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Analysis of Field-Collected Air Samples

Customer and Project Information

Report Certification	
Report number	061-037-IH-Sept1316
Report date	September 13, 2016
Certified by (Name/Title)	Raja Tannous, Laboratory Director
Signature	
Date	*September 13, 2016*

Methods	
U.S. EPA TO-17	Determination of Volatile Organic Compounds in Ambient...
ASTM D 5197	Std. Test Method for Determination of Formaldehyde...

Customer Information	
Customer:	US EPA
City/State/Country	San Francisco, CA, USA
Contact name/Title	Jeff Woodlee
Phone number	415-972-3740

Project Information	
Project number	Not given
Project name	Not given
Project location	Not given
Project date	August 30-31, 2016 & September 1, 2016

Laboratory Receiving Information	
Date samples received by lab	September 2, 2016
Condition of samples	No observed problems
Lab tracking numbers	061-037-01 to 061-037-48

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Sample Information, Caprolactam

Sample No.	Sample Description	Sampler No.	Date Collected	Volume* (L)	Analysis Type	Specified Method
C14-21	13138	203110	August 30, 2016	5.67	Caprolactam	TO-17
C14-22	13243	242458	August 30, 2016	5.66	Caprolactam	TO-17
C14-23	13336	Mi59956	August 30, 2016	5.93	Caprolactam	TO-17
C14-24	13344	Mi59953	August 30, 2016	5.77	Caprolactam	TO-17
C14-25	14414	Mi51114	August 30, 2016	5.40	Caprolactam	TO-17
C14-26	14246	203148	August 30, 2016	5.50	Caprolactam	TO-17
C14-27	14364	Mi59960	August 30, 2016	6.36	Caprolactam	TO-17
C14-28	14112	Mi59929	August 30, 2016	6.87	Caprolactam	TO-17
C14-29	16361	Mi58841	August 30, 2016	7.02	Caprolactam	TO-17
C14-30	16448	242496	August 30, 2016	5.77	Caprolactam	TO-17
C14-31	16158	242403	August 31, 2016	5.49	Caprolactam	TO-17
C14-32	16133	Mi51174	August 31, 2016	5.61	Caprolactam	TO-17
C14-33	17446	242425	August 31, 2016	5.87	Caprolactam	TO-17
C14-34	17144	Mi58846	August 31, 2016	5.60	Caprolactam	TO-17
C14-35	17355	203171	August 31, 2016	5.91	Caprolactam	TO-17
C14-36	17363	203144	August 31, 2016	5.75	Caprolactam	TO-17
C14-37	18446	Mi58839	August 31, 2016	4.65	Caprolactam	TO-17
C14-38	18113	203196	August 31, 2016	5.42	Caprolactam	TO-17
C14-39	18243	Mi59937	August 31, 2016	5.48	Caprolactam	TO-17
C14-40	18357	203124	August 31, 2016	5.23	Caprolactam	TO-17
C14-41	19310	Mi59927	September 11, 2016	5.30	Caprolactam	TO-17
C14-42	19415	242440	September 11, 2016	5.48	Caprolactam	TO-17
C14-43	19331	203105	September 11, 2016	4.94	Caprolactam	TO-17
C14-44	19231	242408	September 11, 2016	5.11	Caprolactam	TO-17

*Volume in liters reported by customer

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Sample Information, Formaldehyde

Sample No.	Sample Description	Sampler No.	Date Collected	Volume* (L)	Analysis Type	Specified Method
F14-21	13138	Supelco Cart	August 30, 2016	54.29	Formaldehyde	D 5197
F14-22	13243	Supelco Cart	August 30, 2016	56.05	Formaldehyde	D 5197
F14-23	13336	Supelco Cart	August 30, 2016	56.02	Formaldehyde	D 5197
F14-24	13344	Supelco Cart	August 30, 2016	55.09	Formaldehyde	D 5197
F14-25	14414	Supelco Cart	August 30, 2016	53.47	Formaldehyde	D 5197
F14-26	14246	Supelco Cart	August 30, 2016	52.13	Formaldehyde	D 5197
F14-27	14364	Supelco Cart	August 30, 2016	60.48	Formaldehyde	D 5197
F14-28	14112	Supelco Cart	August 30, 2016	67.90	Formaldehyde	D 5197
F14-29	16361	Supelco Cart	August 30, 2016	66.37	Formaldehyde	D 5197
F14-30	16448	Supelco Cart	August 30, 2016	53.86	Formaldehyde	D 5197
F14-31	16158	Supelco Cart	August 31, 2016	54.42	Formaldehyde	D 5197
F14-32	16133	Supelco Cart	August 31, 2016	52.87	Formaldehyde	D 5197
F14-33	17446	Supelco Cart	August 31, 2016	54.71	Formaldehyde	D 5197
F14-34	17144	Supelco Cart	August 31, 2016	55.12	Formaldehyde	D 5197
F14-35	17355	Supelco Cart	August 31, 2016	55.66	Formaldehyde	D 5197
F14-36	17363	Supelco Cart	August 31, 2016	54.11	Formaldehyde	D 5197
F14-37	18446	Supelco Cart	August 31, 2016	46.02	Formaldehyde	D 5197
F14-38	18113	Supelco Cart	August 31, 2016	51.61	Formaldehyde	D 5197
F14-39	18243	Supelco Cart	August 31, 2016	51.52	Formaldehyde	D 5197
F14-40	18357	Supelco Cart	August 31, 2016	50.12	Formaldehyde	D 5197
F14-41	19310	Supelco Cart	September 11, 2016	50.52	Formaldehyde	D 5197
F14-42	19415	Supelco Cart	September 11, 2016	52.20	Formaldehyde	D 5197
F14-43	19331	Supelco Cart	September 11, 2016	47.40	Formaldehyde	D 5197
F14-44	19231	Supelco Cart	September 11, 2016	49.02	Formaldehyde	D 5197

*Volume in liters reported by customer

Analytical Information, Caprolactam

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Sample No.	Lab Track. No.	Method	Date Analyzed	Analyst	Data File
C14-21	061-037-01	TO-17	September 8, 2016	R. Gill	T160908_11
C14-22	061-037-02	TO-17	September 8, 2016	R. Gill	T160908_12
C14-23	061-037-03	TO-17	September 8, 2016	R. Gill	T160908_13
C14-24	061-037-04	TO-17	September 8, 2016	R. Gill	T160908_14
C14-25	061-037-05	TO-17	September 8, 2016	R. Gill	T160908_15
C14-26	061-037-06	TO-17	September 8, 2016	R. Gill	T160908_16
C14-27	061-037-07	TO-17	September 8, 2016	R. Gill	T160908_17
C14-28	061-037-08	TO-17	September 8, 2016	R. Gill	T160908_18
C14-29	061-037-09	TO-17	September 8, 2016	R. Gill	T160908_19
C14-30	061-037-10	TO-17	September 8, 2016	R. Gill	T160908_20
C14-31	061-037-11	TO-17	September 8, 2016	R. Gill	T160908_21
C14-32	061-037-12	TO-17	September 8, 2016	R. Gill	T160908_22
C14-33	061-037-13	TO-17	September 8, 2016	R. Gill	T160908_23
C14-34	061-037-14	TO-17	September 8, 2016	R. Gill	T160908_24
C14-35	061-037-15	TO-17	September 8, 2016	R. Gill	T160908_25
C14-36	061-037-16	TO-17	September 8, 2016	R. Gill	T160908_26
C14-37	061-037-17	TO-17	September 8, 2016	R. Gill	T160908_27
C14-38	061-037-18	TO-17	September 8, 2016	R. Gill	T160908_28
C14-39	061-037-19	TO-17	September 8, 2016	R. Gill	T160908_29
C14-40	061-037-20	TO-17	September 8, 2016	R. Gill	T160908_30
C14-41	061-037-21	TO-17	September 8, 2016	R. Gill	T160908_31
C14-42	061-037-22	TO-17	September 8, 2016	R. Gill	T160908_32
C14-43	061-037-23	TO-17	September 8, 2016	R. Gill	T160908_33
C14-44	061-037-24	TO-17	September 8, 2016	R. Gill	T160908_34

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Analytical Information, Formaldehyde

Sample No.	Lab Track. No.	Method	Date Analyzed	Analyst	Data File
F14-21	061-037-25	D 5197	September 11, 2016	T.Cheng	160911B\160911024.D
F14-22	061-037-26	D 5197	September 11, 2016	T.Cheng	160911B\160911025.D
F14-23	061-037-27	D 5197	September 11, 2016	T.Cheng	160911B\160911026.D
F14-24	061-037-28	D 5197	September 11, 2016	T.Cheng	160911B\160911027.D
F14-25	061-037-29	D 5197	September 11, 2016	T.Cheng	160911B\160911028.D
F14-26	061-037-30	D 5197	September 11, 2016	T.Cheng	160911B\160911029.D
F14-27	061-037-31	D 5197	September 11, 2016	T.Cheng	160911B\160911030.D
F14-28	061-037-32	D 5197	September 11, 2016	T.Cheng	160911B\160911031.D
F14-29	061-037-33	D 5197	September 11, 2016	T.Cheng	160911B\160911032.D
F14-30	061-037-34	D 5197	September 11, 2016	T.Cheng	160911B\160911033.D
F14-31	061-037-35	D 5197	September 11, 2016	T.Cheng	160911B\160911034.D
F14-32	061-037-36	D 5197	September 11, 2016	T.Cheng	160911B\160911035.D
F14-33	061-037-37	D 5197	September 11, 2016	T.Cheng	160911B\160911037.D
F14-34	061-037-38	D 5197	September 11, 2016	T.Cheng	160911B\160911038.D
F14-35	061-037-39	D 5197	September 11, 2016	T.Cheng	160911B\160911039.D
F14-36	061-037-40	D 5197	September 11, 2016	T.Cheng	160911B\160911040.D
F14-37	061-037-41	D 5197	September 11, 2016	T.Cheng	160911B\160911041.D
F14-38	061-037-42	D 5197	September 11, 2016	T.Cheng	160911B\160911042.D
F14-39	061-037-43	D 5197	September 11, 2016	T.Cheng	160911B\160911043.D
F14-40	061-037-44	D 5197	September 11, 2016	T.Cheng	160911B\160911044.D
F14-41	061-037-45	D 5197	September 11, 2016	T.Cheng	160911B\160911045.D
F14-42	061-037-46	D 5197	September 11, 2016	T.Cheng	160911B\160911046.D
F14-43	061-037-47	D 5197	September 11, 2016	T.Cheng	160911B\160911047.D
F14-44	061-037-48	D 5197	September 11, 2016	T.Cheng	160911B\160911048.D

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Project Specific Information

Air samples for the analysis of formaldehyde (CAS # 50-00-0) and caprolactam (CAS # 105-60-2) were received by the laboratory on September 2, 2016. There were twenty-four Supelco DNPH cartridges for the analysis of formaldehyde and there were twenty-four multi-sorbent tubes for caprolactam analysis. The analytical results for caprolactam are presented in Table 1. The analytical results for formaldehyde are presented in Table 2. All laboratory data, including but not limited to raw instrument files, calibration files, and quality control checks used to generate the results will be made available to the customer upon request.

Formaldehyde was analyzed by HPLC following ASTM Standard Method D5197. Formaldehyde was quantified using a multi-point (4 or more points) calibration curve.

Cartridge Blank – The average Waters DNPH cartridge blank for formaldehyde is 40 ng. The average cartridge blank was subtracted from a measured mass to determine a blank subtracted sample mass.

MDL and LOQ – A Method Detection Limit (MDL) for formaldehyde of 15 ng was determined from the analysis of ten replicates of a low level standard spiked onto DNPH cartridges. The practical lower limit of quantitation (LOQ) is three times the MDL.

Uncertainty – The laboratory uses the ISO GUM method to estimate the uncertainties associated with the measurement of formaldehyde. The expanded uncertainty is equal to two times the relative standard deviation. For 2016, the expanded uncertainty estimated for formaldehyde was 8.6%.

Caprolactam was analyzed by thermal desorption GC/MS following U.S. EPA Compendium Method TO-17. Caprolactam was quantified using a multi-point (4 or more points) calibration cure prepared with a pure standard.

MDL and LOQ – A Method Detection Limit (MDL) for caprolactam of 2.3 ng was determined from the analysis of three replicates of a low level standard spiked onto multi-sorbent air sampling tubes. The practical lower limit of quantitation (LOQ) is three times the MDL.

Uncertainty – The laboratory uses the ISO GUM method to estimate the uncertainties associated with the measurement of VOCs . The expanded uncertainty is equal to two times the relative standard deviation. For 2016, the expanded uncertainty estimated for caprolactam was 10.2%.

All test methods used in this project are contained in the scope of Berkeley Analytical's ISO/IEC 17025 accreditation (TL-383, International Accreditation Service, Inc.).

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Results, Caprolactam

Table 1. Quantitative analysis of Caprolactam (CAS # 105-60-2).

Sample No.	Sample Name	Volume (L)	Mass (ng)	Conc ($\mu g/m^3$)	Conc* (ppb)
C14-21	13138	5.67	80.4	14.2	3.1
C14-22	13243	5.66	64.5	11.4	2.5
C14-23	13336	5.93	76.7	12.9	2.8
C14-24	13344	5.77	87.9	15.2	3.3
C14-25	14414	5.40	21.3	3.9	0.9
C14-26	14246	5.50	33.4	6.1	1.3
C14-27	14364	6.36	47.1	7.4	1.6
C14-28	14112	6.87	46.8	6.8	1.5
C14-29	16361	7.02	53.4	7.6	1.6
C14-30	16448	5.77	37.9	6.6	1.4
C14-31	16158	5.49	40.2	7.3	1.6
C14-32	16133	5.61	45.5	8.1	1.8
C14-33	17446	5.87	29.2	5.0	1.1
C14-34	17144	5.60	46.0	8.2	1.8
C14-35	17355	5.91	56.4	9.5	2.1
C14-36	17363	5.75	55.3	9.6	2.1
C14-37	18446	4.65	23.6	5.1	1.1
C14-38	18113	5.42	46.4	8.6	1.9
C14-39	18243	5.48	48.6	8.9	1.9
C14-40	18357	5.23	36.8	7.0	1.5
C14-41	19310	5.30	45.1	8.5	1.8
C14-42	19415	5.48	28.4	5.2	1.1
C14-43	19331	4.94	31.9	6.5	1.4
C14-44	19231	5.11	15.9	3.1	0.7

*Concentration in ppb calculated assuming standard conditions of 25° C and 101.3 kPa.

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Results, Formaldehyde

Table 2. Quantitative analysis of formaldehyde (CAS #50-00-0)

Sample No.	Sample Name	Volume (L)	Measured Mass (ng)	Mass – Blank* (ng)	Conc (µg/m³)	Conc** (ppb)
F14-21	13138	54.29	552	512	9.4	7.7
F14-22	13243	56.05	652	612	10.9	8.9
F14-23	13336	56.02	516	476	8.5	6.9
F14-24	13344	55.09	500	460	8.3	6.8
F14-25	14414	53.47	390	350	6.5	5.3
F14-26	14246	52.13	431	391	7.5	6.1
F14-27	14364	60.48	619	579	9.6	7.8
F14-28	14112	67.90	501	461	6.8	5.5
F14-29	16361	66.37	566	526	7.9	6.5
F14-30	16448	53.86	474	434	8.1	6.6
F14-31	16158	54.42	442	402	7.4	6.0
F14-32	16133	52.87	505	465	8.8	7.2
F14-33	17446	54.71	386	346	6.3	5.2
F14-34	17144	55.12	832	792	14.4	11.7
F14-35	17355	55.66	162	122	2.2	1.8
F14-36	17363	54.11	275	235	4.3	3.5
F14-37	18446	46.02	344	304	6.6	5.4
F14-38	18113	51.61	479	439	8.5	6.9
F14-39	18243	51.52	408	368	7.1	5.8
F14-40	18357	50.12	368	328	6.5	5.3
F14-41	19310	50.52	376	336	6.6	5.4
F14-42	19415	52.20	353	313	6.0	4.9
F14-43	19331	47.40	328	288	6.1	4.9
F14-44	19231	49.02	262	222	4.5	3.7

*Measured mass corrected for typical 40 ng formaldehyde cartridge blank. **Concentration in ppb calculated assuming standard conditions of 25° C and 101.3 kPa.

END OF REPORT

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CHAIN-OF-CUSTODY RECORD
for ANALYTICAL SERVICES
2009 Update

Client Information*			
Company:	US EPA		
Street Address:			
City/State/Zip Code:			
Country:	Contact (for reporting):	J Woodlee	
Project/Job Name:			
Project/Job #:		P.O. #:	
Phone:		Fax:	
E-mail address:			

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☐
Aldehyde cartridge samplers	☒
Sampling pump(s)	☐
Other materials (specify):	☐

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	b
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	(f)
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
	F14-21	8/30/15	59	54.29	13138	f	
	22		60	56.05	13243		
	23		60	56.02	13336		
	24		60	55.09	13344		
	25		57	53.47	14414		
	26		56	52.13	14246		
	27		66	60.48	14364		
	28		72	67.90	14112		
	29		71	66.37	16361		
	30		60	53.86	16448		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodlee			9/2/16	US EPA
	R Gill		9/2/16	BKA

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CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*		
Company:	US EPA	
Street Address:		
City/State/Zip Code:		
Country:	Contact (for reporting): Woodell	
Project/Job Name:		
Project/Job #:		P.O. #:
Phone:		Fax:
E-mail address:		

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	b
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	f
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☐
Aldehyde cartridge samplers	☒
Sampling pump(s)	☐
Other materials (specify):	☐

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
	F14-31	8/31/15	58		16158	f	
	32		57		16133		
	33		61		17446		
	34		59		17144		
	35		60		17355		
	36		60		17363		
	37		49		18446		
	38		55		18113		
	39		57		18243		
	40		55		18357		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J. Woodell			9/2/16	USEPA
	Ktia		9/2/16	BCA

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CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*		
Company:	USEPA	
Street Address:		
City/State/Zip Code:		
Country:	Contact (for reporting):	Woodlee
Project/Job Name:		
Project/Job #:	P.O. #:	
Phone:	Fax:	
E-mail address:		

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☐
Aldehyde cartridge samplers	☒
Sampling pump(s)	☐
Other materials (specify):	☐

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	b
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	f
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
	F14-41	9/1/15	54	50.52	19310	f	
	F14-42	↓	57	52.20	19415	↓	
	F14-43	↓	52	47.40	19331	↓	
	F14-44	↓	52	49.02	19231	↓	
						↓	
						↓	
						↓	
						↓	
						↓	
						↓	

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodlee		9/2/15	9/2/15	USEPA
	R Gill	[illegible]	9/2/15	BAA

SC061-037

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CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*			
Company:	USEPA		
Street Address:			
City/State/Zip Code:			
Country:	Contact (for reporting):	J Woodlee	
Project/Job Name:			
Project/Job #:		P.O. #:	
Phone:	(415) 972-3740	Fax:	
E-mail address:	woodlee.jeff@epa.gov		

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☒
Aldehyde cartridge samplers	☐
Sampling pump(s)	☐
Other materials (specify):	☐

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	(b)
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	f
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
203110	C14-21	8/30/16	59	5.67	13138	b -	Caprolactam
242458	22		60	5.66	13243		
Mi59956	23		60	5.93	13336		
Mi59953	24		60	5.77	13344		
Mi51114	25		57	5.40	14414		
203148	26		56	5.50	14246		
Mi59960	27		66	6.36	14364		
Mi59929	28		72	6.87	14112		
Mi58941	29		71	7.02	16361		
242196	30		60	5.77	16448		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodlee			9/2/16	USEPA
	RGill		9/2/16	BAA

JC061-037

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Berkeley Analytical Associates, LLC
815 Harbour Way South, Suite 6
Richmond, CA 94804-3612
Phone: 510-236-2325 Fax: 510-236-2335
e-mail: baalab@berkeleyanalytical.com

CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*		
Company:	USEPA	
Street Address:		
City/State/Zip Code:		
Country:	Contact (for reporting): Woodle	
Project/Job Name:		
Project/Job #:		P.O. #:
Phone:		Fax:
E-mail address:		

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☑
Aldehyde cartridge samplers	☐
Sampling pump(s)	☐
Other materials (specify):	☐

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	(b)
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	f
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
242403 ~~242495~~	C14-31	8/31/15	58	5.49	16158	b –	Caprolactam
Mi51174	C14-32		57	5.61	16133		
242425	33		61	5.87	17446		
Mi58846	34		59	5.60	17144		
203171	35		60	5.91	17355		
203144	36		60	5.75	17363		
Mi58839	37		49	4.65	18446		
203196	38		55	5.42	18413		
Mi59937	39		57	5.48	18243		
203124	40		55	5.23	18357		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodle			9/2/16	USEPA
	R Gill		9/2/16	BAA

JC061-037

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Berkeley Analytical Associates, LLC
815 Harbour Way South, Suite 6
Richmond, CA 94804-3612
Phone: 510-236-2325 Fax: 510-236-2335
e-mail: baalab@berkeleyanalytical.com

CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*		
Company:	USEPA	
Street Address:		
City/State/Zip Code:		
Country:	Contact (for reporting): Woodle	
Project/Job Name:		
Project/Job #:	P.O. #:	
Phone:	Fax:	
E-mail address:		

BAA Analysis Code	
Total VOCs by GC/MS total-ion-current method (TIC)	a
Qualitative GC/MS of individual VOCs	(b)
Qualitative GC/MS plus quantitation of up to 15 individual VOCs	c
Quantitative GC/MS analysis of target list of compounds	d
Quantitative GC/MS Total VOCs plus 4-PCH	e
Quantitative HPLC analysis of formaldehyde	f
Quantitative HPLC analysis of formaldehyde & acetaldehyde	g
Quantitative HPLC analysis of formaldehyde & C2-C9 carbonyls	h
Quantitative HPLC analysis of glutaraldehyde	i
	k
Other (specify):	z

Received from BAA (check if applicable)	
Multi-sorbent tube samplers	☒
Aldehyde cartridge samplers	☐
Sampling pump(s)	☐
Other materials (specify):	☐

Air Sampling Record

Tube/Cartridge Sampler No.	Collected Sample ID	Date Collected	Collection Minutes	Collected Volume (L)	Sample Location / Description / Remarks	Analysis Code	BAA Remarks
Mi59127	C14 - 41	9/1/15	54	5.30	19310	b - Caprolactam	
242440	42	↓	57	5.48	19415	↓	
203105	43	↓	52	4.94	19331	↓	
242408	44	↓	52	5.11	19231	↓	

Sample(s) Handling				
Relinquished By	Received By	Signature	Date	Company
J Woodle			9/2/16	USEPA
	R Gill		9/2/16	BAA

JC061-037

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IH Testing, Invoicing and Report Checklist

Date:	9/11/16	Report ID & Billing Ref:	
Company:	US EPA	Test Methd/ Description: (highlite all applicable)	TO-17; ASTM D5197
Contact Name:	Jeff Woodlee	Program	LEED V4
Contact Phone:	415-992-3740	Quote #:	Date:
Contact Email:	woodlee.jeff@epa.gov	PO #:	
Initiator:		Sample IDs:	

Notes & Deviations:

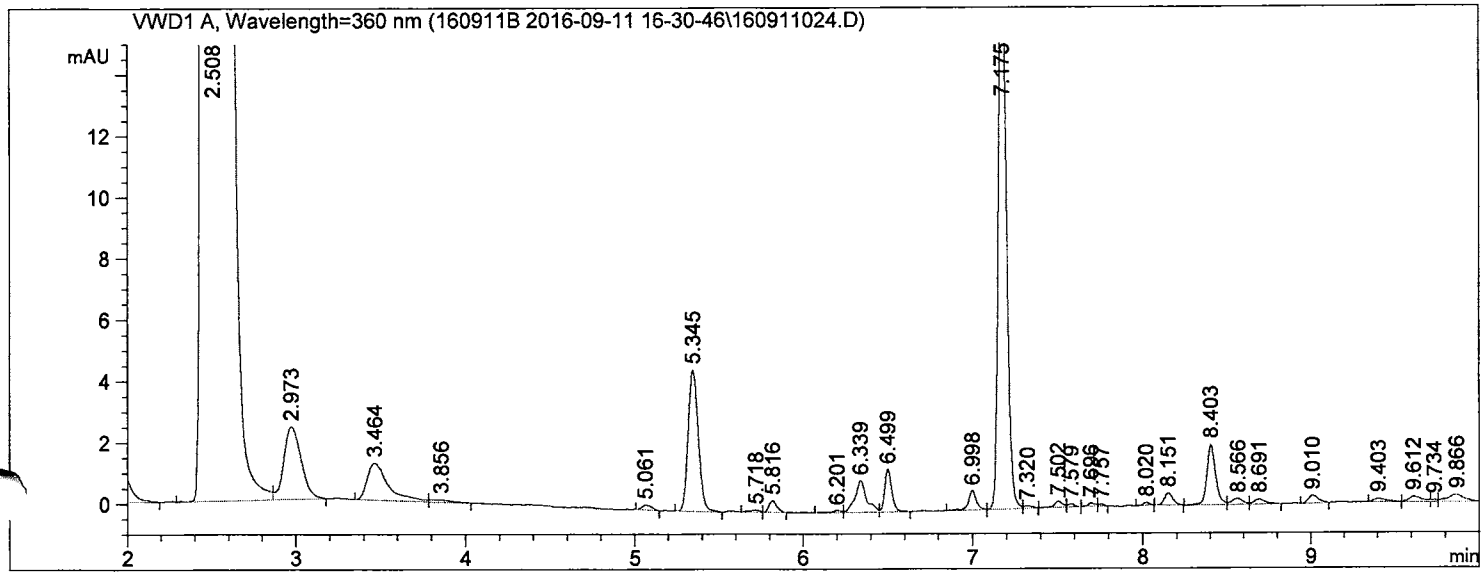
Item to Check	Initials	Notes
COC		
Is it clear what test to be performed[1]?	YES / NO :	
Log in samples and check the Turnaround of the report	YES / NO :	
Scan (to PDF) a copy of the COC form	YES / NO :	
Check and confirm that the samples match the COC	YES / NO :	
Chemical Analysis		
Analyze sampels by TO-17	YES / NO :	
Analyze samples by ASTM D5197	YES / NO :	
Report Preparation		
Prepare the draft reprot	YES / NO :	
Does the Report match Method and Criteria?	YES / NO : *(check COC, estimate send to customer and the top part of this check list)*	
Verify customer information on first page of previewed report (vs. COC or e-mail info)		
ert in the PDF report: Raja or Al's signature and check signature date - the scanned COC page at the end of the report	✓	
Print, Optimize and Secure the report	✓	
E-mail copy of the PDF report to client and other authorized contacts and organizations (enter date sent)	✓	9/13/16 ✓
Invoicing		
Invoice Matches PO/Quote w/ correct ReportID & Billing Reference	✓	
Invoice Number and Date		55944 or 55929
Date invoice sent to customer and other authorized contacts		9/15/16 9/8/2016

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911024.D
Sample Name: 061-037-25

==========

Acq. Operator : SYSTEM Seq. Line : 14
Acq. Instrument : Agilent 1260 Location : Vial 16
Injection Date : 9/11/2016 9:48:29 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-25; F14-21 collected 8/30/2016; 54.29L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.345	1	BB	19.35448	1.42688e-2	552.33189		Formaldehyde;50-00-0
6.339	1	VV	5.05943	1.87009e-2	189.23217		Acetaldehyde;75-07-0

Totals : 741.56406

==========

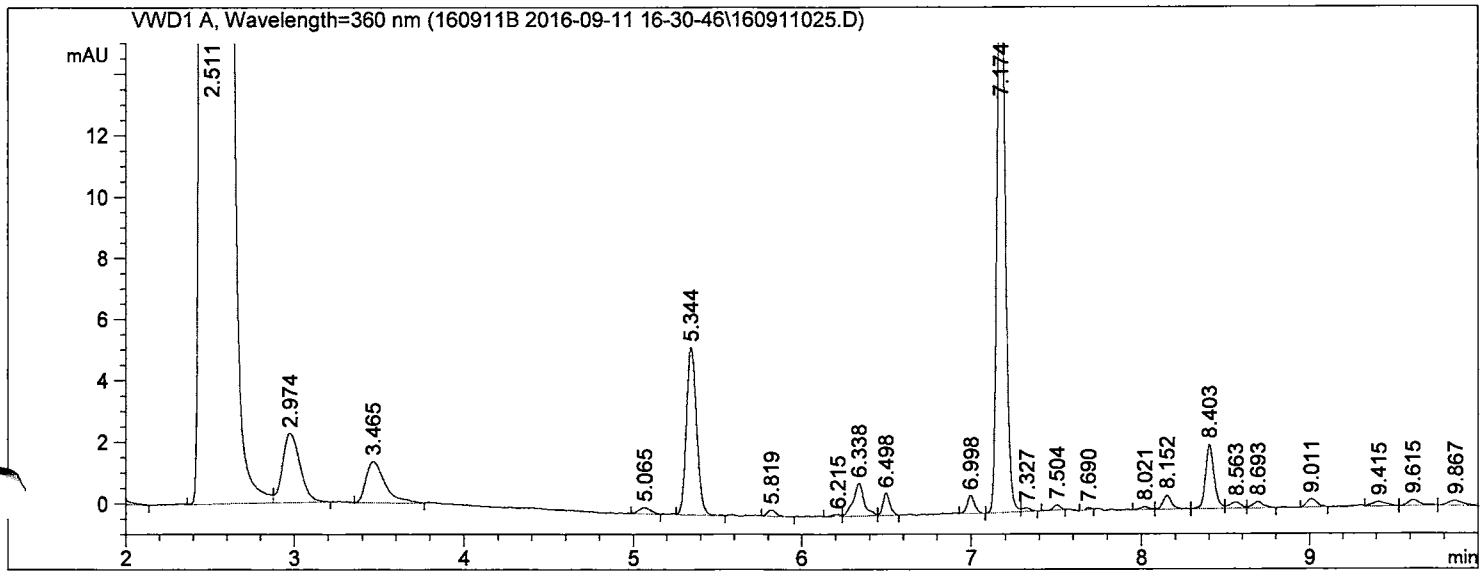
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911025.D
Sample Name: 061-037-26

==========

Acq. Operator : SYSTEM Seq. Line : 15
Acq. Instrument : Agilent 1260 Location : Vial 17
Injection Date : 9/11/2016 10:05:10 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-26; F14-22 collected 8/30/2016; 56.05L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.344	1	VB	22.84377	1.42688e-2	651.90815		Formaldehyde;50-00-0
6.338	1	VV	4.80742	1.87009e-2	179.80652		Acetaldehyde;75-07-0

Totals : 831.71467

==========

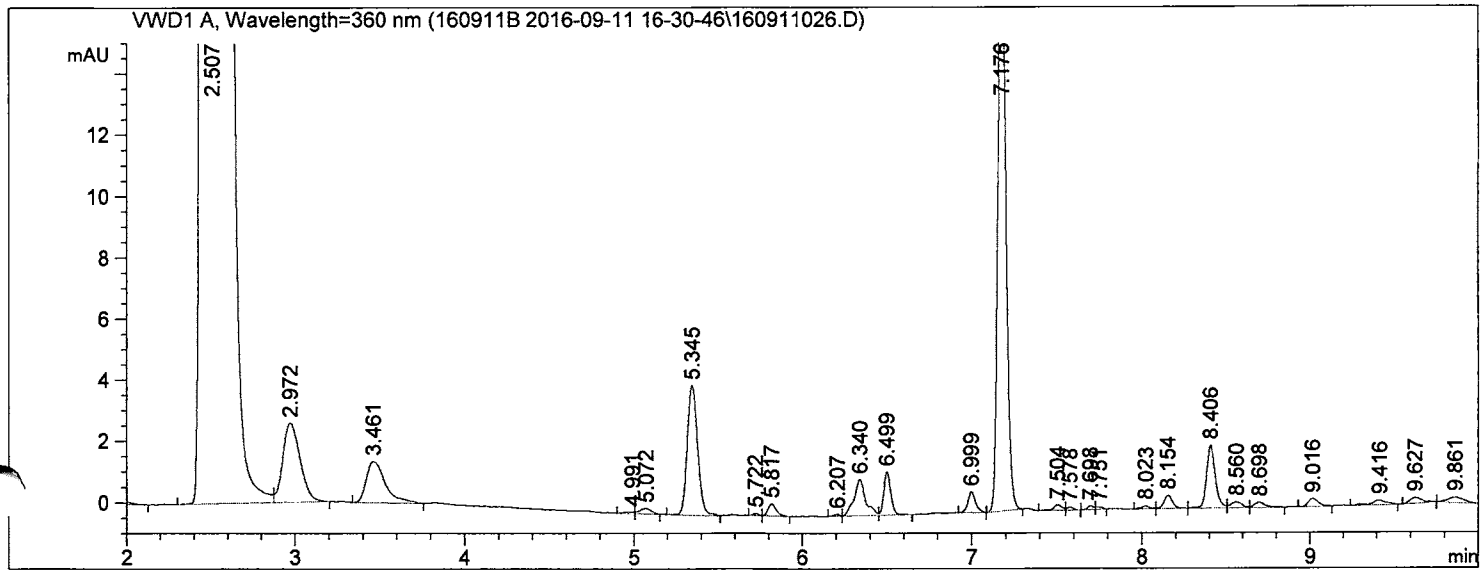
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911026.D
Sample Name: 061-037-27

==========

Acq. Operator : SYSTEM Seq. Line : 16
Acq. Instrument : Agilent 1260 Location : Vial 18
Injection Date : 9/11/2016 10:21:50 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-27; F14-23 collected 8/30/2016; 56.02L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.345	1	BB	18.06526	1.42688e-2	515.54057		Formaldehyde;50-00-0
6.340	1	VV	5.67867	1.87009e-2	212.39310		Acetaldehyde;75-07-0

Totals : 727.93367

==========

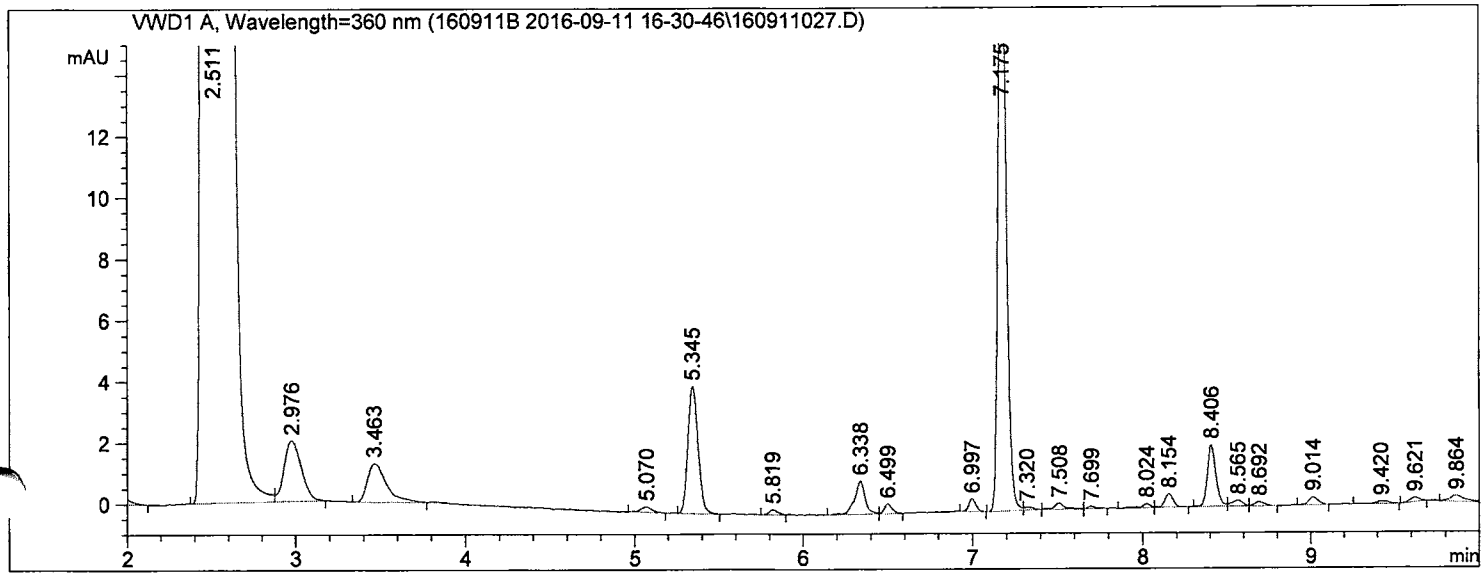
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911027.D
Sample Name: 061-037-28

==========

Acq. Operator : SYSTEM Seq. Line : 17
Acq. Instrument : Agilent 1260 Location : Vial 19
Injection Date : 9/11/2016 10:38:31 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-28; F14-24 collected 8/30/2016; 55.09L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.345	1	VB	17.53262	1.42688e-2	500.34030		Formaldehyde;50-00-0
6.338	1	BV	4.87169	1.87009e-2	182.21054		Acetaldehyde;75-07-0

Totals : 682.55083

==========

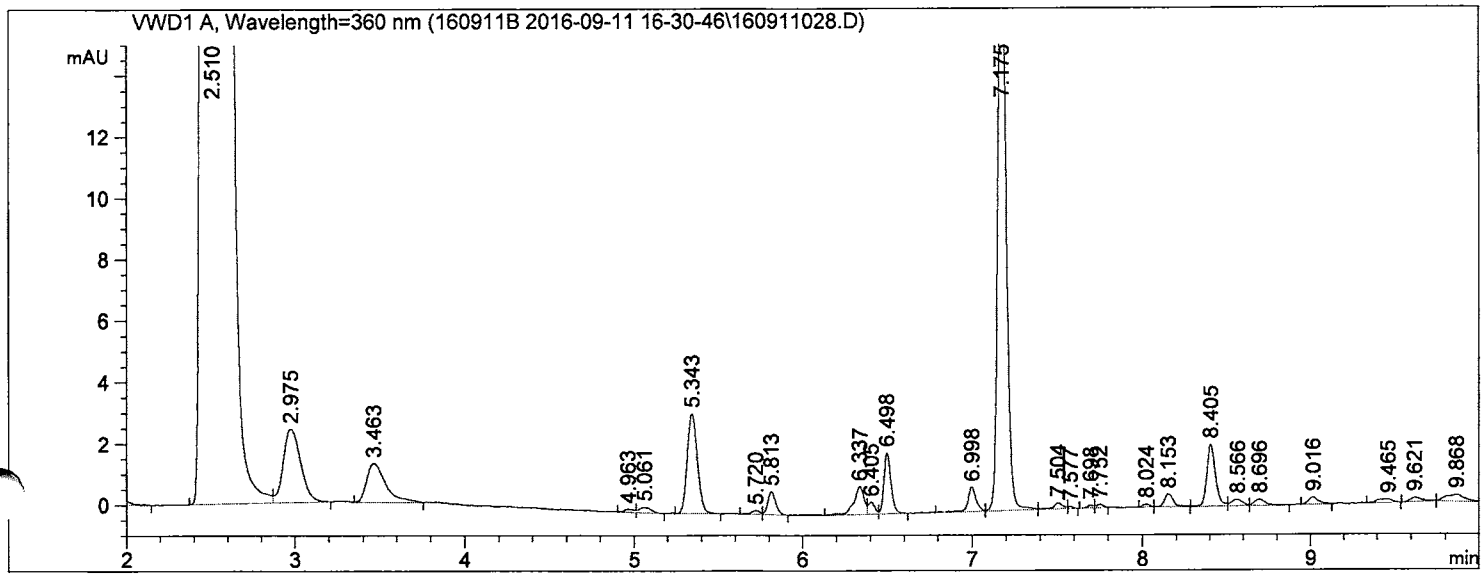
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911028.D
Sample Name: 061-037-29

==========

Acq. Operator : SYSTEM Seq. Line : 18
Acq. Instrument : Agilent 1260 Location : Vial 20
Injection Date : 9/11/2016 10:55:16 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-29; F14-25 collected 8/30/2016; 53.47L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.343	1	BB	13.66834	1.42688e-2	390.06278		Formaldehyde;50-00-0
6.337	1	BV	3.92092	1.87009e-2	146.64964		Acetaldehyde;75-07-0

Totals : 536.71242

==========

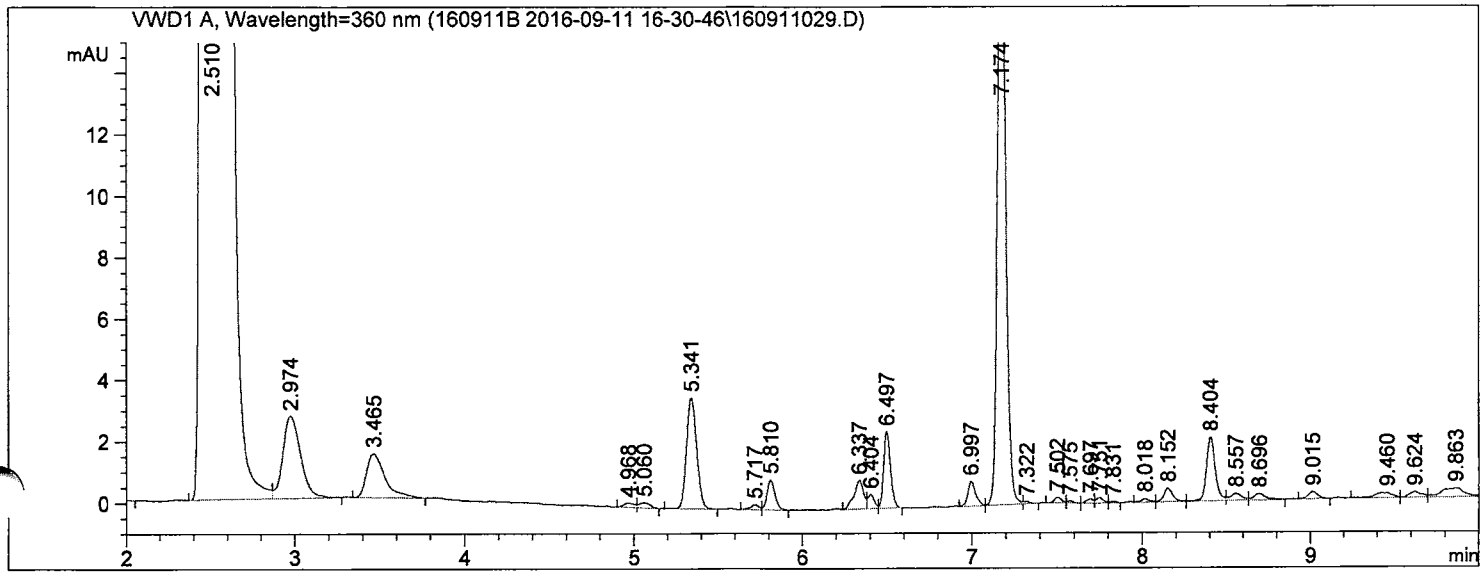
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911029.D
Sample Name: 061-037-30

==========

Acq. Operator : SYSTEM Seq. Line : 19
Acq. Instrument : Agilent 1260 Location : Vial 21
Injection Date : 9/11/2016 11:11:59 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-30; F14-26 collected 8/30/2016; 52.13L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.341	1	BB	15.11978	1.42688e-2	431.48346		Formaldehyde;50-00-0
6.337	1	BV	3.67102	1.87009e-2	137.30304		Acetaldehyde;75-07-0

Totals : 568.78651

==========

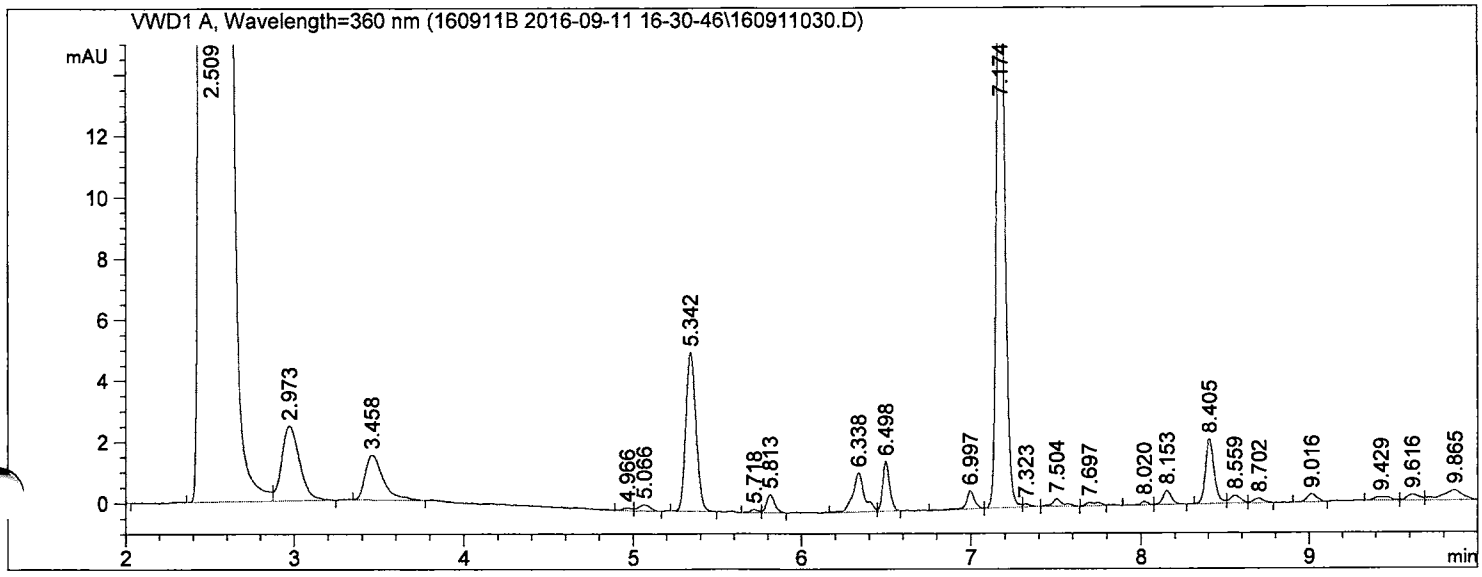
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911030.D
Sample Name: 061-037-31

==========

Acq. Operator : SYSTEM Seq. Line : 20
Acq. Instrument : Agilent 1260 Location : Vial 22
Injection Date : 9/11/2016 11:28:38 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-31; F14-27 collected 8/30/2016; 60.48L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.342	1	BB	21.67541	1.42688e-2	618.56592		Formaldehyde;50-00-0
6.338	1	BV	6.08390	1.87009e-2	227.54918		Acetaldehyde;75-07-0

Totals : 846.11511

==========

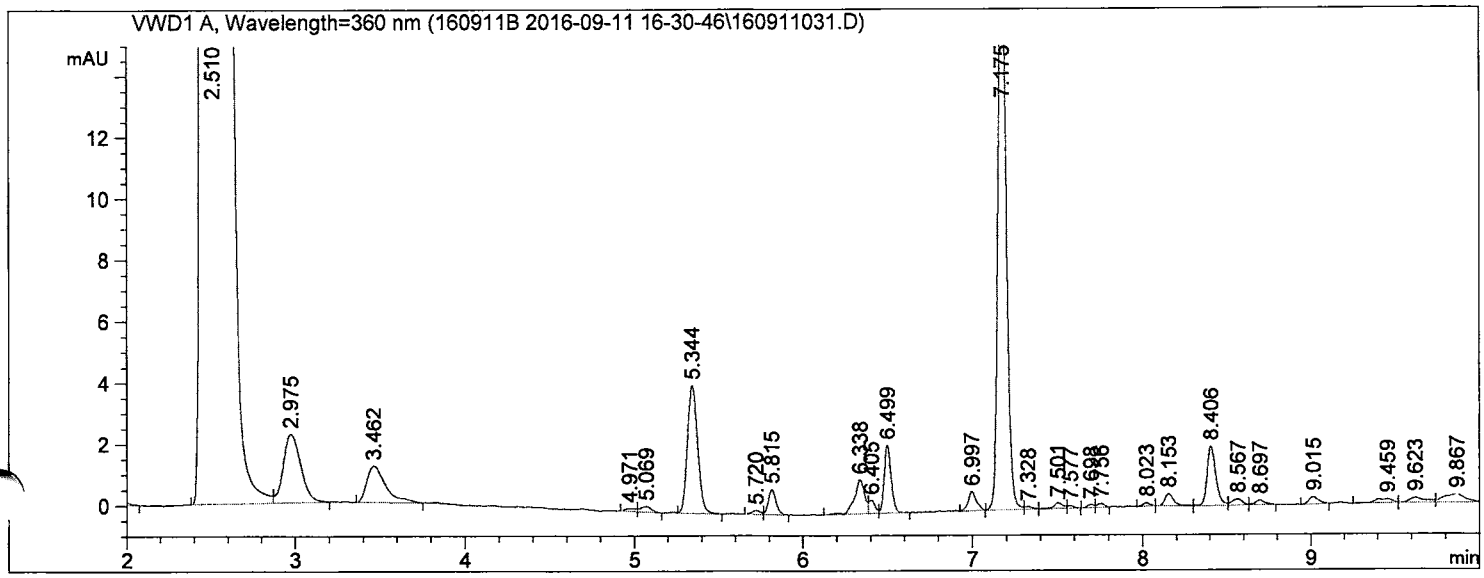
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911031.D
Sample Name: 061-037-32

==========

Acq. Operator : SYSTEM Seq. Line : 21
Acq. Instrument : Agilent 1260 Location : Vial 23
Injection Date : 9/11/2016 11:45:18 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-32; F14-28 collected 8/30/2016; 67.9L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.344	1	VB	17.56005	1.42688e-2	501.12329		Formaldehyde;50-00-0
6.338	1	BV	4.64785	1.87009e-2	173.83822		Acetaldehyde;75-07-0

Totals : 674.96151

==========

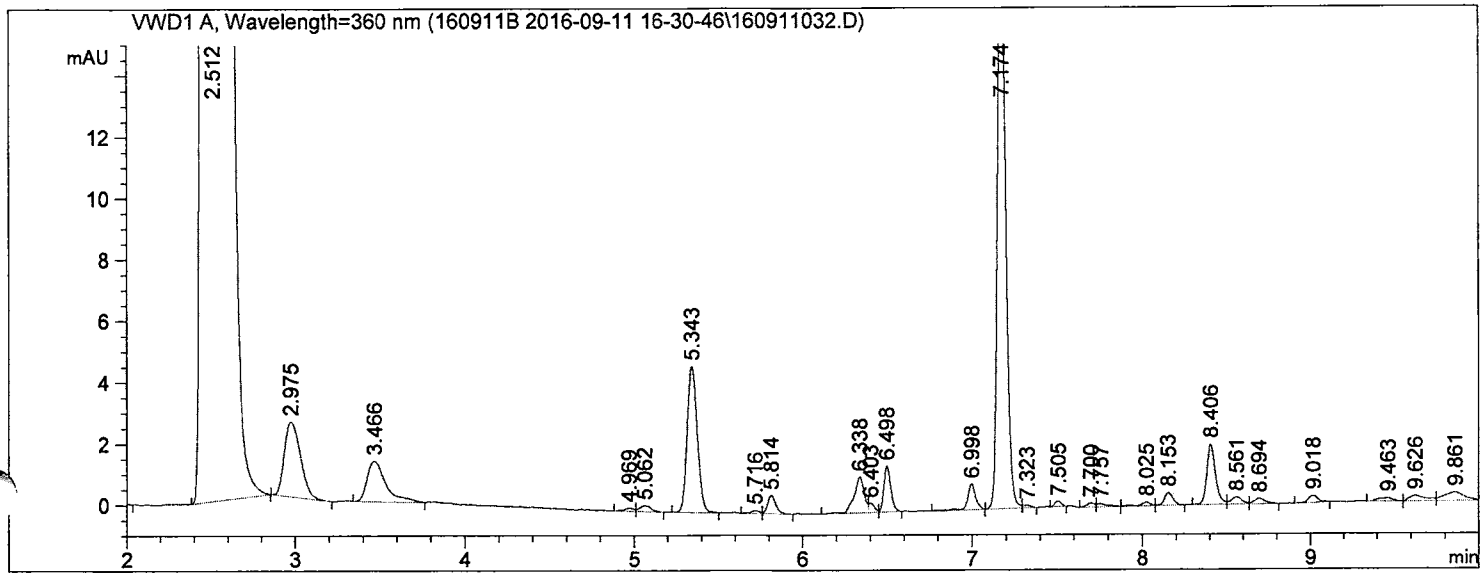
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911032.D
Sample Name: 061-037-33

==========

Acq. Operator : SYSTEM
Seq. Line : 22
Acq. Instrument : Agilent 1260
Location : Vial 24
Injection Date : 9/12/2016 12:01:58 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-33; F14-29 collected 8/30/2016; 66.37L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.343	1	BB	19.82579	1.42688e-2	565.78219		Formaldehyde;50-00-0
6.338	1	BV	4.95251	1.87009e-2	185.23311		Acetaldehyde;75-07-0

Totals : 751.01530

==========

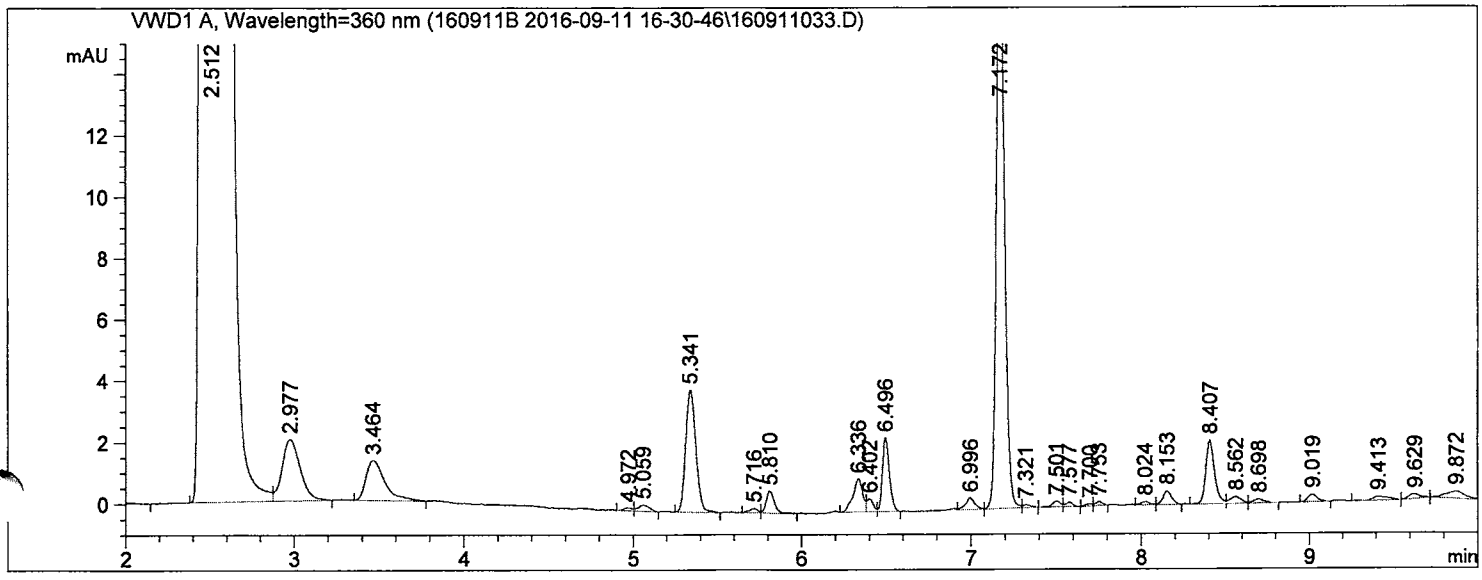
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911033.D
Sample Name: 061-037-34

==========

Acq. Operator : SYSTEM Seq. Line : 23
Acq. Instrument : Agilent 1260 Location : Vial 25
Injection Date : 9/12/2016 12:18:38 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-34; F14-30 collected 8/30/2016; 53.86L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.341	1	BB	16.59670	1.42688e-2	473.63134		Formaldehyde;50-00-0
6.336	1	BV	4.21962	1.87009e-2	157.82162		Acetaldehyde;75-07-0

Totals : 631.45296

==========

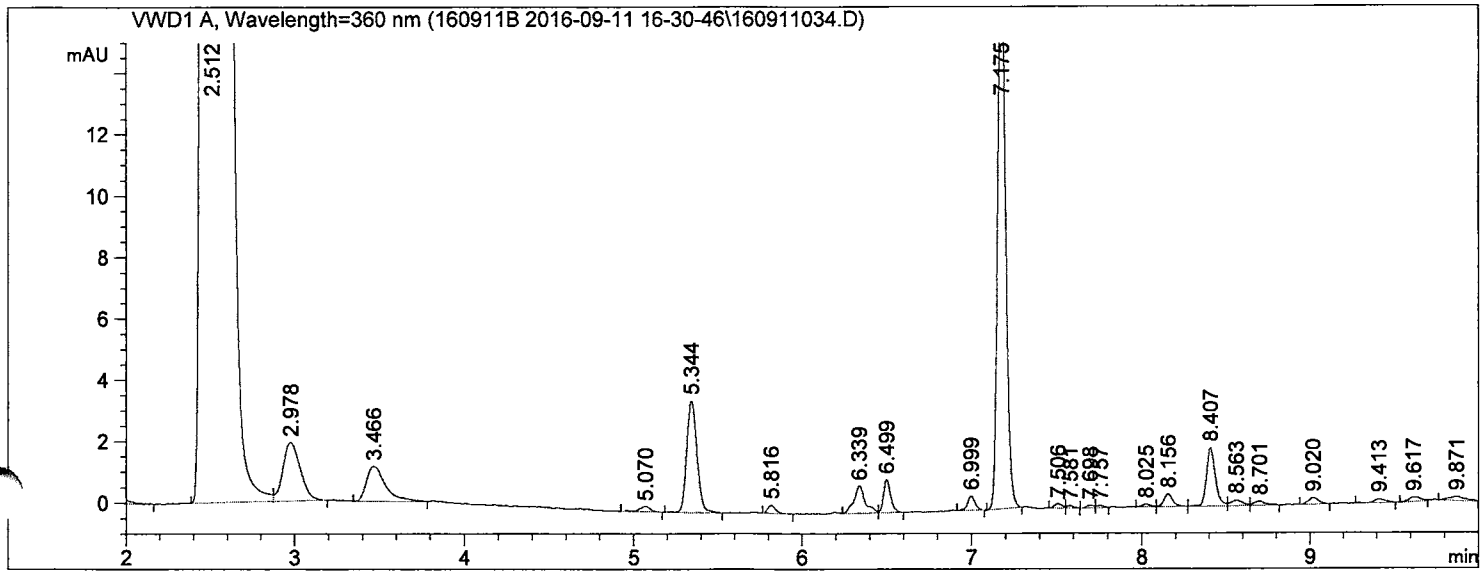
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911034.D
Sample Name: 061-037-35

==========

Acq. Operator : SYSTEM Seq. Line : 24
Acq. Instrument : Agilent 1260 Location : Vial 26
Injection Date : 9/12/2016 12:35:19 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-35; F14-31 collected 8/30/2016; 54.42L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.344	1	BB	15.47648	1.42688e-2	441.66296		Formaldehyde;50-00-0
6.339	1	VV	4.14163	1.87009e-2	154.90464		Acetaldehyde;75-07-0

Totals : 596.56761

==========

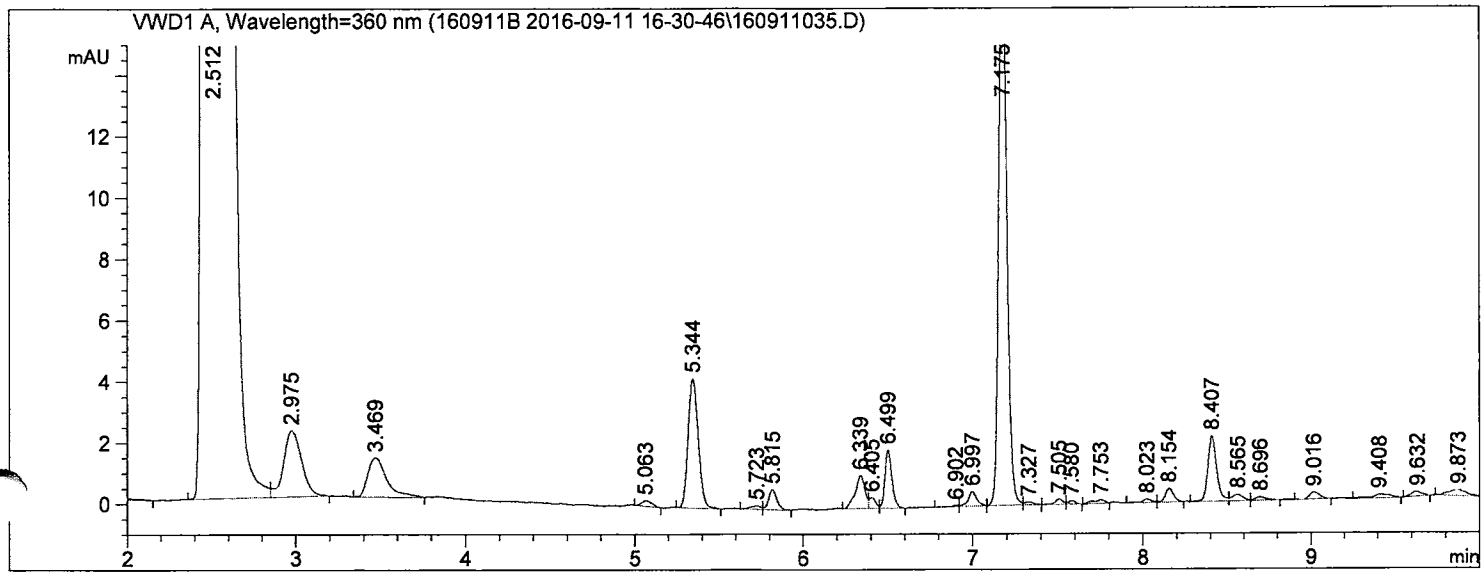
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911035.D
Sample Name: 061-037-36

==========

Acq. Operator : SYSTEM Seq. Line : 25
Acq. Instrument : Agilent 1260 Location : Vial 27
Injection Date : 9/12/2016 12:51:58 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-36; F14-32 collected 8/30/2016; 52.87L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.344	1	BB	17.69249	1.42688e-2	504.90278		Formaldehyde;50-00-0
6.339	1	BV	4.37835	1.87009e-2	163.75846		Acetaldehyde;75-07-0

Totals : 668.66124

==========

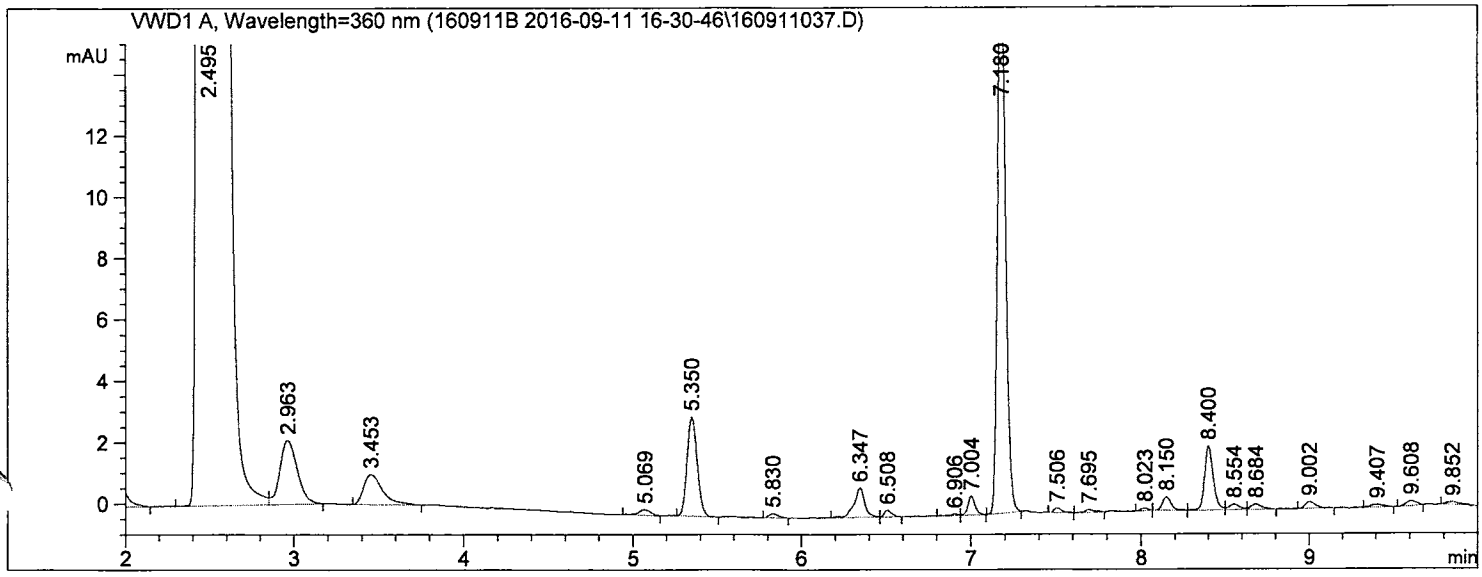
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911037.D
Sample Name: 061-037-37

==========

Acq. Operator : SYSTEM
Seq. Line : 27
Acq. Instrument : Agilent 1260
Location : Vial 28
Injection Date : 9/12/2016 1:25:20 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-37; F14-33 collected 8/30/2016; 54.71L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.350	1	BB	13.54305	1.42688e-2	386.48741		Formaldehyde;50-00-0
6.347	1	BV	4.31900	1.87009e-2	161.53883		Acetaldehyde;75-07-0

Totals : 548.02624

==========

*** End of Report ***

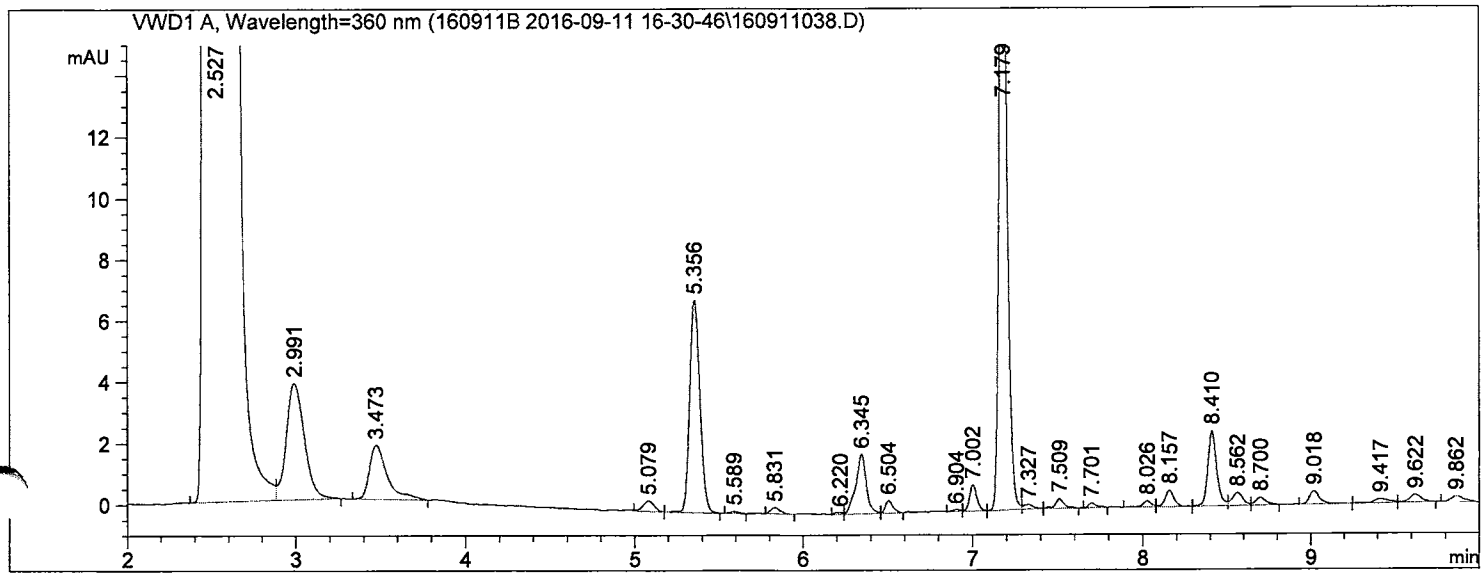
Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911038.D
Sample Name: 061-037-38

==========

Acq. Operator : SYSTEM
Seq. Line : 28
Acq. Instrument : Agilent 1260
Location : Vial 29
Injection Date : 9/12/2016 1:42:00 AM
Inj : 1
Inj Volume : 2.000 µl

Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-38; F14-34 collected 8/30/2016; 55.12L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.356	1	BB	29.15524	1.42688e-2	832.02310		Formaldehyde;50-00-0
6.345	1	VV	8.35106	1.87009e-2	312.34523		Acetaldehyde;75-07-0

Totals : 1144.36833

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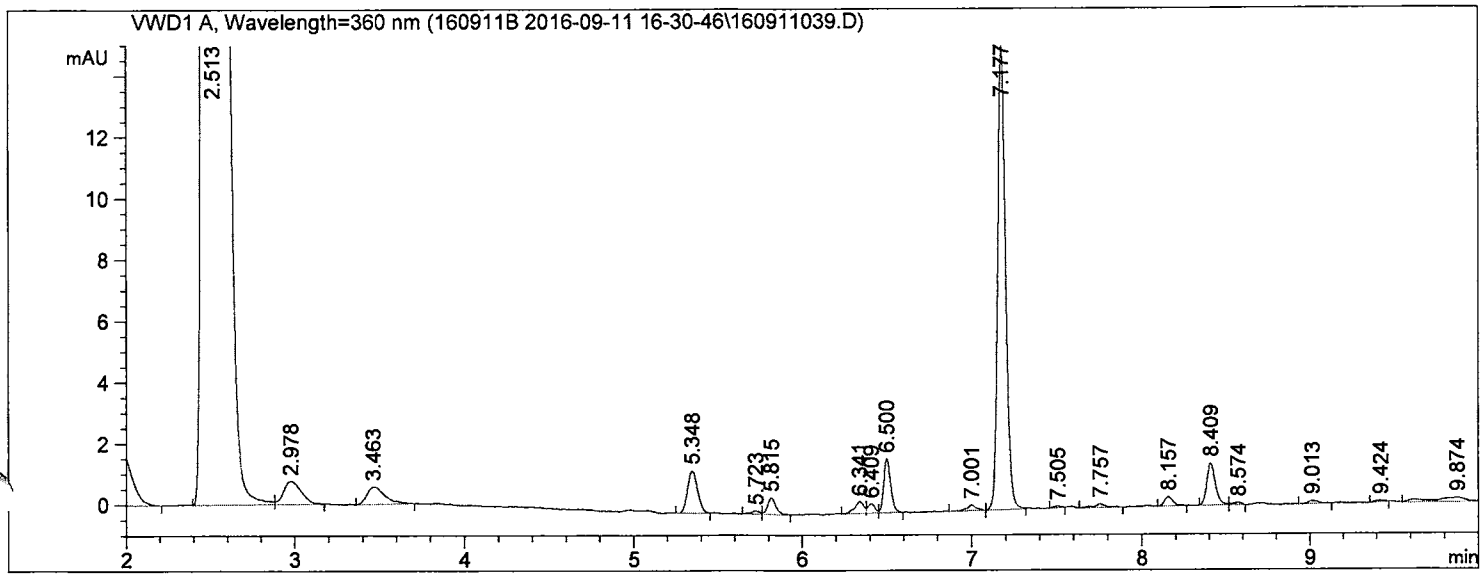
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911039.D
Sample Name: 061-037-39

==========

Acq. Operator : SYSTEM Seq. Line : 29
Acq. Instrument : Agilent 1260 Location : Vial 30
Injection Date : 9/12/2016 1:58:42 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-39; F14-35 collected 8/30/2016; 55.66L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.348	1	BB	5.66545	1.42688e-2	161.67886		Formaldehyde;50-00-0
6.341	1	BV	1.44430	1.87009e-2	54.01946		Acetaldehyde;75-07-0

Totals : 215.69833

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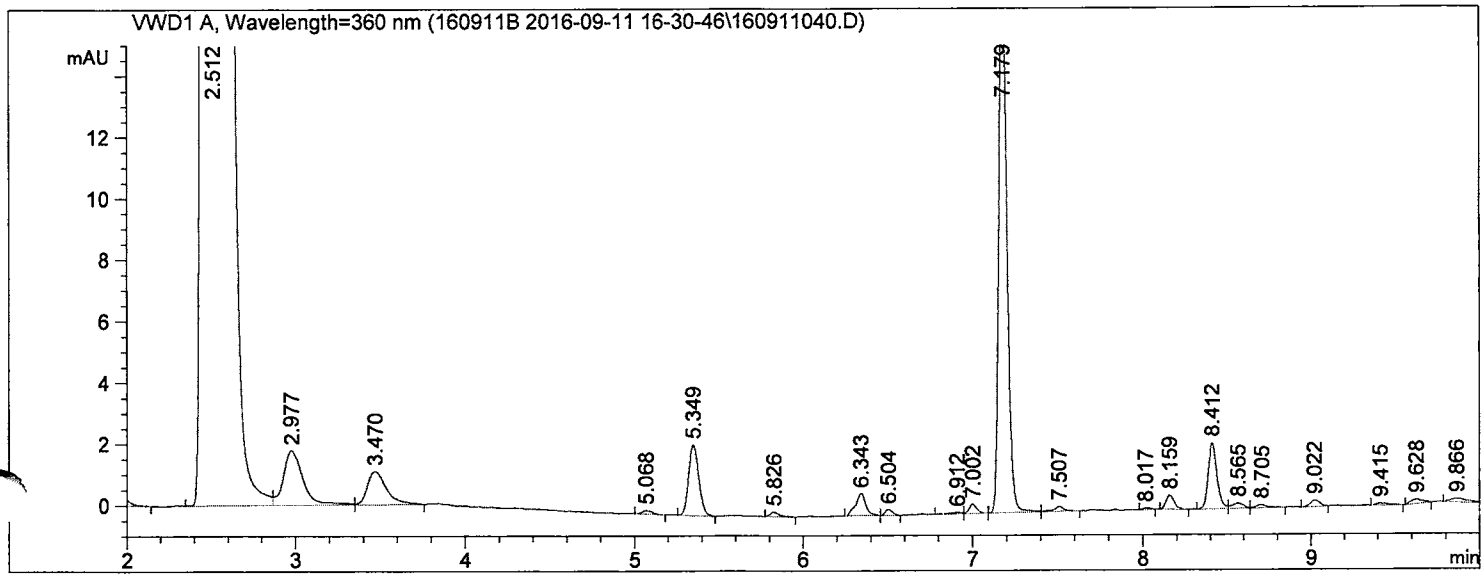
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911040.D
Sample Name: 061-037-40

==========

Acq. Operator : SYSTEM Seq. Line : 30
Acq. Instrument : Agilent 1260 Location : Vial 31
Injection Date : 9/12/2016 2:15:26 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-40; F14-36 collected 8/30/2016; 54.11L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.349	1	BB	9.63831	1.42688e-2	275.05503		Formaldehyde;50-00-0
6.343	1	BB	3.09225	1.87009e-2	115.65584		Acetaldehyde;75-07-0

Totals : 390.71087

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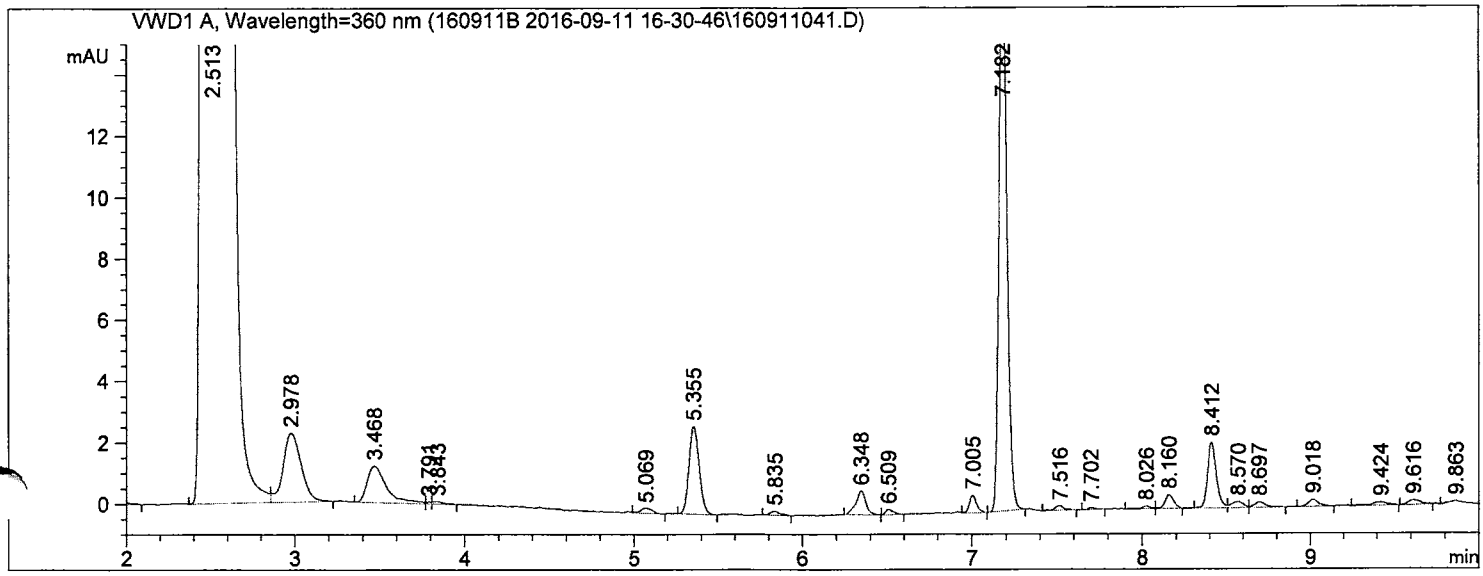
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911041.D
Sample Name: 061-037-41

==========

Acq. Operator : SYSTEM Seq. Line : 31
Acq. Instrument : Agilent 1260 Location : Vial 32
Injection Date : 9/12/2016 2:32:09 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-41; F14-37 collected 8/30/2016; 46.02L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.355	1	BB	12.03895	1.42688e-2	343.56364		Formaldehyde;50-00-0
6.348	1	BB	3.28724	1.87009e-2	122.94890		Acetaldehyde;75-07-0

Totals : 466.51254

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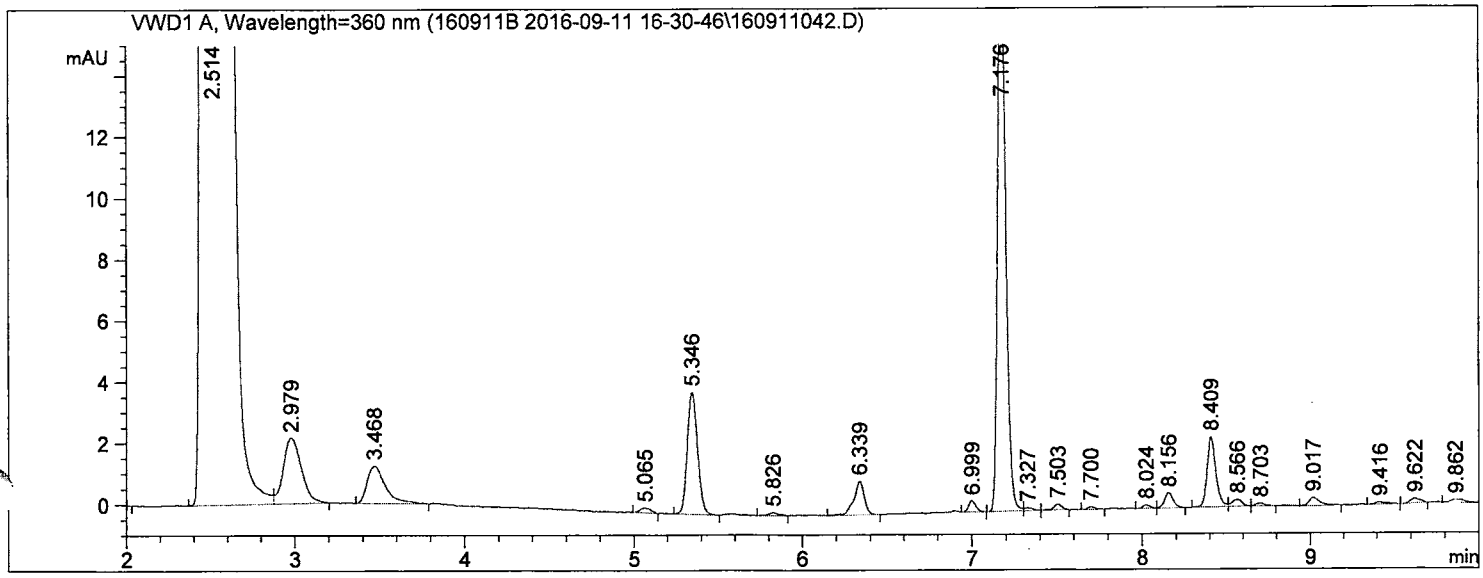
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911042.D
Sample Name: 061-037-42

==========

Acq. Operator : SYSTEM
Seq. Line : 32
Acq. Instrument : Agilent 1260
Location : Vial 33
Injection Date : 9/12/2016 2:48:49 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-42; F14-38 collected 8/30/2016; 51.61L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.346	1	BB	16.79743	1.42688e-2	479.35975		Formaldehyde;50-00-0
6.339	1	BB	4.75334	1.87009e-2	177.78377		Acetaldehyde;75-07-0

Totals : 657.14352

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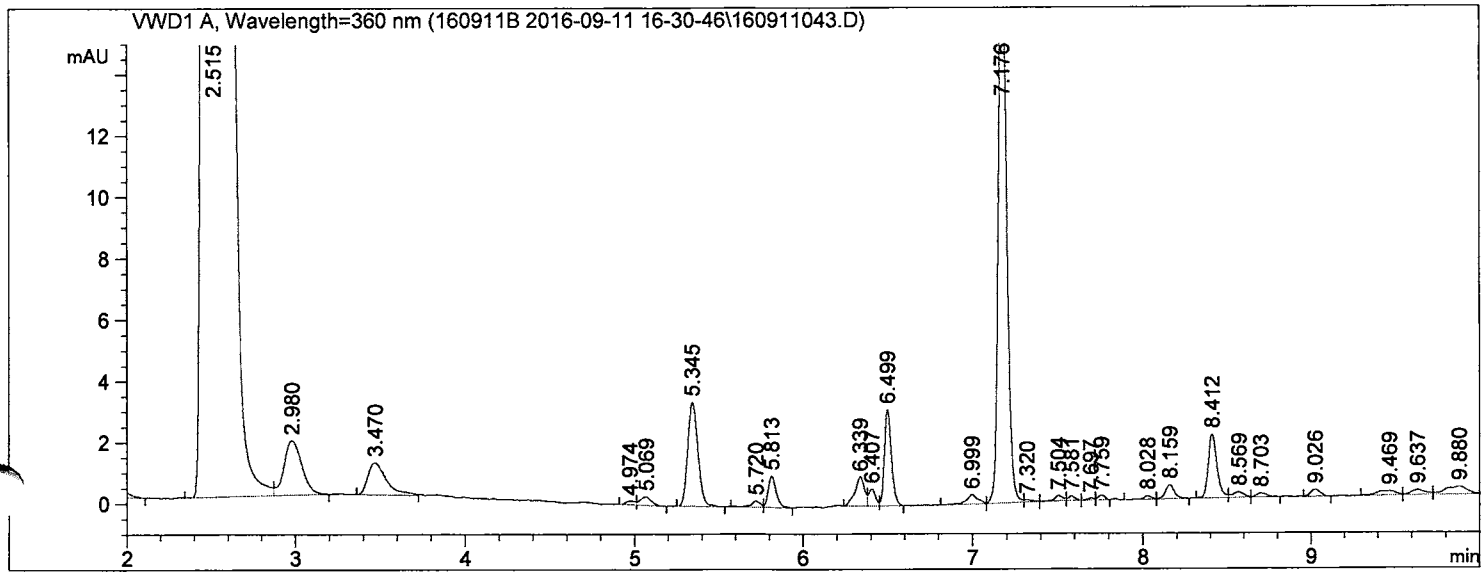
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911043.D
Sample Name: 061-037-43

==========

Acq. Operator : SYSTEM
Seq. Line : 33
Acq. Instrument : Agilent 1260
Location : Vial 34
Injection Date : 9/12/2016 3:05:29 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-43; F14-39 collected 8/30/2016; 51.52L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.345	1	BB	14.29722	1.42688e-2	408.00963		Formaldehyde;50-00-0
6.339	1	BV	3.73341	1.87009e-2	139.63641		Acetaldehyde;75-07-0

Totals : 547.64604

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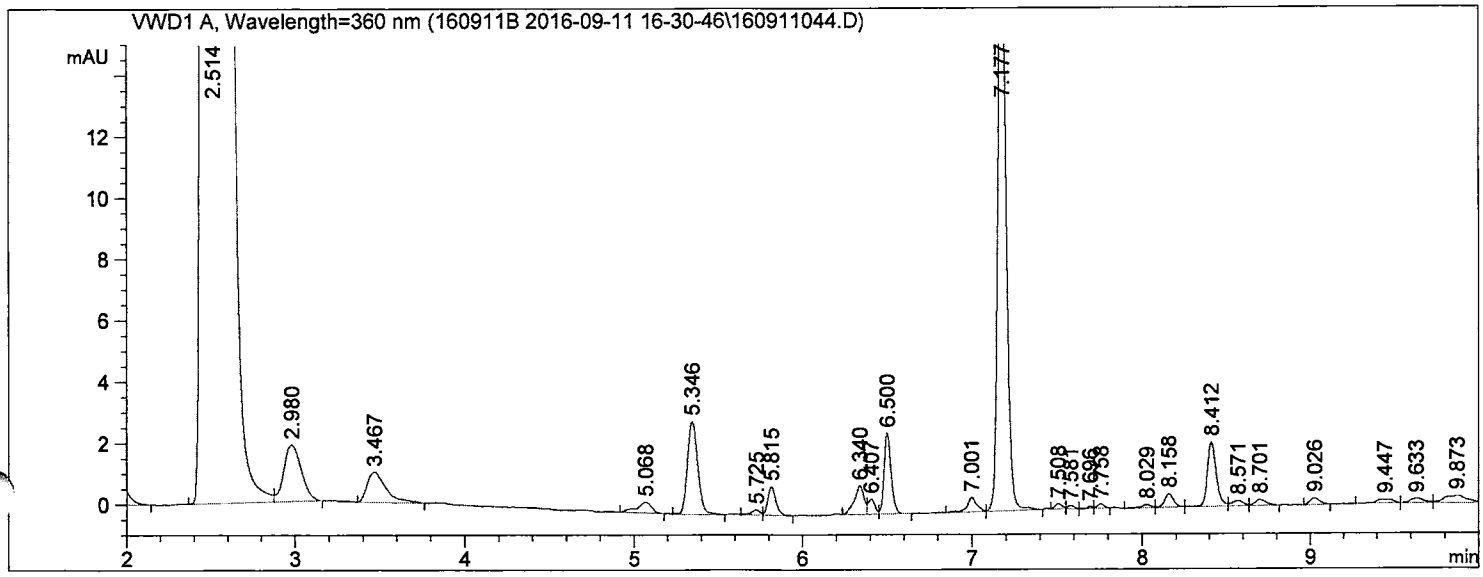
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911044.D
Sample Name: 061-037-44

==========

Acq. Operator : SYSTEM
Seq. Line : 34
Acq. Instrument : Agilent 1260
Location : Vial 35
Injection Date : 9/12/2016 3:22:09 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-44; F14-40 collected 8/30/2016; 50.12L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.346	1	BB	12.89148	1.42688e-2	367.89307		Formaldehyde;50-00-0
6.340	1	BV	3.73871	1.87009e-2	139.83463		Acetaldehyde;75-07-0

Totals : 507.72771

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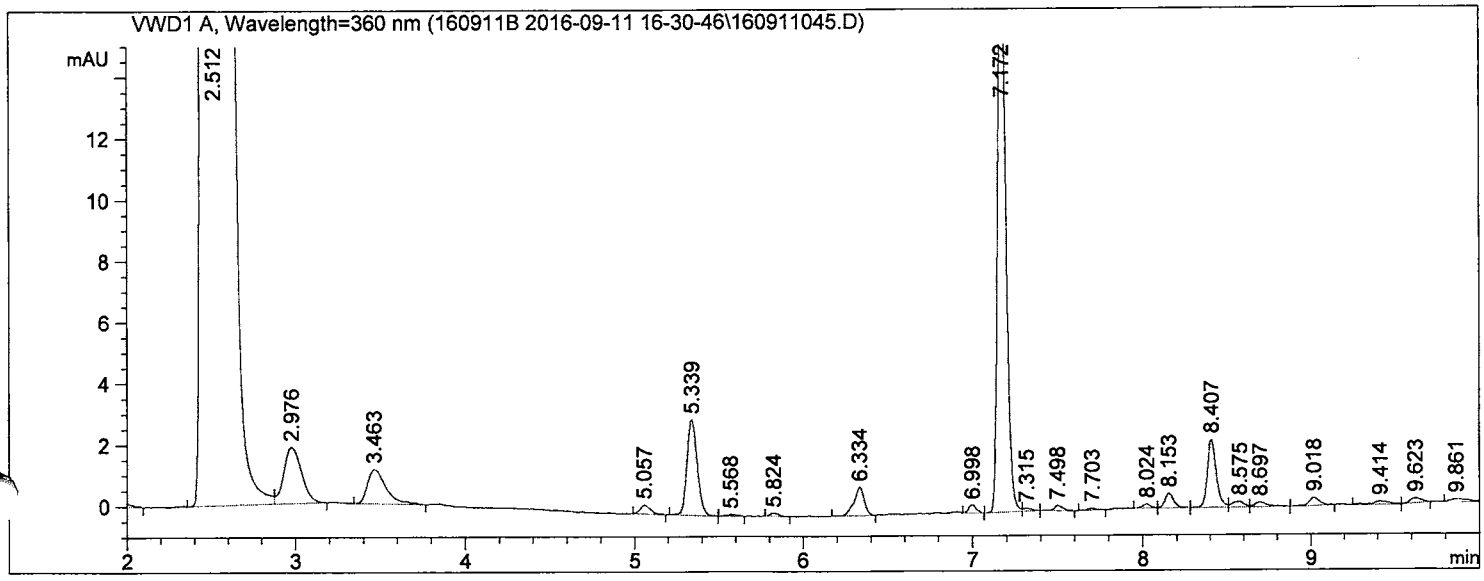
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911045.D
Sample Name: 061-037-45

==========

Acq. Operator : SYSTEM Seq. Line : 35
Acq. Instrument : Agilent 1260 Location : Vial 36
Injection Date : 9/12/2016 3:38:50 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-45; F14-41 collected 8/30/2016; 50.52L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.339	1	BB	13.16788	1.42688e-2	375.78069		Formaldehyde;50-00-0
6.334	1	BB	3.91264	1.87009e-2	146.34013		Acetaldehyde;75-07-0

Totals : 522.12082

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*** End of Report ***

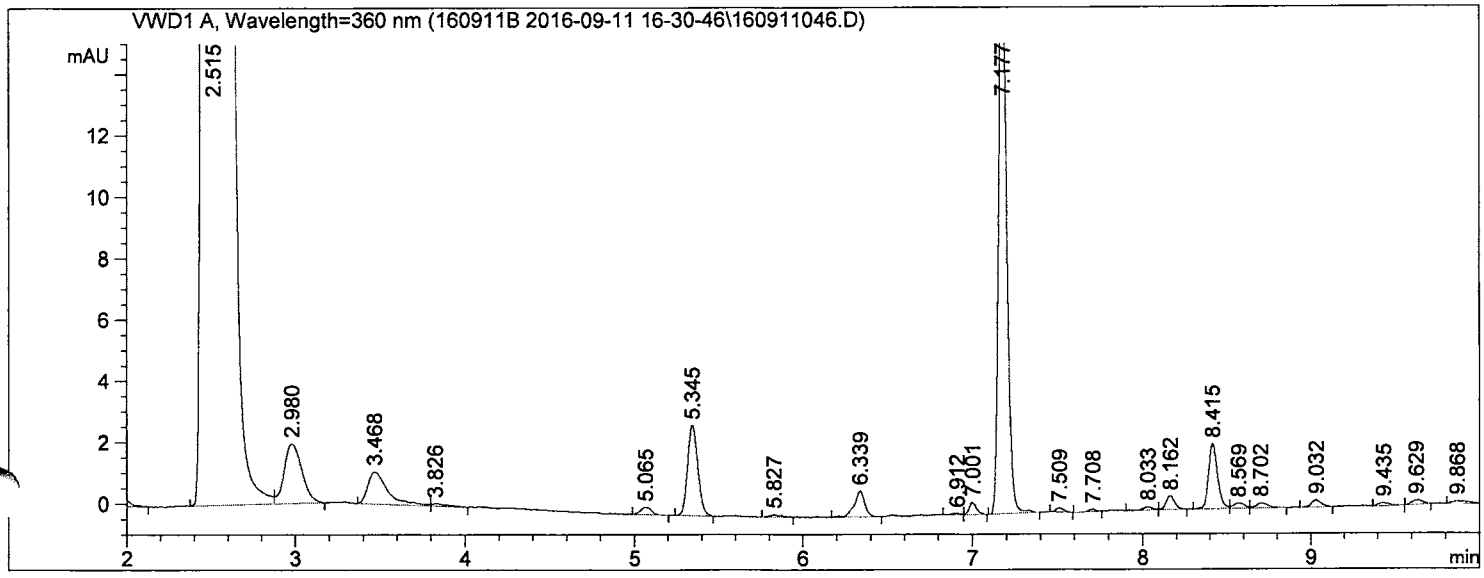
Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911046.D
Sample Name: 061-037-46

==========

Acq. Operator : SYSTEM
Seq. Line : 36
Acq. Instrument : Agilent 1260
Location : Vial 37
Injection Date : 9/12/2016 3:55:32 AM
Inj : 1
Inj Volume : 2.000 µl

Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-46; F14-42 collected 8/30/2016; 52.2L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.345	1	BB	12.37020	1.42688e-2	353.01700		Formaldehyde;50-00-0
6.339	1	BB	3.65430	1.87009e-2	136.67765		Acetaldehyde;75-07-0

Totals : 489.69464

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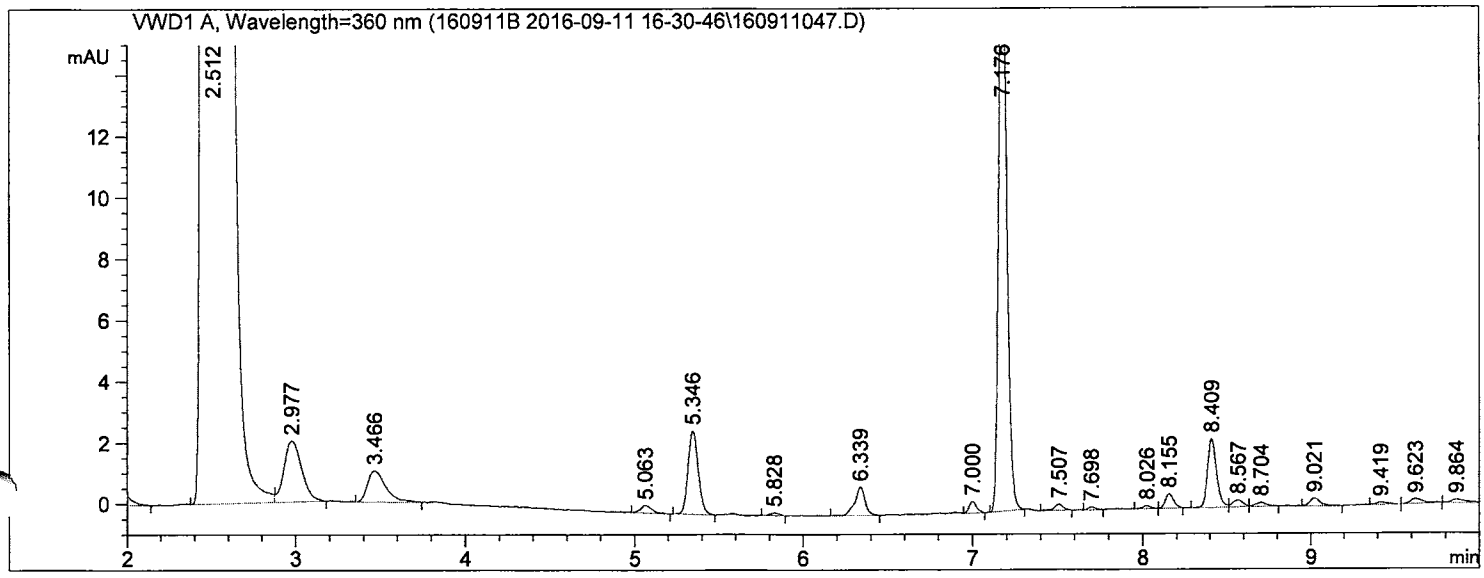
*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911047.D
Sample Name: 061-037-47

==========

Acq. Operator : SYSTEM
Seq. Line : 37
Acq. Instrument : Agilent 1260
Location : Vial 38
Injection Date : 9/12/2016 4:12:12 AM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-47; F14-43 collected 8/30/2016; 47.4L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.346	1	BB	11.47934	1.42688e-2	327.59366		Formaldehyde;50-00-0
6.339	1	BB	4.02364	1.87009e-2	150.49156		Acetaldehyde;75-07-0

Totals : 478.08521

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*** End of Report ***

Data File C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\160911048.D
Sample Name: 061-037-48

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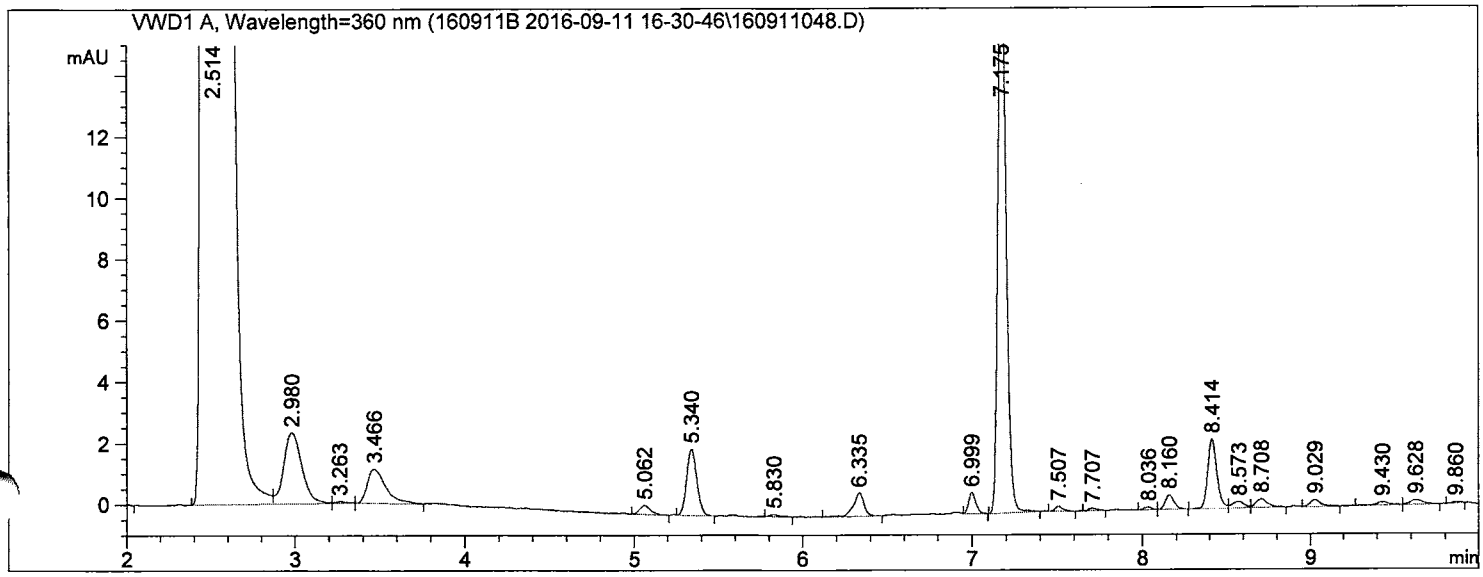
Acq. Operator : SYSTEM Seq. Line : 38
Acq. Instrument : Agilent 1260 Location : Vial 39
Injection Date : 9/12/2016 4:28:52 AM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\160911B 2016-09-11 16-30-46\FORMALDEHYDE.M
Last changed : 9/11/2016 4:30:46 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 9/13/2016 10:12:02 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-037-48; F14-44 collected 8/30/2016; 49.02L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 9/11/2016 4:31:15 PM
Multiplier : 2.000e3
Dilution : 1.0000
Sample Amount: : 1.00000 [ng] (not used in calc.)
Use Multiplier & Dilution Factor with ISTDs

Signal 1: VWD1 A, Wavelength=360 nm

RetTime [min]	Sig	Type	Area [mAU*s]	Amt/Area	Amount [ng]	Grp	Name
5.340	1	VB	9.17106	1.42688e-2	261.72080		Formaldehyde;50-00-0
6.335	1	BB	3.42664	1.87009e-2	128.16263		Acetaldehyde;75-07-0

Totals : 389.88343

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*** End of Report ***

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_11.D
Acq On : 9 Sep 2016 1:22 am
Operator : rgill
Sample : 061-037-01_US EPA; 203110; 5.67L
Misc : C14-21; 111ngBFB;10:1 split
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 15:13:18 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng		0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	987133	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	15.993	105	138708	8.52 ng	#	31
12) Octanal; 124-13-0	16.791	43	376667	270.00 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	179009	80.44 ng		86
22) 1-Methoxy-2-propanol; ...	7.137	45	151379	20.32 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	11.241	43	108351	13.13 ng	#	47
25) Propylene glycol; 57-55-6	11.241	45	512307	91.11 ng	#	74
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	100454	20.14 ng	#	25
34) Ethanol; 64-17-5	2.107	31	142978	50.48 ng	#	29
35) 2-Propanone(acetone); ...	2.390	43	100454	19.15 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_12.D
Acq On : 9 Sep 2016 2:18 am
Operator : rgill
Sample : 061-037-02_US EPA; 242458; 5.66L
Misc : C14-22; 111ngBFB;10:1 split
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 11 15:12:57 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards							
1)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng		0.00
21)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng	#	0.00
32)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng	#	0.00
52)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng	#	0.00
66)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng	#	0.00
97)	1-Bromo-4-flourobenzen...	14.225	95	1026661	111.00 ng	#	0.00
Target Compounds							Qvalue
2)	Trichloroethene;79-01-6	0.000		0	N.D.		
3)	Methyl methacrylate; 8...	0.000		0	N.D.		
4)	Toluene; 108-88-3	0.000		0	N.D.		
5)	Tetrachloroethene; 127...	0.000		0	N.D.		
6)	N,N-Dimethylformamide;...	0.000		0	N.D.		
7)	Ethylbenzene; 100-41-4	0.000		0	N.D.		
8)	Xylene {1}; 1330-20-7	0.000		0	N.D.		
9)	Xylene {2}; 1330-20-7	0.000		0	N.D.		
10)	Styrene; 100-42-5	0.000		0	N.D.		
11)	1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12)	Octanal; 124-13-0	16.796	43	262978	181.25 ng	#	16
13)	Phenol; 108-95-2	0.000		0	N.D.		
14)	1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15)	1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16)	Nonanal; 124-19-6	0.000		0	N.D.		
17)	2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18)	Naphthalene; 91-20-3	0.000		0	N.D.		
19)	4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20)	Caprolactam; 105-60-2	23.938	113	149331	64.52 ng	#	61
22)	1-Methoxy-2-propanol; ...	7.166	45	108788	14.04 ng	#	48
23)	Ethylene glycol; 107-21-1	0.000		0	N.D.		
24)	Butyl acetate; 123-86-4	11.241	43	108231	12.61 ng	#	47
25)	Propylene glycol; 57-55-6	11.246	45	442786	75.71 ng	#	80
26)	2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27)	Hexanoic acid; 142-62-1	0.000		0	N.D.		
28)	2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29)	2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30)	Dodecanol; 112-53-8	0.000		0	N.D.		
31)	Butylated hydroxytolue...	0.000		0	N.D.		
33)	n-Pentane; 109-66-0	2.390	43	129258	24.92 ng	#	25
34)	Ethanol; 64-17-5	2.098	31	138741	47.10 ng	#	74
35)	2-Propanone(acetone); ...	2.390	43	129258	23.69 ng	#	48
36)	1,1-Dichloroethylene;7...	0.000		0	N.D.		
37)	2-Propanol; 67-63-0	0.000		0	N.D.		
38)	Carbon disulfide; 75-15-0	0.000		0	N.D.		
39)	Dichloromethane; 75-09-2	0.000		0	N.D.		
40)	n-Hexane; 110-54-3	0.000		0	N.D.		
41)	Vinyl acetate; 108-05-4	0.000		0	N.D.		
42)	2-Butanone; 78-93-3	0.000		0	N.D.		
43)	Ethyl acetate; 141-78-6	0.000		0	N.D.		
44)	Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_13.D
Acq On : 9 Sep 2016 3:13 am
Operator : rgill
Sample : 061-037-03_US EPA; Mi59956; 5.93L
Misc : C14-23; 111ngBFB;10:1 split
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 11 15:12:36 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng		0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1045662	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.791	43	263321	178.19 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	180828	76.71 ng		86
22) 1-Methoxy-2-propanol; ...	7.151	45	292158	37.01 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	330057	55.41 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	206105	39.02 ng	#	25
34) Ethanol; 64-17-5	2.093	31	363559	121.17 ng	#	85
35) 2-Propanone(acetone); ...	2.390	43	206105	37.09 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	4.542	43	109089	15.18 ng	#	55
43) Ethyl acetate; 141-78-6	4.542	43	109089	16.43 ng	#	70
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_14.D
Acq On : 9 Sep 2016 4:08 am
Operator : rgill
Sample : 061-037-04_US EPA; 2Mi59953 5.77L
Misc : Cl4-24; 111ngBFB;10:1 split
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 11 15:12:15 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	# 0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	# 0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	# 0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	# 0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1007866	111.00 ng	# 0.00
Target Compounds					Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.	
3) Methyl methacrylate; 8...	0.000		0	N.D.	
4) Toluene; 108-88-3	0.000		0	N.D.	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D.	
7) Ethylbenzene; 100-41-4	0.000		0	N.D.	
8) Xylene {1}; 1330-20-7	0.000		0	N.D.	
9) Xylene {2}; 1330-20-7	0.000		0	N.D.	
10) Styrene; 100-42-5	0.000		0	N.D.	
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.	
12) Octanal; 124-13-0	16.791	43	270443	189.87 ng #	16
13) Phenol; 108-95-2	0.000		0	N.D.	
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.	
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
16) Nonanal; 124-19-6	0.000		0	N.D.	
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.	
18) Naphthalene; 91-20-3	0.000		0	N.D.	
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
20) Caprolactam; 105-60-2	23.938	113	199640	87.86 ng	87
22) 1-Methoxy-2-propanol; ...	7.176	45	232487	30.56 ng #	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.	
24) Butyl acetate; 123-86-4	0.000		0	N.D.	
25) Propylene glycol; 57-55-6	11.241	45	332935	57.99 ng #	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.	
27) Hexanoic acid; 142-62-1	0.000		0	N.D.	
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.	
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.	
30) Dodecanol; 112-53-8	0.000		0	N.D.	
31) Butylated hydroxytolue...	0.000		0	N.D.	
33) n-Pentane; 109-66-0	2.093	43	106087	20.84 ng #	25
34) Ethanol; 64-17-5	2.093	31	886226	306.45 ng	96
35) 2-Propanone(acetone); ...	2.390	43	280283	52.34 ng #	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.	
37) 2-Propanol; 67-63-0	2.521	45	101314	16.33 ng #	62
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D.	
40) n-Hexane; 110-54-3	0.000		0	N.D.	
41) Vinyl acetate; 108-05-4	0.000		0	N.D.	
42) 2-Butanone; 78-93-3	0.000		0	N.D.	
43) Ethyl acetate; 141-78-6	0.000		0	N.D.	
44) Chloroform;67-66-3	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_15.D
Acq On : 9 Sep 2016 5:03 am
Operator : rgill
Sample : 061-037-05_US EPA; Mi51114; 5.4L
Misc : C14-25; 111ngBFB;10:1 split
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 11 15:12:00 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.226	95	1048812	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	12.483	91	115098	6.07 ng	#	40
8) Xylene {1}; 1330-20-7	12.483	91	115098	7.74 ng	#	29
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	15.993	105	288326	16.68 ng	#	31
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	50274m	21.26 ng		
22) 1-Methoxy-2-propanol; ...	0.000		0	N.D.		
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	342290	57.29 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	109293	20.63 ng	#	25
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	2.390	43	109293	19.61 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_16.D
Acq On : 9 Sep 2016 5:58 am
Operator : rgill
Sample : 061-037-06_US EPA; 203148; 5.5L
Misc : C14-26; 111ngBFB;10:1 split
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 11 15:11:37 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.226	95	982841	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	12.483	91	127429	7.18 ng	#	40
8) Xylene {1}; 1330-20-7	12.483	91	127429	9.15 ng	#	29
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.939	113	73947m	33.37 ng		
22) 1-Methoxy-2-propanol; ...	0.000		0	N.D.		
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.251	45	370797	66.23 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	2.156	61	110699	27.46 ng	#	28
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_17.D
Acq On : 9 Sep 2016 6:53 am
Operator : rgill
Sample : 061-037-07_US EPA; Mi59960; 6.36L
Misc : C14-27; 111ngBFB;10:1 split
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 11 15:11:04 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.226	95	993842	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.703	91	191522	12.44 ng		93
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.791	43	114406	81.45 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	105475	47.08 ng	#	61
22) 1-Methoxy-2-propanol; ...	7.142	45	226286	30.16 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	362735	64.07 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_18.D
Acq On : 9 Sep 2016 7:47 am
Operator : rgill
Sample : 061-037-08_US EPA; Mi59929; 6.87L
Misc : C14-28; 111ngBFB;10:1 split
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 11 15:10:43 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1016519	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.703	91	198771	12.62 ng		94
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	107263	46.81 ng	#	62
22) 1-Methoxy-2-propanol; ...	0.000		0	N.D.		
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	350314	60.50 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_19.D
Acq On : 9 Sep 2016 8:42 am
Operator : rgill
Sample : 061-037-09_US EPA; Mi58841; 7.02L
Misc : C14-29; 111ngBFB;10:1 split
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 11 15:10:24 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards							
1)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng		0.00
21)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng	#	0.00
32)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng	#	0.00
52)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng	#	0.00
66)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng	#	0.00
97)	1-Bromo-4-flourobenzen...	14.225	95	1011715	111.00 ng	#	0.00
Target Compounds							Qvalue
2)	Trichloroethene;79-01-6	0.000		0	N.D.		
3)	Methyl methacrylate; 8...	0.000		0	N.D.		
4)	Toluene; 108-88-3	9.702	91	187341	11.95 ng		92
5)	Tetrachloroethene; 127...	0.000		0	N.D.		
6)	N,N-Dimethylformamide;...	0.000		0	N.D.		
7)	Ethylbenzene; 100-41-4	0.000		0	N.D.		
8)	Xylene {1}; 1330-20-7	0.000		0	N.D.		
9)	Xylene {2}; 1330-20-7	0.000		0	N.D.		
10)	Styrene; 100-42-5	0.000		0	N.D.		
11)	1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12)	Octanal; 124-13-0	16.791	43	104718	73.24 ng	#	16
13)	Phenol; 108-95-2	0.000		0	N.D.		
14)	1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15)	1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16)	Nonanal; 124-19-6	0.000		0	N.D.		
17)	2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18)	Naphthalene; 91-20-3	0.000		0	N.D.		
19)	4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20)	Caprolactam; 105-60-2	23.938	113	121810	53.41 ng	#	61
22)	1-Methoxy-2-propanol; ...	7.137	45	155542	20.37 ng	#	48
23)	Ethylene glycol; 107-21-1	0.000		0	N.D.		
24)	Butyl acetate; 123-86-4	11.241	43	129516	15.32 ng	#	47
25)	Propylene glycol; 57-55-6	11.241	45	509247	88.37 ng	#	81
26)	2-Butoxyethanol; 111-76-2	14.133	57	102913	15.51 ng	#	44
27)	Hexanoic acid; 142-62-1	0.000		0	N.D.		
28)	2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29)	2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30)	Dodecanol; 112-53-8	0.000		0	N.D.		
31)	Butylated hydroxytolue...	0.000		0	N.D.		
33)	n-Pentane; 109-66-0	0.000		0	N.D.		
34)	Ethanol; 64-17-5	0.000		0	N.D.		
35)	2-Propanone(acetone); ...	0.000		0	N.D.		
36)	1,1-Dichloroethylene;7...	0.000		0	N.D.		
37)	2-Propanol; 67-63-0	0.000		0	N.D.		
38)	Carbon disulfide; 75-15-0	0.000		0	N.D.		
39)	Dichloromethane; 75-09-2	0.000		0	N.D.		
40)	n-Hexane; 110-54-3	0.000		0	N.D.		
41)	Vinyl acetate; 108-05-4	0.000		0	N.D.		
42)	2-Butanone; 78-93-3	0.000		0	N.D.		
43)	Ethyl acetate; 141-78-6	0.000		0	N.D.		
44)	Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_20.D
Acq On : 9 Sep 2016 9:37 am
Operator : rgill
Sample : 061-037-10_US EPA; 242496; 5.77L
Misc : C14-30; 111ngBFB;10:1 split
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 11 15:10:09 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1026718	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	87789m	37.93 ng		
22) 1-Methoxy-2-propanol; ...	7.171	45	106828	13.78 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	11.246	43	106247	12.38 ng	#	47
25) Propylene glycol; 57-55-6	11.246	45	444084	75.93 ng	#	79
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	110259	21.26 ng	#	25
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	2.390	43	110259	20.21 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_21.D
Acq On : 9 Sep 2016 10:32 am
Operator : rgill
Sample : 061-037-11_US EPA; 242403; 5.49L
Misc : C14-31; 111ngBFB;10:1 split
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 11 15:09:45 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.226	95	1040893	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	94282m	40.18 ng		
22) 1-Methoxy-2-propanol; ...	7.176	45	150745	19.19 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.270	45	390981	65.94 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_22.D
Acq On : 9 Sep 2016 11:25 am
Operator : rgill
Sample : 061-037-12_US EPA; Mi51174; 5.61L
Misc : C14-32; 111ngBFB;10:1 split
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 11 15:08:10 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	# 0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	# 0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	# 0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1054789	111.00 ng	# 0.00
Target Compounds					Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.	
3) Methyl methacrylate; 8...	0.000		0	N.D.	
4) Toluene; 108-88-3	0.000		0	N.D.	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D.	
7) Ethylbenzene; 100-41-4	0.000		0	N.D.	
8) Xylene {1}; 1330-20-7	0.000		0	N.D.	
9) Xylene {2}; 1330-20-7	0.000		0	N.D.	
10) Styrene; 100-42-5	0.000		0	N.D.	
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.	
12) Octanal; 124-13-0	0.000		0	N.D.	
13) Phenol; 108-95-2	0.000		0	N.D.	
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.	
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
16) Nonanal; 124-19-6	0.000		0	N.D.	
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.	
18) Naphthalene; 91-20-3	0.000		0	N.D.	
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
20) Caprolactam; 105-60-2	23.938	113	108266	45.53 ng	# 60
22) 1-Methoxy-2-propanol; ...	7.142	45	255021	32.03 ng	# 48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.	
24) Butyl acetate; 123-86-4	11.241	43	111426	12.64 ng	# 47
25) Propylene glycol; 57-55-6	11.241	45	441336	73.45 ng	# 81
26) 2-Butoxyethanol; 111-76-2	14.138	57	101621	14.69 ng	# 44
27) Hexanoic acid; 142-62-1	0.000		0	N.D.	
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.	
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.	
30) Dodecanol; 112-53-8	0.000		0	N.D.	
31) Butylated hydroxytolue...	0.000		0	N.D.	
33) n-Pentane; 109-66-0	2.395	43	114063	21.41 ng	# 25
34) Ethanol; 64-17-5	2.098	31	124423	41.11 ng	# 29
35) 2-Propanone(acetone); ...	2.395	43	114063	20.35 ng	# 48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.	
37) 2-Propanol; 67-63-0	0.000		0	N.D.	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D.	
40) n-Hexane; 110-54-3	0.000		0	N.D.	
41) Vinyl acetate; 108-05-4	0.000		0	N.D.	
42) 2-Butanone; 78-93-3	0.000		0	N.D.	
43) Ethyl acetate; 141-78-6	0.000		0	N.D.	
44) Chloroform;67-66-3	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_23.D
Acq On : 9 Sep 2016 12:19 pm
Operator : rgill
Sample : 061-037-13_US EPA; 242425; 5.87L
Misc : C14-32; 111ngBFB;10:1 split
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 11 15:07:56 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1038365	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.796	43	108850	74.17 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	68295m	29.17 ng		
22) 1-Methoxy-2-propanol; ...	7.161	45	127191	16.23 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	352172	59.54 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_24.D
Acq On : 9 Sep 2016 1:12 pm
Operator : rgill
Sample : 061-037-14_US EPA; Mi58846; 5.6L
Misc : C14-34; 111ngBFB;10:1 split
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 11 15:07:28 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	# 0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	# 0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	# 0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	# 0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1024437	111.00 ng	# 0.00
Target Compounds					Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.	
3) Methyl methacrylate; 8...	0.000		0	N.D.	
4) Toluene; 108-88-3	0.000		0	N.D.	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D.	
7) Ethylbenzene; 100-41-4	0.000		0	N.D.	
8) Xylene {1}; 1330-20-7	0.000		0	N.D.	
9) Xylene {2}; 1330-20-7	0.000		0	N.D.	
10) Styrene; 100-42-5	0.000		0	N.D.	
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.	
12) Octanal; 124-13-0	16.796	43	130335	90.02 ng	# 16
13) Phenol; 108-95-2	0.000		0	N.D.	
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.	
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
16) Nonanal; 124-19-6	0.000		0	N.D.	
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.	
18) Naphthalene; 91-20-3	0.000		0	N.D.	
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
20) Caprolactam; 105-60-2	23.938	113	106254	46.01 ng	# 61
22) 1-Methoxy-2-propanol; ...	7.195	45	210263	27.19 ng	# 48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.	
24) Butyl acetate; 123-86-4	0.000		0	N.D.	
25) Propylene glycol; 57-55-6	11.241	45	411608	70.54 ng	# 38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.	
27) Hexanoic acid; 142-62-1	0.000		0	N.D.	
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.	
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.	
30) Dodecanol; 112-53-8	0.000		0	N.D.	
31) Butylated hydroxytolue...	0.000		0	N.D.	
33) n-Pentane; 109-66-0	2.390	43	154001	29.76 ng	# 25
34) Ethanol; 64-17-5	2.098	31	192142	65.37 ng	# 84
35) 2-Propanone(acetone); ...	2.390	43	154001	28.29 ng	# 48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.	
37) 2-Propanol; 67-63-0	0.000		0	N.D.	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D.	
40) n-Hexane; 110-54-3	0.000		0	N.D.	
41) Vinyl acetate; 108-05-4	0.000		0	N.D.	
42) 2-Butanone; 78-93-3	0.000		0	N.D.	
43) Ethyl acetate; 141-78-6	0.000		0	N.D.	
44) Chloroform;67-66-3	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_25.D
Acq On : 9 Sep 2016 2:05 pm
Operator : rgill
Sample : 061-037-15_US EPA; 203171; 5.91L
Misc : C14-35; 111ngBFB;10:1 split
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 11 15:07:07 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards								
1)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng		0.00
21)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng	#	0.00
32)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng	#	0.00
52)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng	#	0.00
66)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng	#	0.00
97)	1-Bromo-4-flourobenzen...	14.226	95	956839	111.00	ng	#	0.00
Target Compounds								Qvalue
2)	Trichloroethene;79-01-6	0.000		0	N.D.			
3)	Methyl methacrylate; 8...	0.000		0	N.D.			
4)	Toluene; 108-88-3	0.000		0	N.D.			
5)	Tetrachloroethene; 127...	0.000		0	N.D.			
6)	N,N-Dimethylformamide;...	0.000		0	N.D.			
7)	Ethylbenzene; 100-41-4	0.000		0	N.D.			
8)	Xylene {1}; 1330-20-7	0.000		0	N.D.			
9)	Xylene {2}; 1330-20-7	0.000		0	N.D.			
10)	Styrene; 100-42-5	0.000		0	N.D.			
11)	1,2,4-Trimethylbenzene...	0.000		0	N.D.			
12)	Octanal; 124-13-0	16.791	43	144295	106.71	ng	#	16
13)	Phenol; 108-95-2	0.000		0	N.D.			
14)	1-Phenylethanone; 98-86-2	0.000		0	N.D.			
15)	1-Methyl-2-pyrrolidino...	0.000		0	N.D.			
16)	Nonanal; 124-19-6	0.000		0	N.D.			
17)	2-Ethylhexanoic acid; ...	0.000		0	N.D.			
18)	Naphthalene; 91-20-3	0.000		0	N.D.			
19)	4-Phenylcyclohexene; 4...	0.000		0	N.D.			
20)	Caprolactam; 105-60-2	23.938	113	121754	56.44	ng	#	62
22)	1-Methoxy-2-propanol; ...	7.142	45	155176	21.48	ng	#	48
23)	Ethylene glycol; 107-21-1	0.000		0	N.D.			
24)	Butyl acetate; 123-86-4	0.000		0	N.D.			
25)	Propylene glycol; 57-55-6	11.246	45	425401	78.05	ng	#	38
26)	2-Butoxyethanol; 111-76-2	0.000		0	N.D.			
27)	Hexanoic acid; 142-62-1	0.000		0	N.D.			
28)	2-Ethyl-1-hexanol; 104...	0.000		0	N.D.			
29)	2-(2-Butoxyethoxy) eth...	0.000		0	N.D.			
30)	Dodecanol; 112-53-8	0.000		0	N.D.			
31)	Butylated hydroxytolue...	0.000		0	N.D.			
33)	n-Pentane; 109-66-0	0.000		0	N.D.			
34)	Ethanol; 64-17-5	0.000		0	N.D.			
35)	2-Propanone(acetone); ...	0.000		0	N.D.			
36)	1,1-Dichloroethylene;7...	0.000		0	N.D.			
37)	2-Propanol; 67-63-0	0.000		0	N.D.			
38)	Carbon disulfide; 75-15-0	0.000		0	N.D.			
39)	Dichloromethane; 75-09-2	0.000		0	N.D.			
40)	n-Hexane; 110-54-3	0.000		0	N.D.			
41)	Vinyl acetate; 108-05-4	0.000		0	N.D.			
42)	2-Butanone; 78-93-3	0.000		0	N.D.			
43)	Ethyl acetate; 141-78-6	0.000		0	N.D.			
44)	Chloroform;67-66-3	0.000		0	N.D.			

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_26.D
Acq On : 9 Sep 2016 2:59 pm
Operator : rgill
Sample : 061-037-16_US EPA; 203144; 5.75L
Misc : C14-36; 111ngBFB;10:1 split
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 11 15:06:47 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
21) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
32) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
52) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
66) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
97) 1-Bromo-4-flourobenzen...	14.230	95	934049	111.00 ng	# 0.00
Target Compounds					Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.	
3) Methyl methacrylate; 8...	0.000		0	N.D.	
4) Toluene; 108-88-3	0.000		0	N.D.	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D.	
7) Ethylbenzene; 100-41-4	0.000		0	N.D.	
8) Xylene {1}; 1330-20-7	0.000		0	N.D.	
9) Xylene {2}; 1330-20-7	0.000		0	N.D.	
10) Styrene; 100-42-5	0.000		0	N.D.	
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.	
12) Octanal; 124-13-0	16.791	43	146399	110.90 ng	# 16
13) Phenol; 108-95-2	0.000		0	N.D.	
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.	
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
16) Nonanal; 124-19-6	0.000		0	N.D.	
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.	
18) Naphthalene; 91-20-3	0.000		0	N.D.	
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
20) Caprolactam; 105-60-2	23.938	113	116335	55.25 ng	# 61
22) 1-Methoxy-2-propanol; ...	7.161	45	109712	15.56 ng	# 48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.	
24) Butyl acetate; 123-86-4	0.000		0	N.D.	
25) Propylene glycol; 57-55-6	11.246	45	299899	56.37 ng	# 38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.	
27) Hexanoic acid; 142-62-1	0.000		0	N.D.	
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.	
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.	
30) Dodecanol; 112-53-8	0.000		0	N.D.	
31) Butylated hydroxytolue...	0.000		0	N.D.	
33) n-Pentane; 109-66-0	2.390	43	109548	23.22 ng	# 25
34) Ethanol; 64-17-5	0.000		0	N.D.	
35) 2-Propanone(acetone); ...	2.390	43	109548	22.07 ng	# 48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.	
37) 2-Propanol; 67-63-0	0.000		0	N.D.	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D.	
40) n-Hexane; 110-54-3	0.000		0	N.D.	
41) Vinyl acetate; 108-05-4	0.000		0	N.D.	
42) 2-Butanone; 78-93-3	0.000		0	N.D.	
43) Ethyl acetate; 141-78-6	0.000		0	N.D.	
44) Chloroform;67-66-3	0.000		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_27.D
Acq On : 9 Sep 2016 3:54 pm
Operator : rgill
Sample : 061-037-17_US EPA; Mi58839; 4.65L
Misc : Cl4-37; 111ngBFB;10:1 split
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 11 15:06:32 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1001002	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	53341m	23.64 ng		
22) 1-Methoxy-2-propanol; ...	0.000		0	N.D.		
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	263751	46.26 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	138924	27.47 ng	#	25
34) Ethanol; 64-17-5	2.093	31	169312	58.95 ng	#	87
35) 2-Propanone(acetone); ...	2.390	43	138924	26.12 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	2.784	49	137251	31.82 ng	#	45
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_28.D
Acq On : 9 Sep 2016 4:50 pm
Operator : rgill
Sample : 061-037-18_US EPA; 203196; 5.42L
Misc : C14-38; 111ngBFB;10:1 split
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 11 15:06:02 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	974242	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	0.000		0	N.D.		
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.684	43	174006	126.38 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	101983	46.43 ng	#	60
22) 1-Methoxy-2-propanol; ...	7.171	45	139829	19.01 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.256	45	388509	70.01 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	0.000		0	N.D.		
34) Ethanol; 64-17-5	2.112	31	116023	41.50 ng	#	29
35) 2-Propanone(acetone); ...	0.000		0	N.D.		
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_29.D
Acq On : 9 Sep 2016 5:46 pm
Operator : rgill
Sample : 061-037-19_US EPA; Mi59937; 5.48L
Misc : C14-39; 111ngBFB;10:1 split
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 11 15:05:42 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1027410	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.707	91	123929	7.78 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.791	43	100263	69.05 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	112600	48.61 ng	#	62
22) 1-Methoxy-2-propanol; ...	7.171	45	199618	25.74 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	347855	59.44 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	250417	48.25 ng	#	25
34) Ethanol; 64-17-5	2.093	31	225398	76.46 ng	#	85
35) 2-Propanone(acetone); ...	2.390	43	250417	45.87 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_30.D
Acq On : 9 Sep 2016 6:41 pm
Operator : rgill
Sample : 061-037-20_US EPA; 203124; 5.23L
Misc : C14-40; 111ngBFB;10:1 split
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 11 15:05:28 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	996566	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.702	91	111462	7.22 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	82711m	36.82 ng		
22) 1-Methoxy-2-propanol; ...	7.180	45	172266	22.90 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	258284	45.50 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.390	43	235368	46.75 ng	#	25
34) Ethanol; 64-17-5	2.103	31	104997	36.72 ng	#	29
35) 2-Propanone(acetone); ...	2.390	43	235368	44.45 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_31.D
Acq On : 9 Sep 2016 7:37 pm
Operator : rgill
Sample : 061-037-21_US EPA; Mi59927; 5.3L
Misc : C14-41; 111ngBFB;10:1 split
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 11 15:05:00 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.226	95	1007529	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.707	91	113052	7.24 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	15.993	105	123091	7.41 ng	#	31
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	102477	45.12 ng	#	64
22) 1-Methoxy-2-propanol; ...	7.176	45	203345	26.74 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	255331	44.49 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.395	43	273213	53.68 ng	#	25
34) Ethanol; 64-17-5	2.103	31	222282	76.89 ng	#	86
35) 2-Propanone(acetone); ...	2.395	43	273213	51.03 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_32.D
Acq On : 9 Sep 2016 8:33 pm
Operator : rgill
Sample : 061-037-22_US EPA; 242440; 5.48L
Misc : C14-42; 111ngBFB;10:1 split
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 11 15:04:44 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	1001346	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.707	91	123458	7.96 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	64072m	28.38 ng		
22) 1-Methoxy-2-propanol; ...	7.171	45	125004	16.54 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.251	45	267677	46.93 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.395	43	106553	21.06 ng	#	25
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	2.395	43	106553	20.03 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_33.D
Acq On : 9 Sep 2016 9:29 pm
Operator : rgill
Sample : 061-037-23_US EPA; 203105; 4.94L
Misc : C14-43; 111ngBFB;10:1 split
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 11 15:04:21 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	981423	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.707	91	120654	7.93 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	16.796	43	101744	73.36 ng	#	16
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	70521m	31.87 ng		
22) 1-Methoxy-2-propanol; ...	7.210	45	104557	14.11 ng	#	48
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.265	45	271756	48.61 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.395	43	198910	40.12 ng	#	25
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	2.395	43	198910	38.14 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

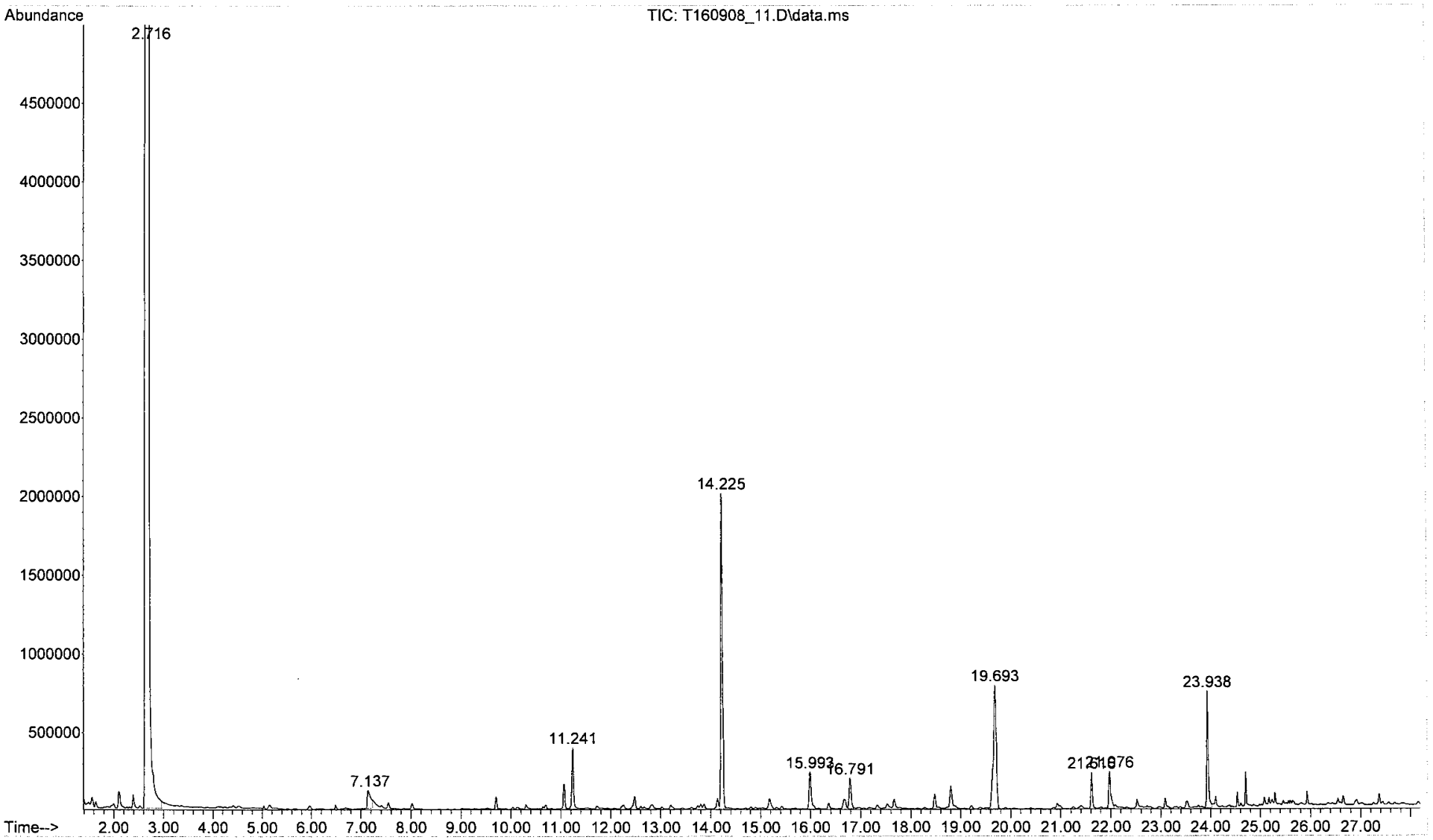
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2016\Sept\
Data File : T160908_34.D
Acq On : 9 Sep 2016 10:24 pm
Operator : rgill
Sample : 061-037-24_US EPA; 242408; 5.11L
Misc : C14-44; 111ngBFB;10:1 split
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 11 15:03:57 2016
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K16\Desorb_Merged_2016_082:
Quant Title : AB95168
QLast Update : Thu Mar 31 15:13:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng		0.00
21) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng	#	0.00
32) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng	#	0.00
52) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng	#	0.00
66) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng	#	0.00
97) 1-Bromo-4-flourobenzen...	14.225	95	975501	111.00 ng	#	0.00
Target Compounds						Qvalue
2) Trichloroethene;79-01-6	0.000		0	N.D.		
3) Methyl methacrylate; 8...	0.000		0	N.D.		
4) Toluene; 108-88-3	9.702	91	123527	8.17 ng	#	18
5) Tetrachloroethene; 127...	0.000		0	N.D.		
6) N,N-Dimethylformamide;...	0.000		0	N.D.		
7) Ethylbenzene; 100-41-4	0.000		0	N.D.		
8) Xylene {1}; 1330-20-7	0.000		0	N.D.		
9) Xylene {2}; 1330-20-7	0.000		0	N.D.		
10) Styrene; 100-42-5	0.000		0	N.D.		
11) 1,2,4-Trimethylbenzene...	0.000		0	N.D.		
12) Octanal; 124-13-0	0.000		0	N.D.		
13) Phenol; 108-95-2	0.000		0	N.D.		
14) 1-Phenylethanone; 98-86-2	0.000		0	N.D.		
15) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
16) Nonanal; 124-19-6	0.000		0	N.D.		
17) 2-Ethylhexanoic acid; ...	0.000		0	N.D.		
18) Naphthalene; 91-20-3	0.000		0	N.D.		
19) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
20) Caprolactam; 105-60-2	23.938	113	34999m	15.91 ng		
22) 1-Methoxy-2-propanol; ...	0.000		0	N.D.		
23) Ethylene glycol; 107-21-1	0.000		0	N.D.		
24) Butyl acetate; 123-86-4	0.000		0	N.D.		
25) Propylene glycol; 57-55-6	11.241	45	123830	22.28 ng	#	38
26) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.		
27) Hexanoic acid; 142-62-1	0.000		0	N.D.		
28) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.		
29) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.		
30) Dodecanol; 112-53-8	0.000		0	N.D.		
31) Butylated hydroxytolue...	0.000		0	N.D.		
33) n-Pentane; 109-66-0	2.395	43	116838	23.71 ng	#	25
34) Ethanol; 64-17-5	0.000		0	N.D.		
35) 2-Propanone(acetone); ...	2.395	43	116838	22.54 ng	#	48
36) 1,1-Dichloroethylene;7...	0.000		0	N.D.		
37) 2-Propanol; 67-63-0	0.000		0	N.D.		
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.		
40) n-Hexane; 110-54-3	0.000		0	N.D.		
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.		
43) Ethyl acetate; 141-78-6	0.000		0	N.D.		
44) Chloroform;67-66-3	0.000		0	N.D.		

File :C:\msdchem\1\data\2016\Sept\T160908_11.D
Operator : rgill
Acquired : 9 Sep 2016 1:22 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-01_US EPA; 203110; 5.67L
Misc Info : C14-21; 111ngBFB;10:1 split
Vial Number: 11



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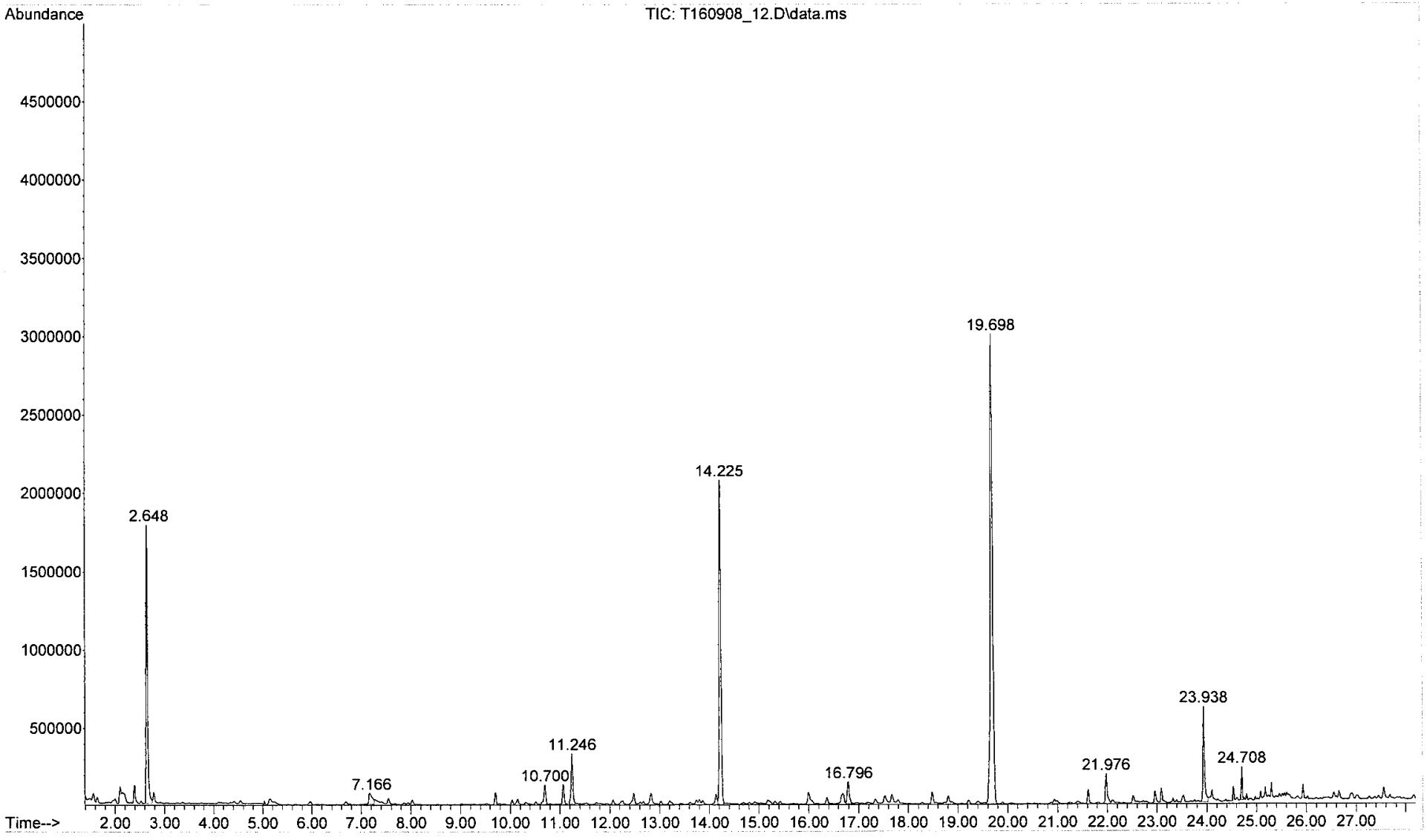
Operator : rgill
Acquired : 9 Sep 2016 2:18 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-02_US EPA; 242458; 5.66L
Misc Info : C14-22; 111ngBFB;10:1 split
Vial Number: 12



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File        :C:\msdchem\1\data\2016\Sept\T160908_13.D
Operator    : rgill
Acquired    :  9 Sep 2016   3:13 am using AcqMethod 130812VOC.M
Instrument  :   GCMS_7890
Sample Name: 061-037-03_US EPA; Mi59956; 5.93L
Misc Info   : C14-23; 111ngBFB;10:1 split
Vial Number: 13
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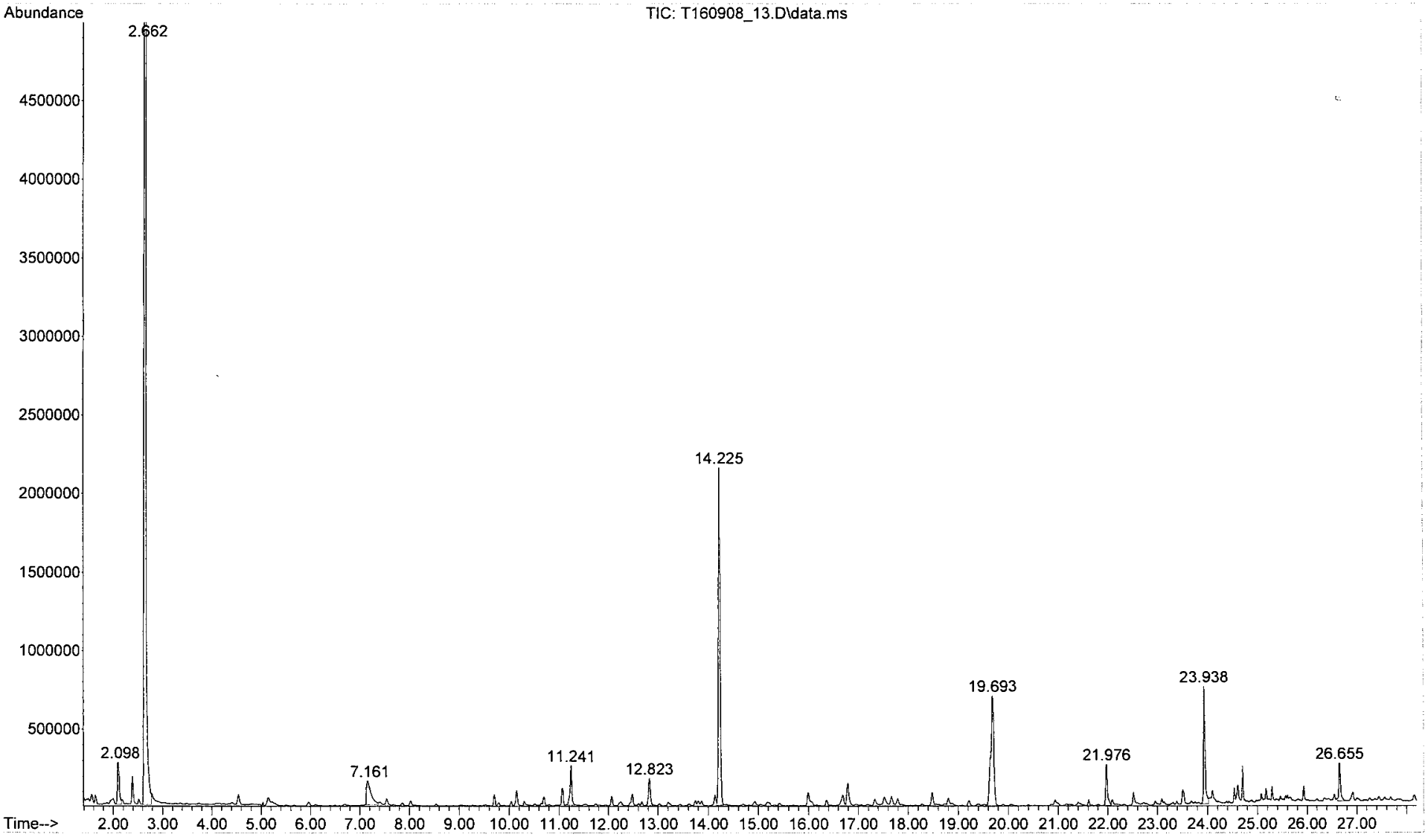

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File        :C:\msdchem\1\data\2016\Sept\T160908_14.D
Operator    : rgill
Acquired    :  9 Sep 2016   4:08 am using AcqMethod 130812VOC.M
Instrument  :   GCMS_7890
Sample Name: 061-037-04_US EPA; 2Mi59953 5.77L
Misc Info   : C14-24; 111ngBFB;10:1 split
Vial Number: 14
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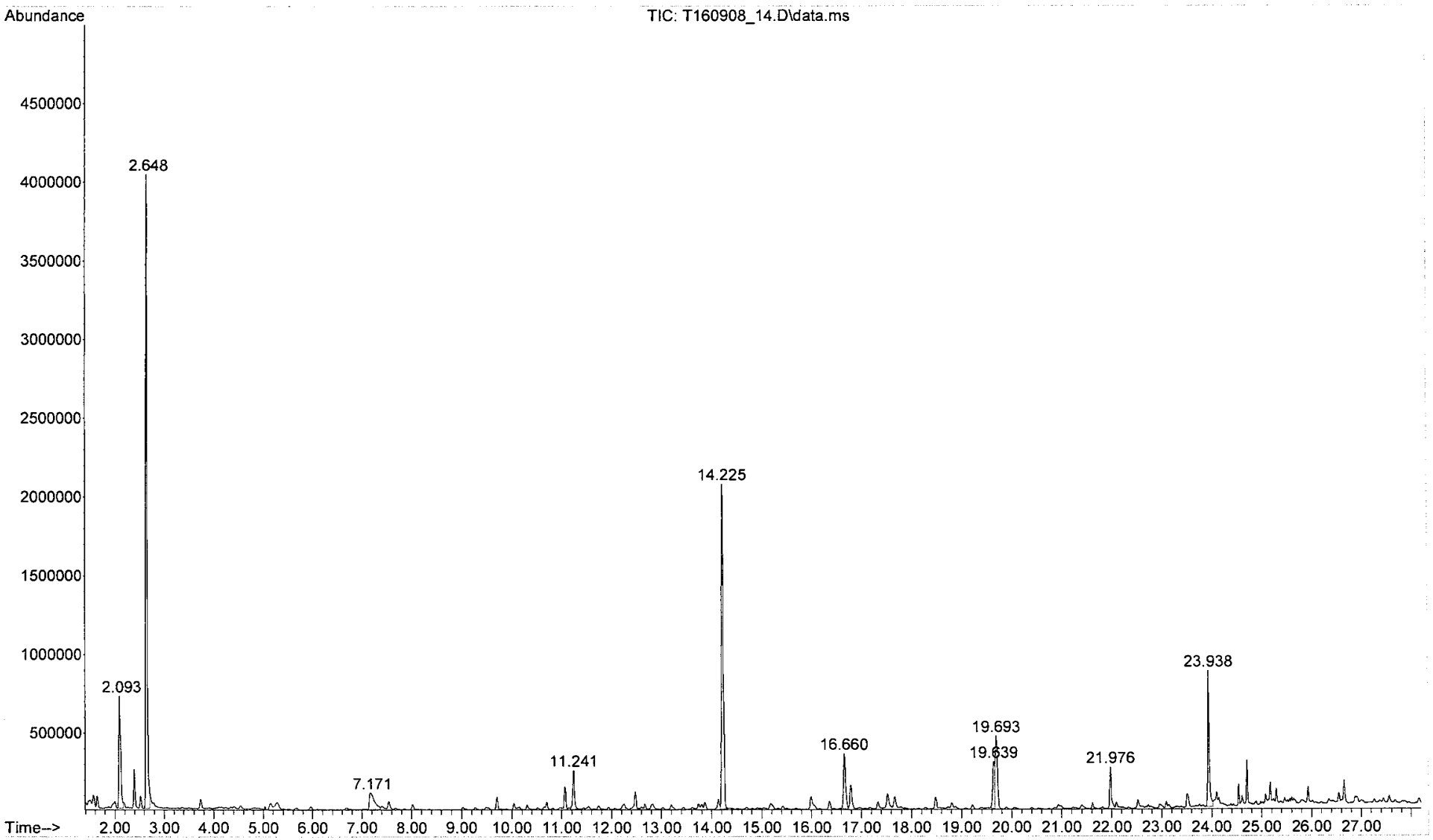
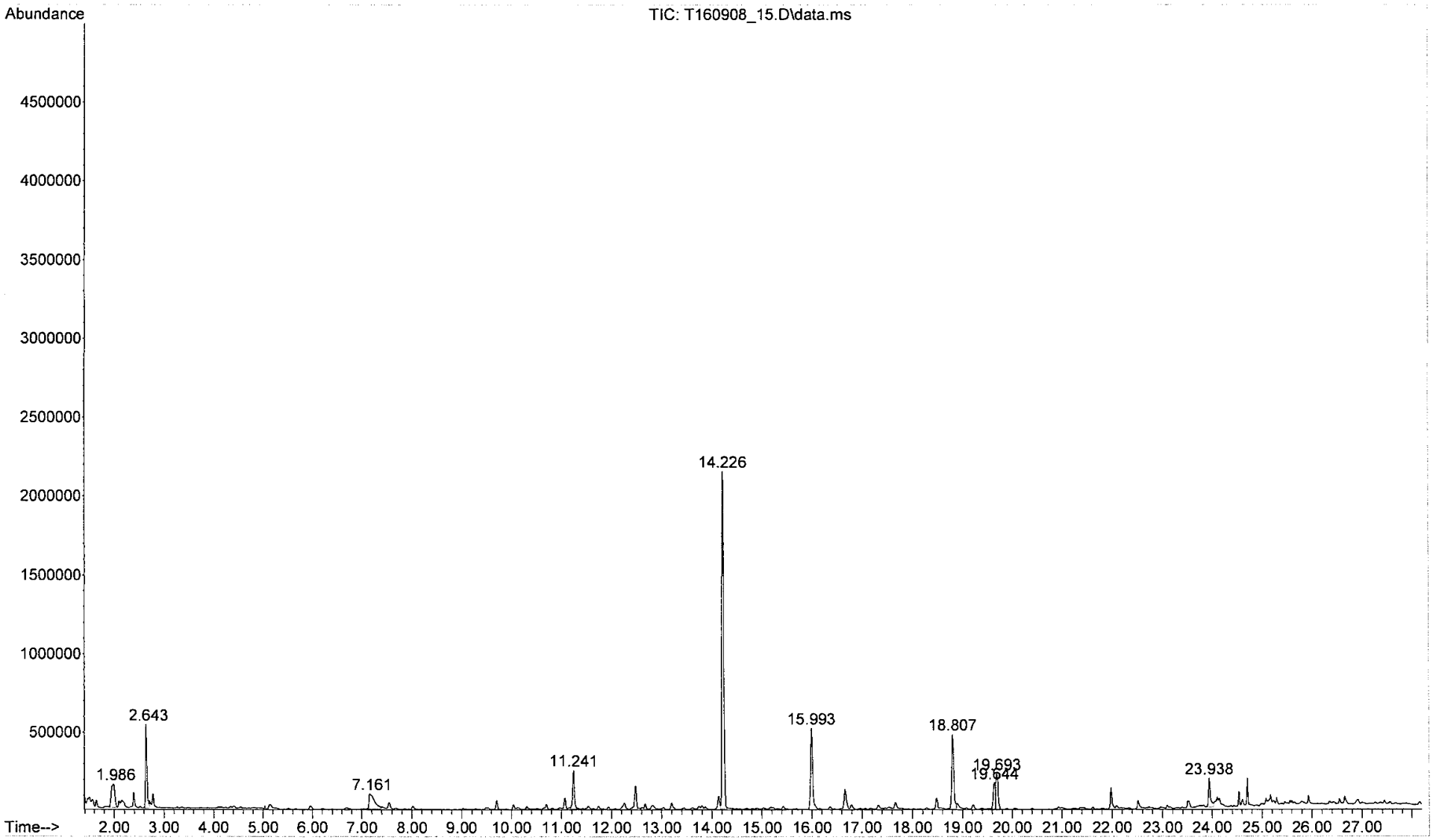
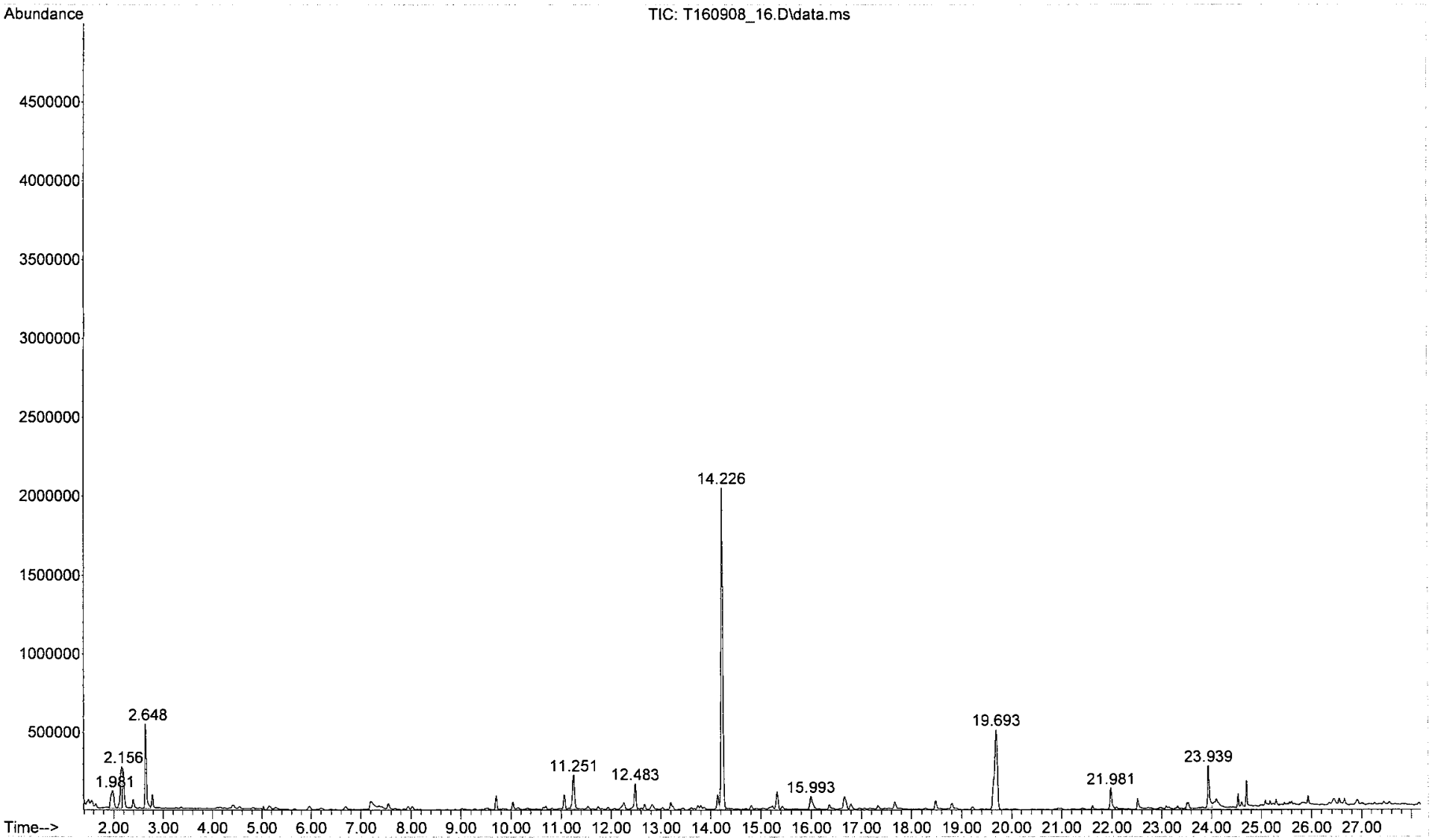


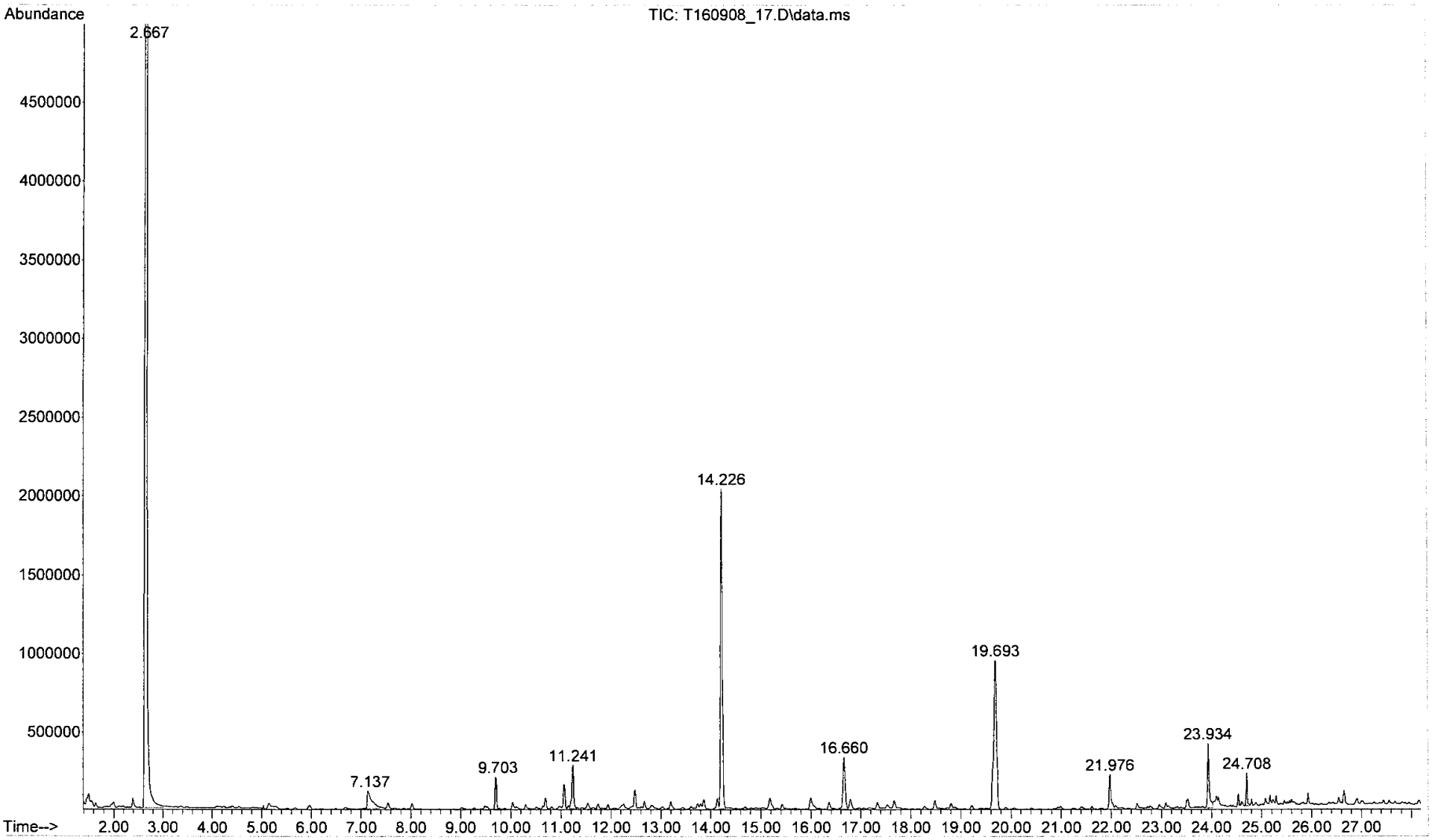
File :C:\msdchem\1\data\2016\Sept\T160908_15.D
Operator : rgill
Acquired : 9 Sep 2016 5:03 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-05_US EPA; Mi51114; 5.4L
Misc Info : C14-25; 111ngBFB;10:1 split
Vial Number: 15



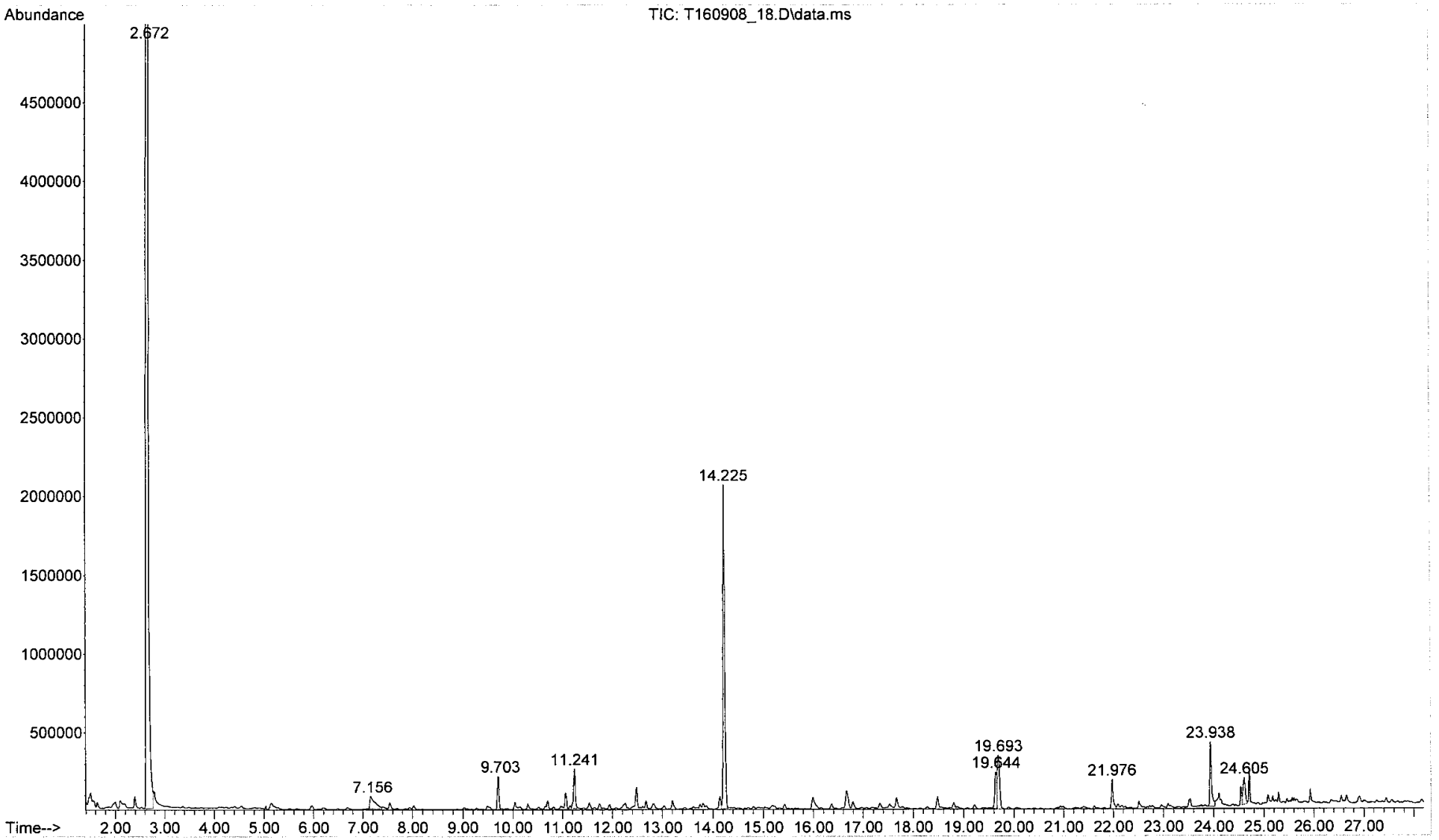
File :C:\msdchem\1\data\2016\Sept\T160908_16.D
Operator : rgill
Acquired : 9 Sep 2016 5:58 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-06_US EPA; 203148; 5.5L
Misc Info : C14-26; 111ngBFB;10:1 split
Vial Number: 16



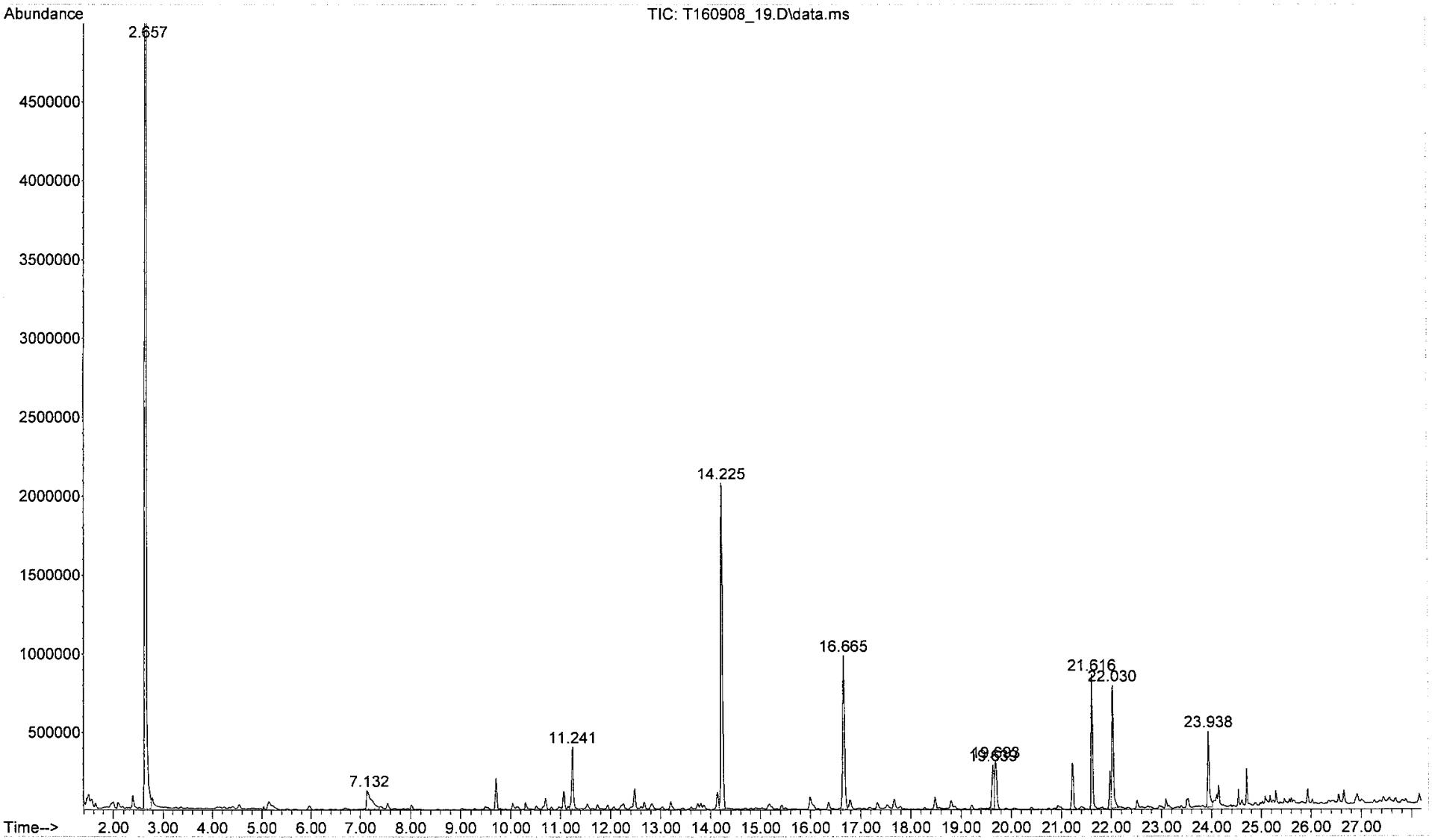
File :C:\msdchem\1\data\2016\Sept\T160908_17.D
Operator : rgill
Acquired : 9 Sep 2016 6:53 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-07_US EPA; Mi59960; 6.36L
Misc Info : C14-27; 111ngBFB;10:1 split
Vial Number: 17



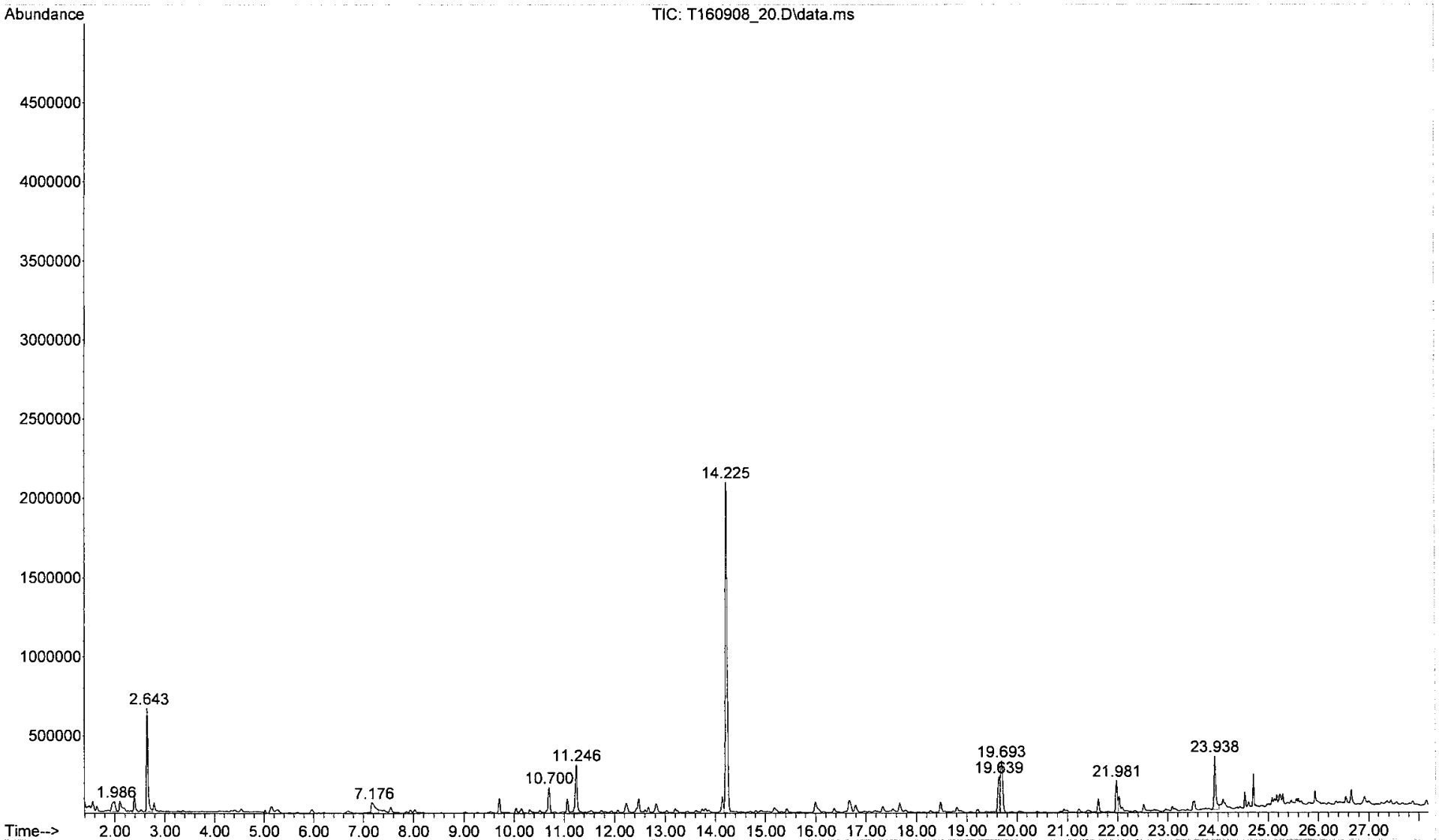
File :C:\msdchem\1\data\2016\Sept\T160908_18.D
Operator : rgill
Acquired : 9 Sep 2016 7:47 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-08_US EPA; Mi59929; 6.87L
Misc Info : C14-28; 111ngBFB;10:1 split
Vial Number: 18



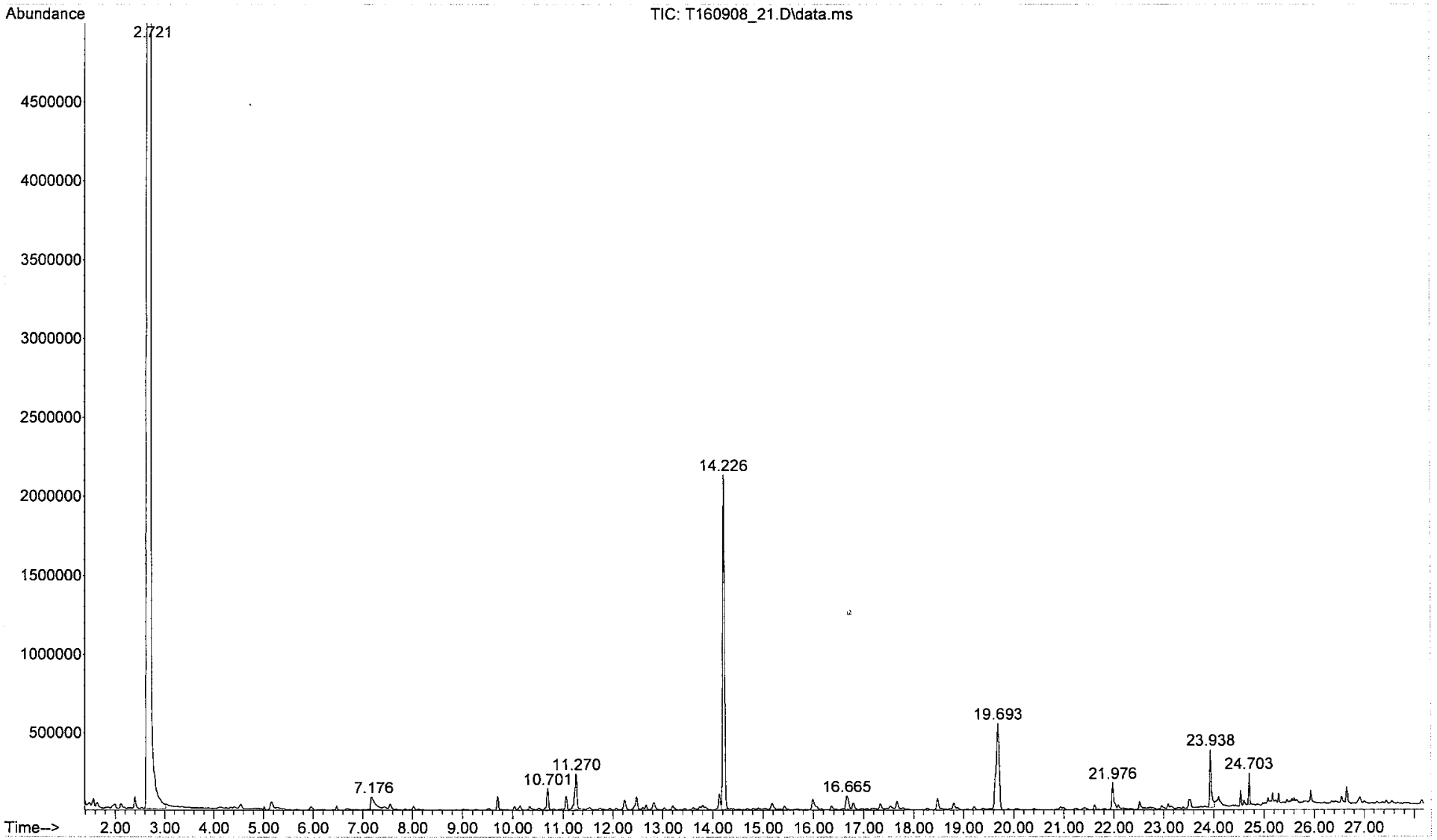
File :C:\msdchem\1\data\2016\Sept\T160908_19.D
Operator : rgill
Acquired : 9 Sep 2016 8:42 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-09_US EPA; Mi58841; 7.02L
Misc Info : C14-29; 111ngBFB;10:1 split
Vial Number: 19



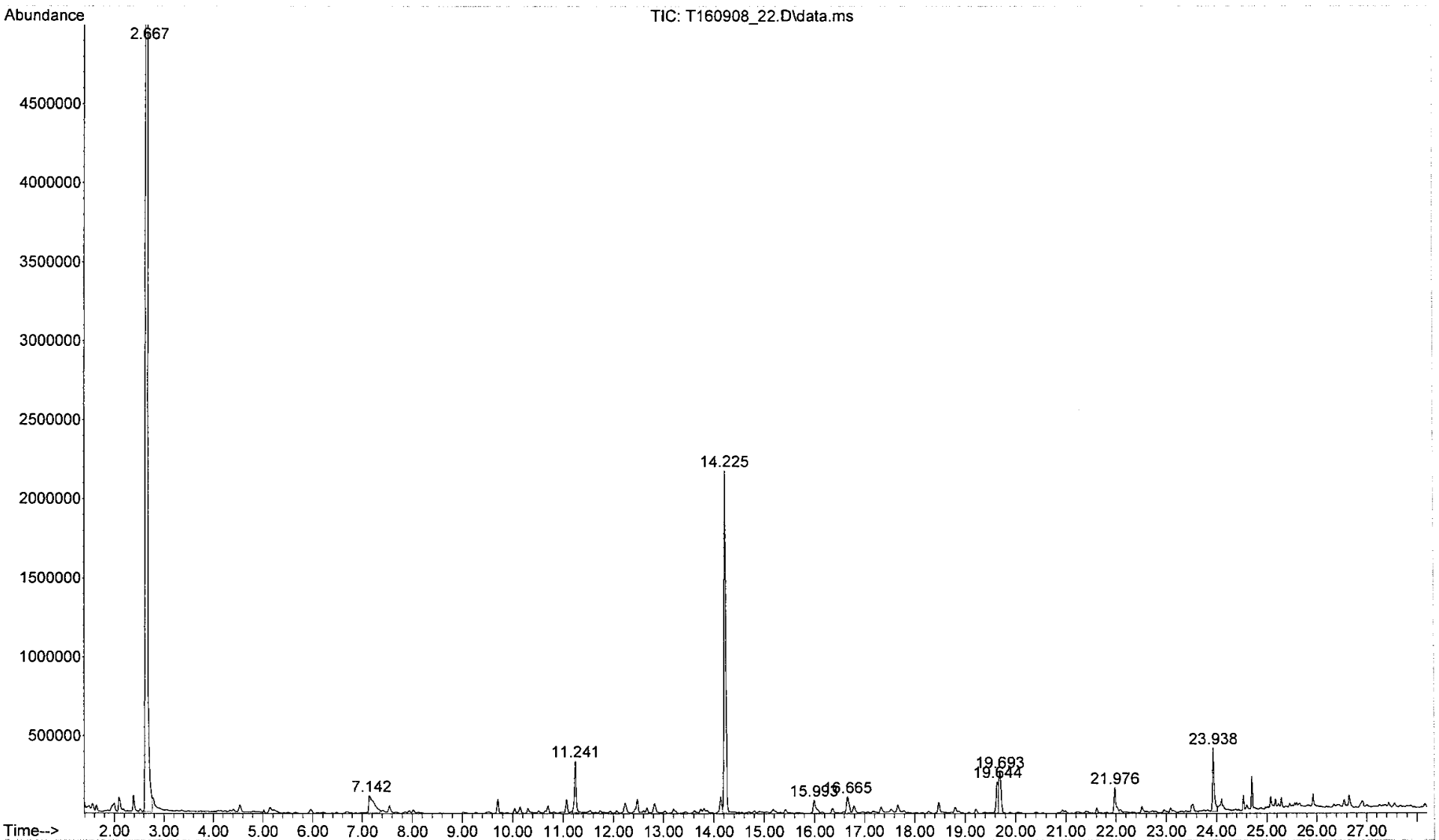
File :C:\msdchem\1\data\2016\Sept\T160908_20.D
Operator : rgill
Acquired : 9 Sep 2016 9:37 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-10_US EPA; 242496; 5.77L
Misc Info : C14-30; 111ngBFB;10:1 split
Vial Number: 20



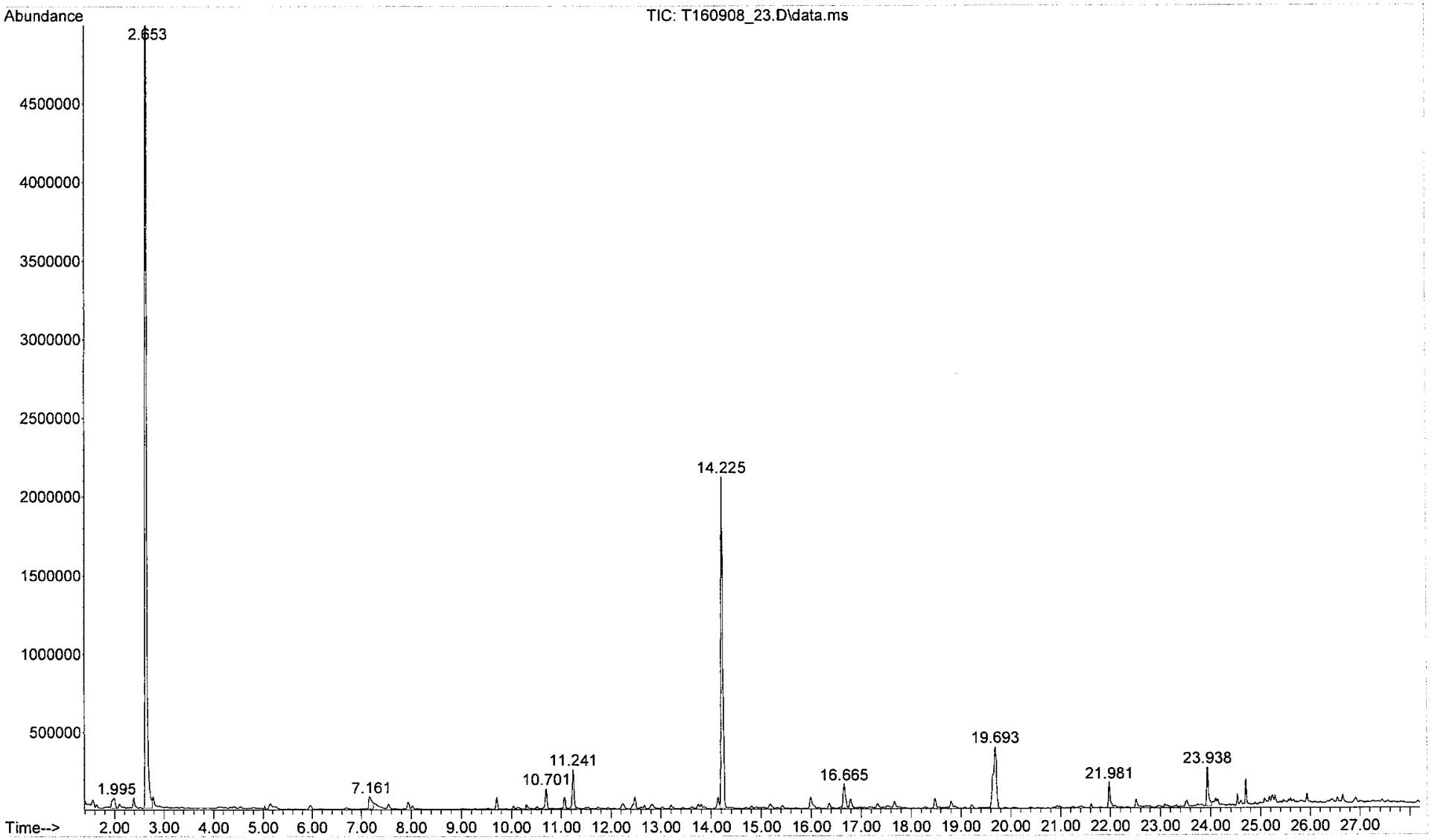
File :C:\msdchem\1\data\2016\Sept\T160908_21.D
Operator : rgill
Acquired : 9 Sep 2016 10:32 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-11_US EPA; 242403; 5.49L
Misc Info : C14-31; 111ngBFB;10:1 split
Vial Number: 21



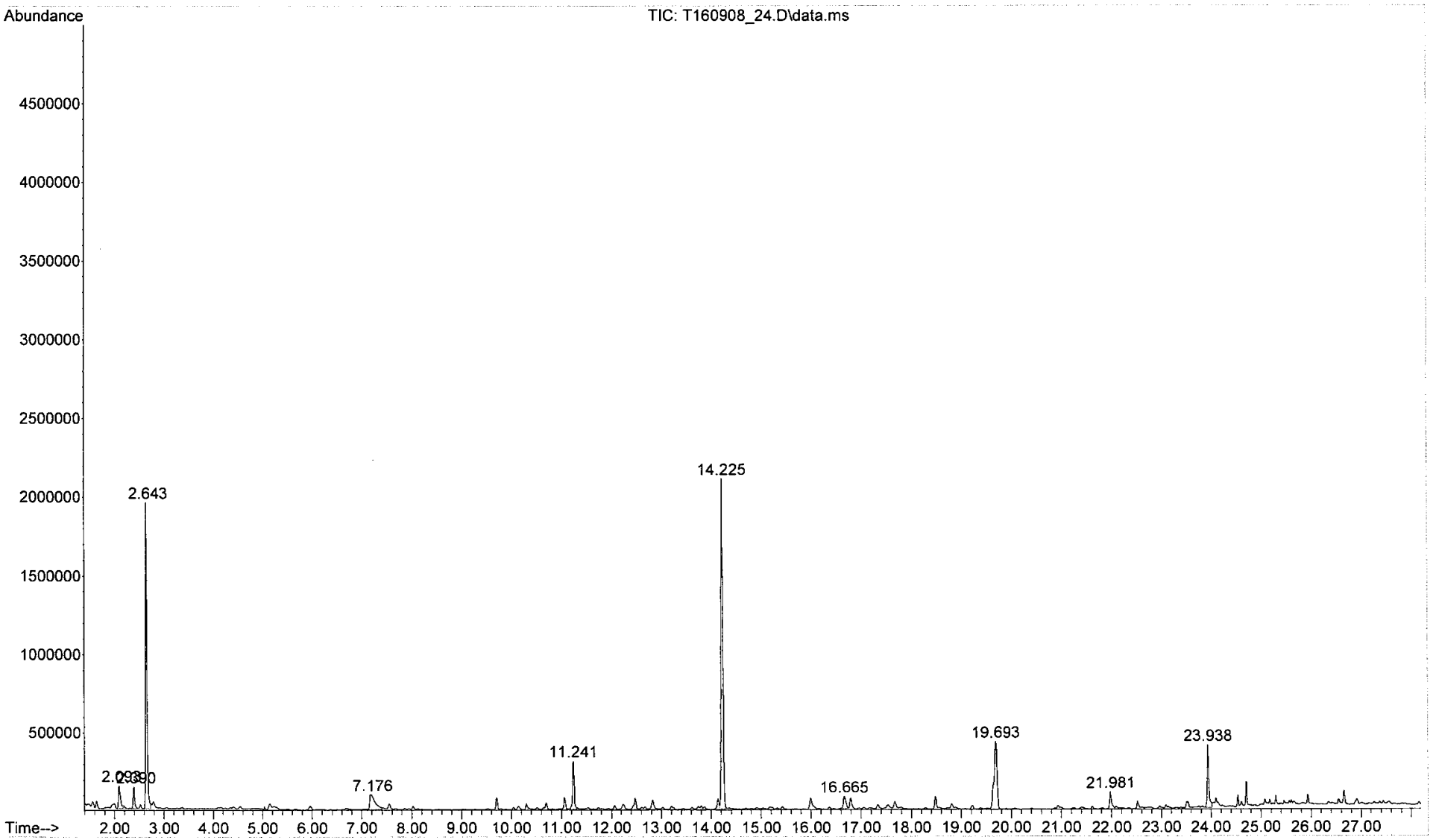
File :C:\msdchem\1\data\2016\Sept\T160908_22.D
Operator : rgill
Acquired : 9 Sep 2016 11:25 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-12_US EPA; Mi51174; 5.61L
Misc Info : C14-32; 111ngBFB;10:1 split
Vial Number: 22



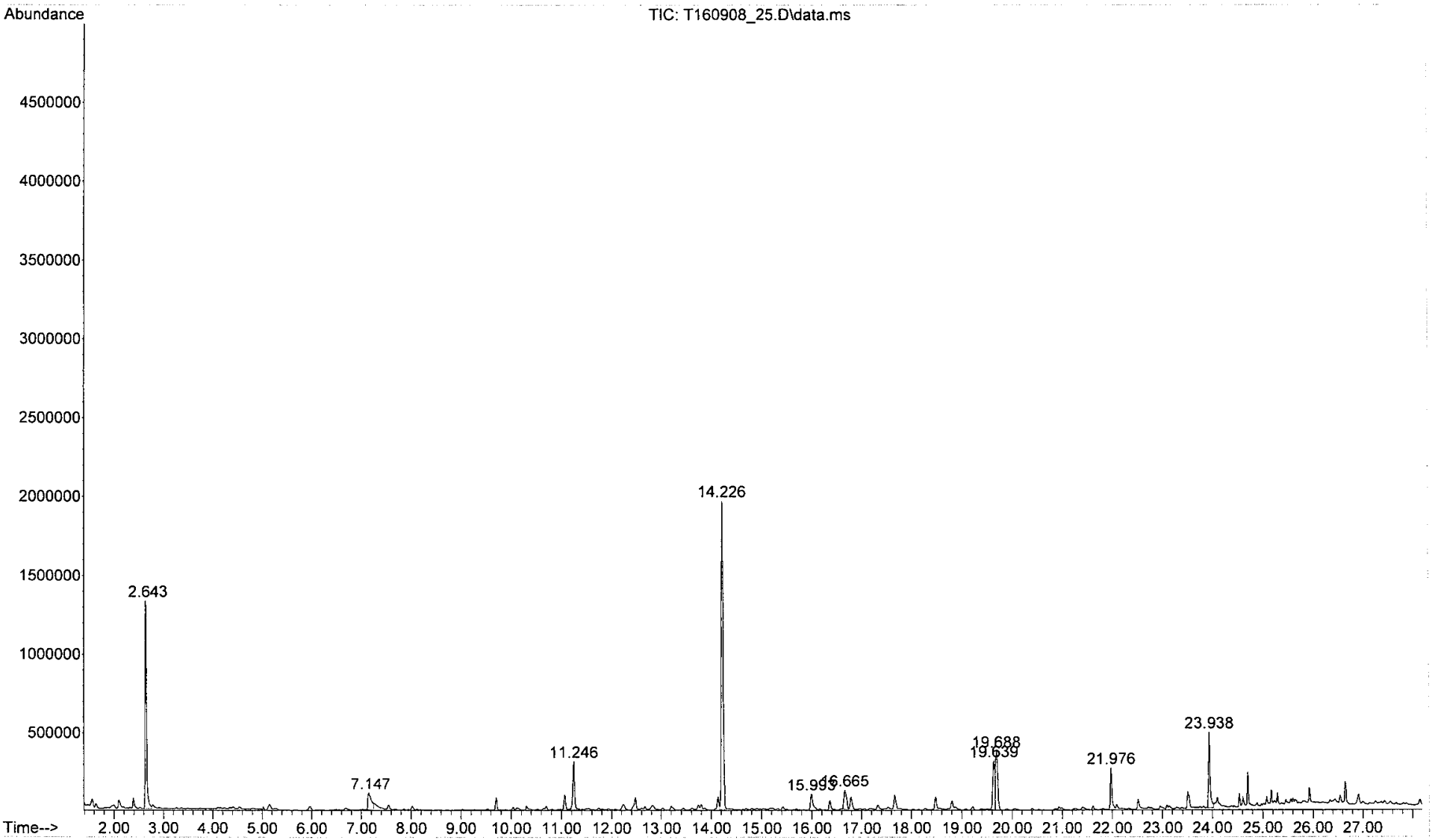
File :C:\msdchem\1\data\2016\Sept\T160908_23.D
Operator : rgill
Acquired : 9 Sep 2016 12:19 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-13_US EPA; 242425; 5.87L
Misc Info : C14-32; 111ngBFB;10:1 split
Vial Number: 23



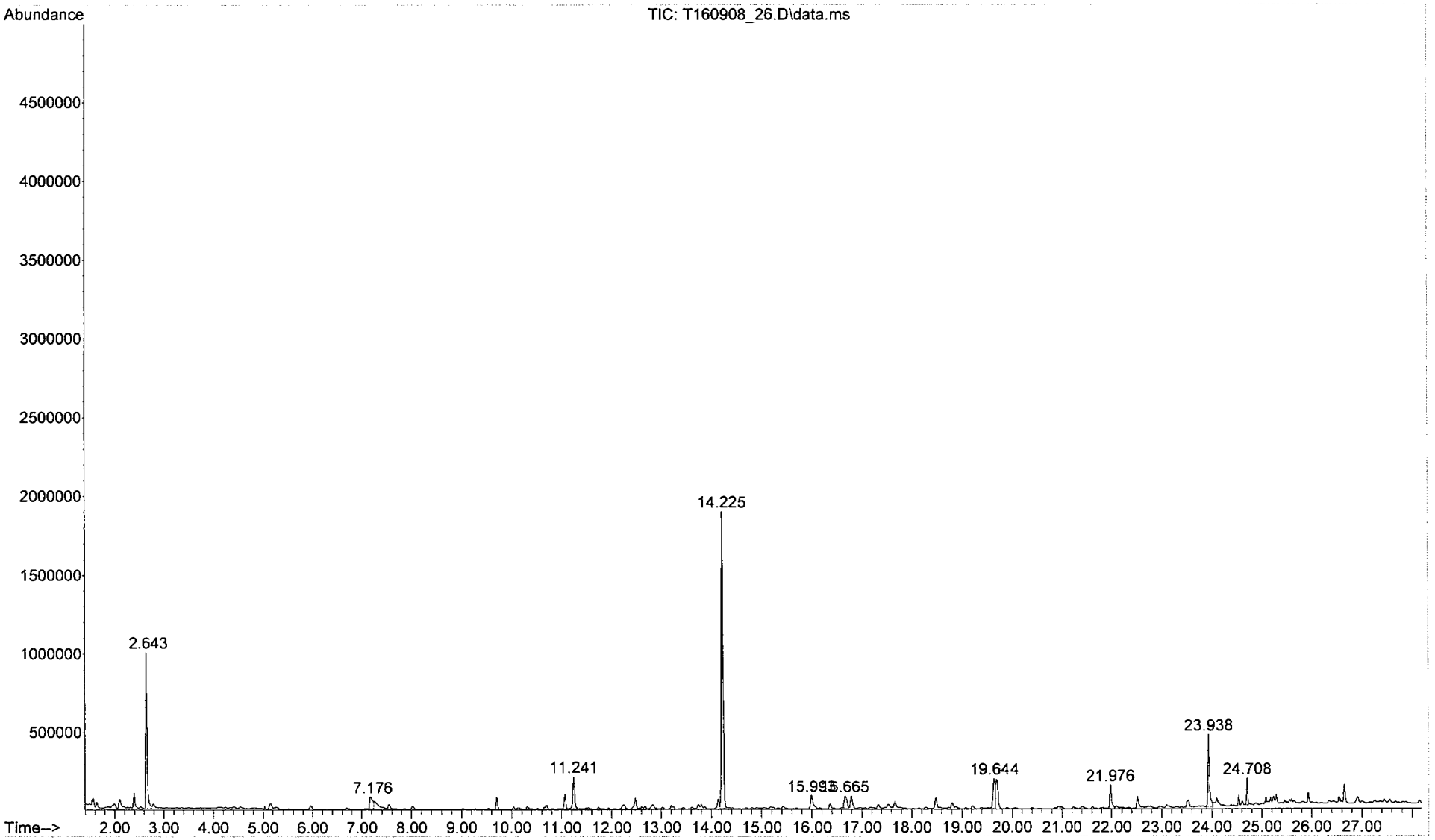
File :C:\msdchem\1\data\2016\Sept\T160908_24.D
Operator : rgill
Acquired : 9 Sep 2016 1:12 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-14_US EPA; Mi58846; 5.6L
Misc Info : C14-34; 111ngBFB;10:1 split
Vial Number: 24



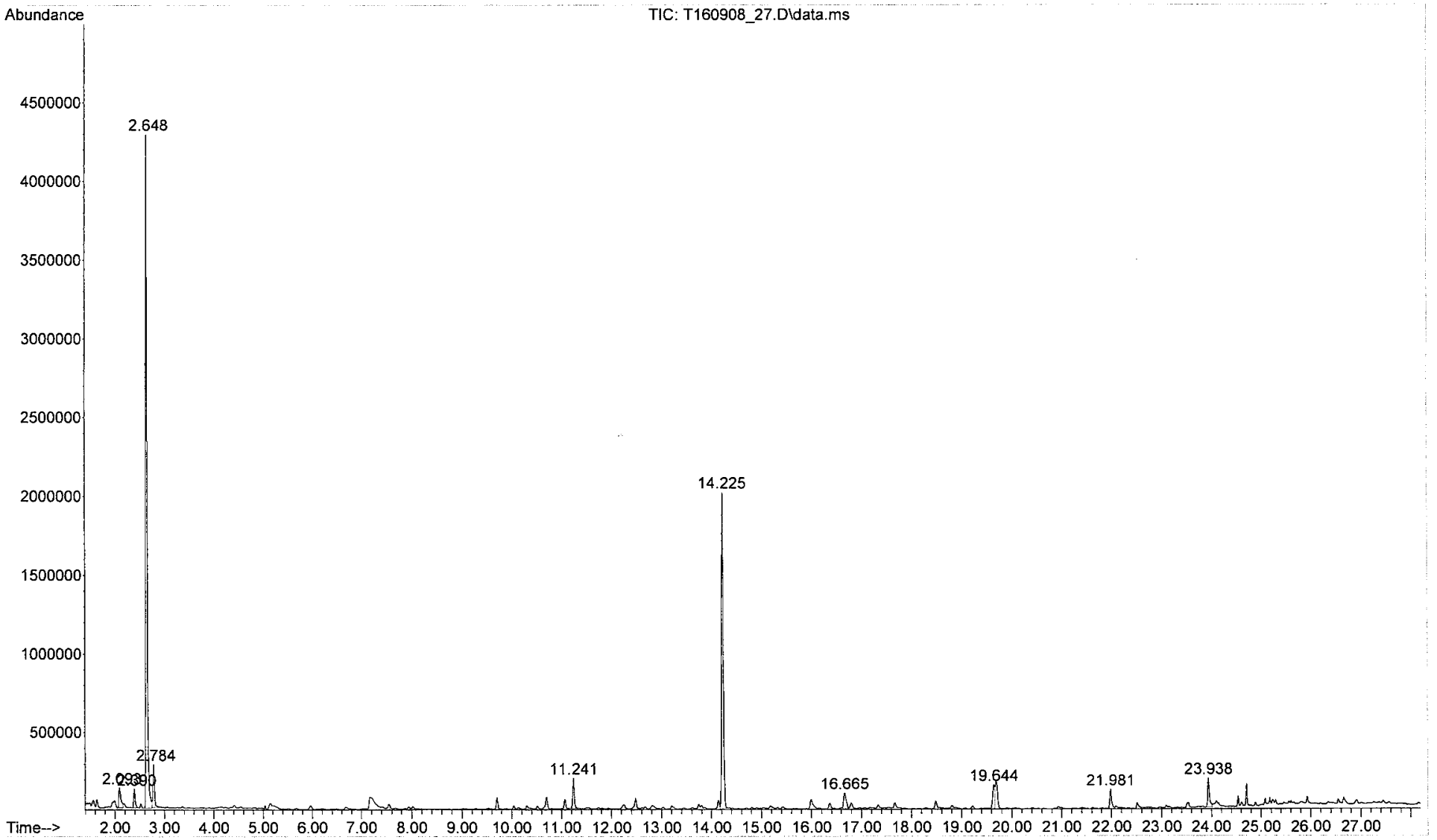
File :C:\msdchem\1\data\2016\Sept\T160908_25.D
Operator : rgill
Acquired : 9 Sep 2016 2:05 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-15_US EPA; 203171; 5.91L
Misc Info : C14-35; 111ngBFB;10:1 split
Vial Number: 25



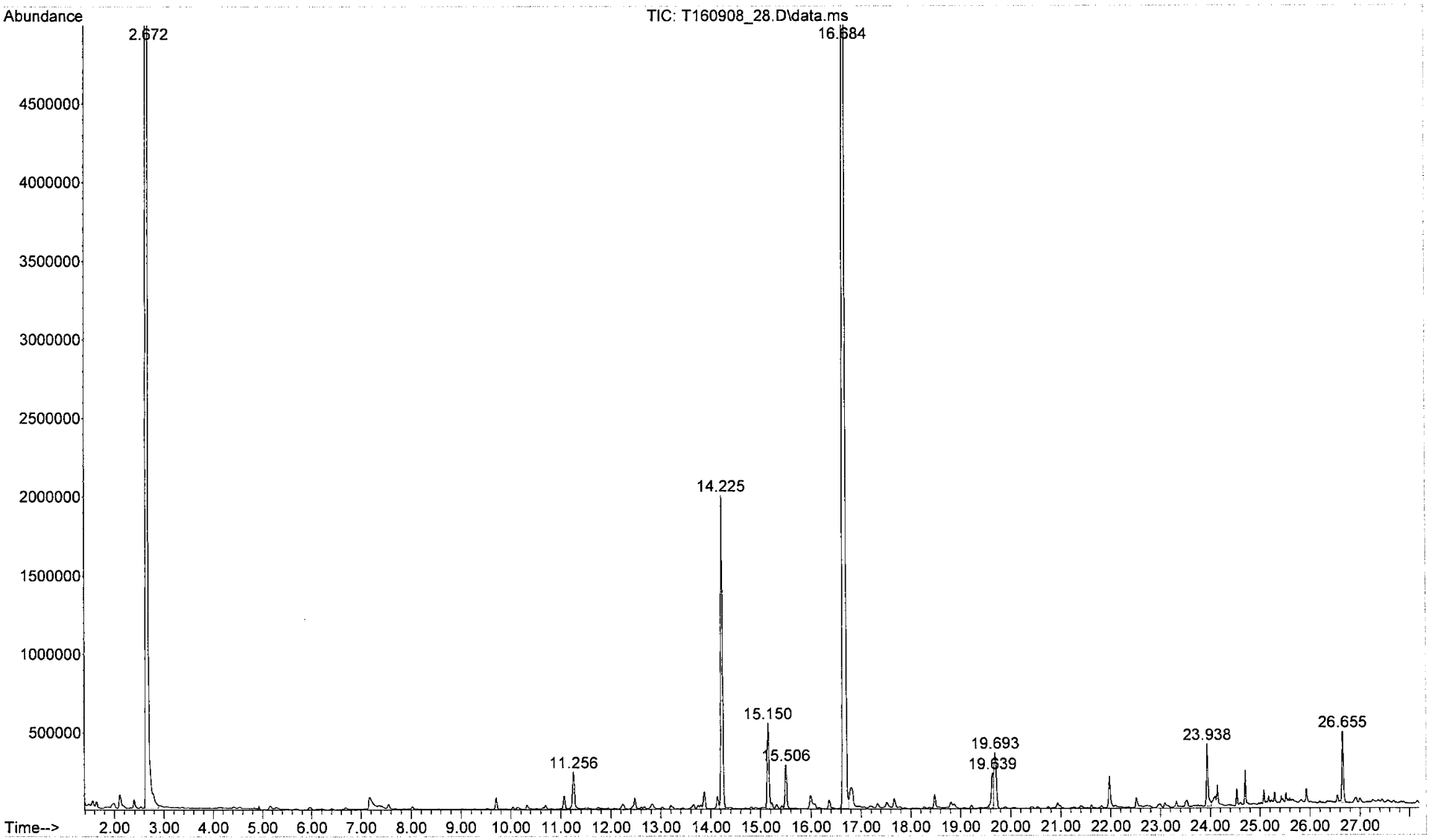
File :C:\msdchem\1\data\2016\Sept\T160908_26.D
Operator : rgill
Acquired : 9 Sep 2016 2:59 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-16_US EPA; 203144; 5.75L
Misc Info : C14-36; 111ngBFB;10:1 split
Vial Number: 26



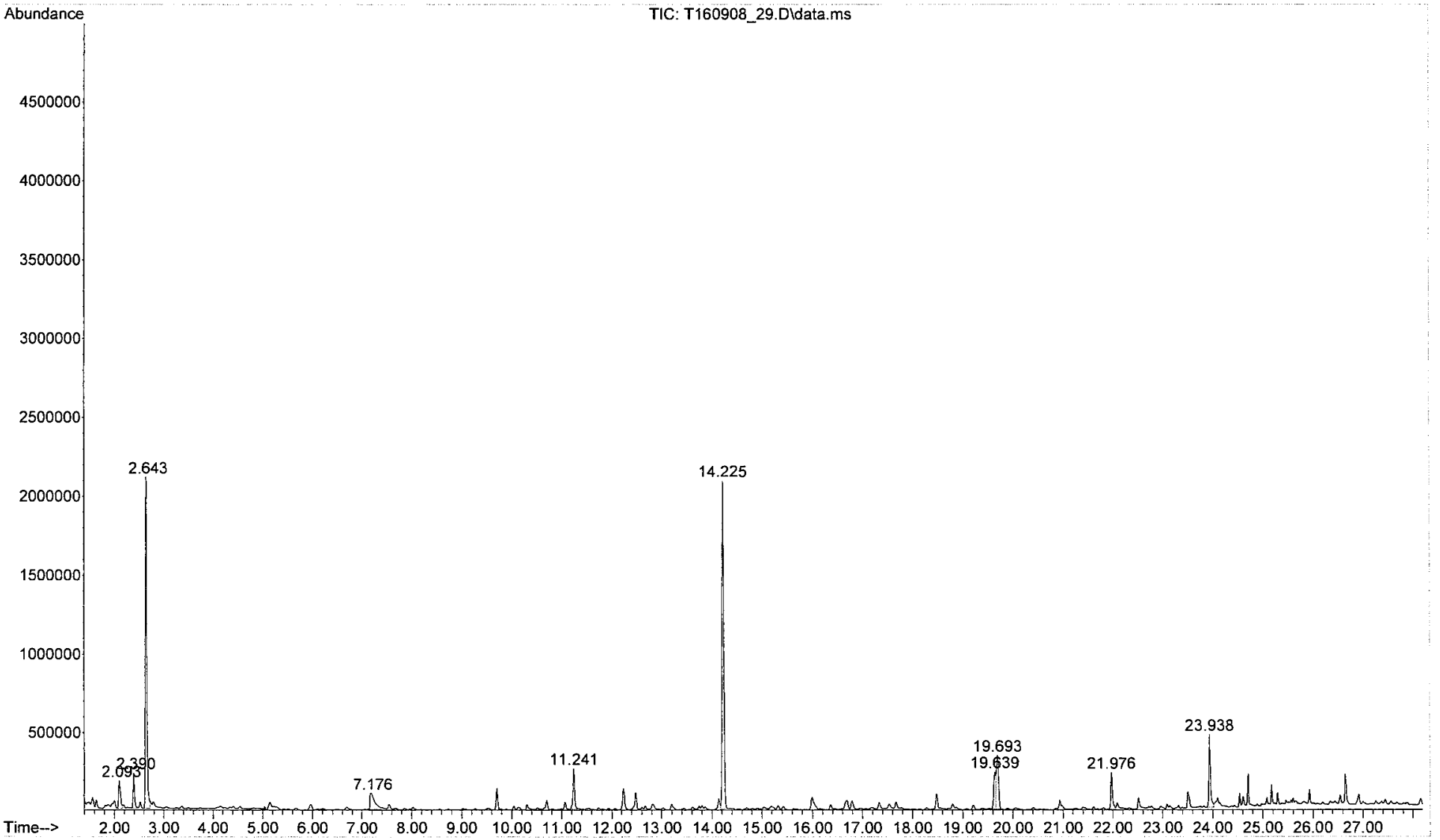
File :C:\msdchem\1\data\2016\Sept\T160908_27.D
Operator : rgill
Acquired : 9 Sep 2016 3:54 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-17_US EPA; Mi58839; 4.65L
Misc Info : C14-37; 111ngBFB;10:1 split
Vial Number: 27



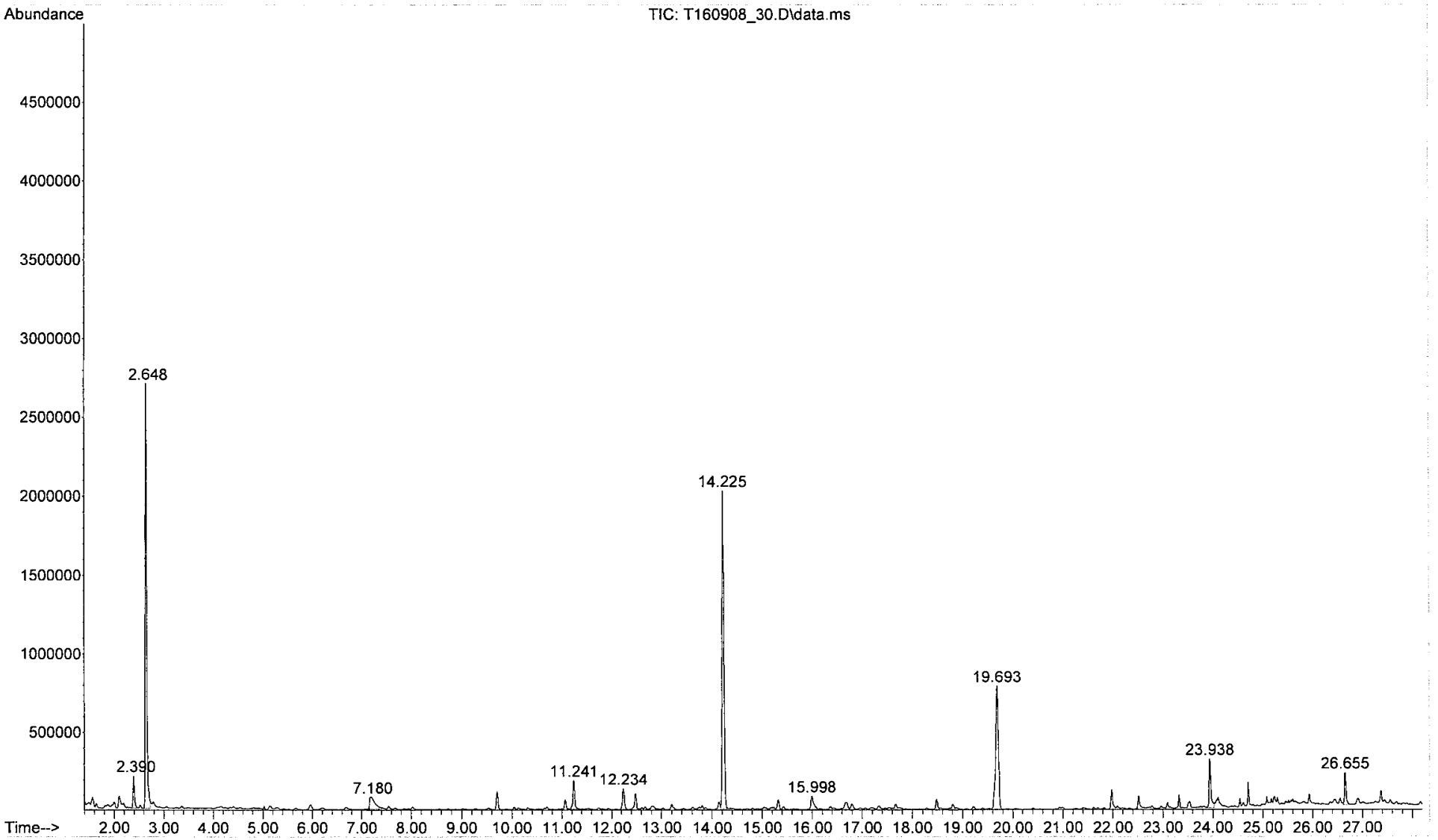
File :C:\msdchem\1\data\2016\Sept\T160908_28.D
Operator : rgill
Acquired : 9 Sep 2016 4:50 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-18_US EPA; 203196; 5.42L
Misc Info : C14-38; 111ngBFB;10:1 split
Vial Number: 28



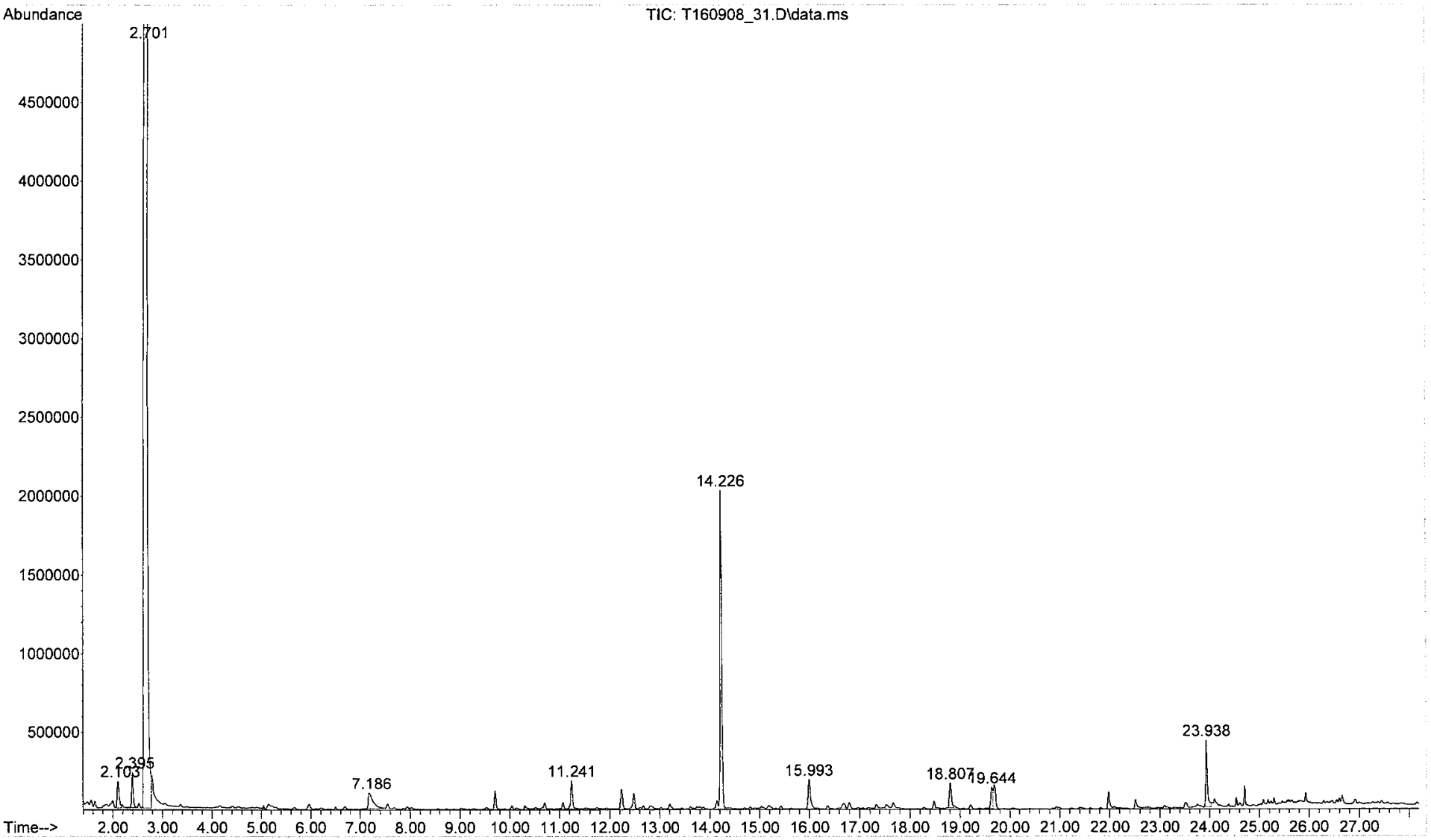
File :C:\msdchem\1\data\2016\Sept\T160908_29.D
Operator : rgill
Acquired : 9 Sep 2016 5:46 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-19_US EPA; Mi59937; 5.48L
Misc Info : C14-39; 111ngBFB;10:1 split
Vial Number: 29



File :C:\msdchem\1\data\2016\Sept\T160908_30.D
Operator : rgill
Acquired : 9 Sep 2016 6:41 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-20_US EPA; 203124; 5.23L
Misc Info : C14-40; 111ngBFB;10:1 split
Vial Number: 30



File :C:\msdchem\1\data\2016\Sept\T160908_31.D
Operator : rgill
Acquired : 9 Sep 2016 7:37 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-21_US EPA; Mi59927; 5.3L
Misc Info : C14-41; 111ngBFB;10:1 split
Vial Number: 31



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File        :C:\msdchem\1\data\2016\Sept\T160908_32.D
Operator    : rgill
Acquired    :  9 Sep 2016   8:33 pm using AcqMethod 130812VOC.M
Instrument  :   GCMS_7890
Sample Name: 061-037-22_US EPA; 242440; 5.48L
Misc Info   : C14-42; 111ngBFB;10:1 split
Vial Number: 32
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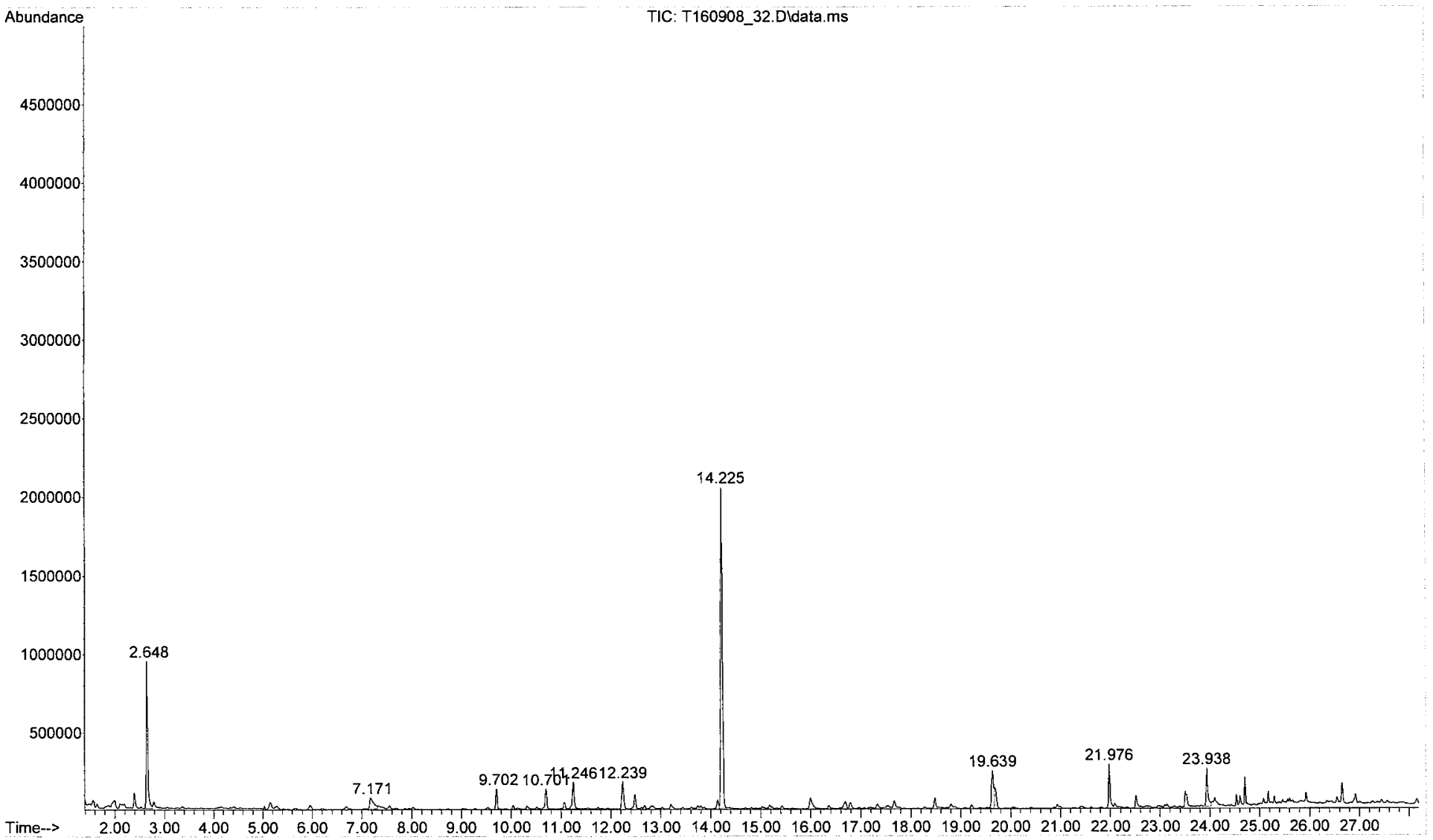
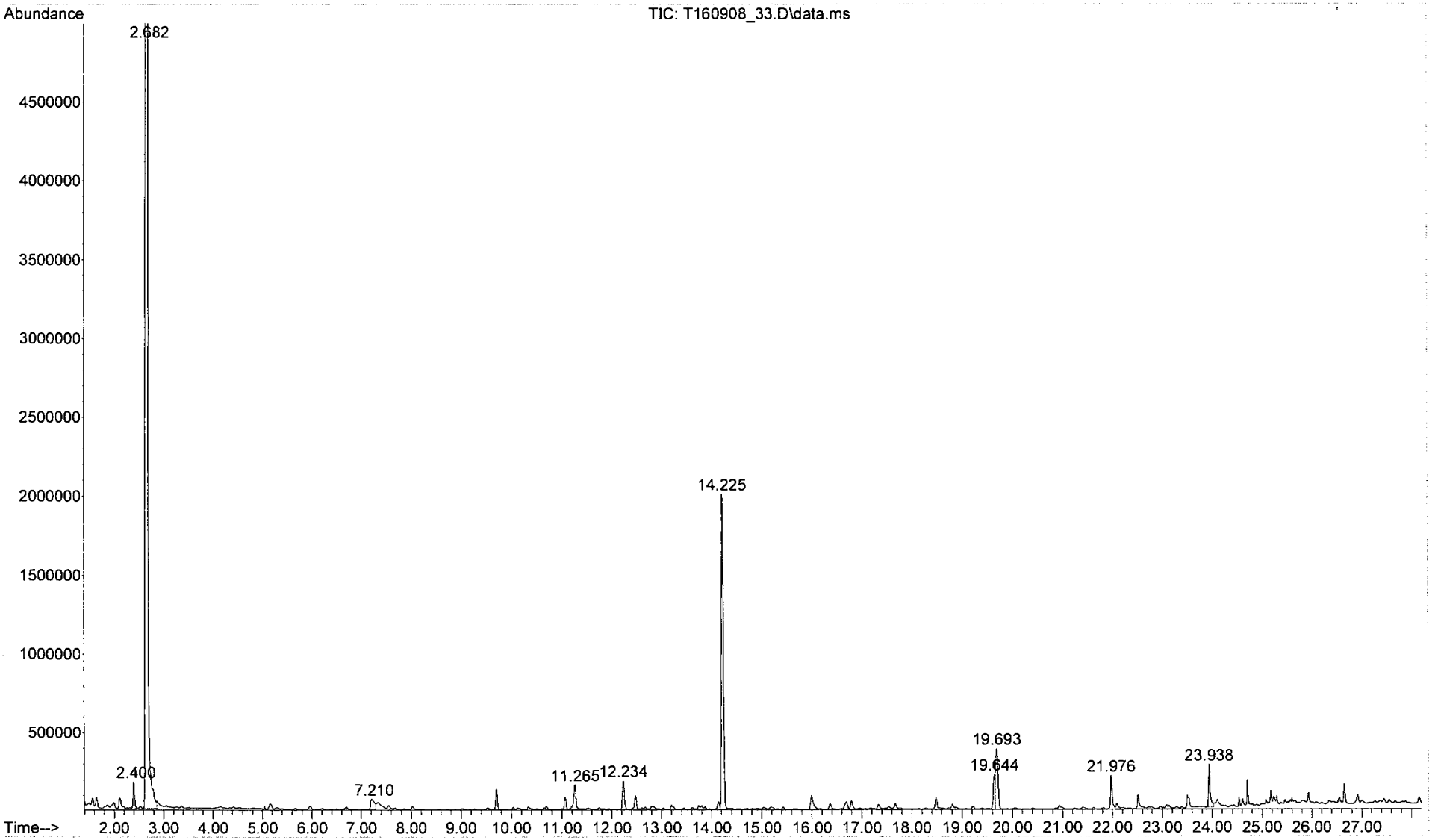
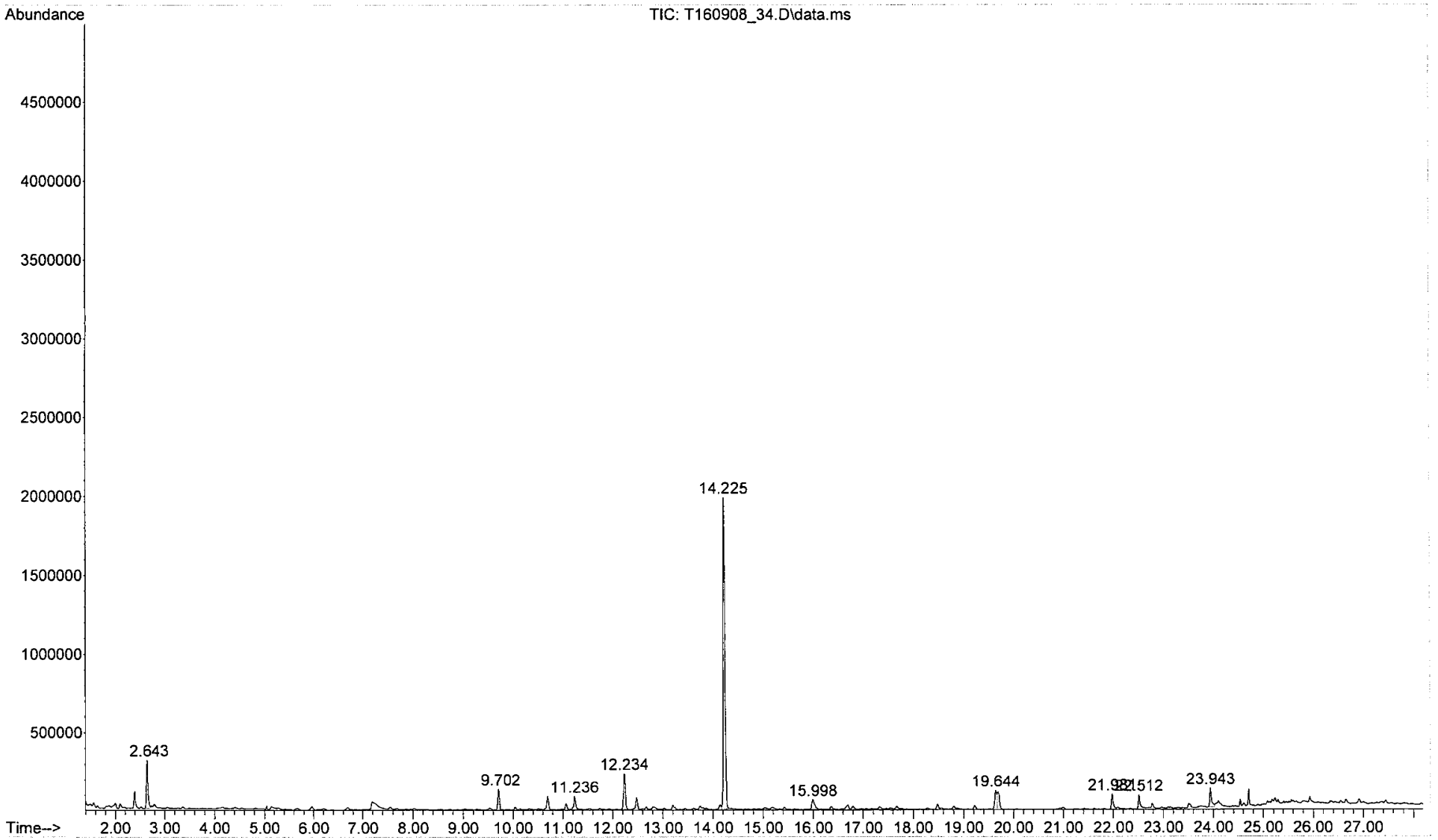


File :C:\msdchem\1\data\2016\Sept\T160908_33.D
Operator : rgill
Acquired : 9 Sep 2016 9:29 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-23_US EPA; 203105; 4.94L
Misc Info : C14-43; 111ngBFB;10:1 split
Vial Number: 33



File :C:\msdchem\1\data\2016\Sept\T160908_34.D
Operator : rgill
Acquired : 9 Sep 2016 10:24 pm using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-037-24_US EPA; 242408; 5.11L
Misc Info : C14-44; 111ngBFB;10:1 split
Vial Number: 34



061-037; 9/11/2016
Caprolactam calculations

		mass (ng)	vol (L)	conc (ug/m3)	conc (ppb)
061-037-01	T160908_11	80.4	5.670	14.2	3.1
061-037-02	T160908_12	64.5	5.660	11.4	2.5
061-037-03	T160908_13	76.7	5.930	12.9	2.8
061-037-04	T160908_14	87.9	5.770	15.2	3.3
061-037-05	T160908_15	21.3	5.400	3.9	0.9
061-037-06	T160908_16	33.4	5.500	6.1	1.3
061-037-07	T160908_17	47.1	6.360	7.4	1.6
061-037-08	T160908_18	46.8	6.870	6.8	1.5
061-037-09	T160908_19	53.4	7.020	7.6	1.6
061-037-10	T160908_20	37.9	5.770	6.6	1.4
061-037-11	T160908_21	40.2	5.490	7.3	1.6
061-037-12	T160908_22	45.5	5.610	8.1	1.8
061-037-13	T160908_23	29.2	5.870	5.0	1.1
061-037-14	T160908_24	46.0	5.600	8.2	1.8
061-037-15	T160908_25	56.4	5.910	9.5	2.1
061-037-16	T160908_26	55.3	5.750	9.6	2.1
061-037-17	T160908_27	23.6	4.650	5.1	1.1
061-037-18	T160908_28	46.4	5.420	8.6	1.9
061-037-19	T160908_29	48.6	5.480	8.9	1.9
061-037-20	T160908_30	36.8	5.230	7.0	1.5
061-037-21	T160908_31	45.1	5.300	8.5	1.8
061-037-22	T160908_32	28.4	5.480	5.2	1.1
061-037-23	T160908_33	31.9	4.940	6.5	1.4
061-037-24	T160908_34	15.9	5.110	3.1	0.7

HCHO\JC061-037_EPA.XLS
Created 9/13/16, rgill

US EPA
Formaldehyde Analysis
Sequence 160911B
Method FORMALDEHYDE.M

40 Typical cartridge blank

File	Sample ID	Rt min	Meas Conc ng/ul	Meas Mass ng	Mass -Blnk ng	Volume L	Conc ng/L	Conc ppbv
160911B\160911024.D	F14-21	5.345		552	512	54.29	9.4	7.7
160911B\160911025.D	F14-22	5.344		652	612	56.05	10.9	8.9
160911B\160911026.D	F14-23	5.345		516	476	56.02	8.5	6.9
160911B\160911027.D	F14-24	5.345		500	460	55.09	8.3	6.8
160911B\160911028.D	F14-25	5.343		390	350	53.47	6.5	5.3
160911B\160911029.D	F14-26	5.341		431	391	52.13	7.5	6.1
160911B\160911030.D	F14-27	5.342		619	579	60.48	9.6	7.8
160911B\160911031.D	F14-28	5.344		501	461	67.9	6.8	5.5
160911B\160911032.D	F14-29	5.343		566	526	66.37	7.9	6.5
160911B\160911033.D	F14-30	5.341		474	434	53.86	8.1	6.6
160911B\160911034.D	F14-31	5.344		442	402	54.42	7.4	6.0
160911B\160911035.D	F14-32	5.344		505	465	52.87	8.8	7.2
160911B\160911037.D	F14-33	5.350		386	346	54.71	6.3	5.2
160911B\160911038.D	F14-34	5.356		832	792	55.12	14.4	11.7
160911B\160911039.D	F14-35	5.348		162	122	55.66	2.2	1.8
160911B\160911040.D	F14-36	5.348		275	235	54.11	4.3	3.5
160911B\160911041.D	F14-37	5.355		344	304	46.02	6.6	5.4
160911B\160911042.D	F14-38	5.346		479	439	51.61	8.5	6.9
160911B\160911043.D	F14-39	5.345		408	368	51.52	7.1	5.8
160911B\160911044.D	F14-40	5.346		368	328	50.12	6.5	5.3
160911B\160911045.D	F14-41	5.339		376	336	50.52	6.6	5.4
160911B\160911046.D	F14-42	5.345		353	313	52.2	6.0	4.9
160911B\160911047.D	F14-43	5.346		328	288	47.4	6.1	4.9
160911B\160911048.D	F14-44	5.340		262	222	49.02	4.5	3.7

061-037-31 60.48 litres
US EPA
F14-27 collected: 8/30/2016
27

061-037-32 67.9 litres
US EPA
F14-28 collected: 8/30/2016
F14-28

061-037-33 66.37 litres
US EPA
F14-29 collected: 8/30/2016
F14-29

061-037-34 53.86 litres
US EPA
F14-30 collected: 8/30/2016
F14-30

061-037-35 1 litres
US EPA
F14-31 collected: 8/31/2016
F14-31

061-037-36 1 litres
US EPA
F14-32 collected: 8/31/2016
F14-32

061-037-37 1 litres
US EPA
F14-33 collected: 8/31/2016
F14-33

061-037-38 1 litres
US EPA
F14-34 collected: 8/31/2016
F14-34

061-037-39 1 litres
US EPA
F14-35 collected: 8/31/2016
F14-35

061-037-40 1 litres
US EPA
F14-36 collected: 8/31/2016
F14-36

061-037-41 1 litres
US EPA
F14-37 collected: 8/31/2016
F14-37

061-037-42 1 litres
US EPA
F14-38 collected: 8/31/2016
F14-38

061-037-43 1 litres
US EPA
F14-39 collected: 8/31/2016
F14-39

061-037-44 1 litres
US EPA
F14-40 collected: 8/31/2016
F14-40

061-037-45 50.52 litres
US EPA
F14-41 collected: 9/1/2016
F14-41

061-037-46 52.2 litres
US EPA
F14-42 collected: 9/1/2016
F14-42

061-037-47 47.4 litres
US EPA
F14-43 collected: 9/1/2016
F14-43

061-037-48 49.02 litres
US EPA
F14-44 collected: 9/1/2016
F14-44

061-037-01 5.67 litres
US EPA
203110 collected: 8/30/2016
C14-21

061-037-02 5.66 litres
US EPA
242458 collected: 8/30/2016
C14-22

061-037-03 5.93 litres
US EPA
Mi59956 collected: 8/30/2016
C14-23

061-037-04 5.77 litres
US EPA
Mi59953 collected: 8/30/2016
C14-24

061-037-05 5.4 litres
US EPA
Mi51114 collected: 8/30/2016
C14-25

061-037-06 5.5 litres
US EPA
203148 collected: 8/30/2016
C14-26

061-037-07 6.36 litres
US EPA
Mi59960 collected: 8/30/2016
C14-27

061-037-08 6.87 litres
US EPA
Mi59929 collected: 8/30/2016
C14-28

061-037-09 7.02 litres
US EPA
Mi58841 collected: 8/30/2016
C14-29

061-037-10 5.77 litres
US EPA
242496 collected: 8/30/2016
C14-30

061-037-11 5.49 litres
US EPA
242403 collected: 8/31/2016
C14-31

061-037-12 5.61 litres
US EPA
Mi51174 collected: 8/31/2016
C14-32

061-037-13 5.87 litres
US EPA
242425 collected: 8/31/2016
C14-33

061-037-14 5.6 litres
US EPA
Mi58846 collected: 8/31/2016
C14-34

061-037-15 5.91 litres
US EPA
203171 collected: 8/31/2016
C14-35

061-037-16 5.75 litres
US EPA
203144 collected: 8/31/2016
C14-35

061-037-17 4.65 litres
US EPA
Mi58839 collected: 8/31/2016
C14-37

061-037-18 5.42 litres
US EPA
203196 collected: 8/31/2016
C14-38

061-037-19 5.48 litres
US EPA
Mi59937 collected: 8/31/2016
C14-39

061-037-20 5.23 litres
US EPA
203124 collected: 8/31/2016
C14-40

061-037-21 5.3 litres
US EPA
Mi59927 collected: 9/1/2016
C14-41

061-037-22 5.48 litres
US EPA
242440 collected: 9/1/2016
C14-42

061-037-23 4.94 litres
US EPA
203105 collected: 9/1/2016
C14-43

061-037-24 5.11 litres
US EPA
242408 collected: 9/1/2016
C14-44

061-037-25 54.29 litres
US EPA
F14-21 collected: 8/30/2016
F14-21

061-037-26 56.05 litres
US EPA
F14-22 collected: 8/30/2016
F14-22

061-037-27 56.02 litres
US EPA
F14-23 collected: 8/30/2016
F14-23

061-037-28 55.09 litres
US EPA
F14-24 collected: 8/30/2016
F14-24

061-037-29 53.47 litres
US EPA
F14-25 collected: 8/30/2016
F14-25

061-037-30 52.13 litres
US EPA
F14-26 collected: 8/30/2016
F14-26

Rupinder Gill

From: Raja Tannous <rtannous@berkeleyanalytical.com>
Sent: Tuesday, September 06, 2016 12:55 PM
To: 'Woodlee, Jeff'
Cc: Rupinder
Subject: RE: Volumes for formaldehyde Samples - 9/2/16 Job

Great, thanks!

From: Woodlee, Jeff [mailto:Woodlee.Jeff@epa.gov]
Sent: Tuesday, September 06, 2016 12:36 PM
To: Raja Tannous
Subject: RE: Volumes for formaldehyde Samples - 9/2/16 Job

Raja,

Sorry I was a little rushed when I transposed to Chain of Custody. Here's 10 values that should match, including 31 & 40, if not please let me know.

Jeff

F14-30 53.86 L
F14-31 54.42 L
F14-32 52.87 L
F14-33 54.71 L
F14-34 55.12 L
F14-35 55.66 L
F14-36 54.11 L
F14-37 46.02 L
F14-38 51.61 L
F14-39 51.52 L
F14-40 50.12 L

Jeff Woodlee, CIH
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(415) 972-3740
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From: Raja Tannous [mailto:rtannous@berkeleyanalytical.com]
Sent: Tuesday, September 06, 2016 12:14 PM
To: Woodlee, Jeff
Subject: Volumes for formaldehyde Samples - 9/2/16 Job

Hi Jeff,
F14-31 to F14-40 do not have the volumes listed in the COC form.
Thanks,
Raja

Raja S. Tannous
Co-Founder & Laboratory Director
rtannous@berkeleyanalytical.com

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