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BERKELEY ANALYTICAL
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Richmond, CA 94804
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Analysis of Field-Collected Air Samples

Customer and Project Information

Report Certification	
Report number	061-028-IH-Dec1315
Report date	December 13, 2015
Certified by (Name/Title)	Raja Tannous, Laboratory Director
Signature	
Date	*December 13, 2015*

Methods	
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	IAQ 75 Hawthorne
Project location	Not given
Project date	December 8, 2015

Laboratory Receiving Information	
Date samples received by lab	December 9, 2015
Condition of samples	No observed problems
Lab tracking numbers	061-028-11 to 061-028-20

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Sample Information

Sample No.	Sample Description	Sampler No.	Date Collected	Volume (L)	Analysis Type	Specified Method
F8-01	10221	Waters Cart	December 8, 2015	47.71	Formaldehyde	D 5197
F8-02	10332	Waters Cart	December 8, 2015	47.59	Formaldehyde	D 5197
F8-03	10366	Waters Cart	December 8, 2015	47.24	Formaldehyde	D 5197
F8-04	10344	Waters Cart	December 8, 2015	43.13	Formaldehyde	D 5197
F8-05	10448	Waters Cart	December 8, 2015	46.71	Formaldehyde	D 5197
F8-06	10146	Waters Cart	December 8, 2015	46.33	Formaldehyde	D 5197
F8-07	10411	Waters Cart	December 8, 2015	45.38	Formaldehyde	D 5197
F8-08	10151	Waters Cart	December 8, 2015	46.89	Formaldehyde	D 5197
F8-09	10216	Waters Cart	December 8, 2015	46.25	Formaldehyde	D 5197
F8-10	12368	Waters Cart	December 8, 2015	48.87	Formaldehyde	D 5197

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Analytical Information

Sample No.	Lab Track. No.	Method	Date Analyzed	Analyst	Data File
F8-01	061-028-11	D 5197	December 11, 2015	T.Cheng	151211\151211003.D
F8-02	061-028-12	D 5197	December 11, 2015	T.Cheng	151211\151211004.D
F8-03	061-028-13	D 5197	December 11, 2015	T.Cheng	151211\151211005.D
F8-04	061-028-14	D 5197	December 11, 2015	T.Cheng	151211\151211006.D
F8-05	061-028-15	D 5197	December 11, 2015	T.Cheng	151211\151211007.D
F8-06	061-028-16	D 5197	December 11, 2015	T.Cheng	151211\151211008.D
F8-07	061-028-17	D 5197	December 11, 2015	T.Cheng	151211\151211009.D
F8-08	061-028-18	D 5197	December 11, 2015	T.Cheng	151211\151211010.D
F8-09	061-028-19	D 5197	December 11, 2015	T.Cheng	151211\151211011.D
F8-10	061-028-20	D 5197	December 11, 2015	T.Cheng	151211\151211012.D

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Project Specific Information

Air samples for the analysis of formaldehyde (CAS # 50-00-0) were received by the laboratory on December 9, 2015. There were ten DNPH cartridges for the analysis of formaldehyde. The analytical results are reported in Table 1. 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 and quantified using multi-point (4 or more points) calibration curve.

MDL and LOQ – Method detection limit (MDL) for formaldehyde of 15 nanograms was determined from the analysis of ten replicates of the 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 2015, the expanded uncertainty estimated for formaldehyde was <9.0%.

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

Table 1. Quantitative analysis of formaldehyde (CAS #50-00-0)

Sample No.	Sample Name	Volume (L)	Mass (ng)	Conc ($\mu g/m^3$)	Conc* (ppb)
F8-01	10221	47.71	700	14.7	12.0
F8-02	10332	47.59	655	13.8	11.2
F8-03	10366	47.24	656	13.9	11.3
F8-04	10344	43.13	622	14.4	11.8
F8-05	10448	46.71	641	13.7	11.2
F8-06	10146	46.33	632	13.6	11.1
F8-07	10411	45.38	621	13.2	10.8
F8-08	10151	46.89	636	13.6	11.1
F8-09	10216	46.25	631	13.6	11.1
F8-10	12368	48.87	517	10.6	8.6

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

END OF REPORT

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e-mail: baalab@berkeleyanalytical.com

CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*			
Company:	US EPA		
Street Address:	75 Hawthorne St		
City/State/Zip Code:	San Francisco, CA 94105		
Country:		Contact (for reporting):	
Project/Job Name:	IAQ 75 Hawthorne		
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
	F8-01	12/8/15	51	47.71	10221	f	
	F8-02		51	47.59	10332		
	F8-03		51	47.24	10366		
	F8-04		47	43.13	10344		
	F8-05		50	46.71	10448		
	F8-06		50	46.33	10146		
	F8-07		50	45.38	10411		
	F8-08		50	46.89	10151		
	F8-09		50	46.25	10216		
	F8-10		53	48.87	12368		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J. Woodlee			12/9/15	US EPA
	Kam Tannous		12/9/15	BKA

JC 061-028

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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):	
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
Mi 51131	C8-01	12/8/15	51	4.878	10221	Caprolactam	
Mi 59952	C8-02		51	4.812	10332		
Mi 59923	C8-03		51	4.960	10366		
Mi 59929	C8-04		47	4.523	10344		
Mi 51157	C8-05		50	4.747	10448		
Mi 51159	C8-06		50	4.892	10146		
Mi 58847	C8-07		50	4.805	10411		
Mi 59924	C8-08		50	4.750	10151		
Mi 51176	C8-09		50	4.893	10216		
Mi 59935	C8-10		53	5.192	12368		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodie			12/8/15	US EPA
	Kayn Tannous		12/9/15	BKA

SC 061-028

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Analysis of Field-Collected Air Samples

Customer and Project Information

Report Certification	
Report number	061-028-IH-Dec1015
Report date	December 10, 2015
Certified by (Name/Title)	Raja Tannous, Laboratory Director
Signature	
Date	*December 11, 2015*

Methods	
U.S. EPA TO-17	Determination of Volatile Organic Compounds in Ambient...

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	IAQ 75 Hawthorne
Project location	Not given
Project date	December 8, 2015

Laboratory Receiving Information	
Date samples received by lab	December 9, 2015
Condition of samples	No observed problems
Lab tracking numbers	061-028-10

Sample Information

Sample No.	Sample Description	Sampler No.	Date Collected	Volume (L)	Analysis Type	Specified Method
C8-01	10221	Mi51131	December 8, 2015	4.878	Caprolactam	TO-17
C8-02	10332	Mi59952	December 8, 2015	4.812	Caprolactam	TO-17
C8-03	10366	Mi59923	December 8, 2015	4.960	Caprolactam	TO-17
C8-04	10344	Mi59929	December 8, 2015	4.523	Caprolactam	TO-17
C8-05	10448	Mi51157	December 8, 2015	4.747	Caprolactam	TO-17
C8-06	10146	Mi51159	December 8, 2015	4.892	Caprolactam	TO-17
C8-07	10411	Mi58847	December 8, 2015	4.805	Caprolactam	TO-17
C8-08	10151	Mi59924	December 8, 2015	4.750	Caprolactam	TO-17
C8-09	10216	Mi51176	December 8, 2015	4.893	Caprolactam	TO-17
C8-10	12368	Mi59935	December 8, 2015	5.192	Caprolactam	TO-17

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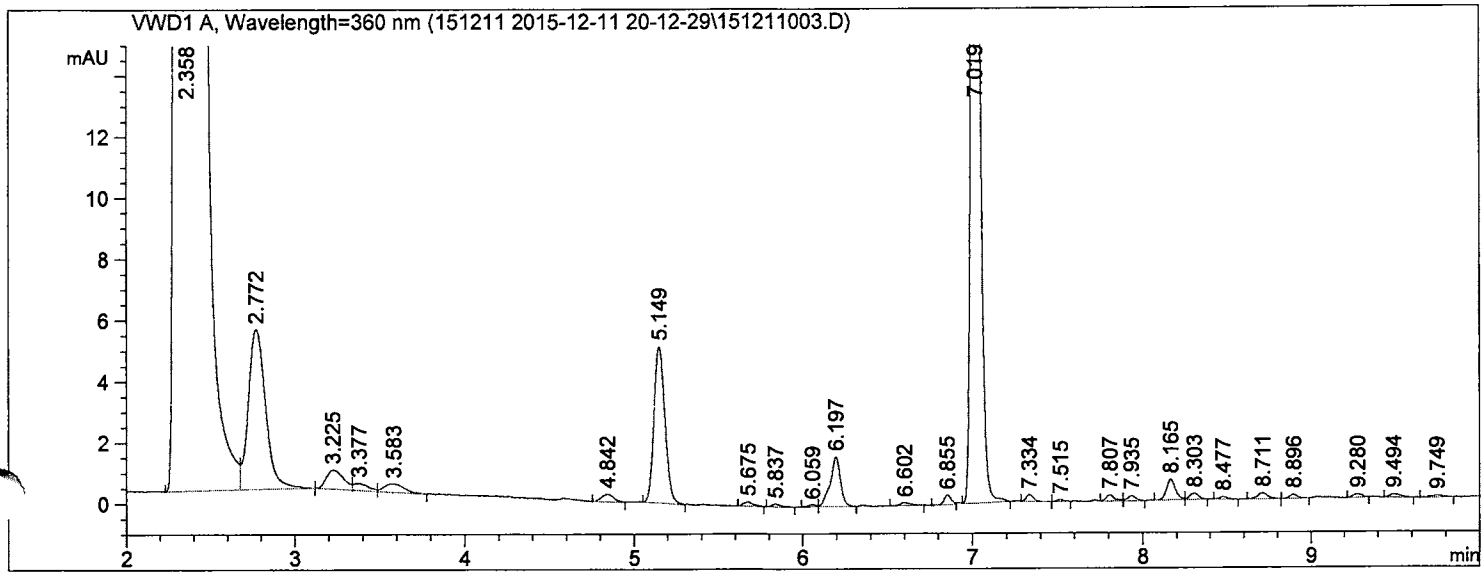
Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211003.D
Sample Name: 061-028-11

==========

Acq. Operator : SYSTEM
Seq. Line : 2
Acq. Instrument : Agilent 1260
Location : Vial 2
Injection Date : 12/11/2015 8:46:28 PM
Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-11; F8-01; 1208; 47.71L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.149	1	BB	23.63251	1.48143e-2	700.19841		Formaldehyde;50-00-0
6.197	1	VB	6.90231	1.89429e-2	261.49929		Acetaldehyde;75-07-0

Totals : 961.69770

==========

*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211004.D
Sample Name: 061-028-12

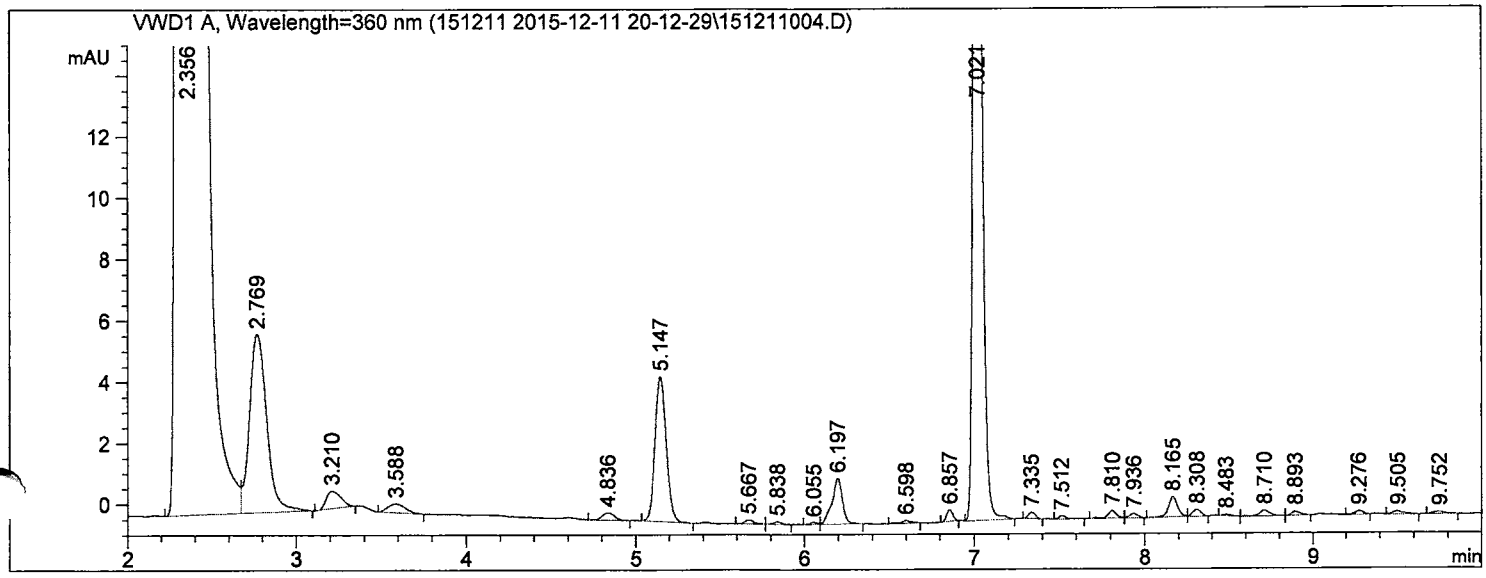
==========

Acq. Operator : SYSTEM
Acq. Instrument : Agilent 1260
Injection Date : 12/11/2015 9:03:08 PM

Seq. Line : 3
Location : Vial 3
Inj : 1
Inj Volume : 2.000 µl

Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-12; F8-02; 1208; 47.59L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.147	1	BB	22.10142	1.48143e-2	654.83419		Formaldehyde;50-00-0
6.197	1	VB	6.48947	1.89429e-2	245.85859		Acetaldehyde;75-07-0

Totals : 900.69279

==========

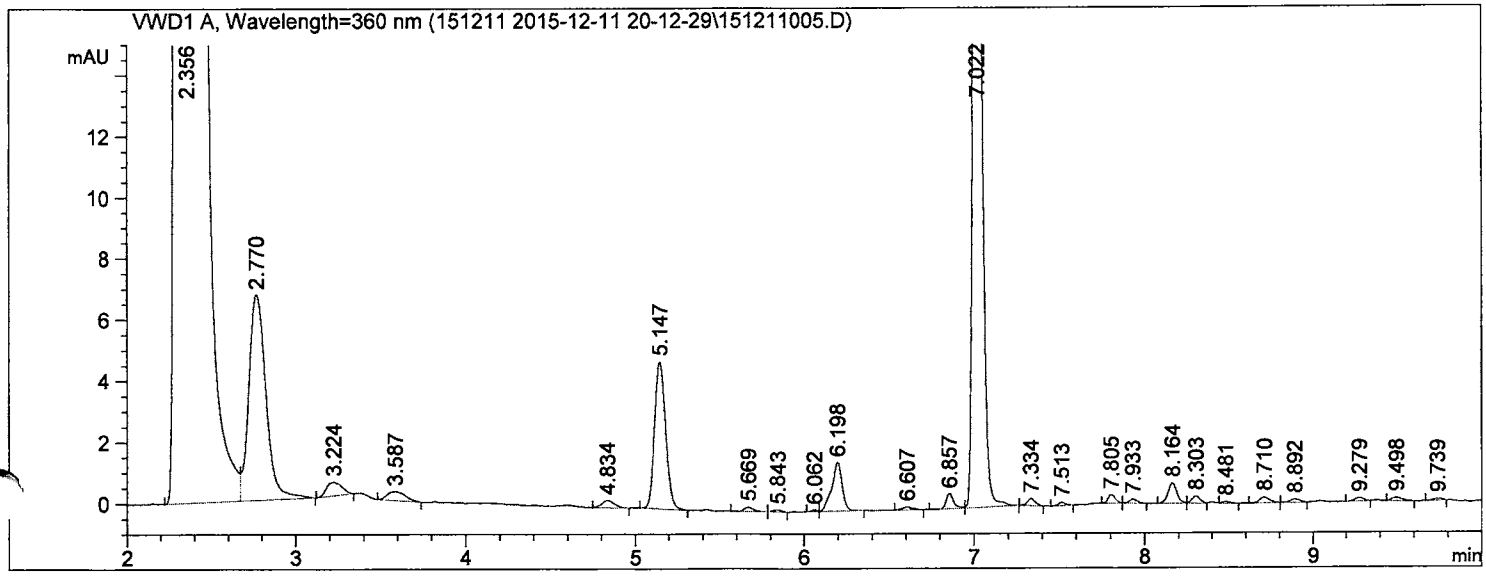
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211005.D
Sample Name: 061-028-13

==========

Acq. Operator : SYSTEM Seq. Line : 4
Acq. Instrument : Agilent 1260 Location : Vial 4
Injection Date : 12/11/2015 9:19:47 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-13; F8-03; 1208; 47.24L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.147	1	BB	22.13697	1.48143e-2	655.88746		Formaldehyde;50-00-0
6.198	1	VB	6.74702	1.89429e-2	255.61577		Acetaldehyde;75-07-0

Totals : 911.50323

==========

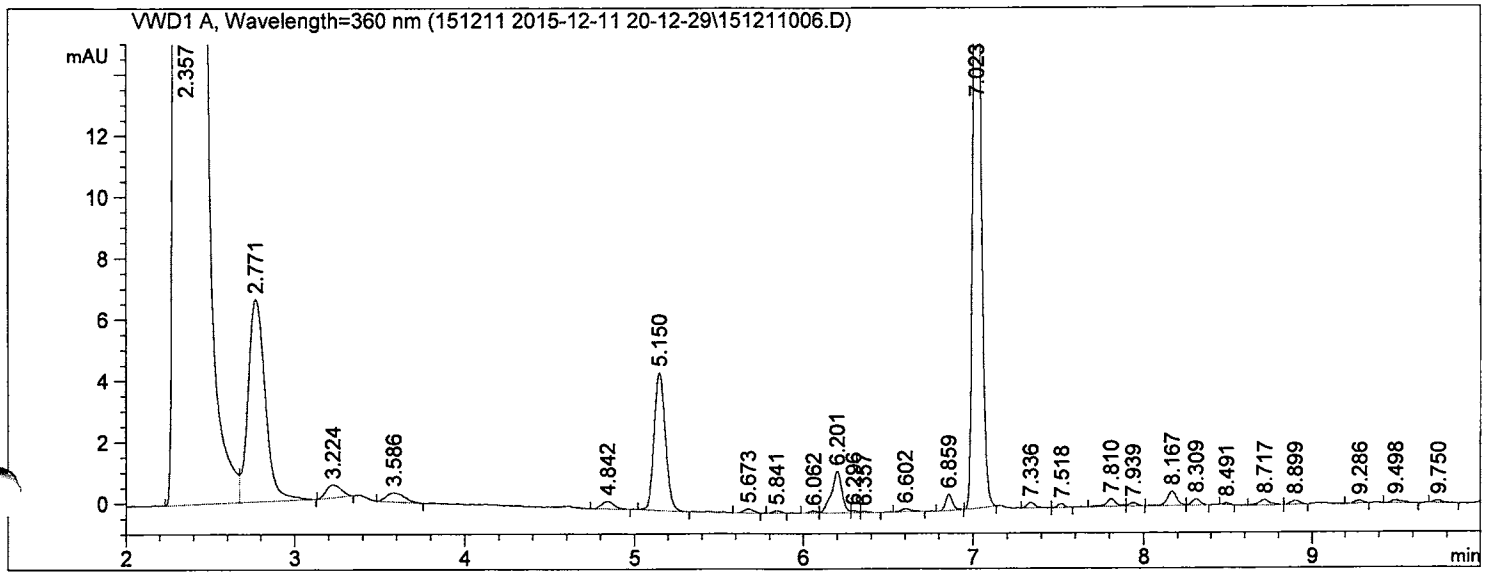
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211006.D
Sample Name: 061-028-14

==========

Acq. Operator : SYSTEM Seq. Line : 5
Acq. Instrument : Agilent 1260 Location : Vial 5
Injection Date : 12/11/2015 9:36:28 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-14; F8-04; 1208; 43.13L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.150	1	BB	20.98261	1.48143e-2	621.68545		Formaldehyde;50-00-0
6.201	1	VV	5.82460	1.89429e-2	220.66943		Acetaldehyde;75-07-0

Totals : 842.35488

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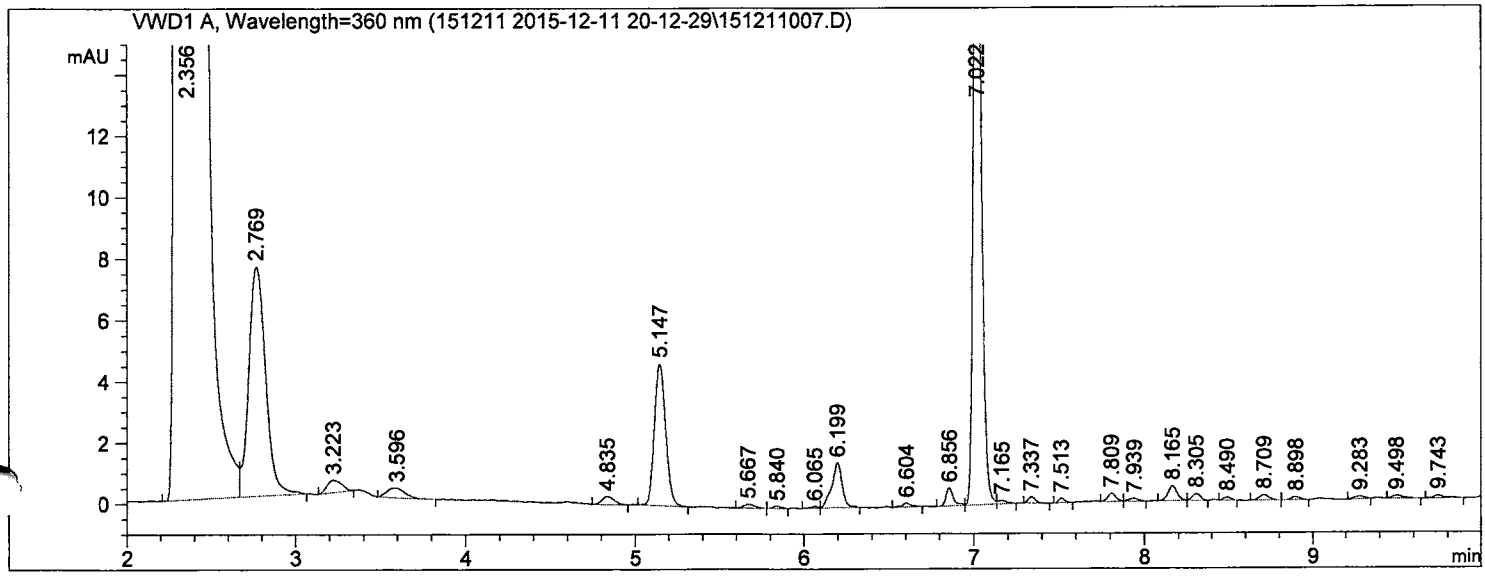
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211007.D
Sample Name: 061-028-15

==========

Acq. Operator : SYSTEM Seq. Line : 6
Acq. Instrument : Agilent 1260 Location : Vial 6
Injection Date : 12/11/2015 9:53:09 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-15; F8-05; 1208; 46.71L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.147	1	BB	21.63320	1.48143e-2	640.96155		Formaldehyde;50-00-0
6.199	1	VB	6.34562	1.89429e-2	240.40859		Acetaldehyde;75-07-0

Totals : 881.37014

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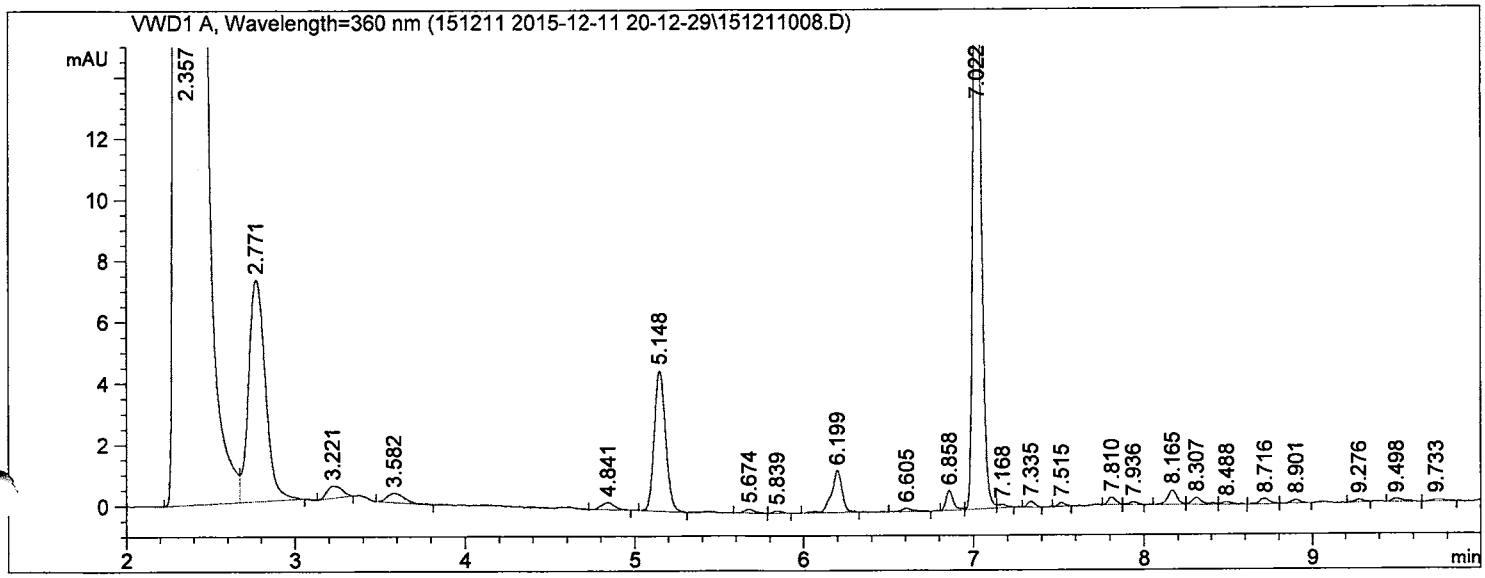
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211008.D
Sample Name: 061-028-16

==========

Acq. Operator : SYSTEM Seq. Line : 7
Acq. Instrument : Agilent 1260 Location : Vial 7
Injection Date : 12/11/2015 10:09:50 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-16; F8-06; 1208; 46.33L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.148	1	BB	21.33581	1.48143e-2	632.15019		Formaldehyde;50-00-0
6.199	1	BB	5.95512	1.89429e-2	225.61409		Acetaldehyde;75-07-0

Totals : 857.76428

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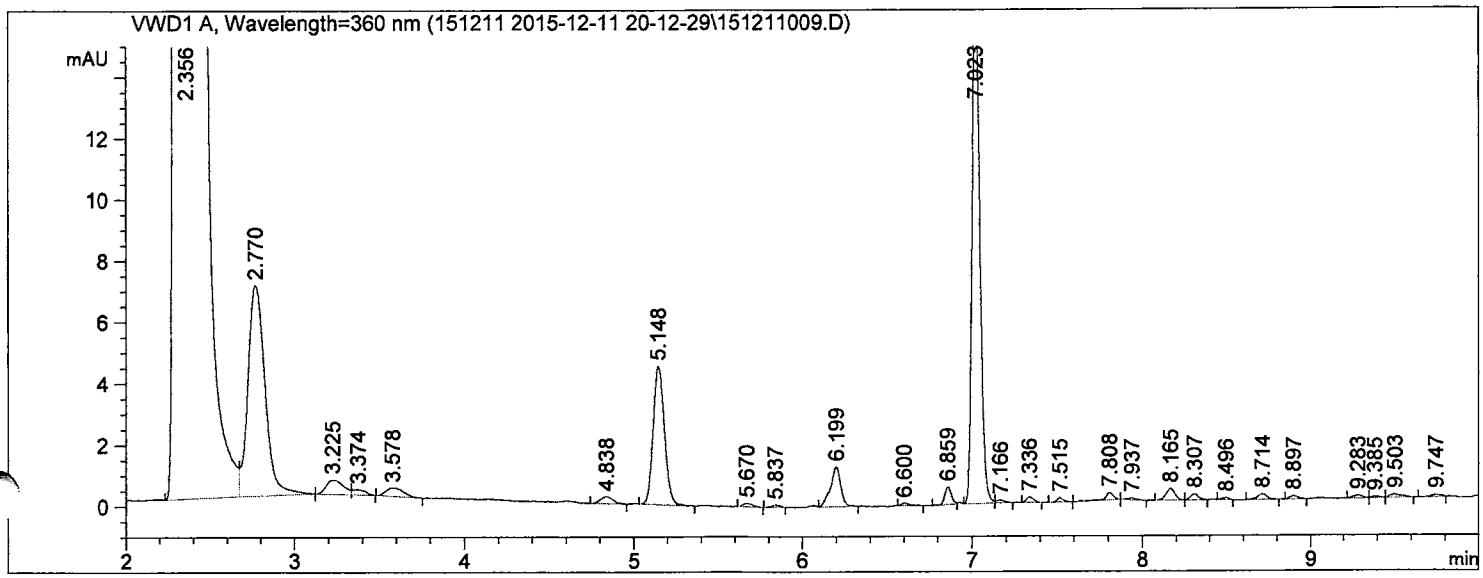
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211009.D
Sample Name: 061-028-17

==========

Acq. Operator : SYSTEM Seq. Line : 8
Acq. Instrument : Agilent 1260 Location : Vial 8
Injection Date : 12/11/2015 10:26:31 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-17; F8-07; 1208; 46.89L



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External Standard Report

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Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.148	1	BB	20.96571	1.48143e-2	621.18464		Formaldehyde;50-00-0
6.199	1	VB	5.58462	1.89429e-2	211.57737		Acetaldehyde;75-07-0

Totals : 832.76201

==========

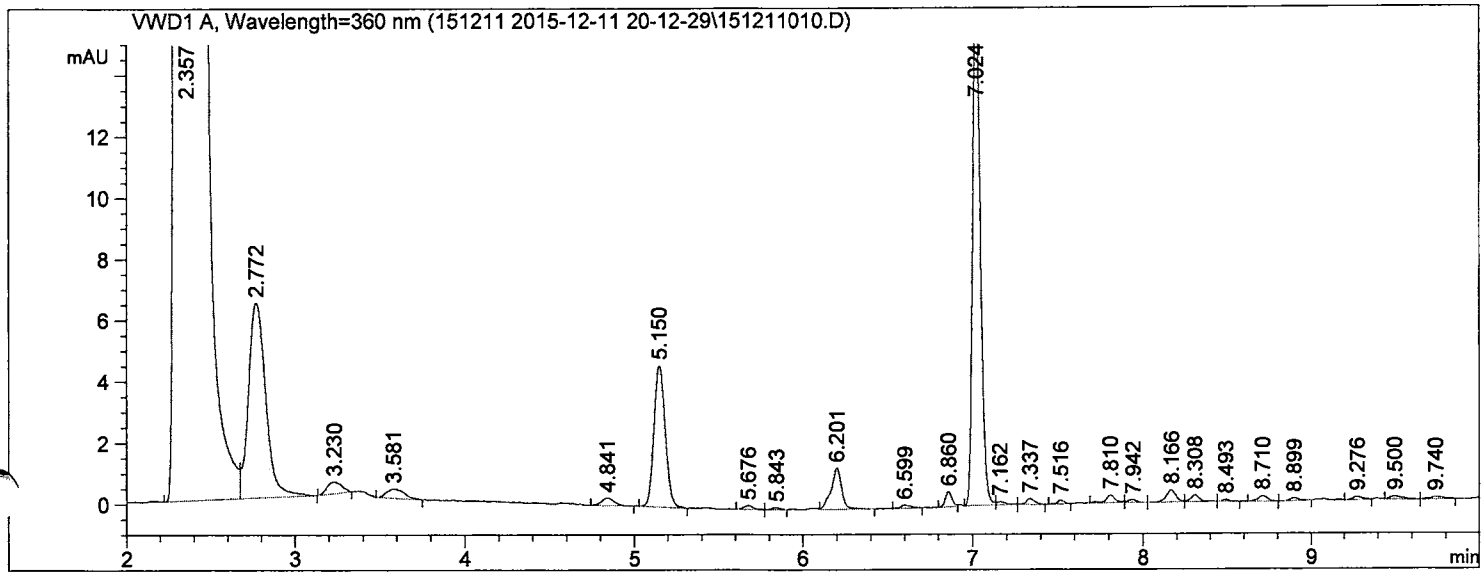
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211010.D
Sample Name: 061-028-18

==========

Acq. Operator : SYSTEM Seq. Line : 9
Acq. Instrument : Agilent 1260 Location : Vial 9
Injection Date : 12/11/2015 10:43:12 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-18; F8-08; 1208; 46.89L



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External Standard Report

==========

Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.150	1	BB	21.47746	1.48143e-2	636.34700		Formaldehyde;50-00-0
6.201	1	VB	5.87250	1.89429e-2	222.48400		Acetaldehyde;75-07-0

Totals : 858.83101

==========

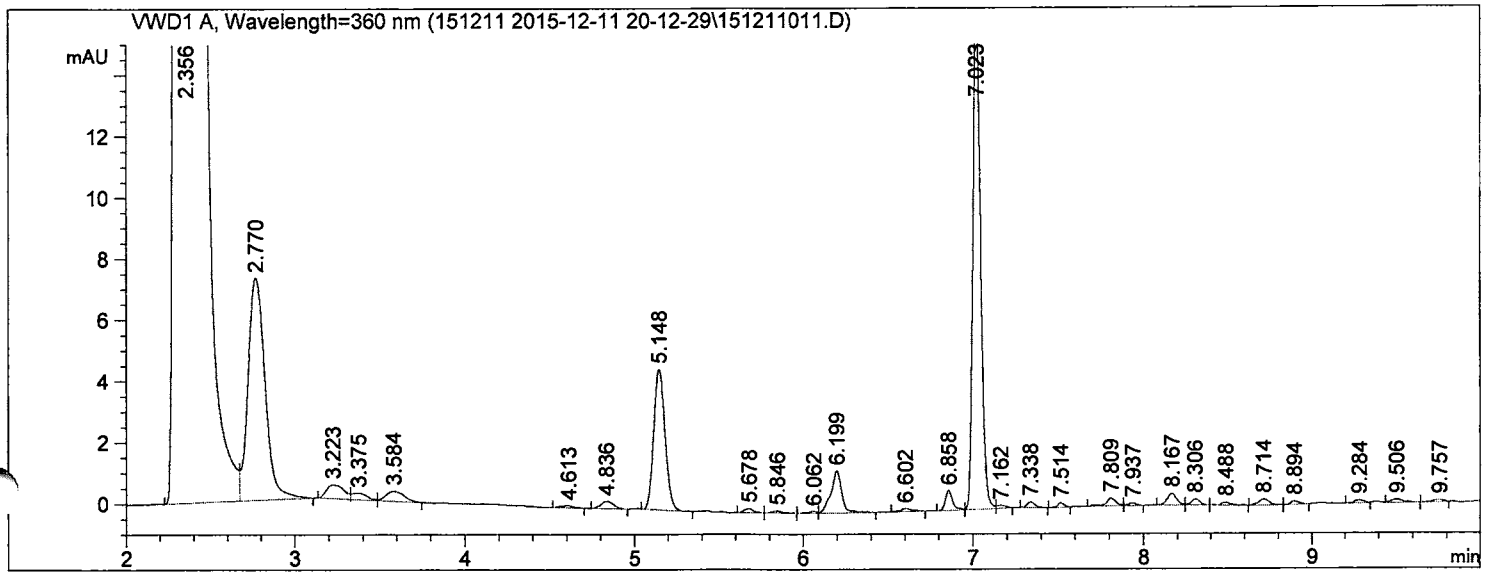
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211011.D
Sample Name: 061-028-19

==========

Acq. Operator : SYSTEM Seq. Line : 10
Acq. Instrument : Agilent 1260 Location : Vial 10
Injection Date : 12/11/2015 10:59:56 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-19; F8-09; 1208; 46.25L



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External Standard Report

==========

Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.148	1	BB	21.30455	1.48143e-2	631.22401		Formaldehyde;50-00-0
6.199	1	VB	6.12974	1.89429e-2	232.22982		Acetaldehyde;75-07-0

Totals : 863.45383

==========

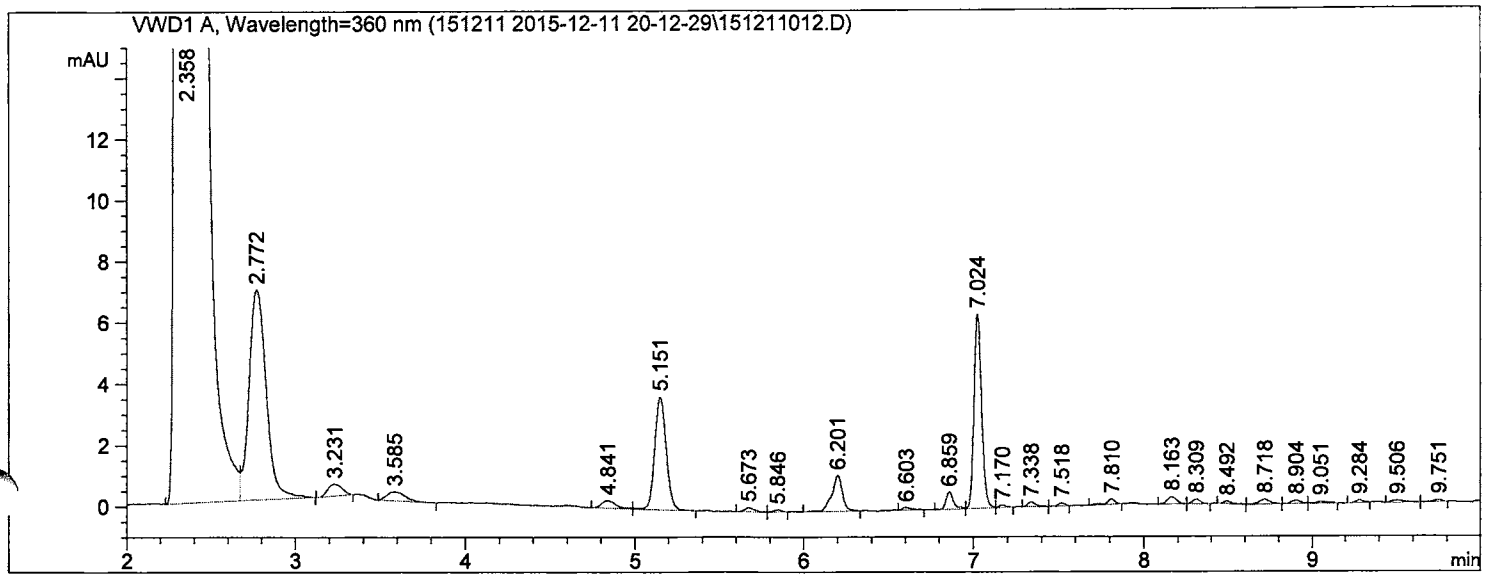
*** End of Report ***

Data File C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\151211012.D
Sample Name: 061-028-20

==========

Acq. Operator : SYSTEM Seq. Line : 11
Acq. Instrument : Agilent 1260 Location : Vial 11
Injection Date : 12/11/2015 11:16:38 PM Inj : 1
Inj Volume : 2.000 µl
Acq. Method : C:\CHEM32\1\DATA\151211 2015-12-11 20-12-29\FORMALDEHYDE.M
Last changed : 12/11/2015 8:12:29 PM by SYSTEM
Analysis Method : C:\CHEM32\1\METHODS\FORMALDEHYDE.M
Last changed : 12/9/2015 1:08:15 AM by SYSTEM
(modified after loading)
Method Info : 2.1*100; 2.7um poroshell 120 EC-C18 column;

Sample Info : US EPA 061-028-20; F8-10; 1208; 48.87L



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External Standard Report

==========

Sorted By : Retention Time
Calib. Data Modified : 12/9/2015 1:08:15 AM
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
5.151	1	VB	17.43271	1.48143e-2	516.50698		Formaldehyde;50-00-0
6.201	1	BV	5.18433	1.89429e-2	196.41210		Acetaldehyde;75-07-0

Totals : 712.91908

==========

*** End of Report ***

Analytical Information

Sample No.	Lab Track. No.	Method	Date Analyzed	Analyst	Data File
C8-01	061-028-01	TO-17	December 9, 2015	R. Gill	T151209_14
C8-02	061-028-02	TO-17	December 9, 2015	R. Gill	T151209_15
C8-03	061-028-03	TO-17	December 9, 2015	R. Gill	T151209_16
C8-04	061-028-04	TO-17	December 9, 2015	R. Gill	T151209_17
C8-05	061-028-05	TO-17	December 9, 2015	R. Gill	T151209_18
C8-06	061-028-06	TO-17	December 9, 2015	R. Gill	T151209_19
C8-07	061-028-07	TO-17	December 9, 2015	R. Gill	T151209_20
C8-08	061-028-08	TO-17	December 9, 2015	R. Gill	T151209_21
C8-09	061-028-09	TO-17	December 9, 2015	R. Gill	T151209_22
C8-10	061-028-10	TO-17	December 9, 2015	R. Gill	T151209_23

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Project Specific Information

Air samples for the analysis of caprolactam (CAS # 105-60-2) were received by the laboratory on December 9, 2015. There were ten multi-sorbent tubes for caprolactam analysis. The analytical results are reported in Table 1. 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.

The multisorbent air samples were analyzed for VOCs following U.S. EPA Compendium Method TO-17. Individual VOCs (iVOCs) were quantified using multi-point (4 or more points) with calibration curves prepared with pure standards, unless otherwise noted.

MDL and LOQ – Method detection limit (MDL) of 3.9 nanograms for caprolactam was determined from the analysis of three replicates of the low level standard spiked onto multisorbent 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 2015, the expanded uncertainty estimated for caprolactam was ±11%.

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

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

Sample No.	Sample Name	Volume (L)	Mass* (ng)	Conc ($\mu g/m^3$)
C8-01	10221	4.878	30.8	6.3
C8-02	10332	4.812	32.9	6.8
C8-03	10366	4.960	41.7	8.4
C8-04	10344	4.523	35.0	7.7
C8-05	10448	4.747	27.4	5.8
C8-06	10146	4.892	46.7	9.6
C8-07	10411	4.805	173	35.9
C8-08	10151	4.750	43.1	9.1
C8-09	10216	4.893	ND*	ND
C8-10	12368	5.192	43.7	8.4

*Nd = Not detected or below the method detection limit (MDL)

END OF REPORT

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e-mail: baalab@berkeleyanalytical.com

CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*		
Company:	US EPA	
Street Address:		
City/State/Zip Code:		
Country:	Contact (for reporting):	
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
Mi 51131	C8-01	12/8/15	51	4.878	10221	Caprolactam	
Mi 59912	C8-02		51	4.812	10332		
Mi 59923	C8-03		51	4.960	10366		
Mi 59929	C8-04		47	4.523	10344		
Mi 51157	C8-05		50	4.747	10448		
Mi 51159	C8-06		50	4.892	10146		
Mi 58947	C8-07		50	4.805	10411		
Mi 59924	C8-08		50	4.750	10151		
Mi 51176	C8-09		50	4.893	10216		
Mi 59935	C8-10		53	5.192	12368		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J Woodke			12/8/15	US EPA
	Jayn Tannous		12/9/15	BKA

SC061-028

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CHAIN-OF-CUSTODY RECORD for ANALYTICAL SERVICES

2009 Update

Client Information*			
Company:	US EPA		
Street Address:	75 Hawthorne St		
City/State/Zip Code:	San Francisco, CA 94105		
Country:		Contact (for reporting):	
Project/Job Name:	IAQ 75 Hawthorne		
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
	F8-01	12/8/15	51	47.71	10221	f	
	F8-02		51	47.59	10332		
	F8-03		51	47.24	10366		
	F8-04		47	43.13	10344		
	F8-05		50	46.71	10448		
	F8-06		50	46.33	10146		
	F8-07		50	45.38	10411		
	F8-08		50	46.89	10151		
	F8-09		50	46.25	10216		
	F8-10		53	48.87	12368		

Sample(s) Handling

Relinquished By	Received By	Signature	Date	Company
J. Woodlee			12/9/15	US EPA
	Kam Tannous		12/9/15	BAA

JC 061-028

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_14.D
Acq On : 10 Dec 2015 12:18 am
Operator : rgill
Sample : 061-028-01_US EPA; 4.878L
Misc : Mi51131;C8-01; 10221; 107ngBFB;10:1 split
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 10 15:47:58 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	803002	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	60001	30.78 ng	94
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D.	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D. d
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D. d
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:48:01 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_15.D
Acq On : 10 Dec 2015 1:05 am
Operator : rgill
Sample : 061-028-02_US EPA; 4.812L
Misc : Mi59952;C8-02; 10332; 107ngBFB;10:1 split
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 10 15:47:06 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	#-0.01
33) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	#-0.01
50) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	#-0.01
60) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	#-0.01
82) 1-Bromo-4-flourobenzen...	13.928	95	792698	107.00 ng	#-0.01

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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	63357	32.93 ng	93
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D. d
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:47:11 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_16.D
Acq On : 10 Dec 2015 1:51 am
Operator : rgill
Sample : 061-028-03_US EPA; 4.96L
Misc : Mi59923;C8-03; 10366; 107ngBFB;10:1 split
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 10 15:46:17 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	793963	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	80227	41.68 ng	95
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D. d
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:46:20 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_17.D
Acq On : 10 Dec 2015 2:37 am
Operator : rgill
Sample : 061-028-04_US EPA; 4.523L
Misc : Mi59929;C8-04; 10344; 107ngBFB;10:1 split
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 10 15:45:17 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	822558	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	69753	34.95 ng	94
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D.
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D.
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D.
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:45:21 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_18.D
Acq On : 10 Dec 2015 3:23 am
Operator : rgill
Sample : 061-028-05_US EPA; 4.747L
Misc : Mi51157;C8-05; 10448; 107ngBFB;10:1 split
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 10 15:44:24 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	860443	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	57177	27.36 ng	94
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D. d
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D.
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:44:28 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_19.D
Acq On : 10 Dec 2015 4:10 am
Operator : rgill
Sample : 061-028-06_US EPA; 4.892L
Misc : Mi51159;C8-06; 10146; 107ngBFB;10:1 split
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 10 15:40:10 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	799253	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	90475	46.73 ng	92
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D.
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D.
89)	DPGME isomer 3; 34590-...	0.000	0	N.D.
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D. d
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D. d
95)	Octanoic acid; 124-07-2	0.000	0	N.D.
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:40:14 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_20.D
Acq On : 10 Dec 2015 4:57 am
Operator : rgill
Sample : 061-028-07_US EPA; 4.805L
Misc : Mi58847;C8-07; 10411; 107ngBFB;10:1 split
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 10 15:39:09 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	820367	107.00 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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	336979	172.54 ng	97
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D. d
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D.
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D.
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D.
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:39:12 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_21.D
Acq On : 10 Dec 2015 5:43 am
Operator : rgill
Sample : 061-028-08_US EPA; 4.75L
Misc : Mi59924;C8-08; 10151; 107ngBFB;10:1 split
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Dec 10 15:38:16 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	0.00
22) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	#-0.01
33) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	#-0.01
50) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	#-0.01
60) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	#-0.01
82) 1-Bromo-4-flourobenzen...	13.929	95	836986	107.00 ng	#-0.01

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. d	
5) Tetrachloroethene; 127...	0.000		0	N.D.	
6) N,N-Dimethylformamide;...	0.000		0	N.D. d	
7) Ethylbenzene; 100-41-4	0.000		0	N.D. d	
8) Xylene {1}; 108-38-3	0.000		0	N.D. d	
9) Xylene {2}; 95-47-6	0.000		0	N.D. d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.	
11) Styrene; 100-42-5	0.000		0	N.D. d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D. d	
13) Octanal; 124-13-0	0.000		0	N.D. d	
14) Phenol; 108-95-2	0.000		0	N.D. d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D. d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.	
17) Nonanal; 124-19-6	0.000		0	N.D. d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D. d	
19) Naphthalene; 91-20-3	0.000		0	N.D. d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.	
21) Caprolactam; 105-60-2	23.695	113	87463	43.12 ng	96
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D. d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D. d	
25) Butyl acetate; 123-86-4	0.000		0	N.D. d	
26) Propylene glycol; 57-55-6	0.000		0	N.D. d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D. d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D. d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D. d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D. d	
31) Dodecanol; 112-53-8	0.000		0	N.D. d	
32) Butylated hydroxytolue...	0.000		0	N.D.	
34) n-Pentane; 109-66-0	0.000		0	N.D. d	
35) Ethanol; 64-17-5	0.000		0	N.D. d	
36) 2-Propanone(acetone); ...	0.000		0	N.D. d	
37) 2-Propanol; 67-63-0	0.000		0	N.D. d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.	
39) Dichloromethane; 75-09-2	0.000		0	N.D. d	
40) n-Hexane; 110-54-3	0.000		0	N.D. d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D. d	
42) 2-Butanone; 78-93-3	0.000		0	N.D. d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D. d	
44) Cyclohexane; 110-82-7	0.000		0	N.D. d	

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D. d
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D. d
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D. d
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D.
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D.
72)	1-Undecene; 821-95-4	0.000	0	N.D. d
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D. d
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D. d
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D. d
89)	DPGME isomer 3; 34590-...	0.000	0	N.D. d
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D.
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

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

Desorb_Merged_2015.M Thu Dec 10 15:38:20 2015

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\2015\Dec\
Data File : T151209_23.D
Acq On : 10 Dec 2015 7:16 am
Operator : rgill
Sample : 061-028-10_US EPA; 5.192L
Misc : Mi59935;C8-10; 12368; 107ngBFB;10:1 split
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 10 15:36:23 2015
Quant Method : \\Ba-fs1\RESOURCES\GCMSFILE\METHODS\5975 Methods\Y2K15\Desorb_Merged_2015.M
Quant Title : AB95168
QLast Update : Wed Jul 29 18:05:39 2015
Response via : Initial Calibration

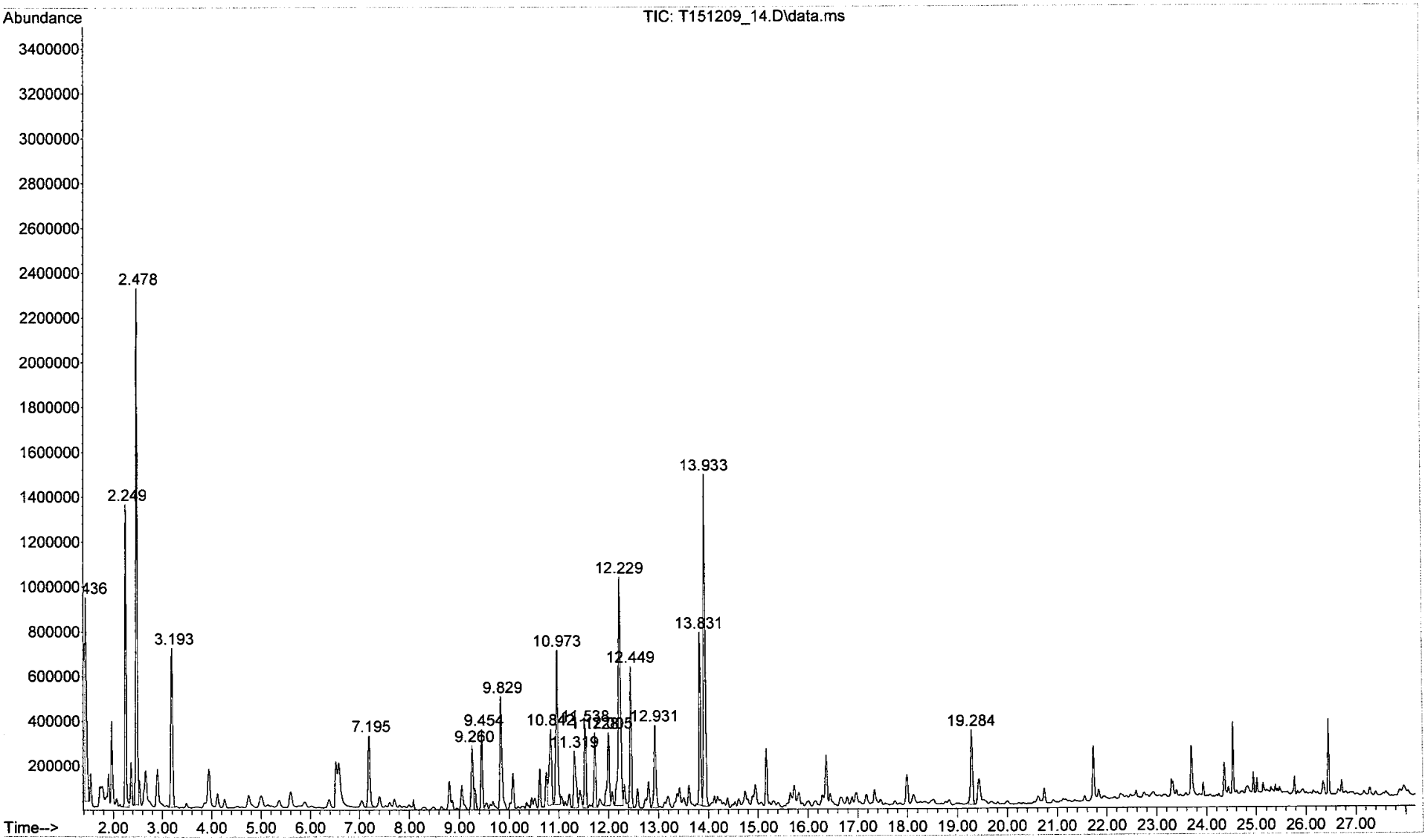
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	ng	0.00
22) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	ng	# 0.00
33) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	ng	# 0.00
50) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	ng	# 0.00
60) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	ng	# 0.00
82) 1-Bromo-4-flourobenzen...	13.933	95	839161	107.00	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.	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.	d	
8) Xylene {1}; 108-38-3	0.000		0	N.D.	d	
9) Xylene {2}; 95-47-6	0.000		0	N.D.	d	
10) Xylene - TOTAL; 1330-20-7	0.000		0	N.D.		
11) Styrene; 100-42-5	0.000		0	N.D.	d	
12) 1,2,4-Trimethylbenzene...	0.000		0	N.D.	d	
13) Octanal; 124-13-0	0.000		0	N.D.	d	
14) Phenol; 108-95-2	0.000		0	N.D.	d	
15) 1-Phenylethanone; 98-86-2	0.000		0	N.D.	d	
16) 1-Methyl-2-pyrrolidino...	0.000		0	N.D.		
17) Nonanal; 124-19-6	0.000		0	N.D.	d	
18) 2-Ethylhexanoic acid; ...	0.000		0	N.D.	d	
19) Naphthalene; 91-20-3	0.000		0	N.D.	d	
20) 4-Phenylcyclohexene; 4...	0.000		0	N.D.		
21) Caprolactam; 105-60-2	23.690	113	88829	43.68	ng	96
23) 1-Methoxy-2-propanol; ...	0.000		0	N.D.	d	
24) Ethylene glycol; 107-21-1	0.000		0	N.D.	d	
25) Butyl acetate; 123-86-4	0.000		0	N.D.	d	
26) Propylene glycol; 57-55-6	0.000		0	N.D.	d	
27) 2-Butoxyethanol; 111-76-2	0.000		0	N.D.	d	
28) Hexanoic acid; 142-62-1	0.000		0	N.D.	d	
29) 2-Ethyl-1-hexanol; 104...	0.000		0	N.D.	d	
30) 2-(2-Butoxyethoxy) eth...	0.000		0	N.D.	d	
31) Dodecanol; 112-53-8	0.000		0	N.D.	d	
32) Butylated hydroxytolue...	0.000		0	N.D.		
34) n-Pentane; 109-66-0	0.000		0	N.D.	d	
35) Ethanol; 64-17-5	0.000		0	N.D.	d	
36) 2-Propanone(acetone); ...	0.000		0	N.D.	d	
37) 2-Propanol; 67-63-0	0.000		0	N.D.	d	
38) Carbon disulfide; 75-15-0	0.000		0	N.D.		
39) Dichloromethane; 75-09-2	0.000		0	N.D.	d	
40) n-Hexane; 110-54-3	0.000		0	N.D.	d	
41) Vinyl acetate; 108-05-4	0.000		0	N.D.		
42) 2-Butanone; 78-93-3	0.000		0	N.D.	d	
43) Ethyl acetate; 141-78-6	0.000		0	N.D.	d	
44) Cyclohexane; 110-82-7	0.000		0	N.D.		

45)	Benzene; 71-43-2	0.000	0	N.D. d
46)	2-Methyl-1-propanol; 7...	0.000	0	N.D. d
47)	1-Butanol; 71-36-3	0.000	0	N.D. d
48)	1,4-Dioxane; 123-91-1	0.000	0	N.D.
49)	Epichlorohydrin; 106-89-8	0.000	0	N.D. d
51)	n-Butanal;123-72-8	0.000	0	N.D.
52)	Pentanal; 110-62-3	0.000	0	N.D. d
53)	4-Methyl-2-pentanone; ...	0.000	0	N.D. d
54)	Hexanal; 66-25-1	0.000	0	N.D. d
55)	2-Furancarboxaldehyde;...	0.000	0	N.D.
56)	4-Heptanone; 123-19-3	0.000	0	N.D. d
57)	2-Heptanone; 110-43-0	0.000	0	N.D. d
58)	Heptanal; 111-71-7	0.000	0	N.D.
59)	Benzaldehyde; 100-52-7	0.000	0	N.D. d
61)	Octane; 111-65-9	0.000	0	N.D. d
62)	n-Nonane; 111-84-2	0.000	0	N.D. d
63)	alpha-Pinene; 7785-70-8	0.000	0	N.D. d
64)	Cyclohexanone; 108-94-1	0.000	0	N.D.
65)	Camphene; 5794-03-6	0.000	0	N.D. d
66)	beta-Pinene; 19902-08-0	0.000	0	N.D.
67)	n-Decane; 124-18-5	0.000	0	N.D. d
68)	.alpha.-Methylstyrene;...	0.000	0	N.D.
69)	3-Carene; 13466-78-9	0.000	0	N.D.
70)	d-Limonene; 5989-27-5	0.000	0	N.D. d
71)	p-Cymene; 99-87-6	0.000	0	N.D. d
72)	1-Undecene; 821-95-4	0.000	0	N.D.
73)	n-Undecane; 1120-21-4	0.000	0	N.D. d
74)	n-Dodecane; 112-40-3	0.000	0	N.D. d
75)	Dodecamethylpentasilox...	0.000	0	N.D.
76)	n-Tridecane; 629-50-5	0.000	0	N.D.
77)	Benzothiazole; 95-16-9	0.000	0	N.D.
78)	n-Tetradecane; 629-59-4	0.000	0	N.D. d
79)	n-Pentadecane; 629-62-9	0.000	0	N.D. d
80)	n-Hexadecane; 544-76-3	0.000	0	N.D. d
81)	n-Heptadecane; 629-78-7	0.000	0	N.D. d
83)	Propyl acetate; 109-60-4	0.000	0	N.D.
84)	Isobutyl acetate;110-19-0	0.000	0	N.D. d
85)	PGMEA; 108-65-6	0.000	0	N.D. d
86)	1,3-Dichloro-2-propano...	0.000	0	N.D.
87)	DPGME isomer 1; 34590-...	0.000	0	N.D.
88)	DPGME isomer 2; 34590-...	0.000	0	N.D.
89)	DPGME isomer 3; 34590-...	0.000	0	N.D.
90)	1,1'-Oxybis-2-propanol...	0.000	0	N.D.
91)	Benzenemethanol; 100-51-6	0.000	0	N.D.
92)	Propylene carbonate; 1...	0.000	0	N.D.
93)	2,2'-Oxybis(1-propanol...	0.000	0	N.D.
94)	2-(2-Hydroxypropoxy)1-...	0.000	0	N.D.
95)	Octanoic acid; 124-07-2	0.000	0	N.D. d
96)	alpha-Terpineol; 10482...	0.000	0	N.D.
97)	Texanol 1; 25265-77-4-IS1	0.000	0	N.D. d
98)	Texanol 3; 25265-77-4-IS3	0.000	0	N.D. d
99)	1-Dodecanamine, N,N-di...	0.000	0	N.D.
100)	3-Methyl-1,1'-biphenyl...	0.000	0	N.D.
101)	TXIB; 6846-50-0	0.000	0	N.D. d

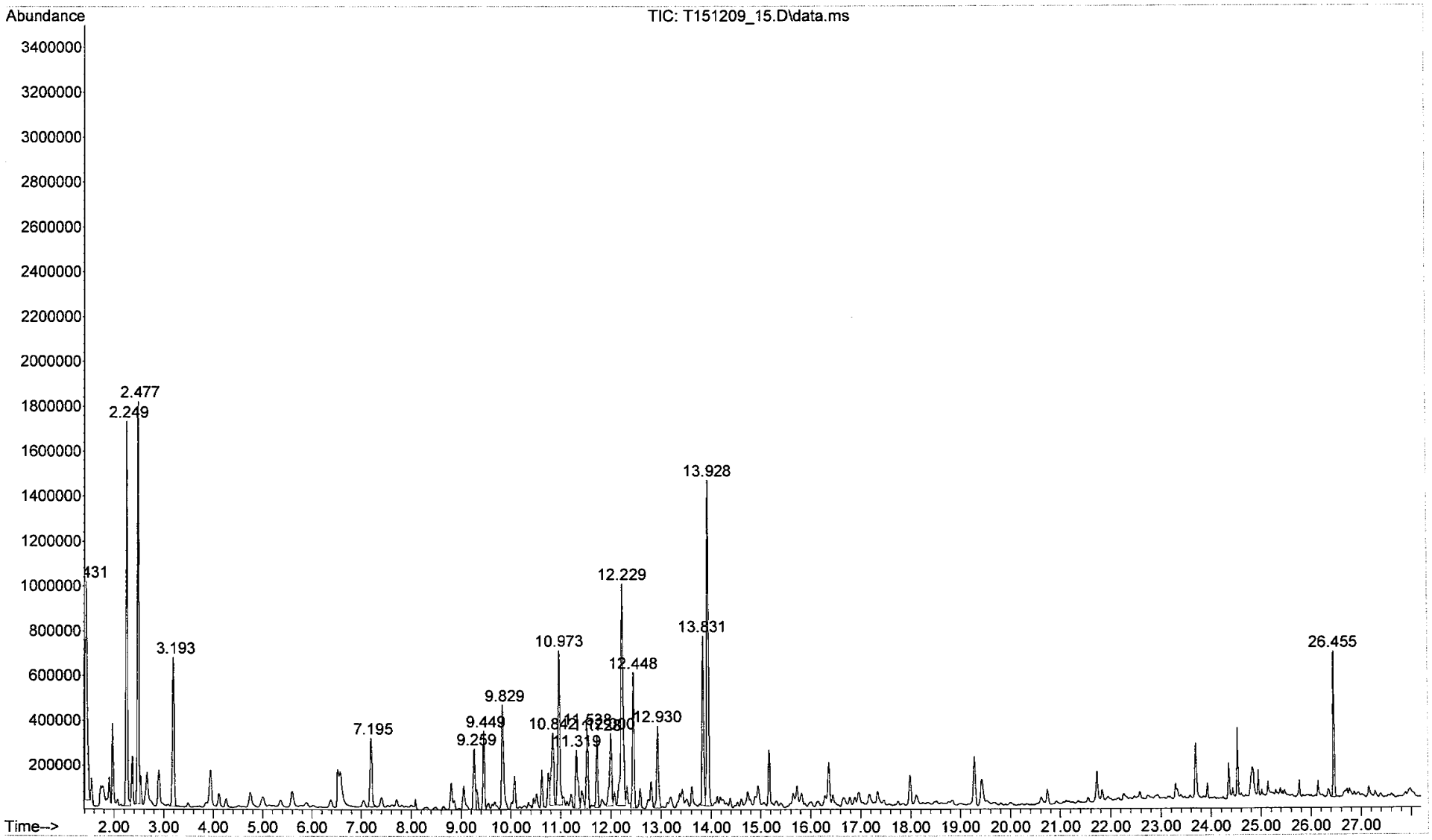
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Desorb_Merged_2015.M Thu Dec 10 15:36:27 2015

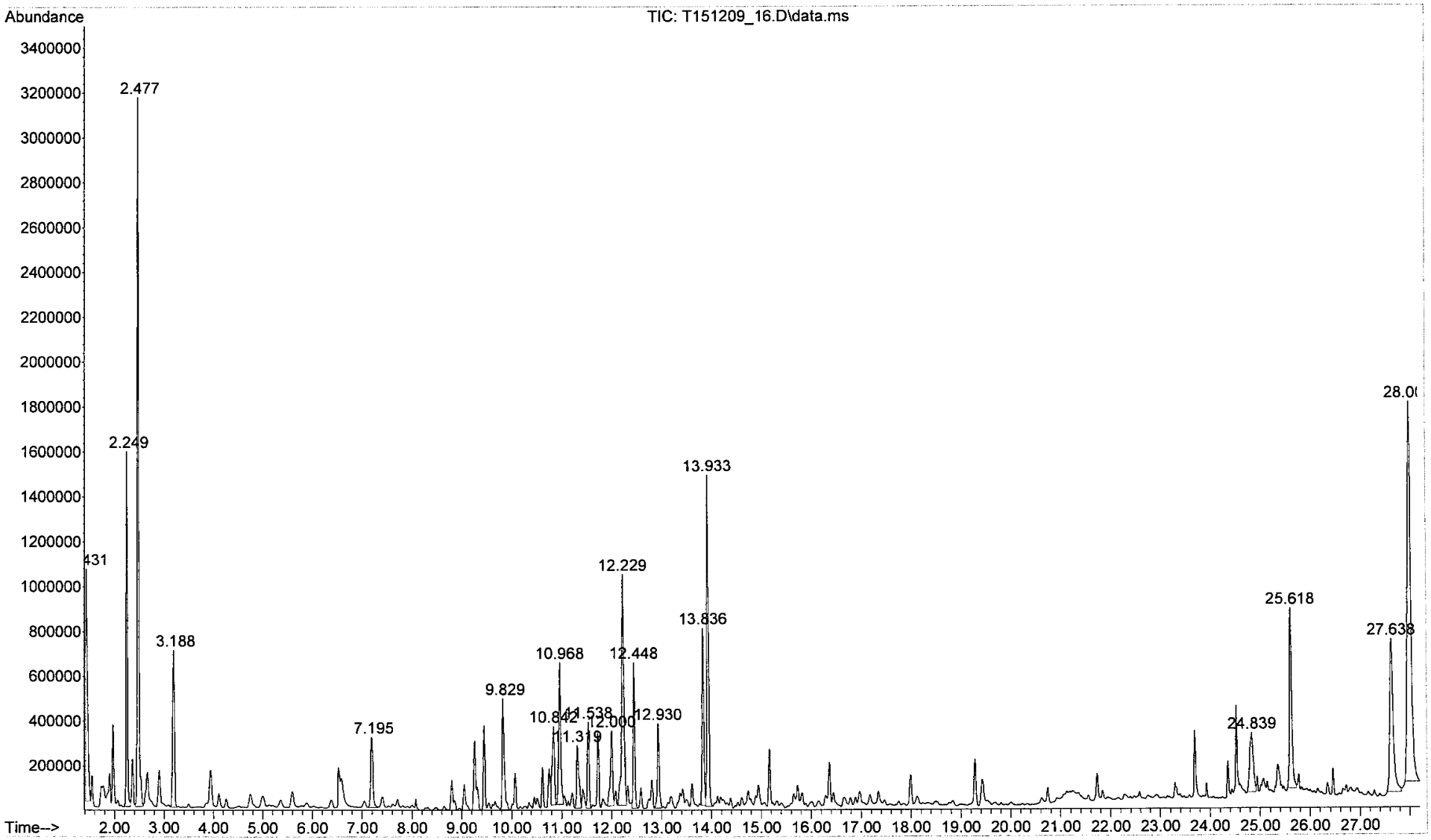
File :T:\5975 Data Files\Y2K15\Dec\T151209_14.D
Operator : rgill
Acquired : 10 Dec 2015 12:18 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-01_US EPA; 4.878L
Misc Info : Mi51131;C8-01; 10221; 107ngBFB;10:1 split
Vial Number: 26



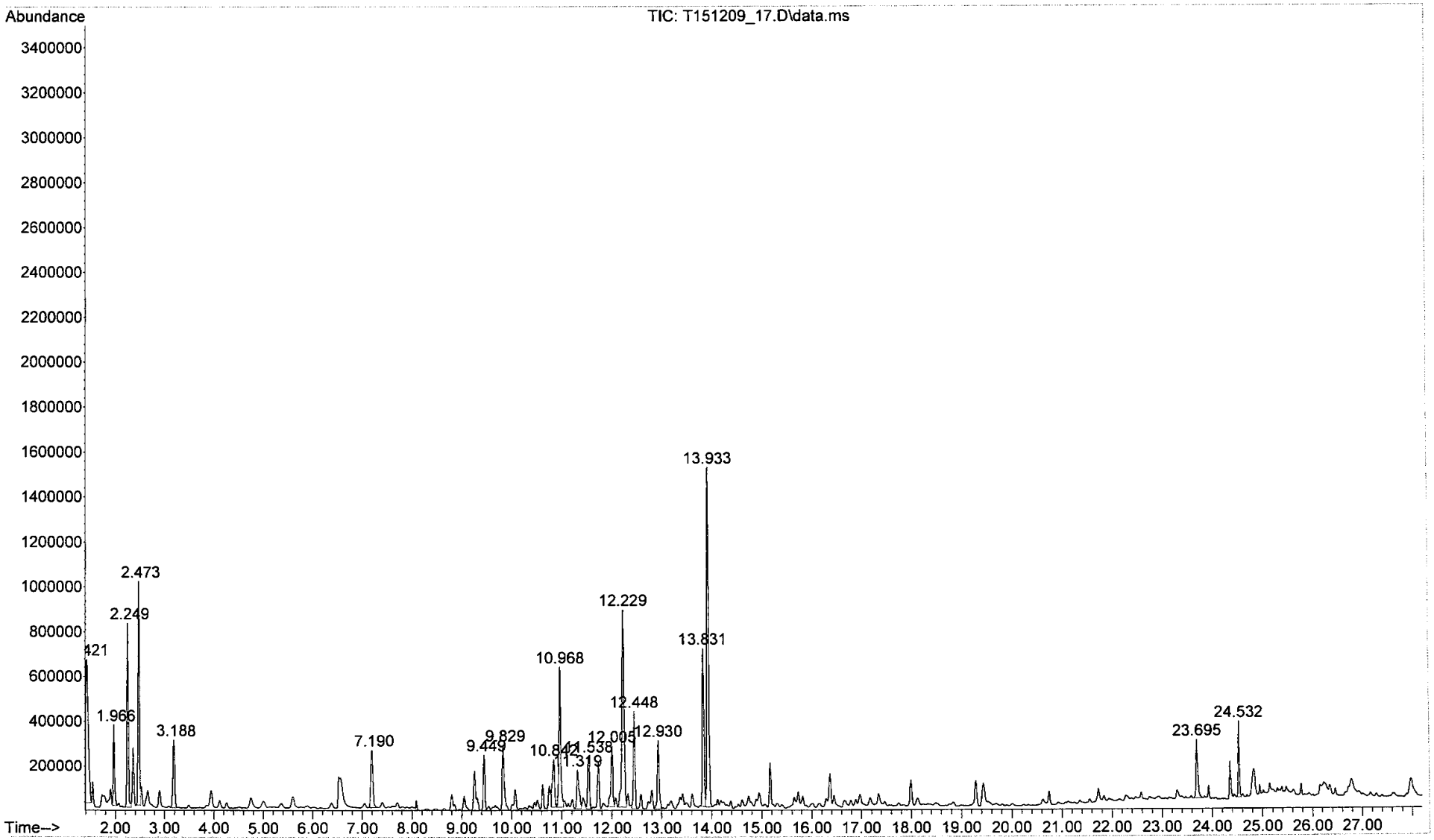
File :T:\5975 Data Files\Y2K15\Dec\T151209_15.D
Operator : rgill
Acquired : 10 Dec 2015 1:05 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-02_US EPA; 4.812L
Misc Info : Mi59952;C8-02; 10332; 107ngBFB;10:1 split
Vial Number: 27



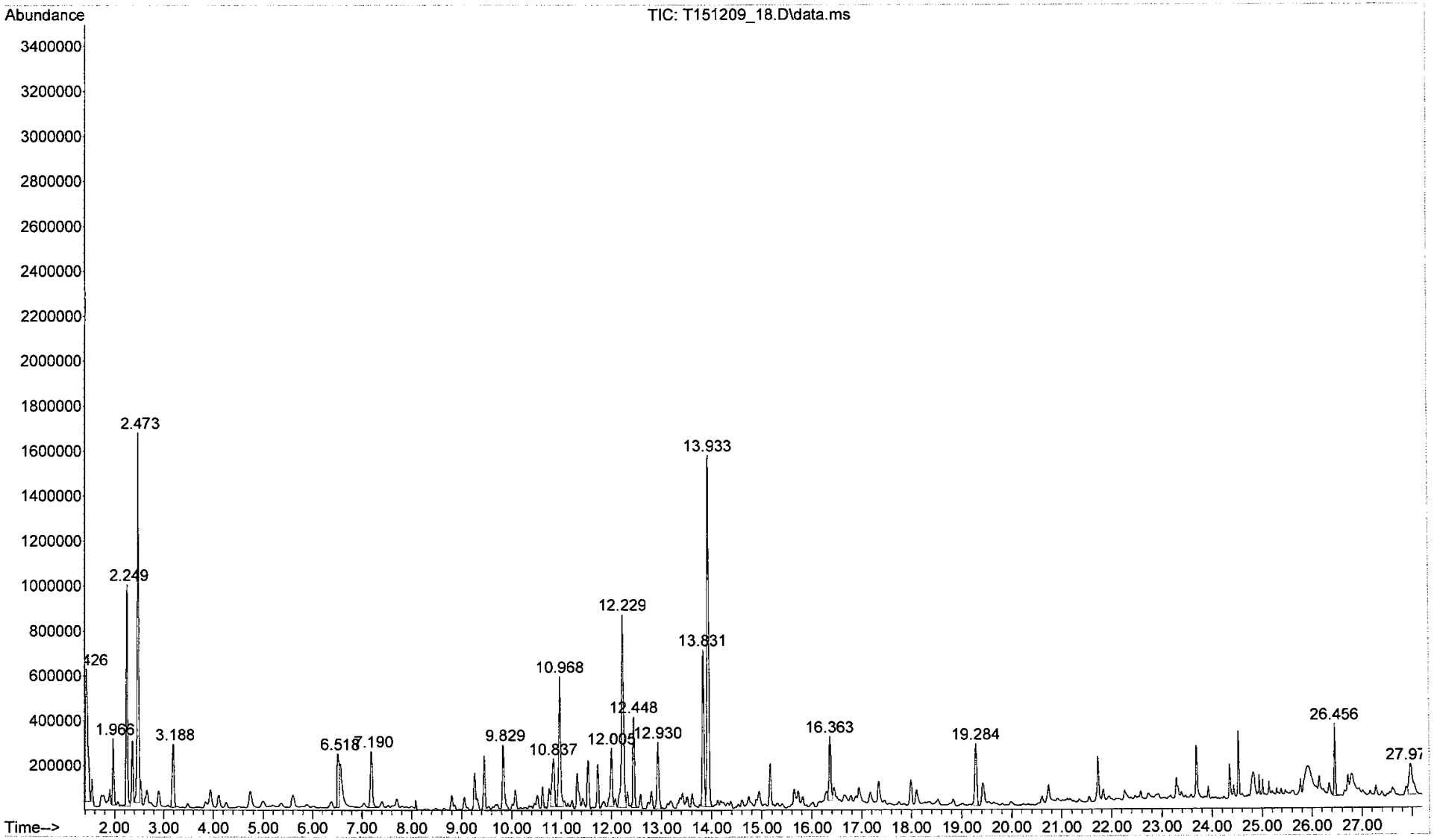
File :T:\5975 Data Files\Y2K15\Dec\T151209_16.D
Operator : rgill
Acquired : 10 Dec 2015 1:51 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-03_US EPA; 4.96L
Misc Info : Mi59923;C8-03; 10366; 107ngBFB;10:1 split
Vial Number: 28



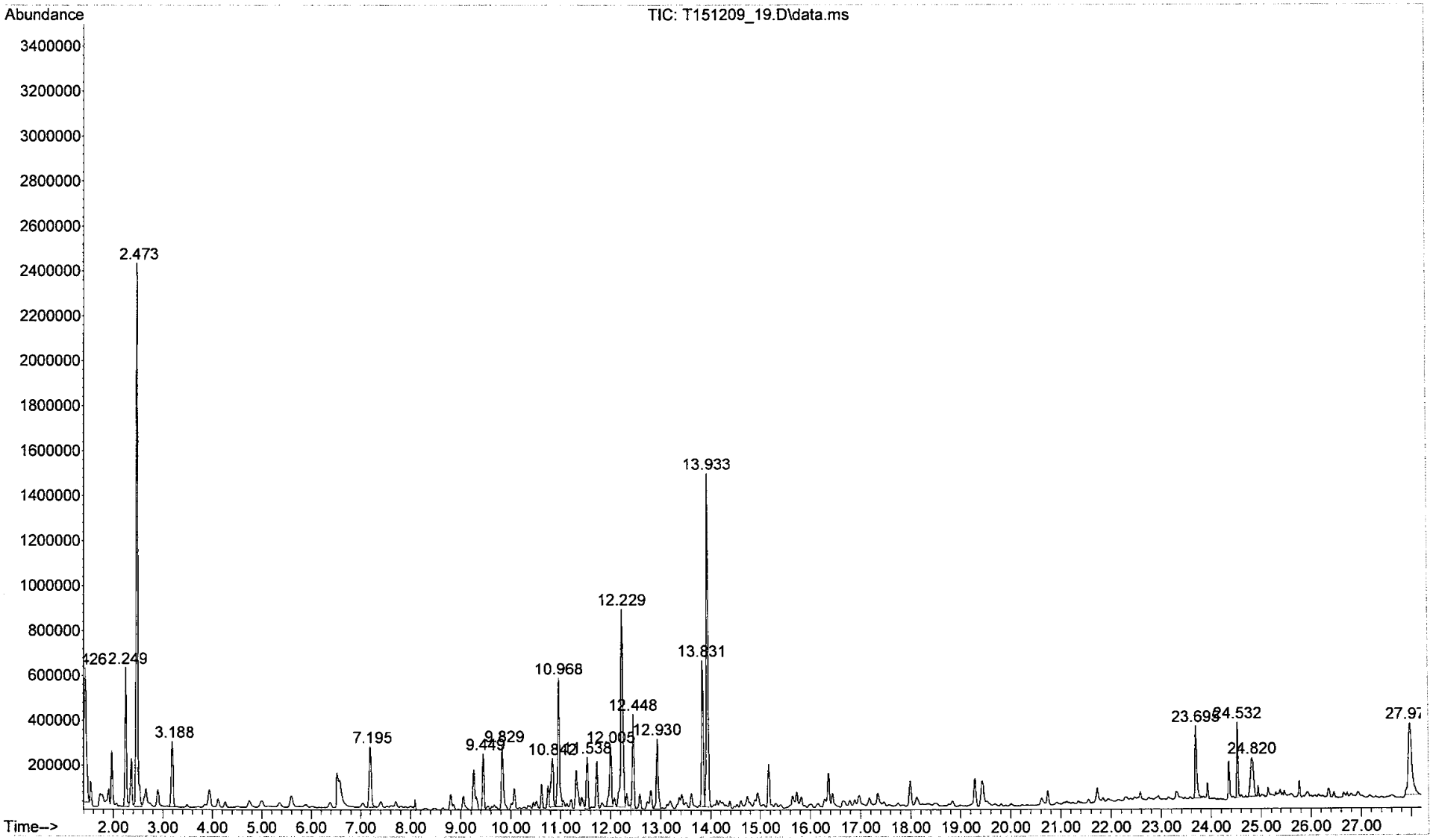
File :T:\5975 Data Files\Y2K15\Dec\T151209_17.D
Operator : rgill
Acquired : 10 Dec 2015 2:37 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-04_US EPA; 4.523L
Misc Info : Mi59929;C8-04; 10344; 107ngBFB;10:1 split
Vial Number: 29



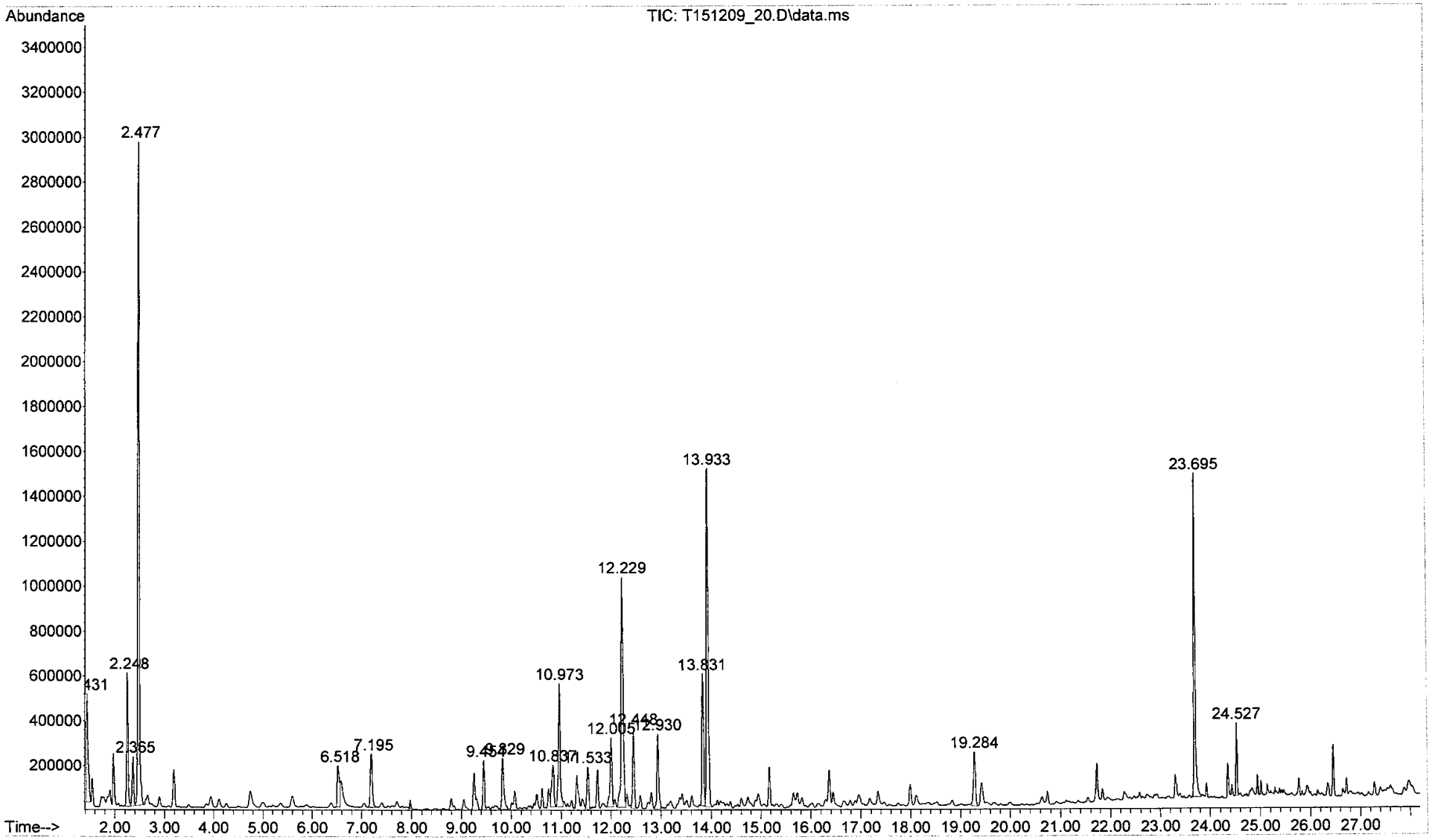
File :T:\5975 Data Files\Y2K15\Dec\T151209_18.D
Operator : rgill
Acquired : 10 Dec 2015 3:23 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-05_US EPA; 4.747L
Misc Info : Mi51157;C8-05; 10448; 107ngBFB;10:1 split
Vial Number: 30



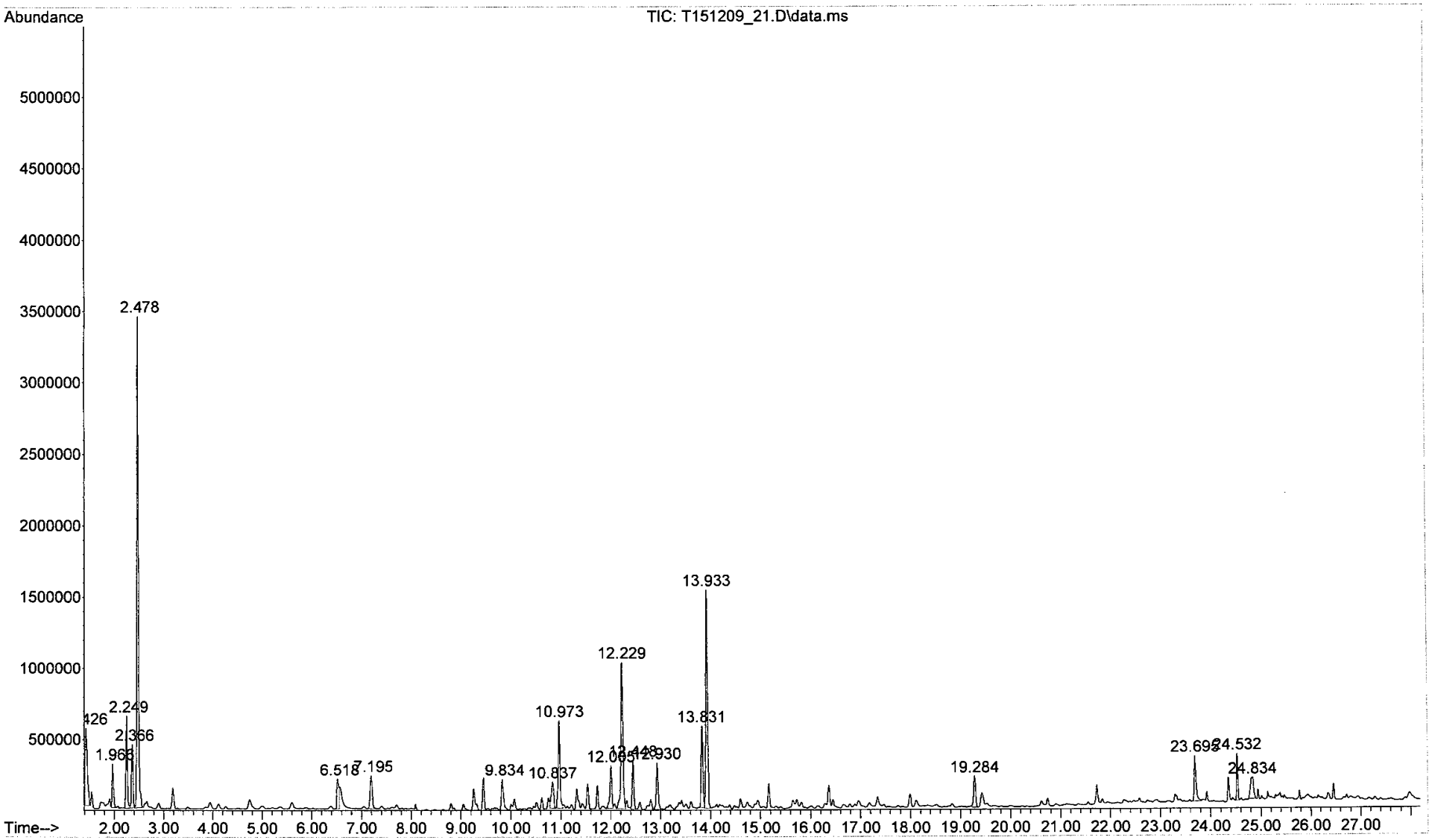
File :T:\5975 Data Files\Y2K15\Dec\T151209_19.D
Operator : rgill
Acquired : 10 Dec 2015 4:10 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-06_US EPA; 4.892L
Misc Info : Mi51159;C8-06; 10146; 107ngBFB;10:1 split
Vial Number: 31



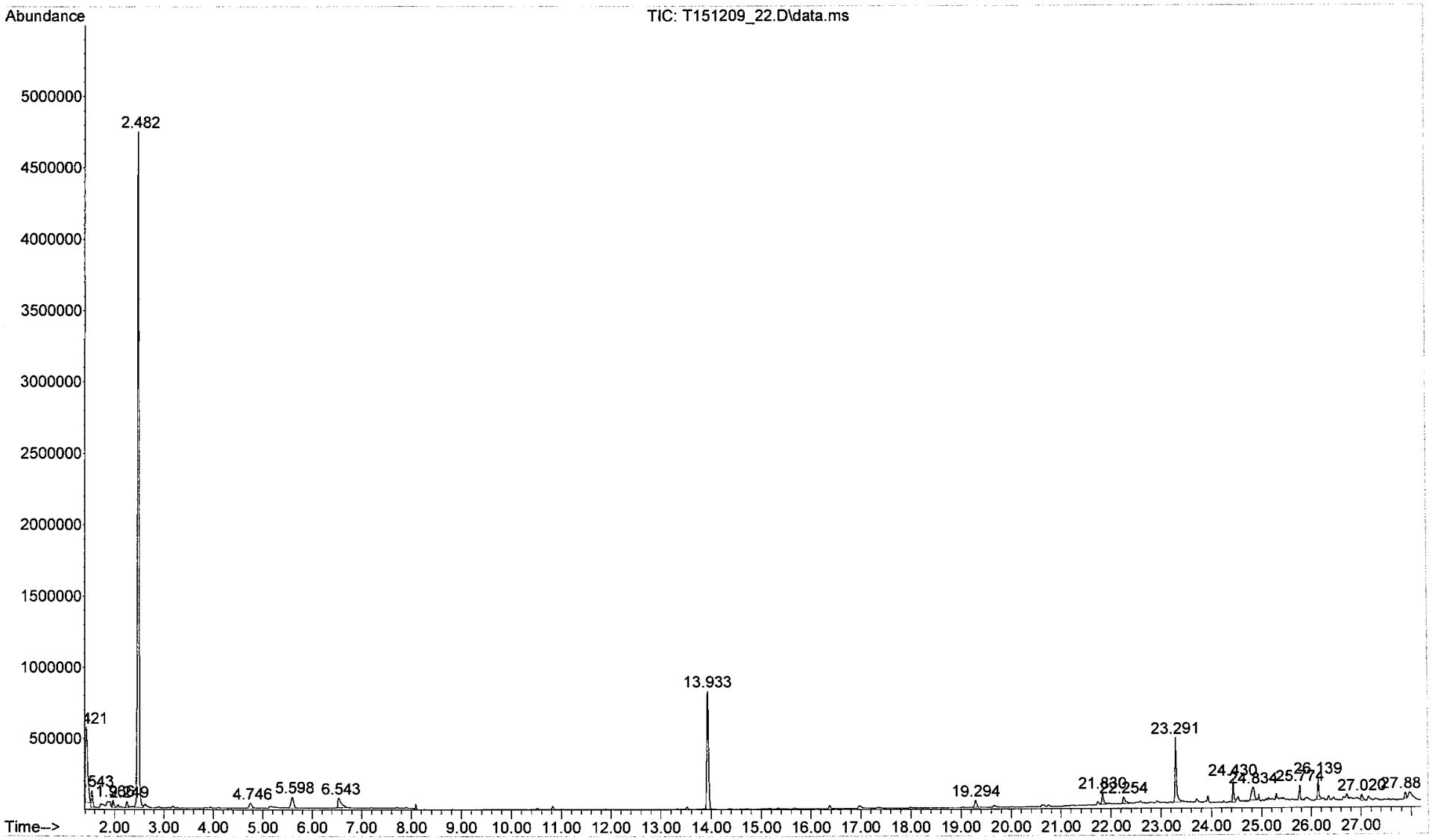
File :T:\5975 Data Files\Y2K15\Dec\T151209_20.D
Operator : rgill
Acquired : 10 Dec 2015 4:57 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-07_US EPA; 4.805L
Misc Info : Mi58847;C8-07; 10411; 107ngBFB;10:1 split
Vial Number: 32



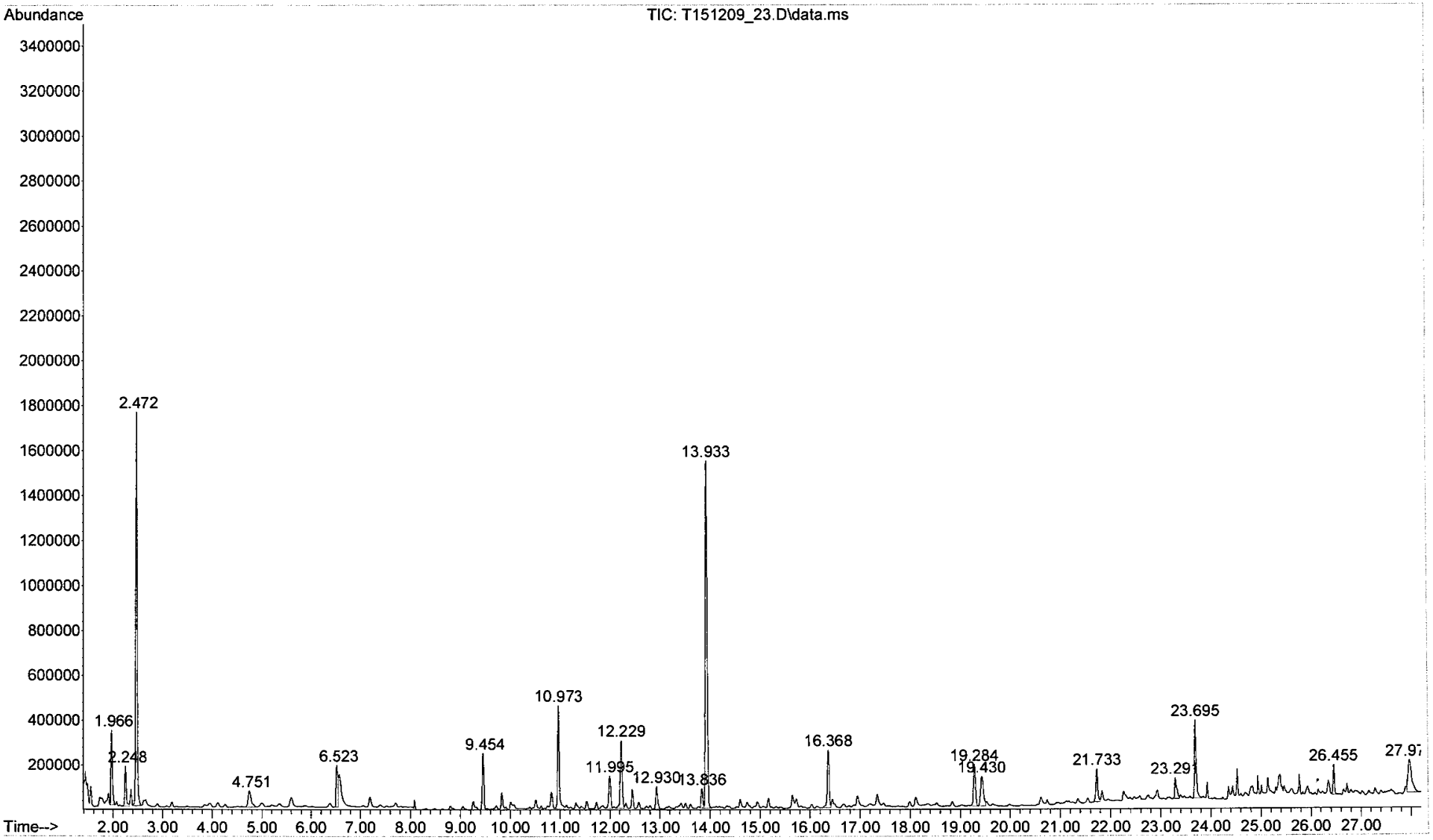
File :T:\5975 Data Files\Y2K15\Dec\T151209_21.D
Operator : rgill
Acquired : 10 Dec 2015 5:43 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-08_US EPA; 4.75L
Misc Info : Mi59924;C8-08; 10151; 107ngBFB;10:1 split
Vial Number: 33



File :T:\5975 Data Files\Y2K15\Dec\T151209_22.D
Operator : rgill
Acquired : 10 Dec 2015 6:29 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-09_US EPA; 4.893L
Misc Info : Mi51176;C8-09; 10216; 107ngBFB;10:1 split
Vial Number: 34



File :T:\5975 Data Files\Y2K15\Dec\T151209_23.D
Operator : rgill
Acquired : 10 Dec 2015 7:16 am using AcqMethod 130812VOC.M
Instrument : GCMS_7890
Sample Name: 061-028-10_US EPA; 5.192L
Misc Info : Mi59935;C8-10; 12368; 107ngBFB;10:1 split
Vial Number: 35



Results

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

Sample No.	Sample Name	Volume (L)	Mass* (ng)	Conc ($\mu g/m^3$)
C8-01	10221	4.878	30.8	6.3
C8-02	10332	4.812	32.9	6.8
C8-03	10366	4.960	41.7	8.4
C8-04	10344	4.523	35.0	7.7
C8-05	10448	4.747	27.4	5.8
C8-06	10146	4.892	46.7	9.6
C8-07	10411	4.805	173	35.9
C8-08	10151	4.750	43.1	9.1
C8-09	10216	4.893	ND*	ND
C8-10	12368	5.192	43.7	8.4

*Nd = Not detected or below the method detection limit (MDL)

END OF REPORT

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The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-01_US EPA; 4.878L

12/10/2015, Rgill

	BFB(ng)	RF			
TIC: T151209_14.D\data.ms	107		0.97	4.9	
			Mass	**Conc.**	
RT	Area	RelResp	ng	ug/m3	CAS#	Compound
13.9	3576758.0	1.000	110.3	22.6		bfb-lstd
23.7	567290.0	0.159	30.8	6.3		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-02_US EPA; 4.812L

12/10/2015, Rgill

	BFB(ng)	RF		
TIC: T151209_15.D\data.ms	107	0.97	4.8	

RT	Area	RelResp	Mass ng	Conc. ug/m3	CAS#	Compound
13.9	3498755.0	1.000	110.3	22.9		bfb-Istd
23.7	650848.0	0.186	32.9	6.8		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-03_US EPA; 4.96L

12/10/2015, Rgill

	BFB(ng)	RF			
TIC: T151209_16.D\data.ms	107		0.97	5.0	
			Mass	**Conc.**	
RT	Area	RelResp	ng	ug/m3	CAS#	Compound
13.9	3513131.0	1.000	110.3	22.2		bfb-Istd
23.7	776481.0	0.221	41.7	8.4		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-04_US EPA; 4.523L

12/10/2015, Rgill

	BFB(ng)	RF			
TIC: T151209_17.D\data.ms	107		0.97	4.5	
			Mass	**Conc.**	
RT	Area	RelResp	ng	ug/m3	CAS#	Compound
13.9	3606175.0	1.000	110.3	24.4		bfb-Istd
23.7	703842.0	0.195	35.0	7.7		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-05_US EPA; 4.747L

12/10/2015, Rgill

	BFB(ng)	RF		
TIC: T151209_18.D\data.ms	107	0.97	4.7	

RT	Area	RelResp	Mass ng	Conc. ug/m3	CAS#	Compound
13.9	3766049.0	1.000	110.3	23.2		bfb-lstd
23.7	517095.0	0.137	27.4	5.8		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-06_US EPA; 4.892L

12/10/2015, Rgill

	BFB(ng)	RF			
TIC: T151209_19.D\data.ms	107		0.97	4.9	
			Mass	**Conc.**	
RT	Area	RelResp	ng	ug/m3	CAS#	Compound
13.9	3509559.0	1.000	110.3	22.5		bfb-Istd
23.7	856738.0	0.244	46.7	9.6		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-07_US EPA; 4.805L

12/10/2015, Rgill

	BFB(ng)	RF		
TIC: T151209_20.D\data.ms	107	0.97	4.8	

RT	Area	RelResp	Mass ng	Conc. ug/m3	CAS#	Compound
13.9	3588473.0	1.000	110.3	23.0		bfb-Istd
23.7	3014080.0	0.840	172.5	35.9		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-08_US EPA; 4.75L

12/10/2015, Rgill

	BFB(ng)	RF			
TIC: T151209_21.D\data.ms	107		0.97	4.8	
			Mass	**Conc.**	
RT	Area	RelResp	ng	ug/m3	CAS#	Compound
13.9	3652519.0	1.000	110.3	23.2		bfb-Istd
23.7	827661.0	0.227	43.1	9.1		Caprolactam

The mass for the UC compounds are calculated based on TIC using Toluene response factor.
TIC Unconfirmed
061-028-10_US EPA; 5.192L

12/10/2015, Rgill

	BFB(ng)	RF		
TIC: T151209_23.D\data.ms	107	0.97	5.2	

RT	Area	RelResp	Mass ng	Conc. ug/m3	CAS#	Compound
13.9	3625696.0	1.000	110.3	21.2		bfb-Istd
23.7	818295.0	0.226	43.7	8.4		Caprolactam

HCHO\JC061-028_EPA.XLS
Created 12/11/15, rgill

US EPA
Formaldehyde Analysis
Sequence 151211
Method FORMALDEHYDE.M

File	Sample ID	Rt min	Meas Mass ng	Volume L	Conc ng/L	Conc ppbv
151211\151211003.D	F8-01	5.149	700	47.71	14.7	12.0
151211\151211004.D	F8-02	5.147	655	47.59	13.8	11.2
151211\151211005.D	F8-03	5.147	656	47.24	13.9	11.3
151211\151211006.D	F8-04	5.150	622	43.13	14.4	11.8
151211\151211007.D	F8-05	5.147	641	46.71	13.7	11.2
151211\151211008.D	F8-06	5.148	632	46.33	13.6	11.1
151211\151211009.D	F8-07	5.148	621	46.89	13.2	10.8
151211\151211010.D	F8-08	5.150	636	46.89	13.6	11.1
151211\151211011.D	F8-09	5.148	631	46.25	13.6	11.1
151211\151211012.D	F8-10	5.151	517	48.87	10.6	8.6

061-028-01 4.878 litres
US EPA
Mi51131 collected: 12/8/2015
1; 10221

061-028-02 4.812 litres
US EPA
Mi59952 collected: 12/8/2015
C8-02; 10332

061-028-03 4.96 litres
US EPA
Mi59923 collected: 12/8/2015
C8-03; 10366

061-028-04 4.523 litres
US EPA
Mi59929 collected: 12/8/2015
C8-04; 10344

061-028-05 4.747 litres
US EPA
Mi51157 collected: 12/8/2015
C8-05;10448

061-028-06 4.892 litres
US EPA
Mi51159 collected: 12/8/2015
C8-06; 10146

061-028-07 4.805 litres
US EPA
Mi58847 collected: 12/8/2015
C8-07; 10411

061-028-08 4.75 litres
US EPA
Mi59924 collected: 12/8/2015
C8-08; 10151

061-028-09 4.893 litres
US EPA
Mi51176 collected: 12/8/2015
C8-09; 10216

061-028-10 5.192 litres
US EPA
Mi59935 collected: 12/8/2015
C8-10; 12368

061-028-11 47.71 litres
US EPA
F8-01 collected: 12/8/2015
10221

061-028-12 47.59 litres
US EPA
F8-02 collected: 12/8/2015
10332

061-028-13 47.24 litres
US EPA
F8-03 collected: 12/8/2015
10366

061-028-14 43.13 litres
US EPA
F8-04 collected: 12/8/2015
10344

061-028-15 46.71 litres
US EPA
F8-05 collected: 12/8/2015
10448

061-028-16 46.33 litres
US EPA
F8-06 collected: 12/8/2015
10146

061-028-17 46.89 litres
US EPA
F8-07 collected: 12/8/2015
10411

061-028-18 46.89 litres
US EPA
F8-08 collected: 12/8/2015
10151

061-028-19 46.25 litres
US EPA
F8-09 collected: 12/8/2015
10216

061-028-20 48.87 litres
US EPA
F8-10 collected: 12/8/2015
12368

061-028-01 4.878 litres
US EPA
Mi51131 collected: 12/8/2015
; 10221

061-028-02 4.812 litres
US EPA
Mi59952 collected: 12/8/2015
C8-02; 10332

061-028-03 4.96 litres
US EPA
Mi59923 collected: 12/8/2015
C8-03; 10366

061-028-04 4.523 litres
US EPA
Mi59929 collected: 12/8/2015
C8-04; 10344

061-028-05 4.747 litres
US EPA
Mi51157 collected: 12/8/2015
C8-05;10448

061-028-06 4.892 litres
US EPA
Mi51159 collected: 12/8/2015
C8-06; 10146

061-028-07 4.805 litres
US EPA
Mi58847 collected: 12/8/2015
C8-07; 10411

061-028-08 4.75 litres
US EPA
Mi59924 collected: 12/8/2015
C8-08; 10151

061-028-09 4.893 litres
US EPA
Mi51176 collected: 12/8/2015
C8-09; 10216

061-028-10 5.192 litres
US EPA
Mi59935 collected: 12/8/2015
C8-10; 12368

061-028-11 47.71 litres
US EPA
F8-01 collected: 12/8/2015
10221

061-028-12 47.59 litres
US EPA
F8-02 collected: 12/8/2015
10332

061-028-13 47.24 litres
US EPA
F8-03 collected: 12/8/2015
10366

061-028-14 43.13 litres
US EPA
F8-04 collected: 12/8/2015
10344

061-028-15 46.71 litres
US EPA
F8-05 collected: 12/8/2015
10448

061-028-16 46.33 litres
US EPA
F8-06 collected: 12/8/2015
10146

061-028-17 46.89 litres
US EPA
F8-07 collected: 12/8/2015
10411

061-028-18 46.89 litres
US EPA
F8-08 collected: 12/8/2015
10151

061-028-19 46.25 litres
US EPA
F8-09 collected: 12/8/2015
10216

061-028-20 48.87 litres
US EPA
F8-10 collected: 12/8/2015
12368

Telephone Message

Date: 12/11/2015 **Time:** 12:45 PM

- (●) Called
- ( ) Returned Your Call
- ( ) Left Voice Mail
- ( ) Please Call
- ( ) Will Call Back
- ( ) Wants To See You

For: Al / Raja
From: Carl Warren
Company: EPA
Phone: 707 208-4538

Carl is Jeff Woodlee's boss. He is interested In the results for the samples dropped off Wed. He would like the Caprolactam results by 2 pm today (Friday) and needs the HCHO results by 9 am Monday. His email is warren.carl@epa.gov

Received By:

Jeff (415) 9723740