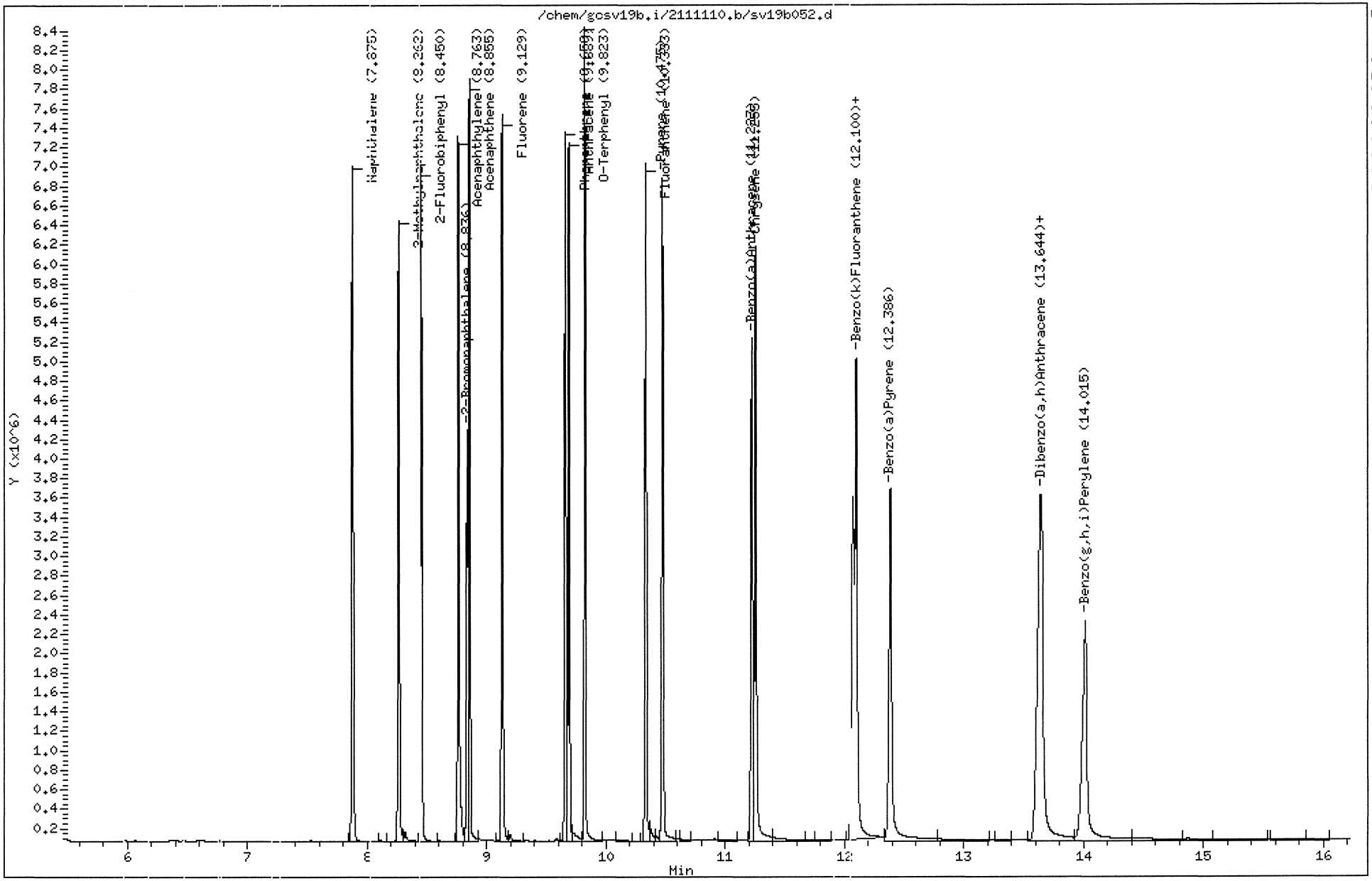
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
16	Benzo(b)Fluoranthene	12.100	12.085	0.015	246167136	100.000	87.5(M2)
17	Benzo(k)Fluoranthene	12.100	12.085	0.015	246167136	100.000	87.5(M2)
18	Benzo(a)Pyrene	12.386	12.370	0.016	130697590	50.0000	47.1
19	Indo(1,2,3cd)Pyrene	13.644	13.598	0.046	240743229	100.000	89.9(M1)
20	Dibenzo(a,h)Anthracene	13.644	13.638	0.006	240743229	100.000	89.9
21	Benzo(g,h,i)Perylene	14.015	13.997	0.018	134663577	50.0000	48.5
M 22	Arom C11-C22				2153853608	850.000	782

QC Flag Legend

M1- Compound response manually integrated because Target system did not integrate.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111110.b/sv19b052.d
Date : 10-NOV-2011 1[illegible]:13
Client ID: 1 84-12-8
Sample Info: 1400x1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

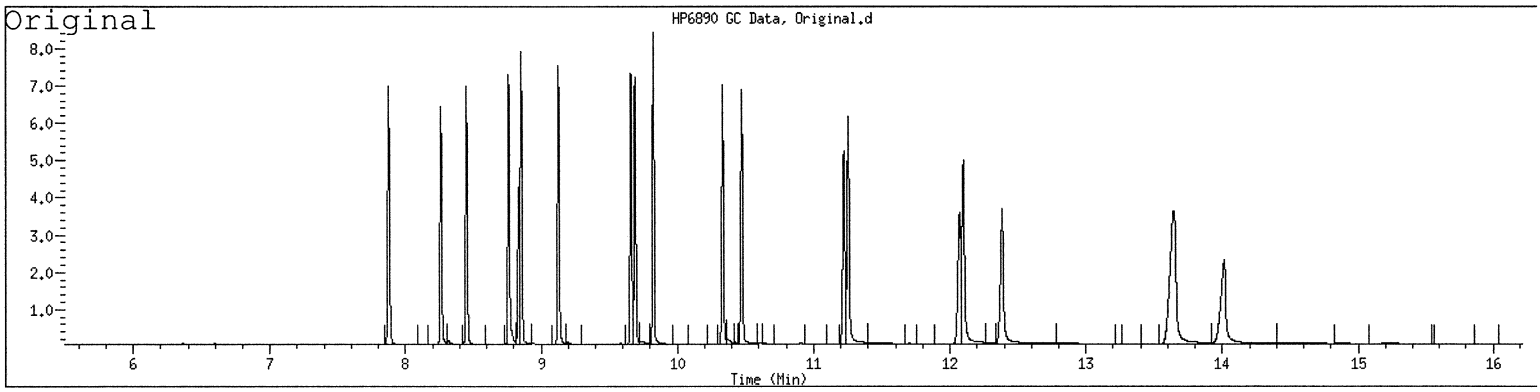
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



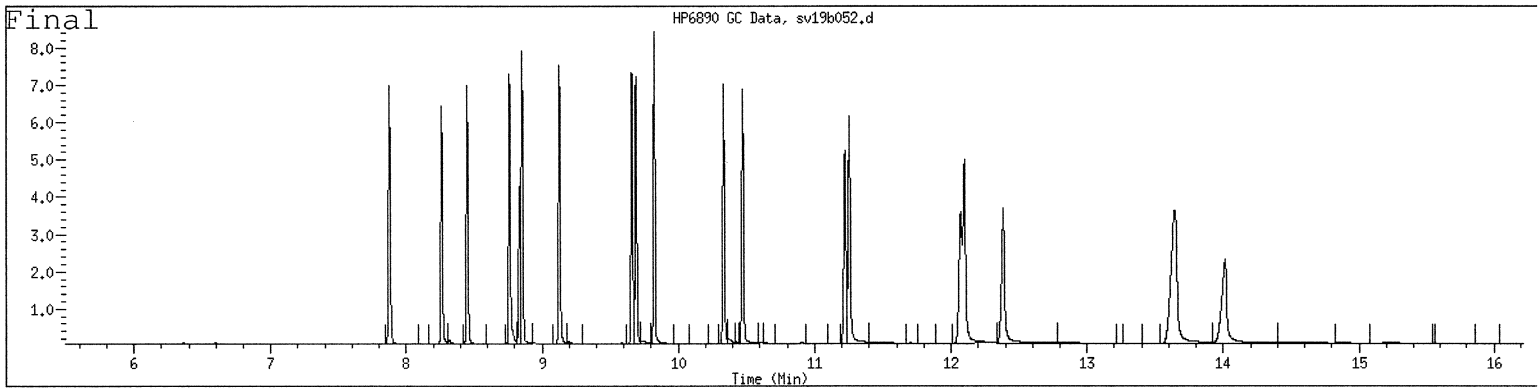
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 14:13	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist:	cal

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 14:37
Lab File ID: sv19b053.d Init. Cal. Date(s): 03-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 12:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 C-9	2719340	2612883	0.010	3.91480	25.00000	Averaged
2 C-10	2739215	2651076	0.010	3.21768	25.00000	Averaged
4 C-12	2801460	2732444	0.010	2.46357	25.00000	Averaged
6 C-14	2878136	2764141	0.010	3.96074	25.00000	Averaged
8 C-16	2983102	2843571	0.010	4.67737	25.00000	Averaged
10 C-18	3021289	2807220	0.010	7.08537	25.00000	Averaged
M 11 Alip C9-C18	2857090	2735223	0.010	4.26546	25.00000	Averaged
12 C-19	3017239	2816034	0.010	6.66852	25.00000	Averaged
13 C-20	3045314	2850436	0.010	6.39926	25.00000	Averaged
$ 15 Chlorooctadecane	2739581	2573613	0.010	6.05816	25.00000	Averaged
16 C-22	3060647	2856542	0.010	6.66869	25.00000	Averaged
18 C-24	3098402	2897387	0.010	6.48770	25.00000	Averaged
20 C-26	3120089	2923933	0.010	6.28687	25.00000	Averaged
22 C-28	3095987	2886973	0.010	6.75113	25.00000	Averaged
115 C-30	3120341	2928603	0.010	6.14475	25.00000	Averaged
114 C-36	2925634	2594512	0.010	11.31796	25.00000	Averaged
M 24 Alip C19-C36	3060457	2844302	0.010	7.06281	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.59037
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b053.d
Lab Smp Id: 1400 Client Smp ID: 1 84-15-4
Inj Date : 10-NOV-2011 14:37
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-15-4
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 17-Nov-2011 12:26 smh Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 53 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.227	6.232	-0.005	130644166	50.0000	48.0
	2 C-10	6.927	6.928	-0.001	132553801	50.0000	48.4
	4 C-12	7.824	7.832	-0.008	136622203	50.0000	48.8
	6 C-14	8.463	8.471	-0.008	138207049	50.0000	48.0
	8 C-16	9.005	9.013	-0.008	142178545	50.0000	47.7
	10 C-18	9.496	9.503	-0.007	140360985	50.0000	46.5
M	11 Alip C9-C18				820566751	300.000	287
	12 C-19	9.726	9.774	-0.048	140801679	50.0000	46.7
	13 C-20	9.949	9.957	-0.008	142521816	50.0000	46.8
$	15 Chlorooctadecane	10.163	10.216	-0.053	128680639	50.0000	47.0
	16 C-22	10.376	10.383	-0.007	142827089	50.0000	46.7
	18 C-24	10.787	10.795	-0.008	144869340	50.0000	46.8
	20 C-26	11.214	11.222	-0.008	146196632	50.0000	46.9
	22 C-28	11.682	11.723	-0.041	144348659	50.0000	46.6

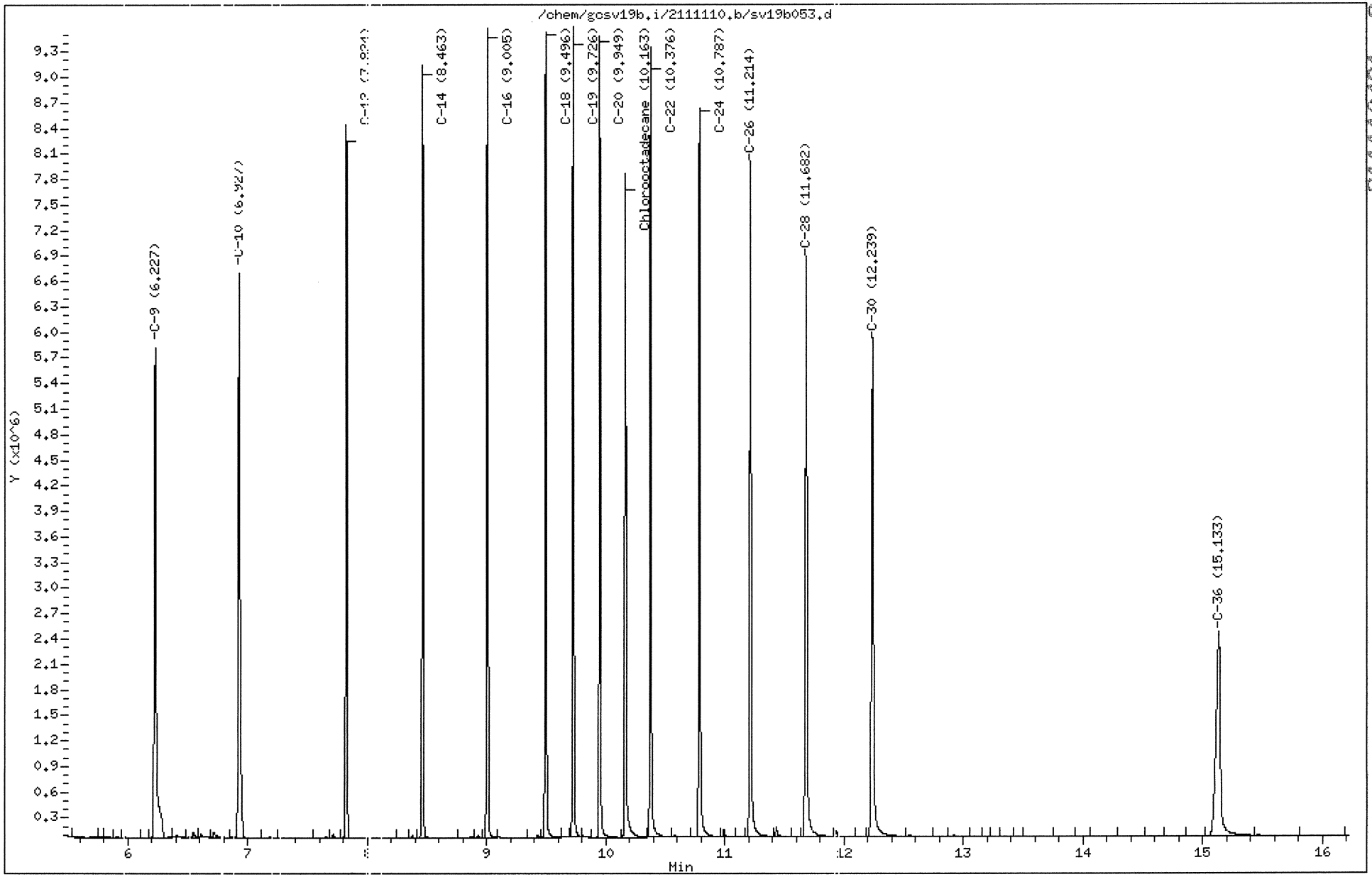
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
115 C-30	12.239	12.249	-0.010	146430165	50.0000	46.9(A)
114 C-36	15.133	15.143	-0.010	129725597	50.0000	44.3(A)
M 24 Alip C19-C36				1137720980	400.000	372

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

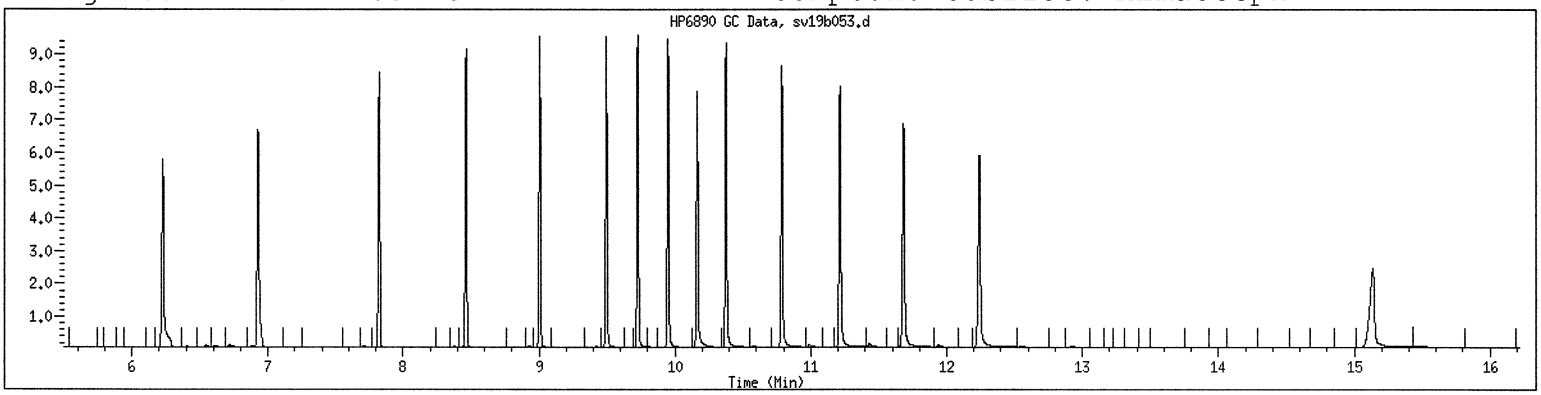
Data File: /chem/gcs\19b.i/2111110.b/s\.19b053.d
Date : 10-NOV-2011 1<:37
Client ID: 1 84-15-4
Sample Info: 140C*1 84-15-4
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

Instrument: gcs\19b.i
Operator: smh
Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 14:37	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-15-4		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 19:16
Lab File ID: sv19b064.d Init. Cal. Date(s): 02-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 15:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	2842159	2638530	0.010	7.16458	25.00000	Averaged
2 2-Methylnaphthalene	2378988	2227337	0.010	6.37462	25.00000	Averaged
$ 3 2-Fluorobiphenyl	2457488	2309148	0.010	6.03623	25.00000	Averaged
4 Acenaphthylene	2763267	2609326	0.010	5.57096	25.00000	Averaged
$ 5 2-Bromonaphthalene	1568778	1541377	0.010	1.74669	25.00000	Averaged
6 Acenaphthene	2910153	2666069	0.010	8.38733	25.00000	Averaged
7 Fluorene	2771184	2646356	0.010	4.50450	25.00000	Averaged
8 Phenanthrene	2760684	2629050	0.010	4.76820	25.00000	Averaged
9 Anthracene	2653997	2541899	0.010	4.22377	25.00000	Averaged
$ 10 O-Terphenyl	2948796	2777283	0.010	5.81637	25.00000	Averaged
12 Fluoranthene	2821141	2690287	0.010	4.63832	25.00000	Averaged
13 Pyrene	2855480	2726104	0.010	4.53079	25.00000	Averaged
14 Benzo(a)Anthracene	2777049	2573062	0.010	7.34547	25.00000	Averaged
15 Chrysene	2748172	2646508	0.010	3.69933	25.00000	Averaged
16 Benzo(b)Fluoranthene	2813367	2638572	0.010	6.21302	25.00000	Averaged
17 Benzo(k)Fluoranthene	2813367	2638572	0.010	6.21302	25.00000	Averaged
18 Benzo(a)Pyrene	2772685	2658760	0.010	4.10883	25.00000	Averaged
19 Indo(1,2,3cd)Pyrene	2679052	2591557	0.010	3.26591	25.00000	Averaged
20 Dibenzo(a,h)Anthracene	2679052	2591557	0.010	3.26591	25.00000	Averaged
21 Benzo(g,h,i)Perylene	2777993	2748023	0.010	1.07885	25.00000	Averaged
M 22 Arom C11-C22	2753988	2615386	0.010	5.03275	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.93784
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b064.d
Lab Smp Id: 1400 Client Smp ID: 1 84-12-8
Inj Date : 10-NOV-2011 19:16
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 16:02 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: cal.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.875	7.880	-0.005	131926498	50.0000	46.4
	2 2-Methylnaphthalene	8.262	8.265	-0.003	111366853	50.0000	46.8
$	3 2-Fluorobiphenyl	8.450	8.454	-0.004	115457412	50.0000	47.0
	4 Acenaphthylene	8.763	8.766	-0.003	130466308	50.0000	47.2
$	5 2-Bromonaphthalene	8.836	8.838	-0.002	77068827	50.0000	49.1
	6 Acenaphthene	8.856	8.858	-0.002	133303433	50.0000	45.8
	7 Fluorene	9.129	9.132	-0.003	132317824	50.0000	47.7
	8 Phenanthrene	9.657	9.657	0.000	131452475	50.0000	47.6
	9 Anthracene	9.688	9.688	0.000	127094930	50.0000	47.9
$	10 O-Terphenyl	9.821	9.822	-0.001	138864147	50.0000	47.1
	12 Fluoranthene	10.329	10.327	0.002	134514358	50.0000	47.7
	13 Pyrene	10.469	10.467	0.002	136305219	50.0000	47.7
	14 Benzo(a)Anthracene	11.214	11.223	-0.009	128653078	50.0000	46.3
	15 Chrysene	11.247	11.250	-0.003	132325413	50.0000	48.2

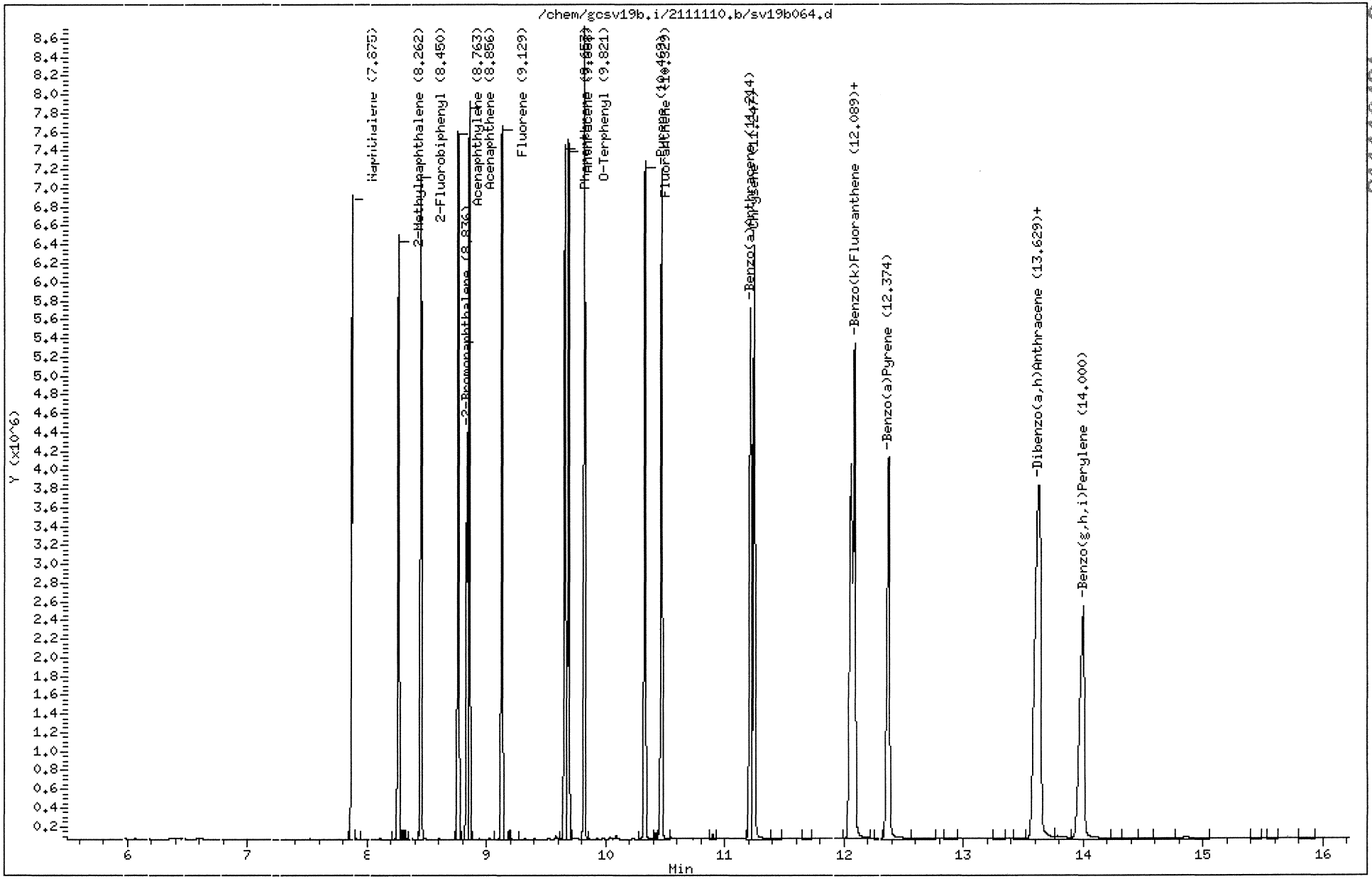
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	ON-COL (UG/ML)
16	Benzo(b)Fluoranthene	12.089	12.085	0.004	263857178	100.000	93.8(M2)
17	Benzo(k)Fluoranthene	12.089	12.085	0.004	263857178	100.000	93.8(M2)
18	Benzo(a)Pyrene	12.374	12.370	0.004	132938020	50.0000	47.9
19	Indo(1,2,3cd)Pyrene	13.629	13.598	0.031	259155661	100.000	96.7(M1)
20	Dibenzo(a,h)Anthracene	13.629	13.638	-0.009	259155661	100.000	96.7
21	Benzo(g,h,i)Perylene	14.000	13.997	0.003	137401151	50.0000	49.5
M 22	Arom C11-C22				2223078399	850.000	807

QC Flag Legend

M1- Compound response manually integrated because Target system did not integrate.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111110.b/sv19b064.d
Date : 10-NOV-2011 19:16
Client ID: 1 84-12-8
Sample Info: 1400x1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

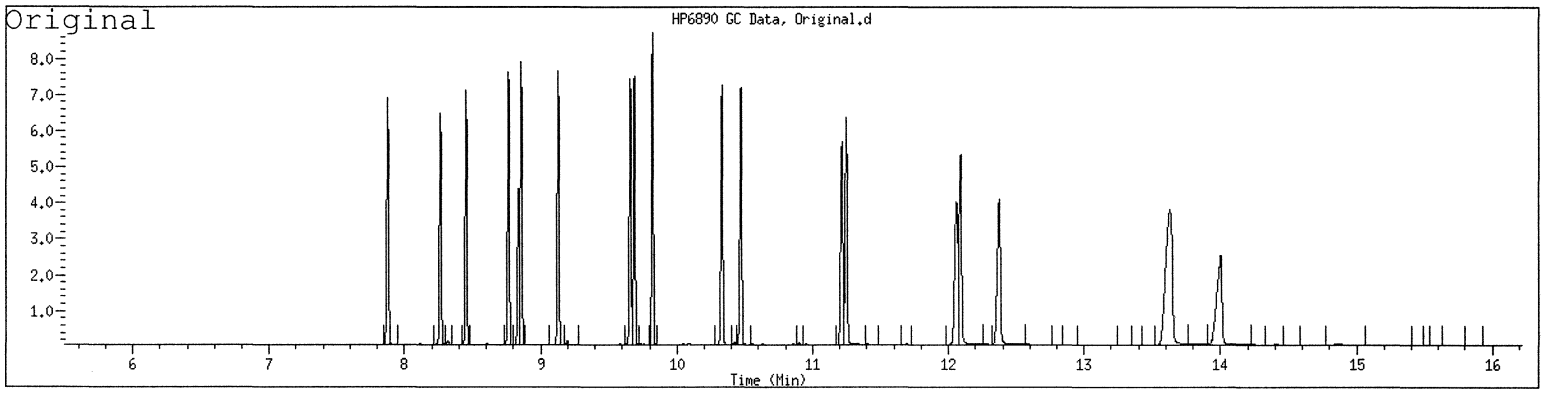
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25

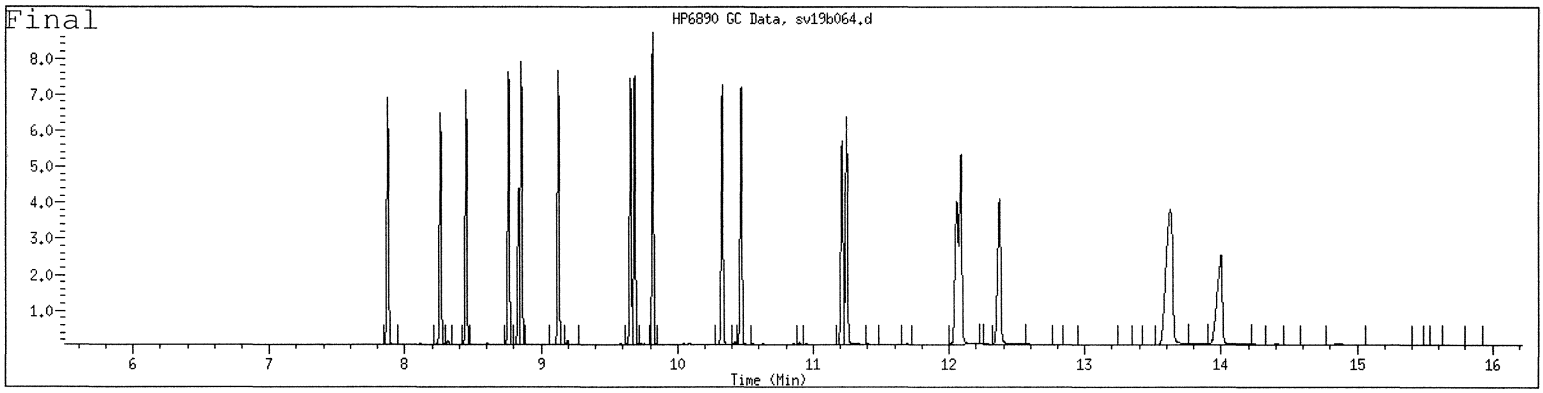


211110421 219

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 19:16	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: cal





GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 19:40
Lab File ID: sv19b065.d Init. Cal. Date(s): 03-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 12:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 C-9	2719340	2659888	0.010	2.18628	25.00000	Averaged
2 C-10	2739215	2728622	0.010	0.38674	25.00000	Averaged
4 C-12	2801460	2758261	0.010	1.54200	25.00000	Averaged
6 C-14	2878136	2797478	0.010	2.80247	25.00000	Averaged
8 C-16	2983102	2910072	0.010	2.44812	25.00000	Averaged
10 C-18	3021289	2857548	0.010	5.41959	25.00000	Averaged
M 11 Alip C9-C18	2857090	2785311	0.010	2.51232	25.00000	Averaged
12 C-19	3017239	2893348	0.010	4.10609	25.00000	Averaged
13 C-20	3045314	2906107	0.010	4.57119	25.00000	Averaged
$ 15 Chlorooctadecane	2739581	2653375	0.010	3.14669	25.00000	Averaged
16 C-22	3060647	2937725	0.010	4.01622	25.00000	Averaged
18 C-24	3098402	2950236	0.010	4.78202	25.00000	Averaged
20 C-26	3120089	2991129	0.010	4.13320	25.00000	Averaged
22 C-28	3095987	2998965	0.010	3.13383	25.00000	Averaged
115 C-30	3120341	2959574	0.010	5.15223	25.00000	Averaged
114 C-36	2925634	2744376	0.010	6.19551	25.00000	Averaged
M 24 Alip C19-C36	3060457	2922682	0.010	4.50175	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.59037
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b065.d
Lab Smp Id: 1400 Client Smp ID: 1 84-15-4
Inj Date : 10-NOV-2011 19:40
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-15-4
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 17-Nov-2011 12:26 smh Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 65 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.227	6.232	-0.005	132994388	50.0000	48.9
	2 C-10	6.927	6.928	-0.001	136431081	50.0000	49.8
	4 C-12	7.824	7.832	-0.008	137913072	50.0000	49.2
	6 C-14	8.463	8.471	-0.008	139873879	50.0000	48.6
	8 C-16	9.005	9.013	-0.008	145503588	50.0000	48.8
	10 C-18	9.495	9.503	-0.008	142877380	50.0000	47.3
M	11 Alip C9-C18				835593388	300.000	293
	12 C-19	9.724	9.774	-0.050	144667418	50.0000	47.9
	13 C-20	9.947	9.957	-0.010	145305352	50.0000	47.7
$	15 Chlorooctadecane	10.161	10.216	-0.055	132668745	50.0000	48.4
	16 C-22	10.372	10.383	-0.011	146886232	50.0000	48.0
	18 C-24	10.783	10.795	-0.012	147511784	50.0000	47.6
	20 C-26	11.209	11.222	-0.013	149556451	50.0000	47.9
	22 C-28	11.676	11.723	-0.047	149948227	50.0000	48.4

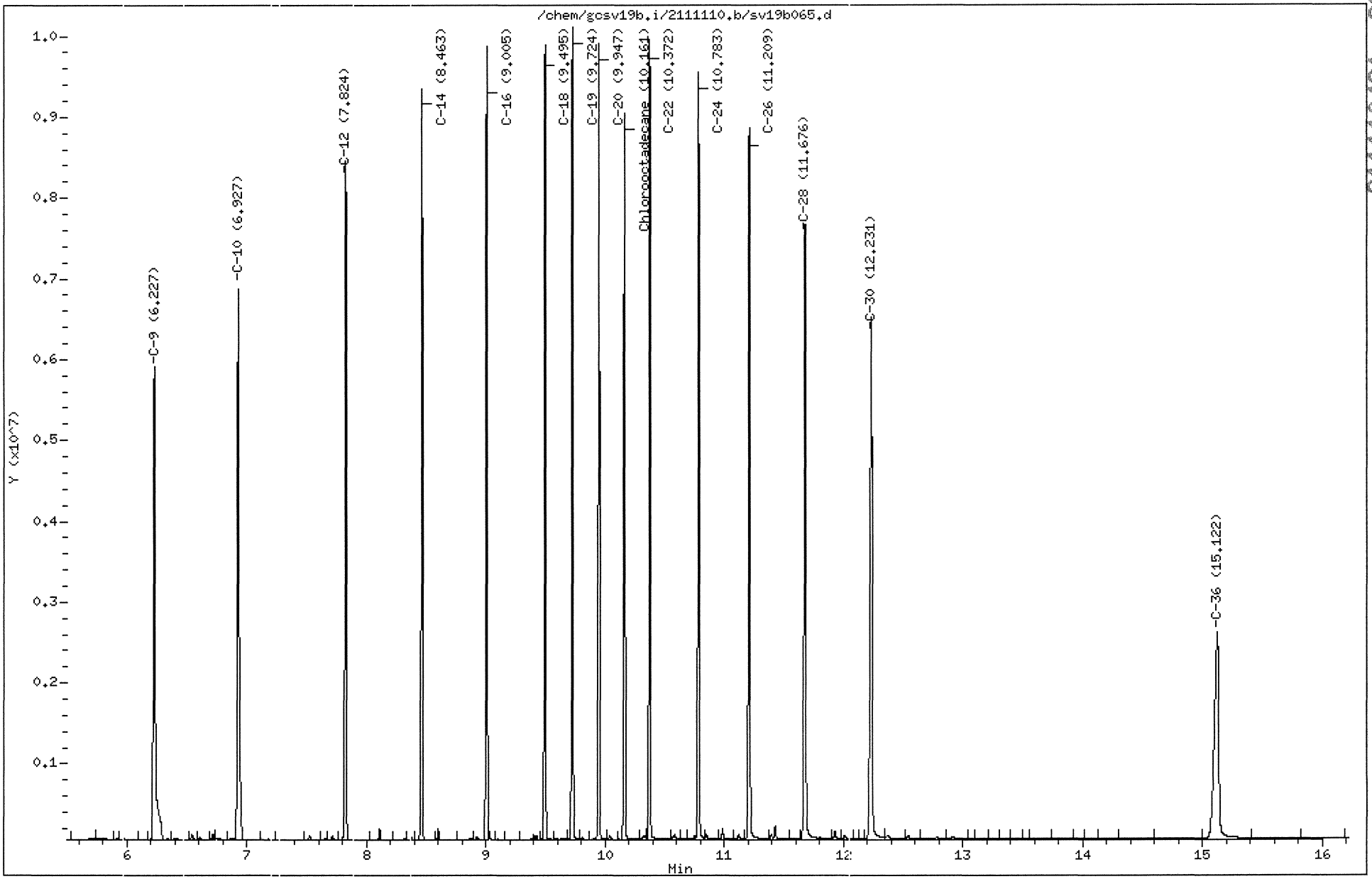
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
115 C-30	12.231	12.249	-0.018	147978676	50.0000	47.4(A)
114 C-36	15.122	15.143	-0.021	137218811	50.0000	46.9
M 24 Alip C19-C36				1169072951	400.000	382

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111110.b/sv19b065.d
Date : 10-NOV-2011 19:40
Client ID: 1 84-15-4
Sample Info: 1400x1 84-15-4
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

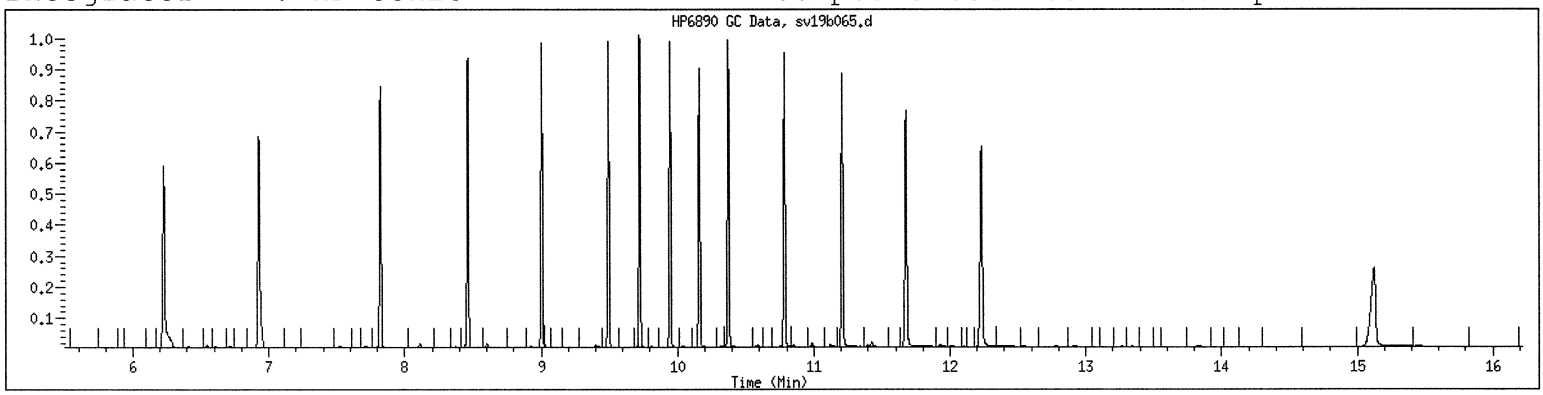
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



Report Date: 11/28/2011 13:45

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 19:40	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-15-4		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 20:04
Lab File ID: sv19b066.d Init. Cal. Date(s): 02-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 15:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	2842159	2642965	0.010	7.00852	25.00000	Averaged
2 2-Methylnaphthalene	2378988	2231406	0.010	6.20357	25.00000	Averaged
$ 3 2-Fluorobiphenyl	2457488	2312112	0.010	5.91564	25.00000	Averaged
4 Acenaphthylene	2763267	2617415	0.010	5.27825	25.00000	Averaged
$ 5 2-Bromonaphthalene	1568778	1491407	0.010	4.93193	25.00000	Averaged
6 Acenaphthene	2910153	2735628	0.010	5.99711	25.00000	Averaged
7 Fluorene	2771184	2660239	0.010	4.00352	25.00000	Averaged
8 Phenanthrene	2760684	2650152	0.010	4.00381	25.00000	Averaged
9 Anthracene	2653997	2547232	0.010	4.02280	25.00000	Averaged
$ 10 O-Terphenyl	2948796	2791334	0.010	5.33987	25.00000	Averaged
12 Fluoranthene	2821141	2708728	0.010	3.98464	25.00000	Averaged
13 Pyrene	2855480	2741506	0.010	3.99143	25.00000	Averaged
14 Benzo(a)Anthracene	2777049	2584979	0.010	6.91634	25.00000	Averaged
15 Chrysene	2748172	2670594	0.010	2.82289	25.00000	Averaged
16 Benzo(b)Fluoranthene	2813367	2662129	0.010	5.37567	25.00000	Averaged
17 Benzo(k)Fluoranthene	2813367	2662129	0.010	5.37567	25.00000	Averaged
18 Benzo(a)Pyrene	2772685	2663116	0.010	3.95173	25.00000	Averaged
19 Indo(1,2,3cd)Pyrene	2679052	2615937	0.010	2.35587	25.00000	Averaged
20 Dibenzo(a,h)Anthracene	2679052	2615937	0.010	2.35587	25.00000	Averaged
21 Benzo(g,h,i)Perylene	2777993	2791903	0.010	-0.50072	25.00000	Averaged
M 22 Arom C11-C22	2753988	2635412	0.010	4.30561	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.93784
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b066.d
Lab Smp Id: 1400 Client Smp ID: 1 84-12-8
Inj Date : 10-NOV-2011 20:04
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 16:02 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 64 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: cal.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.875	7.880	-0.005	132148273	50.0000	46.5
	2 2-Methylnaphthalene	8.262	8.265	-0.003	111570314	50.0000	46.9
$	3 2-Fluorobiphenyl	8.450	8.454	-0.004	115605581	50.0000	47.0
	4 Acenaphthylene	8.762	8.766	-0.004	130870729	50.0000	47.4
$	5 2-Bromonaphthalene	8.835	8.838	-0.003	74570366	50.0000	47.5
	6 Acenaphthene	8.855	8.858	-0.003	136781386	50.0000	47.0
	7 Fluorene	9.128	9.132	-0.004	133011968	50.0000	48.0
	8 Phenanthrene	9.656	9.657	-0.001	132507595	50.0000	48.0
	9 Anthracene	9.686	9.688	-0.002	127361616	50.0000	48.0
$	10 O-Terphenyl	9.819	9.822	-0.003	139566694	50.0000	47.3
	12 Fluoranthene	10.327	10.327	0.000	135436415	50.0000	48.0
	13 Pyrene	10.467	10.467	0.000	137075288	50.0000	48.0
	14 Benzo(a)Anthracene	11.212	11.223	-0.011	129248928	50.0000	46.5
	15 Chrysene	11.244	11.250	-0.006	133529716	50.0000	48.6

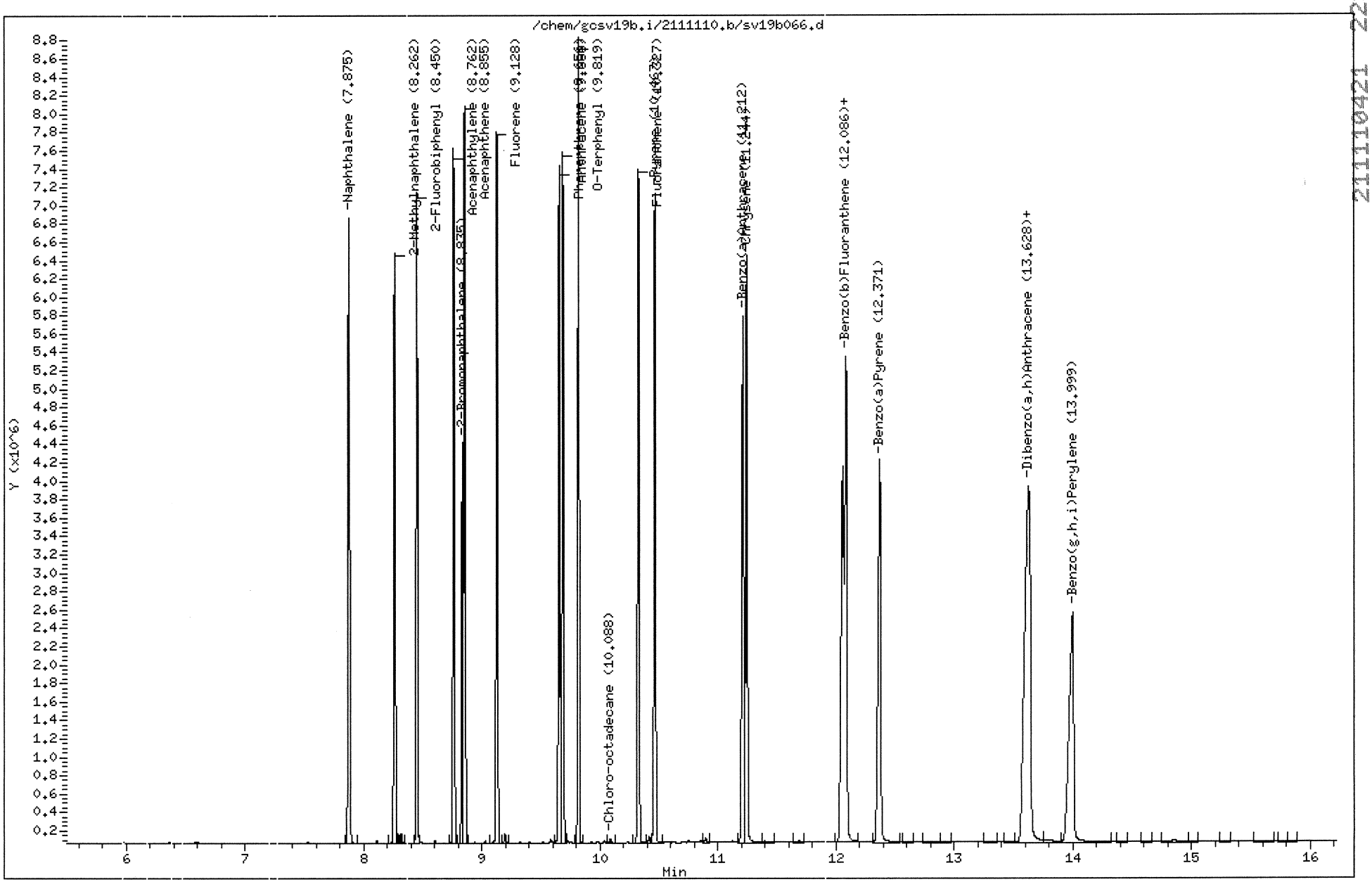
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	16 Benzo(b)Fluoranthene	12.086	12.085	0.001	266212932	100.000	94.6(M2)
	17 Benzo(k)Fluoranthene	12.086	12.085	0.001	266212932	100.000	94.6(M2)
	18 Benzo(a)Pyrene	12.371	12.370	0.001	133155810	50.0000	48.0
	19 Indo(1,2,3cd)Pyrene	13.628	13.598	0.030	261593698	100.000	97.6(M1)
	20 Dibenzo(a,h)Anthracene	13.628	13.638	-0.010	261593698	100.000	97.6
	21 Benzo(g,h,i)Perylene	13.999	13.997	0.002	139595158	50.0000	50.3
M	22 Arom C11-C22				2240099826	850.000	813

QC Flag Legend

M1- Compound response manually integrated because Target system did not integrate.
M2- Compound response manually integrated because Target system integrated incorrectly.

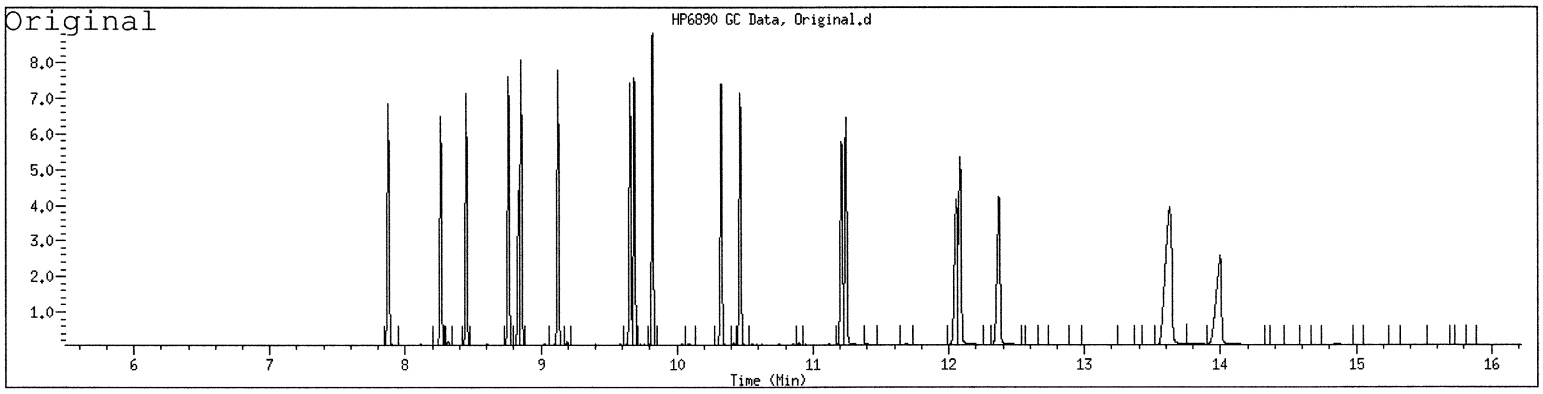
Data File: /chem/gcsv19b.i/2111110.b/sv19b066.d
Date : 10-NOV-2011 20:04
Client ID: 1 84-12-8
Sample Info: 1400*1 84-12-8
Volume Injected (uL): 1.0
Column phase: IB-5MS-30M

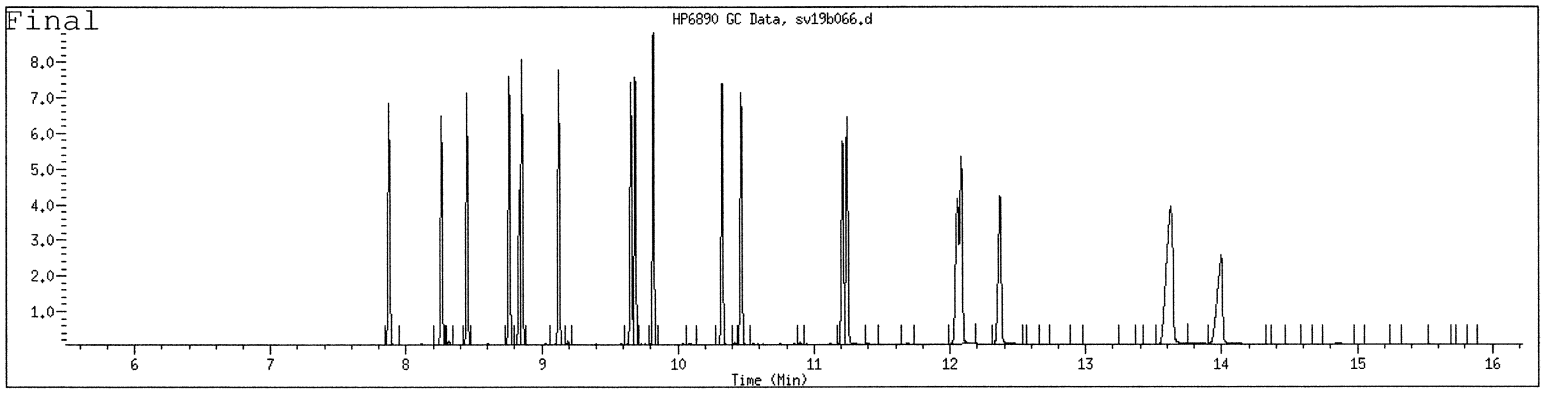
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 20:04	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: cal





GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 10-NOV-2011 20:28
Lab File ID: sv19b067.d Init. Cal. Date(s): 03-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 12:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 C-9	2719340	2595159	0.010	4.56659	25.00000	Averaged
2 C-10	2739215	2674884	0.010	2.34853	25.00000	Averaged
4 C-12	2801460	2701654	0.010	3.56266	25.00000	Averaged
6 C-14	2878136	2749952	0.010	4.45371	25.00000	Averaged
8 C-16	2983102	2863214	0.010	4.01891	25.00000	Averaged
10 C-18	3021289	2811890	0.010	6.93079	25.00000	Averaged
M 11 Alip C9-C18	2857090	2732792	0.010	4.35052	25.00000	Averaged
12 C-19	3017239	2853082	0.010	5.44065	25.00000	Averaged
13 C-20	3045314	2865971	0.010	5.88913	25.00000	Averaged
$ 15 Chlorooctadecane	2739581	2610135	0.010	4.72504	25.00000	Averaged
16 C-22	3060647	2912497	0.010	4.84048	25.00000	Averaged
18 C-24	3098402	2920370	0.010	5.74594	25.00000	Averaged
20 C-26	3120089	2948477	0.010	5.50022	25.00000	Averaged
22 C-28	3095987	2920634	0.010	5.66389	25.00000	Averaged
115 C-30	3120341	2925022	0.010	6.25954	25.00000	Averaged
114 C-36	2925634	2747737	0.010	6.08063	25.00000	Averaged
M 24 Alip C19-C36	3060457	2886724	0.010	5.67670	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.59037
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b067.d
Lab Smp Id: 1400 Client Smp ID: 1 84-15-4
Inj Date : 10-NOV-2011 20:28
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-15-4
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 17-Nov-2011 12:26 smh Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 65 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
1	C-9	6.226	6.232	-0.006	129757950	50.0000	47.7
2	C-10	6.926	6.928	-0.002	133744206	50.0000	48.8
4	C-12	7.824	7.832	-0.008	135082679	50.0000	48.2
6	C-14	8.462	8.471	-0.009	137497622	50.0000	47.8
8	C-16	9.004	9.013	-0.009	143160681	50.0000	48.0
10	C-18	9.493	9.503	-0.010	140594499	50.0000	46.5
M 11	Alip C9-C18				819837637	300.000	287
12	C-19	9.723	9.774	-0.051	142654078	50.0000	47.3
13	C-20	9.944	9.957	-0.013	143298570	50.0000	47.1
$ 15	Chlorooctadecane	10.158	10.216	-0.058	130506738	50.0000	47.6
16	C-22	10.369	10.383	-0.014	145624855	50.0000	47.6
18	C-24	10.779	10.795	-0.016	146018488	50.0000	47.1
20	C-26	11.203	11.222	-0.019	147423847	50.0000	47.2
22	C-28	11.670	11.723	-0.053	146031701	50.0000	47.2

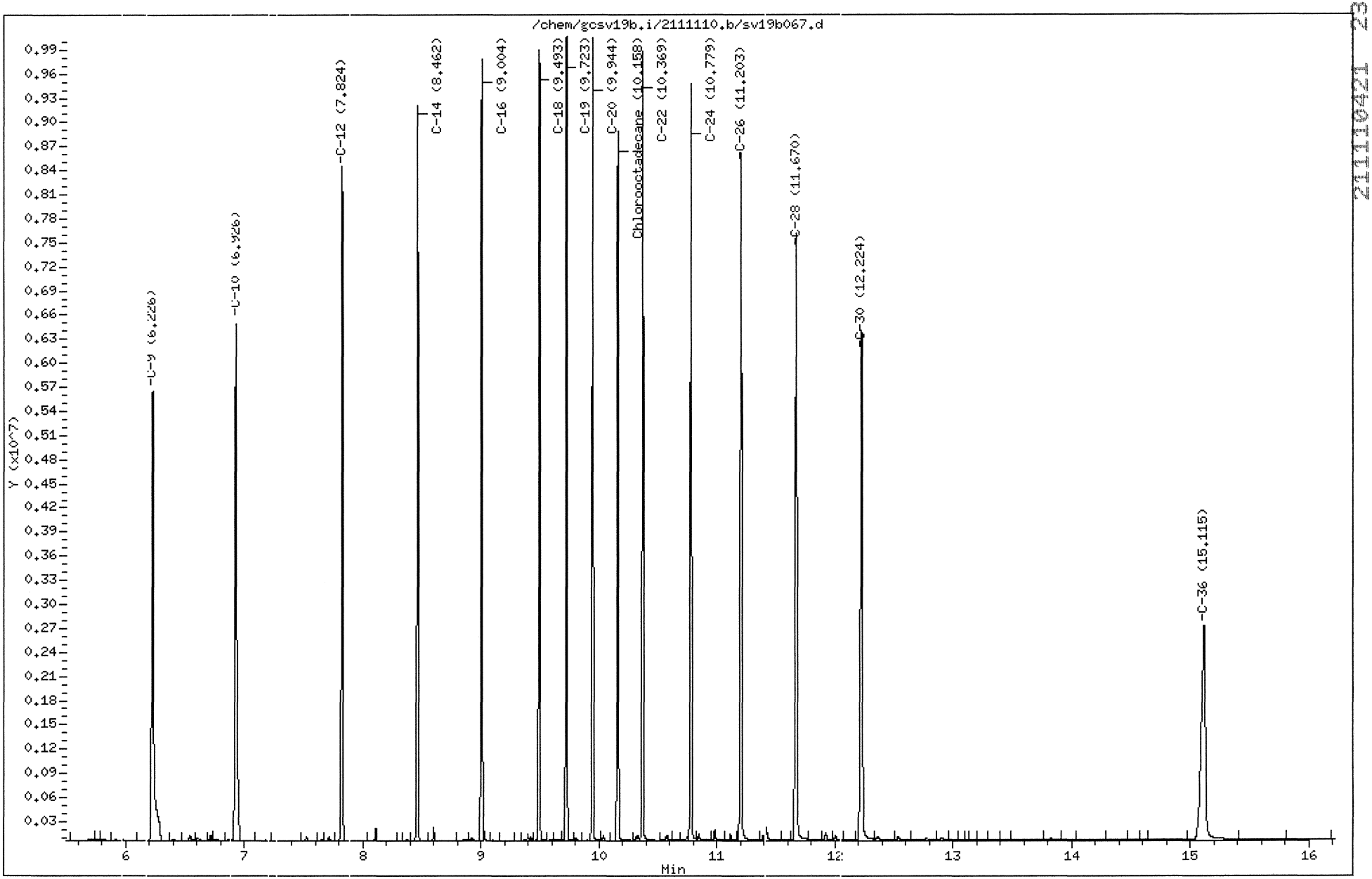
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
115 C-30	12.224	12.249	-0.025	146251088	50.0000	46.9(A)
114 C-36	15.115	15.143	-0.028	137386852	50.0000	47.0(A)
M 24 Alip C19-C36				1154689479	400.000	377

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /chem/gcsv19b.i/2111110.b/sv19b067.d
Date : 10-NOV-2011 20:28
Client ID: 1 84-15-4
Sample Info: 1400x1 84-15-4
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

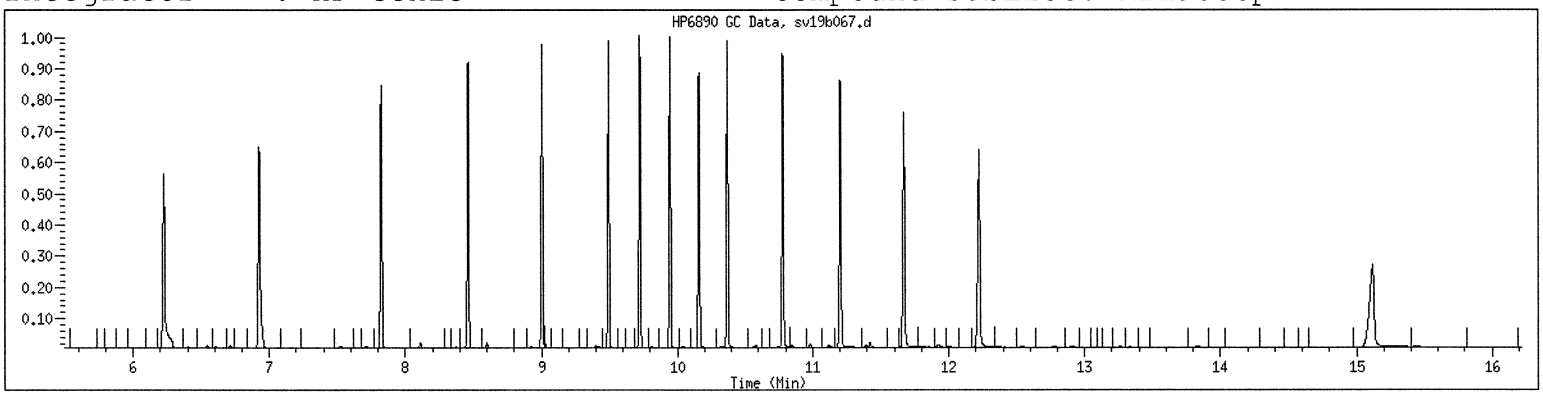
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



Report Date: 11/28/2011 13:45

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/10/2011 20:28	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-15-4		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 11-NOV-2011 00:54
Lab File ID: sv19b078.d Init. Cal. Date(s): 02-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 15:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Naphthalene	2842159	2722174	0.010	4.22163	25.00000	Averaged
2 2-Methylnaphthalene	2378988	2297678	0.010	3.41786	25.00000	Averaged
$ 3 2-Fluorobiphenyl	2457488	2379257	0.010	3.18338	25.00000	Averaged
4 Acenaphthylene	2763267	2697278	0.010	2.38806	25.00000	Averaged
$ 5 2-Bromonaphthalene	1568778	1600937	0.010	-2.04990	25.00000	Averaged
6 Acenaphthene	2910153	2736444	0.010	5.96906	25.00000	Averaged
7 Fluorene	2771184	2729161	0.010	1.51646	25.00000	Averaged
8 Phenanthrene	2760684	2724911	0.010	1.29583	25.00000	Averaged
9 Anthracene	2653997	2633932	0.010	0.75603	25.00000	Averaged
$ 10 O-Terphenyl	2948796	2874302	0.010	2.52625	25.00000	Averaged
12 Fluoranthene	2821141	2795585	0.010	0.90585	25.00000	Averaged
13 Pyrene	2855480	2836140	0.010	0.67729	25.00000	Averaged
14 Benzo(a)Anthracene	2777049	2768248	0.010	0.31692	25.00000	Averaged
15 Chrysene	2748172	2686329	0.010	2.25033	25.00000	Averaged
16 Benzo(b)Fluoranthene	2813367	2758314	0.010	1.95682	25.00000	Averaged
17 Benzo(k)Fluoranthene	2813367	2758314	0.010	1.95682	25.00000	Averaged
18 Benzo(a)Pyrene	2772685	2773561	0.010	-0.03159	25.00000	Averaged
19 Indo(1,2,3cd)Pyrene	2679052	2695641	0.010	-0.61922	25.00000	Averaged
20 Dibenzo(a,h)Anthracene	2679052	2695641	0.010	-0.61922	25.00000	Averaged
21 Benzo(g,h,i)Perylene	2777993	2858854	0.010	-2.91076	25.00000	Averaged
M 22 Arom C11-C22	2753988	2715777	0.010	1.38748	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 2.93784
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b078.d
Lab Smp Id: 1400 Client Smp ID: 1 84-12-8
Inj Date : 11-NOV-2011 00:54
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-12-8
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 16:02 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 78 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: cal.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 Naphthalene	7.875	7.880	-0.005	136108675	50.0000	47.9
	2 2-Methylnaphthalene	8.262	8.265	-0.003	114883891	50.0000	48.3
$	3 2-Fluorobiphenyl	8.450	8.454	-0.004	118962830	50.0000	48.4
	4 Acenaphthylene	8.761	8.766	-0.005	134863909	50.0000	48.8
$	5 2-Bromonaphthalene	8.835	8.838	-0.003	80046832	50.0000	51.0
	6 Acenaphthene	8.854	8.858	-0.004	136822196	50.0000	47.0
	7 Fluorene	9.127	9.132	-0.005	136458026	50.0000	49.2
	8 Phenanthrene	9.653	9.657	-0.004	136245536	50.0000	49.4
	9 Anthracene	9.683	9.688	-0.005	131696619	50.0000	49.6
$	10 O-Terphenyl	9.815	9.822	-0.007	143715086	50.0000	48.7
	12 Fluoranthene	10.318	10.327	-0.009	139779269	50.0000	49.5
	13 Pyrene	10.456	10.467	-0.011	141807007	50.0000	49.7
	14 Benzo(a)Anthracene	11.228	11.223	0.005	138412383	50.0000	49.8
	15 Chrysene	11.196	11.250	-0.054	134316458	50.0000	48.9

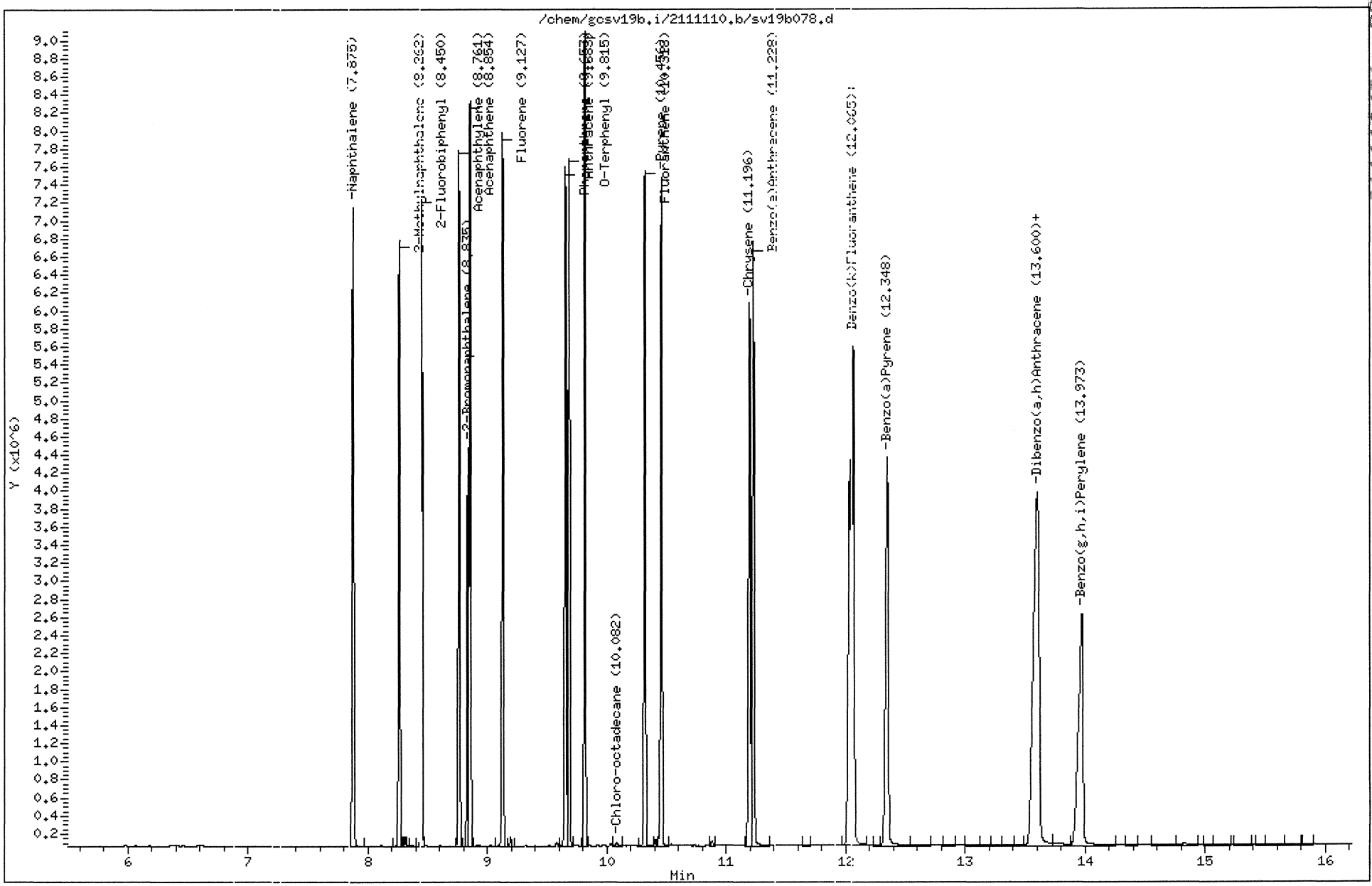
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	16 Benzo(b)Fluoranthene	12.065	12.085	-0.020	275831415	100.000	98.0 (M2)
	17 Benzo(k)Fluoranthene	12.065	12.085	-0.020	275831415	100.000	98.0 (M2)
	18 Benzo(a)Pyrene	12.348	12.370	-0.022	138678057	50.0000	50.0
	19 Indo(1,2,3cd)Pyrene	13.600	13.598	0.002	269564115	100.000	101 (M1)
	20 Dibenzo(a,h)Anthracene	13.600	13.638	-0.038	269564115	100.000	101
	21 Benzo(g,h,i)Perylene	13.973	13.997	-0.024	142942692	50.0000	51.5
M	22 Arom C11-C22				2308410248	850.000	838

QC Flag Legend

M1- Compound response manually integrated because Target system did not integrate.
M2- Compound response manually integrated because Target system integrated incorrectly.

Data File: /chem/gcsv19b.i/2111110.b/sv19b078.d
Date : 11-NOV-2011 00:54
Client ID: 1 84-12-8
Sample Info: 1400x1 84-12-8
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

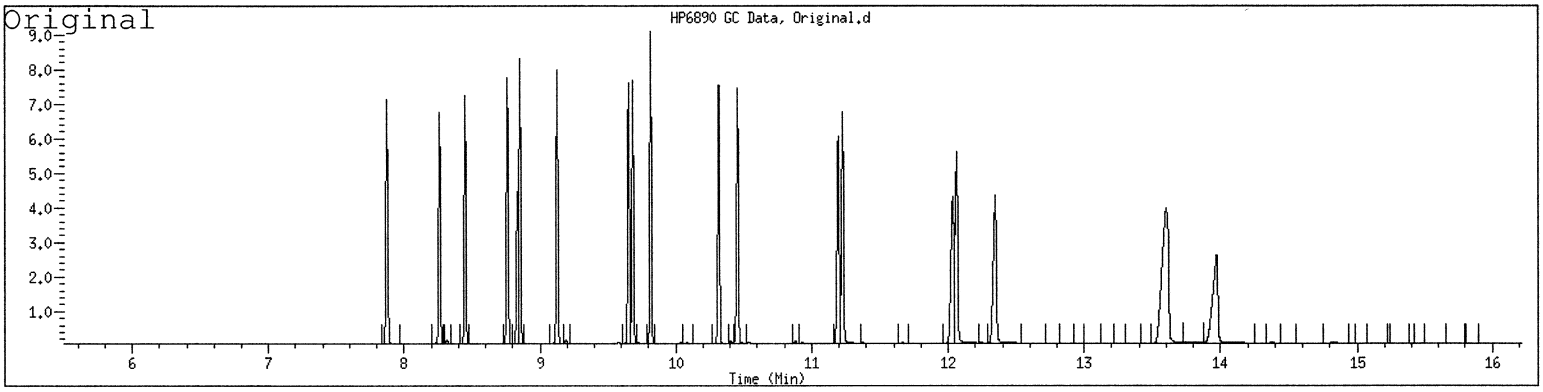
Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



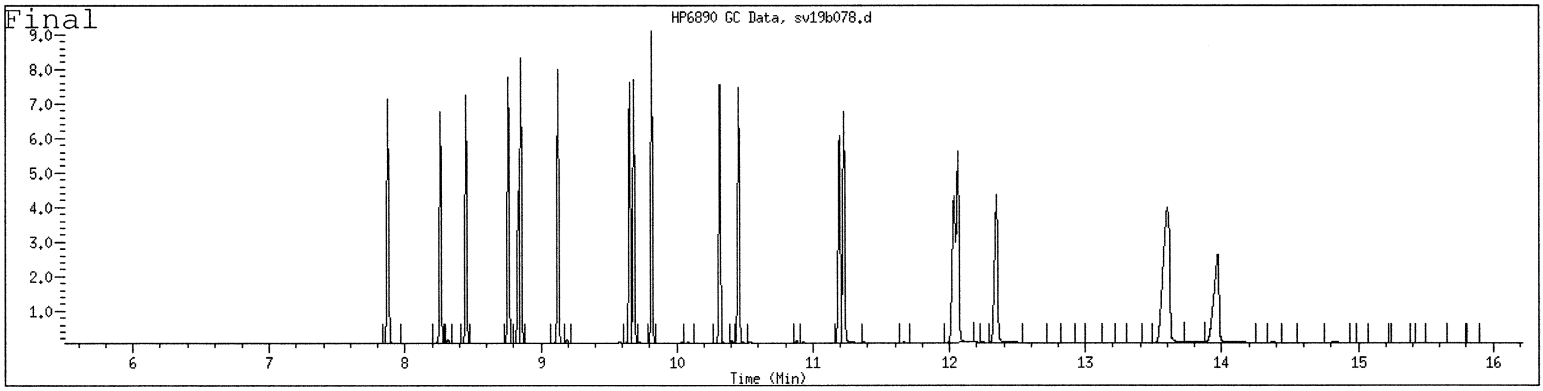
MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1400	SampleType	: CCALIB_3
Injection Date	: 11/11/2011 00:54	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1400*1 84-12-8		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: cal

Original



Final



GCAL, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcsv19b.i Injection Date: 11-NOV-2011 01:18
Lab File ID: sv19b079.d Init. Cal. Date(s): 03-NOV-2011 03-NOV-2011
Analysis Type: WATER Init. Cal. Times: 12:55 14:30
Lab Sample ID: 1400 Quant Type: ESTD
Method: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 C-9	2719340	2535559	0.010	6.75829	25.00000	Averaged
2 C-10	2739215	2603184	0.010	4.96608	25.00000	Averaged
4 C-12	2801460	2633816	0.010	5.98416	25.00000	Averaged
6 C-14	2878136	2682002	0.010	6.81465	25.00000	Averaged
8 C-16	2983102	2774406	0.010	6.99594	25.00000	Averaged
10 C-18	3021289	2770851	0.010	8.28913	25.00000	Averaged
M 11 Alip C9-C18	2857090	2666636	0.010	6.66602	25.00000	Averaged
12 C-19	3017239	2775880	0.010	7.99933	25.00000	Averaged
13 C-20	3045314	2803868	0.010	7.92845	25.00000	Averaged
$ 15 Chlorooctadecane	2739581	2561566	0.010	6.49789	25.00000	Averaged
16 C-22	3060647	2832289	0.010	7.46112	25.00000	Averaged
18 C-24	3098402	2856022	0.010	7.82274	25.00000	Averaged
20 C-26	3120089	2880208	0.010	7.68827	25.00000	Averaged
22 C-28	3095987	2831191	0.010	8.55290	25.00000	Averaged
115 C-30	3120341	2878931	0.010	7.73665	25.00000	Averaged
114 C-36	2925634	2673515	0.010	8.61760	25.00000	Averaged
M 24 Alip C19-C36	3060457	2816488	0.010	7.97165	25.00000	Averaged

Average %D / Drift Results.

Calculated Average %D/Drift = 3.59037
Maximun Average %D/Drift = 25.00000
* Passed Average %D/Drift Test.

GCAL, Inc.

Data file : /chem/gcsv19b.i/2111110.b/sv19b079.d
Lab Smp Id: 1400 Client Smp ID: 1 84-15-4
Inj Date : 11-NOV-2011 01:18
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1400*1 84-15-4
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 17-Nov-2011 12:26 smh Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 79 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
	1 C-9	6.225	6.232	-0.007	126777961	50.0000	46.6
	2 C-10	6.927	6.928	-0.001	130159189	50.0000	47.5
	4 C-12	7.824	7.832	-0.008	131690814	50.0000	47.0
	6 C-14	8.462	8.471	-0.009	134100079	50.0000	46.6
	8 C-16	9.003	9.013	-0.010	138720289	50.0000	46.5
	10 C-18	9.490	9.503	-0.013	138542527	50.0000	45.9
M	11 Alip C9-C18				799990859	300.000	280
	12 C-19	9.718	9.774	-0.056	138794001	50.0000	46.0
	13 C-20	9.938	9.957	-0.019	140193390	50.0000	46.0
$	15 Chlorooctadecane	10.150	10.216	-0.066	128078306	50.0000	46.8
	16 C-22	10.358	10.383	-0.025	141614428	50.0000	46.3
	18 C-24	10.763	10.795	-0.032	142801102	50.0000	46.1
	20 C-26	11.183	11.222	-0.039	144010380	50.0000	46.2
	22 C-28	11.646	11.723	-0.077	141559532	50.0000	45.7

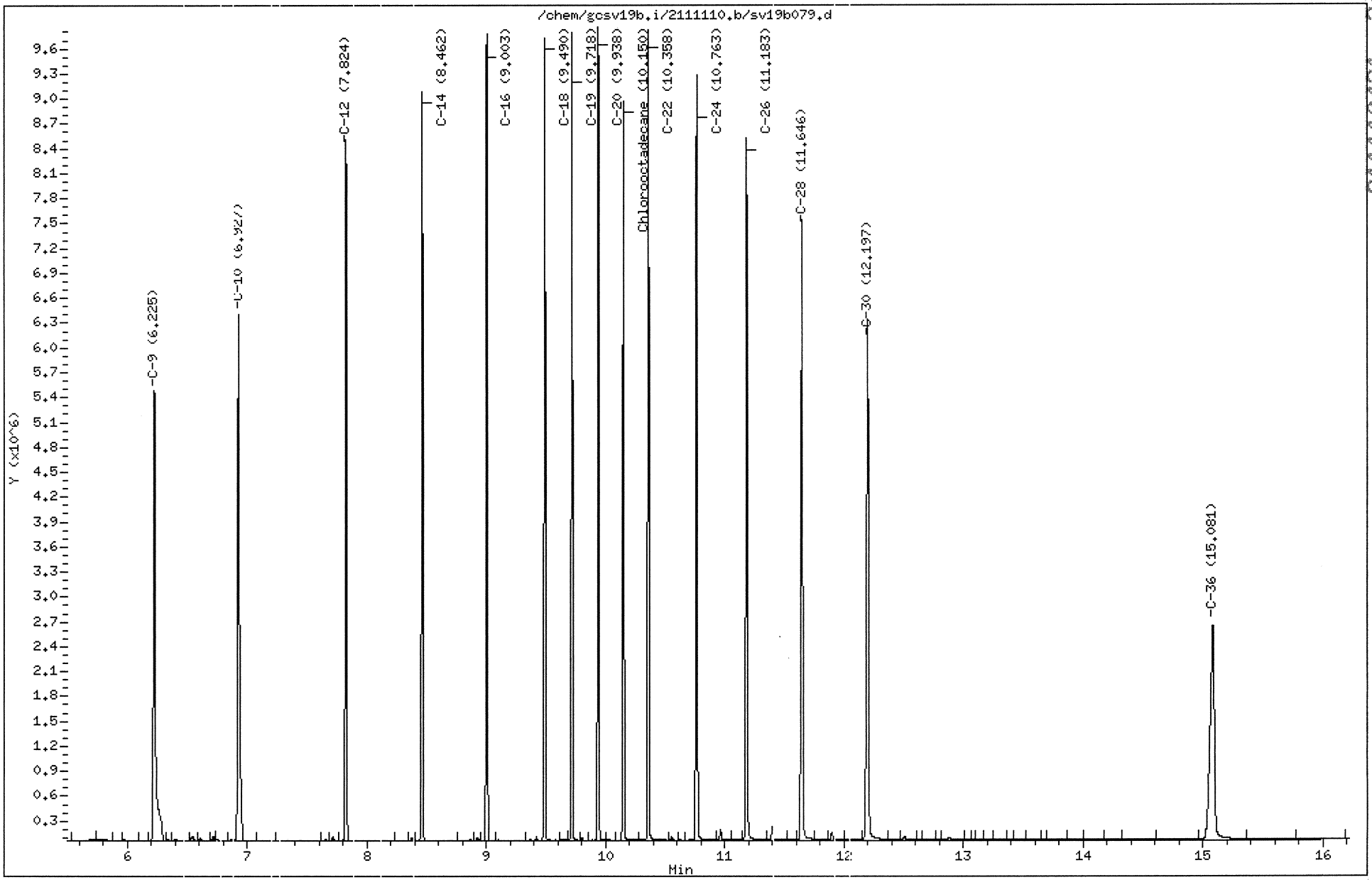
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG/ML)	AMOUNTS ON-COL (UG/ML)
115 C-30	12.197	12.249	-0.052	143946534	50.0000	46.1(A)
114 C-36	15.081	15.143	-0.062	133675738	50.0000	45.7(A)
M 24 Alip C19-C36				1126595105	400.000	368

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

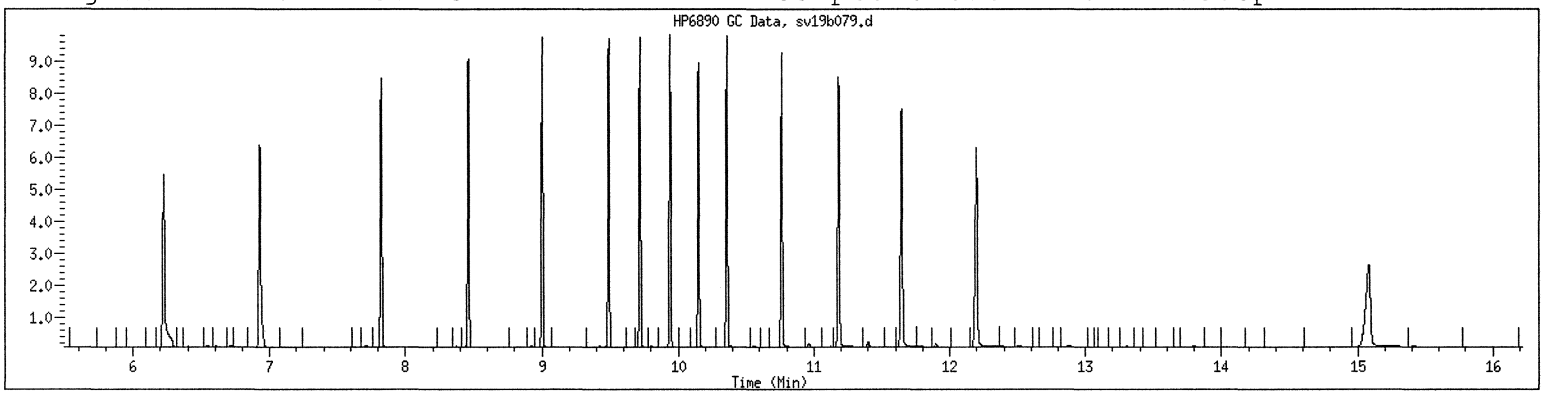
Data File: /chem/gcsv19b.i/2111110.b/sv19b079.d
Date : 11-NOV-2011 01:18
Client ID: 1 84-15-4
Sample Info: 1400*1 84-15-4
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1400 SampleType : CCALIB_3
Injection Date: 11/11/2011 01:18 Instrument : gcsv19b.i
Operator : smh
Sample Info : 1400*1 84-15-4
Misc Info :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Dilution : 1.00
Matrix : WATER
Integrator : HP Genie Compound Sublist: ALmasseph



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: MB1004104

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 211110421

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 1004104

Level: (low/med) LOW | Date Collected: | Time:

% Moisture: | decanted: (Y/N) | Date Received:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Extracted: 11/08/11

Concentrated Extract Volume: 2000 (µL) | Date Analyzed: 11/10/11 | Time: 1515

Soil Aliquot Volume: (µL) | Dilution Factor: 1 | Analyst: SMH

Injection Volume: 1 (µL) | Prep Method: MASS EPH

GPC Cleanup: (Y/N) N | pH: | Analytical Method: MASSEPH

Prep Batch: 468721 | Analytical Batch: 469140 | Sulfur Cleanup: (Y/N) N | Instrument ID: GCS19B

CONCENTRATION UNITS: *ug/L* | Lab File ID: 2111110/sv19b054

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCSV-02-22	C11-C22 Aromatics	42.1	U	42.1	42.1	100
GCSV-02-23	C9-C18 Aliphatic Hydrocarbons	21.8	U	21.8	21.8	100
GCSV-02-24	C19-C36 Aliphatic Hydrocarbons	60.0	U	31.3	60.0	100

FORM I ORG-1

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b054.d
Lab Smp Id: 1004104 Client Smp ID: 1 MB
Inj Date : 10-NOV-2011 15:15
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1004104*1 MB
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 15:43 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 54
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)	
$ 3 2-Fluorobiphenyl	8.448	8.454	-0.006	39667720	16.1416	32.3	
$ 5 2-Bromonaphthalene	8.833	8.838	-0.005	29843186	19.0232	38.0	
$ 10 O-Terphenyl	9.828	9.822	0.006	47260177	16.0269	32.1	
$ 11 Chloro-octadecane	10.176	10.158	0.018	35257119	12.8699	25.7	
M 113 Total Surrogate Area				152028202			(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /var/chem/gcsv19b.i/2111110.b/sv19b054.d

Date : 10-NOV-2011 15:15

Client ID: 1 MB

Sample Info: 1004104*1 MB

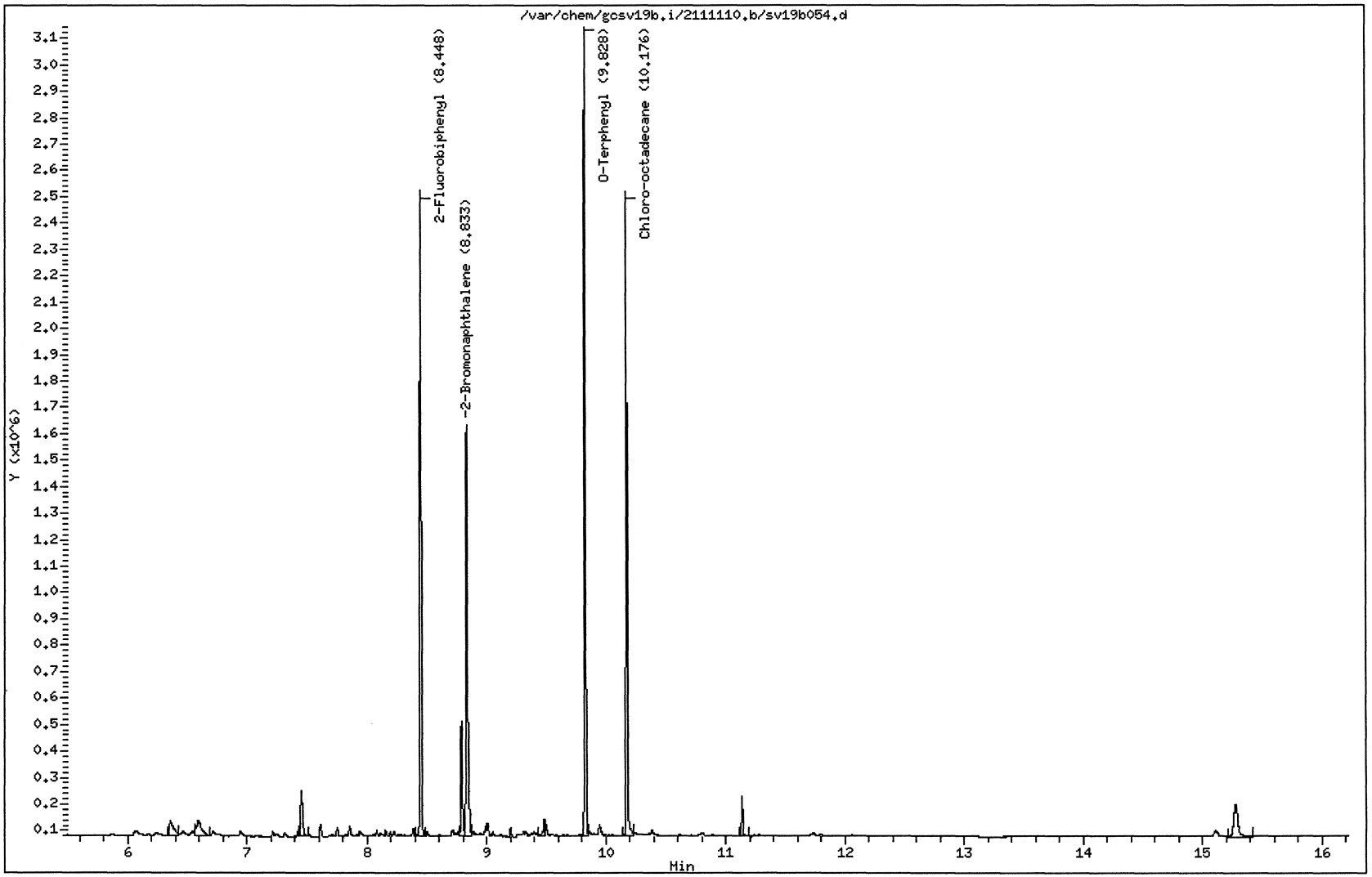
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

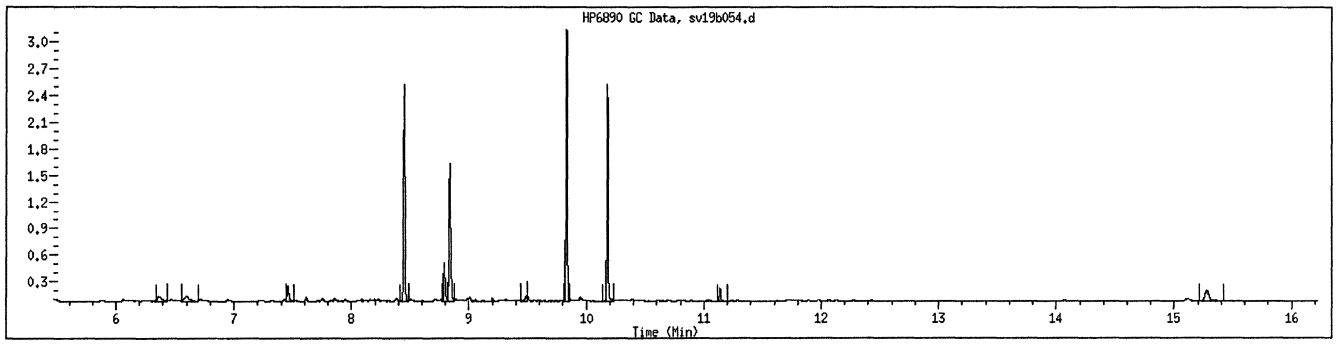
Column diameter: 0.25



Data file : /var/chem/gcsv19b.i/2111110.b/sv19b054.d Page: 1
Report Date: 11/11/2011 15:43

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1004104 SampleType : SAMPLE
Injection Date: 11/10/2011 15:15 Instrument : gcsv19b.i
Operator : smh
Sample Info : 1004104*1 MB
Misc Info :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Dilution : 1.00
Matrix : WATER
Integrator : HP Genie Compound Sublist: all



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: LCS1004105

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 211110421

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 1004105

Level: (low/med) LOW | Date Collected: | Time:

% Moisture: | decanted: (Y/N) | Date Received:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Extracted: 11/08/11

Concentrated Extract Volume: 2000 (µL) | Date Analyzed: 11/10/11 | Time: 1603

Soil Aliquot Volume: (µL) | Dilution Factor: 1 | Analyst: SMH

Injection Volume: 1 (µL) | Prep Method: MASS EPH

GPC Cleanup: (Y/N) N | pH: | Analytical Method: MASSEPH

Prep Batch: 468721 | Analytical Batch: 469140 | Sulfur Cleanup: (Y/N) N | Instrument ID: GCS19B

CONCENTRATION UNITS: *ug/L* | Lab File ID: 2111110/sv19b056

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCSV-02-22	C11-C22 Aromatics	188		42.1	42.1	100
GCSV-02-23	C9-C18 Aliphatic Hydrocarbons	51.9	J	21.8	21.8	100
GCSV-02-24	C19-C36 Aliphatic Hydrocarbons	101		31.3	60.0	100

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b056.d
Lab Smp Id: 1004105 Client Smp ID: 1 LCS
Inj Date : 10-NOV-2011 16:03
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1004105*1 LCS
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 15:43 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 56 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

						CONCENTRATIONS	
						ON-COLUMN	FINAL
	Compounds	RT	EXP RT	DLT RT	RESPONSE	(UG/ML)	(ug/L)
	1 Naphthalene	7.871	7.880	-0.009	47838120	16.8316	33.7
$	3 2-Fluorobiphenyl	8.448	8.454	-0.006	46838239	19.0594	38.1
$	5 2-Bromonaphthalene	8.833	8.838	-0.005	27212745	17.3465	34.7
	6 Acenaphthene	8.850	8.858	-0.008	60129675	20.6620	41.3
	9 Anthracene	9.682	9.688	-0.006	50757402	19.1249	38.2
$	10 O-Terphenyl	9.818	9.822	-0.004	48148931	16.3283	32.7
$	11 Chloro-octadecane	10.160	10.158	0.002	25956734	9.47499	18.9
	13 Pyrene	10.465	10.467	-0.002	52673131	18.4463	36.9
	15 Chrysene	11.239	11.250	-0.011	52294743	19.0289	38.1
M	22 Arom C11-C22				263693071	94.0938	188
M	113 Total Surrogate Area				148156649		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /var/chem/gcsv19b.i/2111110.b/sv19b056.d

Date : 10-NOV-2011 16:03

Client ID: 1 LCS

Sample Info: 1004105%1 LCS

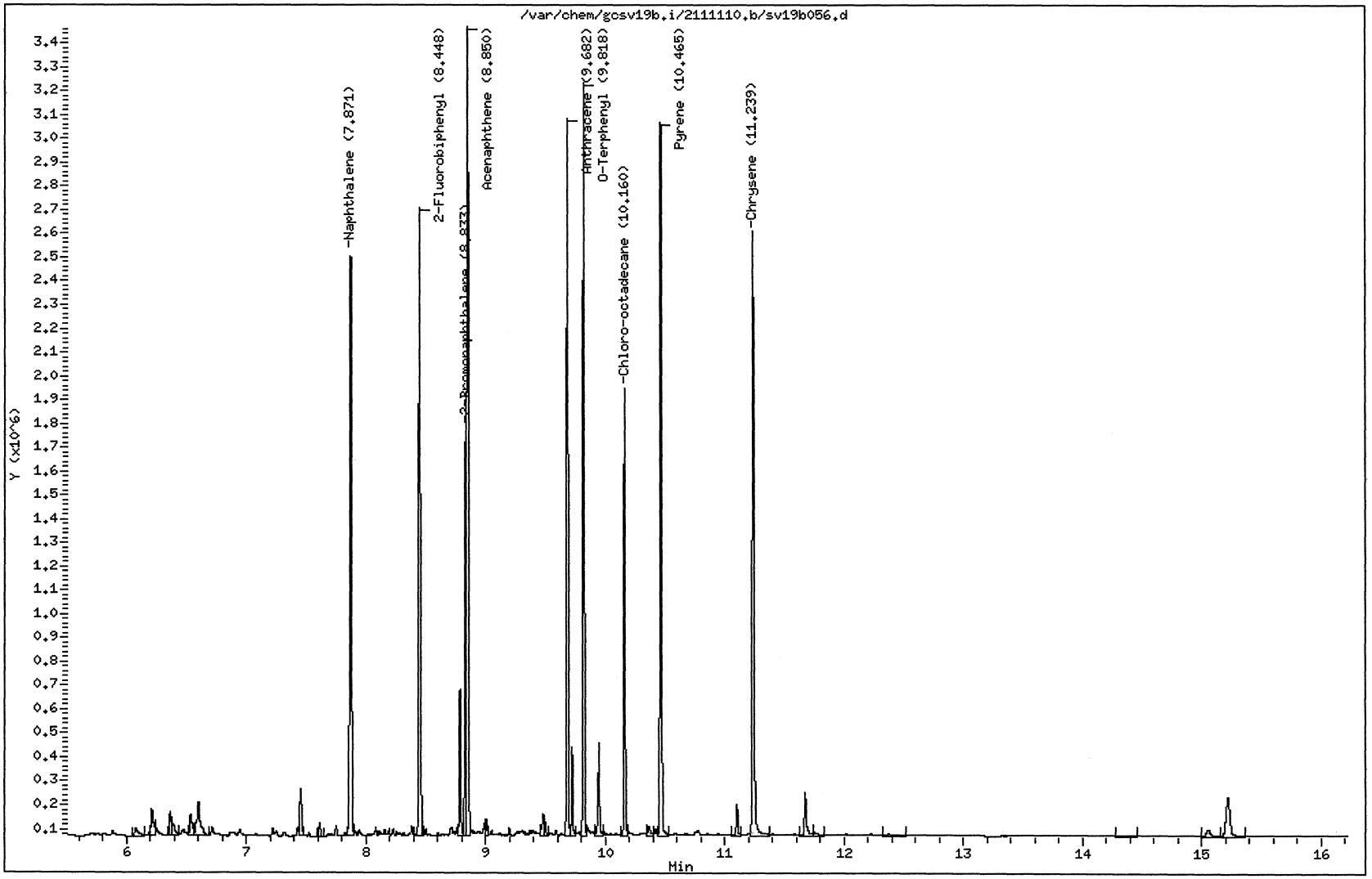
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

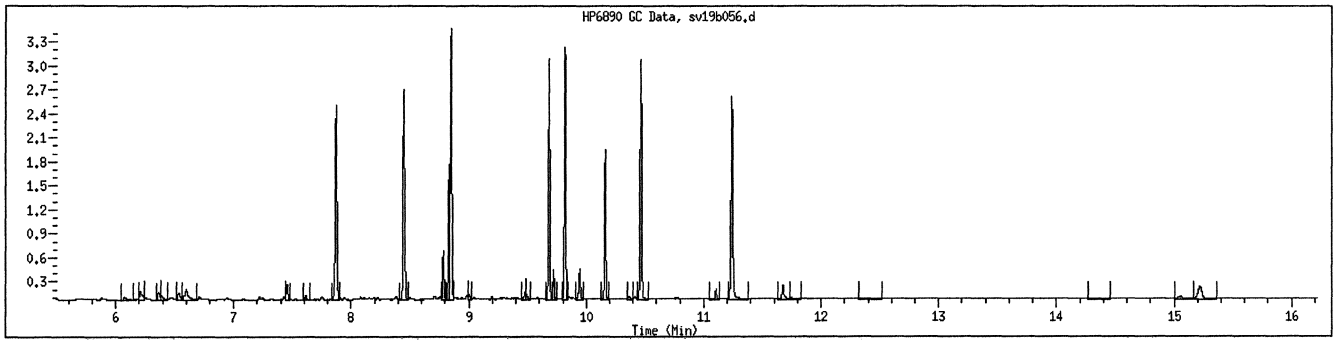
Column diameter: 0.25



Data file : /var/chem/gcsv19b.i/2111110.b/sv19b056.d Page: 1
Report Date: 11/11/2011 15:43

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1004105 SampleType : LCS
Injection Date: 11/10/2011 16:03 Instrument : gcsv19b.i
Operator : smh
Sample Info : 1004105*1 LCS
Misc Info :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Dilution : 1.00
Matrix : WATER
Integrator : HP Genie Compound Sublist: all



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b057.d
Lab Smp Id: 1004105 Client Smp ID: 1 LCS
Inj Date : 10-NOV-2011 16:27
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1004105*1 LCS
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 11-Nov-2011 15:21 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 57 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

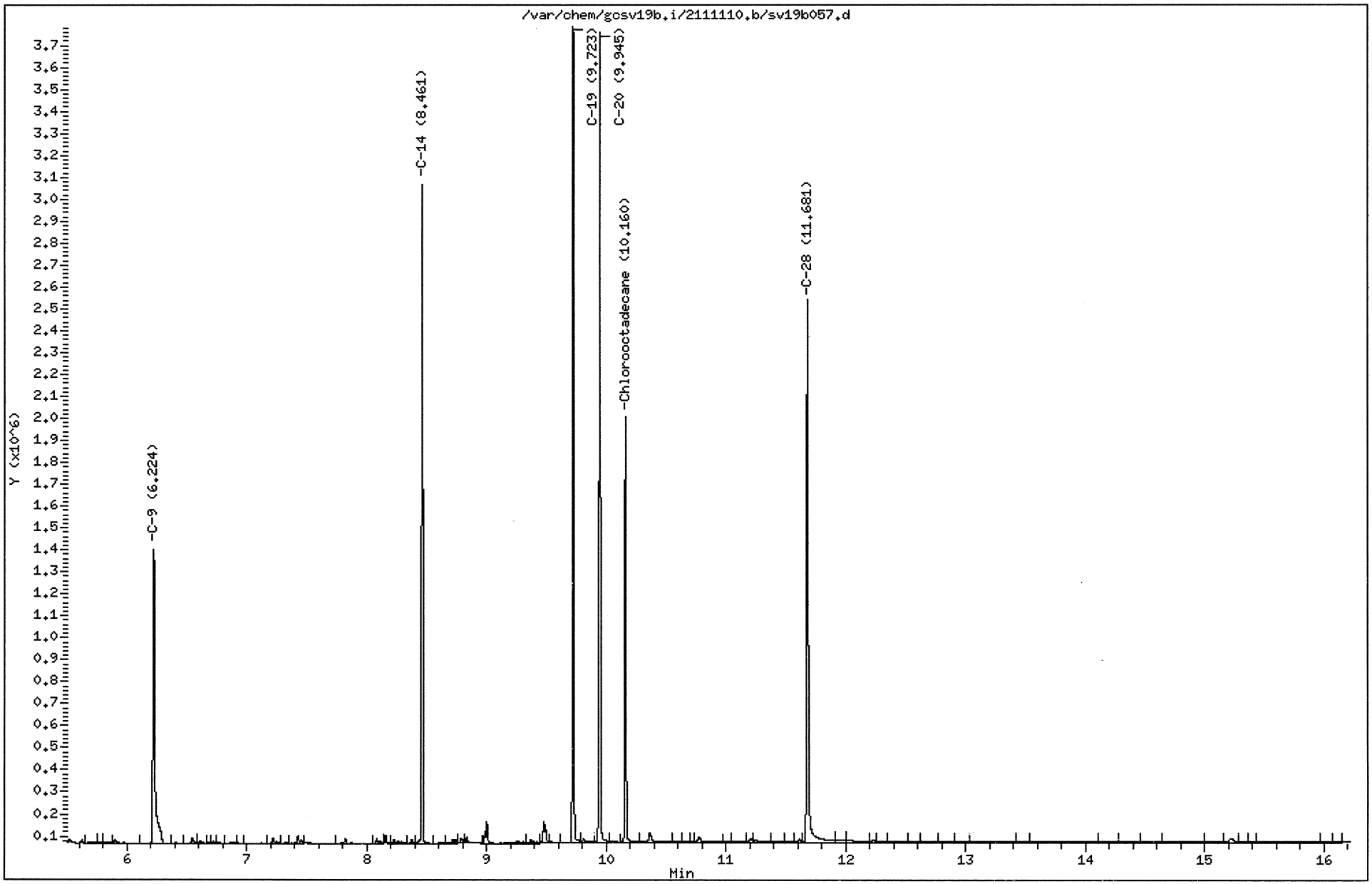
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
	1 C-9	6.224	6.232	-0.008	30157800	11.0901	22.2
	6 C-14	8.461	8.470	-0.009	42709583	14.8393	29.7
M	11 Alip C9-C18				72867383	25.9294	51.9
	12 C-19	9.723	9.773	-0.050	51247556	16.9849	34.0
	13 C-20	9.945	9.956	-0.011	52736163	17.3172	34.6
$	15 Chlorooctadecane	10.160	10.215	-0.055	27978107	10.2125	20.4
	22 C-28	11.681	11.721	-0.040	50693086	16.3738	32.7(H)
M	24 Alip C19-C36				154676805	50.6759	101

QC Flag Legend

H - Operator selected an alternate compound hit.

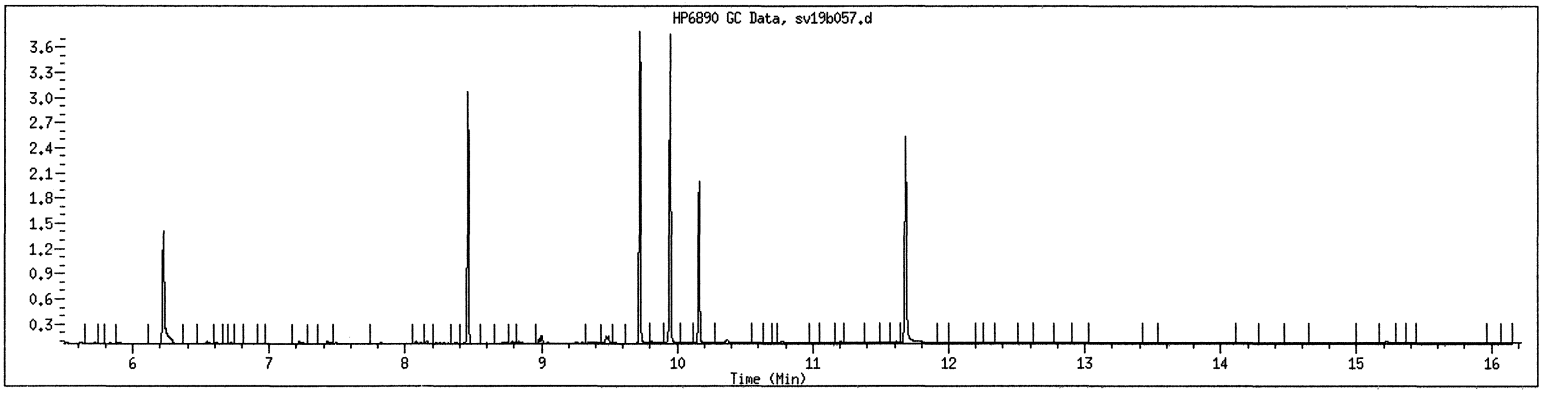
Data File: /var/chem/gcsv19b.i/2111110.b/sv19b057.d
Date : 10-NOV-2011 16:27
Client ID: 1 LCS
Sample Info: 1004105*1 LCS
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1004105	SampleType	: LCS
Injection Date	: 11/10/2011 16:27	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1004105*1 LCS		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

1D

ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: LCSD1004106

Lab Code: LA024 | Case No.: | Contract:

Matrix: Water | SAS No.: | SDG No.: 211110421

Sample wt/vol: 1000 | Units: mL | Lab Sample ID: 1004106

Level: (low/med) LOW | Date Collected: | Time:

% Moisture: | decanted: (Y/N) | Date Received:

GC Column: DB-5MS-30M | ID: .25 (mm) | Date Extracted: 11/08/11

Concentrated Extract Volume: 2000 (µL) | Date Analyzed: 11/10/11 | Time: 1651

Soil Aliquot Volume: (µL) | Dilution Factor: 1 | Analyst: SMH

Injection Volume: 1 (µL) | Prep Method: MASS EPH

GPC Cleanup: (Y/N) N | pH: | Analytical Method: MASSEPH

Prep Batch: 468721 | Analytical Batch: 469140 | Sulfur Cleanup: (Y/N) N | Instrument ID: GCS19B

CONCENTRATION UNITS: *ug/L* | Lab File ID: 2111110/sv19b058

CAS NO.	COMPOUND	RESULT	Q	MDL	LOD	LOQ
GCSV-02-22	C11-C22 Aromatics	191		42.1	42.1	100
GCSV-02-23	C9-C18 Aliphatic Hydrocarbons	52.8	J	21.8	21.8	100
GCSV-02-24	C19-C36 Aliphatic Hydrocarbons	94.2	J	31.3	60.0	100

FORM I ORG-1

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b058.d
Lab Smp Id: 1004106 Client Smp ID: 1 LCSD
Inj Date : 10-NOV-2011 16:51
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1004106*1 LCSD
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Meth Date : 11-Nov-2011 15:43 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 13:18 Cal File: sv19b053s.d
Als bottle: 58 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: all.sub
Target Version: 3.50
Processing Host: org.gcal.com

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	FINAL (ug/L)
	1 Naphthalene	7.871	7.880	-0.009	49288016	17.3418	34.7
$	3 2-Fluorobiphenyl	8.448	8.454	-0.006	48539862	19.7518	39.5
$	5 2-Bromonaphthalene	8.833	8.838	-0.005	27183500	17.3278	34.7
	6 Acenaphthene	8.851	8.858	-0.007	61175611	21.0214	42.0
	9 Anthracene	9.683	9.688	-0.005	51333879	19.3421	38.7
$	10 O-Terphenyl	9.820	9.822	-0.002	49367854	16.7417	33.5
$	11 Chloro-octadecane	10.163	10.158	0.005	32943730	12.0255	24.1
	13 Pyrene	10.469	10.467	0.002	53212368	18.6352	37.3
	15 Chrysene	11.245	11.250	-0.005	52943561	19.2650	38.5
M	22 Arom C11-C22				267953435	95.6055	191
M	113 Total Surrogate Area				158034946		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /var/chem/gcsv19b.i/2111110.b/sv19b058.d

Date : 10-NOV-2011 16:51

Client ID: 1 LCSD

Sample Info: 1004106*1 LCSD

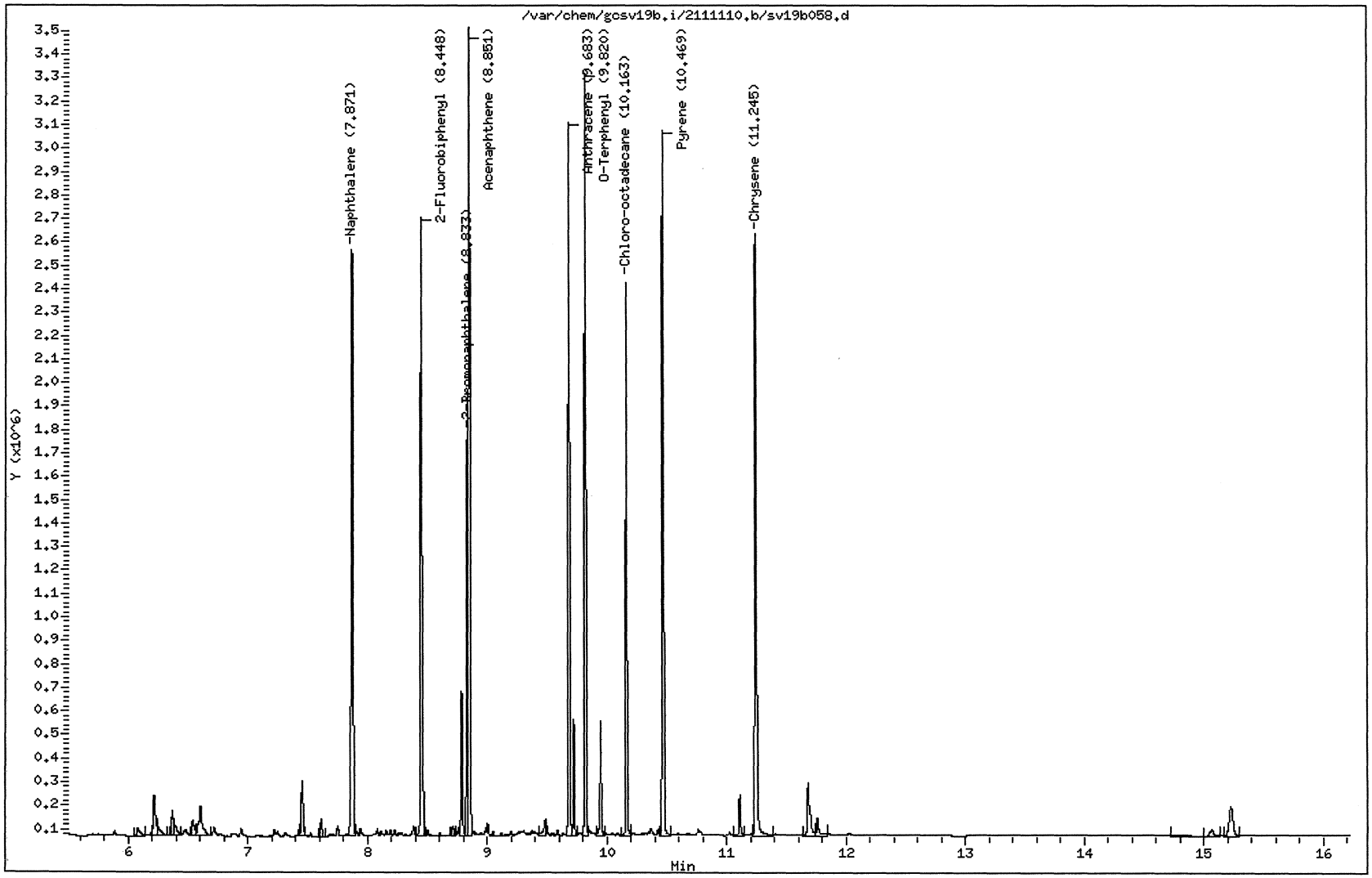
Volume Injected (uL): 1.0

Column phase: DB-5MS-30M

Instrument: gcsv19b.i

Operator: smh

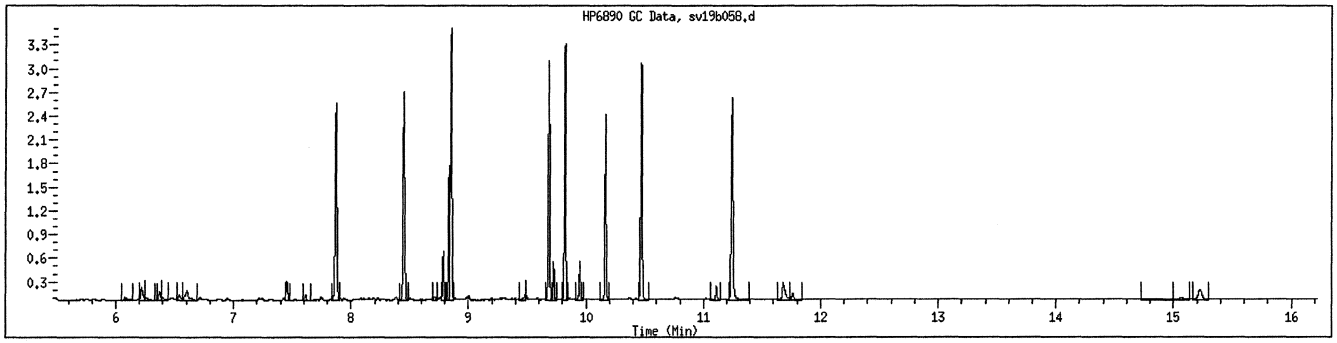
Column diameter: 0.25



Data file : /var/chem/gcsv19b.i/2111110.b/sv19b058.d Page: 1
Report Date: 11/11/2011 15:43

MANUAL INTEGRATION GRAPHIC REPORT

Lab ID : 1004106 SampleType : LCS
Injection Date: 11/10/2011 16:51 Instrument : gcsv19b.i
Operator : smh
Sample Info : 1004106*1 LCSD
Misc Info :
Method : /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Dilution : 1.00
Matrix : WATER
Integrator : HP Genie Compound Sublist: all



NO MANUAL INTEGRATIONS

GCAL, Inc.

Data file : /var/chem/gcsv19b.i/2111110.b/sv19b059.d
Lab Smp Id: 1004106 Client Smp ID: 1 LCSD
Inj Date : 10-NOV-2011 17:15
Operator : smh Inst ID: gcsv19b.i
Smp Info : 1004106*1 LCSD
Misc Info :
Comment :
Method : /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m
Meth Date : 11-Nov-2011 15:05 dlb Quant Type: ESTD
Cal Date : 03-NOV-2011 14:30 Cal File: sv19b056.d
Als bottle: 59 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP Genie Compound Sublist: ALmasseph.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	1000.00000	Volume of sample extracted (mL)
Vt	2000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Uf	1.00000	Correction factor

Cpnd Variable Local Compound Variable

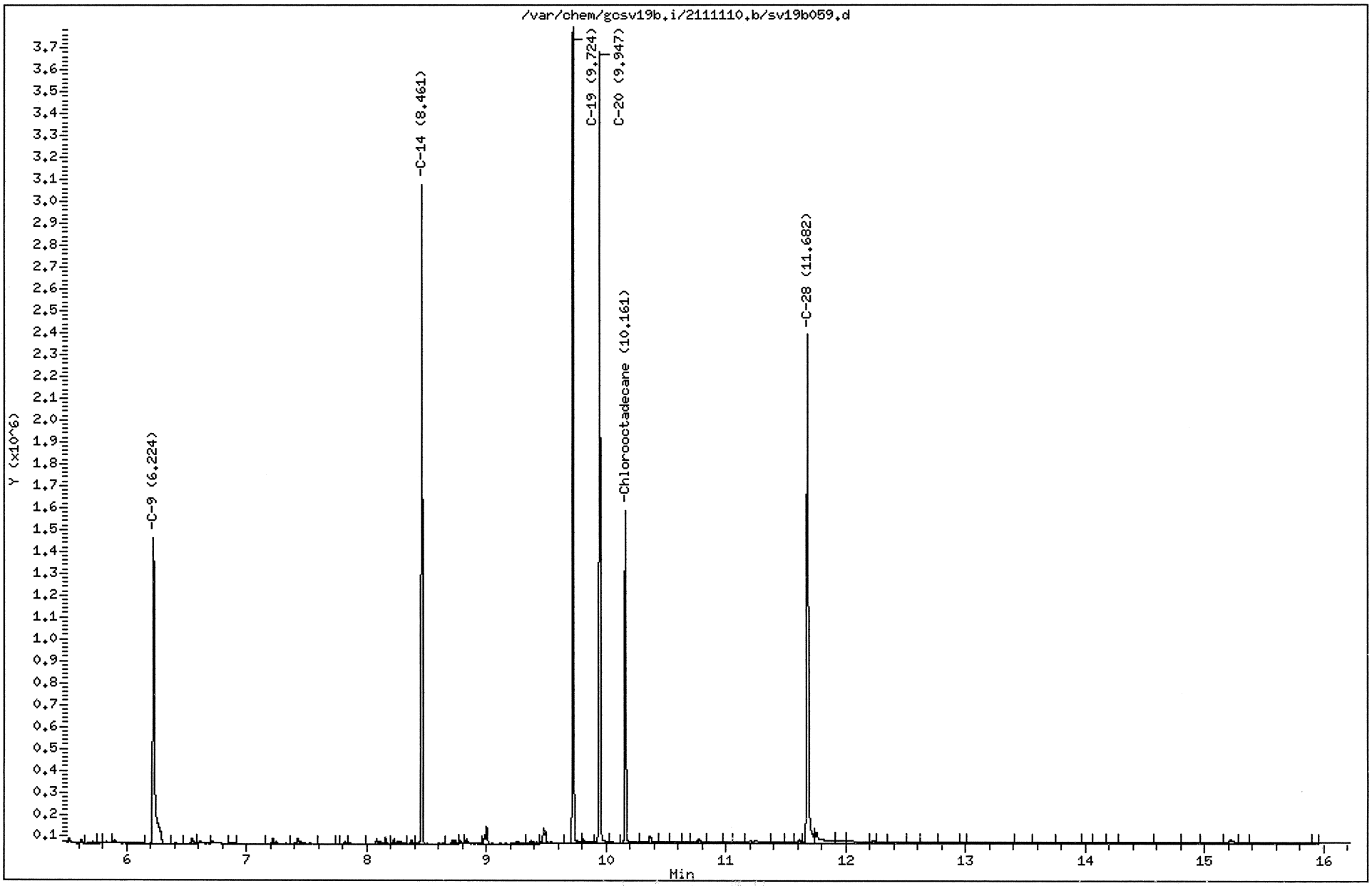
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG/ML)	CONCENTRATIONS FINAL (ug/L)
	1 C-9	6.224	6.232	-0.008	31225286	11.4827	23.0
	6 C-14	8.461	8.470	-0.009	42882291	14.8993	29.8
M	11 Alip C9-C18				74107577	26.3820	52.8
	12 C-19	9.724	9.773	-0.049	49945153	16.5533	33.1
	13 C-20	9.947	9.956	-0.009	50271463	16.5078	33.0
$	15 Chlorooctadecane	10.161	10.215	-0.054	21612655	7.88904	15.8(R)
	22 C-28	11.682	11.721	-0.039	43492976	14.0482	28.1
M	24 Alip C19-C36				143709592	47.1092	94.2

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

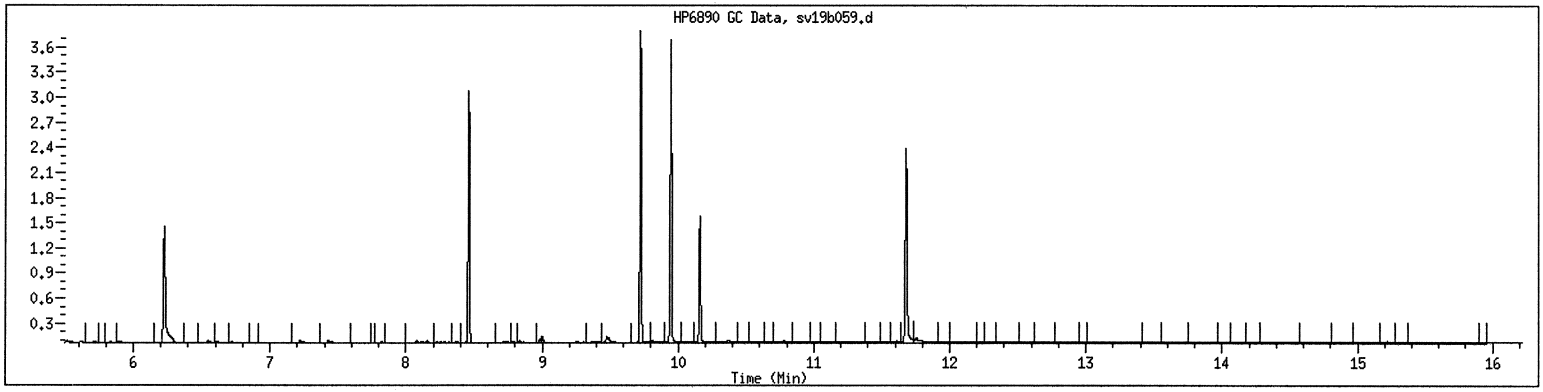
Data File: /var/chem/gcsv19b.i/2111110.b/sv19b059.d
Date : 10-NOV-2011 17:15
Client ID: 1 LCSD
Sample Info: 1004106*1 LCSD
Volume Injected (uL): 1.0
Column phase: DB-5MS-30M

Instrument: gcsv19b.i
Operator: smh
Column diameter: 0.25



MANUAL INTEGRATION GRAPHIC REPORT

Lab ID	: 1004106	SampleType	: LCS
Injection Date	: 11/10/2011 17:15	Instrument	: gcsv19b.i
Operator	: smh		
Sample Info	: 1004106*1 LCSD		
Misc Info	:		
Method	: /var/chem/gcsv19b.i/2111110.b/ALPHEPHmass.m		
Dilution	: 1.00		
Matrix	: WATER		
Integrator	: HP Genie	Compound Sublist	: ALmasseph



NO MANUAL INTEGRATIONS

LABORATORY CHRONICLE: GCSV DEPARTMENT

Date: 11/29/2011
Instrument: gcsv19b.i
Method File: /var/chem/gcsv19b.i/2111110.b/AROEPHmass.m
Batch: /var/chem/gcsv19b.i/2111110.b
Column-Detector: DB-5MS-30M

Sample ID	Standard ID	DataFile	Wgt/Vol	Injection Time	Dil	Anal	ALS	Comments
dcm lot #1118		sv19b051.d	1000.00 ml	10-NOV-2011 13:49	1.000	smh	51	all
1400		sv19b052.d	1000.00 ml	10-NOV-2011 14:13	1.000	smh	52	cal
1400		sv19b053.d	1000.00 ml	10-NOV-2011 14:37	1.000	smh	53	ALmasseph
1004104		sv19b054.d	1000.00 ml	10-NOV-2011 15:15	1.000	smh	54	all
1004104		sv19b055.d	1000.00 ml	10-NOV-2011 15:39	1.000	smh	55	ALmasseph
1004105		sv19b056.d	1000.00 ml	10-NOV-2011 16:03	1.000	smh	56	all
1004105		sv19b057.d	1000.00 ml	10-NOV-2011 16:27	1.000	smh	57	ALmasseph
1004106		sv19b058.d	1000.00 ml	10-NOV-2011 16:51	1.000	smh	58	all
1004106		sv19b059.d	1000.00 ml	10-NOV-2011 17:15	1.000	smh	59	ALmasseph
21110312406		sv19b060.d	990.00 ml	10-NOV-2011 17:40	1.000	smh	60	all
21110312406		sv19b061.d	990.00 ml	10-NOV-2011 18:04	1.000	smh	61	ALmasseph
21110312408		sv19b062.d	990.00 ml	10-NOV-2011 18:28	1.000	smh	62	all
21110312408		sv19b063.d	990.00 ml	10-NOV-2011 18:52	1.000	smh	63	ALmasseph
21110312408		sv19b063s.d	990.00 ml	10-NOV-2011 18:52	1.000	smh	63	Chloro
1400		sv19b064.d	1000.00 ml	10-NOV-2011 19:16	1.000	smh	64	cal
1400		sv19b065.d	1000.00 ml	10-NOV-2011 19:40	1.000	smh	65	ALmasseph
1400		sv19b066.d	1000.00 ml	10-NOV-2011 20:04	1.000	smh	64	cal
1400		sv19b067.d	1000.00 ml	10-NOV-2011 20:28	1.000	smh	65	ALmasseph
21110312409		sv19b068.d	990.00 ml	10-NOV-2011 20:52	1.000	smh	68	all
21110312409		sv19b069.d	990.00 ml	10-NOV-2011 21:16	1.000	smh	69	ALmasseph
21110312409		sv19b069s.d	990.00 ml	10-NOV-2011 21:16	1.000	smh	69	Chloro
21110312410		sv19b070.d	990.00 ml	10-NOV-2011 21:40	1.000	smh	70	all
21110312410		sv19b071.d	990.00 ml	10-NOV-2011 22:04	1.000	smh	71	ALmasseph
21110312410		sv19b071s.d	990.00 ml	10-NOV-2011 22:04	1.000	smh	71	Chloro
21111042101		sv19b072.d	990.00 ml	10-NOV-2011 22:29	1.000	smh	72	all
21111042101		sv19b072s.d	990.00 ml	10-NOV-2011 22:29	1.000	smh	72	surr
21111042101		sv19b073.d	990.00 ml	10-NOV-2011 22:53	1.000	smh	73	ALmasseph
21111031701		sv19b074.d	1000.00 ml	10-NOV-2011 23:17	1.000	smh	74	all
21111031701		sv19b075.d	1000.00 ml	10-NOV-2011 23:41	1.000	smh	75	ALmasseph
21111031702		sv19b076.d	1000.00 ml	11-NOV-2011 00:05	1.000	smh	76	all
21111031702		sv19b077.d	1000.00 ml	11-NOV-2011 00:29	1.000	smh	77	ALmasseph
1400		sv19b078.d	1000.00 ml	11-NOV-2011 00:54	1.000	smh	78	cal
1400		sv19b079.d	1000.00 ml	11-NOV-2011 01:18	1.000	smh	79	ALmasseph
1400		sv19b080.d	1000.00 ml	11-NOV-2011 01:42	1.000	smh	78	cal
1400		sv19b081.d	1000.00 ml	11-NOV-2011 02:07	1.000	smh	79	ALmasseph

Appl-08 General Accounts/9000/211110421/11-15-11

SUBCONTRACT ORDER

APPL, Inc.

ARF: 66186 **PO: 00-66186**

SENDING LABORATORY:

APPL Labs
908 North Temperance Ave.
Clovis, CA 93611
Phone: (559) 275-2175
Fax: (559) 275-4422
Project Manager: Cynthia Clark (cclark@applinc.com) rp

RECEIVING LABORATORY:

Gulf Coast Analytical
7979 GSRI Rd.
Baton Rouge, LA 70820
Phone: (225) 769-4900x
Fax:
DOD Expiration Date:

Comments: Level IV report - DoD format (LOQ/LOD/DL), ADR (A1/A3 8.3a unchecked) EDD and Excel EDD

	APPL ID	Sample ID	LOC ID	Matrix	Collected	Analysis	Price
1.	AY50005	ES057		Water	11/02/11 11:05	MADEP-EPH	$125.00
				Water	11/02/11 11:05	MADEP-VPH	$75.00

Released By	Date	Time	Received By	Date	Time
	11/3/11	1335	FedEx		
FedEx 4796 7085 3529	11/4/11	840		11/4/11	840

To ensure timely payment, please include the PO number on your invoice

5.9

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

SAMPLE RECEIVING CHECKLIST

Workorder: 211110421 Client: 9000 - General Accounts

Profile: 227122 - Appl, Inc. Line Item: 1 - Waters

Received by: Saucier, Charlotte Received Date/Time: 11/4/2011 8:40:00 AM

Samples Received via: FEDEX Number of Coolers Received: 1

Cooler tracking numbers(s): 4796 7085 3529

Cooler temperature(s): 5.9

Were all coolers received at a temperature of 0 - 6° C?	☑ Yes	☐ No	☐ N/A
Were all custody seals intact?	☑ Yes	☐ No	☐ N/A
Were all samples received in proper containers?	☑ Yes	☐ No	☐ N/A
Were all samples properly preserved?	☑ Yes	☐ No	☐ N/A
Was preservative added to any container at the lab?	☐ Yes	☑ No	☐ N/A
Were all containers received in good condition?	☑ Yes	☐ No	☐ N/A
Were all VOA vials received with no head space?	☑ Yes	☐ No	☐ N/A
Do all sample labels match the Chain of Custody?	☑ Yes	☐ No	☐ N/A
Was the client notified about any discrepancies?	☐ Yes	☐ No	☑ N/A

Notes/Comments: