ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1519114

Client: FSL Associates, Inc

ATTN: Bruce Hoskins

Project Name: CUMMINGS BEVERLY

Project Number: CUMMINGS BEVERLY

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RDMS Doc ID 110958

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DUPLICATE (L1519114-07) Analyzed: 08/13/15 18:55 483
S-157-J (L1519114-09) Analyzed: 08/13/15 19:27 519
S-157-J1 (L1519114-10) Analyzed: 08/13/15 19:59 554
S-157-J2 (L1519114-11) Analyzed: 08/13/15 20:31 589
SG-2 (L1519114-02) Analyzed: 08/13/15 22:40 624
SG-4 (L1519114-04) Analyzed: 08/13/15 23:44 660
SG-1 (L1519114-01) Analyzed: 08/14/15 10:19 703
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1.0 Injected on: 07/10/15 15:48 865
5.0 Injected on: 07/10/15 16:19 871
10 Injected on: 07/10/15 16:53 879
20 Injected on: 07/10/15 17:25 889
50.0 Injected on: 07/10/15 17:56 897
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bfb tune - Inst. AIRPIANO1 08/13/15 12:07 933
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S-157-J (L1519114-09) Analyzed: 08/13/15 19:27 978
S-157-J1 (L1519114-10) Analyzed: 08/13/15 19:59 993
S-157-J2 (L1519114-11) Analyzed: 08/13/15 20:31 1010
SG-2 (L1519114-02) Analyzed: 08/13/15 22:40 1026
SG-4 (L1519114-04) Analyzed: 08/13/15 23:44 1032
SG-1 (L1519114-01) Analyzed: 08/14/15 10:19 1045
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Sample Delivery Group Information

Sample Delivery Group Form

Laboratory Job number: L1519114
Project Manager: Chris Anderson **Review Date:** 08/17/2015
Project Number: CUMMINGS BEVERLY
Project Name: CUMMINGS BEVERLY **Received:** 08/11/2015 11:47
Client Account: FSL Associates **Received by:** KB/BB

Samples Delivered by: COURIER **Call Tracker #**
Bill Of Laden N/A **Trackingnum**
Coc Present Present

Container Status Intact **Sample IDs**

All Containers Accounted For? Yes

Were Extra Samples Received? Yes
UNUSED CAN#214, 531, 654, 582

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt N/A **Are samples Properly Preserved?** Yes
Initial pH **preserved in house with** **Final pH**
Other Issues
Chlorine Check N/A

Are VOA/VPH Vials Present? No
Aqueous: Do Vials Contain Head Space? N/A
Soils: Is MeOHCovering the Soil? N/A
Reagent H2O Preserved vials Frozen on N/A
Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
N/A	Absent	No	No	-	No	No

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 18 2015, 03:30 pm

Login Number: L1519114
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 11AUG15 Due Date: 18AUG15

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-01	SG-1	11	S0	07AUG15 07:47	1-Can-2.7

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 A2-DPKG-FULL Package Due Date: 08/18/15

A2-DPKG-FULL,APH-10,CAN-RENT,FLOW-RENT,MCP,TO15-LL,TO15-SIM

| L1519114-02 | SG-2 | 11 | S0 | 07AUG15 07:10 | 1-Can-2.7 |

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1519114-03 | SG-3 | 11 | S0 | 07AUG15 07:29 | 1-Can-2.7 |

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

CAN-RENT,CANCELLED,CLEAN-FEE,FLOW-RENT

| L1519114-04 | SG-4 | 11 | S0 | 07AUG15 08:14 | 1-Can-2.7 |

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

| L1519114-05 | METHOD BLANK | 10 | S0 | 07AUG15 00:00 | 1-Can-6 |

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 18 2015, 03:30 pm

Login Number: L1519114
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 11AUG15 Due Date: 18AUG15

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-06	METHOD BLANK AA	10	S0	07AUG15 00:00	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-07	DUPLICATE	10	S0	08AUG15 10:47	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-08	OUTDOOR CONTROL	10	S0	08AUG15 10:52	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-09	S-157-J	10	S0	08AUG15 10:47	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-10	S-157-J1	10	S0	08AUG15 10:46	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

Sample #	Client ID	Mat	PR	Collected	Container
L1519114-11	S-157-J2	10	S0	08AUG15 10:45	1-Can-6

Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene, NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Aug 18 2015, 03:30 pm

Login Number: L1519114
Account: FSL FSL AssociatesProject: CUMMINGS BEVERLY
Received: 11AUG15 Due Date: 18AUG15

Sample #	Client ID	Mat	PR	Collected	Container

APH-10,CAN-RENT,FLOW-RENT,TO15-LL,TO15-SIM

L1519114-12 UNUSED CAN#214 11 S0 1-Can-2.7
Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

CAN-RENT,CLEAN-FEE,FLOW-RENT

L1519114-13 UNUSED CAN#531 11 S0 1-Can-2.7
Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

CAN-RENT,CLEAN-FEE,FLOW-RENT

L1519114-14 UNUSED CAN#654 10 S0 1-Can-6
Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

CAN-RENT,CLEAN-FEE,FLOW-RENT

L1519114-15 UNUSED CAN#582 10 S0 1-Can-6
Report to MDL-"J" qual Full list TO-15 SIM, + additional compounds by TO-15 including Naphthalene NOT and MCP JOB. REPORT LISTS BUILT. Same list as reported for:L1319529 Package Due Date: 08/18/15

CAN-RENT,CLEAN-FEE,FLOW-RENT

Logged By: Chris Anderson

Chain of Custody

AIR ANALYSIS

PAGE 1 OF 2

CHAIN OF CUSTODY

ALPHA ANALYTICAL

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 8/11/15

ALPHA Job #: L519114

Client Information

Client: FSL Associates
Address: 358 Chestnut Hill Avenue
Boston, MA 02135
Phone: 617-232-0001
Fax: 617-232-7800
Email: bhoskins@fslassociates.com

Project Information

Project Name: Cummings Beverly
Project Location: 181 Elliott Street
Project #:
Project Manager: Bruce Hoskins, LSP
ALPHA Quote #:

Turn-Around-Time

☒ Standard ☐ Rush (only confirmed if pre-approved)

Date Due: 08/18/2015 Time:

Report/Data Deliverables Information

☐ FAX ☒ EMAIL
☐ ADEx ☒ Add'l Deliverables Hard copy in mail

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

☐ These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments:

SIM analysis for TO-15: Where SIM not possible for analytes, use regular TO-15. Possibility of presence of VOCs and petroleum hydrocarbons.

Analysis

All Columns Below Must Be Filled Out

Alpha Lab Use Only	Sample ID	Collection Date	Collection Start Time	Collection End Time	Collection Initial Vac	Collection Final Vac	Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Specific Comments (i.e. PID)
19114.01	SG-1	08/07/15	7:07 am	7:47 am	-30.09	-0.41	SV		2.7L	2024	7248243	☐	☒	☒	☒	☐	☐	☐	
02	SG-2	08/07/15	6:38 am	7:10 am	-29.63	-2.54	SV		2.7L	180	7339502	☐	☒	☒	☒	☐	☐	☐	
03	SG-3	08/07/15	6:52 am	7:29 am	-29.42	0.16	SV		2.7L	403	7316948	☐	☒	☒	☒	☐	☐	☐	
04	SG-4	08/07/15	7:41 am	8:14 am	-29.7	-2.59	SV		2.7L	1727	7339901	☐	☒	☒	☒	☐	☐	☐	
05	Method Blank	08/07/15	N/A	N/A	N/A	N/A	SV		2.7L	384	N/A	☐	☒	☒	☒	☐	☐	☐	
06	Method Blank AA	08/07/15	N/A	N/A	N/A	N/A	AA		6.0L	1836	N/A	☐	☒	☒	☒	☐	☐	☐	
											Container Type	-	-	-	-	-	-	-	

SAMPLE MATRIX CODES:

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Relinquished By	Date/Time	Received By:	Date/Time
	8/11 11:47	MC	8/11/15 11:47
MC	8/11/15 18:00		8/11/15 1800
	8/12/15 0400		8/12/15 0400

Please print clearly & legibly and completely. Samples can not be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Form 101-02 (I)
Revised 29-Dec-09

AIR ANALYSIS

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 8/11/15

ALPHA Job #: L1519114

Client Information

Client: FSL Associates
Address: 358 Chestnut Hill Avenue
Boston, MA 02135
Phone: 617-232-0001
Fax: 617-232-7800
Email: bhoskins@fslassociates.com

Project Information

Project Name: Cummings Beverly
Project Location: 181 Elliott Street
Project #:
Project Manager: Bruce Hoskins, LSP
ALPHA Quote #:

Turn-Around-Time

☒ Standard ☐ Rush (only confirmed if pre-approved)

Date Due: 08/18/2015 Time:

Report/Data Deliverables Information

☐ FAX ☒ EMAIL
☐ ADEx ☒ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

☐ These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Analysis

All Columns Below Must Be Filled Out

Alpha Lab Use Only	Sample ID	Collection Date	Collection Start Time	Collection End Time	Collection Initial Vac	Collection Final Vac	Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Specific Comments (i.e. PID)
1911 4. 07	Duplicate	8/7/15-8/8/15	8:05 am 8/7/15	10:47 am 8/8/15	-30.43	-4.70	AA		6.0L	1898	7321922	☐	☒	☒	☒	☐	☐	☐	
08	Outdoor Control	08/07/15	10:17 am 8/7/15	10:52 am 8/8/15	-29.91	-23.64	AA		6.0L	2062	H/L56506	☐	☒	☒	☒	☐	☐	☐	
09	S-157-J	8/7/15-8/8/15	8:04 am 8/7/15	10:47 am 8/8/15	-30.03	-4.86	AA		6.0L	1616	7321921	☐	☒	☒	☒	☐	☐	☐	
10	S-157-J.1	8/7/15-8/8/15	7:59 am 8/7/15	10:46 am 8/8/15	-29.98	-7.61	AA		6.0L	1778	7249908	☐	☒	☒	☒	☐	☐	☐	
11	S-157-J.2	8/7/15-8/8/15	7:56 am 8/7/15	10:45 am 8/8/15	-30.03	-5.01	AA		6.0L	1680	7313580	☐	☒	☒	☒	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
											Container Type	-	-	-	-	-	-	-	

*SAMPLE MATRIX CODES:

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Relinquished By	Date/Time	Received By:	Date/Time
	8/11 11:47	MC	8/11/15 11:47
MC	8/11/15 18:00		8/11/15 18:00
	8/12/15 0400		8/12/15 0400

Please print clearly & legibly and completely. Samples can not be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Form 101-02 (I)
Revised 29-Dec-09

Organics

Air Petroleum Hydrocarbons Analysis

Initial Calibration

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Method File : APH150711.M
Title : APH Analysis
Last Update : Sat Jul 11 22:47:17 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142728.D 0.4 =R142729.D 2.0 =R142730.D 10 =R142731.D 20 =R142732.D 50 =R142733.D
100 =R142734.D

		Compound	0.2	0.4	2.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------								
2)	T	1,3-butadiene	0.369	0.344	0.404	0.330	0.315	0.321	0.313	0.3423	9.72
3)		isopentane	2.641	2.187	2.316	1.816	1.740	1.748	1.652	2.0144	18.46
4)	T	methyl tert butyl ether	0.793	0.784	0.914	0.752	0.740	0.758	0.733	0.7820	7.95
5)		hexane	3.939	3.177	3.333	2.650	2.506	2.515	2.395	2.9308	19.49
6)		cyclohexane	2.561	2.126	2.772	2.234	2.157	2.232	2.130	2.3160	10.84
7)	I	1,4-difluorobenzene	----------ISTD----------								
8)		2,3-dimethylpentane	0.509	0.540	0.636	0.528	0.501	0.526	0.492	0.5332	9.05
9)	T	benzene	0.240	0.253	0.295	0.238	0.232	0.239	0.233	0.2471	8.97
10)		heptane	0.503	0.535	0.615	0.512	0.496	0.507	0.475	0.5205	8.75
11)	H	C5-C8 Aliphatics Total	0.615	0.565	0.648	0.525	0.504	0.518	0.485	0.5515	10.95
12)	I	chlorobenzene-D5	----------ISTD----------								
13)		toluene	1.558	1.434	1.746	1.426	1.367	1.378	1.311	1.4599	10.12
14)		n-octane	3.120	2.915	3.609	2.922	2.826	2.847	2.595	2.9764	10.73
15)		2,3-dimethylheptane	3.389	3.256	3.992	3.291	3.142	3.052	2.631	3.2504	12.60
16)	T	ethyl benzene	1.732	1.627	1.946	1.617	1.569	1.571	1.454	1.6451	9.52
17)	T	m+p-xylene	1.347	1.250	1.528	1.257	1.220	1.246	1.162	1.2872	9.29
18)		n-nonane	3.237	3.168	3.934	3.194	3.040	2.931	2.568	3.1532	13.10
19)	T	o-xylene	1.457	1.293	1.556	1.288	1.246	1.254	1.155	1.3213	10.41
20)		decane	3.129	3.248	4.080	3.453	3.320	3.113	2.560	3.2720	13.90
21)		butylcyclohexane	3.925	3.890	4.503	3.763	3.538	3.630	2.914	3.7375	12.80
22)		n-undecane	2.753	3.004	4.048	3.621	3.471	3.173	2.607	3.2398	15.68
23)	T	naphthalene	1.483	1.715	1.896	1.873	1.982	1.912	1.770	1.8044	9.30
24)		n-dodecane	1.241	1.977	2.934	3.422	3.442	3.211	2.688	2.7021	30.36
25)	H	C9-C12 Aliphatics Total	2.874	3.048	3.883	3.465	3.339	3.186	2.663	3.2082	12.56
27)		C9-C10 Aromatics Total	0.605	0.589	0.694	0.580	0.564	0.552	0.474	0.5797	11.34
28)	s	bromochloromethane (TIC)	8.532	8.332	8.218	8.041	7.777	7.599	7.444	7.9919	5.01
29)	s	1,4-difluorobenzene (TIC)	1.140	1.121	1.127	1.127	1.127	1.125	1.124	1.1272	0.55
30)	s	chlorobenzene-D5 (TIC)	1.463	1.438	1.451	1.448	1.459	1.462	1.441	1.4518	0.69

Method Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Method File : APH150711.M
Title : APH Analysis
Last Update : Sat Jul 11 22:47:17 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142728.D 0.4 =R142729.D 2.0 =R142730.D 10 =R142731.D 20 =R142732.D 50 =R142733.D
100 =R142734.D

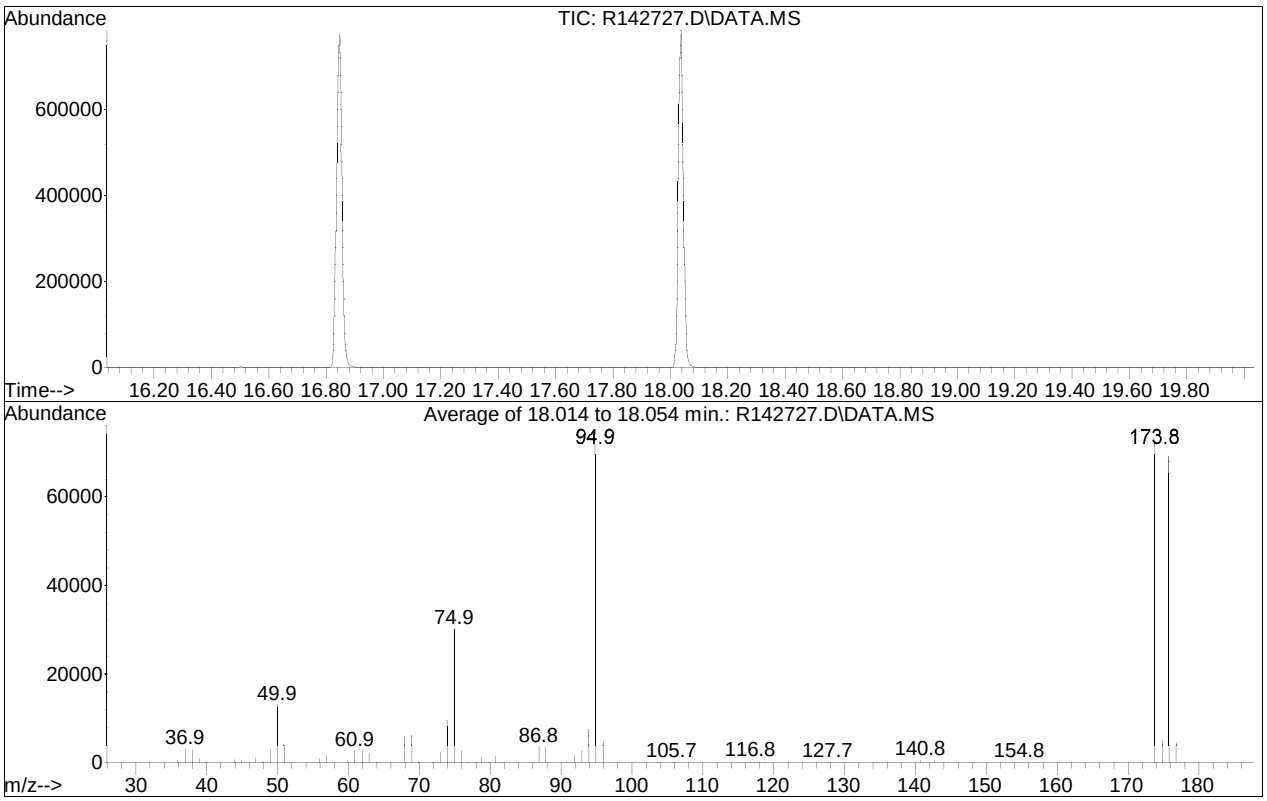
	Compound	0.2	0.4	2.0	10	20	50	100	Avg	%RSD
31) s	1,2-dichloroethane-D4 (TIC)	3.866	3.735	3.745	3.766	3.665	3.674	3.780	3.7471	1.82
32) s	toluene-D8 (TIC)	1.163	1.132	1.190	1.200	1.201	1.266	1.209	1.1945	3.48
33) s	bromofluorobenzene (TIC)	1.433	1.392	1.418	1.416	1.409	1.398	1.422	1.4126	1.01

(#) = Out of Range

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142727.D
Acq On : 11 Jul 2015 4:37 pm
Operator : AIRPIANO1:RY
Sample : WG801904-1,3,250,250
Misc : WG801904
ALS Vial : 1 Sample Multiplier: 1

Integration File: ALIP-Range-all.E

Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Title : APH Analysis
Last Update : Sat Jul 11 22:47:17 2015



Spectrum Information: Average of 18.014 to 18.054 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.2	13120	PASS
75	95	30	66	41.9	30161	PASS
95	95	100	100	100.0	71942	PASS
96	95	5	9	6.7	4803	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	100.8	72521	PASS
175	174	4	9	7.3	5276	PASS
176	174	93	101	95.2	69042	PASS
177	176	5	9	6.6	4573	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142728.D
Acq On : 11 Jul 2015 5:09 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.2
Misc : WG801904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 11 22:41:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	128	887760	10.000 ug/m3	0.00
Standard Area = 859719			Recovery	= 103.26%	
7) 1,4-difluorobenzene	12.43	114	3789384	10.000 ug/m3	0.00
Standard Area = 3754378			Recovery	= 100.93%	
12) chlorobenzene-D5	16.85	54	706824	10.000 ug/m3	0.00
Standard Area = 709082			Recovery	= 99.68%	
System Monitoring Compounds					
28) bromochloromethane (TIC)	10.21	TIC	6030822M6	10.611 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 106.11%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	8059386	10.120 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 101.20%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10343953	10.105 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 101.05%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2732404	10.266 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 102.66%	
32) toluene-D8 (TIC)	15.15	TIC	8381888	9.883 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 98.83%	
33) bromofluorobenzene (TIC)	18.04	TIC	10129699	10.120 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 101.20%	
Target Compounds					Qvalue
2) 1,3-butadiene	4.89	54	14403M2	0.491 ug/m3	
3) isopentane	6.39	TIC	138320	0.858 ug/m3#	61
4) methyl tert butyl ether	9.14	73	50703	0.759 ug/m3#	51
5) hexane	10.25	TIC	246518M2	1.048 ug/m3	
6) cyclohexane	12.33	TIC	156885M2	0.791 ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	158227	0.790 ug/m3#	92
9) benzene	12.02	78	58184	0.644 ug/m3#	59
10) heptane	13.55	TIC	156153	0.805 ug/m3#	71
11) C5-C8 Aliphatics Total	12.26	TIC	2764527	-0.549 ug/m3	
13) toluene	15.26	91	83159	0.825 ug/m3	95
14) n-octane	16.16	TIC	207298	1.004 ug/m3#	98
15) 2,3-dimethylheptane	17.22	TIC	251501	1.081 ug/m3#	72
16) ethyl benzene	17.18	91	106502	0.932 ug/m3	97
17) m+p-xylene	17.32	91	82815M3	0.932 ug/m3	
18) n-nonane	17.83	TIC	240209M3	1.064 ug/m3	
19) o-xylene	17.69	91	89605	0.984 ug/m3	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142728.D
Acq On : 11 Jul 2015 5:09 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.2
Misc : WG801904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 11 22:41:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) decane	19.02	TIC	257694M4	1.056	ug/m3	
21) butylcyclohexane	19.48	TIC	317656M4	1.194	ug/m3	
22) n-undecane	19.97	TIC	249101	0.973	ug/m3#	86
23) naphthalene	20.99	128	110051	0.831	ug/m3#	79
24) n-dodecane	20.88	TIC	121938	0.504	ug/m3#	80
25) C9-C12 Aliphatics Tota	18.07	TIC	2655553	-3.850	ug/m3	
26) C9-C10 Aromatics (120)	18.67	120	179834M5	5.231	ug/m3	
27) C9-C10 Aromatics (134)	19.29	134	33991M5	5.145	ug/m3	
27) C9-C10 Aromatics Total	0.00		213825	32.364	ug/m3	

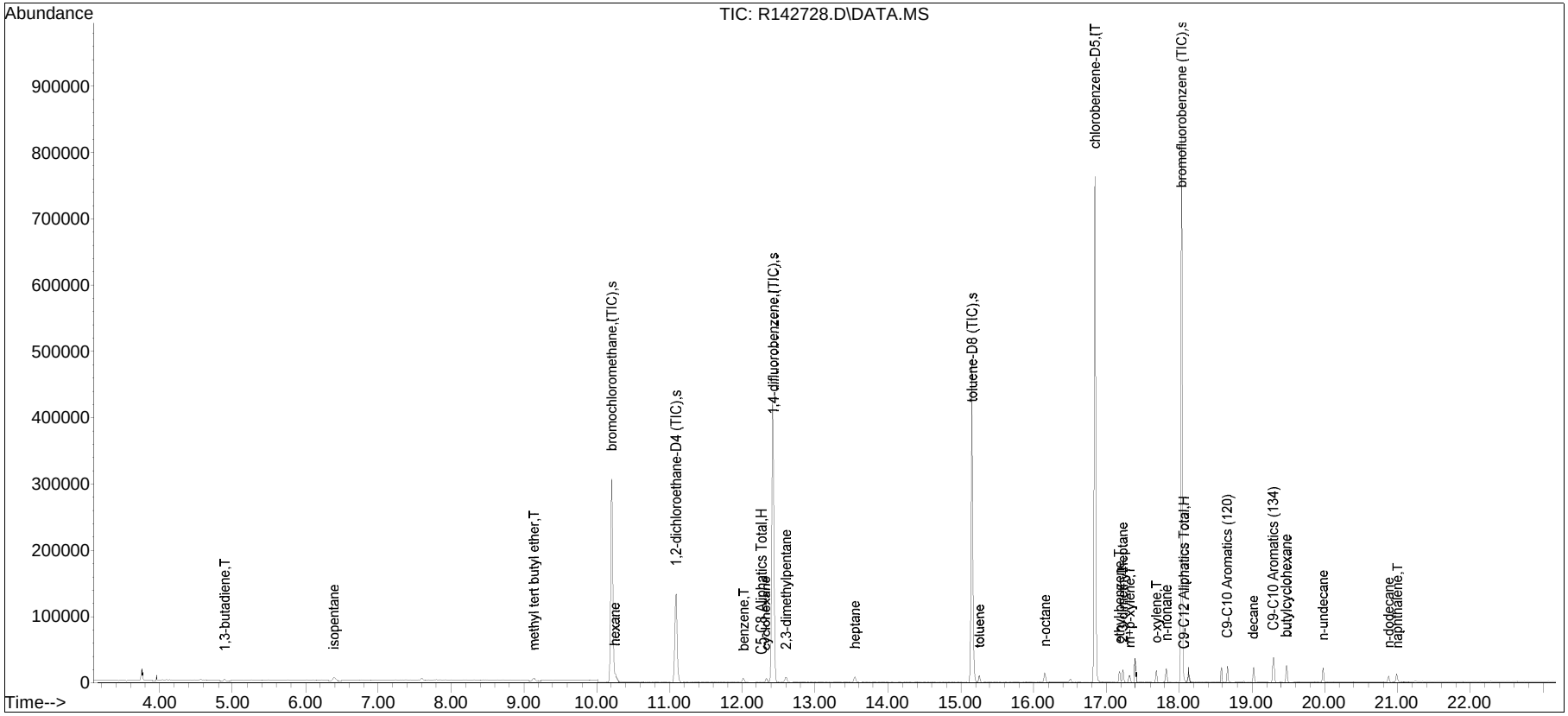
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142728.D
Acq On : 11 Jul 2015 5:09 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.2
Misc : WG801904
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 11 22:41:12 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

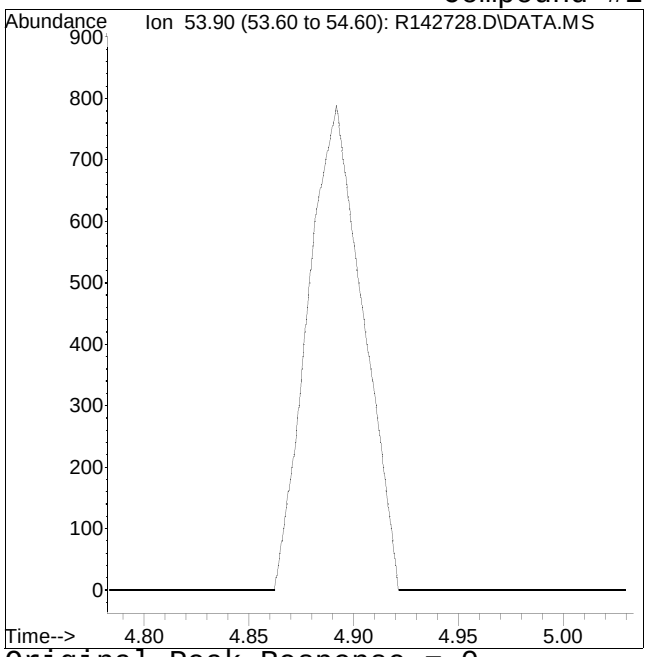
Sub List : Detailed Compounds
Target Compounds
Data File: O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

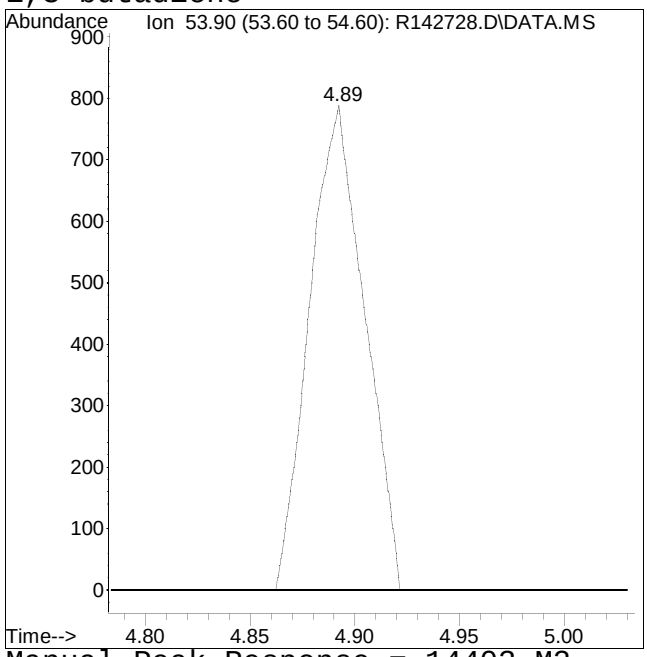


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142728.D
Date Inj'd : 7/11/2015 5:09 pm
Sample : IAPH-10STD0.2
Quant Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #2: 1,3-butadiene



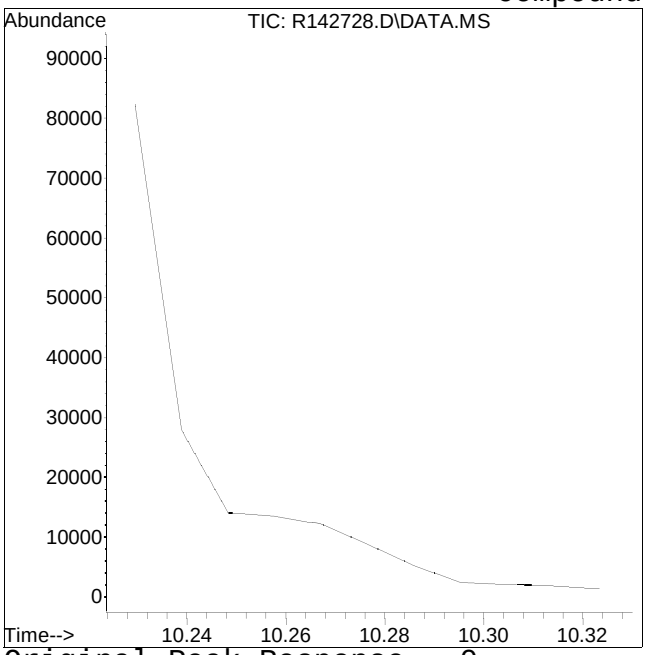


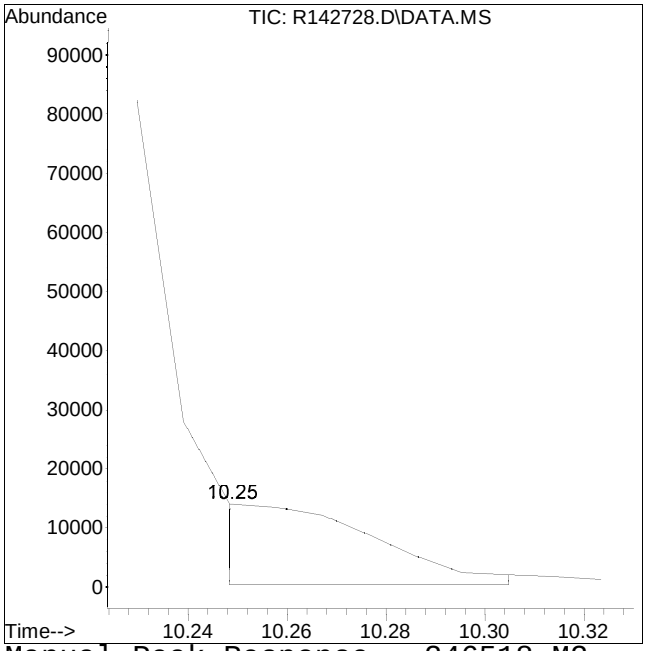
Original Peak Response = 0 Manual Peak Response = 14403 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Quant Method : O:\METHODS\AIR1\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #5: hexane



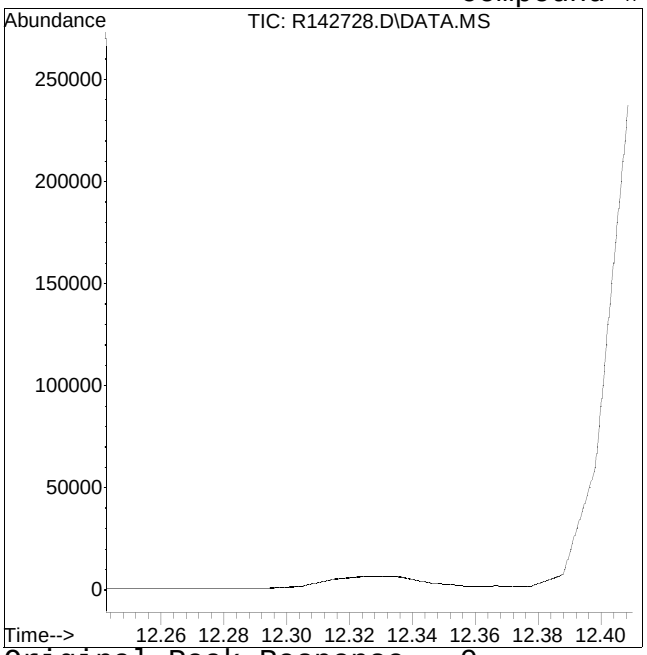


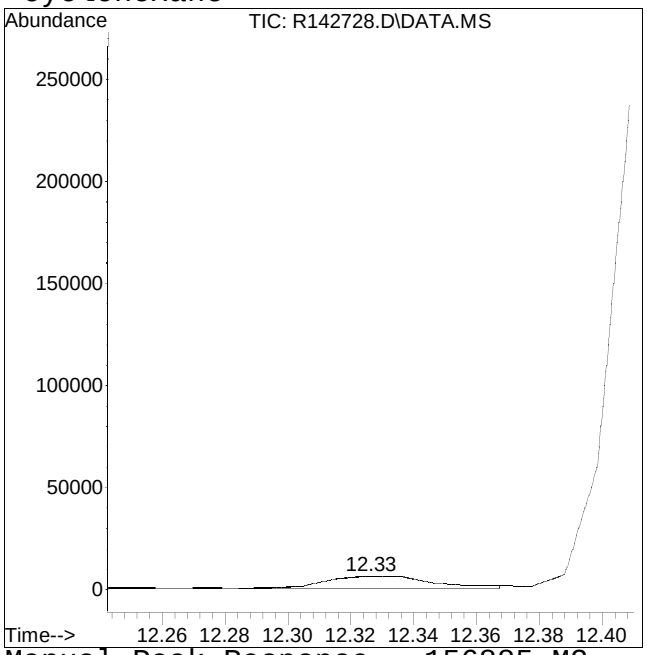
Original Peak Response = 0 Manual Peak Response = 246518 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142728.D
Date Inj'd : 7/11/2015 5:09 pm
Sample : IAPH-10STD0.2
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #6: cyclohexane



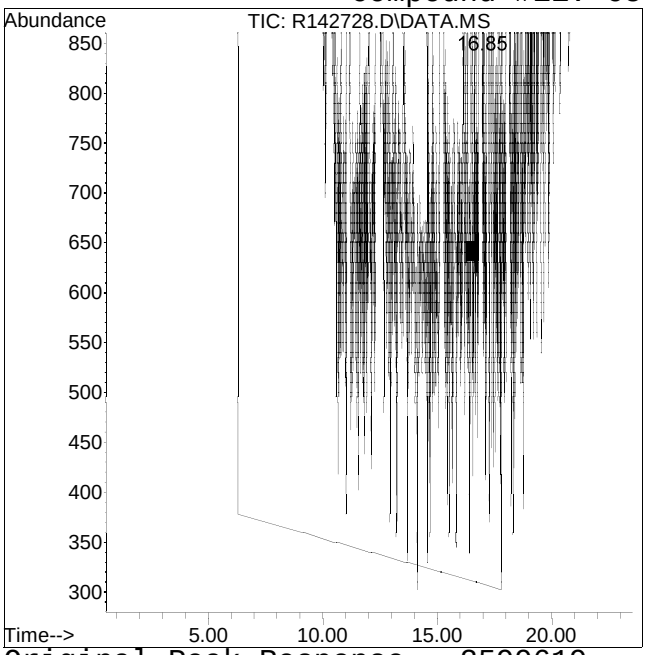


Original Peak Response = 0 Manual Peak Response = 156885 M2
M2 = Peak not found by automatic integration algorithm.

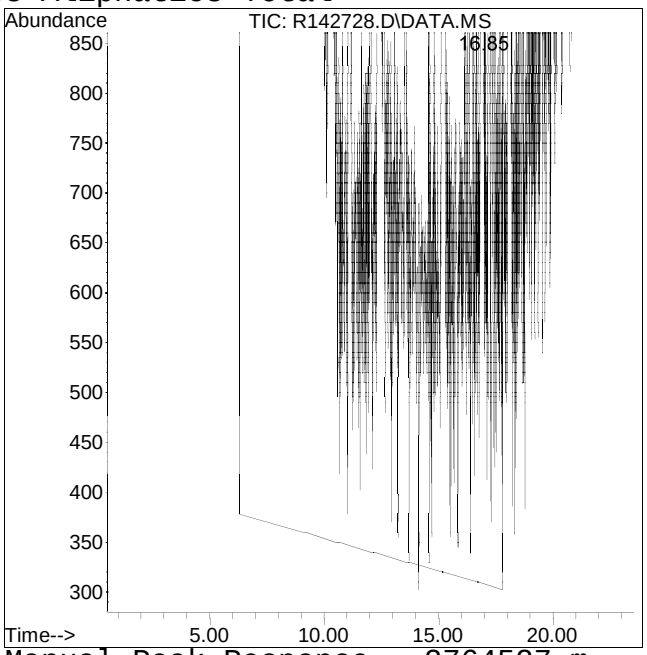
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : QM150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 2599619

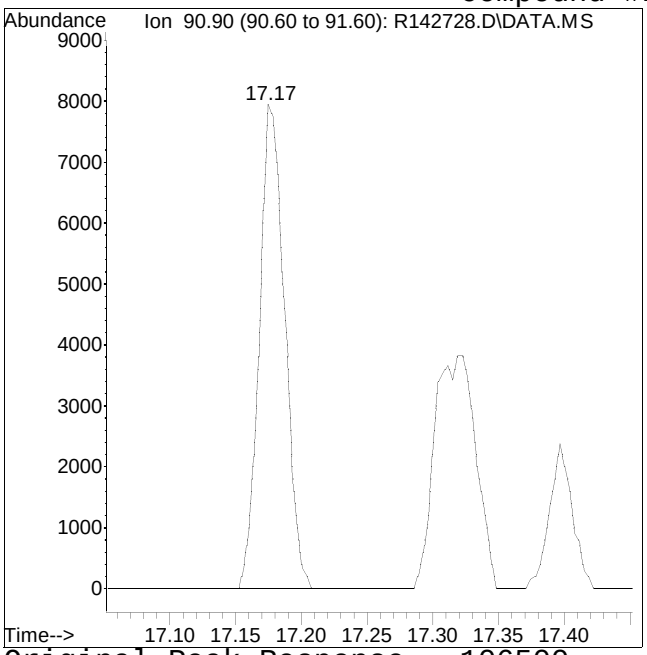


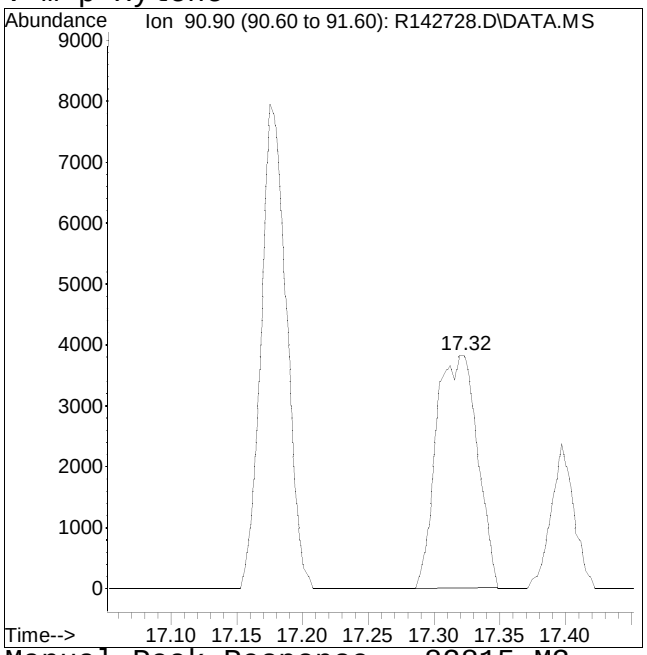
Manual Peak Response = 2764527 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #17: m+p-xylene



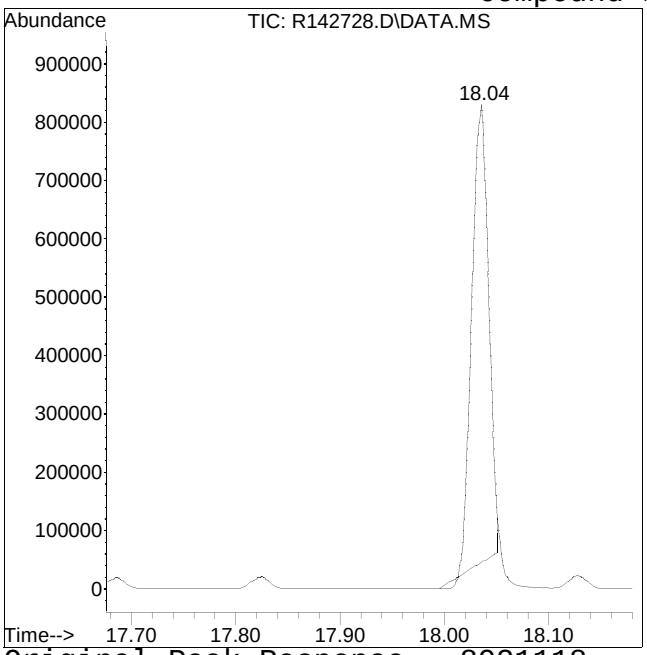


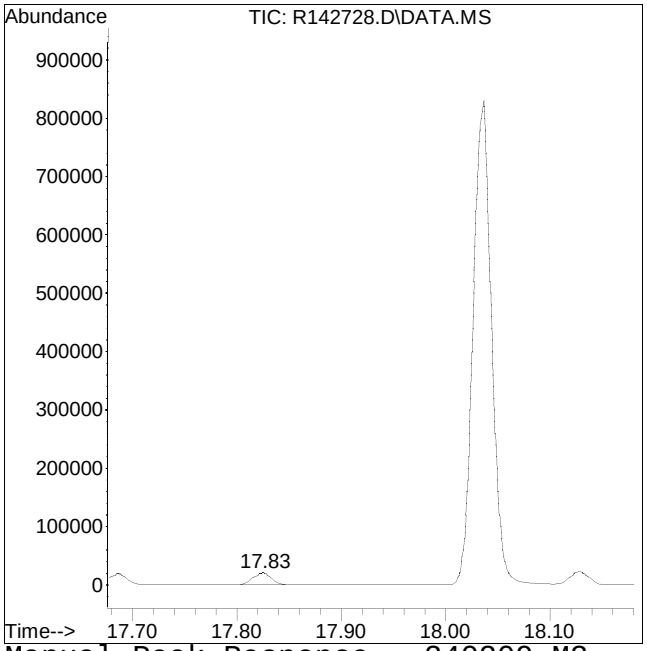
Original Peak Response = 106500 Manual Peak Response = 82815 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #18: n-nonane



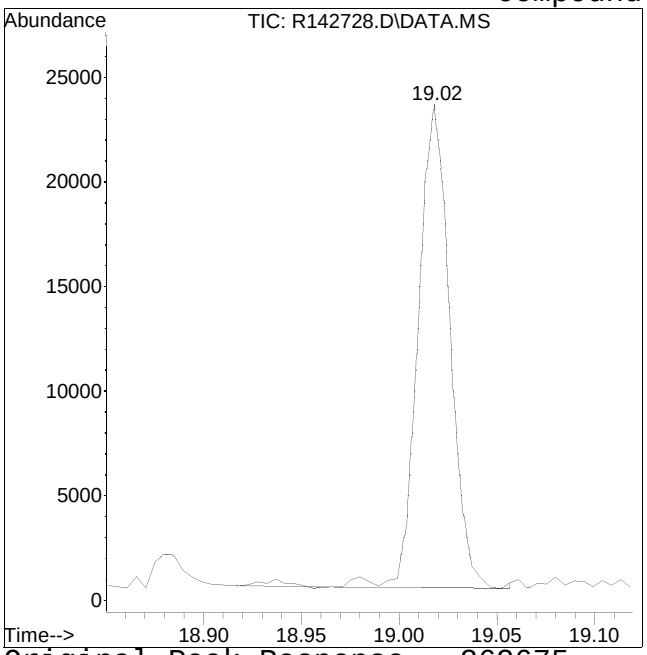


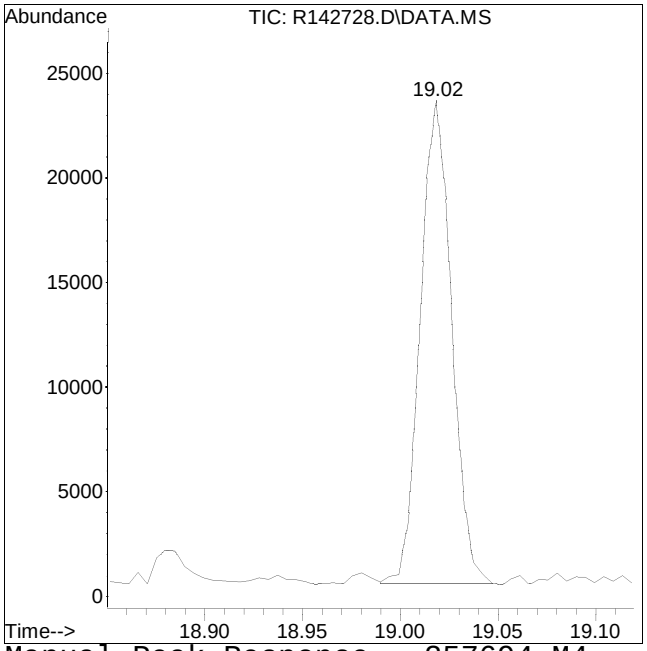
Original Peak Response = 8921118 Manual Peak Response = 240209 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Qmethod : APH150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #20: decane



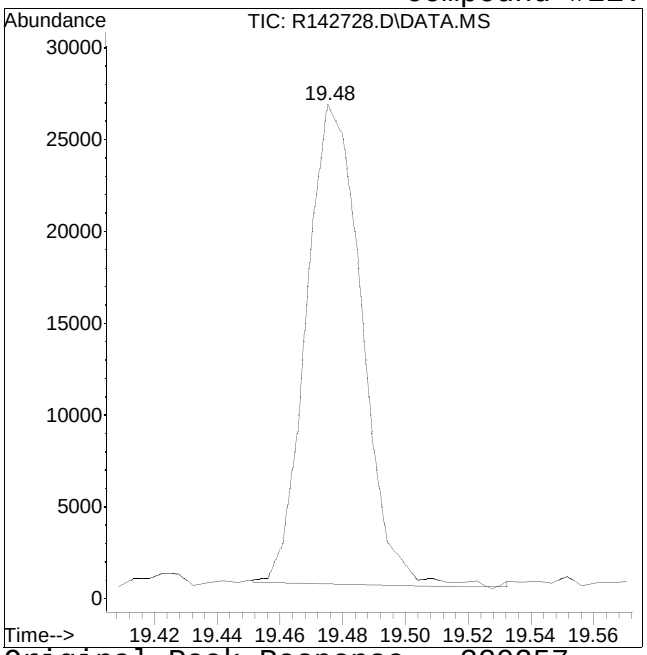


Original Peak Response = 262675 Manual Peak Response = 257694 M4
M4 = Poor automated baseline construction.

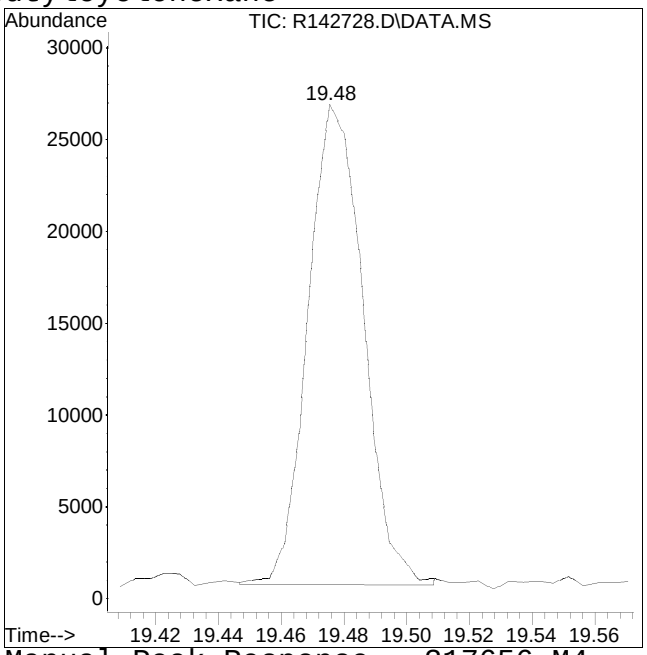
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #21: butylcyclohexane



Original Peak Response = 320257



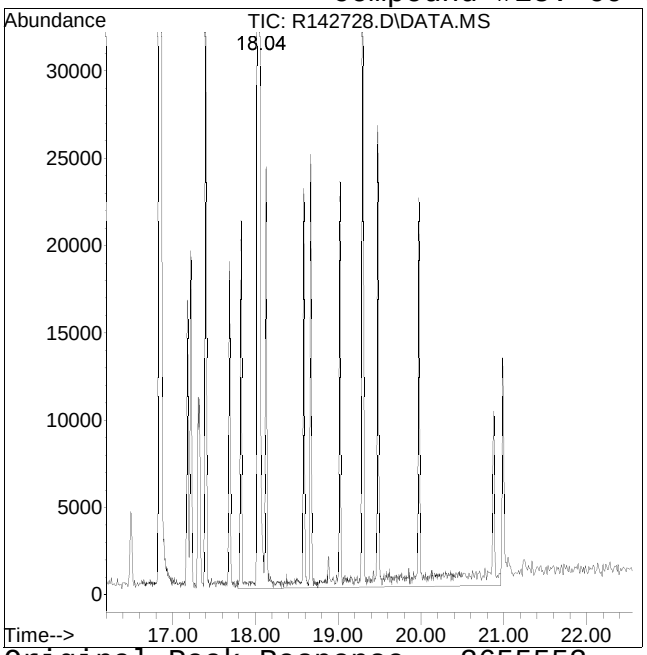
Manual Peak Response = 317656 M4

M4 = Poor automated baseline construction.

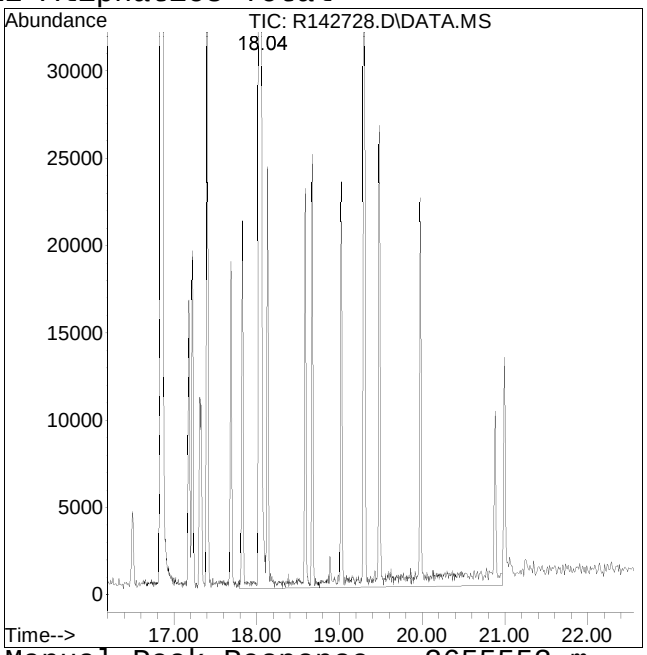
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 2655553

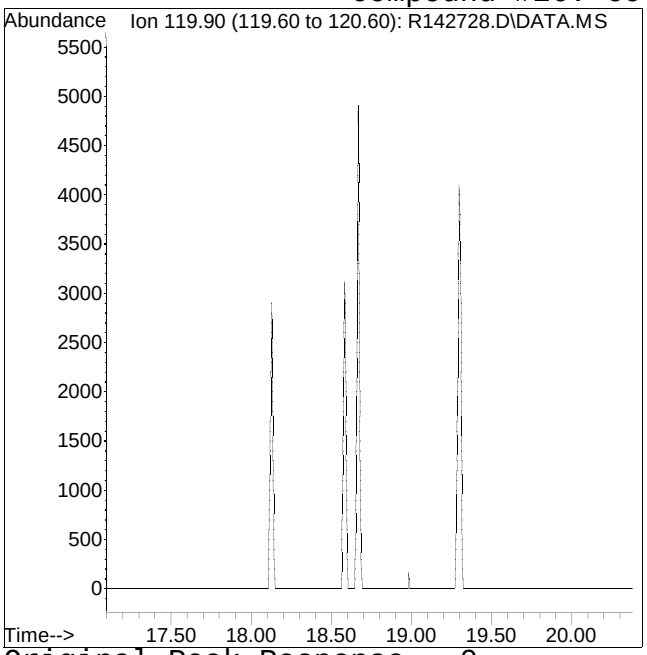


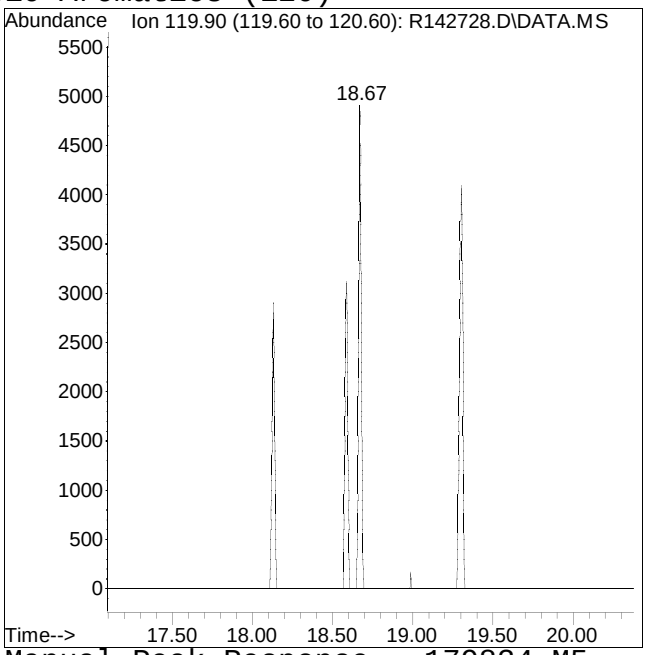
Manual Peak Response = 2655553 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #26: C9-C10 Aromatics (120)



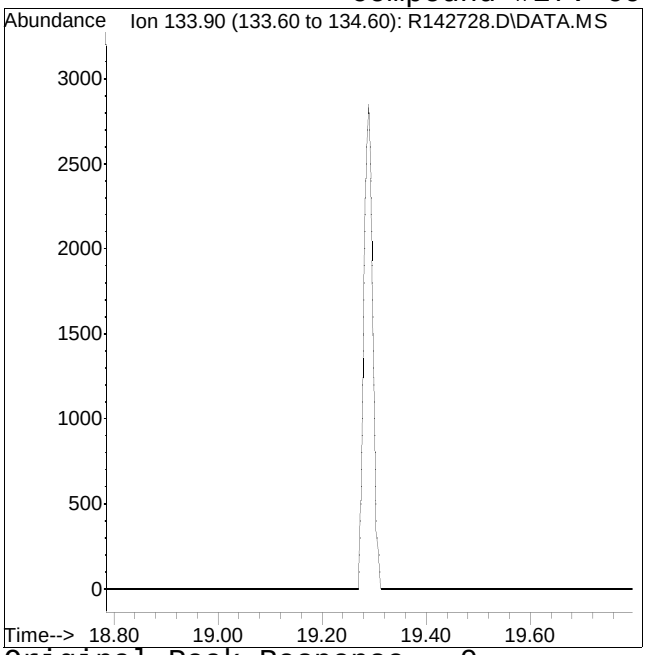


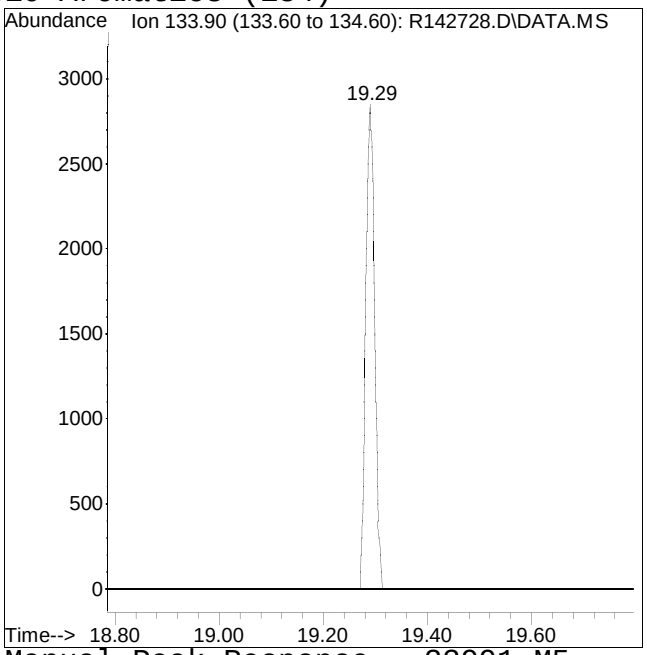
Original Peak Response = 0 Manual Peak Response = 179834 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : QM150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #27: C9-C10 Aromatics (134)



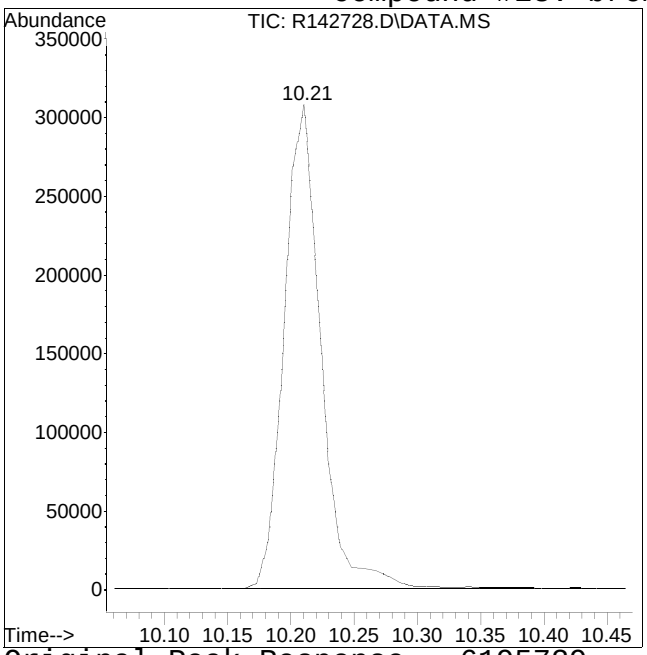


Original Peak Response = 0 Manual Peak Response = 33991 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

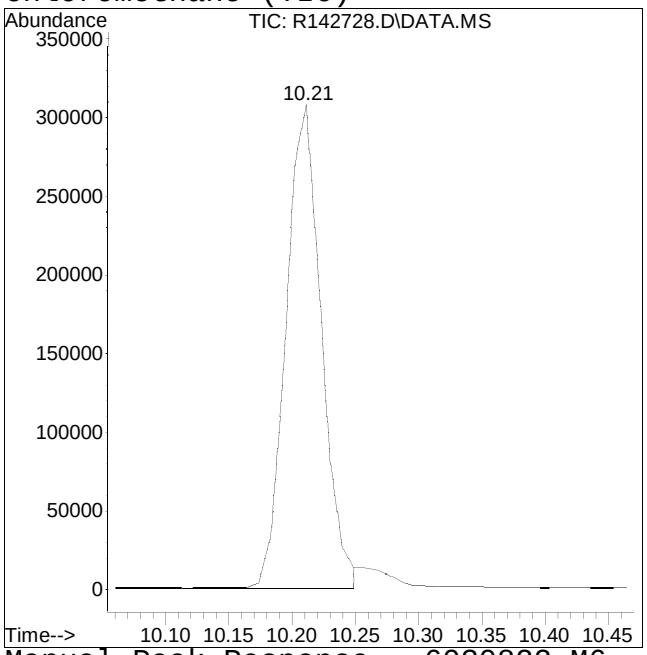
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142728.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:09 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.2 Quant Date : 7/11/2015 10:38 pm

Compound #28: bromochloromethane (TIC)



Original Peak Response = 6195729



Manual Peak Response = 6030822 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142729.D
Acq On : 11 Jul 2015 5:42 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.4
Misc : WG801904
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 22:42:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	890309	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	103.56%	
7) 1,4-difluorobenzene	12.43	114	3786996	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	100.87%	
12) chlorobenzene-D5	16.85	54	722840	10.000	ug/m3	0.00
Standard Area = 709082			Recovery	=	101.94%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	6023003M6	10.363	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	103.63%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	8101400	9.947	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.47%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10395390	9.930	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.30%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2699594	9.918	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.18%	
32) toluene-D8 (TIC)	15.15	TIC	8509432	9.811	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.11%	
33) bromofluorobenzene (TIC)	18.04	TIC	10061690	9.829	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.29%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	26925	0.916	ug/m3	91
3) isopentane	6.40	TIC	229774	1.421	ug/m3	96
4) methyl tert butyl ether	9.14	73	100455	1.500	ug/m3#	72
5) hexane	10.26	TIC	398797M2	1.690	ug/m3	
6) cyclohexane	12.33	TIC	261155M4	1.313	ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	335433	1.676	ug/m3#	94
9) benzene	12.02	78	122558	1.358	ug/m3#	80
10) heptane	13.55	TIC	332549	1.715	ug/m3#	97
11) C5-C8 Aliphatics Total	12.26	TIC	5729863	-0.214	ug/m3	
13) toluene	15.26	91	156510	1.519	ug/m3	99
14) n-octane	16.16	TIC	394041	1.866	ug/m3#	98
15) 2,3-dimethylheptane	17.22	TIC	494196	2.077	ug/m3	99
16) ethyl benzene	17.18	91	204649	1.751	ug/m3	99
17) m+p-xylene	17.33	91	157203M1	1.730	ug/m3	
18) n-nonane	17.82	TIC	480963M3	2.083	ug/m3	
19) o-xylene	17.69	91	162667	1.747	ug/m3	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142729.D
Acq On : 11 Jul 2015 5:42 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.4
Misc : WG801904
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 22:42:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
20) decane	19.02	TIC	547077M4	2.192	ug/m3	
21) butylcyclohexane	19.48	TIC	643846	2.367	ug/m3	99
22) n-undecane	19.97	TIC	555916	2.124	ug/m3#	95
23) naphthalene	20.99	128	260323	1.923	ug/m3#	79
24) n-dodecane	20.88	TIC	397285	1.606	ug/m3	95
25) C9-C12 Aliphatics Tota	18.07	TIC	5582871	-6.973	ug/m3	
26) C9-C10 Aromatics (120)	19.30	120	356464M5	10.139	ug/m3	
27) C9-C10 Aromatics (134)	19.29	134	69248M5	10.249	ug/m3	
27) C9-C10 Aromatics Total	0.00		425711	63.007	ug/m3	

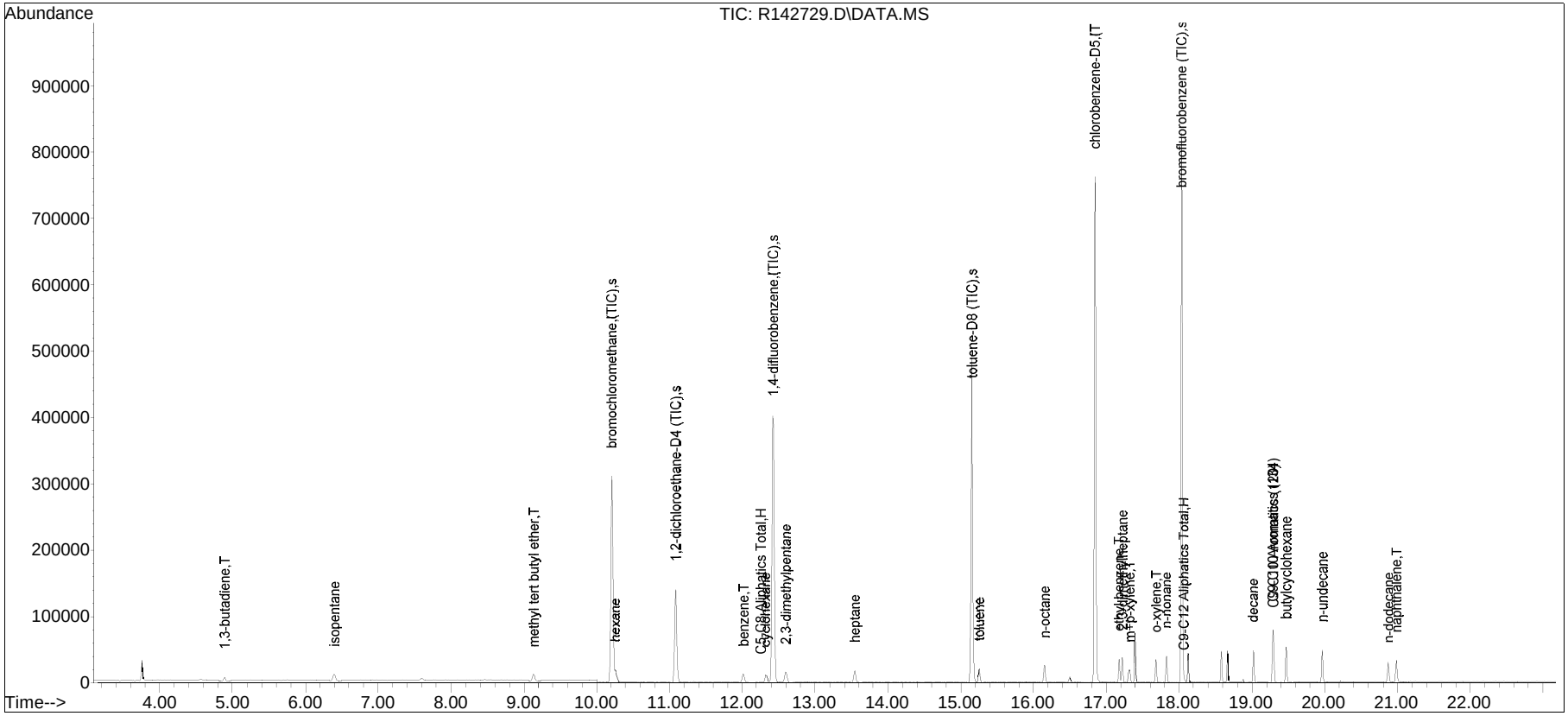
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142729.D
Acq On : 11 Jul 2015 5:42 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD0.4
Misc : WG801904
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 22:42:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

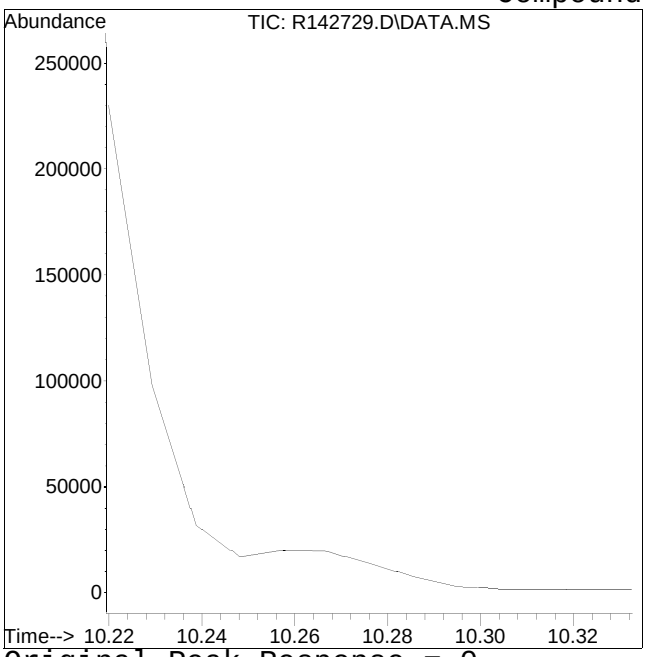
Sub List : Target Compounds
Data File: O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

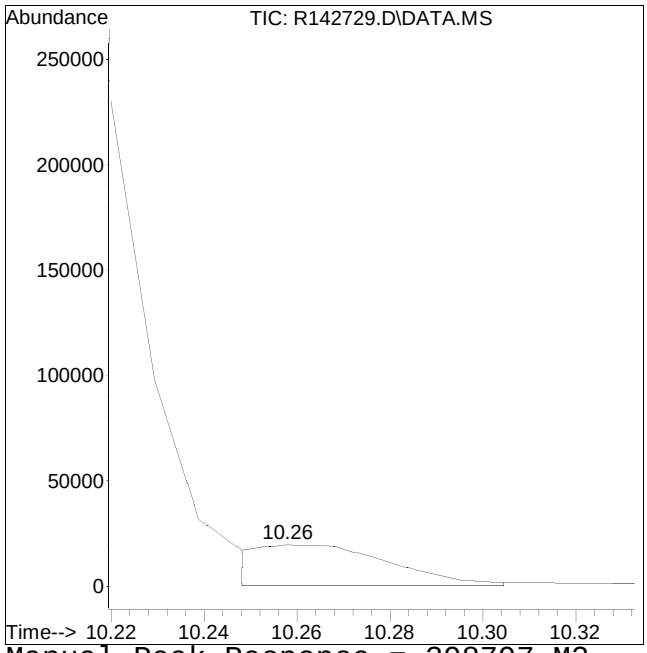


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\IA_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #5: hexane



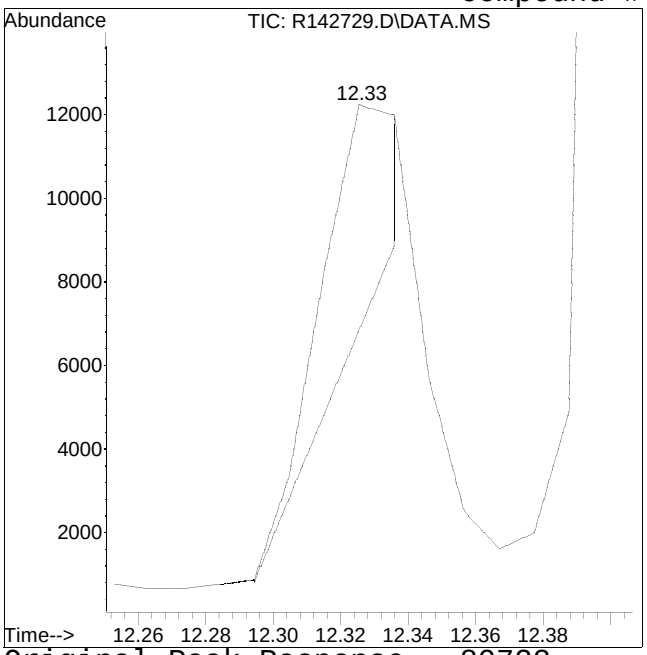


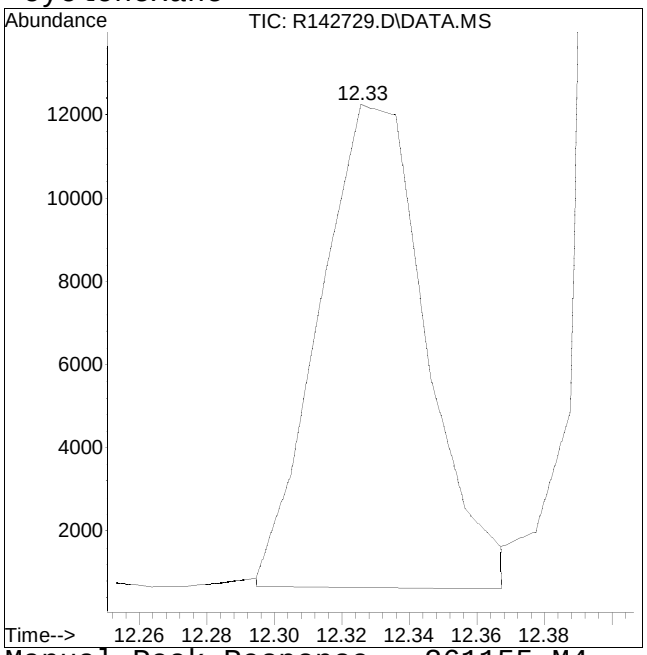
Original Peak Response = 0 Manual Peak Response = 398797 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\AIR_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #6: cyclohexane



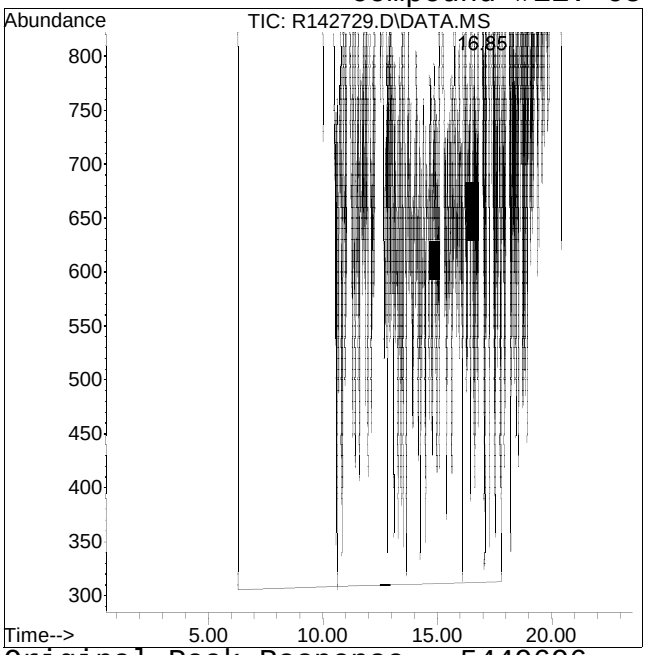


Original Peak Response = 89722 Manual Peak Response = 261155 M4
M4 = Poor automated baseline construction.

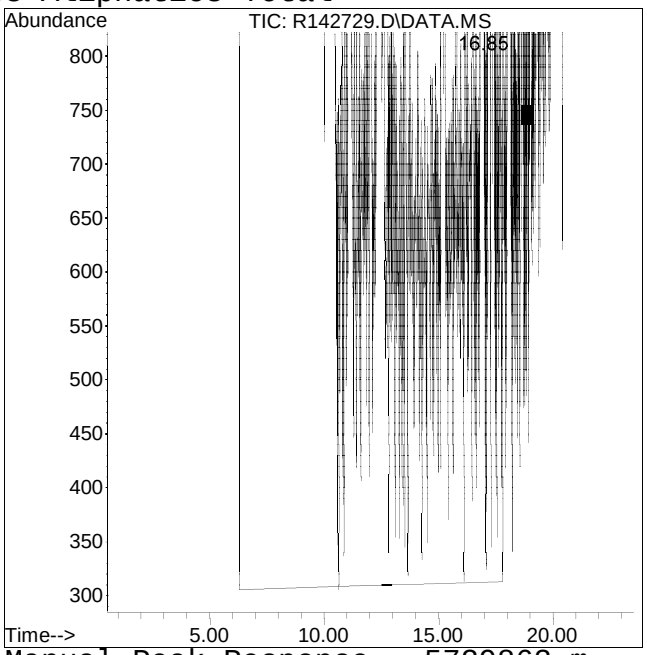
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 5449696

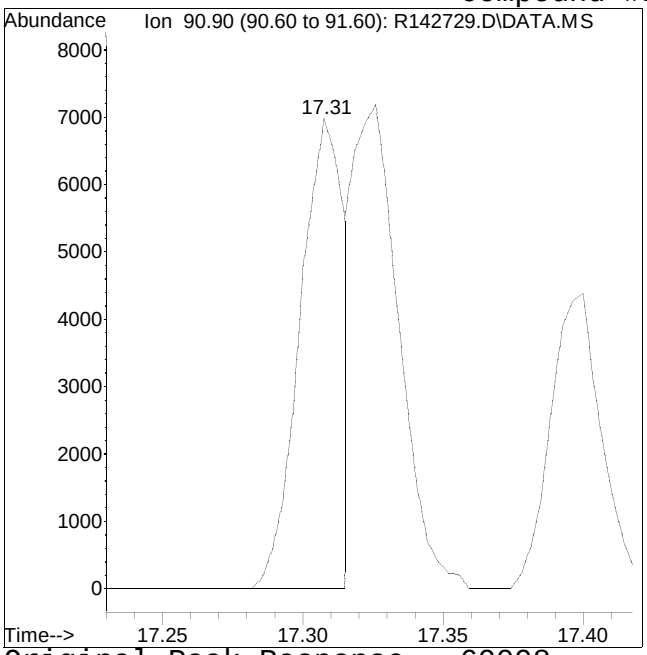


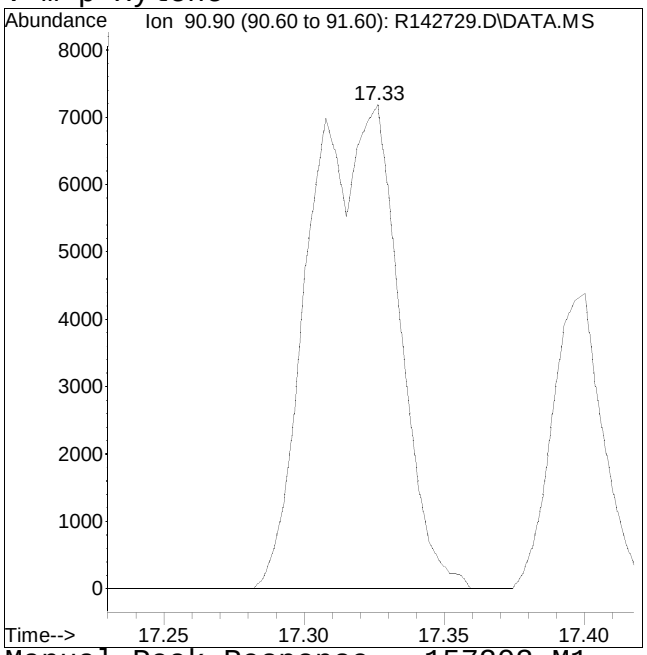
Manual Peak Response = 5729863 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #17: m+p-xylene



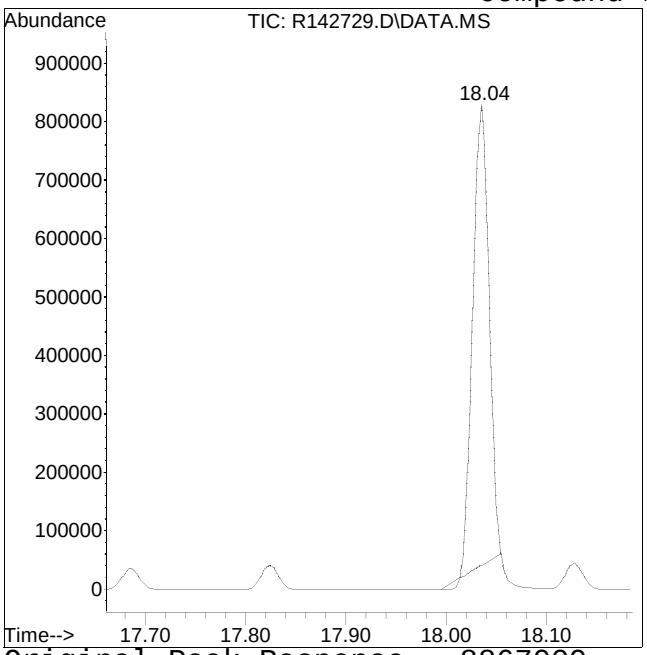


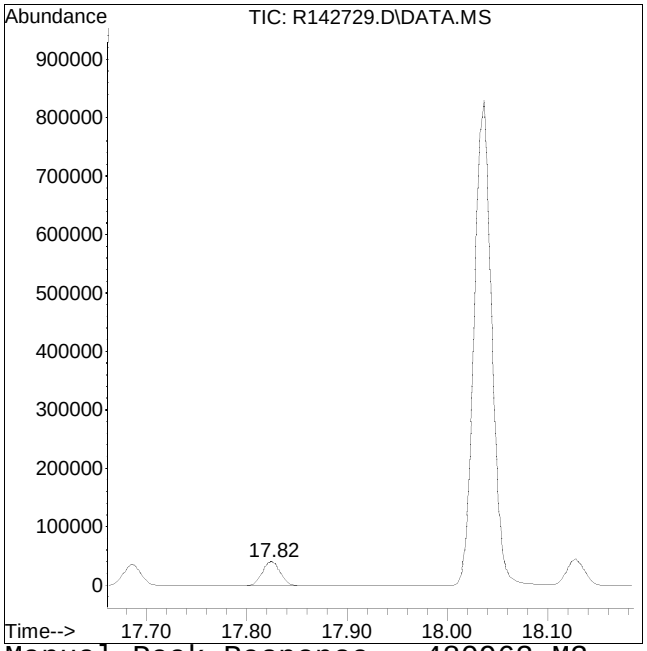
Original Peak Response = 69098 Manual Peak Response = 157203 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #18: n-nonane



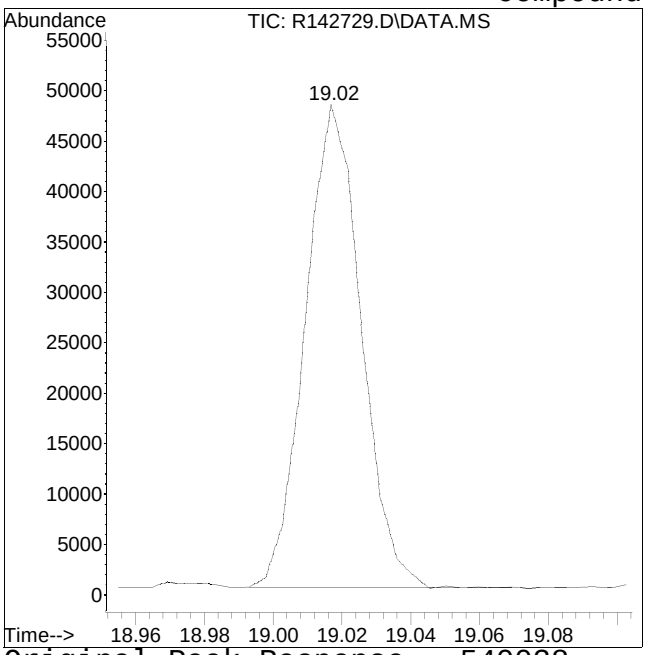


Original Peak Response = 8867009 Manual Peak Response = 480963 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

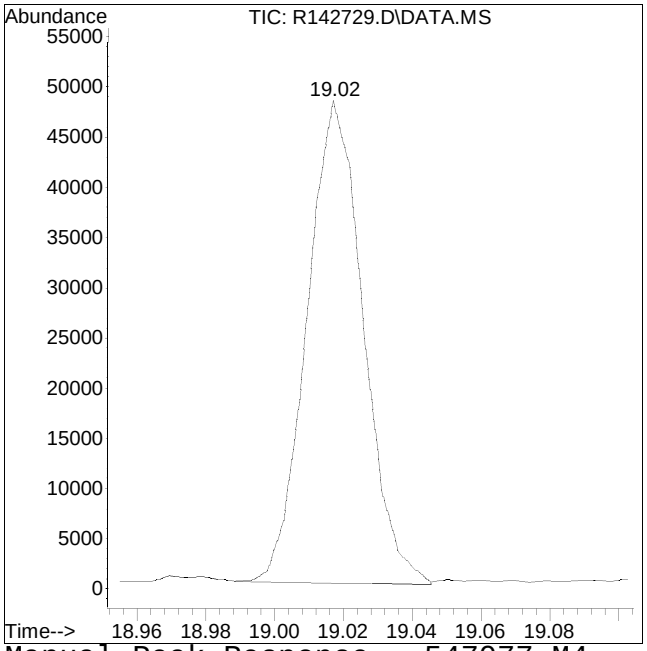
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\IA_ICAL\APH150711.M
Data File : R142729.D
Date Inj'd : 7/11/2015 5:42 pm
Sample : IAPH-10STD0.4
Method : QM150711
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #20: decane



Original Peak Response = 540038



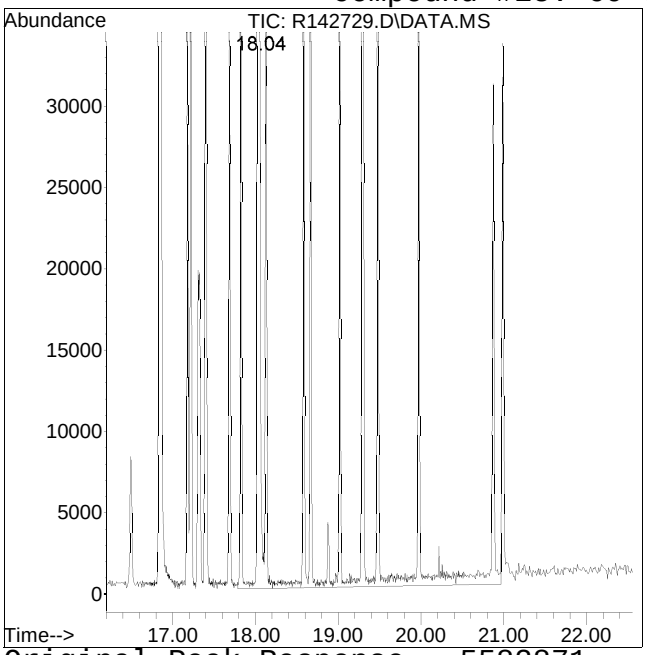
Manual Peak Response = 547077 M4

M4 = Poor automated baseline construction.

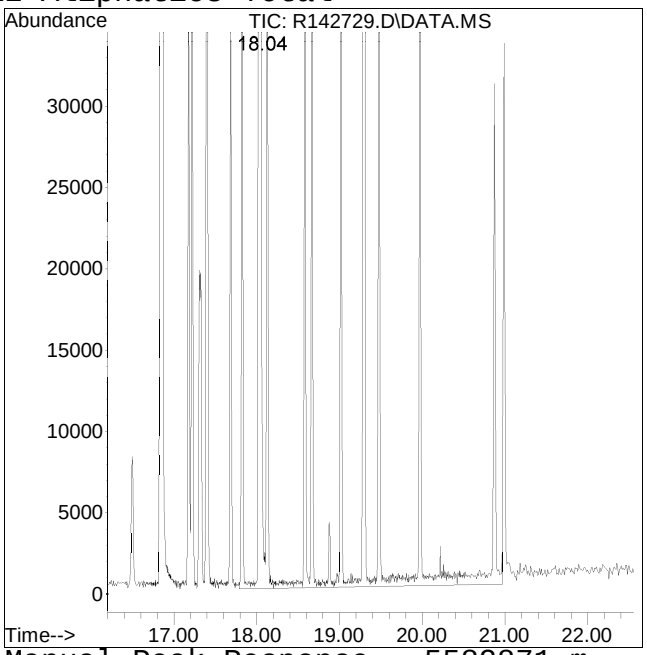
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142729.D
Date Inj'd : 7/11/2015 5:42 pm
Sample : IAPH-10STD0.4
Method :
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 5582871

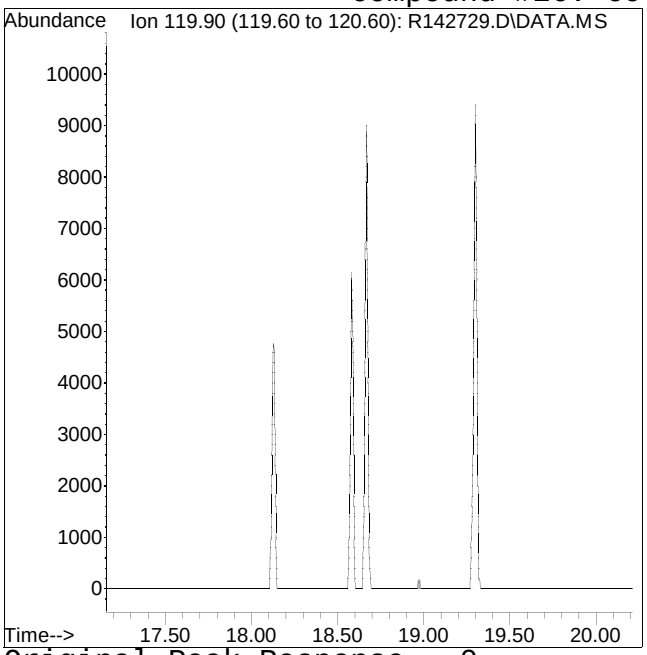


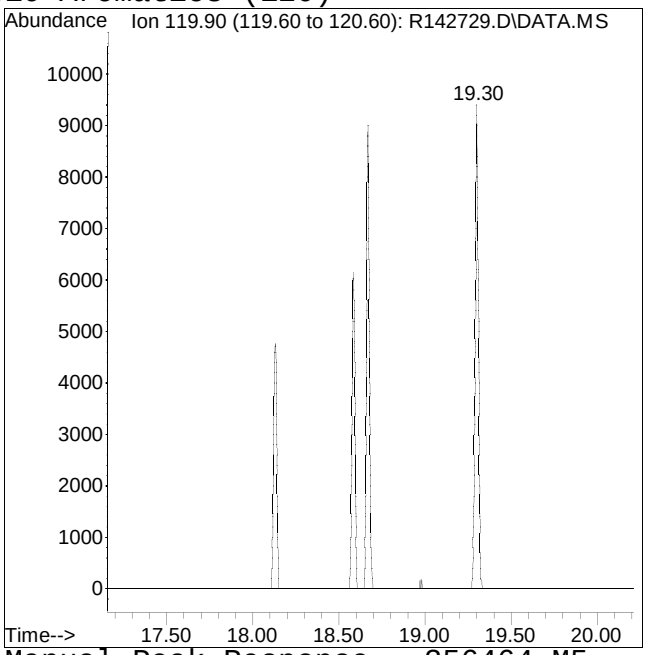
Manual Peak Response = 5582871 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142729.D
Date Inj'd : 7/11/2015 5:42 pm
Sample : IAPH-10STD0.4
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #26: C9-C10 Aromatics (120)



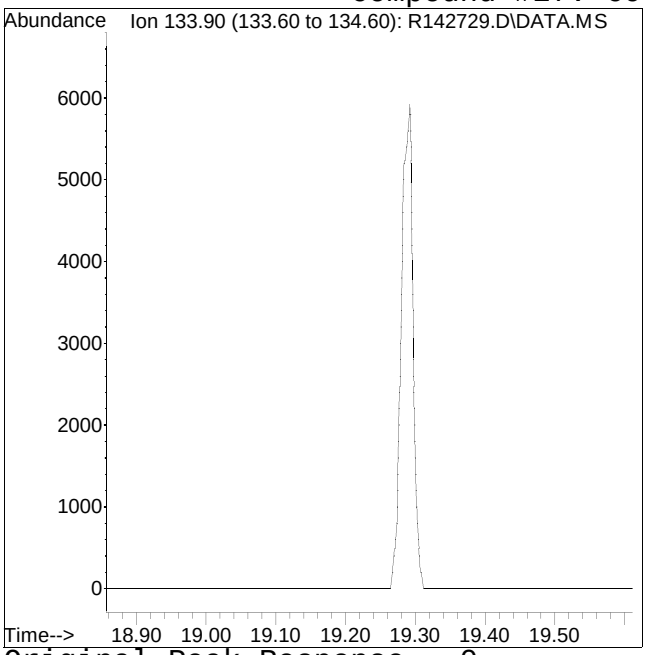


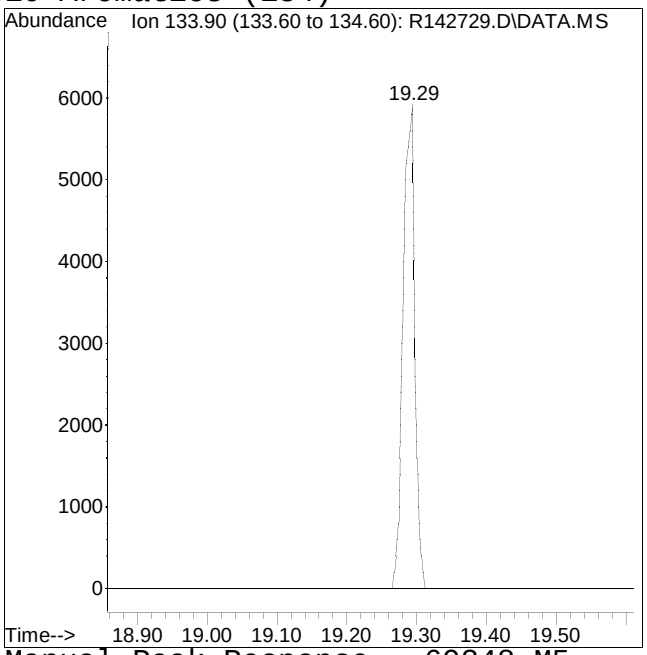
Original Peak Response = 0 Manual Peak Response = 356464 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #27: C9-C10 Aromatics (134)



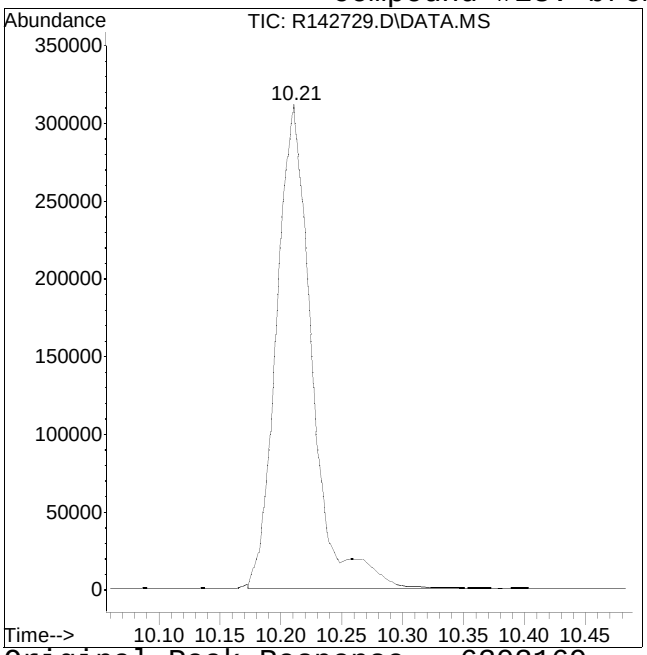


Original Peak Response = 0 Manual Peak Response = 69248 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

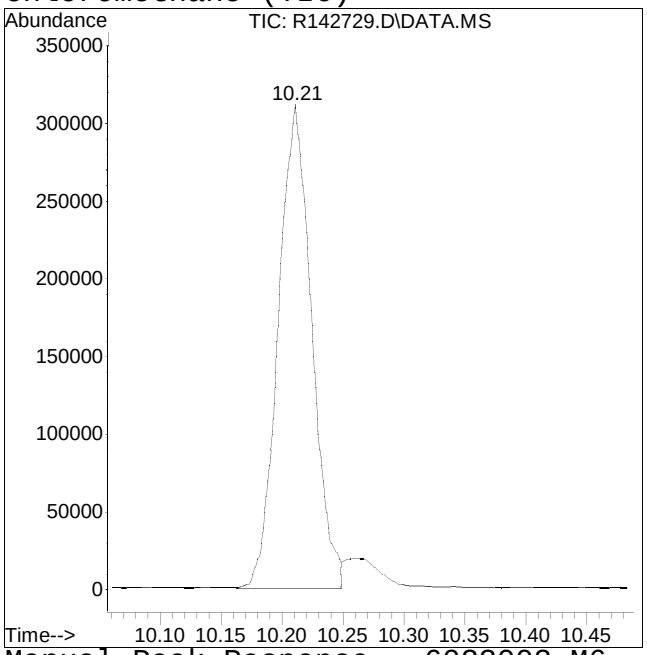
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142729.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 5:42 pm Instrument : Air Piano 1
Sample : IAPH-10STD0.4 Quant Date : 7/11/2015 10:38 pm

Compound #28: bromochloromethane (TIC)



Original Peak Response = 6303169



Manual Peak Response = 6023003 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142730.D
Acq On : 11 Jul 2015 6:13 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD2.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:43:53 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	866391	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	100.78%	
7) 1,4-difluorobenzene	12.43	114	3777026	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	100.60%	
12) chlorobenzene-D5	16.85	54	712642	10.000	ug/m3	0.00
Standard Area = 709082			Recovery	=	100.50%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5856527	10.220	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	102.20%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	8031773	10.003	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.03%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10340600	10.019	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.19%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2668492	9.944	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.44%	
32) toluene-D8 (TIC)	15.15	TIC	10179390	11.904	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	119.04%	
33) bromofluorobenzene (TIC)	18.04	TIC	10106871	10.015	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.15%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	154591	5.405	ug/m3	96
3) isopentane	6.40	TIC	1183960	7.524	ug/m3	99
4) methyl tert butyl ether	9.12	73	570179	8.747	ug/m3	98
5) hexane	10.27	TIC	2032848M2	8.853	ug/m3	
6) cyclohexane	12.33	TIC	1652440M2	8.536	ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	1967089	9.855	ug/m3	99
9) benzene	12.02	78	710590	7.894	ug/m3	99
10) heptane	13.55	TIC	1903376	9.840	ug/m3	100
11) C5-C8 Aliphatics Total	12.26	TIC	33557138	-2.205	ug/m3	
13) toluene	15.25	91	936907	9.223	ug/m3	99
14) n-octane	16.16	TIC	2402242	11.536	ug/m3#	99
15) 2,3-dimethylheptane	17.22	TIC	2981701	12.712	ug/m3	100
16) ethyl benzene	17.18	91	1203686	10.445	ug/m3	99
17) m+p-xylene	17.31	91	945298M1	10.549	ug/m3	
18) n-nonane	17.82	TIC	2938177	12.909	ug/m3#	100
19) o-xylene	17.69	91	962597	10.486	ug/m3	99
20) decane	19.02	TIC	3381801	13.741	ug/m3#	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142730.D
Acq On : 11 Jul 2015 6:13 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD2.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:43:53 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21)	butylcyclohexane	19.48	TIC	3680778	13.726	ug/m3	100
22)	n-undecane	19.97	TIC	3687002	14.288	ug/m3	99
23)	naphthalene	20.99	128	1416201	10.610	ug/m3	99
24)	n-dodecane	20.88	TIC	2910150	11.933	ug/m3	99
25)	C9-C12 Aliphatics Tota	18.07	TIC	33504969	-37.508	ug/m3	
26)	C9-C10 Aromatics (120)	18.66	120	2078518M5	59.966	ug/m3	
27)	C9-C10 Aromatics (134)	19.29	134	394357M5	59.201	ug/m3	
27)	C9-C10 Aromatics Total	0.00		2472875	371.230	ug/m3	

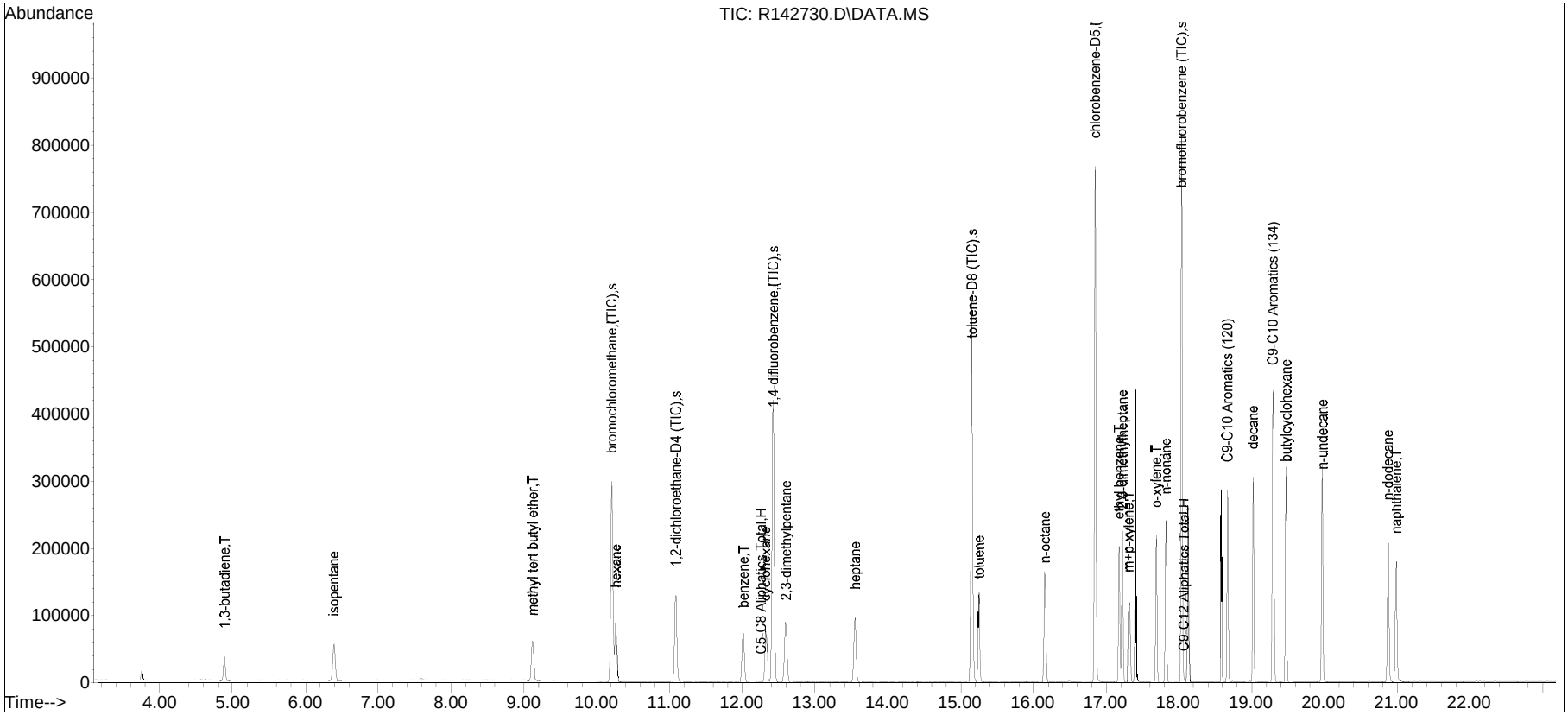
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142730.D
Acq On : 11 Jul 2015 6:13 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD2.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:43:53 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

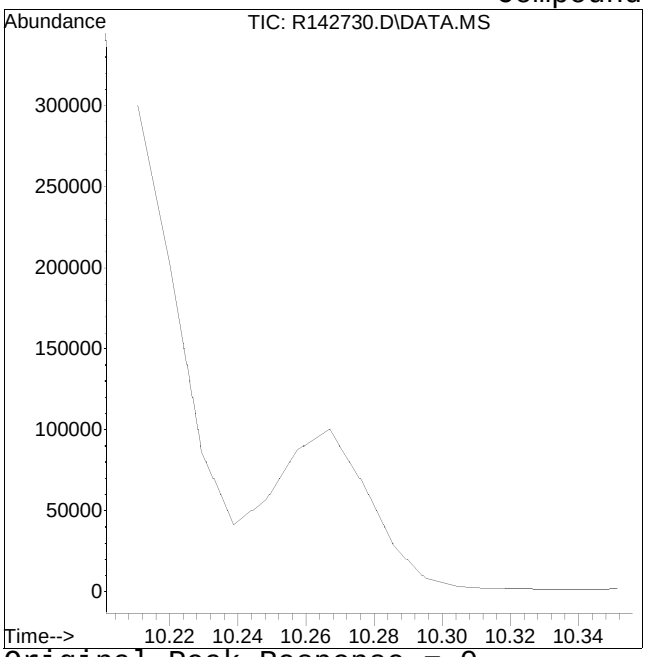
Sub List : Detailed All Compounds
Target Compounds : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

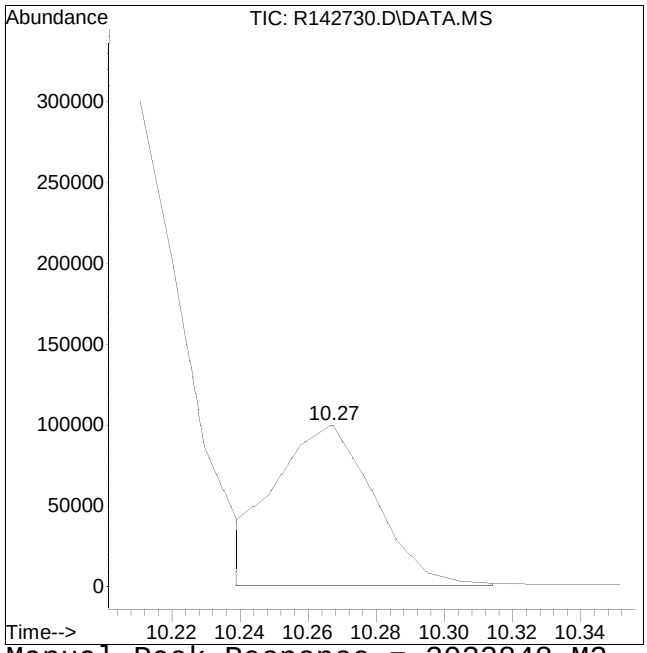


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : O:\METHODS\AIR1\ICAL\APH150711.M
Data File : R142730.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:13 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 7/11/2015 10:38 pm

Compound #5: hexane



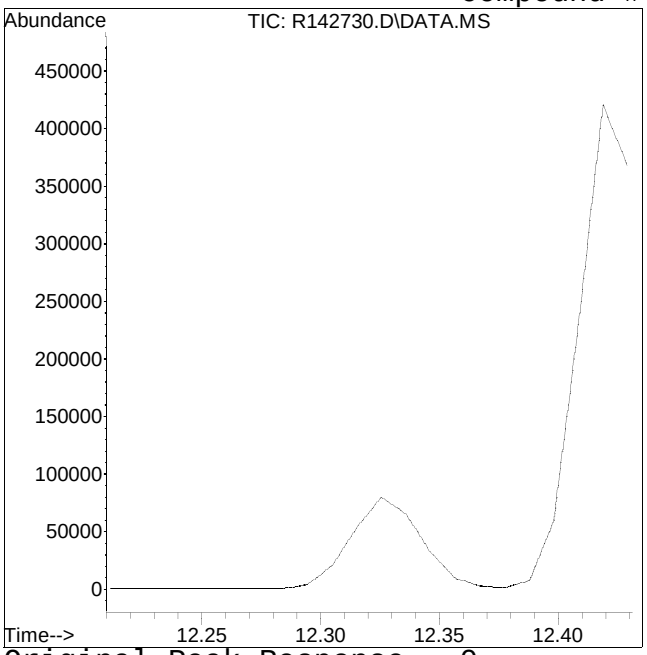


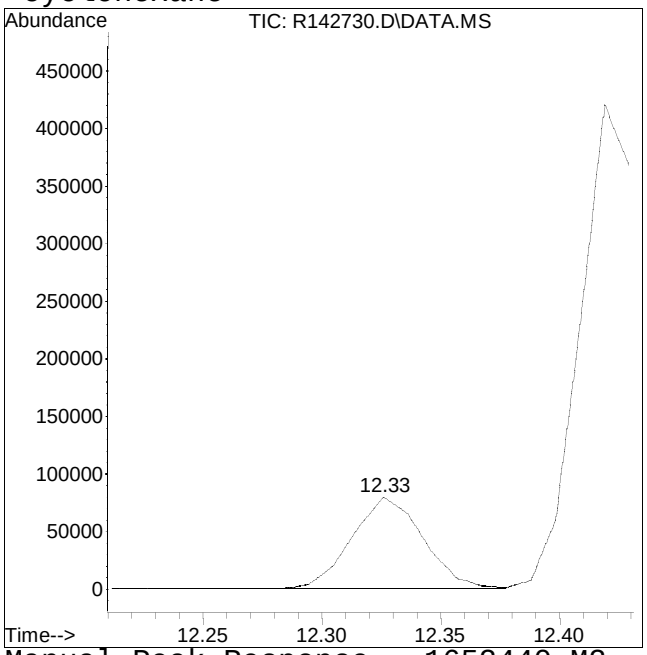
Original Peak Response = 0 Manual Peak Response = 2032848 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142730.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:13 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 7/11/2015 10:38 pm

Compound #6: cyclohexane



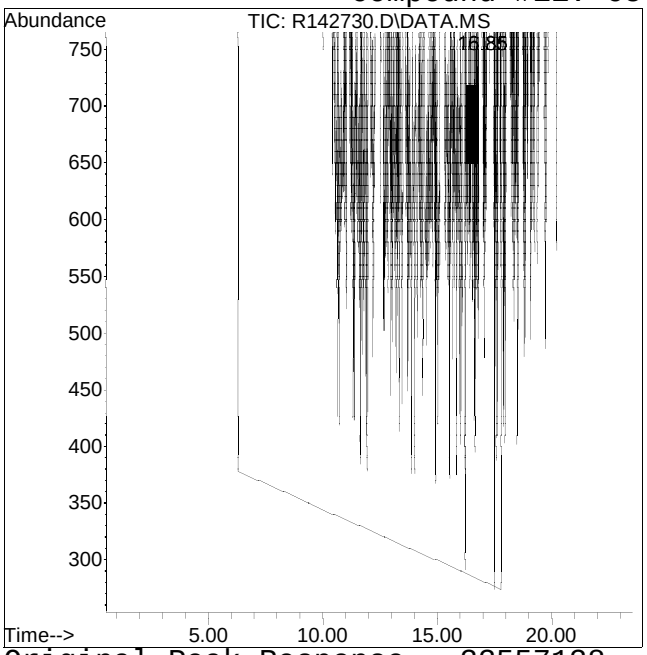


Original Peak Response = 0 Manual Peak Response = 1652440 M2
M2 = Peak not found by automatic integration algorithm.

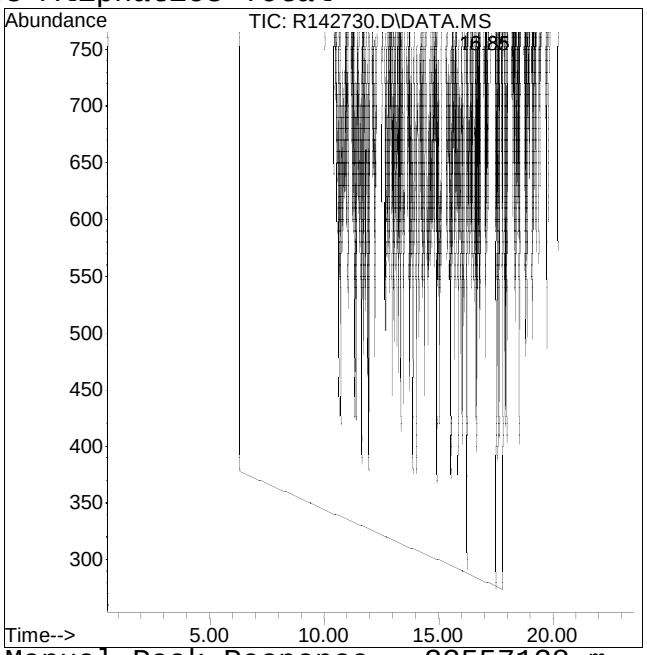
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142730.D
Date Inj'd : 7/11/2015 6:13 pm
Sample : IAPH-10STD2.0
Method :
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 33557138

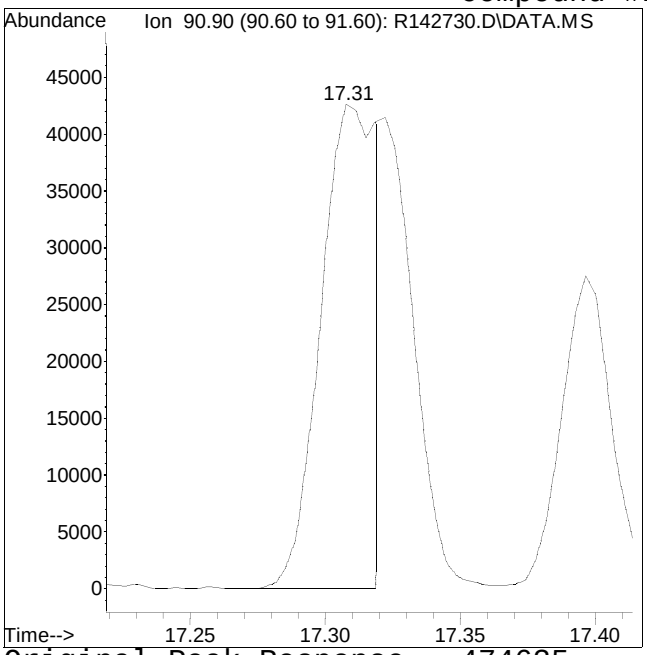


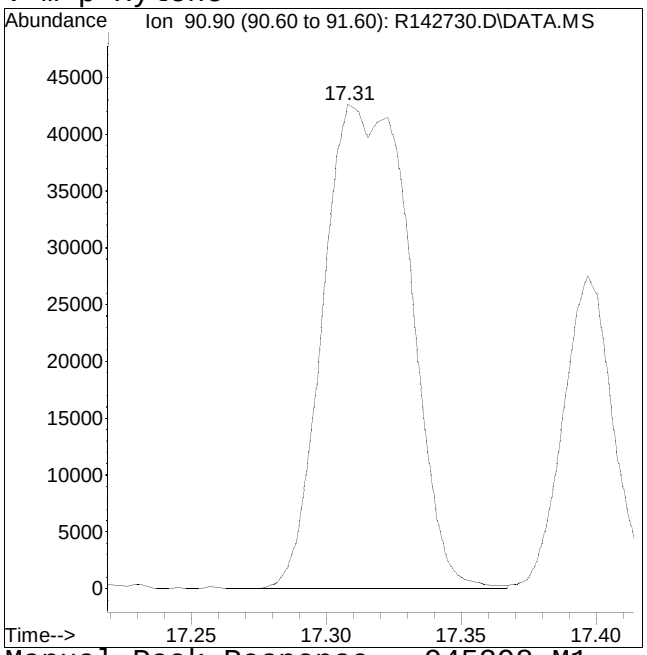
Manual Peak Response = 33557138 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142730.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:13 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 7/11/2015 10:38 pm

Compound #17: m+p-xylene



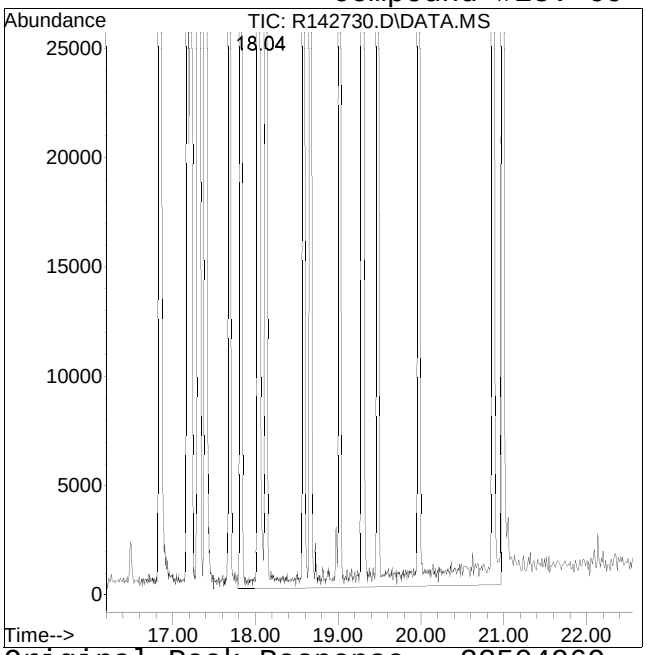


Original Peak Response = 474635 Manual Peak Response = 945298 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

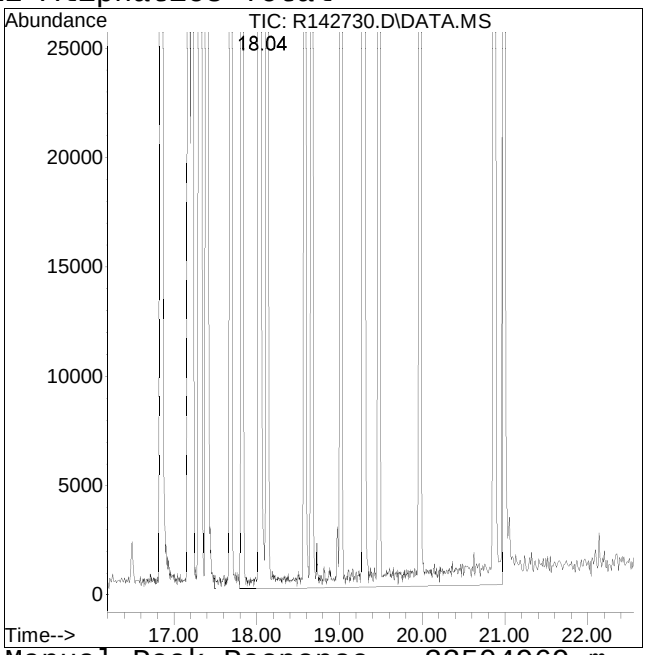
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142730.D
Date Inj'd : 7/11/2015 6:13 pm
Sample : IAPH-10STD2.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 33504969

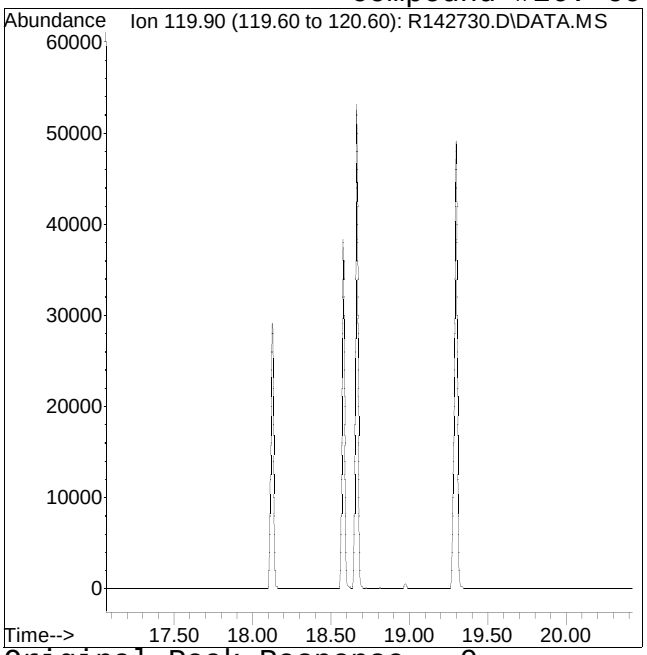


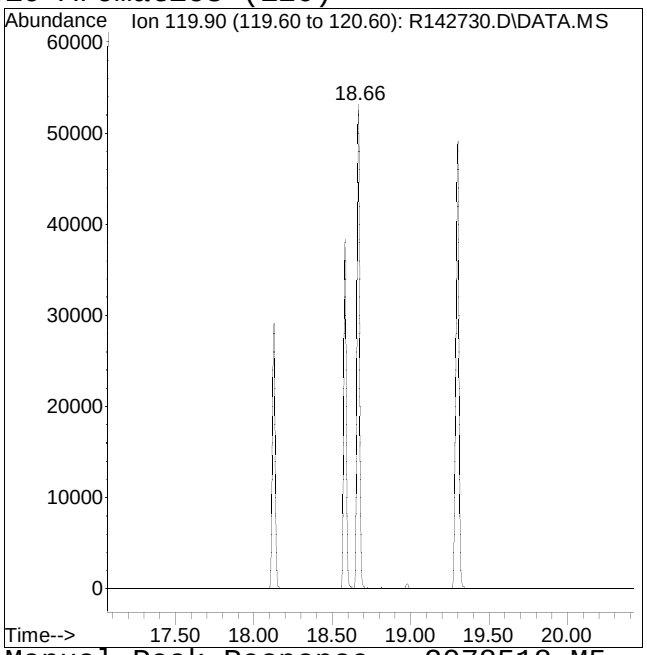
Manual Peak Response = 33504969 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142730.D
Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:13 pm
Instrument : Air Piano 1
Sample : IAPH-10STD2.0
Quant Date : 7/11/2015 10:38 pm

Compound #26: C9-C10 Aromatics (120)



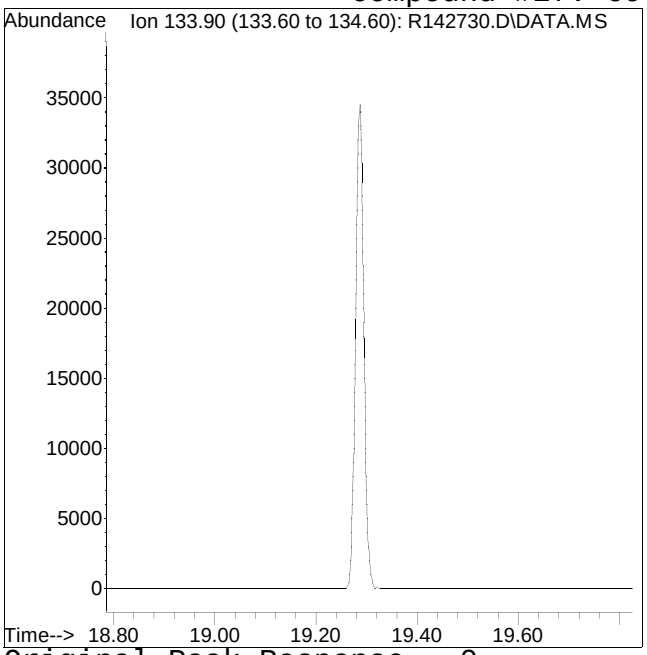


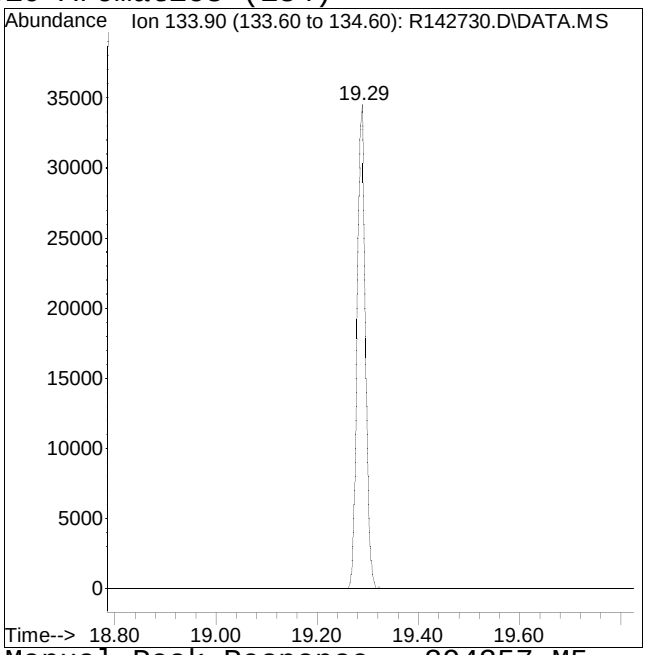
Original Peak Response = 0 Manual Peak Response = 2078518 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142730.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:13 pm Instrument : Air Piano 1
Sample : IAPH-10STD2.0 Quant Date : 7/11/2015 10:38 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 394357 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142731.D
Acq On : 11 Jul 2015 6:45 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD10.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:35:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Wed Jul 08 12:20:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	859719	10.000	ug/m3	0.00
Standard Area = 859719			Recovery = 100.00%			
7) 1,4-difluorobenzene	12.43	114	3754378	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery = 100.00%			
12) chlorobenzene-D5	16.84	54	709082	10.000	ug/m3	0.00
Standard Area = 709082			Recovery = 100.00%			
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5701671	10.690	ug/m3	0.00
Spiked Amount 10.000			Recovery = 106.90%			
29) 1,4-difluorobenzene (TIC)	12.43	TIC	7989335	10.805	ug/m3	0.00
Spiked Amount 10.000			Recovery = 108.05%			
30) chlorobenzene-D5 (TIC)	16.85	TIC	10269262	10.710	ug/m3	0.00
Spiked Amount 10.000			Recovery = 107.10%			
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2670232	8.758	ug/m3	0.00
Spiked Amount 10.000			Recovery = 87.58%			
32) toluene-D8 (TIC)	15.15	TIC	17017252	18.259	ug/m3	0.00
Spiked Amount 10.000			Recovery = 182.59%			
33) bromofluorobenzene (TIC)	18.03	TIC	10041716	9.226	ug/m3	0.00
Spiked Amount 10.000			Recovery = 92.26%			
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	627245	14.403	ug/m3	96
3) isopentane	6.39	TIC	4606571	17.556	ug/m3	99
4) methyl tert butyl ether	9.11	73	2328592	27.201	ug/m3	97
5) hexane	10.27	TIC	8020277M4	24.005	ug/m3	
6) cyclohexane	12.33	TIC	6608380M2	23.718	ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	8134782	29.228	ug/m3	99
9) benzene	12.02	78	2854428	25.073	ug/m3	96
10) heptane	13.55	TIC	7883208	29.308	ug/m3	99
11) C5-C8 Aliphatics Total	12.26	TIC	137809437	280.894	ug/m3	
13) toluene	15.25	91	3810772	33.753	ug/m3	98
14) n-octane	16.16	TIC	9676251	38.568	ug/m3	99
15) 2,3-dimethylheptane	17.22	TIC	12229455	44.730	ug/m3	98
16) ethyl benzene	17.18	91	4976680	39.288	ug/m3	99
17) m+p-xylene	17.31	91	3869580	38.997	ug/m3#	64
18) n-nonane	17.82	TIC	11867420	43.983	ug/m3	98
19) o-xylene	17.68	91	3964252	39.167	ug/m3	99
20) decane	19.02	TIC	14251831	51.235	ug/m3	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142731.D
Acq On : 11 Jul 2015 6:45 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD10.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:35:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Wed Jul 08 12:20:27 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21)	butylcyclohexane	19.48	TIC	15288701	48.895	ug/m3	99
22)	n-undecane	19.97	TIC	16406726	59.334	ug/m3	98
23)	naphthalene	20.99	128	6961970	51.718	ug/m3	100
24)	n-dodecane	20.87	TIC	16888961	71.021	ug/m3	98
25)	C9-C12 Aliphatics Tota	18.07	TIC	144440283	293.529	ug/m3	
26)	C9-C10 Aromatics (120)	18.66	120	8622134M5	196.708	ug/m3	
27)	C9-C10 Aromatics (134)	19.28	134	1657007M5	37.803	ug/m3	
27)	C9-C10 Aromatics Total	0.00		10279141	234.512	ug/m3	

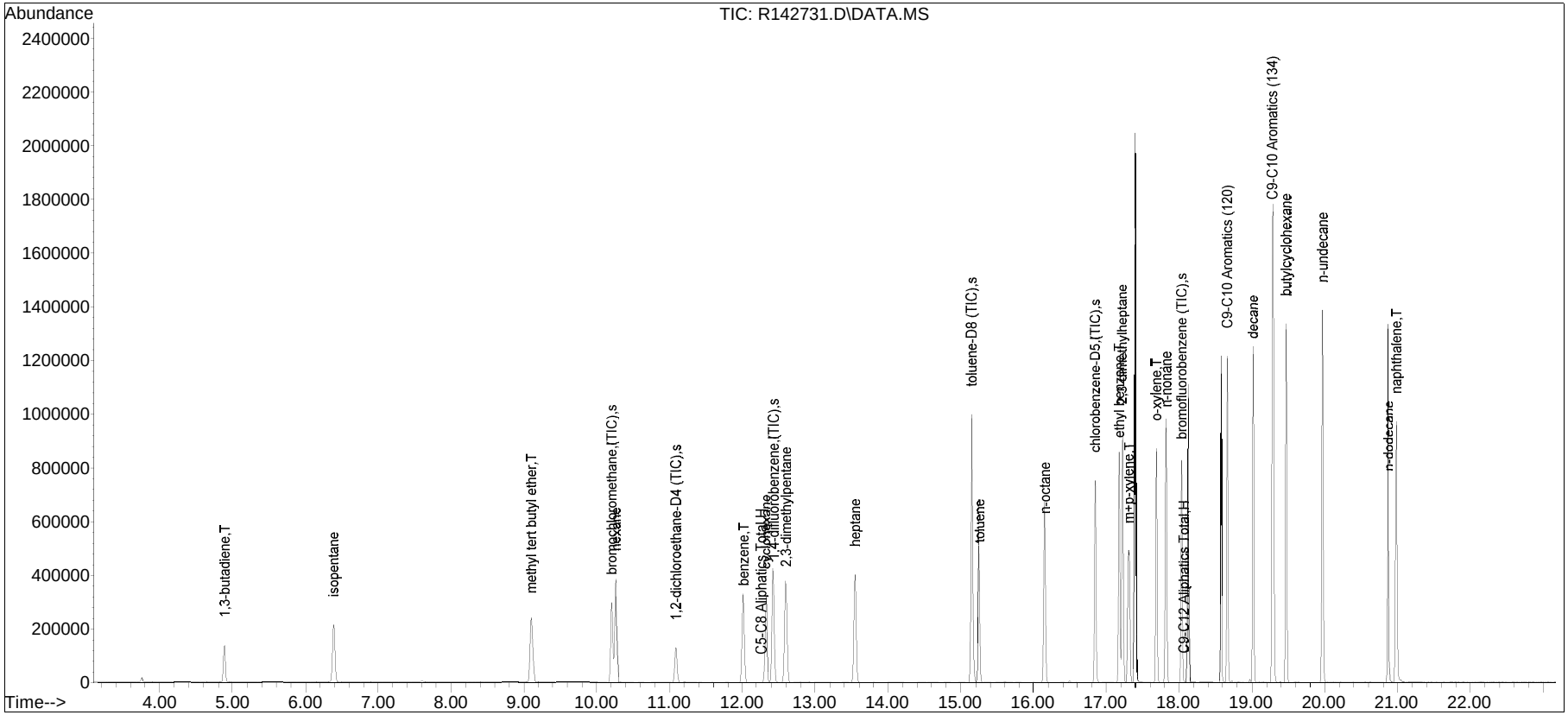
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142731.D
Acq On : 11 Jul 2015 6:45 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD10.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:35:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Wed Jul 08 12:20:27 2015
Response via : Initial Calibration

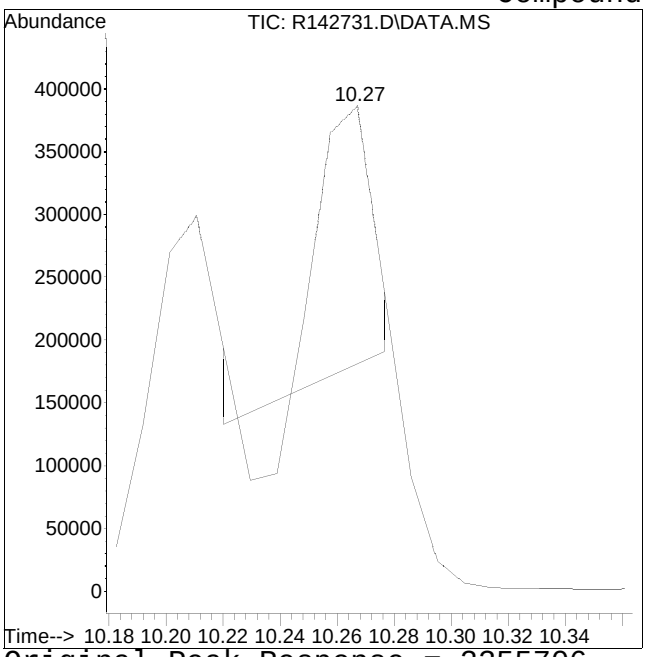
Sub List : Target Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

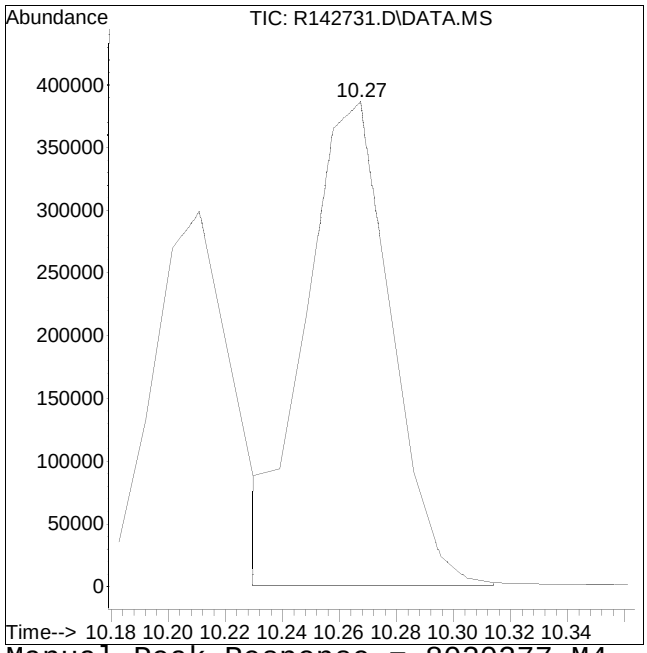


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142731.D
Date Inj'd : 7/11/2015 6:45 pm
Sample : IAPH-10STD10.0
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:34 pm

Compound #5: hexane



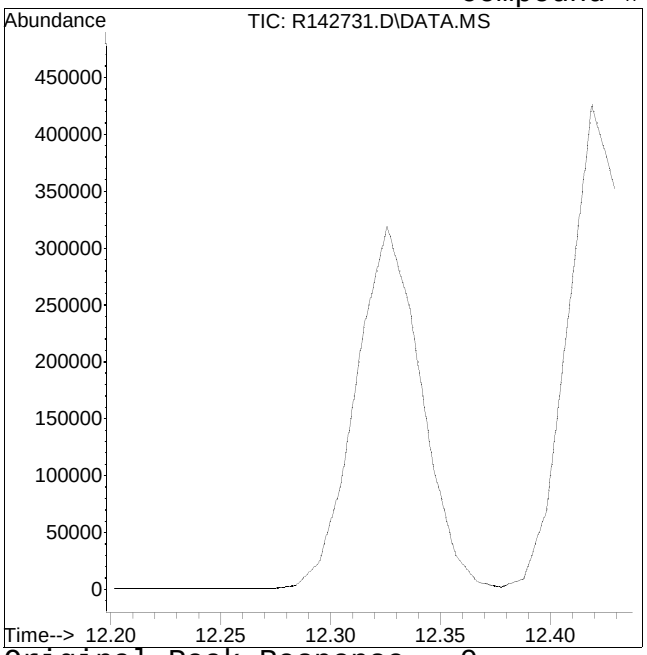


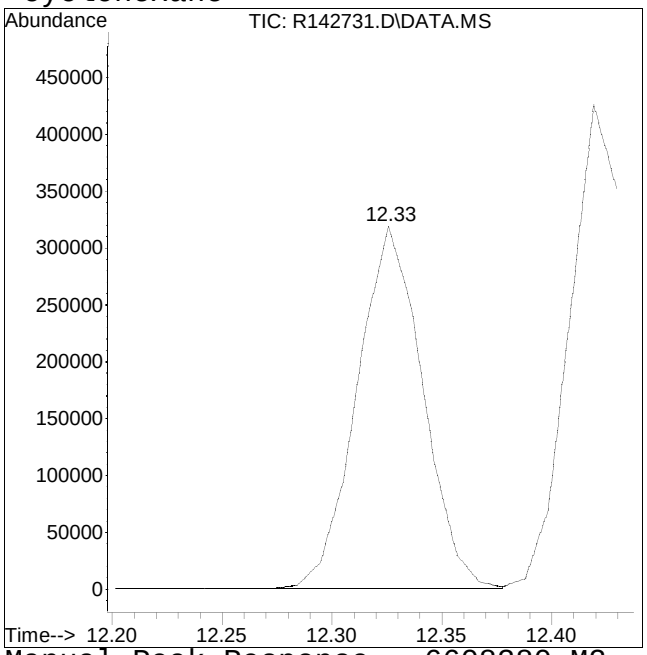
Original Peak Response = 2355706 Manual Peak Response = 8020277 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142731.D
Date Inj'd : 7/11/2015 6:45 pm
Sample : IAPH-10STD10.0
Method : QM150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:34 pm

Compound #6: cyclohexane



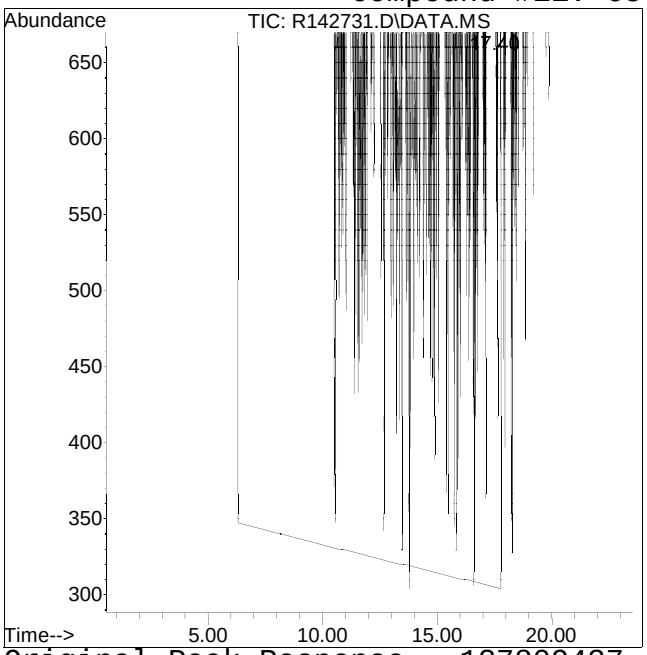


Original Peak Response = 0 Manual Peak Response = 6608380 M2
M2 = Peak not found by automatic integration algorithm.

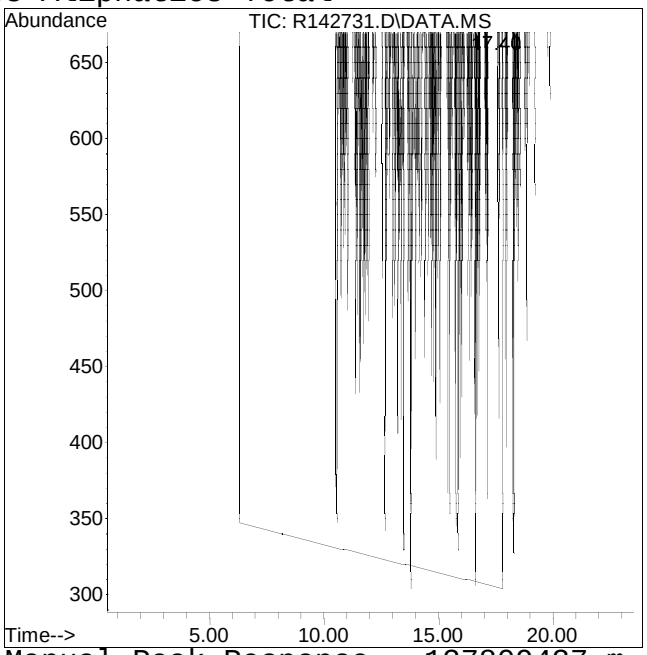
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142731.D
Date Inj'd : 7/11/2015 6:45 pm
Sample : IAPH-10STD10.0
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:34 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 137809437

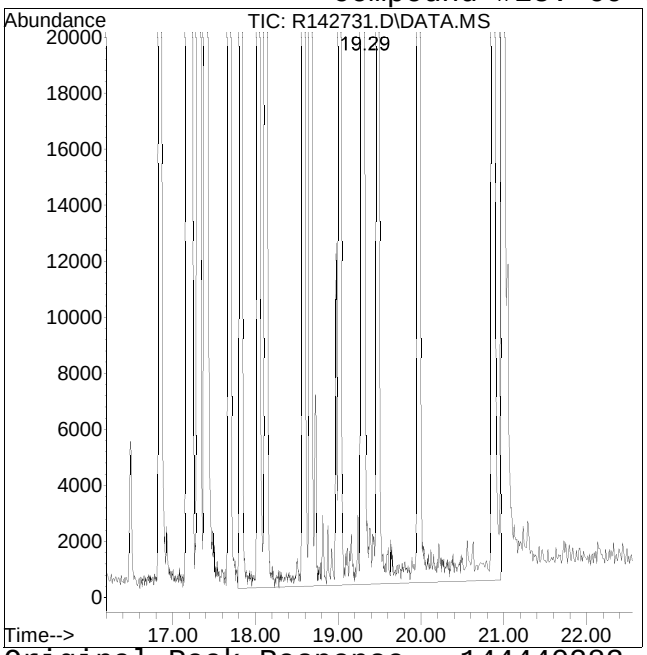


Manual Peak Response = 137809437 m

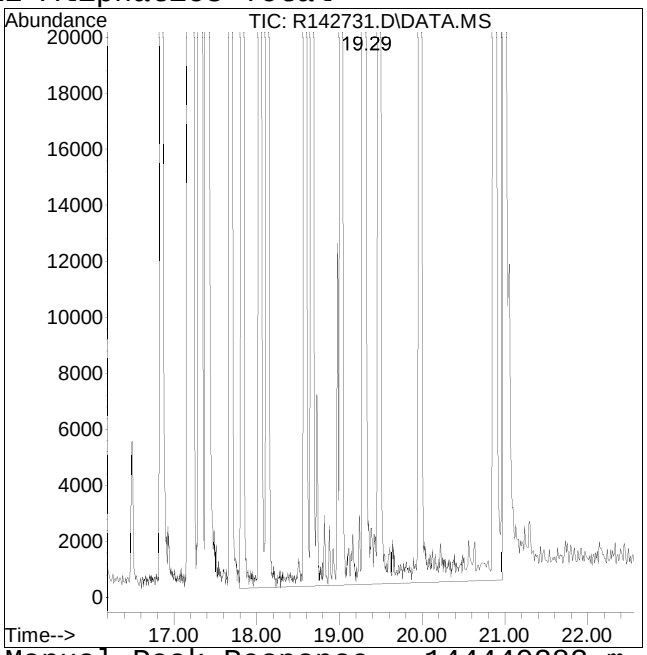
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142731.D
Date Inj'd : 7/11/2015 6:45 pm
Sample : IAPH-10STD10.0
Method :
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:34 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 144440283

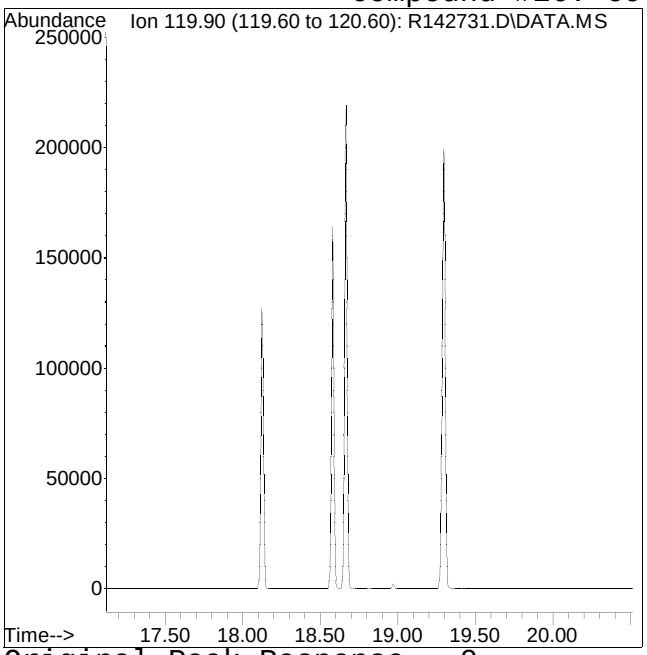


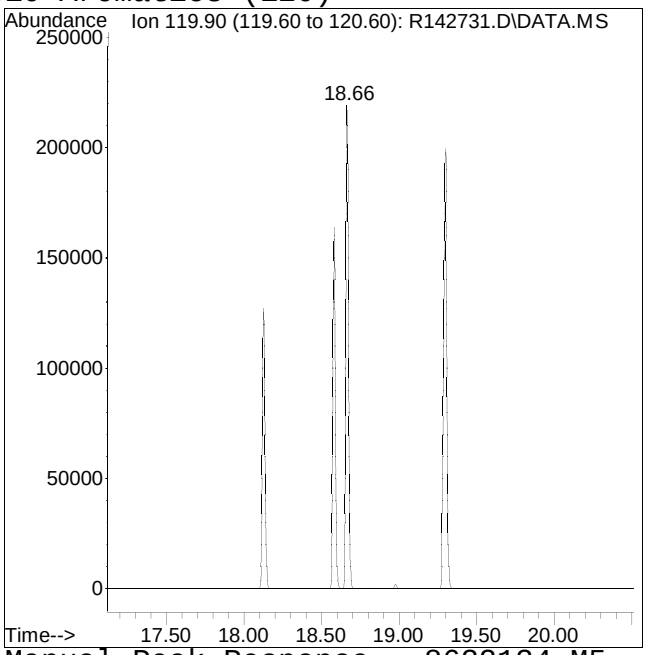
Manual Peak Response = 144440283 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142731.D
Date Inj'd : 7/11/2015 6:45 pm
Sample : IAPH-10STD10.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:34 pm

Compound #26: C9-C10 Aromatics (120)



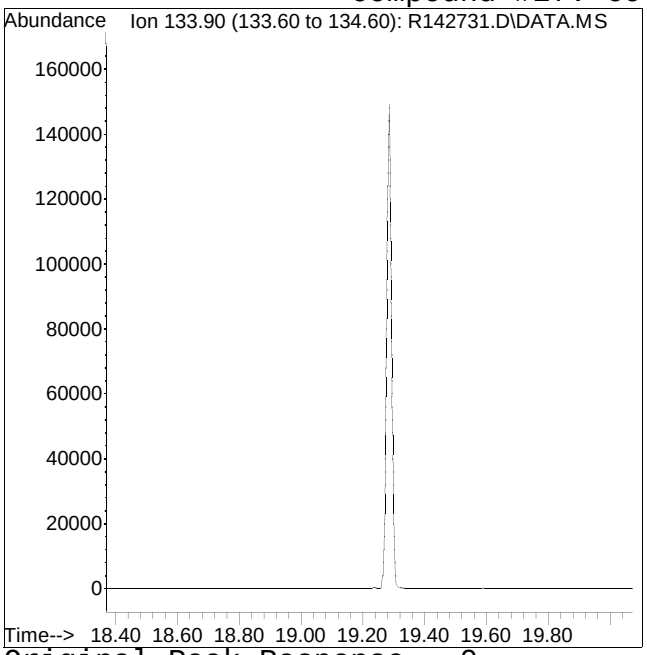


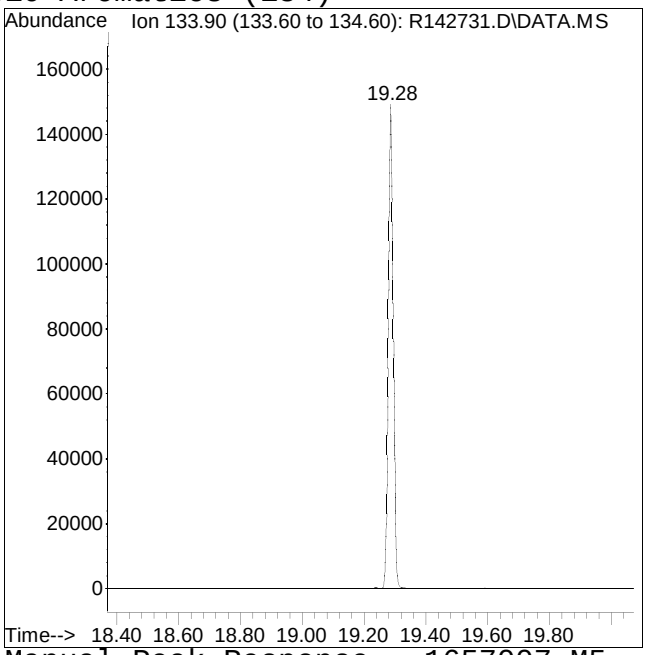
Original Peak Response = 0 Manual Peak Response = 8622134 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142731.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 6:45 pm Instrument : Air Piano 1
Sample : IAPH-10STD10.0 Quant Date : 7/11/2015 10:34 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 1657007 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142732.D
Acq On : 11 Jul 2015 7:18 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD20.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:45:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	851204	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	99.01%	
7) 1,4-difluorobenzene	12.43	114	3720168	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	99.09%	
12) chlorobenzene-D5	16.85	54	707382	10.000	ug/m3	0.00
Standard Area = 709082			Recovery	=	99.76%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5501023	9.671	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.71%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	7972201	10.003	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.03%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10320367	10.074	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.74%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2592248	9.731	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.31%	
32) toluene-D8 (TIC)	15.15	TIC	25494586	30.035	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	300.35%	
33) bromofluorobenzene (TIC)	18.04	TIC	9964229	9.947	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.47%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	1187801	42.269	ug/m3	99
3) isopentane	6.40	TIC	8734169	56.492	ug/m3	100
4) methyl tert butyl ether	9.10	73	4537737	70.855	ug/m3	99
5) hexane	10.27	TIC	15025760M4	66.606	ug/m3	
6) cyclohexane	12.33	TIC	12631527M2	66.411	ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	15273407	77.687	ug/m3	100
9) benzene	12.02	78	5508629	62.128	ug/m3	100
10) heptane	13.55	TIC	15106924	79.293	ug/m3	100
11) C5-C8 Aliphatics Total	12.26	TIC	264744905	-15.988	ug/m3	
13) toluene	15.25	91	7281691	72.211	ug/m3	98
14) n-octane	16.16	TIC	18665345	90.300	ug/m3	100
15) 2,3-dimethylheptane	17.22	TIC	23302953	100.087	ug/m3	100
16) ethyl benzene	17.18	91	9638427	84.256	ug/m3	100
17) m+p-xylene	17.31	91	7495561	84.270	ug/m3#	49
18) n-nonane	17.82	TIC	22544141	99.782	ug/m3	100
19) o-xylene	17.69	91	7646821	83.917	ug/m3	100
20) decane	19.02	TIC	27312152	111.802	ug/m3	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142732.D
Acq On : 11 Jul 2015 7:18 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD20.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:45:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21)	butylcyclohexane	19.48	TIC	28691281	107.790	ug/m3	100
22)	n-undecane	19.97	TIC	31371433	122.477	ug/m3	100
23)	naphthalene	20.99	128	14697708	110.932	ug/m3	100
24)	n-dodecane	20.87	TIC	33893449	140.012	ug/m3	100
25)	C9-C12 Aliphatics Tota	18.07	TIC	278669509	-289.040	ug/m3	
26)	C9-C10 Aromatics (120)	18.66	120	16717916M5	485.904	ug/m3	
27)	C9-C10 Aromatics (134)	19.28	134	3222526M5	487.365	ug/m3	
27)	C9-C10 Aromatics Total	0.00		19940442	3015.734	ug/m3	

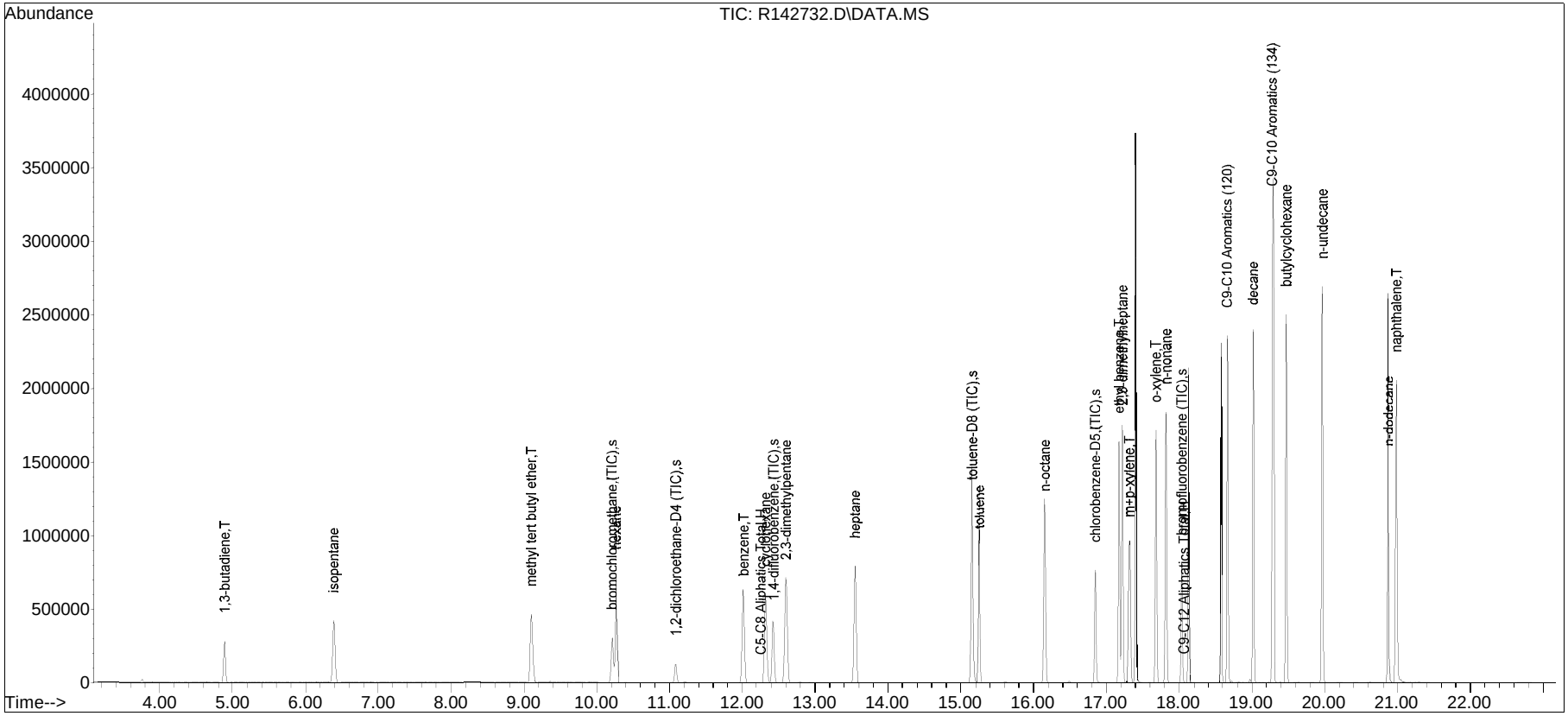
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142732.D
Acq On : 11 Jul 2015 7:18 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD20.0
Misc : WG801904
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 22:45:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

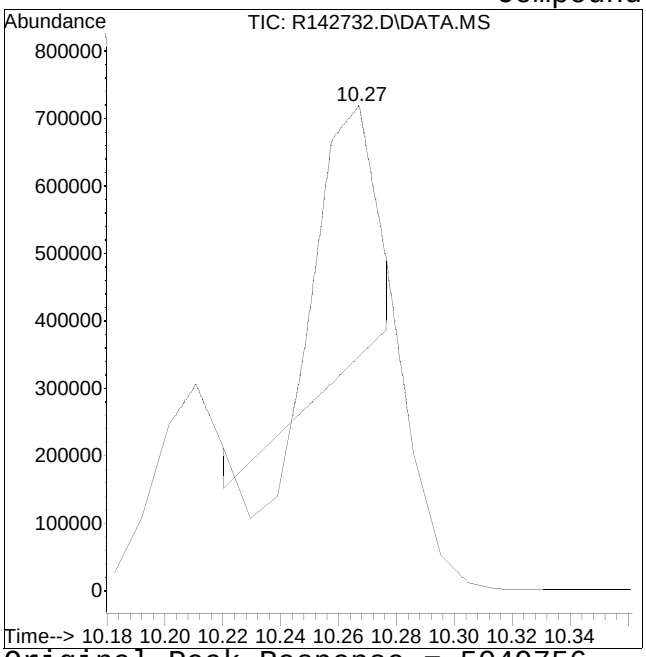
Sub List : Default
Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

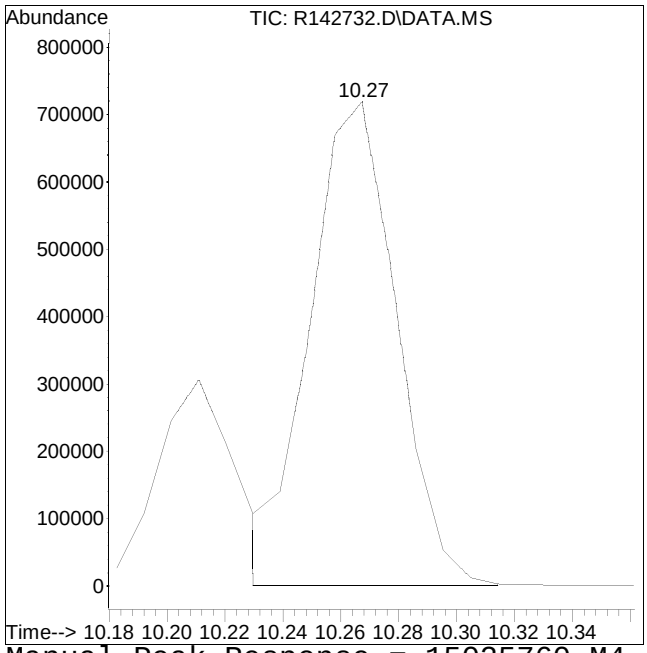


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142732.D
Date Inj'd : 7/11/2015 7:18 pm
Sample : IAPH-10STD20.0
Quant Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #5: hexane



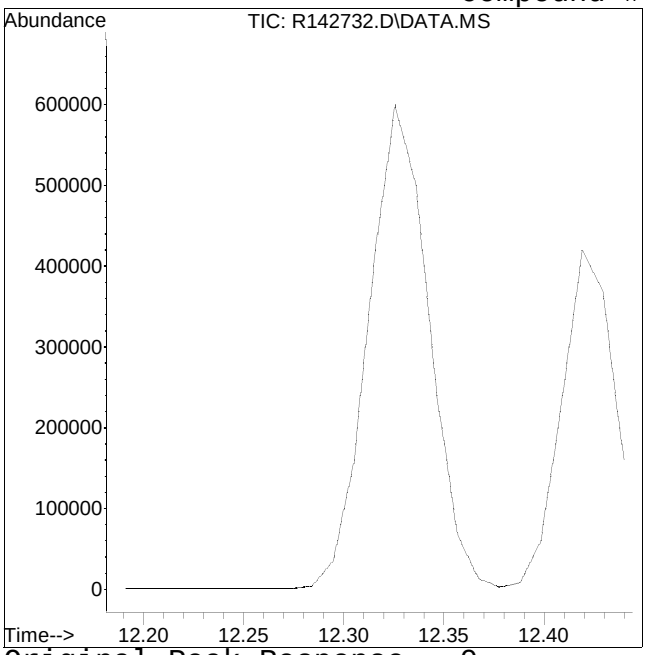


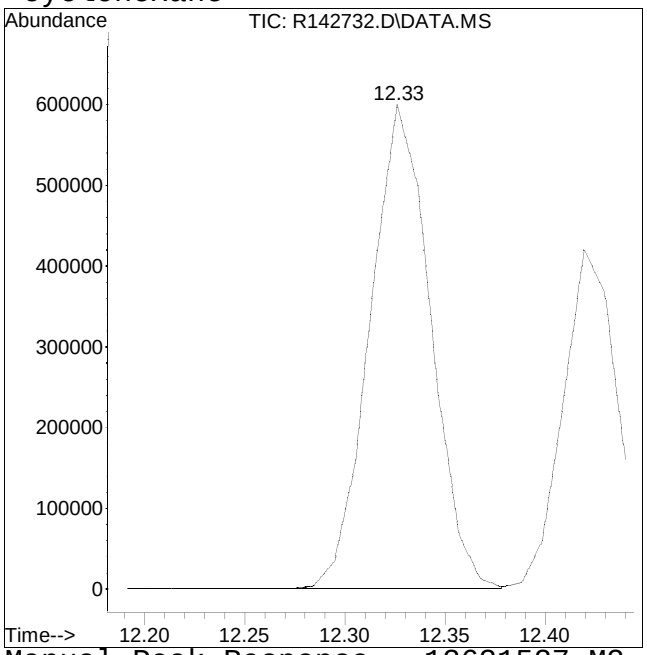
Original Peak Response = 5049756 Manual Peak Response = 15025760 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142732.D
Date Inj'd : 7/11/2015 7:18 pm
Sample : IAPH-10STD20.0
Method : QM50711
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #6: cyclohexane



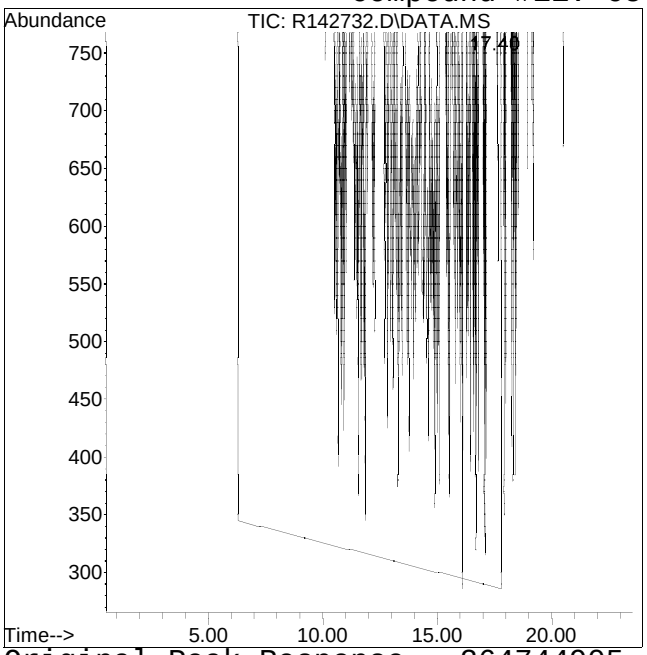


Original Peak Response = 0 Manual Peak Response = 12631527 M2
M2 = Peak not found by automatic integration algorithm.

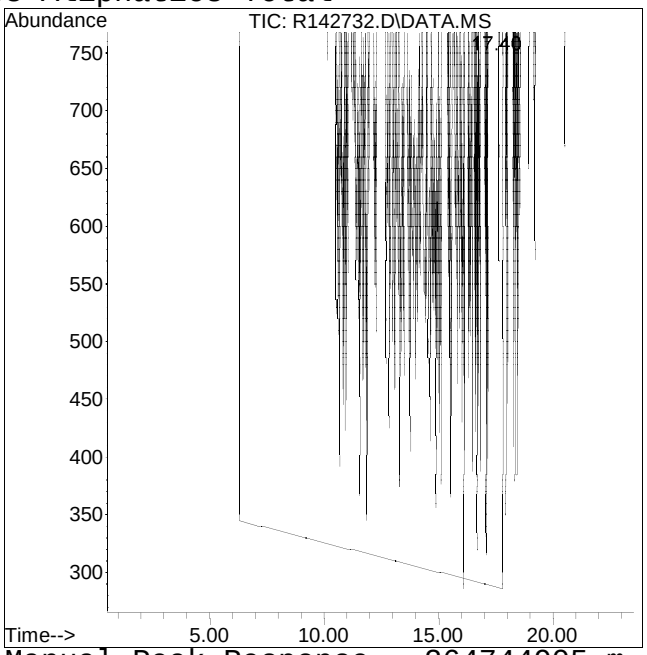
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142732.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:18 pm Instrument : Air Piano 1
Sample : IAPH-10STD20.0 Quant Date : 7/11/2015 10:38 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 264744905

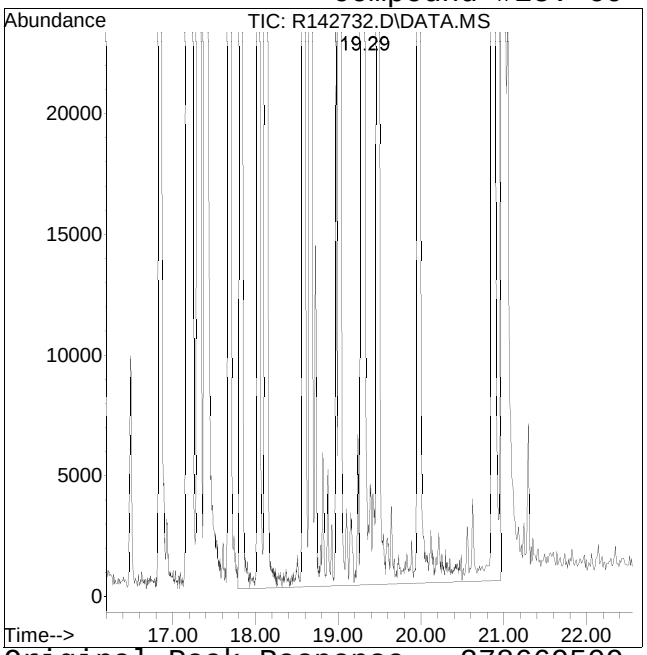


Manual Peak Response = 264744905 m

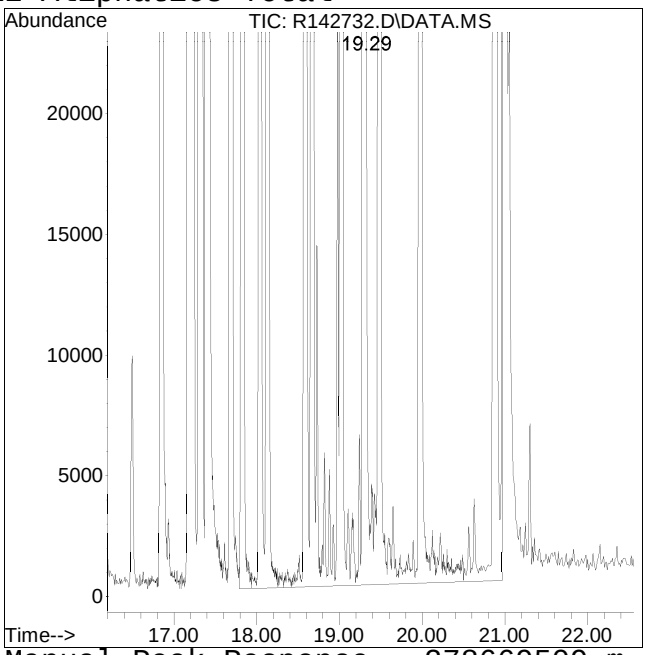
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\IA_ICAL\APH150711.M
Data File : R142732.D
Date Inj'd : 7/11/2015 7:18 pm
Sample : IAPH-10STD20.0
Quant Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 278669509

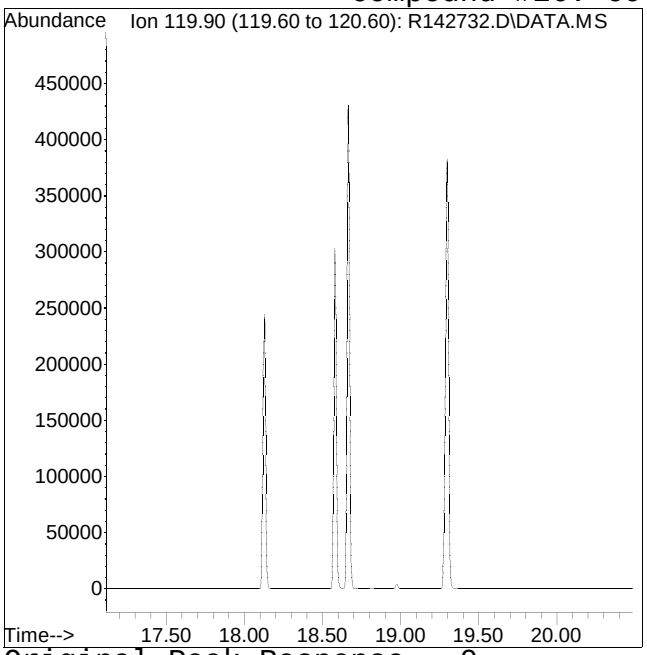


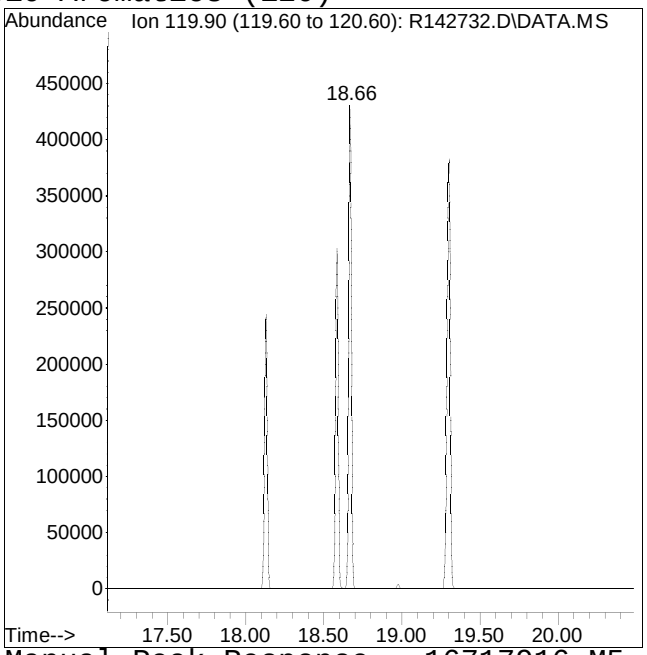
Manual Peak Response = 278669509 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142732.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:18 pm Instrument : Air Piano 1
Sample : IAPH-10STD20.0 Quant Date : 7/11/2015 10:38 pm

Compound #26: C9-C10 Aromatics (120)



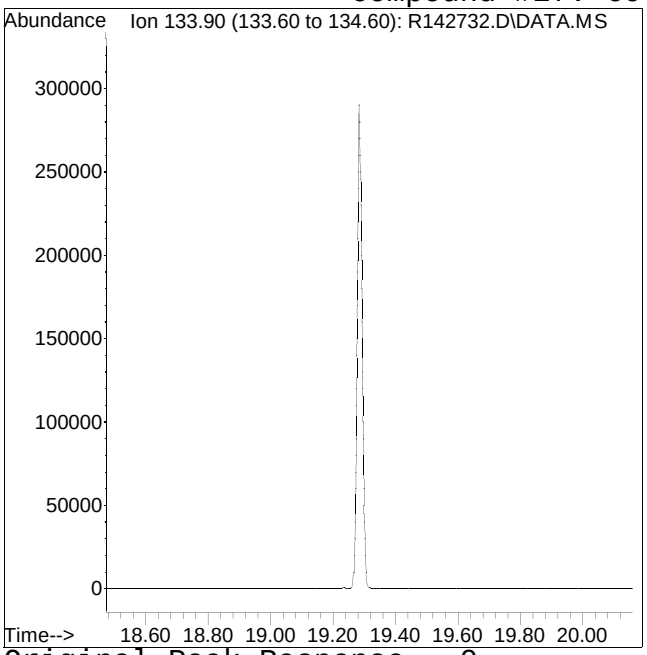


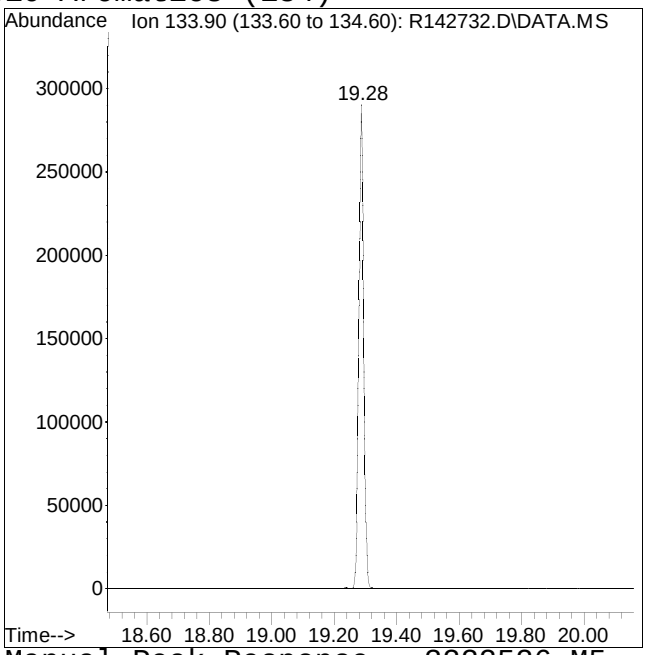
Original Peak Response = 0 Manual Peak Response = 16717916 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : QM150711A_ICAL\APH150711.M
Data File : R142732.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:18 pm Instrument : Air Piano 1
Sample : IAPH-10STD20.0 Quant Date : 7/11/2015 10:38 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 3222526 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142733.D
Acq On : 11 Jul 2015 7:50 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD50.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:45:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	860962	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	100.14%	
7) 1,4-difluorobenzene	12.43	114	3713101	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	98.90%	
12) chlorobenzene-D5	16.84	54	704343	10.000	ug/m3	0.00
Standard Area = 709082			Recovery	=	99.33%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5351995	9.450	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	94.50%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	7920974	9.981	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.81%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10296051	10.094	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.94%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2587881	9.757	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.57%	
32) toluene-D8 (TIC)	15.16	TIC	53514783	63.318	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	633.18%	
33) bromofluorobenzene (TIC)	18.04	TIC	9846185	9.871	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.71%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	3057829	107.582	ug/m3	100
3) isopentane	6.39	TIC	22192073	141.911	ug/m3	100
4) methyl tert butyl ether	9.10	73	11759165	181.534	ug/m3	99
5) hexane	10.27	TIC	38706267M4	169.632	ug/m3	
6) cyclohexane	12.33	TIC	33040012M2	171.742	ug/m3	
8) 2,3-dimethylpentane	12.60	TIC	39983409	203.760	ug/m3	100
9) benzene	12.02	78	14188242	160.325	ug/m3	99
10) heptane	13.55	TIC	38566524	202.812	ug/m3	100
11) C5-C8 Aliphatics Total	12.26	TIC	656242188	-64.597	ug/m3	
13) toluene	15.26	91	18292303	182.184	ug/m3	99
14) n-octane	16.16	TIC	46847985	227.621	ug/m3	99
15) 2,3-dimethylheptane	17.22	TIC	56334191	243.001	ug/m3	99
16) ethyl benzene	17.18	91	24026630	210.938	ug/m3	100
17) m+p-xylene	17.33	91	19050162M1	215.098	ug/m3	
18) n-nonane	17.83	TIC	54147256	240.693	ug/m3	99
19) o-xylene	17.69	91	19176126	211.350	ug/m3	100
20) decane	19.02	TIC	63789380	262.249	ug/m3	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142733.D
Acq On : 11 Jul 2015 7:50 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD50.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:45:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21)	butylcyclohexane	19.48	TIC	68683691	259.149	ug/m3	99
22)	n-undecane	19.97	TIC	71448052	280.144	ug/m3	98
23)	naphthalene	20.99	128	35307521	267.636	ug/m3	100
24)	n-dodecane	20.87	TIC	78778876	326.835	ug/m3	98
25)	C9-C12 Aliphatics Tota	18.07	TIC	664731177	-723.632	ug/m3	
26)	C9-C10 Aromatics (120)	18.67	120	40914511M5	1194.305	ug/m3	
27)	C9-C10 Aromatics (134)	19.29	134	7693167M5	1168.512	ug/m3	
27)	C9-C10 Aromatics Total	0.00		48607678	7383.003	ug/m3	

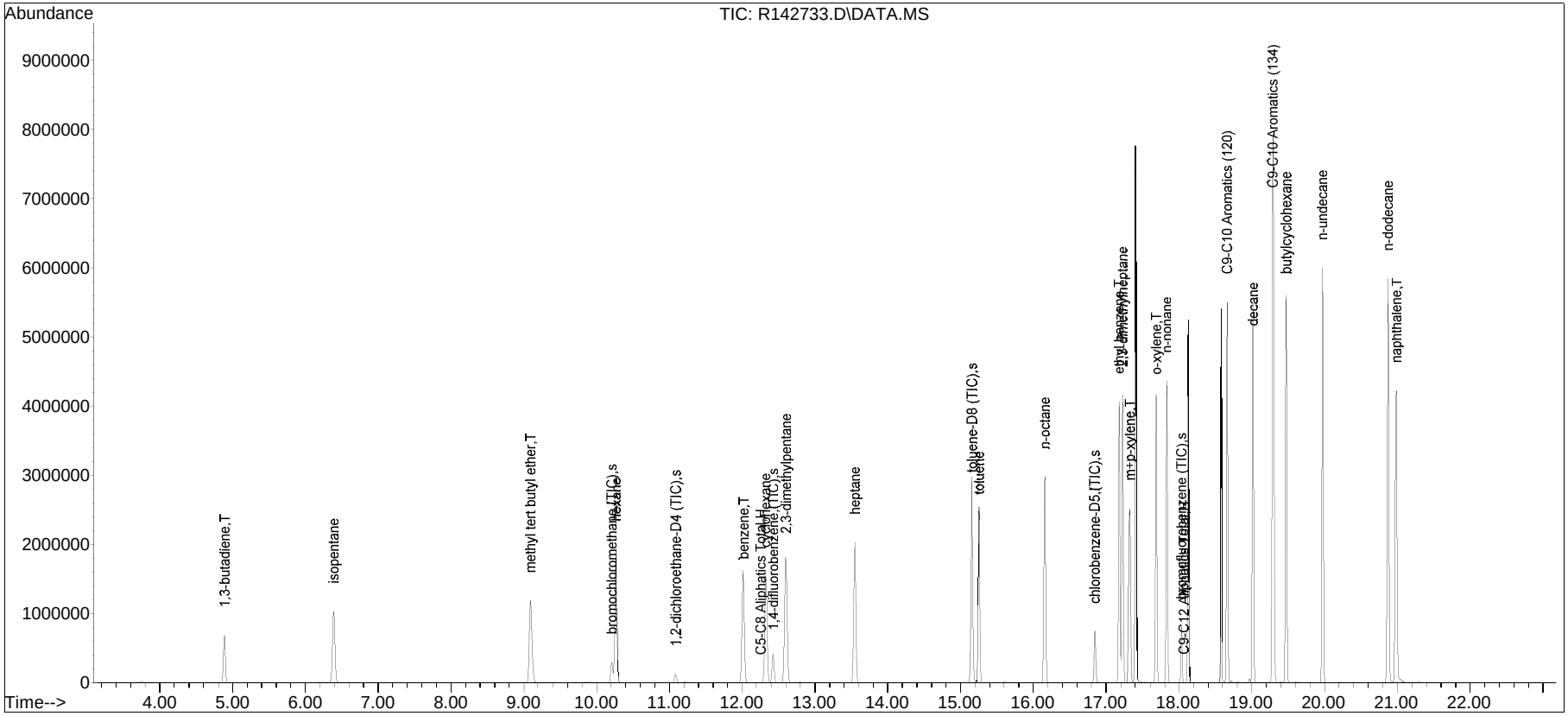
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142733.D
Acq On : 11 Jul 2015 7:50 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD50.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:45:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

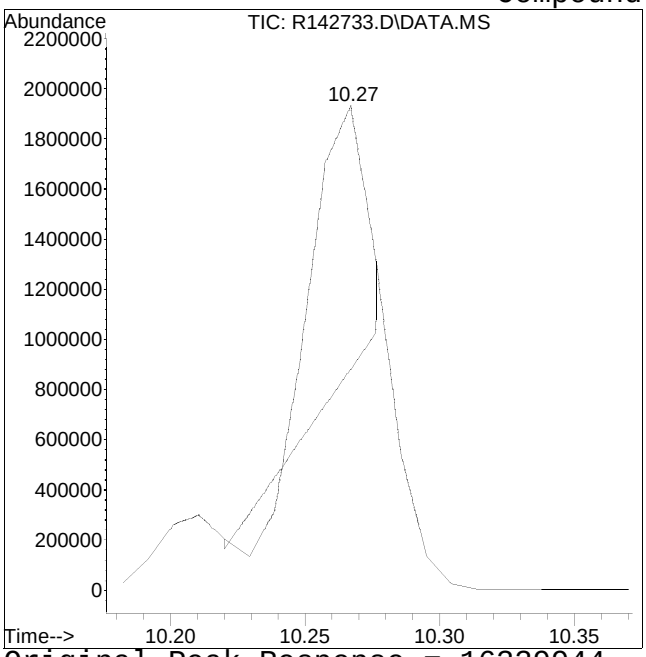
Sub List : Default
Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

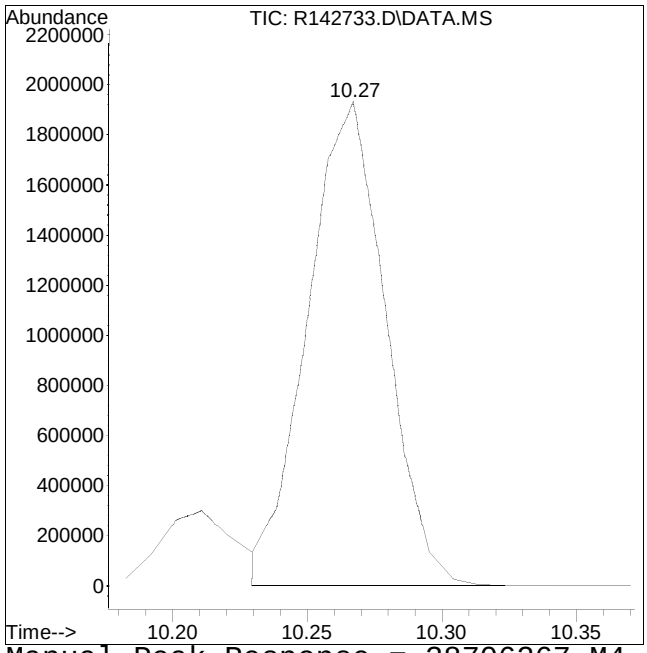


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Quant Method : O:\METHODS\AIR1\APH_ICAL\APH150711.M
Data File : R142733.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:50 pm Instrument : Air Piano 1
Sample : IAPH-10STD50.0 Quant Date : 7/11/2015 10:38 pm

Compound #5: hexane



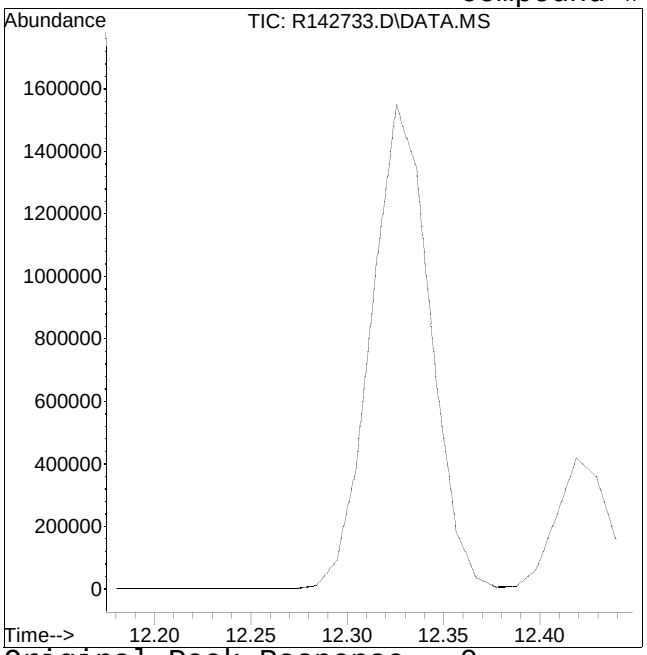


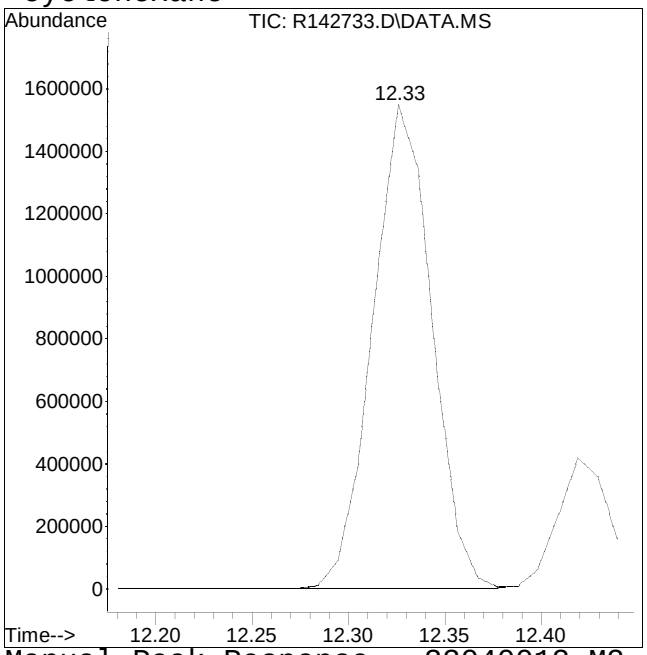
Original Peak Response = 16339944 Manual Peak Response = 38706267 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : QM150711A_ICAL\APH150711.M
Data File : R142733.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:50 pm Instrument : Air Piano 1
Sample : IAPH-10STD50.0 Quant Date : 7/11/2015 10:38 pm

Compound #6: cyclohexane



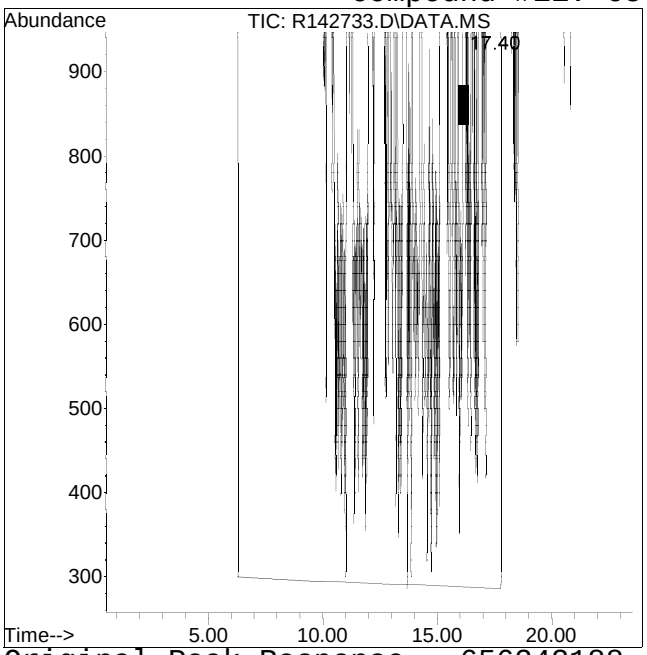


Original Peak Response = 0 Manual Peak Response = 33040012 M2
M2 = Peak not found by automatic integration algorithm.

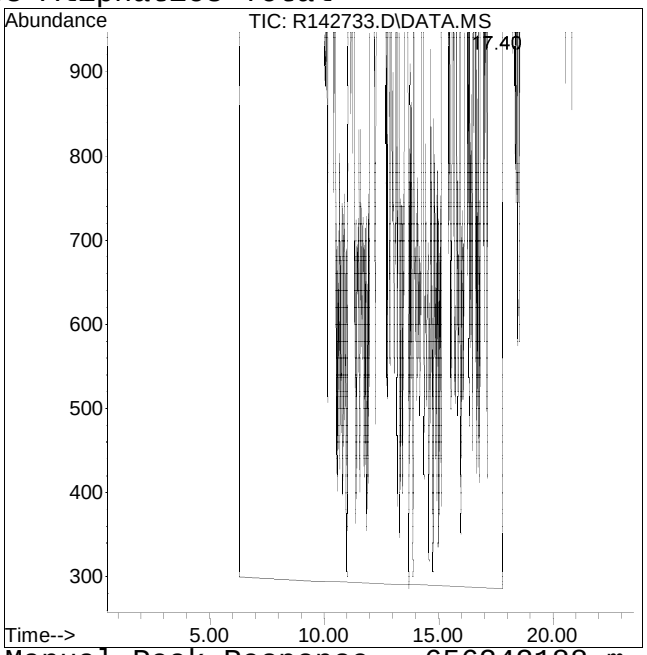
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\APH150711A_ICAL\APH150711.M
Data File : R142733.D
Date Inj'd : 7/11/2015 7:50 pm
Sample : IAPH-10STD50.0
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 656242188

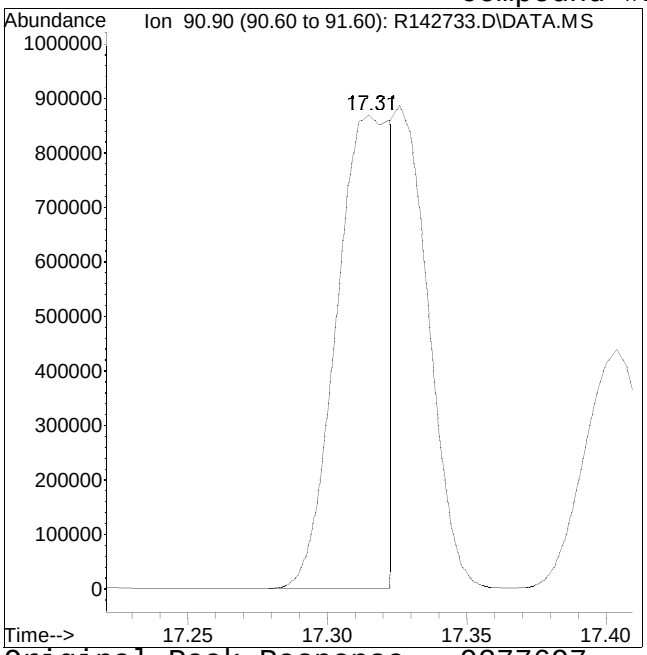


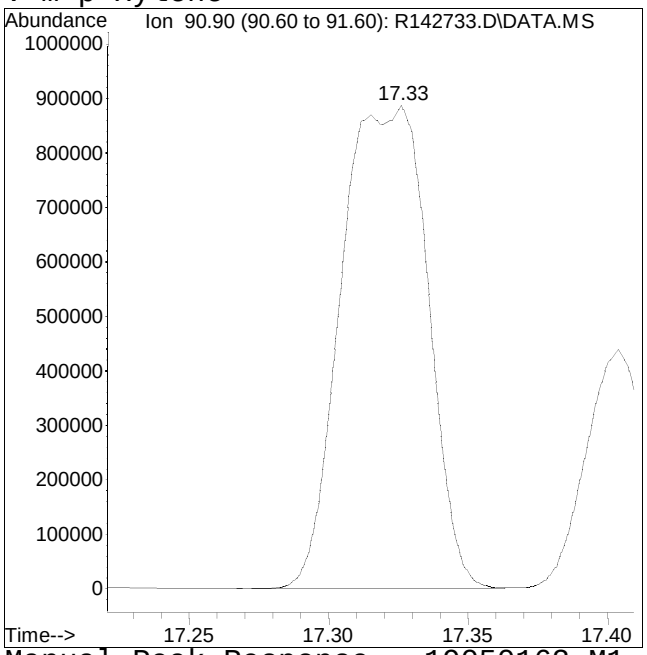
Manual Peak Response = 656242188 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\APH150711A_ICAL\APH150711.M
Data File : R142733.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:50 pm Instrument : Air Piano 1
Sample : IAPH-10STD50.0 Quant Date : 7/11/2015 10:38 pm

Compound #17: m+p-xylene



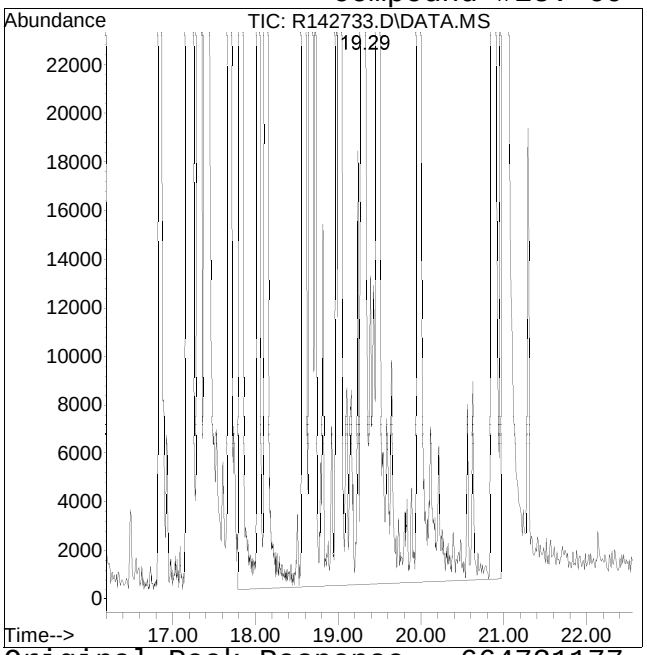


Original Peak Response = 9277697 Manual Peak Response = 19050162 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

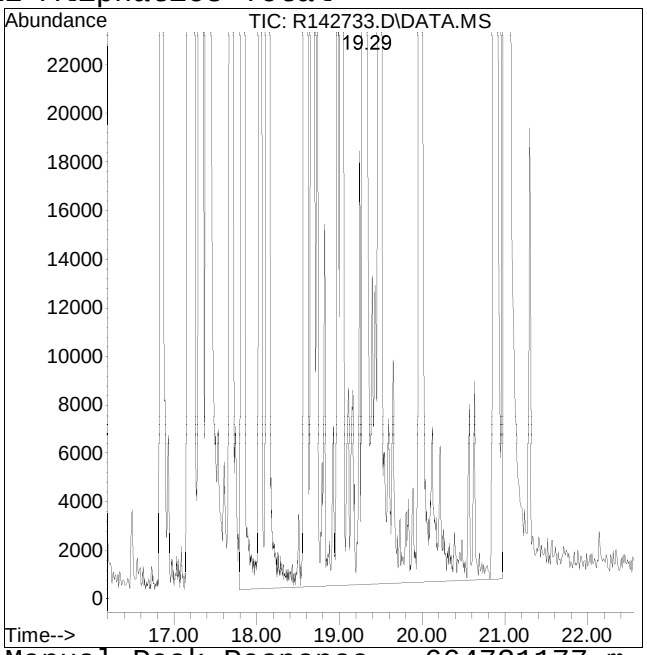
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142733.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:50 pm Instrument : Air Piano 1
Sample : IAPH-10STD50.0 Quant Date : 7/11/2015 10:38 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 664731177

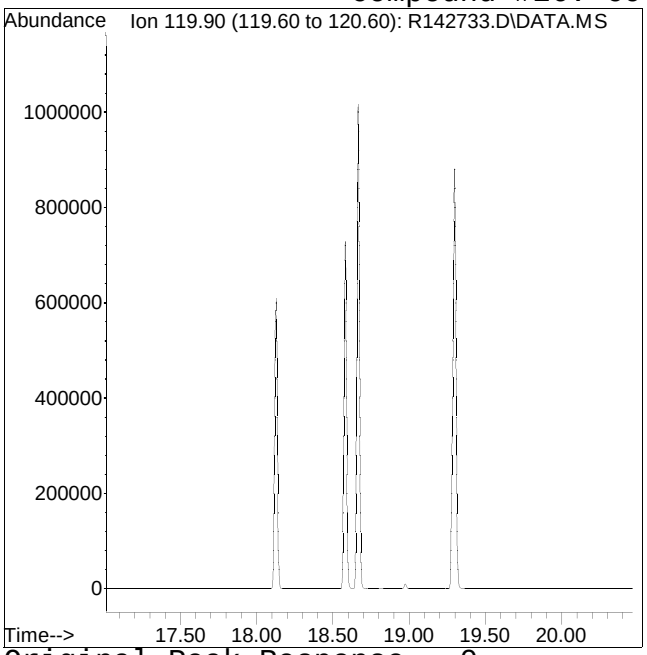


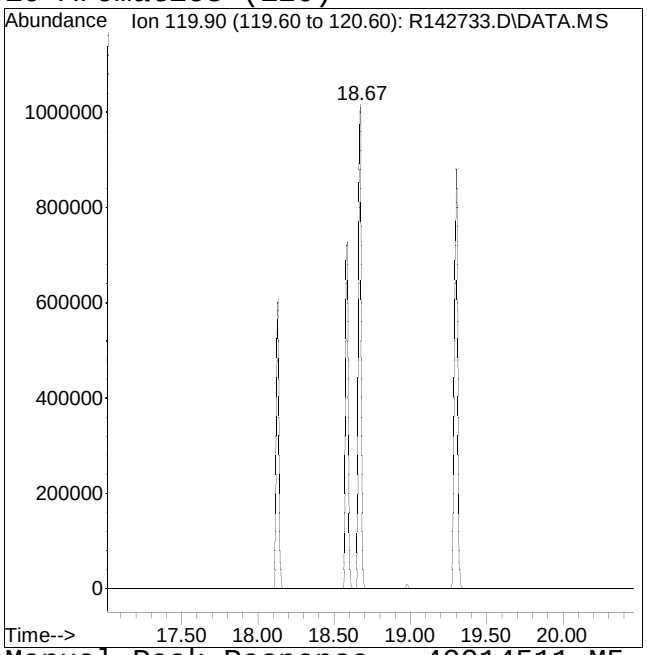
Manual Peak Response = 664731177 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : APH150711A_ICAL\APH150711.M
Data File : R142733.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 7:50 pm Instrument : Air Piano 1
Sample : IAPH-10STD50.0 Quant Date : 7/11/2015 10:38 pm

Compound #26: C9-C10 Aromatics (120)



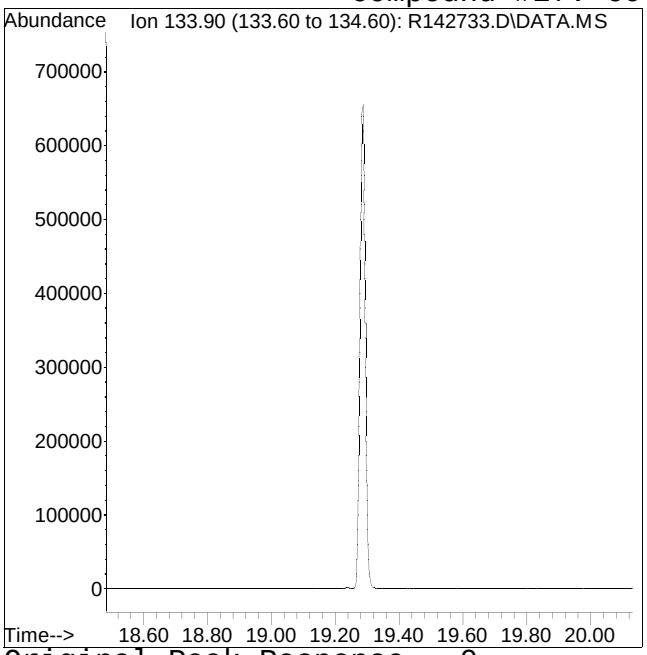


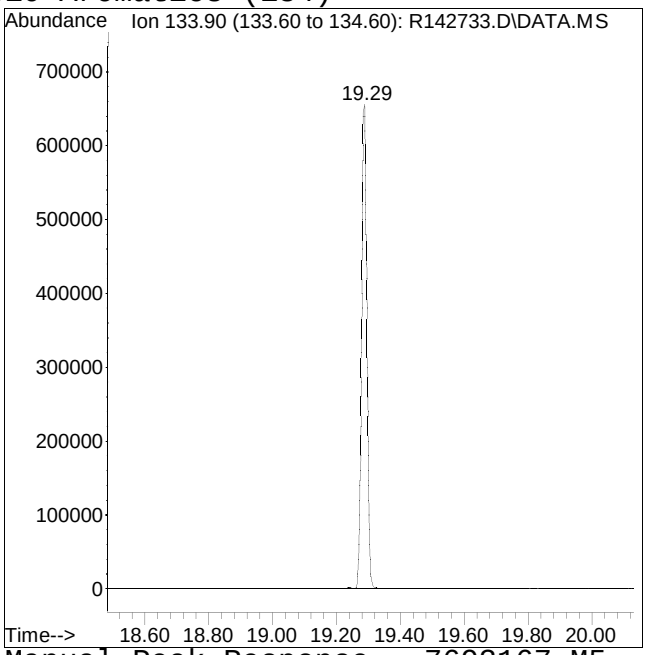
Original Peak Response = 0 Manual Peak Response = 40914511 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142733.D
Date Inj'd : 7/11/2015 7:50 pm
Sample : IAPH-10STD50.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:38 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 7693167 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142734.D
Acq On : 11 Jul 2015 8:23 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD100.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:46:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	853637	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	99.29%	
7) 1,4-difluorobenzene	12.43	114	3672969	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	97.83%	
12) chlorobenzene-D5	16.85	54	696636	10.000	ug/m3	0.00
Standard Area = 709082			Recovery	=	98.24%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5185980	9.258	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	92.58%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	7830679	9.977	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.77%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	10037577	9.949	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.49%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2633461	10.039	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.39%	
32) toluene-D8 (TIC)	15.16	TIC	92635043	110.817	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	1108.17%	
33) bromofluorobenzene (TIC)	18.04	TIC	9905526	10.041	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.41%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	5914430	209.870	ug/m3	99
3) isopentane	6.40	TIC	41581682	268.182	ug/m3	100
4) methyl tert butyl ether	9.10	73	22561186	351.281	ug/m3	99
5) hexane	10.27	TIC	72075024M4	318.582	ug/m3	
6) cyclohexane	12.33	TIC	62521536M4	327.776	ug/m3	
8) 2,3-dimethylpentane	12.61	TIC	73959050	381.022	ug/m3	100
9) benzene	12.02	78	27300950	311.868	ug/m3	99
10) heptane	13.55	TIC	71521218	380.221	ug/m3	100
11) C5-C8 Aliphatics Total	12.26	TIC	1184750269	-188.792	ug/m3	
13) toluene	15.26	91	34407490	346.475	ug/m3	98
14) n-octane	16.16	TIC	84465129	414.933	ug/m3	99
15) 2,3-dimethylheptane	17.23	TIC	96050790	418.906	ug/m3	98
16) ethyl benzene	17.18	91	43969834	390.298	ug/m3	99
17) m+p-xylene	17.33	91	35157087	401.356	ug/m3#	49
18) n-nonane	17.83	TIC	93852826	421.807	ug/m3	97
19) o-xylene	17.69	91	34937328	389.322	ug/m3	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142734.D
Acq On : 11 Jul 2015 8:23 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD100.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:46:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
20)	decane	19.02	TIC	103779942	431.377 ug/m3	96
21)	butylcyclohexane	19.48	TIC	116373593	443.945 ug/m3	99
22)	n-undecane	19.97	TIC	116113844	460.314 ug/m3	96
23)	naphthalene	20.99	128	64623411	495.274 ug/m3	99
24)	n-dodecane	20.88	TIC	130449843	547.193 ug/m3	96
25)	C9-C12 Aliphatics Tota	18.07	TIC	1122510126	-1221.804 ug/m3	
26)	C9-C10 Aromatics (120)	18.67	120	69851426M5	2061.539 ug/m3	
27)	C9-C10 Aromatics (134)	19.29	134	12755927M5	1958.929 ug/m3	
27)	C9-C10 Aromatics Total	0.00		82607353	12686.018 ug/m3	

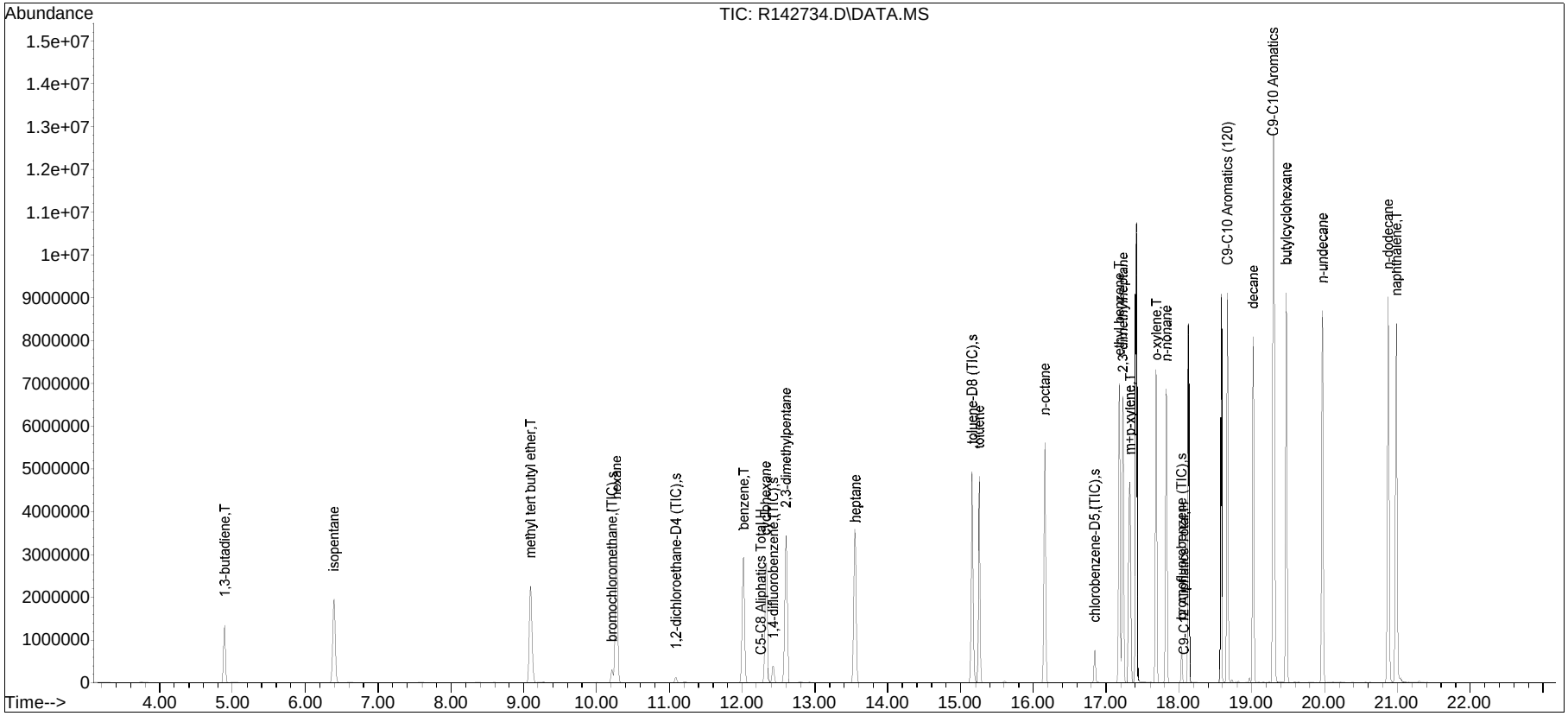
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142734.D
Acq On : 11 Jul 2015 8:23 pm
Operator : AIRPIANO1:RY
Sample : IAPH-10STD100.0
Misc : WG801904
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 22:46:58 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:35:39 2015
Response via : Initial Calibration

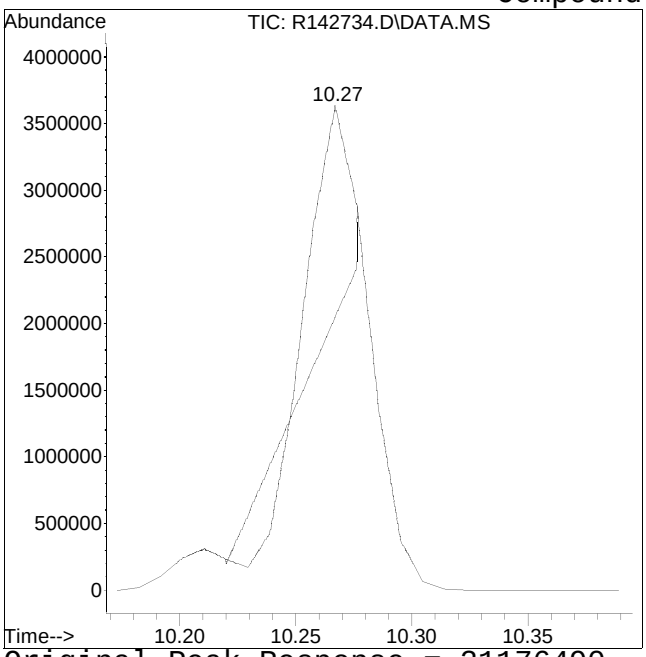
Sub List : Default All Compounds
Target Data : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D

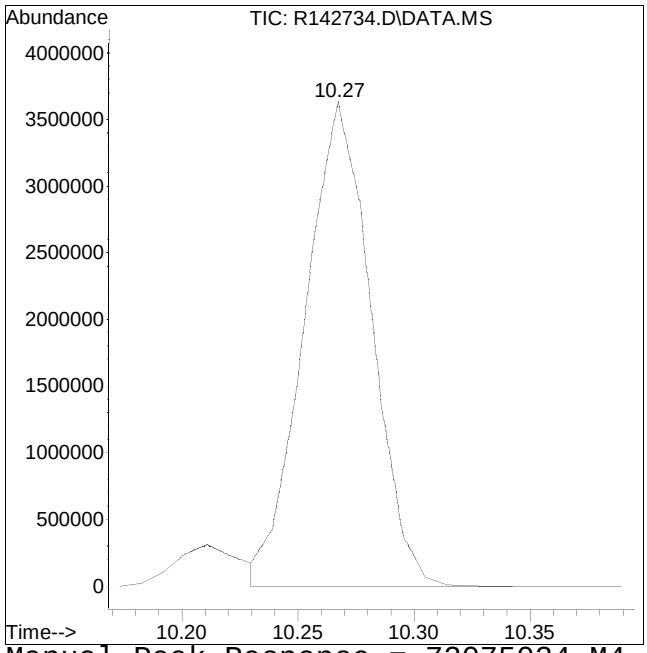


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142734.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 8:23 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 7/11/2015 10:39 pm

Compound #5: hexane



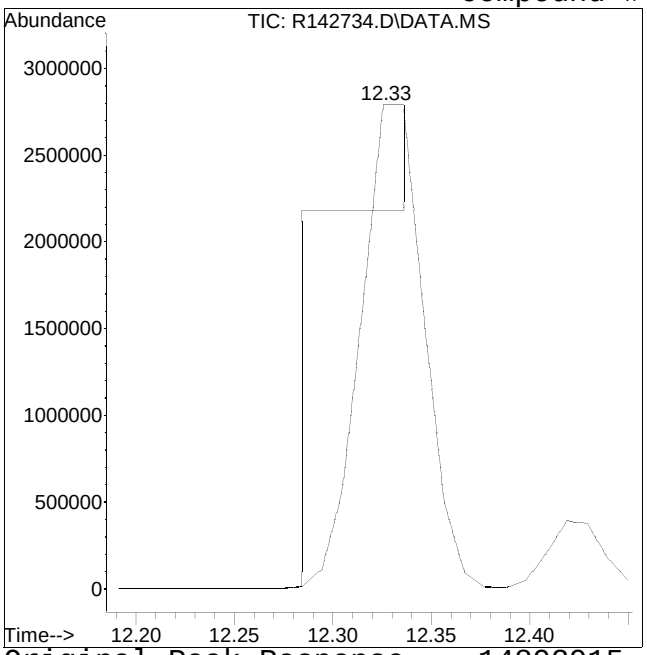


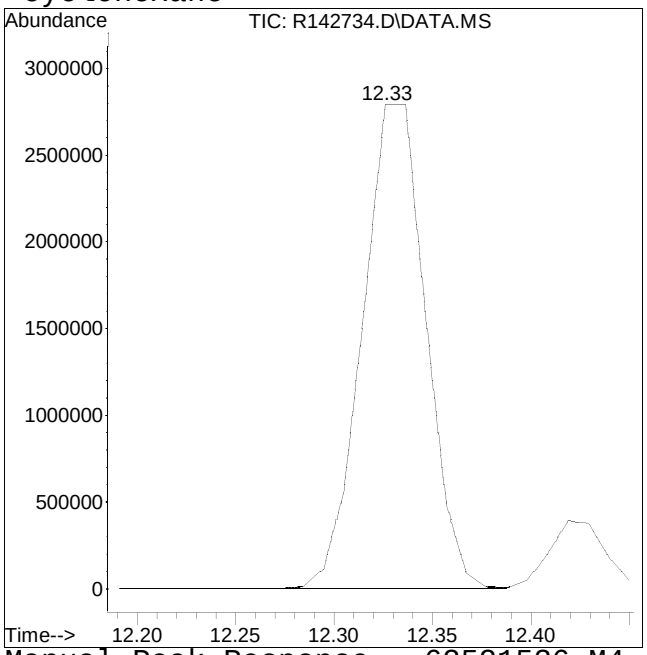
Original Peak Response = 21176490 Manual Peak Response = 72075024 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142734.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 8:23 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 7/11/2015 10:39 pm

Compound #6: cyclohexane



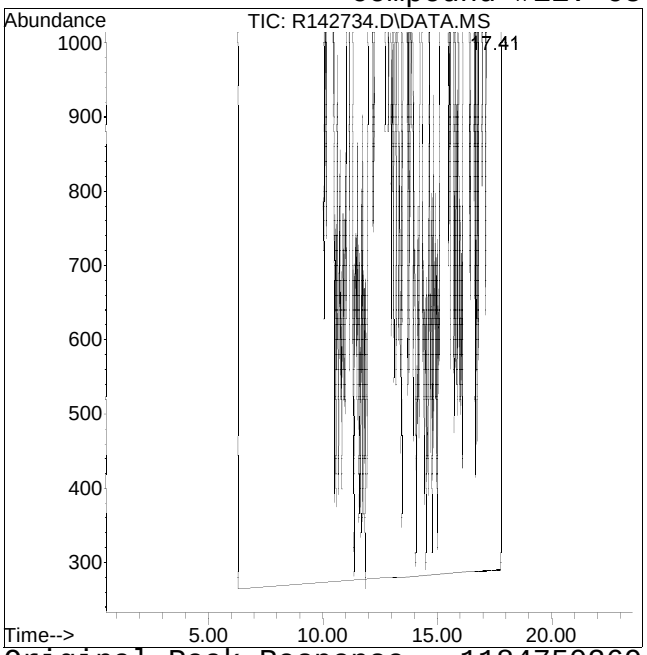


Original Peak Response = -14892915 Manual Peak Response = 62521536 M4
M4 = Poor automated baseline construction.

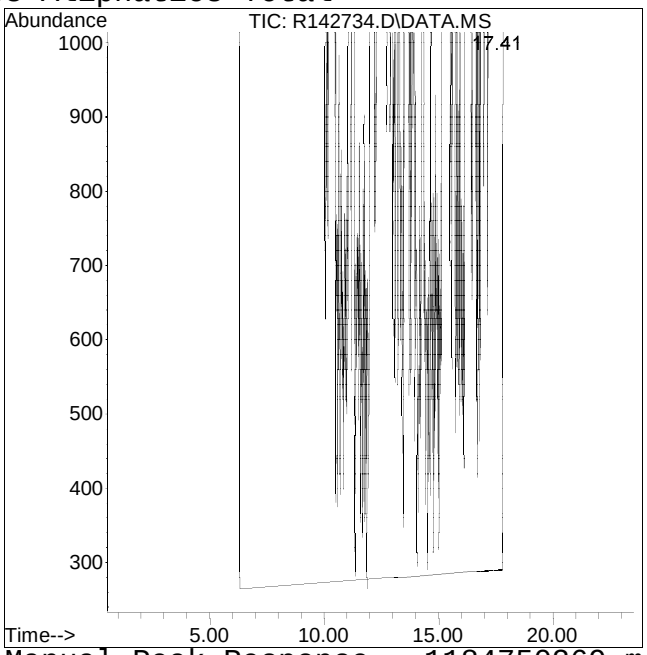
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\APH150711A_ICAL\APH150711.M
Data File : R142734.D
Date Inj'd : 7/11/2015 8:23 pm
Sample : IAPH-10STD100.0
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:39 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 1184750269

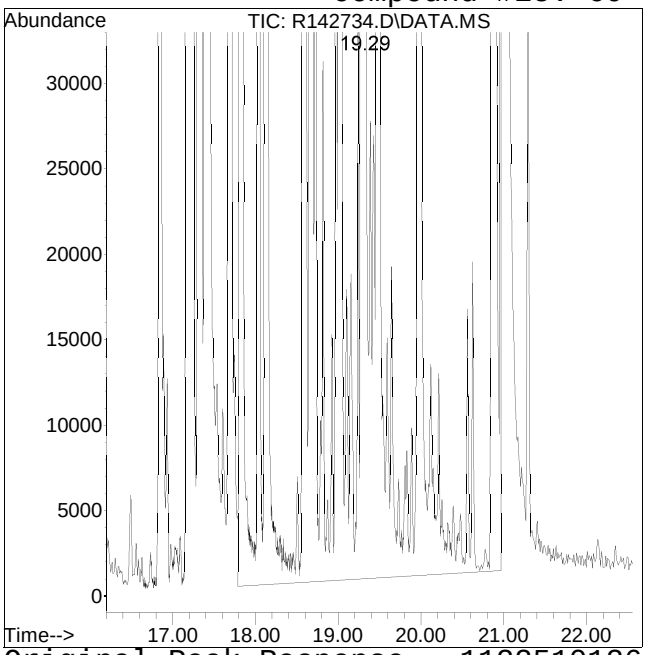


Manual Peak Response = 1184750269 m

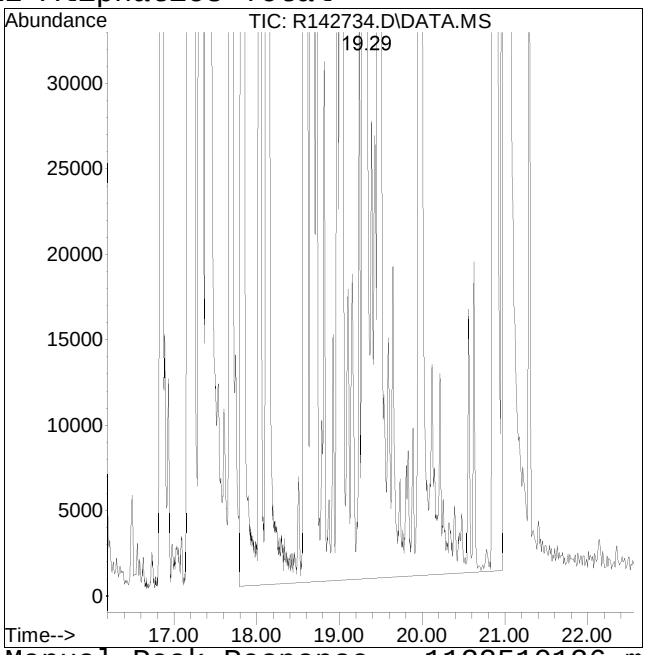
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\APH150711A_ICAL\APH150711.M
Data File : R142734.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 8:23 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 7/11/2015 10:39 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 1122510126

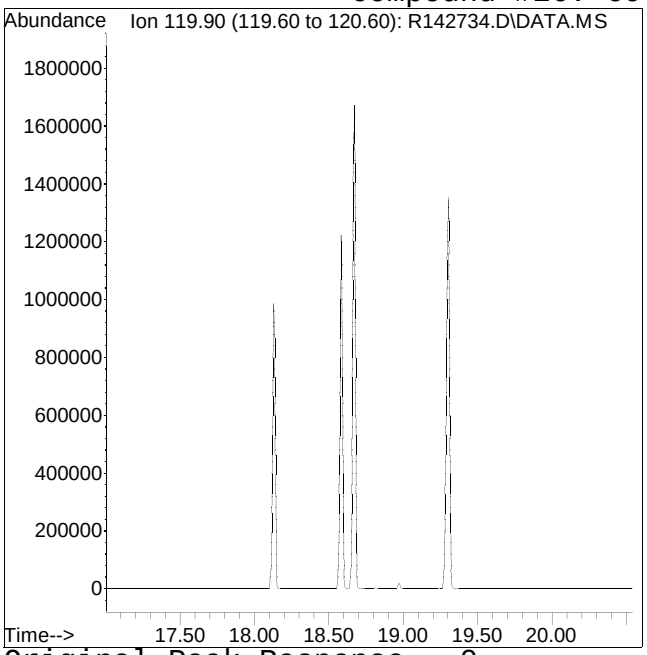


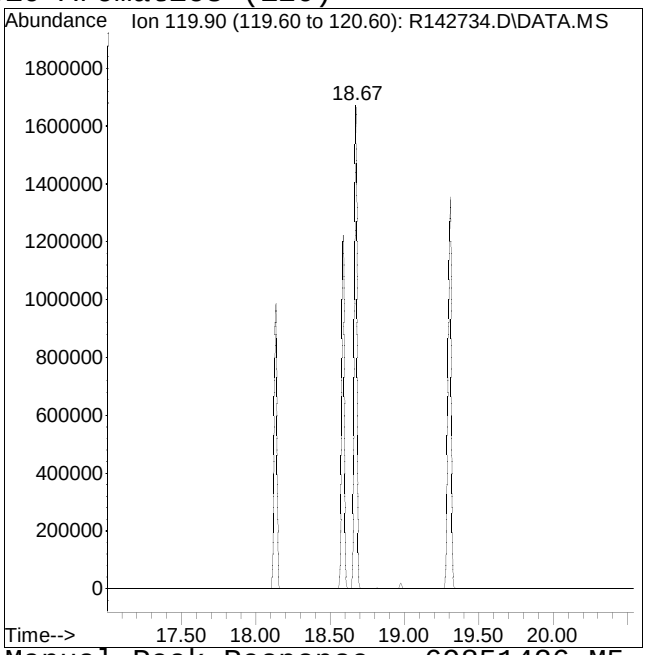
Manual Peak Response = 1122510126 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R142734.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 8:23 pm Instrument : Air Piano 1
Sample : IAPH-10STD100.0 Quant Date : 7/11/2015 10:39 pm

Compound #26: C9-C10 Aromatics (120)



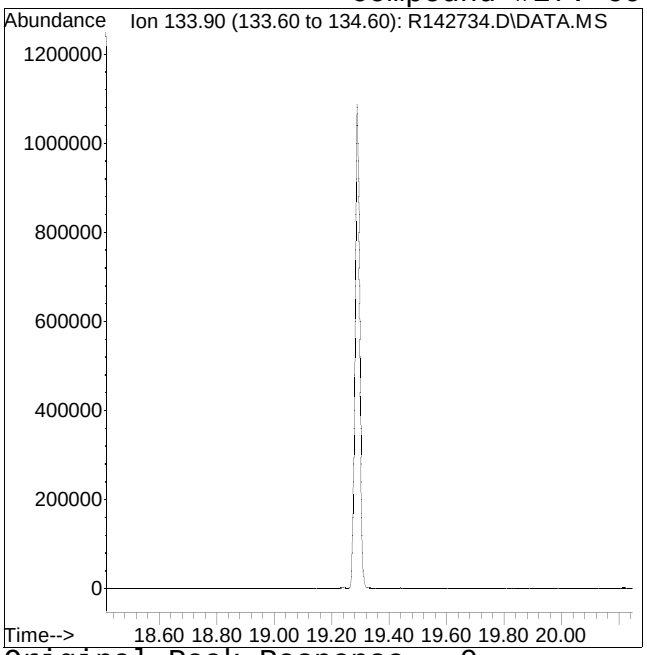


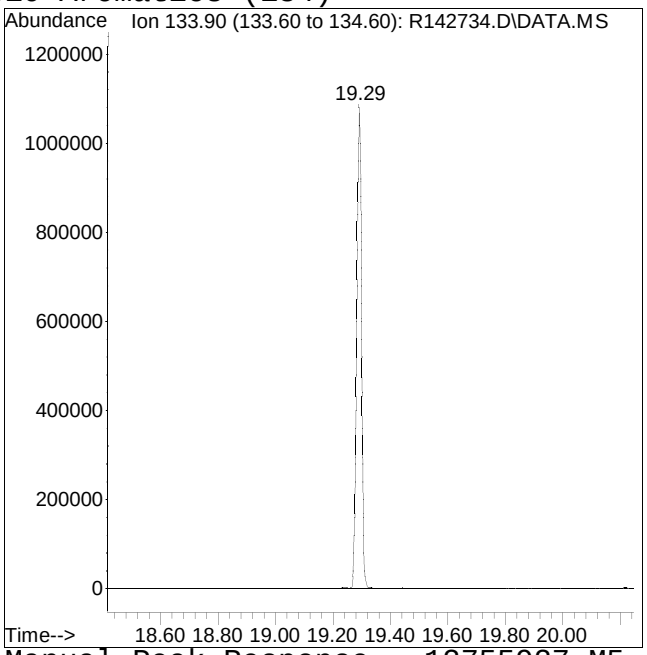
Original Peak Response = 0 Manual Peak Response = 69851426 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142734.D
Date Inj'd : 7/11/2015 8:23 pm
Sample : IAPH-10STD100.0
Method : APH150711.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:39 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 12755927 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

RSF Update Summary Report

```
   Method Path.........: O:\Forensics\Data\AIR1\2015\150711A_ICAL\
   Method File.........: APH150711.M
   Method Title........: APH Analysis
   Last Update.........: Sat Jul 11 22:47:17 2015


   Generating Sum Response Factor For:    C5-C8 Aliphatics Total

   No    Compound                   Level            Conc        Response
   ---------------------------------------------------------------------
    3 isopentane                        1         0.59000       138320.213
    5 hexane                            1         0.70500       246518.264
    6 cyclohexane                       1         0.69000       156884.638
    8 2,3-dimethylpentane               1         0.82000       158226.585
   10 heptane                           1         0.82000       156153.465
   14 n-octane                          1         0.94000       207297.596
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total            4.56500      1063400.761
   ISTD: 1,4-difluorobenzene                    10.00000      3789383.910
Level 1 Response Factor =          0.6147
   Level 1 Data file = R142728.D

    3 isopentane                        2         1.18000       229773.602
    5 hexane                            2         1.41000       398796.862
    6 cyclohexane                       2         1.38000       261154.882
    8 2,3-dimethylpentane               2         1.64000       335432.788
   10 heptane                           2         1.64000       332548.905
   14 n-octane                          2         1.87000       394040.764
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total            9.12000      1951747.803
   ISTD: 1,4-difluorobenzene                    10.00000      3786995.940
Level 2 Response Factor =          0.5651
   Level 2 Data file = R142729.D

    3 isopentane                        3         5.90000      1183959.660
    5 hexane                            3         7.04000      2032847.605
    6 cyclohexane                       3         6.88000      1652440.187
    8 2,3-dimethylpentane               3         8.19000      1967088.570
   10 heptane                           3         8.19000      1903375.929
   14 n-octane                          3         9.34000      2402242.094
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total           45.54000     11141954.045
   ISTD: 1,4-difluorobenzene                    10.00000      3777025.785
Level 3 Response Factor =          0.6478
   Level 3 Data file = R142730.D

    3 isopentane                        4        29.50000      4606571.076
    5 hexane                            4        35.20000      8020276.631
    6 cyclohexane                       4        34.40000      6608379.866
    8 2,3-dimethylpentane               4        41.00000      8134782.435
   10 heptane                           4        41.00000      7883208.384
   14 n-octane                          4        46.70000      9676250.730
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total          227.80000     44929469.122
   ISTD: 1,4-difluorobenzene                    10.00000      3754378.095
Level 4 Response Factor =          0.5253
   Level 4 Data file = R142731.D
```

```
    3 isopentane                        5        58.97000      8734168.514
    5 hexane                            5        70.44000     15025759.886
    6 cyclohexane                       5        68.79000     12631526.663
    8 2,3-dimethylpentane               5        81.90000     15273406.920
   10 heptane                           5        81.90000     15106924.365
   14 n-octane                          5        93.36000     18665344.638
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total          455.36000     85437130.986
   ISTD: 1,4-difluorobenzene                    10.00000      3720168.270
Level 5 Response Factor =          0.5043
   Level 5 Data file = R142732.D

    3 isopentane                        6       147.43000     22192073.340
    5 hexane                            6       178.74000     38706266.840
    6 cyclohexane                       6       171.97000     33040011.671
    8 2,3-dimethylpentane               6       204.74000     39983408.895
   10 heptane                           6       204.91000     38566523.531
   14 n-octane                          6       233.60000     46847984.899
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total         1141.39000    219336269.175
   ISTD: 1,4-difluorobenzene                    10.00000      3713100.690
Level 6 Response Factor =          0.5175
   Level 6 Data file = R142733.D

    3 isopentane                        8       294.85000     41581681.809
    5 hexane                            8       352.47000     72075024.081
    6 cyclohexane                       8       343.93000     62521535.824
    8 2,3-dimethylpentane               8       409.48000     73959049.525
   10 heptane                           8       409.82000     71521217.549
   14 n-octane                          8       467.20000     84465129.475
   ---------------------------------------------------------------------
  Sum RSF For: C5-C8 Aliphatics Total         2277.75000    406123638.263
   ISTD: 1,4-difluorobenzene                    10.00000      3672969.105
Level 8 Response Factor =          0.4854
   Level 8 Data file = R142734.D

   Avg Response Factor =    0.5515
   Rel Standard Deviation =    10.95%


   Generating Sum Response Factor For:    C9-C12 Aliphatics Total

   No     Compound                   Level            Conc        Response
   ---------------------------------------------------------------------
   15 2,3-dimethylheptane                1         1.05000       251500.525
    18 n-nonane                          1         1.05000       240208.826
    20 decane                            1         1.16500       257693.598
    21 butylcyclohexane                  1         1.14500       317655.596
    22 n-undecane                        1         1.28000       249101.247
    24 n-dodecane                        1         1.39000       121937.503
   ---------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total            7.08000      1438097.296
   ISTD: chlorobenzene-D5                        10.00000       706824.470
Level 1 Response Factor =          2.8737
   Level 1 Data file = R142728.D

    15 2,3-dimethylheptane               2         2.10000       494196.038
    18 n-nonane                          2         2.10000       480963.262
    20 decane                            2         2.33000       547077.203
    21 butylcyclohexane                  2         2.29000       643846.438
    22 n-undecane                        2         2.56000       555915.954
    24 n-dodecane                        2         2.78000       397285.154
   ---------------------------------------------------------------------
```

```
   Sum RSF For: C9-C12 Aliphatics Total          14.16000      3119284.048
   ISTD: chlorobenzene-D5                       10.00000       722840.085
Level 2 Response Factor =          3.0475
   Level 2 Data file = R142729.D

   15 2,3-dimethylheptane              3        10.48000      2981701.326
   18 n-nonane                         3        10.48000      2938177.087
   20 decane                           3        11.63000      3381801.296
   21 butylcyclohexane                 3        11.47000      3680777.540
   22 n-undecane                       3        12.78000      3687001.696
   24 n-dodecane                       3        13.92000      2910149.618
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total           70.76000     19579608.563
   ISTD: chlorobenzene-D5                       10.00000       712642.040
Level 3 Response Factor =          3.8828
   Level 3 Data file = R142730.D

   15 2,3-dimethylheptane              4        52.40000     12229454.617
   18 n-nonane                         4        52.40000     11867419.613
   20 decane                           4        58.20000     14251831.167
   21 butylcyclohexane                 4        57.30000     15288700.680
   22 n-undecane                       4        63.90000     16406725.900
   24 n-dodecane                       4        69.60000     16888960.586
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total          353.80000     86933092.563
   ISTD: chlorobenzene-D5                       10.00000       709082.495
Level 4 Response Factor =          3.4652
   Level 4 Data file = R142731.D

   15 2,3-dimethylheptane              5       104.83000     23302952.759
   18 n-nonane                         5       104.83000     22544140.575
   20 decane                           5       116.29000     27312151.995
   21 butylcyclohexane                 5       114.65000     28691281.100
   22 n-undecane                       5       127.76000     31371432.593
   24 n-dodecane                       5       139.22000     33893448.617
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total          707.58000    167115407.639
   ISTD: chlorobenzene-D5                       10.00000       707382.198
Level 5 Response Factor =          3.3388
   Level 5 Data file = R142732.D

   15 2,3-dimethylheptane              6       262.08000     56334191.064
   18 n-nonane                         6       262.29000     54147256.358
   20 decane                           6       290.96000     63789379.756
   21 butylcyclohexane                 6       268.62000     68683691.285
   22 n-undecane                       6       319.65000     71448051.915
   24 n-dodecane                       6       348.33000     78778876.097
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total         1751.93000    393181446.474
   ISTD: chlorobenzene-D5                       10.00000       704342.980
Level 6 Response Factor =          3.1863
   Level 6 Data file = R142733.D

   15 2,3-dimethylheptane              8       524.15000     96050790.262
   18 n-nonane                         8       524.58000     93852826.088
   20 decane                           8       581.92000    103779942.163
   21 butylcyclohexane                 8       573.23000    116373593.140
   22 n-undecane                       8       639.30000    116113844.495
   24 n-dodecane                       8       696.65000    130449842.822
   ----------------------------------------------------------------------
  Sum RSF For: C9-C12 Aliphatics Total         3539.83000    656620838.969
   ISTD: chlorobenzene-D5                       10.00000       696635.775
Level 8 Response Factor =          2.6627
```

```
   Level 8 Data file = R142734.D

   Avg Response Factor =    3.2082
   Rel Standard Deviation =    12.56%


   Generating Sum Response Factor For:    C9-C10 Aromatics (120)

   No    Compound                   Level            Conc        Response
   ---------------------------------------------------------------------
   26 C9-C10 Aromatics (120)           1         5.00000       179834.340
   27 C9-C10 Aromatics (134)           1         5.00000        33990.635
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)            5.00000       213824.975
   ISTD: chlorobenzene-D5                       10.00000       706824.470
Level 1 Response Factor =          0.6050
   Level 1 Data file = R142728.D

   26 C9-C10 Aromatics (120)           2        10.00000       356463.785
   27 C9-C10 Aromatics (134)           2        10.00000        69247.575
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)           10.00000       425711.360
   ISTD: chlorobenzene-D5                       10.00000       722840.085
Level 2 Response Factor =          0.5889
   Level 2 Data file = R142729.D

   26 C9-C10 Aromatics (120)           3        50.00000      2078517.600
   27 C9-C10 Aromatics (134)           3        50.00000       394356.945
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)           50.00000      2472874.545
   ISTD: chlorobenzene-D5                       10.00000       712642.040
Level 3 Response Factor =          0.6940
   Level 3 Data file = R142730.D

   26 C9-C10 Aromatics (120)           4       250.00000      8622133.610
   27 C9-C10 Aromatics (134)           4       250.00000      1657007.210
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)          250.00000     10279140.820
   ISTD: chlorobenzene-D5                       10.00000       709082.495
Level 4 Response Factor =          0.5799
   Level 4 Data file = R142731.D

   26 C9-C10 Aromatics (120)           5       500.00000     16717916.065
   27 C9-C10 Aromatics (134)           5       500.00000      3222525.730
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)          500.00000     19940441.795
   ISTD: chlorobenzene-D5                       10.00000       707382.198
Level 5 Response Factor =          0.5638
   Level 5 Data file = R142732.D

   26 C9-C10 Aromatics (120)           6      1250.00000     40914511.155
   27 C9-C10 Aromatics (134)           6      1250.00000      7693166.879
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)         1250.00000     48607678.034
   ISTD: chlorobenzene-D5                       10.00000       704342.980
Level 6 Response Factor =          0.5521
   Level 6 Data file = R142733.D

   26 C9-C10 Aromatics (120)           8      2500.00000     69851425.735
   27 C9-C10 Aromatics (134)           8      2500.00000     12755927.282
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (120)         2500.00000     82607353.017
   ISTD: chlorobenzene-D5                       10.00000       696635.775
```

```
Level 8 Response Factor =          0.4743
   Level 8 Data file = R142734.D

   Avg Response Factor =    0.5797
   Rel Standard Deviation =    11.34%


   Generating Sum Response Factor For:    C9-C10 Aromatics (134)

   No    Compound                   Level            Conc        Response
   ---------------------------------------------------------------------
   26 C9-C10 Aromatics (120)           1         5.00000       179834.340
   27 C9-C10 Aromatics (134)           1         5.00000        33990.635
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)            5.00000       213824.975
   ISTD: chlorobenzene-D5                       10.00000       706824.470
Level 1 Response Factor =          0.6050
   Level 1 Data file = R142728.D

   26 C9-C10 Aromatics (120)           2        10.00000       356463.785
   27 C9-C10 Aromatics (134)           2        10.00000        69247.575
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)           10.00000       425711.360
   ISTD: chlorobenzene-D5                       10.00000       722840.085
Level 2 Response Factor =          0.5889
   Level 2 Data file = R142729.D

   26 C9-C10 Aromatics (120)           3        50.00000      2078517.600
   27 C9-C10 Aromatics (134)           3        50.00000       394356.945
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)           50.00000      2472874.545
   ISTD: chlorobenzene-D5                       10.00000       712642.040
Level 3 Response Factor =          0.6940
   Level 3 Data file = R142730.D

   26 C9-C10 Aromatics (120)           4       250.00000      8622133.610
   27 C9-C10 Aromatics (134)           4       250.00000      1657007.210
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)          250.00000     10279140.820
   ISTD: chlorobenzene-D5                       10.00000       709082.495
Level 4 Response Factor =          0.5799
   Level 4 Data file = R142731.D

   26 C9-C10 Aromatics (120)           5       500.00000     16717916.065
   27 C9-C10 Aromatics (134)           5       500.00000      3222525.730
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)          500.00000     19940441.795
   ISTD: chlorobenzene-D5                       10.00000       707382.198
Level 5 Response Factor =          0.5638
   Level 5 Data file = R142732.D

   26 C9-C10 Aromatics (120)           6      1250.00000     40914511.155
   27 C9-C10 Aromatics (134)           6      1250.00000      7693166.879
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)         1250.00000     48607678.034
   ISTD: chlorobenzene-D5                       10.00000       704342.980
Level 6 Response Factor =          0.5521
   Level 6 Data file = R142733.D

   26 C9-C10 Aromatics (120)           8      2500.00000     69851425.735
   27 C9-C10 Aromatics (134)           8      2500.00000     12755927.282
   ---------------------------------------------------------------------
  Sum RSF For: C9-C10 Aromatics (134)         2500.00000     82607353.017
```

```
   ISTD: chlorobenzene-D5                        10.00000       696635.775
Level 8 Response Factor =          0.4743
   Level 8 Data file = R142734.D

   Avg Response Factor =    0.5797
   Rel Standard Deviation =    11.34%


   Generating Reference Response Factors

  No     Compound                             No  Refrence Compound
  ----------------------------------------------------------------------

  ----------------------------------------------------------------------

         Abacus Response Factor Update Macro Ver. 1.0
```

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142737.D
Acq On : 11 Jul 2015 10:04 pm
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801904
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 22:51:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	102	0.00
2	T	1,3-butadiene	22.100	21.247	3.9	102	0.00
4	T	methyl tert butyl ether	36.000	35.188	2.3	104	0.00
7	I	1,4-difluorobenzene	10.000	10.000	0.0	98	0.00
9	T	benzene	31.900	30.835	3.3	98	0.00
11	H	C5-C8 Aliphatics Total	122.000	115.343	5.5	52	0.00
12	I	chlorobenzene-D5	10.000	10.000	0.0	95	0.00
13		toluene	37.700	36.747	2.5	95	0.00
16	T	ethyl benzene	43.400	43.428	-0.1	97	0.00
17	T	m+p-xylene	86.800	86.015	0.9	194	0.01
19	T	o-xylene	43.400	43.483	-0.2	98	0.00
23	T	naphthalene	52.420	58.406	-11.4	102	0.00
25	H	C9-C12 Aliphatics Total	174.000	178.567	-2.6	45	0.00
27		C9-C10 Aromatics Total	465.000	400.512	13.9	153	-0.72#
28	s	bromochloromethane (TIC)	10.000	10.439	-4.4	99	0.00
29	s	1,4-difluorobenzene (TIC)	10.000	10.179	-1.8	97	0.00
30	s	chlorobenzene-D5 (TIC)	10.000	9.984	0.2	96	0.00
31	s	1,2-dichloroethane-D4 (TIC)	10.000	10.473	-4.7	99	0.00
32	s	toluene-D8 (TIC)	20.000	9.605	52.0#	46	0.00
33	s	bromofluorobenzene (TIC)	10.000	10.318	-3.2	98	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142737.D
Acq On : 11 Jul 2015 10:04 pm
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801904
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 22:51:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	128	880452	10.000	ug/m3	0.00
Standard Area = 859719			Recovery	=	102.41%	
7) 1,4-difluorobenzene	12.43	114	3665661	10.000	ug/m3	0.00
Standard Area = 3754378			Recovery	=	97.64%	
12) chlorobenzene-D5	16.85	54	676661	10.000	ug/m3	# 0.00
Standard Area = 709082			Recovery	=	95.43%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.21	TIC	5645125M4	10.439	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	104.39%	
29) 1,4-difluorobenzene (TIC)	12.43	TIC	7763812	10.179	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	101.79%	
30) chlorobenzene-D5 (TIC)	16.85	TIC	9807836	9.984	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.84%	
31) 1,2-dichloroethane-D4 ...	11.09	TIC	2655493	10.473	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	104.73%	
32) toluene-D8 (TIC)	15.15	TIC	7763160	9.605	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.05%	
33) bromofluorobenzene (TIC)	18.04	TIC	9862234	10.318	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	103.18%	
Target Compounds						Qvalue
2) 1,3-butadiene	4.89	54	640261	21.247	ug/m3	99
4) methyl tert butyl ether	9.10	73	2422639	35.188	ug/m3	99
9) benzene	12.02	78	2793096	30.835	ug/m3	99
11) C5-C8 Aliphatics Total	12.26	TIC	23316421m	115.343	ug/m3	
13) toluene	15.25	91	3630082	36.747	ug/m3	98
16) ethyl benzene	17.18	91	4834222	43.428	ug/m3	100
17) m+p-xylene	17.32	91	7491706M1	86.015	ug/m3	
19) o-xylene	17.69	91	3887836	43.483	ug/m3	99
23) naphthalene	20.99	128	7131303	58.406	ug/m3	100
25) C9-C12 Aliphatics Total	18.07	TIC	38764034m	178.567	ug/m3	
26) C9-C10 Aromatics (120)	18.98	120	10498905M5	267.643	ug/m3	
27) C9-C10 Aromatics (134)	19.28	134	5212083M5	132.869	ug/m3	
27) C9-C10 Aromatics Total	0.00		15710988	400.512	ug/m3	

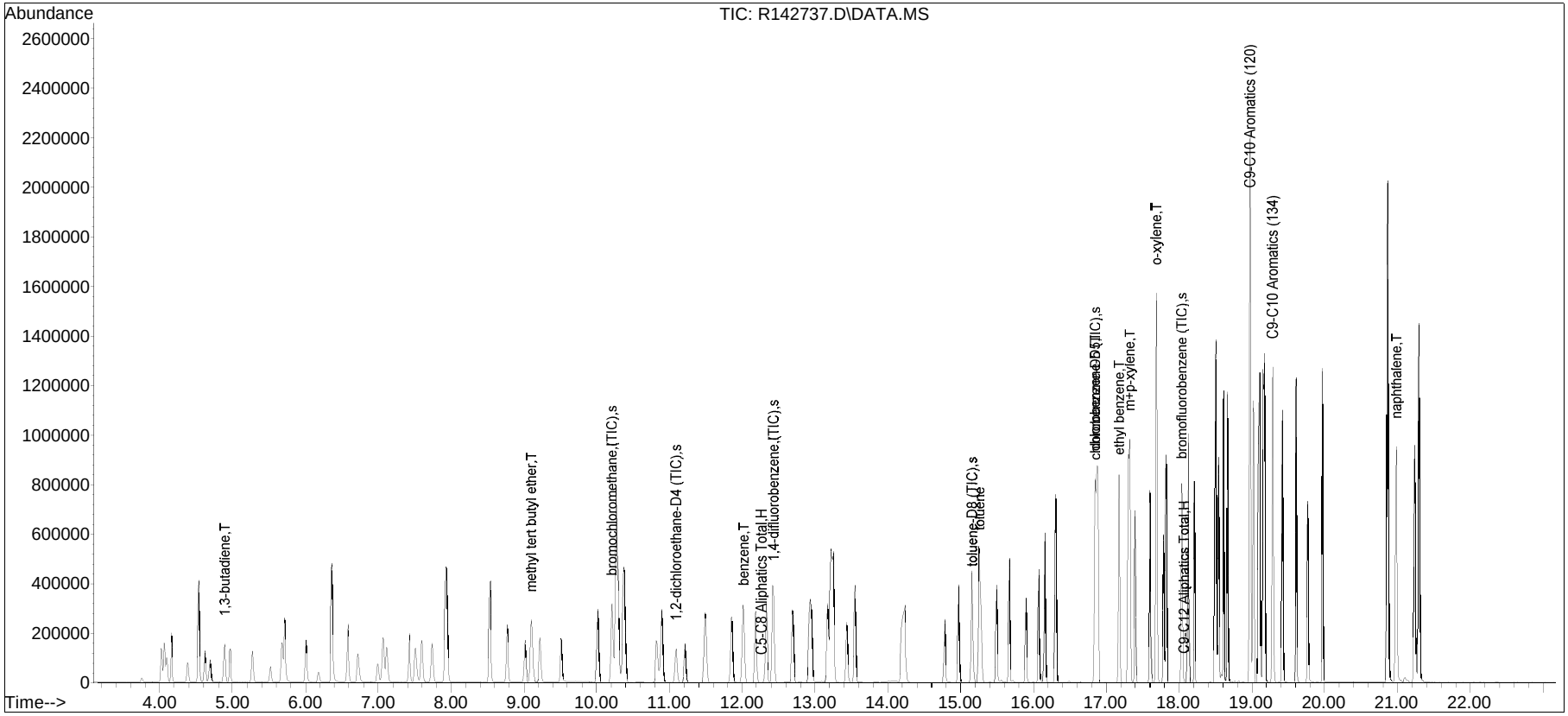
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\
Data File : R142737.D
Acq On : 11 Jul 2015 10:04 pm
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801904
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 11 22:51:41 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

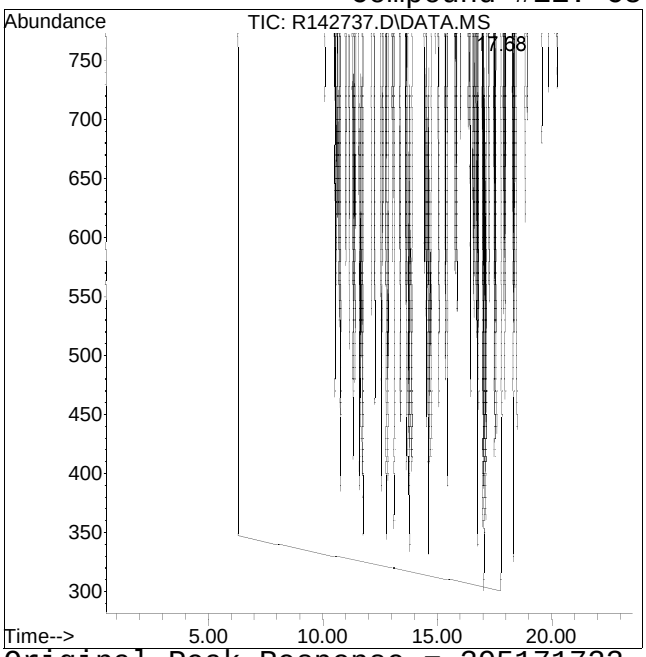
Sub List : APH_STDs
Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\R142731.D



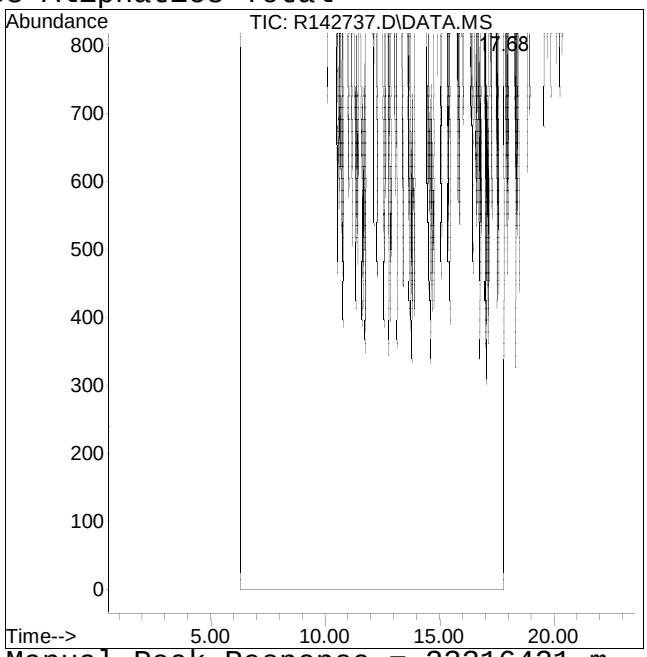
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : O:\METHODS\AIR1\APH150711.M
Data File : R142737.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 10:04 pm Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 10:50 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 395171723

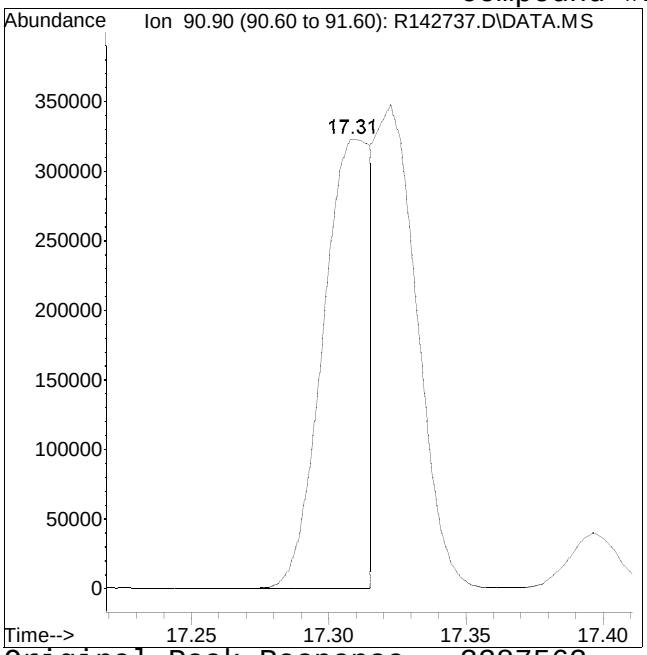


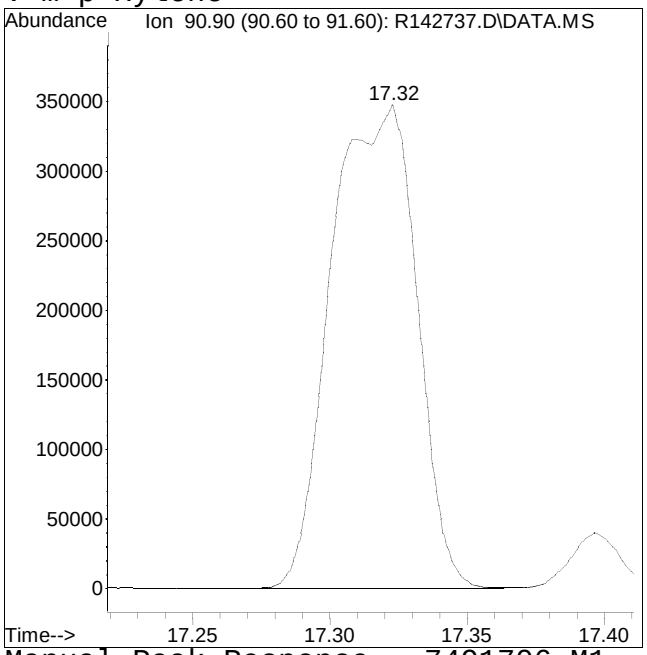
Manual Peak Response = 23316421 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : AIR1_150711A_ICAL\APH150711.M
Data File : R142737.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 10:04 pm Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 10:50 pm

Compound #17: m+p-xylene





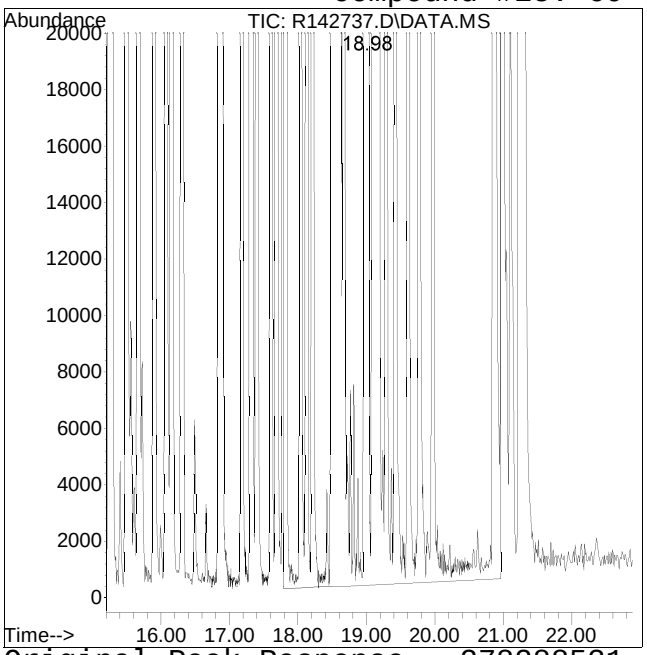
Original Peak Response = 3387563 Manual Peak Response = 7491706 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration/Negative Proof Report

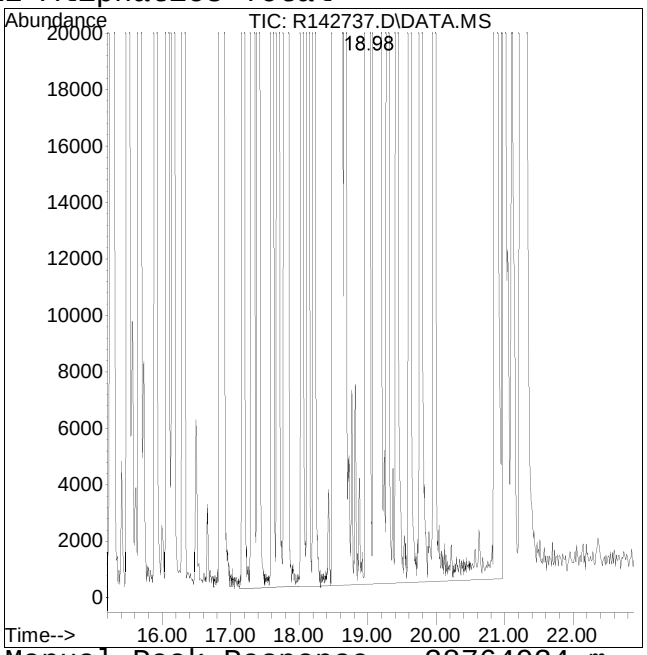
Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142737.D
Date Inj'd : 7/11/2015 10:04 pm
Sample : CTO15-LLSTD10.0

Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:50 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 278288531

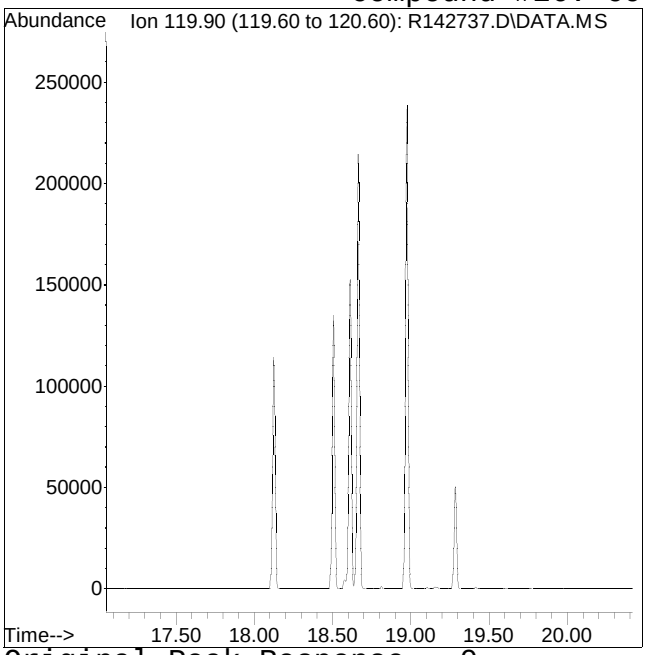


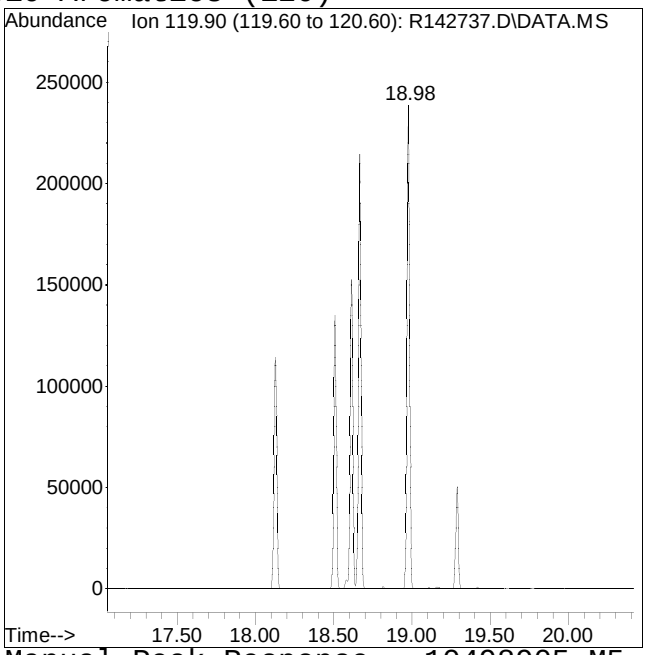
Manual Peak Response = 38764034 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711A_ICAL\APH150711.M
Data File : R142737.D
Date Inj'd : 7/11/2015 10:04 pm
Sample : CTO15-LLSTD10.0
Method : QM150711
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 10:50 pm

Compound #26: C9-C10 Aromatics (120)



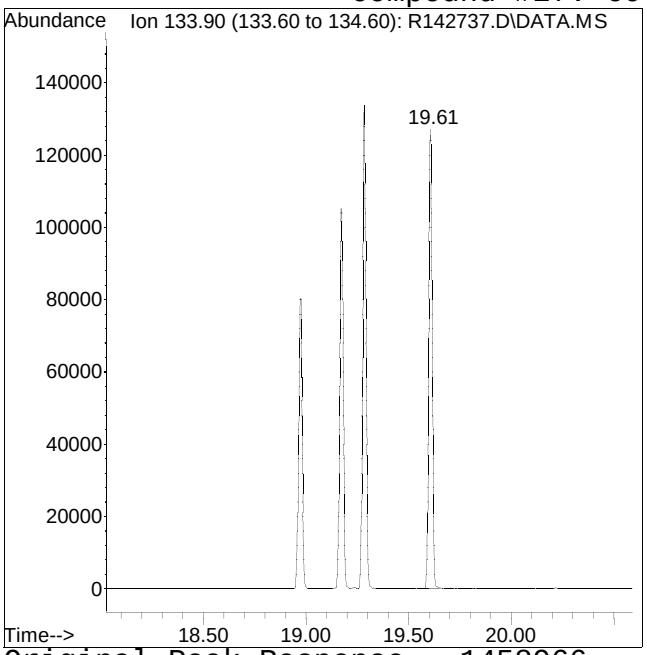


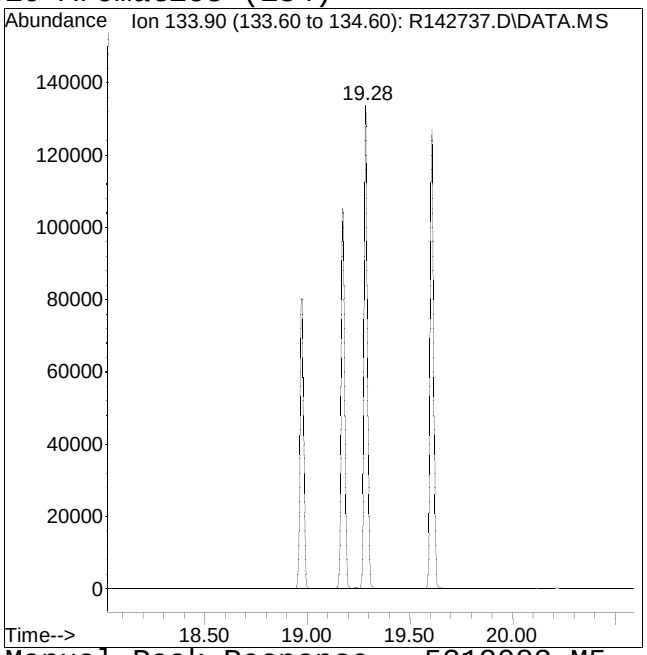
Original Peak Response = 0 Manual Peak Response = 10498905 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\ Method : O:\METHODS\AIR1\APH150711.M
Data File : R142737.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 10:04 pm Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 10:50 pm

Compound #27: C9-C10 Aromatics (134)



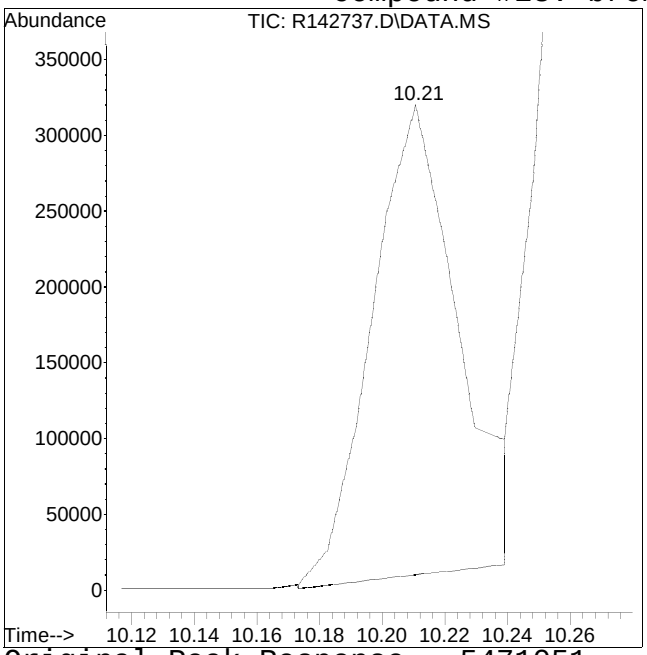


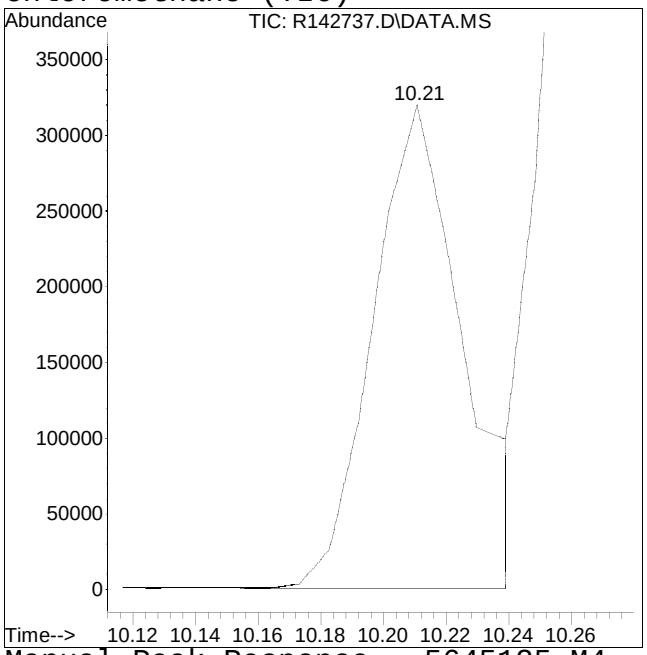
Original Peak Response = 1458966 Manual Peak Response = 5212083 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150711\QM150711A_ICAL\APH150711.M
Data File : R142737.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 10:04 pm Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 10:50 pm

Compound #28: bromochloromethane (TIC)





Original Peak Response = 5471051 Manual Peak Response = 5645125 M4
M4 = Poor automated baseline construction.

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 18 2015, 01:38 pm

Work Group: WG811919 for Department: 3 GC/MS

Created: 13-AUG-15 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1519114-01	SG-1	S	APH-10	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-02	SG-2	S	APH-10	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-04	SG-4	S	APH-10	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-05	METHOD BLANK	S	APH-10	AIR	DONE	U	0906	0818	S0	Can-2.7
L1519114-06	METHOD BLANK AA	S	APH-10	AIR	DONE	U	0906	0818	S0	Can-6
L1519114-07	DUPLICATE	S	APH-10	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-08	OUTDOOR CONTROL	S	APH-10	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-09	S-157-J	S	APH-10	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-10	S-157-J1	S	APH-10	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-11	S-157-J2	S	APH-10	AIR	DONE	U	0907	0818	S0	Can-6
L1519361-01	CAN 163 SHELF 3	S	APH-10	AIR	DONE	U	0911	0820	NC	Can-2.7
WG811919-1	MS BFB Tune Standard	S	APH-10	AIR	DONE	U				
WG811919-1	MS BFB Tune Standard	S	APH-10	SOIL_VAPOR	DONE	U				
WG811919-2	Continuing Calibrati	S	APH-10	AIR	DONE	U				
WG811919-2	Continuing Calibrati	S	APH-10	SOIL_VAPOR	DONE	U				
WG811919-3	Laboratory Control S	S	APH-10	AIR	DONE	U				
WG811919-3	Laboratory Control S	S	APH-10	SOIL_VAPOR	DONE	U				
WG811919-4	Laboratory Method Bl	S	APH-10	AIR	DONE	U				
WG811919-4	Laboratory Method Bl	S	APH-10	SOIL_VAPOR	DONE	U				
WG811919-5	Duplicate Sample	S	APH-10	AIR	DONE	U				
WG811919-5	Duplicate Sample	S	APH-10	SOIL_VAPOR	DONE	U				

Comments:

WG811919-5 L1519114-01

Sequence Logs

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 07/11/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150711.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11240

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	BA1071103	TO15_SFS	R142726	250ml	TEST		NA
1	TA1071101	TO15_SFS	R142727	250ml	TUNE		NA
1	IAPH-10STD0.2	TO15_SFS	R142728	SS15-017C 125ML 0.2			NA
5	IAPH-10STD0.4	TO15_SFS	R142729	SS15-017C 250ML 0.4			NA
6	IAPH-10STD2.0	TO15_SFS	R142730	SS15-017B1 25ML 2.0			NA
6	IAPH-10STD10.0	TO15_SFS	R142731	SS15-017B1 125ML 10.0			NA
6	IAPH-10STD20.0	TO15_SFS	R142732	SS15-017B1 250ML 20.0			NA
7	IAPH-10STD50.0	TO15_SFS	R142733	SS15-017A 125ML 50.0			NA
7	IAPH-10STD100.0	TO15_SFS	R142734	SS15-017A 250ML 100.0			NA
1	BA1071101	TO15_SFS	R142735	250ml			NA
1	BA1071102	TO15_SFS	R142736	250ml			NA
3	CTO15-LLSTD10.0	TO15_SFS	R142737	SS15-018F 250ML 10.0	APH ICV		NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 08/13/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150813.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11252

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	TA1081301	TO15_SFS	R143410	250ml	TUNE		NA
2	CAPH-10STD10.0	TO15_SFS	R143411	SS15-017B2 125ML 10.0	APH CC		NA
3	CTO15-LLSTD10.0	TO15_SFS	R143412	SS15-018D 250ML 10.0	APH / LL LCS		
3	CTO15-SIMSTD5.0	TO15_SFS	R143413	SS15-018D 125ML 5.0	SIM LCS		NA
1	BA1081301	TO15_SFS	R143414	250ml	LL BLANK		NA
1	BA1081302	TO15_SFS	R143415	250ml	SIM BLANK		NA
1	L1519361-01,3,250,250	TO15_SFS	R143416	WG811916,ICAL11250		APH/ LL/ SIM	NA
1	L1519114-05,3,250,250	TO15_SFS	R143417	WG811916,ICAL11250		APH/ LL/ SIM	Y
2	L1519114-06,3,250,250	TO15_SFS	R143418	WG811916,ICAL11250		APH/ LL/ SIM	Y
3	L1519114-08D,3,75.0000,250	TO15_SFS	R143419	WG811916,ICAL11250		APH/ LL/ SIM	Y
4	L1519114-07,3,250,250	TO15_SFS	R143420	WG811916,ICAL11250		APH/ LL/ SIM	Y
5	L1519114-09,3,250,250	TO15_SFS	R143421	WG811916,ICAL11250		APH/ LL/ SIM	Y
6	L1519114-10,3,250,250	TO15_SFS	R143422	WG811916,ICAL11250		APH/ LL/ SIM	Y
7	L1519114-11,3,250,250	TO15_SFS	R143423	WG811916,ICAL11250		APH/ LL/ SIM	Y
8	L1518960-01,3,250,250	TO15_SFS	R143424	WG811916,ICAL11250		STD+ NAPH	Y
9	L1519114-01,3,250,250	TO15_SFS	R143425	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
9	L1519114-01DUP,3,250,250	TO15_SFS	R143426	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
10	L1519114-02,3,250,250	TO15_SFS	R143427	WG811916,ICAL11250		APH/ LL/ SIM	Y
11	L1519114-03,3,250,250	TO15_SFS	R143428	WG811916,ICAL11250		APH/ LL/ SIM	Y
12	L1519114-04,3,250,250	TO15_SFS	R143429	WG811916,ICAL11250		APH/ LL/ SIM	Y
13	L1518960-02D,3,200,250	TO15_SFS	R143430	WG811916,ICAL11250		STD+ NAPH	Y
14	L1518960-03D,3,200,250	TO15_SFS	R143431	WG811916,ICAL11250		STD+ NAPH	Y
15	L1518960-04D,3,100,250	TO15_SFS	R143432	WG811916,ICAL11250	OVERDILUTED	STD+ NAPH	Y

Alpha Analytical Air Lab
Instrument Run Log

16	L1518960-05,3,250,250	TO15_SFS	R143433	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081303	TO15_SFS	R143434	250ml			
9	L1519114-01DUP,3,250,250	TO15_SFS	R143435	WG811916,ICAL11250	REPORT AS L1519114-01	APH/ LL/ SIM	Y
15	L1518960-04D,3,200,250	TO15_SFS	R143436	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081304	TO15_SFS	R143437	250ml			NA
9	L1519114-01DUP,3,250,250	TO15_SFS	R143438	WG811916,ICAL11250	APH / LL/ SIM DUP	APH/ LL/ SIM	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

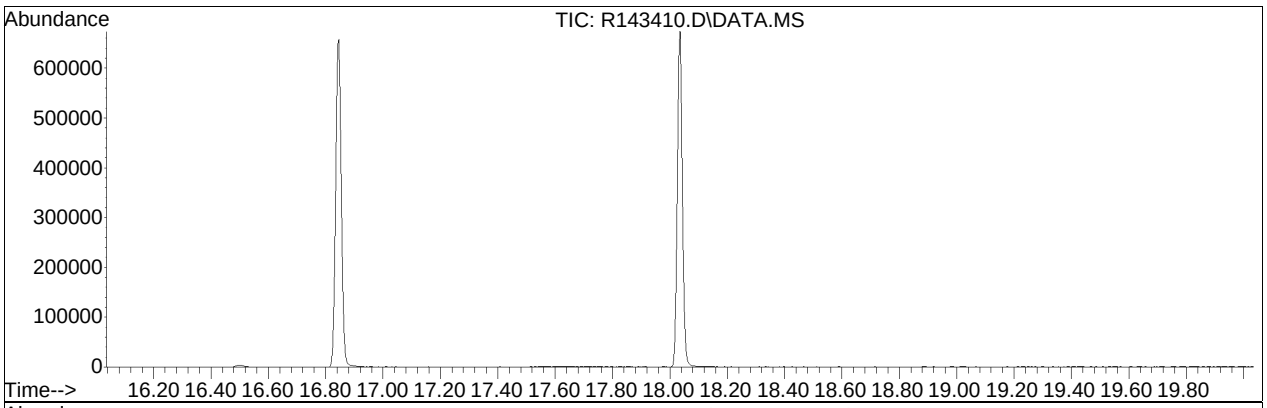
Analytical Event

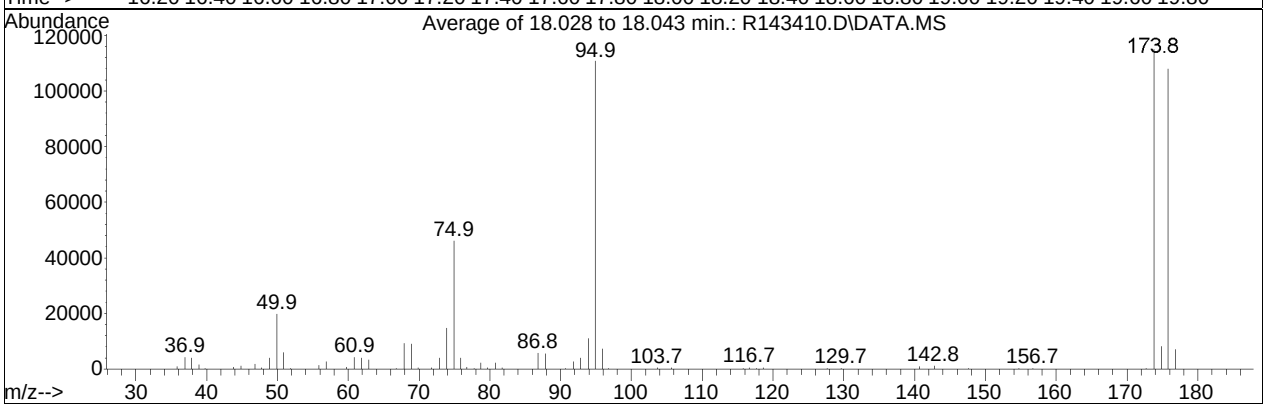
Continuing Calibration
BFB Tune

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143410.D
Acq On : 13 Aug 2015 12:07 pm
Operator : AIRPIANO1:RY
Sample : WG811919-1,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 1 Sample Multiplier: 1

Integration File: ALIP-Range-all.E

Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Title : APH Analysis
Last Update : Sat Jul 11 22:47:17 2015





Spectrum Information: Average of 18.028 to 18.043 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.9	19775	PASS
75	95	30	66	41.8	46258	PASS
95	95	100	100	100.0	110702	PASS
96	95	5	9	6.6	7254	PASS
173	174	0.00	2	0.2	186	PASS
174	95	50	120	103.8	114866	PASS
175	174	4	9	7.2	8220	PASS
176	174	93	101	93.9	107874	PASS
177	176	5	9	6.6	7102	PASS

Continuing Calibration

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143411.D
Acq On : 13 Aug 2015 12:38 pm
Operator : AIRPIANO1:RY
Sample : WG811919-2,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 13 13:29:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	90	0.00
2	T	1,3-butadiene	0.342	0.333	2.6	91	0.00
3		isopentane	2.014	1.869	7.2	93	0.00
4	T	methyl tert butyl ether	0.782	0.691	11.6	83	0.00
5		hexane	2.931	2.520	14.0	86	0.00
6		cyclohexane	2.316	2.167	6.4	87	0.00
7	I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00
8		2,3-dimethylpentane	0.533	0.520	2.4	87	0.00
9	T	benzene	0.247	0.239	3.2	88	0.00
10		heptane	0.520	0.495	4.8	85	0.00
11	H	C5-C8 Aliphatics Total	0.551	0.518	6.0	87	0.00
12	I	chlorobenzene-D5	1.000	1.000	0.0	86	0.00
13		toluene	1.460	1.423	2.5	85	0.00
14		n-octane	2.976	2.931	1.5	86	0.00
15		2,3-dimethylheptane	3.250	3.291	-1.3	86	0.00
16	T	ethyl benzene	1.645	1.642	0.2	87	0.00
17	T	m+p-xylene	1.287	1.270	1.3	86	0.00
18		n-nonane	3.153	3.231	-2.5	87	0.00
19	T	o-xylene	1.321	1.300	1.6	86	0.00
20		decane	3.272	3.411	-4.2	85	0.00
21		butylcyclohexane	3.738	3.797	-1.6	86	0.00
22		n-undecane	3.240	3.597	-11.0	85	0.00
23	T	naphthalene	1.804	1.951	-8.1	89	0.00
24		n-dodecane	2.702	3.559	-31.7#	89	0.00
25	H	C9-C12 Aliphatics Total	3.208	3.500	-9.1	86	0.00
27		C9-C10 Aromatics Total	0.580	0.595	-2.6	88	-0.72#
28	s	bromochloromethane (TIC)	7.992	8.526	-6.7	91	0.00
29	s	1,4-difluorobenzene (TIC)	11.272	11.526	-2.3	88	0.00
30	s	chlorobenzene-D5 (TIC)	14.518	14.792	-1.9	87	0.00
31	s	1,2-dichloroethane-D4 (TIC)	3.747	3.811	-1.7	87	0.00
32	s	toluene-D8 (TIC)	11.945	12.361	-3.5	88	0.00
33	s	bromofluorobenzene (TIC)	14.126	14.214	-0.6	86	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143411.D
Acq On : 13 Aug 2015 12:38 pm
Operator : AIRPIANO1:RY
Sample : WG811919-2,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 13 13:29:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.212	128	774218	10.000	ug/m3	0.00
7) 1,4-difluorobenzene	12.426	114	3308768	10.000	ug/m3	0.00
12) chlorobenzene-D5	16.845	54	607162	10.000	ug/m3	0.00
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.212	TIC	5176910	10.669	ug/m3	0.00
Spiked Amount 10.000			Recovery = 106.69%			
29) 1,4-difluorobenzene (TIC)	12.425	TIC	6997896	10.225	ug/m3	0.00
Spiked Amount 10.000			Recovery = 102.25%			
30) chlorobenzene-D5 (TIC)	16.845	TIC	8981178	10.189	ug/m3	0.00
Spiked Amount 10.000			Recovery = 101.89%			
31) 1,2-dichloroethane-D4 ...	11.089	TIC	2314182	10.172	ug/m3	0.00
Spiked Amount 10.000			Recovery = 101.72%			
32) toluene-D8 (TIC)	15.153	TIC	15010452	20.697	ug/m3	0.00
Spiked Amount 10.000			Recovery = 206.97%			
33) bromofluorobenzene (TIC)	18.034	TIC	8629910	10.062	ug/m3	0.00
Spiked Amount 10.000			Recovery = 100.62%			
Target Compounds						Qvalue
2) 1,3-butadiene	4.893	54	570556	21.532	ug/m3	99
3) isopentane	6.395	TIC	4268755	27.371	ug/m3	99
4) methyl tert butyl ether	9.109	73	1924714	31.791	ug/m3	98
5) hexane	10.258	TIC	6866579M4	30.262	ug/m3	
6) cyclohexane	12.326	TIC	5771505M2	32.188	ug/m3	
8) 2,3-dimethylpentane	12.601	TIC	7048847	39.951	ug/m3	99
9) benzene	12.020	78	2519211	30.811	ug/m3	99
10) heptane	13.547	TIC	6720952	39.027	ug/m3	100
11) C5-C8 Aliphatics Total	12.260	TIC	39027202m	213.885	ug/m3	
13) toluene	15.253	91	3257137	36.745	ug/m3	98
14) n-octane	16.157	TIC	8311490	45.991	ug/m3	100
15) 2,3-dimethylheptane	17.220	TIC	10470886	53.057	ug/m3	100
16) ethyl benzene	17.175	91	4327358M4	43.324	ug/m3	
17) m+p-xylene	17.308	91	3345523M4	42.808	ug/m3	
18) n-nonane	17.824	TIC	10279600	53.693	ug/m3	100
19) o-xylene	17.684	91	3425239	42.695	ug/m3	100
20) decane	19.016	TIC	12052076	60.665	ug/m3	100
21) butylcyclohexane	19.475	TIC	13208599M4	58.206	ug/m3	
22) n-undecane	19.970	TIC	13954042	70.938	ug/m3	100
23) naphthalene	20.985	128	6210647M4	56.688	ug/m3	
24) n-dodecane	20.872	TIC	15040912	91.680	ug/m3	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143411.D
Acq On : 13 Aug 2015 12:38 pm
Operator : AIRPIANO1:RY
Sample : WG811919-2,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 13 13:29:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

Sub List : Default - All compounds listed

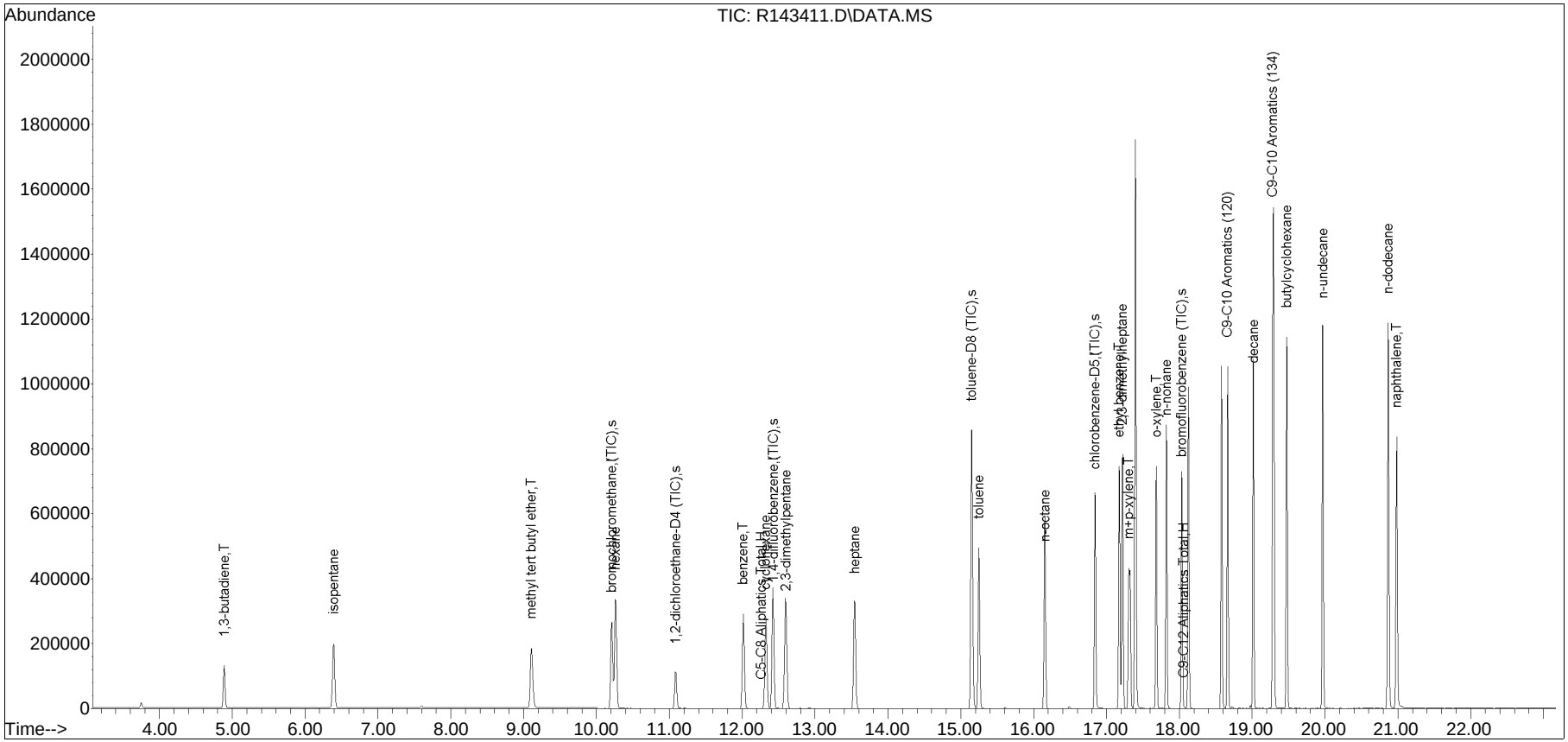
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) C9-C12 Aliphatics Total	18.067	TIC	75193867m	386.031	ug/m3	
26) C9-C10 Aromatics (120)	18.664	120	7577505M5	215.281	ug/m3	
27) C9-C10 Aromatics (134)	19.285	134	1447622M5	41.128	ug/m3	
27) C9-C10 Aromatics Total	0.000		9025127	256.408	ug/m3	

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

Sub List : Default - All compounds listed Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143411.D
Acq On : 13 Aug 2015 12:38 pm
Operator : AIRPIANO1:RY
Sample : WG811919-2,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

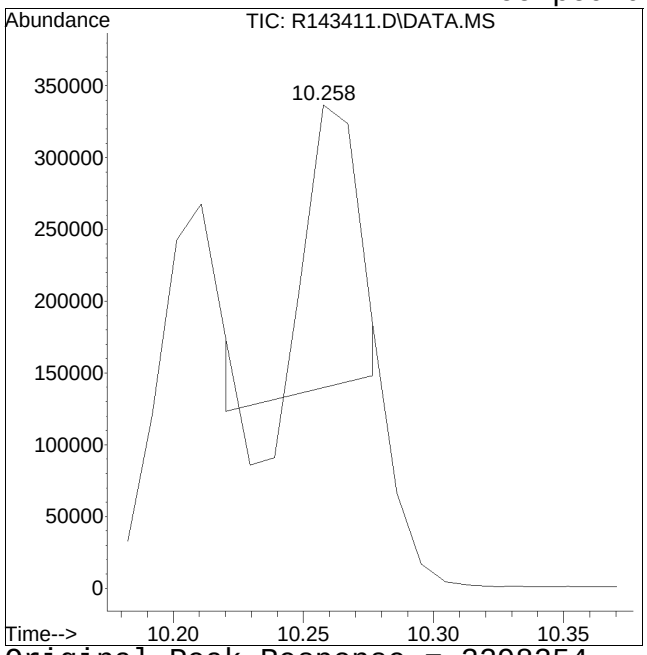
Quant Time: Aug 13 13:29:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

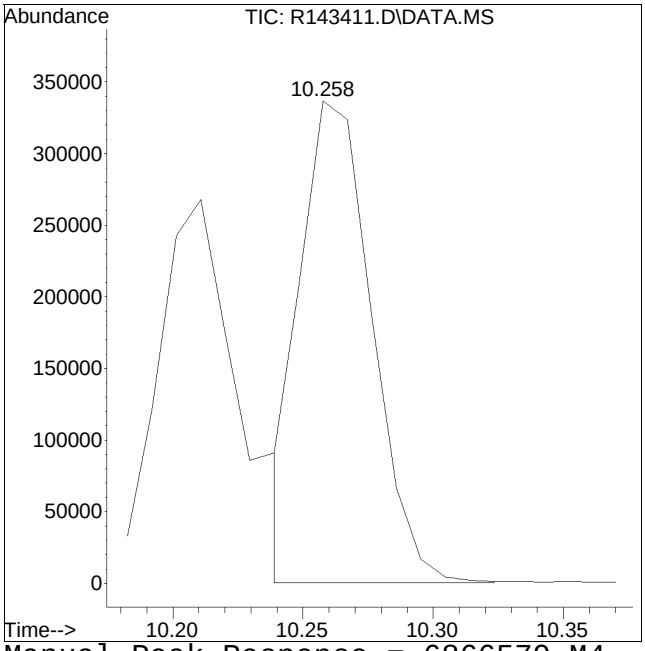


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813A\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #5: hexane



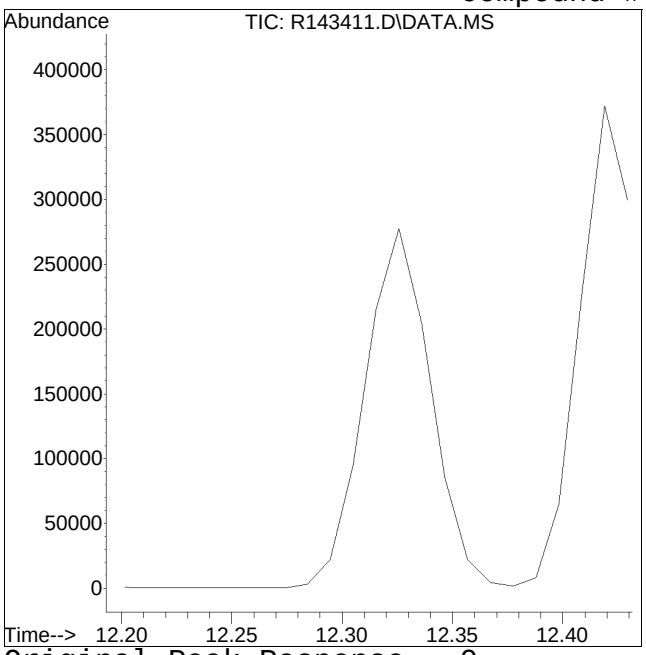


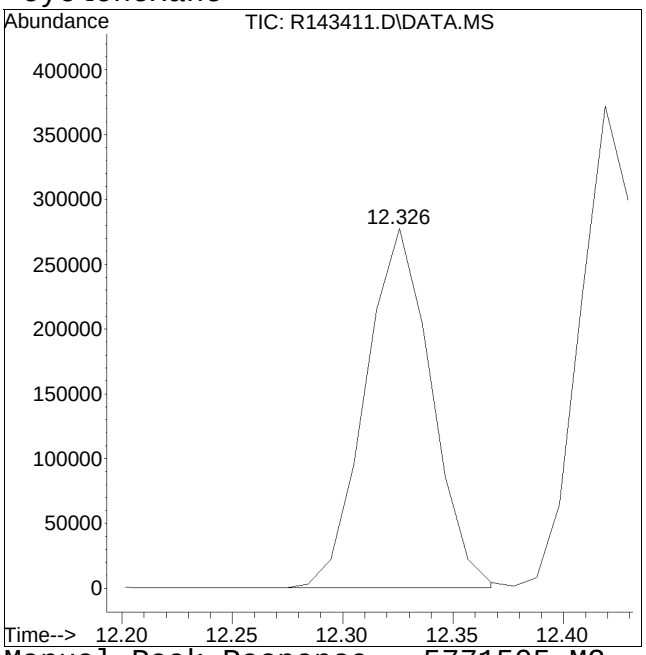
Original Peak Response = 2298254 Manual Peak Response = 6866579 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #6: cyclohexane



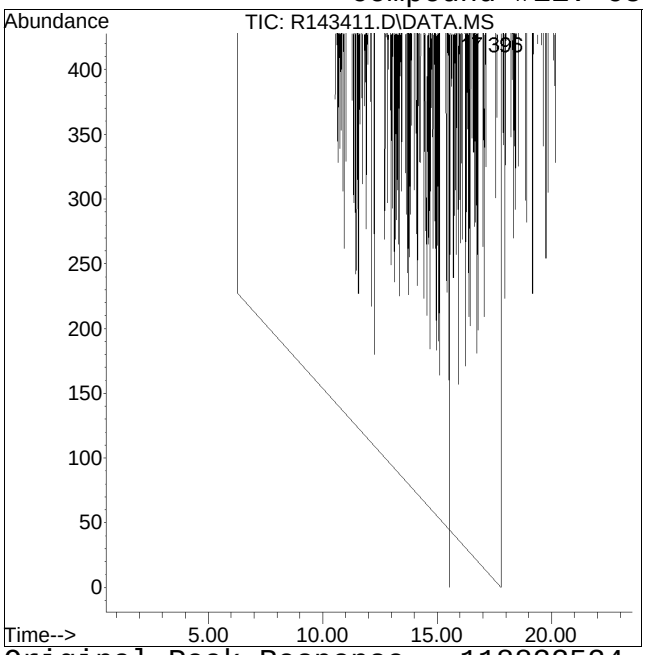


Original Peak Response = 0 Manual Peak Response = 5771505 M2
M2 = Peak not found by automatic integration algorithm.

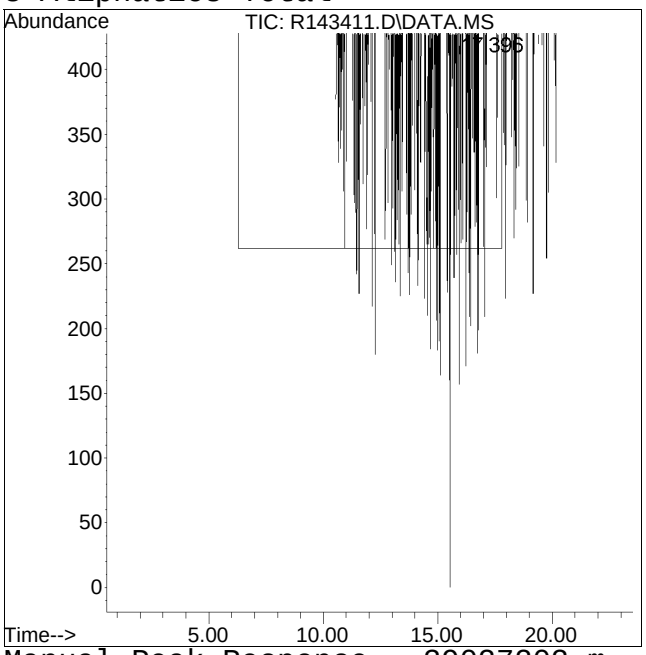
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 118832524

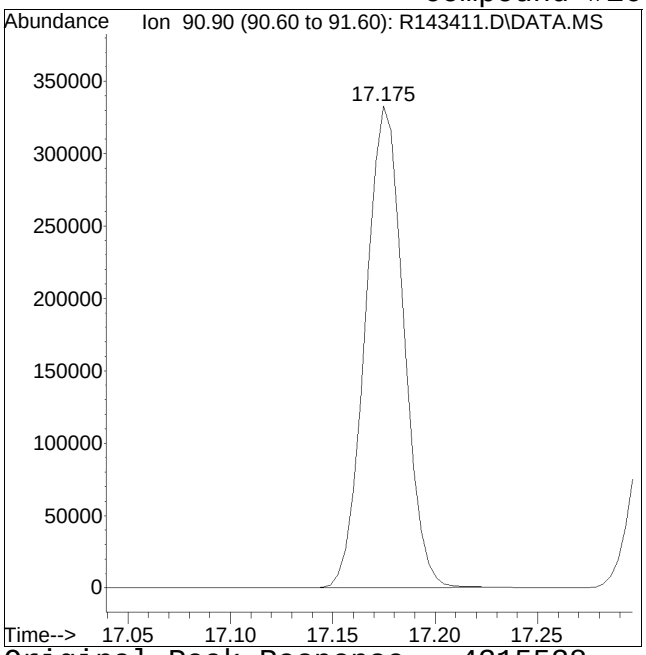


Manual Peak Response = 39027202 m

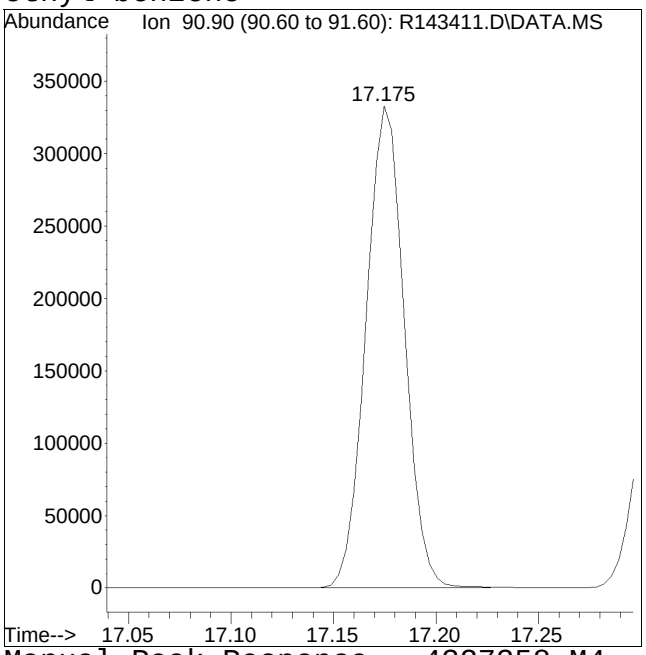
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #16: ethyl benzene



Original Peak Response = 4315538



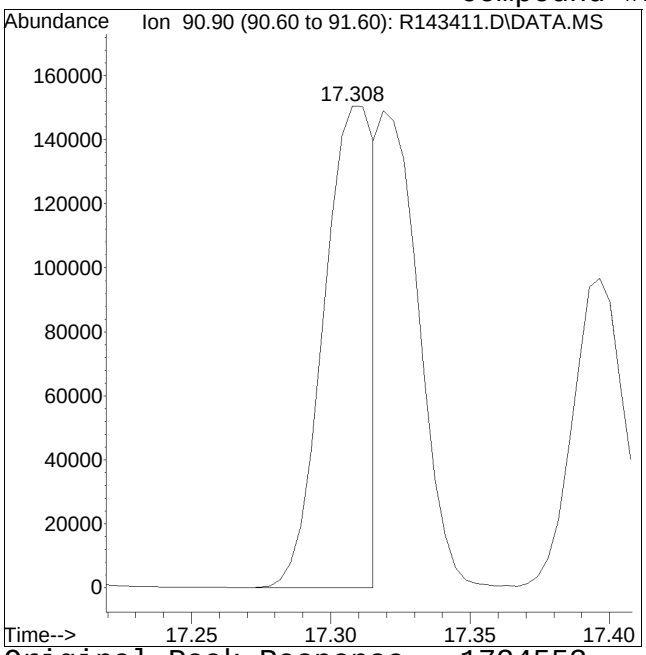
Manual Peak Response = 4327358 M4

M4 = Poor automated baseline construction.

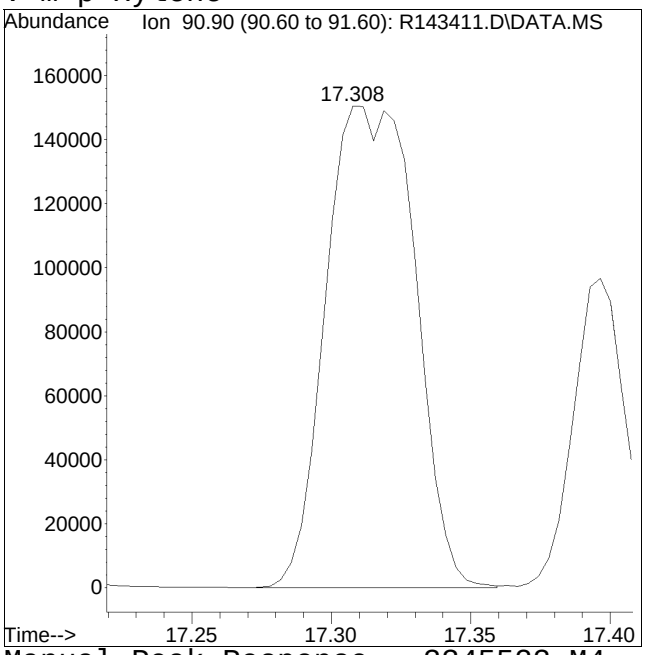
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #17: m+p-xylene



Original Peak Response = 1724553



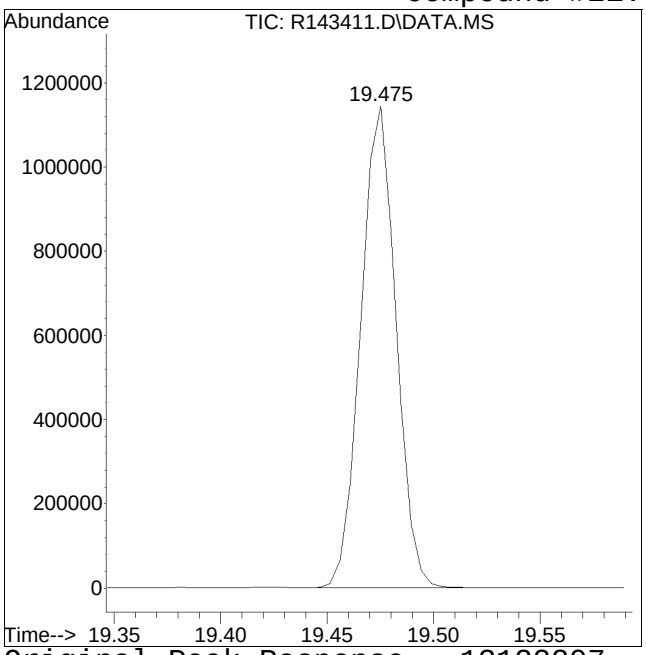
Manual Peak Response = 3345523 M4

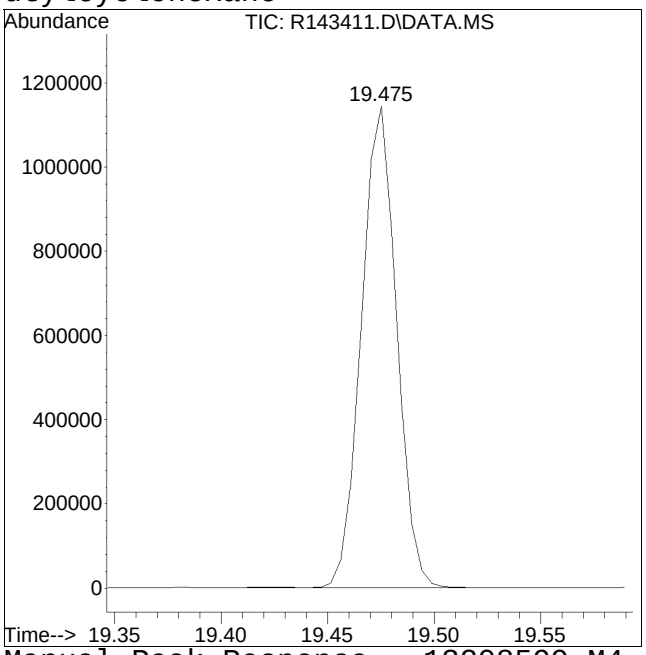
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #21: butylcyclohexane



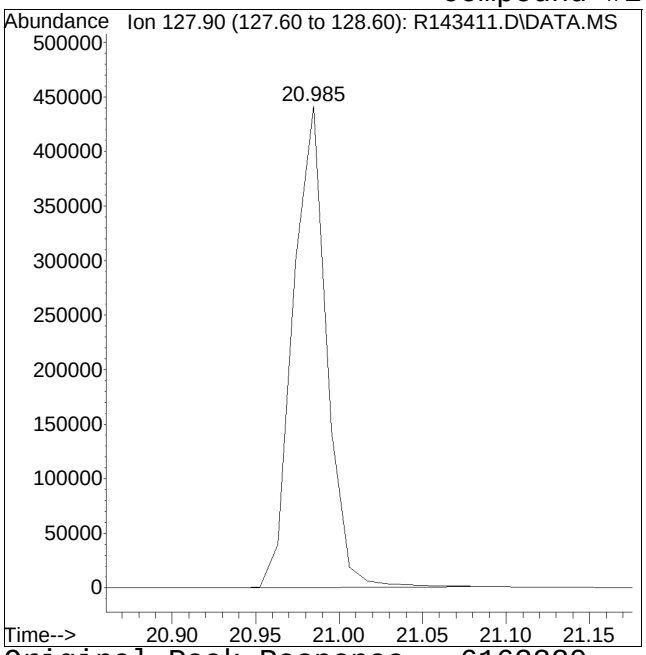


Original Peak Response = 13122207 Manual Peak Response = 13208599 M4
M4 = Poor automated baseline construction.

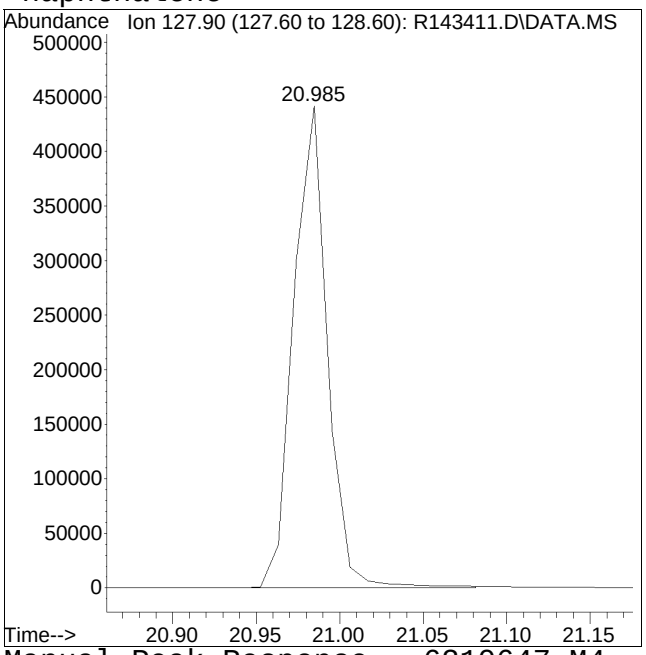
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #23: naphthalene



Original Peak Response = 6163320



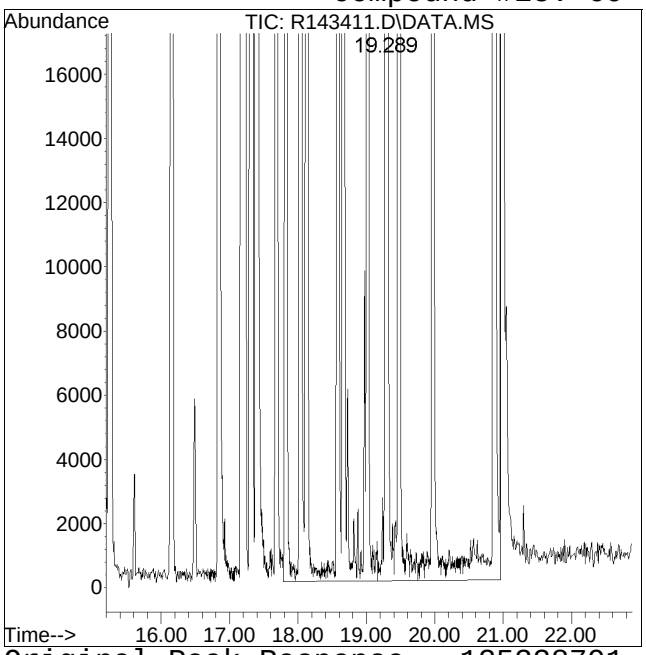
Manual Peak Response = 6210647 M4

M4 = Poor automated baseline construction.

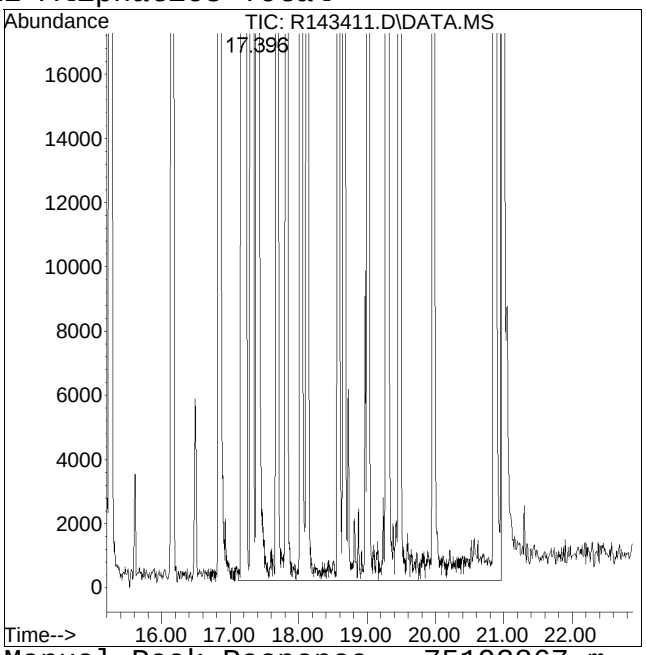
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 125338791

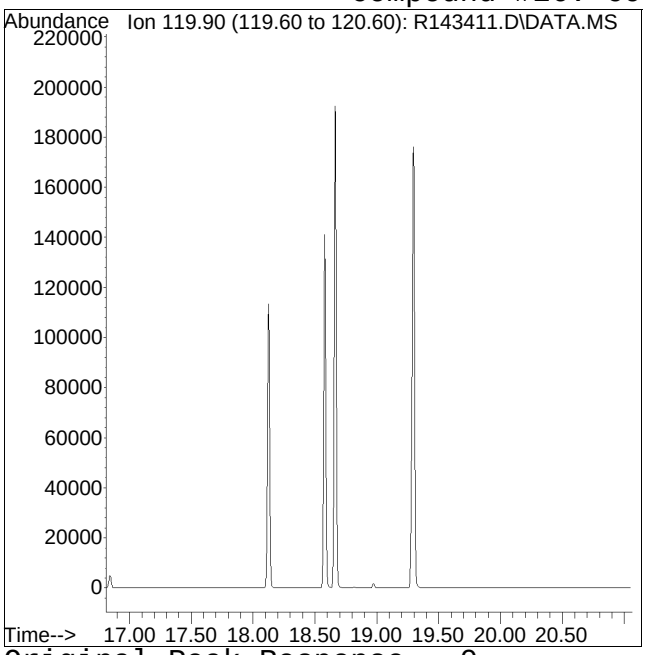


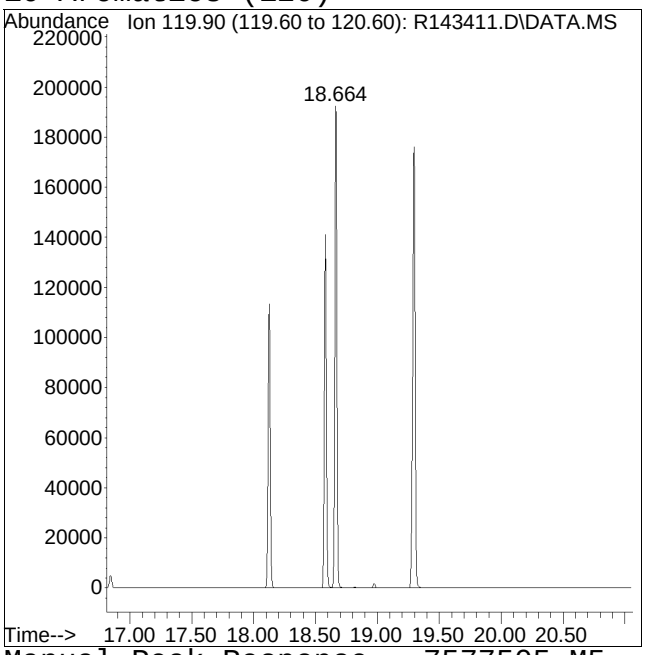
Manual Peak Response = 75193867 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #26: C9-C10 Aromatics (120)



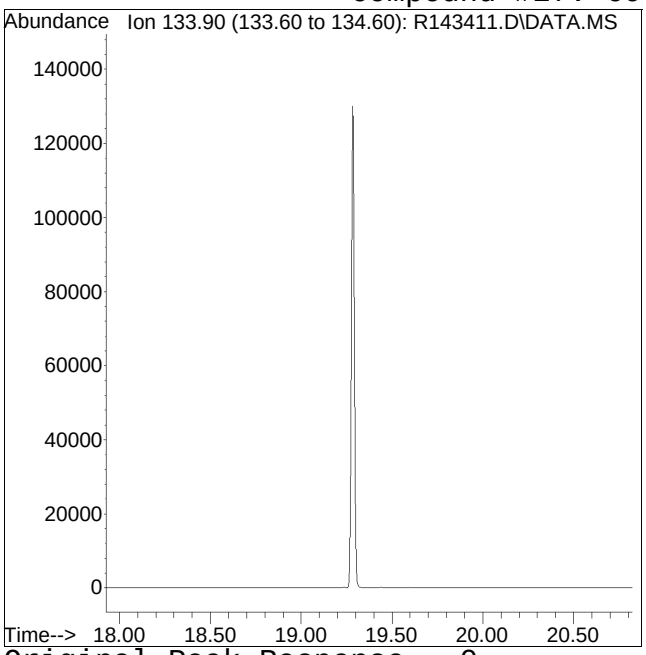


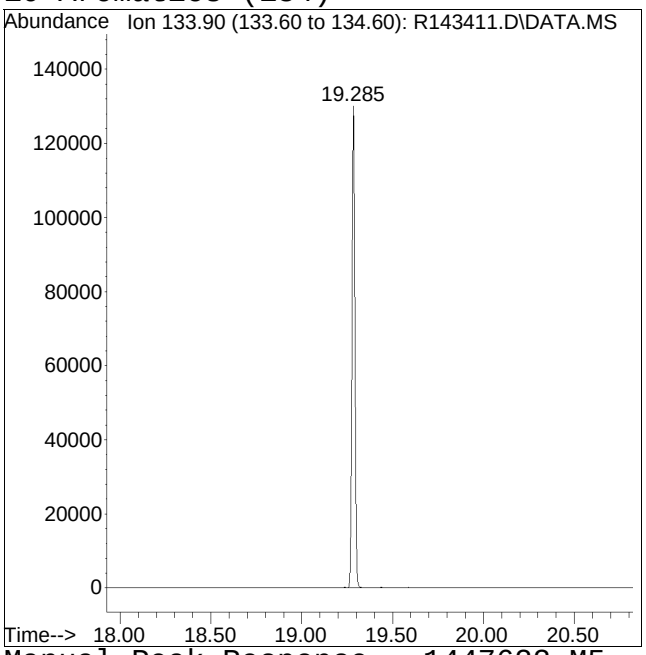
Original Peak Response = 0 Manual Peak Response = 7577505 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143411.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 12:38 pm Instrument : Air Piano 1
Sample : WG811919-2,3,250,250 Quant Date : 8/13/2015 1:28 pm

Compound #27: C9-C10 Aromatics (134)





Original Peak Response = 0 Manual Peak Response = 1447622 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 14:55:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

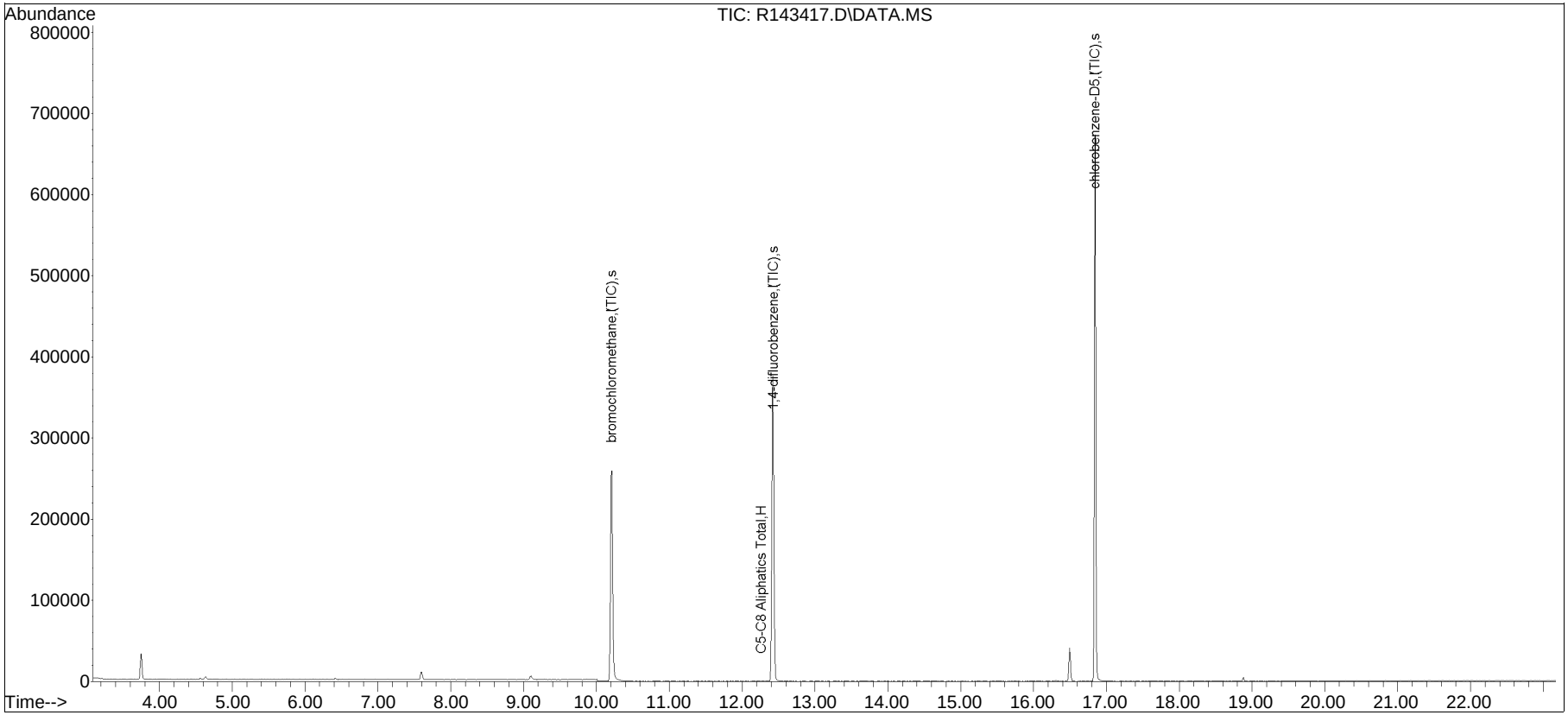
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.210	128	775860	10.000 ug/m3	0.00
Standard Area = 774218			Recovery	= 100.21%	
7) 1,4-difluorobenzene	12.425	114	3314432	10.000 ug/m3	0.00
Standard Area = 3308768			Recovery	= 100.17%	
12) chlorobenzene-D5	16.846	54	626849	10.000 ug/m3	0.00
Standard Area = 607162			Recovery	= 103.24%	
System Monitoring Compounds					
28) bromochloromethane (TIC)	10.211	TIC	5358674M4	10.697 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 106.97%	
29) 1,4-difluorobenzene (TIC)	12.425	TIC	7028285	9.947 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 99.47%	
30) chlorobenzene-D5 (TIC)	16.846	TIC	9166632M4	10.073 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 100.73%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0	0.000 ug/m3	
Spiked Amount 10.000			Recovery	= 0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0	0.000 ug/m3	
Spiked Amount 10.000			Recovery	= 0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0	0.000 ug/m3	
Spiked Amount 10.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,3-butadiene	0.000		0	N.D.	
4) methyl tert butyl ether	0.000		0	N.D.	
9) benzene	0.000		0	N.D.	
11) C5-C8 Aliphatics Total	12.260	TIC	1005798	5.503 ug/m3	
13) toluene	0.000		0	N.D.	
16) ethyl benzene	0.000		0	N.D.	
17) m+p-xylene	0.000		0	N.D.	
19) o-xylene	0.000		0	N.D.	
23) naphthalene	0.000		0	N.D.	
25) C9-C12 Aliphatics Total	18.067		0	N.D.	
27) C9-C10 Aromatics Total	0.000		0	N.D.	

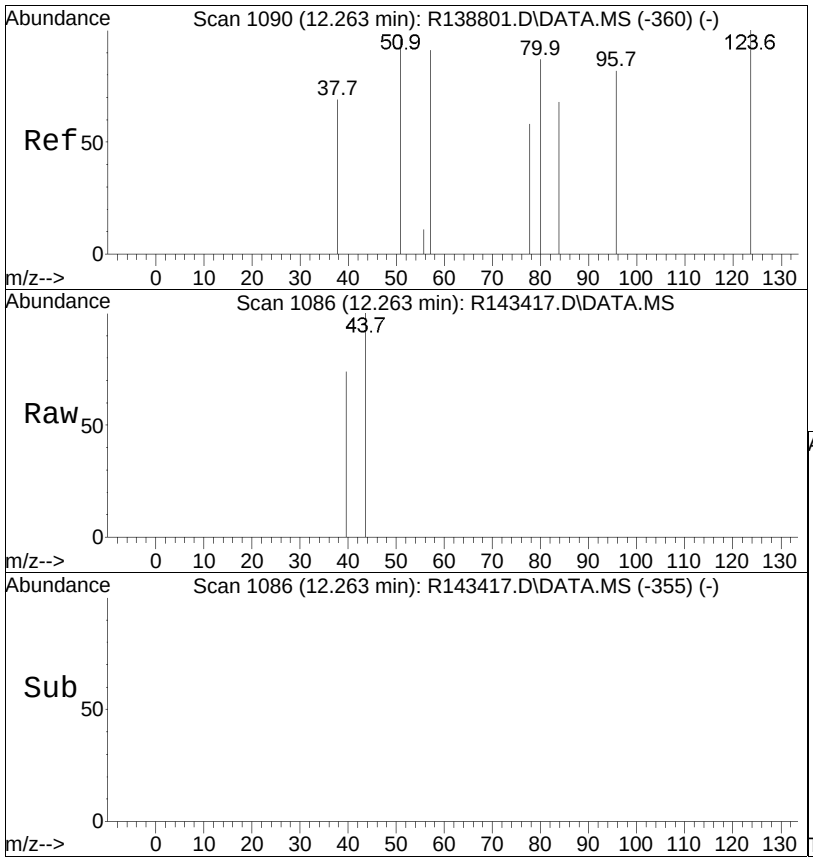
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 1 Sample Multiplier: 1

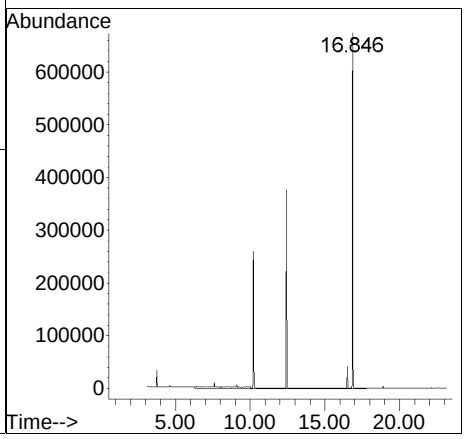
Quant Time: Aug 14 14:55:23 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration





#11
C5-C8 Aliphatics Total
Concen: 5.50 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143417.D
Acq: 13 Aug 2015 5:19 pm

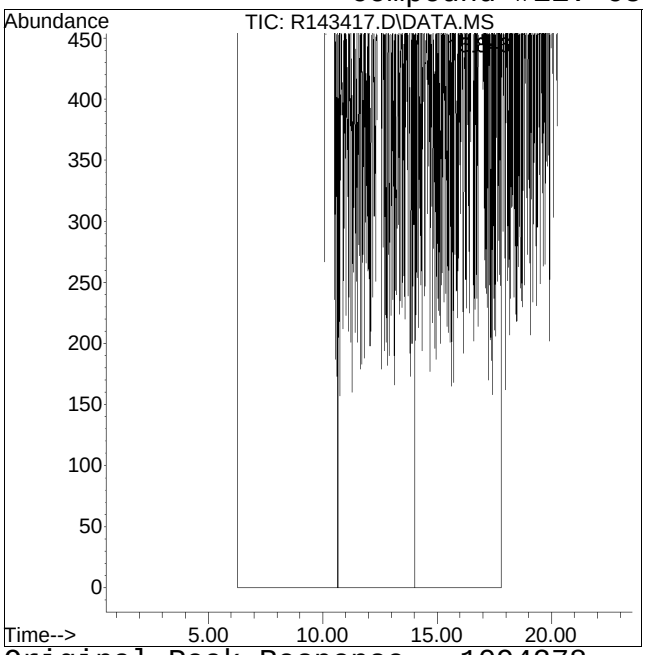
Tgt Ion:TIC Resp: 1005798



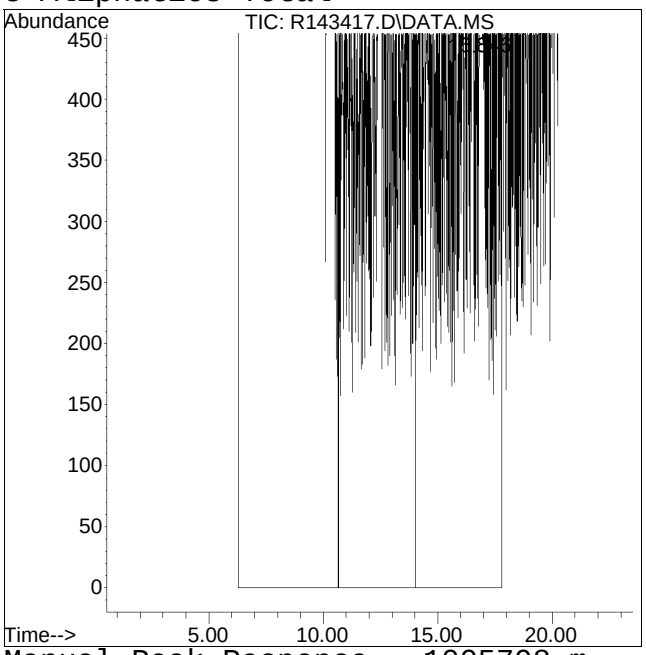
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143417.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 5:19 pm	Instrument	: Air Piano 1
Sample	: L1519114-05,3,250,250	Quant Date	: 8/14/2015 8:38 am

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 1094278

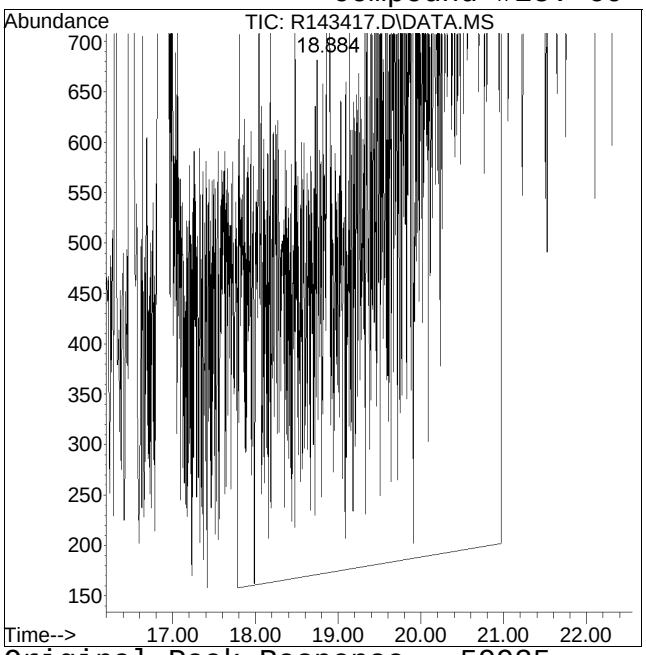


Manual Peak Response = 1005798 m

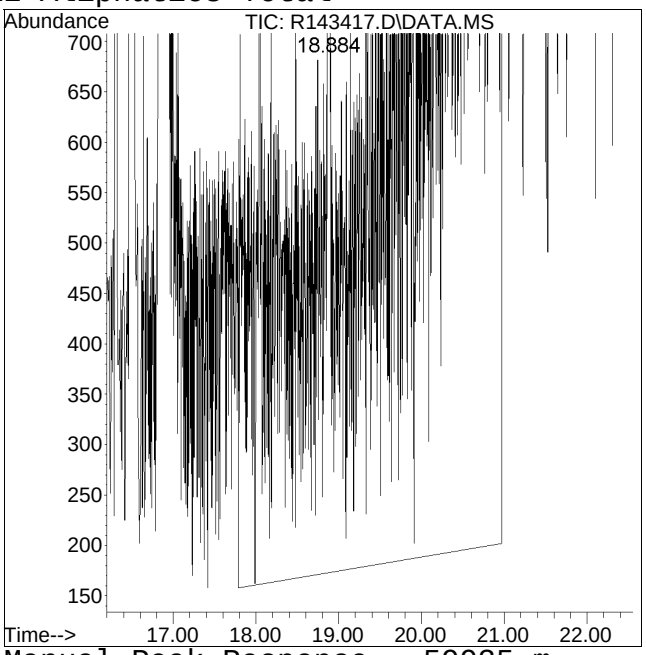
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143417.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 5:19 pm	Instrument	: Air Piano 1
Sample	: L1519114-05,3,250,250	Quant Date	: 8/14/2015 8:38 am

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 59935

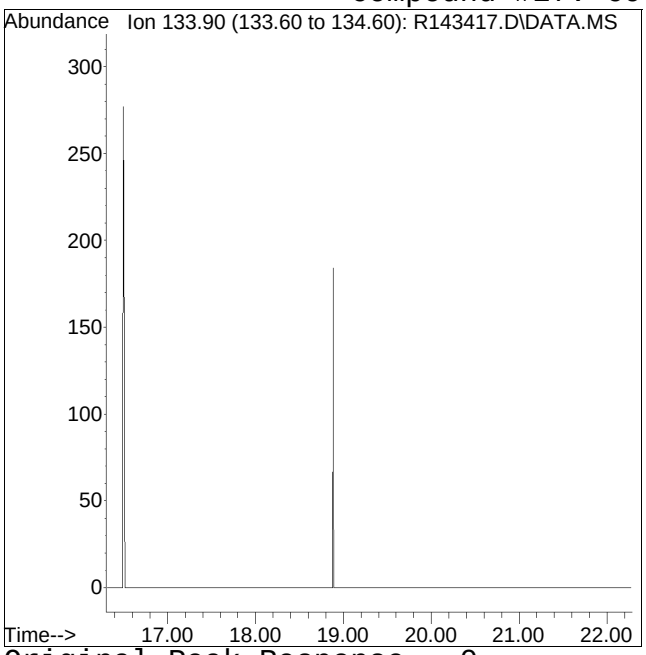


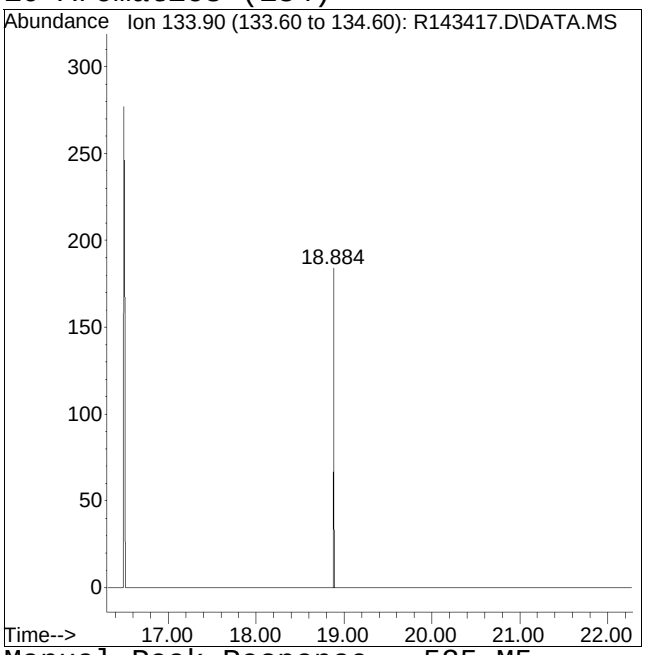
Manual Peak Response = 59935 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143417.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:19 pm Instrument : Air Piano 1
Sample : L1519114-05,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #27: C9-C10 Aromatics (134)



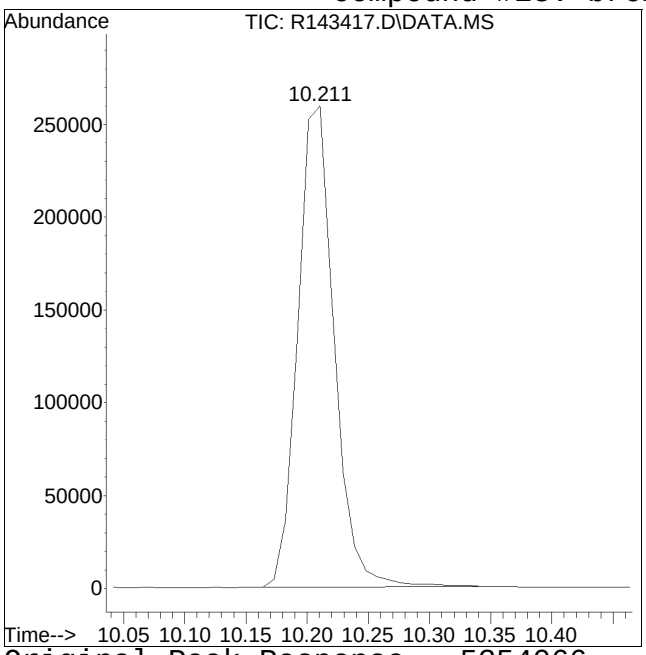


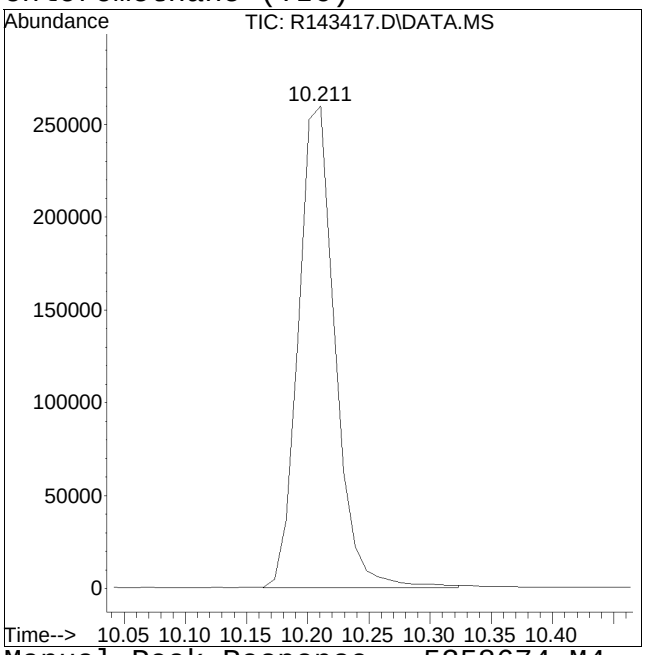
Original Peak Response = 0 Manual Peak Response = 525 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143417.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:19 pm Instrument : Air Piano 1
Sample : L1519114-05,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #28: bromochloromethane (TIC)



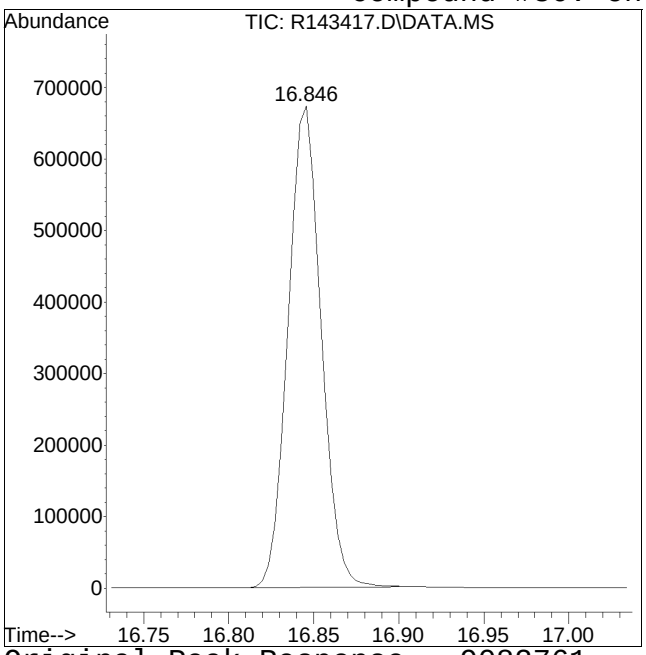


Original Peak Response = 5354066 Manual Peak Response = 5358674 M4
M4 = Poor automated baseline construction.

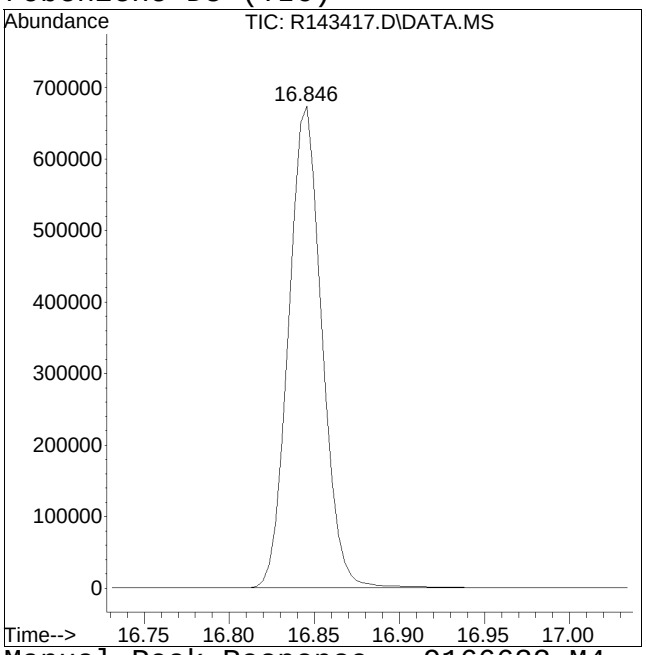
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143417.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:19 pm Instrument : Air Piano 1
Sample : L1519114-05,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #30: chlorobenzene-D5 (TIC)



Original Peak Response = 9082761



Manual Peak Response = 9166632 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 14:56:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

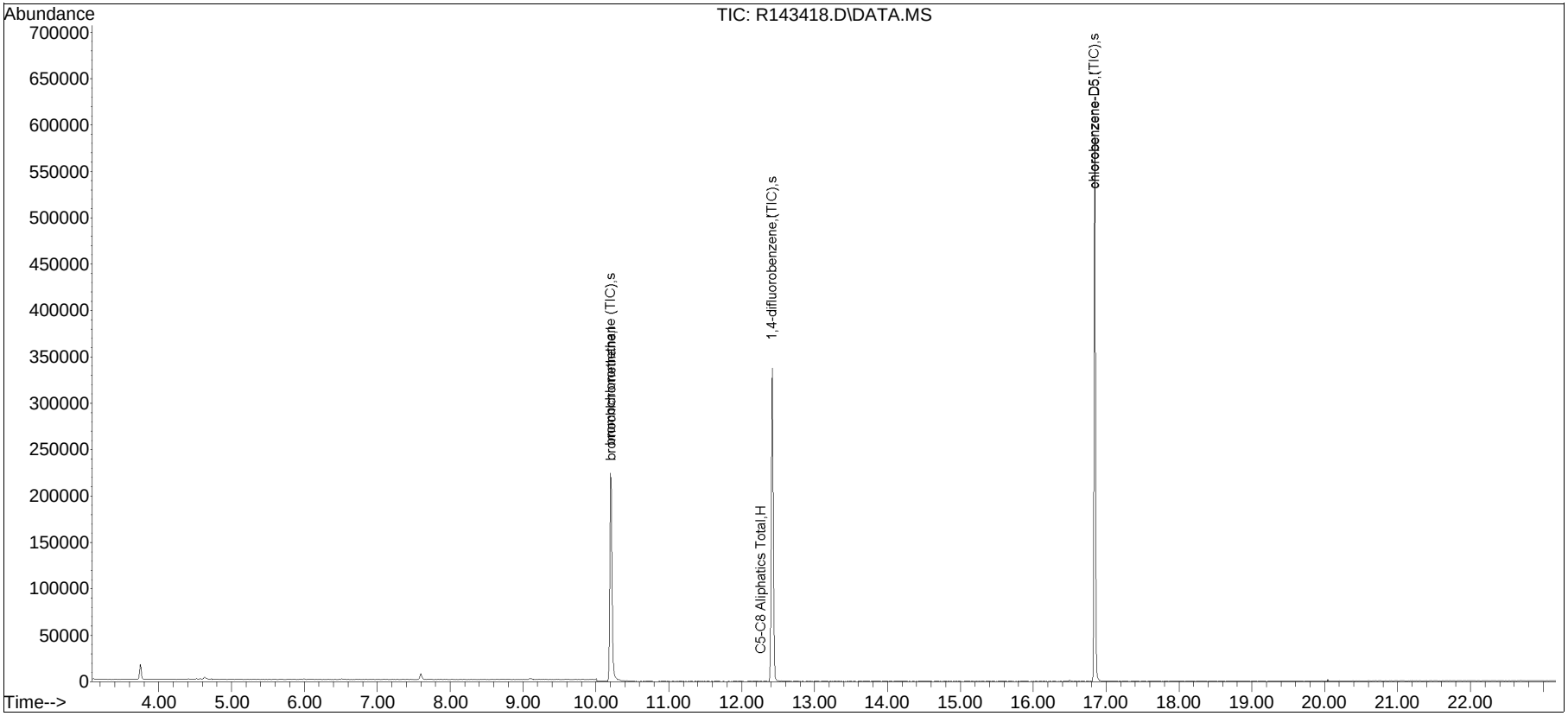
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.209	128	703427	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	90.86%	
7) 1,4-difluorobenzene	12.424	114	2950774	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	89.18%	
12) chlorobenzene-D5	16.845	54	555840	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	91.55%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.201	TIC	4694326M4	10.568	ug/m3	-0.01
Spiked Amount 10.000			Recovery	=	105.68%	
29) 1,4-difluorobenzene (TIC)	12.419	TIC	6323779M4	10.093	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.93%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	8079998M4	10.013	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.13%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	144440	0.888	ug/m3	
13) toluene	0.000		0	N.D.		
16) ethyl benzene	0.000		0	N.D.		
17) m+p-xylene	0.000		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	0.000		0	N.D.		
25) C9-C12 Aliphatics Total	18.067		0	N.D.		
27) C9-C10 Aromatics Total	0.000		0	N.D.		

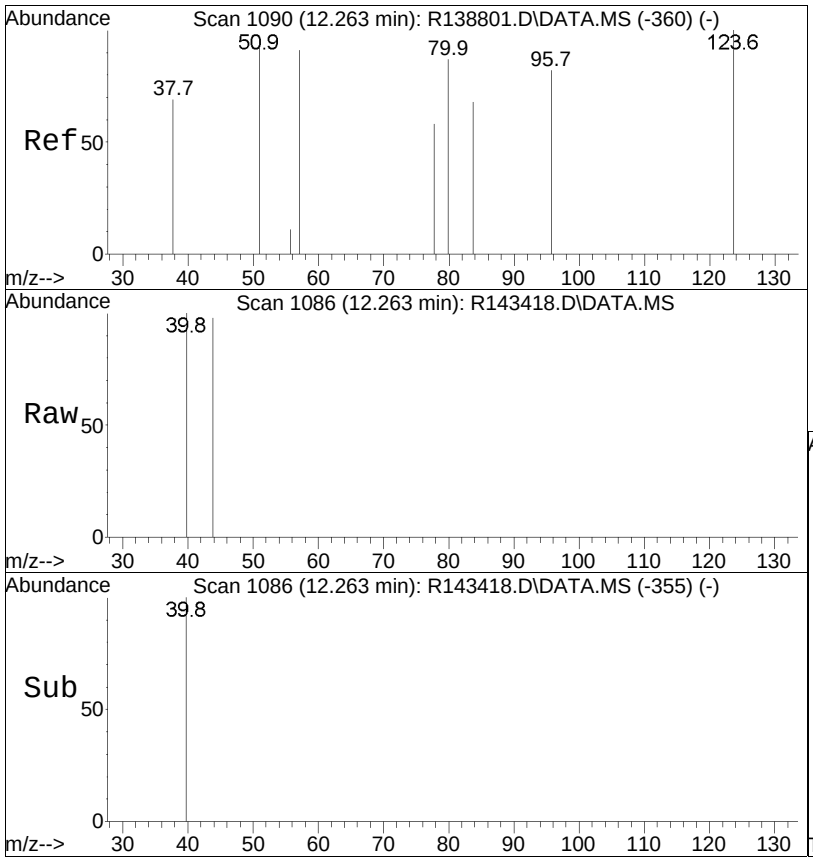
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 2 Sample Multiplier: 1

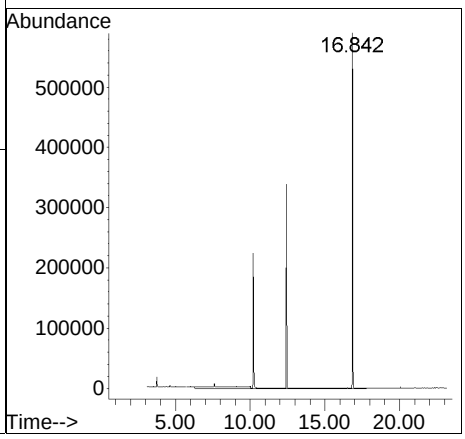
Quant Time: Aug 14 14:56:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration





#11
C5-C8 Aliphatics Total
Concen: 0.89 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143418.D
Acq: 13 Aug 2015 5:51 pm

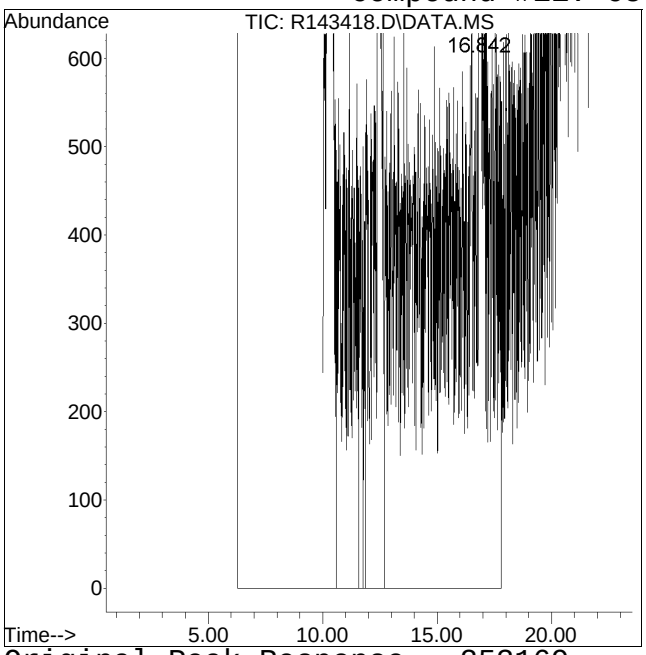
Tgt Ion:TIC Resp: 144440



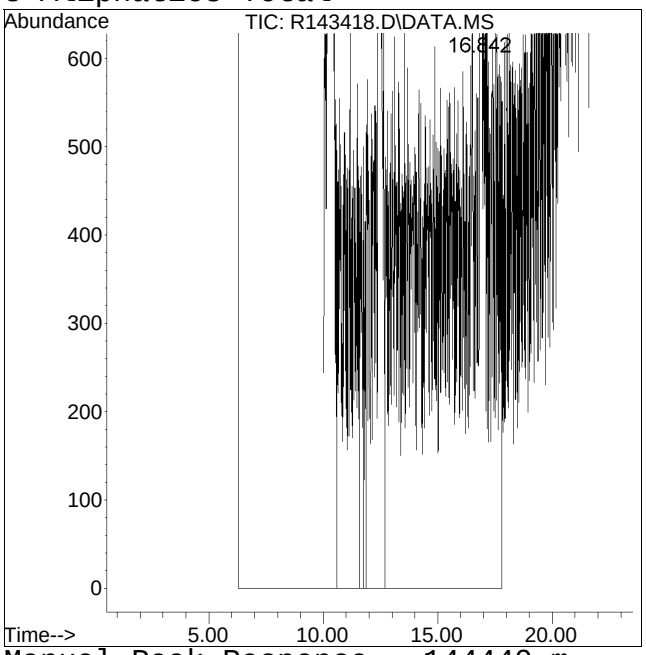
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150806\	Method	: APH150711.M
Data File	: R143418.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 5:51 pm	Instrument	: Air Piano 1
Sample	: L1519114-06,3,250,250	Quant Date	: 8/14/2015 8:38 am

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 253169

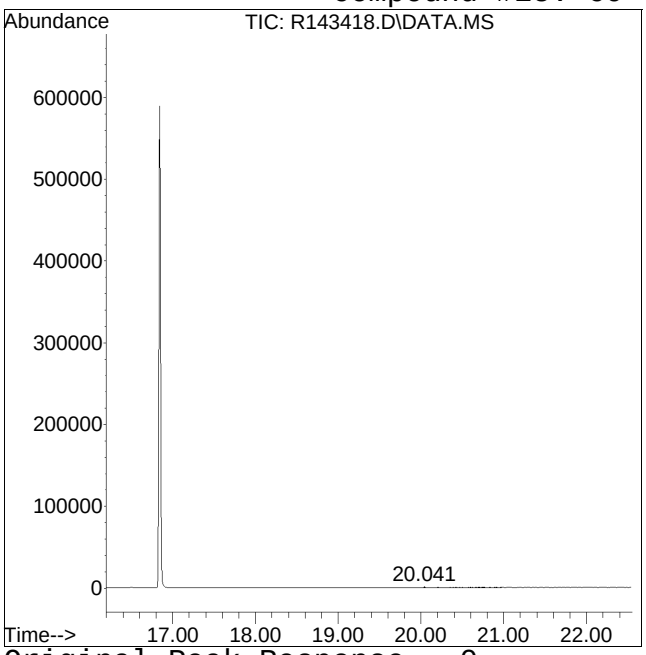


Manual Peak Response = 144440 m

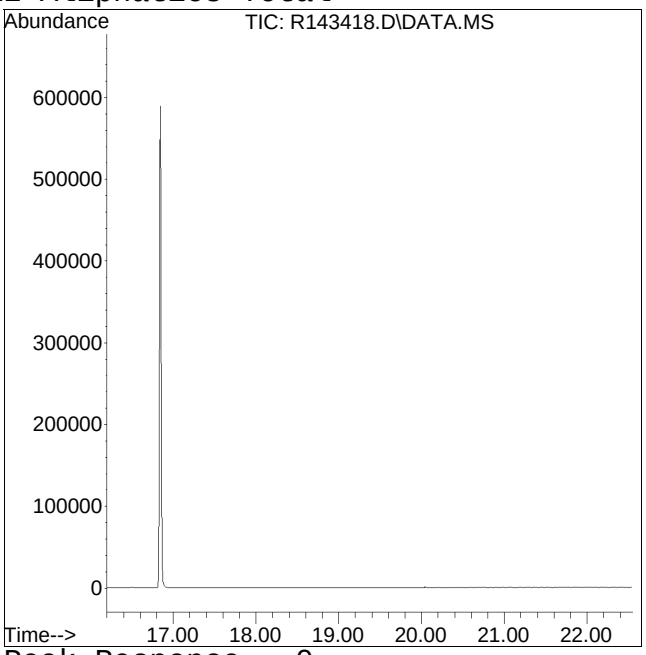
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143418.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:51 pm Instrument : Air Piano 1
Sample : L1519114-06,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 0

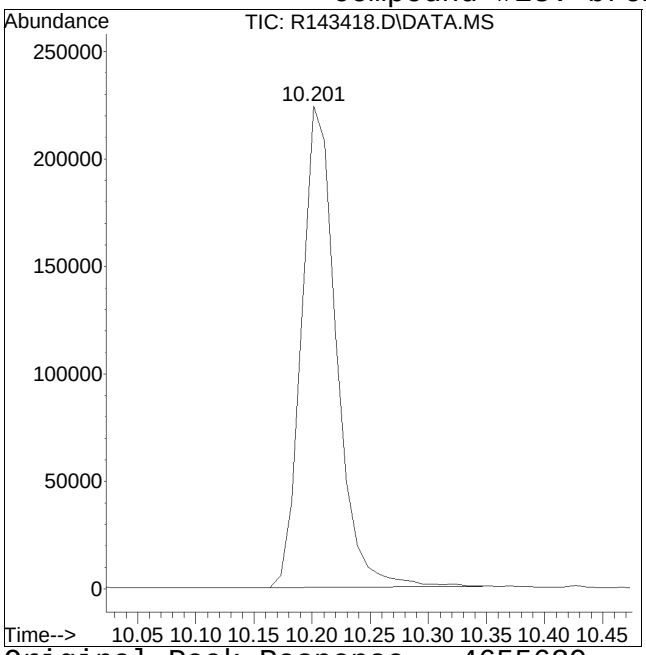


Peak Response = 0

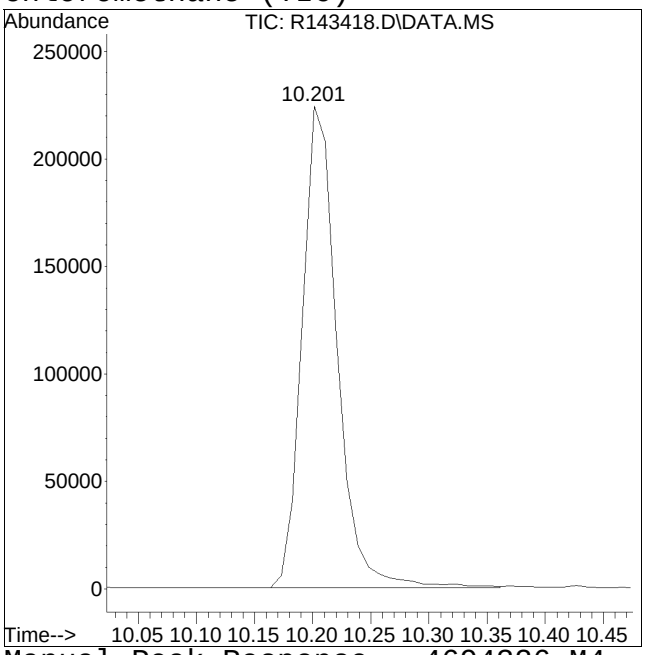
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143418.D
Date Inj'd : 8/13/2015 5:51 pm
Sample : L1519114-06,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:38 am

Compound #28: bromochloromethane (TIC)



Original Peak Response = 4655639



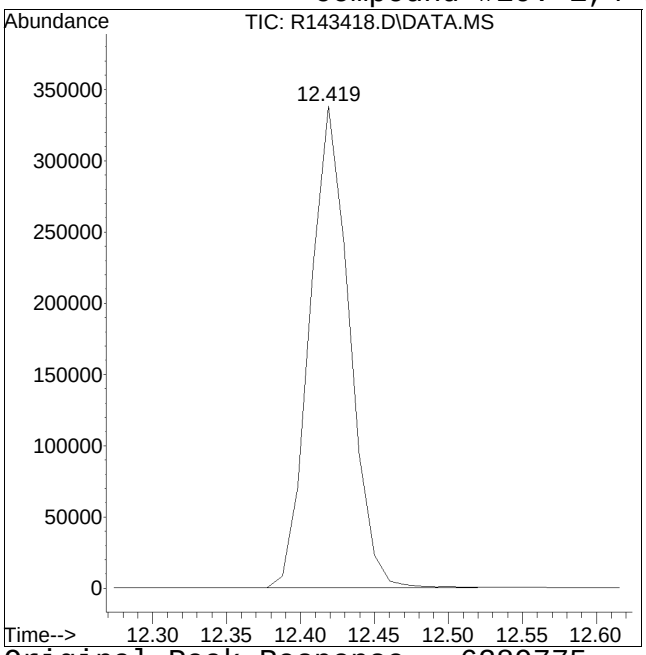
Manual Peak Response = 4694326 M4

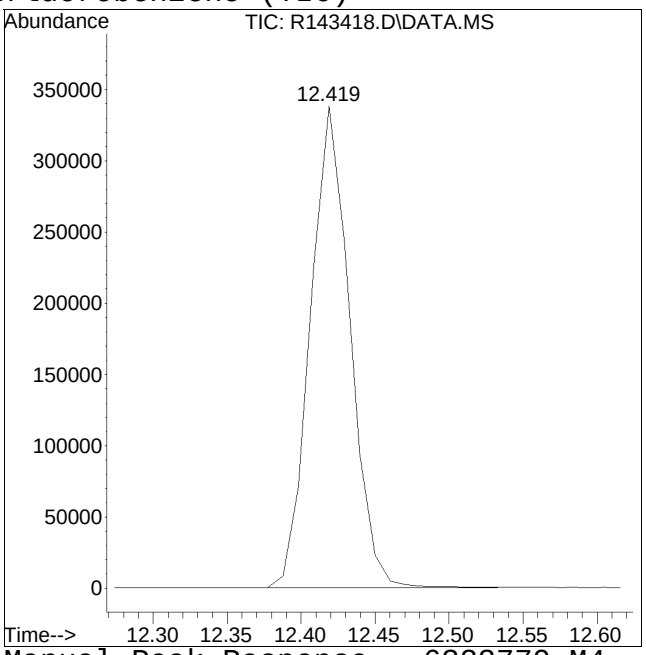
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143418.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:51 pm Instrument : Air Piano 1
Sample : L1519114-06,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #29: 1,4-difluorobenzene (TIC)



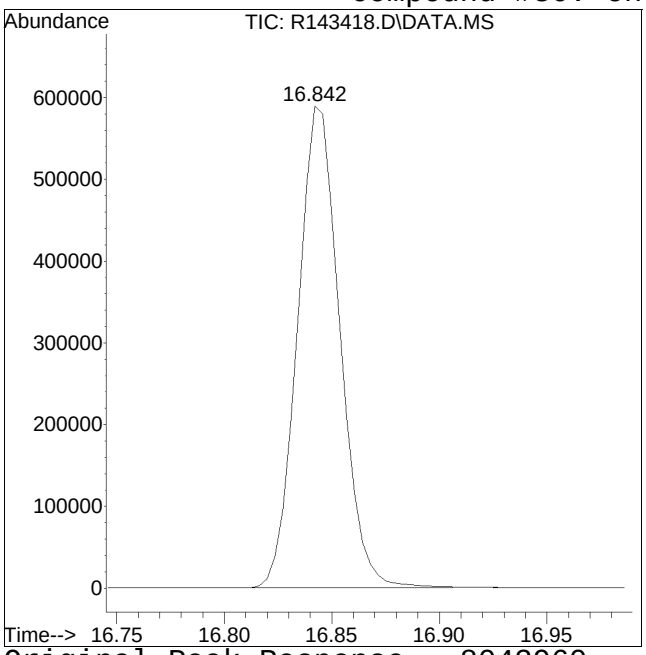


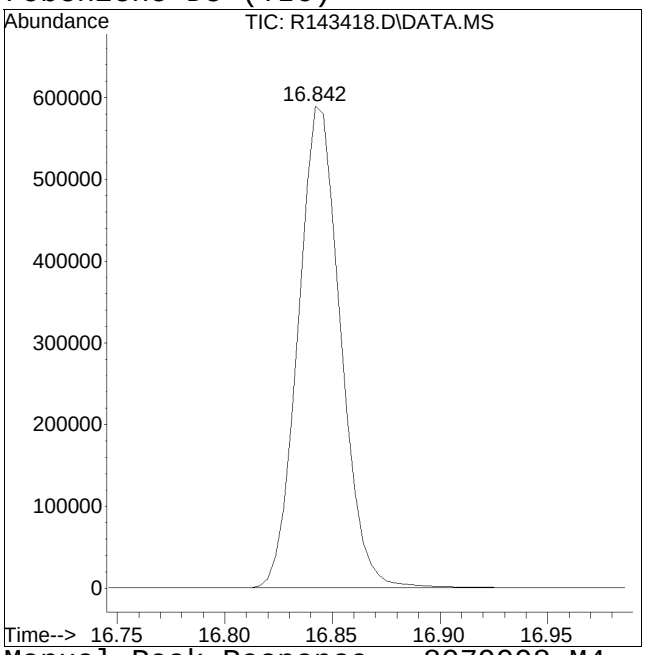
Original Peak Response = 6289775 Manual Peak Response = 6323779 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143418.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:51 pm Instrument : Air Piano 1
Sample : L1519114-06,3,250,250 Quant Date : 8/14/2015 8:38 am

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 8043960 Manual Peak Response = 8079998 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 14:57:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.212	128	647253	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	83.60%	
7) 1,4-difluorobenzene	12.427	114	2809926	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	84.92%	
12) chlorobenzene-D5	16.846	54	547996	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	90.26%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.210	TIC	4425121M4	10.104	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	101.04%	
29) 1,4-difluorobenzene (TIC)	12.419	TIC	6048028M4	9.791	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.91%	
30) chlorobenzene-D5 (TIC)	16.846	TIC	7915725M4	9.950	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.50%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	2256957	12.300	ug/m3	
13) toluene	15.255	91	132208	1.653	ug/m3	97
16) ethyl benzene	17.182		0	N.D.		
17) m+p-xylene	17.314		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	0.000		0	N.D.		
25) C9-C12 Aliphatics Tota	18.067	TIC	3914900	21.351	ug/m3	
26) C9-C10 Aromatics (120)	18.979	120	25174M5	0.792	ug/m3	
27) C9-C10 Aromatics Total	0.000		25174	0.792	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 14:57:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

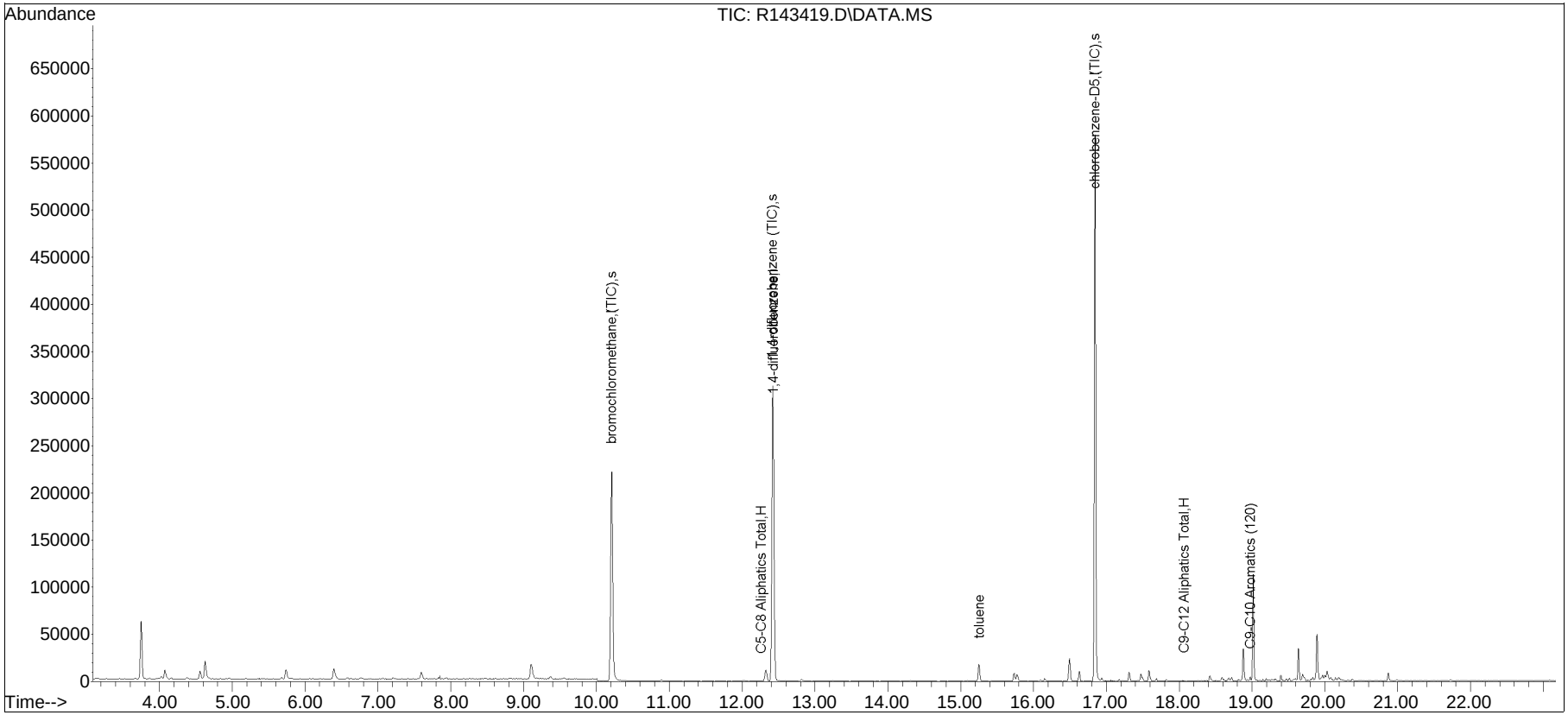
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

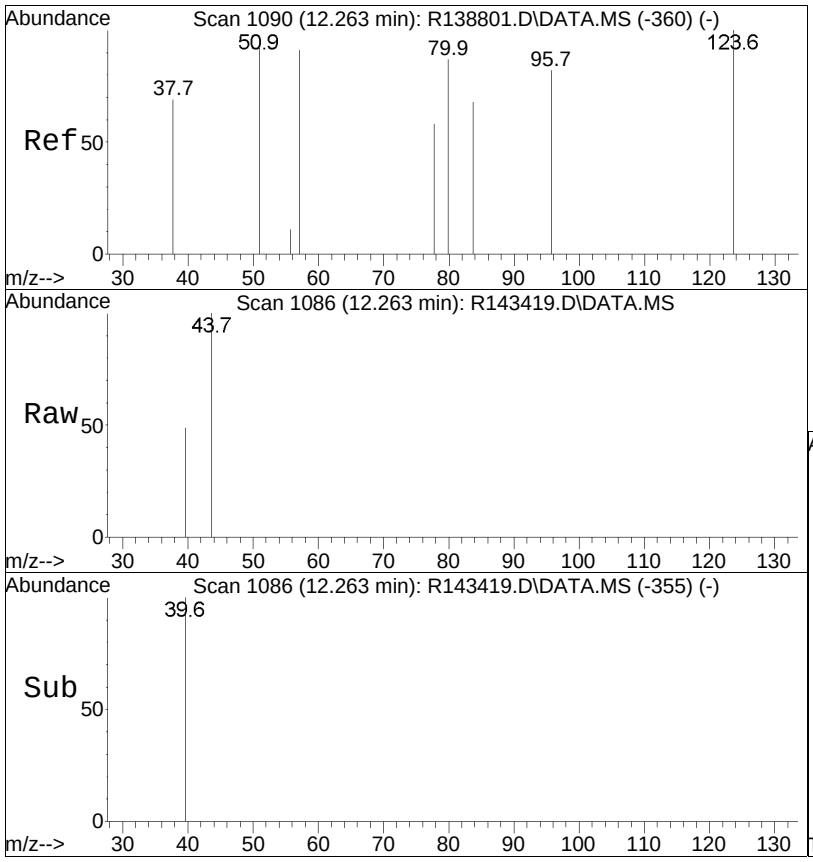
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

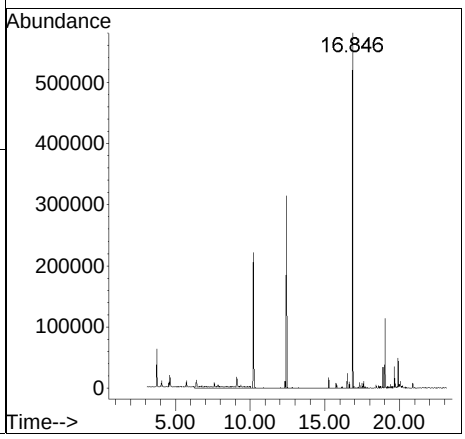
Quant Time: Aug 14 14:57:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

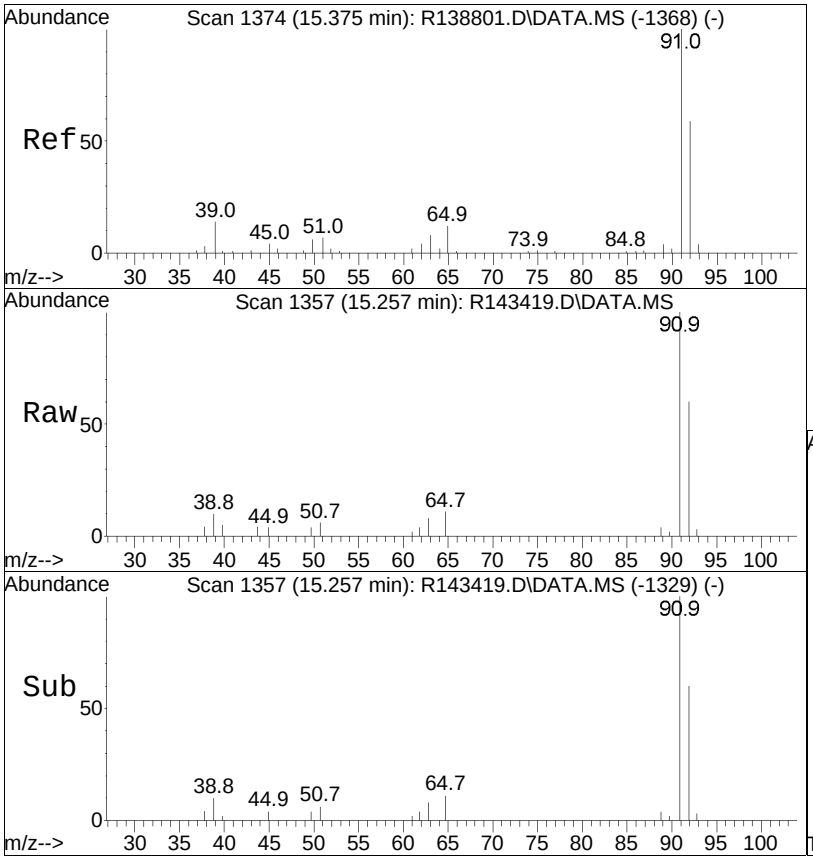




#11
C5-C8 Aliphatics Total
Concen: 14.56 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:TIC Resp: 2256957

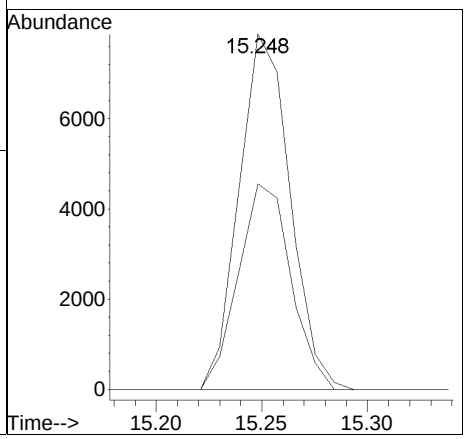


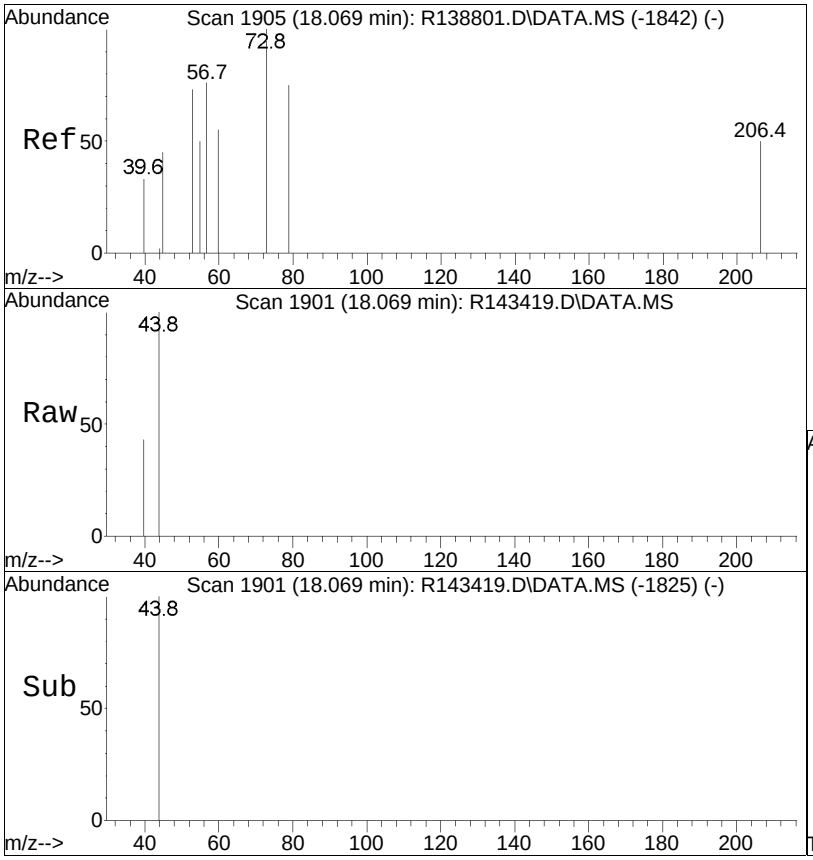


#13
toluene
Concen: 1.65 ug/m3
RT: 15.255 min Scan# 1357
Delta R.T. 0.002 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 91 Resp: 132208

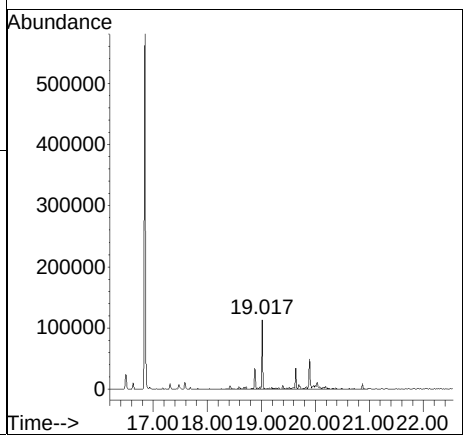
Ion	Ratio	Lower	Upper
91	100		
92	59.6	46.0	69.0

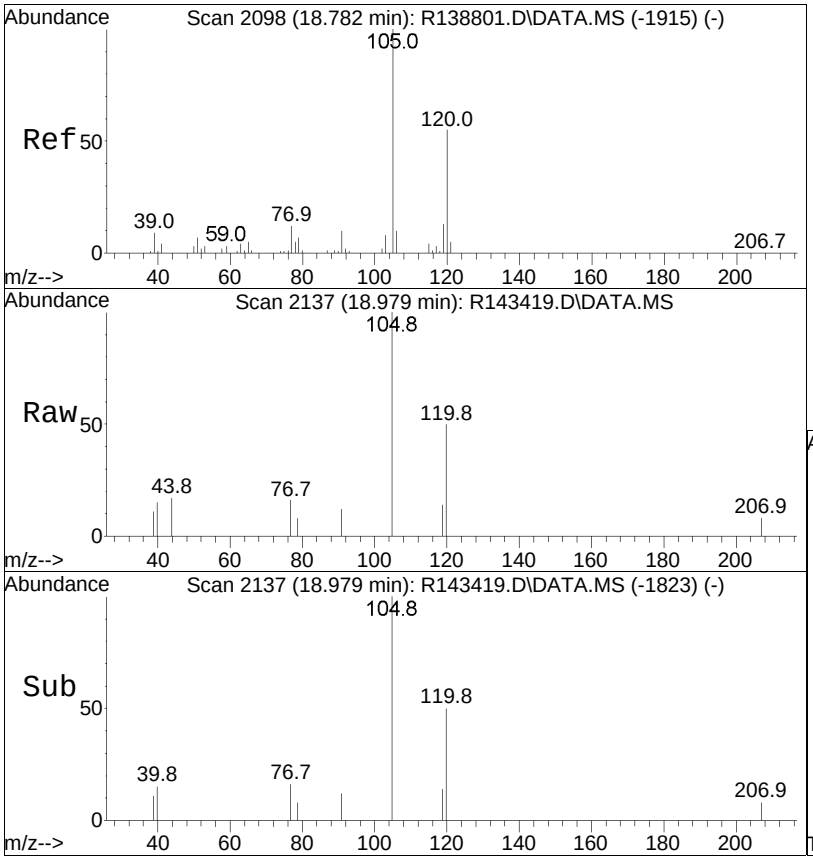




#25
C9-C12 Aliphatics Total
Concen: 22.27 ug/m3 m
RT: 18.067 min Scan# 1901
Delta R.T. 0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

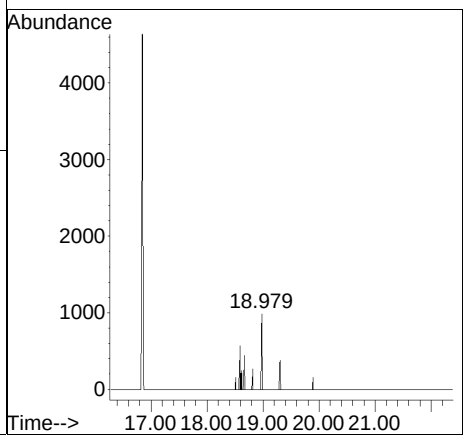
Tgt Ion:TIC Resp: 3914900





#26
C9-C10 Aromatics (120)
Concen: 0.79 ug/m3 m
RT: 18.979 min Scan# 2137
Delta R.T. -1.021 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

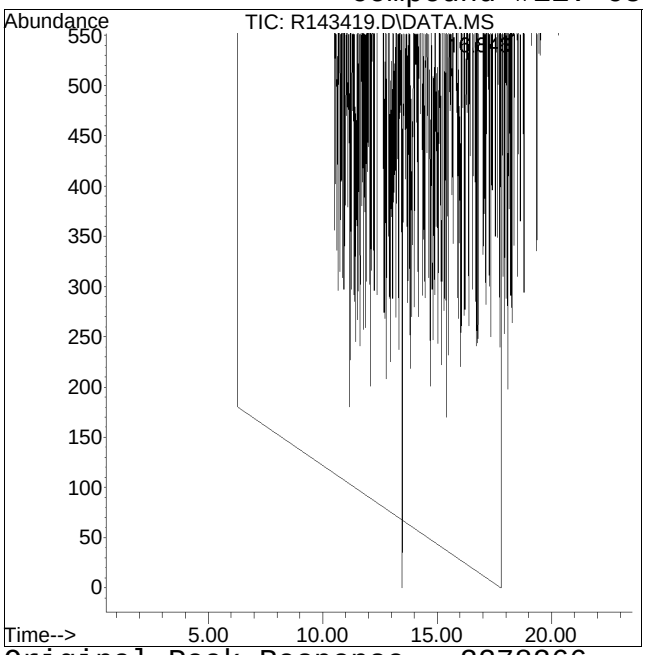
Tgt Ion:120 Resp: 25174



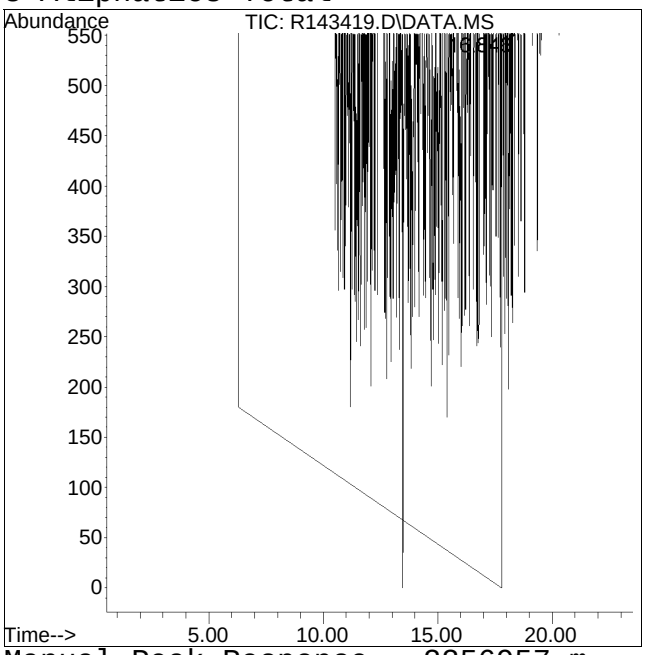
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 2278266

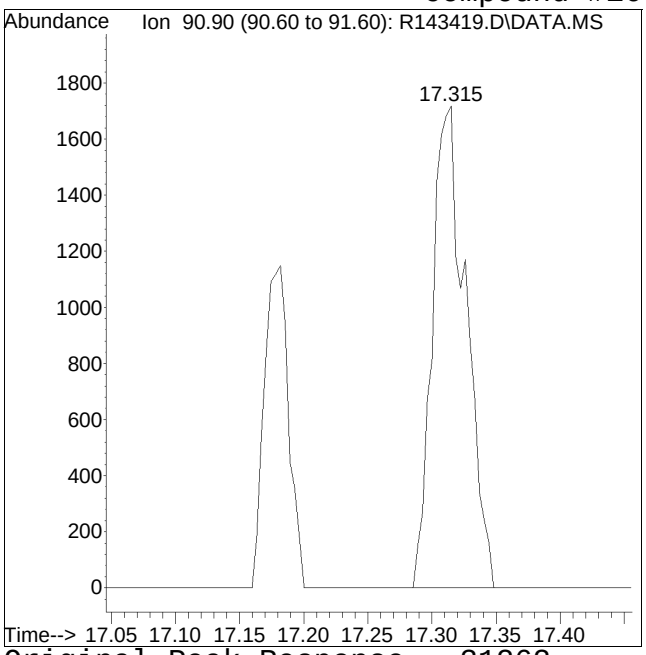


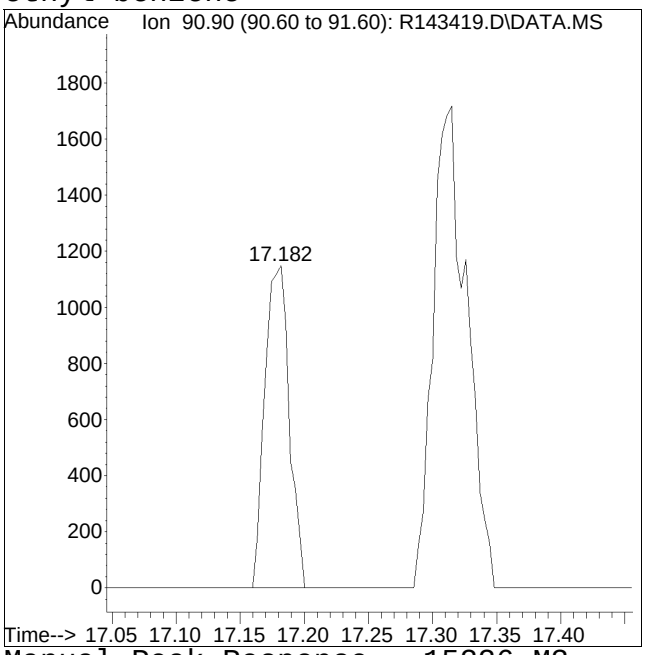
Manual Peak Response = 2256957 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #16: ethyl benzene





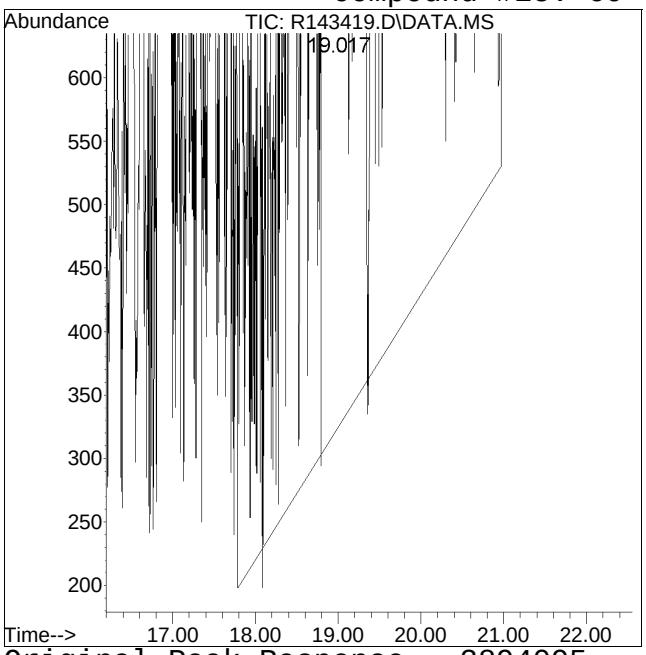
Original Peak Response = 31262 Manual Peak Response = 15226 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

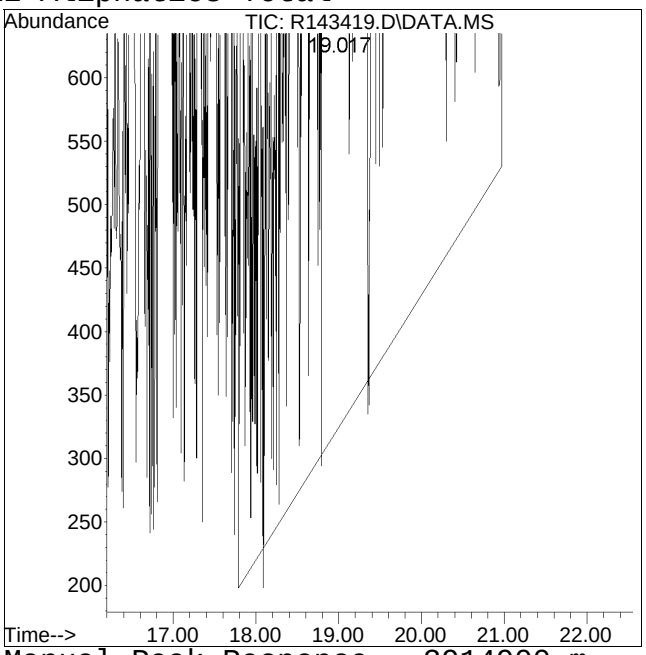
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150811\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 3894095

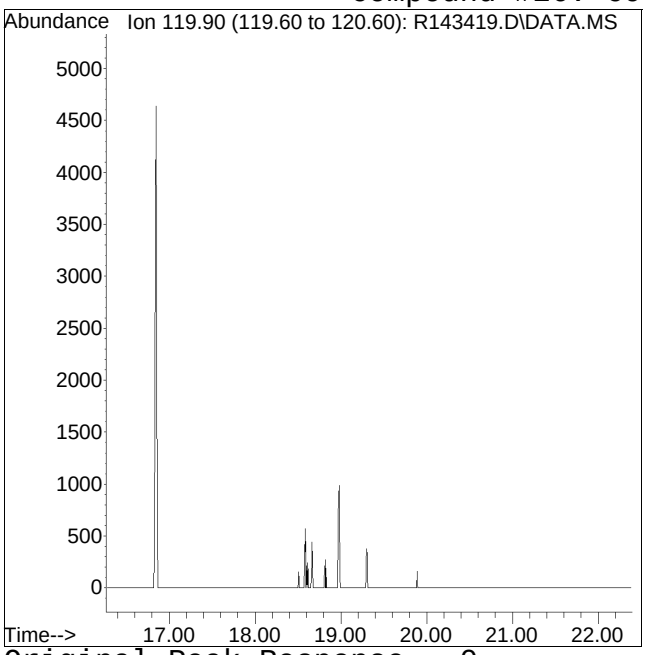


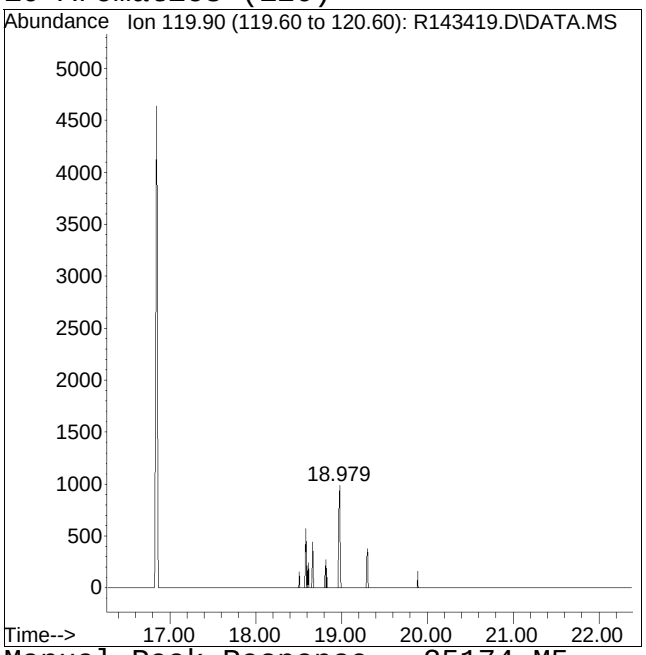
Manual Peak Response = 3914900 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #26: C9-C10 Aromatics (120)



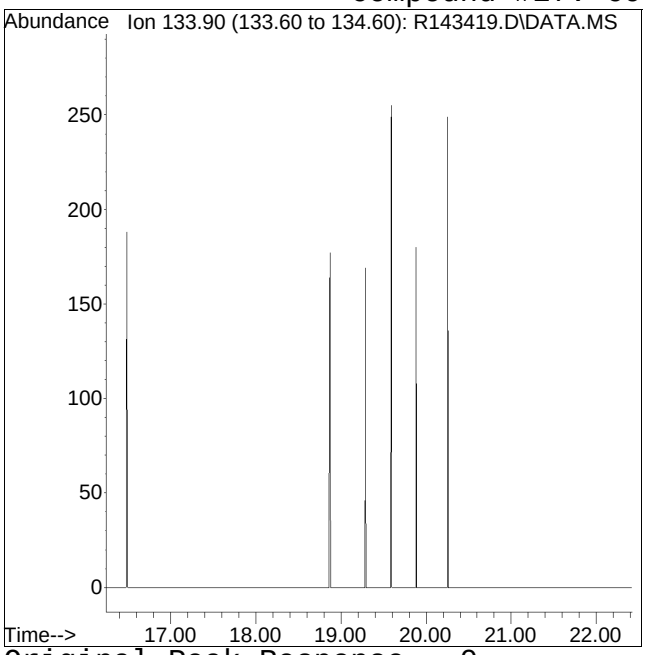


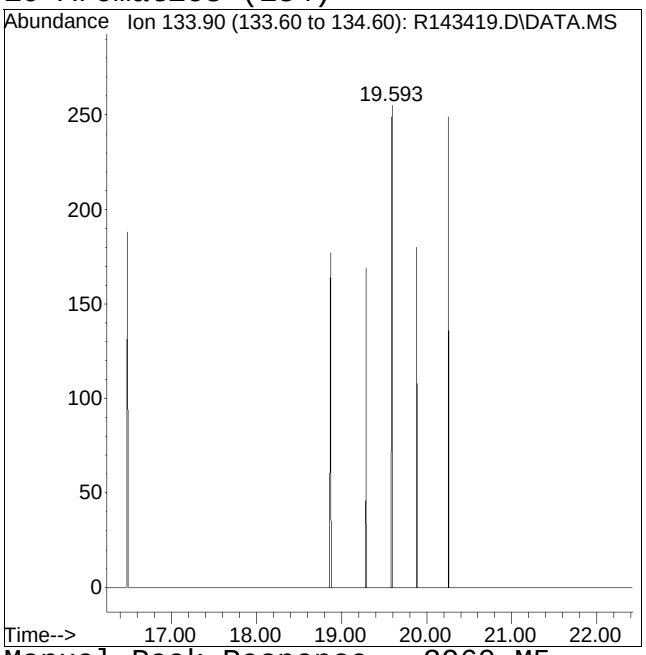
Original Peak Response = 0 Manual Peak Response = 25174 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #27: C9-C10 Aromatics (134)



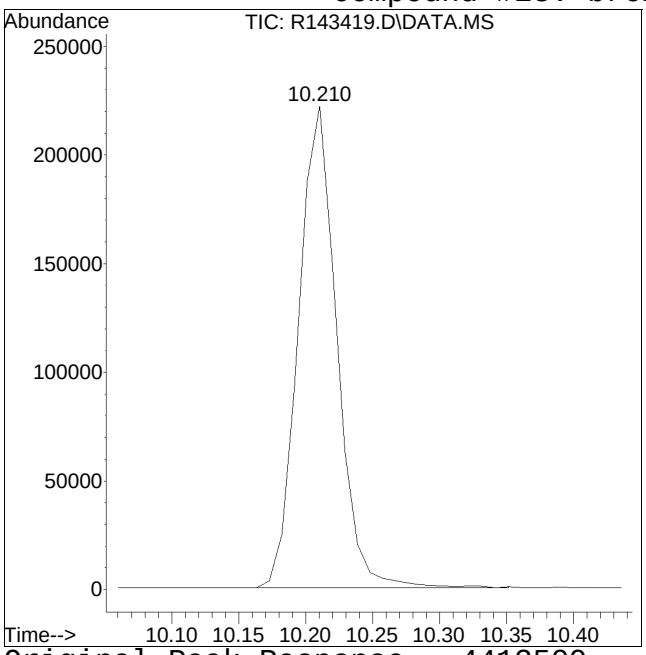


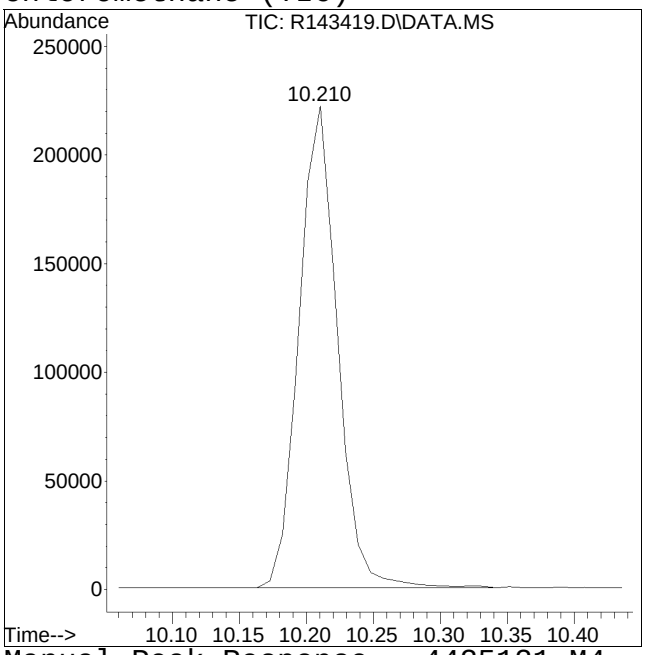
Original Peak Response = 0 Manual Peak Response = 3960 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #28: bromochloromethane (TIC)



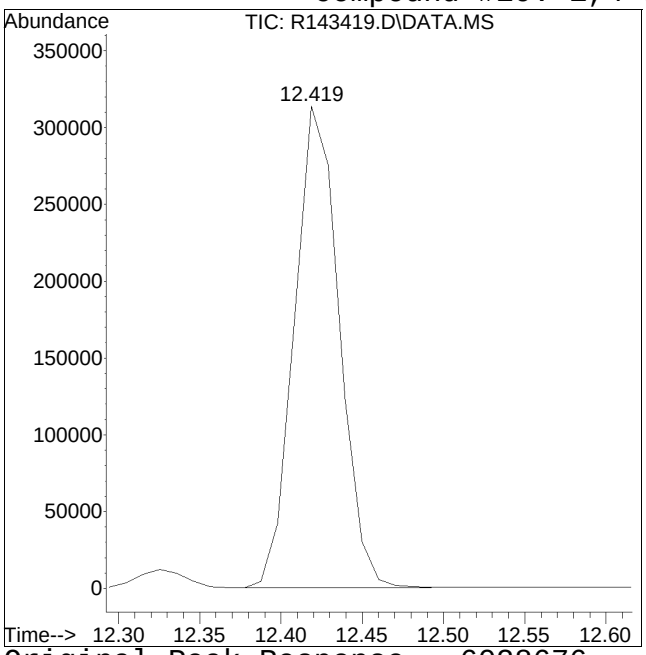


Original Peak Response = 4413509 Manual Peak Response = 4425121 M4
M4 = Poor automated baseline construction.

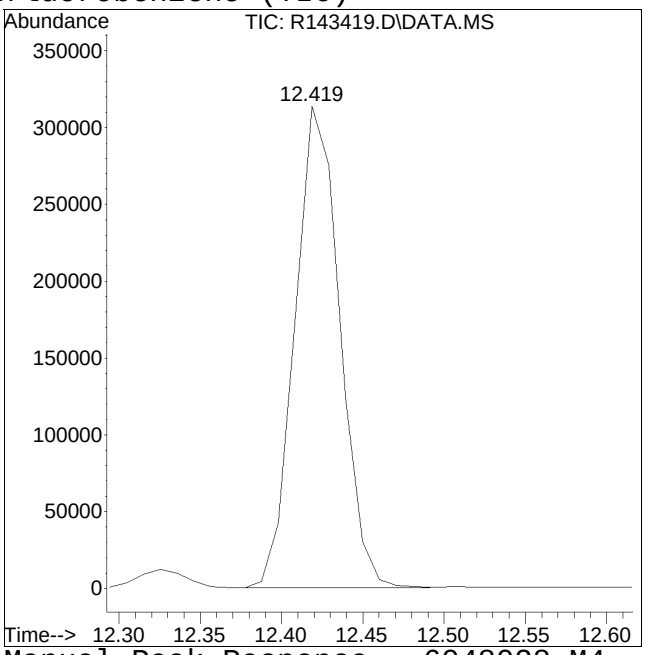
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #29: 1,4-difluorobenzene (TIC)



Original Peak Response = 6028676



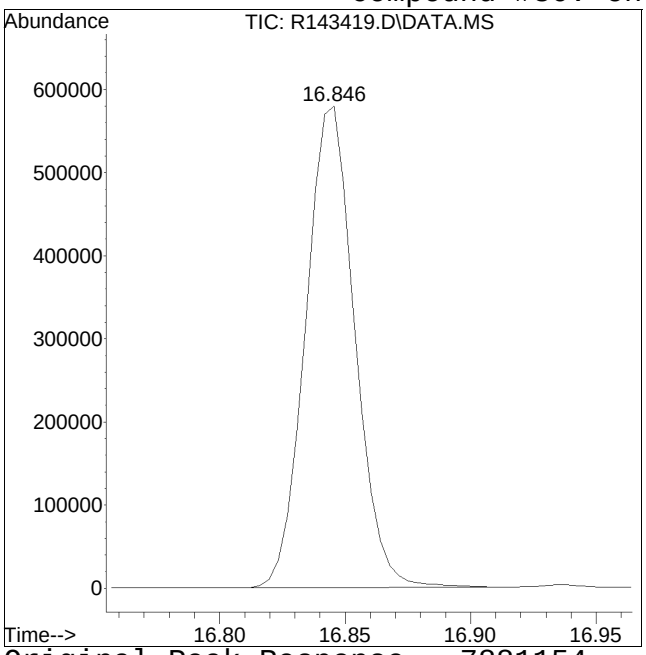
Manual Peak Response = 6048028 M4

M4 = Poor automated baseline construction.

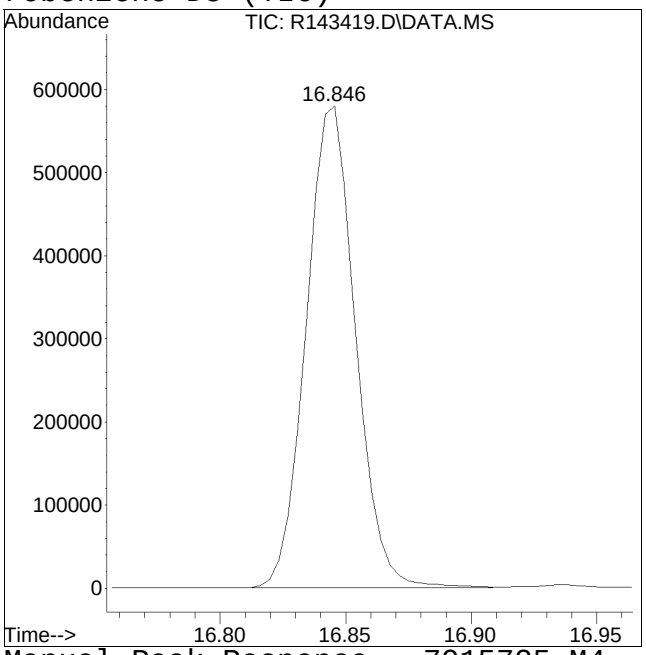
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:39 am

Compound #30: chlorobenzene-D5 (TIC)



Original Peak Response = 7881154



Manual Peak Response = 7915725 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 14:59:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	128	662416	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	85.56%	
7) 1,4-difluorobenzene	12.425	114	2907972	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	87.89%	
12) chlorobenzene-D5	16.845	54	567413	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	93.45%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4753035M4	10.481	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	104.81%	
29) 1,4-difluorobenzene (TIC)	12.419	TIC	6252432M4	9.776	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.76%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	8122093M4	9.860	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.60%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	5606019	28.968	ug/m3	
13) toluene	15.254	91	307790	3.716	ug/m3	98
16) ethyl benzene	17.178		0	N.D.		
17) m+p-xylene	17.310	91	95999	1.314	ug/m3#	52
19) o-xylene	17.685	91	40222	0.536	ug/m3#	28
23) naphthalene	20.991	128	51723	0.505	ug/m3#	79
25) C9-C12 Aliphatics Tota	18.067	TIC	10406910	52.672	ug/m3	
26) C9-C10 Aromatics (120)	18.974	120	128477M5	3.906	ug/m3	
27) C9-C10 Aromatics (134)	18.874	134	19473M5	0.592	ug/m3	
27) C9-C10 Aromatics Total	0.000		147950	4.498	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 14:59:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

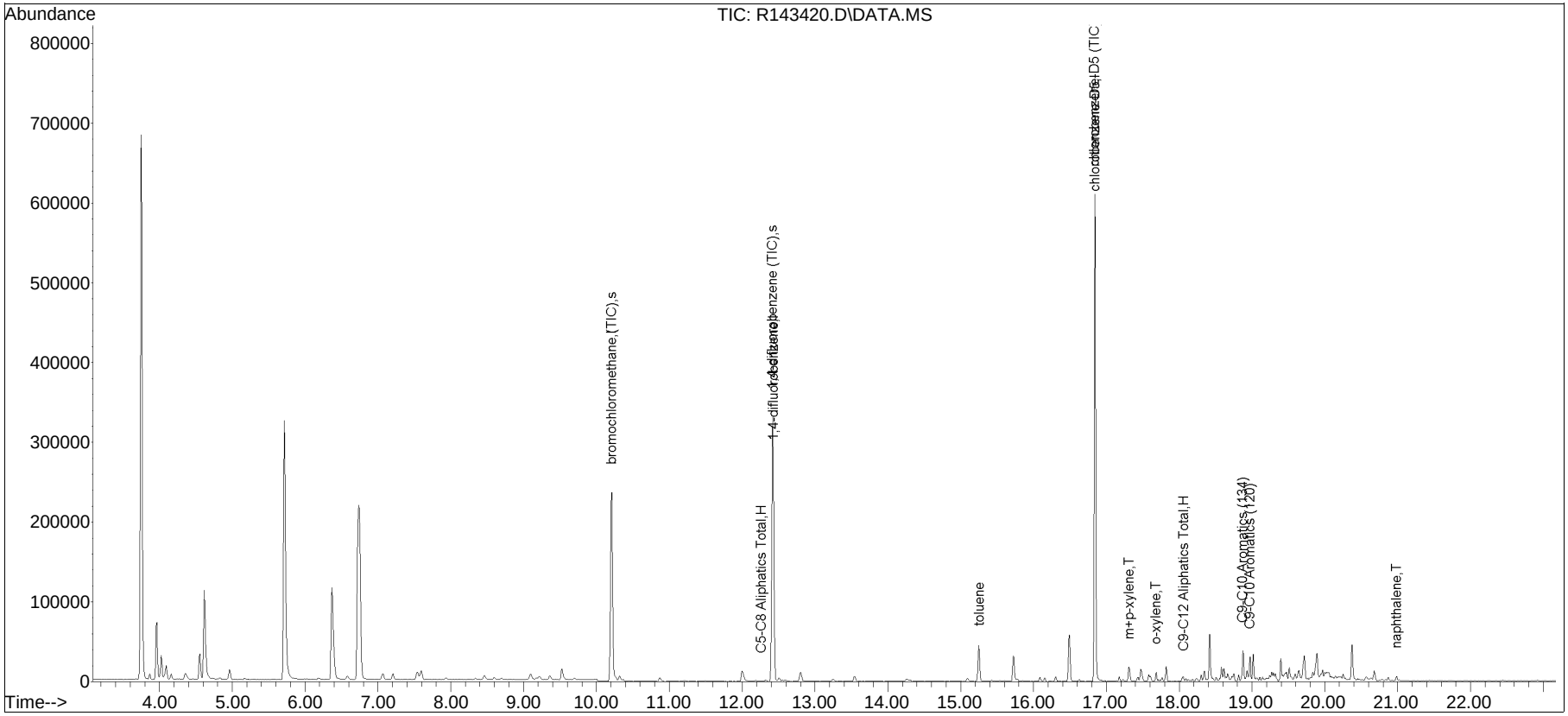
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

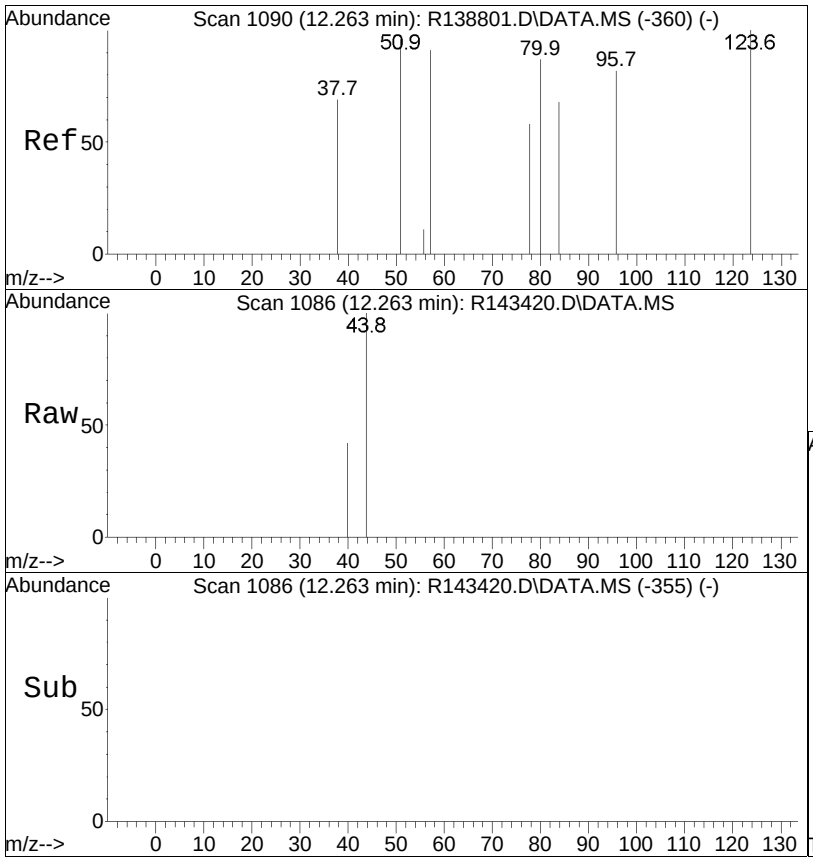
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 4 Sample Multiplier: 1

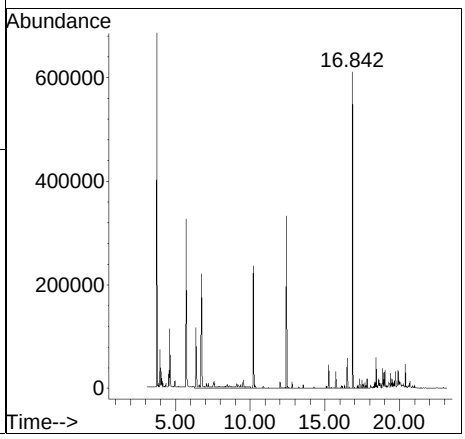
Quant Time: Aug 14 14:59:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

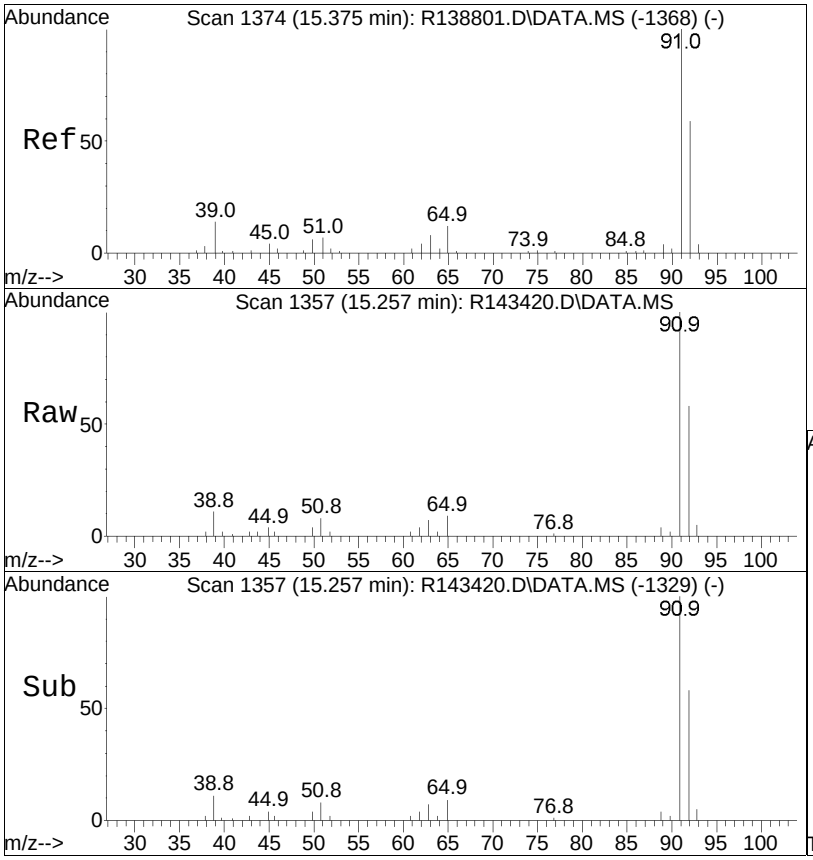




#11
C5-C8 Aliphatics Total
Concen: 34.96 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:TIC Resp: 5606019

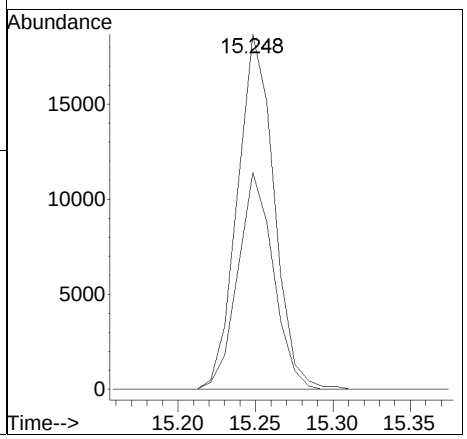


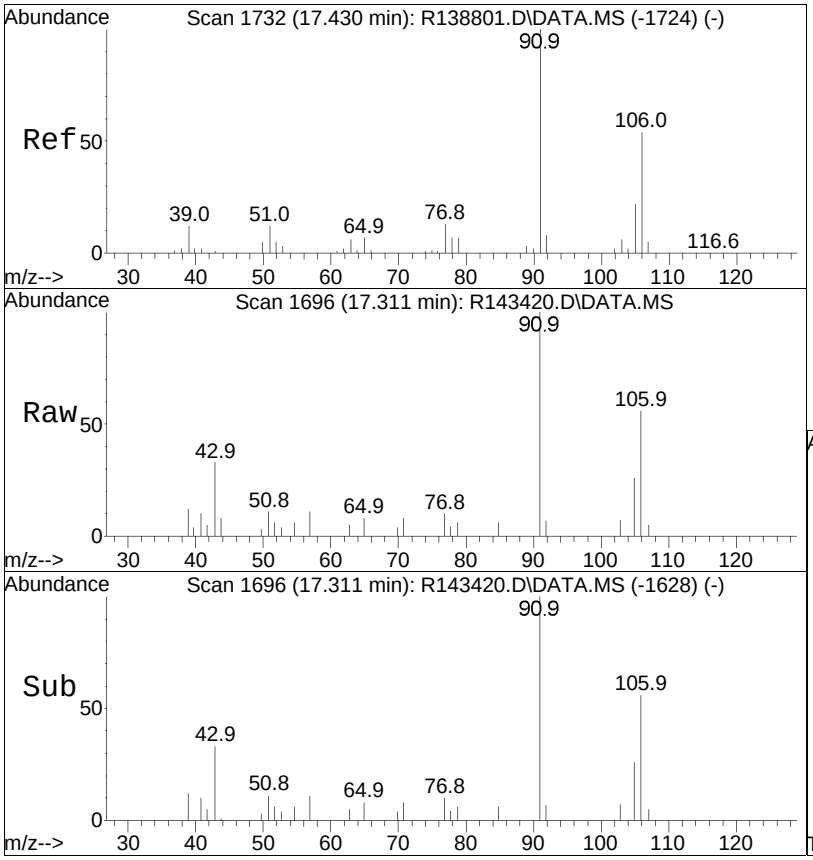


#13
toluene
Concen: 3.72 ug/m3
RT: 15.254 min Scan# 1357
Delta R.T. 0.001 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 307790

Ion	Ratio	Lower	Upper
91	100		
92	59.3	46.0	69.0

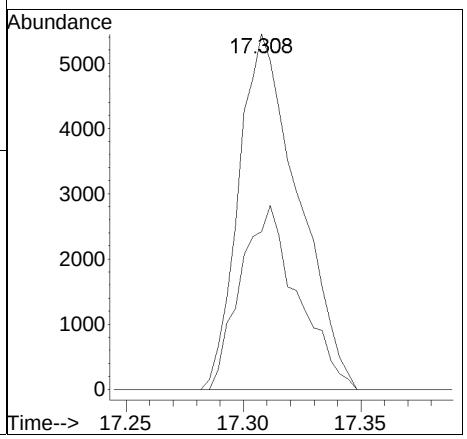


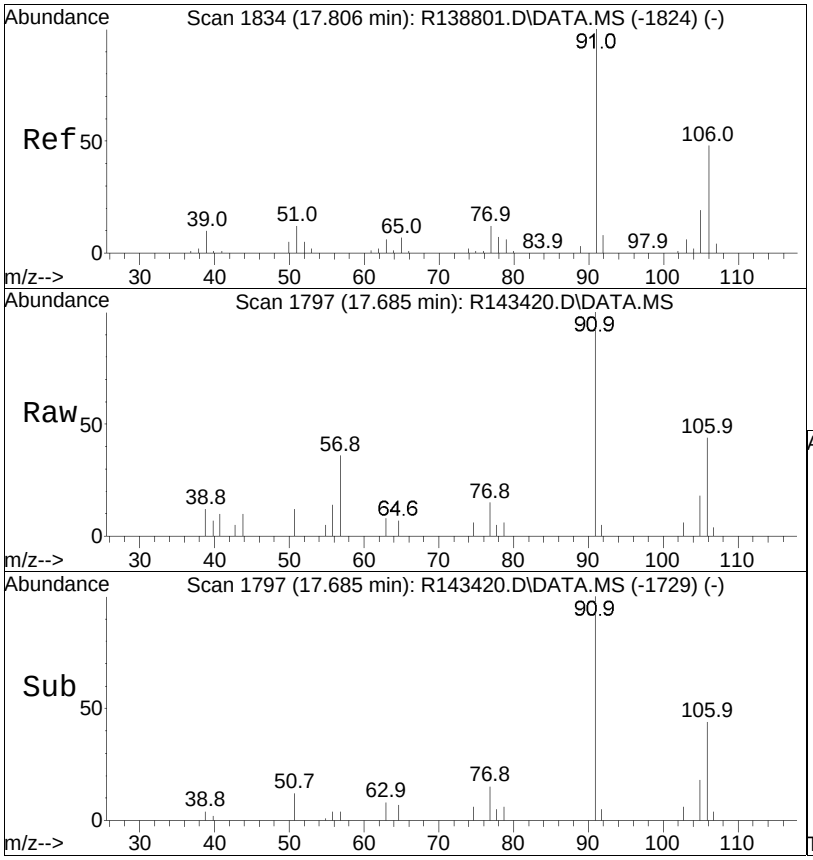


#17
m+p-xylene
Concen: 1.31 ug/m3
RT: 17.310 min Scan# 1696
Delta R.T. -0.002 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 95999

Ion	Ratio	Lower	Upper
91	100		
106	49.8	20.5	30.7#

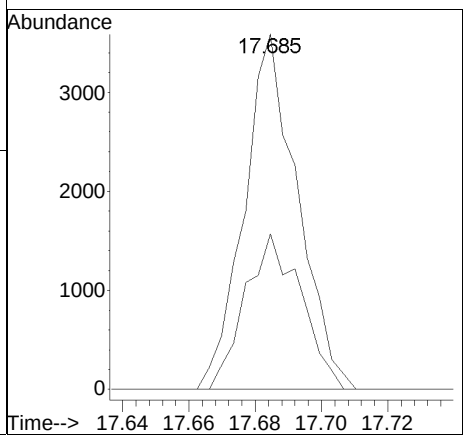


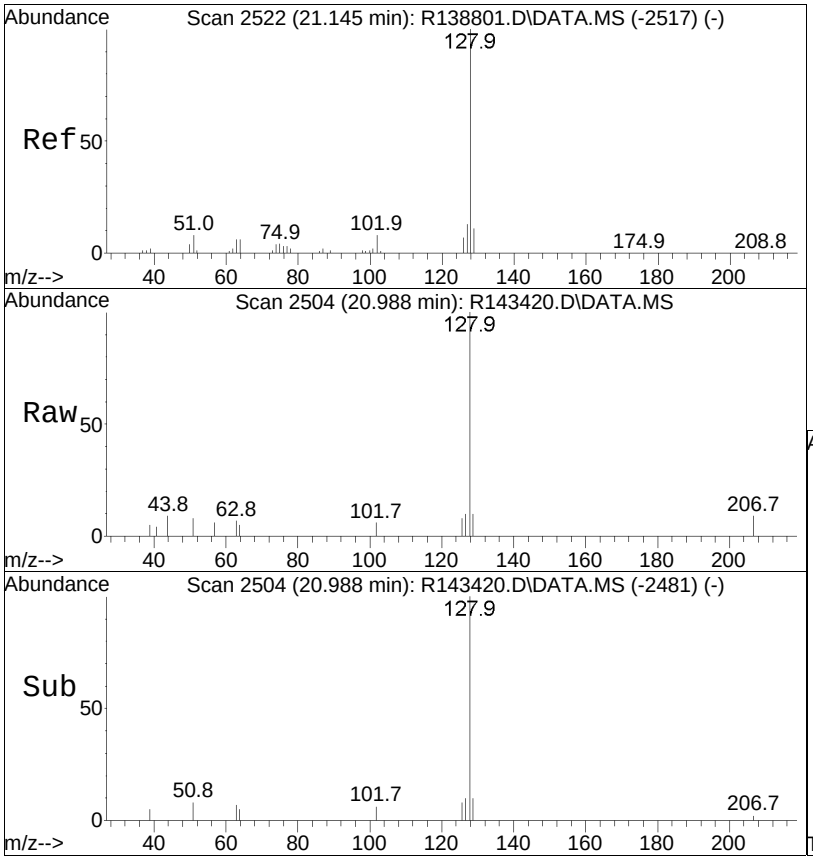


#19
o-xylene
Concen: 0.54 ug/m3
RT: 17.685 min Scan# 1797
Delta R.T. 0.001 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 40222

Ion	Ratio	Lower	Upper
91	100		
106	0.0	39.2	58.8#

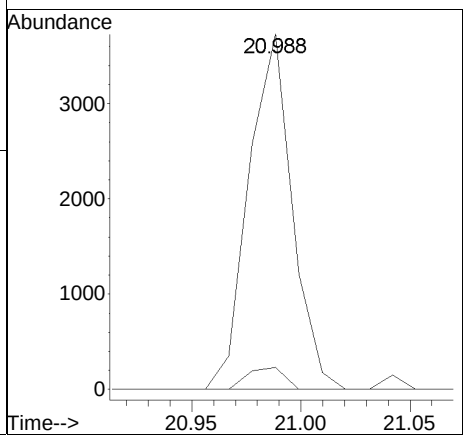


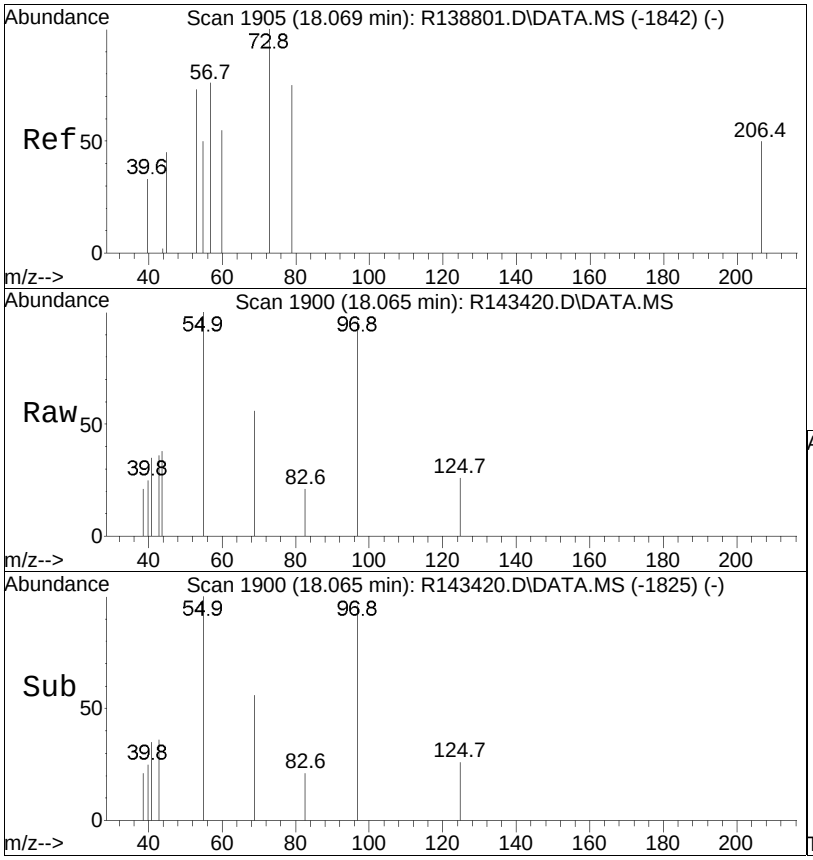


#23
naphthalene
Concen: 0.51 ug/m3
RT: 20.991 min Scan# 2504
Delta R.T. 0.003 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:128 Resp: 51723

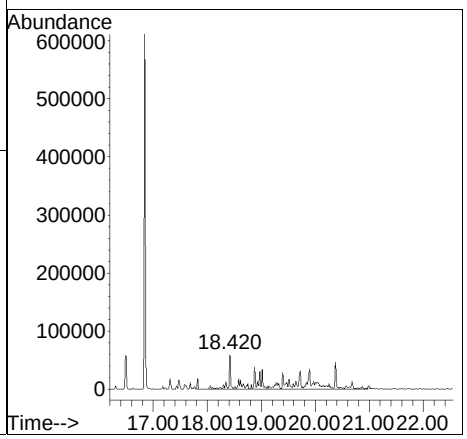
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

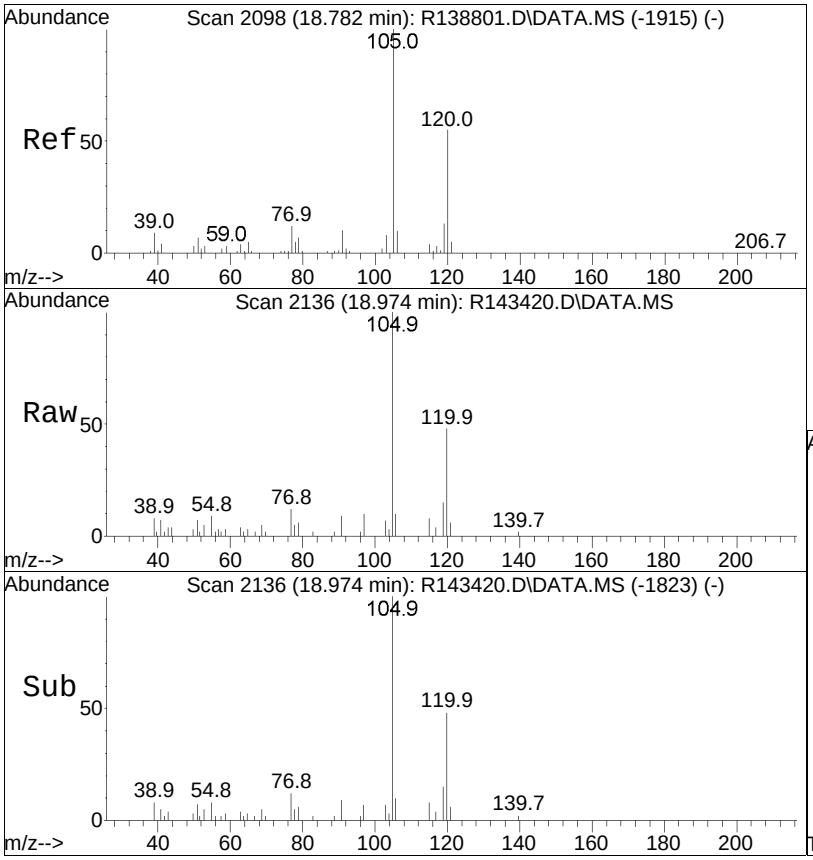




#25
C9-C12 Aliphatics Total
Concen: 57.17 ug/m3 m
RT: 18.067 min Scan# 1900
Delta R.T. 0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

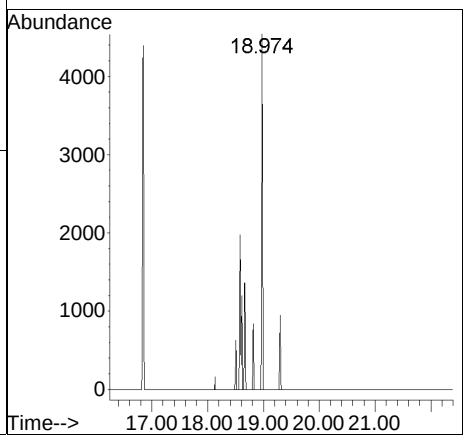
Tgt Ion:TIC Resp:10406910

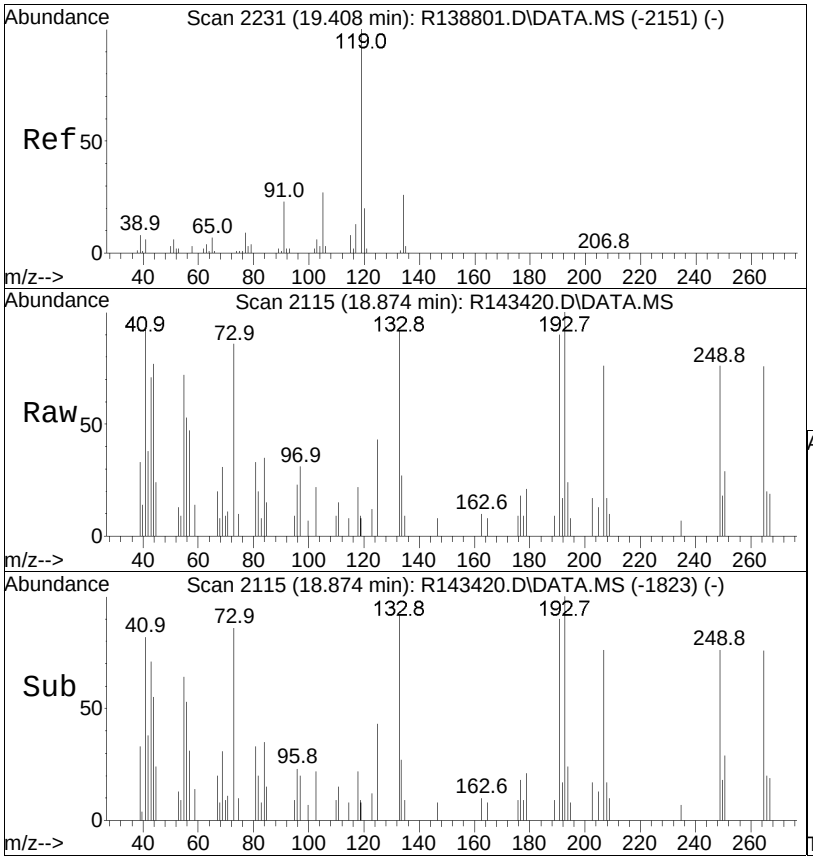




#26
C9-C10 Aromatics (120)
Concen: 3.91 ug/m3 m
RT: 18.974 min Scan# 2136
Delta R.T. -1.026 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

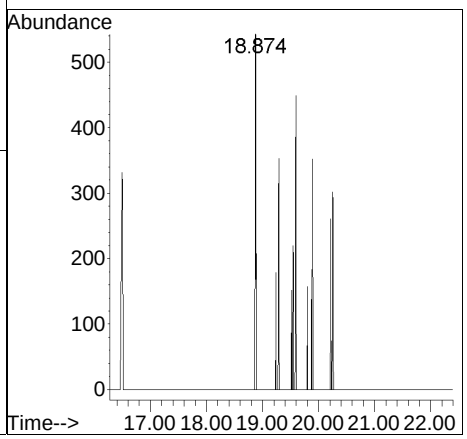
Tgt Ion:120 Resp: 128477





#27
C9-C10 Aromatics (134)
Concen: 0.59 ug/m3 m
RT: 18.874 min Scan# 2115
Delta R.T. -1.126 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

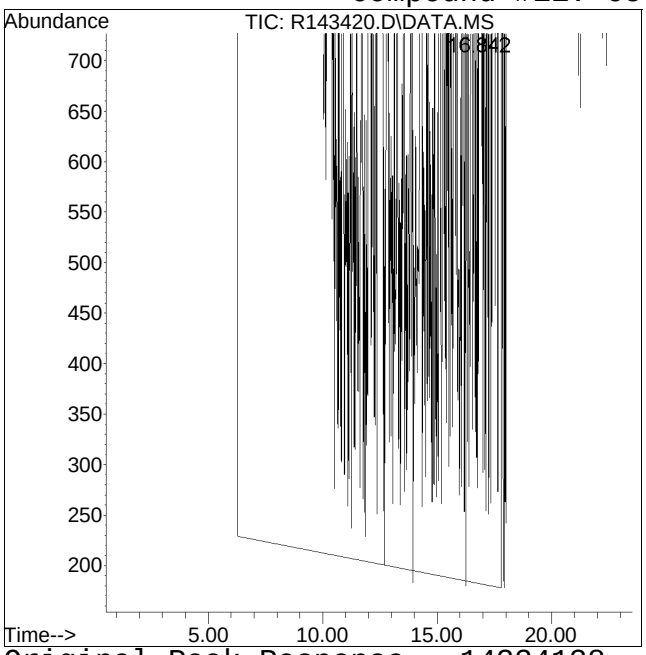
Tgt Ion:134 Resp: 19473



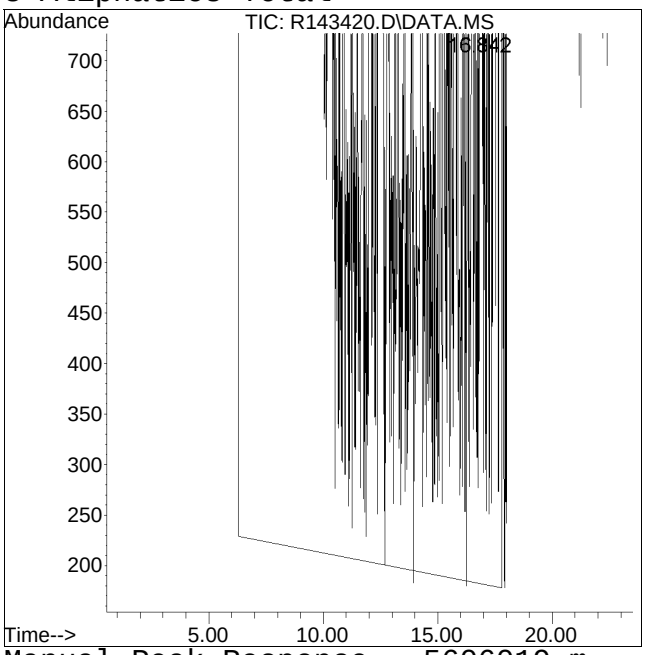
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143420.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 6:55 pm	Instrument	: Air Piano 1
Sample	: L1519114-07,3,250,250	Quant Date	: 8/14/2015 8:39 am

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 14334138

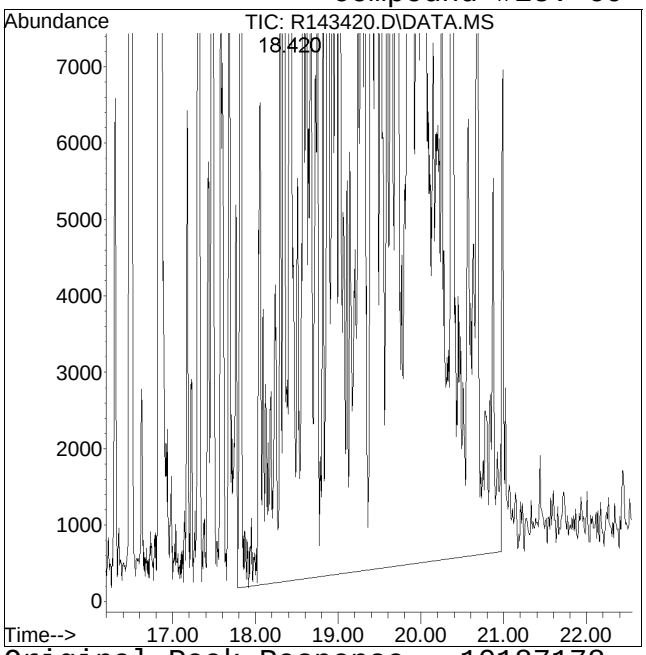


Manual Peak Response = 5606019 m

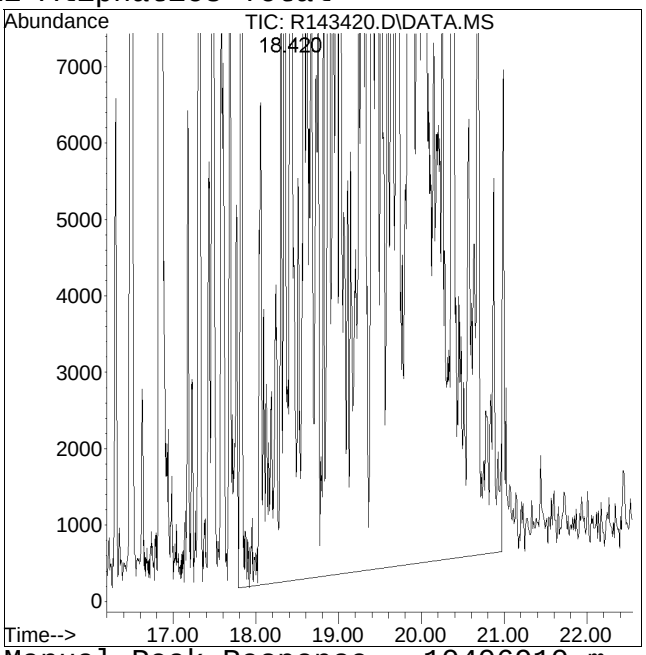
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143420.D
Date Inj'd : 8/13/2015 6:55 pm
Sample : L1519114-07,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:39 am

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 10187178

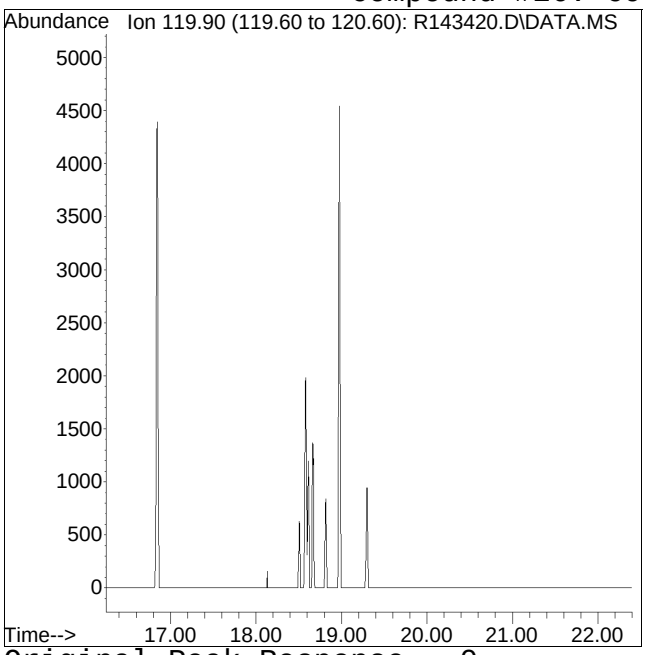


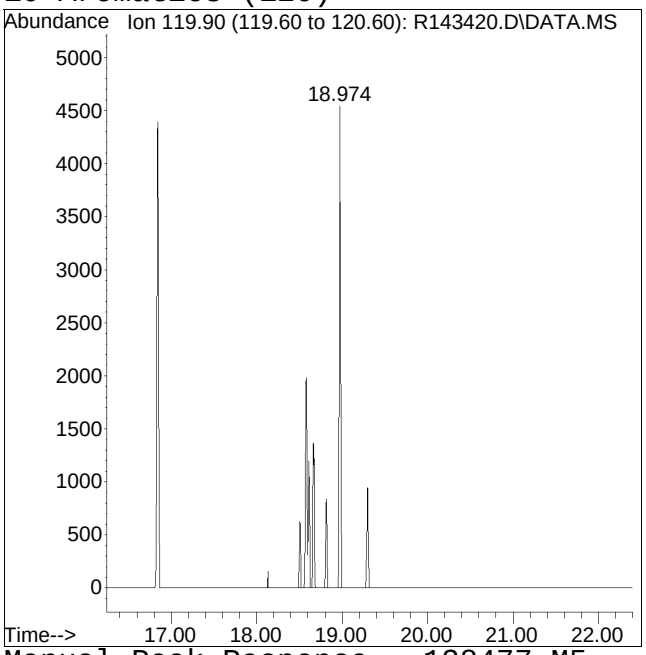
Manual Peak Response = 10406910 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:39 am

Compound #26: C9-C10 Aromatics (120)



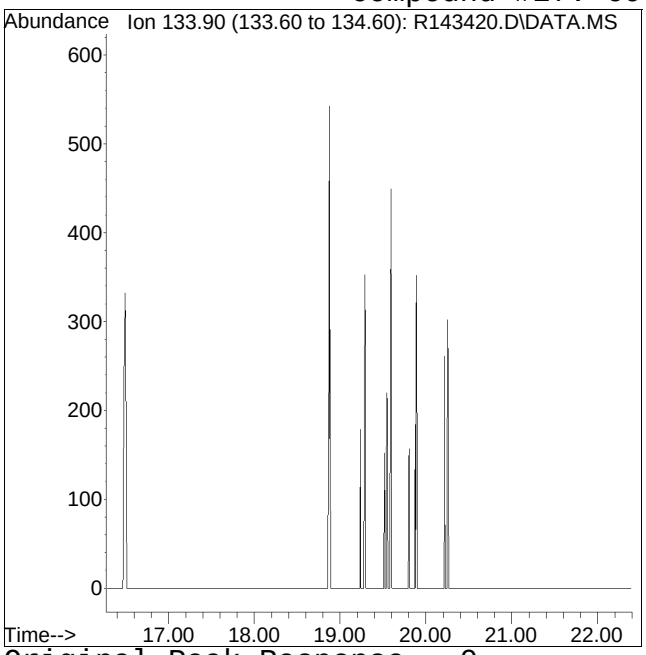


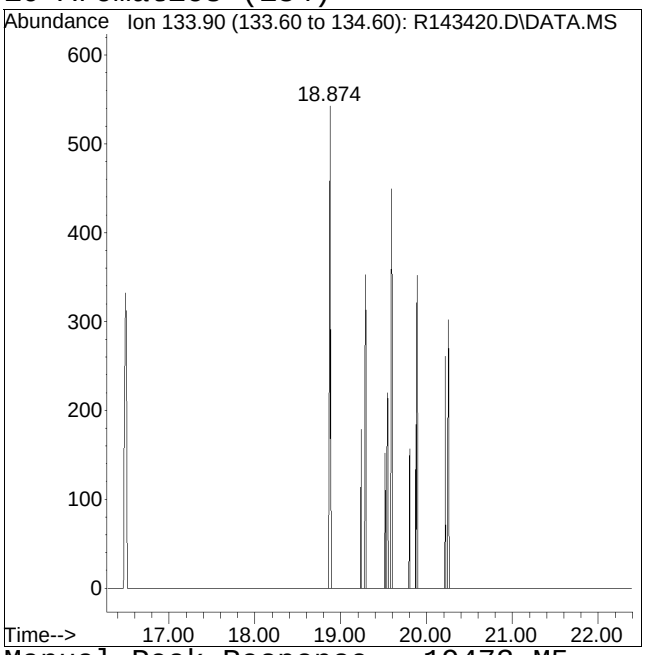
Original Peak Response = 0 Manual Peak Response = 128477 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:39 am

Compound #27: C9-C10 Aromatics (134)



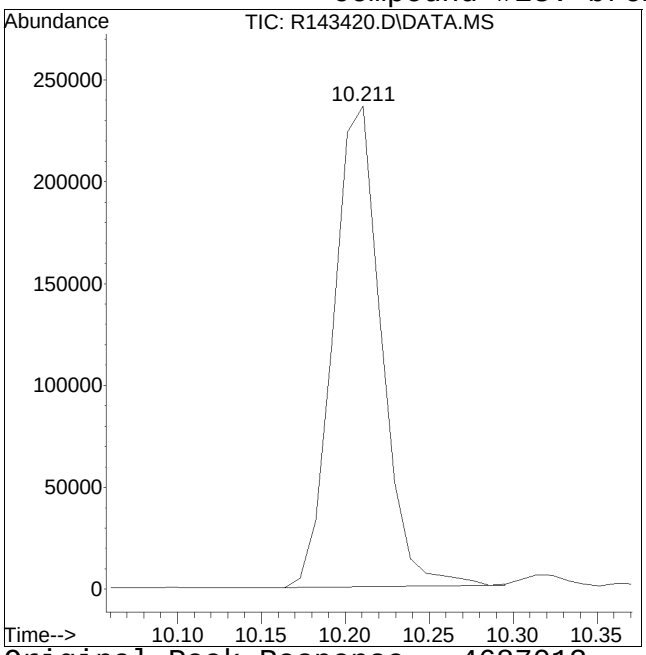


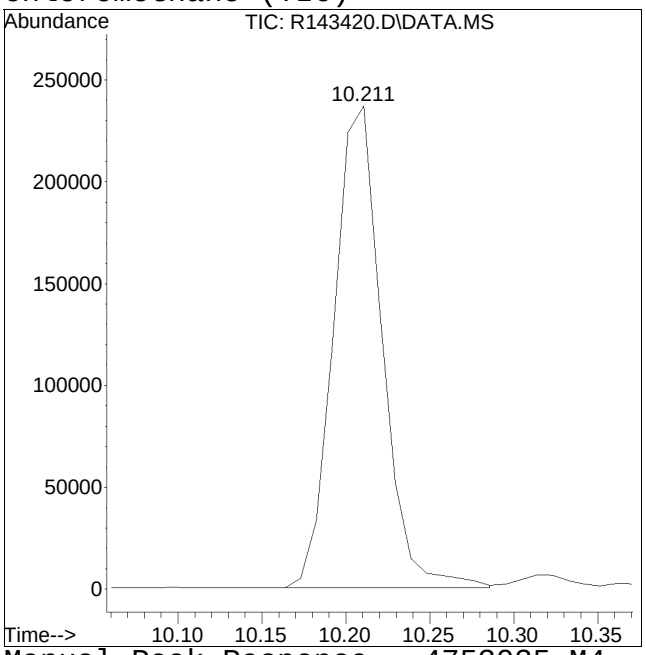
Original Peak Response = 0 Manual Peak Response = 19473 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:39 am

Compound #28: bromochloromethane (TIC)



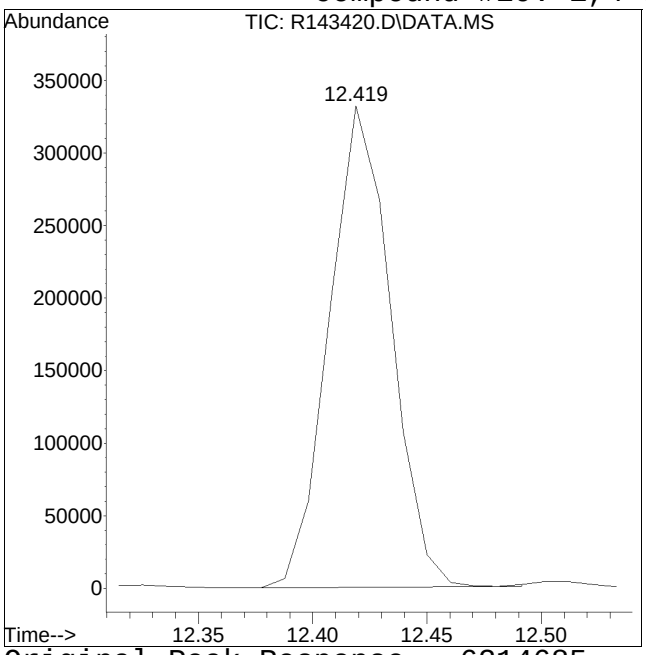


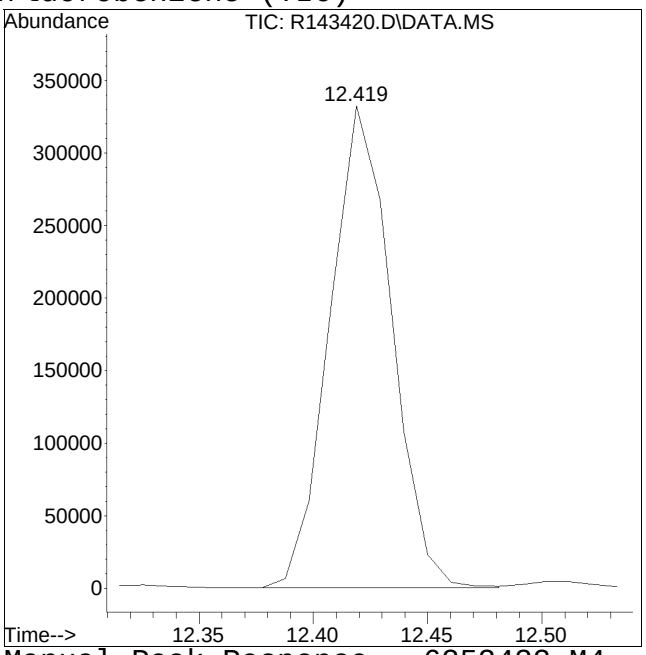
Original Peak Response = 4687013 Manual Peak Response = 4753035 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:39 am

Compound #29: 1,4-difluorobenzene (TIC)



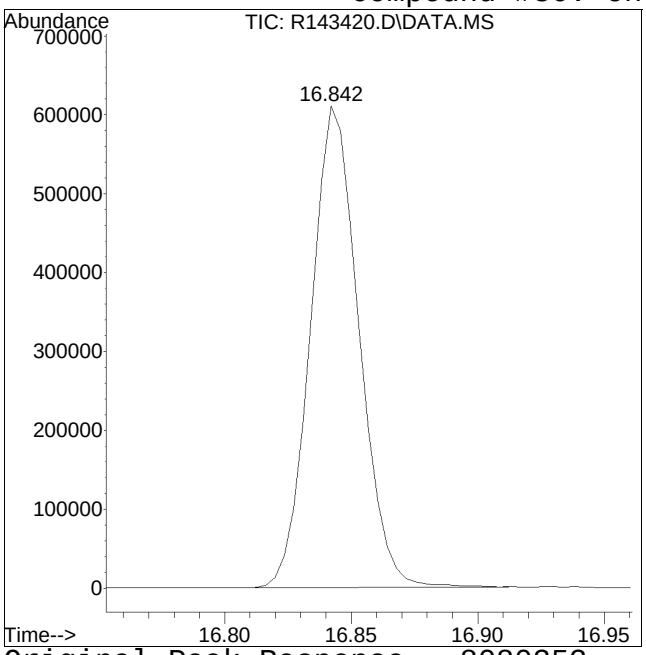


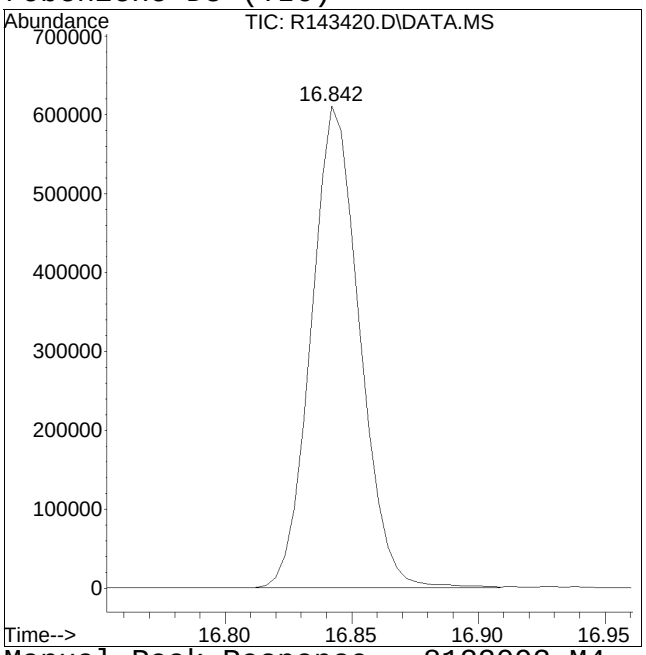
Original Peak Response = 6214685 Manual Peak Response = 6252432 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143420.D
Date Inj'd : 8/13/2015 6:55 pm
Sample : L1519114-07,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:39 am

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 8080353 Manual Peak Response = 8122093 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 15:03:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

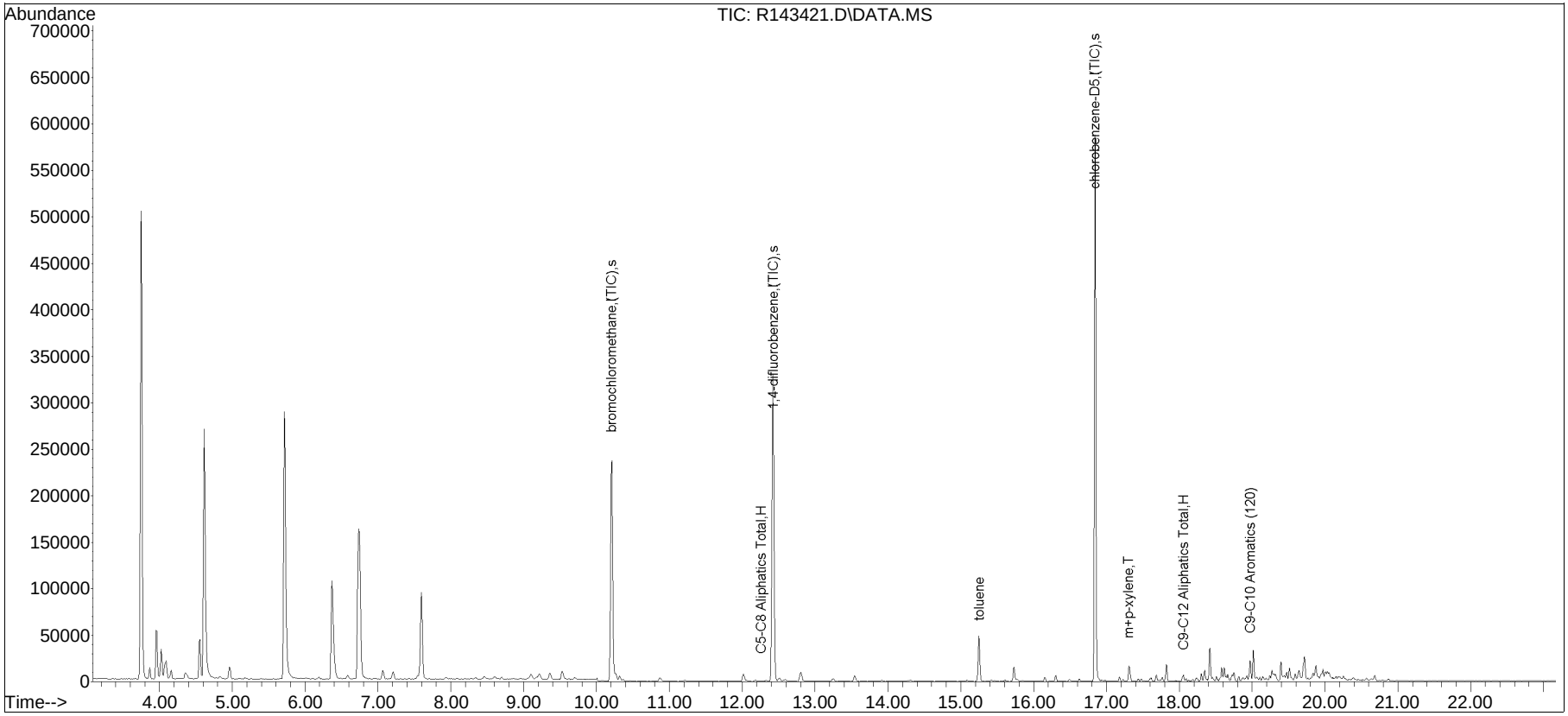
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	128	664923	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	85.88%	
7) 1,4-difluorobenzene	12.425	114	2820327	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	85.24%	
12) chlorobenzene-D5	16.844	54	551324	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	90.80%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4681922M4	10.626	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	106.26%	
29) 1,4-difluorobenzene (TIC)	12.426	TIC	6096636	9.810	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.10%	
30) chlorobenzene-D5 (TIC)	16.845	TIC	7924831	9.901	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.01%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	3314555	15.362	ug/m3	
13) toluene	15.254	91	312656	3.884	ug/m3	95
16) ethyl benzene	17.178		0	N.D.		
17) m+p-xylene	17.309	91	85416	1.204	ug/m3#	50
19) o-xylene	17.685		0	N.D.		
23) naphthalene	0.000		0	N.D.		
25) C9-C12 Aliphatics Tota	18.067	TIC	6946055	35.894	ug/m3	
26) C9-C10 Aromatics (120)	18.975	120	101545M5	3.177	ug/m3	
27) C9-C10 Aromatics Total	0.000		101545	3.177	ug/m3	

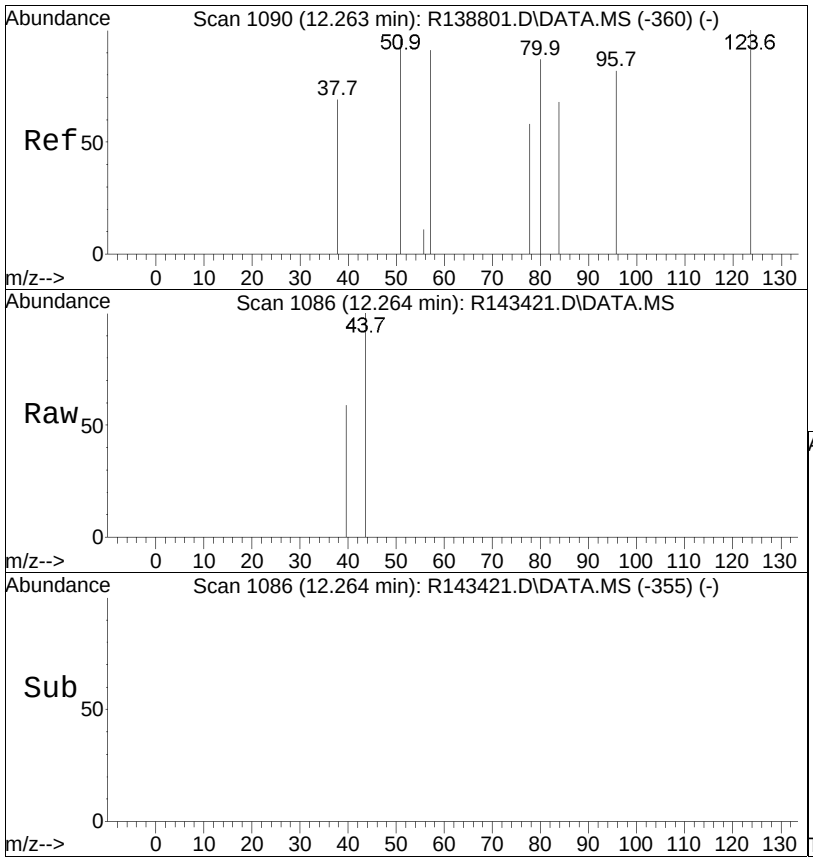
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 5 Sample Multiplier: 1

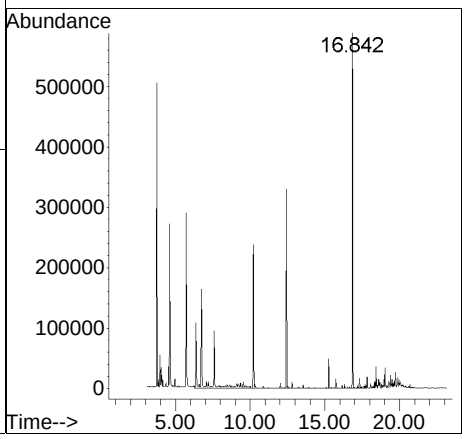
Quant Time: Aug 14 15:03:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

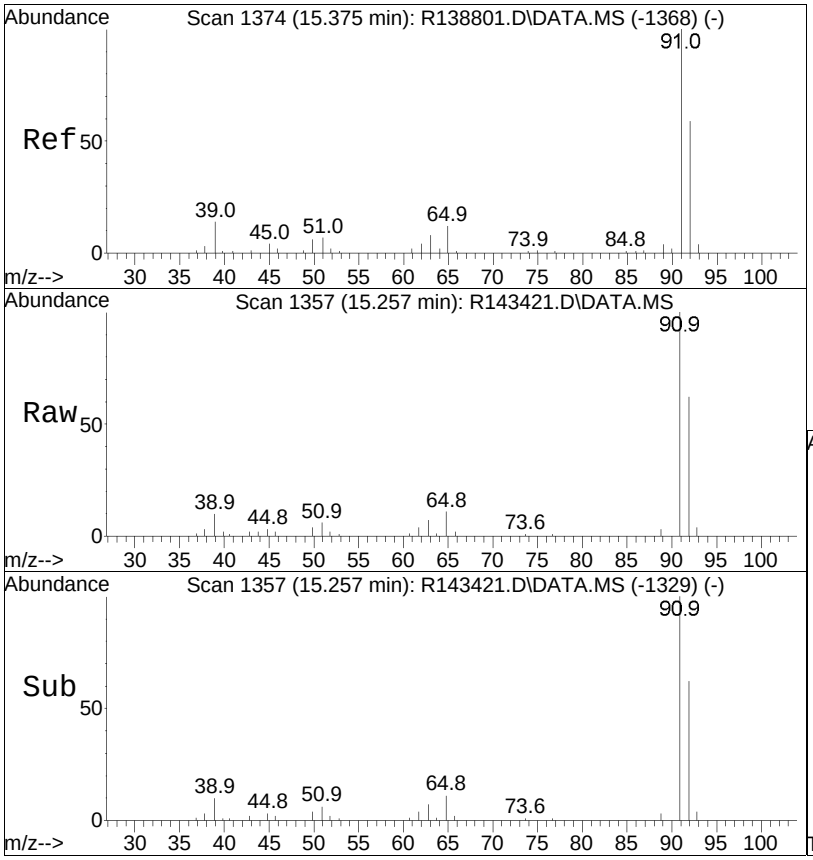




#11
C5-C8 Aliphatics Total
Concen: 21.31 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:TIC Resp: 3314555

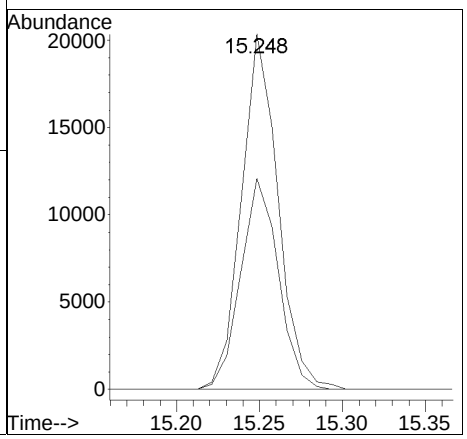


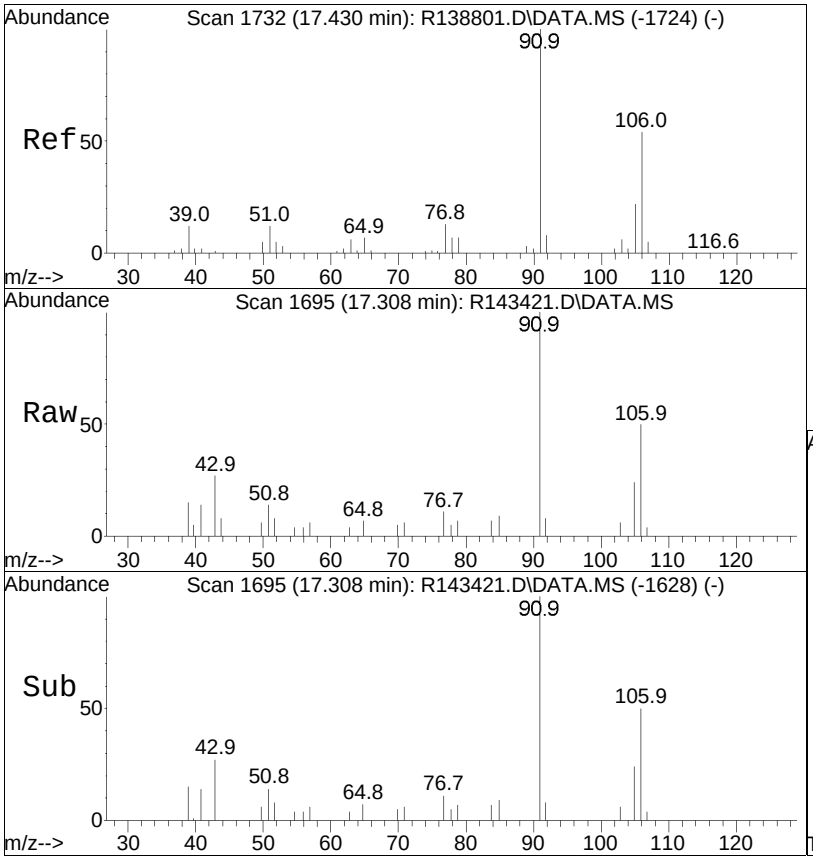


#13
toluene
Concen: 3.88 ug/m3
RT: 15.254 min Scan# 1357
Delta R.T. 0.001 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 312656

Ion	Ratio	Lower	Upper
91	100		
92	61.0	46.0	69.0

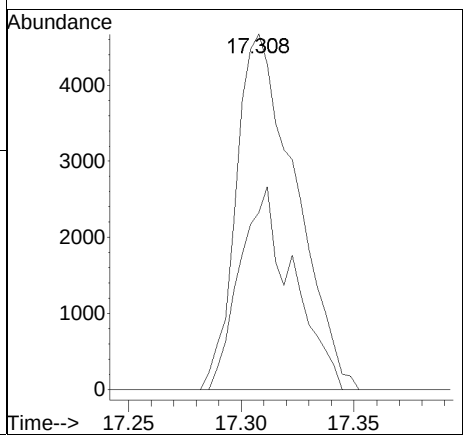


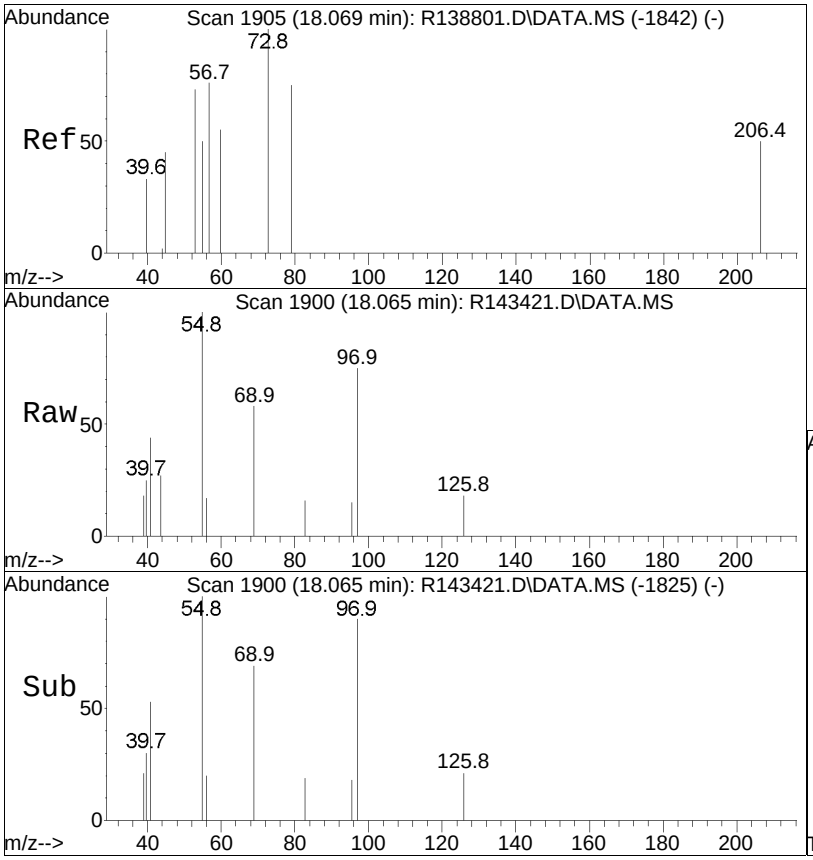


#17
m+p-xylene
Concen: 1.20 ug/m3
RT: 17.309 min Scan# 1695
Delta R.T. -0.003 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 85416

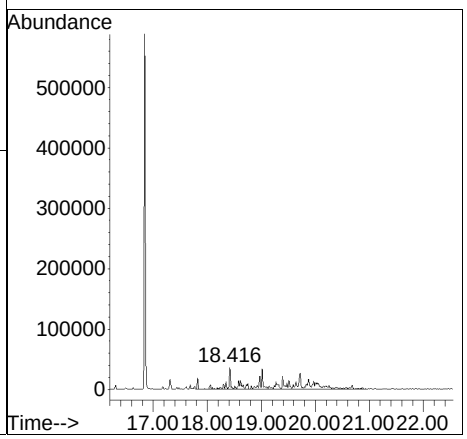
Ion	Ratio	Lower	Upper
91	100		
106	50.9	20.5	30.7#

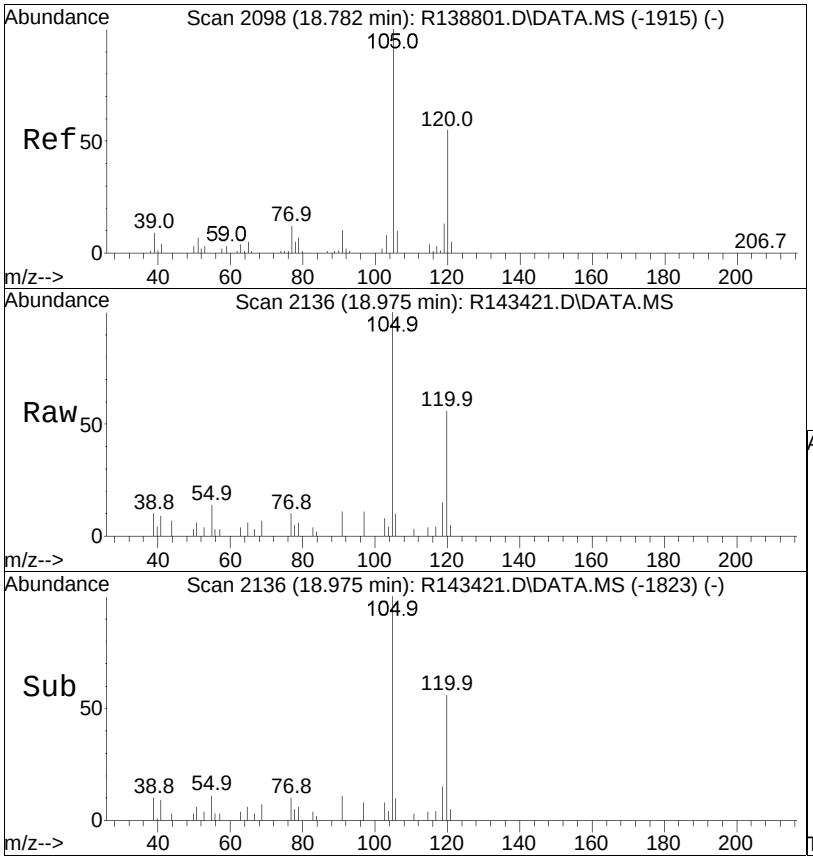




#25
C9-C12 Aliphatics Total
Concen: 39.27 ug/m3 m
RT: 18.067 min Scan# 1900
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

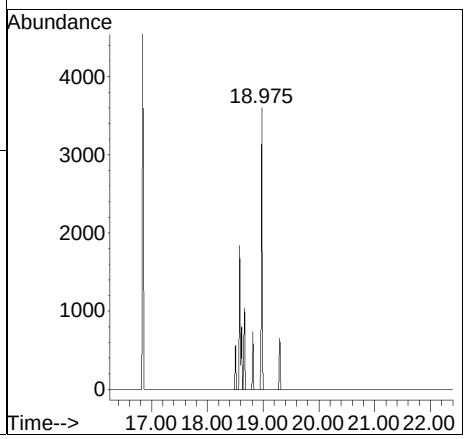
Tgt Ion:TIC Resp: 6946055





#26
C9-C10 Aromatics (120)
Concen: 3.18 ug/m3 m
RT: 18.975 min Scan# 2136
Delta R.T. -1.025 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

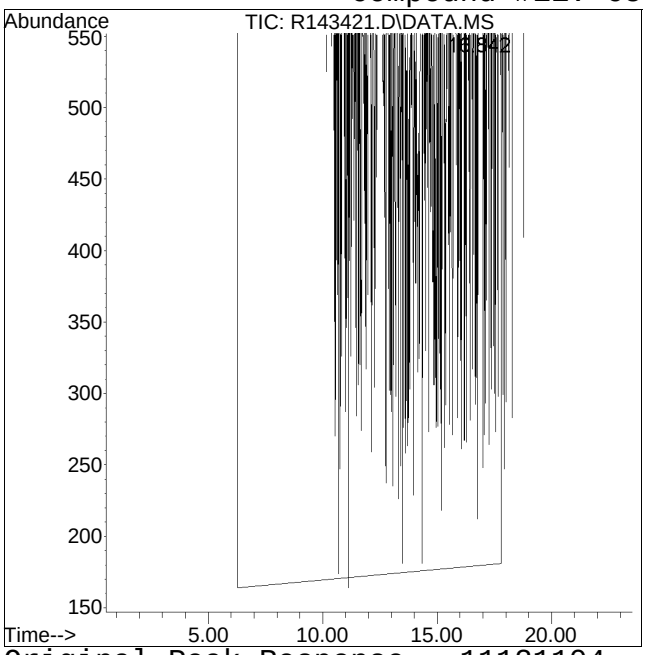
Tgt Ion:120 Resp: 101545



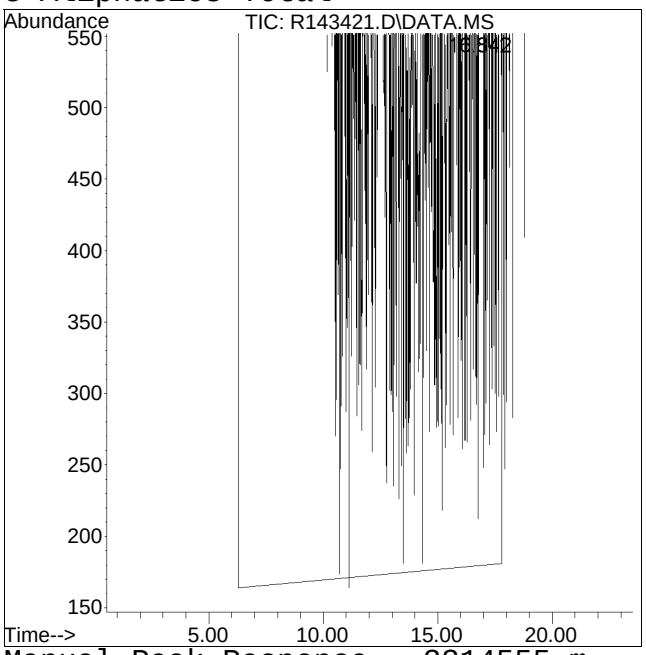
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150813\	Method	: APH150711.M
Data File	: R143421.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 7:27 pm	Instrument	: Air Piano 1
Sample	: L1519114-09,3,250,250	Quant Date	: 8/14/2015 3:01 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 11121104

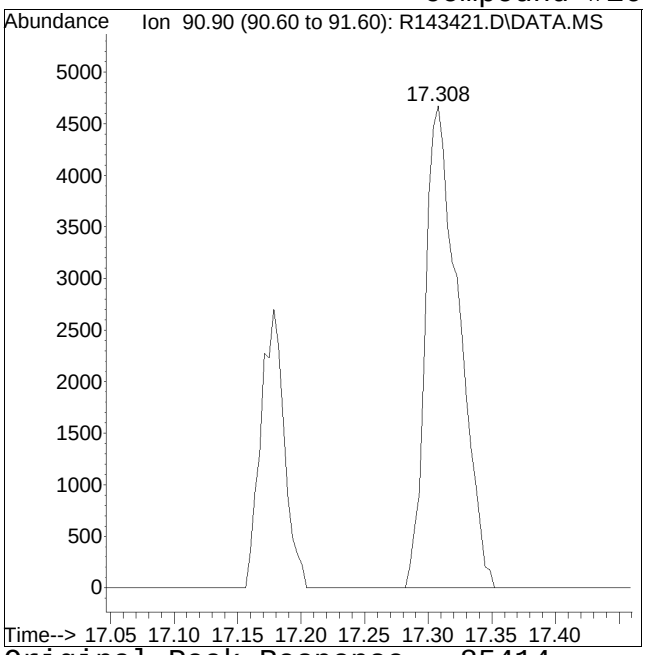


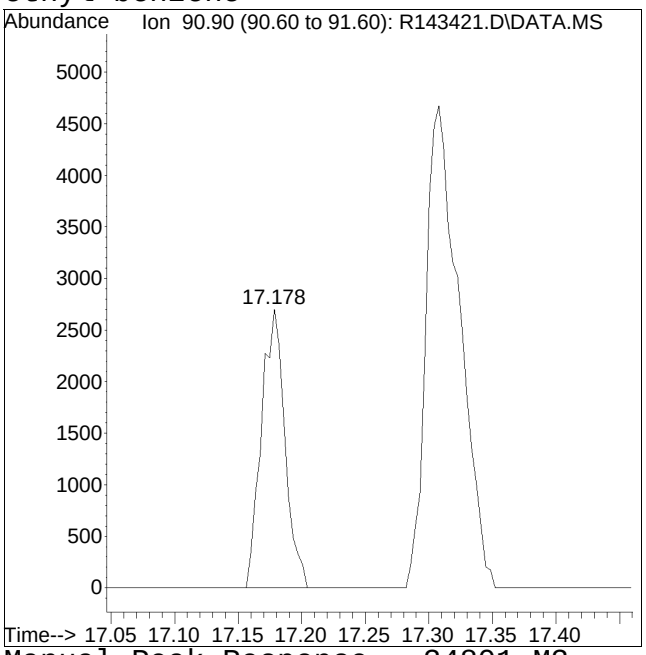
Manual Peak Response = 3314555 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 3:01 pm

Compound #16: ethyl benzene





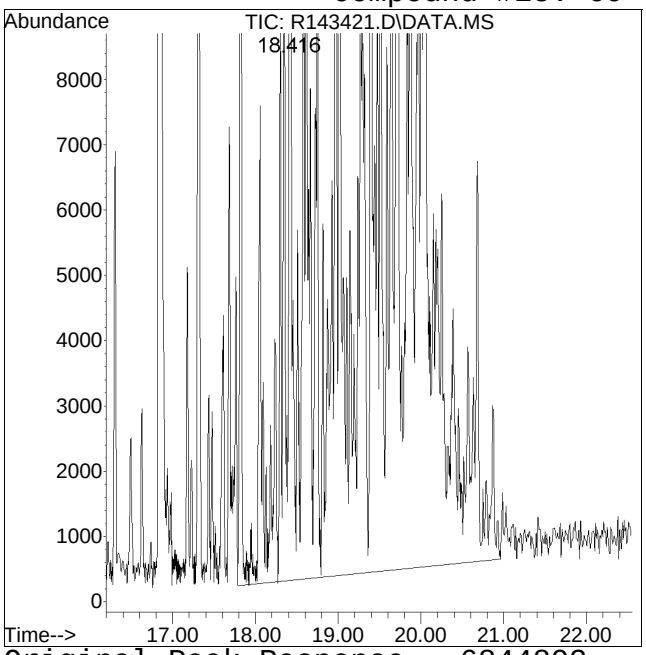
Original Peak Response = 85414 Manual Peak Response = 34801 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

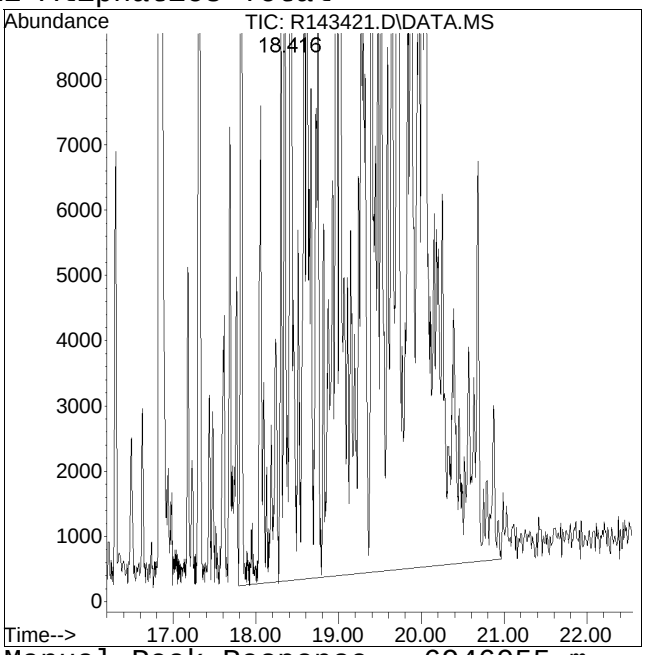
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 3:01 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 6844892

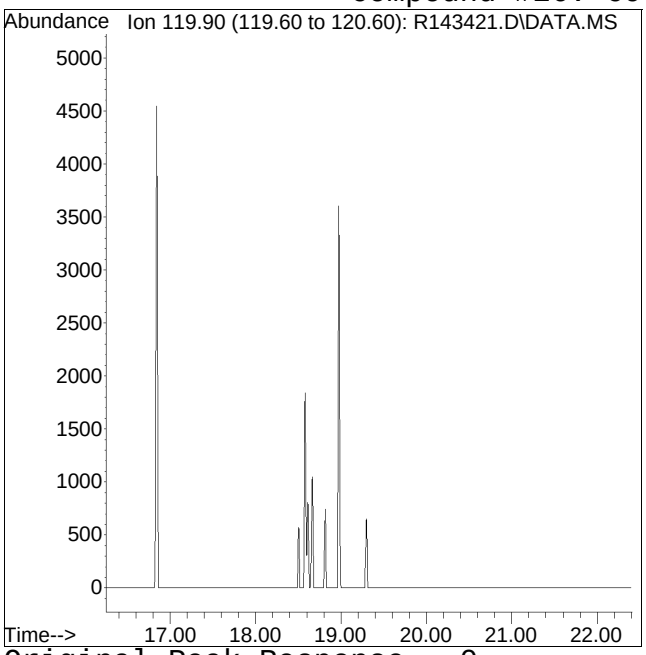


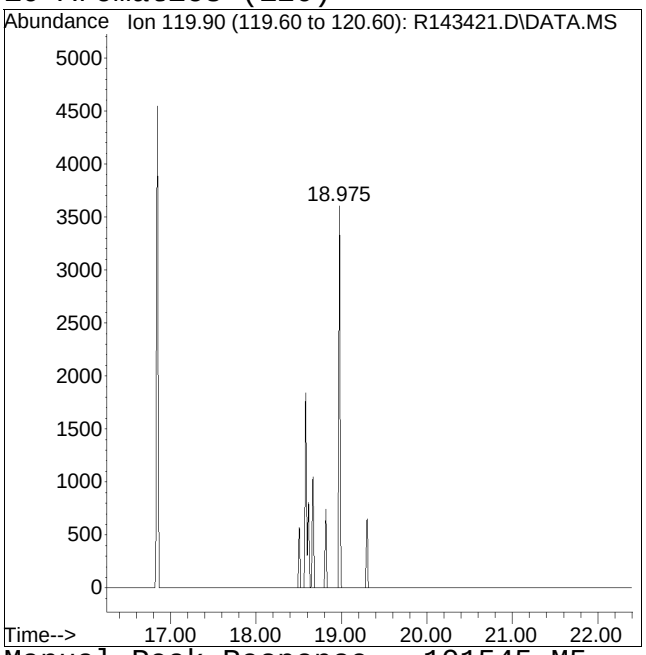
Manual Peak Response = 6946055 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 3:01 pm

Compound #26: C9-C10 Aromatics (120)



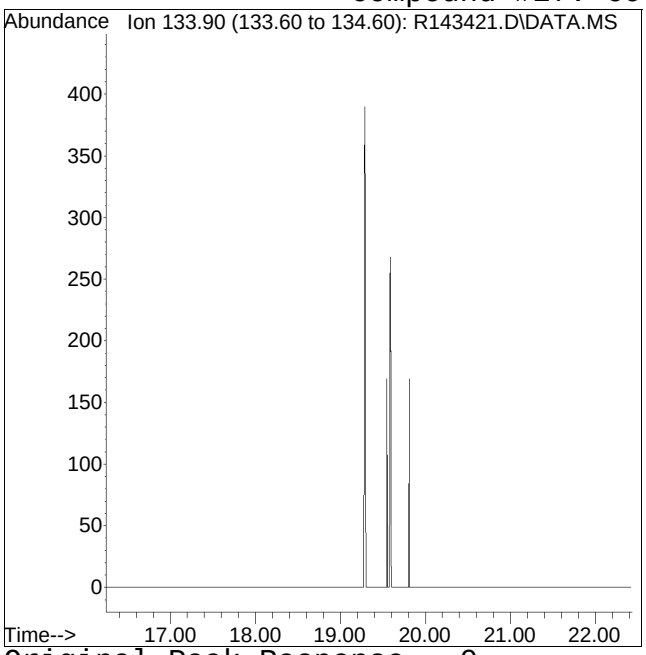


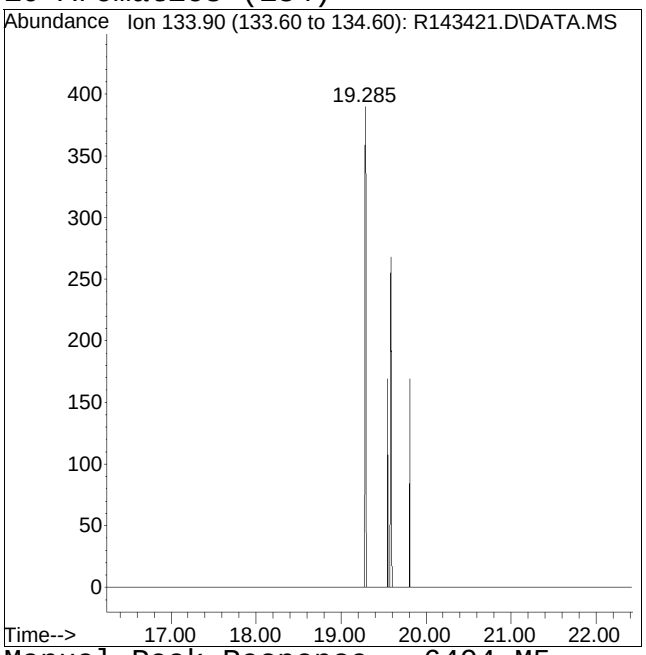
Original Peak Response = 0 Manual Peak Response = 101545 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 3:01 pm

Compound #27: C9-C10 Aromatics (134)



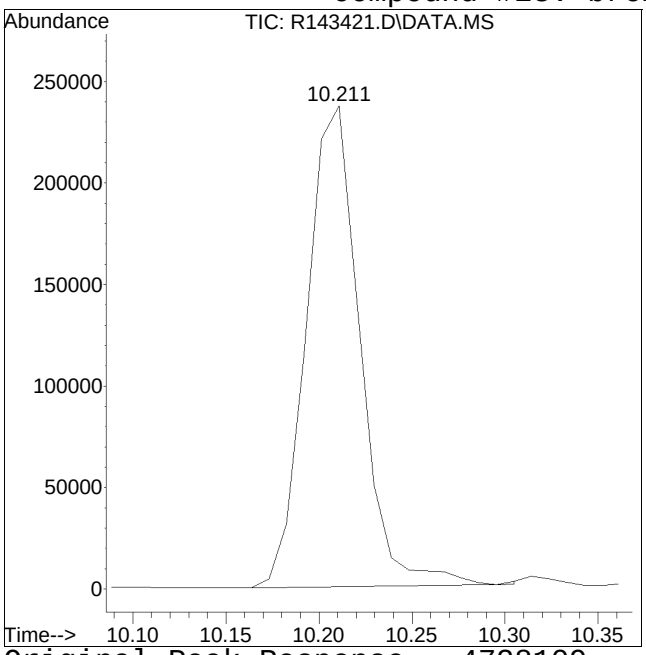


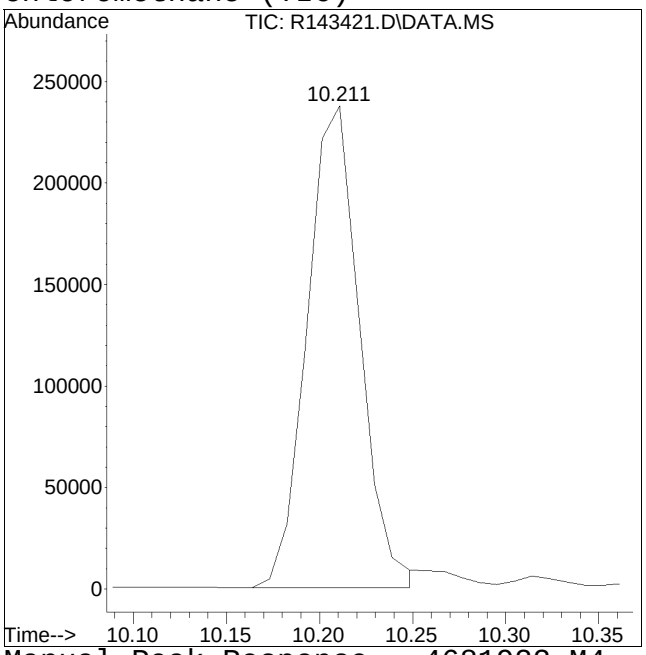
Original Peak Response = 0 Manual Peak Response = 6404 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813\ Method : APH150711.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 3:01 pm

Compound #28: bromochloromethane (TIC)





Original Peak Response = 4728109 Manual Peak Response = 4681922 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 15:05:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	128	597441	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	77.17%	
7) 1,4-difluorobenzene	12.426	114	2669276	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	80.67%	
12) chlorobenzene-D5	16.844	54	544704	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	89.71%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4213197M4	9.678	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.78%	
29) 1,4-difluorobenzene (TIC)	12.426	TIC	5735197	9.341	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	93.41%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	7901781M4	9.992	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	99.92%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	13628776	86.239	ug/m3	
13) toluene	15.253	91	299138	3.762	ug/m3	98
16) ethyl benzene	17.178		0	N.D.		
17) m+p-xylene	17.308	91	104933	1.497	ug/m3#	53
19) o-xylene	17.685	91	44847	0.623	ug/m3#	28
23) naphthalene	20.989	128	87360	0.889	ug/m3#	79
25) C9-C12 Aliphatics Tota	18.067	TIC	19013808	102.267	ug/m3	
26) C9-C10 Aromatics (120)	18.974	120	167942M5	5.318	ug/m3	
27) C9-C10 Aromatics (134)	18.879	134	38543M5	1.221	ug/m3	
27) C9-C10 Aromatics Total	0.000		206486	6.539	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 15:05:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

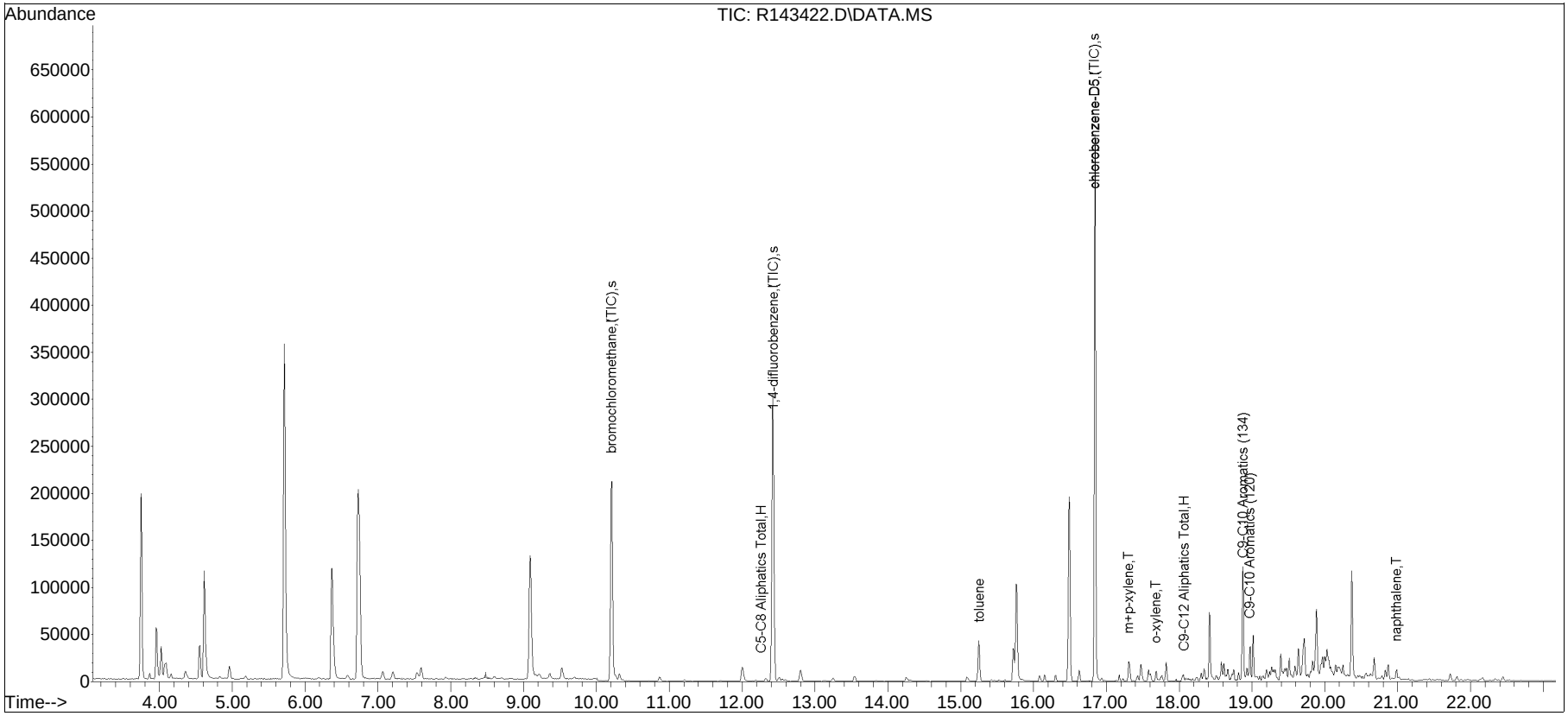
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

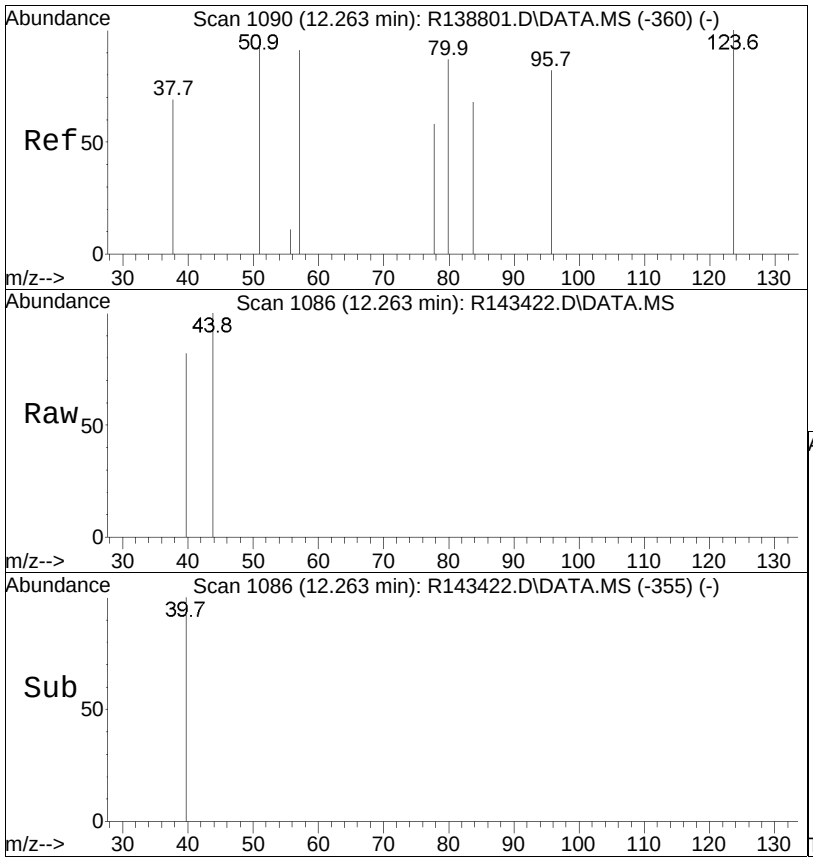
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 6 Sample Multiplier: 1

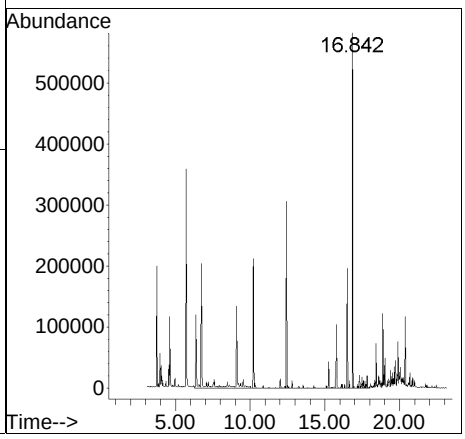
Quant Time: Aug 14 15:05:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

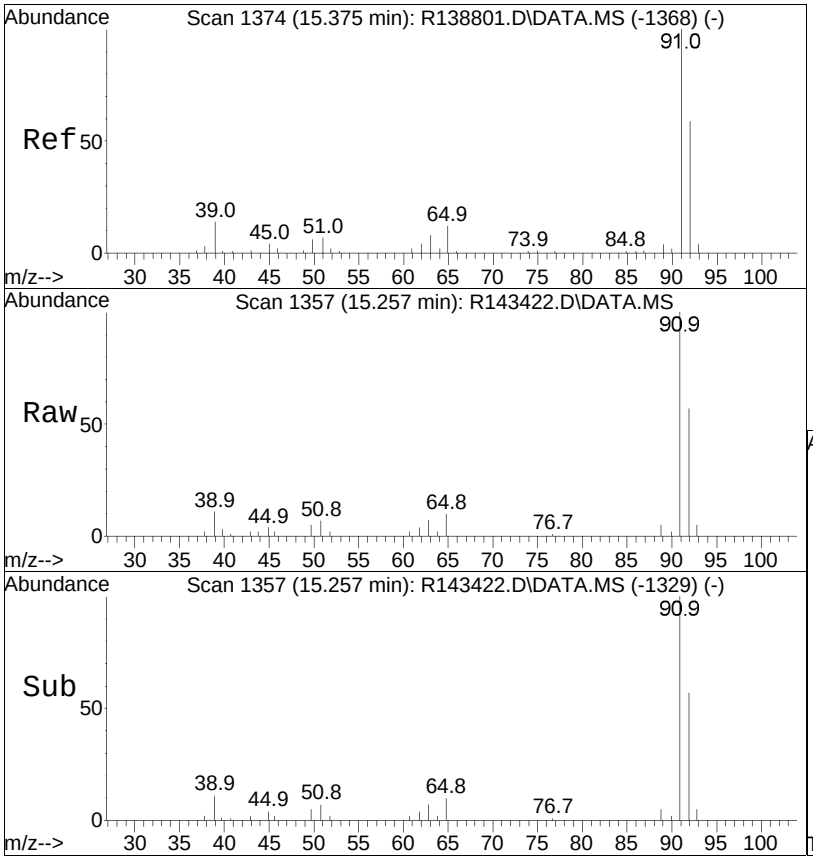




#11
C5-C8 Aliphatics Total
Concen: 92.59 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:TIC Resp:13628776

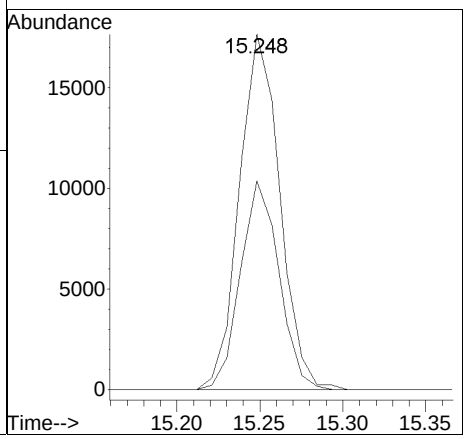


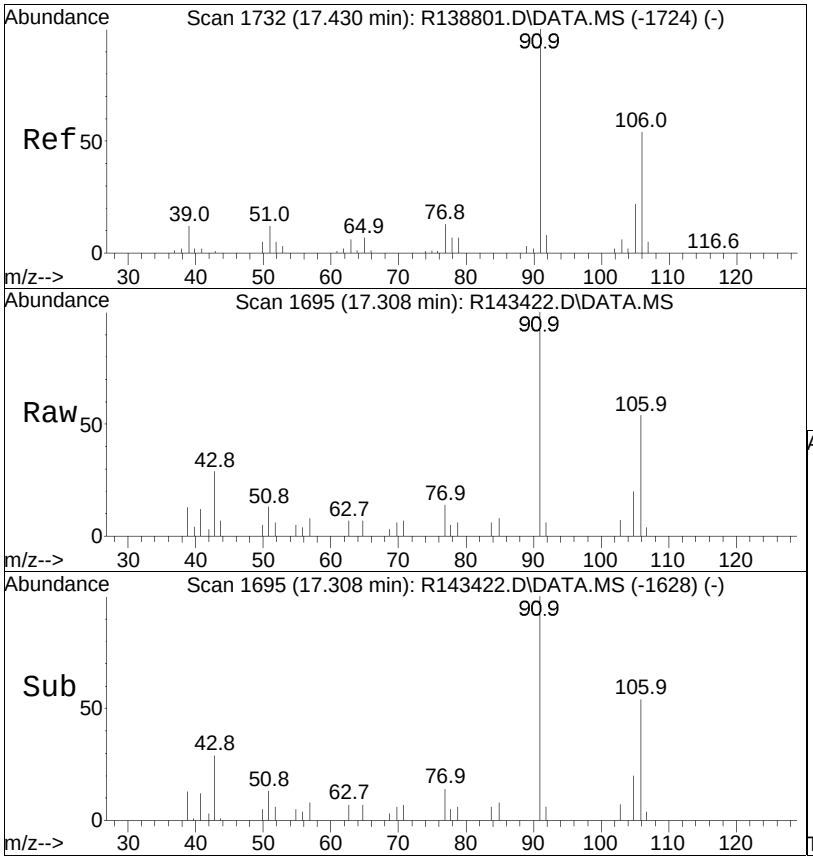


#13
toluene
Concen: 3.76 ug/m3
RT: 15.253 min Scan# 1357
Delta R.T. 0.001 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 299138

Ion	Ratio	Lower	Upper
91	100		
92	56.0	46.0	69.0

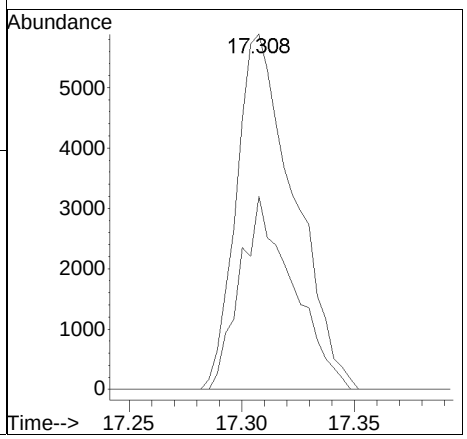


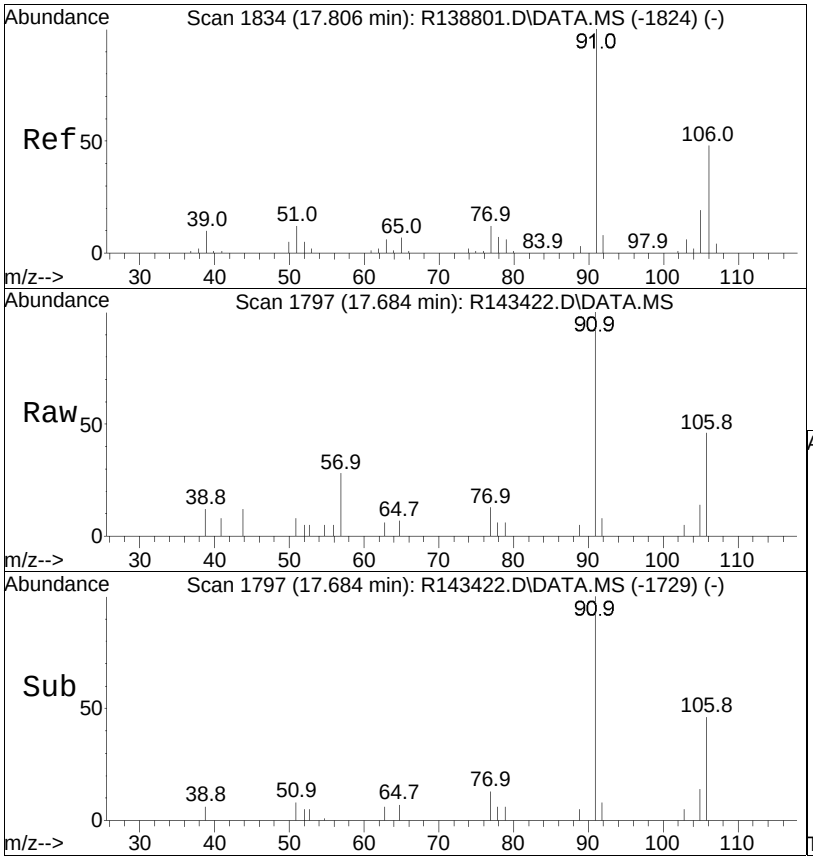


#17
m+p-xylene
Concen: 1.50 ug/m3
RT: 17.308 min Scan# 1695
Delta R.T. -0.003 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 104933

Ion	Ratio	Lower	Upper
91	100		
106	49.7	20.5	30.7#

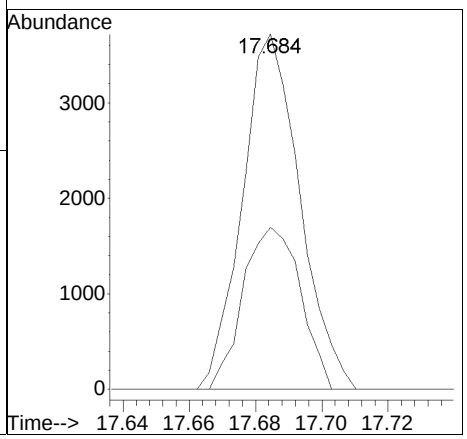


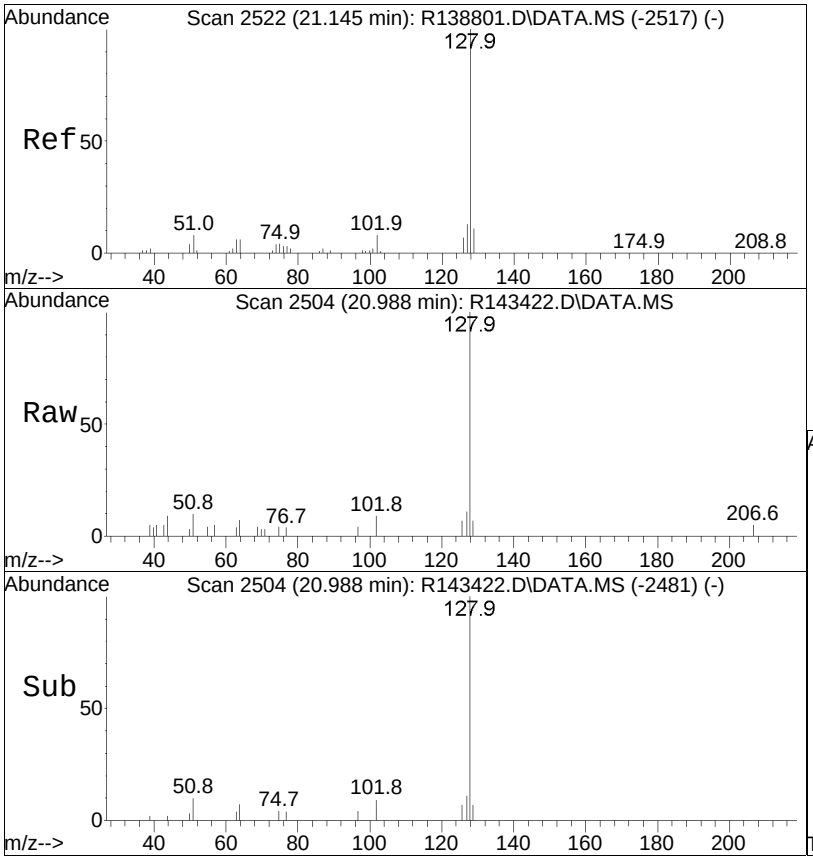


#19
o-xylene
Concen: 0.62 ug/m3
RT: 17.685 min Scan# 1797
Delta R.T. 0.001 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 44847

Ion	Ratio	Lower	Upper
91	100		
106	0.0	39.2	58.8#

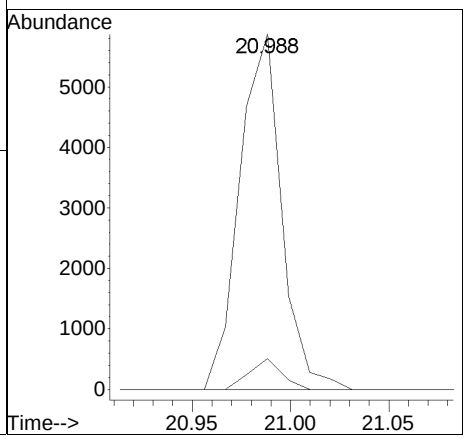


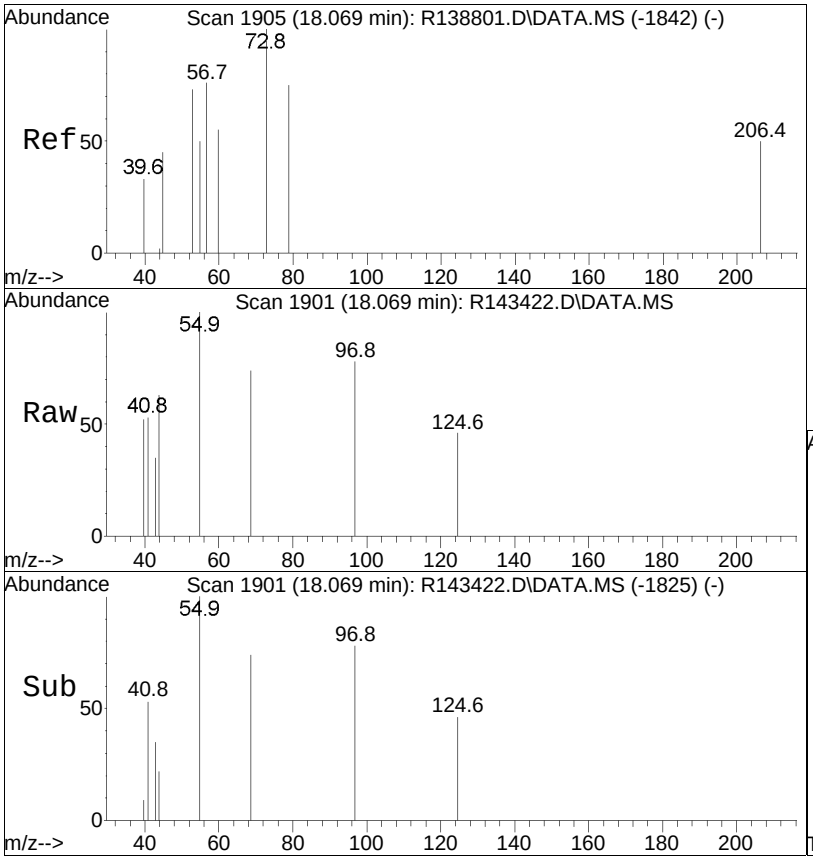


#23
naphthalene
Concen: 0.89 ug/m3
RT: 20.989 min Scan# 2504
Delta R.T. 0.001 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:128 Resp: 87360

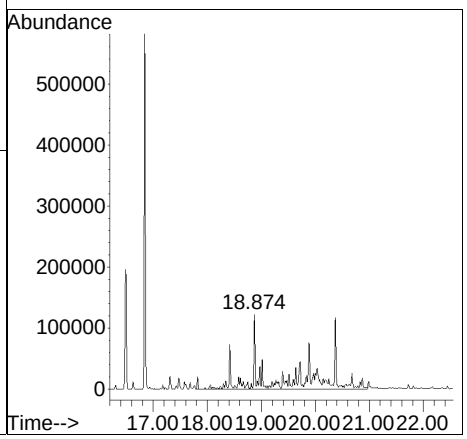
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

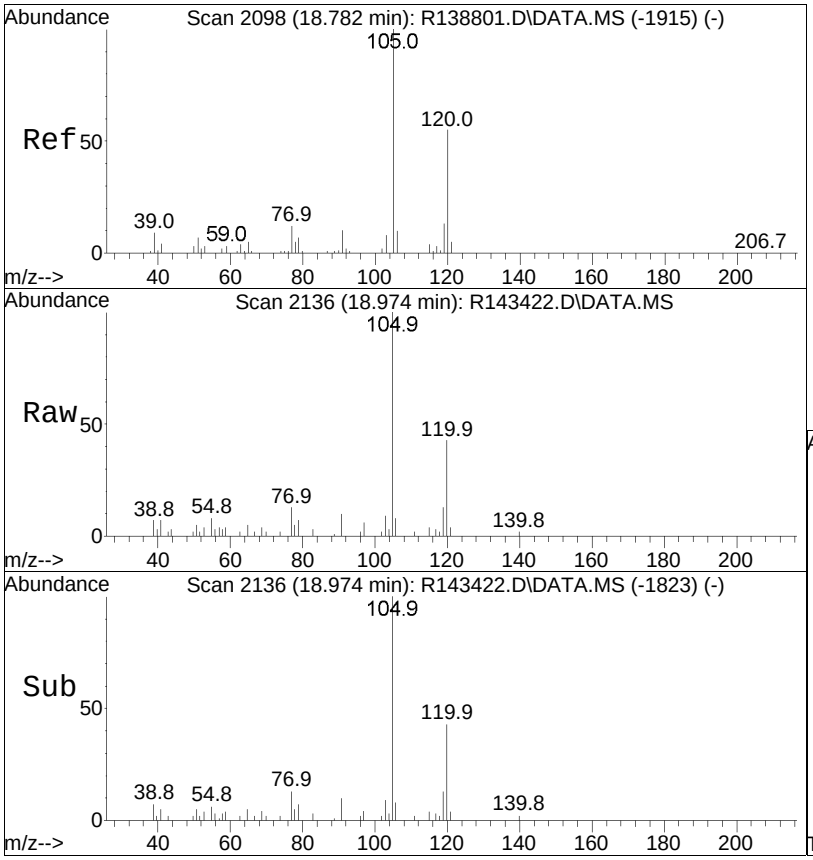




#25
C9-C12 Aliphatics Total
Concen: 108.81 ug/m3 m
RT: 18.067 min Scan# 1901
Delta R.T. 0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

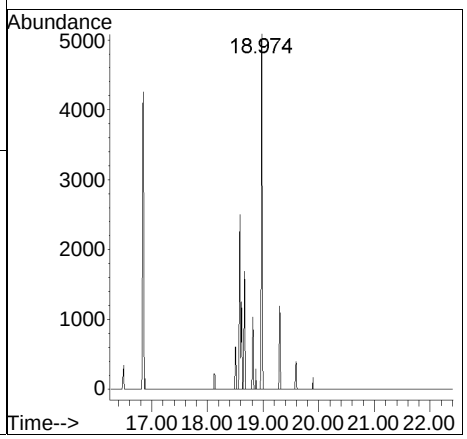
Tgt Ion:TIC Resp:19013808

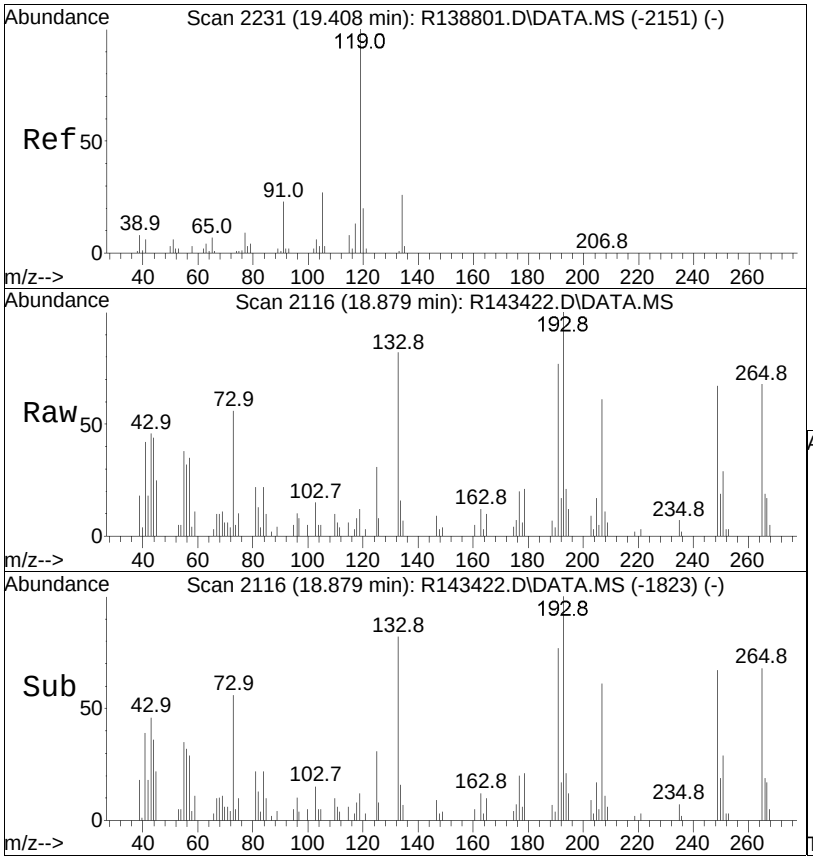




#26
C9-C10 Aromatics (120)
Concen: 5.32 ug/m3 m
RT: 18.974 min Scan# 2136
Delta R.T. -1.026 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

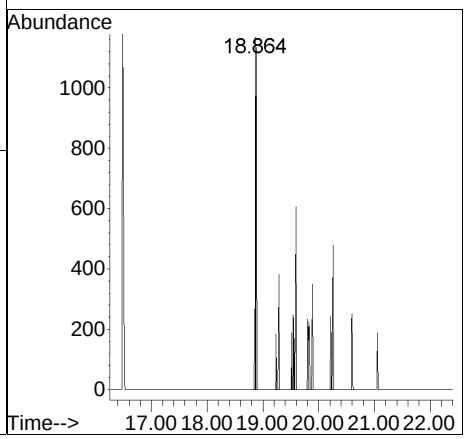
Tgt Ion:120 Resp: 167942





#27
C9-C10 Aromatics (134)
Concen: 1.22 ug/m3 m
RT: 18.879 min Scan# 2116
Delta R.T. -1.121 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

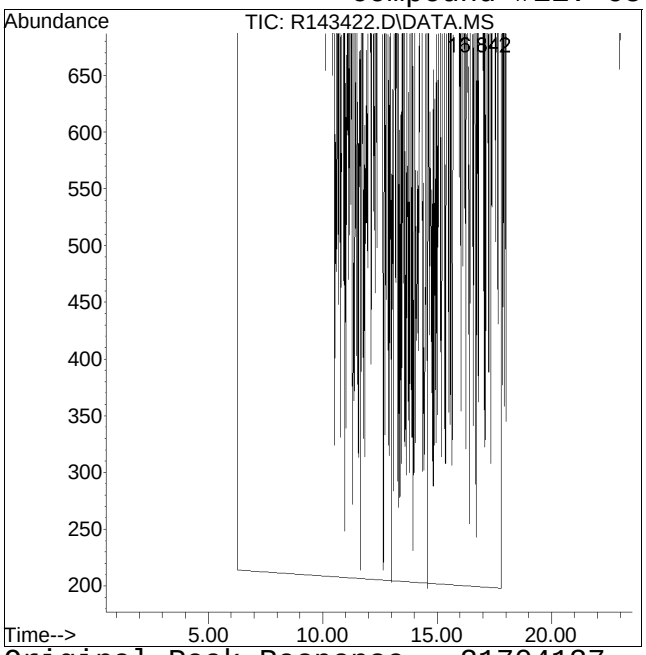
Tgt Ion:134 Resp: 38543



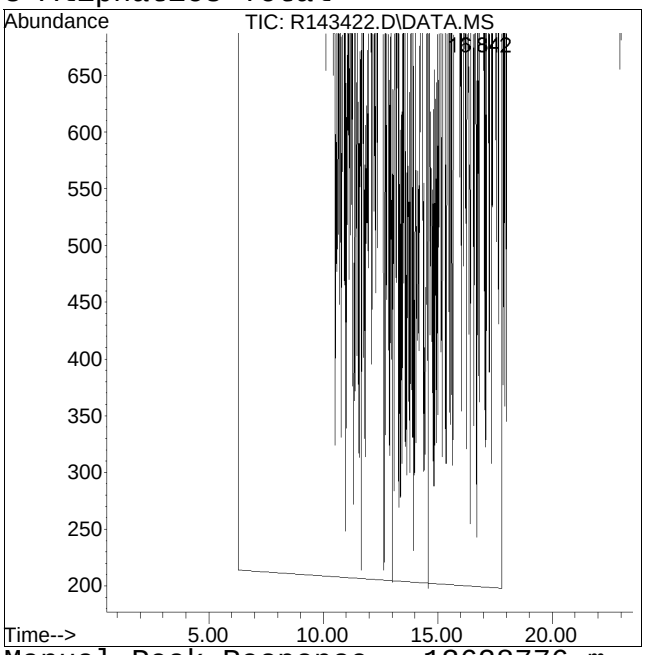
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	QM Method	: APH150711.M
Data File	: R143422.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 7:59 pm	Instrument	: Air Piano 1
Sample	: L1519114-10,3,250,250	Quant Date	: 8/14/2015 3:04 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 21704137

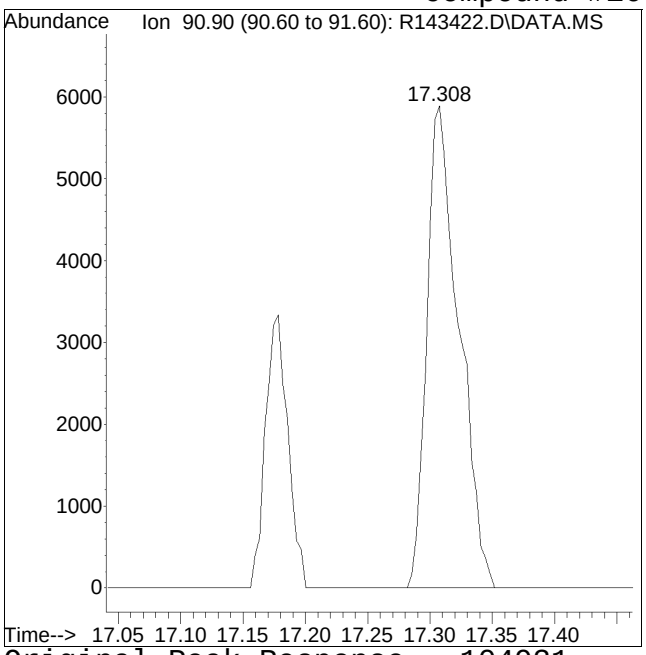


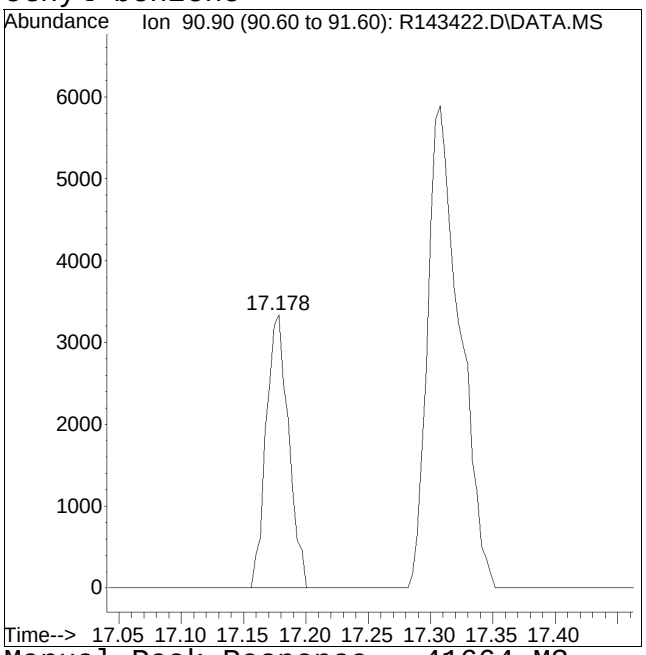
Manual Peak Response = 13628776 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #16: ethyl benzene





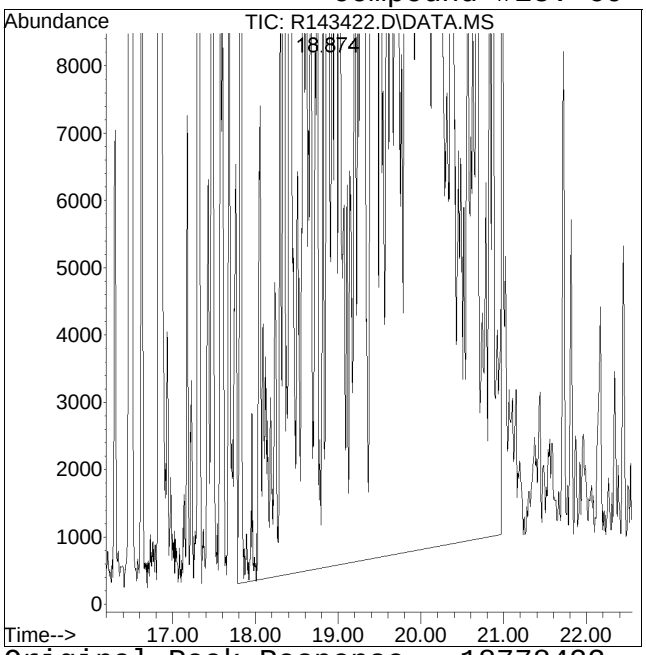
Original Peak Response = 104931 Manual Peak Response = 41664 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

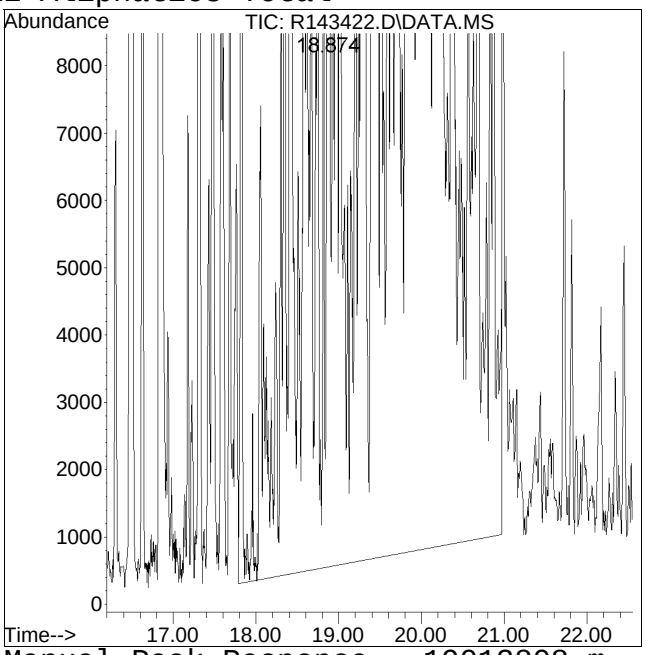
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 18778422

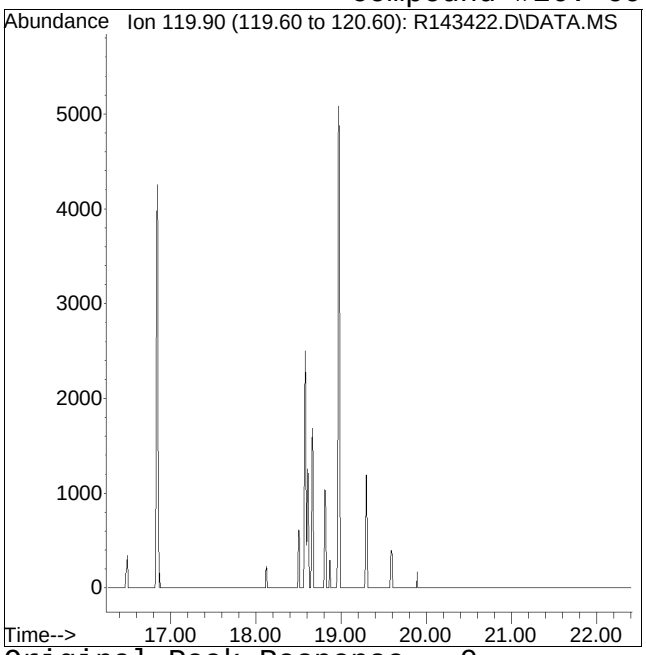


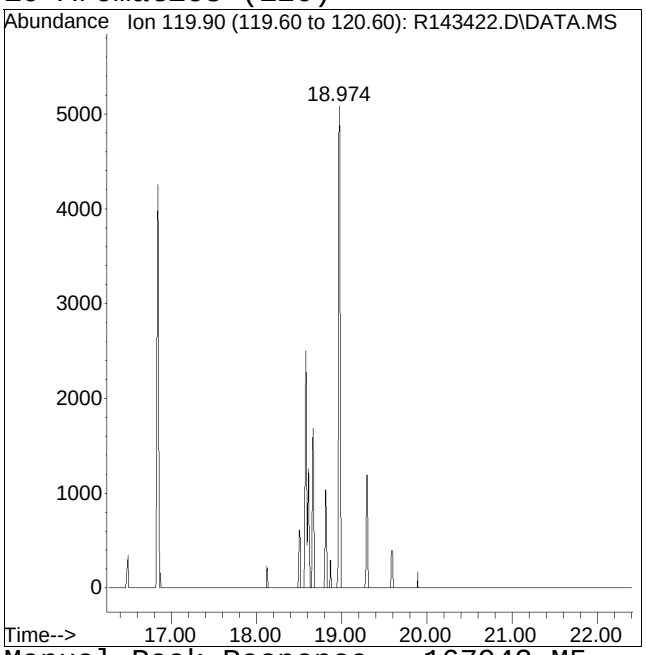
Manual Peak Response = 19013808 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #26: C9-C10 Aromatics (120)



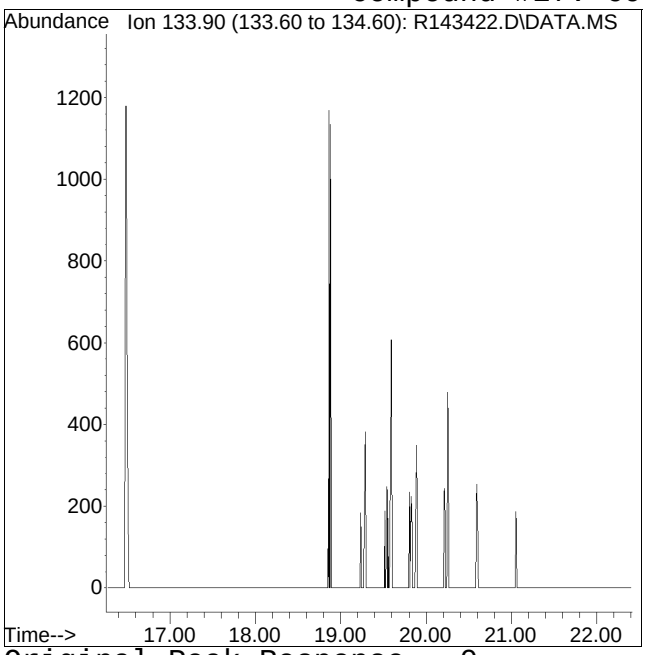


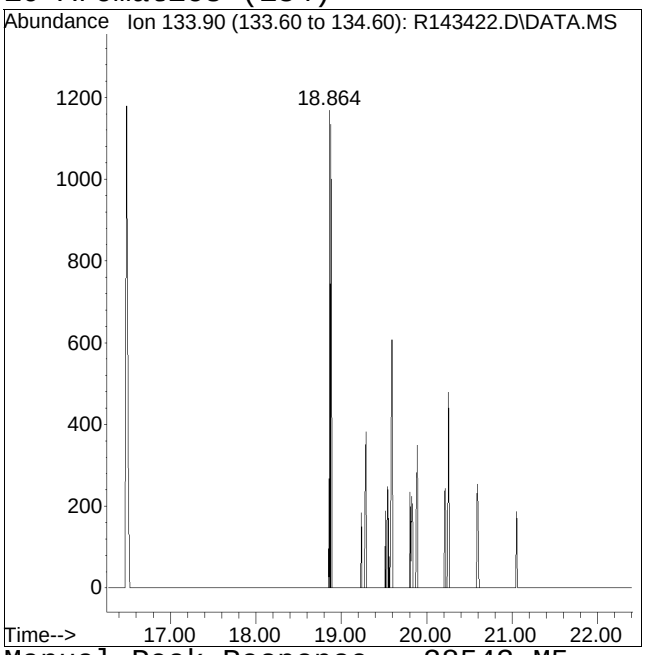
Original Peak Response = 0 Manual Peak Response = 167942 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #27: C9-C10 Aromatics (134)



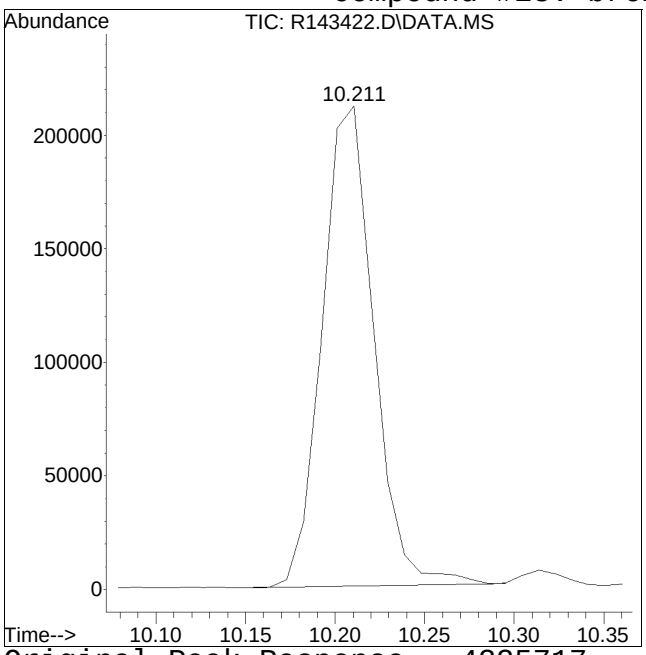


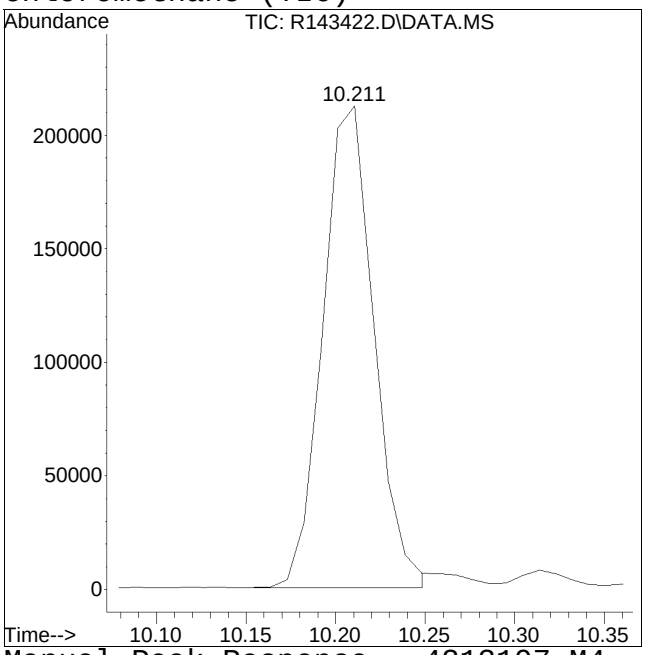
Original Peak Response = 0 Manual Peak Response = 38543 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #28: bromochloromethane (TIC)



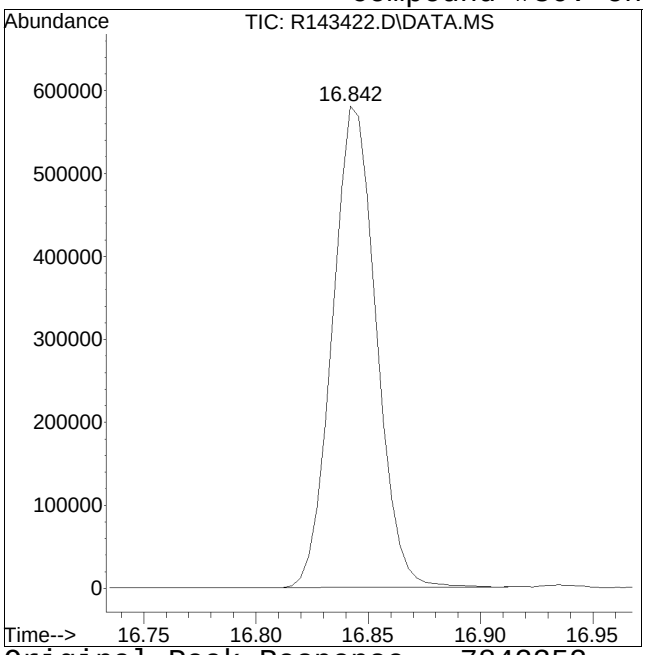


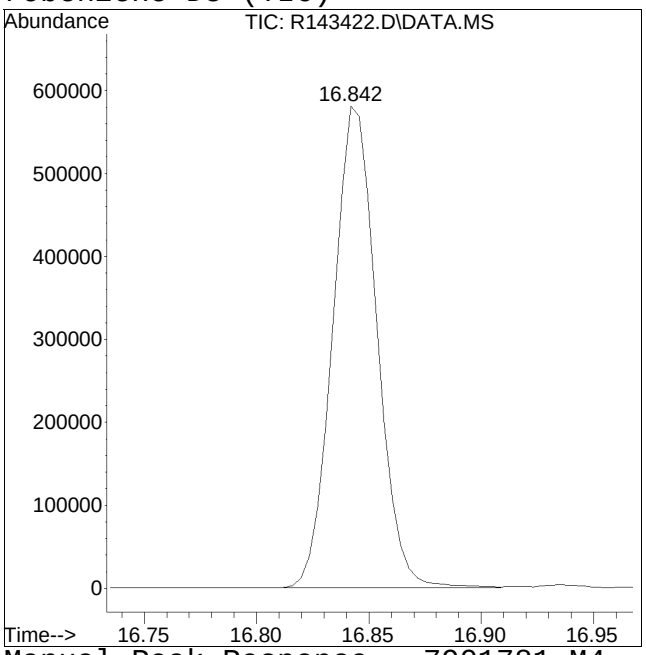
Original Peak Response = 4225717 Manual Peak Response = 4213197 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 3:04 pm

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 7842352 Manual Peak Response = 7901781 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:07:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	128	638768	10.000	ug/m3	0.00
Standard Area = 774218			Recovery = 82.50%			
7) 1,4-difluorobenzene	12.426	114	2786009	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery = 84.20%			
12) chlorobenzene-D5	16.846	54	542050	10.000	ug/m3	0.00
Standard Area = 607162			Recovery = 89.28%			
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4499660M4	10.387	ug/m3	0.00
Spiked Amount 10.000			Recovery = 103.87%			
29) 1,4-difluorobenzene (TIC)	12.419	TIC	6009972M4	9.836	ug/m3	0.00
Spiked Amount 10.000			Recovery = 98.36%			
30) chlorobenzene-D5 (TIC)	16.842	TIC	7831421M4	9.952	ug/m3	0.00
Spiked Amount 10.000			Recovery = 99.52%			
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery = 0.00%			
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery = 0.00%			
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	4988617	27.012	ug/m3	
13) toluene	15.253	91	241558	3.052	ug/m3	99
16) ethyl benzene	17.178		0	N.D.		
17) m+p-xylene	17.312	91	98668	1.414	ug/m3#	51
19) o-xylene	17.686	91	40542	0.566	ug/m3#	28
23) naphthalene	20.988	128	86444	0.884	ug/m3#	79
25) C9-C12 Aliphatics Tota	18.067	TIC	12761420	67.525	ug/m3	
26) C9-C10 Aromatics (120)	18.974	120	159201M5	5.066	ug/m3	
27) C9-C10 Aromatics (134)	19.588	134	24913M5	0.793	ug/m3	
27) C9-C10 Aromatics Total	0.000		184114	5.859	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 15:07:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

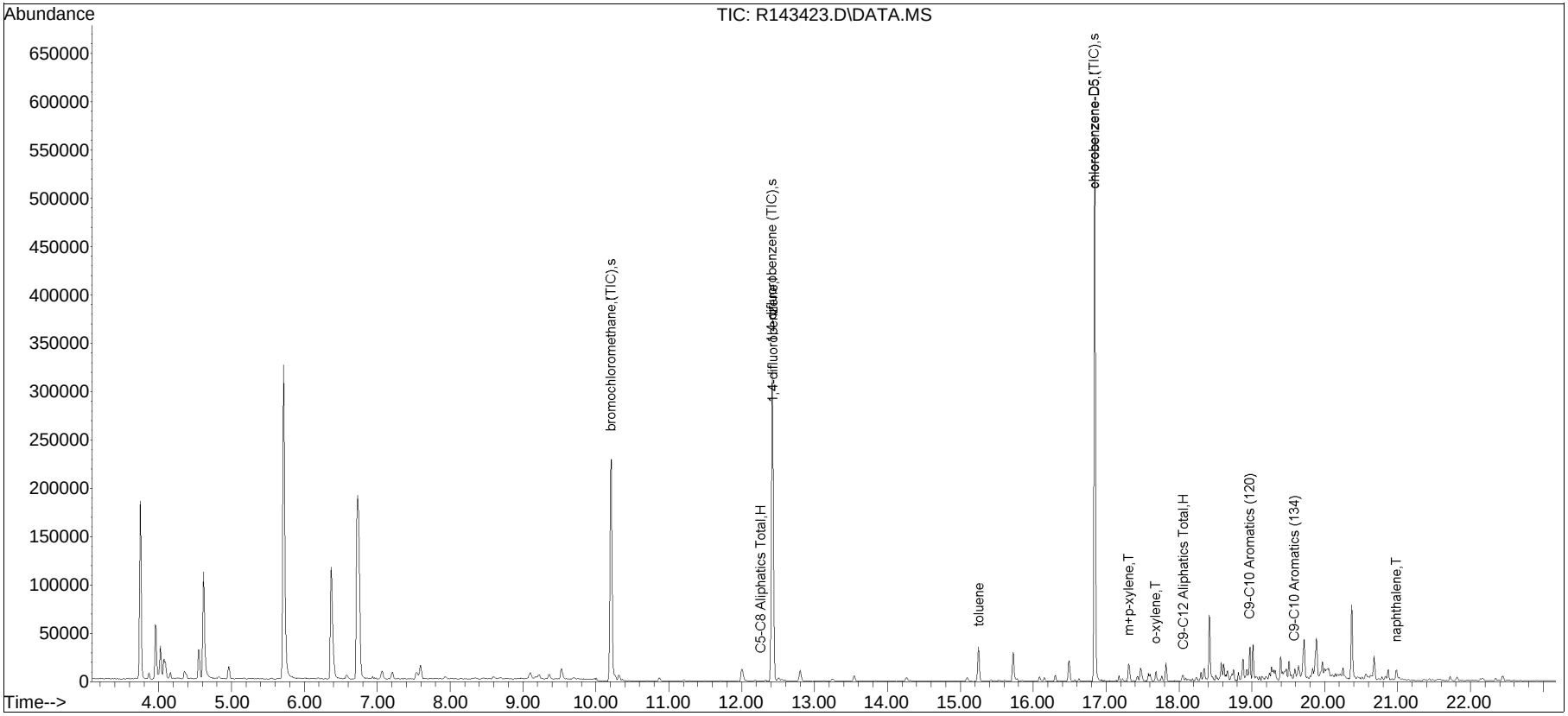
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

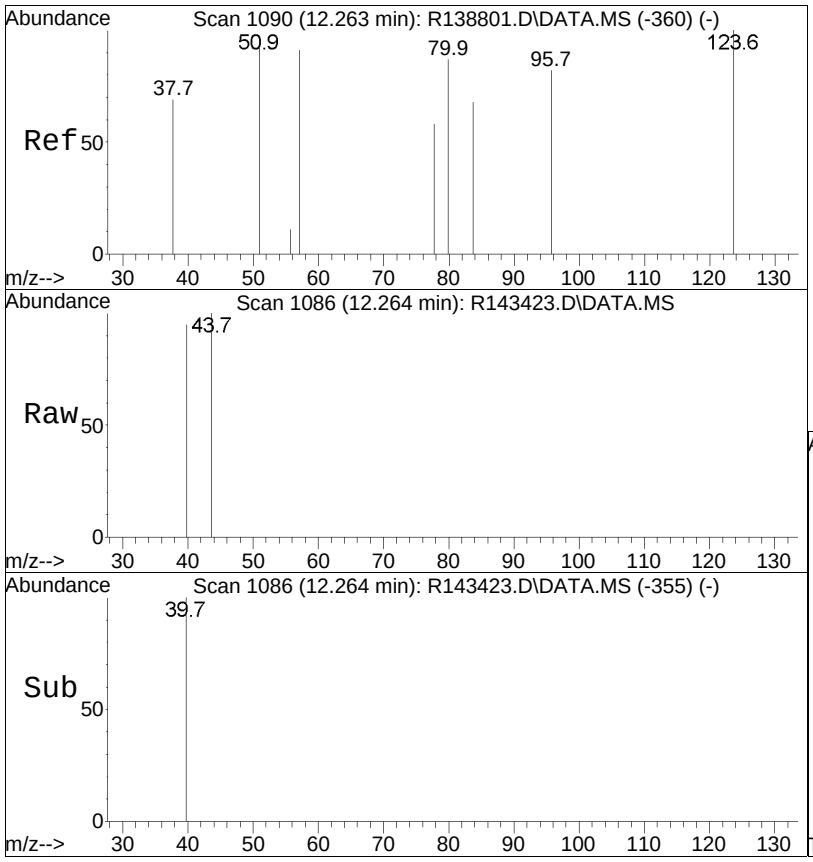
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 7 Sample Multiplier: 1

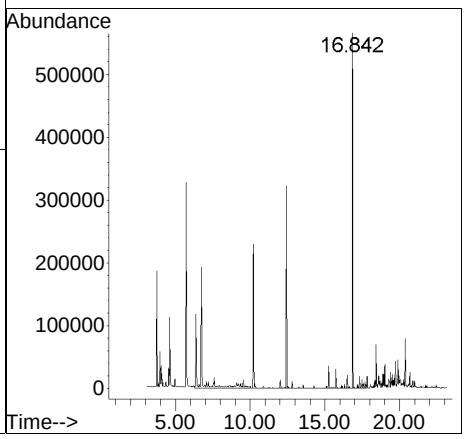
Quant Time: Aug 14 15:07:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

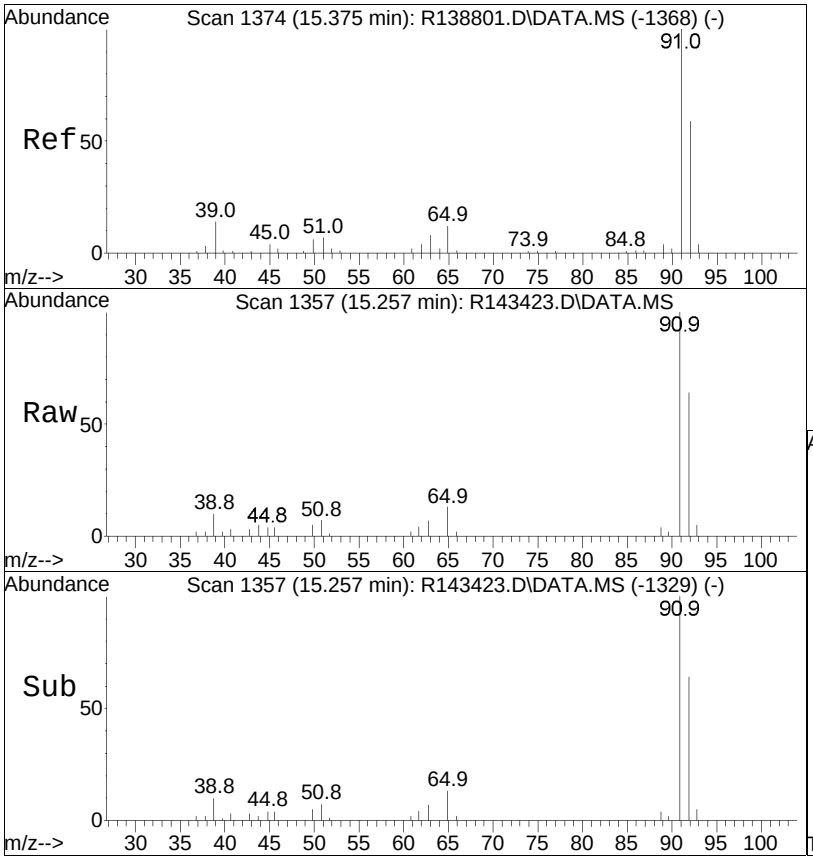




#11
C5-C8 Aliphatics Total
Concen: 32.47 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:TIC Resp: 4988617

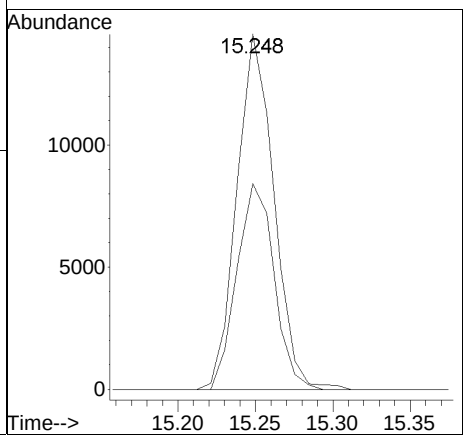


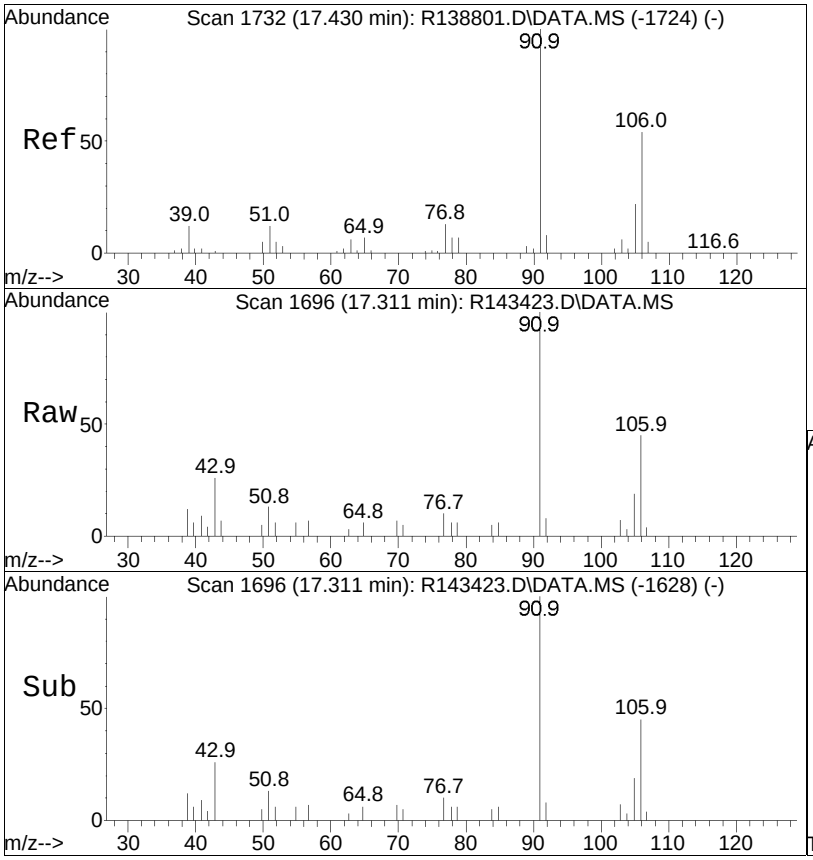


#13
toluene
Concen: 3.05 ug/m3
RT: 15.253 min Scan# 1357
Delta R.T. 0.001 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 241558

Ion	Ratio	Lower	Upper
91	100		
92	58.3	46.0	69.0

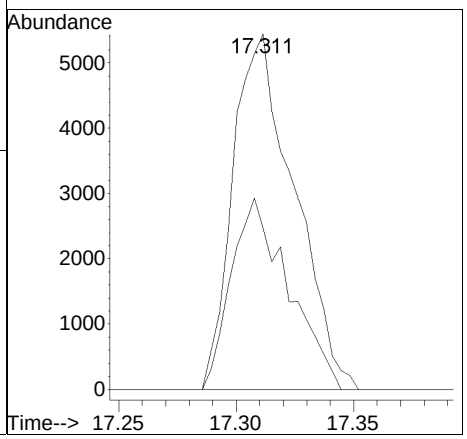


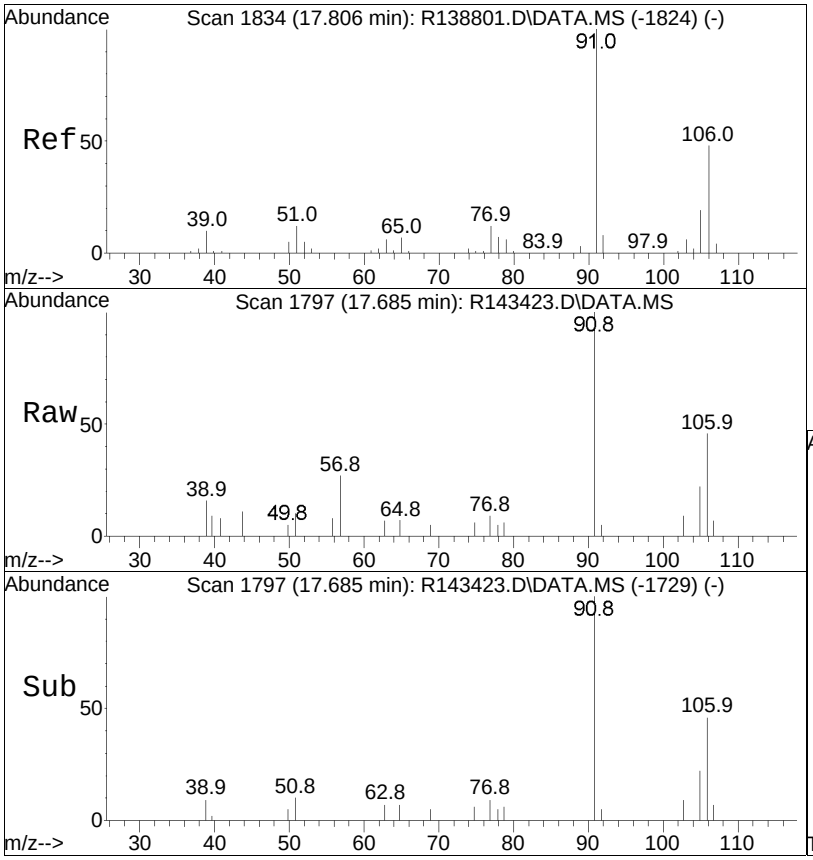


#17
m+p-xylene
Concen: 1.41 ug/m3
RT: 17.312 min Scan# 1696
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 98668

Ion	Ratio	Lower	Upper
91	100		
106	50.4	20.5	30.7#

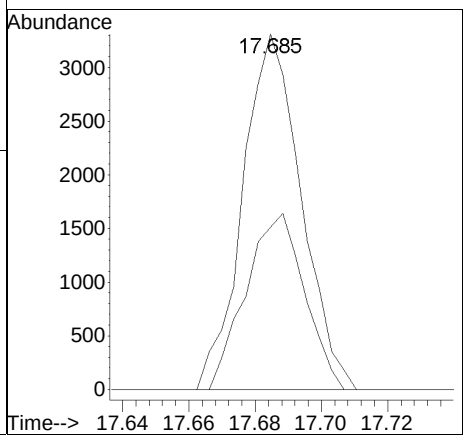


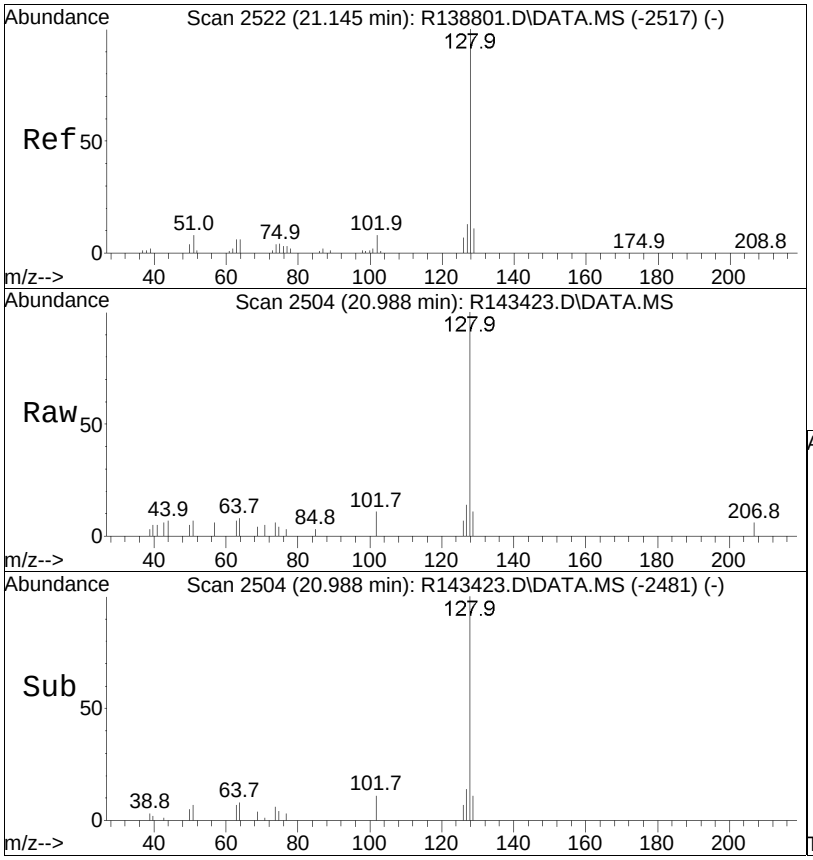


#19
o-xylene
Concen: 0.57 ug/m3
RT: 17.686 min Scan# 1797
Delta R.T. 0.002 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 40542

Ion	Ratio	Lower	Upper
91	100		
106	0.0	39.2	58.8#

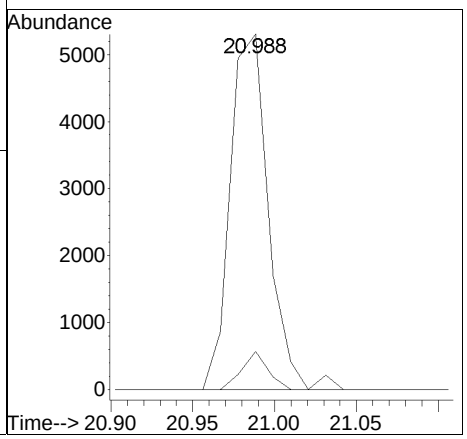


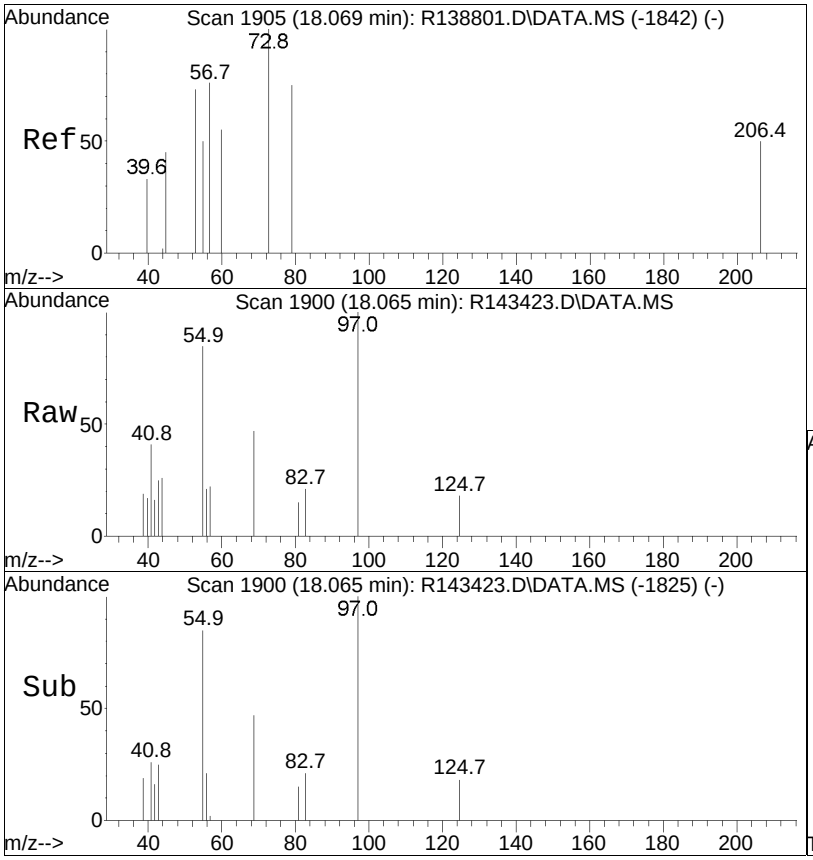


#23
naphthalene
Concen: 0.88 ug/m3
RT: 20.988 min Scan# 2504
Delta R.T. 0.001 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:128 Resp: 86444

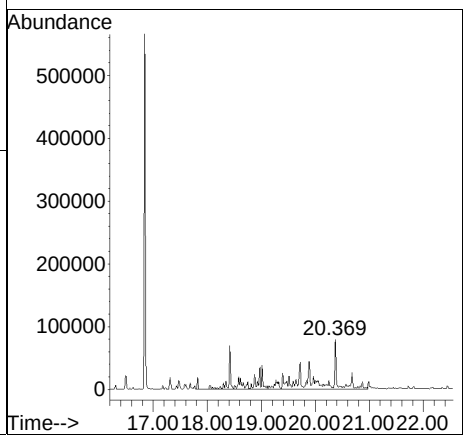
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

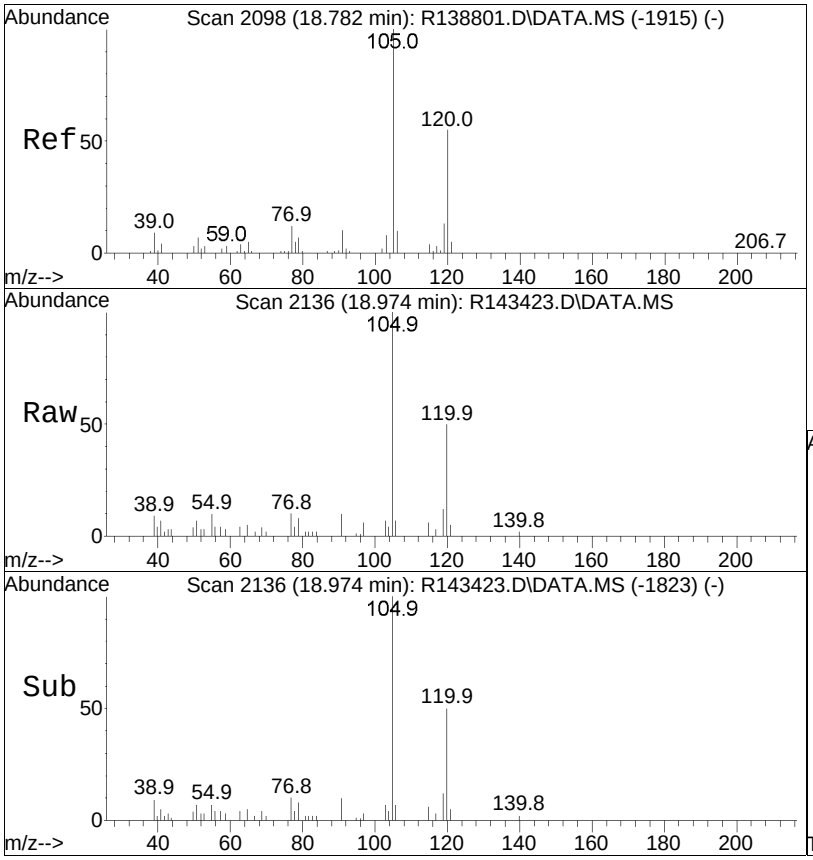




#25
C9-C12 Aliphatics Total
Concen: 73.38 ug/m3 m
RT: 18.067 min Scan# 1900
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

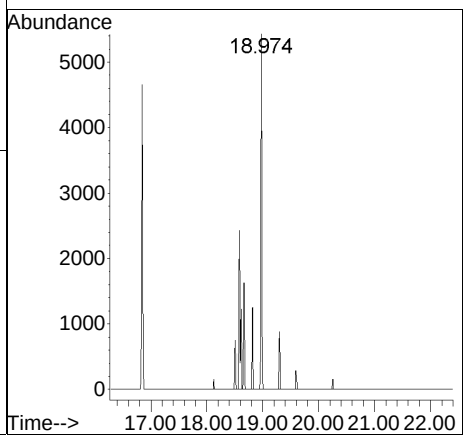
Tgt Ion:TIC Resp:12761420

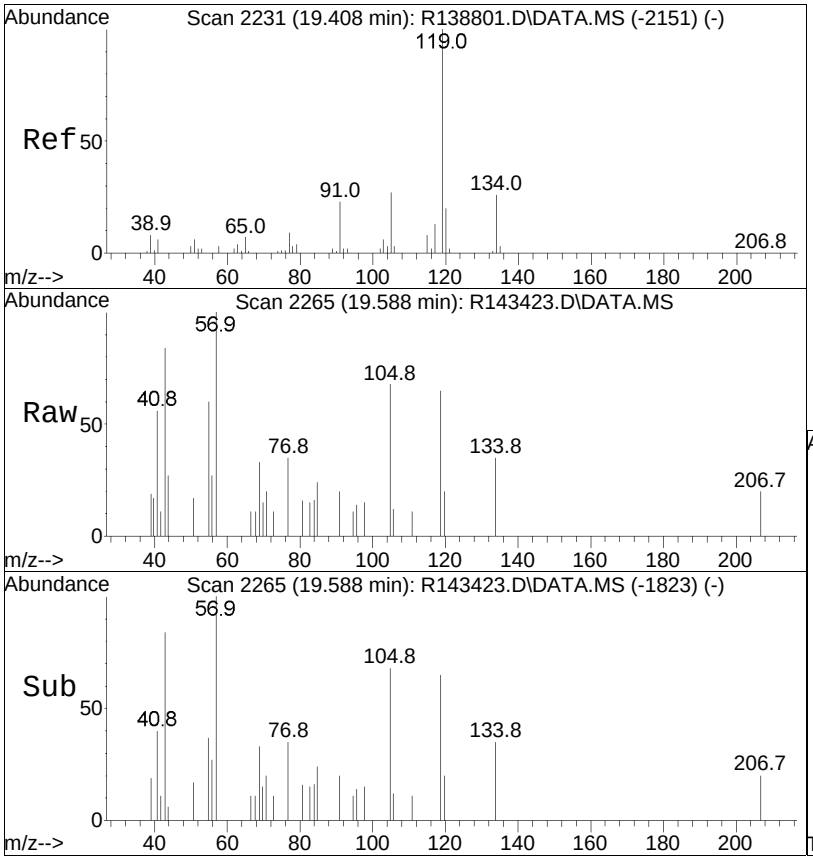




#26
C9-C10 Aromatics (120)
Concen: 5.07 ug/m3 m
RT: 18.974 min Scan# 2136
Delta R.T. -1.026 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

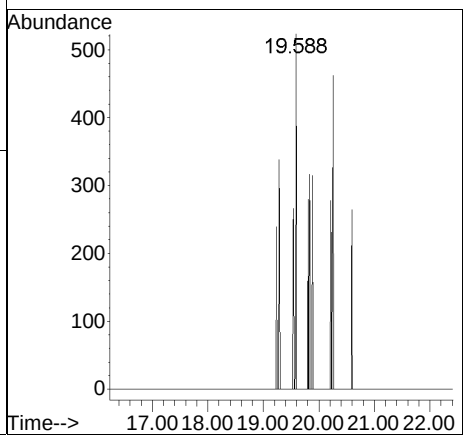
Tgt Ion:120 Resp: 159201





#27
C9-C10 Aromatics (134)
Concen: 0.79 ug/m3 m
RT: 19.588 min Scan# 2265
Delta R.T. -0.412 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

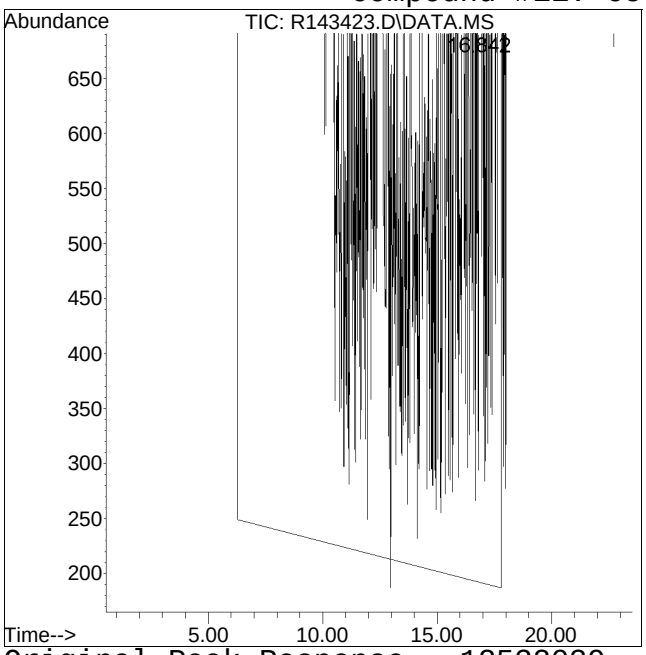
Tgt Ion:134 Resp: 24913



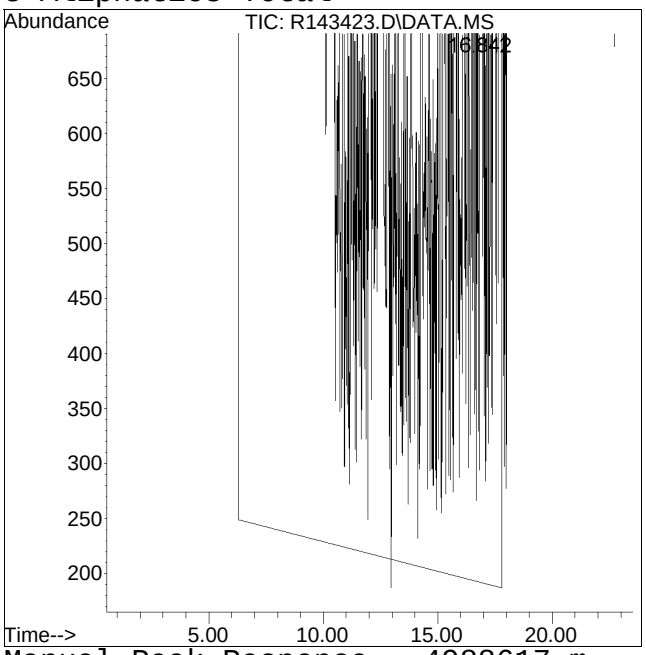
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143423.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 8:31 pm	Instrument	: Air Piano 1
Sample	: L1519114-11,3,250,250	Quant Date	: 8/14/2015 3:06 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 12532039

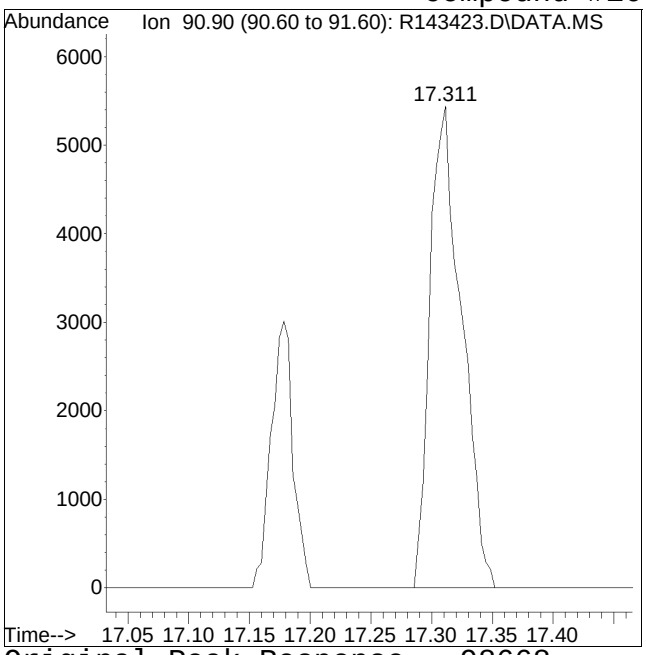


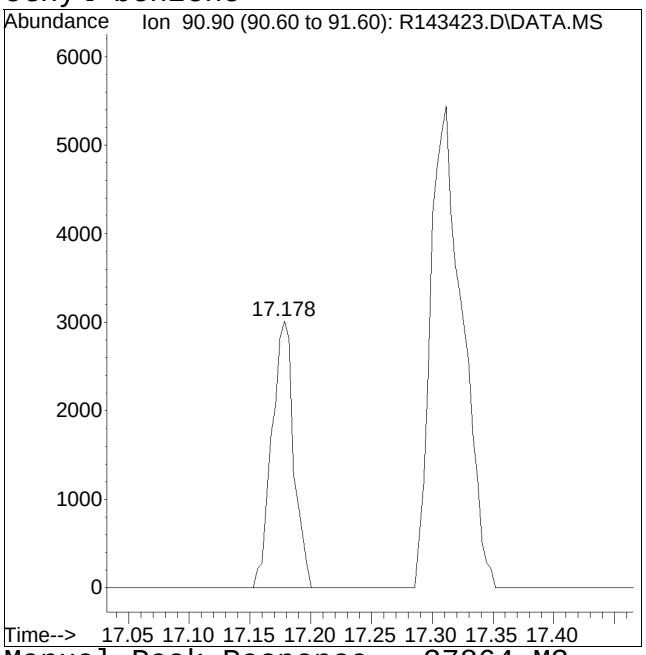
Manual Peak Response = 4988617 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 3:06 pm

Compound #16: ethyl benzene





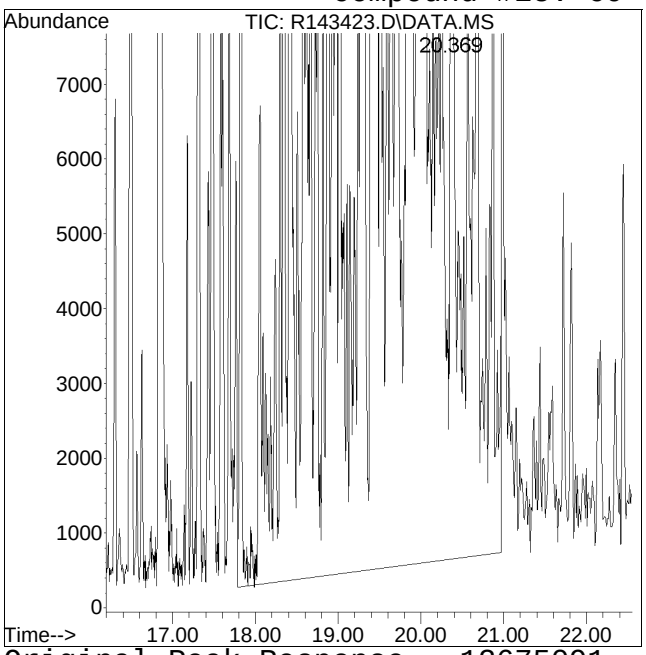
Original Peak Response = 98668 Manual Peak Response = 37864 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

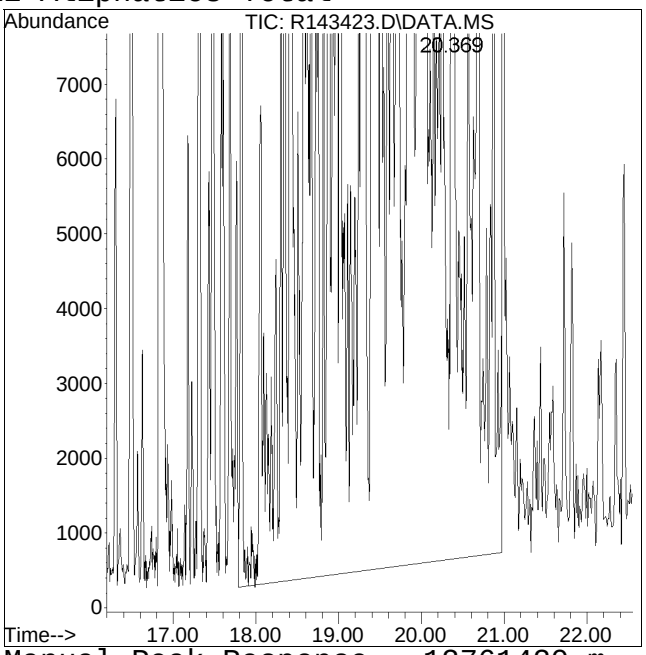
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143423.D
Date Inj'd : 8/13/2015 8:31 pm
Sample : L1519114-11,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 3:06 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 12675091

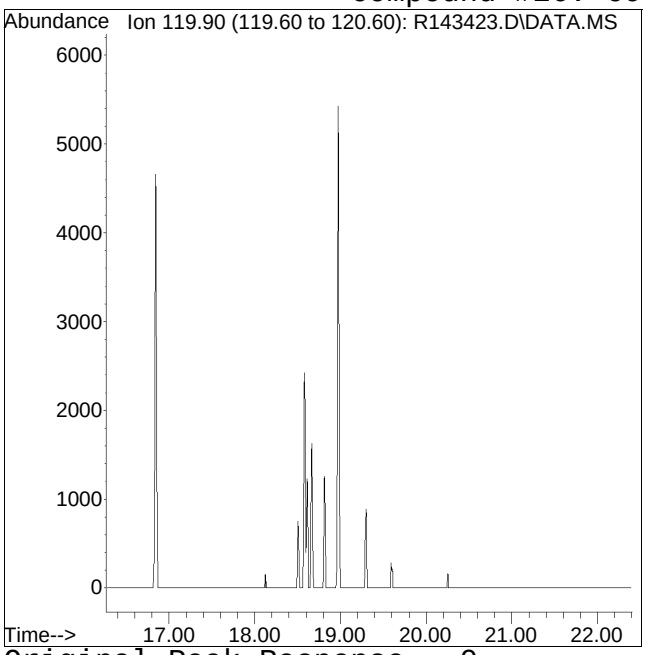


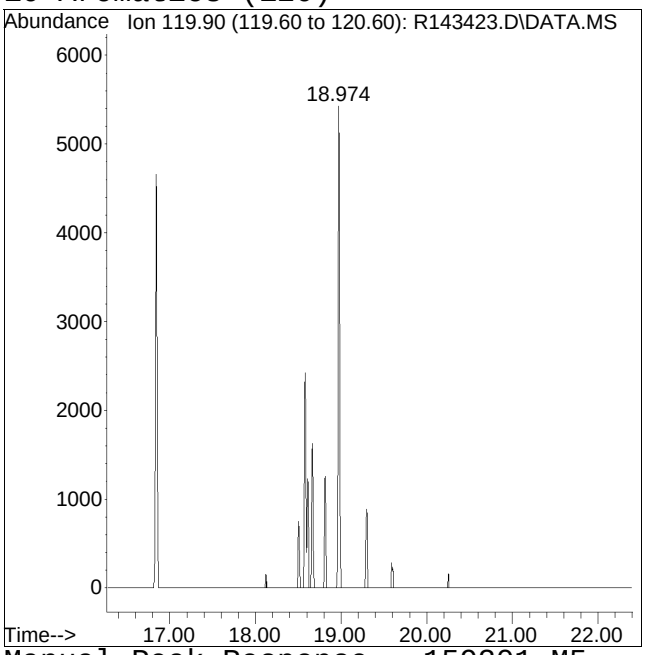
Manual Peak Response = 12761420 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 3:06 pm

Compound #26: C9-C10 Aromatics (120)



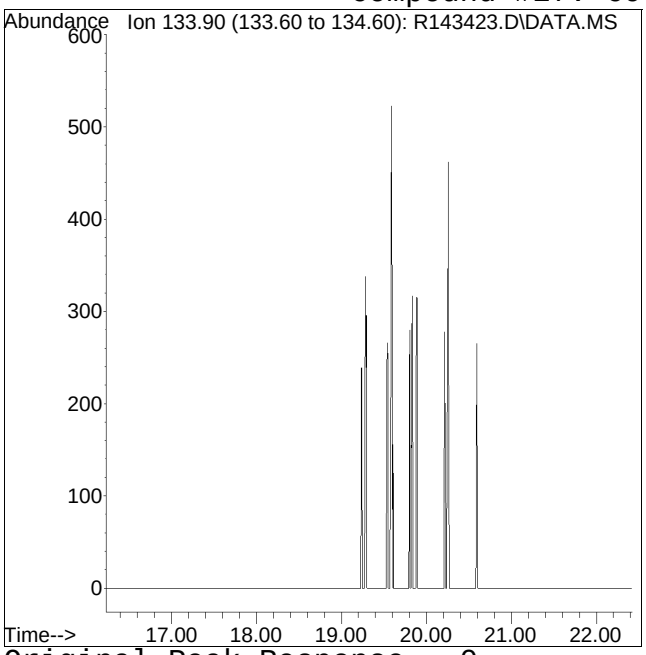


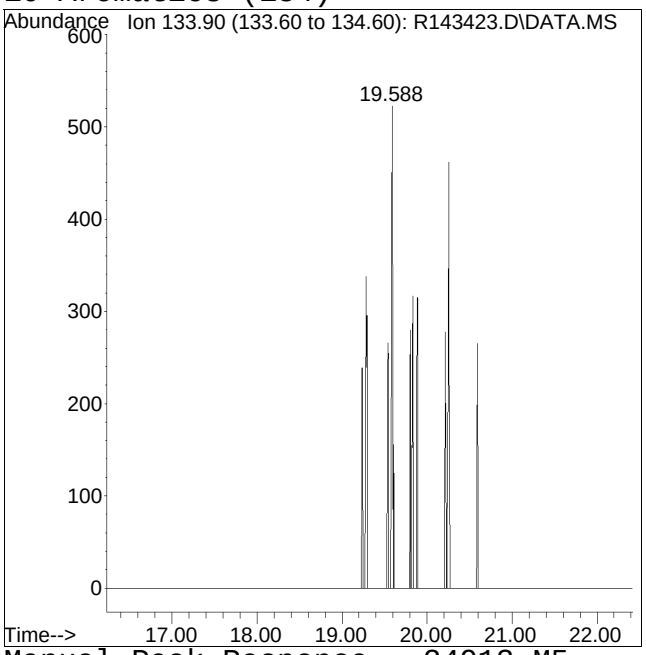
Original Peak Response = 0 Manual Peak Response = 159201 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 3:06 pm

Compound #27: C9-C10 Aromatics (134)



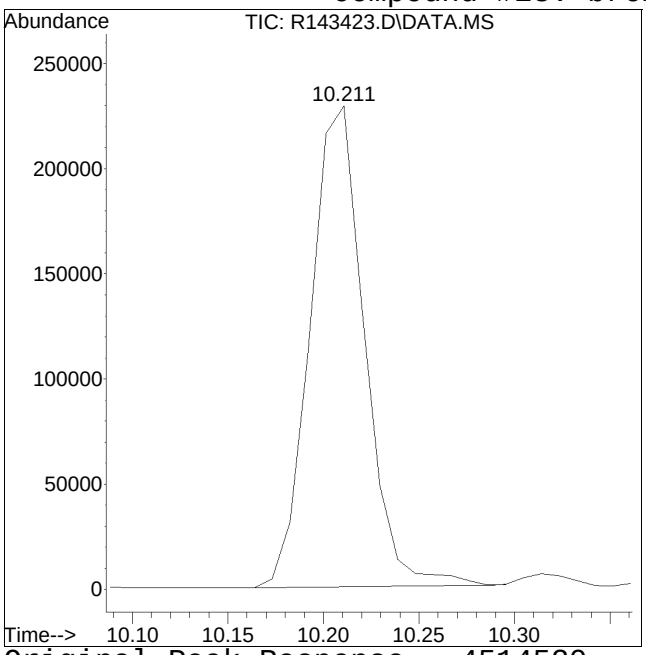


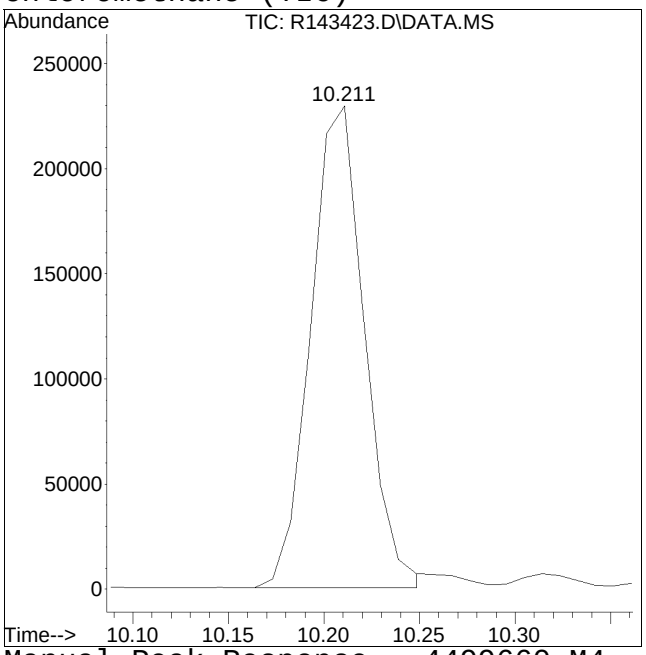
Original Peak Response = 0 Manual Peak Response = 24913 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813\ Method : APH150711.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 3:06 pm

Compound #28: bromochloromethane (TIC)



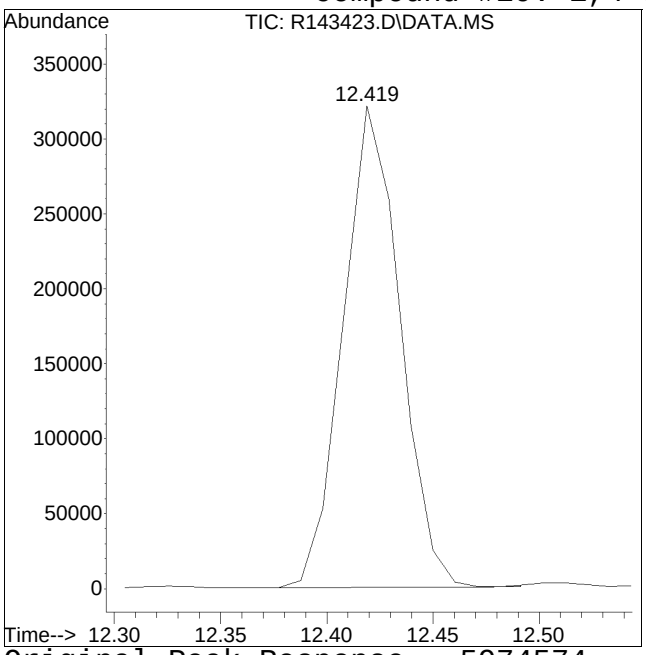


Original Peak Response = 4514520 Manual Peak Response = 4499660 M4
M4 = Poor automated baseline construction.

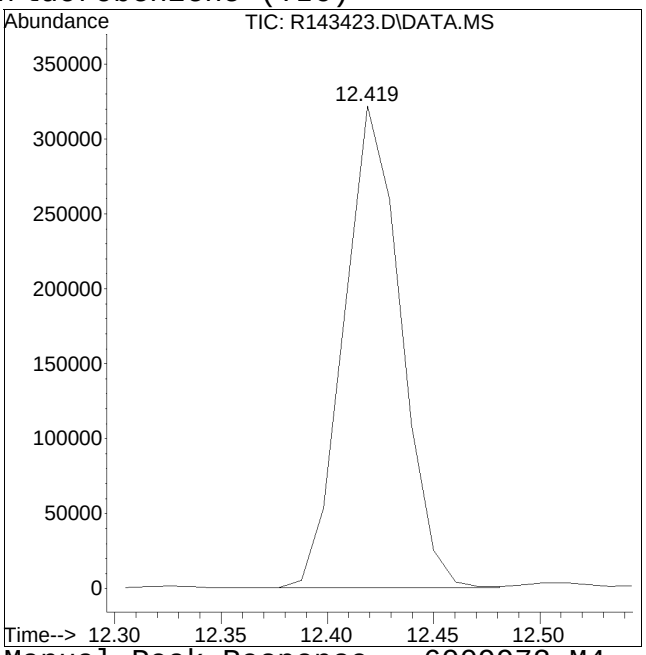
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143423.D
Date Inj'd : 8/13/2015 8:31 pm
Sample : L1519114-11,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 3:06 pm

Compound #29: 1,4-difluorobenzene (TIC)



Original Peak Response = 5974574



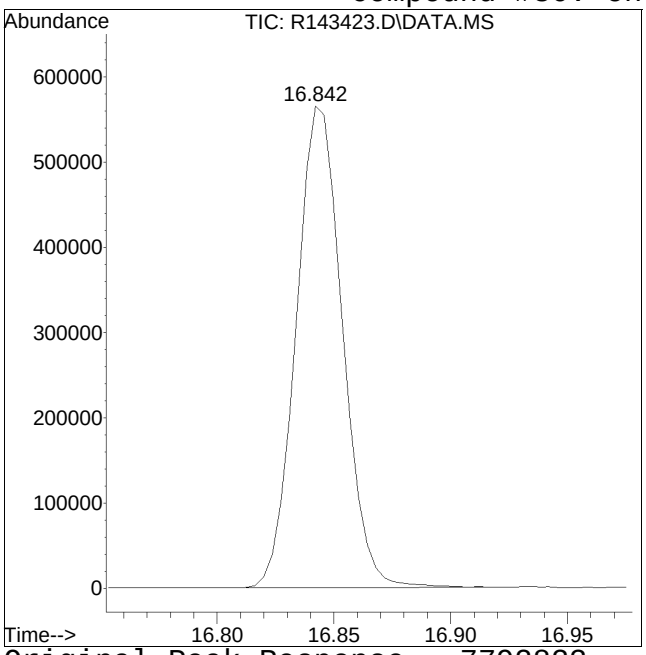
Manual Peak Response = 6009972 M4

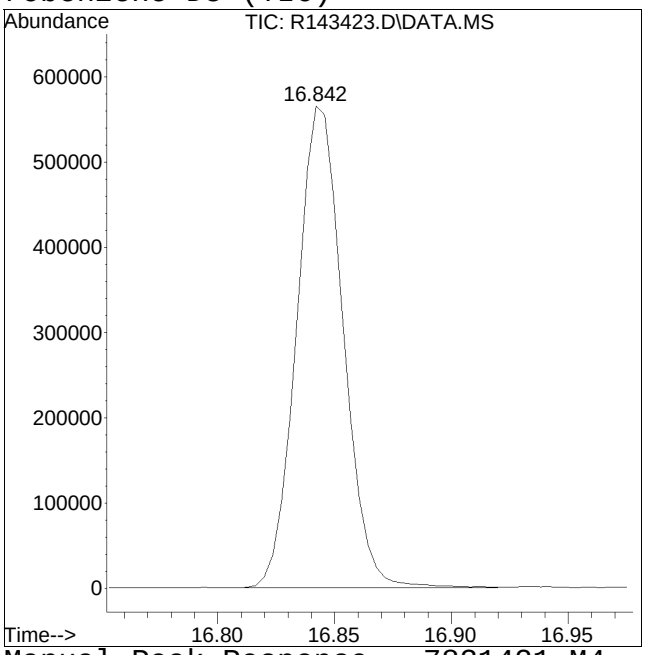
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 3:06 pm

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 7792823 Manual Peak Response = 7831421 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 15:09:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

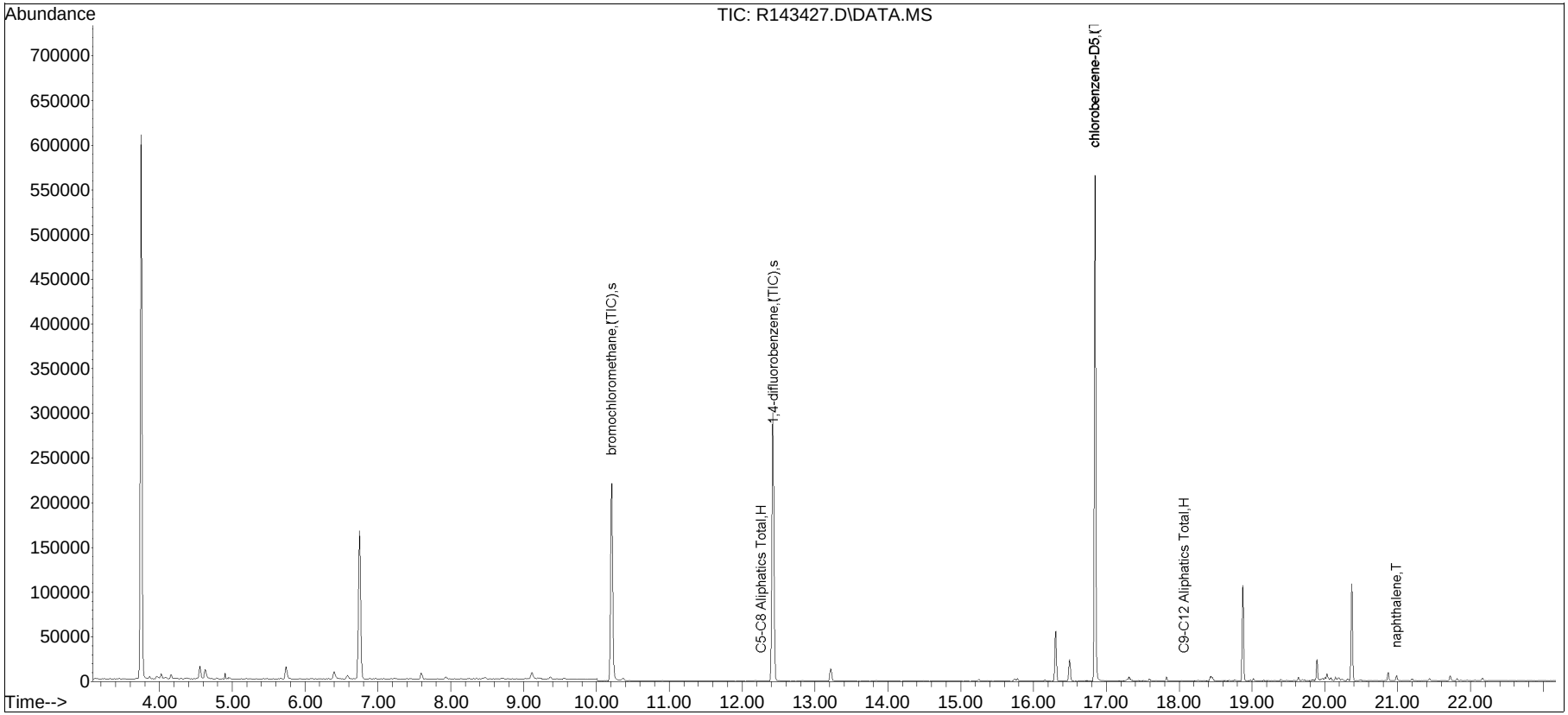
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.212	128	637627	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	82.36%	
7) 1,4-difluorobenzene	12.426	114	2671299	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	80.73%	
12) chlorobenzene-D5	16.845	54	545870	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	89.91%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4457212M4	10.217	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	102.17%	
29) 1,4-difluorobenzene (TIC)	12.426	TIC	5686804	9.242	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	92.42%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	7760010M4	9.792	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.92%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	5362670	36.177	ug/m3	
13) toluene	15.255		0	N.D.		
16) ethyl benzene	0.000		0	N.D.		
17) m+p-xylene	0.000		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	20.990	128	53841	0.547	ug/m3#	79
25) C9-C12 Aliphatics Tota	18.067	TIC	3784942	21.088	ug/m3	
27) C9-C10 Aromatics Total	0.000		0	N.D.		

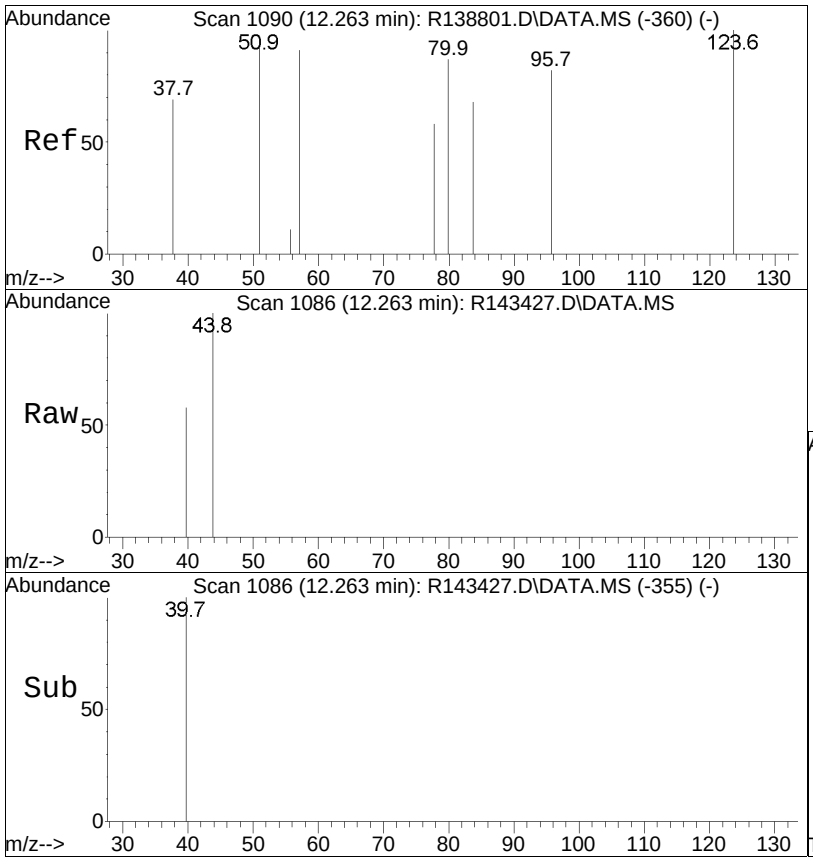
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 10 Sample Multiplier: 1

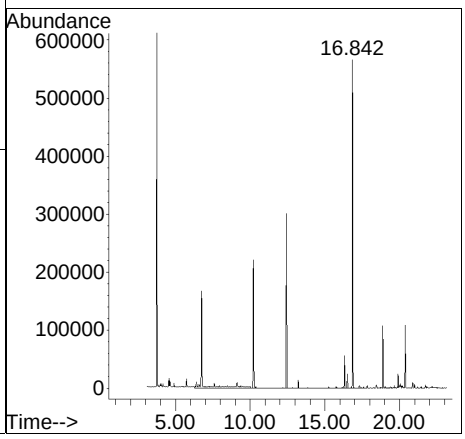
Quant Time: Aug 14 15:09:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

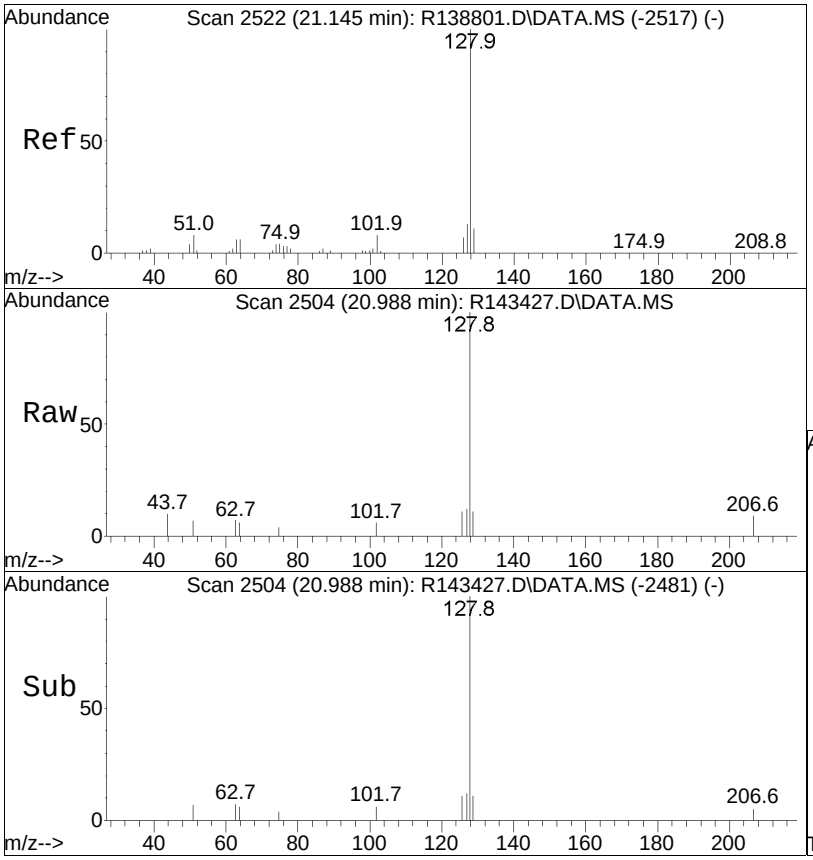




#11
C5-C8 Aliphatics Total
Concen: 36.40 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:TIC Resp: 5362670

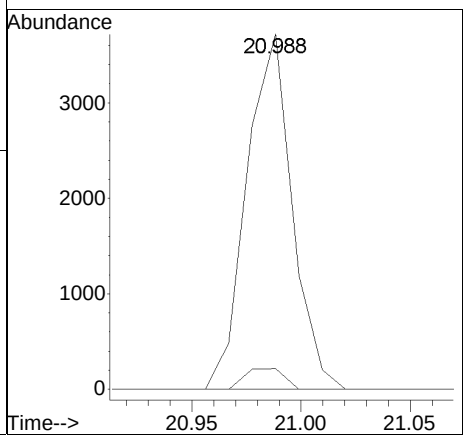


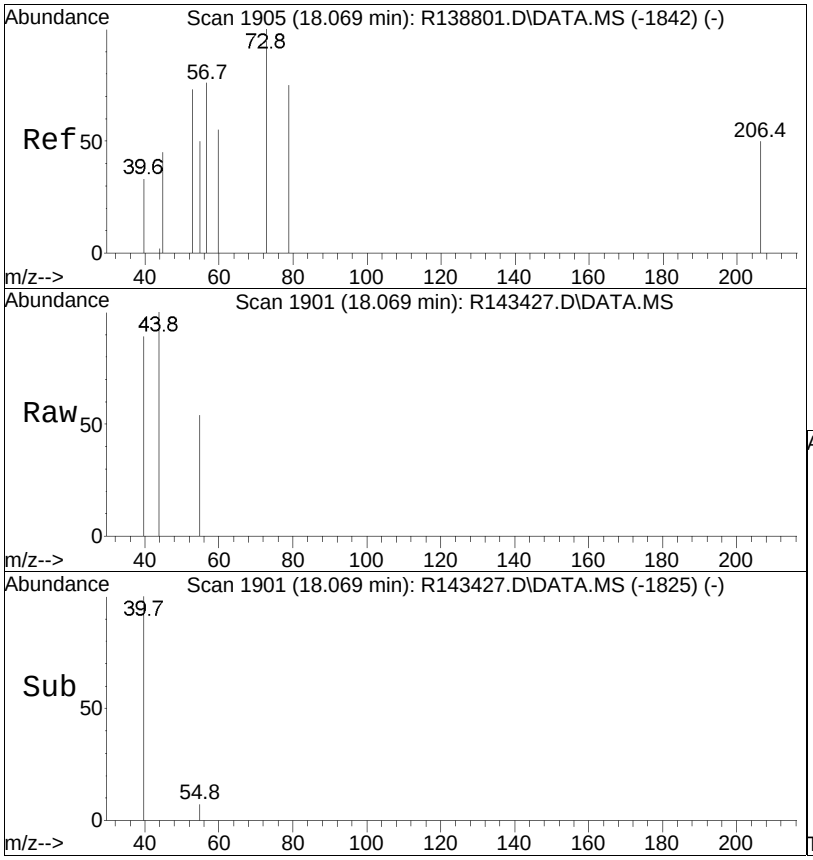


#23
naphthalene
Concen: 0.55 ug/m3
RT: 20.990 min Scan# 2504
Delta R.T. 0.002 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:128 Resp: 53841

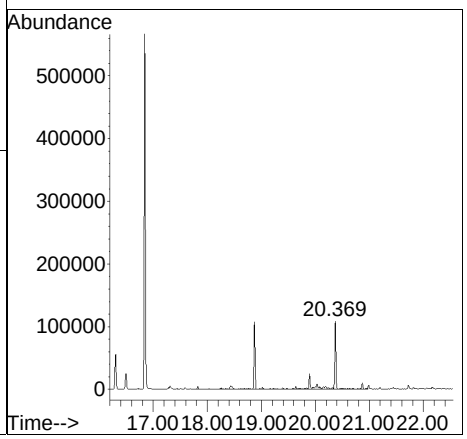
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#





#25
C9-C12 Aliphatics Total
Concen: 21.61 ug/m3 m
RT: 18.067 min Scan# 1901
Delta R.T. 0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

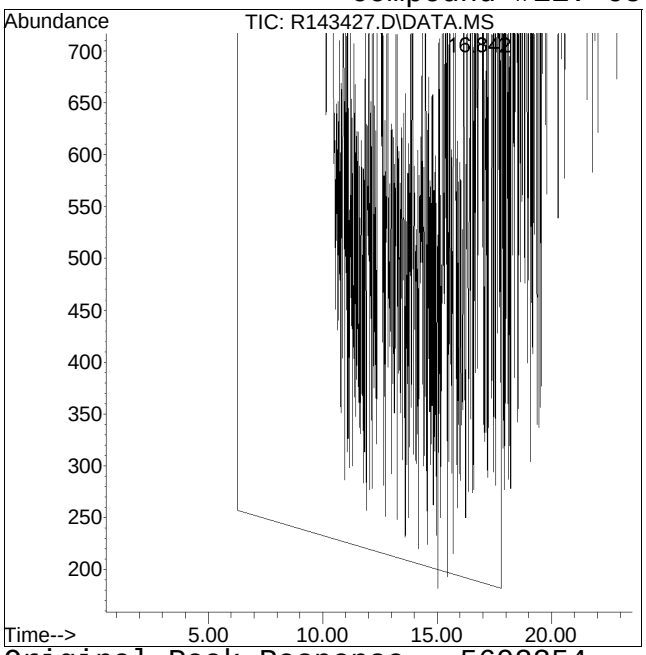
Tgt Ion:TIC Resp: 3784942



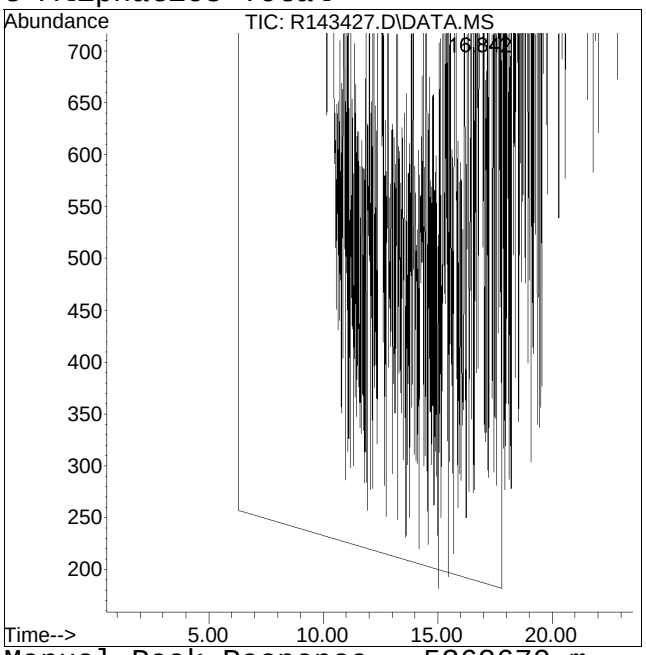
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 5602354

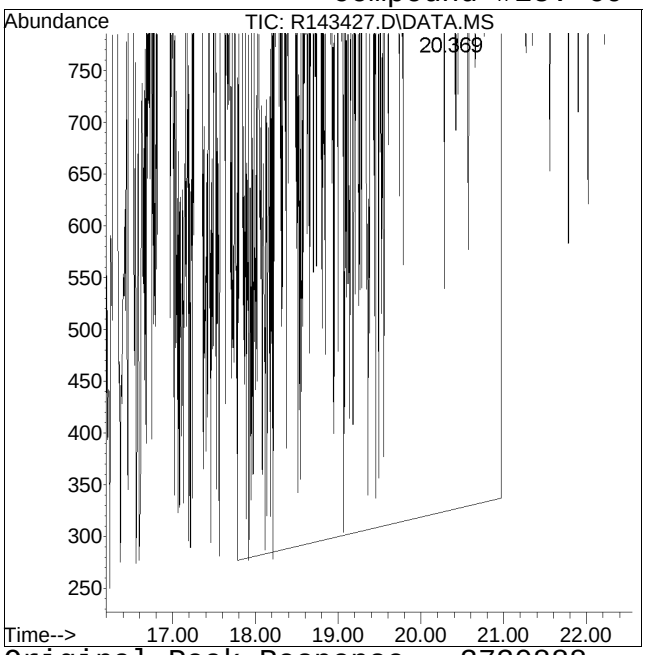


Manual Peak Response = 5362670 m

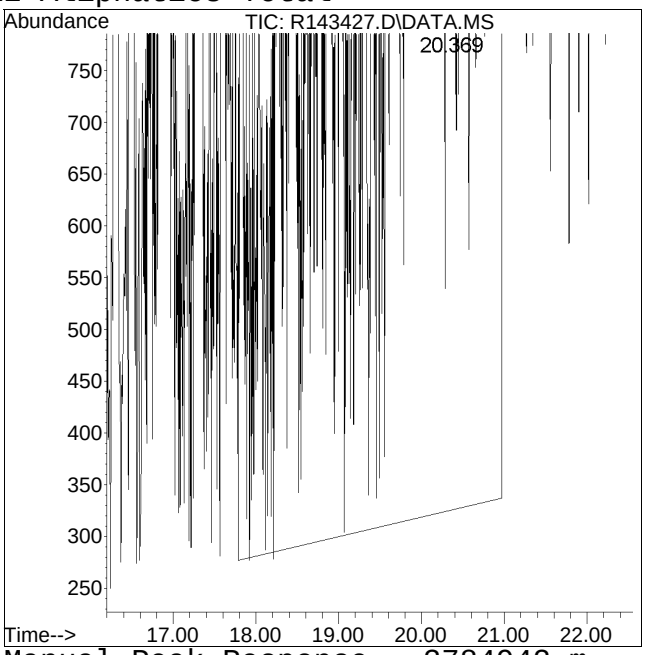
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 3730888

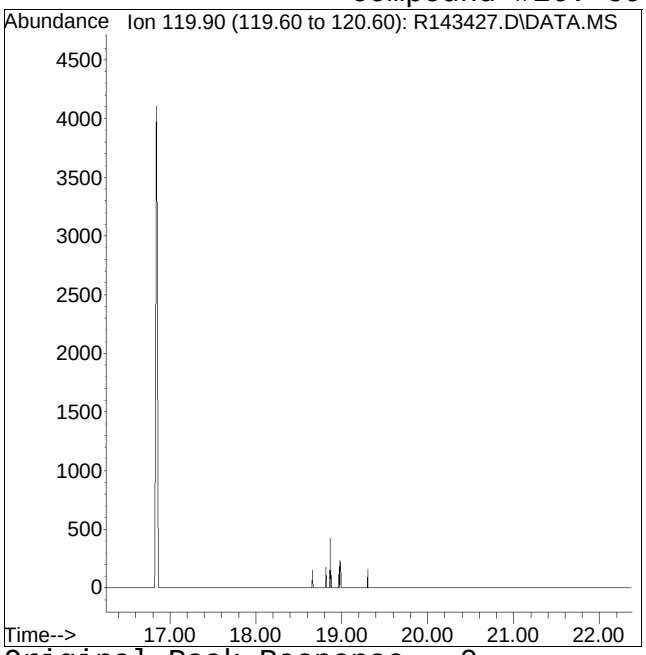


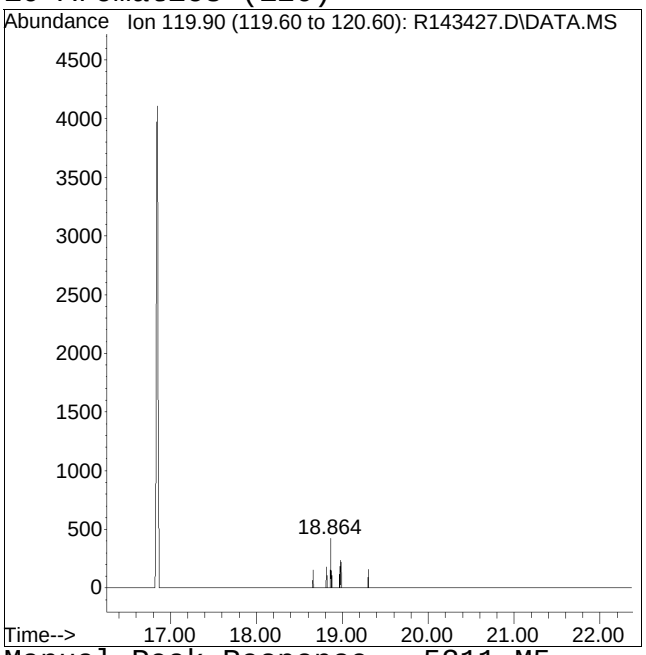
Manual Peak Response = 3784942 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #26: C9-C10 Aromatics (120)



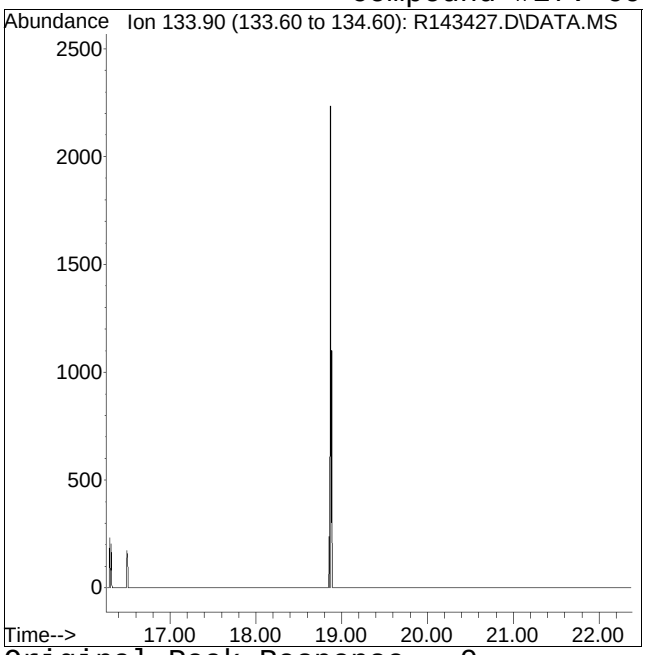


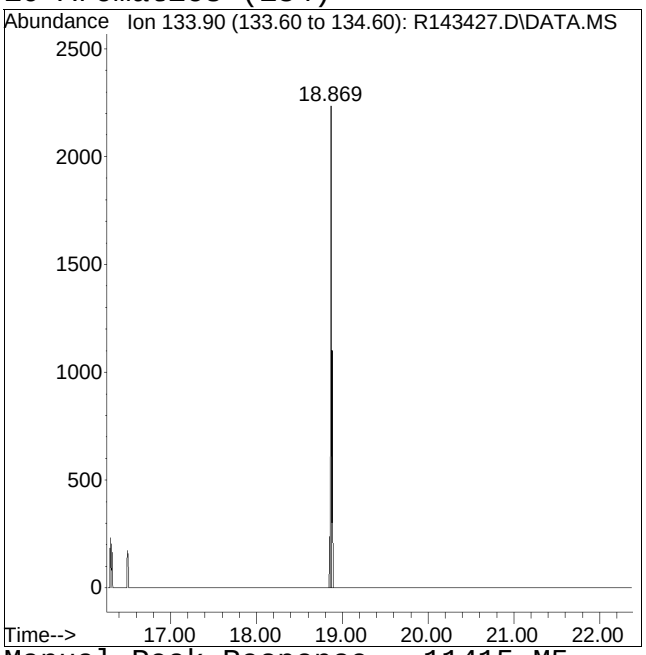
Original Peak Response = 0 Manual Peak Response = 5211 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #27: C9-C10 Aromatics (134)



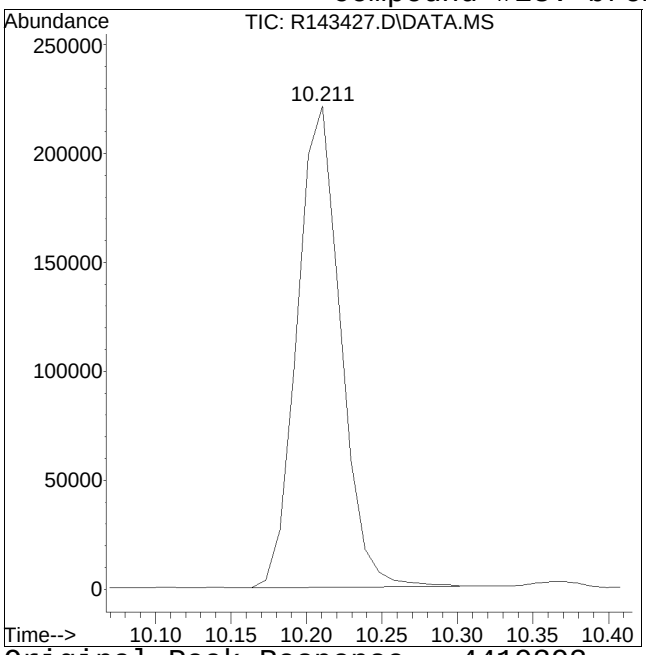


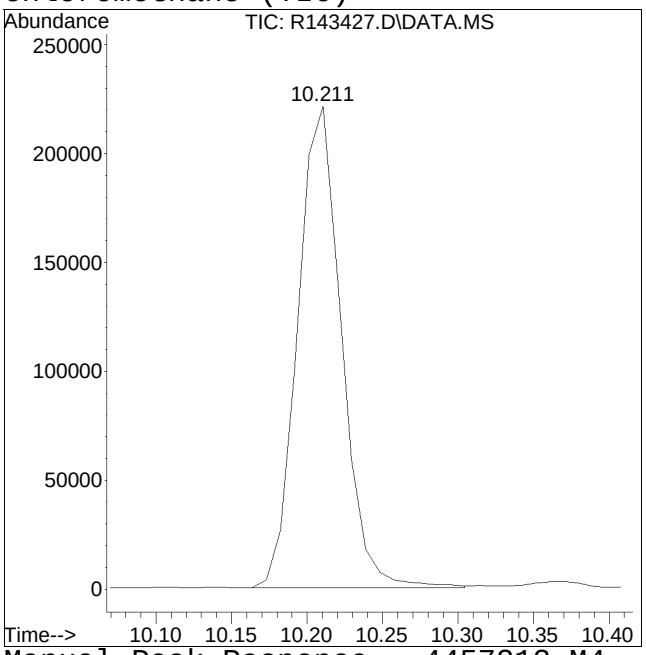
Original Peak Response = 0 Manual Peak Response = 11415 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #28: bromochloromethane (TIC)



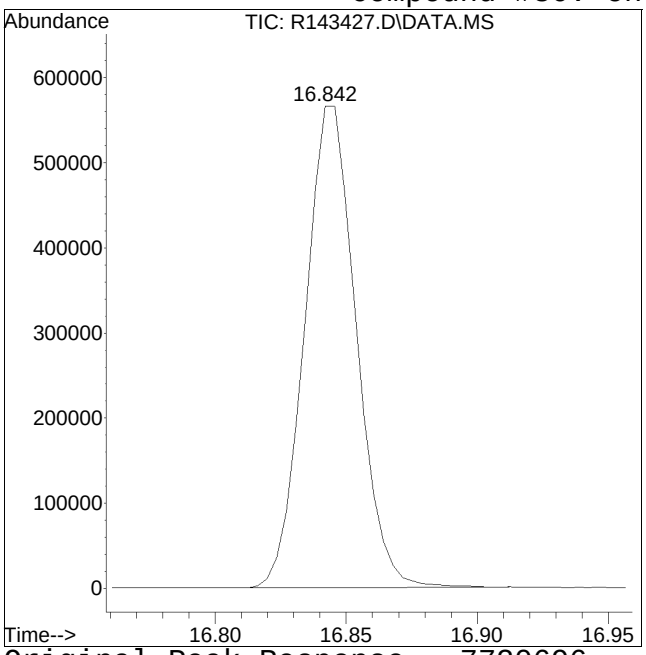


Original Peak Response = 4419393 Manual Peak Response = 4457212 M4
M4 = Poor automated baseline construction.

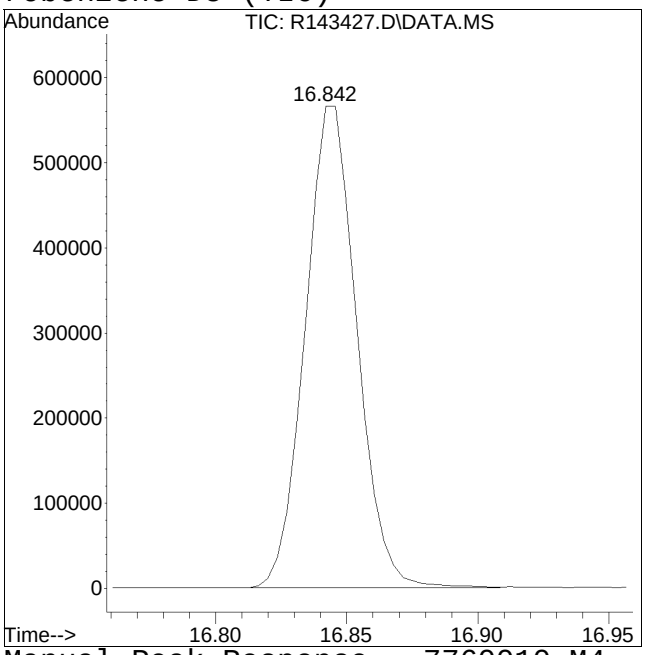
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:40 am

Compound #30: chlorobenzene-D5 (TIC)



Original Peak Response = 7720696



Manual Peak Response = 7760010 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 15:13:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.210	128	637387	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	82.33%	
7) 1,4-difluorobenzene	12.425	114	2663447	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	80.50%	
12) chlorobenzene-D5	16.844	54	564791	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	93.02%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4342865M4	9.621	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.21%	
29) 1,4-difluorobenzene (TIC)	12.419	TIC	6186245M4	9.717	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.17%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	9801744M4	11.954	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	119.54%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.	d	
4) methyl tert butyl ether	9.126	73	67036	1.345	ug/m3#	1
9) benzene	12.020	78	247178	3.756	ug/m3	99
11) C5-C8 Aliphatics Total	12.260	TIC	201153022	1360.664	ug/m3	
13) toluene	15.253	91	106138	1.287	ug/m3	100
16) ethyl benzene	17.174	91	49165M4	0.529	ug/m3	
17) m+p-xylene	17.322	91	109718M4	1.509	ug/m3	
19) o-xylene	17.684		0	N.D.		
23) naphthalene	20.977	128	160800M6	1.578	ug/m3	
25) C9-C12 Aliphatics Tota	18.067	TIC	907788674	4998.192	ug/m3	
26) C9-C10 Aromatics (120)	18.974	120	219661M5	6.709	ug/m3	
27) C9-C10 Aromatics (134)	18.864	134	168149M5	5.136	ug/m3	
27) C9-C10 Aromatics Total	0.000		387810	11.844	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 15:13:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

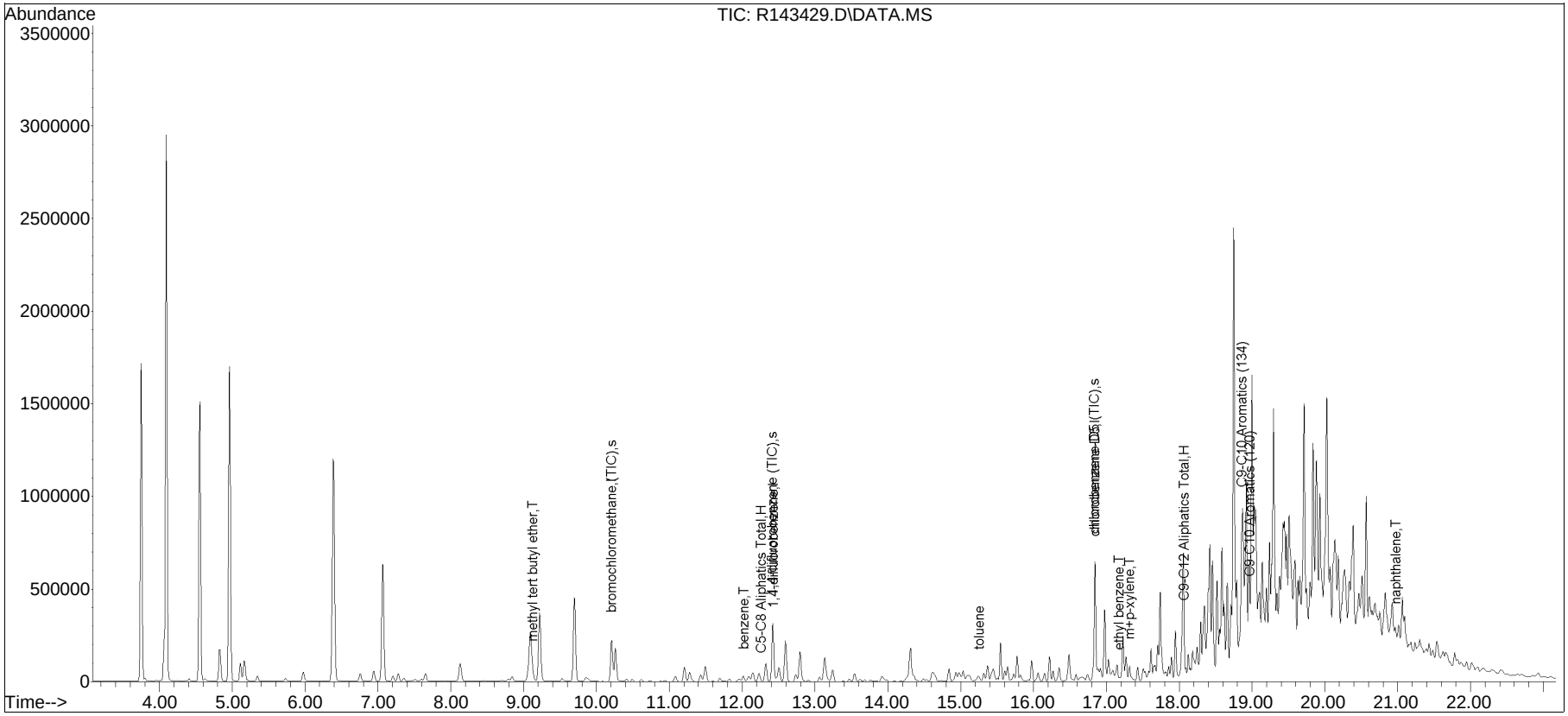
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

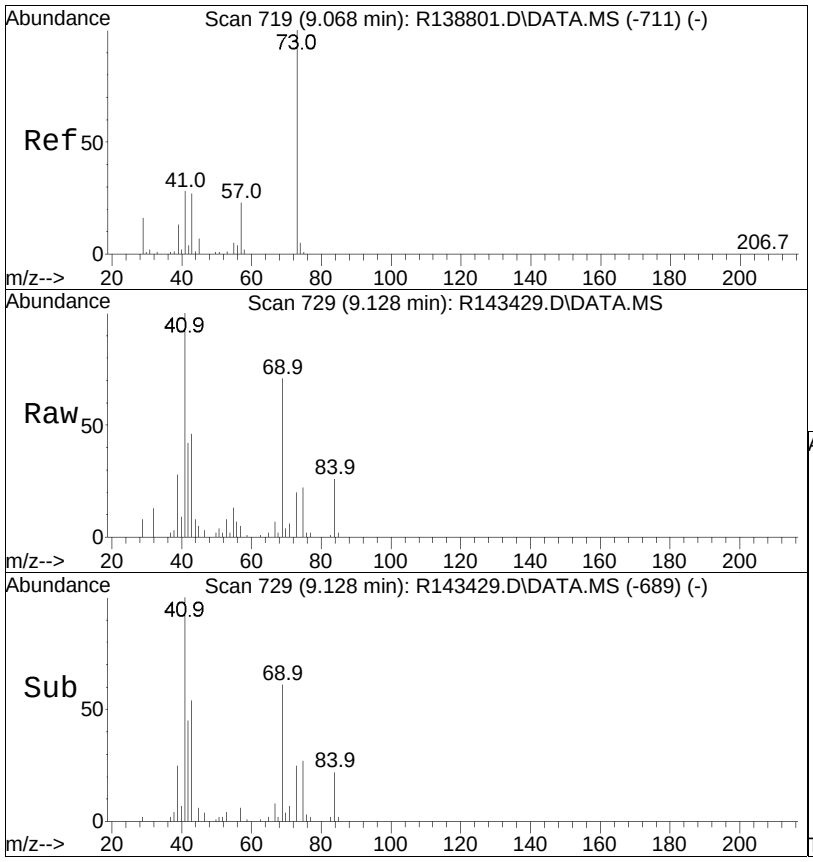
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 15:13:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

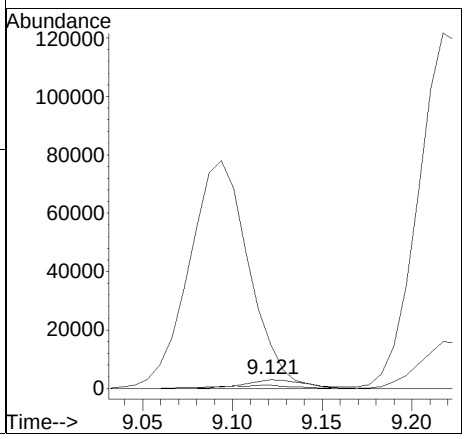


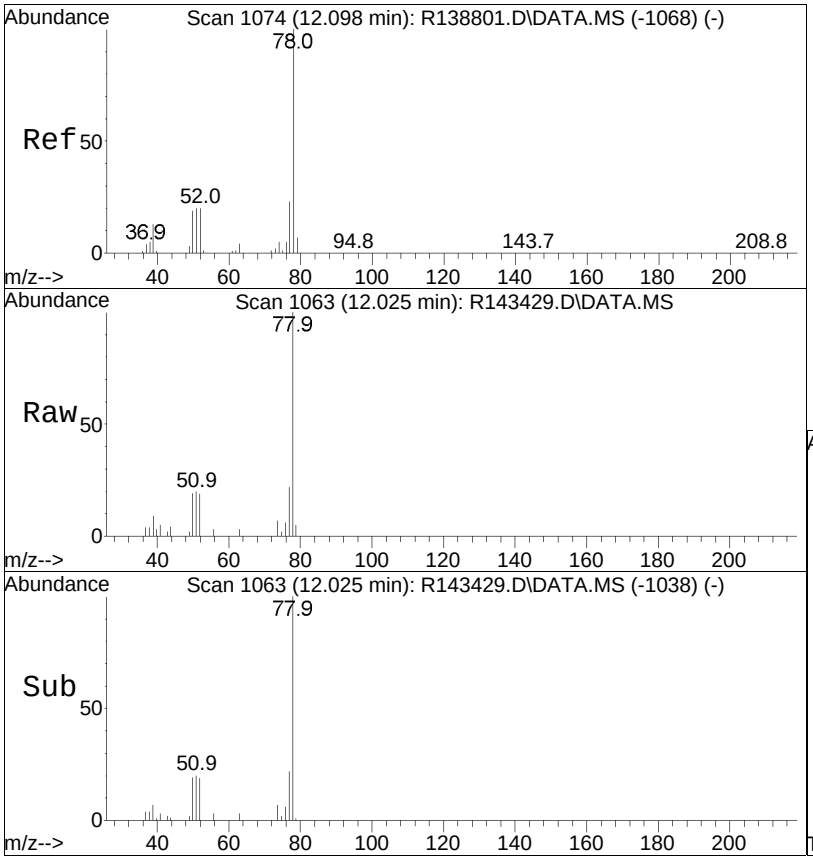


#4
methyl tert butyl ether
Concen: 1.34 ug/m3
RT: 9.126 min Scan# 729
Delta R.T. 0.020 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 73 Resp: 67036

Ion	Ratio	Lower	Upper
73	100		
57	0.0	20.6	31.0#
43	2707.2	18.1	27.1#

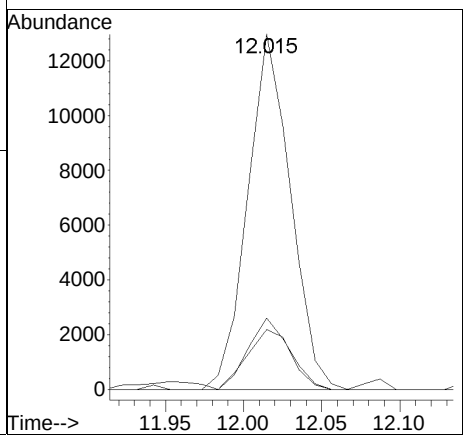


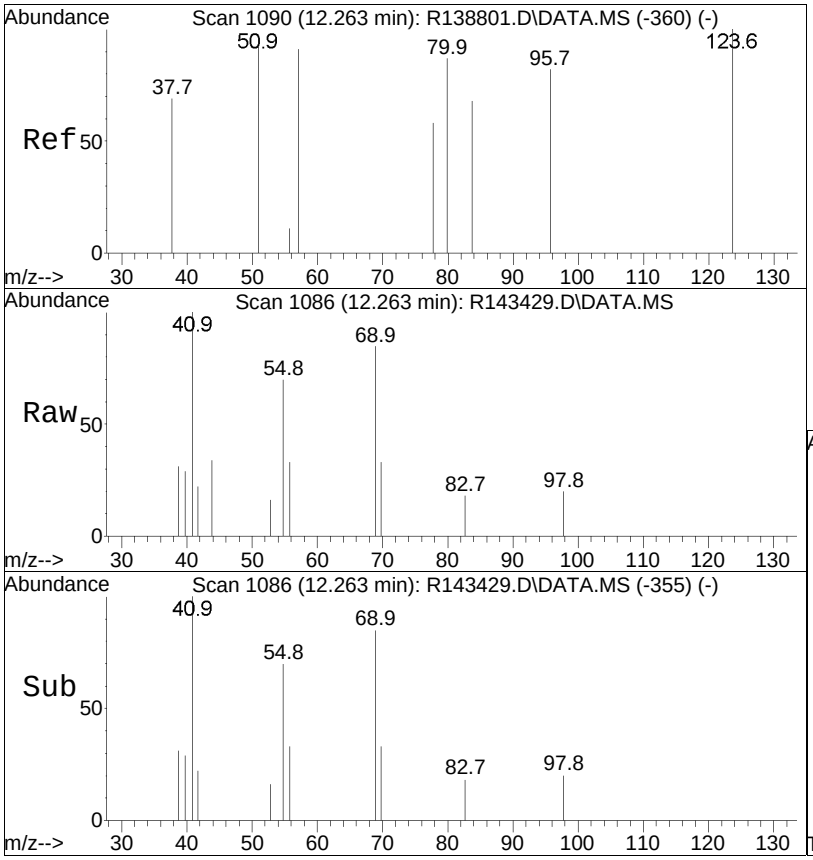


#9
benzene
Concen: 3.76 ug/m3
RT: 12.020 min Scan# 1063
Delta R.T. -0.001 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 78 Resp: 247178

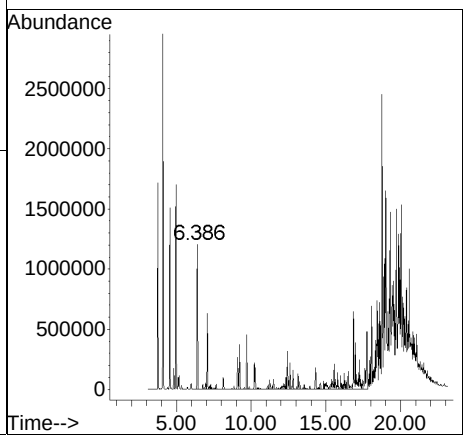
Ion	Ratio	Lower	Upper
78	100		
52	19.4	15.0	22.4
51	17.6	14.2	21.4

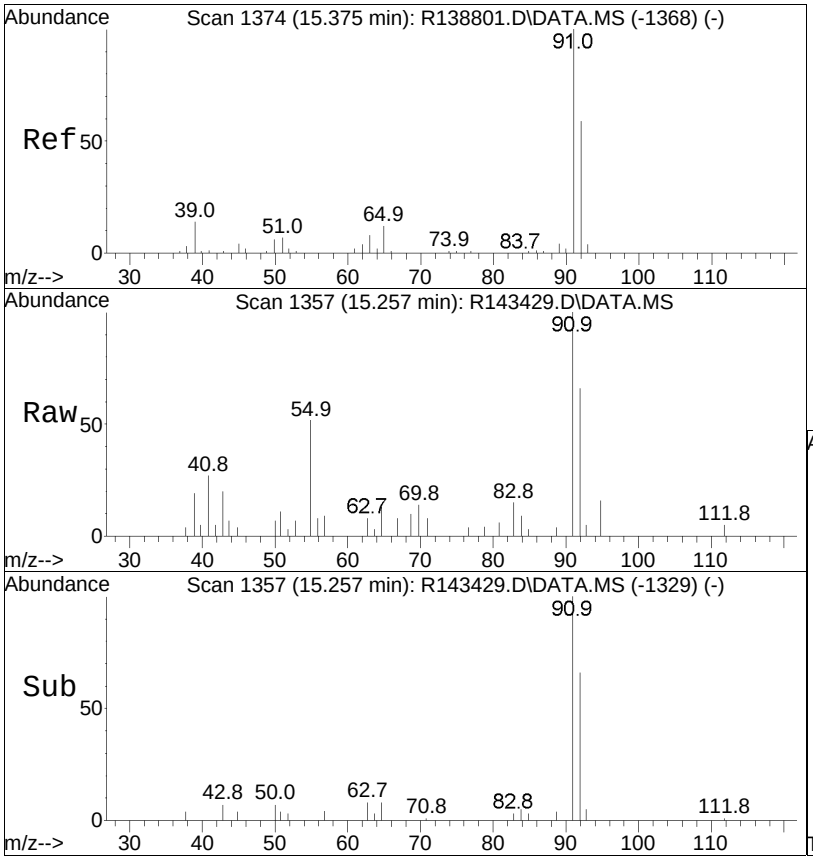




#11
C5-C8 Aliphatics Total
Concen: 1369.50 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:TIC Resp:201153022

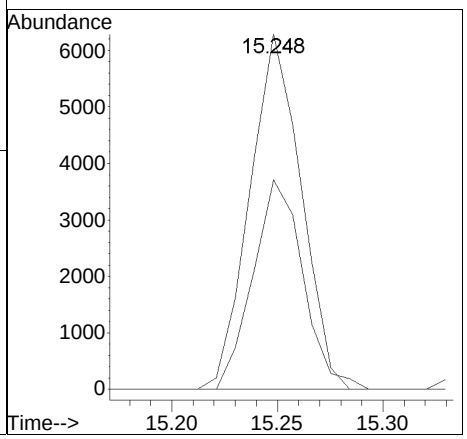


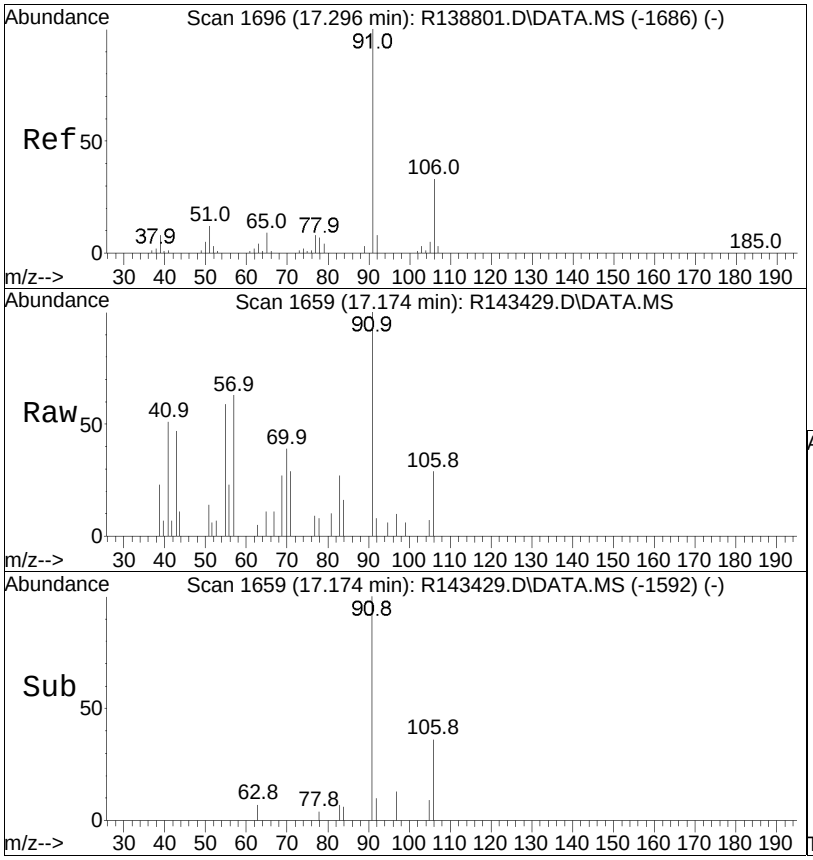


#13
toluene
Concen: 1.29 ug/m3
RT: 15.253 min Scan# 1357
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 106138

Ion	Ratio	Lower	Upper
91	100		
92	57.7	46.0	69.0

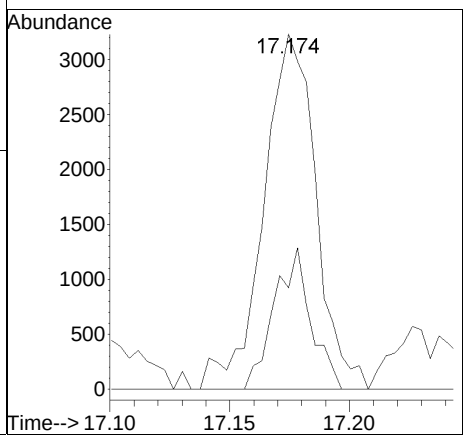


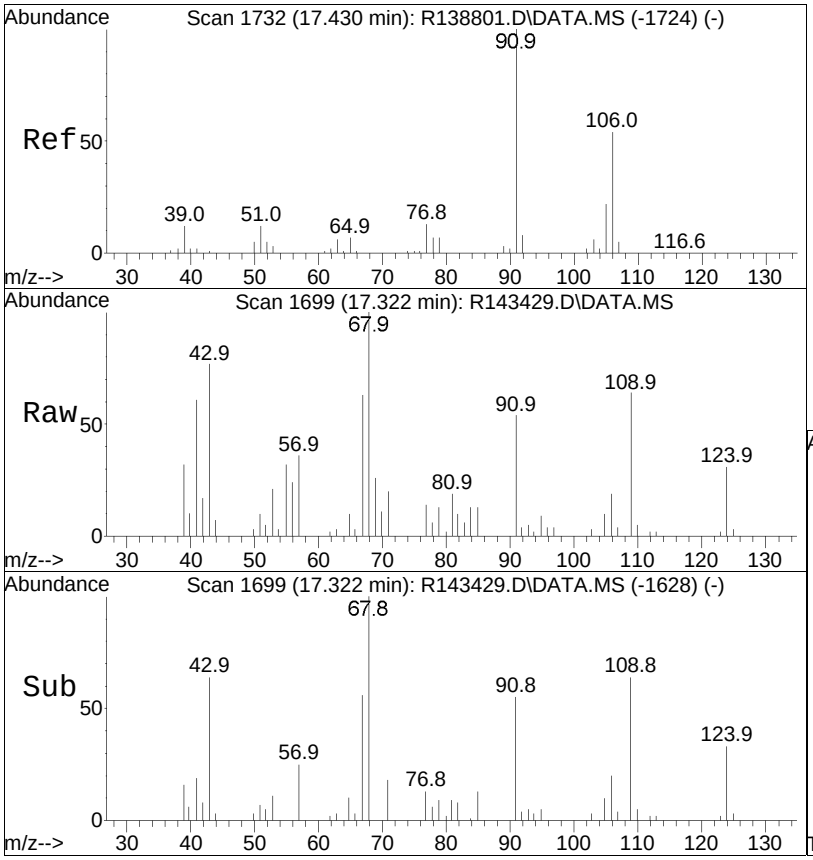


#16
ethyl benzene
Concen: 0.53 ug/m3 m
RT: 17.174 min Scan# 1659
Delta R.T. -0.002 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 49165

Ion	Ratio	Lower	Upper
91	100		
106	0.0	25.8	38.6#

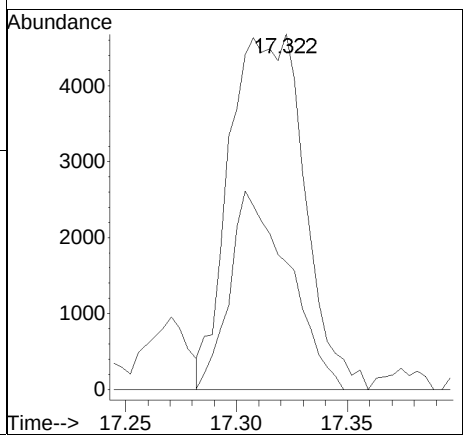


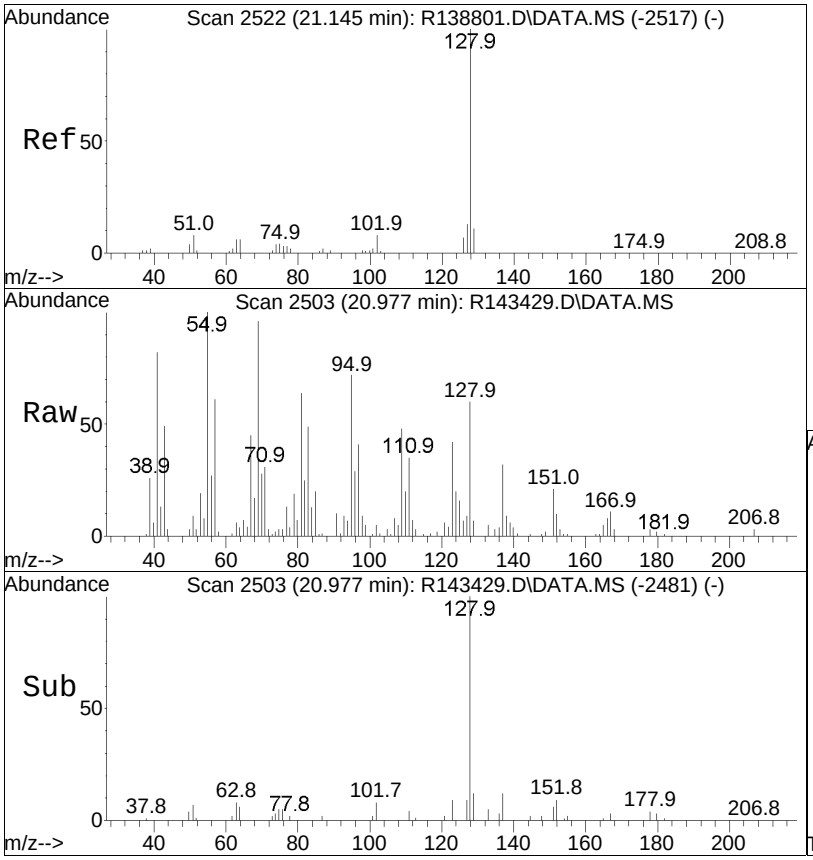


#17
m+p-xylene
Concen: 1.51 ug/m3 m
RT: 17.322 min Scan# 1699
Delta R.T. 0.011 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 109718

Ion	Ratio	Lower	Upper
91	100		
106	44.1	20.5	30.7#

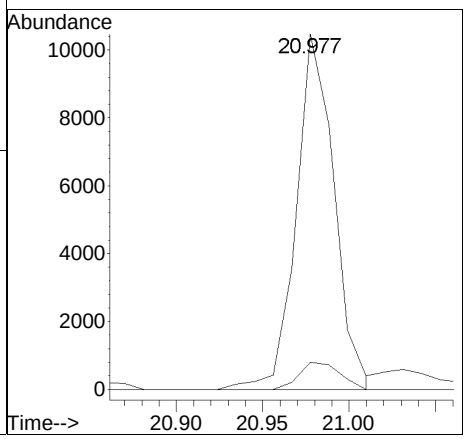


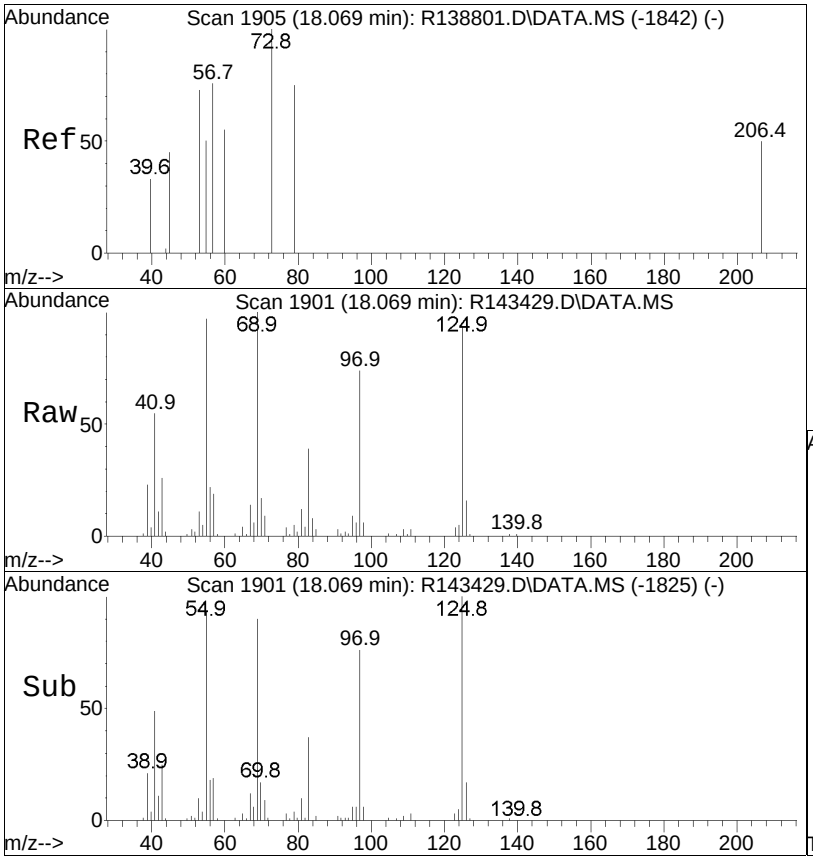


#23
naphthalene
Concen: 1.58 ug/m3 m
RT: 20.977 min Scan# 2503
Delta R.T. -0.010 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:128 Resp: 160800

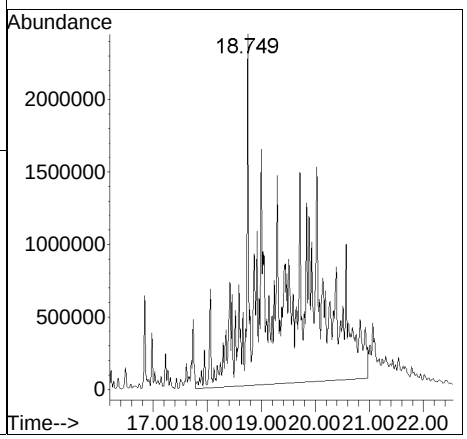
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

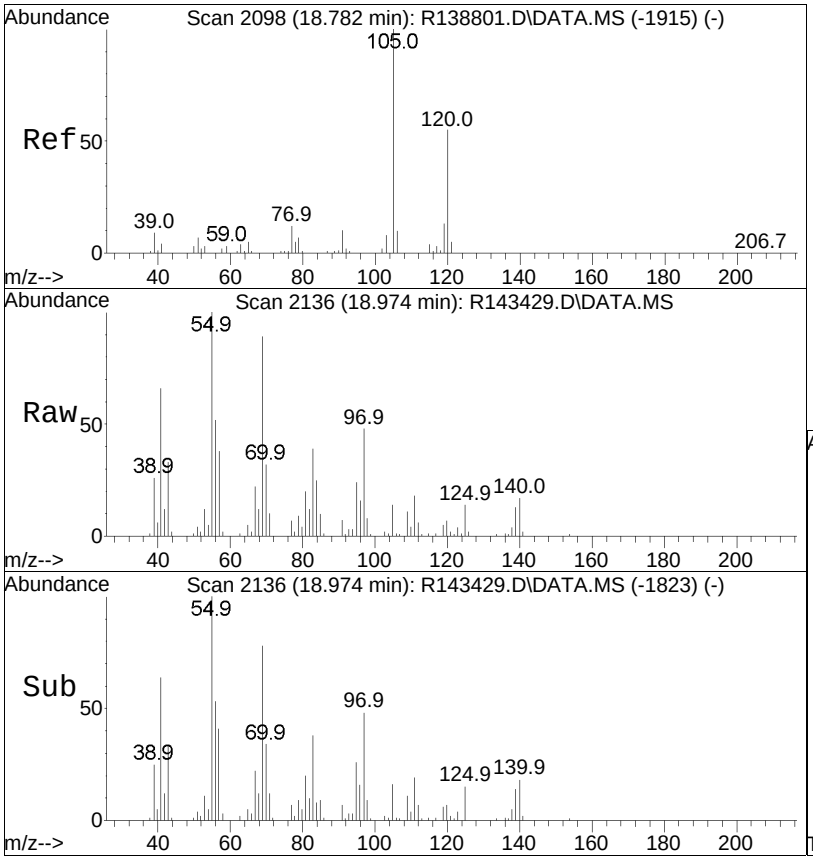




#25
C9-C12 Aliphatics Total
Concen: 5010.04 ug/m3 m
RT: 18.067 min Scan# 1901
Delta R.T. 0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

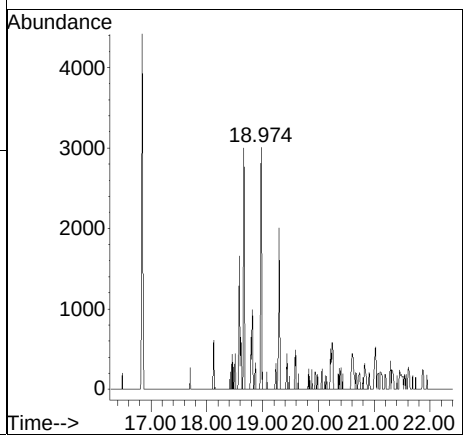
Tgt Ion:TIC Resp:907788674

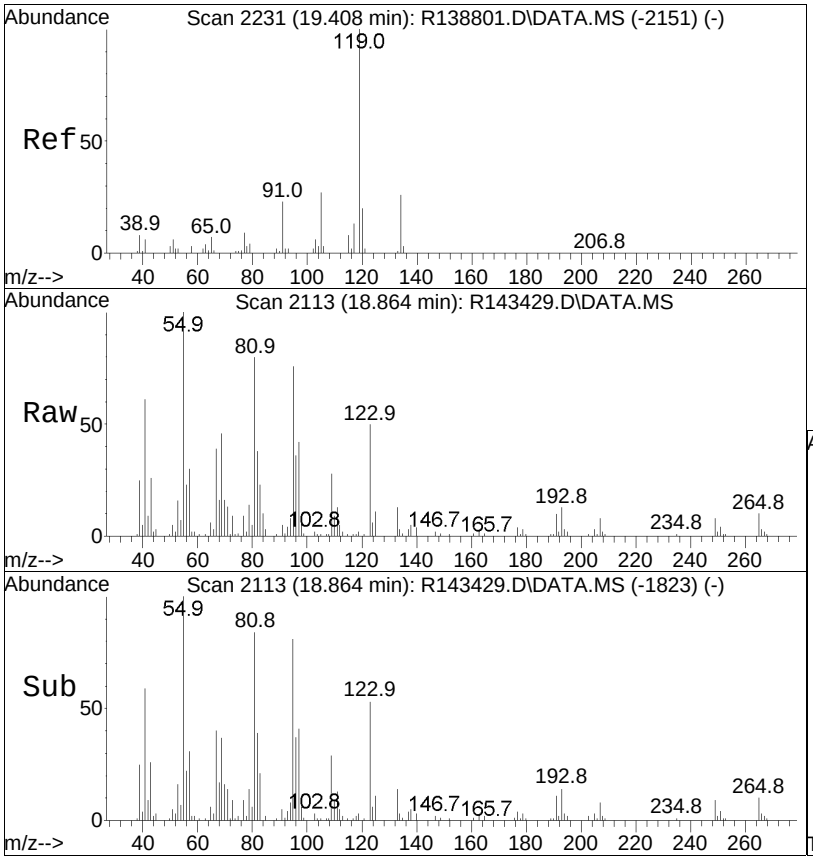




#26
C9-C10 Aromatics (120)
Concen: 6.71 ug/m3 m
RT: 18.974 min Scan# 2136
Delta R.T. -1.026 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

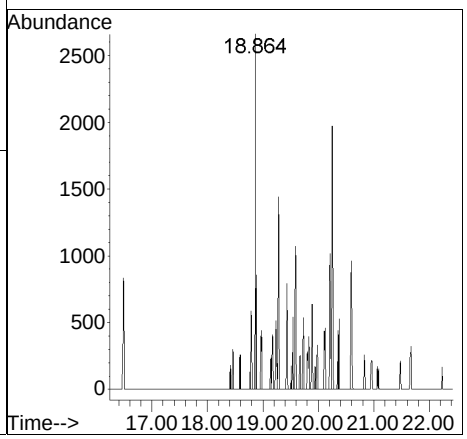
Tgt Ion:120 Resp: 219661





#27
C9-C10 Aromatics (134)
Concen: 5.14 ug/m3 m
RT: 18.864 min Scan# 2113
Delta R.T. -1.136 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

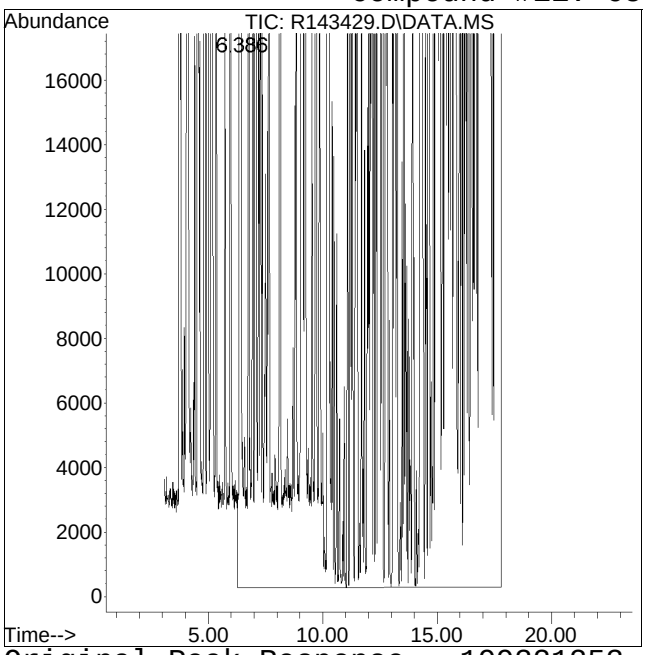
Tgt Ion:134 Resp: 168149



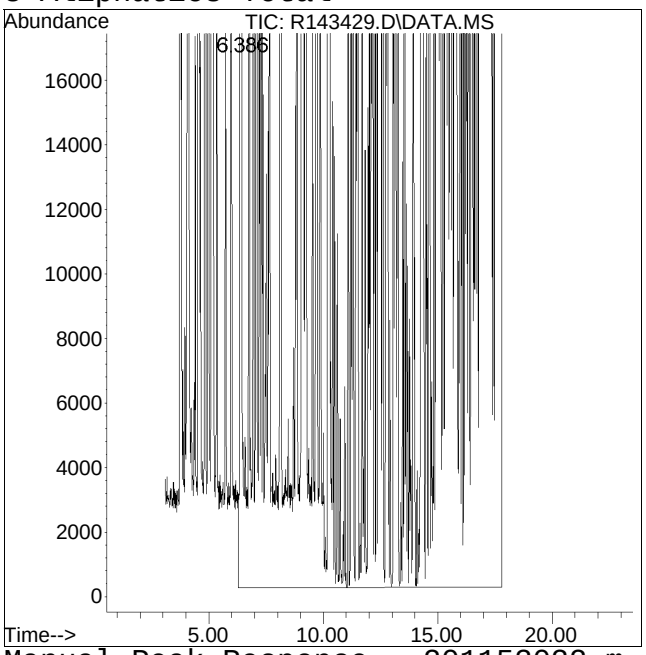
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 199321253

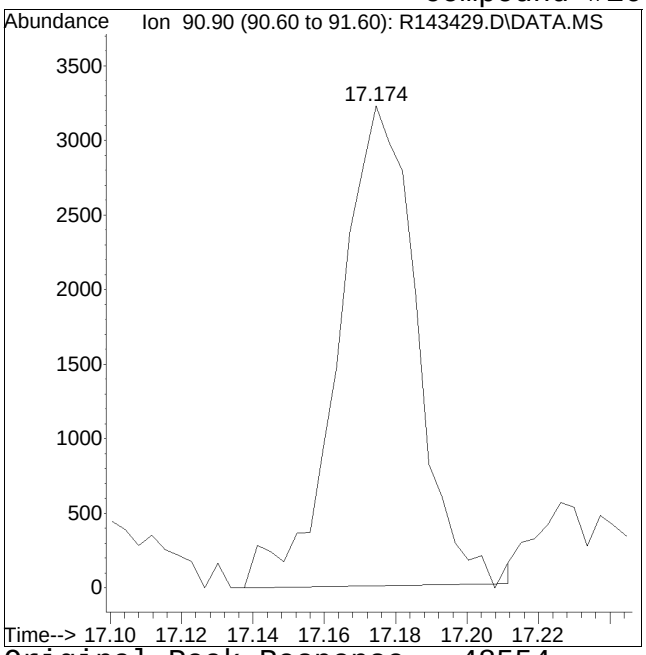


Manual Peak Response = 201153022 m

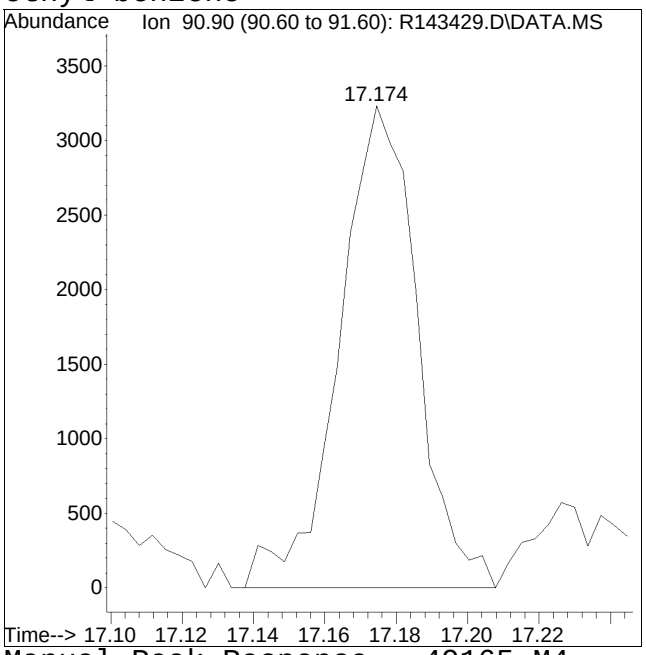
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #16: ethyl benzene



Original Peak Response = 48554



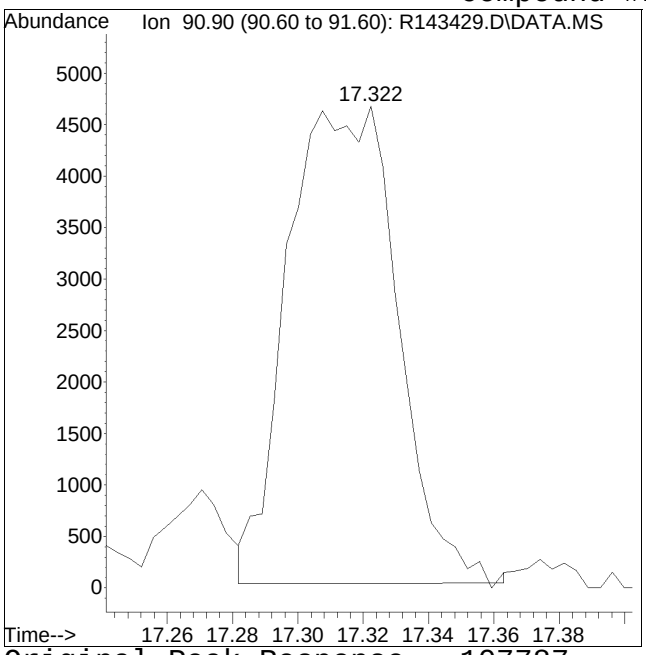
Manual Peak Response = 49165 M4

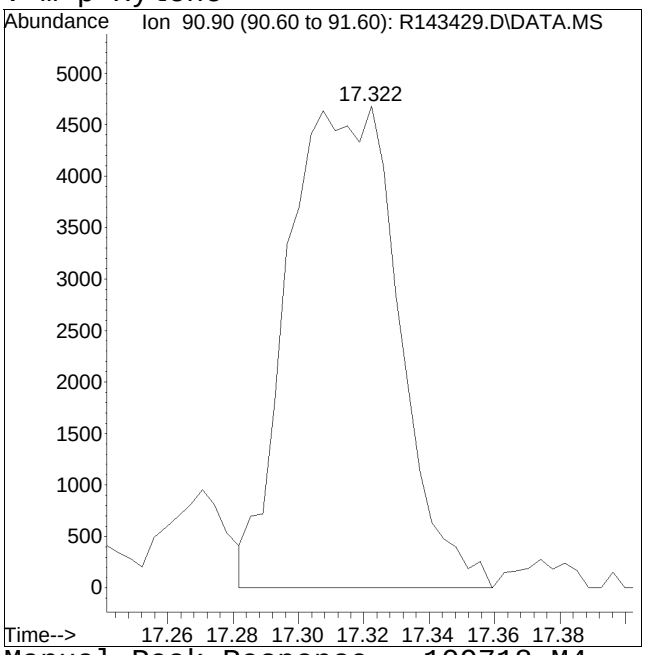
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #17: m+p-xylene





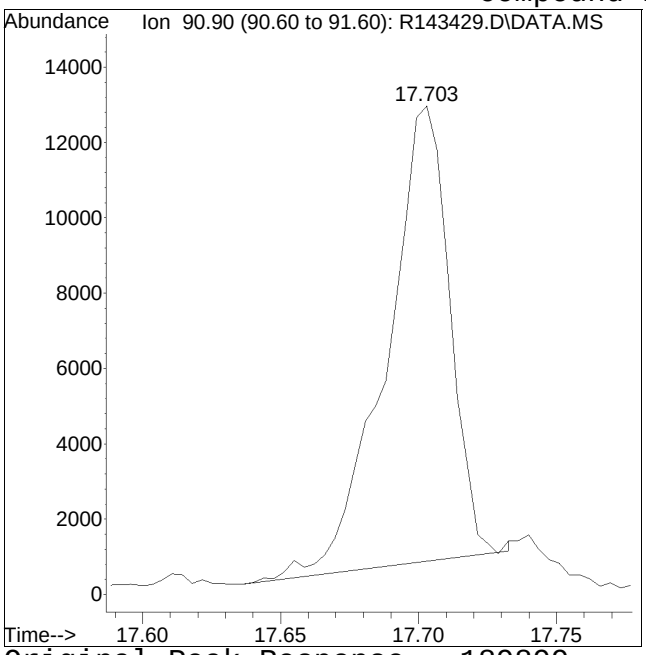
Original Peak Response = 107787 Manual Peak Response = 109718 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

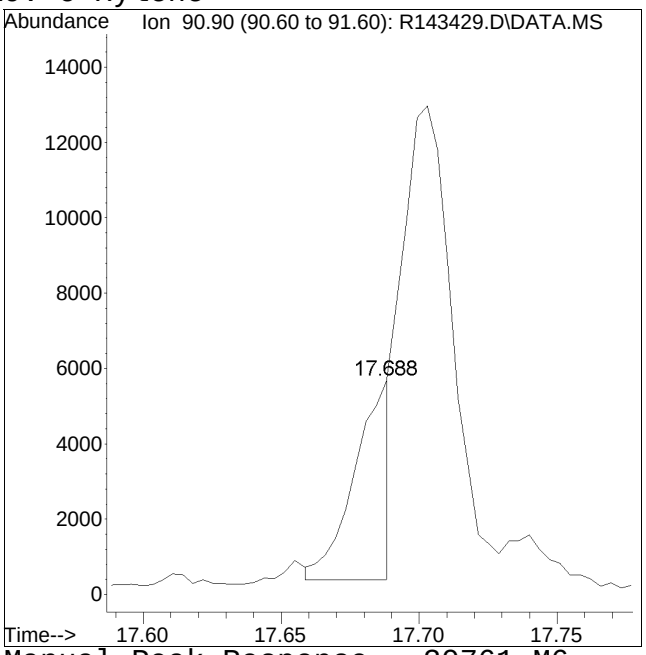
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : APH150711.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 3:11 pm

Compound #19: o-xylene



Original Peak Response = 189899



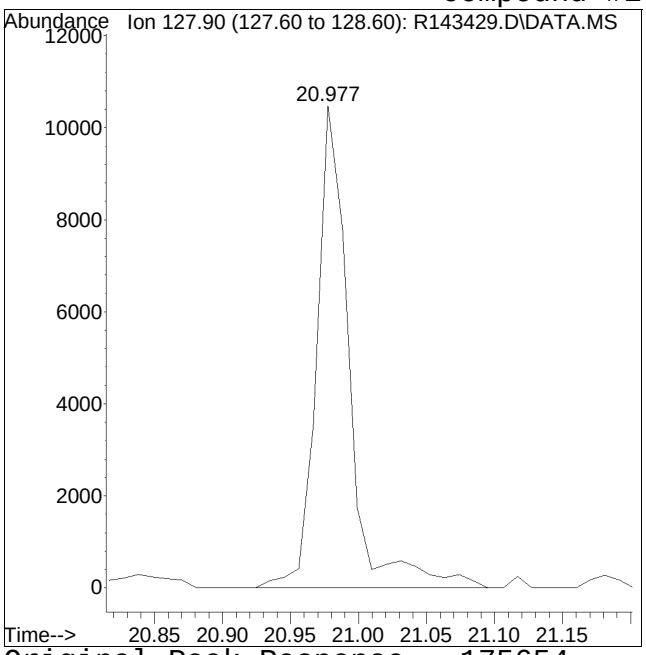
Manual Peak Response = 30761 M6

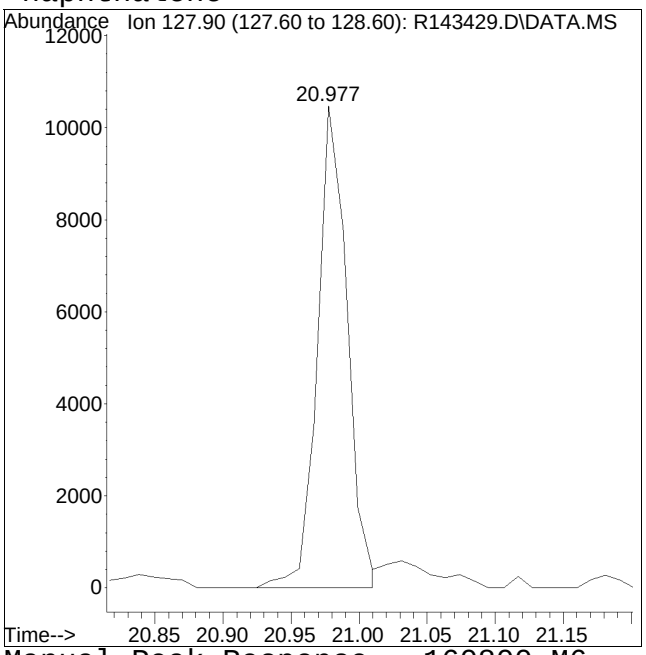
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #23: naphthalene



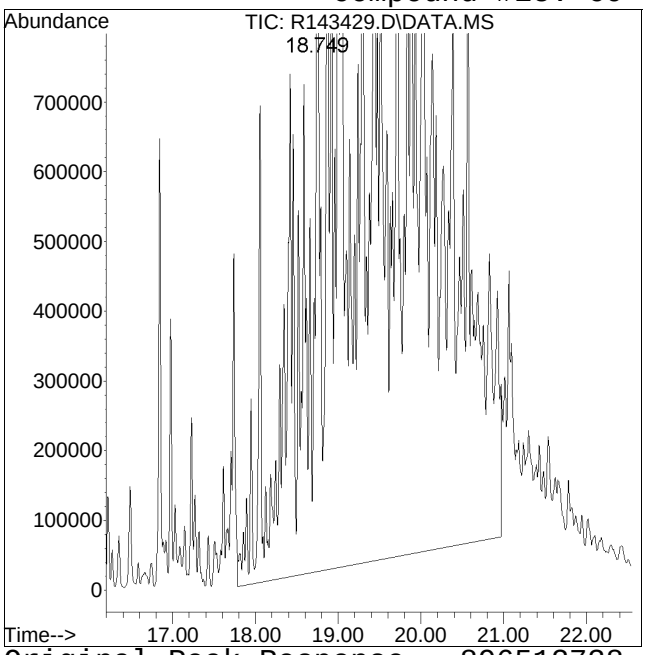


Original Peak Response = 175654 Manual Peak Response = 160800 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

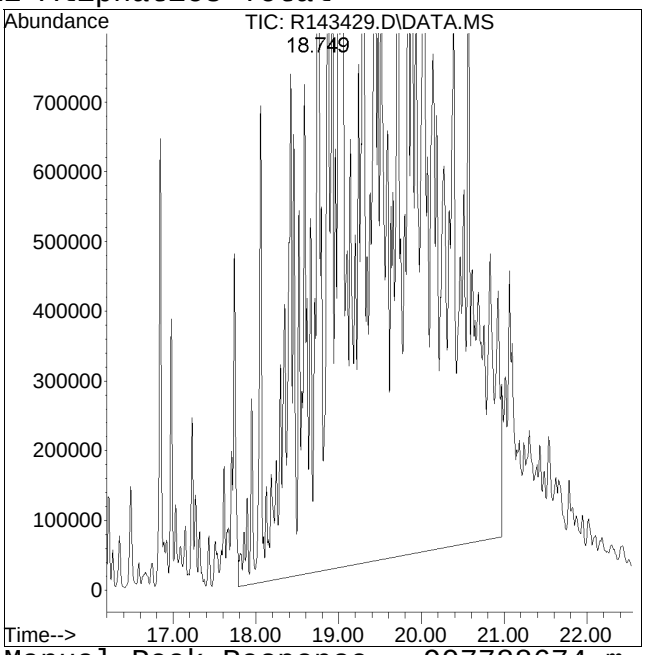
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 896512738

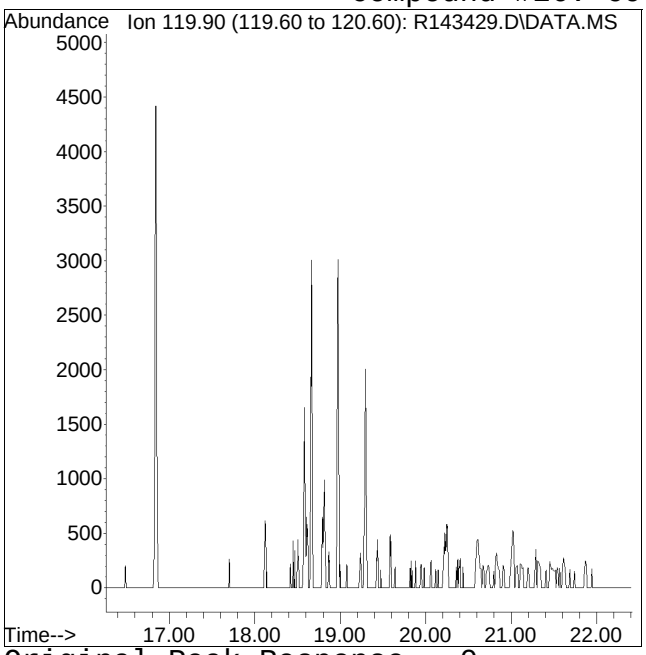


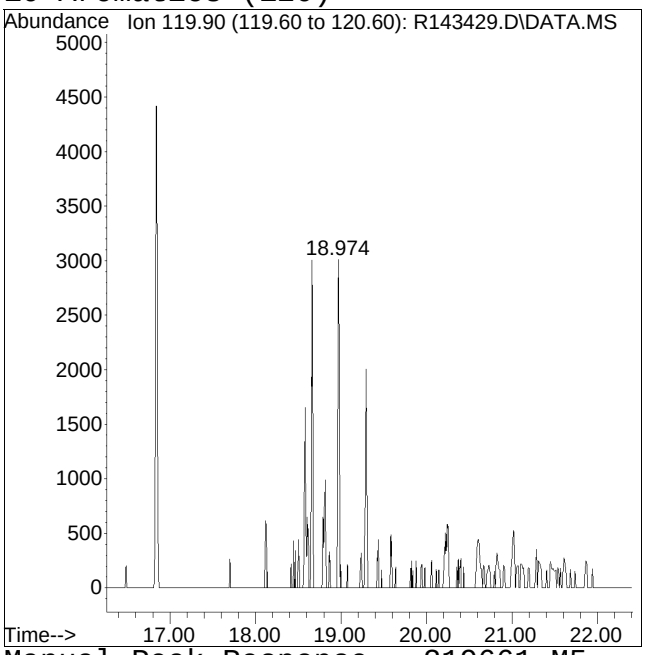
Manual Peak Response = 907788674 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #26: C9-C10 Aromatics (120)



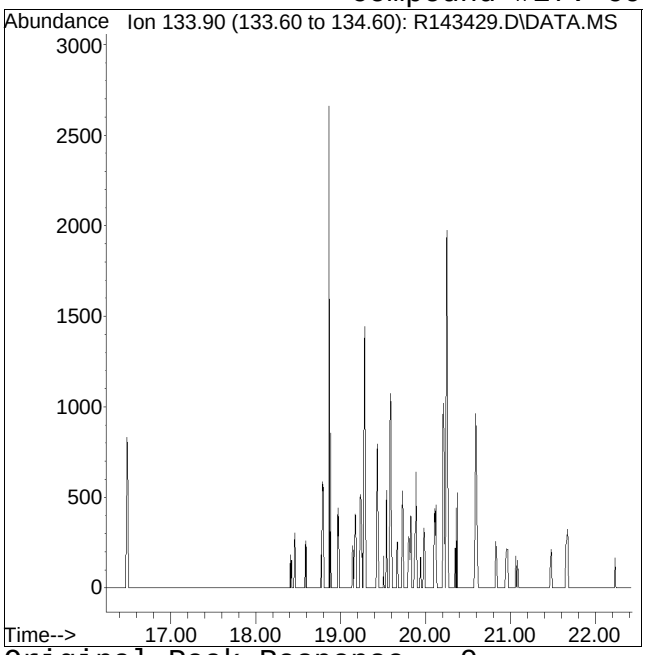


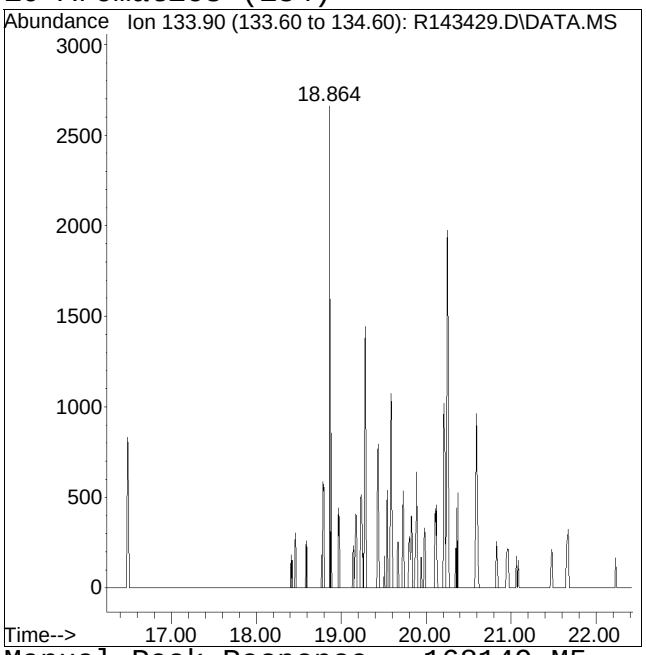
Original Peak Response = 0 Manual Peak Response = 219661 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #27: C9-C10 Aromatics (134)



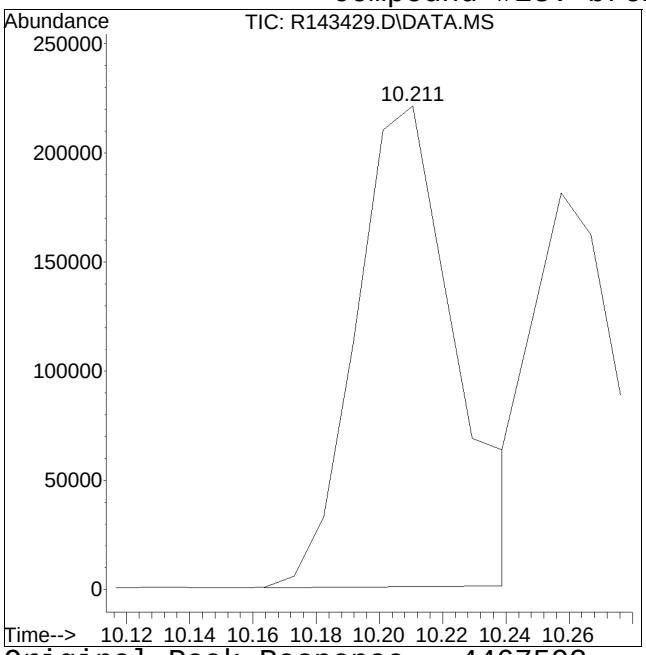


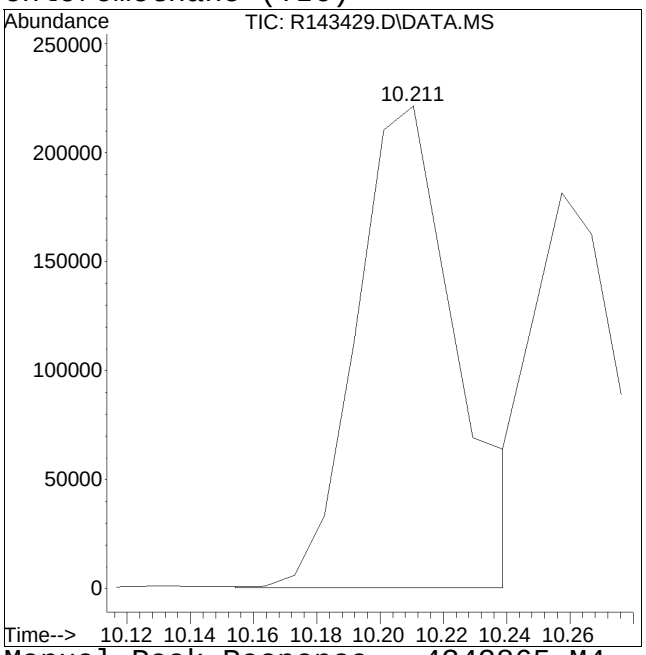
Original Peak Response = 0 Manual Peak Response = 168149 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #28: bromochloromethane (TIC)





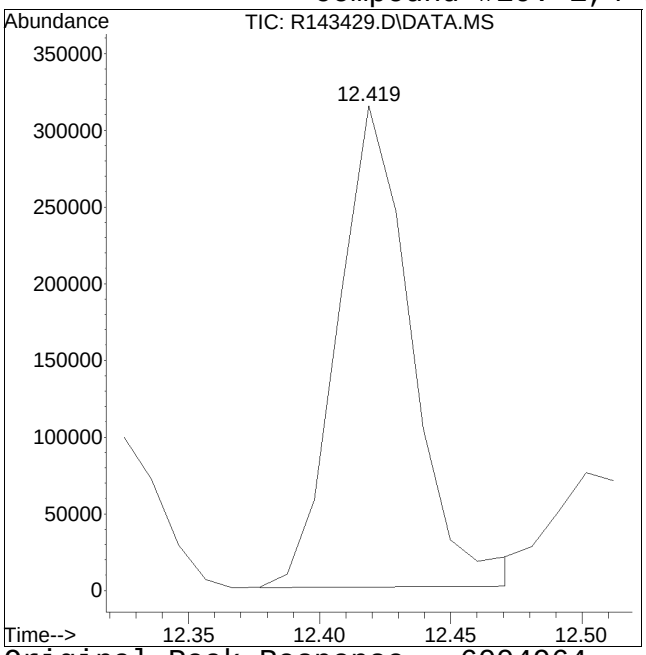
Original Peak Response = 4467592 Manual Peak Response = 4342865 M4
M4 = Poor automated baseline construction.

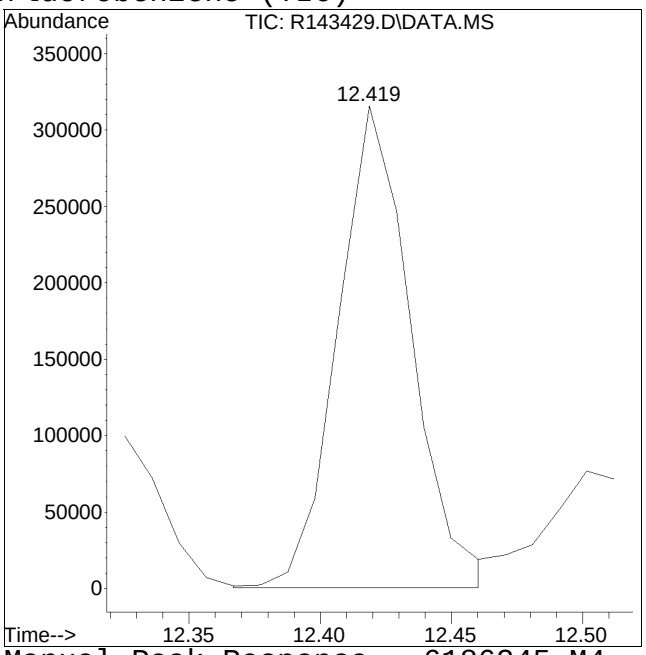
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 3:11 pm

Compound #29: 1,4-difluorobenzene (TIC)



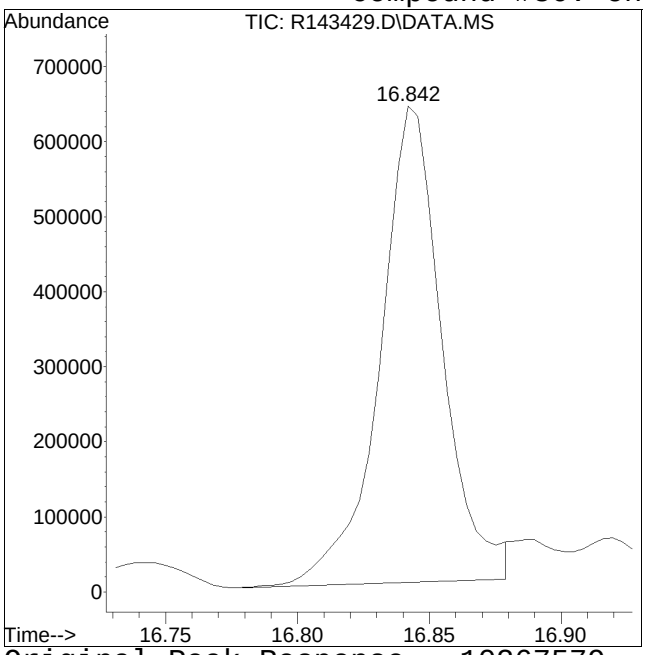


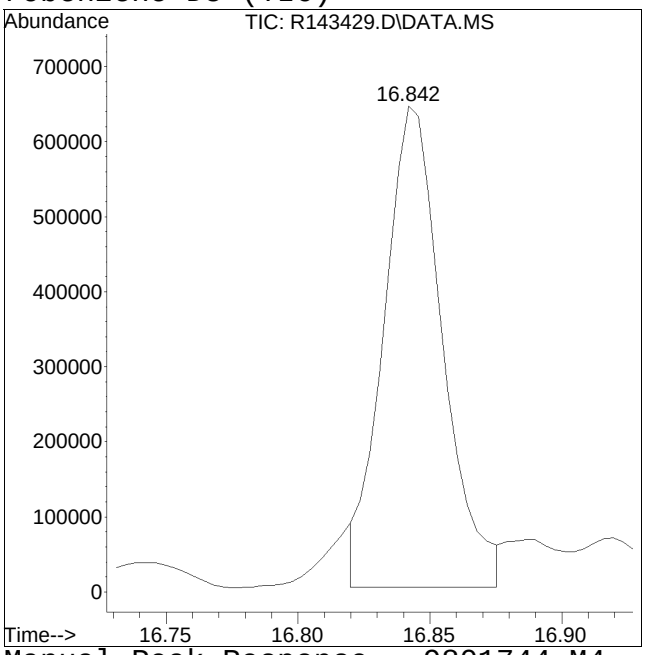
Original Peak Response = 6004964 Manual Peak Response = 6186245 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 3:11 pm

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 10267579 Manual Peak Response = 9801744 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 15:15:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:47:17 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	128	671018	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	86.67%	
7) 1,4-difluorobenzene	12.427	114	2892787	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	87.43%	
12) chlorobenzene-D5	16.845	54	568079	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	93.56%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4732539M4	10.424	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	104.24%	
29) 1,4-difluorobenzene (TIC)	12.426	TIC	6199879	9.682	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.82%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	8052168M4	9.763	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	97.63%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	6716794	41.838	ug/m3	
13) toluene	15.256		0	N.D.		
16) ethyl benzene	0.000		0	N.D.		
17) m+p-xylene	0.000		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	20.988	128	118093M4	1.152	ug/m3	
25) C9-C12 Aliphatics Tota	18.067	TIC	6631678	33.176	ug/m3	
26) C9-C10 Aromatics (120)	18.979	120	38600M5	1.172	ug/m3	
27) C9-C10 Aromatics (134)	18.865	134	67195M5	2.040	ug/m3	
27) C9-C10 Aromatics Total	0.000		105794	3.212	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 15:15:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:47:17 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

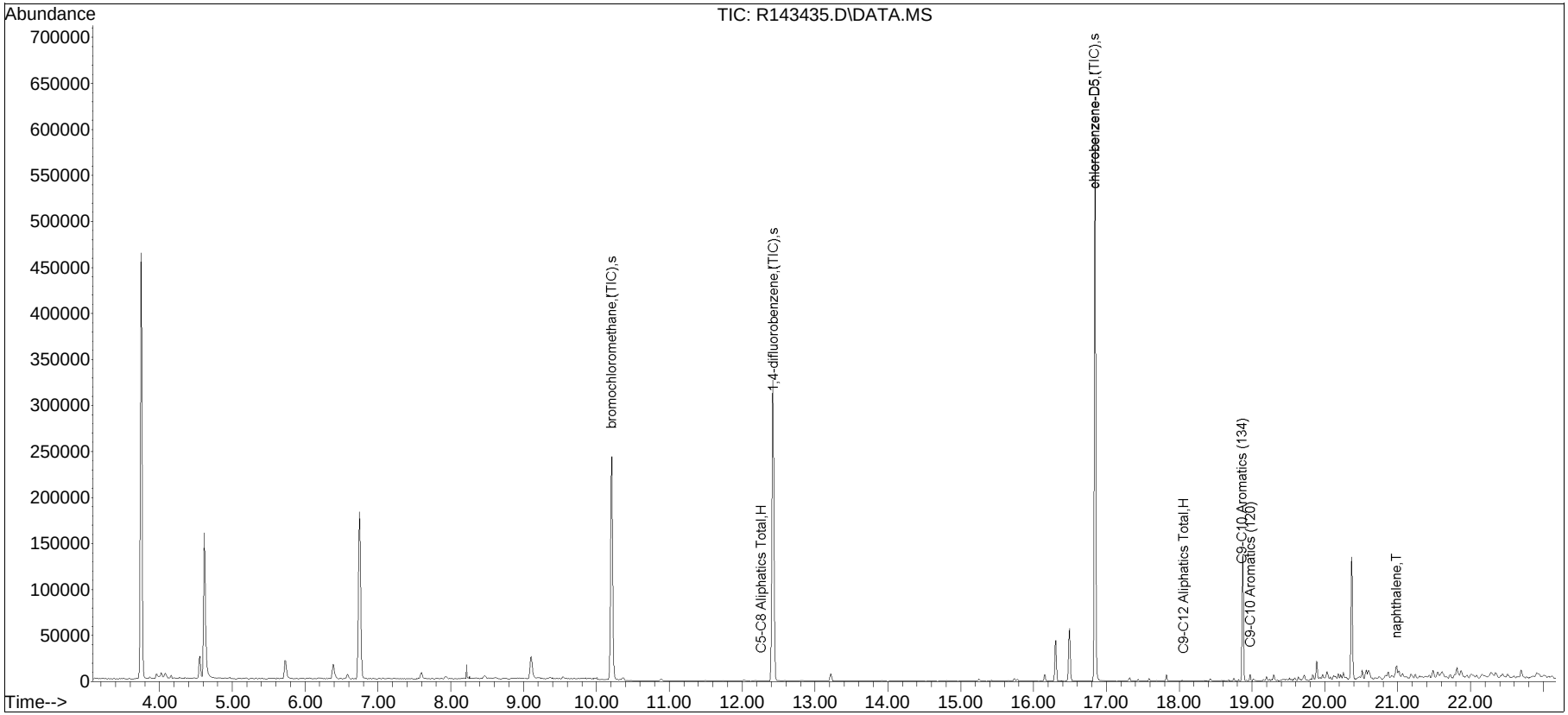
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

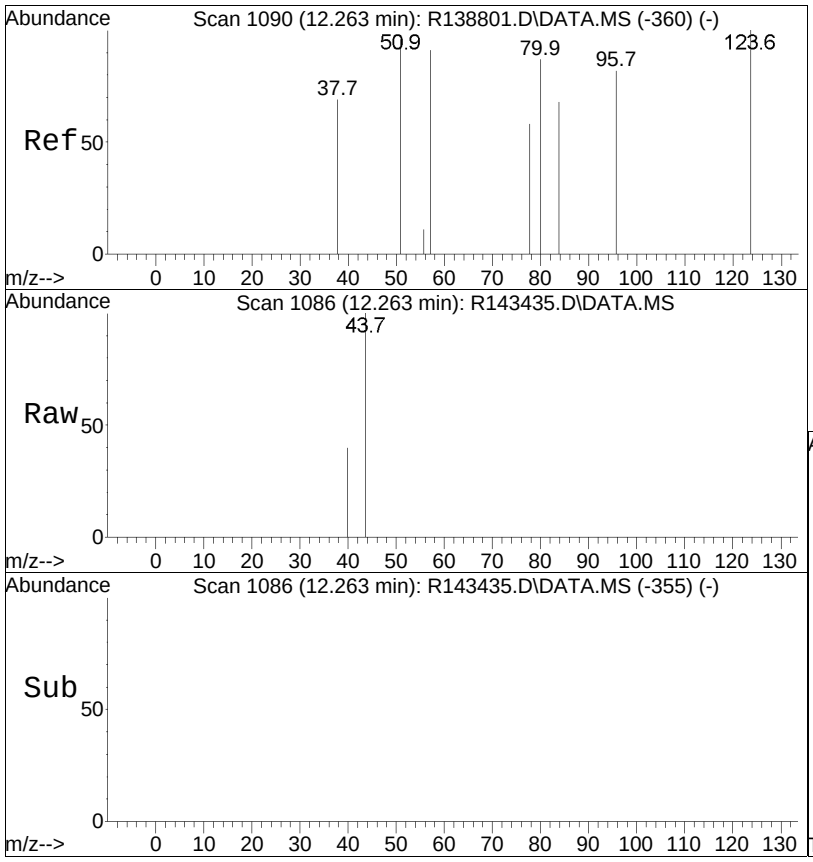
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

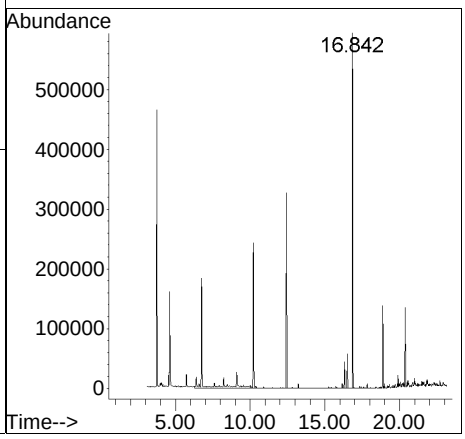
Quant Time: Aug 14 15:15:35 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:47:17 2015
Response via : Initial Calibration

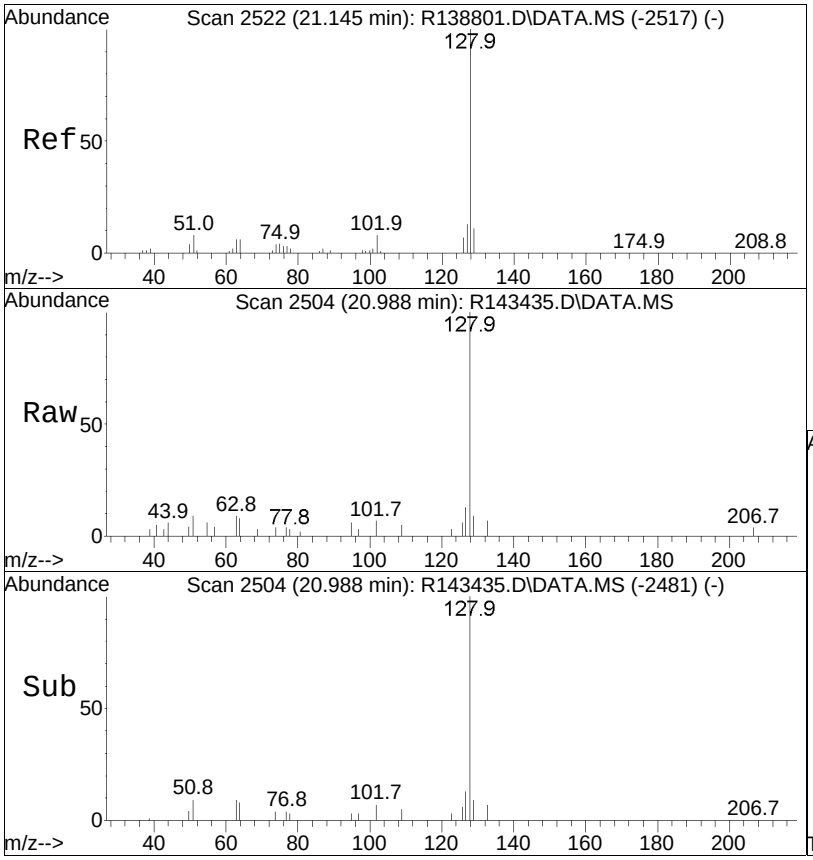




#11
C5-C8 Aliphatics Total
Concen: 42.10 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:TIC Resp: 6716794

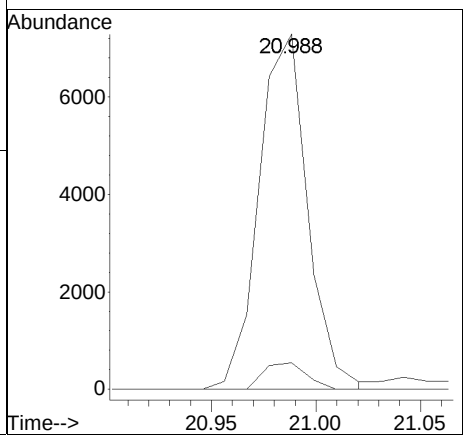


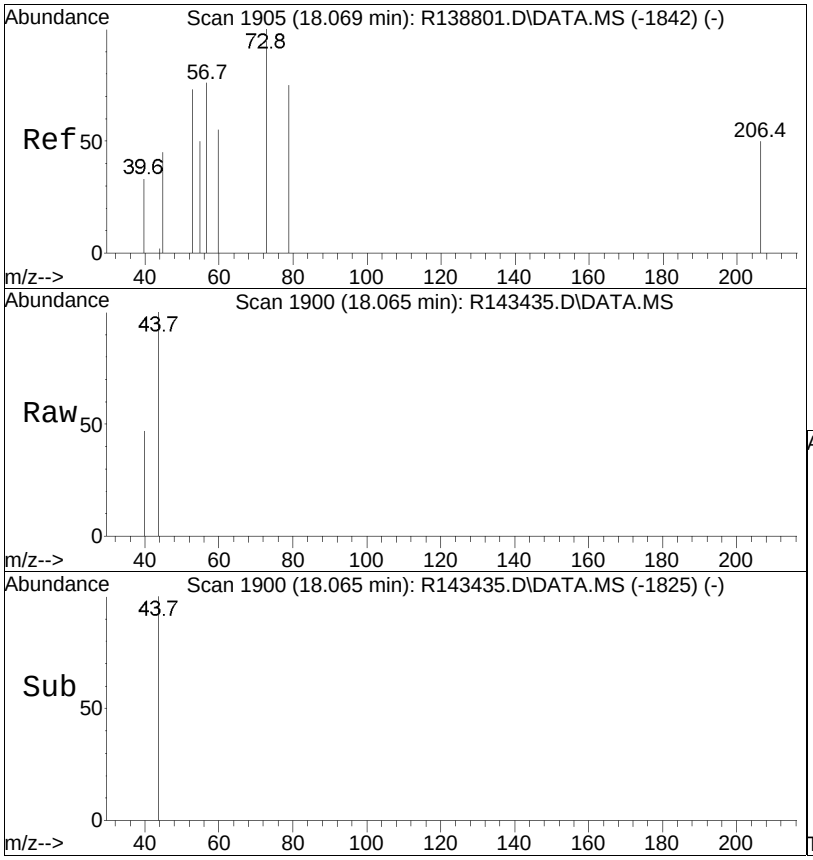


#23
naphthalene
Concen: 1.15 ug/m3 m
RT: 20.988 min Scan# 2504
Delta R.T. 0.001 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:128 Resp: 118093

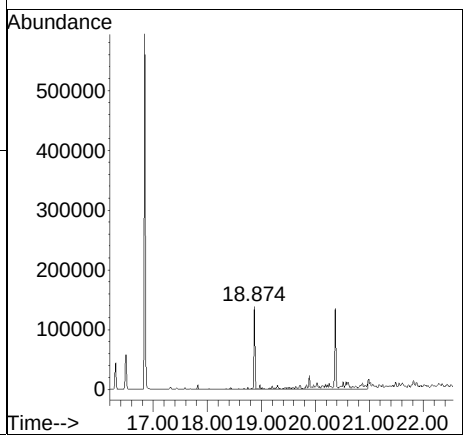
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

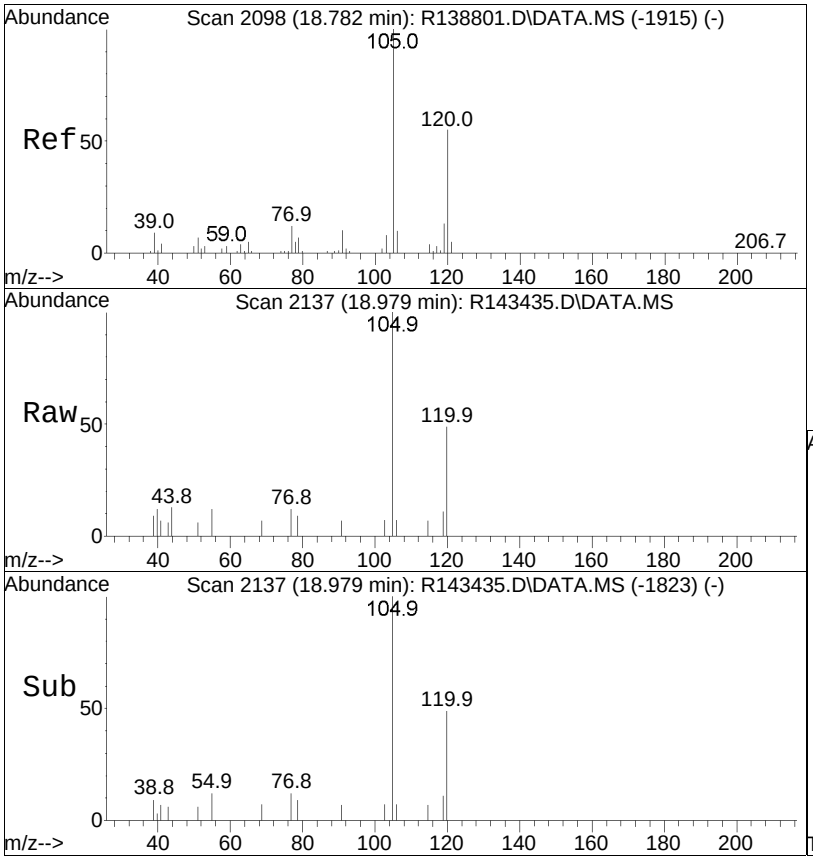




#25
C9-C12 Aliphatics Total
Concen: 36.39 ug/m3 m
RT: 18.067 min Scan# 1900
Delta R.T. 0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

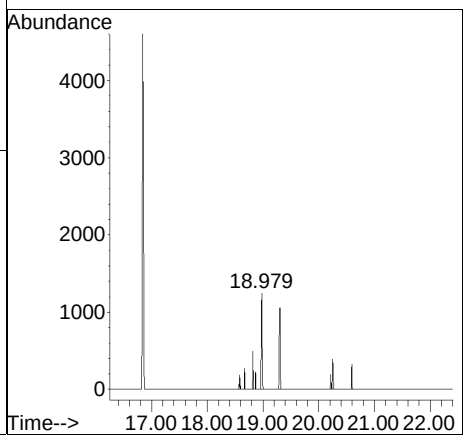
Tgt Ion:TIC Resp: 6631678

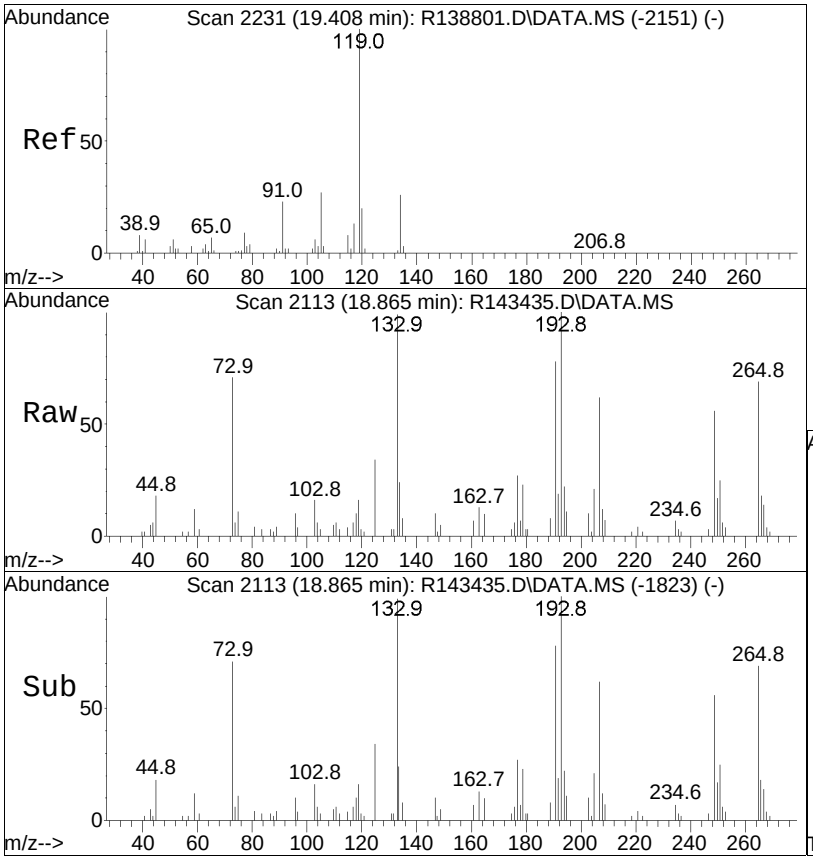




#26
C9-C10 Aromatics (120)
Concen: 1.17 ug/m3 m
RT: 18.979 min Scan# 2137
Delta R.T. -1.021 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

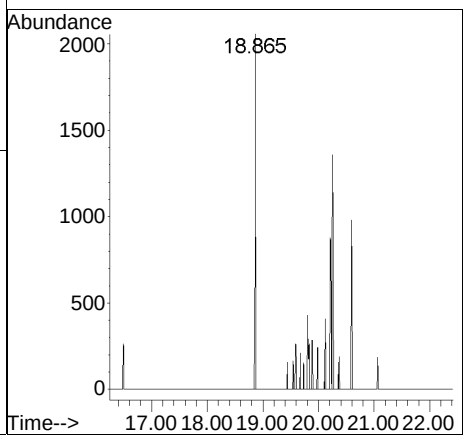
Tgt Ion:120 Resp: 38600





#27
C9-C10 Aromatics (134)
Concen: 2.04 ug/m3 m
RT: 18.865 min Scan# 2113
Delta R.T. -1.135 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

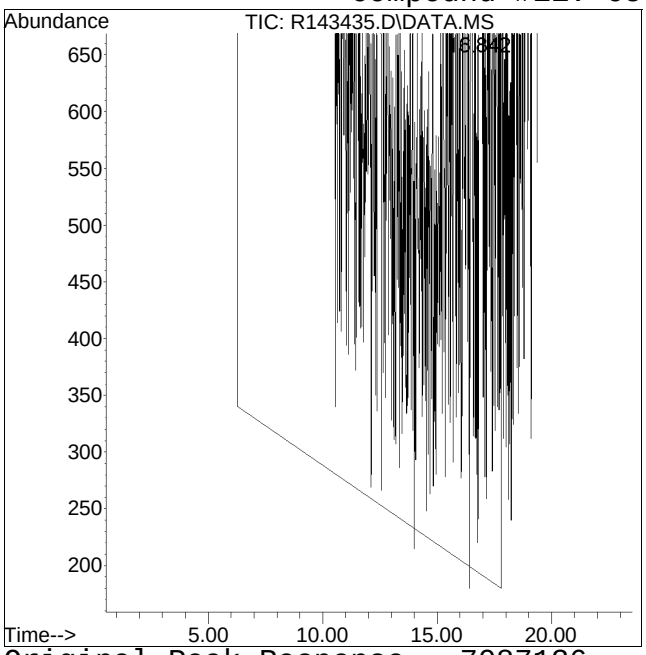
Tgt Ion:134 Resp: 67195



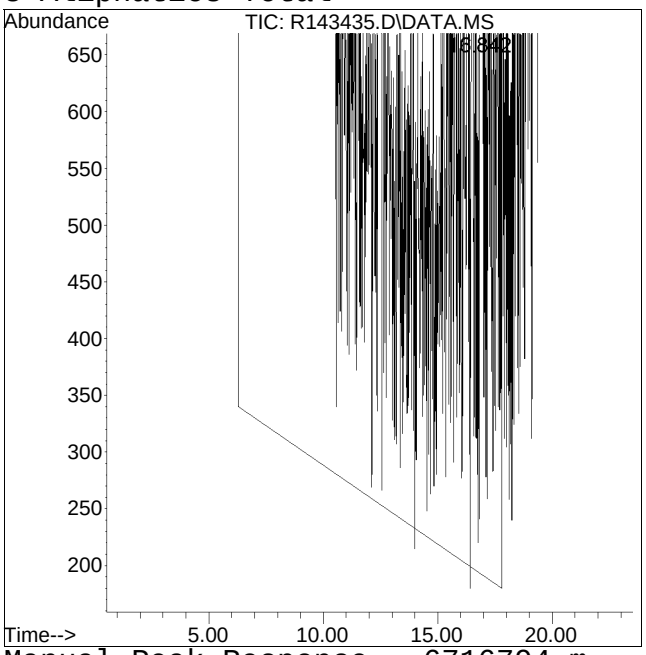
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143435.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/14/2015 10:19 am	Instrument	: Air Piano 1
Sample	: L1519114-01,3,250,250	Quant Date	: 8/14/2015 12:25 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 7087136

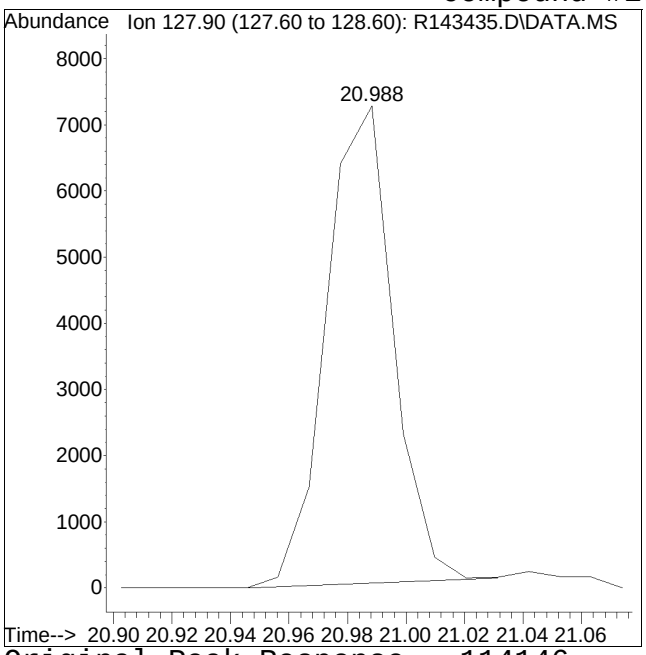


Manual Peak Response = 6716794 m

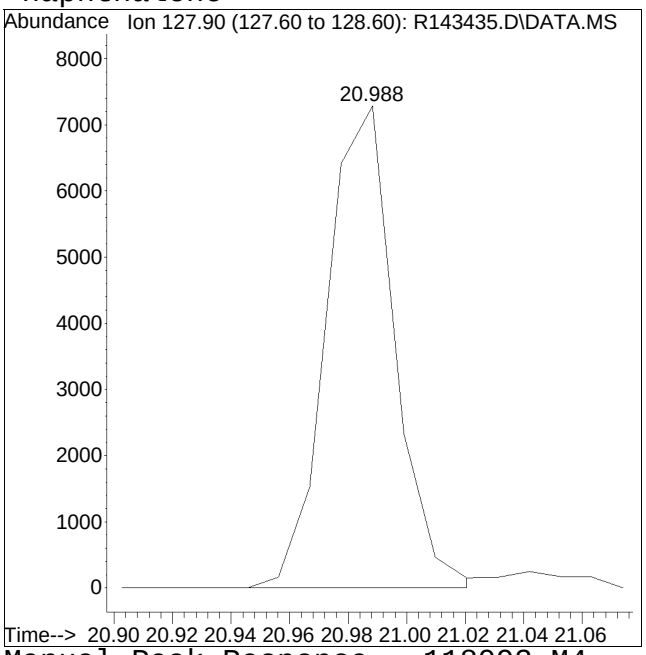
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #23: naphthalene



Original Peak Response = 114146



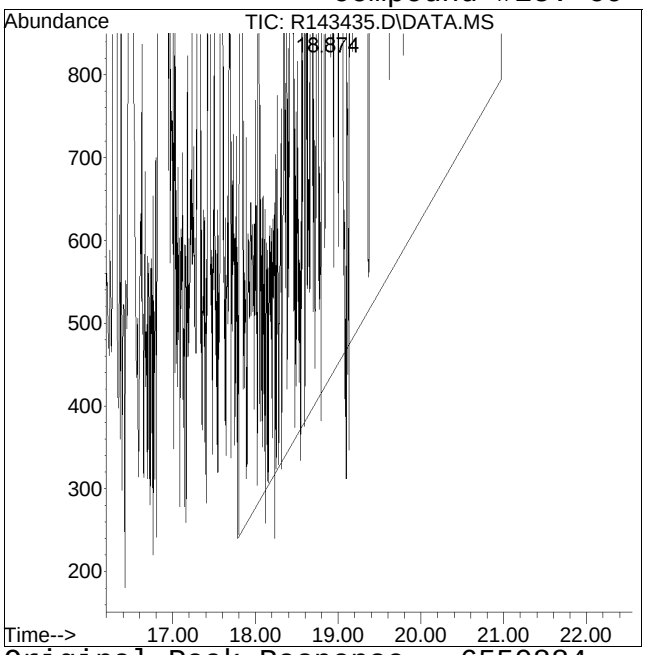
Manual Peak Response = 118093 M4

M4 = Poor automated baseline construction.

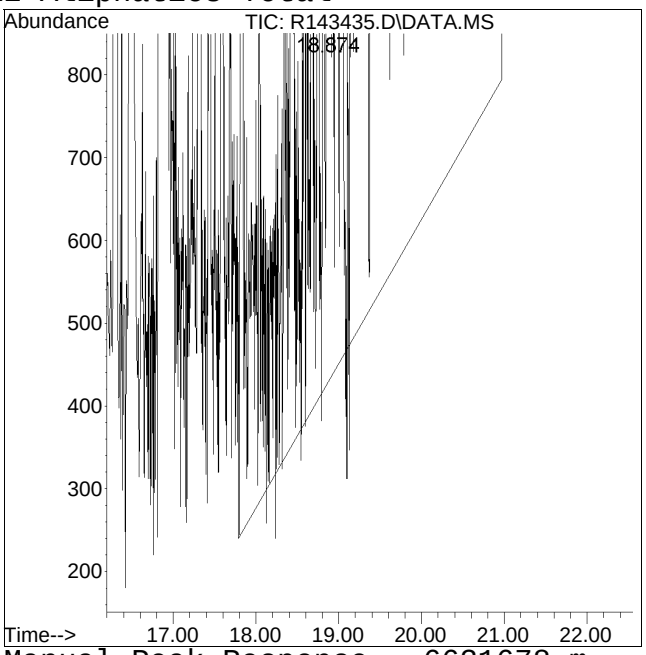
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 6550884

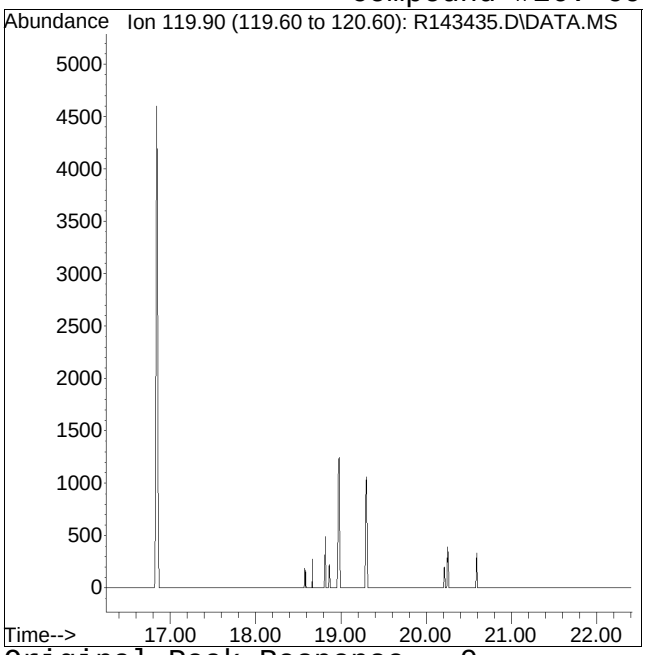


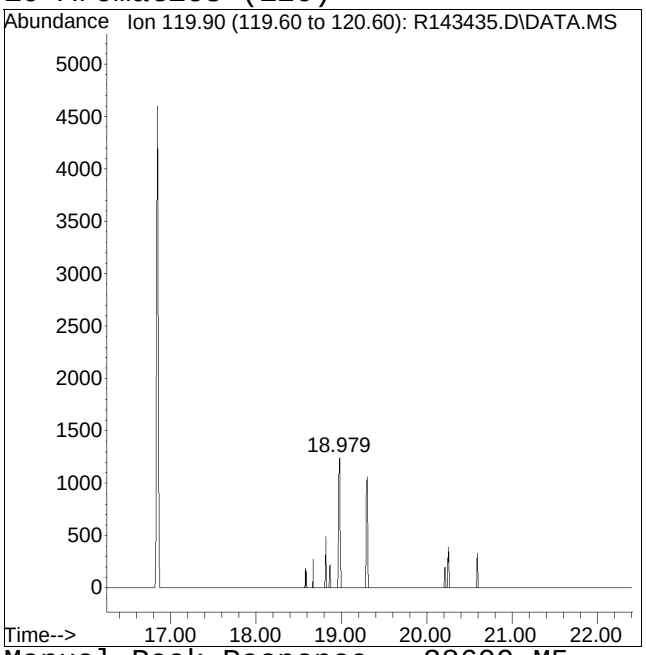
Manual Peak Response = 6631678 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #26: C9-C10 Aromatics (120)



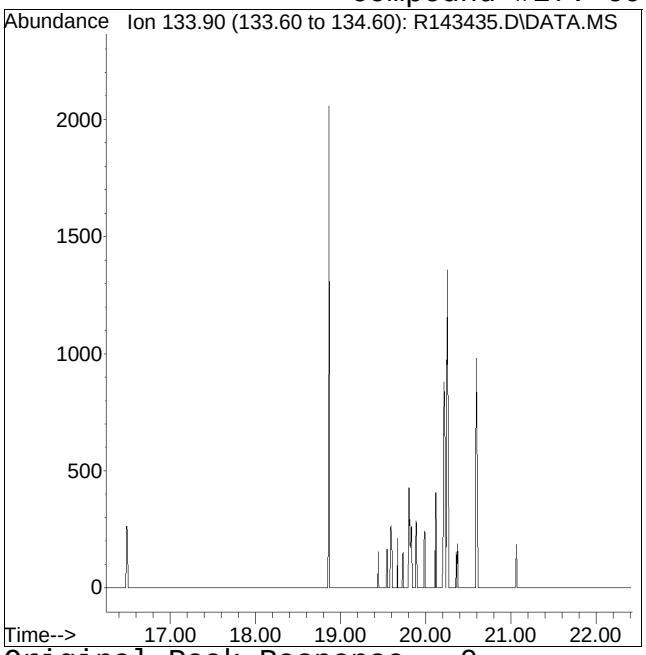


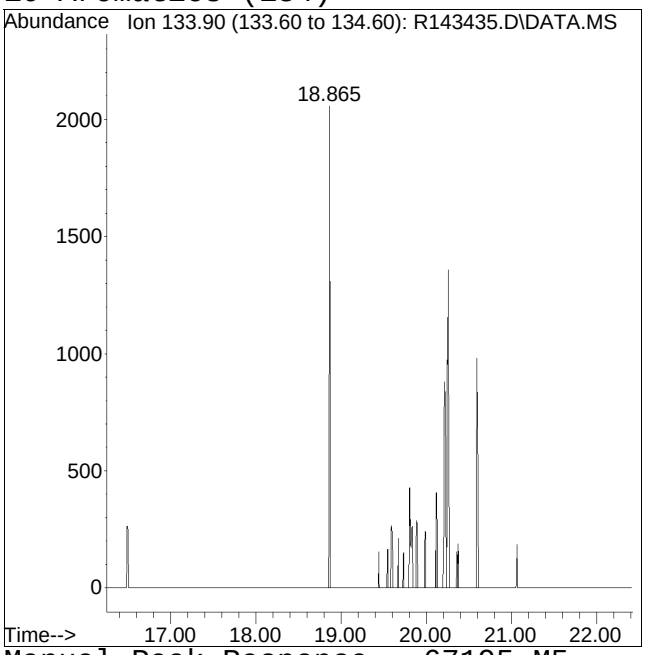
Original Peak Response = 0 Manual Peak Response = 38600 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #27: C9-C10 Aromatics (134)



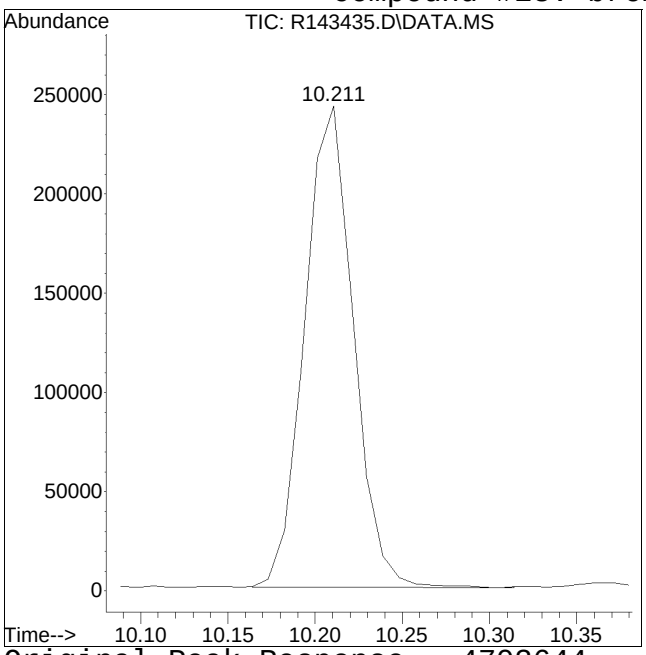


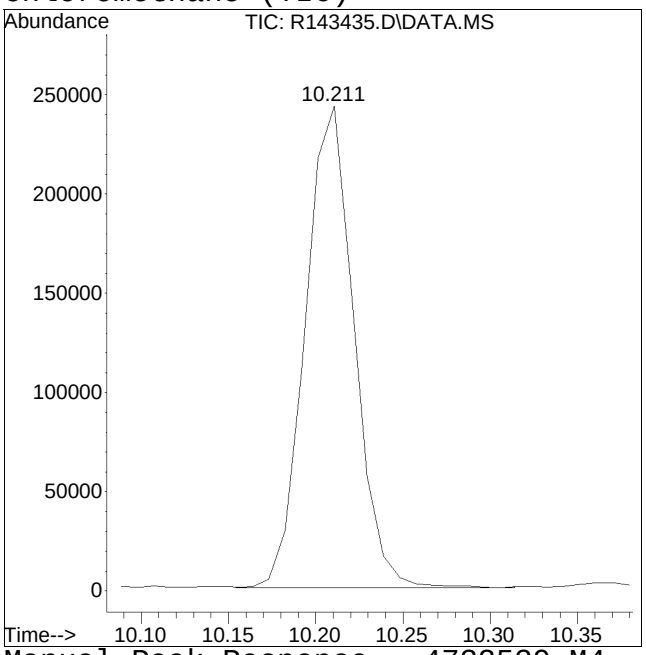
Original Peak Response = 0 Manual Peak Response = 67195 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #28: bromochloromethane (TIC)



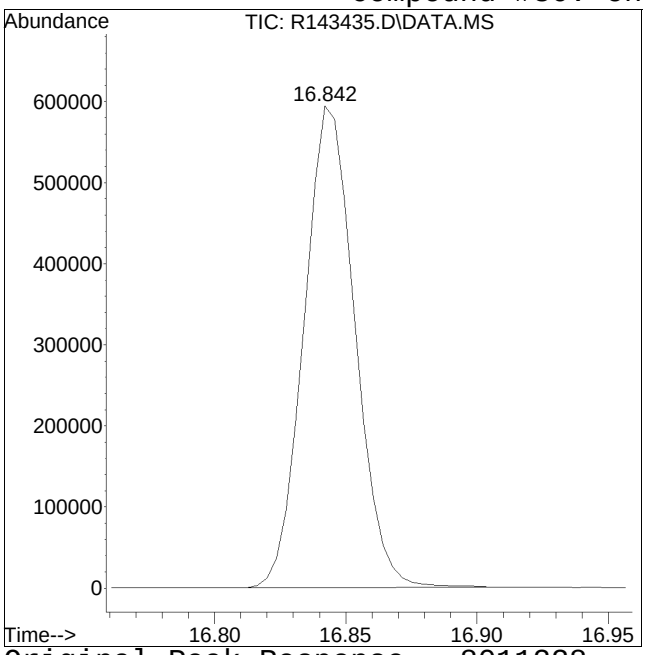


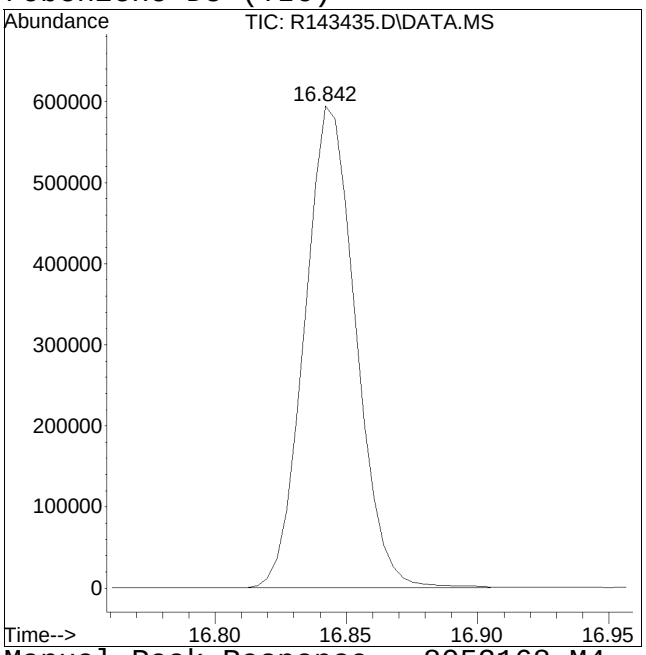
Original Peak Response = 4703644 Manual Peak Response = 4732539 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 8011228 Manual Peak Response = 8052168 M4
M4 = Poor automated baseline construction.

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811919-4,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 13 15:12:16 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

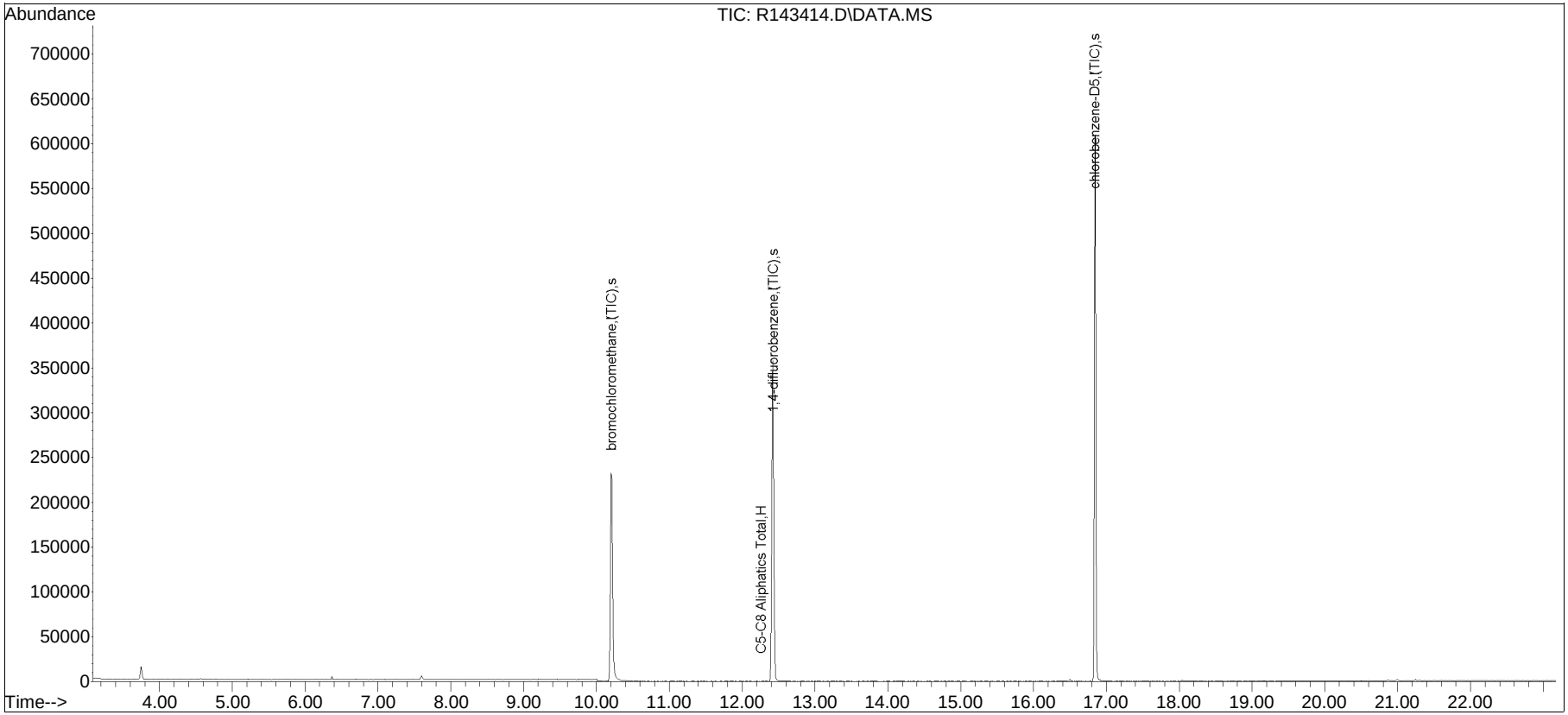
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.209	128	727003	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	93.90%	
7) 1,4-difluorobenzene	12.425	114	3160387	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	95.52%	
12) chlorobenzene-D5	16.845	54	574635	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	94.64%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.209	TIC	4921520	10.717	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	107.17%	
29) 1,4-difluorobenzene (TIC)	12.425	TIC	6647632	10.263	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	102.63%	
30) chlorobenzene-D5 (TIC)	16.846	TIC	8371527	10.035	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	100.35%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	124023	0.712	ug/m3	
13) toluene	0.000		0	N.D.		
16) ethyl benzene	0.000		0	N.D.		
17) m+p-xylene	0.000		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	21.003		0	N.D.		
25) C9-C12 Aliphatics Total	18.067		0	N.D. d		
27) C9-C10 Aromatics Total	0.000		0	N.D.		

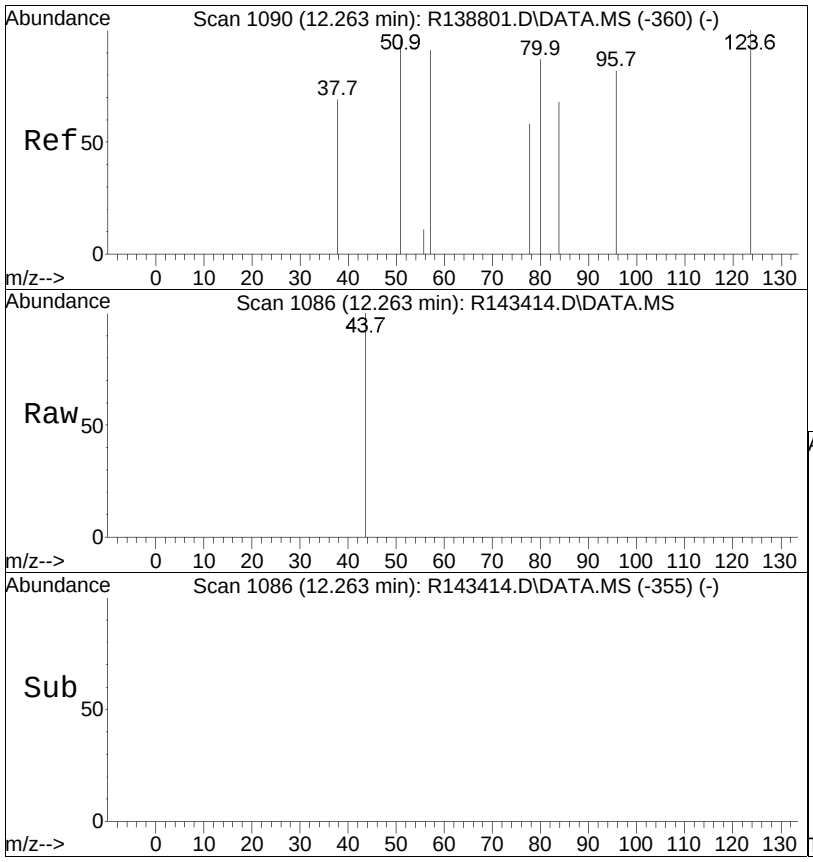
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811919-4,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 1 Sample Multiplier: 1

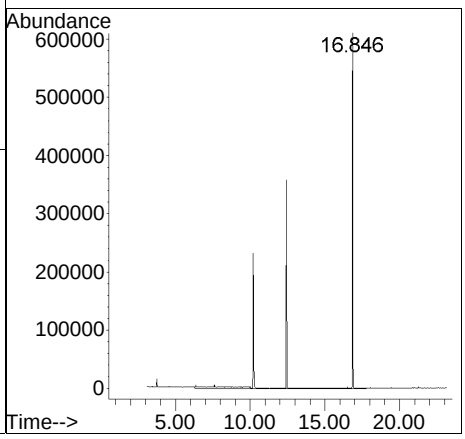
Quant Time: Aug 13 15:12:16 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration





#11
C5-C8 Aliphatics Total
Concen: 0.71 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143414.D
Acq: 13 Aug 2015 2:46 pm

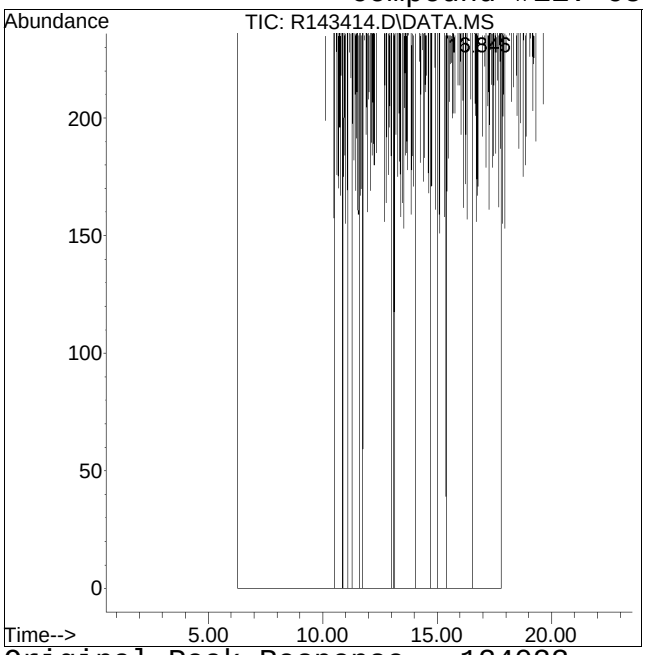
Tgt Ion:TIC Resp: 124023



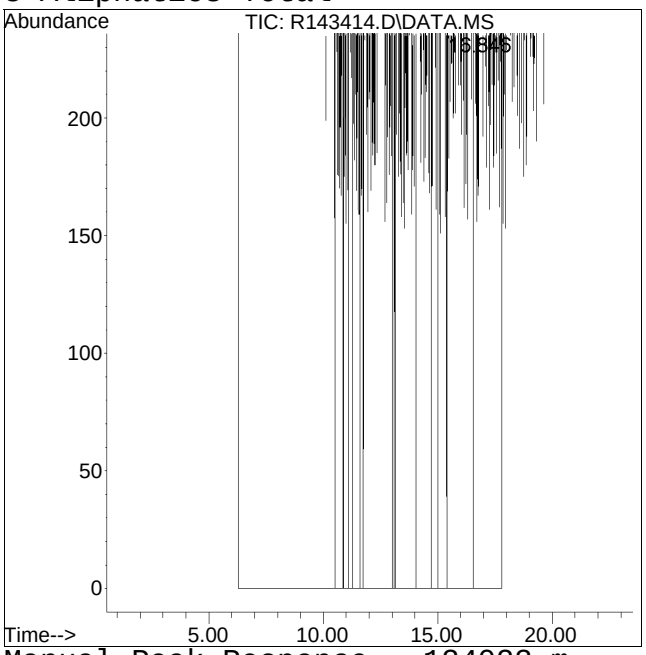
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143414.D	Operator	: AIRPIANO1:RY
Date Inj'd	: 8/13/2015 2:46 pm	Instrument	: Air Piano 1
Sample	: WG811919-4,3,250,250	Quant Date	: 8/13/2015 3:11 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 124023



Manual Peak Response = 124023 m

Batch Quality Control

LCS Raw Data

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811919-3,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:35:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	91	0.00
2	T	1,3-butadiene	22.100	23.222	-5.1	99	0.00
4	T	methyl tert butyl ether	36.000	35.560	1.2	93	0.00
7	I	1,4-difluorobenzene	10.000	10.000	0.0	87	0.00
9	T	benzene	31.900	31.224	2.1	88	0.00
11	H	C5-C8 Aliphatics Total	122.000	115.544	5.3	46	0.00
12	I	chlorobenzene-D5	10.000	10.000	0.0	85	0.00
13		toluene	37.700	38.046	-0.9	88	0.00
16	T	ethyl benzene	43.400	43.400	0.0	87	0.00
17	T	m+p-xylene	86.800	86.397	0.5	174	0.01
19	T	o-xylene	43.400	43.951	-1.3	89	0.00
23	T	naphthalene	52.420	57.507	-9.7	90	-0.01
25	H	C9-C12 Aliphatics Total	174.000	174.321	-0.2	39	0.00
27		C9-C10 Aromatics Total	465.000	402.190	13.5	137	-0.72#
28	s	bromochloromethane (TIC)	10.000	11.062	-10.6	94	0.00
29	s	1,4-difluorobenzene (TIC)	10.000	10.046	-0.5	86	0.00
30	s	chlorobenzene-D5 (TIC)	10.000	10.359	-3.6	89	0.00
31	s	1,2-dichloroethane-D4 (TIC)	10.000	10.192	-1.9	87	0.00
32	s	toluene-D8 (TIC)	20.000	9.474	52.6#	40	0.00
33	s	bromofluorobenzene (TIC)	10.000	10.071	-0.7	86	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811919-3,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:35:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

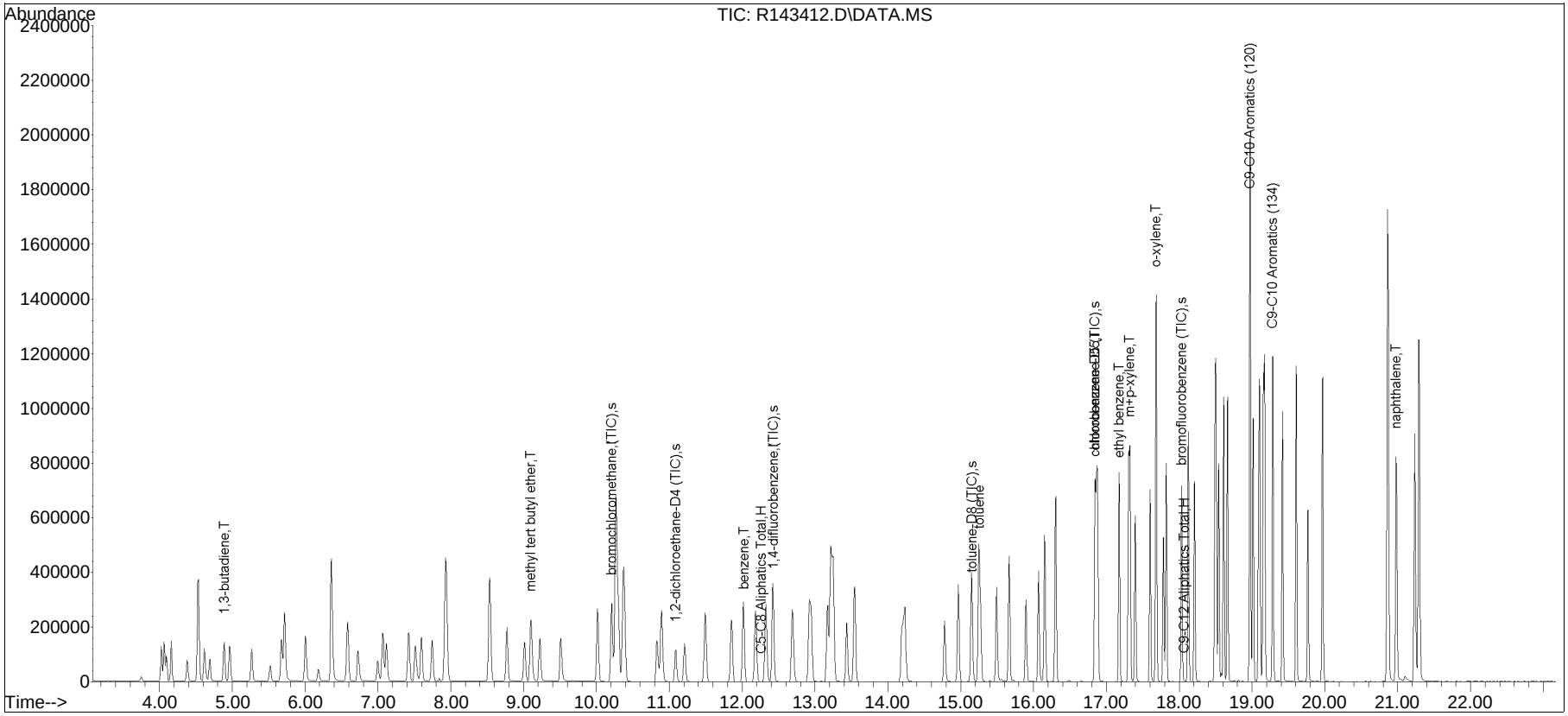
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.212	128	778085	10.000 ug/m3	0.00
Standard Area = 774218			Recovery	= 100.50%	
7) 1,4-difluorobenzene	12.426	114	3255249	10.000 ug/m3	0.00
Standard Area = 3308768			Recovery	= 98.38%	
12) chlorobenzene-D5	16.845	54	606044	10.000 ug/m3	# 0.00
Standard Area = 607162			Recovery	= 99.82%	
System Monitoring Compounds					
28) bromochloromethane (TIC)	10.211	TIC	5357615M4	11.062 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 110.62%	
29) 1,4-difluorobenzene (TIC)	12.426	TIC	6862801	10.046 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 100.46%	
30) chlorobenzene-D5 (TIC)	16.849	TIC	9113869	10.359 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 103.59%	
31) 1,2-dichloroethane-D4 ...	11.090	TIC	2314536	10.192 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 101.92%	
32) toluene-D8 (TIC)	15.153	TIC	6858009	9.474 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 94.74%	
33) bromofluorobenzene (TIC)	18.034	TIC	8621734	10.071 ug/m3	0.00
Spiked Amount 10.000			Recovery	= 100.71%	
Target Compounds					Qvalue
2) 1,3-butadiene	4.892	54	618415	23.222 ug/m3	98
4) methyl tert butyl ether	9.103	73	2163621	35.560 ug/m3	99
9) benzene	12.021	78	2511735	31.224 ug/m3	99
11) C5-C8 Aliphatics Total	12.260	TIC	20742029m	115.544 ug/m3	
13) toluene	15.253	91	3366178	38.046 ug/m3	100
16) ethyl benzene	17.177	91	4326921	43.400 ug/m3	99
17) m+p-xylene	17.322	91	6739701M4	86.397 ug/m3	
19) o-xylene	17.684	91	3519526M4	43.951 ug/m3	
23) naphthalene	20.977	128	6288745M4	57.507 ug/m3	
25) C9-C12 Aliphatics Total	18.067	TIC	33893027m	174.321 ug/m3	
26) C9-C10 Aromatics (120)	18.974	120	9430367M5	268.416 ug/m3	
27) C9-C10 Aromatics (134)	19.283	134	4699959M5	133.775 ug/m3	
27) C9-C10 Aromatics Total	0.000		14130326	402.190 ug/m3	

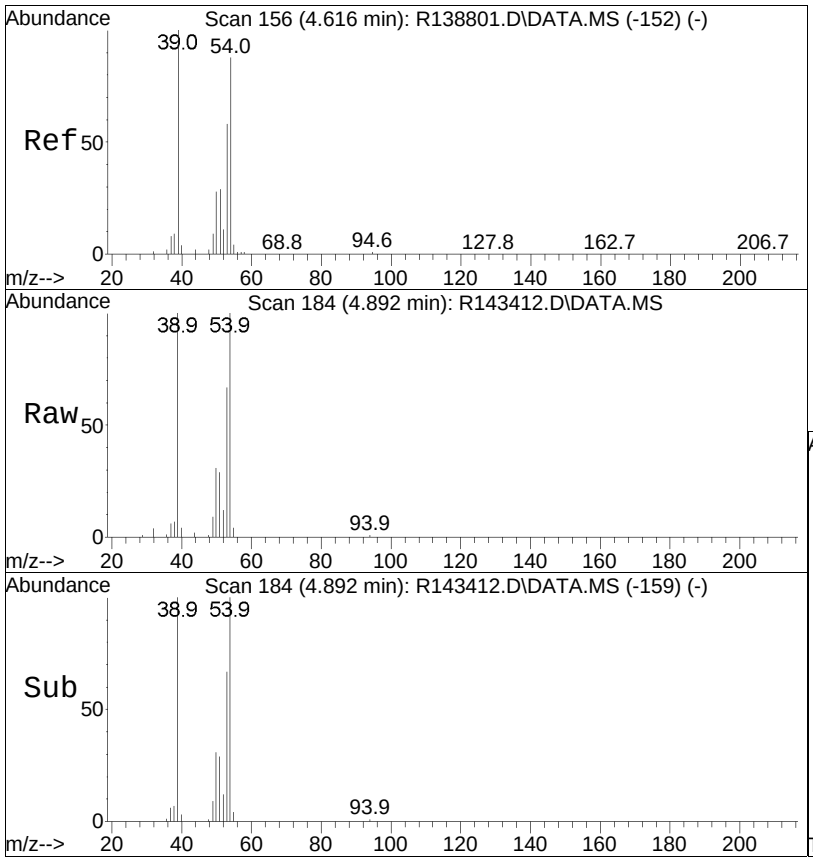
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811919-3,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:35:38 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

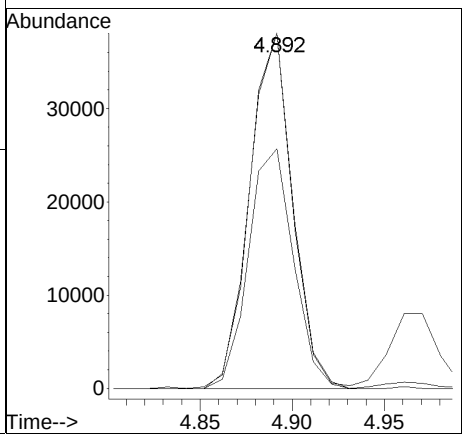


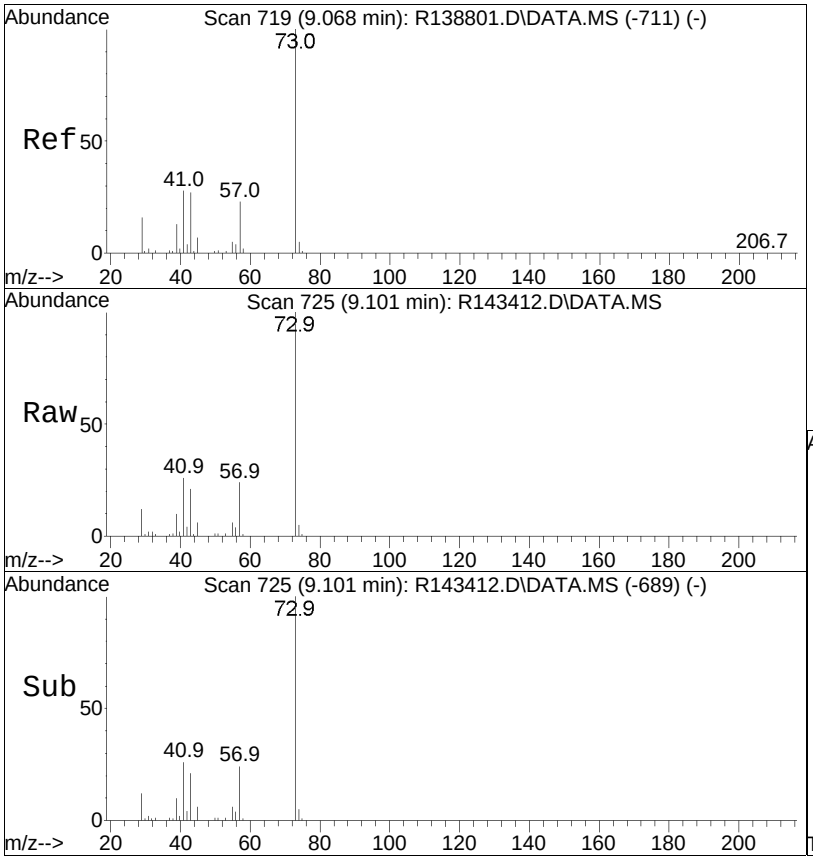


#2
1,3-butadiene
Concen: 23.22 ug/m3
RT: 4.892 min Scan# 184
Delta R.T. 0.001 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 54 Resp: 618415

Ion	Ratio	Lower	Upper
54	100		
53	70.4	56.8	85.2
39	98.0	80.0	120.0

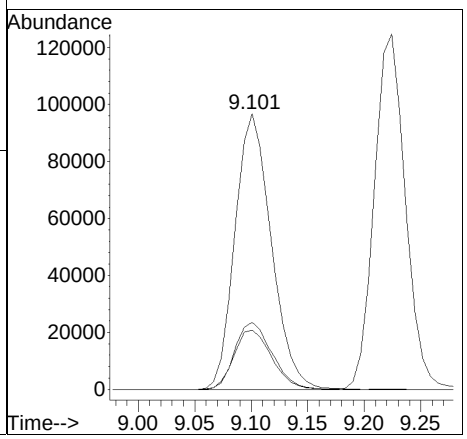


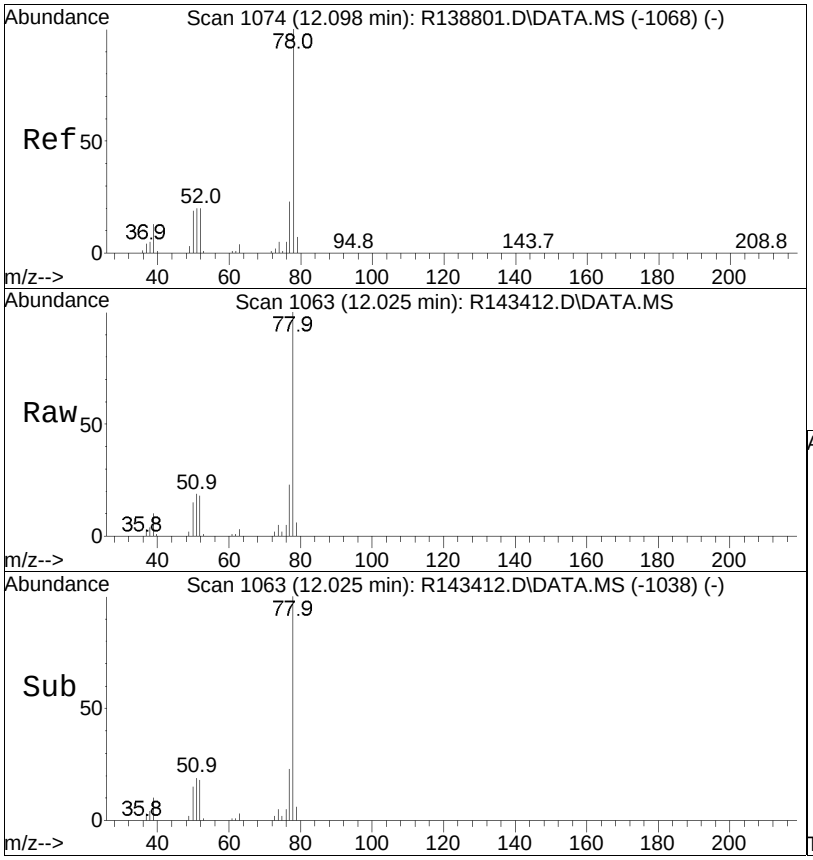


#4
methyl tert butyl ether
Concen: 35.56 ug/m3
RT: 9.103 min Scan# 725
Delta R.T. -0.003 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 73 Resp: 2163621

Ion	Ratio	Lower	Upper
73	100		
57	25.0	20.6	31.0
43	22.1	18.1	27.1

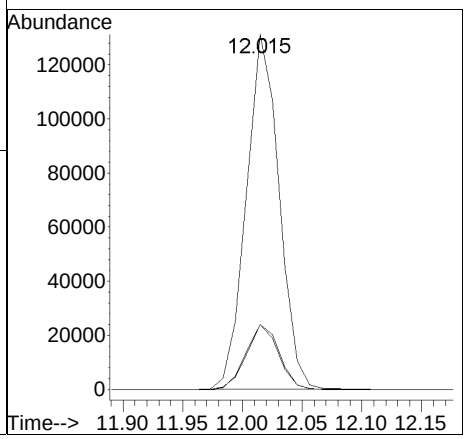


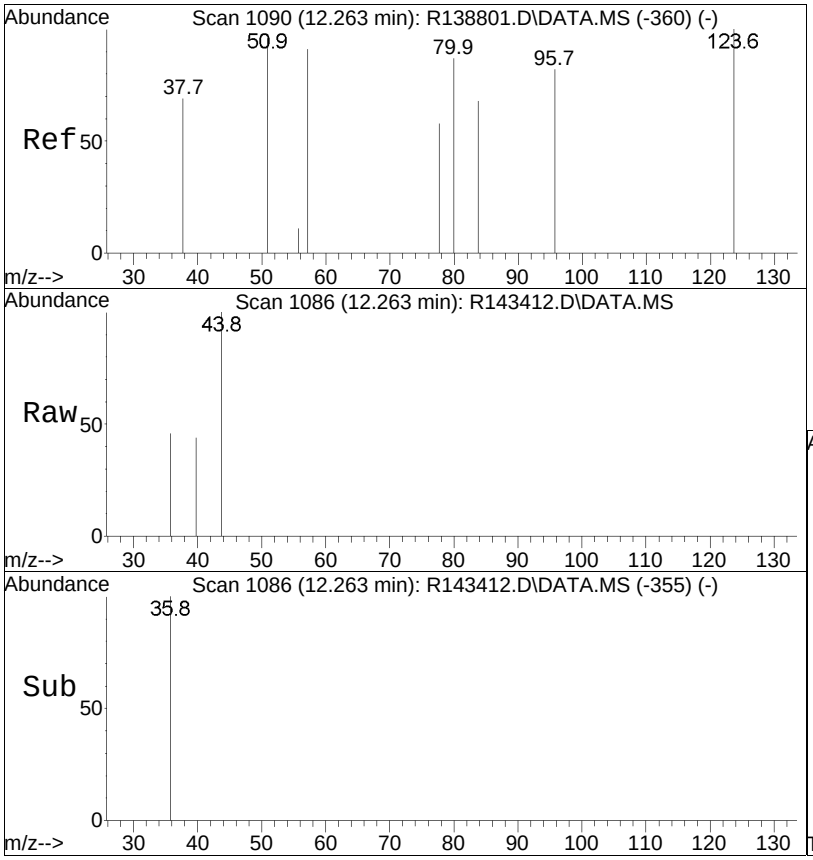


#9
benzene
Concen: 31.22 ug/m3
RT: 12.021 min Scan# 1063
Delta R.T. 0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 78 Resp: 2511735

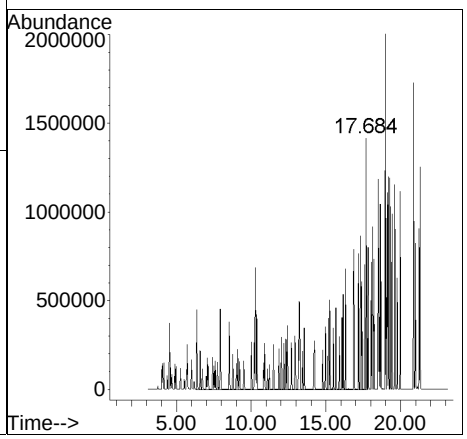
Ion	Ratio	Lower	Upper
78	100		
52	18.1	15.0	22.4
51	18.3	14.2	21.4

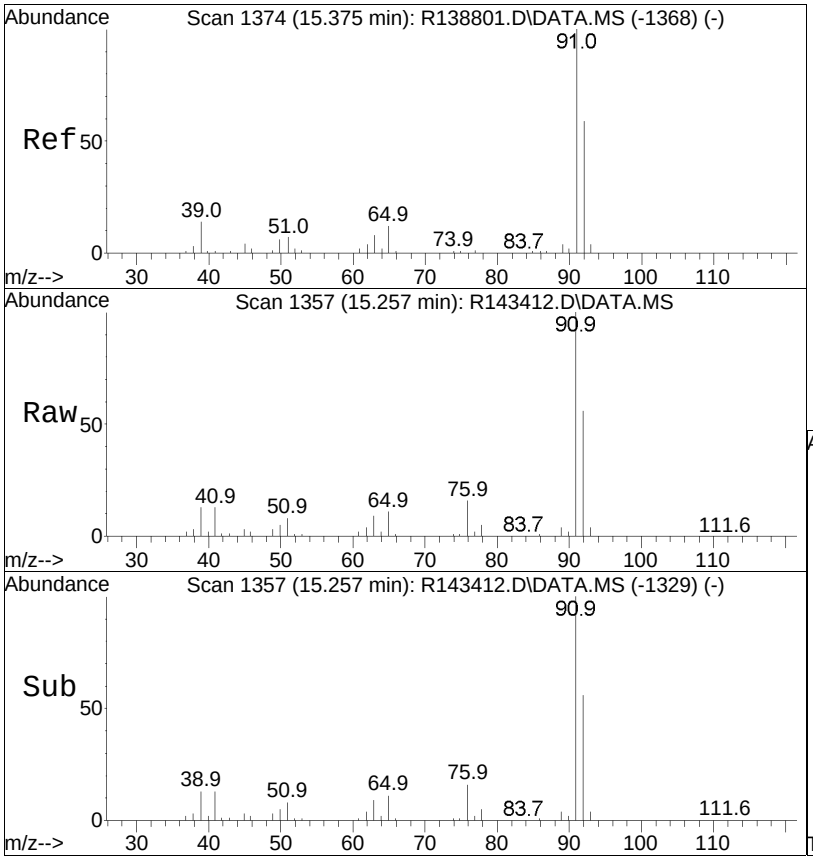




#11
C5-C8 Aliphatics Total
Concen: 115.54 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:TIC Resp:20742029

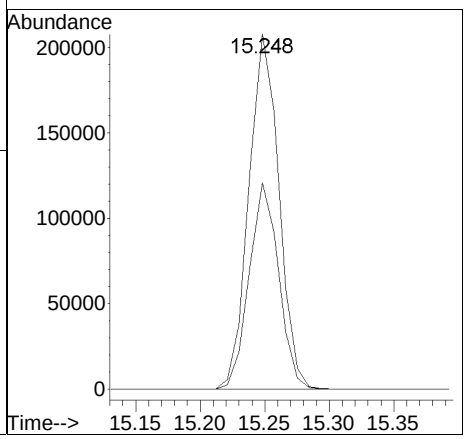


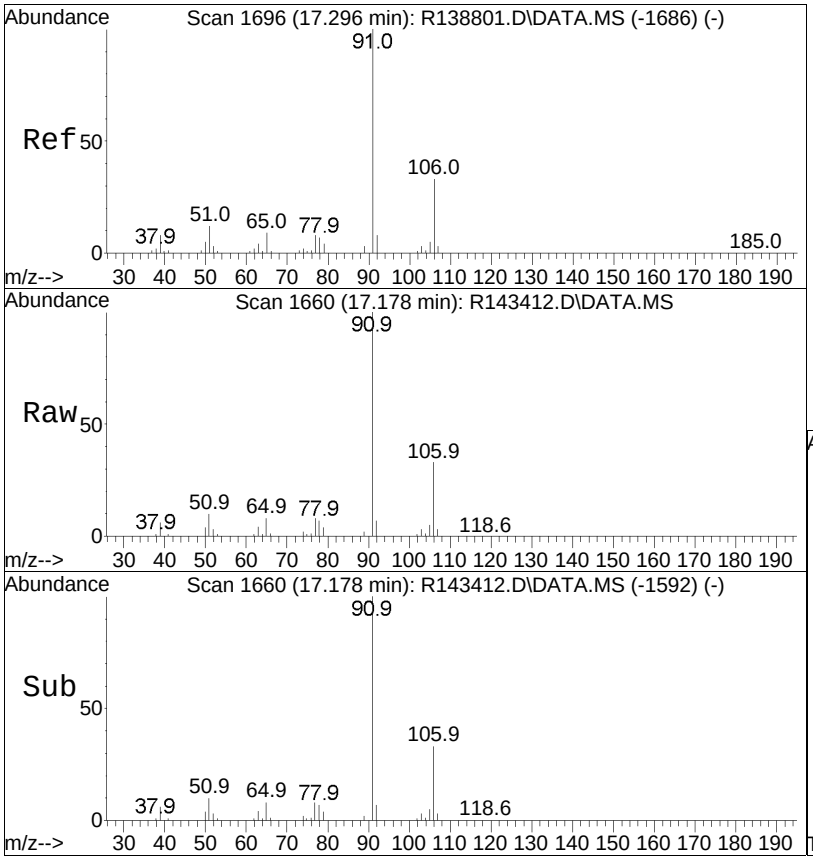


#13
toluene
Concen: 38.05 ug/m3
RT: 15.253 min Scan# 1357
Delta R.T. 0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 3366178

Ion	Ratio	Lower	Upper
91	100		
92	57.2	46.0	69.0

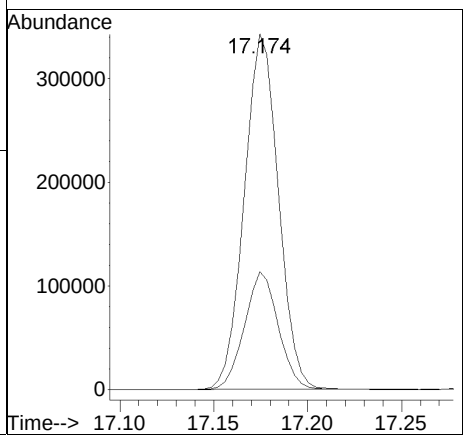


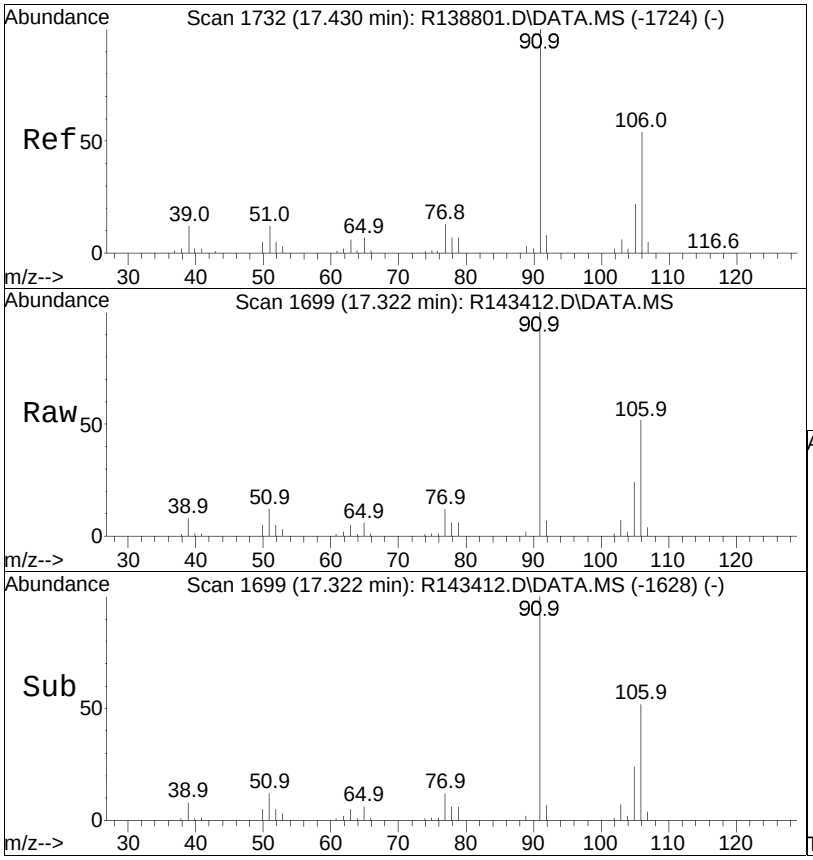


#16
ethyl benzene
Concen: 43.40 ug/m3
RT: 17.177 min Scan# 1660
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 4326921

Ion	Ratio	Lower	Upper
91	100		
106	32.7	25.8	38.6

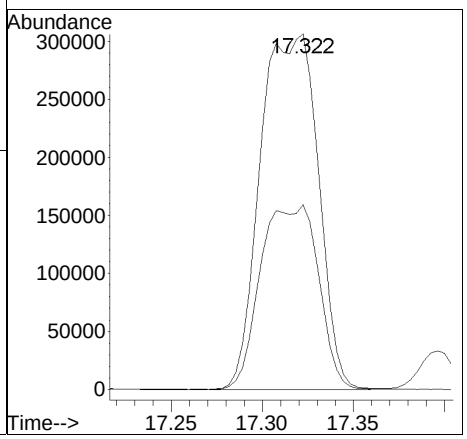


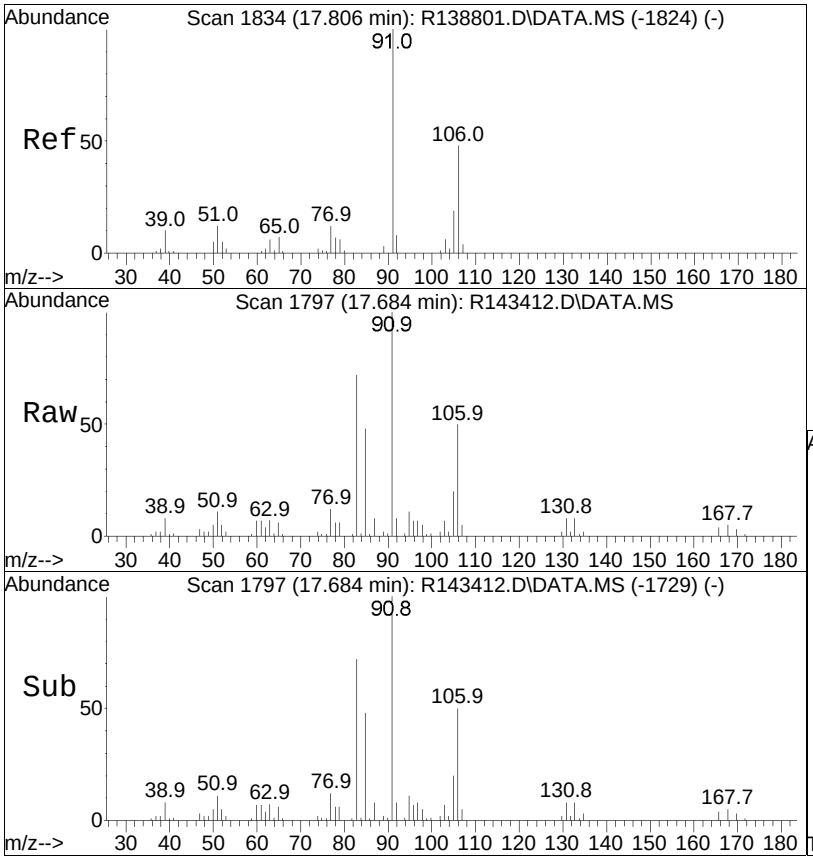


#17
m+p-xylene
Concen: 86.40 ug/m3 m
RT: 17.322 min Scan# 1699
Delta R.T. 0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 6739701

Ion	Ratio	Lower	Upper
91	100		
106	0.0	20.5	30.7#

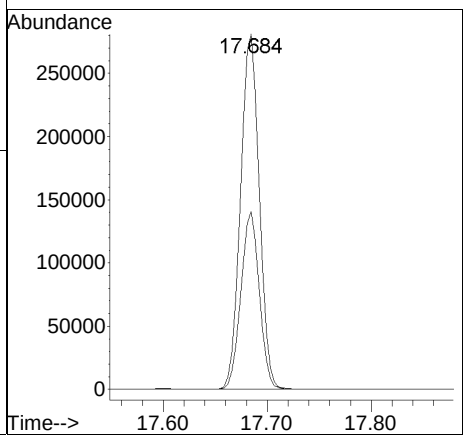


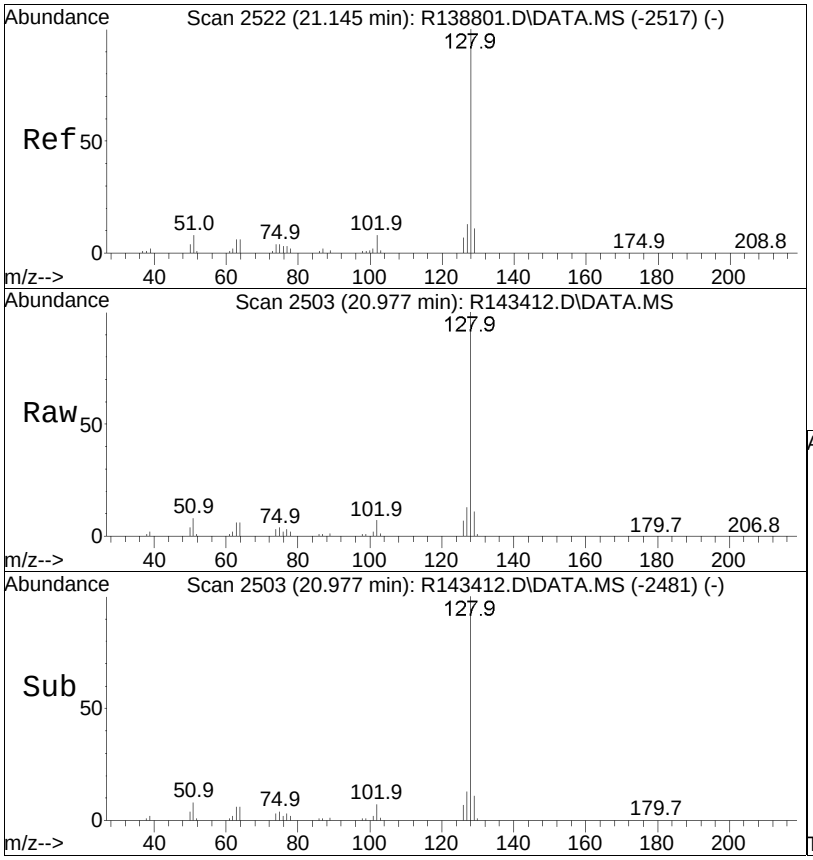


#19
o-xylene
Concen: 43.95 ug/m3 m
RT: 17.684 min Scan# 1797
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 3519526

Ion	Ratio	Lower	Upper
91	100		
106	49.1	39.2	58.8

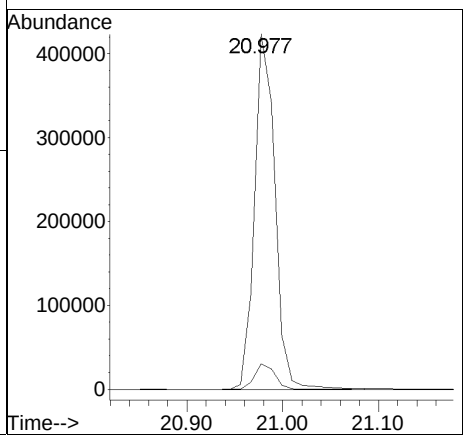


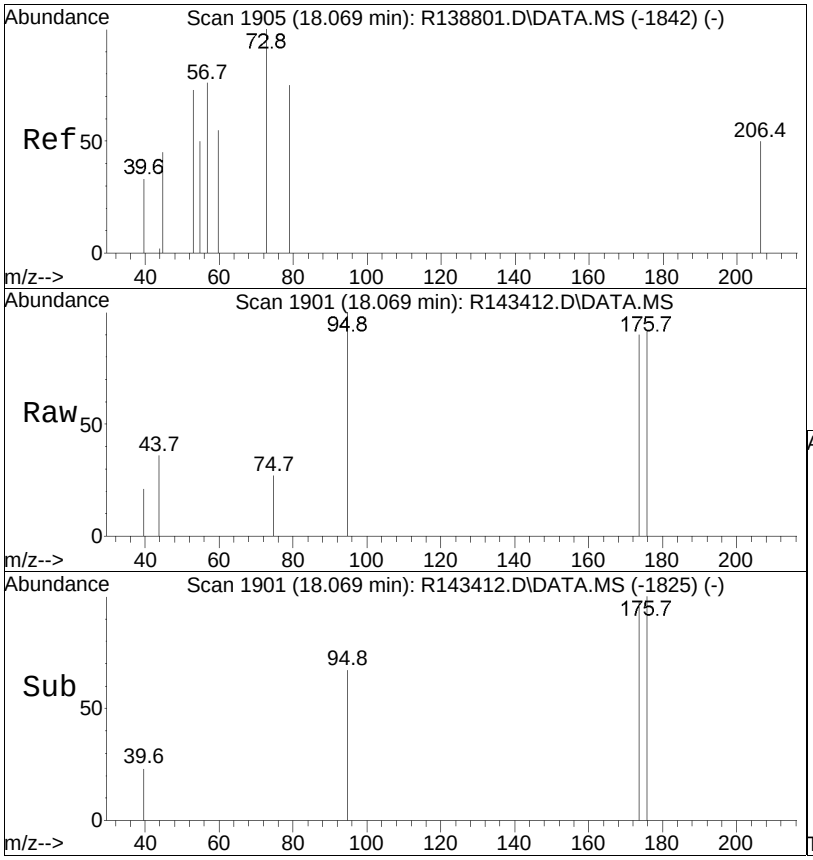


#23
naphthalene
Concen: 57.51 ug/m3 m
RT: 20.977 min Scan# 2503
Delta R.T. -0.010 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:128 Resp: 6288745

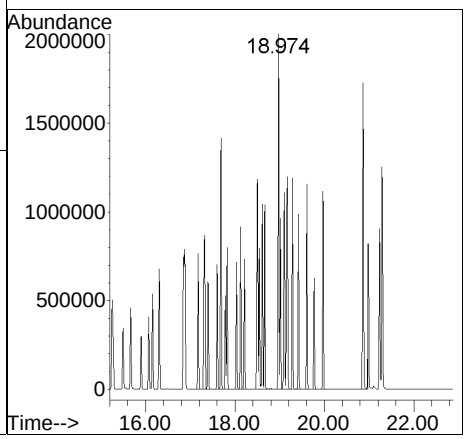
Ion	Ratio	Lower	Upper
128	100		
102	7.3	5.9	8.9

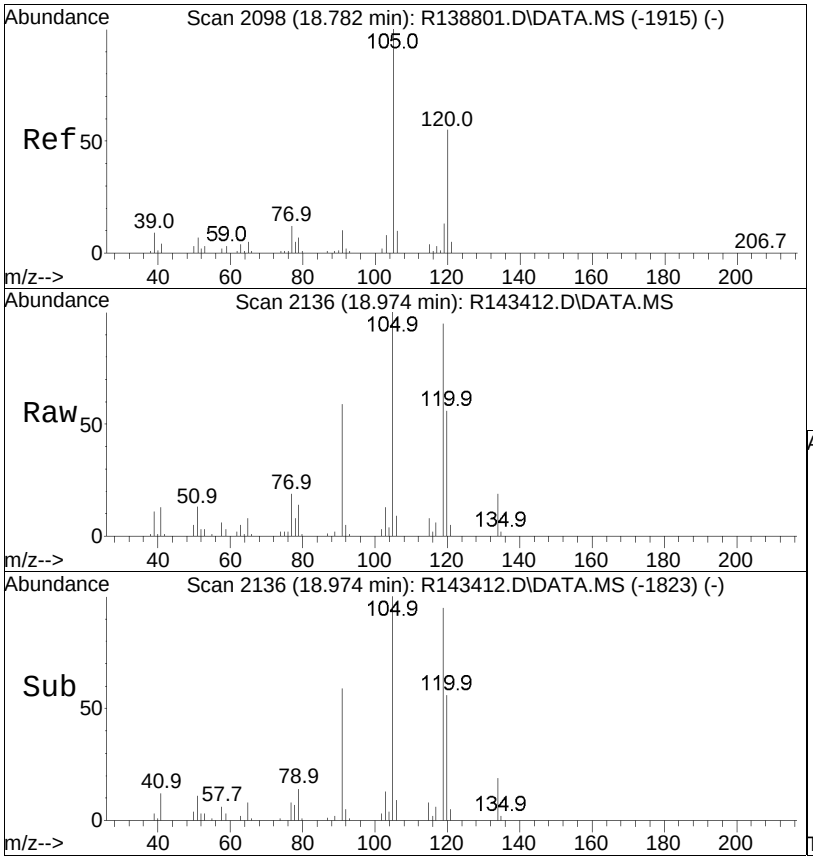




#25
C9-C12 Aliphatics Total
Concen: 174.32 ug/m3 m
RT: 18.067 min Scan# 1901
Delta R.T. 0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

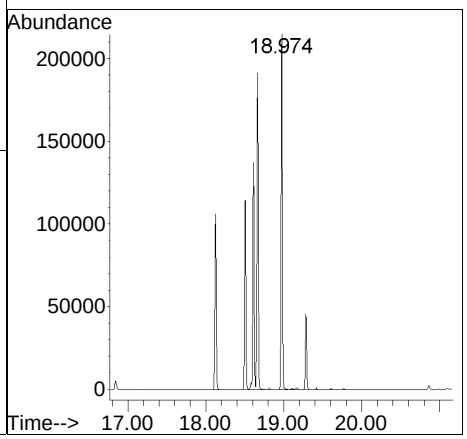
Tgt Ion:TIC Resp:33893027

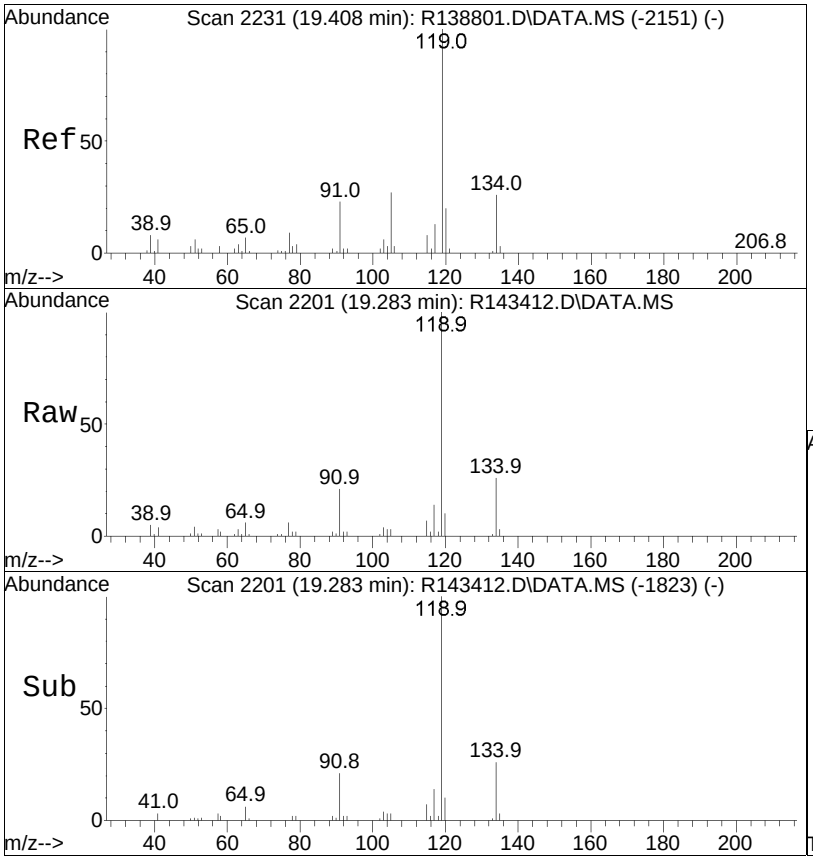




#26
C9-C10 Aromatics (120)
Concen: 268.42 ug/m3 m
RT: 18.974 min Scan# 2136
Delta R.T. -1.026 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

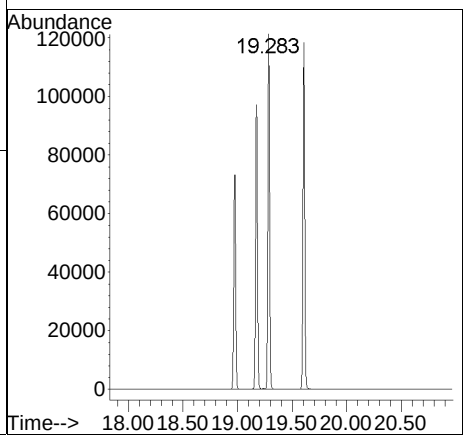
Tgt Ion:120 Resp: 9430367





#27
C9-C10 Aromatics (134)
Concen: 133.77 ug/m3 m
RT: 19.283 min Scan# 2201
Delta R.T. -0.717 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

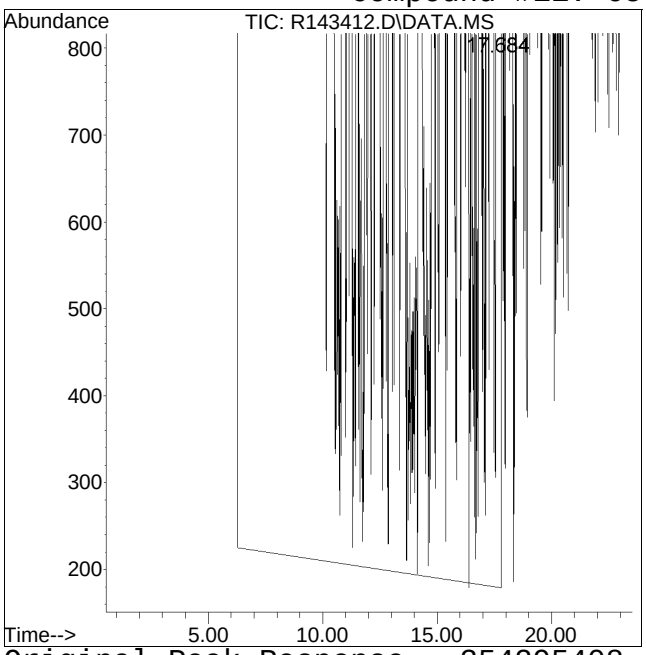
Tgt Ion:134 Resp: 4699959



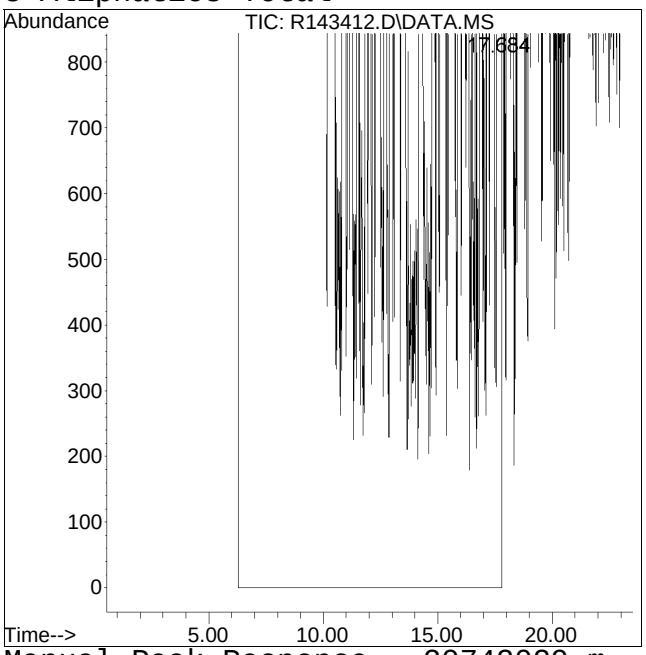
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150813\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 354295408

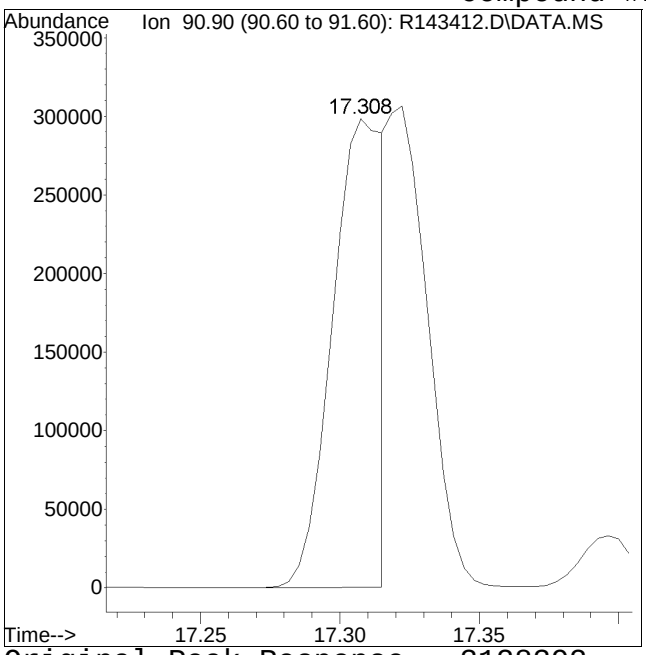


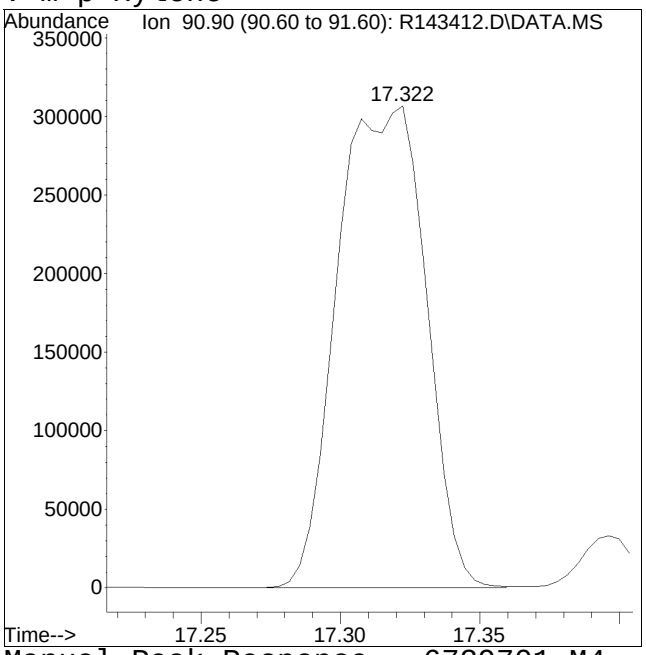
Manual Peak Response = 20742029 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #17: m+p-xylene



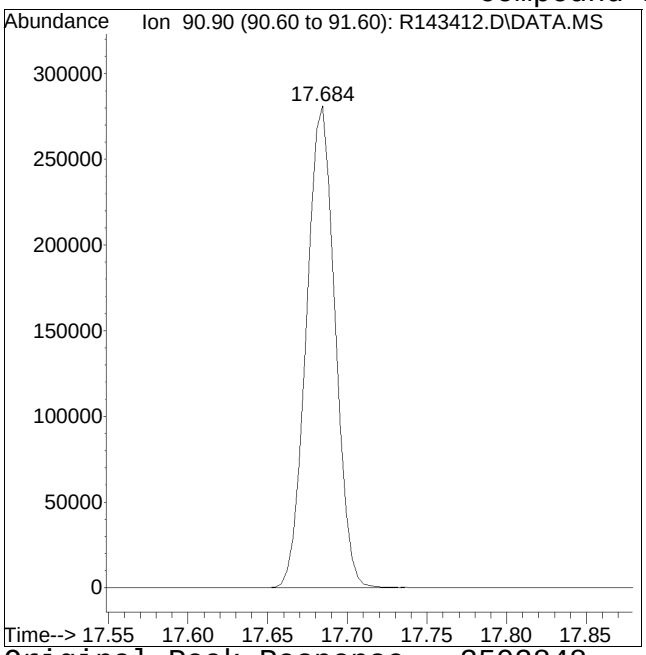


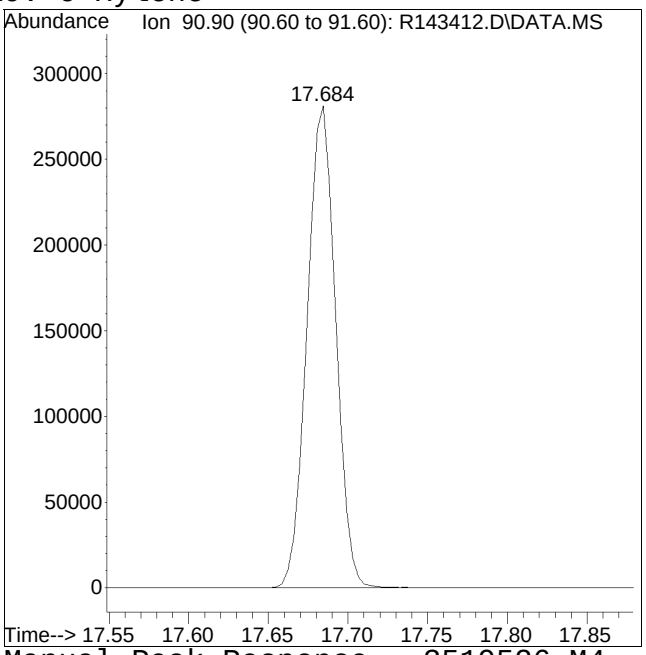
Original Peak Response = 3128392 Manual Peak Response = 6739701 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #19: o-xylene



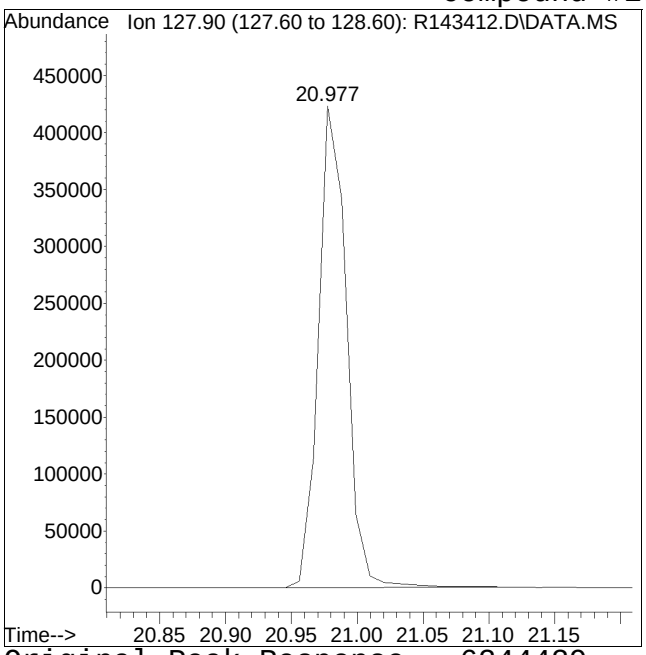


Original Peak Response = 3503848 Manual Peak Response = 3519526 M4
M4 = Poor automated baseline construction.

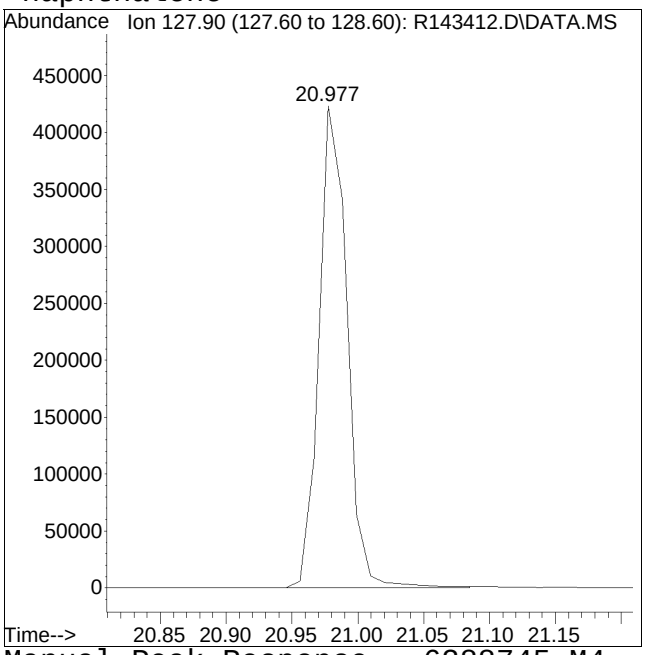
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #23: naphthalene



Original Peak Response = 6244429



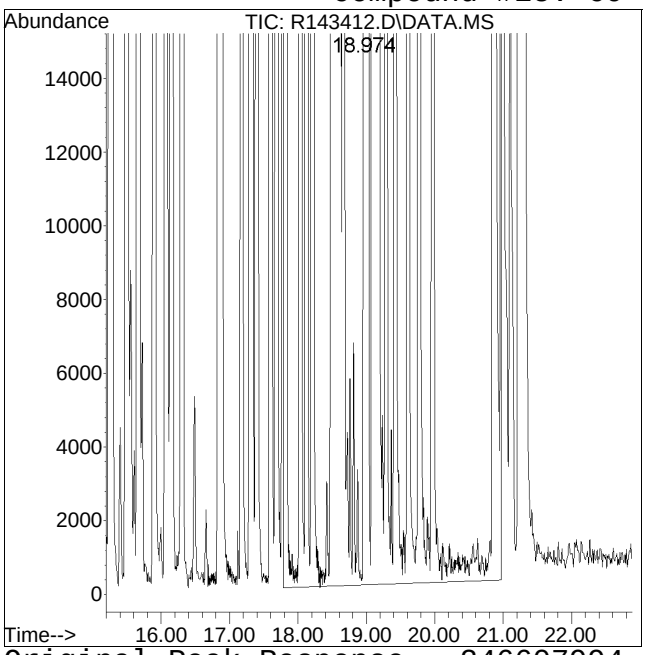
Manual Peak Response = 6288745 M4

M4 = Poor automated baseline construction.

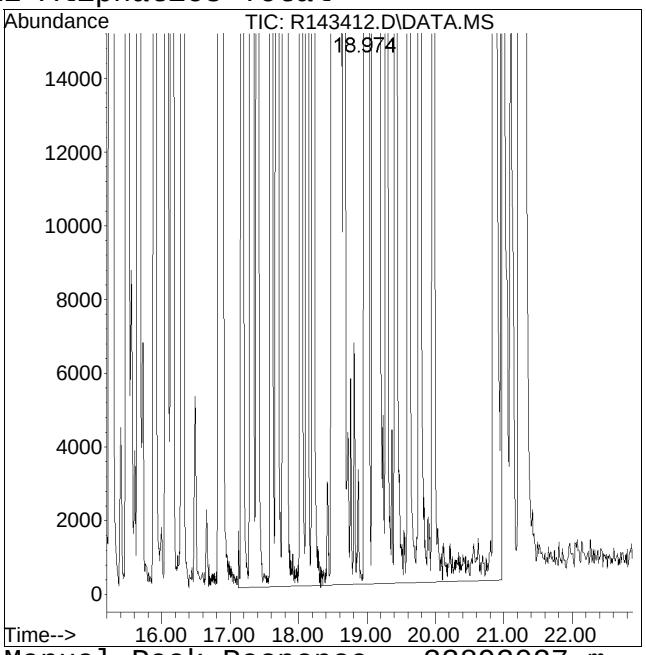
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 246607994

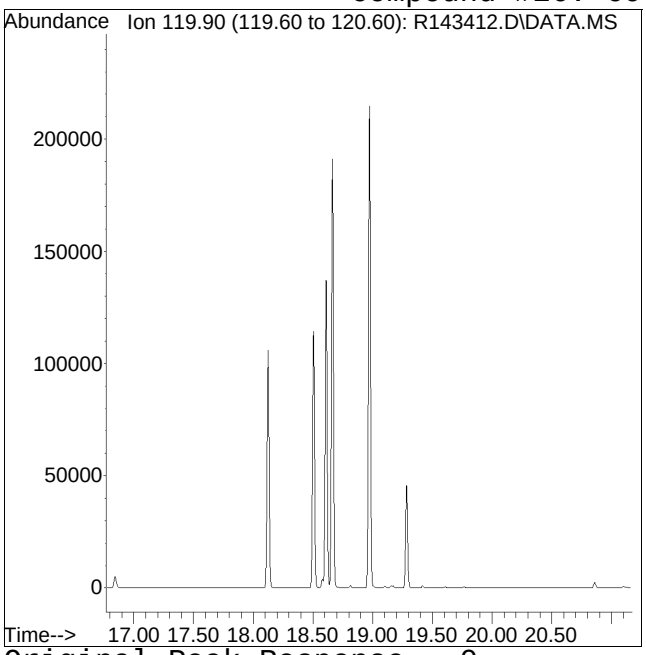


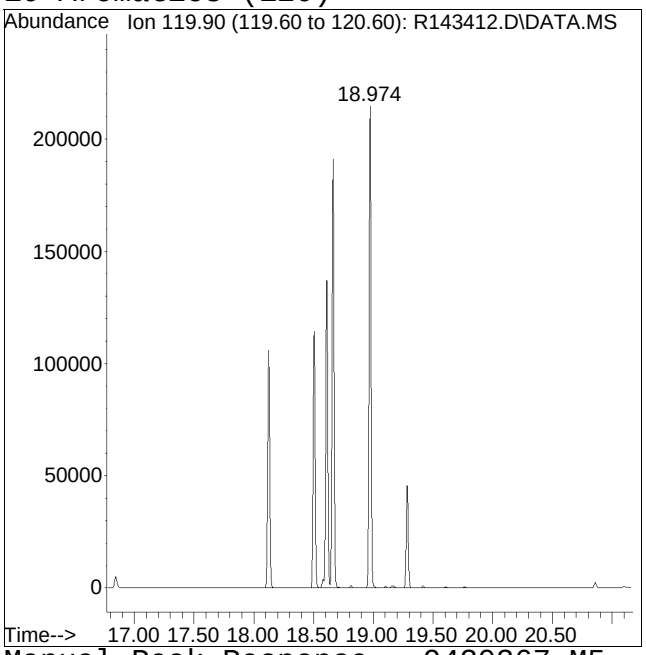
Manual Peak Response = 33893027 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #26: C9-C10 Aromatics (120)



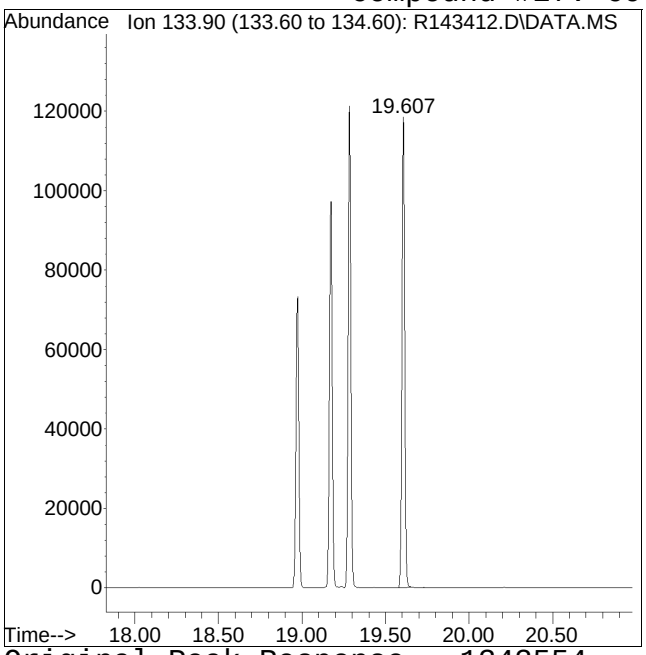


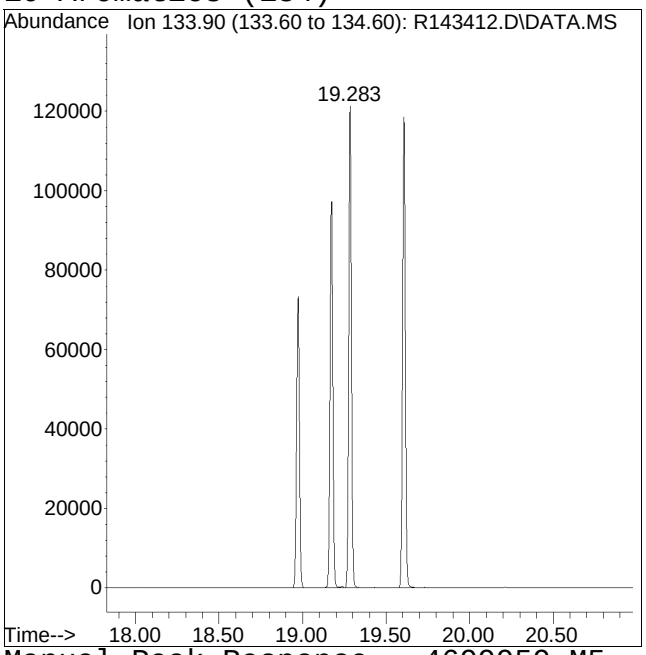
Original Peak Response = 0 Manual Peak Response = 9430367 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #27: C9-C10 Aromatics (134)



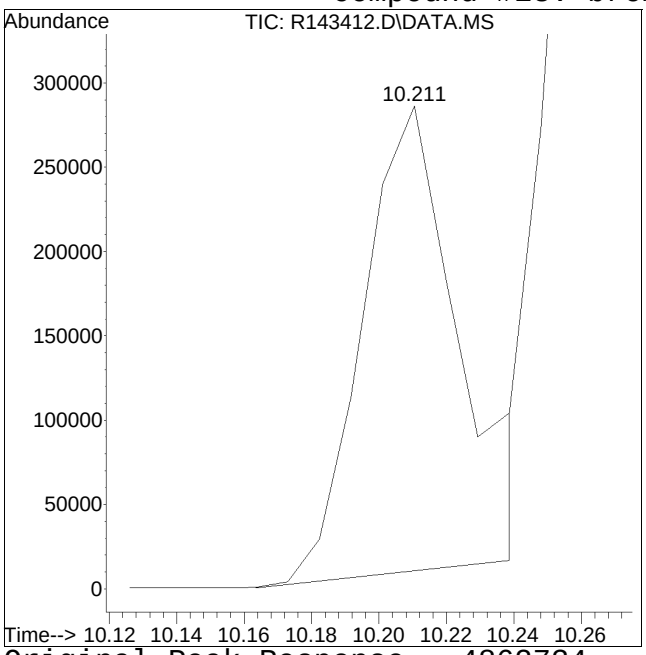


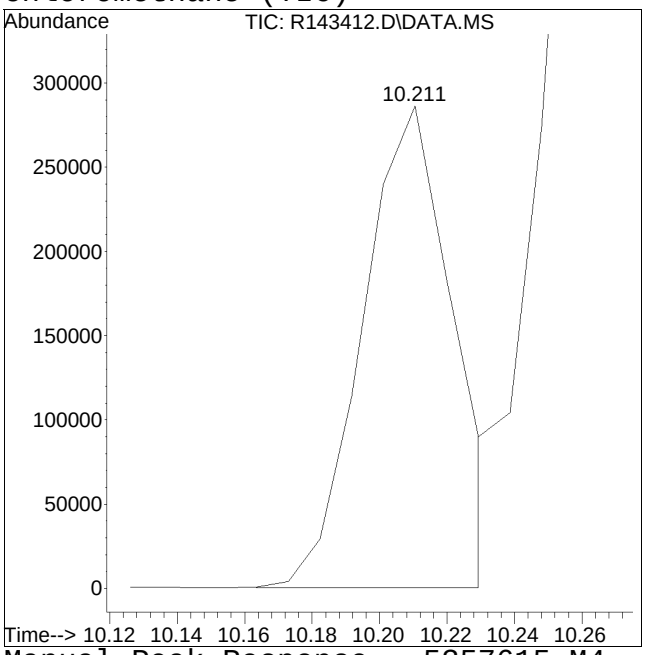
Original Peak Response = 1343554 Manual Peak Response = 4699959 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811919-3,3,250,250 Quant Date : 8/13/2015 1:34 pm

Compound #28: bromochloromethane (TIC)





Original Peak Response = 4862734 Manual Peak Response = 5357615 M4
M4 = Poor automated baseline construction.

Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811919-5,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 15:17:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.212	128	595642	10.000	ug/m3	0.00
Standard Area = 774218			Recovery	=	76.93%	
7) 1,4-difluorobenzene	12.426	114	2648687	10.000	ug/m3	0.00
Standard Area = 3308768			Recovery	=	80.05%	
12) chlorobenzene-D5	16.845	54	543750	10.000	ug/m3	0.00
Standard Area = 607162			Recovery	=	89.56%	
System Monitoring Compounds						
28) bromochloromethane (TIC)	10.211	TIC	4203391M4	9.673	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	96.73%	
29) 1,4-difluorobenzene (TIC)	12.419	TIC	5620403M4	9.170	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	91.70%	
30) chlorobenzene-D5 (TIC)	16.842	TIC	7780822M4	9.857	ug/m3	0.00
Spiked Amount 10.000			Recovery	=	98.57%	
31) 1,2-dichloroethane-D4 ...	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
32) toluene-D8 (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
33) bromofluorobenzene (TIC)	0.000	TIC	0d	0.000	ug/m3	
Spiked Amount 10.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,3-butadiene	0.000		0	N.D.		
4) methyl tert butyl ether	0.000		0	N.D.		
9) benzene	0.000		0	N.D.		
11) C5-C8 Aliphatics Total	12.260	TIC	6191647	42.123	ug/m3	
13) toluene	15.256		0	N.D.		
16) ethyl benzene	0.000		0	N.D.		
17) m+p-xylene	0.000		0	N.D.		
19) o-xylene	0.000		0	N.D.		
23) naphthalene	20.985	128	110538M4	1.127	ug/m3	
25) C9-C12 Aliphatics Tota	18.067	TIC	6261527	32.840	ug/m3	
26) C9-C10 Aromatics (120)	18.975	120	38447M5	1.220	ug/m3	
27) C9-C10 Aromatics (134)	20.251	134	57822M5	1.834	ug/m3	
27) C9-C10 Aromatics Total	0.000		96269	3.054	ug/m3	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811919-5,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 15:17:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813A\R143411.D
Sub List : APH_STD_M - .

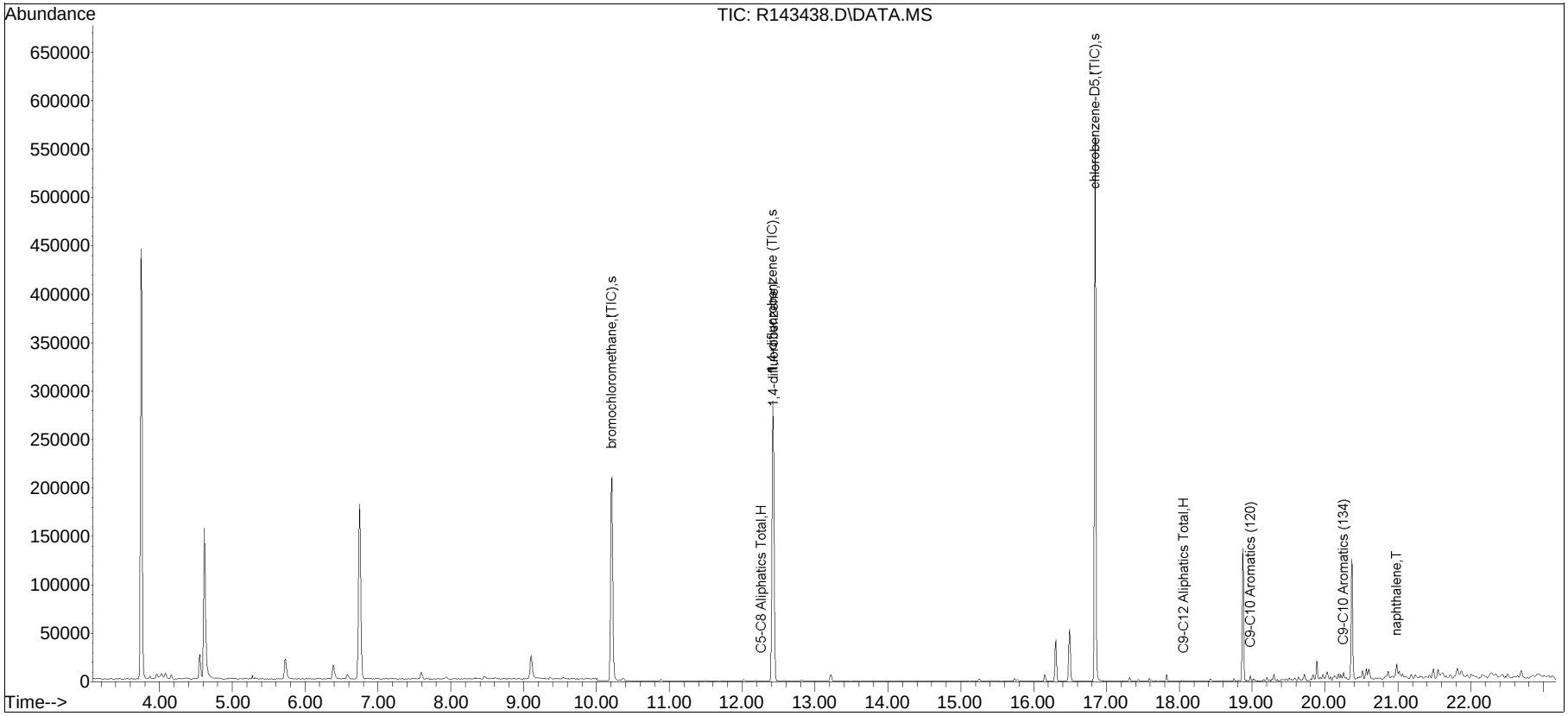
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

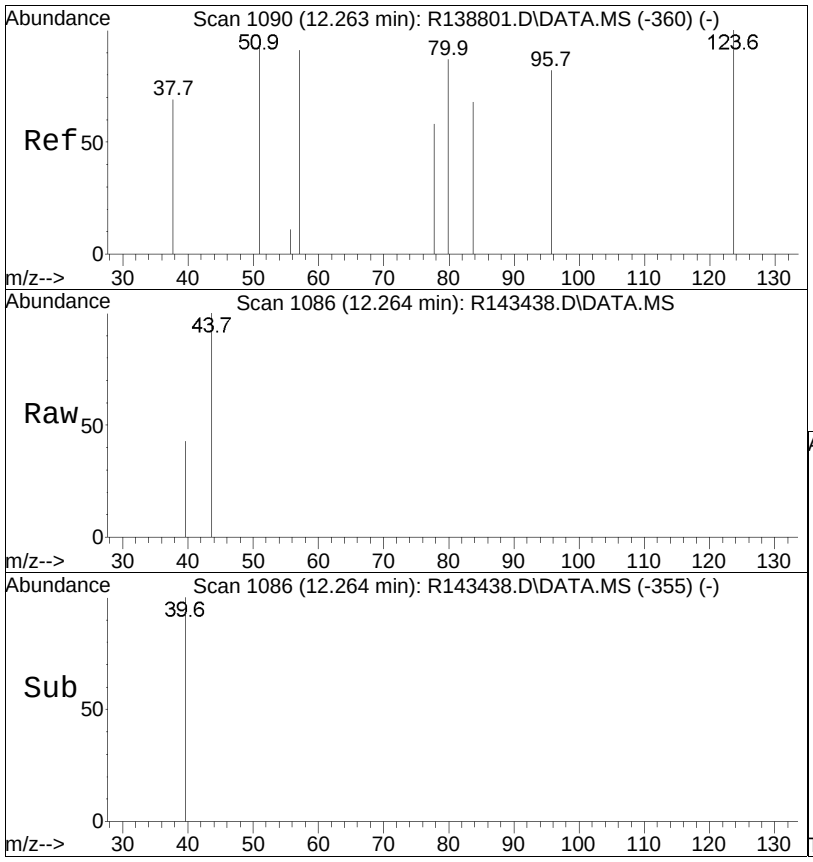
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : APH_STD_M - .Data\AIR1\2015\150813A\R143411.D

Data Path : O:\Forensics\Data\AIR1\2015\150813A\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811919-5,3,250,250
Misc : WG811919,ICAL11252
ALS Vial : 9 Sample Multiplier: 1

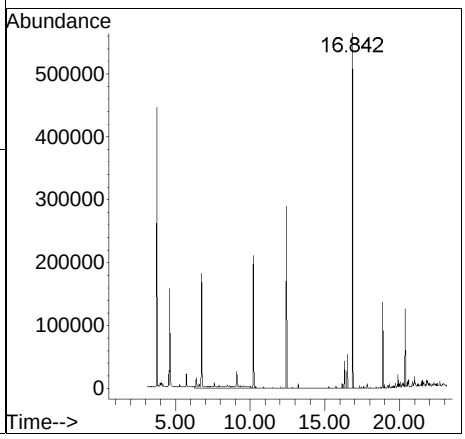
Quant Time: Aug 14 15:17:13 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813A\APH150711.M
Quant Title : APH Analysis
QLast Update : Sat Jul 11 22:48:31 2015
Response via : Initial Calibration

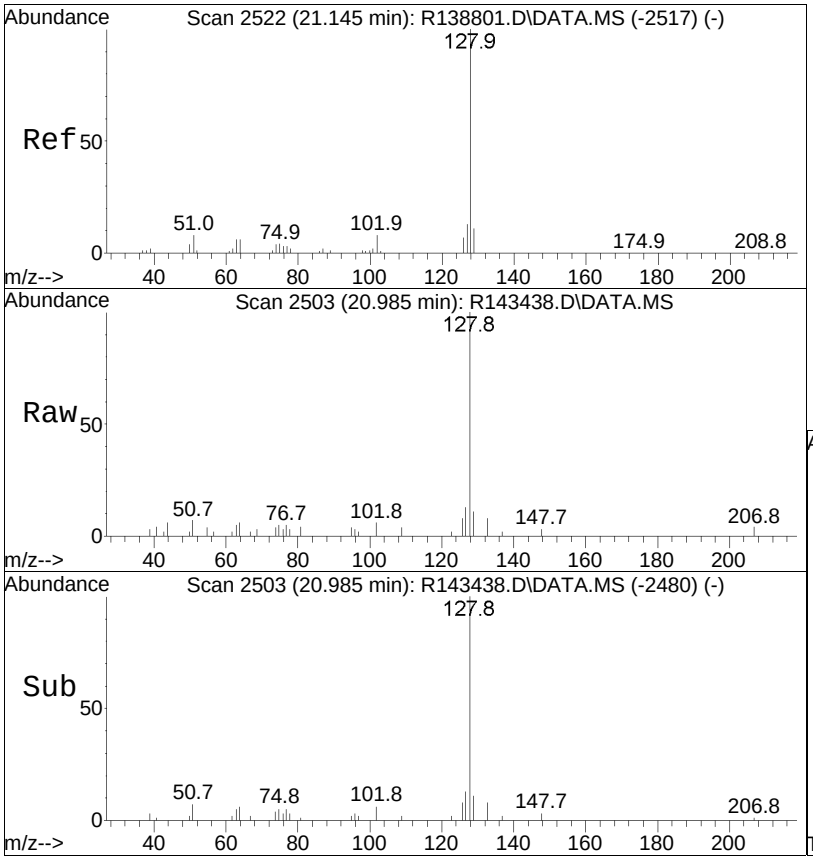




#11
C5-C8 Aliphatics Total
Concen: 42.39 ug/m3 m
RT: 12.260 min Scan# 1086
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:TIC Resp: 6191647

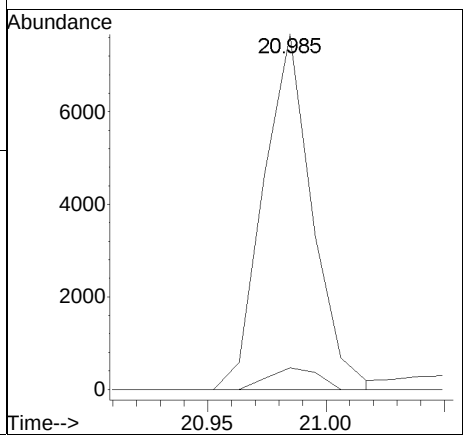


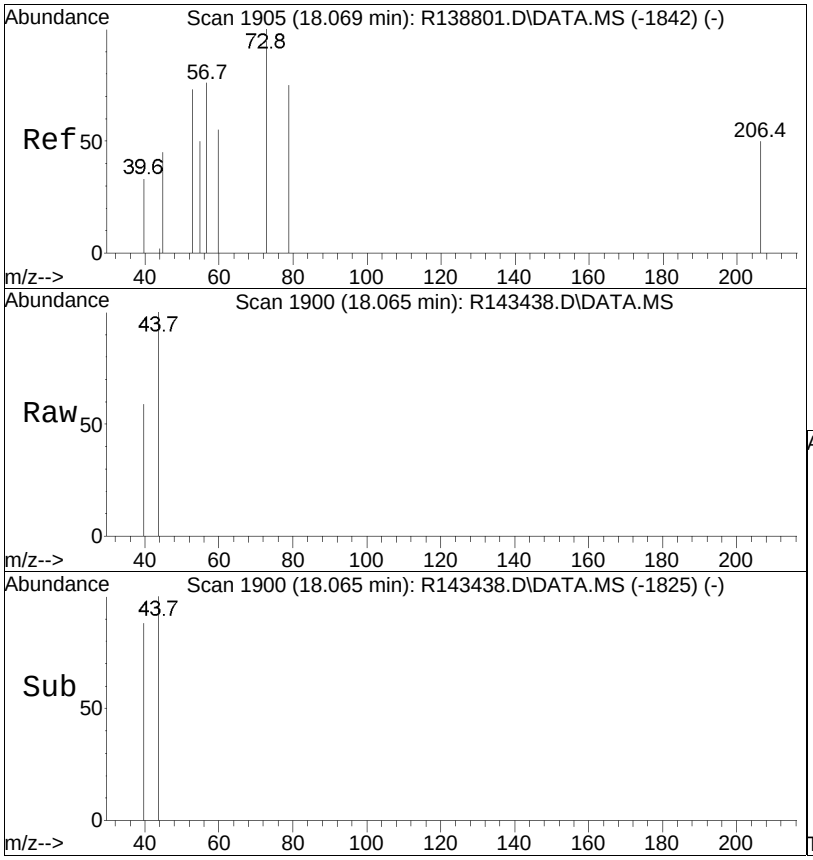


#23
naphthalene
Concen: 1.13 ug/m3 m
RT: 20.985 min Scan# 2503
Delta R.T. -0.003 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:128 Resp: 110538

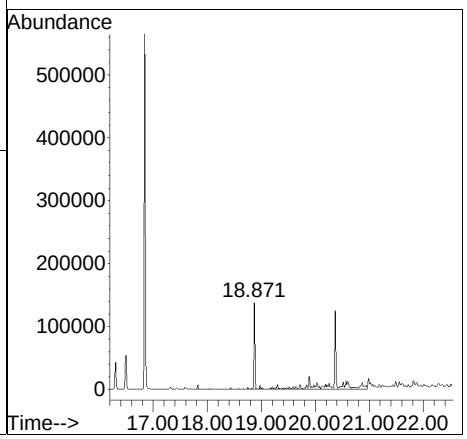
Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.9	8.9#

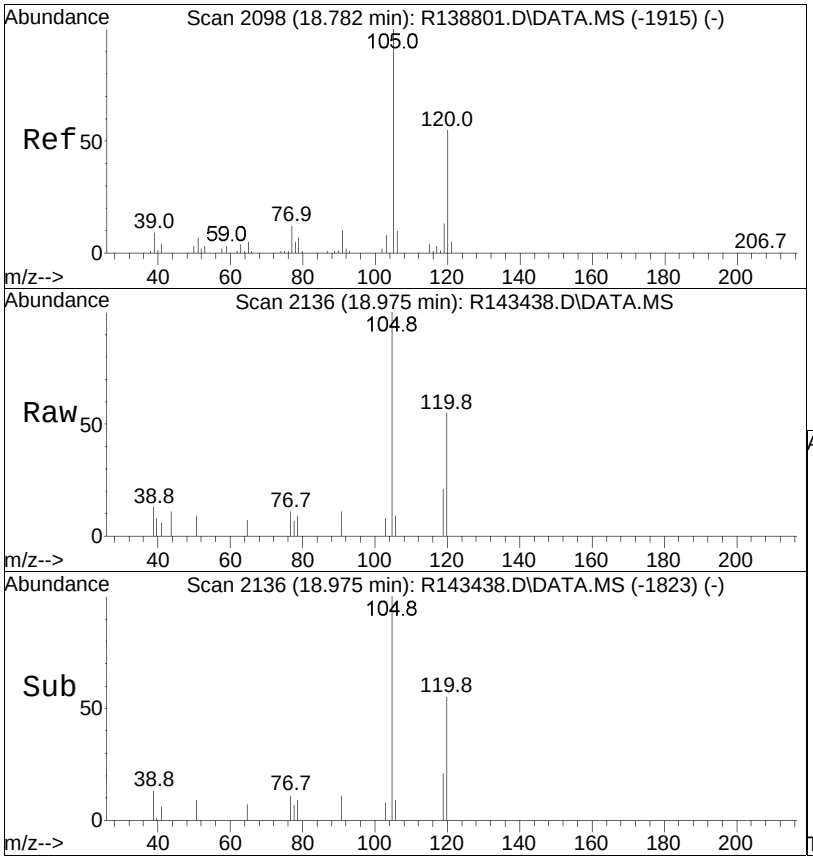




#25
C9-C12 Aliphatics Total
Concen: 35.89 ug/m3 m
RT: 18.067 min Scan# 1900
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

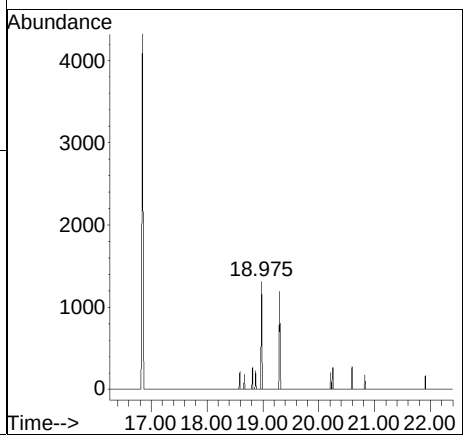
Tgt Ion:TIC Resp: 6261527

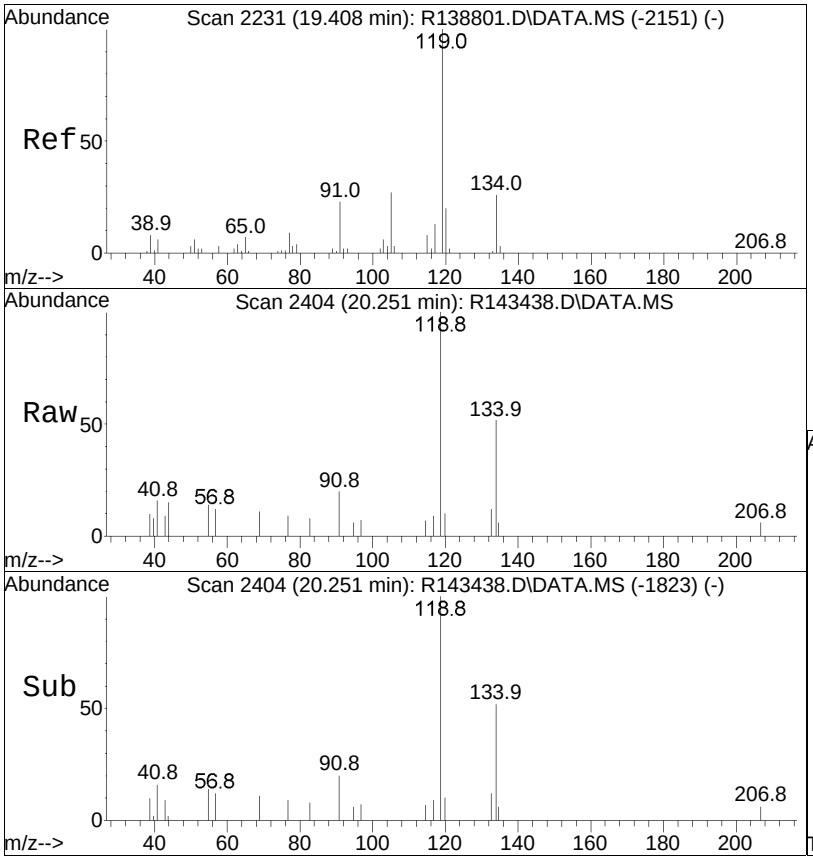




#26
C9-C10 Aromatics (120)
Concen: 1.22 ug/m3 m
RT: 18.975 min Scan# 2136
Delta R.T. -1.025 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

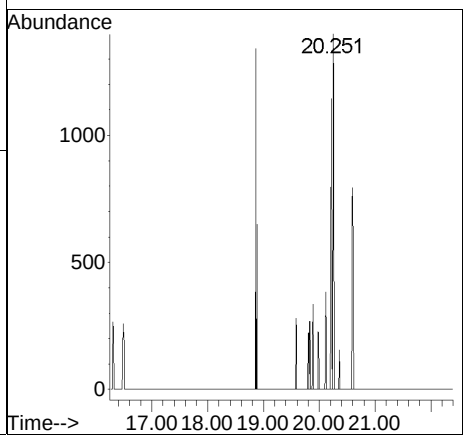
Tgt Ion:120 Resp: 38447





#27
C9-C10 Aromatics (134)
Concen: 1.83 ug/m3 m
RT: 20.251 min Scan# 2404
Delta R.T. 0.251 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

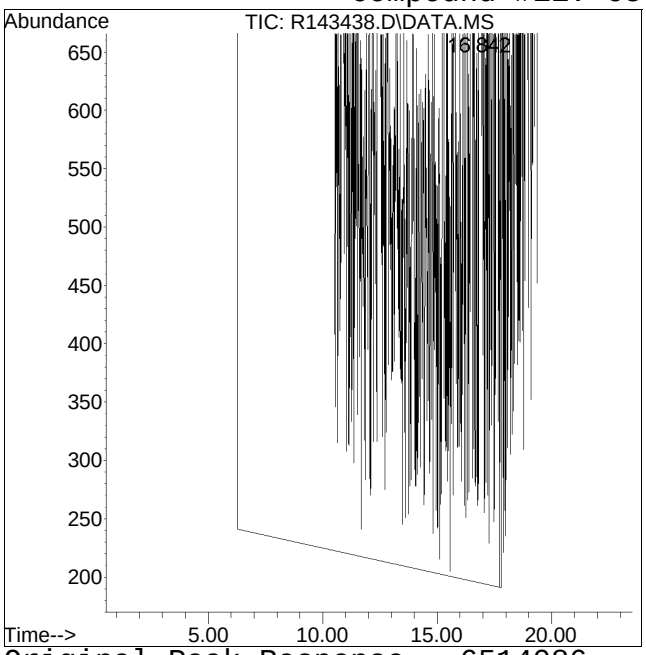
Tgt Ion:134 Resp: 57822



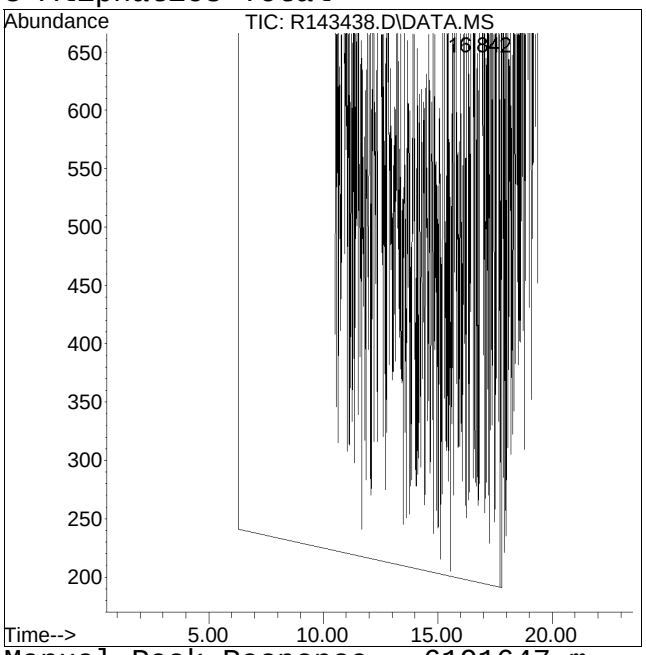
Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150816\	Method	: APH150711.M
Data File	: R143438.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/14/2015 11:54 am	Instrument	: Air Piano 1
Sample	: WG811919-5,3,250,250	Quant Date	: 8/14/2015 12:25 pm

Compound #11: C5-C8 Aliphatics Total



Original Peak Response = 6514086

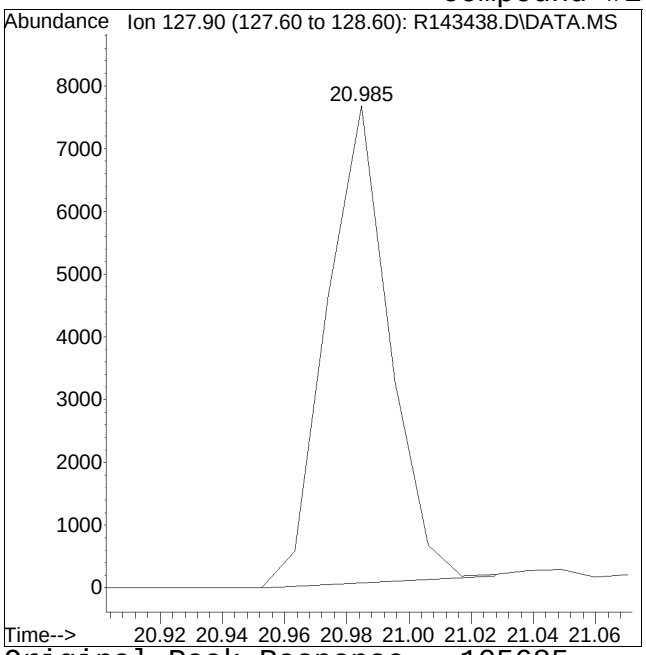


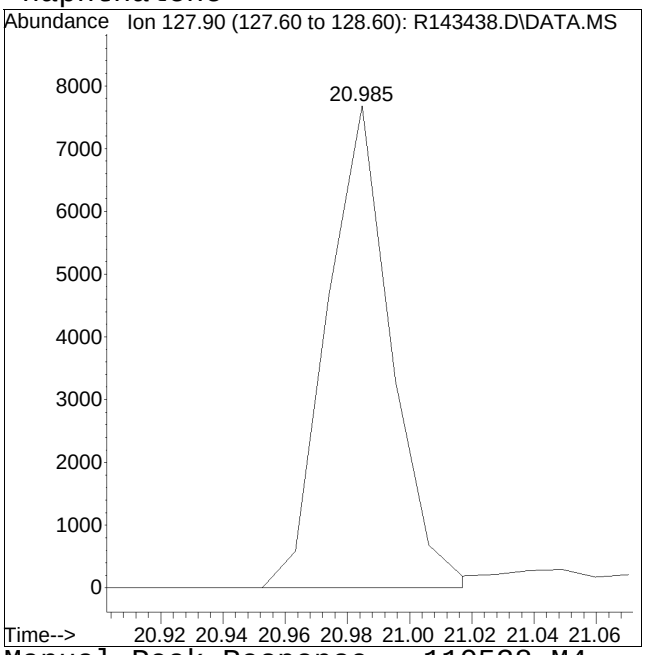
Manual Peak Response = 6191647 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #23: naphthalene



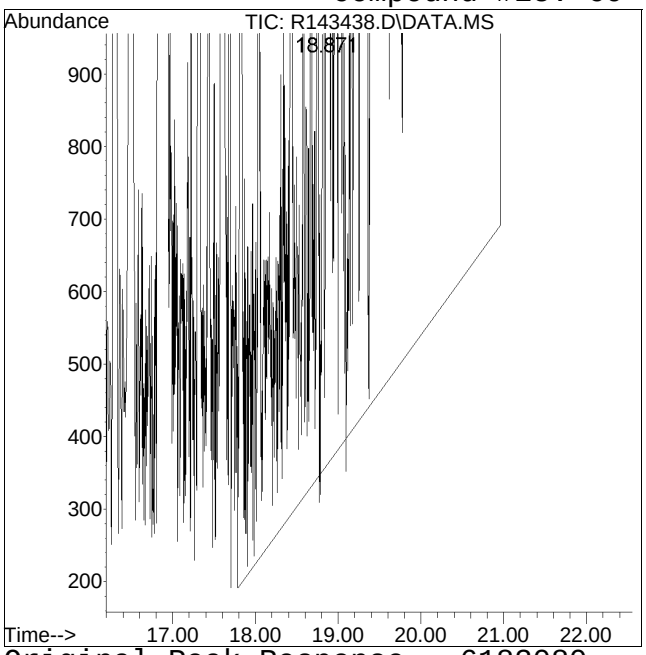


Original Peak Response = 105685 Manual Peak Response = 110538 M4
M4 = Poor automated baseline construction.

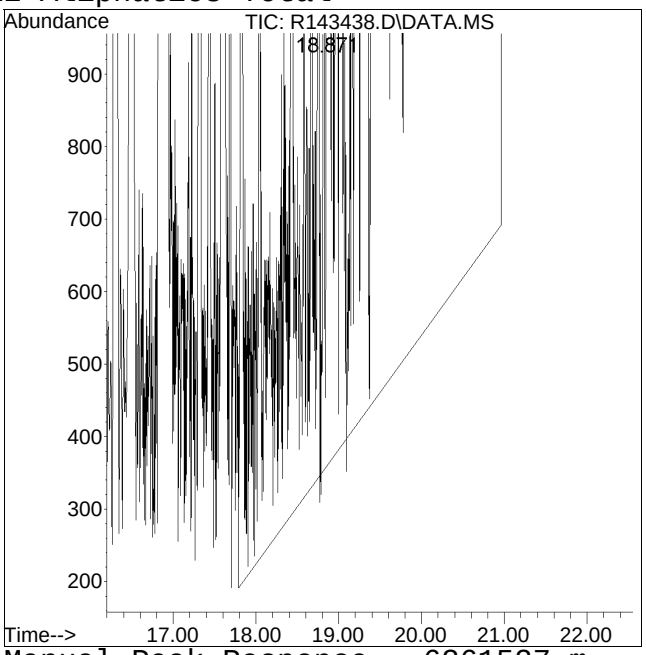
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #25: C9-C12 Aliphatics Total



Original Peak Response = 6183080

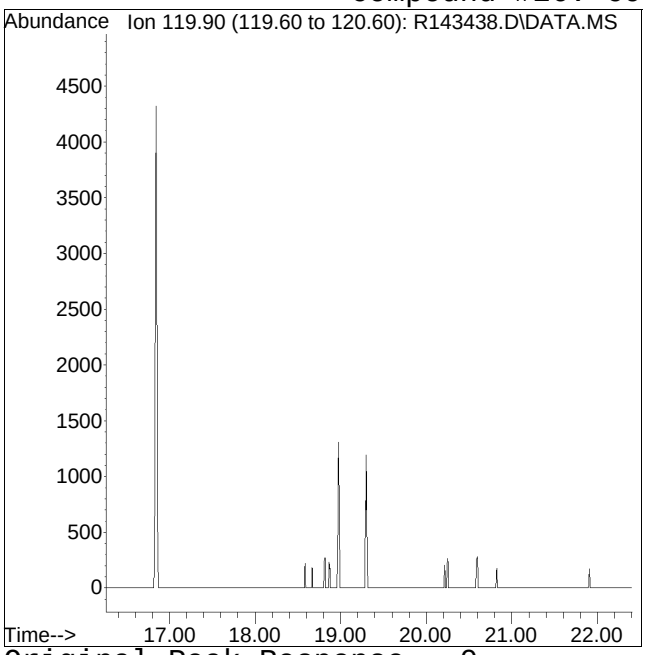


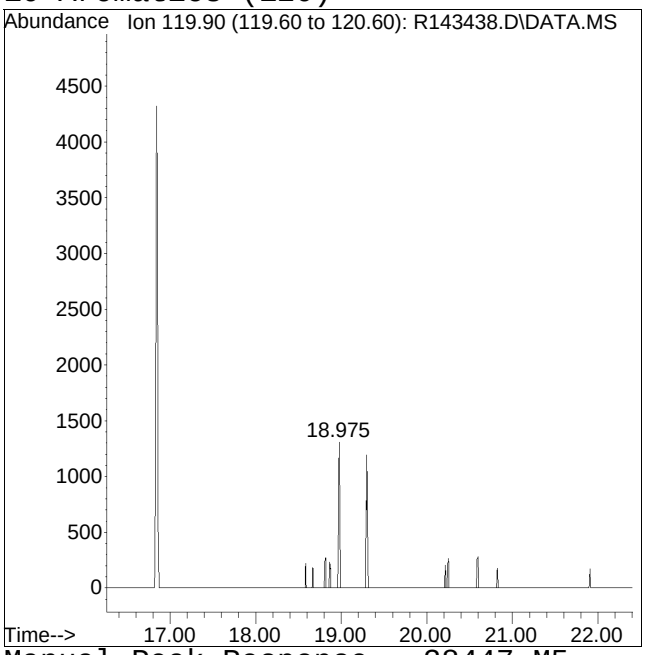
Manual Peak Response = 6261527 m

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #26: C9-C10 Aromatics (120)



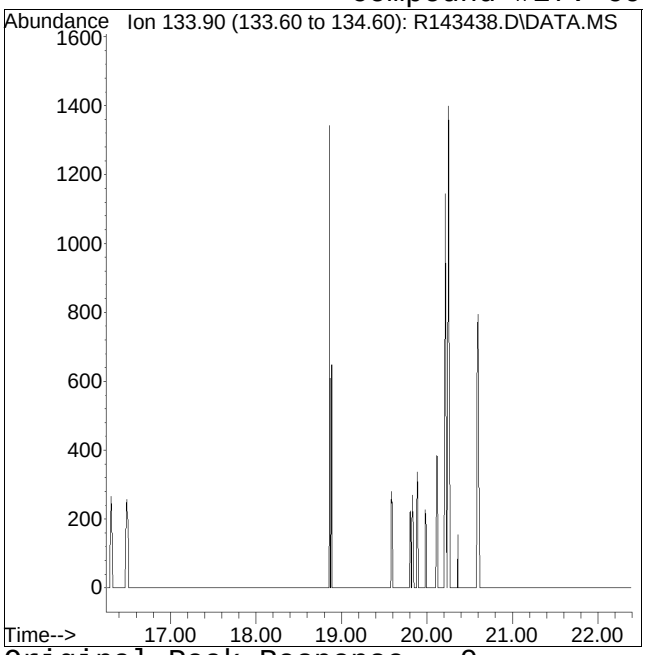


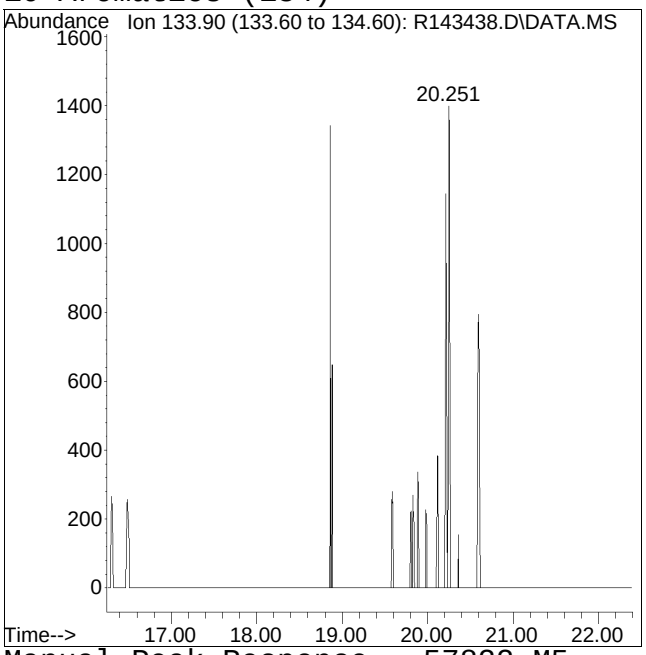
Original Peak Response = 0 Manual Peak Response = 38447 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816A\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #27: C9-C10 Aromatics (134)



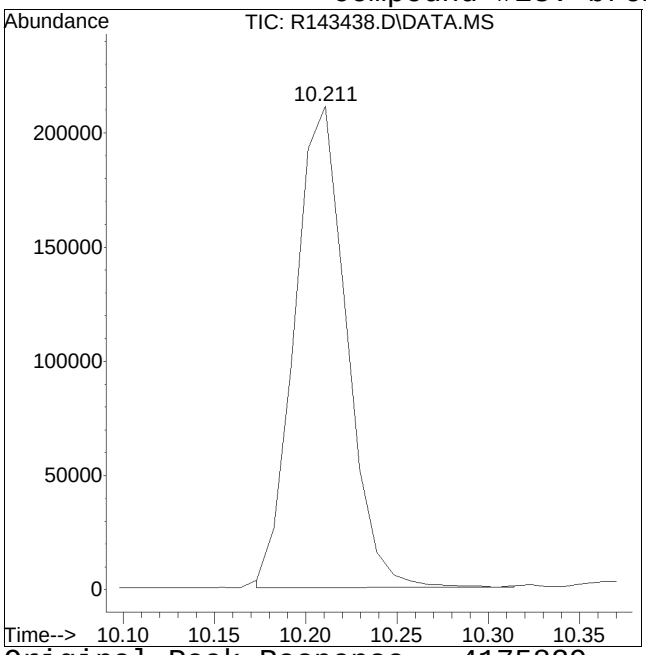


Original Peak Response = 0 Manual Peak Response = 57822 M5
M5 = Manual integration over a retention time range required, i.e. for hydrocarbon range methods.

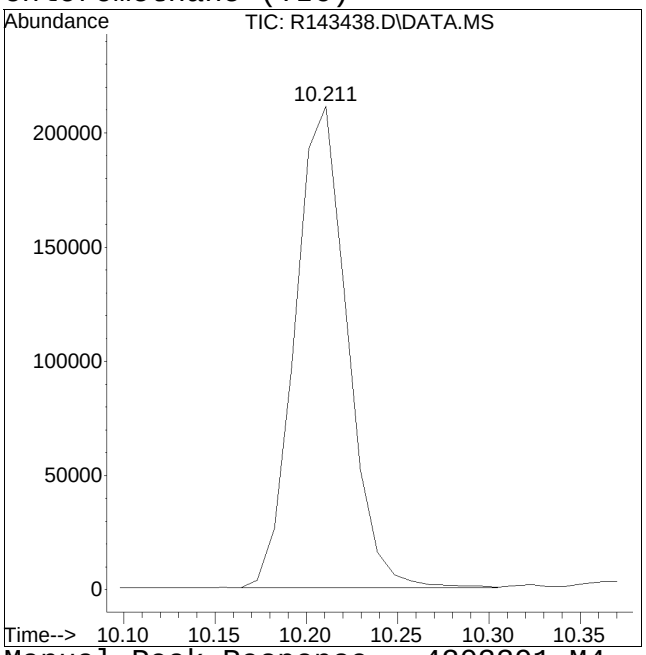
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #28: bromochloromethane (TIC)



Original Peak Response = 4175829



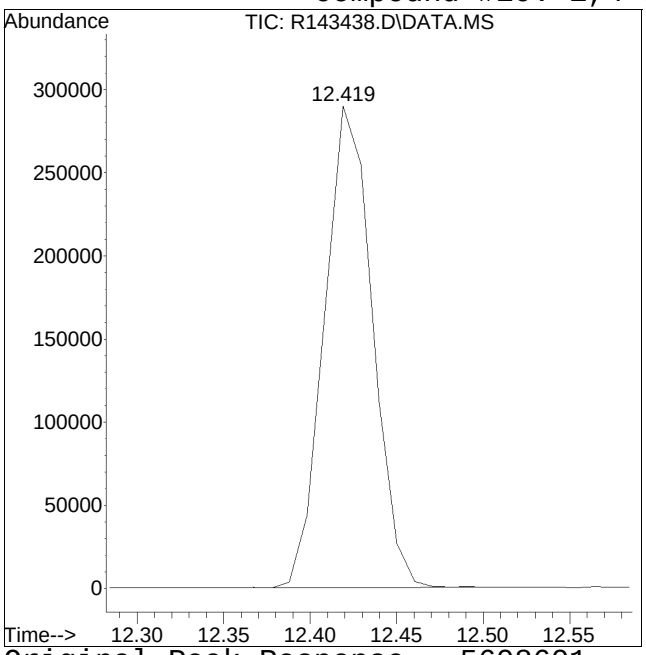
Manual Peak Response = 4203391 M4

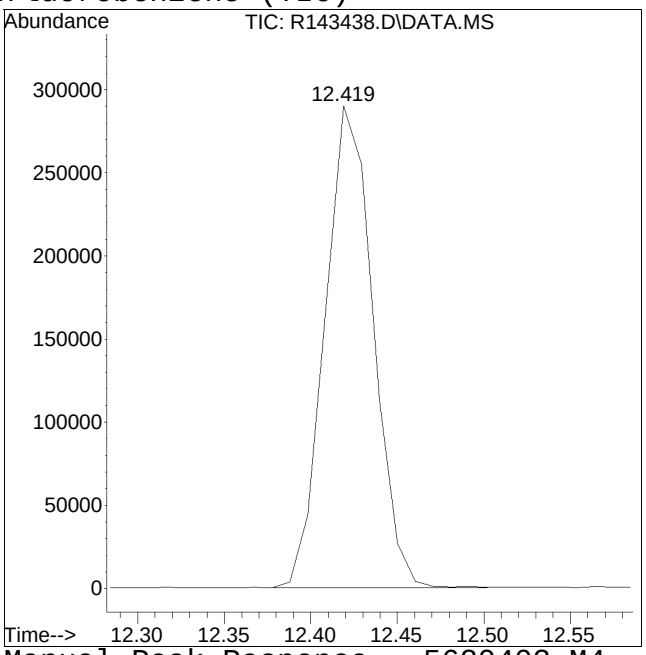
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #29: 1,4-difluorobenzene (TIC)



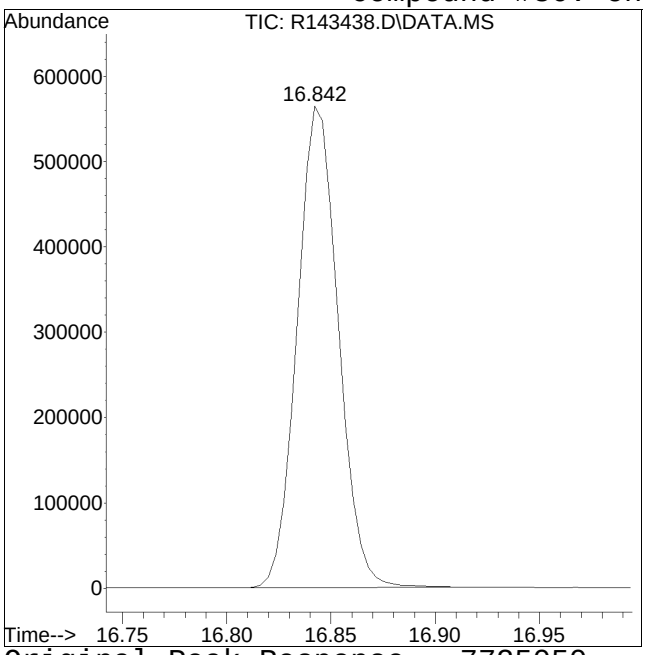


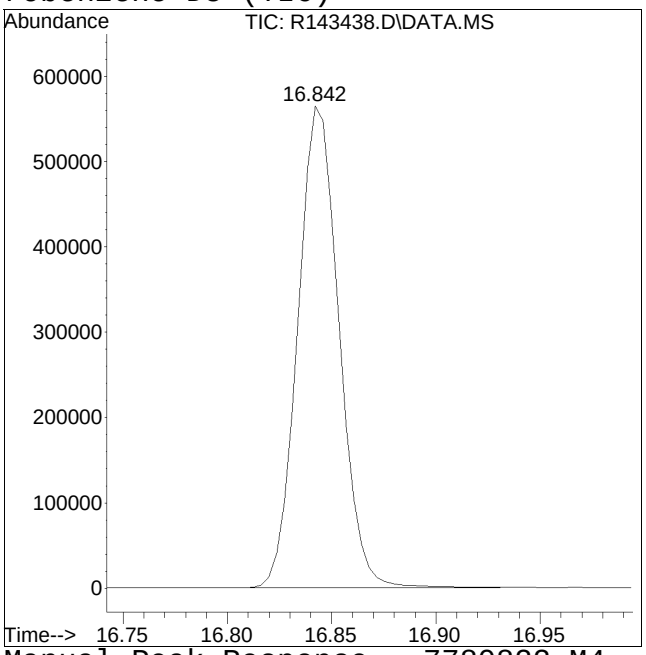
Original Peak Response = 5608601 Manual Peak Response = 5620403 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150816\ Method : APH150711.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811919-5,3,250,250 Quant Date : 8/14/2015 12:25 pm

Compound #30: chlorobenzene-D5 (TIC)





Original Peak Response = 7725050 Manual Peak Response = 7780822 M4
M4 = Poor automated baseline construction.

Canister Dilution Worksheet

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	P_1, in Hg	P_1, atm	V_1, L	P_2, in Hg	P_2, atm	V_2, L	P_1, psia	P_2, psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor	Final Volume Injected, mL	Analyst Initials
L1519114-08D	6.0	-23.82	0.20	1.23	-9.53	0.68	4.09	3.0	10.0	3.33	N2	1000	14.7	1.00	1.00	250	1.00	3.33	75.0000	RY

*N2 = Nitrogen and H2= Hydrogen

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

Form# 117-05
8/18/2015 1:41 PM

GC/MS VOA
Air Analysis
Selective Ion Monitoring

Initial Calibration

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Method File : TSIM150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 10:24:10 2015
Response Via : Initial Calibration

Calibration Files
0.02=R142704.D 0.04=R142705.D 0.1 =R142706.D 0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D
5.0 =R142710.D 10.0=R142711.D 20.0=R142712.D 50.0=R142713.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene			0.618	0.650	0.582	0.583	0.526	0.497	0.488	0.467	0.5515	12.05
3)		dichlorodifluorome...	1.454	1.037	1.064	1.348	0.875	1.066	0.839	0.875	0.883	0.654	1.0097	23.96
4)	C	chloromethane		0.661	0.622	0.630	0.605	0.588	0.522	0.507	0.503	0.468	0.5673	12.06
5)		Freon-114	1.647	1.574	1.557	1.681	1.585	1.562	1.390	1.375	1.356	1.201	1.4927	10.27
6)	C	vinyl chloride	0.618	0.597	0.574	0.639	0.592	0.598	0.539	0.523	0.517	0.485	0.5682	8.74
7)	C	1,3-butadiene	0.499	0.465	0.432	0.504	0.449	0.445	0.412	0.400	0.395	0.364	0.4364	10.37
8)	C	bromomethane	0.623	0.577	0.560	0.620	0.556	0.552	0.498	0.486	0.479	0.450	0.5401	11.03
9)	C	chloroethane	0.417	0.343	0.286	0.310	0.277	0.269	0.245	0.238	0.234	0.216	0.2837	21.27
10)		ethanol			0.475	0.421	0.350	0.335	0.316	0.293	0.290	0.259	0.3423	21.18
11)	C	vinyl bromide	0.654	0.603	0.581	0.624	0.585	0.588	0.538	0.526	0.516	0.484	0.5699	9.27
12)		acetone			1.042	0.958	0.891	0.867	0.770	0.745	0.718	0.665	0.8319	15.54
13)		trichlorofluoromet...	1.552	1.448	1.433	1.566	1.450	1.441	1.326	1.290	1.264	1.192	1.3961	8.85
14)		isopropyl alcohol					1.208	1.113	0.953	0.895	0.893	0.833	0.9827	14.89
15)	C	acrylonitrile	0.649	0.540	0.455	0.454	0.424	0.424	0.405	0.395	0.390	0.367	0.4504	18.83
16)	C	1,1-dichloroethene	1.034	0.990	0.939	1.043	0.969	0.959	0.876	0.852	0.835	0.780	0.9278	9.53
17)		tertiary butyl alc...			1.917	1.391	1.284	1.265	1.096	1.067	1.048	0.985	1.2566	23.95
18)	C	methylene chloride					1.012	0.888	0.702	0.674	0.659	0.609	0.7571	20.79
19)	C	3-chloropropene	0.897	0.759	0.747	0.831	0.777	0.773	0.717	0.695	0.684	0.635	0.7516	10.03
20)	C	carbon disulfide			1.986	1.925	1.709	1.659	1.513	1.466	1.430	1.342	1.6287	14.38
21)		Freon 113	1.293	1.225	1.204	1.302	1.224	1.218	1.114	1.082	1.050	0.986	1.1699	9.07
22)		Halothane	1.140	1.083	0.966	1.195	1.126	1.123	0.916	1.015	0.893	0.866	1.0324	11.30
23)		trans-1,2-dichloro...	1.090	1.032	0.958	1.132	1.066	1.060	0.985	0.952	0.947	0.886	1.0107	7.63
24)	C	1,1-dichloroethane	1.322	1.246	1.222	1.347	1.258	1.257	1.154	1.121	1.108	1.029	1.2064	8.34
25)	C	MTBE	1.853	1.729	1.713	1.872	1.749	1.723	1.609	1.572	1.553	1.451	1.6824	7.98
26)	C	vinyl acetate			1.675	1.743	1.539	1.559	1.540	1.560	1.566	1.500	1.5853	5.13
27)	C	2-butanone	1.942	1.722	1.675	1.711	1.597	1.594	1.482	1.443	1.435	1.346	1.5947	11.06
28)		cis-1,2-dichloroet...	1.098	1.073	1.092	1.245	1.147	1.128	1.065	1.023	1.004	0.929	1.0803	7.95
29)		Ethyl Acetate			0.260	0.293	0.282	0.274	0.271	0.264	0.263	0.247	0.2694	5.27
30)	C	chloroform	1.612	1.517	1.496	1.656	1.564	1.529	1.415	1.376	1.357	1.267	1.4790	8.29
31)		Tetrahydrofuran			0.977	1.074	0.989	0.986	0.874	0.834	0.819	0.775	0.9159	11.39

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Method File : TSIM150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 10:24:10 2015
Response Via : Initial Calibration

Calibration Files
0.02=R142704.D 0.04=R142705.D 0.1 =R142706.D 0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D
5.0 =R142710.D 10.0=R142711.D 20.0=R142712.D 50.0=R142713.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
32)	C	1,2-dichloroethane	0.995	0.922	0.915	0.964	0.909	0.898	0.829	0.810	0.796	0.748	0.8785	9.01
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane	0.638	0.587	0.583	0.627	0.594	0.576	0.548	0.536	0.526	0.490	0.5705	8.04
35)	s	1,2-dichloroethane-D4	0.257	0.257	0.255	0.253	0.255	0.254	0.258	0.256	0.251	0.251	0.2547	1.00
36)	C	1,1,1-trichloroethane	0.577	0.555	0.532	0.583	0.563	0.554	0.530	0.522	0.520	0.500	0.5437	4.95
37)	C	benzene		0.934	0.865	0.927	0.864	0.851	0.810	0.788	0.780	0.748	0.8408	7.70
38)	C	carbon tetrachloride	0.401	0.393	0.425	0.502	0.502	0.517	0.527	0.528	0.534	0.519	0.4849	11.46
39)		cyclohexane	0.578	0.522	0.499	0.538	0.502	0.501	0.466	0.462	0.454	0.434	0.4954	8.76
40)		dibromomethane	0.500	0.409	0.352	0.366	0.338	0.328	0.312	0.309	0.306	0.294	0.3514	17.72
41)	C	1,2-dichloropropane	0.369	0.336	0.335	0.363	0.346	0.341	0.320	0.318	0.312	0.296	0.3335	6.78
42)		bromodichloromethane	0.640	0.557	0.560	0.638	0.599	0.596	0.590	0.587	0.579	0.565	0.5911	4.91
43)	C	1,4-dioxane		0.229	0.215	0.211	0.203	0.188	0.194	0.184	0.190	0.180	0.1994	8.10
44)	C	trichloroethene	0.453	0.434	0.423	0.452	0.436	0.428	0.406	0.397	0.390	0.367	0.4187	6.69
45)	C	2,2,4-trimethylpen...	1.700	1.613	1.606	1.719	1.630	1.576	1.518	1.480	1.440	1.349	1.5632	7.44
46)		heptane	0.716	0.635	0.633	0.673	0.625	0.621	0.590	0.571	0.558	0.523	0.6146	9.17
47)	C	cis-1,3-dichloropr...	1.651	1.561	1.587	1.769	1.696	1.686	1.701	1.699	1.716	1.665	1.6731	3.67
48)	C	4-methyl-2-pentanone	0.828	0.797	0.799	0.857	0.827	0.806	0.782	0.774	0.765	0.695	0.7930	5.57
49)		trans-1,3-dichloro...	0.387	0.373	0.358	0.411	0.404	0.402	0.418	0.419	0.424	0.418	0.4013	5.54
50)	C	1,1,2-trichloroethane	0.360	0.346	0.352	0.388	0.368	0.363	0.349	0.342	0.338	0.325	0.3531	5.04
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene		6.399	5.992	6.321	5.914	5.805	5.387	5.377	5.367	5.044	5.7339	8.15
53)	s	toluene-D8	3.982	3.896	3.923	3.936	3.886	3.951	3.869	3.956	3.965	3.919	3.9284	0.93
54)		2-hexanone			3.836	3.840	3.905	3.965	3.811	3.849	3.845	3.434	3.8107	4.19
55)		dibromochloromethane	3.417	3.208	3.163	3.500	3.306	3.342	3.327	3.424	3.505	3.332	3.3525	3.36
56)	C	1,2-dibromoethane	3.015	2.871	2.880	3.182	3.041	3.020	2.939	2.937	2.958	2.812	2.9656	3.55
57)	C	tetrachloroethene	3.102	2.917	2.905	3.132	2.965	2.933	2.748	2.714	2.721	2.559	2.8695	6.33
58)		1,1,1,2-tetrachlor...	2.509	2.384	2.365	2.579	2.501	2.462	2.385	2.395	2.404	2.260	2.4243	3.72
59)	C	chlorobenzene	5.023	4.861	4.857	5.288	4.962	4.904	4.653	4.608	4.595	4.205	4.7955	6.16
60)	C	ethylbenzene	8.410	7.559	7.432	8.036	7.536	7.470	7.020	7.003	7.035	6.535	7.4037	7.34
61)	C	m+p-xylene	6.385	5.827	5.733	6.221	5.874	5.826	5.470	5.457	5.452	4.901	5.7146	7.41

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Method File : TSIM150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 10:24:10 2015
Response Via : Initial Calibration

Calibration Files
0.02=R142704.D 0.04=R142705.D 0.1 =R142706.D 0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D
5.0 =R142710.D 10.0=R142711.D 20.0=R142712.D 50.0=R142713.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
62)	C	bromoform	3.149	2.851	2.907	3.234	3.199	3.280	3.338	3.504	3.573	3.335	3.2371	7.09
63)	C	styrene	4.517	4.256	4.350	4.695	4.532	4.552	4.404	4.445	4.467	4.139	4.4358	3.57
64)	C	1,1,2,2-tetrachlor...	4.400	4.040	4.058	4.403	4.130	4.112	4.004	3.961	3.960	3.518	4.0587	6.13
65)	C	o-xylene	6.664	6.315	6.059	6.516	6.074	5.959	5.657	5.511	5.553	4.800	5.9110	9.33
66)		1,2,3-trichloropro...	3.248	3.127	3.059	3.333	3.132	3.132	3.020	3.010	3.017	2.785	3.0862	4.82
67)	s	bromofluorobenzene	2.907	2.879	2.880	2.900	2.874	2.870	2.837	2.924	2.967	2.878	2.8916	1.22
68)	C	isopropylbenzene	9.155	8.291	8.018	8.778	8.185	8.246	7.716	7.713	7.642	6.941	8.0685	7.71
69)		bromobenzene	4.132	4.057	3.927	4.210	4.000	3.929	3.758	3.649	3.709	3.438	3.8811	6.17
70)		4-ethyl toluene	9.406	8.466	8.955	9.672	9.307	9.255	8.913	8.910	8.688	7.759	8.9330	6.10
71)		1,3,5-trimethylben...	7.648	7.055	7.044	7.674	7.372	7.328	6.991	6.914	6.648	6.185	7.0859	6.39
72)		tert-butylbenzene	8.102	7.556	7.658	8.251	7.880	7.959	7.485	7.422	7.014	5.935	7.5262	8.85
73)		1,2,4-trimethylben...	7.747	6.868	6.994	7.548	7.273	7.300	6.958	6.958	6.550	5.653	6.9850	8.34
74)	C	Benzyl Chloride	4.621	4.518	4.711	4.903	5.011	5.245	5.630	6.029	6.028	5.822	5.2518	11.14
75)		1,3-dichlorobenzene	5.262	5.028	5.203	5.759	5.542	5.565	5.352	5.381	5.081	4.609	5.2782	6.17
76)	C	1,4-dichlorobenzene	5.628	5.273	5.553	5.789	5.690	5.637	5.456	5.440	5.188	4.665	5.4318	6.02
77)		sec-butylbenzene	1.030	0.989	1.029	1.100	1.069	1.065	1.013	0.997	0.944	0.815	1.0052	7.99
78)		p-isopropyltoluene	9.732	8.924	9.288	9.937	9.726	9.640	9.372	9.337	8.546	7.603	9.2107	7.60
79)		1,2-dichlorobenzene	5.349	4.988	5.025	5.433	5.187	5.313	5.140	5.149	4.818	4.607	5.1008	4.93
80)		n-butylbenzene	7.054	6.882	7.494	8.020	8.262	8.422	8.258	8.227	7.371	6.931	7.6922	7.94
81)	C	1,2,4-trichloroben...		3.237	3.623	3.482	4.023	4.304	4.885	5.065	3.402	3.612	3.9592	16.70
82)		naphthalene		0.773	0.826	0.759	0.872	0.914	1.071	1.127	0.736	0.842	0.8801	15.55
83)		1,2,3-trichloroben...		2.986	3.378	3.138	3.658	3.950	4.538	4.775	2.974	3.400	3.6443	17.99
84)	C	hexachlorobutadiene		3.289	3.440	3.156	3.445	3.592	3.797	3.913	2.586	2.824	3.3380	12.94

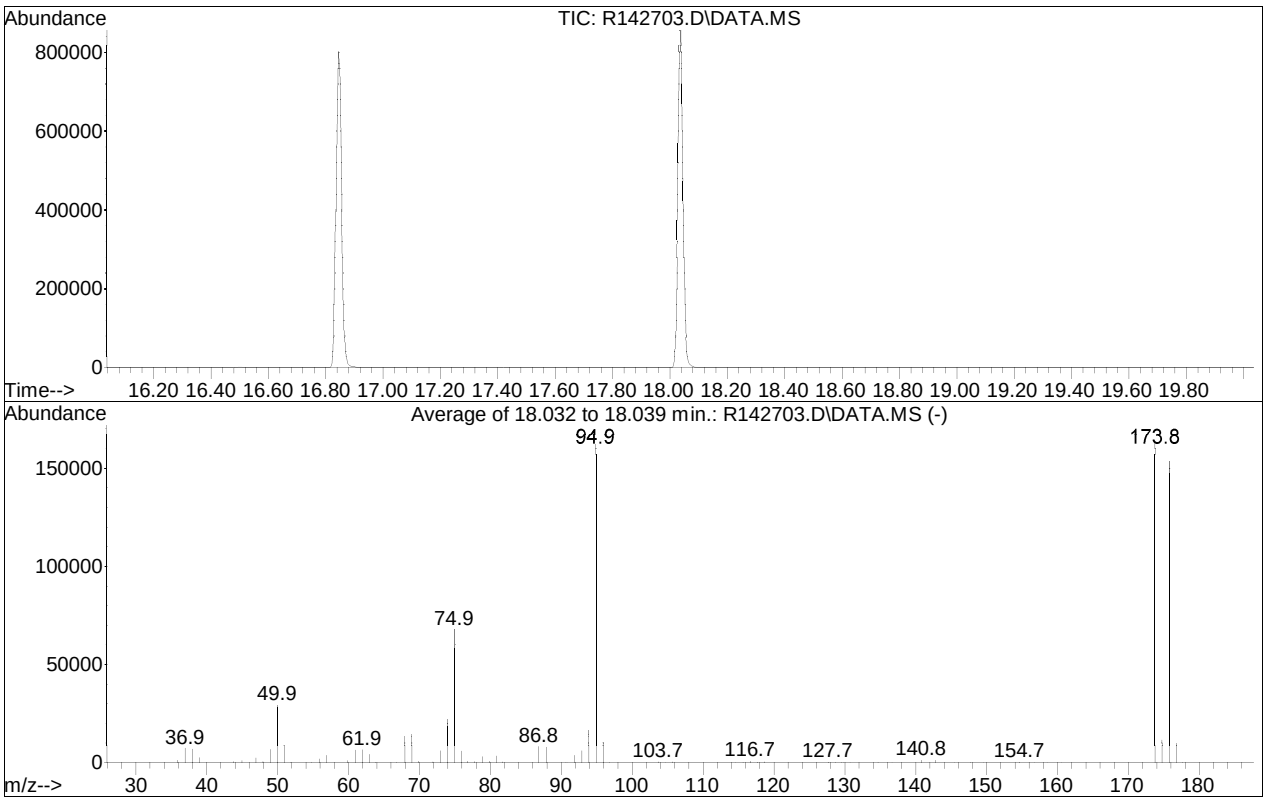
(#) = Out of Range

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142703.D
Acq On : 10 Jul 2015 12:25 pm
Operator : AIRPIANO1:RY
Sample : WG801831-1,3,250,250
Misc : WG801831
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 10:24:10 2015



AutoFind: Scans 1891, 1892, 1893; Background Corrected with Scan 1882

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	29341	PASS
75	95	30	66	41.7	67643	PASS
95	95	100	100	100.0	162389	PASS
96	95	5	9	6.5	10584	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	100.8	163627	PASS
175	174	4	9	7.1	11645	PASS
176	174	93	101	93.8	153451	PASS
177	176	5	9	6.5	9936	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142704.D
Acq On : 10 Jul 2015 1:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:13:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	189472	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.33%	
33) 1,4-difluorobenzene	12.42	114	452393	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 102.58%	
51) chlorobenzene-D5	16.84	54	85905	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 99.97%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	116392	9.982 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.82%	
53) toluene-D8	15.15	98	342081	10.293 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.93%	
67) bromofluorobenzene	18.04	95	249734	10.247 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.47%	

Target Compounds					Qvalue
2) propylene	4.07	41	287M6	0.029 ppbV	
3) dichlorodifluoromethane	4.16	85	551	0.035 ppbV	89
4) chloromethane	4.38	50	321	0.032 ppbV #	75
5) Freon-114	4.54	85	624	0.024 ppbV #	90
6) vinyl chloride	4.70	62	234	0.023 ppbV #	33
7) 1,3-butadiene	4.89	54	189	0.024 ppbV #	67
8) bromomethane	5.27	94	236	0.025 ppbV #	67
9) chloroethane	5.52	64	158	0.034 ppbV #	71
10) ethanol	5.74	31	2294	0.383 ppbV	88
11) vinyl bromide	6.01	106	248	0.024 ppbV	97
12) acetone	6.40	43	2596	0.178 ppbV #	95
13) trichlorofluoromethane	6.59	101	588	0.023 ppbV	88
14) isopropyl alcohol	6.76	45	1125	0.062 ppbV #	77
15) acrylonitrile	7.01	53	246	0.032 ppbV #	80
16) 1,1-dichloroethene	7.43	61	392	0.024 ppbV #	69
17) tertiary butyl alcohol	7.58	59	851	0.041 ppbV #	1
18) methylene chloride	7.59	49	2671	0.201 ppbV	96
19) 3-chloropropene	7.74	41	340	0.025 ppbV #	80
20) carbon disulfide	7.92	76	1549	0.054 ppbV #	1
21) Freon 113	7.95	101	490	0.023 ppbV #	91
22) Halothane	8.54	117	432	0.025 ppbV #	78
23) trans-1,2-dichloroethene	8.77	61	413	0.022 ppbV #	78
24) 1,1-dichloroethane	9.01	63	501	0.023 ppbV #	74

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142704.D
Acq On : 10 Jul 2015 1:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:13:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.14	73	702	0.023 ppbV #	45
26) vinyl acetate	9.23	43	698	0.024 ppbV #	72
27) 2-butanone	9.55	43	736	0.026 ppbV #	83
28) cis-1,2-dichloroethene	10.01	61	416	0.021 ppbV	94
29) Ethyl Acetate	10.33	61	94	0.018 ppbV #	21
30) chloroform	10.36	83	611	0.023 ppbV #	88
31) Tetrahydrofuran	10.89	42	412	0.025 ppbV	92
32) 1,2-dichloroethane	11.21	62	377	0.024 ppbV #	61
34) hexane	10.26	57	577	0.023 ppbV #	64
36) 1,1,1-trichloroethane	11.49	97	522	0.022 ppbV #	77
37) benzene	12.02	78	965	0.026 ppbV #	78
38) carbon tetrachloride	12.19	117	363	0.015 ppbV #	88
39) cyclohexane	12.33	56	523	0.025 ppbV #	86
40) dibromomethane	12.93	93	452	0.032 ppbV	95
41) 1,2-dichloropropane	12.95	63	334	0.023 ppbV #	78
42) bromodichloromethane	13.18	83	579	0.022 ppbV #	88
43) 1,4-dioxane	13.29	88	233	0.027 ppbV	95
44) trichloroethene	13.22	130	410	0.022 ppbV #	91
45) 2,2,4-trimethylpentane	13.25	57	1538	0.022 ppbV #	76
46) heptane	13.54	43	648	0.024 ppbV #	96
47) cis-1,3-dichloropropene	14.20	75	1494	0.019 ppbV #	78
48) 4-methyl-2-pentanone	14.27	43	749	0.021 ppbV #	86
49) trans-1,3-dichloropropene	14.79	75	350	0.019 ppbV #	35
50) 1,1,2-trichloroethane	14.97	97	326M3	0.021 ppbV	
52) toluene	15.25	91	1274	0.028 ppbV	98
54) 2-hexanone	15.55	43	669	0.020 ppbV #	90
55) dibromochloromethane	15.67	129	587	0.021 ppbV #	95
56) 1,2-dibromoethane	15.90	107	518	0.021 ppbV	94
57) tetrachloroethene	16.31	166	533	0.023 ppbV #	87
58) 1,1,1,2-tetrachloroethane	16.87	131	431	0.021 ppbV #	95
59) chlorobenzene	16.88	112	863	0.022 ppbV #	84
60) ethylbenzene	17.18	91	1445	0.024 ppbV	96
61) m+p-xylene	17.32	91	2194	0.047 ppbV	94
62) bromoform	17.40	173	541	0.019 ppbV	98
63) styrene	17.61	104	776	0.021 ppbV	90
64) 1,1,2,2-tetrachloroethane	17.69	83	756	0.022 ppbV	100
65) o-xylene	17.69	91	1145	0.024 ppbV	94
66) 1,2,3-trichloropropane	17.79	75	558	0.022 ppbV #	75
68) isopropylbenzene	18.13	105	1573	0.024 ppbV	97
69) bromobenzene	18.21	77	710	0.022 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142704.D
Acq On : 10 Jul 2015 1:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:13:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
70) 4-ethyl toluene	18.62	105	1616	0.021 ppbV #	95
71) 1,3,5-trimethylbenzene	18.67	105	1314	0.022 ppbV #	95
72) tert-butylbenzene	18.98	119	1392	0.022 ppbV	96
73) 1,2,4-trimethylbenzene	18.98	105	1331	0.022 ppbV	92
74) Benzyl Chloride	19.09	91	794	0.016 ppbV	87
75) 1,3-dichlorobenzene	19.11	146	904	0.020 ppbV	95
76) 1,4-dichlorobenzene	19.16	146	967	0.021 ppbV #	87
77) sec-butylbenzene	19.18	105	1770	0.020 ppbV	96
78) p-isopropyltoluene	19.29	119	1672	0.021 ppbV	94
79) 1,2-dichlorobenzene	19.42	146	919	0.021 ppbV #	86
80) n-butylbenzene	19.61	91	1212M3	0.017 ppbV	
81) 1,2,4-trichlorobenzene	20.87	180	556	0.013 ppbV #	84
82) naphthalene	20.99	128	1557	0.017 ppbV #	89
83) 1,2,3-trichlorobenzene	21.25	180	502	0.013 ppbV #	82
84) hexachlorobutadiene	21.30	225	592	0.018 ppbV #	93

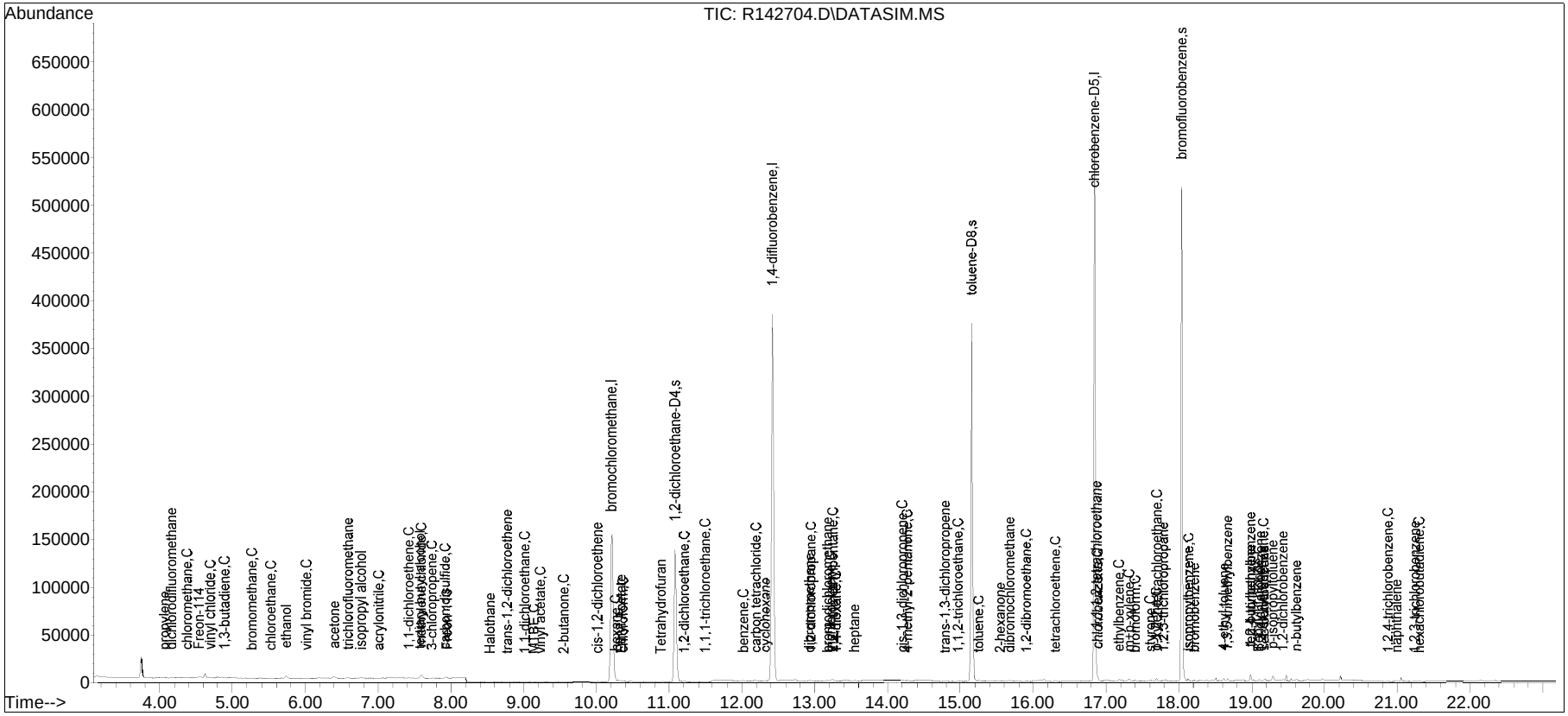
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142704.D
Acq On : 10 Jul 2015 1:06 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.02
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:13:29 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

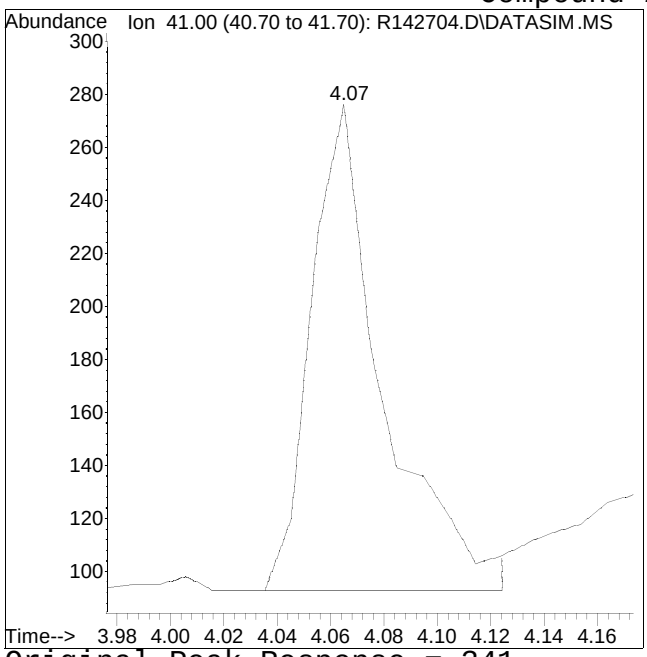
Sub List : Default All Compounds
Data File: O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



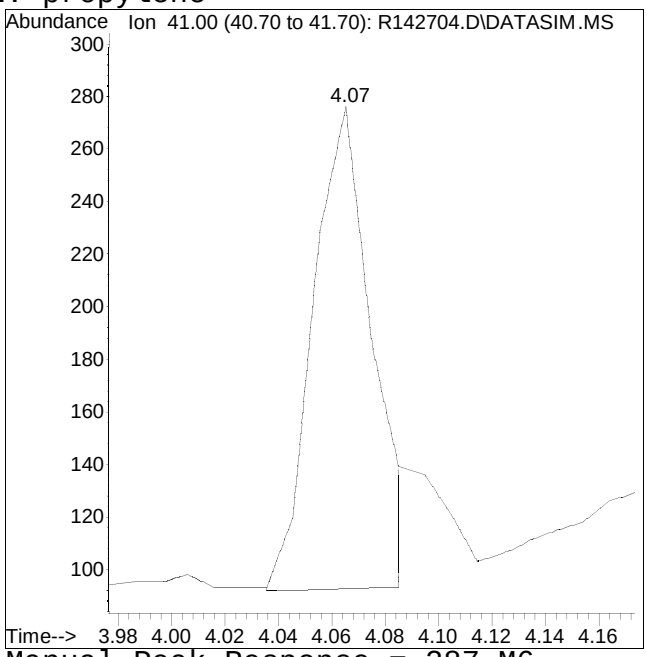
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142704.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 1:06 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 7/11/2015 10:10 am

Compound #2: propylene



Original Peak Response = 341



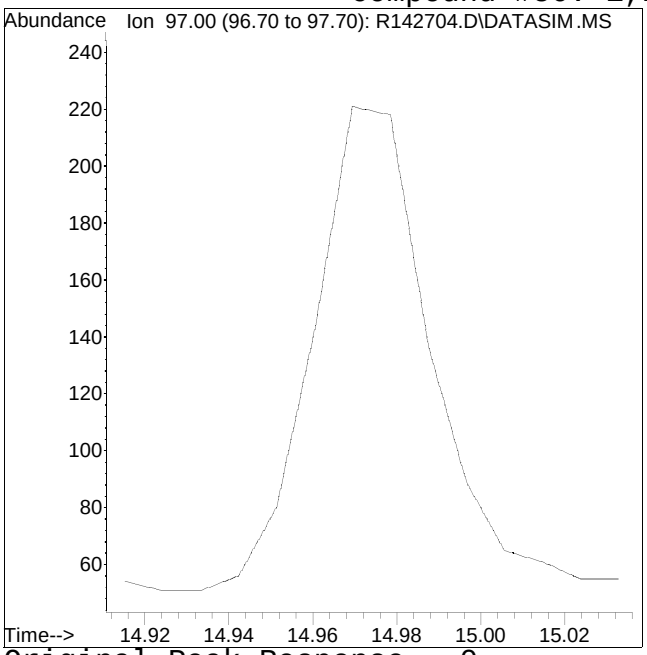
Manual Peak Response = 287 M6

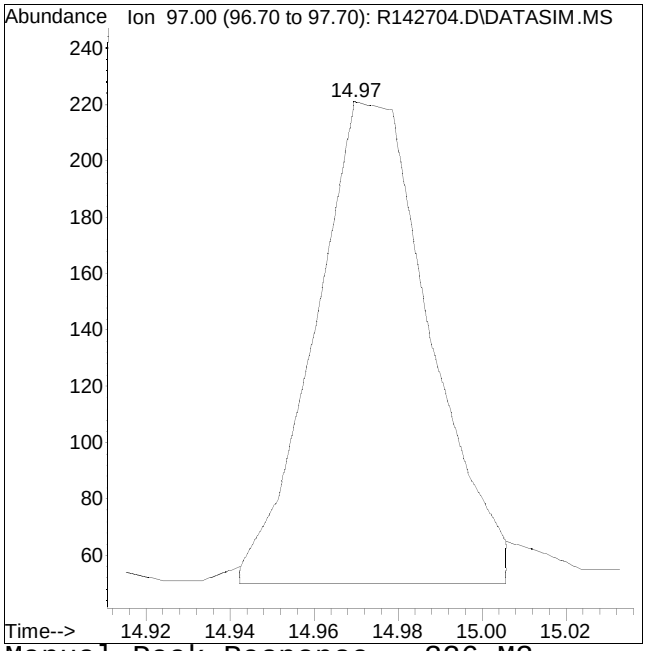
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quantitation Method : TSIM150710.M
Data File : R142704.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 1:06 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 7/11/2015 10:10 am

Compound #50: 1,1,2-trichloroethane





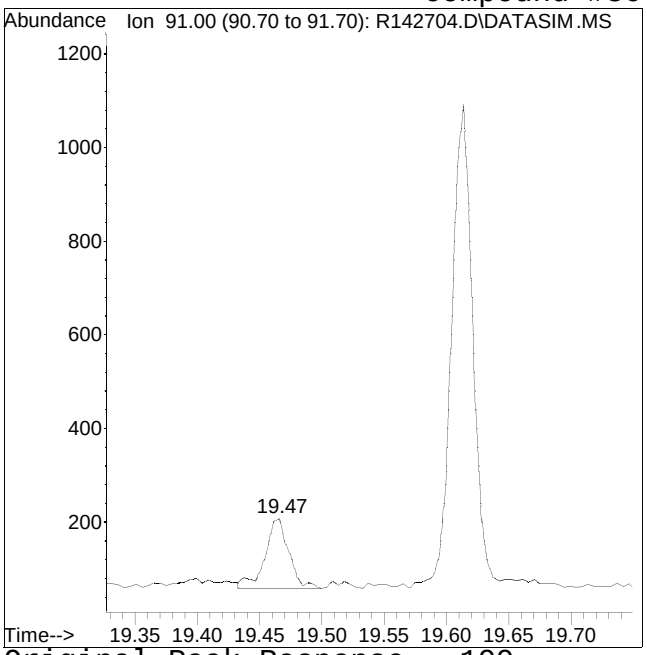
Original Peak Response = 0 Manual Peak Response = 326 M3

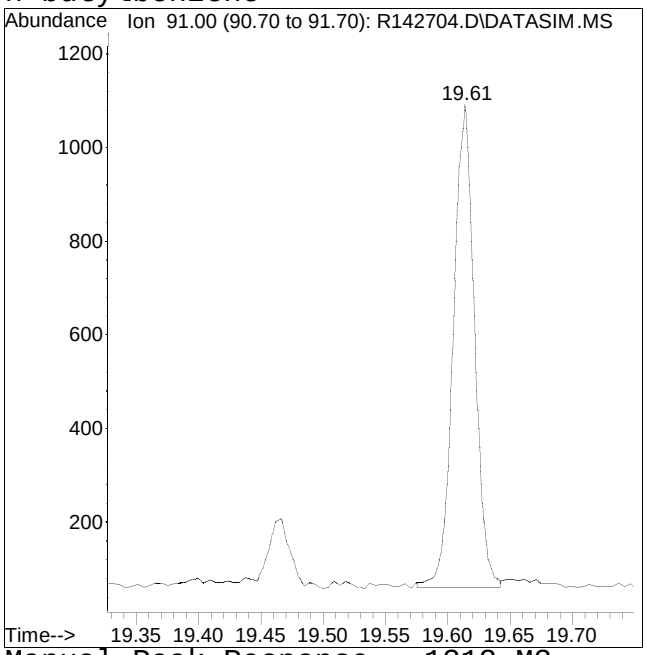
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM150710.M
Data File : R142704.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 1:06 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.02 Quant Date : 7/11/2015 10:10 am

Compound #80: n-butylbenzene





Original Peak Response = 199 Manual Peak Response = 1212 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142705.D
Acq On : 10 Jul 2015 1:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:14:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	190154	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.69%	
33) 1,4-difluorobenzene	12.42	114	451422	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 102.36%	
51) chlorobenzene-D5	16.84	54	86816	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 101.03%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	115854	9.958 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.58%	
53) toluene-D8	15.15	98	338273	10.071 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.71%	
67) bromofluorobenzene	18.03	95	249961	10.149 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.49%	
Target Compounds					Qvalue
2) propylene	4.07	41	521M6	0.052 ppbV	
3) dichlorodifluoromethane	4.16	85	789	0.049 ppbV	93
4) chloromethane	4.38	50	503	0.051 ppbV #	81
5) Freon-114	4.53	85	1197	0.045 ppbV	98
6) vinyl chloride	4.70	62	454	0.044 ppbV #	62
7) 1,3-butadiene	4.88	54	354	0.045 ppbV #	72
8) bromomethane	5.27	94	439	0.046 ppbV	86
9) chloroethane	5.52	64	261	0.056 ppbV #	82
10) ethanol	5.73	31	3018	0.502 ppbV	97
11) vinyl bromide	6.00	106	459	0.045 ppbV	100
12) acetone	6.40	43	4328	0.295 ppbV #	98
13) trichlorofluoromethane	6.59	101	1101	0.044 ppbV	94
14) isopropyl alcohol	6.76	45	1701	0.094 ppbV #	85
15) acrylonitrile	7.00	53	411	0.053 ppbV #	85
16) 1,1-dichloroethene	7.42	61	753	0.045 ppbV #	93
17) tertiary butyl alcohol	7.57	59	1523	0.073 ppbV #	38
18) methylene chloride	7.59	49	2956	0.222 ppbV	98
19) 3-chloropropene	7.74	41	577	0.042 ppbV #	86
20) carbon disulfide	7.92	76	2000	0.069 ppbV #	1
21) Freon 113	7.94	101	932	0.044 ppbV	96
22) Halothane	8.53	117	824	0.047 ppbV #	88
23) trans-1,2-dichloroethene	8.77	61	785	0.042 ppbV #	82
24) 1,1-dichloroethane	9.01	63	948	0.043 ppbV #	87

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142705.D
Acq On : 10 Jul 2015 1:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:14:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.14	73	1315	0.043 ppbV #	70
26) vinyl acetate	9.23	43	1252	0.043 ppbV #	84
27) 2-butanone	9.55	43	1310	0.046 ppbV #	88
28) cis-1,2-dichloroethene	10.01	61	816	0.040 ppbV	94
29) Ethyl Acetate	10.32	61	189	0.037 ppbV #	51
30) chloroform	10.36	83	1154	0.043 ppbV #	93
31) Tetrahydrofuran	10.89	42	772	0.046 ppbV #	88
32) 1,2-dichloroethane	11.21	62	701	0.044 ppbV #	73
34) hexane	10.26	57	1060	0.043 ppbV #	58
36) 1,1,1-trichloroethane	11.49	97	1002	0.042 ppbV #	87
37) benzene	12.02	78	1687	0.046 ppbV #	87
38) carbon tetrachloride	12.18	117	710	0.030 ppbV #	94
39) cyclohexane	12.32	56	942	0.045 ppbV	93
40) dibromomethane	12.92	93	738	0.052 ppbV	91
41) 1,2-dichloropropane	12.95	63	607	0.042 ppbV #	87
42) bromodichloromethane	13.17	83	1006	0.038 ppbV #	96
43) 1,4-dioxane	13.28	88	413	0.047 ppbV	98
44) trichloroethene	13.22	130	784	0.043 ppbV	96
45) 2,2,4-trimethylpentane	13.24	57	2913	0.043 ppbV #	86
46) heptane	13.54	43	1147	0.043 ppbV #	97
47) cis-1,3-dichloropropene	14.19	75	2818	0.037 ppbV #	82
48) 4-methyl-2-pentanone	14.27	43	1439	0.041 ppbV #	88
49) trans-1,3-dichloropropene	14.79	75	673	0.036 ppbV #	59
50) 1,1,2-trichloroethane	14.97	97	625	0.040 ppbV	89
52) toluene	15.25	91	2222	0.048 ppbV	98
54) 2-hexanone	15.54	43	1201	0.036 ppbV #	94
55) dibromochloromethane	15.67	129	1114	0.039 ppbV	96
56) 1,2-dibromoethane	15.90	107	997	0.039 ppbV	95
57) tetrachloroethene	16.31	166	1013	0.042 ppbV #	91
58) 1,1,1,2-tetrachloroethane	16.87	131	828	0.040 ppbV	93
59) chlorobenzene	16.88	112	1688	0.042 ppbV	95
60) ethylbenzene	17.18	91	2625	0.043 ppbV	99
61) m+p-xylene	17.32	91	4047	0.085 ppbV	100
62) bromoform	17.40	173	990	0.034 ppbV	96
63) styrene	17.60	104	1478	0.039 ppbV	98
64) 1,1,2,2-tetrachloroethane	17.69	83	1403	0.040 ppbV	95
65) o-xylene	17.69	91	2193	0.045 ppbV	100
66) 1,2,3-trichloropropane	17.79	75	1086	0.041 ppbV #	84
68) isopropylbenzene	18.13	105	2879	0.043 ppbV	94
69) bromobenzene	18.21	77	1409	0.043 ppbV	90

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142705.D
Acq On : 10 Jul 2015 1:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:14:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.62	105	2940	0.038	ppbV #	95
71) 1,3,5-trimethylbenzene	18.67	105	2450	0.040	ppbV #	97
72) tert-butylbenzene	18.98	119	2624	0.040	ppbV	95
73) 1,2,4-trimethylbenzene	18.98	105	2385	0.039	ppbV	97
74) Benzyl Chloride	19.10	91	1569	0.032	ppbV	92
75) 1,3-dichlorobenzene	19.11	146	1746M3	0.038	ppbV	
76) 1,4-dichlorobenzene	19.16	146	1831	0.039	ppbV	94
77) sec-butylbenzene	19.18	105	3433	0.039	ppbV	98
78) p-isopropyltoluene	19.29	119	3099	0.038	ppbV	98
79) 1,2-dichlorobenzene	19.42	146	1732	0.039	ppbV	97
80) n-butylbenzene	19.61	91	2390	0.033	ppbV	95
81) 1,2,4-trichlorobenzene	20.87	180	1124	0.027	ppbV #	87
82) naphthalene	20.99	128	2686	0.029	ppbV #	93
83) 1,2,3-trichlorobenzene	21.24	180	1037	0.026	ppbV #	74
84) hexachlorobutadiene	21.30	225	1142	0.035	ppbV	94

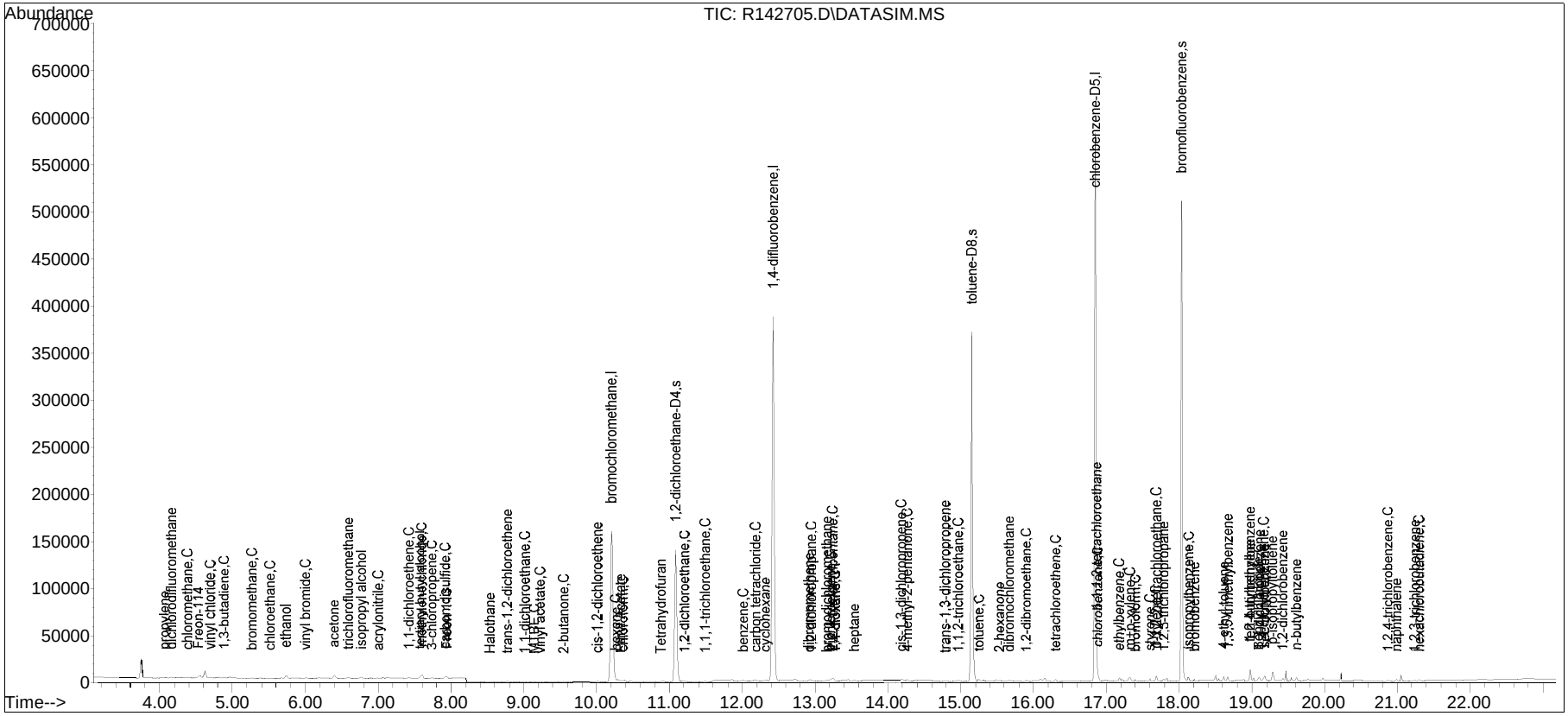
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142705.D
Acq On : 10 Jul 2015 1:38 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.04
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:14:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

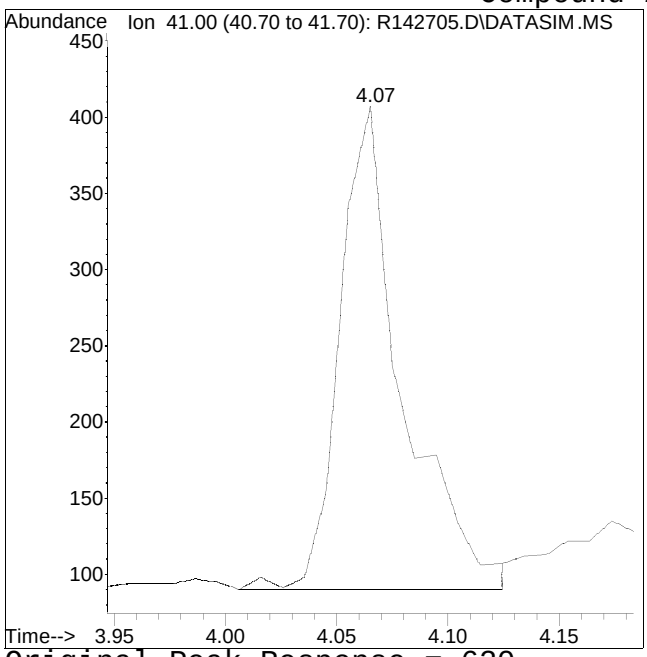
Sub List : Default All Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



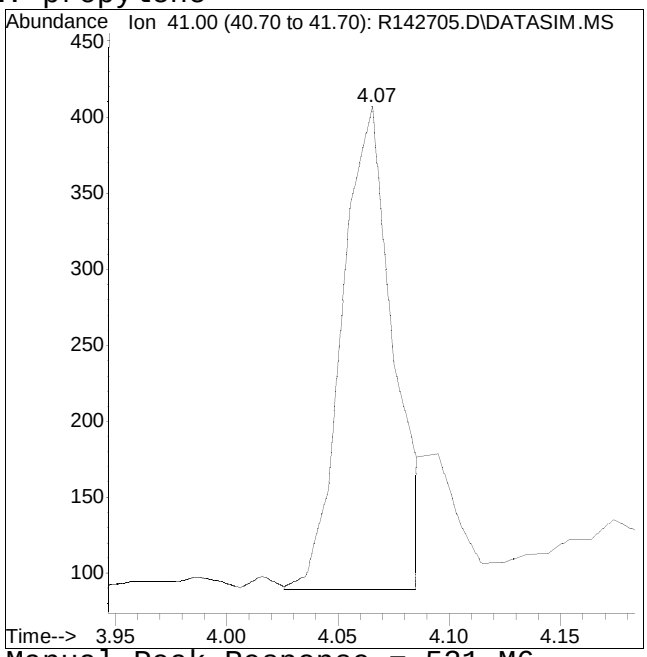
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\TSIM_ICAL\ Quant Method : TSIM150710.M
Data File : R142705.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 1:38 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 7/11/2015 10:10 am

Compound #2: propylene



Original Peak Response = 620



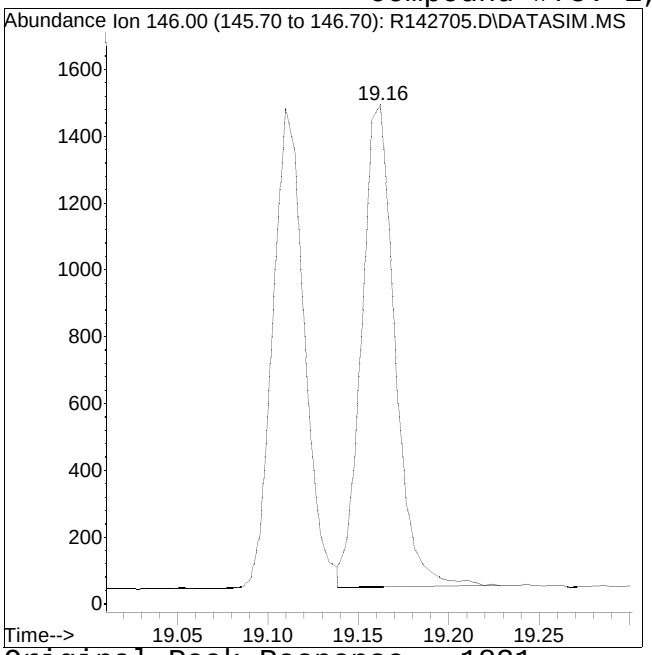
Manual Peak Response = 521 M6

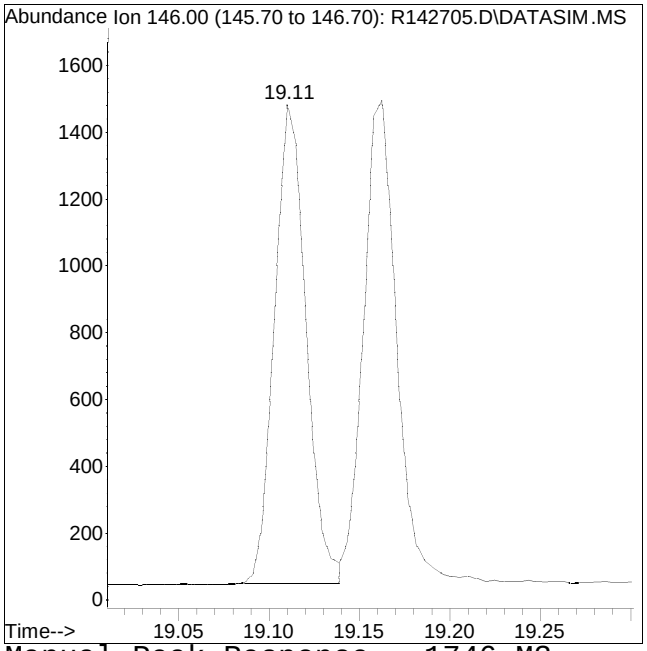
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142705.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 1:38 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.04 Quant Date : 7/11/2015 10:10 am

Compound #75: 1,3-dichlorobenzene





Original Peak Response = 1831 Manual Peak Response = 1746 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142706.D
Acq On : 10 Jul 2015 2:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:15:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	188915	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.03%	
33) 1,4-difluorobenzene	12.42	114	451981	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 102.48%	
51) chlorobenzene-D5	16.84	54	86519	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 100.68%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	115305	9.898 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.98%	
53) toluene-D8	15.15	98	339382	10.139 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.39%	
67) bromofluorobenzene	18.03	95	249176	10.152 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.52%	
Target Compounds					Qvalue
2) propylene	4.07	41	1168M6	0.117 ppbV	
3) dichlorodifluoromethane	4.16	85	2011	0.127 ppbV	97
4) chloromethane	4.38	50	1175	0.119 ppbV	92
5) Freon-114	4.53	85	2941	0.112 ppbV	98
6) vinyl chloride	4.70	62	1085	0.107 ppbV #	81
7) 1,3-butadiene	4.89	54	816	0.105 ppbV	100
8) bromomethane	5.27	94	1057	0.112 ppbV	91
9) chloroethane	5.52	64	541	0.117 ppbV	90
10) ethanol	5.73	31	4485	0.751 ppbV	97
11) vinyl bromide	6.01	106	1097	0.108 ppbV	98
12) acetone	6.40	43	9841	0.676 ppbV #	95
13) trichlorofluoromethane	6.59	101	2707	0.108 ppbV	97
14) isopropyl alcohol	6.76	45	3498	0.194 ppbV #	94
15) acrylonitrile	7.00	53	859	0.112 ppbV #	93
16) 1,1-dichloroethene	7.42	61	1773	0.107 ppbV	93
17) tertiary butyl alcohol	7.56	59	3621	0.175 ppbV #	72
18) methylene chloride	7.59	49	3835	0.289 ppbV	96
19) 3-chloropropene	7.75	41	1412	0.104 ppbV	90
20) carbon disulfide	7.92	76	3752	0.131 ppbV #	1
21) Freon 113	7.94	101	2275	0.108 ppbV	98
22) Halothane	8.54	117	1825	0.105 ppbV #	93
23) trans-1,2-dichloroethene	8.77	61	1810	0.097 ppbV	89
24) 1,1-dichloroethane	9.01	63	2308	0.106 ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142706.D
Acq On : 10 Jul 2015 2:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:15:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.14	73	3237	0.106 ppbV #	87
26) vinyl acetate	9.23	43	3165	0.109 ppbV #	93
27) 2-butanone	9.54	43	3165	0.113 ppbV #	95
28) cis-1,2-dichloroethene	10.01	61	2063	0.103 ppbV	99
29) Ethyl Acetate	10.32	61	492	0.096 ppbV	67
30) chloroform	10.36	83	2826M4	0.106 ppbV	
31) Tetrahydrofuran	10.88	42	1845	0.112 ppbV	95
32) 1,2-dichloroethane	11.21	62	1728	0.110 ppbV #	89
34) hexane	10.26	57	2637	0.106 ppbV #	55
36) 1,1,1-trichloroethane	11.49	97	2404	0.100 ppbV #	91
37) benzene	12.02	78	3911	0.107 ppbV	94
38) carbon tetrachloride	12.18	117	1922	0.081 ppbV #	97
39) cyclohexane	12.33	56	2254	0.107 ppbV	92
40) dibromomethane	12.92	93	1591	0.113 ppbV	91
41) 1,2-dichloropropane	12.95	63	1513	0.105 ppbV #	94
42) bromodichloromethane	13.17	83	2533	0.095 ppbV #	96
43) 1,4-dioxane	13.27	88	971	0.111 ppbV	98
44) trichloroethene	13.22	130	1910	0.104 ppbV	97
45) 2,2,4-trimethylpentane	13.25	57	7258	0.106 ppbV #	96
46) heptane	13.54	43	2863	0.107 ppbV	97
47) cis-1,3-dichloropropene	14.19	75	7172	0.093 ppbV #	91
48) 4-methyl-2-pentanone	14.25	43	3613	0.102 ppbV	97
49) trans-1,3-dichloropropene	14.79	75	1616	0.086 ppbV #	83
50) 1,1,2-trichloroethane	14.97	97	1593	0.101 ppbV #	89
52) toluene	15.25	91	5184	0.111 ppbV	99
54) 2-hexanone	15.52	43	3319	0.101 ppbV	94
55) dibromochloromethane	15.67	129	2737	0.095 ppbV	98
56) 1,2-dibromoethane	15.90	107	2492	0.098 ppbV	97
57) tetrachloroethene	16.31	166	2513	0.106 ppbV	97
58) 1,1,1,2-tetrachloroethane	16.87	131	2046	0.099 ppbV	98
59) chlorobenzene	16.88	112	4202	0.104 ppbV	97
60) ethylbenzene	17.18	91	6430	0.106 ppbV	98
61) m+p-xylene	17.32	91	9921	0.210 ppbV	99
62) bromoform	17.40	173	2515	0.087 ppbV	98
63) styrene	17.60	104	3764	0.099 ppbV	97
64) 1,1,2,2-tetrachloroethane	17.69	83	3511	0.101 ppbV	97
65) o-xylene	17.69	91	5242	0.107 ppbV	100
66) 1,2,3-trichloropropane	17.79	75	2647	0.101 ppbV	95
68) isopropylbenzene	18.13	105	6937	0.104 ppbV	99
69) bromobenzene	18.21	77	3398	0.105 ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142706.D
Acq On : 10 Jul 2015 2:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:15:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	7748	0.100	ppbV #	98
71) 1,3,5-trimethylbenzene	18.67	105	6094	0.101	ppbV #	99
72) tert-butylbenzene	18.98	119	6626	0.102	ppbV	96
73) 1,2,4-trimethylbenzene	18.98	105	6051	0.101	ppbV	98
74) Benzyl Chloride	19.10	91	4076	0.084	ppbV	96
75) 1,3-dichlorobenzene	19.11	146	4502	0.097	ppbV	98
76) 1,4-dichlorobenzene	19.16	146	4804	0.102	ppbV	99
77) sec-butylbenzene	19.18	105	8907	0.102	ppbV	96
78) p-isopropyltoluene	19.29	119	8036	0.099	ppbV	99
79) 1,2-dichlorobenzene	19.42	146	4348	0.098	ppbV	99
80) n-butylbenzene	19.61	91	6484	0.091	ppbV	100
81) 1,2,4-trichlorobenzene	20.87	180	3135	0.074	ppbV #	95
82) naphthalene	20.99	128	7148	0.077	ppbV	97
83) 1,2,3-trichlorobenzene	21.24	180	2923	0.074	ppbV #	93
84) hexachlorobutadiene	21.30	225	2976	0.091	ppbV	97

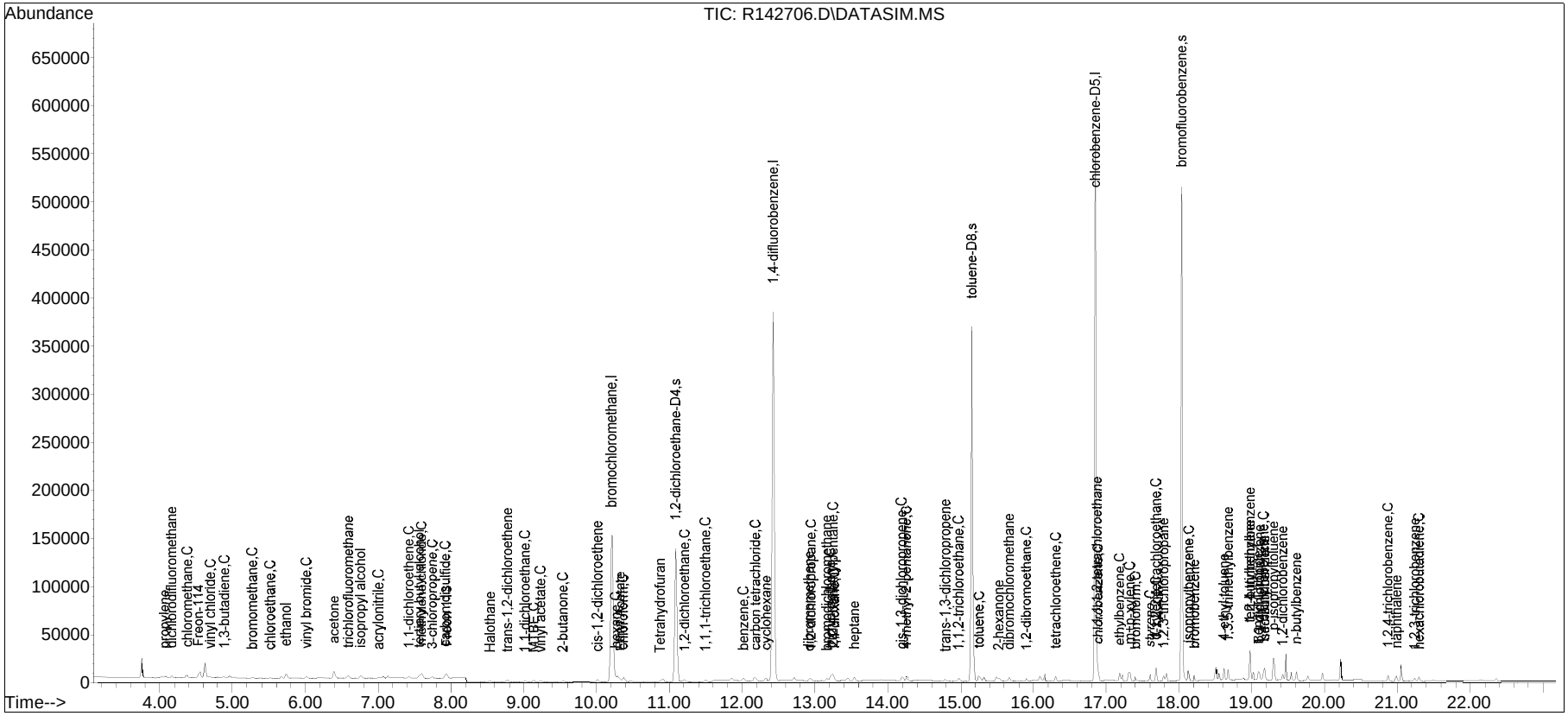
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142706.D
Acq On : 10 Jul 2015 2:11 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.1
Misc : WG801831
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 11 10:15:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

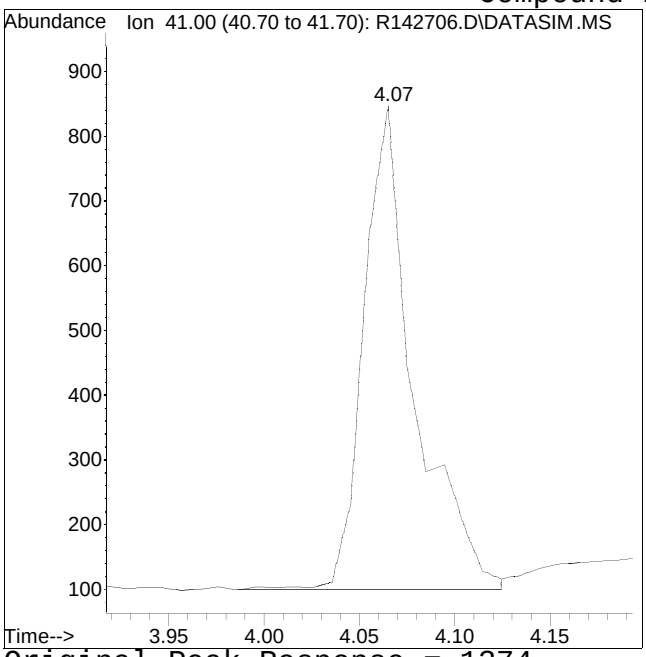
Sub List : Default All Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



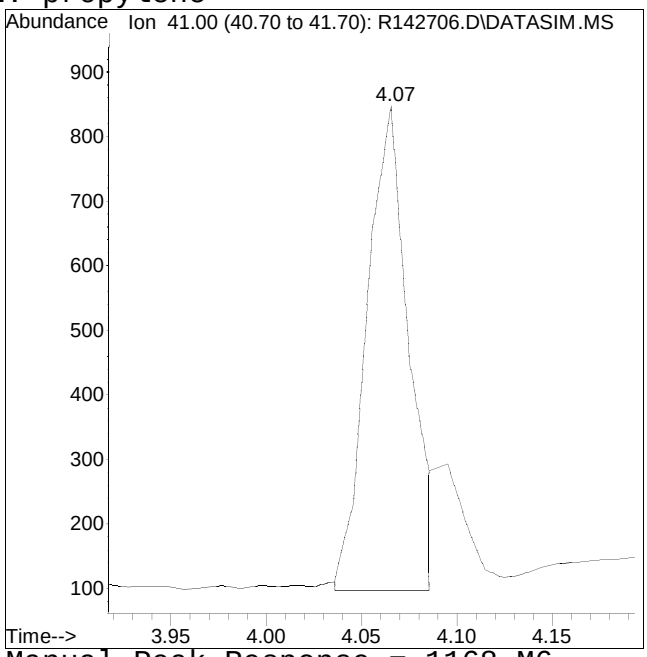
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ QM150710SIM_ICAL TSIM150710.M
Data File : R142706.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:11 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.1 Quant Date : 7/11/2015 10:10 am

Compound #2: propylene



Original Peak Response = 1374



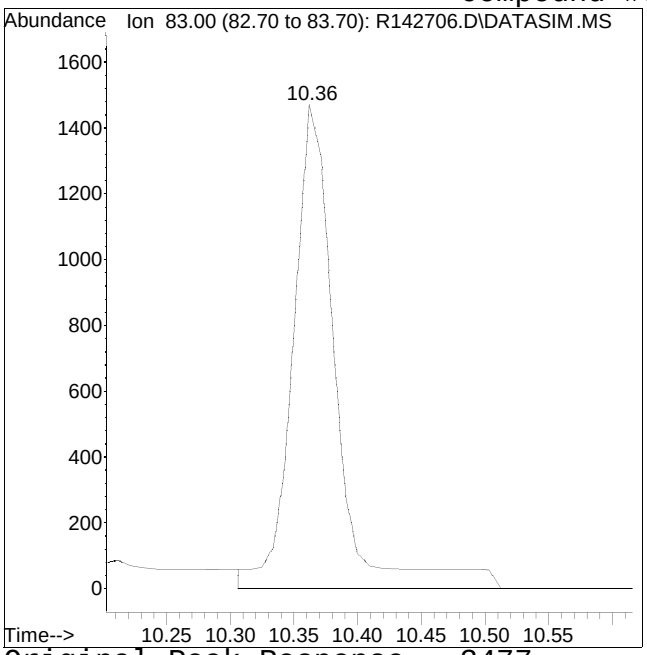
Manual Peak Response = 1168 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

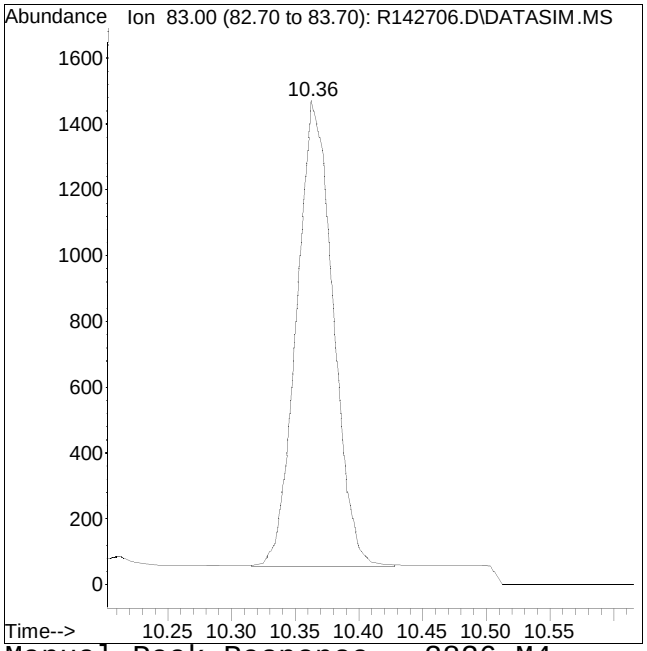
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL
Data File : R142706.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:11 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.1 Quant Date : 7/11/2015 10:10 am

Compound #30: chloroform



Original Peak Response = 3477



Manual Peak Response = 2826 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:16:37 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	187930	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 99.51%	
33) 1,4-difluorobenzene	12.42	114	452381	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 102.57%	
51) chlorobenzene-D5	16.84	54	86321	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 100.45%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	114483	9.819 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.19%	
53) toluene-D8	15.15	98	339799	10.175 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.75%	
67) bromofluorobenzene	18.03	95	250318	10.222 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.22%	

Target Compounds					Qvalue
2) propylene	4.06	41	2444M6	0.247 ppbV	
3) dichlorodifluoromethane	4.16	85	5068	0.321 ppbV	98
4) chloromethane	4.38	50	2367	0.242 ppbV	96
5) Freon-114	4.53	85	6318	0.242 ppbV	99
6) vinyl chloride	4.69	62	2401	0.237 ppbV	92
7) 1,3-butadiene	4.88	54	1893	0.245 ppbV	90
8) bromomethane	5.27	94	2332	0.249 ppbV	95
9) chloroethane	5.52	64	1165	0.253 ppbV	91
10) ethanol	5.73	31	7916	1.332 ppbV	97
11) vinyl bromide	6.00	106	2344	0.232 ppbV	99
12) acetone	6.39	43	17998	1.243 ppbV #	97
13) trichlorofluoromethane	6.59	101	5885	0.236 ppbV	99
14) isopropyl alcohol	6.75	45	5140	0.287 ppbV #	96
15) acrylonitrile	7.00	53	1707M6	0.224 ppbV	
16) 1,1-dichloroethene	7.42	61	3922	0.238 ppbV	97
17) tertiary butyl alcohol	7.55	59	5229	0.254 ppbV #	82
18) methylene chloride	7.59	49	5432	0.412 ppbV	99
19) 3-chloropropene	7.74	41	3124	0.232 ppbV	99
20) carbon disulfide	7.92	76	7235	0.254 ppbV #	1
21) Freon 113	7.94	101	4895	0.234 ppbV	99
22) Halothane	8.53	117	4491	0.261 ppbV	96
23) trans-1,2-dichloroethene	8.77	61	4256	0.230 ppbV	99
24) 1,1-dichloroethane	9.01	63	5061	0.233 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:16:37 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.13	73	7037	0.233 ppbV	95
26) vinyl acetate	9.23	43	6552M3	0.226 ppbV	
27) 2-butanone	9.53	43	6430	0.231 ppbV #	99
28) cis-1,2-dichloroethene	10.01	61	4679	0.234 ppbV	99
29) Ethyl Acetate	10.32	61	1103	0.216 ppbV	93
30) chloroform	10.36	83	6225M4	0.234 ppbV	
31) Tetrahydrofuran	10.87	42	4035	0.246 ppbV	100
32) 1,2-dichloroethane	11.21	62	3624	0.233 ppbV	94
34) hexane	10.26	57	5673	0.229 ppbV #	59
36) 1,1,1-trichloroethane	11.49	97	5273	0.220 ppbV	95
37) benzene	12.02	78	8388	0.229 ppbV	96
38) carbon tetrachloride	12.18	117	4539	0.190 ppbV #	97
39) cyclohexane	12.32	56	4865	0.231 ppbV	98
40) dibromomethane	12.92	93	3315	0.235 ppbV	92
41) 1,2-dichloropropane	12.95	63	3281	0.227 ppbV	98
42) bromodichloromethane	13.17	83	5768	0.216 ppbV	99
43) 1,4-dioxane	13.26	88	1913	0.218 ppbV	84
44) trichloroethene	13.22	130	4093	0.223 ppbV	98
45) 2,2,4-trimethylpentane	13.25	57	15555	0.226 ppbV	99
46) heptane	13.54	43	6085	0.228 ppbV	100
47) cis-1,3-dichloropropene	14.19	75	16006	0.208 ppbV #	95
48) 4-methyl-2-pentanone	14.25	43	7758	0.219 ppbV #	95
49) trans-1,3-dichloropropene	14.79	75	3717	0.197 ppbV	93
50) 1,1,2-trichloroethane	14.97	97	3515	0.223 ppbV	97
52) toluene	15.25	91	10912	0.235 ppbV	98
54) 2-hexanone	15.51	43	6629	0.201 ppbV	94
55) dibromochloromethane	15.67	129	6043	0.210 ppbV	99
56) 1,2-dibromoethane	15.90	107	5494	0.217 ppbV	99
57) tetrachloroethene	16.31	166	5407	0.228 ppbV	98
58) 1,1,1,2-tetrachloroethane	16.87	131	4452	0.216 ppbV	98
59) chlorobenzene	16.88	112	9129	0.227 ppbV	99
60) ethylbenzene	17.18	91	13874	0.229 ppbV	100
61) m+p-xylene	17.32	91	21480	0.455 ppbV	99
62) bromoform	17.40	173	5584	0.194 ppbV	100
63) styrene	17.60	104	8106	0.213 ppbV	99
64) 1,1,2,2-tetrachloroethane	17.69	83	7602	0.220 ppbV	100
65) o-xylene	17.69	91	11250	0.230 ppbV	100
66) 1,2,3-trichloropropane	17.79	75	5754	0.221 ppbV	96
68) isopropylbenzene	18.13	105	15154	0.228 ppbV	100
69) bromobenzene	18.21	77	7269	0.224 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:16:37 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	16698	0.217	ppbV	98
71) 1,3,5-trimethylbenzene	18.66	105	13248	0.220	ppbV	98
72) tert-butylbenzene	18.98	119	14244	0.220	ppbV	98
73) 1,2,4-trimethylbenzene	18.98	105	13031	0.217	ppbV	96
74) Benzyl Chloride	19.09	91	8465	0.174	ppbV	100
75) 1,3-dichlorobenzene	19.11	146	9942	0.215	ppbV	99
76) 1,4-dichlorobenzene	19.16	146	9994	0.212	ppbV	93
77) sec-butylbenzene	19.18	105	18988	0.217	ppbV	98
78) p-isopropyltoluene	19.29	119	17156	0.212	ppbV	100
79) 1,2-dichlorobenzene	19.42	146	9379	0.211	ppbV	99
80) n-butylbenzene	19.61	91	13846	0.194	ppbV	98
81) 1,2,4-trichlorobenzene	20.86	180	6011	0.143	ppbV #	86
82) naphthalene	20.98	128	13111	0.142	ppbV	96
83) 1,2,3-trichlorobenzene	21.24	180	5417	0.138	ppbV #	86
84) hexachlorobutadiene	21.30	225	5449	0.166	ppbV #	88

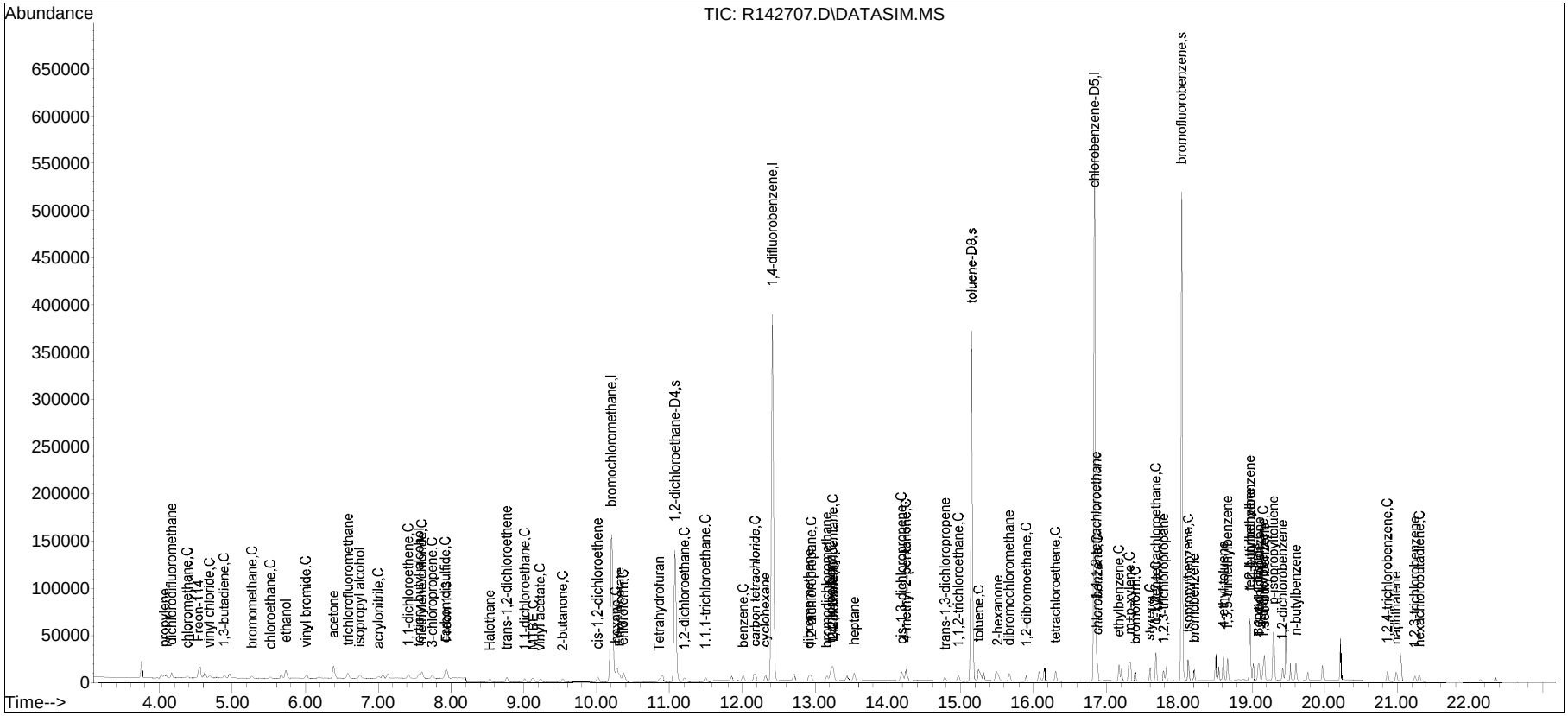
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:16:37 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

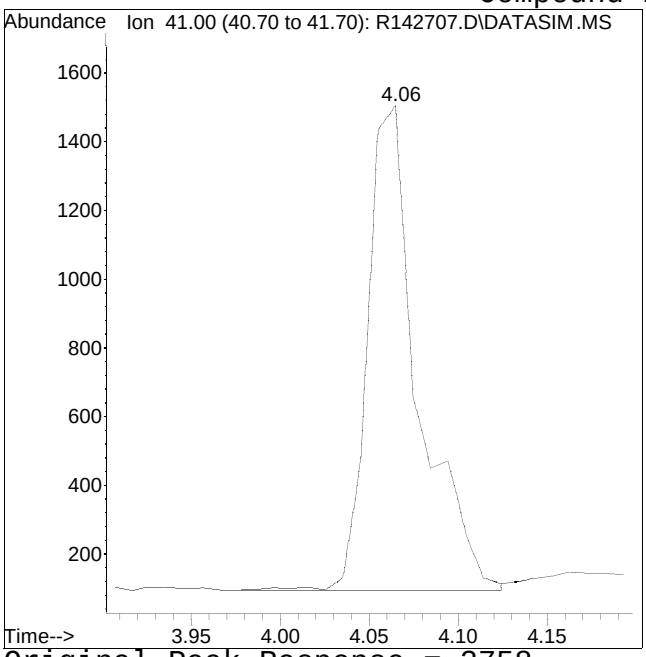
Sub List : Default Compounds
Data File: O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D

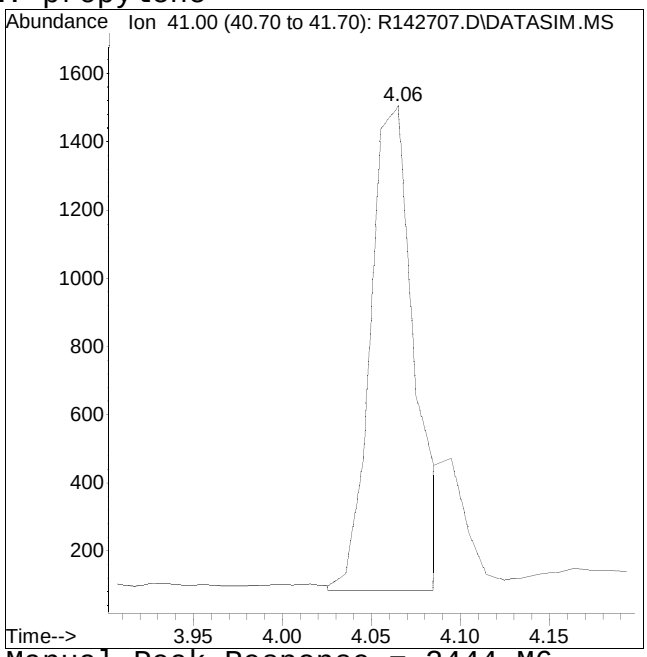


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\SIM_ICAL\ Quant Method : TSIM150710.M
Data File : R142707.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:43 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



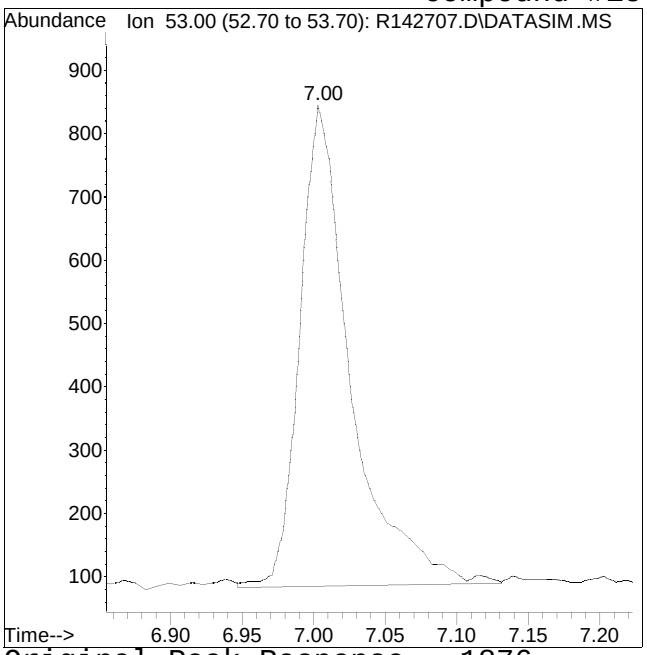


Original Peak Response = 2758 Manual Peak Response = 2444 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

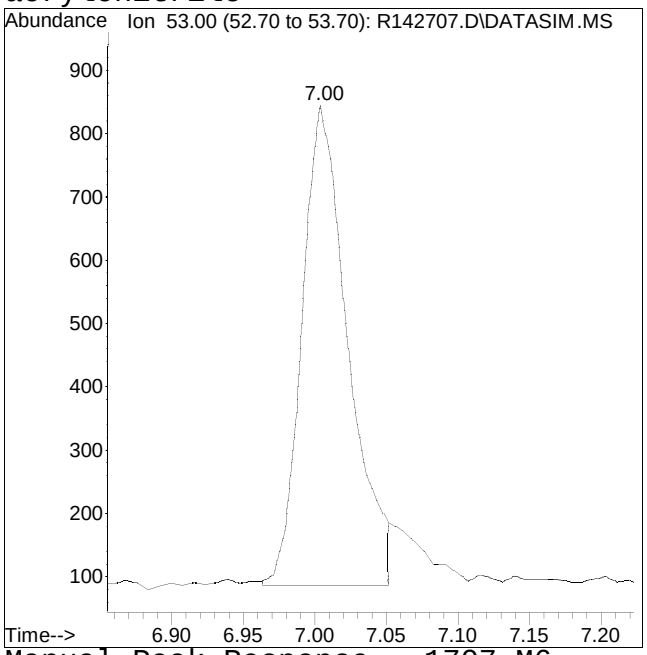
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142707.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:43 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 7/11/2015 10:11 am

Compound #15: acrylonitrile



Original Peak Response = 1876



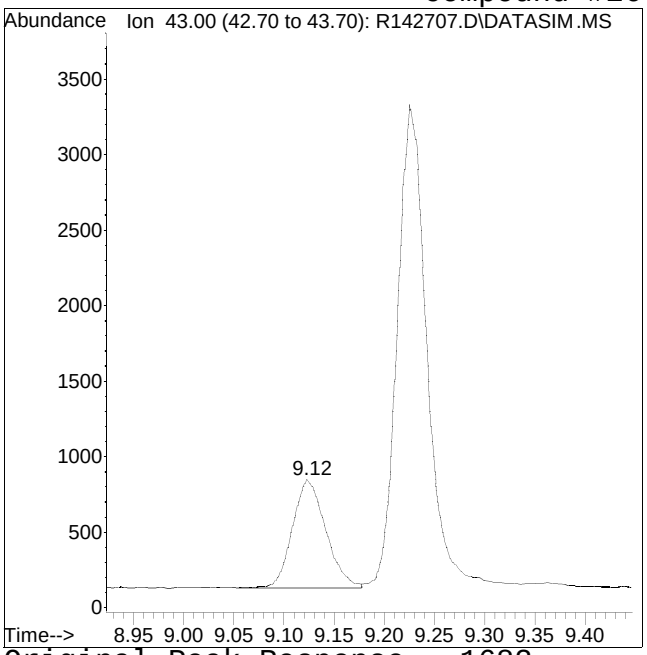
Manual Peak Response = 1707 M6

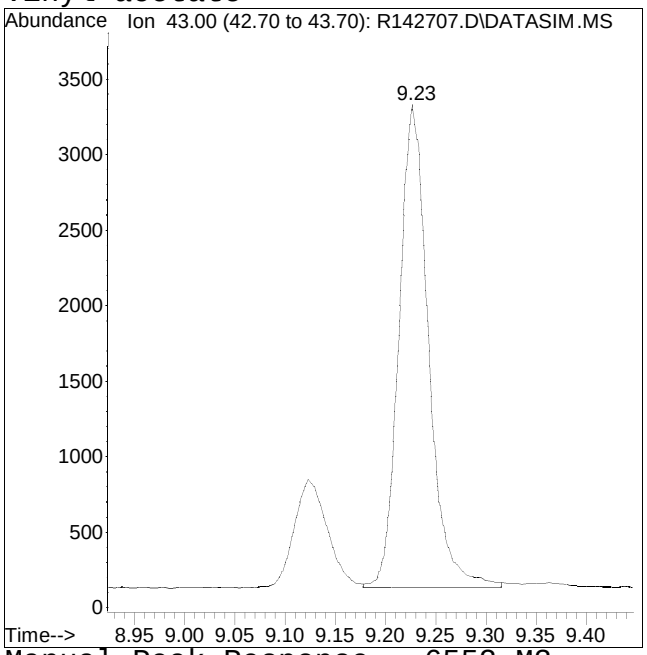
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quantitation Method : TSIM150710.M
Data File : R142707.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:43 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 7/11/2015 10:11 am

Compound #26: vinyl acetate





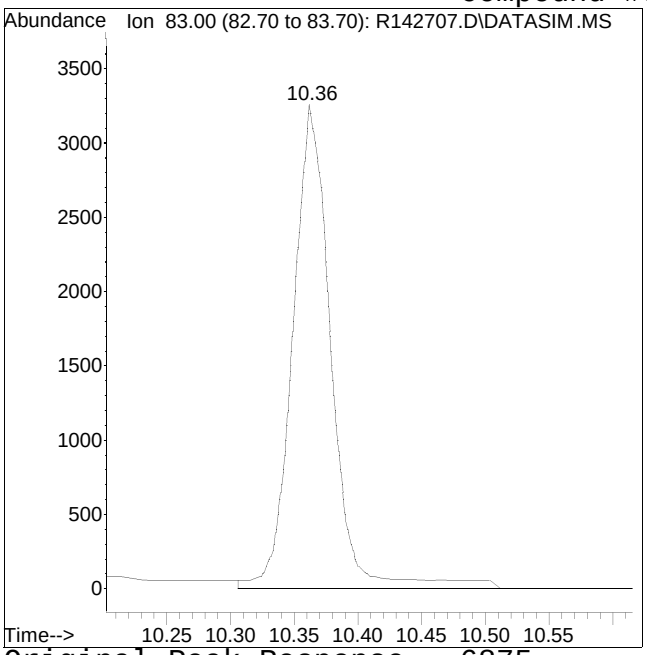
Original Peak Response = 1682 Manual Peak Response = 6552 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

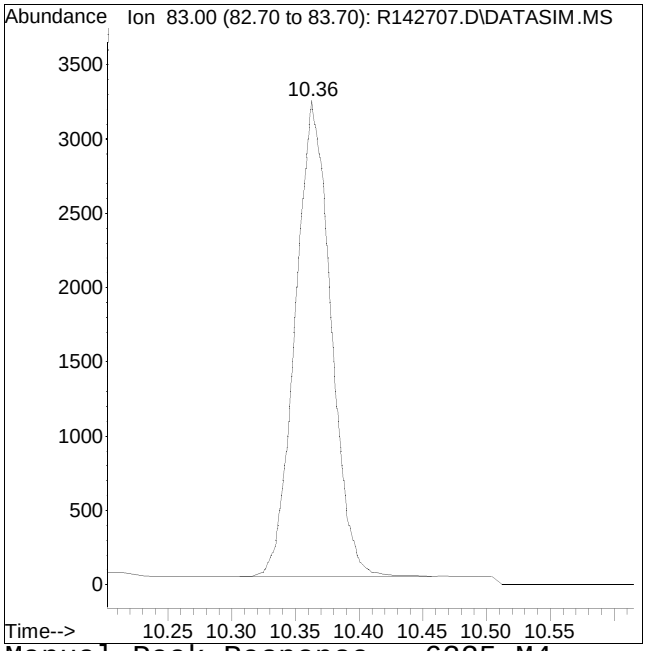
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quantitation Method : TSIM150710.M
Data File : R142707.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 2:43 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.2 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform



Original Peak Response = 6875



Manual Peak Response = 6225 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:17:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	189245	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.21%	
33) 1,4-difluorobenzene	12.42	114	450956	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 102.25%	
51) chlorobenzene-D5	16.84	54	86821	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 101.03%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	115116	9.904 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.04%	
53) toluene-D8	15.15	98	337365	10.044 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.44%	
67) bromofluorobenzene	18.03	95	249539	10.131 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.31%	
Target Compounds					Qvalue
2) propylene	4.07	41	5508M6	0.553 ppbV	
3) dichlorodifluoromethane	4.16	85	8280	0.521 ppbV	99
4) chloromethane	4.38	50	5727	0.580 ppbV	98
5) Freon-114	4.53	85	14998	0.570 ppbV	99
6) vinyl chloride	4.70	62	5604	0.549 ppbV	95
7) 1,3-butadiene	4.88	54	4249	0.546 ppbV	93
8) bromomethane	5.27	94	5262	0.559 ppbV	98
9) chloroethane	5.52	64	2617	0.564 ppbV	94
10) ethanol	5.72	31	16556	2.766 ppbV	99
11) vinyl bromide	6.00	106	5537	0.544 ppbV	100
12) acetone	6.38	43	42140	2.891 ppbV #	97
13) trichlorofluoromethane	6.59	101	13722	0.547 ppbV	99
14) isopropyl alcohol	6.75	45	11435	0.634 ppbV #	97
15) acrylonitrile	7.00	53	4010M6	0.523 ppbV	
16) 1,1-dichloroethene	7.42	61	9167	0.553 ppbV	98
17) tertiary butyl alcohol	7.55	59	12150	0.586 ppbV #	94
18) methylene chloride	7.59	49	9575	0.721 ppbV	98
19) 3-chloropropene	7.74	41	7355	0.542 ppbV	98
20) carbon disulfide	7.92	76	16168	0.565 ppbV #	55
21) Freon 113	7.94	101	11583	0.549 ppbV	98
22) Halothane	8.53	117	10657	0.615 ppbV	98
23) trans-1,2-dichloroethene	8.77	61	10083	0.541 ppbV	92
24) 1,1-dichloroethane	9.01	63	11905	0.545 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:17:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.12	73	16547	0.543	ppbV	96
26) vinyl acetate	9.23	43	14567	0.500	ppbV	98
27) 2-butanone	9.53	43	15109	0.539	ppbV	99
28) cis-1,2-dichloroethene	10.01	61	10850	0.538	ppbV	99
29) Ethyl Acetate	10.32	61	2666	0.519	ppbV	75
30) chloroform	10.36	83	14797M4	0.553	ppbV	
31) Tetrahydrofuran	10.86	42	9354	0.566	ppbV	99
32) 1,2-dichloroethane	11.21	62	8604	0.548	ppbV	97
34) hexane	10.26	57	13400	0.542	ppbV #	70
36) 1,1,1-trichloroethane	11.49	97	12704	0.531	ppbV	97
37) benzene	12.02	78	19485	0.534	ppbV	99
38) carbon tetrachloride	12.18	117	11325	0.476	ppbV	99
39) cyclohexane	12.32	56	11310	0.538	ppbV	98
40) dibromomethane	12.92	93	7629	0.542	ppbV	93
41) 1,2-dichloropropane	12.95	63	7793	0.540	ppbV	99
42) bromodichloromethane	13.17	83	13510	0.508	ppbV	100
43) 1,4-dioxane	13.25	88	4569	0.522	ppbV #	70
44) trichloroethene	13.22	130	9829	0.537	ppbV	99
45) 2,2,4-trimethylpentane	13.25	57	36747	0.537	ppbV	98
46) heptane	13.54	43	14100	0.530	ppbV	100
47) cis-1,3-dichloropropene	14.19	75	38234	0.498	ppbV	97
48) 4-methyl-2-pentanone	14.24	43	18641	0.529	ppbV	97
49) trans-1,3-dichloropropene	14.78	75	9115	0.484	ppbV	92
50) 1,1,2-trichloroethane	14.97	97	8289	0.527	ppbV	95
52) toluene	15.25	91	25674	0.549	ppbV	100
54) 2-hexanone	15.50	43	16953	0.512	ppbV	96
55) dibromochloromethane	15.67	129	14353	0.497	ppbV	99
56) 1,2-dibromoethane	15.90	107	13202	0.517	ppbV	97
57) tetrachloroethene	16.31	166	12871	0.540	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.87	131	10858	0.524	ppbV	98
59) chlorobenzene	16.88	112	21541	0.533	ppbV	98
60) ethylbenzene	17.18	91	32716	0.537	ppbV	99
61) m+p-xylene	17.32	91	50997	1.074	ppbV	99
62) bromoform	17.40	173	13887	0.479	ppbV	99
63) styrene	17.60	104	19675	0.515	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.69	83	17927	0.516	ppbV	100
65) o-xylene	17.69	91	26368	0.537	ppbV	99
66) 1,2,3-trichloropropane	17.79	75	13595	0.519	ppbV	97
68) isopropylbenzene	18.13	105	35530	0.530	ppbV	100
69) bromobenzene	18.21	77	17365	0.532	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:17:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	40401	0.522 ppbV	100
71) 1,3,5-trimethylbenzene	18.67	105	32001	0.527 ppbV	100
72) tert-butylbenzene	18.98	119	34209	0.526 ppbV	97
73) 1,2,4-trimethylbenzene	18.98	105	31573	0.523 ppbV	93
74) Benzyl Chloride	19.09	91	21751	0.445 ppbV	94
75) 1,3-dichlorobenzene	19.11	146	24059	0.518 ppbV	97
76) 1,4-dichlorobenzene	19.16	146	24699	0.521 ppbV	96
77) sec-butylbenzene	19.18	105	46416	0.528 ppbV	98
78) p-isopropyltoluene	19.28	119	42223	0.519 ppbV	98
79) 1,2-dichlorobenzene	19.42	146	22516	0.505 ppbV	98
80) n-butylbenzene	19.61	91	35865	0.500 ppbV	98
81) 1,2,4-trichlorobenzene	20.86	180	17462	0.412 ppbV #	92
82) naphthalene	20.98	128	37855	0.407 ppbV	98
83) 1,2,3-trichlorobenzene	21.24	180	15881	0.403 ppbV #	91
84) hexachlorobutadiene	21.30	225	14954	0.454 ppbV #	86

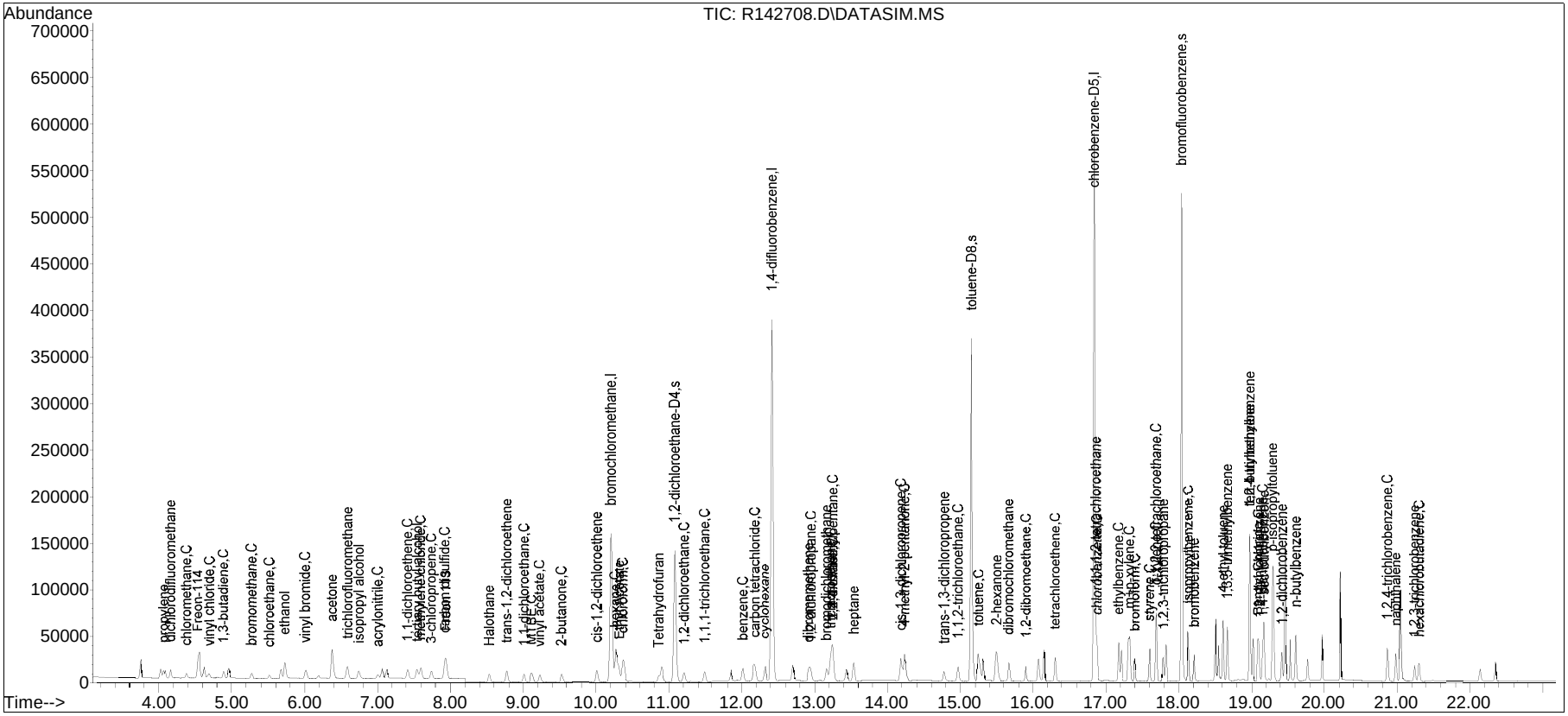
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:17:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

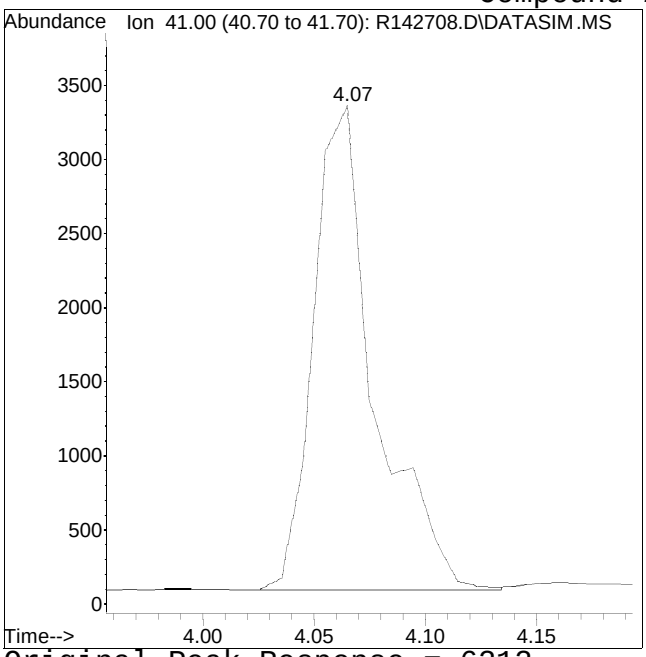
Sub List : Default All Compounds
Data File : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D

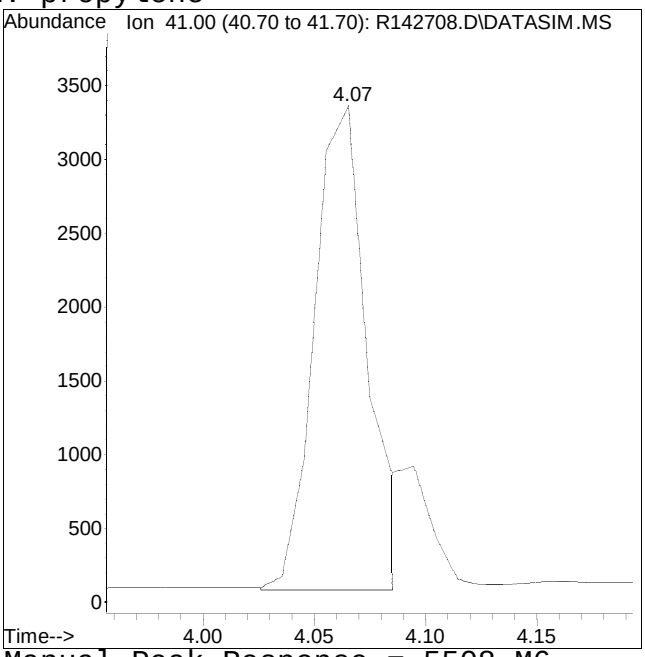


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142708.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:14 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



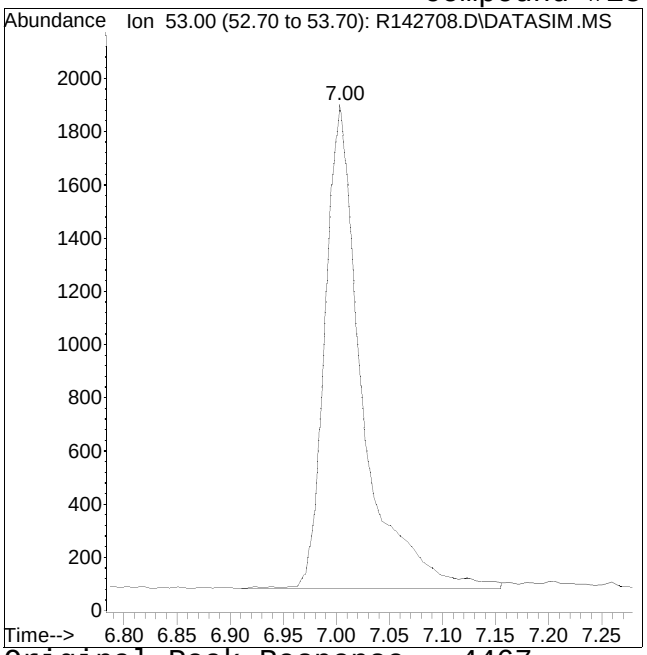


Original Peak Response = 6212 Manual Peak Response = 5508 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

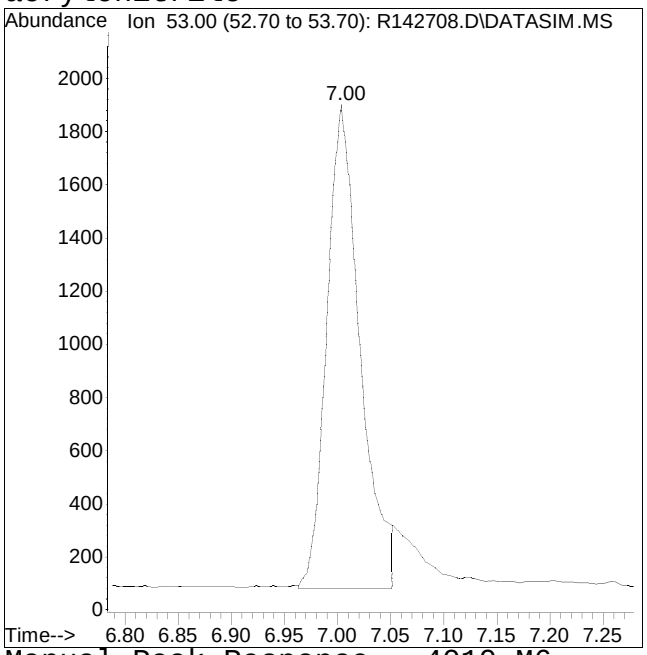
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142708.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:14 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 7/11/2015 10:11 am

Compound #15: acrylonitrile



Original Peak Response = 4467



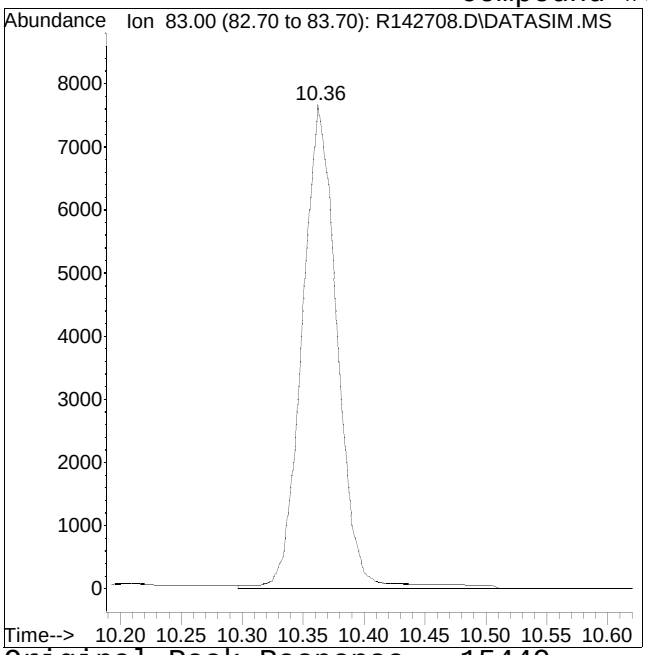
Manual Peak Response = 4010 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

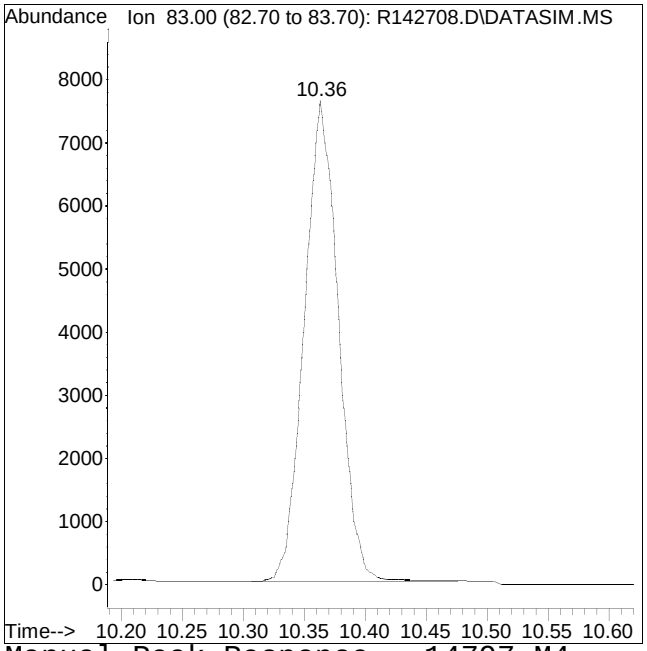
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142708.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:14 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD0.5 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform



Original Peak Response = 15449



Manual Peak Response = 14797 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:19:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	185405	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 98.18%	
33) 1,4-difluorobenzene	12.42	114	448834	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 101.77%	
51) chlorobenzene-D5	16.84	54	85989	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 100.07%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	113995	9.854 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.54%	
53) toluene-D8	15.15	98	339742	10.212 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.12%	
67) bromofluorobenzene	18.03	95	246757	10.115 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.15%	
Target Compounds					Qvalue
2) propylene	4.07	41	10811M6	1.108 ppbV	
3) dichlorodifluoromethane	4.16	85	19770	1.271 ppbV	100
4) chloromethane	4.38	50	10910	1.128 ppbV	100
5) Freon-114	4.53	85	28963	1.124 ppbV	99
6) vinyl chloride	4.70	62	11088	1.110 ppbV	96
7) 1,3-butadiene	4.88	54	8254	1.082 ppbV	92
8) bromomethane	5.27	94	10239	1.110 ppbV	100
9) chloroethane	5.52	64	4995	1.099 ppbV	98
10) ethanol	5.72	31	31023	5.291 ppbV	96
11) vinyl bromide	6.01	106	10905	1.093 ppbV	98
12) acetone	6.37	43	80380	5.628 ppbV #	98
13) trichlorofluoromethane	6.59	101	26723	1.087 ppbV	100
14) isopropyl alcohol	6.74	45	20641	1.168 ppbV	99
15) acrylonitrile	7.00	53	7864M6	1.048 ppbV	
16) 1,1-dichloroethene	7.42	61	17787	1.095 ppbV	99
17) tertiary butyl alcohol	7.53	59	23459	1.155 ppbV	95
18) methylene chloride	7.59	49	16471	1.266 ppbV	98
19) 3-chloropropene	7.75	41	14323	1.078 ppbV	97
20) carbon disulfide	7.92	76	30752	1.096 ppbV #	78
21) Freon 113	7.94	101	22586	1.093 ppbV	100
22) Halothane	8.53	117	20812	1.225 ppbV	98
23) trans-1,2-dichloroethene	8.77	61	19648	1.076 ppbV	93
24) 1,1-dichloroethane	9.01	63	23305	1.090 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:19:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) MTBE	9.12	73	31948	1.071 ppbV	99
26) vinyl acetate	9.23	43	28897	1.012 ppbV	99
27) 2-butanone	9.52	43	29556	1.076 ppbV	99
28) cis-1,2-dichloroethene	10.01	61	20912	1.059 ppbV	97
29) Ethyl Acetate	10.31	61	5079	1.010 ppbV	98
30) chloroform	10.36	83	28354M4	1.081 ppbV	
31) Tetrahydrofuran	10.85	42	18274	1.128 ppbV	99
32) 1,2-dichloroethane	11.21	62	16643	1.082 ppbV	98
34) hexane	10.26	57	25836	1.050 ppbV	80
36) 1,1,1-trichloroethane	11.49	97	24887	1.046 ppbV	97
37) benzene	12.02	78	38195	1.051 ppbV	99
38) carbon tetrachloride	12.18	117	23223	0.981 ppbV	99
39) cyclohexane	12.33	56	22500	1.076 ppbV	93
40) dibromomethane	12.92	93	14737	1.052 ppbV	96
41) 1,2-dichloropropane	12.95	63	15285	1.064 ppbV	97
42) bromodichloromethane	13.17	83	26734	1.010 ppbV	100
43) 1,4-dioxane	13.24	88	8444	0.968 ppbV #	73
44) trichloroethene	13.22	130	19214	1.056 ppbV	99
45) 2,2,4-trimethylpentane	13.25	57	70746	1.038 ppbV	98
46) heptane	13.54	43	27864	1.053 ppbV	100
47) cis-1,3-dichloropropene	14.19	75	75672	0.991 ppbV	98
48) 4-methyl-2-pentanone	14.24	43	36166	1.031 ppbV #	95
49) trans-1,3-dichloropropene	14.78	75	18022	0.961 ppbV	95
50) 1,1,2-trichloroethane	14.97	97	16297	1.041 ppbV	97
52) toluene	15.25	91	49918	1.078 ppbV	100
54) 2-hexanone	15.50	43	34092	1.040 ppbV	97
55) dibromochloromethane	15.67	129	28739	1.004 ppbV	100
56) 1,2-dibromoethane	15.90	107	25967	1.027 ppbV	98
57) tetrachloroethene	16.31	166	25218	1.067 ppbV	99
58) 1,1,1,2-tetrachloroethane	16.87	131	21170	1.032 ppbV	99
59) chlorobenzene	16.88	112	42170	1.054 ppbV	99
60) ethylbenzene	17.18	91	64238	1.064 ppbV	99
61) m+p-xylene	17.32	91	100190	2.130 ppbV	100
62) bromoform	17.40	173	28205	0.983 ppbV	100
63) styrene	17.60	104	39141	1.034 ppbV	99
64) 1,1,2,2-tetrachloroethane	17.69	83	35359	1.027 ppbV	100
65) o-xylene	17.69	91	51245	1.053 ppbV	98
66) 1,2,3-trichloropropane	17.79	75	26932	1.037 ppbV	99
68) isopropylbenzene	18.13	105	70907	1.069 ppbV	99
69) bromobenzene	18.21	77	33781	1.045 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:19:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	79586	1.038	ppbV	99
71) 1,3,5-trimethylbenzene	18.67	105	63016	1.048	ppbV	99
72) tert-butylbenzene	18.97	119	68436	1.063	ppbV	100
73) 1,2,4-trimethylbenzene	18.97	105	62773	1.049	ppbV	99
74) Benzyl Chloride	19.09	91	45100	0.932	ppbV	96
75) 1,3-dichlorobenzene	19.11	146	47854	1.040	ppbV	94
76) 1,4-dichlorobenzene	19.16	146	48472	1.033	ppbV	98
77) sec-butylbenzene	19.18	105	91610	1.052	ppbV	97
78) p-isopropyltoluene	19.28	119	82896	1.029	ppbV	99
79) 1,2-dichlorobenzene	19.42	146	45682	1.034	ppbV	98
80) n-butylbenzene	19.61	91	72424	1.020	ppbV	97
81) 1,2,4-trichlorobenzene	20.86	180	37007	0.881	ppbV #	95
82) naphthalene	20.98	128	78562	0.853	ppbV	98
83) 1,2,3-trichlorobenzene	21.24	180	33968	0.871	ppbV #	94
84) hexachlorobutadiene	21.29	225	30891	0.946	ppbV	95

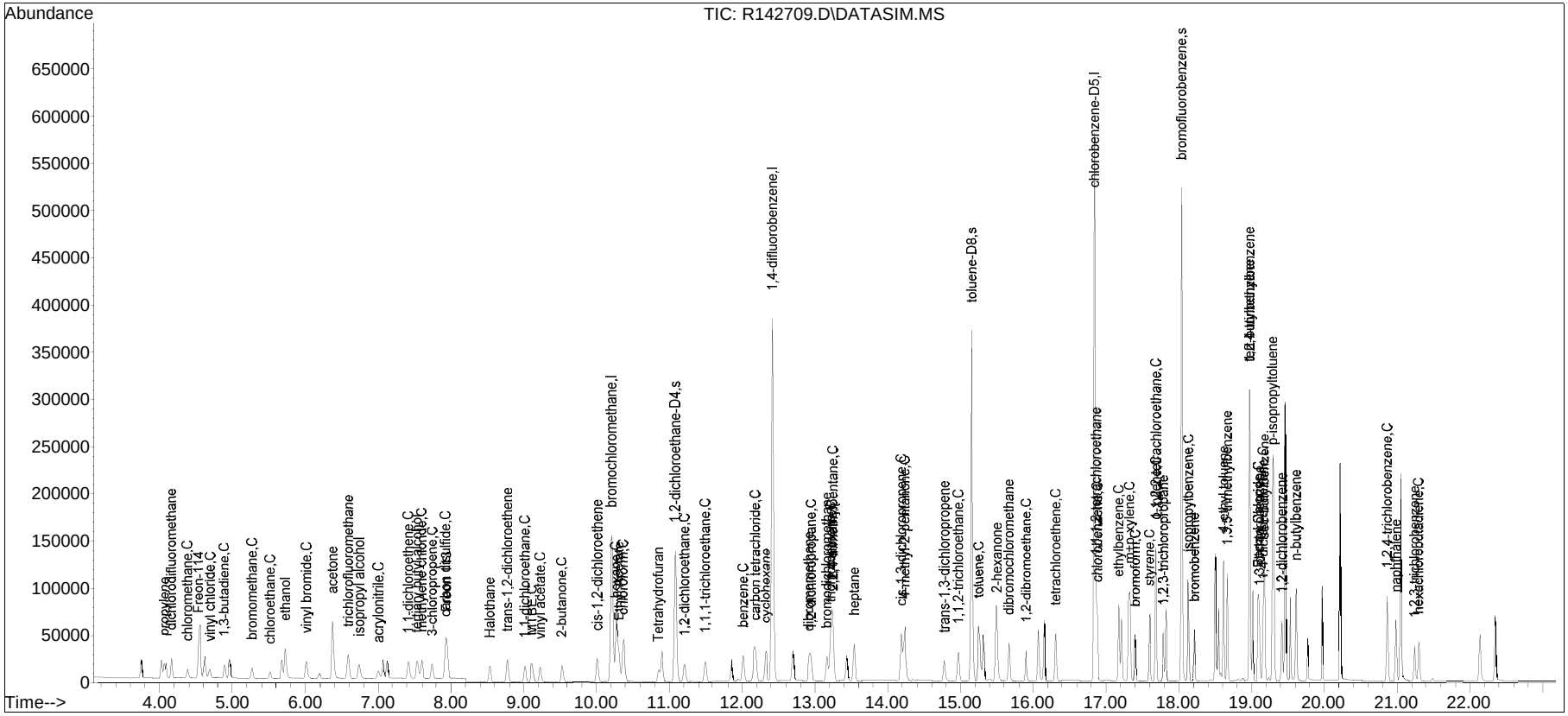
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801831
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 10:19:03 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

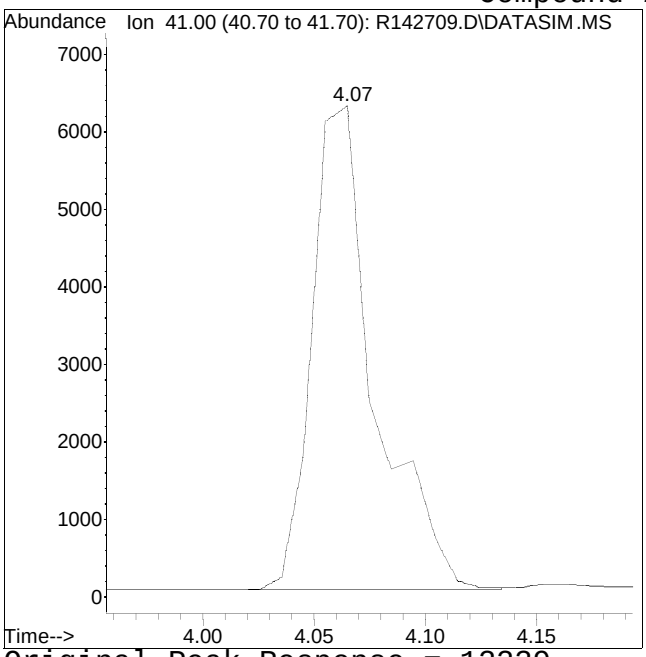
Sub List : Default All Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



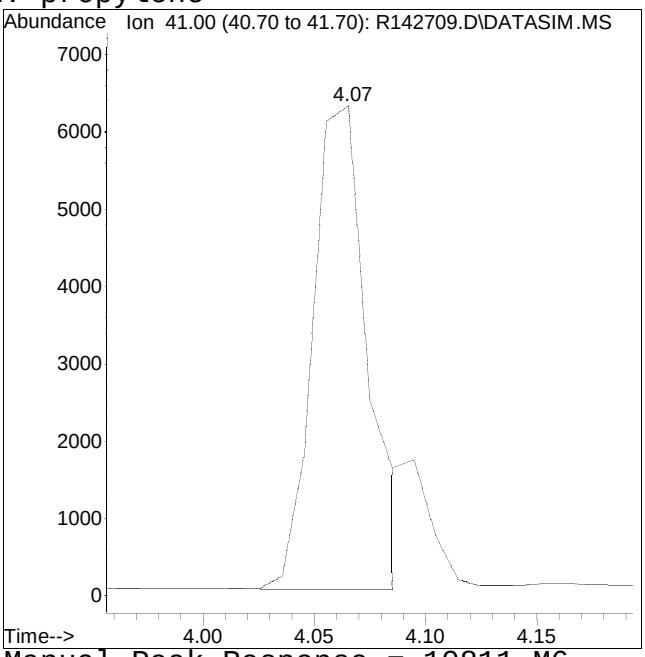
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\0710\SIM_ICAL\ Quant Method : TSIM150710.M
Data File : R142709.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:48 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD1.0 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



Original Peak Response = 12239



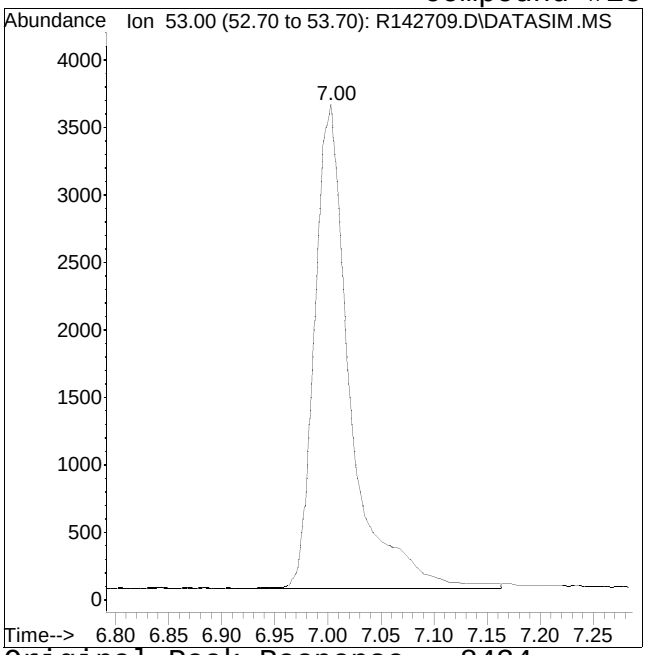
Manual Peak Response = 10811 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

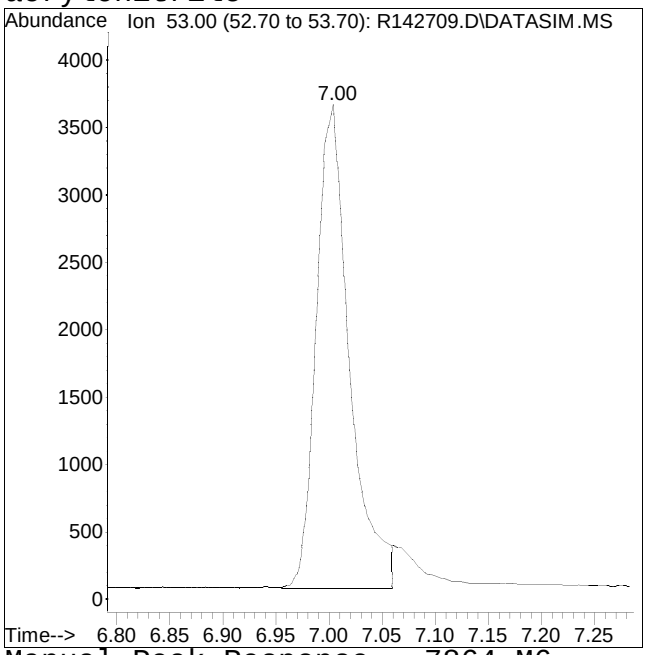
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL TSIM150710.M
Data File : R142709.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:48 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD1.0 Quant Date : 7/11/2015 10:11 am

Compound #15: acrylonitrile



Original Peak Response = 8434



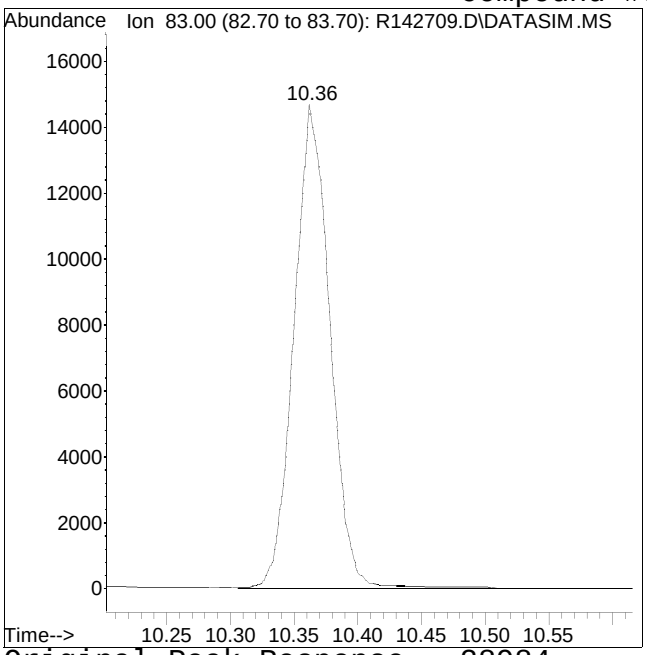
Manual Peak Response = 7864 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

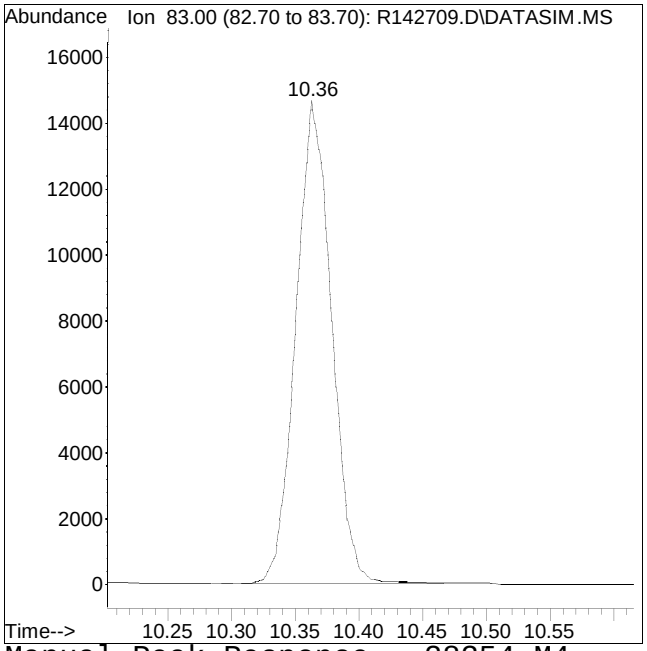
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL
Data File : R142709.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 3:48 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD1.0 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform



Original Peak Response = 28984



Manual Peak Response = 28354 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:10:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 12:00:41 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.20	49	188851	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.00%	
33) 1,4-difluorobenzene	12.42	114	441025	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 100.00%	
51) chlorobenzene-D5	16.84	54	85933	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 100.00%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.08	65	113667	7.893 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 78.93%	
53) toluene-D8	15.15	98	332466	9.923 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.23%	
67) bromofluorobenzene	18.03	95	243791	9.598 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 95.98%	
Target Compounds					Qvalue
2) propylene	4.06	41	49691M6	4.597 ppbV	
3) dichlorodifluoromethane	4.16	85	79244	2.052 ppbV	98
4) chloromethane	4.38	50	49244	3.731 ppbV	97
5) Freon-114	4.53	85	131217	2.814 ppbV	95
6) vinyl chloride	4.69	62	50893	3.171 ppbV	98
7) 1,3-butadiene	4.88	54	38863	3.625 ppbV	99
8) bromomethane	5.27	94	46998	2.936 ppbV	100
9) chloroethane	5.52	64	23143	2.916 ppbV	93
10) ethanol	5.71	31	149303	13.733 ppbV #	75
11) vinyl bromide	6.00	106	50830	3.127 ppbV	99
12) acetone	6.36	43	363705	16.364 ppbV	98
13) trichlorofluoromethane	6.59	101	125163	2.905 ppbV	99
14) isopropyl alcohol	6.72	45	90020	3.693 ppbV	100
15) acrylonitrile	7.00	53	38233	3.704 ppbV	99
16) 1,1-dichloroethene	7.42	61	82730	3.179 ppbV	95
17) tertiary butyl alcohol	7.51	59	103465	2.665 ppbV	97
18) methylene chloride	7.59	49	66243	3.681 ppbV	90
19) 3-chloropropene	7.74	41	67675	3.284 ppbV #	88
20) carbon disulfide	7.92	76	142902	2.814 ppbV	98
21) Freon 113	7.94	101	105228	3.095 ppbV	93
22) Halothane	8.53	117	86526	3.378 ppbV	96
23) trans-1,2-dichloroethene	8.77	61	93002	3.789 ppbV	91
24) 1,1-dichloroethane	9.01	63	108929	3.619 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:10:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 12:00:41 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25)	MTBE	9.10	73	151945	3.180	ppbV	#	93
26)	vinyl acetate	9.22	43	145448	4.332	ppbV		97
27)	2-butanone	9.51	43	139959	4.294	ppbV		93
28)	cis-1,2-dichloroethene	10.01	61	100543	3.971	ppbV		91
29)	Ethyl Acetate	10.30	61	25617	4.793	ppbV		74
30)	chloroform	10.36	83	133565M4	3.156	ppbV		
31)	Tetrahydrofuran	10.83	42	82511M6	4.610	ppbV		
32)	1,2-dichloroethane	11.21	62	78303	3.160	ppbV		95
34)	hexane	10.26	57	120944	4.760	ppbV	#	87
36)	1,1,1-trichloroethane	11.49	97	116908	3.541	ppbV		95
37)	benzene	12.02	78	178588	3.942	ppbV		93
38)	carbon tetrachloride	12.18	117	116273	3.909	ppbV		99
39)	cyclohexane	12.32	56	102728	4.971	ppbV	#	83
40)	dibromomethane	12.92	93	68836	3.530	ppbV	#	77
41)	1,2-dichloropropane	12.94	63	70558	4.375	ppbV		96
42)	bromodichloromethane	13.17	83	130058	3.728	ppbV	#	98
43)	1,4-dioxane	13.22	88	42835	4.329	ppbV		88
44)	trichloroethene	13.22	130	89431	4.474	ppbV		94
45)	2,2,4-trimethylpentane	13.24	57	334779	5.020	ppbV	#	94
46)	heptane	13.54	43	130039	4.957	ppbV		100
47)	cis-1,3-dichloropropene	14.19	75	375198	4.042	ppbV		99
48)	4-methyl-2-pentanone	14.22	43	172374	5.406	ppbV		97
49)	trans-1,3-dichloropropene	14.78	75	92108	4.048	ppbV		99
50)	1,1,2-trichloroethane	14.97	97	76884	4.184	ppbV		95
52)	toluene	15.25	91	231456	4.404	ppbV		100
54)	2-hexanone	15.48	43	163755	5.817	ppbV	#	93
55)	dibromochloromethane	15.67	129	142969	4.482	ppbV		100
56)	1,2-dibromoethane	15.89	107	126287	4.636	ppbV		98
57)	tetrachloroethene	16.31	166	118053	4.643	ppbV	#	93
58)	1,1,1,2-tetrachloroethane	16.87	131	102460	4.519	ppbV		95
59)	chlorobenzene	16.88	112	199903	4.754	ppbV		92
60)	ethylbenzene	17.18	91	301605	4.412	ppbV		97
61)	m+p-xylene	17.32	91	470074	8.777	ppbV		96
62)	bromoform	17.40	173	143414	4.649	ppbV		100
63)	styrene	17.60	104	189228	4.941	ppbV		94
64)	1,1,2,2-tetrachloroethane	17.68	83	172027	4.332	ppbV		100
65)	o-xylene	17.68	91	243074	4.358	ppbV		96
66)	1,2,3-trichloropropane	17.78	75	129741	4.126	ppbV		97
68)	isopropylbenzene	18.13	105	331538	4.615	ppbV		97
69)	bromobenzene	18.21	77	161470	4.167	ppbV	#	80

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:10:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 12:00:41 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	382940	4.897	ppbV	97
71) 1,3,5-trimethylbenzene	18.67	105	300380	4.603	ppbV	93
72) tert-butylbenzene	18.97	119	321591	4.861	ppbV	100
73) 1,2,4-trimethylbenzene	18.97	105	298980	4.660	ppbV	94
74) Benzyl Chloride	19.09	91	241908	4.818	ppbV #	82
75) 1,3-dichlorobenzene	19.10	146	229965	5.073	ppbV	95
76) 1,4-dichlorobenzene	19.16	146	234432	4.997	ppbV #	88
77) sec-butylbenzene	19.17	105	435146	4.809	ppbV	100
78) p-isopropyltoluene	19.28	119	402684	5.043	ppbV	97
79) 1,2-dichlorobenzene	19.42	146	220846	5.077	ppbV	96
80) n-butylbenzene	19.60	91	354797	4.938	ppbV	97
81) 1,2,4-trichlorobenzene	20.86	180	209902	6.197	ppbV	96
82) naphthalene	20.98	128	460120	6.585	ppbV	98
83) 1,2,3-trichlorobenzene	21.24	180	194973	6.242	ppbV #	83
84) hexachlorobutadiene	21.29	225	163137	5.490	ppbV	96

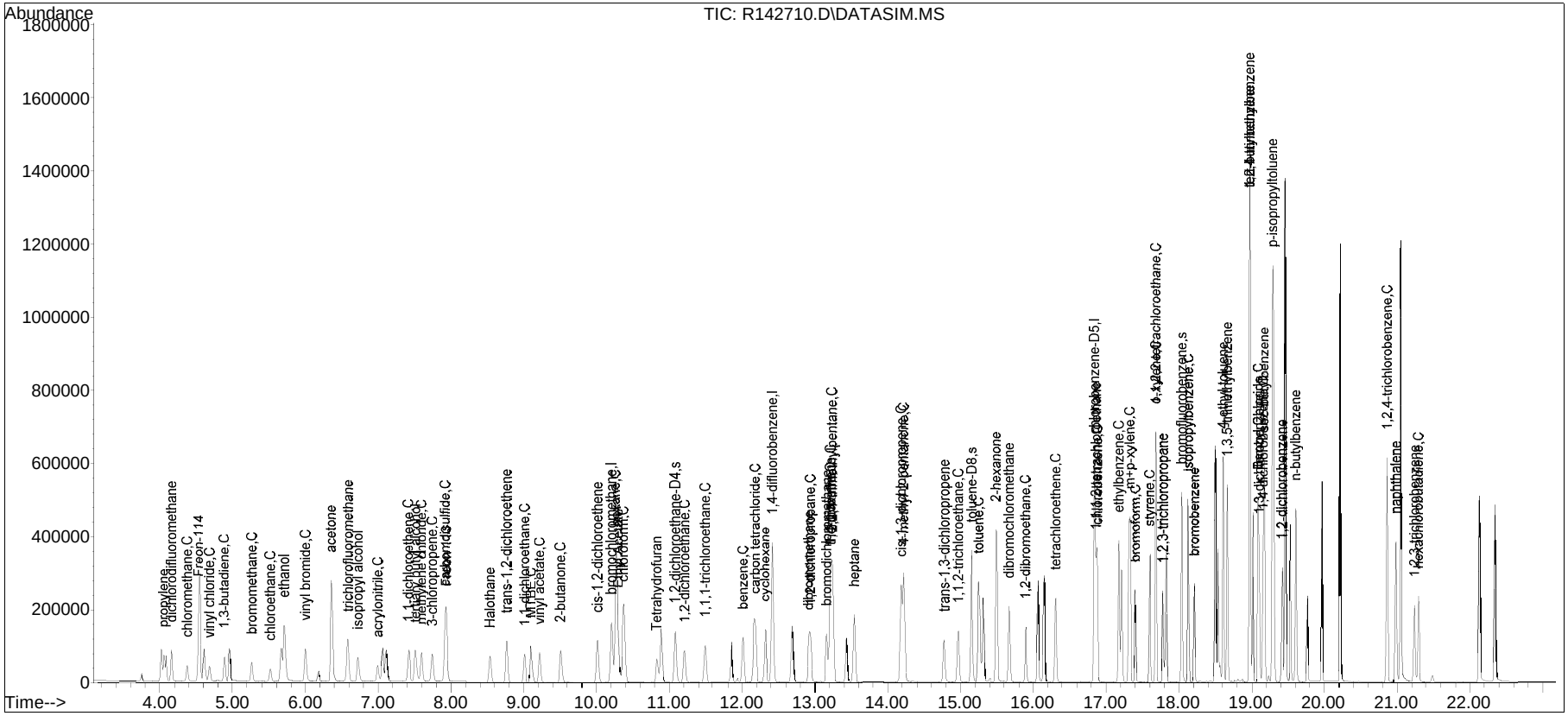
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:10:00 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 12:00:41 2015
Response via : Initial Calibration

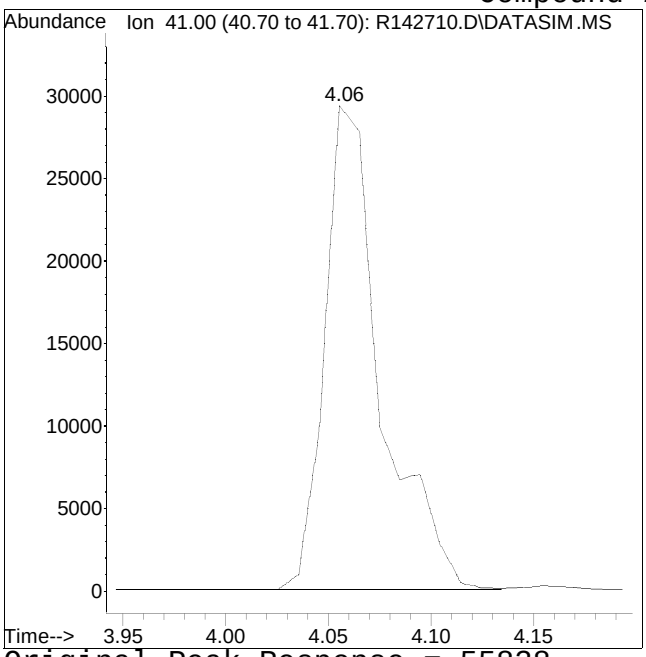
Sub List : Default All Compounds
Data File : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



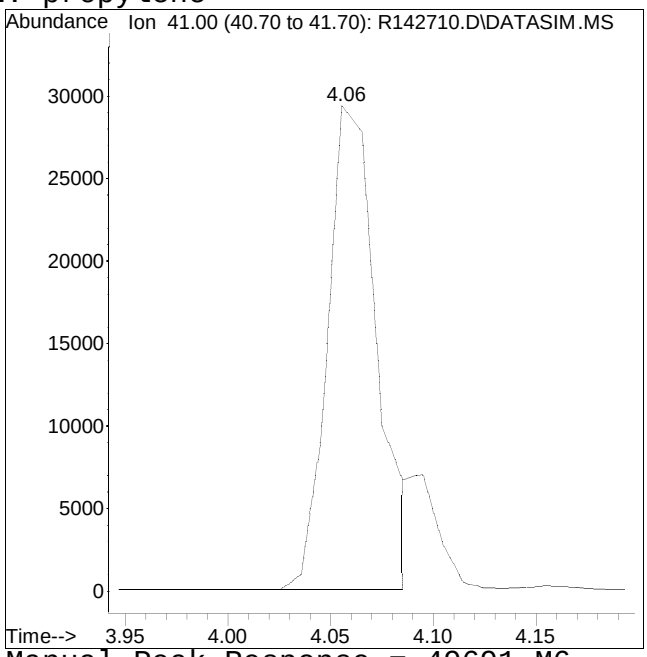
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142710.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:19 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 7/11/2015 10:09 am

Compound #2: propylene



Original Peak Response = 55838



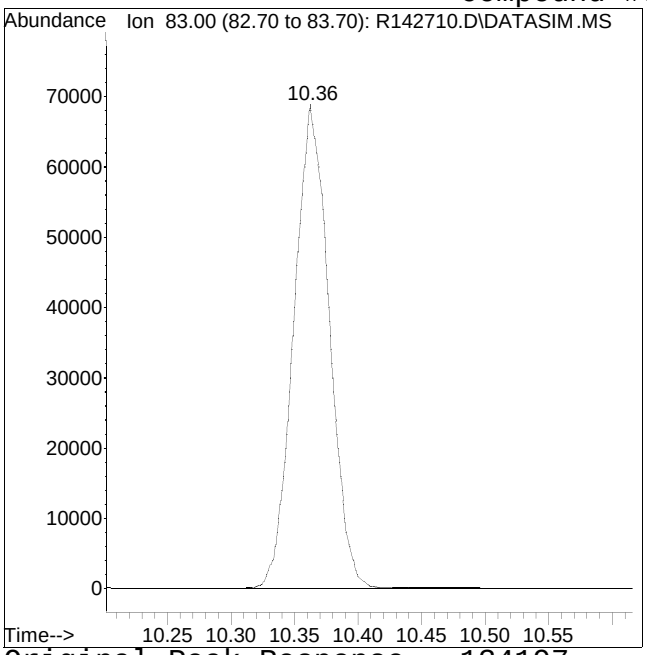
Manual Peak Response = 49691 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

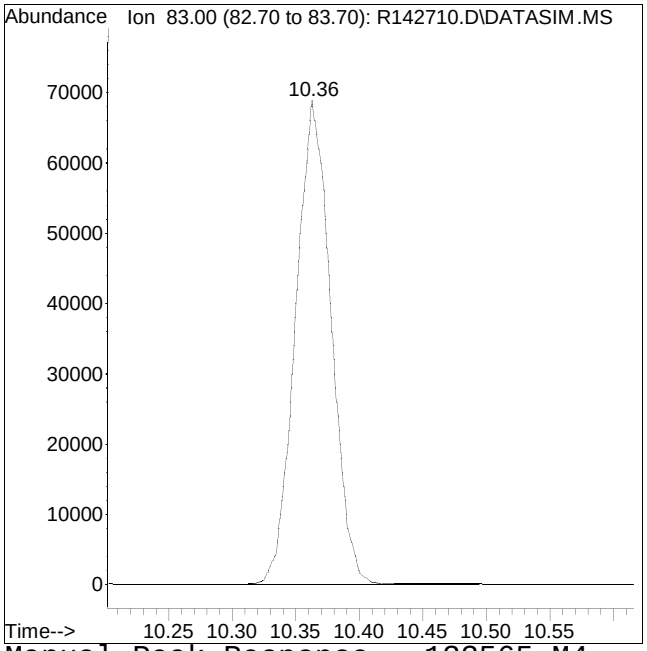
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quantitation Method : TSIM150710.M
Data File : R142710.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:19 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 7/11/2015 10:09 am

Compound #30: chloroform



Original Peak Response = 134197



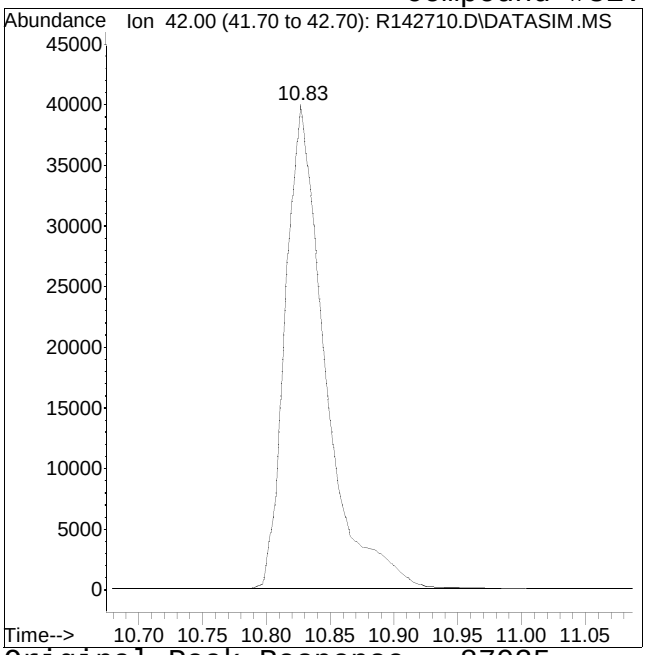
Manual Peak Response = 133565 M4

M4 = Poor automated baseline construction.

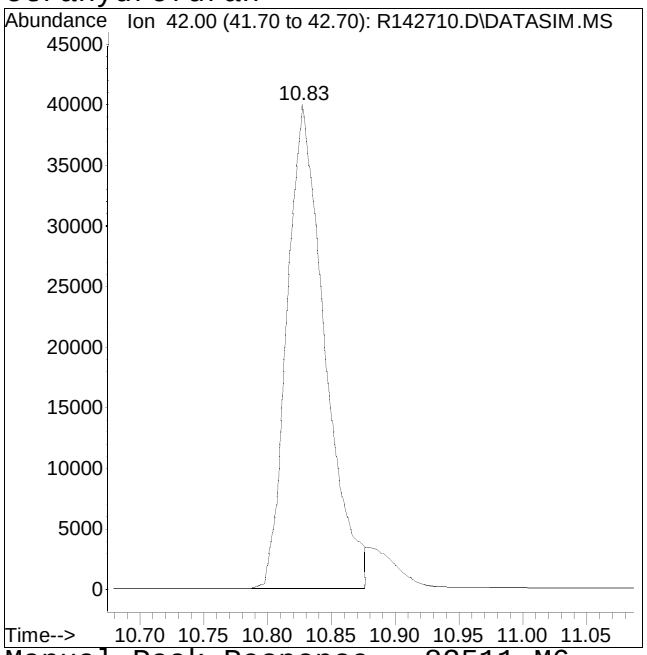
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142710.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:19 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 7/11/2015 10:09 am

Compound #31: Tetrahydrofuran



Original Peak Response = 87035



Manual Peak Response = 82511 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:20:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.20	49	187578	10.000	ppbV	0.00
Standard Area = 188851			Recovery = 99.33%			
33) 1,4-difluorobenzene	12.42	114	437574	10.000	ppbV	0.00
Standard Area = 441025			Recovery = 99.22%			
51) chlorobenzene-D5	16.84	54	83670	10.000	ppbV	0.00
Standard Area = 85933			Recovery = 97.37%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.08	65	112145	9.944	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.44%			
53) toluene-D8	15.15	98	331003	10.225	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.25%			
67) bromofluorobenzene	18.03	95	244643	10.306	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.06%			
Target Compounds						Qvalue
2) propylene	4.07	41	93211M6	9.443	ppbV	
3) dichlorodifluoromethane	4.16	85	164224	10.432	ppbV	100
4) chloromethane	4.38	50	95069	9.718	ppbV	99
5) Freon-114	4.53	85	258008	9.898	ppbV	99
6) vinyl chloride	4.70	62	98016	9.695	ppbV	98
7) 1,3-butadiene	4.88	54	74971	9.711	ppbV	95
8) bromomethane	5.27	94	91254	9.774	ppbV	99
9) chloroethane	5.52	64	44669	9.716	ppbV	99
10) ethanol	5.72	31	274828	46.331	ppbV	95
11) vinyl bromide	6.00	106	98574	9.762	ppbV	99
12) acetone	6.36	43	698308	48.325	ppbV	98
13) trichlorofluoromethane	6.59	101	241968	9.732	ppbV	100
14) isopropyl alcohol	6.72	45	167860	9.387	ppbV	100
15) acrylonitrile	7.00	53	74075	9.753	ppbV	99
16) 1,1-dichloroethene	7.42	61	159863	9.727	ppbV	98
17) tertiary butyl alcohol	7.51	59	200146	9.738	ppbV	99
18) methylene chloride	7.59	49	126350	9.602	ppbV	97
19) 3-chloropropene	7.74	41	130437	9.702	ppbV	100
20) carbon disulfide	7.92	76	274983	9.687	ppbV	98
21) Freon 113	7.94	101	202885	9.706	ppbV	100
22) Halothane	8.53	117	190431	11.079	ppbV	99
23) trans-1,2-dichloroethene	8.77	61	178495	9.661	ppbV	99
24) 1,1-dichloroethane	9.01	63	210314	9.719	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:20:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.10	73	294847	9.768	ppbV	98
26) vinyl acetate	9.22	43	292596	10.127	ppbV	100
27) 2-butanone	9.50	43	270659	9.735	ppbV	98
28) cis-1,2-dichloroethene	10.01	61	191847	9.605	ppbV	98
29) Ethyl Acetate	10.30	61	49579	9.743	ppbV	93
30) chloroform	10.36	83	258169M4	9.730	ppbV	
31) Tetrahydrofuran	10.82	42	156523M6	9.549	ppbV	
32) 1,2-dichloroethane	11.21	62	151915	9.766	ppbV	99
34) hexane	10.26	57	234623	9.776	ppbV	97
36) 1,1,1-trichloroethane	11.49	97	228245	9.839	ppbV	99
37) benzene	12.02	78	344804	9.730	ppbV	99
38) carbon tetrachloride	12.18	117	231108	10.017	ppbV	100
39) cyclohexane	12.33	56	202060	9.912	ppbV	92
40) dibromomethane	12.92	93	135146	9.894	ppbV	98
41) 1,2-dichloropropane	12.95	63	139137	9.938	ppbV	97
42) bromodichloromethane	13.17	83	257064	9.961	ppbV	100
43) 1,4-dioxane	13.22	88	80722	9.497	ppbV	94
44) trichloroethene	13.22	130	173873	9.798	ppbV	100
45) 2,2,4-trimethylpentane	13.24	57	647532	9.747	ppbV	100
46) heptane	13.54	43	249956	9.687	ppbV	99
47) cis-1,3-dichloropropene	14.19	75	743607	9.988	ppbV	100
48) 4-methyl-2-pentanone	14.22	43	338881	9.907	ppbV	97
49) trans-1,3-dichloropropene	14.78	75	183489	10.039	ppbV	99
50) 1,1,2-trichloroethane	14.97	97	149476	9.798	ppbV	100
52) toluene	15.25	91	449858	9.981	ppbV	100
54) 2-hexanone	15.48	43	322061	10.100	ppbV	98
55) dibromochloromethane	15.67	129	286463	10.289	ppbV	99
56) 1,2-dibromoethane	15.90	107	245722	9.992	ppbV	97
57) tetrachloroethene	16.31	166	227060	9.877	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.87	131	200393	10.044	ppbV	100
59) chlorobenzene	16.88	112	385589	9.905	ppbV	99
60) ethylbenzene	17.18	91	585965	9.977	ppbV	100
61) m+p-xylene	17.32	91	913211	19.952	ppbV	99
62) bromoform	17.40	173	293211	10.499	ppbV	100
63) styrene	17.60	104	371881	10.092	ppbV	100
64) 1,1,2,2-tetrachloroethane	17.68	83	331429	9.894	ppbV	99
65) o-xylene	17.69	91	461081	9.741	ppbV	98
66) 1,2,3-trichloropropane	17.78	75	251805	9.967	ppbV	100
68) isopropylbenzene	18.13	105	645381	9.996	ppbV	100
69) bromobenzene	18.21	77	305353	9.711	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:20:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	745469	9.997	ppbV	100
71) 1,3,5-trimethylbenzene	18.67	105	578532	9.890	ppbV	100
72) tert-butylbenzene	18.97	119	621039	9.917	ppbV	100
73) 1,2,4-trimethylbenzene	18.97	105	582193	10.000	ppbV	99
74) Benzyl Chloride	19.09	91	504432	10.708	ppbV	99
75) 1,3-dichlorobenzene	19.10	146	450222	10.054	ppbV	98
76) 1,4-dichlorobenzene	19.16	146	455146	9.970	ppbV	99
77) sec-butylbenzene	19.17	105	834131	9.844	ppbV	99
78) p-isopropyltoluene	19.28	119	781254	9.963	ppbV	99
79) 1,2-dichlorobenzene	19.42	146	430824	10.018	ppbV	99
80) n-butylbenzene	19.60	91	688335	9.963	ppbV	99
81) 1,2,4-trichlorobenzene	20.86	180	423806	10.368	ppbV	99
82) naphthalene	20.98	128	943356	10.528	ppbV	100
83) 1,2,3-trichlorobenzene	21.24	180	399522	10.523	ppbV	100
84) hexachlorobutadiene	21.29	225	327416	10.306	ppbV	99

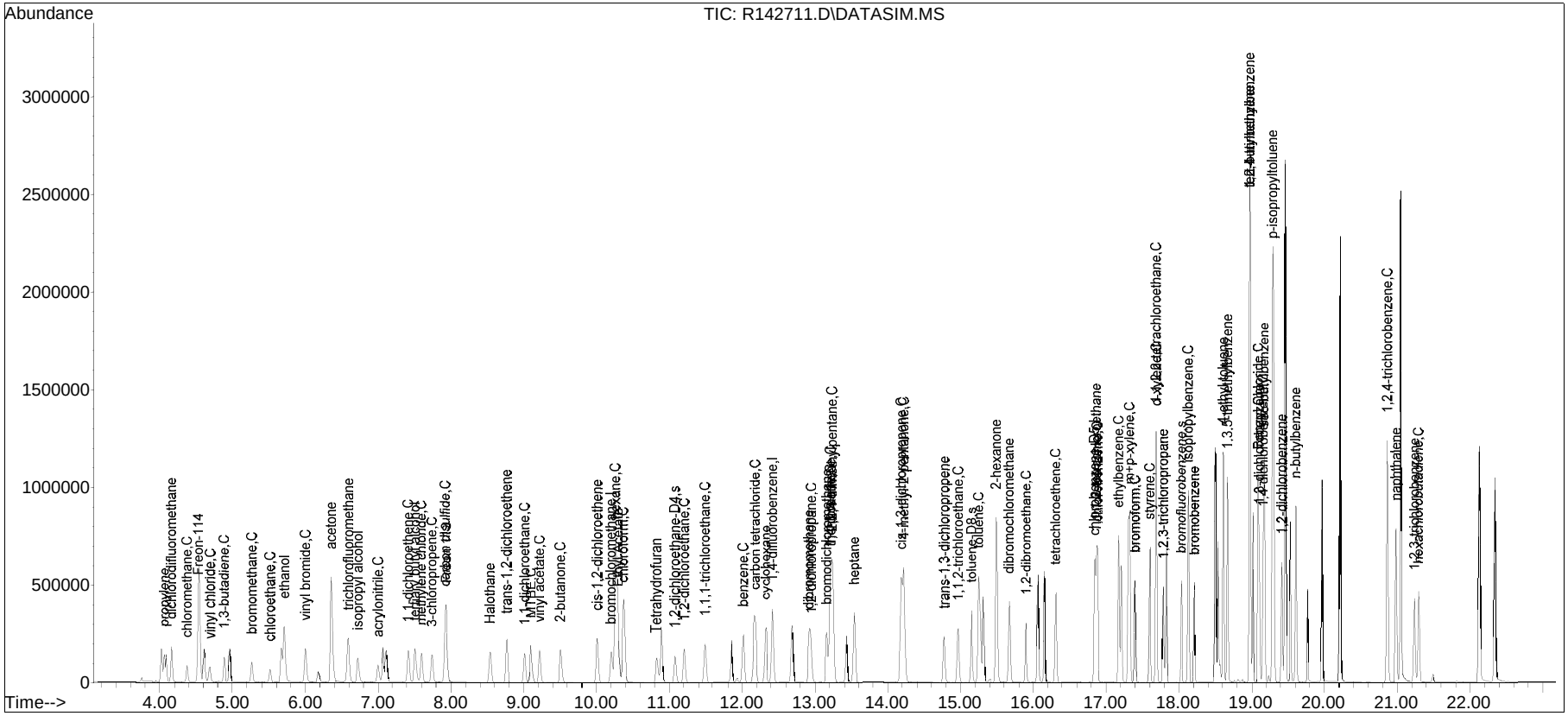
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801831
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 10:20:09 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

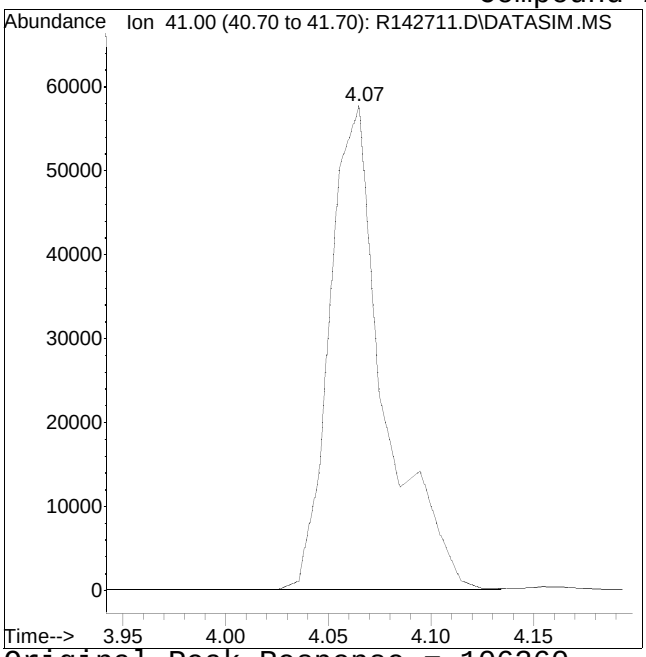
Sub List : Default All Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D

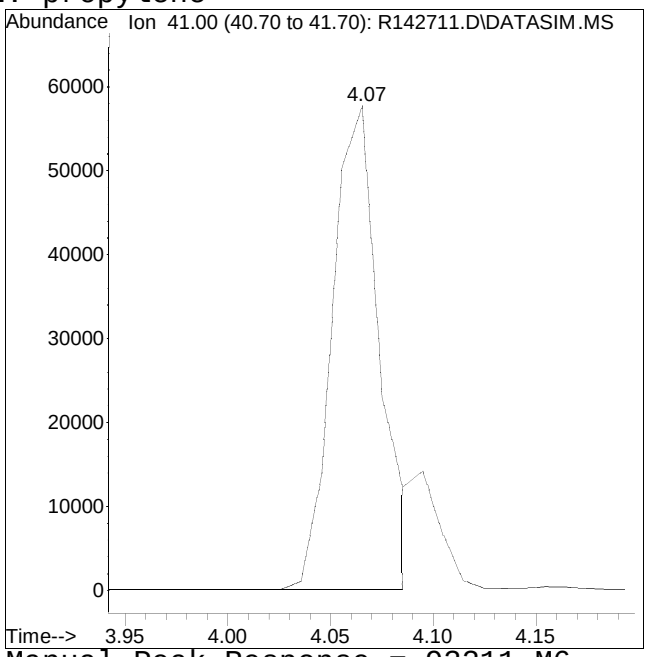


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL TSIM150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



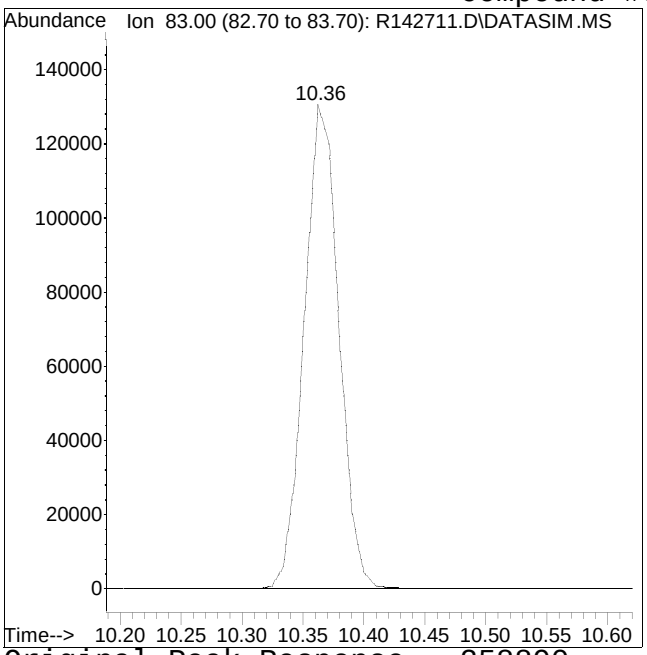


Original Peak Response = 106360 Manual Peak Response = 93211 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

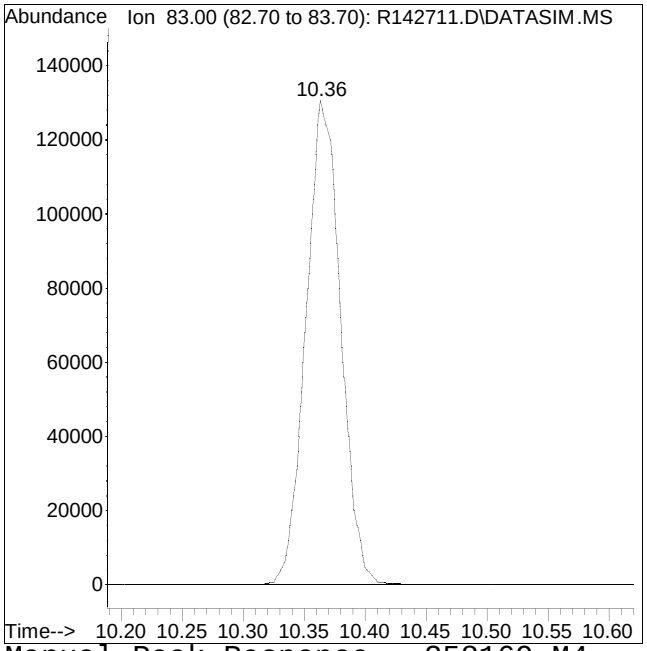
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL_TSIM150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform



Original Peak Response = 258890



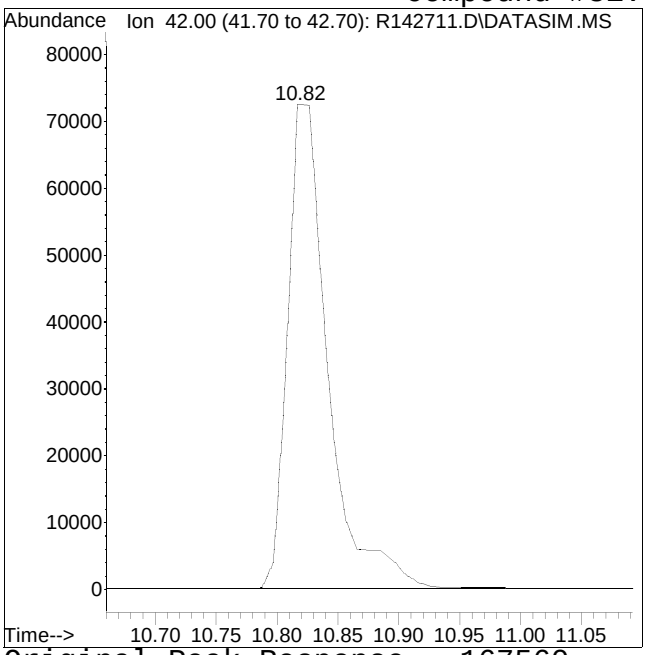
Manual Peak Response = 258169 M4

M4 = Poor automated baseline construction.

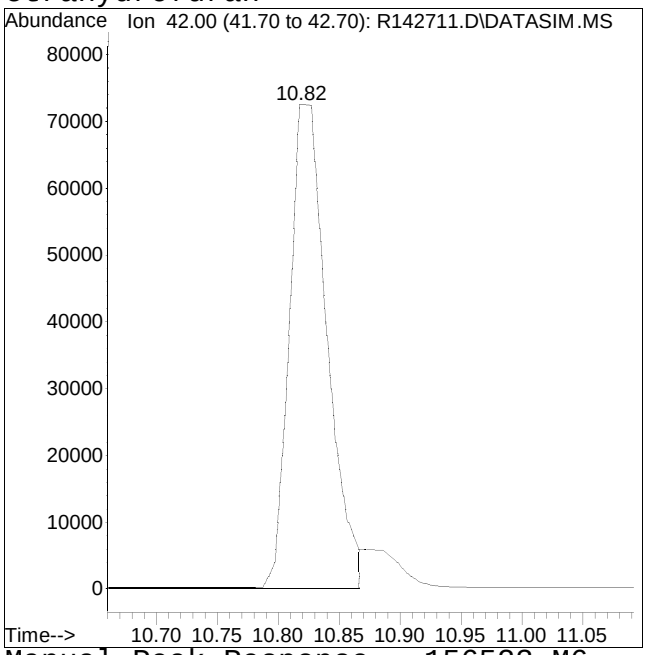
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 10:11 am

Compound #31: Tetrahydrofuran



Original Peak Response = 167560



Manual Peak Response = 156523 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:21:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.20	49	186810	10.000	ppbV	0.00
Standard Area = 188851			Recovery = 98.92%			
33) 1,4-difluorobenzene	12.42	114	434578	10.000	ppbV	0.00
Standard Area = 441025			Recovery = 98.54%			
51) chlorobenzene-D5	16.84	54	82115	10.000	ppbV	0.00
Standard Area = 85933			Recovery = 95.56%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.08	65	108919	9.724	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.24%			
53) toluene-D8	15.15	98	325624	10.250	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.50%			
67) bromofluorobenzene	18.03	95	243612	10.457	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.57%			
Target Compounds						Qvalue
2) propylene	4.06	41	182270M6	18.541	ppbV	
3) dichlorodifluoromethane	4.16	85	329902	21.043	ppbV	100
4) chloromethane	4.38	50	187811	19.278	ppbV	100
5) Freon-114	4.53	85	506609	19.515	ppbV	100
6) vinyl chloride	4.69	62	193318	19.200	ppbV	99
7) 1,3-butadiene	4.88	54	147566	19.193	ppbV	97
8) bromomethane	5.27	94	178854	19.236	ppbV	100
9) chloroethane	5.52	64	87607	19.134	ppbV	99
10) ethanol	5.72	31	540883	91.558	ppbV	97
11) vinyl bromide	6.00	106	192905	19.183	ppbV	99
12) acetone	6.36	43	1341668	93.230	ppbV	97
13) trichlorofluoromethane	6.59	101	472211	19.070	ppbV	100
14) isopropyl alcohol	6.72	45	333721	18.738	ppbV	100
15) acrylonitrile	7.00	53	145860	19.284	ppbV	100
16) 1,1-dichloroethene	7.42	61	312050	19.066	ppbV	99
17) tertiary butyl alcohol	7.51	59	391556	19.129	ppbV	99
18) methylene chloride	7.59	49	246119	18.780	ppbV	98
19) 3-chloropropene	7.74	41	255722	19.100	ppbV	100
20) carbon disulfide	7.92	76	534449	18.904	ppbV	96
21) Freon 113	7.94	101	392277	18.843	ppbV	100
22) Halothane	8.54	117	333824	19.501	ppbV	99
23) trans-1,2-dichloroethene	8.77	61	353943	19.237	ppbV	99
24) 1,1-dichloroethane	9.01	63	413956	19.209	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:21:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) MTBE	9.10	73	580118	19.298	ppbV		99
26) vinyl acetate	9.22	43	585006	20.330	ppbV		100
27) 2-butanone	9.50	43	536120	19.362	ppbV		99
28) cis-1,2-dichloroethene	10.01	61	375123	18.859	ppbV		97
29) Ethyl Acetate	10.30	61	98182	19.373	ppbV		92
30) chloroform	10.37	83	507003M4	19.187	ppbV		
31) Tetrahydrofuran	10.82	42	306098M6	18.752	ppbV		
32) 1,2-dichloroethane	11.21	62	297471	19.202	ppbV		99
34) hexane	10.26	57	456876	19.168	ppbV		98
36) 1,1,1-trichloroethane	11.49	97	452371	19.634	ppbV		99
37) benzene	12.02	78	677990	19.264	ppbV		99
38) carbon tetrachloride	12.18	117	463753	20.238	ppbV		99
39) cyclohexane	12.32	56	394449	19.484	ppbV		99
40) dibromomethane	12.92	93	265529	19.573	ppbV		95
41) 1,2-dichloropropane	12.95	63	271508	19.525	ppbV		97
42) bromodichloromethane	13.17	83	503291	19.636	ppbV		99
43) 1,4-dioxane	13.21	88	164963	19.541	ppbV		96
44) trichloroethene	13.22	130	339067	19.238	ppbV		99
45) 2,2,4-trimethylpentane	13.25	57	1251908	18.975	ppbV		97
46) heptane	13.54	43	485304	18.937	ppbV		100
47) cis-1,3-dichloropropene	14.19	75	1491660	20.173	ppbV		99
48) 4-methyl-2-pentanone	14.22	43	664527	19.562	ppbV	#	95
49) trans-1,3-dichloropropene	14.78	75	368774	20.316	ppbV		99
50) 1,1,2-trichloroethane	14.97	97	293719	19.385	ppbV		98
52) toluene	15.25	91	881401	19.926	ppbV		100
54) 2-hexanone	15.48	43	631459	20.177	ppbV		98
55) dibromochloromethane	15.67	129	575695	21.070	ppbV		99
56) 1,2-dibromoethane	15.90	107	485866	20.131	ppbV		97
57) tetrachloroethene	16.31	166	446899	19.808	ppbV		99
58) 1,1,1,2-tetrachloroethane	16.87	131	394821	20.163	ppbV		99
59) chlorobenzene	16.88	112	754659	19.753	ppbV		99
60) ethylbenzene	17.18	91	1155322	20.043	ppbV		100
61) m+p-xylene	17.32	91	1790877	39.869	ppbV		99
62) bromoform	17.40	173	586871	21.412	ppbV		99
63) styrene	17.60	104	733639	20.286	ppbV		99
64) 1,1,2,2-tetrachloroethane	17.68	83	650402	19.783	ppbV		100
65) o-xylene	17.69	91	912048	19.633	ppbV		99
66) 1,2,3-trichloropropane	17.78	75	495514	19.984	ppbV		99
68) isopropylbenzene	18.13	105	1255124	19.809	ppbV		100
69) bromobenzene	18.21	77	609114	19.739	ppbV		98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:21:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	1426845	19.496	ppbV	99
71) 1,3,5-trimethylbenzene	18.67	105	1091850	19.020	ppbV	99
72) tert-butylbenzene	18.98	119	1151876	18.742	ppbV	99
73) 1,2,4-trimethylbenzene	18.98	105	1075779	18.827	ppbV	97
74) Benzyl Chloride	19.09	91	989967	21.413	ppbV	98
75) 1,3-dichlorobenzene	19.11	146	834445	18.986	ppbV	95
76) 1,4-dichlorobenzene	19.16	146	851950	19.015	ppbV	97
77) sec-butylbenzene	19.17	105	1550390	18.643	ppbV	98
78) p-isopropyltoluene	19.28	119	1403579	18.238	ppbV	99
79) 1,2-dichlorobenzene	19.42	146	791315	18.749	ppbV	98
80) n-butylbenzene	19.60	91	1210548	17.853	ppbV	100
81) 1,2,4-trichlorobenzene	20.86	180	558748	13.929	ppbV	99
82) naphthalene	20.98	128	1208511	13.743	ppbV	100
83) 1,2,3-trichlorobenzene	21.24	180	488469	13.109	ppbV	99
84) hexachlorobutadiene	21.29	225	424732	13.623	ppbV	99

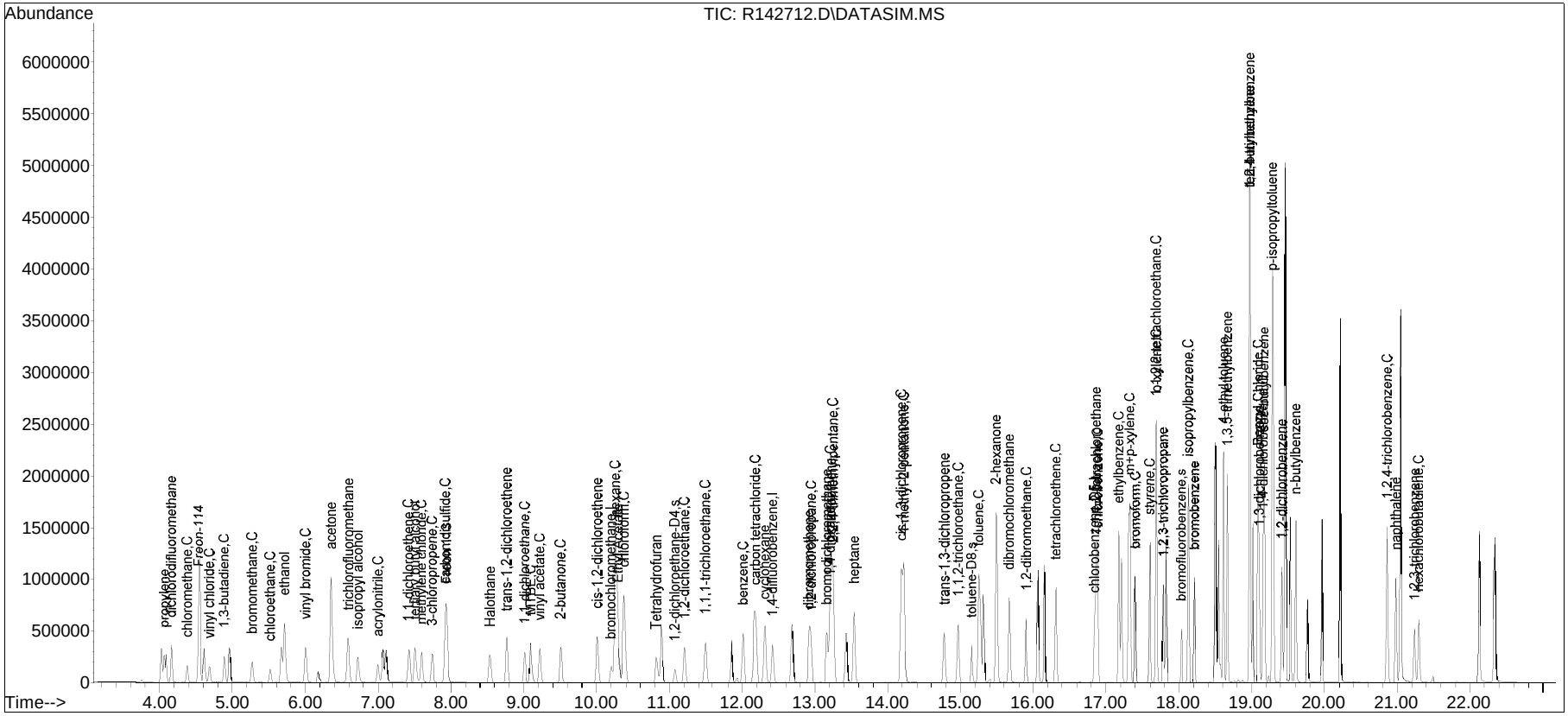
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:21:44 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

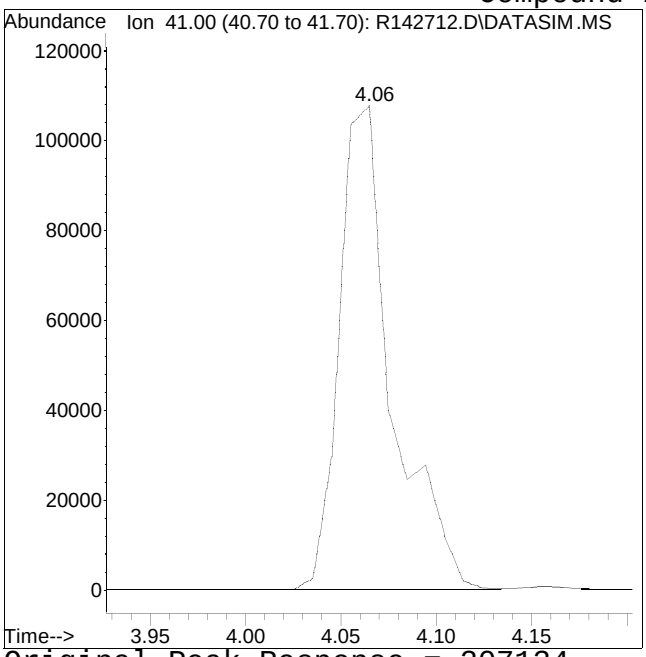
Sub List : Default
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



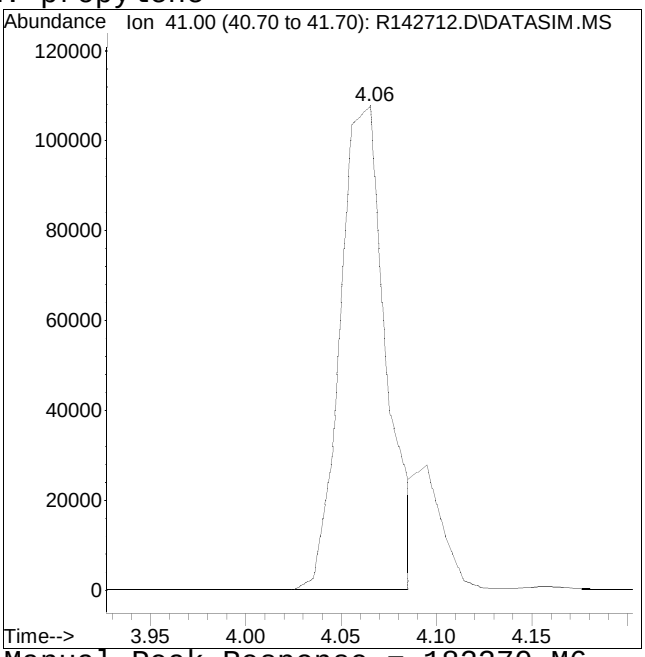
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142712.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



Original Peak Response = 207134



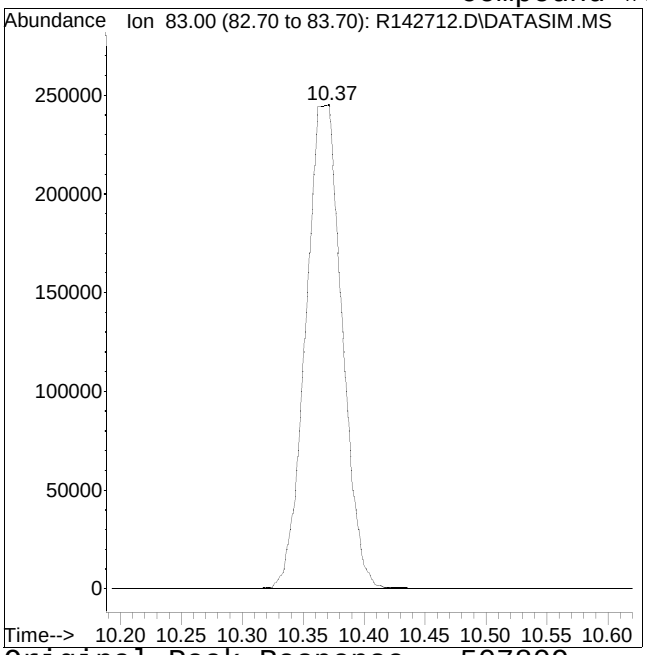
Manual Peak Response = 182270 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

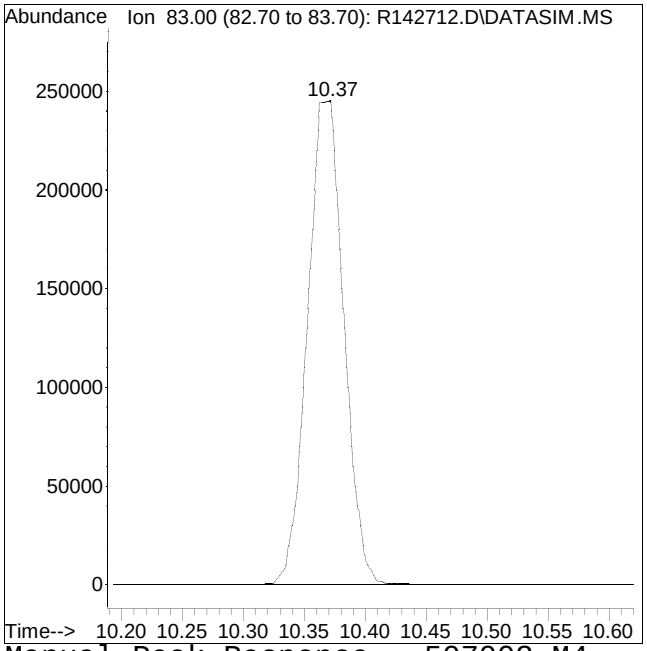
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM150710.M
Data File : R142712.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform



Original Peak Response = 507809



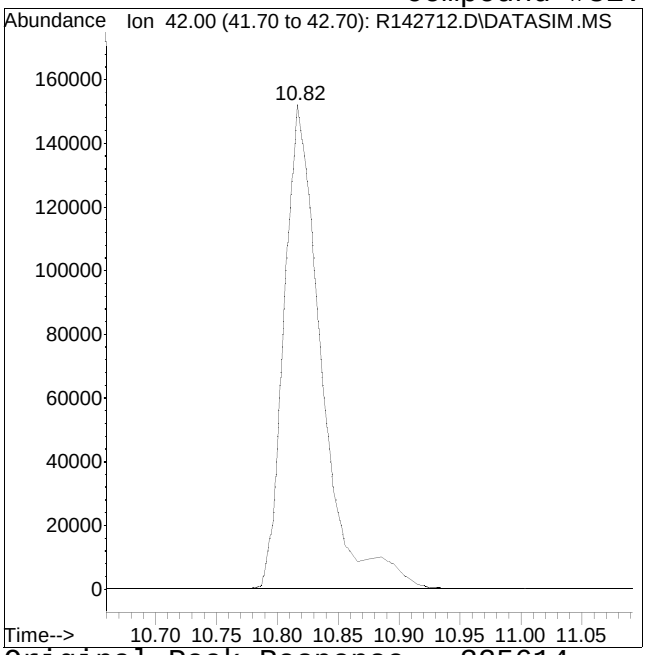
Manual Peak Response = 507003 M4

M4 = Poor automated baseline construction.

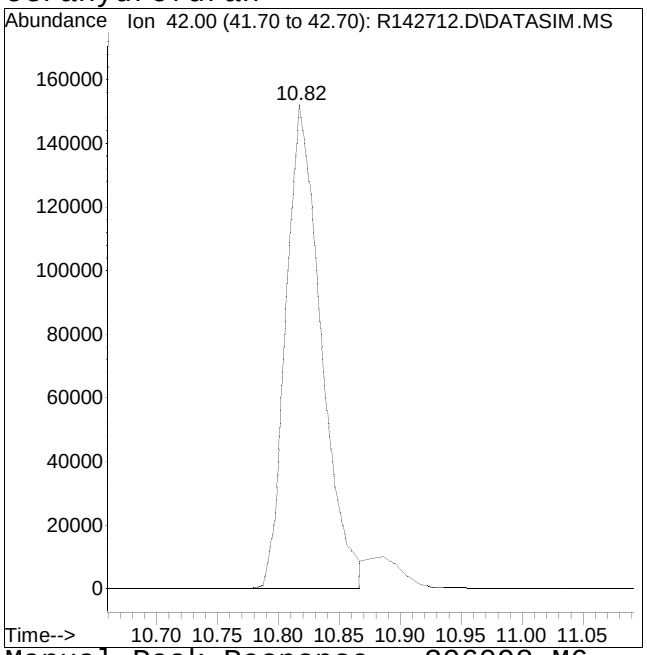
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL TSIM150710.M
Data File : R142712.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 7/11/2015 10:11 am

Compound #31: Tetrahydrofuran



Original Peak Response = 325614



Manual Peak Response = 306098 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:22:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	189374	10.000 ppbV	0.00
Standard Area = 188851			Recovery	= 100.28%	
33) 1,4-difluorobenzene	12.42	114	433641	10.000 ppbV	0.00
Standard Area = 441025			Recovery	= 98.33%	
51) chlorobenzene-D5	16.85	54	82308	10.000 ppbV	0.00
Standard Area = 85933			Recovery	= 95.78%	
System Monitoring Compounds					
35) 1,2-dichloroethane-D4	11.09	65	108735	9.729 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.29%	
53) toluene-D8	15.15	98	322558	10.129 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.29%	
67) bromofluorobenzene	18.03	95	236882	10.145 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.45%	

Target Compounds					Qvalue
2) propylene	4.07	41	442487M6	44.401 ppbV	
3) dichlorodifluoromethane	4.16	85	619426	38.976 ppbV	100
4) chloromethane	4.38	50	443004	44.856 ppbV	100
5) Freon-114	4.53	85	1137112	43.210 ppbV	100
6) vinyl chloride	4.69	62	459264	44.996 ppbV	100
7) 1,3-butadiene	4.88	54	344745	44.231 ppbV	100
8) bromomethane	5.27	94	426271	45.225 ppbV	99
9) chloroethane	5.52	64	204965	44.160 ppbV	100
10) ethanol	5.72	31	1224954	204.546 ppbV	95
11) vinyl bromide	6.00	106	457979	44.926 ppbV	100
12) acetone	6.36	43	3146222	215.665 ppbV	97
13) trichlorofluoromethane	6.58	101	1128901	44.973 ppbV	99
14) isopropyl alcohol	6.72	45	788734	43.688 ppbV	100
15) acrylonitrile	7.00	53	347493	45.319 ppbV	100
16) 1,1-dichloroethene	7.42	61	738196	44.492 ppbV	99
17) tertiary butyl alcohol	7.51	59	932572	44.943 ppbV	99
18) methylene chloride	7.59	49	576305	43.379 ppbV	98
19) 3-chloropropene	7.74	41	601317	44.304 ppbV	99
20) carbon disulfide	7.92	76	1270489	44.330 ppbV	95
21) Freon 113	7.94	101	933826	44.249 ppbV	100
22) Halothane	8.54	117	820304	47.271 ppbV	100
23) trans-1,2-dichloroethene	8.77	61	838810	44.972 ppbV	100
24) 1,1-dichloroethane	9.01	63	974683	44.616 ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:22:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) MTBE	9.10	73	1373748	45.081	ppbV	100
26) vinyl acetate	9.22	43	1419942	48.678	ppbV	100
27) 2-butanone	9.50	43	1274319	45.399	ppbV	100
28) cis-1,2-dichloroethene	10.01	61	879897	43.636	ppbV	95
29) Ethyl Acetate	10.30	61	233806	45.509	ppbV	99
30) chloroform	10.37	83	1199651M4	44.785	ppbV	
31) Tetrahydrofuran	10.82	42	734101	44.362	ppbV	93
32) 1,2-dichloroethane	11.21	62	707866	45.076	ppbV	98
34) hexane	10.26	57	1062060	44.655	ppbV	97
36) 1,1,1-trichloroethane	11.49	97	1084414	47.169	ppbV	98
37) benzene	12.02	78	1620834	46.152	ppbV	98
38) carbon tetrachloride	12.19	117	1125130	49.207	ppbV	98
39) cyclohexane	12.33	56	940134	46.538	ppbV	92
40) dibromomethane	12.92	93	637514	47.095	ppbV	91
41) 1,2-dichloropropane	12.95	63	641871	46.260	ppbV	97
42) bromodichloromethane	13.18	83	1224369	47.872	ppbV	97
43) 1,4-dioxane	13.21	88	391030	46.421	ppbV	92
44) trichloroethene	13.22	130	796342	45.281	ppbV	97
45) 2,2,4-trimethylpentane	13.25	57	2925433	44.436	ppbV	98
46) heptane	13.54	43	1134575	44.367	ppbV	99
47) cis-1,3-dichloropropene	14.19	75	3609870	48.925	ppbV	99
48) 4-methyl-2-pentanone	14.22	43	1507721	44.479	ppbV	96
49) trans-1,3-dichloropropene	14.78	75	906453	50.044	ppbV	99
50) 1,1,2-trichloroethane	14.97	97	704204	46.576	ppbV	95
52) toluene	15.25	91	2075863	46.819	ppbV	100
54) 2-hexanone	15.48	43	1413317	45.054	ppbV	98
55) dibromochloromethane	15.67	129	1371125	50.064	ppbV	99
56) 1,2-dibromoethane	15.90	107	1157102	47.830	ppbV	98
57) tetrachloroethene	16.31	166	1053105	46.567	ppbV	96
58) 1,1,1,2-tetrachloroethane	16.87	131	930046	47.385	ppbV	100
59) chlorobenzene	16.88	112	1730337	45.186	ppbV	100
60) ethylbenzene	17.18	91	2689353	46.548	ppbV	100
61) m+p-xylene	17.33	91	4033740	89.590	ppbV	100
62) bromoform	17.40	173	1372431	49.956	ppbV	99
63) styrene	17.60	104	1703478	46.994	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.69	83	1447948	43.938	ppbV	100
65) o-xylene	17.69	91	1975382	42.423	ppbV	99
66) 1,2,3-trichloropropane	17.79	75	1146088	46.114	ppbV	97
68) isopropylbenzene	18.13	105	2856489	44.977	ppbV	100
69) bromobenzene	18.21	77	1415062	45.748	ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:22:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	3193032	43.527	ppbV	99
71) 1,3,5-trimethylbenzene	18.67	105	2545237	44.233	ppbV	97
72) tert-butylbenzene	18.98	119	2442307	39.645	ppbV	100
73) 1,2,4-trimethylbenzene	18.98	105	2326588	40.622	ppbV	95
74) Benzyl Chloride	19.09	91	2395992	51.704	ppbV	97
75) 1,3-dichlorobenzene	19.11	146	1896721	43.056	ppbV	98
76) 1,4-dichlorobenzene	19.16	146	1919909	42.752	ppbV	99
77) sec-butylbenzene	19.18	105	3355693	40.256	ppbV	99
78) p-isopropyltoluene	19.29	119	3129041	40.563	ppbV	100
79) 1,2-dichlorobenzene	19.42	146	1896050	44.818	ppbV	99
80) n-butylbenzene	19.61	91	2852521	41.970	ppbV	97
81) 1,2,4-trichlorobenzene	20.86	180	1486629	36.972	ppbV #	94
82) naphthalene	20.98	128	3463372	39.293	ppbV	98
83) 1,2,3-trichlorobenzene	21.24	180	1399437	37.469	ppbV	97
84) hexachlorobutadiene	21.29	225	1162098	37.186	ppbV	99

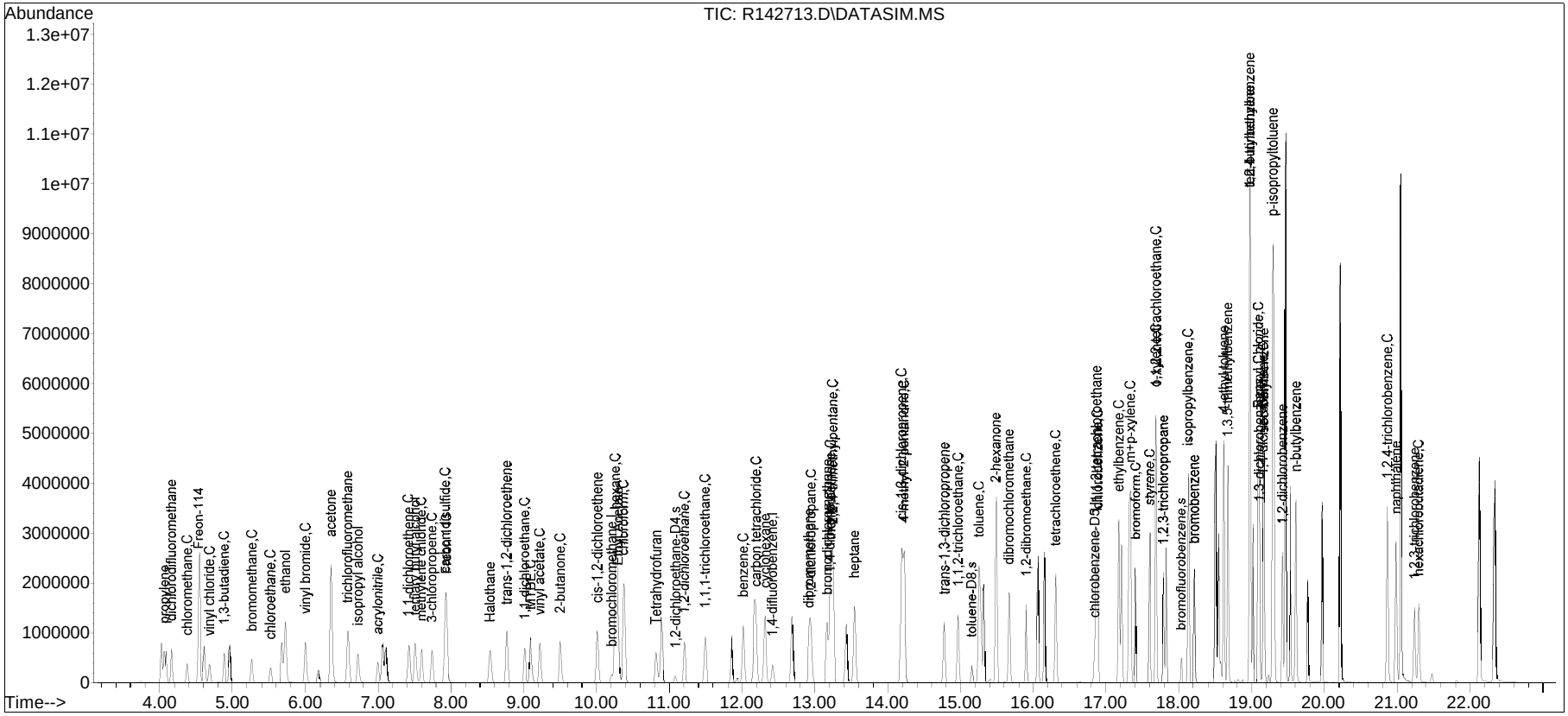
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801831
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 10:22:49 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:10:40 2015
Response via : Initial Calibration

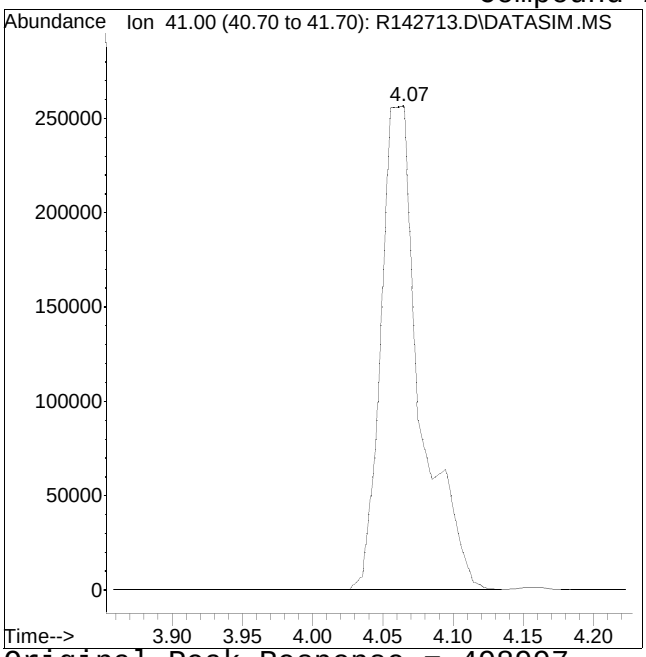
Sub List : Default Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



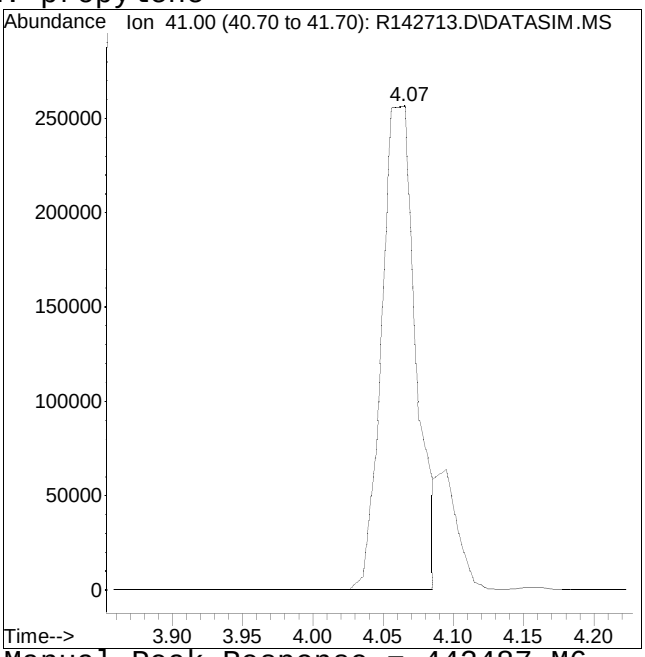
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142713.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:56 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD50.0 Quant Date : 7/11/2015 10:11 am

Compound #2: propylene



Original Peak Response = 498997



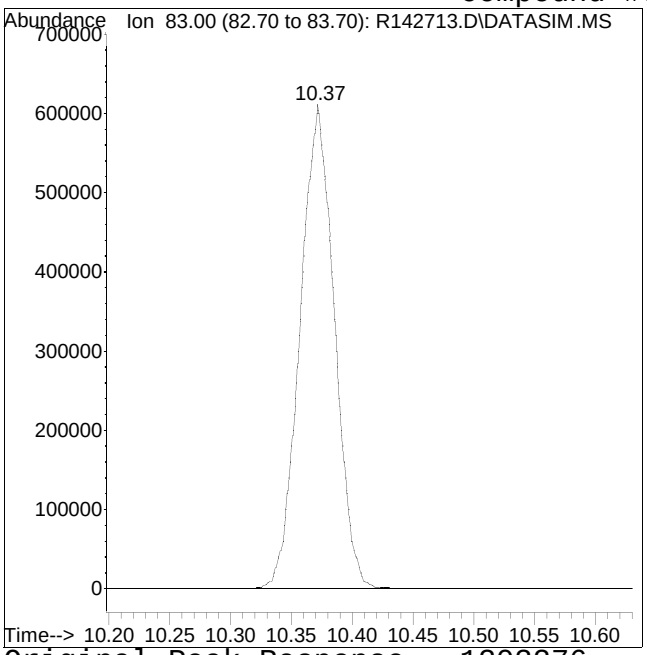
Manual Peak Response = 442487 M6

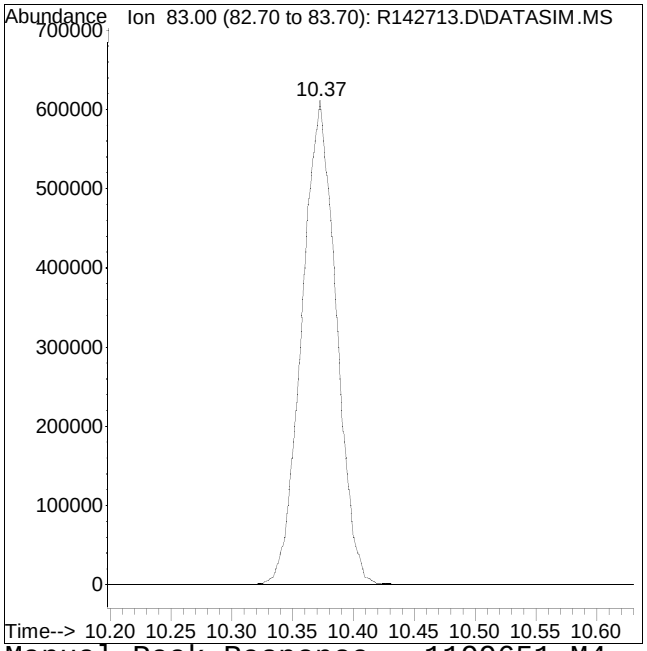
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL TSIM150710.M
Data File : R142713.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:56 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD50.0 Quant Date : 7/11/2015 10:11 am

Compound #30: chloroform





Original Peak Response = 1203276 Manual Peak Response = 1199651 M4
M4 = Poor automated baseline construction.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	96	0.00
2		propylene	0.552	0.536	2.9	98	0.00
3		dichlorodifluoromethane	1.010	0.786	22.2	90	0.00
4	C	chloromethane	0.567	0.510	10.1	94	0.00
5		Freon-114	1.493	1.387	7.1	96	0.00
6	C	vinyl chloride	0.568	0.530	6.7	95	0.00
7	C	1,3-butadiene	0.436	0.426	2.3	100	0.00
8	C	bromomethane	0.540	0.495	8.3	96	0.00
9	C	chloroethane	0.284	0.245	13.7	96	0.00
10		ethanol	0.342	0.298	12.9	91	0.00
11	C	vinyl bromide	0.570	0.538	5.6	96	0.00
12		acetone	0.832	0.803	3.5	100	0.00
13		trichlorofluoromethane	1.396	1.322	5.3	96	0.00
14		isopropyl alcohol	0.983	1.018	-3.6	103	0.00
15	C	acrylonitrile	0.450	0.387	14.0	92	0.00
16	C	1,1-dichloroethene	0.928	0.878	5.4	96	0.00
17		tertiary butyl alcohol	1.257	1.067	15.1	94	0.00
18	C	methylene chloride	0.757	0.709	6.3	97	0.00
19	C	3-chloropropene	0.752	0.764	-1.6	103	0.00
20	C	carbon disulfide	1.629	1.491	8.5	95	0.00
21		Freon 113	1.170	1.124	3.9	97	0.00
22		Halothane	1.032	1.101	-6.7	116	0.00
23		trans-1,2-dichloroethene	1.011	0.880	13.0	86	0.00
24	C	1,1-dichloroethane	1.206	1.141	5.4	95	0.00
25	C	MTBE	1.682	1.625	3.4	97	0.00
26	C	vinyl acetate	1.585	1.808	-14.1	113	0.00
27	C	2-butanone	1.595	1.475	7.5	96	0.00
28		cis-1,2-dichloroethene	1.080	1.173	-8.6	106	0.00
29		Ethyl Acetate	0.269	0.270	-0.4	96	0.00
30	C	chloroform	1.479	1.441	2.6	98	0.00
31		Tetrahydrofuran	0.916	0.849	7.3	94	0.00
32	C	1,2-dichloroethane	0.879	0.817	7.1	95	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00
34	C	hexane	0.571	0.536	6.1	96	0.00
35	s	1,2-dichloroethane-D4	0.255	0.253	0.8	97	0.00
36	C	1,1,1-trichloroethane	0.544	0.530	2.6	98	0.00
37	C	benzene	0.841	0.782	7.0	95	0.00
38	C	carbon tetrachloride	0.485	0.531	-9.5	99	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
39		cyclohexane	0.495	0.466	5.9	99	0.00
40		dibromomethane	0.351	0.295	16.0	93	0.00
41	C	1,2-dichloropropane	0.334	0.322	3.6	99	0.00
42		bromodichloromethane	0.591	0.592	-0.2	99	0.00
43	C	1,4-dioxane	0.199	0.194	2.5	98	0.00
44	C	trichloroethene	0.419	0.403	3.8	98	0.00
45	C	2,2,4-trimethylpentane	1.563	1.476	5.6	96	0.00
46		heptane	0.615	0.576	6.3	96	0.00
47	C	cis-1,3-dichloropropene	1.673	1.794	-7.2	104	0.00
48	C	4-methyl-2-pentanone	0.793	0.767	3.3	97	0.00
49		trans-1,3-dichloropropene	0.401	0.379	5.5	89	0.00
50	C	1,1,2-trichloroethane	0.353	0.353	0.0	100	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	95	0.00
52	C	toluene	5.734	5.581	2.7	99	0.00
53	s	toluene-D8	3.928	4.036	-2.7	99	0.00
54		2-hexanone	3.811	3.907	-2.5	97	0.00
55		dibromochloromethane	3.353	3.546	-5.8	101	0.00
56	C	1,2-dibromoethane	2.966	3.033	-2.3	98	0.00
57	C	tetrachloroethene	2.869	2.819	1.7	98	0.00
58		1,1,1,2-tetrachloroethane	2.424	2.334	3.7	93	0.00
59	C	chlorobenzene	4.796	4.802	-0.1	98	0.00
60	C	ethylbenzene	7.404	7.321	1.1	99	0.00
61	C	m+p-xylene	5.715	5.714	0.0	99	0.00
62	C	bromoform	3.237	3.548	-9.6	101	0.00
63	C	styrene	4.436	4.612	-4.0	100	0.00
64	C	1,1,2,2-tetrachloroethane	4.059	4.191	-3.3	100	0.00
65	C	o-xylene	5.911	5.866	0.8	99	0.00
66		1,2,3-trichloropropane	3.086	2.959	4.1	93	0.00
67	s	bromofluorobenzene	2.892	2.924	-1.1	98	0.00
68	C	isopropylbenzene	8.069	7.857	2.6	97	0.00
69		bromobenzene	3.881	3.704	4.6	94	0.00
70		4-ethyl toluene	8.933	8.422	5.7	90	0.00
71		1,3,5-trimethylbenzene	7.086	7.197	-1.6	98	0.00
72		tert-butylbenzene	7.526	7.283	3.2	93	0.00
73		1,2,4-trimethylbenzene	6.985	7.234	-3.6	99	0.00
74	C	Benzyl Chloride	5.252	6.055	-15.3	102	0.00
75		1,3-dichlorobenzene	5.278	5.613	-6.3	100	0.00
76	C	1,4-dichlorobenzene	5.432	5.658	-4.2	99	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77	sec-butylbenzene	10.052	9.852	2.0	92	0.00
78	p-isopropyltoluene	9.211	8.493	7.8	86	0.00
79	1,2-dichlorobenzene	5.101	5.371	-5.3	99	0.00
80	n-butylbenzene	7.692	8.215	-6.8	95	0.00
81 C	1,2,4-trichlorobenzene	3.959	4.997	-26.2	97	0.00
82	naphthalene	8.801	10.497	-19.3	93	0.00
83	1,2,3-trichlorobenzene	3.644	4.455	-22.3	93	0.00
84 C	hexachlorobutadiene	3.338	3.865	-15.8	97	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.20	49	181887	10.000	ppbV	0.00
Standard Area = 188851			Recovery = 96.31%			
33) 1,4-difluorobenzene	12.42	114	434124	10.000	ppbV	0.00
Standard Area = 441025			Recovery = 98.44%			
51) chlorobenzene-D5	16.84	54	81708	10.000	ppbV	0.00
Standard Area = 85933			Recovery = 95.08%			
System Monitoring Compounds						
35) 1,2-dichloroethane-D4	11.08	65	109939	9.944	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.44%			
53) toluene-D8	15.15	98	329771	10.274	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.74%			
67) bromofluorobenzene	18.03	95	238882	10.111	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.11%			
Target Compounds						Qvalue
2) propylene	4.06	41	48718M6	4.857	ppbV	
3) dichlorodifluoromethane	4.16	85	71475	3.892	ppbV	100
4) chloromethane	4.38	50	46345	4.492	ppbV	100
5) Freon-114	4.53	85	126107	4.645	ppbV	100
6) vinyl chloride	4.69	62	48180	4.662	ppbV	100
7) 1,3-butadiene	4.88	54	38778	4.885	ppbV	98
8) bromomethane	5.27	94	45011	4.582	ppbV	99
9) chloroethane	5.52	64	22298	4.322	ppbV	100
10) ethanol	5.71	31	135644	21.789	ppbV	99
11) vinyl bromide	6.00	106	48956	4.723	ppbV	100
12) acetone	6.36	43	365236	24.139	ppbV	99
13) trichlorofluoromethane	6.58	101	120205	4.734	ppbV	98
14) isopropyl alcohol	6.72	45	92602	5.181	ppbV	100
15) acrylonitrile	7.00	53	35214M6	4.299	ppbV	
16) 1,1-dichloroethene	7.42	61	79819	4.730	ppbV	100
17) tertiary butyl alcohol	7.51	59	97026	4.245	ppbV	99
18) methylene chloride	7.59	49	64477	4.682	ppbV	99
19) 3-chloropropene	7.74	41	69469	5.082	ppbV	99
20) carbon disulfide	7.92	76	135588	4.577	ppbV	99
21) Freon 113	7.94	101	102248	4.805	ppbV	99
22) Halothane	8.53	117	100139	5.333	ppbV	99
23) trans-1,2-dichloroethene	8.77	61	80052	4.354	ppbV	100
24) 1,1-dichloroethane	9.01	63	103768	4.729	ppbV	100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25)	MTBE	9.10	73	147805	4.830	ppbV		99
26)	vinyl acetate	9.22	43	164410	5.702	ppbV		100
27)	2-butanone	9.51	43	134119	4.624	ppbV		100
28)	cis-1,2-dichloroethene	10.01	61	106639	5.427	ppbV		99
29)	Ethyl Acetate	10.30	61	24511	5.003	ppbV		99
30)	chloroform	10.36	83	131051M4	4.872	ppbV		
31)	Tetrahydrofuran	10.83	42	77171M6	4.632	ppbV		
32)	1,2-dichloroethane	11.21	62	74259	4.647	ppbV		100
34)	hexane	10.26	57	116364	4.698	ppbV		97
36)	1,1,1-trichloroethane	11.49	97	114967	4.871	ppbV		99
37)	benzene	12.02	78	169673	4.648	ppbV		100
38)	carbon tetrachloride	12.18	117	115154	5.470	ppbV		99
39)	cyclohexane	12.32	56	101202	4.706	ppbV		99
40)	dibromomethane	12.92	93	64105	4.202	ppbV		99
41)	1,2-dichloropropane	12.94	63	69984	4.833	ppbV		99
42)	bromodichloromethane	13.17	83	128485	5.007	ppbV		100
43)	1,4-dioxane	13.22	88	42090	4.862	ppbV		100
44)	trichloroethene	13.22	130	87390	4.808	ppbV		100
45)	2,2,4-trimethylpentane	13.24	57	320312	4.720	ppbV		100
46)	heptane	13.54	43	125079	4.688	ppbV		99
47)	cis-1,3-dichloropropene	14.19	75	389446	5.362	ppbV		100
48)	4-methyl-2-pentanone	14.22	43	166467	4.835	ppbV		99
49)	trans-1,3-dichloropropene	14.78	75	82199	4.718	ppbV		100
50)	1,1,2-trichloroethane	14.97	97	76672	5.002	ppbV		100
52)	toluene	15.25	91	227992	4.866	ppbV		100
54)	2-hexanone	15.48	43	159597	5.126	ppbV	#	93
55)	dibromochloromethane	15.66	129	144870	5.289	ppbV		100
56)	1,2-dibromoethane	15.90	107	123913	5.114	ppbV		97
57)	tetrachloroethene	16.31	166	115187	4.913	ppbV		99
58)	1,1,1,2-tetrachloroethane	16.87	131	95334	4.813	ppbV		100
59)	chlorobenzene	16.88	112	196178	5.007	ppbV		100
60)	ethylbenzene	17.18	91	299095	4.944	ppbV		99
61)	m+p-xylene	17.32	91	466846	9.998	ppbV		99
62)	bromoform	17.40	173	144955	5.480	ppbV		100
63)	styrene	17.60	104	188423	5.199	ppbV		99
64)	1,1,2,2-tetrachloroethane	17.68	83	171225	5.163	ppbV		100
65)	o-xylene	17.68	91	239636	4.962	ppbV		100
66)	1,2,3-trichloropropane	17.78	75	120883	4.794	ppbV		100
68)	isopropylbenzene	18.13	105	320993	4.869	ppbV		100
69)	bromobenzene	18.21	77	151317	4.772	ppbV		100

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
70) 4-ethyl toluene	18.61	105	344072	4.714	ppbV	100
71) 1,3,5-trimethylbenzene	18.66	105	294021	5.078	ppbV	100
72) tert-butylbenzene	18.97	119	297534	4.838	ppbV	100
73) 1,2,4-trimethylbenzene	18.97	105	295554	5.178	ppbV	97
74) Benzyl Chloride	19.09	91	247385	5.765	ppbV	99
75) 1,3-dichlorobenzene	19.10	146	229315	5.317	ppbV	99
76) 1,4-dichlorobenzene	19.16	146	231153	5.208	ppbV	100
77) sec-butylbenzene	19.17	105	402508	4.901	ppbV	100
78) p-isopropyltoluene	19.28	119	346964	4.610	ppbV	99
79) 1,2-dichlorobenzene	19.42	146	219419	5.265	ppbV	100
80) n-butylbenzene	19.60	91	335604	5.340	ppbV	99
81) 1,2,4-trichlorobenzene	20.86	180	204133	6.310	ppbV	100
82) naphthalene	20.98	128	428828	5.964	ppbV	100
83) 1,2,3-trichlorobenzene	21.24	180	182008	6.112	ppbV	100
84) hexachlorobutadiene	21.29	225	157906	5.790	ppbV	99

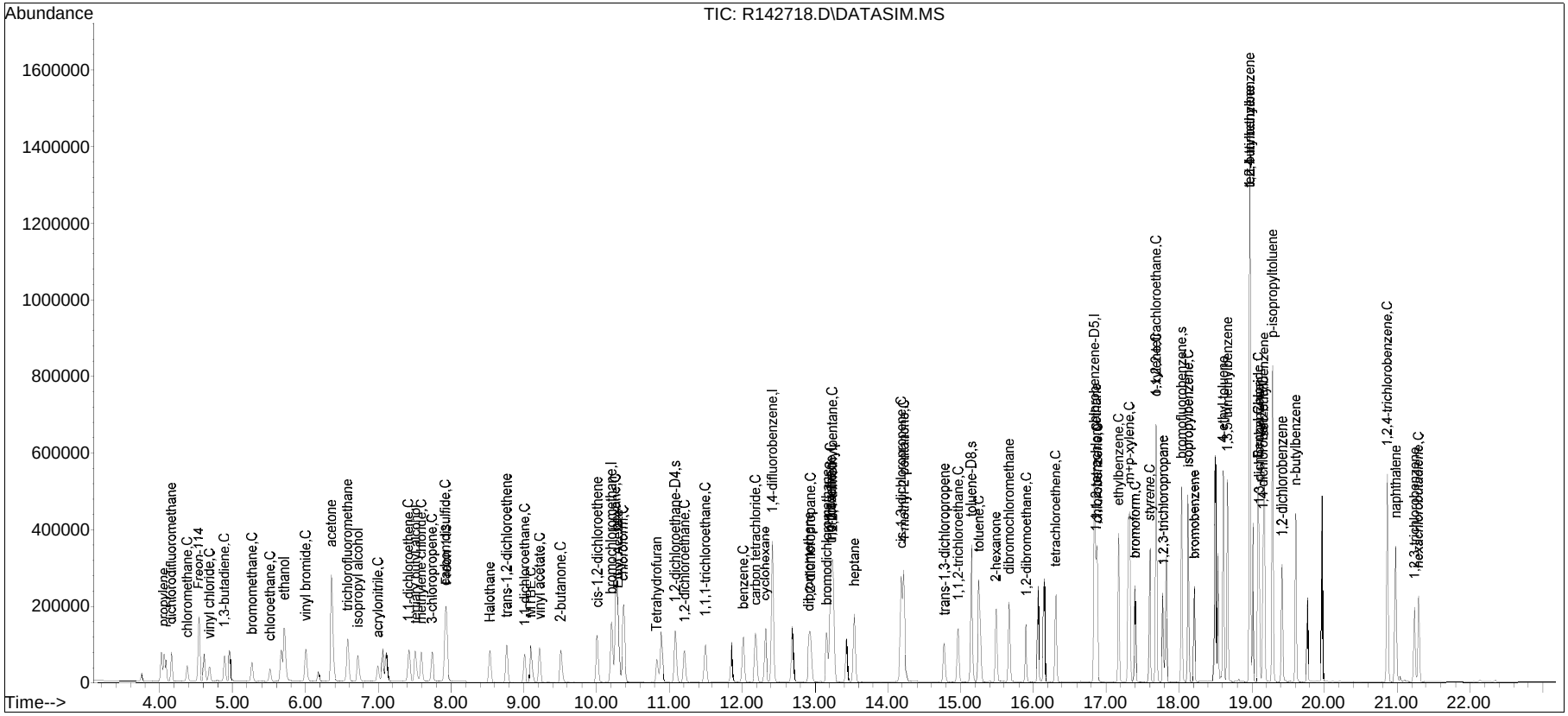
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\
Data File : R142718.D
Acq On : 11 Jul 2015 9:45 am
Operator : AIRPIANO1:RY
Sample : CTO15-SIMSTD5.0
Misc : WG801831
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 10:25:14 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

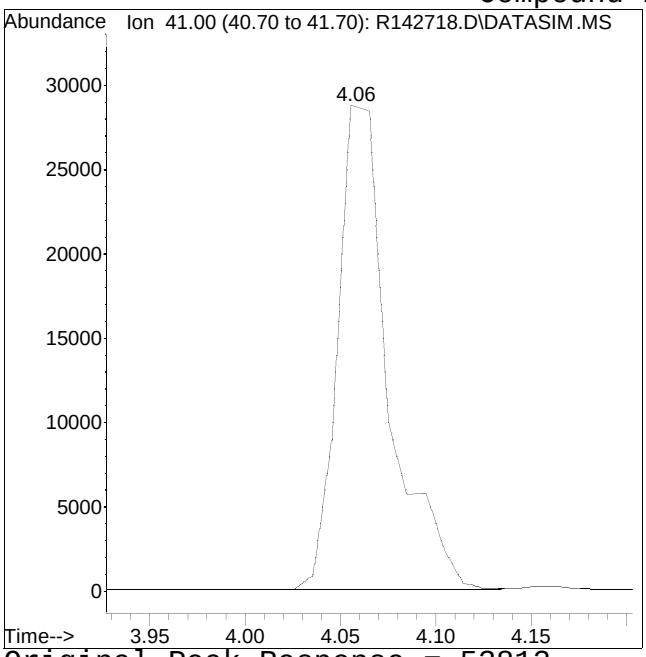
Sub List : Default All Compounds
Data Path : O:\Forensics\Data\AIR1\2015\150710SIM_ICAL\R142710.D



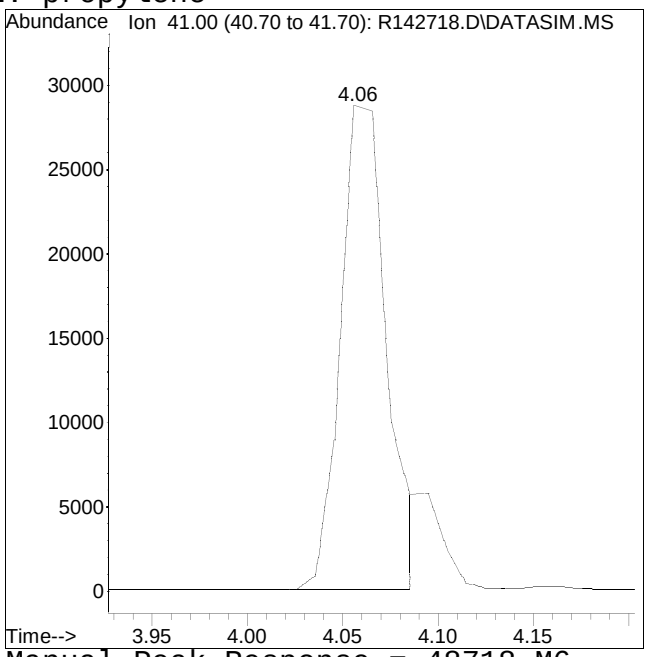
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Qmethod : TSIM_ICAL TSIM150710.M
Data File : R142718.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:45 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 7/11/2015 10:24 am

Compound #2: propylene



Original Peak Response = 53812



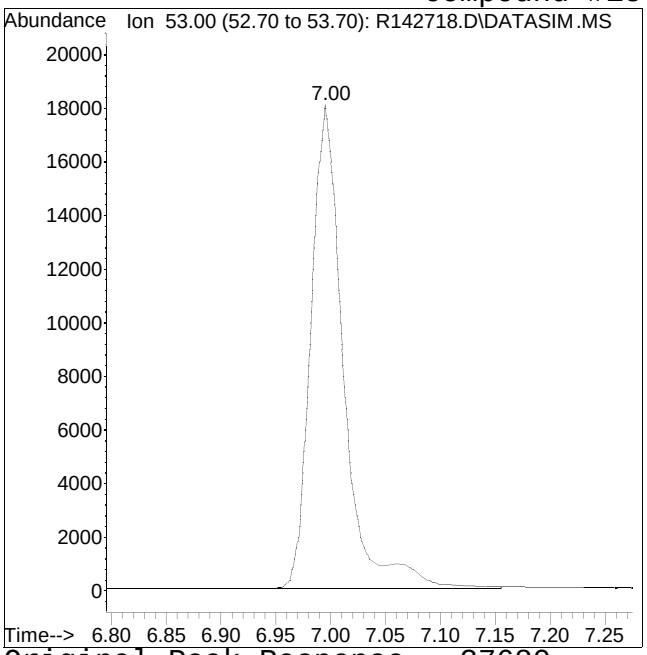
Manual Peak Response = 48718 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

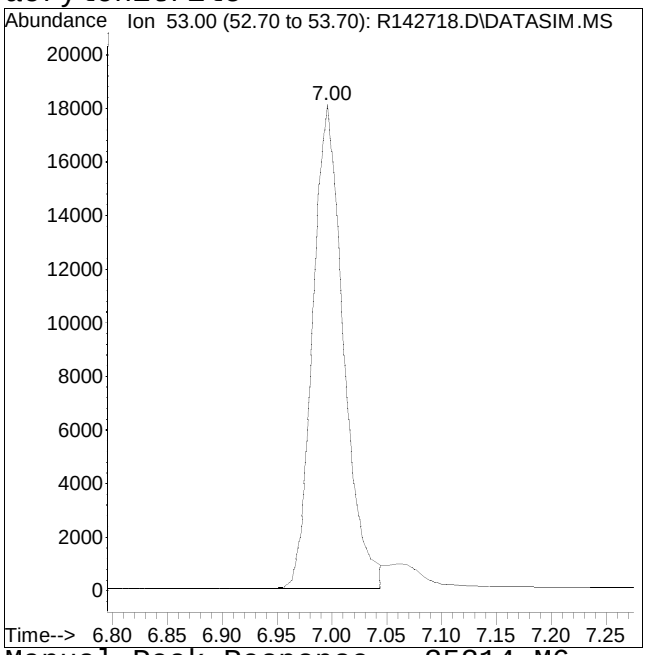
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL_TSIM150710.M
Data File : R142718.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:45 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 7/11/2015 10:24 am

Compound #15: acrylonitrile



Original Peak Response = 37680



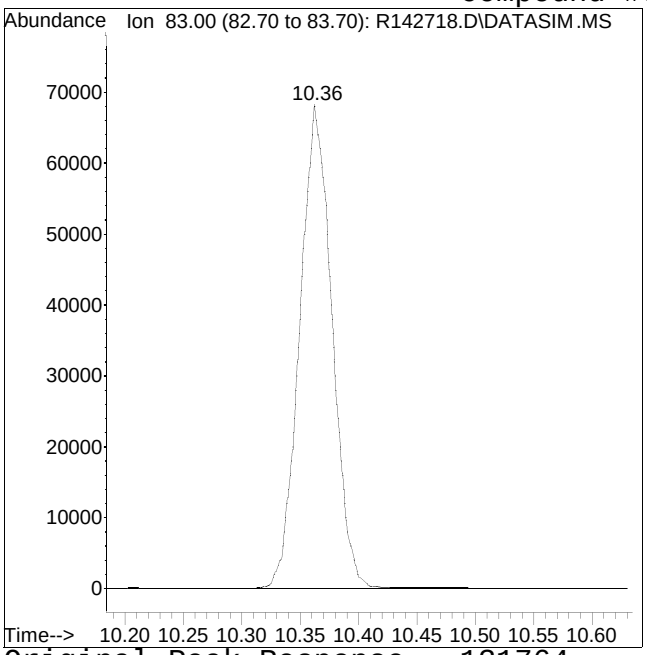
Manual Peak Response = 35214 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

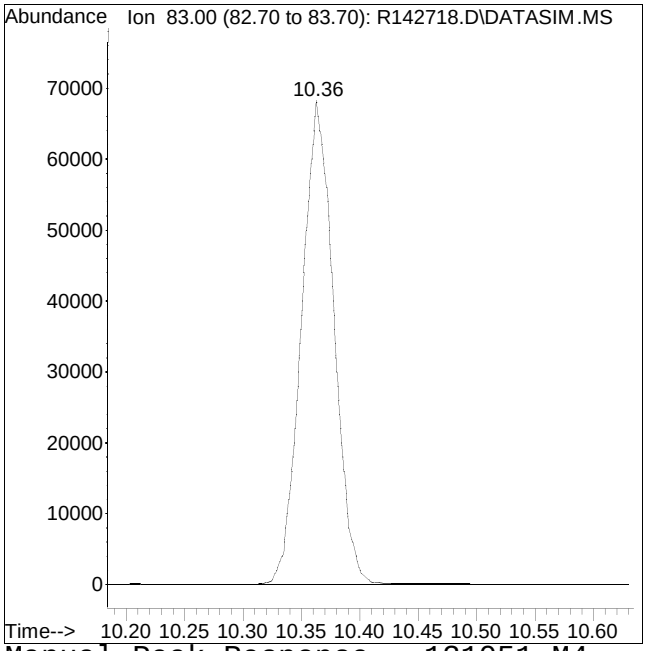
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : TSIM_ICAL
Data File : R142718.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:45 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 7/11/2015 10:24 am

Compound #30: chloroform



Original Peak Response = 131764



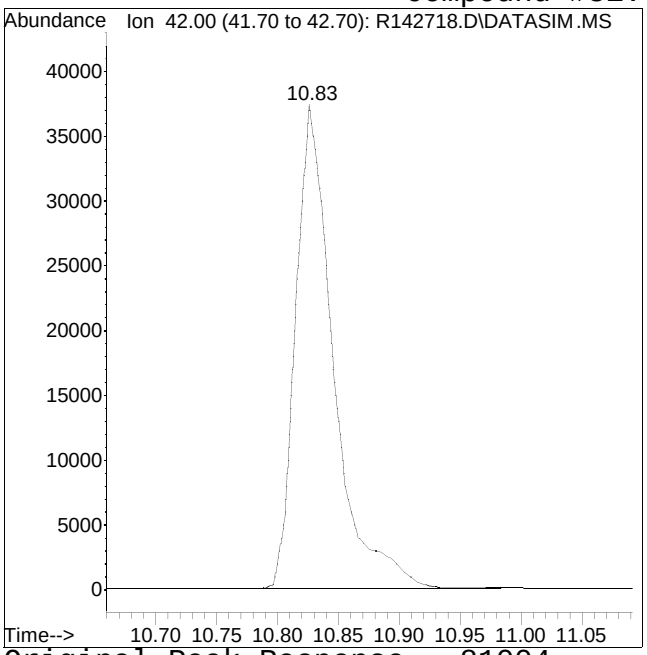
Manual Peak Response = 131051 M4

M4 = Poor automated baseline construction.

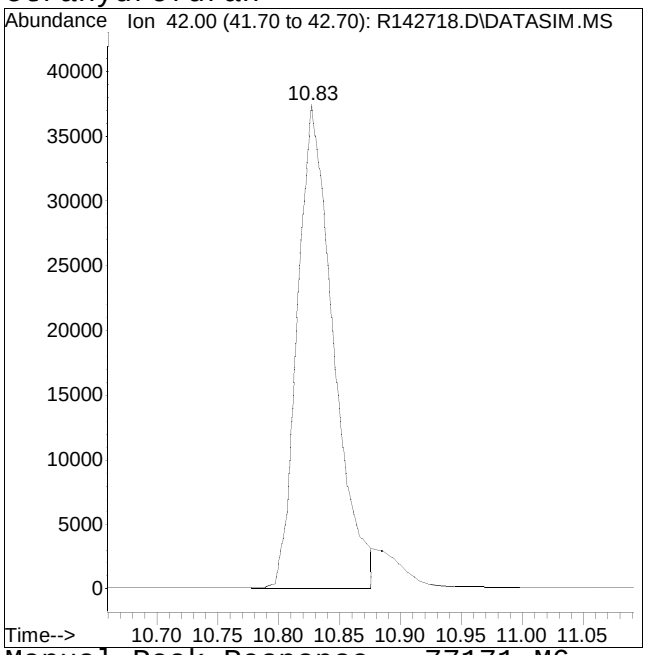
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TSIM150710.M
Data File : R142718.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:45 am Instrument : Air Piano 1
Sample : CTO15-SIMSTD5.0 Quant Date : 7/11/2015 10:24 am

Compound #31: Tetrahydrofuran



Original Peak Response = 81004



Manual Peak Response = 77171 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 18 2015, 01:42 pm

Work Group: WG811918 for Department: 3 GC/MS

Created: 13-AUG-15 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1519114-01	SG-1	S	TO15-SIM	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-02	SG-2	S	TO15-SIM	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-04	SG-4	S	TO15-SIM	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-05	METHOD BLANK	S	TO15-SIM	AIR	DONE	U	0906	0818	S0	Can-2.7
L1519114-06	METHOD BLANK AA	S	TO15-SIM	AIR	DONE	U	0906	0818	S0	Can-6
L1519114-07	DUPLICATE	S	TO15-SIM	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-08	OUTDOOR CONTROL	S	TO15-SIM	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-09	S-157-J	S	TO15-SIM	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-10	S-157-J1	S	TO15-SIM	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-11	S-157-J2	S	TO15-SIM	AIR	DONE	U	0907	0818	S0	Can-6
L1519361-01	CAN 163 SHELF 3	S	TO15-SIM	AIR	DONE	U	0911	0820	NC	Can-2.7
WG811918-1	MS BFB Tune Standard	S	TO15-SIM	AIR	DONE	U				
WG811918-1	MS BFB Tune Standard	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG811918-2	Continuing Calibrati	S	TO15-SIM	AIR	DONE	U				
WG811918-2	Continuing Calibrati	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG811918-3	Laboratory Control S	S	TO15-SIM	AIR	DONE	U				
WG811918-3	Laboratory Control S	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG811918-4	Laboratory Method Bl	S	TO15-SIM	AIR	DONE	U				
WG811918-4	Laboratory Method Bl	S	TO15-SIM	SOIL_VAPOR	DONE	U				
WG811918-5	Duplicate Sample	S	TO15-SIM	AIR	DONE	U				
WG811918-5	Duplicate Sample	S	TO15-SIM	SOIL_VAPOR	DONE	U				

Comments:

WG811918-5 L1519114-01

Sequence Logs

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\150710TO15_ICAL.SEQ
Date: 07-11-2015
Time: 09:48:35
Int. Std Volume: 100 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.02	1	5	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.04	1	5	100	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.1	1	5	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.2	1	6	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.5	1	6	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD1.0	1	6	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD5.0	1	7	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD10	1	7	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD20	1	8	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD50	1	8	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD100	1	8	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA1071001	1	1	250	0	C:\Smart\Alpha-TO15.CTD	12:00
BA1071002	1	1	250	0	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-LLSTD10	1	2	250	100	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-SIMSTD5.0	1	2	125	100	C:\Smart\Alpha-TO15.CTD	12:00

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 07/10/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150710.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11240

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/s ublist	Leak Check Pass ? Y/N
1	TA1071001	TO15_SFS	R142701	250ml	TEST		NA
1	TA1071001	TO15_SFS	R142702	250ml	TEST		NA
1	TA1071001	TO15_SFS	R142703	250ml	TUNE		NA
		Pause					NA
5	ITO15-SIMSTD0.02	TO15_SFS	R142704	SS15-014D 50ML 0.02	SIM ONLY		NA
5	ITO15-SIMSTD0.04	TO15_SFS	R142705	SS15-014D 100ML 0.04	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS	R142706	SS15-014D 250ML 0.1	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS	R142707	SS15-014C 50ML 0.2			NA
6	ITO15-SIMSTD0.5	TO15_SFS	R142708	SS15-014C 125ML 0.5			NA
6	ITO15-SIMSTD1.0	TO15_SFS	R142709	SS15-014C 250ML 1.0			NA
7	ITO15-SIMSTD5.0	TO15_SFS	R142710	SS15-014B1 125ML 5.0			NA
7	ITO15-SIMSTD10.0	TO15_SFS	R142711	SS15-014B1 250ML 10.0			NA
8	ITO15-SIMSTD20.0	TO15_SFS	R142712	SS15-014A 50ML 20.0			NA
8	ITO15-SIMSTD50.0	TO15_SFS	R142713	SS15-014A 125ML 50.0			NA
8	ITO15-LLSTD100.0	TO15_SFS	R142714	SS15-014A 250ML 100.0	NOT FOR SIM		NA
1	BA1071001	TO15_SFS	R142715	250ml			NA
		Pause					NA
1	BA1071002	TO15_SFS	R142716	250ml			NA
2	CTO15-LLSTD10.0	TO15_SFS	R142717	SS15-018F 250ML 10.0	FULL SCAN ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS	R142718	SS15-018F 125ML 5.0	SIM ICV		NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 08/13/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150813.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11252

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	TA1081301	TO15_SFS	R143410	250ml	TUNE		NA
2	CAPH-10STD10.0	TO15_SFS	R143411	SS15-017B2 125ML 10.0	APH CC		NA
3	CTO15-LLSTD10.0	TO15_SFS	R143412	SS15-018D 250ML 10.0	APH / LL LCS		
3	CTO15-SIMSTD5.0	TO15_SFS	R143413	SS15-018D 125ML 5.0	SIM LCS		NA
1	BA1081301	TO15_SFS	R143414	250ml	LL BLANK		NA
1	BA1081302	TO15_SFS	R143415	250ml	SIM BLANK		NA
1	L1519361-01,3,250,250	TO15_SFS	R143416	WG811916,ICAL11250		APH/ LL/ SIM	NA
1	L1519114-05,3,250,250	TO15_SFS	R143417	WG811916,ICAL11250		APH/ LL/ SIM	Y
2	L1519114-06,3,250,250	TO15_SFS	R143418	WG811916,ICAL11250		APH/ LL/ SIM	Y
3	L1519114-08D,3,75.0000,250	TO15_SFS	R143419	WG811916,ICAL11250		APH/ LL/ SIM	Y
4	L1519114-07,3,250,250	TO15_SFS	R143420	WG811916,ICAL11250		APH/ LL/ SIM	Y
5	L1519114-09,3,250,250	TO15_SFS	R143421	WG811916,ICAL11250		APH/ LL/ SIM	Y
6	L1519114-10,3,250,250	TO15_SFS	R143422	WG811916,ICAL11250		APH/ LL/ SIM	Y
7	L1519114-11,3,250,250	TO15_SFS	R143423	WG811916,ICAL11250		APH/ LL/ SIM	Y
8	L1518960-01,3,250,250	TO15_SFS	R143424	WG811916,ICAL11250		STD+ NAPH	Y
9	L1519114-01,3,250,250	TO15_SFS	R143425	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
9	L1519114-01DUP,3,250,250	TO15_SFS	R143426	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
10	L1519114-02,3,250,250	TO15_SFS	R143427	WG811916,ICAL11250		APH/ LL/ SIM	Y
11	L1519114-03,3,250,250	TO15_SFS	R143428	WG811916,ICAL11250		APH/ LL/ SIM	Y
12	L1519114-04,3,250,250	TO15_SFS	R143429	WG811916,ICAL11250		APH/ LL/ SIM	Y
13	L1518960-02D,3,200,250	TO15_SFS	R143430	WG811916,ICAL11250		STD+ NAPH	Y
14	L1518960-03D,3,200,250	TO15_SFS	R143431	WG811916,ICAL11250		STD+ NAPH	Y
15	L1518960-04D,3,100,250	TO15_SFS	R143432	WG811916,ICAL11250	OVERDILUTED	STD+ NAPH	Y

Alpha Analytical Air Lab
Instrument Run Log

16	L1518960-05,3,250,250	TO15_SFS	R143433	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081303	TO15_SFS	R143434	250ml			
9	L1519114-01DUP,3,250,250	TO15_SFS	R143435	WG811916,ICAL11250	REPORT AS L1519114-01	APH/ LL/ SIM	Y
15	L1518960-04D,3,200,250	TO15_SFS	R143436	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081304	TO15_SFS	R143437	250ml			NA
9	L1519114-01DUP,3,250,250	TO15_SFS	R143438	WG811916,ICAL11250	APH / LL/ SIM DUP	APH/ LL/ SIM	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Analytical Event

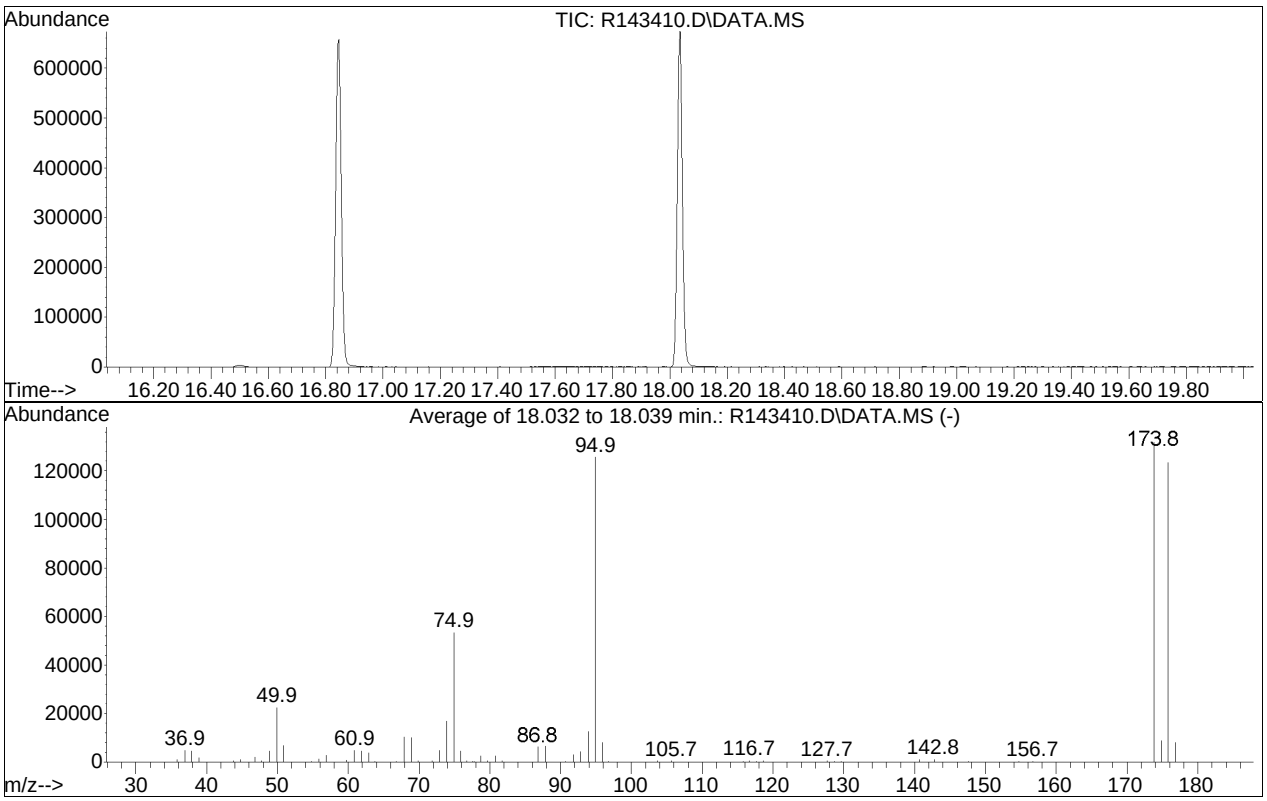
Continuing Calibration
BFB Tune

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143410.D
Acq On : 13 Aug 2015 12:07 pm
Operator : AIRPIANO1:RY
Sample : WG811918-1,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 10:24:10 2015



AutoFind: Scans 1891, 1892, 1893; Background Corrected with Scan 1882

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.9	22549	PASS
75	95	30	66	42.4	53277	PASS
95	95	100	100	100.0	125667	PASS
96	95	5	9	6.5	8222	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	104.7	131611	PASS
175	174	4	9	6.8	9009	PASS
176	174	93	101	93.7	123384	PASS
177	176	5	9	6.5	8050	PASS

Continuing Calibration

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	80	0.00
2		propylene	5.000	4.519	9.6	76	0.00
3		dichlorodifluoromethane	5.000	3.827	23.5	74	0.00
4	C	chloromethane	5.000	5.009	-0.2	87	0.00
5		Freon-114	5.000	5.037	-0.7	86	0.00
6	C	vinyl chloride	5.000	5.049	-1.0	85	0.00
7	C	1,3-butadiene	5.000	5.294	-5.9	90	0.00
8	C	bromomethane	5.000	4.899	2.0	85	0.00
9	C	chloroethane	5.000	4.676	6.5	87	0.00
10		ethanol	25.000	22.673	9.3	78	0.00
11	C	vinyl bromide	5.000	4.955	0.9	84	0.00
12		acetone	25.000	25.178	-0.7	87	0.00
13		trichlorofluoromethane	5.000	4.971	0.6	84	0.00
14		isopropyl alcohol	5.000	5.419	-8.4	89	0.00
15	C	acrylonitrile	5.000	4.587	8.3	82	0.00
16	C	1,1-dichloroethene	5.000	4.943	1.1	84	0.00
17		tertiary butyl alcohol	5.000	4.441	11.2	81	0.00
18	C	methylene chloride	5.000	5.224	-4.5	90	0.00
19	C	3-chloropropene	5.000	5.304	-6.1	89	0.00
20	C	carbon disulfide	5.000	4.554	8.9	78	0.00
21		Freon 113	5.000	4.967	0.7	83	0.00
22		Halothane	5.000	5.418	-8.4	98	0.00
23		trans-1,2-dichloroethene	5.000	4.508	9.8	74	0.00
24	C	1,1-dichloroethane	5.000	4.821	3.6	81	0.00
25	C	MTBE	5.000	4.835	3.3	81	0.00
26	C	vinyl acetate	5.000	5.380	-7.6	89	0.00
27	C	2-butanone	5.000	4.639	7.2	80	0.00
28		cis-1,2-dichloroethene	5.000	5.486	-9.7	89	0.00
29		Ethyl Acetate	5.000	4.944	1.1	78	0.00
30	C	chloroform	5.000	4.949	1.0	83	0.00
31		Tetrahydrofuran	5.000	4.514	9.7	76	0.00
32	C	1,2-dichloroethane	5.000	4.655	6.9	79	0.00
33	I	1,4-difluorobenzene	10.000	10.000	0.0	84	0.00
34	C	hexane	5.000	4.488	10.2	79	0.00
35	s	1,2-dichloroethane-D4	10.000	9.698	3.0	81	0.00
36	C	1,1,1-trichloroethane	5.000	4.764	4.7	82	0.00
37	C	benzene	5.000	4.565	8.7	80	0.00
38	C	carbon tetrachloride	5.000	5.198	-4.0	81	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
39		cyclohexane	5.000	4.546	9.1	82	0.00
40		dibromomethane	5.000	4.102	18.0	78	0.00
41	C	1,2-dichloropropane	5.000	4.684	6.3	82	0.00
42		bromodichloromethane	5.000	4.821	3.6	81	0.00
43	C	1,4-dioxane	5.000	4.748	5.0	82	0.00
44	C	trichloroethene	5.000	4.750	5.0	83	0.00
45	C	2,2,4-trimethylpentane	5.000	4.635	7.3	81	0.00
46		heptane	5.000	4.559	8.8	80	0.00
47	C	cis-1,3-dichloropropene	5.000	5.079	-1.6	84	0.00
48	C	4-methyl-2-pentanone	5.000	4.682	6.4	80	0.00
49		trans-1,3-dichloropropene	5.000	4.374	12.5	71	0.00
50	C	1,1,2-trichloroethane	5.000	4.934	1.3	84	0.00
51	I	chlorobenzene-D5	10.000	10.000	0.0	80	0.00
52	C	toluene	5.000	4.811	3.8	82	0.00
53	s	toluene-D8	10.000	10.290	-2.9	84	0.00
54		2-hexanone	5.000	4.991	0.2	80	0.00
55		dibromochloromethane	5.000	5.009	-0.2	81	0.00
56	C	1,2-dibromoethane	5.000	5.091	-1.8	82	0.00
57	C	tetrachloroethene	5.000	4.904	1.9	82	0.00
58		1,1,1,2-tetrachloroethane	5.000	4.680	6.4	76	0.00
59	C	chlorobenzene	5.000	4.916	1.7	81	0.00
60	C	ethylbenzene	5.000	4.796	4.1	81	0.00
61	C	m+p-xylene	10.000	9.857	1.4	83	0.00
62	C	bromoform	5.000	5.106	-2.1	79	0.00
63	C	styrene	5.000	5.094	-1.9	82	0.00
64	C	1,1,2,2-tetrachloroethane	5.000	5.036	-0.7	82	0.00
65	C	o-xylene	5.000	4.806	3.9	80	0.00
66		1,2,3-trichloropropane	5.000	4.722	5.6	77	0.00
67	s	bromofluorobenzene	10.000	10.009	-0.1	82	0.00
68	C	isopropylbenzene	5.000	4.809	3.8	81	0.00
69		bromobenzene	5.000	4.654	6.9	77	0.00
70		4-ethyl toluene	5.000	4.898	2.0	79	0.00
71		1,3,5-trimethylbenzene	5.000	5.015	-0.3	81	0.00
72		tert-butylbenzene	5.000	4.860	2.8	78	0.00
73		1,2,4-trimethylbenzene	5.000	5.171	-3.4	83	0.00
74	C	Benzyl Chloride	5.000	4.934	1.3	74	0.00
75		1,3-dichlorobenzene	5.000	5.154	-3.1	81	0.00
76	C	1,4-dichlorobenzene	5.000	5.205	-4.1	83	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
77	sec-butylbenzene	5.000	4.808	3.8	76	0.00
78	p-isopropyltoluene	5.000	4.478	10.4	71	0.00
79	1,2-dichlorobenzene	5.000	5.220	-4.4	83	0.00
80	n-butylbenzene	5.000	5.323	-6.5	79	0.00
81 C	1,2,4-trichlorobenzene	5.000	6.190	-23.8	80	0.00
82	naphthalene	5.000	5.881	-17.6	77	0.00
83	1,2,3-trichlorobenzene	5.000	6.032	-20.6	78	0.00
84 C	hexachlorobutadiene	5.000	5.641	-12.8	79	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.203	49	150943	10.000 ppbV	0.00
Standard Area = 150943			Recovery = 100.00%		
33) 1,4-difluorobenzene	12.420	114	371929	10.000 ppbV	0.00
Standard Area = 371929			Recovery = 100.00%		
51) chlorobenzene-D5	16.843	54	68865	10.000 ppbV	0.00
Standard Area = 68865			Recovery = 100.00%		
System Monitoring Compounds					
Target Compounds					Qvalue
3) dichlorodifluoromethane	4.164	85	58323	3.827 ppbV	100
4) chloromethane	4.380	50	42890	5.009 ppbV	100
5) Freon-114	4.528	85	113496	5.037 ppbV	100
6) vinyl chloride	4.686	62	43300	5.049 ppbV	100
7) 1,3-butadiene	4.883	54	34875	5.294 ppbV	94
8) bromomethane	5.269	94	39942	4.899 ppbV	100
9) chloroethane	5.516	64	20021	4.676 ppbV	99
12) acetone	6.356	43	316148	25.178 ppbV	98
13) trichlorofluoromethane	6.579	101	104744	4.971 ppbV	99
15) acrylonitrile	6.995	53	31183M6	4.587 ppbV	
16) 1,1-dichloroethene	7.419	61	69216	4.943 ppbV	99
18) methylene chloride	7.595	49	59697	5.224 ppbV	99
21) Freon 113	7.938	101	87719	4.967 ppbV	100
22) Halothane	8.533	117	84430	5.418 ppbV	99
23) trans-1,2-dichloroethene	8.766	61	68771	4.508 ppbV	96
24) 1,1-dichloroethane	9.006	63	87784	4.821 ppbV	99
25) MTBE	9.102	73	122791	4.835 ppbV	99
27) 2-butanone	9.507	43	111677	4.639 ppbV	100
28) cis-1,2-dichloroethene	10.008	61	89461	5.486 ppbV	92
30) chloroform	10.362	83	110480M4	4.949 ppbV	
32) 1,2-dichloroethane	11.210	62	61727	4.655 ppbV	99
36) 1,1,1-trichloroethane	11.494	97	96340	4.764 ppbV	98
37) benzene	12.016	78	142752	4.565 ppbV	99
38) carbon tetrachloride	12.182	117	93747	5.198 ppbV	99
41) 1,2-dichloropropane	12.938	63	58098	4.684 ppbV	99
42) bromodichloromethane	13.166	83	105989	4.821 ppbV	99
43) 1,4-dioxane	13.218	88	35213	4.748 ppbV	97
44) trichloroethene	13.218	130	73962	4.750 ppbV	99
47) cis-1,3-dichloropropene	14.189	75	316050	5.079 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

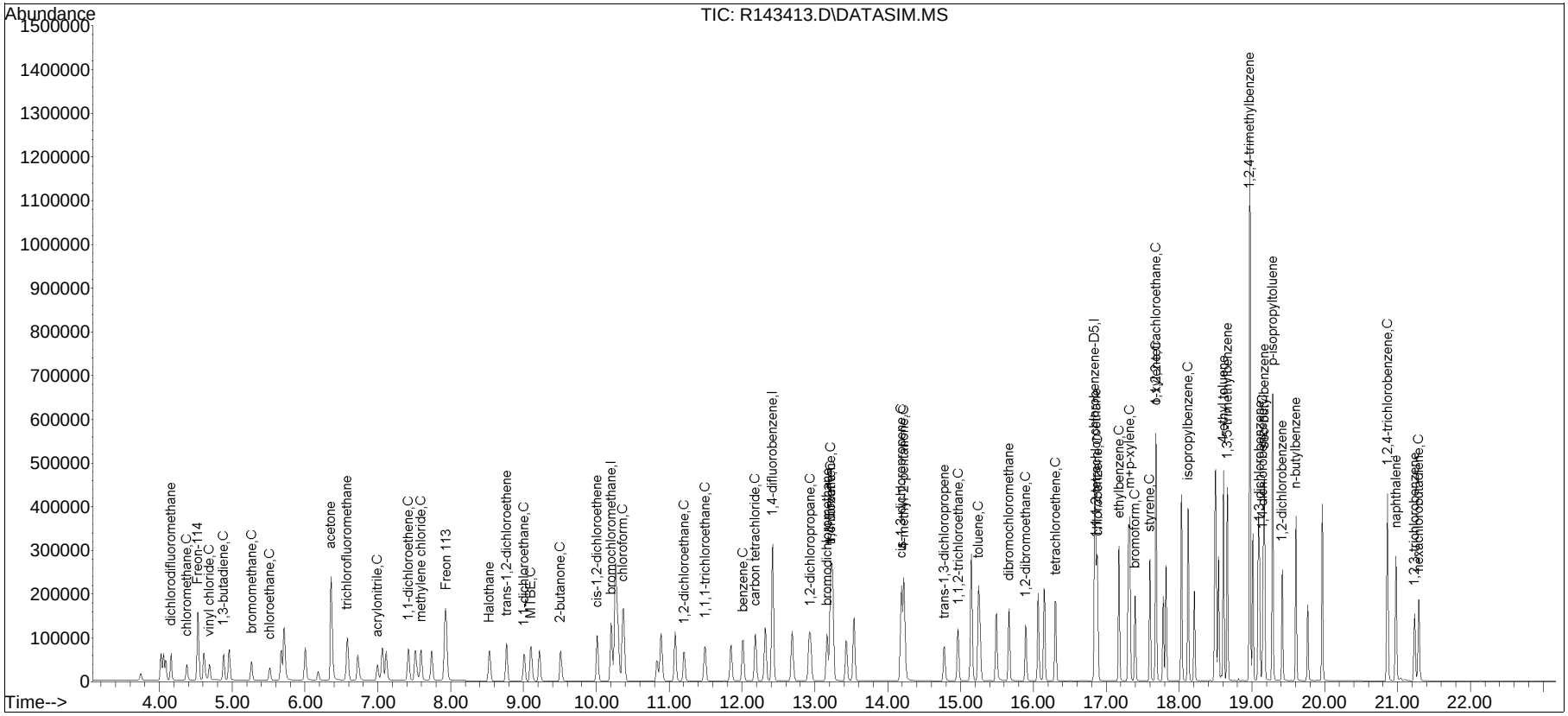
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 4-methyl-2-pentanone	14.220	43	138103	4.682	ppbV	100
49) trans-1,3-dichloropropene	14.780	75	65286	4.374	ppbV	98
50) 1,1,2-trichloroethane	14.969	97	64802	4.934	ppbV	98
52) toluene	15.250	91	189986	4.811	ppbV	100
55) dibromochloromethane	15.665	129	115635	5.009	ppbV	100
56) 1,2-dibromoethane	15.891	107	103963	5.091	ppbV	100
57) tetrachloroethene	16.307	166	96897	4.904	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.862	131	78139	4.680	ppbV	99
59) chlorobenzene	16.880	112	162335	4.916	ppbV	99
60) ethylbenzene	17.176	91	244542	4.796	ppbV	99
61) m+p-xylene	17.320	91	387931	9.857	ppbV	98
62) bromoform	17.398	173	113814	5.106	ppbV	100
63) styrene	17.601	104	155601	5.094	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.682	83	140748	5.036	ppbV	100
65) o-xylene	17.682	91	195633	4.806	ppbV	98
68) isopropylbenzene	18.122	105	267214	4.809	ppbV	99
70) 4-ethyl toluene	18.610	105	301335	4.898	ppbV	99
71) 1,3,5-trimethylbenzene	18.661	105	244715	5.015	ppbV	99
73) 1,2,4-trimethylbenzene	18.971	105	248717	5.171	ppbV	97
75) 1,3-dichlorobenzene	19.104	146	187355	5.154	ppbV	97
76) 1,4-dichlorobenzene	19.152	146	194700	5.205	ppbV	95
77) sec-butylbenzene	19.171	105	332825	4.808	ppbV	98
78) p-isopropyltoluene	19.285	119	284053	4.478	ppbV	99
79) 1,2-dichlorobenzene	19.418	146	183362	5.220	ppbV	97
80) n-butylbenzene	19.604	91	281971	5.323	ppbV	99
81) 1,2,4-trichlorobenzene	20.861	180	168762	6.190	ppbV	98
82) naphthalene	20.979	128	356418	5.881	ppbV	99
83) 1,2,3-trichlorobenzene	21.236	180	151392	6.032	ppbV	98
84) hexachlorobutadiene	21.290	225	129660	5.641	ppbV	96

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

Sub List : Default-SIM - All compounds listedSIM\R143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

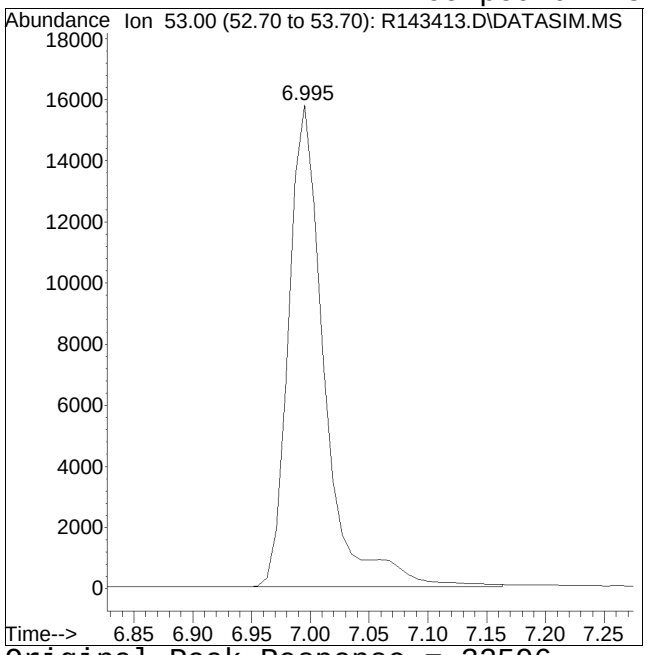


Manual Integration/Negative Proof Report

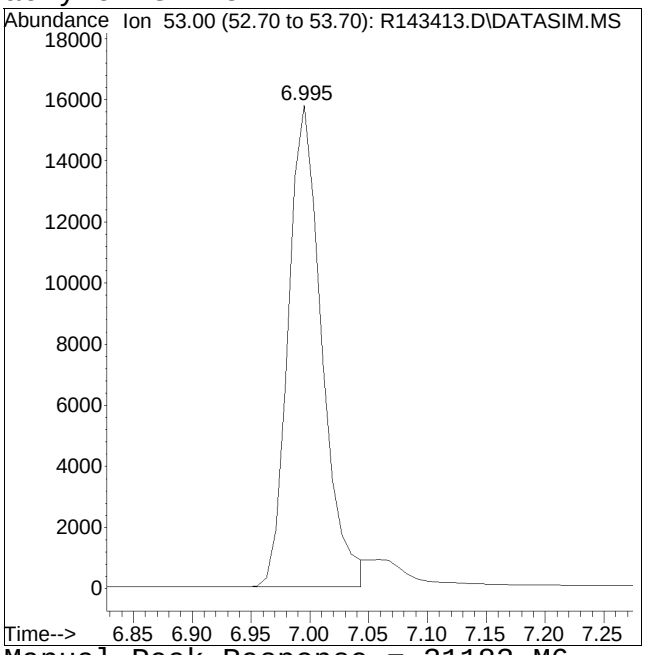
Data Path : O:\Forensics\Data\AIR1\2015\0508\DATASIM\
Data File : R143413.D
Date Inj'd : 8/13/2015 1:43 pm
Sample : WG811918-2,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 8/13/2015 2:04 pm

Compound #15: acrylonitrile



Original Peak Response = 33596



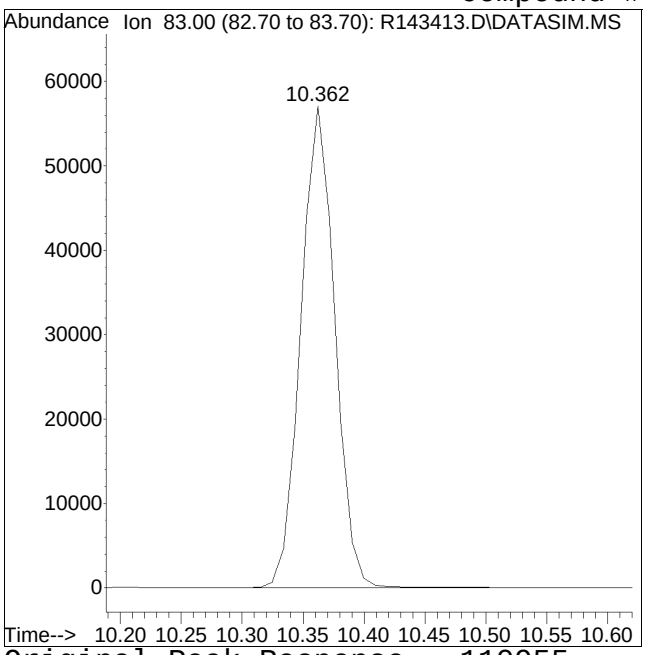
Manual Peak Response = 31183 M6

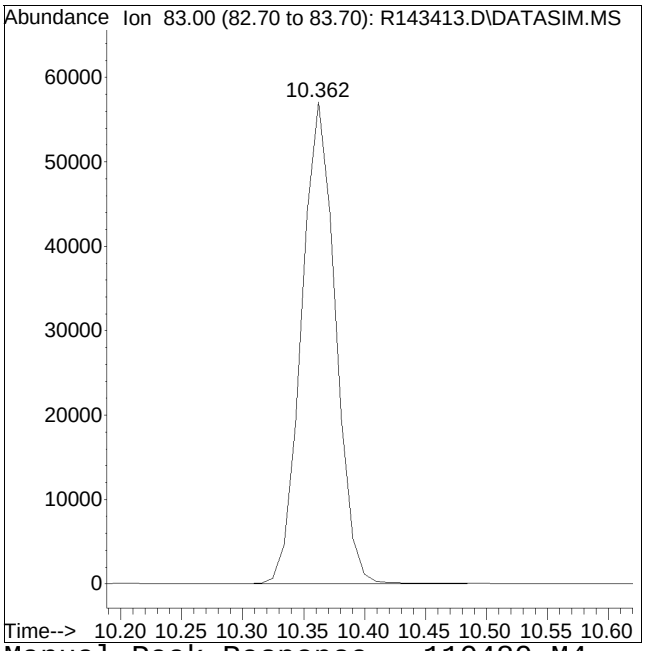
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143413.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:43 pm Instrument : Air Piano 1
Sample : WG811918-2,3,250,250 Quant Date : 8/13/2015 2:04 pm

Compound #30: chloroform





Original Peak Response = 110955 Manual Peak Response = 110480 M4
M4 = Poor automated baseline construction.

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:51:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.202	49	158060	10.000 ppbV	0.00
Standard Area = 150943			Recovery	= 104.72%	
33) 1,4-difluorobenzene	12.420	114	385892	10.000 ppbV	0.00
Standard Area = 371929			Recovery	= 103.75%	
51) chlorobenzene-D5	16.843	54	72841	10.000 ppbV	0.00
Standard Area = 68865			Recovery	= 105.77%	
System Monitoring Compounds					
Target Compounds					Qvalue
3) dichlorodifluoromethane	4.164		0	N.D.	
4) chloromethane	4.380		0	N.D.	
5) Freon-114	4.528		0	N.D.	
6) vinyl chloride	4.686		0	N.D.	
7) 1,3-butadiene	0.000		0	N.D.	
8) bromomethane	5.268		0	N.D.	
9) chloroethane	5.516	64	63M4	0.014 ppbV	
13) trichlorofluoromethane	6.579		0	N.D.	
16) 1,1-dichloroethene	7.411		0	N.D.	
18) methylene chloride	7.595	49	7450	0.623 ppbV	99
21) Freon 113	7.930		0	N.D.	
23) trans-1,2-dichloroethene	8.759		0	N.D.	
24) 1,1-dichloroethane	9.013		0	N.D.	
25) MTBE	9.095		0	N.D.	
28) cis-1,2-dichloroethene	10.015		0	N.D.	
30) chloroform	10.202		0	N.D.	
32) 1,2-dichloroethane	11.209		0	N.D.	
36) 1,1,1-trichloroethane	11.484		0	N.D.	
37) benzene	12.016		0	N.D.	
38) carbon tetrachloride	12.171		0	N.D.	
41) 1,2-dichloropropane	12.938		0	N.D.	
42) bromodichloromethane	13.166		0	N.D.	
44) trichloroethene	13.218		0	N.D.	
47) cis-1,3-dichloropropene	14.173		0	N.D.	
49) trans-1,3-dichloropropene	14.779		0	N.D.	
50) 1,1,2-trichloroethane	14.978		0	N.D.	
52) toluene	15.249		0	N.D.	
55) dibromochloromethane	15.665		0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:51:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

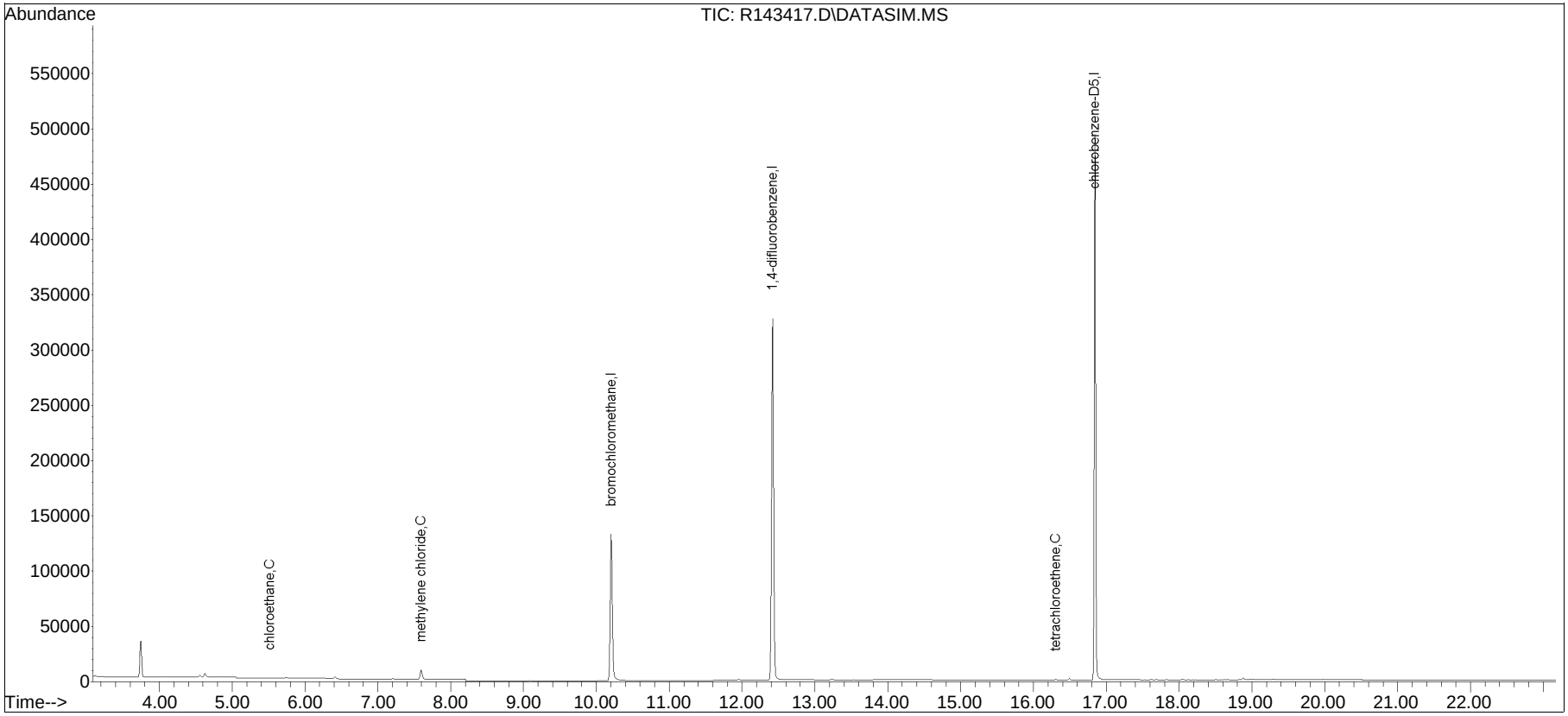
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dibromoethane	15.918		0	N.D.		
57) tetrachloroethene	16.307	166	512	0.024	ppbV #	92
58) 1,1,1,2-tetrachloroethane	16.869		0	N.D.		
59) chlorobenzene	16.880		0	N.D.		
60) ethylbenzene	17.183		0	N.D.		
61) m+p-xylene	17.324		0	N.D.		
62) bromoform	17.401		0	N.D.		
63) styrene	17.616		0	N.D.		
64) 1,1,2,2-tetrachloroethane	17.697		0	N.D.		
65) o-xylene	17.689		0	N.D.		
71) 1,3,5-trimethylbenzene	18.669		0	N.D.		
73) 1,2,4-trimethylbenzene	18.980		0	N.D.		
75) 1,3-dichlorobenzene	19.113		0	N.D.		
76) 1,4-dichlorobenzene	19.166		0	N.D.		
79) 1,2-dichlorobenzene	19.428		0	N.D.		
81) 1,2,4-trichlorobenzene	20.872		0	N.D.		
82) naphthalene	20.990		0	N.D.		
84) hexachlorobutadiene	21.300		0	N.D.		

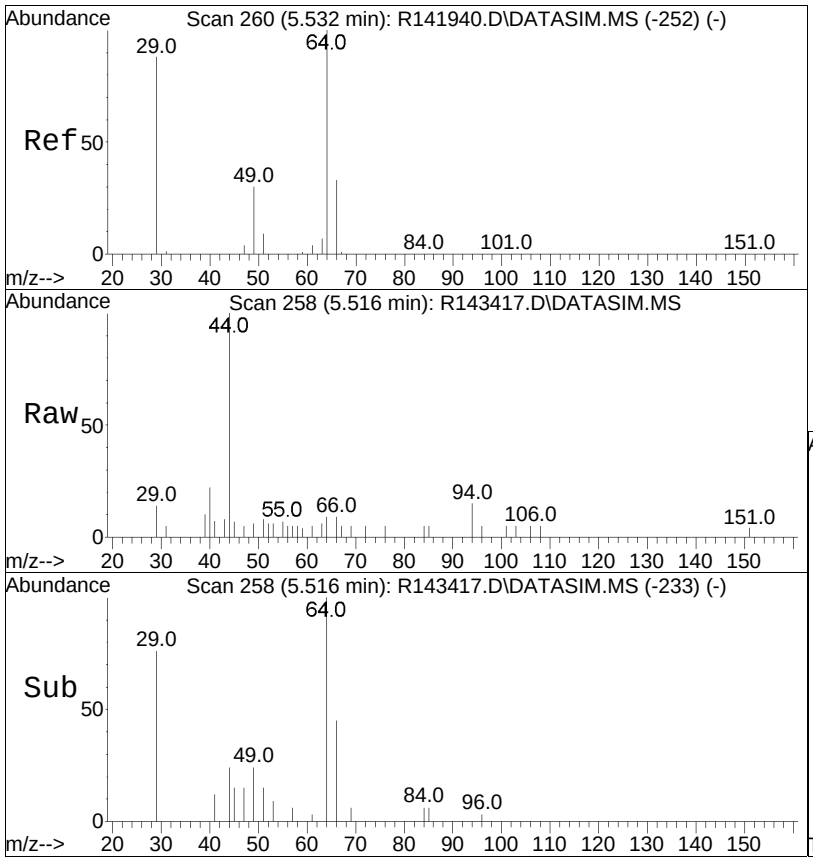
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:51:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

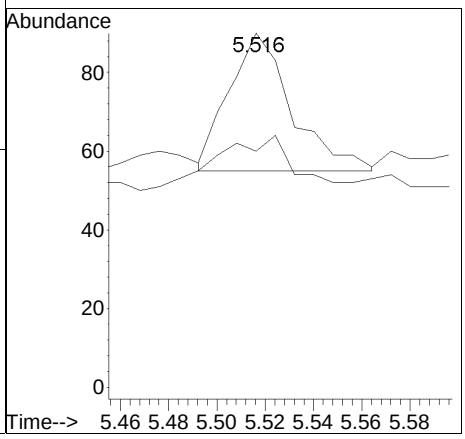


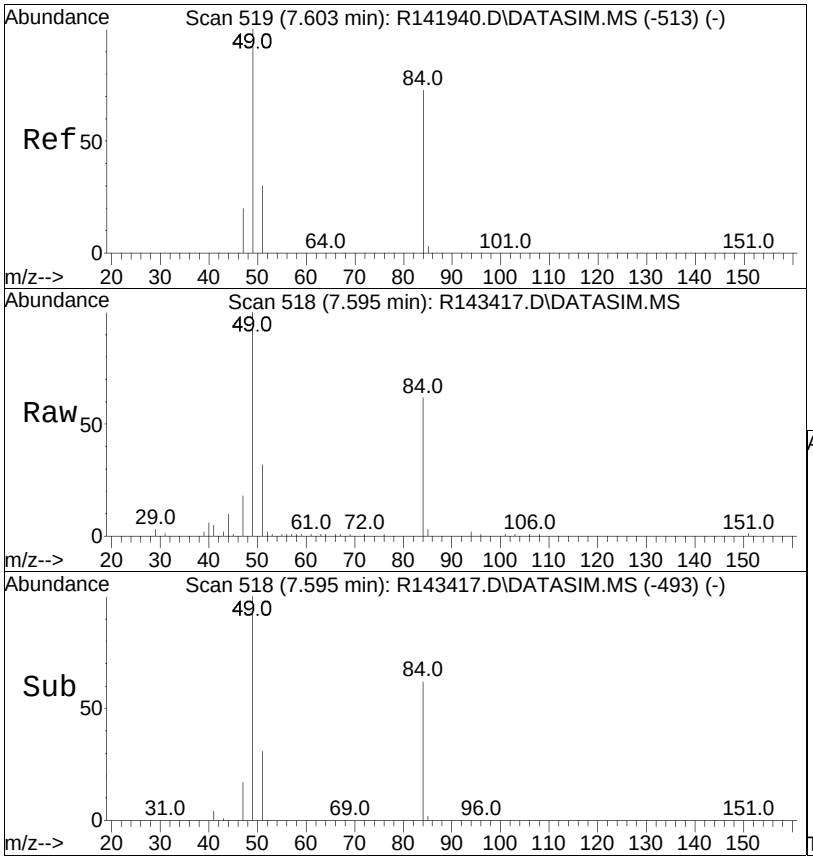


#9
chloroethane
Concen: 0.01 ppbV m
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143417.D
Acq: 13 Aug 2015 5:19 pm

Tgt Ion: 64 Resp: 63

Ion	Ratio	Lower	Upper
64	100		
49	66.7	27.4	41.0#

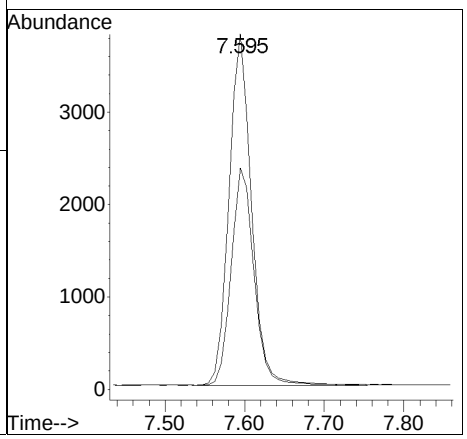


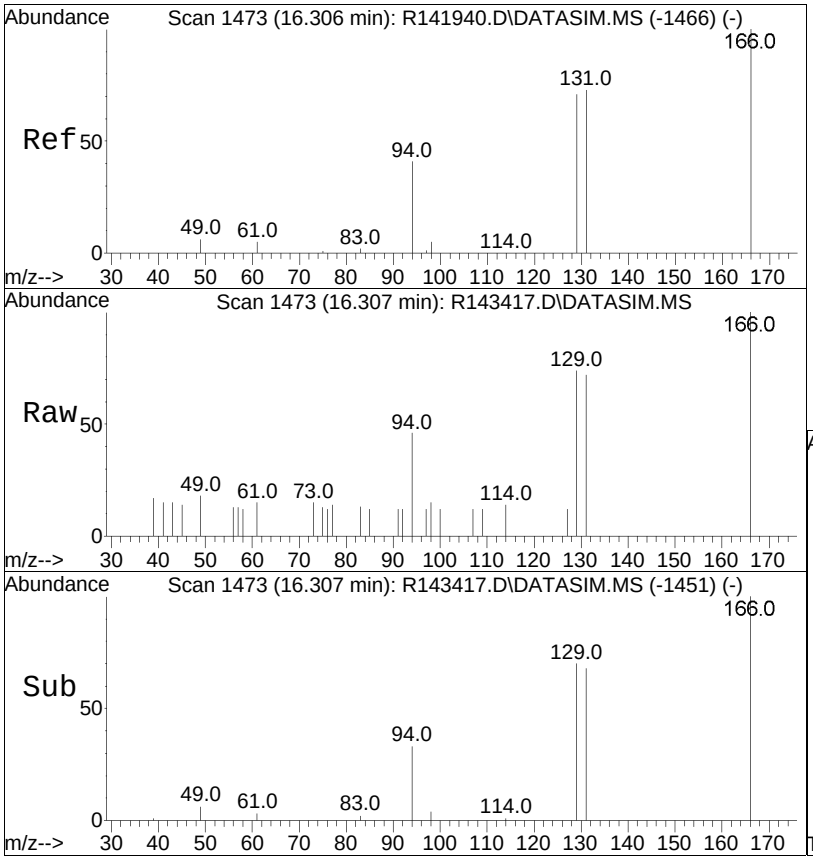


#18
methylene chloride
Concen: 0.62 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143417.D
Acq: 13 Aug 2015 5:19 pm

Tgt Ion: 49 Resp: 7450

Ion	Ratio	Lower	Upper
49	100		
84	62.4	50.8	76.2

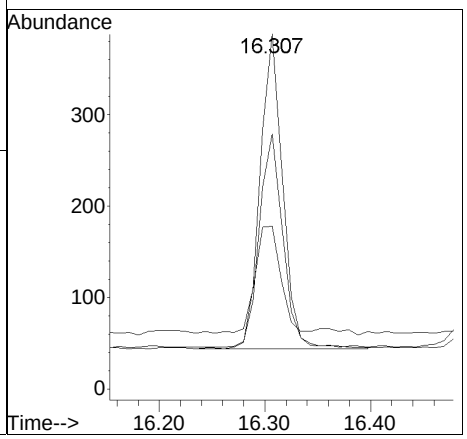




#57
tetrachloroethene
Concen: 0.02 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143417.D
Acq: 13 Aug 2015 5:19 pm

Tgt Ion:166 Resp: 512

Ion	Ratio	Lower	Upper
166	100		
131	71.9	57.0	85.4
94	45.9	26.2	39.4#

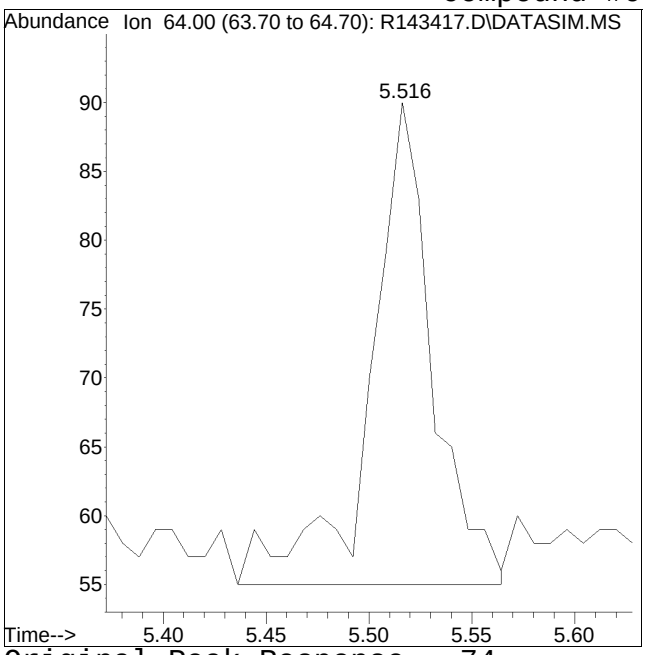


Manual Integration/Negative Proof Report

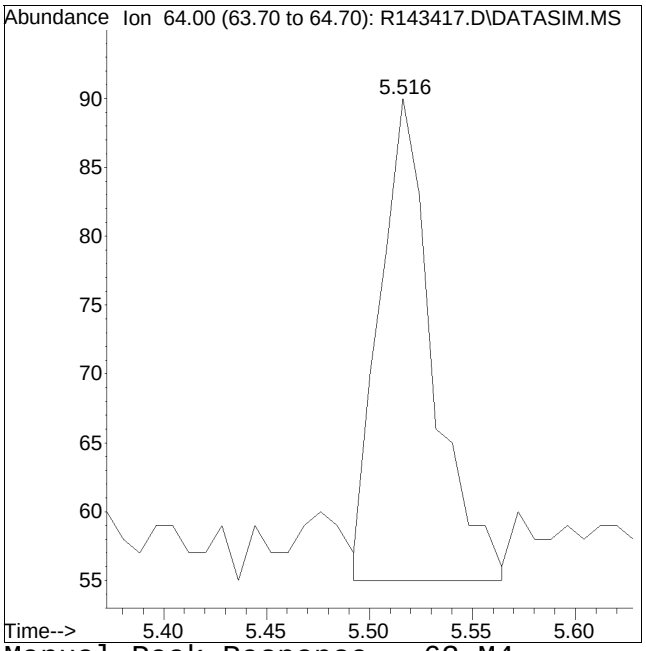
Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143417.D
Date Inj'd : 8/13/2015 5:19 pm
Sample : L1519114-05,3,250,250

QMethod : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:43 am

Compound #9: chloroethane



Original Peak Response = 74



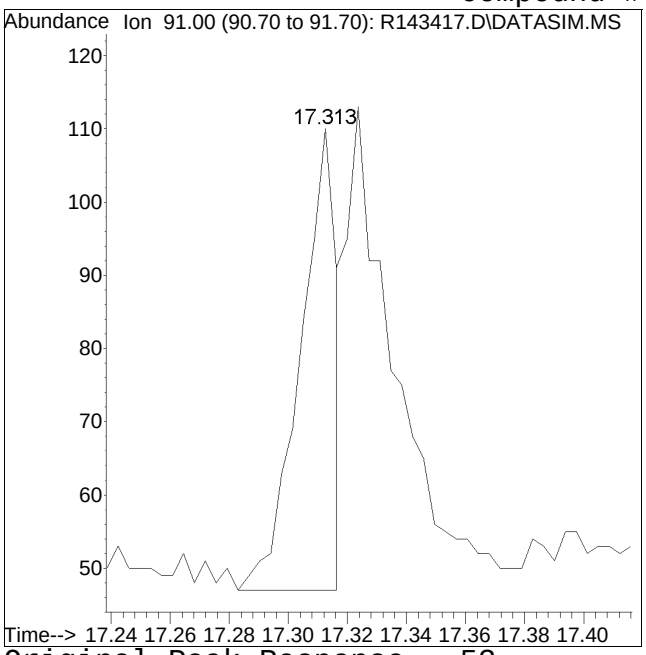
Manual Peak Response = 63 M4

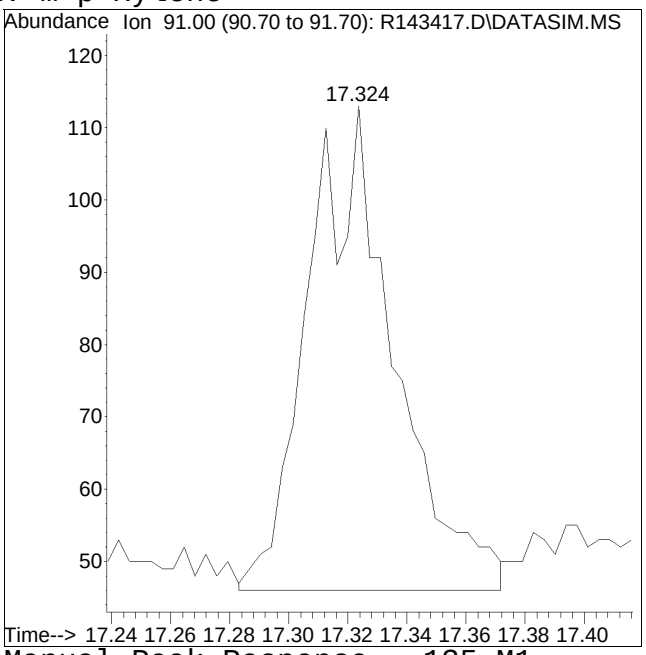
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143417.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:19 pm Instrument : Air Piano 1
Sample : L1519114-05,3,250,250 Quant Date : 8/14/2015 8:43 am

Compound #61: m+p-xylene





Original Peak Response = 53 Manual Peak Response = 135 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 13:53:24 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	139669	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		92.53%	
33) 1,4-difluorobenzene	12.420	114	348567	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		93.72%	
51) chlorobenzene-D5	16.843	54	64467	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		93.61%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164		0	N.D.		
4) chloromethane	4.380		0	N.D.		
5) Freon-114	4.519		0	N.D.		
6) vinyl chloride	4.696		0	N.D.		
7) 1,3-butadiene	0.000		0	N.D.		
8) bromomethane	5.261		0	N.D.		
9) chloroethane	5.516	64	53	0.013	ppbV #	33
13) trichlorofluoromethane	6.587		0	N.D.		
16) 1,1-dichloroethene	7.419		0	N.D.		
18) methylene chloride	7.595	49	5120	0.484	ppbV	99
21) Freon 113	7.938		0	N.D.		
23) trans-1,2-dichloroethene	8.773		0	N.D.		
24) 1,1-dichloroethane	9.006		0	N.D.		
25) MTBE	9.095		0	N.D.		
28) cis-1,2-dichloroethene	10.008		0	N.D.		
30) chloroform	10.203		0	N.D.		
32) 1,2-dichloroethane	11.239		0	N.D.		
36) 1,1,1-trichloroethane	11.514		0	N.D.		
37) benzene	12.016		0	N.D.		
38) carbon tetrachloride	12.203		0	N.D.		
41) 1,2-dichloropropane	12.948		0	N.D.		
42) bromodichloromethane	13.156		0	N.D.		
44) trichloroethene	13.207		0	N.D.		
47) cis-1,3-dichloropropene	14.205		0	N.D.		
49) trans-1,3-dichloropropene	14.725		0	N.D.		
50) 1,1,2-trichloroethane	14.933		0	N.D.		
52) toluene	15.259		0	N.D.		
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 13:53:24 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

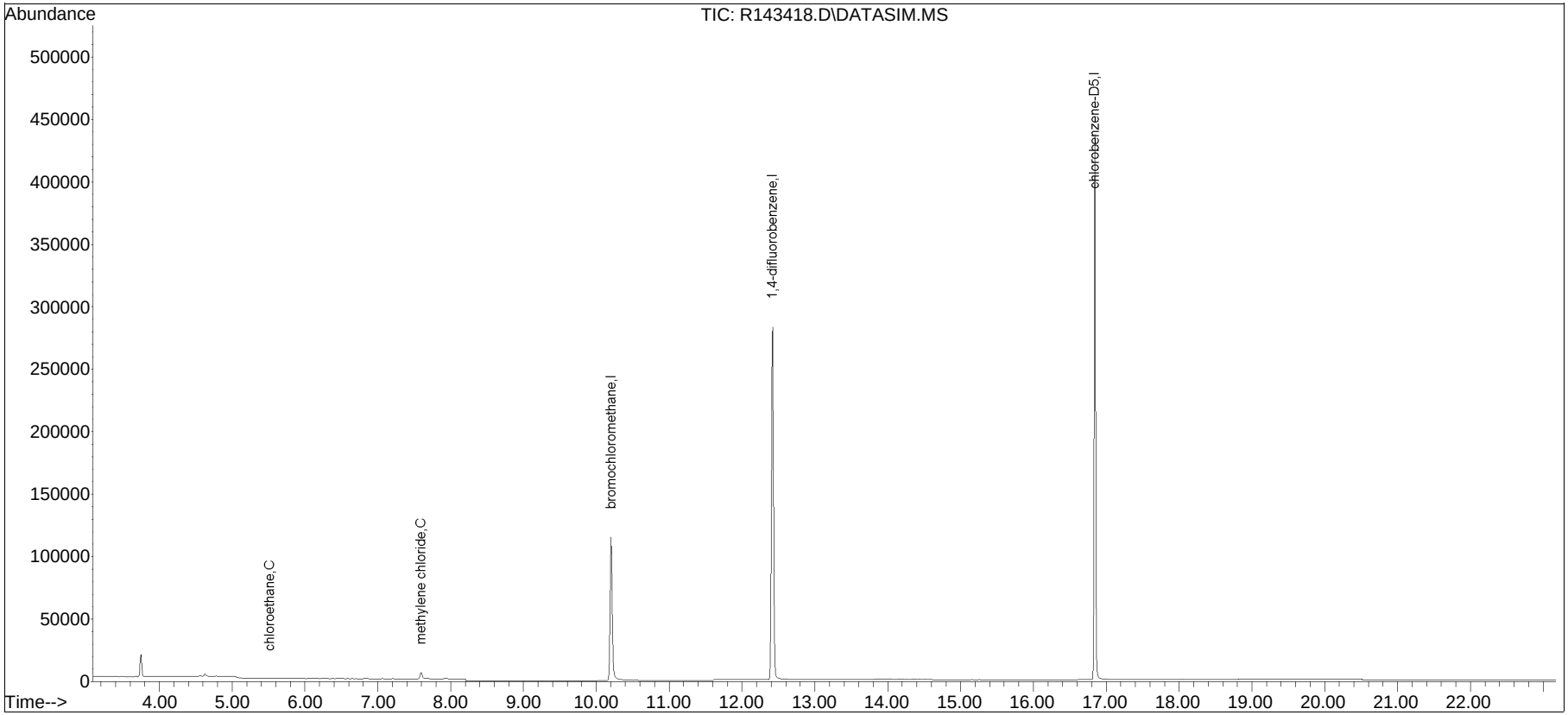
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,2-dibromoethane	15.918		0	N.D.	
57) tetrachloroethene	16.307		0	N.D.	
58) 1,1,1,2-tetrachloroethane	16.866		0	N.D.	
59) chlorobenzene	16.880		0	N.D.	
60) ethylbenzene	17.180		0	N.D.	
61) m+p-xylene	17.320		0	N.D.	
62) bromoform	17.405		0	N.D.	
63) styrene	17.616		0	N.D.	
64) 1,1,2,2-tetrachloroethane	17.693		0	N.D.	
65) o-xylene	17.686		0	N.D.	
71) 1,3,5-trimethylbenzene	18.665		0	N.D.	
73) 1,2,4-trimethylbenzene	18.980		0	N.D.	
75) 1,3-dichlorobenzene	19.113		0	N.D.	
76) 1,4-dichlorobenzene	19.166		0	N.D.	
79) 1,2-dichlorobenzene	19.428		0	N.D.	
81) 1,2,4-trichlorobenzene	20.872		0	N.D.	
82) naphthalene	21.033		0	N.D.	
84) hexachlorobutadiene	21.301		0	N.D.	

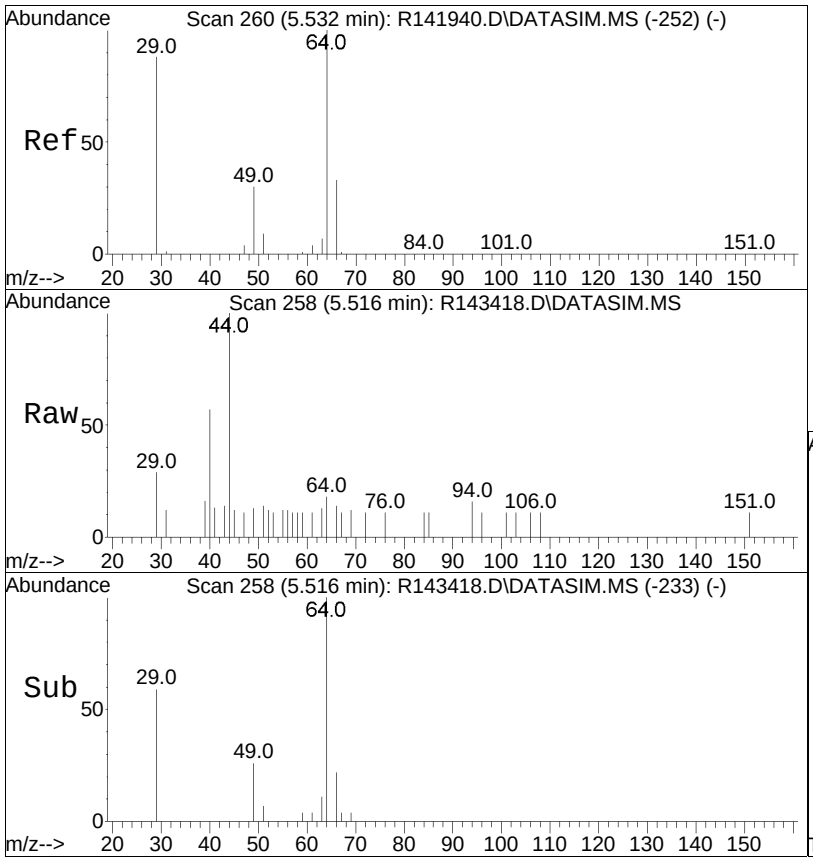
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 13:53:24 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

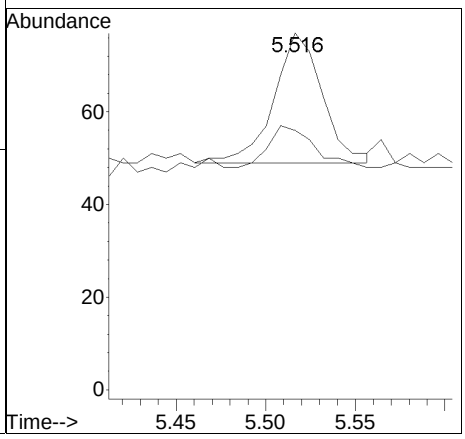


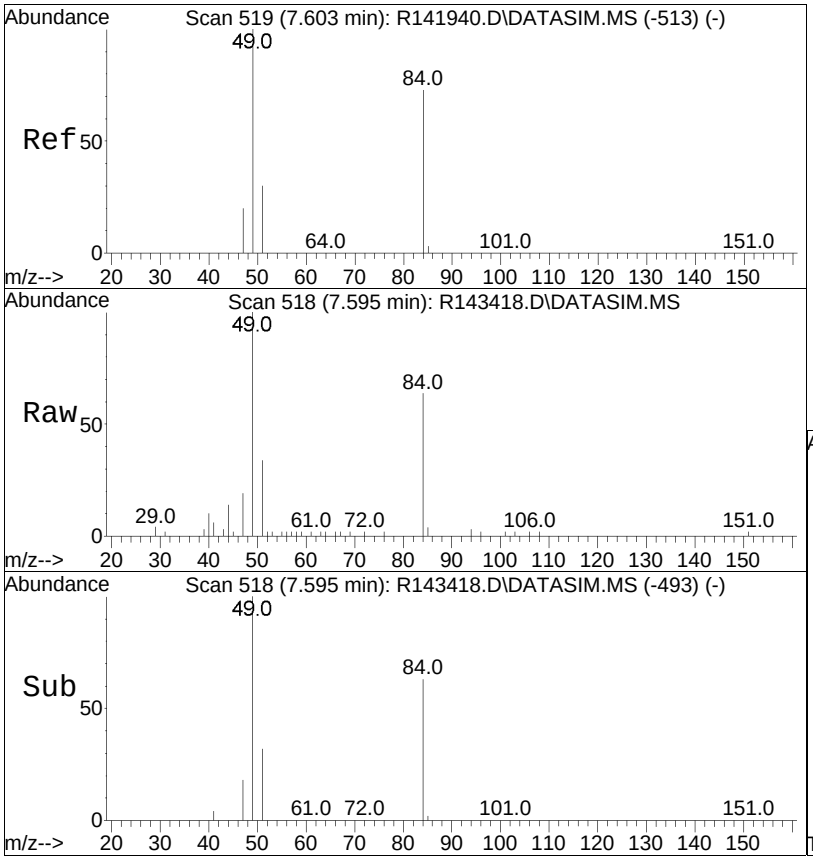


#9
chloroethane
Concen: 0.01 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143418.D
Acq: 13 Aug 2015 5:51 pm

Tgt Ion: 64 Resp: 53

Ion	Ratio	Lower	Upper
64	100		
49	72.7	27.4	41.0#

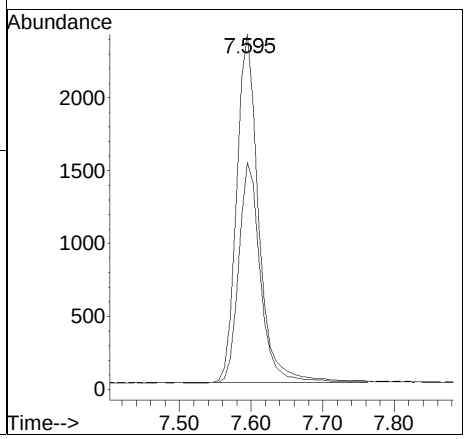




#18
methylene chloride
Concen: 0.48 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143418.D
Acq: 13 Aug 2015 5:51 pm

Tgt Ion: 49 Resp: 5120

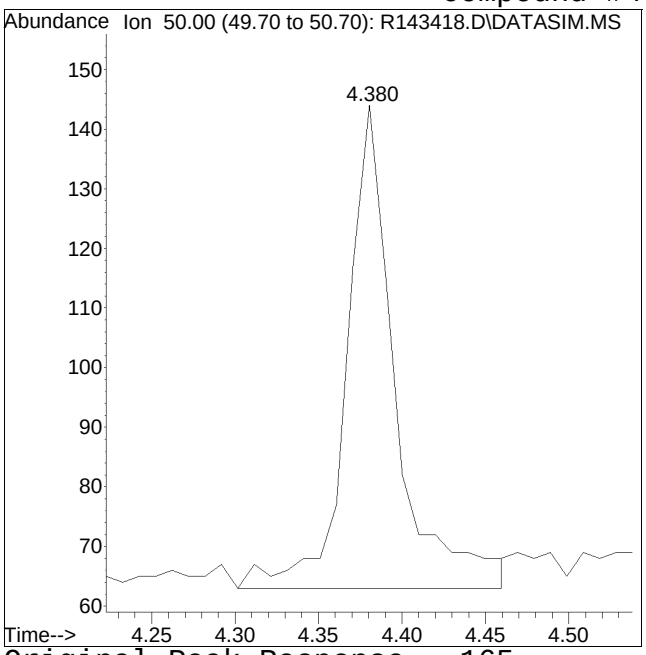
Ion	Ratio	Lower	Upper
49	100		
84	63.9	50.8	76.2



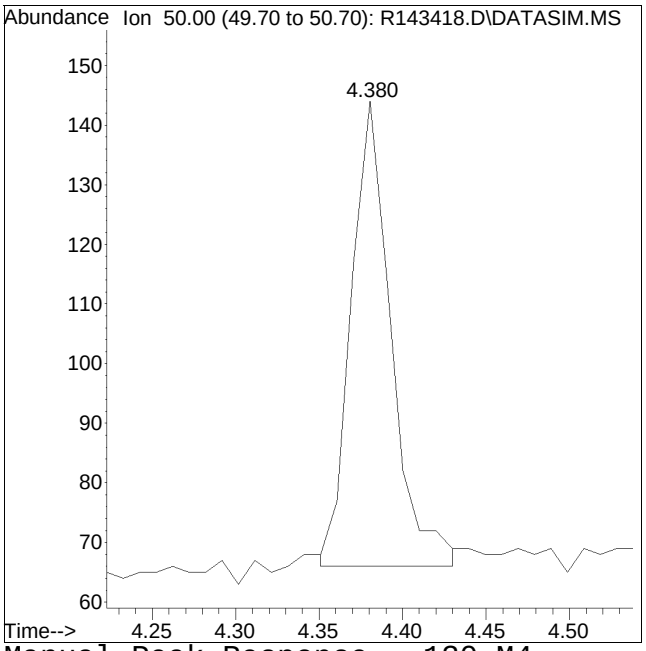
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143418.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:51 pm Instrument : Air Piano 1
Sample : L1519114-06,3,250,250 Quant Date : 8/14/2015 8:43 am

Compound #4: chloromethane



Original Peak Response = 165



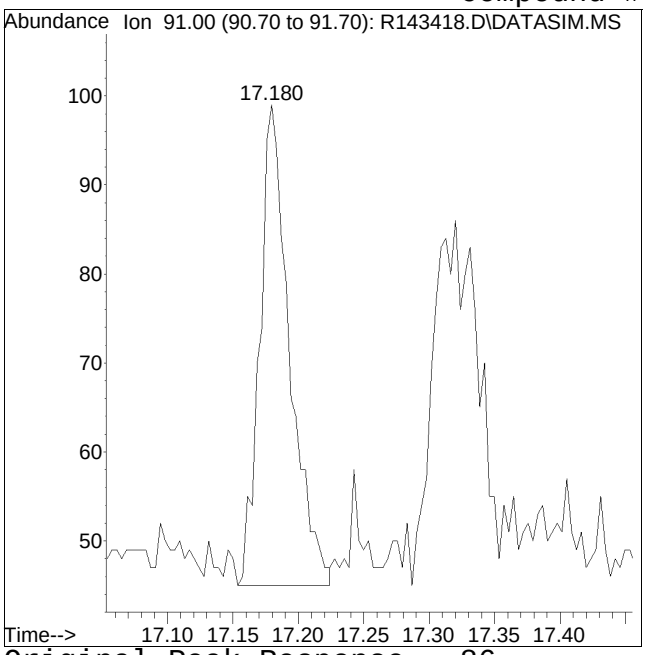
Manual Peak Response = 130 M4

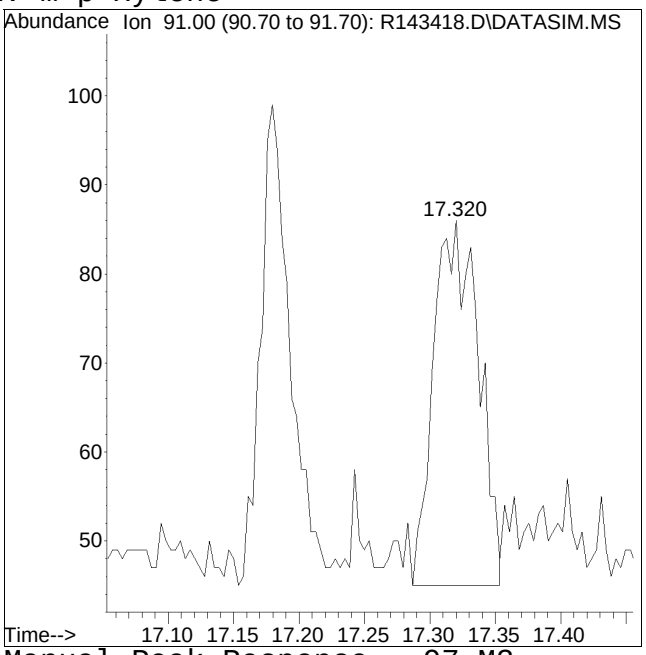
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143418.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 5:51 pm Instrument : Air Piano 1
Sample : L1519114-06,3,250,250 Quant Date : 8/14/2015 8:43 am

Compound #61: m+p-xylene





Original Peak Response = 86 Manual Peak Response = 97 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 13:55:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.202	49	131515	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		87.13%	
33) 1,4-difluorobenzene	12.420	114	334850	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		90.03%	
51) chlorobenzene-D5	16.843	54	63993	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		92.93%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.163	85	1567	0.118	ppbV	95
4) chloromethane	4.380	50	1364	0.183	ppbV	94
5) Freon-114	4.528	85	101	0.005	ppbV #	77
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	4.883	54	40	0.007	ppbV #	49
8) bromomethane	5.268		0	N.D.		
9) chloroethane	5.516	64	70	0.019	ppbV #	38
13) trichlorofluoromethane	6.587	101	1623	0.088	ppbV	97
16) 1,1-dichloroethene	7.467		0	N.D.		
18) methylene chloride	7.595	49	5300	0.532	ppbV	95
21) Freon 113	7.938	101	583	0.038	ppbV #	94
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.020		0	N.D.		
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008		0	N.D.		
30) chloroform	10.362	83	169	0.009	ppbV #	69
32) 1,2-dichloroethane	11.209		0	N.D.		
36) 1,1,1-trichloroethane	11.494		0	N.D.		
37) benzene	12.016	78	917	0.033	ppbV #	83
38) carbon tetrachloride	12.182	117	308	0.019	ppbV #	92
41) 1,2-dichloropropane	12.948		0	N.D.		
42) bromodichloromethane	13.166		0	N.D.		
44) trichloroethene	13.218		0	N.D.		
47) cis-1,3-dichloropropene	14.189		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.960		0	N.D.		
52) toluene	15.249	91	15932	0.434	ppbV	100
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 13:55:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

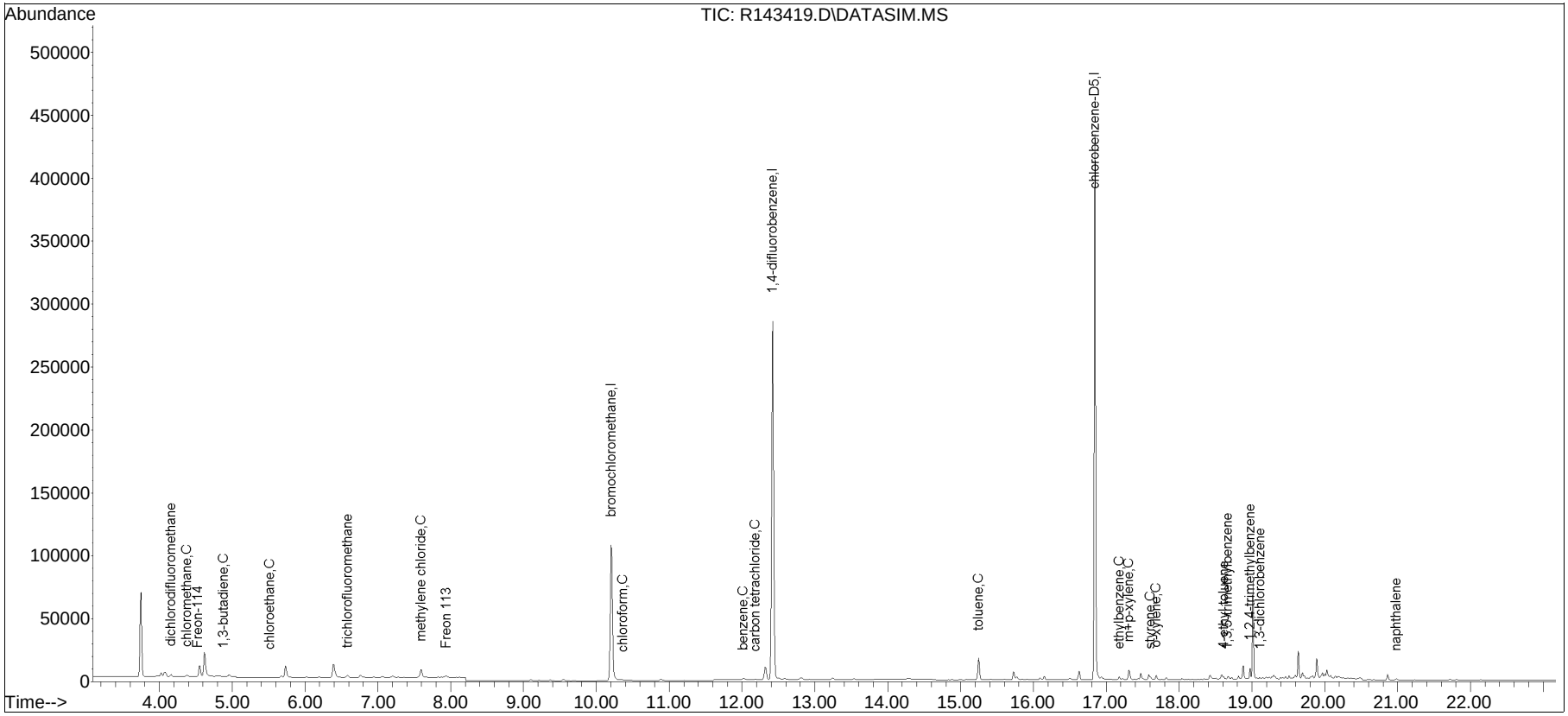
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dibromoethane	15.909		0	N.D.		
57) tetrachloroethene	16.307		0	N.D.		
58) 1,1,1,2-tetrachloroethane	16.873		0	N.D.		
59) chlorobenzene	16.888		0	N.D.		
60) ethylbenzene	17.179	91	1794	0.038	ppbV	94
61) m+p-xylene	17.309	91	3739	0.102	ppbV	94
62) bromoform	17.398		0	N.D.		
63) styrene	17.604	104	1050	0.037	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.671		0	N.D.		
65) o-xylene	17.686	91	1561	0.041	ppbV	95
71) 1,3,5-trimethylbenzene	18.665	105	917	0.020	ppbV #	98
73) 1,2,4-trimethylbenzene	18.975	105	2837	0.063	ppbV #	72
75) 1,3-dichlorobenzene	19.109	146	357	0.011	ppbV #	75
76) 1,4-dichlorobenzene	19.161		0	N.D.		
79) 1,2-dichlorobenzene	19.423		0	N.D.		
81) 1,2,4-trichlorobenzene	20.861		0	N.D.		
82) naphthalene	20.979	128	1485M6	0.026	ppbV	
84) hexachlorobutadiene	21.300		0	N.D.		

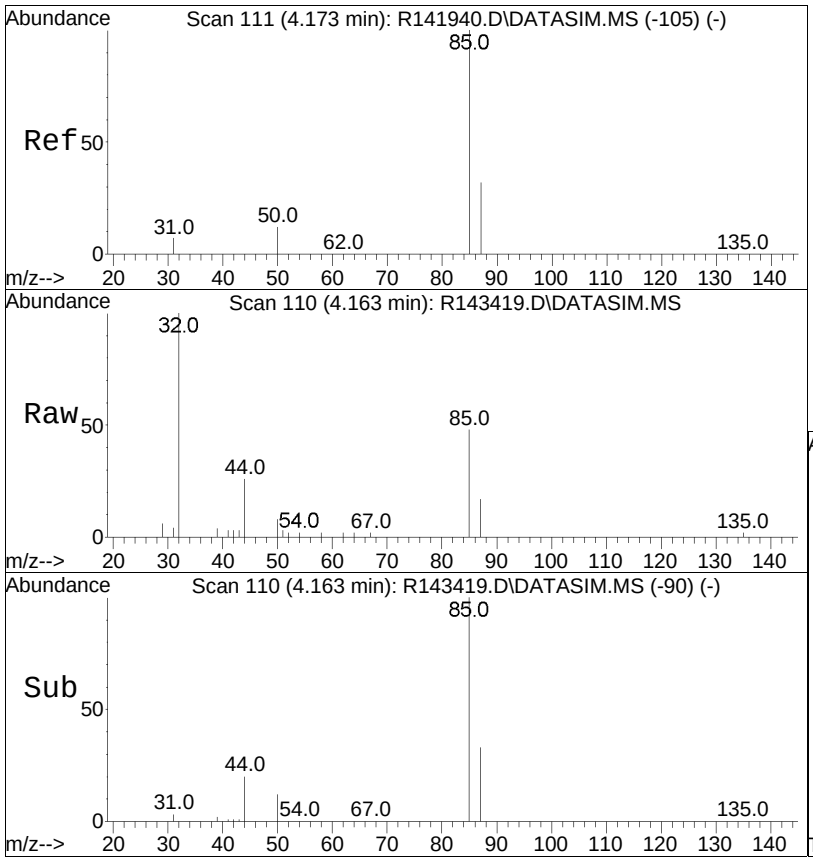
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 13:55:06 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

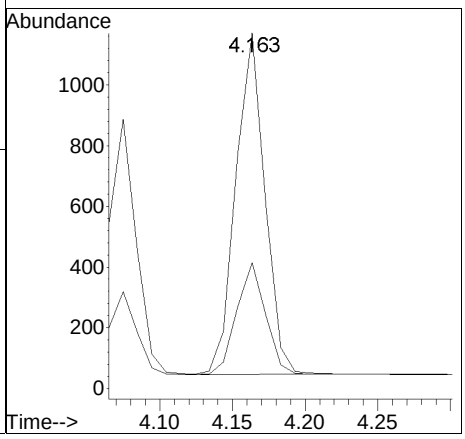


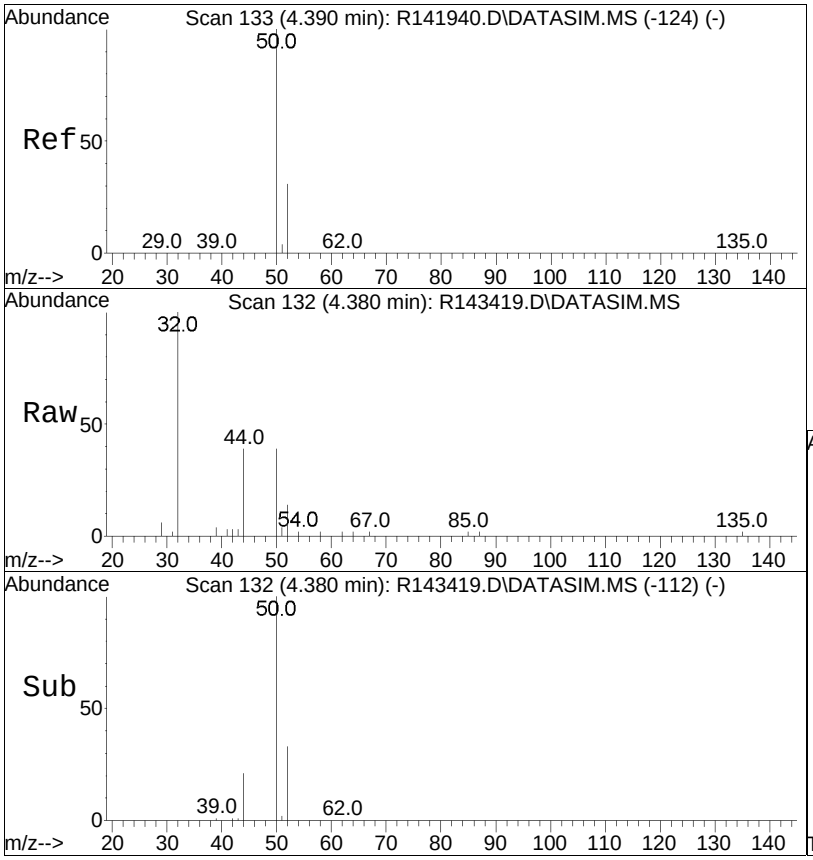


#3
dichlorodifluoromethane
Concen: 0.12 ppbV
RT: 4.163 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 85 Resp: 1567

Ion	Ratio	Lower	Upper
85	100		
87	35.4	26.0	39.0

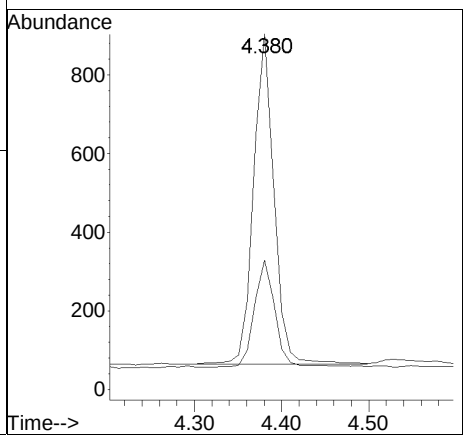


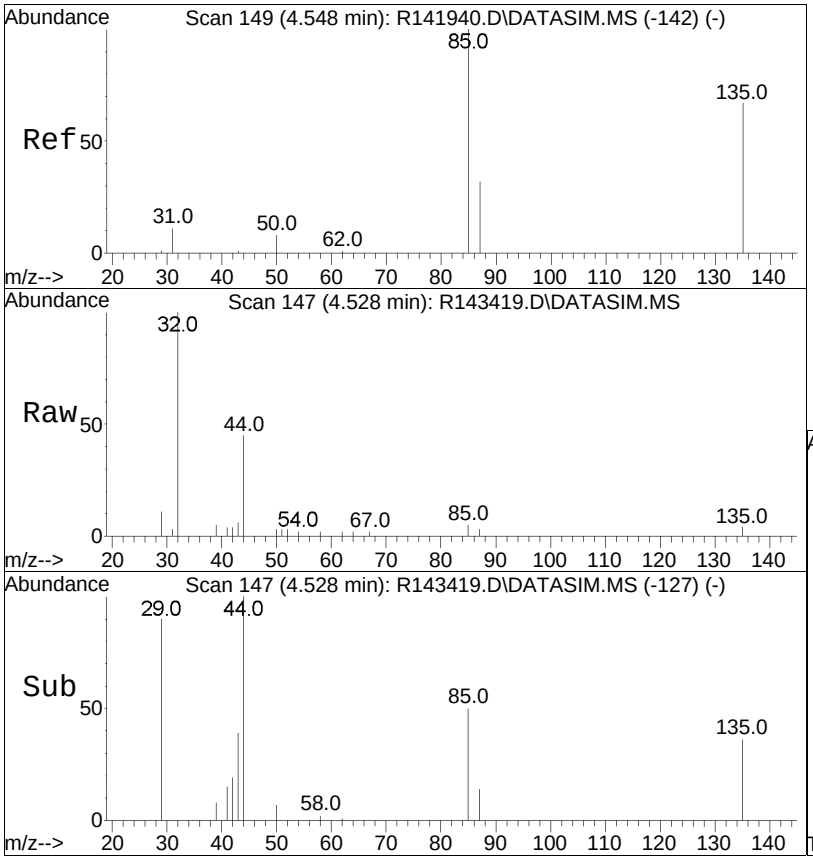


#4
chloromethane
Concen: 0.18 ppbV
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 50 Resp: 1364

Ion	Ratio	Lower	Upper
50	100		
52	36.4	26.2	39.4

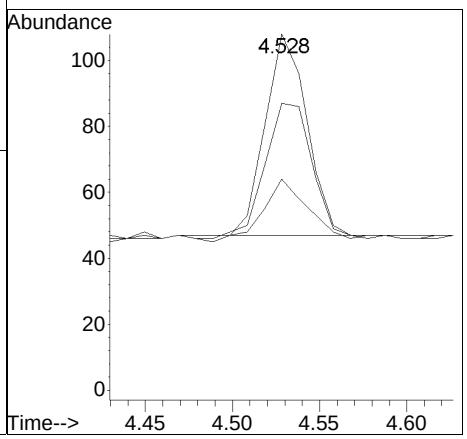


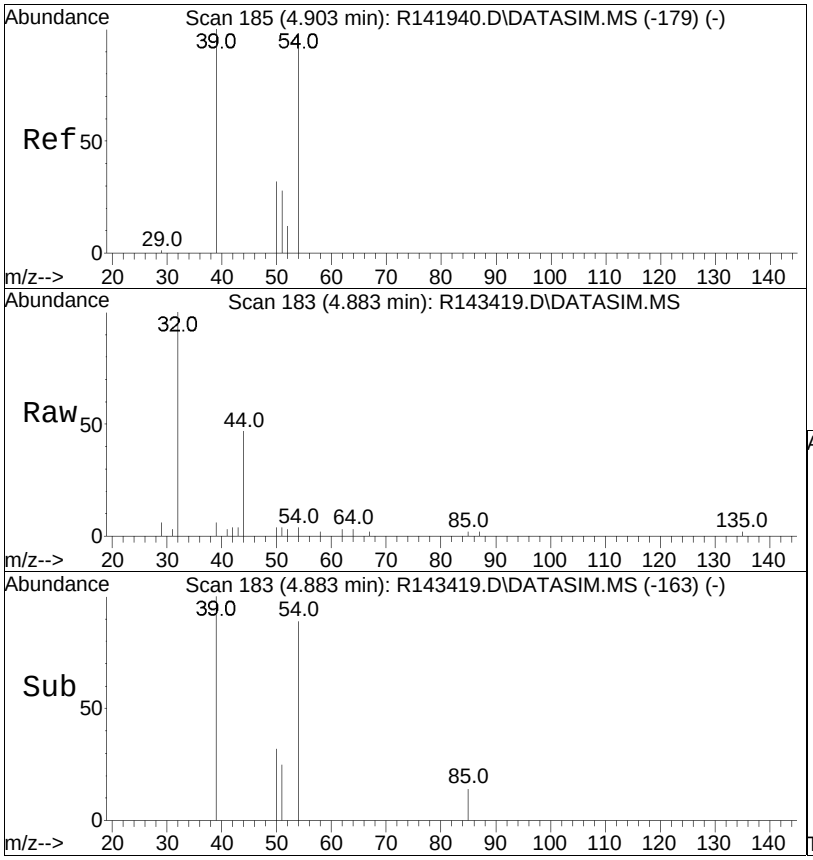


#5
Freon-114
Concen: 0.01 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 85 Resp: 101

Ion	Ratio	Lower	Upper
85	100		
87	59.3	25.4	38.0#
135	80.6	57.0	85.6

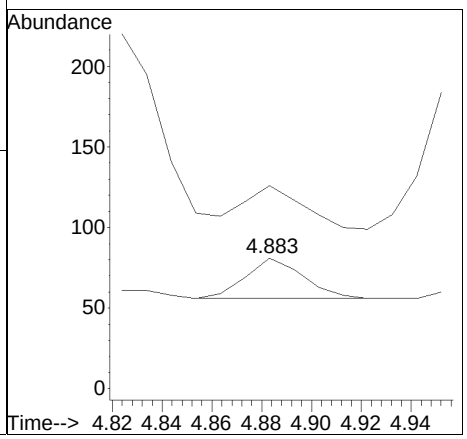


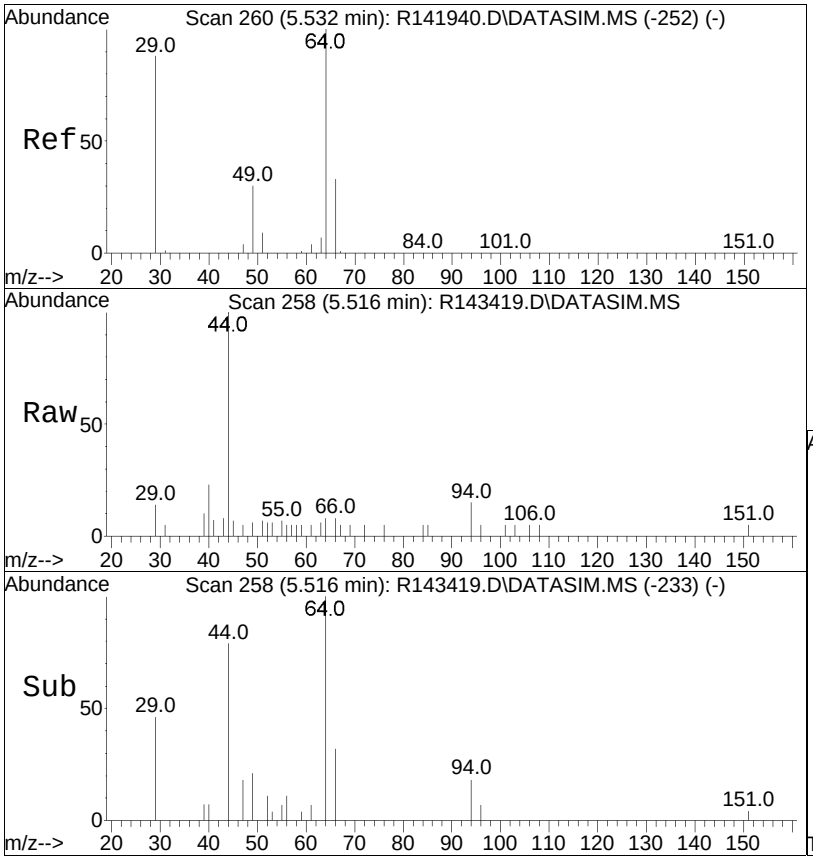


#7
1,3-butadiene
Concen: 0.01 ppbV
RT: 4.883 min Scan# 183
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 54 Resp: 40

Ion	Ratio	Lower	Upper
54	100		
39	155.6	82.6	124.0#

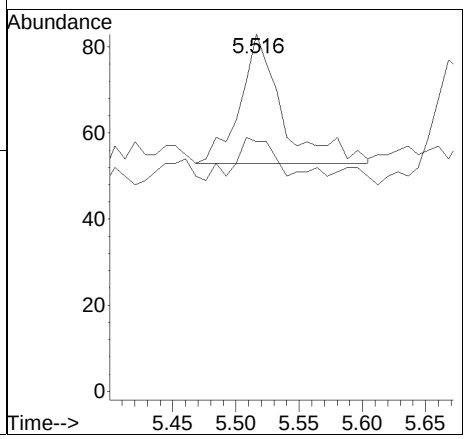


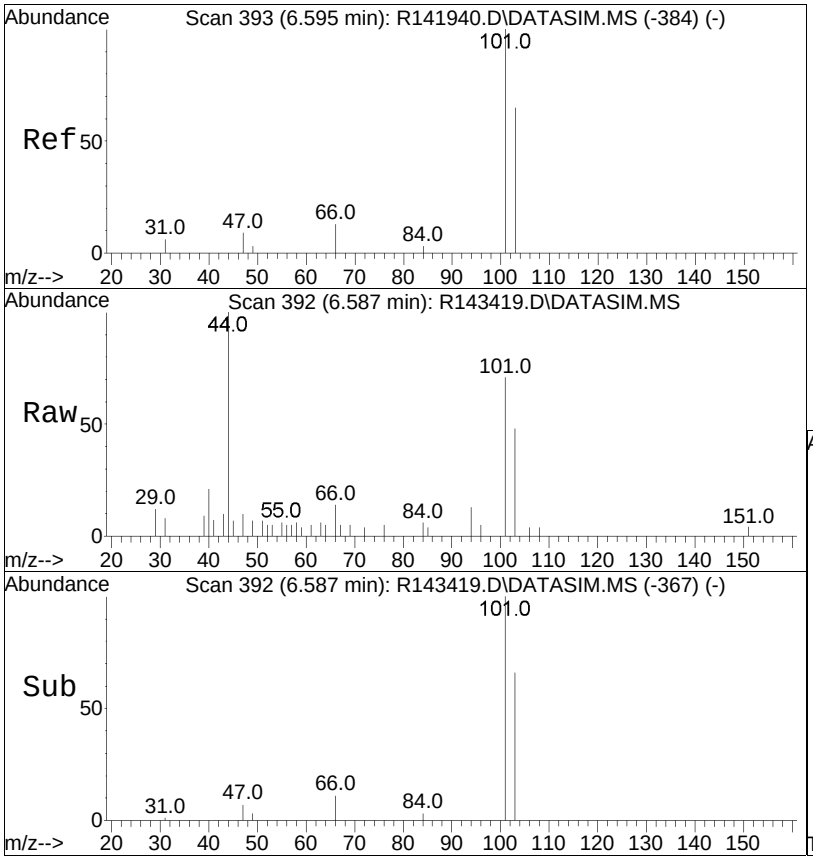


#9
chloroethane
Concen: 0.02 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 64 Resp: 70

Ion	Ratio	Lower	Upper
64	100		
49	69.9	27.4	41.0#

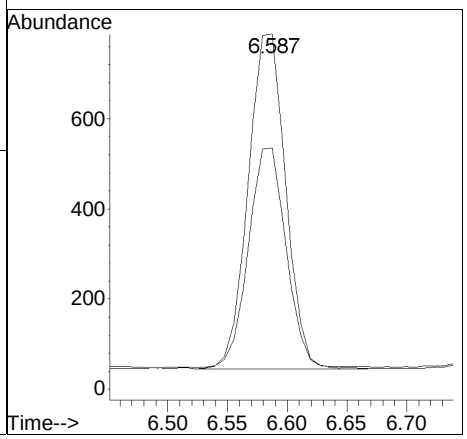


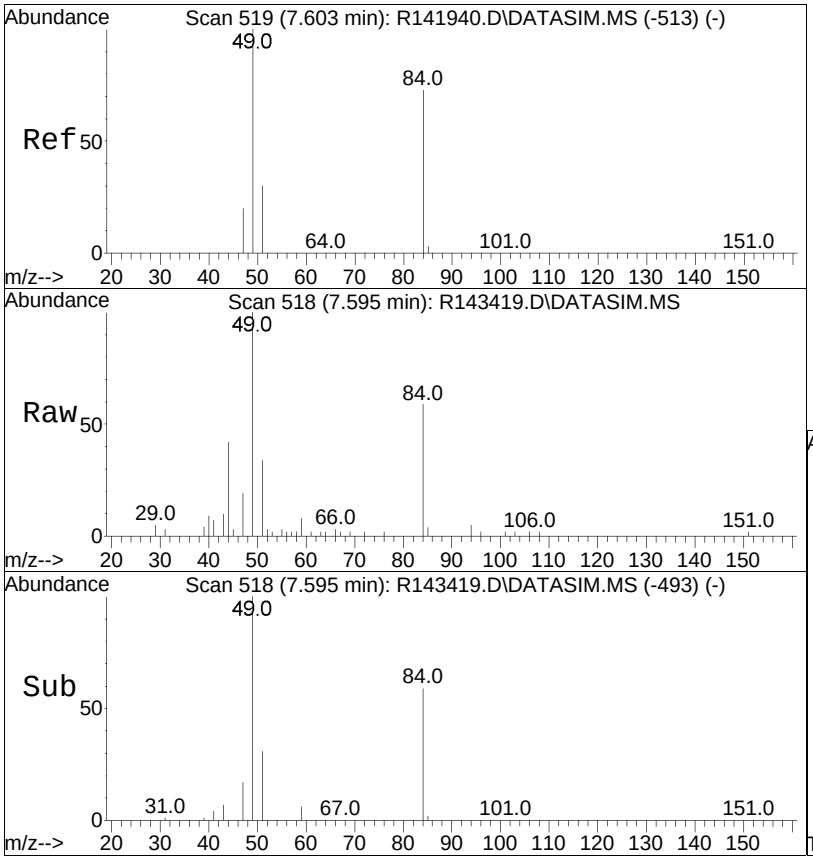


#13
trichlorofluoromethane
Concen: 0.09 ppbV
RT: 6.587 min Scan# 392
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:101 Resp: 1623

Ion	Ratio	Lower	Upper
101	100		
103	67.9	52.2	78.2

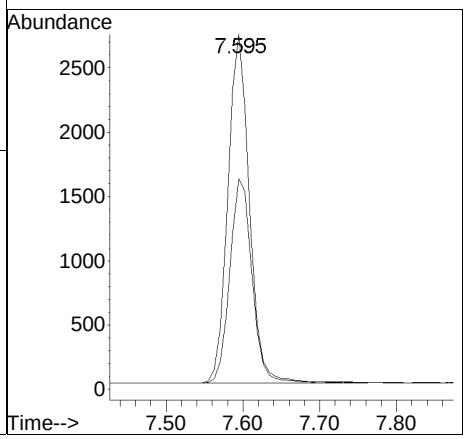


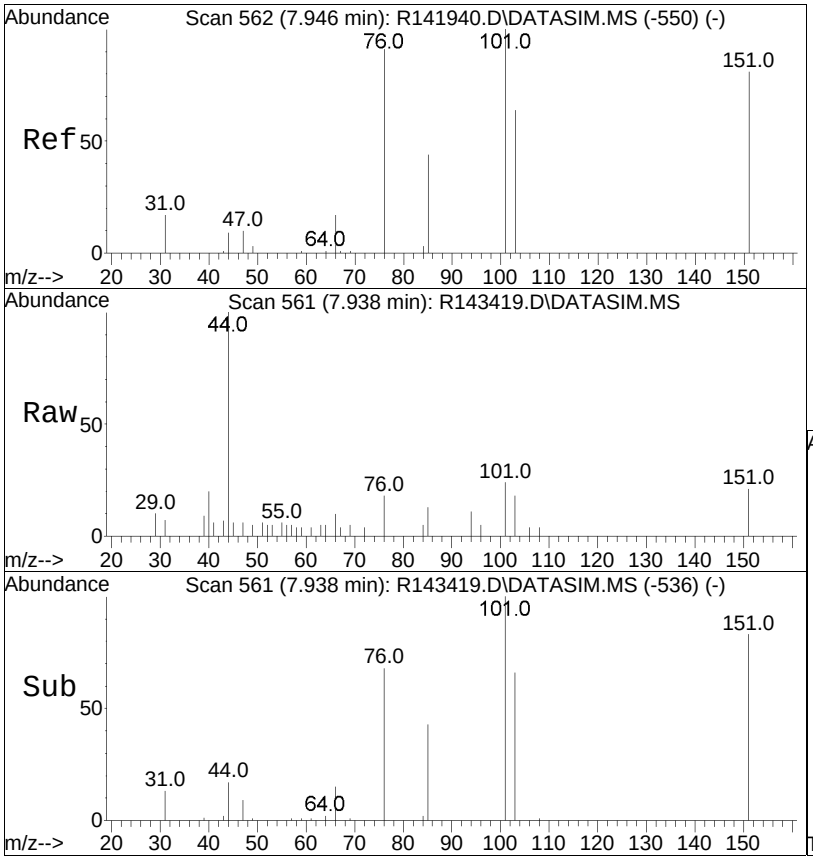


#18
methylene chloride
Concen: 0.53 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 49 Resp: 5300

Ion	Ratio	Lower	Upper
49	100		
84	59.3	50.8	76.2

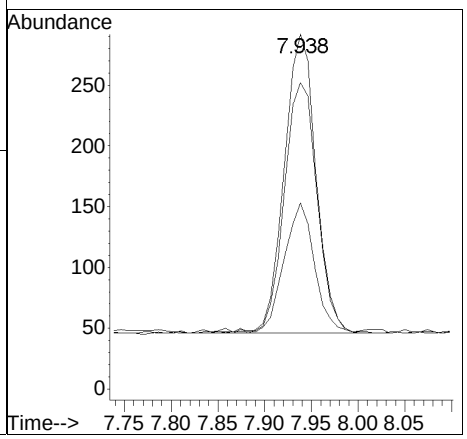


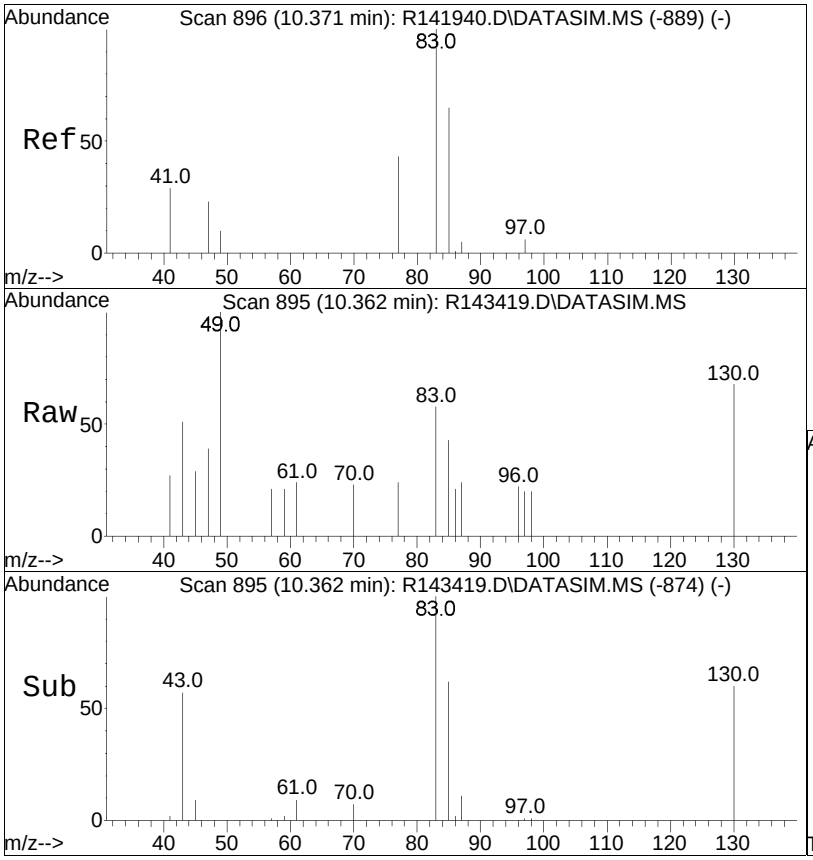


#21
Freon 113
Concen: 0.04 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:101 Resp: 583

Ion	Ratio	Lower	Upper
101	100		
85	52.4	32.5	48.7#
151	86.3	69.1	103.7

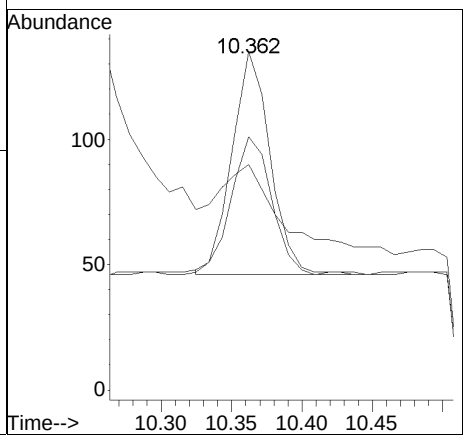


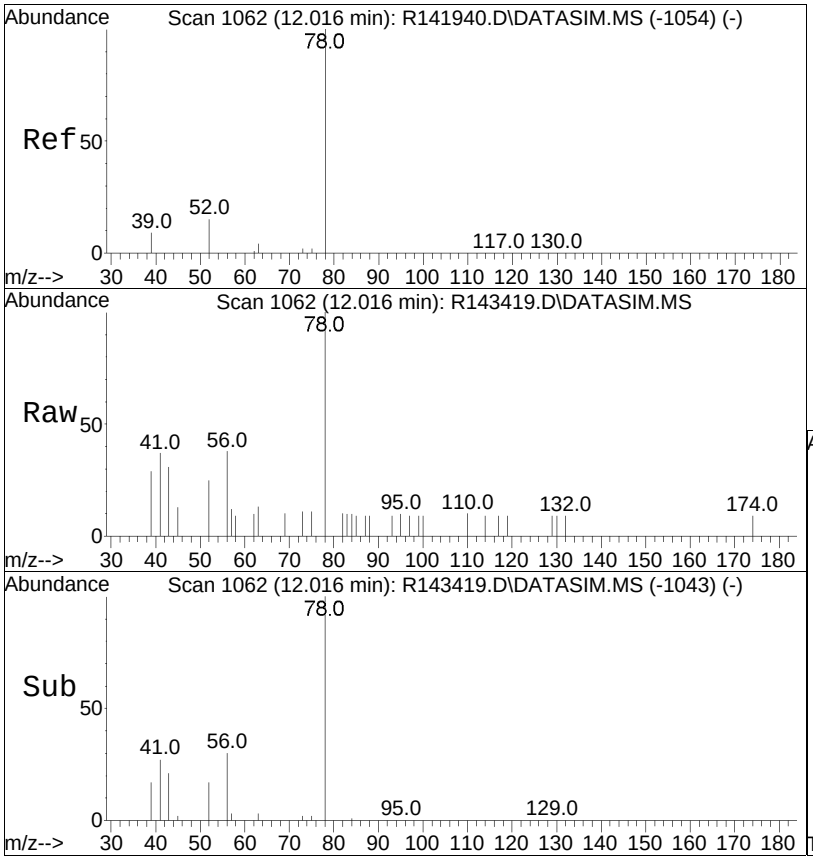


#30
chloroform
Concen: 0.01 ppbV
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 83 Resp: 169

Ion	Ratio	Lower	Upper
83	100		
85	74.8	51.6	77.4
47	66.7	22.6	33.8#

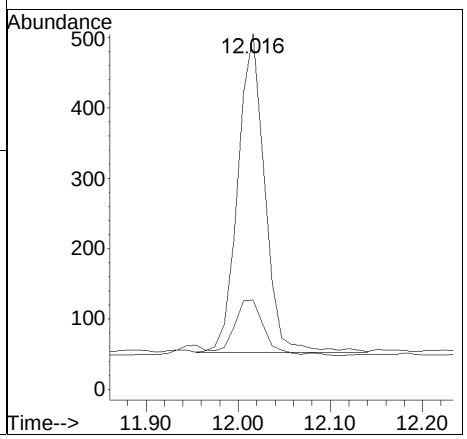


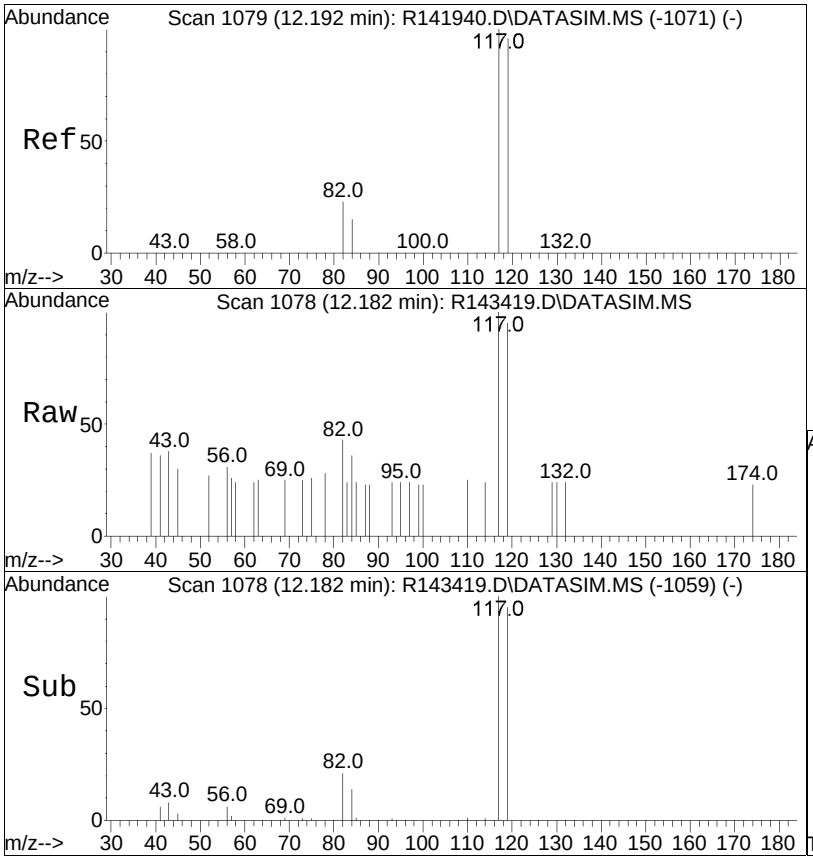


#37
benzene
Concen: 0.03 ppbV
RT: 12.016 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 78 Resp: 917

Ion	Ratio	Lower	Upper
78	100		
52	25.1	14.2	21.2#

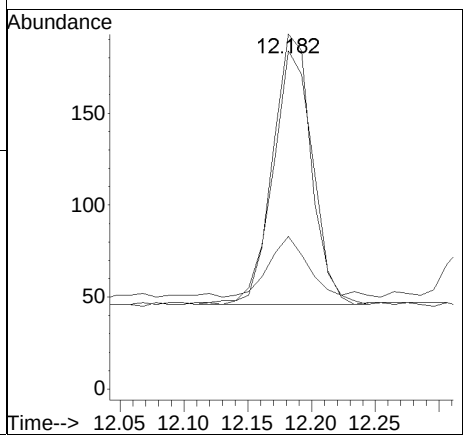


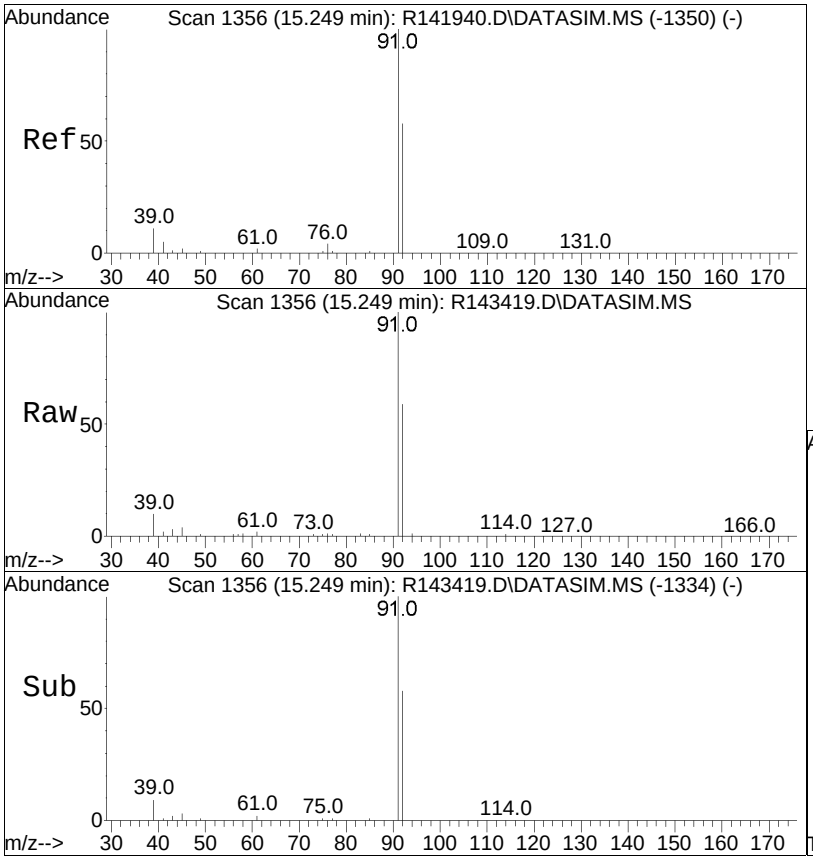


#38
carbon tetrachloride
Concen: 0.02 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:117 Resp: 308

Ion	Ratio	Lower	Upper
117	100		
119	95.3	76.4	114.6
82	43.0	18.3	27.5#

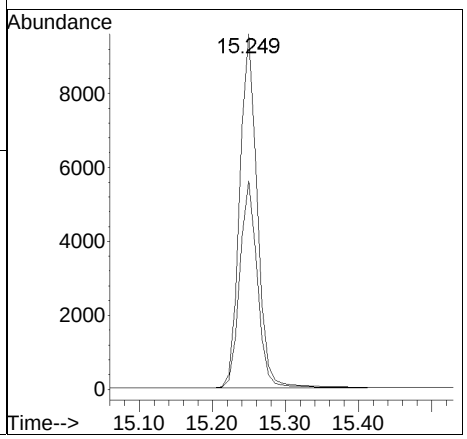


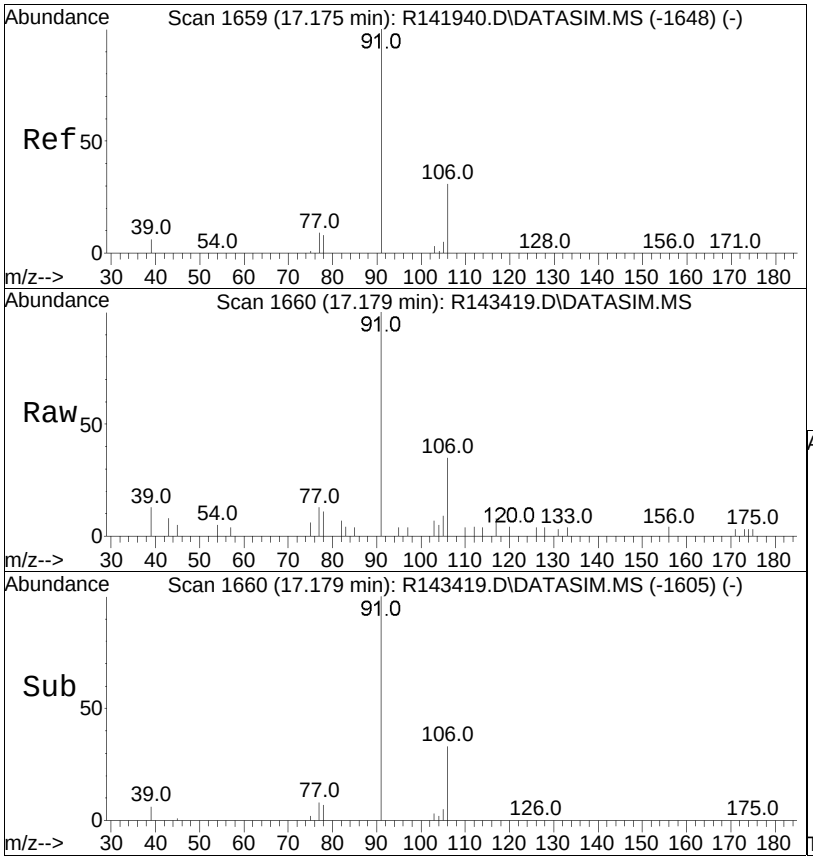


#52
toluene
Concen: 0.43 ppbV
RT: 15.249 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 91 Resp: 15932

Ion	Ratio	Lower	Upper
91	100		
92	58.7	46.8	70.2

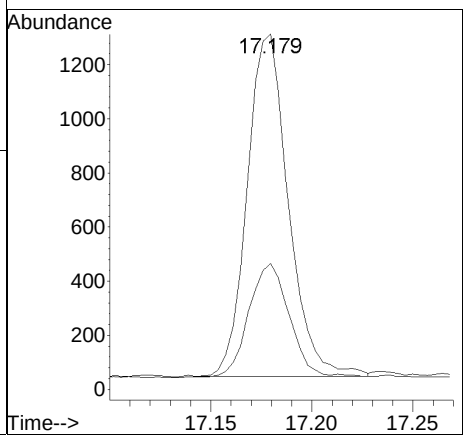


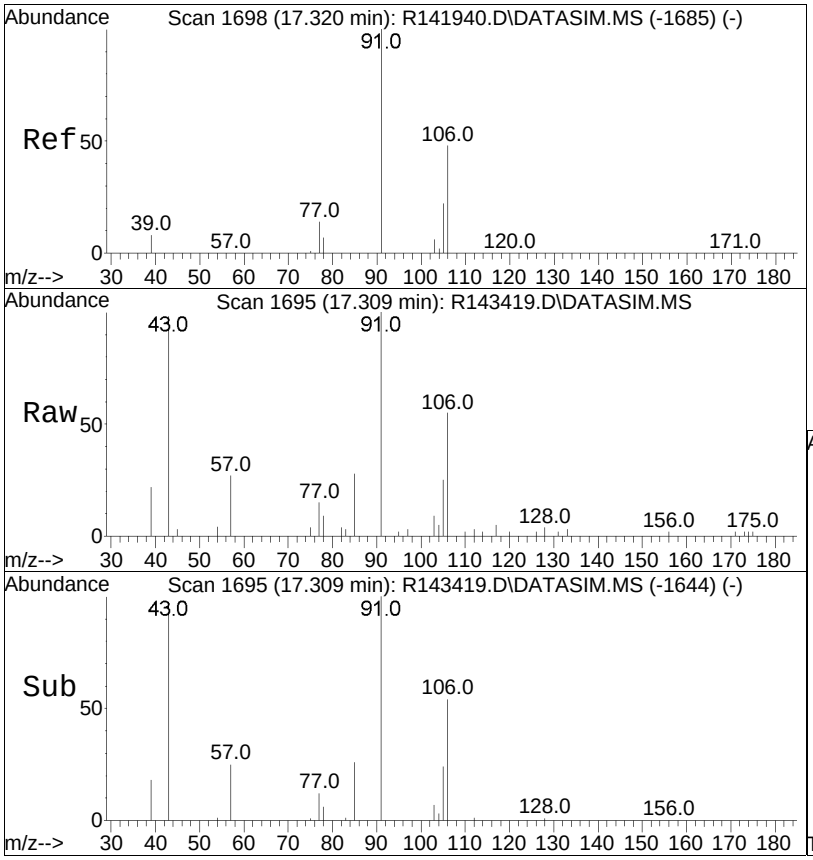


#60
ethylbenzene
Concen: 0.04 ppbV
RT: 17.179 min Scan# 1660
Delta R.T. 0.004 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 91 Resp: 1794

Ion	Ratio	Lower	Upper
91	100		
106	35.5	25.8	38.8

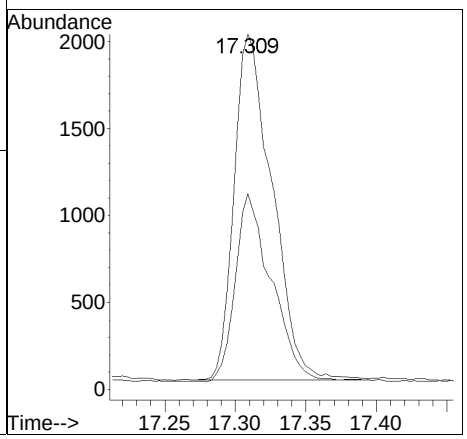


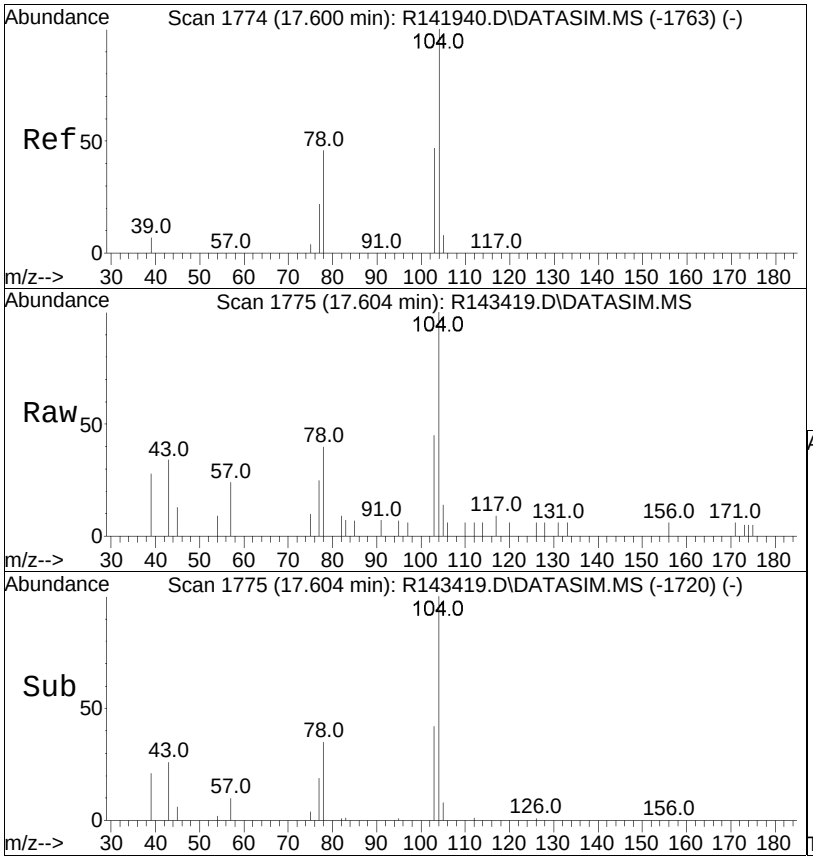


#61
m+p-xylene
Concen: 0.10 ppbV
RT: 17.309 min Scan# 1695
Delta R.T. -0.011 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 91 Resp: 3739

Ion	Ratio	Lower	Upper
91	100		
106	55.1	40.6	61.0

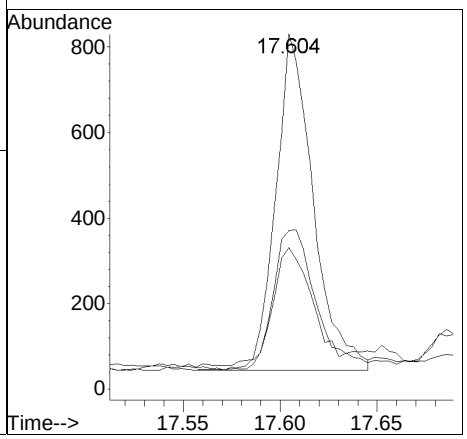


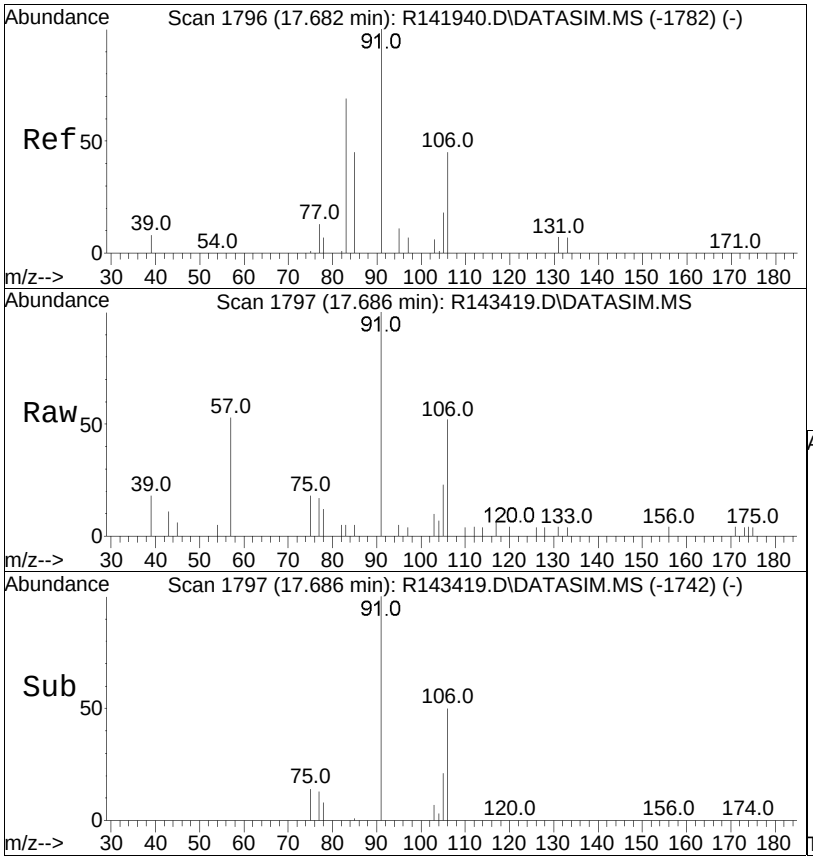


#63
styrene
Concen: 0.04 ppbV
RT: 17.604 min Scan# 1775
Delta R.T. 0.003 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:104 Resp: 1050

Ion	Ratio	Lower	Upper
104	100		
103	44.7	37.7	56.5
78	39.9	31.0	46.6

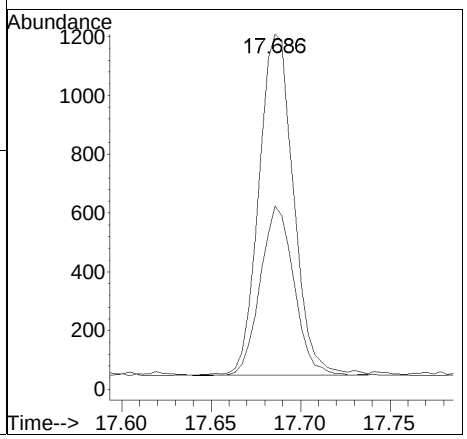


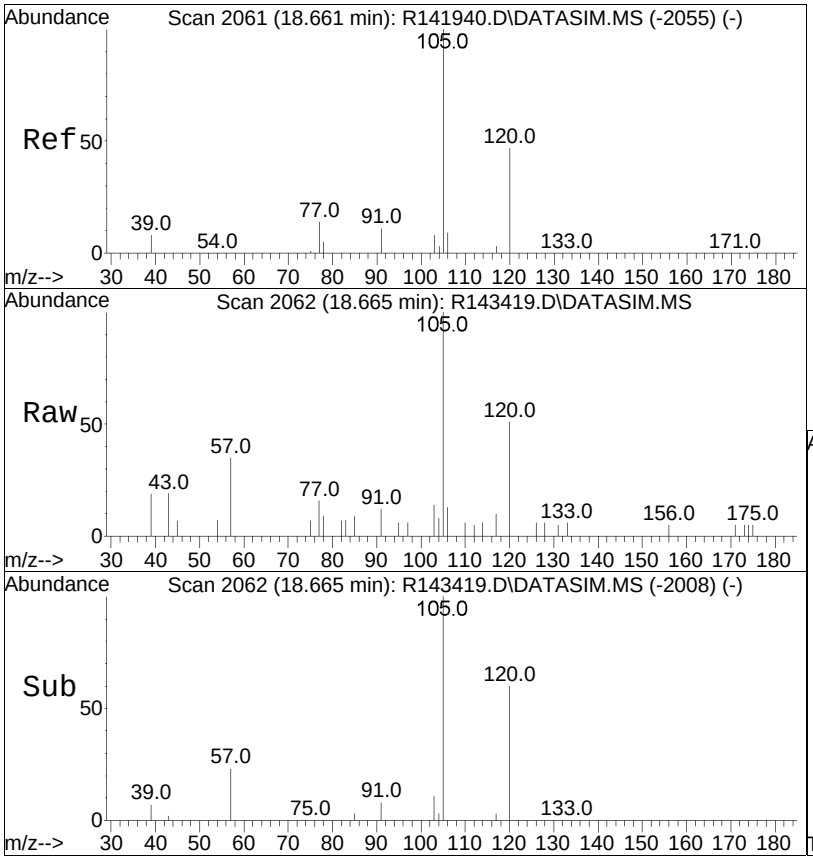


#65
o-xylene
Concen: 0.04 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 91 Resp: 1561

Ion	Ratio	Lower	Upper
91	100		
106	51.6	38.5	57.7

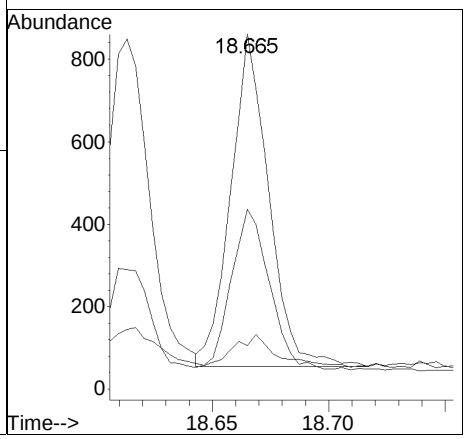


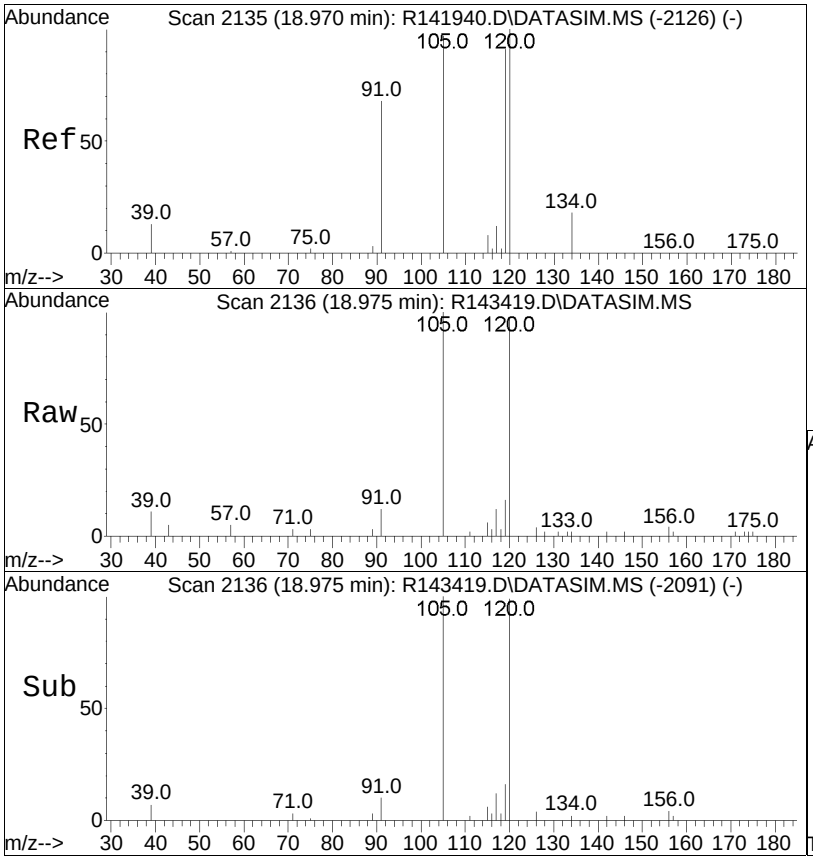


#71
1,3,5-trimethylbenzene
Concen: 0.02 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:105 Resp: 917

Ion	Ratio	Lower	Upper
105	100		
120	50.6	40.9	61.3
91	12.3	7.8	11.6#

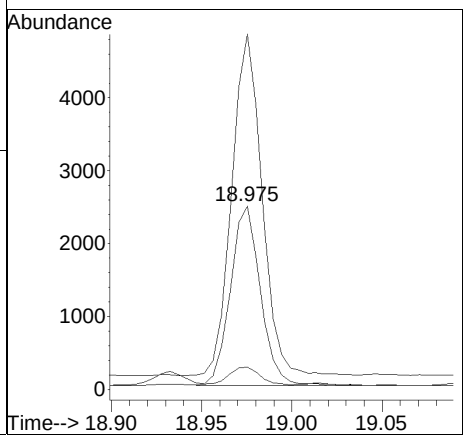


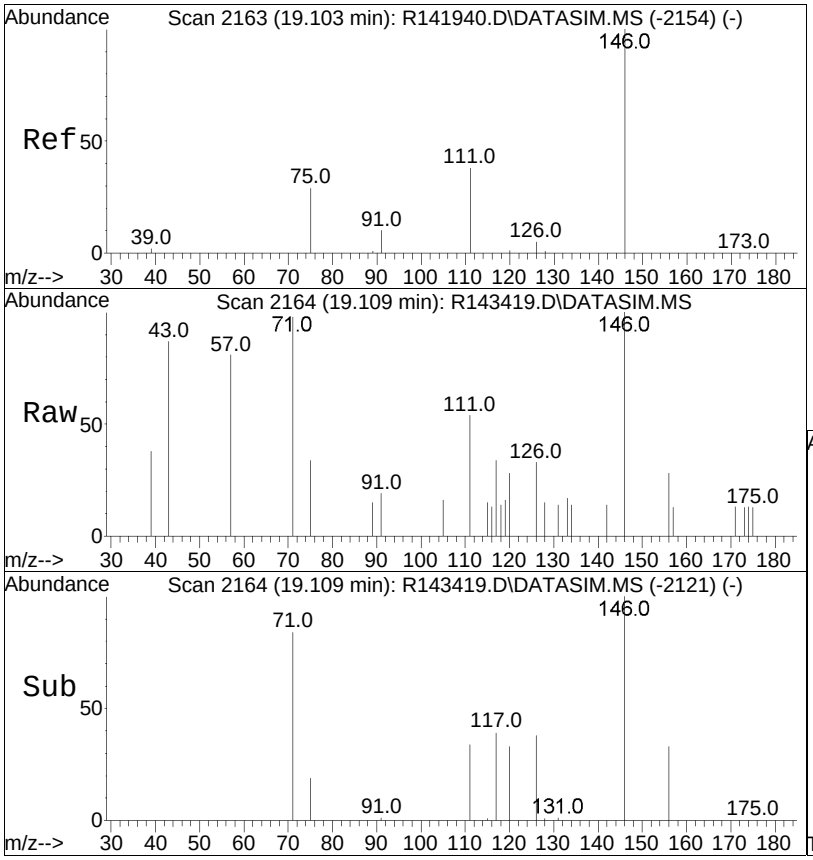


#73
1,2,4-trimethylbenzene
Concen: 0.06 ppbV
RT: 18.975 min Scan# 2136
Delta R.T. 0.005 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:105 Resp: 2837

Ion	Ratio	Lower	Upper
105	100		
120	194.0	174.7	262.1
91	12.2	55.2	82.8#

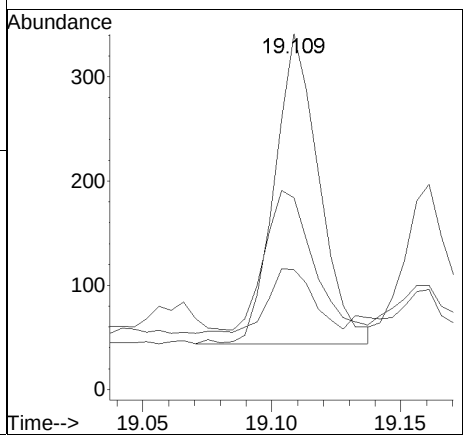


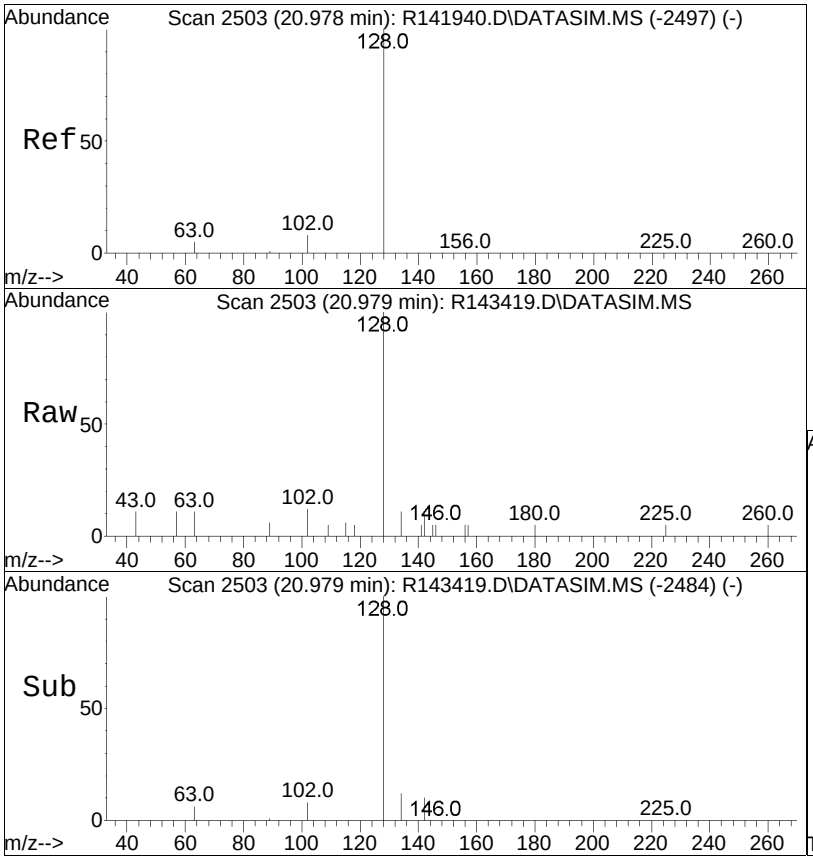


#75
1,3-dichlorobenzene
Concen: 0.01 ppbV
RT: 19.109 min Scan# 2164
Delta R.T. 0.005 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:146 Resp: 357

Ion	Ratio	Lower	Upper
146	100		
111	54.0	29.9	44.9#
75	33.7	18.8	28.2#

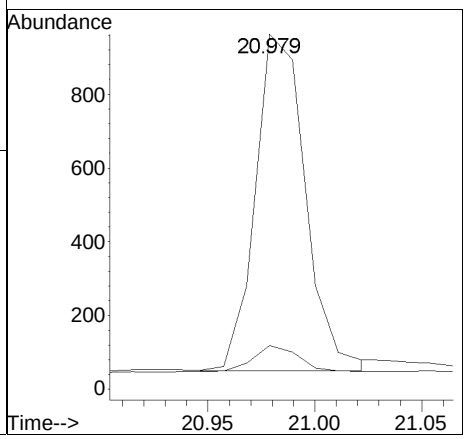




#82
naphthalene
Concen: 0.03 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion:128 Resp: 1485

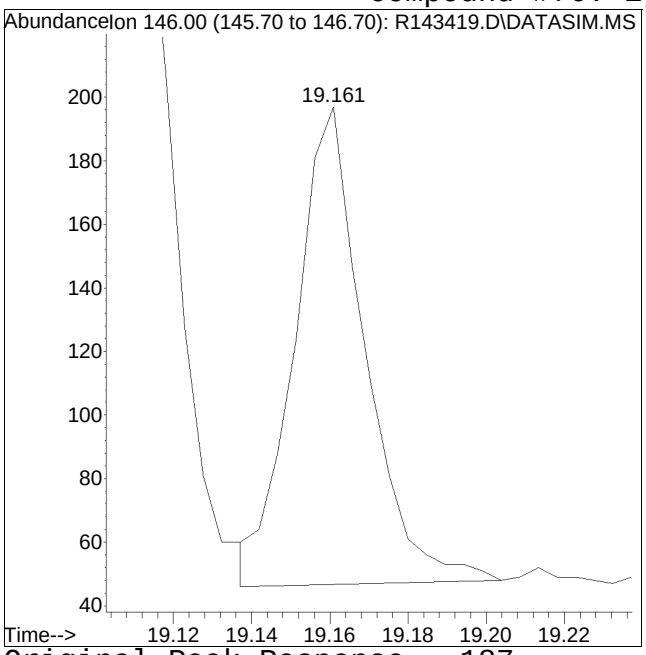
Ion	Ratio	Lower	Upper
128	100		
102	12.4	5.7	8.5#



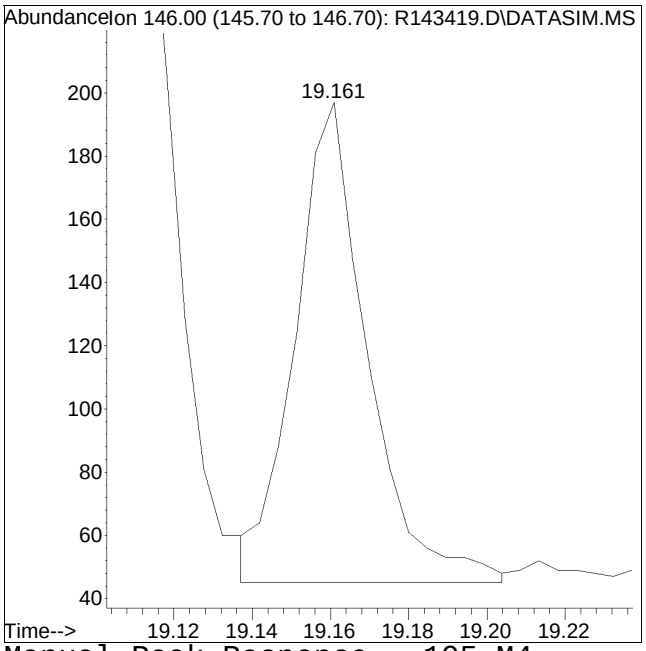
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:43 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 187



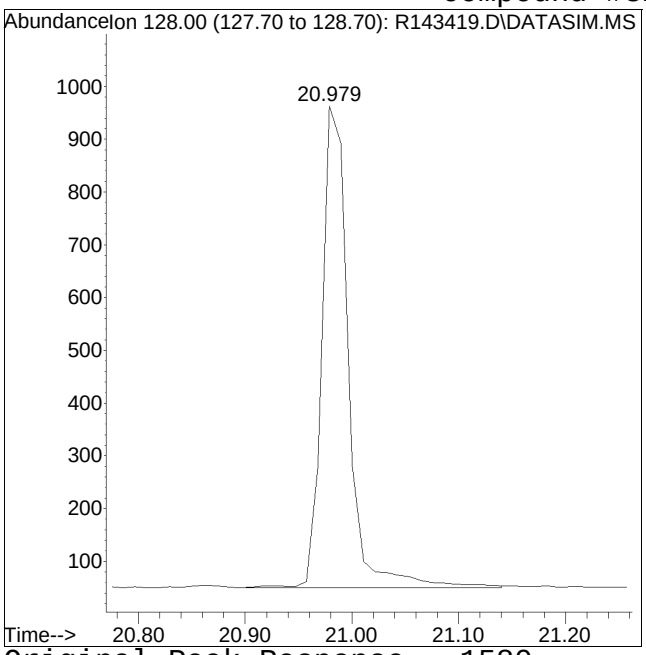
Manual Peak Response = 195 M4

M4 = Poor automated baseline construction.

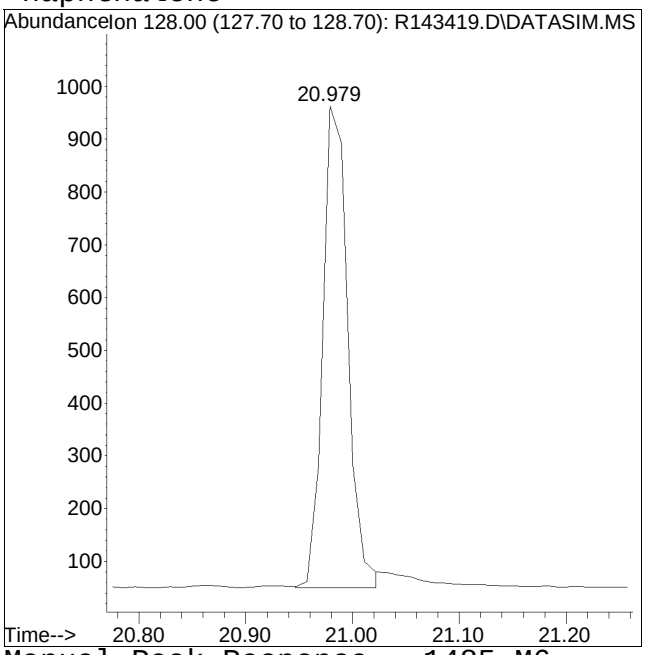
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143419.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:23 pm Instrument : Air Piano 1
Sample : L1519114-08D,3,75.0000,250 Quant Date : 8/14/2015 8:43 am

Compound #82: naphthalene



Original Peak Response = 1580



Manual Peak Response = 1485 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 14:00:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	139967	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		92.73%	
33) 1,4-difluorobenzene	12.420	114	343026	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		92.23%	
51) chlorobenzene-D5	16.843	54	65533	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		95.16%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	6067	0.429	ppbV	99
4) chloromethane	4.380	50	4482M4	0.564	ppbV	
5) Freon-114	4.528	85	303	0.015	ppbV #	85
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	4.883	54	99M4	0.016	ppbV	
8) bromomethane	5.269	94	91	0.012	ppbV #	54
9) chloroethane	5.516	64	99	0.025	ppbV #	43
13) trichlorofluoromethane	6.579	101	4237	0.217	ppbV	100
16) 1,1-dichloroethene	7.419		0	N.D.		
18) methylene chloride	7.595	49	6299	0.594	ppbV	99
21) Freon 113	7.938	101	1118	0.068	ppbV	96
23) trans-1,2-dichloroethene	8.766	61	82	0.006	ppbV #	63
24) 1,1-dichloroethane	9.013		0	N.D.		
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008	61	491	0.032	ppbV	97
30) chloroform	10.362	83	1223	0.059	ppbV #	95
32) 1,2-dichloroethane	11.210	62	224	0.018	ppbV #	56
36) 1,1,1-trichloroethane	11.494	97	496	0.027	ppbV #	78
37) benzene	12.016	78	2281M4	0.079	ppbV	
38) carbon tetrachloride	12.182	117	1099	0.066	ppbV #	96
41) 1,2-dichloropropane	12.948		0	N.D.		
42) bromodichloromethane	13.166	83	179	0.009	ppbV #	85
44) trichloroethene	13.218	130	209	0.015	ppbV #	91
47) cis-1,3-dichloropropene	14.205		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.960		0	N.D.		
52) toluene	15.250	91	36421	0.969	ppbV	99
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 14:00:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

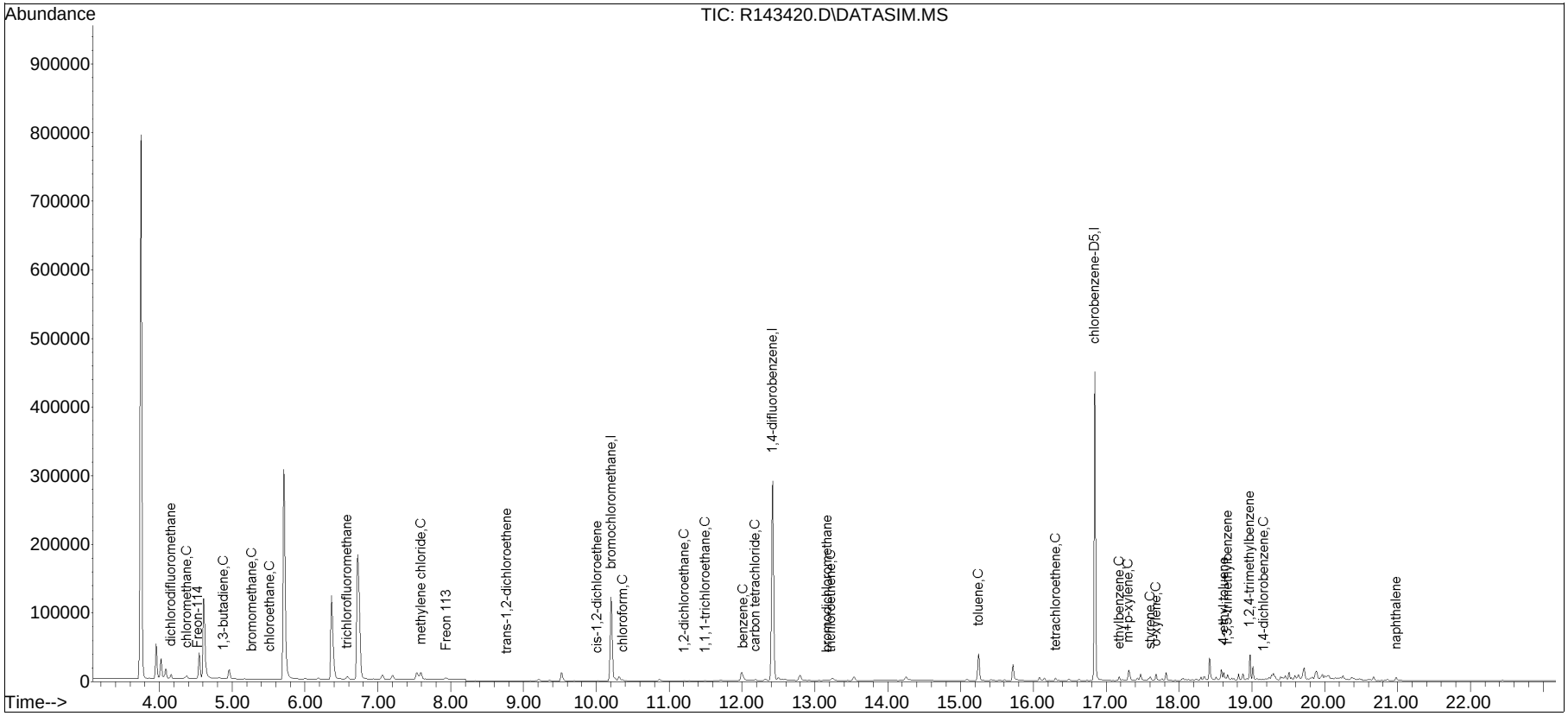
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dibromoethane	15.909		0	N.D.		
57) tetrachloroethene	16.307	166	1919	0.102	ppbV	97
58) 1,1,1,2-tetrachloroethane	16.862		0	N.D.		
59) chlorobenzene	16.884		0	N.D.		
60) ethylbenzene	17.176	91	4429	0.091	ppbV	98
61) m+p-xylene	17.305	91	10930	0.292	ppbV	100
62) bromoform	17.401		0	N.D.		
63) styrene	17.605	104	2882	0.099	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.671		0	N.D.		
65) o-xylene	17.686	91	4680	0.121	ppbV	98
71) 1,3,5-trimethylbenzene	18.665	105	3821	0.082	ppbV	98
73) 1,2,4-trimethylbenzene	18.971	105	12581	0.275	ppbV #	68
75) 1,3-dichlorobenzene	19.109		0	N.D.		
76) 1,4-dichlorobenzene	19.161	146	289M4	0.008	ppbV	
79) 1,2-dichlorobenzene	19.418		0	N.D.		
81) 1,2,4-trichlorobenzene	20.861		0	N.D.		
82) naphthalene	20.979	128	6090M6	0.106	ppbV	
84) hexachlorobutadiene	21.290		0	N.D.		

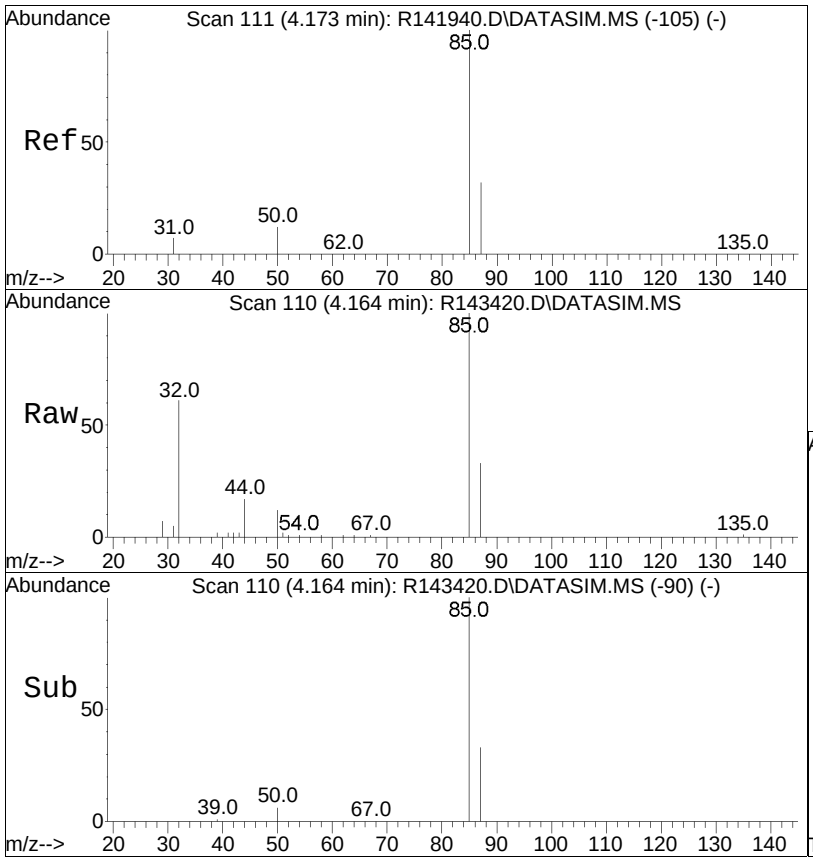
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 14:00:28 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

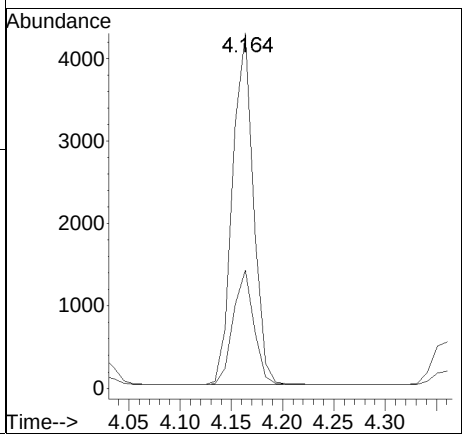


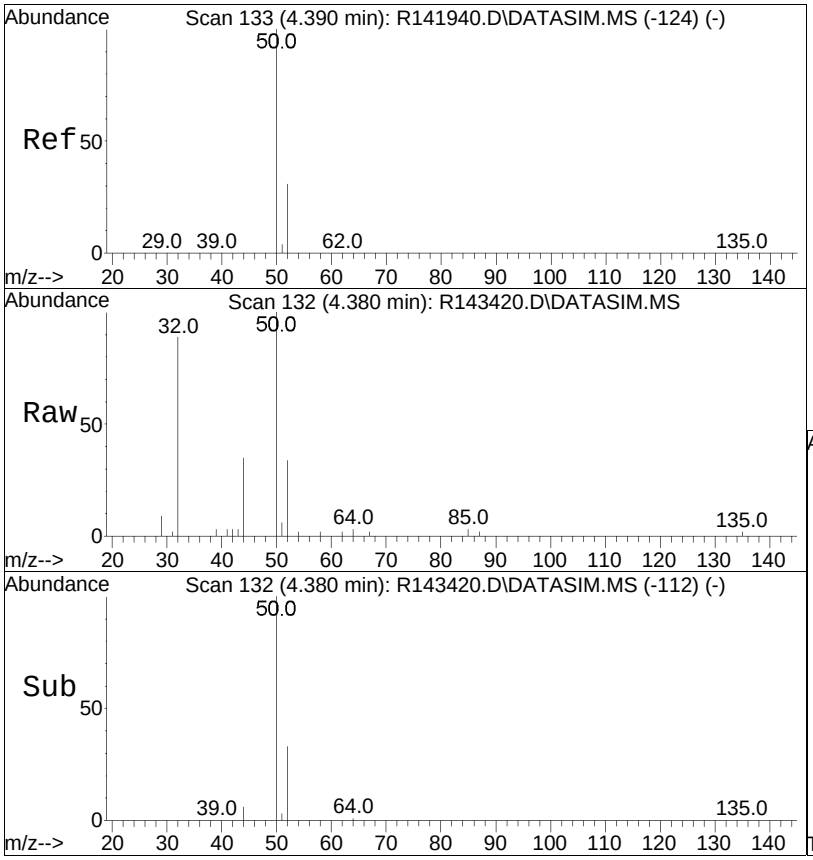


#3
dichlorodifluoromethane
Concen: 0.43 ppbV
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 85 Resp: 6067

Ion	Ratio	Lower	Upper
85	100		
87	33.3	26.0	39.0

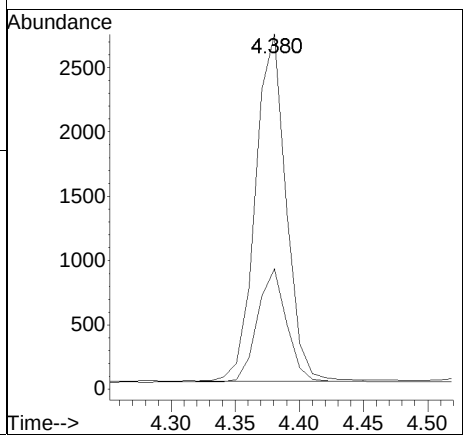


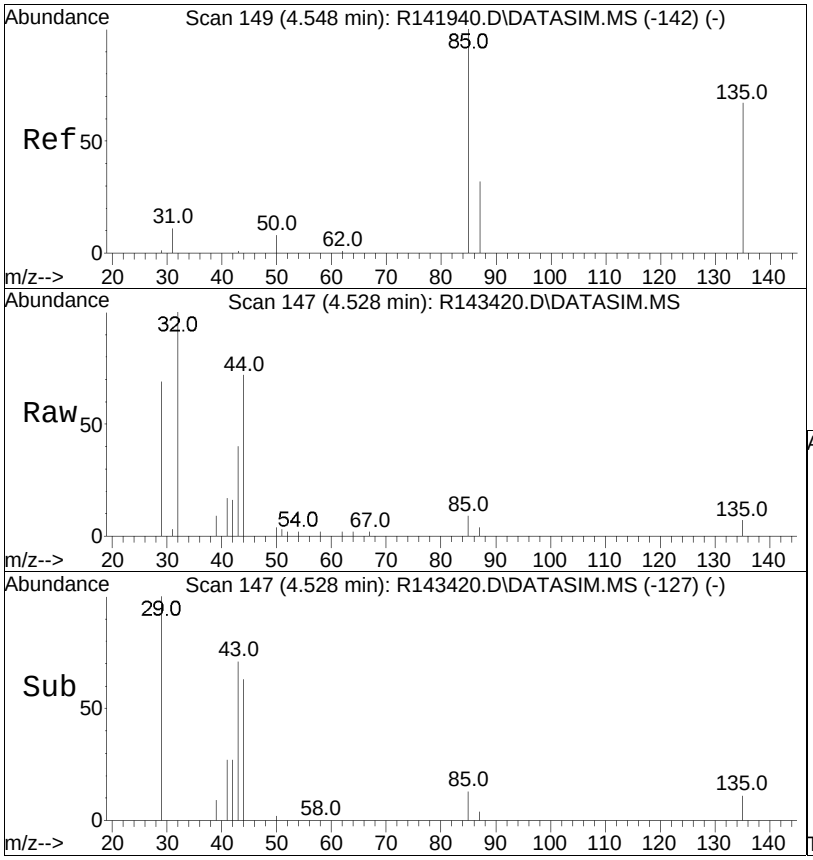


#4
chloromethane
Concen: 0.56 ppbV m
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 50 Resp: 4482

Ion	Ratio	Lower	Upper
50	100		
52	33.9	26.2	39.4

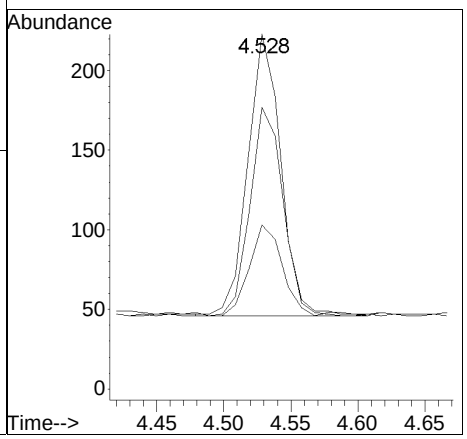


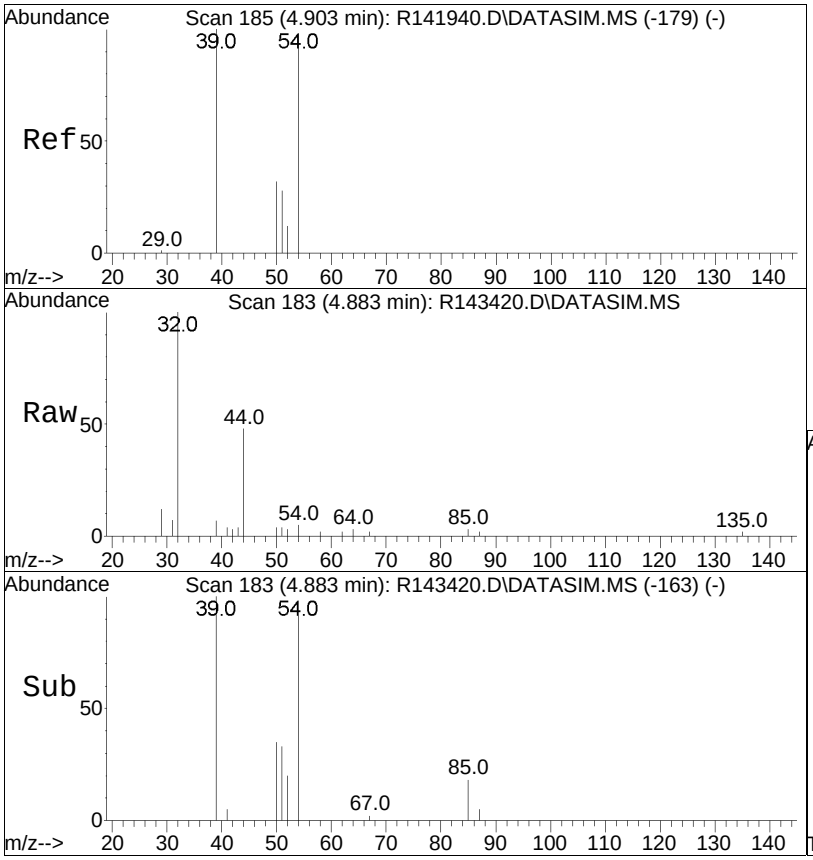


#5
Freon-114
Concen: 0.01 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 85 Resp: 303

Ion	Ratio	Lower	Upper
85	100		
87	46.2	25.4	38.0#
135	79.4	57.0	85.6

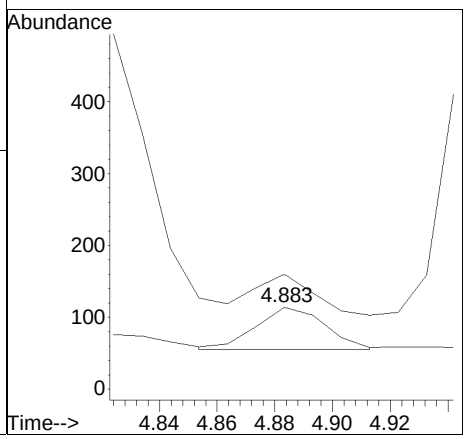


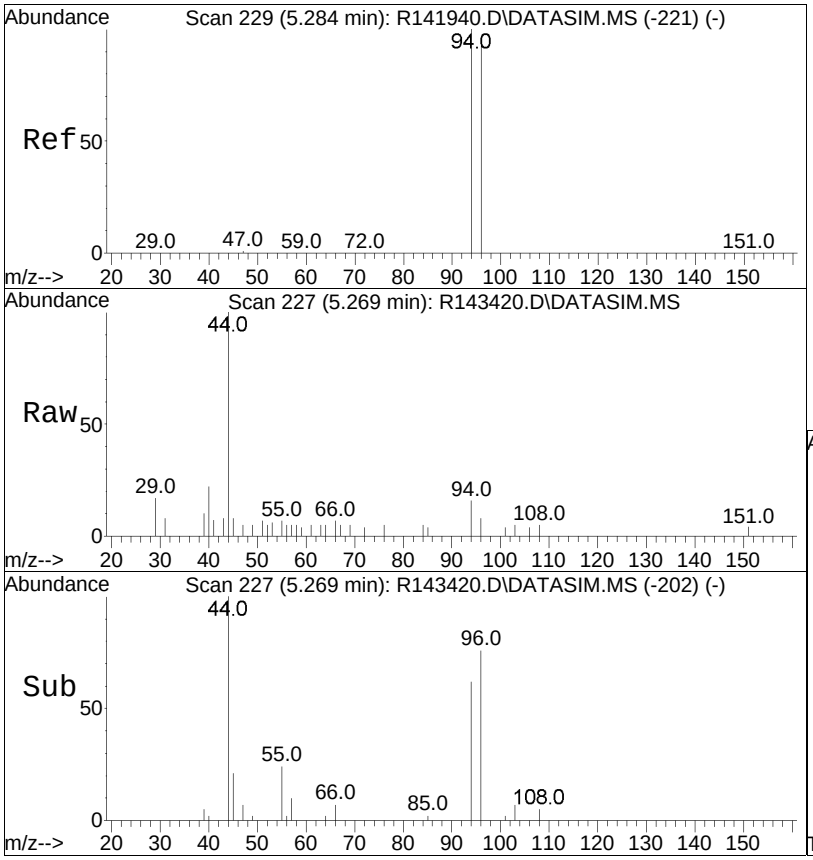


#7
1,3-butadiene
Concen: 0.02 ppbV m
RT: 4.883 min Scan# 183
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 54 Resp: 99

Ion	Ratio	Lower	Upper
54	100		
39	140.4	82.6	124.0#

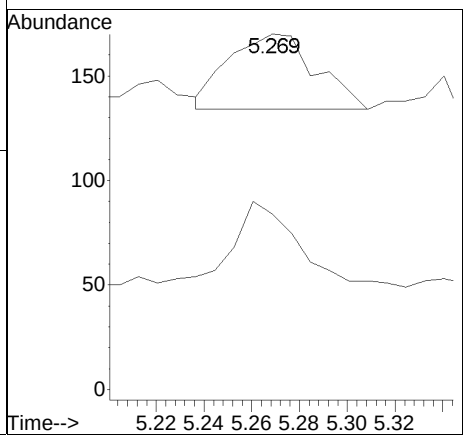


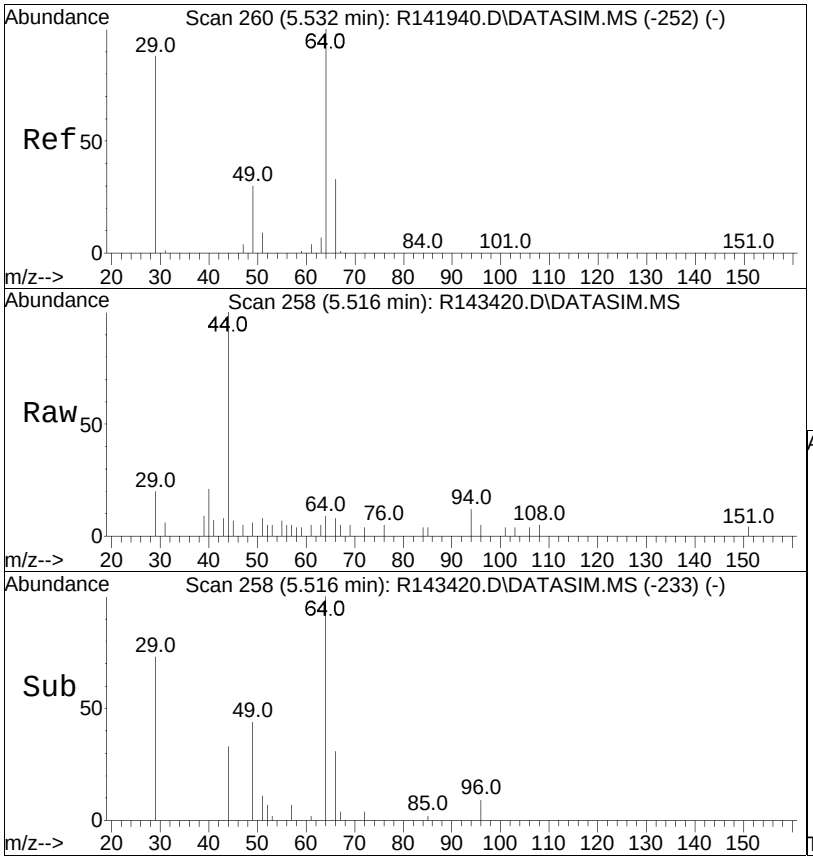


#8
bromomethane
Concen: 0.01 ppbV
RT: 5.269 min Scan# 227
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 94 Resp: 91

Ion	Ratio	Lower	Upper
94	100		
96	49.4	74.9	112.3#

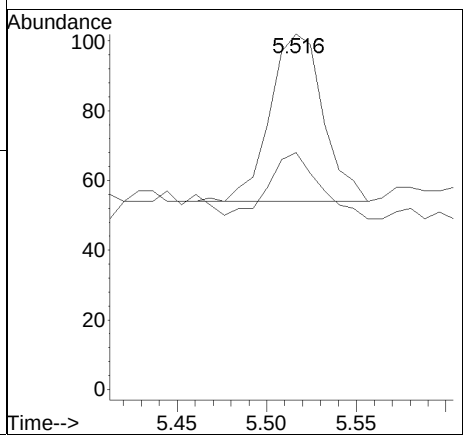


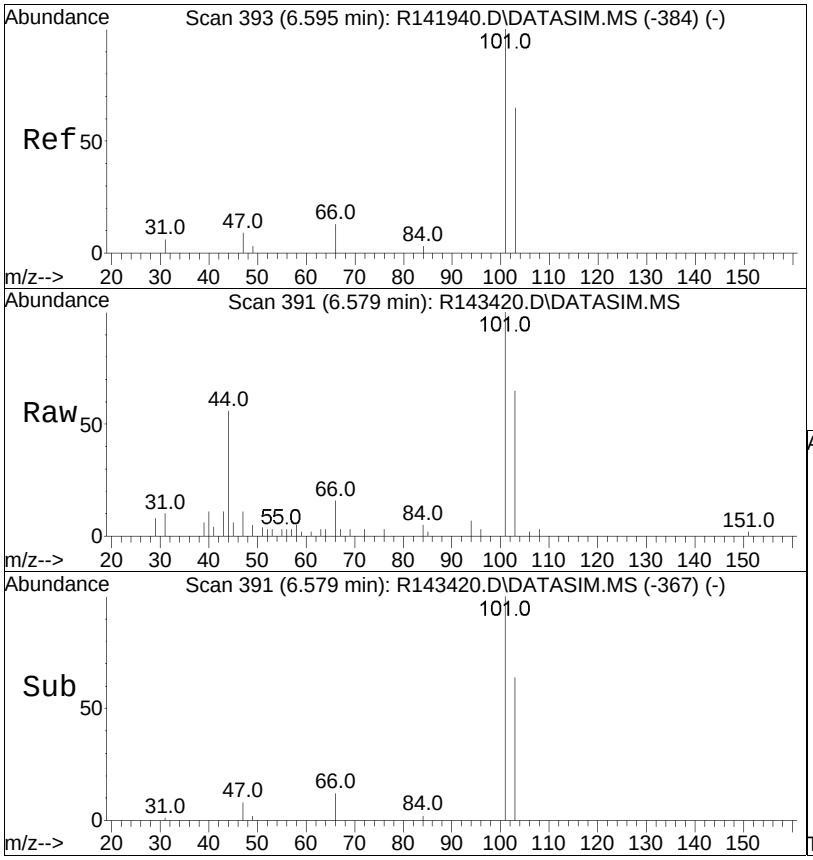


#9
chloroethane
Concen: 0.02 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 64 Resp: 99

Ion	Ratio	Lower	Upper
64	100		
49	66.7	27.4	41.0#

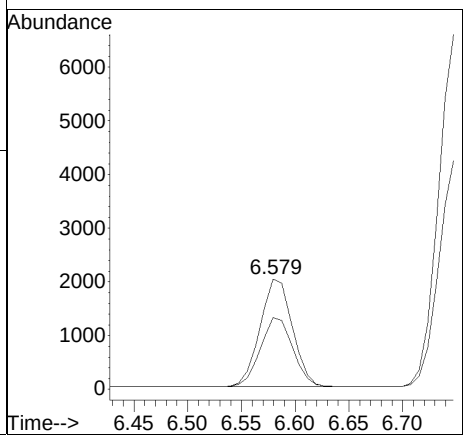


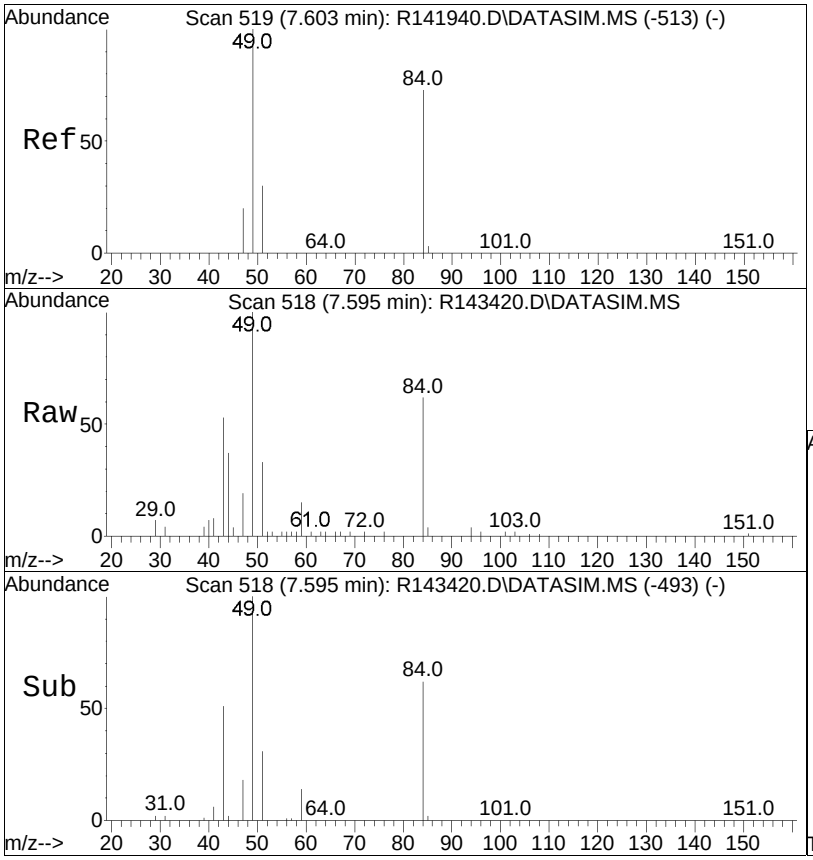


#13
trichlorofluoromethane
Concen: 0.22 ppbV
RT: 6.579 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:101 Resp: 4237

Ion	Ratio	Lower	Upper
101	100		
103	65.0	52.2	78.2

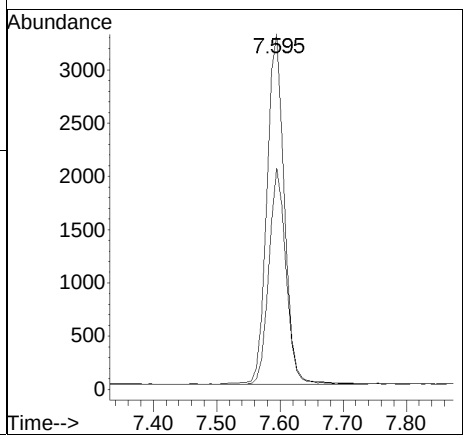


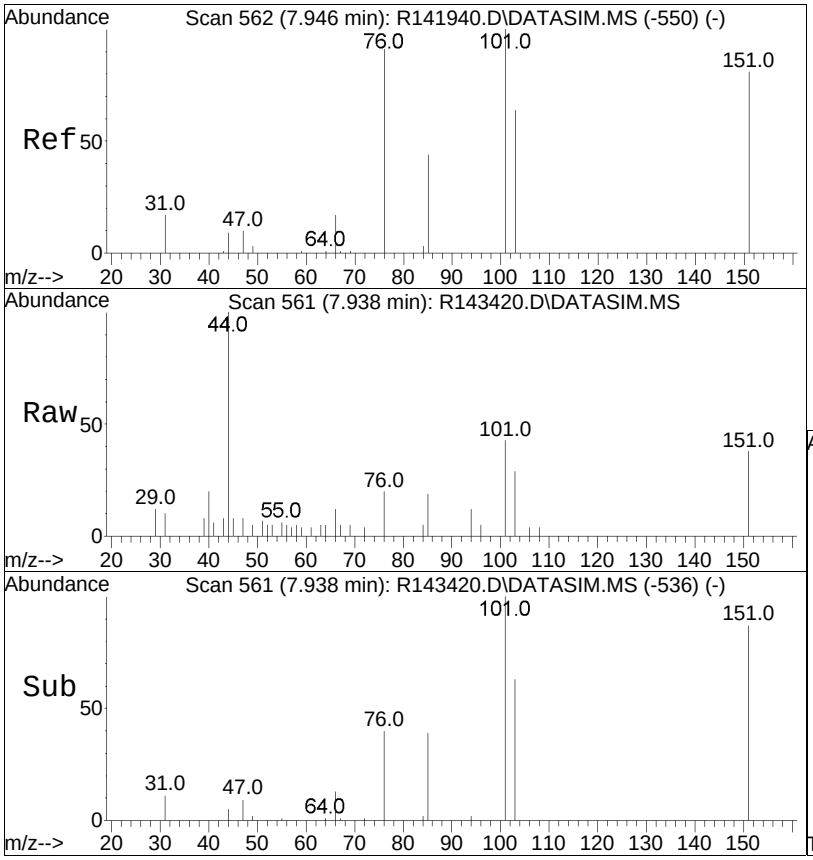


#18
methylene chloride
Concen: 0.59 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 49 Resp: 6299

Ion	Ratio	Lower	Upper
49	100		
84	62.3	50.8	76.2

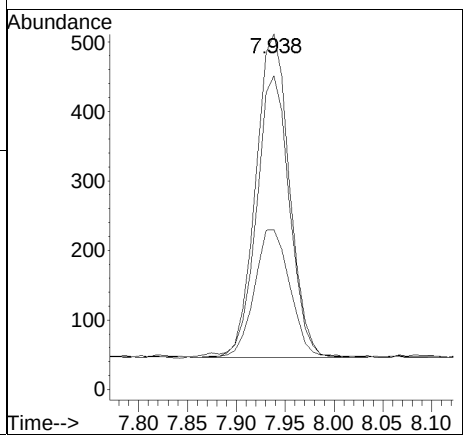


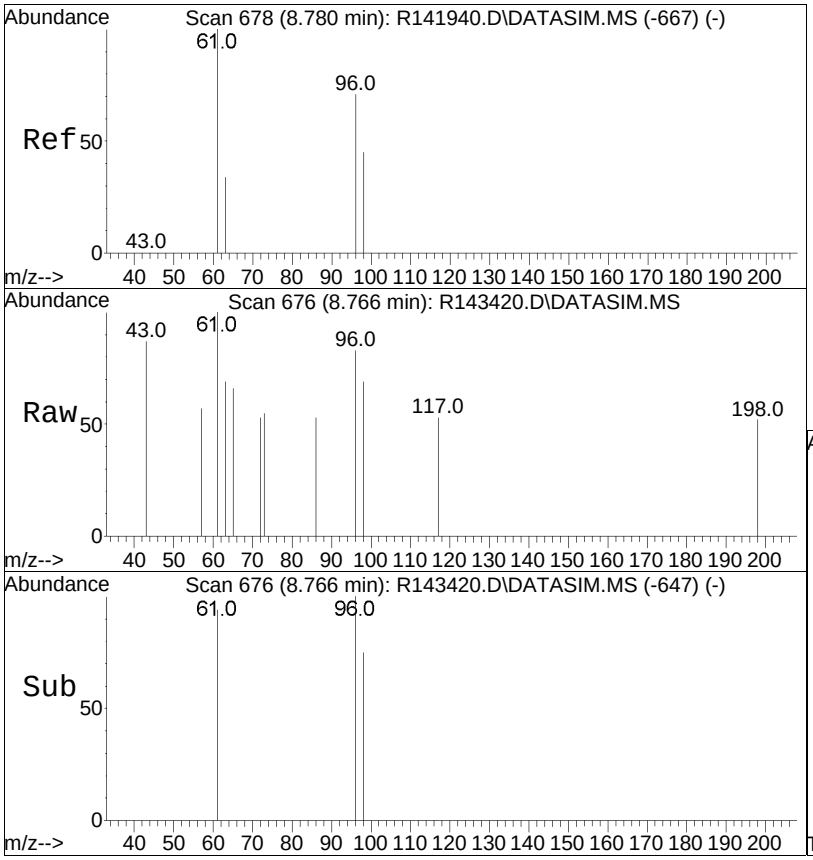


#21
Freon 113
Concen: 0.07 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:101 Resp: 1118

Ion	Ratio	Lower	Upper
101	100		
85	45.0	32.5	48.7
151	88.3	69.1	103.7

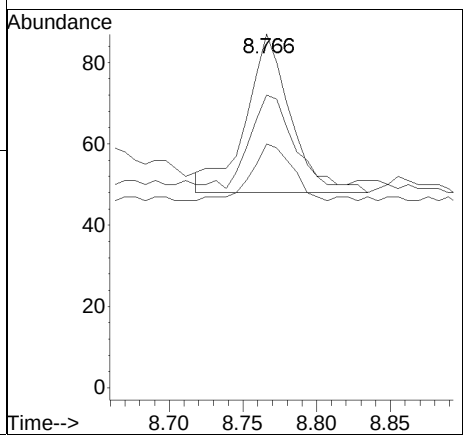


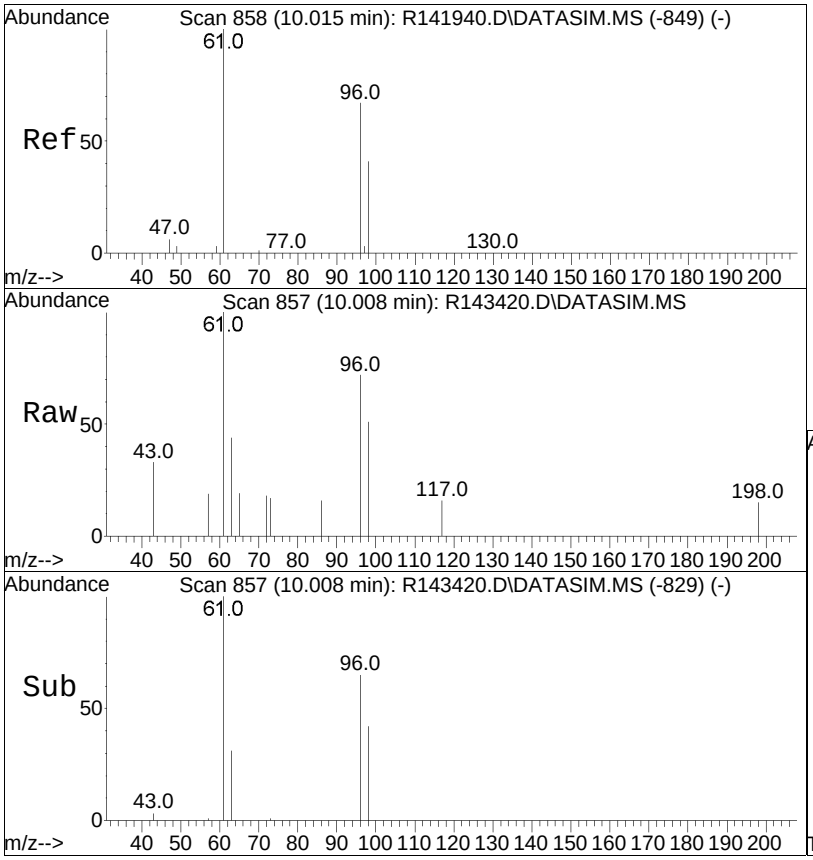


#23
trans-1,2-dichloroethene
Concen: 0.01 ppbV
RT: 8.766 min Scan# 676
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 61 Resp: 82

Ion	Ratio	Lower	Upper
61	100		
96	82.8	48.9	73.3#
98	69.0	30.4	45.6#

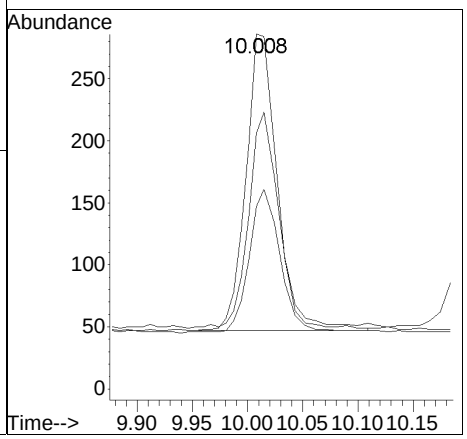


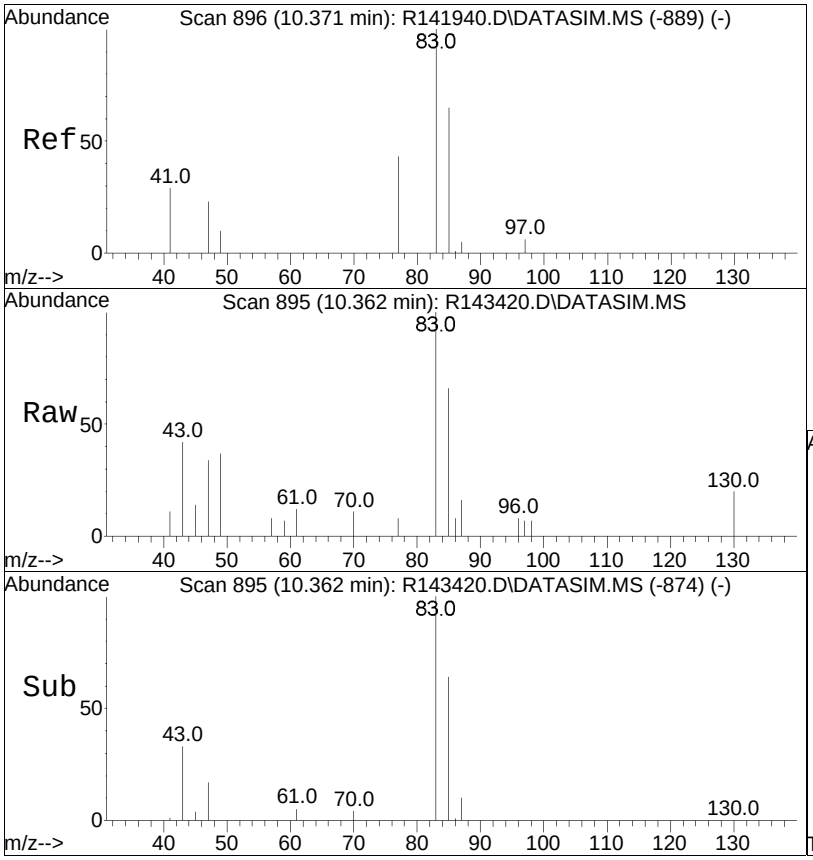


#28
cis-1,2-dichloroethene
Concen: 0.03 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 61 Resp: 491

Ion	Ratio	Lower	Upper
61	100		
96	72.0	57.8	86.8
98	51.4	36.9	55.3

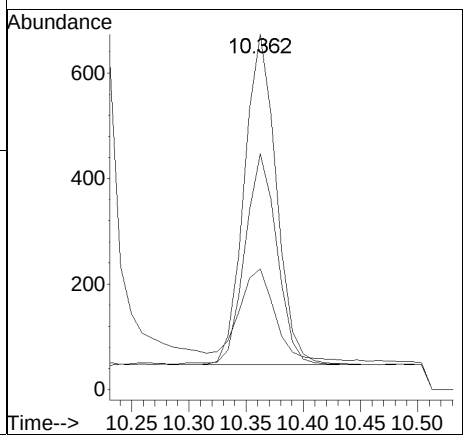


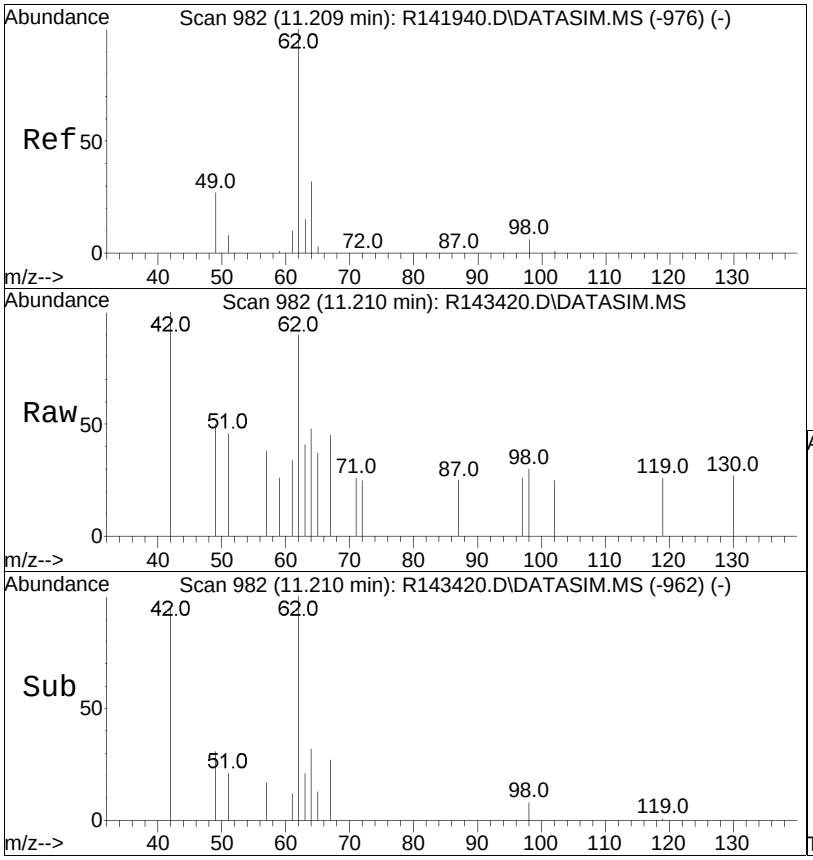


#30
chloroform
Concen: 0.06 ppbV
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 83 Resp: 1223

Ion	Ratio	Lower	Upper
83	100		
85	66.3	51.6	77.4
47	34.0	22.6	33.8#

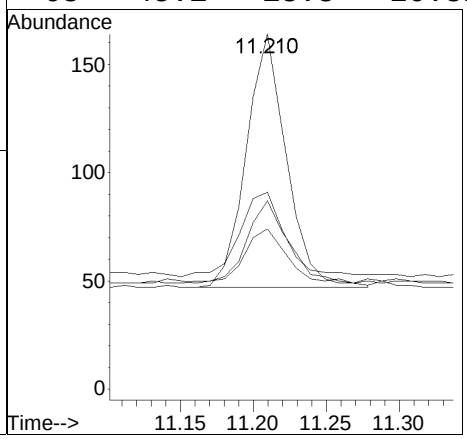


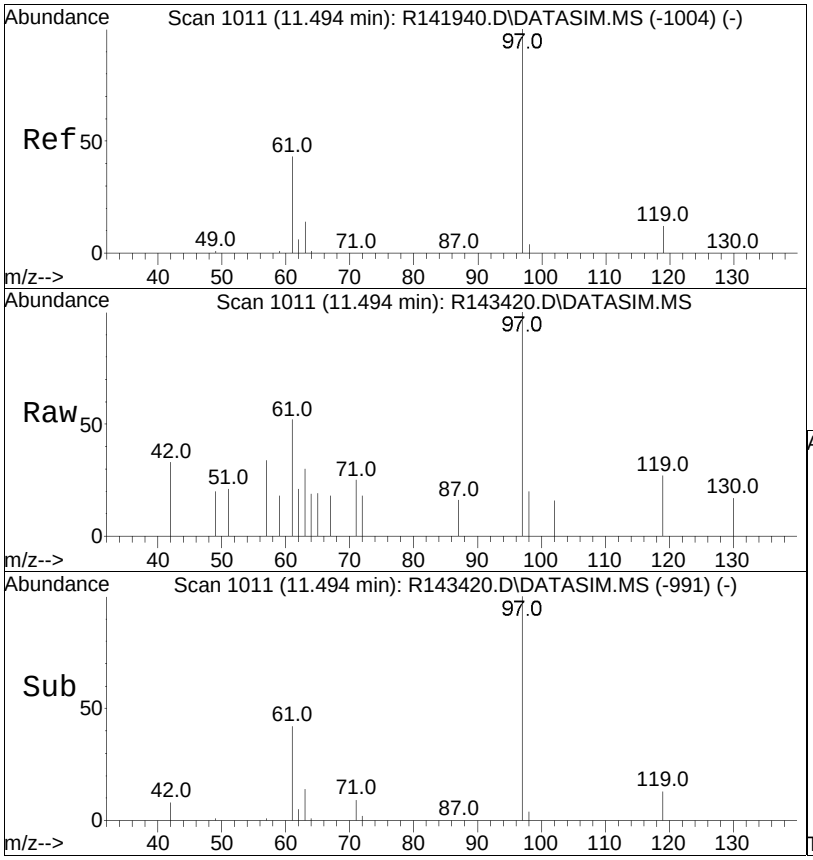


#32
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.210 min Scan# 982
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 62 Resp: 224

Ion	Ratio	Lower	Upper
62	100		
64	53.0	26.2	39.4#
49	55.5	25.7	38.5#
63	45.1	13.8	20.8#

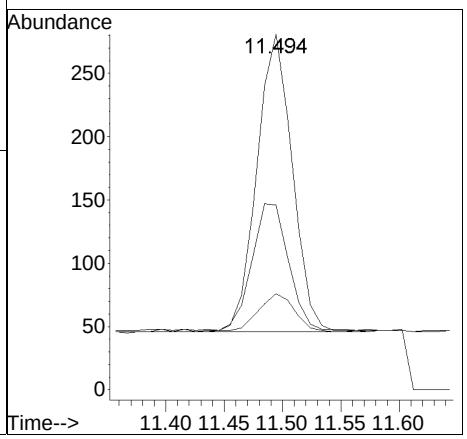


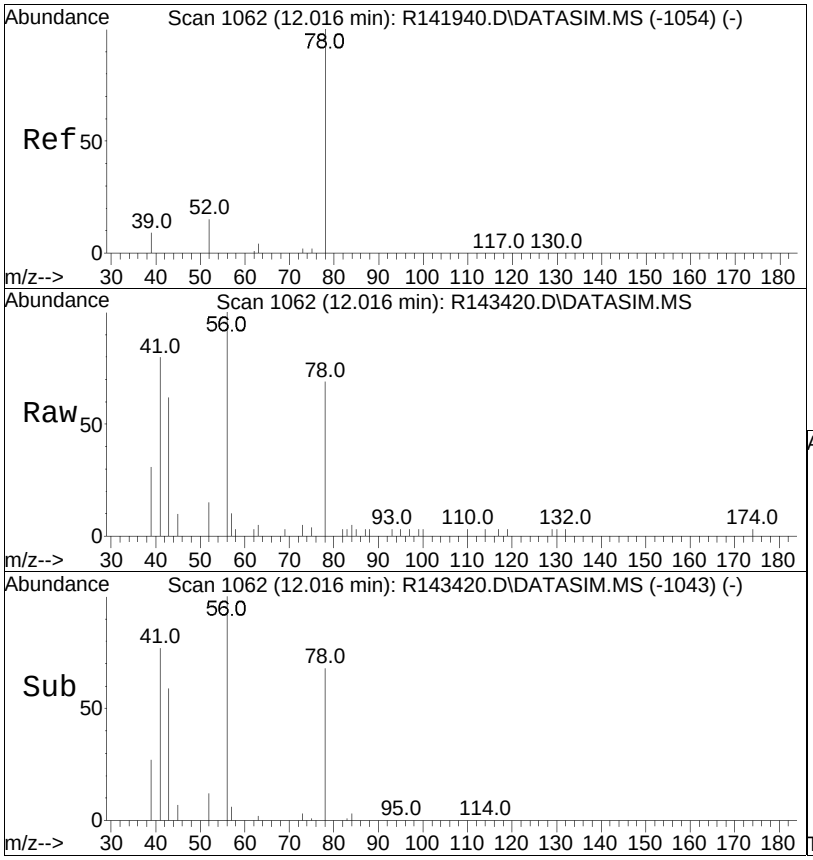


#36
1,1,1-trichloroethane
Concen: 0.03 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 97 Resp: 496

Ion	Ratio	Lower	Upper
97	100		
61	52.0	32.6	49.0#
119	27.0	11.0	16.4#

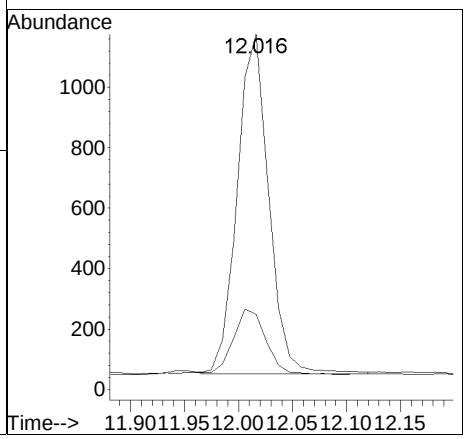


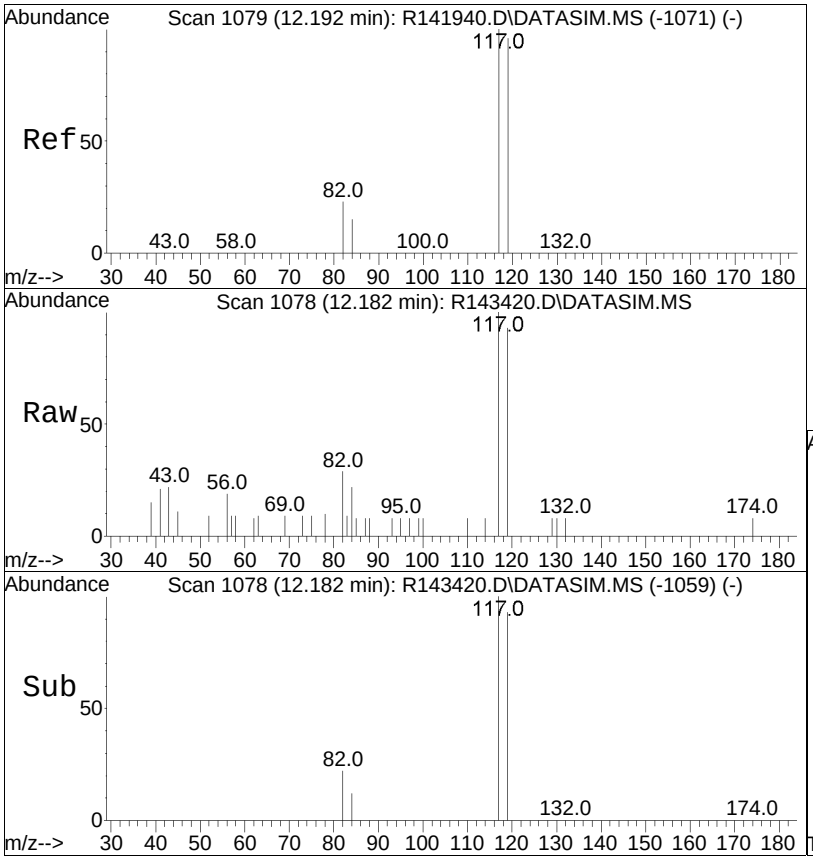


#37
benzene
Concen: 0.08 ppbV m
RT: 12.016 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 78 Resp: 2281

Ion	Ratio	Lower	Upper
78	100		
52	21.2	14.2	21.2

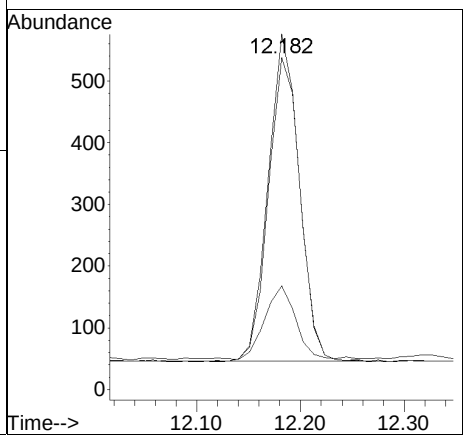


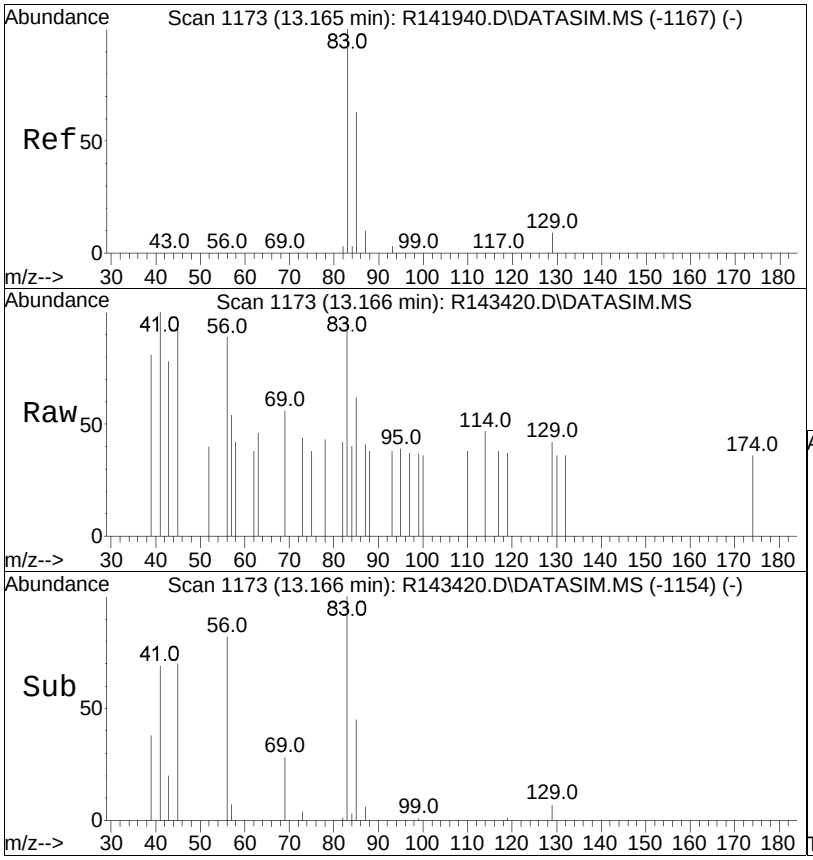


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:117 Resp: 1099

Ion	Ratio	Lower	Upper
117	100		
119	93.4	76.4	114.6
82	29.2	18.3	27.5#

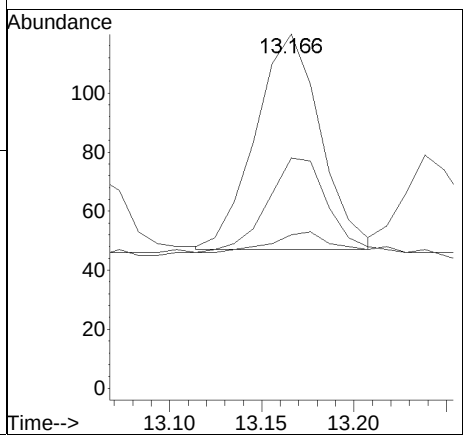


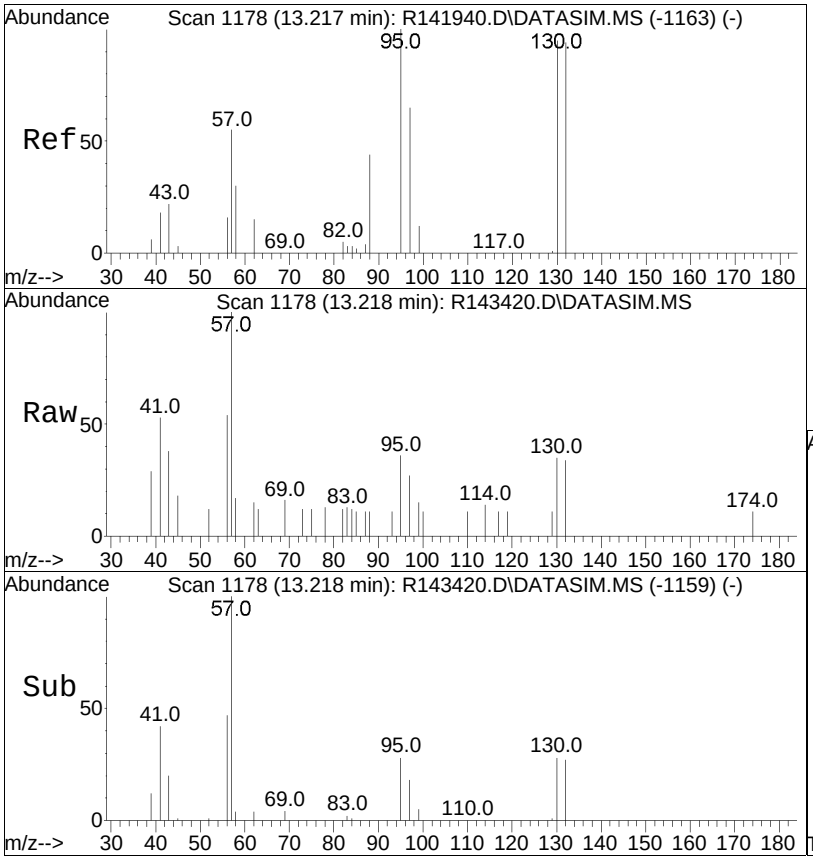


#42
bromodichloromethane
Concen: 0.01 ppbV
RT: 13.166 min Scan# 1173
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 83 Resp: 179

Ion	Ratio	Lower	Upper
83	100		
85	65.0	50.6	75.8
129	43.3	8.9	13.3#

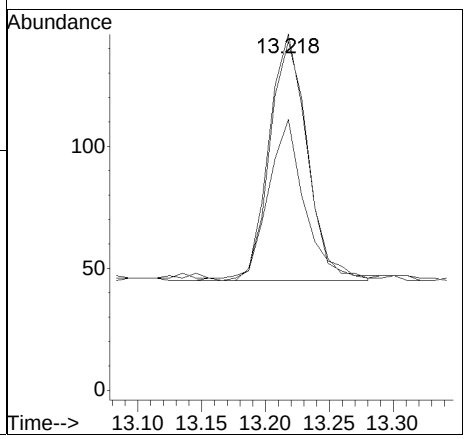


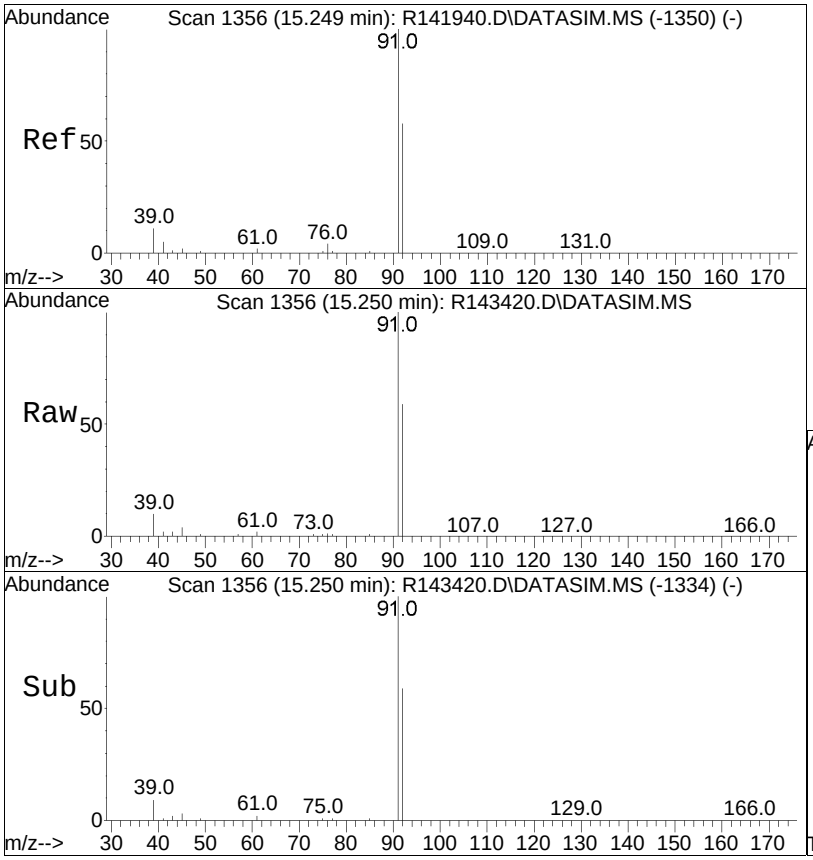


#44
trichloroethene
Concen: 0.01 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:130 Resp: 209

Ion	Ratio	Lower	Upper
130	100		
132	97.9	77.5	116.3
97	76.0	47.4	71.2#

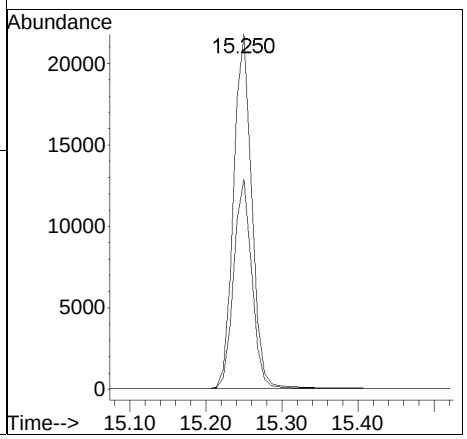


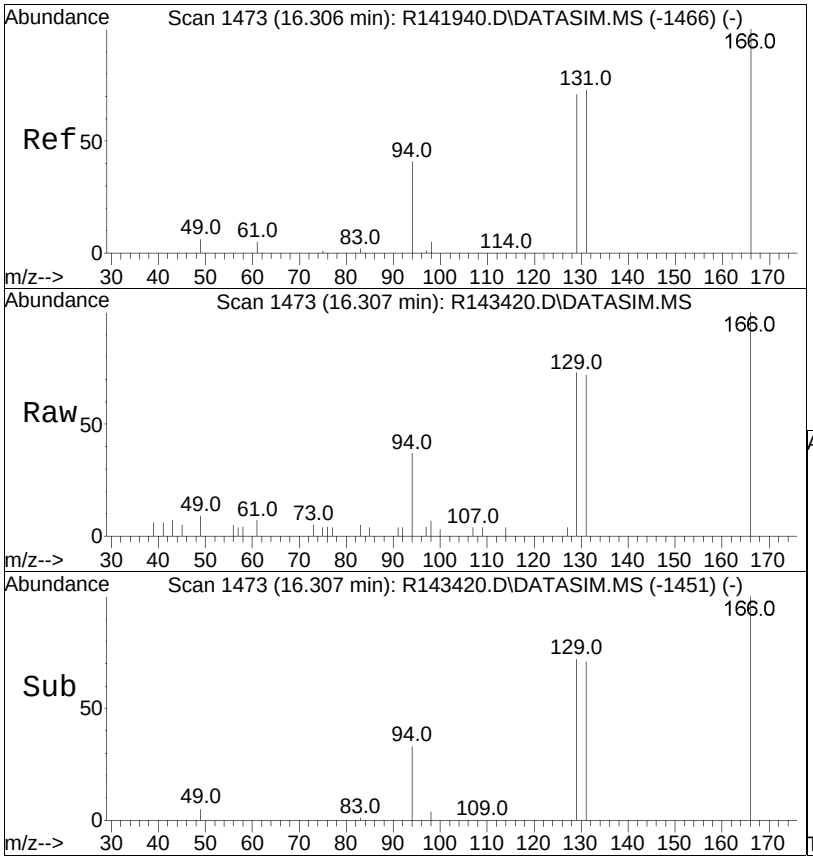


#52
toluene
Concen: 0.97 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 36421

Ion	Ratio	Lower	Upper
91	100		
92	59.2	46.8	70.2

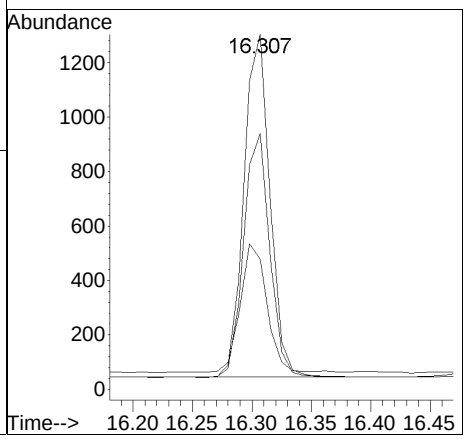


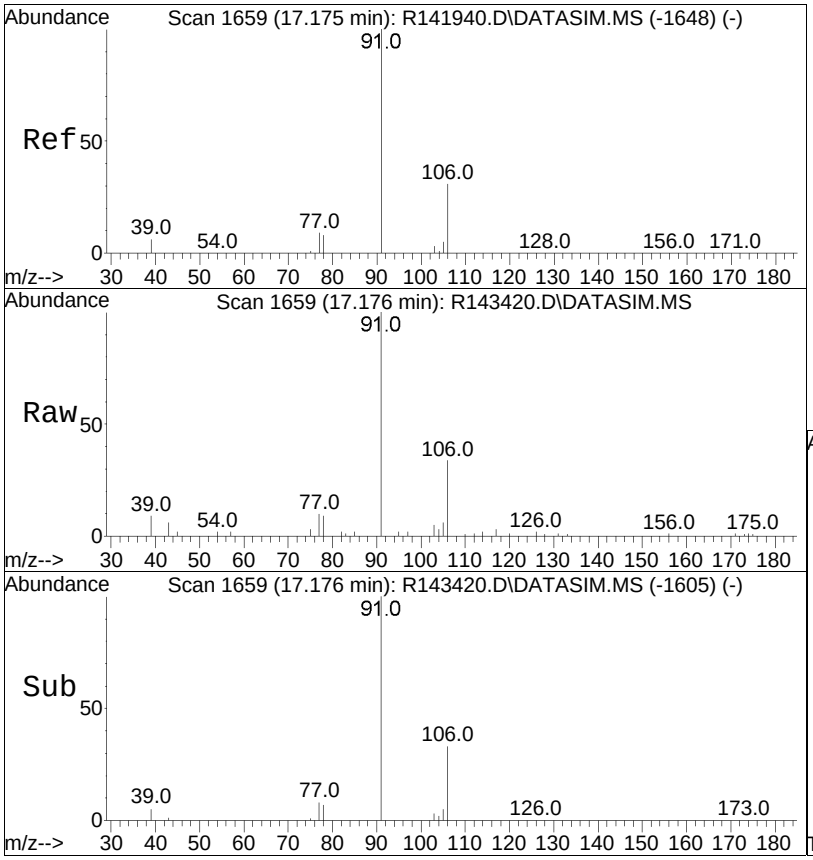


#57
tetrachloroethene
Concen: 0.10 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:166 Resp: 1919

Ion	Ratio	Lower	Upper
166	100		
131	72.0	57.0	85.4
94	36.6	26.2	39.4

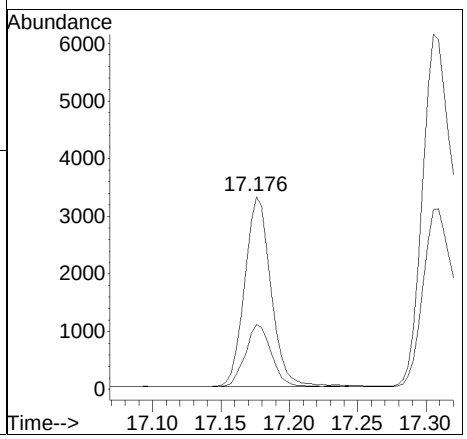


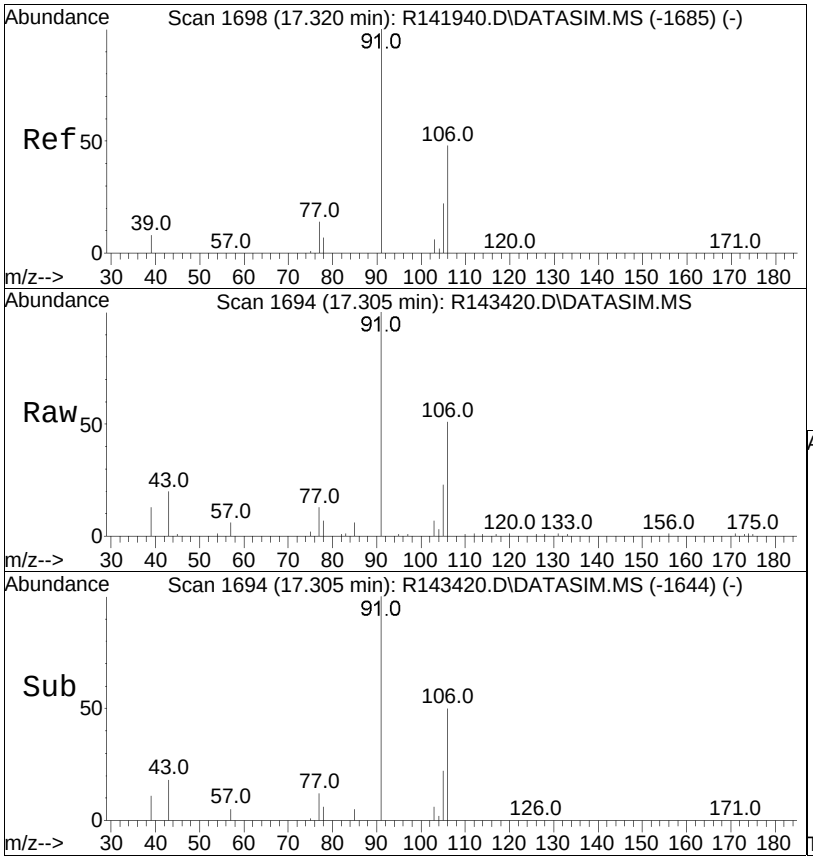


#60
ethylbenzene
Concen: 0.09 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 4429

Ion	Ratio	Lower	Upper
91	100		
106	33.6	25.8	38.8

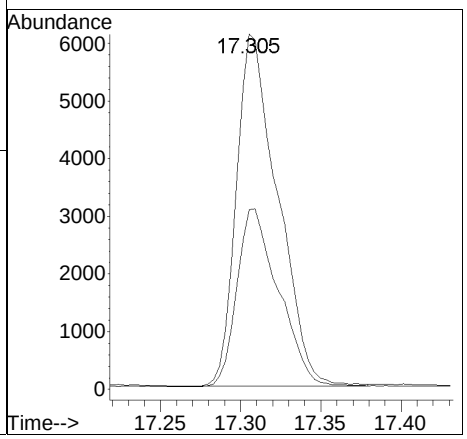


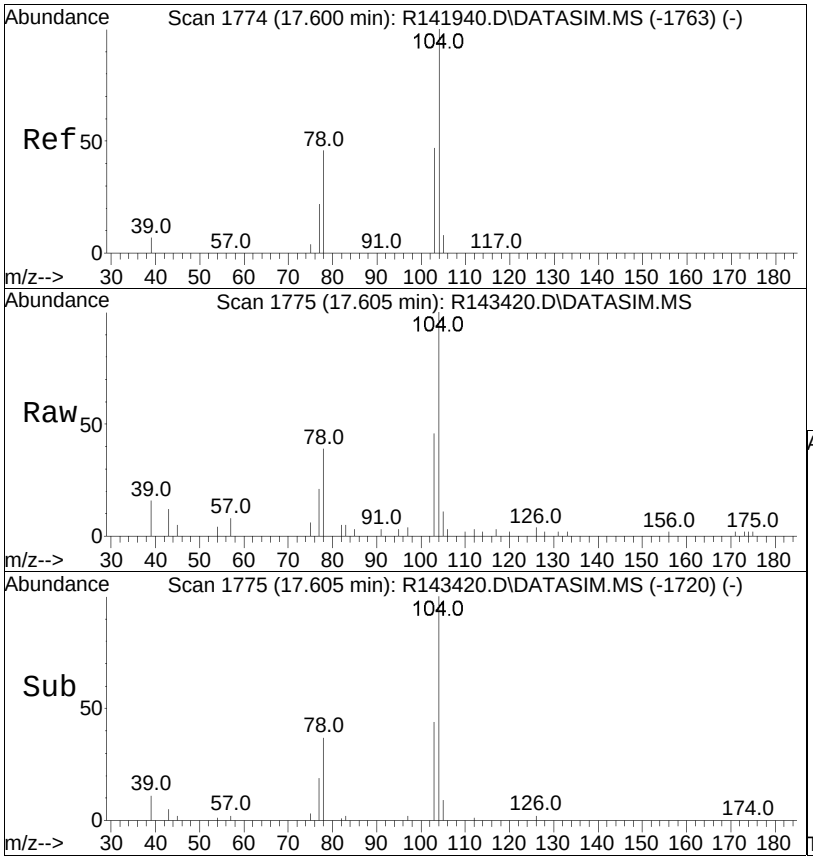


#61
m+p-xylene
Concen: 0.29 ppbV
RT: 17.305 min Scan# 1694
Delta R.T. -0.015 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 10930

Ion	Ratio	Lower	Upper
91	100		
106	50.6	40.6	61.0

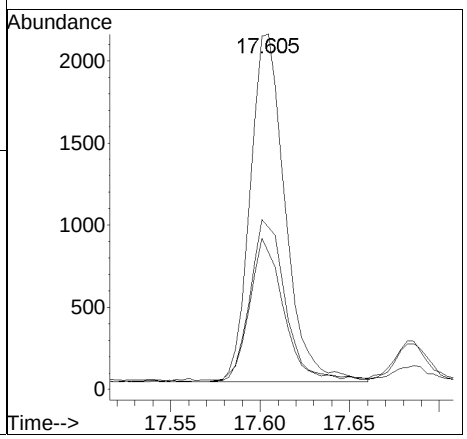


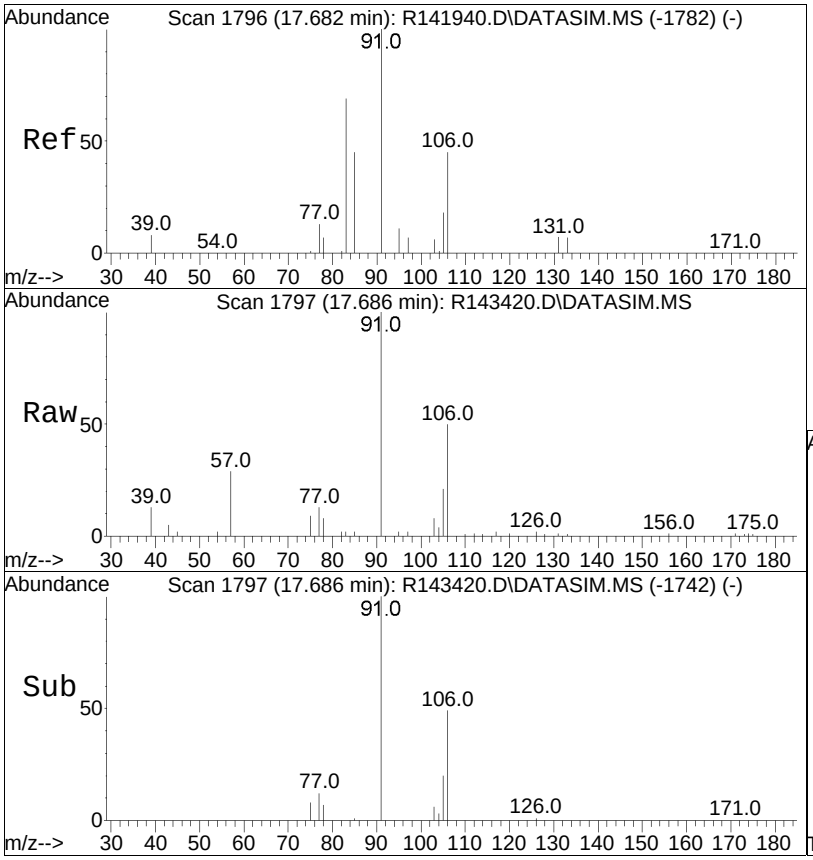


#63
styrene
Concen: 0.10 ppbV
RT: 17.605 min Scan# 1775
Delta R.T. 0.004 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:104 Resp: 2882

Ion	Ratio	Lower	Upper
104	100		
103	45.6	37.7	56.5
78	38.5	31.0	46.6

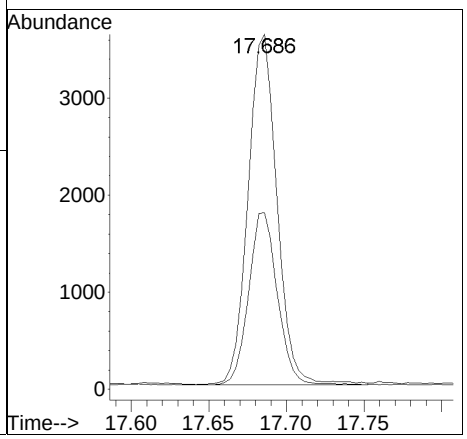


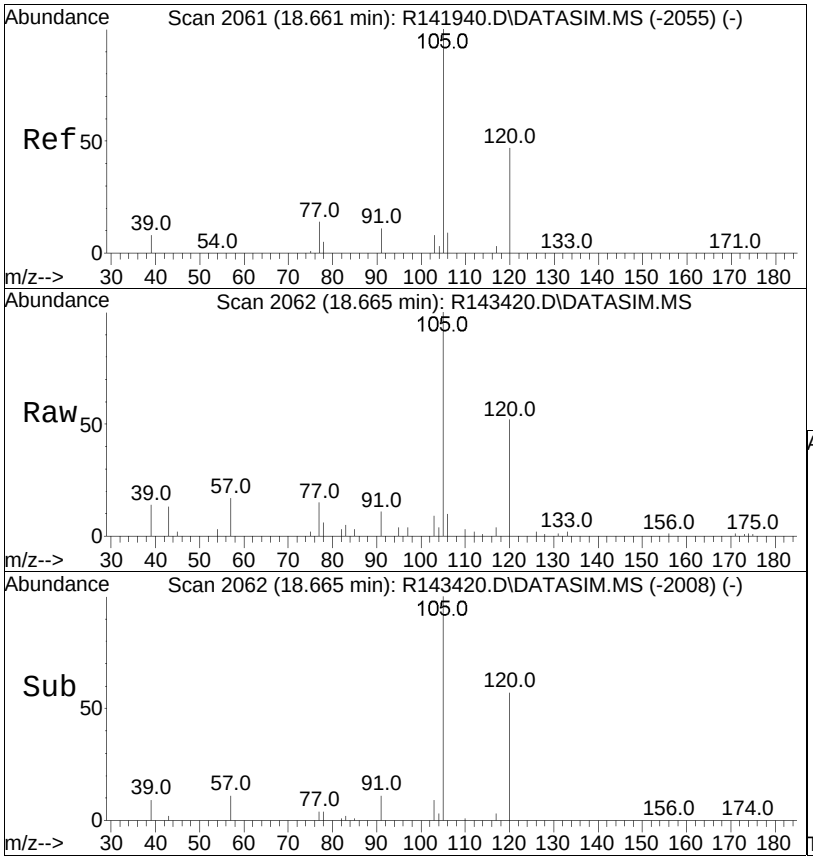


#65
o-xylene
Concen: 0.12 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 91 Resp: 4680

Ion	Ratio	Lower	Upper
91	100		
106	49.7	38.5	57.7

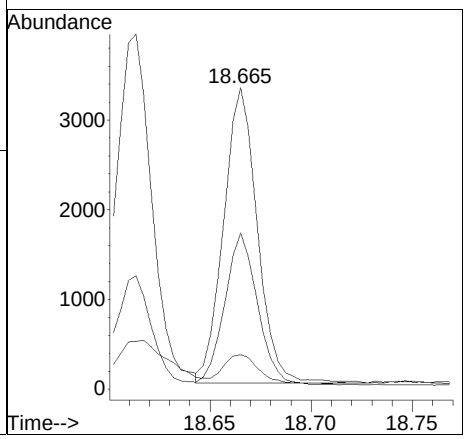


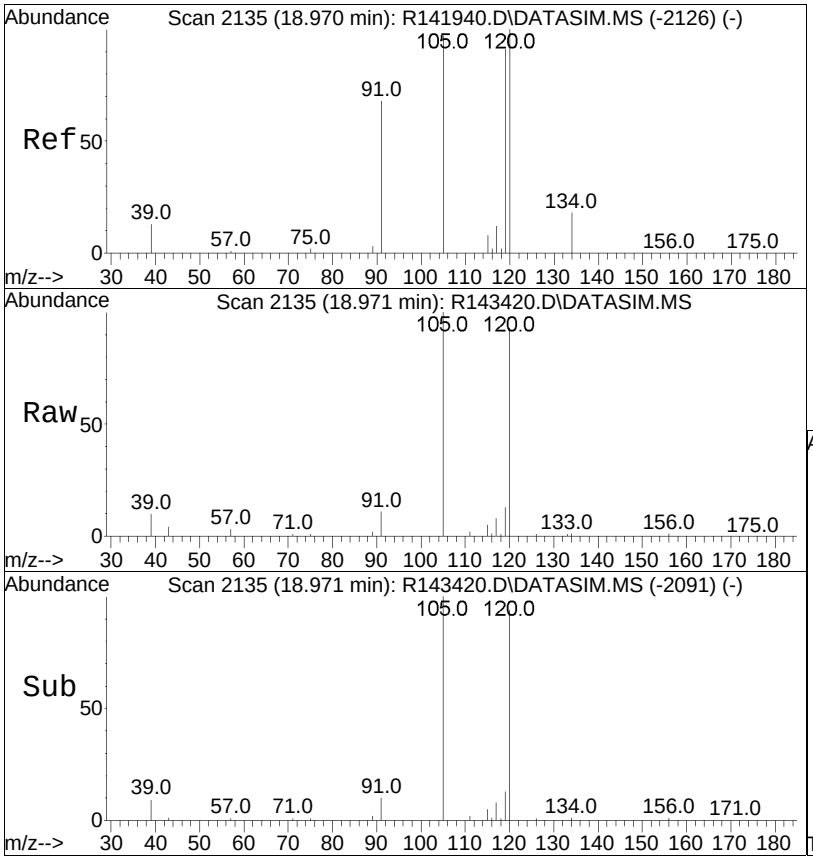


#71
1,3,5-trimethylbenzene
Concen: 0.08 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:105 Resp: 3821

Ion	Ratio	Lower	Upper
105	100		
120	51.8	40.9	61.3
91	11.5	7.8	11.6

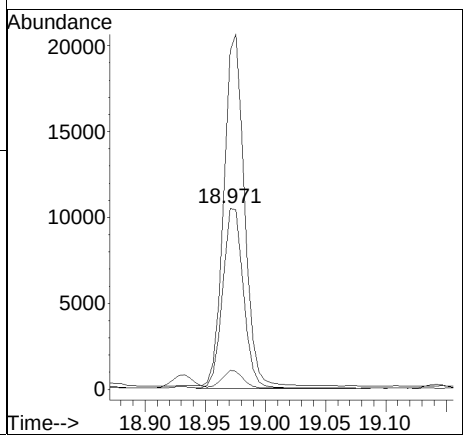


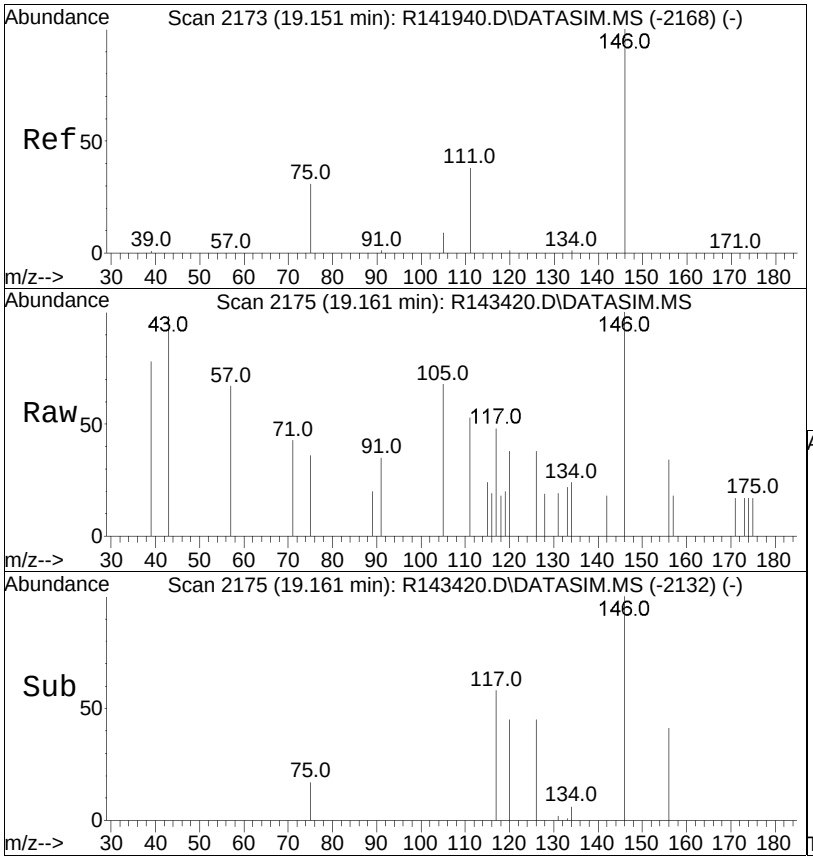


#73
1,2,4-trimethylbenzene
Concen: 0.27 ppbV
RT: 18.971 min Scan# 2135
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:105 Resp: 12581

Ion	Ratio	Lower	Upper
105	100		
120	186.9	174.7	262.1
91	10.6	55.2	82.8#

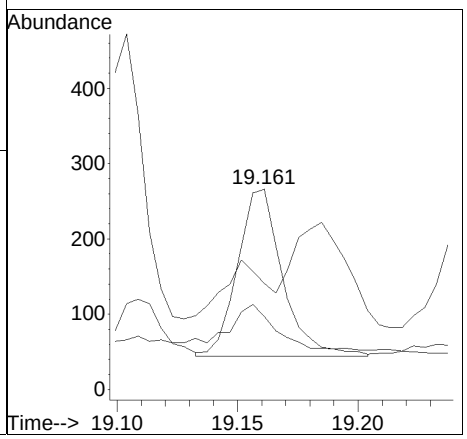


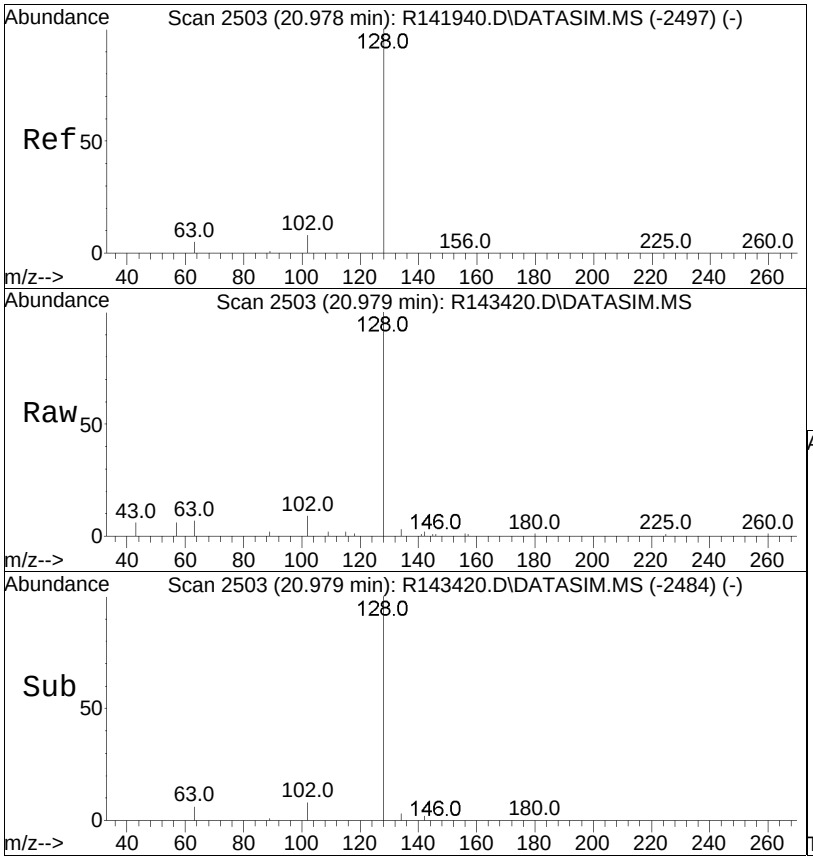


#76
1,4-dichlorobenzene
Concen: 0.01 ppbV m
RT: 19.161 min Scan# 2175
Delta R.T. 0.005 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:146 Resp: 289

Ion	Ratio	Lower	Upper
146	100		
111	53.0	26.8	40.2#
75	36.5	17.5	26.3#

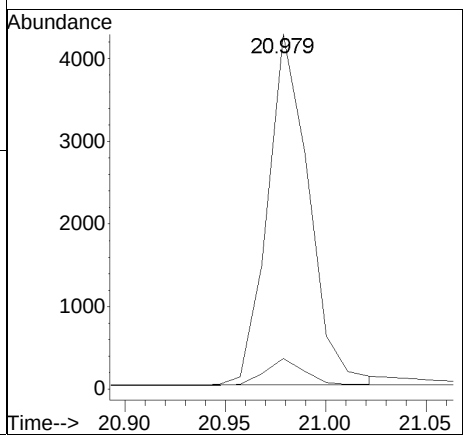




#82
naphthalene
Concen: 0.11 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:128 Resp: 6090

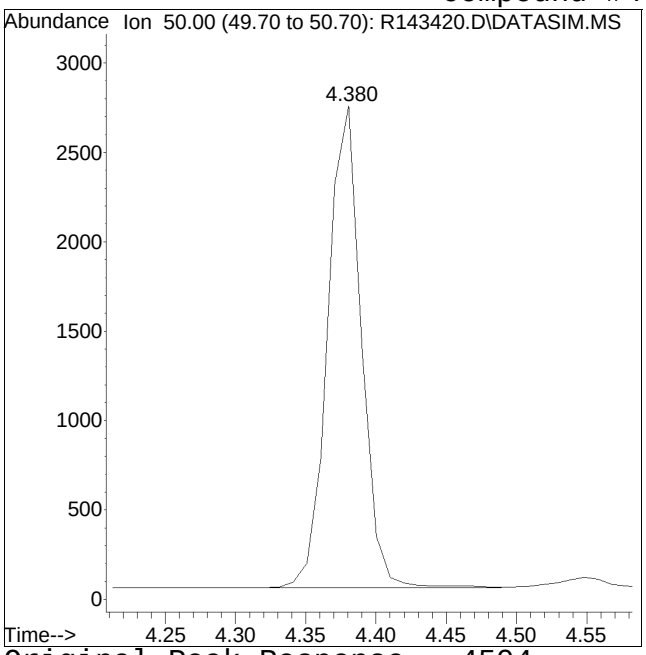
Ion	Ratio	Lower	Upper
128	100		
102	8.7	5.7	8.5#



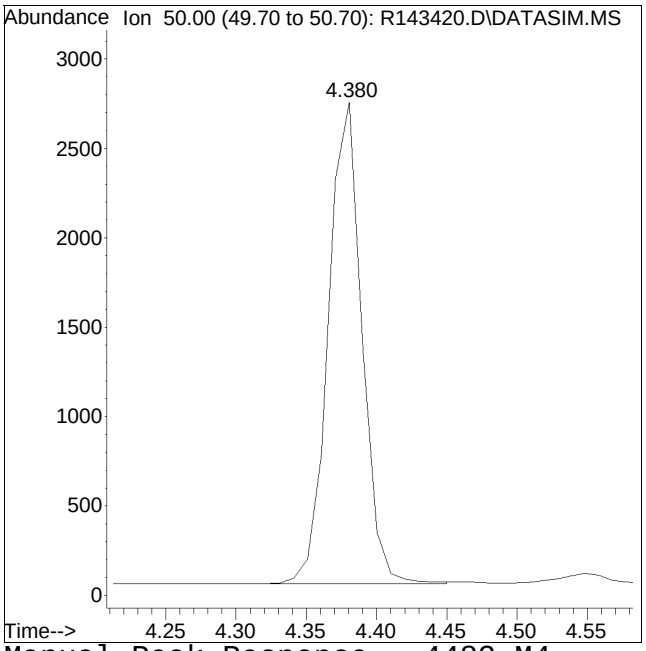
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #4: chloromethane



Original Peak Response = 4504



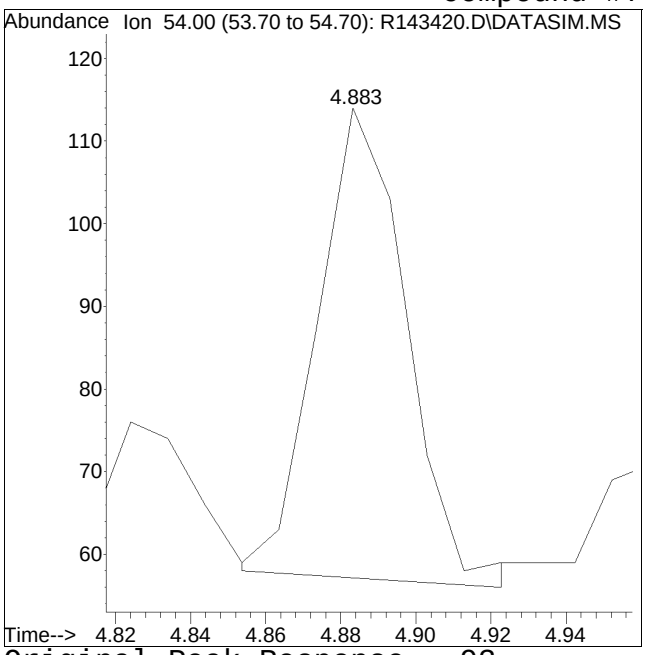
Manual Peak Response = 4482 M4

M4 = Poor automated baseline construction.

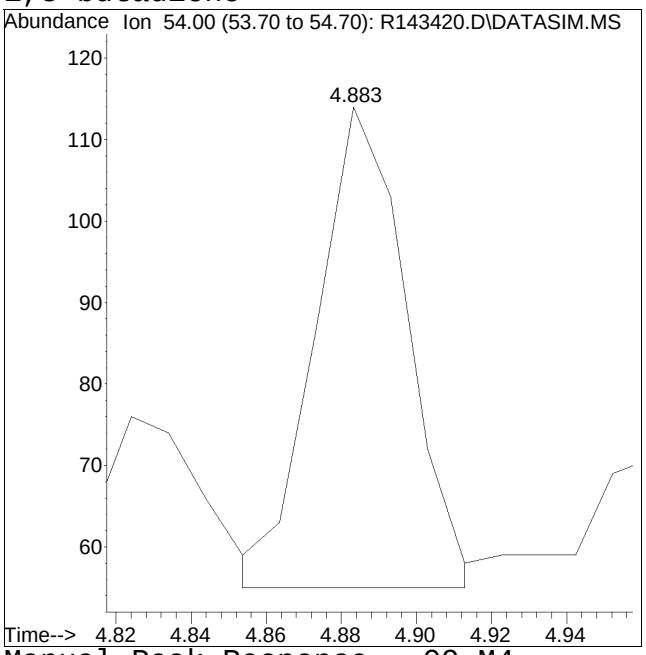
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #7: 1,3-butadiene



Original Peak Response = 93



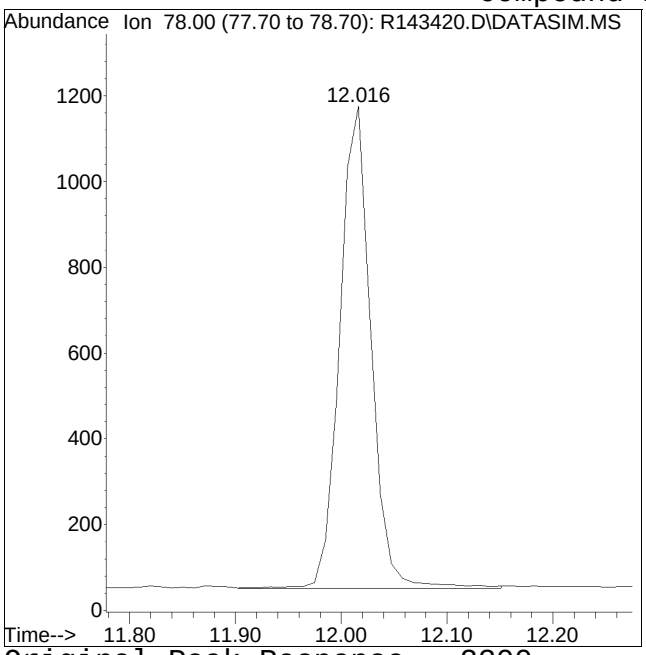
Manual Peak Response = 99 M4

M4 = Poor automated baseline construction.

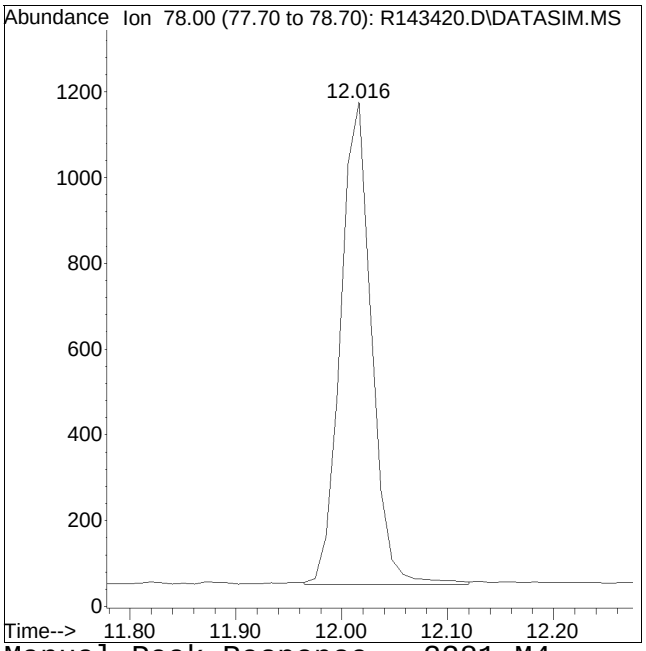
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #37: benzene



Original Peak Response = 2300



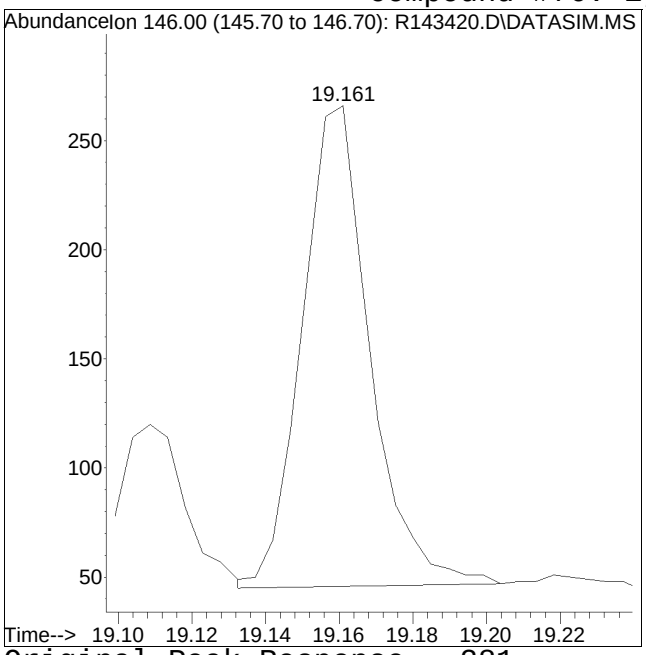
Manual Peak Response = 2281 M4

M4 = Poor automated baseline construction.

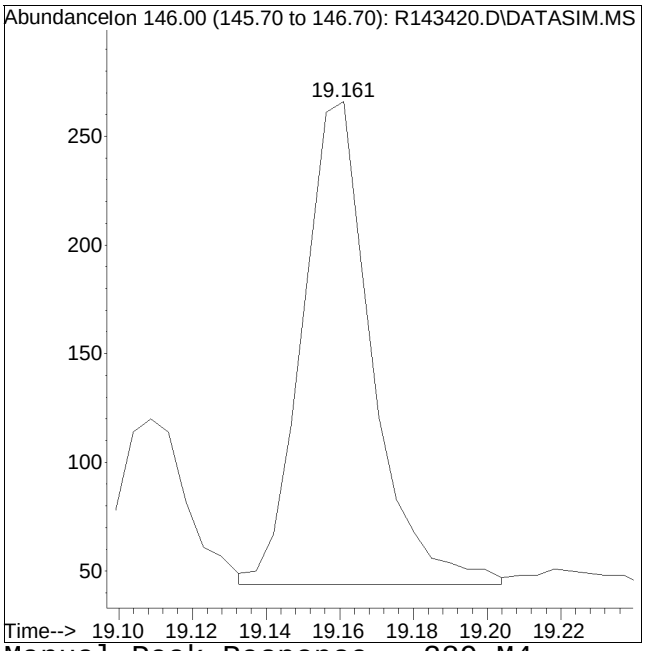
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 281



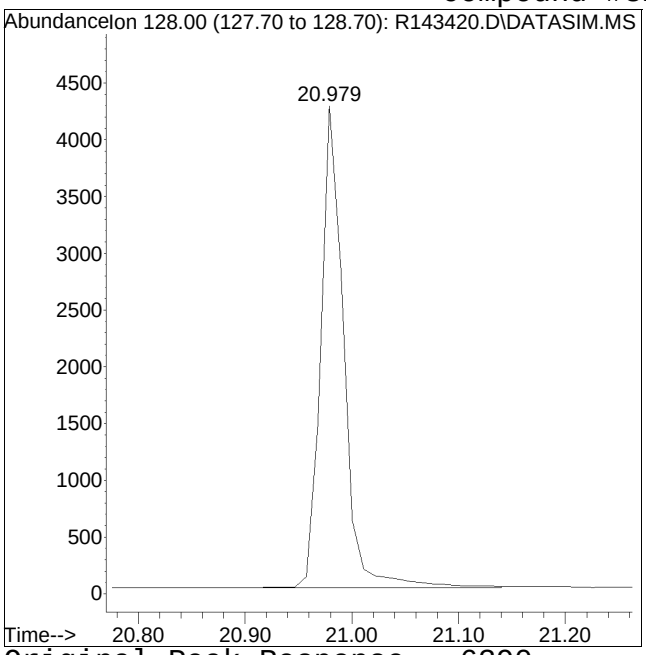
Manual Peak Response = 289 M4

M4 = Poor automated baseline construction.

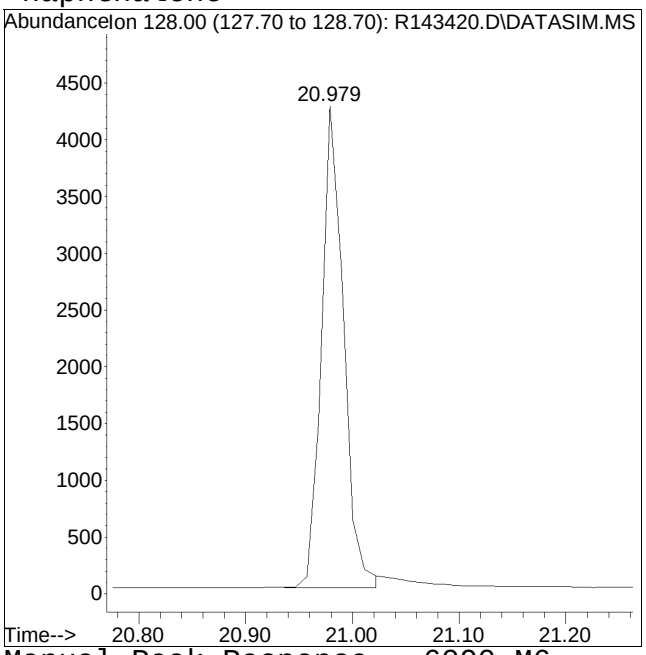
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #82: naphthalene



Original Peak Response = 6390



Manual Peak Response = 6090 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 14:03:10 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	138781	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		91.94%	
33) 1,4-difluorobenzene	12.420	114	335581	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		90.23%	
51) chlorobenzene-D5	16.843	54	64492	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		93.65%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	8334M4	0.595	ppbV	
4) chloromethane	4.381	50	4570	0.580	ppbV	99
5) Freon-114	4.528	85	302	0.015	ppbV #	87
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	4.883	54	112	0.018	ppbV #	71
8) bromomethane	5.261	94	115	0.015	ppbV #	53
9) chloroethane	5.516	64	113M4	0.029	ppbV	
13) trichlorofluoromethane	6.580	101	4258	0.220	ppbV	99
16) 1,1-dichloroethene	7.411		0	N.D.		
18) methylene chloride	7.595	49	66598	6.338	ppbV	98
21) Freon 113	7.938	101	1192	0.073	ppbV	96
23) trans-1,2-dichloroethene	8.773		0	N.D.		
24) 1,1-dichloroethane	9.013		0	N.D.		
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008	61	548	0.037	ppbV	97
30) chloroform	10.362	83	1341M4	0.065	ppbV	
32) 1,2-dichloroethane	11.210	62	233	0.019	ppbV #	56
36) 1,1,1-trichloroethane	11.494	97	354	0.019	ppbV #	74
37) benzene	12.016	78	2510M4	0.089	ppbV	
38) carbon tetrachloride	12.182	117	1080	0.066	ppbV #	95
41) 1,2-dichloropropane	12.949	63	69	0.006	ppbV #	60
42) bromodichloromethane	13.166	83	188	0.009	ppbV #	87
44) trichloroethene	13.218	130	207	0.015	ppbV	94
47) cis-1,3-dichloropropene	14.189		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.970		0	N.D.		
52) toluene	15.250	91	37362	1.010	ppbV	100
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 14:03:10 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

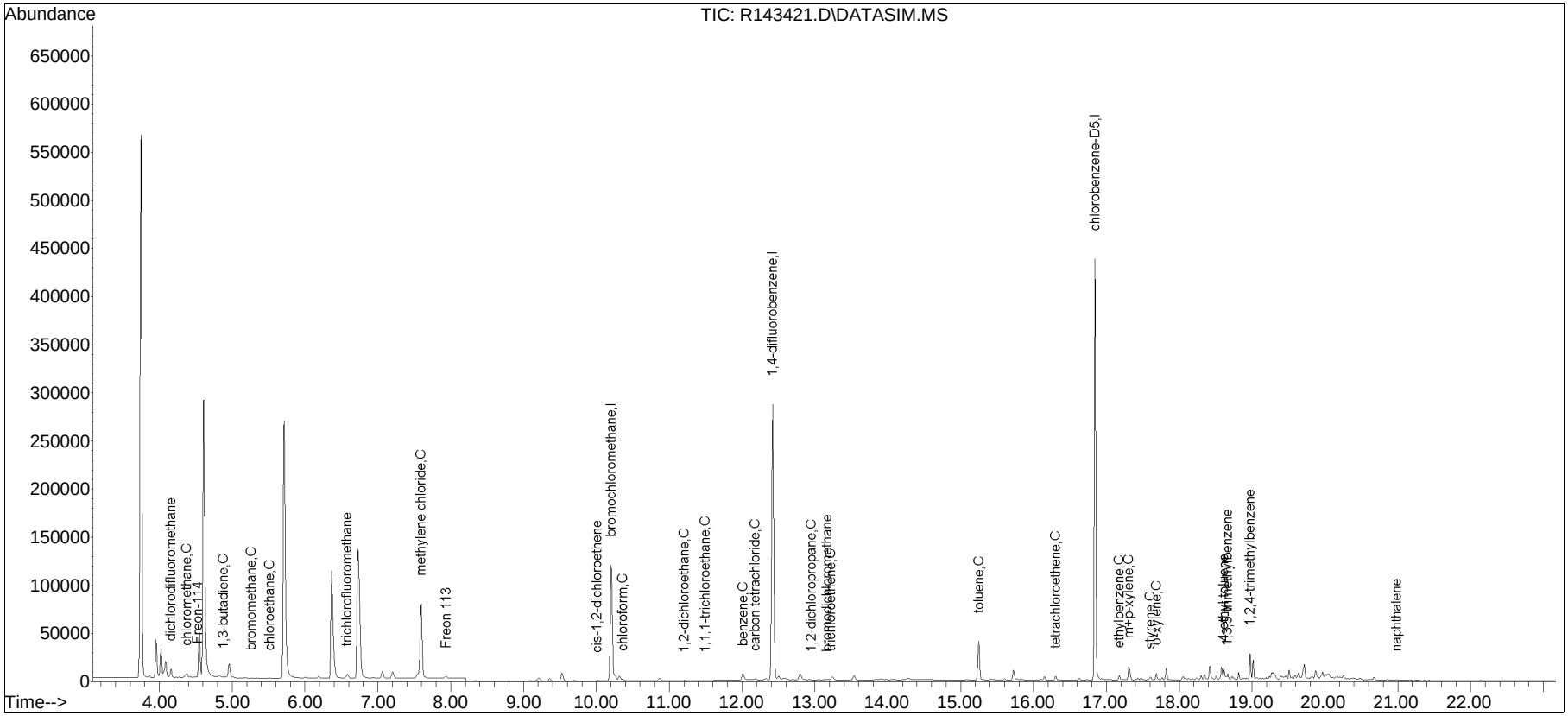
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dibromoethane	15.900		0	N.D.		
57) tetrachloroethene	16.307	166	2144	0.116	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.866		0	N.D.		
59) chlorobenzene	16.884		0	N.D.		
60) ethylbenzene	17.176	91	3989	0.084	ppbV	99
61) m+p-xylene	17.309	91	9821	0.266	ppbV	99
62) bromoform	17.401		0	N.D.		
63) styrene	17.605	104	1605	0.056	ppbV	97
64) 1,1,2,2-tetrachloroethane	17.675		0	N.D.		
65) o-xylene	17.686	91	4157	0.109	ppbV	100
71) 1,3,5-trimethylbenzene	18.665	105	3141	0.069	ppbV #	96
73) 1,2,4-trimethylbenzene	18.972	105	8986	0.199	ppbV #	67
75) 1,3-dichlorobenzene	19.110		0	N.D.		
76) 1,4-dichlorobenzene	19.162		0	N.D.		
79) 1,2-dichlorobenzene	19.424		0	N.D.		
81) 1,2,4-trichlorobenzene	20.868		0	N.D.		
82) naphthalene	20.986	128	925M6	0.016	ppbV	
84) hexachlorobutadiene	21.297		0	N.D.		

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

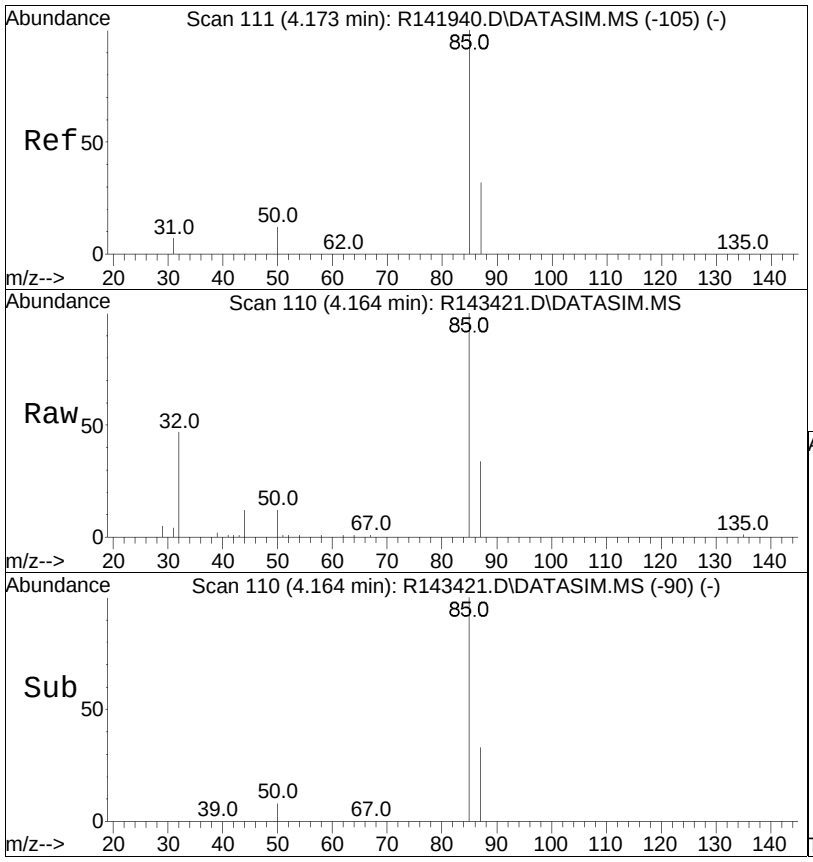
Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 14:03:10 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration



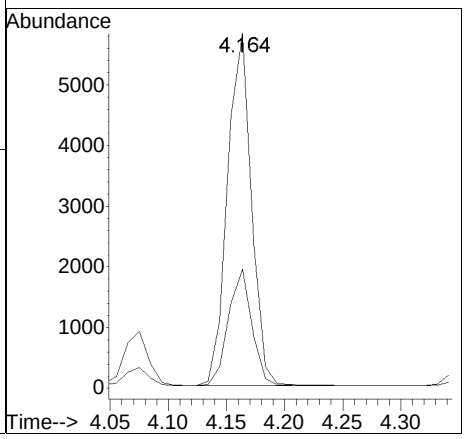
TSIM150710.M Fri Aug 14 14:03:59 2015

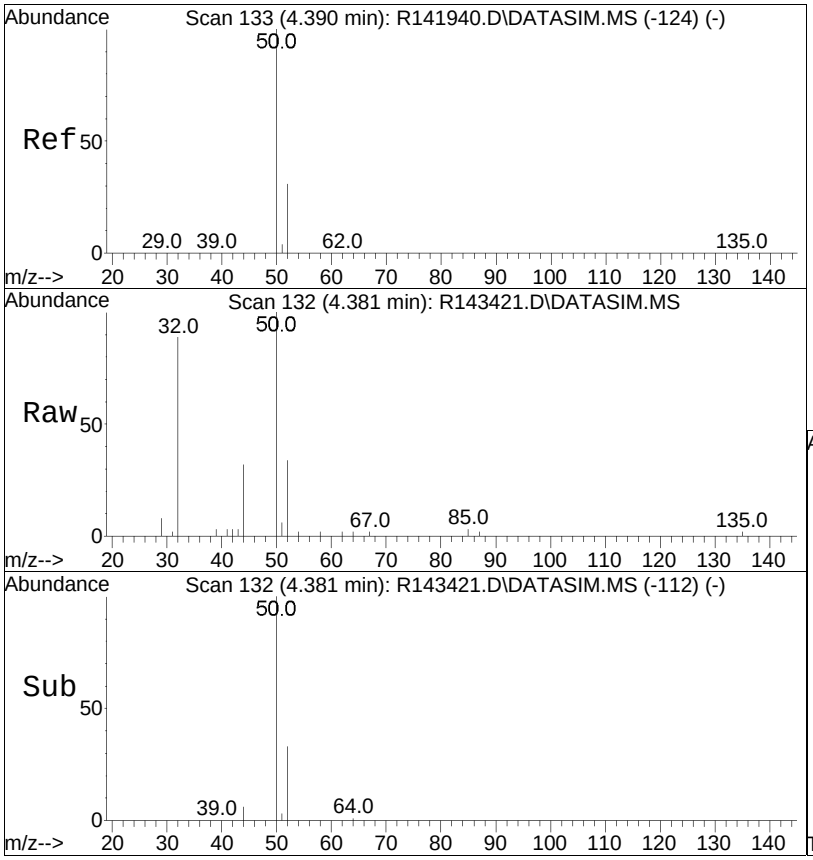


#3
dichlorodifluoromethane
Concen: 0.59 ppbV m
RT: 4.164 min Scan# 110
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 85 Resp: 8334

Ion	Ratio	Lower	Upper
85	100		
87	33.5	26.0	39.0

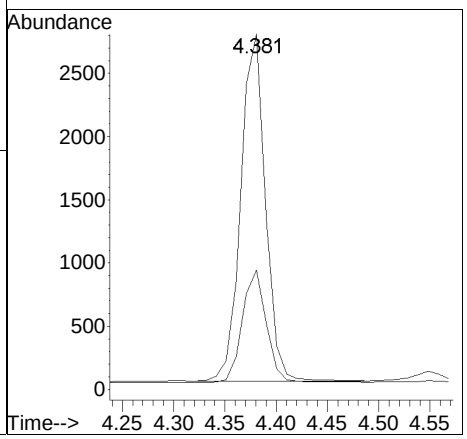


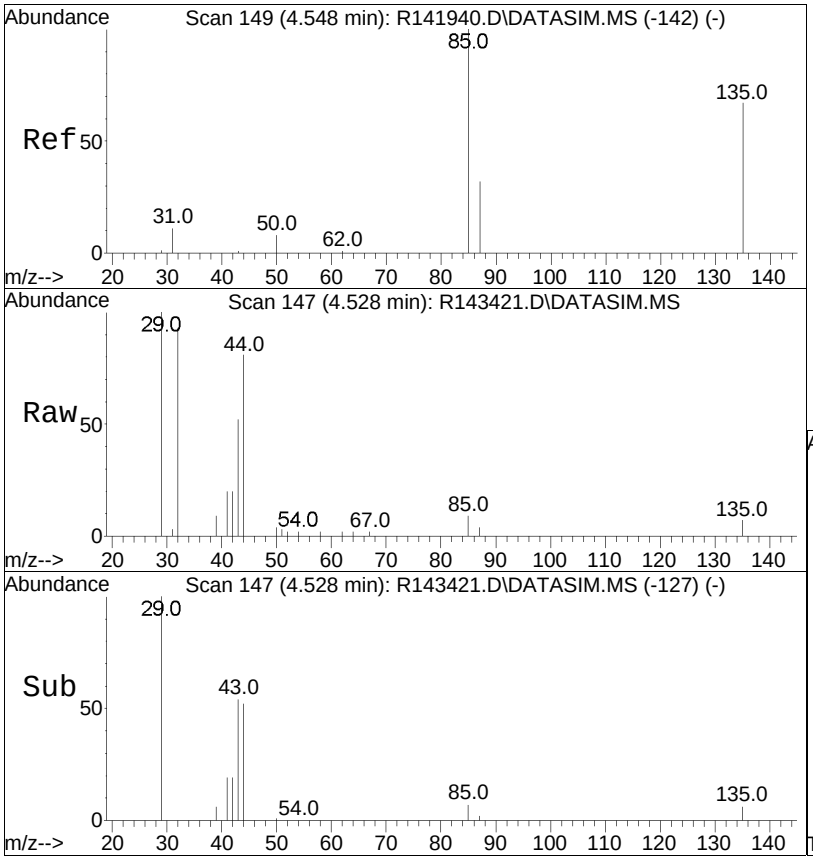


#4
chloromethane
Concen: 0.58 ppbV
RT: 4.381 min Scan# 132
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 50 Resp: 4570

Ion	Ratio	Lower	Upper
50	100		
52	33.6	26.2	39.4

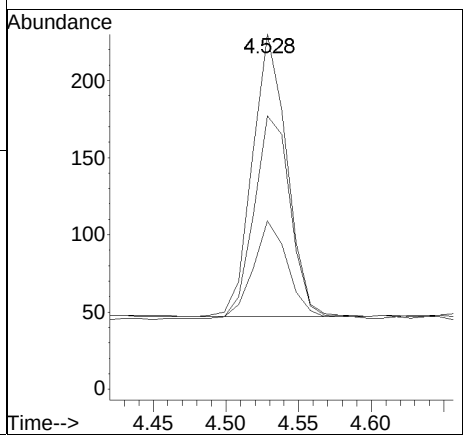


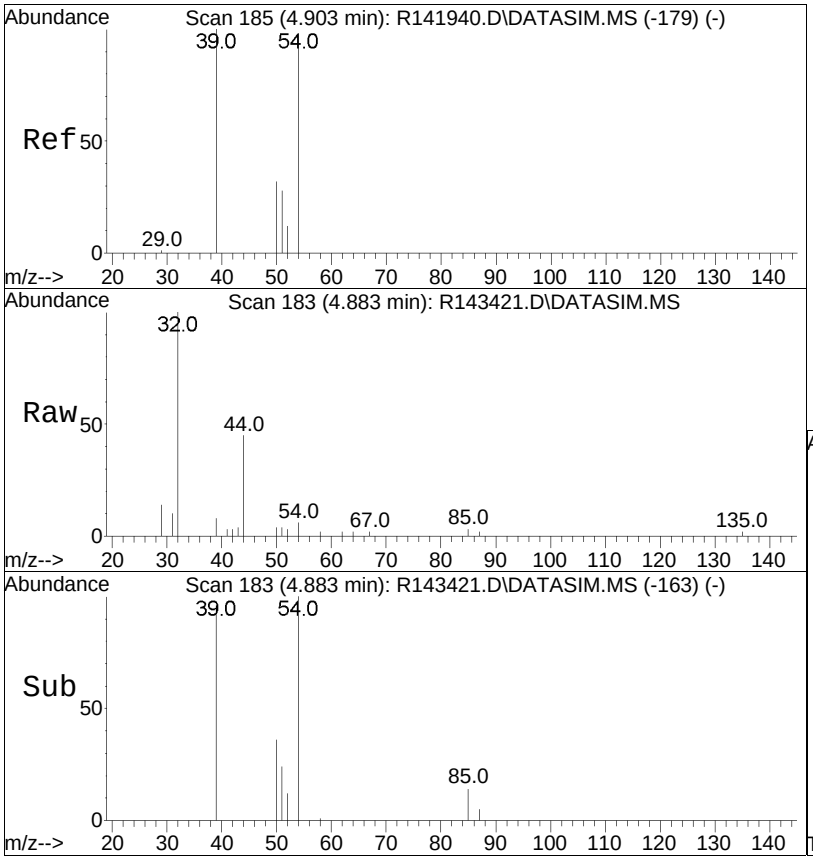


#5
Freon-114
Concen: 0.01 ppbV
RT: 4.528 min Scan# 147
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 85 Resp: 302

Ion	Ratio	Lower	Upper
85	100		
87	47.4	25.4	38.0#
135	77.0	57.0	85.6

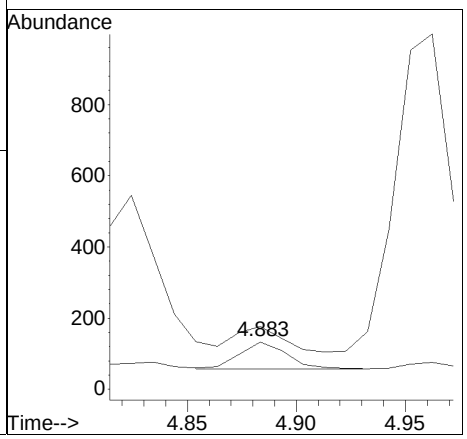


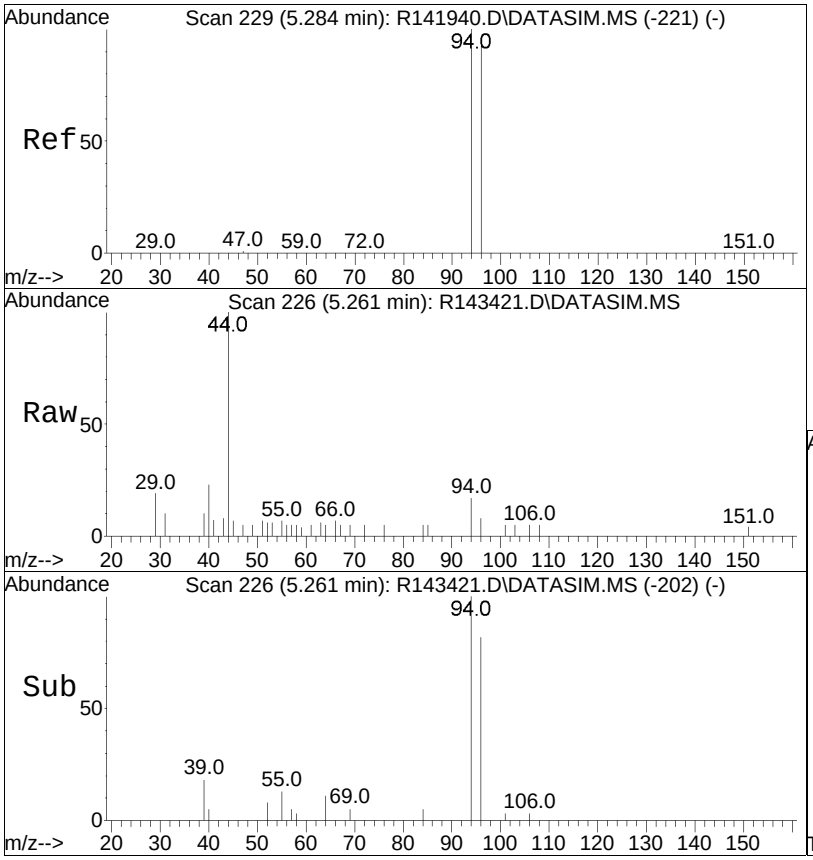


#7
1,3-butadiene
Concen: 0.02 ppbV
RT: 4.883 min Scan# 183
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 54 Resp: 112

Ion	Ratio	Lower	Upper
54	100		
39	133.1	82.6	124.0#

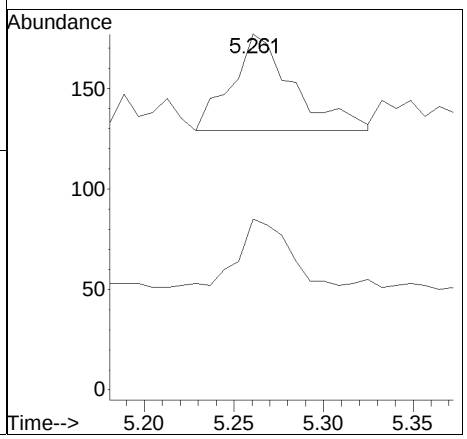


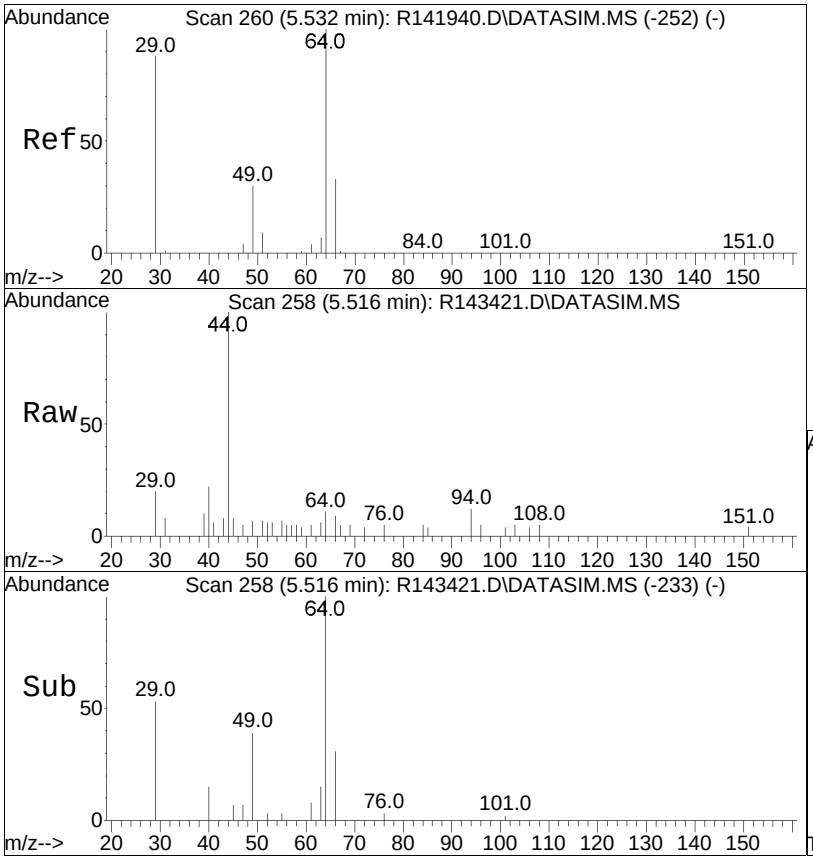


#8
bromomethane
Concen: 0.02 ppbV
RT: 5.261 min Scan# 226
Delta R.T. -0.008 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 94 Resp: 115

Ion	Ratio	Lower	Upper
94	100		
96	48.0	74.9	112.3#

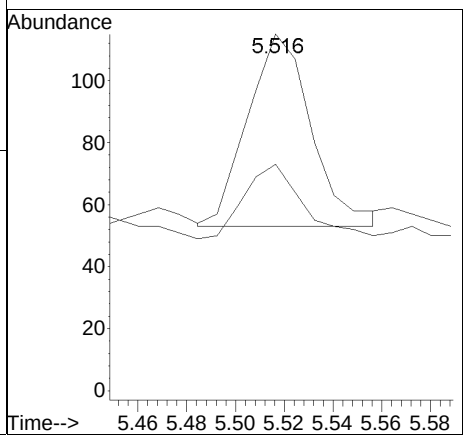


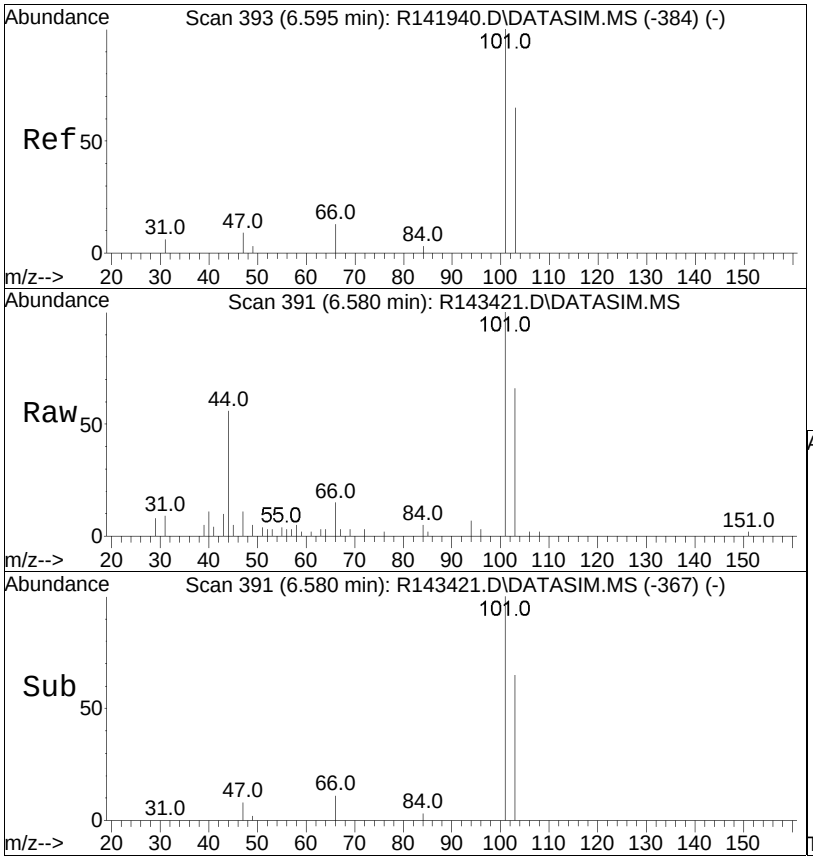


#9
chloroethane
Concen: 0.03 ppbV m
RT: 5.516 min Scan# 258
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 64 Resp: 113

Ion	Ratio	Lower	Upper
64	100		
49	63.5	27.4	41.0#

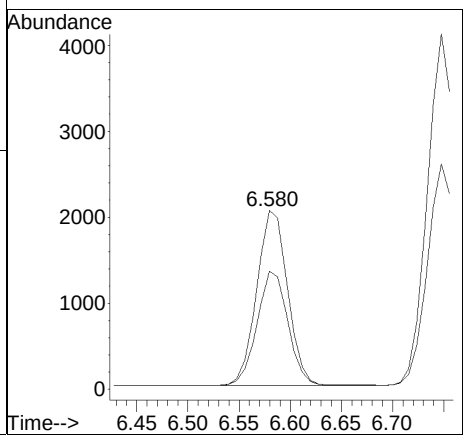


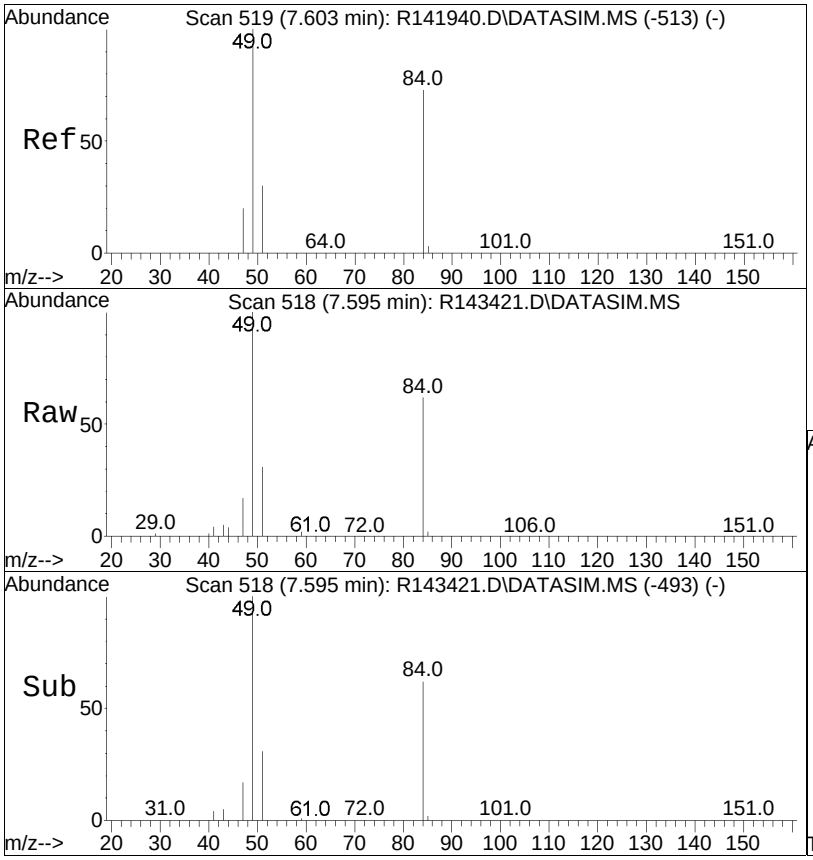


#13
trichlorofluoromethane
Concen: 0.22 ppbV
RT: 6.580 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:101 Resp: 4258

Ion	Ratio	Lower	Upper
101	100		
103	66.0	52.2	78.2

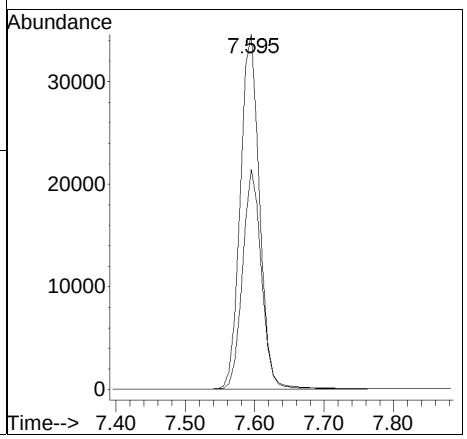


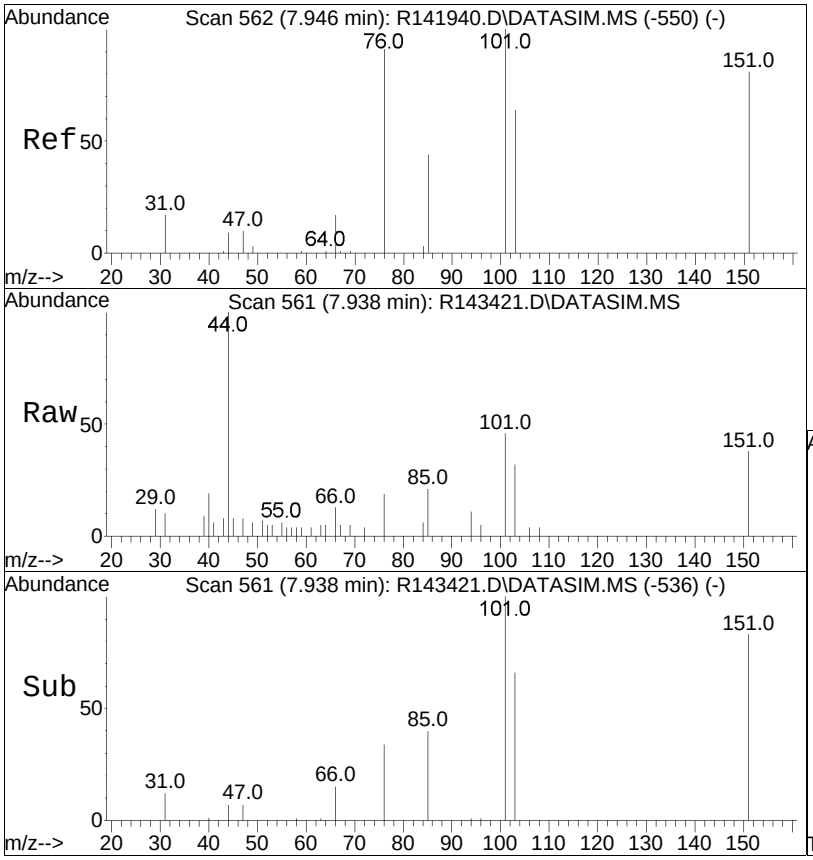


#18
methylene chloride
Concen: 6.34 ppbV
RT: 7.595 min Scan# 518
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 49 Resp: 66598

Ion	Ratio	Lower	Upper
49	100		
84	62.0	50.8	76.2

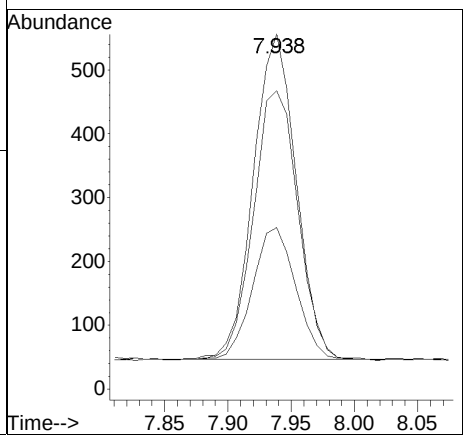


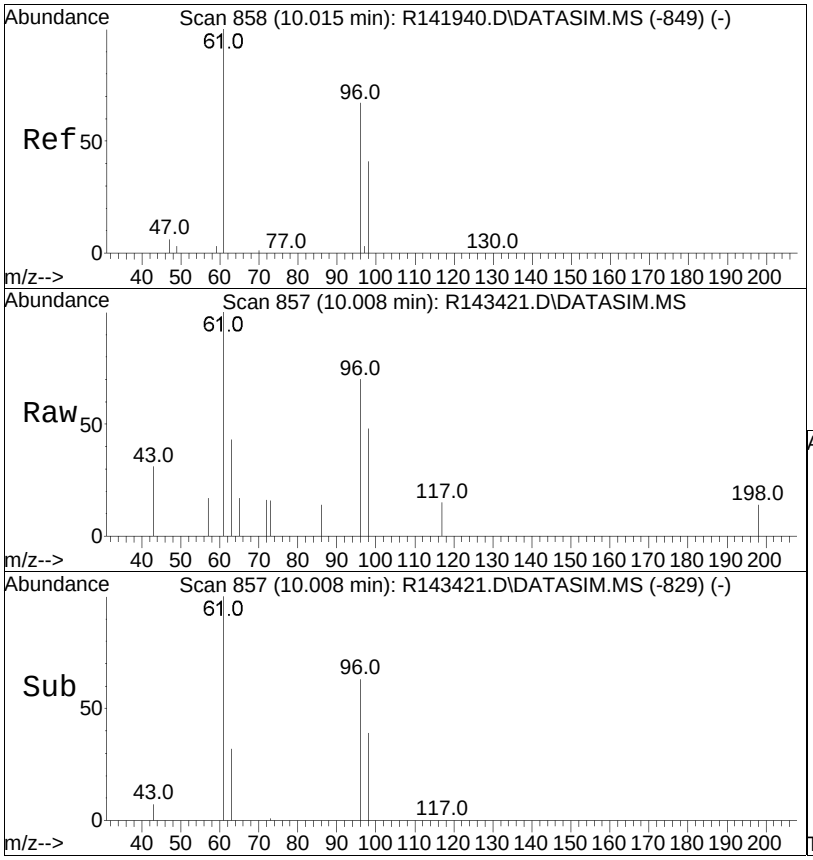


#21
Freon 113
Concen: 0.07 ppbV
RT: 7.938 min Scan# 561
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:101 Resp: 1192

Ion	Ratio	Lower	Upper
101	100		
85	45.5	32.5	48.7
151	84.0	69.1	103.7

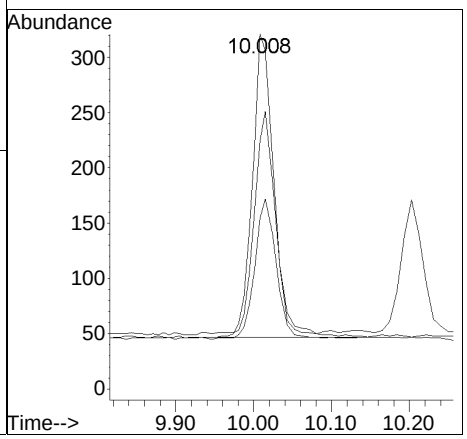


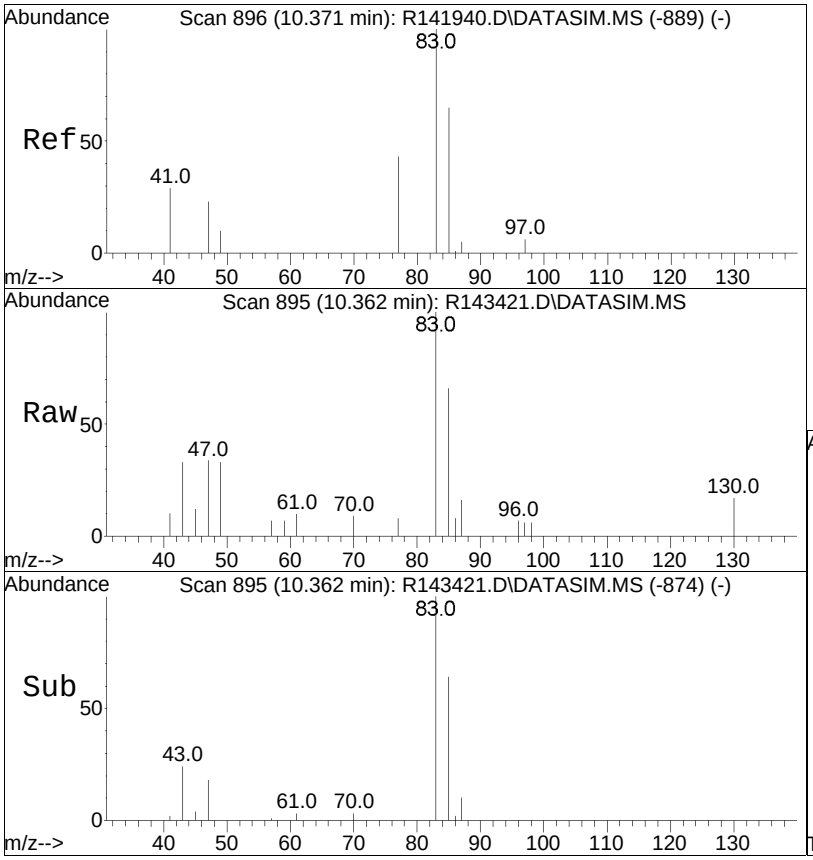


#28
cis-1,2-dichloroethene
Concen: 0.04 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 61 Resp: 548

Ion	Ratio	Lower	Upper
61	100		
96	69.8	57.8	86.8
98	48.0	36.9	55.3

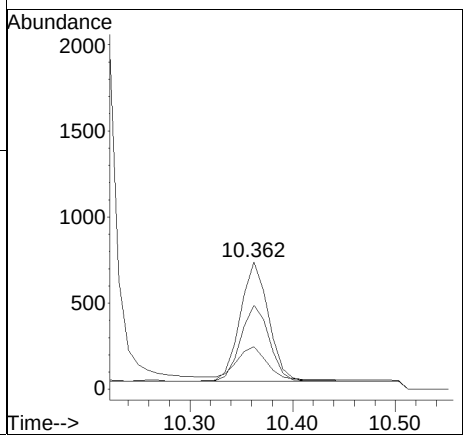


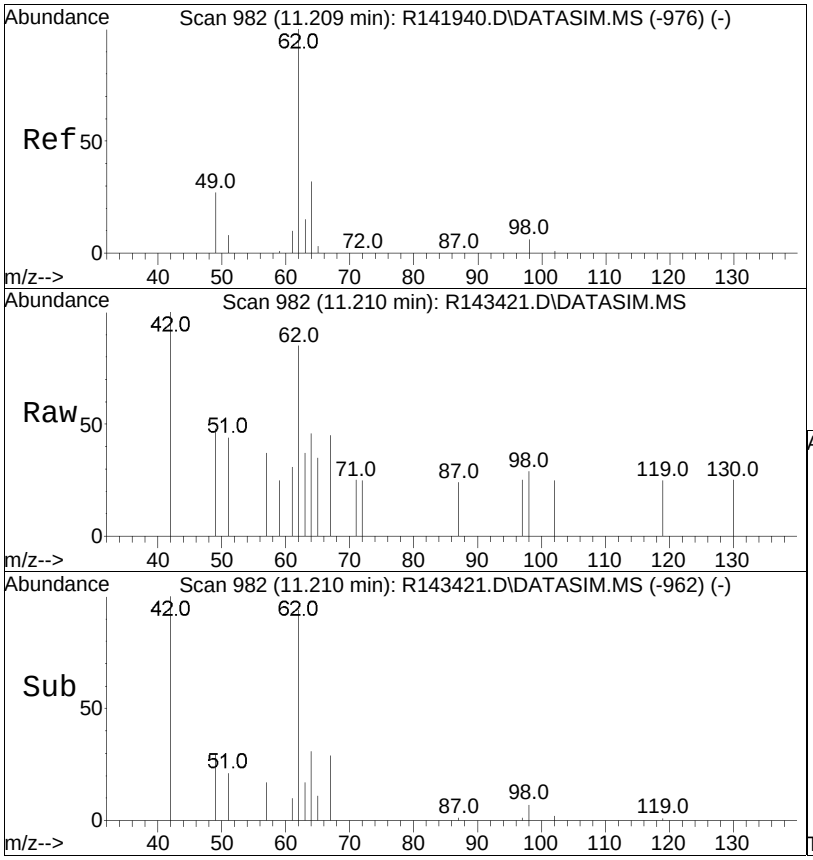


#30
chloroform
Concen: 0.07 ppbV m
RT: 10.362 min Scan# 895
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 83 Resp: 1341

Ion	Ratio	Lower	Upper
83	100		
85	66.1	51.6	77.4
47	33.5	22.6	33.8

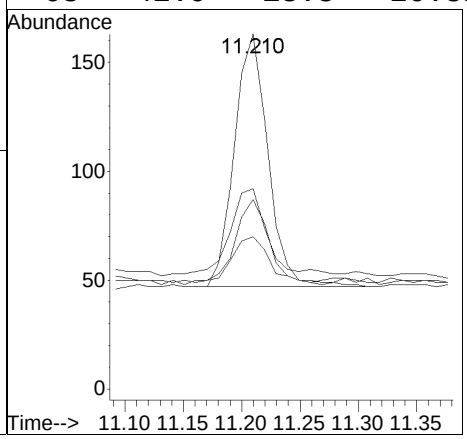


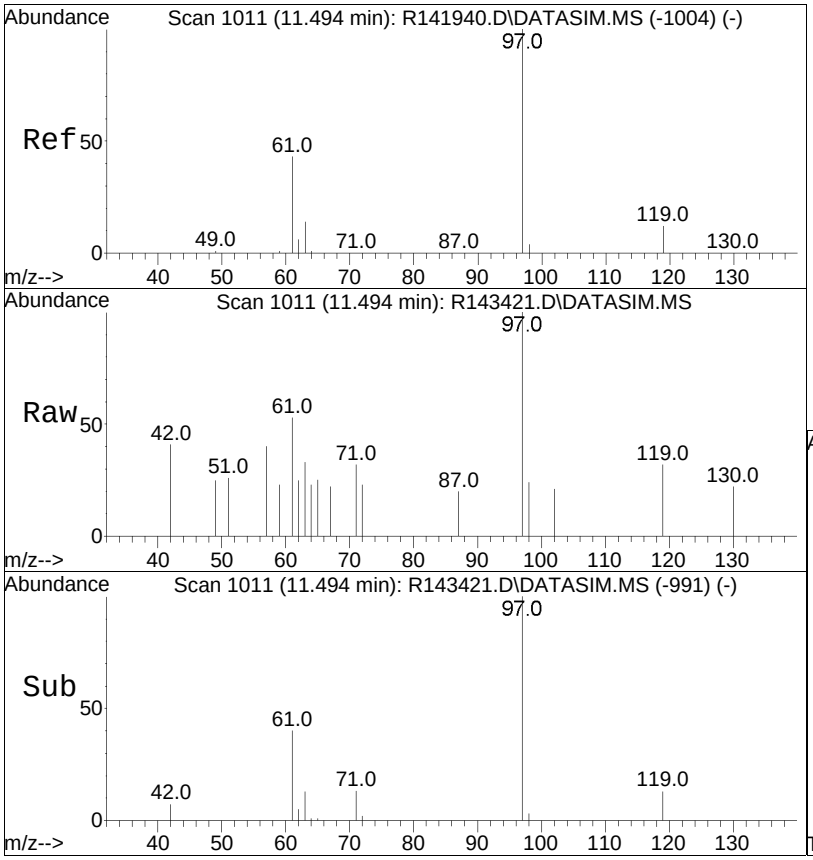


#32
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.210 min Scan# 982
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 62 Resp: 233

Ion	Ratio	Lower	Upper
62	100		
64	53.4	26.2	39.4#
49	56.4	25.7	38.5#
63	42.9	13.8	20.8#

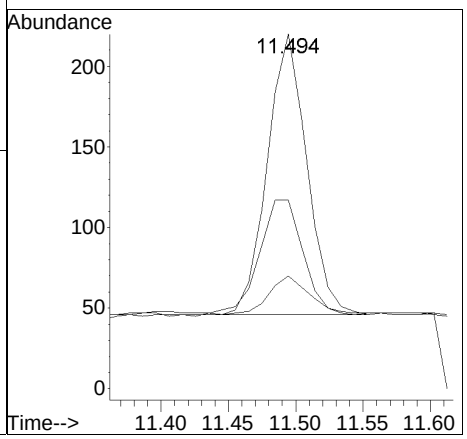


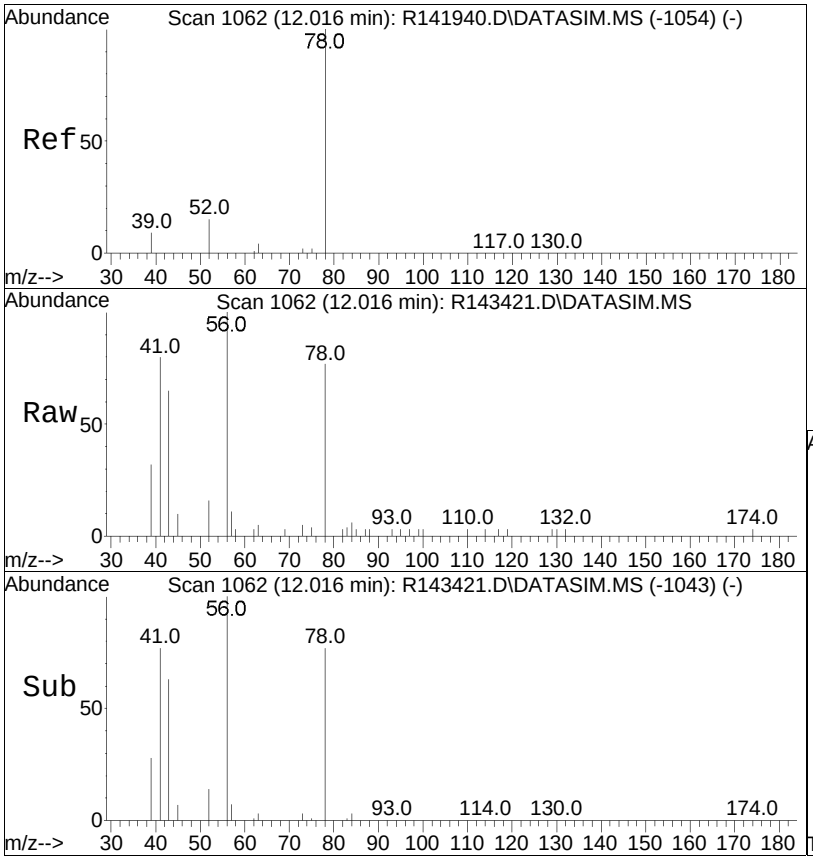


#36
1,1,1-trichloroethane
Concen: 0.02 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 97 Resp: 354

Ion	Ratio	Lower	Upper
97	100		
61	53.2	32.6	49.0#
119	31.8	11.0	16.4#

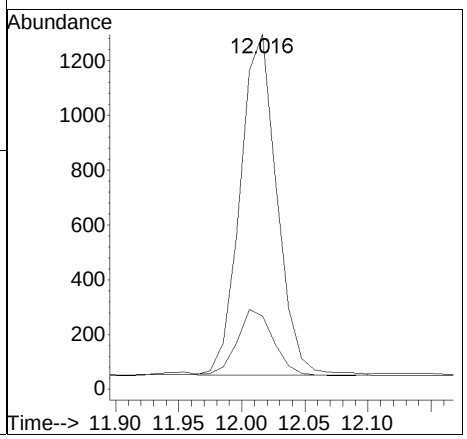


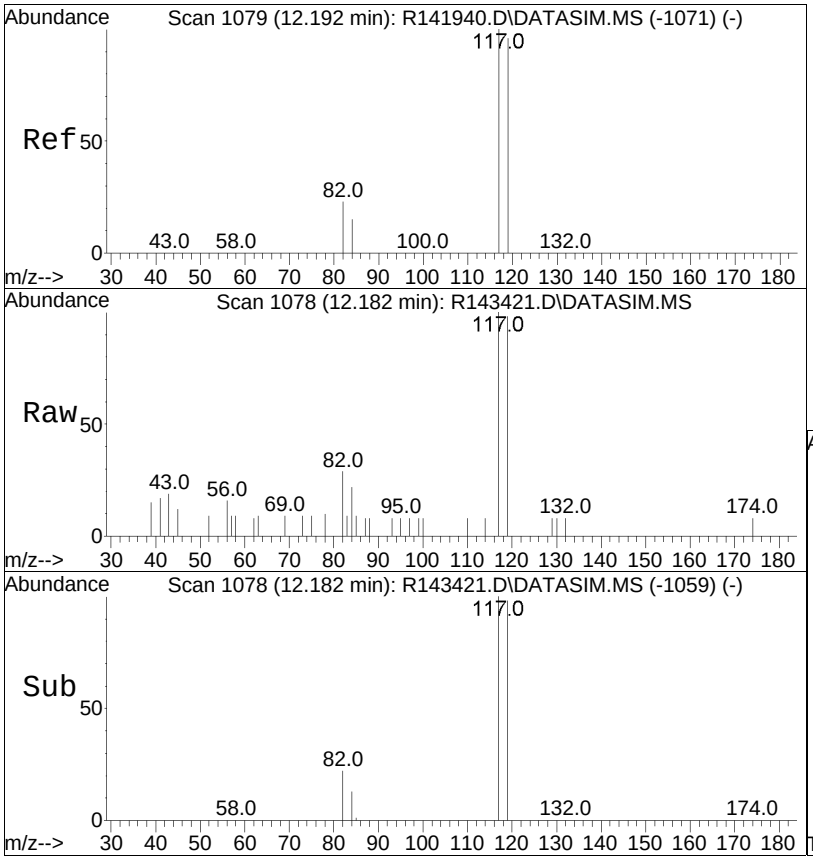


#37
benzene
Concen: 0.09 ppbV m
RT: 12.016 min Scan# 1062
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 78 Resp: 2510

Ion	Ratio	Lower	Upper
78	100		
52	20.7	14.2	21.2

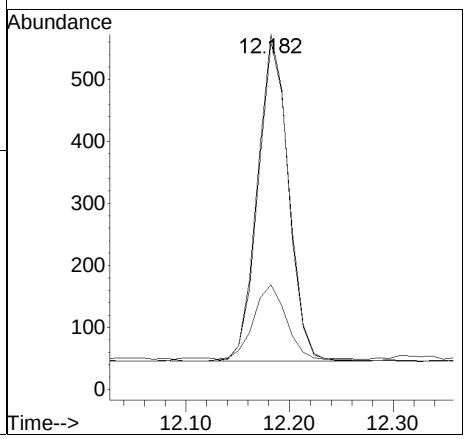


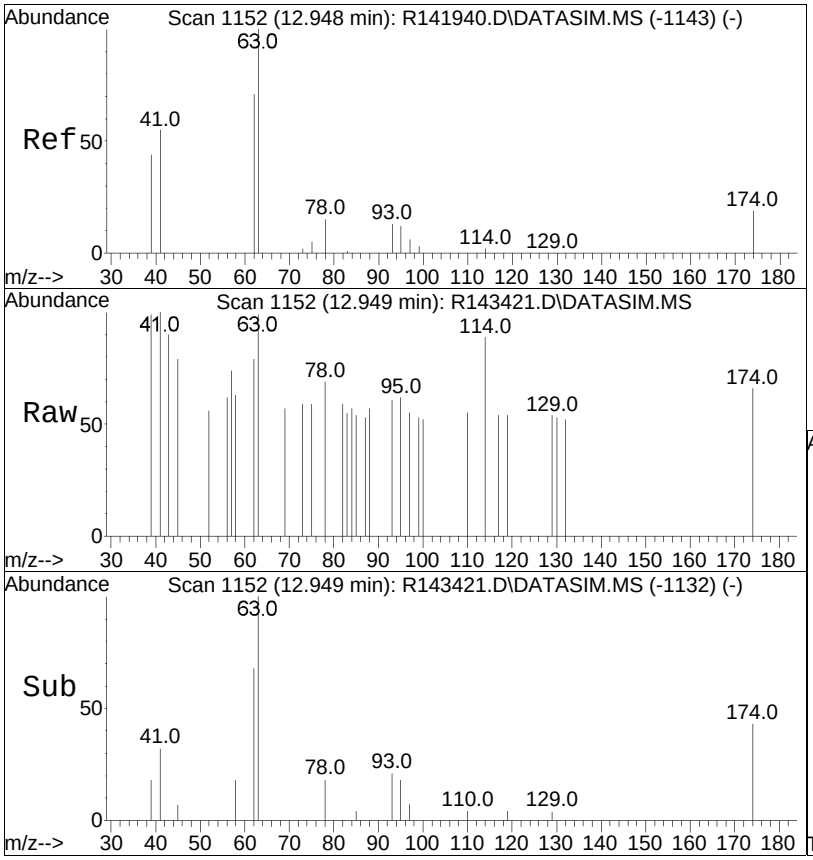


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:117 Resp: 1080

Ion	Ratio	Lower	Upper
117	100		
119	97.9	76.4	114.6
82	29.5	18.3	27.5#

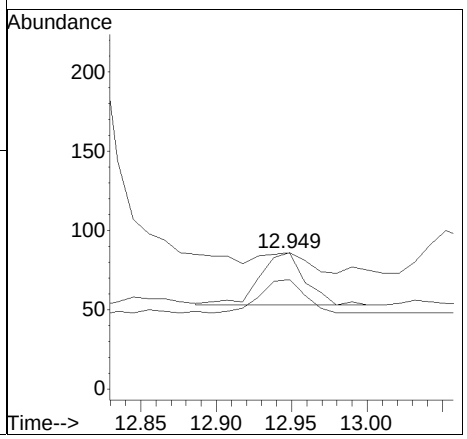


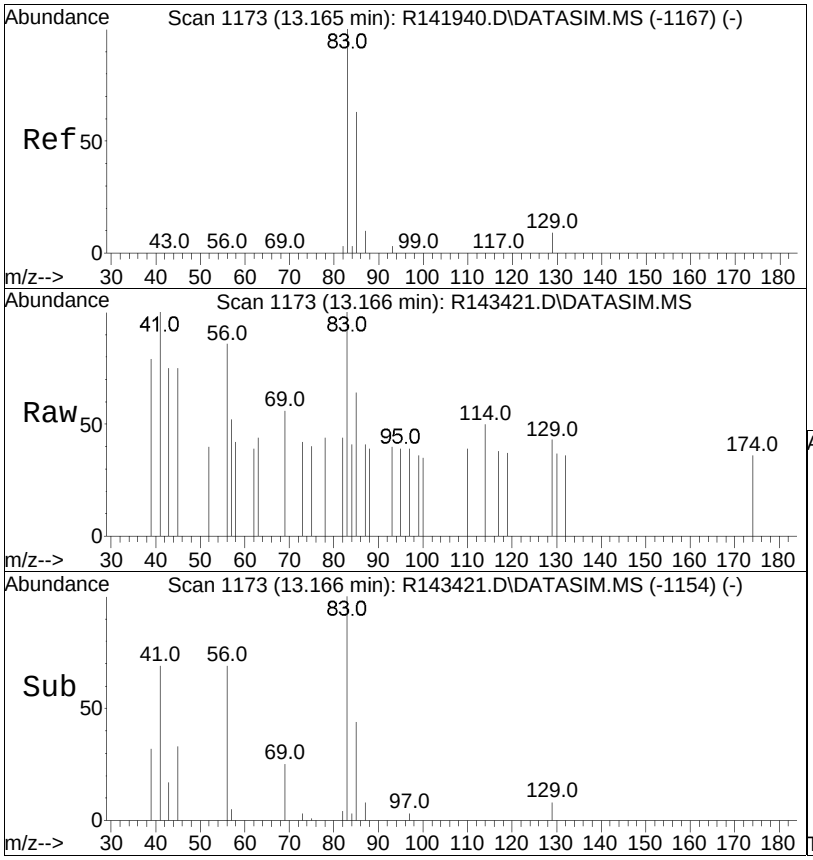


#41
1,2-dichloropropane
Concen: 0.01 ppbV
RT: 12.949 min Scan# 1152
Delta R.T. 0.010 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 63 Resp: 69

Ion	Ratio	Lower	Upper
63	100		
62	80.2	59.0	88.4
39	100.0	31.4	47.2#

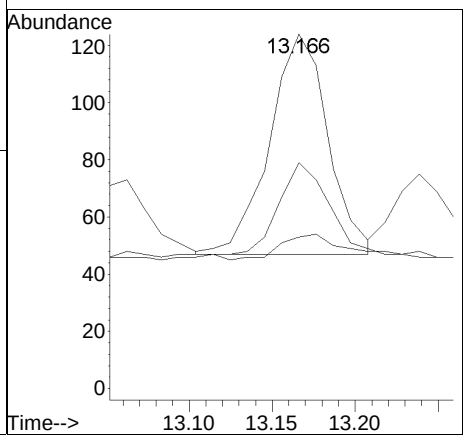


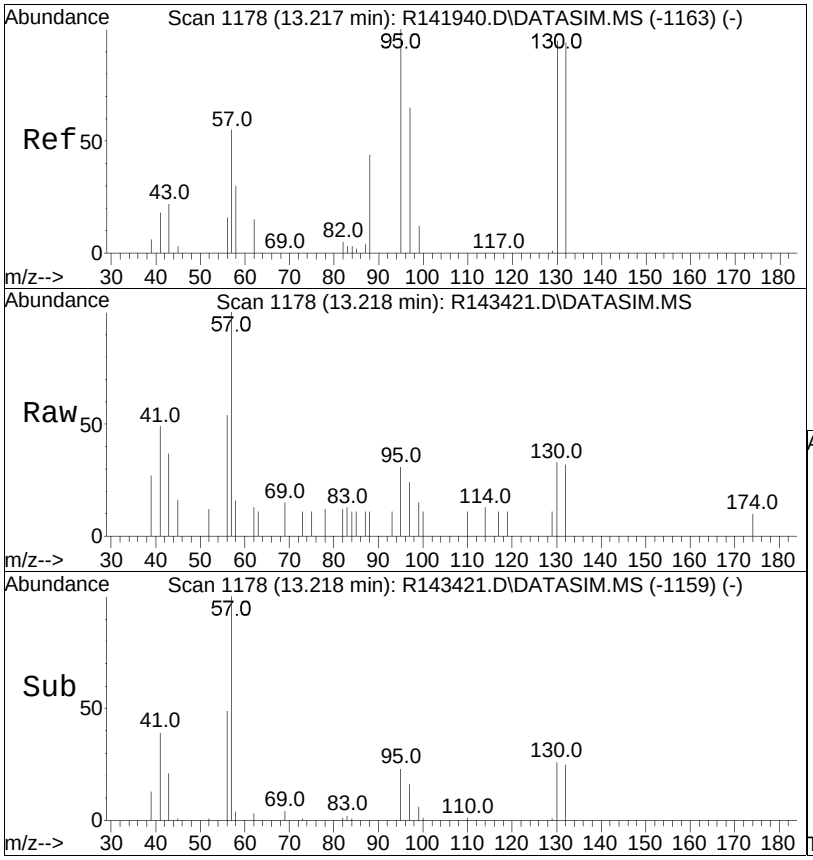


#42
bromodichloromethane
Concen: 0.01 ppbV
RT: 13.166 min Scan# 1173
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 83 Resp: 188

Ion	Ratio	Lower	Upper
83	100		
85	63.7	50.6	75.8
129	42.7	8.9	13.3#

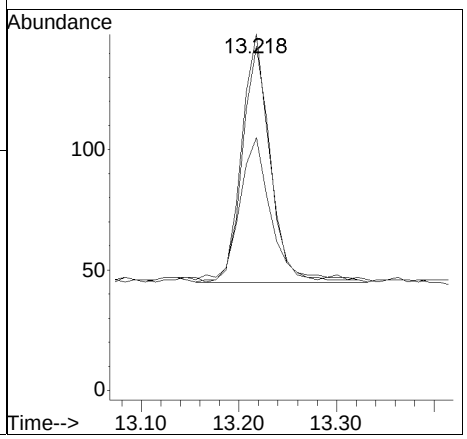


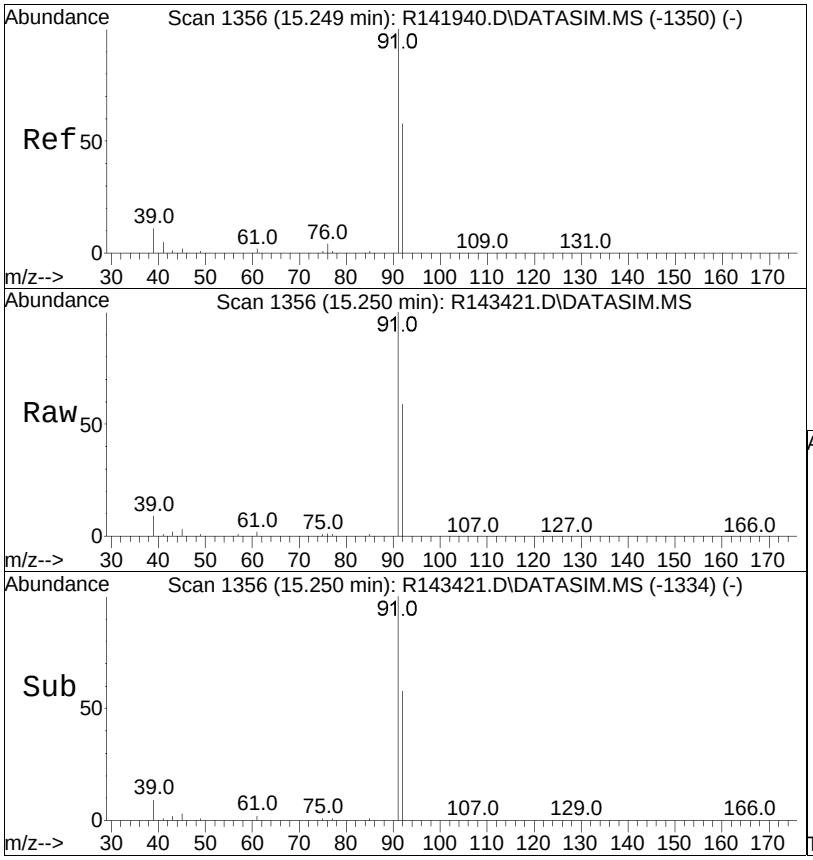


#44
trichloroethene
Concen: 0.01 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:130 Resp: 207

Ion	Ratio	Lower	Upper
130	100		
132	96.6	77.5	116.3
97	70.9	47.4	71.2

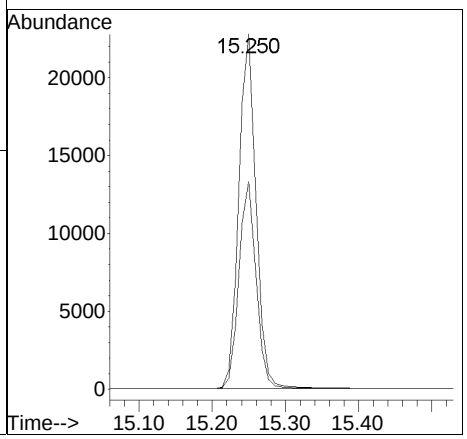


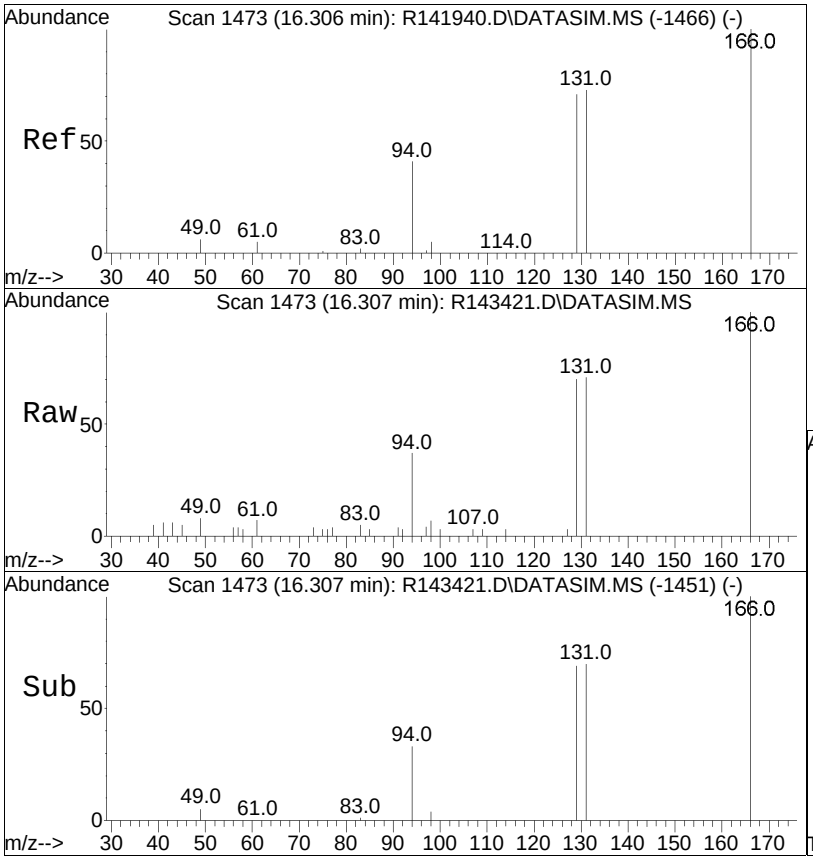


#52
toluene
Concen: 1.01 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 37362

Ion	Ratio	Lower	Upper
91	100		
92	58.6	46.8	70.2

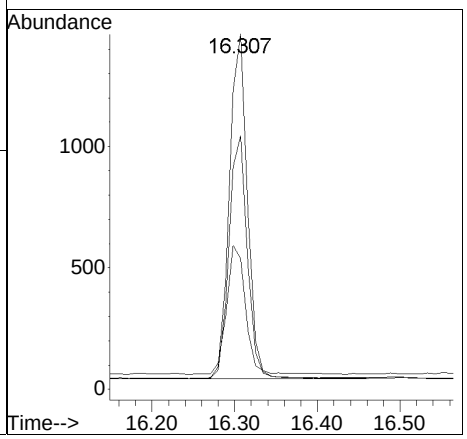


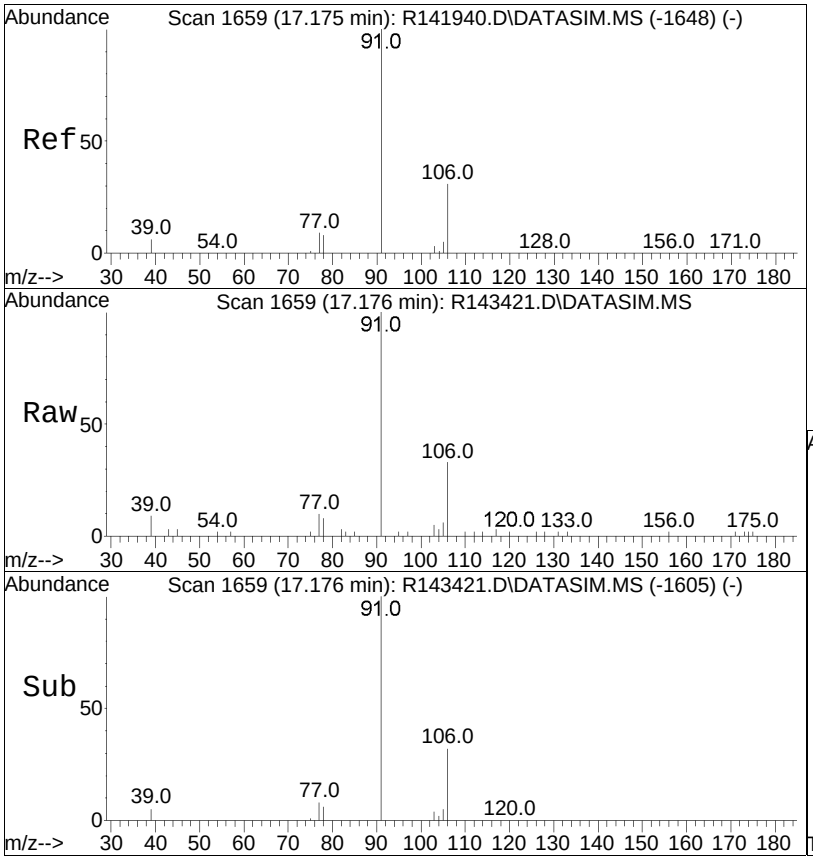


#57
tetrachloroethene
Concen: 0.12 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:166 Resp: 2144

Ion	Ratio	Lower	Upper
166	100		
131	71.4	57.0	85.4
94	36.8	26.2	39.4

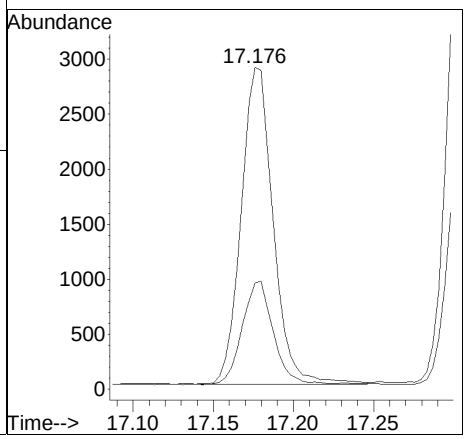


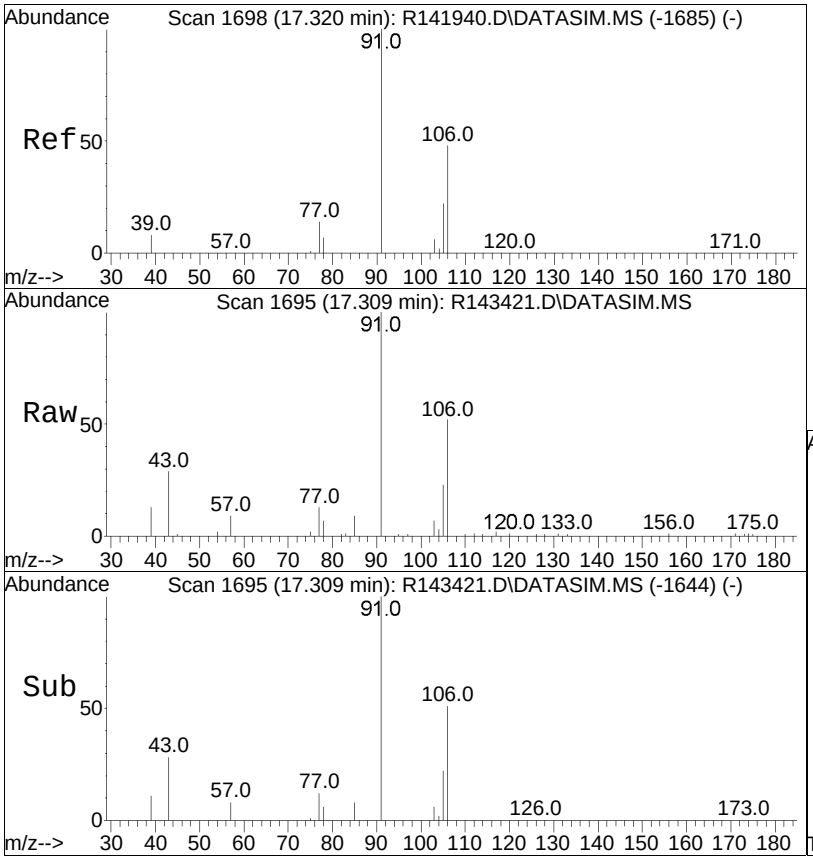


#60
ethylbenzene
Concen: 0.08 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 3989

Ion	Ratio	Lower	Upper
91	100		
106	33.1	25.8	38.8

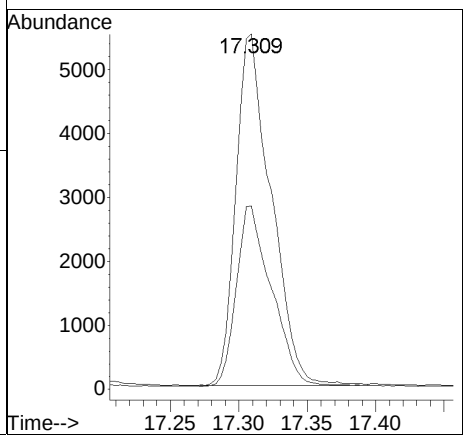


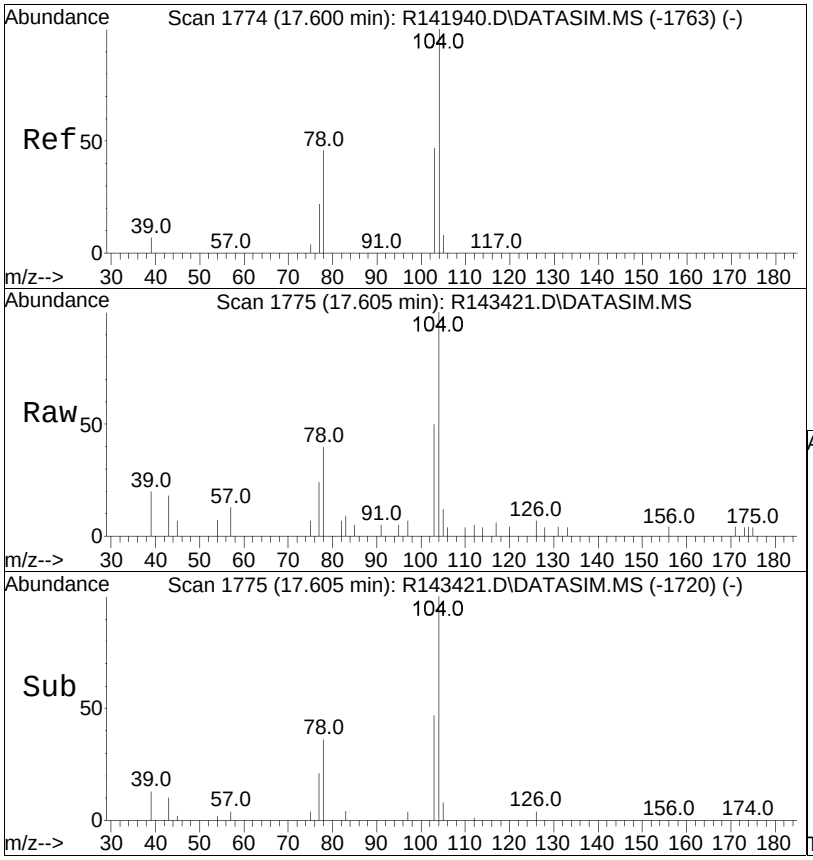


#61
m+p-xylene
Concen: 0.27 ppbV
RT: 17.309 min Scan# 1695
Delta R.T. -0.011 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 9821

Ion	Ratio	Lower	Upper
91	100		
106	51.6	40.6	61.0

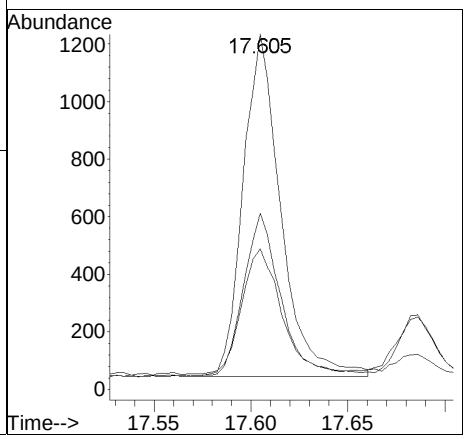


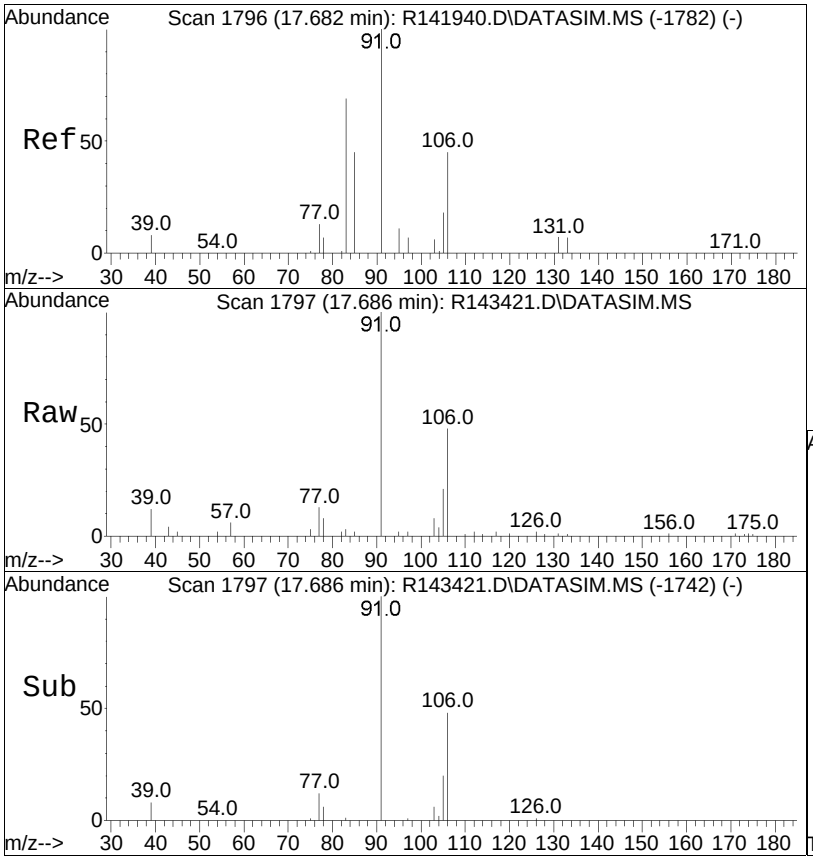


#63
styrene
Concen: 0.06 ppbV
RT: 17.605 min Scan# 1775
Delta R.T. 0.004 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:104 Resp: 1605

Ion	Ratio	Lower	Upper
104	100		
103	49.6	37.7	56.5
78	39.6	31.0	46.6

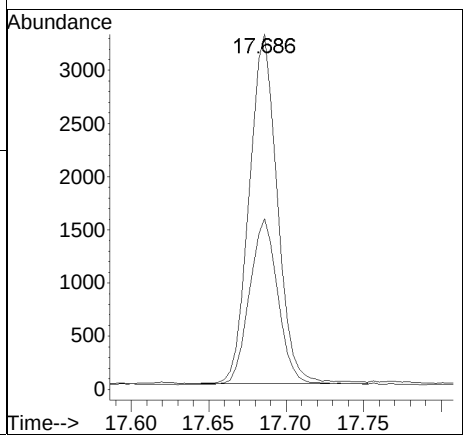


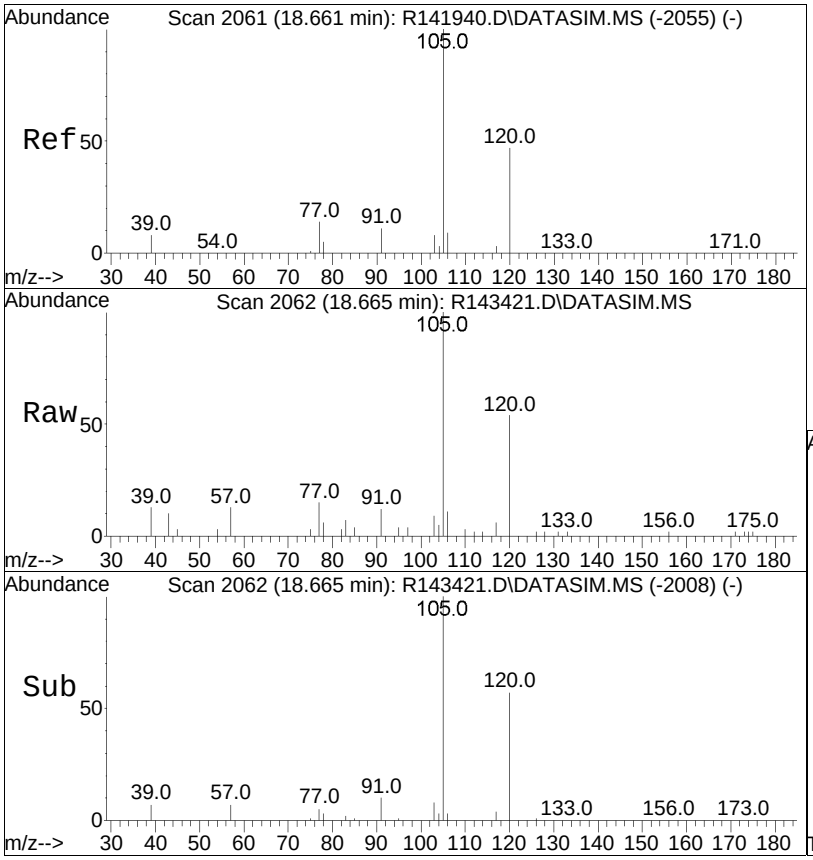


#65
o-xylene
Concen: 0.11 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 91 Resp: 4157

Ion	Ratio	Lower	Upper
91	100		
106	48.1	38.5	57.7

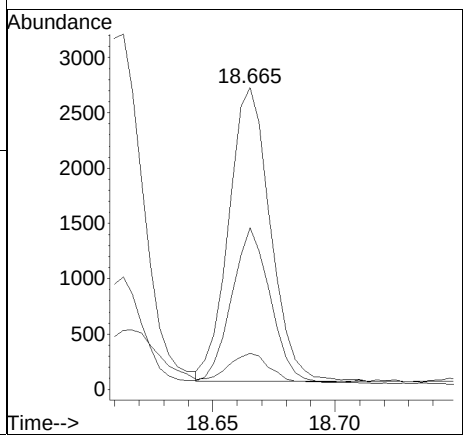


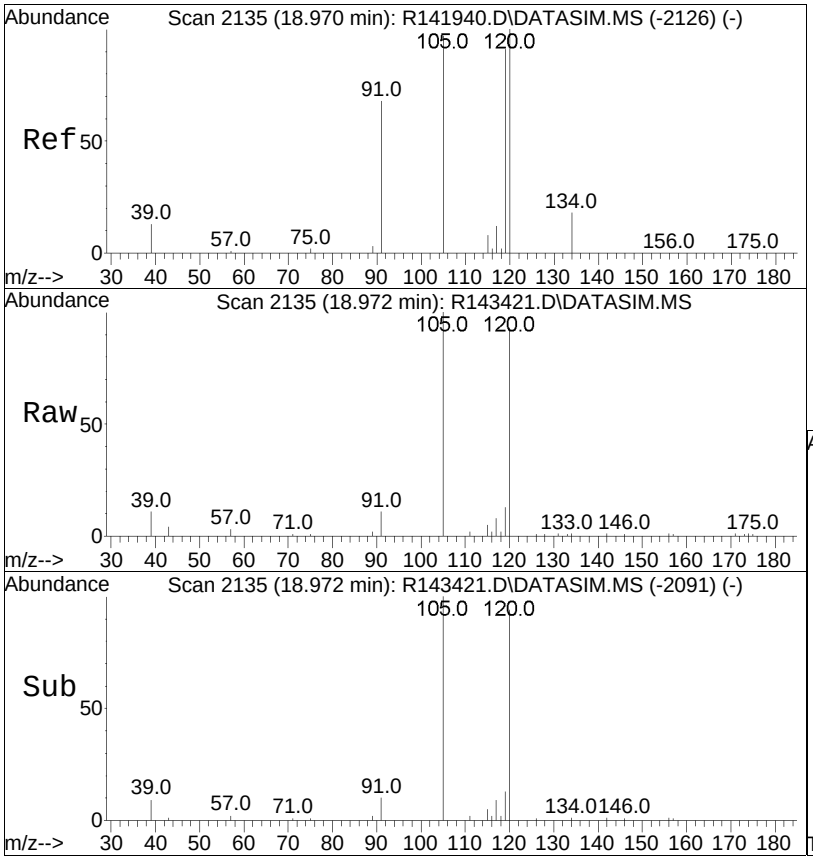


#71
1,3,5-trimethylbenzene
Concen: 0.07 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:105 Resp: 3141

Ion	Ratio	Lower	Upper
105	100		
120	53.6	40.9	61.3
91	12.0	7.8	11.6#

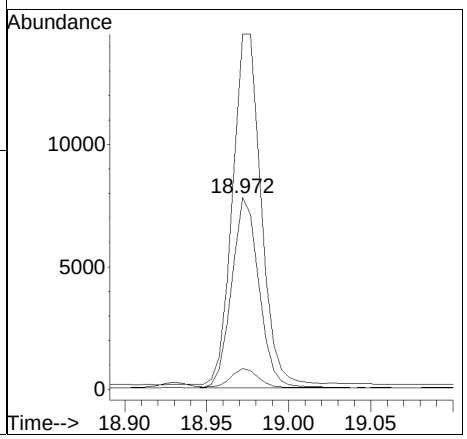


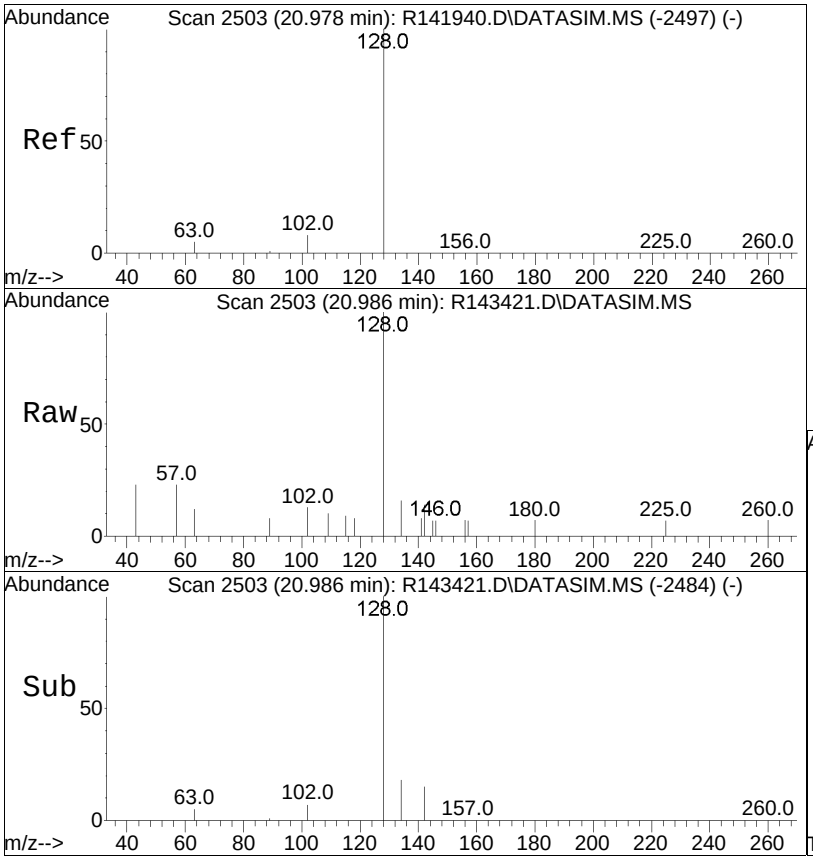


#73
1,2,4-trimethylbenzene
Concen: 0.20 ppbV
RT: 18.972 min Scan# 2135
Delta R.T. 0.001 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:105 Resp: 8986

Ion	Ratio	Lower	Upper
105	100		
120	185.3	174.7	262.1
91	10.9	55.2	82.8#

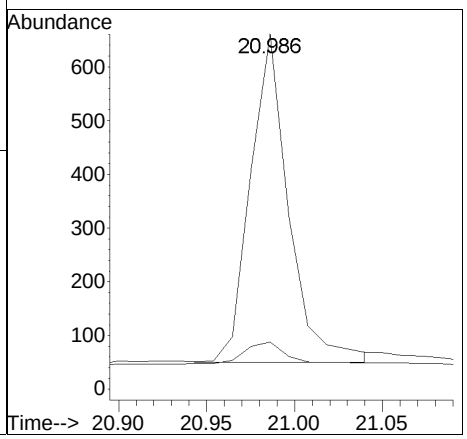




#82
naphthalene
Concen: 0.02 ppbV m
RT: 20.986 min Scan# 2503
Delta R.T. 0.007 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion:128 Resp: 925

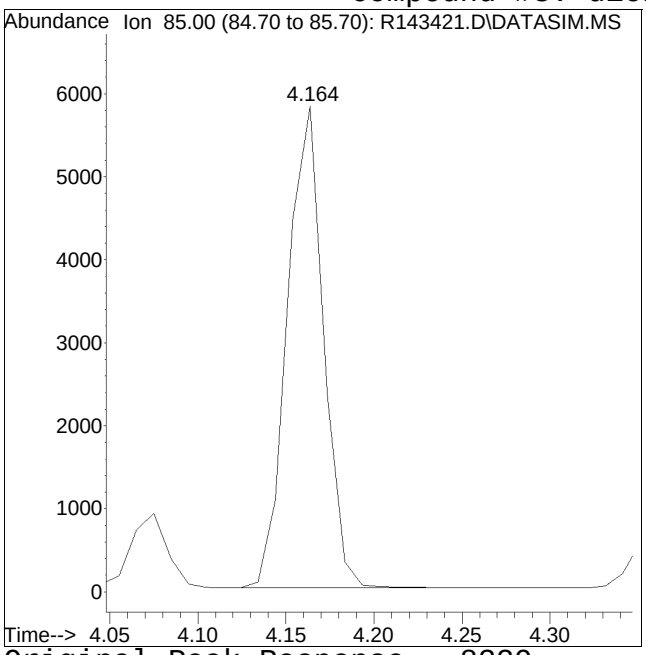
Ion	Ratio	Lower	Upper
128	100		
102	13.3	5.7	8.5#



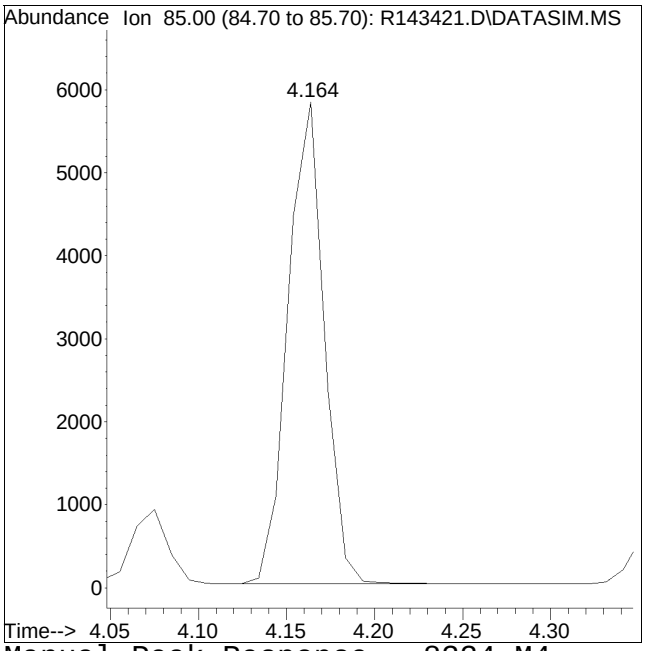
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #3: dichlorodifluoromethane



Original Peak Response = 8329



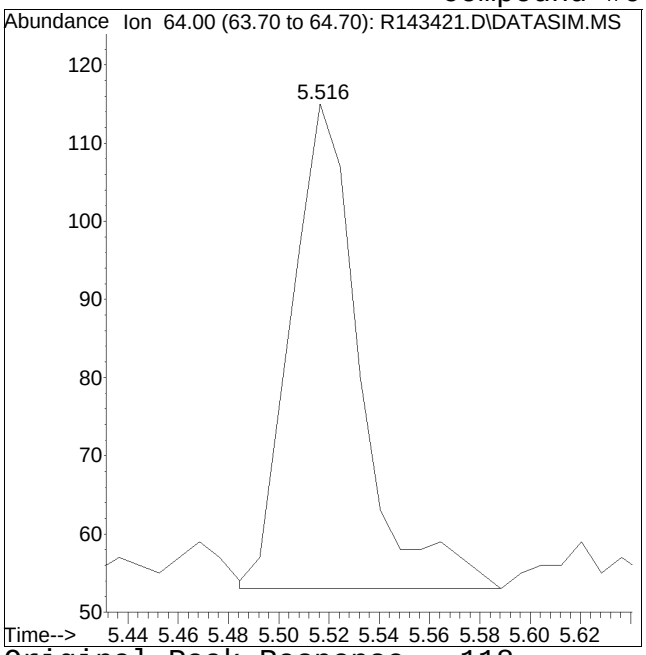
Manual Peak Response = 8334 M4

M4 = Poor automated baseline construction.

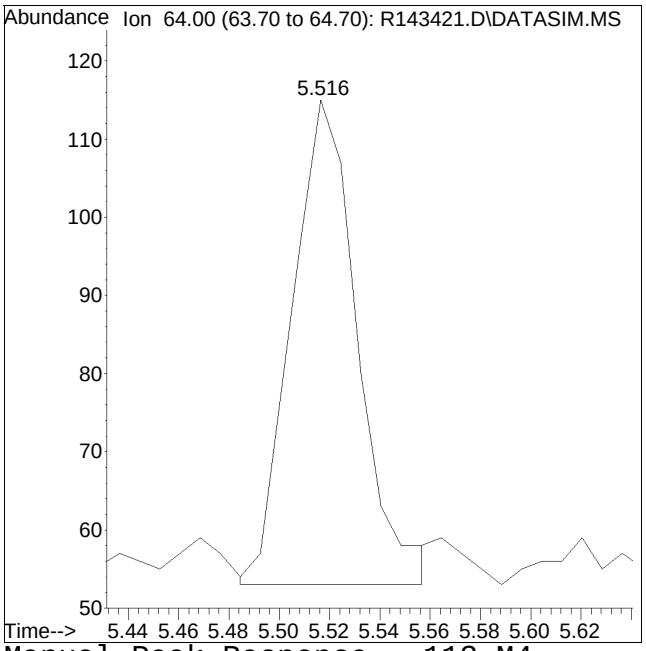
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #9: chloroethane



Original Peak Response = 118



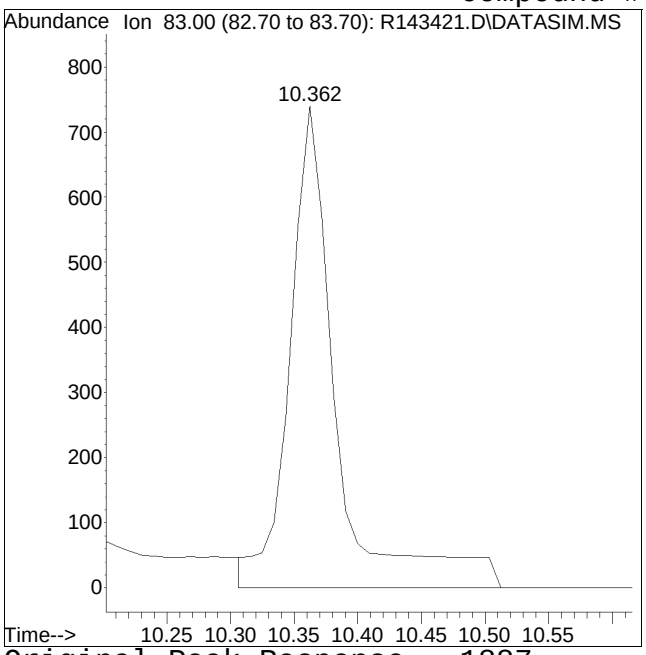
Manual Peak Response = 113 M4

M4 = Poor automated baseline construction.

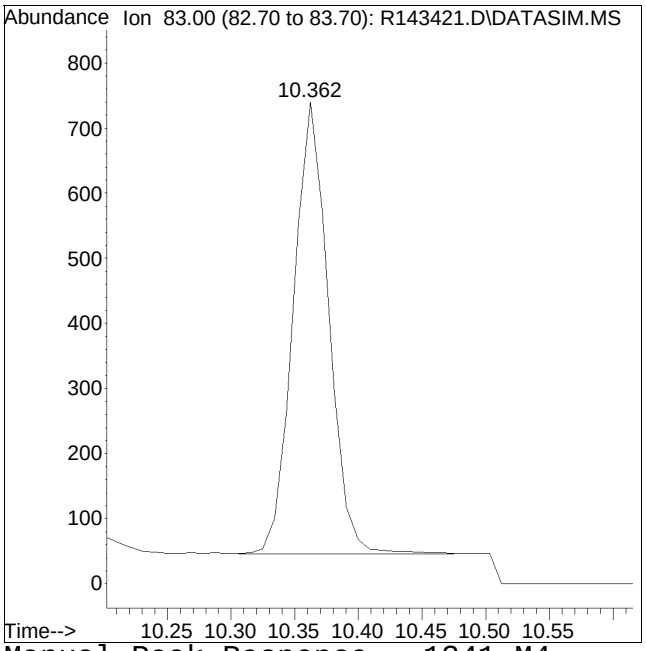
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #30: chloroform



Original Peak Response = 1887



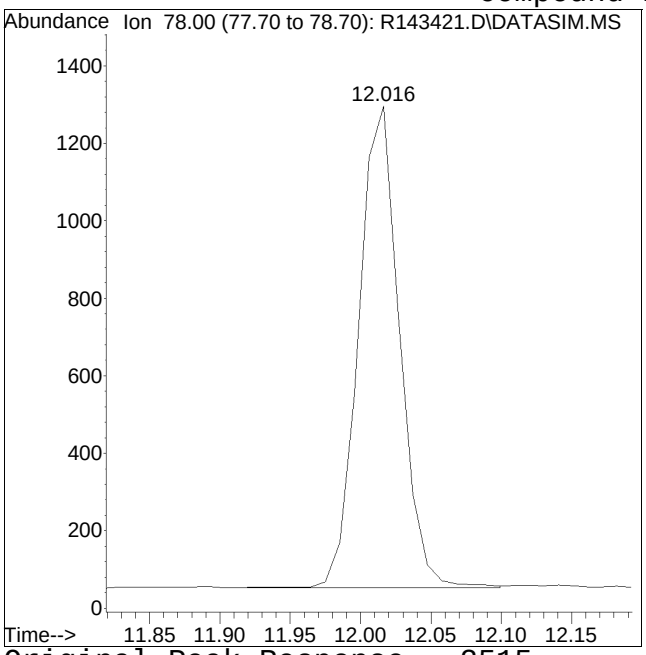
Manual Peak Response = 1341 M4

M4 = Poor automated baseline construction.

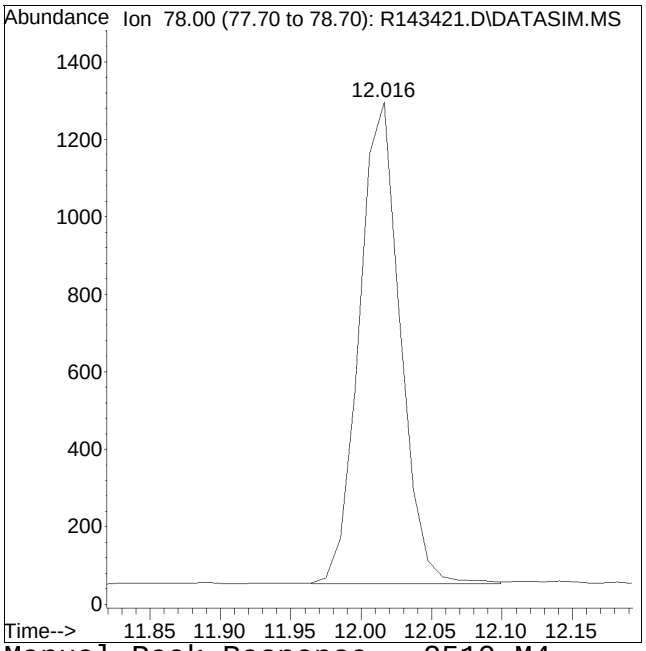
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #37: benzene



Original Peak Response = 2515



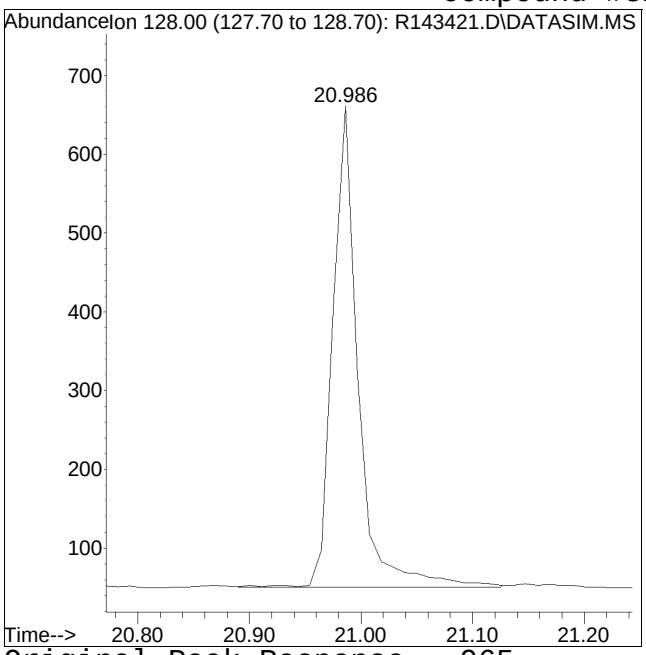
Manual Peak Response = 2510 M4

M4 = Poor automated baseline construction.

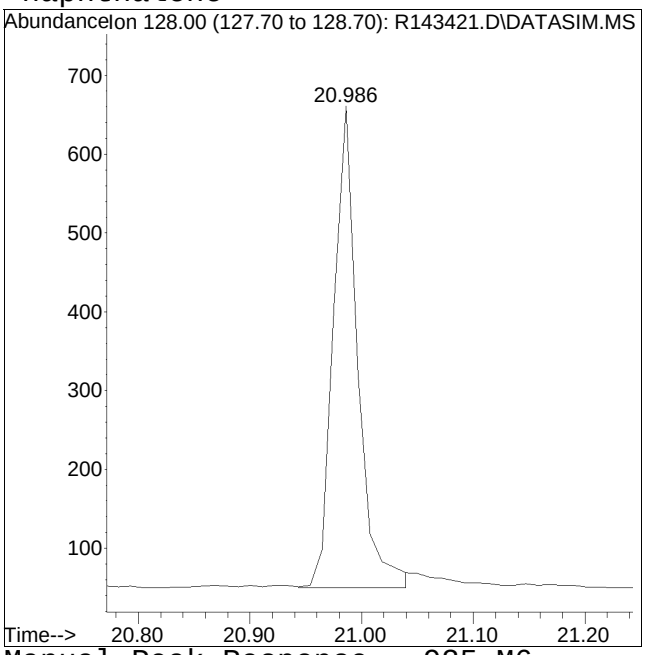
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #82: naphthalene



Original Peak Response = 965



Manual Peak Response = 925 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 14:06:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.202	49	125611	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		83.22%	
33) 1,4-difluorobenzene	12.420	114	316546	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		85.11%	
51) chlorobenzene-D5	16.843	54	63568	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		92.31%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	4805M4	0.379	ppbV	
4) chloromethane	4.380	50	4422	0.621	ppbV	97
5) Freon-114	4.528	85	296	0.016	ppbV #	89
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	4.883	54	101	0.018	ppbV #	66
8) bromomethane	5.260	94	98	0.014	ppbV #	55
9) chloroethane	5.516	64	105	0.029	ppbV #	53
13) trichlorofluoromethane	6.579	101	4222	0.241	ppbV	98
16) 1,1-dichloroethene	7.435		0	N.D.		
18) methylene chloride	7.595	49	7065M4	0.743	ppbV	
21) Freon 113	7.938	101	1175	0.080	ppbV	97
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.006		0	N.D.		
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008	61	538	0.040	ppbV	98
30) chloroform	10.362	83	1252	0.067	ppbV #	95
32) 1,2-dichloroethane	11.210	62	245	0.022	ppbV #	53
36) 1,1,1-trichloroethane	11.494	97	340	0.020	ppbV #	72
37) benzene	12.016	78	2311	0.087	ppbV #	92
38) carbon tetrachloride	12.182	117	1042	0.068	ppbV #	92
41) 1,2-dichloropropane	12.948	63	78	0.007	ppbV #	58
42) bromodichloromethane	13.166	83	181	0.010	ppbV #	81
44) trichloroethene	13.218	130	191M4	0.014	ppbV	
47) cis-1,3-dichloropropene	14.189		0	N.D.		
49) trans-1,3-dichloropropene	14.780		0	N.D.		
50) 1,1,2-trichloroethane	14.969		0	N.D.		
52) toluene	15.249	91	34278	0.940	ppbV	100
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 14:06:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

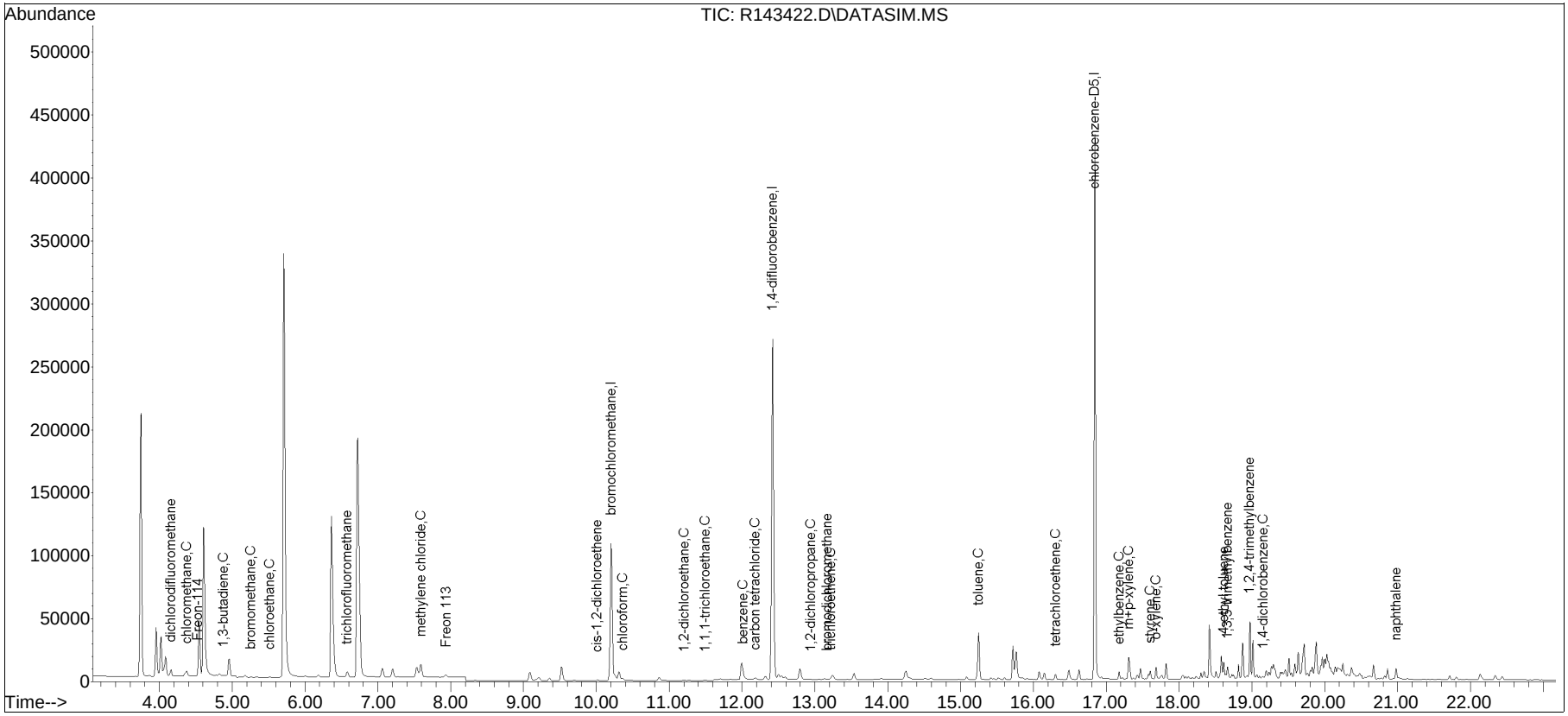
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,2-dibromoethane	15.900		0	N.D.	
57) tetrachloroethene	16.307	166	2164	0.119 ppbV	97
58) 1,1,1,2-tetrachloroethane	16.858		0	N.D.	
59) chlorobenzene	16.884		0	N.D.	
60) ethylbenzene	17.176	91	4719	0.100 ppbV	100
61) m+p-xylene	17.309	91	11869	0.327 ppbV	98
62) bromoform	17.398		0	N.D.	
63) styrene	17.605	104	3491	0.124 ppbV	99
64) 1,1,2,2-tetrachloroethane	17.664		0	N.D.	
65) o-xylene	17.686	91	4938	0.131 ppbV	97
71) 1,3,5-trimethylbenzene	18.665	105	4454	0.099 ppbV	98
73) 1,2,4-trimethylbenzene	18.971	105	15098	0.340 ppbV #	68
75) 1,3-dichlorobenzene	19.109		0	N.D.	
76) 1,4-dichlorobenzene	19.156	146	292	0.008 ppbV #	55
79) 1,2-dichlorobenzene	19.418		0	N.D.	
81) 1,2,4-trichlorobenzene	20.861		0	N.D.	
82) naphthalene	20.979	128	10299M6	0.184 ppbV	
84) hexachlorobutadiene	21.290		0	N.D.	

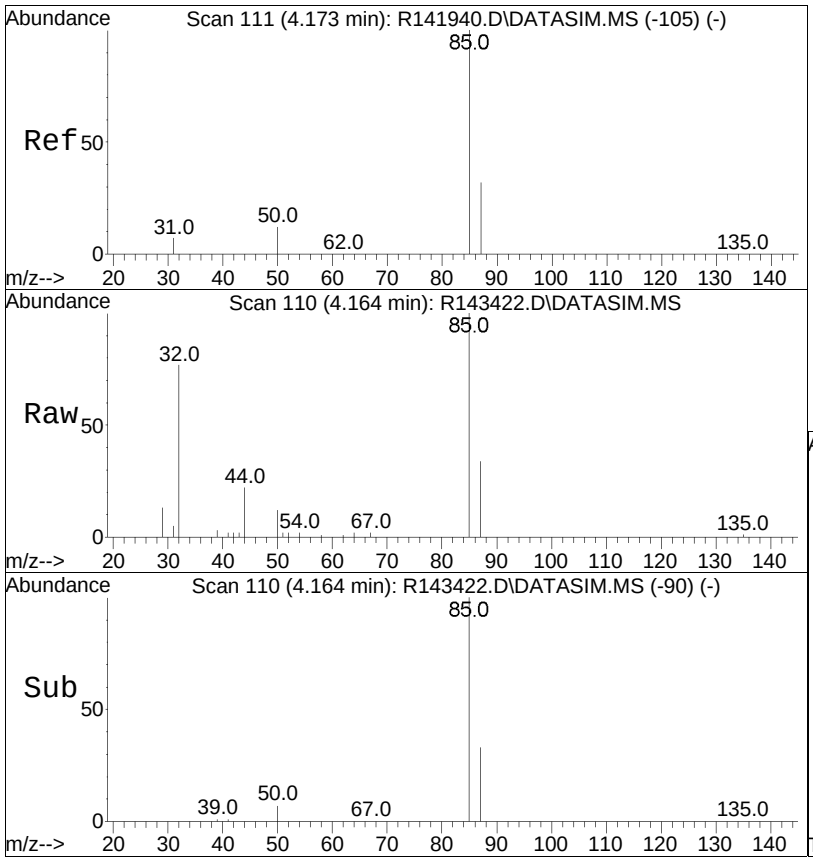
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 14:06:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

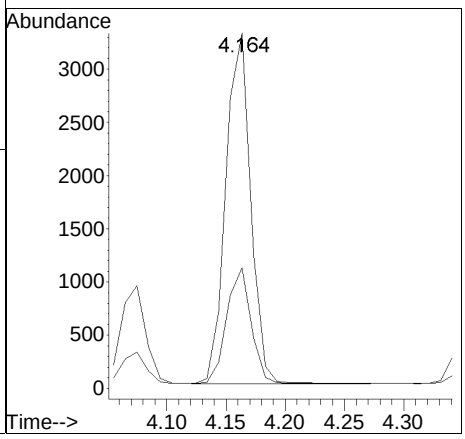


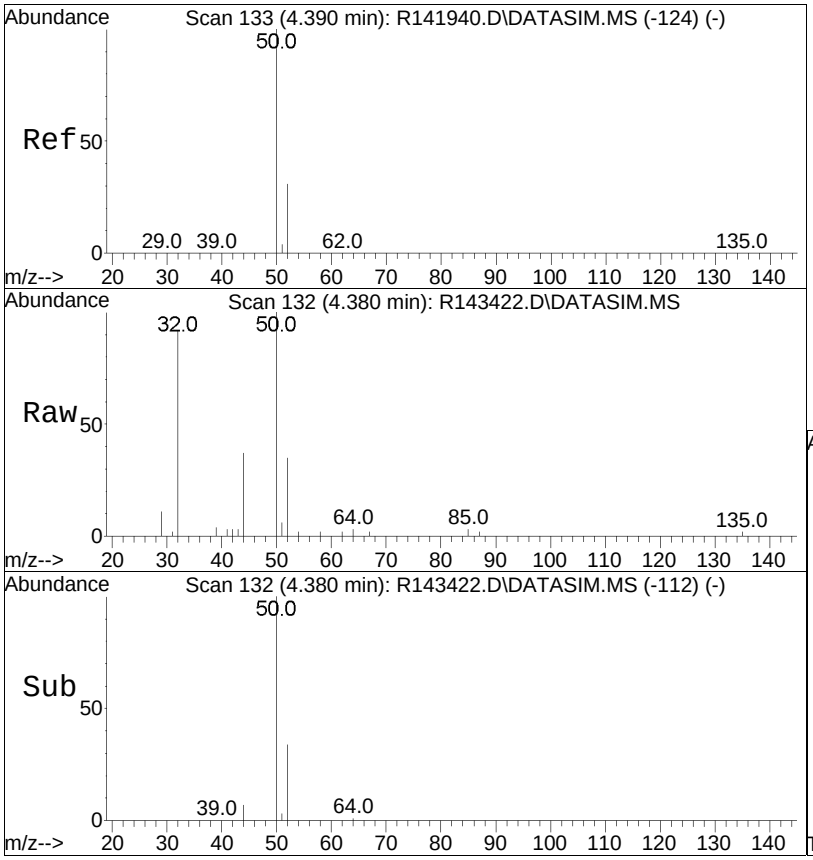


#3
dichlorodifluoromethane
Concen: 0.38 ppbV m
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 85 Resp: 4805

Ion	Ratio	Lower	Upper
85	100		
87	34.0	26.0	39.0

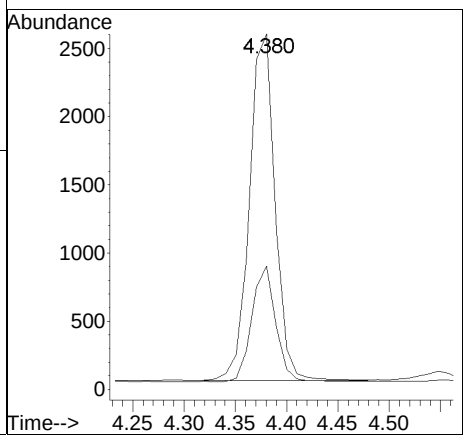


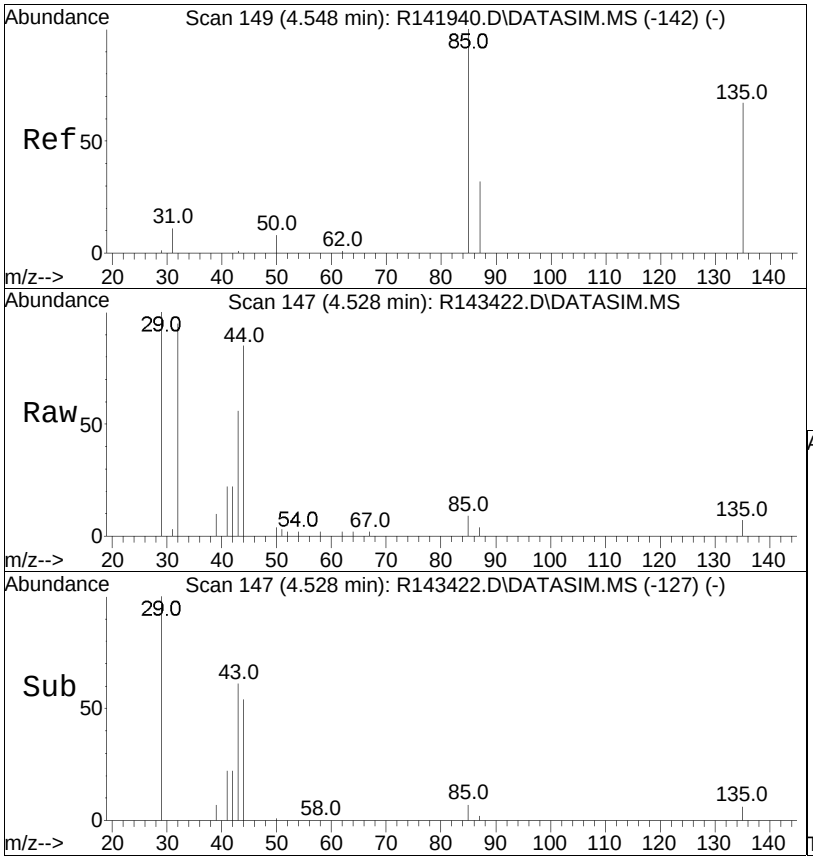


#4
chloromethane
Concen: 0.62 ppbV
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 50 Resp: 4422

Ion	Ratio	Lower	Upper
50	100		
52	34.7	26.2	39.4

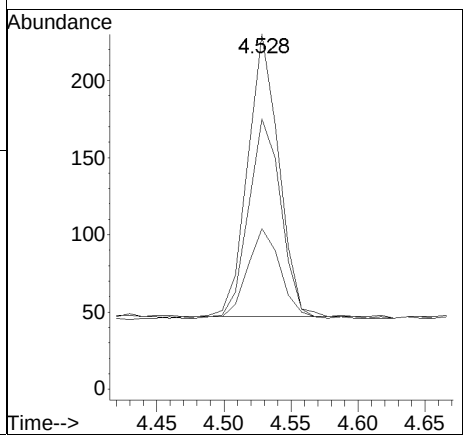


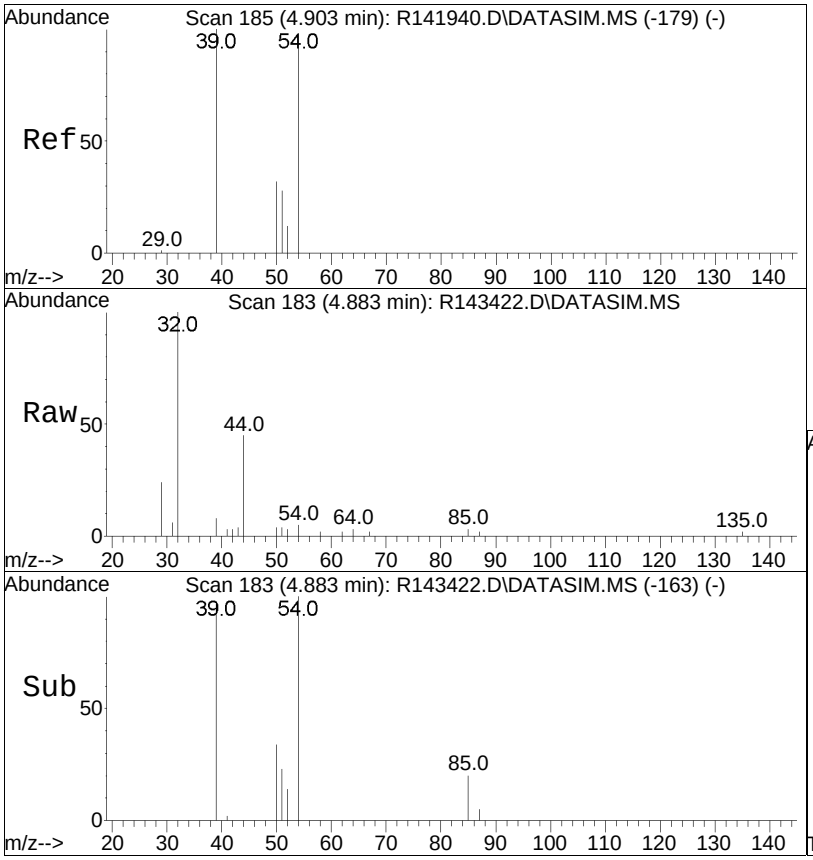


#5
Freon-114
Concen: 0.02 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 85 Resp: 296

Ion	Ratio	Lower	Upper
85	100		
87	45.2	25.4	38.0#
135	76.1	57.0	85.6

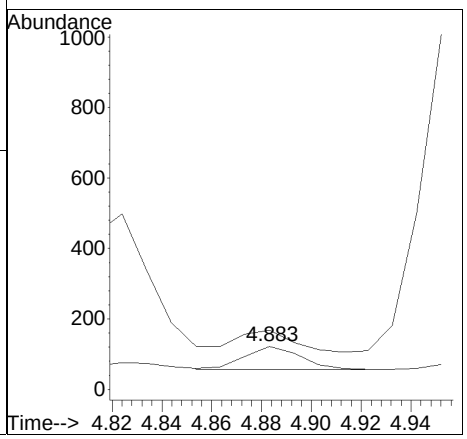


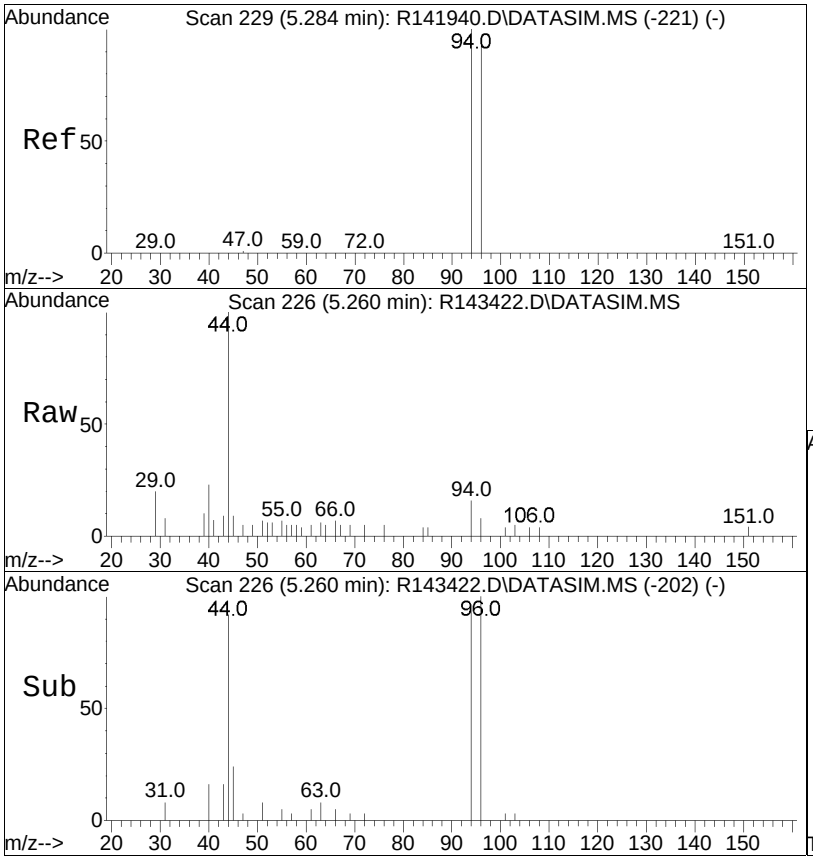


#7
1,3-butadiene
Concen: 0.02 ppbV
RT: 4.883 min Scan# 183
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 54 Resp: 101

Ion	Ratio	Lower	Upper
54	100		
39	137.7	82.6	124.0#

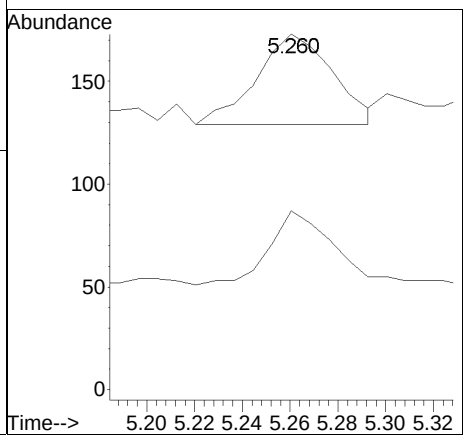


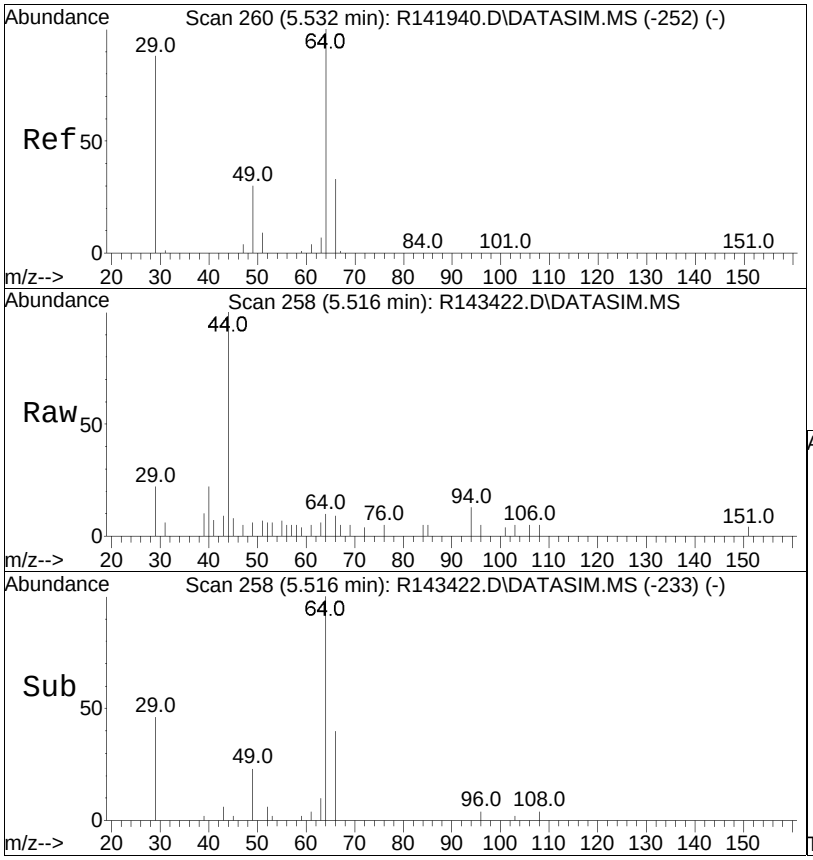


#8
bromomethane
Concen: 0.01 ppbV
RT: 5.260 min Scan# 226
Delta R.T. -0.008 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 94 Resp: 98

Ion	Ratio	Lower	Upper
94	100		
96	50.3	74.9	112.3#

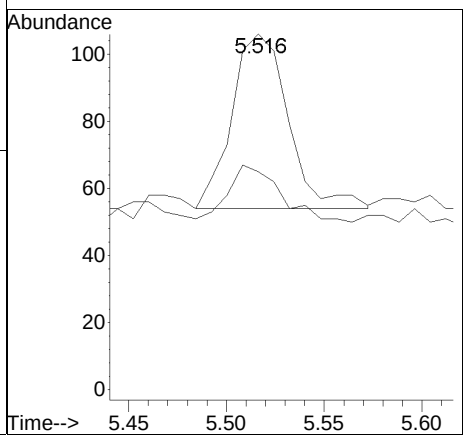


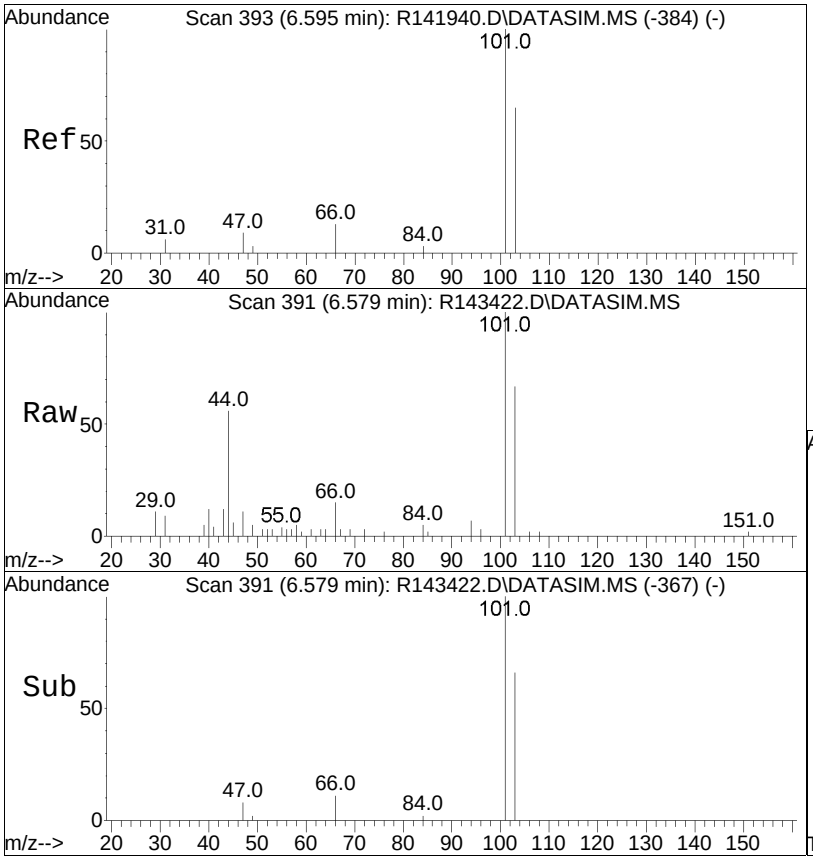


#9
chloroethane
Concen: 0.03 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 64 Resp: 105

Ion	Ratio	Lower	Upper
64	100		
49	61.3	27.4	41.0#

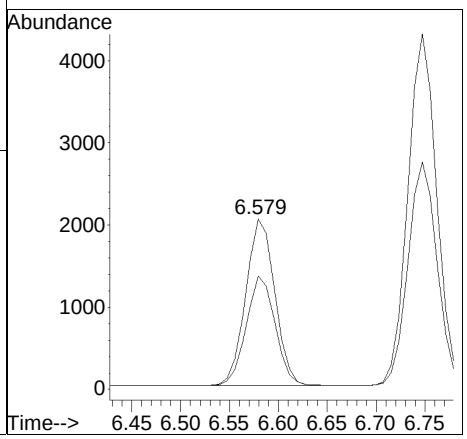


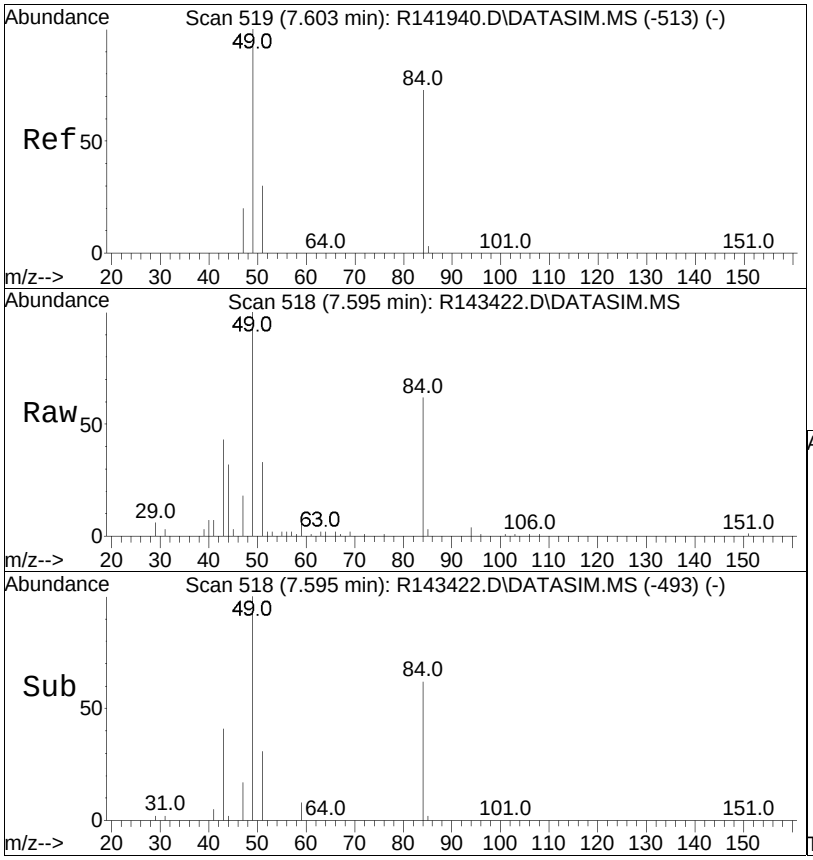


#13
trichlorofluoromethane
Concen: 0.24 ppbV
RT: 6.579 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:101 Resp: 4222

Ion	Ratio	Lower	Upper
101	100		
103	66.6	52.2	78.2

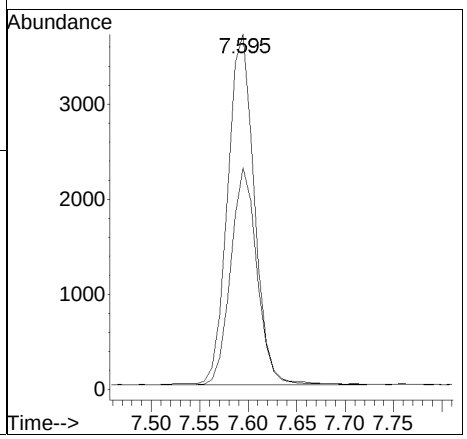


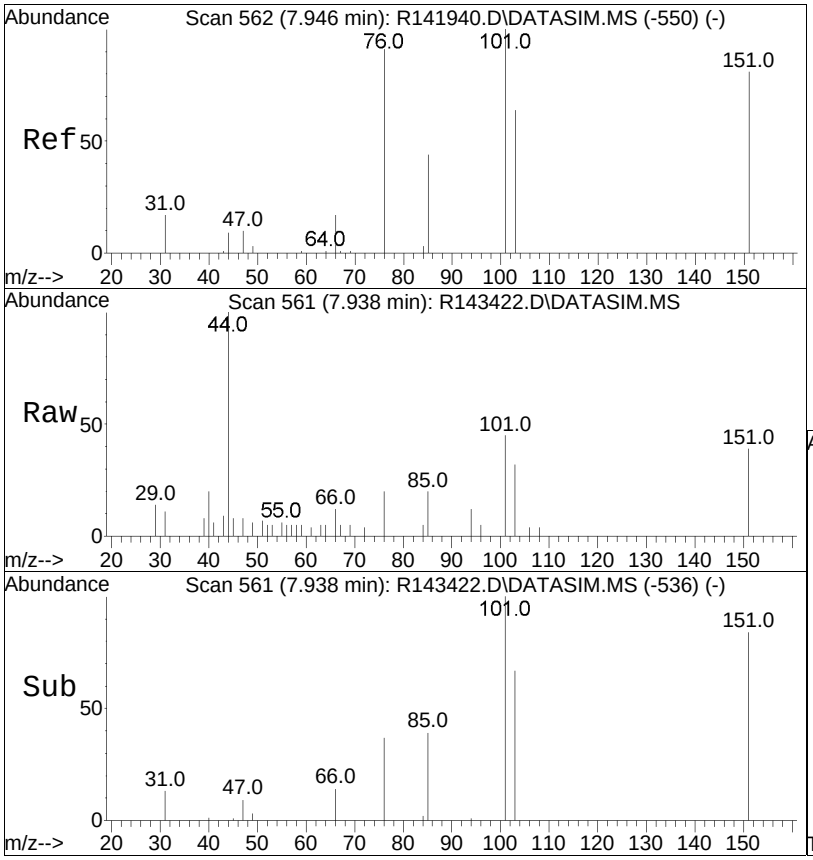


#18
methylene chloride
Concen: 0.74 ppbV m
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 49 Resp: 7065

Ion	Ratio	Lower	Upper
49	100		
84	62.4	50.8	76.2

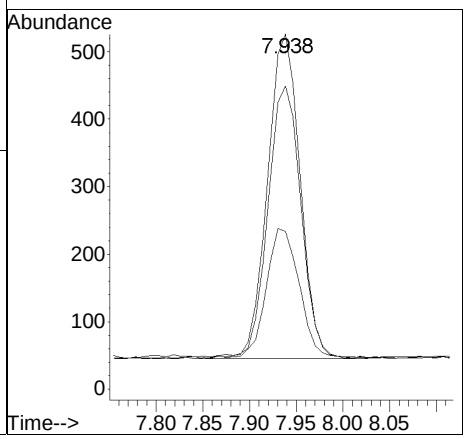


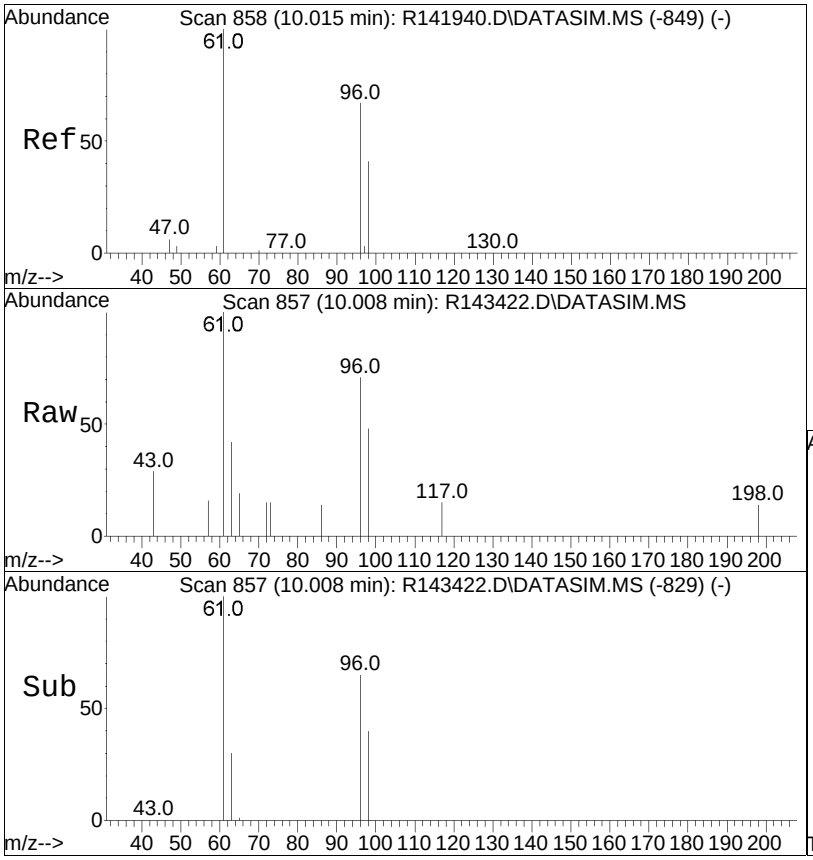


#21
Freon 113
Concen: 0.08 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:101 Resp: 1175

Ion	Ratio	Lower	Upper
101	100		
85	44.5	32.5	48.7
151	85.4	69.1	103.7

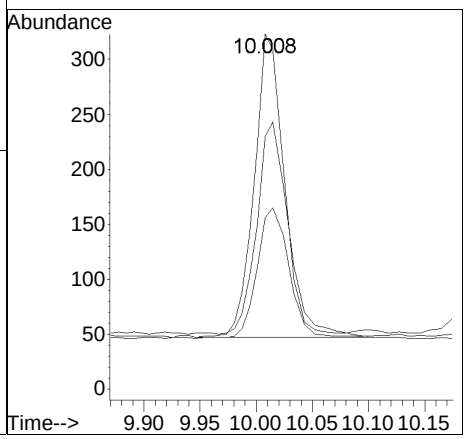


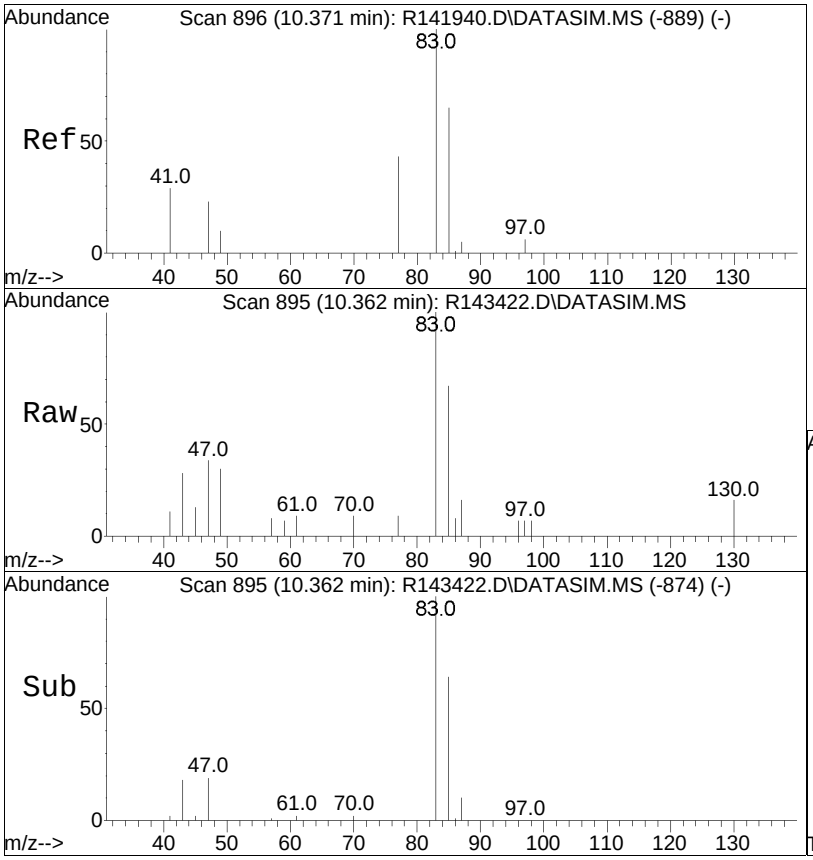


#28
cis-1,2-dichloroethene
Concen: 0.04 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 61 Resp: 538

Ion	Ratio	Lower	Upper
61	100		
96	71.2	57.8	86.8
98	48.3	36.9	55.3

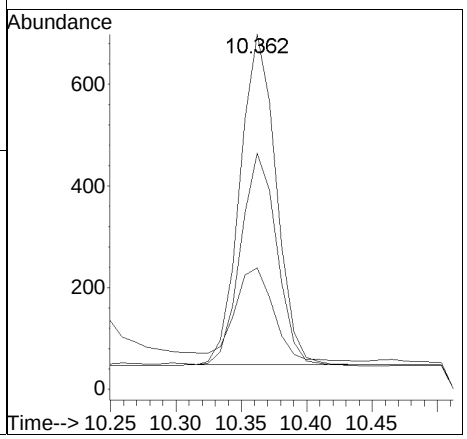


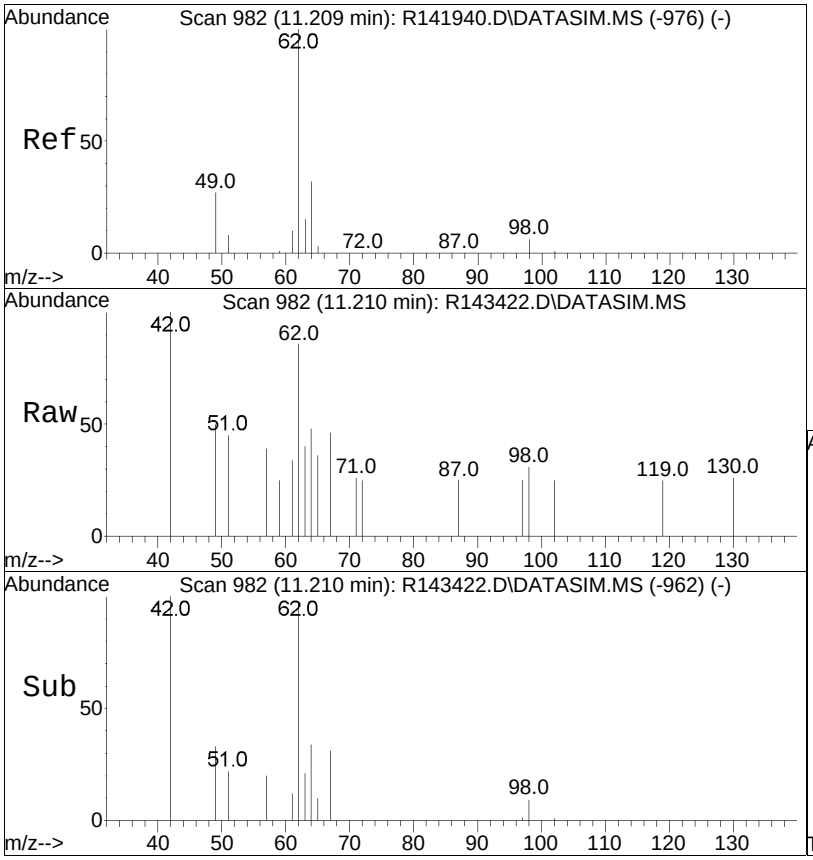


#30
chloroform
Concen: 0.07 ppbV
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 83 Resp: 1252

Ion	Ratio	Lower	Upper
83	100		
85	66.5	51.6	77.4
47	34.2	22.6	33.8#

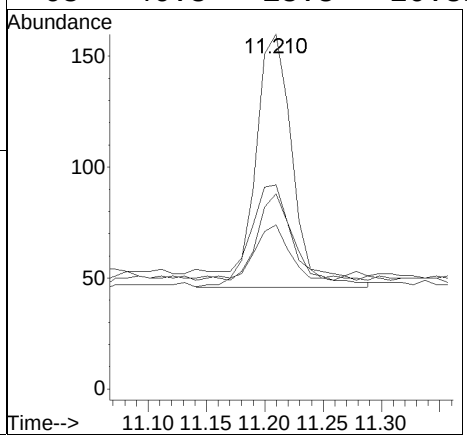


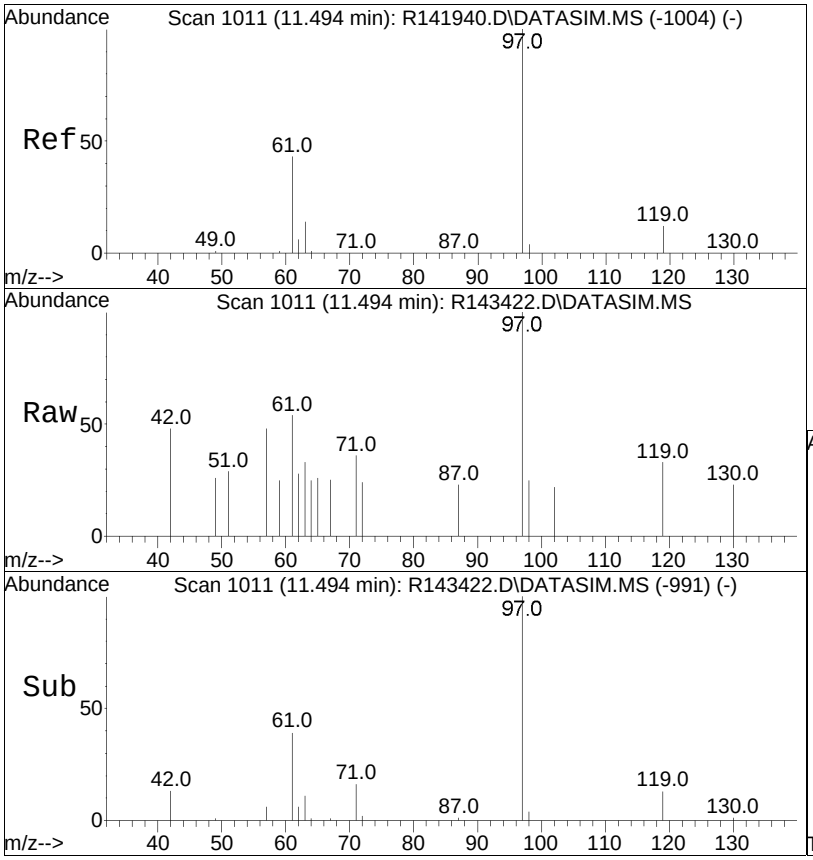


#32
1,2-dichloroethane
Concen: 0.02 ppbV
RT: 11.210 min Scan# 982
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 62 Resp: 245

Ion	Ratio	Lower	Upper
62	100		
64	55.0	26.2	39.4#
49	57.5	25.7	38.5#
63	46.3	13.8	20.8#

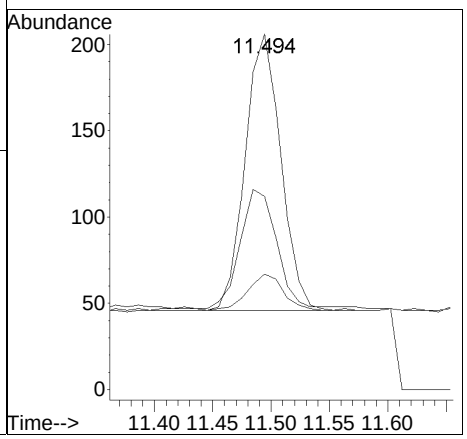


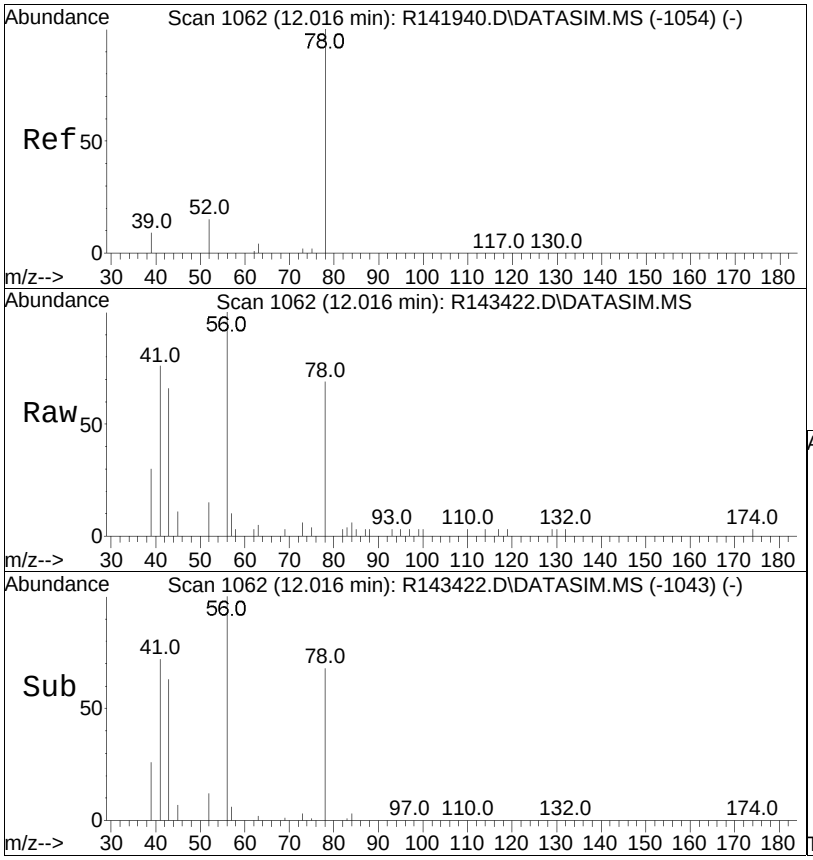


#36
1,1,1-trichloroethane
Concen: 0.02 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 97 Resp: 340

Ion	Ratio	Lower	Upper
97	100		
61	54.4	32.6	49.0#
119	32.5	11.0	16.4#

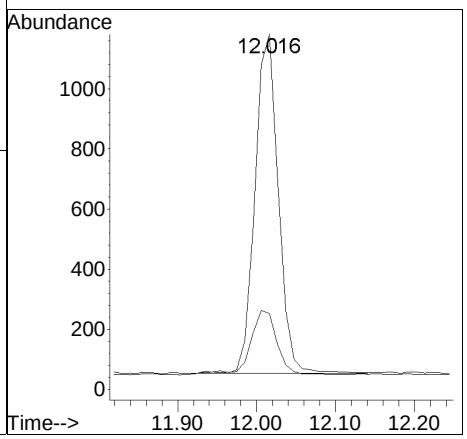


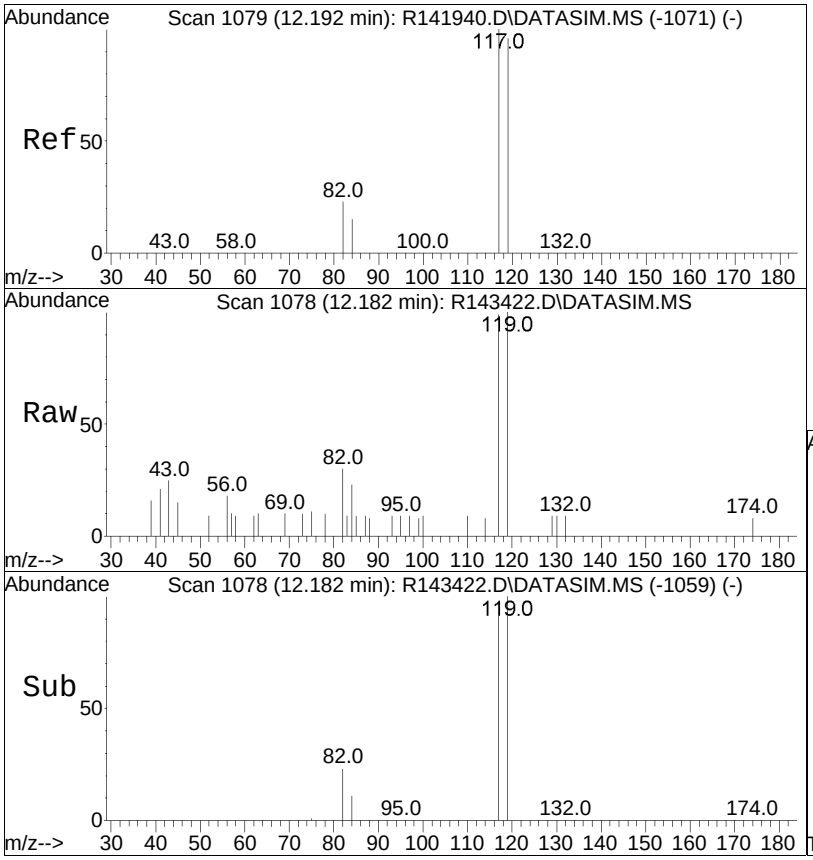


#37
benzene
Concen: 0.09 ppbV
RT: 12.016 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 78 Resp: 2311

Ion	Ratio	Lower	Upper
78	100		
52	21.4	14.2	21.2#

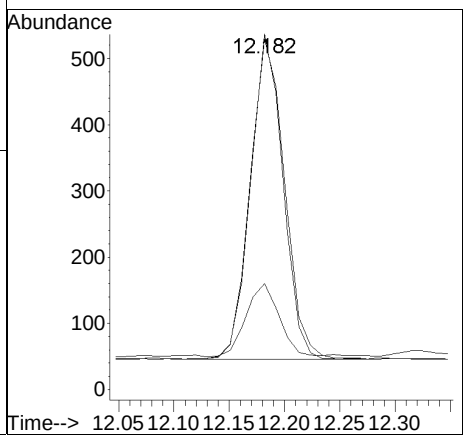


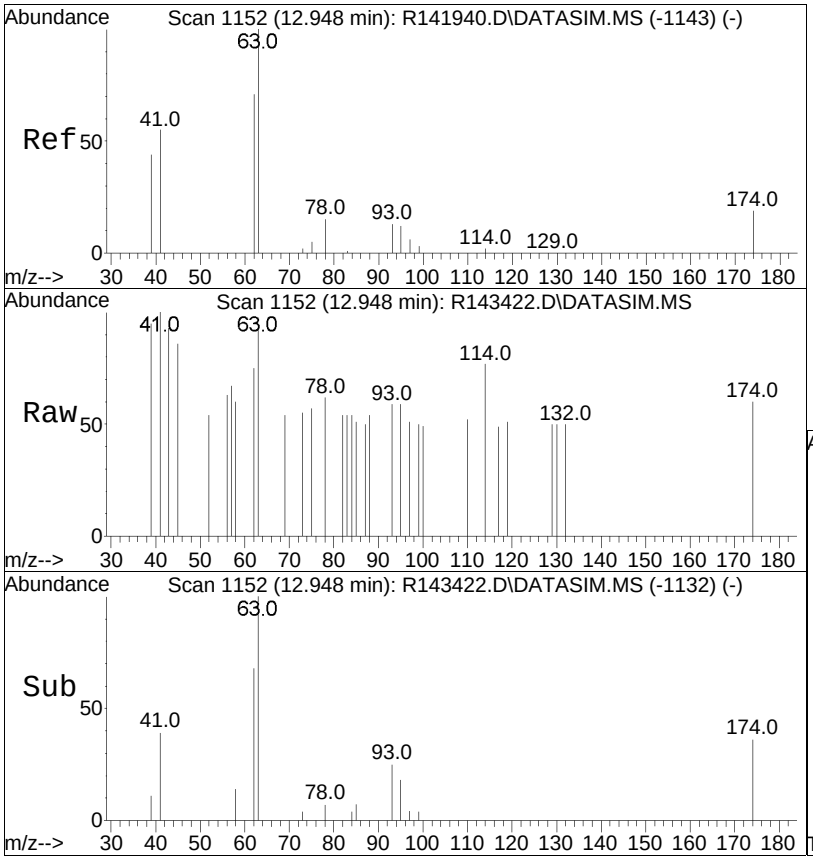


#38
carbon tetrachloride
Concen: 0.07 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:117 Resp: 1042

Ion	Ratio	Lower	Upper
117	100		
119	101.3	76.4	114.6
82	30.2	18.3	27.5#

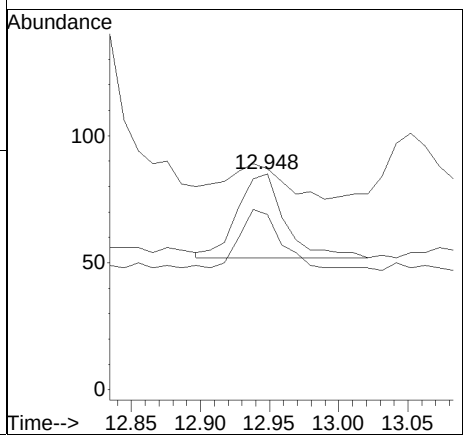


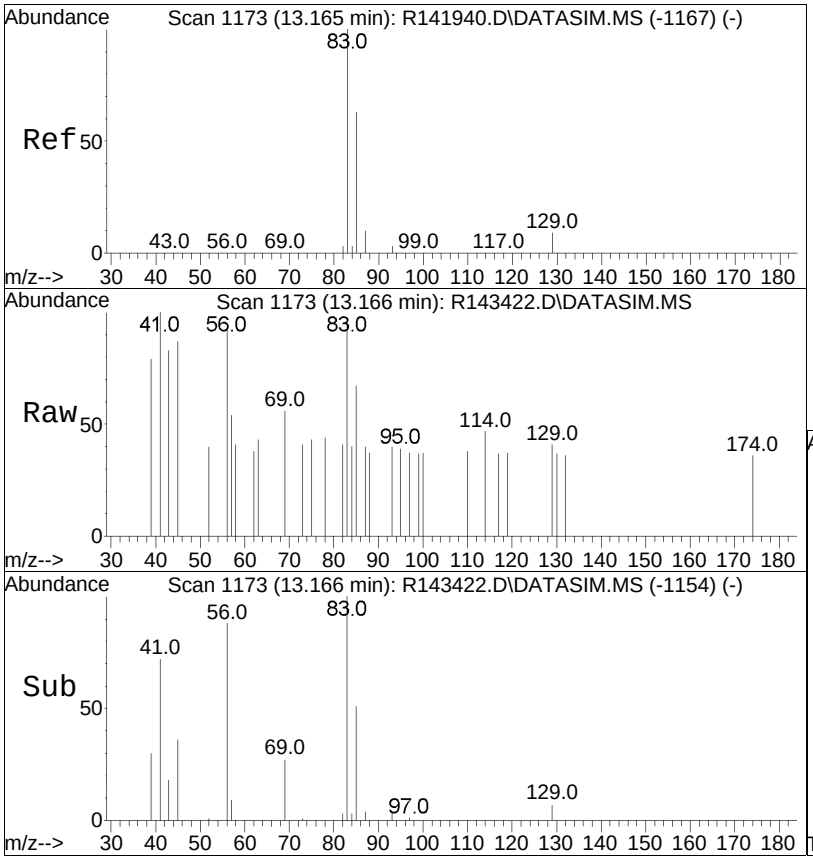


#41
1,2-dichloropropane
Concen: 0.01 ppbV
RT: 12.948 min Scan# 1152
Delta R.T. 0.010 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 63 Resp: 78

Ion	Ratio	Lower	Upper
63	100		
62	81.2	59.0	88.4
39	102.4	31.4	47.2#

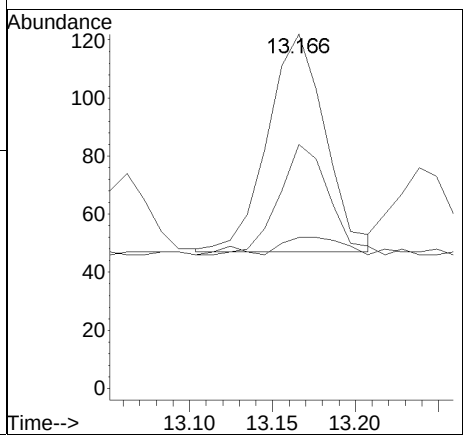


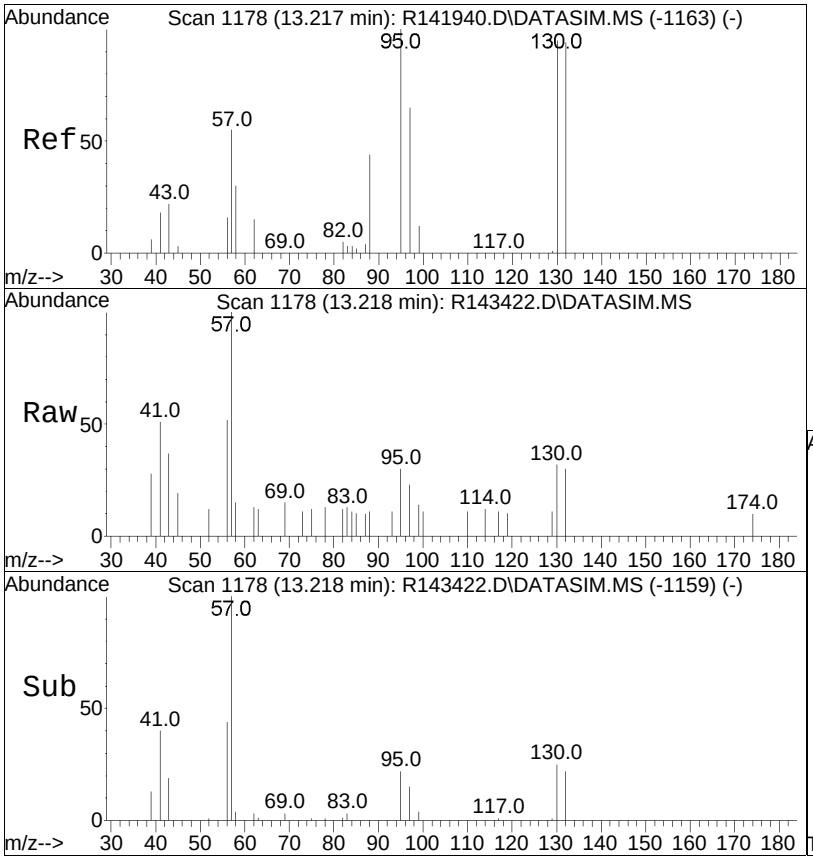


#42
bromodichloromethane
Concen: 0.01 ppbV
RT: 13.166 min Scan# 1173
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 83 Resp: 181

Ion	Ratio	Lower	Upper
83	100		
85	68.9	50.6	75.8
129	42.6	8.9	13.3#

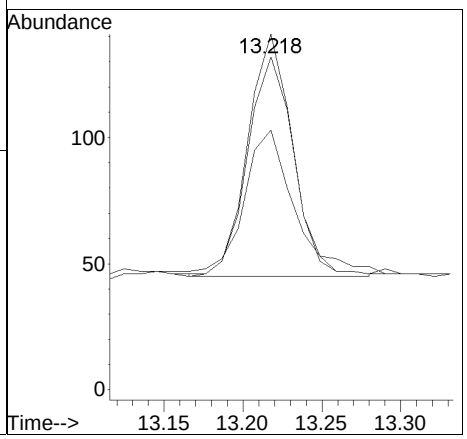


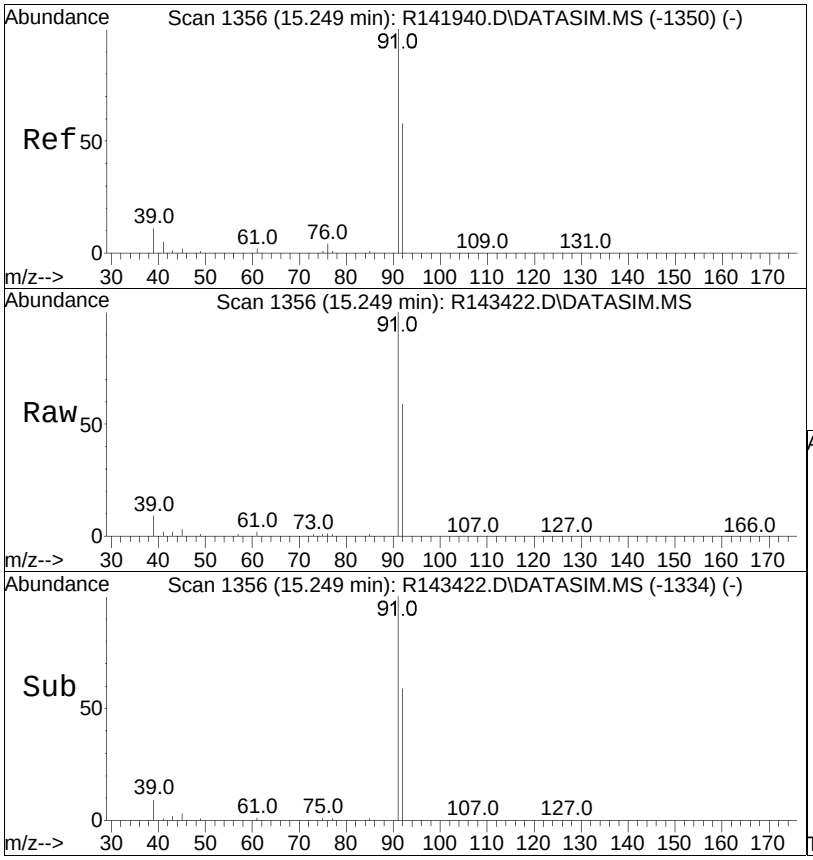


#44
trichloroethene
Concen: 0.01 ppbV m
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:130 Resp: 191

Ion	Ratio	Lower	Upper
130	100		
132	93.6	77.5	116.3
97	73.0	47.4	71.2#

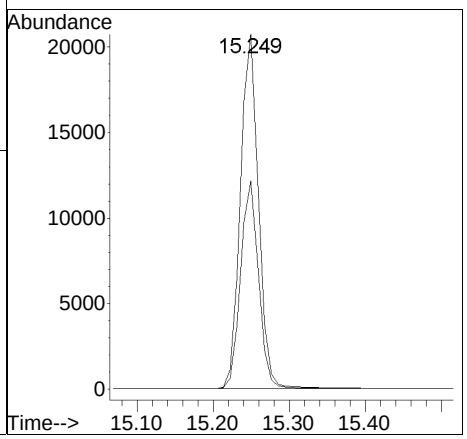


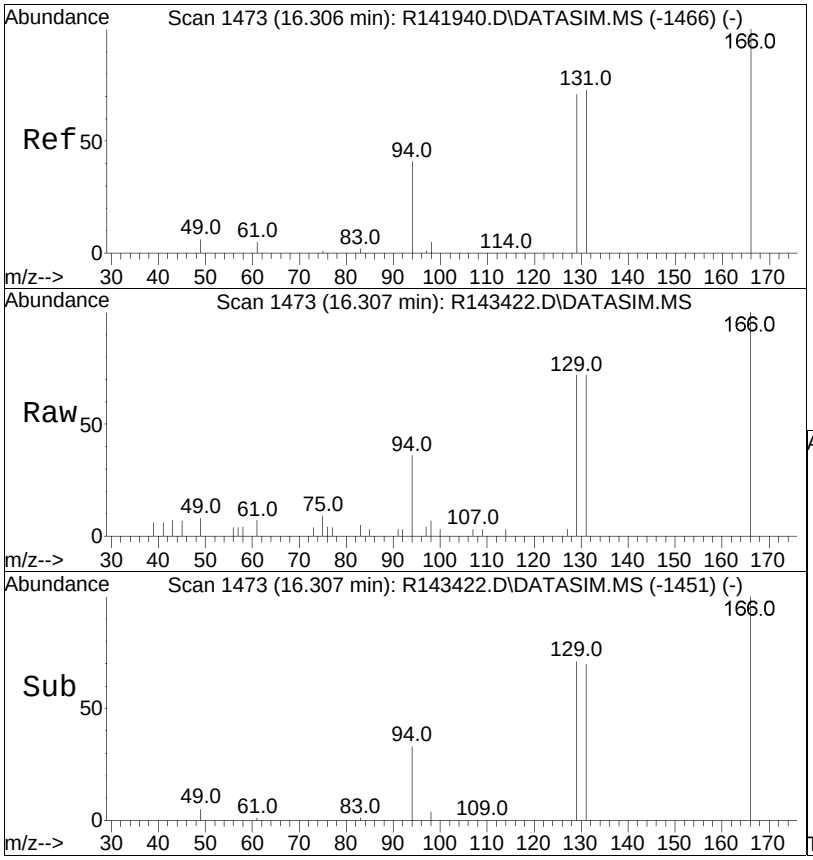


#52
toluene
Concen: 0.94 ppbV
RT: 15.249 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 34278

Ion	Ratio	Lower	Upper
91	100		
92	58.7	46.8	70.2

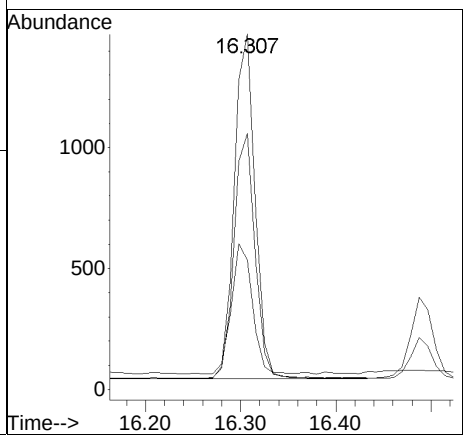


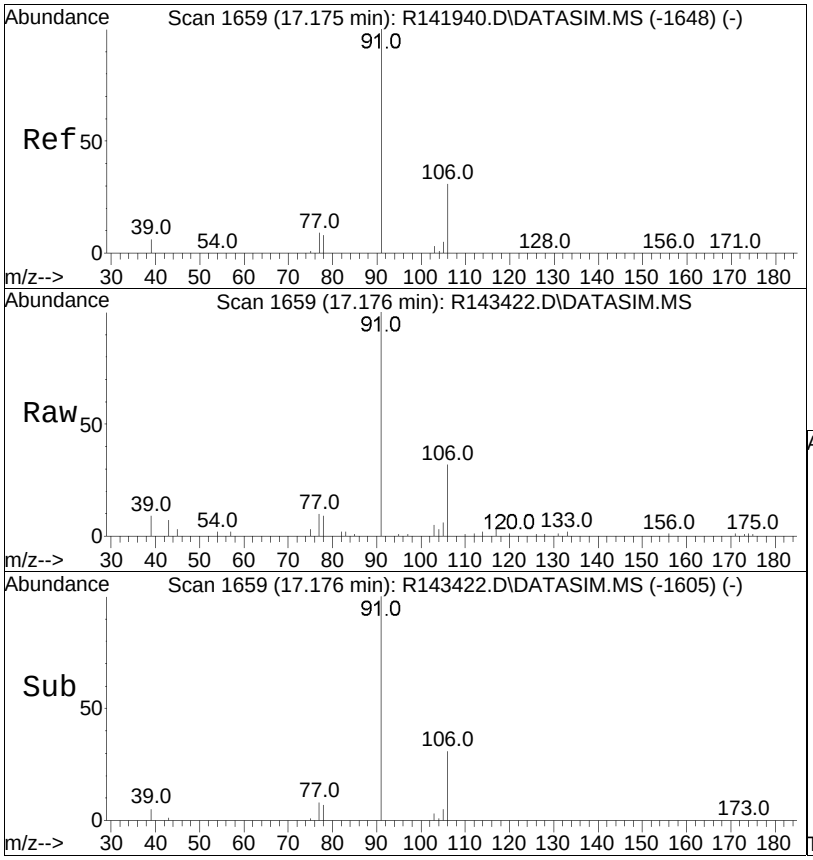


#57
tetrachloroethene
Concen: 0.12 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:166 Resp: 2164

Ion	Ratio	Lower	Upper
166	100		
131	72.0	57.0	85.4
94	36.4	26.2	39.4

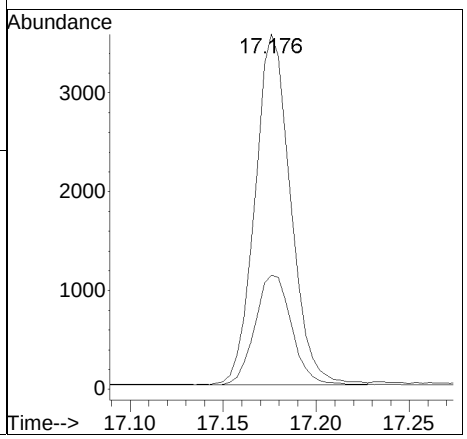


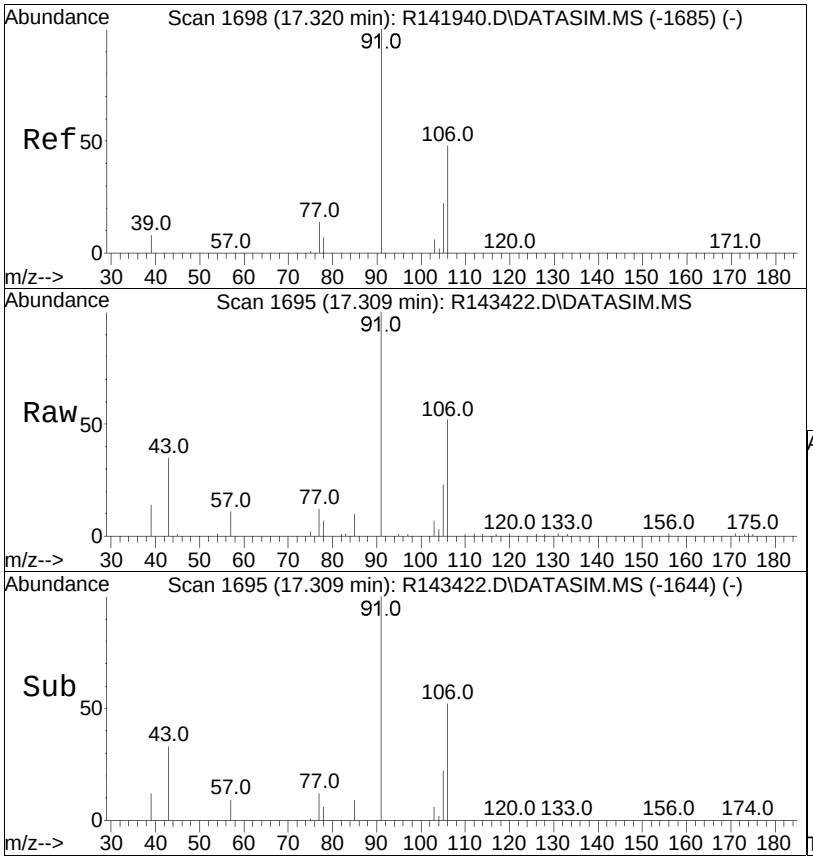


#60
ethylbenzene
Concen: 0.10 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 4719

Ion	Ratio	Lower	Upper
91	100		
106	32.1	25.8	38.8

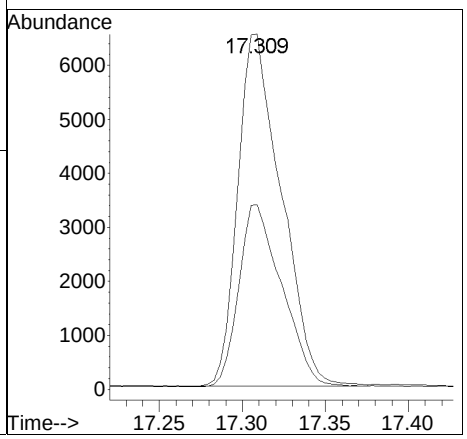


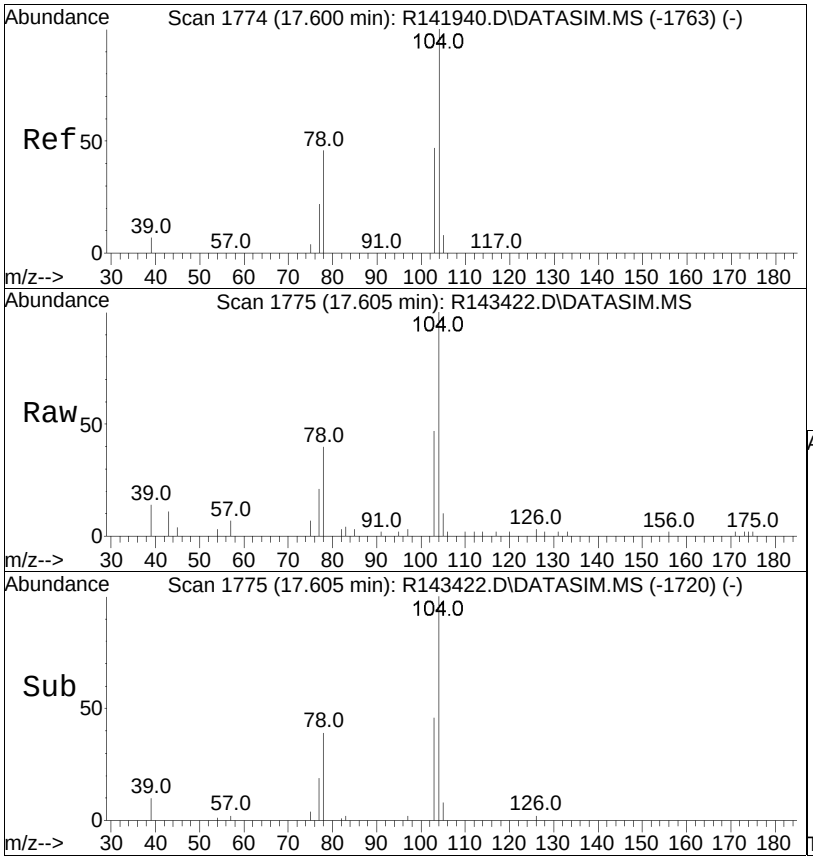


#61
m+p-xylene
Concen: 0.33 ppbV
RT: 17.309 min Scan# 1695
Delta R.T. -0.011 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 11869

Ion	Ratio	Lower	Upper
91	100		
106	52.0	40.6	61.0

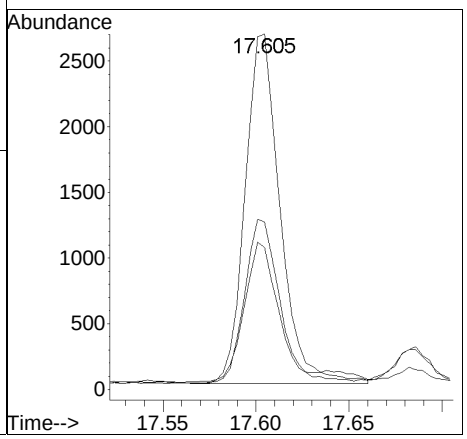


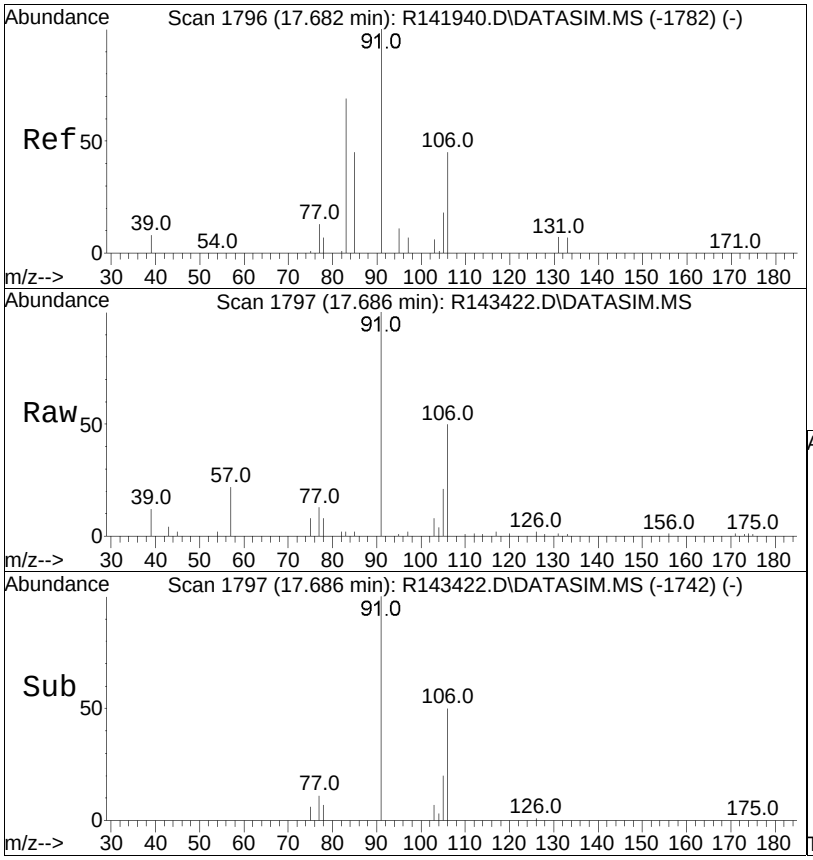


#63
styrene
Concen: 0.12 ppbV
RT: 17.605 min Scan# 1775
Delta R.T. 0.004 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:104 Resp: 3491

Ion	Ratio	Lower	Upper
104	100		
103	47.1	37.7	56.5
78	39.9	31.0	46.6

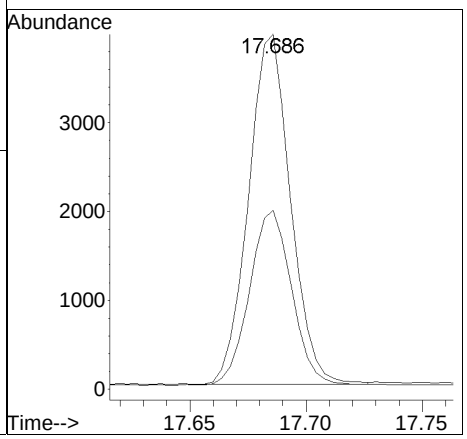


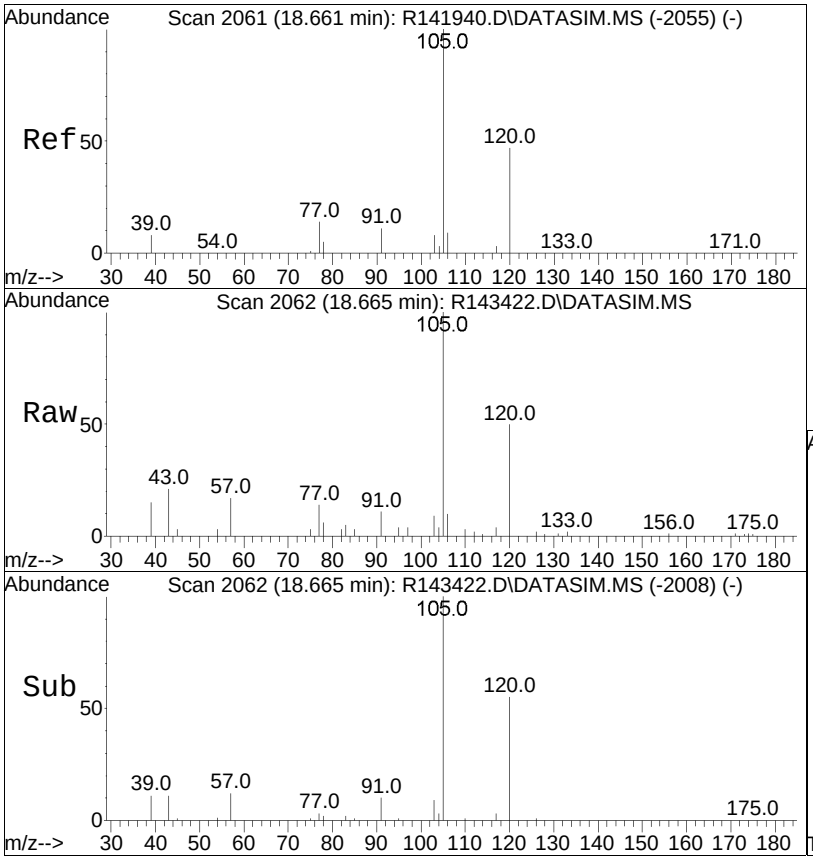


#65
o-xylene
Concen: 0.13 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 91 Resp: 4938

Ion	Ratio	Lower	Upper
91	100		
106	50.4	38.5	57.7

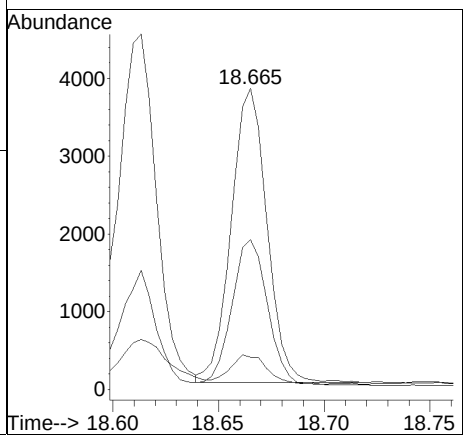


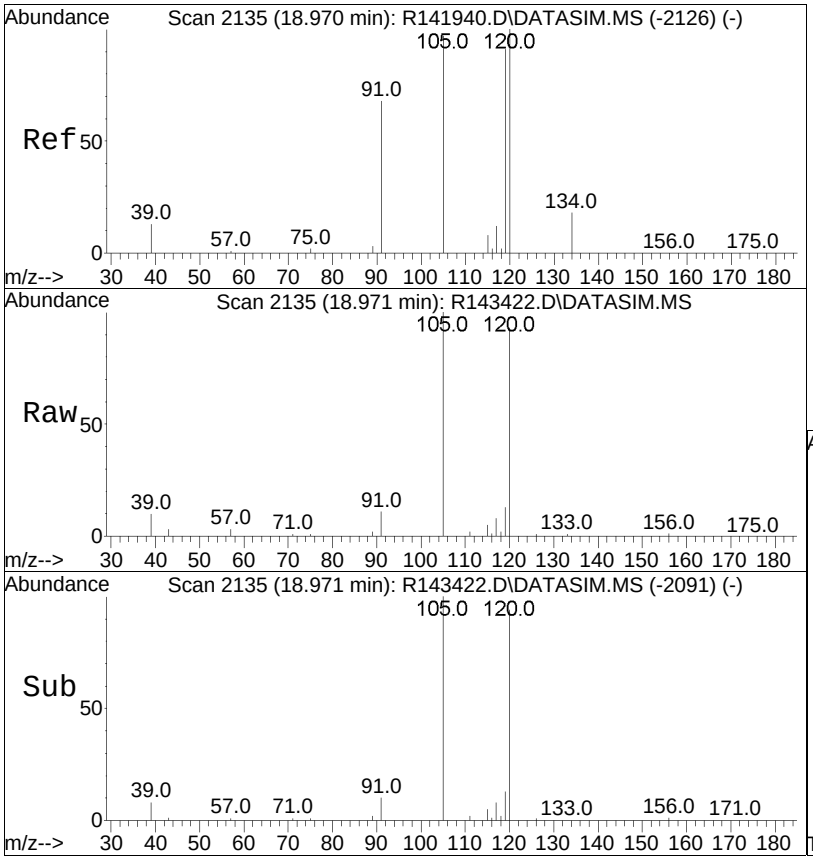


#71
1,3,5-trimethylbenzene
Concen: 0.10 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:105 Resp: 4454

Ion	Ratio	Lower	Upper
105	100		
120	49.8	40.9	61.3
91	10.7	7.8	11.6

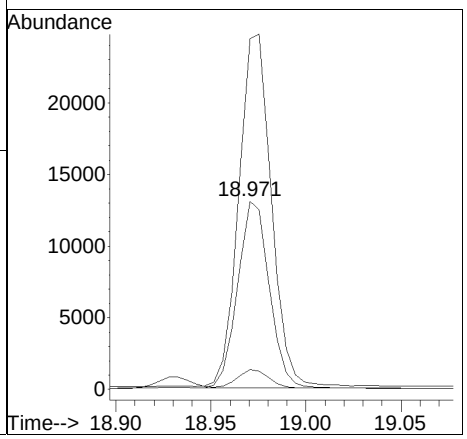


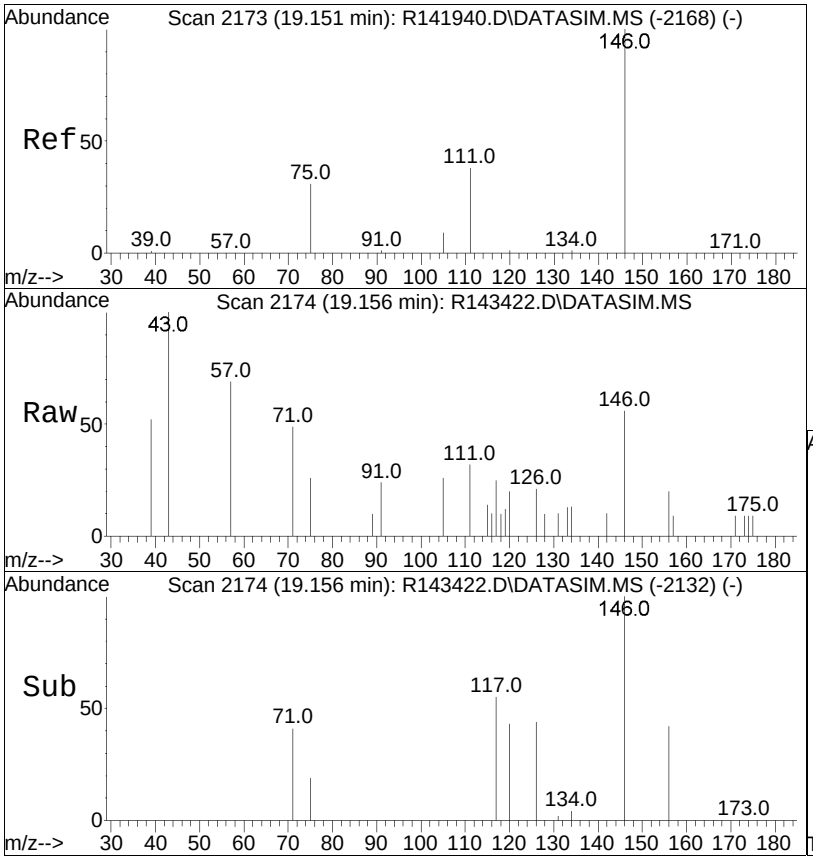


#73
1,2,4-trimethylbenzene
Concen: 0.34 ppbV
RT: 18.971 min Scan# 2135
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:105 Resp: 15098

Ion	Ratio	Lower	Upper
105	100		
120	186.5	174.7	262.1
91	10.6	55.2	82.8#

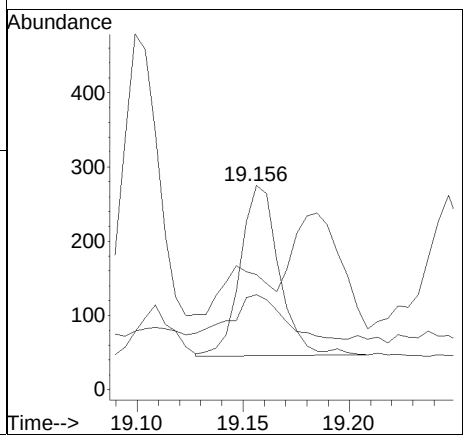


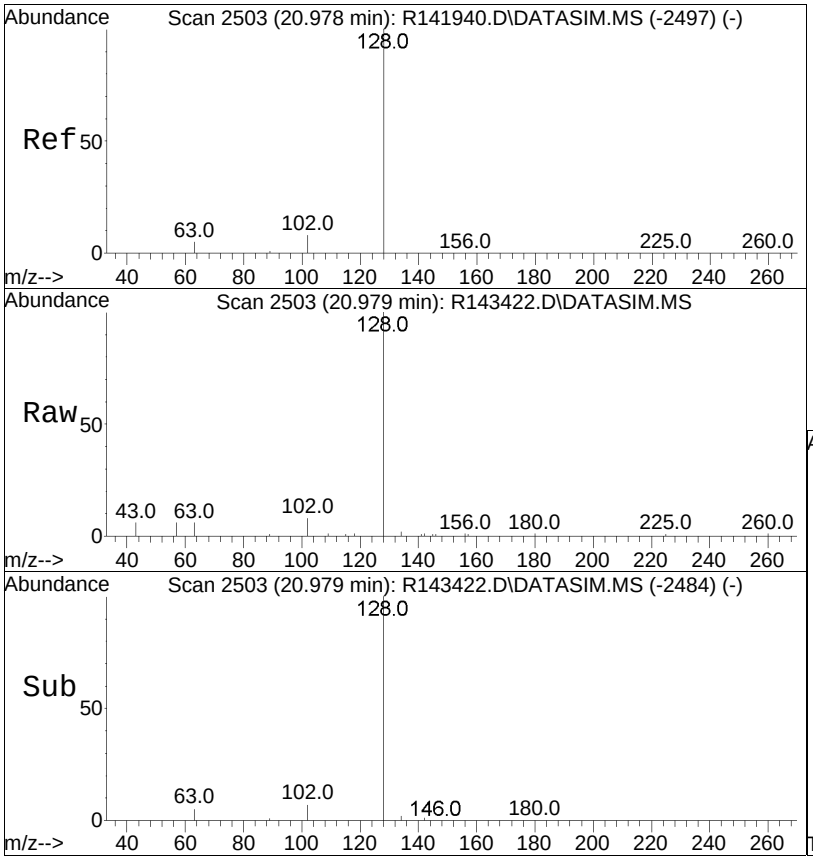


#76
1,4-dichlorobenzene
Concen: 0.01 ppbV
RT: 19.156 min Scan# 2174
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:146 Resp: 292

Ion	Ratio	Lower	Upper
146	100		
111	56.4	26.8	40.2#
75	46.5	17.5	26.3#

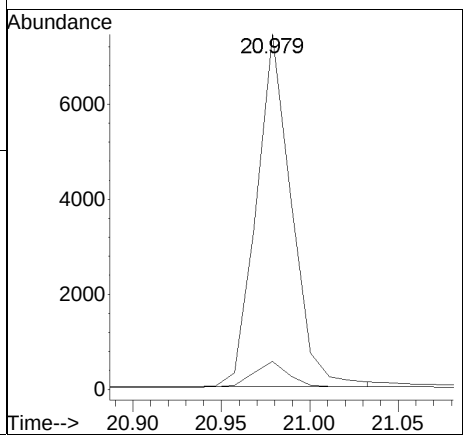




#82
naphthalene
Concen: 0.18 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:128 Resp: 10299

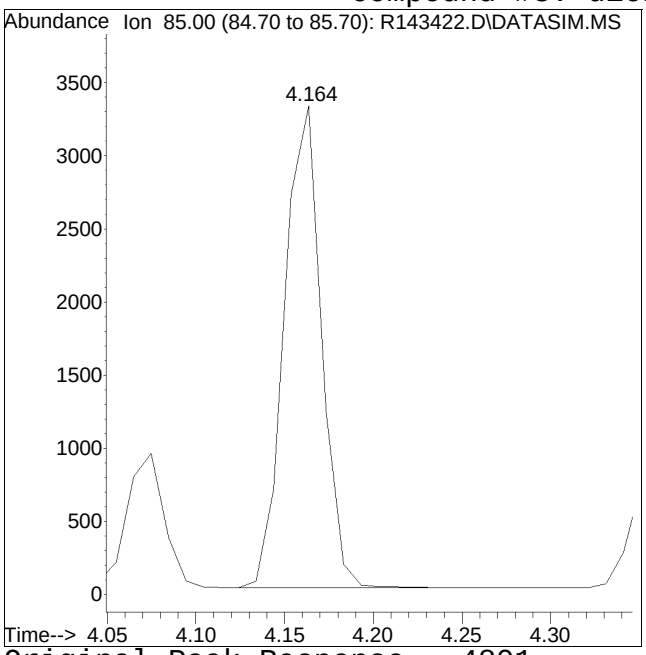
Ion	Ratio	Lower	Upper
128	100		
102	7.9	5.7	8.5



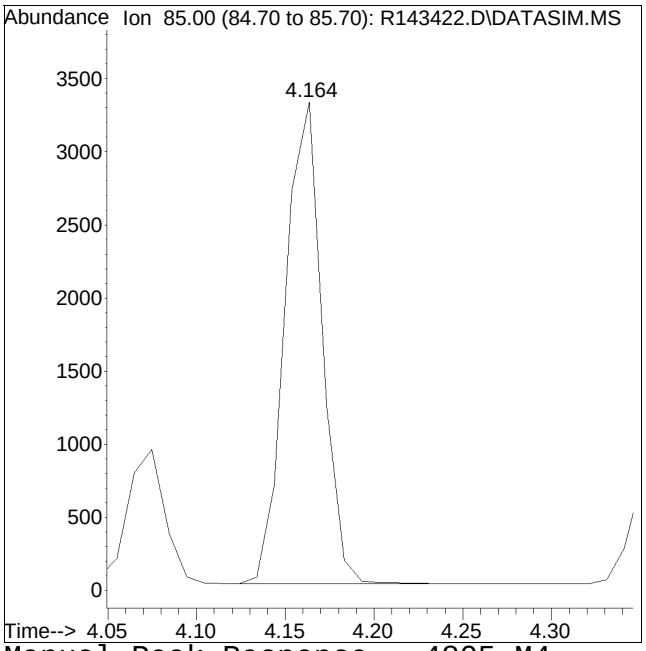
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #3: dichlorodifluoromethane



Original Peak Response = 4801



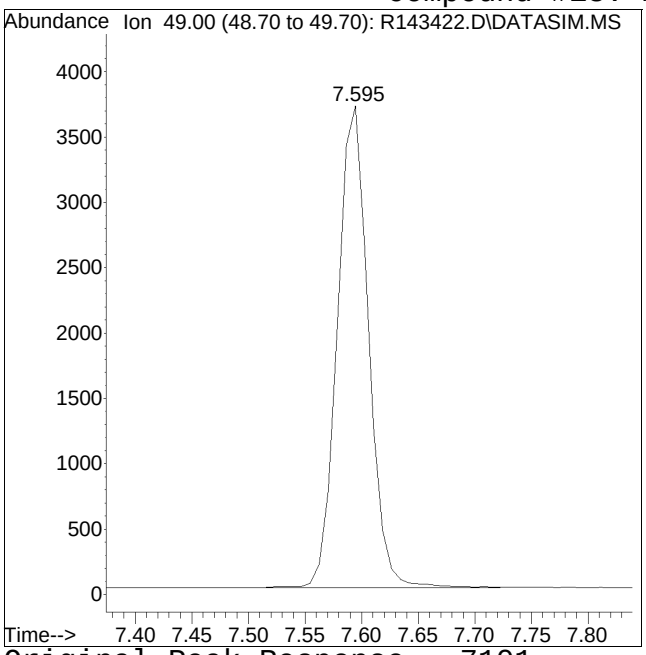
Manual Peak Response = 4805 M4

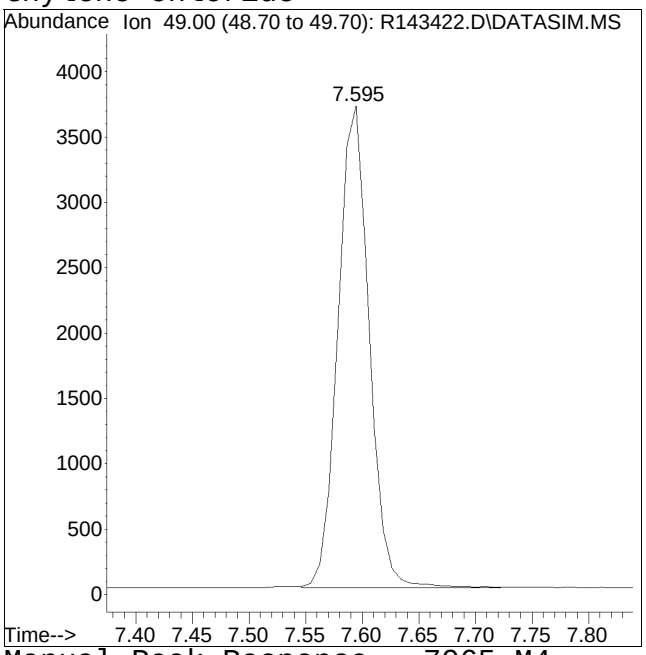
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #18: methylene chloride



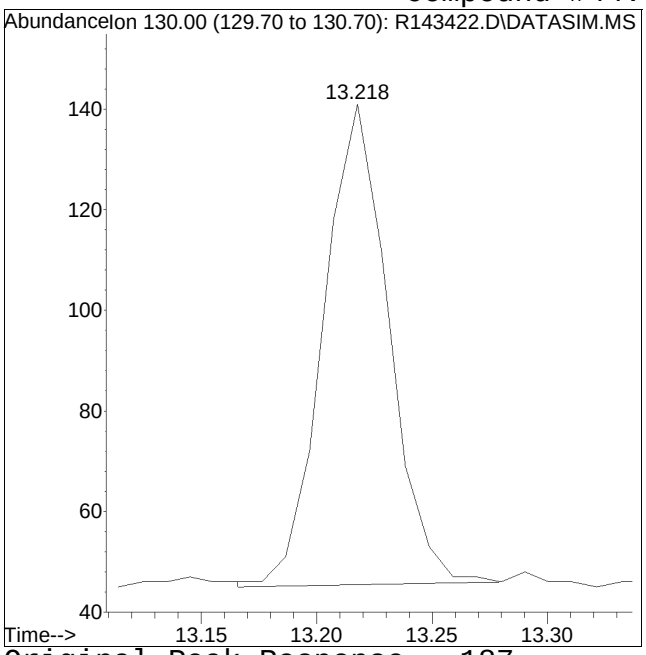


Original Peak Response = 7101 Manual Peak Response = 7065 M4
M4 = Poor automated baseline construction.

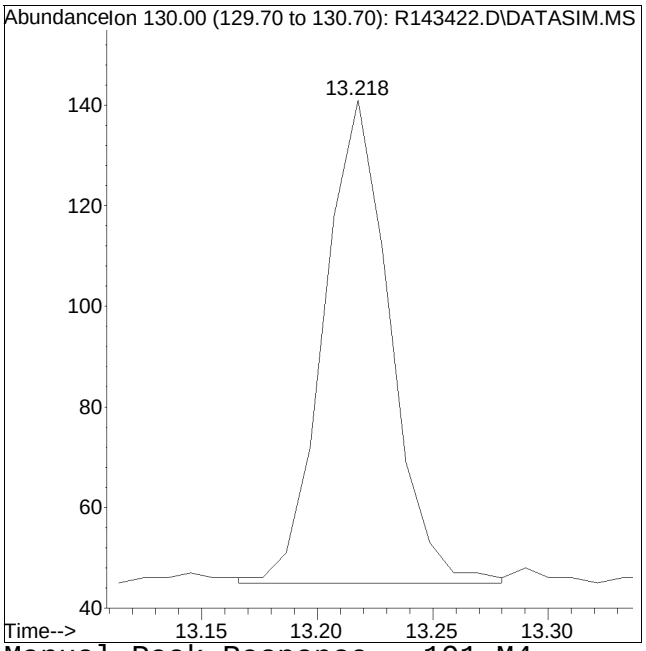
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #44: trichloroethene



Original Peak Response = 187



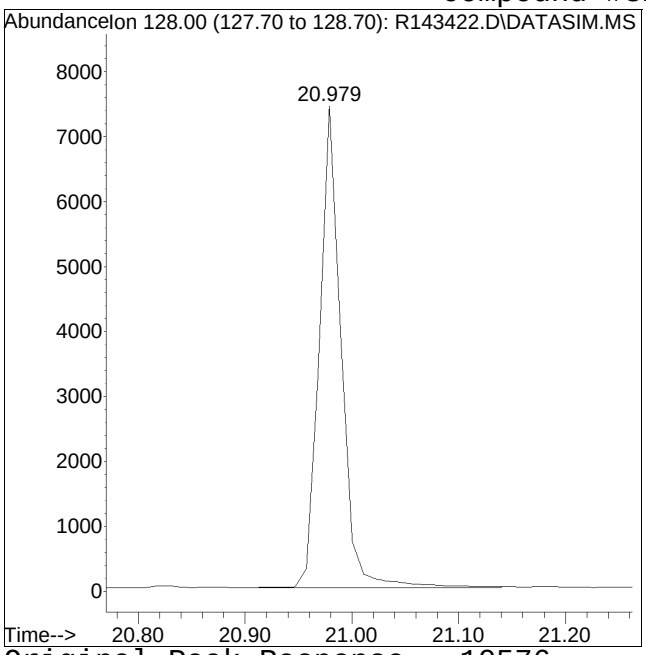
Manual Peak Response = 191 M4

M4 = Poor automated baseline construction.

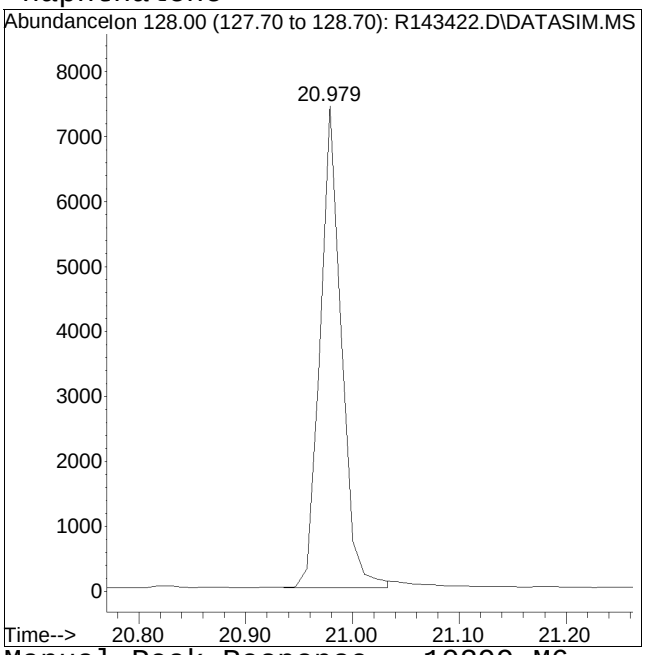
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 8:45 am

Compound #82: naphthalene



Original Peak Response = 10576



Manual Peak Response = 10299 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 14:08:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	133179	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		88.23%	
33) 1,4-difluorobenzene	12.420	114	330127	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		88.76%	
51) chlorobenzene-D5	16.843	54	63470	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		92.17%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	5048M4	0.375	ppbV	
4) chloromethane	4.381	50	4422	0.585	ppbV	97
5) Freon-114	4.528	85	293M4	0.015	ppbV	
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	4.883	54	104	0.018	ppbV #	76
8) bromomethane	5.269	94	99	0.014	ppbV #	53
9) chloroethane	5.516	64	113	0.030	ppbV #	55
13) trichlorofluoromethane	6.580	101	4328	0.233	ppbV	98
16) 1,1-dichloroethene	7.419		0	N.D.		
18) methylene chloride	7.595	49	8502M6	0.843	ppbV	
21) Freon 113	7.938	101	1414	0.091	ppbV	96
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.006		0	N.D.		
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008	61	558	0.039	ppbV	96
30) chloroform	10.362	83	1259	0.064	ppbV	95
32) 1,2-dichloroethane	11.210	62	242M4	0.021	ppbV	
36) 1,1,1-trichloroethane	11.494	97	325	0.018	ppbV #	69
37) benzene	12.016	78	2318	0.084	ppbV #	91
38) carbon tetrachloride	12.182	117	1034	0.065	ppbV #	97
41) 1,2-dichloropropane	12.938		0	N.D.		
42) bromodichloromethane	13.166	83	166	0.009	ppbV #	80
44) trichloroethene	13.218	130	201	0.015	ppbV #	90
47) cis-1,3-dichloropropene	14.205		0	N.D.		
49) trans-1,3-dichloropropene	14.789		0	N.D.		
50) 1,1,2-trichloroethane	14.933		0	N.D.		
52) toluene	15.250	91	28115	0.773	ppbV	100
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 14:08:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

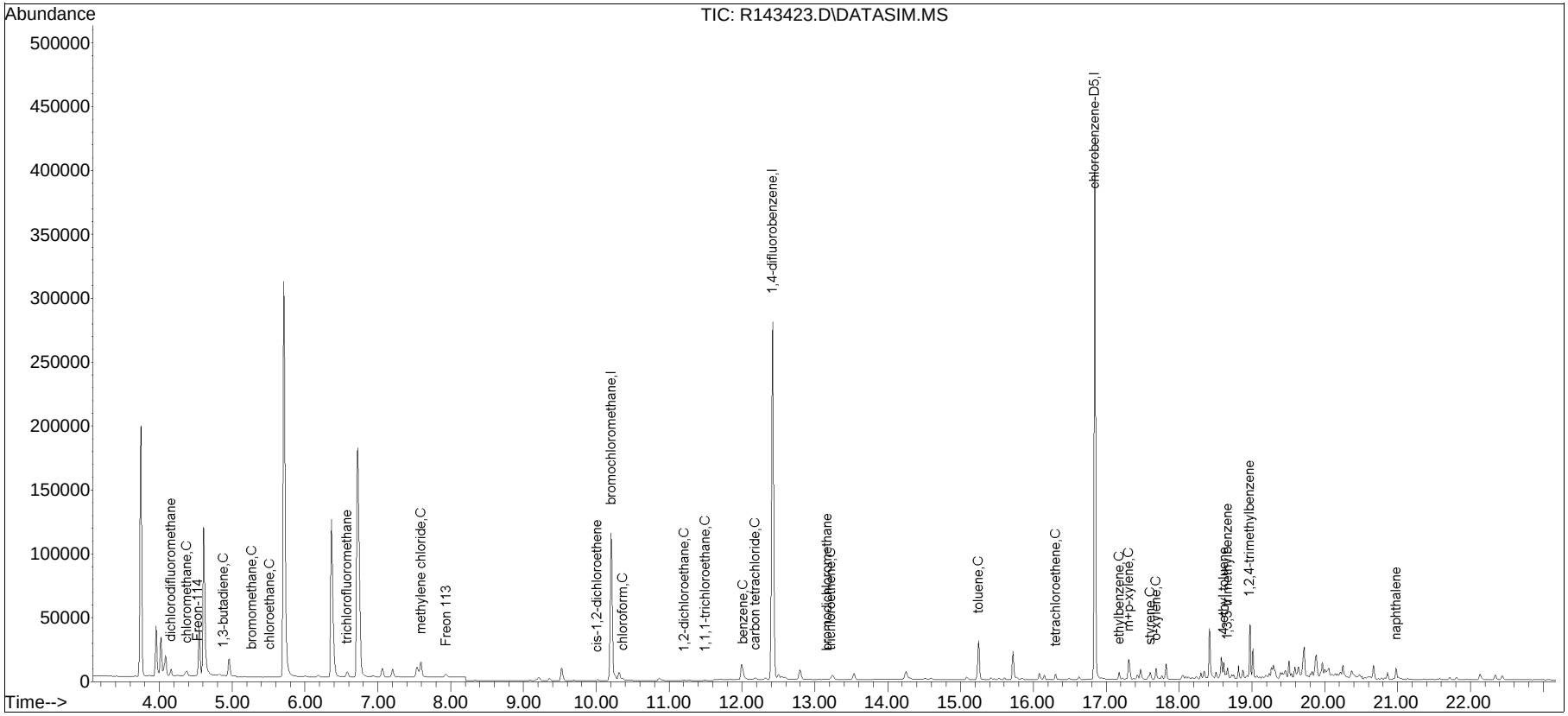
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,2-dibromoethane	15.846		0	N.D.	
57) tetrachloroethene	16.307	166	2181	0.120 ppbV	97
58) 1,1,1,2-tetrachloroethane	16.873		0	N.D.	
59) chlorobenzene	16.888		0	N.D.	
60) ethylbenzene	17.176	91	4442	0.095 ppbV	100
61) m+p-xylene	17.309	91	11218	0.309 ppbV	98
62) bromoform	17.398		0	N.D.	
63) styrene	17.605	104	2936	0.104 ppbV	98
64) 1,1,2,2-tetrachloroethane	17.675		0	N.D.	
65) o-xylene	17.682	91	4710	0.126 ppbV	97
71) 1,3,5-trimethylbenzene	18.665	105	4184	0.093 ppbV	97
73) 1,2,4-trimethylbenzene	18.971	105	14428	0.325 ppbV #	67
75) 1,3-dichlorobenzene	19.104		0	N.D.	
76) 1,4-dichlorobenzene	19.156		0	N.D.	
79) 1,2-dichlorobenzene	19.423		0	N.D.	
81) 1,2,4-trichlorobenzene	20.861		0	N.D.	
82) naphthalene	20.979	128	10548M6	0.189 ppbV	
84) hexachlorobutadiene	21.290		0	N.D.	

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

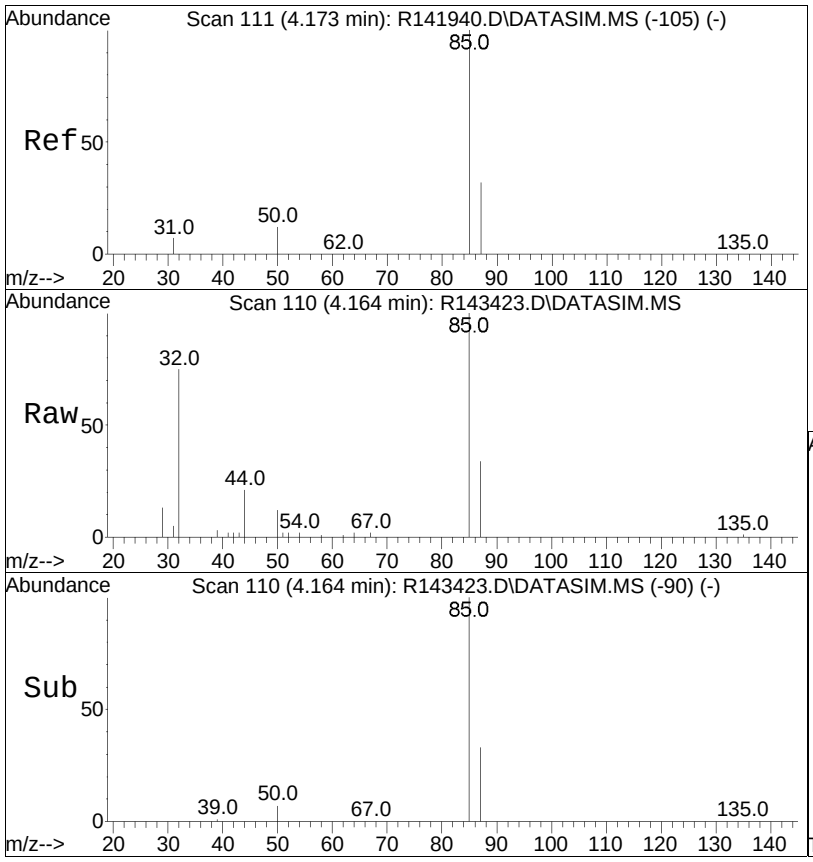
Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 14:08:45 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration



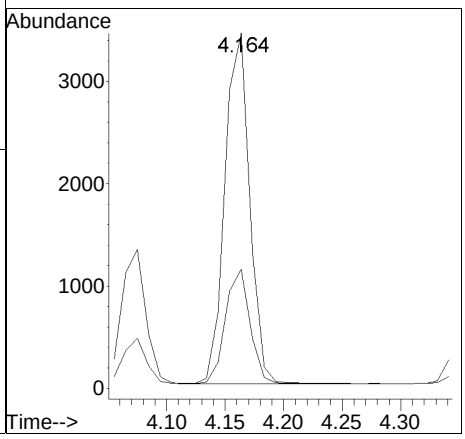
TSIM150710.M Fri Aug 14 14:09:11 2015

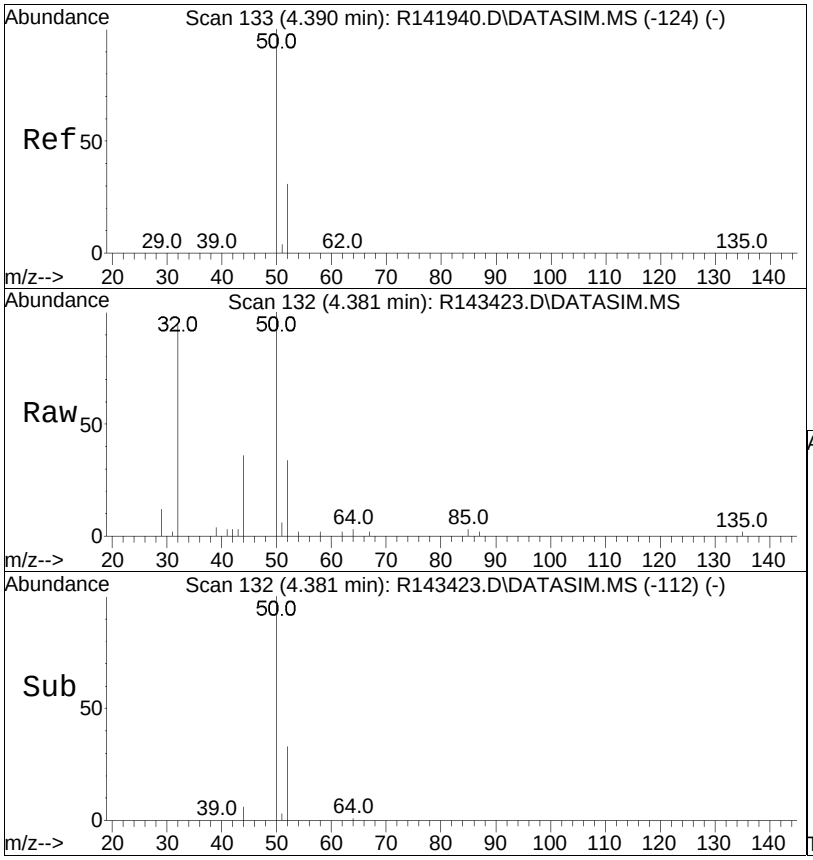


#3
dichlorodifluoromethane
Concen: 0.38 ppbV m
RT: 4.164 min Scan# 110
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 85 Resp: 5048

Ion	Ratio	Lower	Upper
85	100		
87	33.6	26.0	39.0

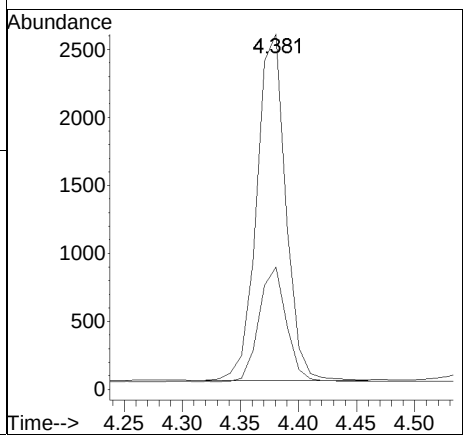


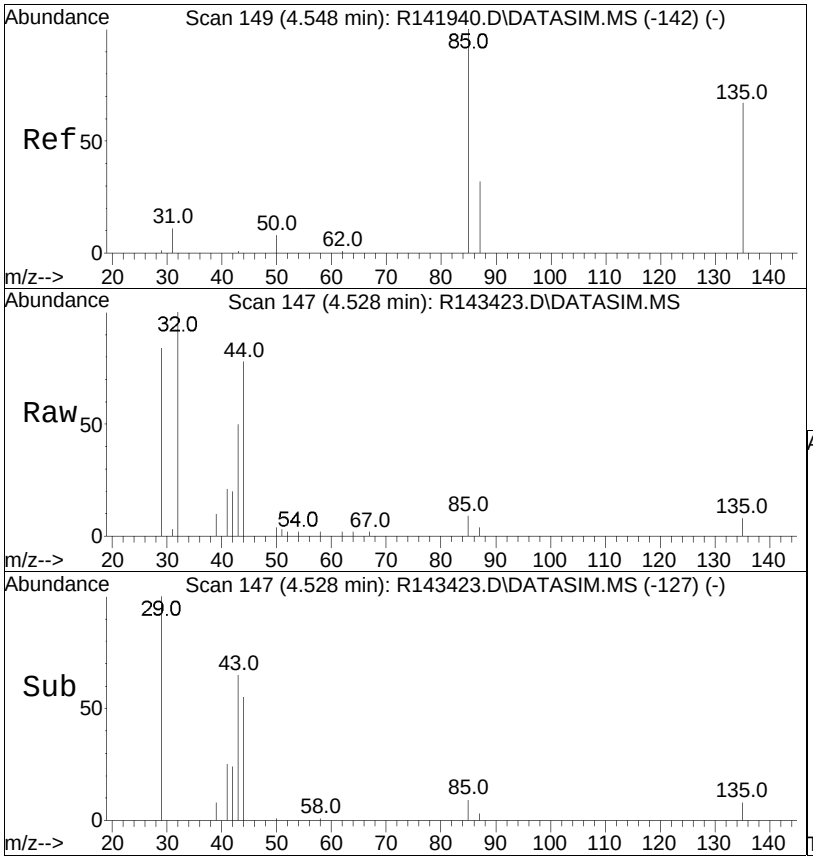


#4
chloromethane
Concen: 0.59 ppbV
RT: 4.381 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 50 Resp: 4422

Ion	Ratio	Lower	Upper
50	100		
52	34.4	26.2	39.4

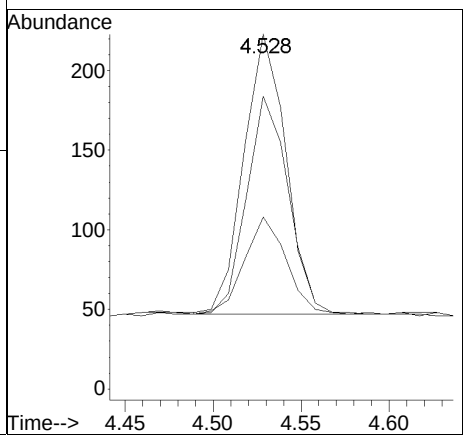


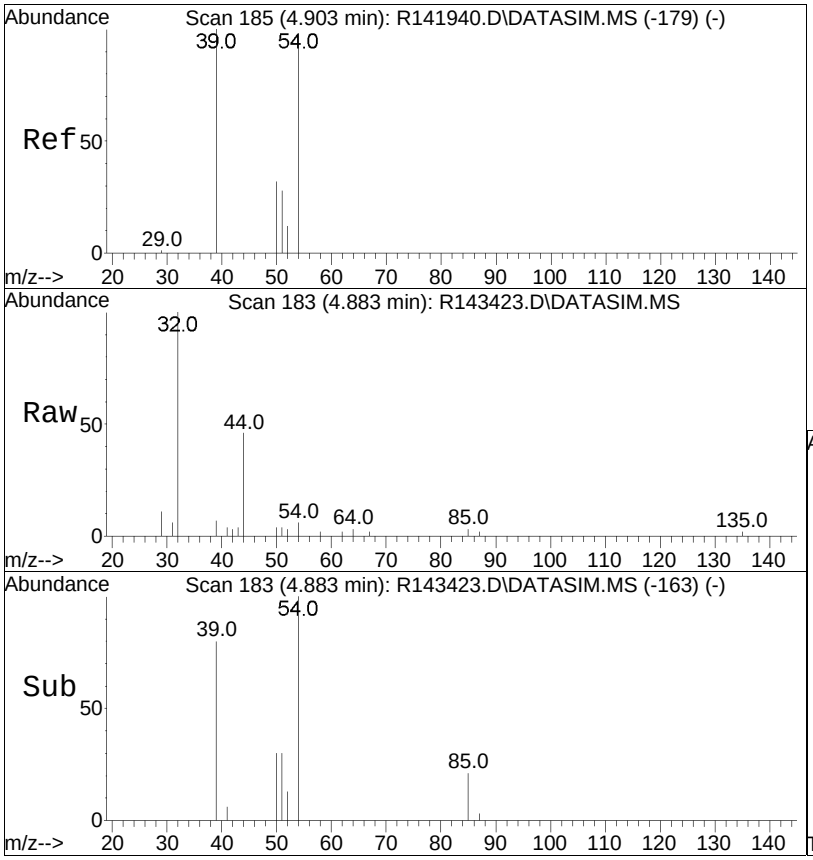


#5
Freon-114
Concen: 0.01 ppbV m
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 85 Resp: 293

Ion	Ratio	Lower	Upper
85	100		
87	48.4	25.4	38.0#
135	82.5	57.0	85.6

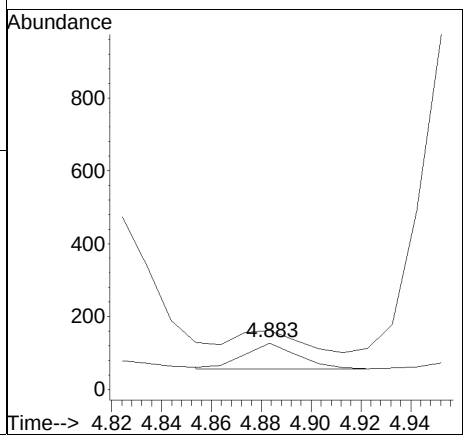


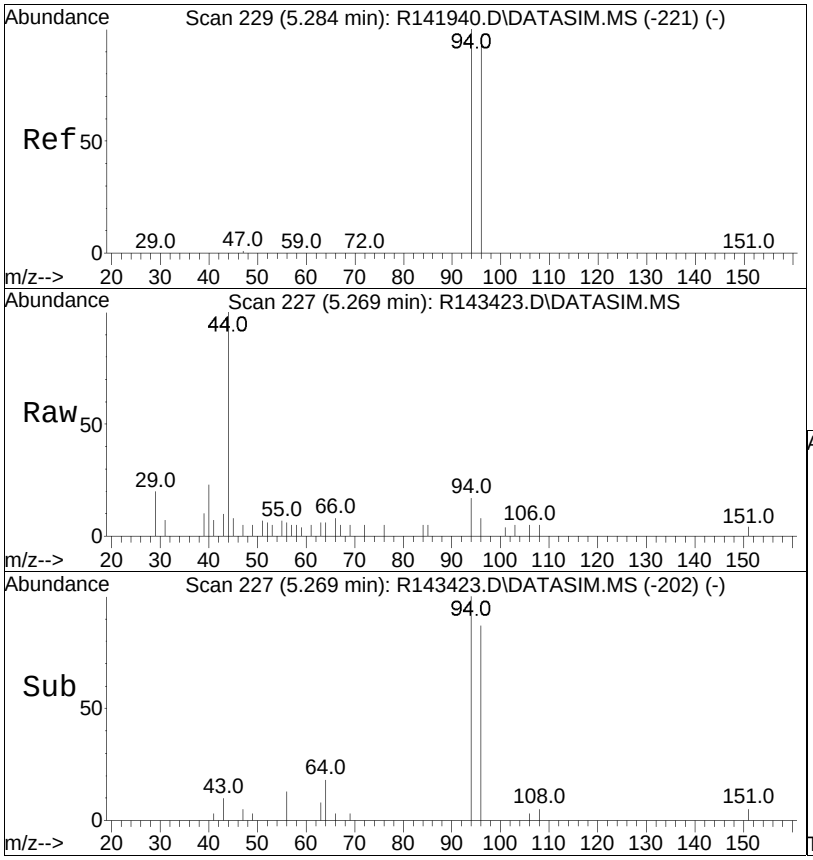


#7
1,3-butadiene
Concen: 0.02 ppbV
RT: 4.883 min Scan# 183
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 54 Resp: 104

Ion	Ratio	Lower	Upper
54	100		
39	127.6	82.6	124.0#

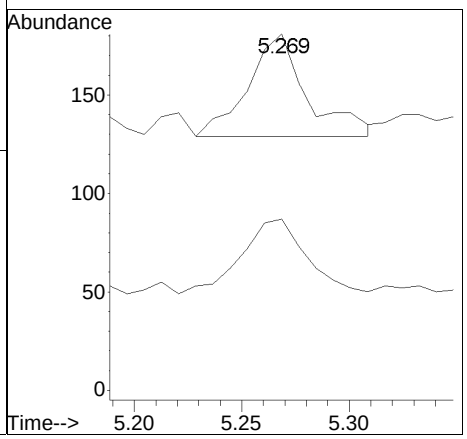


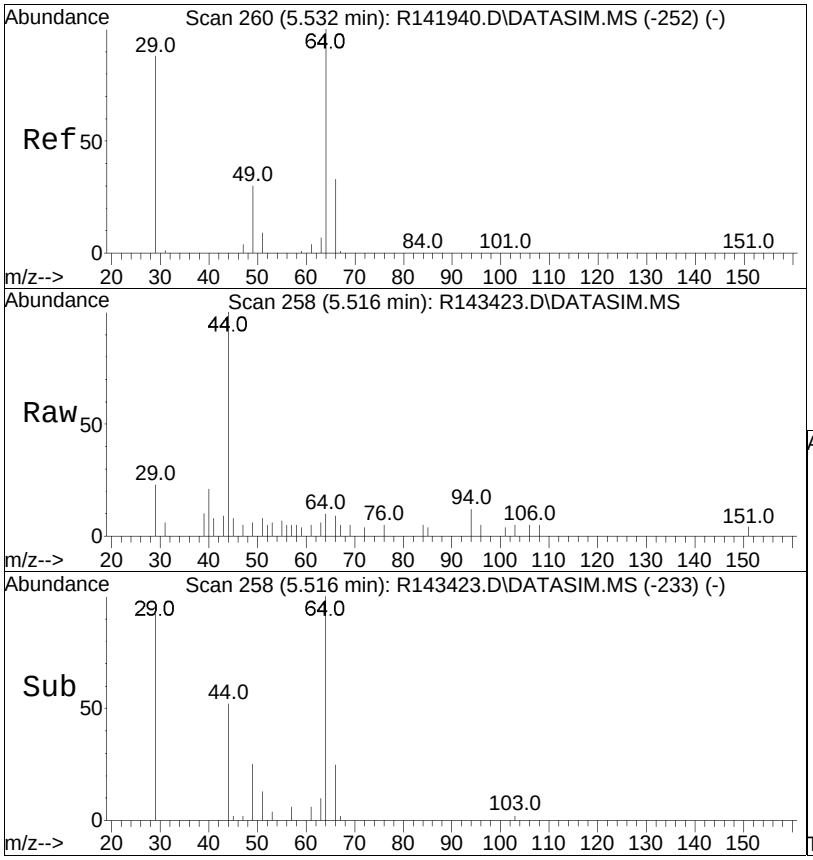


#8
bromomethane
Concen: 0.01 ppbV
RT: 5.269 min Scan# 227
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 94 Resp: 99

Ion	Ratio	Lower	Upper
94	100		
96	48.1	74.9	112.3#

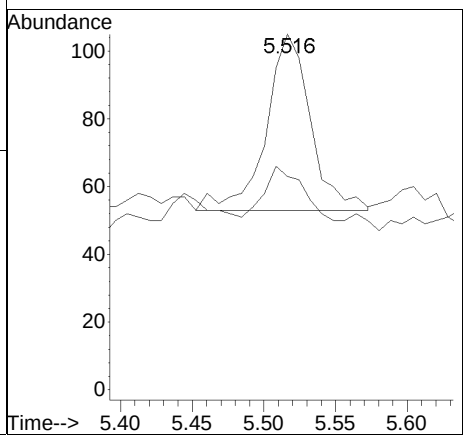


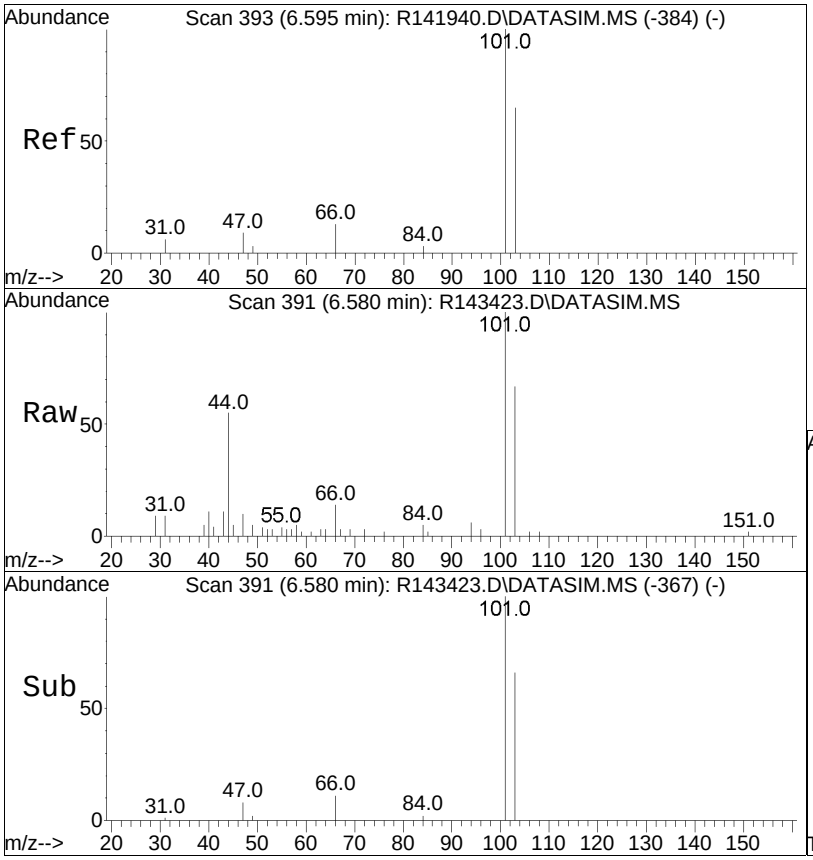


#9
chloroethane
Concen: 0.03 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 64 Resp: 113

Ion	Ratio	Lower	Upper
64	100		
49	60.0	27.4	41.0#

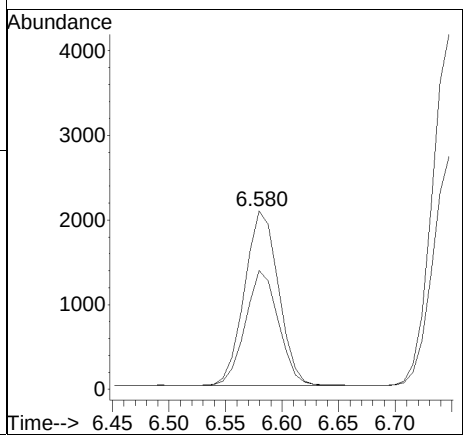


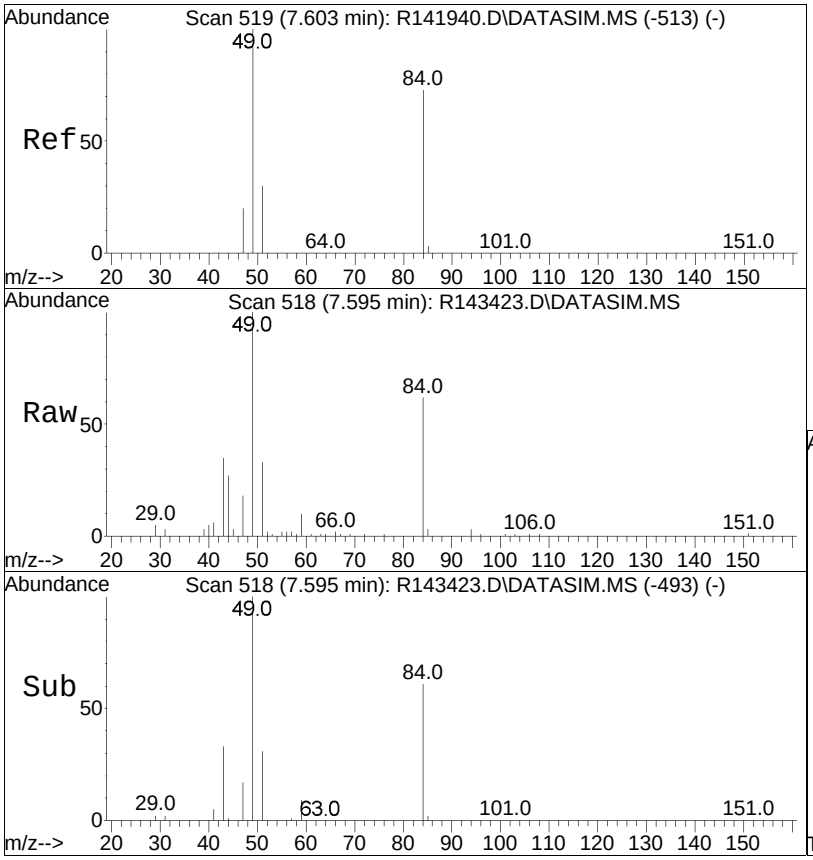


#13
trichlorofluoromethane
Concen: 0.23 ppbV
RT: 6.580 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:101 Resp: 4328

Ion	Ratio	Lower	Upper
101	100		
103	66.6	52.2	78.2

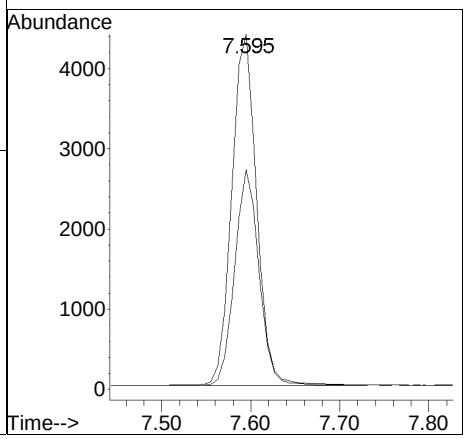


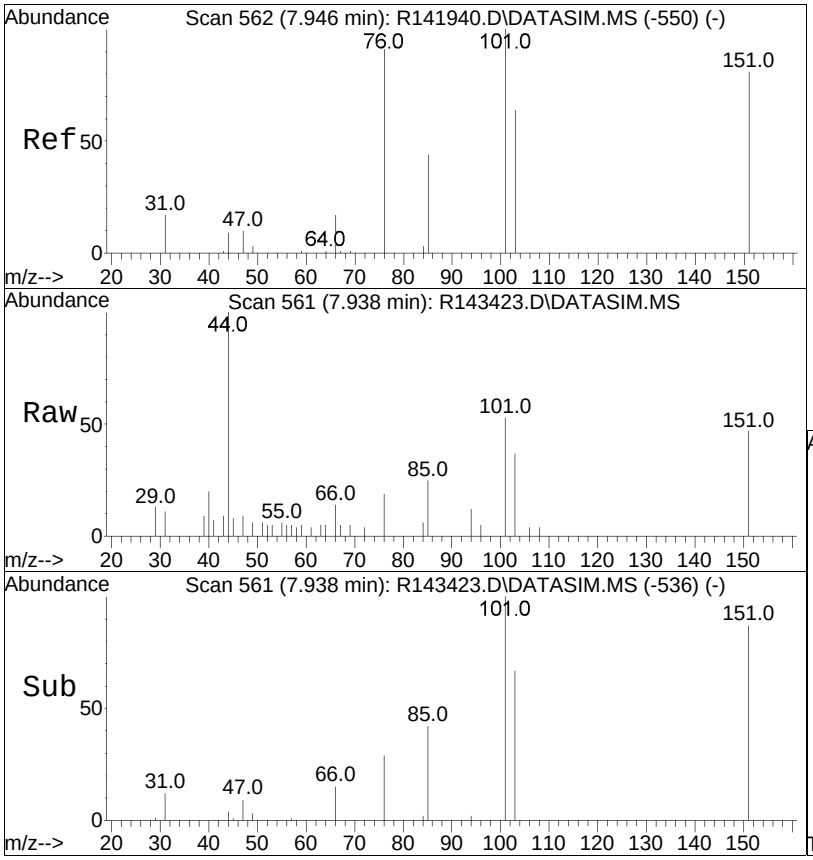


#18
methylene chloride
Concen: 0.84 ppbV m
RT: 7.595 min Scan# 518
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 49 Resp: 8502

Ion	Ratio	Lower	Upper
49	100		
84	61.9	50.8	76.2

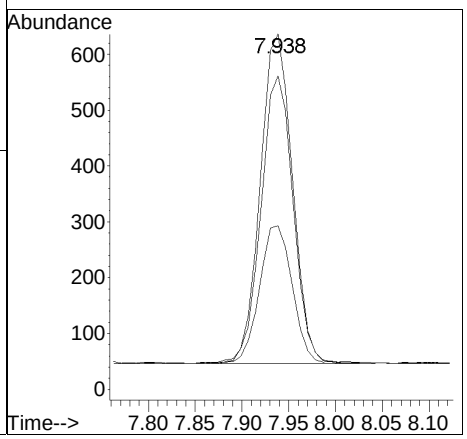


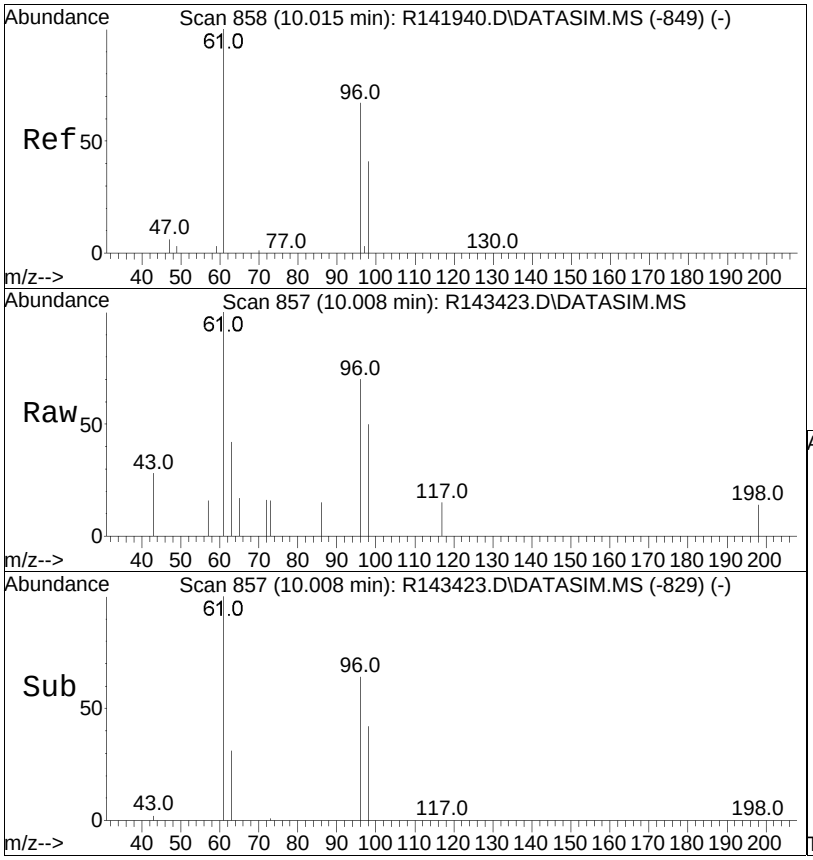


#21
Freon 113
Concen: 0.09 ppbV
RT: 7.938 min Scan# 561
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:101 Resp: 1414

Ion	Ratio	Lower	Upper
101	100		
85	46.1	32.5	48.7
151	88.2	69.1	103.7

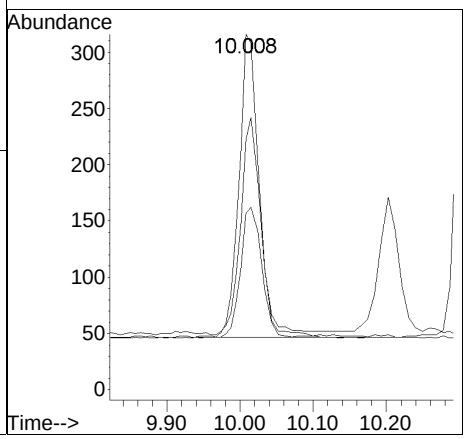


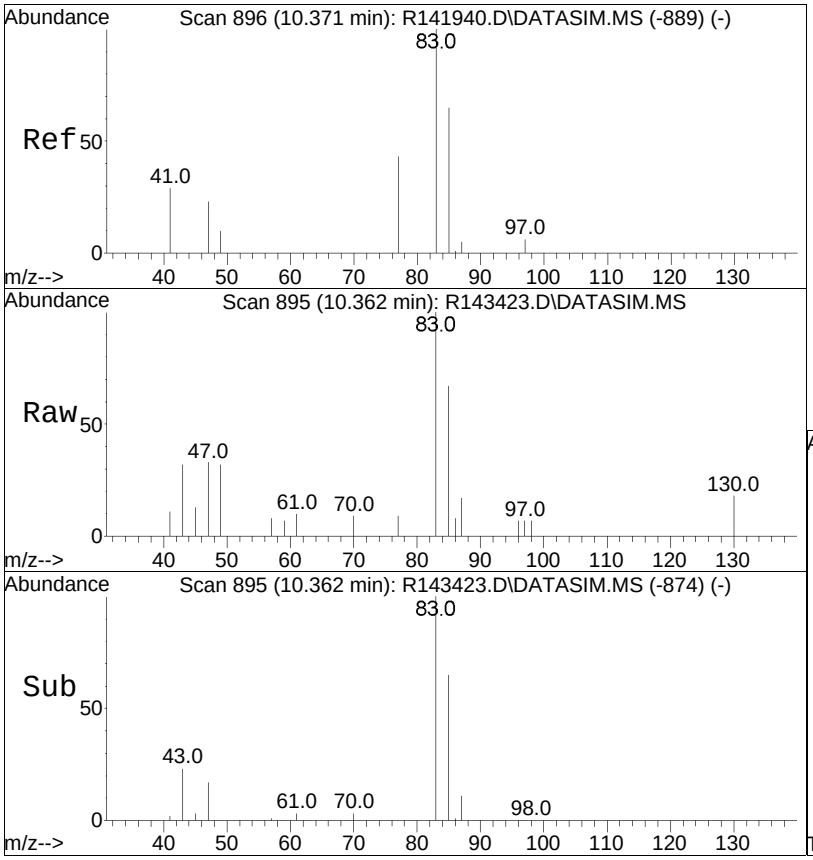


#28
cis-1,2-dichloroethene
Concen: 0.04 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 61 Resp: 558

Ion	Ratio	Lower	Upper
61	100		
96	70.3	57.8	86.8
98	49.7	36.9	55.3

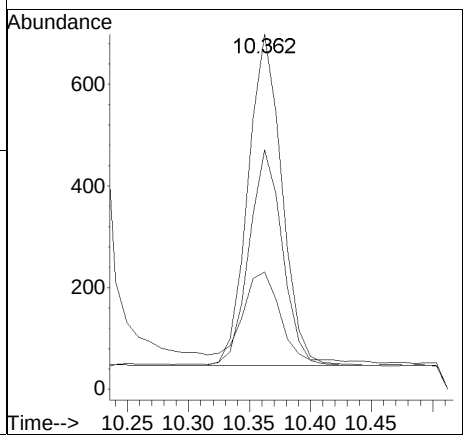


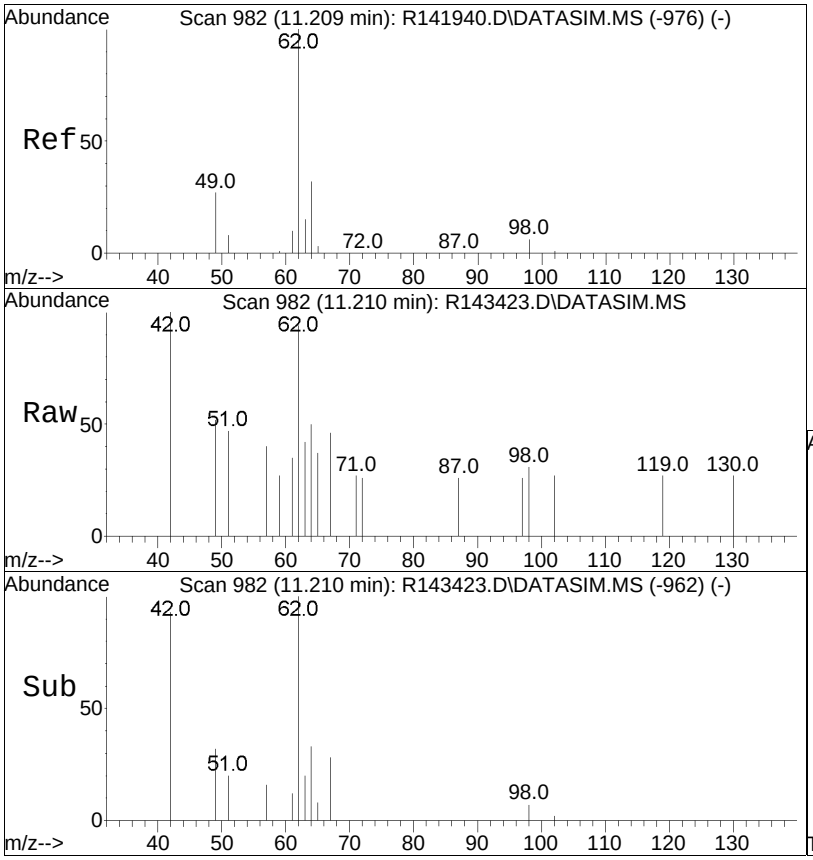


#30
chloroform
Concen: 0.06 ppbV
RT: 10.362 min Scan# 895
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 83 Resp: 1259

Ion	Ratio	Lower	Upper
83	100		
85	67.4	51.6	77.4
47	33.0	22.6	33.8

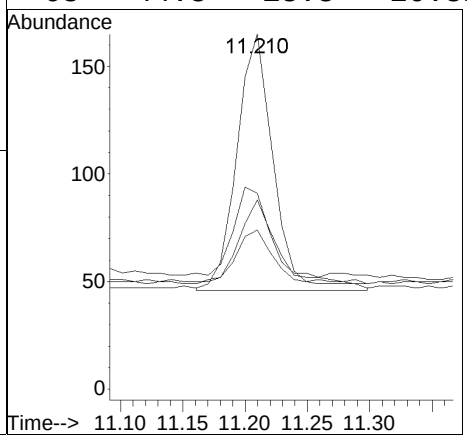


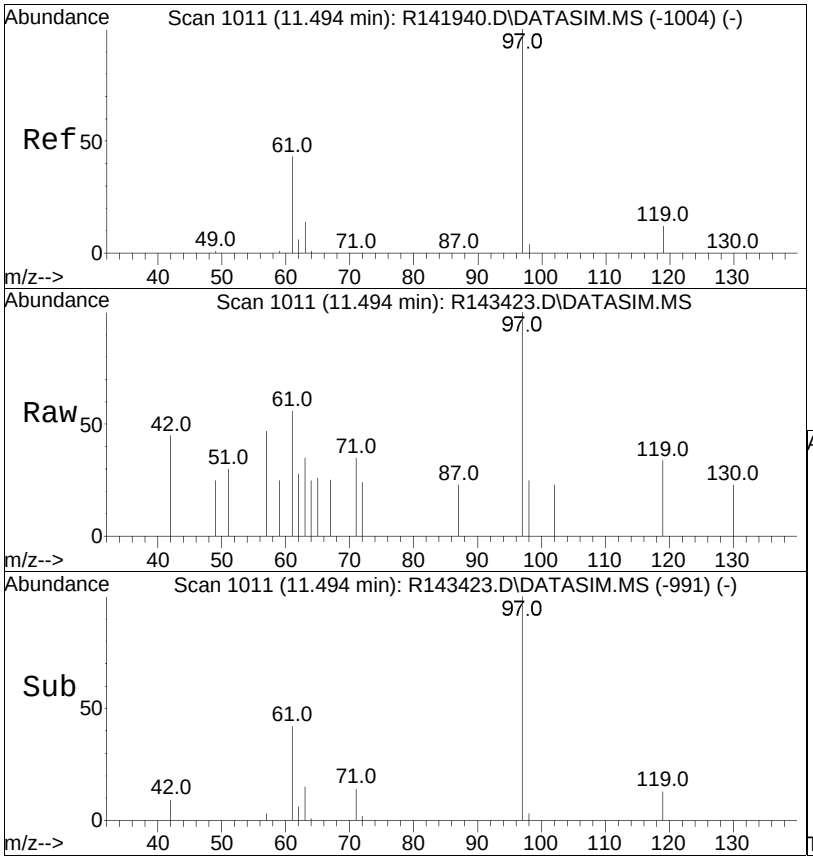


#32
1,2-dichloroethane
Concen: 0.02 ppbV m
RT: 11.210 min Scan# 982
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 62 Resp: 242

Ion	Ratio	Lower	Upper
62	100		
64	53.3	26.2	39.4#
49	55.2	25.7	38.5#
63	44.8	13.8	20.8#

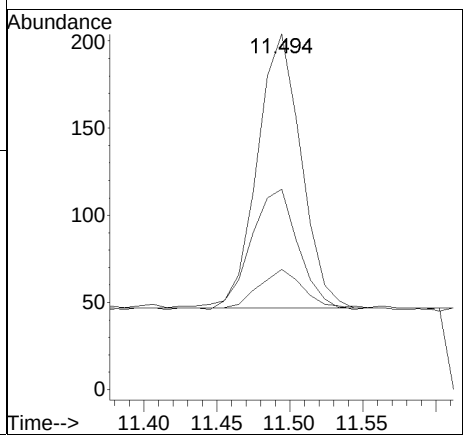


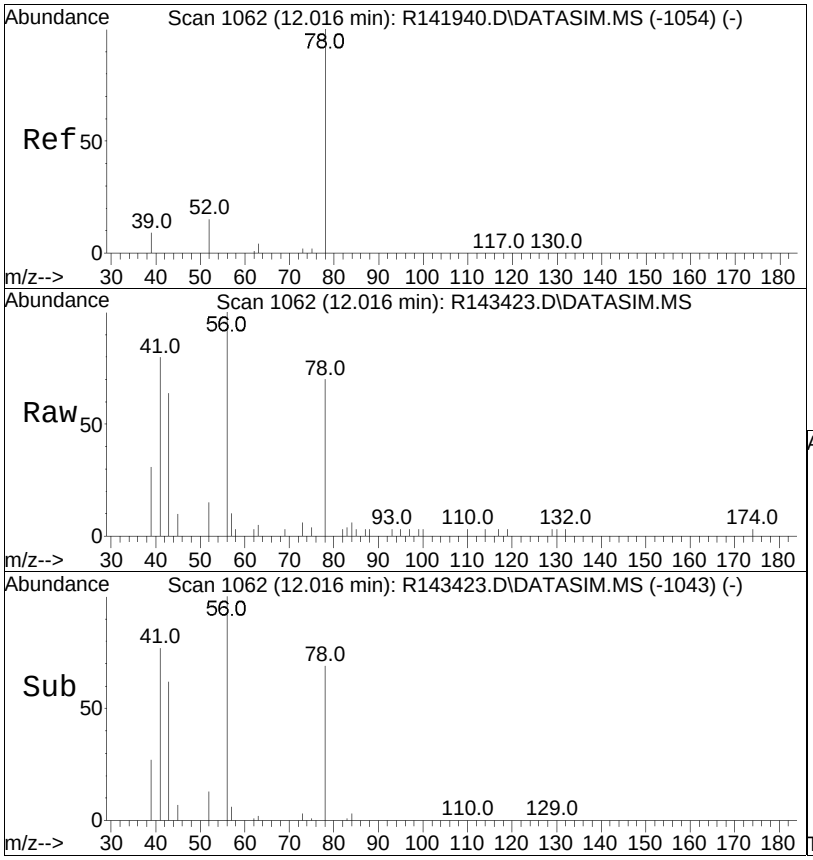


#36
1,1,1-trichloroethane
Concen: 0.02 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 97 Resp: 325

Ion	Ratio	Lower	Upper
97	100		
61	56.4	32.6	49.0#
119	33.8	11.0	16.4#

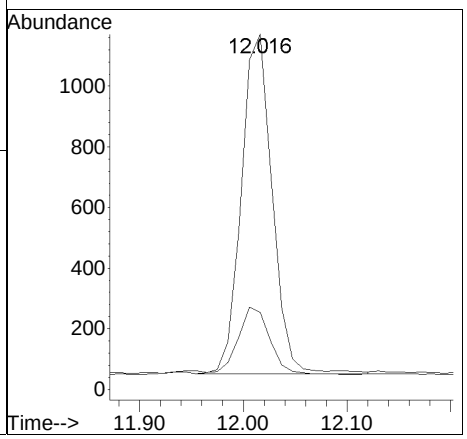


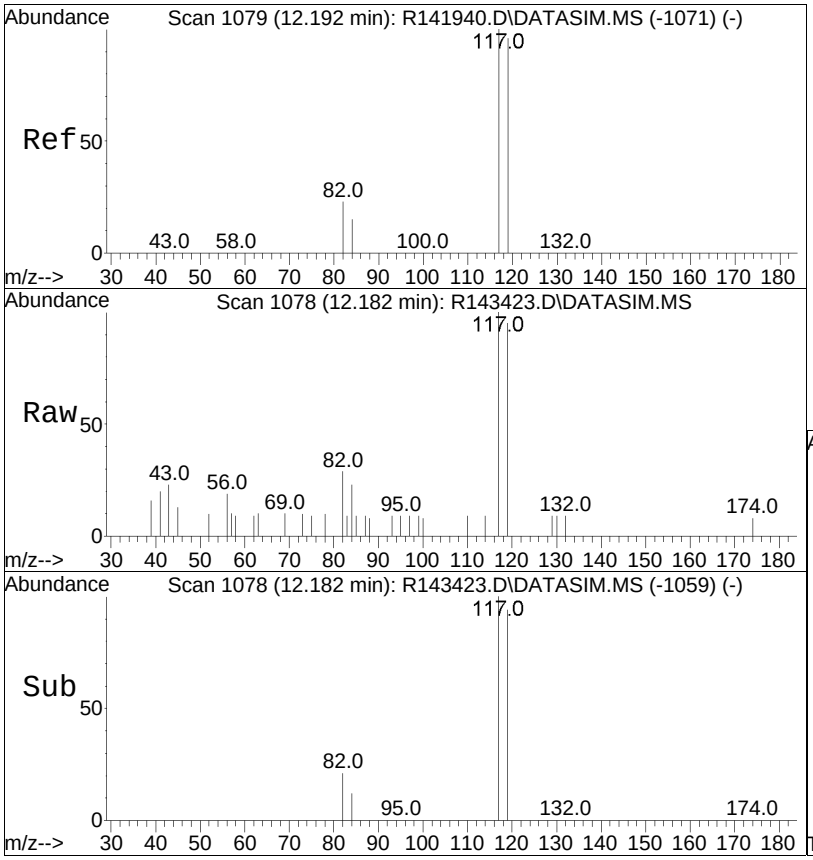


#37
benzene
Concen: 0.08 ppbV
RT: 12.016 min Scan# 1062
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 78 Resp: 2318

Ion	Ratio	Lower	Upper
78	100		
52	21.7	14.2	21.2#

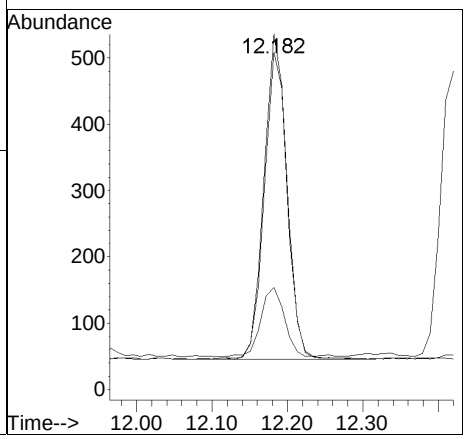


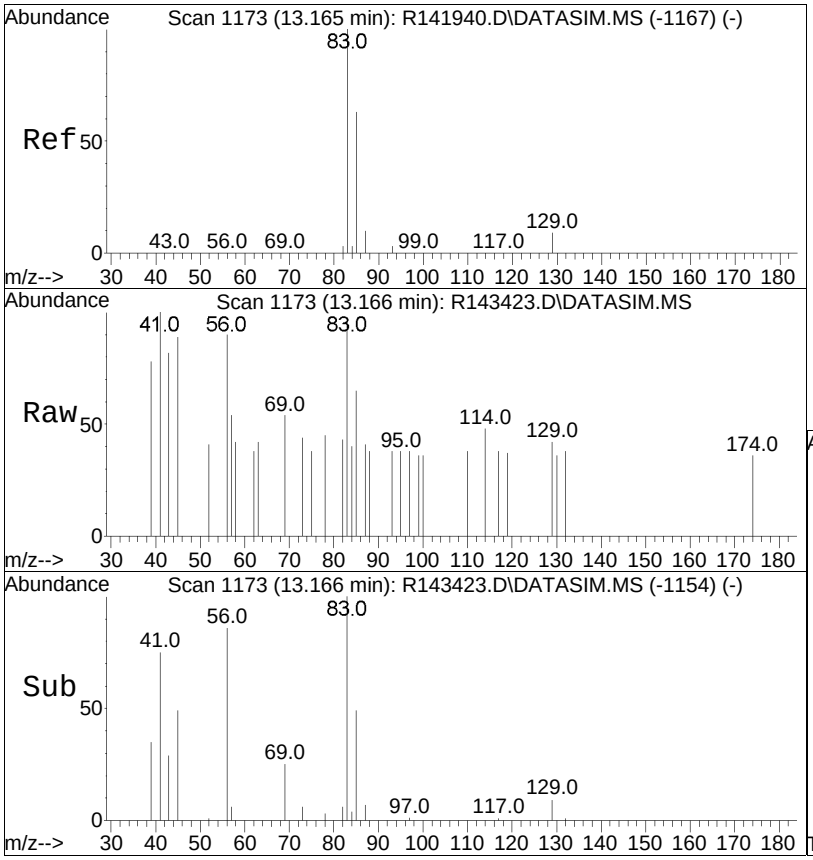


#38
carbon tetrachloride
Concen: 0.06 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:117 Resp: 1034

Ion	Ratio	Lower	Upper
117	100		
119	95.0	76.4	114.6
82	28.7	18.3	27.5#

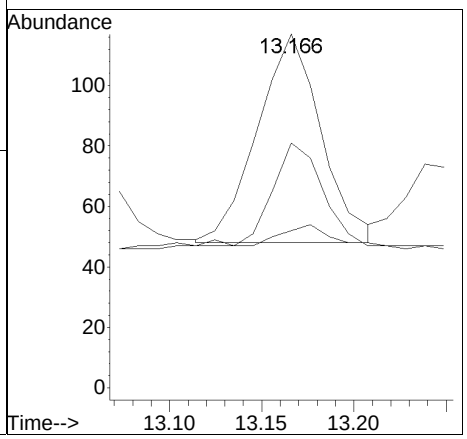


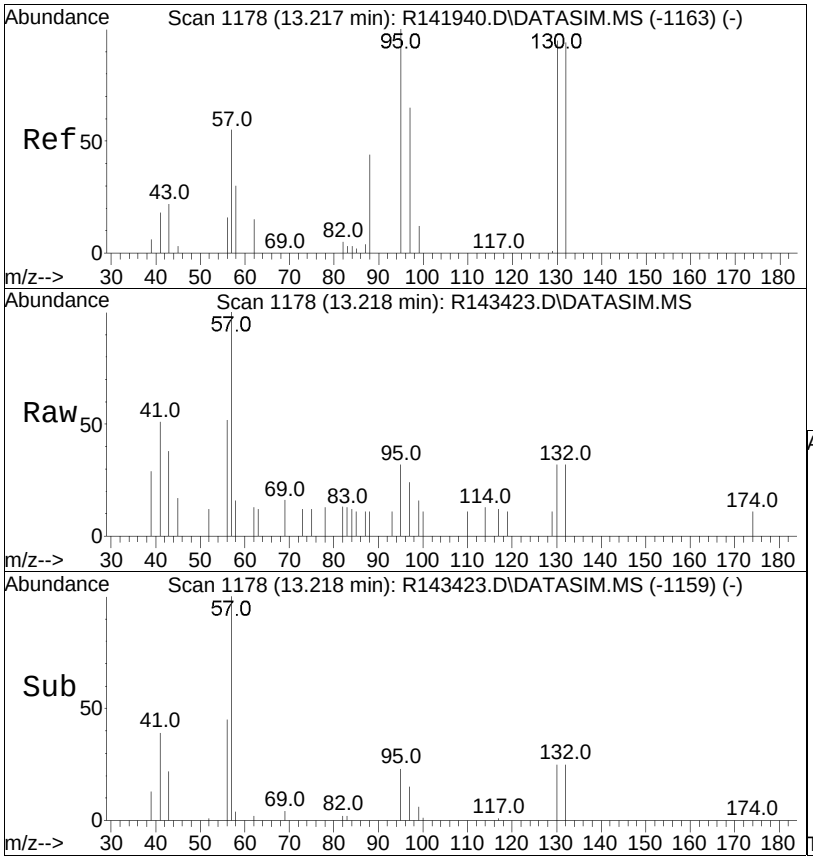


#42
bromodichloromethane
Concen: 0.01 ppbV
RT: 13.166 min Scan# 1173
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 83 Resp: 166

Ion	Ratio	Lower	Upper
83	100		
85	69.2	50.6	75.8
129	44.4	8.9	13.3#

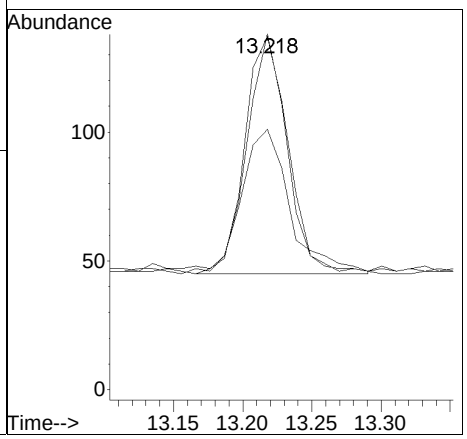


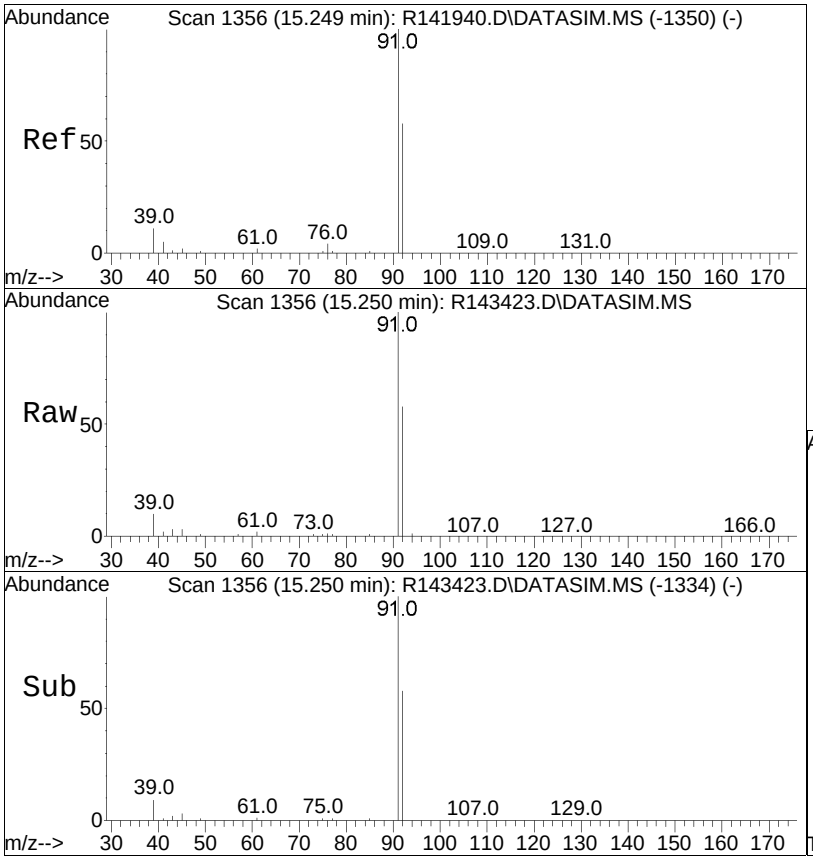


#44
trichloroethene
Concen: 0.01 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:130 Resp: 201

Ion	Ratio	Lower	Upper
130	100		
132	100.7	77.5	116.3
97	73.7	47.4	71.2#

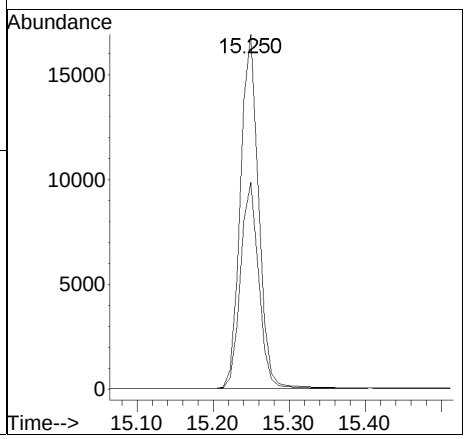


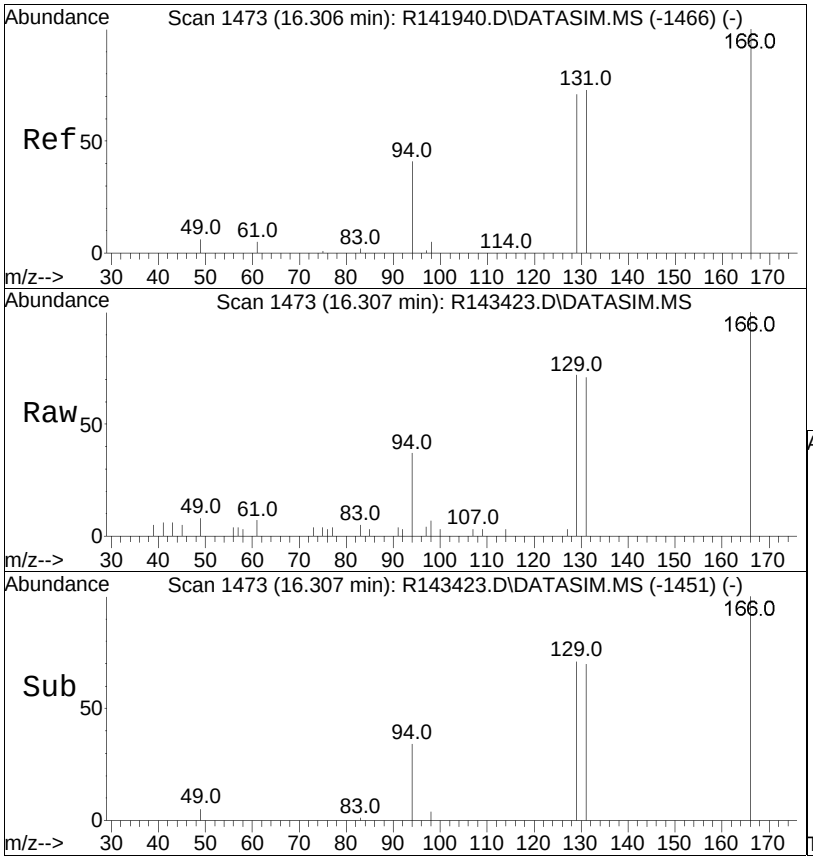


#52
toluene
Concen: 0.77 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 28115

Ion	Ratio	Lower	Upper
91	100		
92	58.3	46.8	70.2

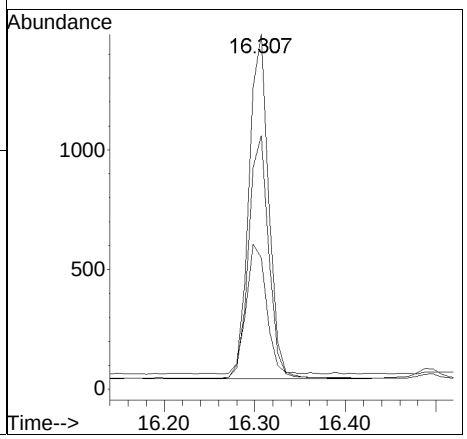


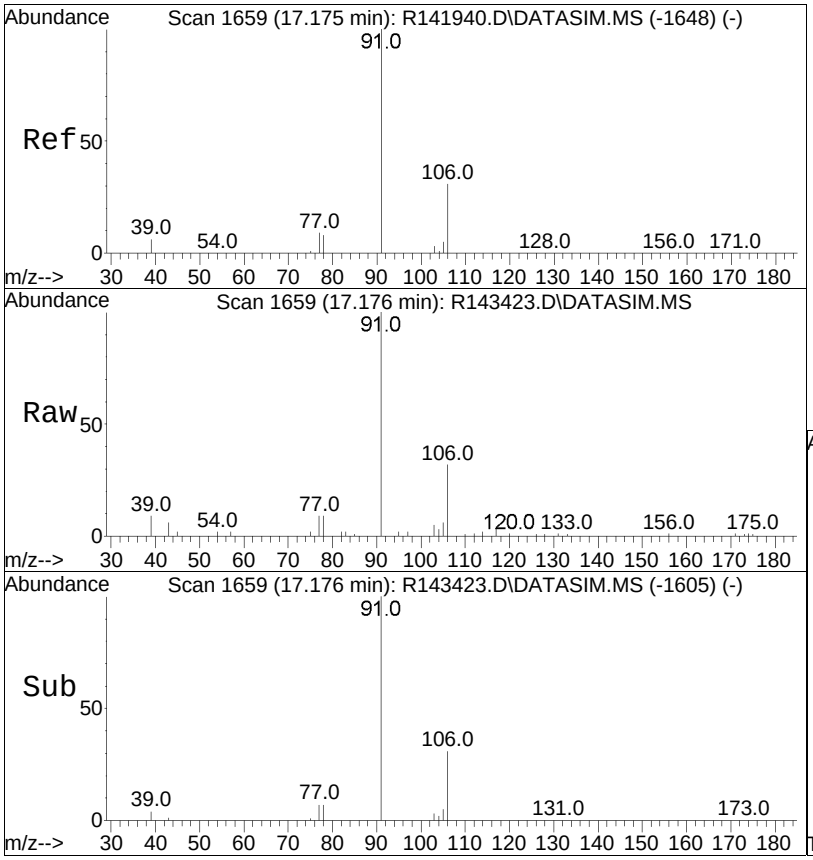


#57
tetrachloroethene
Concen: 0.12 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:166 Resp: 2181

Ion	Ratio	Lower	Upper
166	100		
131	71.4	57.0	85.4
94	37.0	26.2	39.4

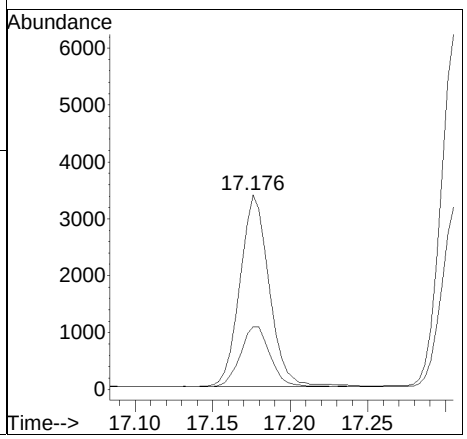


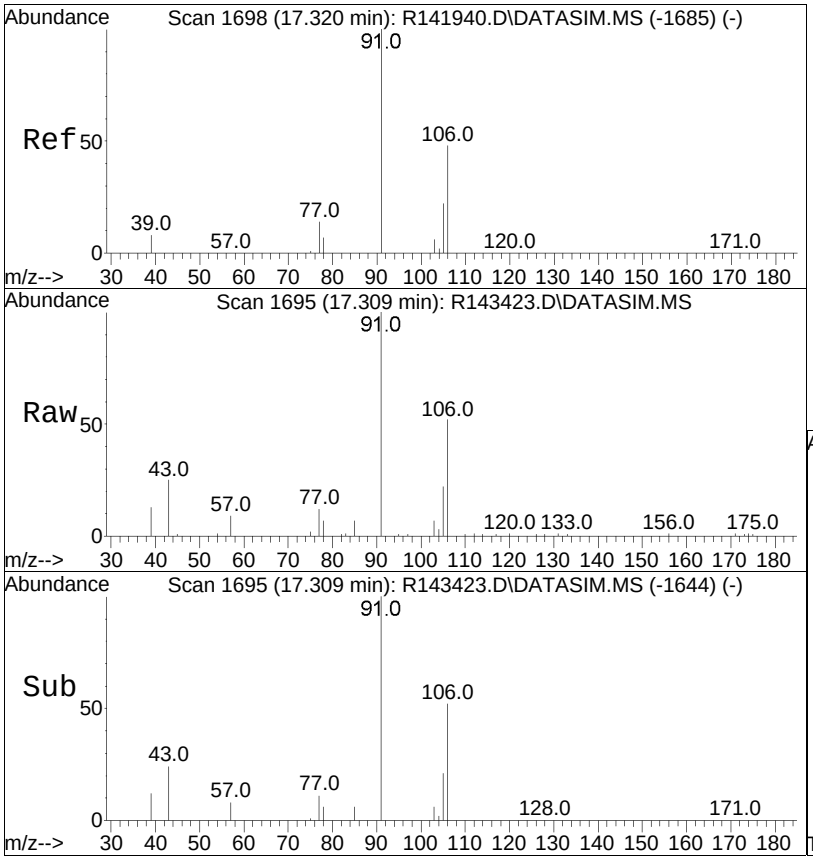


#60
ethylbenzene
Concen: 0.09 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 4442

Ion	Ratio	Lower	Upper
91	100		
106	32.3	25.8	38.8

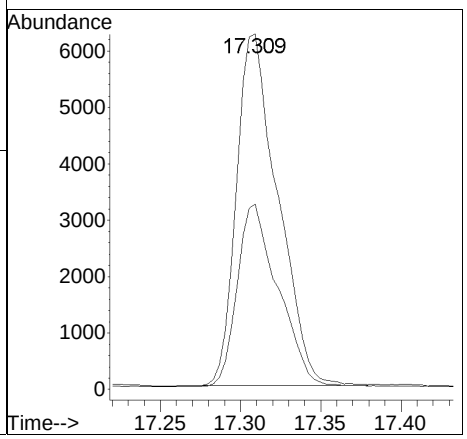


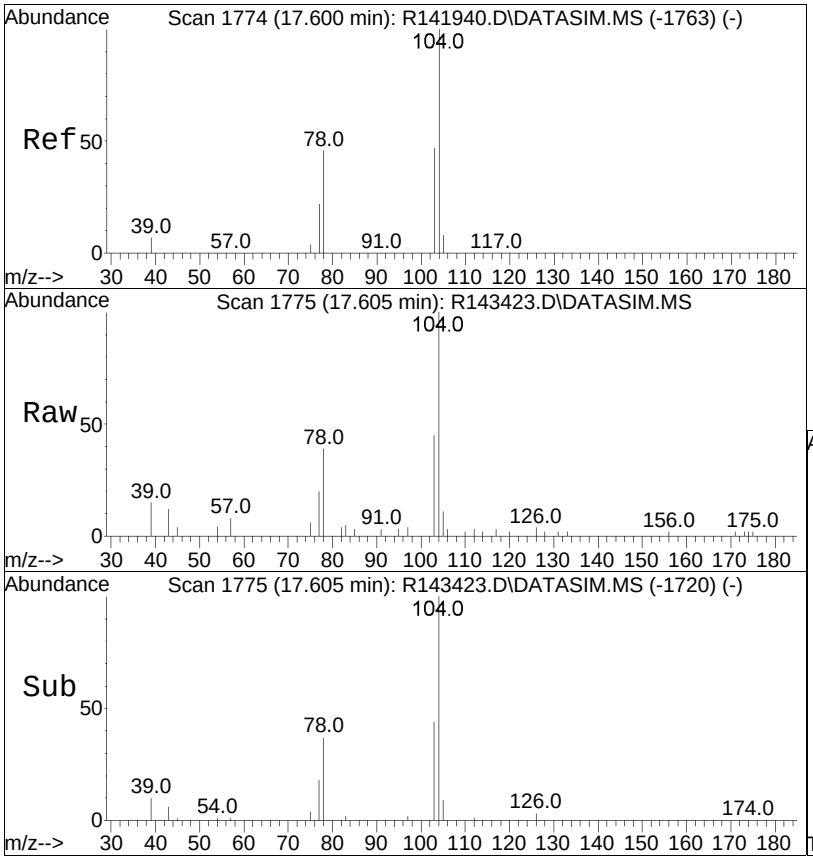


#61
m+p-xylene
Concen: 0.31 ppbV
RT: 17.309 min Scan# 1695
Delta R.T. -0.011 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 11218

Ion	Ratio	Lower	Upper
91	100		
106	52.2	40.6	61.0

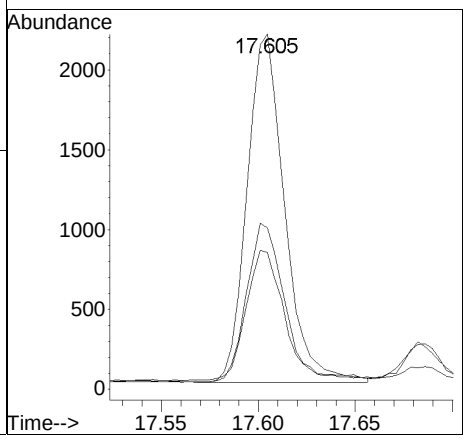


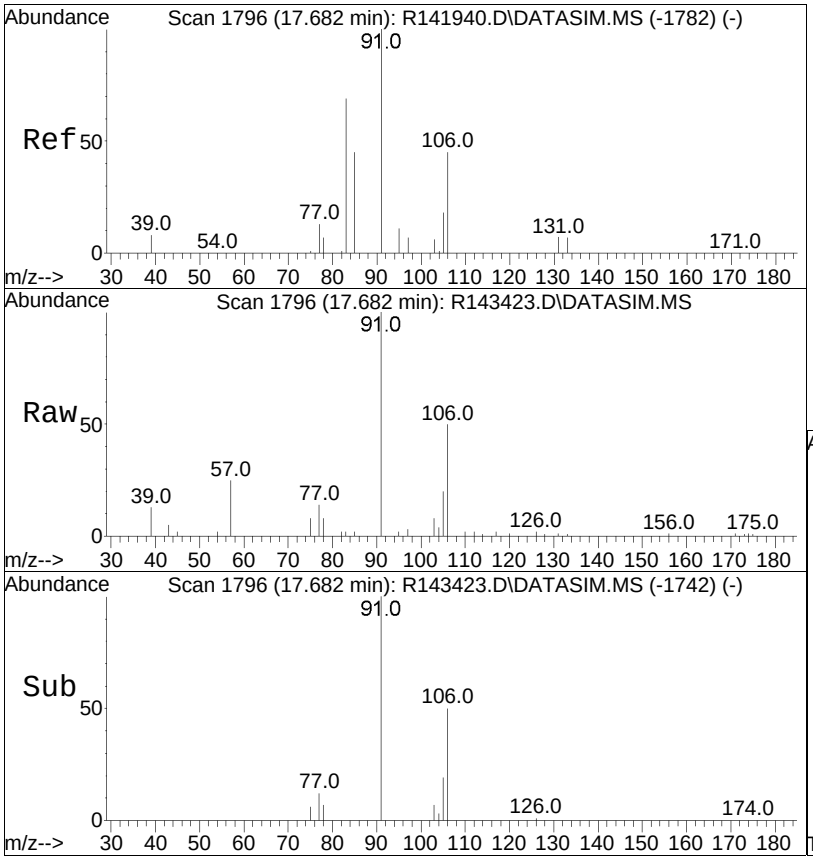


#63
styrene
Concen: 0.10 ppbV
RT: 17.605 min Scan# 1775
Delta R.T. 0.004 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:104 Resp: 2936

Ion	Ratio	Lower	Upper
104	100		
103	45.5	37.7	56.5
78	38.5	31.0	46.6

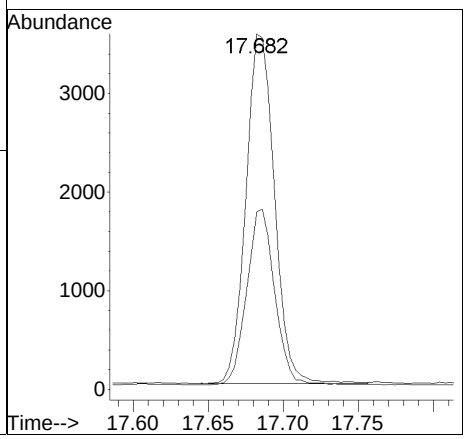


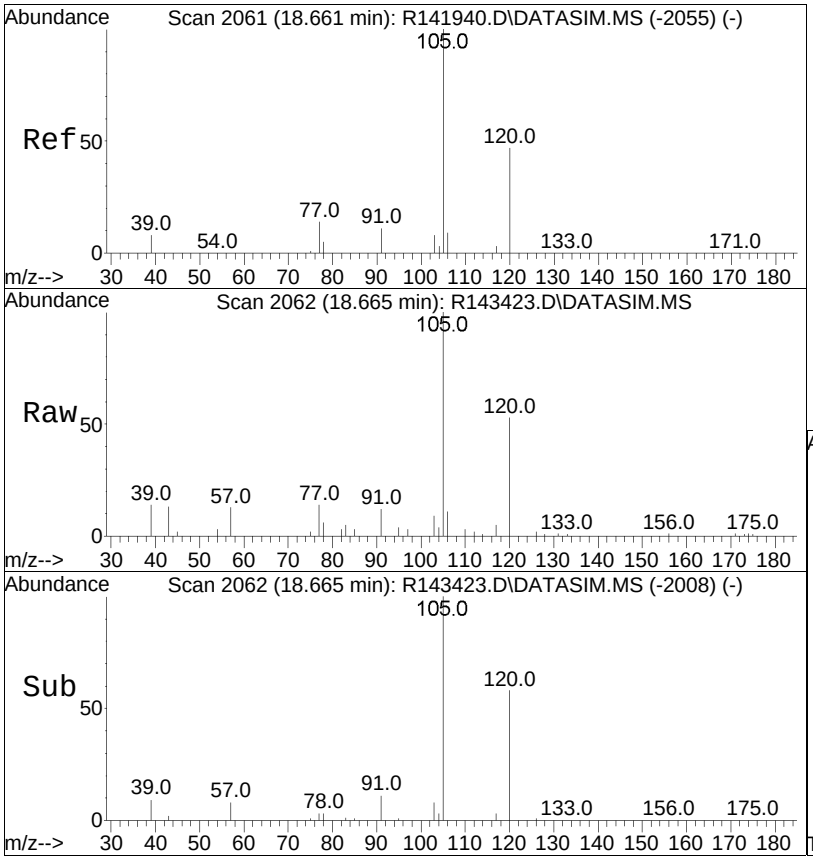


#65
o-xylene
Concen: 0.13 ppbV
RT: 17.682 min Scan# 1796
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 91 Resp: 4710

Ion	Ratio	Lower	Upper
91	100		
106	50.0	38.5	57.7

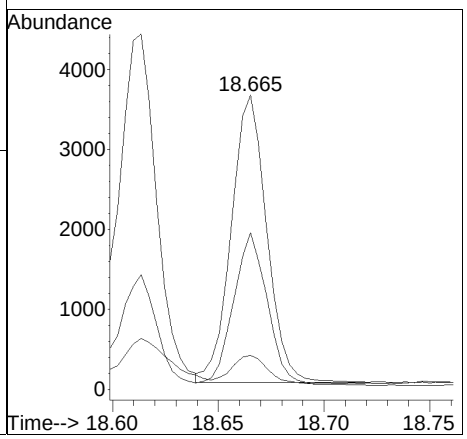


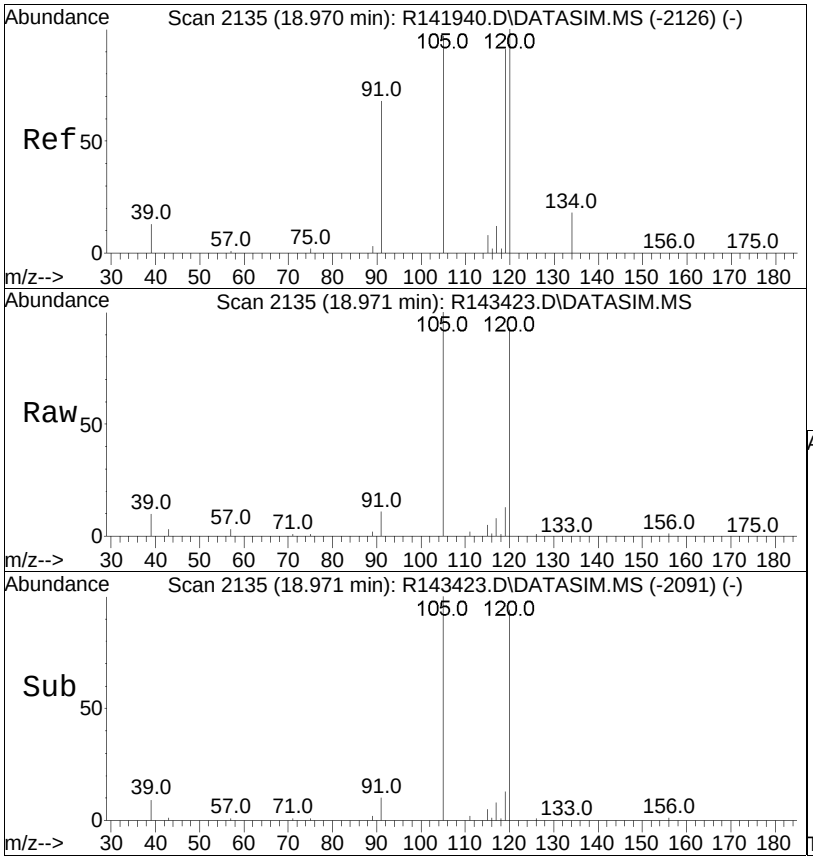


#71
1,3,5-trimethylbenzene
Concen: 0.09 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:105 Resp: 4184

Ion	Ratio	Lower	Upper
105	100		
120	53.3	40.9	61.3
91	11.6	7.8	11.6

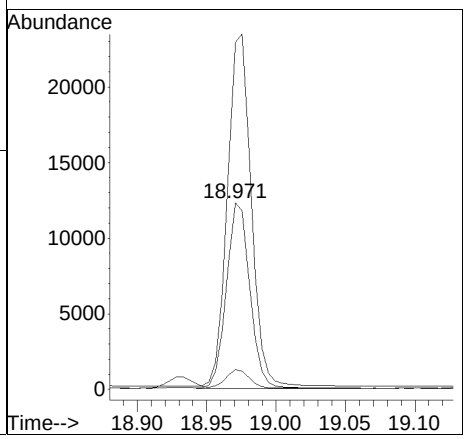


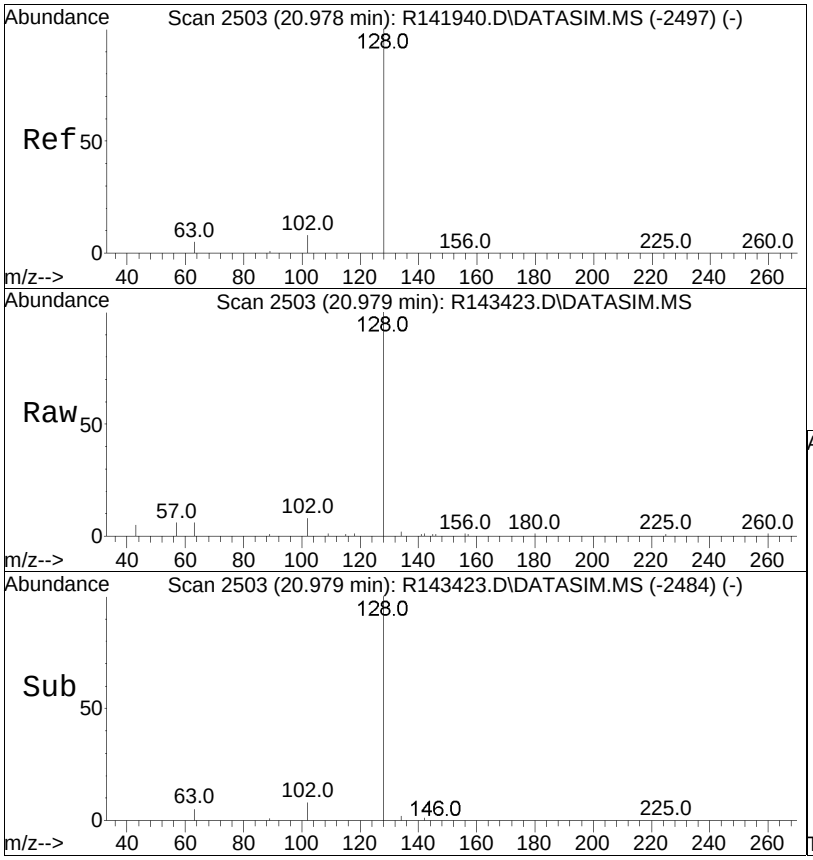


#73
1,2,4-trimethylbenzene
Concen: 0.33 ppbV
RT: 18.971 min Scan# 2135
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:105 Resp: 14428

Ion	Ratio	Lower	Upper
105	100		
120	186.0	174.7	262.1
91	10.6	55.2	82.8#

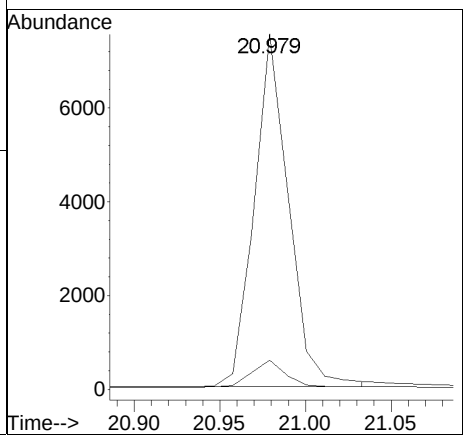




#82
naphthalene
Concen: 0.19 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. 0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:128 Resp: 10548

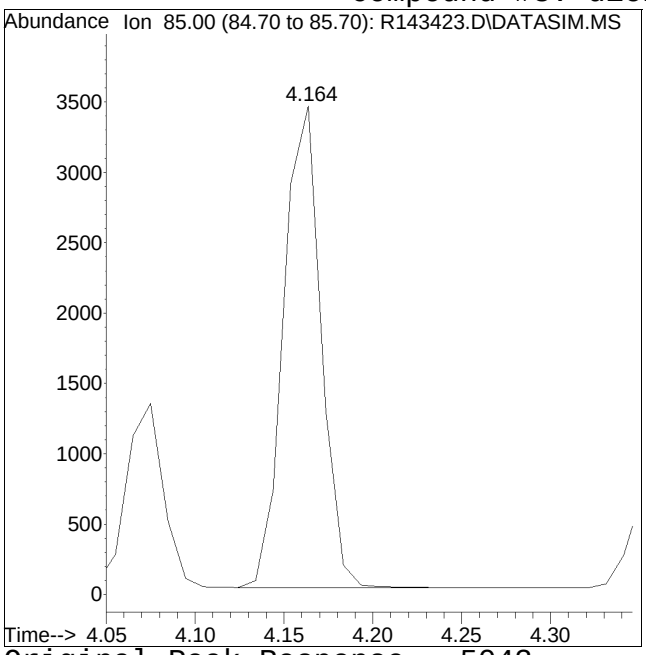
Ion	Ratio	Lower	Upper
128	100		
102	8.2	5.7	8.5



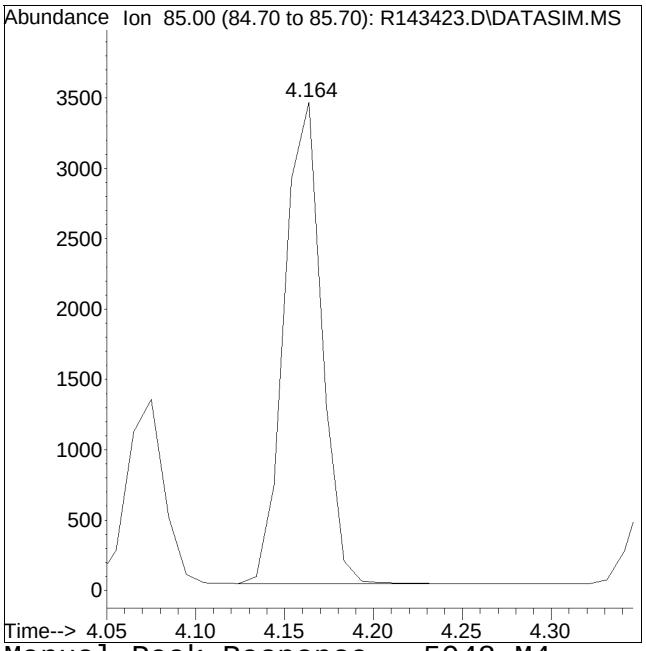
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:46 am

Compound #3: dichlorodifluoromethane



Original Peak Response = 5043



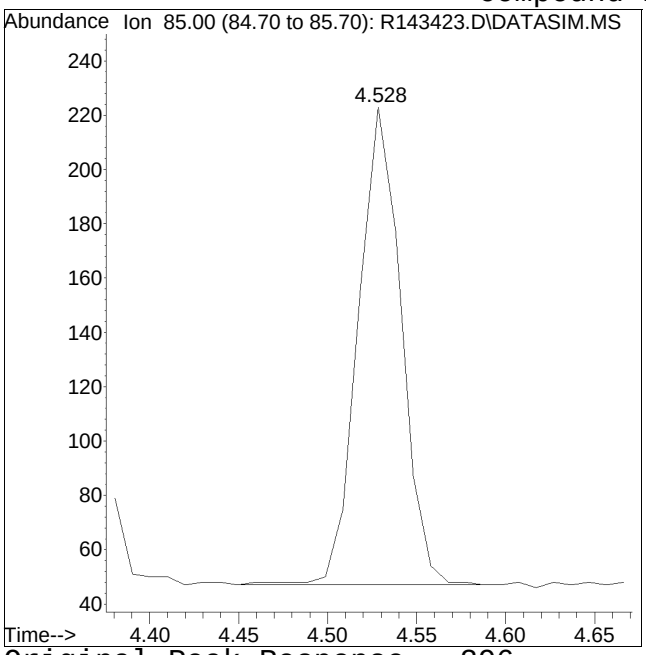
Manual Peak Response = 5048 M4

M4 = Poor automated baseline construction.

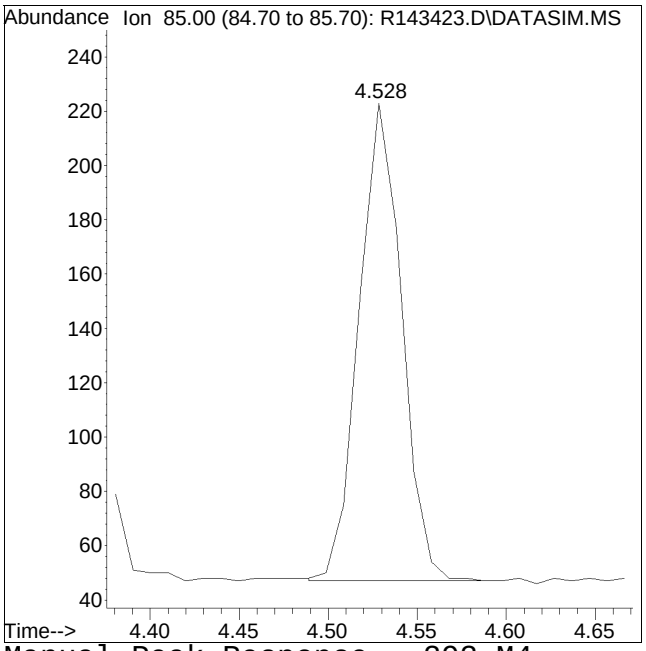
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143423.D
Date Inj'd : 8/13/2015 8:31 pm
Sample : L1519114-11,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:46 am

Compound #5: Freon-114



Original Peak Response = 296



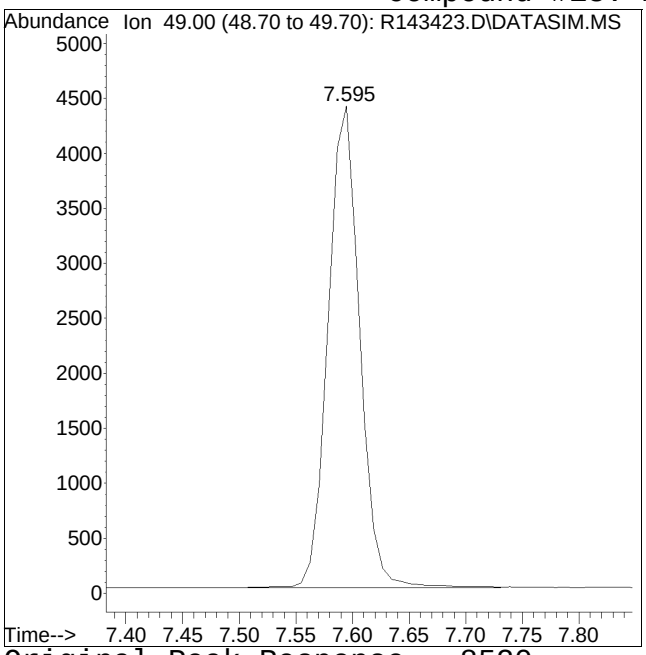
Manual Peak Response = 293 M4

M4 = Poor automated baseline construction.

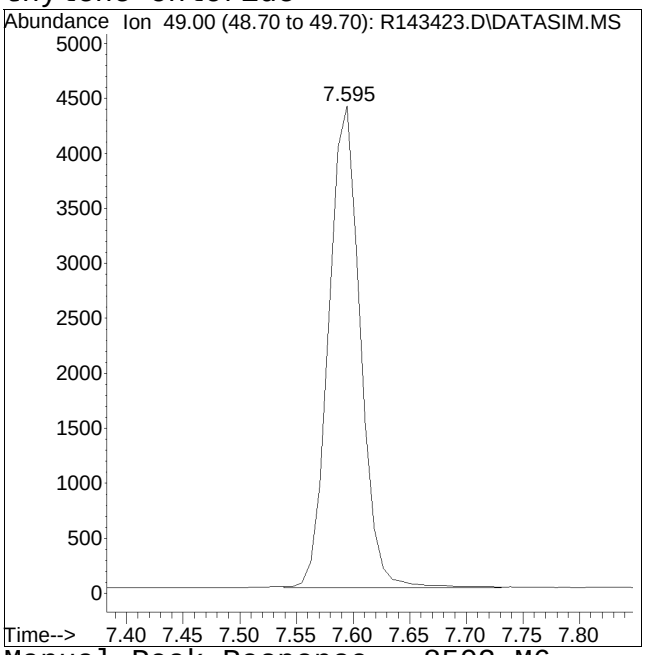
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015
Data File : R143423.D
Date Inj'd : 8/13/2015 8:31 pm
Sample : L1519114-11,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:46 am

Compound #18: methylene chloride



Original Peak Response = 8520



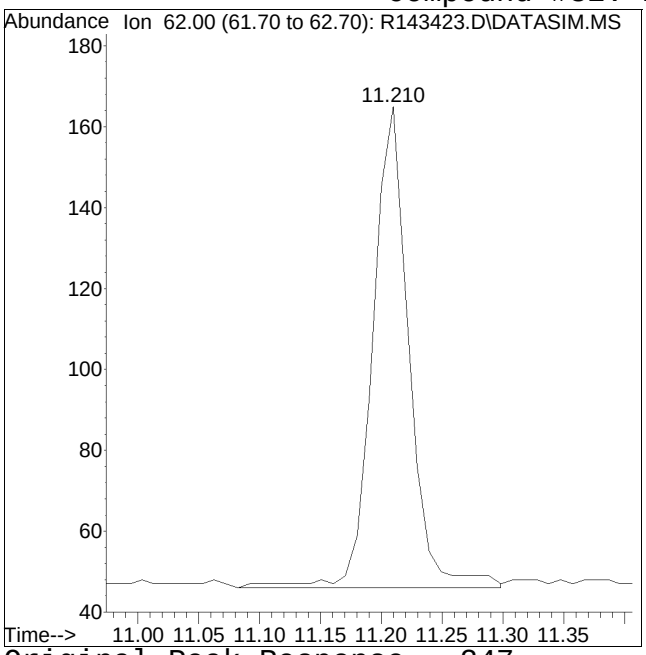
Manual Peak Response = 8502 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

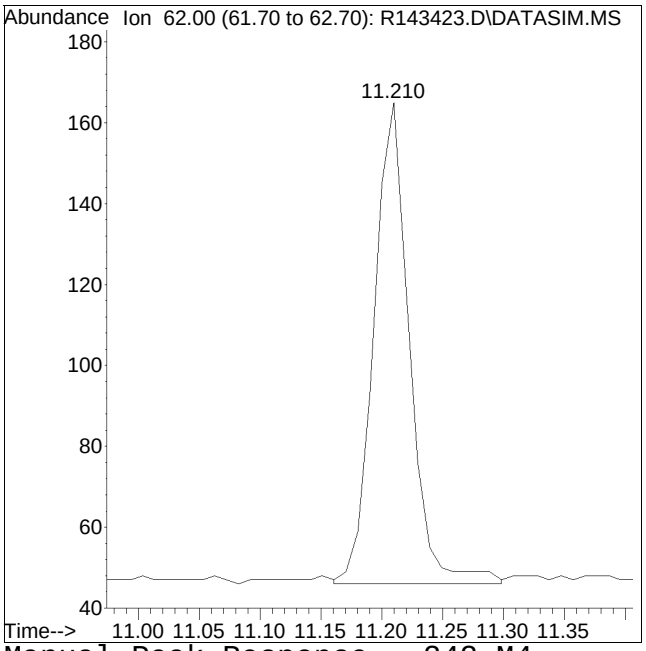
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:46 am

Compound #32: 1,2-dichloroethane



Original Peak Response = 247



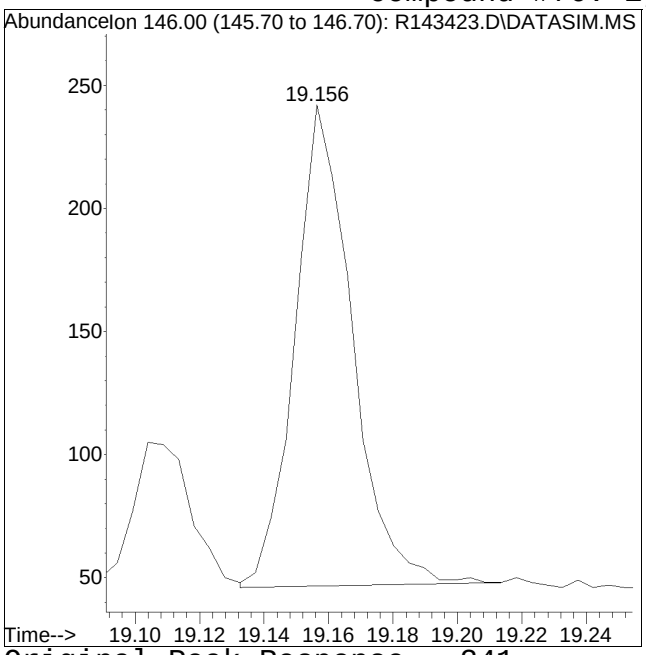
Manual Peak Response = 242 M4

M4 = Poor automated baseline construction.

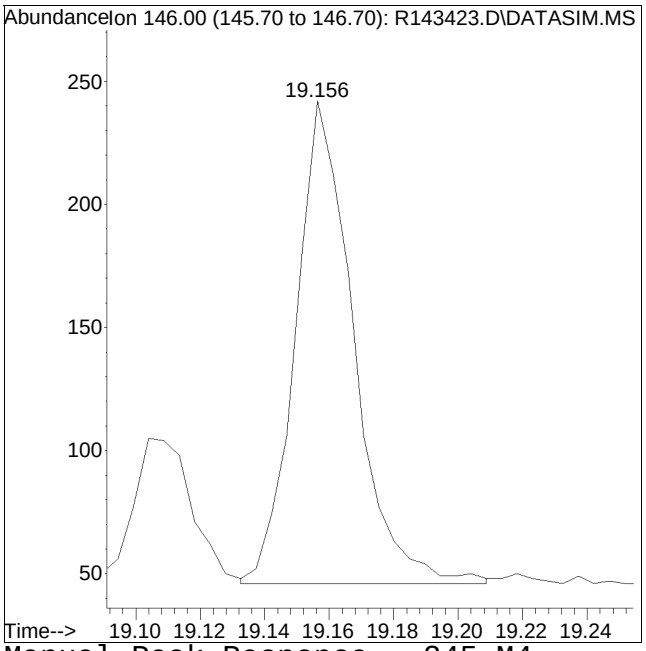
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:46 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 241



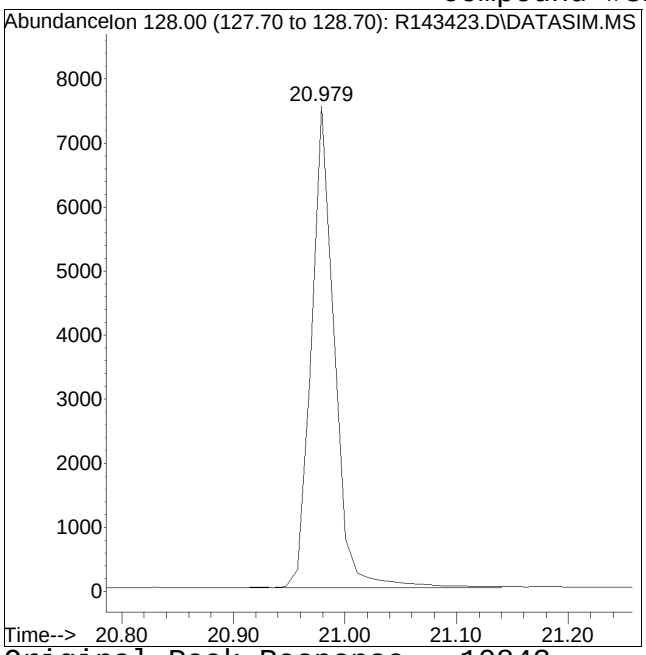
Manual Peak Response = 245 M4

M4 = Poor automated baseline construction.

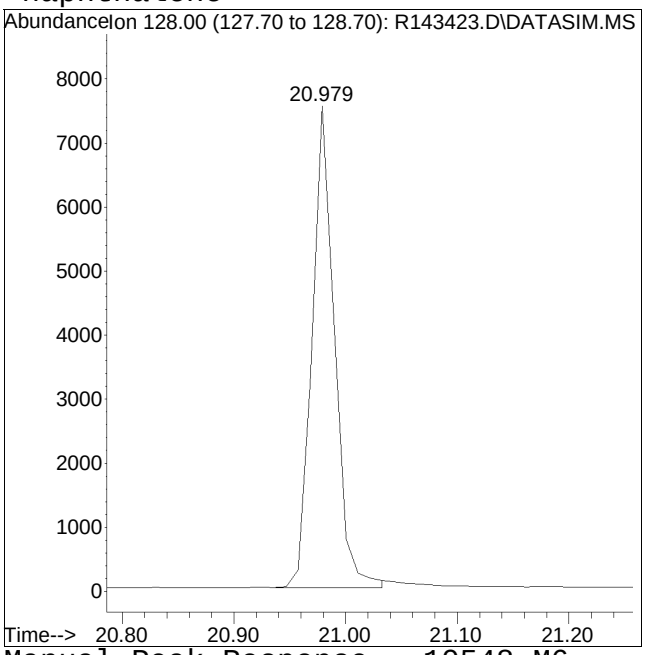
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:46 am

Compound #82: naphthalene



Original Peak Response = 10843



Manual Peak Response = 10548 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 14:11:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.202	49	133875	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		88.69%	
33) 1,4-difluorobenzene	12.420	114	312720	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		84.08%	
51) chlorobenzene-D5	16.843	54	62988	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		91.47%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	5000M4	0.370	ppbV	
4) chloromethane	4.380	50	444M4	0.058	ppbV	
5) Freon-114	4.528	85	300M4	0.015	ppbV	
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	0.000		0	N.D.		
8) bromomethane	5.252		0	N.D.		
9) chloroethane	5.516	64	68	0.018	ppbV #	35
13) trichlorofluoromethane	6.579	101	4353	0.233	ppbV	98
16) 1,1-dichloroethene	7.427		0	N.D.		
18) methylene chloride	7.595	49	4990	0.492	ppbV	98
21) Freon 113	7.938	101	1084	0.069	ppbV	91
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.013	63	179M4	0.011	ppbV	
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.015		0	N.D.		
30) chloroform	10.362	83	2486	0.126	ppbV	96
32) 1,2-dichloroethane	11.210		0	N.D.		
36) 1,1,1-trichloroethane	11.494	97	262	0.015	ppbV #	63
37) benzene	12.016		0	N.D.		
38) carbon tetrachloride	12.182	117	884M4	0.058	ppbV	
41) 1,2-dichloropropane	12.990		0	N.D.		
42) bromodichloromethane	13.166	83	209M6	0.011	ppbV	
44) trichloroethene	13.218	130	6173	0.471	ppbV	99
47) cis-1,3-dichloropropene	14.220		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.942		0	N.D.		
52) toluene	15.249	91	2430	0.067	ppbV	100
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 14:11:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

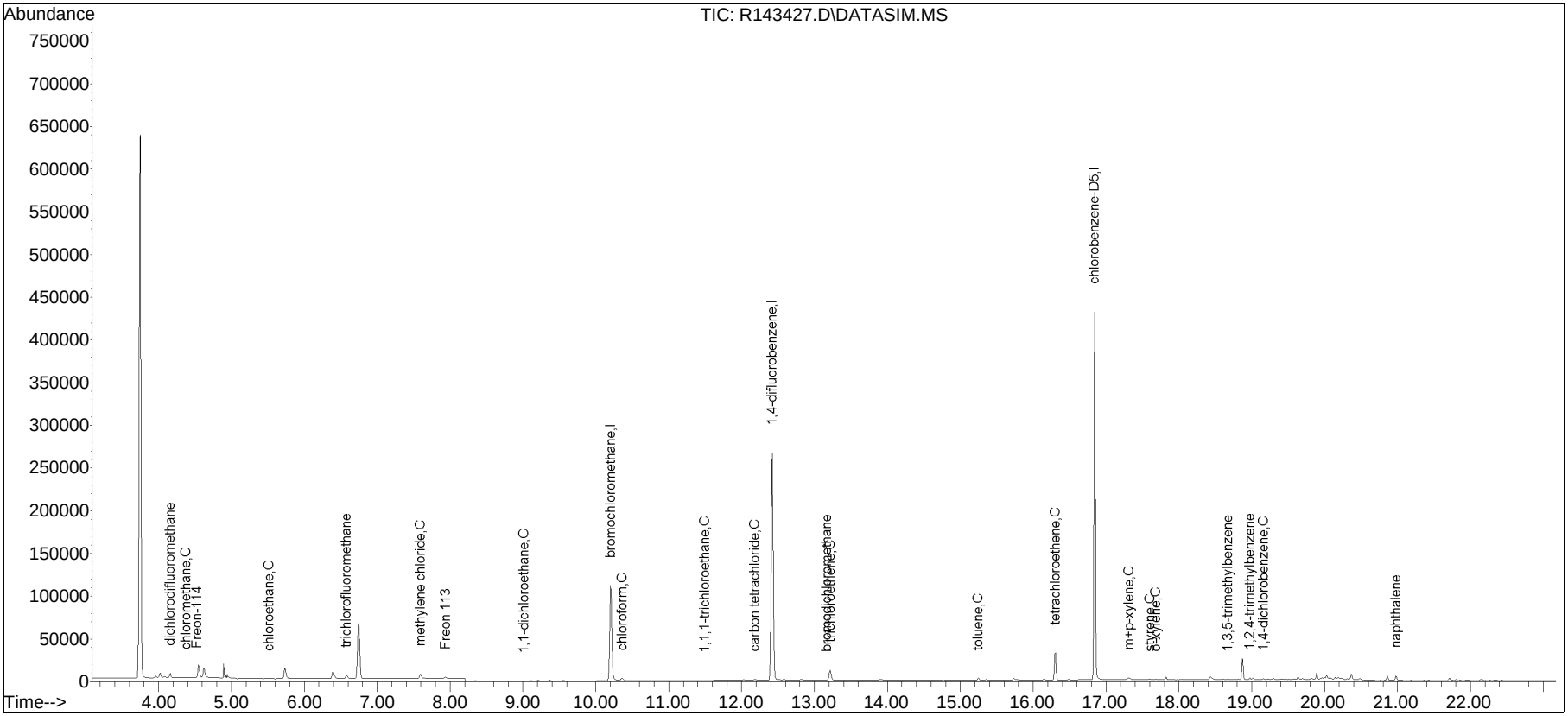
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,2-dibromoethane	15.810		0	N.D.	
57) tetrachloroethene	16.307	166	16937M4	0.937 ppbV	
58) 1,1,1,2-tetrachloroethane	16.843		0	N.D.	
59) chlorobenzene	16.884		0	N.D.	
60) ethylbenzene	17.180		0	N.D.	
61) m+p-xylene	17.313	91	785M4	0.022 ppbV	
62) bromoform	17.401		0	N.D.	
63) styrene	17.608	104	247	0.009 ppbV #	75
64) 1,1,2,2-tetrachloroethane	17.782		0	N.D.	
65) o-xylene	17.686	91	417	0.011 ppbV	90
71) 1,3,5-trimethylbenzene	18.669	105	324	0.007 ppbV #	89
73) 1,2,4-trimethylbenzene	18.975	105	797	0.018 ppbV #	80
75) 1,3-dichlorobenzene	19.113		0	N.D.	
76) 1,4-dichlorobenzene	19.161	146	828M4	0.024 ppbV	
79) 1,2-dichlorobenzene	19.423		0	N.D.	
81) 1,2,4-trichlorobenzene	20.861		0	N.D.	
82) naphthalene	20.979	128	6629M6	0.120 ppbV	
84) hexachlorobutadiene	21.290		0	N.D.	

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

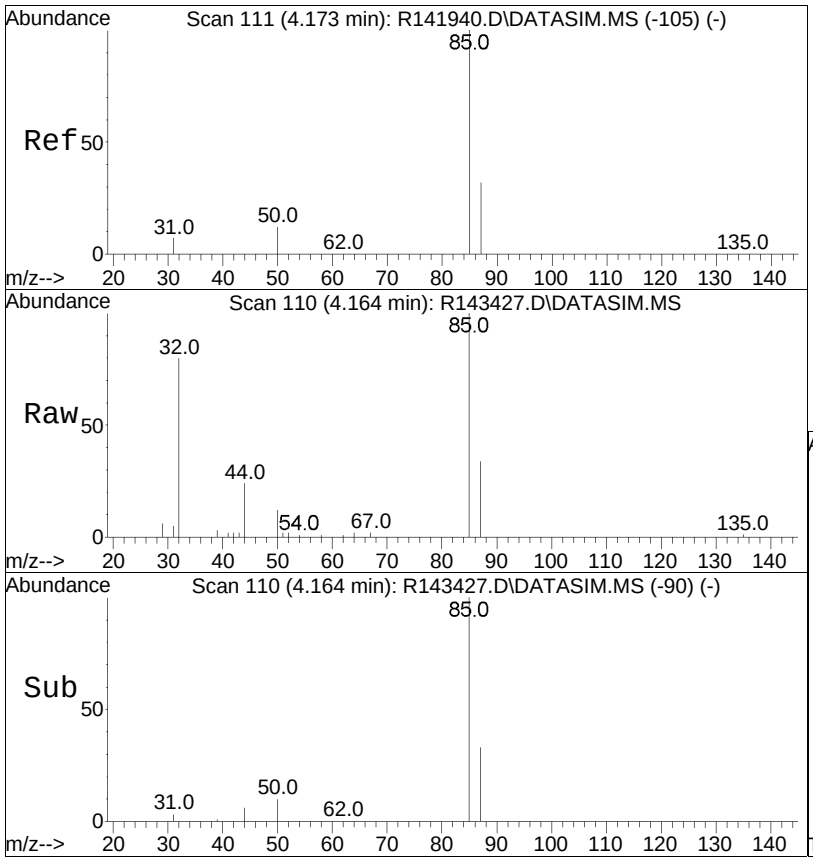
Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 14:11:40 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration



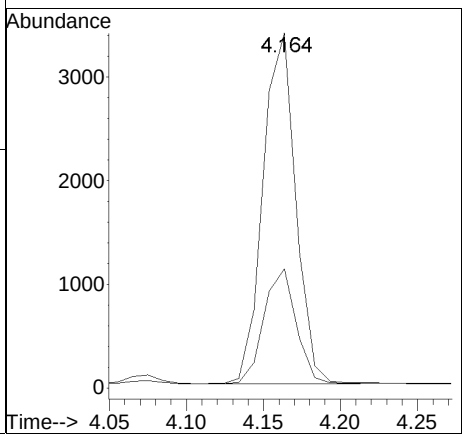
TSIM150710.M Fri Aug 14 14:12:03 2015

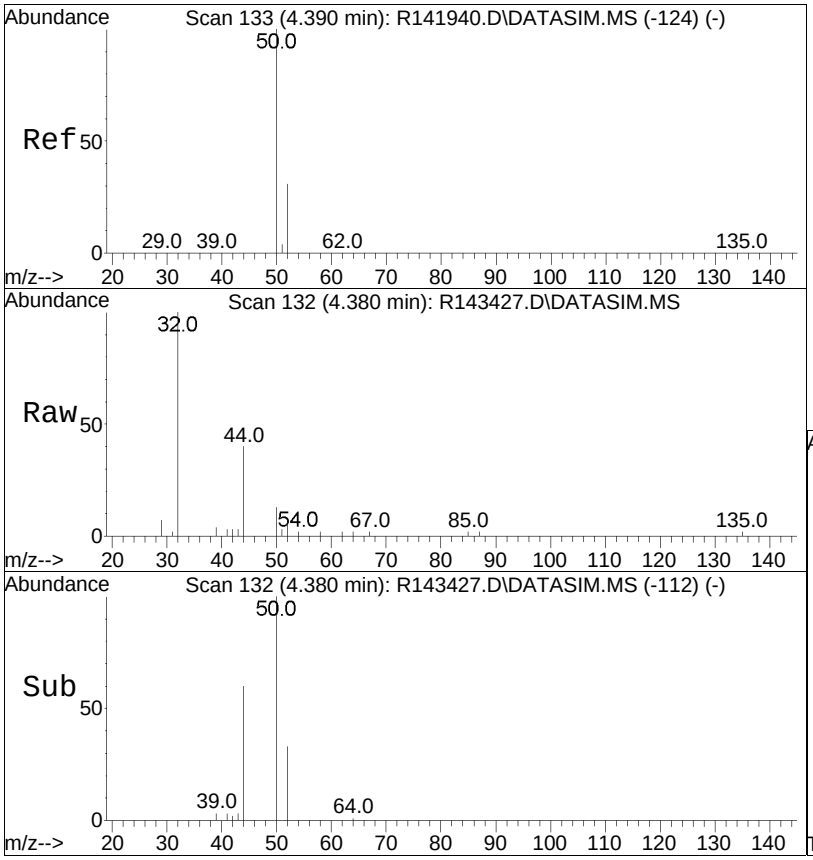


#3
dichlorodifluoromethane
Concen: 0.37 ppbV m
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 85 Resp: 5000

Ion	Ratio	Lower	Upper
85	100		
87	33.7	26.0	39.0

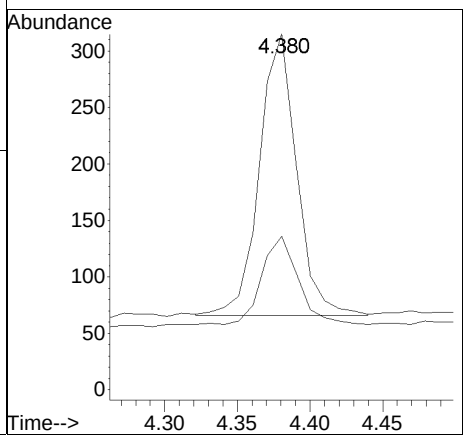


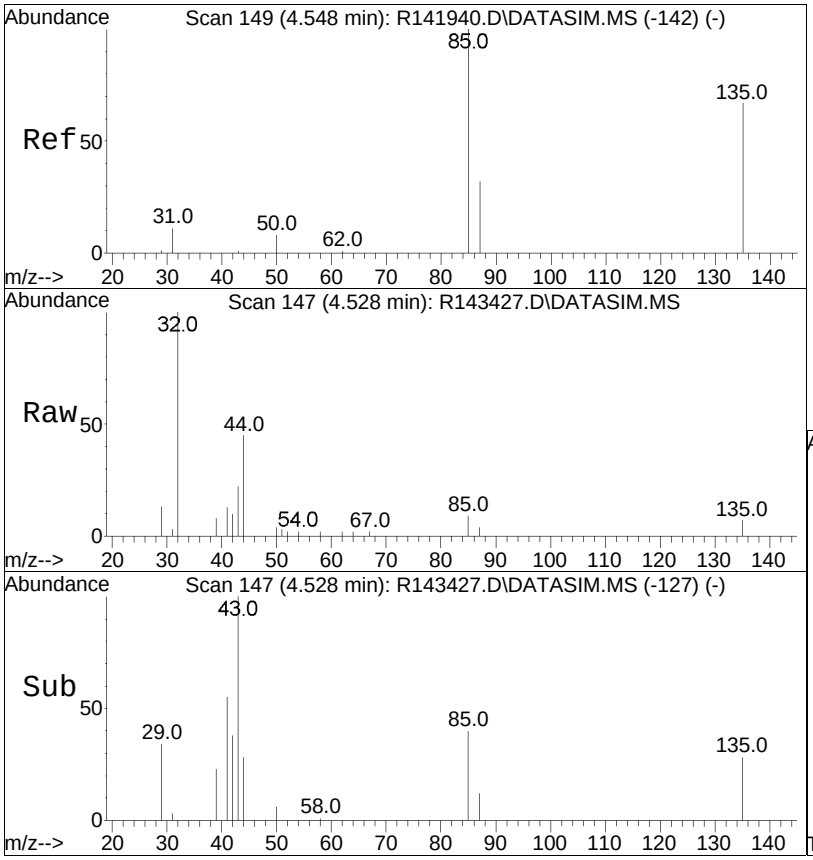


#4
chloromethane
Concen: 0.06 ppbV m
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 50 Resp: 444

Ion	Ratio	Lower	Upper
50	100		
52	43.2	26.2	39.4#

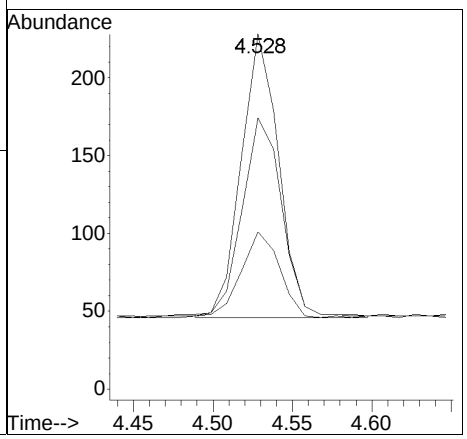


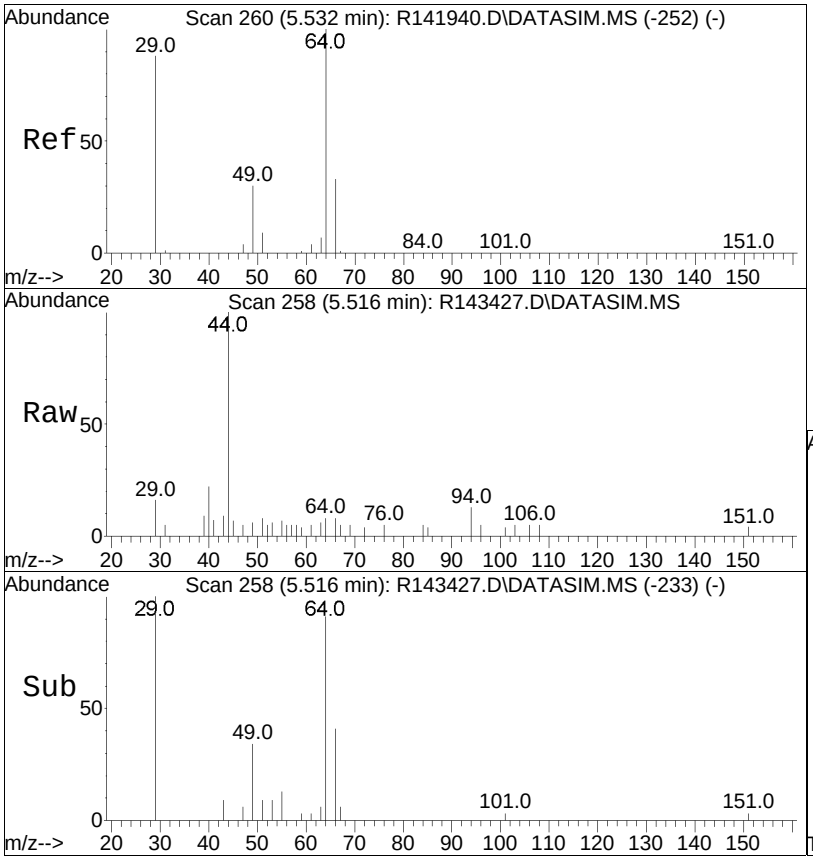


#5
Freon-114
Concen: 0.02 ppbV m
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 85 Resp: 300

Ion	Ratio	Lower	Upper
85	100		
87	44.3	25.4	38.0#
135	76.3	57.0	85.6

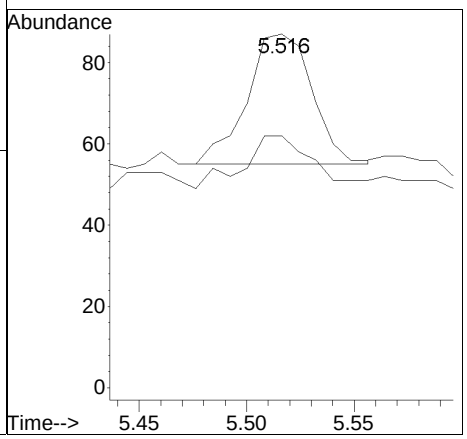


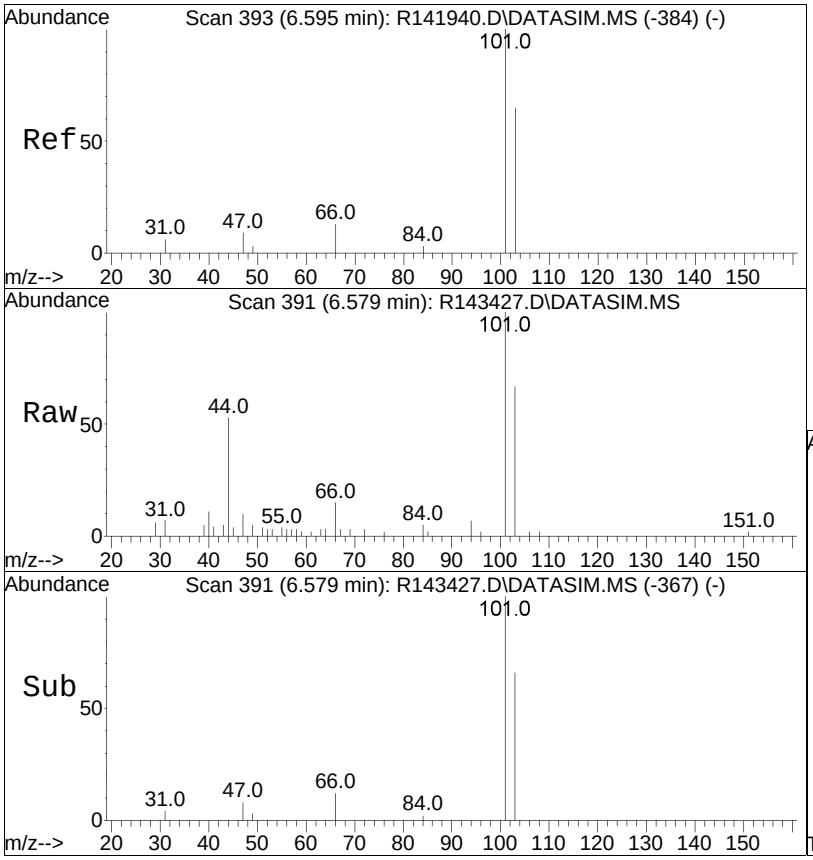


#9
chloroethane
Concen: 0.02 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 64 Resp: 68

Ion	Ratio	Lower	Upper
64	100		
49	71.3	27.4	41.0#

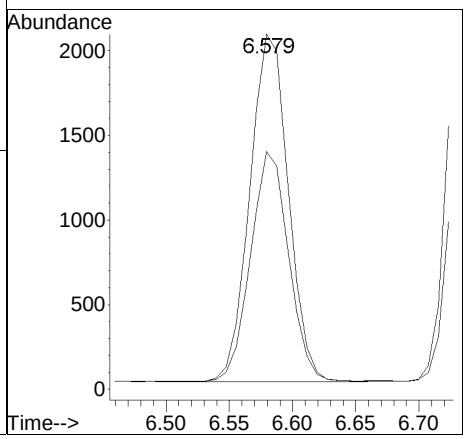


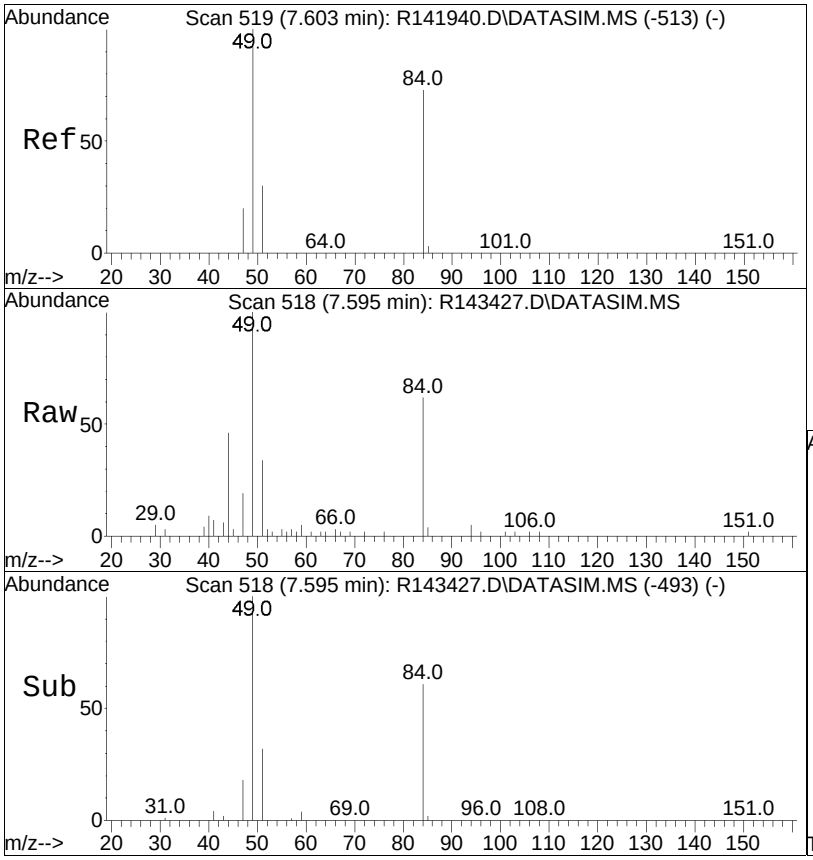


#13
trichlorofluoromethane
Concen: 0.23 ppbV
RT: 6.579 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:101 Resp: 4353

Ion	Ratio	Lower	Upper
101	100		
103	66.9	52.2	78.2

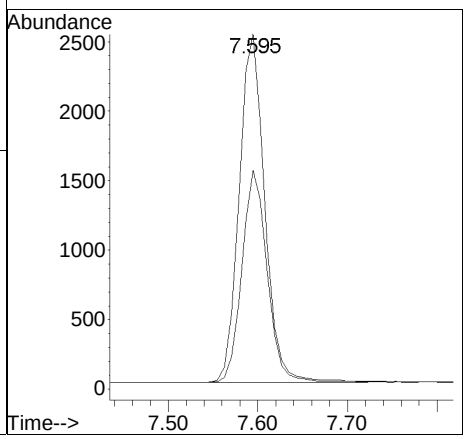


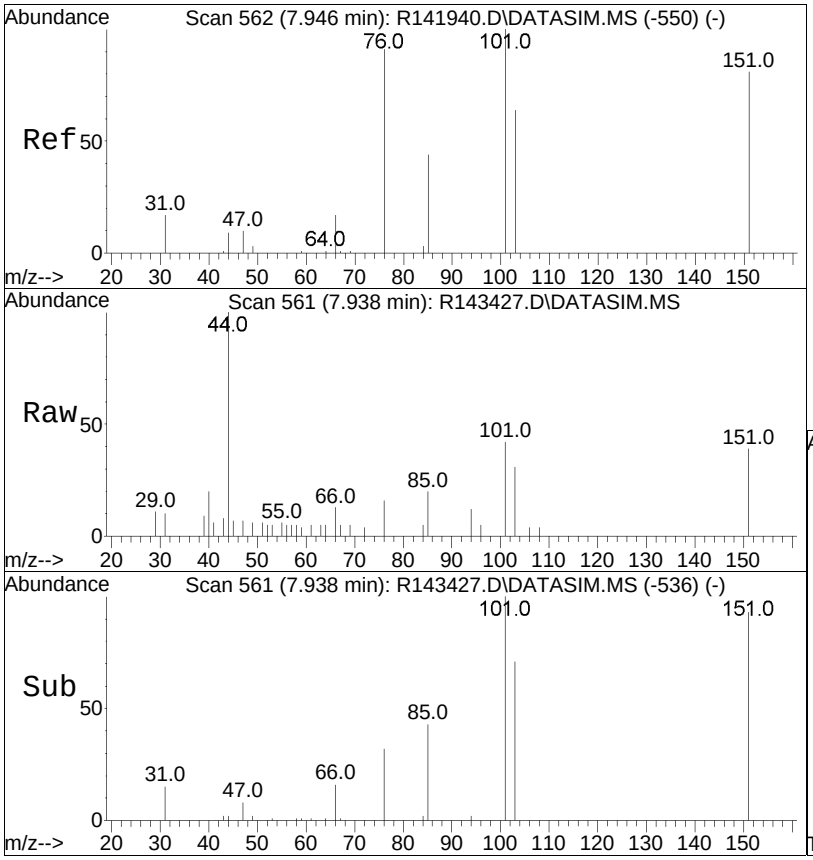


#18
methylene chloride
Concen: 0.49 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 49 Resp: 4990

Ion	Ratio	Lower	Upper
49	100		
84	61.7	50.8	76.2

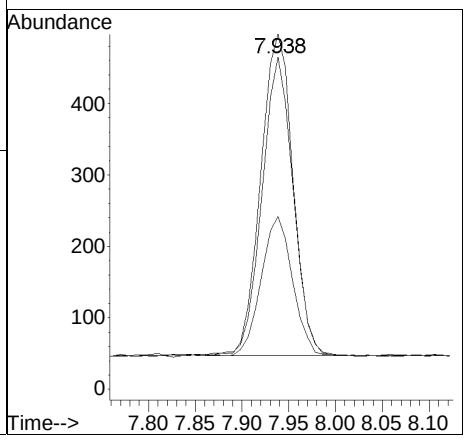


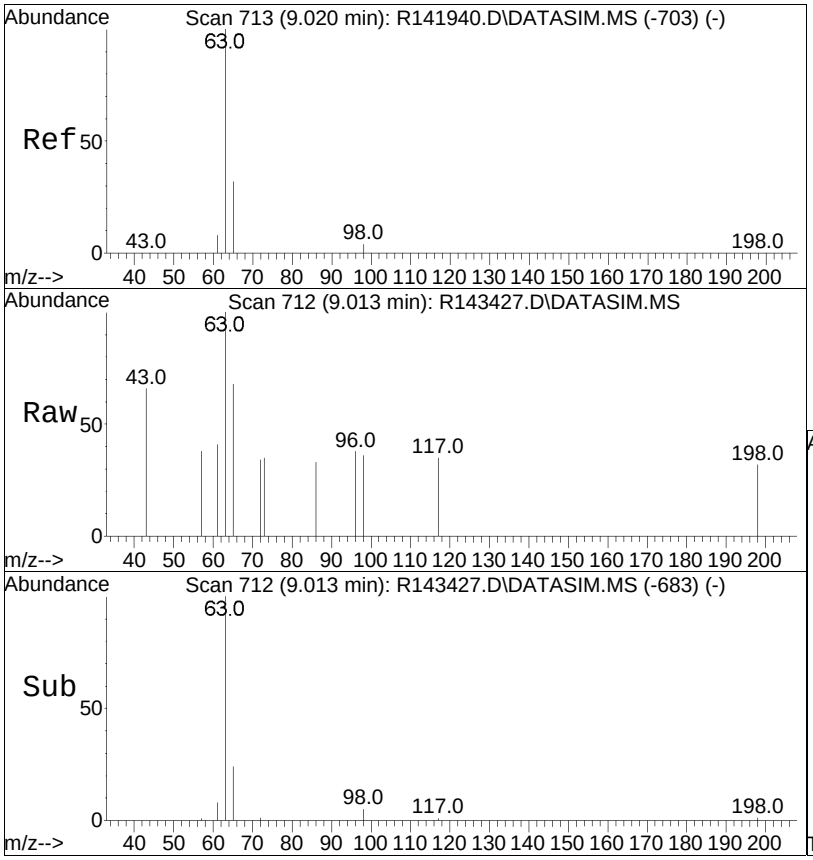


#21
Freon 113
Concen: 0.07 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:101 Resp: 1084

Ion	Ratio	Lower	Upper
101	100		
85	48.7	32.5	48.7
151	93.6	69.1	103.7

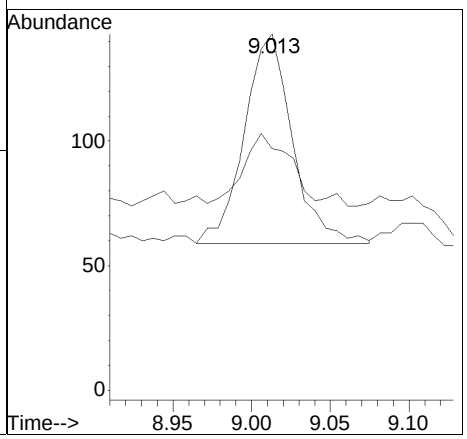


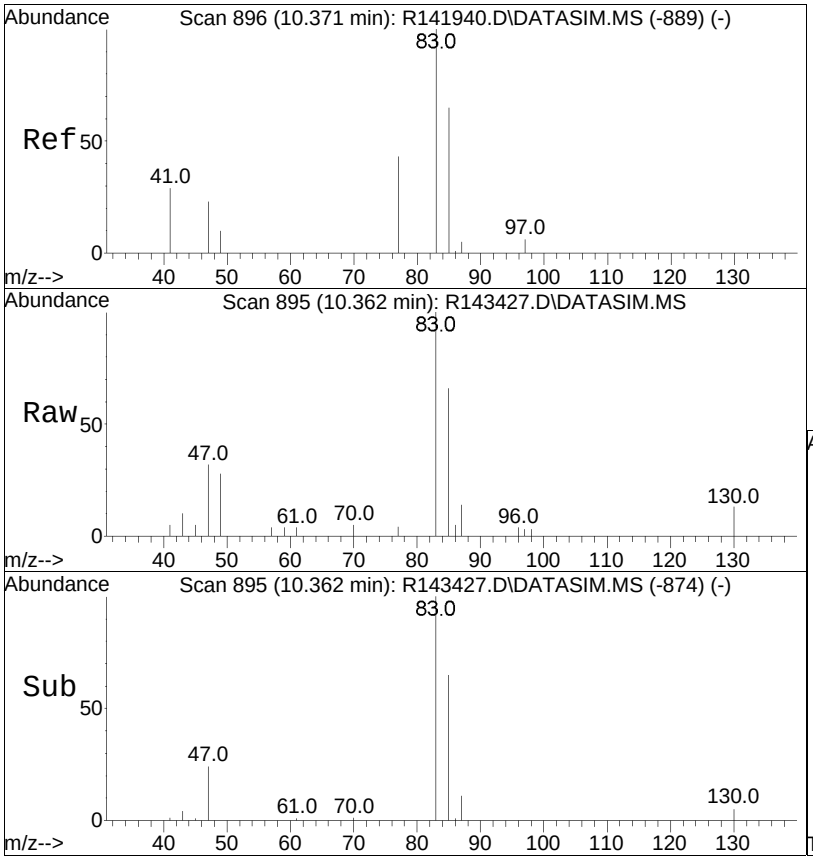


#24
1,1-dichloroethane
Concen: 0.01 ppbV m
RT: 9.013 min Scan# 712
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 63 Resp: 179

Ion	Ratio	Lower	Upper
63	100		
65	67.8	25.2	37.8#

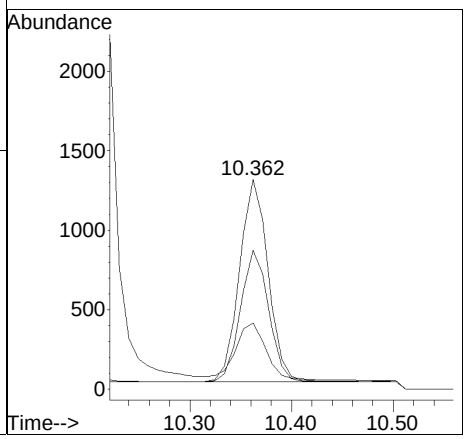


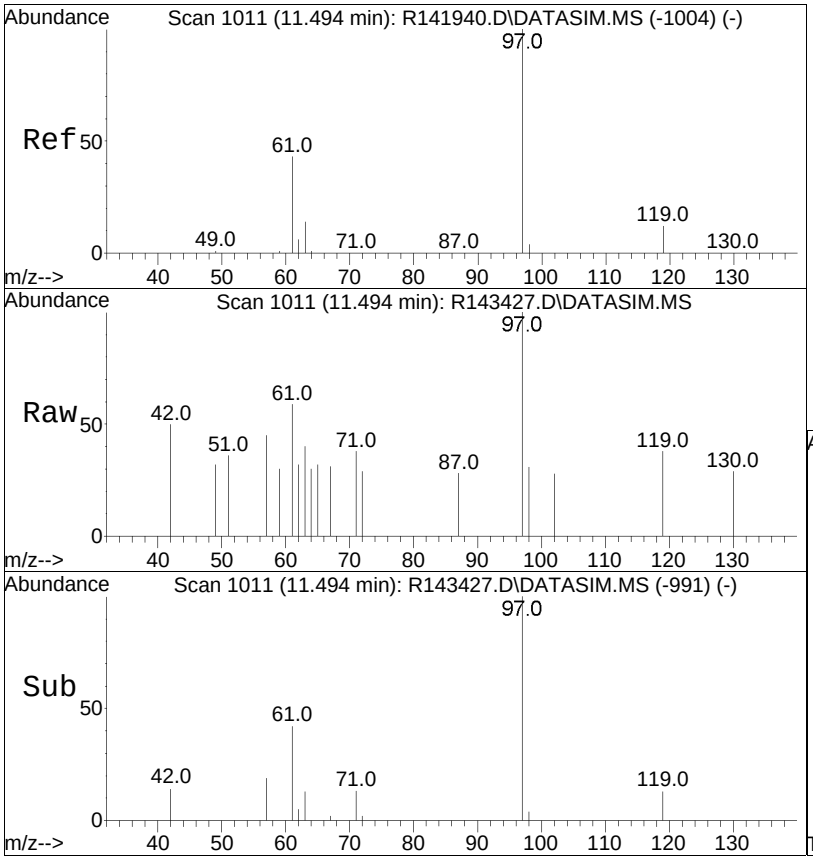


#30
chloroform
Concen: 0.13 ppbV
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 83 Resp: 2486

Ion	Ratio	Lower	Upper
83	100		
85	66.3	51.6	77.4
47	31.6	22.6	33.8

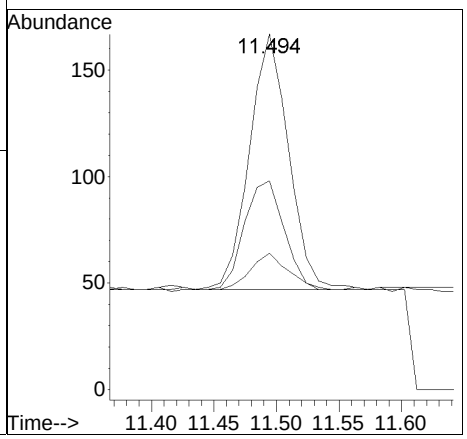


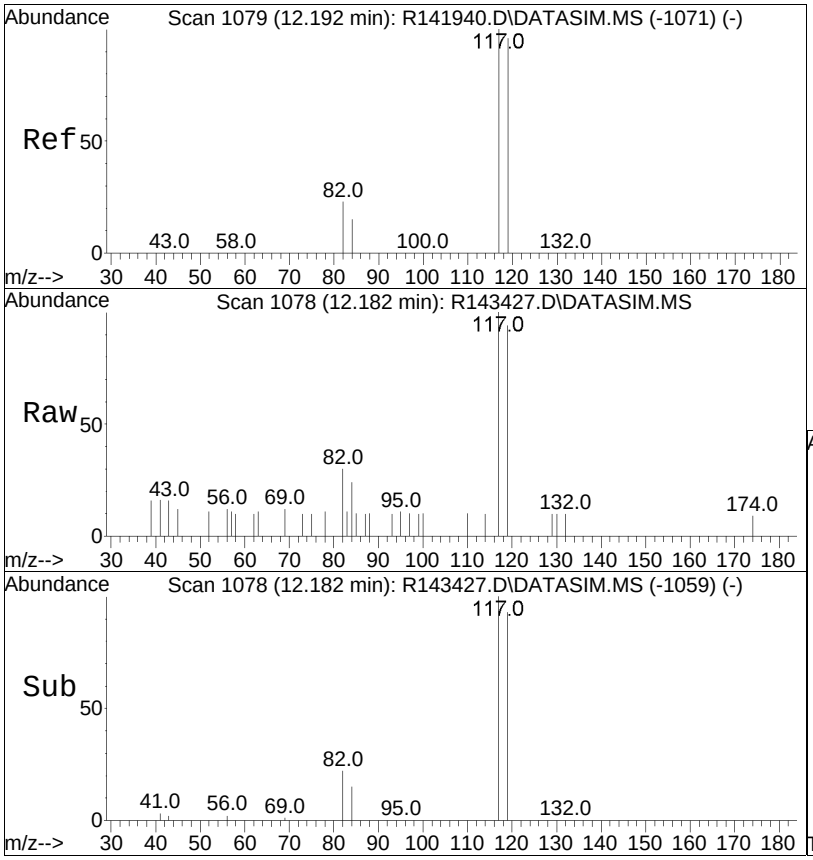


#36
1,1,1-trichloroethane
Concen: 0.02 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 97 Resp: 262

Ion	Ratio	Lower	Upper
97	100		
61	58.7	32.6	49.0#
119	38.3	11.0	16.4#

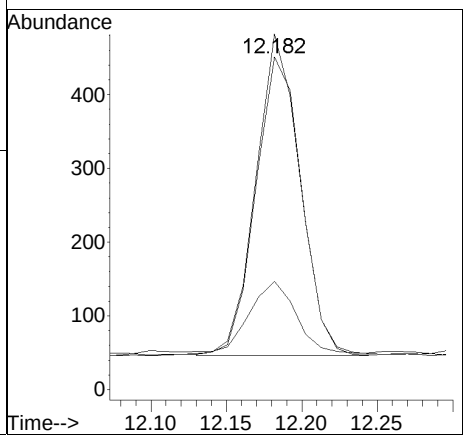


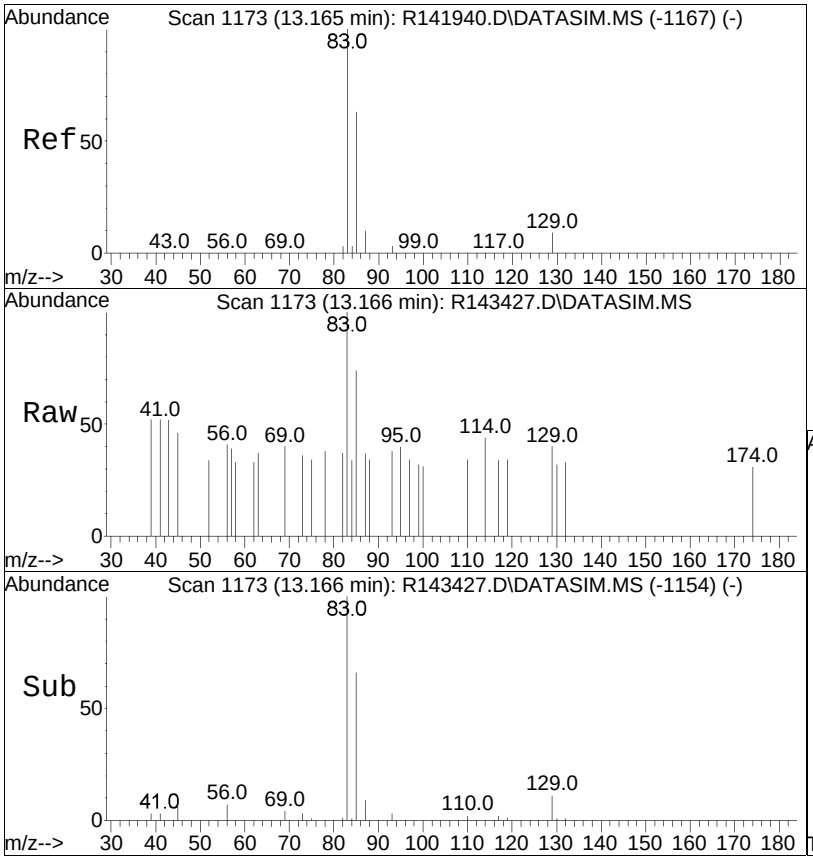


#38
carbon tetrachloride
Concen: 0.06 ppbV m
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:117 Resp: 884

Ion	Ratio	Lower	Upper
117	100		
119	93.6	76.4	114.6
82	30.5	18.3	27.5#

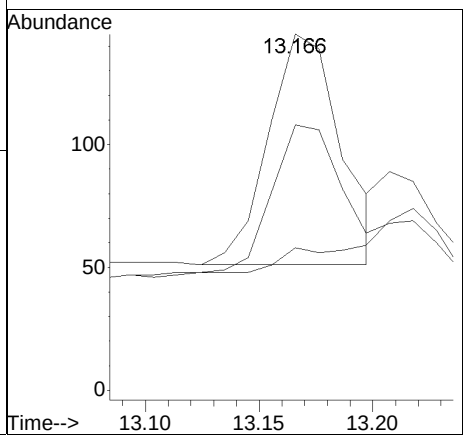


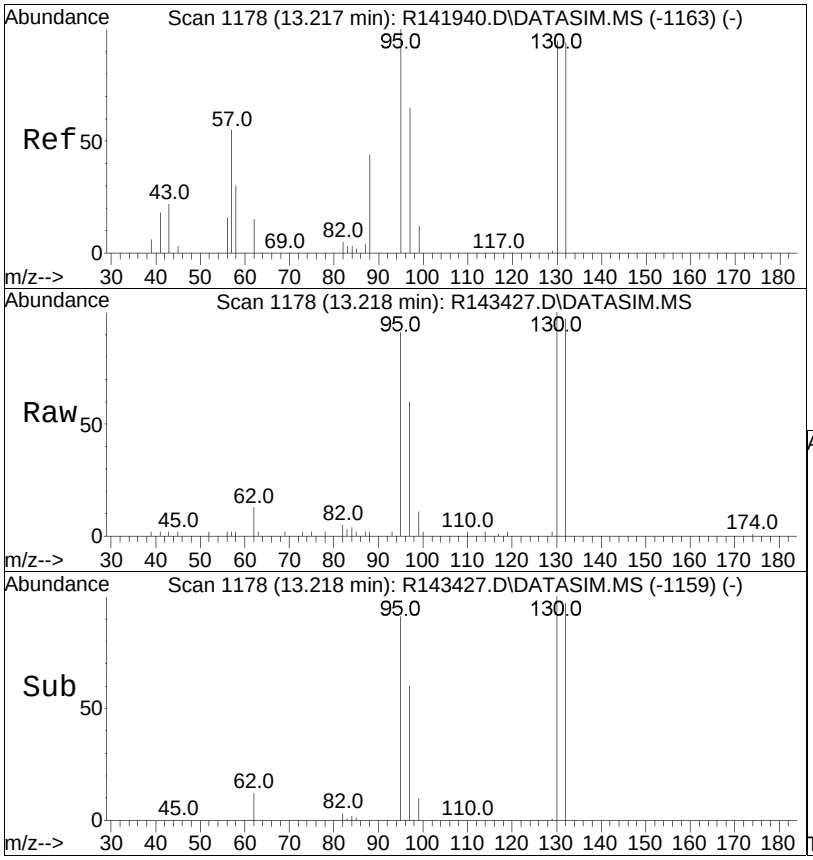


#42
bromodichloromethane
Concen: 0.01 ppbV m
RT: 13.166 min Scan# 1173
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 83 Resp: 209

Ion	Ratio	Lower	Upper
83	100		
85	74.5	50.6	75.8
129	40.0	8.9	13.3#

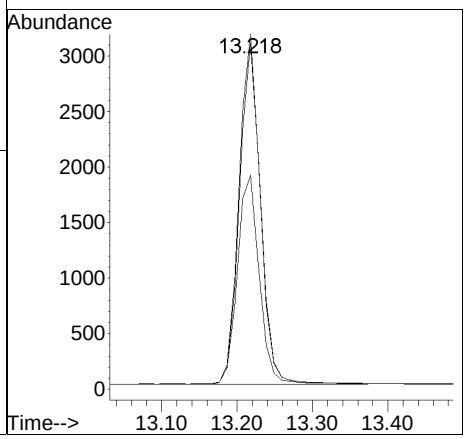


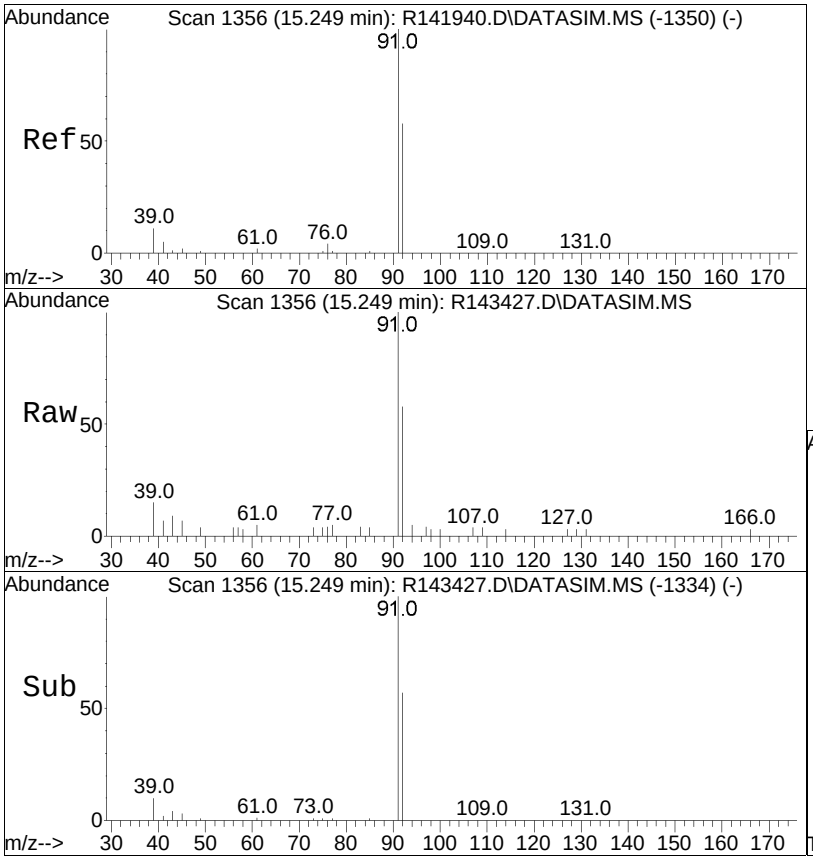


#44
trichloroethene
Concen: 0.47 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:130 Resp: 6173

Ion	Ratio	Lower	Upper
130	100		
132	97.4	77.5	116.3
97	60.3	47.4	71.2

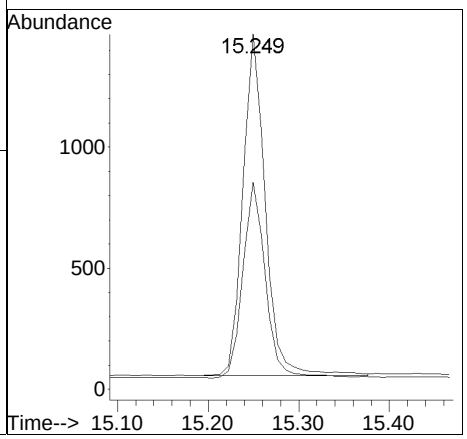


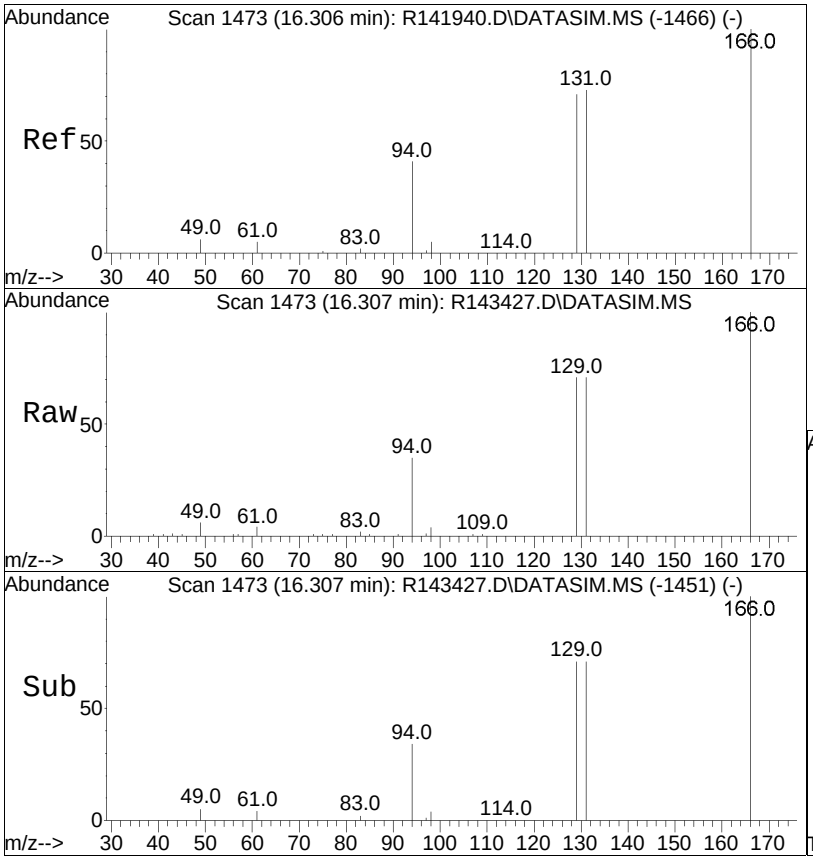


#52
toluene
Concen: 0.07 ppbV
RT: 15.249 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 91 Resp: 2430

Ion	Ratio	Lower	Upper
91	100		
92	58.4	46.8	70.2

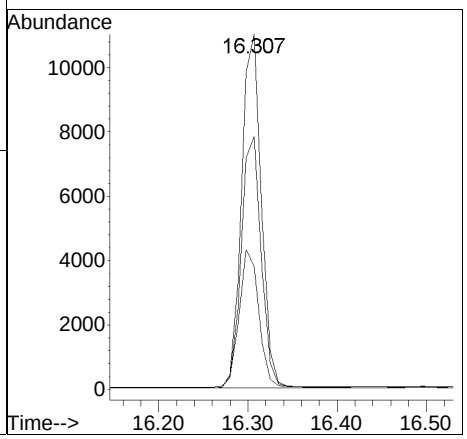


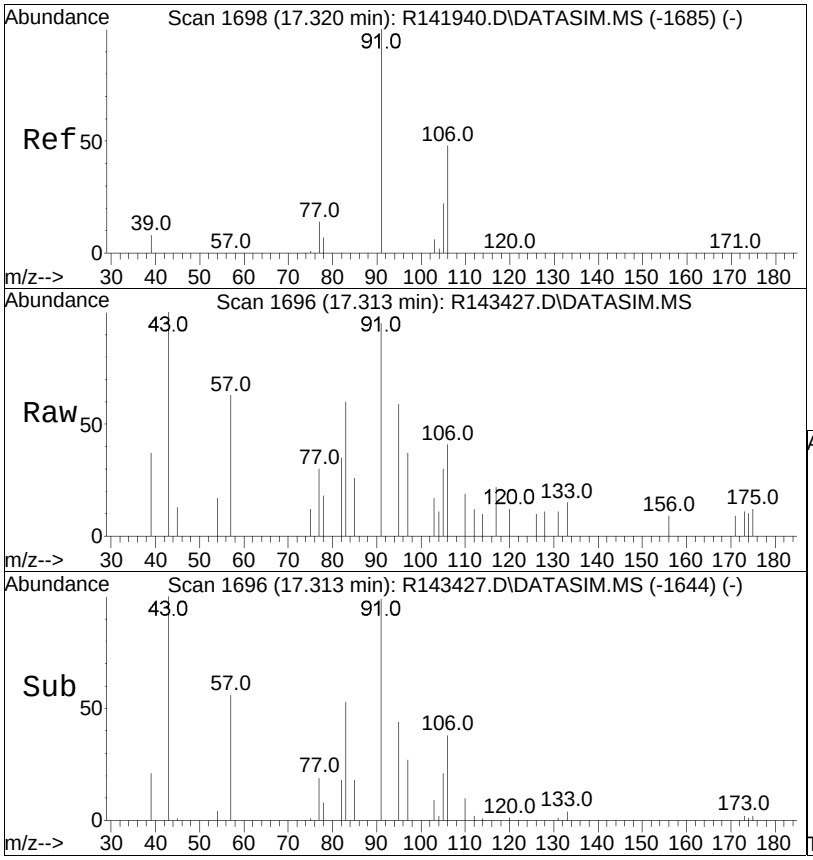


#57
tetrachloroethene
Concen: 0.94 ppbV m
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:166 Resp: 16937

Ion	Ratio	Lower	Upper
166	100		
131	71.3	57.0	85.4
94	34.7	26.2	39.4

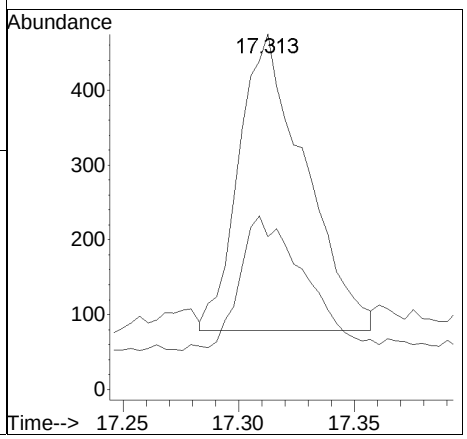


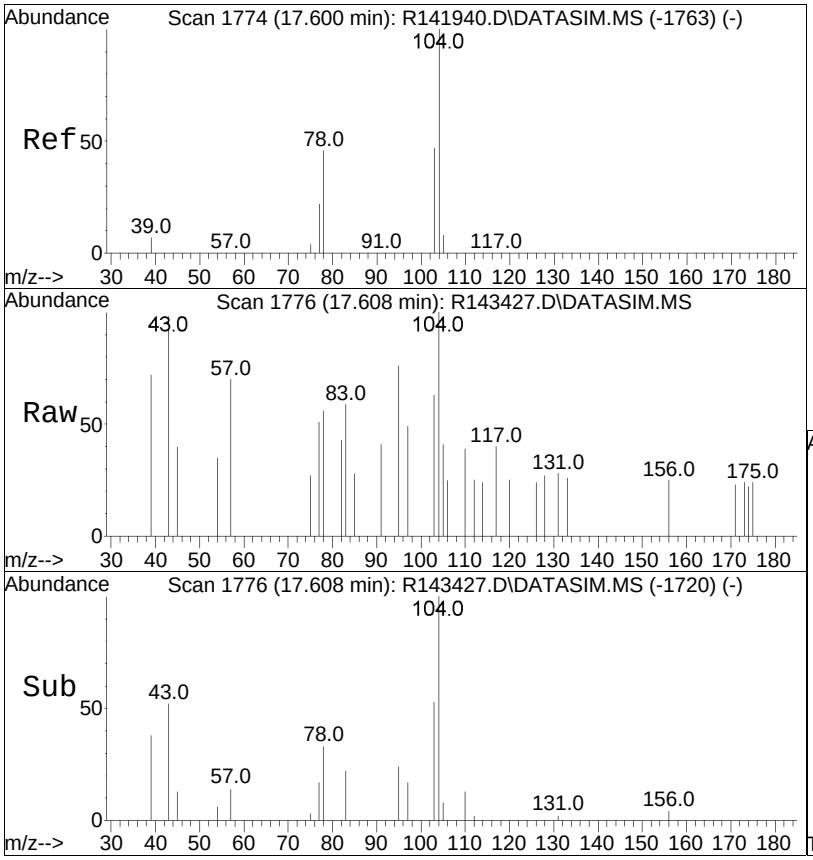


#61
m+p-xylene
Concen: 0.02 ppbV m
RT: 17.313 min Scan# 1696
Delta R.T. -0.008 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 91 Resp: 785

Ion	Ratio	Lower	Upper
91	100		
106	42.9	40.6	61.0

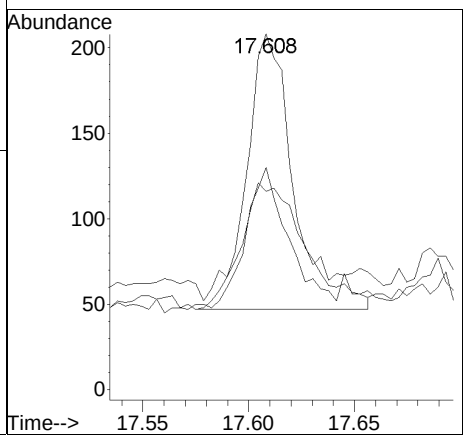


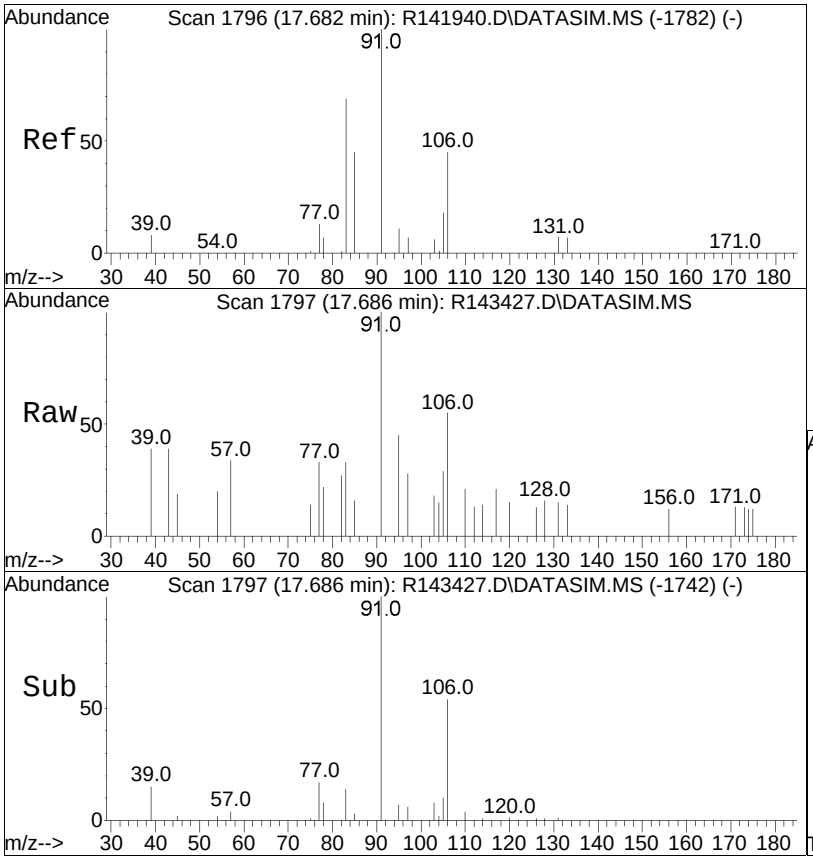


#63
styrene
Concen: 0.01 ppbV
RT: 17.608 min Scan# 1776
Delta R.T. 0.007 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:104 Resp: 247

Ion	Ratio	Lower	Upper
104	100		
103	62.5	37.7	56.5#
78	55.8	31.0	46.6#

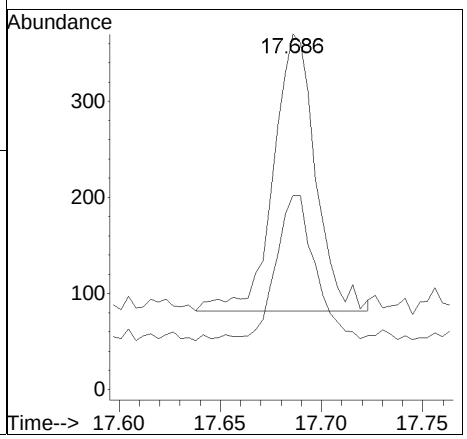


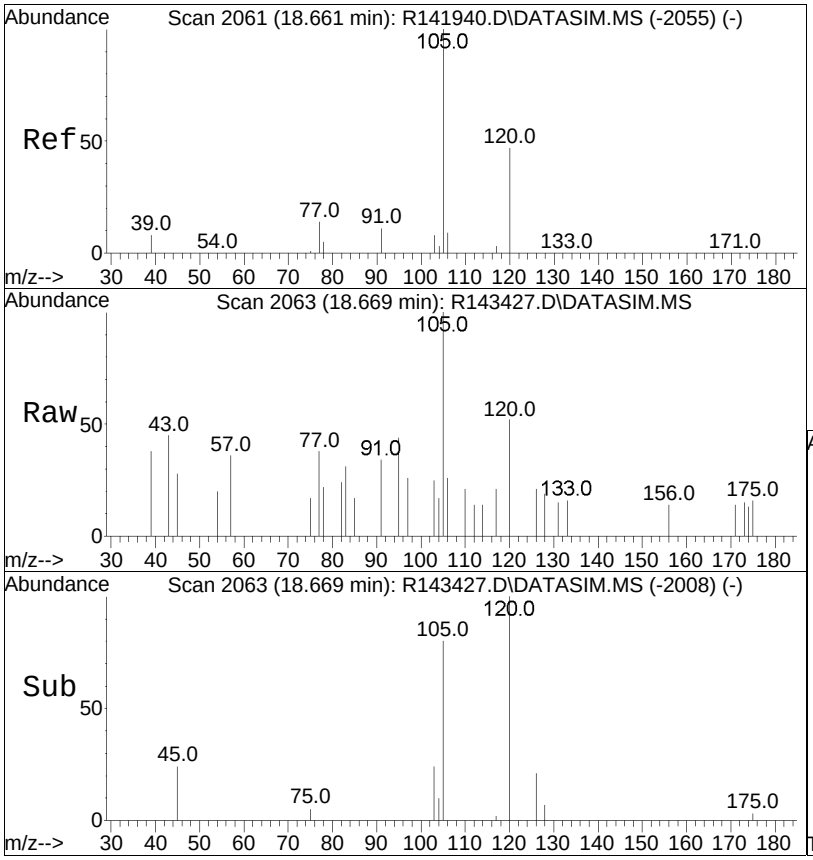


#65
o-xylene
Concen: 0.01 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 91 Resp: 417

Ion	Ratio	Lower	Upper
91	100		
106	54.6	38.5	57.7

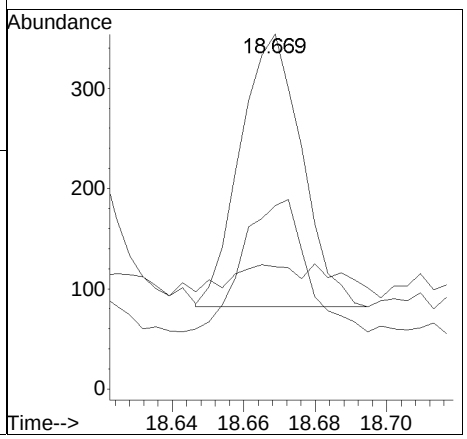


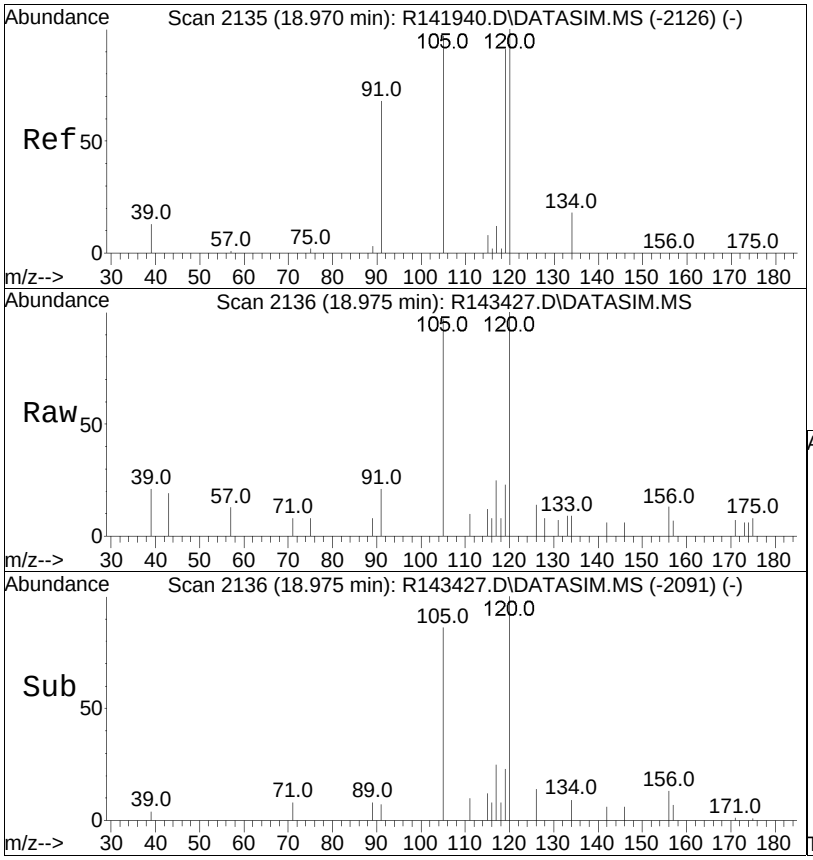


#71
1,3,5-trimethylbenzene
Concen: 0.01 ppbV
RT: 18.669 min Scan# 2063
Delta R.T. 0.004 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:105 Resp: 324

Ion	Ratio	Lower	Upper
105	100		
120	51.7	40.9	61.3
91	34.5	7.8	11.6#

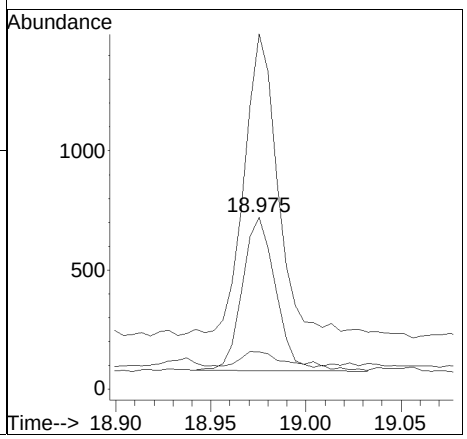


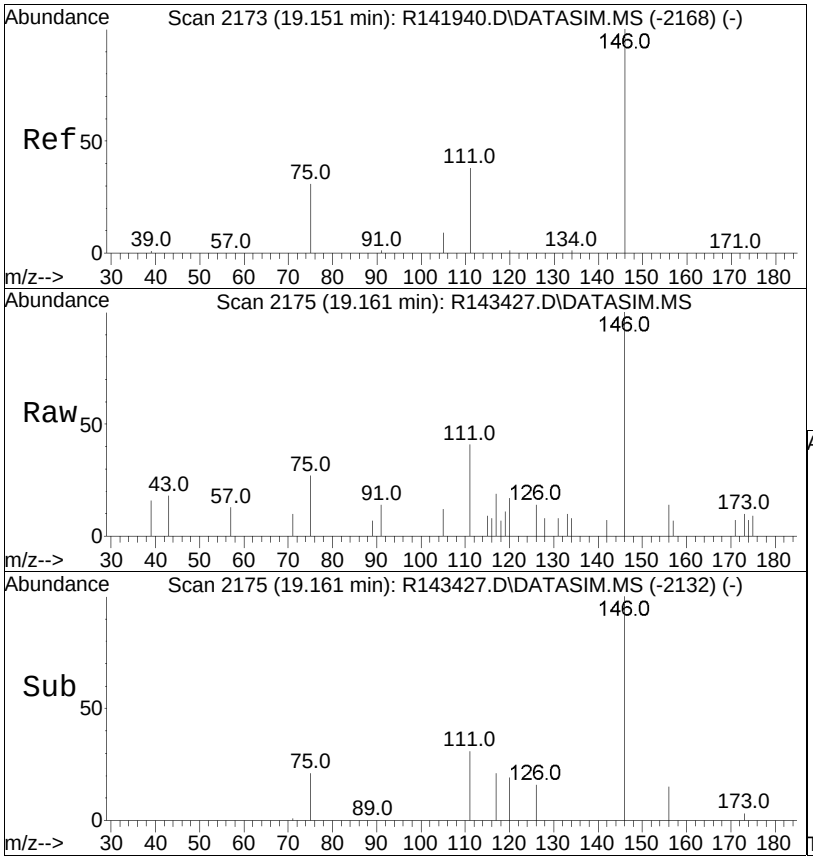


#73
1,2,4-trimethylbenzene
Concen: 0.02 ppbV
RT: 18.975 min Scan# 2136
Delta R.T. 0.005 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:105 Resp: 797

Ion	Ratio	Lower	Upper
105	100		
120	206.4	174.7	262.1
91	21.7	55.2	82.8#

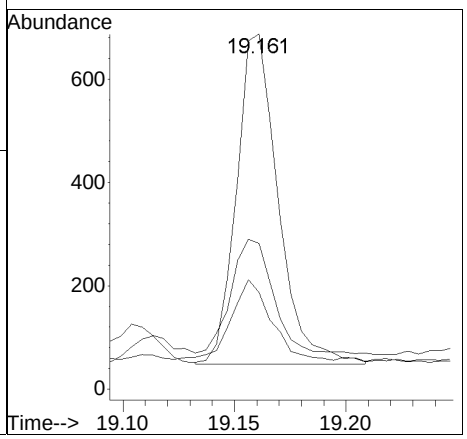


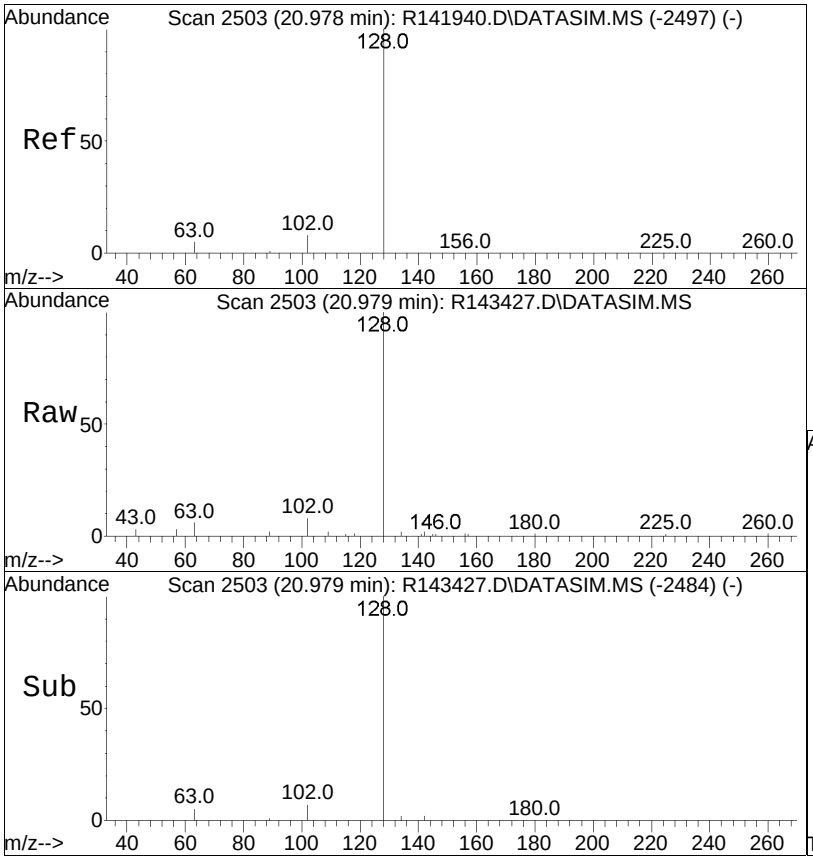


#76
1,4-dichlorobenzene
Concen: 0.02 ppbV m
RT: 19.161 min Scan# 2175
Delta R.T. 0.005 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:146 Resp: 828

Ion	Ratio	Lower	Upper
146	100		
111	41.0	26.8	40.2#
75	27.2	17.5	26.3#

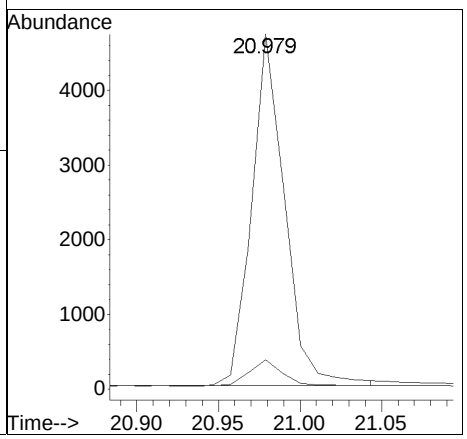




#82
naphthalene
Concen: 0.12 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion:128 Resp: 6629

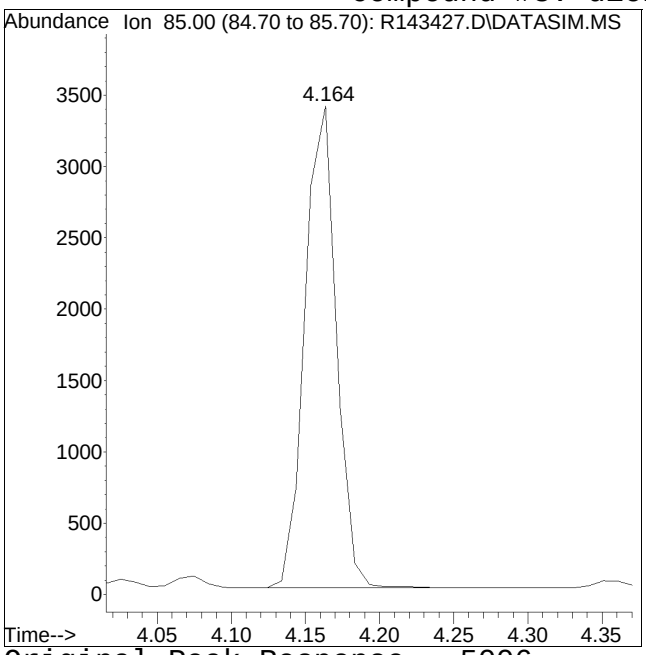
Ion	Ratio	Lower	Upper
128	100		
102	8.4	5.7	8.5



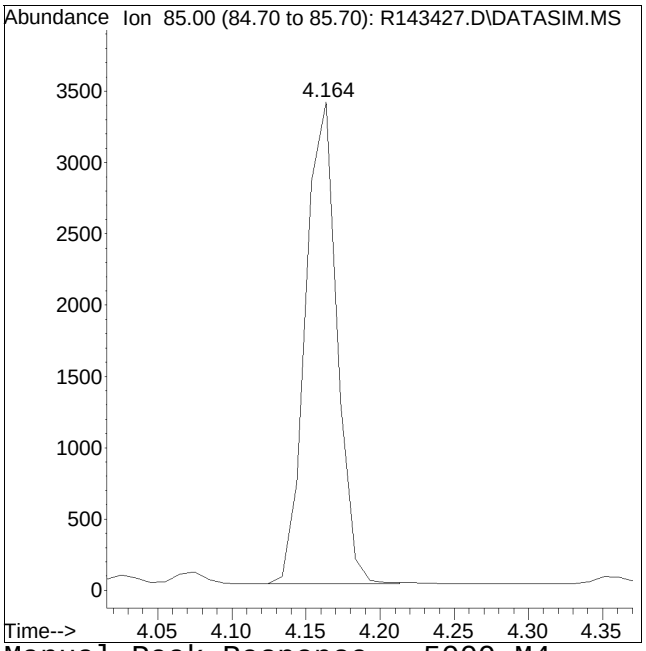
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #3: dichlorodifluoromethane



Original Peak Response = 5006



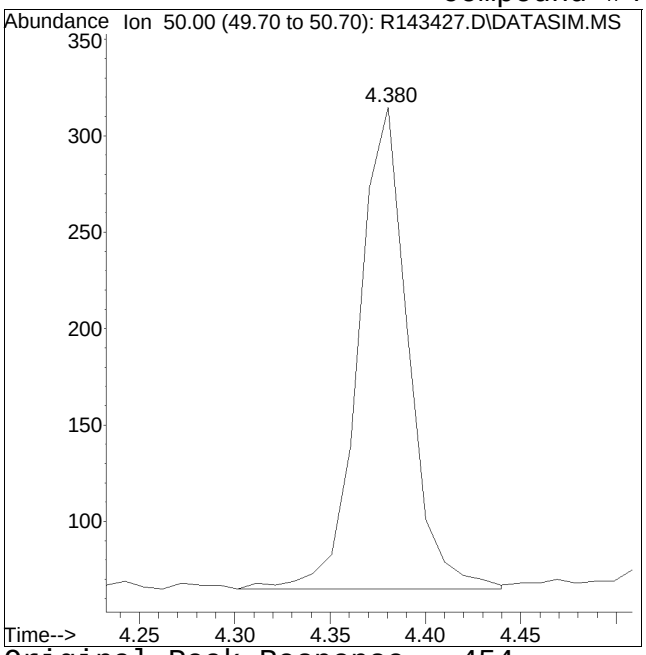
Manual Peak Response = 5000 M4

M4 = Poor automated baseline construction.

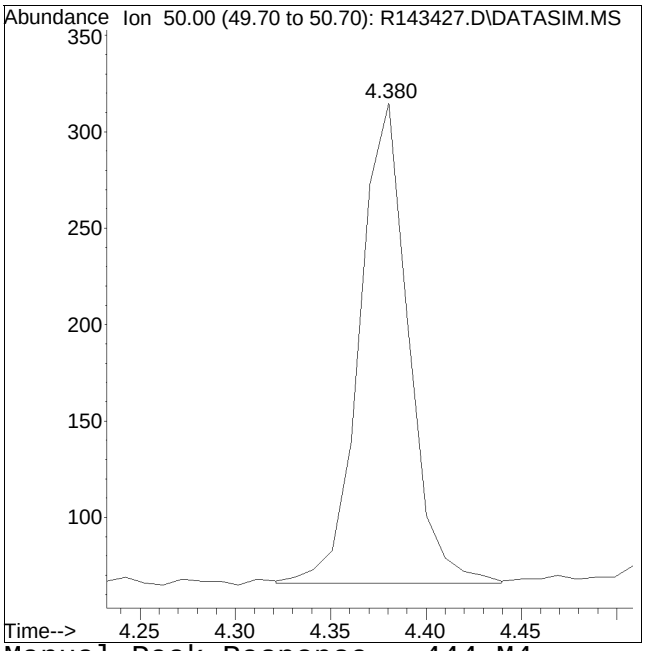
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #4: chloromethane



Original Peak Response = 454



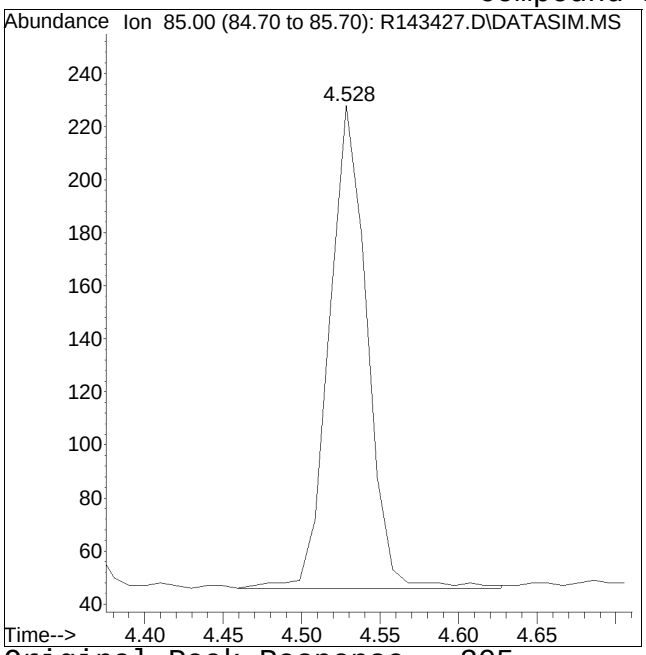
Manual Peak Response = 444 M4

M4 = Poor automated baseline construction.

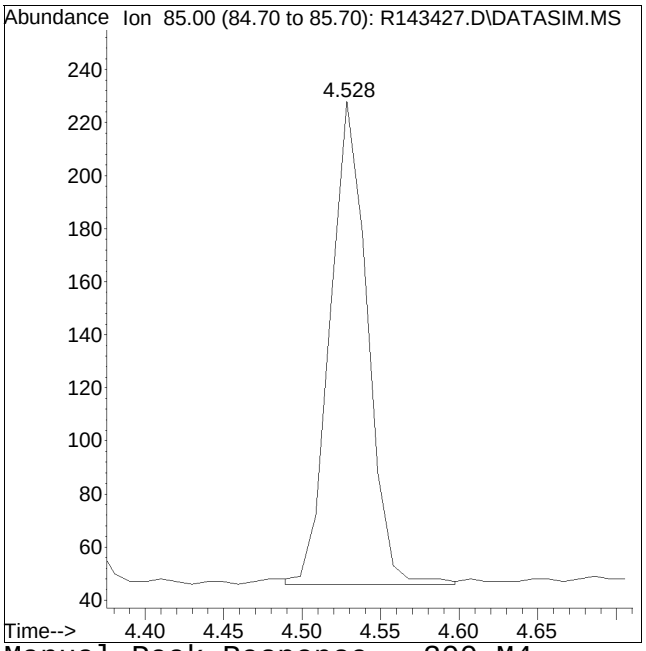
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #5: Freon-114



Original Peak Response = 305



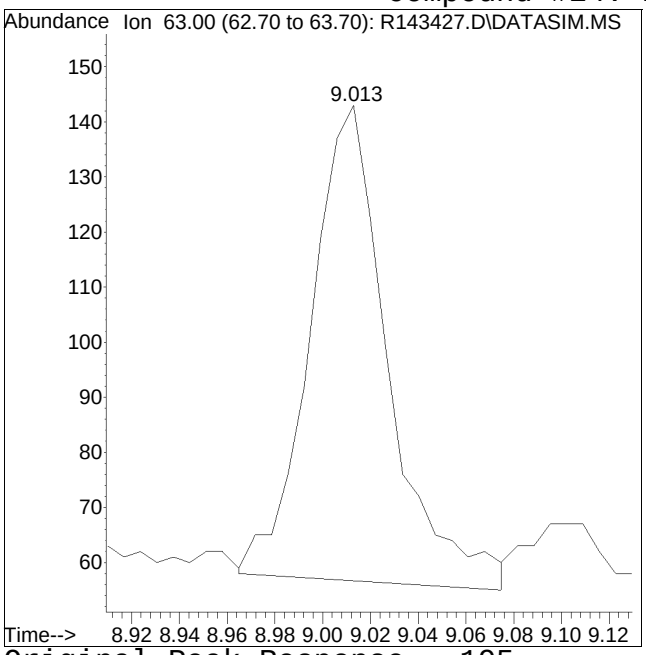
Manual Peak Response = 300 M4

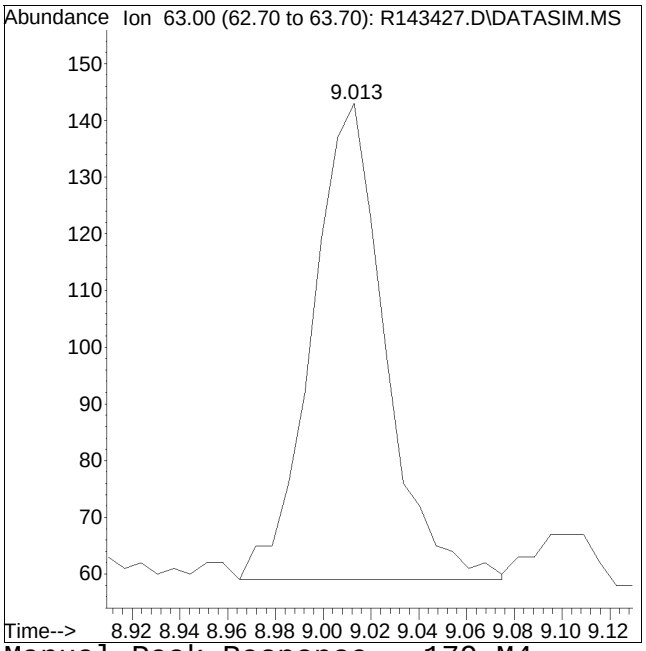
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #24: 1,1-dichloroethane



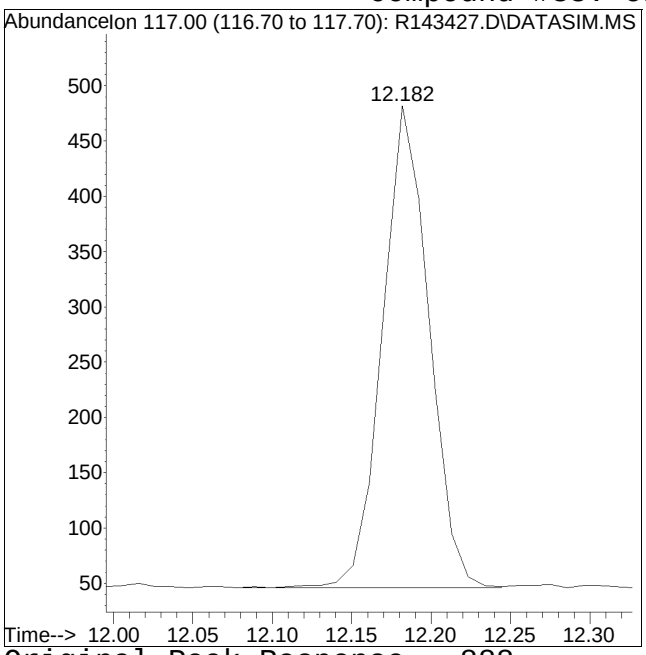


Original Peak Response = 195 Manual Peak Response = 179 M4
M4 = Poor automated baseline construction.

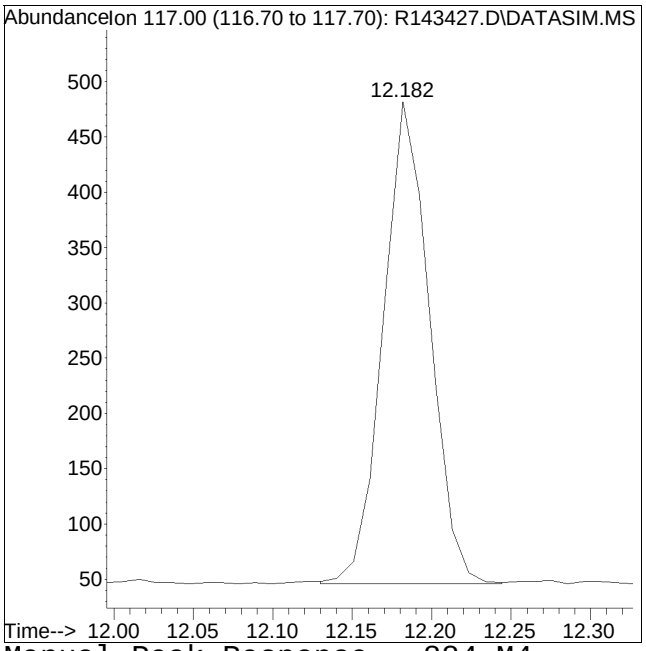
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #38: carbon tetrachloride



Original Peak Response = 888



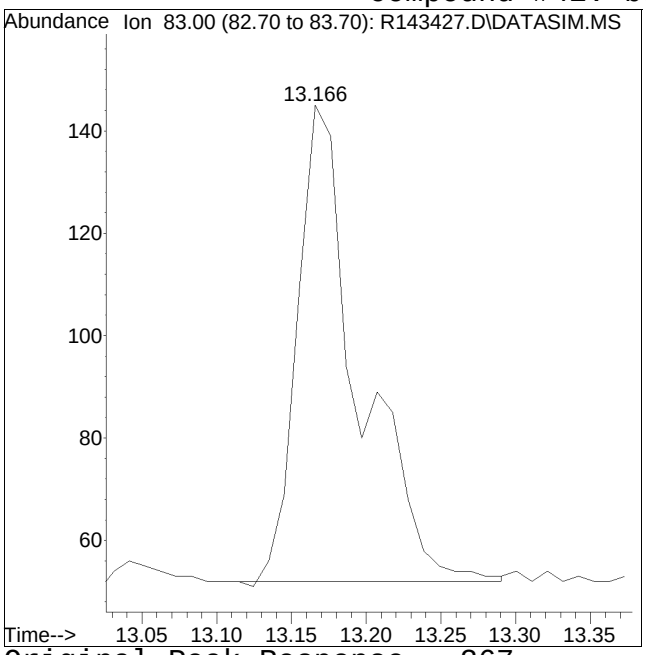
Manual Peak Response = 884 M4

M4 = Poor automated baseline construction.

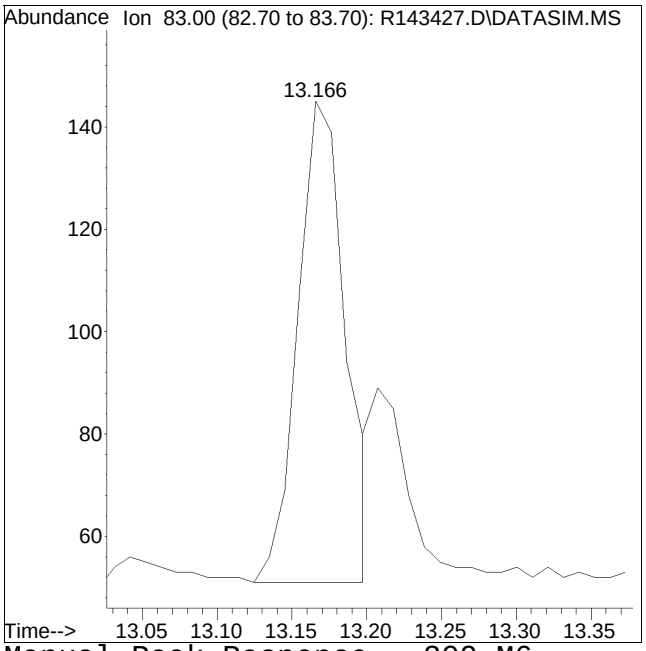
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #42: bromodichloromethane



Original Peak Response = 267



Manual Peak Response = 209 M6

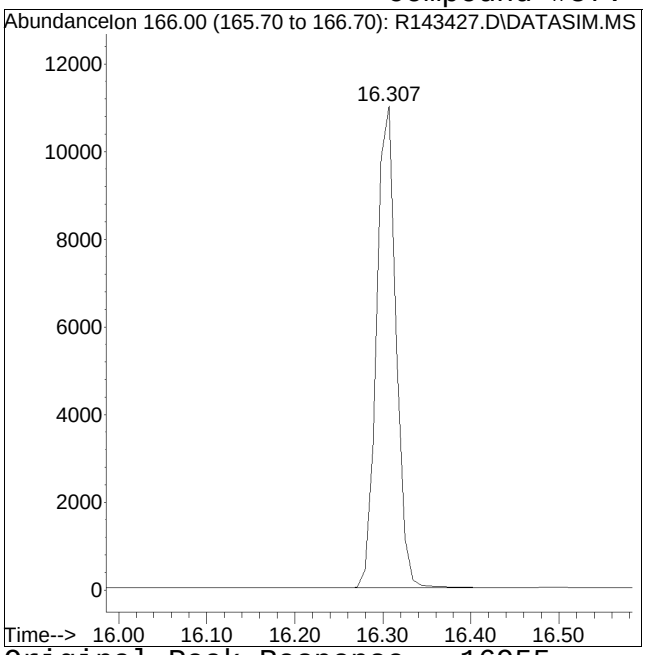
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

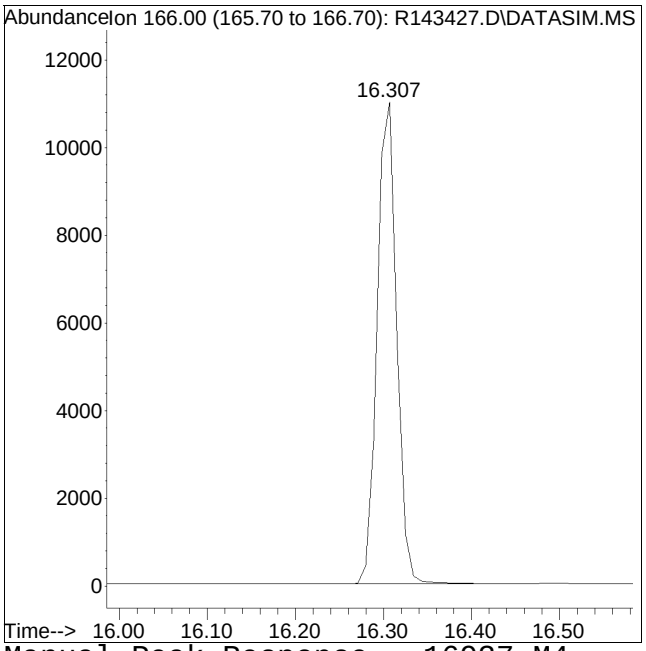
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143427.D
Date Inj'd : 8/13/2015 10:40 pm
Sample : L1519114-02,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #57: tetrachloroethene



Original Peak Response = 16955



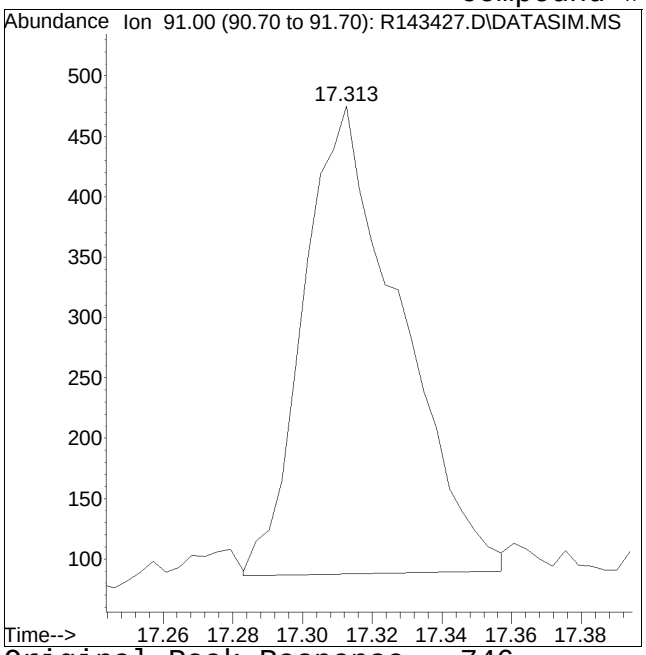
Manual Peak Response = 16937 M4

M4 = Poor automated baseline construction.

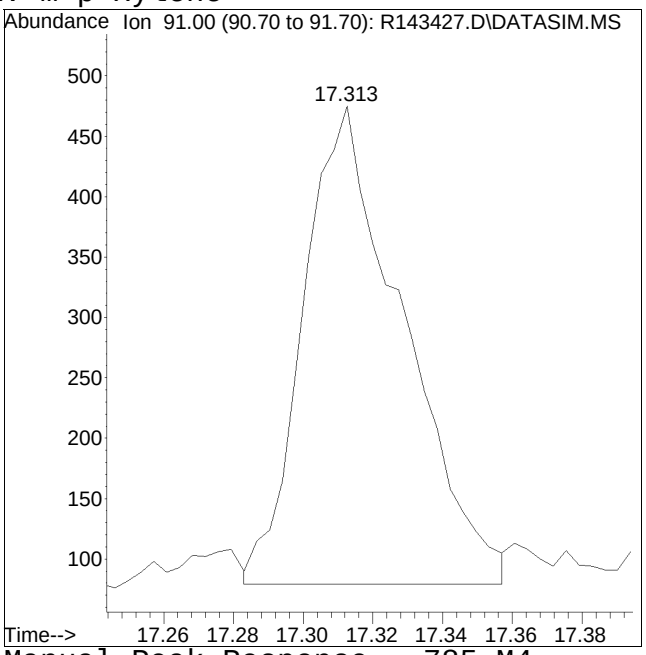
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #61: m+p-xylene



Original Peak Response = 746



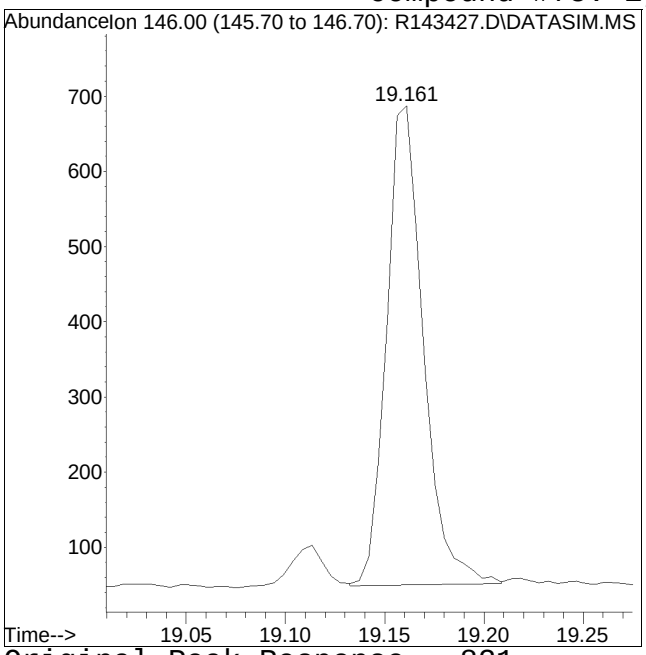
Manual Peak Response = 785 M4

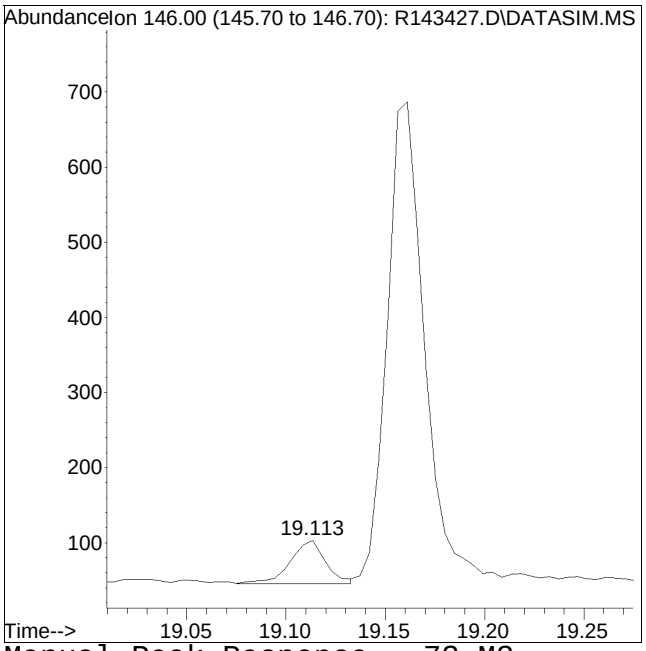
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #75: 1,3-dichlorobenzene





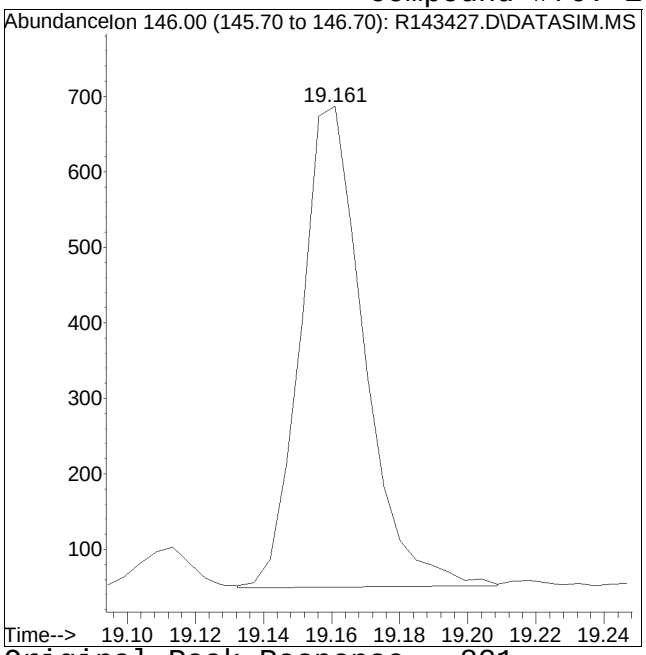
Original Peak Response = 821 Manual Peak Response = 73 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

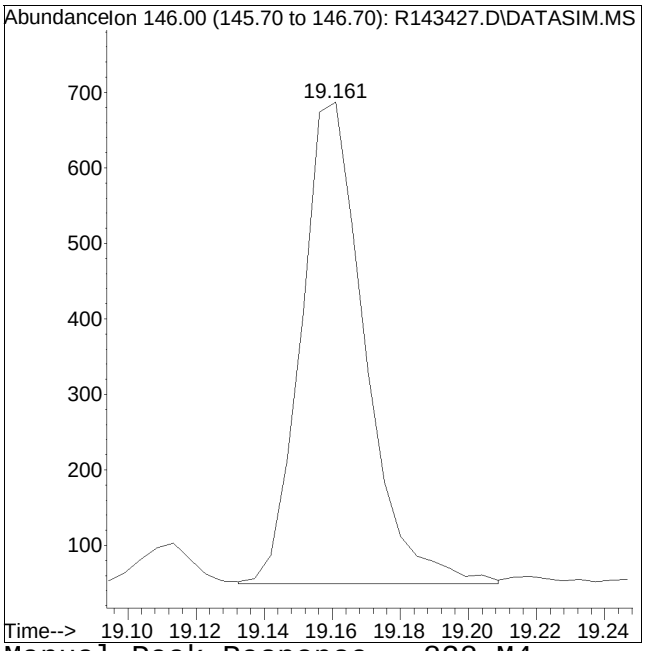
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 821



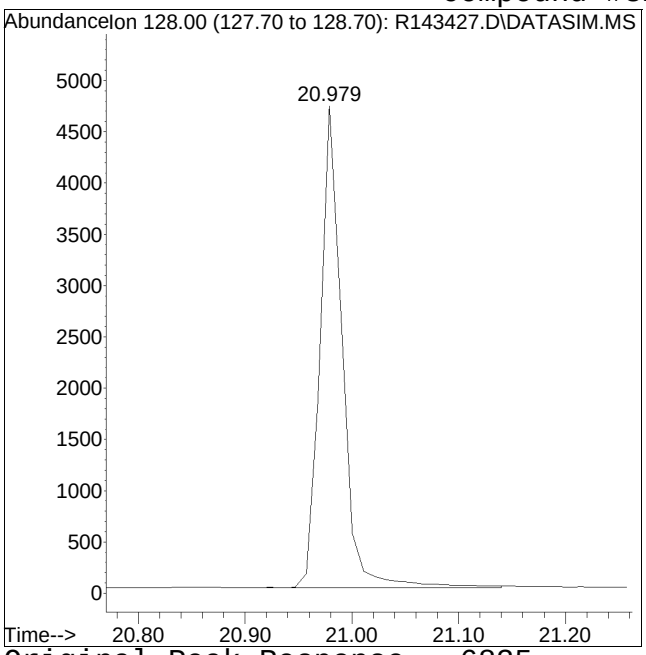
Manual Peak Response = 828 M4

M4 = Poor automated baseline construction.

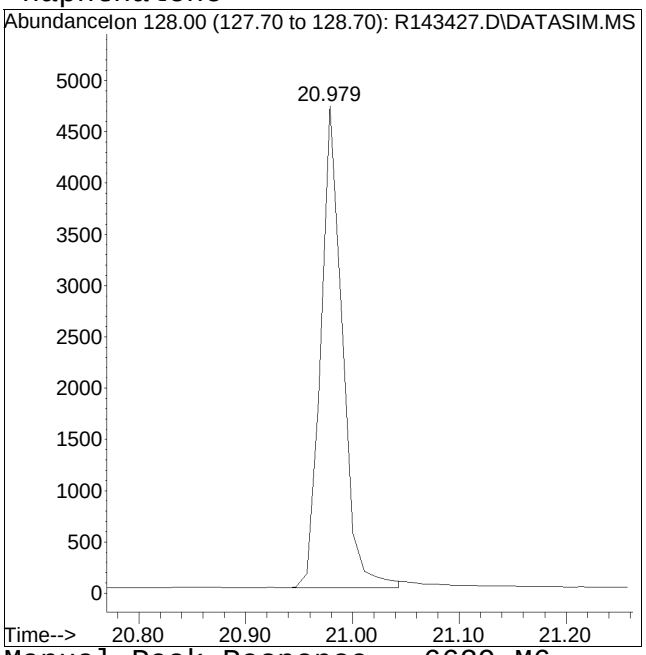
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143427.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 10:40 pm Instrument : Air Piano 1
Sample : L1519114-02,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #82: naphthalene



Original Peak Response = 6835



Manual Peak Response = 6629 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 14:19:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.202	49	134155	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		88.88%	
33) 1,4-difluorobenzene	12.420	114	315111	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		84.72%	
51) chlorobenzene-D5	16.843	54	65506	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		95.12%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	773	0.057	ppbV	90
4) chloromethane	4.380	50	403M6	0.053	ppbV	
5) Freon-114	4.528	85	279	0.014	ppbV #	88
6) vinyl chloride	4.686	62	738M4	0.097	ppbV	
7) 1,3-butadiene	4.883	54	125M3	0.021	ppbV	
8) bromomethane	5.260		0	N.D.		
9) chloroethane	5.516	64	123	0.032	ppbV #	55
13) trichlorofluoromethane	6.587	101	381	0.020	ppbV	93
16) 1,1-dichloroethene	7.419		0	N.D.		
18) methylene chloride	7.595	49	6107M6	0.601	ppbV	
21) Freon 113	7.938	101	127	0.008	ppbV #	81
23) trans-1,2-dichloroethene	8.766	61	310M4	0.023	ppbV	
24) 1,1-dichloroethane	9.006	63	1893M6	0.117	ppbV	
25) MTBE	9.123	73	7827	0.347	ppbV #	1
28) cis-1,2-dichloroethene	10.008	61	1307	0.090	ppbV	98
30) chloroform	10.362	83	1438M4	0.072	ppbV	
32) 1,2-dichloroethane	0.000		0	N.D.	d	
36) 1,1,1-trichloroethane	11.494		0	N.D.		
37) benzene	12.016	78	28598M6	1.079	ppbV	
38) carbon tetrachloride	12.182		0	N.D.		
41) 1,2-dichloropropane	0.000		0	N.D.	d	
42) bromodichloromethane	0.000		0	N.D.	d	
44) trichloroethene	13.218	130	292	0.022	ppbV #	82
47) cis-1,3-dichloropropene	14.157		0	N.D.		
49) trans-1,3-dichloropropene	14.779		0	N.D.		
50) 1,1,2-trichloroethane	0.000		0	N.D.	d	
52) toluene	15.249	91	11730M4	0.312	ppbV	
55) dibromochloromethane	15.674		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 14:19:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+NAPH - All Compounds reported

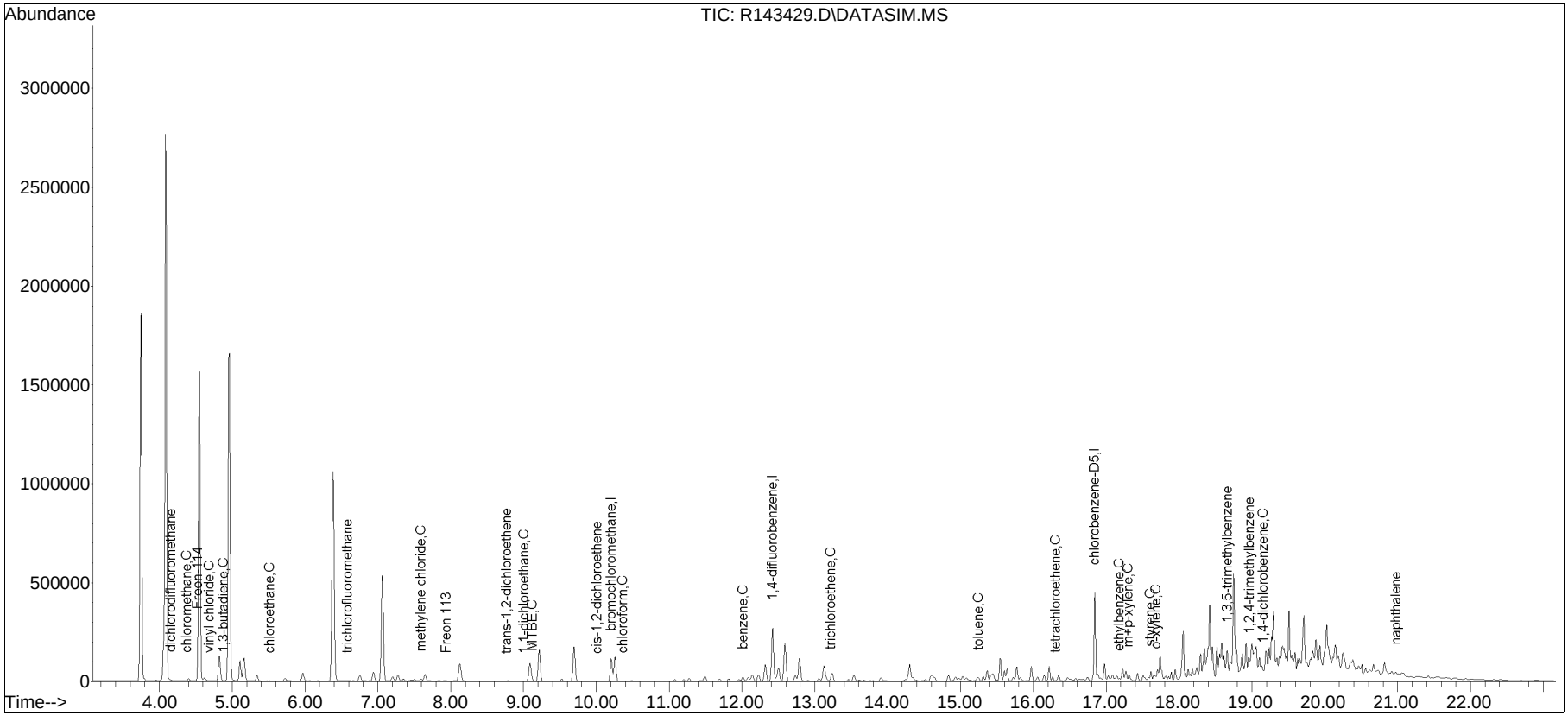
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56) 1,2-dibromoethane	15.900		0	N.D.		
57) tetrachloroethene	16.307	166	551	0.029	ppbV #	85
58) 1,1,1,2-tetrachloroethane	0.000		0	N.D.	d	
59) chlorobenzene	0.000		0	N.D.	d	
60) ethylbenzene	17.176	91	4802	0.099	ppbV	98
61) m+p-xylene	17.305	91	11780	0.315	ppbV	96
62) bromoform	17.401		0	N.D.		
63) styrene	17.604	104	406	0.014	ppbV #	43
64) 1,1,2,2-tetrachloroethane	0.000		0	N.D.	d	
65) o-xylene	17.686	91	5112M6	0.132	ppbV	
71) 1,3,5-trimethylbenzene	18.661	105	7979	0.172	ppbV #	66
73) 1,2,4-trimethylbenzene	18.971	105	8239M6	0.180	ppbV	
75) 1,3-dichlorobenzene	19.109		0	N.D.		
76) 1,4-dichlorobenzene	19.156	146	1098M4	0.031	ppbV	
79) 1,2-dichlorobenzene	19.418		0	N.D.		
81) 1,2,4-trichlorobenzene	0.000		0	N.D.	d	
82) naphthalene	20.979	128	17900M6	0.310	ppbV	
84) hexachlorobutadiene	21.290		0	N.D.		

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

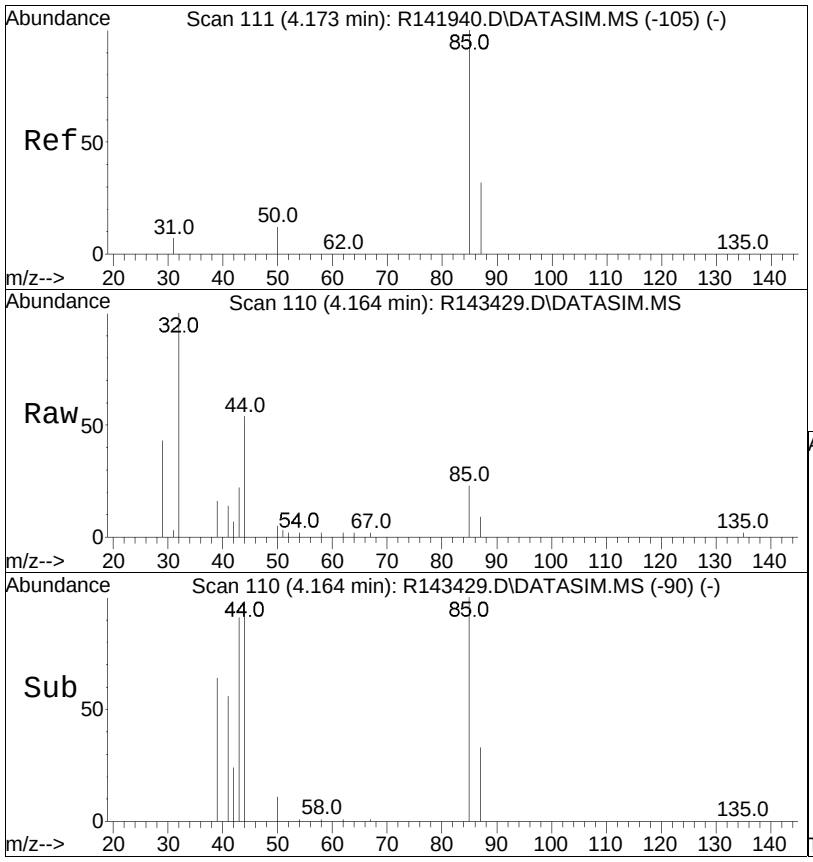
Sub List : TO15_SIM+NAPH - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 14:19:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration



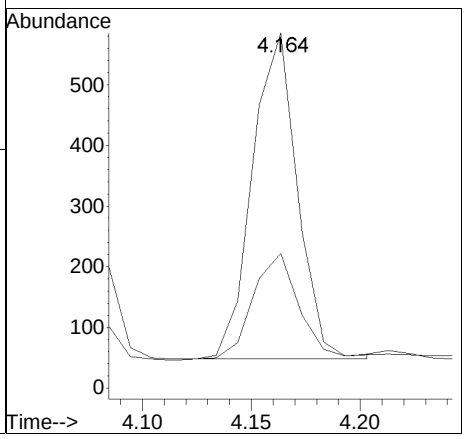
TSIM150710.M Fri Aug 14 14:19:41 2015

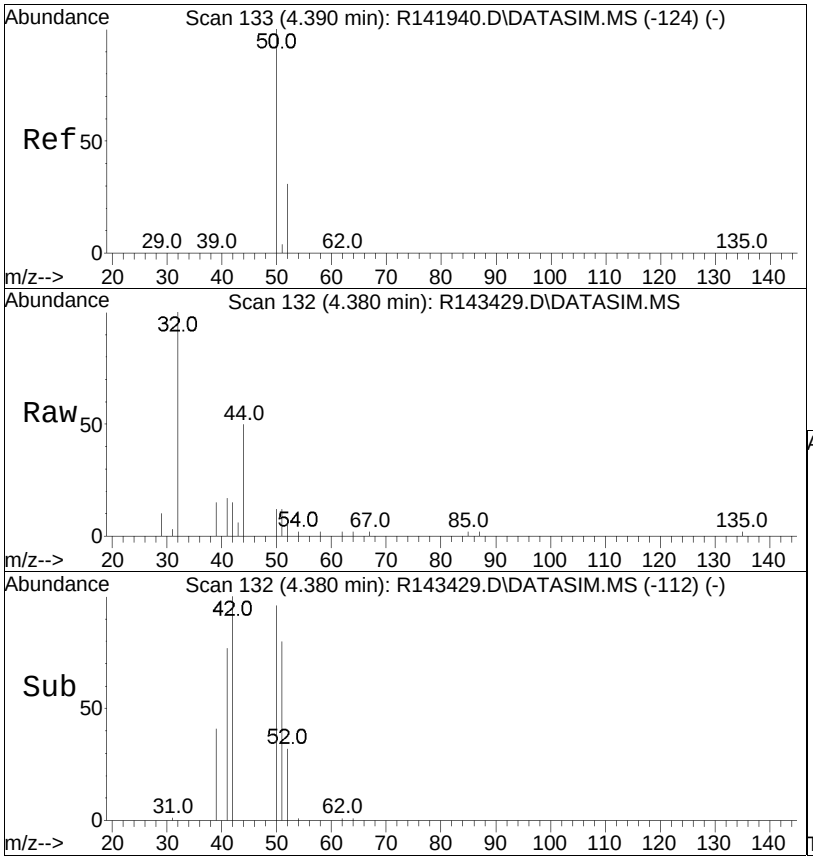


#3
dichlorodifluoromethane
Concen: 0.06 ppbV
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 85 Resp: 773

Ion	Ratio	Lower	Upper
85	100		
87	37.9	26.0	39.0

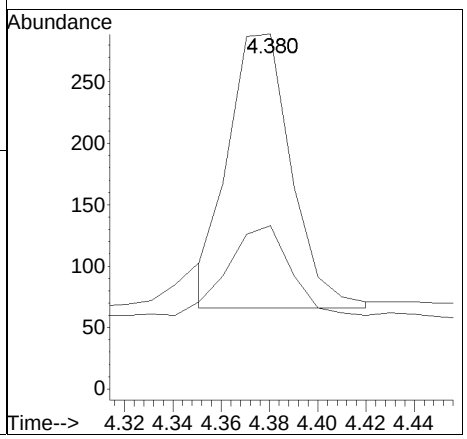


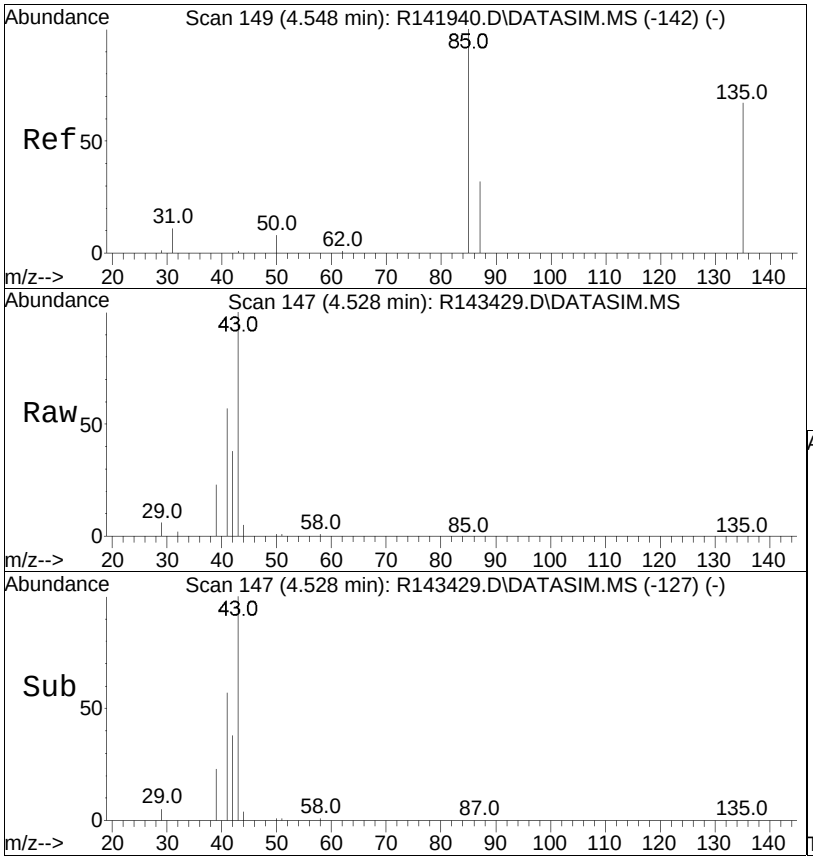


#4
chloromethane
Concen: 0.05 ppbV m
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 50 Resp: 403

Ion	Ratio	Lower	Upper
50	100		
52	46.0	26.2	39.4#

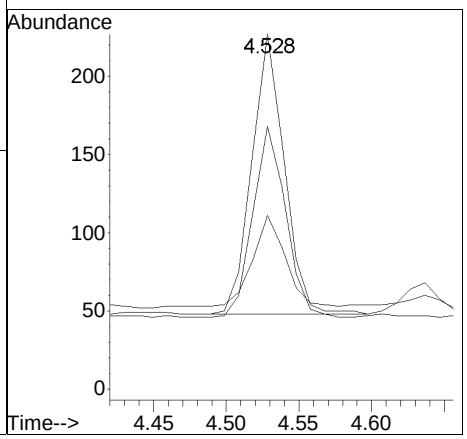


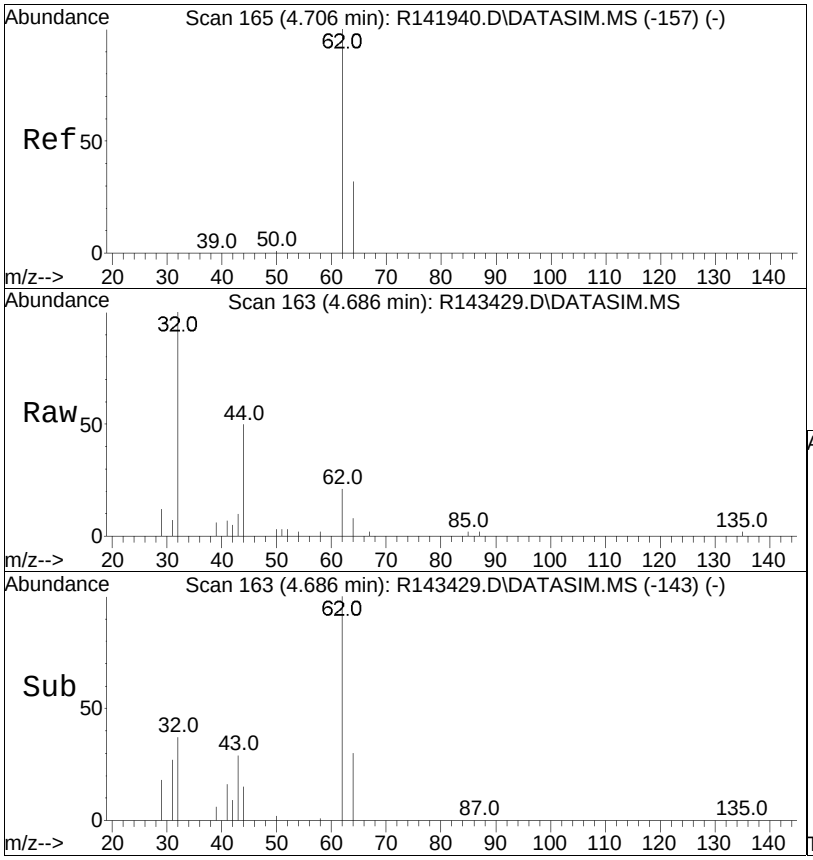


#5
Freon-114
Concen: 0.01 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 85 Resp: 279

Ion	Ratio	Lower	Upper
85	100		
87	48.9	25.4	38.0#
135	74.0	57.0	85.6

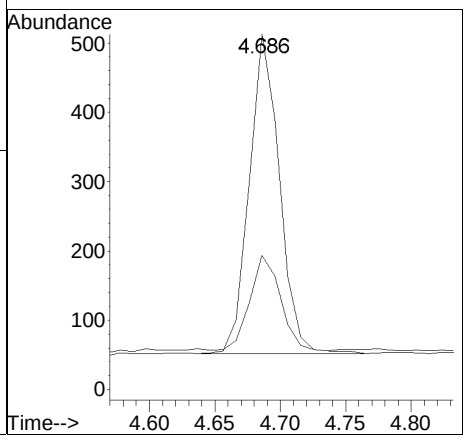


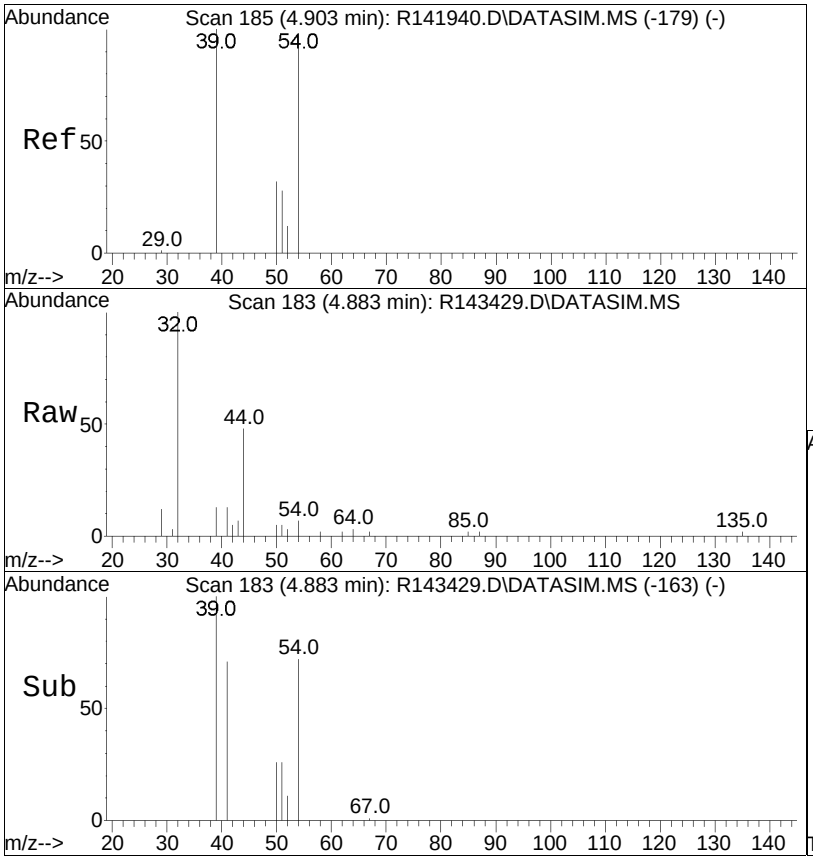


#6
vinyl chloride
Concen: 0.10 ppbV m
RT: 4.686 min Scan# 163
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 62 Resp: 738

Ion	Ratio	Lower	Upper
62	100		
64	37.8	24.7	37.1#

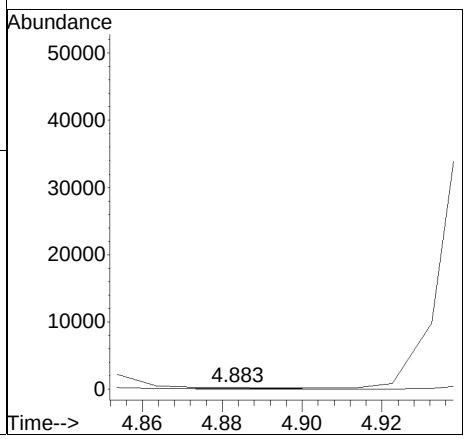


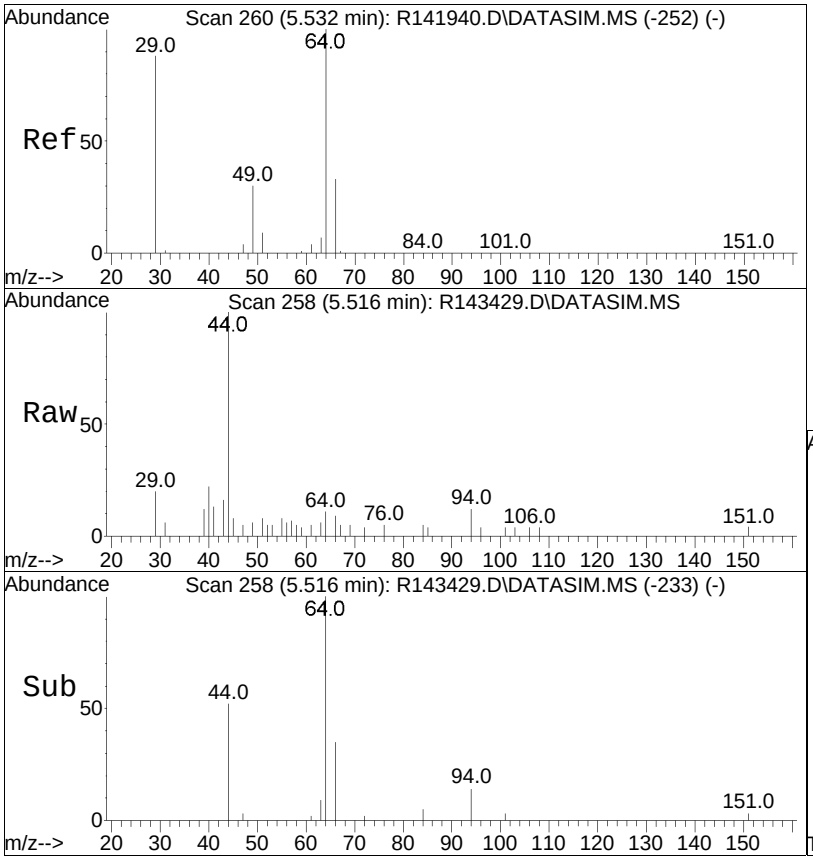


#7
1,3-butadiene
Concen: 0.02 ppbV m
RT: 4.883 min Scan# 183
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 54 Resp: 125

Ion	Ratio	Lower	Upper
54	100		
39	186.8	82.6	124.0#

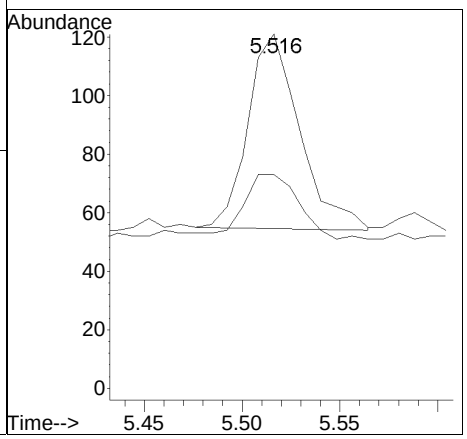


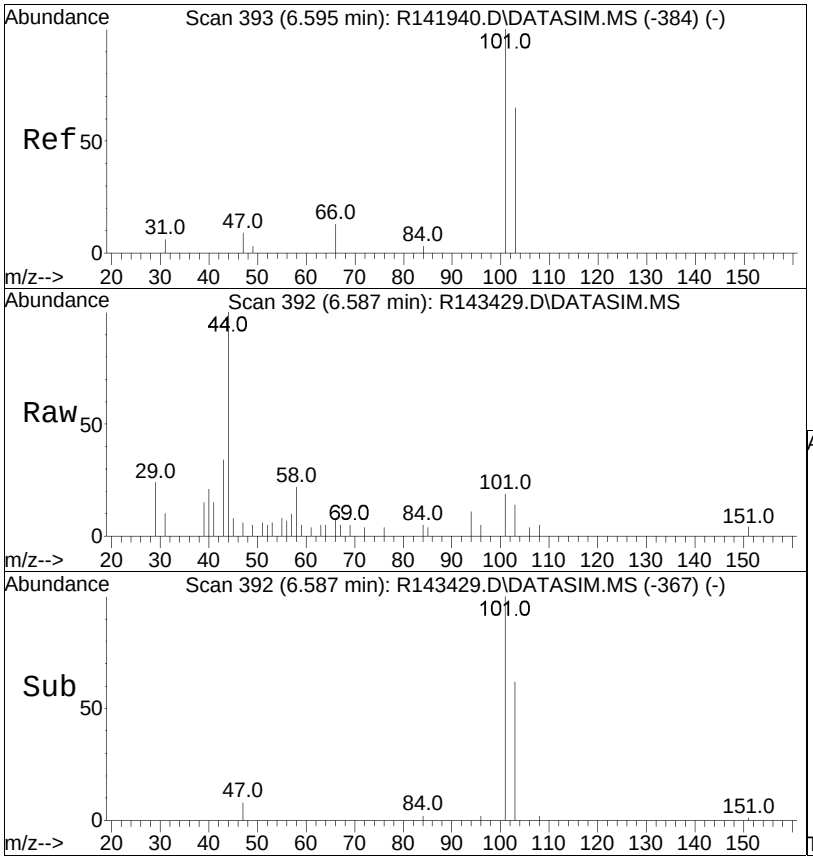


#9
chloroethane
Concen: 0.03 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 64 Resp: 123

Ion	Ratio	Lower	Upper
64	100		
49	60.3	27.4	41.0#

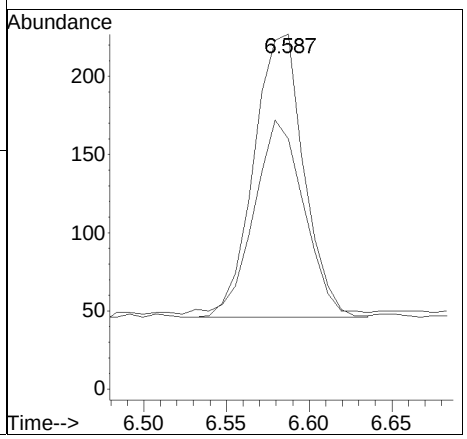


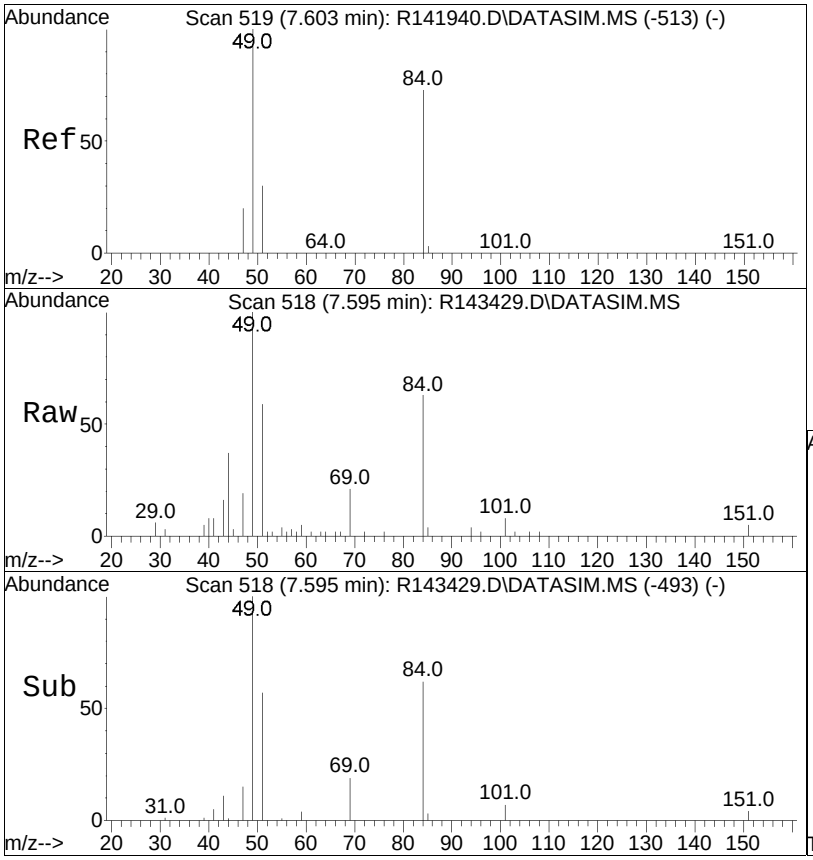


#13
trichlorofluoromethane
Concen: 0.02 ppbV
RT: 6.587 min Scan# 392
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:101 Resp: 381

Ion	Ratio	Lower	Upper
101	100		
103	70.5	52.2	78.2

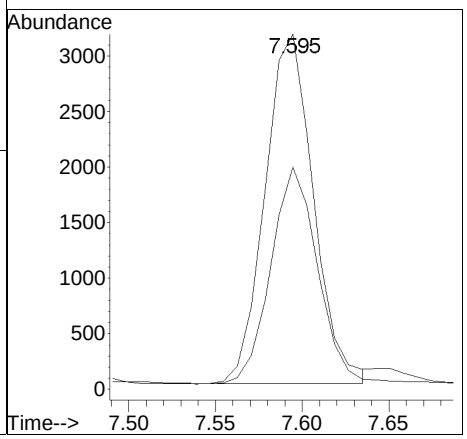


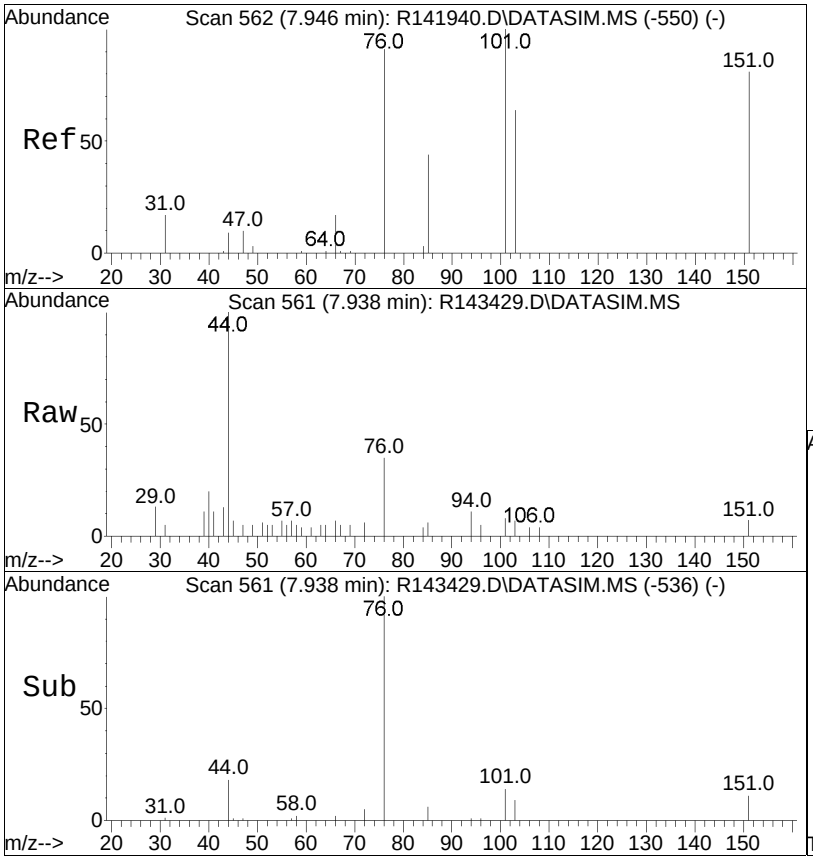


#18
methylene chloride
Concen: 0.60 ppbV m
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 49 Resp: 6107

Ion	Ratio	Lower	Upper
49	100		
84	62.6	50.8	76.2

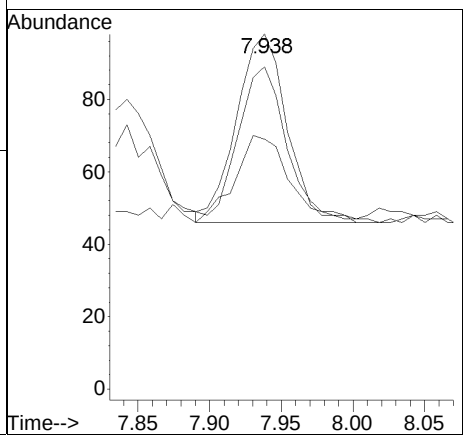


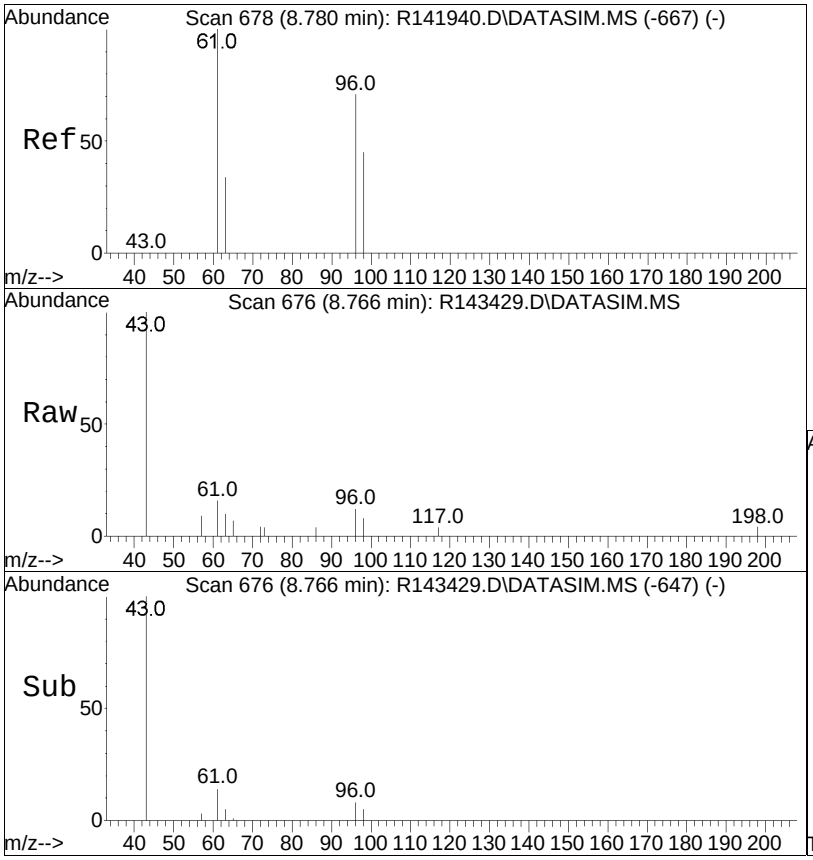


#21
Freon 113
Concen: 0.01 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:101 Resp: 127

Ion	Ratio	Lower	Upper
101	100		
85	70.4	32.5	48.7#
151	90.8	69.1	103.7

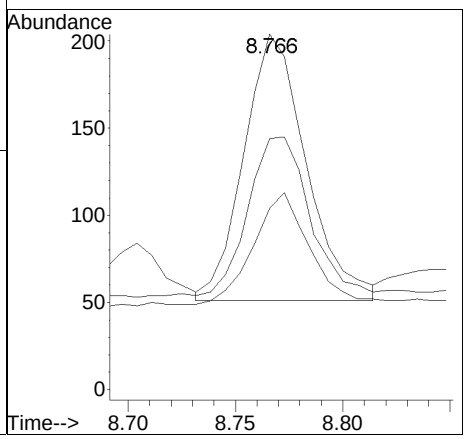


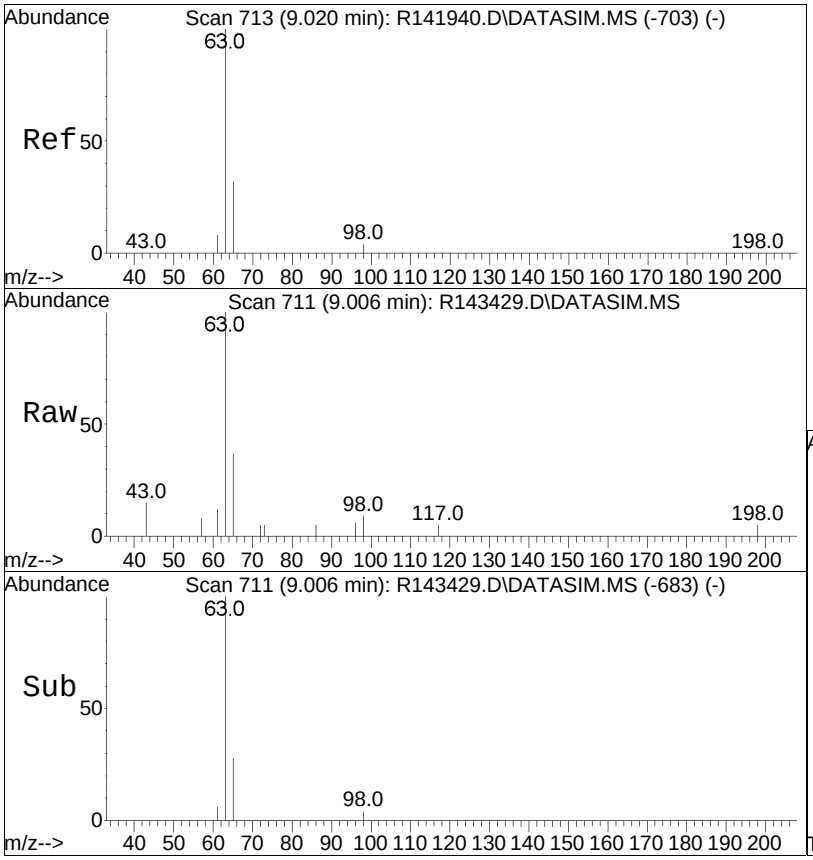


#23
trans-1,2-dichloroethene
Concen: 0.02 ppbV m
RT: 8.766 min Scan# 676
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 61 Resp: 310

Ion	Ratio	Lower	Upper
61	100		
96	70.6	48.9	73.3
98	51.0	30.4	45.6#

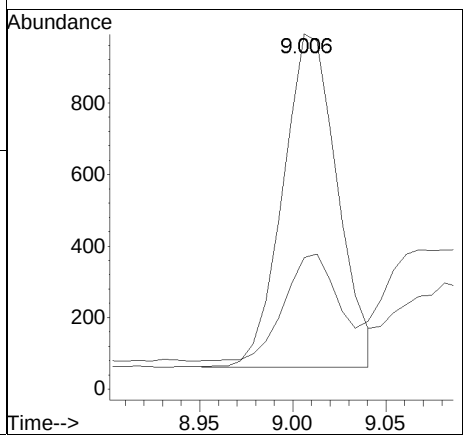


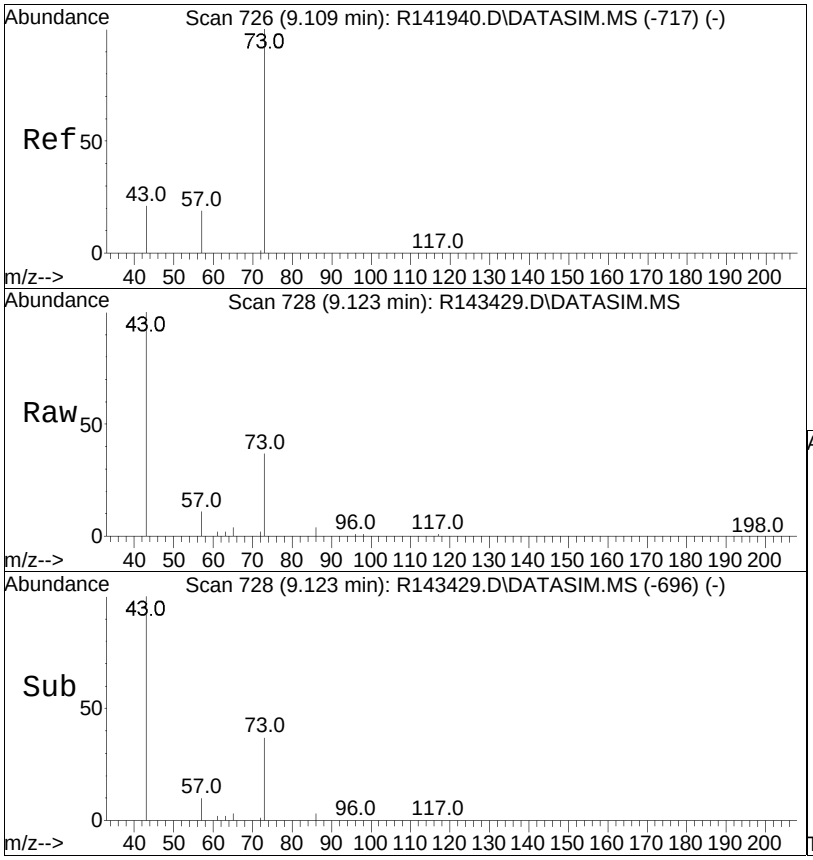


#24
1,1-dichloroethane
Concen: 0.12 ppbV m
RT: 9.006 min Scan# 711
Delta R.T. -0.007 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 63 Resp: 1893

Ion	Ratio	Lower	Upper
63	100		
65	37.1	25.2	37.8

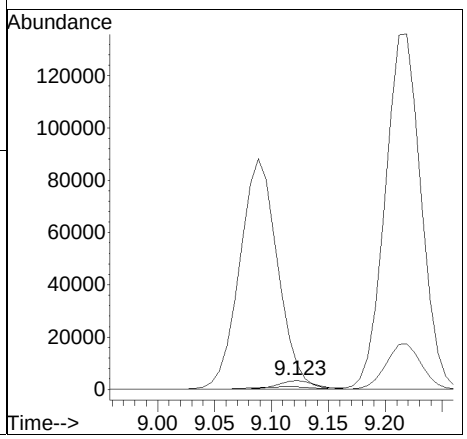


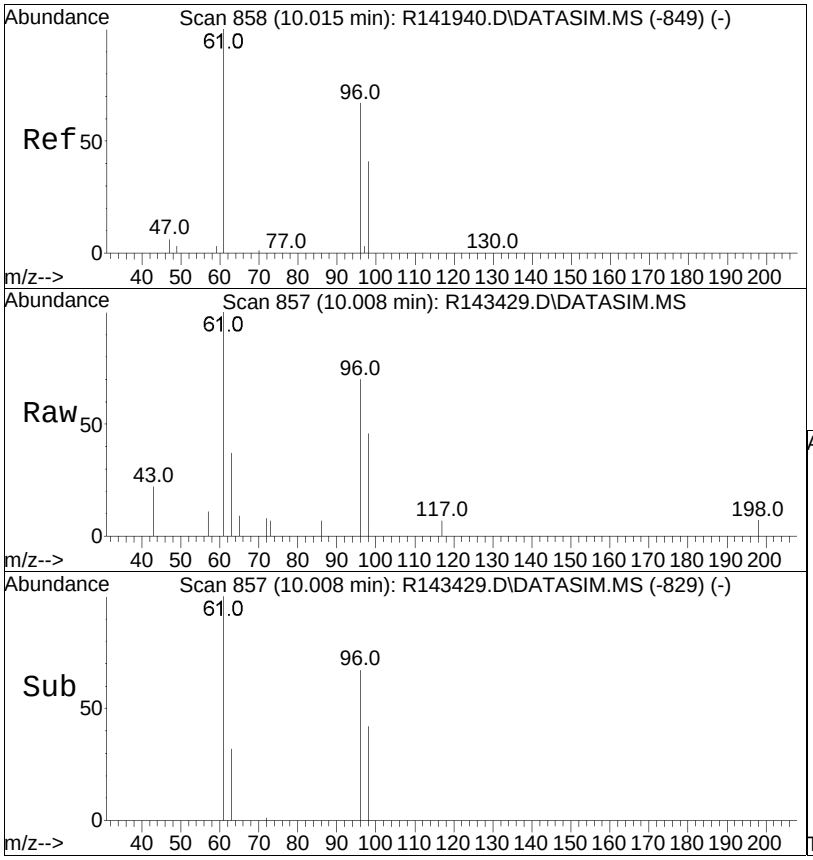


#25
MTBE
Concen: 0.35 ppbV
RT: 9.123 min Scan# 728
Delta R.T. 0.020 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 73 Resp: 7827

Ion	Ratio	Lower	Upper
73	100		
57	28.9	19.5	29.3
43	273.6	18.2	27.4#

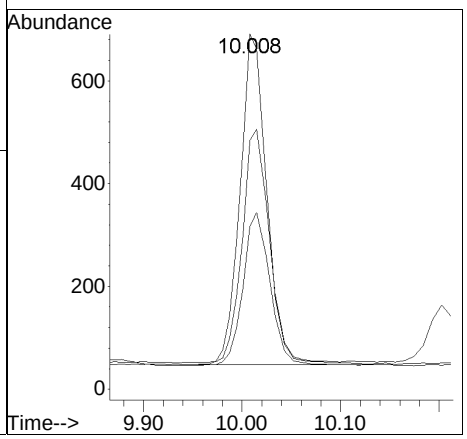


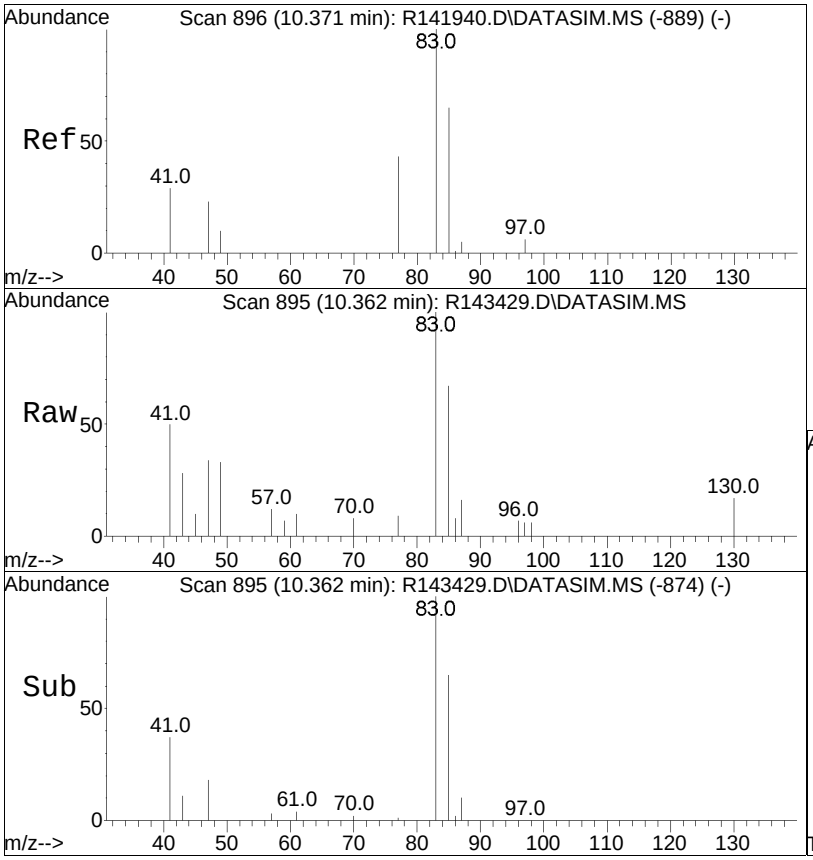


#28
cis-1,2-dichloroethene
Concen: 0.09 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 61 Resp: 1307

Ion	Ratio	Lower	Upper
61	100		
96	70.0	57.8	86.8
98	45.9	36.9	55.3

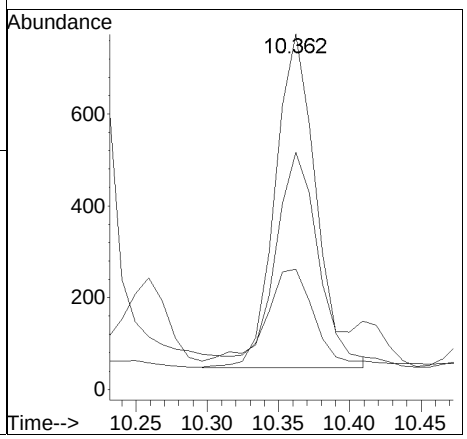


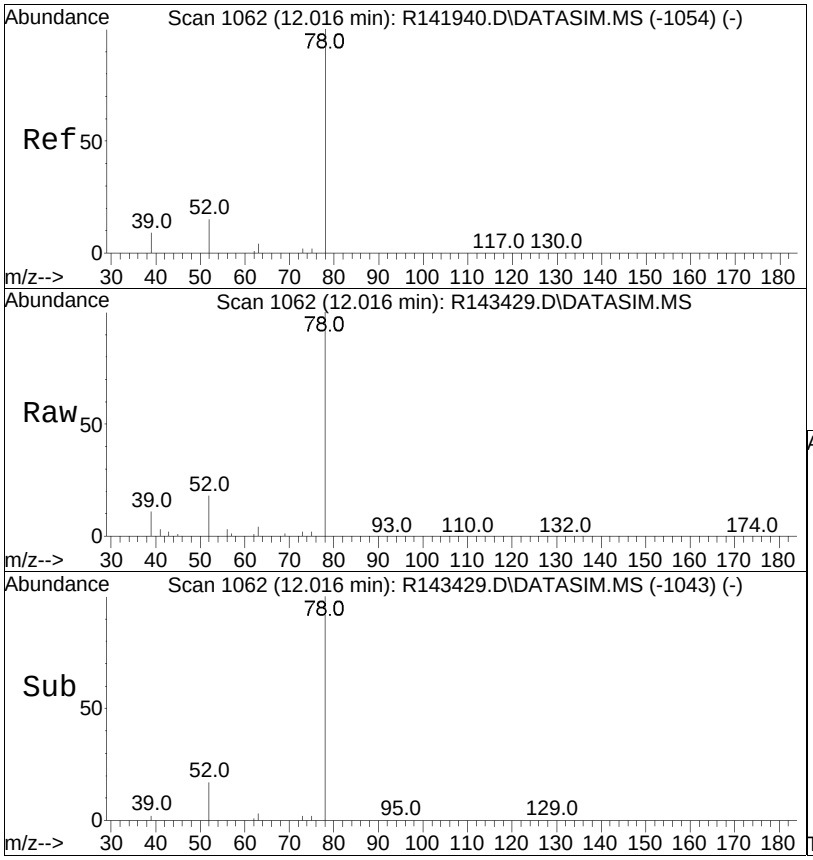


#30
chloroform
Concen: 0.07 ppbV m
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 83 Resp: 1438

Ion	Ratio	Lower	Upper
83	100		
85	66.8	51.6	77.4
47	33.9	22.6	33.8#

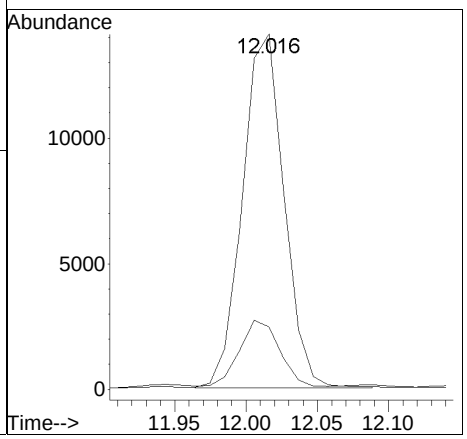


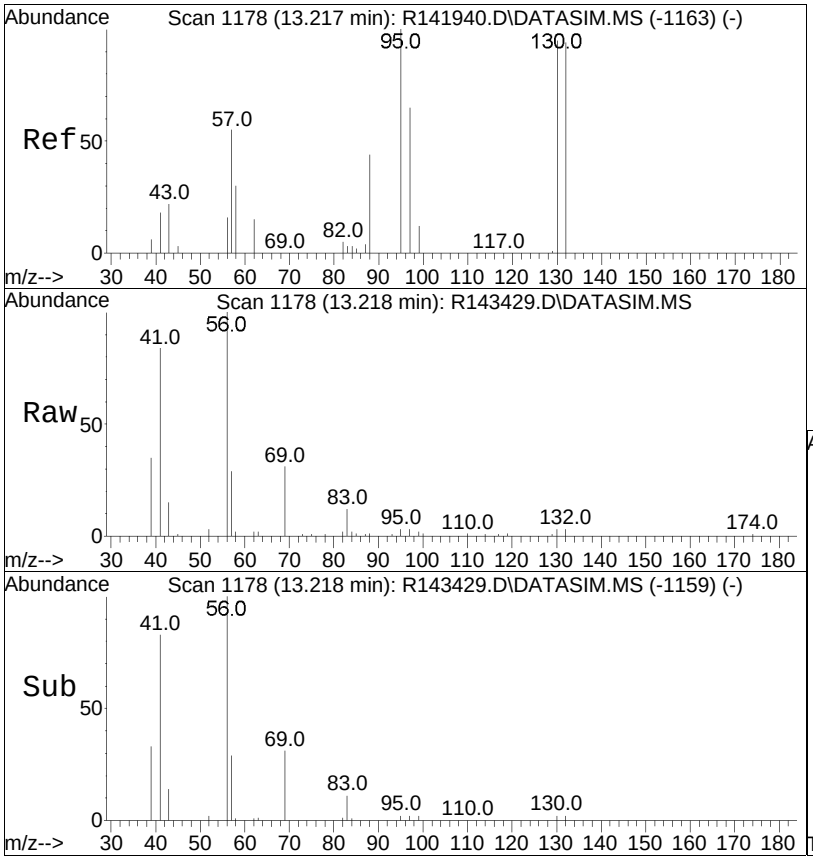


#37
benzene
Concen: 1.08 ppbV m
RT: 12.016 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 78 Resp: 28598

Ion	Ratio	Lower	Upper
78	100		
52	17.6	14.2	21.2

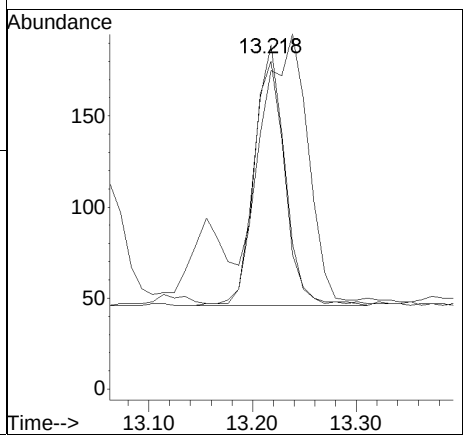


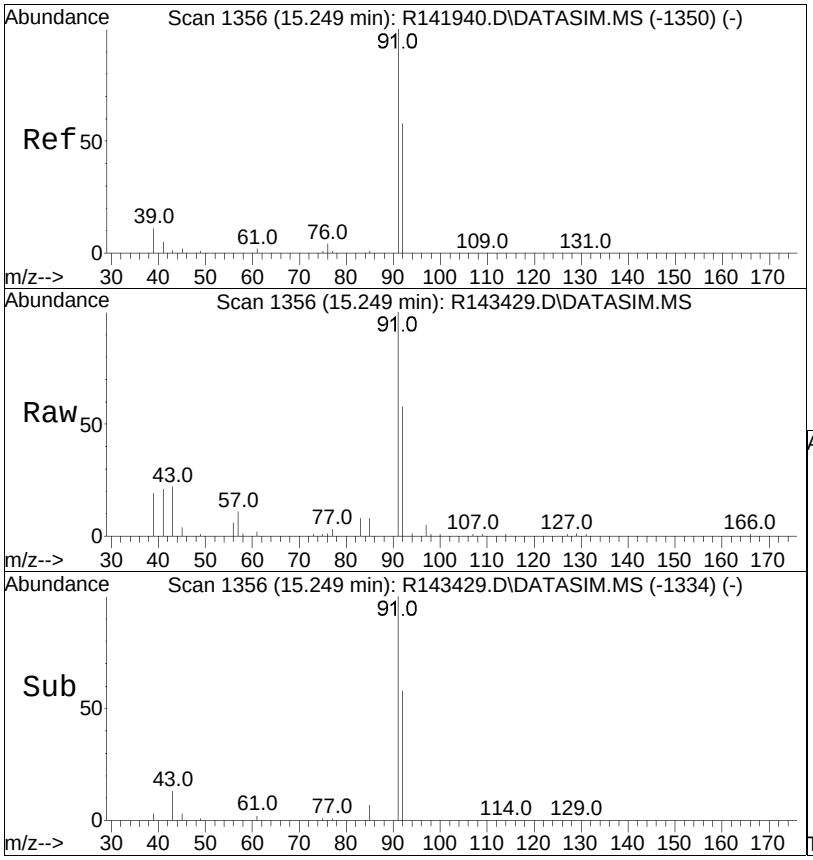


#44
trichloroethene
Concen: 0.02 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:130 Resp: 292

Ion	Ratio	Lower	Upper
130	100		
132	95.2	77.5	116.3
97	92.6	47.4	71.2#

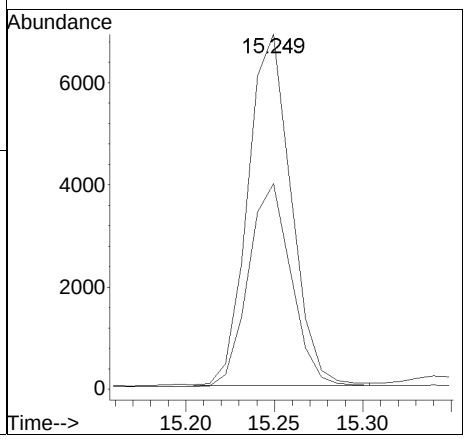


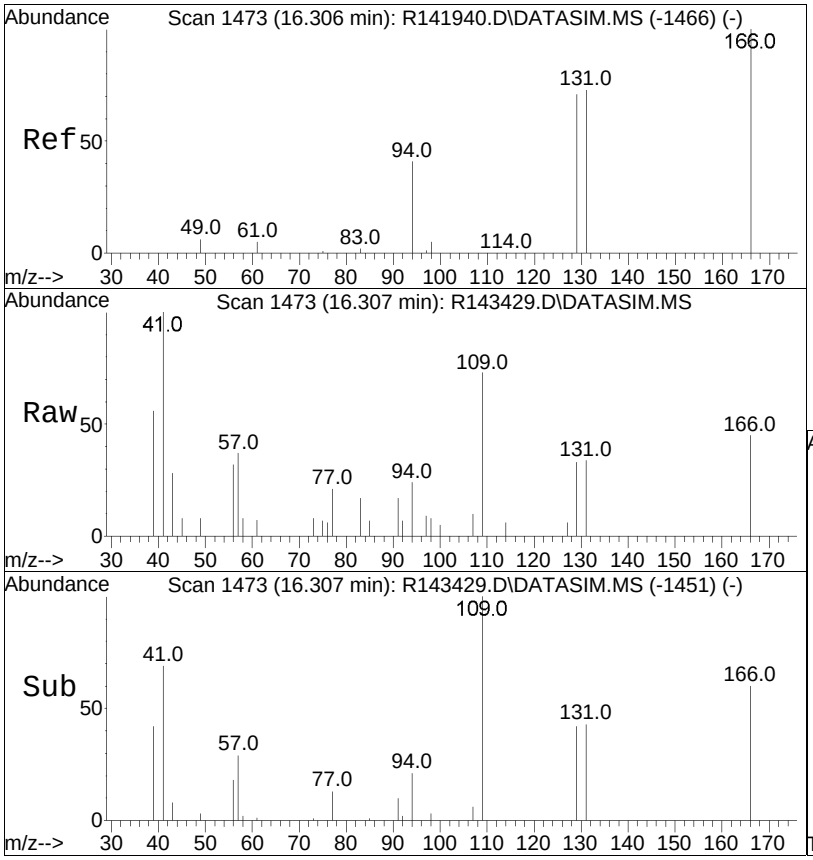


#52
toluene
Concen: 0.31 ppbV m
RT: 15.249 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 11730

Ion	Ratio	Lower	Upper
91	100		
92	57.9	46.8	70.2

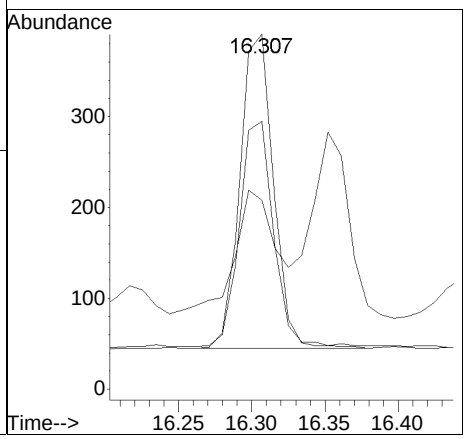


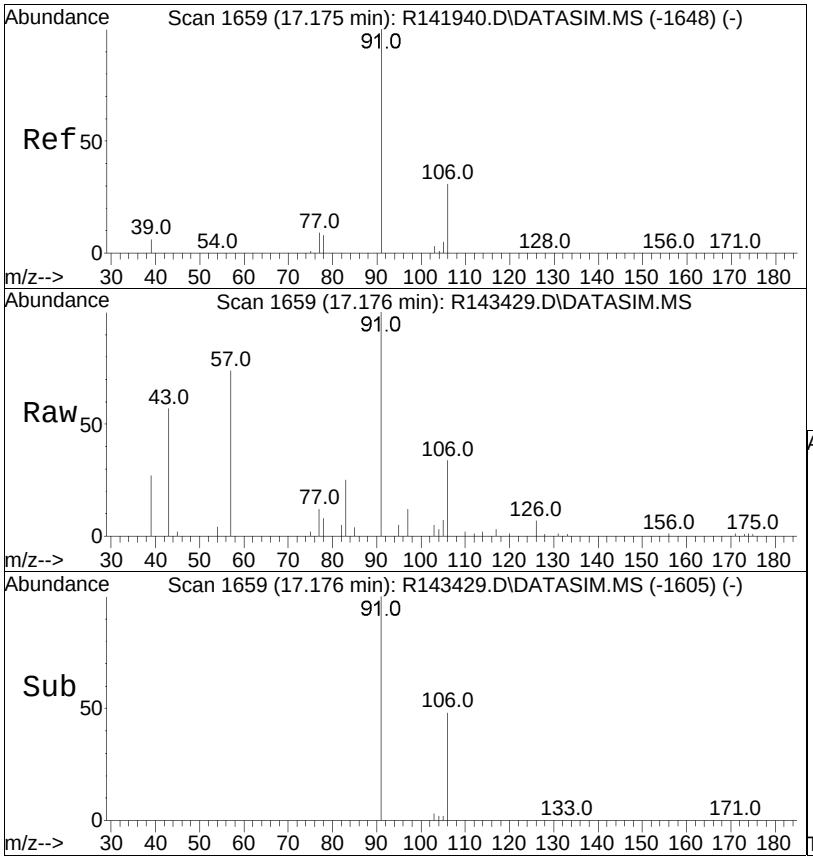


#57
tetrachloroethene
Concen: 0.03 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:166 Resp: 551

Ion	Ratio	Lower	Upper
166	100		
131	75.4	57.0	85.4
94	53.2	26.2	39.4#

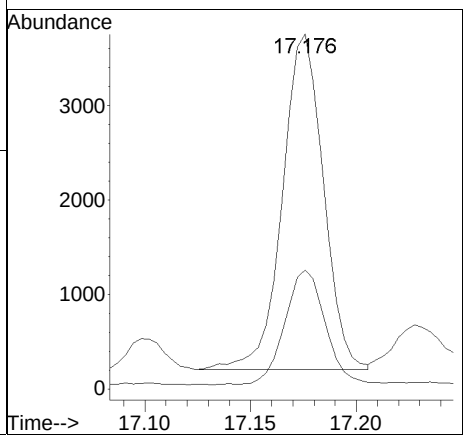


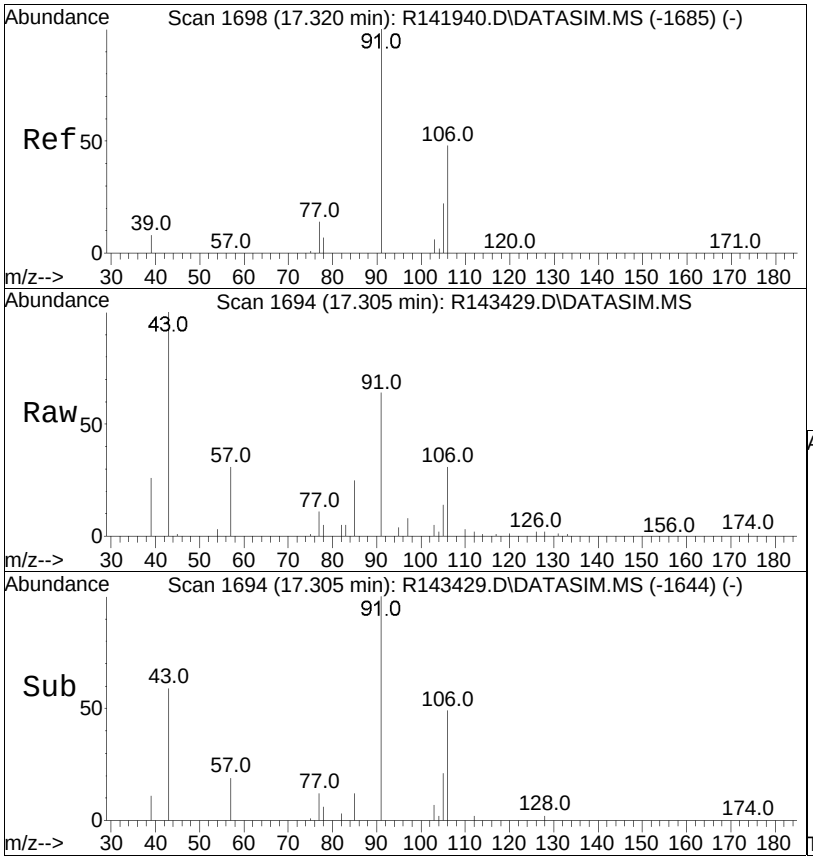


#60
ethylbenzene
Concen: 0.10 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 4802

Ion	Ratio	Lower	Upper
91	100		
106	33.6	25.8	38.8

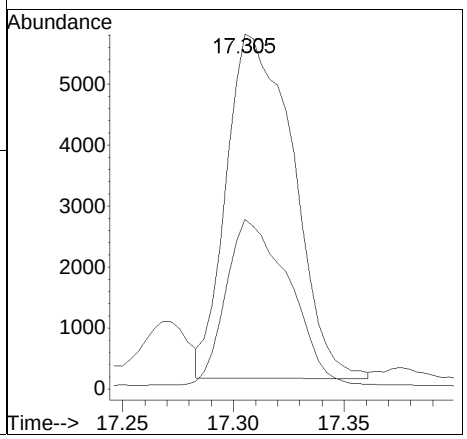


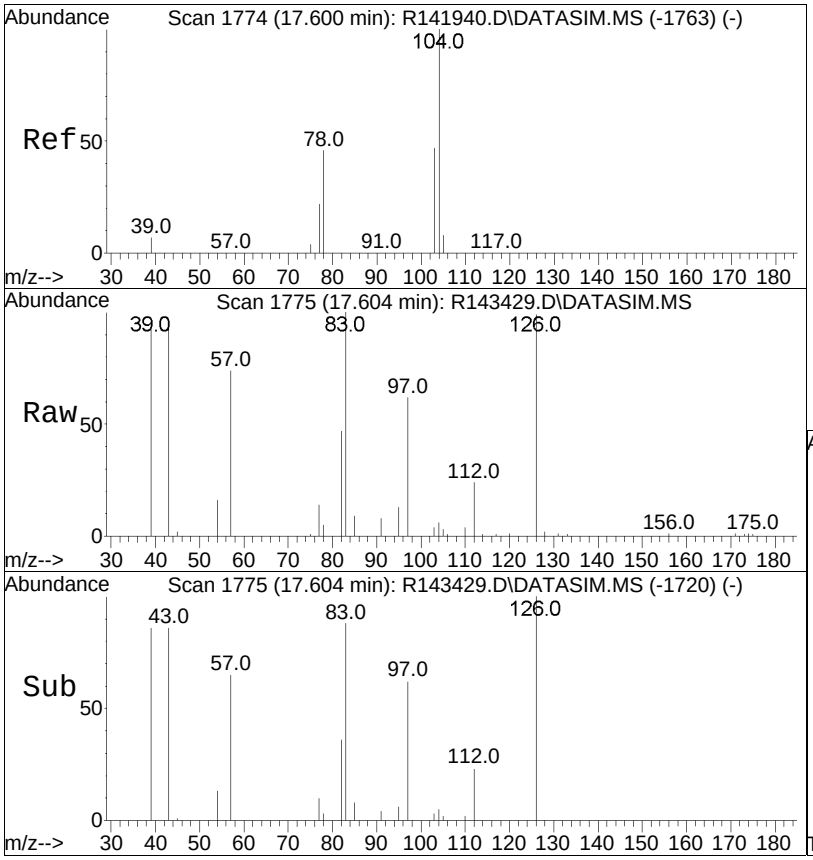


#61
m+p-xylene
Concen: 0.31 ppbV
RT: 17.305 min Scan# 1694
Delta R.T. -0.015 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 11780

Ion	Ratio	Lower	Upper
91	100		
106	47.8	40.6	61.0

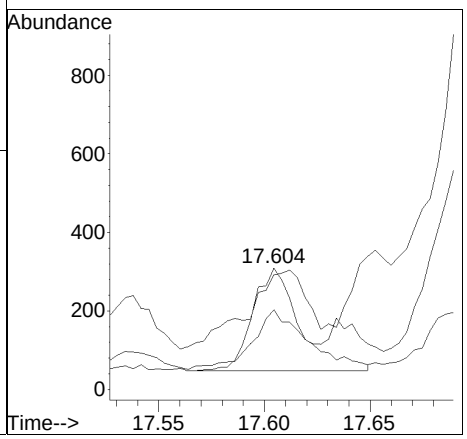


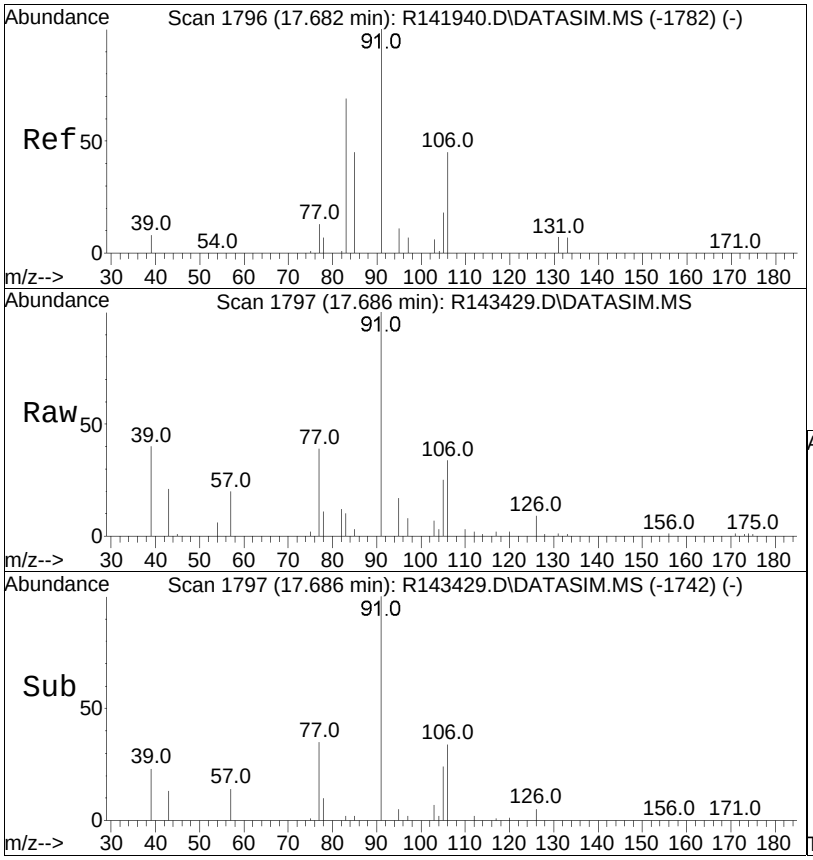


#63
styrene
Concen: 0.01 ppbV
RT: 17.604 min Scan# 1775
Delta R.T. 0.004 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:104 Resp: 406

Ion	Ratio	Lower	Upper
104	100		
103	65.7	37.7	56.5#
78	94.5	31.0	46.6#

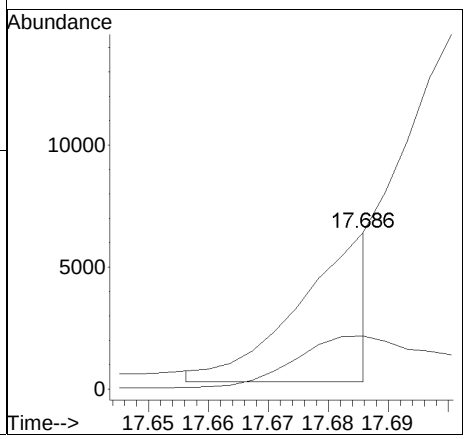


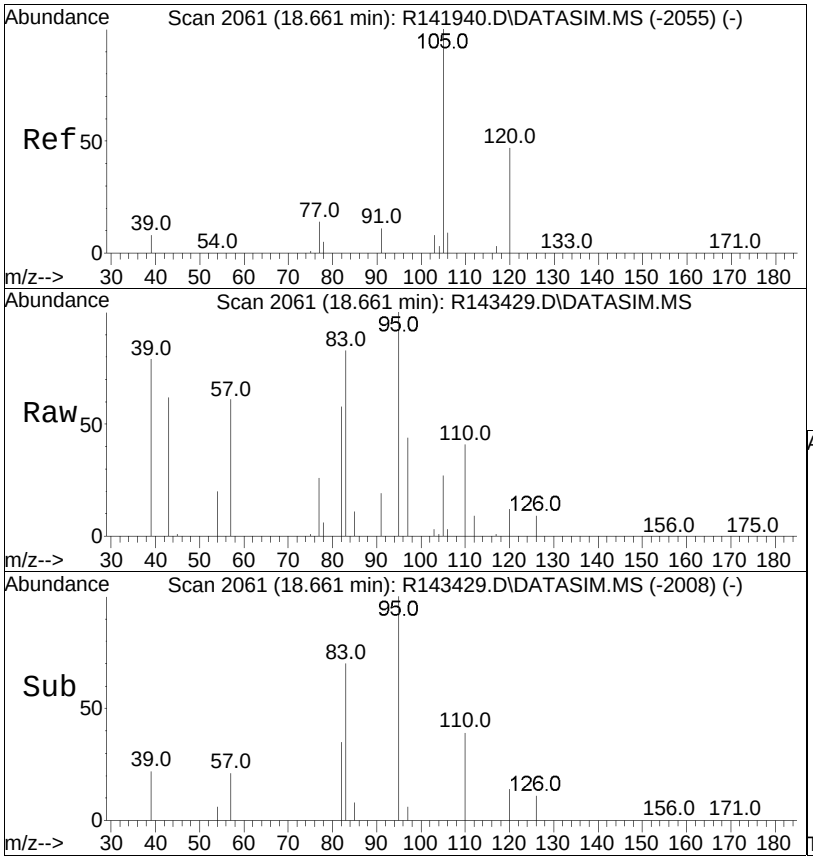


#65
o-xylene
Concen: 0.13 ppbV m
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 91 Resp: 5112

Ion	Ratio	Lower	Upper
91	100		
106	34.0	38.5	57.7#

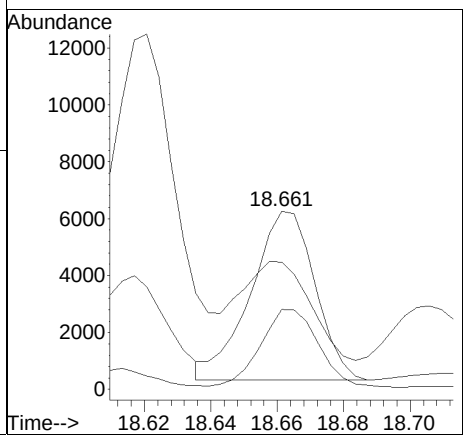


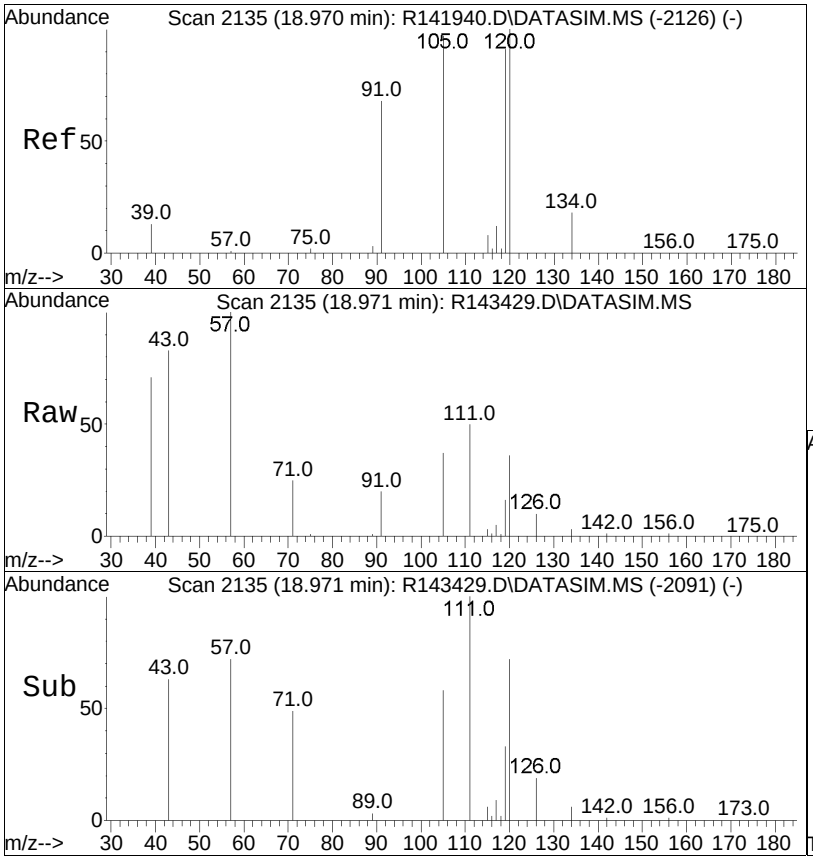


#71
1,3,5-trimethylbenzene
Concen: 0.17 ppbV
RT: 18.661 min Scan# 2061
Delta R.T. -0.004 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:105 Resp: 7979

Ion	Ratio	Lower	Upper
105	100		
120	44.9	40.9	61.3
91	71.4	7.8	11.6#

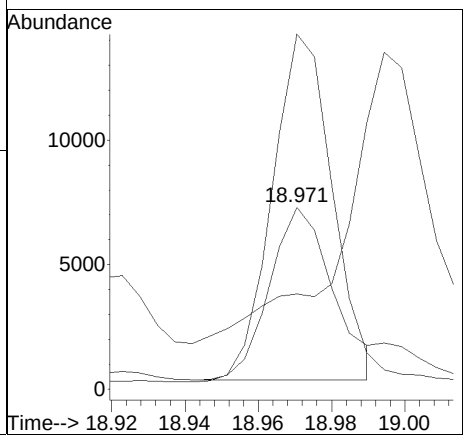


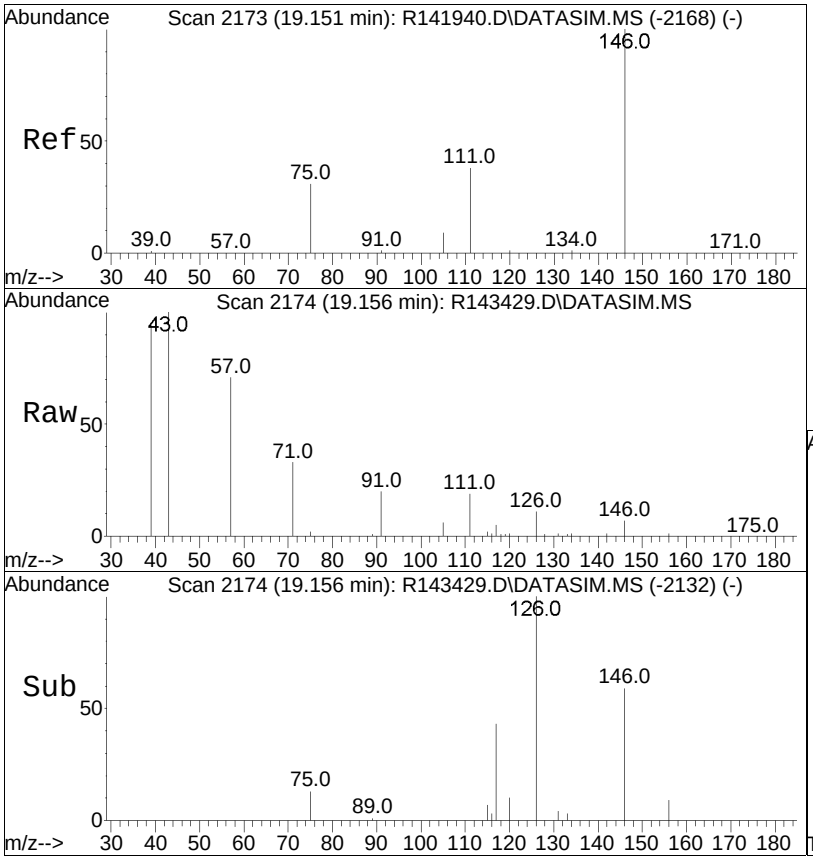


#73
1,2,4-trimethylbenzene
Concen: 0.18 ppbV m
RT: 18.971 min Scan# 2135
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:105 Resp: 8239

Ion	Ratio	Lower	Upper
105	100		
120	97.6	174.7	262.1#
91	52.4	55.2	82.8#

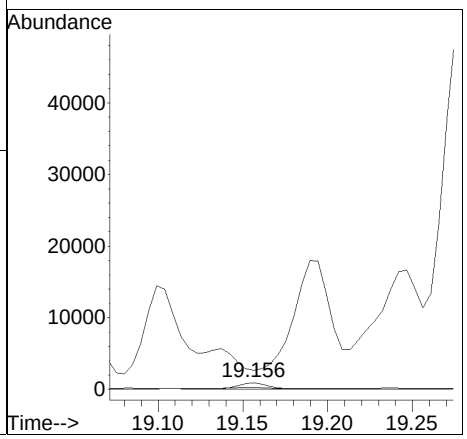


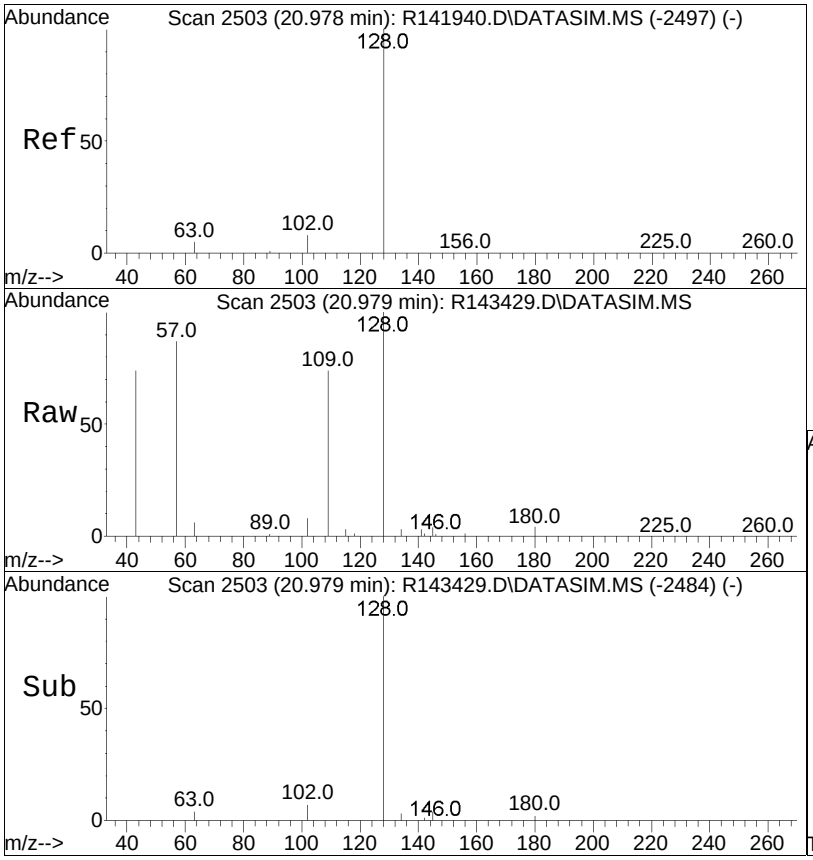


#76
1,4-dichlorobenzene
Concen: 0.03 ppbV m
RT: 19.156 min Scan# 2174
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:146 Resp: 1098

Ion	Ratio	Lower	Upper
146	100		
111	292.8	26.8	40.2#
75	35.6	17.5	26.3#

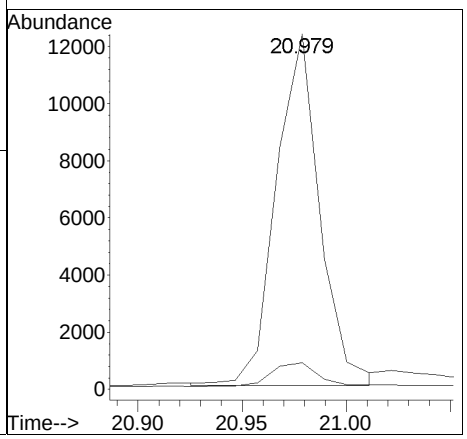




#82
naphthalene
Concen: 0.31 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion:128 Resp: 17900

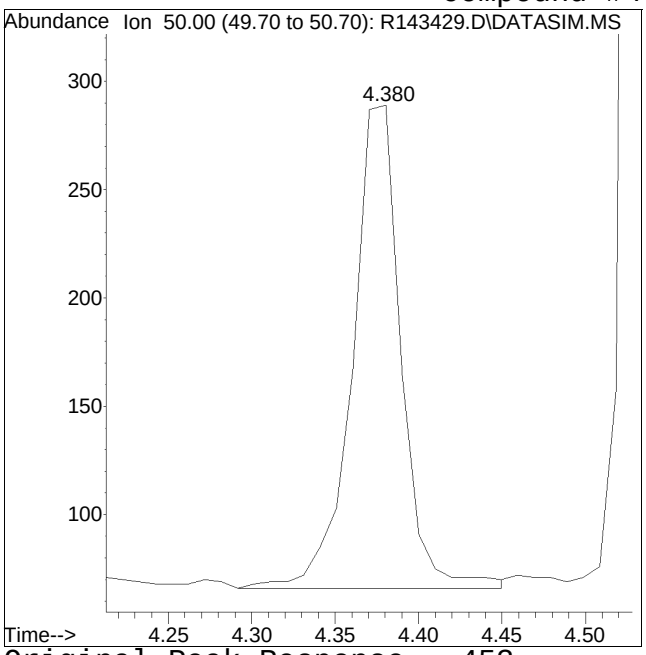
Ion	Ratio	Lower	Upper
128	100		
102	7.5	5.7	8.5



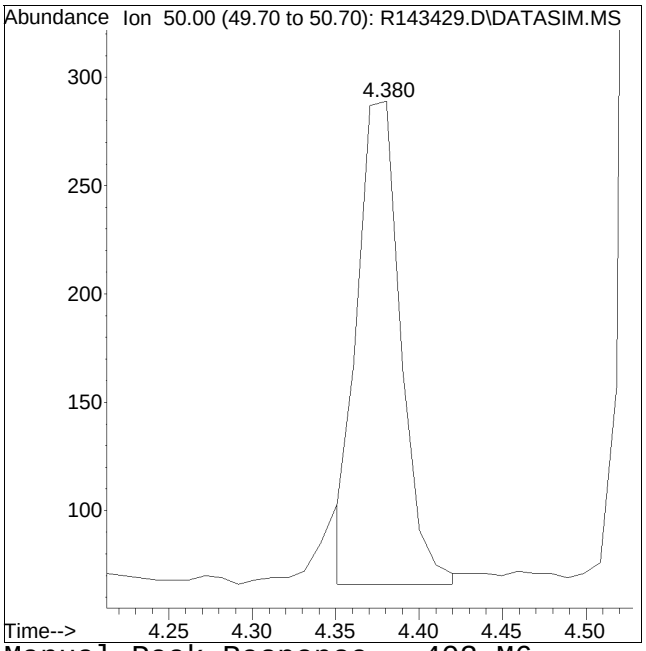
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #4: chloromethane



Original Peak Response = 453



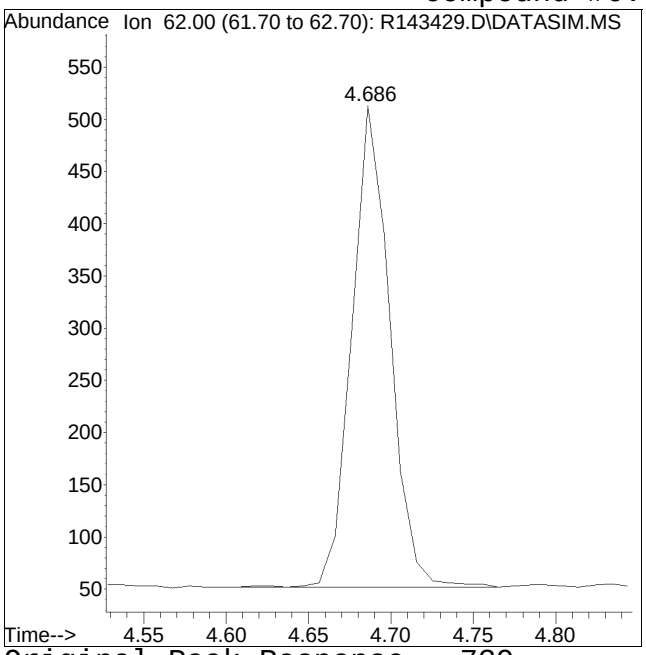
Manual Peak Response = 403 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

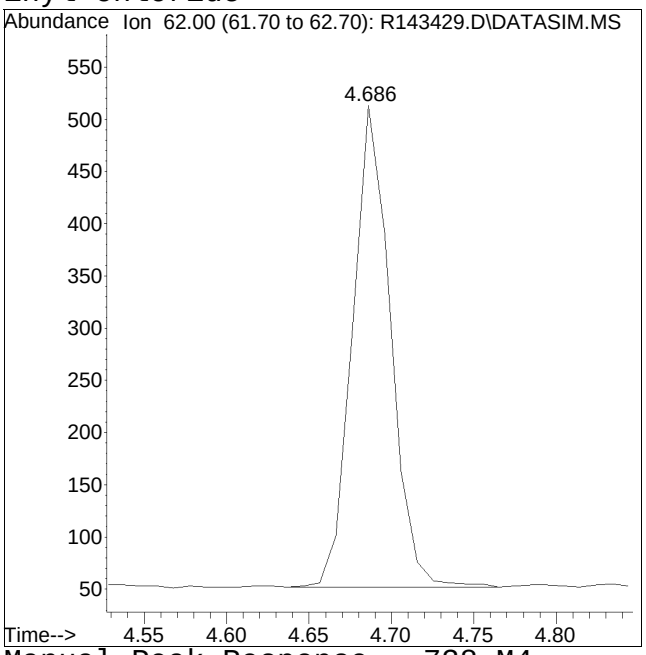
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #6: vinyl chloride



Original Peak Response = 739



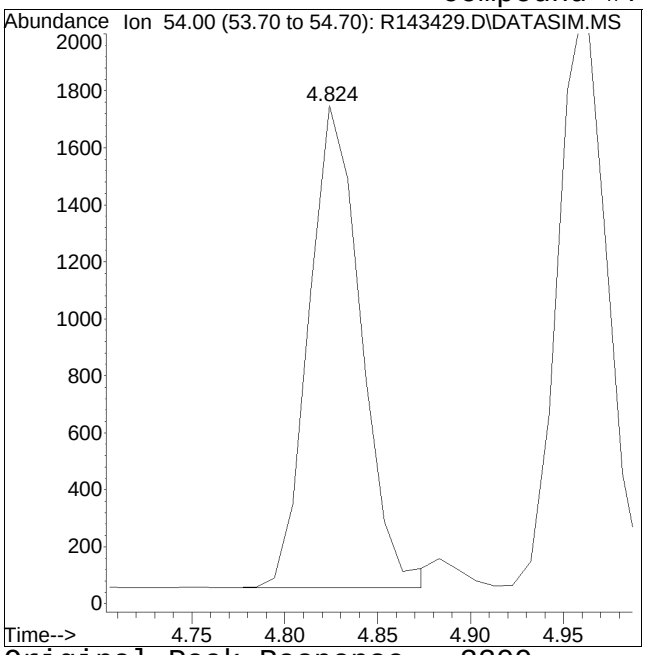
Manual Peak Response = 738 M4

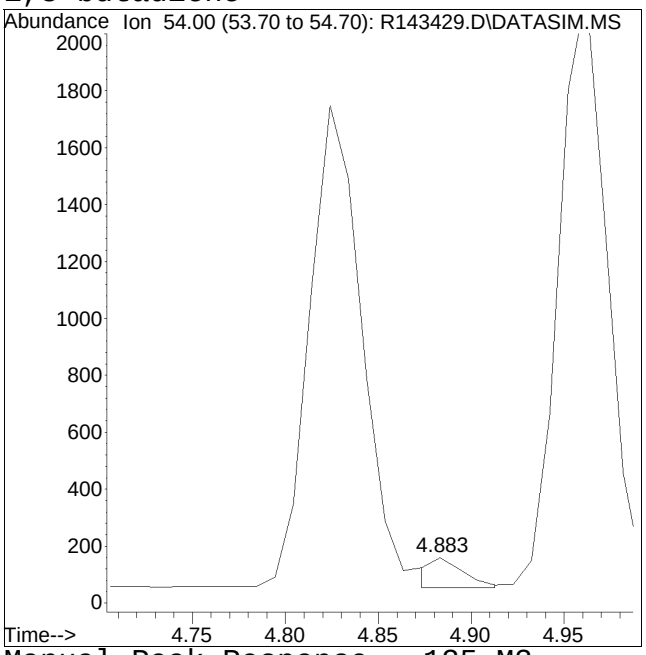
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #7: 1,3-butadiene





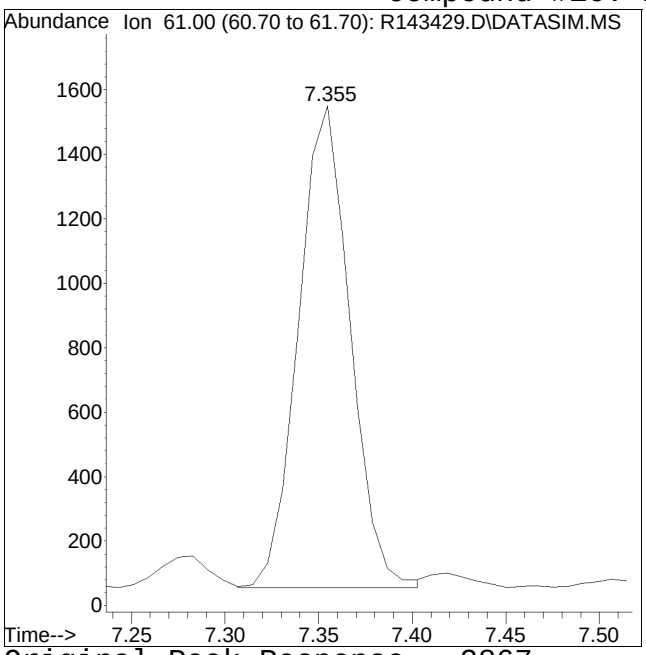
Original Peak Response = 3309 Manual Peak Response = 125 M3

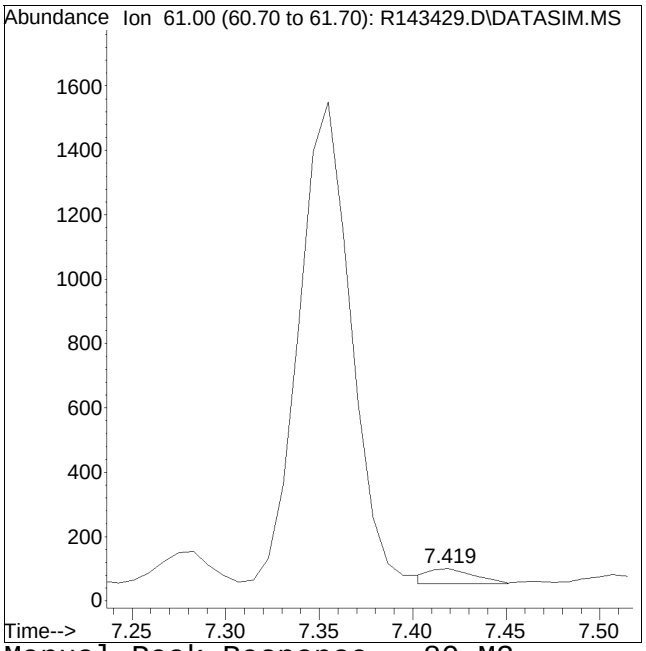
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #16: 1,1-dichloroethene





Original Peak Response = 2867 Manual Peak Response = 80 M3

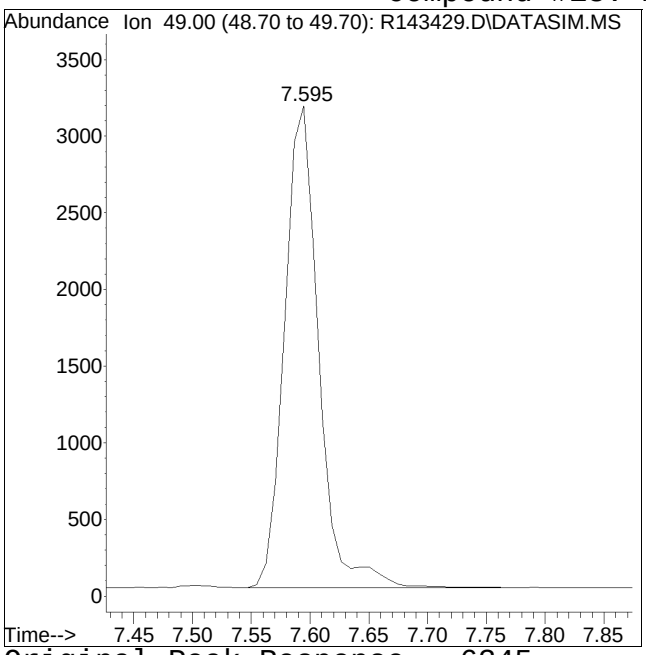
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

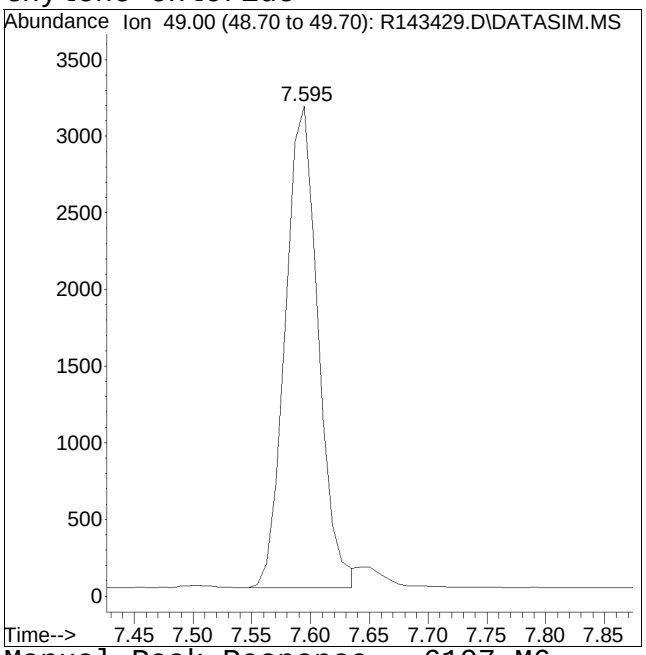
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #18: methylene chloride



Original Peak Response = 6345



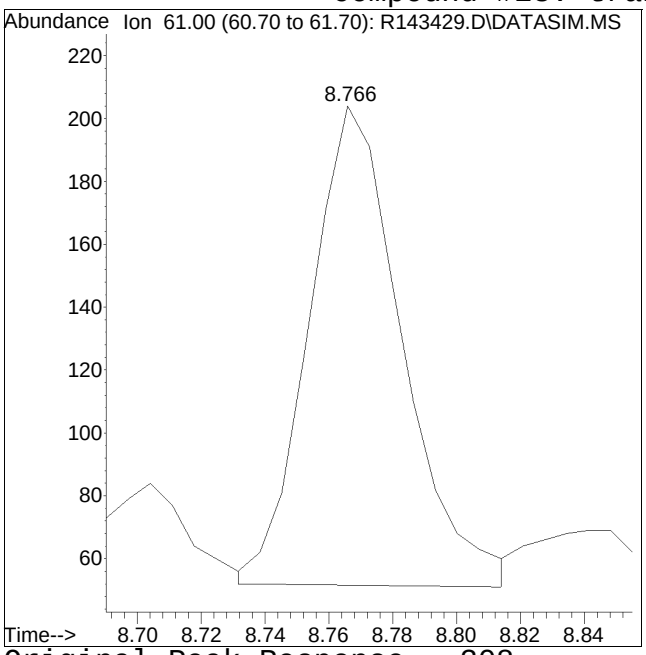
Manual Peak Response = 6107 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

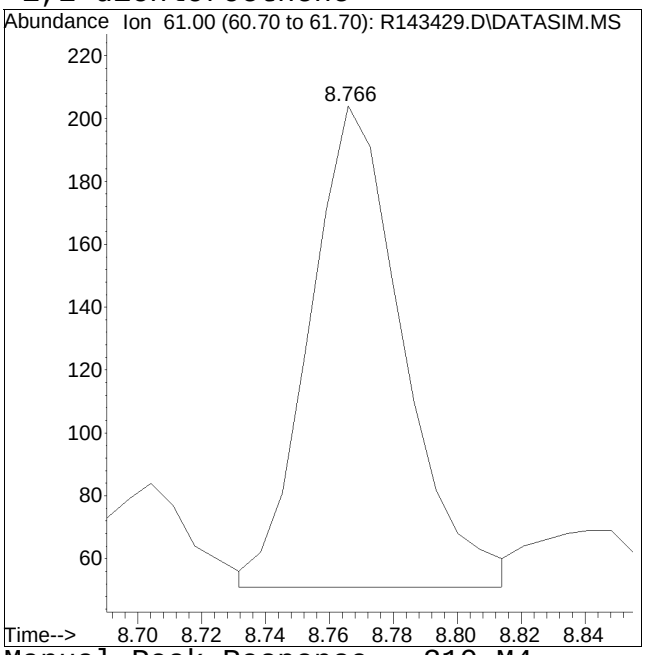
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #23: trans-1,2-dichloroethene



Original Peak Response = 308



Manual Peak Response = 310 M4

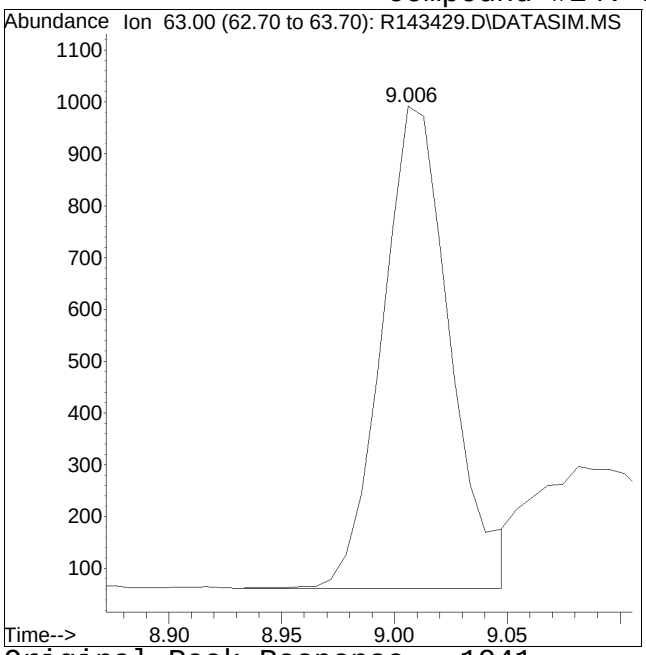
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

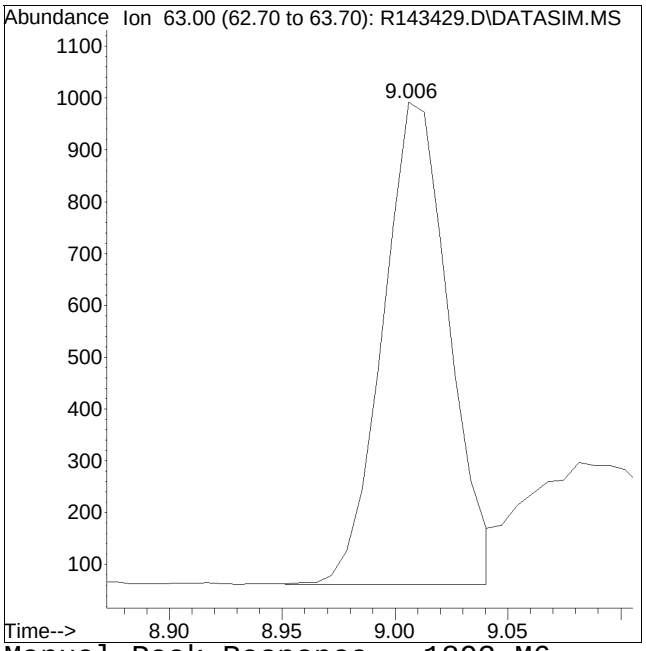
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #24: 1,1-dichloroethane



Original Peak Response = 1941



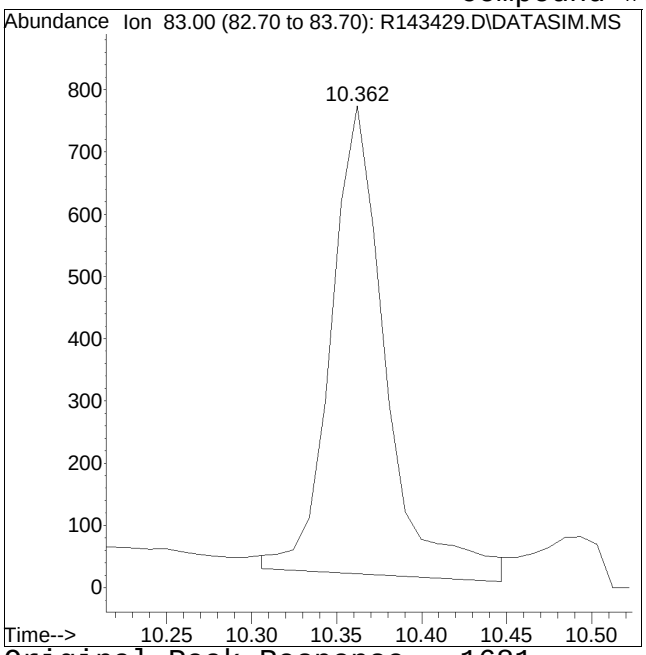
Manual Peak Response = 1893 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

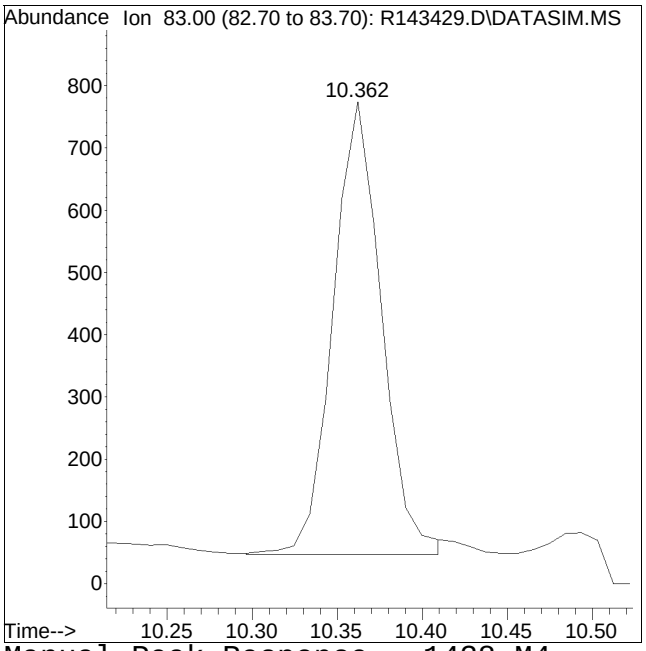
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #30: chloroform



Original Peak Response = 1681



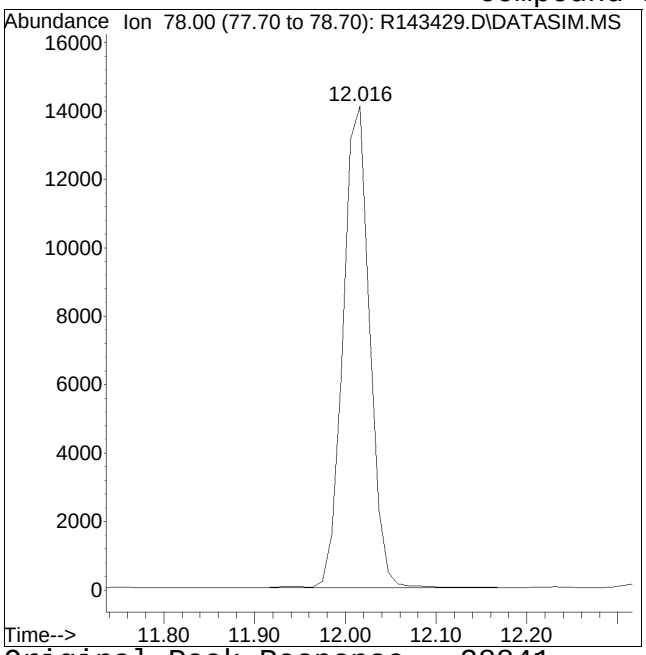
Manual Peak Response = 1438 M4

M4 = Poor automated baseline construction.

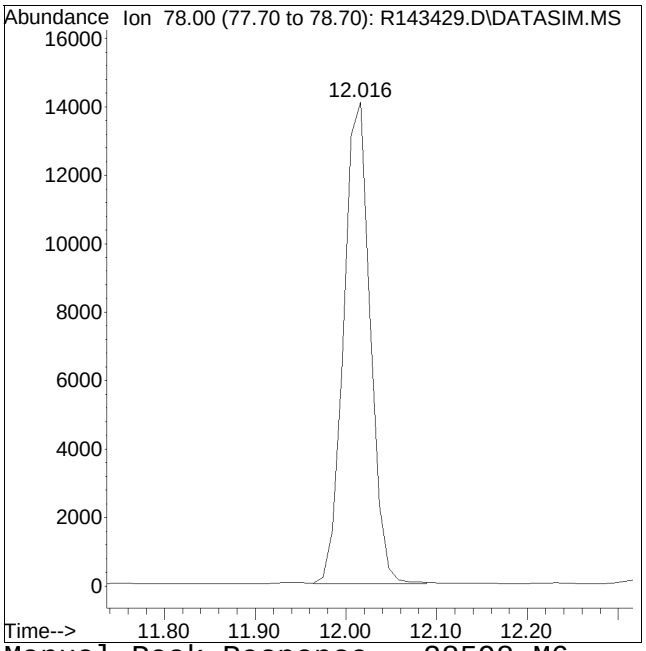
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #37: benzene



Original Peak Response = 28841



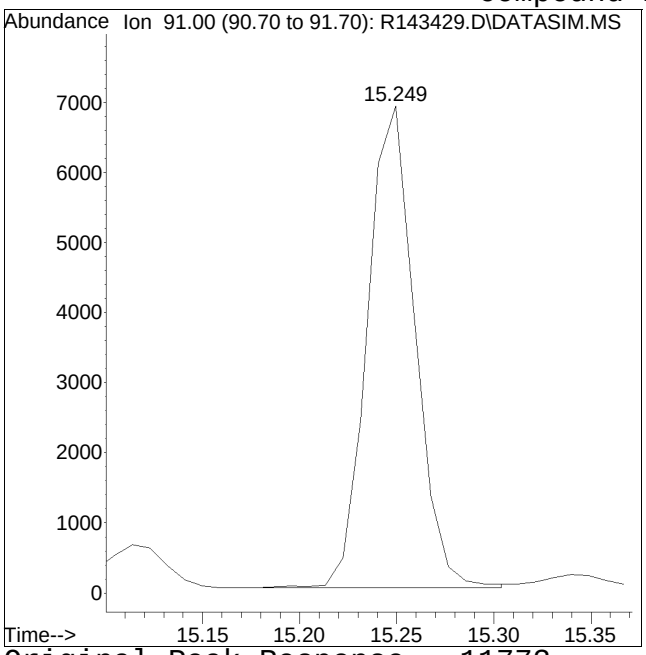
Manual Peak Response = 28598 M6

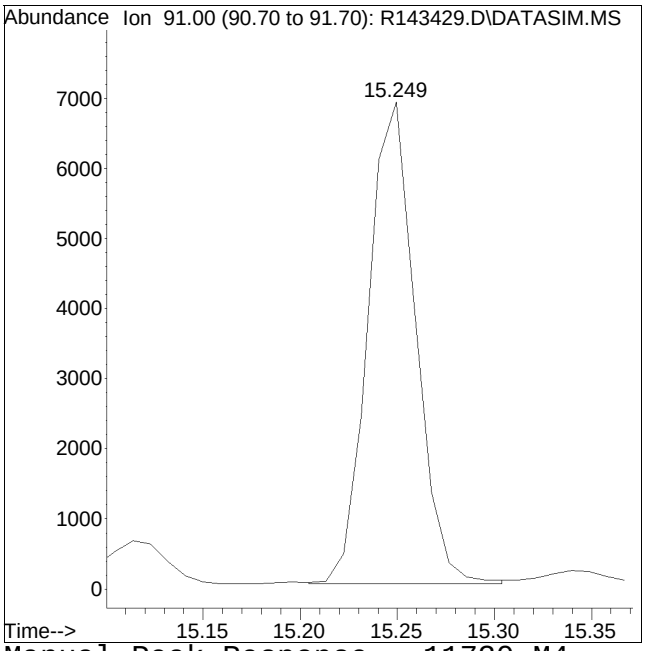
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #52: toluene





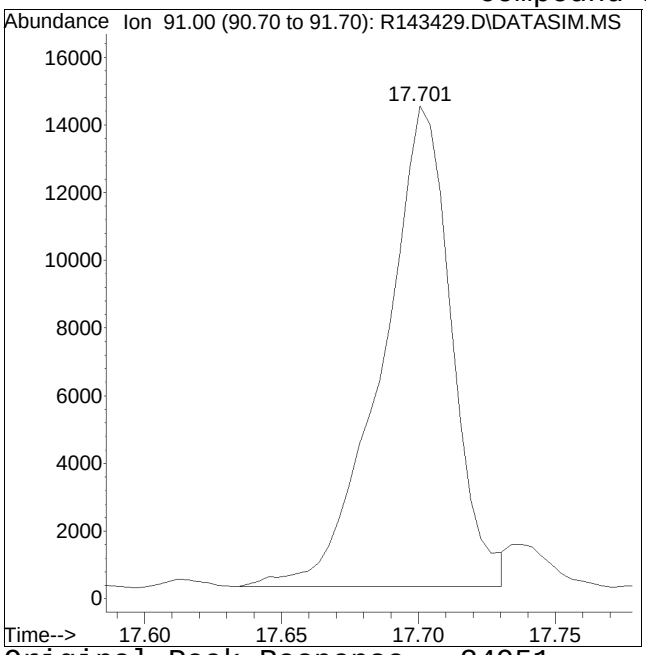
Original Peak Response = 11773 Manual Peak Response = 11730 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

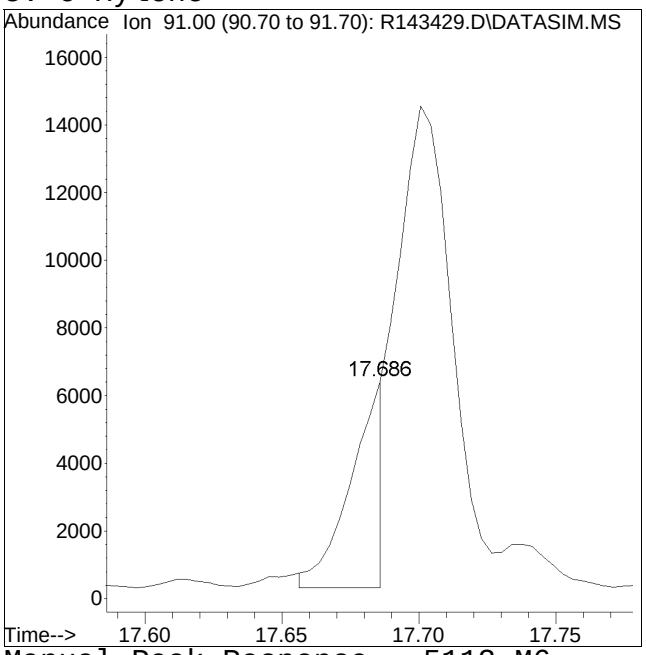
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #65: o-xylene



Original Peak Response = 24951



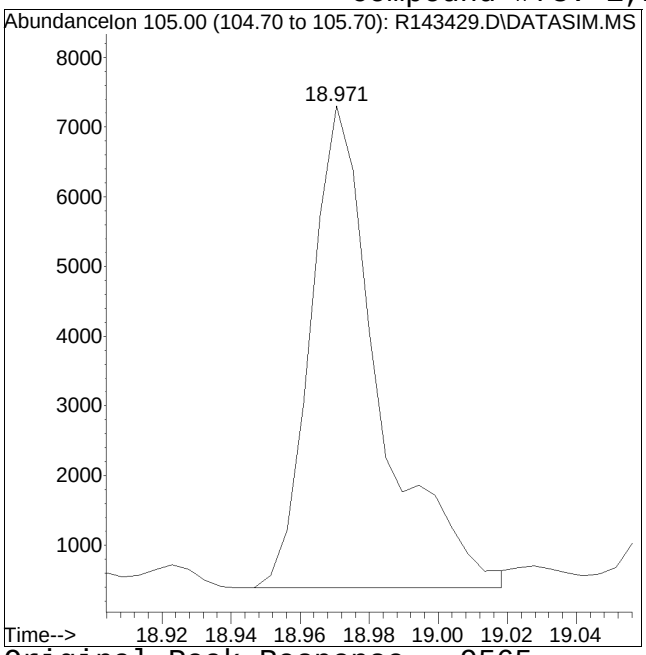
Manual Peak Response = 5112 M6

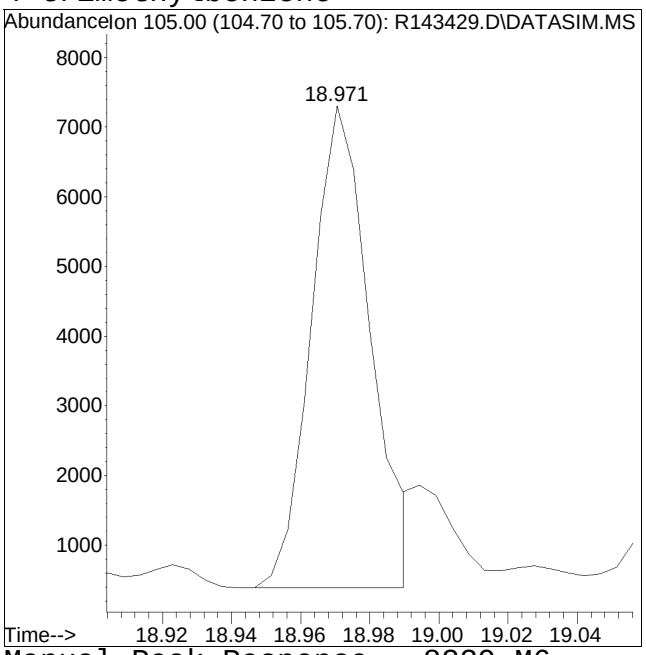
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #73: 1,2,4-trimethylbenzene



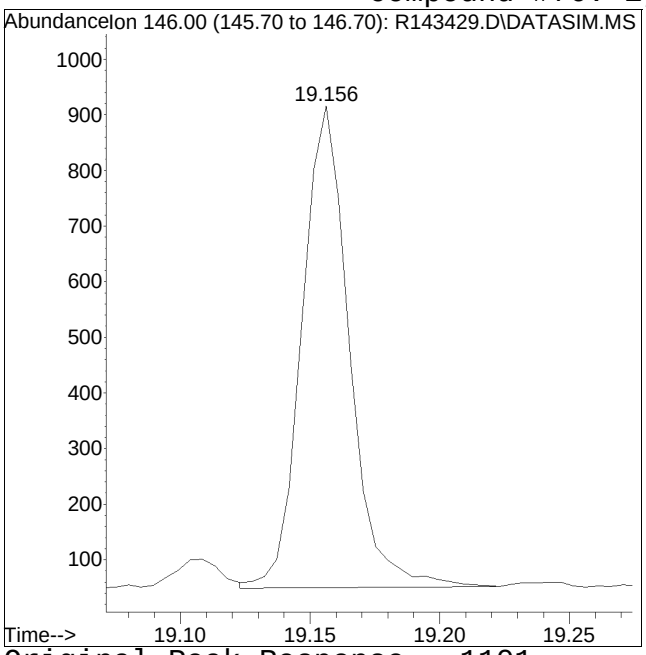


Original Peak Response = 9565 Manual Peak Response = 8239 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

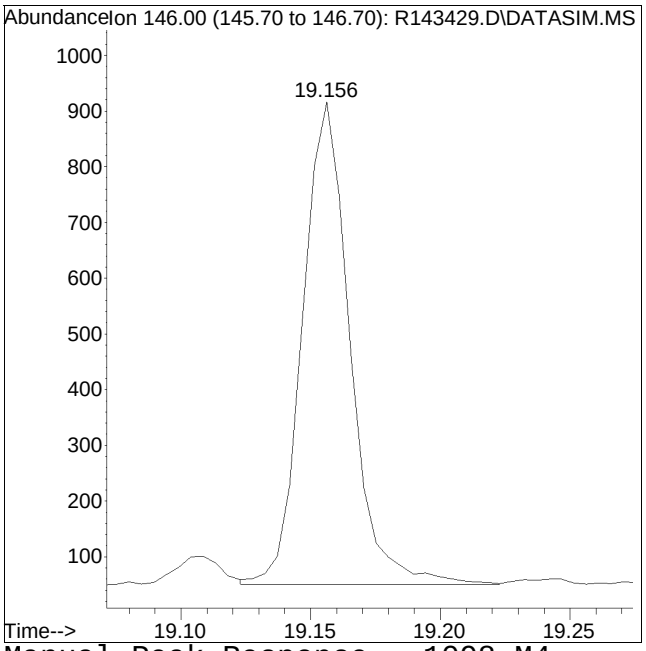
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:48 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 1101



Manual Peak Response = 1098 M4

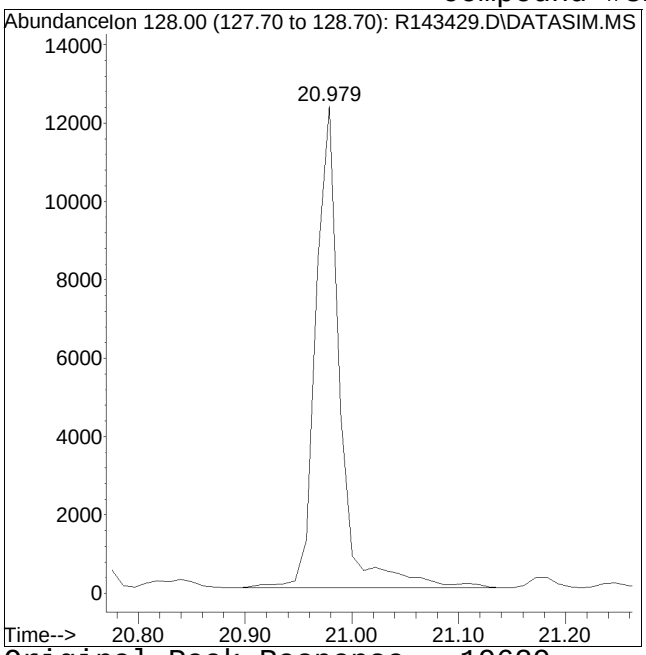
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

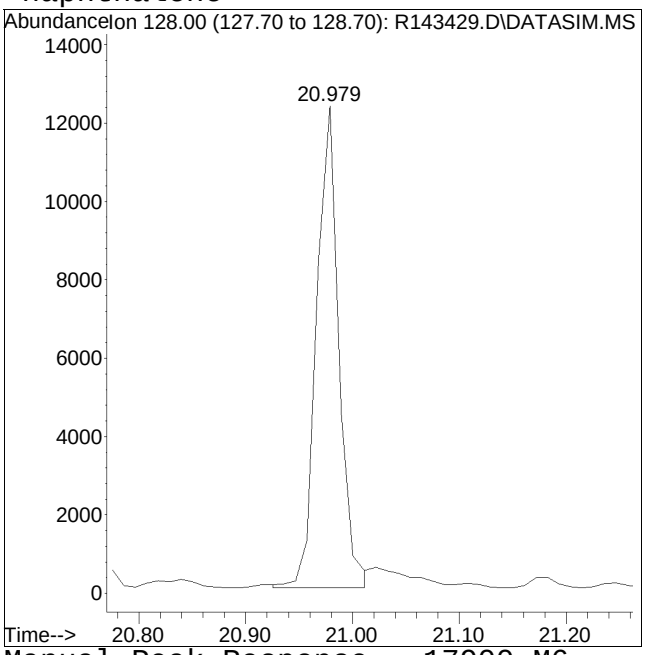
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:48 am

Compound #82: naphthalene



Original Peak Response = 19629



Manual Peak Response = 17900 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+Naph - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	141803	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		93.94%	
33) 1,4-difluorobenzene	12.420	114	341690	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		91.87%	
51) chlorobenzene-D5	16.843	54	65111	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		94.55%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	3243	0.226	ppbV	97
4) chloromethane	4.380		0	N.D.		
5) Freon-114	4.528	85	300	0.014	ppbV #	85
6) vinyl chloride	4.696		0	N.D.		
7) 1,3-butadiene	0.000		0	N.D.		
8) bromomethane	5.277		0	N.D.		
9) chloroethane	5.508	64	58M4	0.014	ppbV	
13) trichlorofluoromethane	6.579	101	4640	0.234	ppbV	99
16) 1,1-dichloroethene	7.435		0	N.D.		
18) methylene chloride	7.595	49	5344	0.498	ppbV	99
21) Freon 113	7.938	101	1121	0.068	ppbV	94
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.013	63	225	0.013	ppbV #	24
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.015		0	N.D.		
30) chloroform	10.362	83	2632	0.126	ppbV	97
32) 1,2-dichloroethane	11.190		0	N.D.		
36) 1,1,1-trichloroethane	11.494	97	763	0.041	ppbV #	83
37) benzene	12.016		0	N.D.		
38) carbon tetrachloride	12.182	117	848	0.051	ppbV #	94
41) 1,2-dichloropropane	12.938		0	N.D.		
42) bromodichloromethane	13.166		0	N.D.		
44) trichloroethene	13.218	130	3436	0.240	ppbV	98
47) cis-1,3-dichloropropene	14.205		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.978		0	N.D.		
52) toluene	15.250	91	2605	0.070	ppbV	99
55) dibromochloromethane	15.665		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+Naph - All Compounds reported

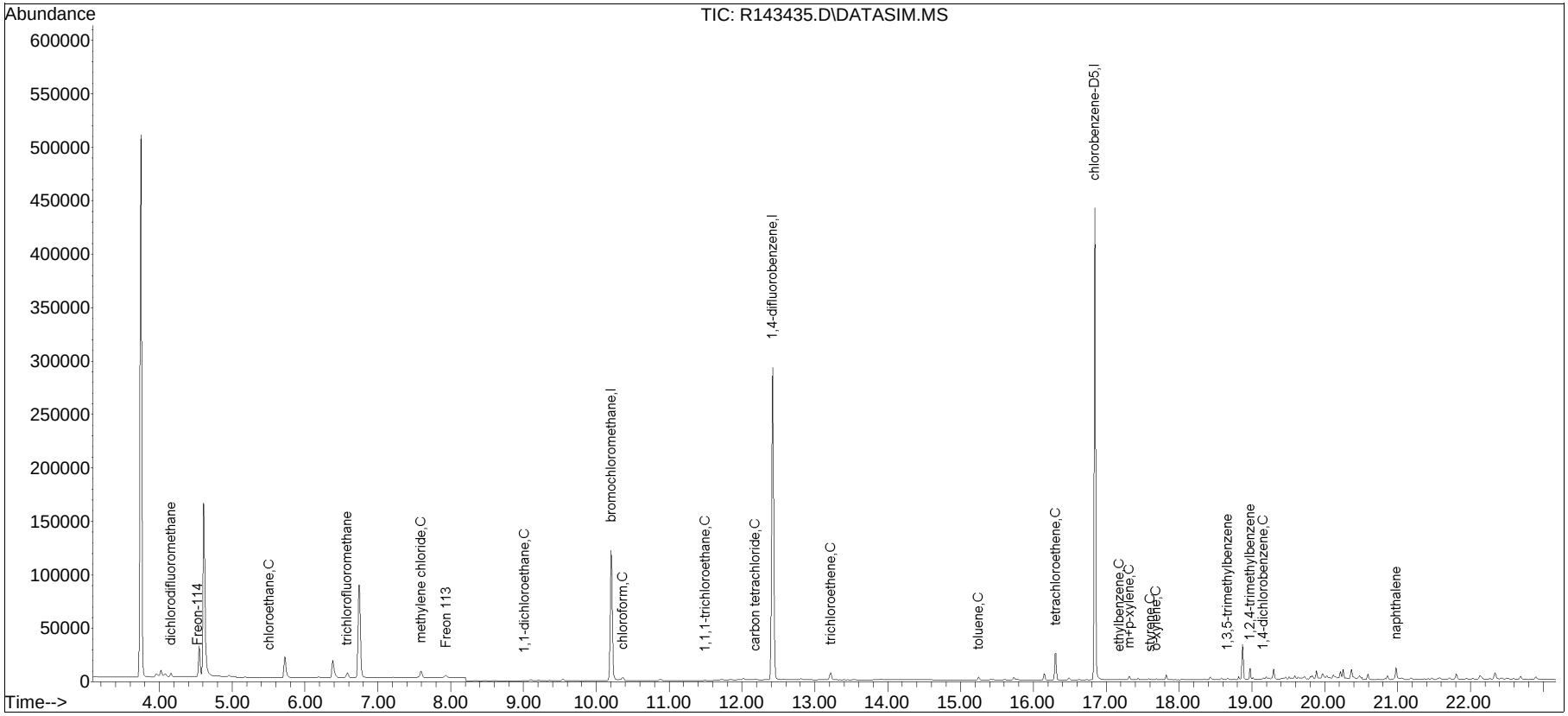
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56) 1,2-dibromoethane	15.900		0	N.D.	
57) tetrachloroethene	16.307	166	13309	0.712 ppbV	99
58) 1,1,1,2-tetrachloroethane	16.854		0	N.D.	
59) chlorobenzene	16.888		0	N.D.	
60) ethylbenzene	17.180	91	439	0.009 ppbV #	81
61) m+p-xylene	17.313	91	1192	0.032 ppbV	96
62) bromoform	17.398		0	N.D.	
63) styrene	17.608	104	254	0.009 ppbV #	75
64) 1,1,2,2-tetrachloroethane	17.660		0	N.D.	
65) o-xylene	17.686	91	725	0.019 ppbV	95
71) 1,3,5-trimethylbenzene	18.665	105	528	0.011 ppbV #	84
73) 1,2,4-trimethylbenzene	18.975	105	3458	0.076 ppbV #	75
75) 1,3-dichlorobenzene	19.109		0	N.D.	
76) 1,4-dichlorobenzene	19.156	146	899M4	0.025 ppbV	
79) 1,2-dichlorobenzene	19.423		0	N.D.	
81) 1,2,4-trichlorobenzene	20.861		0	N.D.	
82) naphthalene	20.979	128	13147M6	0.229 ppbV	
84) hexachlorobutadiene	21.290		0	N.D.	

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

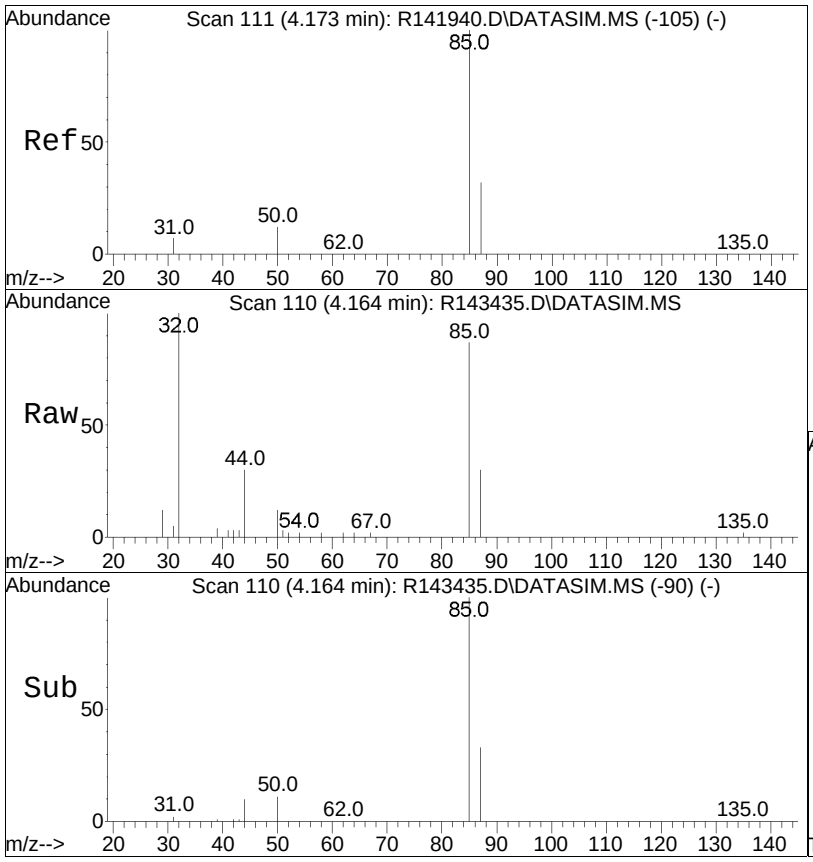
Sub List : TO15_SIM+Naph - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration



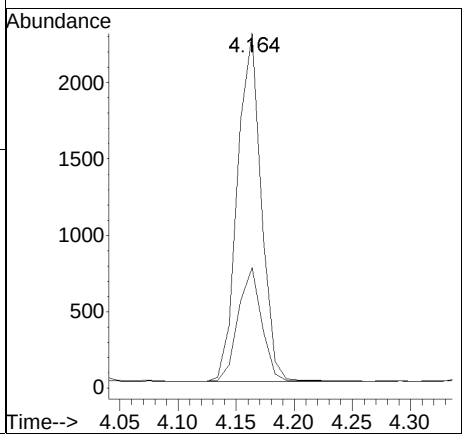
TSIM150710.M Fri Aug 14 14:29:02 2015

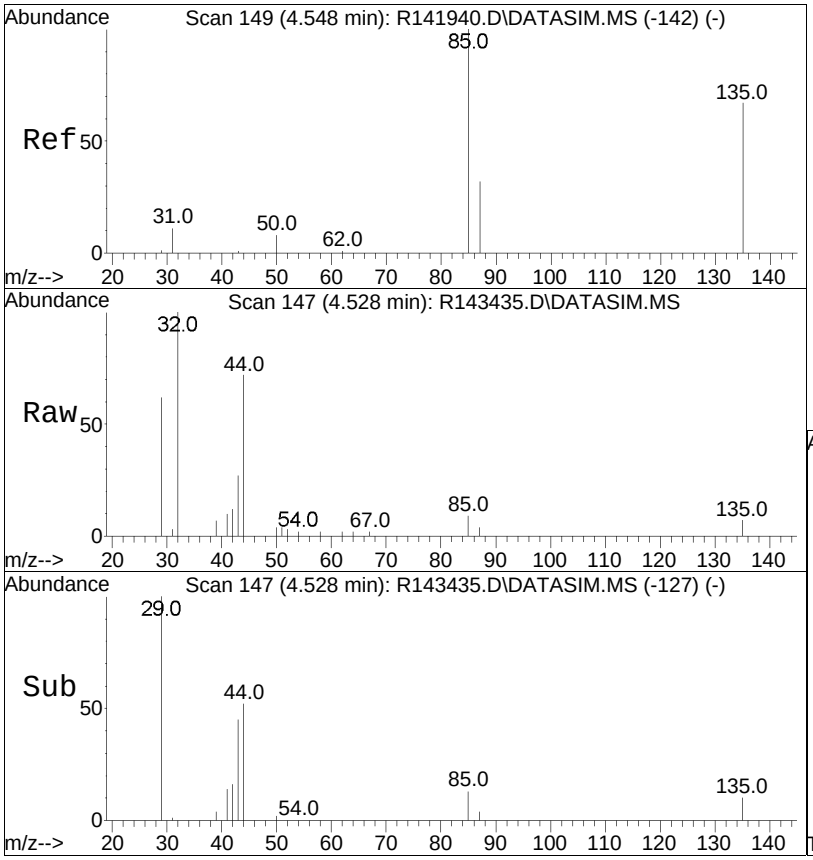


#3
dichlorodifluoromethane
Concen: 0.23 ppbV
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 85 Resp: 3243

Ion	Ratio	Lower	Upper
85	100		
87	34.0	26.0	39.0

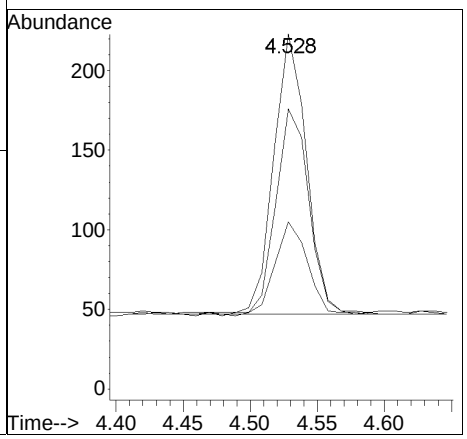


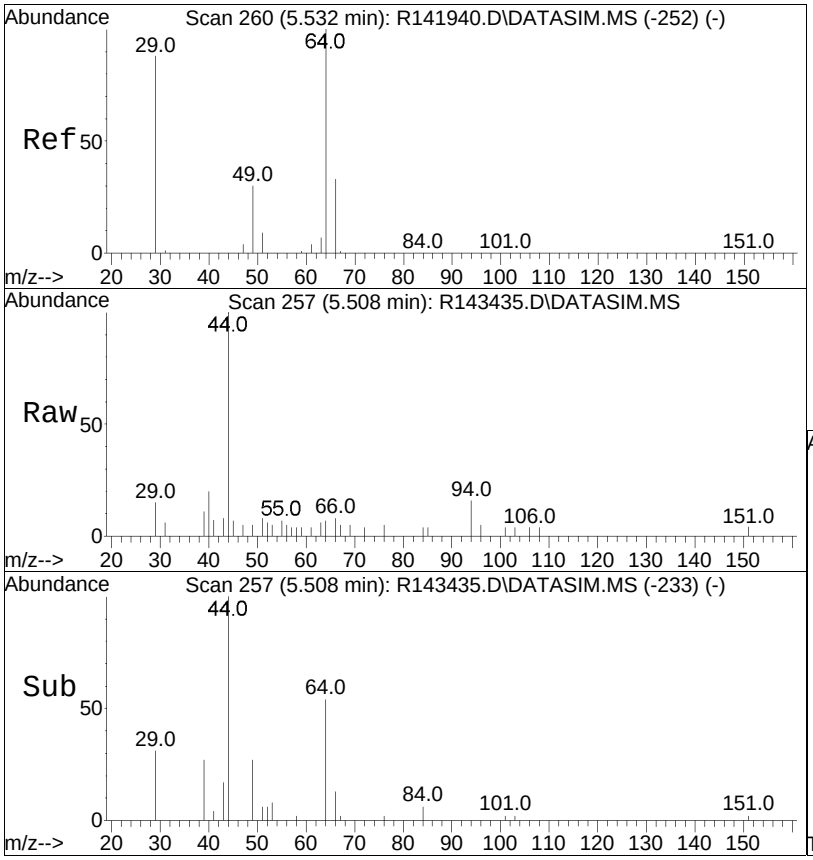


#5
Freon-114
Concen: 0.01 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 85 Resp: 300

Ion	Ratio	Lower	Upper
85	100		
87	47.1	25.4	38.0#
135	78.9	57.0	85.6

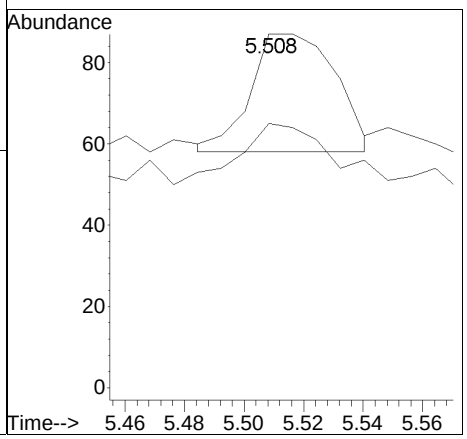


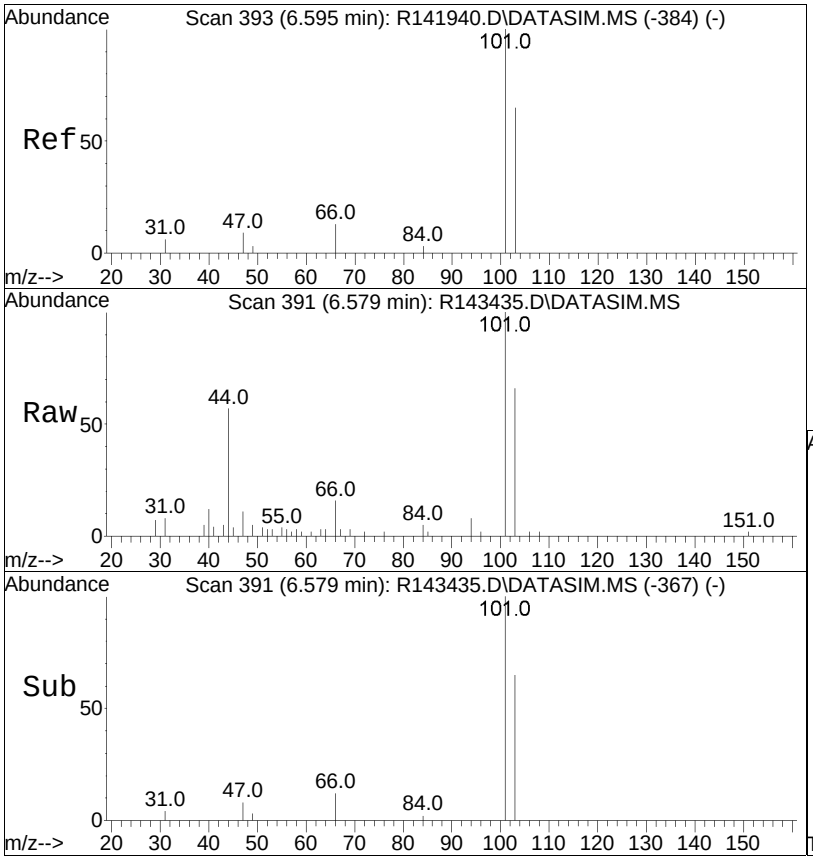


#9
chloroethane
Concen: 0.01 ppbV m
RT: 5.508 min Scan# 257
Delta R.T. -0.008 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 64 Resp: 58

Ion	Ratio	Lower	Upper
64	100		
49	74.7	27.4	41.0#

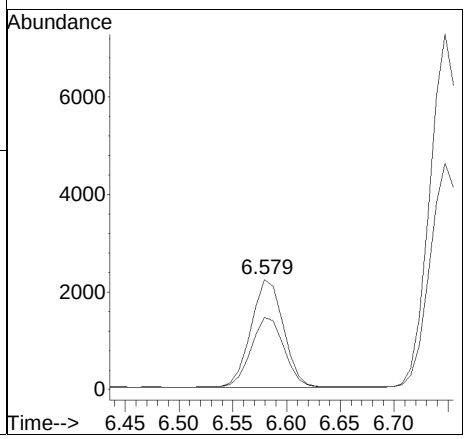


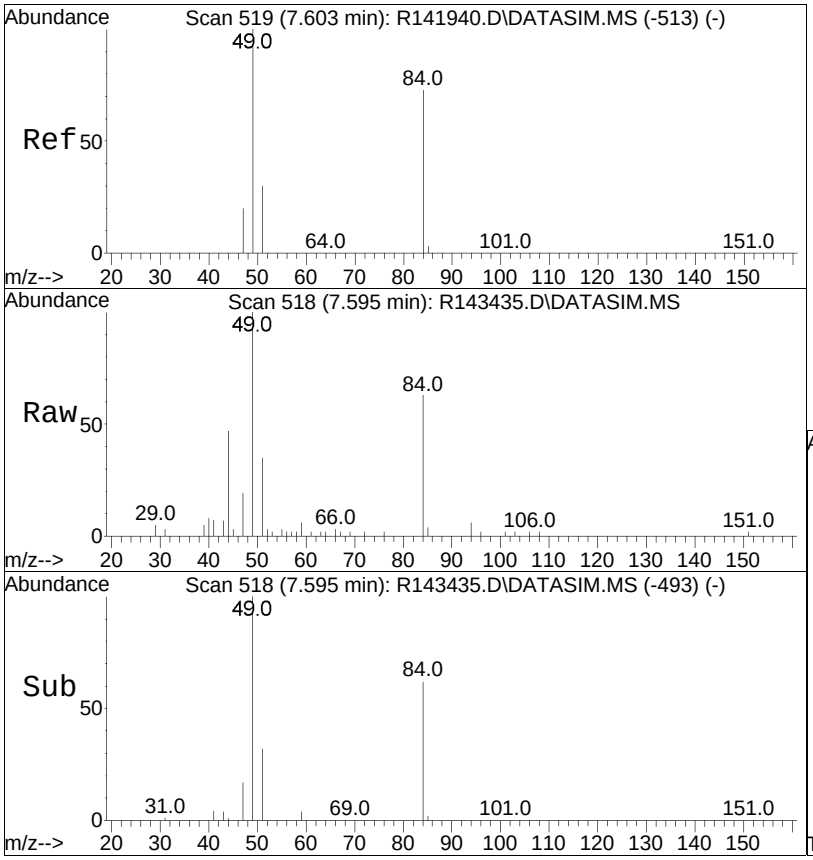


#13
trichlorofluoromethane
Concen: 0.23 ppbV
RT: 6.579 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:101 Resp: 4640

Ion	Ratio	Lower	Upper
101	100		
103	65.6	52.2	78.2

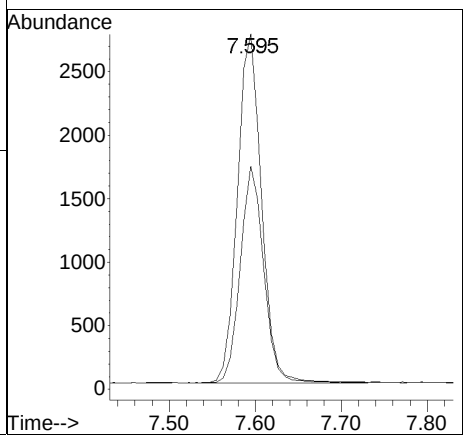


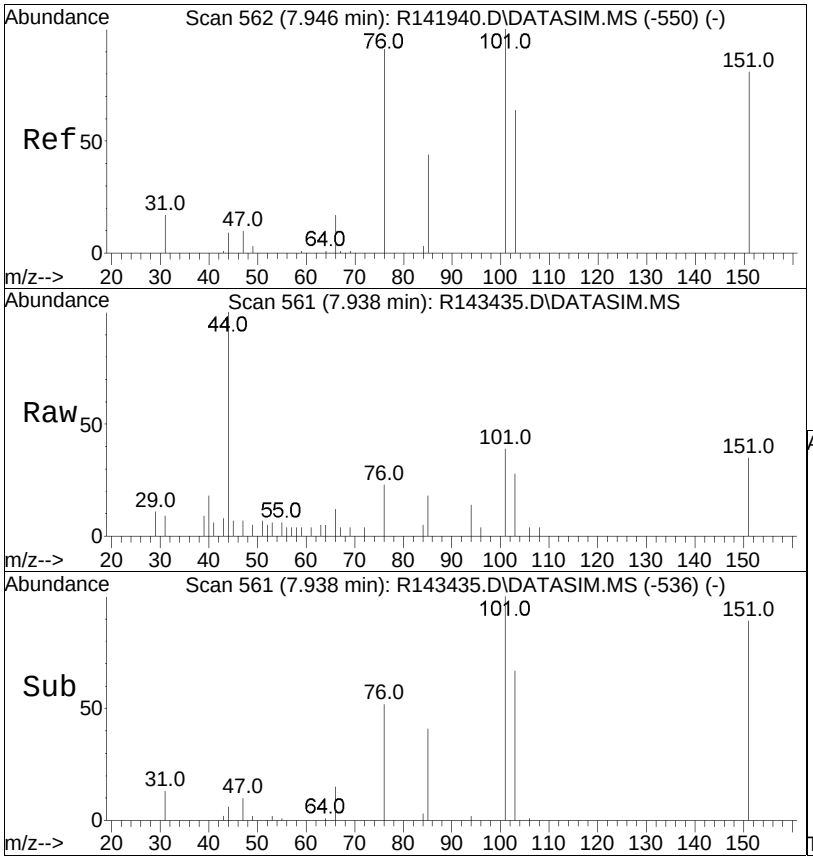


#18
methylene chloride
Concen: 0.50 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 49 Resp: 5344

Ion	Ratio	Lower	Upper
49	100		
84	62.9	50.8	76.2

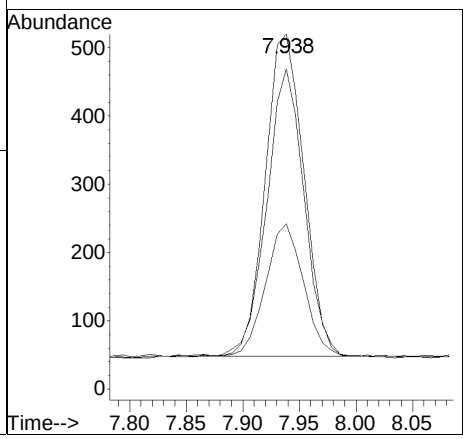


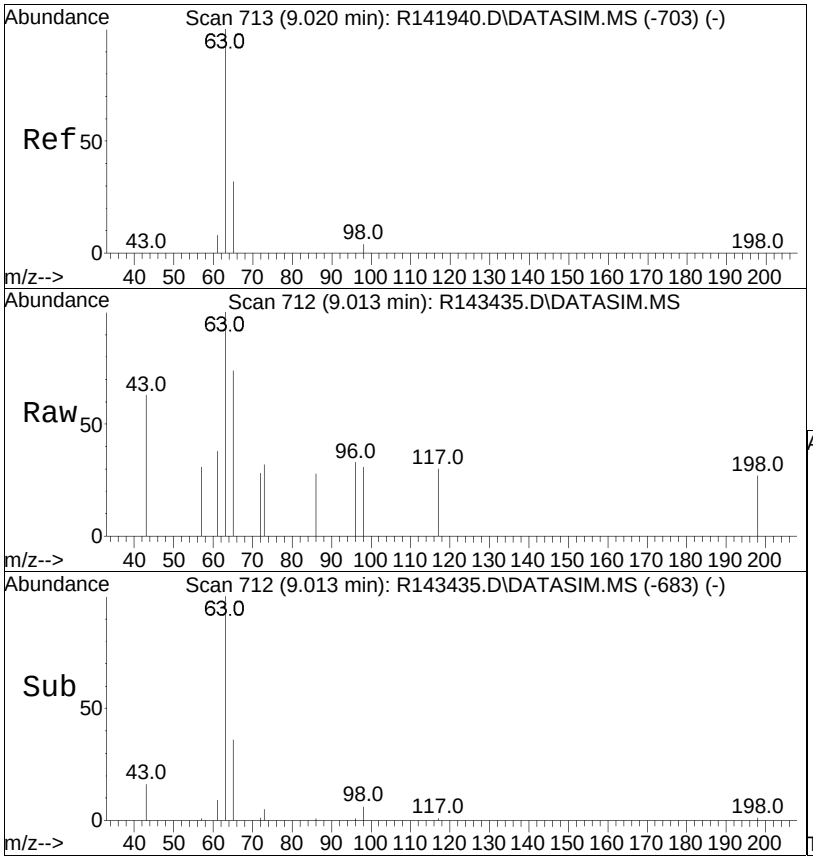


#21
Freon 113
Concen: 0.07 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:101 Resp: 1121

Ion	Ratio	Lower	Upper
101	100		
85	46.5	32.5	48.7
151	90.2	69.1	103.7

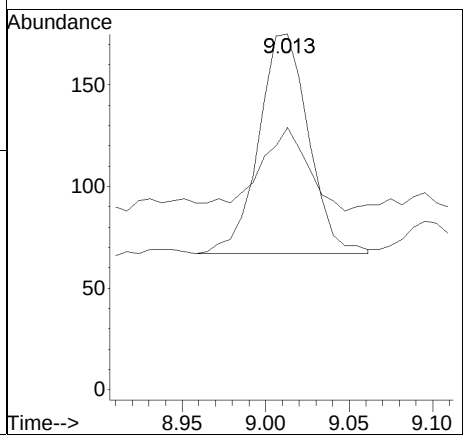


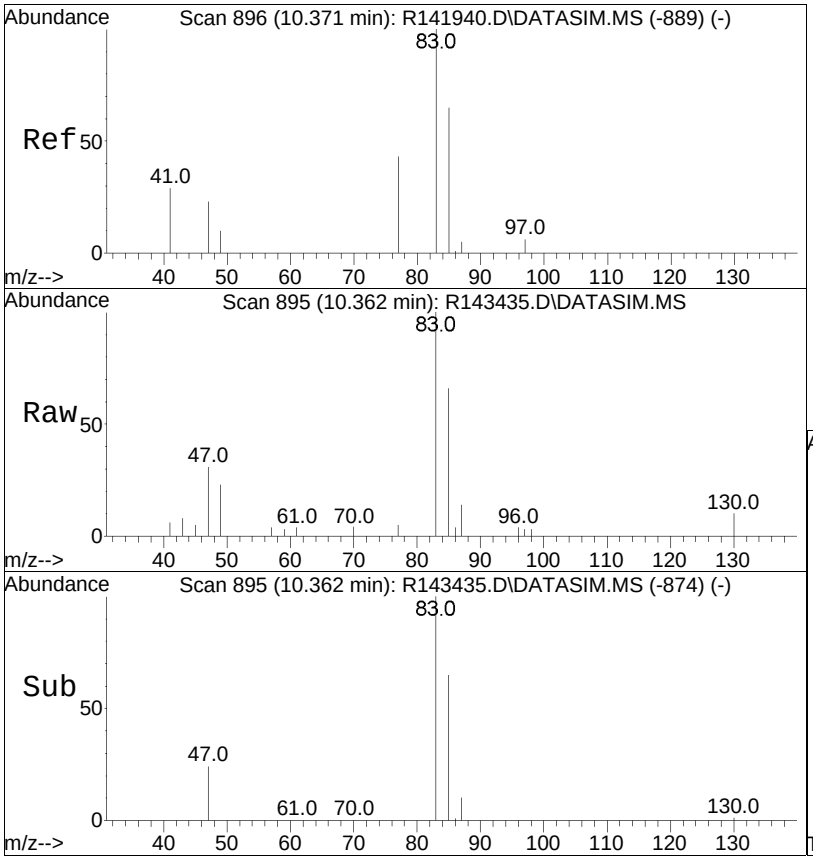


#24
1,1-dichloroethane
Concen: 0.01 ppbV
RT: 9.013 min Scan# 712
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 63 Resp: 225

Ion	Ratio	Lower	Upper
63	100		
65	73.7	25.2	37.8#

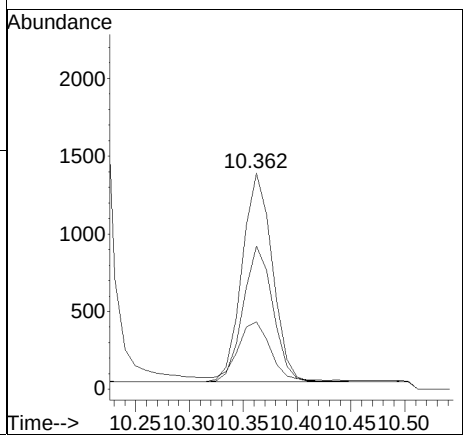


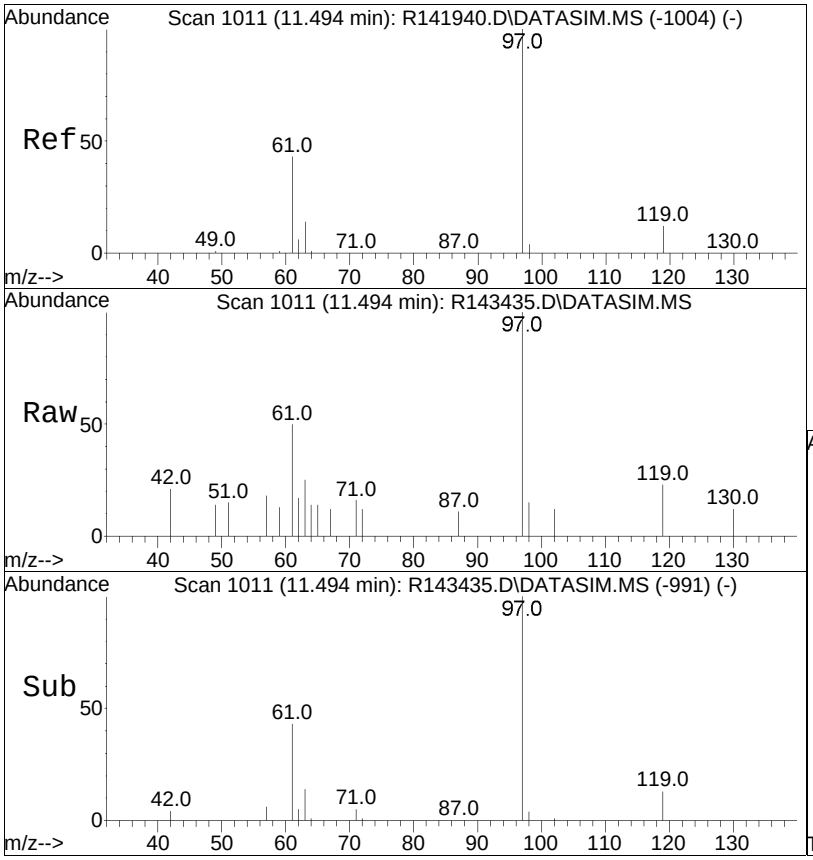


#30
chloroform
Concen: 0.13 ppbV
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 83 Resp: 2632

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.6	77.4
47	31.2	22.6	33.8

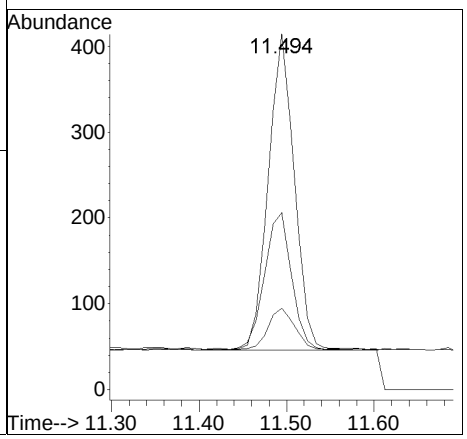


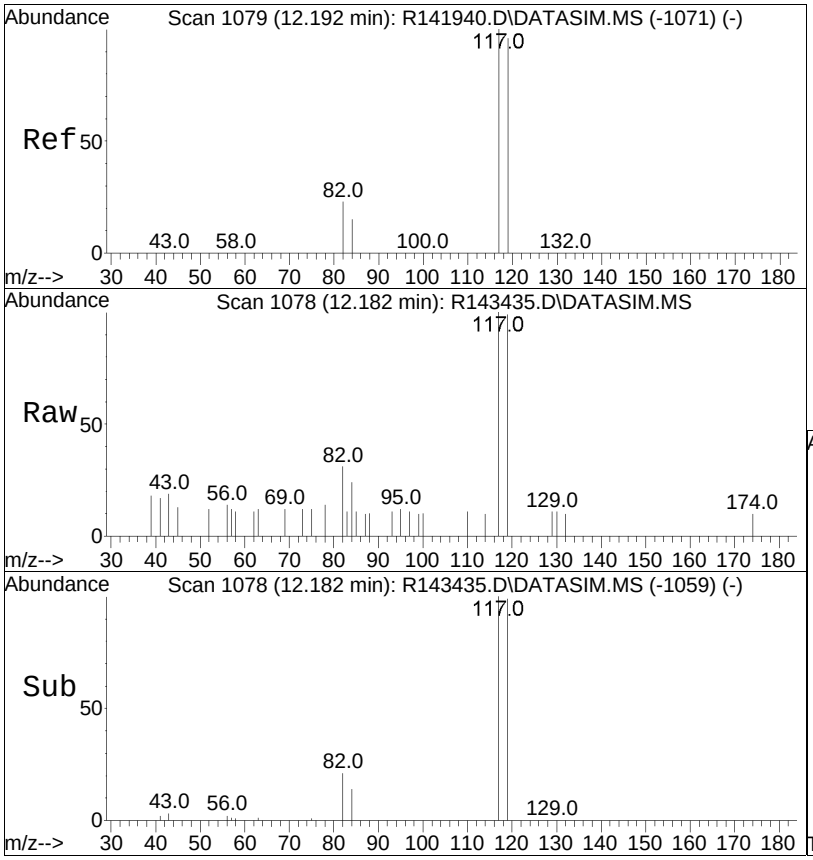


#36
1,1,1-trichloroethane
Concen: 0.04 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 97 Resp: 763

Ion	Ratio	Lower	Upper
97	100		
61	49.8	32.6	49.0#
119	22.9	11.0	16.4#

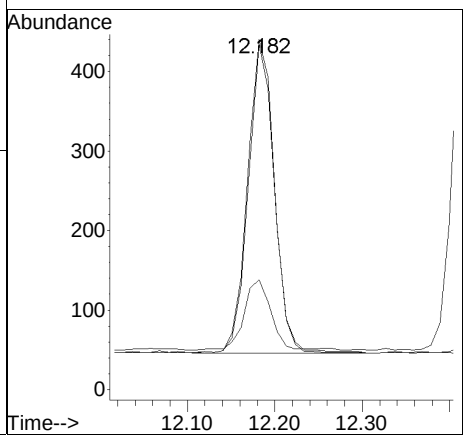


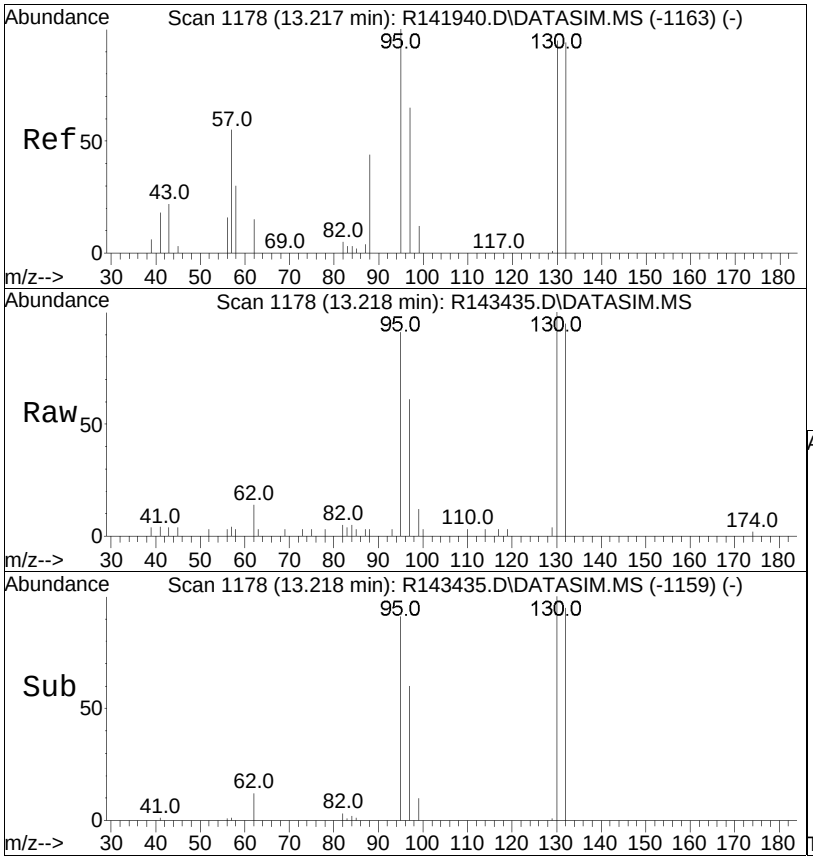


#38
carbon tetrachloride
Concen: 0.05 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:117 Resp: 848

Ion	Ratio	Lower	Upper
117	100		
119	98.6	76.4	114.6
82	31.4	18.3	27.5#

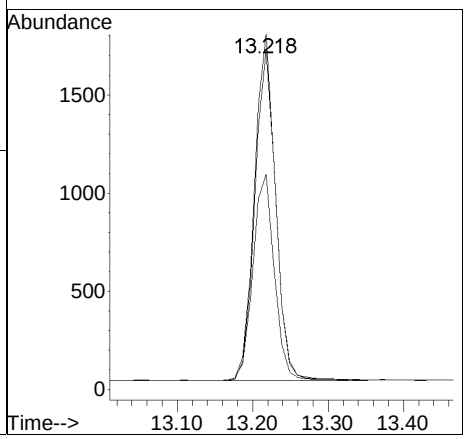


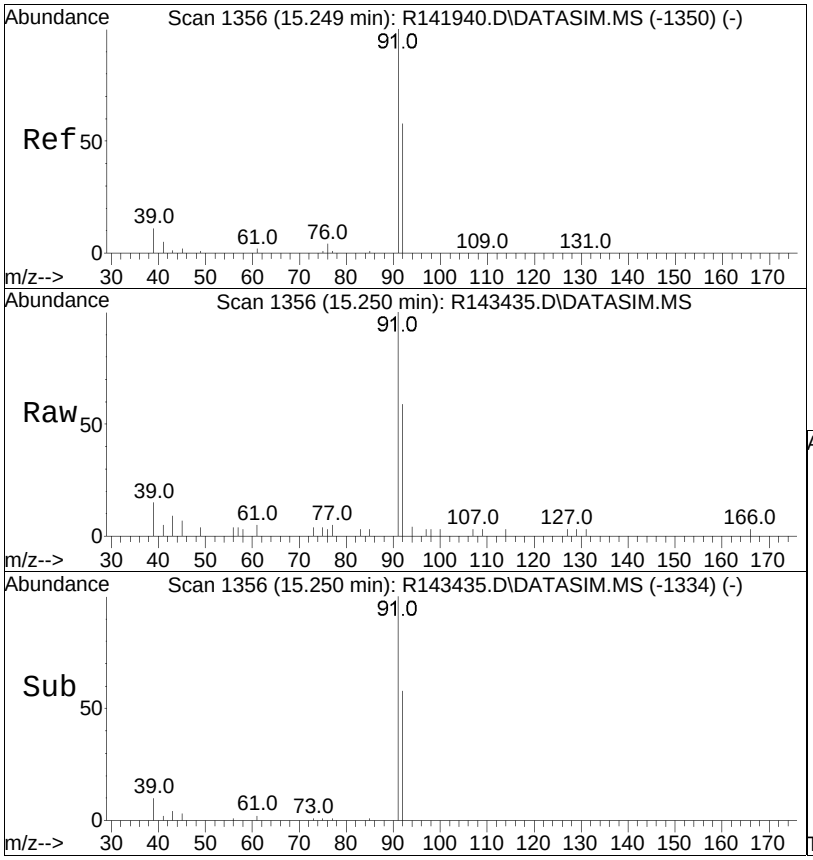


#44
trichloroethene
Concen: 0.24 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:130 Resp: 3436

Ion	Ratio	Lower	Upper
130	100		
132	95.5	77.5	116.3
97	60.6	47.4	71.2

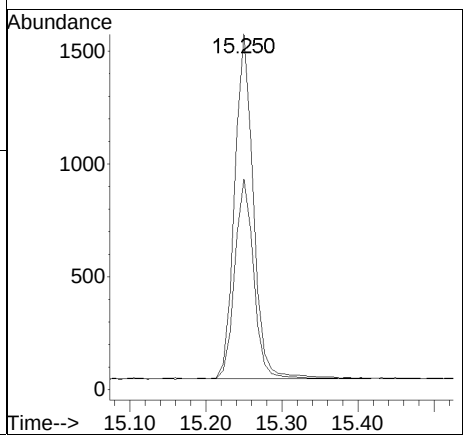


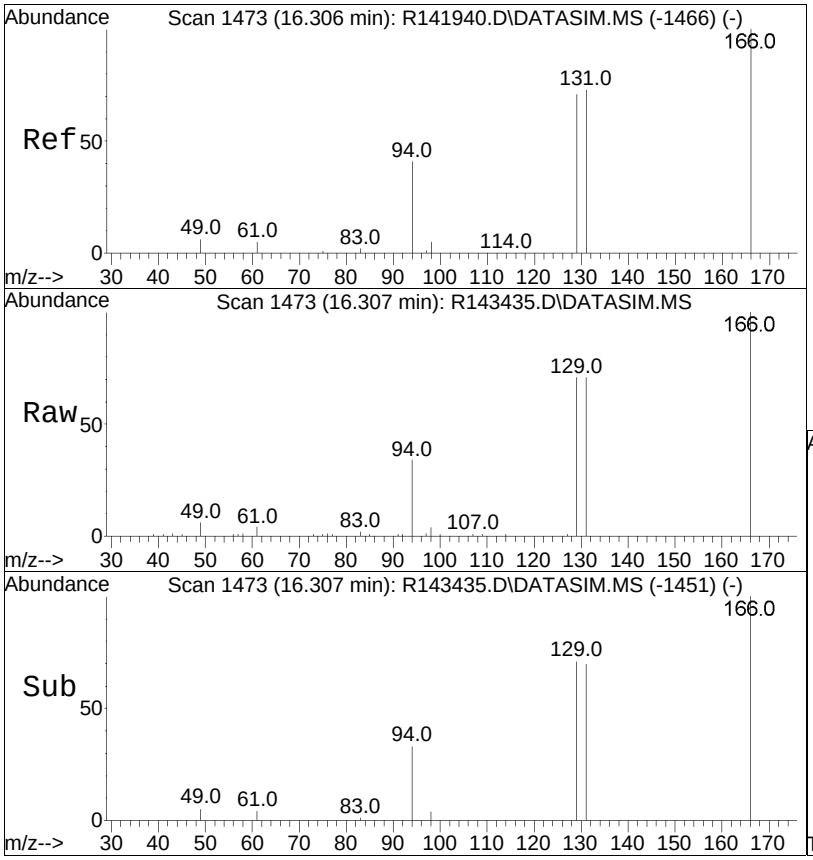


#52
toluene
Concen: 0.07 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 91 Resp: 2605

Ion	Ratio	Lower	Upper
91	100		
92	59.3	46.8	70.2

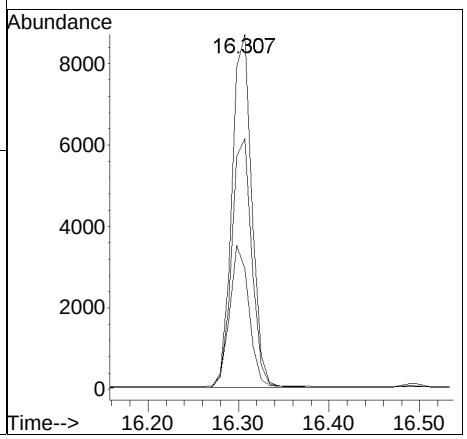


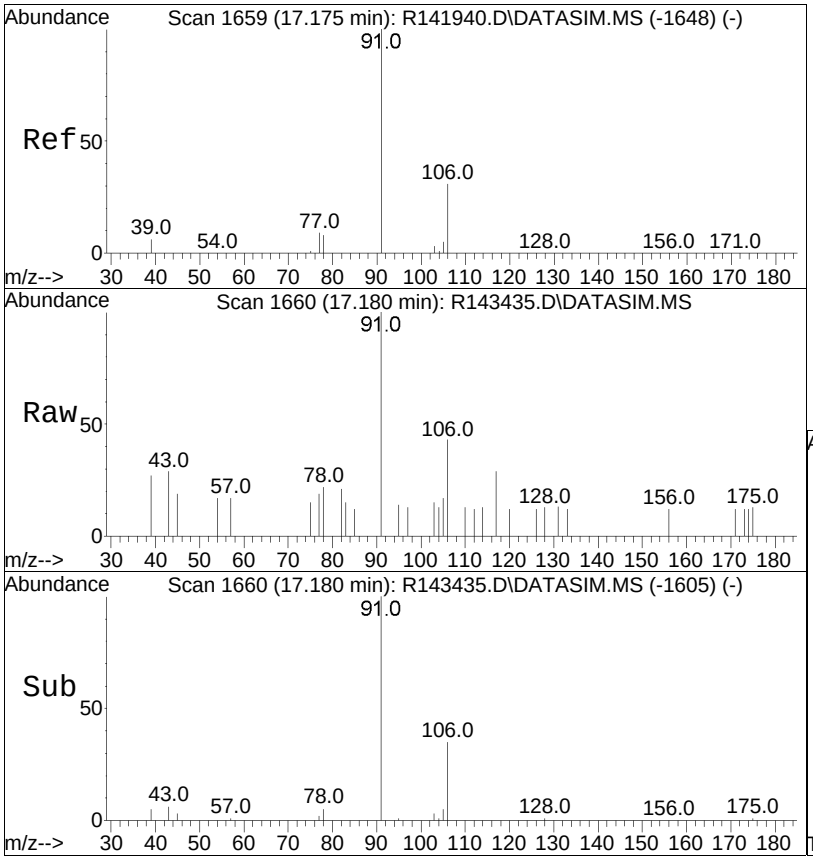


#57
tetrachloroethene
Concen: 0.71 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:166 Resp: 13309

Ion	Ratio	Lower	Upper
166	100		
131	70.6	57.0	85.4
94	34.0	26.2	39.4

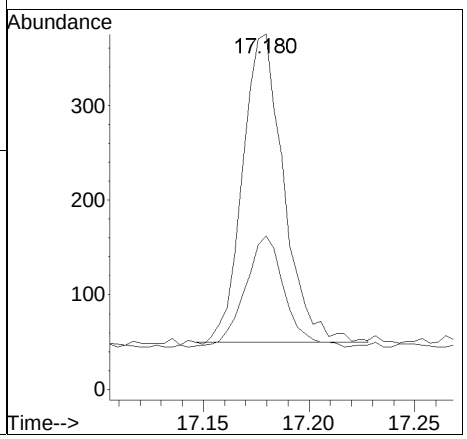


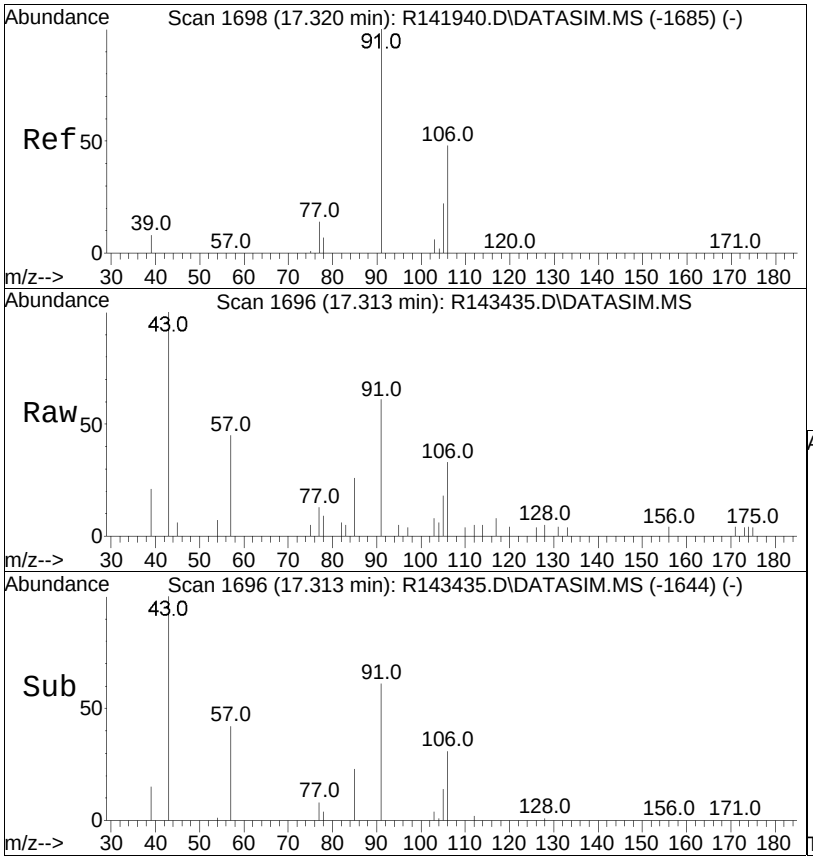


#60
ethylbenzene
Concen: 0.01 ppbV
RT: 17.180 min Scan# 1660
Delta R.T. 0.004 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 91 Resp: 439

Ion	Ratio	Lower	Upper
91	100		
106	43.2	25.8	38.8#

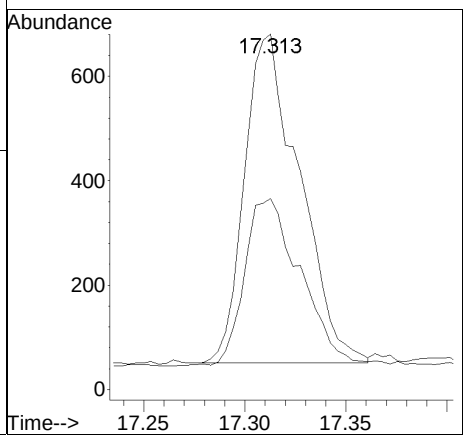


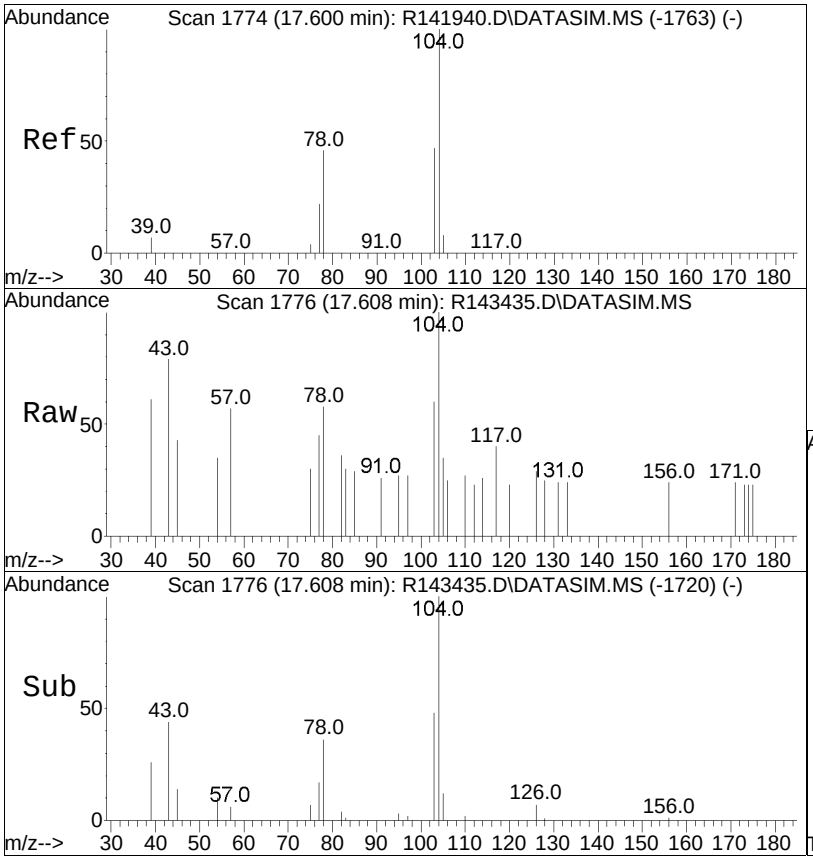


#61
m+p-xylene
Concen: 0.03 ppbV
RT: 17.313 min Scan# 1696
Delta R.T. -0.007 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 91 Resp: 1192

Ion	Ratio	Lower	Upper
91	100		
106	53.7	40.6	61.0

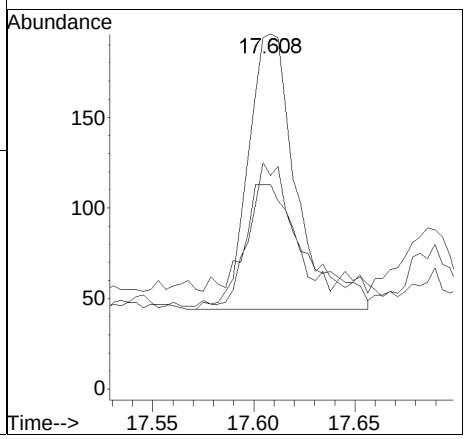


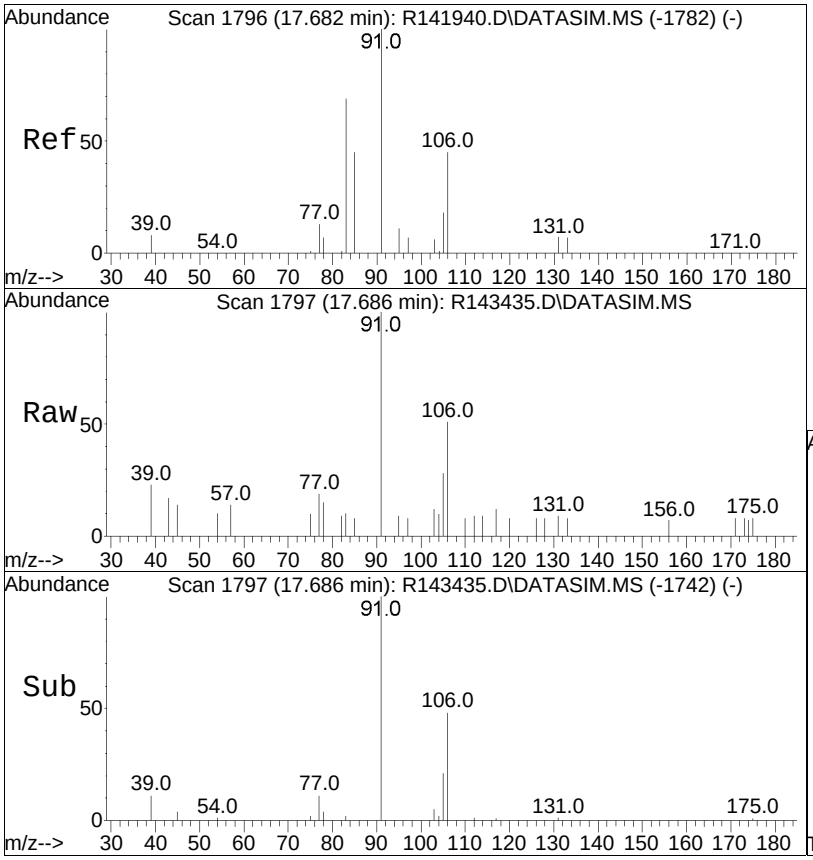


#63
styrene
Concen: 0.01 ppbV
RT: 17.608 min Scan# 1776
Delta R.T. 0.007 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:104 Resp: 254

Ion	Ratio	Lower	Upper
104	100		
103	60.2	37.7	56.5#
78	57.7	31.0	46.6#

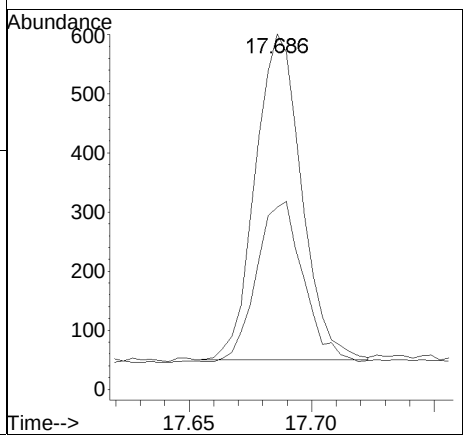


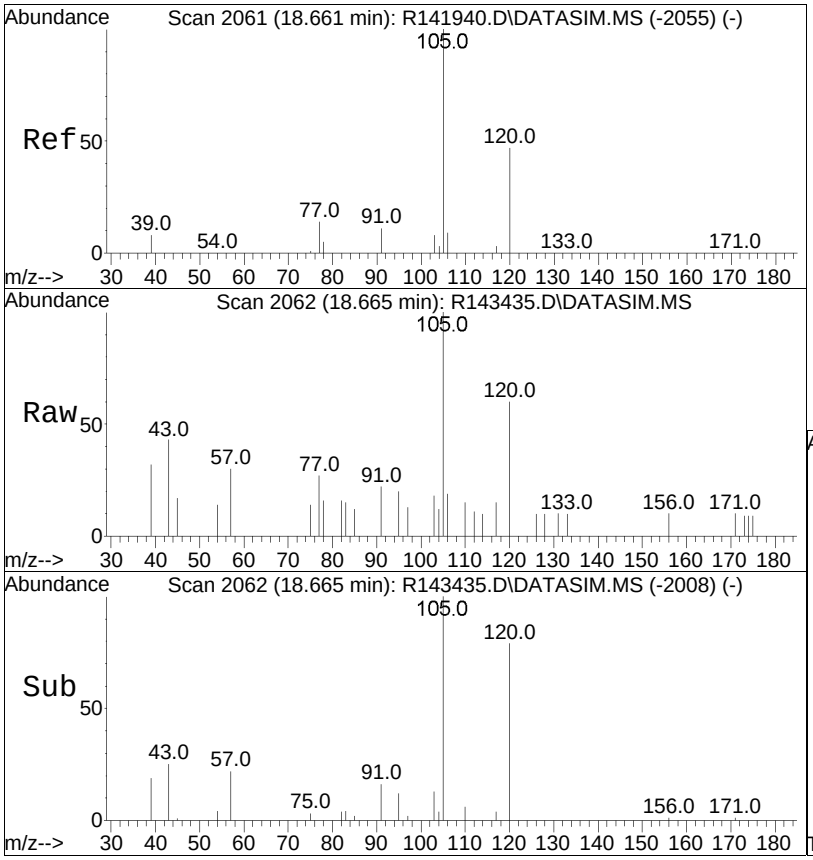


#65
o-xylene
Concen: 0.02 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 91 Resp: 725

Ion	Ratio	Lower	Upper
91	100		
106	51.2	38.5	57.7

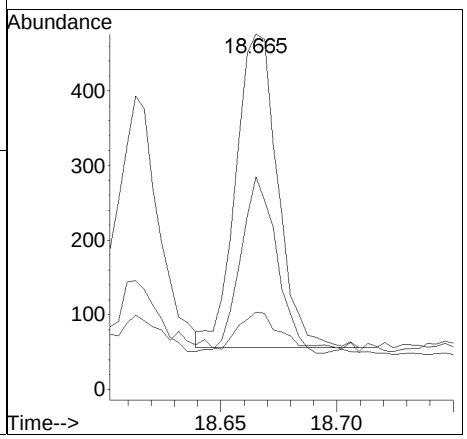


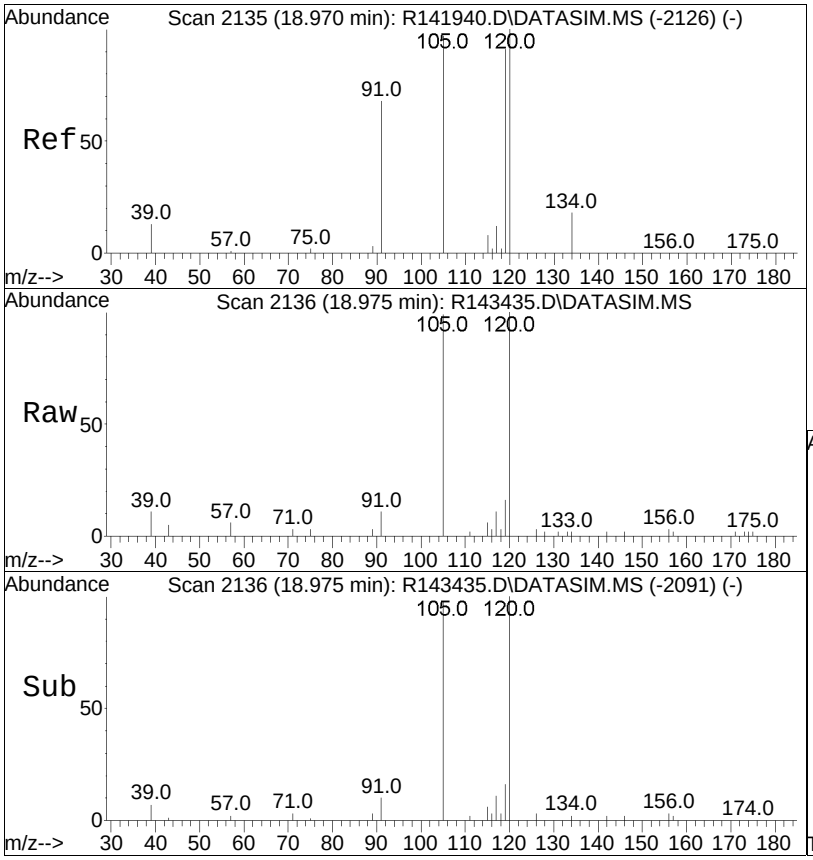


#71
1,3,5-trimethylbenzene
Concen: 0.01 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:105 Resp: 528

Ion	Ratio	Lower	Upper
105	100		
120	59.9	40.9	61.3
91	21.8	7.8	11.6#

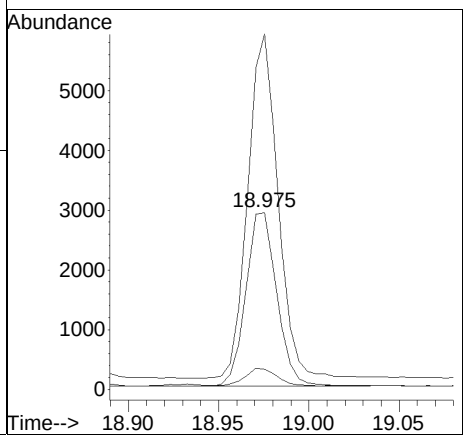


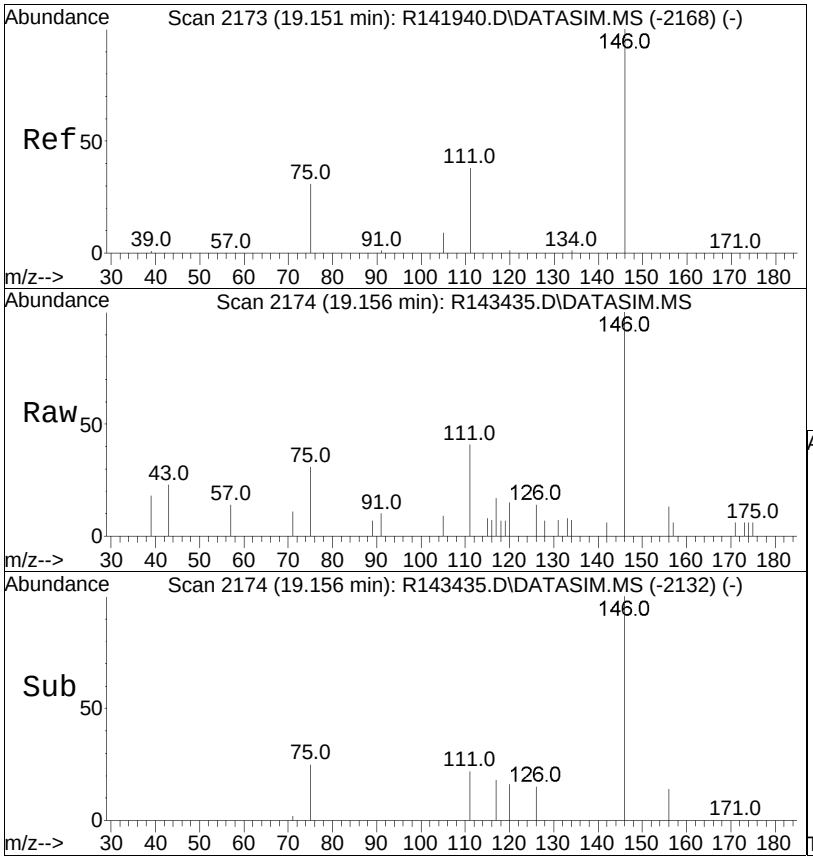


#73
1,2,4-trimethylbenzene
Concen: 0.08 ppbV
RT: 18.975 min Scan# 2136
Delta R.T. 0.005 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:105 Resp: 3458

Ion	Ratio	Lower	Upper
105	100		
120	201.2	174.7	262.1
91	11.4	55.2	82.8#

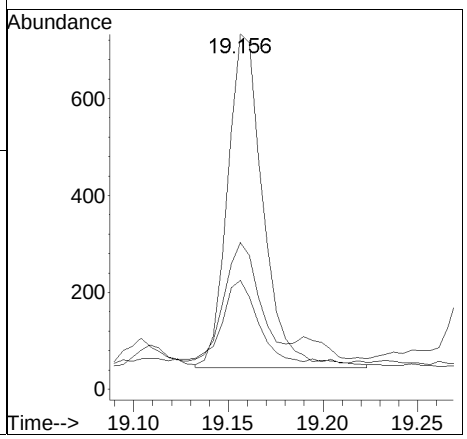


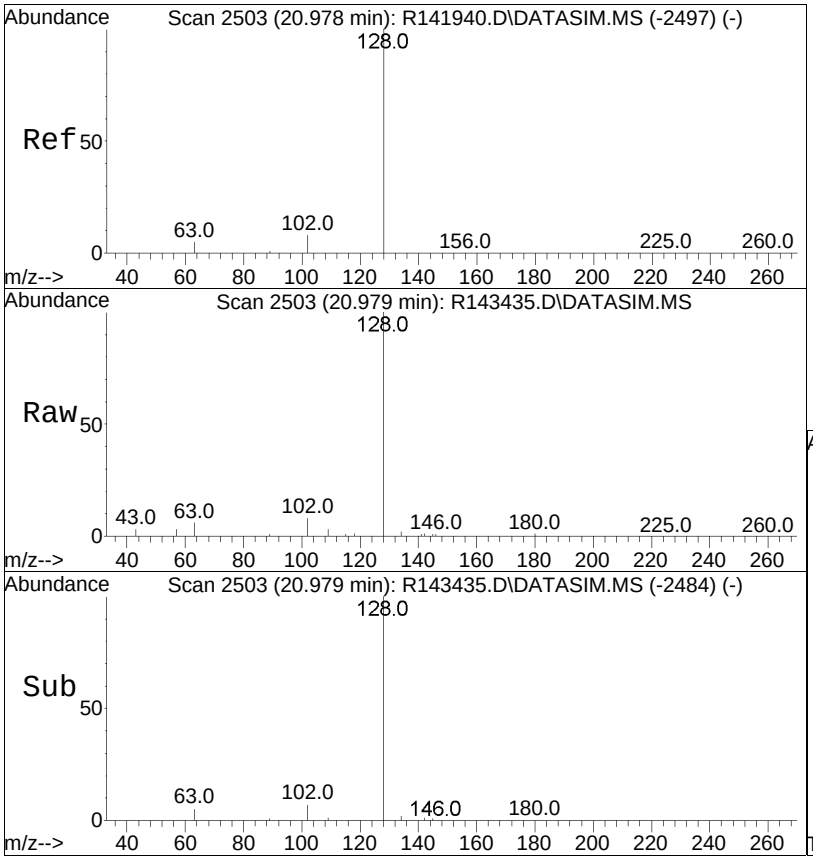


#76
1,4-dichlorobenzene
Concen: 0.03 ppbV m
RT: 19.156 min Scan# 2174
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:146 Resp: 899

Ion	Ratio	Lower	Upper
146	100		
111	41.3	26.8	40.2#
75	30.7	17.5	26.3#

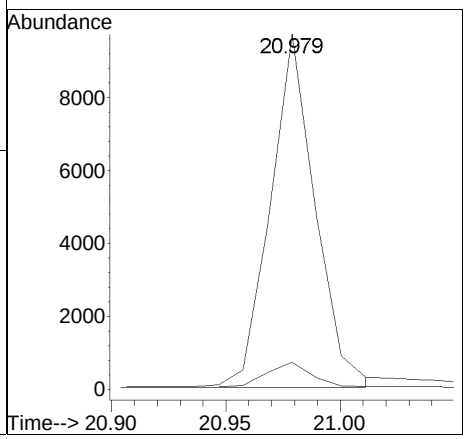




#82
naphthalene
Concen: 0.23 ppbV m
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion:128 Resp: 13147

Ion	Ratio	Lower	Upper
128	100		
102	7.6	5.7	8.5

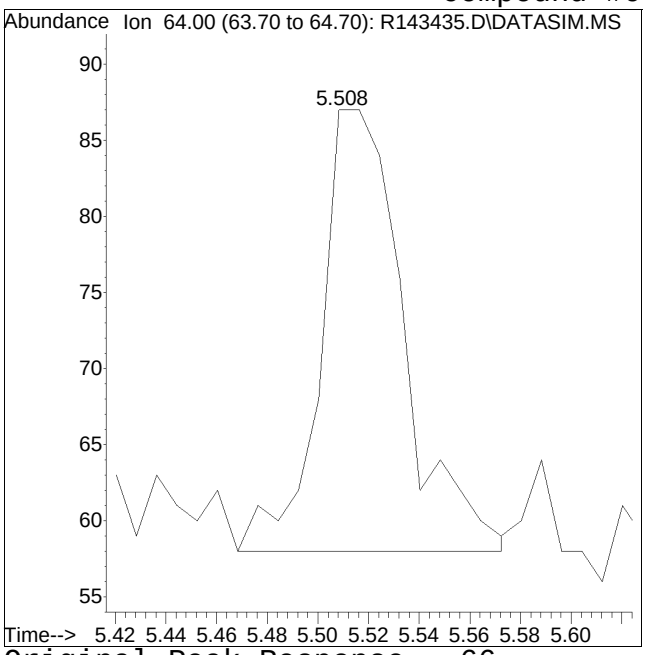


Manual Integration/Negative Proof Report

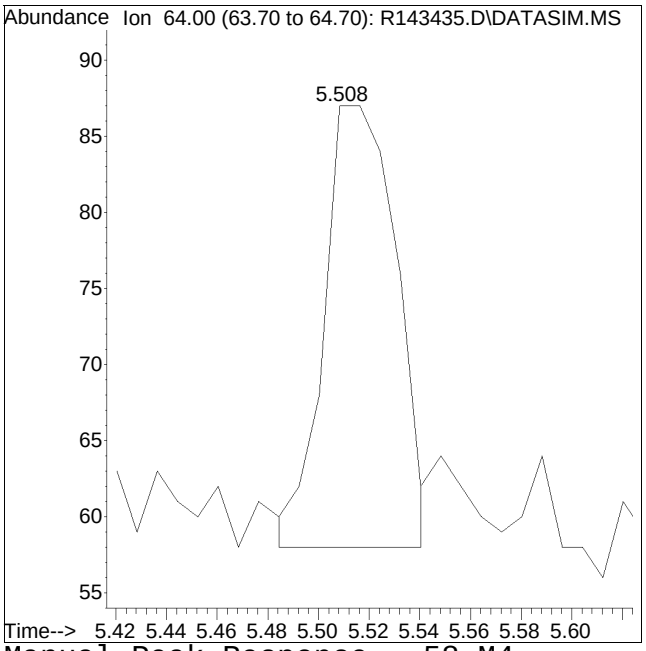
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143435.D
Date Inj'd : 8/14/2015 10:19 am
Sample : L1519114-01,3,250,250

Method : TSIM150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 10:40 am

Compound #9: chloroethane



Original Peak Response = 66



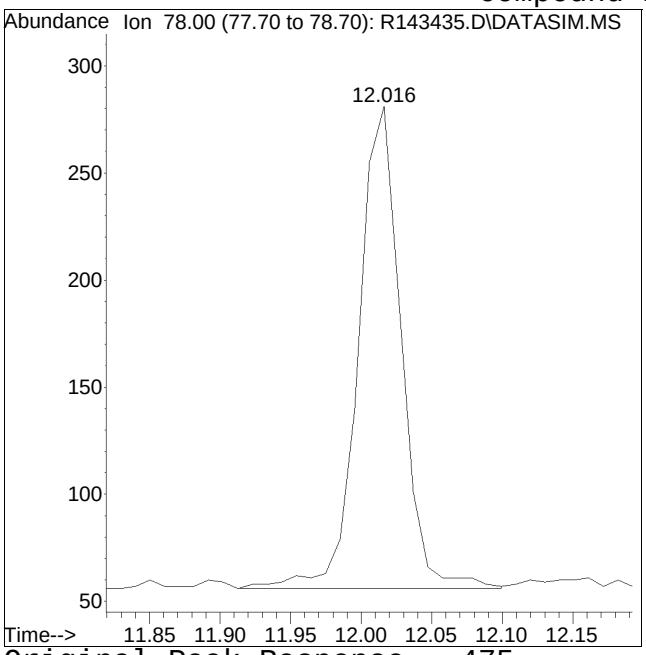
Manual Peak Response = 58 M4

M4 = Poor automated baseline construction.

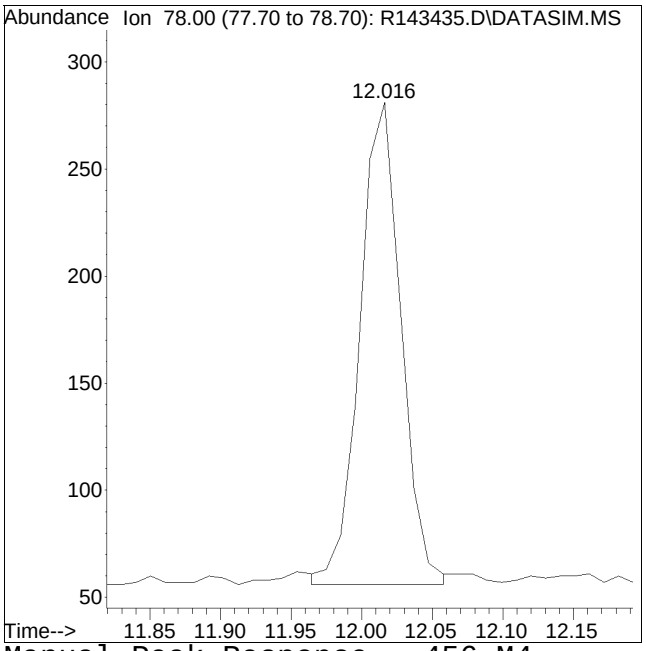
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 10:40 am

Compound #37: benzene



Original Peak Response = 475



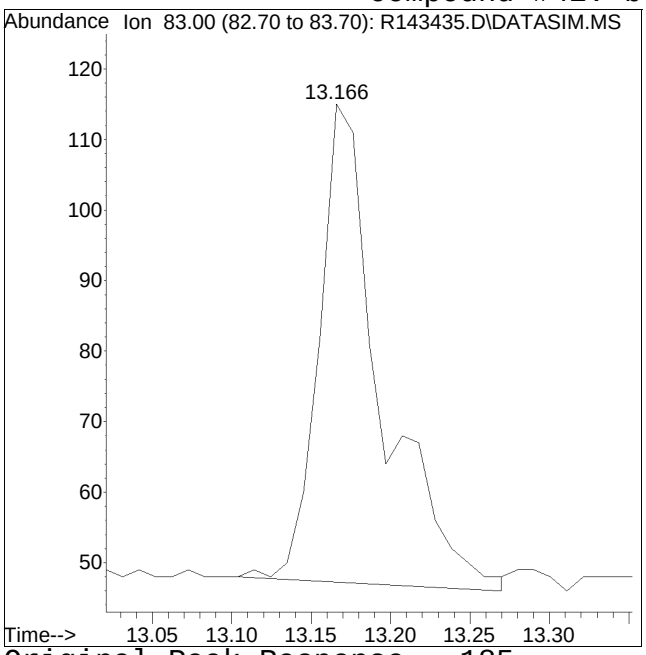
Manual Peak Response = 456 M4

M4 = Poor automated baseline construction.

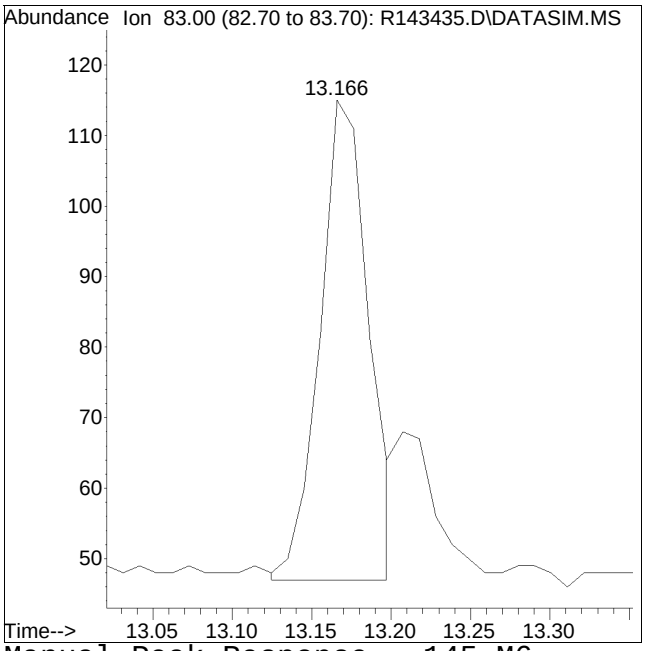
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 10:40 am

Compound #42: bromodichloromethane



Original Peak Response = 185



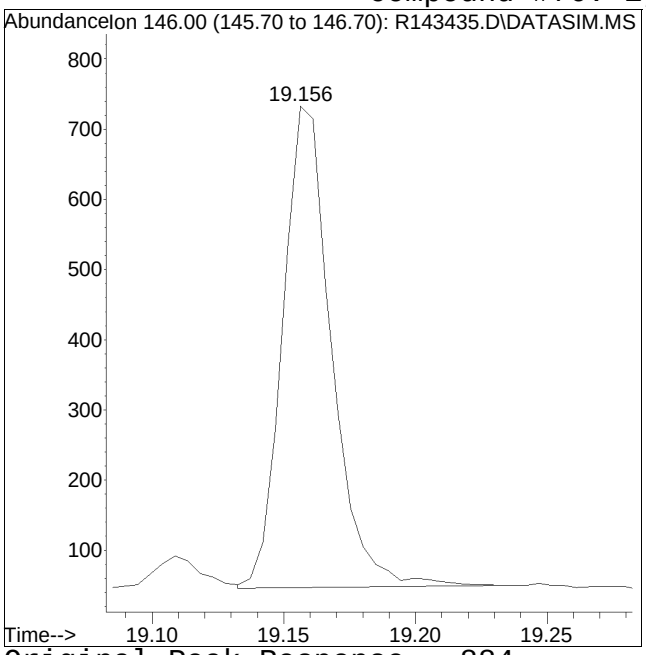
Manual Peak Response = 145 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

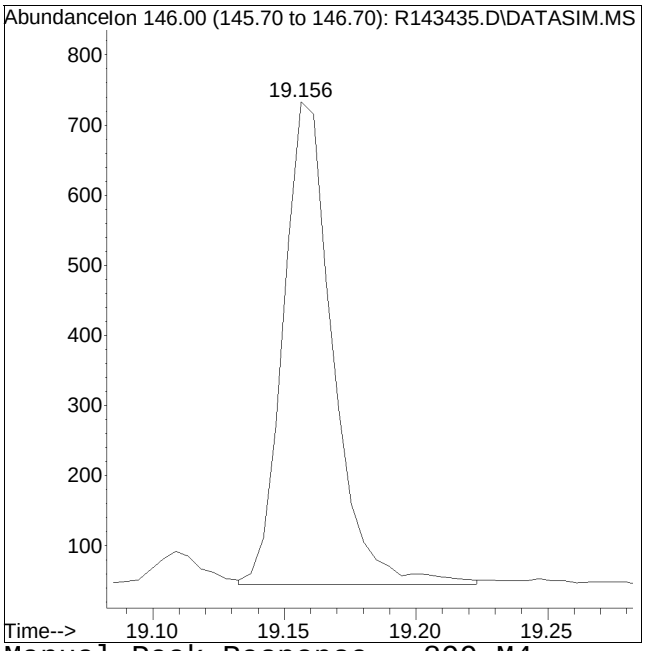
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 10:40 am

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 884



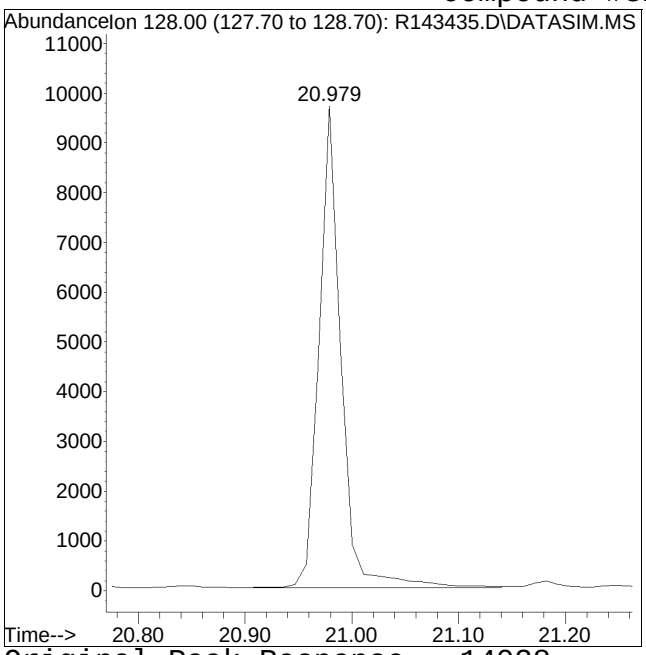
Manual Peak Response = 899 M4

M4 = Poor automated baseline construction.

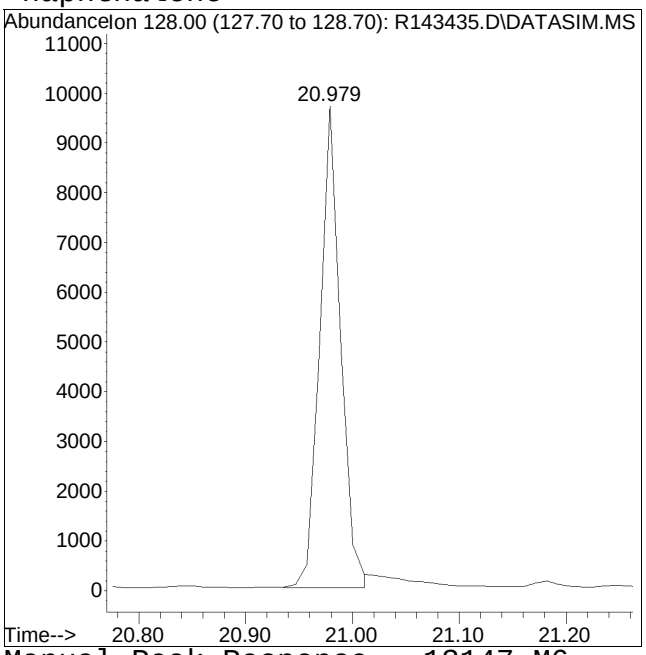
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\TSIM\ Method : TSIM150710.M
Data File : R143435.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 10:19 am Instrument : Air Piano 1
Sample : L1519114-01,3,250,250 Quant Date : 8/14/2015 10:40 am

Compound #82: naphthalene



Original Peak Response = 14028



Manual Peak Response = 13147 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143415.D
Acq On : 13 Aug 2015 3:18 pm
Operator : AIRPIANO1:RY
Sample : WG811918-4,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:48:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.202	49	141348	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		93.64%	
33) 1,4-difluorobenzene	12.420	114	366034	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		98.42%	
51) chlorobenzene-D5	16.843	54	64913	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		94.26%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.163		0	N.D.		
4) chloromethane	4.380		0	N.D.		
5) Freon-114	4.528		0	N.D.		
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	0.000		0	N.D.		
8) bromomethane	5.276		0	N.D.		
9) chloroethane	5.516	64	60	0.015	ppbV #	29
12) acetone	6.507		0	N.D.		
13) trichlorofluoromethane	6.579		0	N.D.		
15) acrylonitrile	7.003		0	N.D.		
16) 1,1-dichloroethene	7.411		0	N.D.		
18) methylene chloride	7.594	49	3494	0.326	ppbV	96
21) Freon 113	7.938		0	N.D.		
22) Halothane	8.532		0	N.D.		
23) trans-1,2-dichloroethene	8.773		0	N.D.		
24) 1,1-dichloroethane	8.999		0	N.D.		
25) MTBE	9.109		0	N.D.		
27) 2-butanone	9.493		0	N.D.		
28) cis-1,2-dichloroethene	10.015		0	N.D.		
30) chloroform	10.202		0	N.D.		
32) 1,2-dichloroethane	11.239		0	N.D.		
36) 1,1,1-trichloroethane	11.494		0	N.D.		
37) benzene	12.016		0	N.D.		
38) carbon tetrachloride	12.182		0	N.D.		
41) 1,2-dichloropropane	12.948		0	N.D.		
42) bromodichloromethane	13.176		0	N.D.		
43) 1,4-dioxane	0.000		0	N.D.	d	
44) trichloroethene	13.228		0	N.D.		
47) cis-1,3-dichloropropene	14.204		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143415.D
Acq On : 13 Aug 2015 3:18 pm
Operator : AIRPIANO1:RY
Sample : WG811918-4,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:48:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

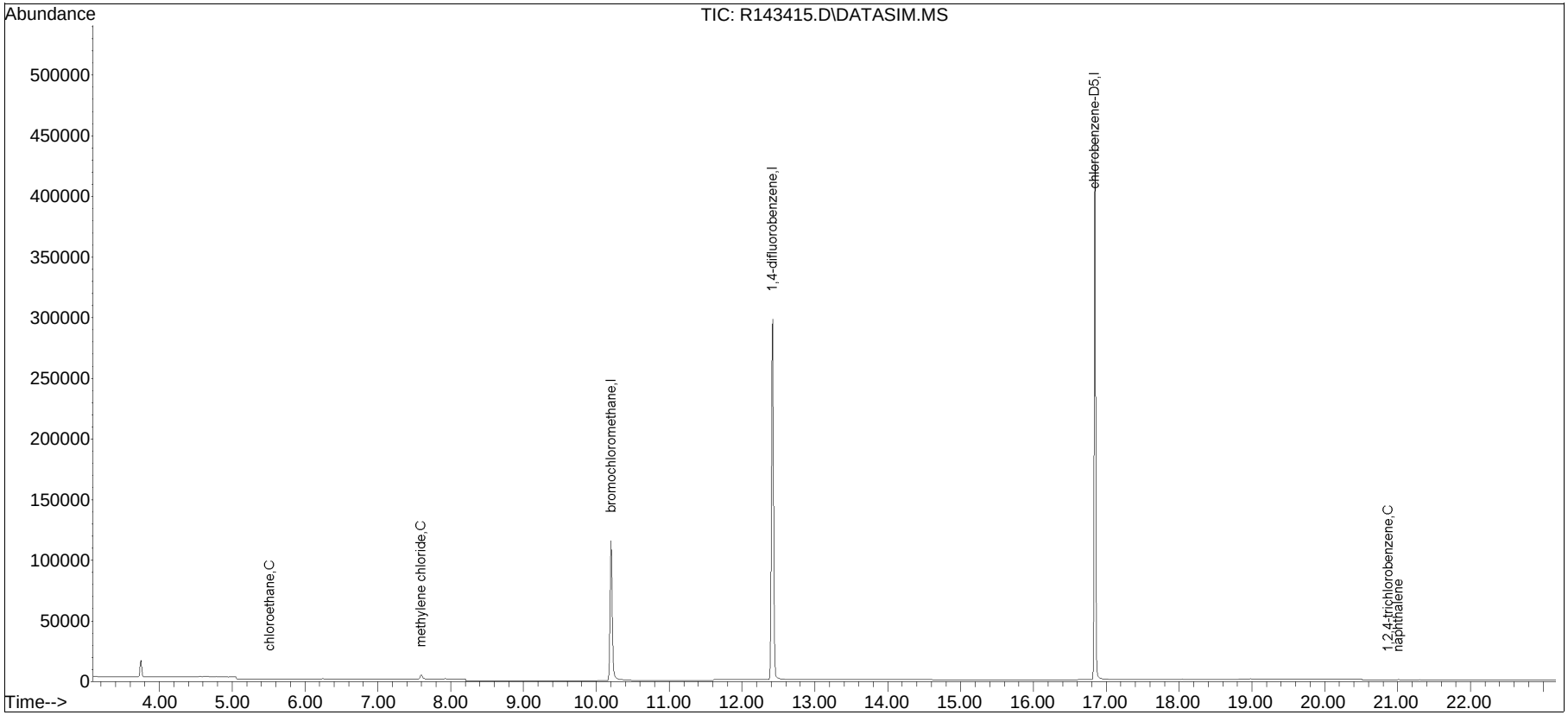
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 4-methyl-2-pentanone	14.204		0	N.D.		
49) trans-1,3-dichloropropene	14.806		0	N.D.		
50) 1,1,2-trichloroethane	14.969		0	N.D.		
52) toluene	15.258		0	N.D.		
55) dibromochloromethane	15.674		0	N.D.		
56) 1,2-dibromoethane	15.909		0	N.D.		
57) tetrachloroethene	16.307		0	N.D.		
58) 1,1,1,2-tetrachloroethane	16.865		0	N.D.		
59) chlorobenzene	16.880		0	N.D.		
60) ethylbenzene	17.179		0	N.D.		
61) m+p-xylene	17.312		0	N.D.		
62) bromoform	17.401		0	N.D.		
63) styrene	17.619		0	N.D.		
64) 1,1,2,2-tetrachloroethane	17.693		0	N.D.		
65) o-xylene	17.689		0	N.D.		
68) isopropylbenzene	18.129		0	N.D.		
70) 4-ethyl toluene	18.617		0	N.D.		
71) 1,3,5-trimethylbenzene	18.676		0	N.D.		
73) 1,2,4-trimethylbenzene	18.980		0	N.D.		
75) 1,3-dichlorobenzene	19.113		0	N.D.		
76) 1,4-dichlorobenzene	19.166		0	N.D.		
77) sec-butylbenzene	19.180		0	N.D.		
78) p-isopropyltoluene	19.289		0	N.D.		
79) 1,2-dichlorobenzene	19.427		0	N.D.		
80) n-butylbenzene	19.613		0	N.D.		
81) 1,2,4-trichlorobenzene	20.872	180	375	0.015	ppbV #	56
82) naphthalene	21.011	128	1117	0.020	ppbV #	64
83) 1,2,3-trichlorobenzene	21.247		0	N.D.		
84) hexachlorobutadiene	21.300		0	N.D.		

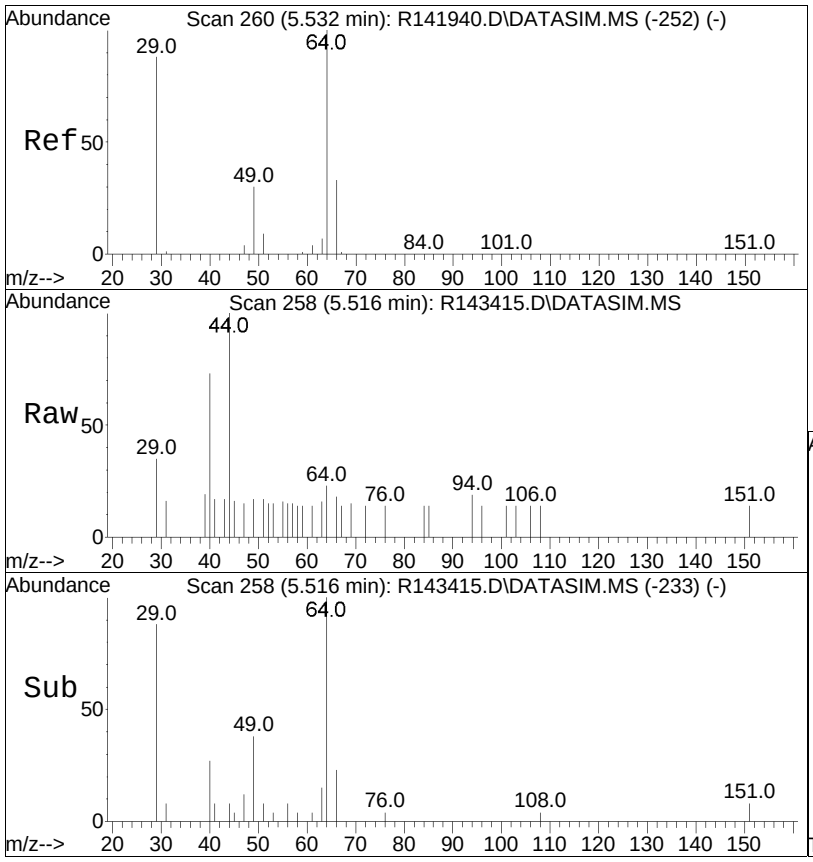
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-SIM - All compounds listedSIM\R143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143415.D
Acq On : 13 Aug 2015 3:18 pm
Operator : AIRPIANO1:RY
Sample : WG811918-4,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 13:48:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

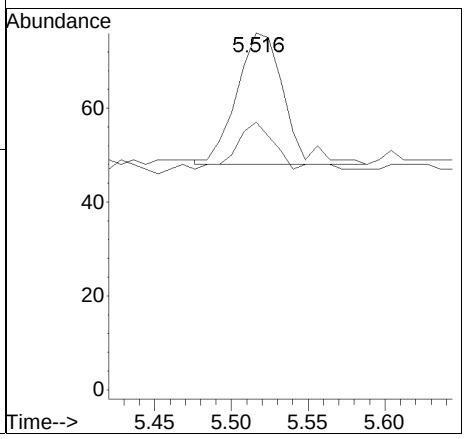


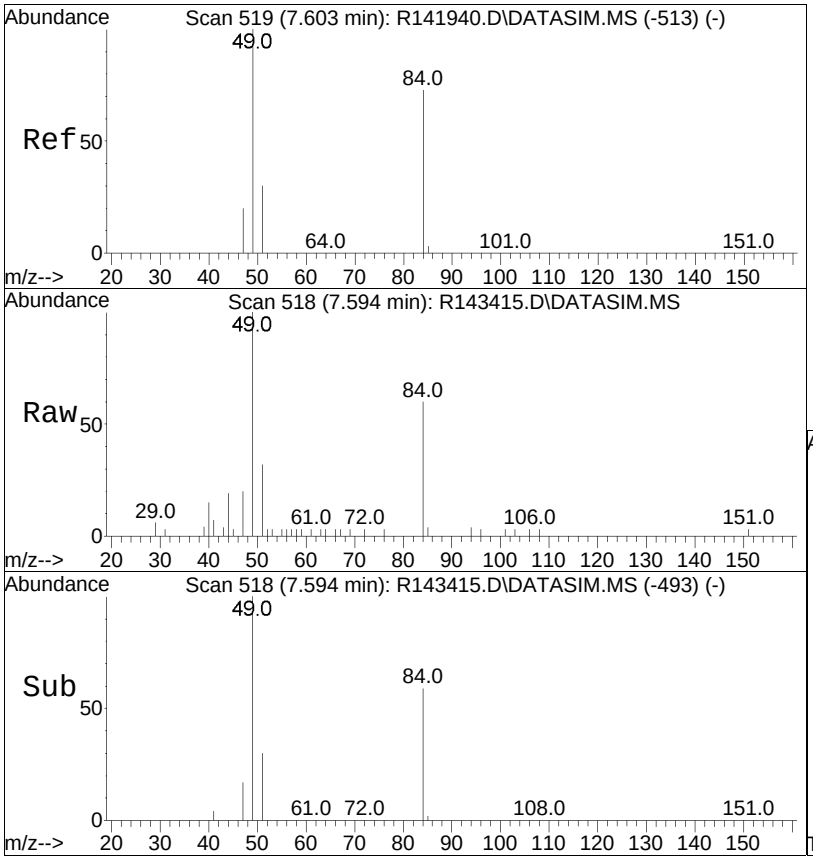


#9
chloroethane
Concen: 0.01 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143415.D
Acq: 13 Aug 2015 3:18 pm

Tgt Ion: 64 Resp: 60

Ion	Ratio	Lower	Upper
64	100		
49	75.0	27.4	41.0#

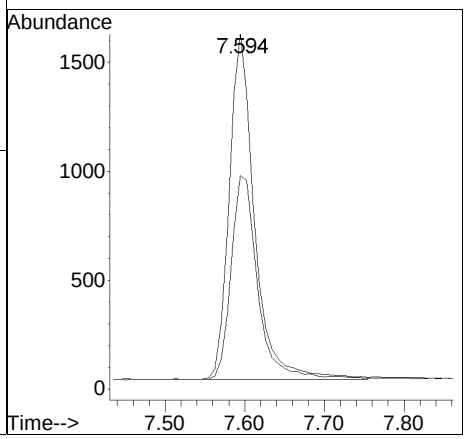


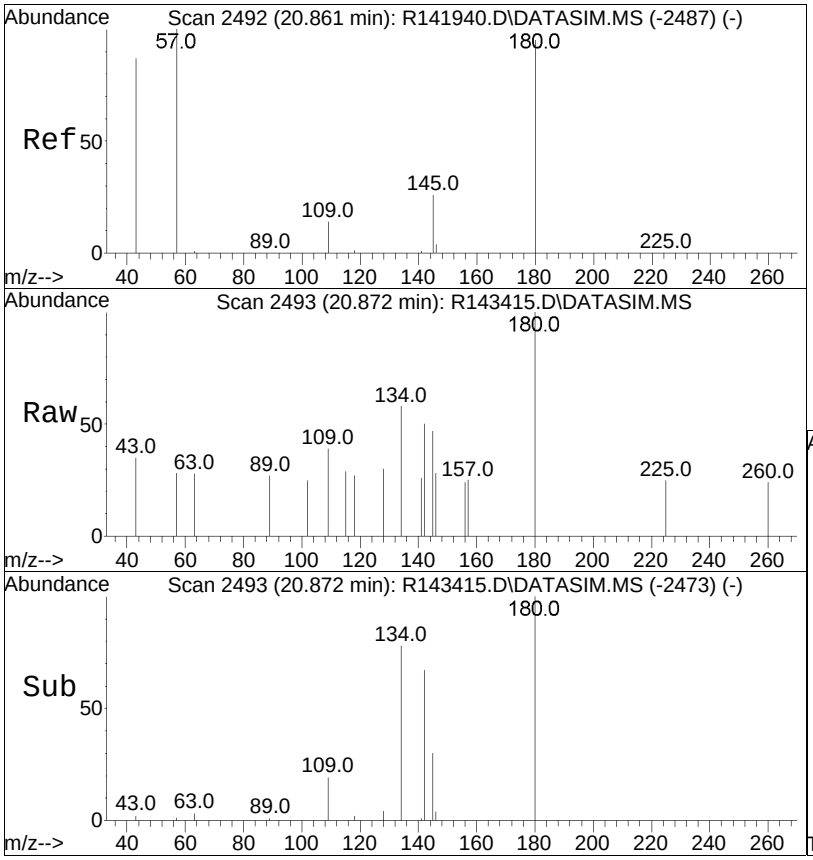


#18
methylene chloride
Concen: 0.33 ppbV
RT: 7.594 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143415.D
Acq: 13 Aug 2015 3:18 pm

Tgt Ion: 49 Resp: 3494

Ion	Ratio	Lower	Upper
49	100		
84	60.2	50.8	76.2

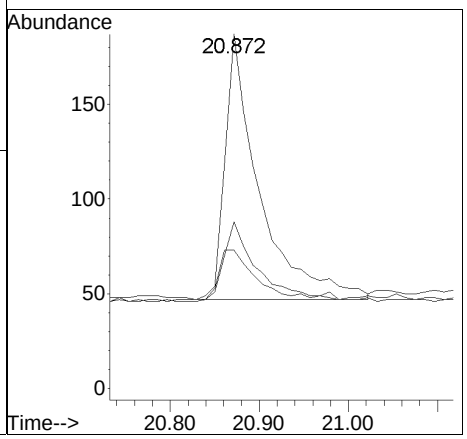


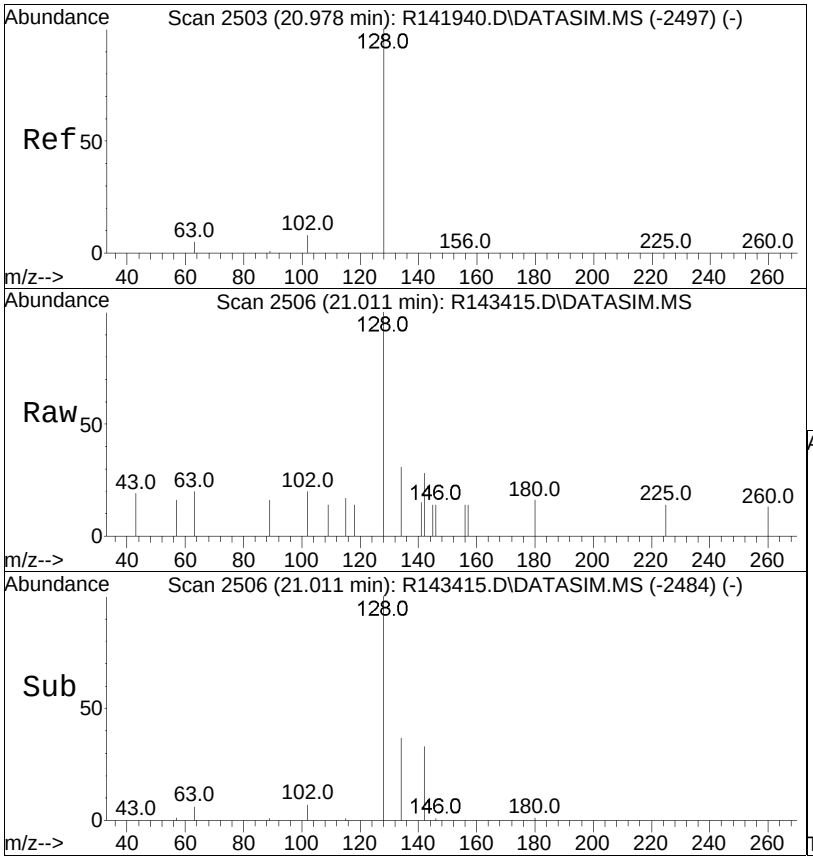


#81
1,2,4-trichlorobenzene
Concen: 0.01 ppbV
RT: 20.872 min Scan# 2493
Delta R.T. 0.010 min
Lab File: R143415.D
Acq: 13 Aug 2015 3:18 pm

Tgt Ion:180 Resp: 375

Ion	Ratio	Lower	Upper
180	100		
145	47.1	22.1	33.1#
109	39.0	12.3	18.5#

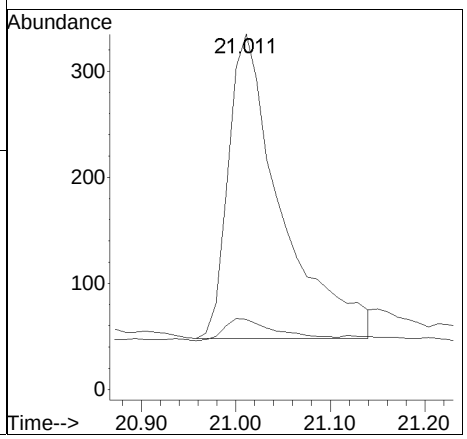




#82
naphthalene
Concen: 0.02 ppbV
RT: 21.011 min Scan# 2506
Delta R.T. 0.032 min
Lab File: R143415.D
Acq: 13 Aug 2015 3:18 pm

Tgt Ion:128 Resp: 1117

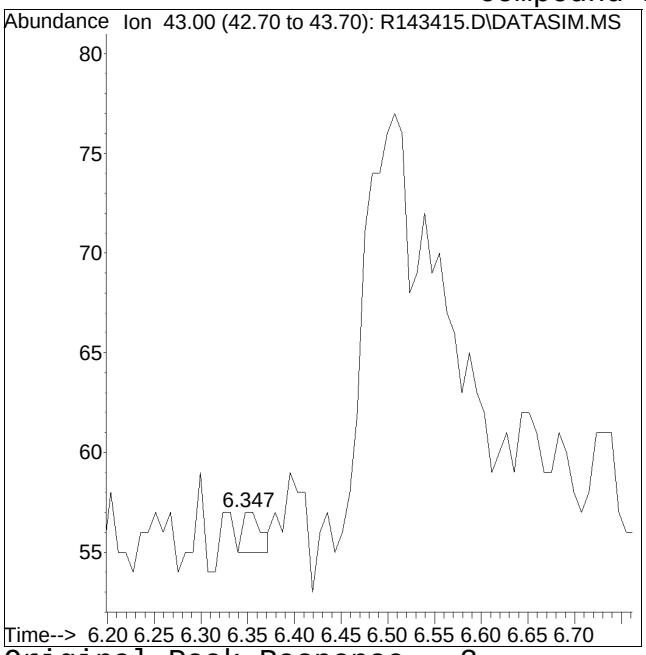
Ion	Ratio	Lower	Upper
128	100		
102	19.7	5.7	8.5#

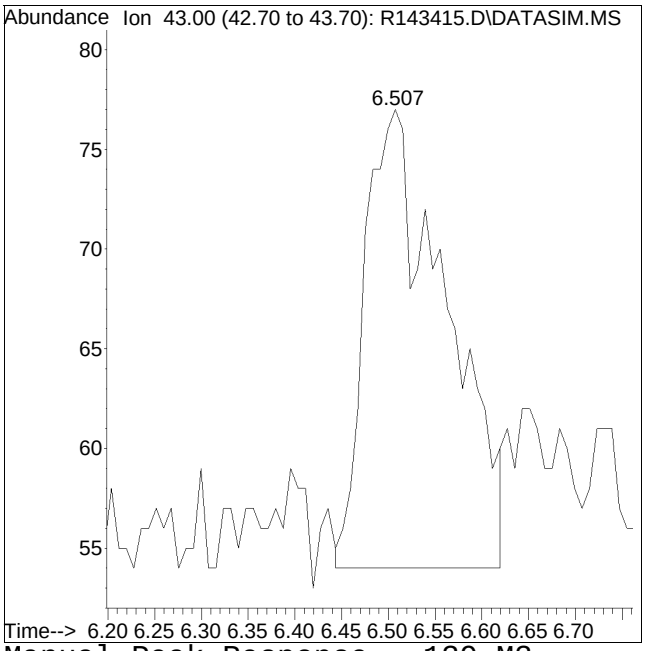


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015QMethod
Data File : R143415.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 3:18 pm Instrument : Air Piano 1
Sample : WG811918-4,3,250,250 Quant Date : 8/13/2015 3:42 pm

Compound #12: acetone





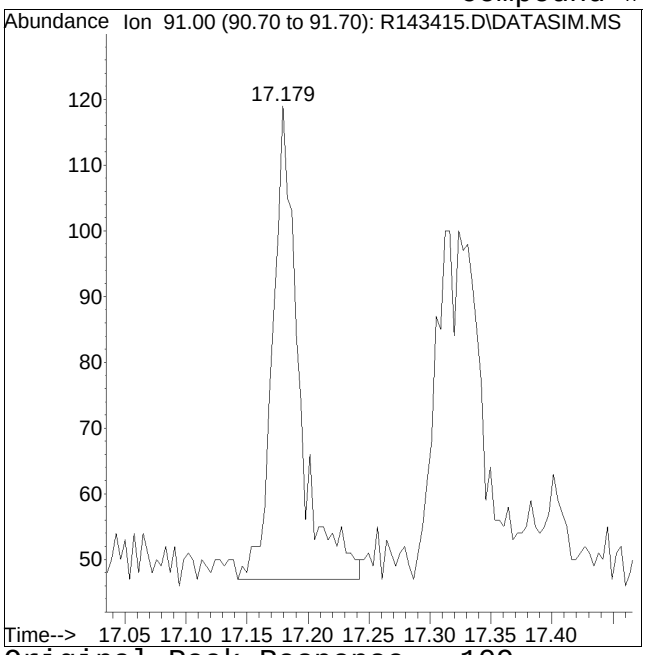
Original Peak Response = 3 Manual Peak Response = 139 M3

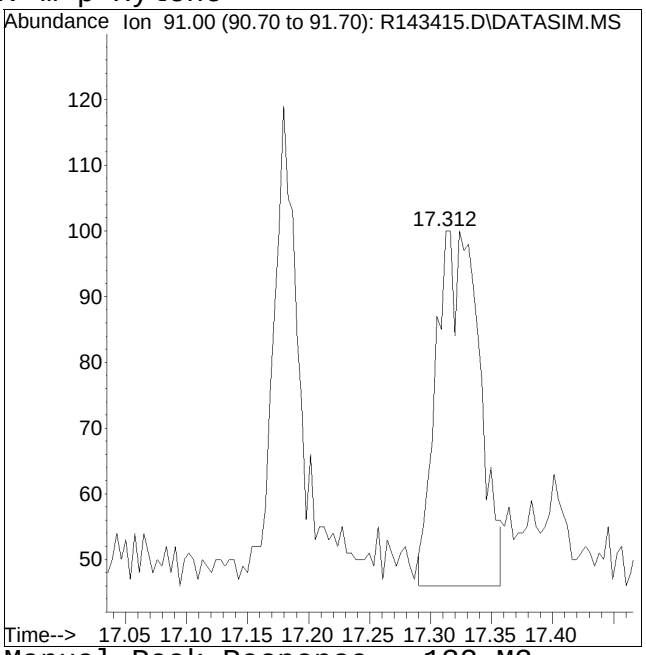
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143415.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 3:18 pm Instrument : Air Piano 1
Sample : WG811918-4,3,250,250 Quant Date : 8/13/2015 3:42 pm

Compound #61: m+p-xylene





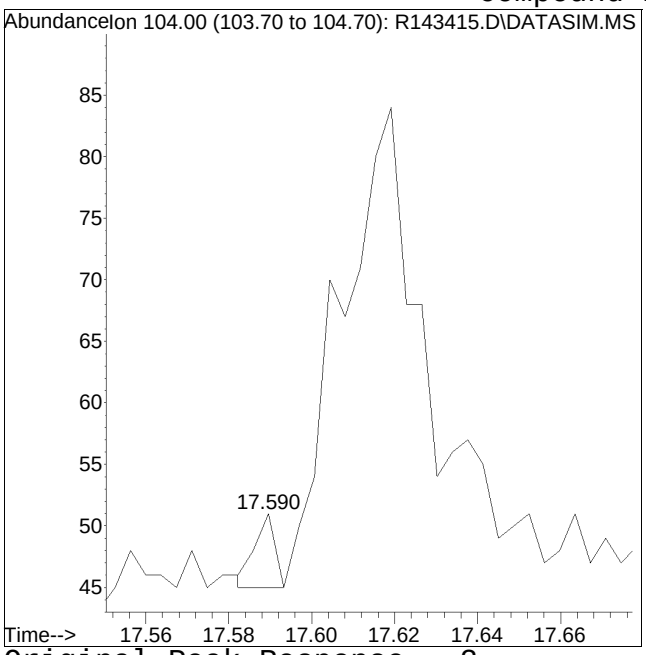
Original Peak Response = 109 Manual Peak Response = 132 M3

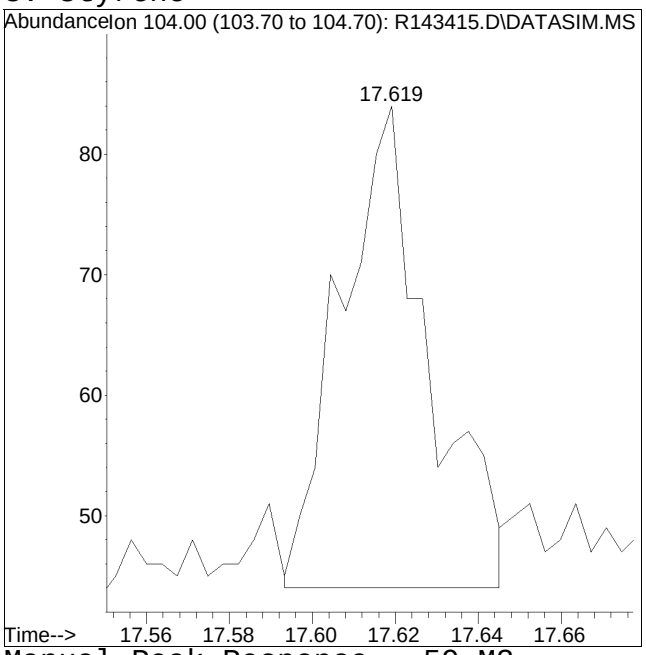
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143415.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 3:18 pm Instrument : Air Piano 1
Sample : WG811918-4,3,250,250 Quant Date : 8/13/2015 3:42 pm

Compound #63: styrene





Original Peak Response = 2 Manual Peak Response = 59 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Batch Quality Control

LCS Raw Data

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-3,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	80	0.00
3		dichlorodifluoromethane	5.000	3.827	23.5	74	0.00
4	C	chloromethane	5.000	5.009	-0.2	87	0.00
5		Freon-114	5.000	5.037	-0.7	86	0.00
6	C	vinyl chloride	5.000	5.049	-1.0	85	0.00
7	C	1,3-butadiene	5.000	5.294	-5.9	90	0.00
8	C	bromomethane	5.000	4.899	2.0	85	0.00
9	C	chloroethane	5.000	4.676	6.5	87	0.00
12		acetone	25.000	25.178	-0.7	87	0.00
13		trichlorofluoromethane	5.000	4.971	0.6	84	0.00
15	C	acrylonitrile	5.000	4.587	8.3	82	0.00
16	C	1,1-dichloroethene	5.000	4.943	1.1	84	0.00
18	C	methylene chloride	5.000	5.224	-4.5	90	0.00
21		Freon 113	5.000	4.967	0.7	83	0.00
22		Halothane	5.000	5.418	-8.4	98	0.00
23		trans-1,2-dichloroethene	5.000	4.508	9.8	74	0.00
24	C	1,1-dichloroethane	5.000	4.821	3.6	81	0.00
25	C	MTBE	5.000	4.835	3.3	81	0.00
27	C	2-butanone	5.000	4.639	7.2	80	0.00
28		cis-1,2-dichloroethene	5.000	5.486	-9.7	89	0.00
30	C	chloroform	5.000	4.949	1.0	83	0.00
32	C	1,2-dichloroethane	5.000	4.655	6.9	79	0.00
33	I	1,4-difluorobenzene	10.000	10.000	0.0	84	0.00
36	C	1,1,1-trichloroethane	5.000	4.764	4.7	82	0.00
37	C	benzene	5.000	4.565	8.7	80	0.00
38	C	carbon tetrachloride	5.000	5.198	-4.0	81	0.00
41	C	1,2-dichloropropane	5.000	4.684	6.3	82	0.00
42		bromodichloromethane	5.000	4.821	3.6	81	0.00
43	C	1,4-dioxane	5.000	4.748	5.0	82	0.00
44	C	trichloroethene	5.000	4.750	5.0	83	0.00
47	C	cis-1,3-dichloropropene	5.000	5.079	-1.6	84	0.00
48	C	4-methyl-2-pentanone	5.000	4.682	6.4	80	0.00
49		trans-1,3-dichloropropene	5.000	4.374	12.5	71	0.00
50	C	1,1,2-trichloroethane	5.000	4.934	1.3	84	0.00
51	I	chlorobenzene-D5	10.000	10.000	0.0	80	0.00
52	C	toluene	5.000	4.811	3.8	82	0.00
55		dibromochloromethane	5.000	5.009	-0.2	81	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-3,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
56 C	1,2-dibromoethane	5.000	5.091	-1.8	82	0.00
57 C	tetrachloroethene	5.000	4.904	1.9	82	0.00
58	1,1,1,2-tetrachloroethane	5.000	4.680	6.4	76	0.00
59 C	chlorobenzene	5.000	4.916	1.7	81	0.00
60 C	ethylbenzene	5.000	4.796	4.1	81	0.00
61 C	m+p-xylene	10.000	9.857	1.4	83	0.00
62 C	bromoform	5.000	5.106	-2.1	79	0.00
63 C	styrene	5.000	5.094	-1.9	82	0.00
64 C	1,1,2,2-tetrachloroethane	5.000	5.036	-0.7	82	0.00
65 C	o-xylene	5.000	4.806	3.9	80	0.00
68 C	isopropylbenzene	5.000	4.809	3.8	81	0.00
70	4-ethyl toluene	5.000	4.898	2.0	79	0.00
71	1,3,5-trimethylbenzene	5.000	5.015	-0.3	81	0.00
73	1,2,4-trimethylbenzene	5.000	5.171	-3.4	83	0.00
75	1,3-dichlorobenzene	5.000	5.154	-3.1	81	0.00
76 C	1,4-dichlorobenzene	5.000	5.205	-4.1	83	0.00
77	sec-butylbenzene	5.000	4.808	3.8	76	0.00
78	p-isopropyltoluene	5.000	4.478	10.4	71	0.00
79	1,2-dichlorobenzene	5.000	5.220	-4.4	83	0.00
80	n-butylbenzene	5.000	5.323	-6.5	79	0.00
81 C	1,2,4-trichlorobenzene	5.000	6.190	-23.8	80	0.00
82	naphthalene	5.000	5.881	-17.6	77	0.00
83	1,2,3-trichlorobenzene	5.000	6.032	-20.6	78	0.00
84 C	hexachlorobutadiene	5.000	5.641	-12.8	79	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-3,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.203	49	150943	10.000 ppbV	0.00
Standard Area = 150943			Recovery = 100.00%		
33) 1,4-difluorobenzene	12.420	114	371929	10.000 ppbV	0.00
Standard Area = 371929			Recovery = 100.00%		
51) chlorobenzene-D5	16.843	54	68865	10.000 ppbV	0.00
Standard Area = 68865			Recovery = 100.00%		
System Monitoring Compounds					
Target Compounds					Qvalue
3) dichlorodifluoromethane	4.164	85	58323	3.827 ppbV	100
4) chloromethane	4.380	50	42890	5.009 ppbV	100
5) Freon-114	4.528	85	113496	5.037 ppbV	100
6) vinyl chloride	4.686	62	43300	5.049 ppbV	100
7) 1,3-butadiene	4.883	54	34875	5.294 ppbV	94
8) bromomethane	5.269	94	39942	4.899 ppbV	100
9) chloroethane	5.516	64	20021	4.676 ppbV	99
12) acetone	6.356	43	316148	25.178 ppbV	98
13) trichlorofluoromethane	6.579	101	104744	4.971 ppbV	99
15) acrylonitrile	6.995	53	31183M6	4.587 ppbV	
16) 1,1-dichloroethene	7.419	61	69216	4.943 ppbV	99
18) methylene chloride	7.595	49	59697	5.224 ppbV	99
21) Freon 113	7.938	101	87719	4.967 ppbV	100
22) Halothane	8.533	117	84430	5.418 ppbV	99
23) trans-1,2-dichloroethene	8.766	61	68771	4.508 ppbV	96
24) 1,1-dichloroethane	9.006	63	87784	4.821 ppbV	99
25) MTBE	9.102	73	122791	4.835 ppbV	99
27) 2-butanone	9.507	43	111677	4.639 ppbV	100
28) cis-1,2-dichloroethene	10.008	61	89461	5.486 ppbV	92
30) chloroform	10.362	83	110480M4	4.949 ppbV	
32) 1,2-dichloroethane	11.210	62	61727	4.655 ppbV	99
36) 1,1,1-trichloroethane	11.494	97	96340	4.764 ppbV	98
37) benzene	12.016	78	142752	4.565 ppbV	99
38) carbon tetrachloride	12.182	117	93747	5.198 ppbV	99
41) 1,2-dichloropropane	12.938	63	58098	4.684 ppbV	99
42) bromodichloromethane	13.166	83	105989	4.821 ppbV	99
43) 1,4-dioxane	13.218	88	35213	4.748 ppbV	97
44) trichloroethene	13.218	130	73962	4.750 ppbV	99
47) cis-1,3-dichloropropene	14.189	75	316050	5.079 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-3,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : Default-SIM - All compounds listed

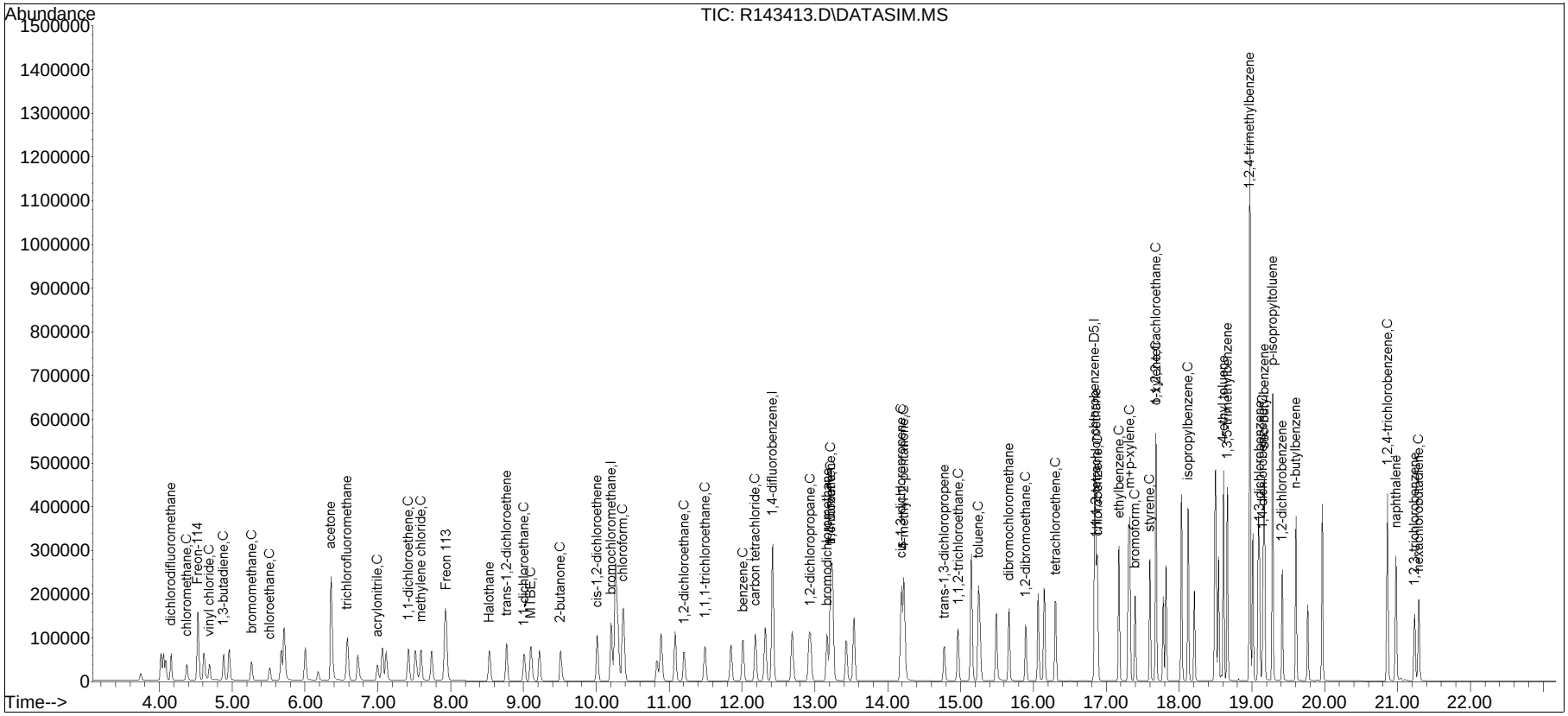
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
48) 4-methyl-2-pentanone	14.220	43	138103	4.682	ppbV	100
49) trans-1,3-dichloropropene	14.780	75	65286	4.374	ppbV	98
50) 1,1,2-trichloroethane	14.969	97	64802	4.934	ppbV	98
52) toluene	15.250	91	189986	4.811	ppbV	100
55) dibromochloromethane	15.665	129	115635	5.009	ppbV	100
56) 1,2-dibromoethane	15.891	107	103963	5.091	ppbV	100
57) tetrachloroethene	16.307	166	96897	4.904	ppbV	98
58) 1,1,1,2-tetrachloroethane	16.862	131	78139	4.680	ppbV	99
59) chlorobenzene	16.880	112	162335	4.916	ppbV	99
60) ethylbenzene	17.176	91	244542	4.796	ppbV	99
61) m+p-xylene	17.320	91	387931	9.857	ppbV	98
62) bromoform	17.398	173	113814	5.106	ppbV	100
63) styrene	17.601	104	155601	5.094	ppbV	99
64) 1,1,2,2-tetrachloroethane	17.682	83	140748	5.036	ppbV	100
65) o-xylene	17.682	91	195633	4.806	ppbV	98
68) isopropylbenzene	18.122	105	267214	4.809	ppbV	99
70) 4-ethyl toluene	18.610	105	301335	4.898	ppbV	99
71) 1,3,5-trimethylbenzene	18.661	105	244715	5.015	ppbV	99
73) 1,2,4-trimethylbenzene	18.971	105	248717	5.171	ppbV	97
75) 1,3-dichlorobenzene	19.104	146	187355	5.154	ppbV	97
76) 1,4-dichlorobenzene	19.152	146	194700	5.205	ppbV	95
77) sec-butylbenzene	19.171	105	332825	4.808	ppbV	98
78) p-isopropyltoluene	19.285	119	284053	4.478	ppbV	99
79) 1,2-dichlorobenzene	19.418	146	183362	5.220	ppbV	97
80) n-butylbenzene	19.604	91	281971	5.323	ppbV	99
81) 1,2,4-trichlorobenzene	20.861	180	168762	6.190	ppbV	98
82) naphthalene	20.979	128	356418	5.881	ppbV	99
83) 1,2,3-trichlorobenzene	21.236	180	151392	6.032	ppbV	98
84) hexachlorobutadiene	21.290	225	129660	5.641	ppbV	96

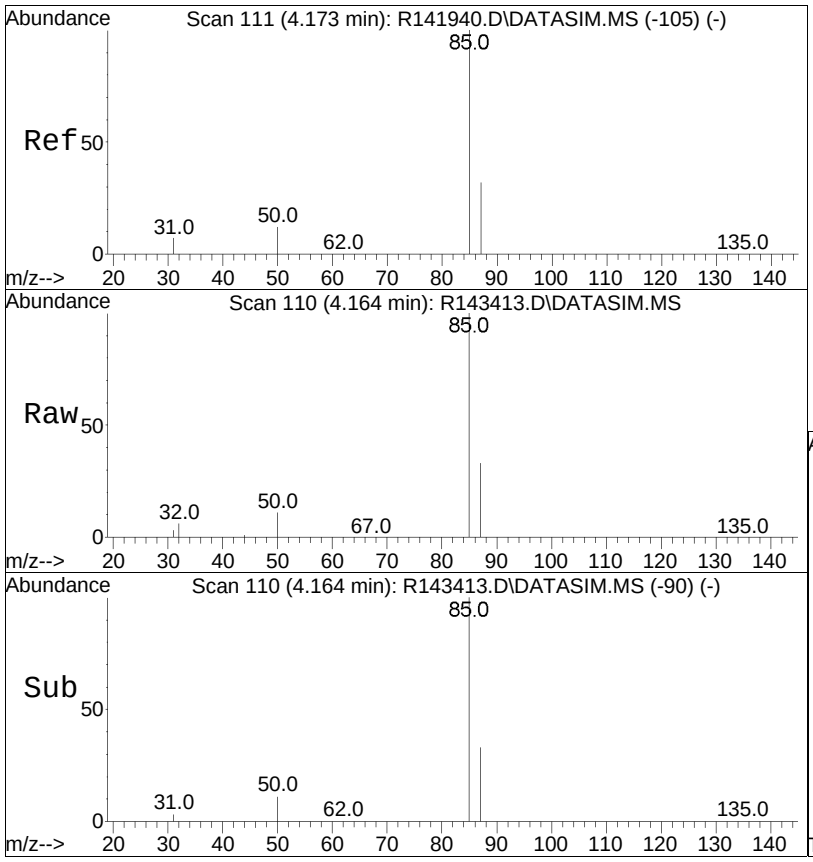
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-SIM - All compounds listedSIM\R143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-3,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

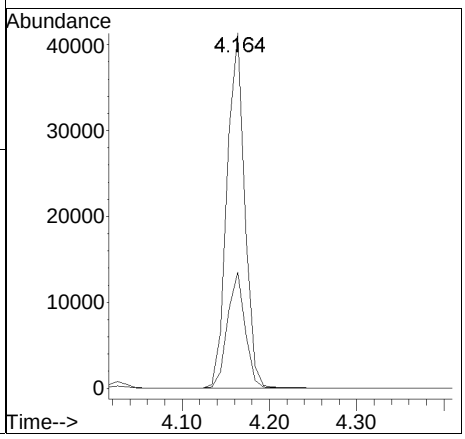


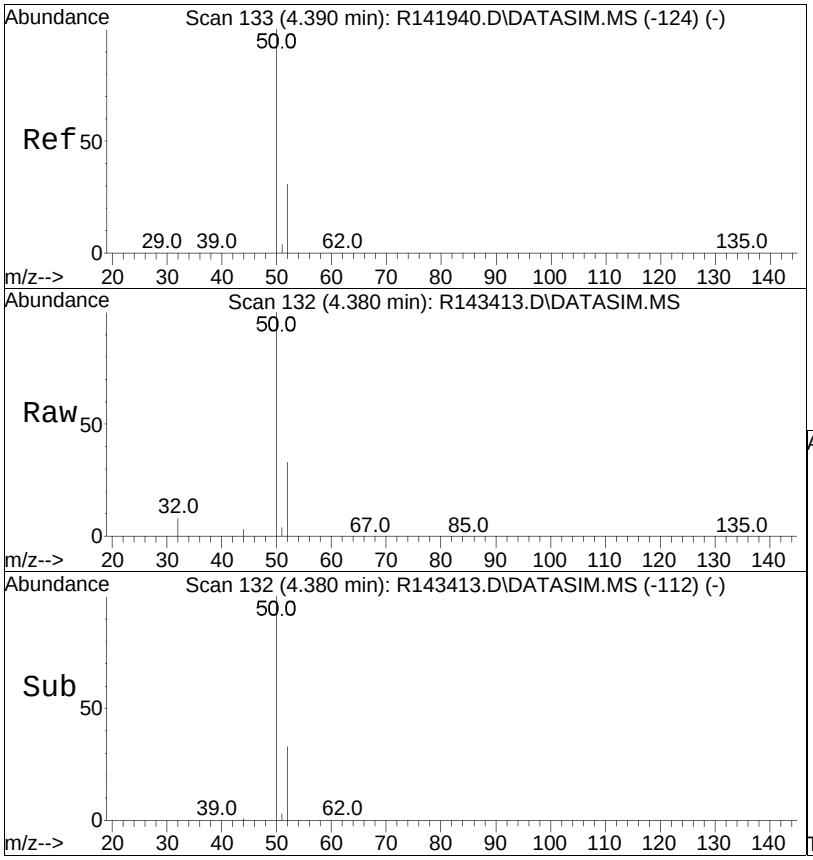


#3
dichlorodifluoromethane
Concen: 3.83 ppbV
RT: 4.164 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 85 Resp: 58323

Ion	Ratio	Lower	Upper
85	100		
87	32.8	26.0	39.0

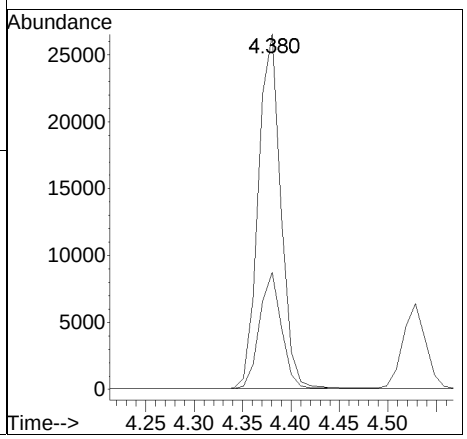


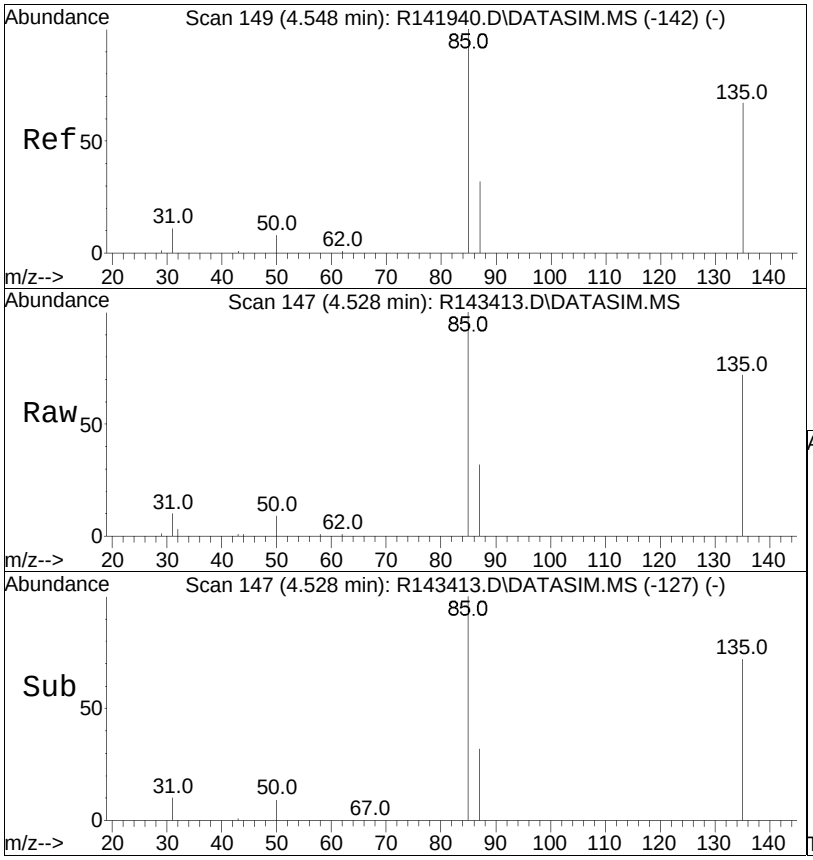


#4
chloromethane
Concen: 5.01 ppbV
RT: 4.380 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 50 Resp: 42890

Ion	Ratio	Lower	Upper
50	100		
52	33.0	26.2	39.4

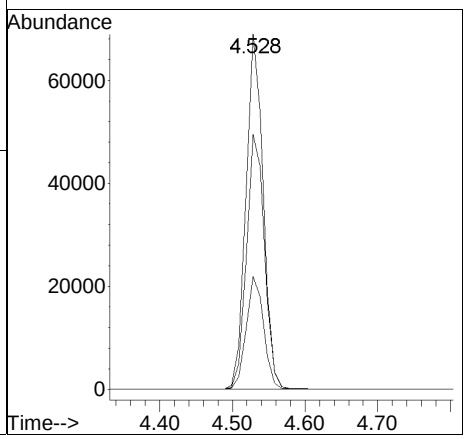


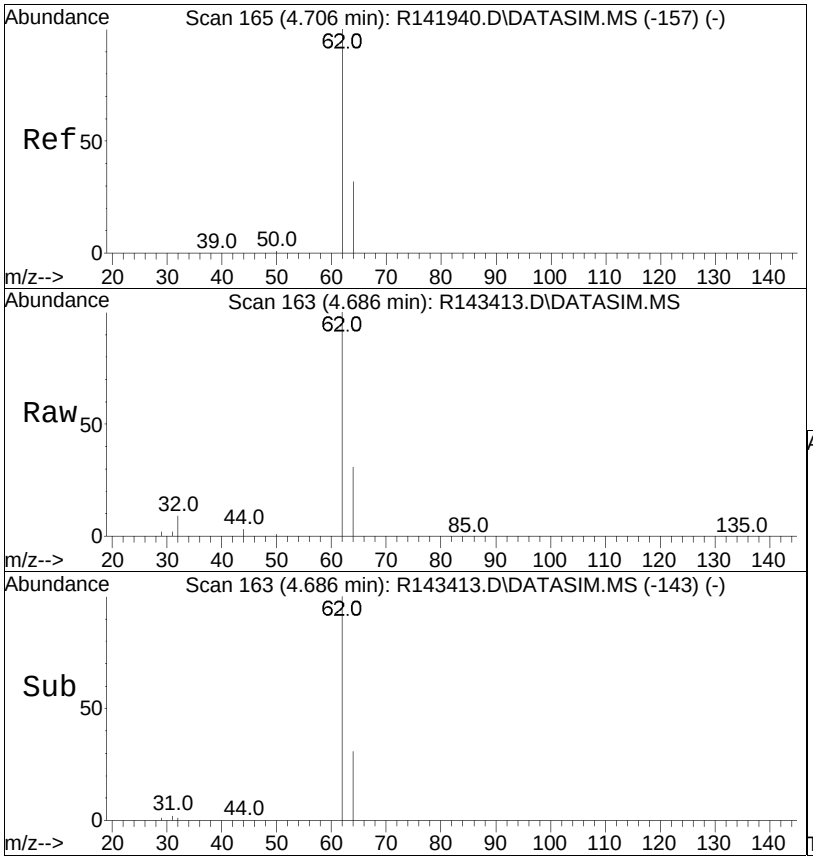


#5
Freon-114
Concen: 5.04 ppbV
RT: 4.528 min Scan# 147
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 85 Resp: 113496

Ion	Ratio	Lower	Upper
85	100		
87	31.8	25.4	38.0
135	71.7	57.0	85.6

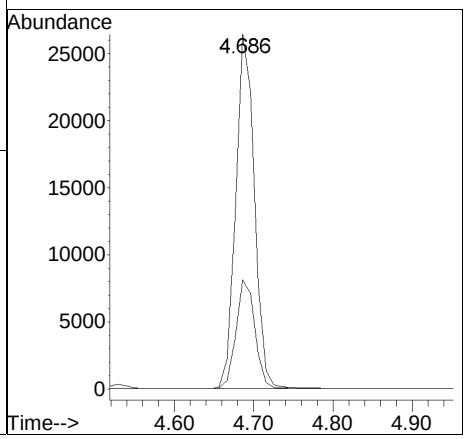


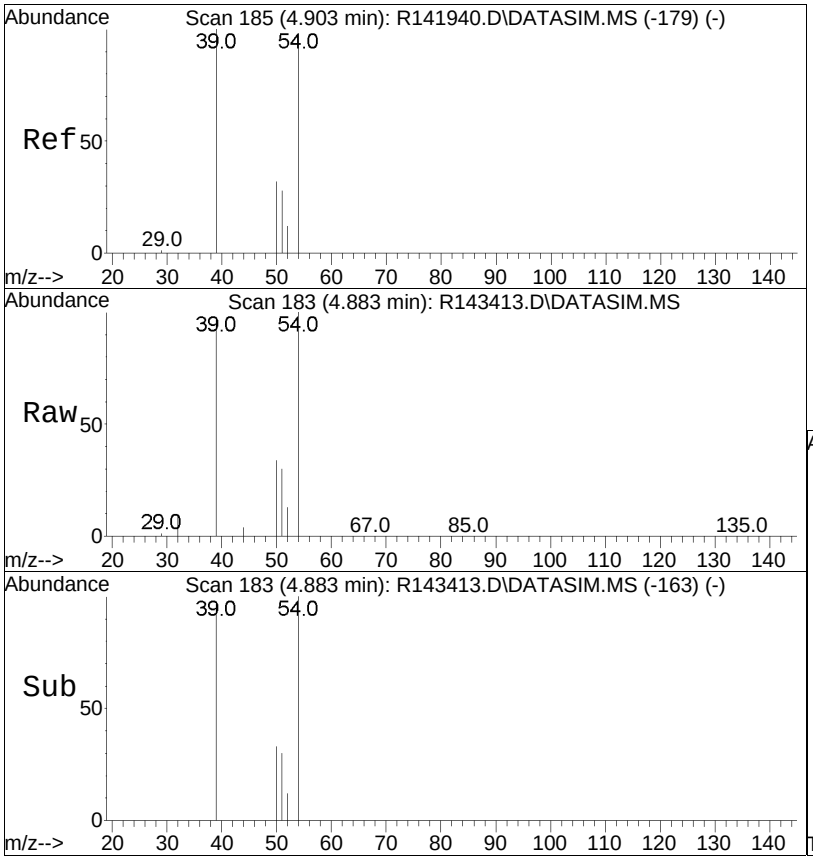


#6
vinyl chloride
Concen: 5.05 ppbV
RT: 4.686 min Scan# 163
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 62 Resp: 43300

Ion	Ratio	Lower	Upper
62	100		
64	30.8	24.7	37.1

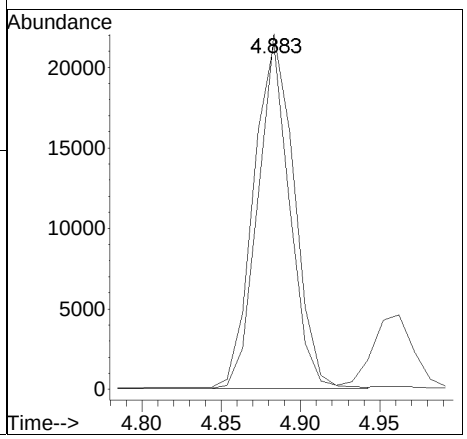


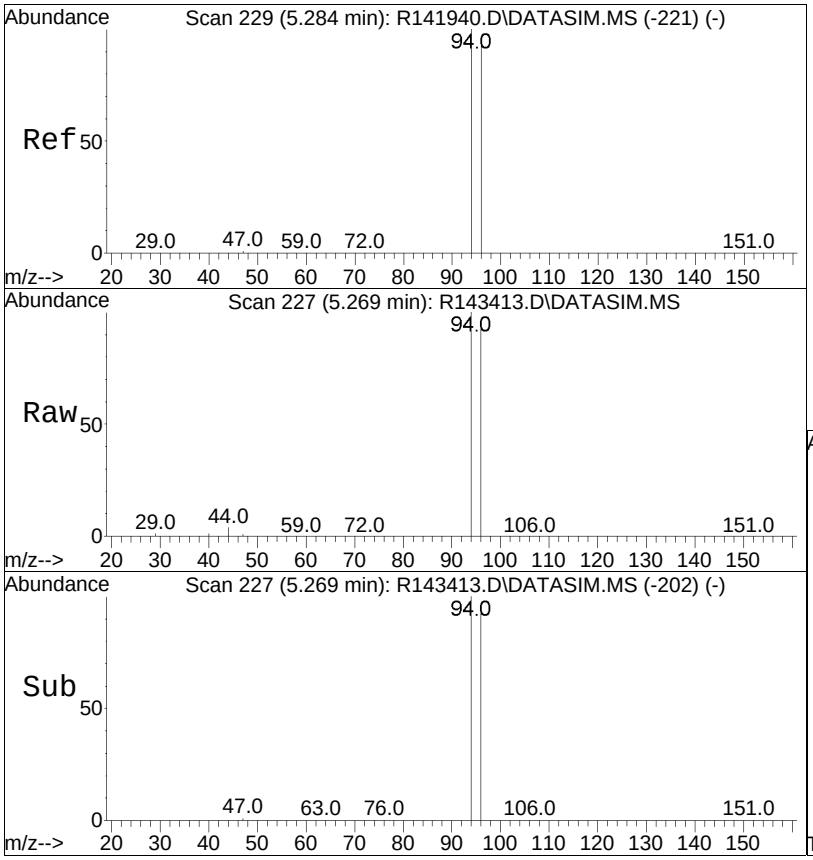


#7
1,3-butadiene
Concen: 5.29 ppbV
RT: 4.883 min Scan# 183
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 54 Resp: 34875

Ion	Ratio	Lower	Upper
54	100		
39	97.5	82.6	124.0

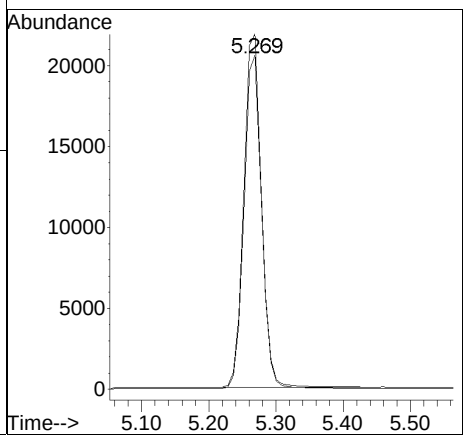


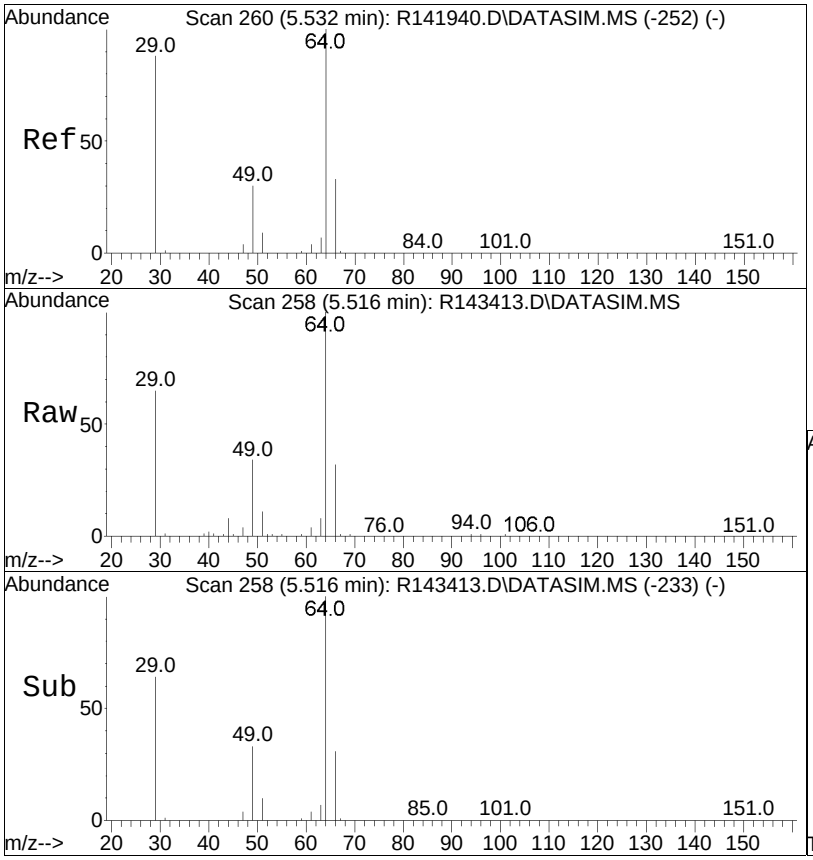


#8
bromomethane
Concen: 4.90 ppbV
RT: 5.269 min Scan# 227
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 94 Resp: 39942

Ion	Ratio	Lower	Upper
94	100		
96	94.0	74.9	112.3

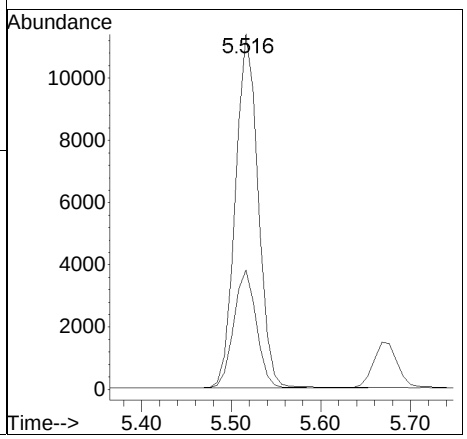


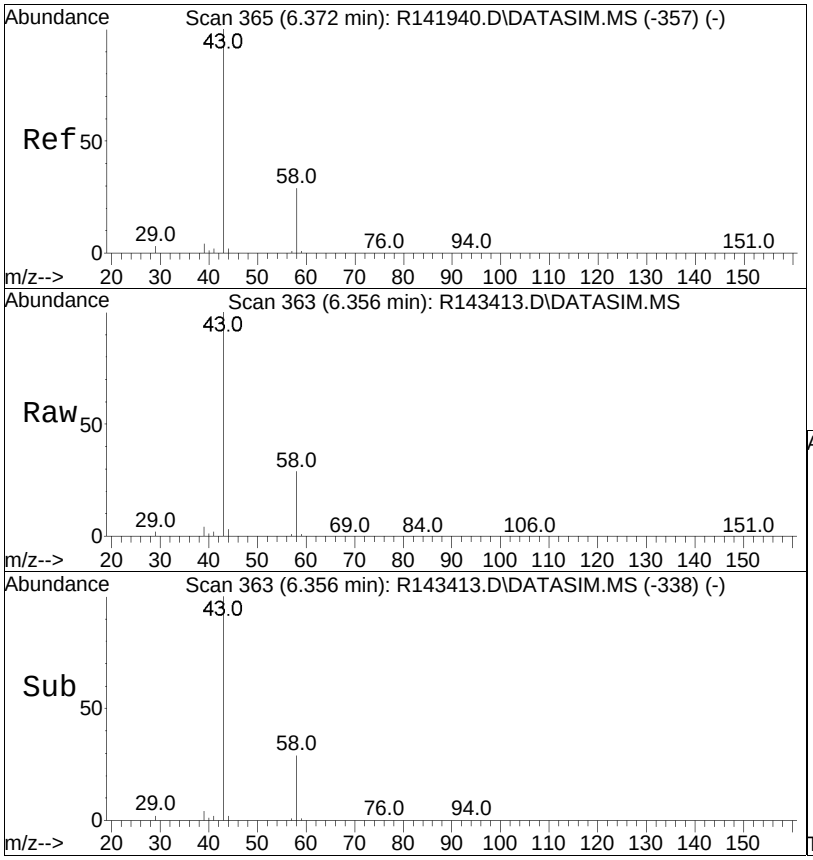


#9
chloroethane
Concen: 4.68 ppbV
RT: 5.516 min Scan# 258
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 64 Resp: 20021

Ion	Ratio	Lower	Upper
64	100		
49	33.6	27.4	41.0

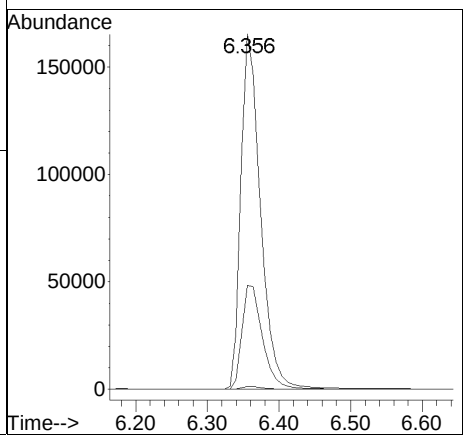


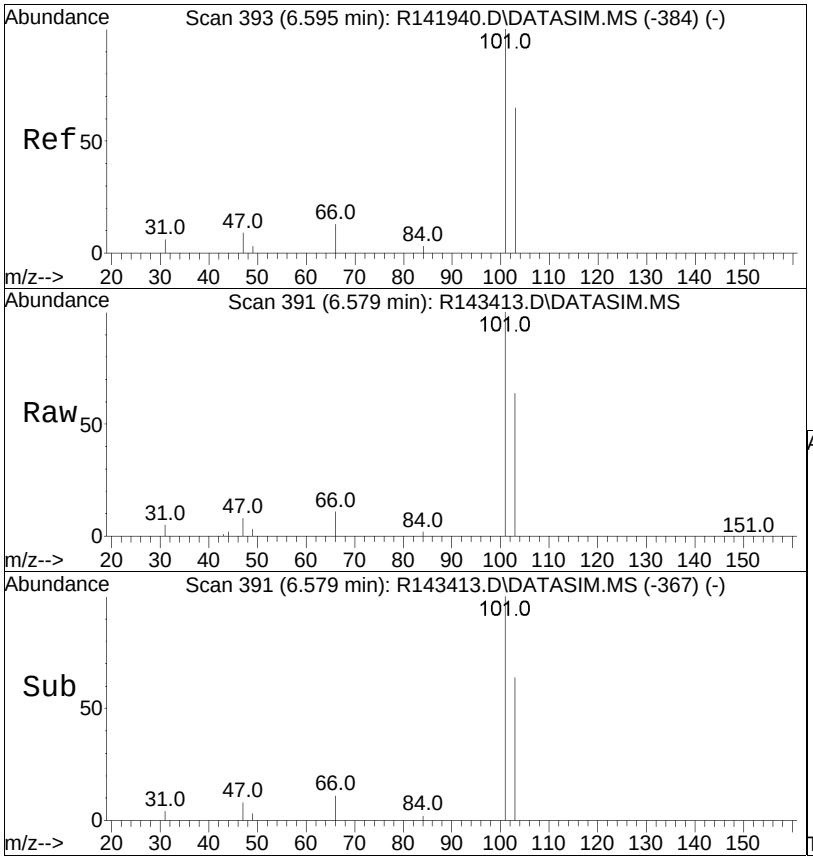


#12
acetone
Concen: 25.18 ppbV
RT: 6.356 min Scan# 363
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 43 Resp: 316148

Ion	Ratio	Lower	Upper
43	100		
58	29.3	22.5	33.7
57	0.8	0.6	1.0

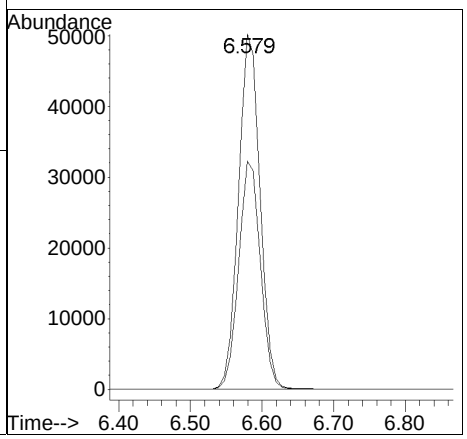


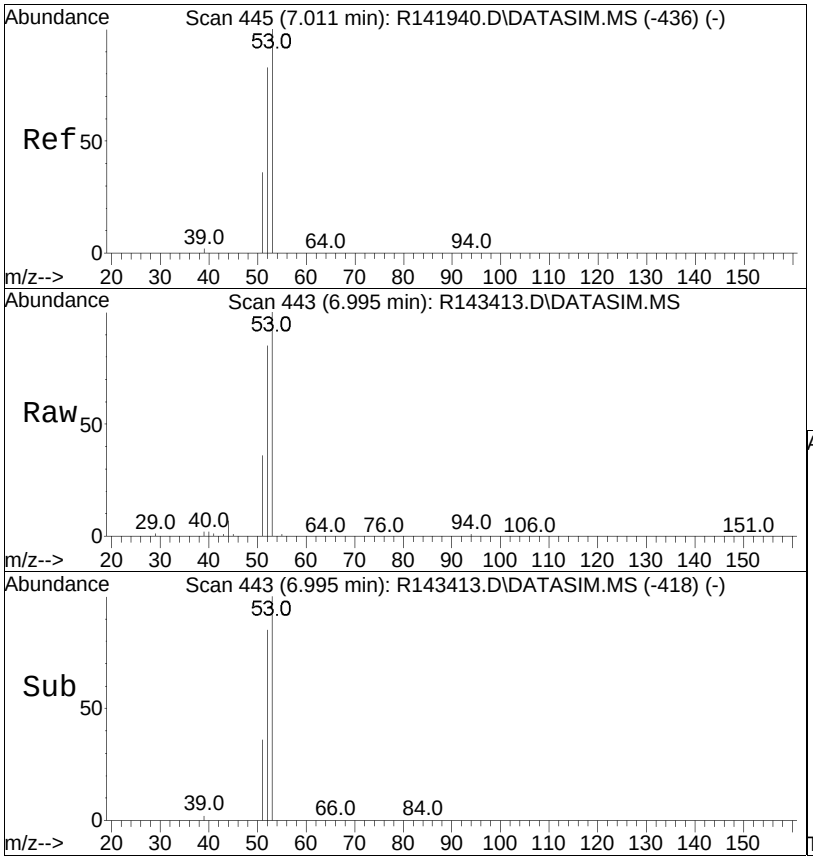


#13
trichlorofluoromethane
Concen: 4.97 ppbV
RT: 6.579 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:101 Resp: 104744

Ion	Ratio	Lower	Upper
101	100		
103	64.2	52.2	78.2

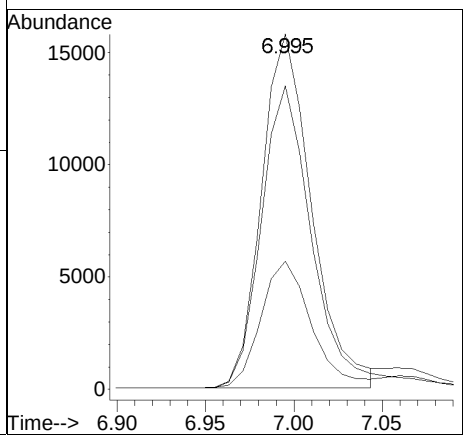


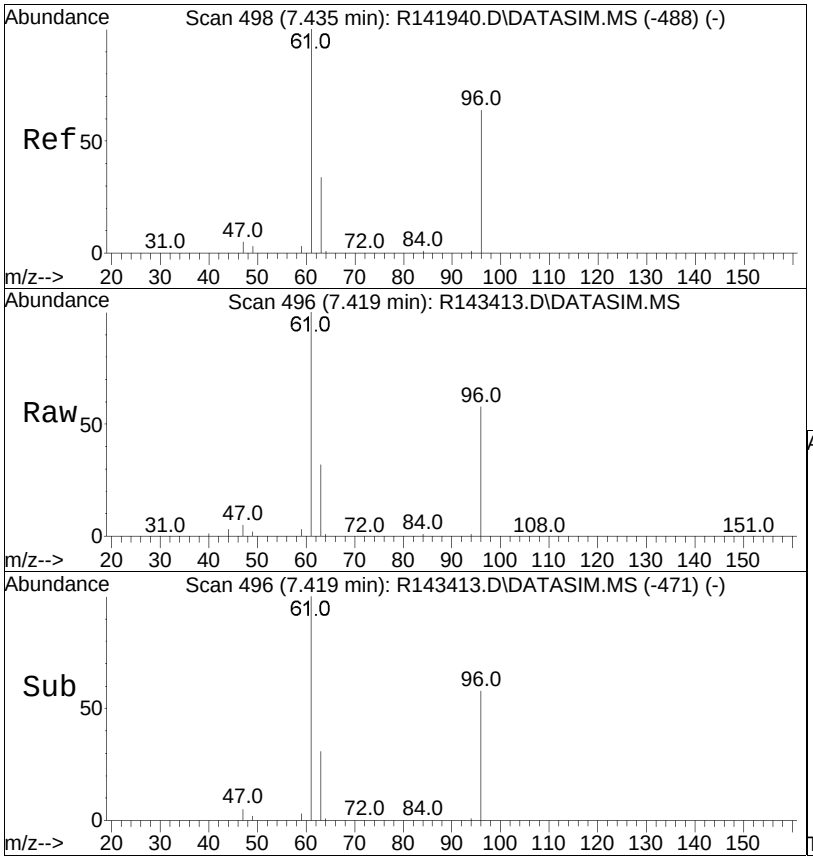


#15
acrylonitrile
Concen: 4.59 ppbV m
RT: 6.995 min Scan# 443
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 53 Resp: 31183

Ion	Ratio	Lower	Upper
53	100		
52	85.4	68.1	102.1
51	36.1	29.7	44.5

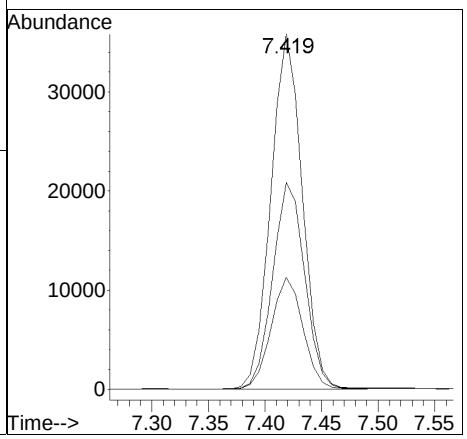


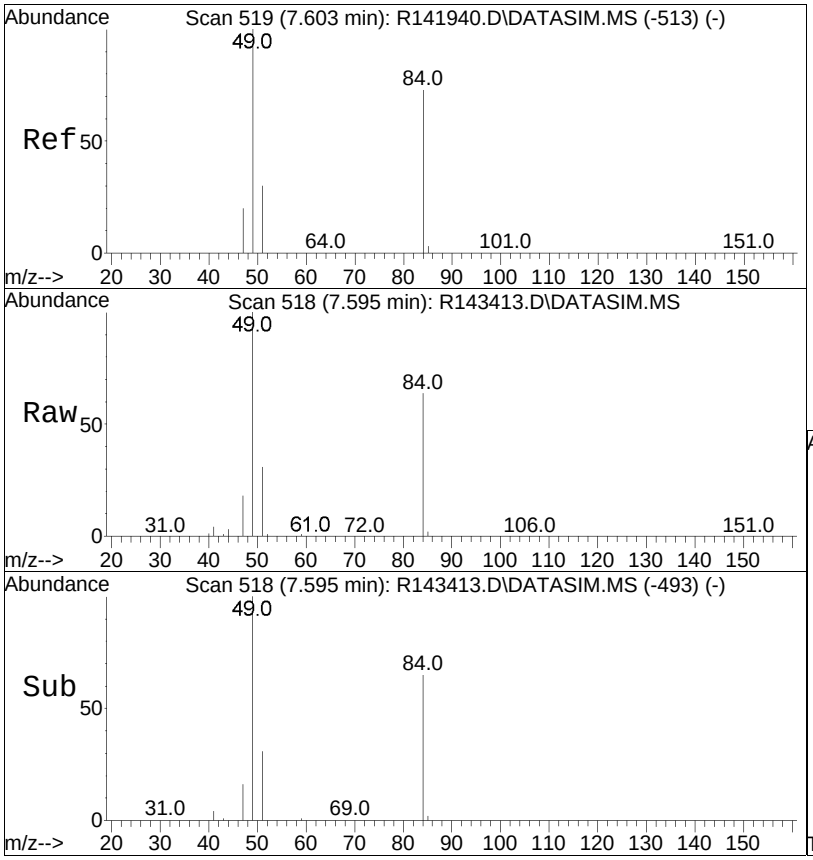


#16
1,1-dichloroethene
Concen: 4.94 ppbV
RT: 7.419 min Scan# 496
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 61 Resp: 69216

Ion	Ratio	Lower	Upper
61	100		
96	58.2	45.8	68.6
63	31.5	25.5	38.3

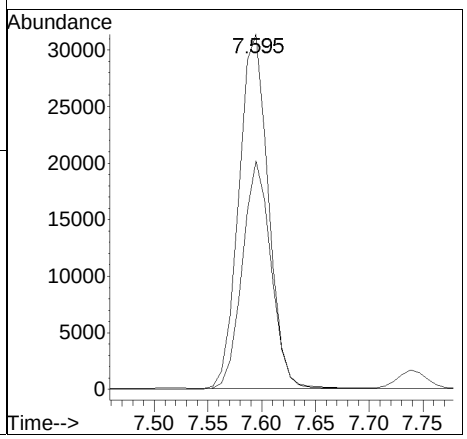


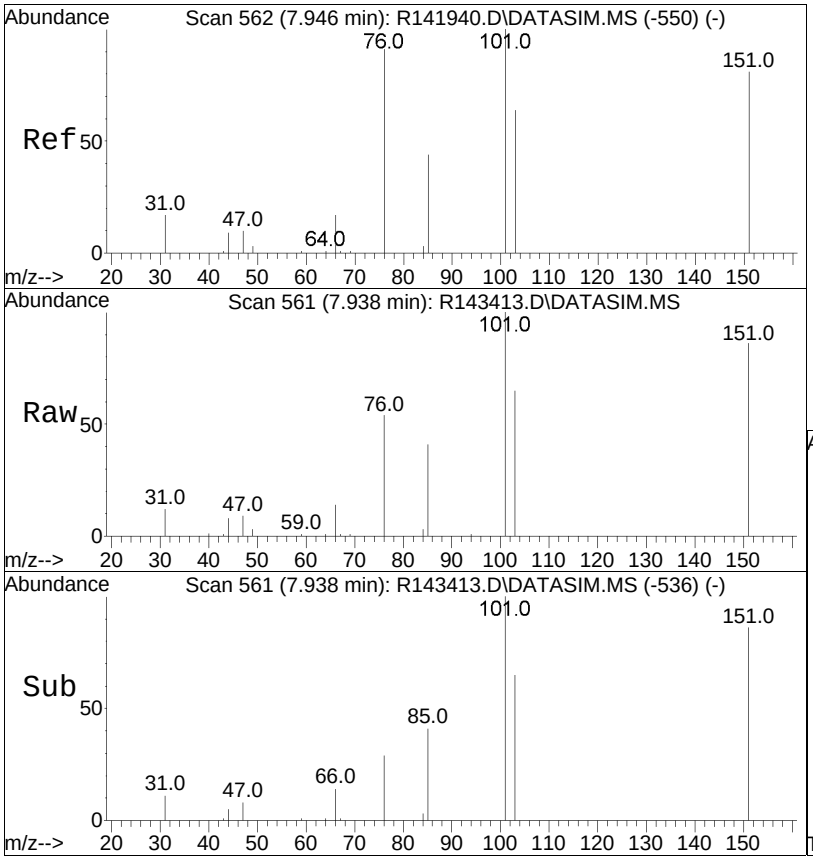


#18
methylene chloride
Concen: 5.22 ppbV
RT: 7.595 min Scan# 518
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 49 Resp: 59697

Ion	Ratio	Lower	Upper
49	100		
84	64.4	50.8	76.2

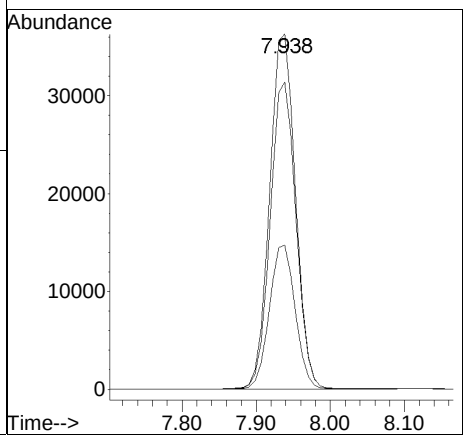


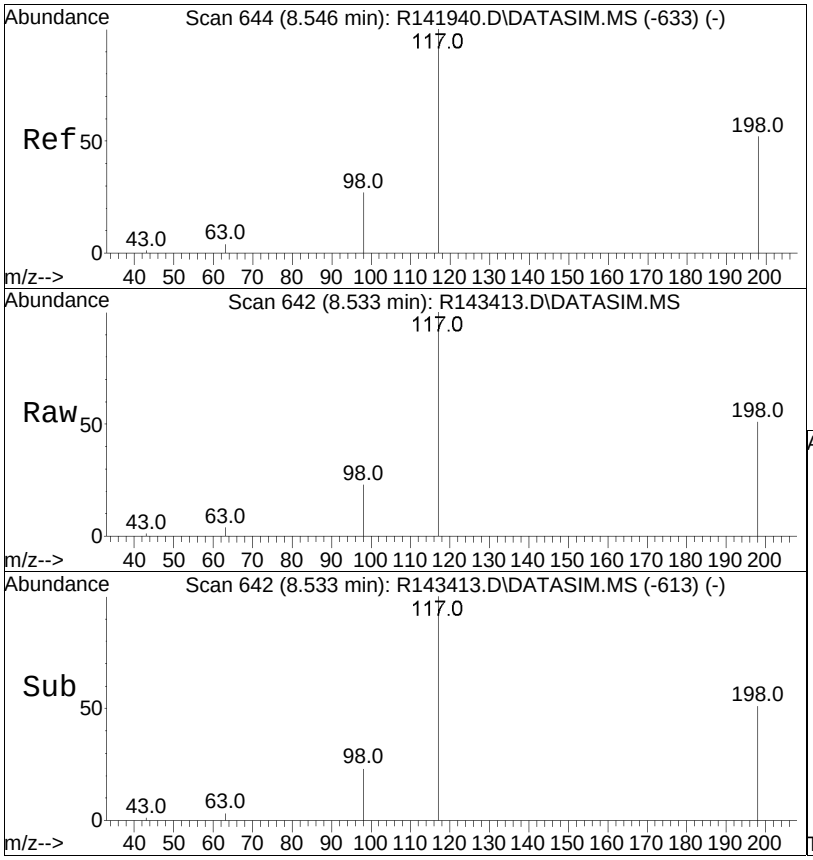


#21
Freon 113
Concen: 4.97 ppbV
RT: 7.938 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:101 Resp: 87719

Ion	Ratio	Lower	Upper
101	100		
85	40.6	32.5	48.7
151	86.4	69.1	103.7

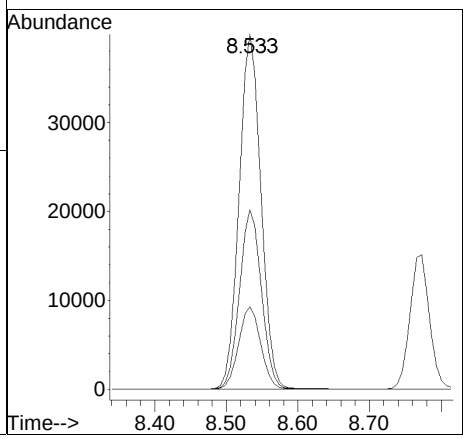


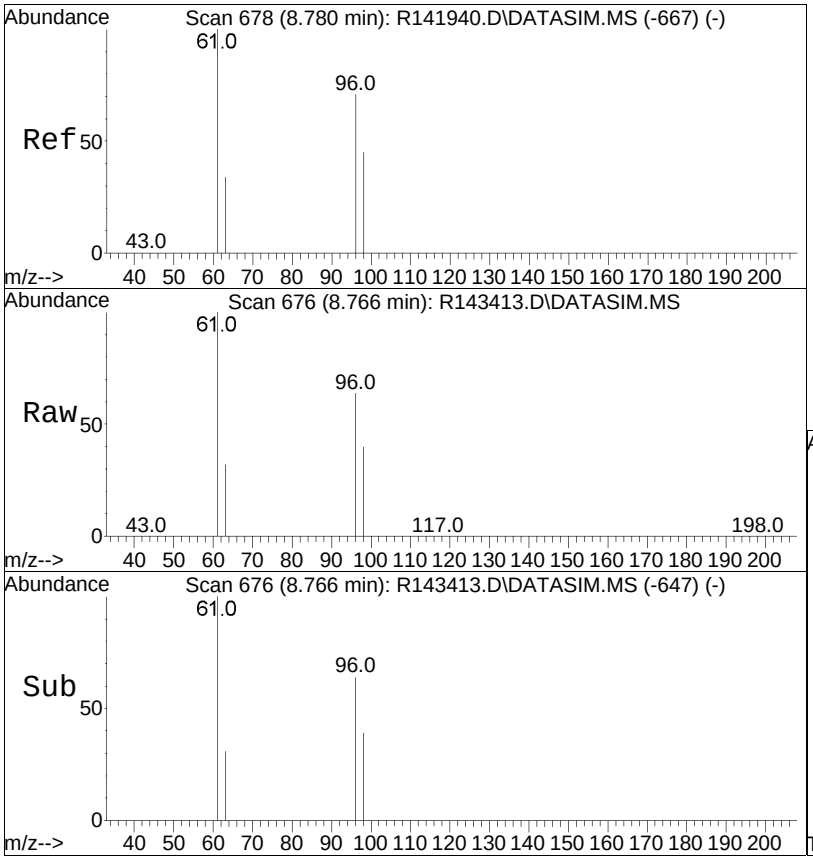


#22
Halothane
Concen: 5.42 ppbV
RT: 8.533 min Scan# 642
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:117 Resp: 84430

Ion	Ratio	Lower	Upper
117	100		
198	50.6	40.1	60.1
98	23.3	18.5	27.7

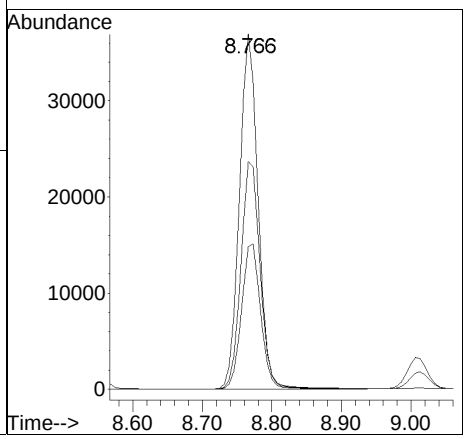


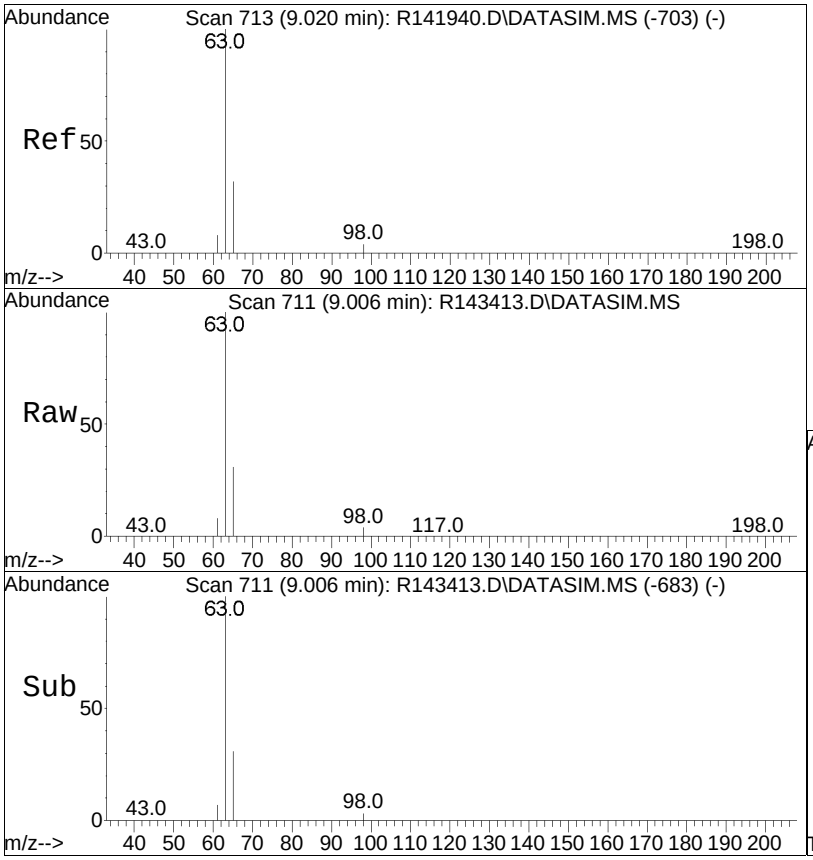


#23
trans-1,2-dichloroethene
Concen: 4.51 ppbV
RT: 8.766 min Scan# 676
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 61 Resp: 68771

Ion	Ratio	Lower	Upper
61	100		
96	64.1	48.9	73.3
98	40.2	30.4	45.6

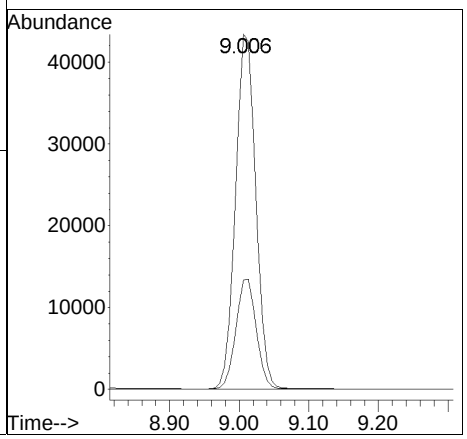


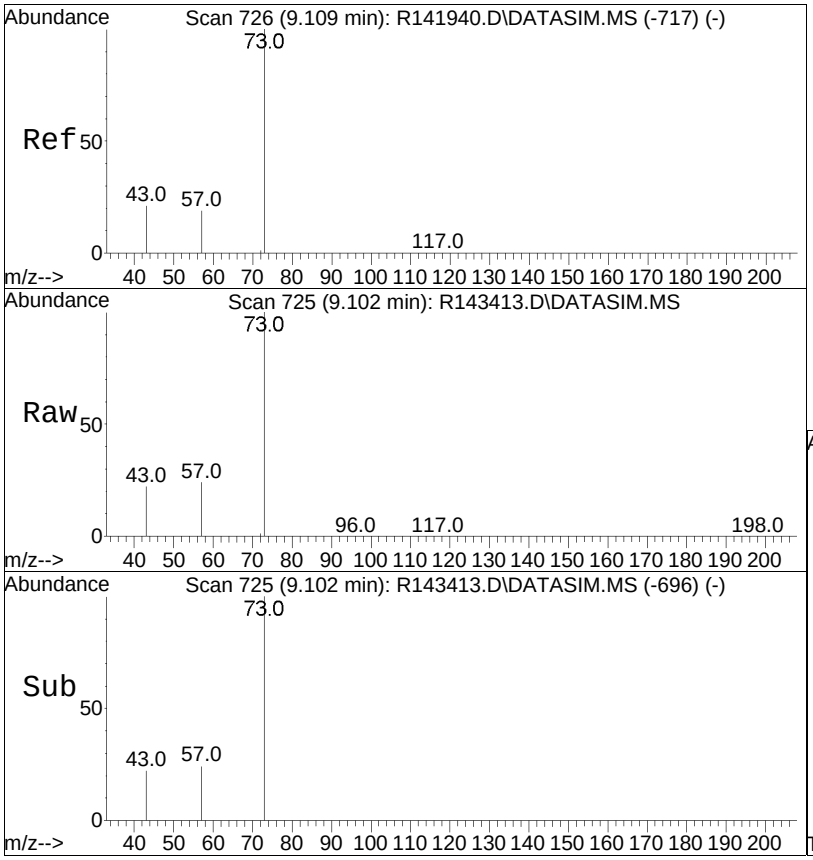


#24
1,1-dichloroethane
Concen: 4.82 ppbV
RT: 9.006 min Scan# 711
Delta R.T. -0.007 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 63 Resp: 87784

Ion	Ratio	Lower	Upper
63	100		
65	30.9	25.2	37.8

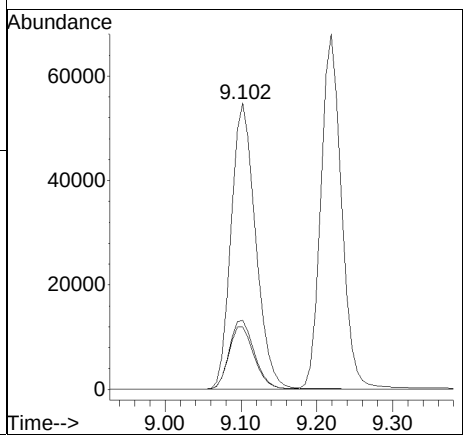


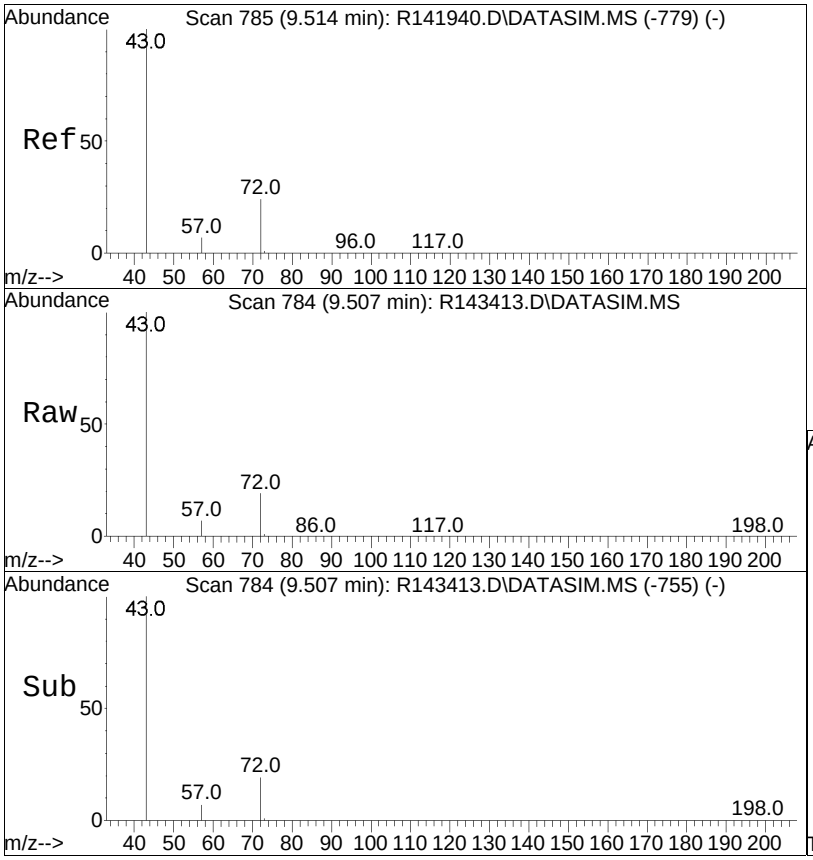


#25
MTBE
Concen: 4.84 ppbV
RT: 9.102 min Scan# 725
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 73 Resp: 122791

Ion	Ratio	Lower	Upper
73	100		
57	24.1	19.5	29.3
43	21.9	18.2	27.4

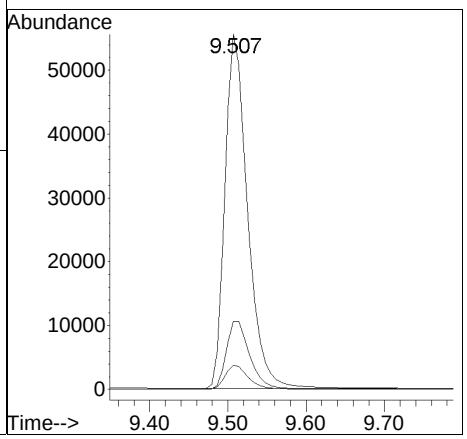


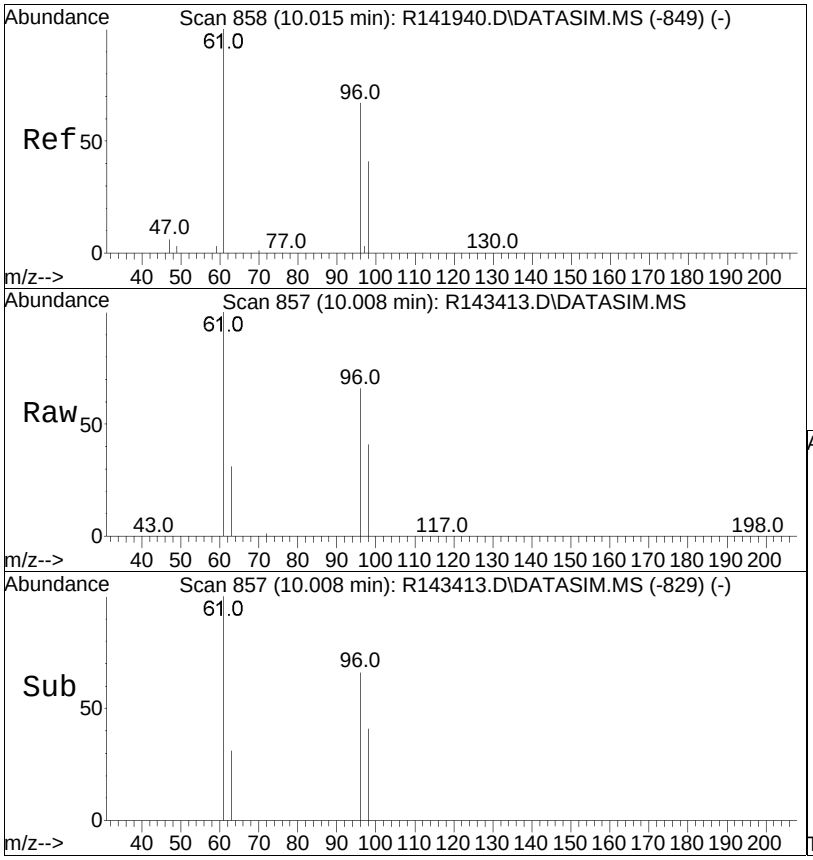


#27
2-butanone
Concen: 4.64 ppbV
RT: 9.507 min Scan# 784
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 43 Resp: 111677

Ion	Ratio	Lower	Upper
43	100		
72	19.2	15.4	23.0
57	6.9	5.5	8.3

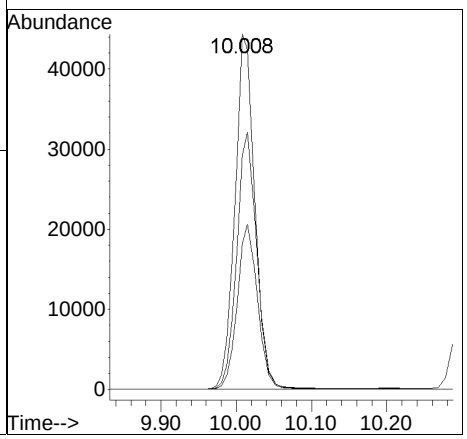


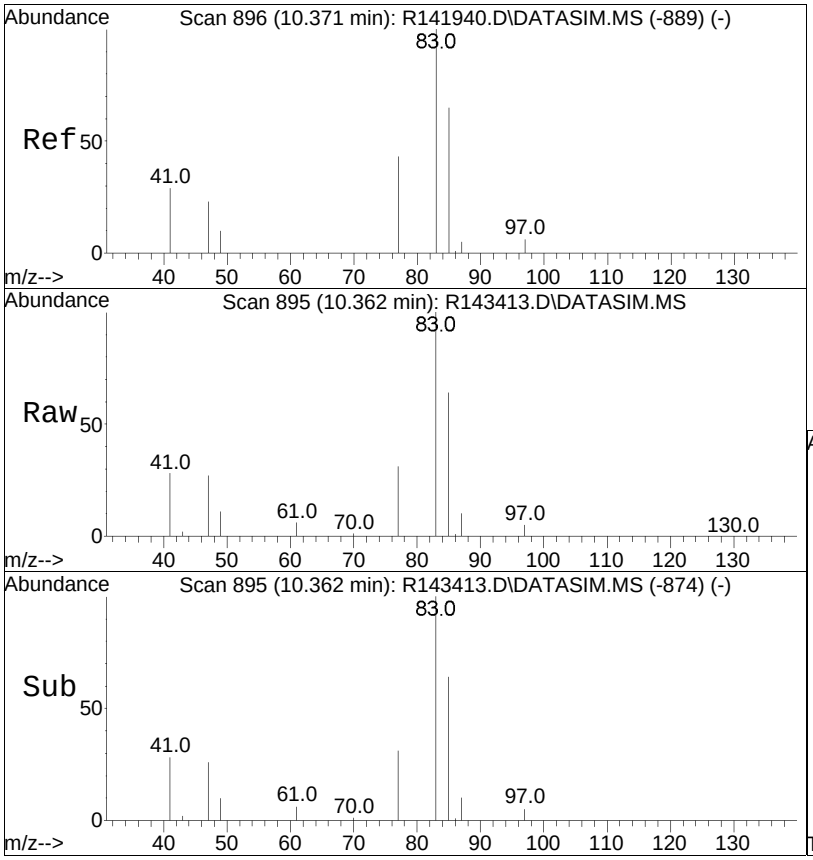


#28
cis-1,2-dichloroethene
Concen: 5.49 ppbV
RT: 10.008 min Scan# 857
Delta R.T. -0.007 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 61 Resp: 89461

Ion	Ratio	Lower	Upper
61	100		
96	65.9	57.8	86.8
98	40.9	36.9	55.3

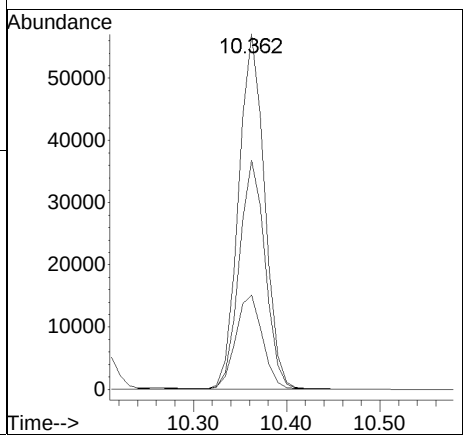


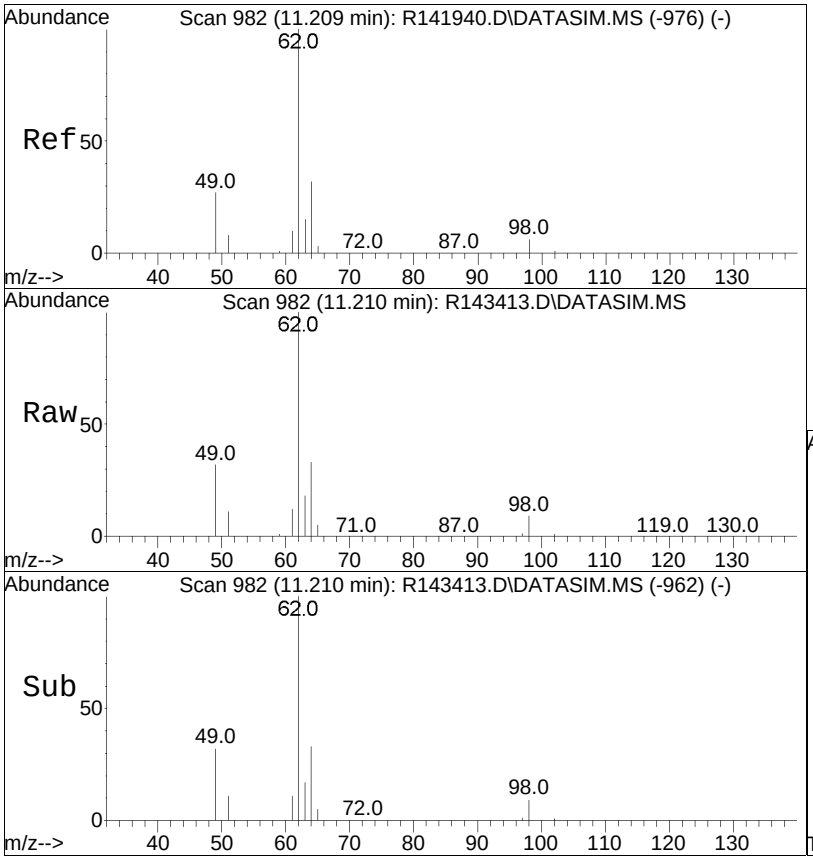


#30
chloroform
Concen: 4.95 ppbV m
RT: 10.362 min Scan# 895
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 83 Resp: 110480

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.6	77.4
47	26.6	22.6	33.8

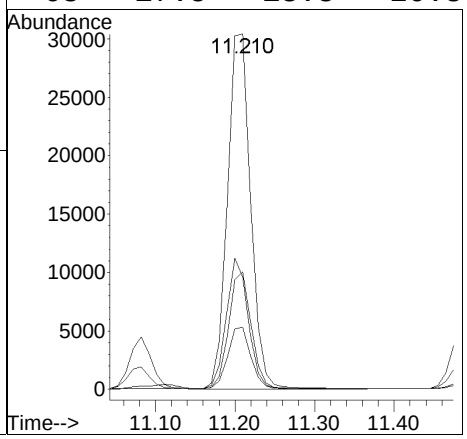


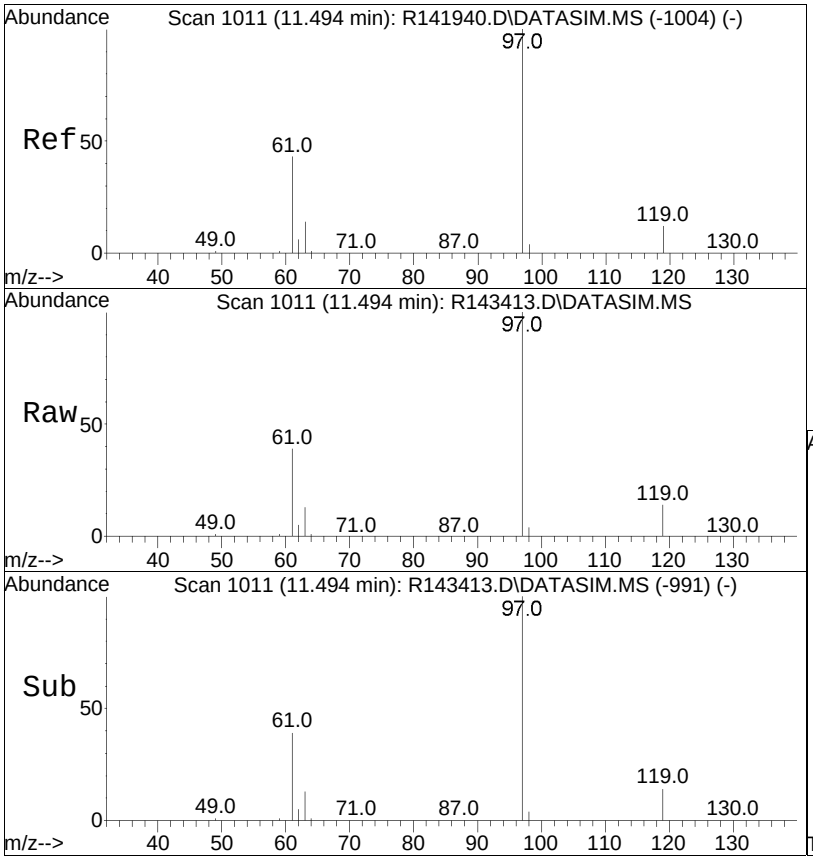


#32
1,2-dichloroethane
Concen: 4.65 ppbV
RT: 11.210 min Scan# 982
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 62 Resp: 61727

Ion	Ratio	Lower	Upper
62	100		
64	33.1	26.2	39.4
49	31.6	25.7	38.5
63	17.5	13.8	20.8

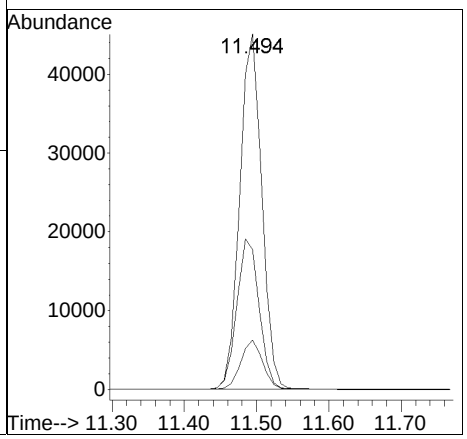


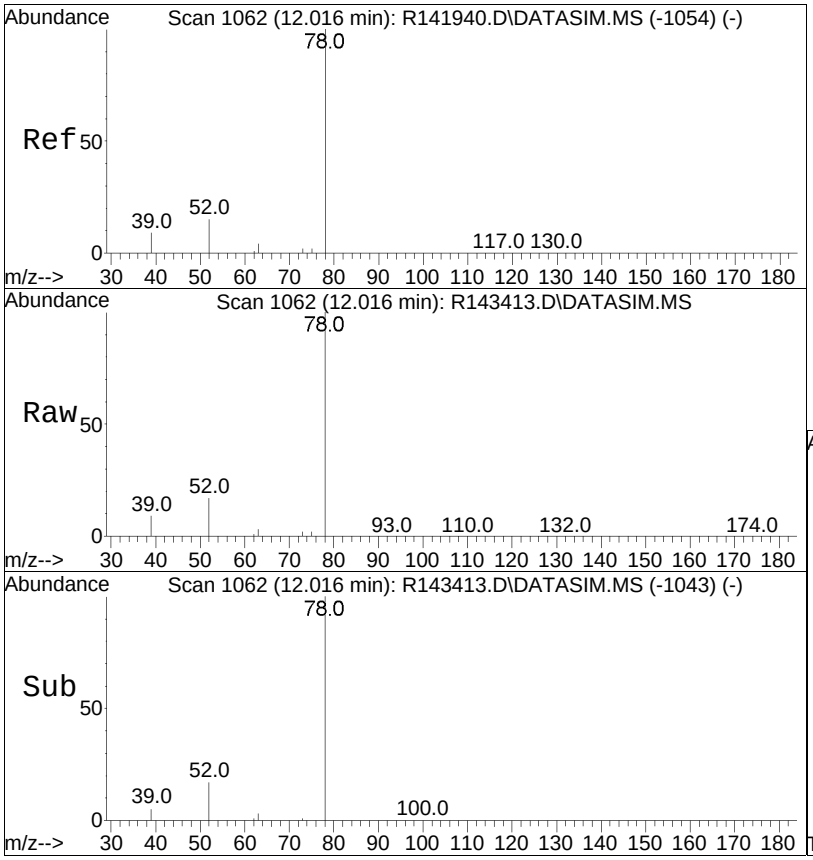


#36
1,1,1-trichloroethane
Concen: 4.76 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 97 Resp: 96340

Ion	Ratio	Lower	Upper
97	100		
61	39.4	32.6	49.0
119	13.9	11.0	16.4

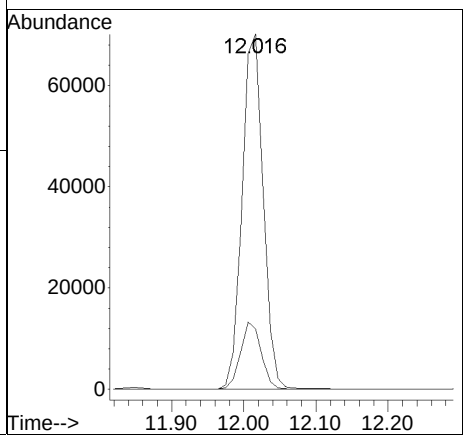


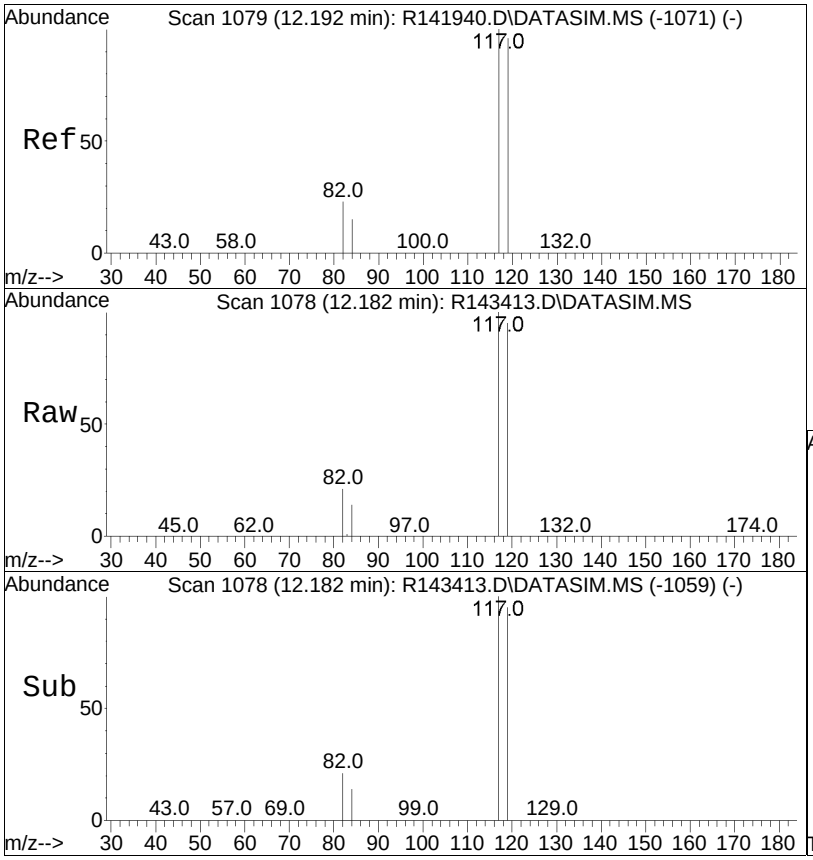


#37
benzene
Concen: 4.56 ppbV
RT: 12.016 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 78 Resp: 142752

Ion	Ratio	Lower	Upper
78	100		
52	17.1	14.2	21.2

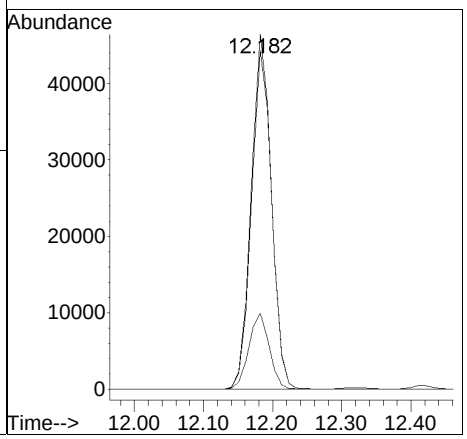


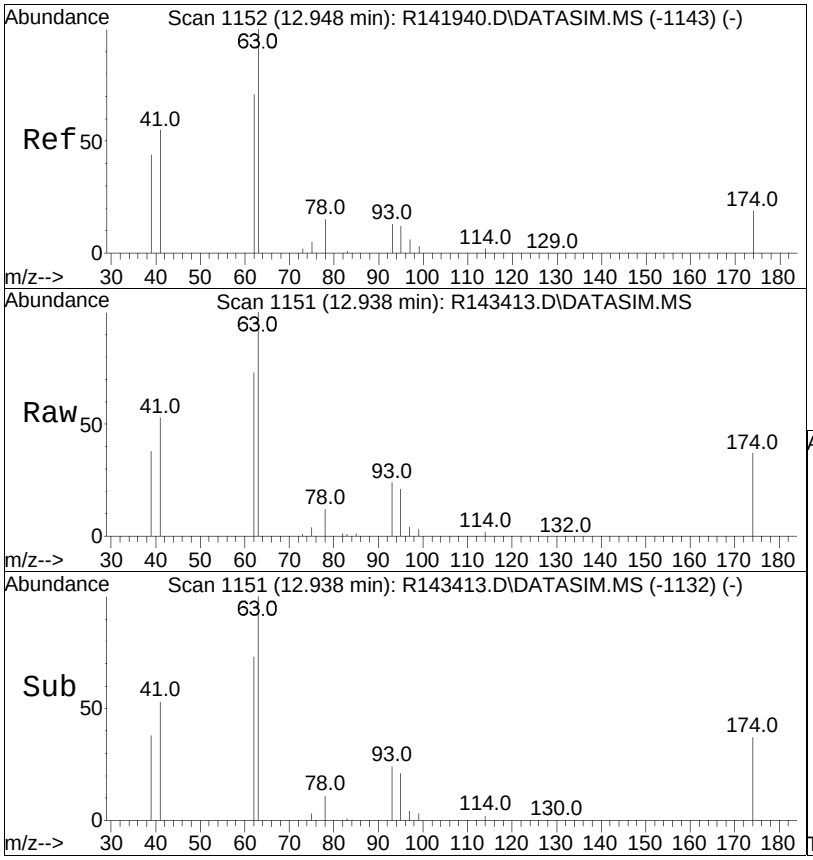


#38
carbon tetrachloride
Concen: 5.20 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:117 Resp: 93747

Ion	Ratio	Lower	Upper
117	100		
119	95.4	76.4	114.6
82	21.4	18.3	27.5

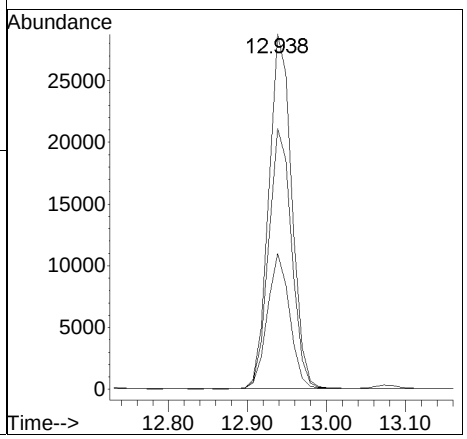


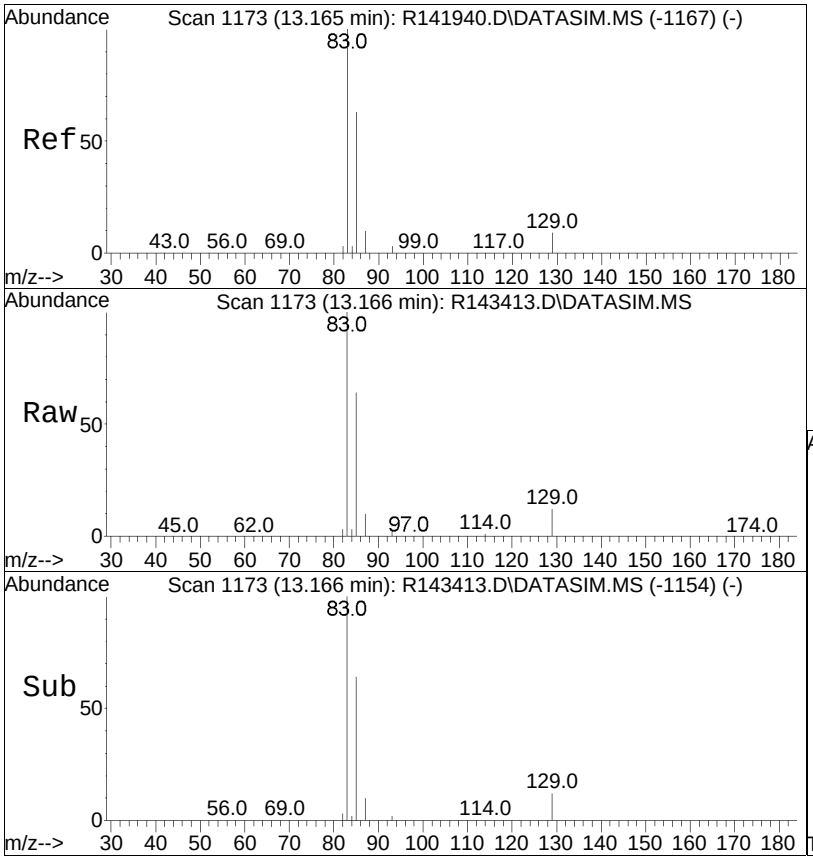


#41
1,2-dichloropropane
Concen: 4.68 ppbV
RT: 12.938 min Scan# 1151
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 63 Resp: 58098

Ion	Ratio	Lower	Upper
63	100		
62	73.4	59.0	88.4
39	38.3	31.4	47.2

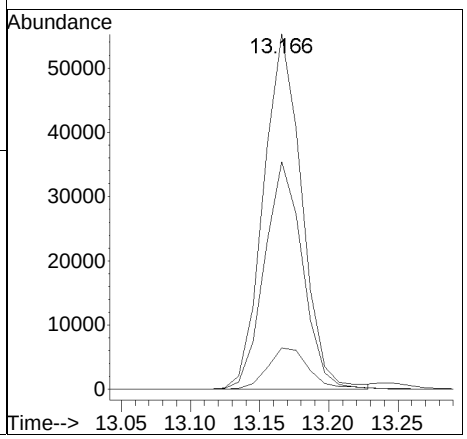


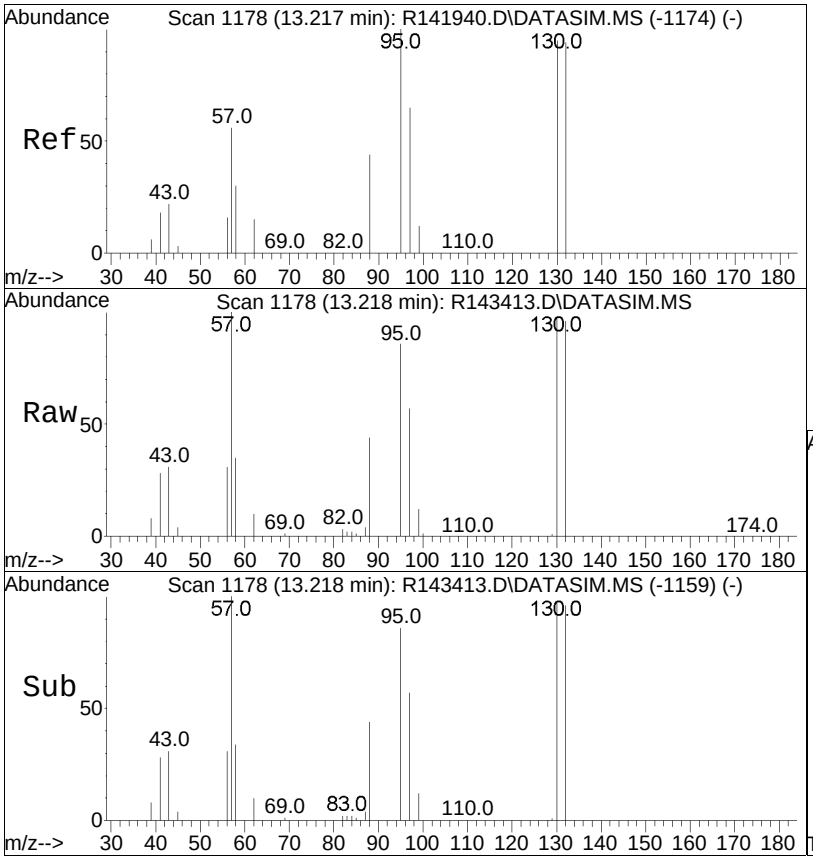


#42
bromodichloromethane
Concen: 4.82 ppbV
RT: 13.166 min Scan# 1173
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 83 Resp: 105989

Ion	Ratio	Lower	Upper
83	100		
85	64.1	50.6	75.8
129	11.7	8.9	13.3

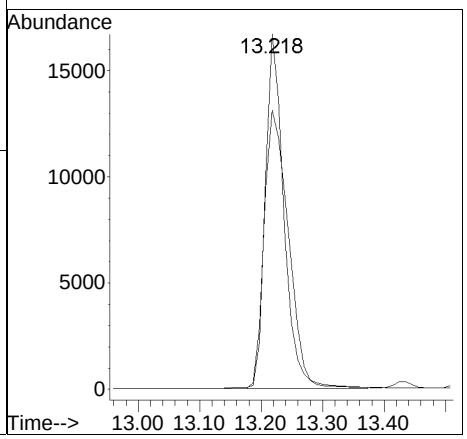


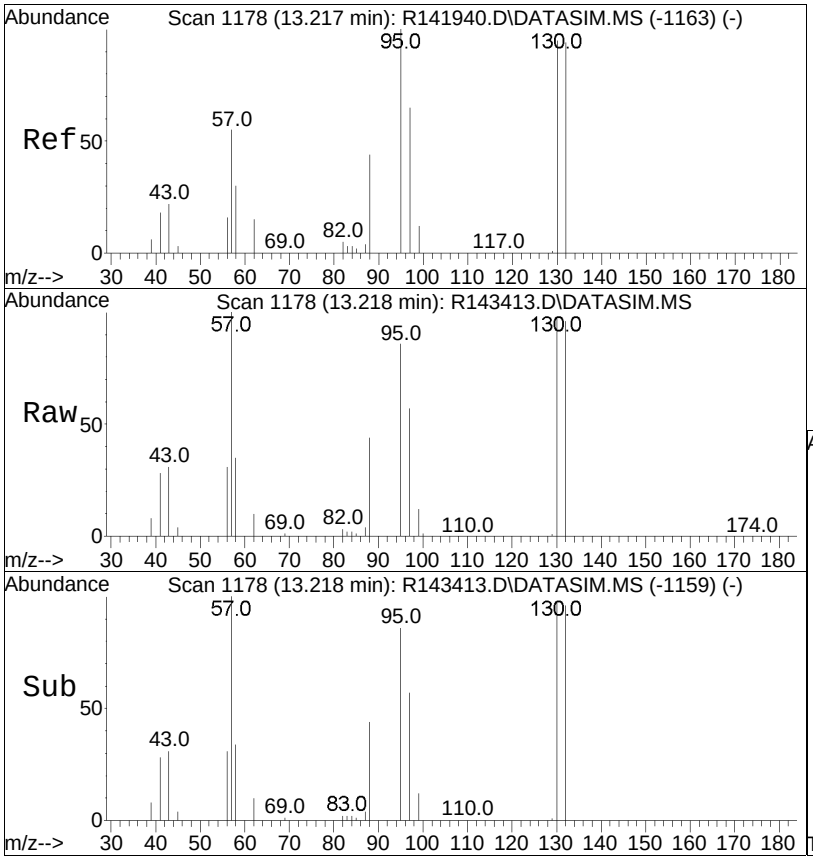


#43
1,4-dioxane
Concen: 4.75 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 88 Resp: 35213

Ion	Ratio	Lower	Upper
88	100		
58	78.6	60.8	91.2

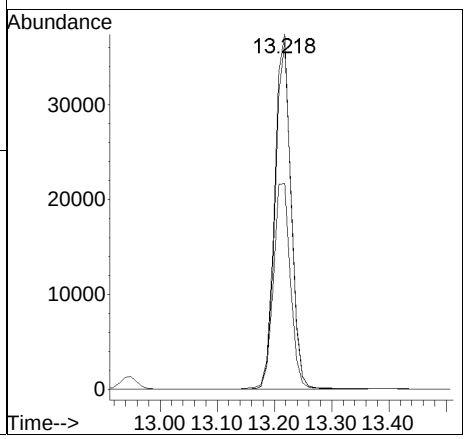


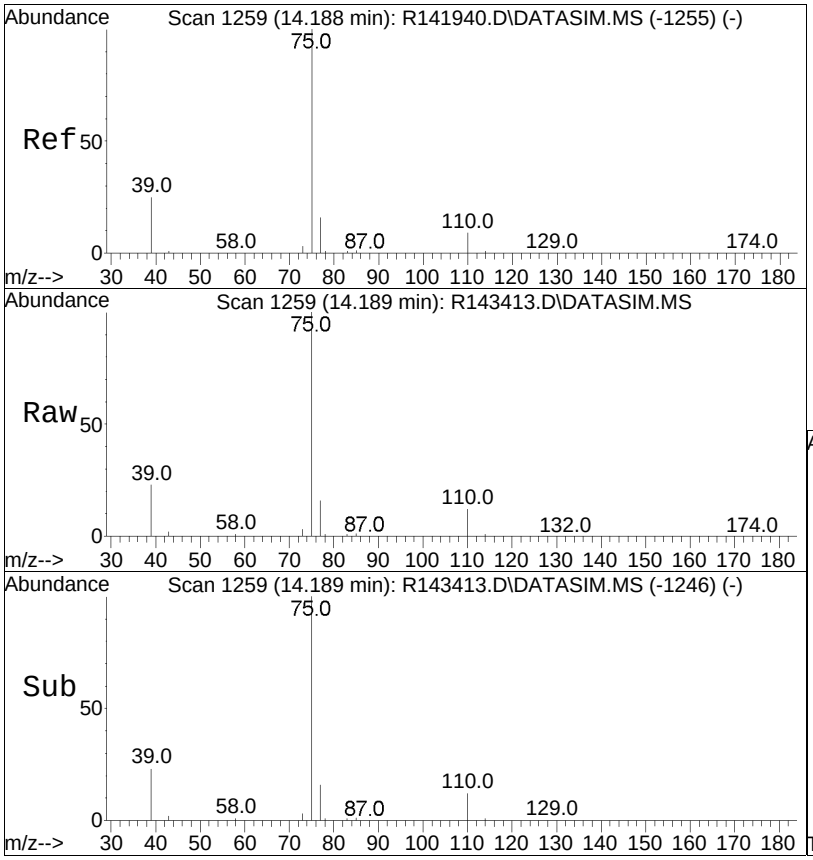


#44
trichloroethene
Concen: 4.75 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:130 Resp: 73962

Ion	Ratio	Lower	Upper
130	100		
132	97.6	77.5	116.3
97	58.0	47.4	71.2

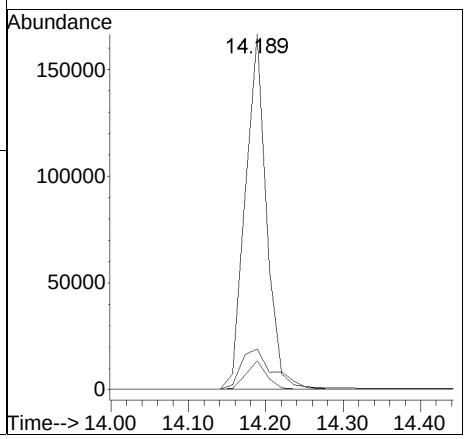


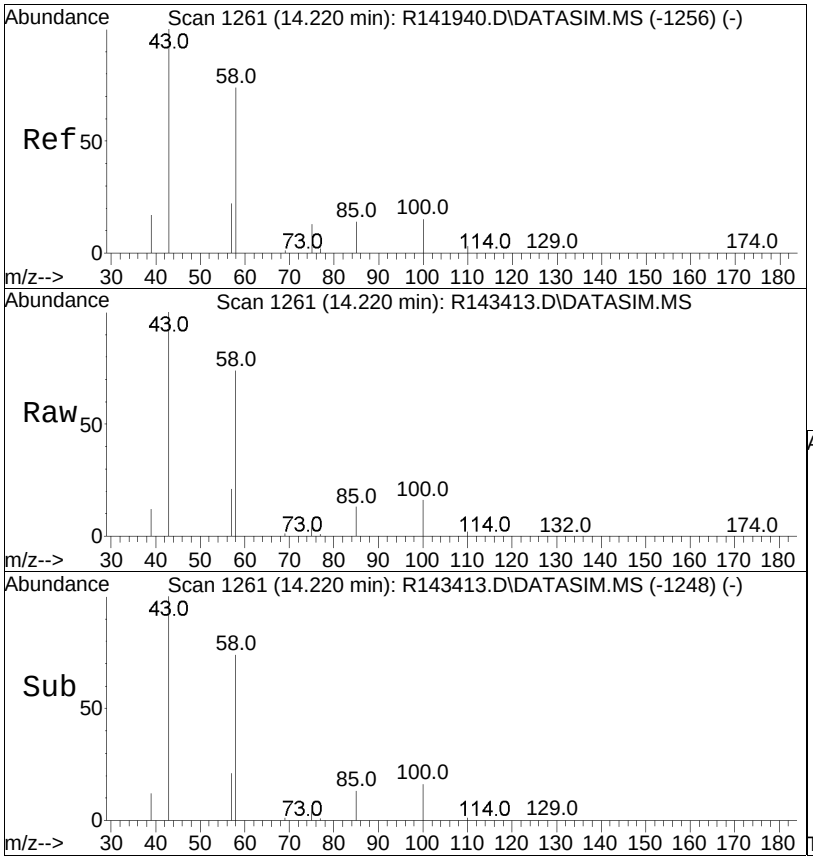


#47
cis-1,3-dichloropropene
Concen: 5.08 ppbV
RT: 14.189 min Scan# 1259
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 75 Resp: 316050

Ion	Ratio	Lower	Upper
75	100		
39	11.4	9.8	14.6
77	8.1	6.4	9.6

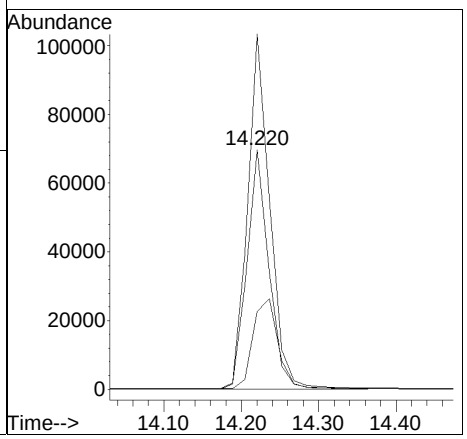


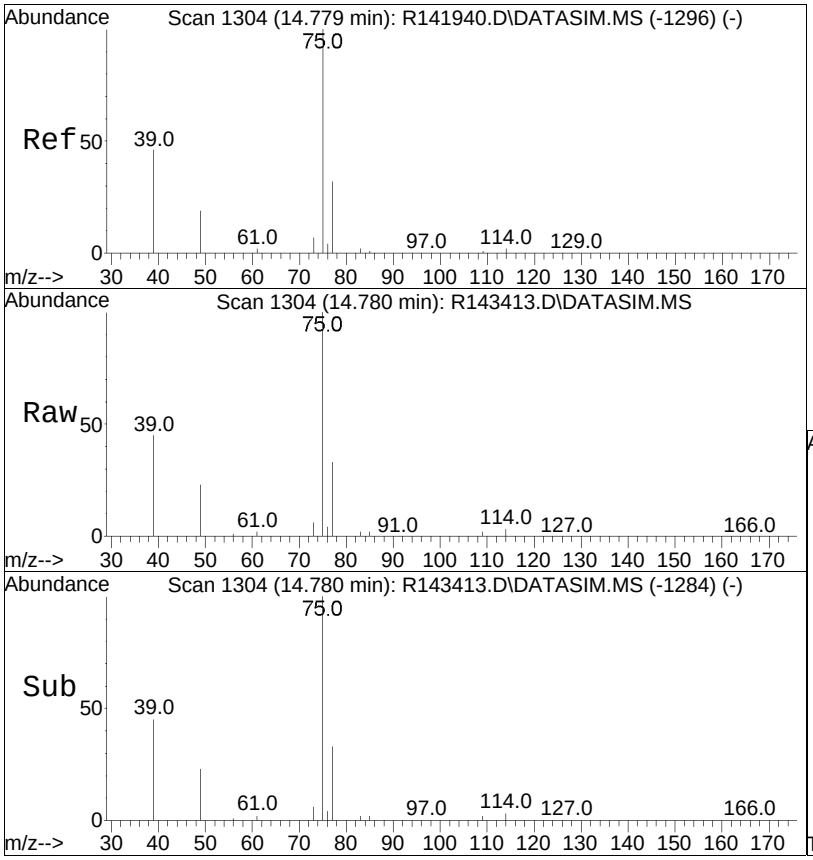


#48
4-methyl-2-pentanone
Concen: 4.68 ppbV
RT: 14.220 min Scan# 1261
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 43 Resp: 138103

Ion	Ratio	Lower	Upper
43	100		
58	148.4	118.6	177.8
100	32.6	25.6	38.4

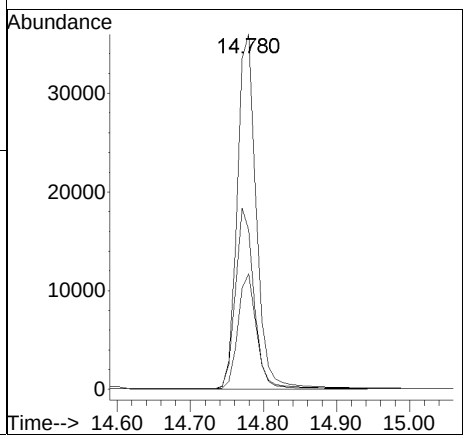


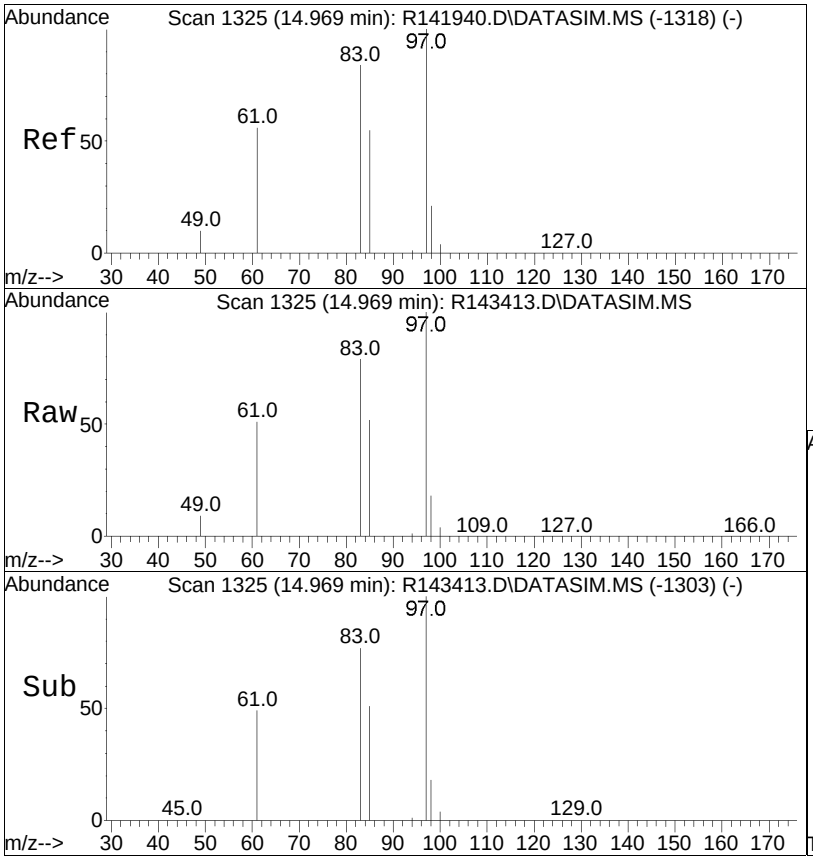


#49
trans-1,3-dichloropropene
Concen: 4.37 ppbV
RT: 14.780 min Scan# 1304
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 75 Resp: 65286

Ion	Ratio	Lower	Upper
75	100		
77	32.6	25.8	38.6
39	44.8	37.1	55.7

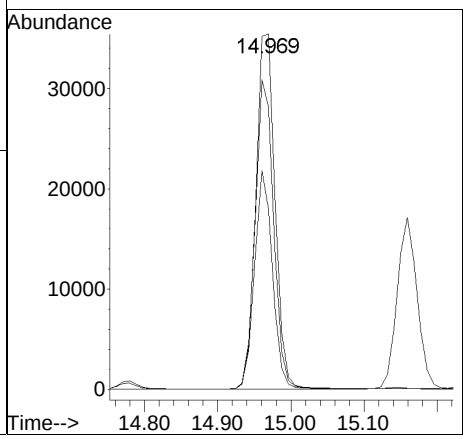


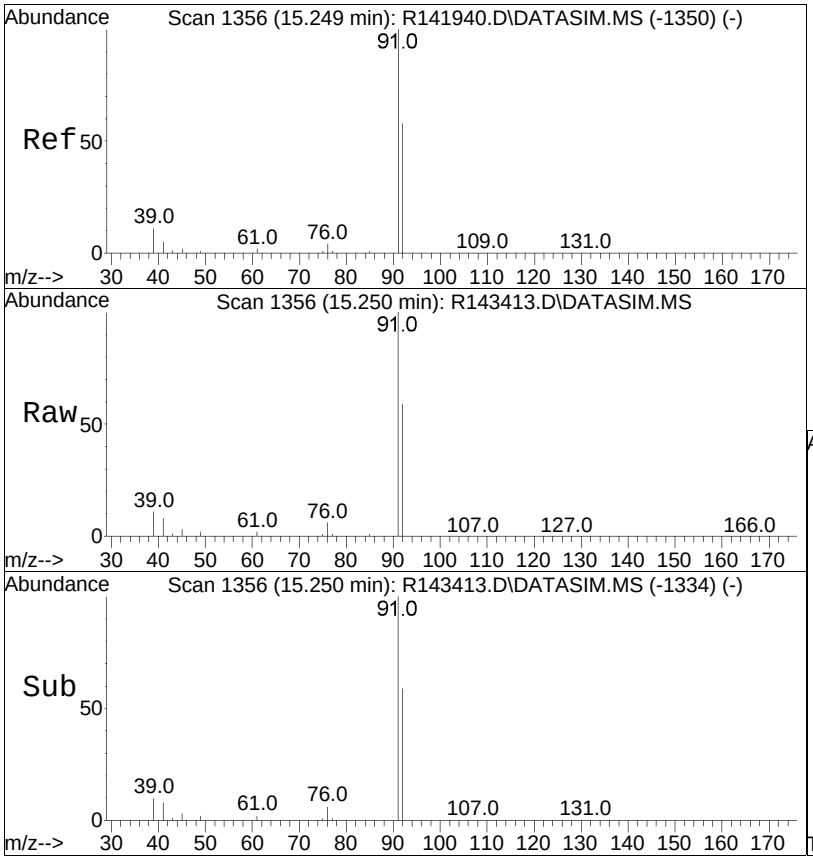


#50
1,1,2-trichloroethane
Concen: 4.93 ppbV
RT: 14.969 min Scan# 1325
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 97 Resp: 64802

Ion	Ratio	Lower	Upper
97	100		
83	79.4	64.6	97.0
61	50.7	42.2	63.2

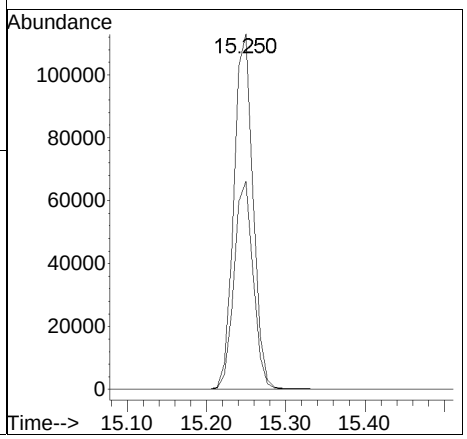


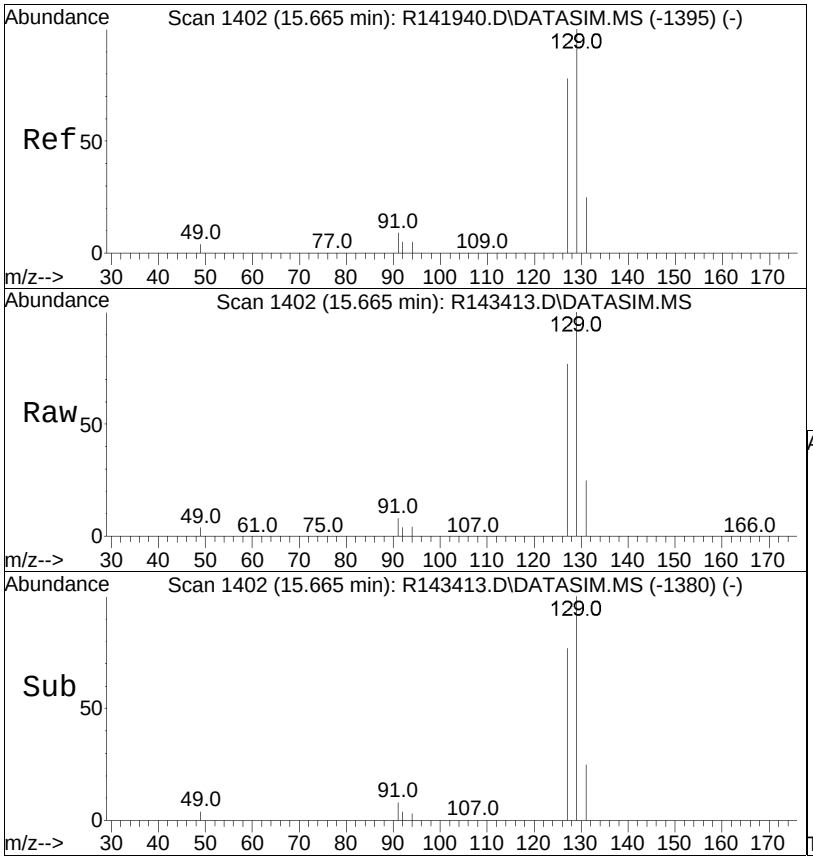


#52
toluene
Concen: 4.81 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 91 Resp: 189986

Ion	Ratio	Lower	Upper
91	100		
92	58.5	46.8	70.2

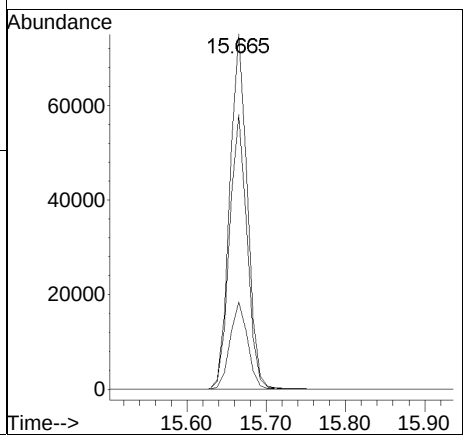


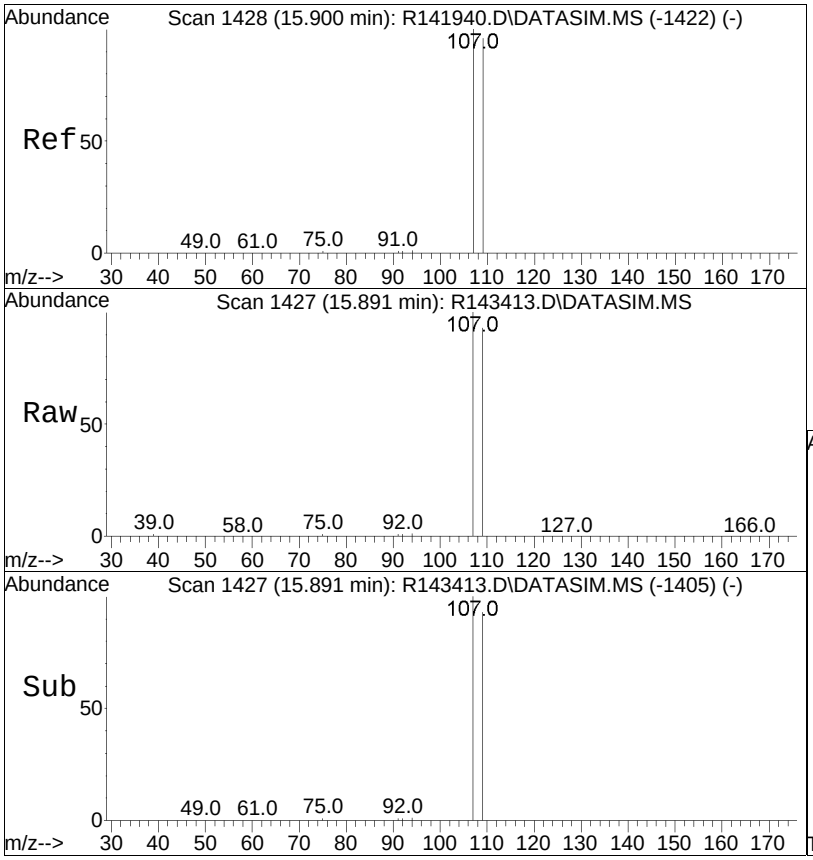


#55
dibromochloromethane
Concen: 5.01 ppbV
RT: 15.665 min Scan# 1402
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:129 Resp: 115635

Ion	Ratio	Lower	Upper
129	100		
127	77.3	62.0	93.0
131	24.6	19.8	29.6

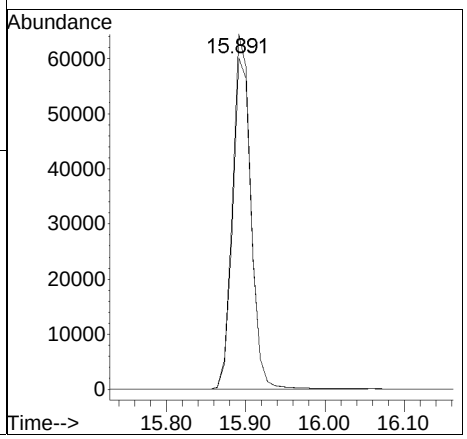


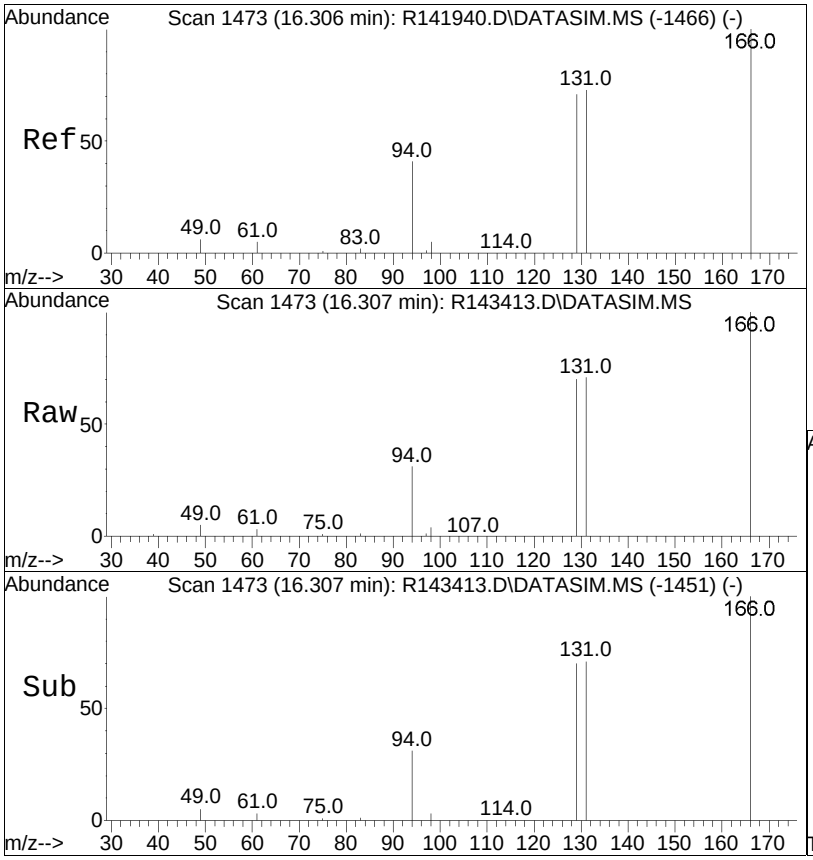


#56
1,2-dibromoethane
Concen: 5.09 ppbV
RT: 15.891 min Scan# 1427
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:107 Resp: 103963

Ion	Ratio	Lower	Upper
107	100		
109	93.3	74.4	111.6

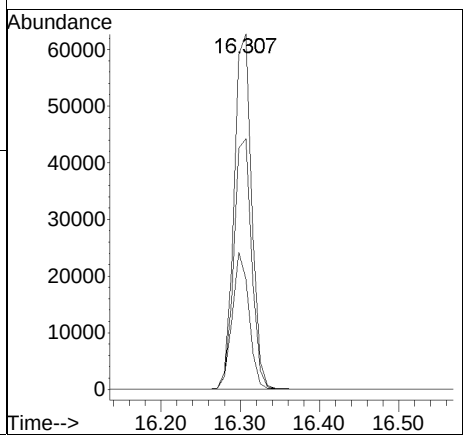


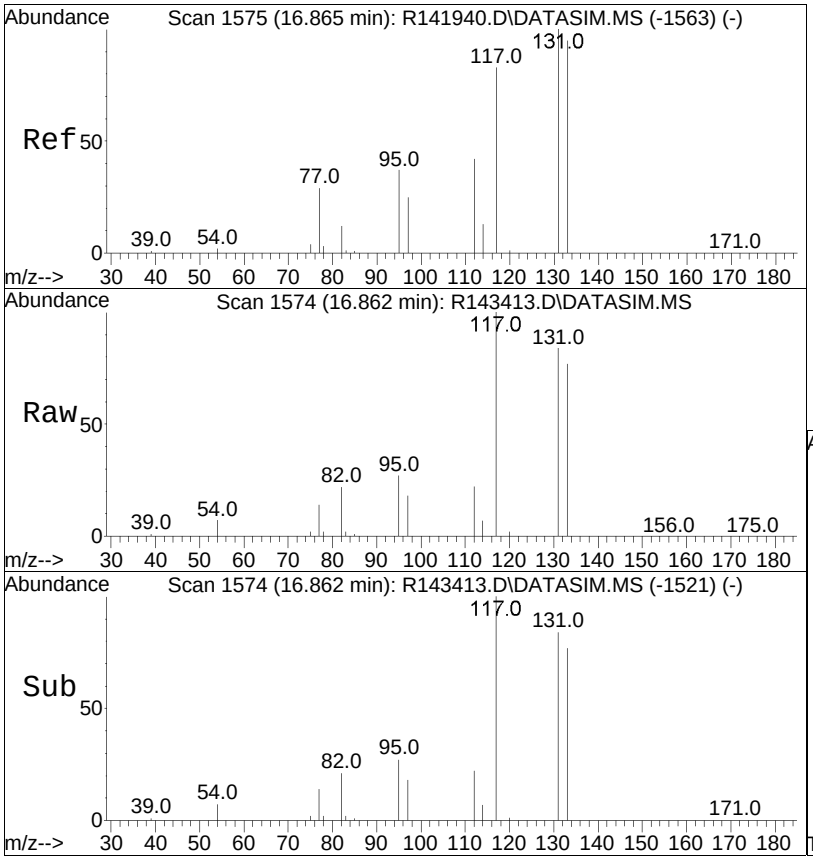


#57
tetrachloroethene
Concen: 4.90 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:166 Resp: 96897

Ion	Ratio	Lower	Upper
166	100		
131	70.5	57.0	85.4
94	31.1	26.2	39.4

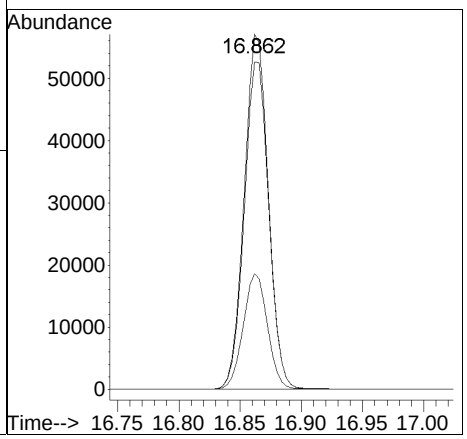


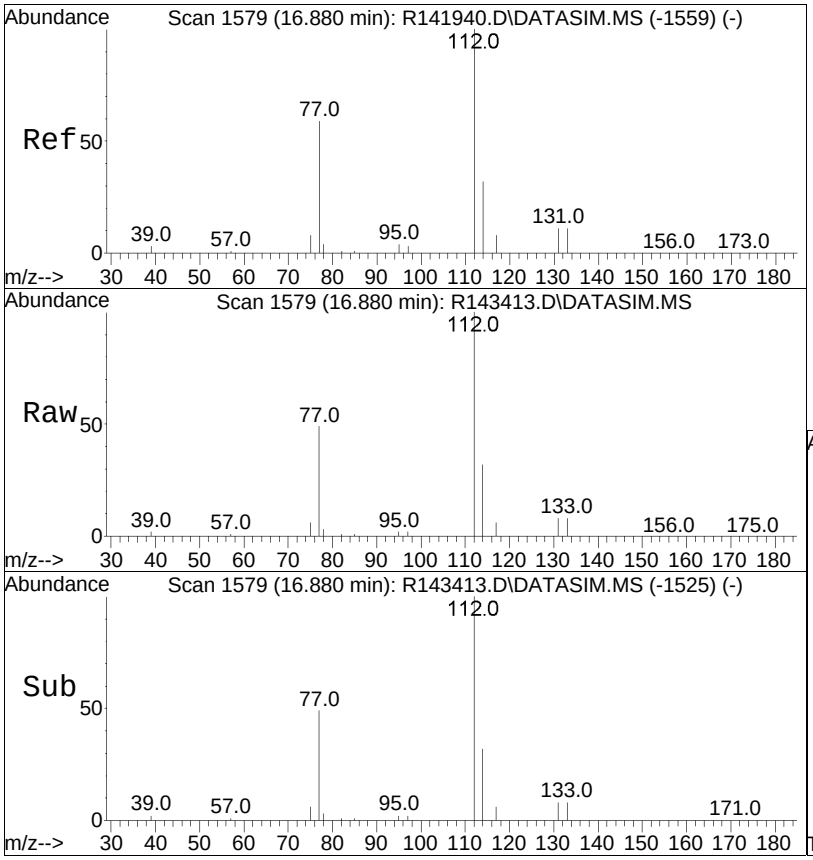


#58
1,1,1,2-tetrachloroethane
Concen: 4.68 ppbV
RT: 16.862 min Scan# 1574
Delta R.T. -0.004 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:131 Resp: 78139

Ion	Ratio	Lower	Upper
131	100		
133	92.2	74.9	112.3
95	32.6	25.8	38.8

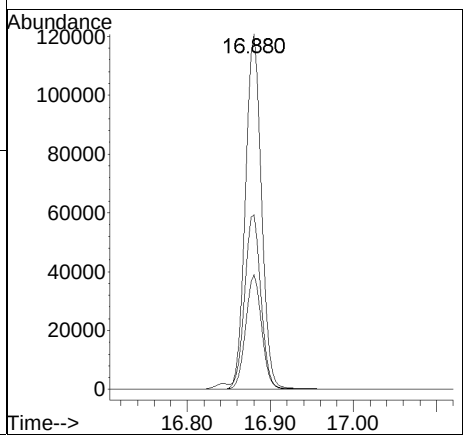


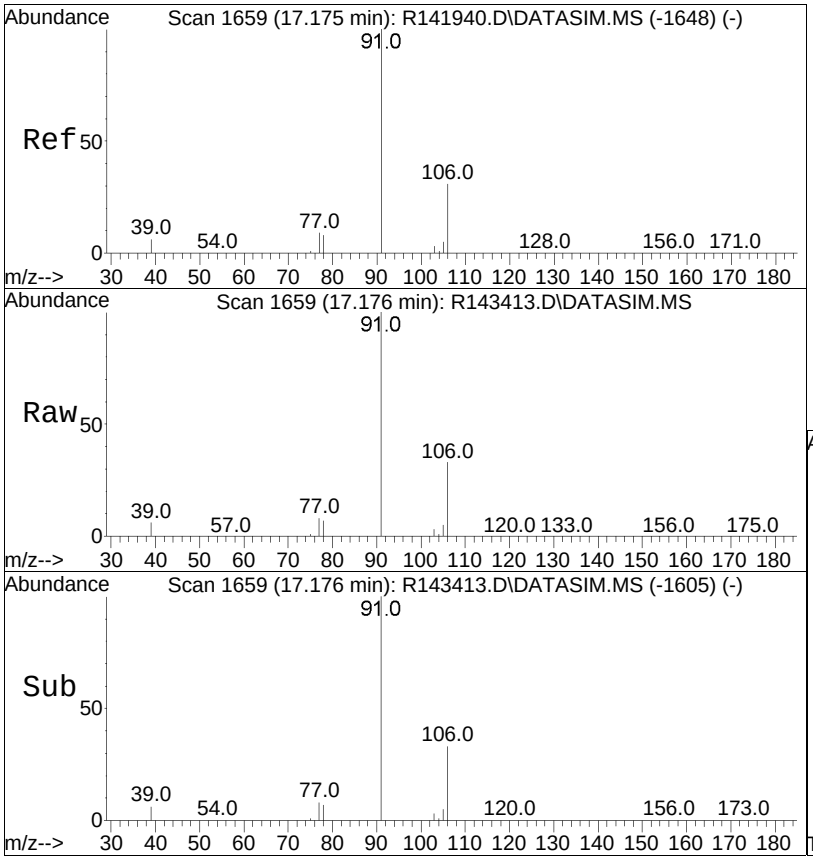


#59
chlorobenzene
Concen: 4.92 ppbV
RT: 16.880 min Scan# 1579
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:112 Resp: 162335

Ion	Ratio	Lower	Upper
112	100		
114	32.3	25.8	38.8
77	49.2	40.4	60.6

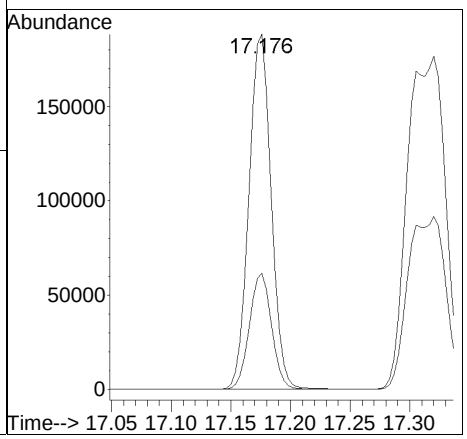


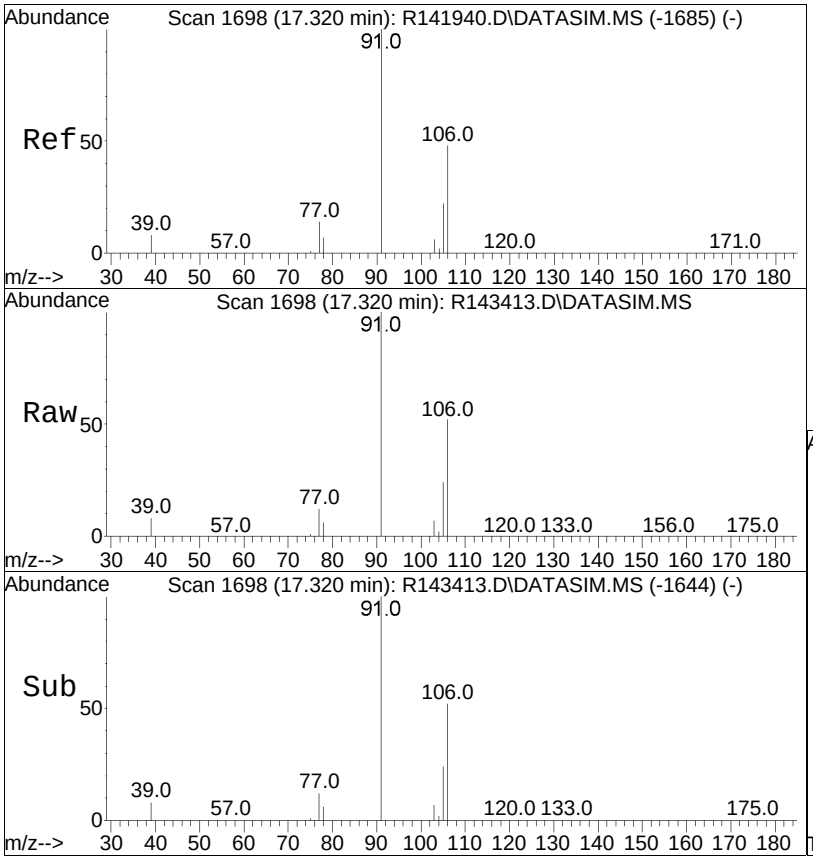


#60
ethylbenzene
Concen: 4.80 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 91 Resp: 244542

Ion	Ratio	Lower	Upper
91	100		
106	32.7	25.8	38.8

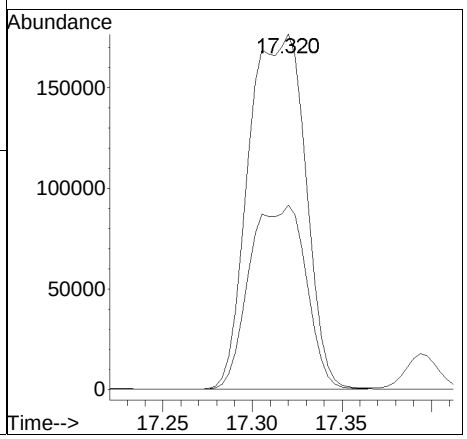


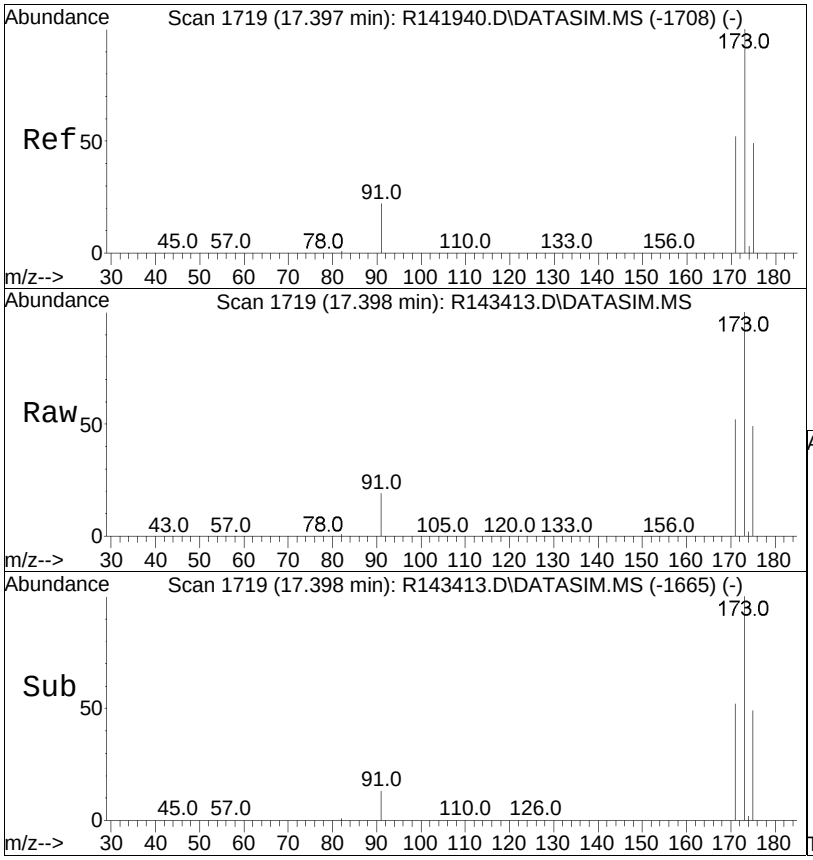


#61
m+p-xylene
Concen: 9.86 ppbV
RT: 17.320 min Scan# 1698
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 91 Resp: 387931

Ion	Ratio	Lower	Upper
91	100		
106	51.9	40.6	61.0

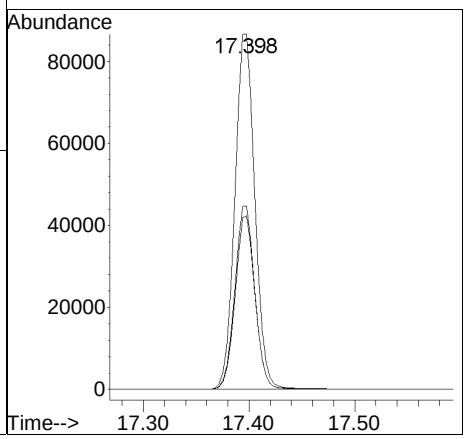


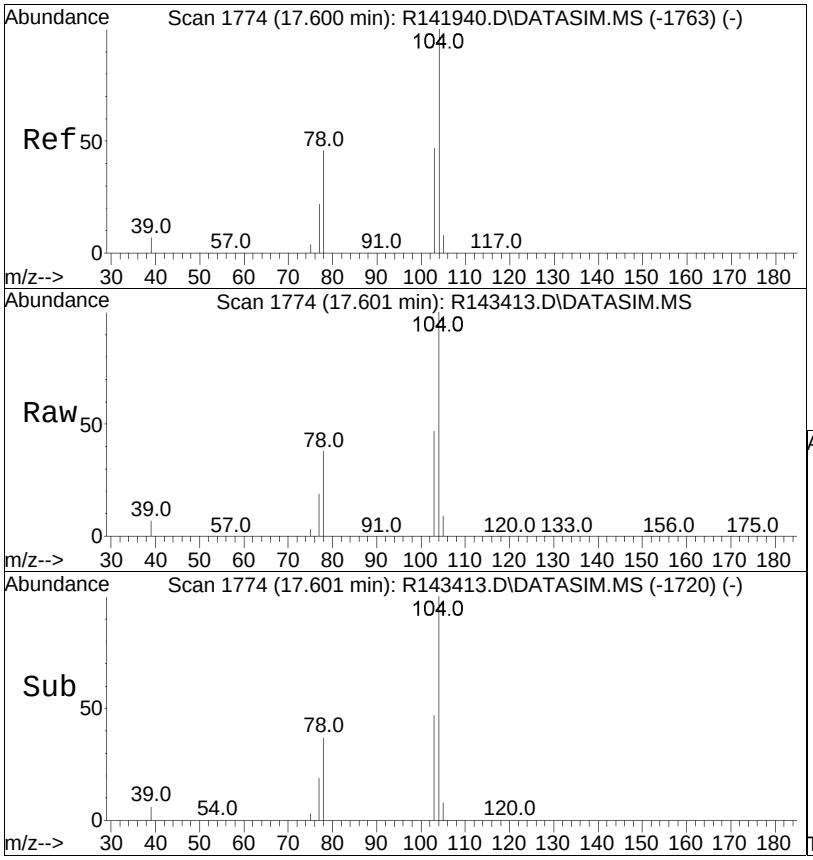


#62
bromoform
Concen: 5.11 ppbV
RT: 17.398 min Scan# 1719
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:173 Resp: 113814

Ion	Ratio	Lower	Upper
173	100		
175	48.9	39.0	58.6
171	51.7	41.2	61.8

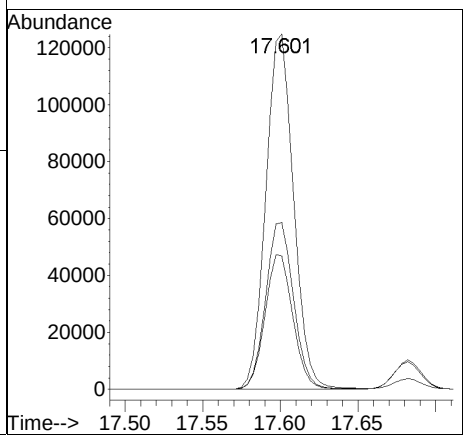


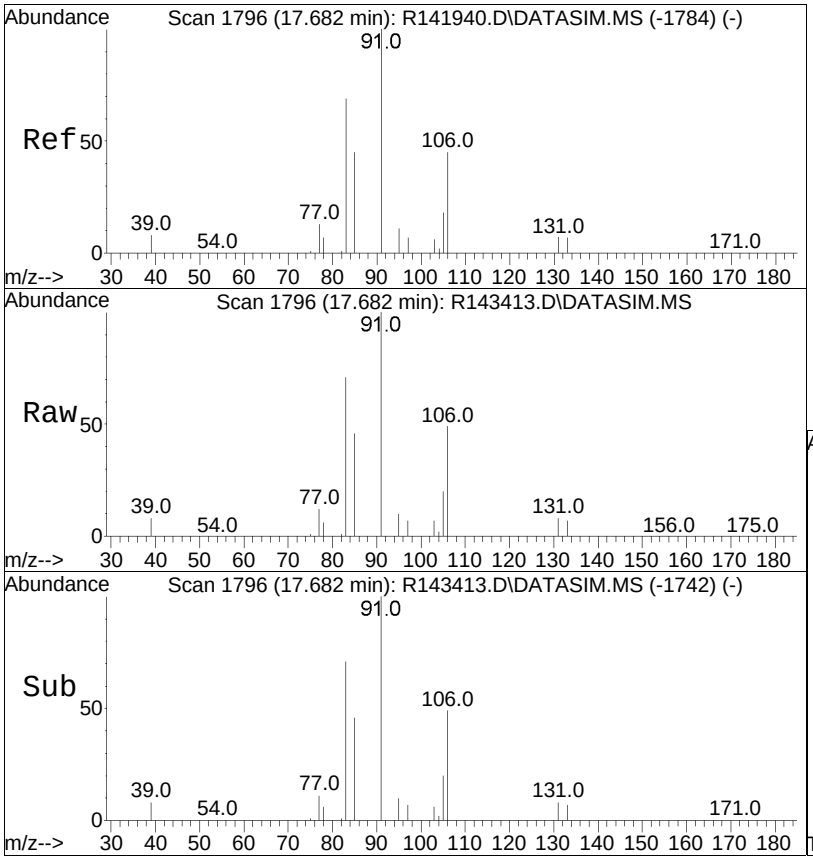


#63
styrene
Concen: 5.09 ppbV
RT: 17.601 min Scan# 1774
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:104 Resp: 155601

Ion	Ratio	Lower	Upper
104	100		
103	47.0	37.7	56.5
78	37.5	31.0	46.6

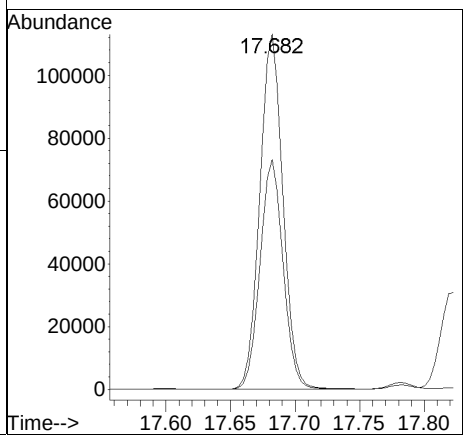


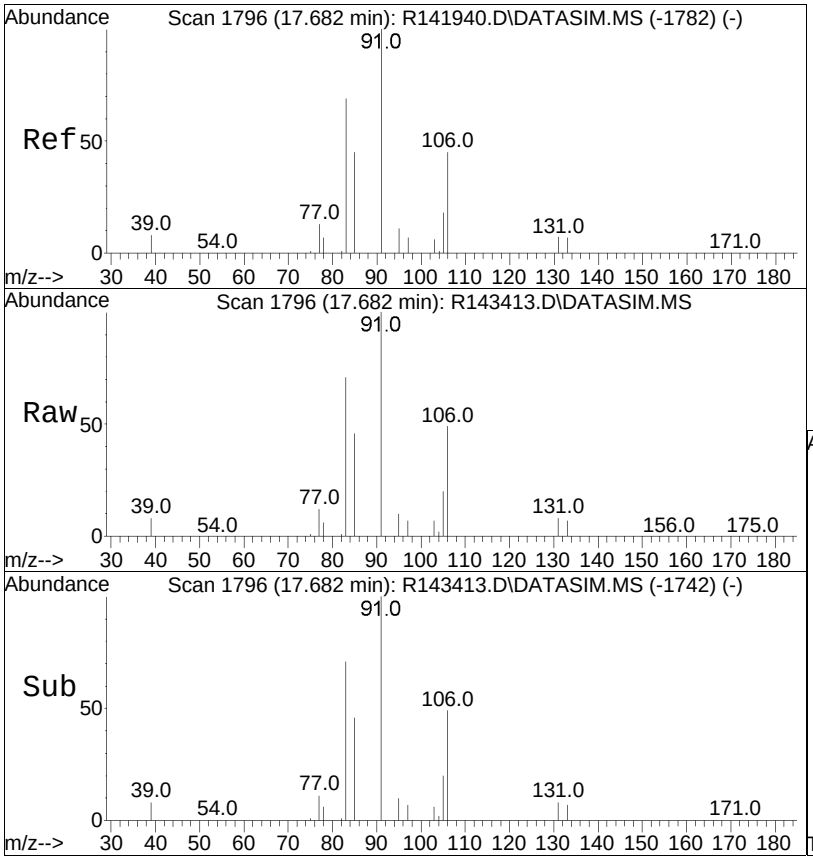


#64
1,1,2,2-tetrachloroethane
Concen: 5.04 ppbV
RT: 17.682 min Scan# 1796
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 83 Resp: 140748

Ion	Ratio	Lower	Upper
83	100		
85	64.7	51.6	77.4

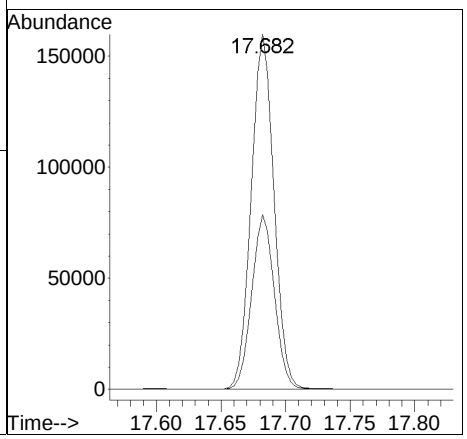


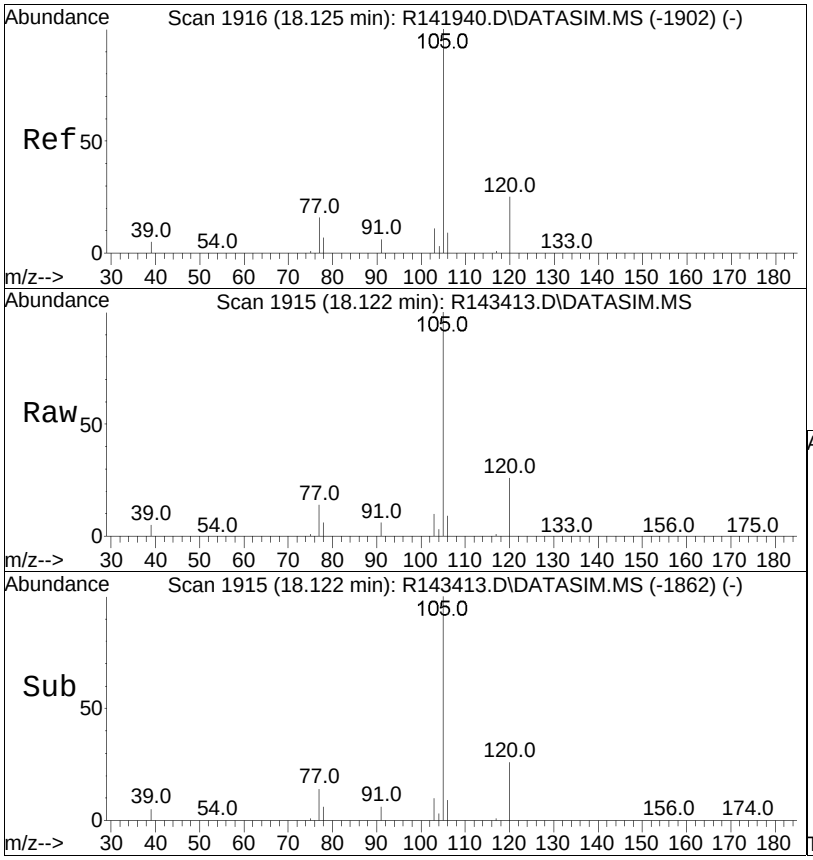


#65
o-xylene
Concen: 4.81 ppbV
RT: 17.682 min Scan# 1796
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 91 Resp: 195633

Ion	Ratio	Lower	Upper
91	100		
106	49.2	38.5	57.7

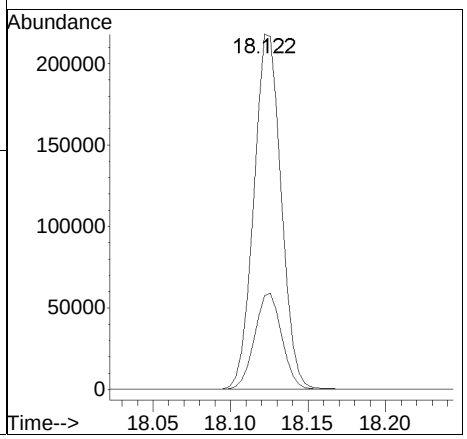


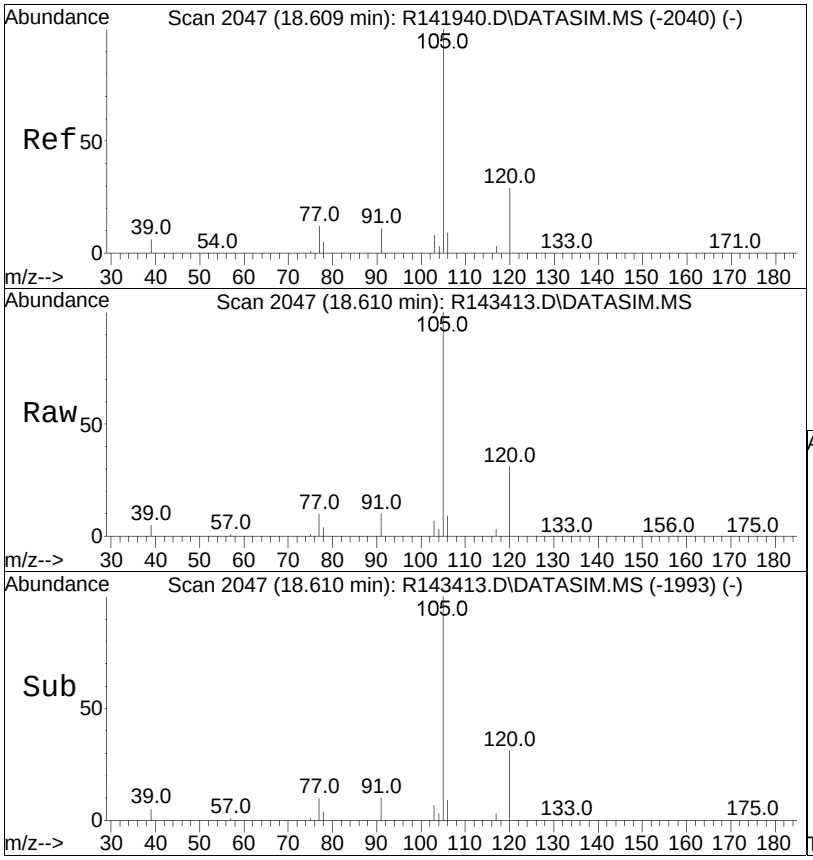


#68
isopropylbenzene
Concen: 4.81 ppbV
RT: 18.122 min Scan# 1915
Delta R.T. -0.004 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:105 Resp: 267214

Ion	Ratio	Lower	Upper
105	100		
120	26.4	21.5	32.3

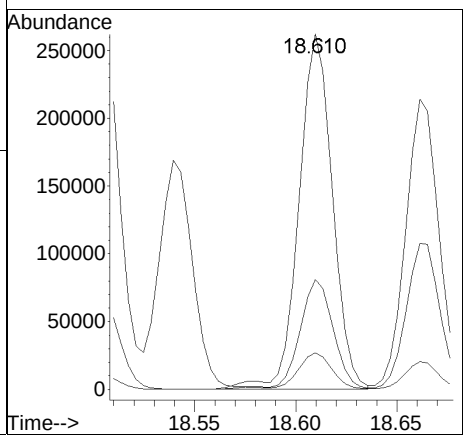


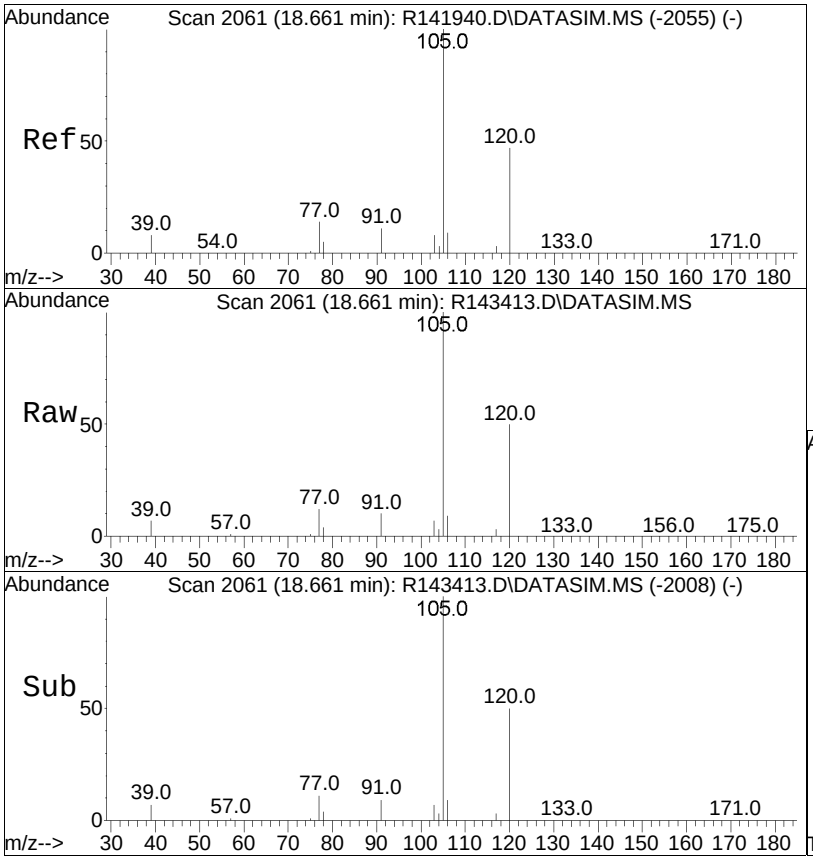


#70
4-ethyl toluene
Concen: 4.90 ppbV
RT: 18.610 min Scan# 2047
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:105 Resp: 301335

Ion	Ratio	Lower	Upper
105	100		
120	31.0	24.4	36.6
91	10.3	8.3	12.5

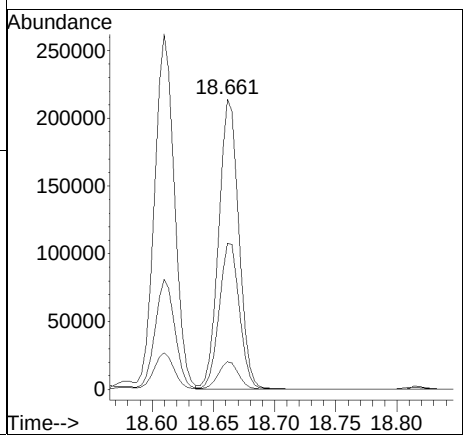


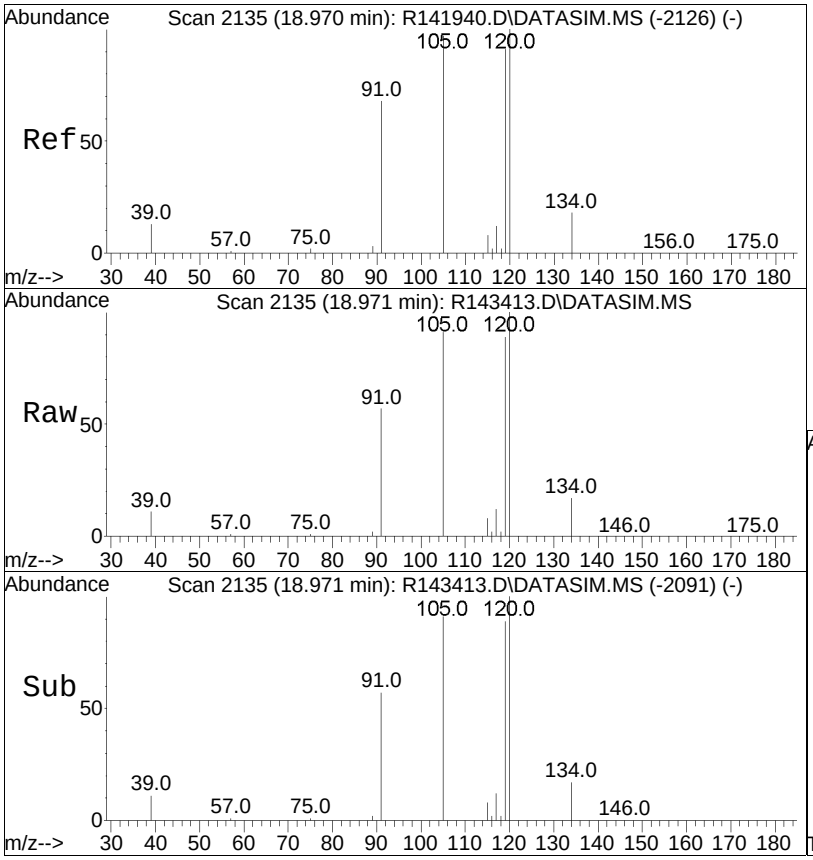


#71
1,3,5-trimethylbenzene
Concen: 5.01 ppbV
RT: 18.661 min Scan# 2061
Delta R.T. -0.004 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:105 Resp: 244715

Ion	Ratio	Lower	Upper
105	100		
120	50.3	40.9	61.3
91	9.6	7.8	11.6

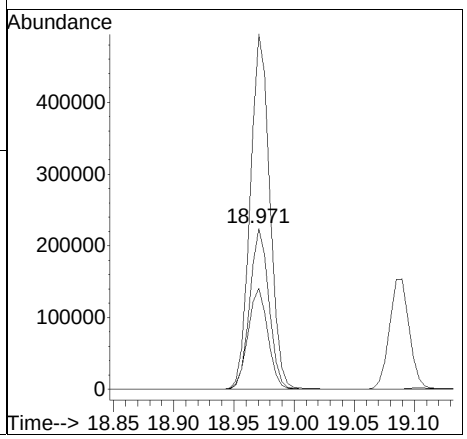


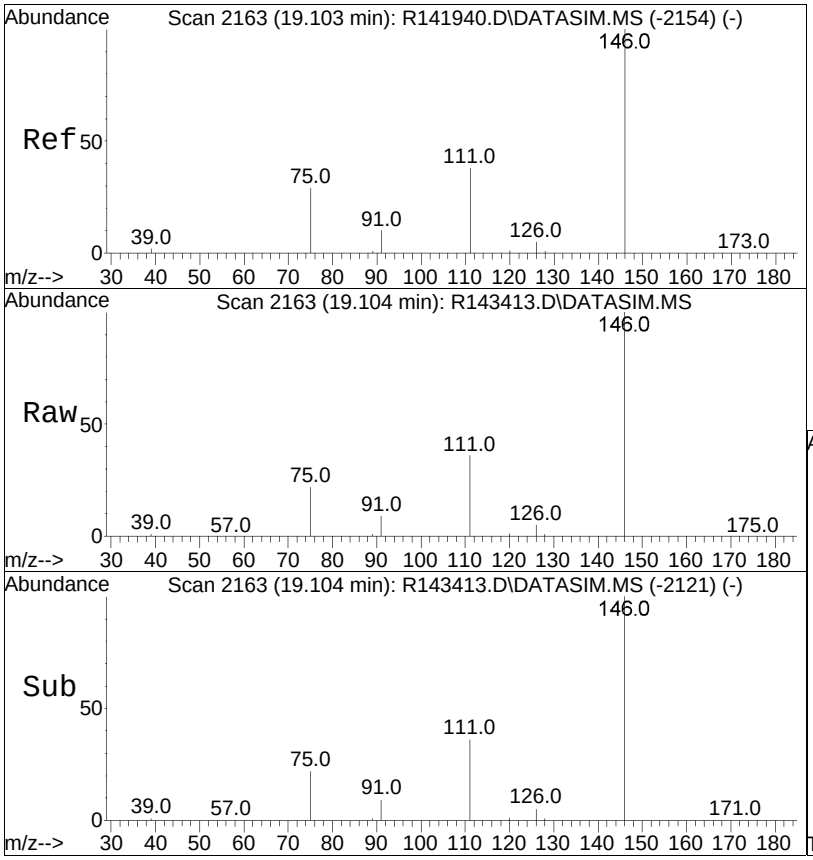


#73
1,2,4-trimethylbenzene
Concen: 5.17 ppbV
RT: 18.971 min Scan# 2135
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:105 Resp: 248717

Ion	Ratio	Lower	Upper
105	100		
120	220.7	174.7	262.1
91	62.7	55.2	82.8

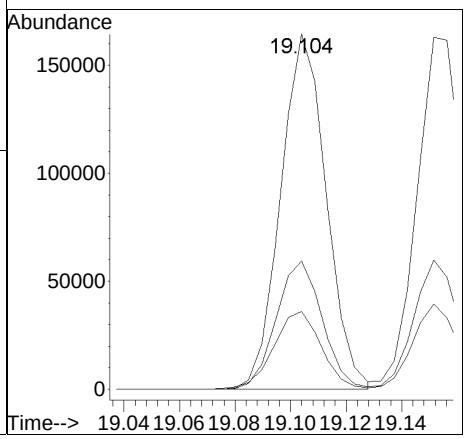


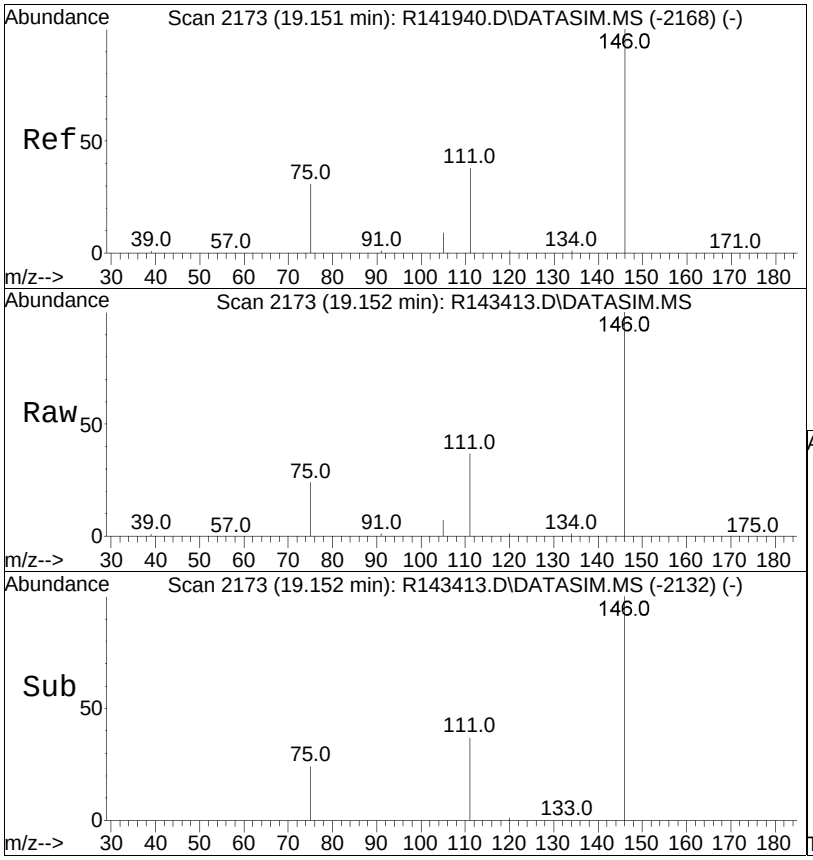


#75
1,3-dichlorobenzene
Concen: 5.15 ppbV
RT: 19.104 min Scan# 2163
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:146 Resp: 187355

Ion	Ratio	Lower	Upper
146	100		
111	36.1	29.9	44.9
75	22.0	18.8	28.2

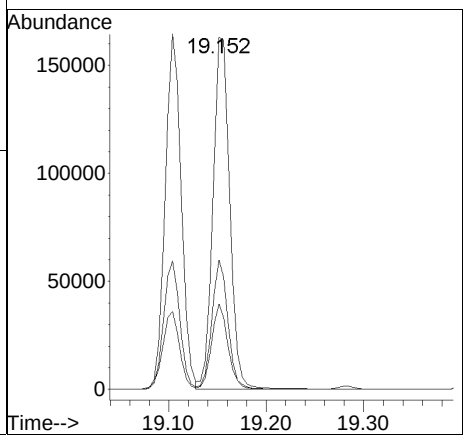


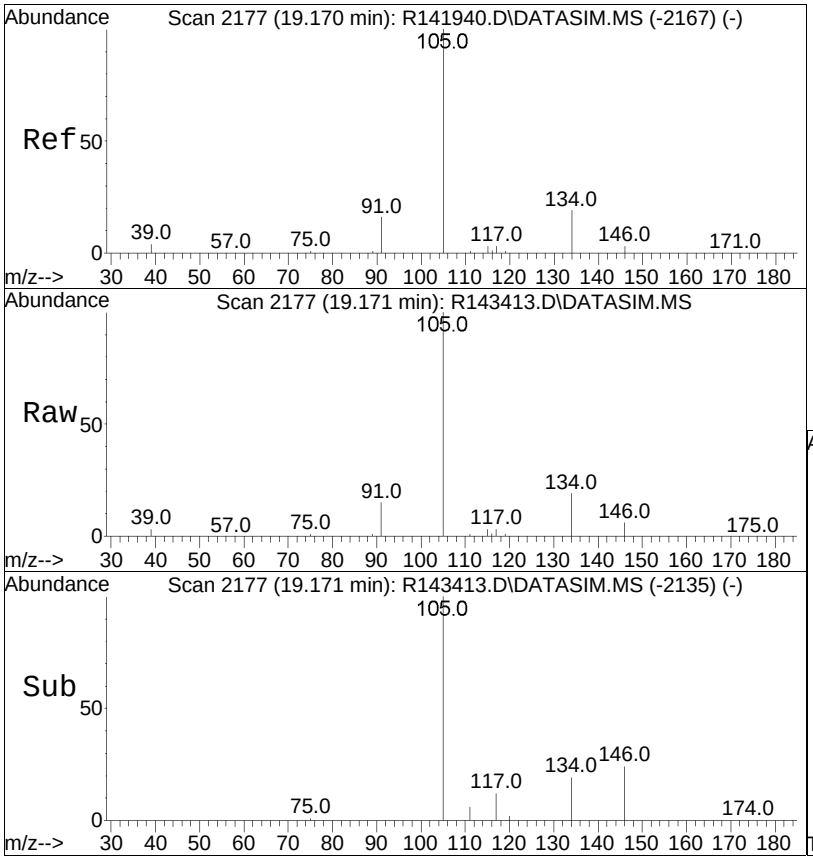


#76
1,4-dichlorobenzene
Concen: 5.21 ppbV
RT: 19.152 min Scan# 2173
Delta R.T. -0.005 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:146 Resp: 194700

Ion	Ratio	Lower	Upper
146	100		
111	36.7	26.8	40.2
75	24.2	17.5	26.3

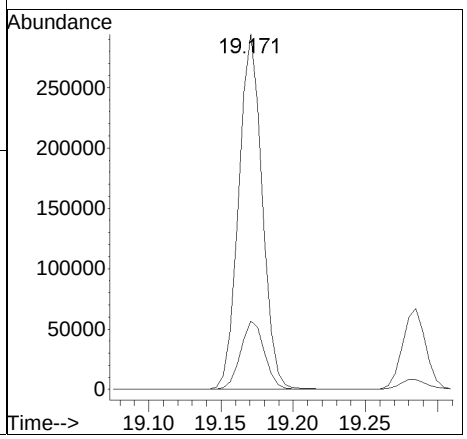


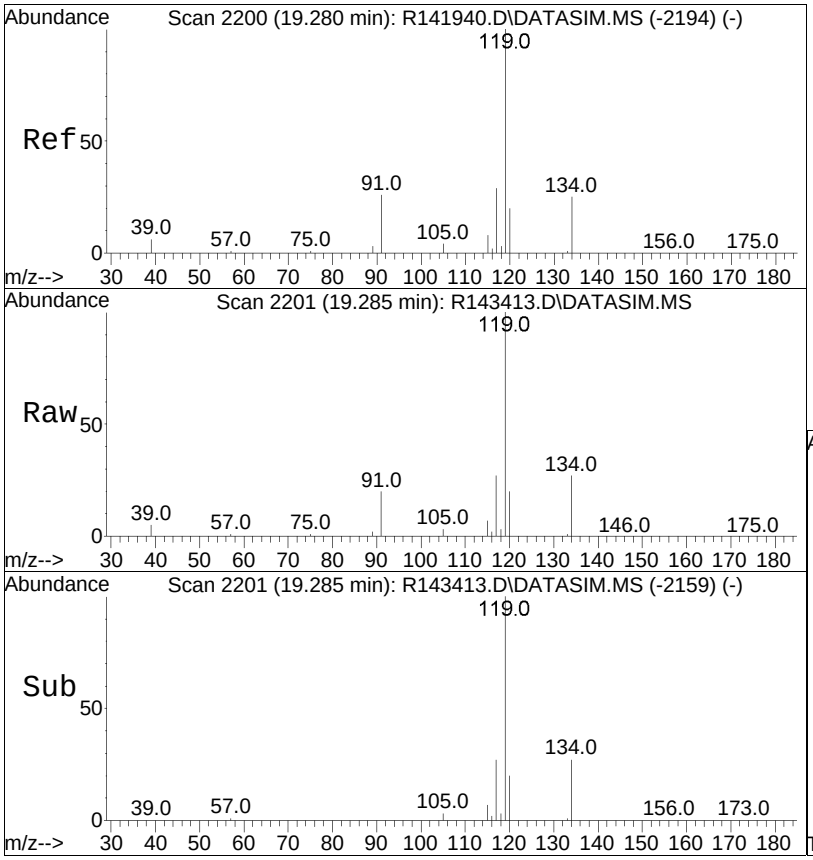


#77
sec-butylbenzene
Concen: 4.81 ppbV
RT: 19.171 min Scan# 2177
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:105 Resp: 332825

Ion	Ratio	Lower	Upper
105	100		
134	19.2	14.8	22.2

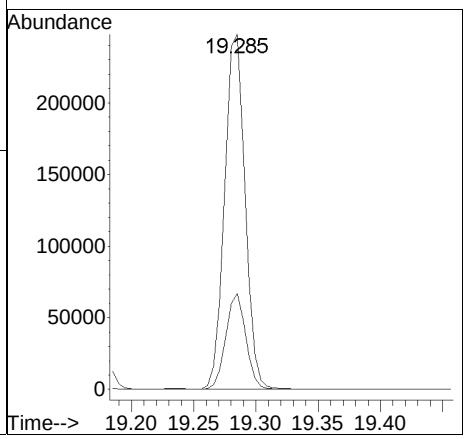


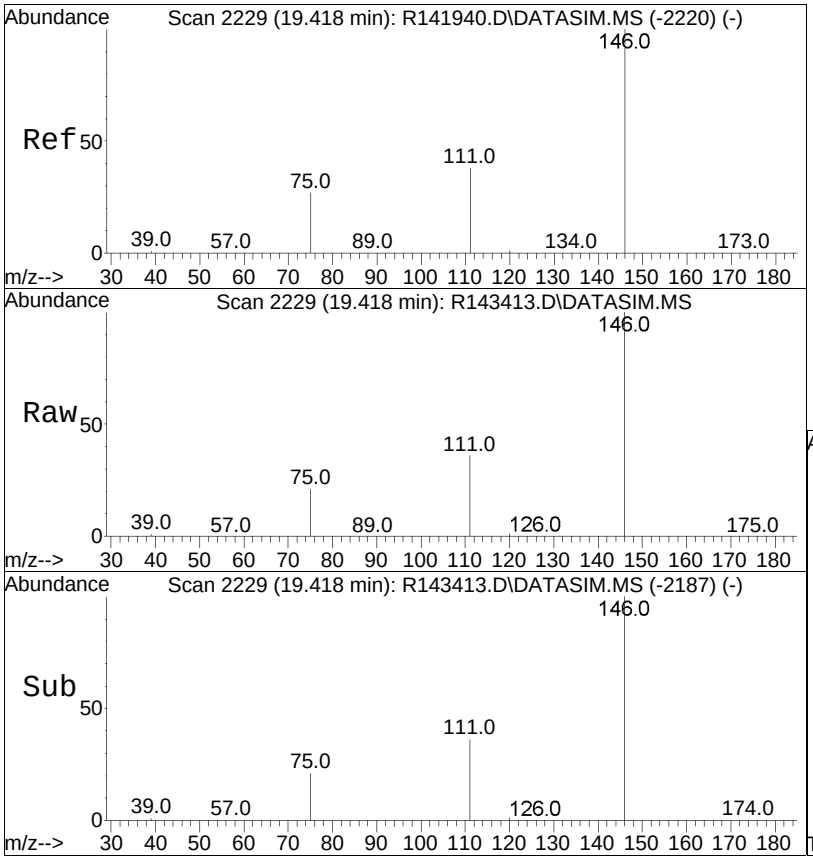


#78
p-isopropyltoluene
Concen: 4.48 ppbV
RT: 19.285 min Scan# 2201
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:119 Resp: 284053

Ion	Ratio	Lower	Upper
119	100		
134	27.0	21.0	31.6

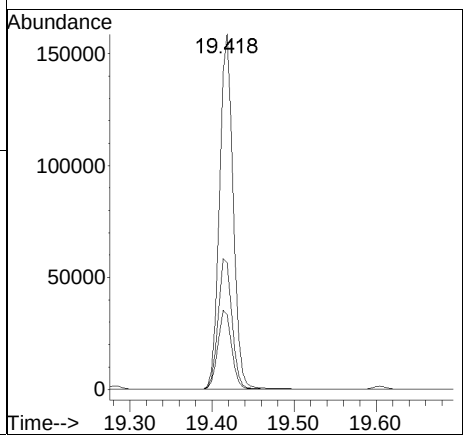


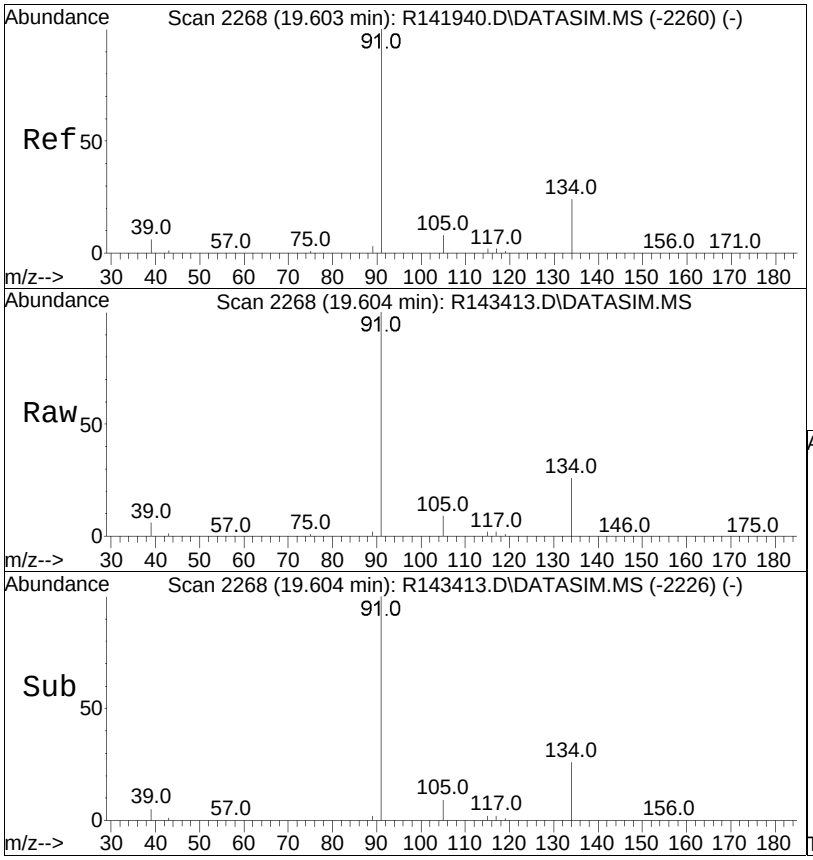


#79
1,2-dichlorobenzene
Concen: 5.22 ppbV
RT: 19.418 min Scan# 2229
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:146 Resp: 183362

Ion	Ratio	Lower	Upper
146	100		
111	35.7	30.1	45.1
75	21.1	18.2	27.4

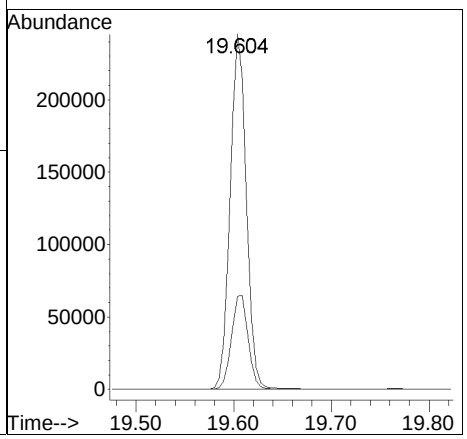


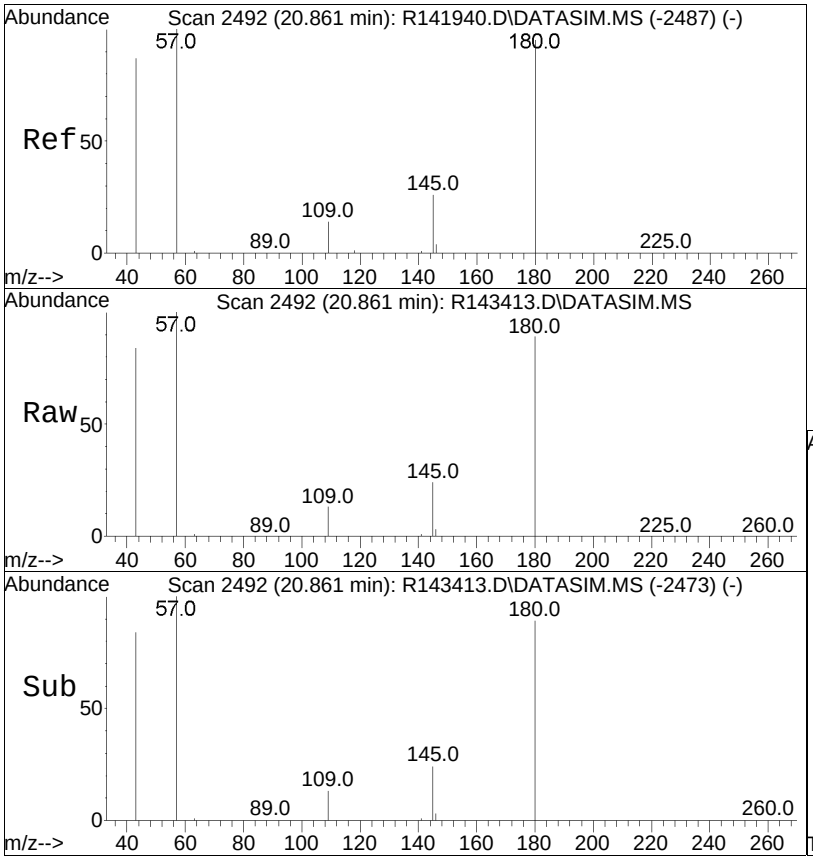


#80
n-butylbenzene
Concen: 5.32 ppbV
RT: 19.604 min Scan# 2268
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion: 91 Resp: 281971

Ion	Ratio	Lower	Upper
91	100		
134	26.2	20.5	30.7

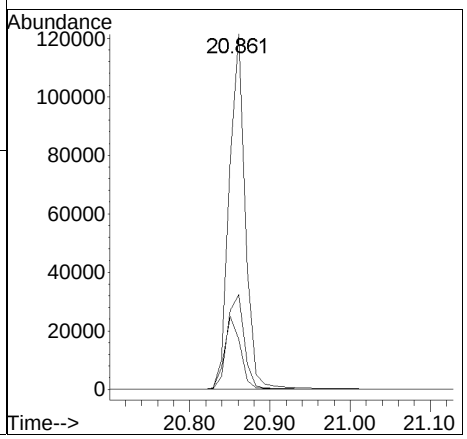


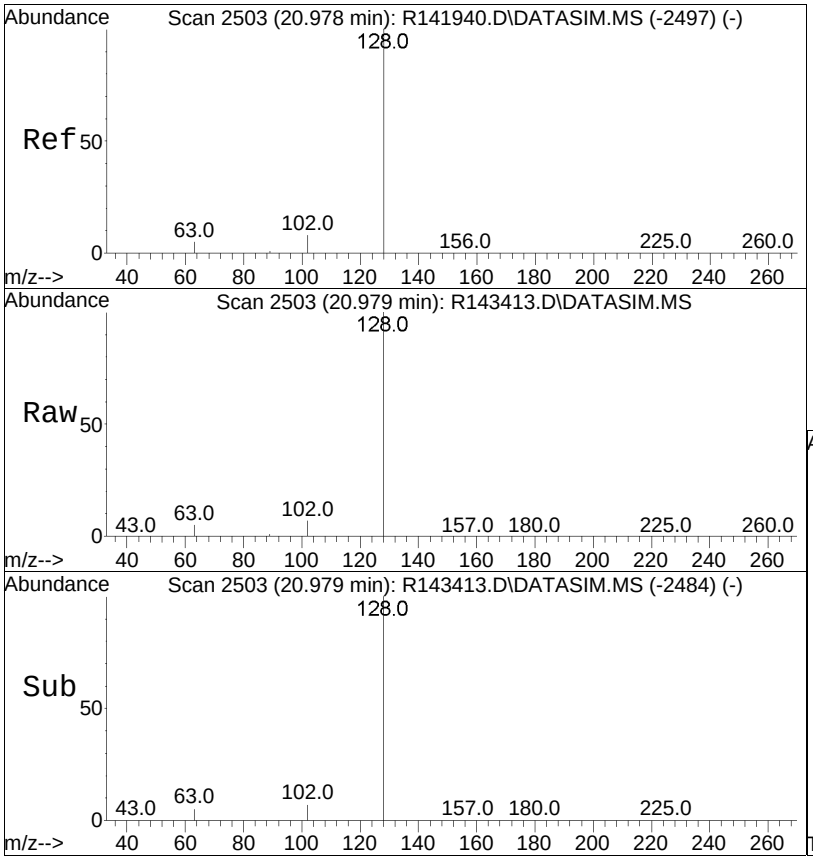


#81
1,2,4-trichlorobenzene
Concen: 6.19 ppbV
RT: 20.861 min Scan# 2492
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:180 Resp: 168762

Ion	Ratio	Lower	Upper
180	100		
145	26.6	22.1	33.1
109	14.1	12.3	18.5

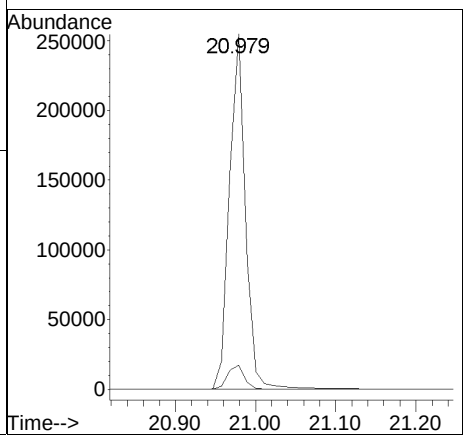


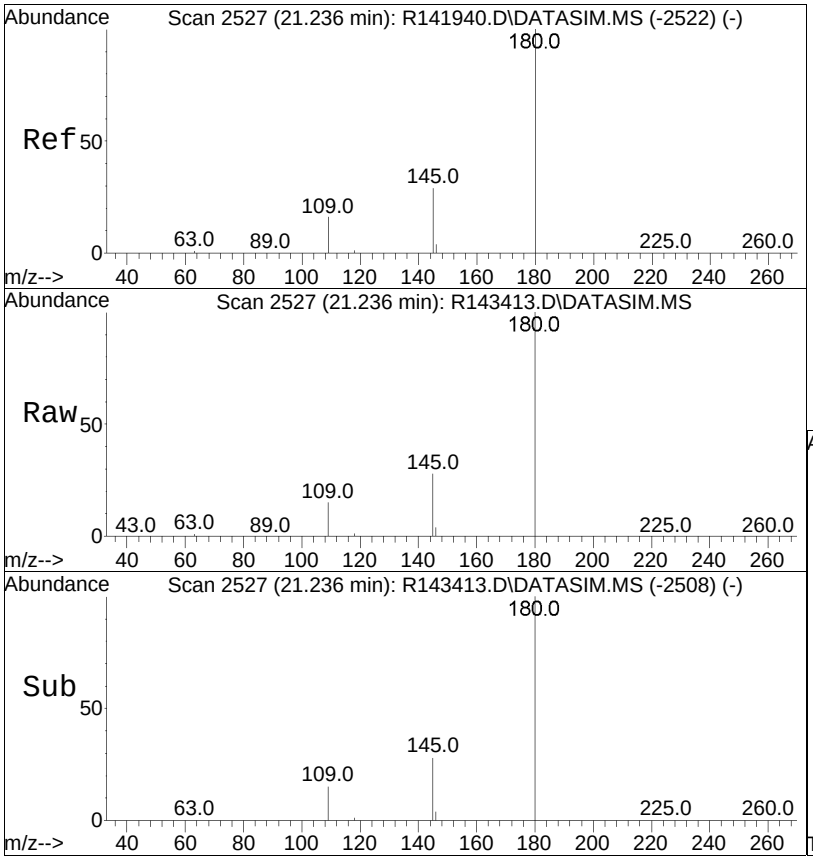


#82
naphthalene
Concen: 5.88 ppbV
RT: 20.979 min Scan# 2503
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:128 Resp: 356418

Ion	Ratio	Lower	Upper
128	100		
102	6.8	5.7	8.5

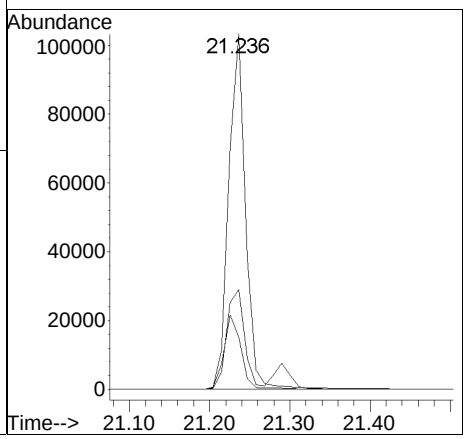


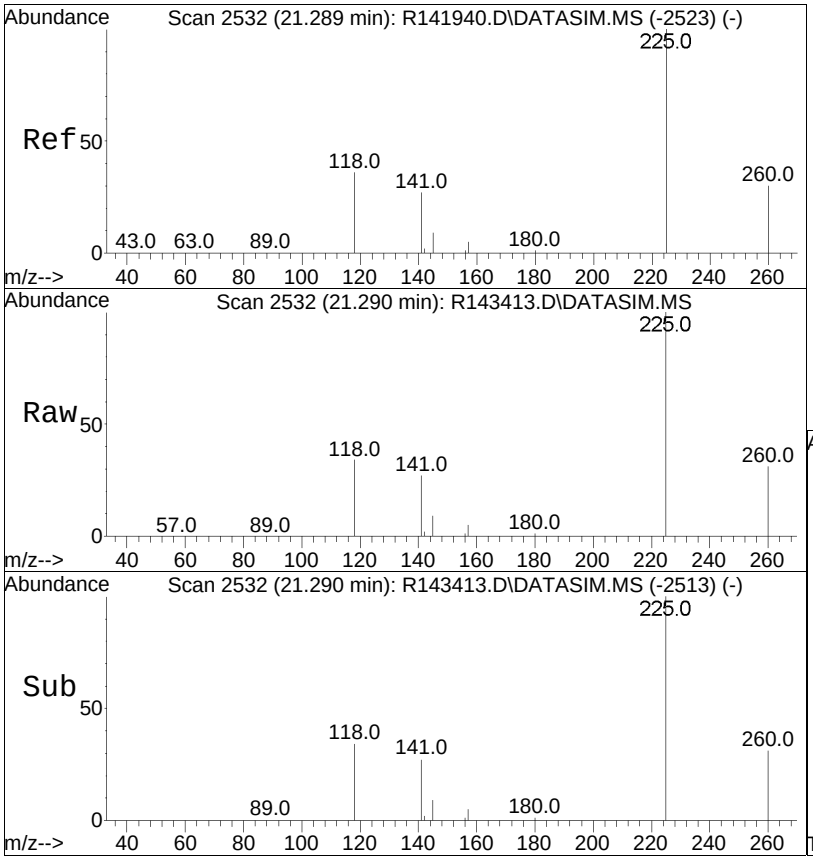


#83
1,2,3-trichlorobenzene
Concen: 6.03 ppbV
RT: 21.236 min Scan# 2527
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:180 Resp: 151392

Ion	Ratio	Lower	Upper
180	100		
145	28.2	23.2	34.8
109	14.7	12.8	19.2

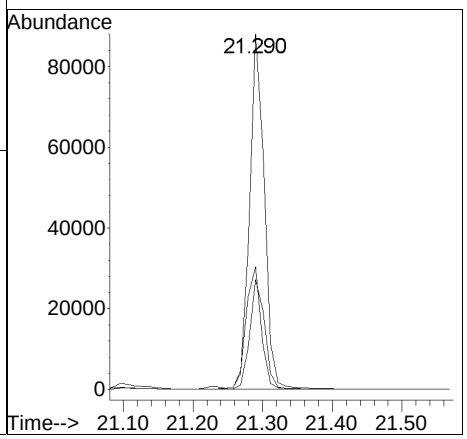




#84
hexachlorobutadiene
Concen: 5.64 ppbV
RT: 21.290 min Scan# 2532
Delta R.T. -0.000 min
Lab File: R143413.D
Acq: 13 Aug 2015 1:43 pm

Tgt Ion:225 Resp: 129660

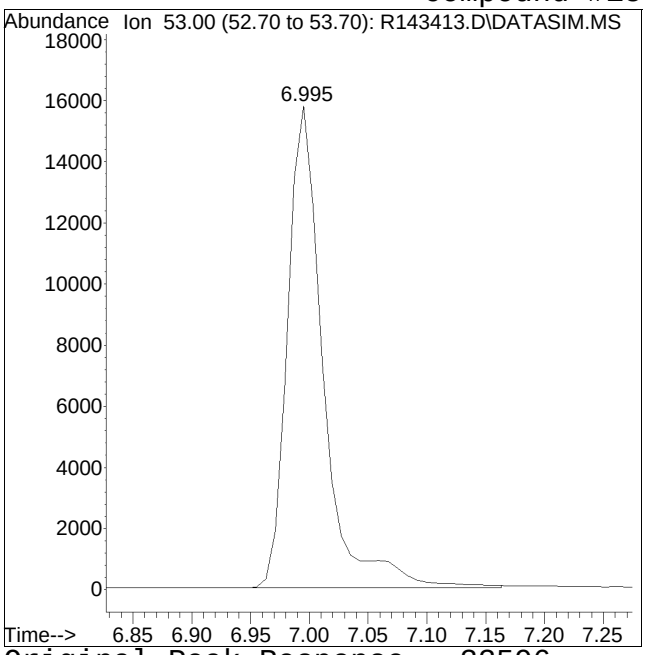
Ion	Ratio	Lower	Upper
225	100		
260	30.9	24.7	37.1
118	34.5	30.7	46.1



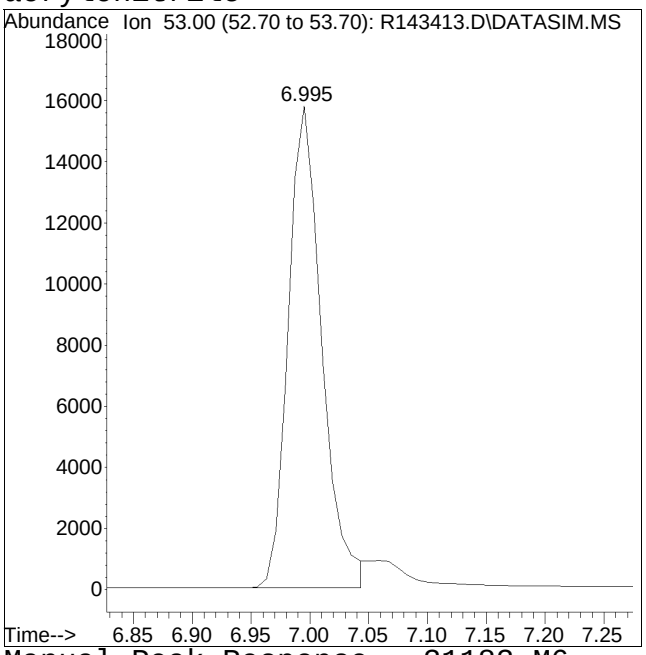
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143413.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:43 pm Instrument : Air Piano 1
Sample : WG811918-3,3,250,250 Quant Date : 8/13/2015 2:04 pm

Compound #15: acrylonitrile



Original Peak Response = 33596



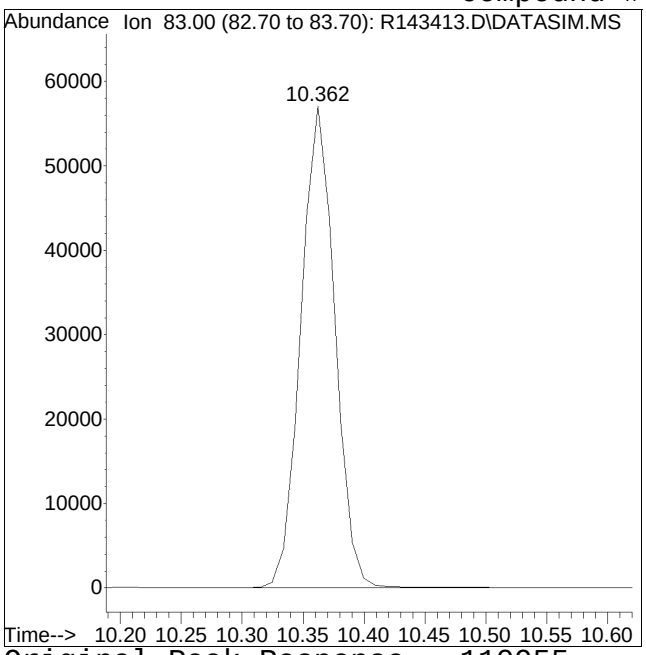
Manual Peak Response = 31183 M6

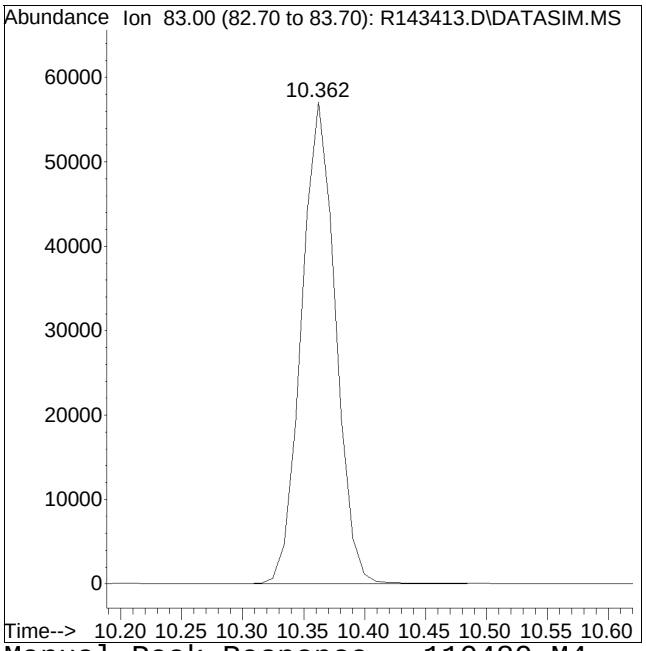
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143413.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:43 pm Instrument : Air Piano 1
Sample : WG811918-3,3,250,250 Quant Date : 8/13/2015 2:04 pm

Compound #30: chloroform





Original Peak Response = 110955 Manual Peak Response = 110480 M4
M4 = Poor automated baseline construction.

Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811918-5,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+Naph - All Compounds reported

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.203	49	125322	10.000	ppbV	0.00
Standard Area = 150943			Recovery =		83.03%	
33) 1,4-difluorobenzene	12.420	114	308361	10.000	ppbV	0.00
Standard Area = 371929			Recovery =		82.91%	
51) chlorobenzene-D5	16.843	54	63343	10.000	ppbV	0.00
Standard Area = 68865			Recovery =		91.98%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) dichlorodifluoromethane	4.164	85	3782M4	0.299	ppbV	
4) chloromethane	4.381		0	N.D.		
5) Freon-114	4.528	85	289	0.015	ppbV #	83
6) vinyl chloride	4.686		0	N.D.		
7) 1,3-butadiene	0.000		0	N.D.		
8) bromomethane	5.261		0	N.D.		
9) chloroethane	5.516	64	56M4	0.016	ppbV	
13) trichlorofluoromethane	6.580	101	4613	0.264	ppbV	100
16) 1,1-dichloroethene	7.355		0	N.D.		
18) methylene chloride	7.595	49	5366	0.566	ppbV	98
21) Freon 113	7.938	101	1084	0.074	ppbV	95
23) trans-1,2-dichloroethene	8.766		0	N.D.		
24) 1,1-dichloroethane	9.013	63	214	0.014	ppbV #	36
25) MTBE	0.000		0	N.D.	d	
28) cis-1,2-dichloroethene	10.008		0	N.D.		
30) chloroform	10.362	83	2630M4	0.142	ppbV	
32) 1,2-dichloroethane	11.210		0	N.D.		
36) 1,1,1-trichloroethane	11.494	97	732	0.044	ppbV #	87
37) benzene	12.016		0	N.D.		
38) carbon tetrachloride	12.182	117	790	0.053	ppbV #	96
41) 1,2-dichloropropane	12.938		0	N.D.		
42) bromodichloromethane	13.166	83	149M6	0.008	ppbV	
44) trichloroethene	13.218	130	3353	0.260	ppbV	100
47) cis-1,3-dichloropropene	14.205		0	N.D.		
49) trans-1,3-dichloropropene	14.798		0	N.D.		
50) 1,1,2-trichloroethane	14.906		0	N.D.		
52) toluene	15.250	91	2594	0.071	ppbV	98
55) dibromochloromethane	15.665		0	N.D.		
56) 1,2-dibromoethane	15.900		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811918-5,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813SIM\R143413.D
Sub List : TO15_SIM+Naph - All Compounds reported

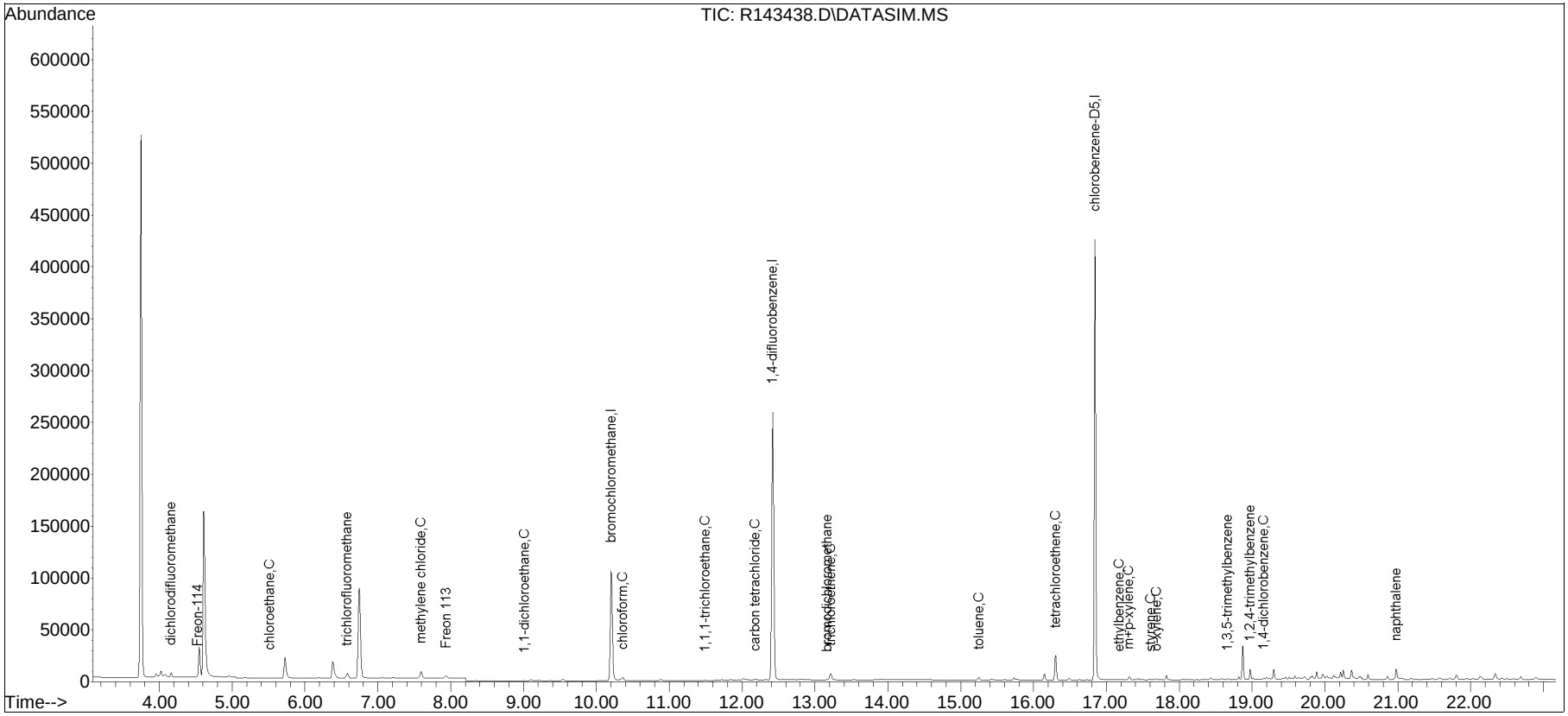
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) tetrachloroethene	16.307	166	12763	0.702	ppbV	100
58) 1,1,1,2-tetrachloroethane	16.877		0	N.D.		
59) chlorobenzene	16.888		0	N.D.		
60) ethylbenzene	17.176	91	427	0.009	ppbV	91
61) m+p-xylene	17.309	91	1217	0.034	ppbV	98
62) bromoform	17.398		0	N.D.		
63) styrene	17.608	104	220	0.008	ppbV #	74
64) 1,1,2,2-tetrachloroethane	17.719		0	N.D.		
65) o-xylene	17.686	91	738	0.020	ppbV	92
70) 4-ethyl toluene	18.613		0	N.D.		
71) 1,3,5-trimethylbenzene	18.665	105	509	0.011	ppbV #	96
73) 1,2,4-trimethylbenzene	18.972	105	3367M4	0.076	ppbV	
75) 1,3-dichlorobenzene	19.110		0	N.D.		
76) 1,4-dichlorobenzene	19.157	146	927M4	0.027	ppbV	
79) 1,2-dichlorobenzene	19.424		0	N.D.		
81) 1,2,4-trichlorobenzene	20.857		0	N.D.		
82) naphthalene	20.975	128	12686M4	0.228	ppbV	
84) hexachlorobutadiene	21.297		0	N.D.		

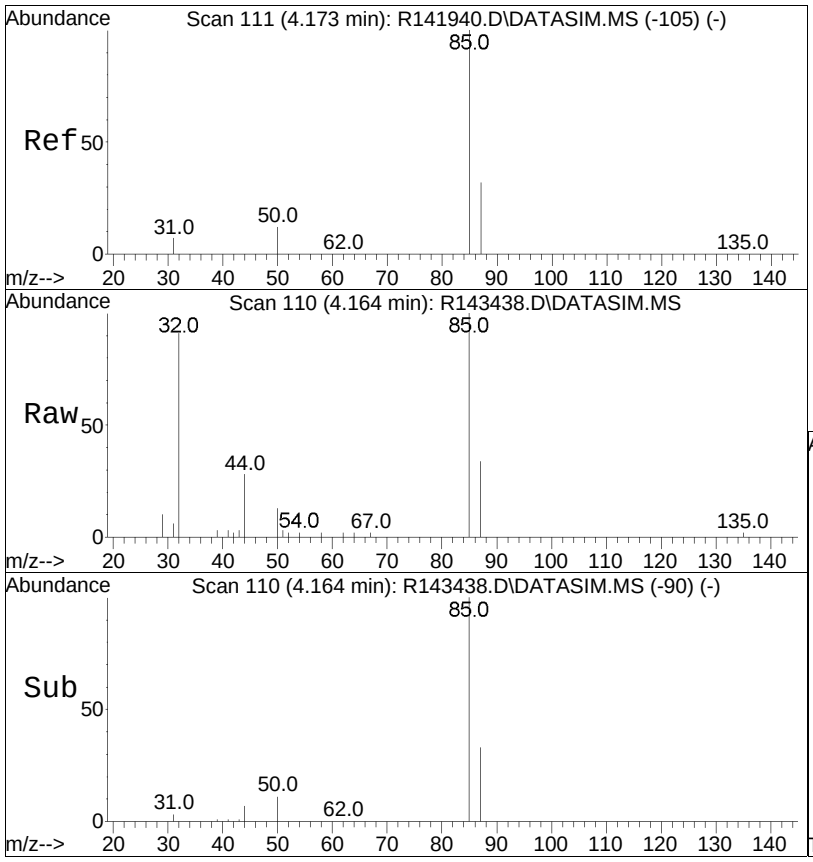
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : TO15_SIM+Naph - All Compounds reportedR143413.D

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811918-5,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 14:28:19 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015
Response via : Initial Calibration

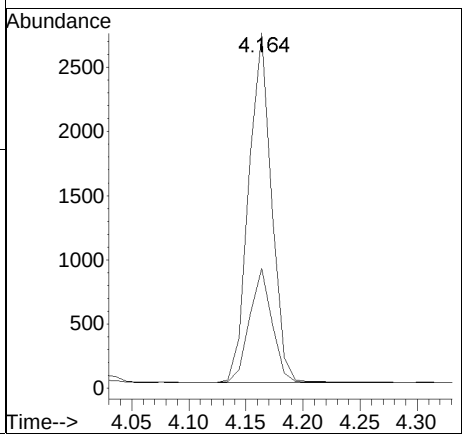


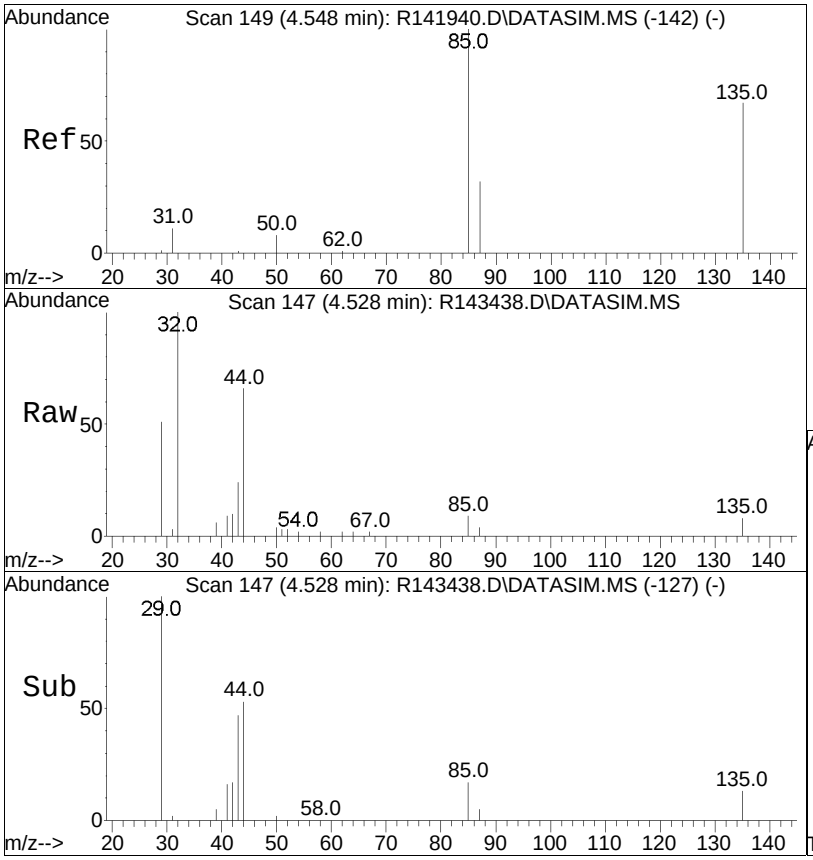


#3
dichlorodifluoromethane
Concen: 0.30 ppbV m
RT: 4.164 min Scan# 110
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 85 Resp: 3782

Ion	Ratio	Lower	Upper
85	100		
87	33.8	26.0	39.0

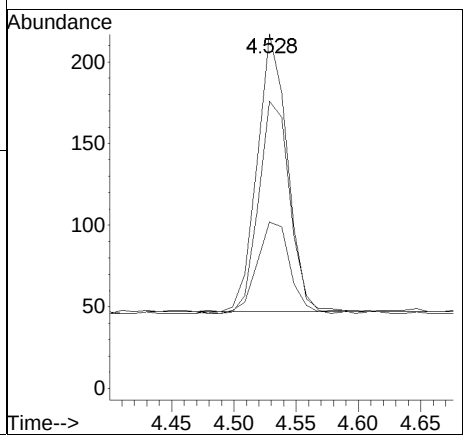


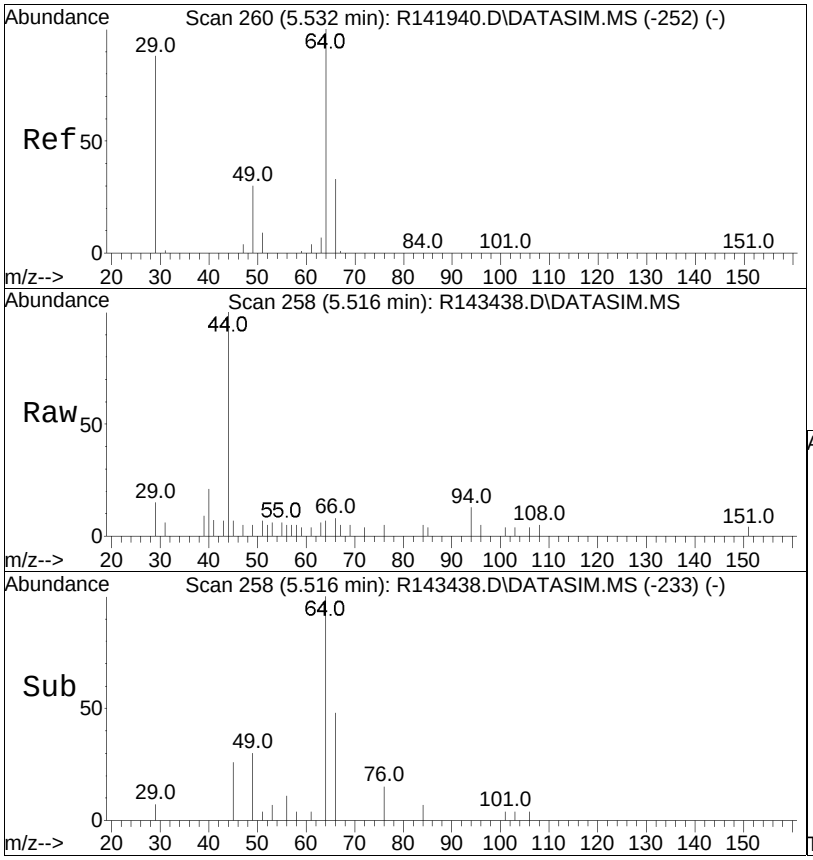


#5
Freon-114
Concen: 0.02 ppbV
RT: 4.528 min Scan# 147
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 85 Resp: 289

Ion	Ratio	Lower	Upper
85	100		
87	47.0	25.4	38.0#
135	81.1	57.0	85.6

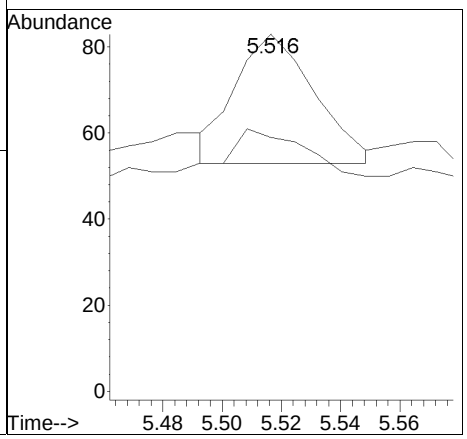


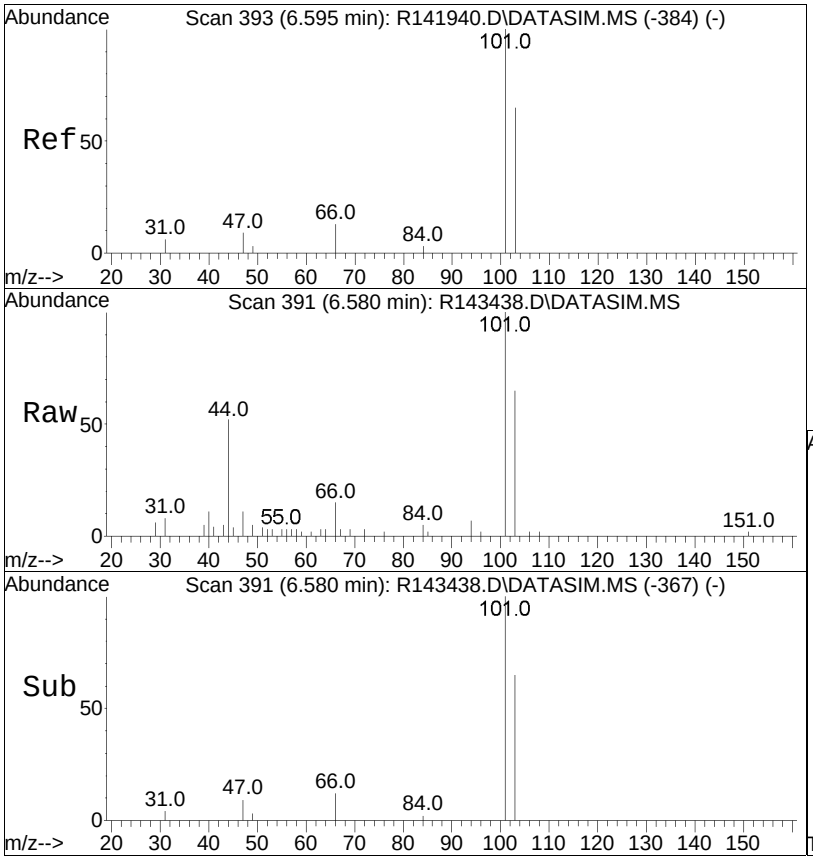


#9
chloroethane
Concen: 0.02 ppbV m
RT: 5.516 min Scan# 258
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 64 Resp: 56

Ion	Ratio	Lower	Upper
64	100		
49	71.1	27.4	41.0#

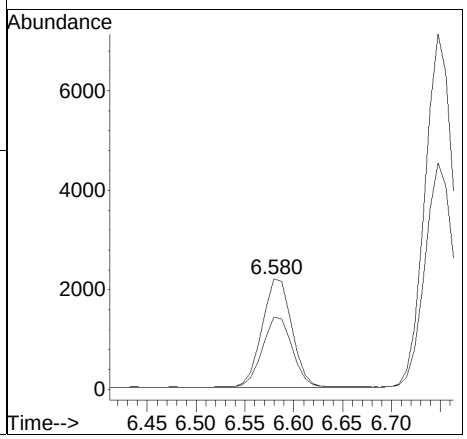


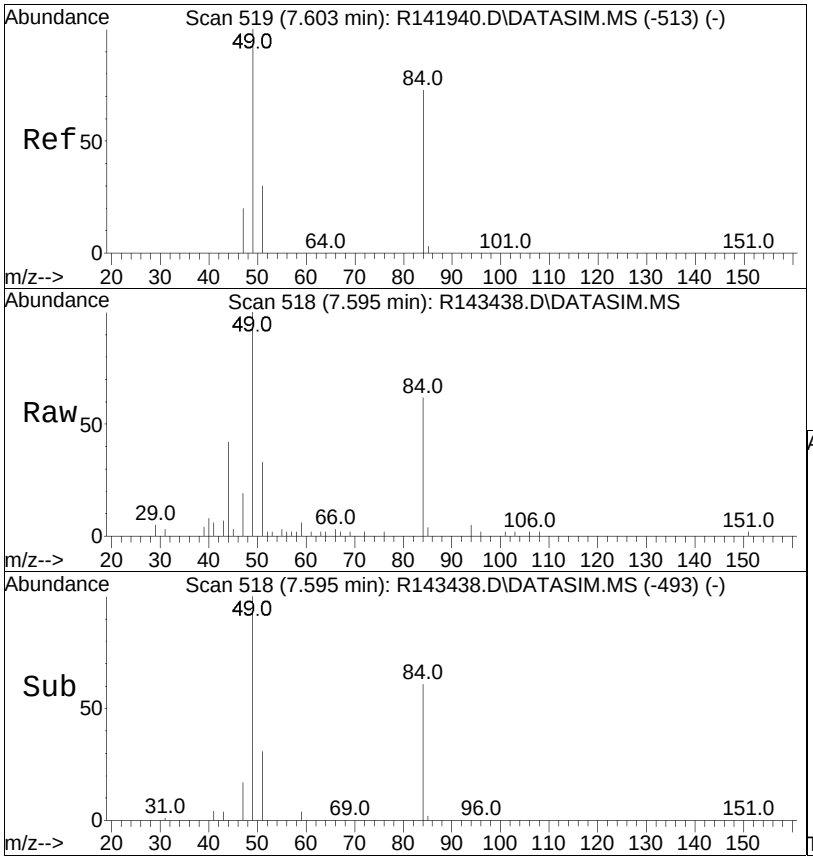


#13
trichlorofluoromethane
Concen: 0.26 ppbV
RT: 6.580 min Scan# 391
Delta R.T. -0.008 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:101 Resp: 4613

Ion	Ratio	Lower	Upper
101	100		
103	65.5	52.2	78.2

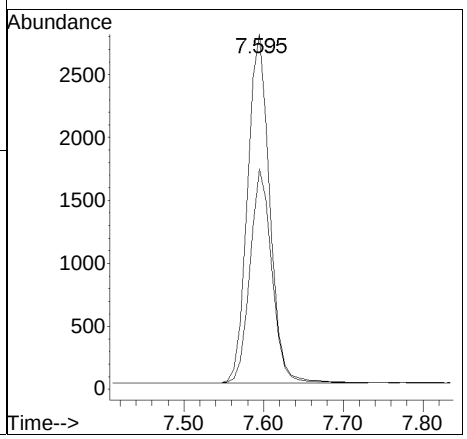


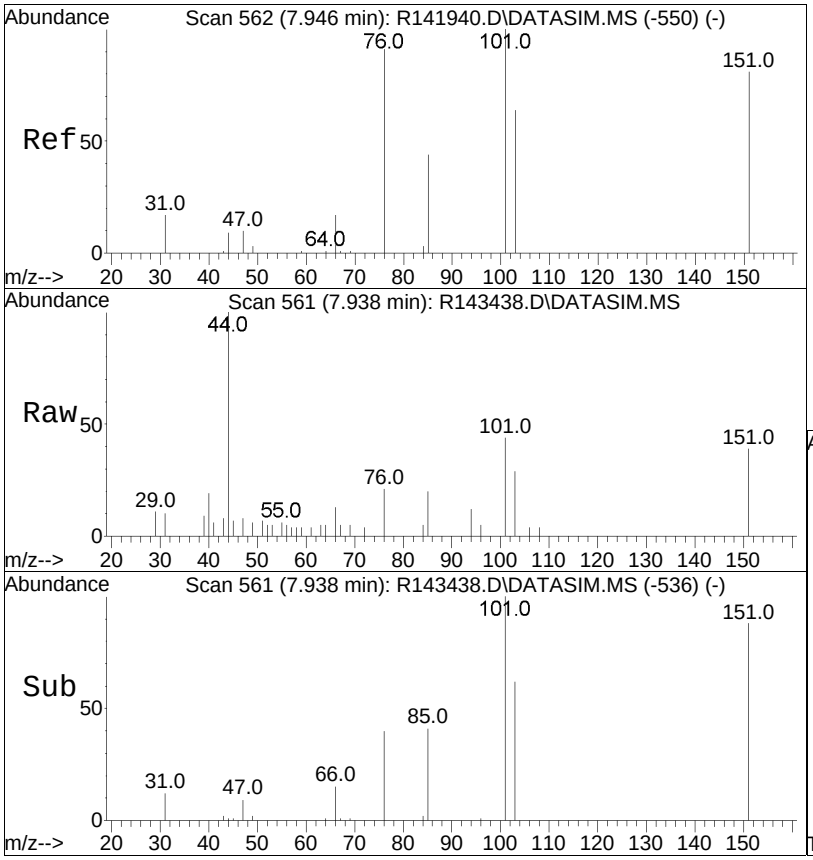


#18
methylene chloride
Concen: 0.57 ppbV
RT: 7.595 min Scan# 518
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 49 Resp: 5366

Ion	Ratio	Lower	Upper
49	100		
84	62.0	50.8	76.2

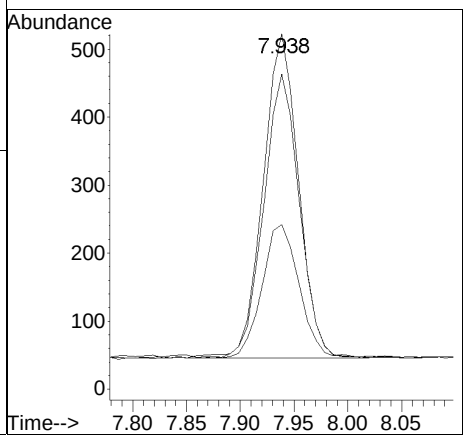


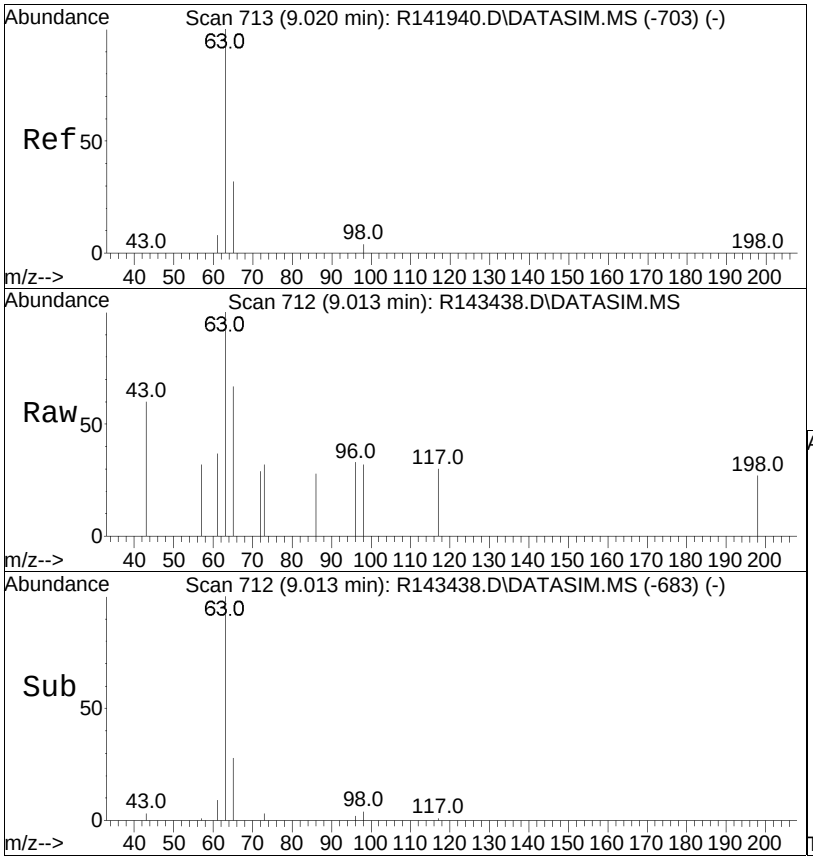


#21
Freon 113
Concen: 0.07 ppbV
RT: 7.938 min Scan# 561
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:101 Resp: 1084

Ion	Ratio	Lower	Upper
101	100		
85	46.4	32.5	48.7
151	88.7	69.1	103.7

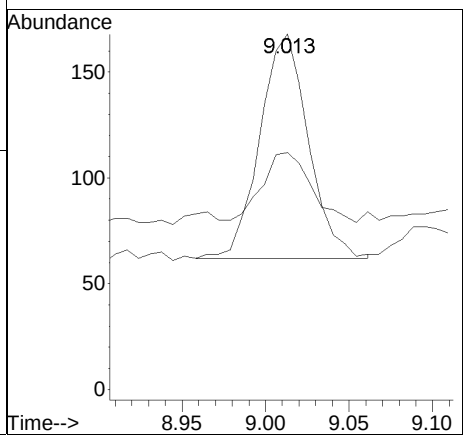


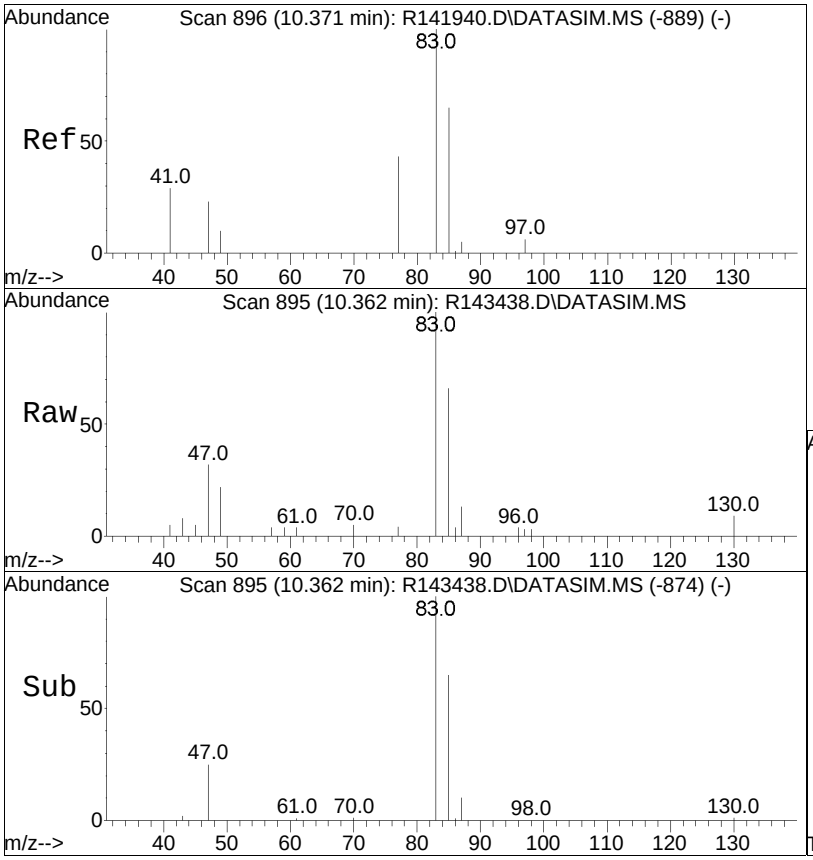


#24
1,1-dichloroethane
Concen: 0.01 ppbV
RT: 9.013 min Scan# 712
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 63 Resp: 214

Ion	Ratio	Lower	Upper
63	100		
65	66.7	25.2	37.8#

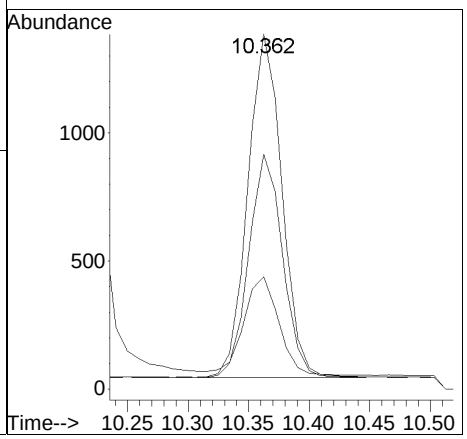


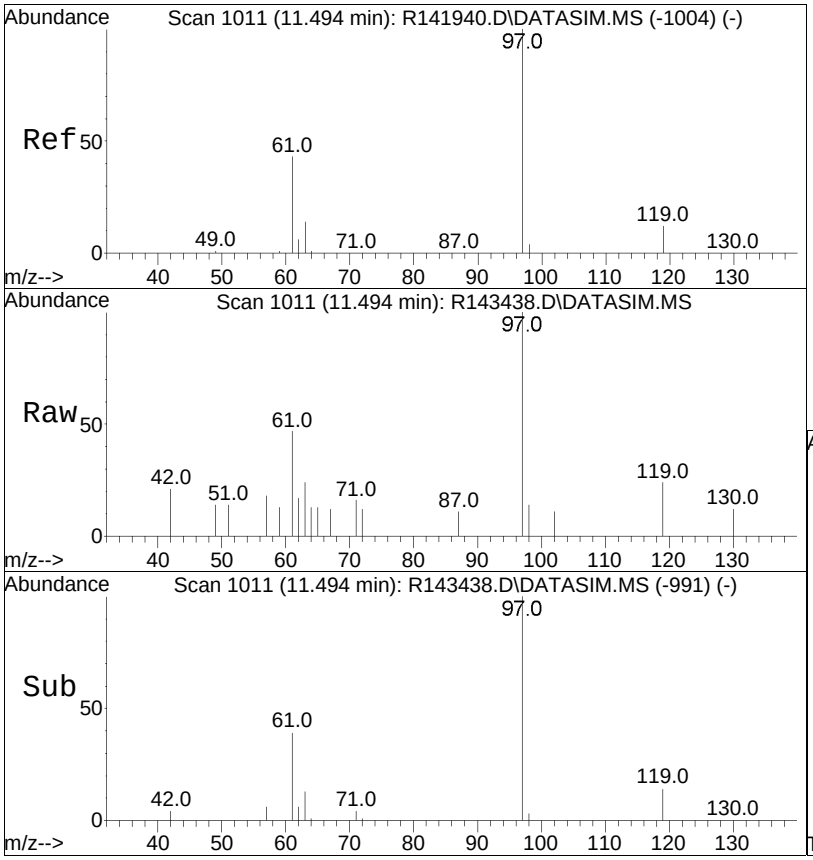


#30
chloroform
Concen: 0.14 ppbV m
RT: 10.362 min Scan# 895
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 83 Resp: 2630

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.6	77.4
47	31.7	22.6	33.8

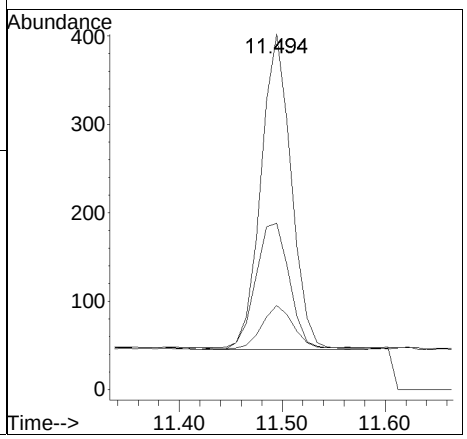


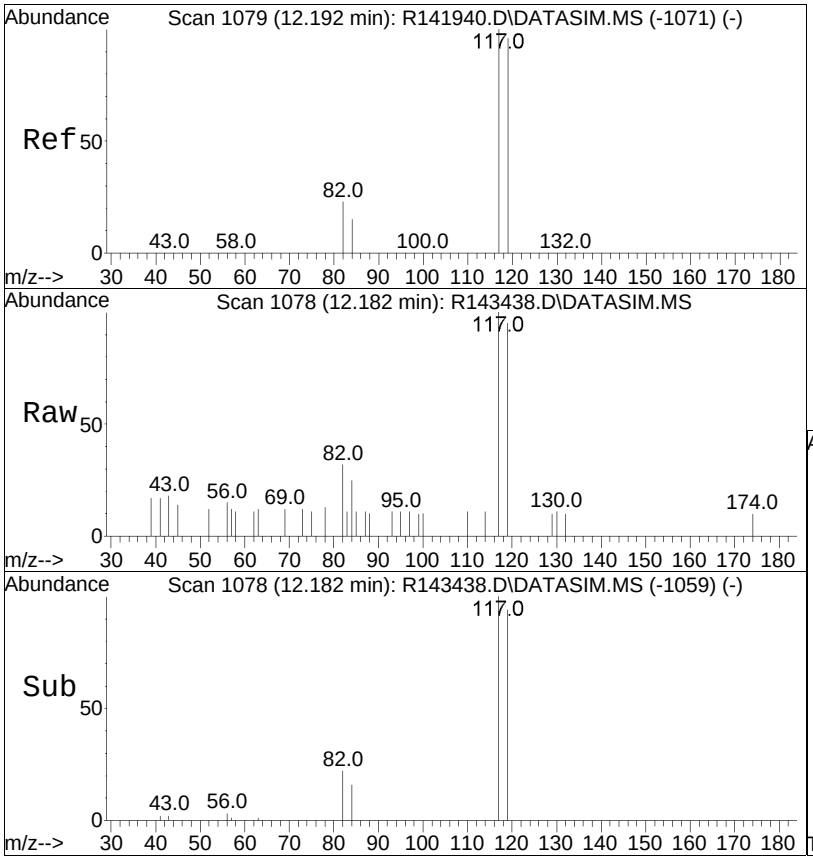


#36
1,1,1-trichloroethane
Concen: 0.04 ppbV
RT: 11.494 min Scan# 1011
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 97 Resp: 732

Ion	Ratio	Lower	Upper
97	100		
61	46.8	32.6	49.0
119	23.6	11.0	16.4#

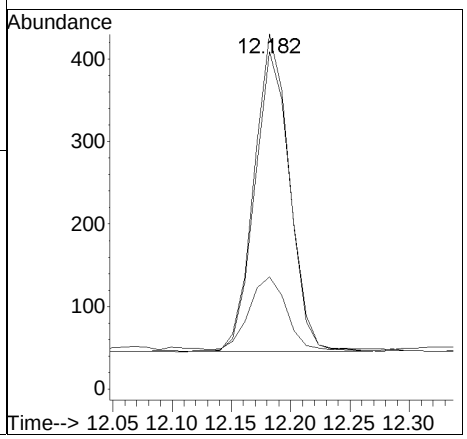


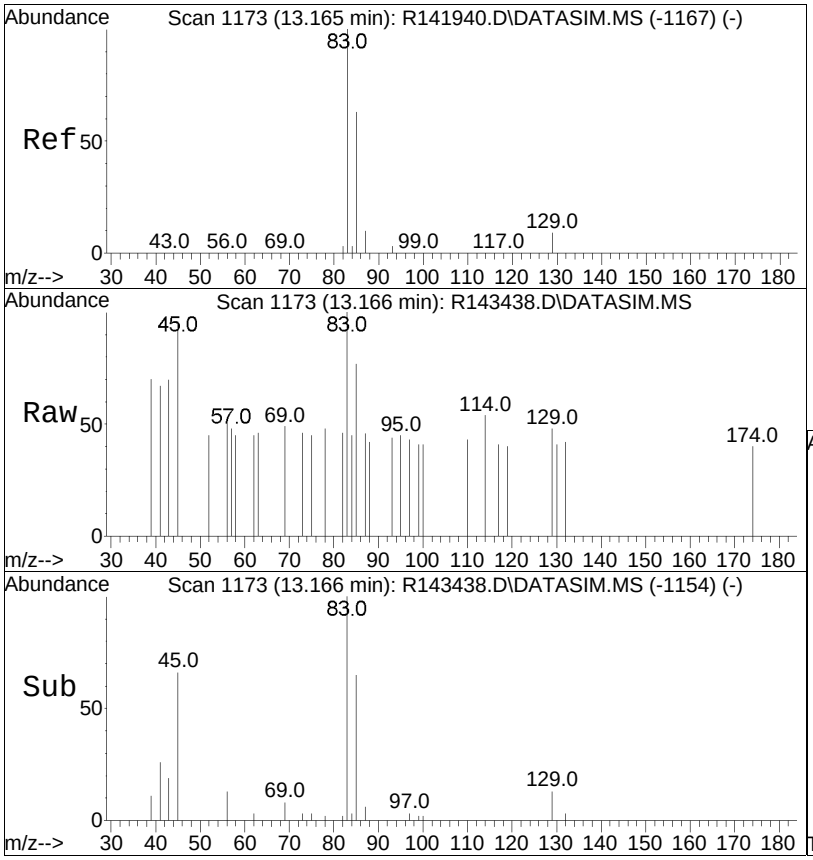


#38
carbon tetrachloride
Concen: 0.05 ppbV
RT: 12.182 min Scan# 1078
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:117 Resp: 790

Ion	Ratio	Lower	Upper
117	100		
119	95.1	76.4	114.6
82	31.6	18.3	27.5#

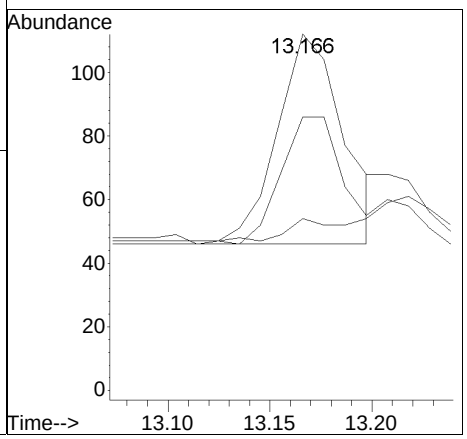


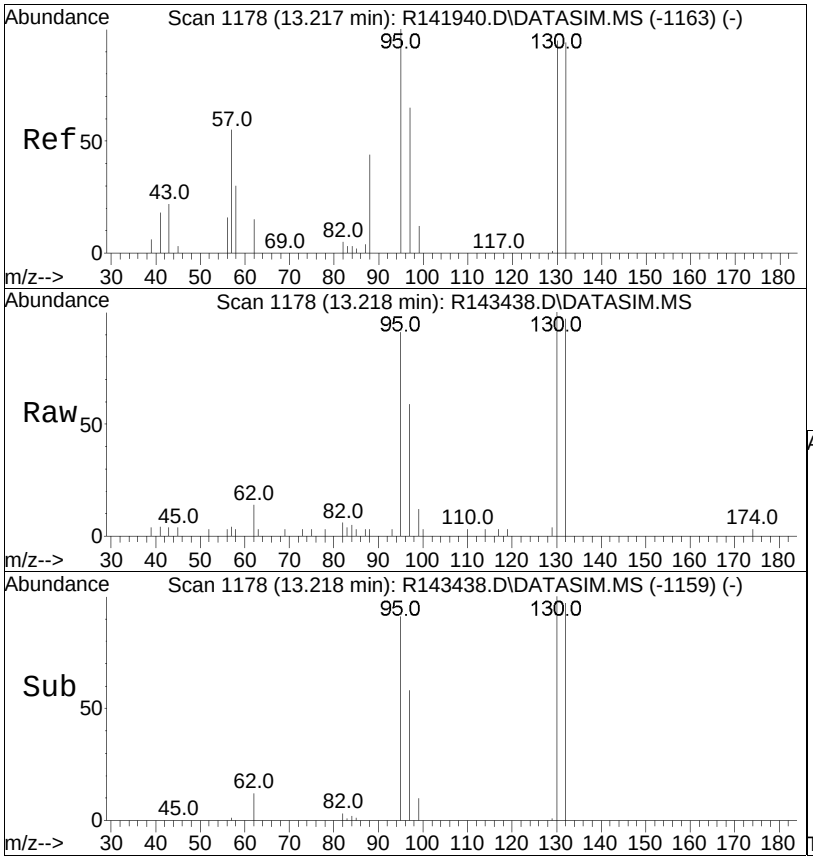


#42
bromodichloromethane
Concen: 0.01 ppbV m
RT: 13.166 min Scan# 1173
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 83 Resp: 149

Ion	Ratio	Lower	Upper
83	100		
85	76.8	50.6	75.8#
129	48.2	8.9	13.3#

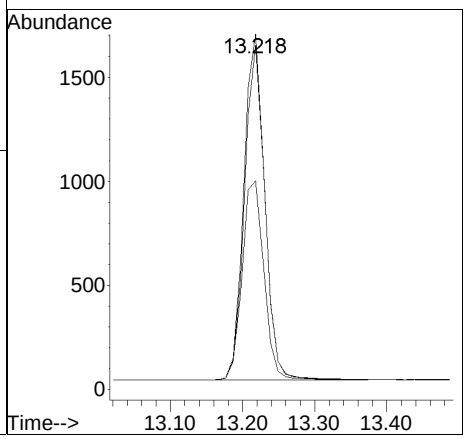


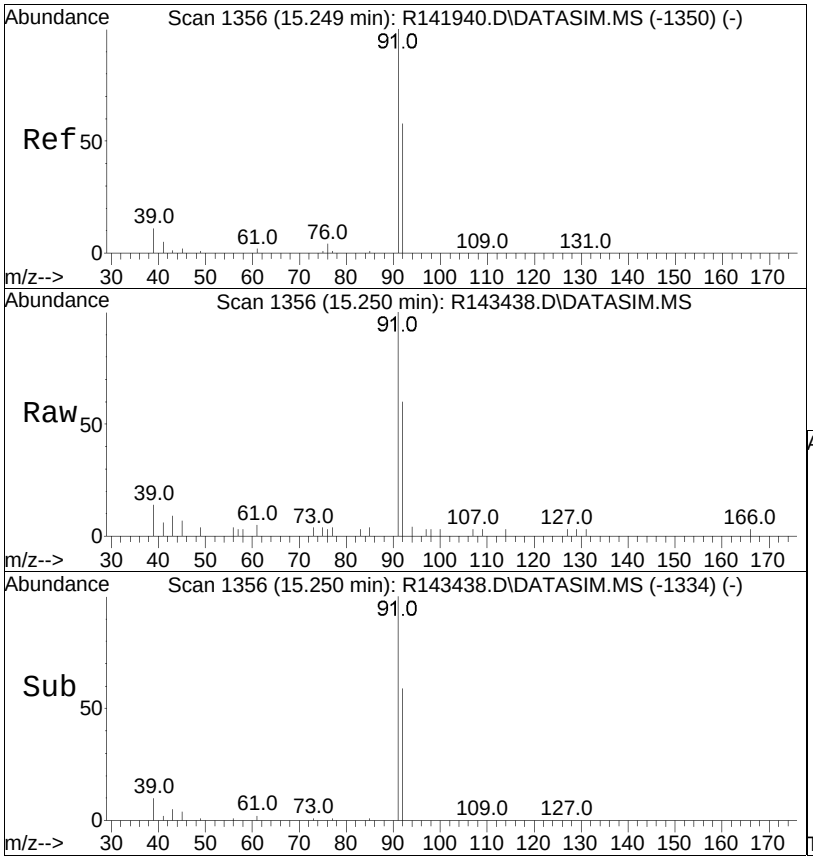


#44
trichloroethene
Concen: 0.26 ppbV
RT: 13.218 min Scan# 1178
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:130 Resp: 3353

Ion	Ratio	Lower	Upper
130	100		
132	96.9	77.5	116.3
97	58.7	47.4	71.2

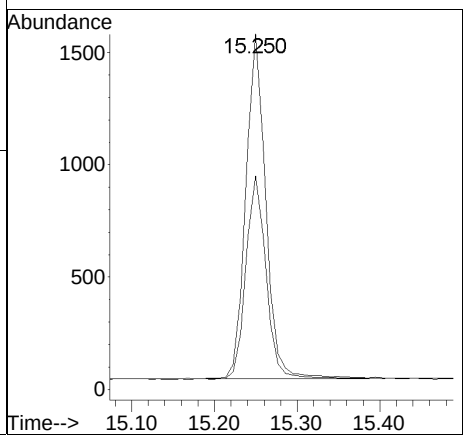


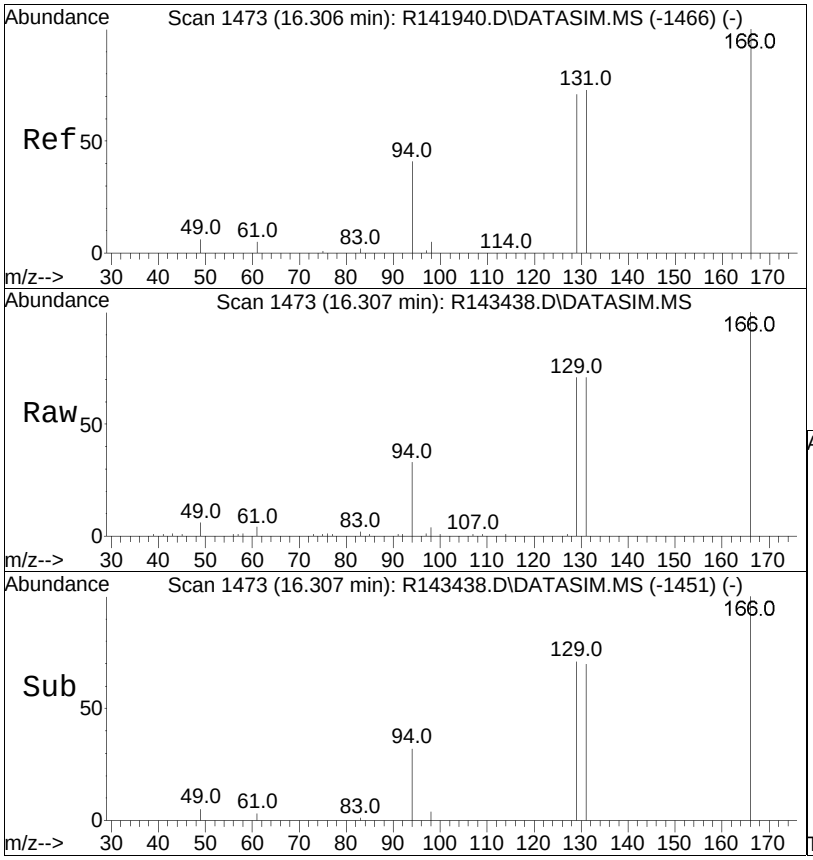


#52
toluene
Concen: 0.07 ppbV
RT: 15.250 min Scan# 1356
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 91 Resp: 2594

Ion	Ratio	Lower	Upper
91	100		
92	60.1	46.8	70.2

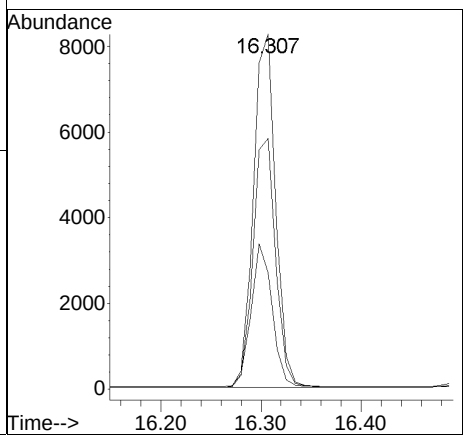


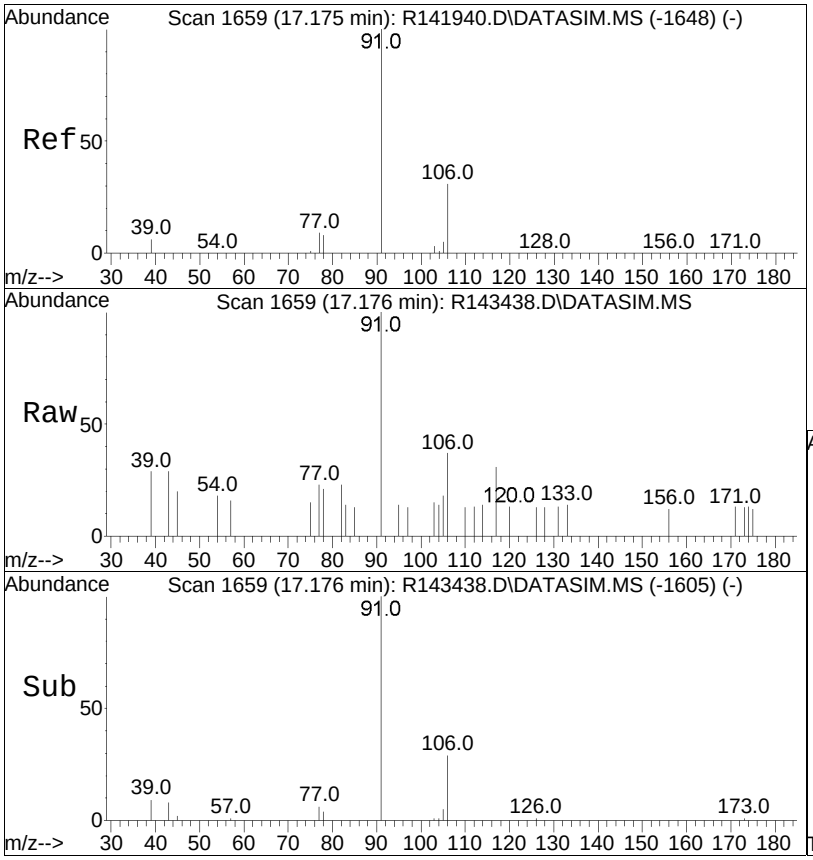


#57
tetrachloroethene
Concen: 0.70 ppbV
RT: 16.307 min Scan# 1473
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:166 Resp: 12763

Ion	Ratio	Lower	Upper
166	100		
131	70.7	57.0	85.4
94	32.7	26.2	39.4

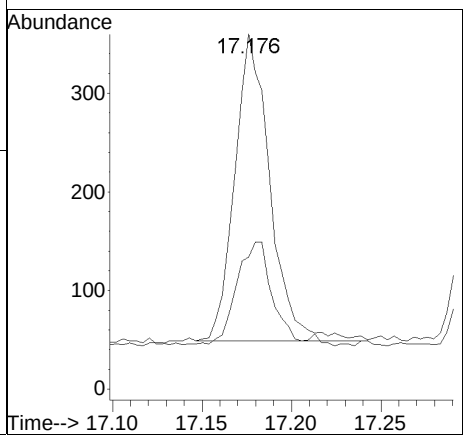


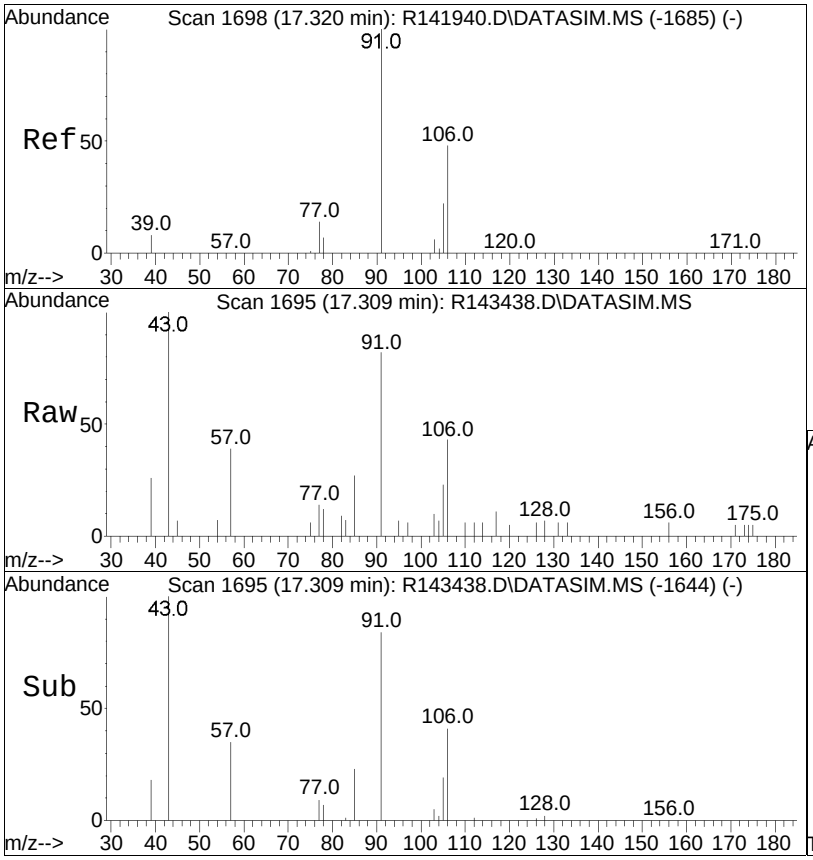


#60
ethylbenzene
Concen: 0.01 ppbV
RT: 17.176 min Scan# 1659
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 91 Resp: 427

Ion	Ratio	Lower	Upper
91	100		
106	37.2	25.8	38.8

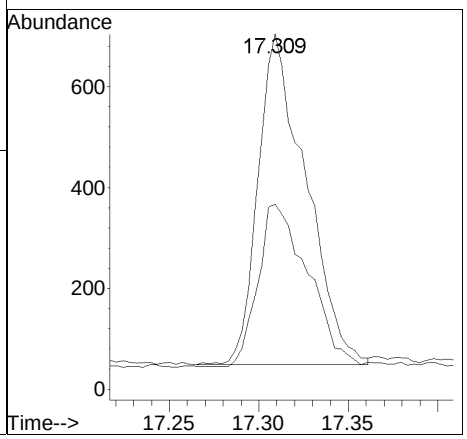


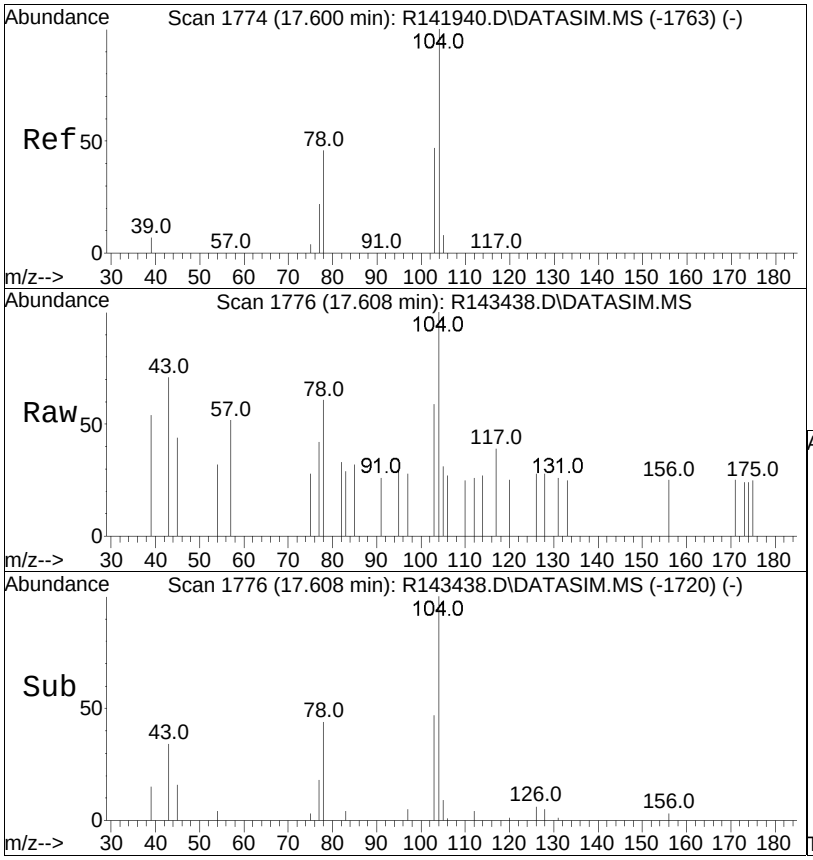


#61
m+p-xylene
Concen: 0.03 ppbV
RT: 17.309 min Scan# 1695
Delta R.T. -0.011 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 91 Resp: 1217

Ion	Ratio	Lower	Upper
91	100		
106	52.1	40.6	61.0

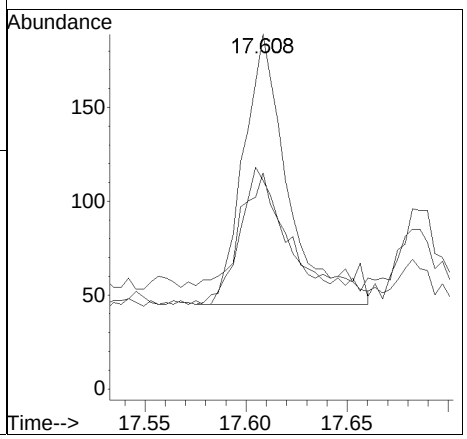


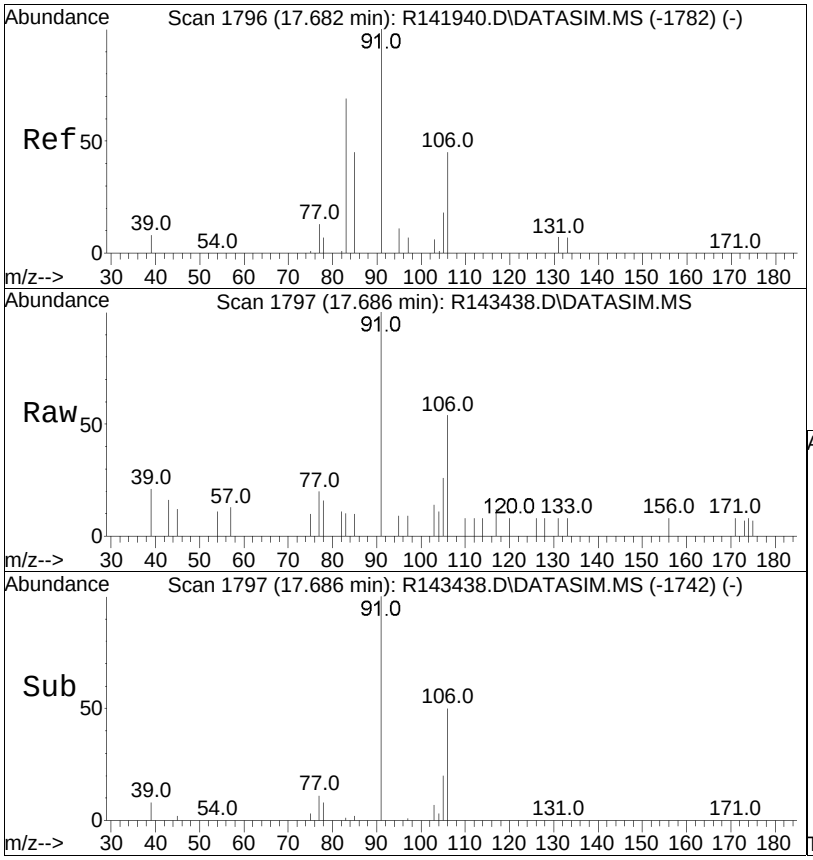


#63
styrene
Concen: 0.01 ppbV
RT: 17.608 min Scan# 1776
Delta R.T. 0.007 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:104 Resp: 220

Ion	Ratio	Lower	Upper
104	100		
103	58.7	37.7	56.5#
78	60.8	31.0	46.6#

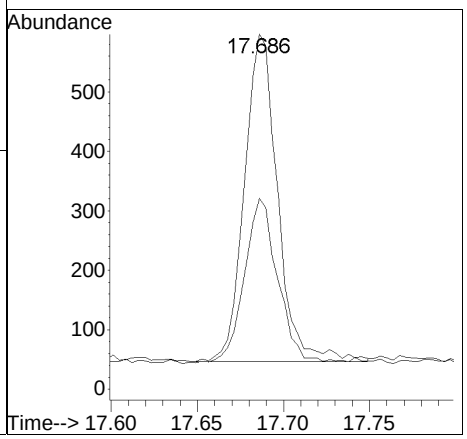


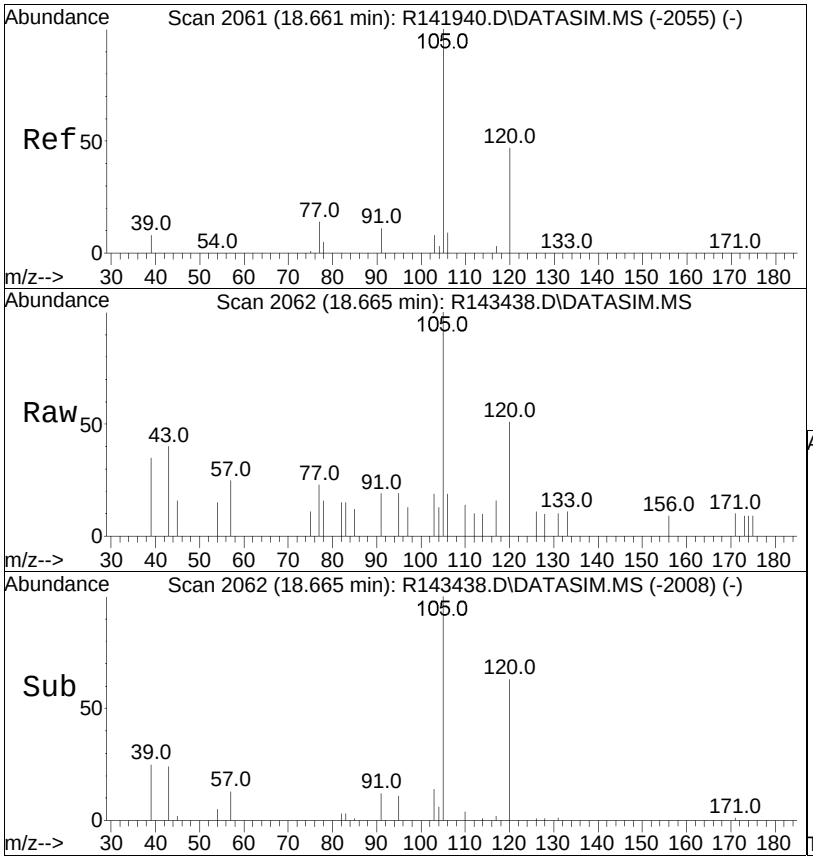


#65
o-xylene
Concen: 0.02 ppbV
RT: 17.686 min Scan# 1797
Delta R.T. 0.004 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 91 Resp: 738

Ion	Ratio	Lower	Upper
91	100		
106	53.8	38.5	57.7

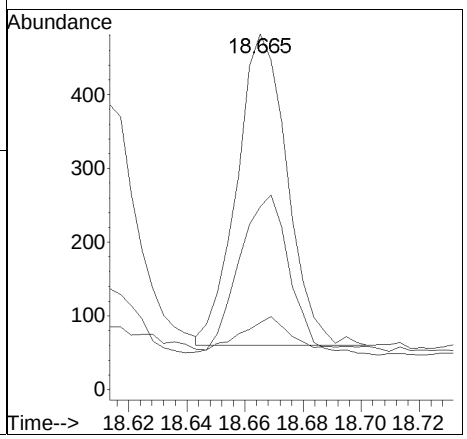


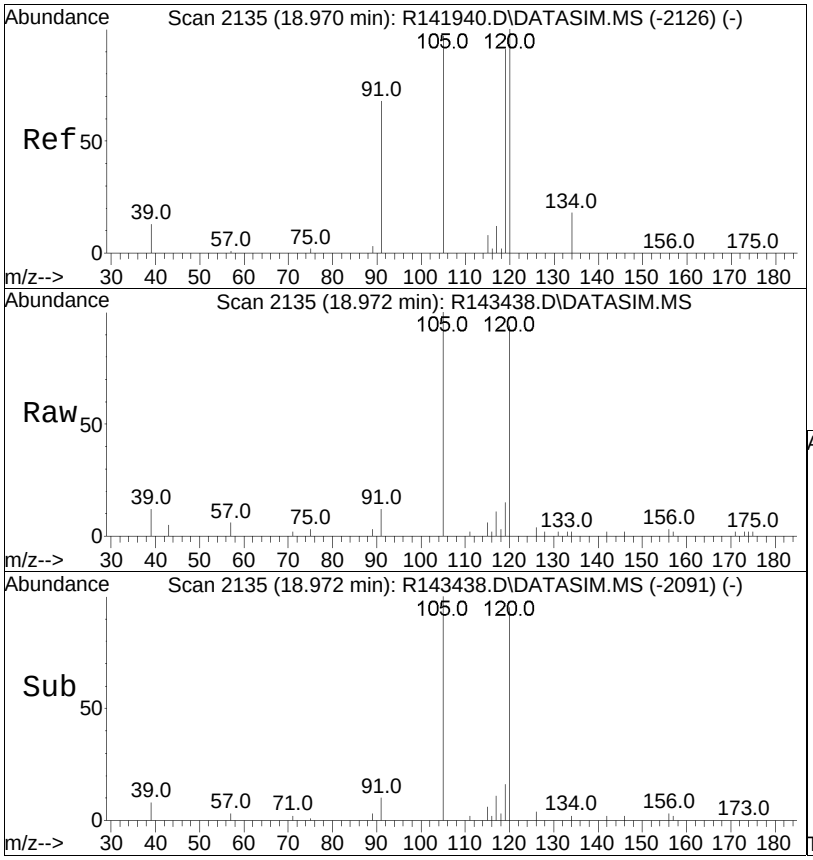


#71
1,3,5-trimethylbenzene
Concen: 0.01 ppbV
RT: 18.665 min Scan# 2062
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:105 Resp: 509

Ion	Ratio	Lower	Upper
105	100		
120	51.5	40.9	61.3
91	18.9	7.8	11.6#

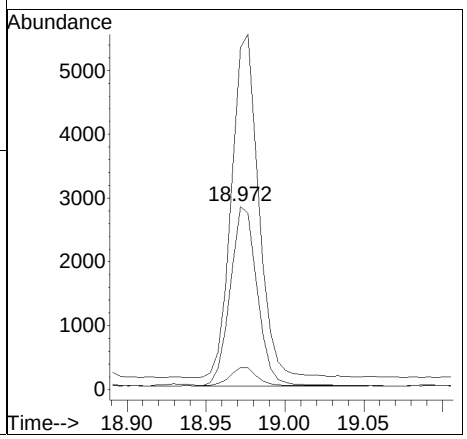


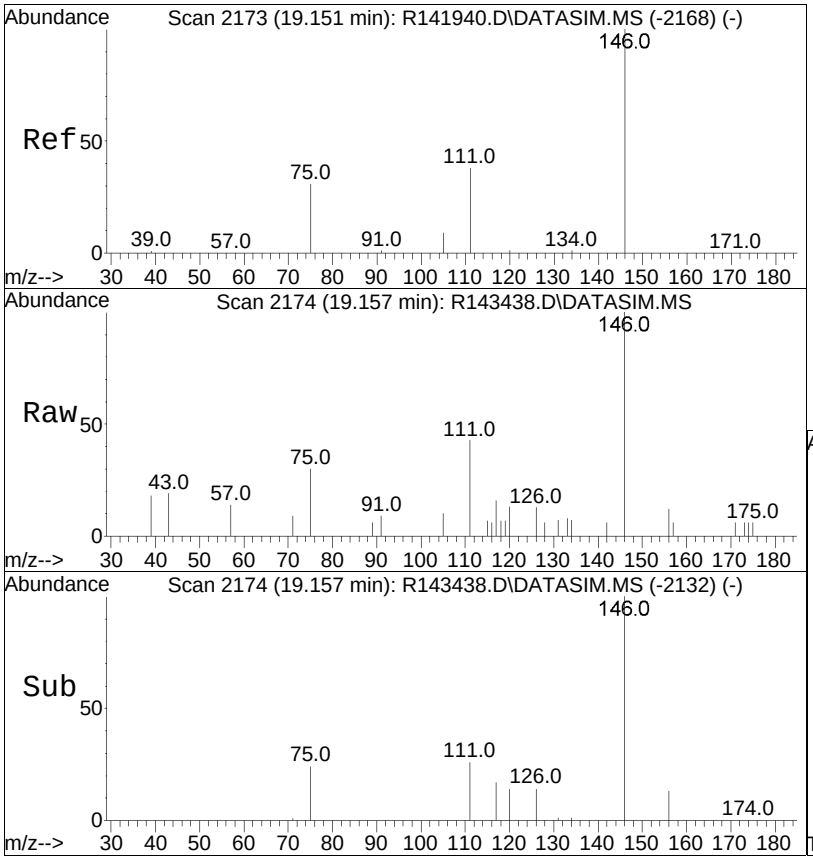


#73
1,2,4-trimethylbenzene
Concen: 0.08 ppbV m
RT: 18.972 min Scan# 2135
Delta R.T. 0.001 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:105 Resp: 3367

Ion	Ratio	Lower	Upper
105	100		
120	93.5	174.7	262.1#
91	12.0	55.2	82.8#

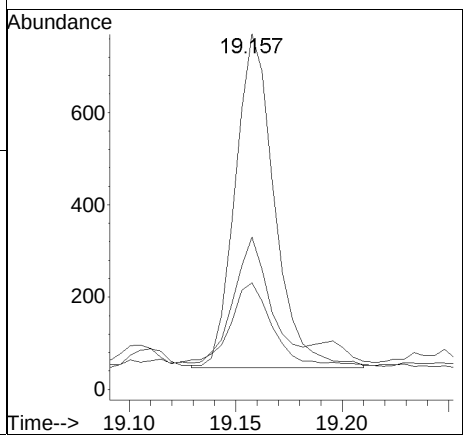


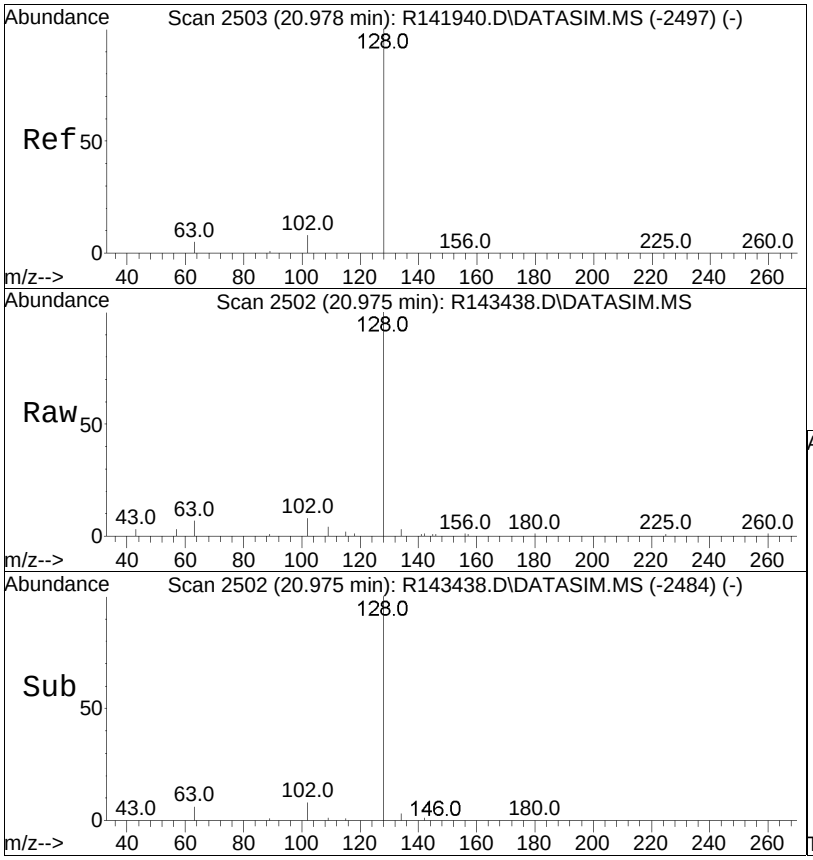


#76
1,4-dichlorobenzene
Concen: 0.03 ppbV m
RT: 19.157 min Scan# 2174
Delta R.T. 0.001 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:146 Resp: 927

Ion	Ratio	Lower	Upper
146	100		
111	42.9	26.8	40.2#
75	30.0	17.5	26.3#

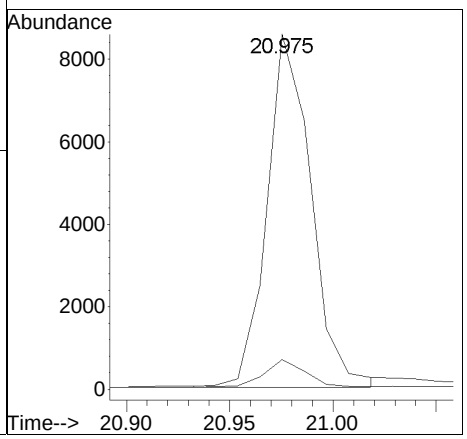




#82
naphthalene
Concen: 0.23 ppbV m
RT: 20.975 min Scan# 2502
Delta R.T. -0.004 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion:128 Resp: 12686

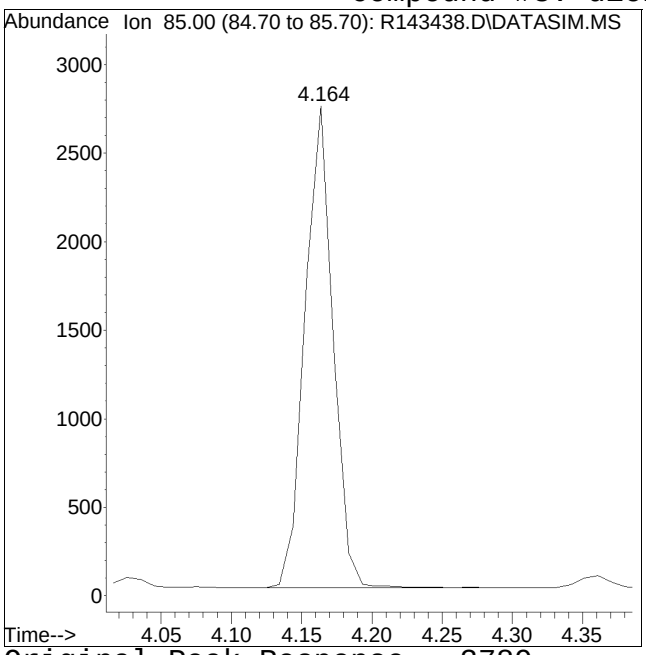
Ion	Ratio	Lower	Upper
128	100		
102	8.4	5.7	8.5



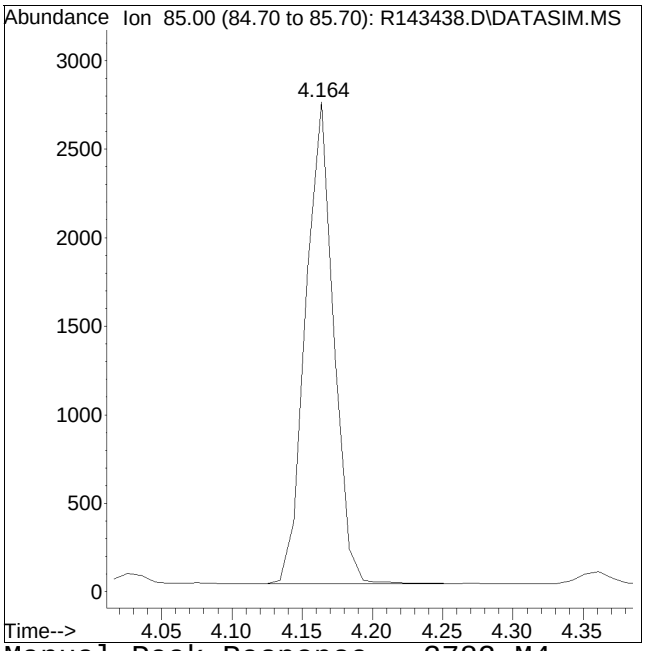
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #3: dichlorodifluoromethane



Original Peak Response = 3789



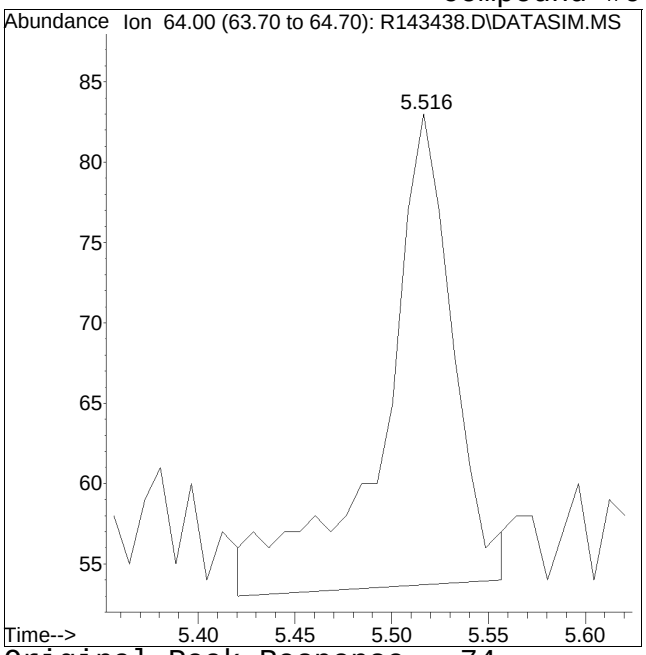
Manual Peak Response = 3782 M4

M4 = Poor automated baseline construction.

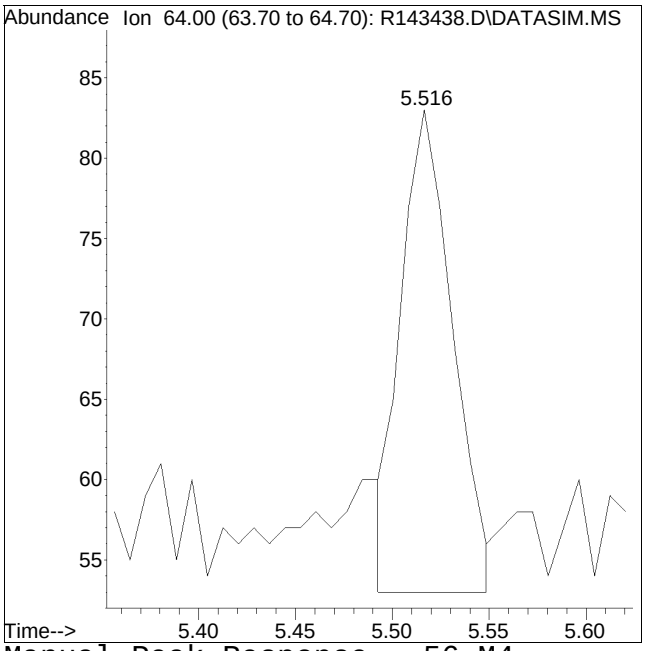
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #9: chloroethane



Original Peak Response = 74



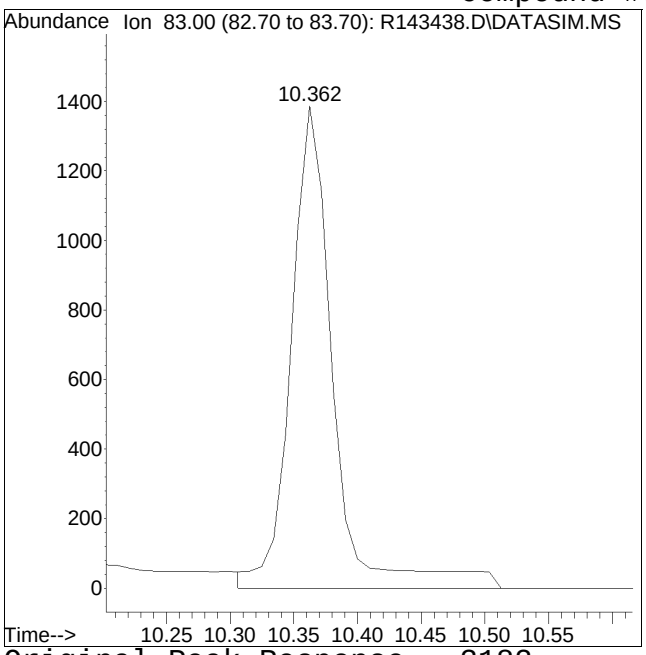
Manual Peak Response = 56 M4

M4 = Poor automated baseline construction.

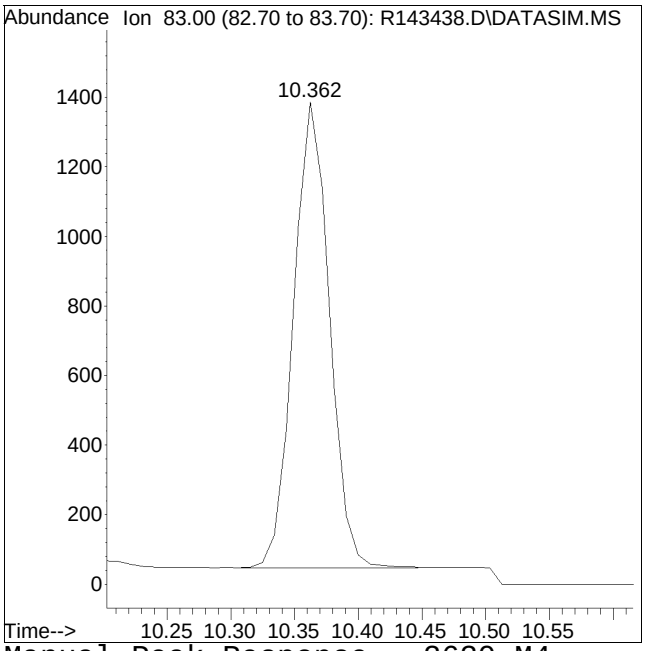
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #30: chloroform



Original Peak Response = 3182



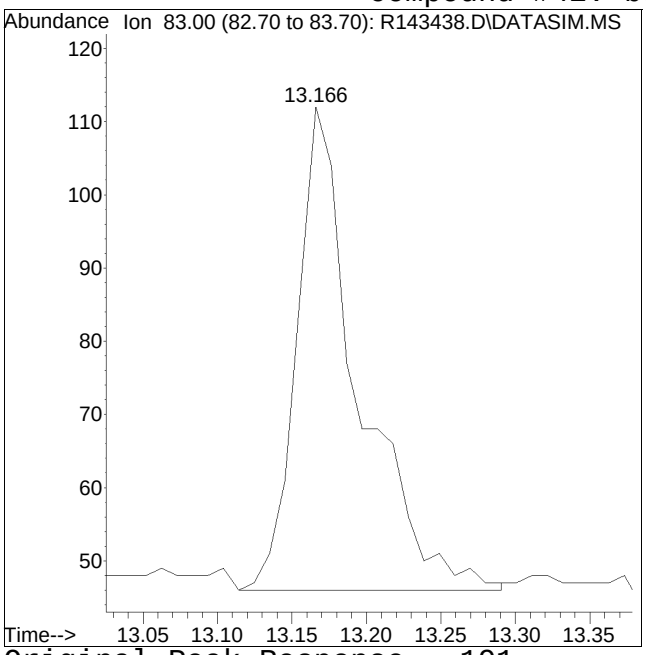
Manual Peak Response = 2630 M4

M4 = Poor automated baseline construction.

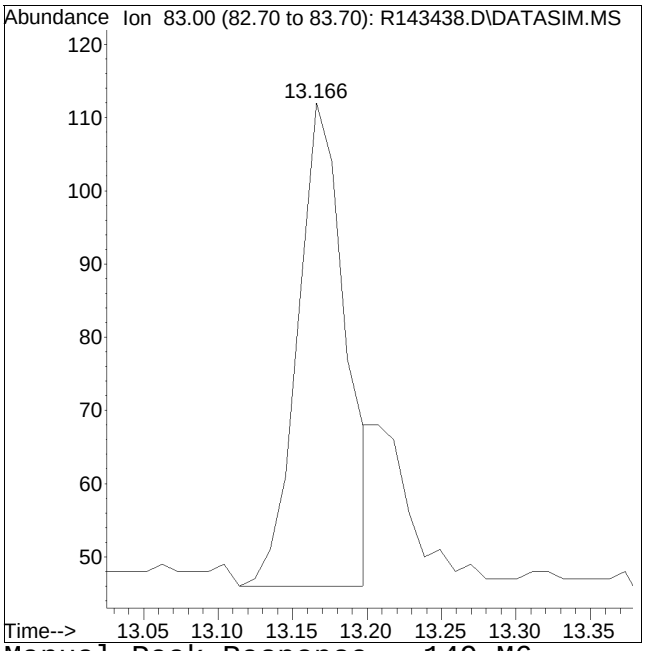
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #42: bromodichloromethane



Original Peak Response = 191



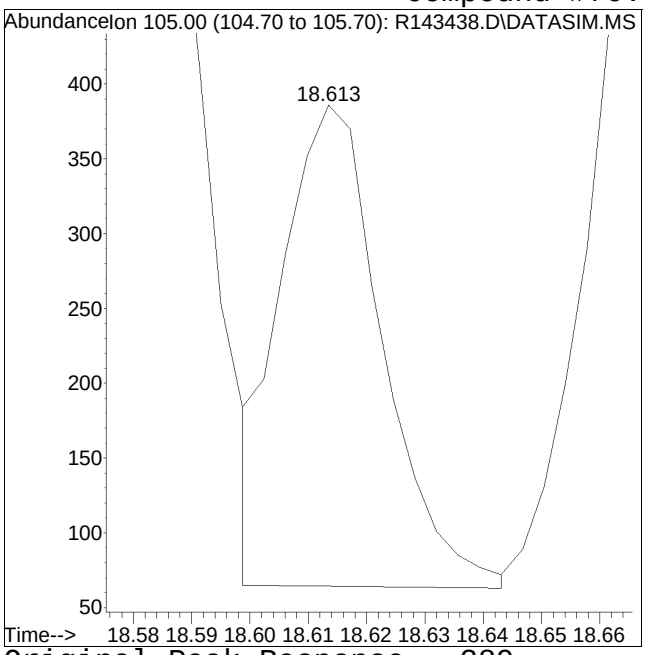
Manual Peak Response = 149 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

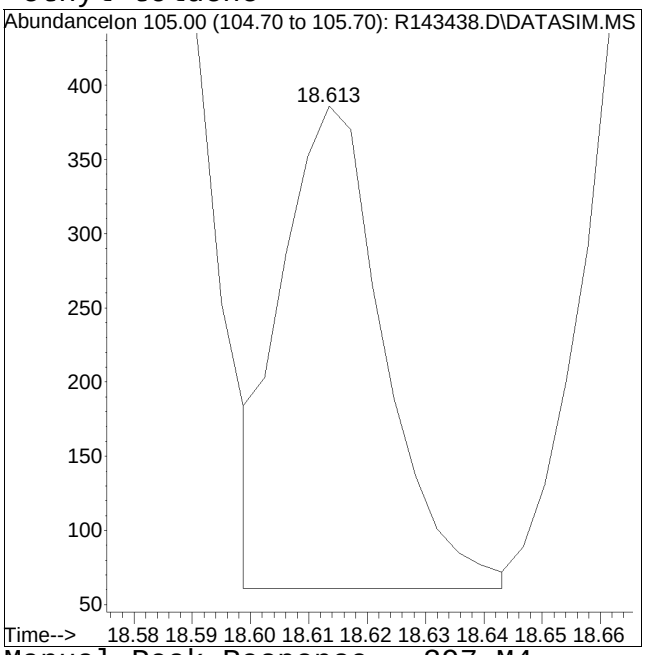
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #70: 4-ethyl toluene



Original Peak Response = 389



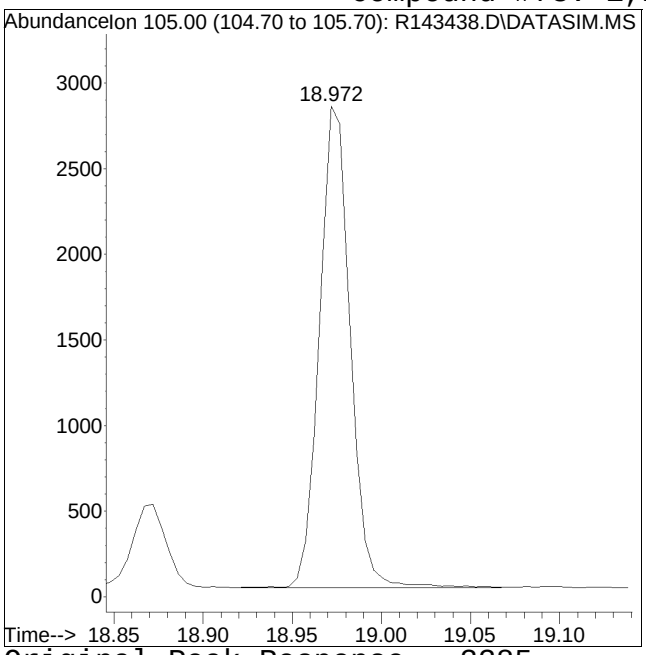
Manual Peak Response = 397 M4

M4 = Poor automated baseline construction.

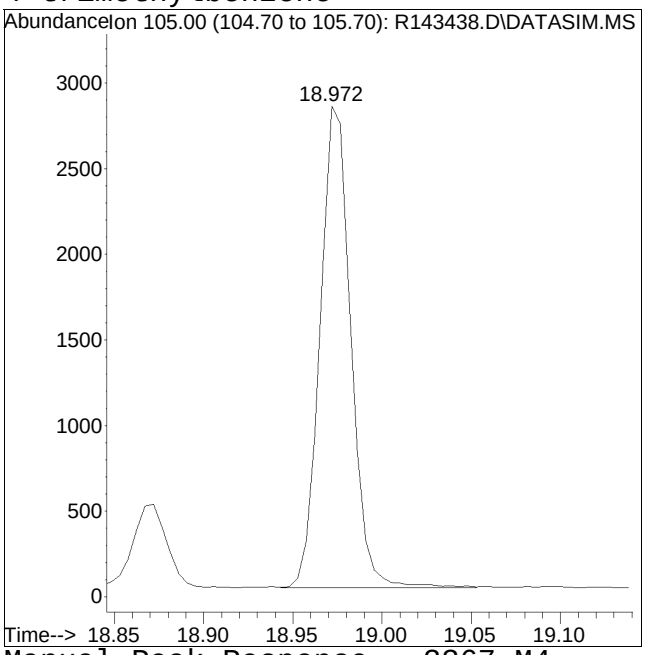
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\TSIM\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #73: 1,2,4-trimethylbenzene



Original Peak Response = 3385



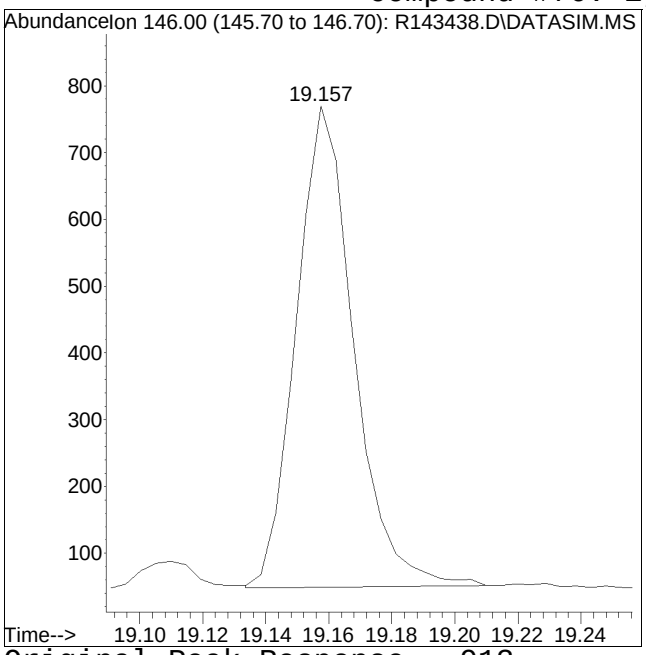
Manual Peak Response = 3367 M4

M4 = Poor automated baseline construction.

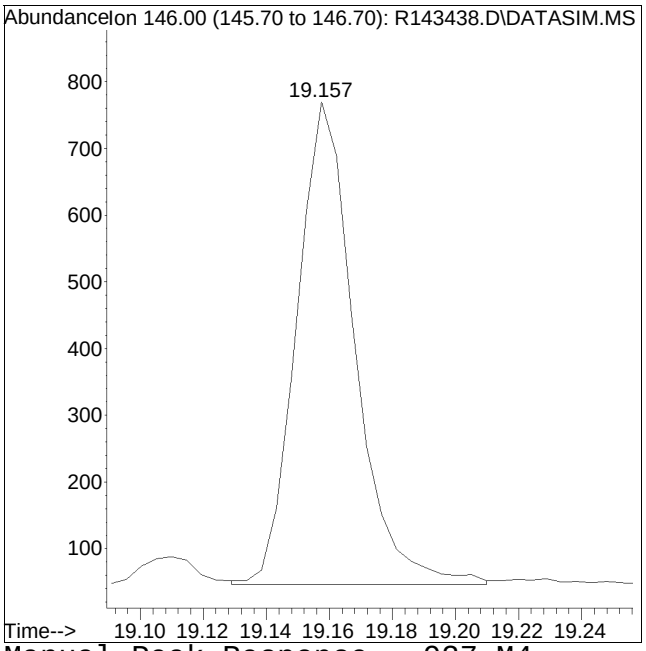
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #76: 1,4-dichlorobenzene



Original Peak Response = 913



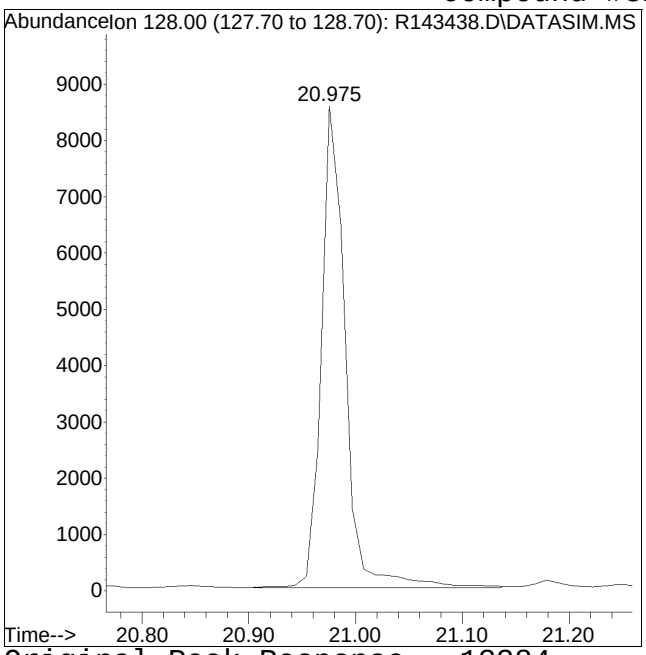
Manual Peak Response = 927 M4

M4 = Poor automated baseline construction.

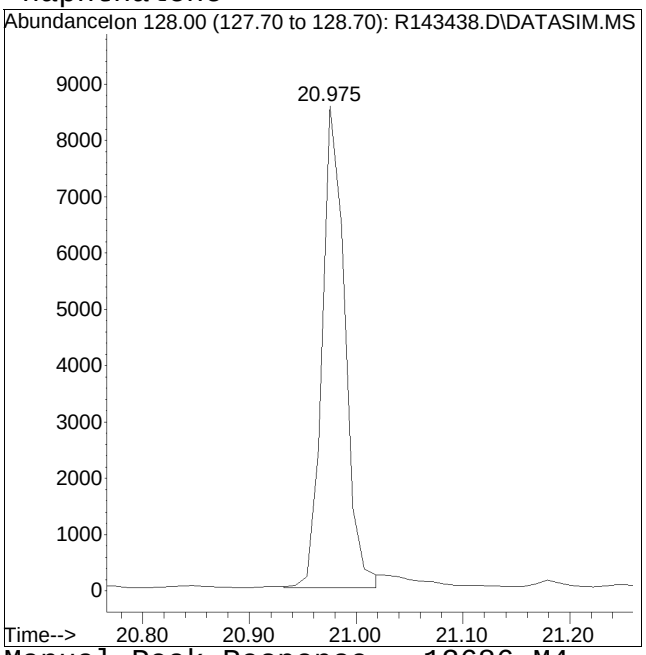
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\TSIM\ Method : TSIM150710.M
Data File : R143438.D Operator : AIRPIANO1:MB
Date Inj'd : 8/14/2015 11:54 am Instrument : Air Piano 1
Sample : WG811918-5,3,250,250 Quant Date : 8/14/2015 12:17 pm

Compound #82: naphthalene



Original Peak Response = 13384



Manual Peak Response = 12686 M4

M4 = Poor automated baseline construction.

Canister Dilution Worksheet

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	P_1, in Hg	P_1, atm	V_1, L	P_2, in Hg	P_2, atm	V_2, L	P_1, psia	P_2, psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor	Final Volume Injected, mL	Analyst Initials
L1519114-08D	6.0	-23.82	0.20	1.23	-9.53	0.68	4.09	3.0	10.0	3.33	N2	1000	14.7	1.00	1.00	250	1.00	3.33	75.0000	RY

*N2 = Nitrogen and H2= Hydrogen

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

Form# 117-05
8/18/2015 1:41 PM

Volatile Organics in Air
TO-15 Low Level

Initial Calibration

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Method File : TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D 5.0 =R142710.D 10 =R142711.D 20 =R142712.D
50 =R142713.D 100 =R142714.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	1.103	1.052	0.955	0.897	0.875	0.865	0.835	0.752	0.9168	12.56
3)		propylene		0.505	0.507	0.462	0.434	0.430	0.418	0.374	0.4468	10.74
4)		propane		0.602	0.526	0.415	0.409	0.414	0.377	0.329	0.4390	21.26
5)		dichlorodifluoromethane	1.210	0.843	1.027	0.786	0.827	0.836	0.630	0.620	0.8474	23.04
6)	C	chloromethane	0.579	0.570	0.583	0.484	0.477	0.470	0.439	0.402	0.5007	13.72
7)		Freon-114	1.535	1.535	1.505	1.332	1.307	1.288	1.144	1.040	1.3358	13.73
8)	C	methanol			0.183	0.145	0.136	0.133	0.121	0.107	0.1374	18.95
9)	C	vinyl chloride	0.551	0.553	0.561	0.506	0.499	0.491	0.466	0.421	0.5059	9.52
10)	C	1,3-butadiene	0.420	0.425	0.400	0.374	0.371	0.367	0.342	0.305	0.3756	10.63
11)		butane	1.200	0.933	0.879	0.759	0.702	0.701	0.647	0.558	0.7974	25.42
12)	C	acetaldehyde	0.333	0.258	0.244	0.202	0.193	0.189	0.164	0.135	0.2147	28.80
13)	C	bromomethane	0.665	0.593	0.564	0.509	0.479	0.474	0.450	0.407	0.5176	16.27
14)	C	chloroethane	0.310	0.275	0.285	0.242	0.228	0.225	0.211	0.193	0.2463	16.31
15)		ethanol		0.331	0.307	0.294	0.268	0.270	0.241	0.203	0.2736	15.53
16)		dichlorofluoromethane	1.215	1.143	1.097	0.991	0.960	0.958	0.904	0.819	1.0108	12.98
17)	C	vinyl bromide	0.625	0.592	0.575	0.532	0.516	0.513	0.485	0.437	0.5345	11.38
18)	C	acrolein	0.208	0.219	0.223	0.219	0.206	0.203	0.192	0.176	0.2058	7.67
19)		acetone	0.941	0.861	0.813	0.715	0.694	0.668	0.622	0.536	0.7312	18.13
20)	C	acetonitrile	0.636	0.509	0.513	0.433	0.419	0.409	0.374	0.326	0.4524	21.46
21)		trichlorofluoromethane	1.697	1.464	1.431	1.292	1.270	1.241	1.173	1.065	1.3292	14.80
22)		isopropyl alcohol		1.121	1.098	0.897	0.846	0.836	0.785	0.706	0.8984	17.34
23)	C	acrylonitrile	0.384	0.473	0.442	0.377	0.374	0.370	0.352	0.324	0.3869	12.37
24)		pentane	1.332	1.081	0.971	0.869	0.823	0.796	0.763	0.677	0.9140	22.98
25)		ethyl ether	0.630	0.613	0.552	0.537	0.505	0.491	0.449	0.395	0.5217	15.16
26)	C	1,1-dichloroethene	1.012	0.922	0.920	0.841	0.800	0.793	0.742	0.670	0.8377	13.14
27)		tertiary butyl alcohol		1.215	1.218	1.046	1.004	0.982	0.938	0.851	1.0362	13.23
28)	C	methylene chloride		0.908	0.830	0.656	0.631	0.627	0.580	0.517	0.6782	20.58
29)	C	3-chloropropene	0.933	0.805	0.768	0.674	0.653	0.642	0.602	0.531	0.7010	18.22
30)	C	carbon disulfide	1.842	1.628	1.556	1.457	1.414	1.379	1.306	1.153	1.4669	14.33
31)		Freon 113	1.256	1.233	1.219	1.093	1.070	1.034	0.982	0.870	1.0947	12.36

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Method File : TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D 5.0 =R142710.D 10 =R142711.D 20 =R142712.D
50 =R142713.D 100 =R142714.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
32)		trans-1,2-dichloroethene	1.006	0.973	0.960	0.918	0.894	0.883	0.833	0.662	0.8911	12.10
33)	C	1,1-dichloroethane	1.327	1.164	1.197	1.085	1.052	1.045	0.977	0.891	1.0923	12.44
34)	C	MTBE	1.696	1.663	1.629	1.480	1.456	1.441	1.358	1.248	1.4963	10.45
35)	C	vinyl acetate	1.868	1.528	1.506	1.432	1.457	1.458	1.406	1.291	1.4933	11.21
36)	C	2-butanone	1.711	1.556	1.518	1.393	1.344	1.342	1.259	1.137	1.4075	12.88
37)		cis-1,2-dichloroethene	1.221	1.067	1.047	1.010	0.979	0.996	0.919	0.845	1.0106	10.95
38)		Ethyl Acetate	0.298	0.279	0.270	0.258	0.256	0.257	0.245	0.218	0.2601	9.04
39)	C	chloroform	1.723	1.619	1.576	1.416	1.405	1.395	1.307	1.171	1.4514	12.30
40)		Tetrahydrofuran	0.924	0.950	0.959	0.822	0.771	0.770	0.733	0.657	0.8233	13.44
41)		2,2-dichloropropane	1.416	1.374	1.344	1.169	1.146	1.152	1.087	0.982	1.2086	12.63
42)	C	1,2-dichloroethane	0.864	0.849	0.817	0.769	0.747	0.743	0.702	0.643	0.7666	9.79
43)	I	1,4-difluorobenzene	----------ISTD----------									
44)	C	hexane	0.753	0.607	0.592	0.585	0.565	0.559	0.512	0.494	0.5834	13.50
45)		diisopropyl ether	0.300	0.279	0.262	0.255	0.245	0.244	0.232	0.226	0.2554	9.63
46)		tert-butyl ethyl ether	0.984	0.896	0.912	0.856	0.831	0.805	0.784	0.770	0.8547	8.50
47)	s	1,2-dichloroethane-D4	0.254	0.253	0.259	0.268	0.259	0.249	0.254	0.253	0.2560	2.30
48)	C	1,1,1-trichloroethane	0.616	0.564	0.570	0.543	0.526	0.523	0.505	0.506	0.5441	6.99
49)		1,1-dichloropropene	0.423	0.418	0.398	0.400	0.388	0.377	0.357	0.368	0.3910	5.97
50)	C	benzene	0.931	0.889	0.864	0.822	0.785	0.780	0.752	0.732	0.8195	8.55
51)		thiophene	0.533	0.532	0.549	0.521	0.507	0.502	0.484	0.468	0.5120	5.28
52)	C	carbon tetrachloride	0.522	0.532	0.552	0.556	0.562	0.560	0.548	0.539	0.5465	2.56
53)		cyclohexane	0.471	0.502	0.508	0.467	0.463	0.455	0.436	0.424	0.4656	6.25
54)		tert-amyl methyl ether	0.786	0.774	0.777	0.751	0.721	0.713	0.687	0.665	0.7342	6.09
55)		dibromomethane	0.413	0.356	0.343	0.327	0.326	0.322	0.310	0.304	0.3376	10.28
56)	C	1,2-dichloropropane	0.347	0.345	0.348	0.329	0.323	0.314	0.302	0.289	0.3248	6.83
57)		bromodichloromethane	0.703	0.652	0.636	0.620	0.608	0.596	0.584	0.571	0.6214	6.84
58)	C	1,4-dioxane	0.166	0.192	0.179	0.194	0.188	0.189	0.182	0.173	0.1828	5.35
59)	C	trichloroethene	0.504	0.456	0.428	0.435	0.415	0.411	0.390	0.369	0.4260	9.75
60)	C	2,2,4-trimethylpentane	1.801	1.707	1.608	1.547	1.499	1.465	1.384	1.295	1.5382	10.79
61)		methyl methacrylate	0.486	0.439	0.426	0.407	0.403	0.404	0.386	0.370	0.4152	8.65
62)		heptane	0.712	0.697	0.614	0.604	0.585	0.570	0.534	0.502	0.6022	12.13

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Method File : TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D 5.0 =R142710.D 10 =R142711.D 20 =R142712.D
50 =R142713.D 100 =R142714.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
63)	C	cis-1,3-dichloropropene	0.408	0.440	0.423	0.423	0.429	0.428	0.421	0.416	0.4237	2.24
64)	C	4-methyl-2-pentanone	0.804	0.891	0.815	0.808	0.777	0.772	0.699	0.674	0.7800	8.79
65)		trans-1,3-dichloropropene	0.355	0.379	0.407	0.421	0.420	0.426	0.423	0.425	0.4071	6.41
66)	C	1,1,2-trichloroethane	0.391	0.380	0.366	0.364	0.355	0.349	0.334	0.326	0.3582	6.08
67)	I	chlorobenzene-D5	----------ISTD----------									
68)	C	toluene	6.192	6.247	5.772	5.458	5.464	5.429	5.212	4.953	5.5908	8.10
69)	s	toluene-D8	3.992	4.043	4.001	3.944	4.040	4.037	4.104	4.027	4.0235	1.15
70)		2-methylthiophene	5.194	4.922	4.967	4.483	4.514	4.507	4.383	4.128	4.6371	7.65
71)		1,3-dichloropropane	2.590	2.427	2.350	2.275	2.286	2.277	2.204	2.099	2.3135	6.38
72)		2-hexanone	4.268	4.054	4.117	3.840	3.940	3.889	3.538	2.984	3.8287	10.55
73)		3-methylthiophene	5.380	5.141	5.067	4.633	4.664	4.749	4.503	4.086	4.7779	8.55
74)		dibromochloromethane	3.727	3.595	3.633	3.646	3.748	3.795	3.687	3.553	3.6730	2.22
75)	C	1,2-dibromoethane	3.297	3.026	3.119	3.100	3.075	3.064	3.005	2.844	3.0662	4.13
76)		butyl acetate	0.372	0.451	0.534	0.507	0.530	0.525	0.501	0.478	0.4873	11.14
77)		octane	1.704	1.582	1.547	1.419	1.426	1.409	1.373	1.280	1.4677	9.18
78)	C	tetrachloroethene	3.551	3.334	3.128	2.978	3.002	2.961	2.850	2.630	3.0543	9.34
79)		1,1,1,2-tetrachloroethane	2.623	2.569	2.582	2.453	2.501	2.496	2.398	2.184	2.4757	5.59
80)	C	chlorobenzene	5.350	5.018	4.948	4.588	4.645	4.636	4.350	3.913	4.6809	9.36
81)	C	ethylbenzene	8.264	7.726	7.482	7.067	7.108	7.098	6.738	6.187	7.2087	8.72
82)		2-ethylthiophene	5.756	5.807	5.641	5.267	5.252	5.341	5.056	4.646	5.3457	7.27
83)	C	m+p-xylene	6.271	5.962	5.790	5.453	5.526	5.483	5.096	4.560	5.5175	9.54
84)	C	bromoform	3.777	3.677	3.820	3.863	4.063	4.151	3.928	3.564	3.8554	5.00
85)	C	styrene	4.782	4.563	4.607	4.432	4.478	4.511	4.298	3.929	4.4500	5.67
86)	C	1,1,2,2-tetrachloroethane	4.739	4.433	4.248	4.191	4.174	4.158	3.731	3.141	4.1018	11.71
87)	C	o-xylene	6.403	6.059	5.988	5.665	5.576	5.651	5.023	4.348	5.5892	11.54
88)		1,2,3-trichloropropane	3.213	3.140	3.131	3.028	3.058	3.035	2.890	2.701	3.0245	5.36
89)		nonane	5.369	4.928	4.766	4.520	4.499	4.375	3.813	3.081	4.4188	15.90
90)	s	bromofluorobenzene	2.887	2.913	2.906	2.862	2.924	2.962	2.921	2.926	2.9127	1.02
91)	C	isopropylbenzene	8.909	8.285	8.147	7.789	7.832	7.728	7.204	6.607	7.8128	8.88
92)		bromobenzene	4.395	4.000	3.893	3.756	3.699	3.733	3.541	3.251	3.7836	8.85
93)		2-chlorotoluene	2.676	2.463	2.361	2.273	2.281	2.255	2.115	1.896	2.2901	10.06

Response Factor Report Air Piano 1

Method Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Method File : TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015
Response Via : Initial Calibration

Calibration Files
0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D 5.0 =R142710.D 10 =R142711.D 20 =R142712.D
50 =R142713.D 100 =R142714.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
94)		n-propylbenzene	2.737	2.444	2.493	2.355	2.328	2.308	2.127	1.818	2.3264	11.60
95)		4-chlorotoluene	6.629	6.416	6.137	5.899	5.768	5.733	5.428	4.912	5.8652	9.31
96)		4-ethyl toluene	9.567	9.343	9.208	8.887	9.004	8.784	8.123	7.202	8.7647	8.73
97)		1,3,5-trimethylbenzene	7.912	7.442	7.285	6.937	6.951	6.679	6.417	5.754	6.9220	9.56
98)		tert-butylbenzene	8.729	8.247	8.034	7.516	7.564	7.188	6.456	5.533	7.4084	13.83
99)		1,2,4-trimethylbenzene	7.606	7.361	7.331	6.943	7.052	6.614	6.027	5.097	6.7539	12.32
100)		decane	4.999	4.885	5.019	4.775	4.691	4.399	4.077	3.363	4.5260	12.54
101)	C	Benzyl Chloride	4.956	5.179	5.334	5.623	6.076	6.072	6.056	5.589	5.6106	7.74
102)		1,3-dichlorobenzene	5.746	5.659	5.733	5.420	5.526	5.192	4.813	4.170	5.2821	10.38
103)	C	1,4-dichlorobenzene	5.709	5.864	5.782	5.568	5.508	5.296	4.900	4.224	5.3564	10.29
104)		sec-butylbenzene	1.120	1.097	1.065	1.022	1.012	0.954	0.866	0.713	0.9812	13.80
105)		1,2,3-trimethylbenzene	6.855	6.724	6.665	6.256	6.158	5.908	5.537	4.773	6.1095	11.44
106)		p-isopropyltoluene	9.834	9.862	9.776	9.434	9.498	8.656	8.224	6.999	9.0354	11.22
107)		1,2-dichlorobenzene	5.398	5.456	5.461	5.215	5.263	4.929	4.840	4.353	5.1145	7.53
108)		n-butylbenzene	8.265	8.467	8.428	8.318	8.329	7.527	7.295	6.478	7.8883	9.11
109)		indan	7.407	7.684	7.437	6.955	6.992	6.724	6.463	5.681	6.9180	9.26
110)		indene	4.732	4.770	4.816	4.625	4.663	4.571	4.514	4.164	4.6069	4.46
111)	C	1,2-dibromo-3-chloropropane	1.761	1.839	1.812	1.881	1.980	1.745	1.869	1.763	1.8315	4.31
112)		undecane	4.455	5.081	5.274	5.640	5.736	4.489	4.598	3.862	4.8918	13.28
113)		1,2,4,5-tetramethylbenzene	1.157	1.230	1.229	1.233	1.240	0.986	1.050	0.940	1.1332	10.87
114)		dodecane	2.165	2.996	4.182	6.092	6.424	3.795	3.801	3.077	4.0664	36.67#
115)	C	1,2,4-trichlorobenzene	3.488	3.982	4.274	4.986	5.253	3.545	3.914	3.702	4.1430	15.85
116)		naphthalene	0.722	0.869	0.928	1.072	1.148	0.734	0.880	0.882	0.9045	16.34
117)		1,2,3-trichlorobenzene	3.054	3.685	4.083	4.632	4.983	3.050	3.631	3.758	3.8596	17.80
118)		benzothiophene	6.909	8.033	8.573	9.253	9.906	7.142	8.613	8.620	8.3810	11.98
119)	C	hexachlorobutadiene	3.246	3.766	3.915	4.230	4.398	2.913	3.297	3.120	3.6106	15.09
120)		2-methylnaphthalene			1.867	3.752	4.541	2.748	3.375	3.902	3.3639	28.03
121)		1-methylnaphthalene			2.622	3.499	3.937	2.681	3.248	3.705	3.2822	16.43

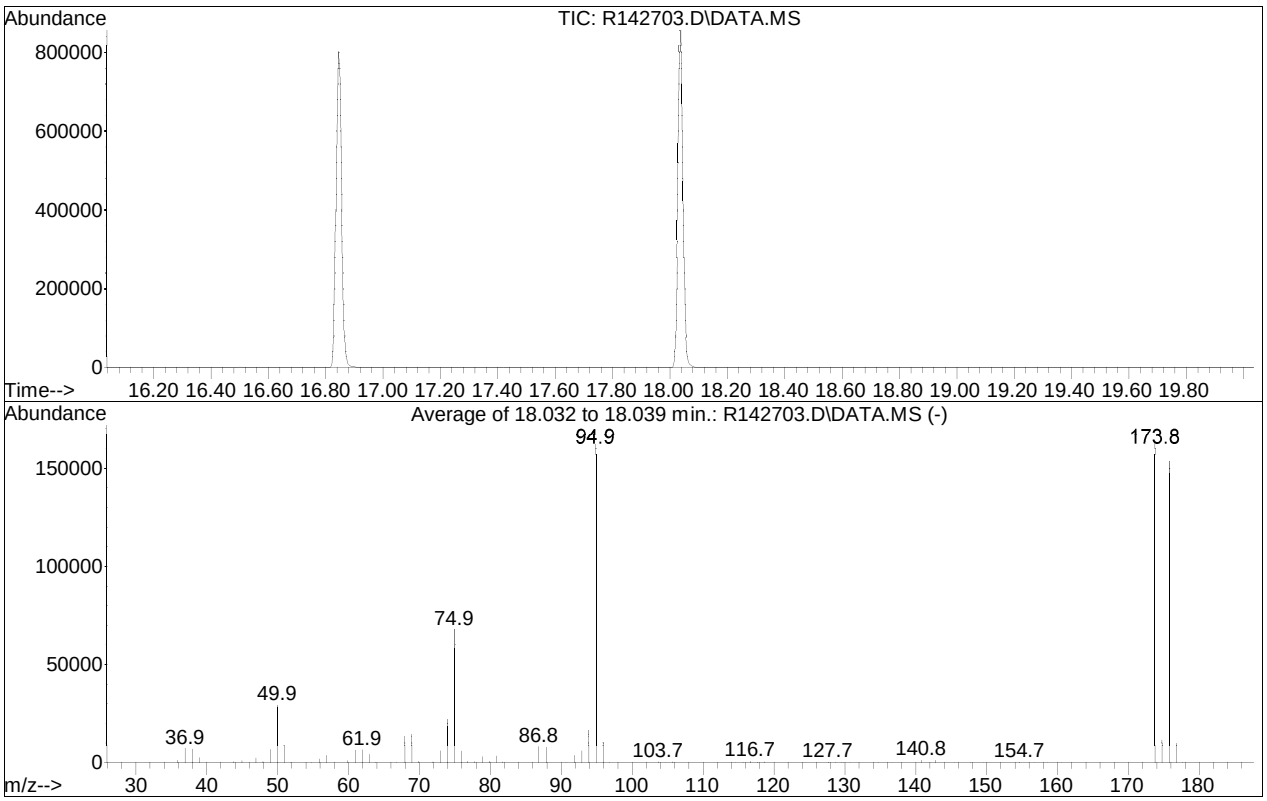
(#) = Out of Range

BFB

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142703.D
Acq On : 10 Jul 2015 12:25 pm
Operator : AIRPIANO1:RY
Sample : WG801817-1,3,250,250
Misc : WG801817
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015



AutoFind: Scans 1891, 1892, 1893; Background Corrected with Scan 1882

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	18.1	29341	PASS
75	95	30	66	41.7	67643	PASS
95	95	100	100	100.0	162389	PASS
96	95	5	9	6.5	10584	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	100.8	163627	PASS
175	174	4	9	7.1	11645	PASS
176	174	93	101	93.8	153451	PASS
177	176	5	9	6.5	9936	PASS

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:39:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	179476	10.000 ppbV	0.00
Standard Area = 179180			Recovery	= 100.17%	
43) 1,4-difluorobenzene	12.42	114	402017	10.000 ppbV	0.00
Standard Area = 387589			Recovery	= 103.72%	
67) chlorobenzene-D5	16.85	54	75875	10.000 ppbV	0.00
Standard Area = 73180			Recovery	= 103.68%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.09	65	101919	9.784 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.84%	
69) toluene-D8	15.15	98	302923	9.883 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.83%	
90) bromofluorobenzene	18.04	95	219077	9.874 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 98.74%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.02	51	3959	0.252 ppbV	94
3) propylene	4.06	41	2085M6	0.268 ppbV	
4) propane	4.09	29	2570	0.350 ppbV #	77
5) dichlorodifluoromethane	4.16	85	4344	0.293 ppbV	95
6) chloromethane	4.38	50	2078	0.243 ppbV	89
7) Freon-114	4.53	85	5511	0.235 ppbV	86
8) methanol	4.64	31	3892	1.596 ppbV #	10
9) vinyl chloride	4.69	62	1977	0.221 ppbV #	85
10) 1,3-butadiene	4.88	54	1508	0.226 ppbV	84
11) butane	4.96	43	4309	0.342 ppbV #	94
12) acetaldehyde	4.56	29	5970	1.728 ppbV #	78
13) bromomethane	5.27	94	2386	0.277 ppbV #	80
14) chloroethane	5.51	64	1113	0.271 ppbV	90
15) ethanol	5.73	31	7376	1.532 ppbV	100
16) dichlorofluoromethane	5.67	67	4360	0.253 ppbV #	97
17) vinyl bromide	6.00	106	2243	0.242 ppbV	99
18) acrolein	6.19	56	748	0.202 ppbV #	86
19) acetone	6.39	43	16880	1.355 ppbV #	93
20) acetonitrile	6.02	41	2282	0.303 ppbV	95
21) trichlorofluoromethane	6.59	101	6093	0.267 ppbV #	83
22) isopropyl alcohol	6.75	45	4657	0.307 ppbV #	88
23) acrylonitrile	7.00	53	1379	0.205 ppbV #	75
24) pentane	7.07	43	4780	0.324 ppbV #	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:39:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.13	31	2262	0.249 ppbV #	81
26) 1,1-dichloroethene	7.42	61	3634	0.253 ppbV	91
27) tertiary butyl alcohol	7.56	59	4880	0.271 ppbV #	80
28) methylene chloride	7.60	49	4783	0.422 ppbV	90
29) 3-chloropropene	7.75	41	3348	0.286 ppbV	96
30) carbon disulfide	7.92	76	6611	0.260 ppbV #	1
31) Freon 113	7.94	101	4509	0.235 ppbV	89
32) trans-1,2-dichloroethene	8.77	61	3611	0.225 ppbV	94
33) 1,1-dichloroethane	9.01	63	4765	0.252 ppbV	91
34) MTBE	9.13	73	6087	0.233 ppbV	94
35) vinyl acetate	9.23	43	6704	0.256 ppbV #	81
36) 2-butanone	9.53	43	6142	0.255 ppbV #	84
37) cis-1,2-dichloroethene	10.02	61	4382	0.249 ppbV	89
38) Ethyl Acetate	10.33	61	1068	0.232 ppbV #	22
39) chloroform	10.36	83	6183	0.245 ppbV	95
40) Tetrahydrofuran	10.87	42	3315	0.240 ppbV	94
41) 2,2-dichloropropane	10.39	77	5081	0.247 ppbV	89
42) 1,2-dichloroethane	11.21	62	3103	0.231 ppbV	97
44) hexane	10.27	57	6055	0.267 ppbV #	49
45) diisopropyl ether	10.30	87	2412	0.245 ppbV #	72
46) tert-butyl ethyl ether	10.90	59	7908	0.237 ppbV	97
48) 1,1,1-trichloroethane	11.49	97	4956	0.234 ppbV	92
49) 1,1-dichloropropene	11.85	75	3400	0.218 ppbV	94
50) benzene	12.01	78	7488	0.237 ppbV	98
51) thiophene	12.17	84	4282	0.210 ppbV	87
52) carbon tetrachloride	12.18	117	4201	0.186 ppbV	83
53) cyclohexane	12.33	56	3783	0.203 ppbV #	76
54) tert-amyl methyl ether	12.71	73	6320	0.218 ppbV	92
55) dibromomethane	12.93	93	3320	0.253 ppbV #	83
56) 1,2-dichloropropane	12.95	63	2792	0.215 ppbV #	86
57) bromodichloromethane	13.17	83	5656	0.232 ppbV	87
58) 1,4-dioxane	13.27	88	1332	0.176 ppbV #	76
59) trichloroethene	13.22	130	4056	0.243 ppbV #	91
60) 2,2,4-trimethylpentane	13.25	57	14484	0.240 ppbV #	90
61) methyl methacrylate	13.44	41	3911	0.241 ppbV #	86
62) heptane	13.55	43	5726	0.243 ppbV #	88
63) cis-1,3-dichloropropene	14.20	75	3282	0.190 ppbV #	81
64) 4-methyl-2-pentanone	14.27	43	6462	0.207 ppbV	98
65) trans-1,3-dichloropropene	14.79	75	2857	0.169 ppbV #	89
66) 1,1,2-trichloroethane	14.97	97	3144	0.220 ppbV	90

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:39:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.26	91	9396	0.227	ppbV		86
70)	2-methylthiophene	15.32	97	7882	0.230	ppbV		98
71)	1,3-dichloropropane	15.28	76	3931	0.227	ppbV		97
72)	2-hexanone	15.52	43	6477	0.217	ppbV	#	98
73)	3-methylthiophene	15.49	97	8164	0.231	ppbV		95
74)	dibromochloromethane	15.66	129	5656	0.199	ppbV		96
75)	1,2-dibromoethane	15.90	107	5003	0.214	ppbV		93
76)	butyl acetate	16.09	73	565	0.141	ppbV		95
77)	octane	16.16	85	2586	0.239	ppbV	#	92
78)	tetrachloroethene	16.31	166	5389	0.237	ppbV		98
79)	1,1,1,2-tetrachloroethane	16.86	131	3981	0.210	ppbV		92
80)	chlorobenzene	16.88	112	8118	0.230	ppbV		97
81)	ethylbenzene	17.18	91	12540	0.233	ppbV		93
82)	2-ethylthiophene	17.21	97	8734	0.219	ppbV		94
83)	m+p-xylene	17.32	91	19033	0.454	ppbV		96
84)	bromoform	17.40	173	5732	0.186	ppbV	#	84
85)	styrene	17.60	104	7256	0.214	ppbV		93
86)	1,1,2,2-tetrachloroethane	17.69	83	7191	0.227	ppbV		98
87)	o-xylene	17.68	91	9716	0.230	ppbV		97
88)	1,2,3-trichloropropane	17.79	75	4875	0.210	ppbV		97
89)	nonane	17.82	43	8147	0.239	ppbV		92
91)	isopropylbenzene	18.13	105	13519	0.227	ppbV		99
92)	bromobenzene	18.21	77	6669	0.238	ppbV		92
93)	2-chlorotoluene	18.50	126	4061	0.235	ppbV		87
94)	n-propylbenzene	18.51	120	4154	0.235	ppbV		84
95)	4-chlorotoluene	18.55	91	10059	0.230	ppbV		98
96)	4-ethyl toluene	18.62	105	14518	0.213	ppbV		98
97)	1,3,5-trimethylbenzene	18.67	105	12007	0.228	ppbV	#	94
98)	tert-butylbenzene	18.97	119	13246	0.231	ppbV		96
99)	1,2,4-trimethylbenzene	18.98	105	11542	0.216	ppbV		97
100)	decane	19.02	57	7586	0.213	ppbV	#	97
101)	Benzyl Chloride	19.09	91	7520	0.163	ppbV		97
102)	1,3-dichlorobenzene	19.11	146	8719	0.208	ppbV		95
103)	1,4-dichlorobenzene	19.16	146	8664	0.207	ppbV		95
104)	sec-butylbenzene	19.17	105	17000	0.221	ppbV		100
105)	1,2,3-trimethylbenzene	19.30	105	10403	0.223	ppbV		95
106)	p-isopropyltoluene	19.29	119	14923	0.207	ppbV		99
107)	1,2-dichlorobenzene	19.42	146	8192	0.205	ppbV		99
108)	n-butylbenzene	19.61	91	12542	0.198	ppbV		96
109)	indan	19.46	117	11240	0.212	ppbV		94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:39:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	7181	0.203	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	2672	0.178	ppbV #	79
112) undecane	19.97	57	6760	0.155	ppbV #	94
113) 1,2,4,5-tetramethylben...	20.22	119	17564	0.187	ppbV #	96
114) dodecane	20.87	57	3285	0.067	ppbV #	70
115) 1,2,4-trichlorobenzene	20.87	180	5293	0.133	ppbV	91
116) naphthalene	20.99	128	10952	0.126	ppbV	96
117) 1,2,3-trichlorobenzene	21.25	180	4635	0.123	ppbV	97
118) benzothiophene	21.05	134	10484	0.139	ppbV	100
119) hexachlorobutadiene	21.30	225	4926	0.148	ppbV #	86
120) 2-methylnaphthalene	22.14		0	N.D.		
121) 1-methylnaphthalene	22.35		0	N.D.		

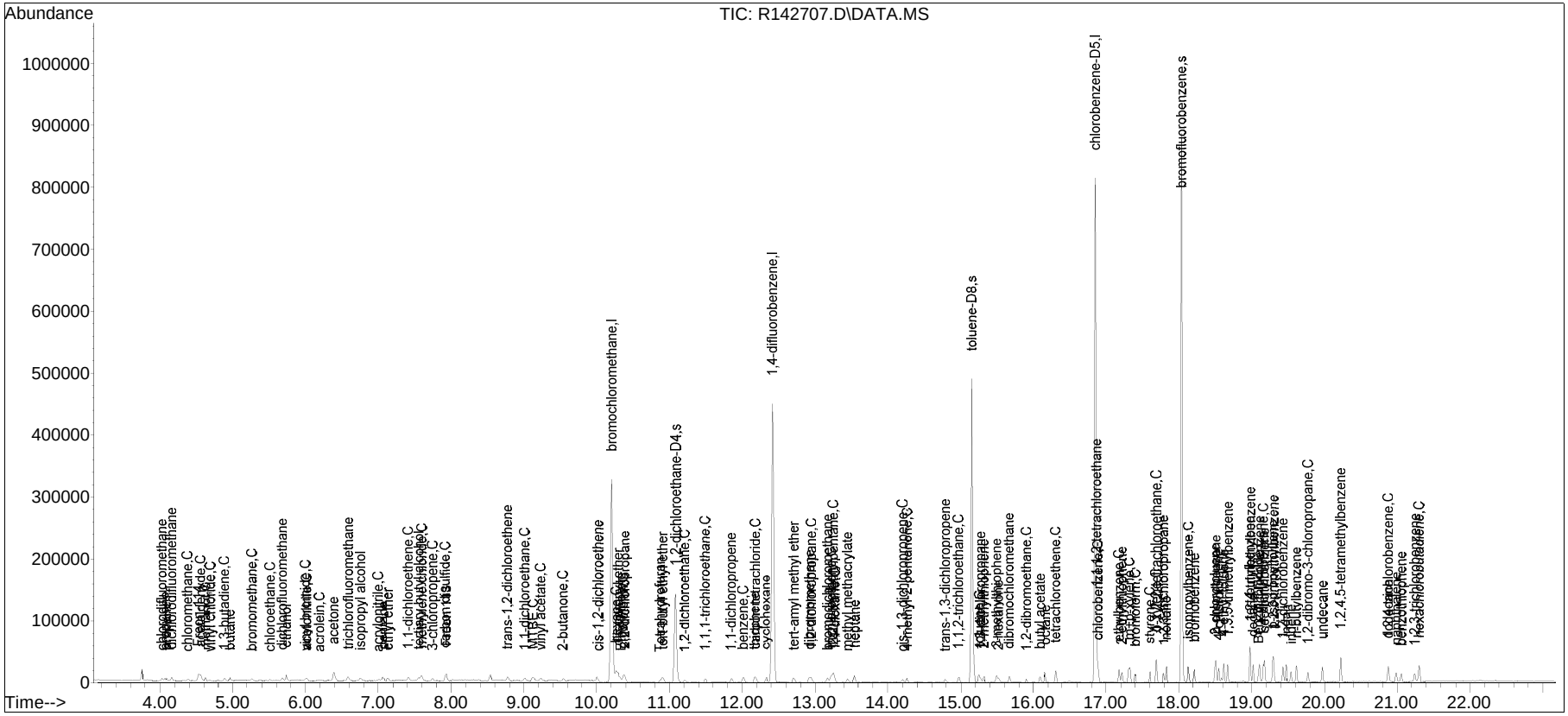
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142707.D
Acq On : 10 Jul 2015 2:43 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.2
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:39:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

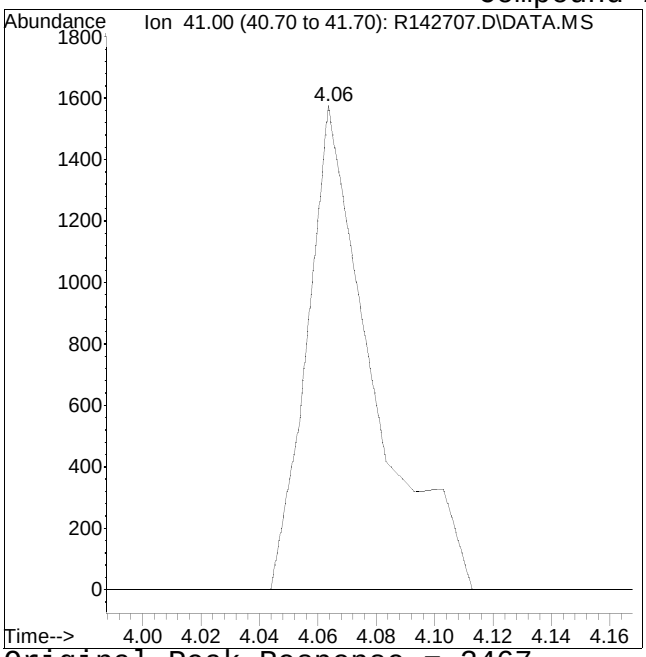
Sub List : Default All Compounds
Target Ions : All Ions
Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



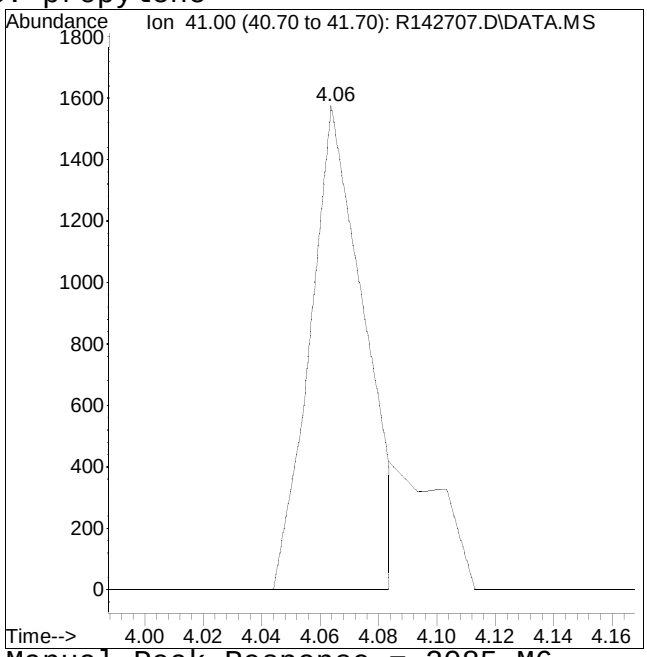
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142707.D
Date Inj'd : 7/10/2015 2:43 pm
Sample : ITO15-SIMSTD0.2
Quant Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



Original Peak Response = 2467



Manual Peak Response = 2085 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:40:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	181276	10.000 ppbV	0.00
Standard Area = 179180			Recovery	= 101.17%	
43) 1,4-difluorobenzene	12.42	114	398180	10.000 ppbV	0.00
Standard Area = 387589			Recovery	= 102.73%	
67) chlorobenzene-D5	16.85	54	75390	10.000 ppbV	0.00
Standard Area = 73180			Recovery	= 103.02%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.09	65	100863	9.776 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.76%	
69) toluene-D8	15.15	98	304801	10.009 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 100.09%	
90) bromofluorobenzene	18.04	95	219588	9.961 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 99.61%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.02	51	9531	0.601 ppbV	99
3) propylene	4.06	41	4573M6	0.581 ppbV	
4) propane	4.09	29	5458	0.736 ppbV	96
5) dichlorodifluoromethane	4.16	85	7638	0.510 ppbV	100
6) chloromethane	4.38	50	5166	0.597 ppbV	91
7) Freon-114	4.54	85	13910	0.587 ppbV	95
8) methanol	4.63	31	9223	3.744 ppbV #	71
9) vinyl chloride	4.69	62	5012	0.555 ppbV	89
10) 1,3-butadiene	4.89	54	3850	0.572 ppbV	89
11) butane	4.97	43	8461	0.665 ppbV #	97
12) acetaldehyde	4.56	29	11681	3.347 ppbV	92
13) bromomethane	5.27	94	5375	0.618 ppbV	88
14) chloroethane	5.52	64	2497	0.603 ppbV #	88
15) ethanol	5.73	31	14995	3.084 ppbV	100
16) dichlorofluoromethane	5.68	67	10361	0.595 ppbV	98
17) vinyl bromide	6.00	106	5363	0.573 ppbV	98
18) acrolein	6.19	56	1987	0.532 ppbV #	81
19) acetone	6.38	43	39032	3.103 ppbV	99
20) acetonitrile	6.02	41	4611	0.607 ppbV	98
21) trichlorofluoromethane	6.59	101	13272	0.576 ppbV	96
22) isopropyl alcohol	6.75	45	10157	0.662 ppbV #	97
23) acrylonitrile	7.01	53	4284	0.631 ppbV	92
24) pentane	7.07	43	9799	0.657 ppbV #	90

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:40:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25)	ethyl ether	7.13	31	5560	0.607	ppbV		95
26)	1,1-dichloroethene	7.42	61	8354	0.576	ppbV		95
27)	tertiary butyl alcohol	7.55	59	11008	0.605	ppbV	#	93
28)	methylene chloride	7.60	49	8229	0.720	ppbV		98
29)	3-chloropropene	7.75	41	7299	0.617	ppbV		98
30)	carbon disulfide	7.93	76	14757	0.576	ppbV	#	58
31)	Freon 113	7.94	101	11176	0.576	ppbV		98
32)	trans-1,2-dichloroethene	8.77	61	8815	0.544	ppbV		96
33)	1,1-dichloroethane	9.01	63	10549	0.553	ppbV		91
34)	MTBE	9.12	73	15070	0.571	ppbV		98
35)	vinyl acetate	9.23	43	13849	0.524	ppbV		98
36)	2-butanone	9.53	43	14100	0.579	ppbV		95
37)	cis-1,2-dichloroethene	10.01	61	9672	0.545	ppbV		96
38)	Ethyl Acetate	10.31	61	2526	0.543	ppbV		94
39)	chloroform	10.37	83	14674	0.576	ppbV		97
40)	Tetrahydrofuran	10.86	42	8609	0.616	ppbV		95
41)	2,2-dichloropropane	10.39	77	12452	0.600	ppbV		96
42)	1,2-dichloroethane	11.21	62	7692	0.568	ppbV	#	90
44)	hexane	10.27	57	12089	0.538	ppbV	#	76
45)	diisopropyl ether	10.29	87	5563	0.571	ppbV		98
46)	tert-butyl ethyl ether	10.90	59	17845	0.539	ppbV		99
48)	1,1,1-trichloroethane	11.49	97	11232	0.537	ppbV		99
49)	1,1-dichloropropene	11.85	75	8324	0.539	ppbV	#	86
50)	benzene	12.01	78	17709	0.567	ppbV		98
51)	thiophene	12.17	84	10597	0.525	ppbV		93
52)	carbon tetrachloride	12.19	117	10600	0.474	ppbV		91
53)	cyclohexane	12.33	56	9985	0.541	ppbV		90
54)	tert-amyl methyl ether	12.71	73	15402	0.537	ppbV		96
55)	dibromomethane	12.93	93	7088	0.546	ppbV		95
56)	1,2-dichloropropane	12.95	63	6876	0.534	ppbV		97
57)	bromodichloromethane	13.17	83	12986	0.537	ppbV	#	91
58)	1,4-dioxane	13.25	88	3822	0.510	ppbV	#	48
59)	trichloroethene	13.22	130	9075	0.549	ppbV		98
60)	2,2,4-trimethylpentane	13.25	57	33976	0.569	ppbV		96
61)	methyl methacrylate	13.44	41	8749	0.545	ppbV		93
62)	heptane	13.55	43	13881	0.596	ppbV		94
63)	cis-1,3-dichloropropene	14.20	75	8764	0.513	ppbV		97
64)	4-methyl-2-pentanone	14.25	43	17740	0.573	ppbV	#	88
65)	trans-1,3-dichloropropene	14.79	75	7550	0.451	ppbV		97
66)	1,1,2-trichloroethane	14.97	97	7560	0.534	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:40:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
68)	toluene	15.25	91	23548	0.572 ppbV	99
70)	2-methylthiophene	15.32	97	18554	0.545 ppbV #	95
71)	1,3-dichloropropane	15.28	76	9148	0.531 ppbV	98
72)	2-hexanone	15.51	43	15283	0.515 ppbV	95
73)	3-methylthiophene	15.49	97	19380	0.551 ppbV	99
74)	dibromochloromethane	15.66	129	13550	0.479 ppbV	97
75)	1,2-dibromoethane	15.90	107	11407	0.492 ppbV	94
76)	butyl acetate	16.08	73	1699	0.425 ppbV	73
77)	octane	16.15	85	5965	0.555 ppbV	98
78)	tetrachloroethene	16.31	166	12569	0.555 ppbV	97
79)	1,1,1,2-tetrachloroethane	16.87	131	9683	0.514 ppbV	92
80)	chlorobenzene	16.88	112	18914	0.540 ppbV	98
81)	ethylbenzene	17.18	91	29125	0.544 ppbV	98
82)	2-ethylthiophene	17.21	97	21888	0.553 ppbV	92
83)	m+p-xylene	17.32	91	44949	1.079 ppbV	100
84)	bromoform	17.40	173	13859	0.452 ppbV	97
85)	styrene	17.60	104	17200	0.509 ppbV	96
86)	1,1,2,2-tetrachloroethane	17.68	83	16709	0.531 ppbV	94
87)	o-xylene	17.68	91	22841	0.543 ppbV	98
88)	1,2,3-trichloropropane	17.79	75	11835	0.513 ppbV	96
89)	nonane	17.82	43	18576	0.548 ppbV	91
91)	isopropylbenzene	18.13	105	31232	0.529 ppbV	99
92)	bromobenzene	18.21	77	15077	0.541 ppbV	100
93)	2-chlorotoluene	18.49	126	9283	0.540 ppbV	94
94)	n-propylbenzene	18.51	120	9211	0.525 ppbV	87
95)	4-chlorotoluene	18.55	91	24186	0.556 ppbV	99
96)	4-ethyl toluene	18.61	105	35217	0.519 ppbV	99
97)	1,3,5-trimethylbenzene	18.66	105	28051	0.535 ppbV	99
98)	tert-butylbenzene	18.97	119	31088	0.545 ppbV	99
99)	1,2,4-trimethylbenzene	18.97	105	27749	0.522 ppbV	95
100)	decane	19.02	57	18415	0.521 ppbV #	95
101)	Benzyl Chloride	19.09	91	19522	0.426 ppbV	98
102)	1,3-dichlorobenzene	19.11	146	21331	0.512 ppbV	97
103)	1,4-dichlorobenzene	19.15	146	22106	0.532 ppbV	98
104)	sec-butylbenzene	19.17	105	41352	0.542 ppbV	99
105)	1,2,3-trimethylbenzene	19.30	105	25346	0.546 ppbV	98
106)	p-isopropyltoluene	19.29	119	37175	0.519 ppbV	98
107)	1,2-dichlorobenzene	19.42	146	20567	0.518 ppbV	95
108)	n-butylbenzene	19.61	91	31916	0.508 ppbV	98
109)	indan	19.46	117	28964	0.549 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:40:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	17981	0.512	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	6933	0.464	ppbV	93
112) undecane	19.97	57	19153	0.443	ppbV #	95
113) 1,2,4,5-tetramethylben...	20.22	119	46355	0.496	ppbV	97
114) dodecane	20.87	57	11294	0.233	ppbV	89
115) 1,2,4-trichlorobenzene	20.86	180	15010	0.379	ppbV	94
116) naphthalene	20.99	128	32774	0.379	ppbV	98
117) 1,2,3-trichlorobenzene	21.25	180	13892	0.370	ppbV	98
118) benzothiophene	21.05	134	30280	0.405	ppbV	97
119) hexachlorobutadiene	21.30	225	14196	0.428	ppbV	98
120) 2-methylnaphthalene	22.14	142	3256	0.095	ppbV	96
121) 1-methylnaphthalene	22.35	142	5990	0.202	ppbV #	92

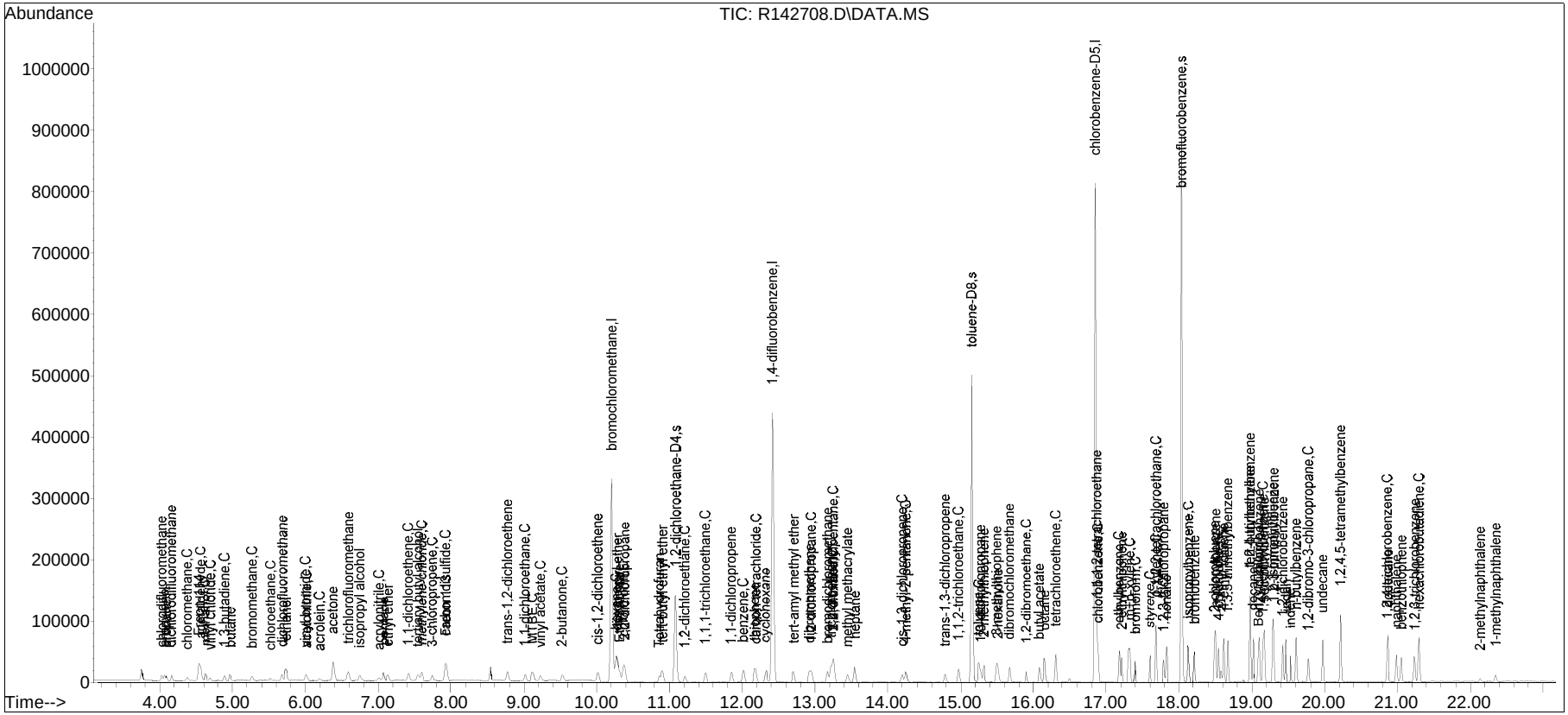
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142708.D
Acq On : 10 Jul 2015 3:14 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD0.5
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:40:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

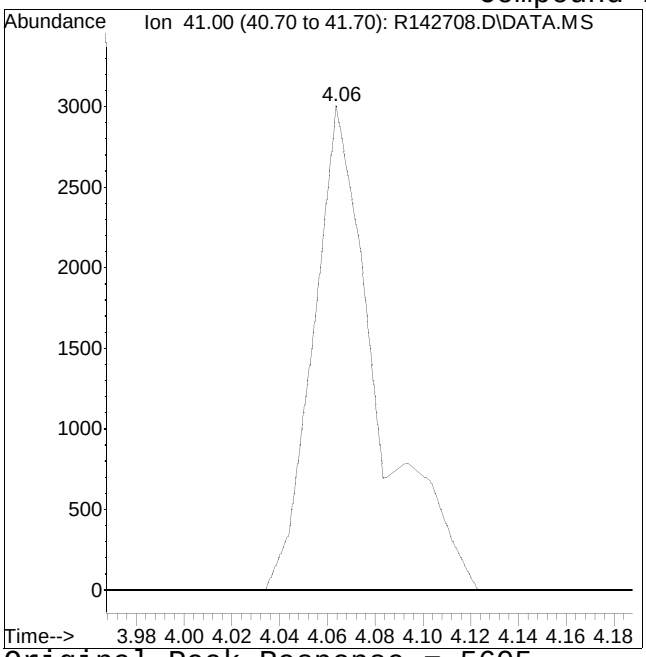
Sub List : Default All Compounds
Target Ions : All Ions
Data File : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



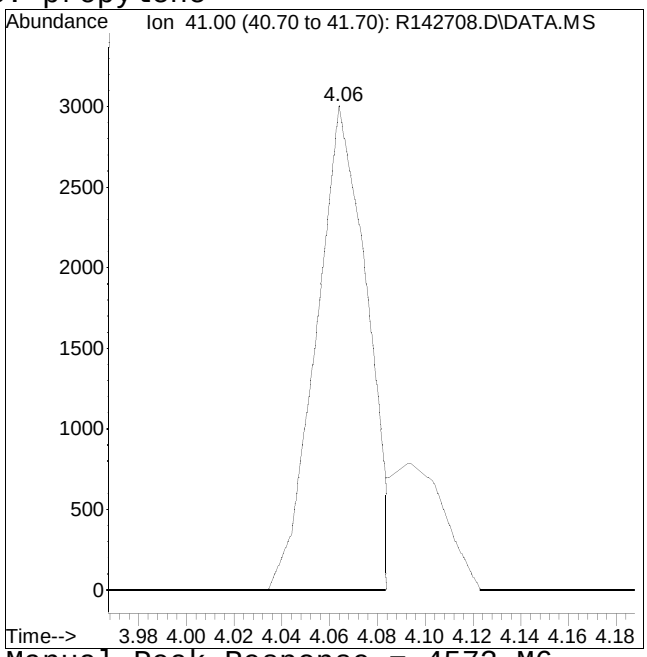
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QMS150710T_ICAL\TALL150710.M
Data File : R142708.D
Date Inj'd : 7/10/2015 3:14 pm
Sample : ITO15-SIMSTD0.5
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



Original Peak Response = 5605



Manual Peak Response = 4573 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:42:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	49	177570	10.000	ppbV	0.00
Standard Area = 179180			Recovery = 99.10%			
43) 1,4-difluorobenzene	12.42	114	395987	10.000	ppbV	0.00
Standard Area = 387589			Recovery = 102.17%			
67) chlorobenzene-D5	16.85	54	75310	10.000	ppbV	0.00
Standard Area = 73180			Recovery = 102.91%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	11.09	65	102559	9.996	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.96%			
69) toluene-D8	15.15	98	301289	9.904	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.04%			
90) bromofluorobenzene	18.04	95	218849	9.938	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.38%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.02	51	16955	1.091	ppbV	98
3) propylene	4.06	41	9000M6	1.168	ppbV	
4) propane	4.09	29	9346	1.286	ppbV	97
5) dichlorodifluoromethane	4.16	85	18233	1.242	ppbV	98
6) chloromethane	4.38	50	10361	1.222	ppbV	96
7) Freon-114	4.54	85	26728	1.151	ppbV	95
8) methanol	4.63	31	16281	6.748	ppbV #	88
9) vinyl chloride	4.69	62	9954	1.124	ppbV	98
10) 1,3-butadiene	4.89	54	7107	1.078	ppbV	93
11) butane	4.96	43	15606	1.253	ppbV	98
12) acetaldehyde	4.56	29	21626	6.325	ppbV	97
13) bromomethane	5.27	94	10007	1.175	ppbV	99
14) chloroethane	5.52	64	5067	1.249	ppbV	97
15) ethanol	5.72	31	27281	5.728	ppbV	98
16) dichlorofluoromethane	5.67	67	19472	1.142	ppbV #	96
17) vinyl bromide	6.00	106	10219	1.115	ppbV	94
18) acrolein	6.19	56	3953	1.080	ppbV	96
19) acetone	6.38	43	72173	5.857	ppbV #	99
20) acetonitrile	6.01	41	9113	1.225	ppbV	96
21) trichlorofluoromethane	6.59	101	25405	1.126	ppbV	98
22) isopropyl alcohol	6.75	45	19496	1.298	ppbV	98
23) acrylonitrile	7.00	53	7843	1.180	ppbV	97
24) pentane	7.07	43	17241	1.179	ppbV #	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:42:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.13	31	9799	1.092 ppbV	97
26) 1,1-dichloroethene	7.43	61	16344	1.151 ppbV	89
27) tertiary butyl alcohol	7.54	59	21626	1.213 ppbV #	93
28) methylene chloride	7.60	49	14735	1.316 ppbV	100
29) 3-chloropropene	7.75	41	13639	1.177 ppbV	98
30) carbon disulfide	7.92	76	27630	1.100 ppbV #	82
31) Freon 113	7.94	101	21645	1.140 ppbV	95
32) trans-1,2-dichloroethene	8.78	61	17054	1.074 ppbV	99
33) 1,1-dichloroethane	9.01	63	21263	1.138 ppbV	97
34) MTBE	9.11	73	28933	1.119 ppbV	98
35) vinyl acetate	9.23	43	26740	1.033 ppbV #	95
36) 2-butanone	9.53	43	26960	1.130 ppbV	96
37) cis-1,2-dichloroethene	10.01	61	18594	1.069 ppbV	96
38) Ethyl Acetate	10.31	61	4788	1.052 ppbV	93
39) chloroform	10.37	83	27988	1.122 ppbV	95
40) Tetrahydrofuran	10.85	42	17030	1.244 ppbV	97
41) 2,2-dichloropropane	10.38	77	23865	1.173 ppbV	96
42) 1,2-dichloroethane	11.21	62	14511	1.094 ppbV	97
44) hexane	10.27	57	23460	1.049 ppbV #	71
45) diisopropyl ether	10.28	87	10357	1.069 ppbV	89
46) tert-butyl ethyl ether	10.90	59	36112	1.098 ppbV	98
48) 1,1,1-trichloroethane	11.49	97	22586	1.085 ppbV	93
49) 1,1-dichloropropene	11.86	75	15757	1.027 ppbV #	88
50) benzene	12.01	78	34226	1.101 ppbV	96
51) thiophene	12.17	84	21738	1.083 ppbV	99
52) carbon tetrachloride	12.19	117	21865	0.982 ppbV	91
53) cyclohexane	12.33	56	20130	1.097 ppbV	98
54) tert-amyl methyl ether	12.70	73	30773	1.078 ppbV	97
55) dibromomethane	12.93	93	13589	1.053 ppbV	98
56) 1,2-dichloropropane	12.95	63	13798	1.078 ppbV	94
57) bromodichloromethane	13.17	83	25194	1.047 ppbV	93
58) 1,4-dioxane	13.24	88	7086	0.951 ppbV #	74
59) trichloroethene	13.22	130	16938	1.031 ppbV	91
60) 2,2,4-trimethylpentane	13.25	57	63694	1.073 ppbV	99
61) methyl methacrylate	13.44	41	16859	1.056 ppbV #	97
62) heptane	13.55	43	24297	1.048 ppbV	93
63) cis-1,3-dichloropropene	14.20	75	16734	0.984 ppbV	97
64) 4-methyl-2-pentanone	14.25	43	32273	1.049 ppbV	95
65) trans-1,3-dichloropropene	14.79	75	16100	0.967 ppbV	98
66) 1,1,2-trichloroethane	14.97	97	14474	1.029 ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:42:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.25	91	43466	1.056	ppbV		97
70)	2-methylthiophene	15.32	97	37403	1.100	ppbV		99
71)	1,3-dichloropropane	15.28	76	17695	1.028	ppbV		97
72)	2-hexanone	15.51	43	31002	1.045	ppbV	#	94
73)	3-methylthiophene	15.49	97	38158	1.086	ppbV		97
74)	dibromochloromethane	15.66	129	27359	0.969	ppbV		100
75)	1,2-dibromoethane	15.90	107	23490	1.014	ppbV		97
76)	butyl acetate	16.08	73	4021	1.008	ppbV		97
77)	octane	16.15	85	11653	1.085	ppbV	#	97
78)	tetrachloroethene	16.31	166	23555	1.042	ppbV		98
79)	1,1,1,2-tetrachloroethane	16.86	131	19446	1.033	ppbV		94
80)	chlorobenzene	16.88	112	37264	1.065	ppbV		99
81)	ethylbenzene	17.17	91	56347	1.053	ppbV		96
82)	2-ethylthiophene	17.21	97	42483	1.074	ppbV		96
83)	m+p-xylene	17.32	91	87213	2.096	ppbV		100
84)	bromoform	17.40	173	28772	0.940	ppbV		95
85)	styrene	17.60	104	34693	1.029	ppbV		95
86)	1,1,2,2-tetrachloroethane	17.68	83	31993	1.018	ppbV		96
87)	o-xylene	17.68	91	45098	1.074	ppbV		99
88)	1,2,3-trichloropropane	17.78	75	23583	1.024	ppbV		98
89)	nonane	17.82	43	35889	1.059	ppbV	#	99
91)	isopropylbenzene	18.12	105	61358	1.040	ppbV		98
92)	bromobenzene	18.21	77	29321	1.052	ppbV		100
93)	2-chlorotoluene	18.49	126	17782	1.035	ppbV		95
94)	n-propylbenzene	18.51	120	18776	1.071	ppbV		86
95)	4-chlorotoluene	18.54	91	46217	1.064	ppbV		98
96)	4-ethyl toluene	18.61	105	69345	1.023	ppbV		94
97)	1,3,5-trimethylbenzene	18.66	105	54861	1.048	ppbV		100
98)	tert-butylbenzene	18.97	119	60505	1.062	ppbV		100
99)	1,2,4-trimethylbenzene	18.97	105	55213	1.040	ppbV		98
100)	decane	19.02	57	37796	1.070	ppbV		100
101)	Benzyl Chloride	19.09	91	40171	0.878	ppbV		99
102)	1,3-dichlorobenzene	19.11	146	43173	1.037	ppbV		99
103)	1,4-dichlorobenzene	19.15	146	43542	1.050	ppbV		97
104)	sec-butylbenzene	19.17	105	80226	1.053	ppbV		99
105)	1,2,3-trimethylbenzene	19.30	105	50192	1.082	ppbV		96
106)	p-isopropyltoluene	19.29	119	73624	1.029	ppbV		96
107)	1,2-dichlorobenzene	19.42	146	41127	1.038	ppbV		97
108)	n-butylbenzene	19.61	91	63470	1.012	ppbV		99
109)	indan	19.46	117	56011	1.064	ppbV		97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:42:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	36268	1.033	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	13649	0.915	ppbV	95
112) undecane	19.97	57	39715	0.919	ppbV	95
113) 1,2,4,5-tetramethylben...	20.22	119	92563	0.991	ppbV	97
114) dodecane	20.87	57	31492	0.651	ppbV	96
115) 1,2,4-trichlorobenzene	20.86	180	32190	0.814	ppbV	96
116) naphthalene	20.99	128	69893	0.808	ppbV	99
117) 1,2,3-trichlorobenzene	21.23	180	30747	0.819	ppbV	99
118) benzothiophene	21.05	134	64561	0.865	ppbV	99
119) hexachlorobutadiene	21.30	225	29486	0.890	ppbV	98
120) 2-methylnaphthalene	22.14	142	14058	0.411	ppbV	93
121) 1-methylnaphthalene	22.35	142	19746	0.666	ppbV	95

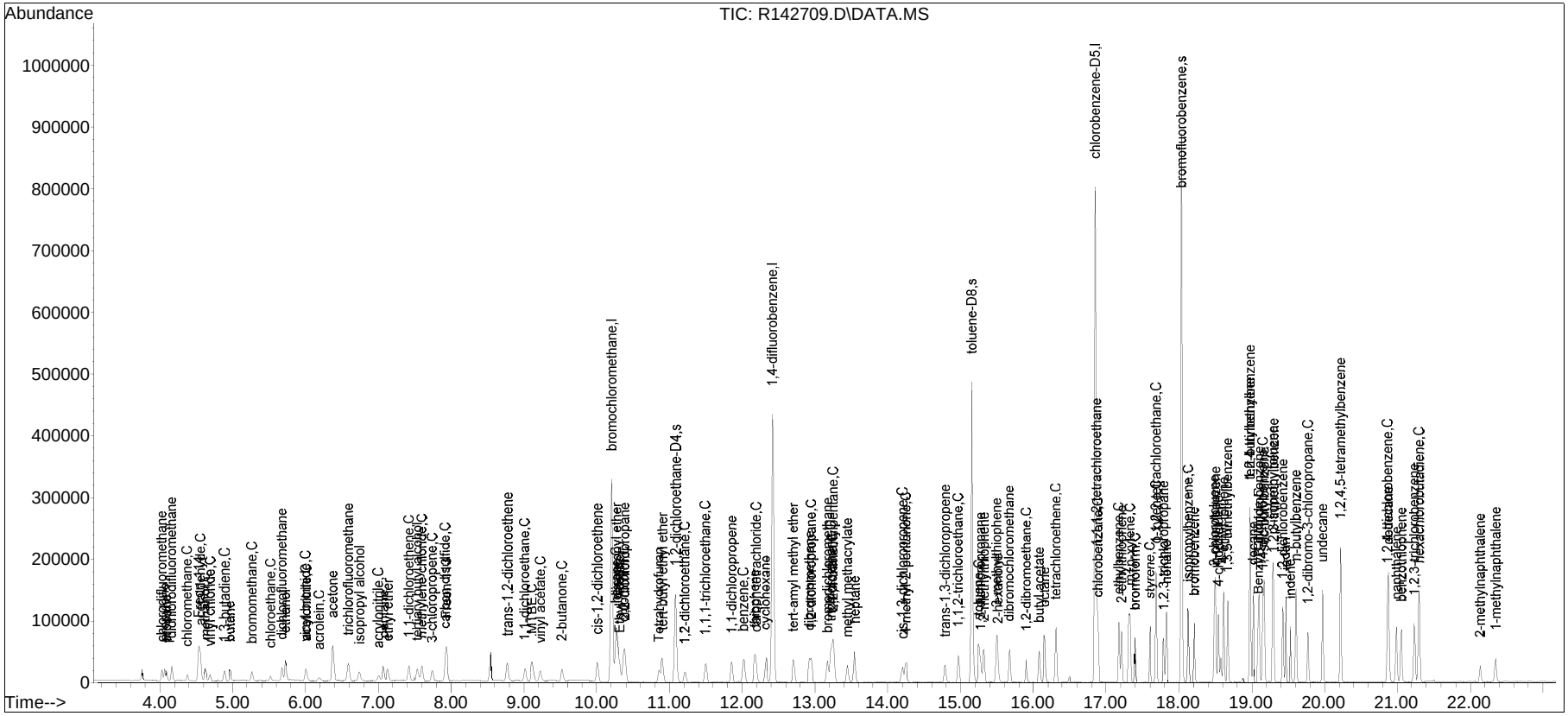
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142709.D
Acq On : 10 Jul 2015 3:48 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD1.0
Misc : WG801817
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 11 08:42:01 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

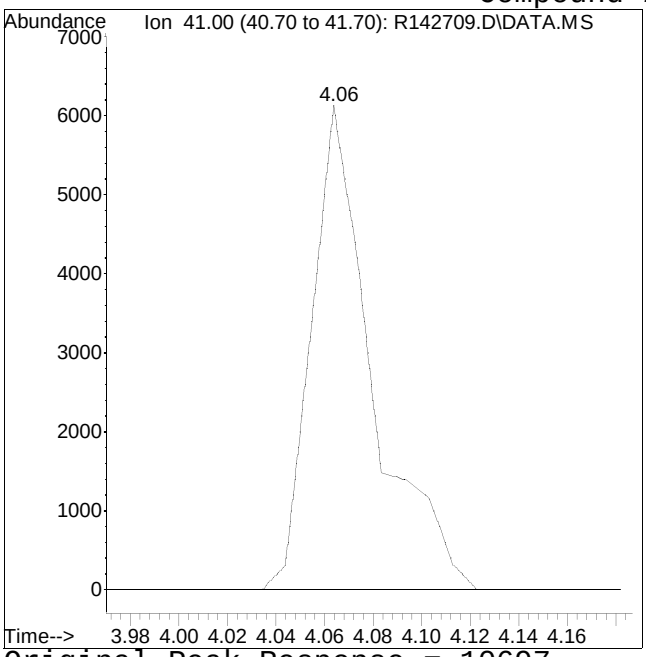
Sub List : Default All Compounds
Target Ions : All Ions
Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



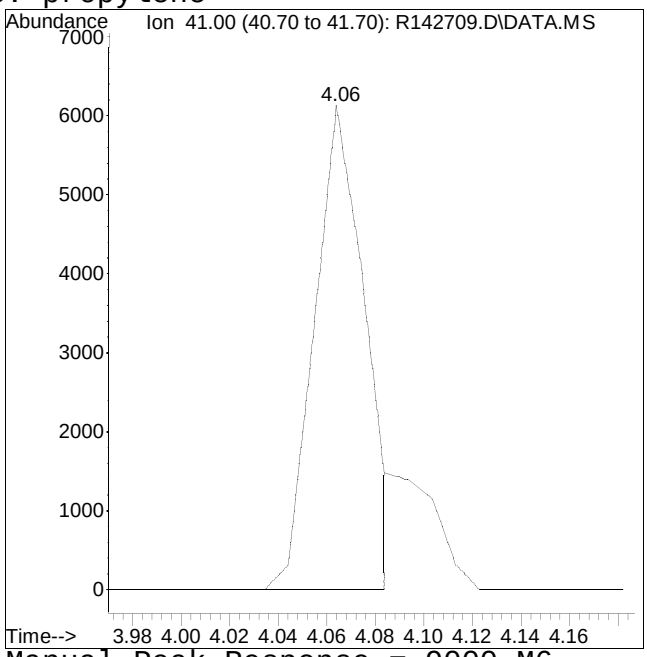
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QM150710T_ICAL\TALL150710.M
Data File : R142709.D
Date Inj'd : 7/10/2015 3:48 pm
Sample : ITO15-SIMSTD1.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



Original Peak Response = 10697



Manual Peak Response = 9000 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:43:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	180968	10.000 ppbV	0.00
Standard Area = 179180			Recovery	= 101.00%	
43) 1,4-difluorobenzene	12.42	114	385816	10.000 ppbV	0.00
Standard Area = 387589			Recovery	= 99.54%	
67) chlorobenzene-D5	16.84	54	75753	10.000 ppbV	0.00
Standard Area = 73180			Recovery	= 103.52%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.09	65	103376	10.341 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 103.41%	
69) toluene-D8	15.15	98	298798	9.764 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.64%	
90) bromofluorobenzene	18.03	95	216784	9.787 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 97.87%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.02	51	81193	5.125 ppbV	98
3) propylene	4.06	41	41781M6	5.321 ppbV	
4) propane	4.09	29	37590	5.077 ppbV	98
5) dichlorodifluoromethane	4.16	85	71118	4.753 ppbV	98
6) chloromethane	4.38	50	43801	5.071 ppbV	95
7) Freon-114	4.53	85	120521	5.094 ppbV	94
8) methanol	4.62	31	65414	26.602 ppbV	96
9) vinyl chloride	4.69	62	45764	5.072 ppbV	98
10) 1,3-butadiene	4.89	54	33840	5.035 ppbV	94
11) butane	4.96	43	68662	5.408 ppbV	99
12) acetaldehyde	4.55	29	91576	26.281 ppbV	98
13) bromomethane	5.27	94	46027	5.304 ppbV	94
14) chloroethane	5.52	64	21858	5.287 ppbV	98
15) ethanol	5.71	31	133062	27.413 ppbV	100
16) dichlorofluoromethane	5.67	67	89669	5.160 ppbV	99
17) vinyl bromide	6.00	106	48176	5.156 ppbV	96
18) acrolein	6.18	56	19818	5.313 ppbV	95
19) acetone	6.36	43	323287	25.742 ppbV	99
20) acetonitrile	6.00	41	39197	5.170 ppbV	95
21) trichlorofluoromethane	6.59	101	116880	5.084 ppbV	100
22) isopropyl alcohol	6.72	45	81151	5.302 ppbV	98
23) acrylonitrile	6.99	53	34070	5.031 ppbV	97
24) pentane	7.07	43	78634M6	5.278 ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:43:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	7.12	31	48603	5.314	ppbV	98
26) 1,1-dichloroethene	7.43	61	76116	5.259	ppbV	98
27) tertiary butyl alcohol	7.51	59	94633	5.208	ppbV	99
28) methylene chloride	7.59	49	59335	5.198	ppbV	96
29) 3-chloropropene	7.75	41	60952	5.161	ppbV	93
30) carbon disulfide	7.92	76	131862	5.152	ppbV	96
31) Freon 113	7.94	101	98926	5.110	ppbV	96
32) trans-1,2-dichloroethene	8.77	61	83103	5.137	ppbV	98
33) 1,1-dichloroethane	9.01	63	98160	5.155	ppbV	97
34) MTBE	9.10	73	133960	5.084	ppbV	98
35) vinyl acetate	9.22	43	129597	4.914	ppbV	98
36) 2-butanone	9.51	43	126014	5.182	ppbV	99
37) cis-1,2-dichloroethene	10.01	61	91364	5.155	ppbV	99
38) Ethyl Acetate	10.30	61	23363	5.035	ppbV	98
39) chloroform	10.36	83	128102	5.038	ppbV	99
40) Tetrahydrofuran	10.84	42	74382M6	5.330	ppbV	
41) 2,2-dichloropropane	10.38	77	105742	5.100	ppbV	98
42) 1,2-dichloroethane	11.21	62	69560	5.147	ppbV	99
44) hexane	10.26	57	112813	5.178	ppbV #	73
45) diisopropyl ether	10.28	87	49173	5.211	ppbV	97
46) tert-butyl ethyl ether	10.89	59	165220	5.155	ppbV	98
48) 1,1,1-trichloroethane	11.49	97	104715	5.163	ppbV	99
49) 1,1-dichloropropene	11.86	75	77208	5.163	ppbV	98
50) benzene	12.01	78	158528	5.234	ppbV	98
51) thiophene	12.17	84	100437	5.135	ppbV	100
52) carbon tetrachloride	12.18	117	107325	4.948	ppbV	98
53) cyclohexane	12.33	56	90142	5.041	ppbV	99
54) tert-amyl methyl ether	12.69	73	144931	5.211	ppbV	99
55) dibromomethane	12.92	93	63137	5.020	ppbV	96
56) 1,2-dichloropropane	12.95	63	63503	5.093	ppbV	95
57) bromodichloromethane	13.18	83	119579	5.101	ppbV	100
58) 1,4-dioxane	13.22	88	37350	5.144	ppbV	90
59) trichloroethene	13.22	130	83938	5.245	ppbV	94
60) 2,2,4-trimethylpentane	13.25	57	298362	5.158	ppbV	99
61) methyl methacrylate	13.43	41	78469	5.046	ppbV	99
62) heptane	13.55	43	116503	5.159	ppbV	99
63) cis-1,3-dichloropropene	14.20	75	81651	4.930	ppbV	100
64) 4-methyl-2-pentanone	14.24	43	155945	5.202	ppbV	99
65) trans-1,3-dichloropropene	14.78	75	81171	5.005	ppbV	99
66) 1,1,2-trichloroethane	14.97	97	70301	5.129	ppbV	95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:43:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
68)	toluene	15.25	91	206735	4.995 ppbV	98
70)	2-methylthiophene	15.31	97	169793	4.965 ppbV	98
71)	1,3-dichloropropane	15.28	76	86153	4.975 ppbV	99
72)	2-hexanone	15.49	43	145437	4.873 ppbV	99
73)	3-methylthiophene	15.49	97	175494	4.967 ppbV	100
74)	dibromochloromethane	15.66	129	138098	4.863 ppbV	99
75)	1,2-dibromoethane	15.90	107	117422	5.040 ppbV	96
76)	butyl acetate	16.07	73	19207	4.787 ppbV	79
77)	octane	16.15	85	53750	4.976 ppbV	98
78)	tetrachloroethene	16.31	166	112804	4.961 ppbV	97
79)	1,1,1,2-tetrachloroethane	16.86	131	92897	4.904 ppbV	96
80)	chlorobenzene	16.88	112	173772	4.939 ppbV	99
81)	ethylbenzene	17.17	91	267665	4.971 ppbV	98
82)	2-ethylthiophene	17.21	97	199495	5.014 ppbV	99
83)	m+p-xylene	17.31	91	413060	9.868 ppbV	99
84)	bromoform	17.40	173	146321	4.754 ppbV	97
85)	styrene	17.60	104	167860	4.948 ppbV	99
86)	1,1,2,2-tetrachloroethane	17.68	83	158750	5.021 ppbV	98
87)	o-xylene	17.68	91	214559	5.080 ppbV	99
88)	1,2,3-trichloropropane	17.78	75	114689	4.951 ppbV	98
89)	nonane	17.82	43	171195	5.023 ppbV	100
91)	isopropylbenzene	18.12	105	295032	4.972 ppbV	100
92)	bromobenzene	18.21	77	142280	5.077 ppbV	98
93)	2-chlorotoluene	18.49	126	86107	4.983 ppbV	89
94)	n-propylbenzene	18.50	120	89216	5.058 ppbV	99
95)	4-chlorotoluene	18.54	91	223421	5.113 ppbV	98
96)	4-ethyl toluene	18.61	105	336617	4.935 ppbV	100
97)	1,3,5-trimethylbenzene	18.66	105	262742	4.990 ppbV	100
98)	tert-butylbenzene	18.97	119	284662	4.968 ppbV	98
99)	1,2,4-trimethylbenzene	18.97	105	262965	4.923 ppbV	99
100)	decane	19.02	57	180859	5.089 ppbV	99
101)	Benzyl Chloride	19.09	91	212972	4.627 ppbV	99
102)	1,3-dichlorobenzene	19.11	146	205290	4.904 ppbV	99
103)	1,4-dichlorobenzene	19.16	146	210881	5.054 ppbV	99
104)	sec-butylbenzene	19.17	105	387287	5.052 ppbV	100
105)	1,2,3-trimethylbenzene	19.30	105	236969	5.080 ppbV	97
106)	p-isopropyltoluene	19.28	119	357330	4.966 ppbV	99
107)	1,2-dichlorobenzene	19.42	146	197535	4.954 ppbV	98
108)	n-butylbenzene	19.61	91	315042	4.993 ppbV	100
109)	indan	19.46	117	263449	4.974 ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:43:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	19.54	115	175170	4.959 ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	71250	4.749 ppbV	95
112) undecane	19.97	57	213637	4.917 ppbV	98
113) 1,2,4,5-tetramethylben...	20.22	119	466886	4.971 ppbV	100
114) dodecane	20.87	57	230735	4.741 ppbV	98
115) 1,2,4-trichlorobenzene	20.86	180	188838	4.745 ppbV	100
116) naphthalene	20.98	128	406028	4.668 ppbV	100
117) 1,2,3-trichlorobenzene	21.23	180	175457	4.648 ppbV	99
118) benzothiophene	21.04	134	350458	4.670 ppbV	99
119) hexachlorobutadiene	21.30	225	160213	4.809 ppbV	99
120) 2-methylnaphthalene	22.14	142	142112	4.131 ppbV	97
121) 1-methylnaphthalene	22.34	142	132543	4.444 ppbV	94

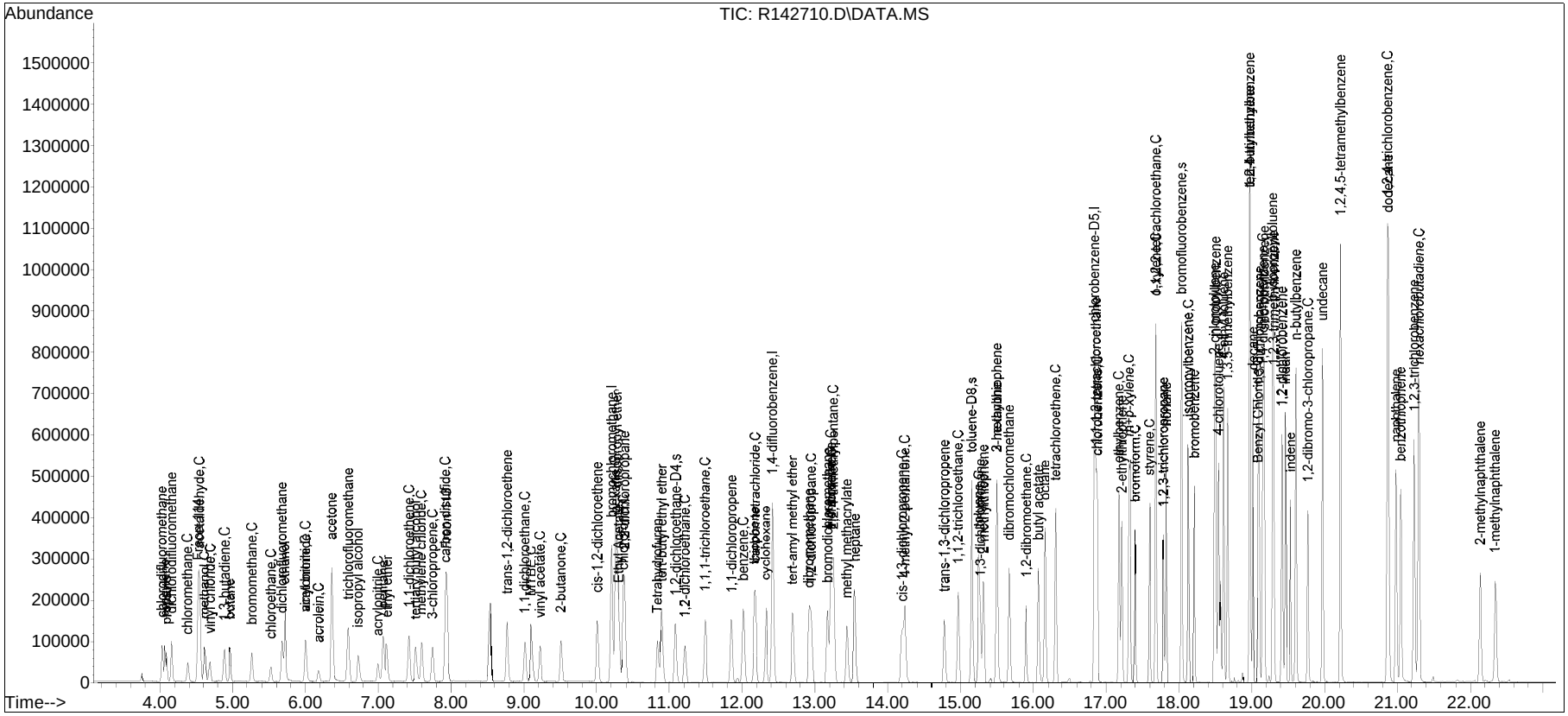
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142710.D
Acq On : 10 Jul 2015 4:19 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD5.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:43:30 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

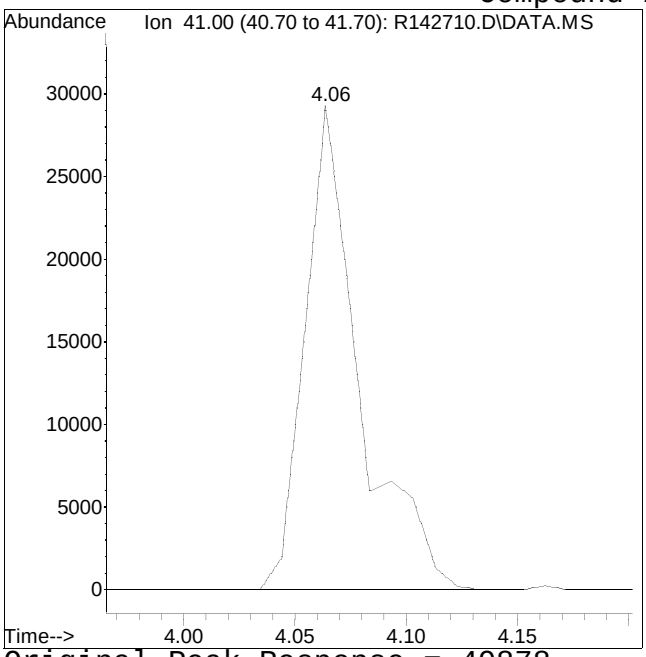
Sub List : Default All Compounds
Reference : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



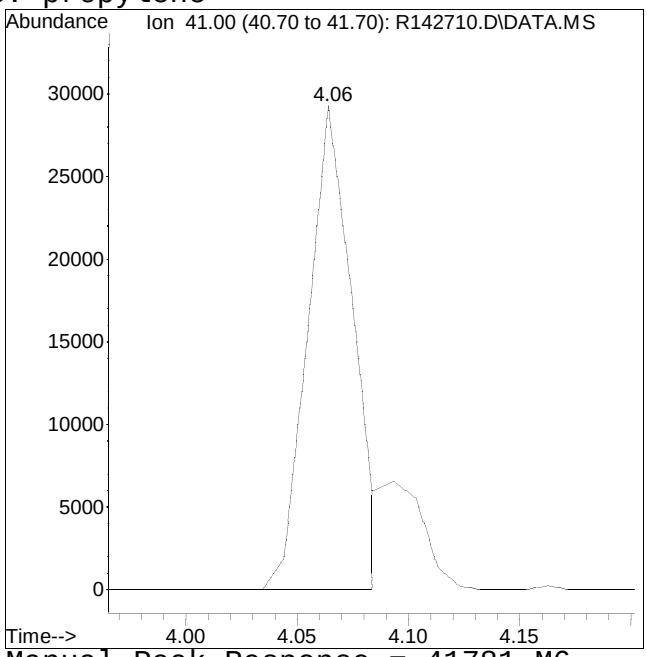
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QMS150710T_ICAL\TALL150710.M
Data File : R142710.D
Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:19 pm
Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



Original Peak Response = 49878



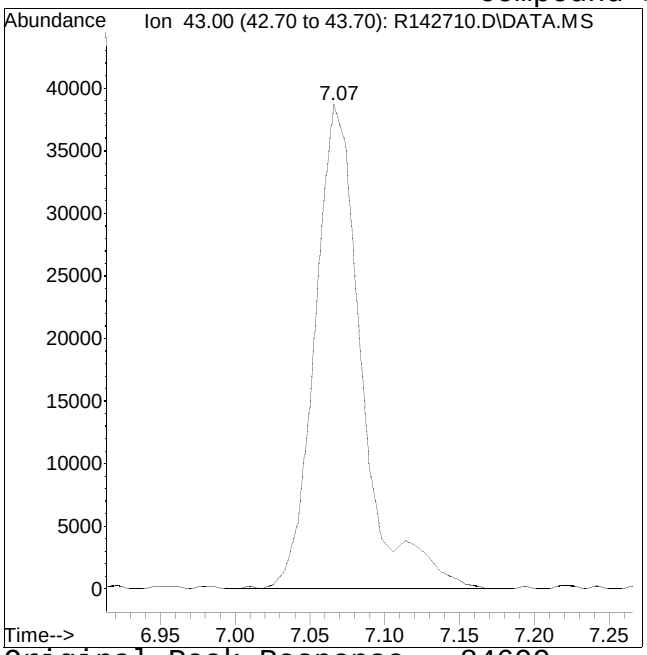
Manual Peak Response = 41781 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

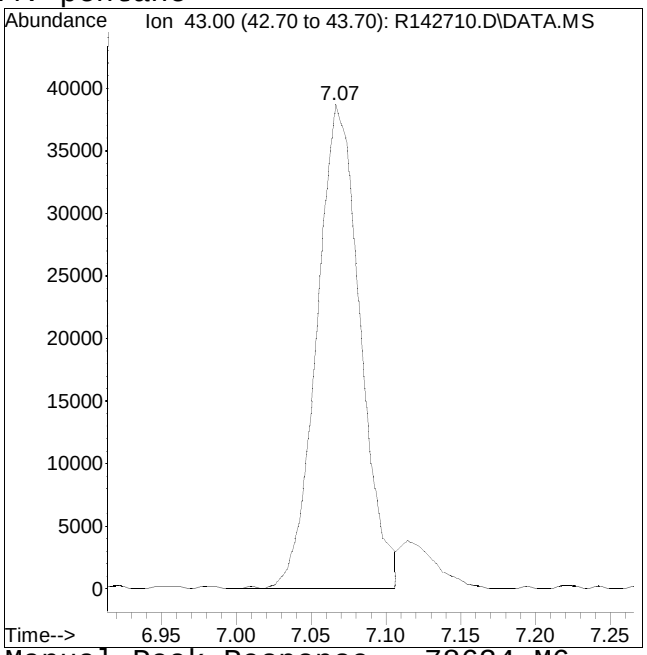
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142710.D
Date Inj'd : 7/10/2015 4:19 pm
Sample : ITO15-SIMSTD5.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #24: pentane



Original Peak Response = 84699



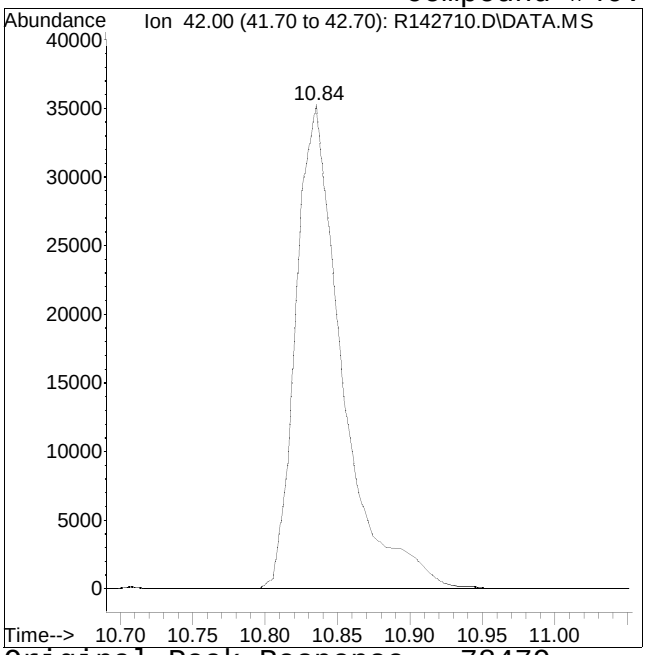
Manual Peak Response = 78634 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

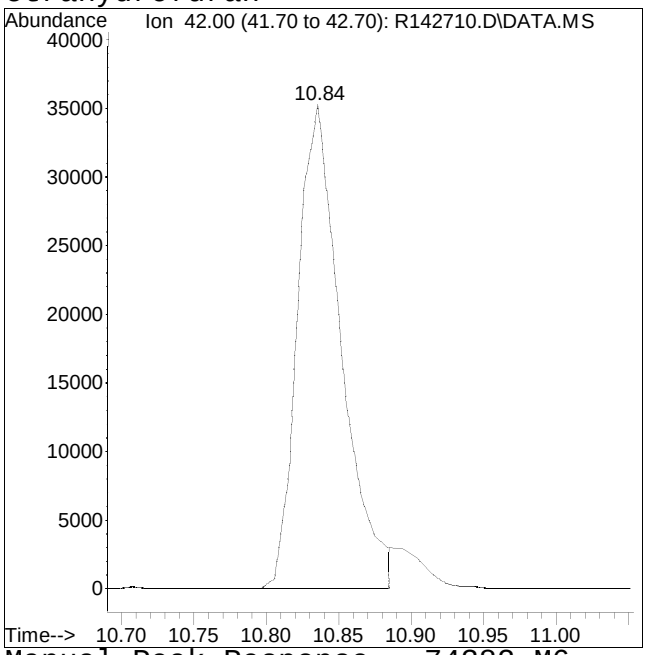
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Method : QM150710T_ICAL\TALL150710.M
Data File : R142710.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:19 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD5.0 Quant Date : 7/11/2015 8:38 am

Compound #40: Tetrahydrofuran



Original Peak Response = 78479



Manual Peak Response = 74382 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:37:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 07:19:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	179180	10.000 ppbV	0.00
Standard Area = 179180			Recovery = 100.00%		
43) 1,4-difluorobenzene	12.42	114	387589	10.000 ppbV	0.00
Standard Area = 387589			Recovery = 100.00%		
67) chlorobenzene-D5	16.85	54	73180	10.000 ppbV	0.00
Standard Area = 73180			Recovery = 100.00%		
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.09	65	100428	7.756 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 77.56%		
69) toluene-D8	15.15	98	295611	10.106 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.06%		
90) bromofluorobenzene	18.03	95	213987	10.054 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.54%		

Target Compounds					Qvalue
2) chlorodifluoromethane	4.02	51	156856	7.967 ppbV #	88
3) propylene	4.06	41	77748M6	7.909 ppbV	
4) propane	4.09	29	73310	6.434 ppbV #	83
5) dichlorodifluoromethane	4.16	85	148136	4.644 ppbV	98
6) chloromethane	4.38	50	85526	7.350 ppbV	97
7) Freon-114	4.54	85	234249	5.790 ppbV	92
8) methanol	4.62	31	121733	27.345 ppbV	96
9) vinyl chloride	4.69	62	89329	6.328 ppbV	100
10) 1,3-butadiene	4.89	54	66542	6.576 ppbV	93
11) butane	4.97	43	125712	6.309 ppbV	98
12) acetaldehyde	4.55	29	172505	23.949 ppbV #	68
13) bromomethane	5.27	94	85915	5.895 ppbV	99
14) chloroethane	5.52	64	40935	5.598 ppbV	100
15) ethanol	5.71	31	240297	26.284 ppbV #	75
16) dichlorofluoromethane	5.67	67	172049	5.495 ppbV	98
17) vinyl bromide	6.00	106	92505	6.421 ppbV	100
18) acrolein	6.18	56	36932	6.372 ppbV #	88
19) acetone	6.36	43	621742	32.122 ppbV	98
20) acetonitrile	6.00	41	75068	6.210 ppbV	93
21) trichlorofluoromethane	6.59	101	227641	5.901 ppbV	98
22) isopropyl alcohol	6.72	45	151545	6.742 ppbV	99
23) acrylonitrile	6.99	53	67056	7.512 ppbV	96
24) pentane	7.07	43	147507M6	6.312 ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:37:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 07:19:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25) ethyl ether	7.11	31	90565	4.886	ppbV #	82
26) 1,1-dichloroethene	7.43	61	143307	6.277	ppbV	98
27) tertiary butyl alcohol	7.51	59	179908	6.385	ppbV	98
28) methylene chloride	7.60	49	113025	6.904	ppbV	87
29) 3-chloropropene	7.75	41	116938	6.243	ppbV	96
30) carbon disulfide	7.92	76	253407	5.646	ppbV	100
31) Freon 113	7.94	101	191663	6.360	ppbV	92
32) trans-1,2-dichloroethene	8.77	61	160185	7.697	ppbV	97
33) 1,1-dichloroethane	9.01	63	188543	7.284	ppbV	94
34) MTBE	9.10	73	260875	6.387	ppbV #	90
35) vinyl acetate	9.22	43	261133	8.608	ppbV	97
36) 2-butanone	9.51	43	240791	8.643	ppbV	93
37) cis-1,2-dichloroethene	10.01	61	175497	7.769	ppbV	95
38) Ethyl Acetate	10.30	61	45941	8.473	ppbV #	98
39) chloroform	10.37	83	251770	6.393	ppbV	98
40) Tetrahydrofuran	10.83	42	138162M6	8.322	ppbV	
41) 2,2-dichloropropane	10.39	77	205287	5.849	ppbV	93
42) 1,2-dichloroethane	11.21	62	133818	6.363	ppbV #	93
44) hexane	10.27	57	218888	9.582	ppbV	85
45) diisopropyl ether	10.28	87	94805	7.665	ppbV #	57
46) tert-butyl ethyl ether	10.89	59	321976	8.680	ppbV	93
48) 1,1,1-trichloroethane	11.49	97	203763	7.221	ppbV #	97
49) 1,1-dichloropropene	11.86	75	150214	7.561	ppbV	95
50) benzene	12.01	78	304253	7.717	ppbV #	91
51) thiophene	12.17	84	196495	7.852	ppbV	93
52) carbon tetrachloride	12.19	117	217888	7.672	ppbV	93
53) cyclohexane	12.33	56	179632	9.780	ppbV	90
54) tert-amyl methyl ether	12.69	73	279388	7.405	ppbV	93
55) dibromomethane	12.93	93	126337	7.966	ppbV	91
56) 1,2-dichloropropane	12.95	63	125259	8.940	ppbV #	91
57) bromodichloromethane	13.18	83	235499	7.492	ppbV #	98
58) 1,4-dioxane	13.22	88	72947	8.351	ppbV	91
59) trichloroethene	13.22	130	160769	9.297	ppbV	91
60) 2,2,4-trimethylpentane	13.25	57	581109	9.731	ppbV #	93
61) methyl methacrylate	13.43	41	156229	9.233	ppbV	90
62) heptane	13.55	43	226860	9.620	ppbV	99
63) cis-1,3-dichloropropene	14.20	75	166378	7.989	ppbV	99
64) 4-methyl-2-pentanone	14.24	43	301179	9.732	ppbV	99
65) trans-1,3-dichloropropene	14.78	75	162922	7.846	ppbV	97
66) 1,1,2-trichloroethane	14.97	97	137704	8.443	ppbV	94

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:37:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 07:19:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.25	91	399854	9.163	ppbV		98
70)	2-methylthiophene	15.32	97	330332	9.028	ppbV		99
71)	1,3-dichloropropane	15.28	76	167304	8.487	ppbV		92
72)	2-hexanone	15.49	43	288320	11.475	ppbV		99
73)	3-methylthiophene	15.49	97	341299	8.870	ppbV		100
74)	dibromochloromethane	15.66	129	274308	9.667	ppbV		99
75)	1,2-dibromoethane	15.90	107	225055	9.756	ppbV		99
76)	butyl acetate	16.07	73	38759	9.185	ppbV	#	58
77)	octane	16.15	85	104350	8.837	ppbV	#	71
78)	tetrachloroethene	16.31	166	219651	10.130	ppbV		93
79)	1,1,1,2-tetrachloroethane	16.86	131	182988	9.330	ppbV		97
80)	chlorobenzene	16.88	112	339890	9.833	ppbV		91
81)	ethylbenzene	17.18	91	520149	9.187	ppbV		97
82)	2-ethylthiophene	17.21	97	384360	8.807	ppbV		94
83)	m+p-xylene	17.32	91	808730M4	17.795	ppbV		
84)	bromoform	17.40	173	297351	10.269	ppbV		99
85)	styrene	17.60	104	327730	9.627	ppbV		94
86)	1,1,2,2-tetrachloroethane	17.68	83	305419	9.125	ppbV		100
87)	o-xylene	17.68	91	408016	8.759	ppbV		97
88)	1,2,3-trichloropropane	17.78	75	223760	8.514	ppbV		95
89)	nonane	17.82	43	329224	10.982	ppbV		100
91)	isopropylbenzene	18.12	105	573180	9.465	ppbV		97
92)	bromobenzene	18.21	77	270727	8.337	ppbV		85
93)	2-chlorotoluene	18.49	126	166934	10.238	ppbV		88
94)	n-propylbenzene	18.50	120	170386	9.724	ppbV		86
95)	4-chlorotoluene	18.54	91	422120	8.856	ppbV		93
96)	4-ethyl toluene	18.61	105	658878	9.697	ppbV		98
97)	1,3,5-trimethylbenzene	18.66	105	508702	9.219	ppbV		95
98)	tert-butylbenzene	18.97	119	553542	9.753	ppbV		99
99)	1,2,4-trimethylbenzene	18.97	105	516043	9.509	ppbV		96
100)	decane	19.02	57	343299	11.100	ppbV		99
101)	Benzyl Chloride	19.09	91	444631	9.420	ppbV		94
102)	1,3-dichlorobenzene	19.11	146	404401M3	10.314	ppbV		
103)	1,4-dichlorobenzene	19.16	146	403045	10.156	ppbV	#	92
104)	sec-butylbenzene	19.17	105	740528	9.534	ppbV		100
105)	1,2,3-trimethylbenzene	19.30	105	450612	9.046	ppbV		96
106)	p-isopropyltoluene	19.28	119	695082	10.017	ppbV		98
107)	1,2-dichlorobenzene	19.42	146	385170	10.430	ppbV	#	93
108)	n-butylbenzene	19.61	91	609518	9.505	ppbV		97
109)	indan	19.46	117	511647	9.914	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:37:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 07:19:04 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	19.54	115	341210	10.004 ppbV	98
111) 1,2-dibromo-3-chloropr...	19.77	75	144926	8.346 ppbV #	78
112) undecane	19.97	57	419729	12.815 ppbV	95
113) 1,2,4,5-tetramethylben...	20.22	119	907331	10.494 ppbV	97
114) dodecane	20.87	57	470140	16.906 ppbV	94
115) 1,2,4-trichlorobenzene	20.86	180	384432	12.812 ppbV	96
116) naphthalene	20.99	128	840292	13.474 ppbV	95
117) 1,2,3-trichlorobenzene	21.23	180	364653	13.240 ppbV	96
118) benzothiophene	21.04	134	724945	11.812 ppbV	97
119) hexachlorobutadiene	21.30	225	321828	12.026 ppbV #	89
120) 2-methylnaphthalene	22.14	142	332313	13.656 ppbV	96
121) 1-methylnaphthalene	22.34	142	288130	12.974 ppbV	95

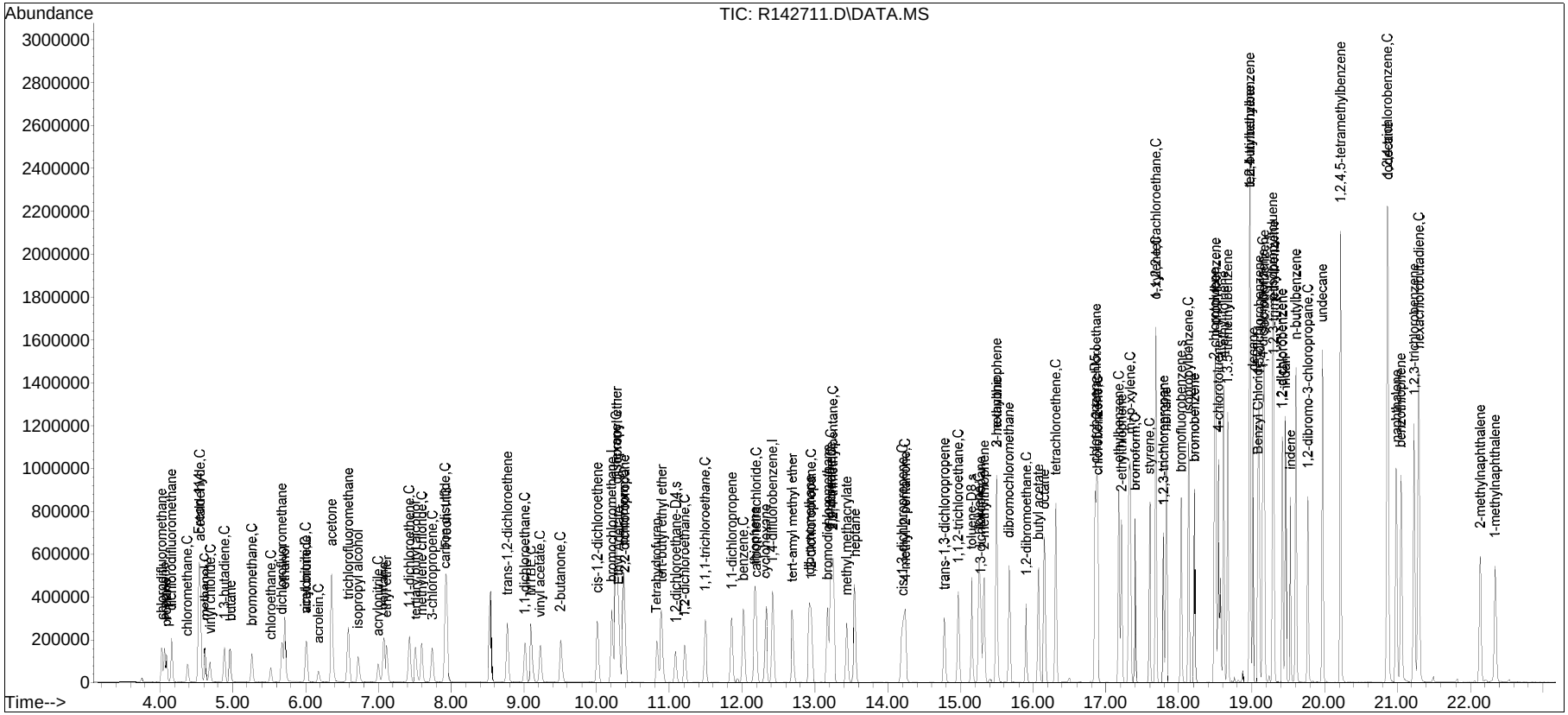
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142711.D
Acq On : 10 Jul 2015 4:53 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD10.0
Misc : WG801817
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 11 08:37:36 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Wed Jun 03 07:19:04 2015
Response via : Initial Calibration

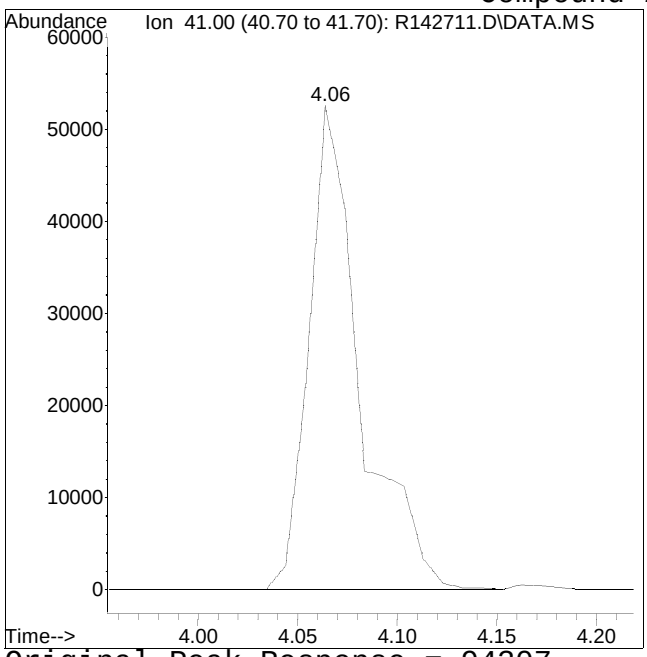
Sub List : Default All Compounds
Data File: O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



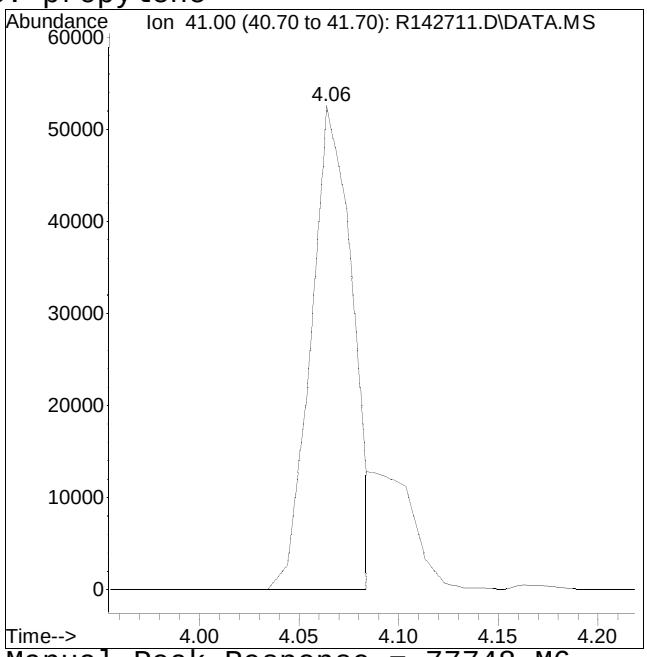
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ITO15_ICAL\TALL150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 8:36 am

Compound #3: propylene



Original Peak Response = 94307



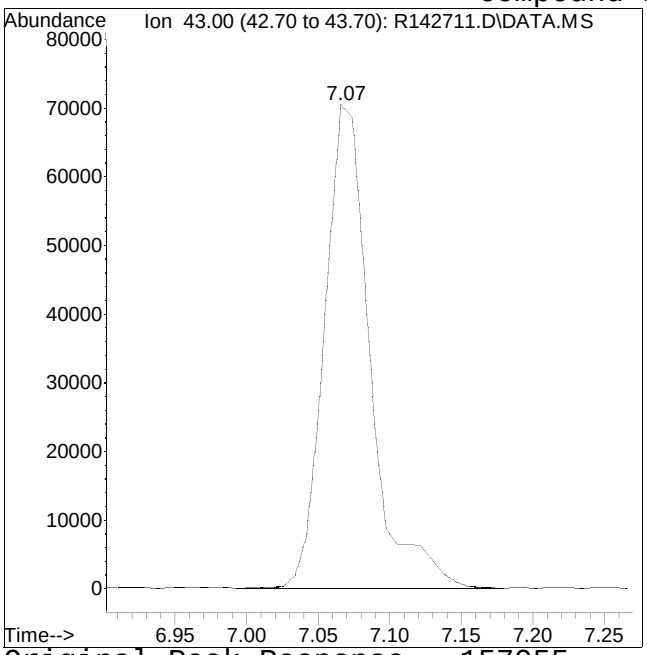
Manual Peak Response = 77748 M6

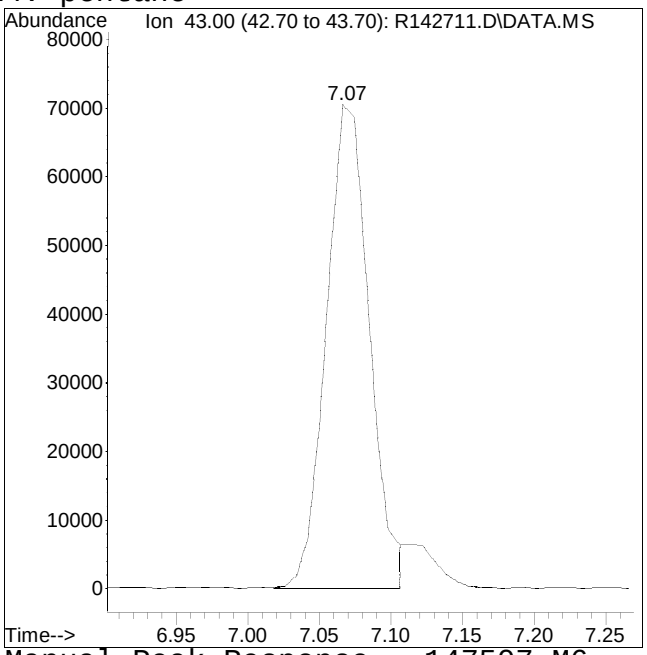
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QM150710T_ICAL\TALL150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 8:36 am

Compound #24: pentane



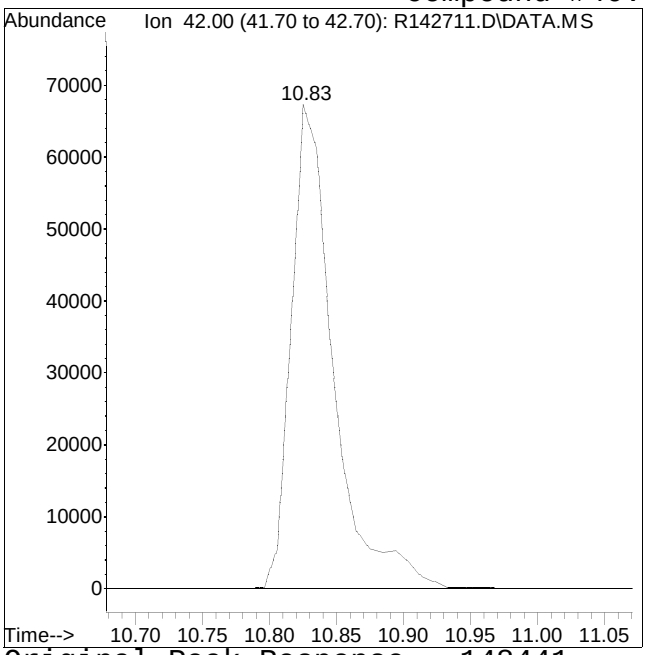


Original Peak Response = 157955 Manual Peak Response = 147507 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

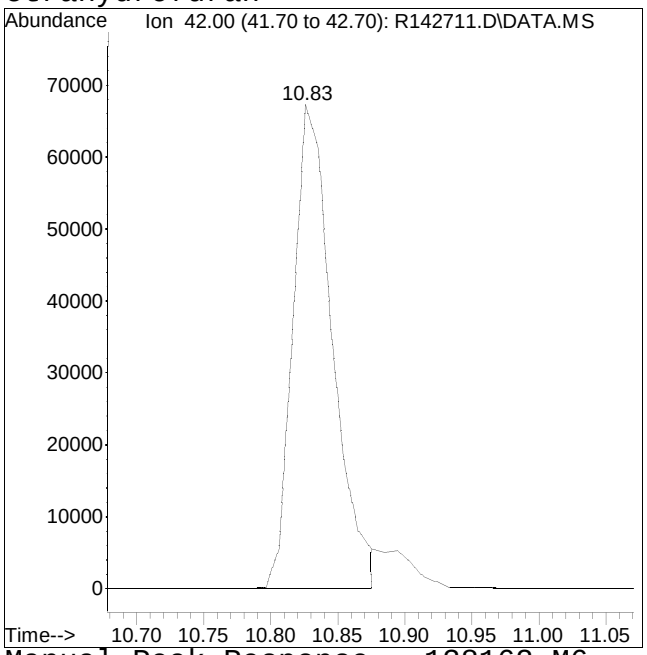
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QM150710T_ICAL\TALL150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 8:36 am

Compound #40: Tetrahydrofuran



Original Peak Response = 148441



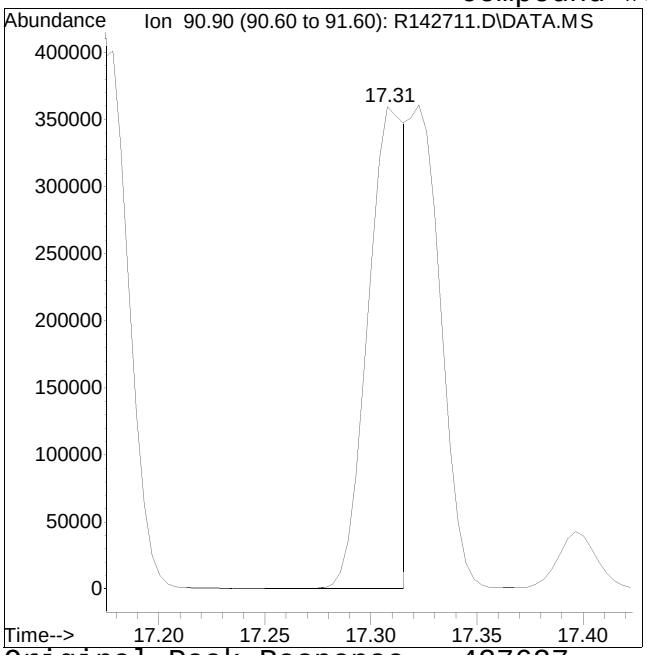
Manual Peak Response = 138162 M6

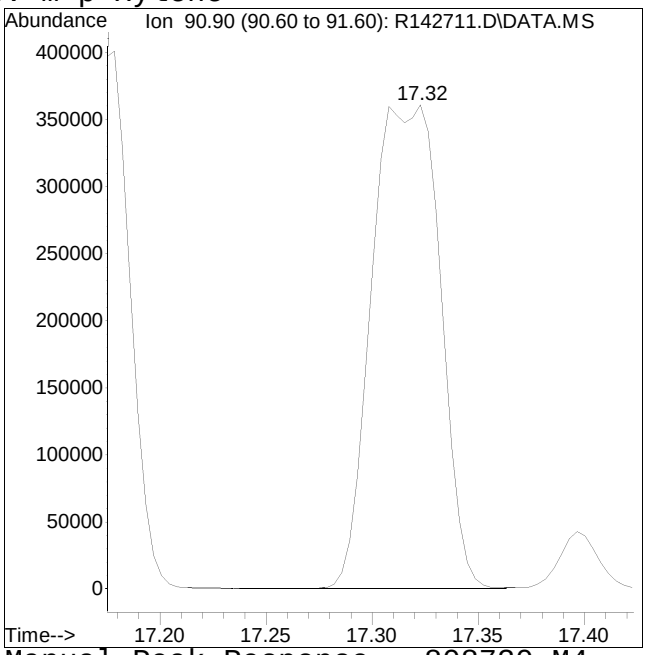
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QM150710T_ICAL\TALL150710.M
Data File : R142711.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 4:53 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD10.0 Quant Date : 7/11/2015 8:36 am

Compound #83: m+p-xylene



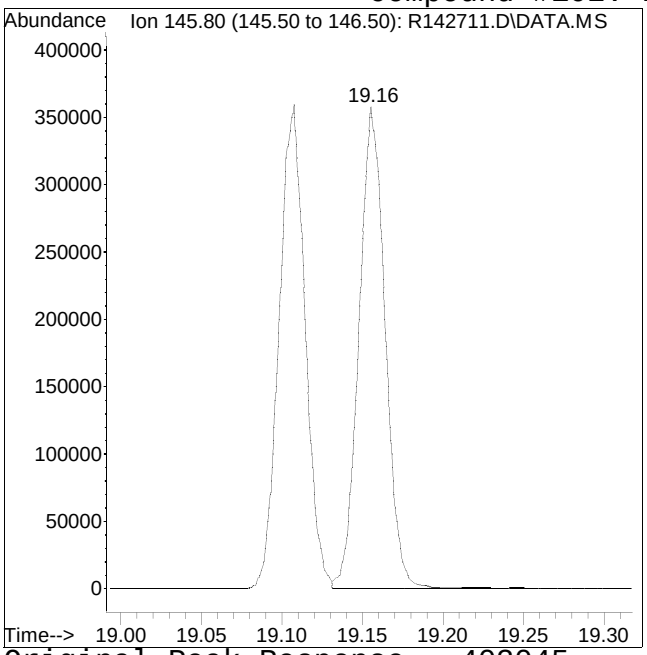


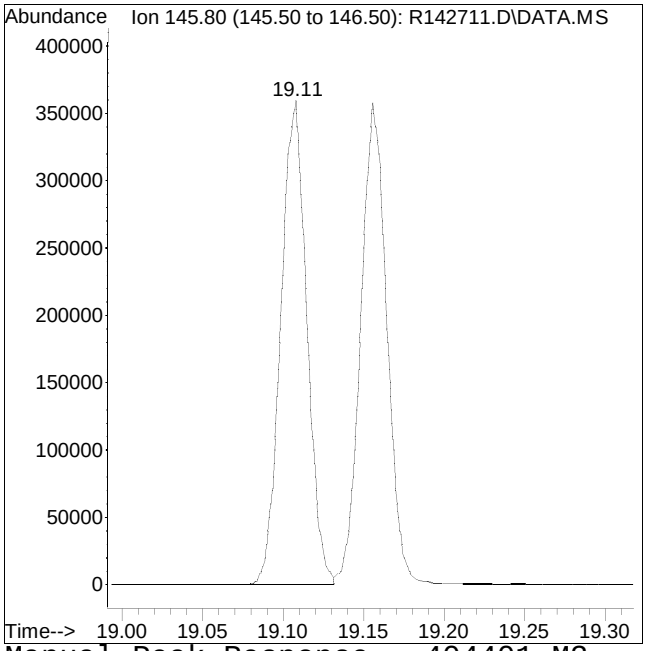
Original Peak Response = 427627 Manual Peak Response = 808730 M4
M4 = Poor automated baseline construction.

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142711.D
Date Inj'd : 7/10/2015 4:53 pm
Sample : ITO15-SIMSTD10.0
Quant Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:36 am

Compound #102: 1,3-dichlorobenzene





Original Peak Response = 403045 Manual Peak Response = 404401 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:44:46 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	49	177941	10.000	ppbV	0.00
Standard Area = 179180			Recovery = 99.31%			
43) 1,4-difluorobenzene	12.43	114	385534	10.000	ppbV	0.01
Standard Area = 387589			Recovery = 99.47%			
67) chlorobenzene-D5	16.85	54	72392	10.000	ppbV	0.00
Standard Area = 73180			Recovery = 98.92%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	11.09	65	95922	9.602	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.02%			
69) toluene-D8	15.15	98	292252	9.994	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.94%			
90) bromofluorobenzene	18.04	95	214459	10.131	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.31%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.02	51	307936	19.768	ppbV	97
3) propylene	4.06	41	152893M6	19.802	ppbV	
4) propane	4.09	29	147203	20.219	ppbV	99
5) dichlorodifluoromethane	4.16	85	297541	20.226	ppbV	100
6) chloromethane	4.38	50	167400	19.709	ppbV	96
7) Freon-114	4.53	85	458288	19.700	ppbV	96
8) methanol	4.62	31	236150	97.670	ppbV	98
9) vinyl chloride	4.69	62	174896	19.715	ppbV	100
10) 1,3-butadiene	4.89	54	130607	19.764	ppbV	97
11) butane	4.97	43	249551	19.989	ppbV	99
12) acetaldehyde	4.55	29	336658	98.259	ppbV	99
13) bromomethane	5.27	94	168639	19.765	ppbV	98
14) chloroethane	5.52	64	79902	19.655	ppbV	95
15) ethanol	5.72	31	479869	100.544	ppbV	100
16) dichlorofluoromethane	5.67	67	341023	19.959	ppbV	98
17) vinyl bromide	6.01	106	182739	19.892	ppbV	97
18) acrolein	6.18	56	72164	19.676	ppbV	99
19) acetone	6.35	43	1188937	96.279	ppbV	100
20) acetonitrile	6.00	41	145496	19.517	ppbV	96
21) trichlorofluoromethane	6.59	101	441659	19.537	ppbV	99
22) isopropyl alcohol	6.72	45	297520	19.769	ppbV	99
23) acrylonitrile	6.99	53	131649	19.769	ppbV	97
24) pentane	7.07	43	283292M6	19.339	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:44:46 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
25)	ethyl ether	7.11	31	174891	19.446	ppbV	96
26)	1,1-dichloroethene	7.43	61	282351	19.840	ppbV	99
27)	tertiary butyl alcohol	7.51	59	349422	19.557	ppbV	98
28)	methylene chloride	7.60	49	223045	19.872	ppbV	99
29)	3-chloropropene	7.75	41	228518	19.678	ppbV	96
30)	carbon disulfide	7.92	76	490737	19.500	ppbV	99
31)	Freon 113	7.94	101	368122	19.340	ppbV	99
32)	trans-1,2-dichloroethene	8.77	61	314207	19.752	ppbV	99
33)	1,1-dichloroethane	9.01	63	371874	19.861	ppbV	99
34)	MTBE	9.10	73	512770	19.793	ppbV	98
35)	vinyl acetate	9.22	43	518853	20.008	ppbV	98
36)	2-butanone	9.51	43	477711	19.977	ppbV	100
37)	cis-1,2-dichloroethene	10.01	61	354631	20.348	ppbV	99
38)	Ethyl Acetate	10.30	61	91631	20.084	ppbV	96
39)	chloroform	10.37	83	496450	19.856	ppbV	99
40)	Tetrahydrofuran	10.83	42	274181M6	19.983	ppbV	
41)	2,2-dichloropropane	10.39	77	410027	20.112	ppbV	99
42)	1,2-dichloroethane	11.21	62	264375	19.894	ppbV	98
44)	hexane	10.27	57	430733	19.783	ppbV	98
45)	diisopropyl ether	10.28	87	188188	19.956	ppbV	99
46)	tert-butyl ethyl ether	10.89	59	620345	19.370	ppbV	99
48)	1,1,1-trichloroethane	11.49	97	403023	19.884	ppbV	99
49)	1,1-dichloropropene	11.86	75	290518	19.443	ppbV	99
50)	benzene	12.01	78	601237	19.866	ppbV	99
51)	thiophene	12.17	84	387423	19.822	ppbV	99
52)	carbon tetrachloride	12.19	117	431426	19.906	ppbV	98
53)	cyclohexane	12.33	56	350520	19.617	ppbV	99
54)	tert-amyl methyl ether	12.69	73	549784	19.783	ppbV	98
55)	dibromomethane	12.93	93	248032	19.737	ppbV	96
56)	1,2-dichloropropane	12.95	63	242434	19.458	ppbV	99
57)	bromodichloromethane	13.17	83	459824	19.630	ppbV	99
58)	1,4-dioxane	13.22	88	145501	20.052	ppbV	99
59)	trichloroethene	13.22	130	317266	19.839	ppbV	97
60)	2,2,4-trimethylpentane	13.25	57	1129241	19.536	ppbV	99
61)	methyl methacrylate	13.43	41	311487	20.044	ppbV	99
62)	heptane	13.55	43	439503	19.477	ppbV	99
63)	cis-1,3-dichloropropene	14.20	75	330363	19.962	ppbV	99
64)	4-methyl-2-pentanone	14.23	43	595506	19.878	ppbV	98
65)	trans-1,3-dichloropropene	14.78	75	328518	20.272	ppbV	99
66)	1,1,2-trichloroethane	14.97	97	269160	19.650	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:44:46 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
68)	toluene	15.25	91	786032	19.872	ppbV	100
70)	2-methylthiophene	15.32	97	652500	19.968	ppbV	99
71)	1,3-dichloropropane	15.28	76	329717	19.922	ppbV	99
72)	2-hexanone	15.49	43	563077	19.742	ppbV	98
73)	3-methylthiophene	15.49	97	687635	20.367	ppbV	99
74)	dibromochloromethane	15.66	129	549506	20.251	ppbV	99
75)	1,2-dibromoethane	15.90	107	443576	19.924	ppbV	99
76)	butyl acetate	16.07	73	76082	19.843	ppbV	96
77)	octane	16.15	85	204031	19.765	ppbV	98
78)	tetrachloroethene	16.31	166	428691	19.729	ppbV	97
79)	1,1,1,2-tetrachloroethane	16.86	131	361324	19.961	ppbV	98
80)	chlorobenzene	16.88	112	671227	19.963	ppbV	99
81)	ethylbenzene	17.18	91	1027622	19.971	ppbV	100
82)	2-ethylthiophene	17.21	97	773261	20.337	ppbV	98
83)	m+p-xylene	17.32	91	1587679	39.691	ppbV	100
84)	bromoform	17.40	173	601052	20.434	ppbV	98
85)	styrene	17.60	104	653108	20.145	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.68	83	602063	19.927	ppbV	100
87)	o-xylene	17.68	91	818220	20.272	ppbV	98
88)	1,2,3-trichloropropane	17.78	75	439489	19.855	ppbV	99
89)	nonane	17.82	43	633490	19.451	ppbV	99
91)	isopropylbenzene	18.13	105	1118924	19.734	ppbV	100
92)	bromobenzene	18.21	77	540504	20.182	ppbV	100
93)	2-chlorotoluene	18.49	126	326528	19.773	ppbV	96
94)	n-propylbenzene	18.51	120	334175	19.826	ppbV	87
95)	4-chlorotoluene	18.54	91	829976	19.876	ppbV	99
96)	4-ethyl toluene	18.61	105	1271738	19.512	ppbV	100
97)	1,3,5-trimethylbenzene	18.66	105	967050	19.217	ppbV	99
98)	tert-butylbenzene	18.97	119	1040675	19.005	ppbV	98
99)	1,2,4-trimethylbenzene	18.97	105	957545	18.758	ppbV	98
100)	decane	19.02	57	636863	18.753	ppbV	96
101)	Benzyl Chloride	19.09	91	879145	19.988	ppbV	99
102)	1,3-dichlorobenzene	19.11	146	751677	18.790	ppbV	98
103)	1,4-dichlorobenzene	19.15	146	766785	19.232	ppbV	99
104)	sec-butylbenzene	19.17	105	1380628	18.847	ppbV	99
105)	1,2,3-trimethylbenzene	19.30	105	855388	19.189	ppbV	100
106)	p-isopropyltoluene	19.29	119	1253283	18.227	ppbV	99
107)	1,2-dichlorobenzene	19.42	146	713568	18.728	ppbV	99
108)	n-butylbenzene	19.61	91	1089758	18.074	ppbV	99
109)	indan	19.46	117	973541	19.235	ppbV	98

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:44:46 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	661857	19.608	ppbV	100
111) 1,2-dibromo-3-chloropr...	19.77	75	252619	17.621	ppbV	99
112) undecane	19.97	57	649895	15.652	ppbV	98
113) 1,2,4,5-tetramethylben...	20.22	119	1428167	15.912	ppbV	99
114) dodecane	20.87	57	549396	11.813	ppbV	99
115) 1,2,4-trichlorobenzene	20.86	180	513241	13.496	ppbV	100
116) naphthalene	20.98	128	1062631	12.784	ppbV	100
117) 1,2,3-trichlorobenzene	21.23	180	441654	12.243	ppbV	99
118) benzothiophene	21.04	134	1034083	14.420	ppbV	100
119) hexachlorobutadiene	21.30	225	421744	13.247	ppbV	99
120) 2-methylnaphthalene	22.14	142	397829	12.102	ppbV	98
121) 1-methylnaphthalene	22.34	142	388206	13.620	ppbV	98

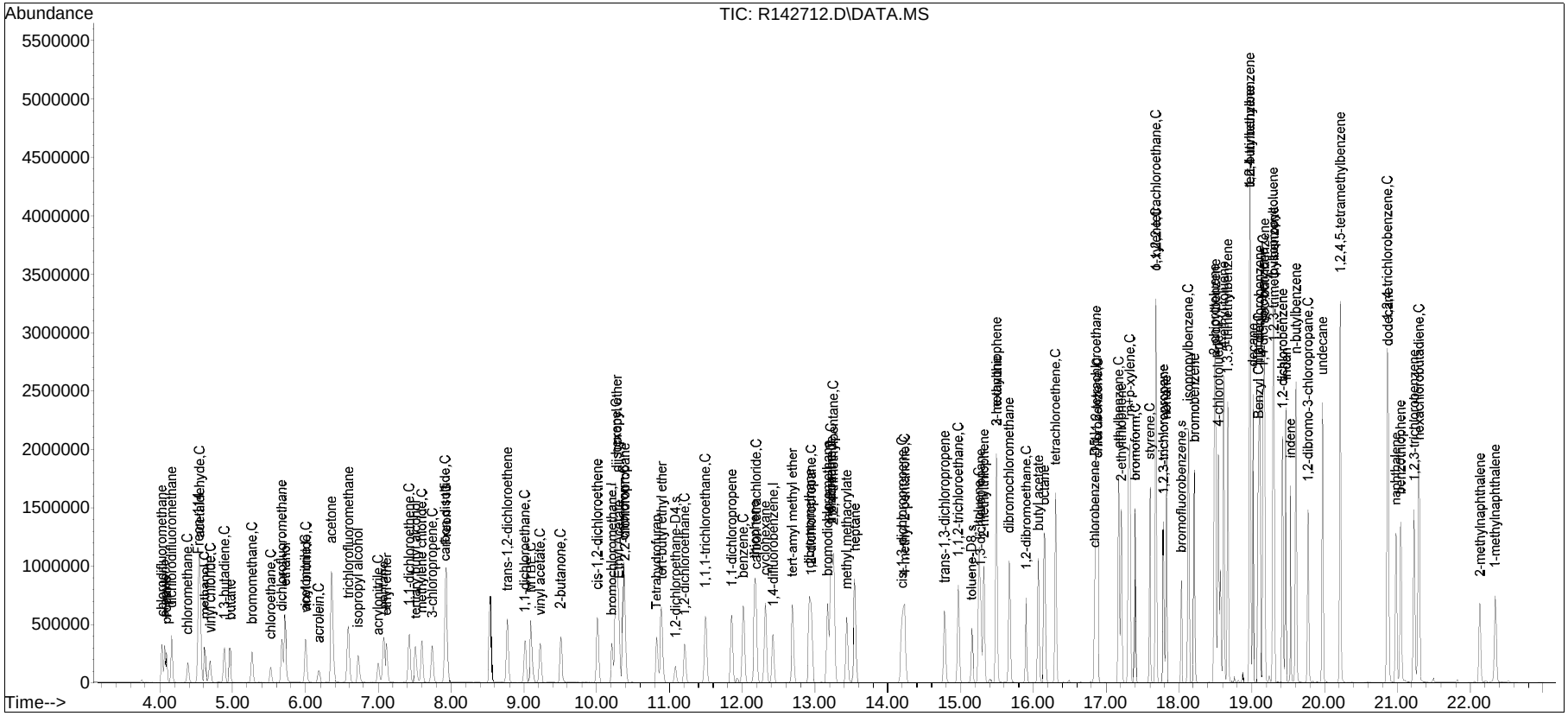
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142712.D
Acq On : 10 Jul 2015 5:25 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD20.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:44:46 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

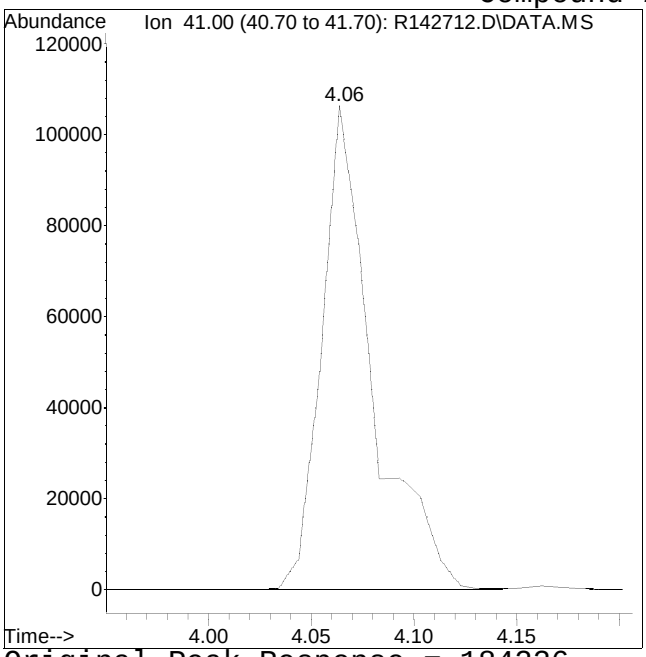
Sub List : Default
Compound List: O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D



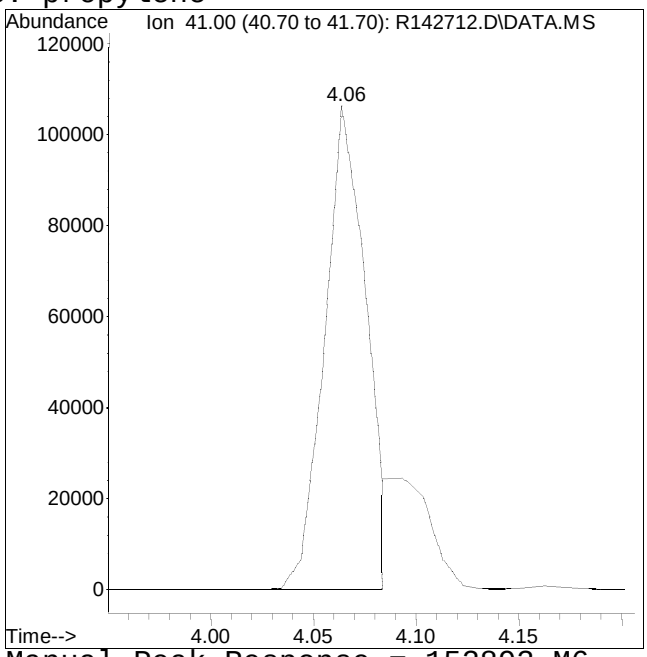
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ITO15_ICAL\TALL150710.M
Data File : R142712.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 5:25 pm Instrument : Air Piano 1
Sample : ITO15-SIMSTD20.0 Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



Original Peak Response = 184226



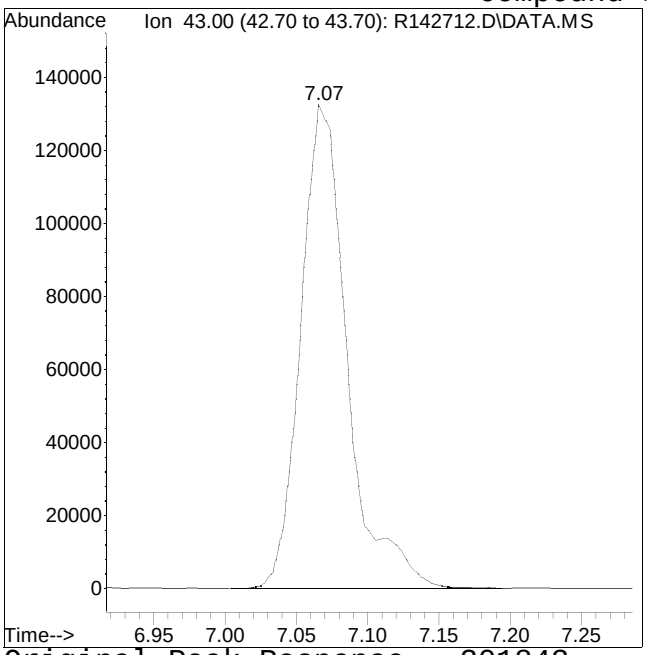
Manual Peak Response = 152893 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

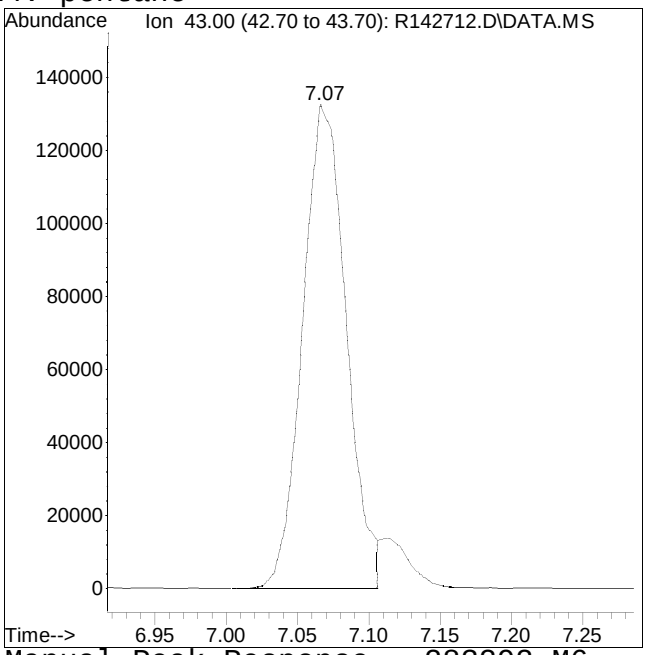
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142712.D
Date Inj'd : 7/10/2015 5:25 pm
Sample : ITO15-SIMSTD20.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #24: pentane



Original Peak Response = 301843



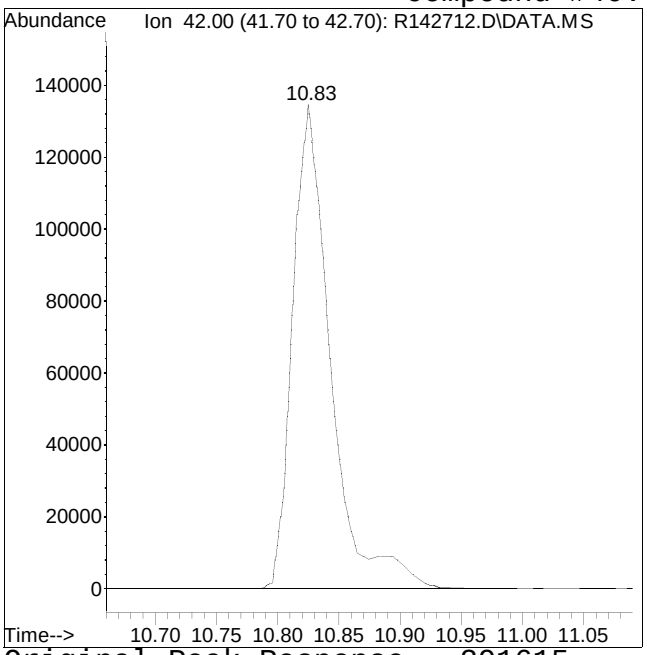
Manual Peak Response = 283292 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

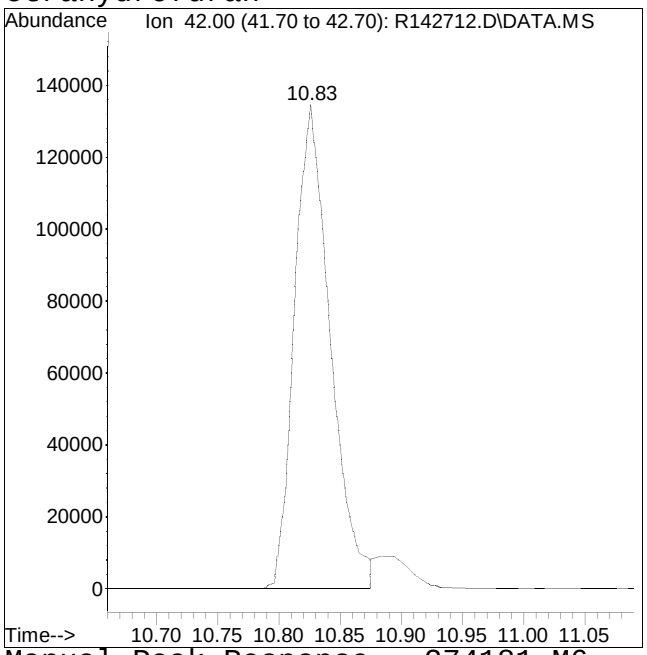
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142712.D
Date Inj'd : 7/10/2015 5:25 pm
Sample : ITO15-SIMSTD20.0
Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #40: Tetrahydrofuran



Original Peak Response = 291615



Manual Peak Response = 274181 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:45:52 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.21	49	179027	10.000	ppbV	0.00
Standard Area = 179180			Recovery = 99.91%			
43) 1,4-difluorobenzene	12.43	114	384632	10.000	ppbV	0.01
Standard Area = 387589			Recovery = 99.24%			
67) chlorobenzene-D5	16.85	54	71426	10.000	ppbV	0.00
Standard Area = 73180			Recovery = 97.60%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	11.09	65	97548	9.788	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.88%			
69) toluene-D8	15.15	98	293150	10.160	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.60%			
90) bromofluorobenzene	18.04	95	208651	9.990	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.90%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.02	51	747727	47.710	ppbV	98
3) propylene	4.06	41	373826M6	48.123	ppbV	
4) propane	4.09	29	337587	46.089	ppbV	99
5) dichlorodifluoromethane	4.16	85	564128	38.114	ppbV	100
6) chloromethane	4.38	50	393107	46.003	ppbV	96
7) Freon-114	4.53	85	1024077	43.755	ppbV	98
8) methanol	4.62	31	543197	223.301	ppbV	97
9) vinyl chloride	4.69	62	417496	46.777	ppbV	99
10) 1,3-butadiene	4.89	54	305949	46.018	ppbV	92
11) butane	4.96	43	578727	46.075	ppbV	99
12) acetaldehyde	4.55	29	735744	213.435	ppbV	99
13) bromomethane	5.27	94	402779	46.921	ppbV	98
14) chloroethane	5.52	64	188983	46.206	ppbV	98
15) ethanol	5.73	31	1080344	224.986	ppbV	96
16) dichlorofluoromethane	5.67	67	809023	47.063	ppbV	98
17) vinyl bromide	6.00	106	433947	46.951	ppbV	97
18) acrolein	6.18	56	172250	46.680	ppbV	99
19) acetone	6.36	43	2783900	224.070	ppbV	100
20) acetonitrile	6.00	41	334931	44.655	ppbV	97
21) trichlorofluoromethane	6.59	101	1050401	46.182	ppbV	99
22) isopropyl alcohol	6.73	45	702914	46.423	ppbV	99
23) acrylonitrile	7.00	53	315079	47.028	ppbV	98
24) pentane	7.07	43	682935M6	46.338	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:45:52 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
25) ethyl ether	7.11	31	402317	44.461 ppbV	97
26) 1,1-dichloroethene	7.43	61	664602	46.416 ppbV	98
27) tertiary butyl alcohol	7.51	59	839930	46.727 ppbV	99
28) methylene chloride	7.60	49	518760	45.937 ppbV	99
29) 3-chloropropene	7.75	41	538857	46.120 ppbV	97
30) carbon disulfide	7.92	76	1168712	46.159 ppbV	97
31) Freon 113	7.94	101	879151	45.909 ppbV	99
32) trans-1,2-dichloroethene	8.77	61	745298	46.567 ppbV	100
33) 1,1-dichloroethane	9.02	63	874437	46.418 ppbV	98
34) MTBE	9.09	73	1215272	46.624 ppbV	98
35) vinyl acetate	9.22	43	1258434	48.232 ppbV	98
36) 2-butanone	9.51	43	1127183	46.852 ppbV	99
37) cis-1,2-dichloroethene	10.01	61	822480	46.906 ppbV	98
38) Ethyl Acetate	10.30	61	219212	47.757 ppbV	95
39) chloroform	10.37	83	1169594	46.495 ppbV	98
40) Tetrahydrofuran	10.83	42	656510	47.558 ppbV	98
41) 2,2-dichloropropane	10.39	77	973431	47.459 ppbV	98
42) 1,2-dichloroethane	11.22	62	628271	46.990 ppbV	98
44) hexane	10.27	57	985090	45.350 ppbV	93
45) diisopropyl ether	10.28	87	446064	47.412 ppbV	92
46) tert-butyl ethyl ether	10.89	59	1507947	47.194 ppbV	99
48) 1,1,1-trichloroethane	11.49	97	971279	48.034 ppbV	98
49) 1,1-dichloropropene	11.86	75	686188	46.032 ppbV	99
50) benzene	12.03	78	1446642	47.913 ppbV	98
51) thiophene	12.17	84	931299	47.760 ppbV	98
52) carbon tetrachloride	12.19	117	1053799	48.736 ppbV	99
53) cyclohexane	12.33	56	838064	47.013 ppbV	99
54) tert-amyl methyl ether	12.69	73	1321321	47.657 ppbV	98
55) dibromomethane	12.93	93	595591	47.505 ppbV	97
56) 1,2-dichloropropane	12.95	63	580464	46.697 ppbV	97
57) bromodichloromethane	13.18	83	1123971	48.094 ppbV	99
58) 1,4-dioxane	13.21	88	349872	48.331 ppbV	98
59) trichloroethene	13.22	130	749618	46.985 ppbV	97
60) 2,2,4-trimethylpentane	13.26	57	2661575	46.154 ppbV	99
61) methyl methacrylate	13.43	41	742458	47.889 ppbV	99
62) heptane	13.55	43	1026717	45.606 ppbV	97
63) cis-1,3-dichloropropene	14.20	75	810193	49.070 ppbV	98
64) 4-methyl-2-pentanone	14.24	43	1343725	44.958 ppbV	99
65) trans-1,3-dichloropropene	14.79	75	813319	50.305 ppbV	96
66) 1,1,2-trichloroethane	14.97	97	642193	46.994 ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:45:52 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.26	91	1861389	47.695	ppbV		100
70)	2-methylthiophene	15.32	97	1565279	48.549	ppbV		99
71)	1,3-dichloropropane	15.28	76	787158	48.205	ppbV		98
72)	2-hexanone	15.49	43	1263460	44.898	ppbV		98
73)	3-methylthiophene	15.49	97	1608065	48.273	ppbV		99
74)	dibromochloromethane	15.67	129	1316626	49.177	ppbV		99
75)	1,2-dibromoethane	15.90	107	1073092	48.852	ppbV		100
76)	butyl acetate	16.07	73	179011	47.320	ppbV		98
77)	octane	16.16	85	490474	48.157	ppbV		89
78)	tetrachloroethene	16.31	166	1017691	47.470	ppbV		99
79)	1,1,1,2-tetrachloroethane	16.87	131	856572	47.960	ppbV		98
80)	chlorobenzene	16.88	112	1553616	46.832	ppbV		98
81)	ethylbenzene	17.18	91	2406349	47.399	ppbV		100
82)	2-ethylthiophene	17.22	97	1805795	48.136	ppbV		98
83)	m+p-xylene	17.33	91	3639686	92.220	ppbV		100
84)	bromoform	17.40	173	1402735	48.333	ppbV		100
85)	styrene	17.60	104	1535028	47.988	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.68	83	1332336	44.694	ppbV		99
87)	o-xylene	17.69	91	1793917	45.047	ppbV		99
88)	1,2,3-trichloropropane	17.78	75	1032091	47.258	ppbV		98
89)	nonane	17.82	43	1361613	42.374	ppbV	#	92
91)	isopropylbenzene	18.13	105	2572878	45.990	ppbV		99
92)	bromobenzene	18.21	77	1264607	47.859	ppbV		99
93)	2-chlorotoluene	18.49	126	755486	46.368	ppbV		78
94)	n-propylbenzene	18.51	120	759531	45.672	ppbV		87
95)	4-chlorotoluene	18.55	91	1938680	47.055	ppbV		100
96)	4-ethyl toluene	18.61	105	2901128	45.113	ppbV		100
97)	1,3,5-trimethylbenzene	18.67	105	2291608	46.154	ppbV		100
98)	tert-butylbenzene	18.97	119	2305660	42.676	ppbV		99
99)	1,2,4-trimethylbenzene	18.98	105	2152480	42.736	ppbV		96
100)	decane	19.02	57	1455906	43.451	ppbV		90
101)	Benzyl Chloride	19.09	91	2162921	49.840	ppbV		99
102)	1,3-dichlorobenzene	19.11	146	1718735	43.544	ppbV		97
103)	1,4-dichlorobenzene	19.16	146	1750048	44.487	ppbV		98
104)	sec-butylbenzene	19.17	105	3092469	42.786	ppbV		100
105)	1,2,3-trimethylbenzene	19.30	105	1977328	44.959	ppbV		98
106)	p-isopropyltoluene	19.29	119	2936974	43.291	ppbV		98
107)	1,2-dichlorobenzene	19.42	146	1728569	45.980	ppbV		99
108)	n-butylbenzene	19.61	91	2605331	43.794	ppbV		98
109)	indan	19.46	117	2308302	46.223	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:45:52 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
110) indene	19.54	115	1612132	48.408 ppbV	99
111) 1,2-dibromo-3-chloropr...	19.77	75	667651	47.200 ppbV	96
112) undecane	19.97	57	1642094	40.083 ppbV	94
113) 1,2,4,5-tetramethylben...	20.22	119	3751294	42.360 ppbV	98
114) dodecane	20.87	57	1357580	29.585 ppbV	88
115) 1,2,4-trichlorobenzene	20.86	180	1397737	37.251 ppbV	98
116) naphthalene	20.99	128	3142480	38.316 ppbV	99
117) 1,2,3-trichlorobenzene	21.23	180	1296633	36.431 ppbV	100
118) benzothiophene	21.05	134	3075858	43.471 ppbV	99
119) hexachlorobutadiene	21.30	225	1177532	37.487 ppbV	99
120) 2-methylnaphthalene	22.12	142	1205199	37.158 ppbV	99
121) 1-methylnaphthalene	22.34	142	1160076	41.251 ppbV	98

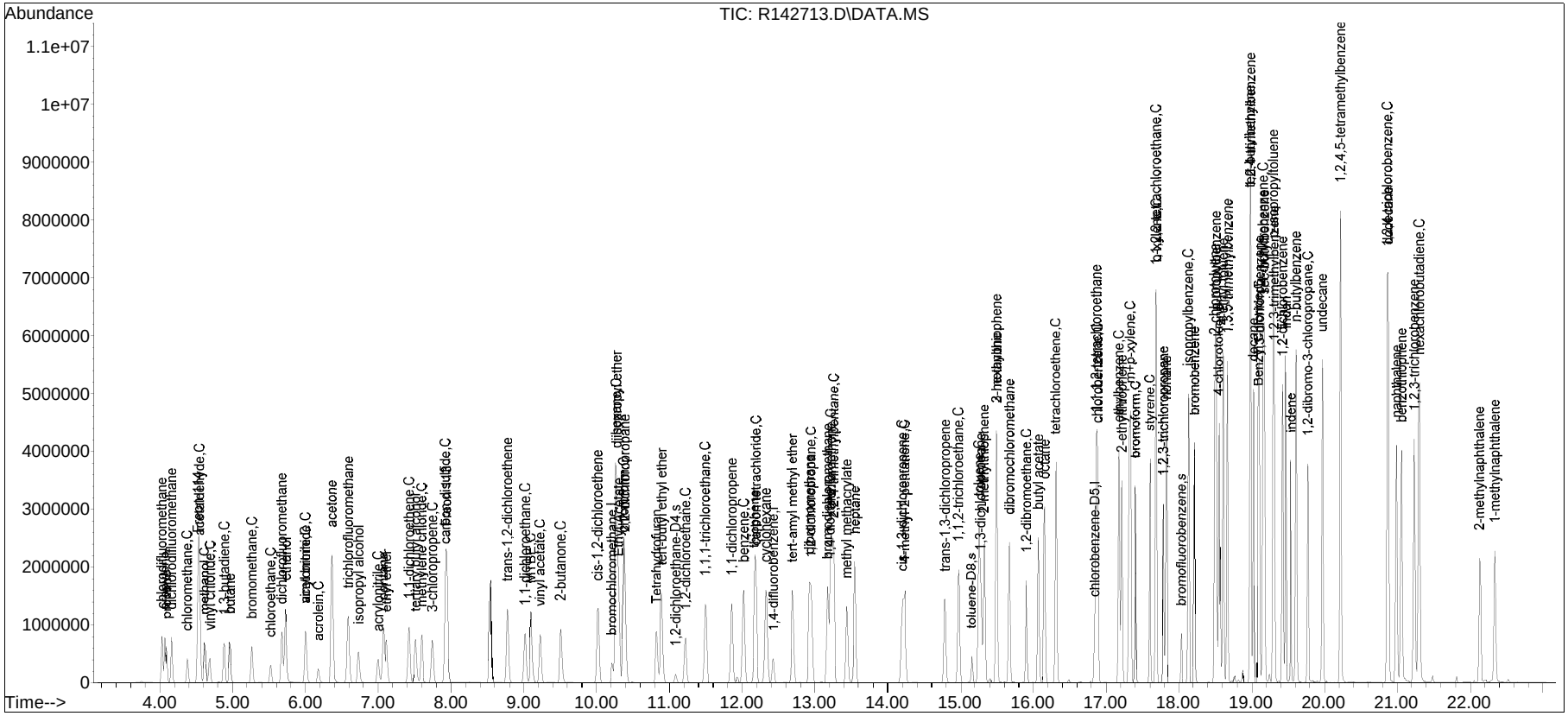
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142713.D
Acq On : 10 Jul 2015 5:56 pm
Operator : AIRPIANO1:RY
Sample : ITO15-SIMSTD50.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:45:52 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

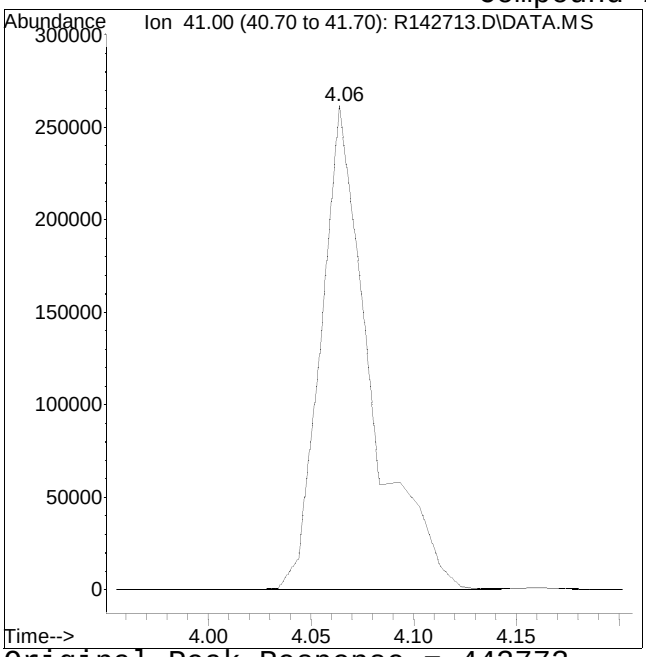
Sub List : Default
Compound List: O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D

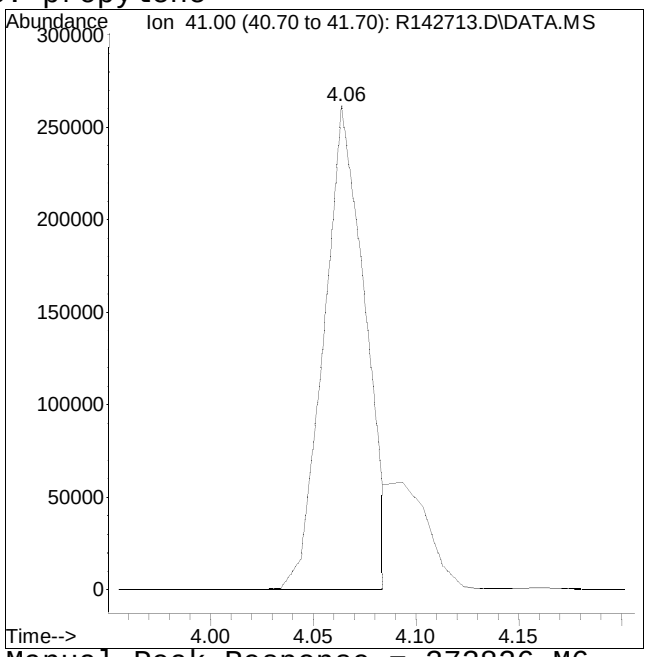


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ITO15_ICAL\TALL150710.M
Data File : R142713.D
Date Inj'd : 7/10/2015 5:56 pm
Sample : ITO15-SIMSTD50.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



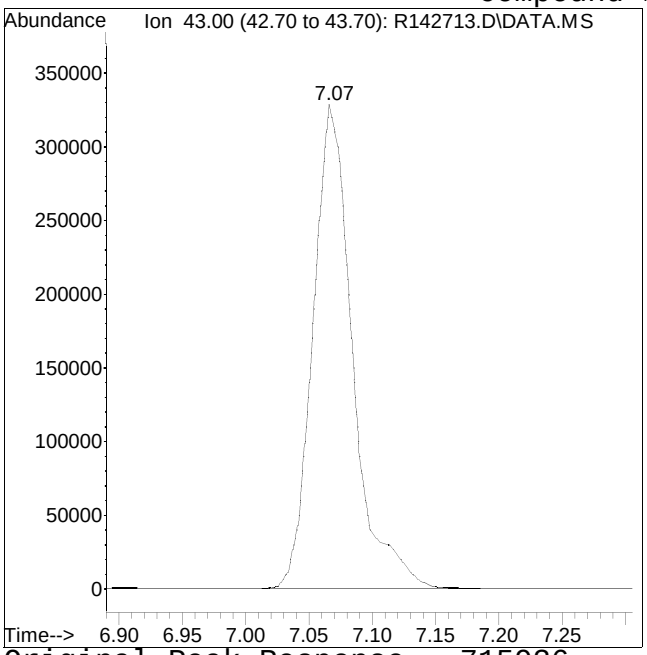


Original Peak Response = 443773 Manual Peak Response = 373826 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

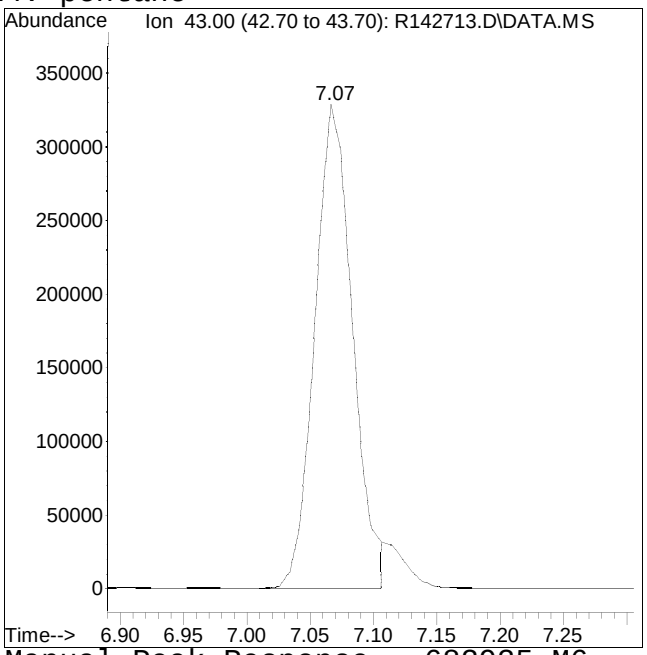
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142713.D
Date Inj'd : 7/10/2015 5:56 pm
Sample : ITO15-SIMSTD50.0
Quant Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #24: pentane



Original Peak Response = 715936



Manual Peak Response = 682935 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142714.D
Acq On : 10 Jul 2015 6:30 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:47:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.22	49	190035	10.000	ppbV	0.00
Standard Area = 179180			Recovery = 106.06%			
43) 1,4-difluorobenzene	12.43	114	375566	10.000	ppbV	0.01
Standard Area = 387589			Recovery = 96.90%			
67) chlorobenzene-D5	16.85	54	70717	10.000	ppbV	0.00
Standard Area = 73180			Recovery = 96.63%			
System Monitoring Compounds						
47) 1,2-dichloroethane-D4	11.10	65	94871	9.749	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.49%			
69) toluene-D8	15.16	98	284774	9.969	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.69%			
90) bromofluorobenzene	18.04	95	206909	10.006	ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.06%			
Target Compounds						Qvalue
2) chlorodifluoromethane	4.02	51	1428700	85.881	ppbV	99
3) propylene	4.06	41	710066M6	86.112	ppbV	
4) propane	4.09	29	625375	80.433	ppbV	99
5) dichlorodifluoromethane	4.16	85	1178928	75.038	ppbV	100
6) chloromethane	4.38	50	764030	84.230	ppbV	96
7) Freon-114	4.53	85	1976118	79.541	ppbV	97
8) methanol	4.63	31	1013742	392.595	ppbV	99
9) vinyl chloride	4.69	62	800221	84.464	ppbV	100
10) 1,3-butadiene	4.89	54	580416	82.243	ppbV	92
11) butane	4.96	43	1060716	79.557	ppbV	99
12) acetaldehyde	4.55	29	1283095	350.657	ppbV	95
13) bromomethane	5.27	94	774124	84.957	ppbV	98
14) chloroethane	5.52	64	367592	84.670	ppbV	98
15) ethanol	5.75	31	1933303	379.295	ppbV	95
16) dichlorofluoromethane	5.68	67	1556116	85.280	ppbV	99
17) vinyl bromide	6.01	106	830289	84.629	ppbV	98
18) acrolein	6.18	56	333775	85.213	ppbV	98
19) acetone	6.37	43	5093627	386.227	ppbV	99
20) acetonitrile	6.01	41	619712	77.838	ppbV	97
21) trichlorofluoromethane	6.59	101	2023249	83.802	ppbV	99
22) isopropyl alcohol	6.74	45	1341798	83.484	ppbV	99
23) acrylonitrile	7.01	53	616406	86.673	ppbV	98
24) pentane	7.07	43	1286642M6	82.243	ppbV	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142714.D
Acq On : 10 Jul 2015 6:30 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:47:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) ethyl ether	7.11	31	750685	78.154	ppbV		94
26) 1,1-dichloroethene	7.43	61	1274167	83.833	ppbV		98
27) tertiary butyl alcohol	7.52	59	1617122	84.752	ppbV		99
28) methylene chloride	7.60	49	982080	81.927	ppbV		96
29) 3-chloropropene	7.75	41	1009845	81.424	ppbV		98
30) carbon disulfide	7.92	76	2191546	81.543	ppbV		97
31) Freon 113	7.94	101	1653244	81.331	ppbV		99
32) trans-1,2-dichloroethene	8.77	61	1258089	74.053	ppbV		98
33) 1,1-dichloroethane	9.02	63	1692859	84.658	ppbV		97
34) MTBE	9.10	73	2371368	85.708	ppbV		98
35) vinyl acetate	9.23	43	2453501	88.589	ppbV		99
36) 2-butanone	9.51	43	2160286	84.592	ppbV		98
37) cis-1,2-dichloroethene	10.02	61	1606065	86.288	ppbV		99
38) Ethyl Acetate	10.31	61	414144	84.998	ppbV		89
39) chloroform	10.38	83	2225823	83.357	ppbV		99
40) Tetrahydrofuran	10.83	42	1248647	85.213	ppbV		99
41) 2,2-dichloropropane	10.40	77	1865996	85.705	ppbV		96
42) 1,2-dichloroethane	11.22	62	1221051	86.035	ppbV		99
44) hexane	10.27	57	1856511	87.531	ppbV	#	72
45) diisopropyl ether	10.29	87	850622	92.596	ppbV		84
46) tert-butyl ethyl ether	10.89	59	2890448	92.646	ppbV		99
48) 1,1,1-trichloroethane	11.50	97	1899301	96.195	ppbV		98
49) 1,1-dichloropropene	11.86	75	1380877	94.870	ppbV		98
50) benzene	12.03	78	2749161	93.250	ppbV		99
51) thiophene	12.18	84	1756960	92.277	ppbV		95
52) carbon tetrachloride	12.19	117	2025533	95.938	ppbV		97
53) cyclohexane	12.34	56	1590733	91.390	ppbV		97
54) tert-amyl methyl ether	12.70	73	2497566	92.256	ppbV		97
55) dibromomethane	12.94	93	1142518	93.329	ppbV		99
56) 1,2-dichloropropane	12.96	63	1084286	89.335	ppbV		97
57) bromodichloromethane	13.19	83	2143637	93.939	ppbV		99
58) 1,4-dioxane	13.22	88	650163	91.981	ppbV		95
59) trichloroethene	13.23	130	1384187	88.854	ppbV		97
60) 2,2,4-trimethylpentane	13.26	57	4861827	86.343	ppbV		97
61) methyl methacrylate	13.44	41	1389013	91.755	ppbV		96
62) heptane	13.56	43	1884032	85.707	ppbV		95
63) cis-1,3-dichloropropene	14.20	75	1562286	96.906	ppbV		96
64) 4-methyl-2-pentanone	14.24	43	2530598	86.713	ppbV		98
65) trans-1,3-dichloropropene	14.79	75	1597765	101.209	ppbV		95
66) 1,1,2-trichloroethane	14.98	97	1226018	91.883	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142714.D
Acq On : 10 Jul 2015 6:30 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:47:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	toluene	15.26	91	3502698	90.650	ppbV		99
70)	2-methylthiophene	15.33	97	2918872	91.439	ppbV		99
71)	1,3-dichloropropane	15.28	76	1484111	91.797	ppbV		94
72)	2-hexanone	15.50	43	2109860	75.726	ppbV	#	91
73)	3-methylthiophene	15.50	97	2889369	87.607	ppbV		98
74)	dibromochloromethane	15.67	129	2512671	94.791	ppbV		99
75)	1,2-dibromoethane	15.91	107	2010885	92.463	ppbV		100
76)	butyl acetate	16.07	73	338280	90.318	ppbV		92
77)	octane	16.16	85	905372	89.785	ppbV		83
78)	tetrachloroethene	16.31	166	1860136	87.636	ppbV		98
79)	1,1,1,2-tetrachloroethane	16.87	131	1544699	87.355	ppbV		97
80)	chlorobenzene	16.89	112	2767362	84.255	ppbV		99
81)	ethylbenzene	17.18	91	4375201	87.044	ppbV		100
82)	2-ethylthiophene	17.22	97	3285257	88.450	ppbV		97
83)	m+p-xylene	17.33	91	6448710	165.032	ppbV		98
84)	bromoform	17.41	173	2520035	87.701	ppbV		100
85)	styrene	17.61	104	2778599	87.736	ppbV		99
86)	1,1,2,2-tetrachloroethane	17.69	83	2221071	75.255	ppbV		100
87)	o-xylene	17.69	91	3075034	77.990	ppbV		98
88)	1,2,3-trichloropropane	17.79	75	1910272	88.345	ppbV		97
89)	nonane	17.83	43	2178939	68.489	ppbV	#	84
91)	isopropylbenzene	18.13	105	4671963	84.348	ppbV		99
92)	bromobenzene	18.22	77	2298845	87.871	ppbV		99
93)	2-chlorotoluene	18.50	126	1340589	83.104	ppbV		76
94)	n-propylbenzene	18.51	120	1285977	78.103	ppbV		85
95)	4-chlorotoluene	18.55	91	3473579	85.155	ppbV		99
96)	4-ethyl toluene	18.62	105	5093299	79.995	ppbV		99
97)	1,3,5-trimethylbenzene	18.67	105	4068753	82.769	ppbV		98
98)	tert-butylbenzene	18.98	119	3912946	73.151	ppbV		98
99)	1,2,4-trimethylbenzene	18.98	105	3604370	72.279	ppbV		94
100)	decane	19.02	57	2378321	71.691	ppbV		82
101)	Benzyl Chloride	19.10	91	3952221	91.984	ppbV		100
102)	1,3-dichlorobenzene	19.12	146	2948595	75.452	ppbV		95
103)	1,4-dichlorobenzene	19.16	146	2987139	76.696	ppbV		97
104)	sec-butylbenzene	19.18	105	5043140	70.474	ppbV		100
105)	1,2,3-trimethylbenzene	19.31	105	3375586	77.520	ppbV		97
106)	p-isopropyltoluene	19.29	119	4949334	73.685	ppbV		100
107)	1,2-dichlorobenzene	19.43	146	3078620	82.713	ppbV		97
108)	n-butylbenzene	19.61	91	4581081	77.777	ppbV		98
109)	indan	19.47	117	4017668	81.259	ppbV		99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142714.D
Acq On : 10 Jul 2015 6:30 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:47:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) indene	19.54	115	2944775	89.310	ppbV	99
111) 1,2-dibromo-3-chloropr...	19.77	75	1247048	89.044	ppbV #	90
112) undecane	19.97	57	2731323	67.340	ppbV	86
113) 1,2,4,5-tetramethylben...	20.22	119	6645502	75.793	ppbV	97
114) dodecane	20.87	57	2175771	47.891	ppbV #	81
115) 1,2,4-trichlorobenzene	20.87	180	2618111	70.475	ppbV	98
116) naphthalene	20.99	128	6240067	76.847	ppbV	98
117) 1,2,3-trichlorobenzene	21.23	180	2657438	75.414	ppbV	98
118) benzothiophene	21.05	134	6095540	87.011	ppbV	99
119) hexachlorobutadiene	21.30	225	2206239	70.941	ppbV	98
120) 2-methylnaphthalene	22.14	142	2759036	85.917	ppbV	99
121) 1-methylnaphthalene	22.34	142	2620023	94.099	ppbV	97

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

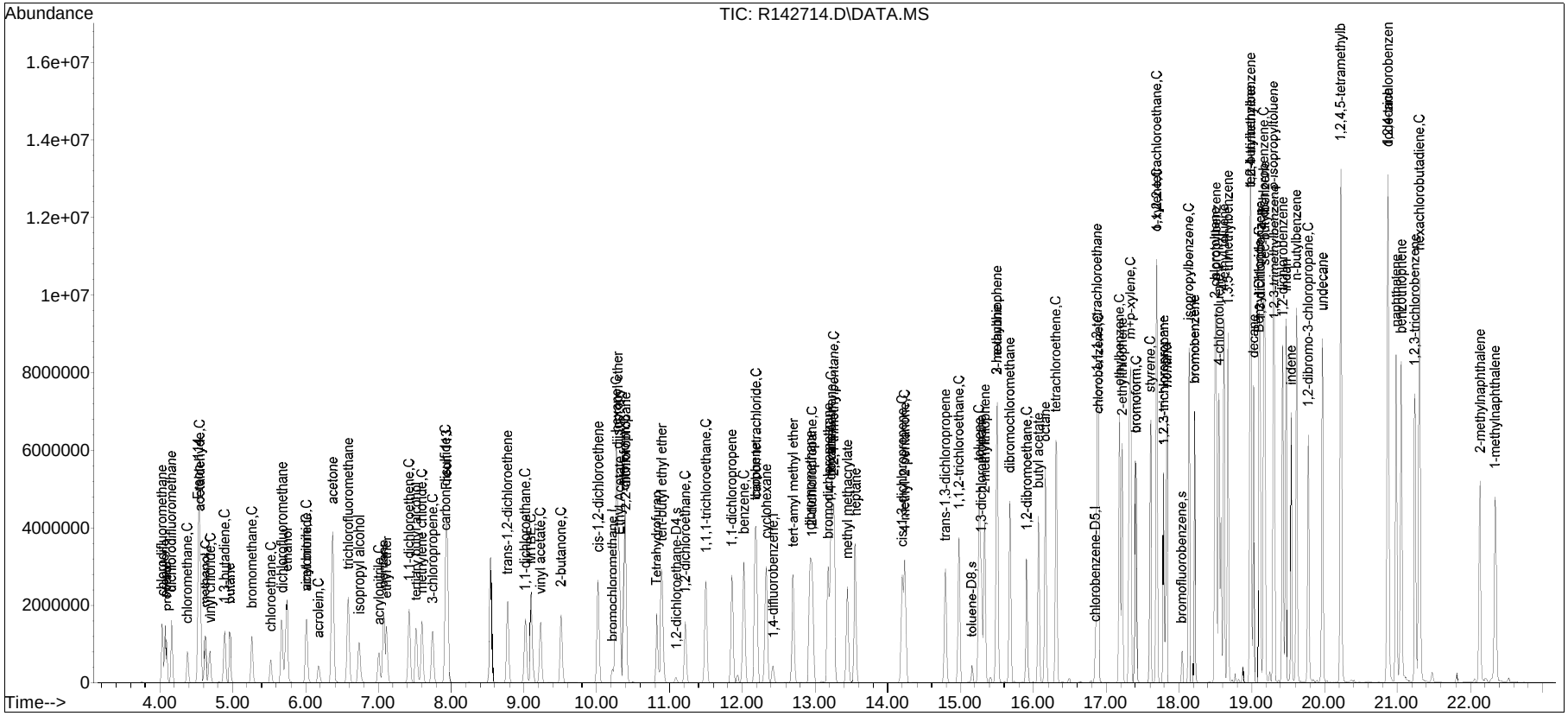
Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142714.D
Acq On : 10 Jul 2015 6:30 pm
Operator : AIRPIANO1:RY
Sample : ITO15-LLSTD100.0
Misc : WG801817
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 11 08:47:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:38:00 2015
Response via : Initial Calibration

Sub List : Default
Target Compounds
Internal Standards
Qualifiers

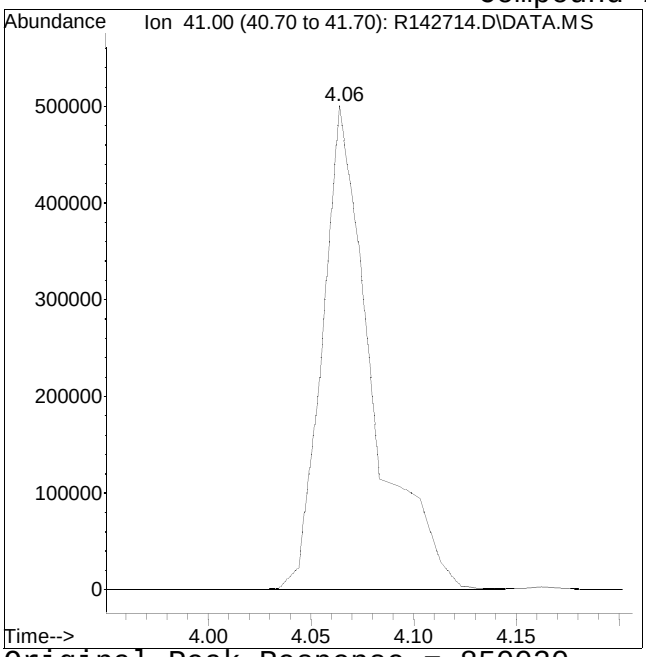
Data File : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D

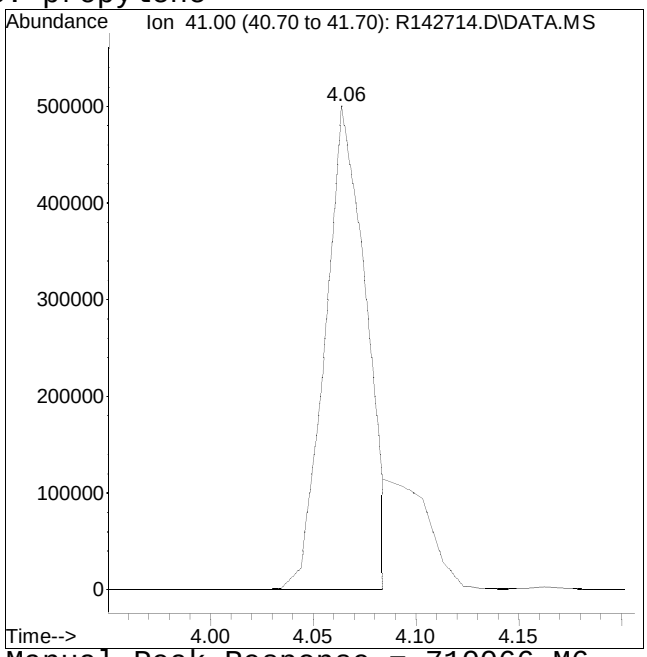


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\QMS150710T_ICAL\TALL150710.M
Data File : R142714.D
Date Inj'd : 7/10/2015 6:30 pm
Sample : ITO15-LLSTD100.0
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 8:38 am

Compound #3: propylene



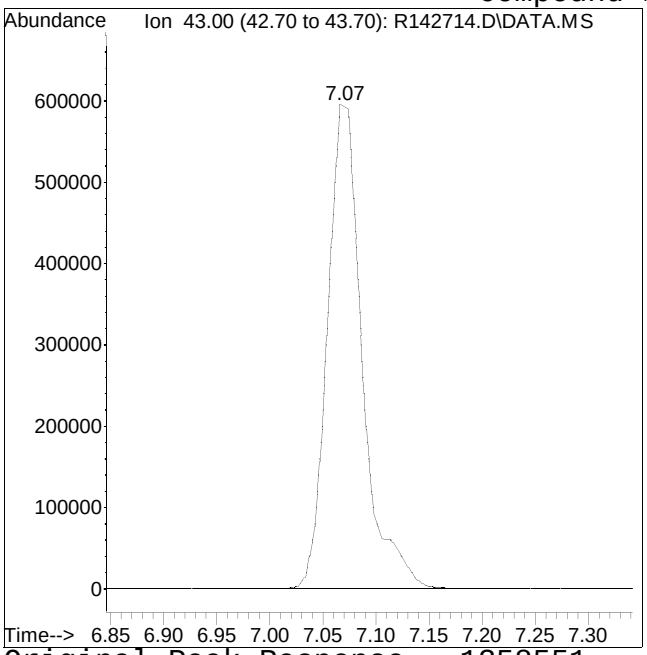


Original Peak Response = 850020 Manual Peak Response = 710066 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

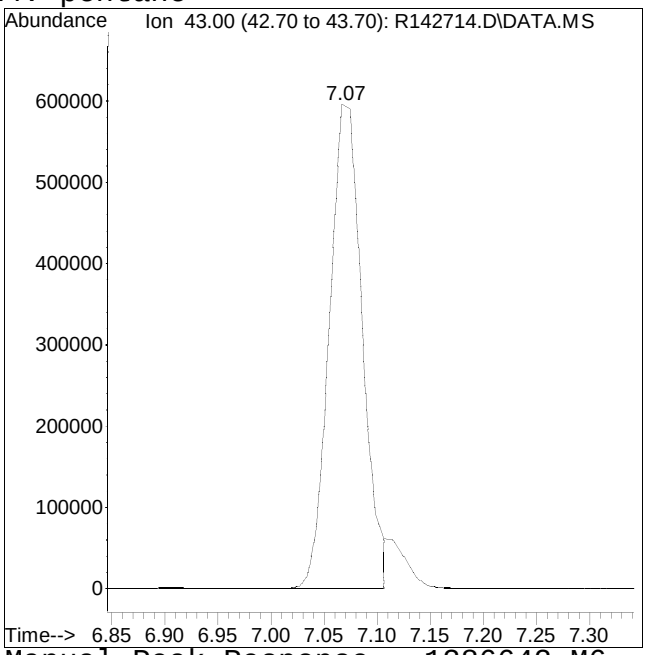
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ QM150710T_ICAL\TALL150710.M
Data File : R142714.D Operator : AIRPIANO1:RY
Date Inj'd : 7/10/2015 6:30 pm Instrument : Air Piano 1
Sample : ITO15-LLSTD100.0 Quant Date : 7/11/2015 8:38 am

Compound #24: pentane



Original Peak Response = 1358551



Manual Peak Response = 1286642 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	100	0.00
2		chlorodifluoromethane	0.917	0.800	12.8	91	0.00
3		propylene	0.447	0.475	-6.3	110	0.00
4		propane	0.439	0.359	18.2	88	0.00
5		dichlorodifluoromethane	0.847	0.927	-9.4	112	0.00
6	C	chloromethane	0.501	0.454	9.4	95	0.00
7		Freon-114	1.336	1.326	0.7	101	0.00
8	C	methanol	0.137	0.121	11.7	89	0.00
9	C	vinyl chloride	0.506	0.490	3.2	98	0.00
10	C	1,3-butadiene	0.376	0.394	-4.8	106	0.00
11		butane	0.797	0.691	13.3	99	0.00
13	C	bromomethane	0.518	0.482	6.9	101	0.00
14	C	chloroethane	0.246	0.231	6.1	101	0.00
15		ethanol	0.274	0.258	5.8	96	0.00
16		dichlorofluoromethane	1.011	0.917	9.3	96	0.00
17	C	vinyl bromide	0.534	0.521	2.4	101	0.00
18	C	acrolein	0.206	0.195	5.3	95	0.00
19		acetone	0.731	0.719	1.6	104	0.00
20	C	acetonitrile	0.452	0.397	12.2	95	0.00
21		trichlorofluoromethane	1.329	1.276	4.0	100	0.00
22		isopropyl alcohol	0.898	0.920	-2.4	109	0.00
23	C	acrylonitrile	0.387	0.360	7.0	96	0.00
24		pentane	0.914	0.785	14.1	95	0.00
25		ethyl ether	0.522	0.469	10.2	93	0.00
26	C	1,1-dichloroethene	0.838	0.801	4.4	100	0.00
27		tertiary butyl alcohol	1.036	0.990	4.4	99	0.00
28	C	methylene chloride	0.678	0.644	5.0	102	0.00
29	C	3-chloropropene	0.701	0.704	-0.4	108	0.00
30	C	carbon disulfide	1.467	1.408	4.0	100	0.00
31		Freon 113	1.095	1.080	1.4	101	0.00
32		trans-1,2-dichloroethene	0.891	0.721	19.1	81	0.00
33	C	1,1-dichloroethane	1.092	1.032	5.5	98	0.00
34	C	MTBE	1.496	1.483	0.9	102	0.00
35	C	vinyl acetate	1.493	1.696	-13.6	116	0.00
36	C	2-butanone	1.407	1.332	5.3	99	0.00
37		cis-1,2-dichloroethene	1.011	1.117	-10.5	114	0.00
38		Ethyl Acetate	0.260	0.251	3.5	98	0.00
39	C	chloroform	1.451	1.425	1.8	101	0.00
40		Tetrahydrofuran	0.823	0.769	6.6	100	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	1.209	1.092	9.7	95	0.00
42	C	1,2-dichloroethane	0.767	0.732	4.6	98	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	101	0.00
44	C	hexane	0.583	0.560	3.9	100	0.00
45		diisopropyl ether	0.255	0.236	7.5	98	0.00
46		tert-butyl ethyl ether	0.855	0.780	8.8	95	0.00
47	s	1,2-dichloroethane-D4	0.256	0.245	4.3	96	0.00
48	C	1,1,1-trichloroethane	0.544	0.527	3.1	101	0.00
49		1,1-dichloropropene	0.391	0.378	3.3	98	-0.01
50	C	benzene	0.819	0.765	6.6	98	0.00
52	C	carbon tetrachloride	0.547	0.564	-3.1	101	0.00
53		cyclohexane	0.466	0.459	1.5	100	0.00
54		tert-amyl methyl ether	0.734	0.681	7.2	95	0.00
55		dibromomethane	0.338	0.309	8.6	96	-0.01
56	C	1,2-dichloropropane	0.325	0.317	2.5	99	0.00
57		bromodichloromethane	0.621	0.603	2.9	100	0.00
58	C	1,4-dioxane	0.183	0.183	0.0	98	0.00
59	C	trichloroethene	0.426	0.405	4.9	99	0.00
60	C	2,2,4-trimethylpentane	1.538	1.470	4.4	99	0.00
61		methyl methacrylate	0.415	0.374	9.9	94	0.00
62		heptane	0.602	0.568	5.6	98	0.00
63	C	cis-1,3-dichloropropene	0.424	0.450	-6.1	106	0.00
64	C	4-methyl-2-pentanone	0.780	0.758	2.8	98	0.00
65		trans-1,3-dichloropropene	0.407	0.378	7.1	91	0.00
66	C	1,1,2-trichloroethane	0.358	0.365	-2.0	104	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	97	0.00
68	C	toluene	5.591	5.586	0.1	99	0.00
69	s	toluene-D8	4.024	4.133	-2.7	99	0.00
71		1,3-dichloropropane	2.313	2.182	5.7	93	0.00
72		2-hexanone	3.829	4.004	-4.6	99	0.00
74		dibromochloromethane	3.673	3.966	-8.0	103	0.00
75	C	1,2-dibromoethane	3.066	3.216	-4.9	101	0.00
76		butyl acetate	0.487	0.508	-4.3	93	0.00
77		octane	1.468	1.393	5.1	95	0.00
78	C	tetrachloroethene	3.054	3.147	-3.0	102	0.00
79		1,1,1,2-tetrachloroethane	2.476	2.462	0.6	96	0.00
80	C	chlorobenzene	4.681	4.808	-2.7	100	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
81	C	ethylbenzene	7.209	7.369	-2.2	101	0.00
83	C	m+p-xylene	5.518	5.718	-3.6	100	0.00
84	C	bromoform	3.855	4.260	-10.5	102	0.00
85	C	styrene	4.450	4.669	-4.9	101	0.00
86	C	1,1,2,2-tetrachloroethane	4.102	4.454	-8.6	104	0.00
87	C	o-xylene	5.589	5.888	-5.3	102	0.00
88		1,2,3-trichloropropane	3.025	2.993	1.1	95	0.00
89		nonane	4.419	4.307	2.5	93	0.00
90	s	bromofluorobenzene	2.913	2.962	-1.7	98	0.00
91	C	isopropylbenzene	7.813	7.926	-1.4	98	0.00
92		bromobenzene	3.784	3.727	1.5	98	0.00
93		2-chlorotoluene	2.290	2.258	1.4	96	0.00
94		n-propylbenzene	2.326	2.305	0.9	96	0.00
95		4-chlorotoluene	5.865	5.763	1.7	97	0.00
96		4-ethyl toluene	8.765	8.909	-1.6	96	0.00
97		1,3,5-trimethylbenzene	6.922	7.215	-4.2	101	0.00
98		tert-butylbenzene	7.408	7.406	0.0	95	0.00
99		1,2,4-trimethylbenzene	6.754	7.370	-9.1	101	0.00
100		decane	4.526	4.690	-3.6	97	0.00
101	C	Benzyl Chloride	5.611	6.562	-16.9	105	0.00
102		1,3-dichlorobenzene	5.282	5.699	-7.9	100	0.00
103	C	1,4-dichlorobenzene	5.356	5.628	-5.1	99	0.00
104		sec-butylbenzene	9.812	9.769	0.4	94	0.00
106		p-isopropyltoluene	9.035	8.573	5.1	88	0.00
107		1,2-dichlorobenzene	5.115	5.475	-7.0	101	0.00
108		n-butylbenzene	7.888	8.316	-5.4	97	0.00
111	C	1,2-dibromo-3-chloropropane	1.831	1.956	-6.8	96	0.00
112		undecane	4.892	5.425	-10.9	92	0.00
114		dodecane	4.066	5.646	-38.9#	85	0.00
115	C	1,2,4-trichlorobenzene	4.143	5.245	-26.6	97	0.00
116		naphthalene	9.045	10.835	-19.8	92	-0.01
117		1,2,3-trichlorobenzene	3.860	4.764	-23.4	93	0.00
119	C	hexachlorobutadiene	3.611	4.371	-21.0	96	-0.01

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.21	49	179261	10.000 ppbV	0.00
Standard Area = 179180			Recovery	= 100.05%	
43) 1,4-difluorobenzene	12.42	114	391331	10.000 ppbV	0.00
Standard Area = 387589			Recovery	= 100.97%	
67) chlorobenzene-D5	16.85	54	71010	10.000 ppbV	0.00
Standard Area = 73180			Recovery	= 97.03%	
System Monitoring Compounds					
47) 1,2-dichloroethane-D4	11.09	65	95949	9.578 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 95.78%	
69) toluene-D8	15.15	98	293463	10.271 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 102.71%	
90) bromofluorobenzene	18.03	95	210335	10.170 ppbV	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery	= 101.70%	
Target Compounds					Qvalue
2) chlorodifluoromethane	4.02	51	143458	8.729 ppbV	100
3) propylene	4.06	41	85169M6	10.633 ppbV	
4) propane	4.09	29	64281	8.169 ppbV	98
5) dichlorodifluoromethane	4.16	85	166194	10.941 ppbV	100
6) chloromethane	4.38	50	81302	9.059 ppbV	94
7) Freon-114	4.53	85	237621	9.924 ppbV	98
8) methanol	4.62	31	108473	44.029 ppbV	96
9) vinyl chloride	4.69	62	87867	9.688 ppbV	100
10) 1,3-butadiene	4.89	54	70589	10.484 ppbV	96
11) butane	4.96	43	123925	8.670 ppbV	98
13) bromomethane	5.27	94	86457	9.318 ppbV	96
14) chloroethane	5.52	64	41454	9.391 ppbV	95
15) ethanol	5.71	31	231041	47.112 ppbV	99
16) dichlorofluoromethane	5.67	67	164330	9.069 ppbV	98
17) vinyl bromide	6.00	106	93426	9.751 ppbV	99
18) acrolein	6.18	56	34945	9.473 ppbV	95
19) acetone	6.35	43	644643	49.182 ppbV	99
20) acetonitrile	6.00	41	71226	8.783 ppbV	98
21) trichlorofluoromethane	6.59	101	228651	9.596 ppbV	97
22) isopropyl alcohol	6.72	45	164948	10.243 ppbV	100
23) acrylonitrile	6.99	53	64451	9.292 ppbV	98
24) pentane	7.07	43	140693M6	8.587 ppbV	
25) ethyl ether	7.11	31	84121	8.994 ppbV	96

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) 1,1-dichloroethene	7.43	61	143558	9.560	ppbV	98
27) tertiary butyl alcohol	7.51	59	177397	9.550	ppbV	99
28) methylene chloride	7.60	49	115433	9.495	ppbV	98
29) 3-chloropropene	7.75	41	126250	10.047	ppbV	94
30) carbon disulfide	7.92	76	252407	9.599	ppbV	98
31) Freon 113	7.94	101	193630	9.867	ppbV	100
32) trans-1,2-dichloroethene	8.77	61	129296	8.094	ppbV	98
33) 1,1-dichloroethane	9.01	63	185030	9.450	ppbV	99
34) MTBE	9.10	73	265843	9.911	ppbV	98
35) vinyl acetate	9.22	43	303984	11.356	ppbV	100
36) 2-butanone	9.51	43	238800	9.465	ppbV	99
37) cis-1,2-dichloroethene	10.01	61	200266	11.055	ppbV	98
38) Ethyl Acetate	10.30	61	45020	9.656	ppbV	98
39) chloroform	10.37	83	255504	9.820	ppbV	99
40) Tetrahydrofuran	10.83	42	137856M6	9.341	ppbV	
41) 2,2-dichloropropane	10.38	77	195729	9.034	ppbV	99
42) 1,2-dichloroethane	11.21	62	131245	9.550	ppbV	99
44) hexane	10.27	57	219337	9.607	ppbV	96
45) diisopropyl ether	10.28	87	92499	9.256	ppbV	98
46) tert-butyl ethyl ether	10.89	59	305165	9.124	ppbV	98
48) 1,1,1-trichloroethane	11.49	97	206161	9.682	ppbV	99
49) 1,1-dichloropropene	11.85	75	147937	9.669	ppbV	97
50) benzene	12.01	78	299386	9.336	ppbV	100
52) carbon tetrachloride	12.19	117	220558	10.312	ppbV	98
53) cyclohexane	12.33	56	179628	9.858	ppbV	97
54) tert-amyl methyl ether	12.69	73	266392	9.271	ppbV	99
55) dibromomethane	12.92	93	121011	9.159	ppbV	98
56) 1,2-dichloropropane	12.95	63	123938	9.751	ppbV	97
57) bromodichloromethane	13.17	83	235872	9.700	ppbV	100
58) 1,4-dioxane	13.22	88	71577	10.008	ppbV	100
59) trichloroethene	13.22	130	158684	9.519	ppbV	97
60) 2,2,4-trimethylpentane	13.25	57	575188	9.556	ppbV	99
61) methyl methacrylate	13.43	41	146550	9.020	ppbV	98
62) heptane	13.55	43	222301	9.433	ppbV	98
63) cis-1,3-dichloropropene	14.20	75	176284	10.633	ppbV	99
64) 4-methyl-2-pentanone	14.23	43	296468	9.713	ppbV	99
65) trans-1,3-dichloropropene	14.78	75	147805	9.278	ppbV	98
66) 1,1,2-trichloroethane	14.97	97	142712	10.182	ppbV	98
68) toluene	15.25	91	396641	9.991	ppbV	100
71) 1,3-dichloropropane	15.28	76	154968	9.433	ppbV	99

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default-ICV-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
72)	2-hexanone	15.49	43	284332	10.458	ppbV #	96
74)	dibromochloromethane	15.66	129	281645	10.798	ppbV	98
75)	1,2-dibromoethane	15.90	107	228392	10.490	ppbV	100
76)	butyl acetate	16.07	73	36080	10.426	ppbV	95
77)	octane	16.15	85	98927	9.492	ppbV	98
78)	tetrachloroethene	16.31	166	223503	10.305	ppbV	97
79)	1,1,1,2-tetrachloroethane	16.86	131	174801	9.943	ppbV	98
80)	chlorobenzene	16.88	112	341447	10.272	ppbV	99
81)	ethylbenzene	17.17	91	523281	10.223	ppbV	99
83)	m+p-xylene	17.32	91	812013	20.725	ppbV	99
84)	bromoform	17.40	173	302513	11.050	ppbV	98
85)	styrene	17.60	104	331546	10.492	ppbV	99
86)	1,1,2,2-tetrachloroethane	17.68	83	316305	10.860	ppbV	98
87)	o-xylene	17.68	91	418088	10.534	ppbV	99
88)	1,2,3-trichloropropane	17.78	75	212551	9.897	ppbV	98
89)	nonane	17.82	43	305813	9.746	ppbV	98
91)	isopropylbenzene	18.12	105	562836	10.145	ppbV	100
92)	bromobenzene	18.21	77	264644	9.850	ppbV	98
93)	2-chlorotoluene	18.49	126	160360	9.861	ppbV	93
94)	n-propylbenzene	18.50	120	163685	9.908	ppbV	99
95)	4-chlorotoluene	18.54	91	409218	9.825	ppbV	100
96)	4-ethyl toluene	18.61	105	632658	10.165	ppbV	99
97)	1,3,5-trimethylbenzene	18.66	105	512372	10.424	ppbV	99
98)	tert-butylbenzene	18.97	119	525903	9.997	ppbV	99
99)	1,2,4-trimethylbenzene	18.97	105	523379	10.913	ppbV	96
100)	decane	19.02	57	333056	10.363	ppbV	98
101)	Benzyl Chloride	19.09	91	465963	11.696	ppbV	99
102)	1,3-dichlorobenzene	19.11	146	404676	10.789	ppbV	100
103)	1,4-dichlorobenzene	19.15	146	399670	10.508	ppbV	99
104)	sec-butylbenzene	19.17	105	693712	9.956	ppbV	100
106)	p-isopropyltoluene	19.28	119	608775	9.488	ppbV	97
107)	1,2-dichlorobenzene	19.42	146	388807	10.706	ppbV	98
108)	n-butylbenzene	19.61	91	590525	10.542	ppbV	100
111)	1,2-dibromo-3-chloropr...	19.77	75	138862	10.677	ppbV	98
112)	undecane	19.97	57	385247	11.091	ppbV	100
114)	dodecane	20.87	57	400906	13.884	ppbV	99
115)	1,2,4-trichlorobenzene	20.86	180	372470	12.661	ppbV	99
116)	naphthalene	20.98	128	769369	11.979	ppbV	100
117)	1,2,3-trichlorobenzene	21.23	180	338317	12.344	ppbV	98
119)	hexachlorobutadiene	21.29	225	310371	12.105	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D
Sub List : Default-ICV-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

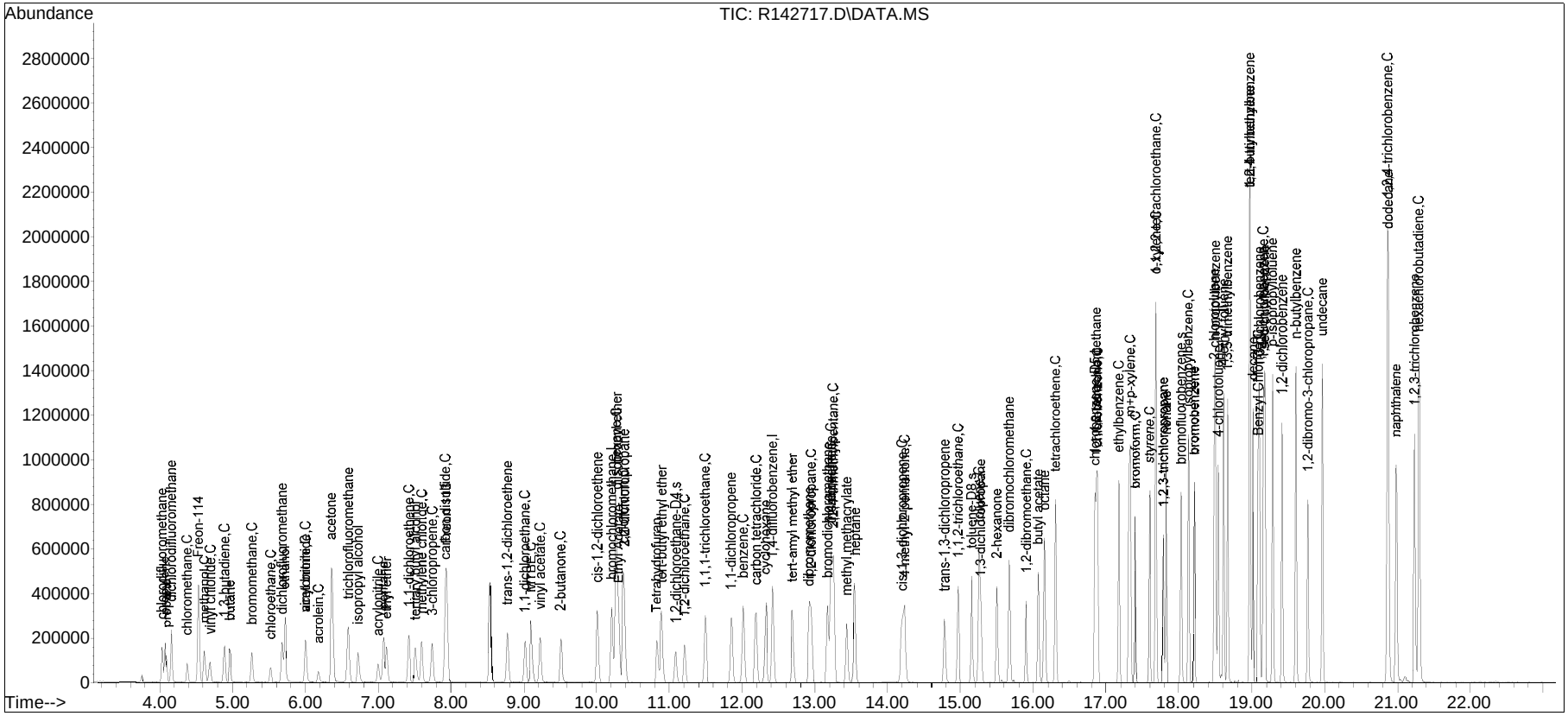
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150710T_ICAL\
Data File : R142717.D
Acq On : 11 Jul 2015 9:13 am
Operator : AIRPIANO1:RY
Sample : CTO15-LLSTD10.0
Misc : WG801817
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 11 09:36:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150710T_ICAL\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

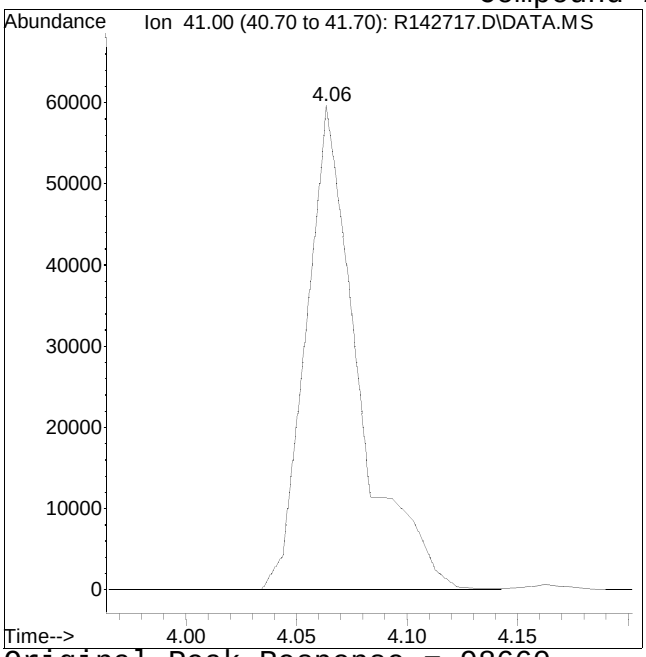
Sub List : Defaults vs Data
Reference: O:\Forensics\Data\AIR1\2015\150710T_ICAL\R142711.D

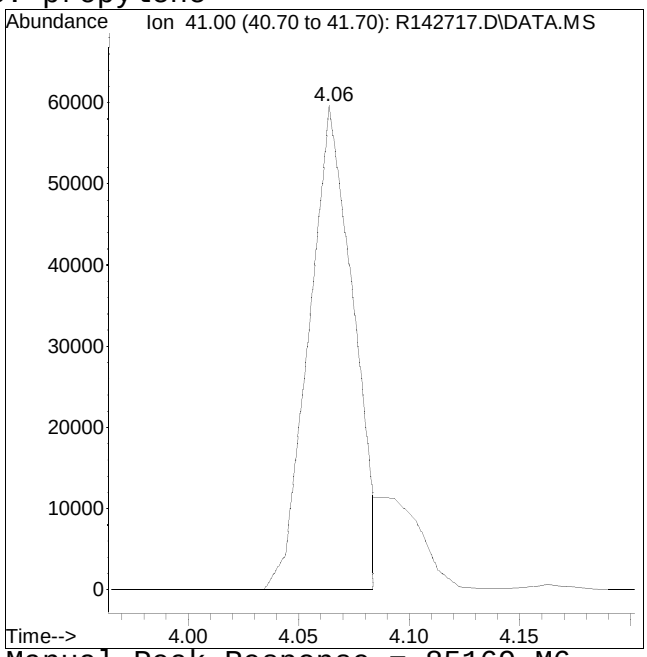


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\CTO15_ICAL\TALL150710.M
Data File : R142717.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:13 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 9:34 am

Compound #3: propylene



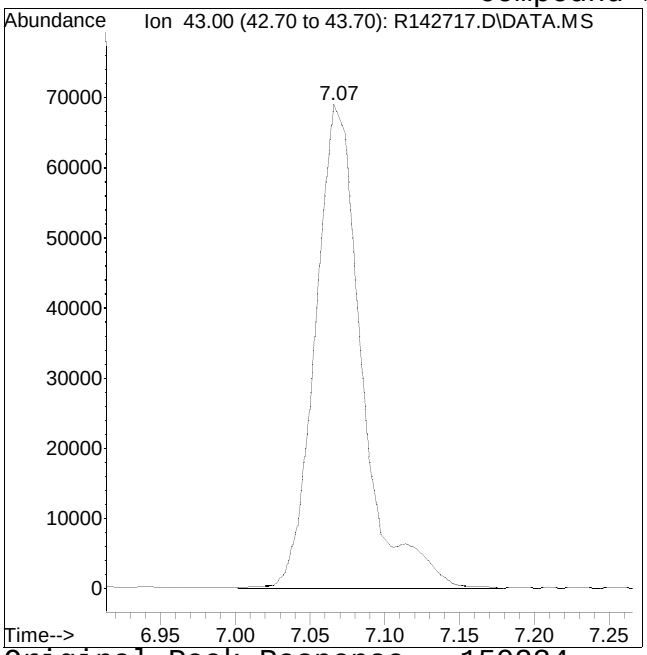


Original Peak Response = 98660 Manual Peak Response = 85169 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

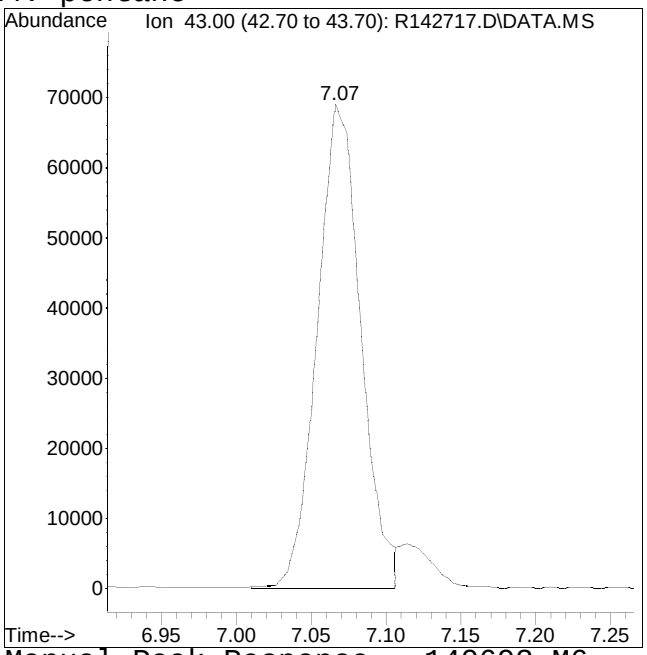
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ICAL\TALL150710.M
Data File : R142717.D
Date Inj'd : 7/11/2015 9:13 am
Sample : CTO15-LLSTD10.0
Method : TO15_ICAL
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 7/11/2015 9:34 am

Compound #24: pentane



Original Peak Response = 150234



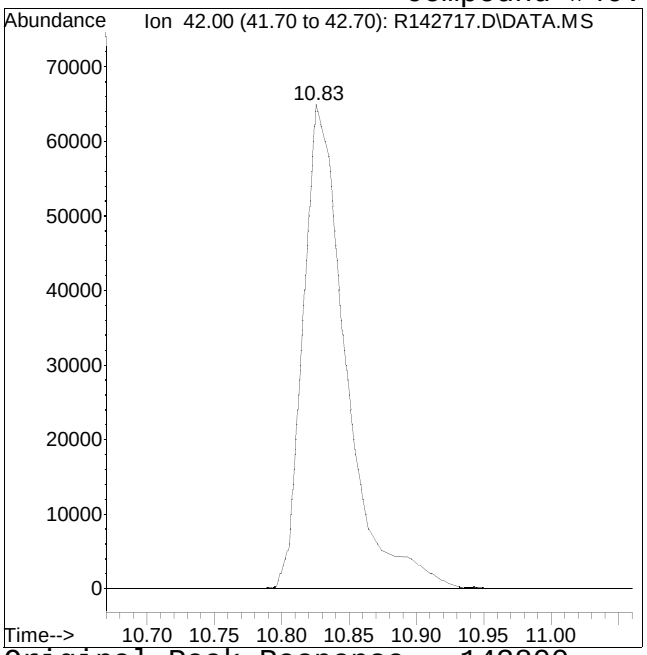
Manual Peak Response = 140693 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

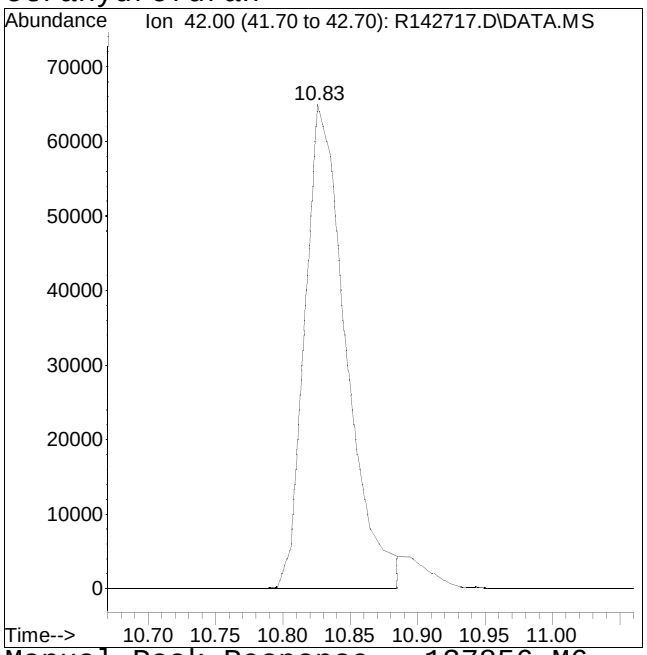
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150710\ Quant Method : TALL150710.M
Data File : R142717.D Operator : AIRPIANO1:RY
Date Inj'd : 7/11/2015 9:13 am Instrument : Air Piano 1
Sample : CTO15-LLSTD10.0 Quant Date : 7/11/2015 9:34 am

Compound #40: Tetrahydrofuran



Original Peak Response = 143800



Manual Peak Response = 137856 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Aug 18 2015, 01:43 pm

Work Group: WG811916 for Department: 3 GC/MS

Created: 13-AUG-15 Due: Operator: ry

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1518960-01	5221 MUSIC CENTER	S	TO15-LL	AIR	DONE	U	0909	0817	S0	Can-6
L1518960-02	VP-2-SS	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0817	S0	Can-2.7
L1518960-03	VP-1-SS	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0817	S0	Can-2.7
L1518960-04	VP-3	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0817	S0	Can-2.7
L1518960-05	VP-4	S	TO15-LL	SOIL_VAPOR	DONE	U	0909	0817	S0	Can-2.7
L1519114-01	SG-1	S	TO15-LL	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-02	SG-2	S	TO15-LL	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-04	SG-4	S	TO15-LL	SOIL_VAPOR	DONE	U	0906	0818	S0	Can-2.7
L1519114-05	METHOD BLANK	S	TO15-LL	AIR	DONE	U	0906	0818	S0	Can-2.7
L1519114-06	METHOD BLANK AA	S	TO15-LL	AIR	DONE	U	0906	0818	S0	Can-6
L1519114-07	DUPLICATE	S	TO15-LL	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-08	OUTDOOR CONTROL	S	TO15-LL	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-09	S-157-J	S	TO15-LL	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-10	S-157-J1	S	TO15-LL	AIR	DONE	U	0907	0818	S0	Can-6
L1519114-11	S-157-J2	S	TO15-LL	AIR	DONE	U	0907	0818	S0	Can-6
L1519361-01	CAN 163 SHELF 3	S	TO15-LL	AIR	DONE	U	0911	0820	NC	Can-2.7
WG811916-1	MS BFB Tune Standard	S	TO15-LL	AIR	DONE	U				
WG811916-1	MS BFB Tune Standard	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG811916-2	Continuing Calibrati	S	TO15-LL	AIR	DONE	U				
WG811916-2	Continuing Calibrati	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG811916-3	Laboratory Control S	S	TO15-LL	AIR	DONE	U				
WG811916-3	Laboratory Control S	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG811916-4	Laboratory Method Bl	S	TO15-LL	AIR	DONE	U				
WG811916-4	Laboratory Method Bl	S	TO15-LL	SOIL_VAPOR	DONE	U				
WG811916-5	Duplicate Sample	S	TO15-LL	AIR	DONE	U				
WG811916-5	Duplicate Sample	S	TO15-LL	SOIL_VAPOR	DONE	U				

Comments:

WG811916-5 L1519114-01

Sequence Logs

----------SEQUENCE TABLE ----------

Sequence Name: C:\Smart\150710TO15_ICAL.SEQ
Date: 07-11-2015
Time: 09:48:35
Int. Std Volume: 100 cc

Sample Name	Inlet #	Auto Pos	Samp Vol.	Cal Std Vol.	Method	Time
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
TA1071001	1	1	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.02	1	5	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.04	1	5	100	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.1	1	5	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.2	1	6	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD0.5	1	6	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD1.0	1	6	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD5.0	1	7	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD10	1	7	250	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD20	1	8	50	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD50	1	8	125	100	C:\Smart\Alpha-TO15.CTD	12:00
ITO15-SIMSTD100	1	8	250	100	C:\Smart\Alpha-TO15.CTD	12:00
BA1071001	1	1	250	0	C:\Smart\Alpha-TO15.CTD	12:00
BA1071002	1	1	250	0	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-LLSTD10	1	2	250	100	C:\Smart\Alpha-TO15.CTD	12:00
CTO15-SIMSTD5.0	1	2	125	100	C:\Smart\Alpha-TO15.CTD	12:00

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 07/10/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150710.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11240

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/s ublist	Leak Check Pass ? Y/N
1	TA1071001	TO15_SFS	R142701	250ml	TEST		NA
1	TA1071001	TO15_SFS	R142702	250ml	TEST		NA
1	TA1071001	TO15_SFS	R142703	250ml	TUNE		NA
		Pause					NA
5	ITO15-SIMSTD0.02	TO15_SFS	R142704	SS15-014D 50ML 0.02	SIM ONLY		NA
5	ITO15-SIMSTD0.04	TO15_SFS	R142705	SS15-014D 100ML 0.04	SIM ONLY		NA
5	ITO15-SIMSTD0.1	TO15_SFS	R142706	SS15-014D 250ML 0.1	SIM ONLY		NA
6	ITO15-SIMSTD0.2	TO15_SFS	R142707	SS15-014C 50ML 0.2			NA
6	ITO15-SIMSTD0.5	TO15_SFS	R142708	SS15-014C 125ML 0.5			NA
6	ITO15-SIMSTD1.0	TO15_SFS	R142709	SS15-014C 250ML 1.0			NA
7	ITO15-SIMSTD5.0	TO15_SFS	R142710	SS15-014B1 125ML 5.0			NA
7	ITO15-SIMSTD10.0	TO15_SFS	R142711	SS15-014B1 250ML 10.0			NA
8	ITO15-SIMSTD20.0	TO15_SFS	R142712	SS15-014A 50ML 20.0			NA
8	ITO15-SIMSTD50.0	TO15_SFS	R142713	SS15-014A 125ML 50.0			NA
8	ITO15-LLSTD100.0	TO15_SFS	R142714	SS15-014A 250ML 100.0	NOT FOR SIM		NA
1	BA1071001	TO15_SFS	R142715	250ml			NA
		Pause					NA
1	BA1071002	TO15_SFS	R142716	250ml			NA
2	CTO15-LLSTD10.0	TO15_SFS	R142717	SS15-018F 250ML 10.0	FULL SCAN ICV		NA
2	CTO15-SIMSTD5.0	TO15_SFS	R142718	SS15-018F 125ML 5.0	SIM ICV		NA

Alpha Analytical Air Lab
Instrument Run Log

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2{ Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Alpha Analytical Air Lab
Instrument Run Log

Instrument ID: Airpiano 1

Internal Standard/Surrogate IDs: CSS15-014 / CSS14-015

Date: 08/13/15

Internal Standard/Surrogate Volume: 100 ml

Analyst Initials: RY

Sequence File Name: 150813.S

SIM ICAL# 11251 PIANO ICAL # 11244 Full Scan ICAL# 11250 APH ICAL# 11252

AS Position #	Sample ID	Acquisition Method	Data File ID	Standard ID or Batch ID #, ICAL Ref #	Comment (s)	Product/sublist	Leak Check Pass ? Y/N
1	TA1081301	TO15_SFS	R143410	250ml	TUNE		NA
2	CAPH-10STD10.0	TO15_SFS	R143411	SS15-017B2 125ML 10.0	APH CC		NA
3	CTO15-LLSTD10.0	TO15_SFS	R143412	SS15-018D 250ML 10.0	APH / LL LCS		
3	CTO15-SIMSTD5.0	TO15_SFS	R143413	SS15-018D 125ML 5.0	SIM LCS		NA
1	BA1081301	TO15_SFS	R143414	250ml	LL BLANK		NA
1	BA1081302	TO15_SFS	R143415	250ml	SIM BLANK		NA
1	L1519361-01,3,250,250	TO15_SFS	R143416	WG811916,ICAL11250		APH/ LL/ SIM	NA
1	L1519114-05,3,250,250	TO15_SFS	R143417	WG811916,ICAL11250		APH/ LL/ SIM	Y
2	L1519114-06,3,250,250	TO15_SFS	R143418	WG811916,ICAL11250		APH/ LL/ SIM	Y
3	L1519114-08D,3,75.0000,250	TO15_SFS	R143419	WG811916,ICAL11250		APH/ LL/ SIM	Y
4	L1519114-07,3,250,250	TO15_SFS	R143420	WG811916,ICAL11250		APH/ LL/ SIM	Y
5	L1519114-09,3,250,250	TO15_SFS	R143421	WG811916,ICAL11250		APH/ LL/ SIM	Y
6	L1519114-10,3,250,250	TO15_SFS	R143422	WG811916,ICAL11250		APH/ LL/ SIM	Y
7	L1519114-11,3,250,250	TO15_SFS	R143423	WG811916,ICAL11250		APH/ LL/ SIM	Y
8	L1518960-01,3,250,250	TO15_SFS	R143424	WG811916,ICAL11250		STD+ NAPH	Y
9	L1519114-01,3,250,250	TO15_SFS	R143425	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
9	L1519114-01DUP,3,250,250	TO15_SFS	R143426	WG811916,ICAL11250	RR, CARRYOVER	APH/ LL/ SIM	Y
10	L1519114-02,3,250,250	TO15_SFS	R143427	WG811916,ICAL11250		APH/ LL/ SIM	Y
11	L1519114-03,3,250,250	TO15_SFS	R143428	WG811916,ICAL11250		APH/ LL/ SIM	Y
12	L1519114-04,3,250,250	TO15_SFS	R143429	WG811916,ICAL11250		APH/ LL/ SIM	Y
13	L1518960-02D,3,200,250	TO15_SFS	R143430	WG811916,ICAL11250		STD+ NAPH	Y
14	L1518960-03D,3,200,250	TO15_SFS	R143431	WG811916,ICAL11250		STD+ NAPH	Y
15	L1518960-04D,3,100,250	TO15_SFS	R143432	WG811916,ICAL11250	OVERDILUTED	STD+ NAPH	Y

Alpha Analytical Air Lab
Instrument Run Log

16	L1518960-05,3,250,250	TO15_SFS	R143433	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081303	TO15_SFS	R143434	250ml			
9	L1519114-01DUP,3,250,250	TO15_SFS	R143435	WG811916,ICAL11250	REPORT AS L1519114-01	APH/ LL/ SIM	Y
15	L1518960-04D,3,200,250	TO15_SFS	R143436	WG811916,ICAL11250		STD+ NAPH	Y
16	BA1081304	TO15_SFS	R143437	250ml			NA
9	L1519114-01DUP,3,250,250	TO15_SFS	R143438	WG811916,ICAL11250	APH / LL/ SIM DUP	APH/ LL/ SIM	Y

Date(s) of Initial Calibration: Refer to Initial Calibration Summary Form 6

Date Acquired: see Instrument Performance Check Summary and/or quantitation report.

Sample ID information: L1301234-01,3,250,2 { Lab sample ID, dept #, actual volume analyzed (mL), nominal volume analyzed (mL) }

Dilution Factor: See Form 1 report, or divide nominal volume by actual volume analyzed

Analytical Event

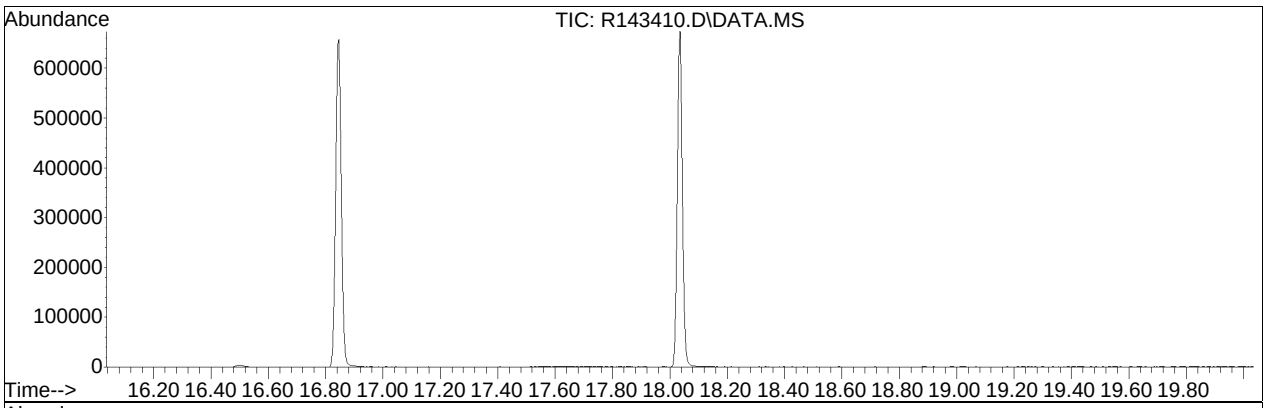
Continuing Calibration
BFB Tune

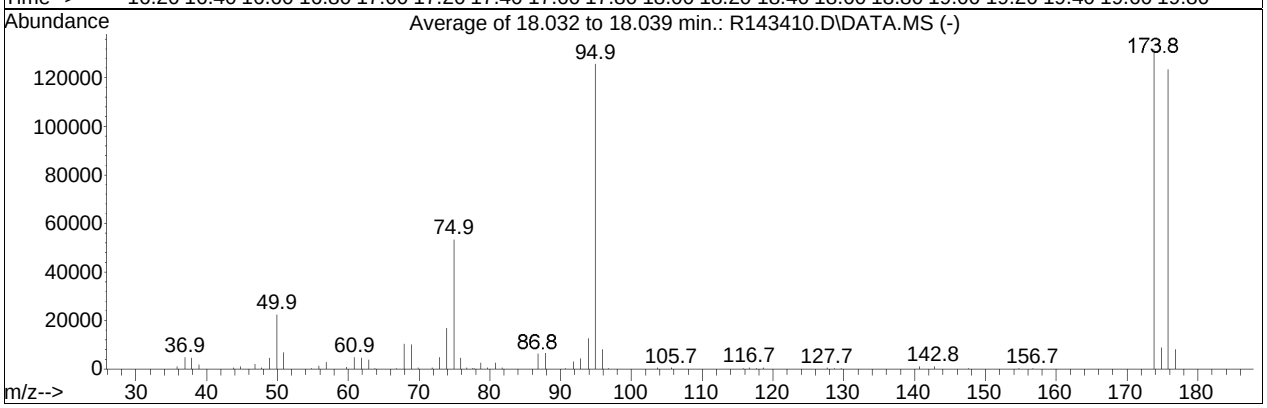
BFB

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143410.D
Acq On : 13 Aug 2015 12:07 pm
Operator : AIRPIANO1:RY
Sample : WG811916-1,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Title : TO-14A/TO-15 SIM/Full Scan Analysis
Last Update : Sat Jul 11 08:50:46 2015





AutoFind: Scans 1891, 1892, 1893; Background Corrected with Scan 1882

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	17.9	22549	PASS
75	95	30	66	42.4	53277	PASS
95	95	100	100	100.0	125667	PASS
96	95	5	9	6.5	8222	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	104.7	131611	PASS
175	174	4	9	6.8	9009	PASS
176	174	93	101	93.7	123384	PASS
177	176	5	9	6.5	8050	PASS

Continuing Calibration

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	82	0.00
2		chlorodifluoromethane	0.917	0.828	9.7	77	0.00
3		propylene	0.447	0.474	-6.0	89	0.00
4		propane	0.439	0.341	22.3	68	0.00
5		dichlorodifluoromethane	0.847	0.732	13.6	72	0.00
6	C	chloromethane	0.501	0.509	-1.6	87	0.00
7		Freon-114	1.336	1.403	-5.0	88	-0.01
8	C	methanol	0.137	0.128	6.6	77	0.00
9	C	vinyl chloride	0.506	0.526	-4.0	86	0.00
10	C	1,3-butadiene	0.376	0.422	-12.2	93	0.00
11		butane	0.797	0.737	7.5	86	-0.01
13	C	bromomethane	0.518	0.519	-0.2	89	0.00
14	C	chloroethane	0.246	0.247	-0.4	89	0.00
15		ethanol	0.274	0.271	1.1	83	0.00
16		dichlorofluoromethane	1.011	0.954	5.6	81	0.00
17	C	vinyl bromide	0.534	0.538	-0.7	85	0.00
18	C	acrolein	0.206	0.211	-2.4	84	0.00
19		acetone	0.731	0.752	-2.9	89	0.00
20	C	acetonitrile	0.452	0.441	2.4	86	0.00
21		trichlorofluoromethane	1.329	1.319	0.8	85	0.00
22		isopropyl alcohol	0.898	0.978	-8.9	95	0.00
23	C	acrylonitrile	0.387	0.391	-1.0	86	0.00
24		pentane	0.914	0.855	6.5	85	0.00
25		ethyl ether	0.522	0.503	3.6	81	0.00
26	C	1,1-dichloroethene	0.838	0.832	0.7	85	0.00
27		tertiary butyl alcohol	1.036	0.985	4.9	80	0.00
28	C	methylene chloride	0.678	0.705	-4.0	92	0.00
29	C	3-chloropropene	0.701	0.733	-4.6	92	0.00
30	C	carbon disulfide	1.467	1.458	0.6	84	0.00
31		Freon 113	1.095	1.136	-3.7	87	0.00
32		trans-1,2-dichloroethene	0.891	0.765	14.1	70	0.00
33	C	1,1-dichloroethane	1.092	0.982	10.1	76	0.00
34	C	MTBE	1.496	1.475	1.4	83	0.00
35	C	vinyl acetate	1.493	1.634	-9.4	92	0.00
36	C	2-butanone	1.407	1.367	2.8	83	0.00
37		cis-1,2-dichloroethene	1.011	1.098	-8.6	92	0.00
38		Ethyl Acetate	0.260	0.258	0.8	82	0.00
39	C	chloroform	1.451	1.451	0.0	85	0.00
40		Tetrahydrofuran	0.823	0.775	5.8	82	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	1.209	1.089	9.9	78	0.00
42	C	1,2-dichloroethane	0.767	0.747	2.6	82	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	84	0.00
44	C	hexane	0.583	0.540	7.4	81	0.00
45		diisopropyl ether	0.255	0.234	8.2	81	0.00
46		tert-butyl ethyl ether	0.855	0.760	11.1	77	0.00
48	C	1,1,1-trichloroethane	0.544	0.520	4.4	83	0.00
49		1,1-dichloropropene	0.391	0.357	8.7	78	-0.01
50	C	benzene	0.819	0.770	6.0	83	0.00
52	C	carbon tetrachloride	0.547	0.550	-0.5	83	-0.01
53		cyclohexane	0.466	0.444	4.7	81	0.00
54		tert-amyl methyl ether	0.734	0.662	9.8	77	0.00
55		dibromomethane	0.338	0.308	8.9	80	-0.01
56	C	1,2-dichloropropane	0.325	0.311	4.3	81	0.00
57		bromodichloromethane	0.621	0.589	5.2	82	0.00
58	C	1,4-dioxane	0.183	0.185	-1.1	83	0.00
59	C	trichloroethene	0.426	0.410	3.8	83	0.00
60	C	2,2,4-trimethylpentane	1.538	1.431	7.0	81	0.00
61		methyl methacrylate	0.415	0.360	13.3	75	0.00
62		heptane	0.602	0.547	9.1	79	0.00
63	C	cis-1,3-dichloropropene	0.424	0.429	-1.2	84	-0.02
64	C	4-methyl-2-pentanone	0.780	0.733	6.0	80	0.00
65		trans-1,3-dichloropropene	0.407	0.356	12.5	71	0.00
66	C	1,1,2-trichloroethane	0.358	0.353	1.4	84	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	82	0.00
68	C	toluene	5.591	5.597	-0.1	84	0.00
71		1,3-dichloropropane	2.313	2.159	6.7	78	0.00
72		2-hexanone	3.829	3.805	0.6	80	0.00
74		dibromochloromethane	3.673	3.788	-3.1	83	0.00
75	C	1,2-dibromoethane	3.066	3.176	-3.6	85	0.00
76		butyl acetate	0.487	0.482	1.0	75	0.00
77		octane	1.468	1.348	8.2	78	0.00
78	C	tetrachloroethene	3.054	3.105	-1.7	85	0.00
79		1,1,1,2-tetrachloroethane	2.476	2.381	3.8	78	0.00
80	C	chlorobenzene	4.681	4.705	-0.5	83	0.00
81	C	ethylbenzene	7.209	7.191	0.2	83	0.00
83	C	m+p-xylene	5.518	5.591	-1.3	83	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84 C	bromoform	3.855	3.998	-3.7	81	0.00
85 C	styrene	4.450	4.531	-1.8	83	0.00
86 C	1,1,2,2-tetrachloroethane	4.102	4.366	-6.4	86	0.00
87 C	o-xylene	5.589	5.828	-4.3	86	0.00
88	1,2,3-trichloropropane	3.025	2.862	5.4	77	0.00
89	nonane	4.419	4.046	8.4	74	0.00
91 C	isopropylbenzene	7.813	7.794	0.2	82	0.00
92	bromobenzene	3.784	3.587	5.2	80	0.00
93	2-chlorotoluene	2.290	2.115	7.6	76	0.00
94	n-propylbenzene	2.326	2.222	4.5	79	0.00
95	4-chlorotoluene	5.865	5.538	5.6	79	0.00
96	4-ethyl toluene	8.765	8.252	5.9	76	0.00
97	1,3,5-trimethylbenzene	6.922	7.013	-1.3	83	0.00
98	tert-butylbenzene	7.408	7.252	2.1	79	0.00
99	1,2,4-trimethylbenzene	6.754	7.128	-5.5	83	0.00
100	decane	4.526	4.368	3.5	77	0.00
101 C	Benzyl Chloride	5.611	5.682	-1.3	77	0.00
102	1,3-dichlorobenzene	5.282	5.545	-5.0	83	0.00
103 C	1,4-dichlorobenzene	5.356	5.617	-4.9	84	0.00
104	sec-butylbenzene	9.812	9.698	1.2	79	0.00
106	p-isopropyltoluene	9.035	8.418	6.8	73	0.00
107	1,2-dichlorobenzene	5.115	5.421	-6.0	85	0.00
108	n-butylbenzene	7.888	8.112	-2.8	80	0.00
111 C	1,2-dibromo-3-chloropropane	1.831	1.766	3.5	73	0.00
112	undecane	4.892	5.160	-5.5	74	0.00
114	dodecane	4.066	5.274	-29.7	68	0.00
115 C	1,2,4-trichlorobenzene	4.143	5.057	-22.1	79	0.00
116	naphthalene	9.045	10.470	-15.8	75	-0.01
117	1,2,3-trichlorobenzene	3.860	4.555	-18.0	75	0.00
119 C	hexachlorobutadiene	3.611	4.189	-16.0	79	-0.01

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	146644	10.000	ppbV	0.00
Standard Area = 146644			Recovery = 100.00%			
43) 1,4-difluorobenzene	12.419	114	326890	10.000	ppbV	0.00
Standard Area = 326890			Recovery = 100.00%			
67) chlorobenzene-D5	16.842	54	60310	10.000	ppbV	0.00
Standard Area = 60310			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	4.024	51	121370	9.028	ppbV	98
3) propylene	4.064	41	69516M6	10.609	ppbV	
4) propane	4.093	29	49970	7.762	ppbV	98
5) dichlorodifluoromethane	4.162	85	107310	8.636	ppbV	99
6) chloromethane	4.379	50	74582	10.158	ppbV	94
7) Freon-114	4.527	85	205708	10.502	ppbV	96
8) methanol	4.616	31	93661	46.473	ppbV	95
9) vinyl chloride	4.694	62	77174	10.402	ppbV	97
10) 1,3-butadiene	4.892	54	61834	11.227	ppbV	93
11) butane	4.961	43	108049	9.240	ppbV	99
13) bromomethane	5.267	94	76136	10.031	ppbV	97
14) chloroethane	5.523	64	36257	10.040	ppbV	99
15) ethanol	5.715	31	198905	49.580	ppbV	94
16) dichlorofluoromethane	5.675	67	139858	9.435	ppbV	99
17) vinyl bromide	6.002	106	78893	10.065	ppbV	99
18) acrolein	6.178	56	30886	10.235	ppbV	97
19) acetone	6.362	43	551629	51.446	ppbV	98
20) acetonitrile	6.002	41	64643	9.745	ppbV	96
21) trichlorofluoromethane	6.586	101	193424	9.923	ppbV	99
22) isopropyl alcohol	6.722	45	143399	10.885	ppbV	100
23) acrylonitrile	6.994	53	57407	10.117	ppbV	97
24) pentane	7.066	43	125316M6	9.350	ppbV	
25) ethyl ether	7.114	31	73792	9.645	ppbV	97
26) 1,1-dichloroethene	7.425	61	121993	9.930	ppbV	97
27) tertiary butyl alcohol	7.513	59	144395	9.503	ppbV	99
28) methylene chloride	7.593	49	103435	10.400	ppbV	97
29) 3-chloropropene	7.745	41	107469	10.455	ppbV	93
30) carbon disulfide	7.921	76	213814	9.940	ppbV	98
31) Freon 113	7.937	101	166581	10.377	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) trans-1,2-dichloroethene	8.771	61	112227	8.588	ppbV		98
33) 1,1-dichloroethane	9.011	63	143937	8.986	ppbV		98
34) MTBE	9.101	73	216344	9.860	ppbV		97
35) vinyl acetate	9.224	43	239644	10.944	ppbV		98
36) 2-butanone	9.506	43	200414	9.710	ppbV		99
37) cis-1,2-dichloroethene	10.013	61	161078	10.869	ppbV		100
38) Ethyl Acetate	10.304	61	37867	9.928	ppbV		97
39) chloroform	10.370	83	212846	10.000	ppbV		99
40) Tetrahydrofuran	10.825	42	113712M6	9.418	ppbV		
41) 2,2-dichloropropane	10.380	77	159691	9.010	ppbV		99
42) 1,2-dichloroethane	11.208	62	109542	9.744	ppbV		98
44) hexane	10.257	57	176602	9.260	ppbV	#	72
45) diisopropyl ether	10.276	87	76530	9.168	ppbV		95
46) tert-butyl ethyl ether	10.894	59	248552	8.897	ppbV		99
48) 1,1,1-trichloroethane	11.493	97	170040	9.560	ppbV		99
49) 1,1-dichloropropene	11.849	75	116787	9.137	ppbV		100
50) benzene	12.015	78	251708	9.396	ppbV		98
52) carbon tetrachloride	12.180	117	179888	10.069	ppbV		98
53) cyclohexane	12.325	56	145005	9.527	ppbV		98
54) tert-amyl methyl ether	12.688	73	216434	9.017	ppbV		98
55) dibromomethane	12.916	93	100594	9.115	ppbV		99
56) 1,2-dichloropropane	12.947	63	101557	9.565	ppbV		98
57) bromodichloromethane	13.175	83	192671	9.486	ppbV		99
58) 1,4-dioxane	13.216	88	60570	10.138	ppbV		99
59) trichloroethene	13.216	130	134151	9.634	ppbV		98
60) 2,2,4-trimethylpentane	13.247	57	467813	9.304	ppbV		98
61) methyl methacrylate	13.434	41	117801	8.680	ppbV		97
62) heptane	13.548	43	178859	9.086	ppbV		98
63) cis-1,3-dichloropropene	14.187	75	140141	10.119	ppbV		98
64) 4-methyl-2-pentanone	14.235	43	239642	9.399	ppbV		99
65) trans-1,3-dichloropropene	14.778	75	116352	8.744	ppbV		97
66) 1,1,2-trichloroethane	14.968	97	115274	9.845	ppbV		97
68) toluene	15.248	91	337570	10.011	ppbV		100
71) 1,3-dichloropropane	15.275	76	130232	9.334	ppbV		98
72) 2-hexanone	15.492	43	229452	9.937	ppbV	#	95
74) dibromochloromethane	15.664	129	228429	10.312	ppbV		97
75) 1,2-dibromoethane	15.899	107	191534	10.358	ppbV		98
76) butyl acetate	16.071	73	29078	9.893	ppbV		98
77) octane	16.152	85	81274	9.182	ppbV		94
78) tetrachloroethene	16.306	166	187279	10.167	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

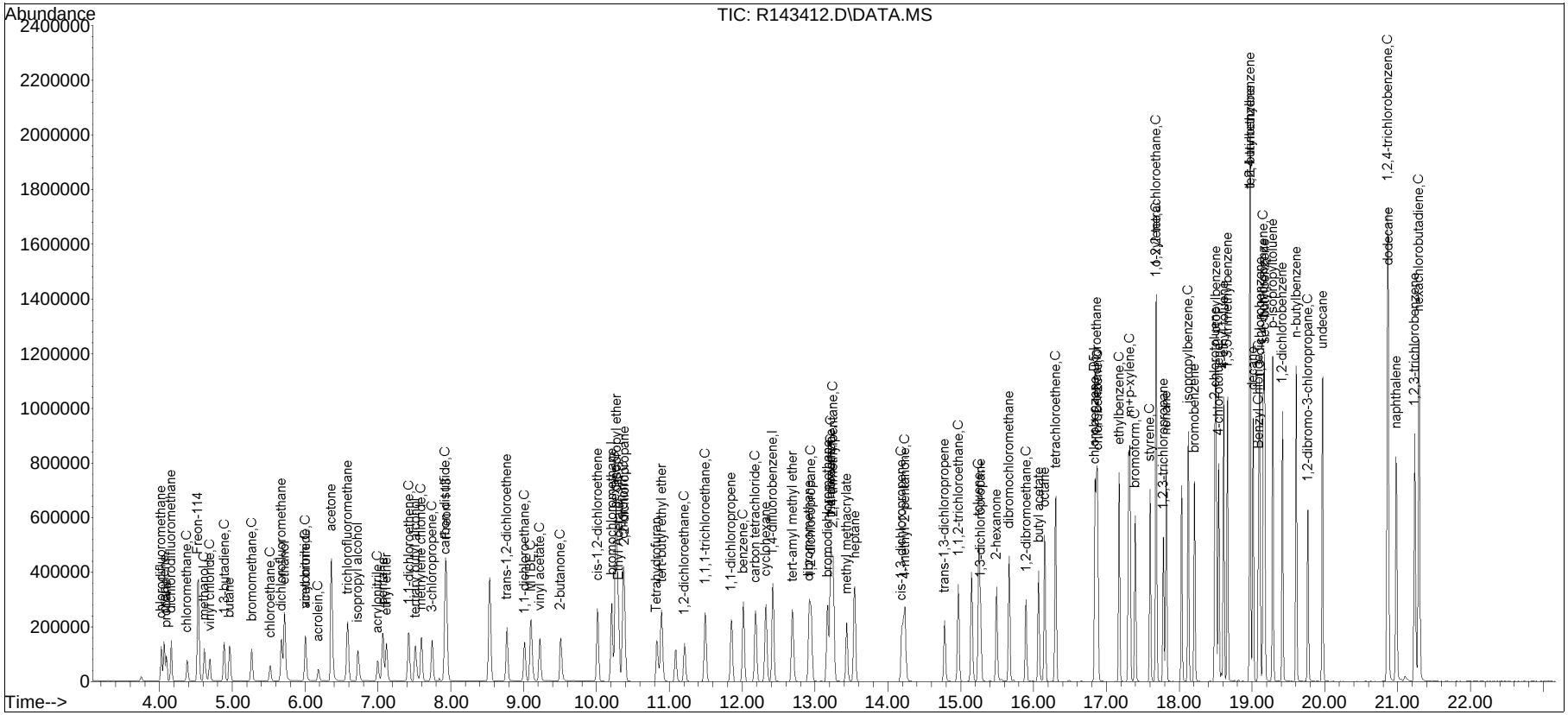
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.864	131	143596	9.617	ppbV		97
80)	chlorobenzene	16.879	112	283781	10.052	ppbV		99
81)	ethylbenzene	17.174	91	433670	9.975	ppbV		99
83)	m+p-xylene	17.322	91	674406	20.267	ppbV		99
84)	bromoform	17.396	173	241146	10.371	ppbV		98
85)	styrene	17.599	104	273253	10.182	ppbV		100
86)	1,1,2,2-tetrachloroethane	17.681	83	263321	10.644	ppbV		99
87)	o-xylene	17.684	91	351468	10.427	ppbV		98
88)	1,2,3-trichloropropane	17.784	75	172622	9.464	ppbV		99
89)	nonane	17.821	43	244017	9.157	ppbV	#	98
91)	isopropylbenzene	18.124	105	470079	9.976	ppbV		100
92)	bromobenzene	18.209	77	216348	9.481	ppbV		94
93)	2-chlorotoluene	18.490	126	127555	9.235	ppbV		80
94)	n-propylbenzene	18.505	120	134033	9.553	ppbV		100
95)	4-chlorotoluene	18.542	91	334006	9.442	ppbV		99
96)	4-ethyl toluene	18.612	105	497684	9.415	ppbV		100
97)	1,3,5-trimethylbenzene	18.664	105	422976	10.132	ppbV		100
98)	tert-butylbenzene	18.974	119	437365	9.789	ppbV		99
99)	1,2,4-trimethylbenzene	18.974	105	429897	10.554	ppbV		94
100)	decane	19.012	57	263409	9.650	ppbV		98
101)	Benzyl Chloride	19.088	91	342700	10.128	ppbV		99
102)	1,3-dichlorobenzene	19.107	146	334410	10.497	ppbV		99
103)	1,4-dichlorobenzene	19.155	146	338738	10.486	ppbV		98
104)	sec-butylbenzene	19.174	105	584894	9.884	ppbV		100
106)	p-isopropyltoluene	19.283	119	507667	9.316	ppbV		99
107)	1,2-dichlorobenzene	19.417	146	326928	10.599	ppbV		98
108)	n-butylbenzene	19.607	91	489213	10.283	ppbV		99
111)	1,2-dibromo-3-chloropr...	19.769	75	106501	9.642	ppbV		99
112)	undecane	19.969	57	311180	10.548	ppbV		99
114)	dodecane	20.870	57	318078	12.970	ppbV		96
115)	1,2,4-trichlorobenzene	20.860	180	304967	12.205	ppbV		100
116)	naphthalene	20.977	128	631461	11.576	ppbV		100
117)	1,2,3-trichlorobenzene	21.235	180	274716	11.802	ppbV		99
119)	hexachlorobutadiene	21.288	225	252657	11.603	ppbV		97

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

Sub List : Default-LCS-AP2 - All compounds listed43412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

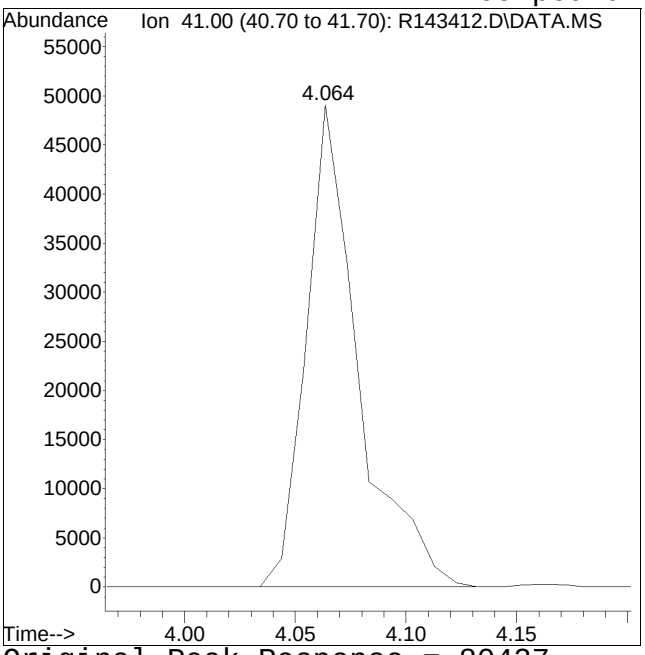
Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

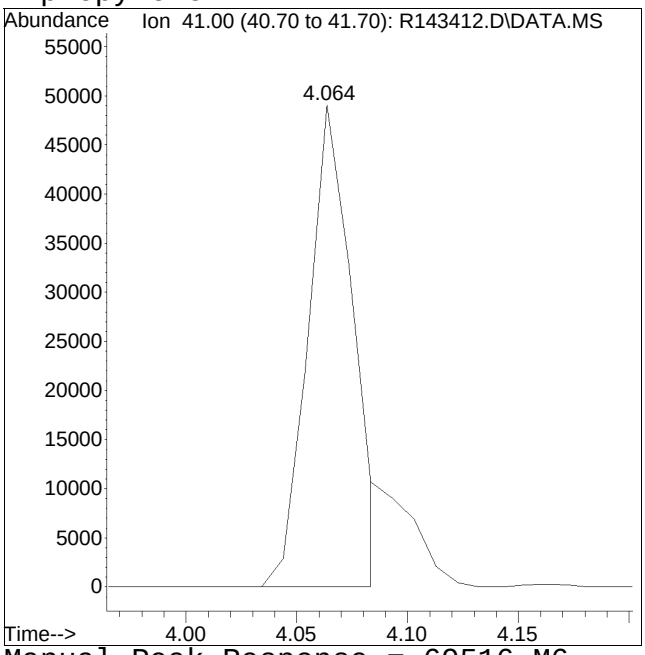


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\MEOH\ Method : TALL150710.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811916-2,3,250,250 Quant Date : 8/13/2015 1:36 pm

Compound #3: propylene





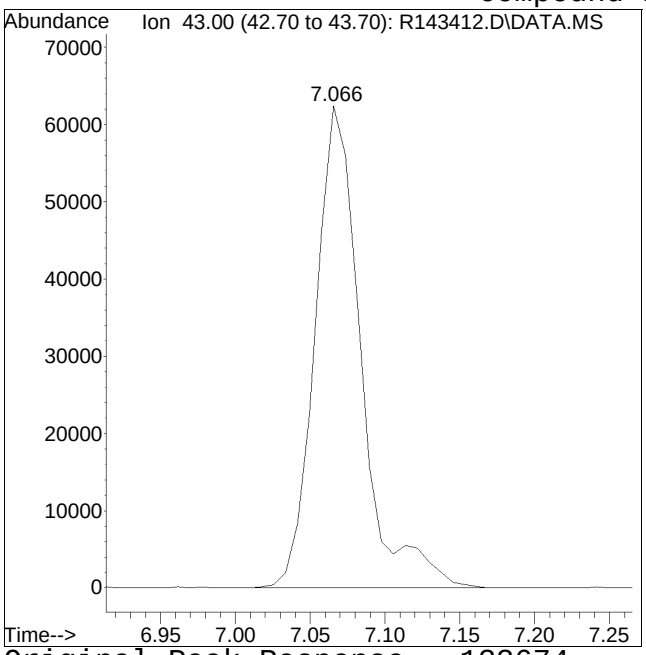
Original Peak Response = 80427 Manual Peak Response = 69516 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

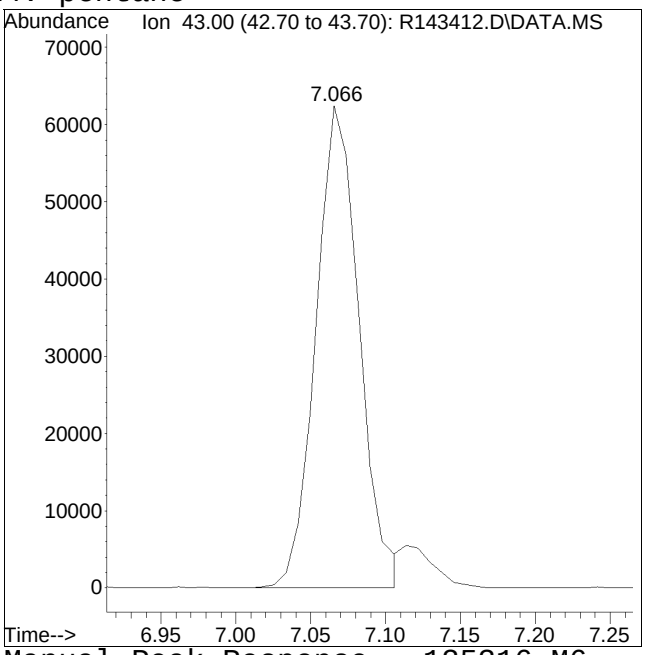
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143412.D
Date Inj'd : 8/13/2015 1:12 pm
Sample : WG811916-2,3,250,250

Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 8/13/2015 1:36 pm

Compound #24: pentane



Original Peak Response = 133674



Manual Peak Response = 125316 M6

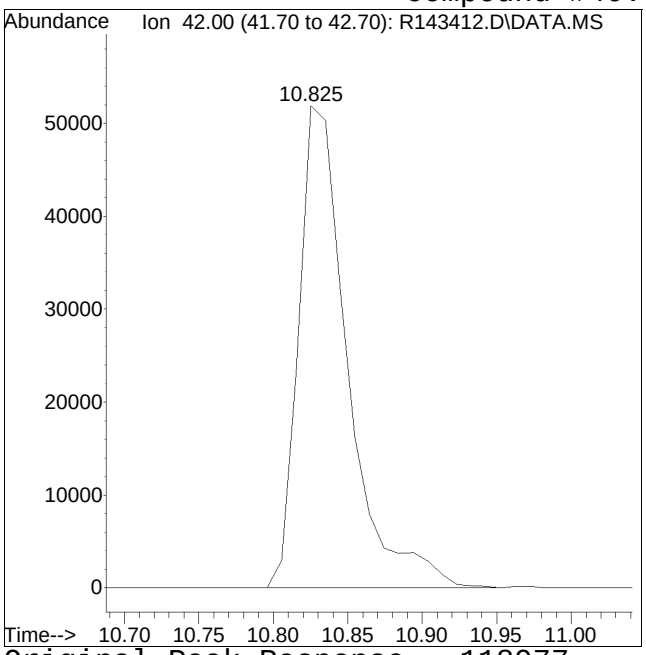
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

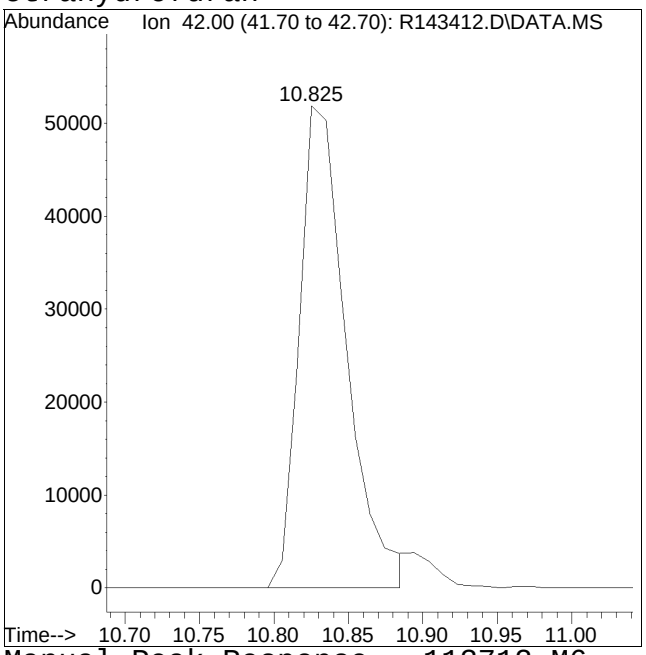
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143412.D
Date Inj'd : 8/13/2015 1:12 pm
Sample : WG811916-2,3,250,250

Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 8/13/2015 1:36 pm

Compound #40: Tetrahydrofuran



Original Peak Response = 118977



Manual Peak Response = 113712 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Sample Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 09:51:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) bromochloromethane	10.201	49	150937	10.000 ppbV	0.00
Standard Area = 146644			Recovery = 102.93%		
43) 1,4-difluorobenzene	12.419	114	333674	10.000 ppbV	0.00
Standard Area = 326890			Recovery = 102.08%		
67) chlorobenzene-D5	16.846	54	63219	10.000 ppbV	0.00
Standard Area = 60310			Recovery = 104.82%		

System Monitoring Compounds

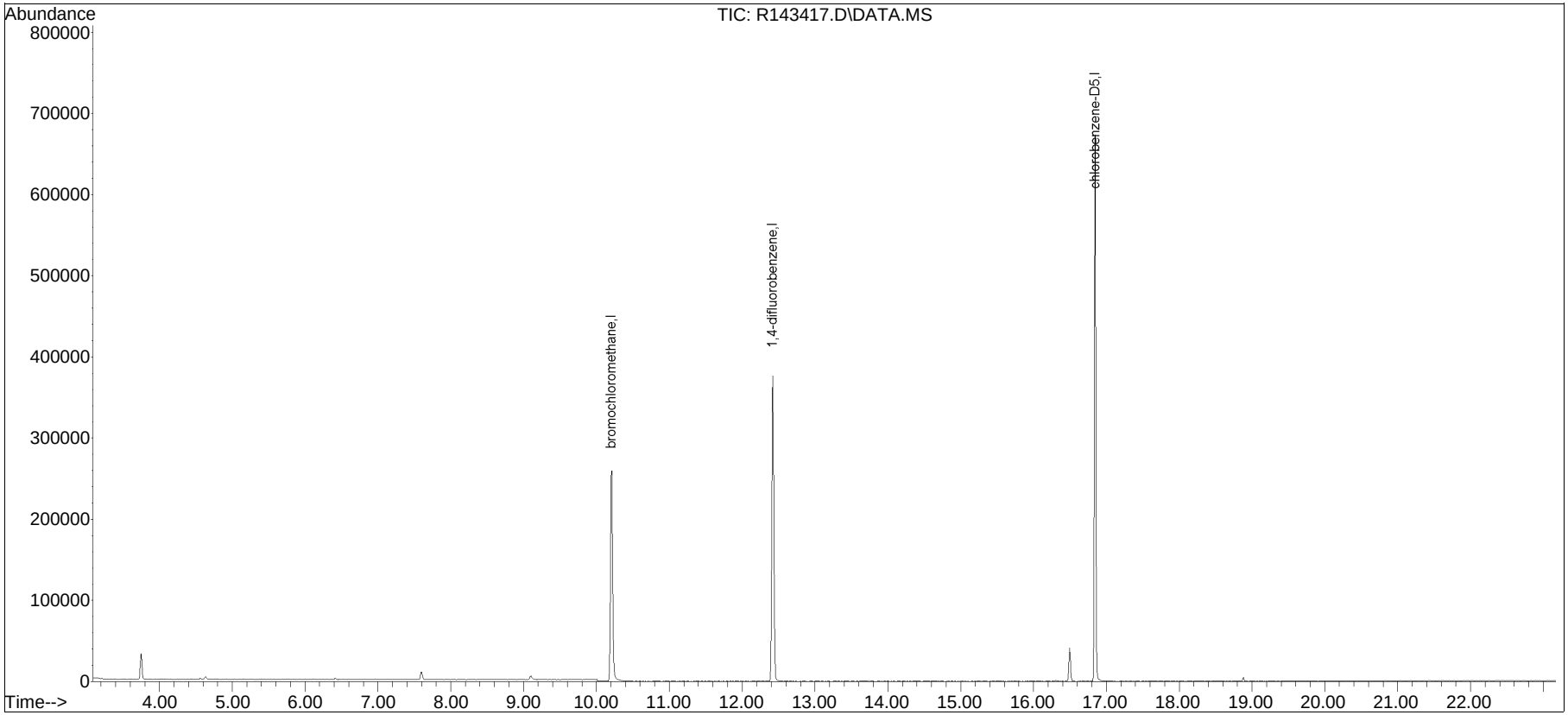
Target Compounds				Qvalue
3) propylene	0.000	0	N.D.	
15) ethanol	5.755	0	N.D.	
17) vinyl bromide	0.000	0	N.D.	
19) acetone	6.410	0	N.D.	
22) isopropyl alcohol	0.000	0	N.D.	
29) 3-chloropropene	0.000	0	N.D.	
30) carbon disulfide	0.000	0	N.D.	
35) vinyl acetate	0.000	0	N.D.	
36) 2-butanone	0.000	0	N.D.	
38) Ethyl Acetate	0.000	0	N.D.	
40) Tetrahydrofuran	0.000	0	N.D.	
44) hexane	0.000	0	N.D.	
53) cyclohexane	0.000	0	N.D. d	
58) 1,4-dioxane	0.000	0	N.D.	
60) 2,2,4-trimethylpentane	0.000	0	N.D.	
62) heptane	13.600	0	N.D.	
64) 4-methyl-2-pentanone	0.000	0	N.D.	
72) 2-hexanone	0.000	0	N.D.	
96) 4-ethyl toluene	0.000	0	N.D.	
101) Benzyl Chloride	0.000	0	N.D.	

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143417.D
Acq On : 13 Aug 2015 5:19 pm
Operator : AIRPIANO1:MB
Sample : L1519114-05,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 09:51:07 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:00 2015

Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143417.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 5:19 pm	Instrument	: Air Piano 1
Sample	: L1519114-05,3,250,250	Quant Date	: 8/14/2015 8:53 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:51:27 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.201	49	133154	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		90.80%	
43) 1,4-difluorobenzene	12.419	114	297560	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		91.03%	
67) chlorobenzene-D5	16.842	54	55475	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		91.98%	

System Monitoring Compounds

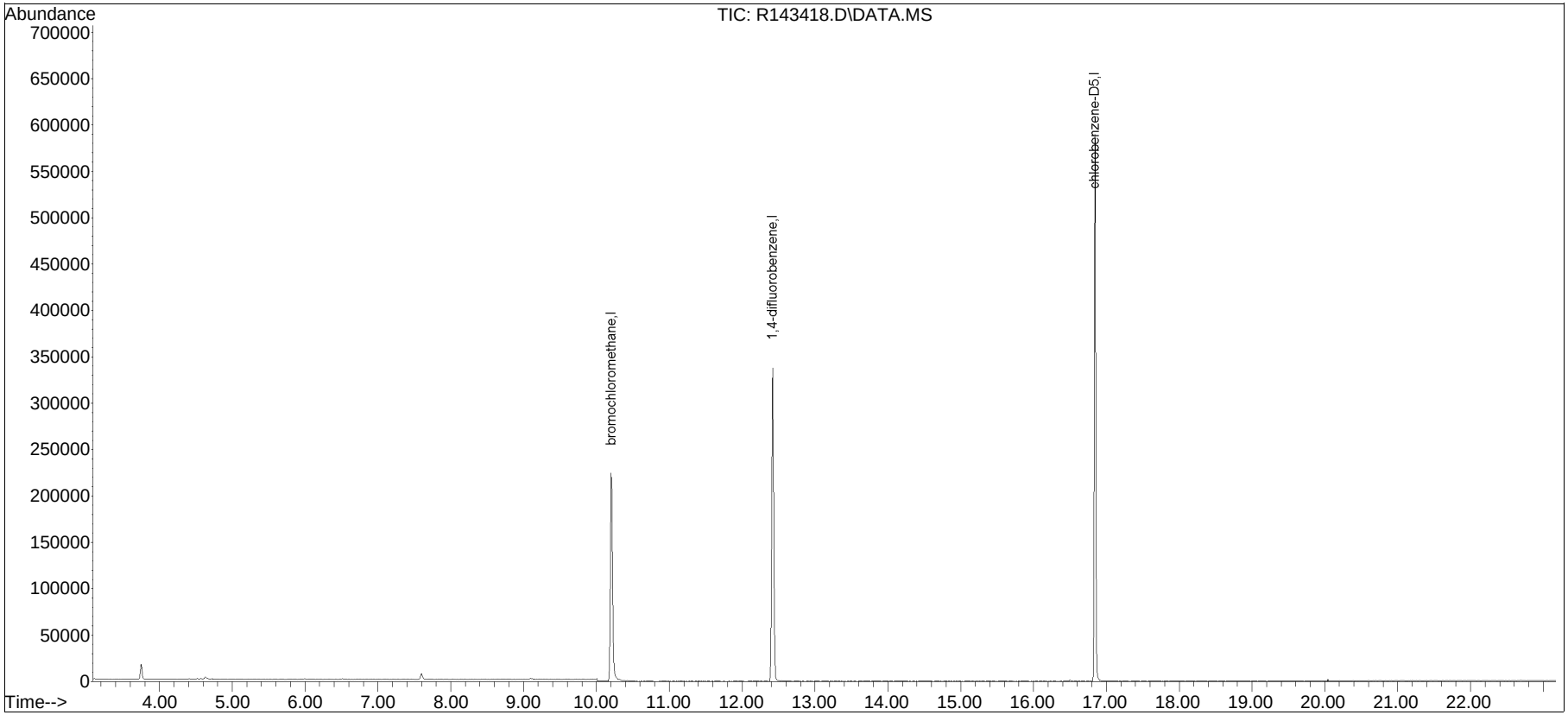
Target Compounds			Qvalue
3) propylene	0.000	0	N.D.
15) ethanol	5.763	0	N.D.
17) vinyl bromide	0.000	0	N.D.
19) acetone	6.322	0	N.D.
22) isopropyl alcohol	0.000	0	N.D.
29) 3-chloropropene	0.000	0	N.D.
30) carbon disulfide	7.929	0	N.D.
35) vinyl acetate	0.000	0	N.D.
36) 2-butanone	9.389	0	N.D.
38) Ethyl Acetate	0.000	0	N.D.
40) Tetrahydrofuran	0.000	0	N.D.
44) hexane	0.000	0	N.D.
53) cyclohexane	0.000	0	N.D. d
58) 1,4-dioxane	0.000	0	N.D.
60) 2,2,4-trimethylpentane	0.000	0	N.D.
62) heptane	13.651	0	N.D.
64) 4-methyl-2-pentanone	0.000	0	N.D.
72) 2-hexanone	0.000	0	N.D.
96) 4-ethyl toluene	0.000	0	N.D.
101) Benzyl Chloride	0.000	0	N.D.

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143418.D
Acq On : 13 Aug 2015 5:51 pm
Operator : AIRPIANO1:MB
Sample : L1519114-06,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 09:51:27 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:05 2015

Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143418.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 5:51 pm	Instrument	: Air Piano 1
Sample	: L1519114-06,3,250,250	Quant Date	: 8/14/2015 8:54 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 09:51:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

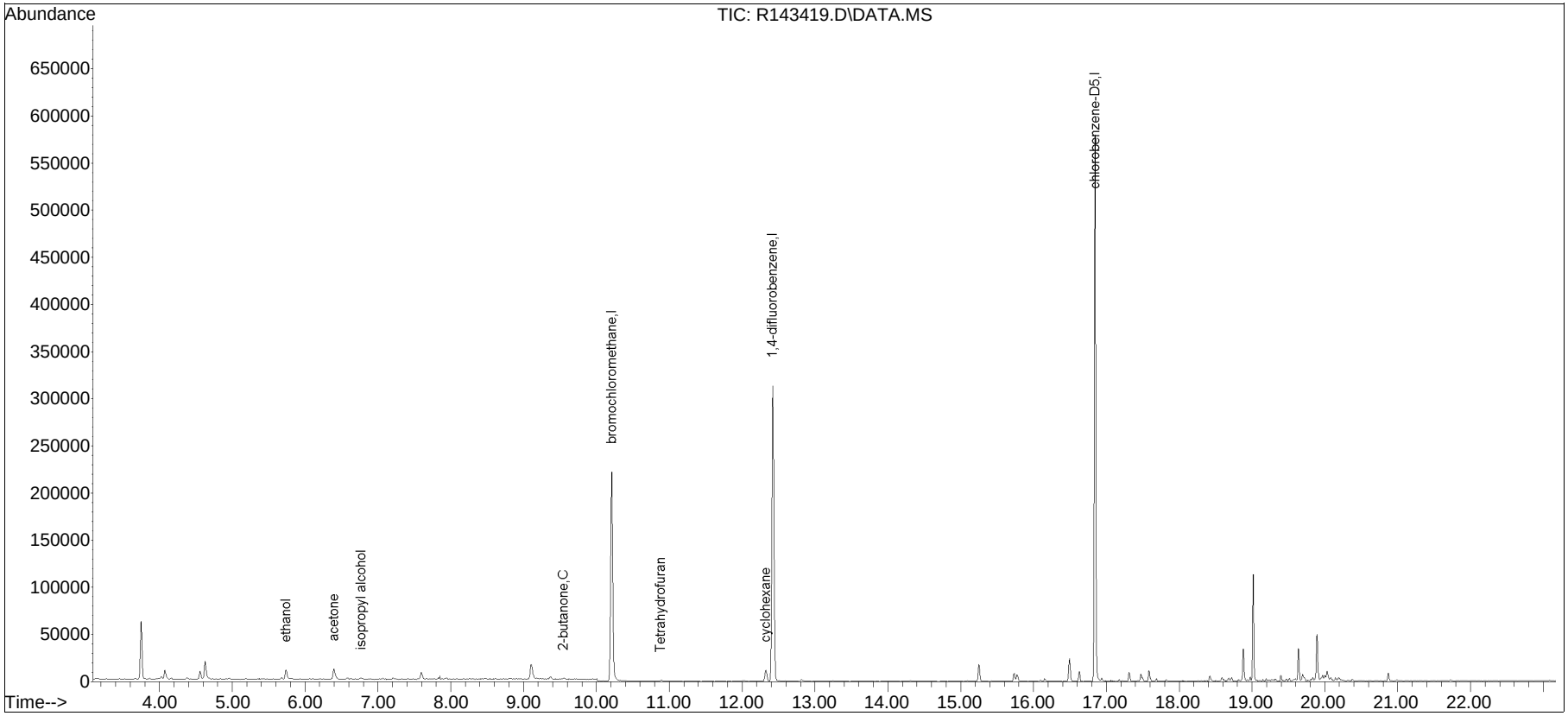
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.210	49	122086	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		83.25%	
43) 1,4-difluorobenzene	12.419	114	282987	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		86.57%	
67) chlorobenzene-D5	16.846	54	54595	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		90.52%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064		0	N.D.		
15) ethanol	5.739	31	7805	2.337	ppbV	99
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.394	43	13077	1.465	ppbV #	90
22) isopropyl alcohol	6.770	45	1838	0.168	ppbV #	88
29) 3-chloropropene	7.593		0	N.D.		
30) carbon disulfide	7.929		0	N.D.		
35) vinyl acetate	0.000		0	N.D. d		
36) 2-butanone	9.547	43	1600	0.093	ppbV #	92
38) Ethyl Acetate	0.000		0	N.D.		
40) Tetrahydrofuran	10.884	42	1065	0.106	ppbV #	40
44) hexane	10.257		0	N.D.		
53) cyclohexane	12.325	56	6298	0.478	ppbV	91
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	13.247		0	N.D.		
62) heptane	13.537		0	N.D.		
64) 4-methyl-2-pentanone	14.282		0	N.D.		
72) 2-hexanone	15.429		0	N.D.		
96) 4-ethyl toluene	18.616		0	N.D.		
101) Benzyl Chloride	18.979		0	N.D.		

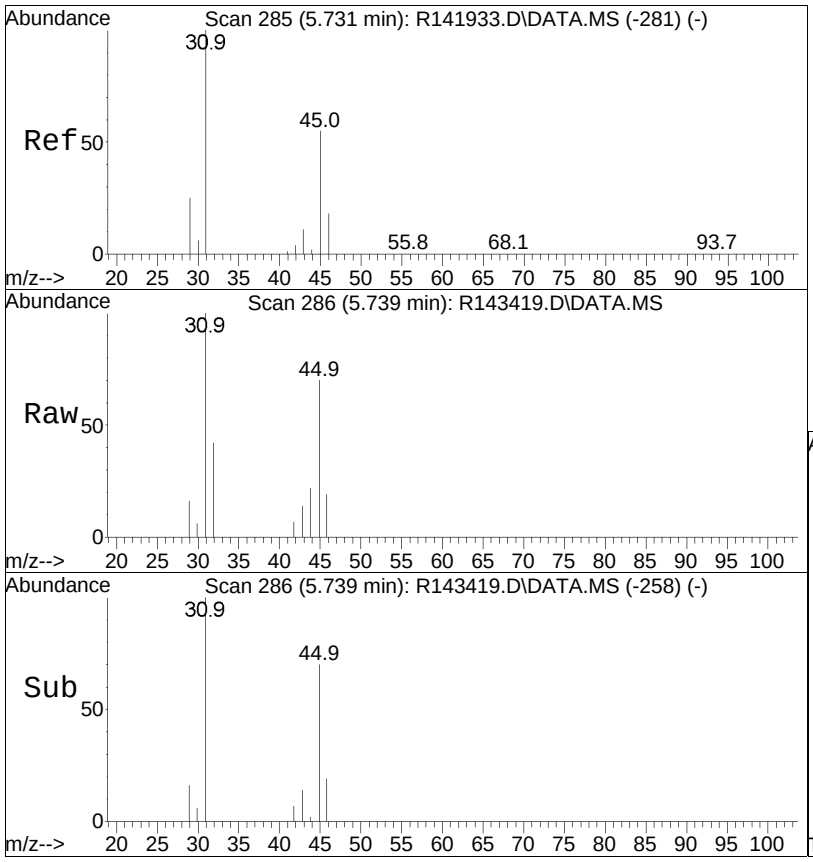
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143419.D
Acq On : 13 Aug 2015 6:23 pm
Operator : AIRPIANO1:MB
Sample : L1519114-08D,3,75.0000,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 09:51:48 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

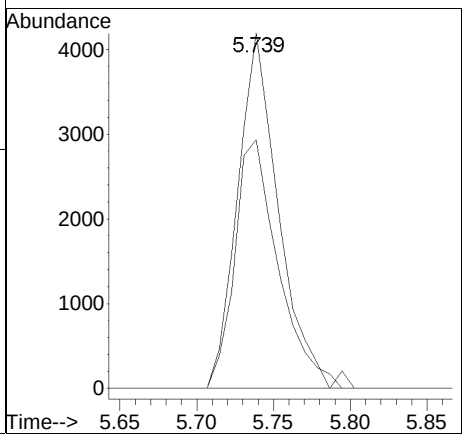


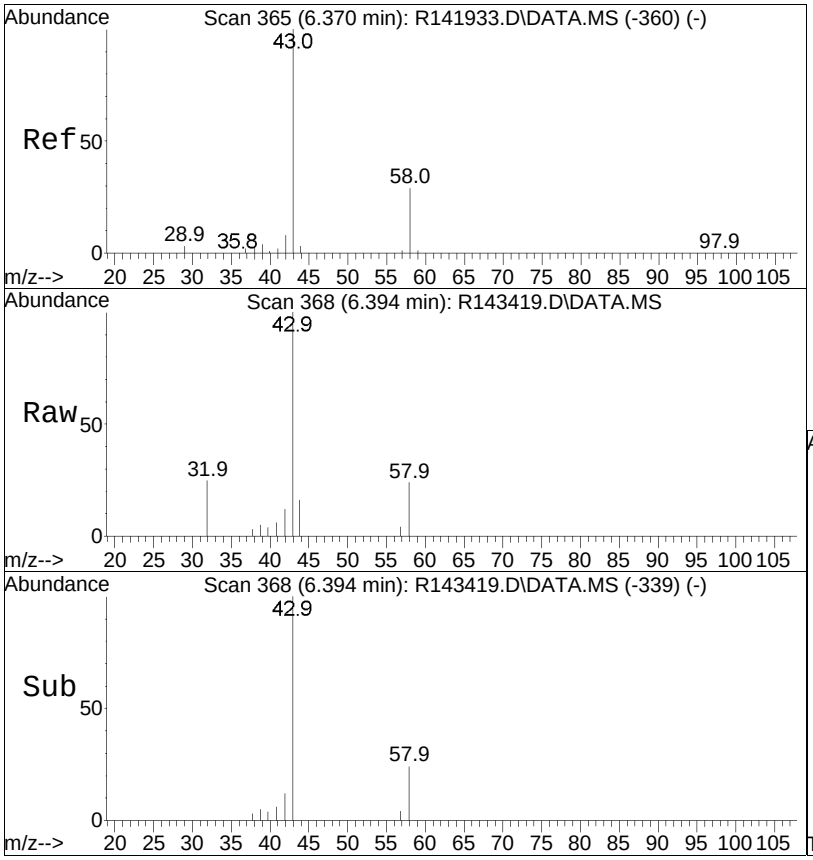


#15
ethanol
Concen: 2.34 ppbV
RT: 5.739 min Scan# 286
Delta R.T. 0.024 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 31 Resp: 7805

Ion	Ratio	Lower	Upper
31	100		
45	70.0	56.5	84.7

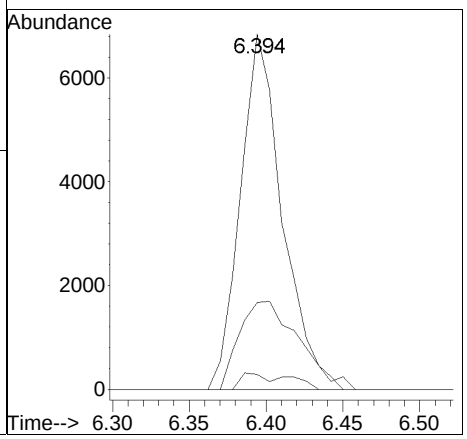


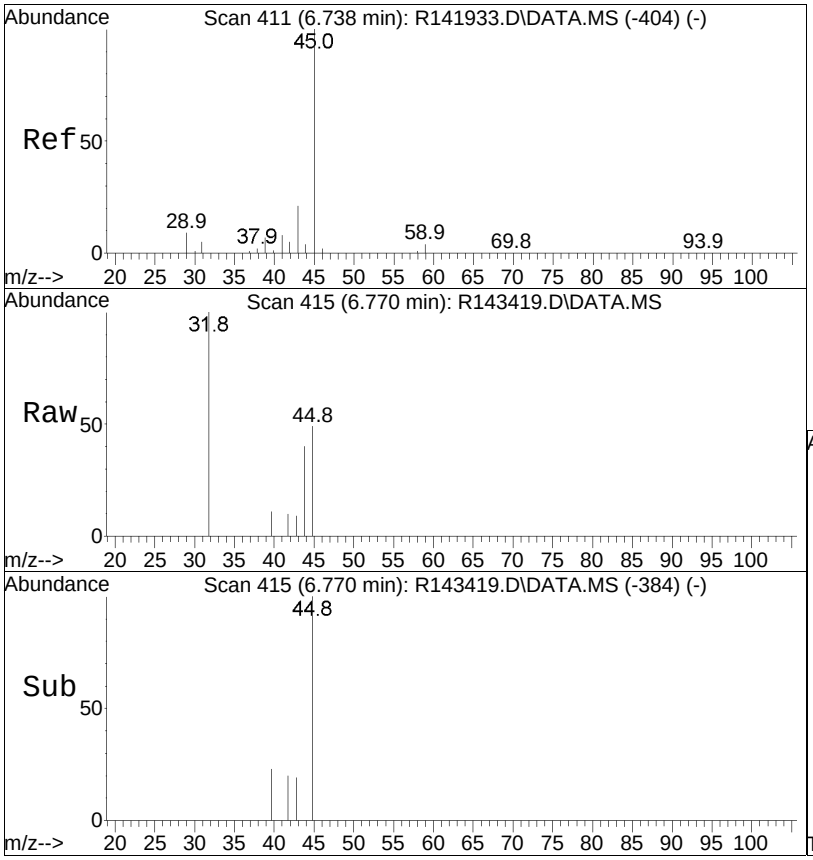


#19
acetone
Concen: 1.46 ppbV
RT: 6.394 min Scan# 368
Delta R.T. 0.032 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 43 Resp: 13077

Ion	Ratio	Lower	Upper
43	100		
58	24.4	24.1	36.1
57	4.2	0.7	1.1#

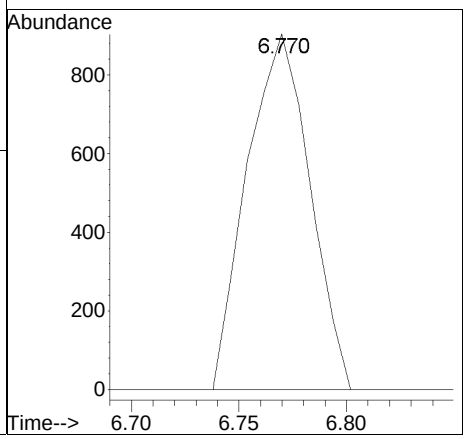


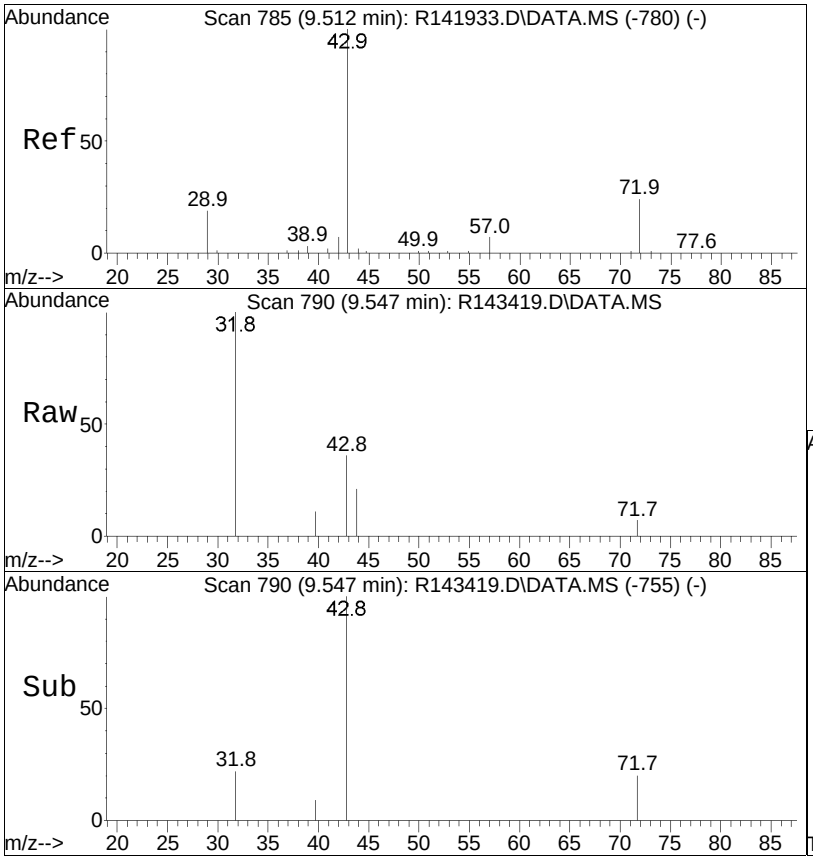


#22
isopropyl alcohol
Concen: 0.17 ppbV
RT: 6.770 min Scan# 415
Delta R.T. 0.048 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 45 Resp: 1838

Ion	Ratio	Lower	Upper
45	100		
59	0.0	3.3	4.9#

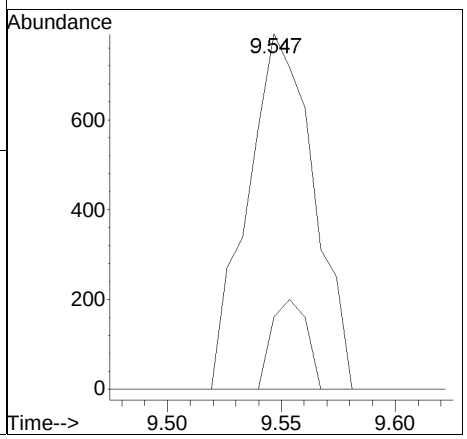


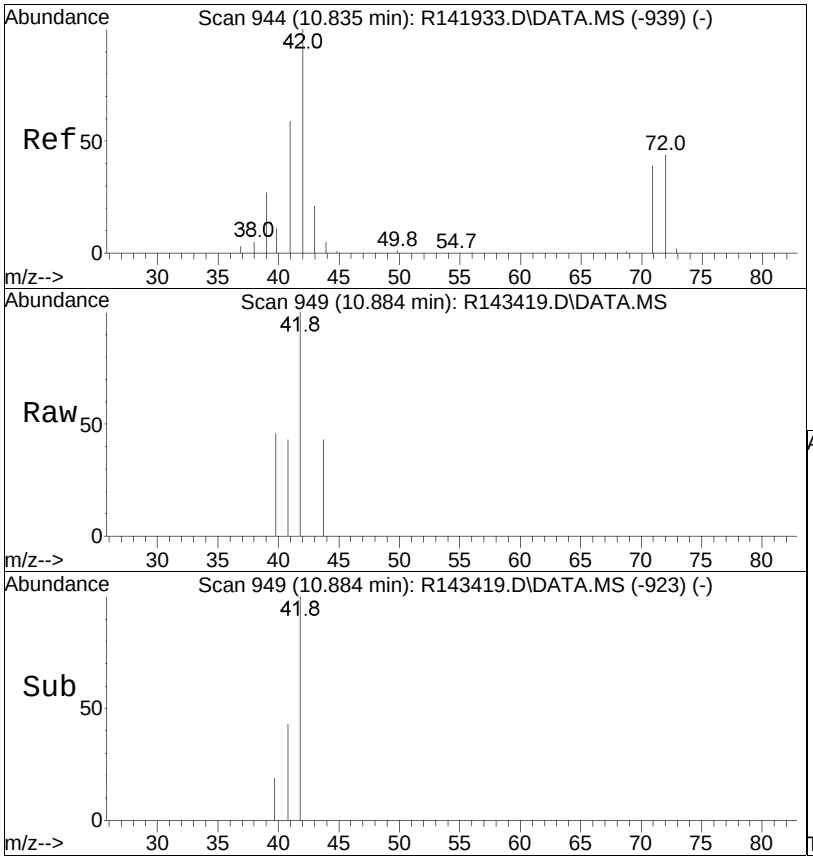


#36
2-butanone
Concen: 0.09 ppbV
RT: 9.547 min Scan# 790
Delta R.T. 0.041 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 43 Resp: 1600

Ion	Ratio	Lower	Upper
43	100		
72	20.4	15.4	23.0
57	0.0	5.8	8.6#

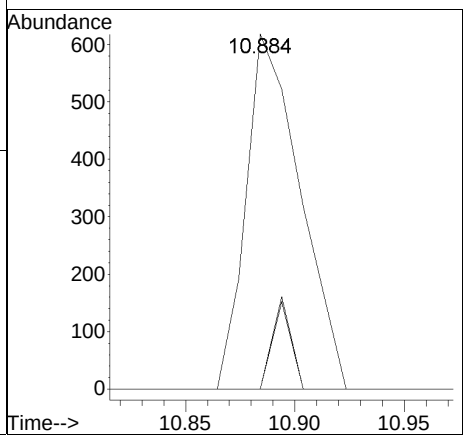


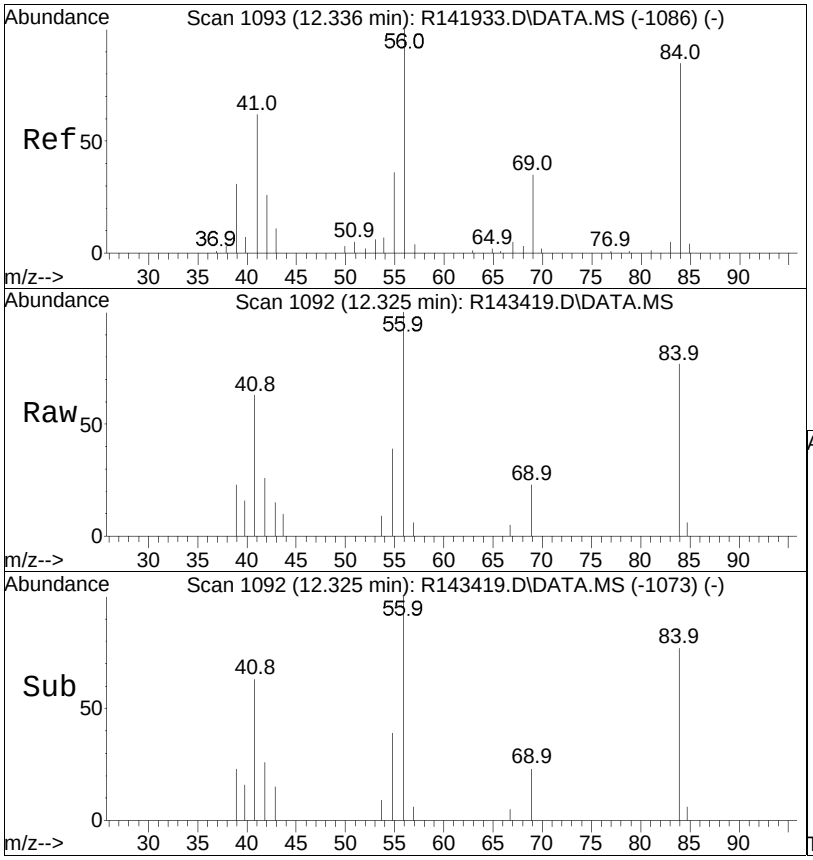


#40
Tetrahydrofuran
Concen: 0.11 ppbV
RT: 10.884 min Scan# 949
Delta R.T. 0.059 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 42 Resp: 1065

Ion	Ratio	Lower	Upper
42	100		
71	0.0	27.4	41.2#
72	0.0	28.4	42.6#

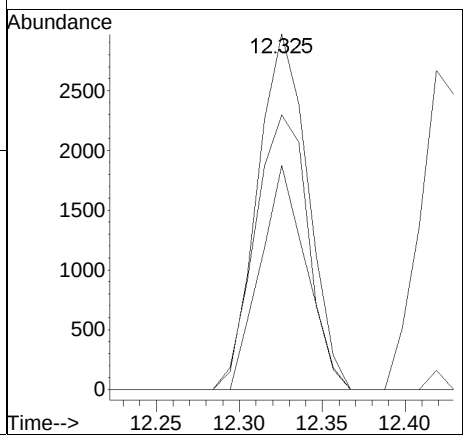




#53
cyclohexane
Concen: 0.48 ppbV
RT: 12.325 min Scan# 1092
Delta R.T. -0.000 min
Lab File: R143419.D
Acq: 13 Aug 2015 6:23 pm

Tgt Ion: 56 Resp: 6298

Ion	Ratio	Lower	Upper
56	100		
84	82.8	58.2	87.2
41	63.0	47.0	70.4



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143419.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 6:23 pm	Instrument	: Air Piano 1
Sample	: L1519114-08D,3,75.0000,250	Quant Date	: 8/14/2015 8:54 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 10:38:04 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

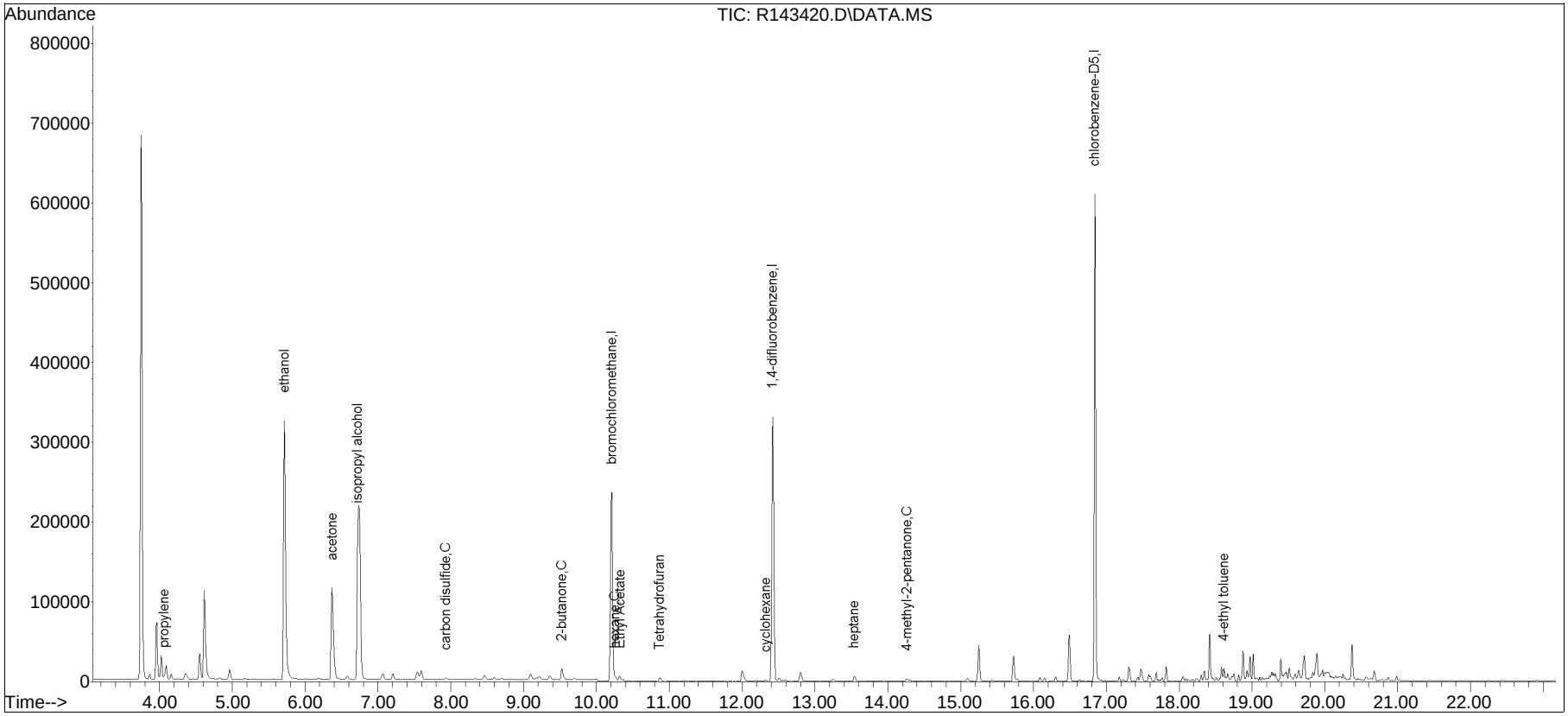
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	133052	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		90.73%	
43) 1,4-difluorobenzene	12.419	114	292024	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		89.33%	
67) chlorobenzene-D5	16.842	54	56697	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		94.01%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064	41	1376	0.231	ppbV #	77
15) ethanol	5.715	31	259259	71.226	ppbV	99
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.370	43	145465	14.952	ppbV #	98
22) isopropyl alcohol	6.722	45	251963	21.080	ppbV	98
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.929	76	786	0.040	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.526	43	18851	1.007	ppbV #	95
38) Ethyl Acetate	10.323	61	1063	0.307	ppbV #	36
40) Tetrahydrofuran	10.865	42	3066M6	0.280	ppbV	
44) hexane	10.258	57	2131	0.125	ppbV #	27
53) cyclohexane	12.326	56	1028	0.076	ppbV #	41
58) 1,4-dioxane	13.279		0	N.D.		
60) 2,2,4-trimethylpentane	13.247		0	N.D.		
62) heptane	13.538	43	3750	0.213	ppbV #	92
64) 4-methyl-2-pentanone	14.267	43	3287M6	0.144	ppbV	
72) 2-hexanone	15.465		0	N.D.		
96) 4-ethyl toluene	18.612	105	4067	0.082	ppbV	94
101) Benzyl Chloride	19.141		0	N.D.		

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

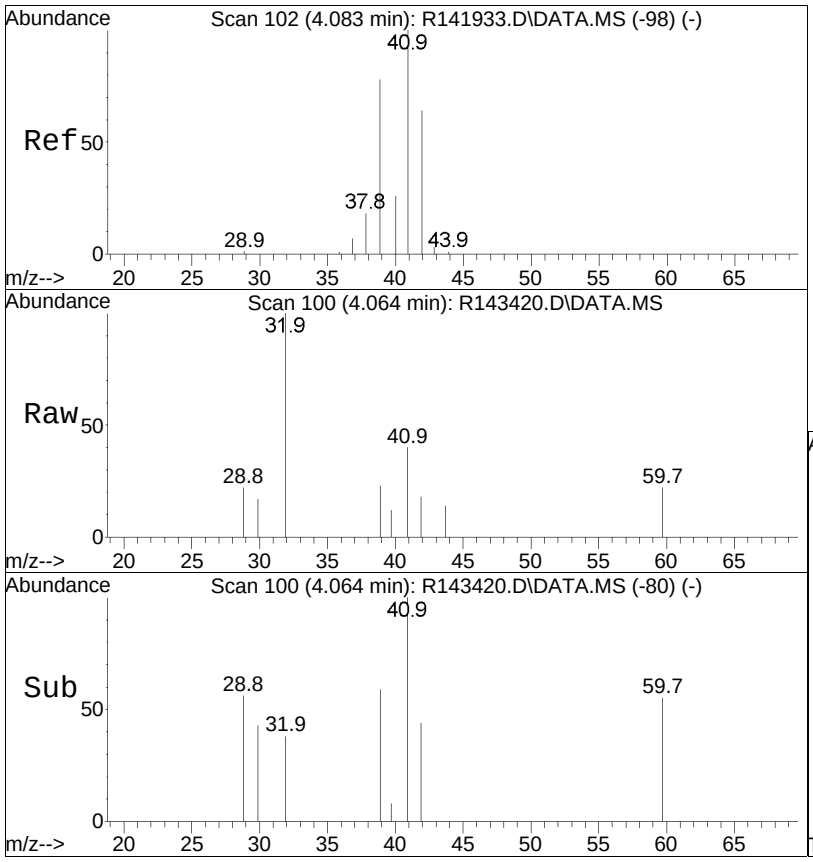
Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143420.D
Acq On : 13 Aug 2015 6:55 pm
Operator : AIRPIANO1:MB
Sample : L1519114-07,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 10:38:04 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:18 2015

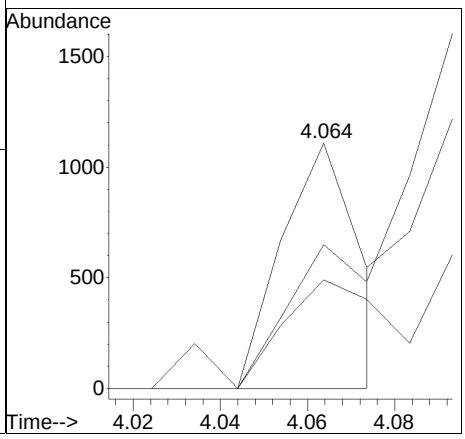
Page 2

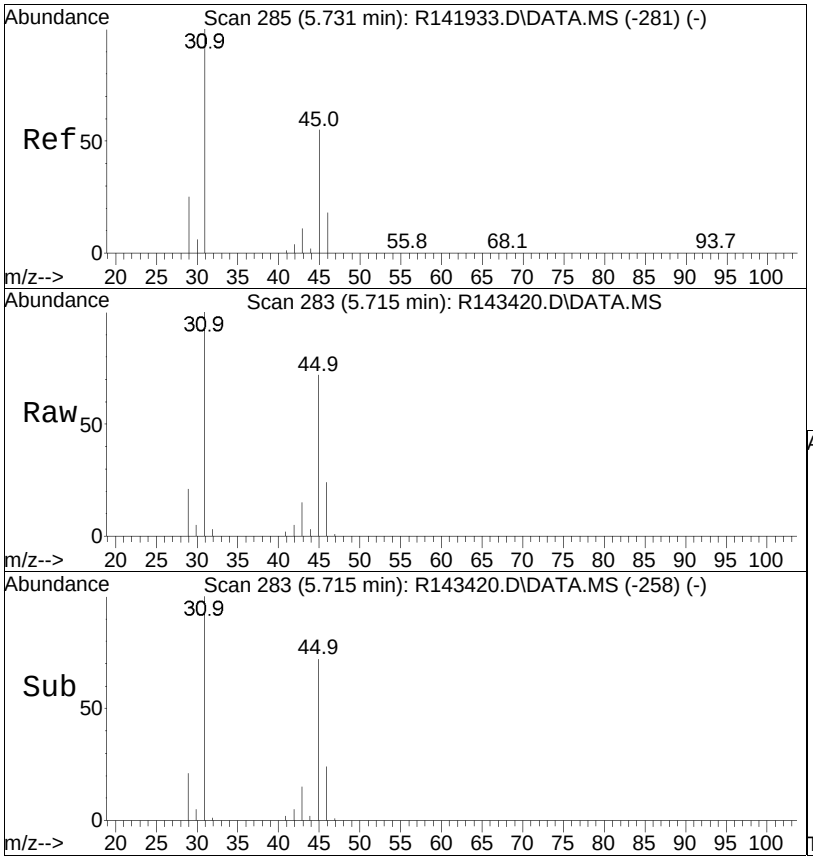


#3
propylene
Concen: 0.23 ppbV
RT: 4.064 min Scan# 100
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 41 Resp: 1376

Ion	Ratio	Lower	Upper
41	100		
42	44.3	53.1	79.7#
39	87.7	57.7	86.5#

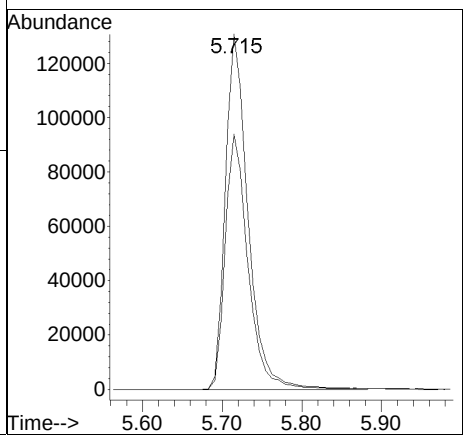


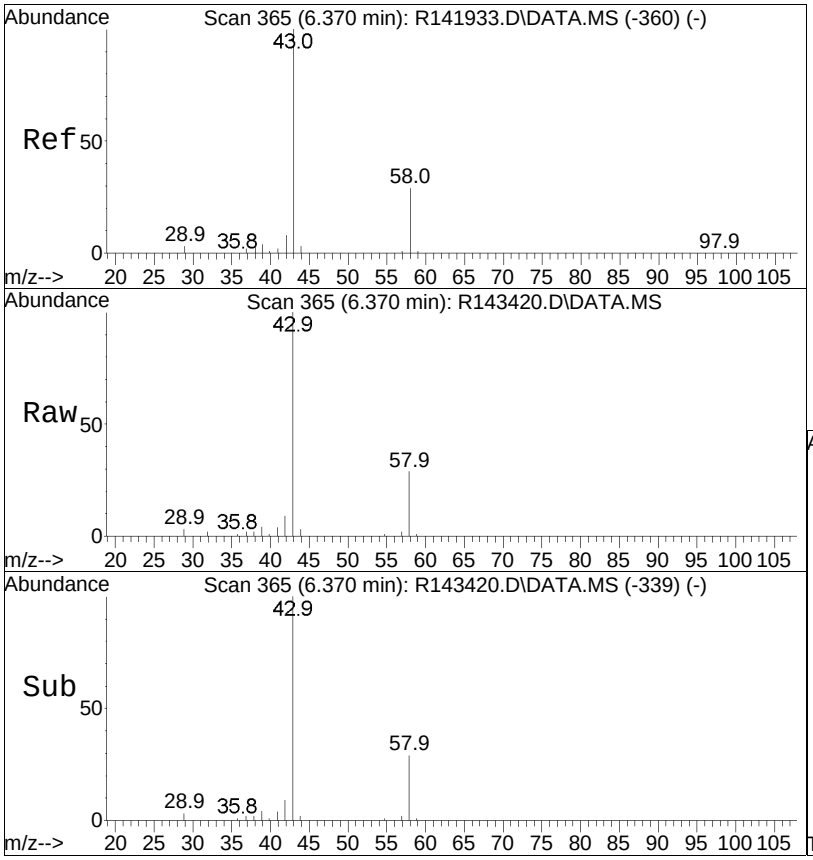


#15
ethanol
Concen: 71.23 ppbV
RT: 5.715 min Scan# 283
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 31 Resp: 259259

Ion	Ratio	Lower	Upper
31	100		
45	71.8	56.5	84.7

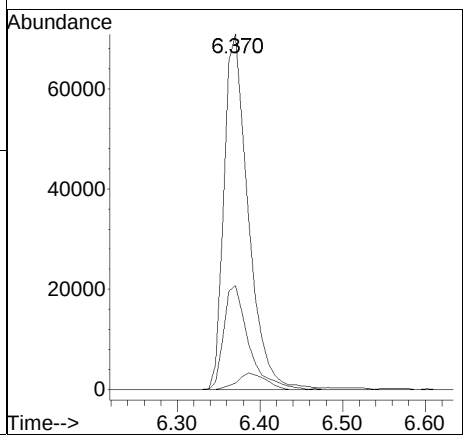


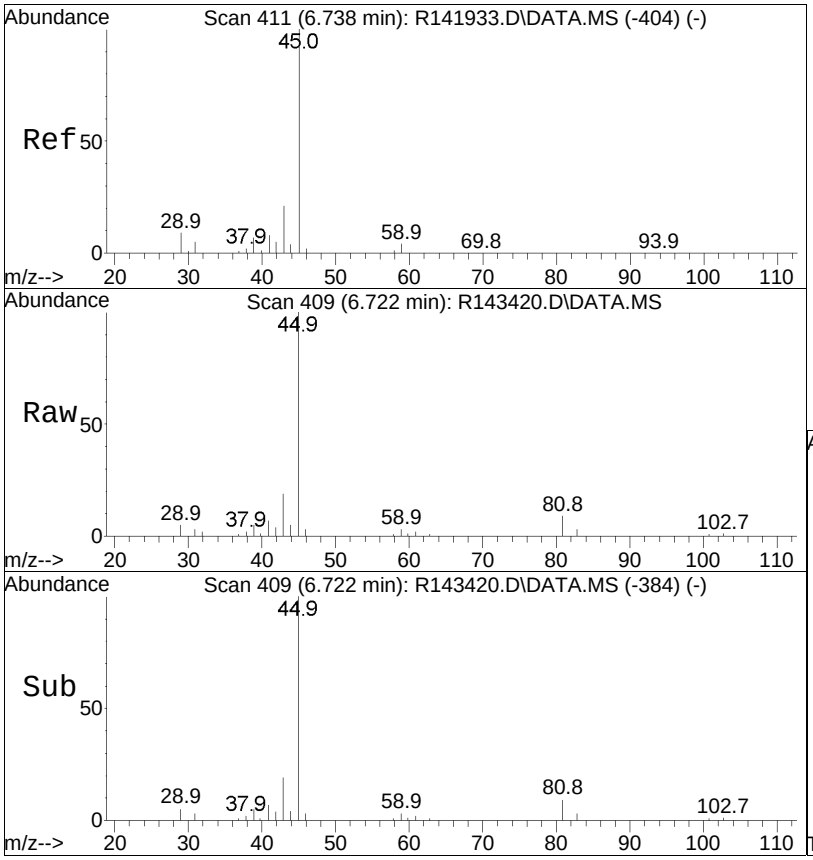


#19
acetone
Concen: 14.95 ppbV
RT: 6.370 min Scan# 365
Delta R.T. 0.008 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 43 Resp: 145465

Ion	Ratio	Lower	Upper
43	100		
58	29.2	24.1	36.1
57	1.8	0.7	1.1#

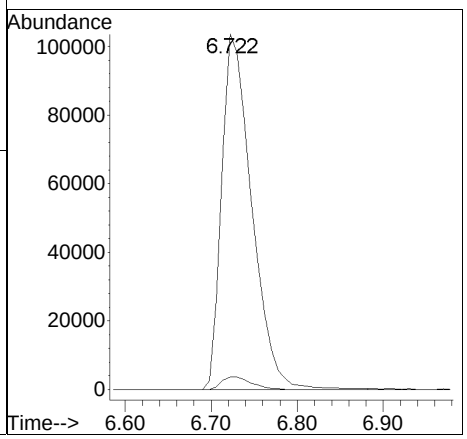


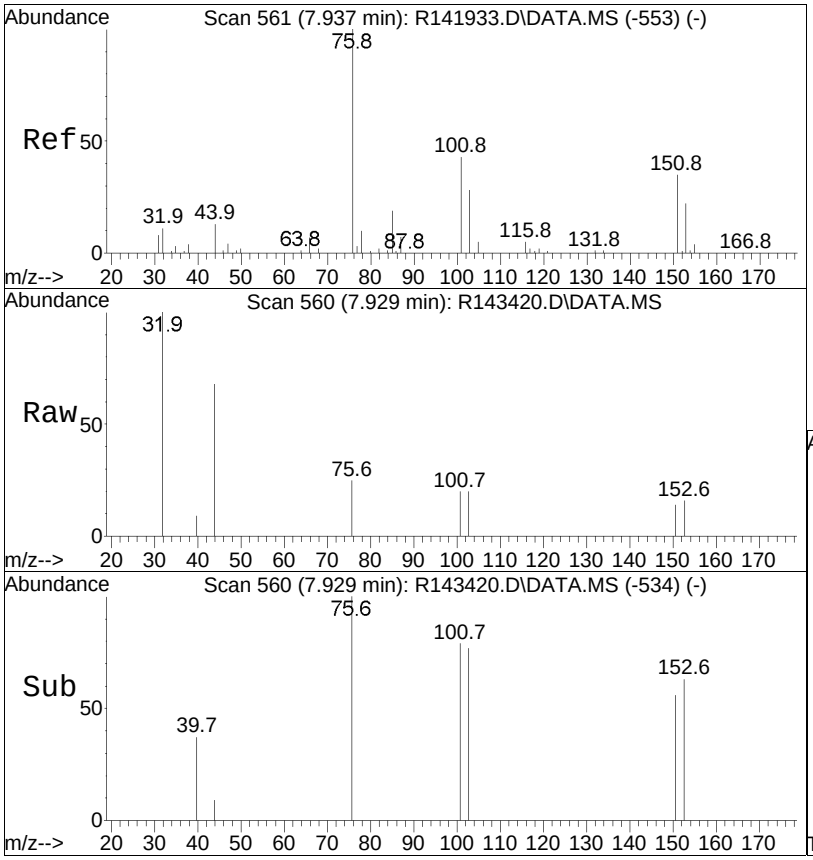


#22
isopropyl alcohol
Concen: 21.08 ppbV
RT: 6.722 min Scan# 409
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 45 Resp: 251963

Ion	Ratio	Lower	Upper
45	100		
59	3.5	3.3	4.9

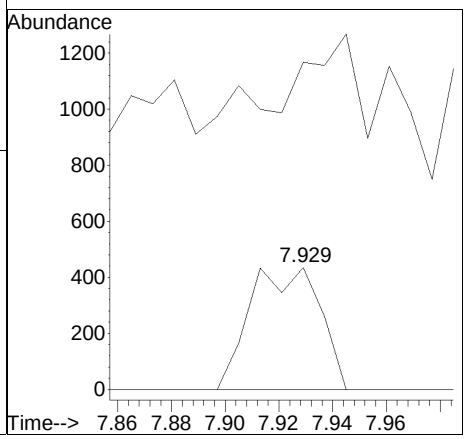


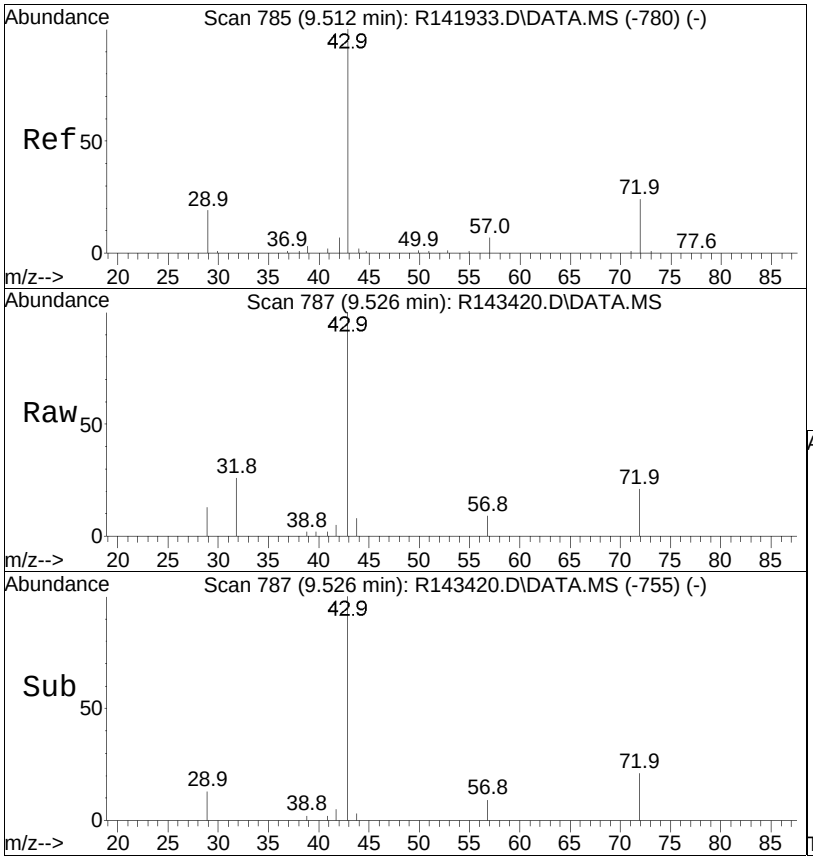


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.929 min Scan# 560
Delta R.T. 0.008 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 76 Resp: 786

Ion	Ratio	Lower	Upper
76	100		
44	268.3	11.6	17.4#

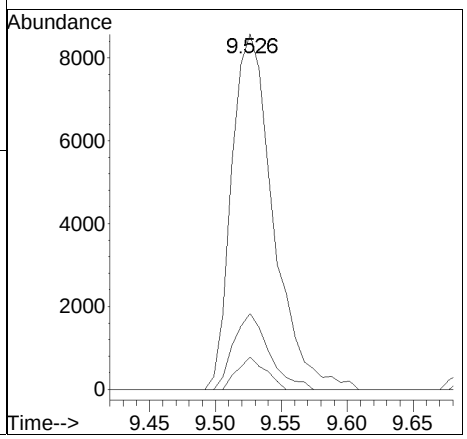


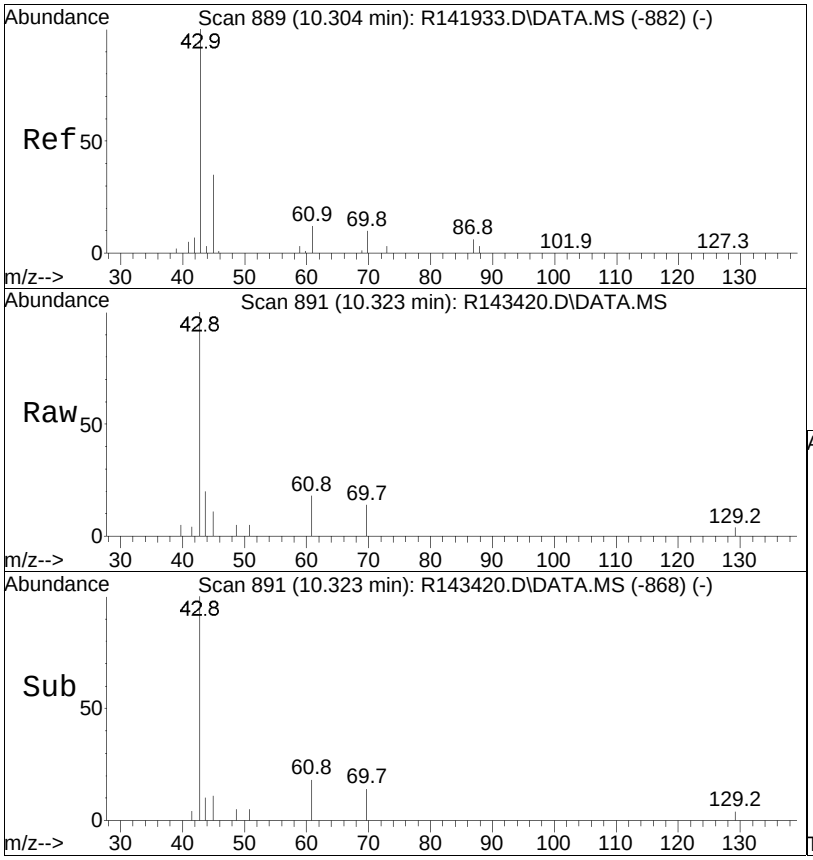


#36
2-butanone
Concen: 1.01 ppbV
RT: 9.526 min Scan# 787
Delta R.T. 0.020 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 43 Resp: 18851

Ion	Ratio	Lower	Upper
43	100		
72	21.4	15.4	23.0
57	9.1	5.8	8.6#

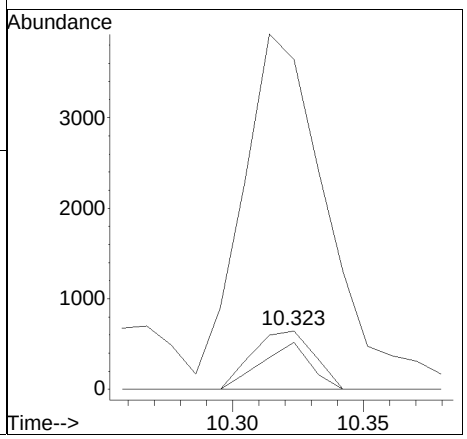


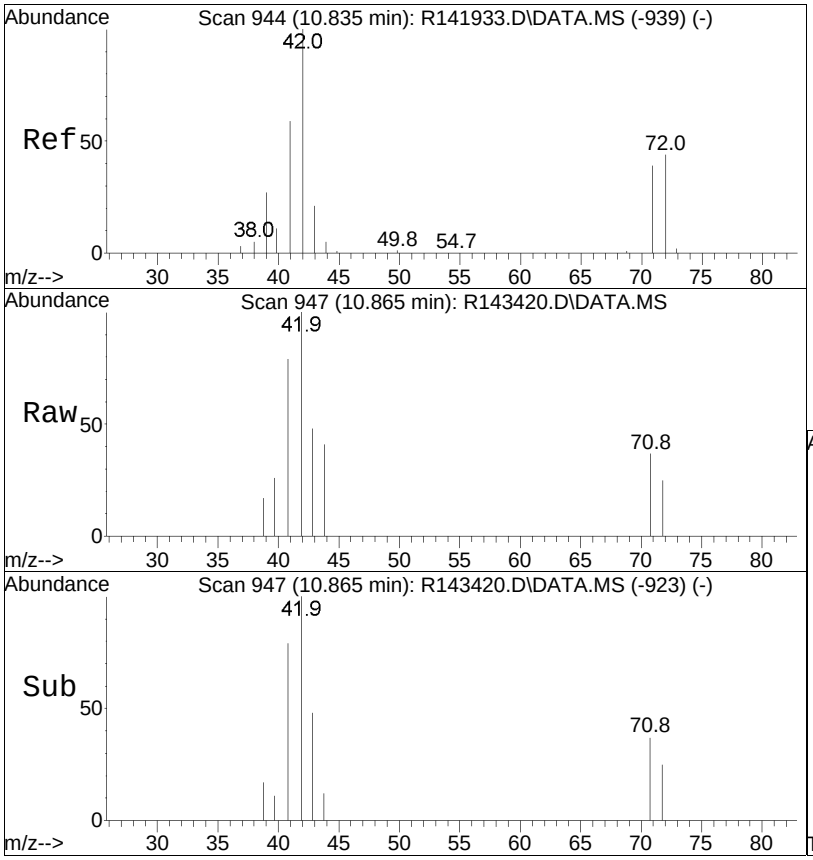


#38
Ethyl Acetate
Concen: 0.31 ppbV
RT: 10.323 min Scan# 891
Delta R.T. 0.019 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 61 Resp: 1063

Ion	Ratio	Lower	Upper
61	100		
70	80.5	52.0	78.0#
43	564.5	662.4	993.6#

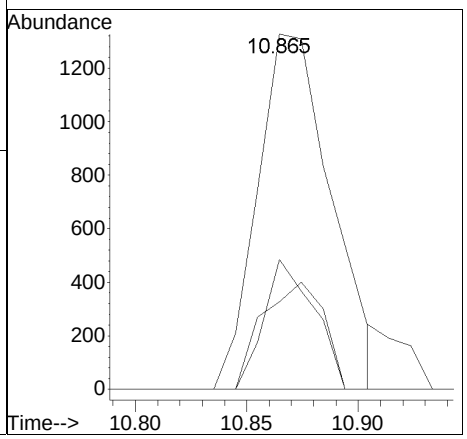


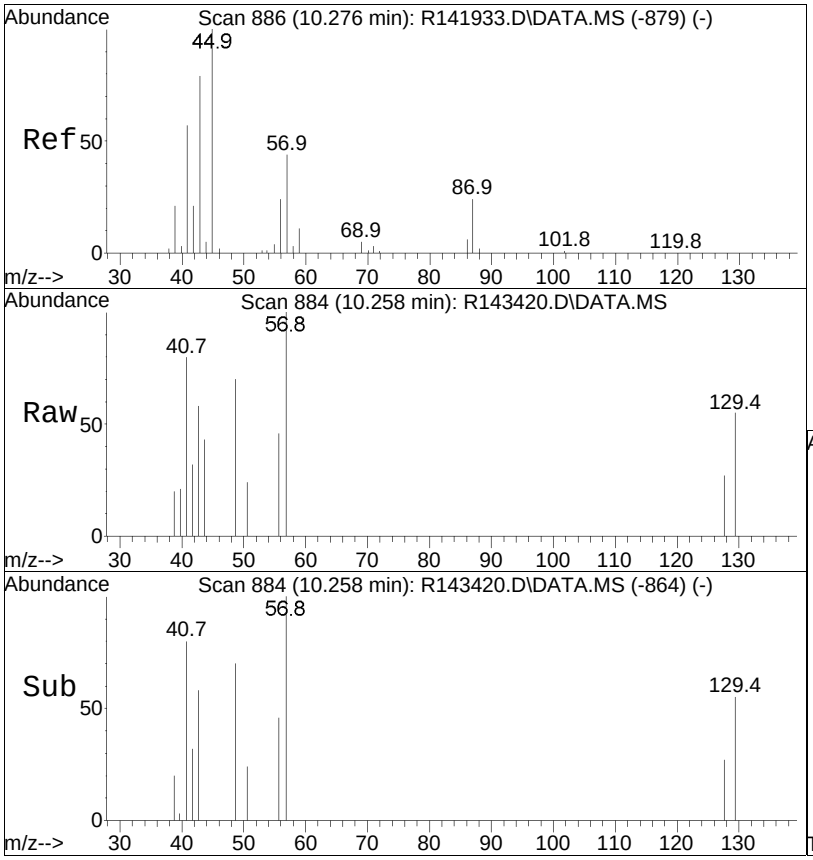


#40
Tetrahydrofuran
Concen: 0.28 ppbV m
RT: 10.865 min Scan# 947
Delta R.T. 0.039 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 42 Resp: 3066

Ion	Ratio	Lower	Upper
42	100		
71	36.5	27.4	41.2
72	24.6	28.4	42.6#

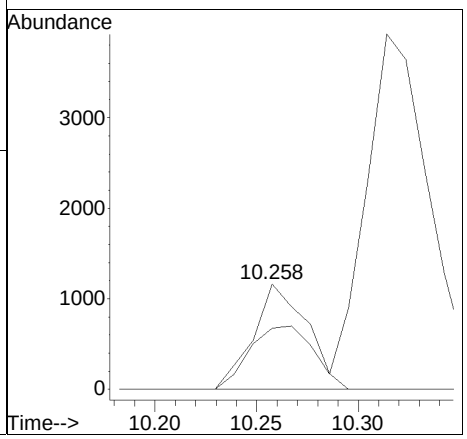


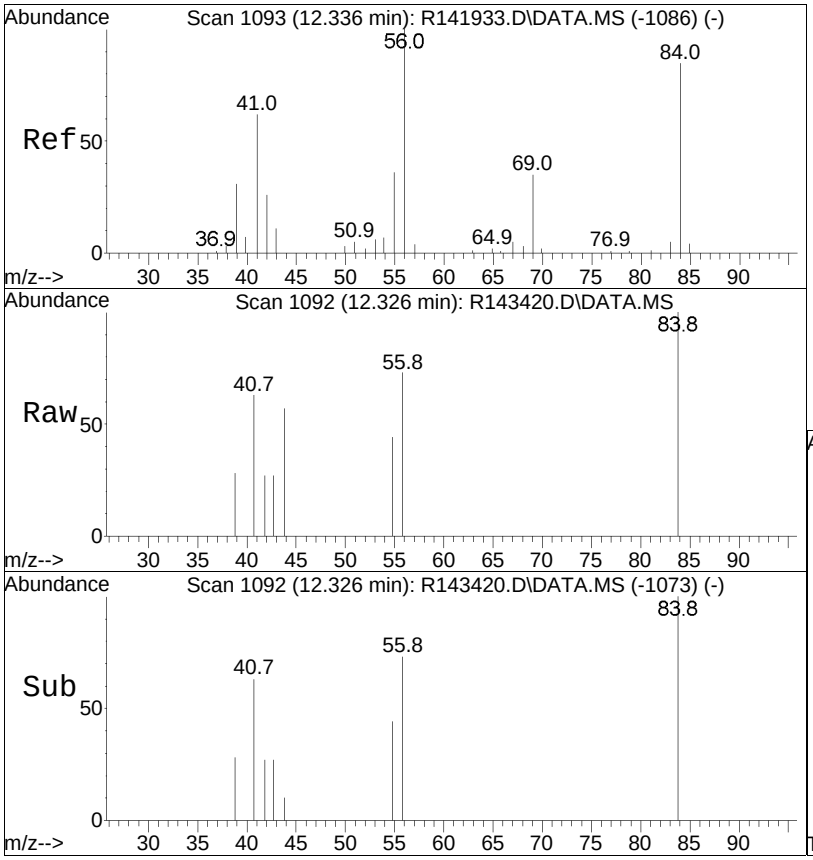


#44
hexane
Concen: 0.13 ppbV
RT: 10.258 min Scan# 884
Delta R.T. -0.009 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 57 Resp: 2131

Ion	Ratio	Lower	Upper
57	100		
43	58.1	125.7	188.5#
86	0.0	8.8	13.2#

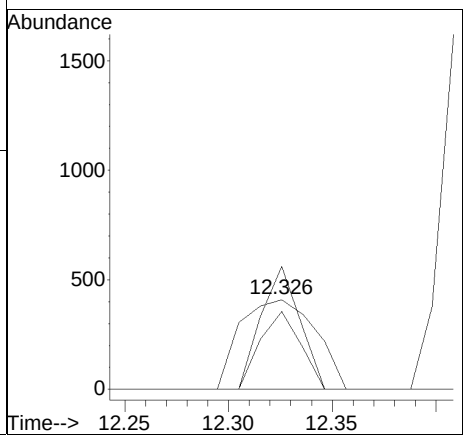


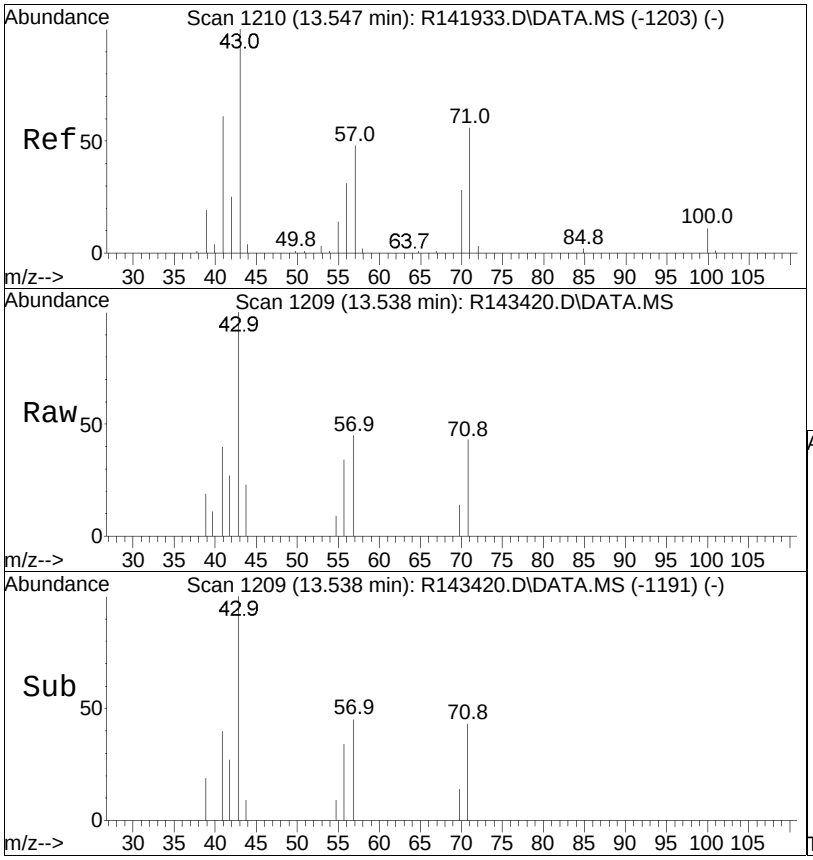


#53
cyclohexane
Concen: 0.08 ppbV
RT: 12.326 min Scan# 1092
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 56 Resp: 1028

Ion	Ratio	Lower	Upper
56	100		
84	137.2	58.2	87.2#
41	86.8	47.0	70.4#

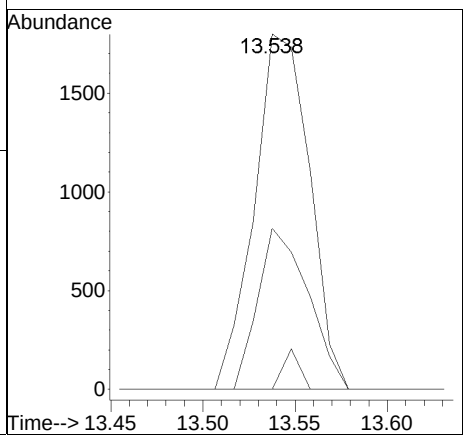


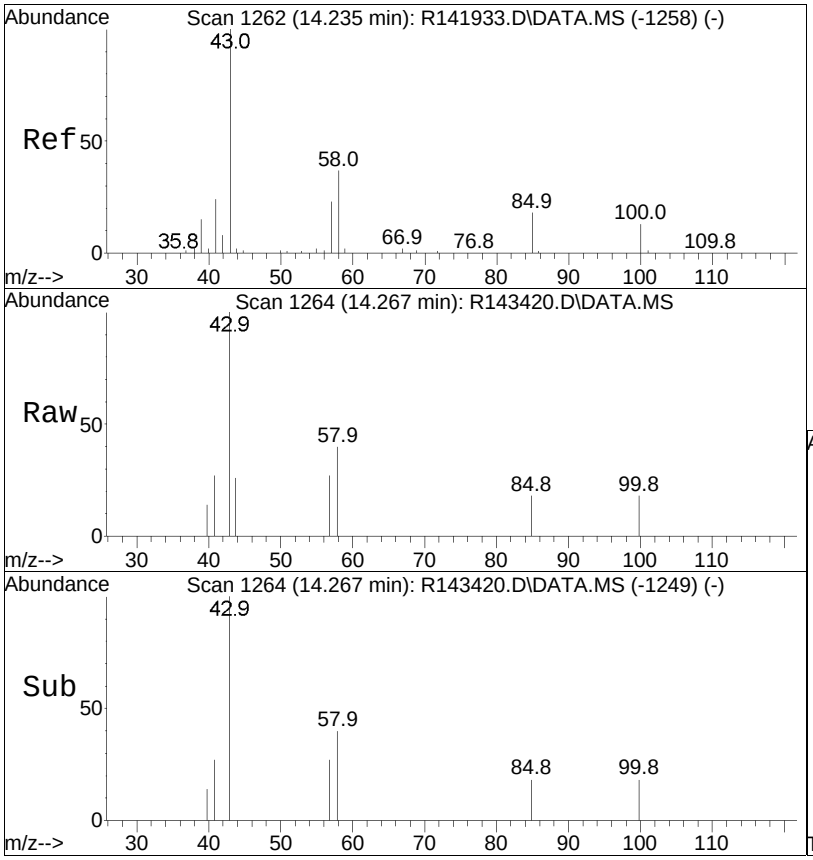


#62
heptane
Concen: 0.21 ppbV
RT: 13.538 min Scan# 1209
Delta R.T. -0.010 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 43 Resp: 3750

Ion	Ratio	Lower	Upper
43	100		
57	45.4	37.9	56.9
100	0.0	9.1	13.7#

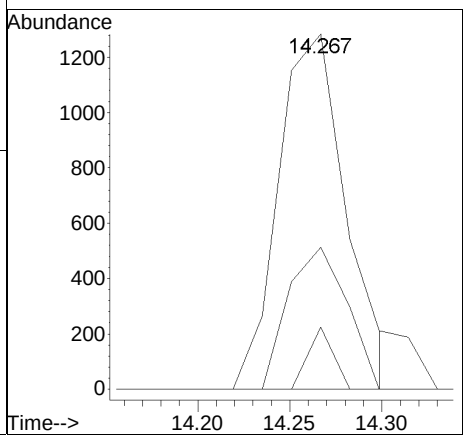


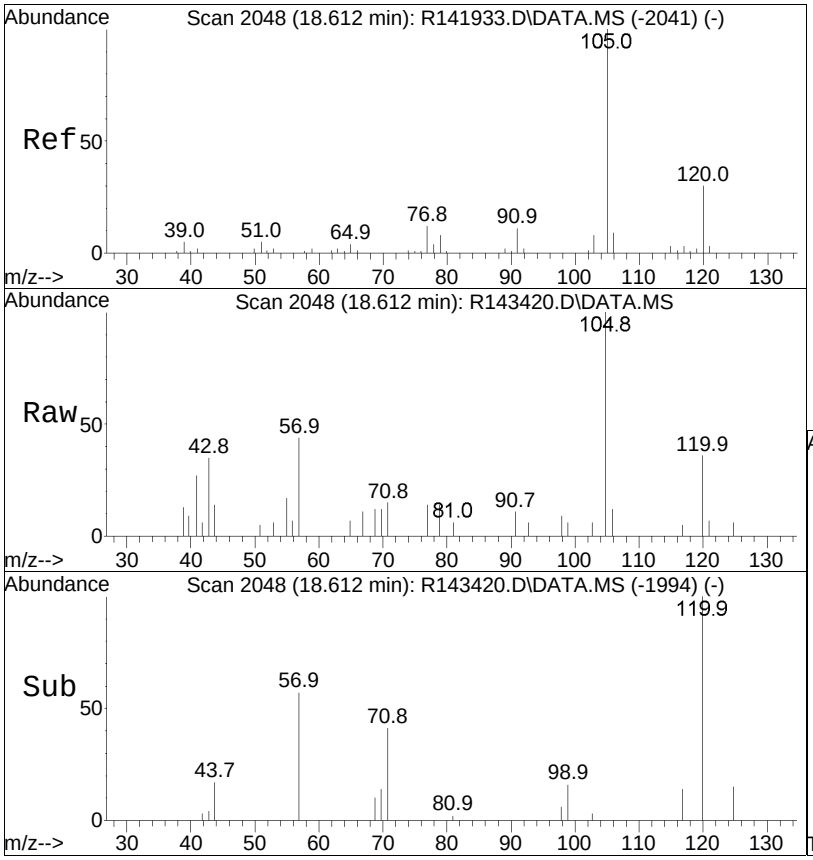


#64
4-methyl-2-pentanone
Concen: 0.14 ppbV m
RT: 14.267 min Scan# 1264
Delta R.T. 0.032 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion: 43 Resp: 3287

Ion	Ratio	Lower	Upper
43	100		
58	40.0	29.9	44.9
100	17.5	8.9	13.3#

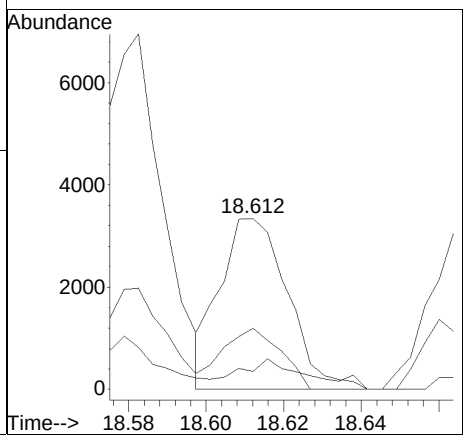




#96
4-ethyl toluene
Concen: 0.08 ppbV
RT: 18.612 min Scan# 2048
Delta R.T. -0.000 min
Lab File: R143420.D
Acq: 13 Aug 2015 6:55 pm

Tgt Ion:105 Resp: 4067

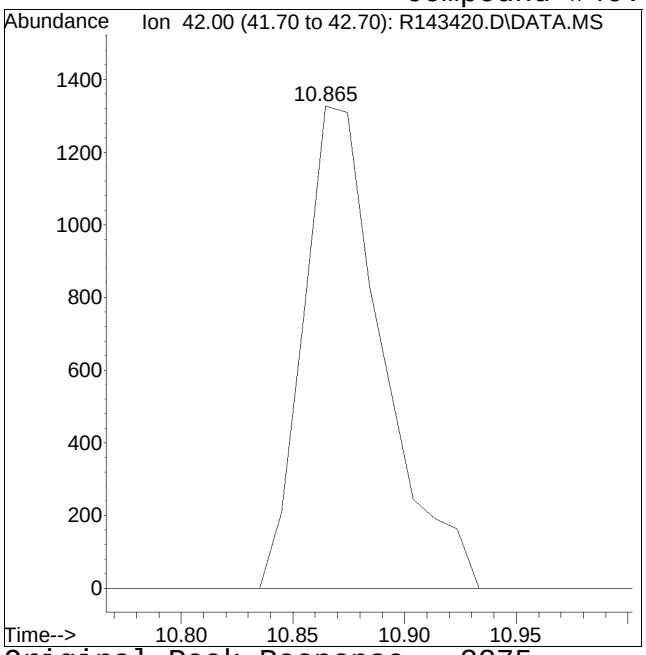
Ion	Ratio	Lower	Upper
105	100		
120	35.8	25.0	37.4
91	10.5	8.4	12.6



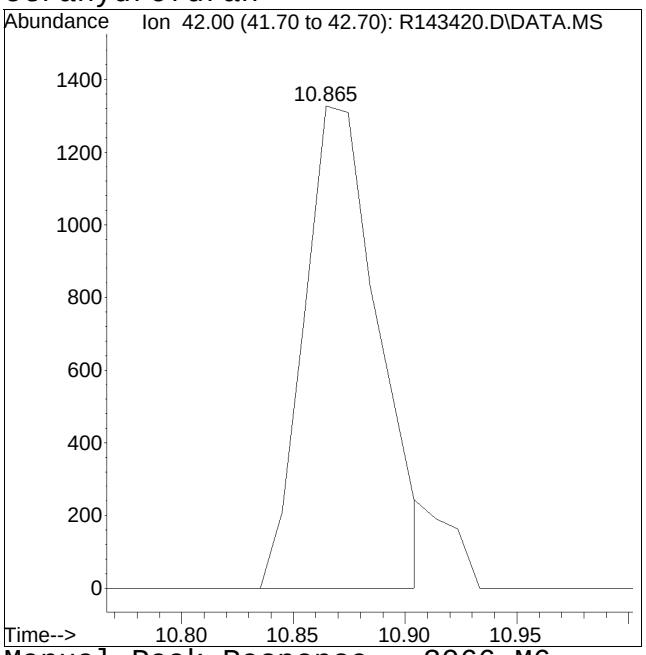
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:55 am

Compound #40: Tetrahydrofuran



Original Peak Response = 3275



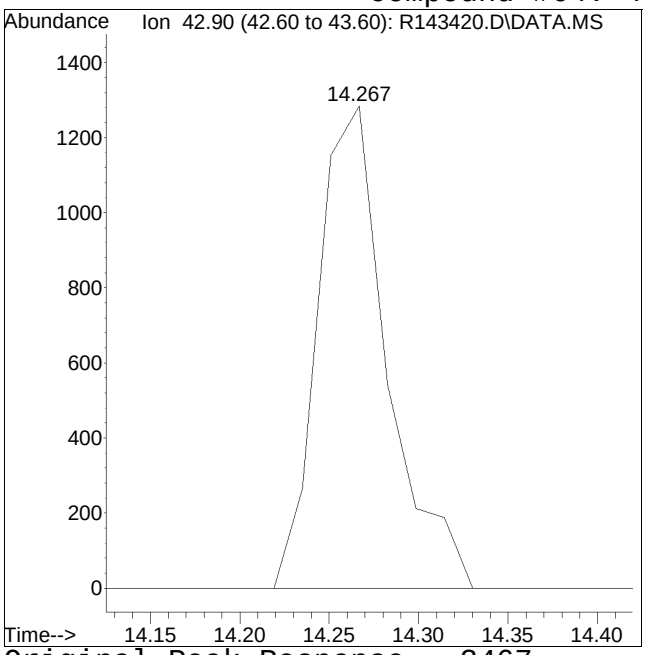
Manual Peak Response = 3066 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

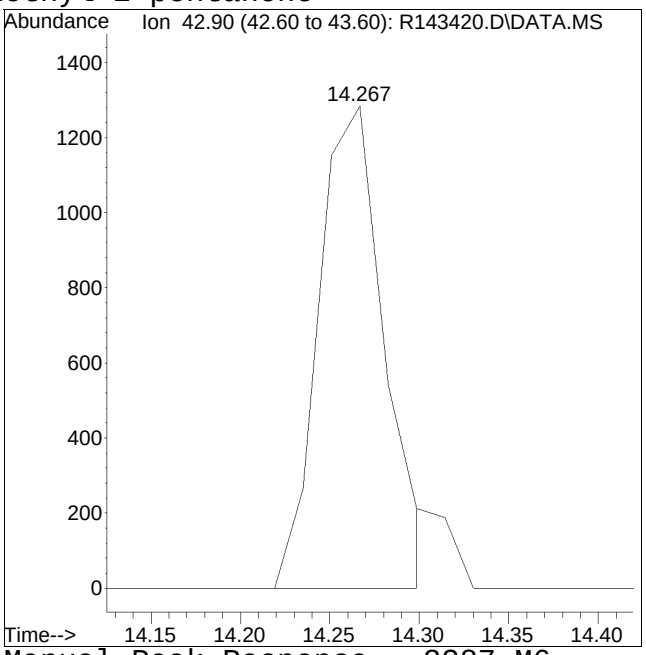
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143420.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 6:55 pm Instrument : Air Piano 1
Sample : L1519114-07,3,250,250 Quant Date : 8/14/2015 8:55 am

Compound #64: 4-methyl-2-pentanone



Original Peak Response = 3467



Manual Peak Response = 3287 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 10:38:22 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

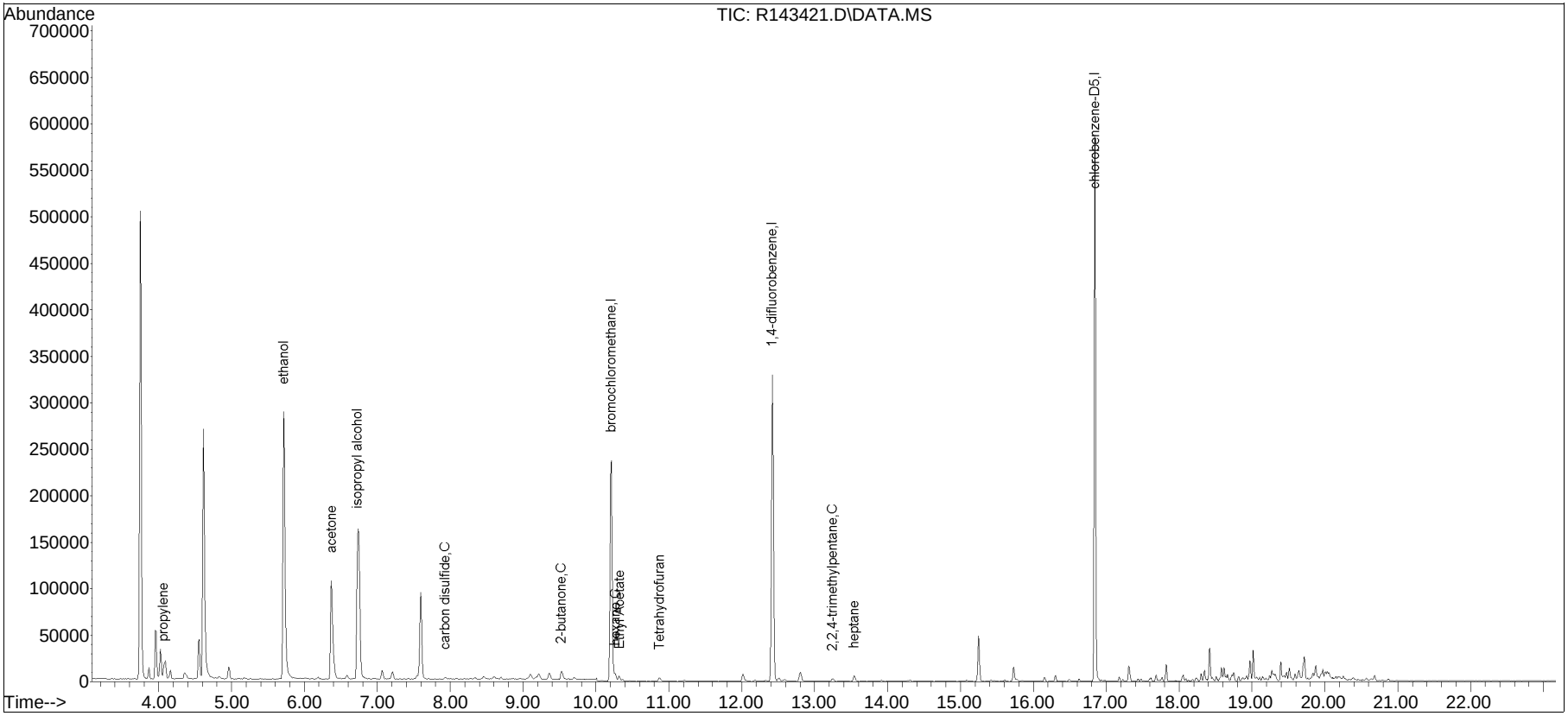
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	130859	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		89.24%	
43) 1,4-difluorobenzene	12.419	114	284167	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		86.93%	
67) chlorobenzene-D5	16.842	54	55132	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		91.41%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064	41	1424M6	0.244	ppbV	
15) ethanol	5.715	31	232331	64.898	ppbV	98
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.370	43	132255	13.822	ppbV #	99
22) isopropyl alcohol	6.730	45	183139	15.579	ppbV	99
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.929	76	905	0.047	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.526	43	12405	0.674	ppbV #	94
38) Ethyl Acetate	10.323	61	756	0.222	ppbV	76
40) Tetrahydrofuran	10.875	42	3034M6	0.282	ppbV	
44) hexane	10.267	57	3346	0.202	ppbV #	29
53) cyclohexane	12.326		0	N.D.		
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	13.248	57	3214	0.074	ppbV #	80
62) heptane	13.538	43	3348	0.196	ppbV #	78
64) 4-methyl-2-pentanone	14.267		0	N.D.		
72) 2-hexanone	15.456		0	N.D.		
96) 4-ethyl toluene	18.612		0	N.D.		
101) Benzyl Chloride	19.147		0	N.D.		

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

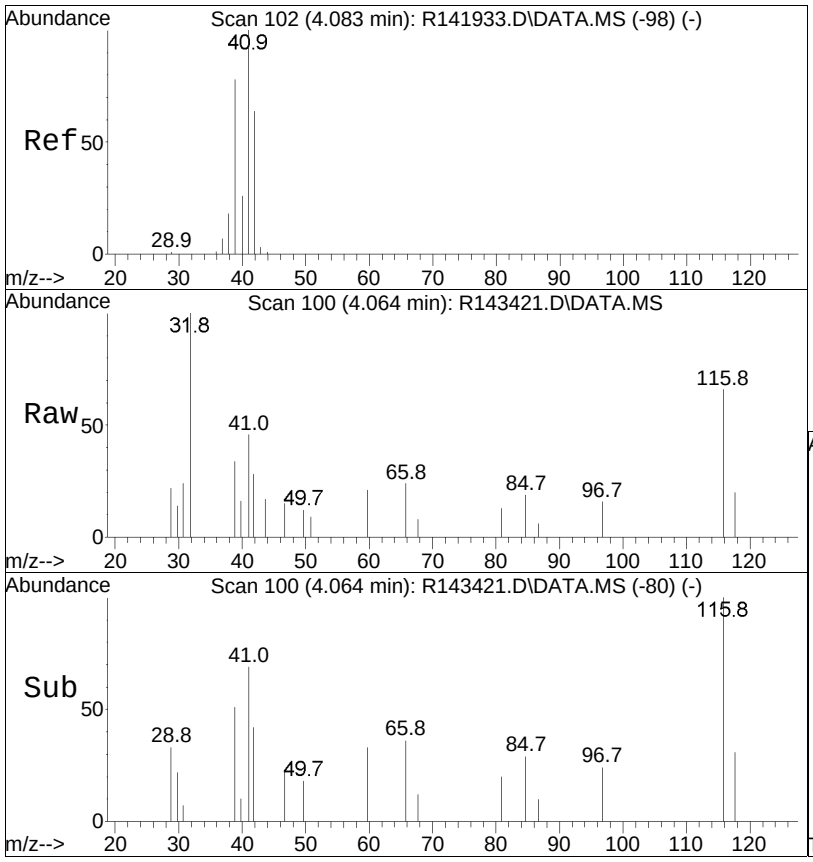
Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143421.D
Acq On : 13 Aug 2015 7:27 pm
Operator : AIRPIANO1:MB
Sample : L1519114-09,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 10:38:22 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:26 2015

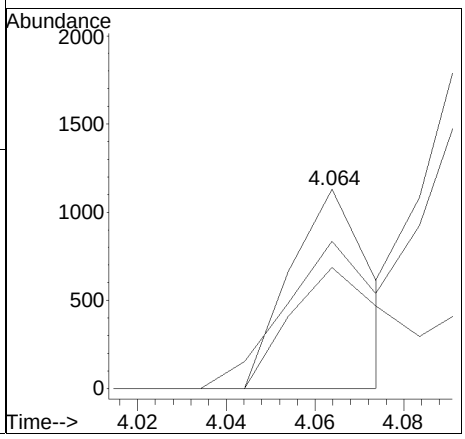
Page 2

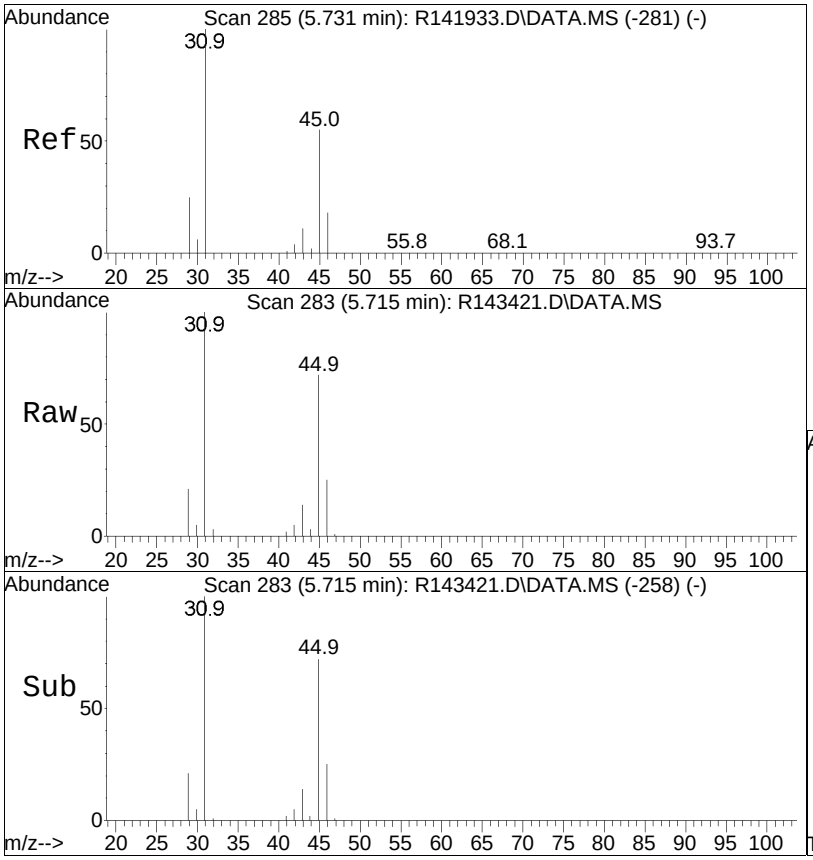


#3
propylene
Concen: 0.24 ppbV m
RT: 4.064 min Scan# 100
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 41 Resp: 1424

Ion	Ratio	Lower	Upper
41	100		
42	60.7	53.1	79.7
39	73.9	57.7	86.5

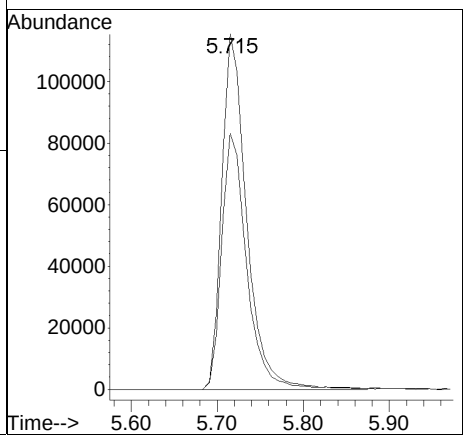


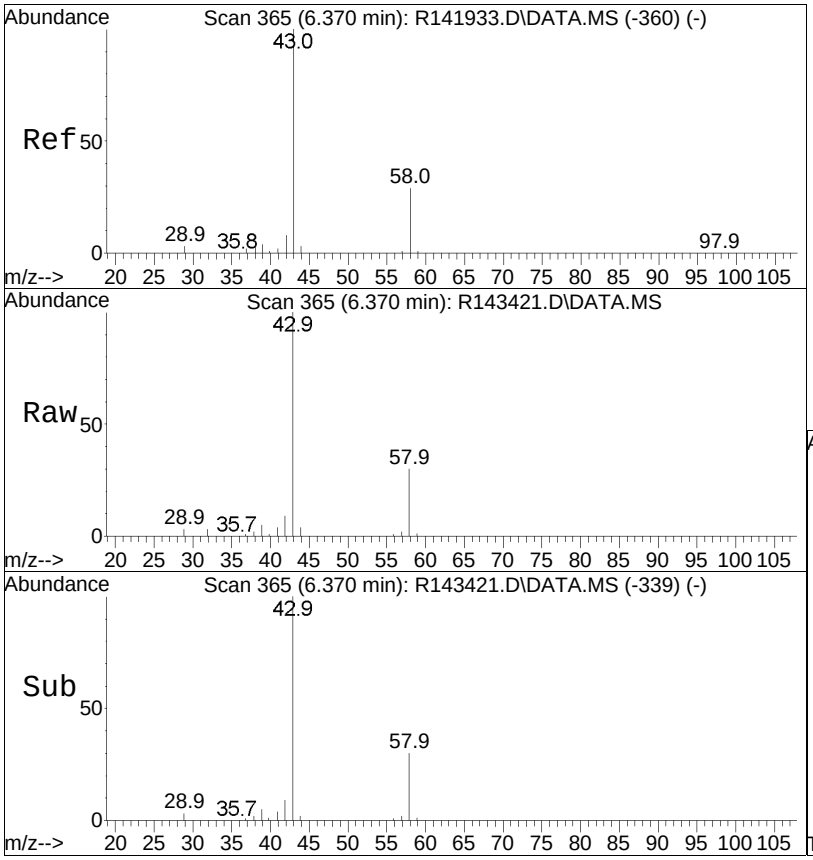


#15
ethanol
Concen: 64.90 ppbV
RT: 5.715 min Scan# 283
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 31 Resp: 232331

Ion	Ratio	Lower	Upper
31	100		
45	72.1	56.5	84.7

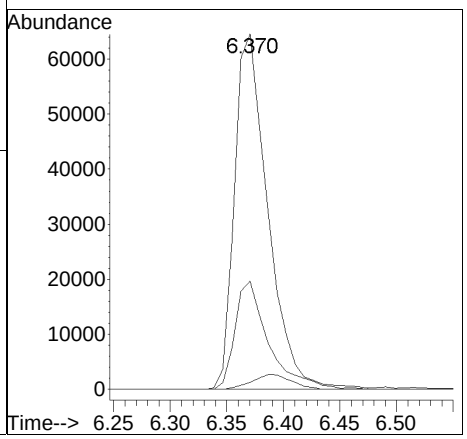


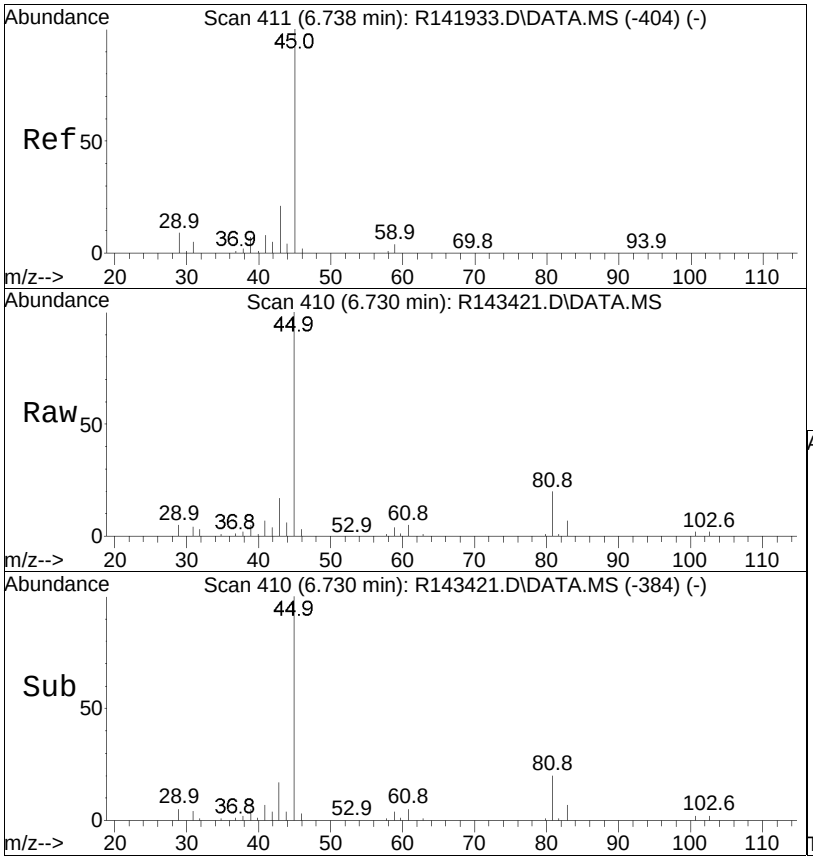


#19
acetone
Concen: 13.82 ppbV
RT: 6.370 min Scan# 365
Delta R.T. 0.008 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 43 Resp: 132255

Ion	Ratio	Lower	Upper
43	100		
58	30.5	24.1	36.1
57	2.0	0.7	1.1#

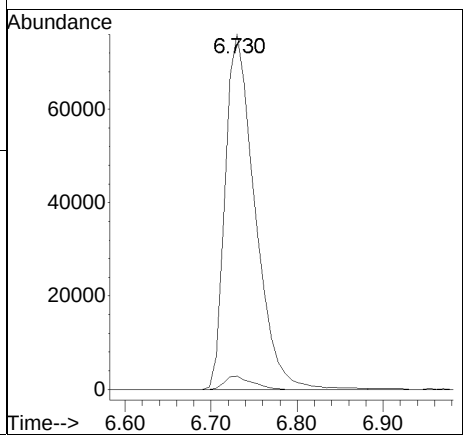


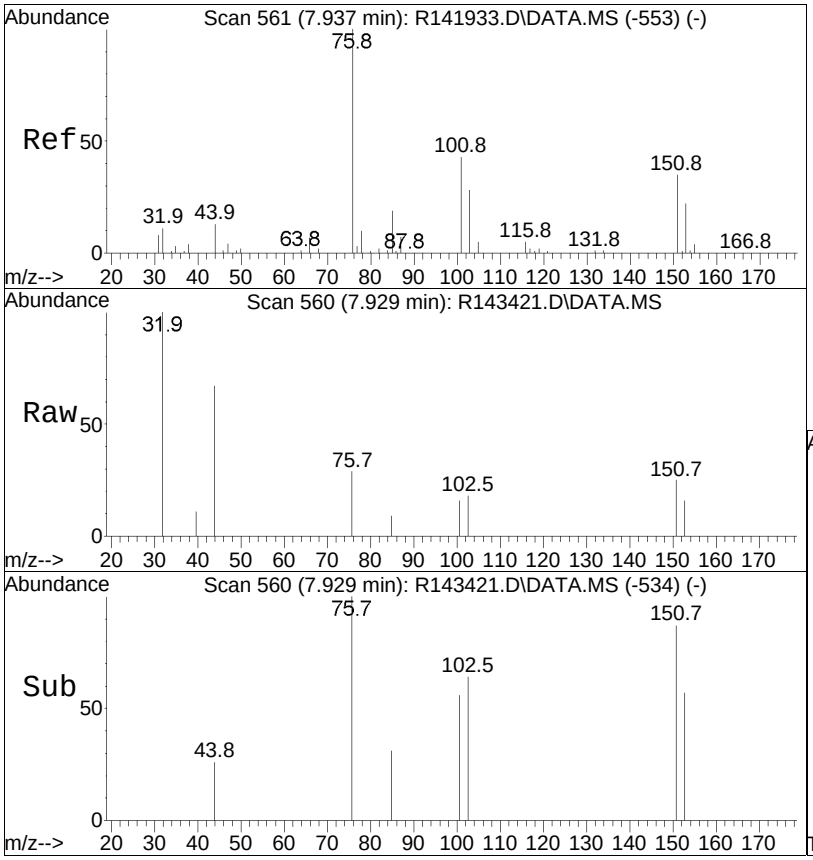


#22
isopropyl alcohol
Concen: 15.58 ppbV
RT: 6.730 min Scan# 410
Delta R.T. 0.008 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 45 Resp: 183139

Ion	Ratio	Lower	Upper
45	100		
59	3.8	3.3	4.9

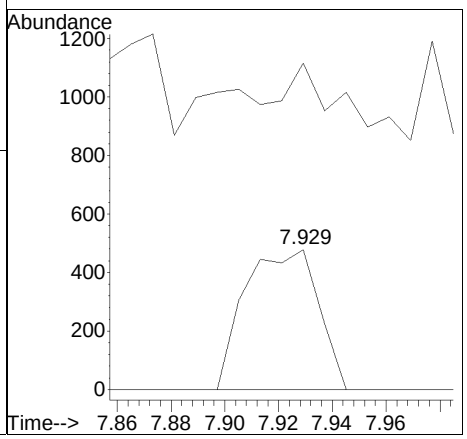


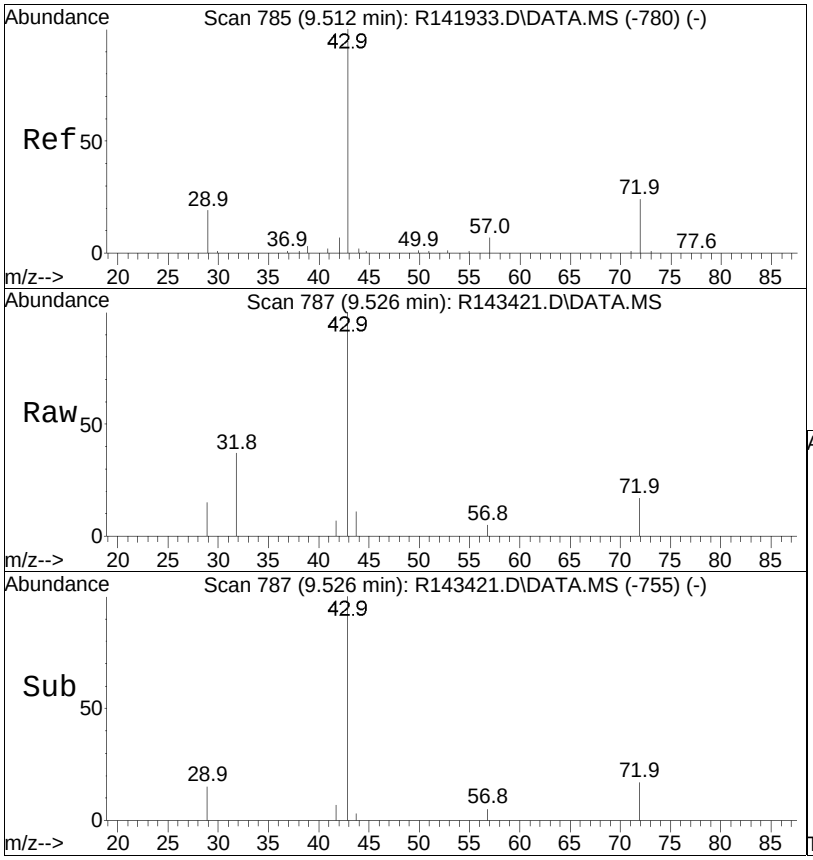


#30
carbon disulfide
Concen: 0.05 ppbV
RT: 7.929 min Scan# 560
Delta R.T. 0.008 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 76 Resp: 905

Ion	Ratio	Lower	Upper
76	100		
44	233.5	11.6	17.4#

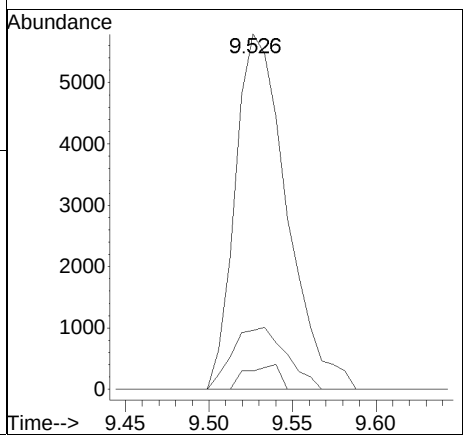


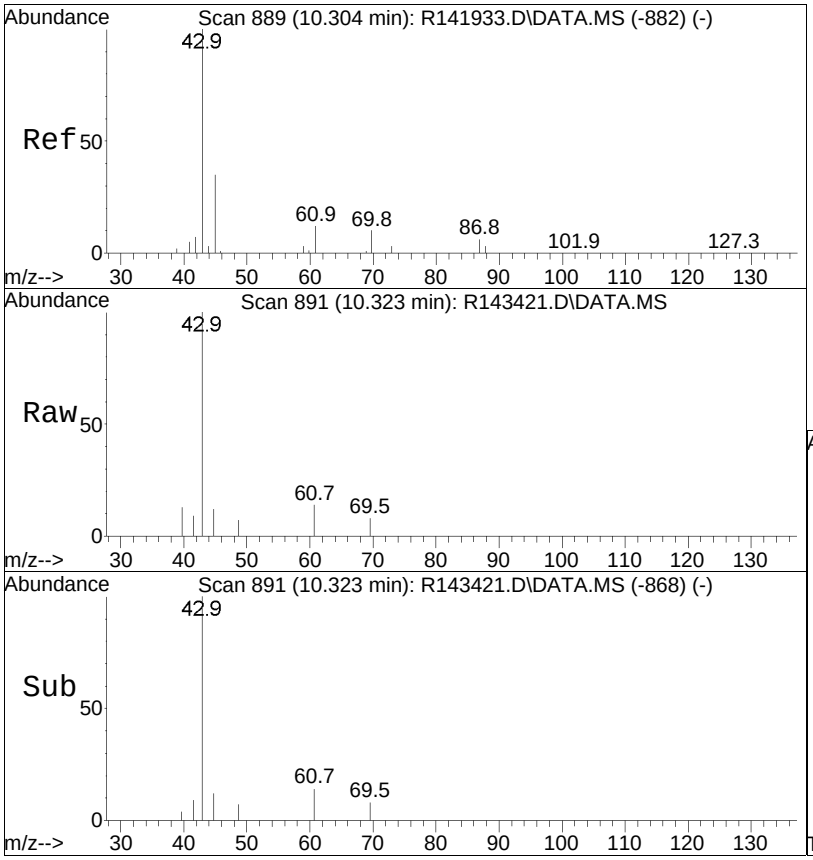


#36
2-butanone
Concen: 0.67 ppbV
RT: 9.526 min Scan# 787
Delta R.T. 0.021 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 43 Resp: 12405

Ion	Ratio	Lower	Upper
43	100		
72	16.6	15.4	23.0
57	5.1	5.8	8.6#

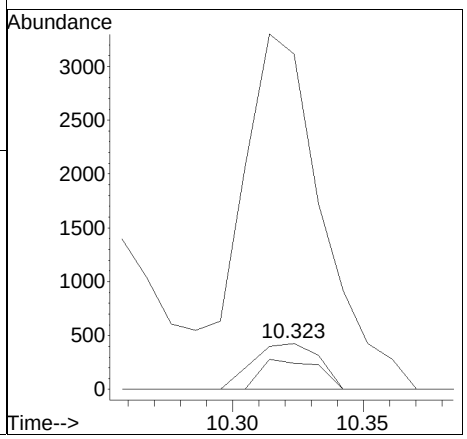


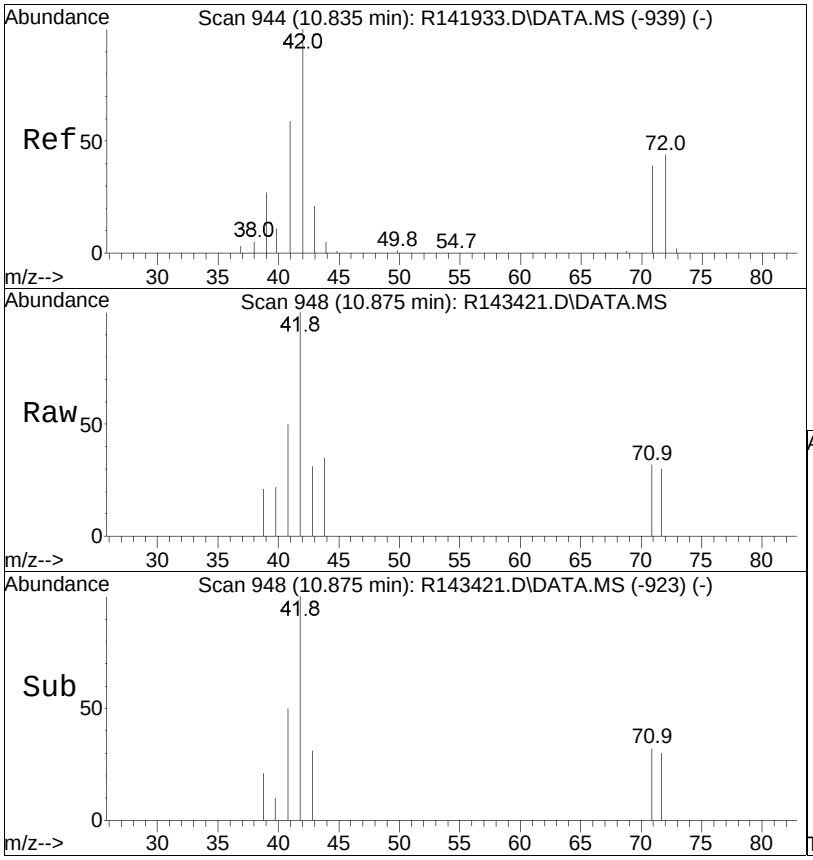


#38
Ethyl Acetate
Concen: 0.22 ppbV
RT: 10.323 min Scan# 891
Delta R.T. 0.019 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 61 Resp: 756

Ion	Ratio	Lower	Upper
61	100		
70	57.0	52.0	78.0
43	731.2	662.4	993.6

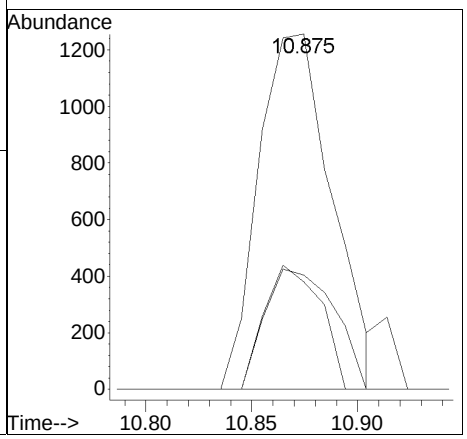


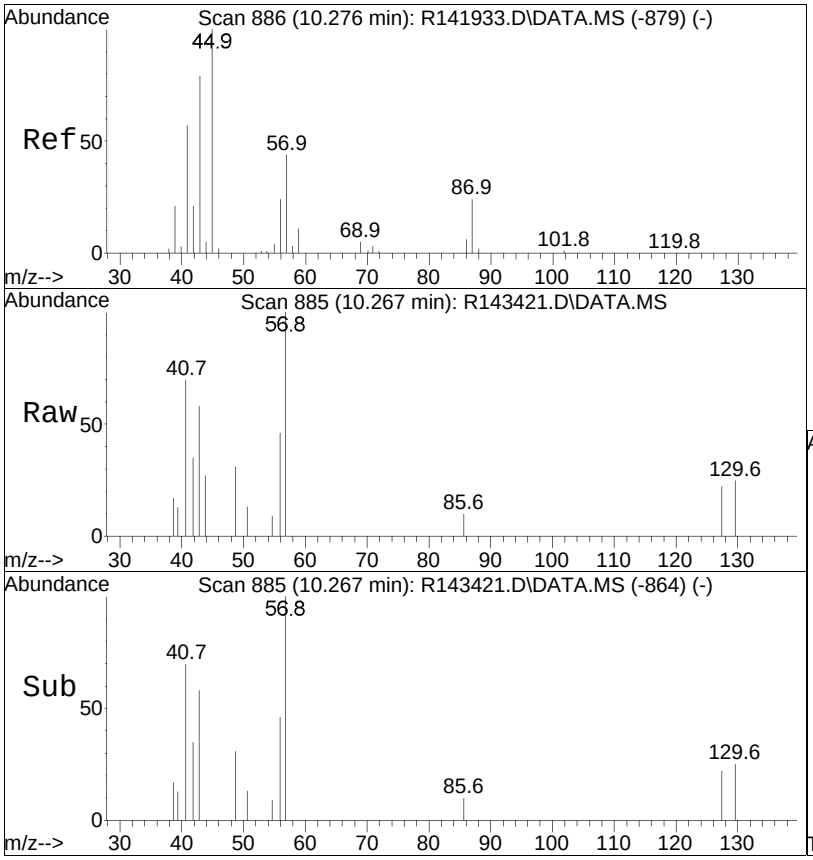


#40
Tetrahydrofuran
Concen: 0.28 ppbV m
RT: 10.875 min Scan# 948
Delta R.T. 0.049 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 42 Resp: 3034

Ion	Ratio	Lower	Upper
42	100		
71	32.2	27.4	41.2
72	30.3	28.4	42.6

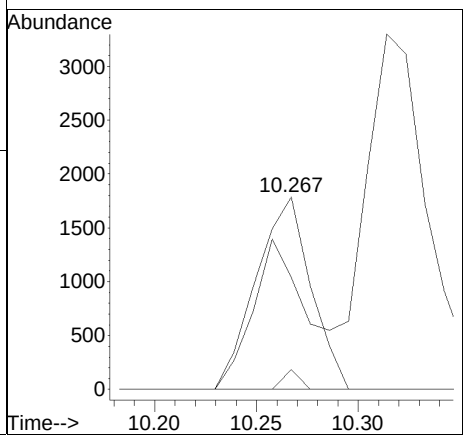


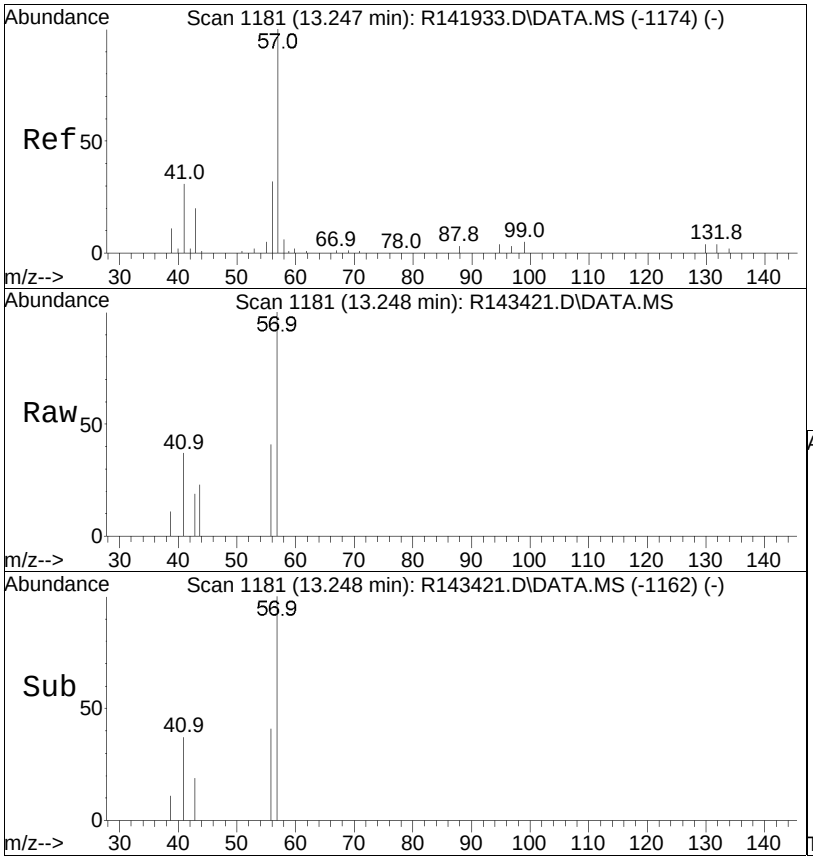


#44
hexane
Concen: 0.20 ppbV
RT: 10.267 min Scan# 885
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 57 Resp: 3346

Ion	Ratio	Lower	Upper
57	100		
43	58.1	125.7	188.5#
86	10.3	8.8	13.2

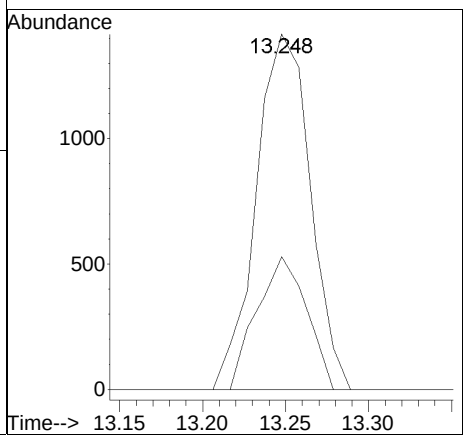


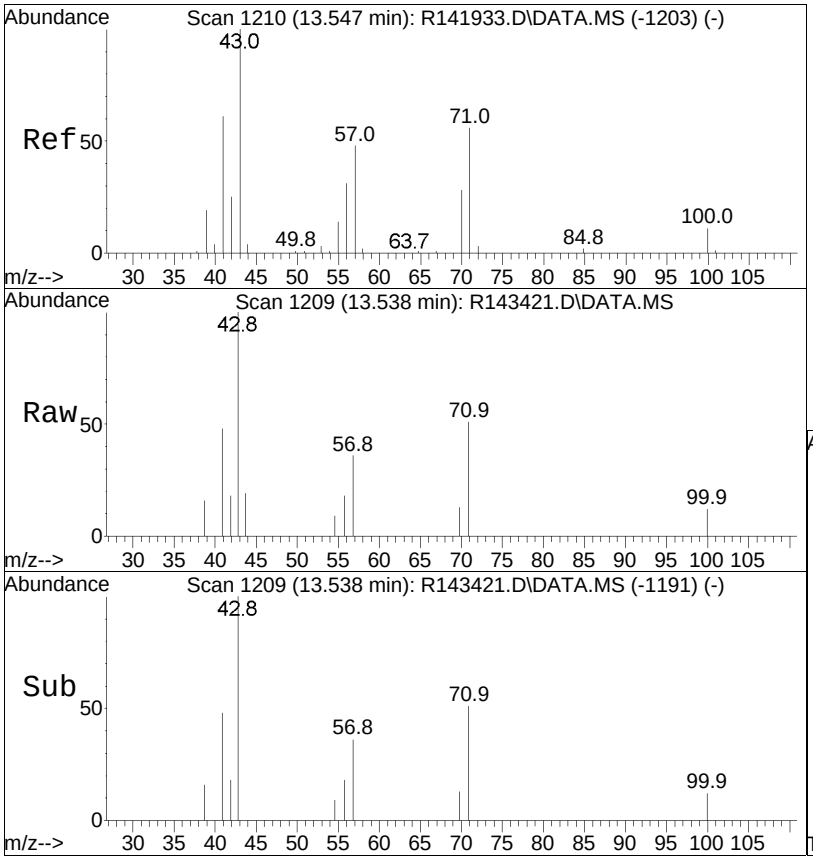


#60
2,2,4-trimethylpentane
Concen: 0.07 ppbV
RT: 13.248 min Scan# 1181
Delta R.T. 0.000 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 57 Resp: 3214

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.2	4.8#
41	37.4	21.4	32.0#

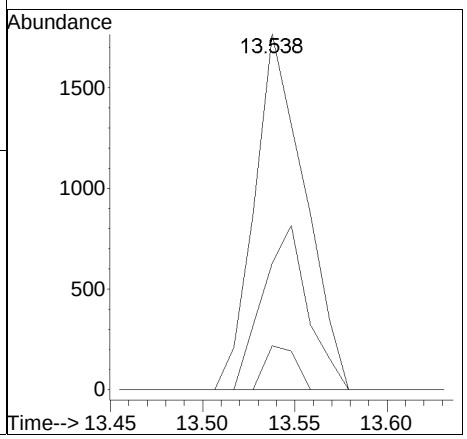




#62
heptane
Concen: 0.20 ppbV
RT: 13.538 min Scan# 1209
Delta R.T. -0.010 min
Lab File: R143421.D
Acq: 13 Aug 2015 7:27 pm

Tgt Ion: 43 Resp: 3348

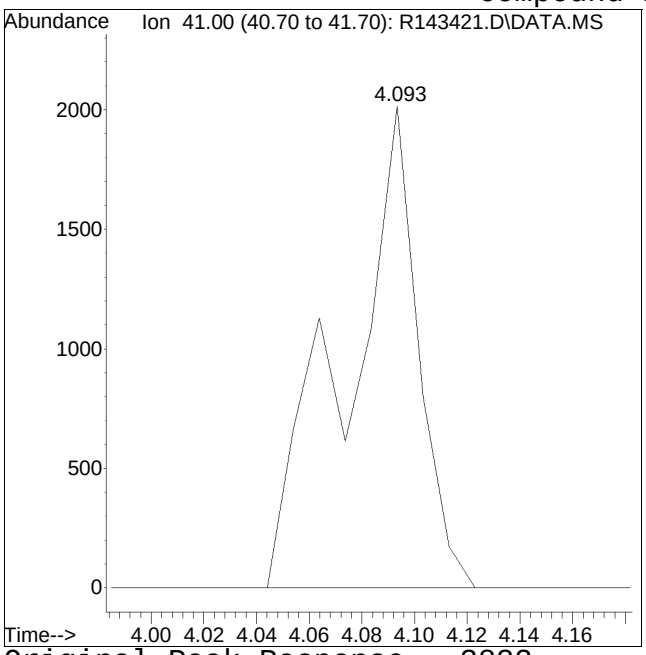
Ion	Ratio	Lower	Upper
43	100		
57	29.9	37.9	56.9#
100	10.3	9.1	13.7

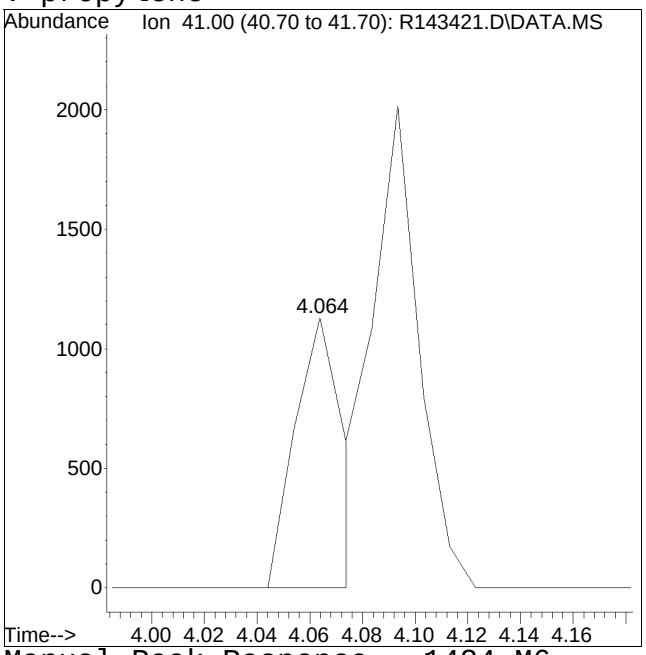


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:55 am

Compound #3: propylene



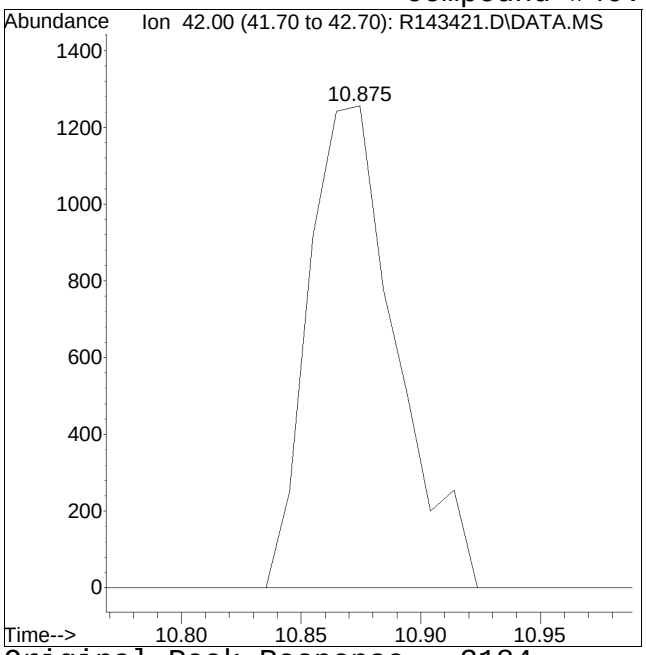


Original Peak Response = 3832 Manual Peak Response = 1424 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

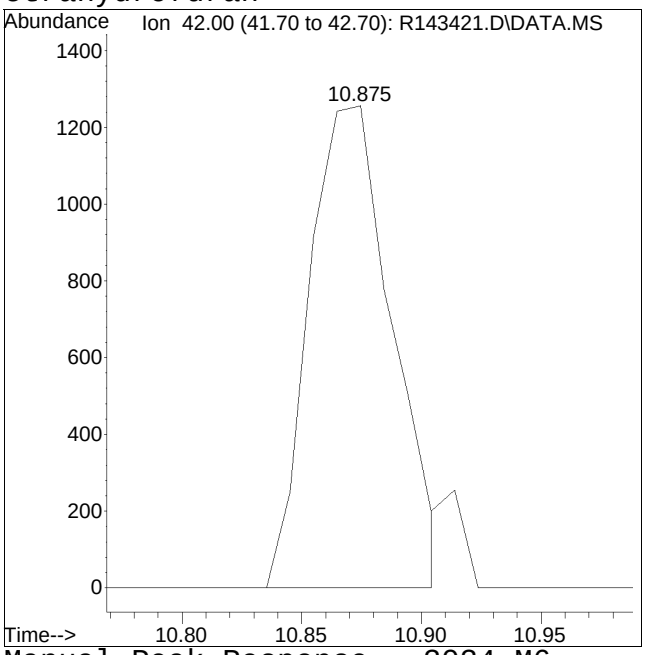
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143421.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:27 pm Instrument : Air Piano 1
Sample : L1519114-09,3,250,250 Quant Date : 8/14/2015 8:55 am

Compound #40: Tetrahydrofuran



Original Peak Response = 3184



Manual Peak Response = 3034 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 10:18:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

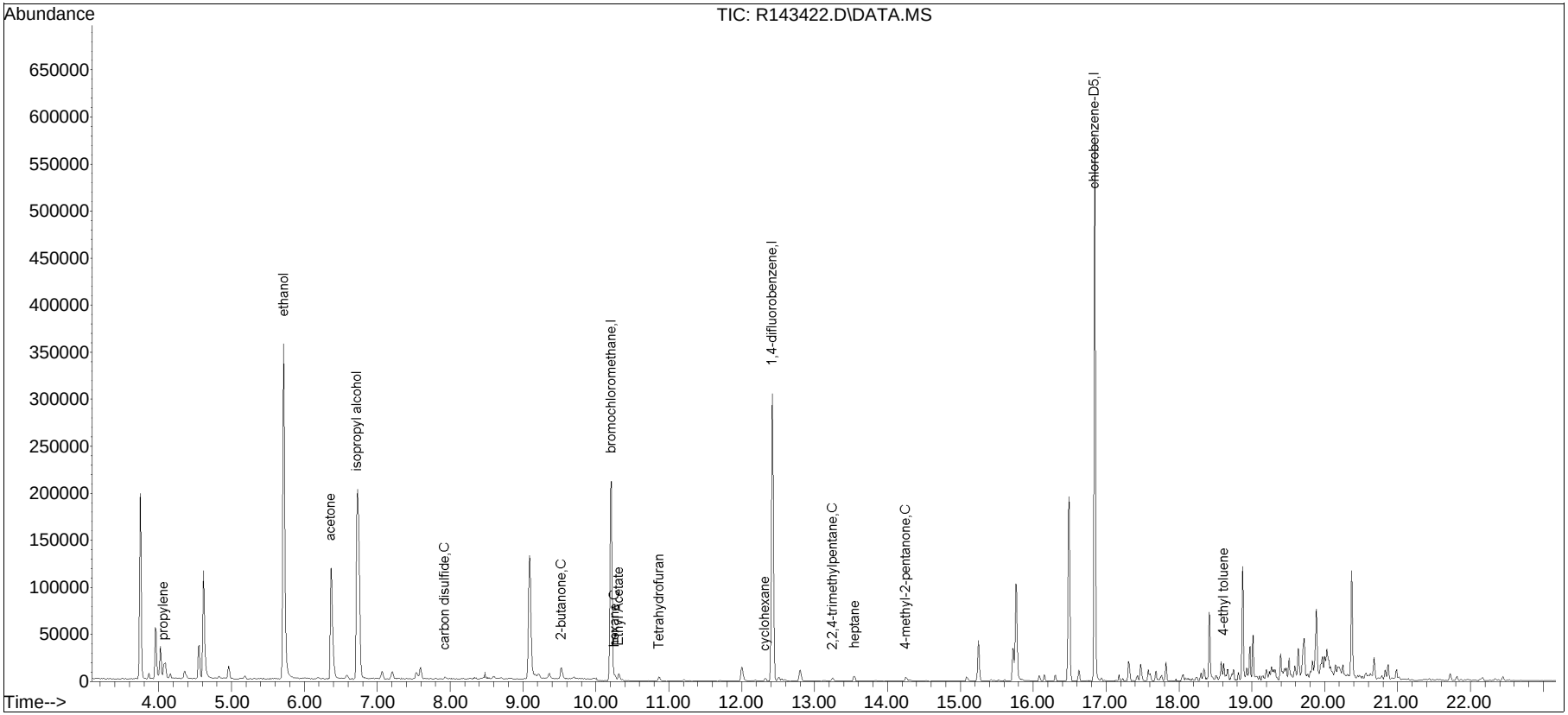
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	116792	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		79.64%	
43) 1,4-difluorobenzene	12.419	114	268528	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		82.15%	
67) chlorobenzene-D5	16.842	54	54463	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		90.31%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064	41	1699M6	0.326	ppbV	
15) ethanol	5.715	31	277241	86.771	ppbV	100
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.362	43	151310	17.718	ppbV #	97
22) isopropyl alcohol	6.722	45	254261	24.234	ppbV	98
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.921	76	714	0.042	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.526	43	16696	1.016	ppbV	98
38) Ethyl Acetate	10.314	61	1122	0.369	ppbV #	86
40) Tetrahydrofuran	10.865	42	3018	0.314	ppbV	93
44) hexane	10.257	57	2267	0.145	ppbV #	31
53) cyclohexane	12.315	56	1819	0.145	ppbV #	78
58) 1,4-dioxane	13.258		0	N.D.		
60) 2,2,4-trimethylpentane	13.247	57	2985	0.072	ppbV #	77
62) heptane	13.548	43	3316	0.205	ppbV #	96
64) 4-methyl-2-pentanone	14.251	43	4586	0.219	ppbV #	87
72) 2-hexanone	0.000		0	N.D.	d	
96) 4-ethyl toluene	18.612	105	4589	0.096	ppbV	94
101) Benzyl Chloride	19.088		0	N.D.		

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

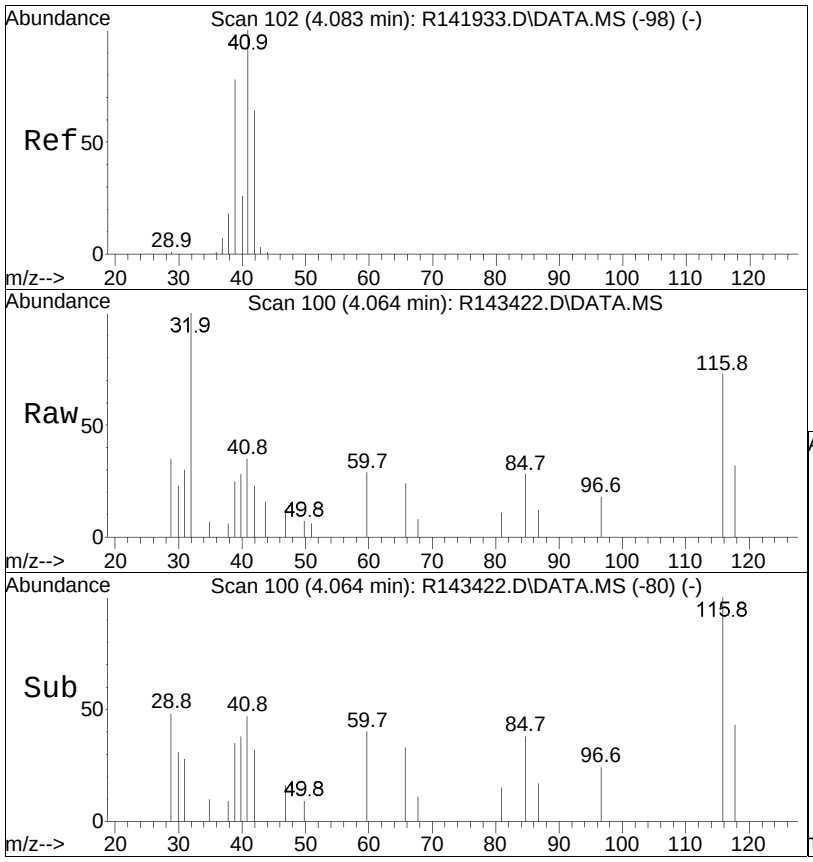
Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143422.D
Acq On : 13 Aug 2015 7:59 pm
Operator : AIRPIANO1:MB
Sample : L1519114-10,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 10:18:51 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:34 2015

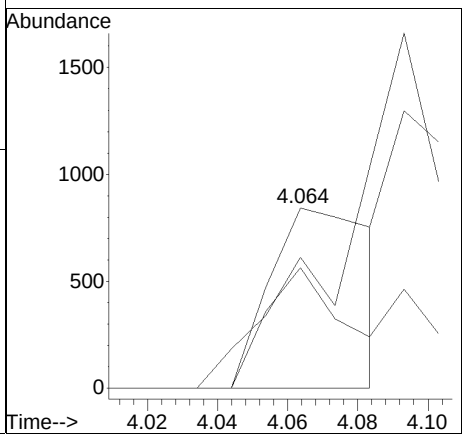
Page 2

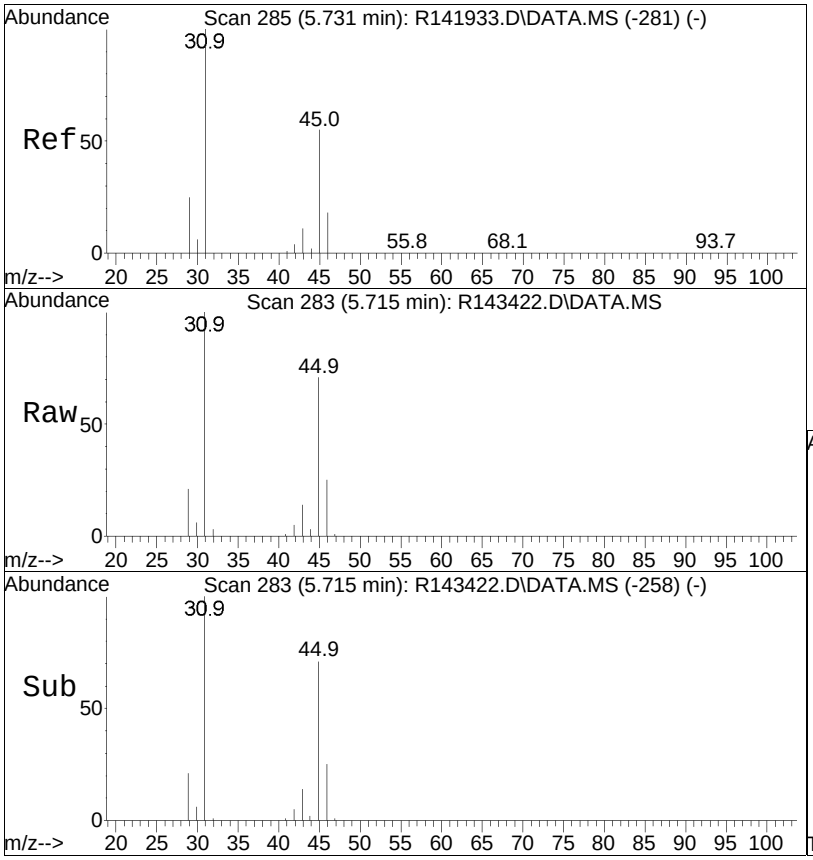


#3
propylene
Concen: 0.33 ppbV m
RT: 4.064 min Scan# 100
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 41 Resp: 1699

Ion	Ratio	Lower	Upper
41	100		
42	66.9	53.1	79.7
39	72.7	57.7	86.5

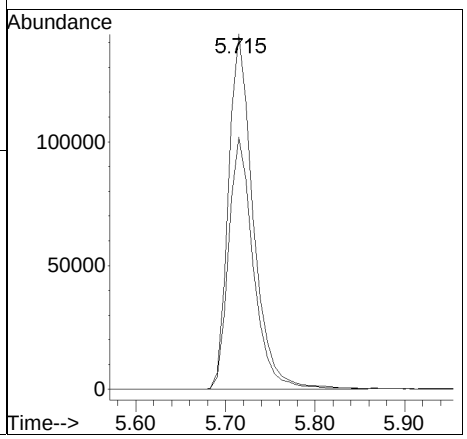


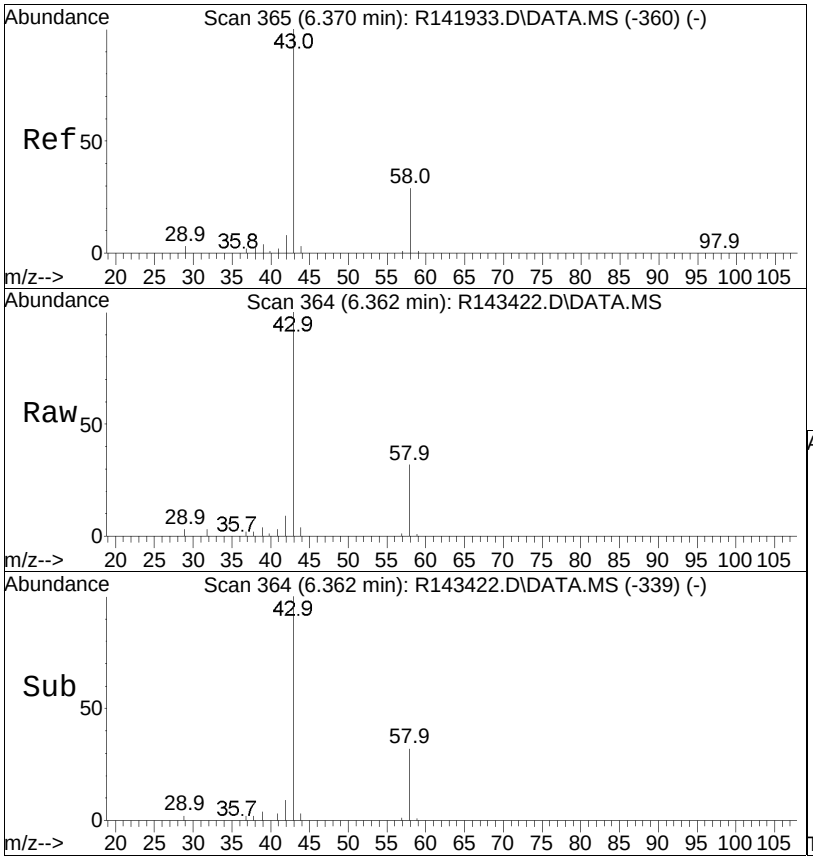


#15
ethanol
Concen: 86.77 ppbV
RT: 5.715 min Scan# 283
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 31 Resp: 277241

Ion	Ratio	Lower	Upper
31	100		
45	71.0	56.5	84.7

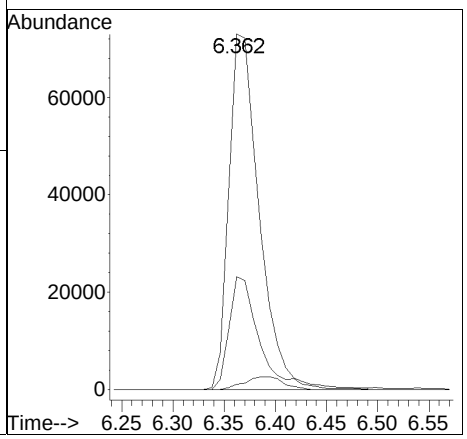


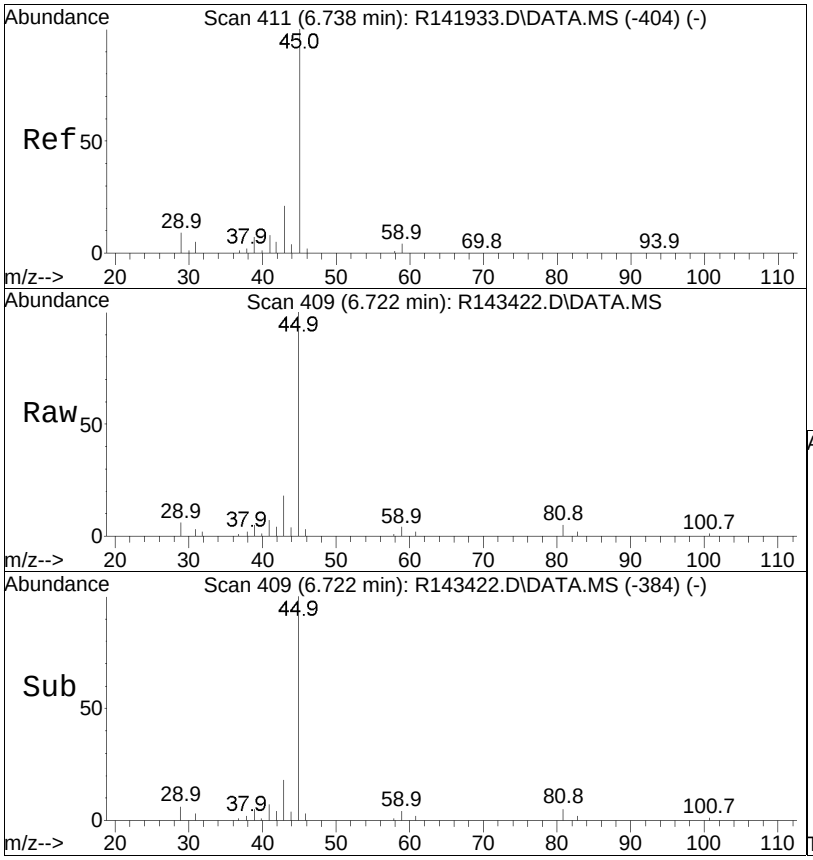


#19
acetone
Concen: 17.72 ppbV
RT: 6.362 min Scan# 364
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 43 Resp: 151310

Ion	Ratio	Lower	Upper
43	100		
58	31.7	24.1	36.1
57	1.5	0.7	1.1#

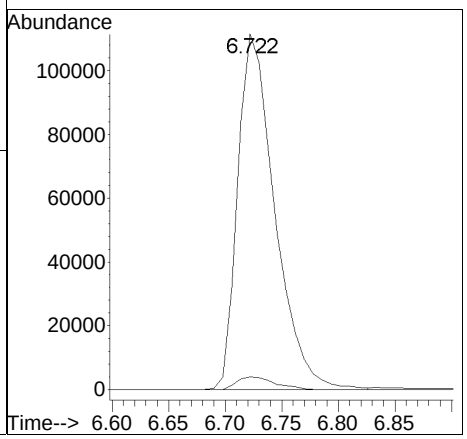


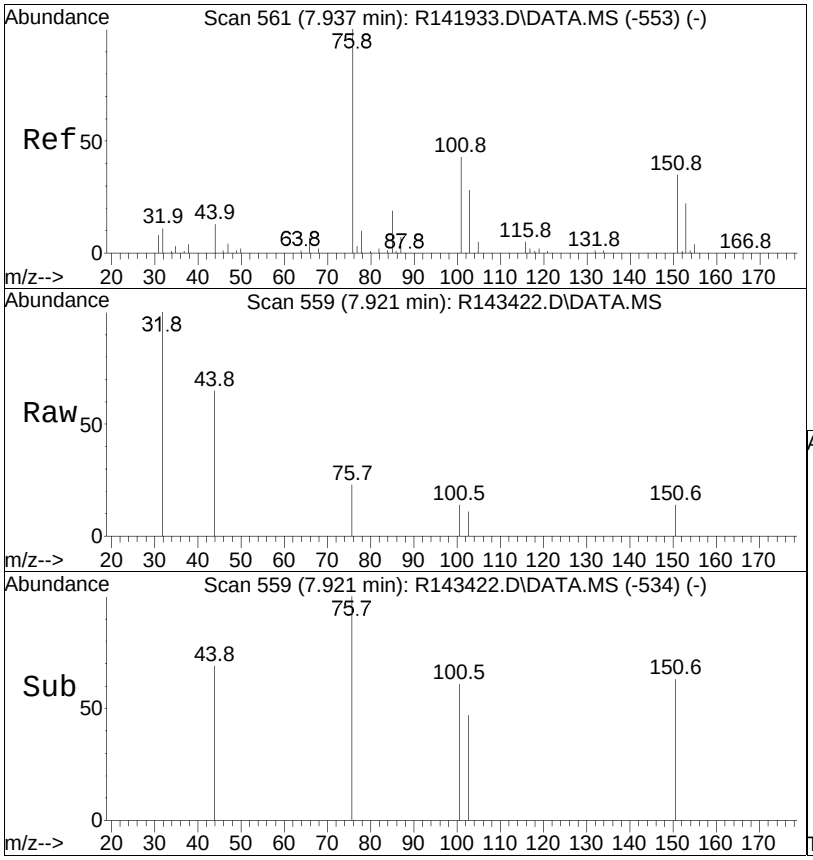


#22
isopropyl alcohol
Concen: 24.23 ppbV
RT: 6.722 min Scan# 409
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 45 Resp: 254261

Ion	Ratio	Lower	Upper
45	100		
59	3.5	3.3	4.9

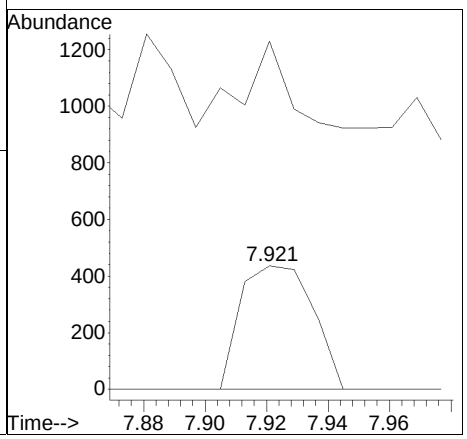


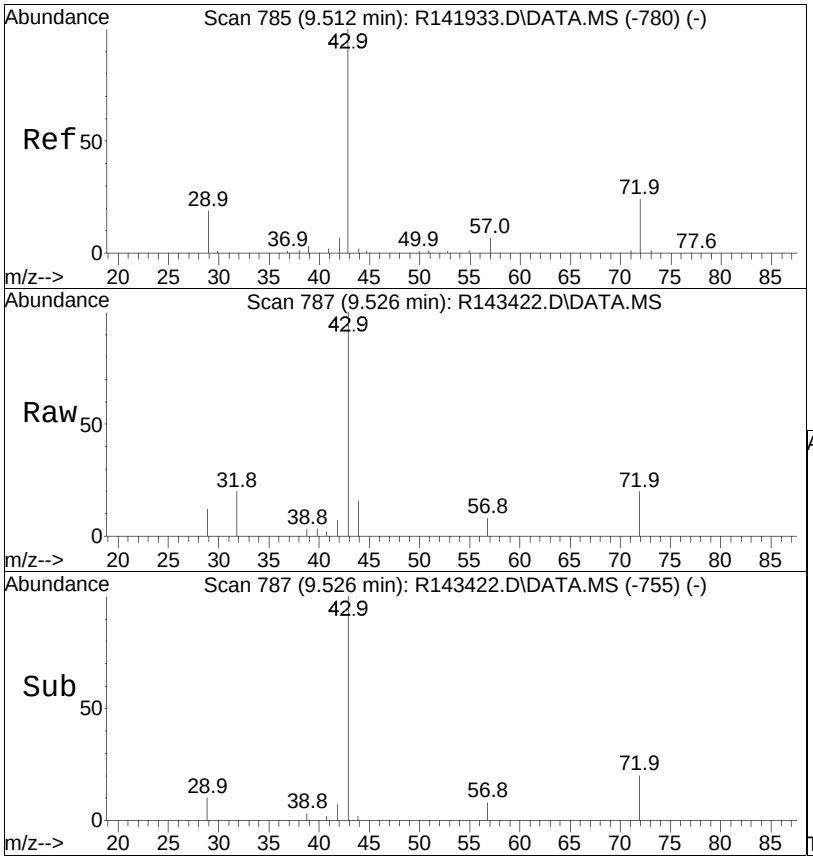


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.921 min Scan# 559
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 76 Resp: 714

Ion	Ratio	Lower	Upper
76	100		
44	282.1	11.6	17.4#

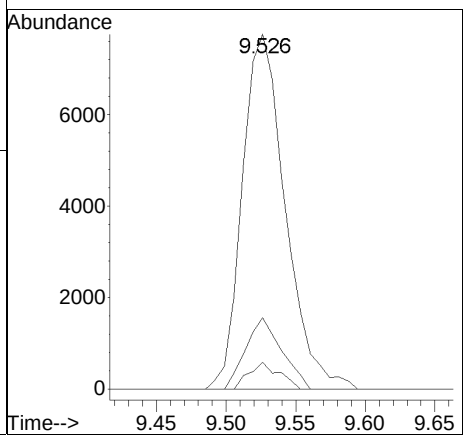


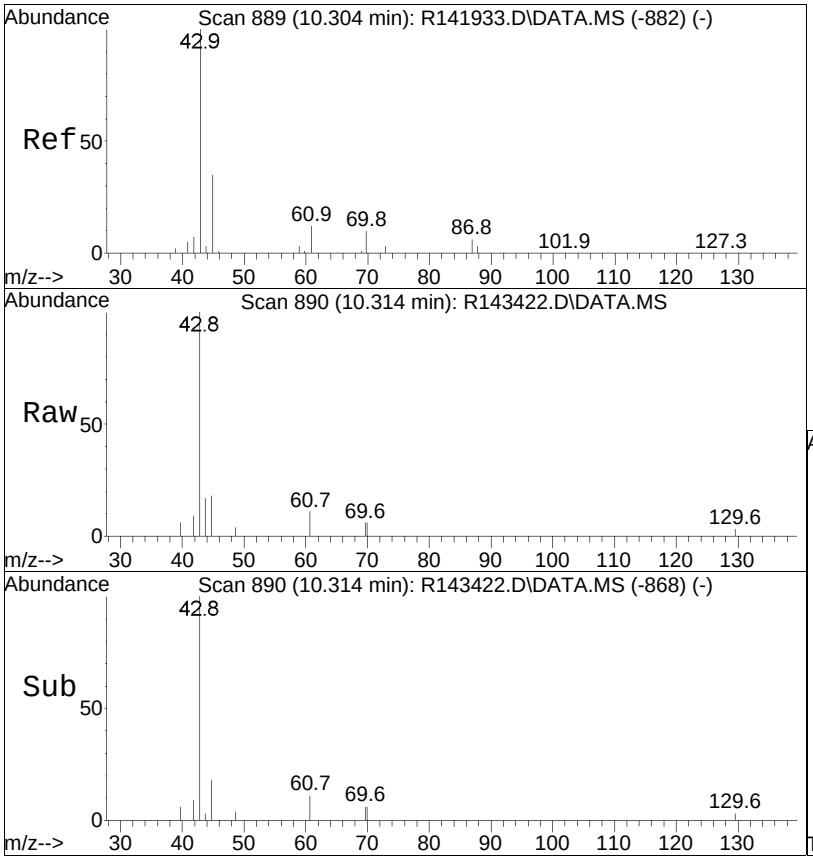


#36
2-butanone
Concen: 1.02 ppbV
RT: 9.526 min Scan# 787
Delta R.T. 0.020 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 43 Resp: 16696

Ion	Ratio	Lower	Upper
43	100		
72	20.2	15.4	23.0
57	7.6	5.8	8.6

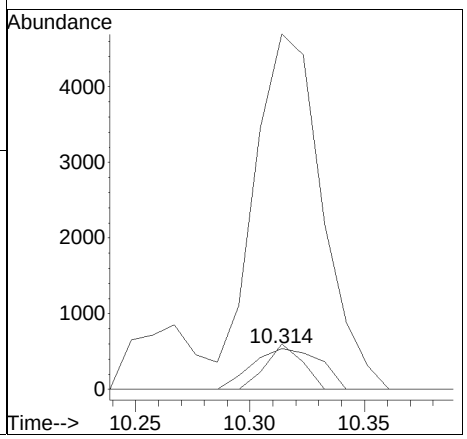


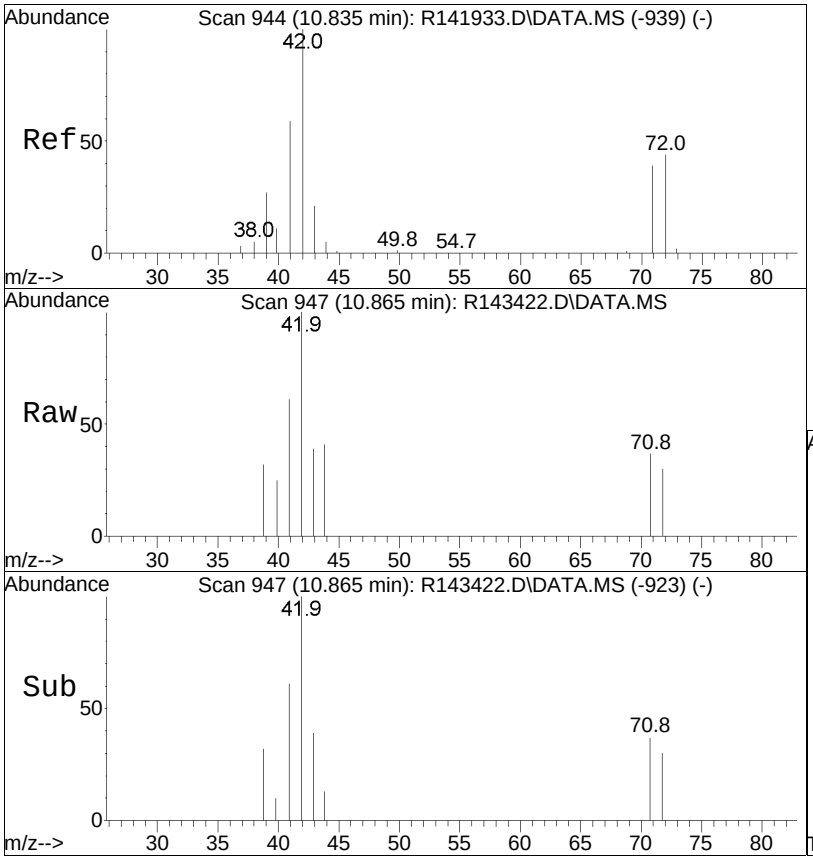


#38
Ethyl Acetate
Concen: 0.37 ppbV
RT: 10.314 min Scan# 890
Delta R.T. 0.009 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 61 Resp: 1122

Ion	Ratio	Lower	Upper
61	100		
70	111.3	52.0	78.0#
43	869.8	662.4	993.6

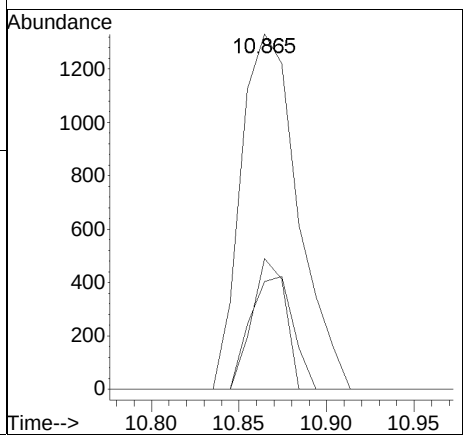


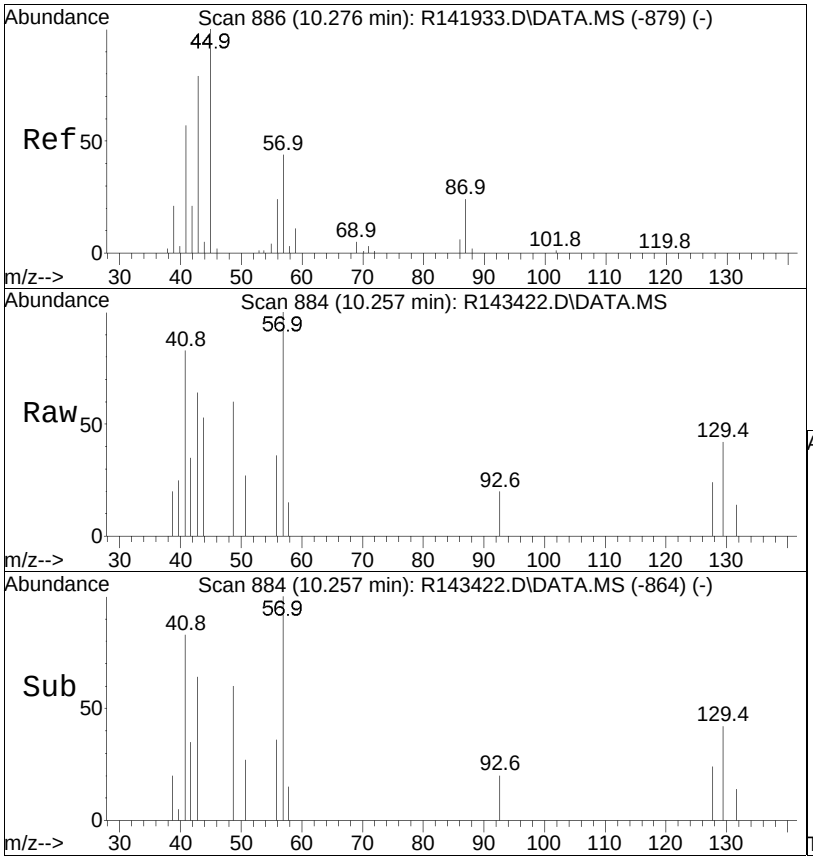


#40
Tetrahydrofuran
Concen: 0.31 ppbV
RT: 10.865 min Scan# 947
Delta R.T. 0.039 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 42 Resp: 3018

Ion	Ratio	Lower	Upper
42	100		
71	36.8	27.4	41.2
72	30.4	28.4	42.6

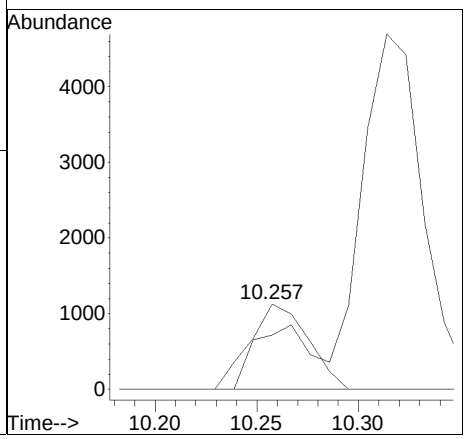


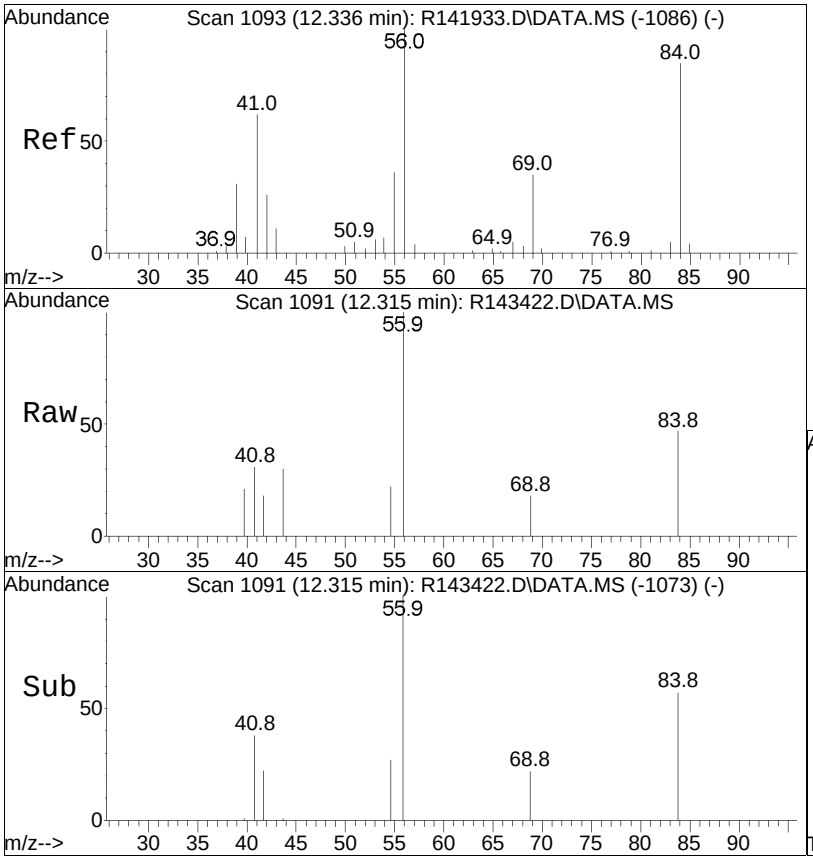


#44
hexane
Concen: 0.14 ppbV
RT: 10.257 min Scan# 884
Delta R.T. -0.010 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 57 Resp: 2267

Ion	Ratio	Lower	Upper
57	100		
43	63.7	125.7	188.5#
86	0.0	8.8	13.2#

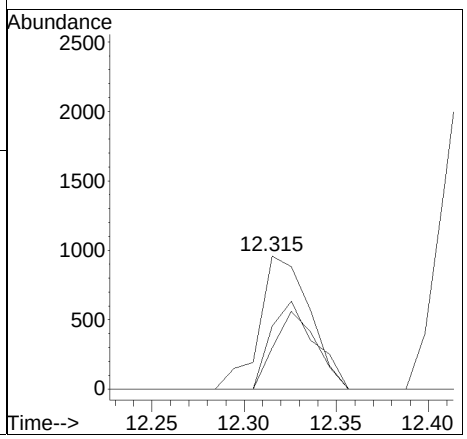


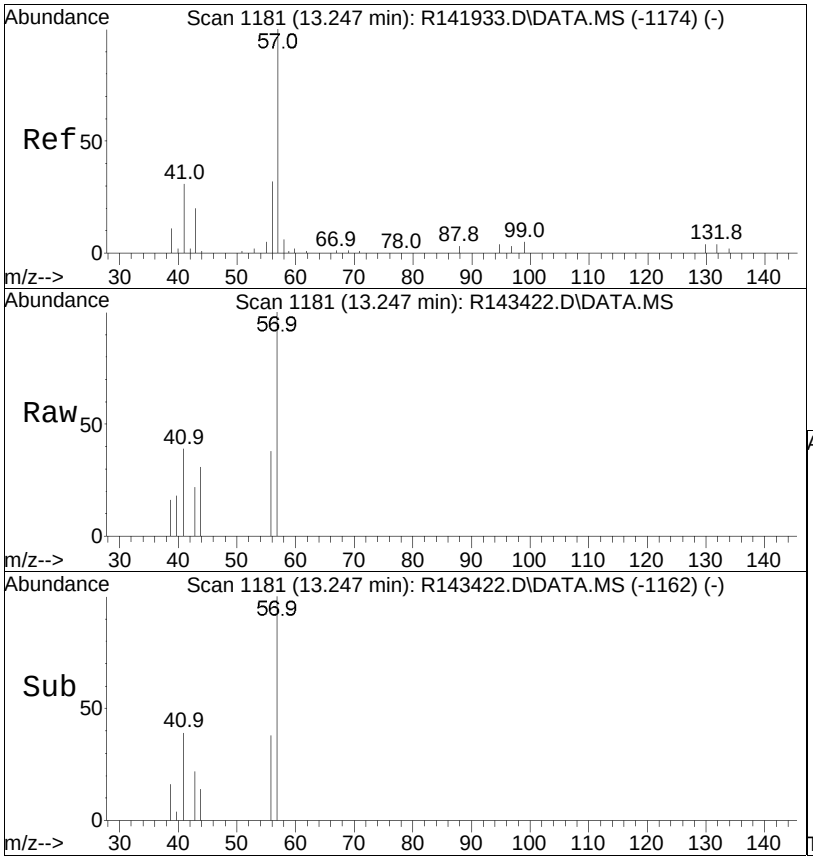


#53
cyclohexane
Concen: 0.15 ppbV
RT: 12.315 min Scan# 1091
Delta R.T. -0.011 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 56 Resp: 1819

Ion	Ratio	Lower	Upper
56	100		
84	47.5	58.2	87.2#
41	49.2	47.0	70.4

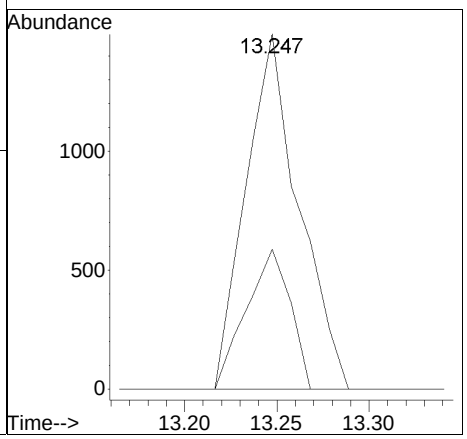


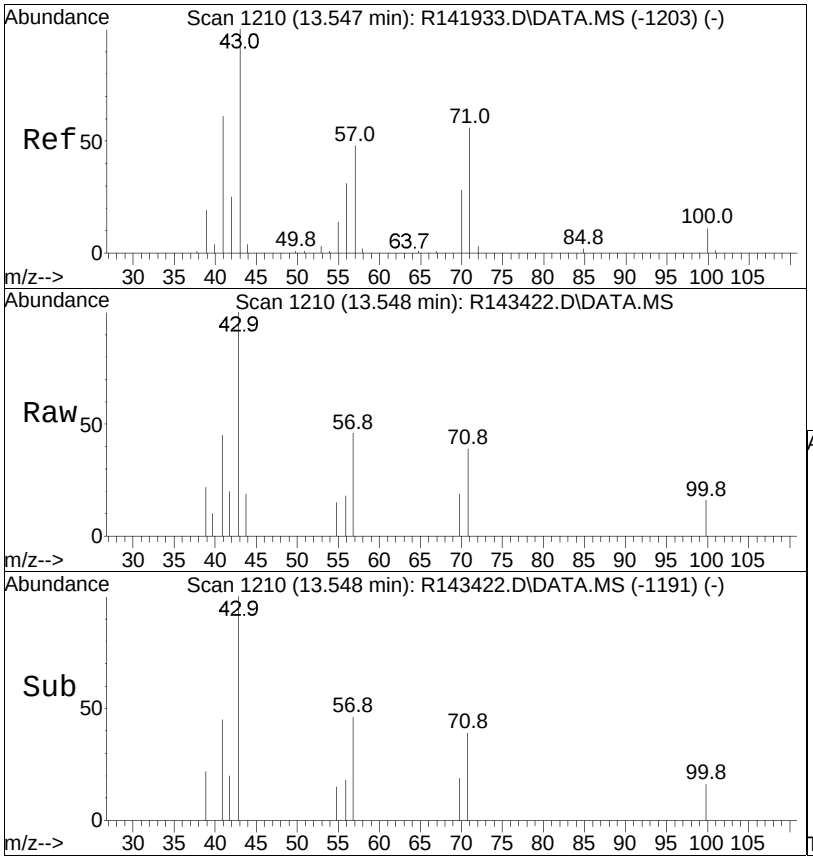


#60
2,2,4-trimethylpentane
Concen: 0.07 ppbV
RT: 13.247 min Scan# 1181
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 57 Resp: 2985

Ion	Ratio	Lower	Upper
57	100		
99	0.0	3.2	4.8#
41	39.5	21.4	32.0#

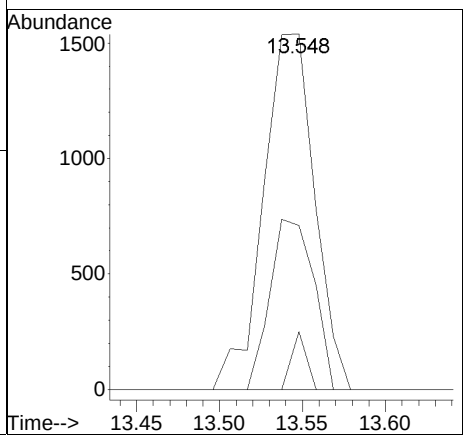


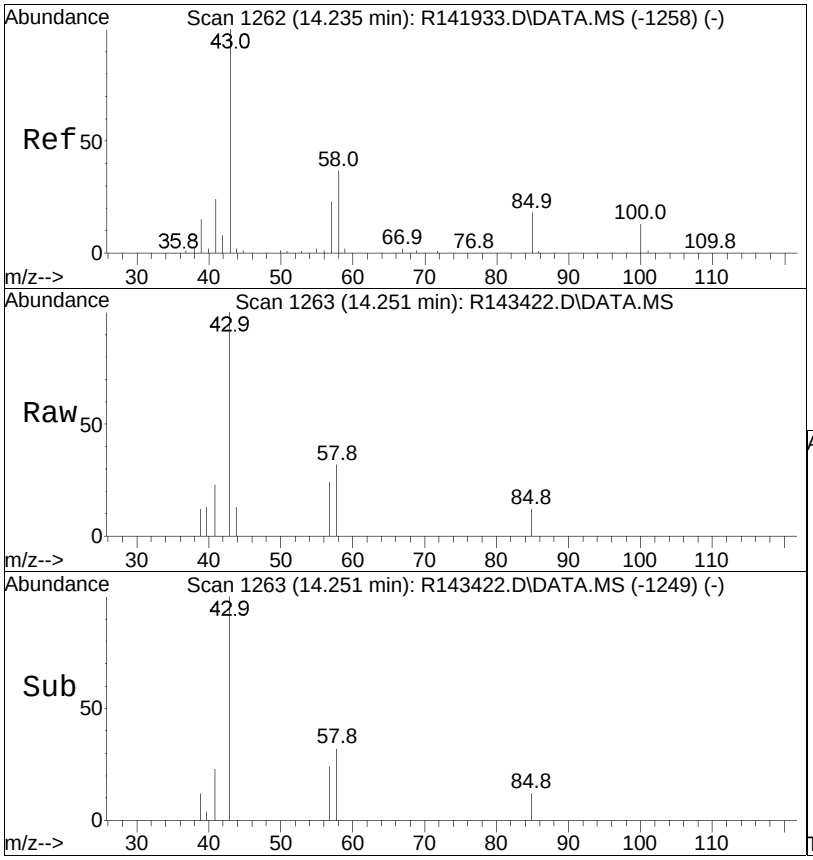


#62
heptane
Concen: 0.21 ppbV
RT: 13.548 min Scan# 1210
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 43 Resp: 3316

Ion	Ratio	Lower	Upper
43	100		
57	46.1	37.9	56.9
100	16.2	9.1	13.7#

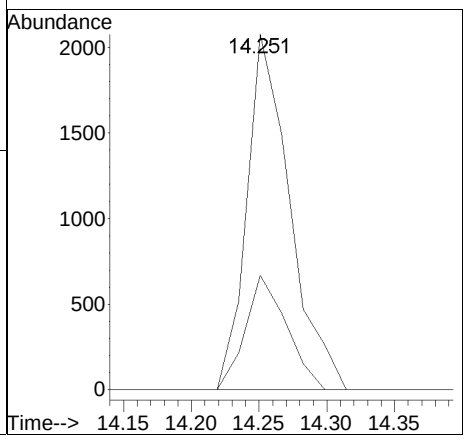


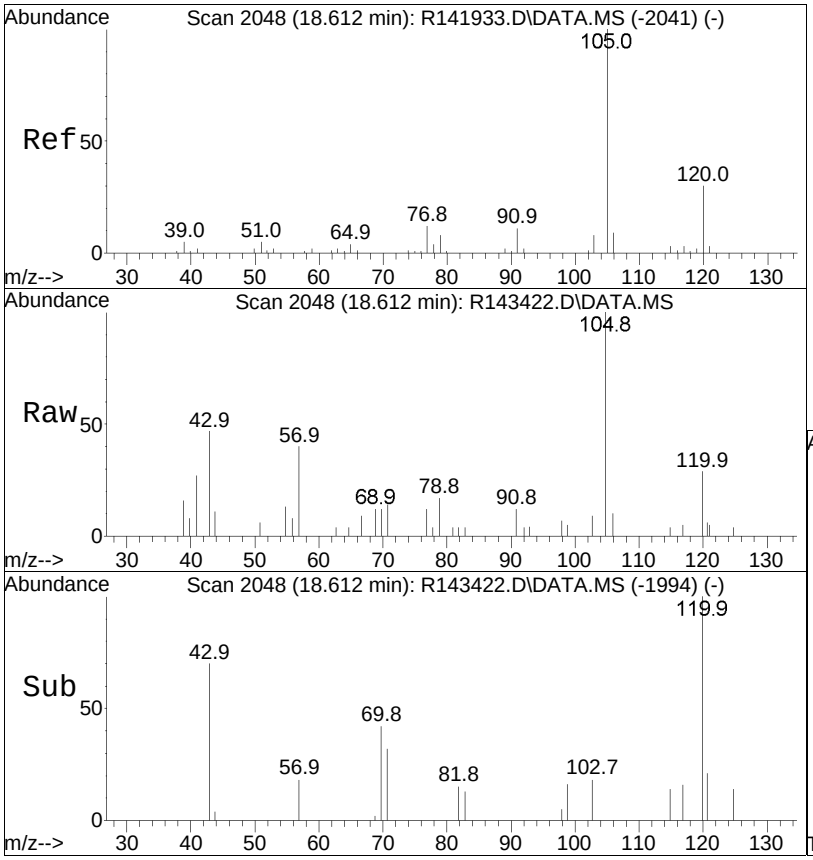


#64
4-methyl-2-pentanone
Concen: 0.22 ppbV
RT: 14.251 min Scan# 1263
Delta R.T. 0.016 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion: 43 Resp: 4586

Ion	Ratio	Lower	Upper
43	100		
58	32.1	29.9	44.9
100	0.0	8.9	13.3#

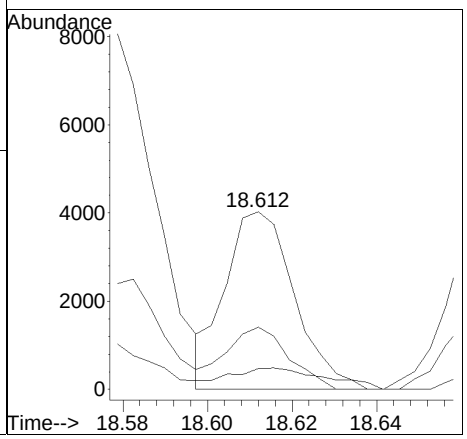




#96
4-ethyl toluene
Concen: 0.10 ppbV
RT: 18.612 min Scan# 2048
Delta R.T. -0.000 min
Lab File: R143422.D
Acq: 13 Aug 2015 7:59 pm

Tgt Ion:105 Resp: 4589

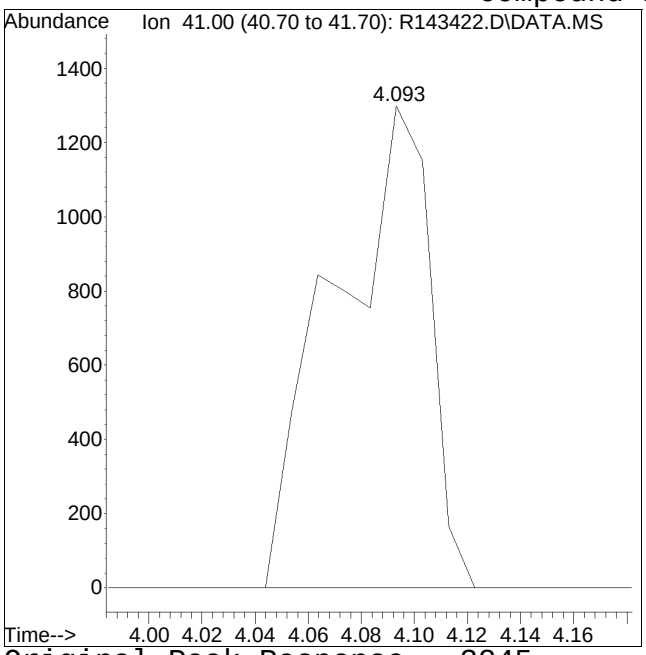
Ion	Ratio	Lower	Upper
105	100		
120	35.0	25.0	37.4
91	11.8	8.4	12.6



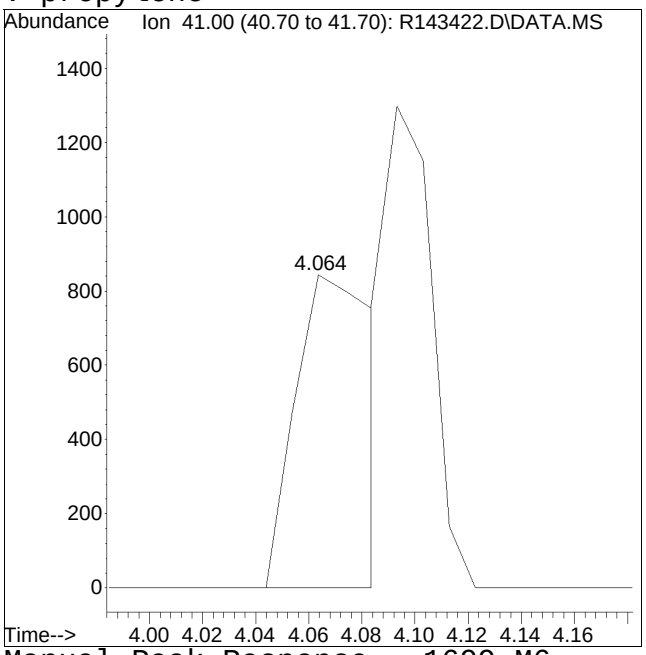
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143422.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 7:59 pm Instrument : Air Piano 1
Sample : L1519114-10,3,250,250 Quant Date : 8/14/2015 8:55 am

Compound #3: propylene



Original Peak Response = 3245



Manual Peak Response = 1699 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 10:19:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

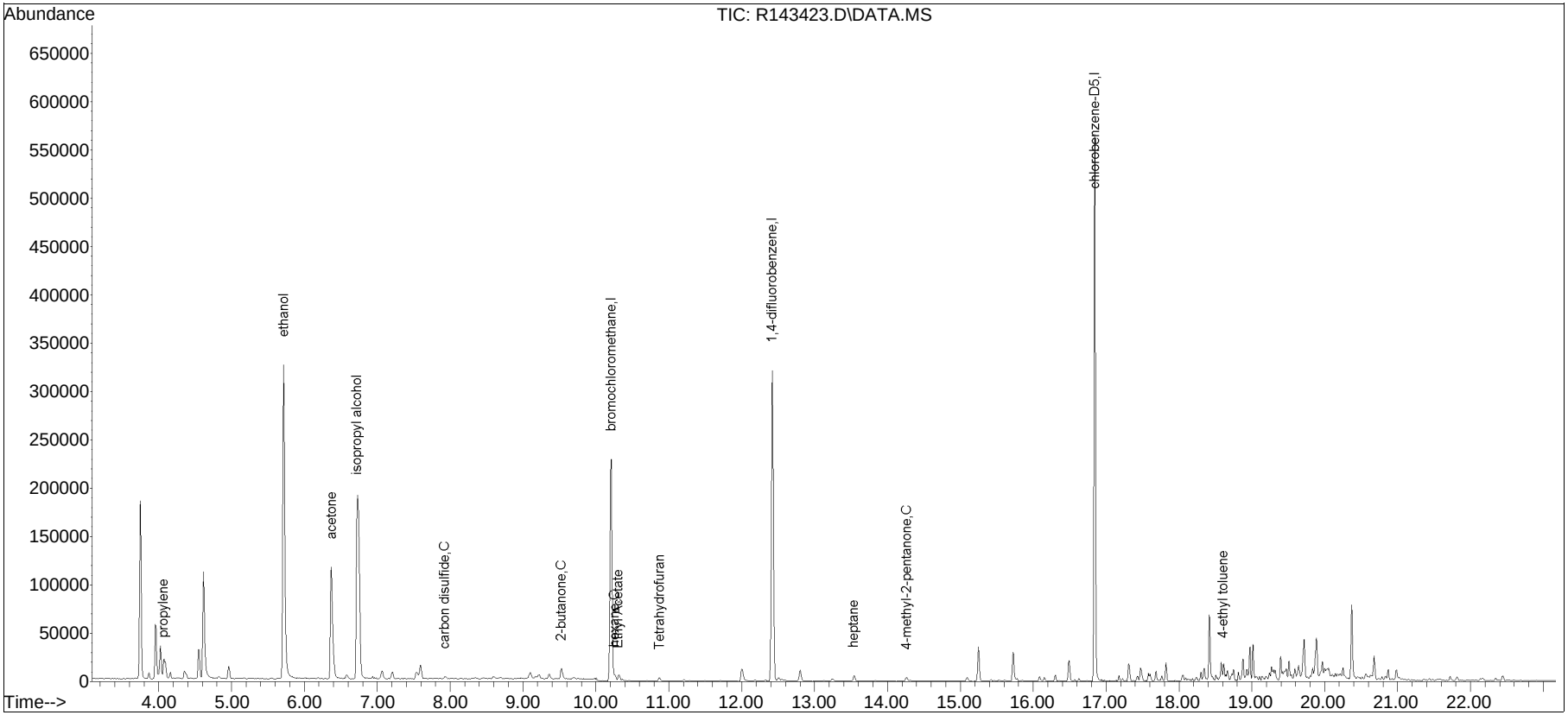
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	127057	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		86.64%	
43) 1,4-difluorobenzene	12.419	114	280396	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		85.78%	
67) chlorobenzene-D5	16.846	54	54254	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		89.96%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064	41	1013M6	0.178	ppbV	
15) ethanol	5.715	31	253430	72.910	ppbV	98
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.370	43	145869	15.701	ppbV #	99
22) isopropyl alcohol	6.722	45	247206	21.658	ppbV	99
29) 3-chloropropene	0.000		0	N.D.		
30) carbon disulfide	7.921	76	733	0.039	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.526	43	15395	0.861	ppbV #	96
38) Ethyl Acetate	10.305	61	883	0.267	ppbV #	26
40) Tetrahydrofuran	10.874	42	2482	0.237	ppbV #	75
44) hexane	10.258	57	2061	0.126	ppbV #	28
53) cyclohexane	12.326		0	N.D.		
58) 1,4-dioxane	13.268		0	N.D.		
60) 2,2,4-trimethylpentane	13.248		0	N.D.		
62) heptane	13.538	43	3320	0.197	ppbV #	84
64) 4-methyl-2-pentanone	14.267	43	4061	0.186	ppbV #	88
72) 2-hexanone	0.000		0	N.D.	d	
96) 4-ethyl toluene	18.608	105	4346M3	0.091	ppbV	
101) Benzyl Chloride	19.145		0	N.D.		

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

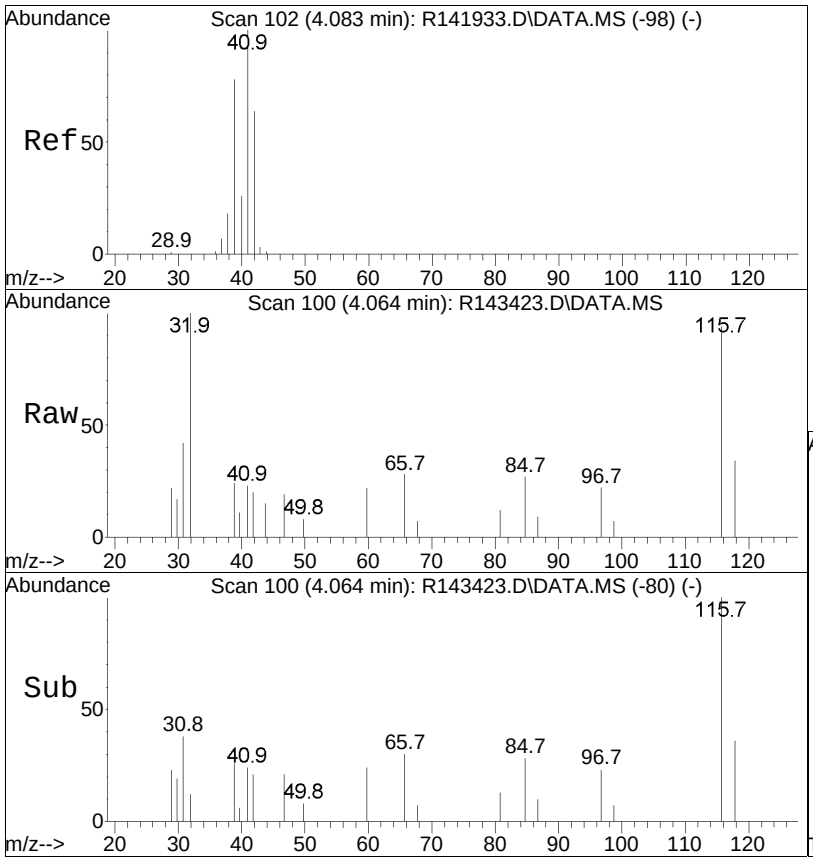
Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143423.D
Acq On : 13 Aug 2015 8:31 pm
Operator : AIRPIANO1:MB
Sample : L1519114-11,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 10:19:43 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



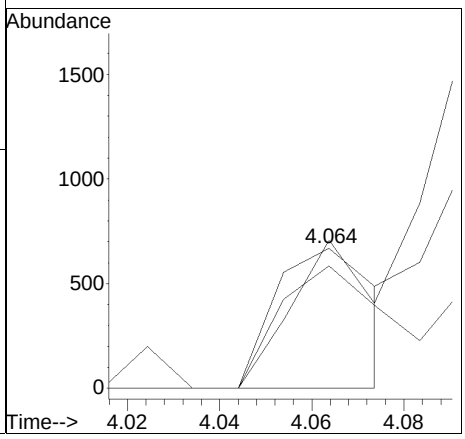
TALL150710.M Fri Aug 14 12:35:42 2015

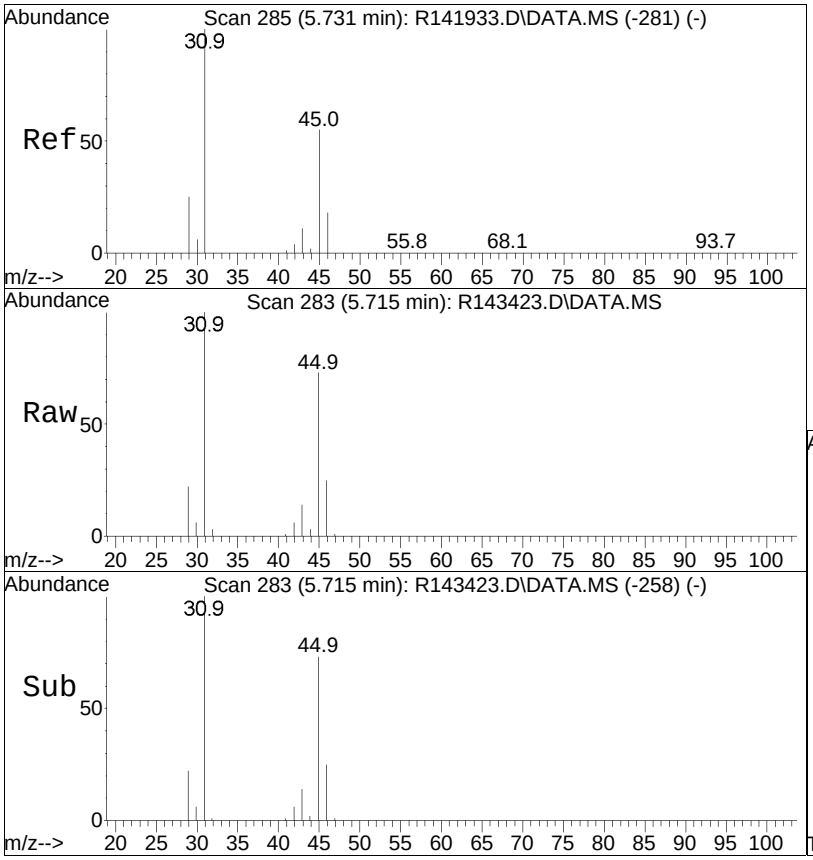


#3
propylene
Concen: 0.18 ppbV m
RT: 4.064 min Scan# 100
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 41 Resp: 1013

Ion	Ratio	Lower	Upper
41	100		
42	87.4	53.1	79.7#
39	105.8	57.7	86.5#

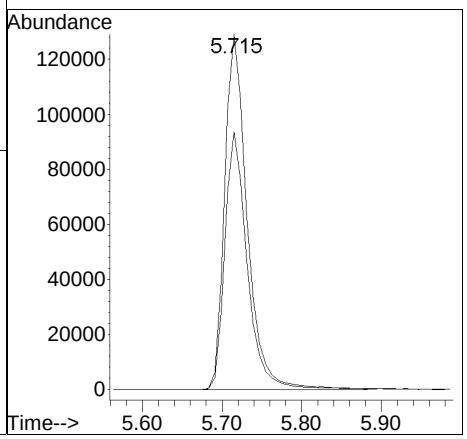


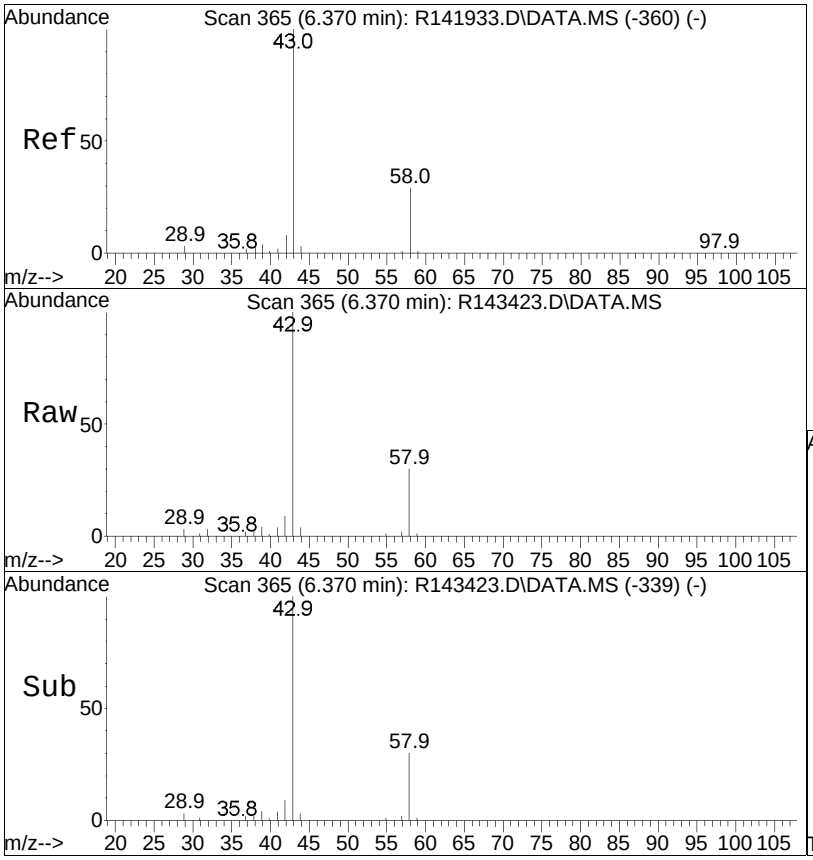


#15
ethanol
Concen: 72.91 ppbV
RT: 5.715 min Scan# 283
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 31 Resp: 253430

Ion	Ratio	Lower	Upper
31	100		
45	72.6	56.5	84.7

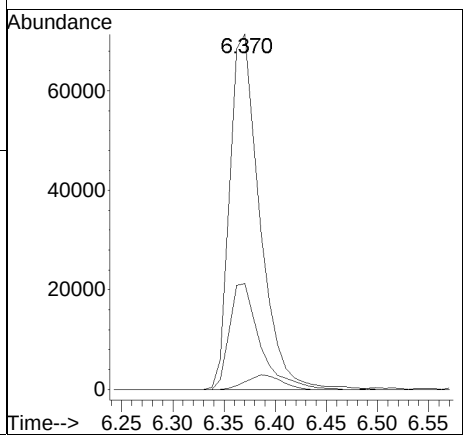


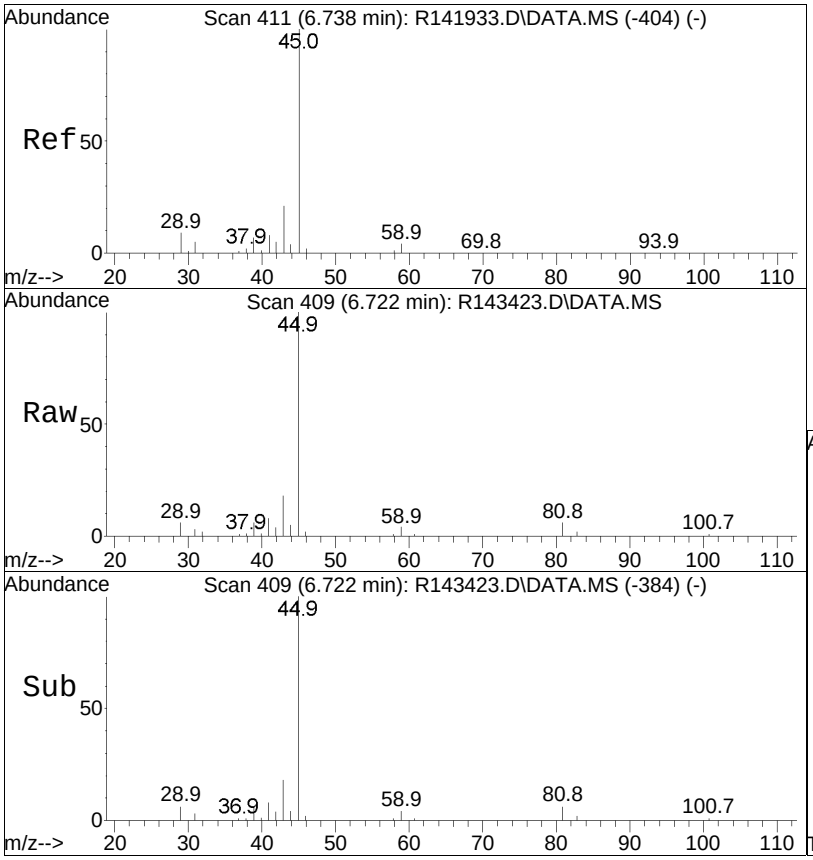


#19
acetone
Concen: 15.70 ppbV
RT: 6.370 min Scan# 365
Delta R.T. 0.008 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 43 Resp: 145869

Ion	Ratio	Lower	Upper
43	100		
58	29.8	24.1	36.1
57	2.2	0.7	1.1#

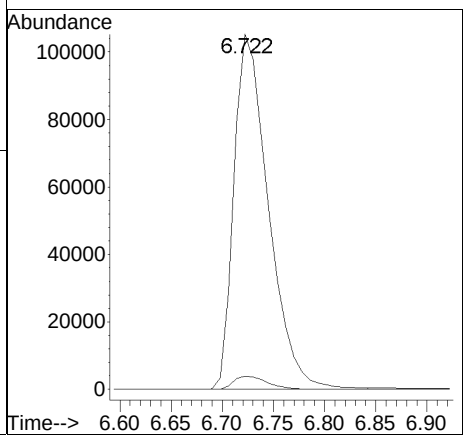


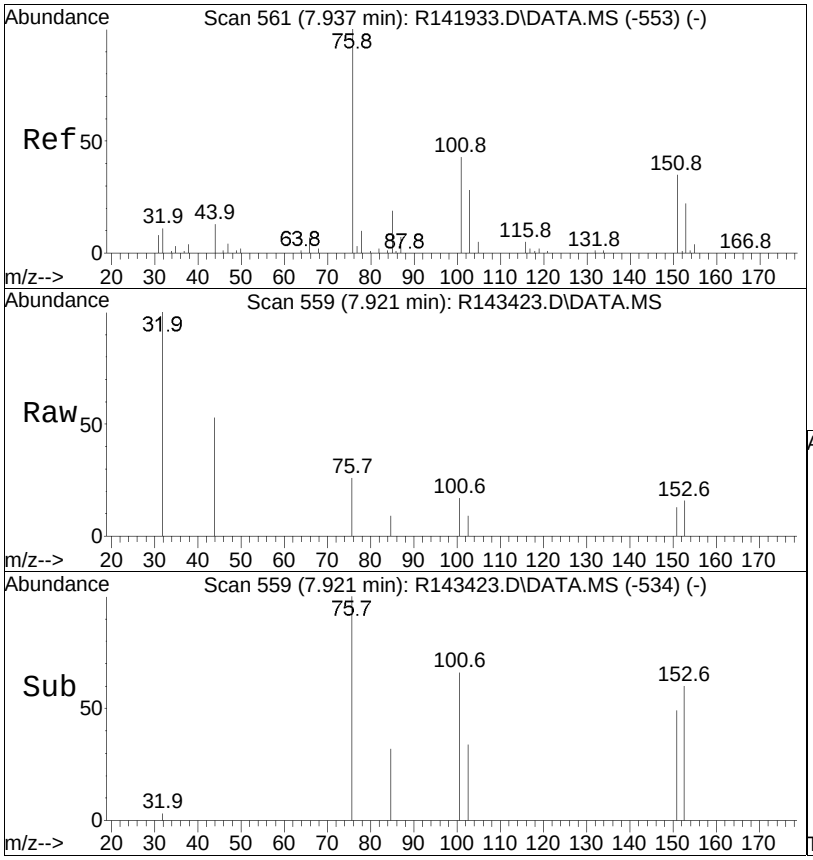


#22
isopropyl alcohol
Concen: 21.66 ppbV
RT: 6.722 min Scan# 409
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 45 Resp: 247206

Ion	Ratio	Lower	Upper
45	100		
59	3.8	3.3	4.9

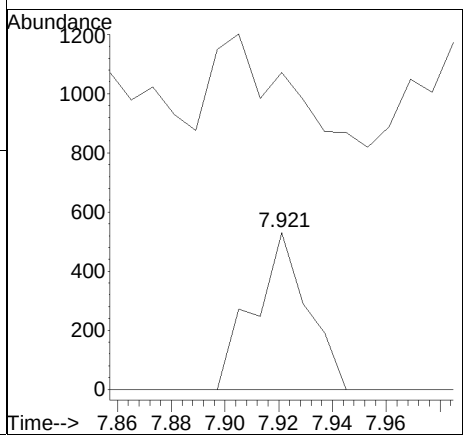


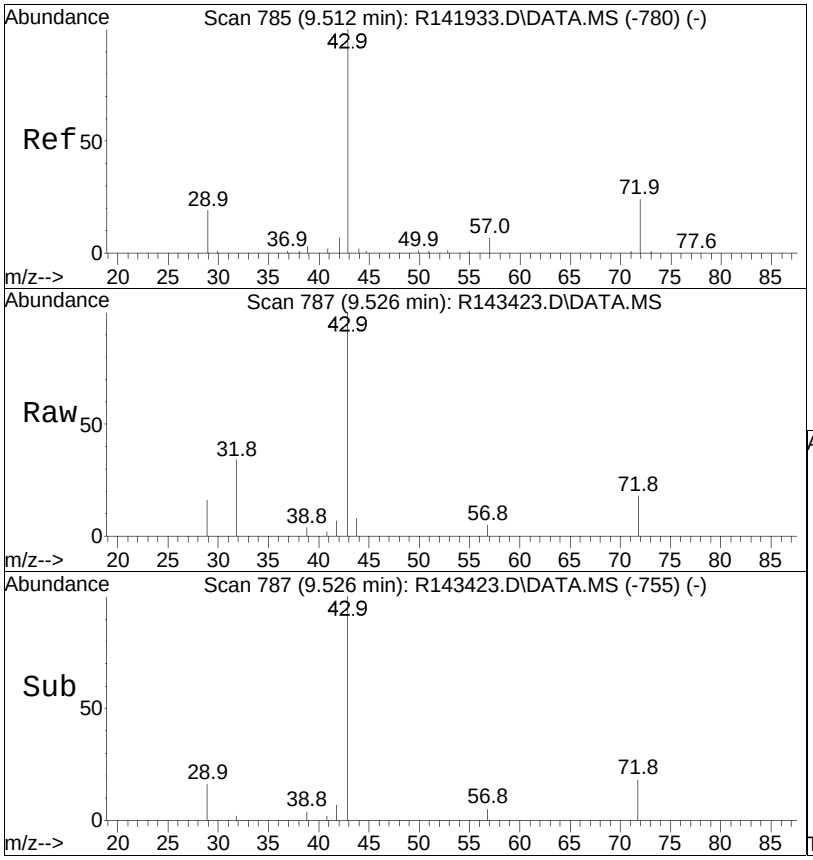


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.921 min Scan# 559
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 76 Resp: 733

Ion	Ratio	Lower	Upper
76	100		
44	202.3	11.6	17.4#

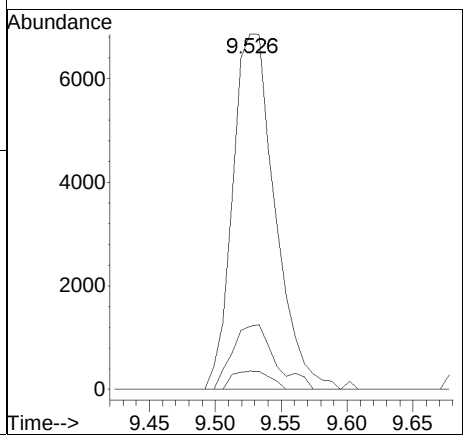


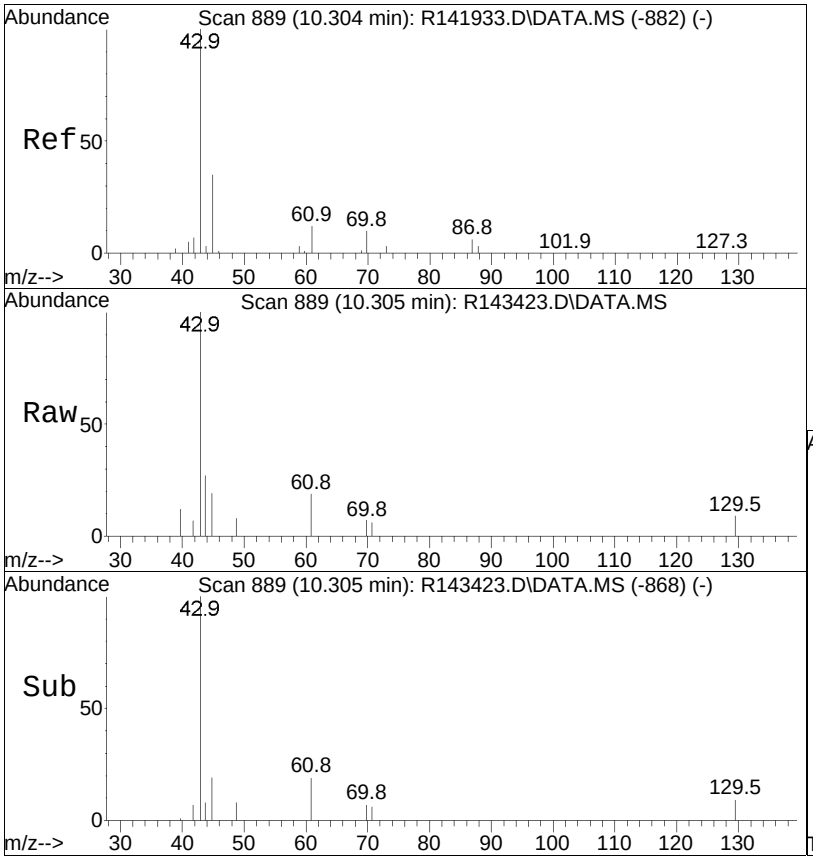


#36
2-butanone
Concen: 0.86 ppbV
RT: 9.526 min Scan# 787
Delta R.T. 0.021 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 43 Resp: 15395

Ion	Ratio	Lower	Upper
43	100		
72	17.8	15.4	23.0
57	5.2	5.8	8.6#

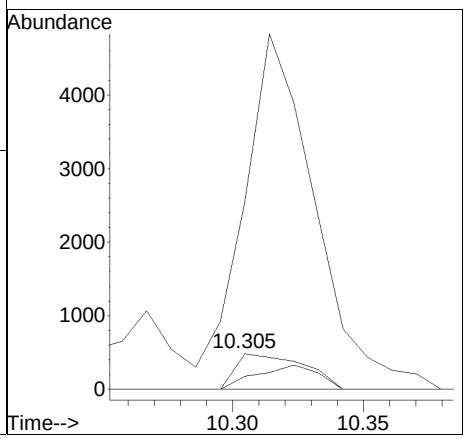


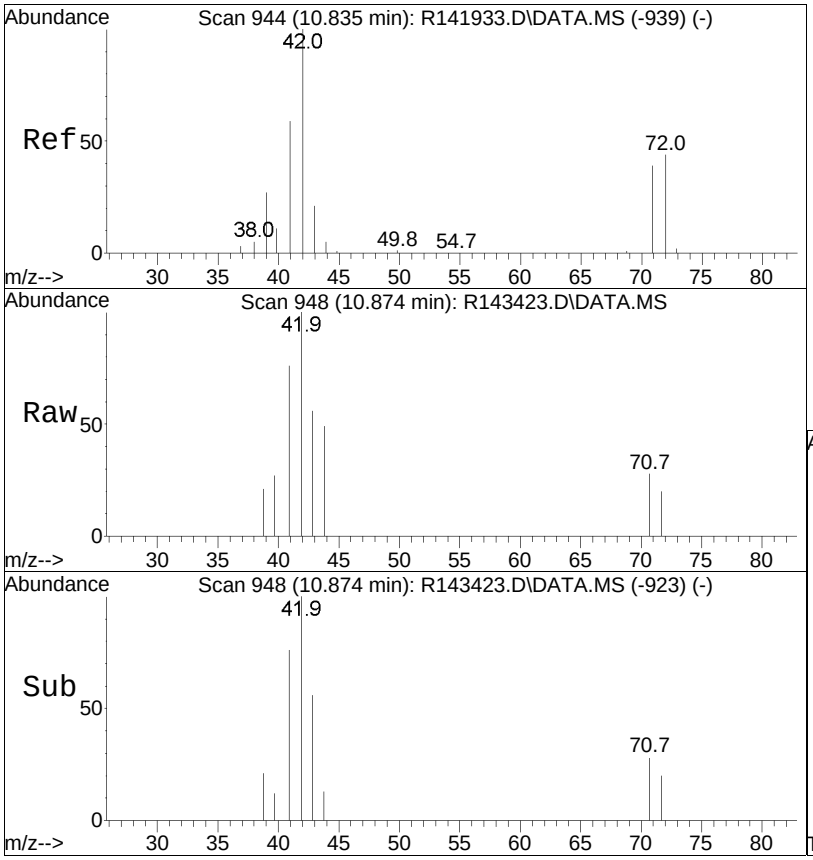


#38
Ethyl Acetate
Concen: 0.27 ppbV
RT: 10.305 min Scan# 889
Delta R.T. -0.000 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 61 Resp: 883

Ion	Ratio	Lower	Upper
61	100		
70	37.0	52.0	78.0#
43	528.1	662.4	993.6#

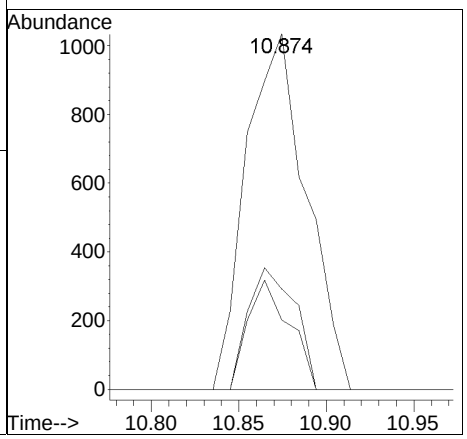


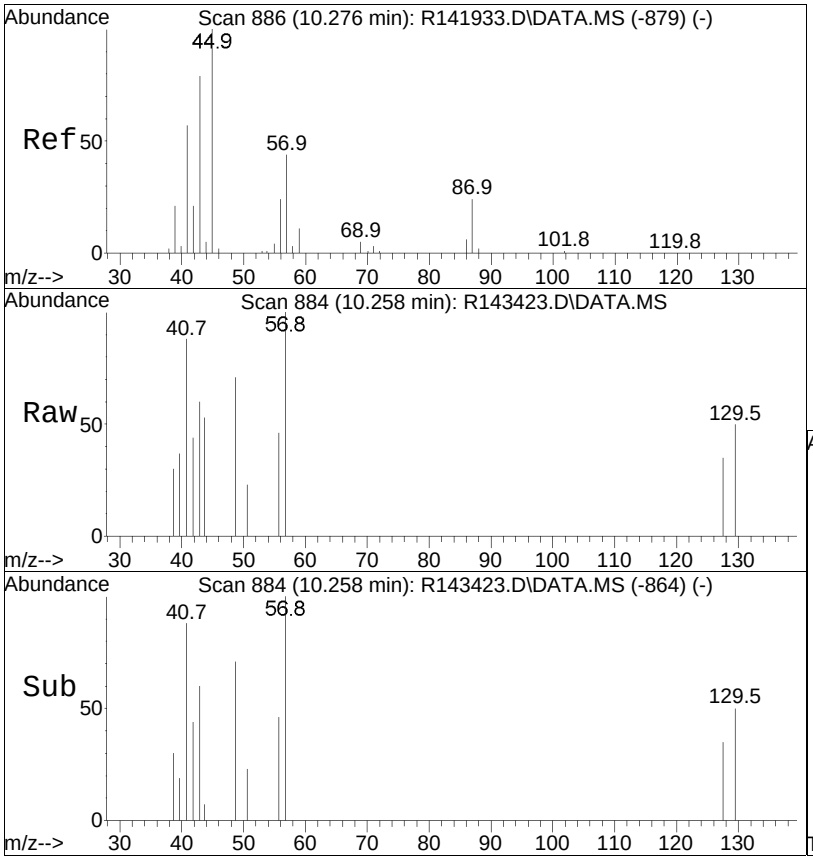


#40
Tetrahydrofuran
Concen: 0.24 ppbV
RT: 10.874 min Scan# 948
Delta R.T. 0.049 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 42 Resp: 2482

Ion	Ratio	Lower	Upper
42	100		
71	47.8	27.4	41.2#
72	19.5	28.4	42.6#

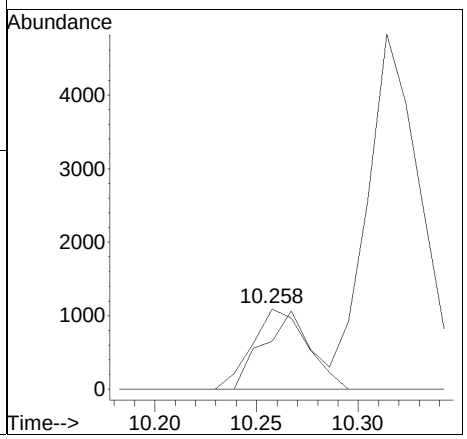


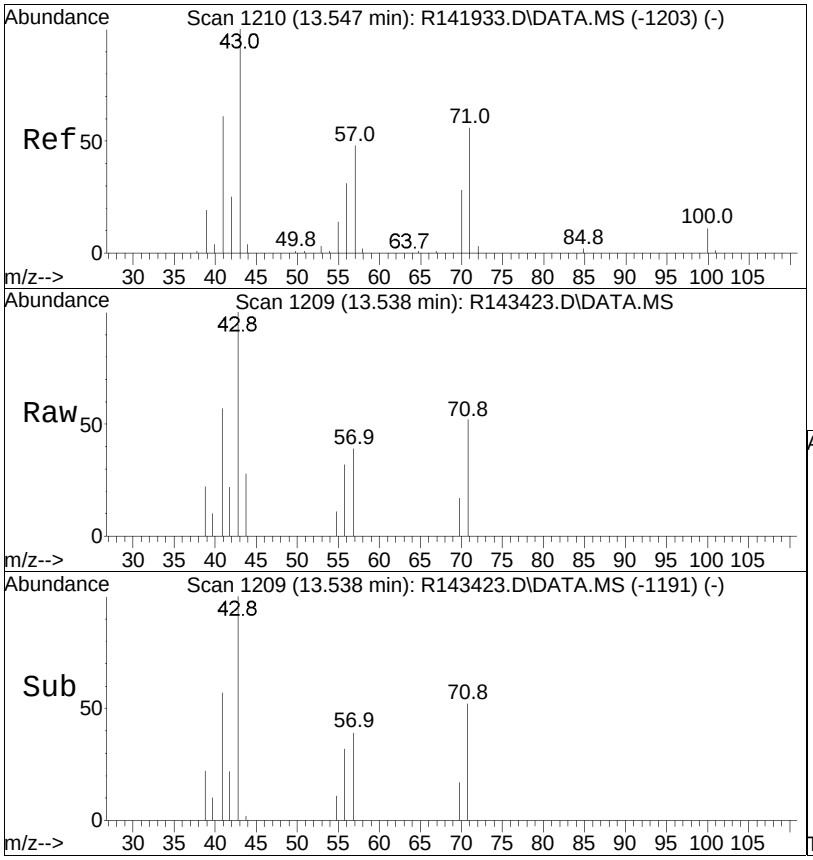


#44
hexane
Concen: 0.13 ppbV
RT: 10.258 min Scan# 884
Delta R.T. -0.009 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 57 Resp: 2061

Ion	Ratio	Lower	Upper
57	100		
43	59.8	125.7	188.5#
86	0.0	8.8	13.2#

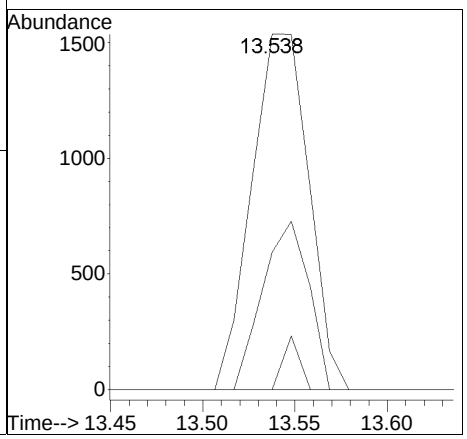


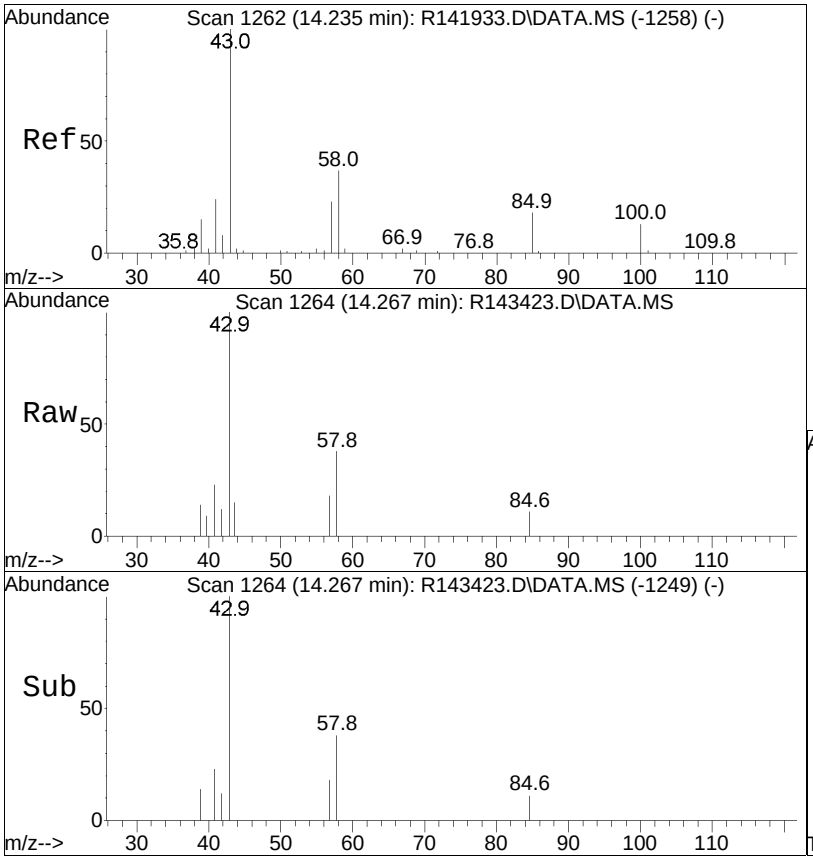


#62
heptane
Concen: 0.20 ppbV
RT: 13.538 min Scan# 1209
Delta R.T. -0.010 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 43 Resp: 3320

Ion	Ratio	Lower	Upper
43	100		
57	38.6	37.9	56.9
100	0.0	9.1	13.7#

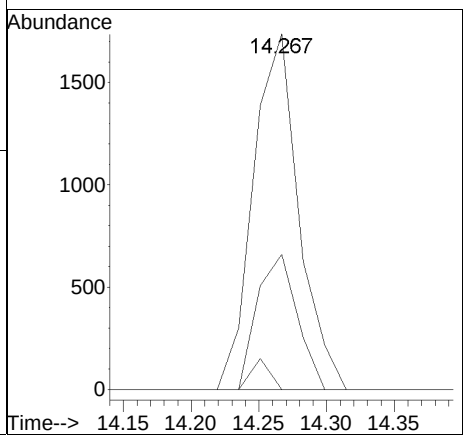


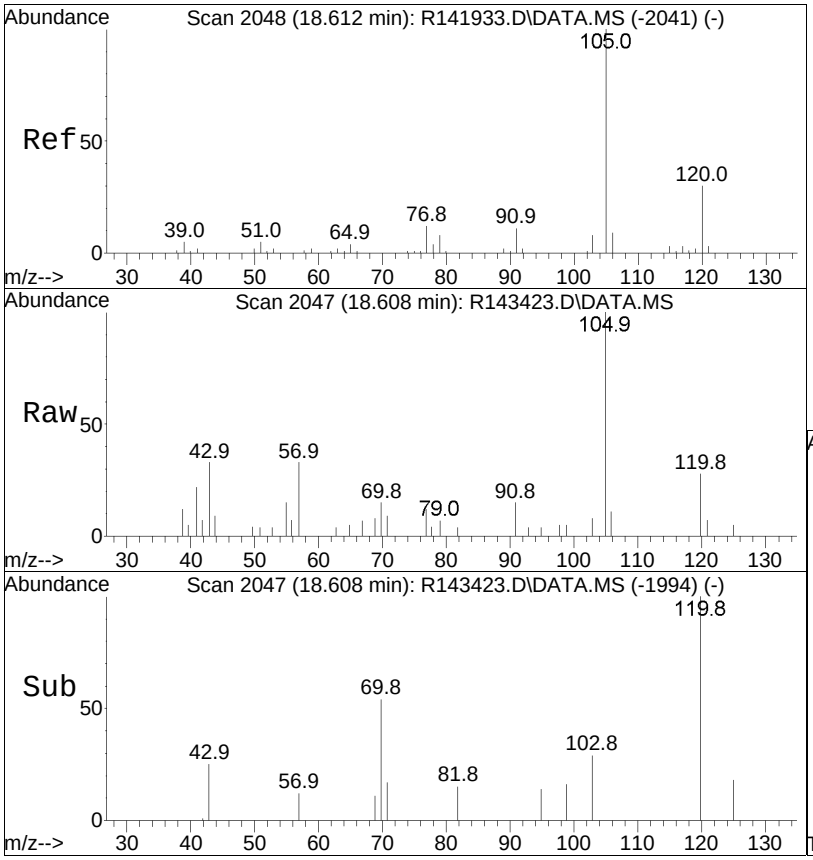


#64
4-methyl-2-pentanone
Concen: 0.19 ppbV
RT: 14.267 min Scan# 1264
Delta R.T. 0.032 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion: 43 Resp: 4061

Ion	Ratio	Lower	Upper
43	100		
58	32.9	29.9	44.9
100	0.0	8.9	13.3#

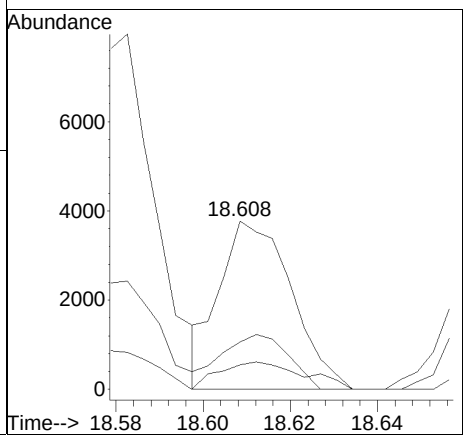




#96
4-ethyl toluene
Concen: 0.09 ppbV m
RT: 18.608 min Scan# 2047
Delta R.T. -0.004 min
Lab File: R143423.D
Acq: 13 Aug 2015 8:31 pm

Tgt Ion:105 Resp: 4346

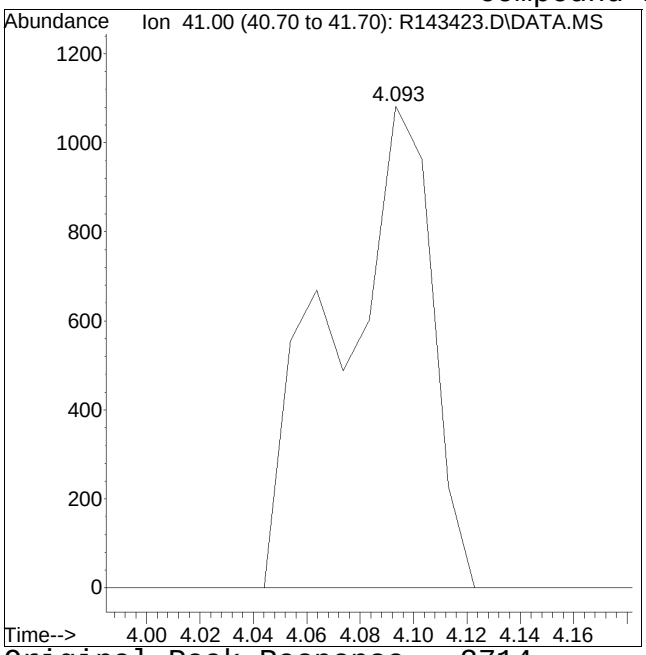
Ion	Ratio	Lower	Upper
105	100		
120	28.2	25.0	37.4
91	14.6	8.4	12.6#



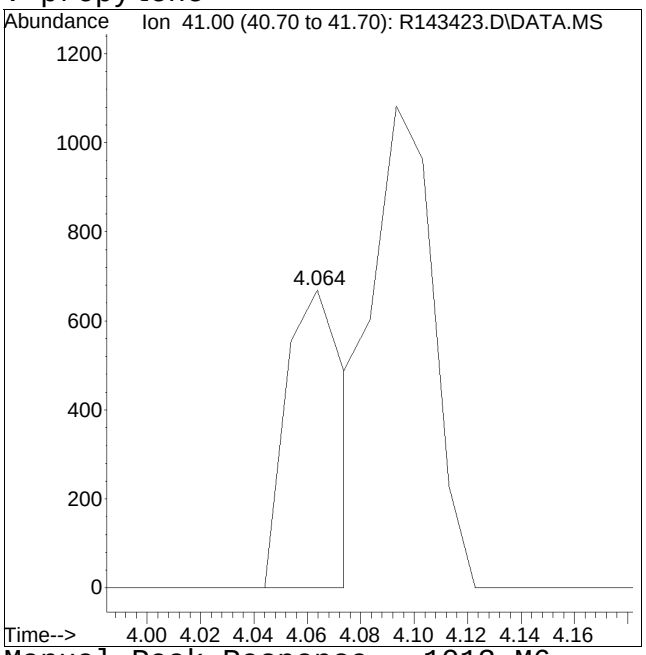
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:56 am

Compound #3: propylene



Original Peak Response = 2714



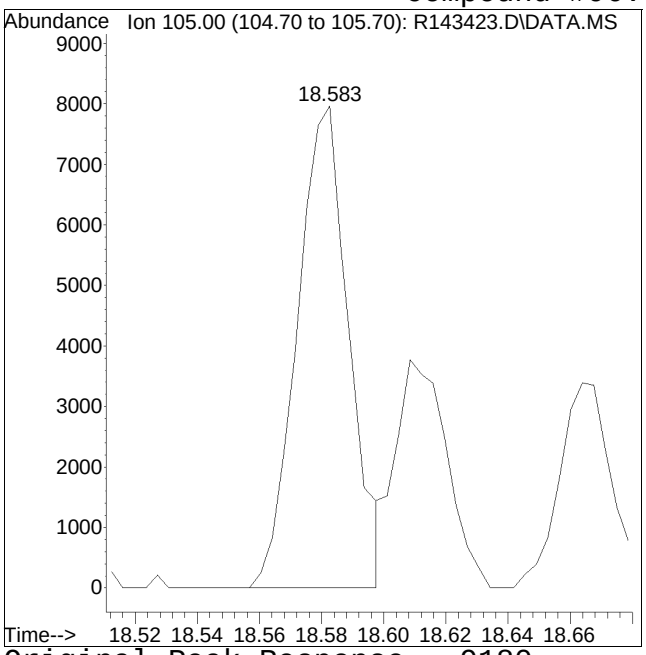
Manual Peak Response = 1013 M6

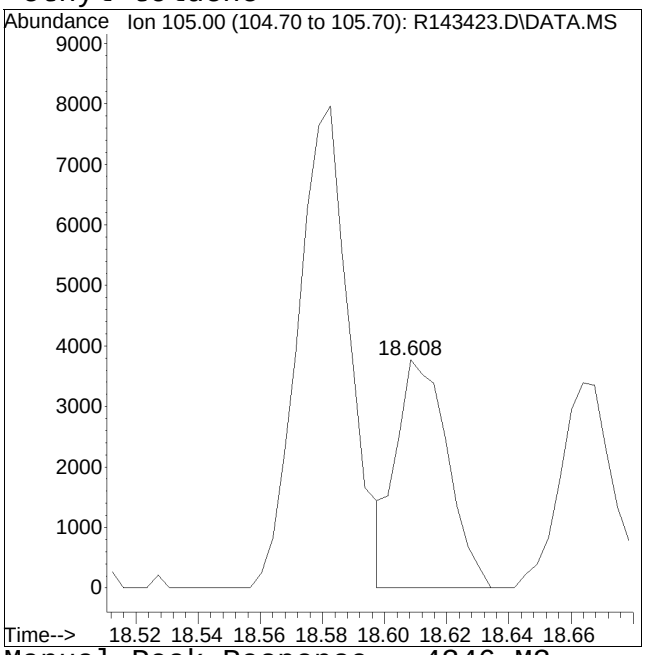
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143423.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 8:31 pm Instrument : Air Piano 1
Sample : L1519114-11,3,250,250 Quant Date : 8/14/2015 8:56 am

Compound #96: 4-ethyl toluene





Original Peak Response = 9180 Manual Peak Response = 4346 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 10:22:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

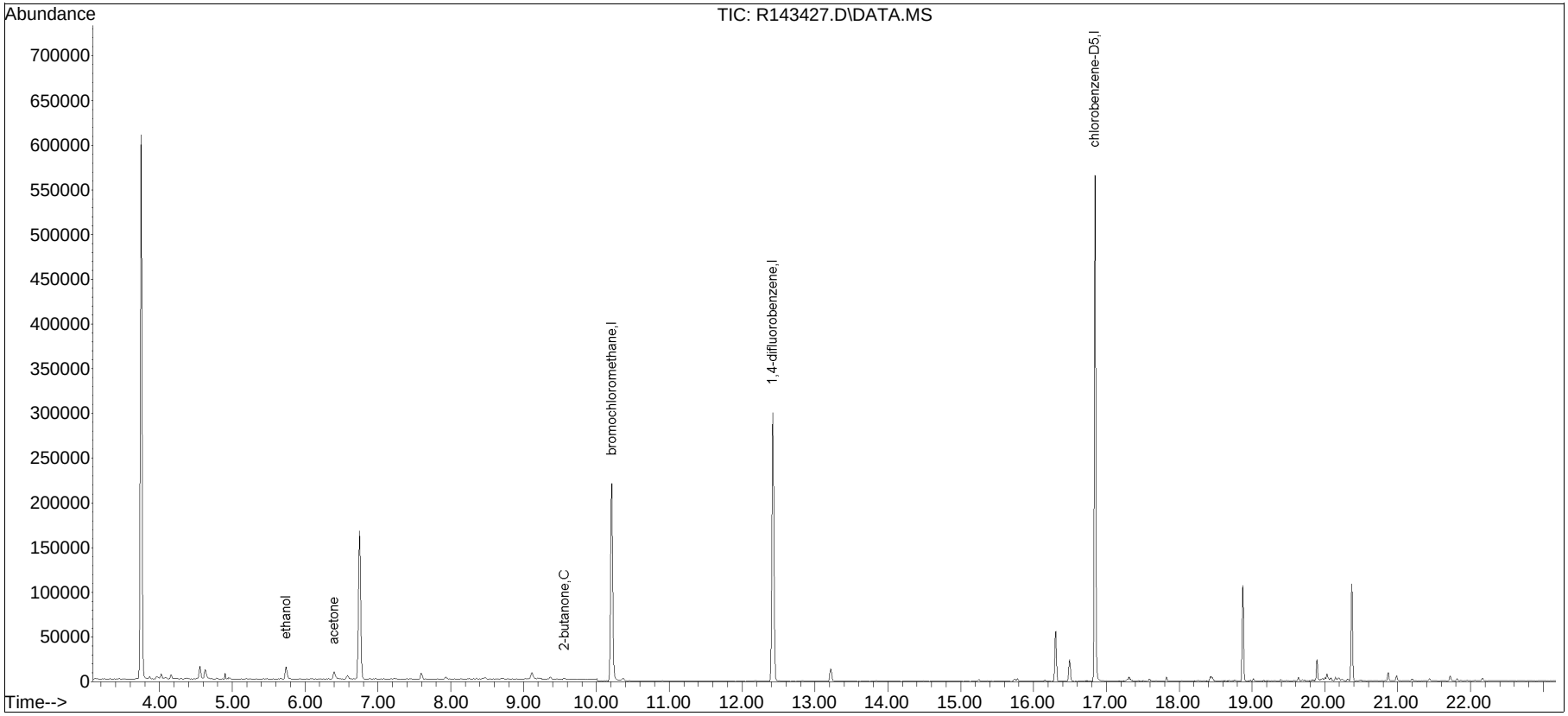
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	125663	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		85.69%	
43) 1,4-difluorobenzene	12.419	114	269210	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		82.35%	
67) chlorobenzene-D5	16.842	54	54513	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		90.39%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064		0	N.D.		
15) ethanol	5.739	31	10636	3.094	ppbV	88
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.394	43	9955	1.083	ppbV #	100
22) isopropyl alcohol	0.000		0	N.D.	d	
29) 3-chloropropene	7.585		0	N.D.		
30) carbon disulfide	7.921		0	N.D.		
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.560	43	1371	0.078	ppbV #	63
38) Ethyl Acetate	0.000		0	N.D.		
40) Tetrahydrofuran	10.904		0	N.D.		
44) hexane	0.000		0	N.D.		
53) cyclohexane	0.000		0	N.D.	d	
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	0.000		0	N.D.		
62) heptane	13.682		0	N.D.		
64) 4-methyl-2-pentanone	0.000		0	N.D.		
72) 2-hexanone	15.456		0	N.D.		
96) 4-ethyl toluene	18.582		0	N.D.		
101) Benzyl Chloride	0.000		0	N.D.		

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

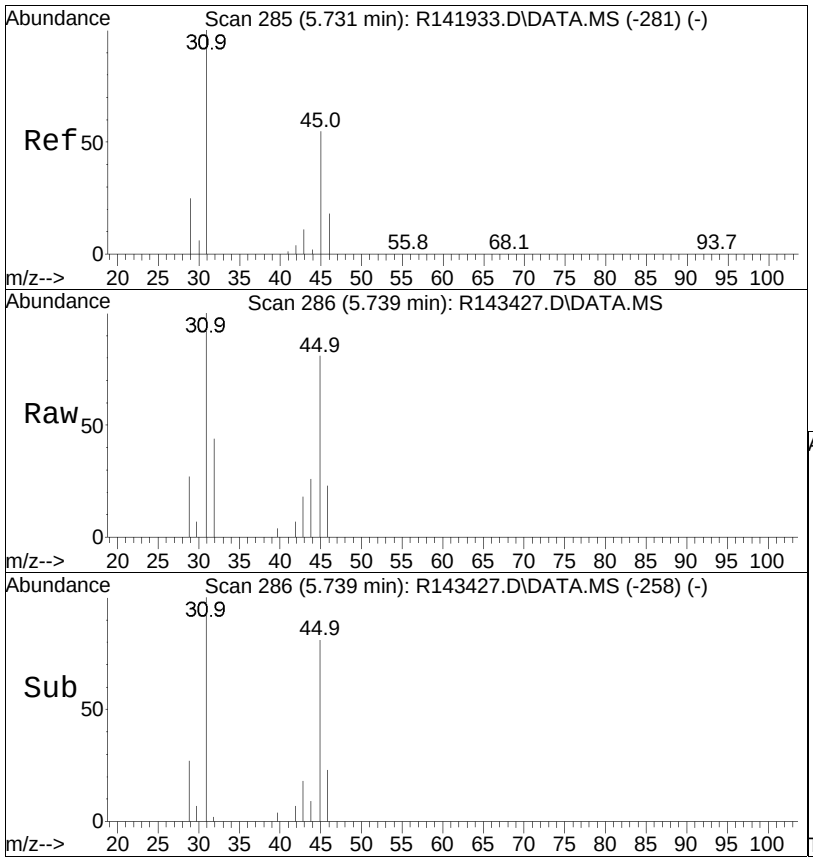
Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143427.D
Acq On : 13 Aug 2015 10:40 pm
Operator : AIRPIANO1:MB
Sample : L1519114-02,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 10:22:59 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:35:49 2015

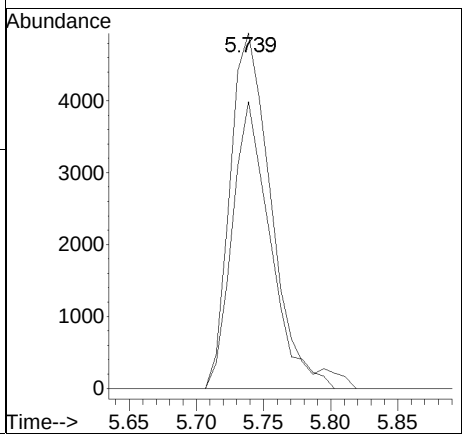
Page 2

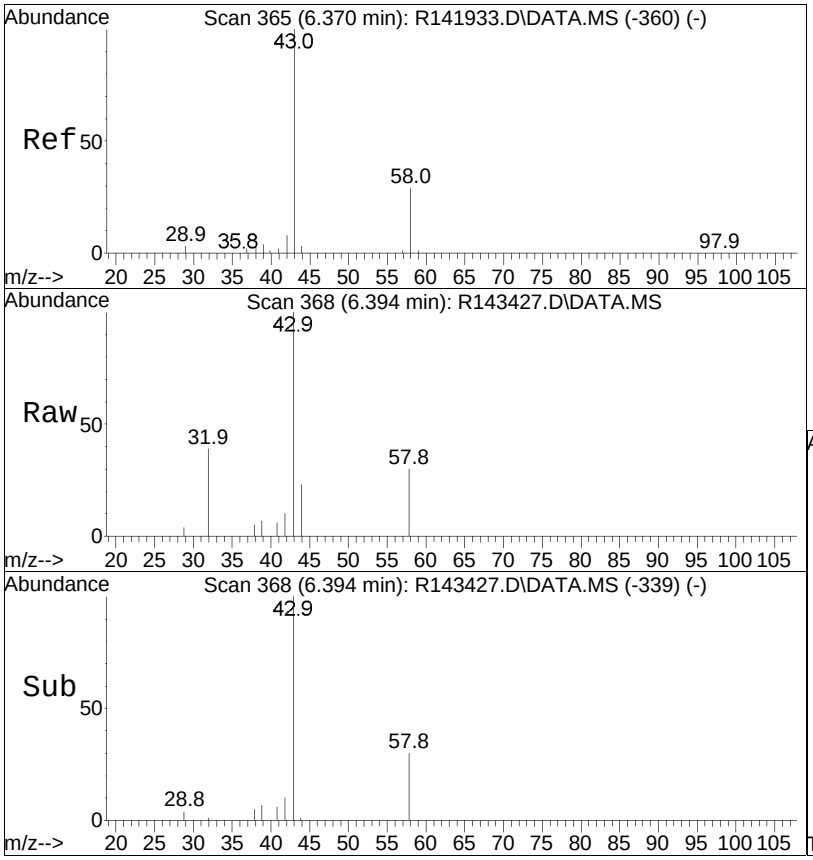


#15
ethanol
Concen: 3.09 ppbV
RT: 5.739 min Scan# 286
Delta R.T. 0.024 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 31 Resp: 10636

Ion	Ratio	Lower	Upper
31	100		
45	80.7	56.5	84.7

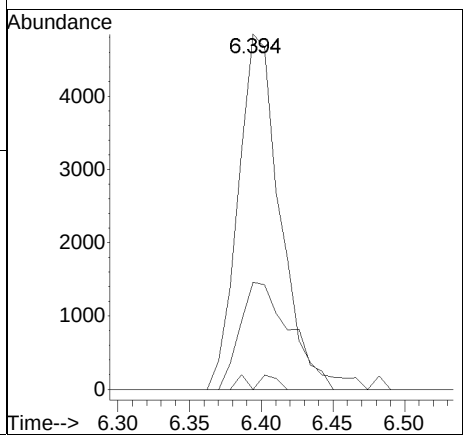


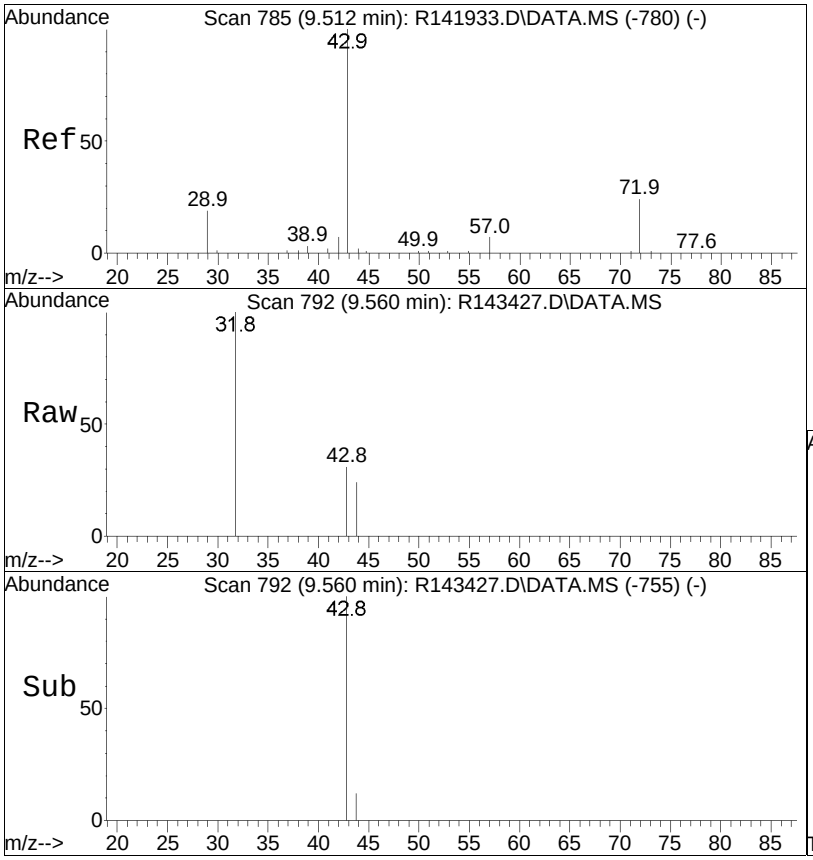


#19
acetone
Concen: 1.08 ppbV
RT: 6.394 min Scan# 368
Delta R.T. 0.032 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 43 Resp: 9955

Ion	Ratio	Lower	Upper
43	100		
58	30.2	24.1	36.1
57	0.0	0.7	1.1#

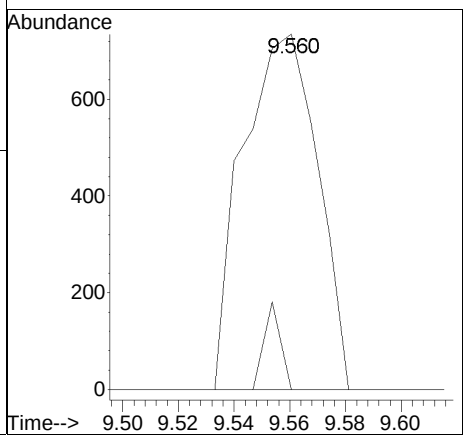




#36
2-butanone
Concen: 0.08 ppbV
RT: 9.560 min Scan# 792
Delta R.T. 0.055 min
Lab File: R143427.D
Acq: 13 Aug 2015 10:40 pm

Tgt Ion: 43 Resp: 1371

Ion	Ratio	Lower	Upper
43	100		
72	0.0	15.4	23.0#
57	0.0	5.8	8.6#



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143427.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/13/2015 10:40 pm	Instrument	: Air Piano 1
Sample	: L1519114-02,3,250,250	Quant Date	: 8/14/2015 8:58 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 10:25:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

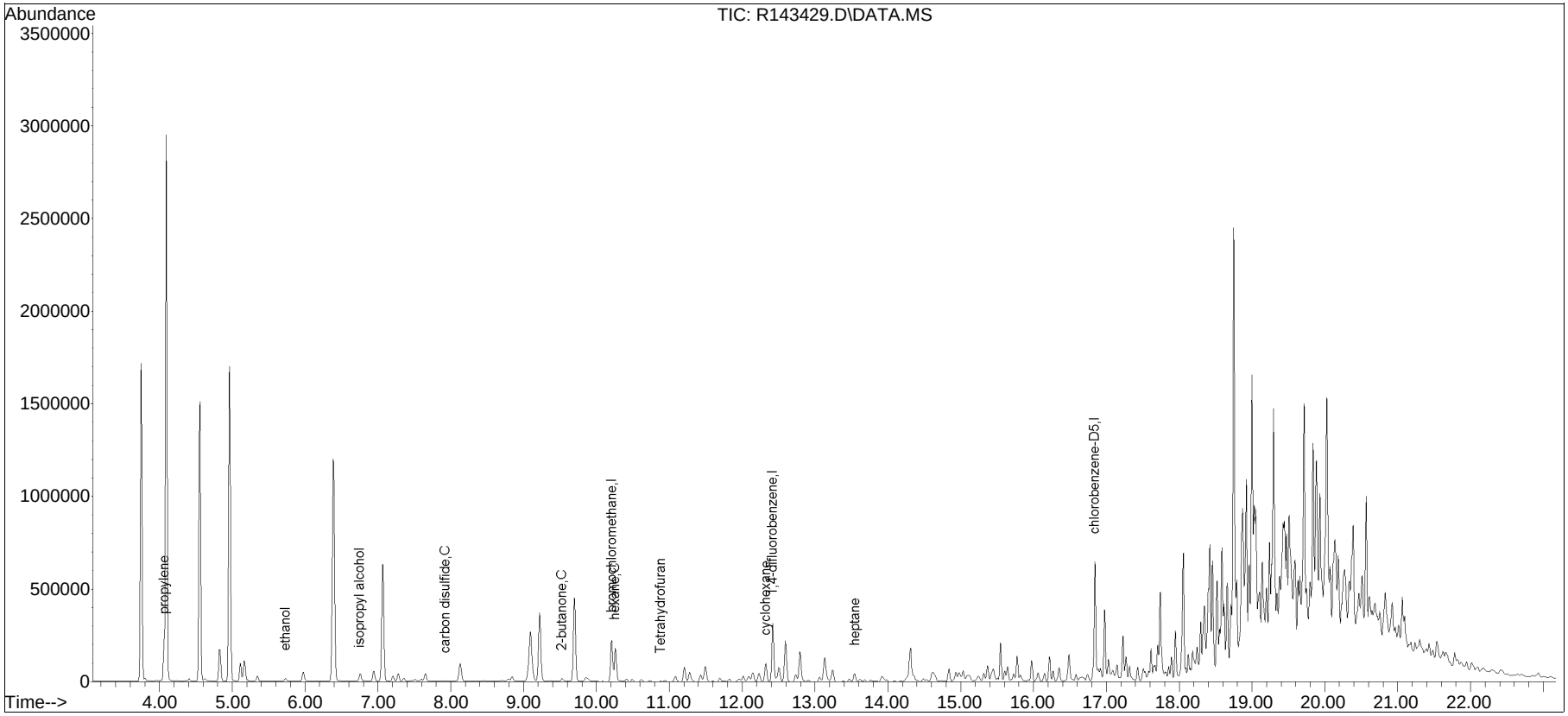
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	124934	10.000	ppbV	0.00
Standard Area = 146644			Recovery	=	85.20%	
43) 1,4-difluorobenzene	12.419	114	267689	10.000	ppbV	0.00
Standard Area = 326890			Recovery	=	81.89%	
67) chlorobenzene-D5	16.842	54	56322	10.000	ppbV	0.00
Standard Area = 60310			Recovery	=	93.39%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064	41	100135M6	17.937	ppbV	
15) ethanol	5.731	31	11934	3.492	ppbV	98
17) vinyl bromide	0.000		0	N.D.		
19) acetone	0.000		0	N.D.	d	
22) isopropyl alcohol	6.746	45	9645	0.859	ppbV #	88
29) 3-chloropropene	0.000		0	N.D.	d	
30) carbon disulfide	7.921	76	1604	0.088	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.526	43	19173	1.090	ppbV	96
38) Ethyl Acetate	0.000		0	N.D.		
40) Tetrahydrofuran	10.884	42	1237	0.120	ppbV #	64
44) hexane	10.257	57	86253	5.523	ppbV #	39
53) cyclohexane	12.326	56	50238	4.031	ppbV	95
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	0.000		0	N.D.	d	
62) heptane	13.548	43	22250M4	1.380	ppbV	
64) 4-methyl-2-pentanone	0.000		0	N.D.	d	
72) 2-hexanone	0.000		0	N.D.	d	
96) 4-ethyl toluene	0.000		0	N.D.	d	
101) Benzyl Chloride	0.000		0	N.D.	d	

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

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

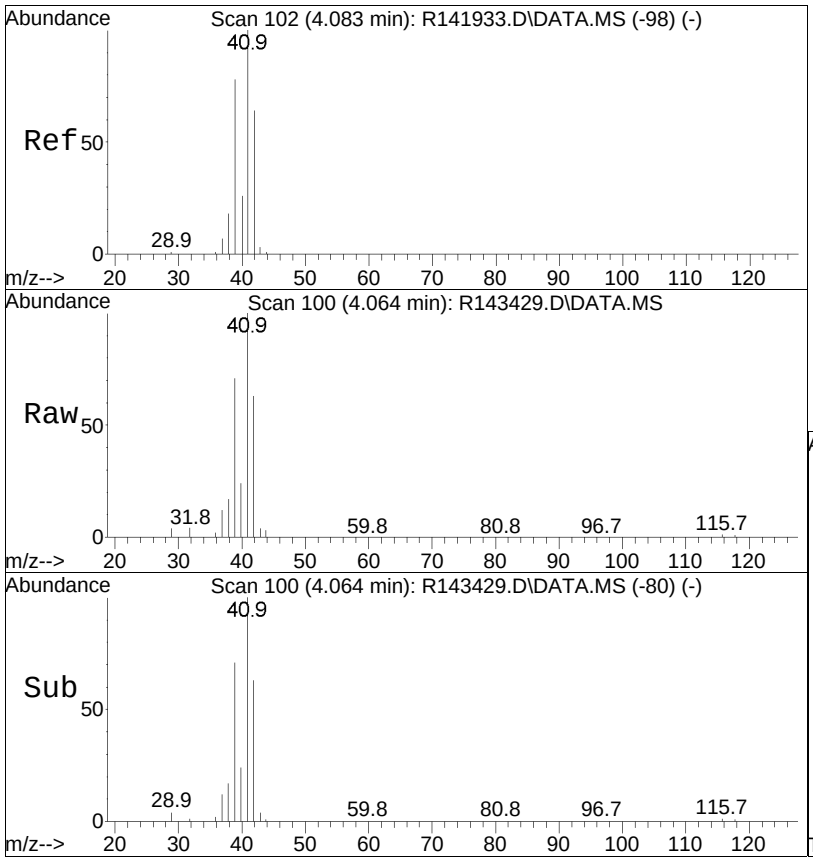
Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143429.D
Acq On : 13 Aug 2015 11:44 pm
Operator : AIRPIANO1:MB
Sample : L1519114-04,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 10:25:15 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



TALL150710.M Fri Aug 14 12:36:03 2015

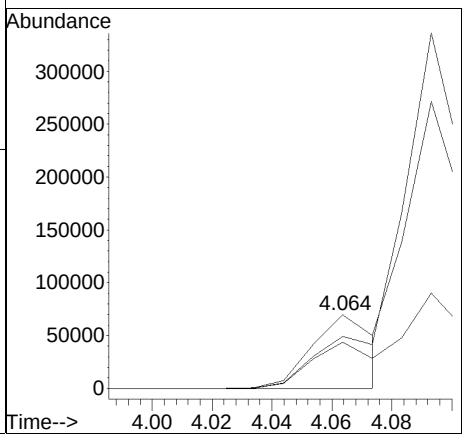
Page 2

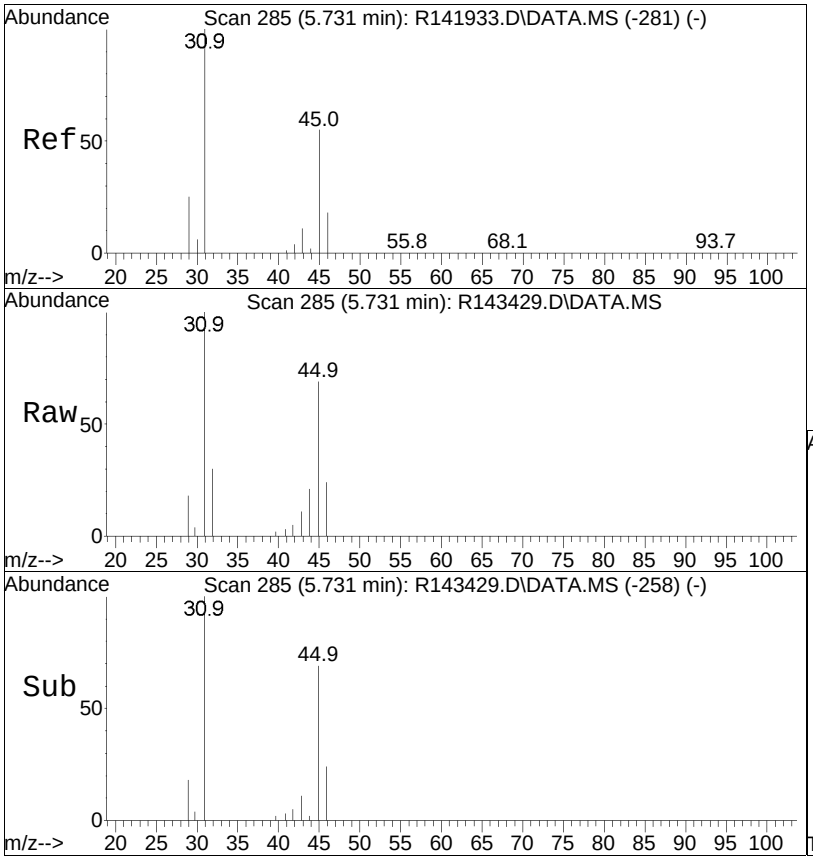


#3
propylene
Concen: 17.94 ppbV m
RT: 4.064 min Scan# 100
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 41 Resp: 100135

Ion	Ratio	Lower	Upper
41	100		
42	62.9	53.1	79.7
39	70.7	57.7	86.5

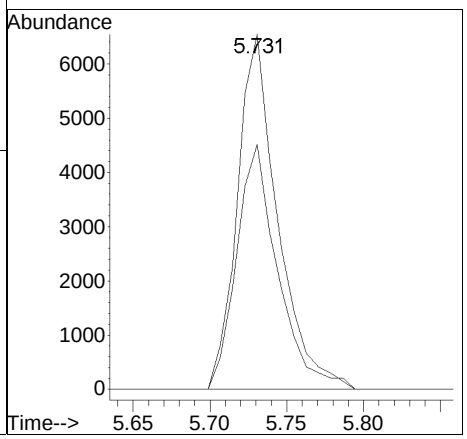


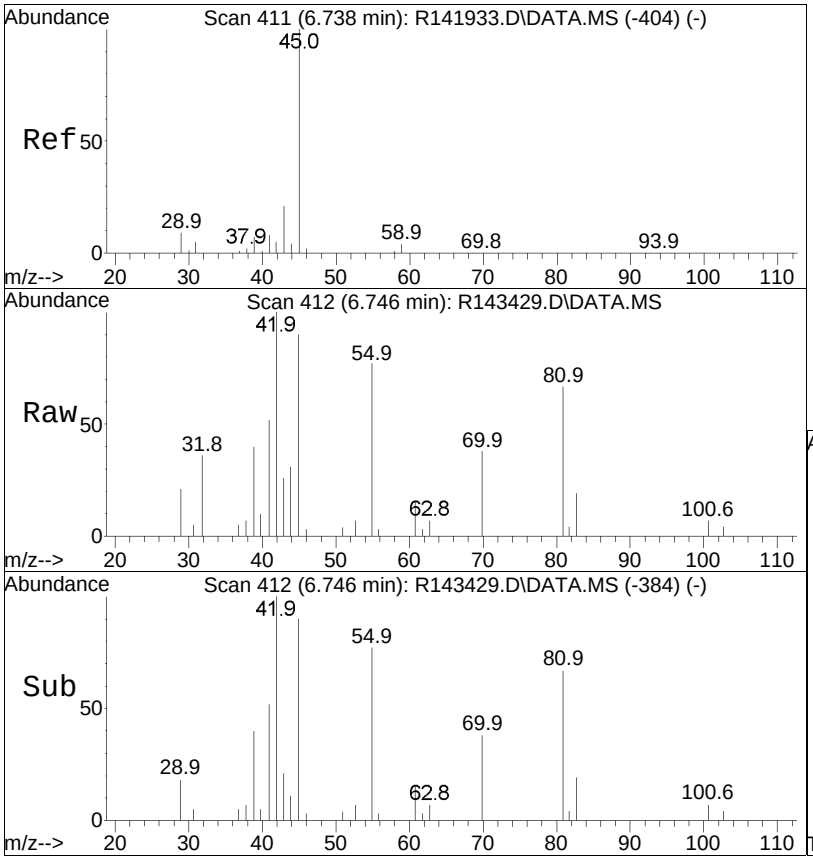


#15
ethanol
Concen: 3.49 ppbV
RT: 5.731 min Scan# 285
Delta R.T. 0.016 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 31 Resp: 11934

Ion	Ratio	Lower	Upper
31	100		
45	69.0	56.5	84.7

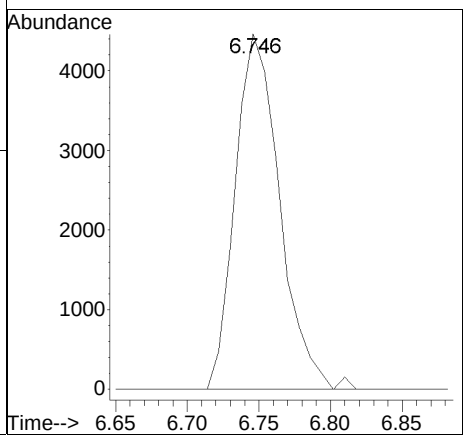


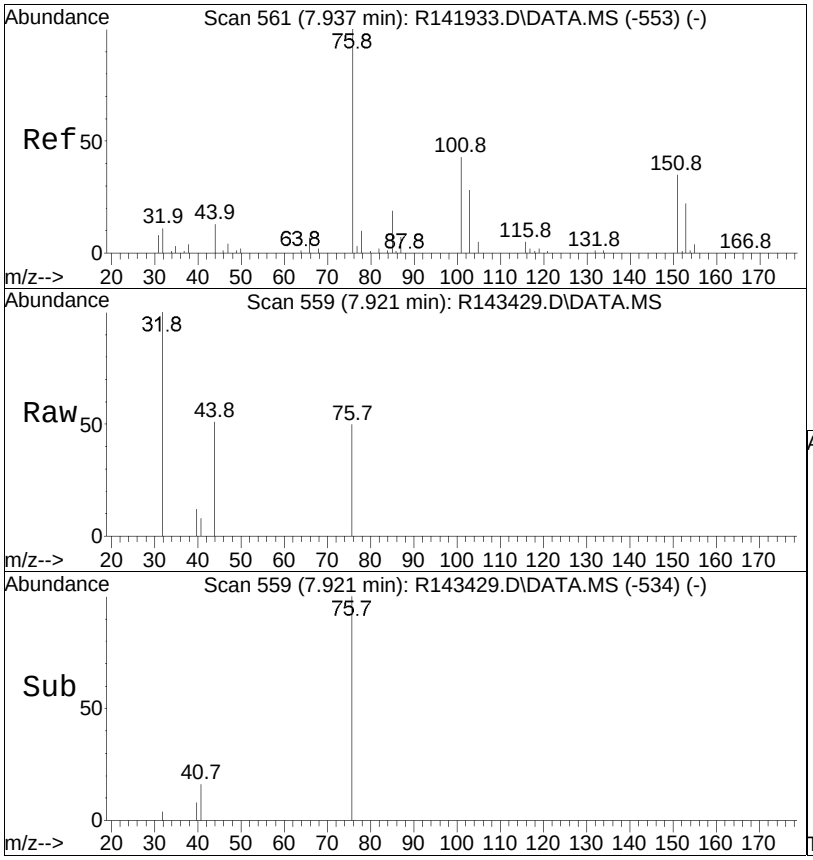


#22
isopropyl alcohol
Concen: 0.86 ppbV
RT: 6.746 min Scan# 412
Delta R.T. 0.024 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 45 Resp: 9645

Ion	Ratio	Lower	Upper
45	100		
59	0.0	3.3	4.9#

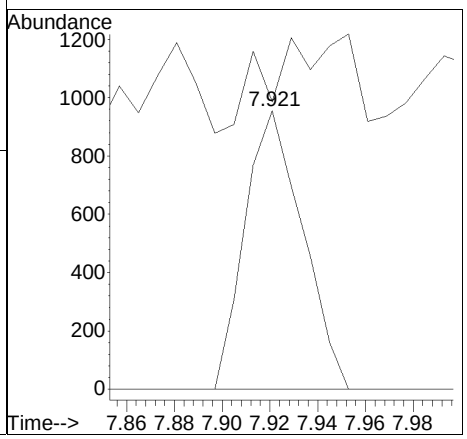


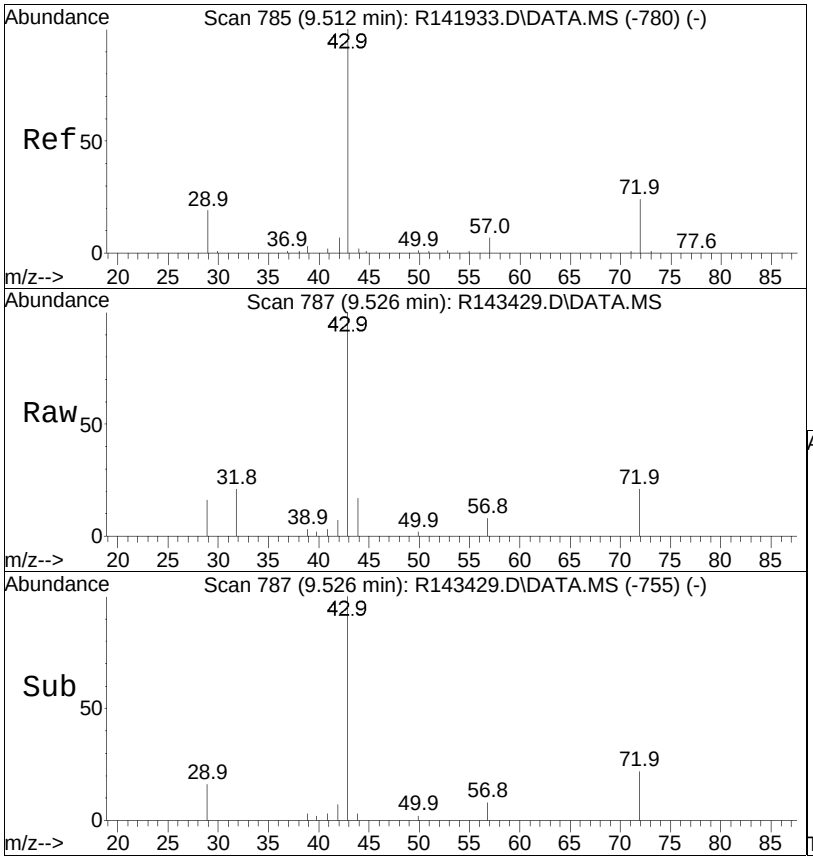


#30
carbon disulfide
Concen: 0.09 ppbV
RT: 7.921 min Scan# 559
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 76 Resp: 1604

Ion	Ratio	Lower	Upper
76	100		
44	103.2	11.6	17.4#

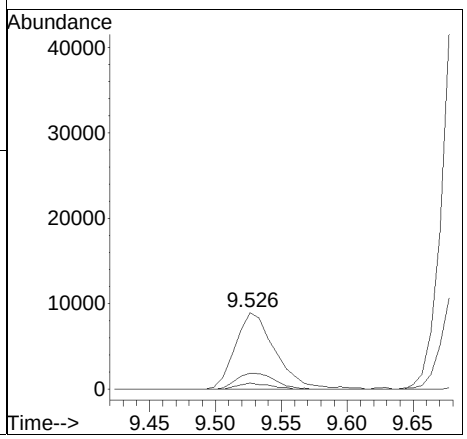


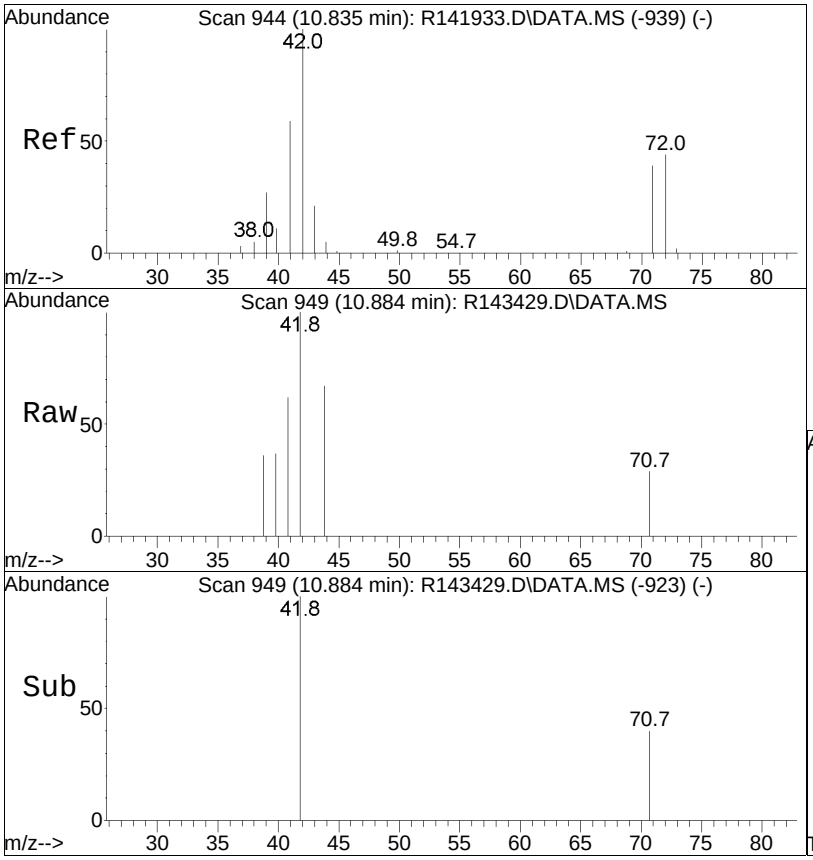


#36
2-butanone
Concen: 1.09 ppbV
RT: 9.526 min Scan# 787
Delta R.T. 0.020 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 43 Resp: 19173

Ion	Ratio	Lower	Upper
43	100		
72	21.2	15.4	23.0
57	8.2	5.8	8.6

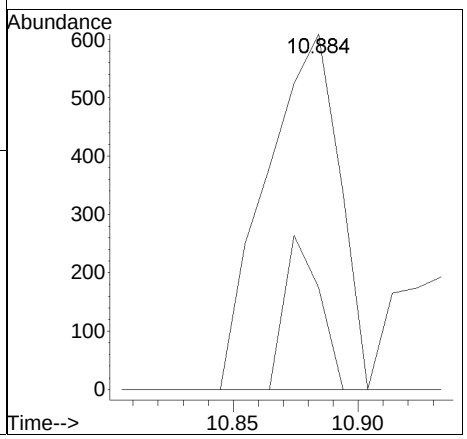


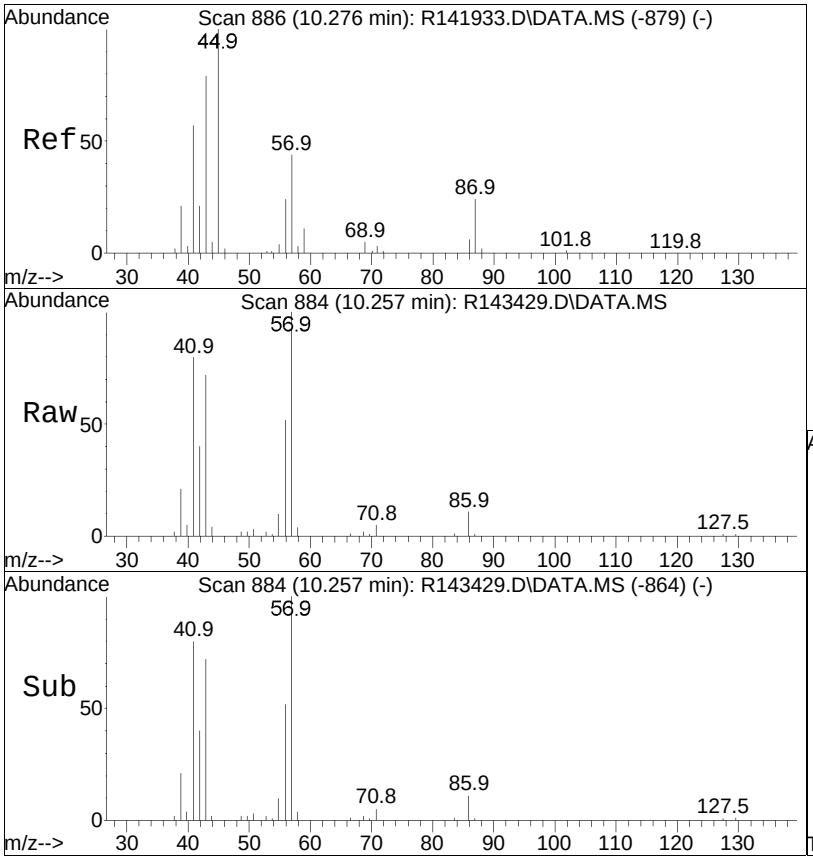


#40
Tetrahydrofuran
Concen: 0.12 ppbV
RT: 10.884 min Scan# 949
Delta R.T. 0.059 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 42 Resp: 1237

Ion	Ratio	Lower	Upper
42	100		
71	28.7	27.4	41.2
72	0.0	28.4	42.6#

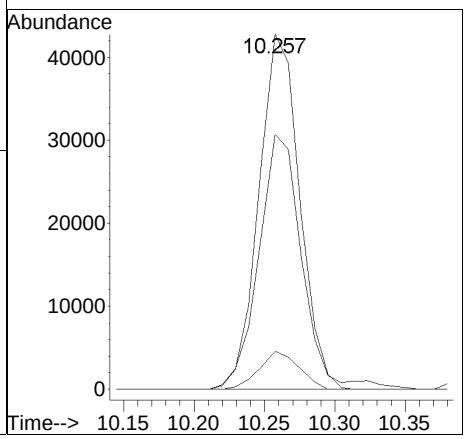


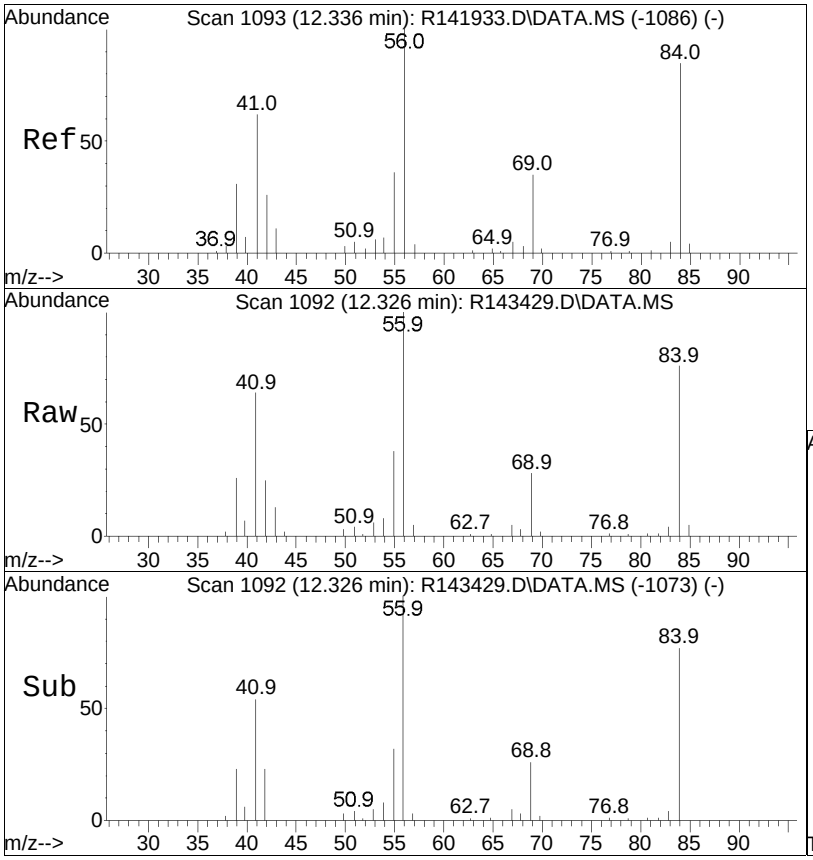


#44
hexane
Concen: 5.52 ppbV
RT: 10.257 min Scan# 884
Delta R.T. -0.010 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 57 Resp: 86253

Ion	Ratio	Lower	Upper
57	100		
43	71.8	125.7	188.5#
86	10.7	8.8	13.2

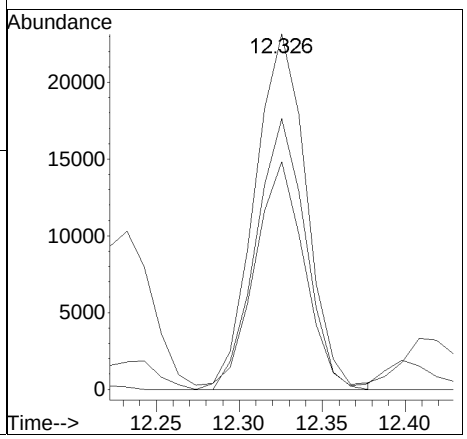


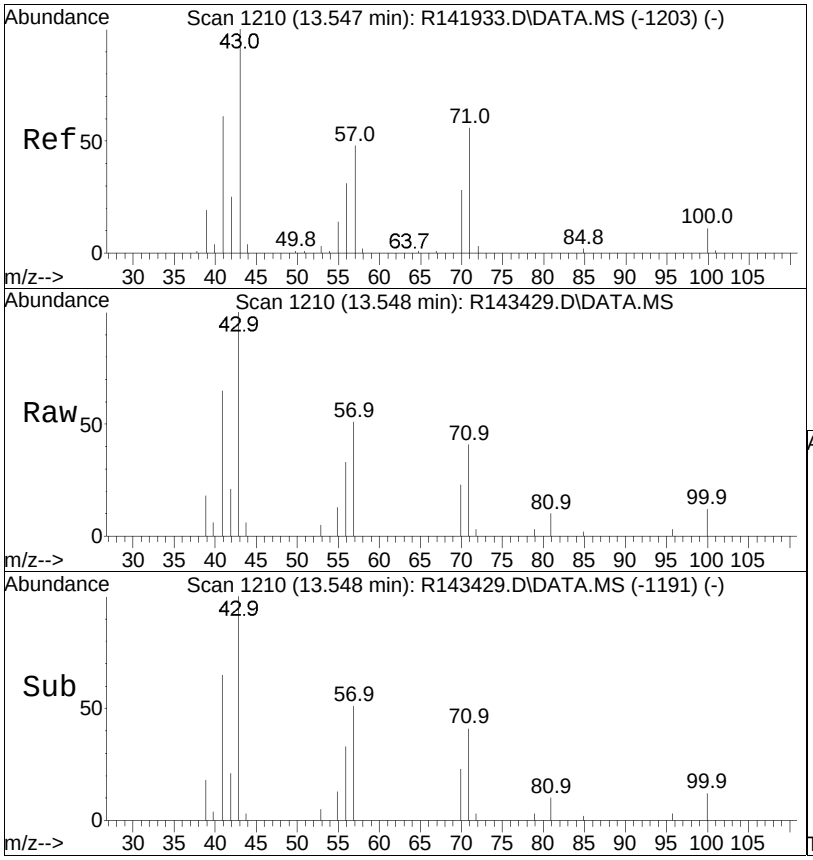


#53
cyclohexane
Concen: 4.03 ppbV
RT: 12.326 min Scan# 1092
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 56 Resp: 50238

Ion	Ratio	Lower	Upper
56	100		
84	76.1	58.2	87.2
41	64.1	47.0	70.4

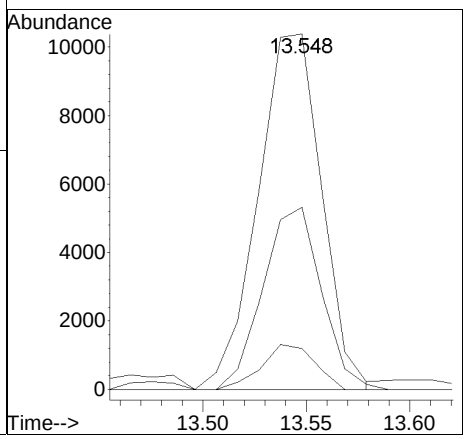




#62
heptane
Concen: 1.38 ppbV m
RT: 13.548 min Scan# 1210
Delta R.T. -0.000 min
Lab File: R143429.D
Acq: 13 Aug 2015 11:44 pm

Tgt Ion: 43 Resp: 22250

Ion	Ratio	Lower	Upper
43	100		
57	51.2	37.9	56.9
100	11.5	9.1	13.7

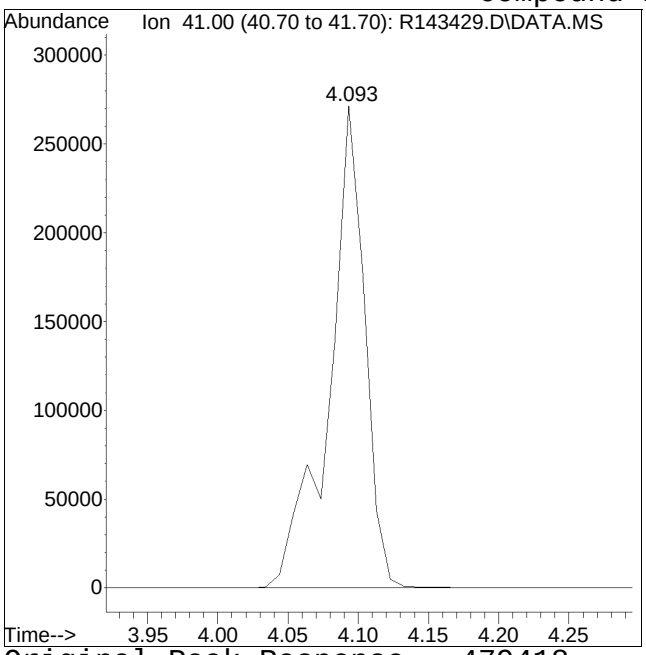


Manual Integration/Negative Proof Report

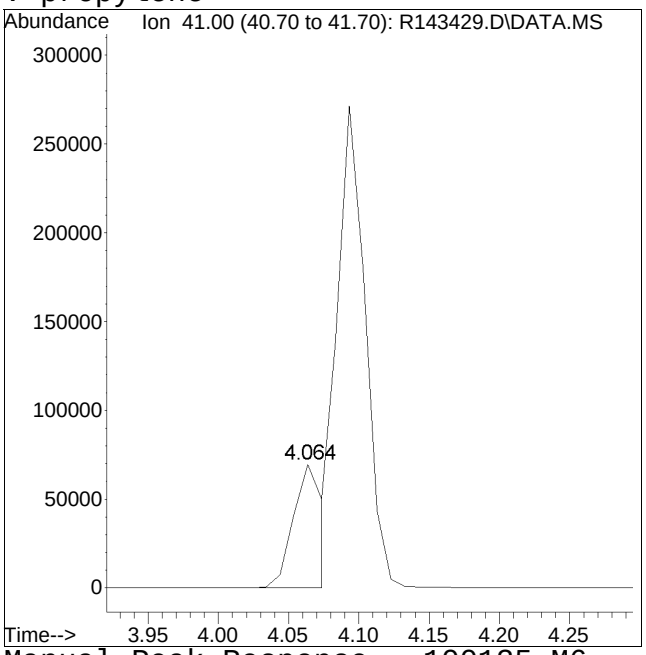
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143429.D
Date Inj'd : 8/13/2015 11:44 pm
Sample : L1519114-04,3,250,250

Method : TALL150710.M
Operator : AIRPIANO1:MB
Instrument : Air Piano 1
Quant Date : 8/14/2015 8:59 am

Compound #3: propylene



Original Peak Response = 479418



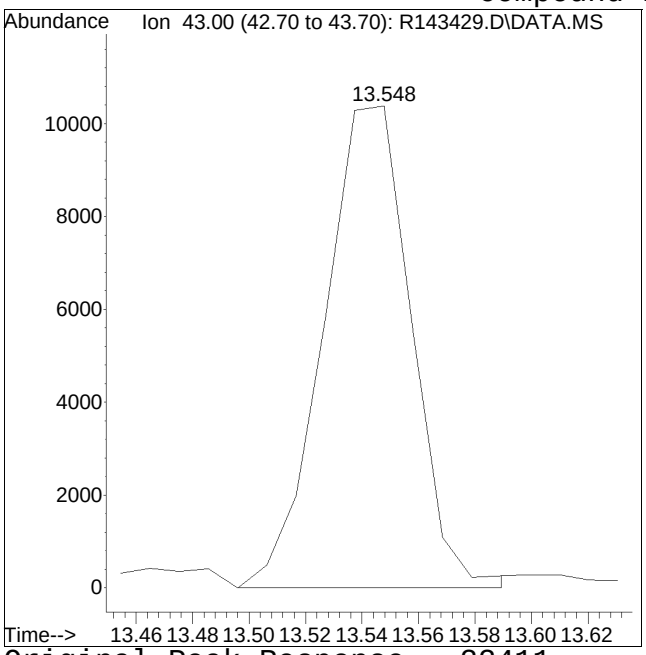
Manual Peak Response = 100135 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

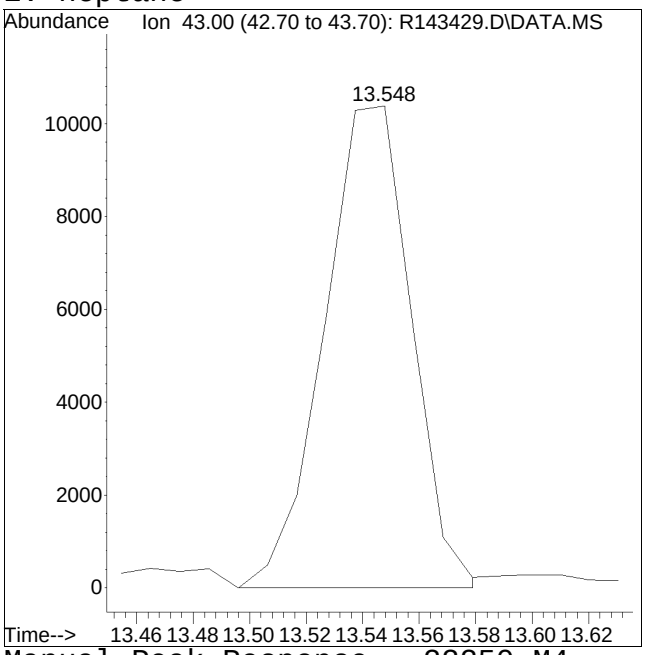
Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143429.D Operator : AIRPIANO1:MB
Date Inj'd : 8/13/2015 11:44 pm Instrument : Air Piano 1
Sample : L1519114-04,3,250,250 Quant Date : 8/14/2015 8:59 am

Compound #62: heptane



Original Peak Response = 22411



Manual Peak Response = 22250 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 11:51:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	132499	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		90.35%	
43) 1,4-difluorobenzene	12.419	114	291228	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		89.09%	
67) chlorobenzene-D5	16.842	54	56737	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		94.08%	

System Monitoring Compounds

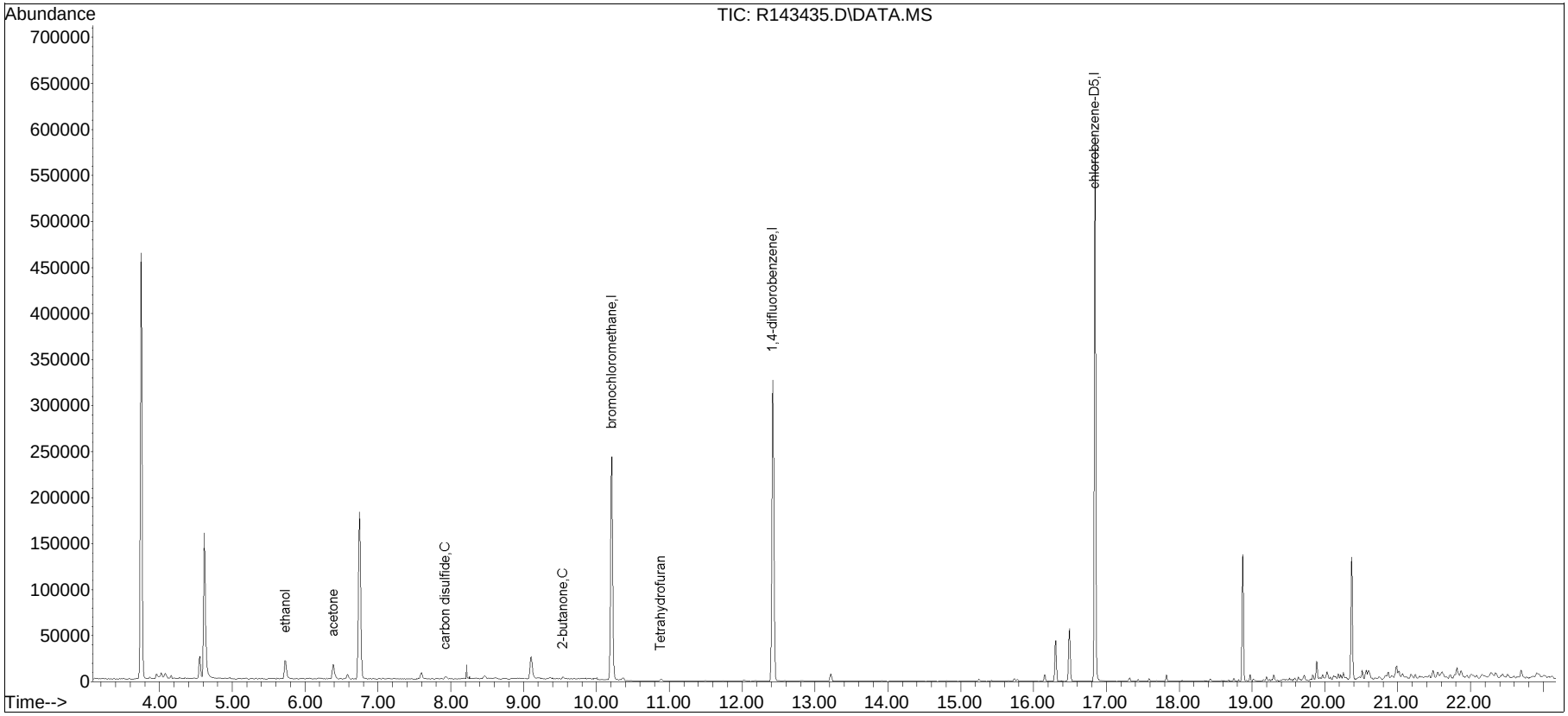
Target Compounds						Qvalue
3) propylene	4.074		0	N.D.		
15) ethanol	5.731	31	17190	4.742	ppbV	91
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.386	43	20068	2.071	ppbV #	96
22) isopropyl alcohol	0.000		0	N.D.	d	
29) 3-chloropropene	7.593		0	N.D.		
30) carbon disulfide	7.921	76	918	0.047	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.540	43	2704	0.145	ppbV #	90
38) Ethyl Acetate	0.000		0	N.D.		
40) Tetrahydrofuran	10.884	42	1693	0.155	ppbV #	78
44) hexane	10.276		0	N.D.		
53) cyclohexane	0.000		0	N.D.	d	
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	0.000		0	N.D.		
62) heptane	13.538		0	N.D.		
64) 4-methyl-2-pentanone	0.000		0	N.D.		
72) 2-hexanone	15.456		0	N.D.		
96) 4-ethyl toluene	18.612		0	N.D.		
101) Benzyl Chloride	18.974		0	N.D.		

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

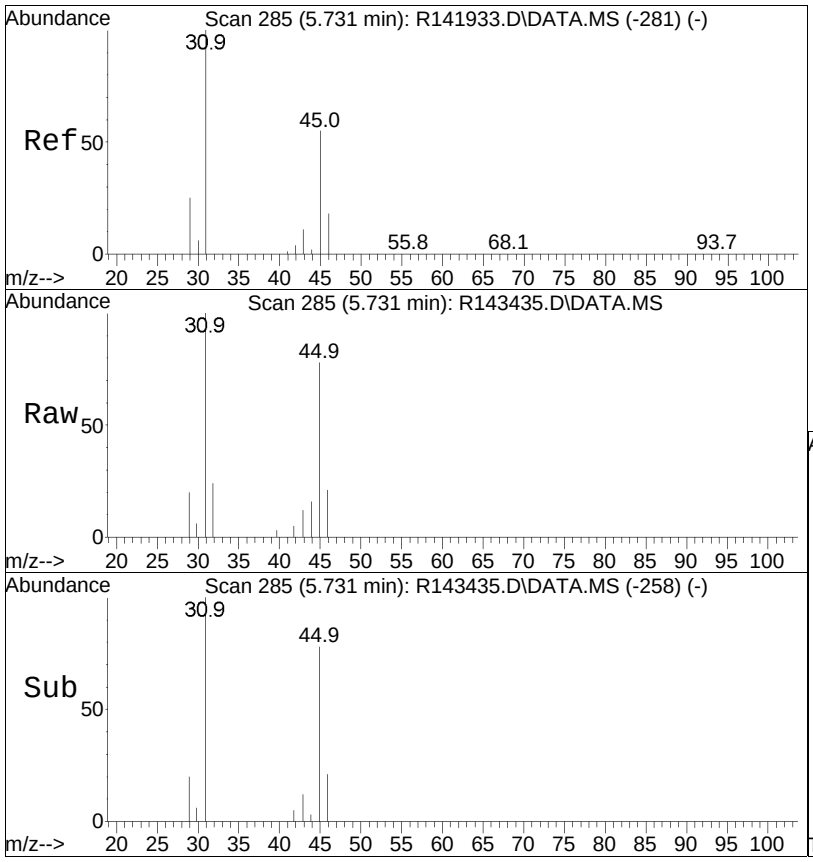
Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143435.D
Acq On : 14 Aug 2015 10:19 am
Operator : AIRPIANO1:MB
Sample : L1519114-01,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 11:51:17 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration



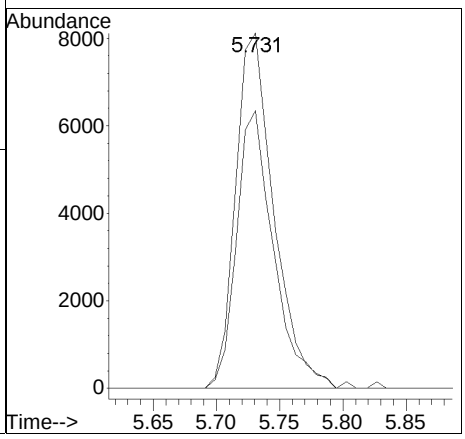
TALL150710.M Fri Aug 14 12:36:26 2015

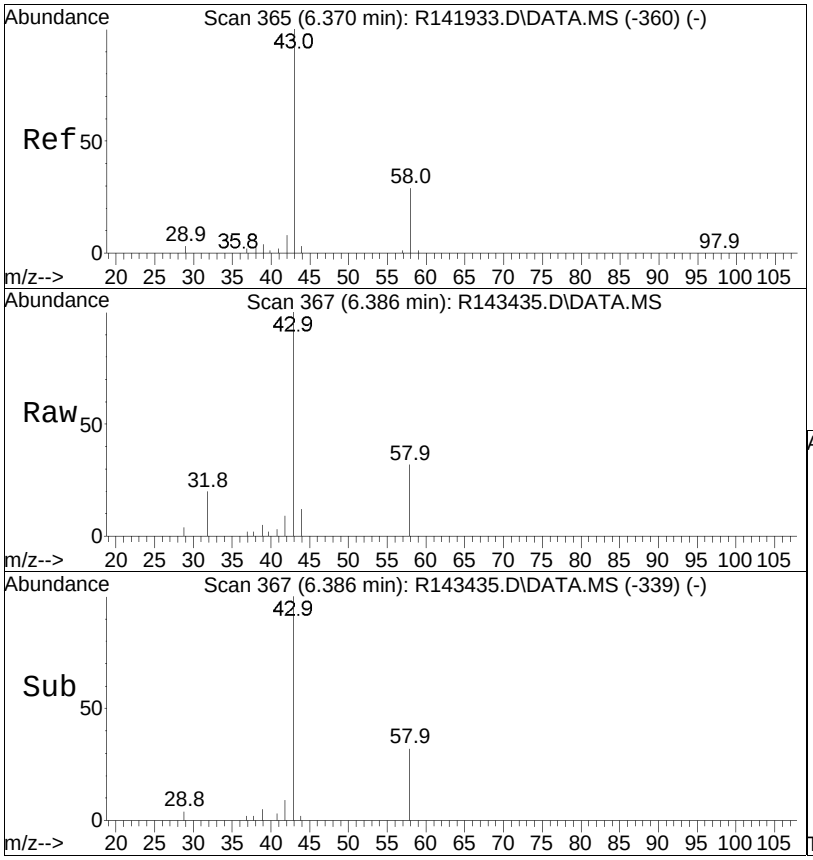


#15
ethanol
Concen: 4.74 ppbV
RT: 5.731 min Scan# 285
Delta R.T. 0.016 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 31 Resp: 17190

Ion	Ratio	Lower	Upper
31	100		
45	78.1	56.5	84.7

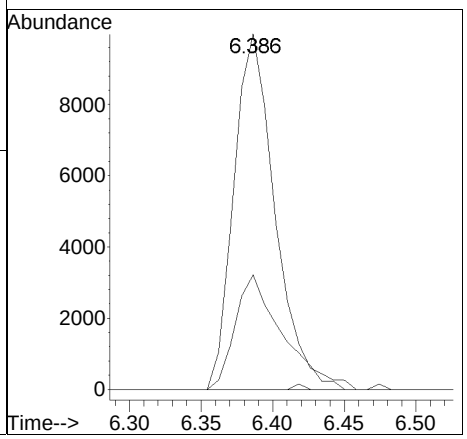


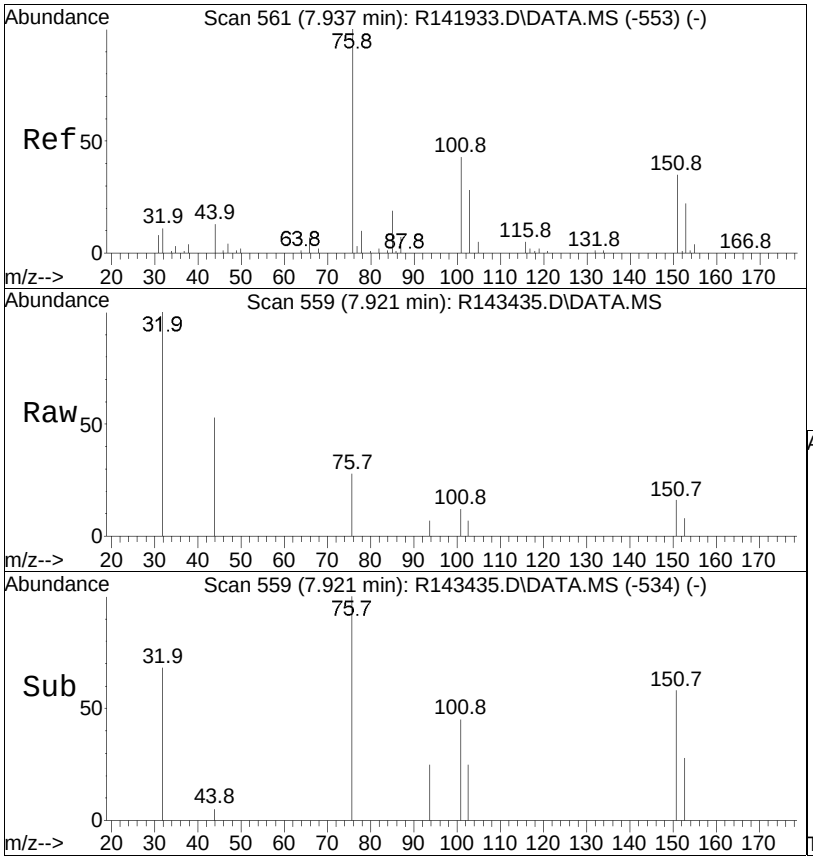


#19
acetone
Concen: 2.07 ppbV
RT: 6.386 min Scan# 367
Delta R.T. 0.024 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 43 Resp: 20068

Ion	Ratio	Lower	Upper
43	100		
58	32.2	24.1	36.1
57	0.0	0.7	1.1#

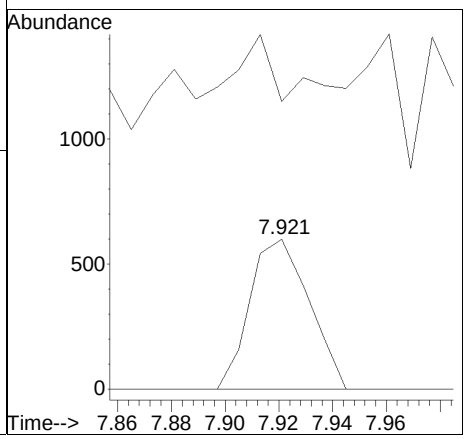


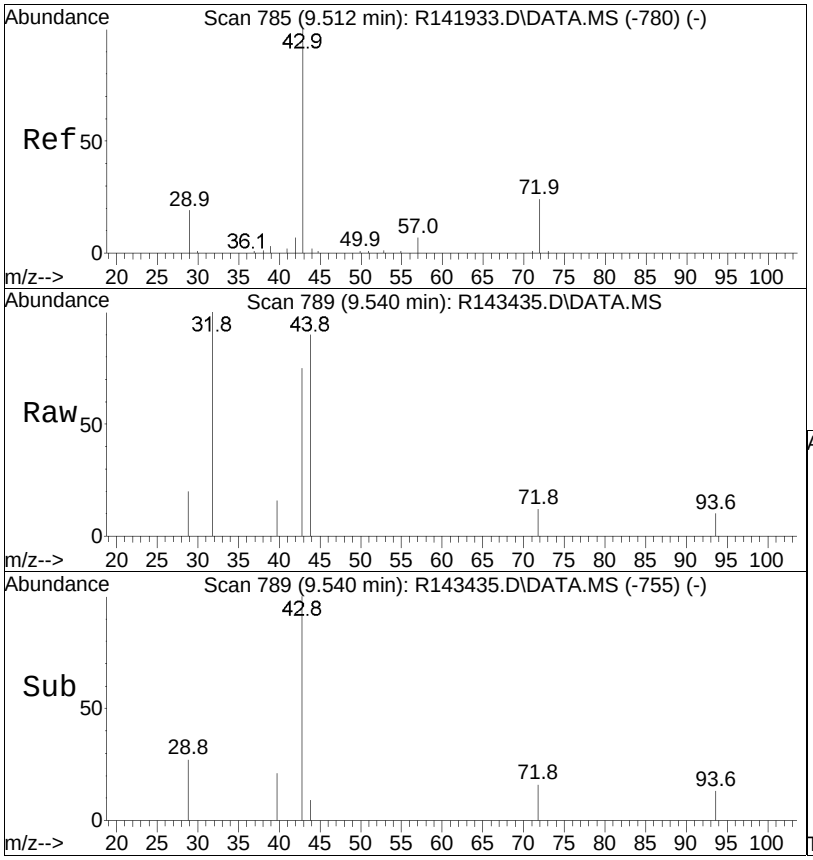


#30
carbon disulfide
Concen: 0.05 ppbV
RT: 7.921 min Scan# 559
Delta R.T. -0.000 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 76 Resp: 918

Ion	Ratio	Lower	Upper
76	100		
44	192.0	11.6	17.4#

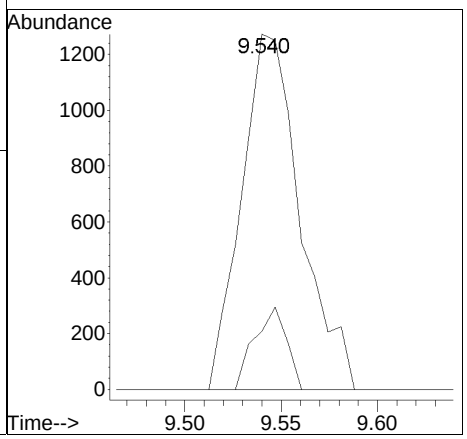


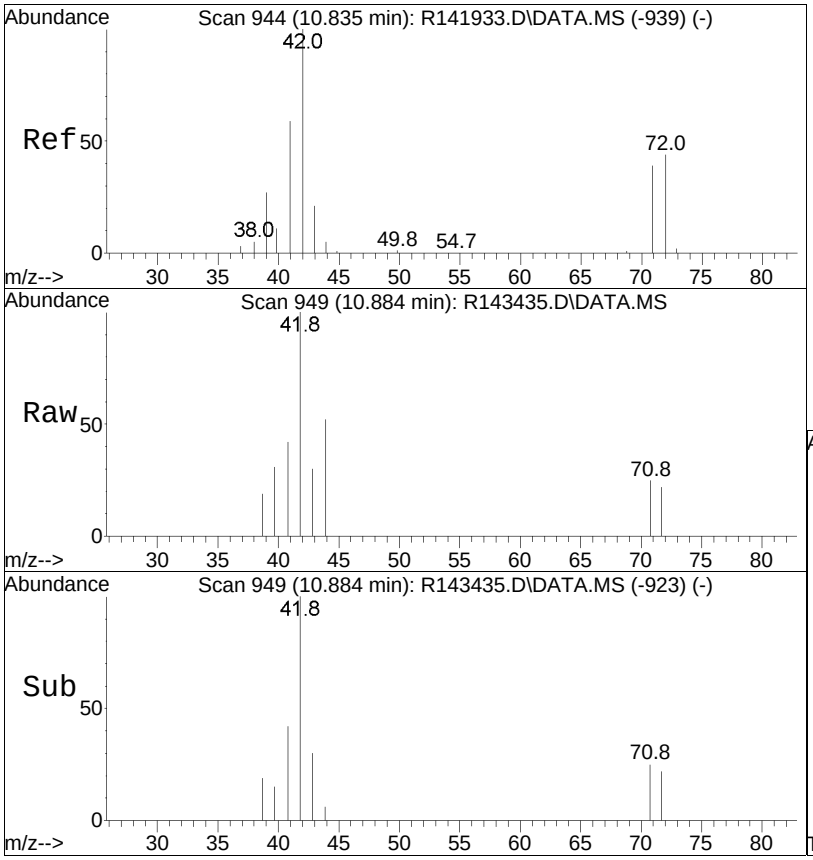


#36
2-butanone
Concen: 0.14 ppbV
RT: 9.540 min Scan# 789
Delta R.T. 0.034 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 43 Resp: 2704

Ion	Ratio	Lower	Upper
43	100		
72	16.3	15.4	23.0
57	0.0	5.8	8.6#

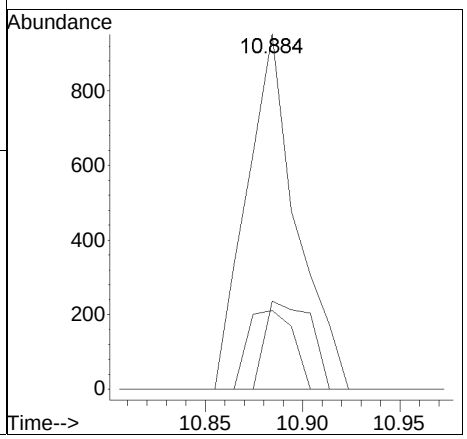




#40
Tetrahydrofuran
Concen: 0.16 ppbV
RT: 10.884 min Scan# 949
Delta R.T. 0.059 min
Lab File: R143435.D
Acq: 14 Aug 2015 10:19 am

Tgt Ion: 42 Resp: 1693

Ion	Ratio	Lower	Upper
42	100		
71	47.0	27.4	41.2#
72	22.2	28.4	42.6#



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143435.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/14/2015 10:19 am	Instrument	: Air Piano 1
Sample	: L1519114-01,3,250,250	Quant Date	: 8/14/2015 11:44 am

There are no manual integrations or false positives in this file.

Method Blank
Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811916-4,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 13 15:10:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.201	49	136875	10.000	ppbV	0.00
Standard Area = 146644			Recovery = 93.34%			
43) 1,4-difluorobenzene	12.419	114	319542	10.000	ppbV	0.00
Standard Area = 326890			Recovery = 97.75%			
67) chlorobenzene-D5	16.842	54	57381	10.000	ppbV	0.00
Standard Area = 60310			Recovery = 95.14%			

System Monitoring Compounds

Target Compounds				Qvalue
2) chlorodifluoromethane	0.000	0	N.D.	
3) propylene	0.000	0	N.D.	
4) propane	3.995	0	N.D.	
5) dichlorodifluoromethane	0.000	0	N.D.	
6) chloromethane	0.000	0	N.D.	
7) Freon-114	0.000	0	N.D.	
8) methanol	0.000	0	N.D.	
9) vinyl chloride	0.000	0	N.D.	
10) 1,3-butadiene	0.000	0	N.D.	
11) butane	4.842	0	N.D.	
13) bromomethane	0.000	0	N.D.	
14) chloroethane	0.000	0	N.D.	
15) ethanol	5.795	0	N.D.	
16) dichlorofluoromethane	0.000	0	N.D.	
17) vinyl bromide	0.000	0	N.D.	
18) acrolein	0.000	0	N.D.	
19) acetone	6.474	0	N.D.	
20) acetonitrile	0.000	0	N.D.	
21) trichlorofluoromethane	0.000	0	N.D.	
22) isopropyl alcohol	0.000	0	N.D.	
23) acrylonitrile	0.000	0	N.D.	
24) pentane	7.042	0	N.D.	
25) ethyl ether	0.000	0	N.D.	
26) 1,1-dichloroethene	0.000	0	N.D.	
27) tertiary butyl alcohol	0.000	0	N.D.	
28) methylene chloride	7.601	0	N.D.	
29) 3-chloropropene	0.000	0	N.D.	
30) carbon disulfide	7.929	0	N.D.	
31) Freon 113	0.000	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811916-4,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 13 15:10:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
32)	trans-1,2-dichloroethene	0.000		0	N.D.		
33)	1,1-dichloroethane	0.000		0	N.D.		
34)	MTBE	0.000		0	N.D.		
35)	vinyl acetate	0.000		0	N.D.		
36)	2-butanone	0.000		0	N.D.		
37)	cis-1,2-dichloroethene	0.000		0	N.D.		
38)	Ethyl Acetate	0.000		0	N.D.		
39)	chloroform	0.000		0	N.D.		
40)	Tetrahydrofuran	0.000		0	N.D.		
41)	2,2-dichloropropane	0.000		0	N.D.		
42)	1,2-dichloroethane	0.000		0	N.D.		
44)	hexane	0.000		0	N.D.		
45)	diisopropyl ether	0.000		0	N.D.		
46)	tert-butyl ethyl ether	0.000		0	N.D.		
48)	1,1,1-trichloroethane	0.000		0	N.D.		
49)	1,1-dichloropropene	0.000		0	N.D.		
50)	benzene	0.000		0	N.D.		
52)	carbon tetrachloride	0.000		0	N.D.		
53)	cyclohexane	0.000		0	N.D.	d	
54)	tert-amyl methyl ether	0.000		0	N.D.		
55)	dibromomethane	0.000		0	N.D.		
56)	1,2-dichloropropane	0.000		0	N.D.		
57)	bromodichloromethane	0.000		0	N.D.		
58)	1,4-dioxane	0.000		0	N.D.		
59)	trichloroethene	0.000		0	N.D.		
60)	2,2,4-trimethylpentane	0.000		0	N.D.		
61)	methyl methacrylate	0.000		0	N.D.		
62)	heptane	13.569		0	N.D.		
63)	cis-1,3-dichloropropene	0.000		0	N.D.		
64)	4-methyl-2-pentanone	0.000		0	N.D.		
65)	trans-1,3-dichloropropene	0.000		0	N.D.		
66)	1,1,2-trichloroethane	0.000		0	N.D.		
68)	toluene	0.000		0	N.D.		
71)	1,3-dichloropropane	0.000		0	N.D.		
72)	2-hexanone	0.000		0	N.D.		
74)	dibromochloromethane	0.000		0	N.D.		
75)	1,2-dibromoethane	0.000		0	N.D.		
76)	butyl acetate	0.000		0	N.D.		
77)	octane	0.000		0	N.D.		
78)	tetrachloroethene	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811916-4,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 13 15:10:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

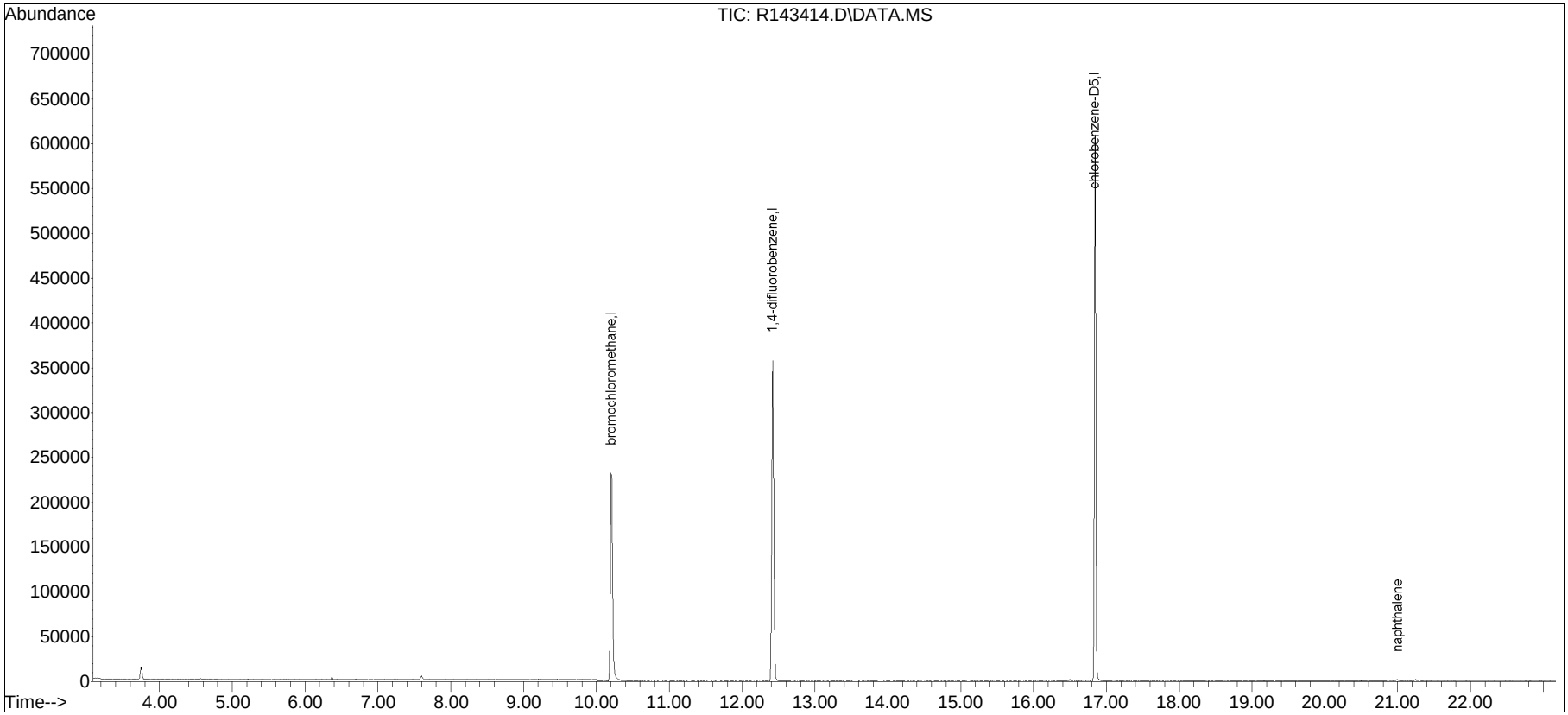
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	1,1,1,2-tetrachloroethane	0.000		0	N.D.		
80)	chlorobenzene	0.000		0	N.D.		
81)	ethylbenzene	17.175		0	N.D.		
83)	m+p-xylene	17.175		0	N.D.		
84)	bromoform	0.000		0	N.D.		
85)	styrene	0.000		0	N.D.		
86)	1,1,2,2-tetrachloroethane	0.000		0	N.D.		
87)	o-xylene	0.000		0	N.D.		
88)	1,2,3-trichloropropane	0.000		0	N.D.		
89)	nonane	17.762		0	N.D.		
91)	isopropylbenzene	18.132		0	N.D.		
92)	bromobenzene	0.000		0	N.D.		
93)	2-chlorotoluene	0.000		0	N.D.		
94)	n-propylbenzene	0.000		0	N.D.		
95)	4-chlorotoluene	18.557		0	N.D.		
96)	4-ethyl toluene	18.616		0	N.D.		
97)	1,3,5-trimethylbenzene	18.668		0	N.D.		
98)	tert-butylbenzene	18.979		0	N.D.		
99)	1,2,4-trimethylbenzene	18.984		0	N.D.		
100)	decane	0.000		0	N.D.		
101)	Benzyl Chloride	18.979		0	N.D.		
102)	1,3-dichlorobenzene	19.112		0	N.D.		
103)	1,4-dichlorobenzene	19.165		0	N.D.		
104)	sec-butylbenzene	19.179		0	N.D.		
106)	p-isopropyltoluene	19.293		0	N.D.		
107)	1,2-dichlorobenzene	19.426		0	N.D.		
108)	n-butylbenzene	19.622		0	N.D.		
111)	1,2-dibromo-3-chloropr...	0.000		0	N.D.		
112)	undecane	0.000		0	N.D.		
114)	dodecane	0.000		0	N.D.		
115)	1,2,4-trichlorobenzene	20.870		0	N.D.		
116)	naphthalene	20.999	128	2498	0.048	ppbV #	79
117)	1,2,3-trichlorobenzene	21.246		0	N.D.		
119)	hexachlorobutadiene	21.299		0	N.D.		

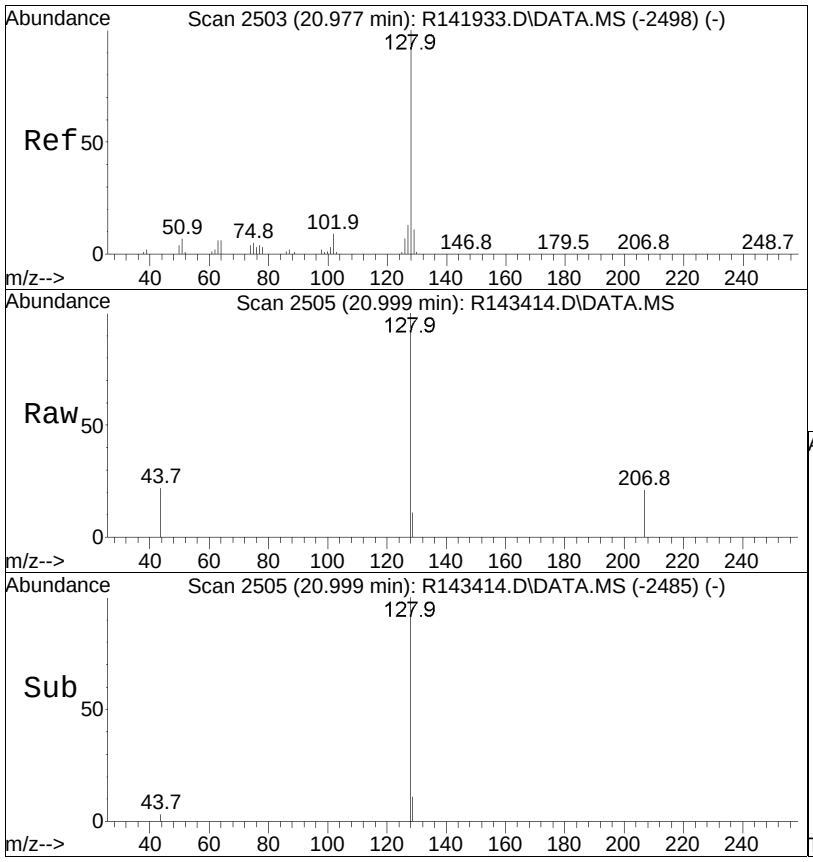
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed43412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143414.D
Acq On : 13 Aug 2015 2:46 pm
Operator : AIRPIANO1:RY
Sample : WG811916-4,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 13 15:10:57 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

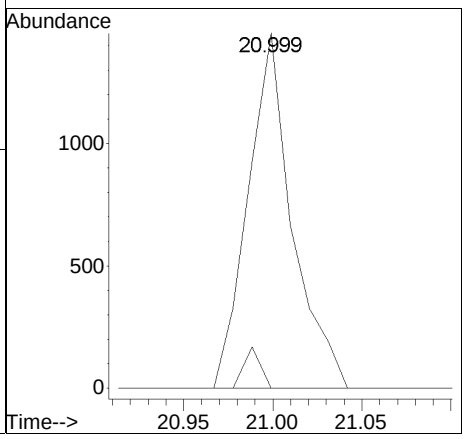




#116
naphthalene
Concen: 0.05 ppbV
RT: 20.999 min Scan# 2505
Delta R.T. 0.011 min
Lab File: R143414.D
Acq: 13 Aug 2015 2:46 pm

Tgt Ion:128 Resp: 2498

Ion	Ratio	Lower	Upper
128	100		
102	0.0	5.8	8.8#



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143414.D	Operator	: AIRPIANO1:RY
Date Inj'd	: 8/13/2015 2:46 pm	Instrument	: Air Piano 1
Sample	: WG811916-4,3,250,250	Quant Date	: 8/13/2015 3:10 pm

There are no manual integrations or false positives in this file.

Batch Quality Control

LCS Raw Data

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	bromochloromethane	10.000	10.000	0.0	82	0.00
2		chlorodifluoromethane	10.000	9.028	9.7	77	0.00
3		propylene	10.000	10.609	-6.1	89	0.00
4		propane	10.000	7.762	22.4	68	0.00
5		dichlorodifluoromethane	10.000	8.636	13.6	72	0.00
6	C	chloromethane	10.000	10.158	-1.6	87	0.00
7		Freon-114	10.000	10.502	-5.0	88	-0.01
8	C	methanol	50.000	46.473	7.1	77	0.00
9	C	vinyl chloride	10.000	10.402	-4.0	86	0.00
10	C	1,3-butadiene	10.000	11.227	-12.3	93	0.00
11		butane	10.000	9.240	7.6	86	-0.01
13	C	bromomethane	10.000	10.031	-0.3	89	0.00
14	C	chloroethane	10.000	10.040	-0.4	89	0.00
15		ethanol	50.000	49.580	0.8	83	0.00
16		dichlorofluoromethane	10.000	9.435	5.6	81	0.00
17	C	vinyl bromide	10.000	10.065	-0.6	85	0.00
18	C	acrolein	10.000	10.235	-2.3	84	0.00
19		acetone	50.000	51.446	-2.9	89	0.00
20	C	acetonitrile	10.000	9.745	2.6	86	0.00
21		trichlorofluoromethane	10.000	9.923	0.8	85	0.00
22		isopropyl alcohol	10.000	10.885	-8.8	95	0.00
23	C	acrylonitrile	10.000	10.117	-1.2	86	0.00
24		pentane	10.000	9.350	6.5	85	0.00
25		ethyl ether	10.000	9.645	3.6	81	0.00
26	C	1,1-dichloroethene	10.000	9.930	0.7	85	0.00
27		tertiary butyl alcohol	10.000	9.503	5.0	80	0.00
28	C	methylene chloride	10.000	10.400	-4.0	92	0.00
29	C	3-chloropropene	10.000	10.455	-4.6	92	0.00
30	C	carbon disulfide	10.000	9.940	0.6	84	0.00
31		Freon 113	10.000	10.377	-3.8	87	0.00
32		trans-1,2-dichloroethene	10.000	8.588	14.1	70	0.00
33	C	1,1-dichloroethane	10.000	8.986	10.1	76	0.00
34	C	MTBE	10.000	9.860	1.4	83	0.00
35	C	vinyl acetate	10.000	10.944	-9.4	92	0.00
36	C	2-butanone	10.000	9.710	2.9	83	0.00
37		cis-1,2-dichloroethene	10.000	10.869	-8.7	92	0.00
38		Ethyl Acetate	10.000	9.928	0.7	82	0.00
39	C	chloroform	10.000	10.000	0.0	85	0.00
40		Tetrahydrofuran	10.000	9.418	5.8	82	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	10.000	9.010	9.9	78	0.00
42	C	1,2-dichloroethane	10.000	9.744	2.6	82	0.00
43	I	1,4-difluorobenzene	10.000	10.000	0.0	84	0.00
44	C	hexane	10.000	9.260	7.4	81	0.00
45		diisopropyl ether	10.000	9.168	8.3	81	0.00
46		tert-butyl ethyl ether	10.000	8.897	11.0	77	0.00
48	C	1,1,1-trichloroethane	10.000	9.560	4.4	83	0.00
49		1,1-dichloropropene	10.000	9.137	8.6	78	-0.01
50	C	benzene	10.000	9.396	6.0	83	0.00
52	C	carbon tetrachloride	10.000	10.069	-0.7	83	-0.01
53		cyclohexane	10.000	9.527	4.7	81	0.00
54		tert-amyl methyl ether	10.000	9.017	9.8	77	0.00
55		dibromomethane	10.000	9.115	8.8	80	-0.01
56	C	1,2-dichloropropane	10.000	9.565	4.4	81	0.00
57		bromodichloromethane	10.000	9.486	5.1	82	0.00
58	C	1,4-dioxane	10.000	10.138	-1.4	83	0.00
59	C	trichloroethene	10.000	9.634	3.7	83	0.00
60	C	2,2,4-trimethylpentane	10.000	9.304	7.0	81	0.00
61		methyl methacrylate	10.000	8.680	13.2	75	0.00
62		heptane	10.000	9.086	9.1	79	0.00
63	C	cis-1,3-dichloropropene	10.000	10.119	-1.2	84	-0.02
64	C	4-methyl-2-pentanone	10.000	9.399	6.0	80	0.00
65		trans-1,3-dichloropropene	10.000	8.744	12.6	71	0.00
66	C	1,1,2-trichloroethane	10.000	9.845	1.5	84	0.00
67	I	chlorobenzene-D5	10.000	10.000	0.0	82	0.00
68	C	toluene	10.000	10.011	-0.1	84	0.00
71		1,3-dichloropropane	10.000	9.334	6.7	78	0.00
72		2-hexanone	10.000	9.937	0.6	80	0.00
74		dibromochloromethane	10.000	10.312	-3.1	83	0.00
75	C	1,2-dibromoethane	10.000	10.358	-3.6	85	0.00
76		butyl acetate	10.000	9.893	1.1	75	0.00
77		octane	10.000	9.182	8.2	78	0.00
78	C	tetrachloroethene	10.000	10.167	-1.7	85	0.00
79		1,1,1,2-tetrachloroethane	10.000	9.617	3.8	78	0.00
80	C	chlorobenzene	10.000	10.052	-0.5	83	0.00
81	C	ethylbenzene	10.000	9.975	0.3	83	0.00
83	C	m+p-xylene	20.000	20.267	-1.3	83	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
84 C	bromoform	10.000	10.371	-3.7	81	0.00
85 C	styrene	10.000	10.182	-1.8	83	0.00
86 C	1,1,2,2-tetrachloroethane	10.000	10.644	-6.4	86	0.00
87 C	o-xylene	10.000	10.427	-4.3	86	0.00
88	1,2,3-trichloropropane	10.000	9.464	5.4	77	0.00
89	nonane	10.000	9.157	8.4	74	0.00
91 C	isopropylbenzene	10.000	9.976	0.2	82	0.00
92	bromobenzene	10.000	9.481	5.2	80	0.00
93	2-chlorotoluene	10.000	9.235	7.7	76	0.00
94	n-propylbenzene	10.000	9.553	4.5	79	0.00
95	4-chlorotoluene	10.000	9.442	5.6	79	0.00
96	4-ethyl toluene	10.000	9.415	5.9	76	0.00
97	1,3,5-trimethylbenzene	10.000	10.132	-1.3	83	0.00
98	tert-butylbenzene	10.000	9.789	2.1	79	0.00
99	1,2,4-trimethylbenzene	10.000	10.554	-5.5	83	0.00
100	decane	10.000	9.650	3.5	77	0.00
101 C	Benzyl Chloride	10.000	10.128	-1.3	77	0.00
102	1,3-dichlorobenzene	10.000	10.497	-5.0	83	0.00
103 C	1,4-dichlorobenzene	10.000	10.486	-4.9	84	0.00
104	sec-butylbenzene	10.000	9.884	1.2	79	0.00
106	p-isopropyltoluene	10.000	9.316	6.8	73	0.00
107	1,2-dichlorobenzene	10.000	10.599	-6.0	85	0.00
108	n-butylbenzene	10.000	10.283	-2.8	80	0.00
111 C	1,2-dibromo-3-chloropropane	10.000	9.642	3.6	73	0.00
112	undecane	10.000	10.548	-5.5	74	0.00
114	dodecane	10.000	12.970	-29.7	68	0.00
115 C	1,2,4-trichlorobenzene	10.000	12.205	-22.1	79	0.00
116	naphthalene	10.000	11.576	-15.8	75	-0.01
117	1,2,3-trichlorobenzene	10.000	11.802	-18.0	75	0.00
119 C	hexachlorobutadiene	10.000	11.603	-16.0	79	-0.01

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	146644	10.000	ppbV	0.00
Standard Area = 146644			Recovery = 100.00%			
43) 1,4-difluorobenzene	12.419	114	326890	10.000	ppbV	0.00
Standard Area = 326890			Recovery = 100.00%			
67) chlorobenzene-D5	16.842	54	60310	10.000	ppbV	0.00
Standard Area = 60310			Recovery = 100.00%			
System Monitoring Compounds						
Target Compounds						Qvalue
2) chlorodifluoromethane	4.024	51	121370	9.028	ppbV	98
3) propylene	4.064	41	69516M6	10.609	ppbV	
4) propane	4.093	29	49970	7.762	ppbV	98
5) dichlorodifluoromethane	4.162	85	107310	8.636	ppbV	99
6) chloromethane	4.379	50	74582	10.158	ppbV	94
7) Freon-114	4.527	85	205708	10.502	ppbV	96
8) methanol	4.616	31	93661	46.473	ppbV	95
9) vinyl chloride	4.694	62	77174	10.402	ppbV	97
10) 1,3-butadiene	4.892	54	61834	11.227	ppbV	93
11) butane	4.961	43	108049	9.240	ppbV	99
13) bromomethane	5.267	94	76136	10.031	ppbV	97
14) chloroethane	5.523	64	36257	10.040	ppbV	99
15) ethanol	5.715	31	198905	49.580	ppbV	94
16) dichlorofluoromethane	5.675	67	139858	9.435	ppbV	99
17) vinyl bromide	6.002	106	78893	10.065	ppbV	99
18) acrolein	6.178	56	30886	10.235	ppbV	97
19) acetone	6.362	43	551629	51.446	ppbV	98
20) acetonitrile	6.002	41	64643	9.745	ppbV	96
21) trichlorofluoromethane	6.586	101	193424	9.923	ppbV	99
22) isopropyl alcohol	6.722	45	143399	10.885	ppbV	100
23) acrylonitrile	6.994	53	57407	10.117	ppbV	97
24) pentane	7.066	43	125316M6	9.350	ppbV	
25) ethyl ether	7.114	31	73792	9.645	ppbV	97
26) 1,1-dichloroethene	7.425	61	121993	9.930	ppbV	97
27) tertiary butyl alcohol	7.513	59	144395	9.503	ppbV	99
28) methylene chloride	7.593	49	103435	10.400	ppbV	97
29) 3-chloropropene	7.745	41	107469	10.455	ppbV	93
30) carbon disulfide	7.921	76	213814	9.940	ppbV	98
31) Freon 113	7.937	101	166581	10.377	ppbV	97

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
32) trans-1,2-dichloroethene	8.771	61	112227	8.588	ppbV		98
33) 1,1-dichloroethane	9.011	63	143937	8.986	ppbV		98
34) MTBE	9.101	73	216344	9.860	ppbV		97
35) vinyl acetate	9.224	43	239644	10.944	ppbV		98
36) 2-butanone	9.506	43	200414	9.710	ppbV		99
37) cis-1,2-dichloroethene	10.013	61	161078	10.869	ppbV		100
38) Ethyl Acetate	10.304	61	37867	9.928	ppbV		97
39) chloroform	10.370	83	212846	10.000	ppbV		99
40) Tetrahydrofuran	10.825	42	113712M6	9.418	ppbV		
41) 2,2-dichloropropane	10.380	77	159691	9.010	ppbV		99
42) 1,2-dichloroethane	11.208	62	109542	9.744	ppbV		98
44) hexane	10.257	57	176602	9.260	ppbV	#	72
45) diisopropyl ether	10.276	87	76530	9.168	ppbV		95
46) tert-butyl ethyl ether	10.894	59	248552	8.897	ppbV		99
48) 1,1,1-trichloroethane	11.493	97	170040	9.560	ppbV		99
49) 1,1-dichloropropene	11.849	75	116787	9.137	ppbV		100
50) benzene	12.015	78	251708	9.396	ppbV		98
52) carbon tetrachloride	12.180	117	179888	10.069	ppbV		98
53) cyclohexane	12.325	56	145005	9.527	ppbV		98
54) tert-amyl methyl ether	12.688	73	216434	9.017	ppbV		98
55) dibromomethane	12.916	93	100594	9.115	ppbV		99
56) 1,2-dichloropropane	12.947	63	101557	9.565	ppbV		98
57) bromodichloromethane	13.175	83	192671	9.486	ppbV		99
58) 1,4-dioxane	13.216	88	60570	10.138	ppbV		99
59) trichloroethene	13.216	130	134151	9.634	ppbV		98
60) 2,2,4-trimethylpentane	13.247	57	467813	9.304	ppbV		98
61) methyl methacrylate	13.434	41	117801	8.680	ppbV		97
62) heptane	13.548	43	178859	9.086	ppbV		98
63) cis-1,3-dichloropropene	14.187	75	140141	10.119	ppbV		98
64) 4-methyl-2-pentanone	14.235	43	239642	9.399	ppbV		99
65) trans-1,3-dichloropropene	14.778	75	116352	8.744	ppbV		97
66) 1,1,2-trichloroethane	14.968	97	115274	9.845	ppbV		97
68) toluene	15.248	91	337570	10.011	ppbV		100
71) 1,3-dichloropropane	15.275	76	130232	9.334	ppbV		98
72) 2-hexanone	15.492	43	229452	9.937	ppbV	#	95
74) dibromochloromethane	15.664	129	228429	10.312	ppbV		97
75) 1,2-dibromoethane	15.899	107	191534	10.358	ppbV		98
76) butyl acetate	16.071	73	29078	9.893	ppbV		98
77) octane	16.152	85	81274	9.182	ppbV		94
78) tetrachloroethene	16.306	166	187279	10.167	ppbV		95

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Default-LCS-AP2 - All compounds listed

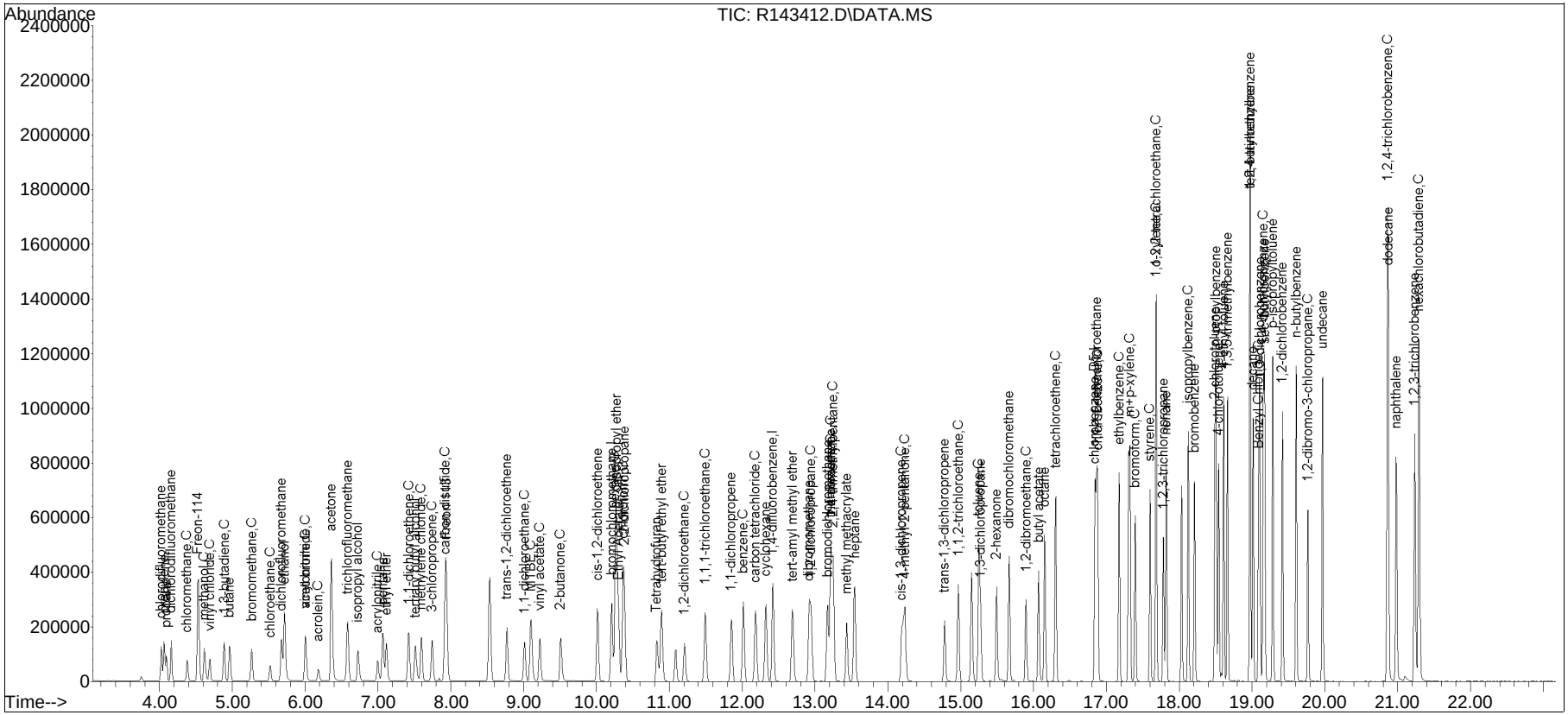
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79)	1,1,1,2-tetrachloroethane	16.864	131	143596	9.617	ppbV		97
80)	chlorobenzene	16.879	112	283781	10.052	ppbV		99
81)	ethylbenzene	17.174	91	433670	9.975	ppbV		99
83)	m+p-xylene	17.322	91	674406	20.267	ppbV		99
84)	bromoform	17.396	173	241146	10.371	ppbV		98
85)	styrene	17.599	104	273253	10.182	ppbV		100
86)	1,1,2,2-tetrachloroethane	17.681	83	263321	10.644	ppbV		99
87)	o-xylene	17.684	91	351468	10.427	ppbV		98
88)	1,2,3-trichloropropane	17.784	75	172622	9.464	ppbV		99
89)	nonane	17.821	43	244017	9.157	ppbV	#	98
91)	isopropylbenzene	18.124	105	470079	9.976	ppbV		100
92)	bromobenzene	18.209	77	216348	9.481	ppbV		94
93)	2-chlorotoluene	18.490	126	127555	9.235	ppbV		80
94)	n-propylbenzene	18.505	120	134033	9.553	ppbV		100
95)	4-chlorotoluene	18.542	91	334006	9.442	ppbV		99
96)	4-ethyl toluene	18.612	105	497684	9.415	ppbV		100
97)	1,3,5-trimethylbenzene	18.664	105	422976	10.132	ppbV		100
98)	tert-butylbenzene	18.974	119	437365	9.789	ppbV		99
99)	1,2,4-trimethylbenzene	18.974	105	429897	10.554	ppbV		94
100)	decane	19.012	57	263409	9.650	ppbV		98
101)	Benzyl Chloride	19.088	91	342700	10.128	ppbV		99
102)	1,3-dichlorobenzene	19.107	146	334410	10.497	ppbV		99
103)	1,4-dichlorobenzene	19.155	146	338738	10.486	ppbV		98
104)	sec-butylbenzene	19.174	105	584894	9.884	ppbV		100
106)	p-isopropyltoluene	19.283	119	507667	9.316	ppbV		99
107)	1,2-dichlorobenzene	19.417	146	326928	10.599	ppbV		98
108)	n-butylbenzene	19.607	91	489213	10.283	ppbV		99
111)	1,2-dibromo-3-chloropr...	19.769	75	106501	9.642	ppbV		99
112)	undecane	19.969	57	311180	10.548	ppbV		99
114)	dodecane	20.870	57	318078	12.970	ppbV		96
115)	1,2,4-trichlorobenzene	20.860	180	304967	12.205	ppbV		100
116)	naphthalene	20.977	128	631461	11.576	ppbV		100
117)	1,2,3-trichlorobenzene	21.235	180	274716	11.802	ppbV		99
119)	hexachlorobutadiene	21.288	225	252657	11.603	ppbV		97

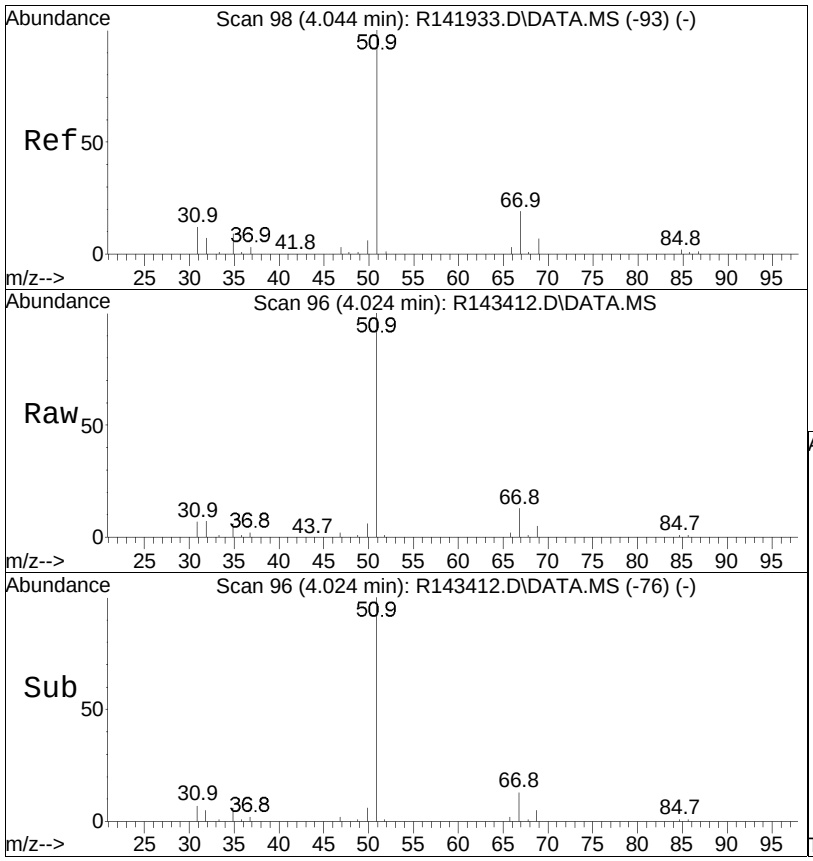
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Default-LCS-AP2 - All compounds listed43412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-3,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

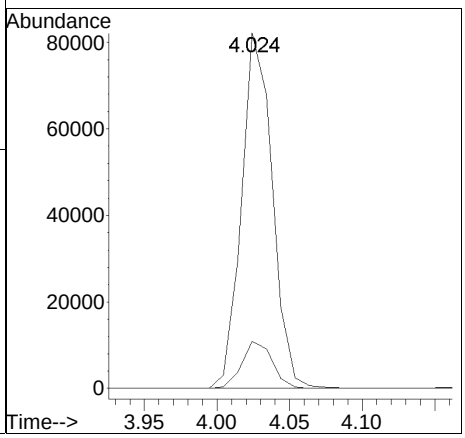


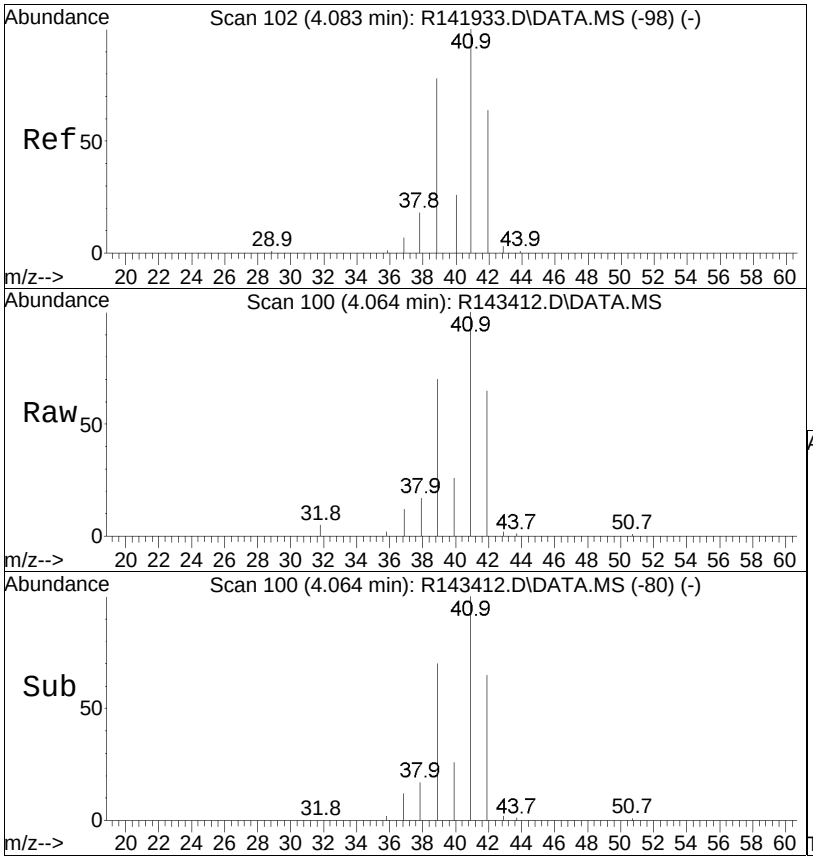


#2
chlorodifluoromethane
Concen: 9.03 ppbV
RT: 4.024 min Scan# 96
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 51 Resp: 121370

Ion	Ratio	Lower	Upper
51	100		
67	13.2	11.3	16.9

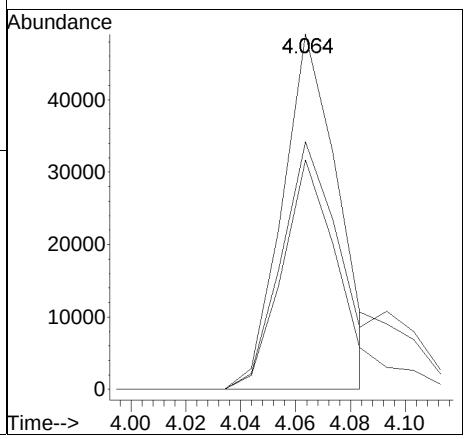


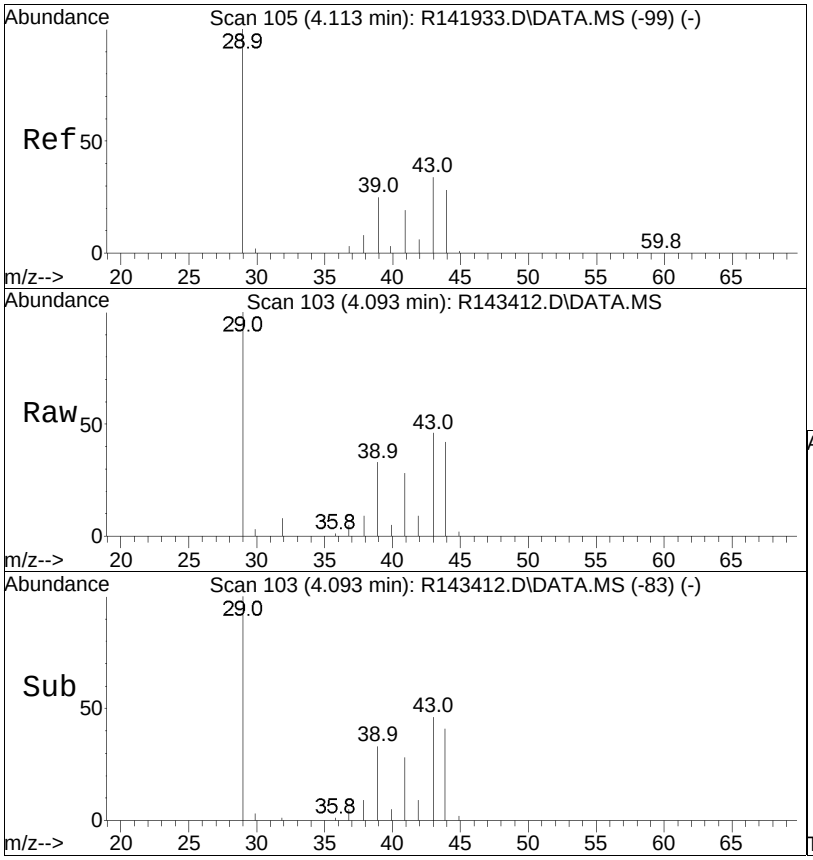


#3
propylene
Concen: 10.61 ppbV m
RT: 4.064 min Scan# 100
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 41 Resp: 69516

Ion	Ratio	Lower	Upper
41	100		
42	64.5	53.1	79.7
39	69.7	57.7	86.5

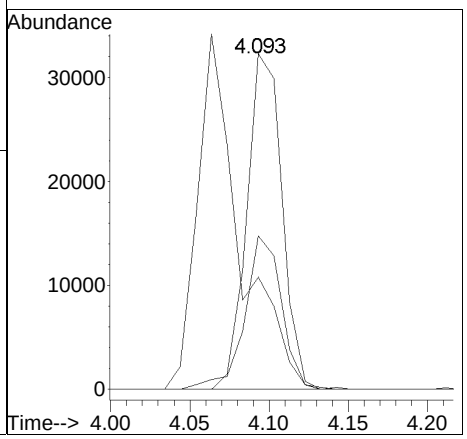


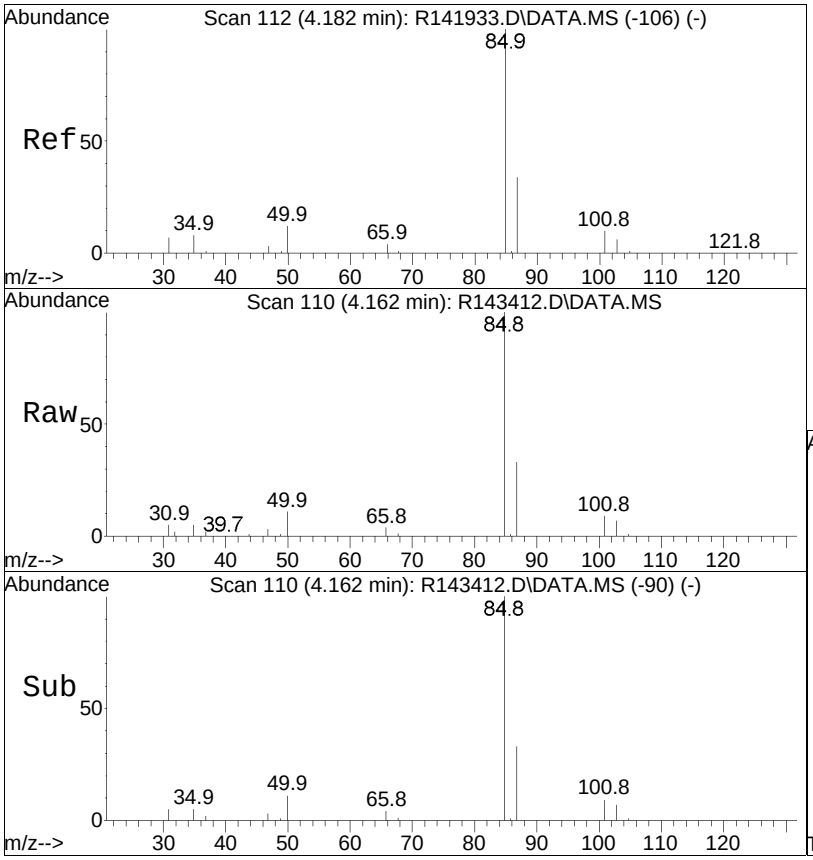


#4
propane
Concen: 7.76 ppbV
RT: 4.093 min Scan# 103
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 29 Resp: 49970

Ion	Ratio	Lower	Upper
29	100		
43	45.7	37.4	56.0
39	33.4	25.4	38.2

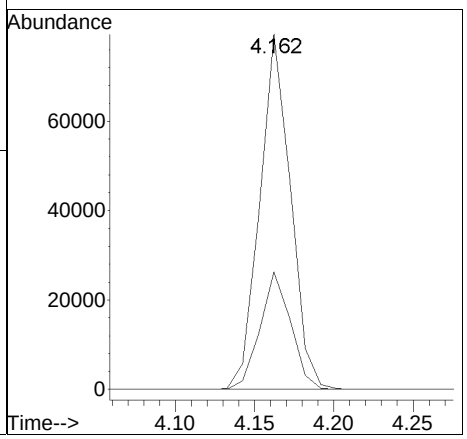


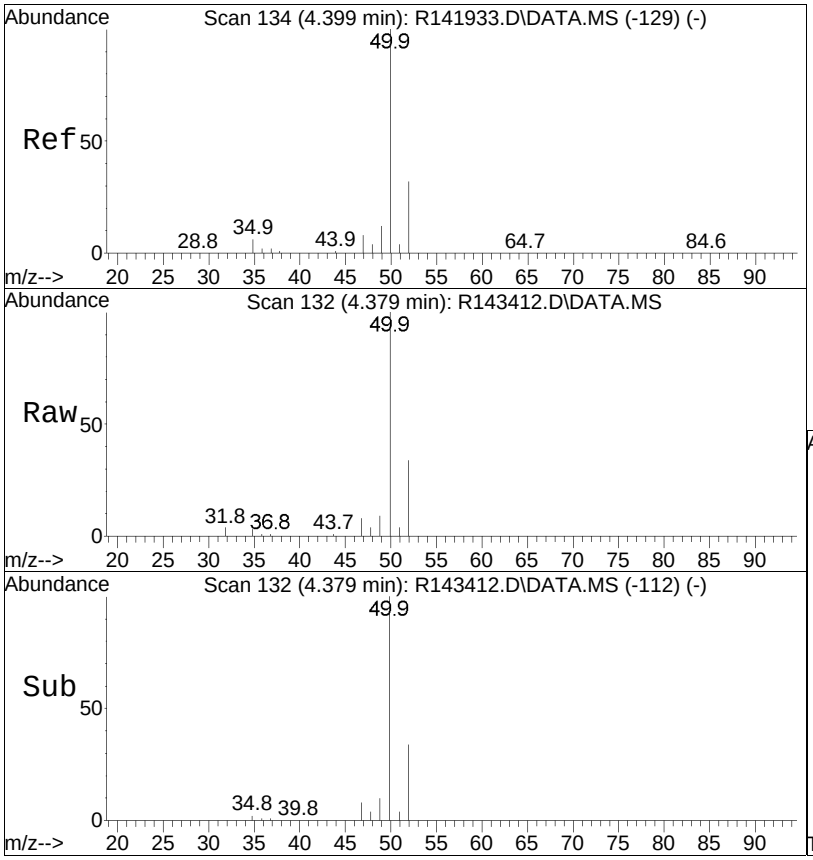


#5
dichlorodifluoromethane
Concen: 8.64 ppbV
RT: 4.162 min Scan# 110
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 85 Resp: 107310

Ion	Ratio	Lower	Upper
85	100		
87	33.1	25.9	38.9

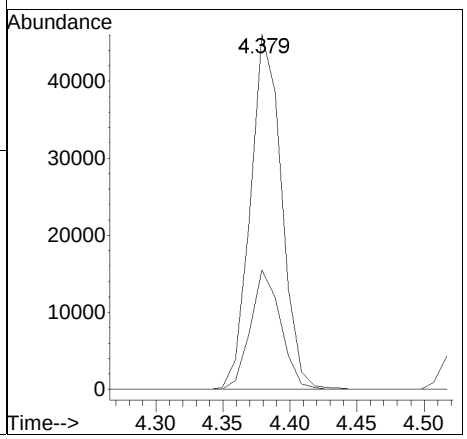


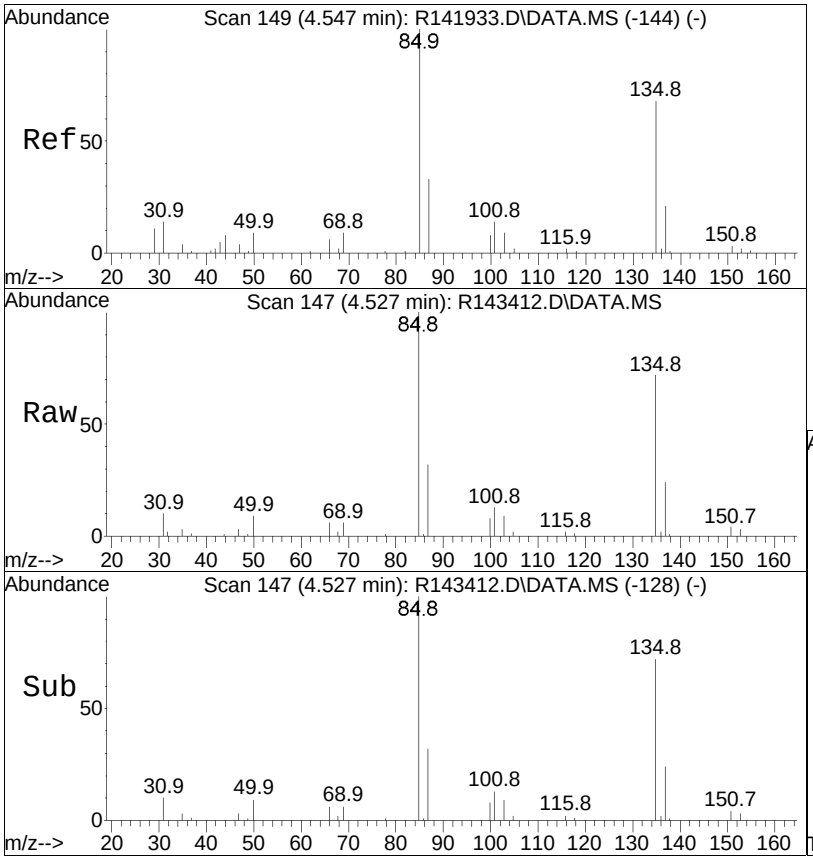


#6
chloromethane
Concen: 10.16 ppbV
RT: 4.379 min Scan# 132
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 50 Resp: 74582

Ion	Ratio	Lower	Upper
50	100		
52	33.7	24.2	36.4

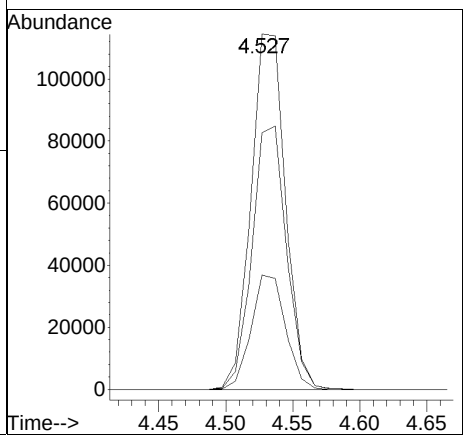


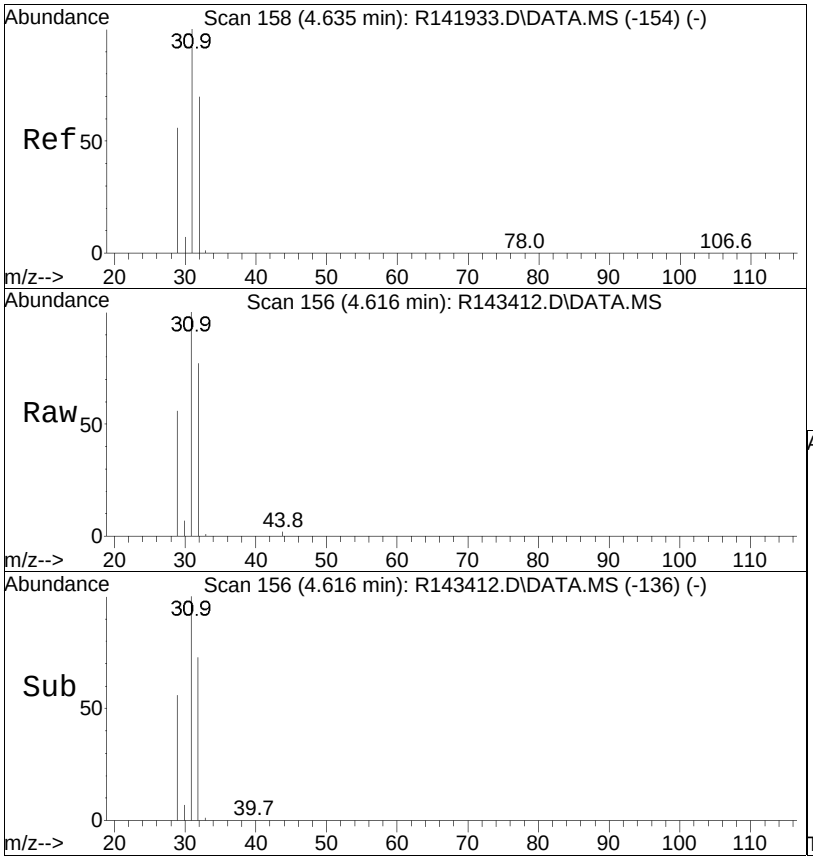


#7
Freon-114
Concen: 10.50 ppbV
RT: 4.527 min Scan# 147
Delta R.T. -0.010 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 85 Resp: 205708

Ion	Ratio	Lower	Upper
85	100		
87	32.2	25.7	38.5
135	72.2	61.4	92.0

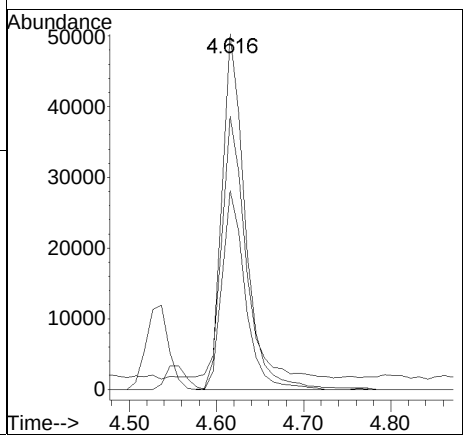


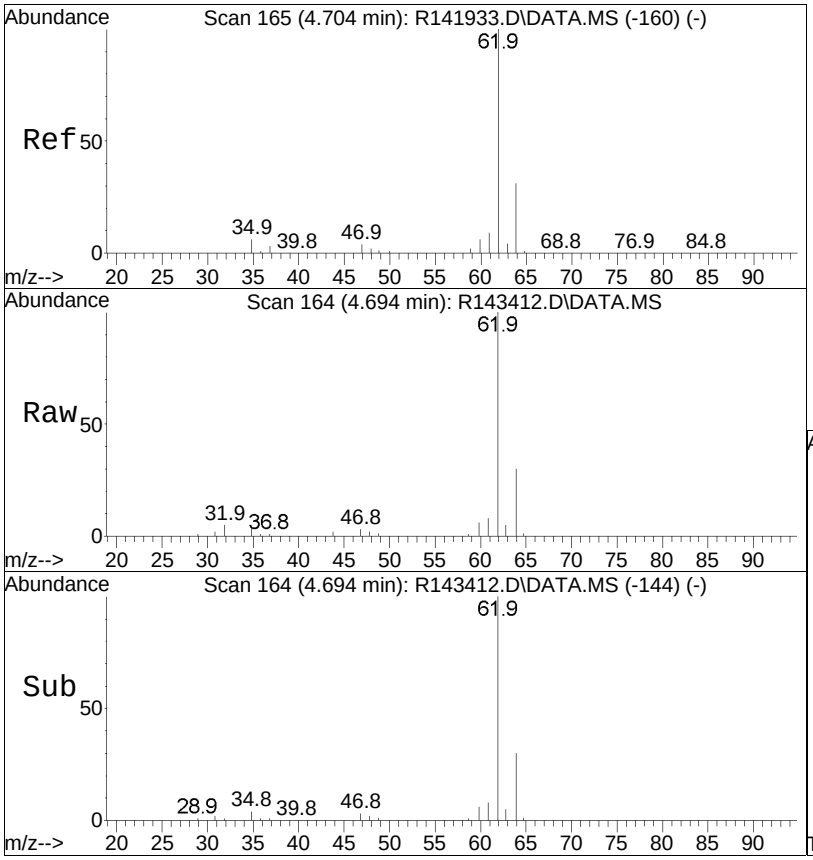


#8
methanol
Concen: 46.47 ppbV
RT: 4.616 min Scan# 156
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 31 Resp: 93661

Ion	Ratio	Lower	Upper
31	100		
32	76.8	57.2	85.8
29	55.9	46.4	69.6

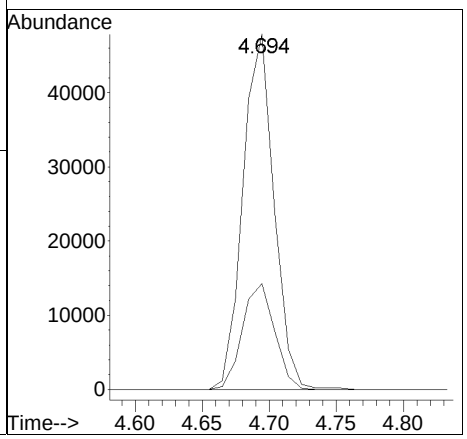


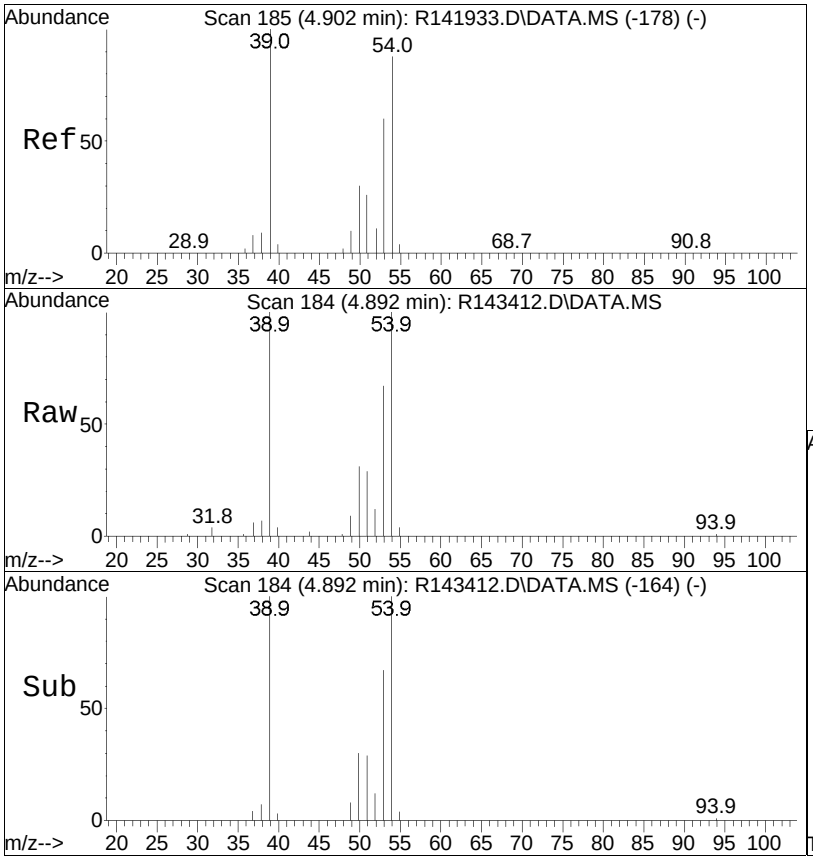


#9
vinyl chloride
Concen: 10.40 ppbV
RT: 4.694 min Scan# 164
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 62 Resp: 77174

Ion	Ratio	Lower	Upper
62	100		
64	29.8	25.0	37.6

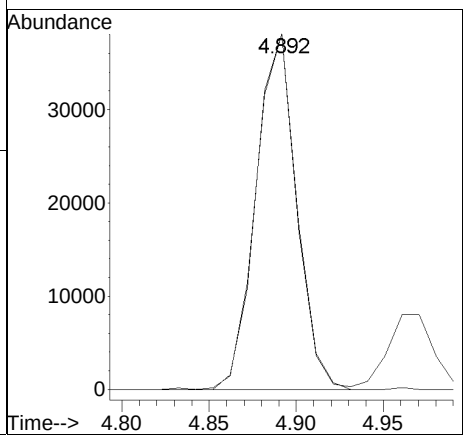


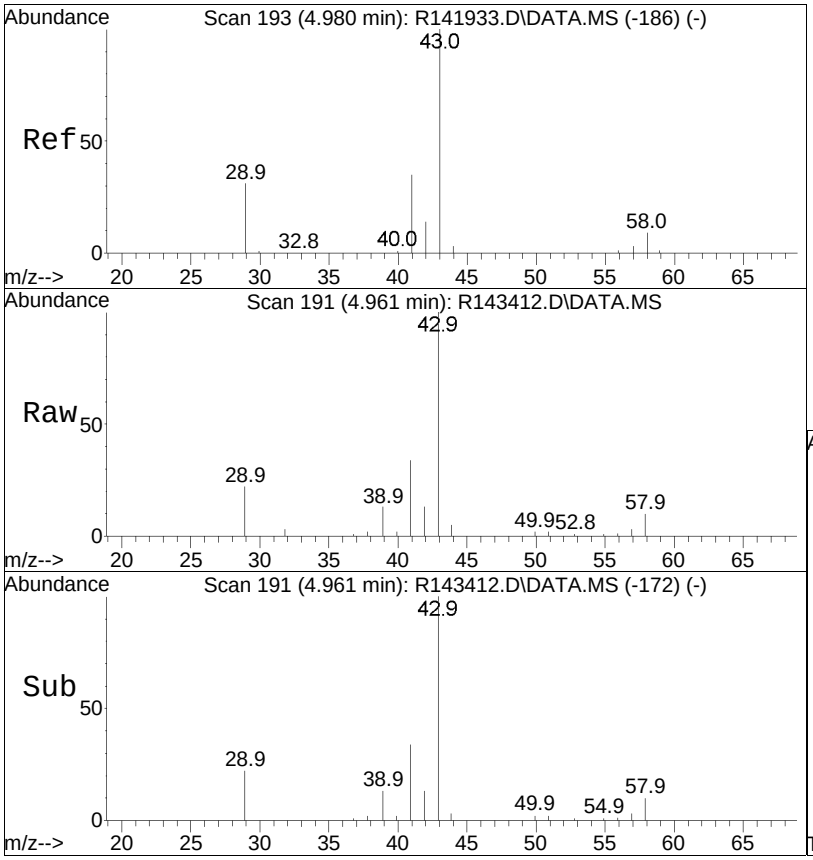


#10
1,3-butadiene
Concen: 11.23 ppbV
RT: 4.892 min Scan# 184
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 54 Resp: 61834

Ion	Ratio	Lower	Upper
54	100		
39	100.0	86.1	129.1

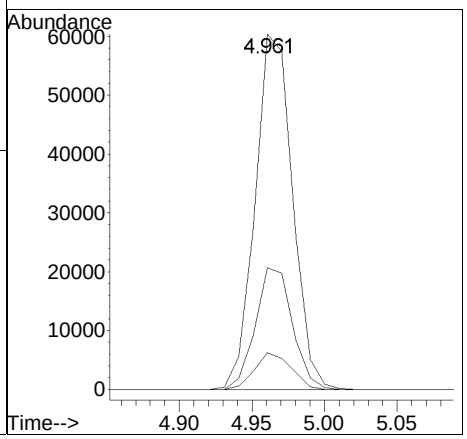


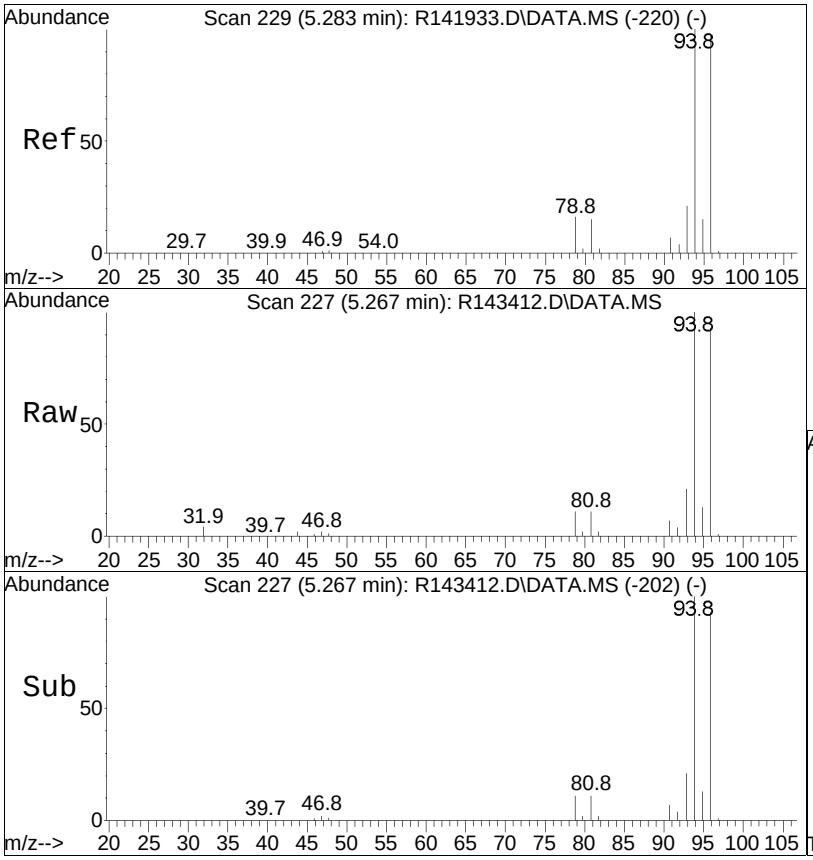


#11
butane
Concen: 9.24 ppbV
RT: 4.961 min Scan# 191
Delta R.T. -0.010 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 108049

Ion	Ratio	Lower	Upper
43	100		
58	10.3	7.4	11.0
41	34.2	27.6	41.4

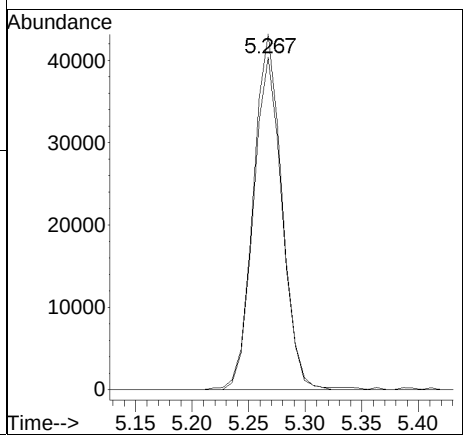


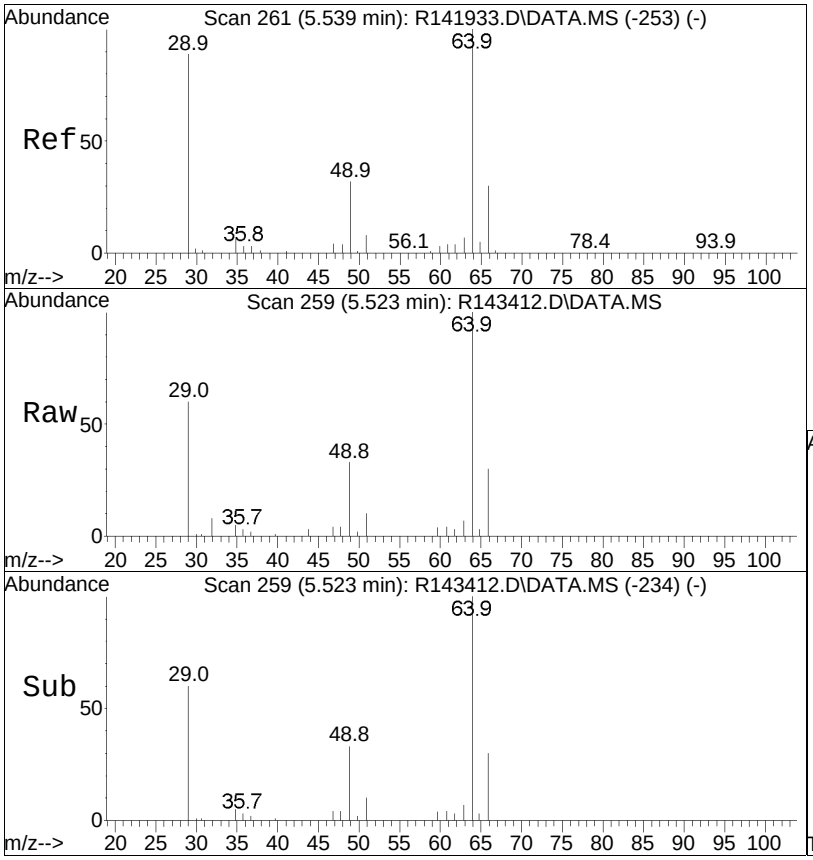


#13
bromomethane
Concen: 10.03 ppbV
RT: 5.267 min Scan# 227
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 94 Resp: 76136

Ion	Ratio	Lower	Upper
94	100		
96	93.5	76.9	115.3

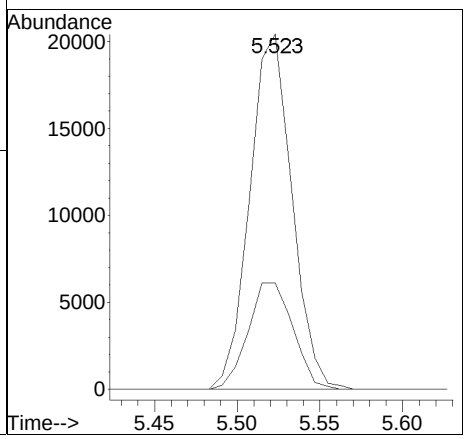


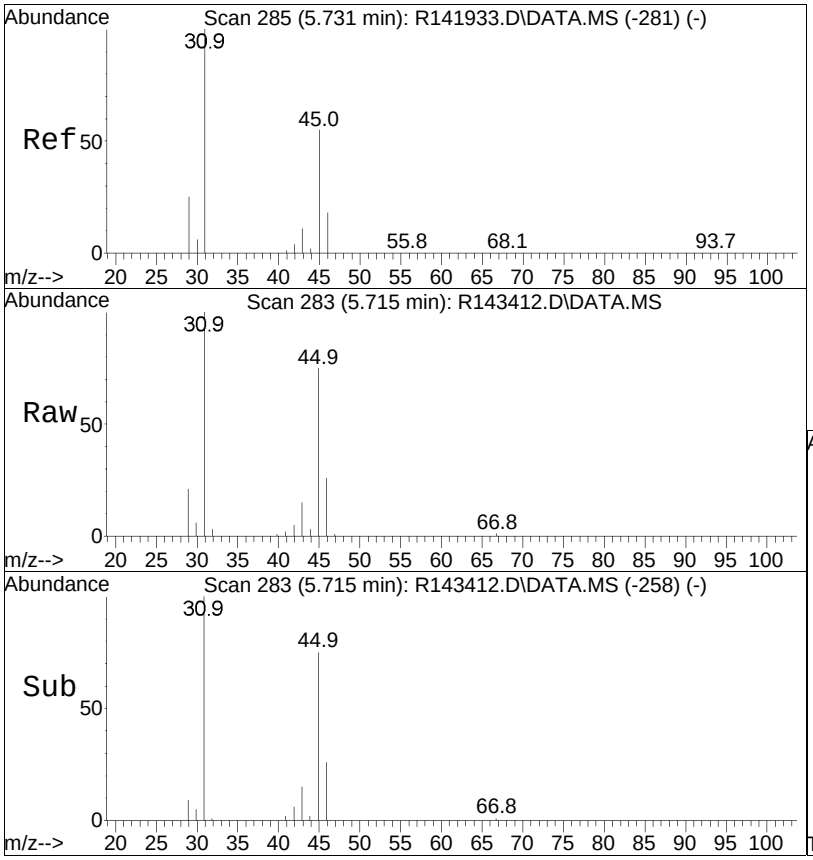


#14
chloroethane
Concen: 10.04 ppbV
RT: 5.523 min Scan# 259
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 64 Resp: 36257

Ion	Ratio	Lower	Upper
64	100		
66	30.0	24.4	36.6

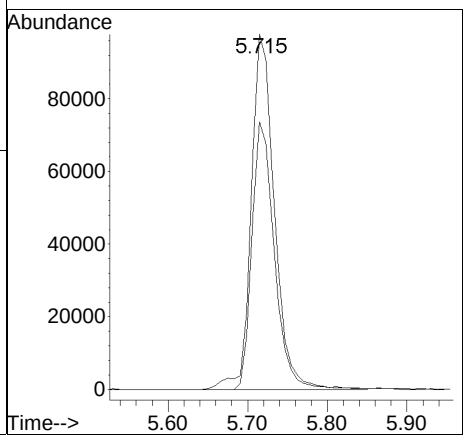


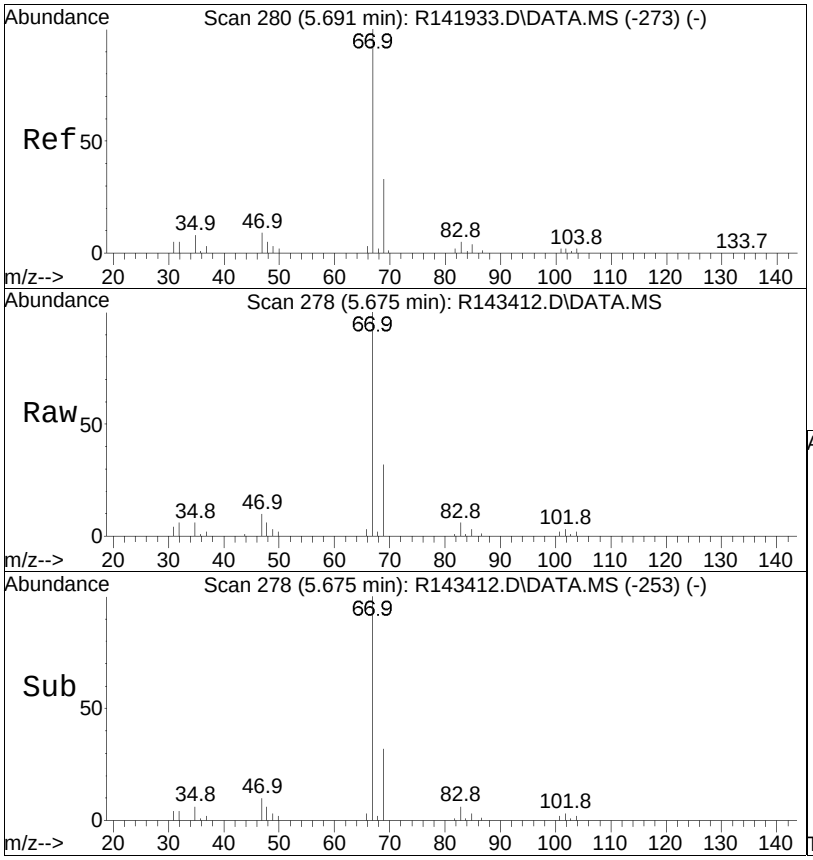


#15
ethanol
Concen: 49.58 ppbV
RT: 5.715 min Scan# 283
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 31 Resp: 198905

Ion	Ratio	Lower	Upper
31	100		
45	75.3	56.5	84.7

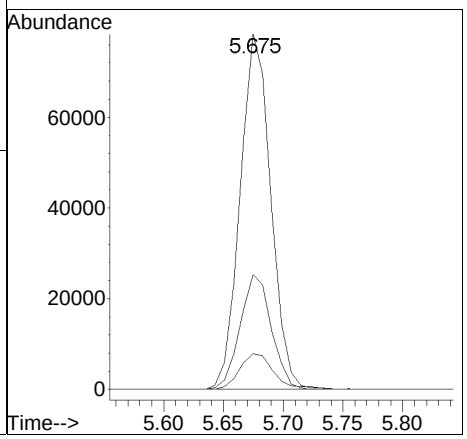


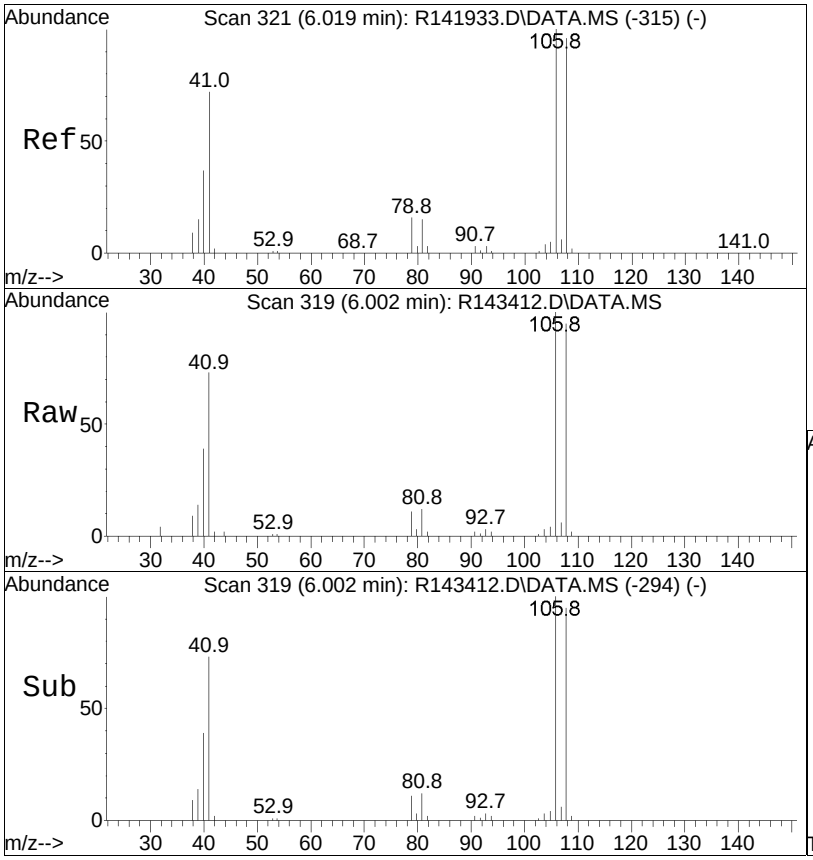


#16
dichlorofluoromethane
Concen: 9.44 ppbV
RT: 5.675 min Scan# 278
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 67 Resp: 139858

Ion	Ratio	Lower	Upper
67	100		
69	32.3	26.4	39.6
47	10.0	8.7	13.1

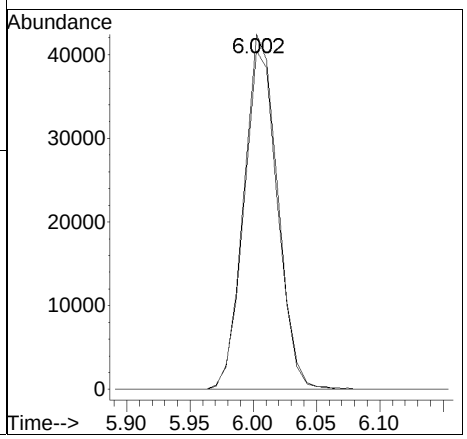


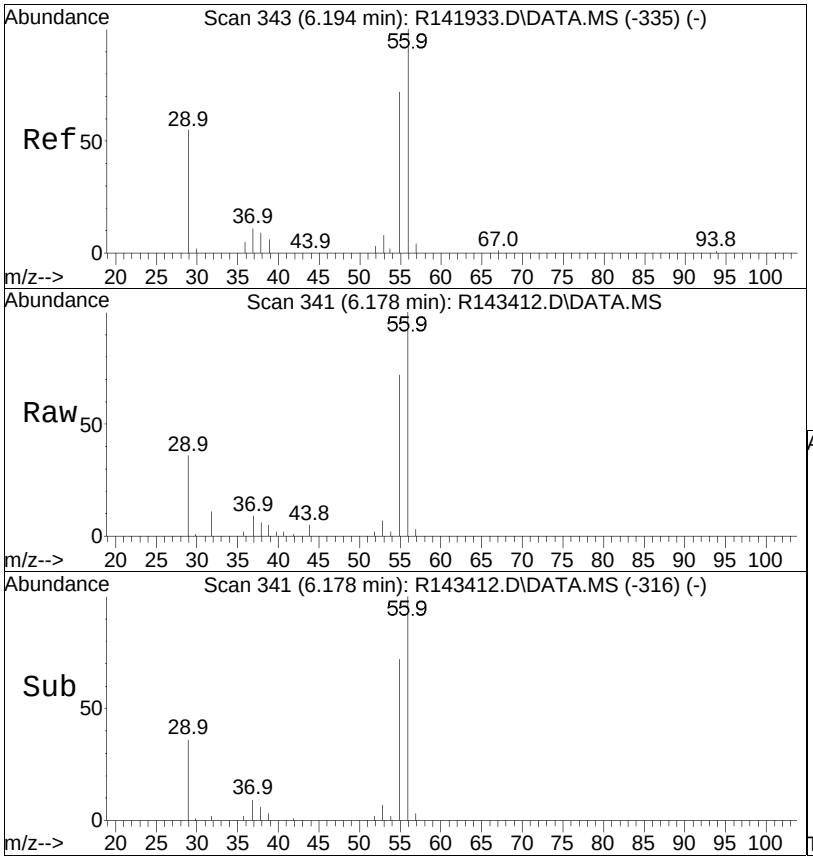


#17
vinyl bromide
Concen: 10.07 ppbV
RT: 6.002 min Scan# 319
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:106 Resp: 78893

Ion	Ratio	Lower	Upper
106	100		
108	95.3	76.8	115.2

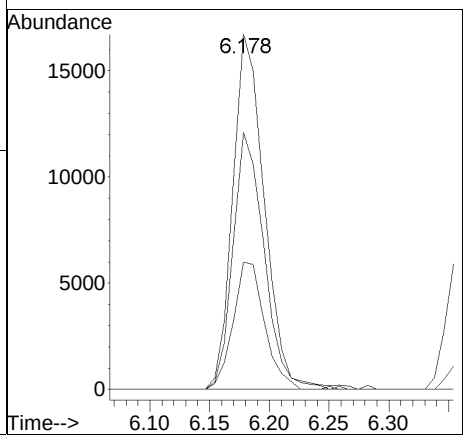


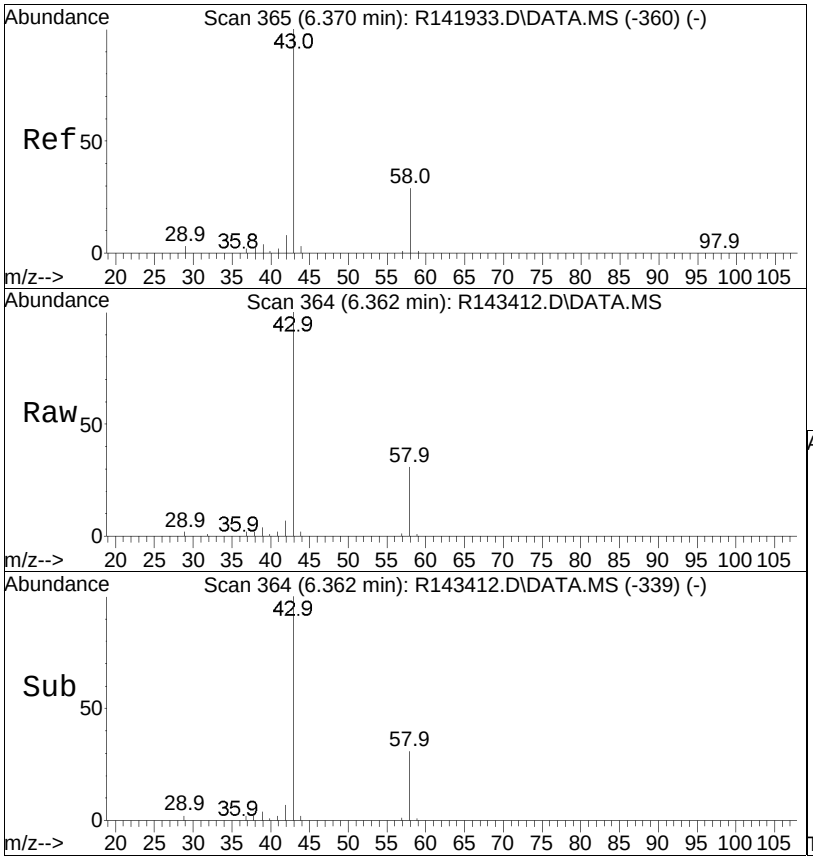


#18
acrolein
Concen: 10.24 ppbV
RT: 6.178 min Scan# 341
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 56 Resp: 30886

Ion	Ratio	Lower	Upper
56	100		
55	72.3	59.1	88.7
29	35.9	30.7	46.1

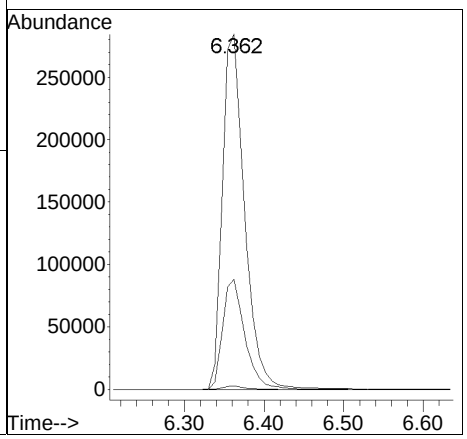


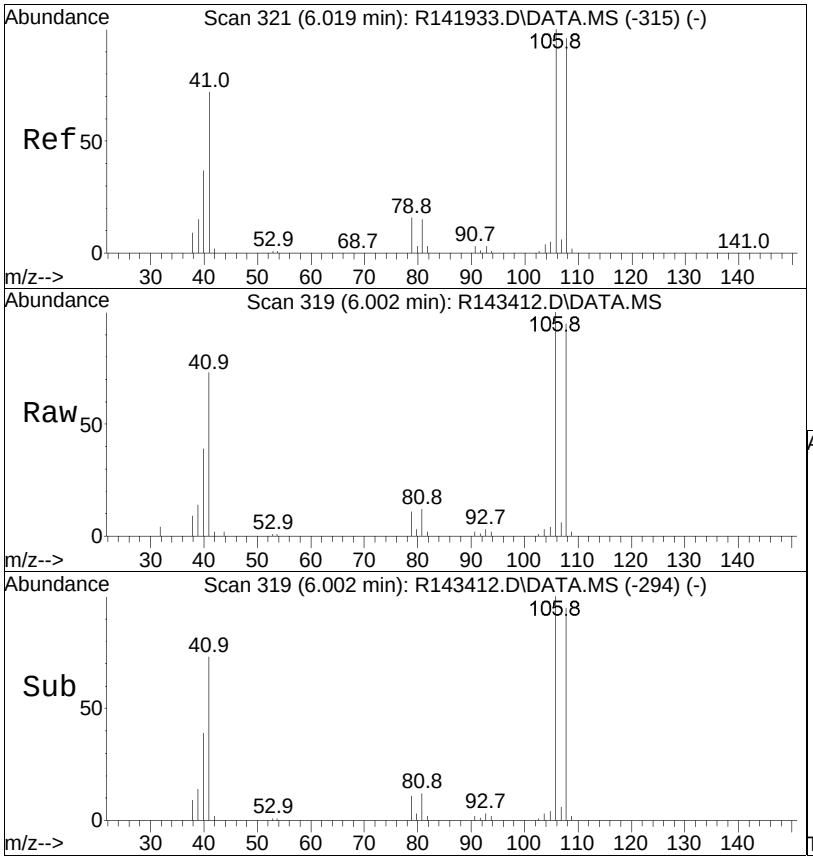


#19
acetone
Concen: 51.45 ppbV
RT: 6.362 min Scan# 364
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 551629

Ion	Ratio	Lower	Upper
43	100		
58	31.0	24.1	36.1
57	1.0	0.7	1.1

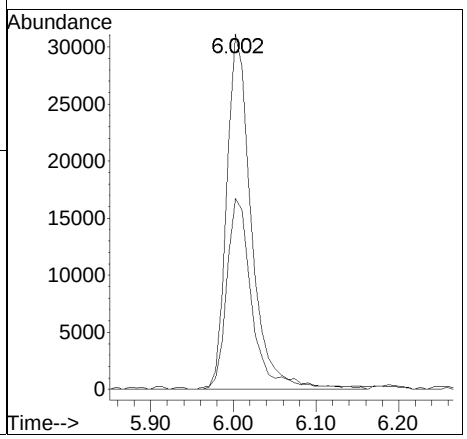


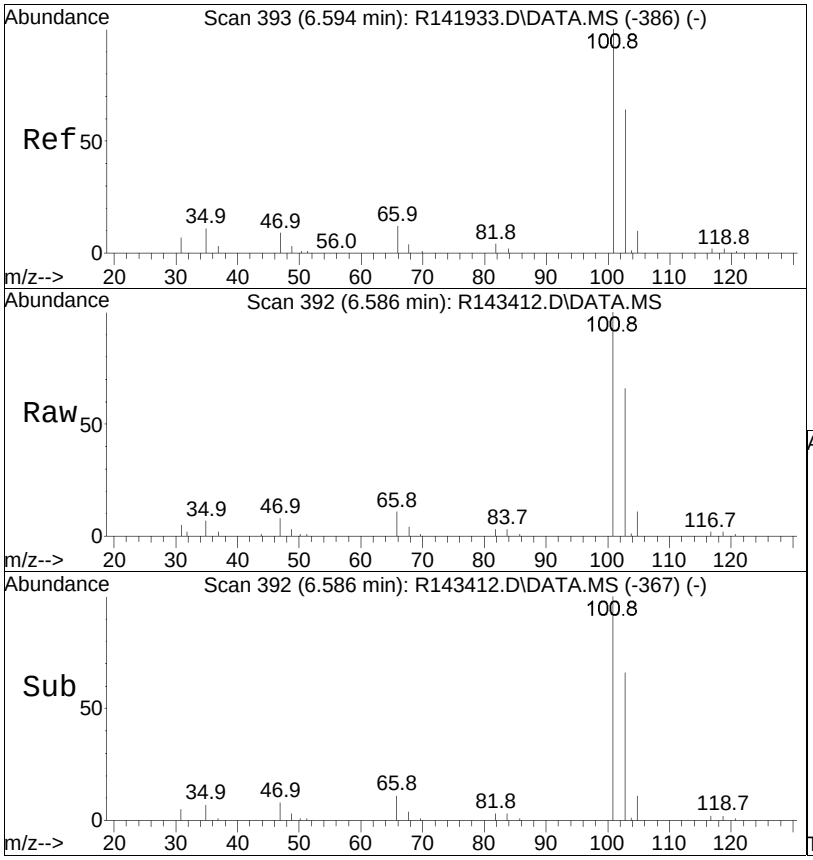


#20
acetonitrile
Concen: 9.74 ppbV
RT: 6.002 min Scan# 319
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 41 Resp: 64643

Ion	Ratio	Lower	Upper
41	100		
40	53.7	45.4	68.0

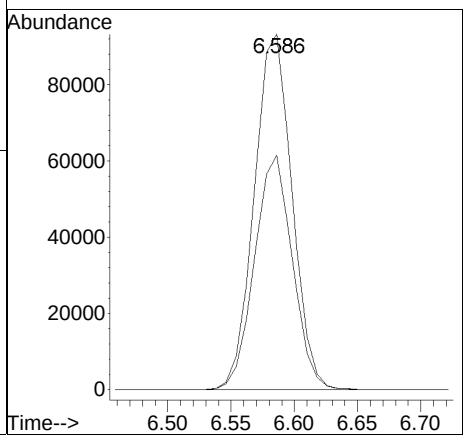


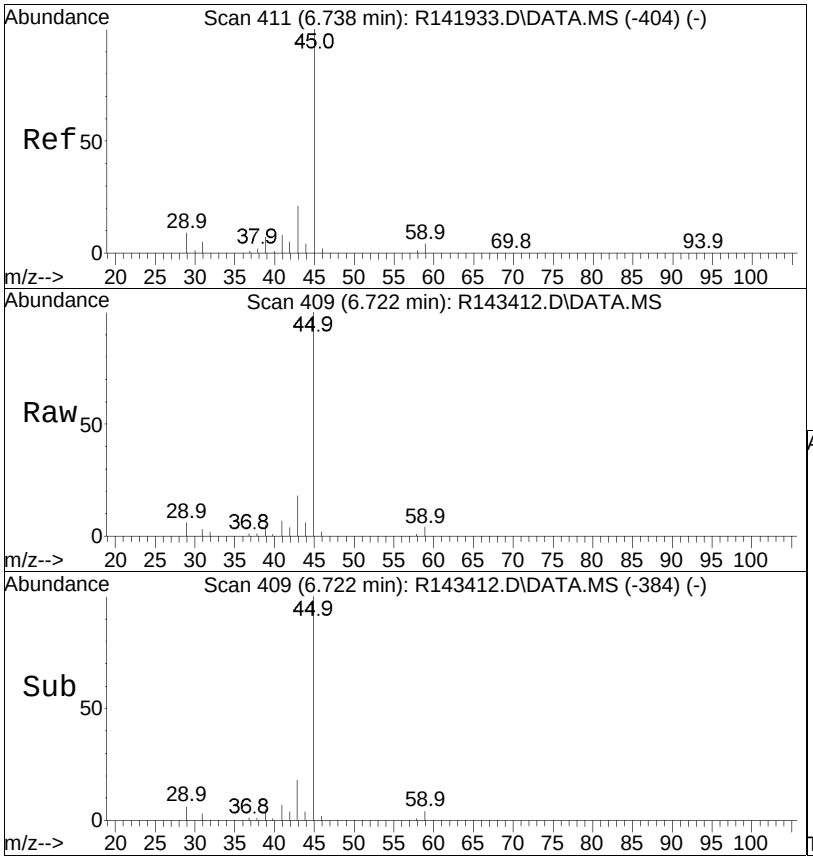


#21
trichlorofluoromethane
Concen: 9.92 ppbV
RT: 6.586 min Scan# 392
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:101 Resp: 193424

Ion	Ratio	Lower	Upper
101	100		
103	65.9	52.3	78.5

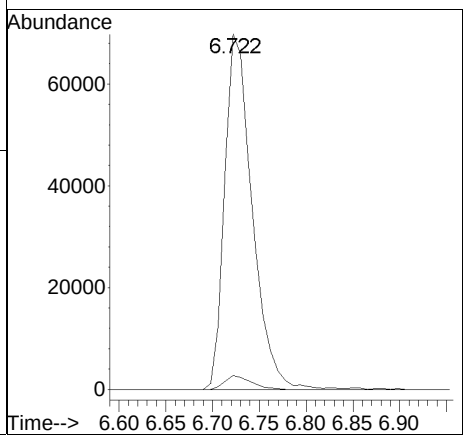


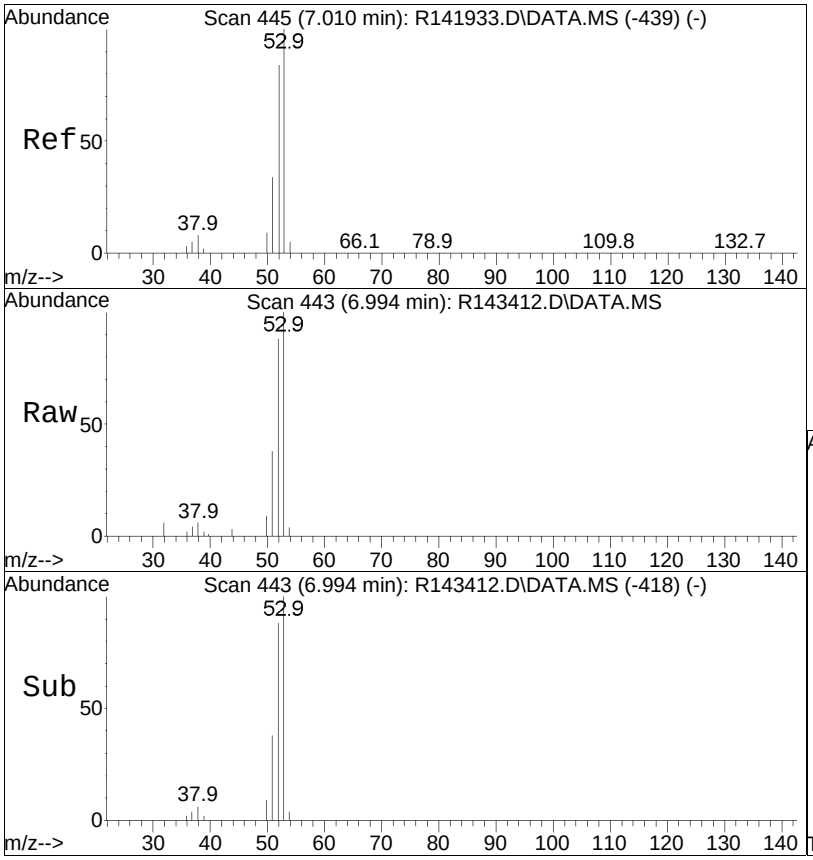


#22
isopropyl alcohol
Concen: 10.89 ppbV
RT: 6.722 min Scan# 409
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 45 Resp: 143399

Ion	Ratio	Lower	Upper
45	100		
59	3.9	3.3	4.9

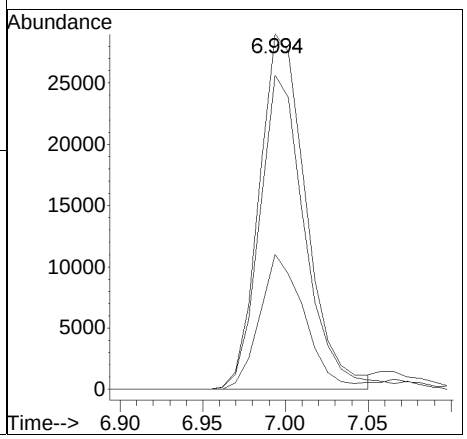


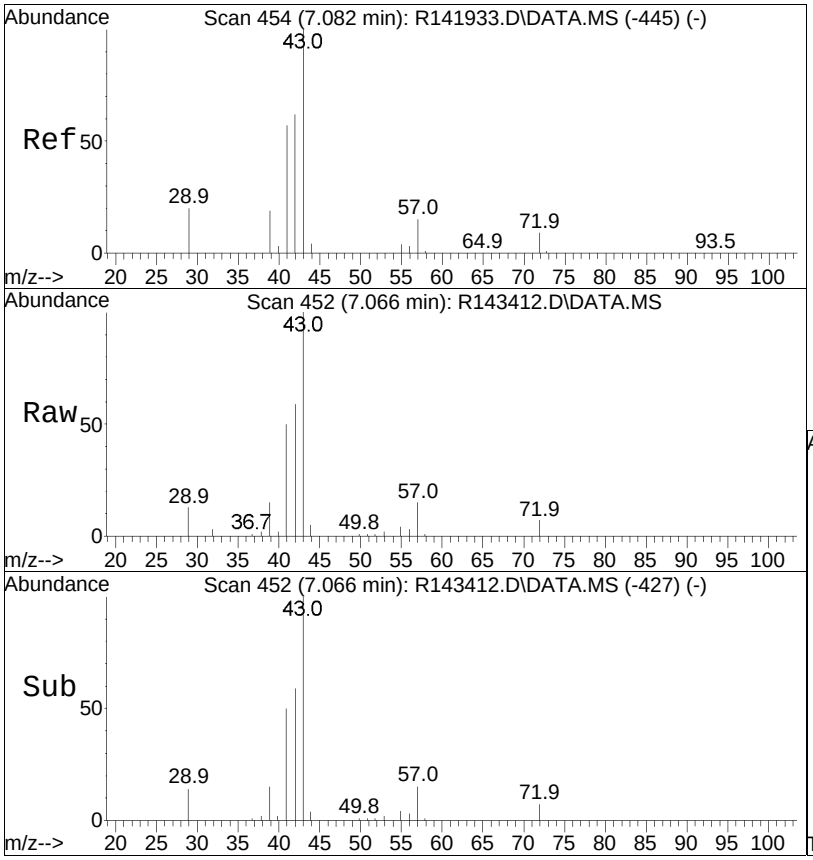


#23
acrylonitrile
Concen: 10.12 ppbV
RT: 6.994 min Scan# 443
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 53 Resp: 57407

Ion	Ratio	Lower	Upper
53	100		
52	88.5	68.5	102.7
51	38.0	31.0	46.6

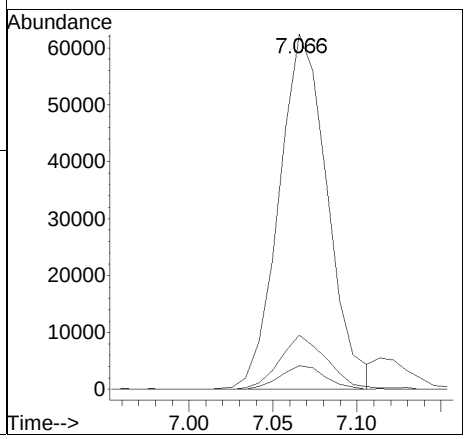


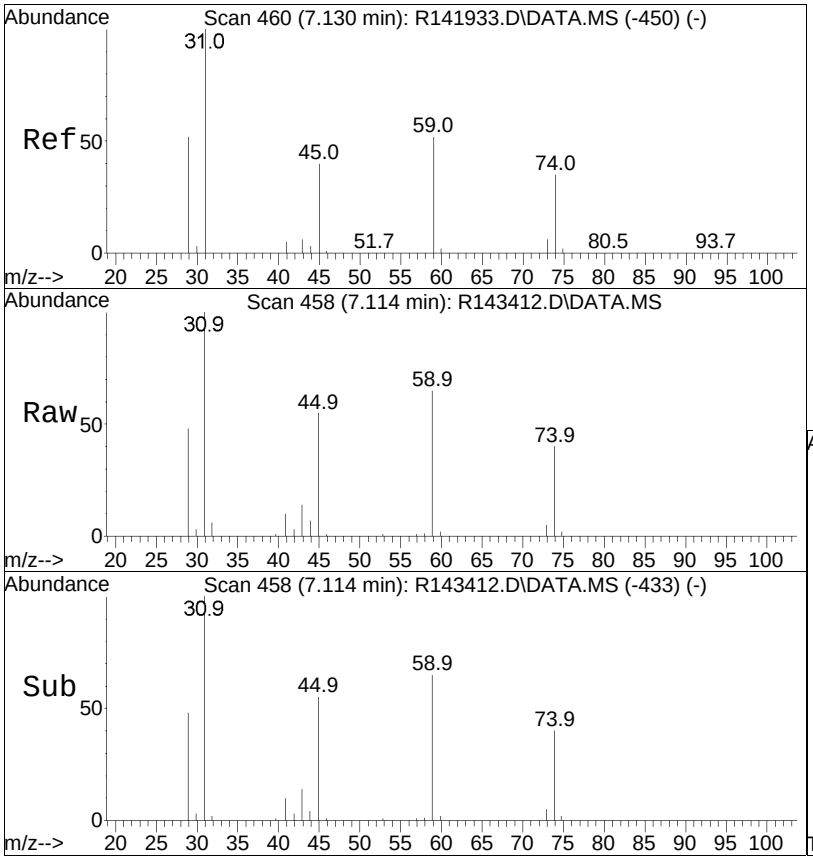


#24
pentane
Concen: 9.35 ppbV m
RT: 7.066 min Scan# 452
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 125316

Ion	Ratio	Lower	Upper
43	100		
57	15.3	12.6	18.8
72	6.7	6.0	9.0

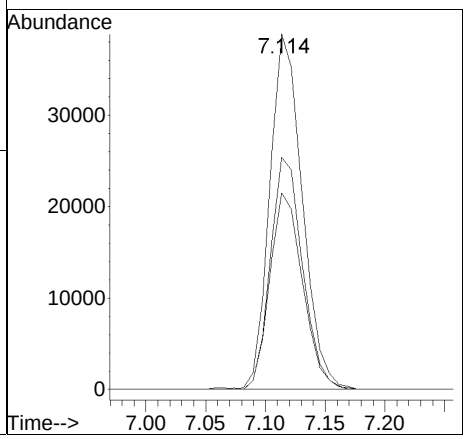


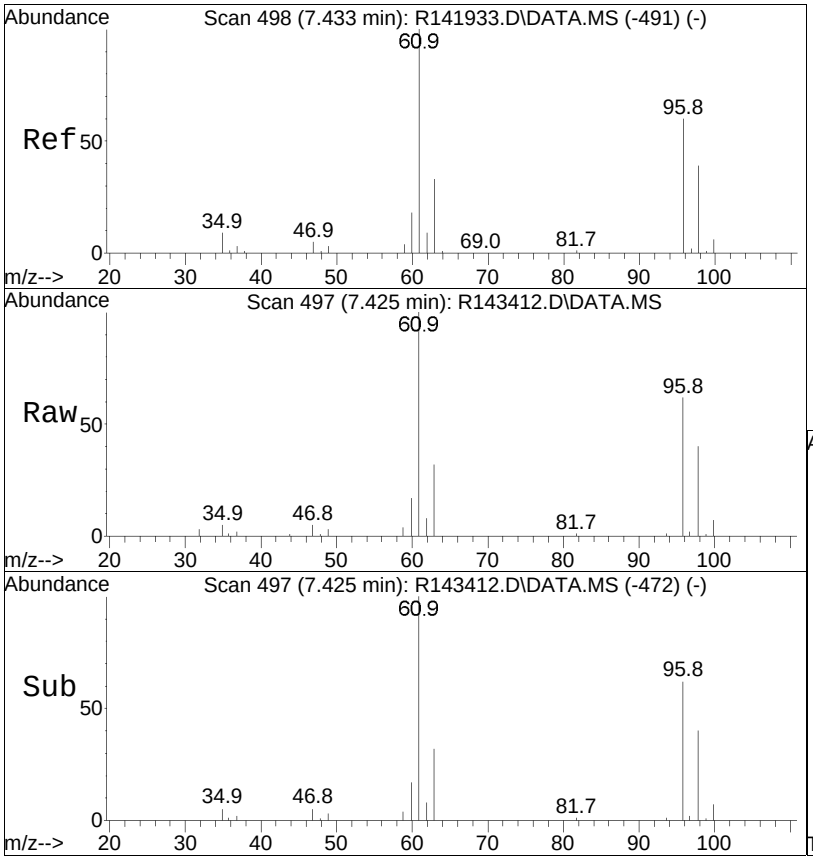


#25
ethyl ether
Concen: 9.64 ppbV
RT: 7.114 min Scan# 458
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 31 Resp: 73792

Ion	Ratio	Lower	Upper
31	100		
59	65.3	50.3	75.5
45	55.3	42.8	64.2

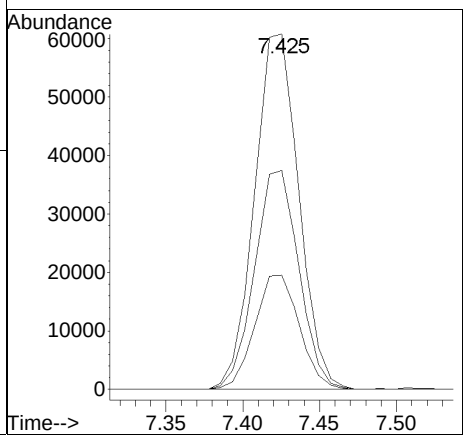


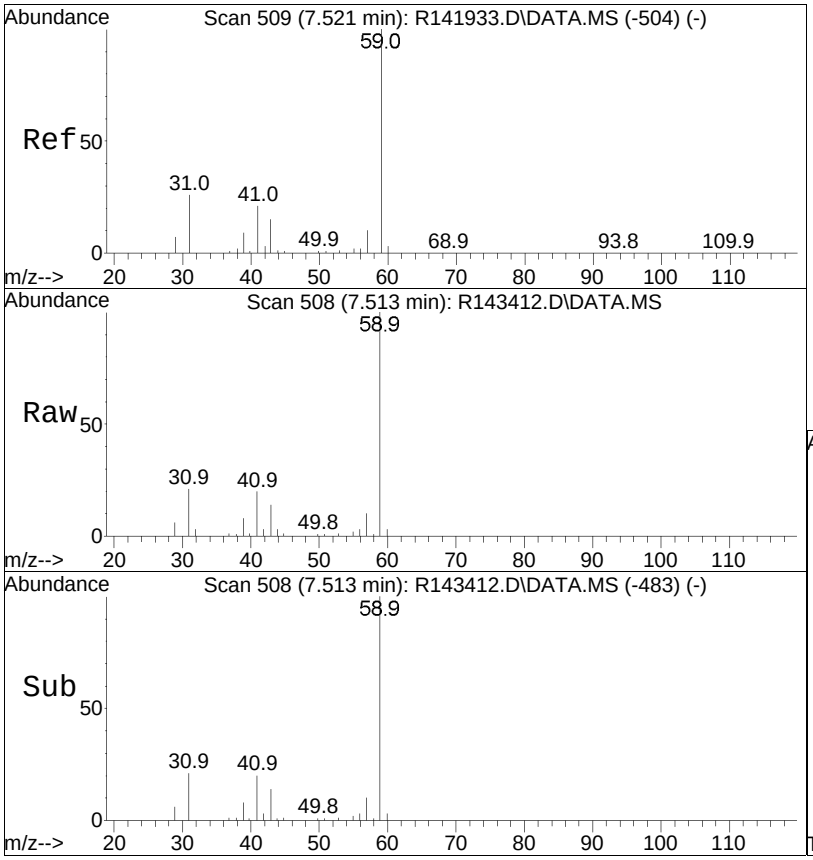


#26
1,1-dichloroethene
Concen: 9.93 ppbV
RT: 7.425 min Scan# 497
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 61 Resp: 121993

Ion	Ratio	Lower	Upper
61	100		
96	61.6	48.1	72.1
63	32.1	23.7	35.5

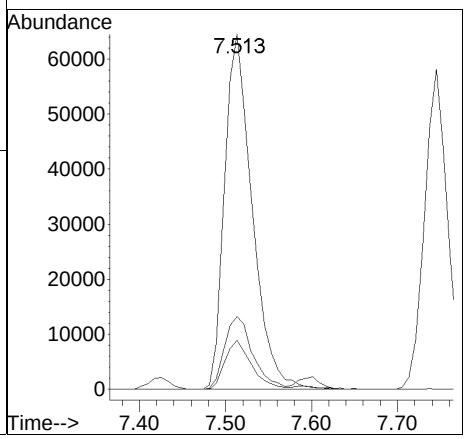


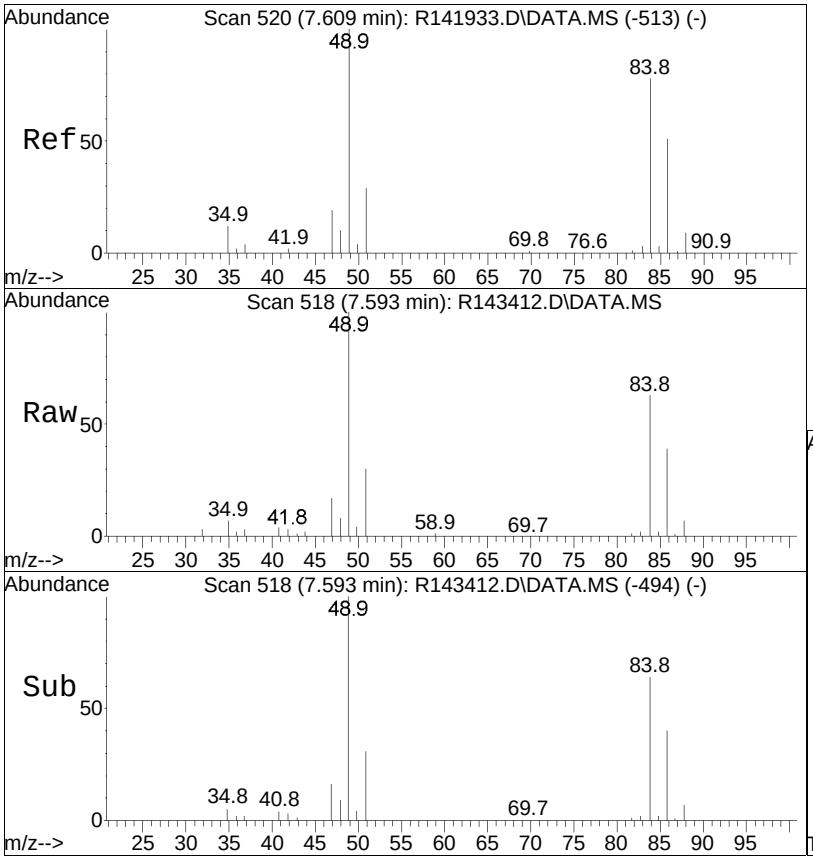


#27
tertiary butyl alcohol
Concen: 9.50 ppbV
RT: 7.513 min Scan# 508
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 59 Resp: 144395

Ion	Ratio	Lower	Upper
59	100		
41	20.5	16.5	24.7
43	13.9	10.4	15.6

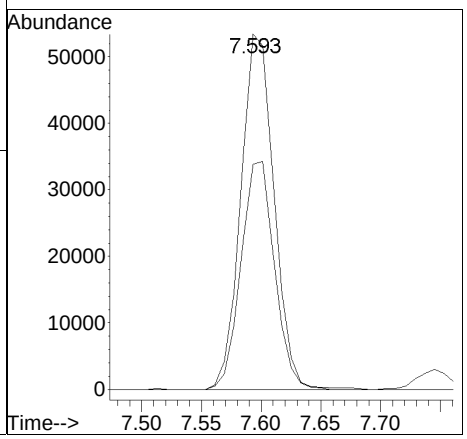


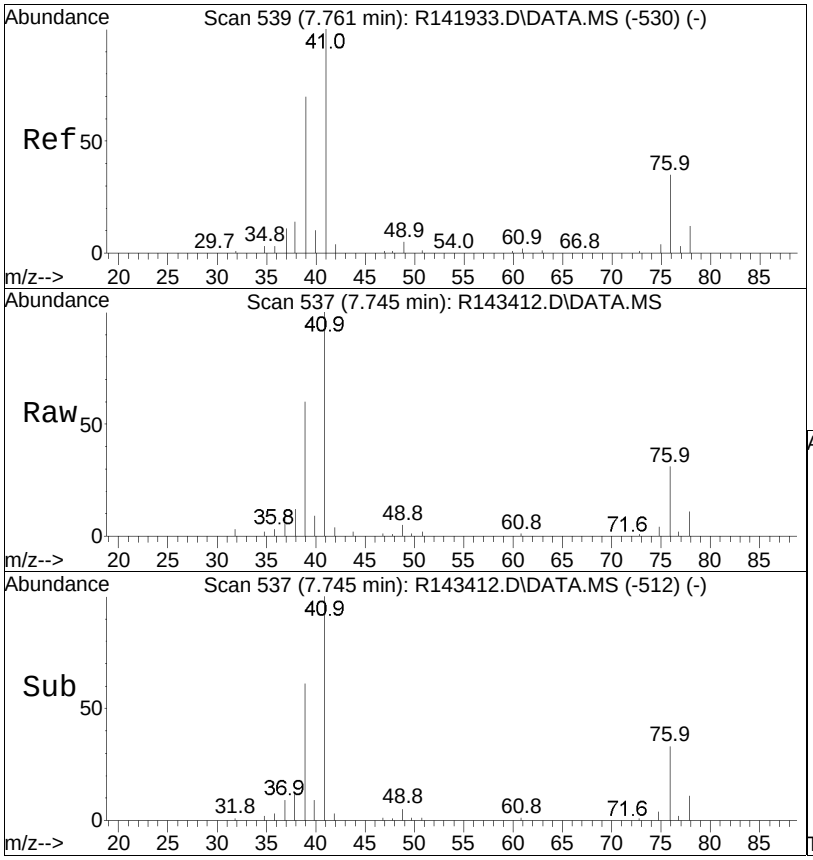


#28
methylene chloride
Concen: 10.40 ppbV
RT: 7.593 min Scan# 518
Delta R.T. -0.008 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 49 Resp: 103435

Ion	Ratio	Lower	Upper
49	100		
84	63.4	52.9	79.3

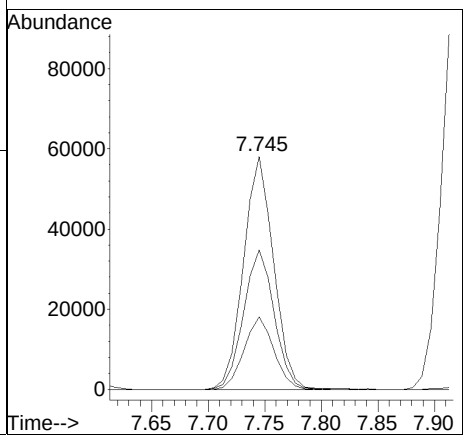


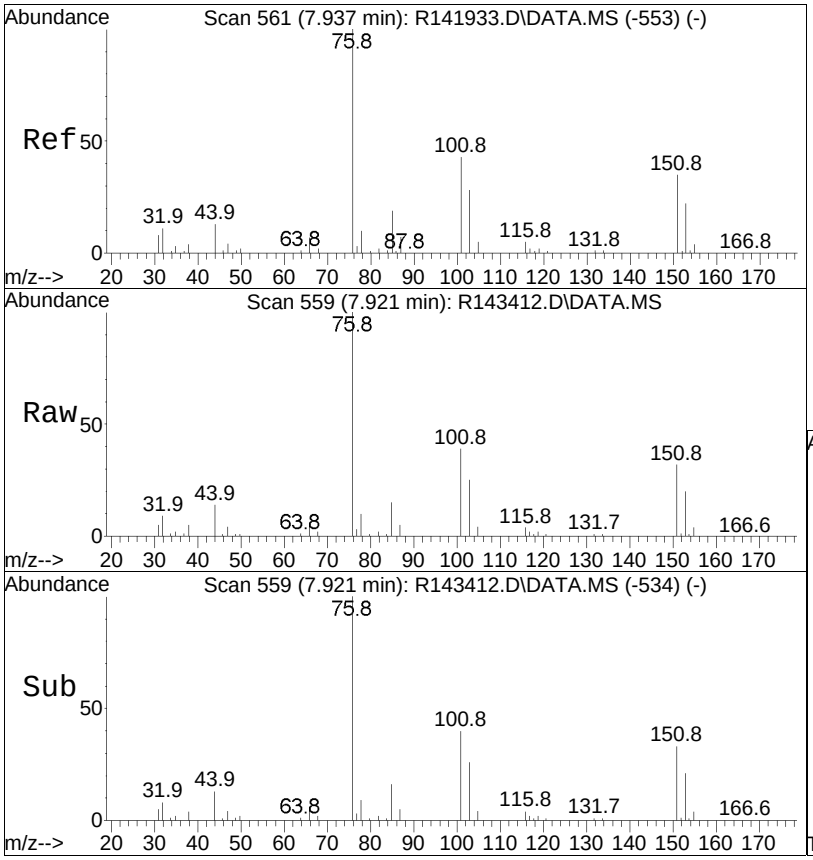


#29
3-chloropropene
Concen: 10.45 ppbV
RT: 7.745 min Scan# 537
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 41 Resp: 107469

Ion	Ratio	Lower	Upper
41	100		
39	59.9	53.4	80.0
76	31.1	26.3	39.5

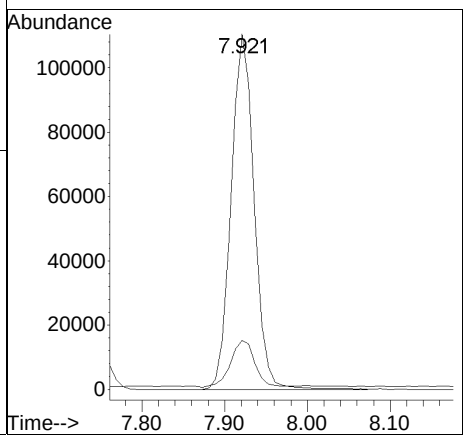


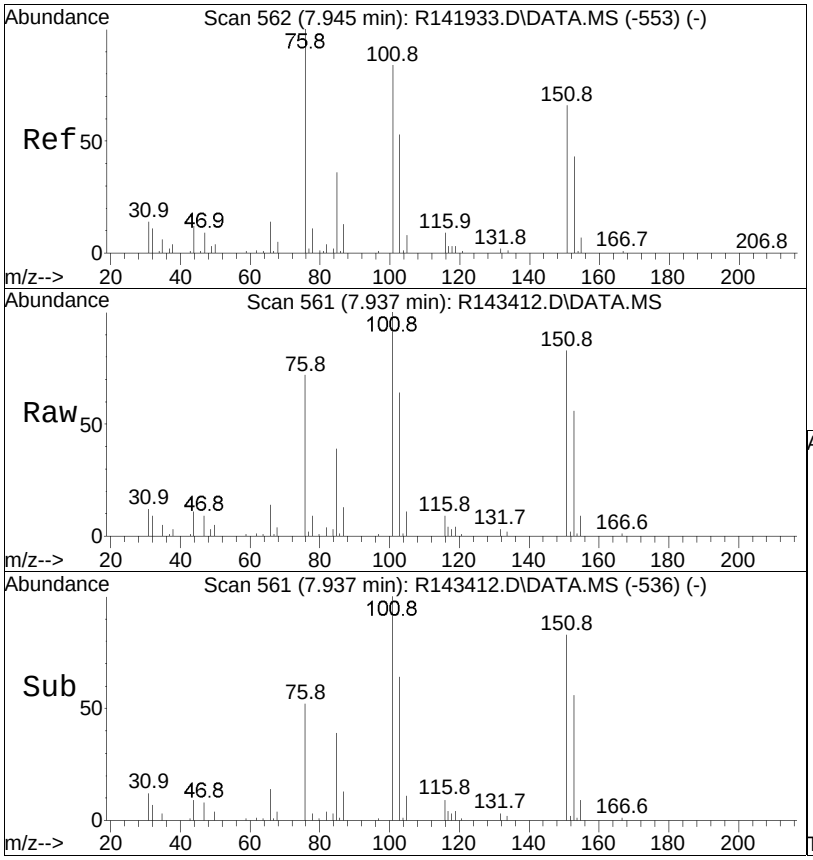


#30
carbon disulfide
Concen: 9.94 ppbV
RT: 7.921 min Scan# 559
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 76 Resp: 213814

Ion	Ratio	Lower	Upper
76	100		
44	13.8	11.6	17.4

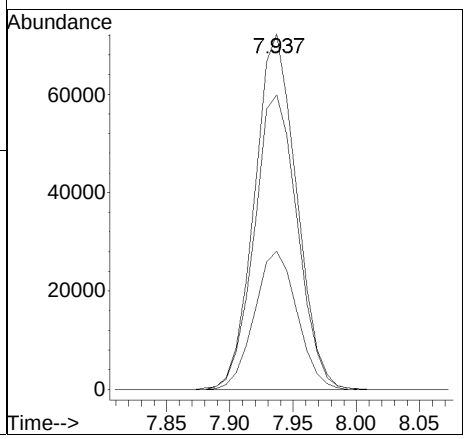


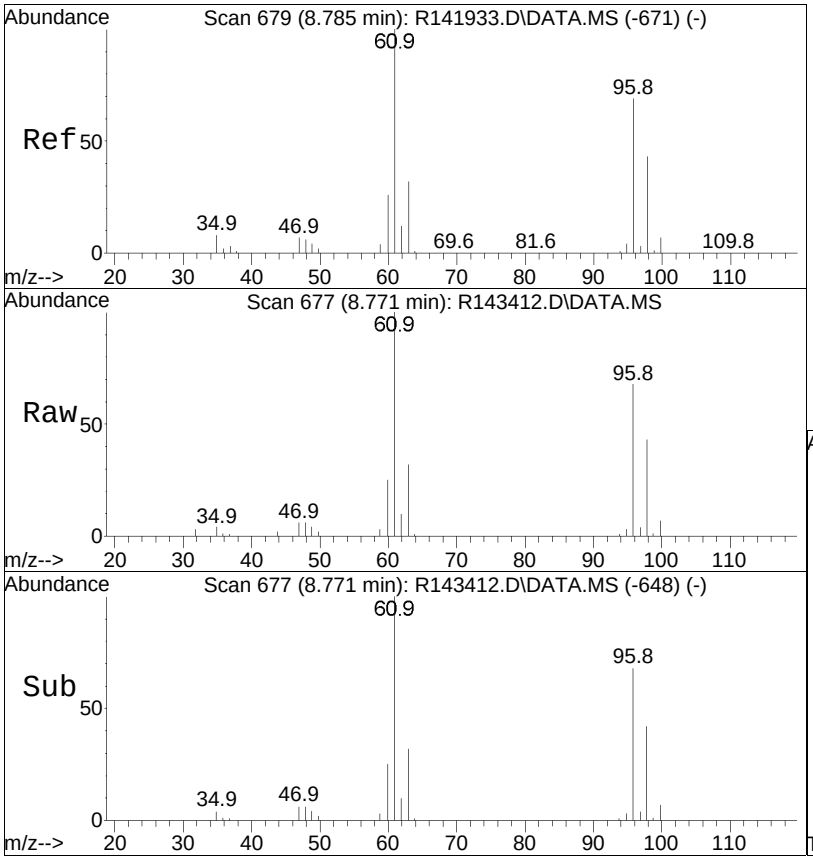


#31
Freon 113
Concen: 10.38 ppbV
RT: 7.937 min Scan# 561
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:101 Resp: 166581

Ion	Ratio	Lower	Upper
101	100		
85	38.9	32.2	48.2
151	82.9	69.0	103.6

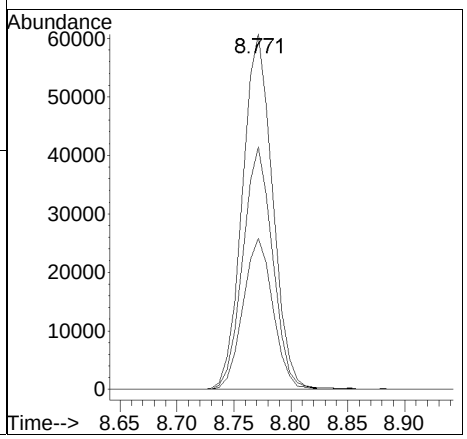


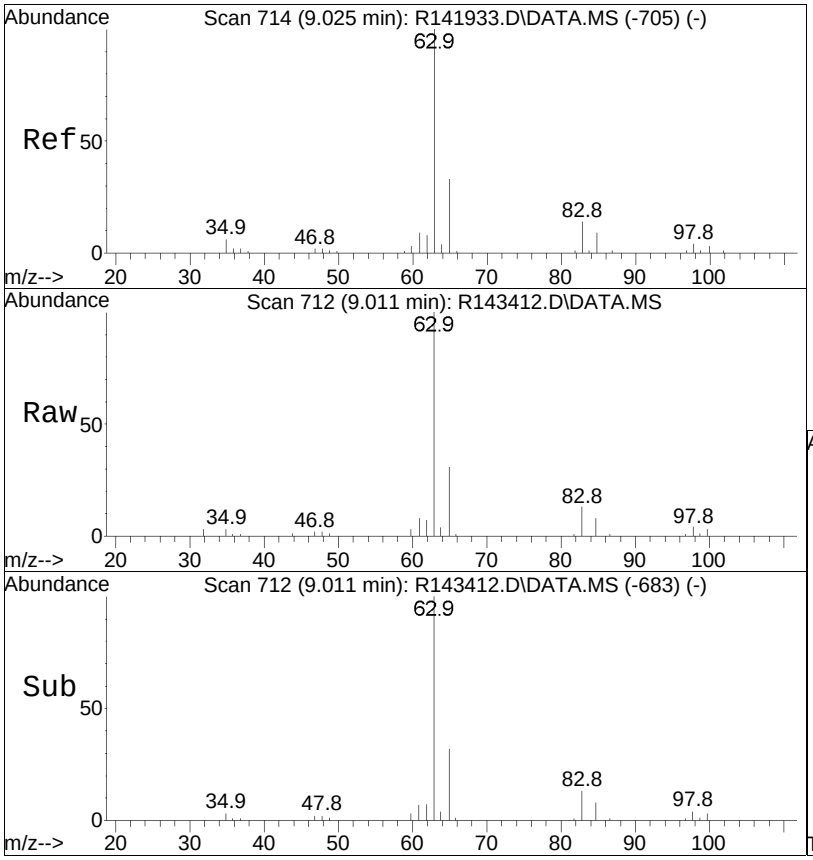


#32
trans-1,2-dichloroethene
Concen: 8.59 ppbV
RT: 8.771 min Scan# 677
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 61 Resp: 112227

Ion	Ratio	Lower	Upper
61	100		
96	68.3	52.6	78.8
98	42.6	34.3	51.5

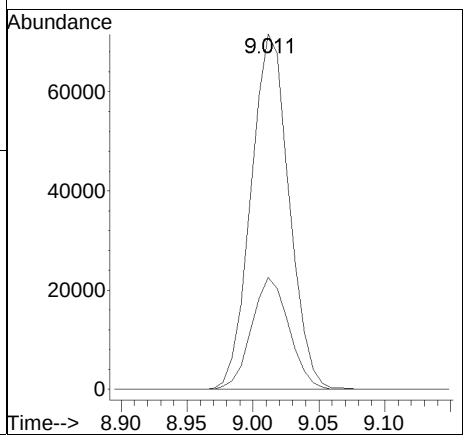


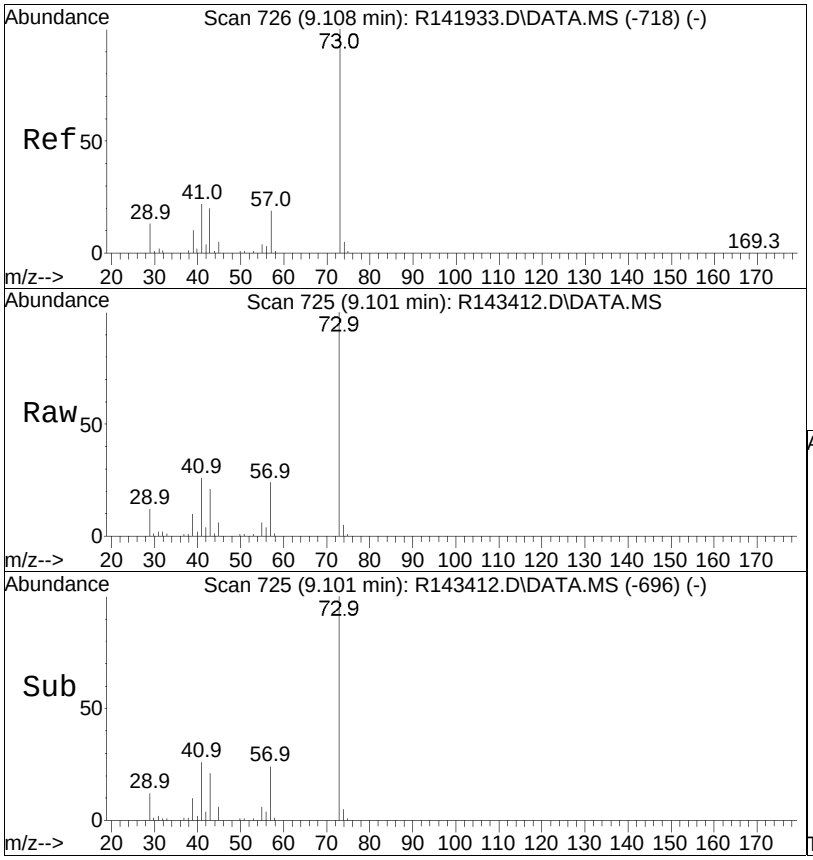


#33
1,1-dichloroethane
Concen: 8.99 ppbV
RT: 9.011 min Scan# 712
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 63 Resp: 143937

Ion	Ratio	Lower	Upper
63	100		
65	31.5	24.2	36.2

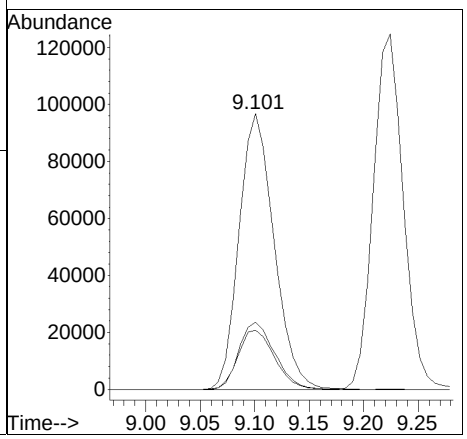


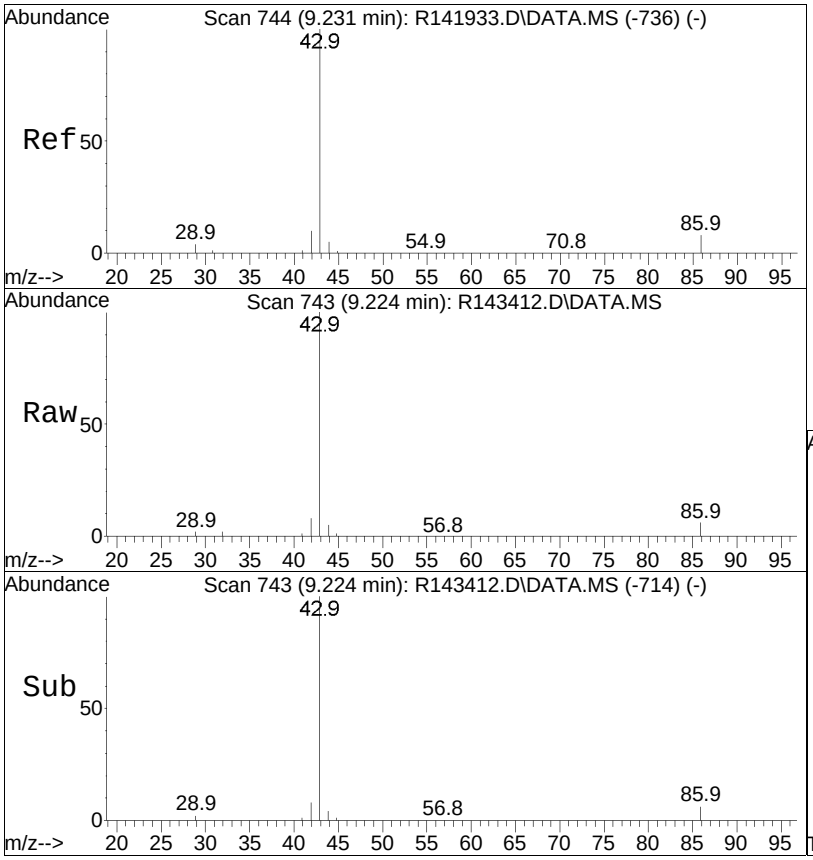


#34
MTBE
Concen: 9.86 ppbV
RT: 9.101 min Scan# 725
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 73 Resp: 216344

Ion	Ratio	Lower	Upper
73	100		
57	24.4	20.2	30.2
43	21.5	19.1	28.7

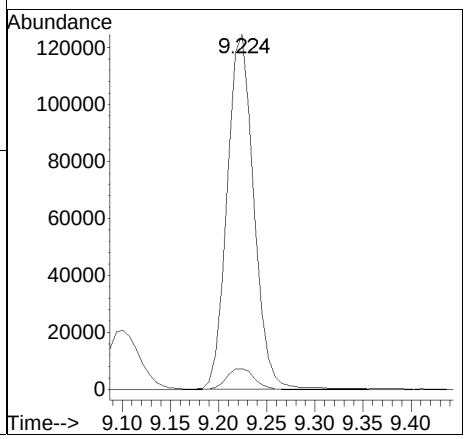


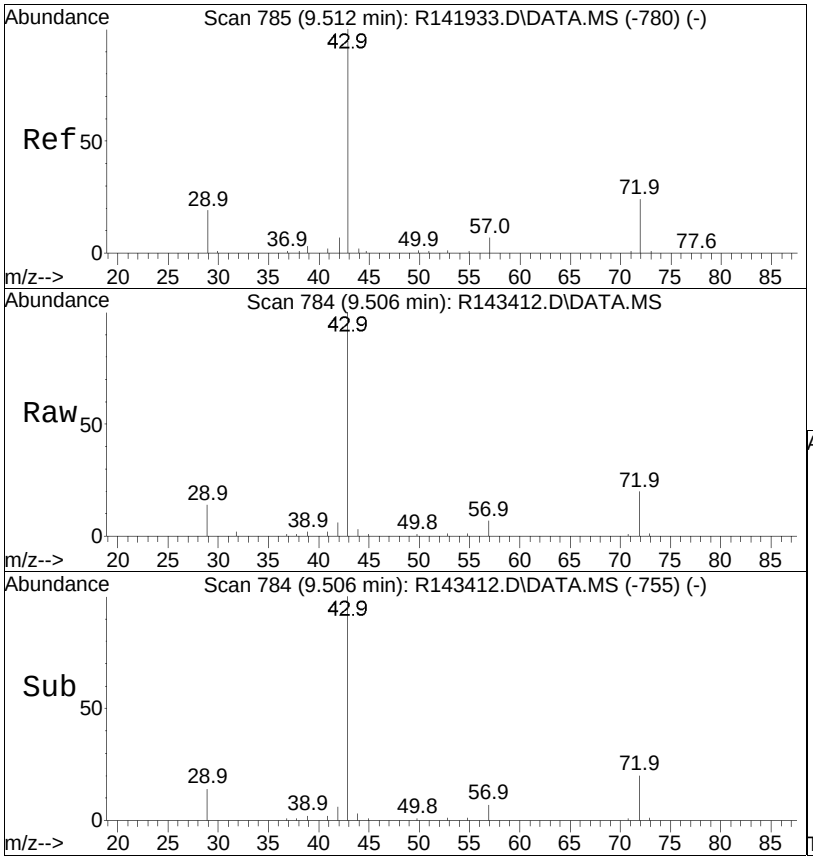


#35
vinyl acetate
Concen: 10.94 ppbV
RT: 9.224 min Scan# 743
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 239644

Ion	Ratio	Lower	Upper
43	100		
86	5.8	5.3	7.9

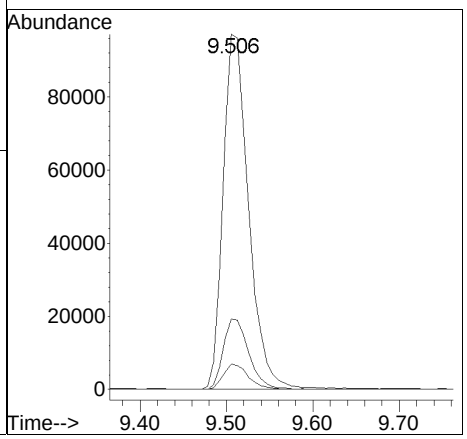


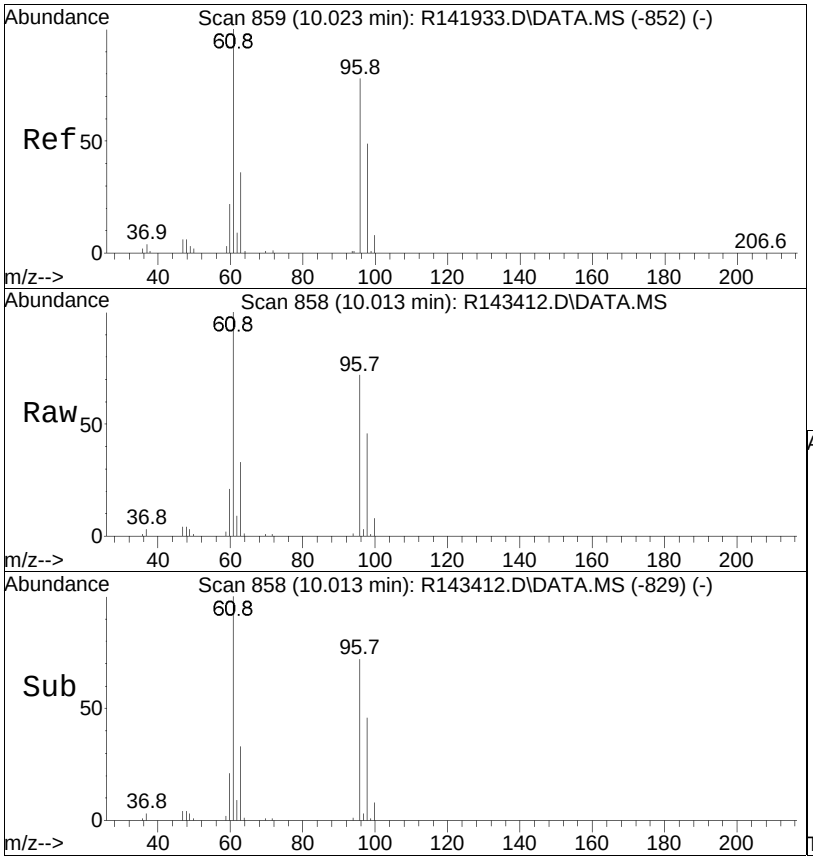


#36
2-butanone
Concen: 9.71 ppbV
RT: 9.506 min Scan# 784
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 200414

Ion	Ratio	Lower	Upper
43	100		
72	19.8	15.4	23.0
57	7.2	5.8	8.6

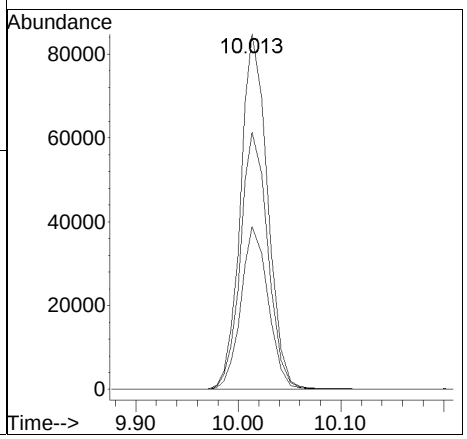


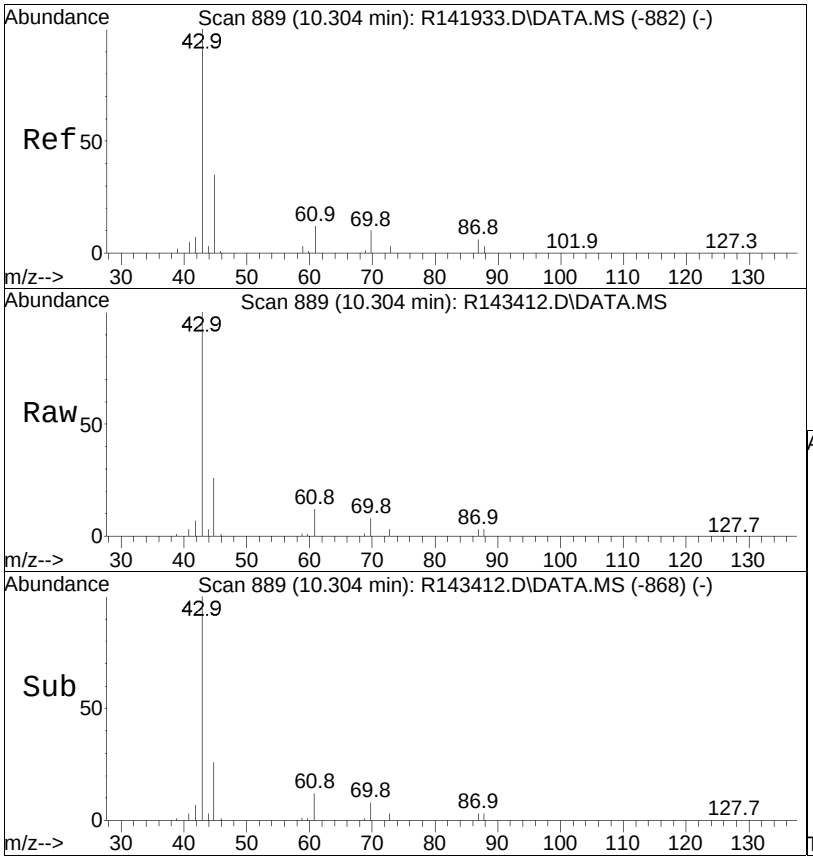


#37
cis-1,2-dichloroethene
Concen: 10.87 ppbV
RT: 10.013 min Scan# 858
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 61 Resp: 161078

Ion	Ratio	Lower	Upper
61	100		
96	72.4	58.2	87.2
98	45.9	36.7	55.1

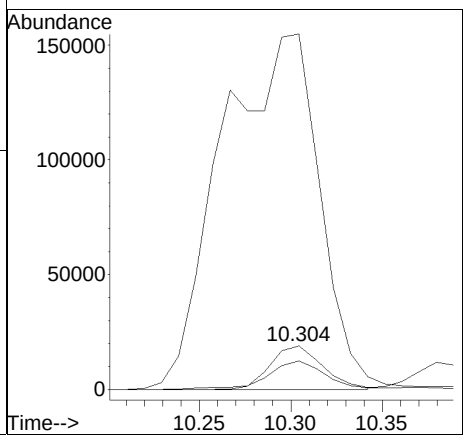


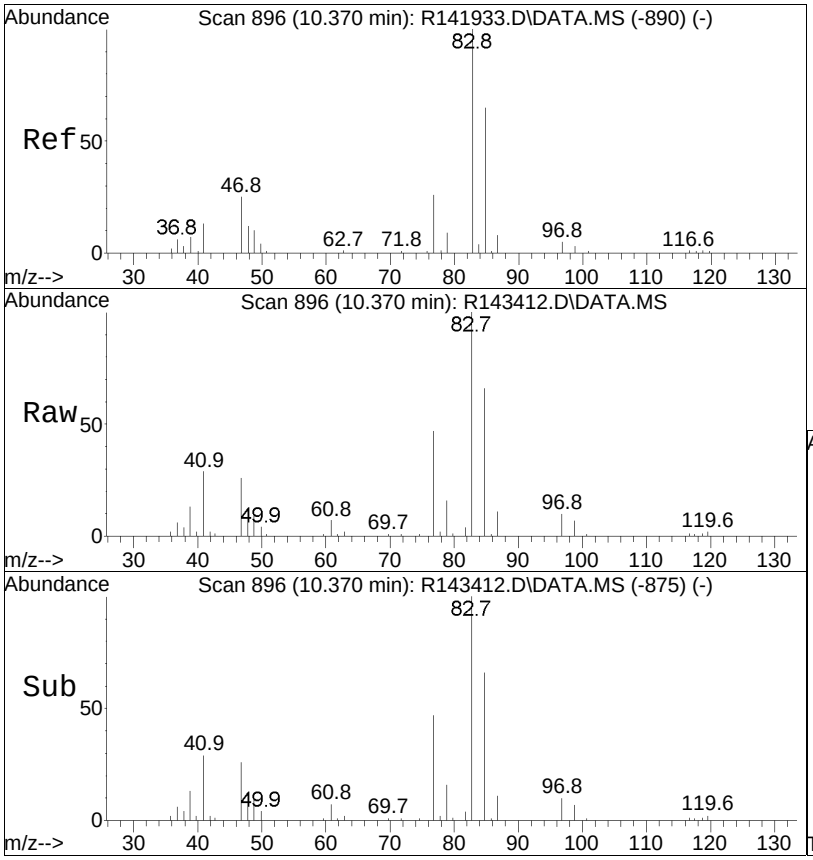


#38
Ethyl Acetate
Concen: 9.93 ppbV
RT: 10.304 min Scan# 889
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 61 Resp: 37867

Ion	Ratio	Lower	Upper
61	100		
70	65.4	52.0	78.0
43	816.2	662.4	993.6

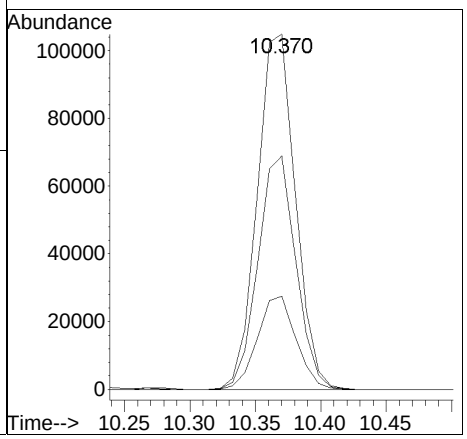


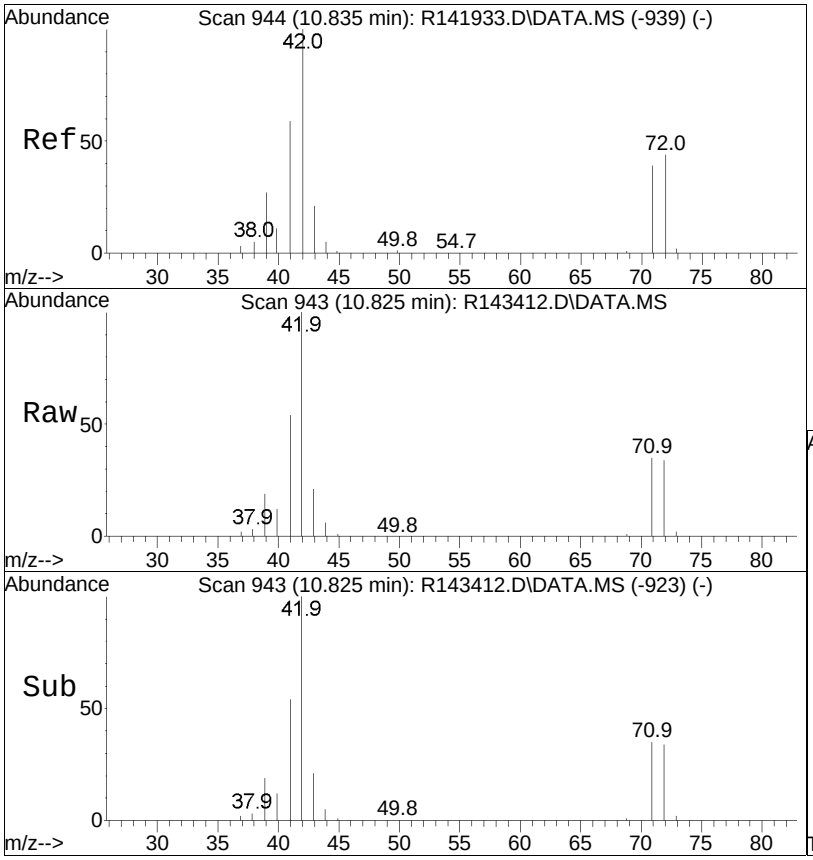


#39
chloroform
Concen: 10.00 ppbV
RT: 10.370 min Scan# 896
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 83 Resp: 212846

Ion	Ratio	Lower	Upper
83	100		
85	65.7	52.3	78.5
47	26.2	21.7	32.5

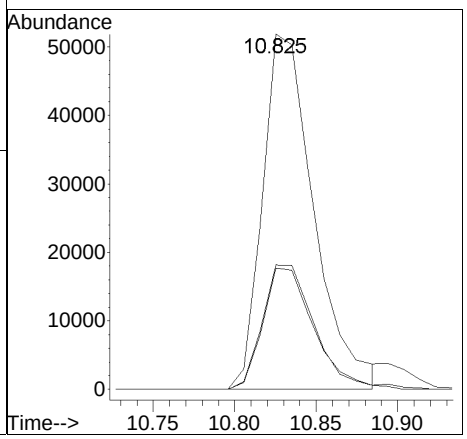


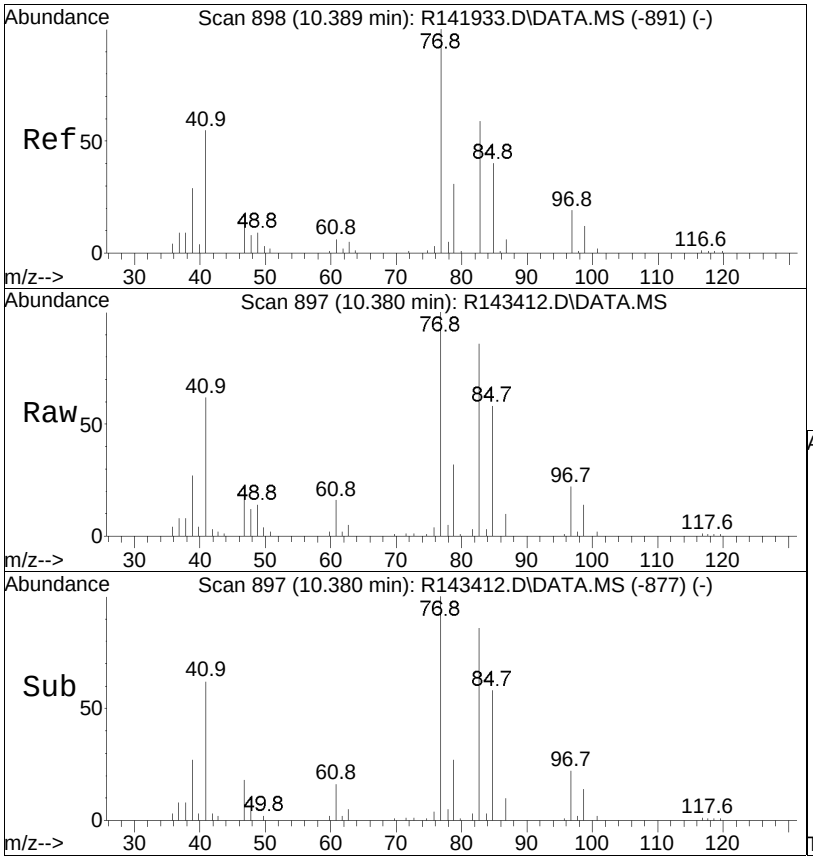


#40
Tetrahydrofuran
Concen: 9.42 ppbV m
RT: 10.825 min Scan# 943
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 42 Resp: 113712

Ion	Ratio	Lower	Upper
42	100		
71	35.0	27.4	41.2
72	34.2	28.4	42.6

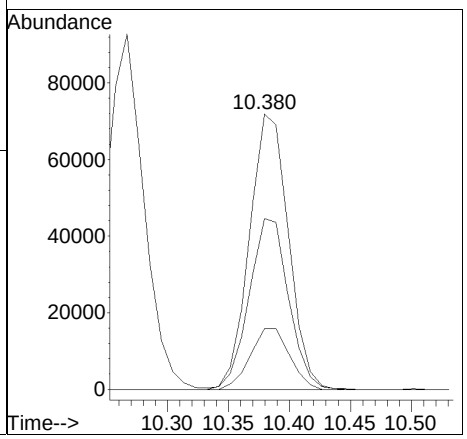


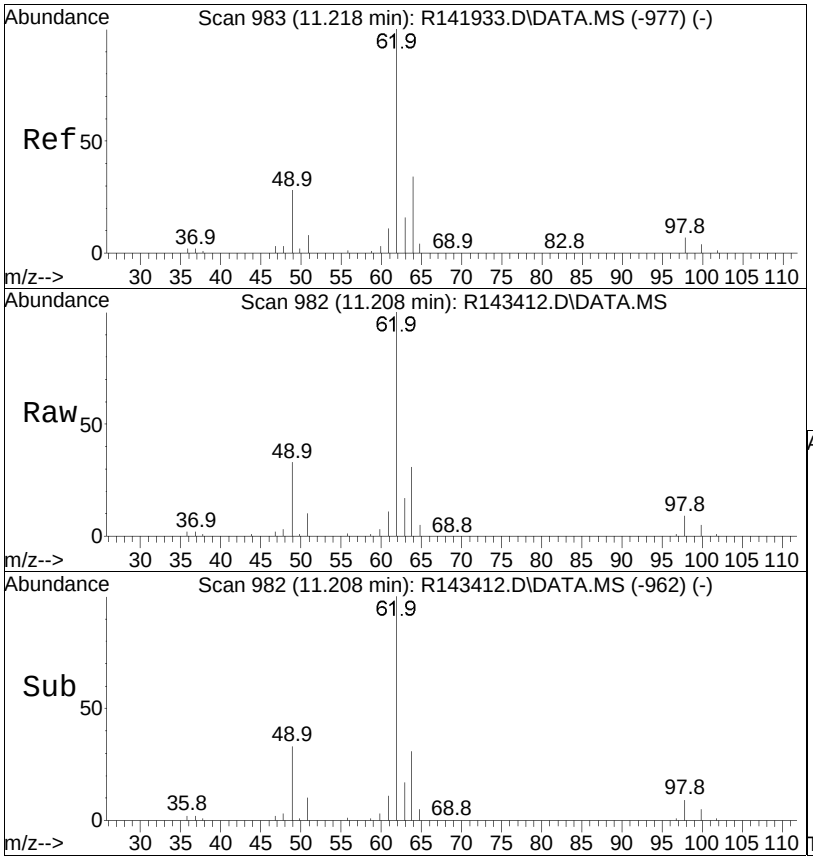


#41
2,2-dichloropropane
Concen: 9.01 ppbV
RT: 10.380 min Scan# 897
Delta R.T. -0.010 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 77 Resp: 159691

Ion	Ratio	Lower	Upper
77	100		
41	62.0	49.3	73.9
97	22.1	17.5	26.3

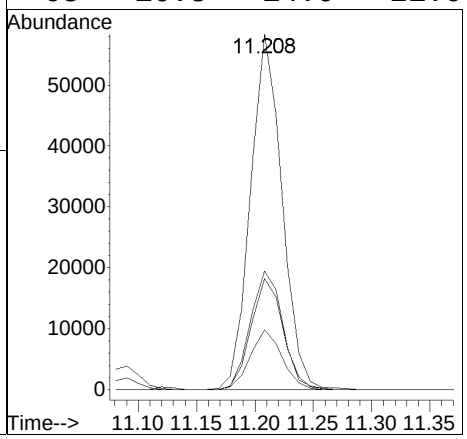


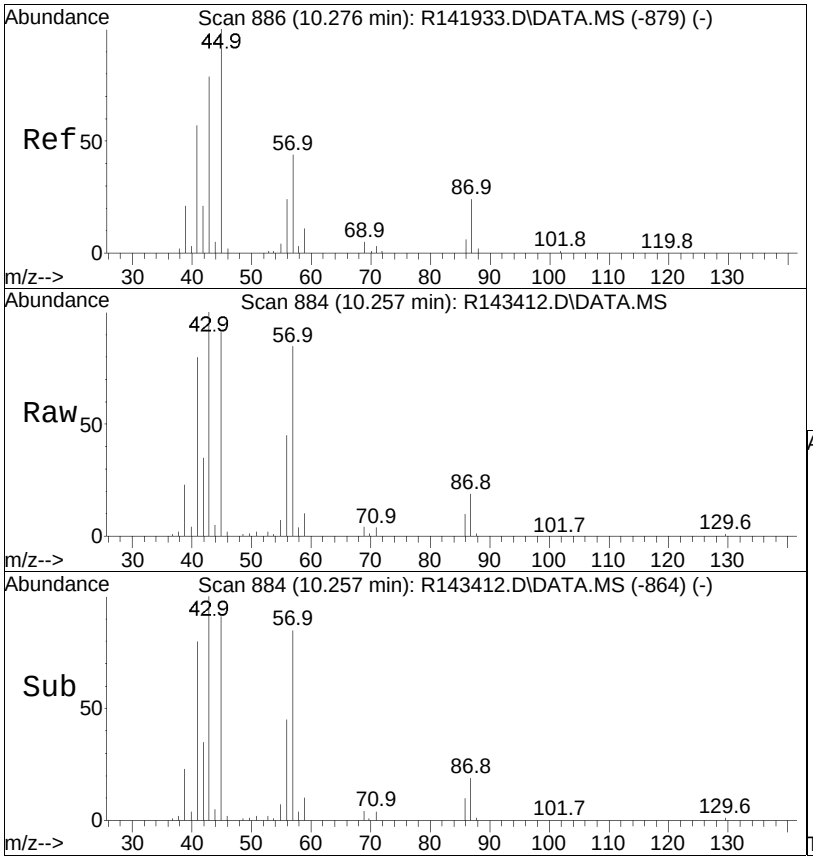


#42
1,2-dichloroethane
Concen: 9.74 ppbV
RT: 11.208 min Scan# 982
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 62 Resp: 109542

Ion	Ratio	Lower	Upper
62	100		
64	31.1	25.5	38.3
49	33.3	28.3	42.5
63	16.8	14.0	21.0

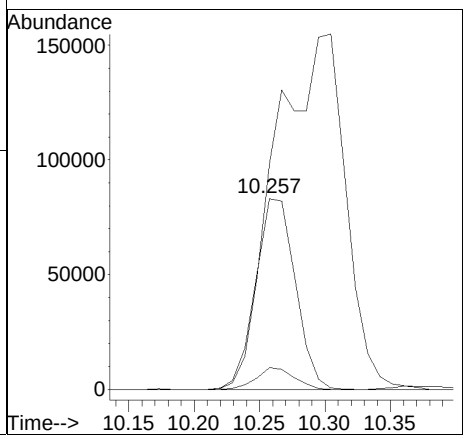


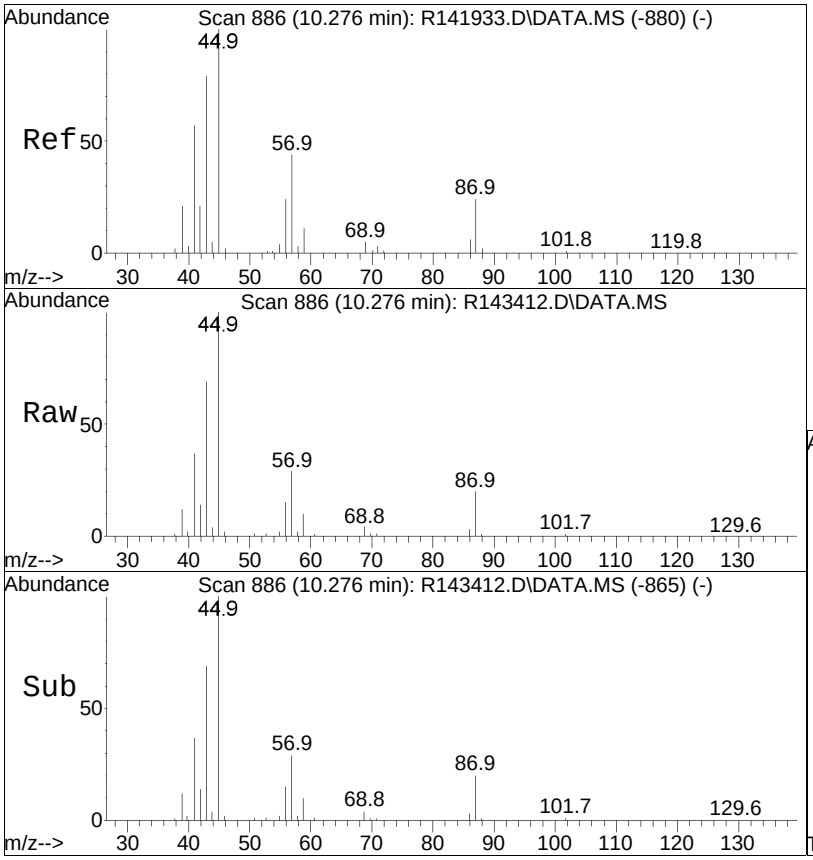


#44
hexane
Concen: 9.26 ppbV
RT: 10.257 min Scan# 884
Delta R.T. -0.010 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 57 Resp: 176602

Ion	Ratio	Lower	Upper
57	100		
43	118.2	125.7	188.5#
86	11.4	8.8	13.2

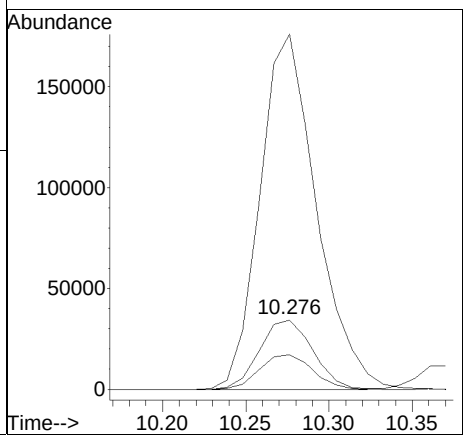


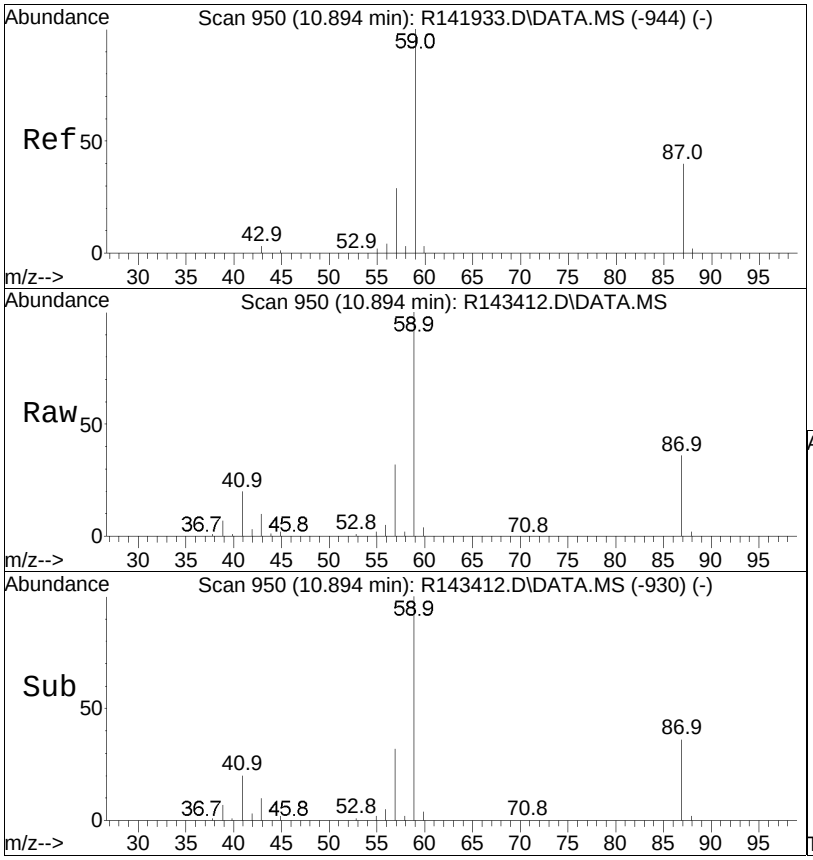


#45
diisopropyl ether
Concen: 9.17 ppbV
RT: 10.276 min Scan# 886
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 87 Resp: 76530

Ion	Ratio	Lower	Upper
87	100		
59	50.0	41.7	62.5
45	512.7	421.2	631.8

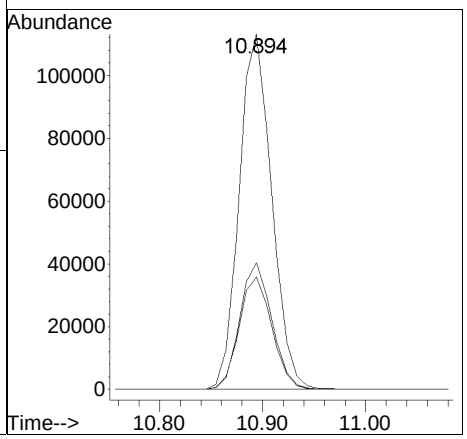


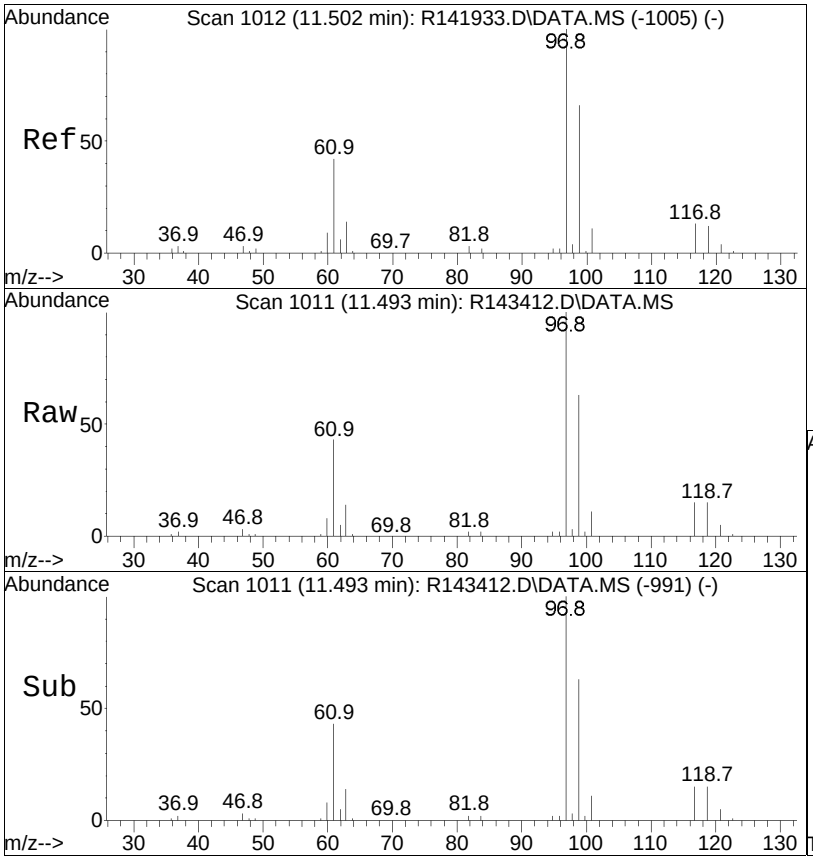


#46
tert-butyl ethyl ether
Concen: 8.90 ppbV
RT: 10.894 min Scan# 950
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 59 Resp: 248552

Ion	Ratio	Lower	Upper
59	100		
87	35.7	28.5	42.7
57	31.6	26.6	39.8

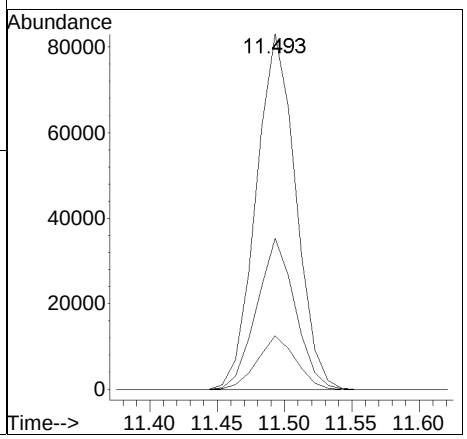


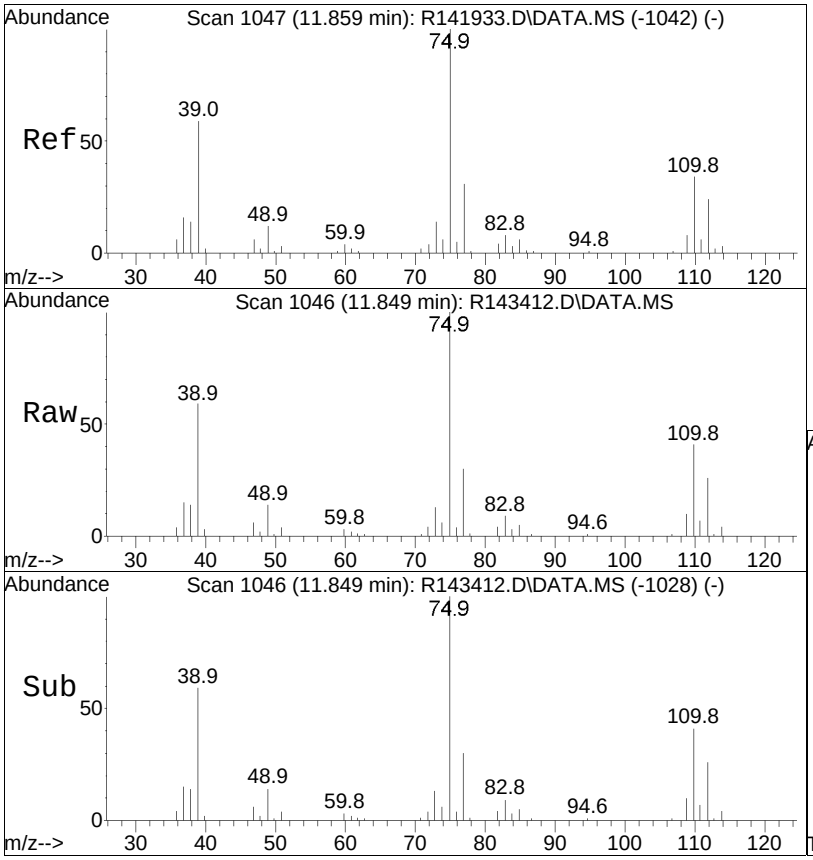


#48
1,1,1-trichloroethane
Concen: 9.56 ppbV
RT: 11.493 min Scan# 1011
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 97 Resp: 170040

Ion	Ratio	Lower	Upper
97	100		
61	42.6	34.7	52.1
119	15.1	11.8	17.6

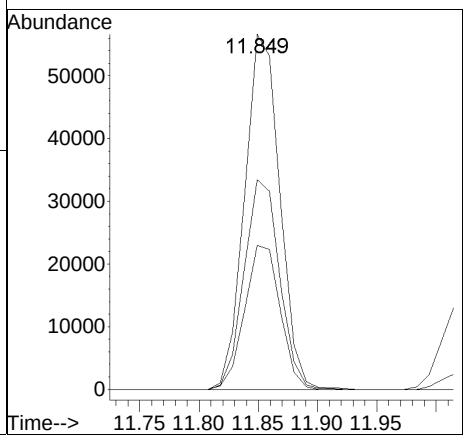


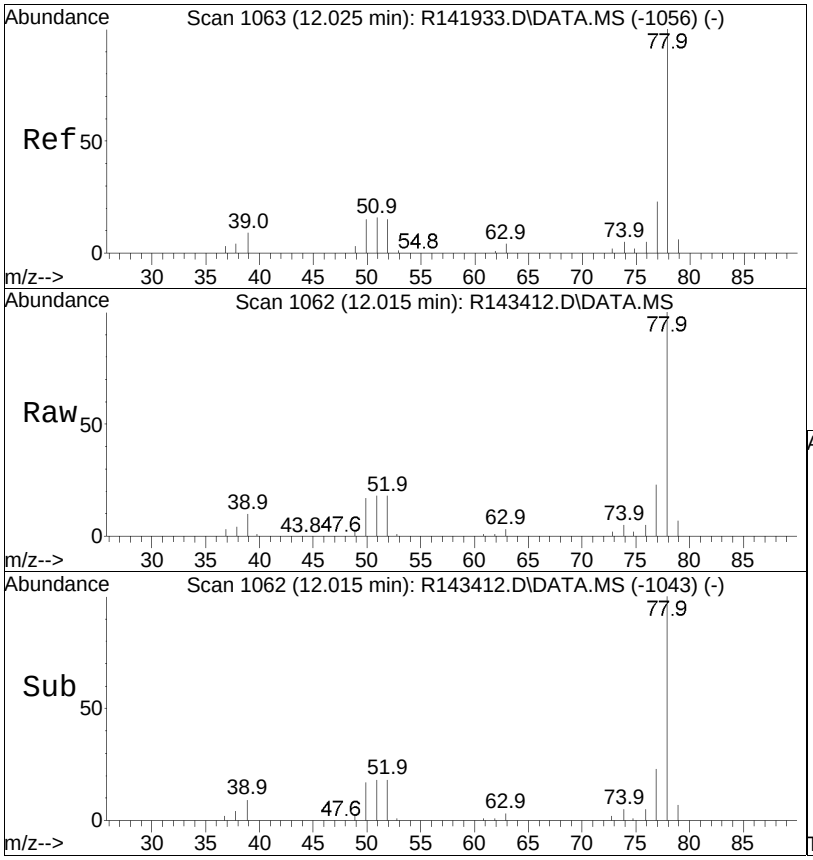


#49
1,1-dichloropropene
Concen: 9.14 ppbV
RT: 11.849 min Scan# 1046
Delta R.T. -0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 75 Resp: 116787

Ion	Ratio	Lower	Upper
75	100		
110	40.5	32.6	48.8
39	59.0	47.3	70.9

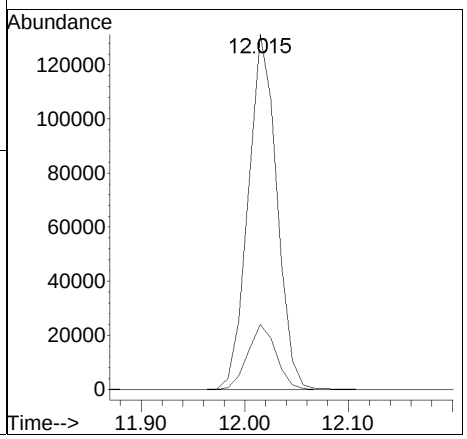


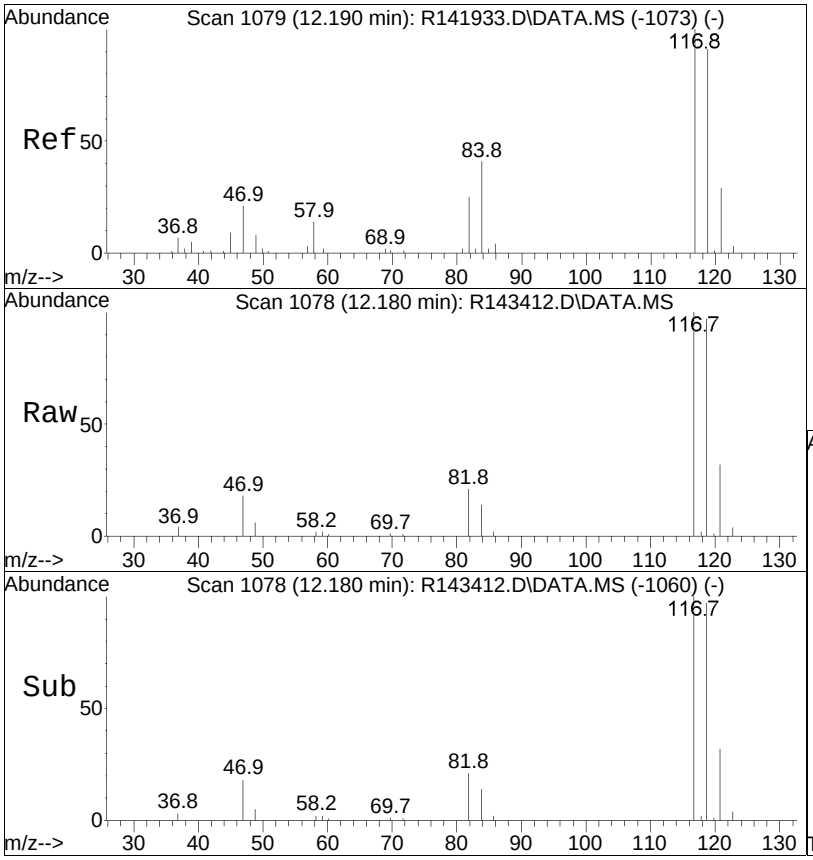


#50
benzene
Concen: 9.40 ppbV
RT: 12.015 min Scan# 1062
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 78 Resp: 251708

Ion	Ratio	Lower	Upper
78	100		
52	18.3	15.2	22.8

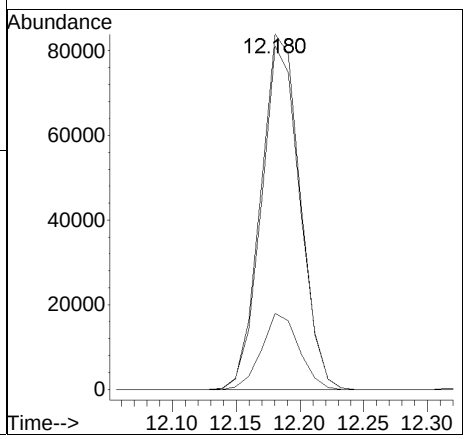


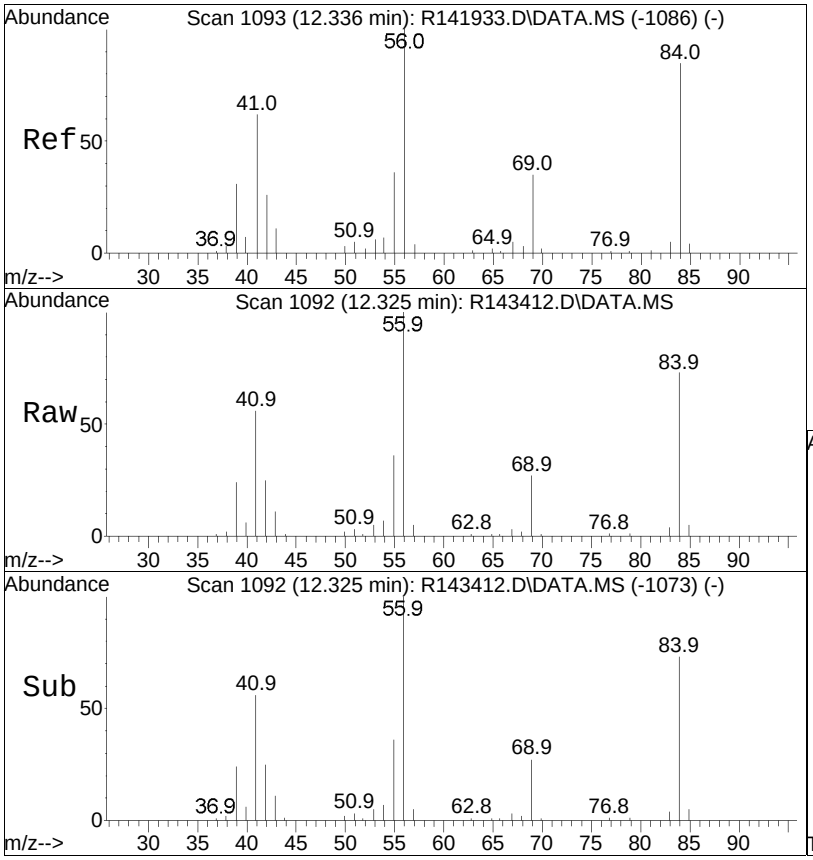


#52
carbon tetrachloride
Concen: 10.07 ppbV
RT: 12.180 min Scan# 1078
Delta R.T. -0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:117 Resp: 179888

Ion	Ratio	Lower	Upper
117	100		
119	96.6	78.9	118.3
82	21.4	17.4	26.2

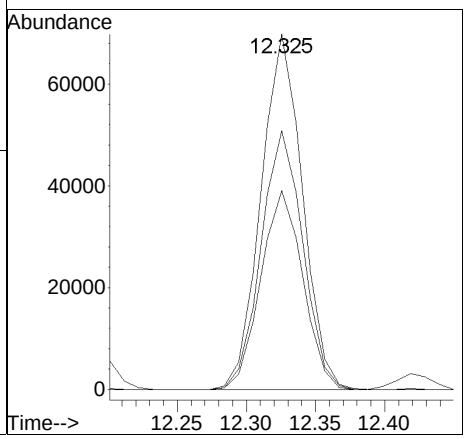


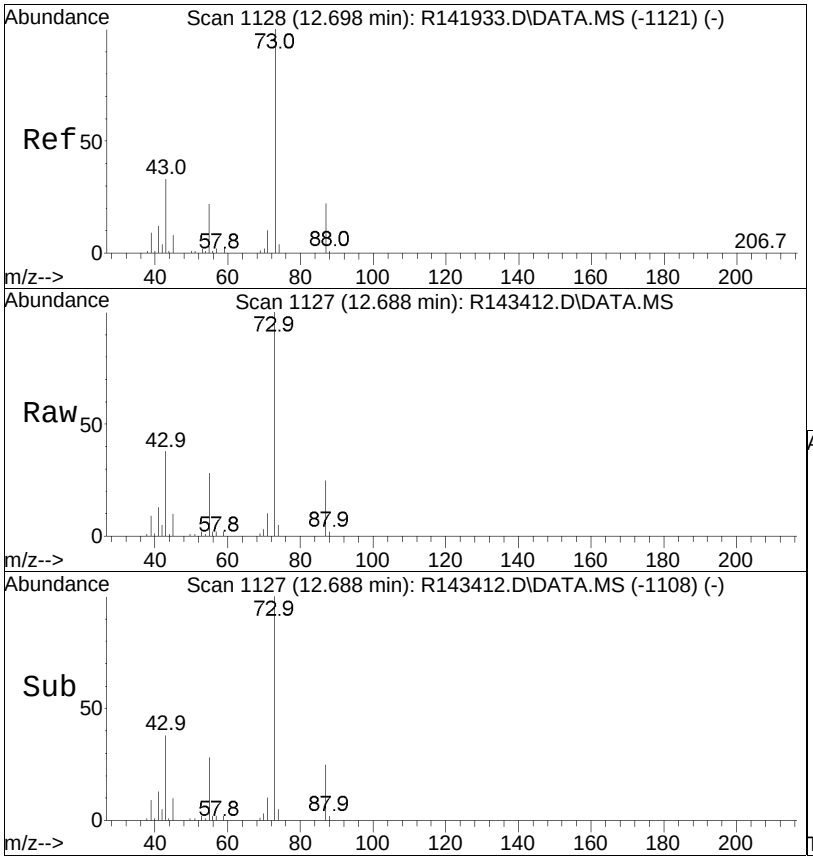


#53
cyclohexane
Concen: 9.53 ppbV
RT: 12.325 min Scan# 1092
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 56 Resp: 145005

Ion	Ratio	Lower	Upper
56	100		
84	72.8	58.2	87.2
41	55.9	47.0	70.4

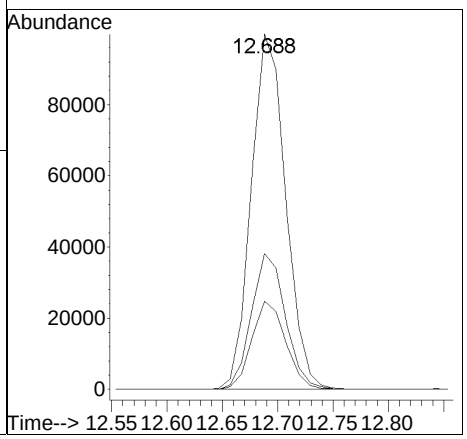


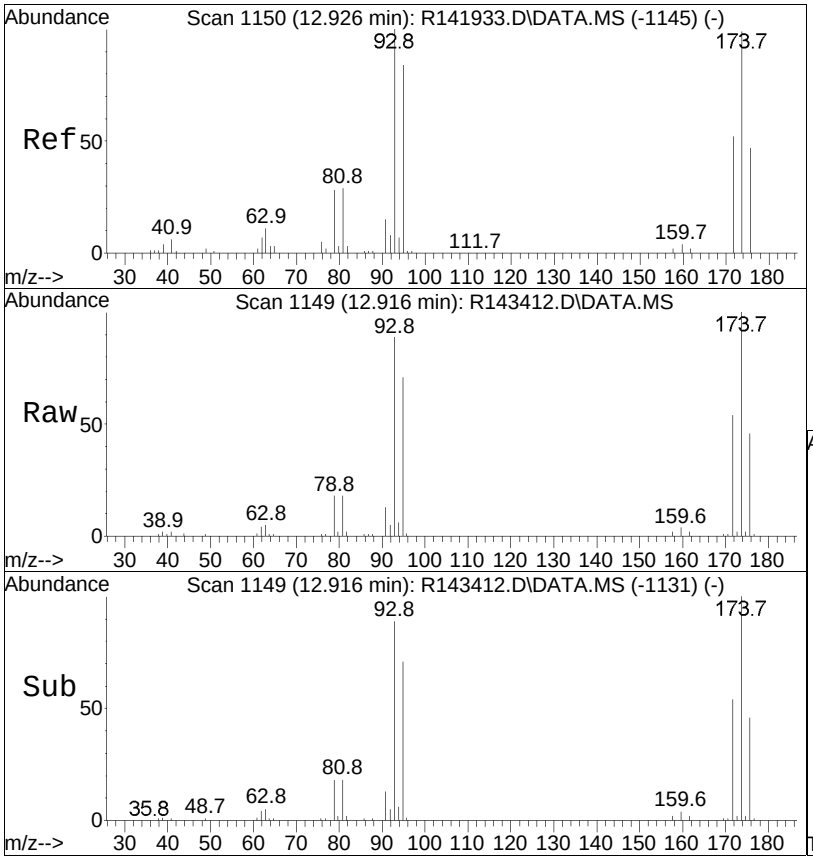


#54
tert-amyl methyl ether
Concen: 9.02 ppbV
RT: 12.688 min Scan# 1127
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 73 Resp: 216434

Ion	Ratio	Lower	Upper
73	100		
43	38.3	31.5	47.3
87	24.8	18.5	27.7

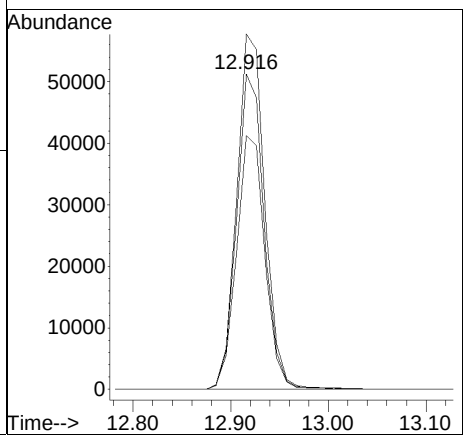


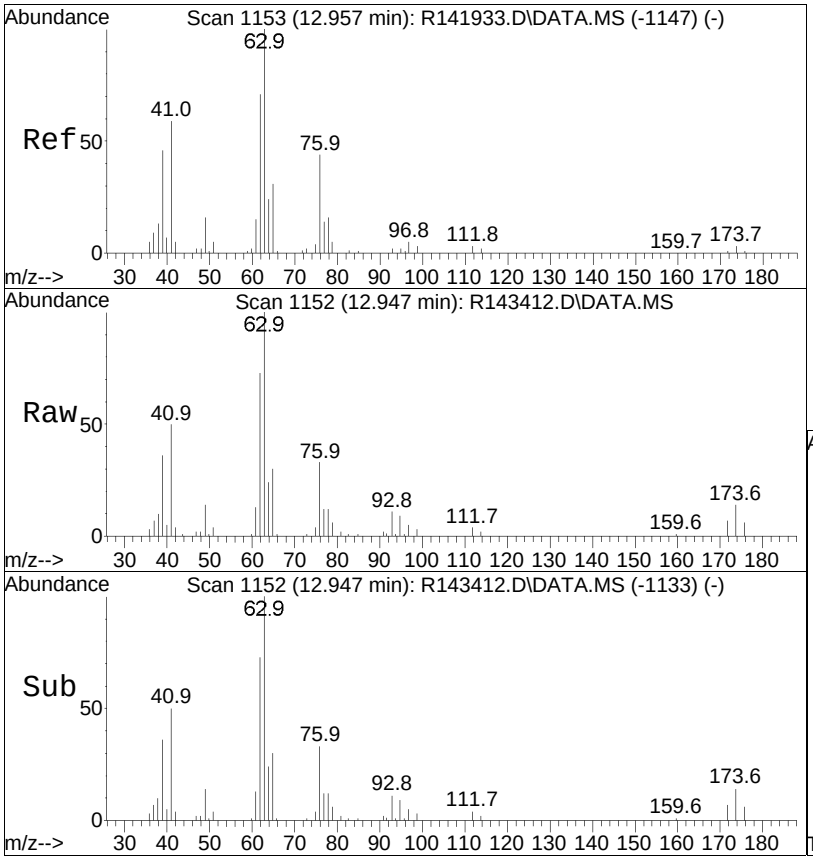


#55
dibromomethane
Concen: 9.11 ppbV
RT: 12.916 min Scan# 1149
Delta R.T. -0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 93 Resp: 100594

Ion	Ratio	Lower	Upper
93	100		
174	112.7	91.1	136.7
95	80.5	65.6	98.4

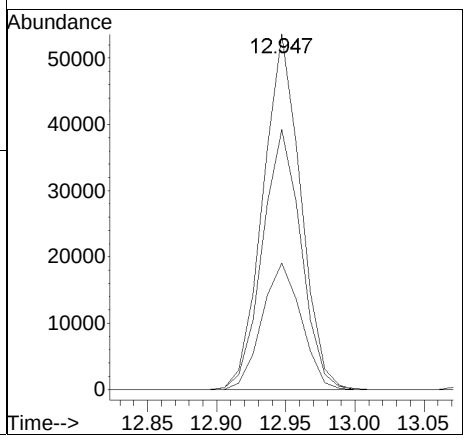


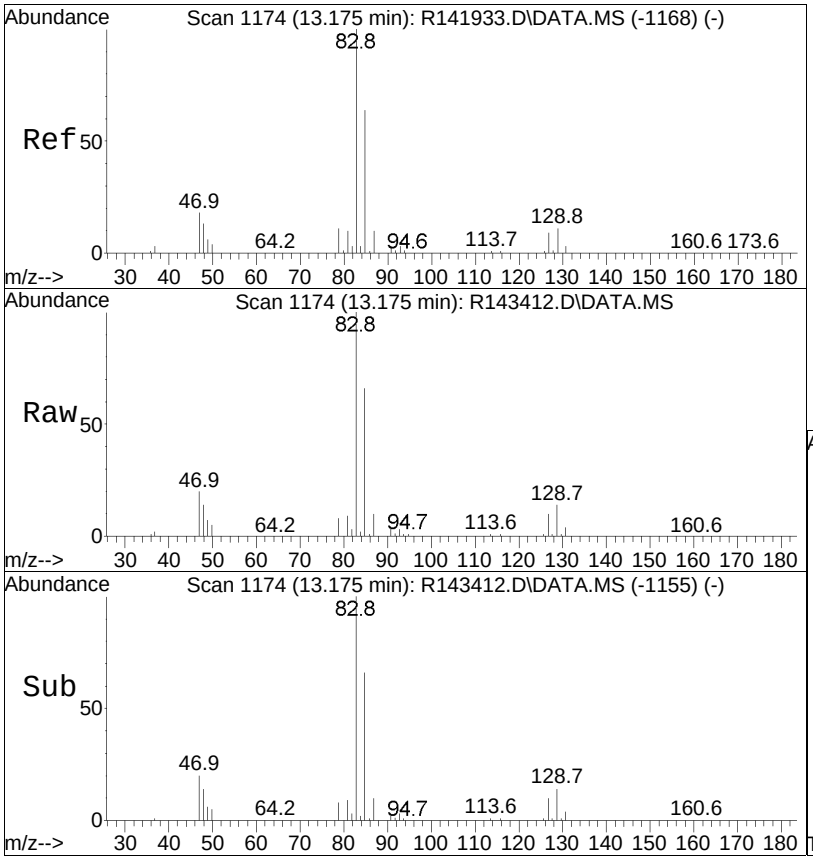


#56
1,2-dichloropropane
Concen: 9.57 ppbV
RT: 12.947 min Scan# 1152
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 63 Resp: 101557

Ion	Ratio	Lower	Upper
63	100		
62	73.1	60.1	90.1
39	35.6	28.9	43.3

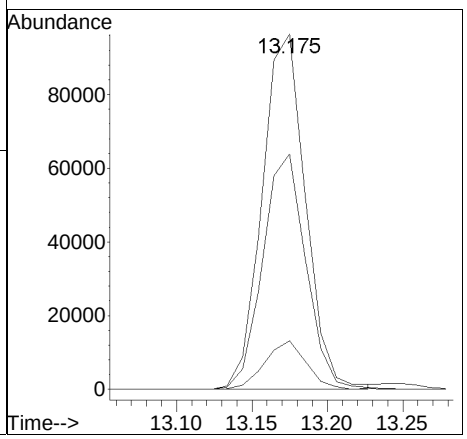


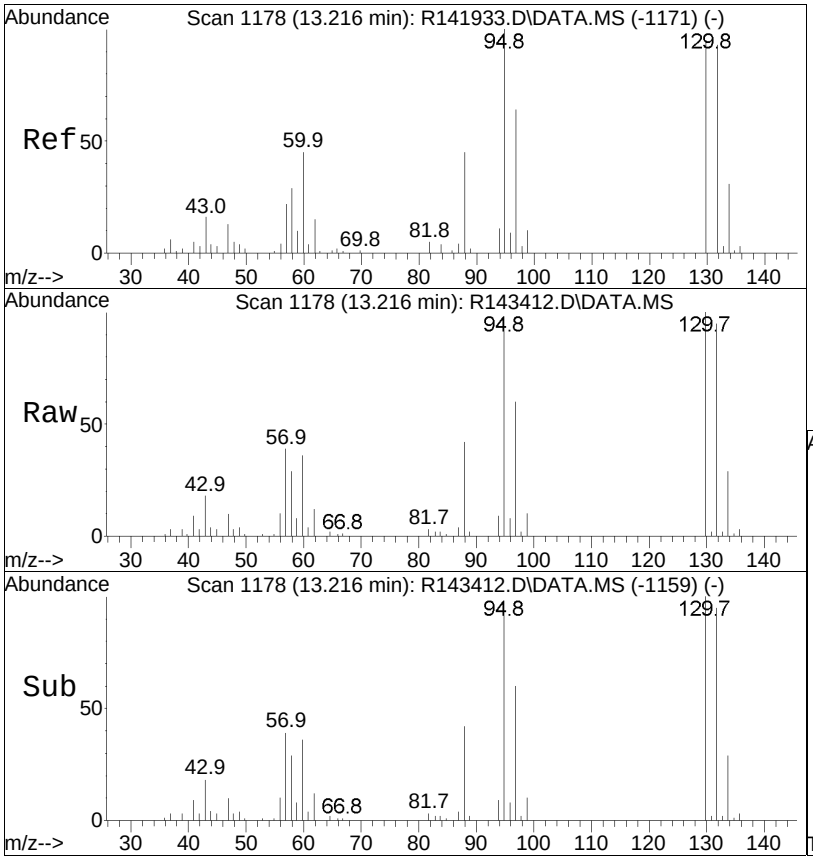


#57
bromodichloromethane
Concen: 9.49 ppbV
RT: 13.175 min Scan# 1174
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 83 Resp: 192671

Ion	Ratio	Lower	Upper
83	100		
85	66.3	52.2	78.2
129	13.7	10.5	15.7

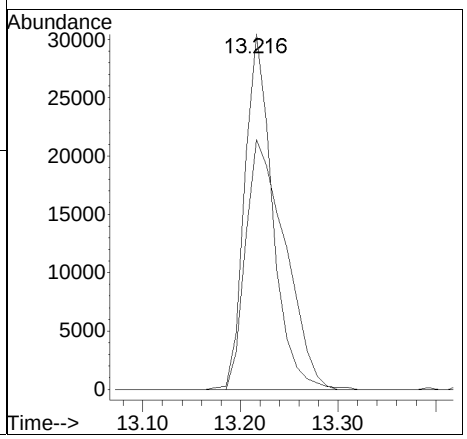


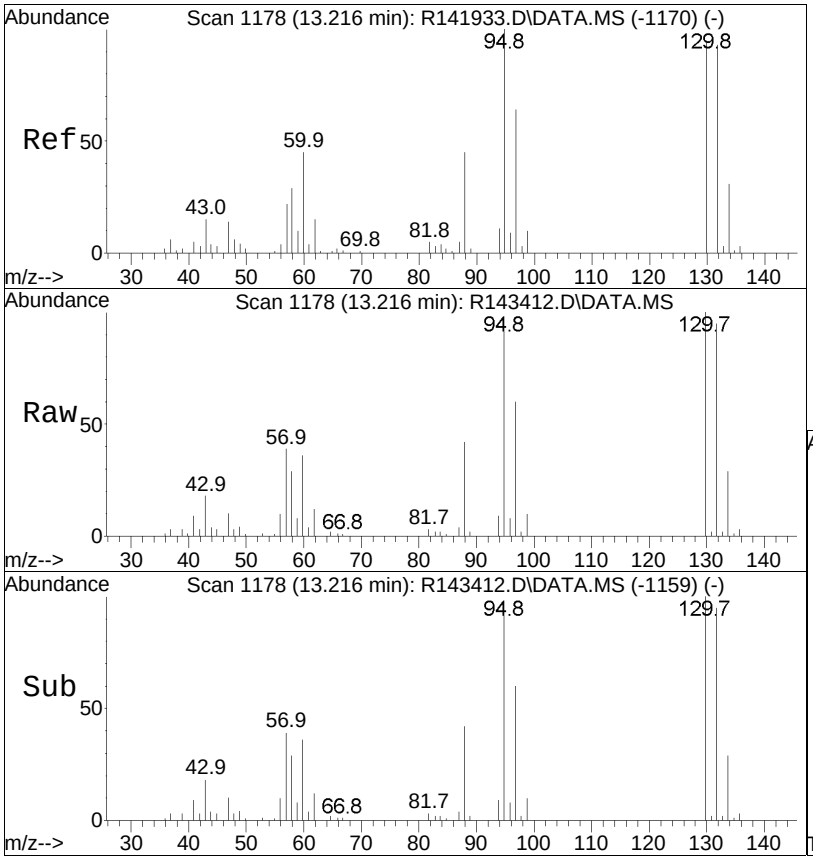


#58
1,4-dioxane
Concen: 10.14 ppbV
RT: 13.216 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 88 Resp: 60570

Ion	Ratio	Lower	Upper
88	100		
58	70.3	56.9	85.3

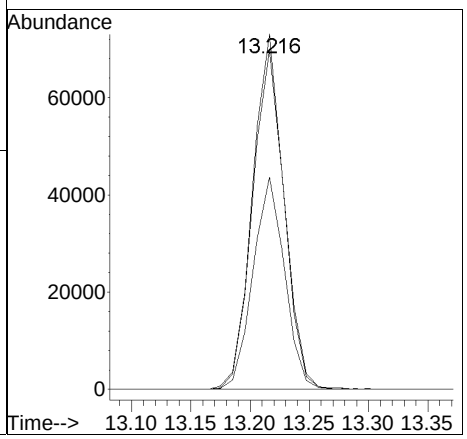


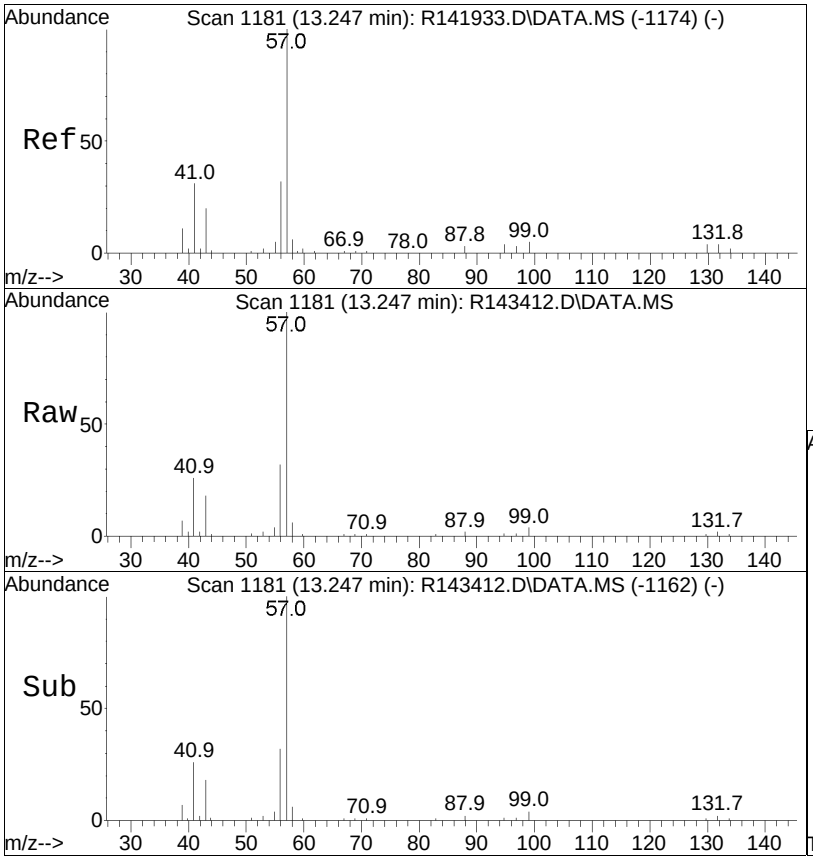


#59
trichloroethene
Concen: 9.63 ppbV
RT: 13.216 min Scan# 1178
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:130 Resp: 134151

Ion	Ratio	Lower	Upper
130	100		
132	95.5	75.6	113.4
97	59.8	45.6	68.4

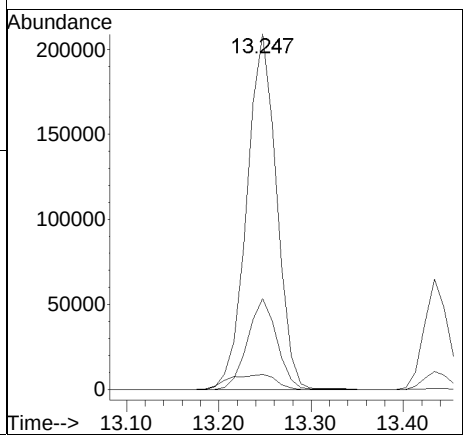


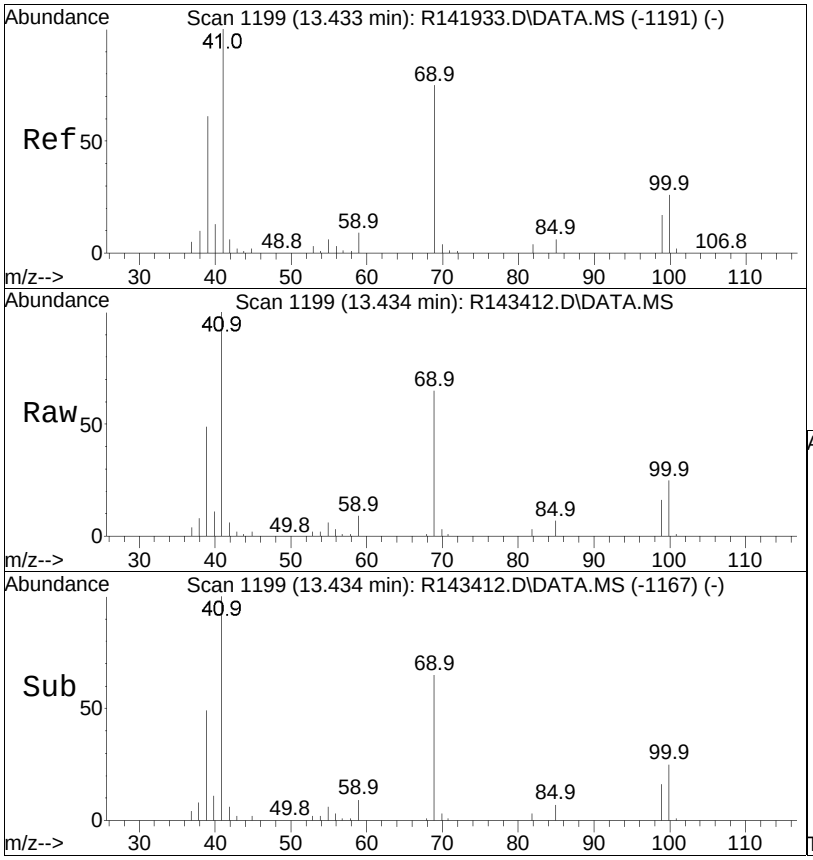


#60
2,2,4-trimethylpentane
Concen: 9.30 ppbV
RT: 13.247 min Scan# 1181
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 57 Resp: 467813

Ion	Ratio	Lower	Upper
57	100		
99	4.2	3.2	4.8
41	25.6	21.4	32.0

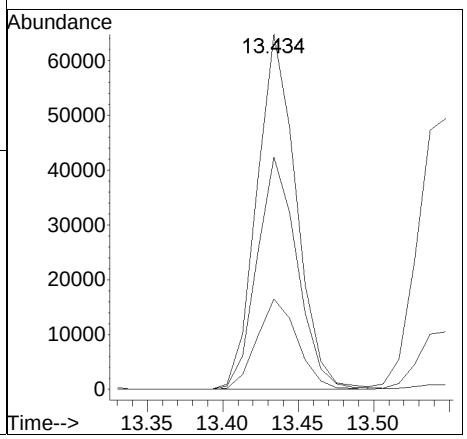


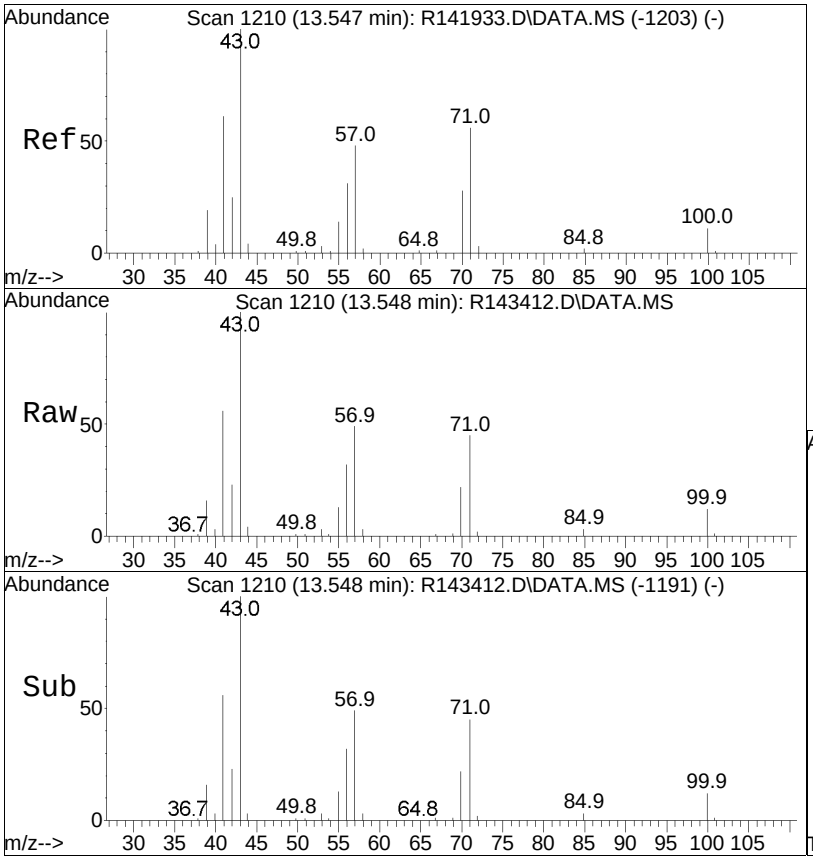


#61
methyl methacrylate
Concen: 8.68 ppbV
RT: 13.434 min Scan# 1199
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 41 Resp: 117801

Ion	Ratio	Lower	Upper
41	100		
69	66.8	51.5	77.3
100	26.3	20.0	30.0

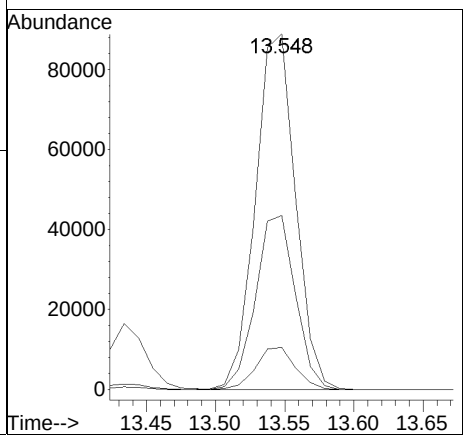


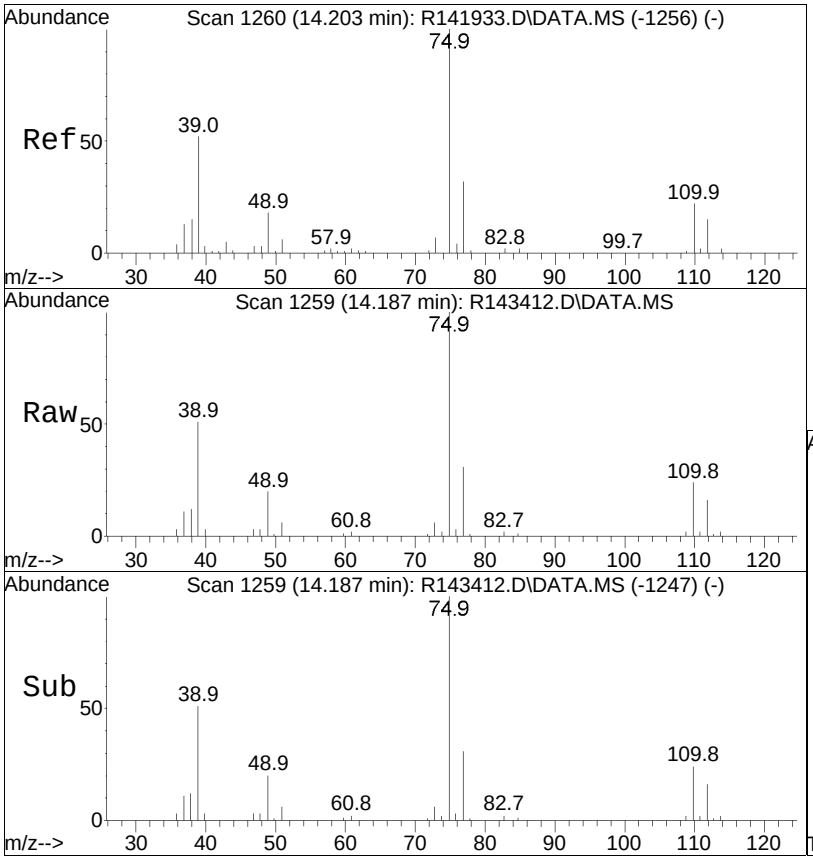


#62
heptane
Concen: 9.09 ppbV
RT: 13.548 min Scan# 1210
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 178859

Ion	Ratio	Lower	Upper
43	100		
57	48.9	37.9	56.9
100	11.8	9.1	13.7

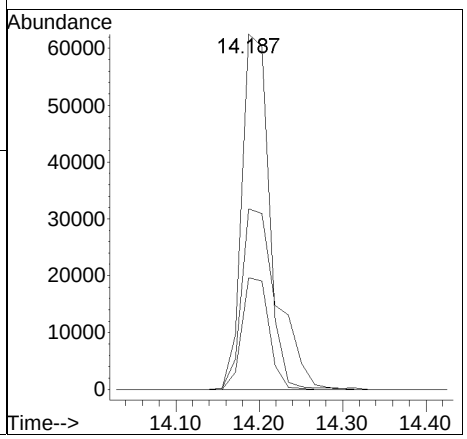


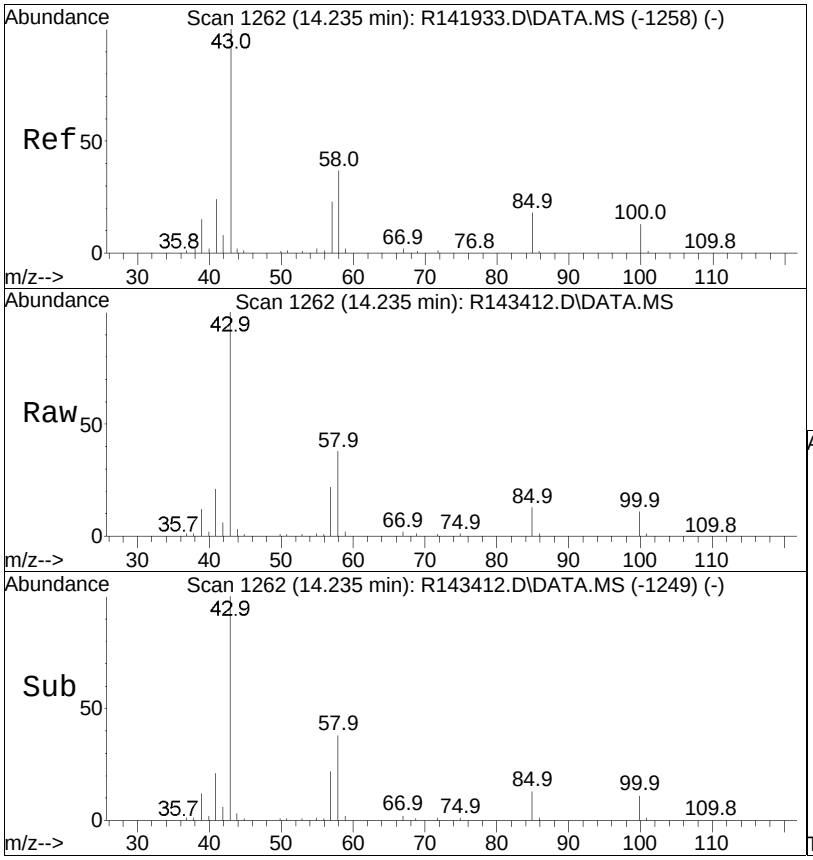


#63
cis-1,3-dichloropropene
Concen: 10.12 ppbV
RT: 14.187 min Scan# 1259
Delta R.T. -0.016 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 75 Resp: 140141

Ion	Ratio	Lower	Upper
75	100		
39	50.8	42.4	63.6
77	31.4	25.6	38.4

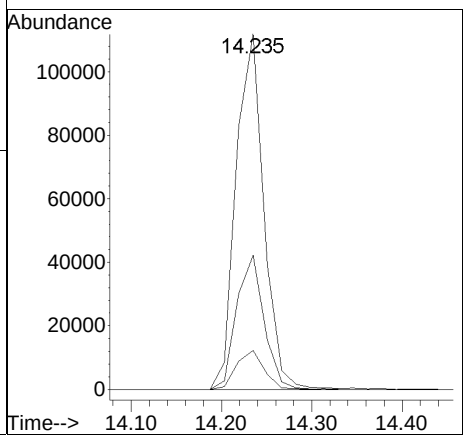


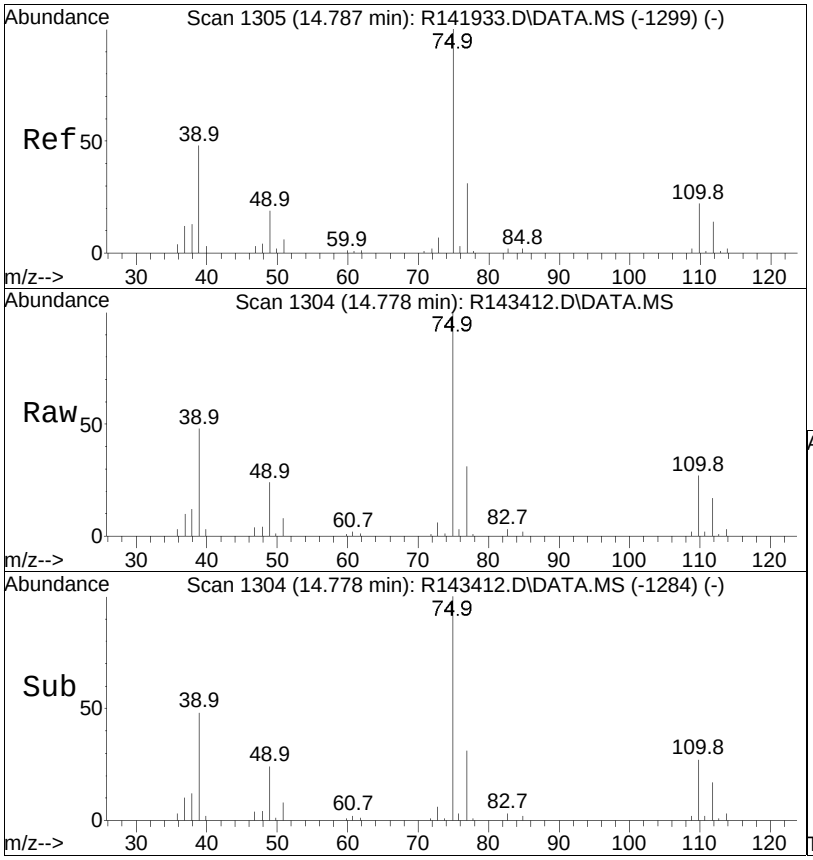


#64
4-methyl-2-pentanone
Concen: 9.40 ppbV
RT: 14.235 min Scan# 1262
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 239642

Ion	Ratio	Lower	Upper
43	100		
58	37.8	29.9	44.9
100	11.0	8.9	13.3

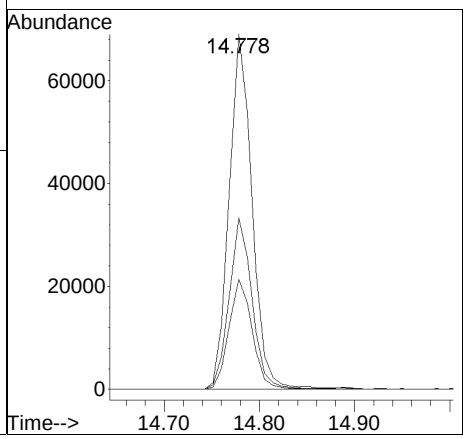


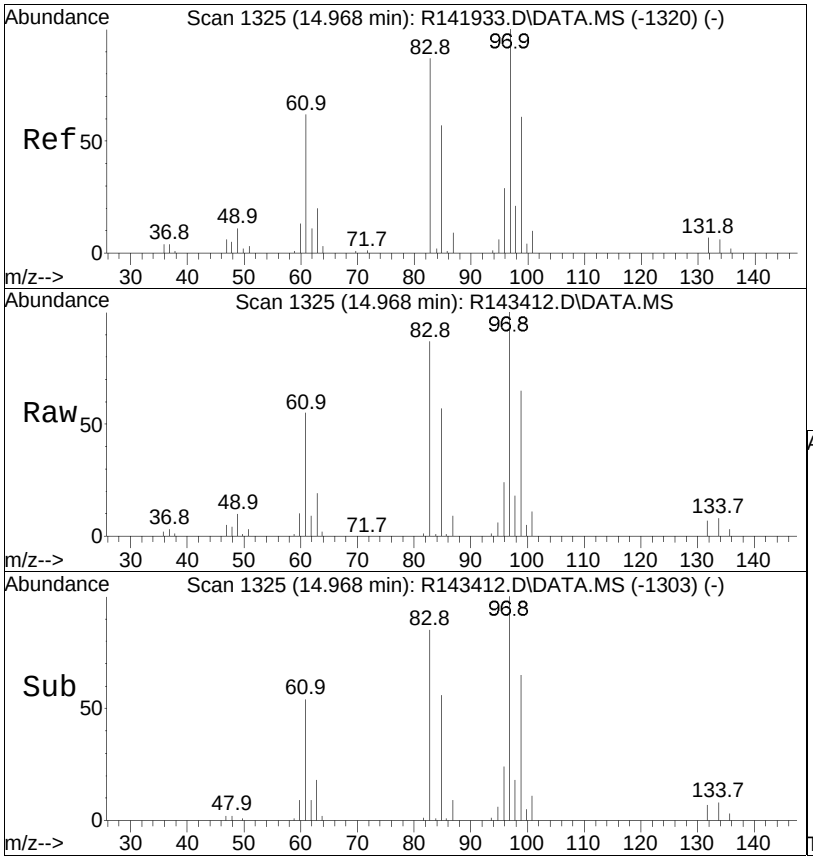


#65
trans-1,3-dichloropropene
Concen: 8.74 ppbV
RT: 14.778 min Scan# 1304
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 75 Resp: 116352

Ion	Ratio	Lower	Upper
75	100		
77	31.1	26.2	39.2
39	48.3	40.6	61.0

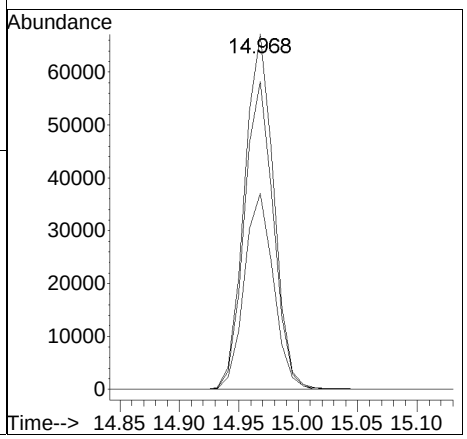


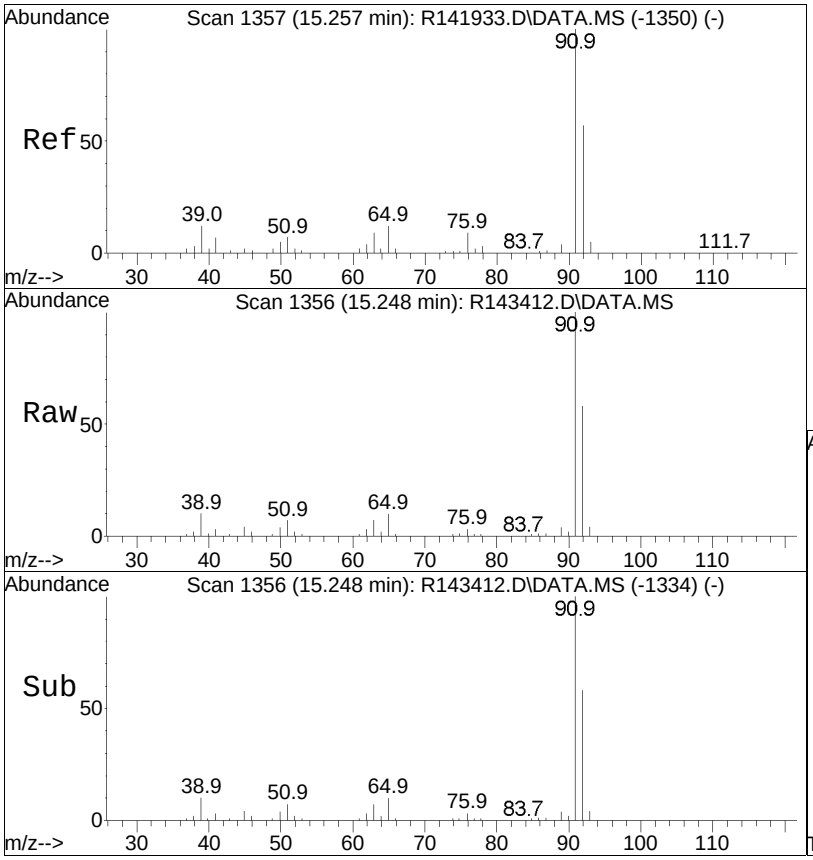


#66
1,1,2-trichloroethane
Concen: 9.85 ppbV
RT: 14.968 min Scan# 1325
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 97 Resp: 115274

Ion	Ratio	Lower	Upper
97	100		
83	86.7	66.6	100.0
61	55.2	44.6	66.8

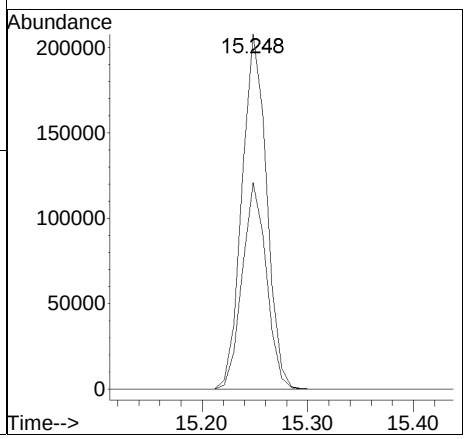


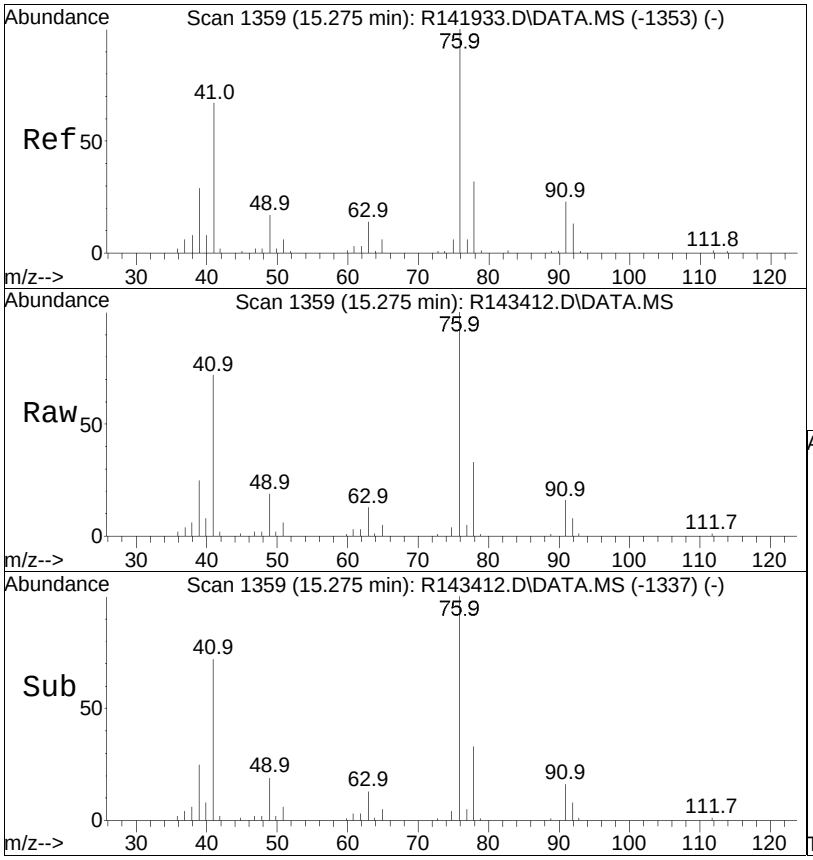


#68
toluene
Concen: 10.01 ppbV
RT: 15.248 min Scan# 1356
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 337570

Ion	Ratio	Lower	Upper
91	100		
92	58.2	46.8	70.2

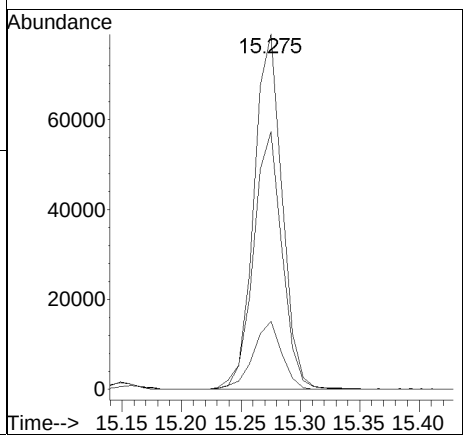


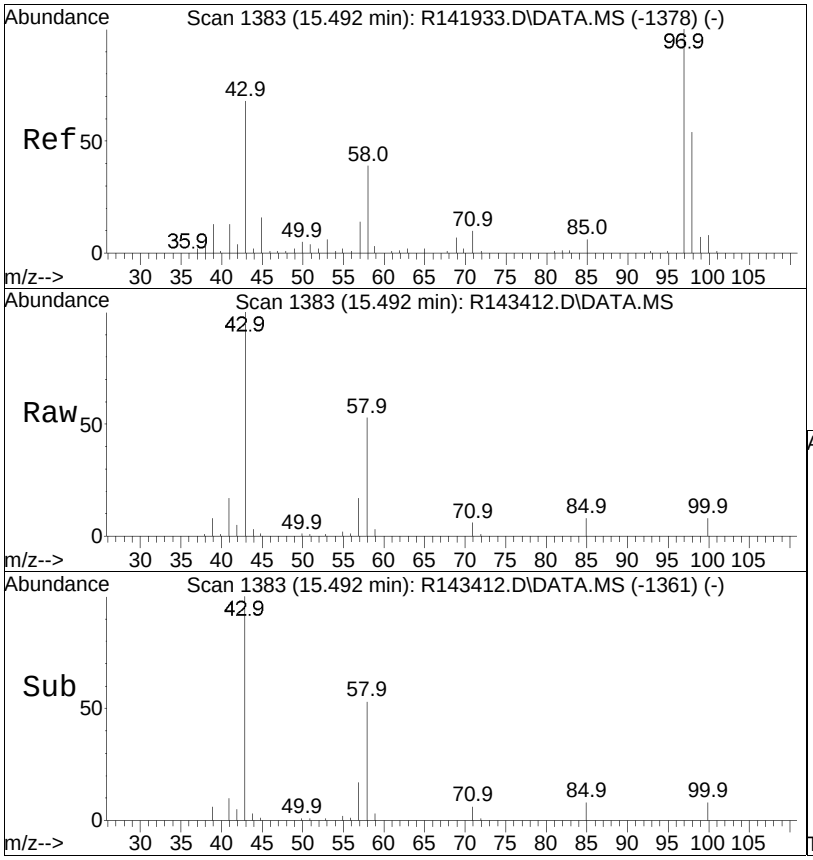


#71
1,3-dichloropropane
Concen: 9.33 ppbV
RT: 15.275 min Scan# 1359
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 76 Resp: 130232

Ion	Ratio	Lower	Upper
76	100		
41	72.5	59.2	88.8
49	19.2	14.9	22.3

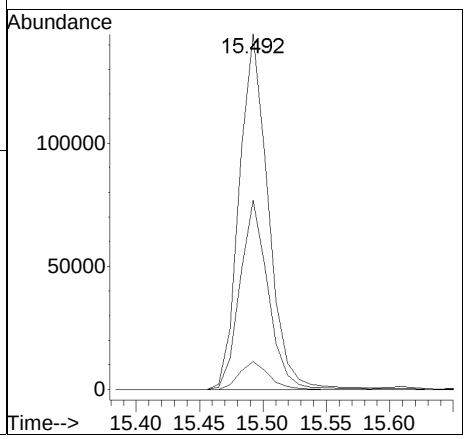


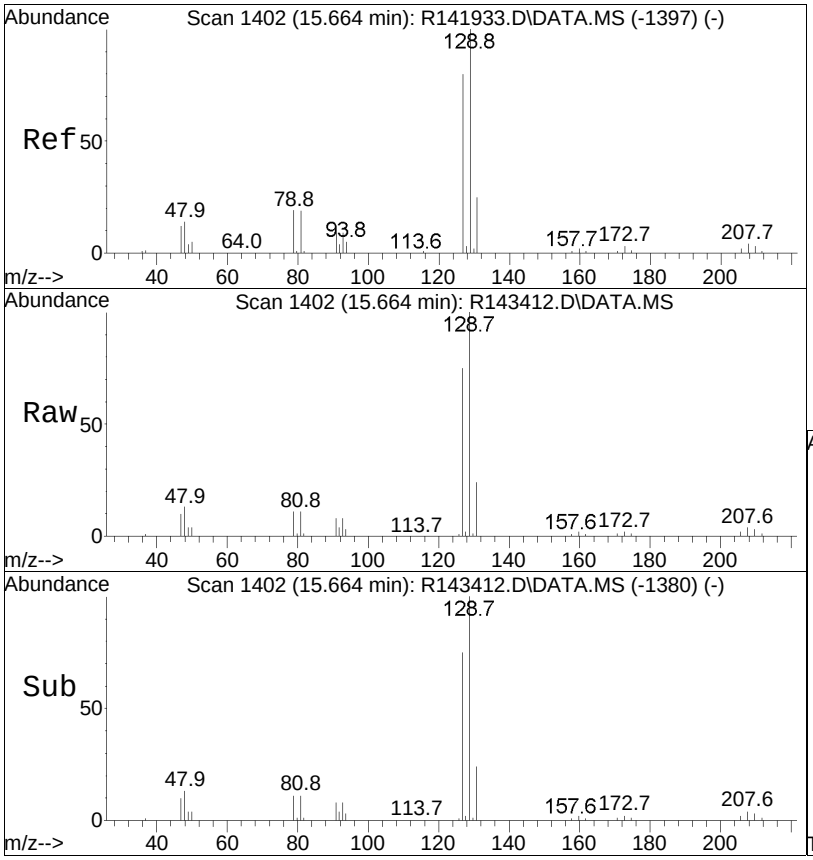


#72
2-hexanone
Concen: 9.94 ppbV
RT: 15.492 min Scan# 1383
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 229452

Ion	Ratio	Lower	Upper
43	100		
58	53.3	45.0	67.4
100	7.8	8.8	13.2#

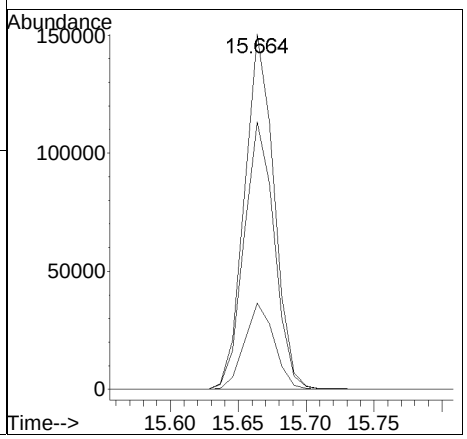


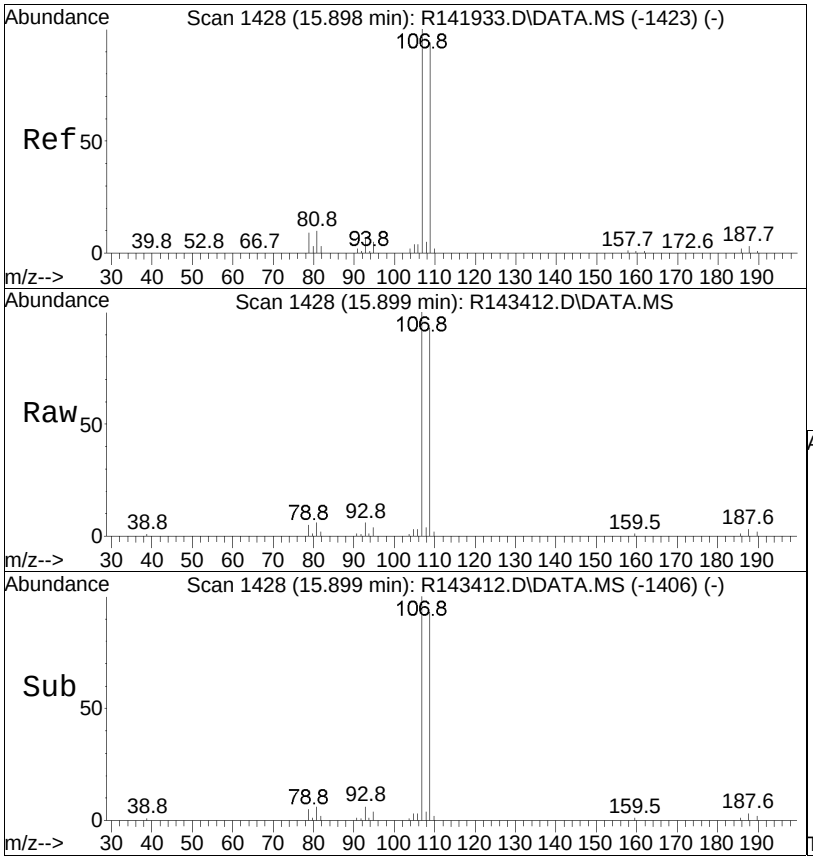


#74
dibromochloromethane
Concen: 10.31 ppbV
RT: 15.664 min Scan# 1402
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:129 Resp: 228429

Ion	Ratio	Lower	Upper
129	100		
127	75.3	62.9	94.3
131	24.3	19.6	29.4

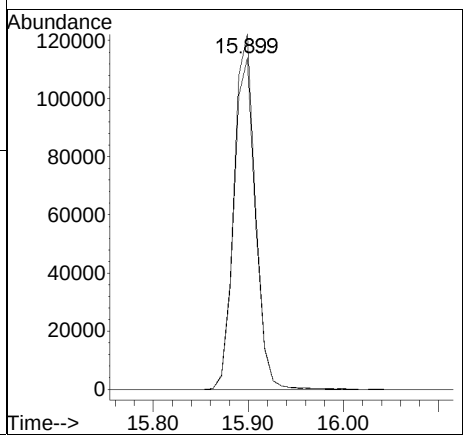


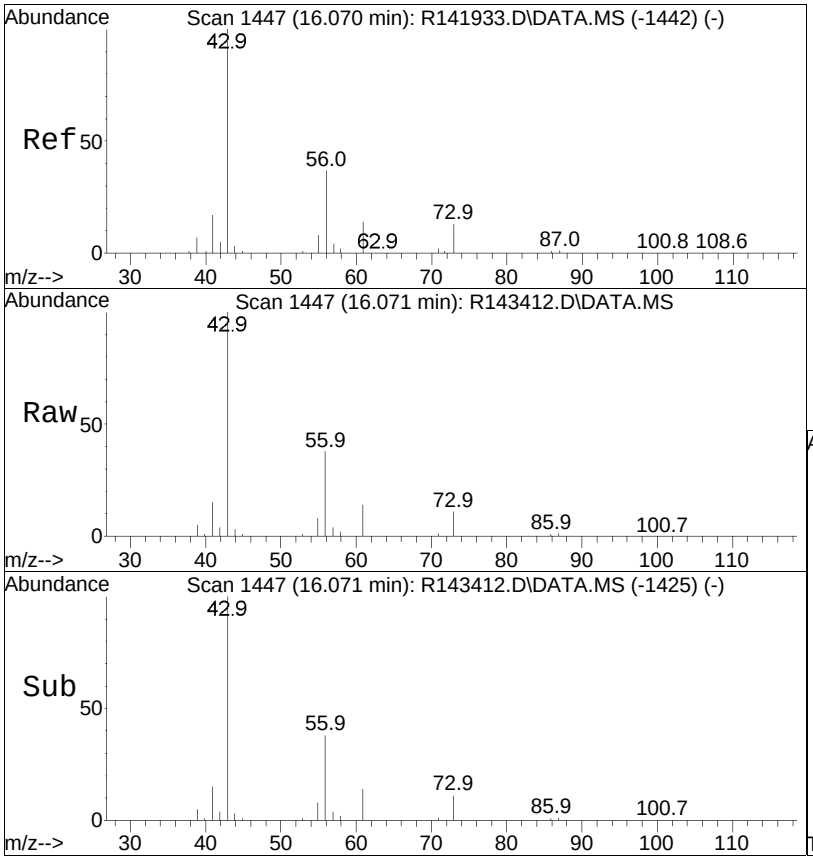


#75
1,2-dibromoethane
Concen: 10.36 ppbV
RT: 15.899 min Scan# 1428
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:107 Resp: 191534

Ion	Ratio	Lower	Upper
107	100		
109	93.2	76.0	114.0

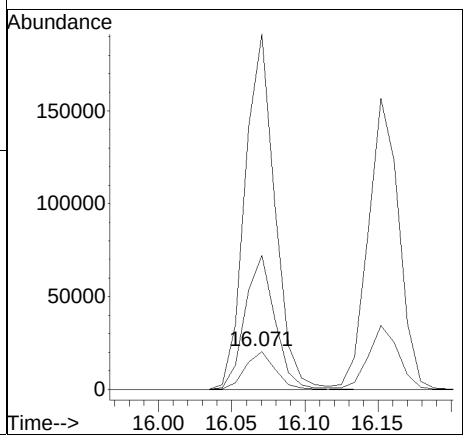


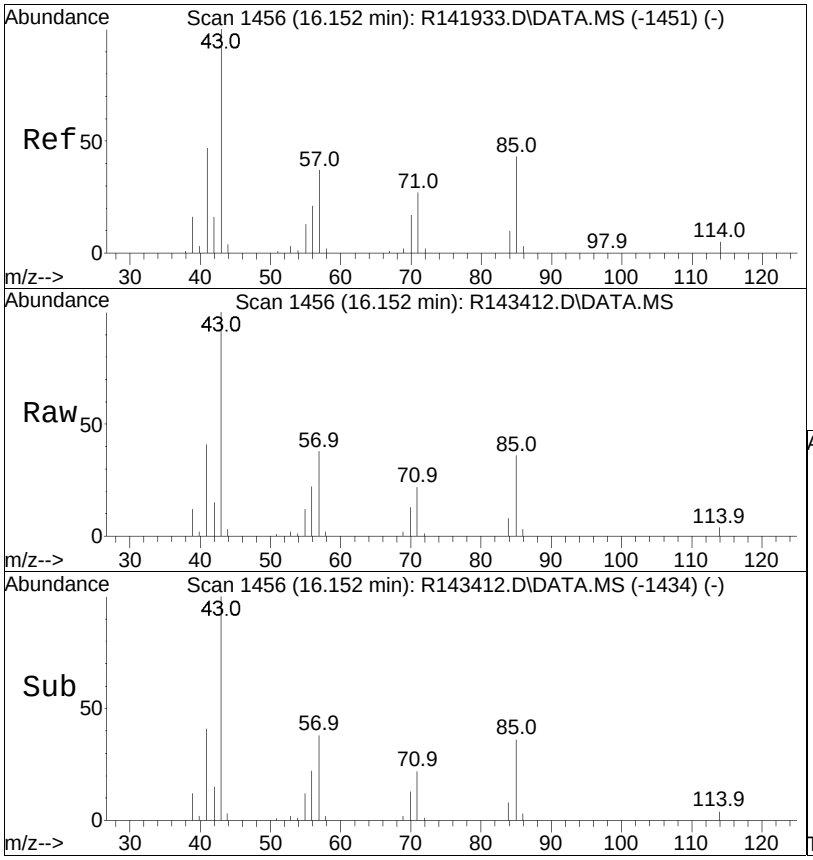


#76
butyl acetate
Concen: 9.89 ppbV
RT: 16.071 min Scan# 1447
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 73 Resp: 29078

Ion	Ratio	Lower	Upper
73	100		
56	355.5	282.4	423.6
43	941.7	744.6	1116.8

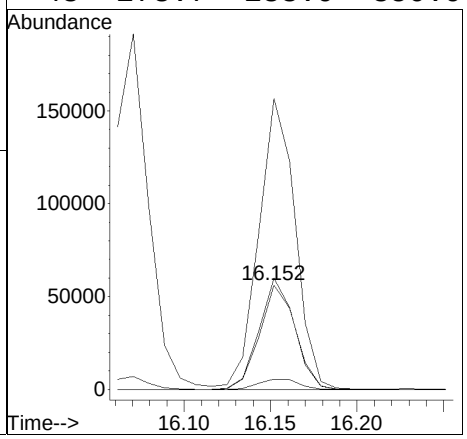


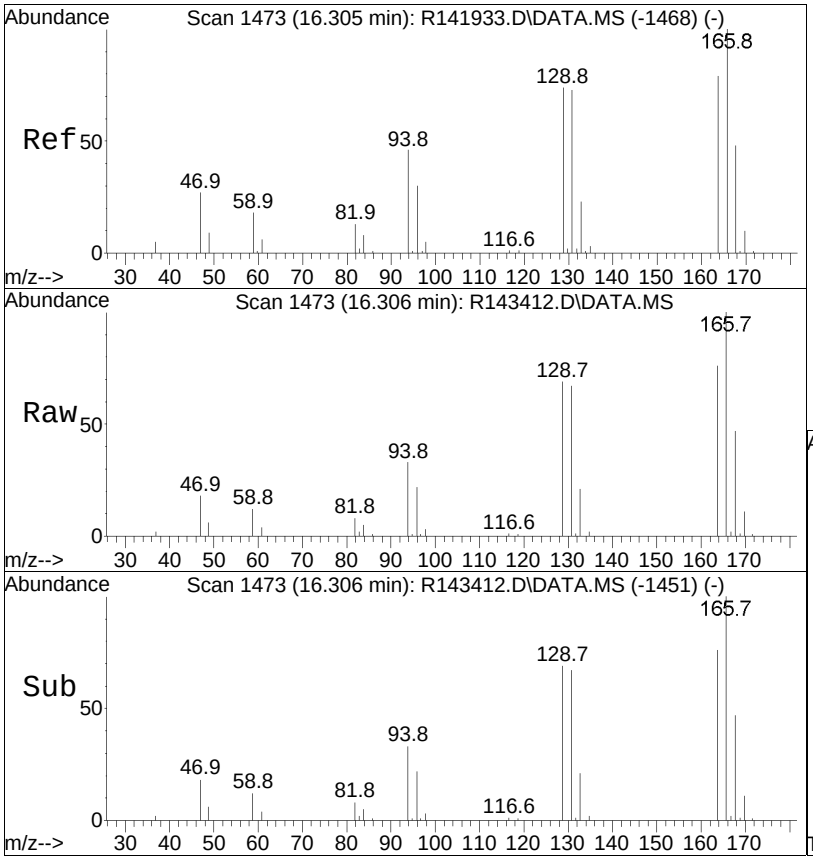


#77
octane
Concen: 9.18 ppbV
RT: 16.152 min Scan# 1456
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 85 Resp: 81274

Ion	Ratio	Lower	Upper
85	100		
57	106.7	82.0	123.0
114	9.9	8.3	12.5
43	278.7	233.9	350.9

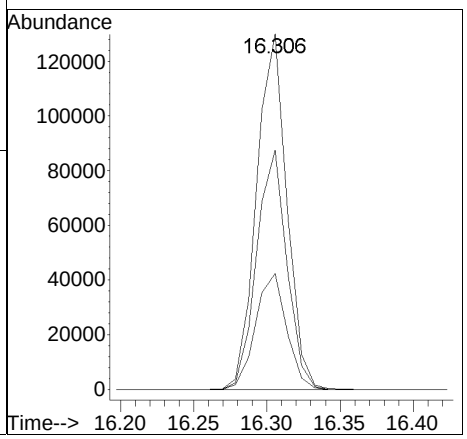


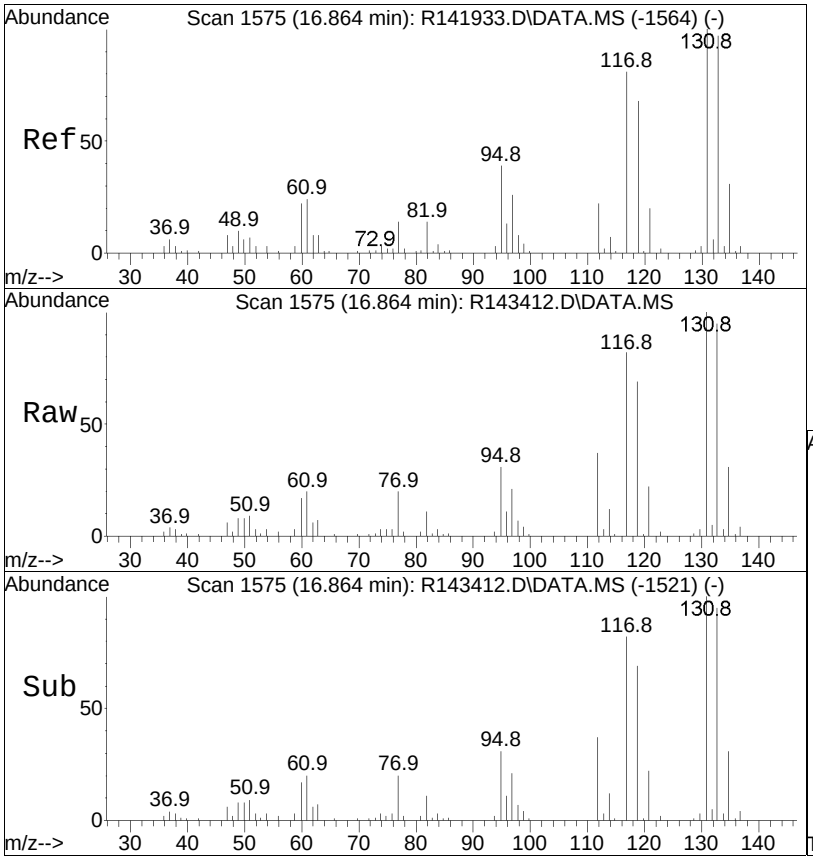


#78
tetrachloroethene
Concen: 10.17 ppbV
RT: 16.306 min Scan# 1473
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:166 Resp: 187279

Ion	Ratio	Lower	Upper
166	100		
131	67.3	56.1	84.1
94	32.6	29.3	43.9

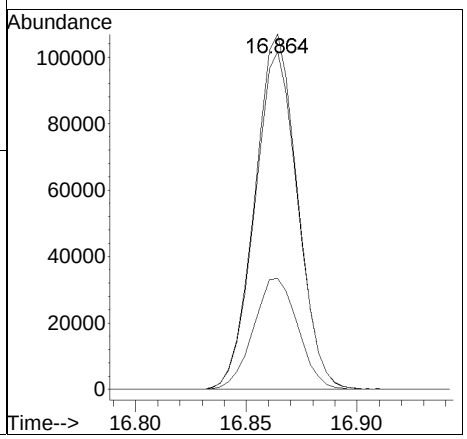


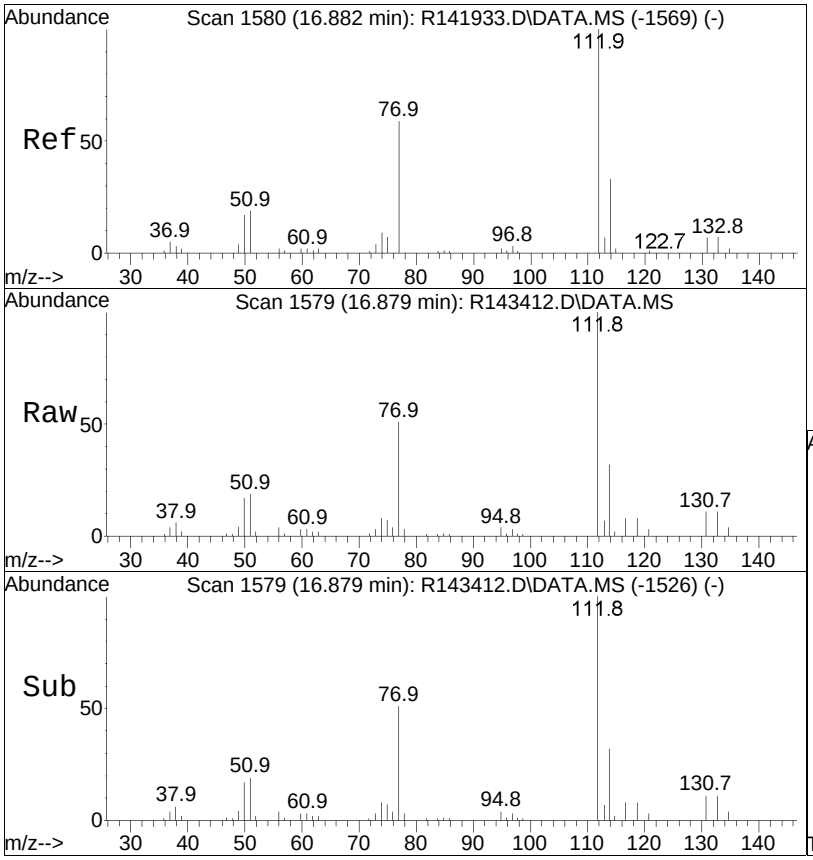


#79
1,1,1,2-tetrachloroethane
Concen: 9.62 ppbV
RT: 16.864 min Scan# 1575
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:131 Resp: 143596

Ion	Ratio	Lower	Upper
131	100		
133	95.1	78.5	117.7
95	31.2	26.9	40.3

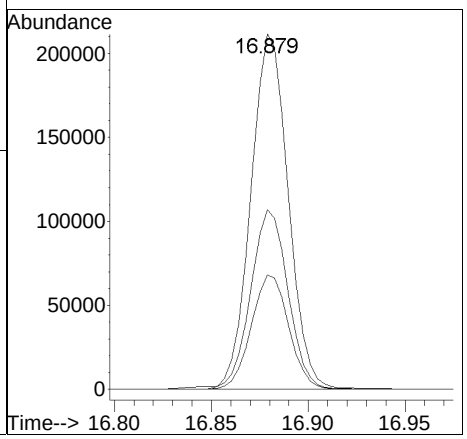


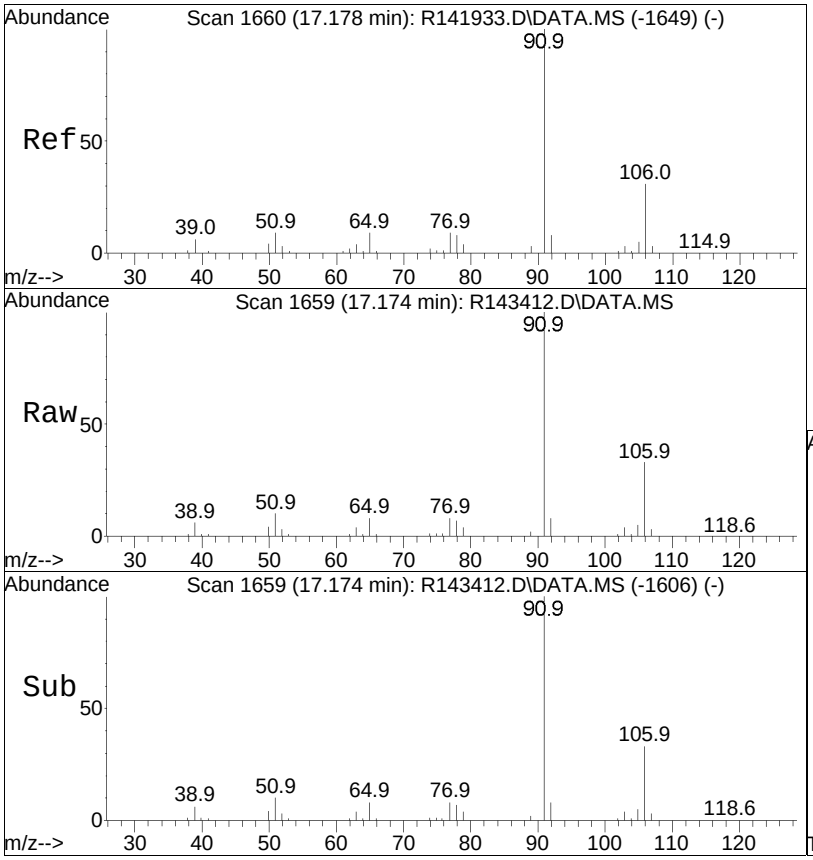


#80
chlorobenzene
Concen: 10.05 ppbV
RT: 16.879 min Scan# 1579
Delta R.T. -0.004 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:112 Resp: 283781

Ion	Ratio	Lower	Upper
112	100		
114	32.2	25.8	38.8
77	50.6	40.0	60.0

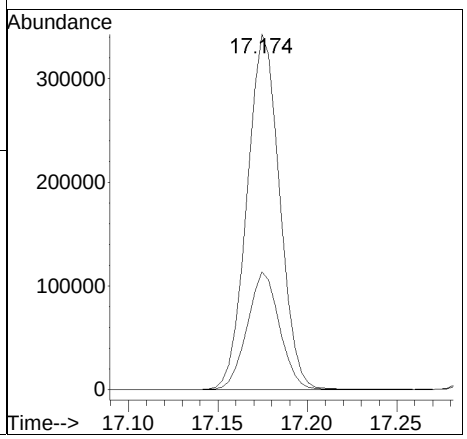


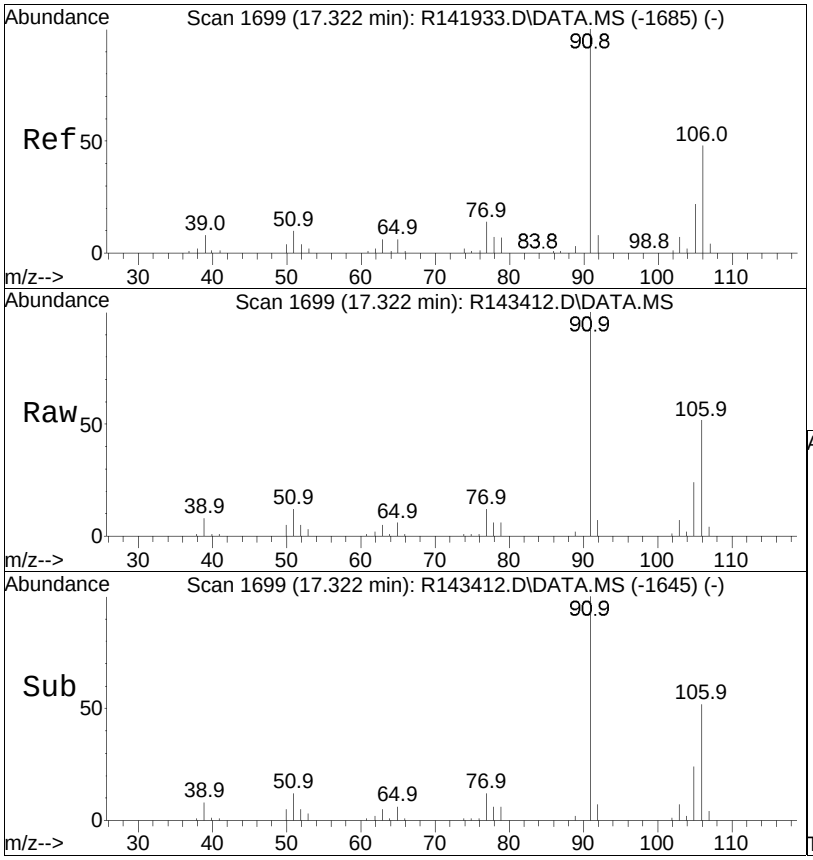


#81
ethylbenzene
Concen: 9.98 ppbV
RT: 17.174 min Scan# 1659
Delta R.T. -0.004 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 433670

Ion	Ratio	Lower	Upper
91	100		
106	33.1	26.0	39.0

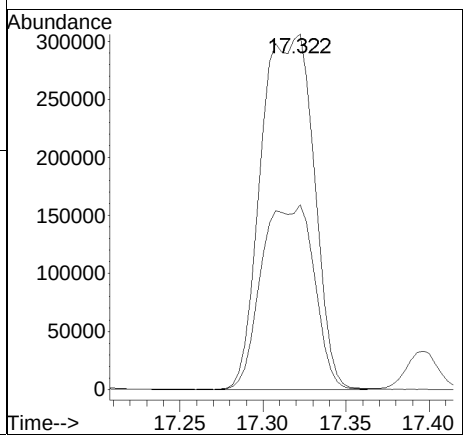


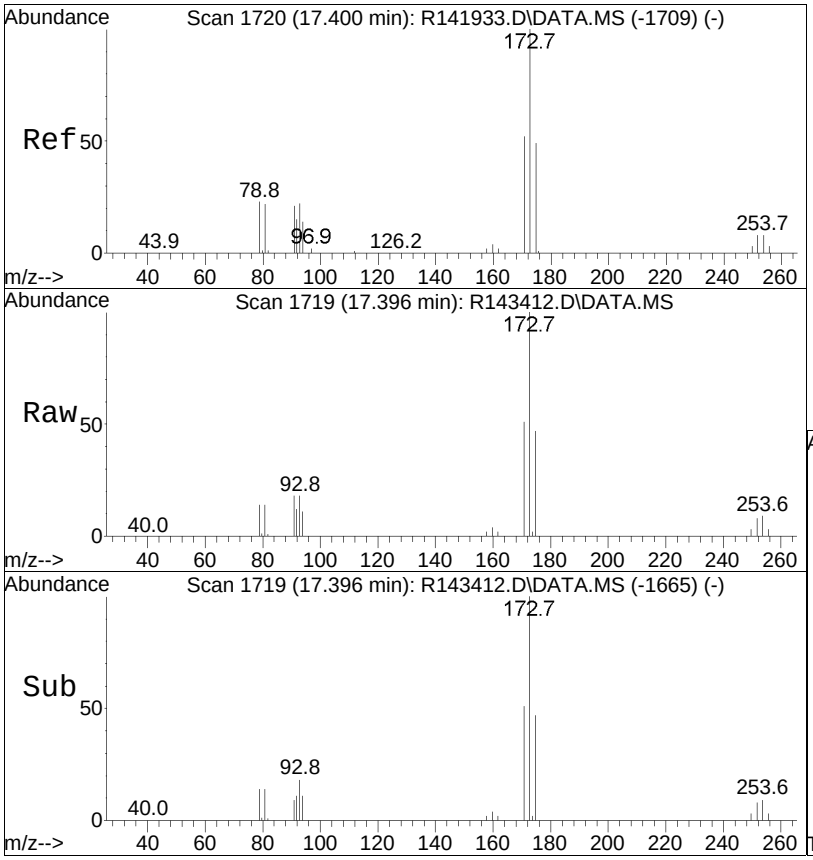


#83
m+p-xylene
Concen: 20.27 ppbV
RT: 17.322 min Scan# 1699
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 674406

Ion	Ratio	Lower	Upper
91	100		
106	52.0	41.0	61.6

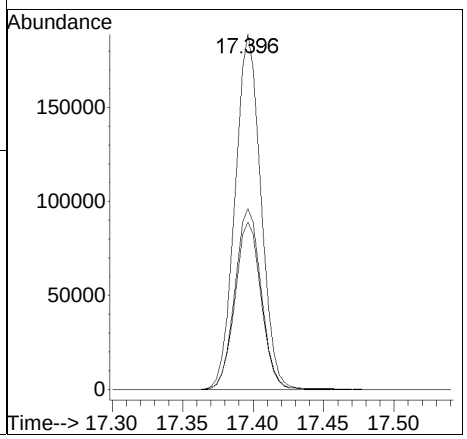


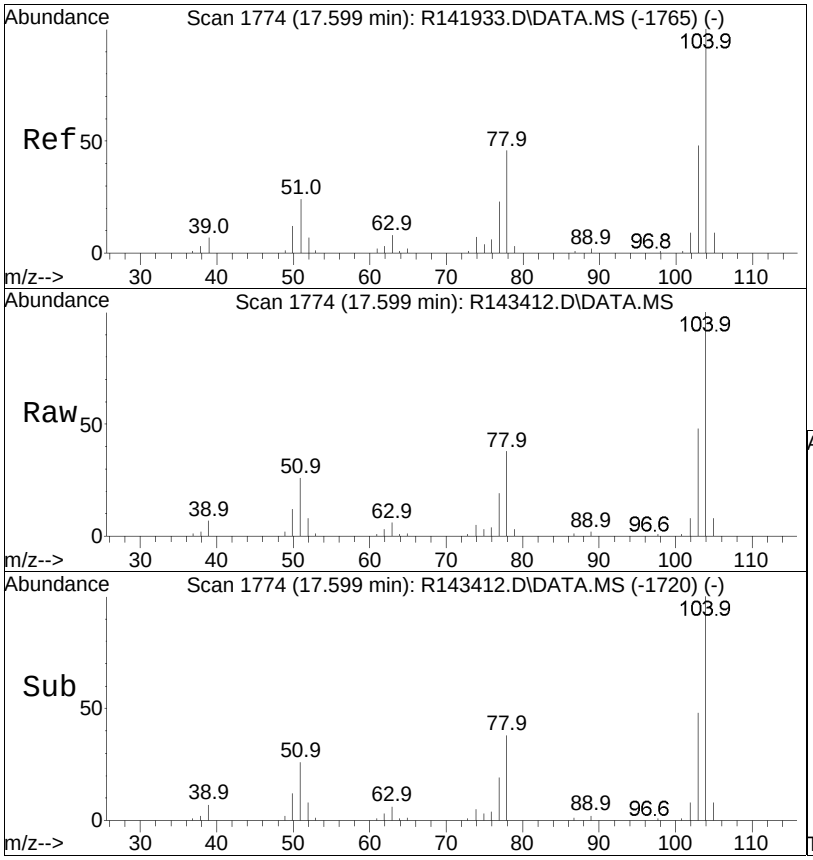


#84
bromoform
Concen: 10.37 ppbV
RT: 17.396 min Scan# 1719
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:173 Resp: 241146

Ion	Ratio	Lower	Upper
173	100		
175	47.1	38.4	57.6
171	50.9	42.2	63.2

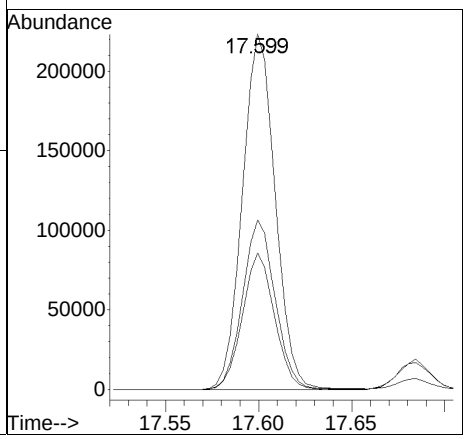


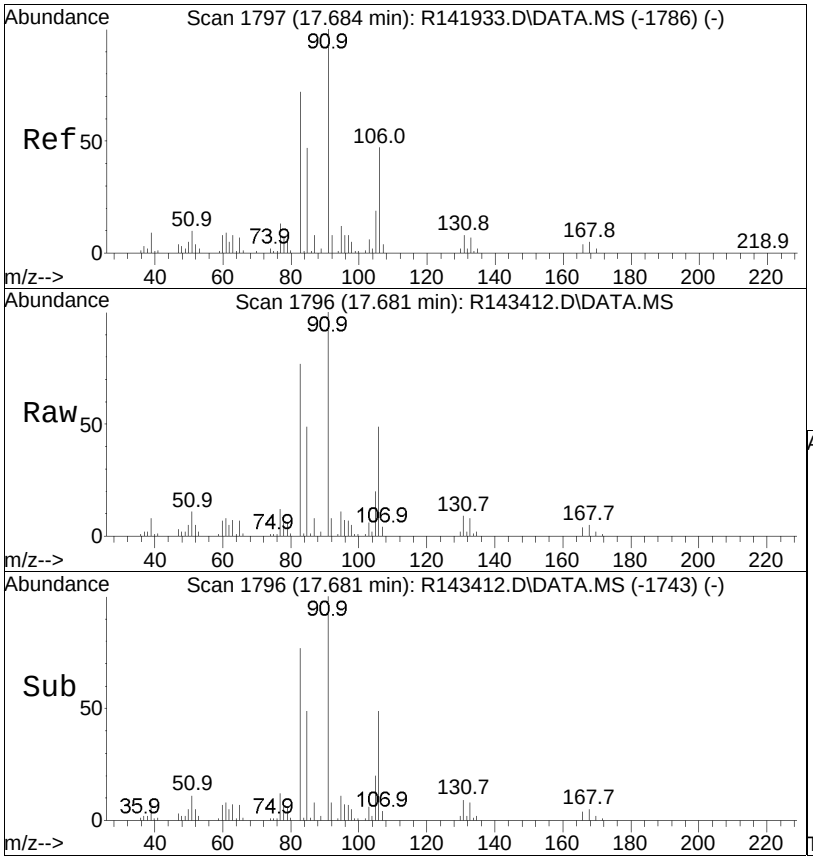


#85
styrene
Concen: 10.18 ppbV
RT: 17.599 min Scan# 1774
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:104 Resp: 273253

Ion	Ratio	Lower	Upper
104	100		
103	47.7	38.5	57.7
78	38.4	30.9	46.3

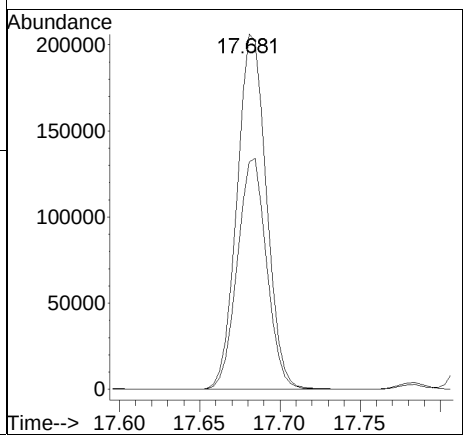


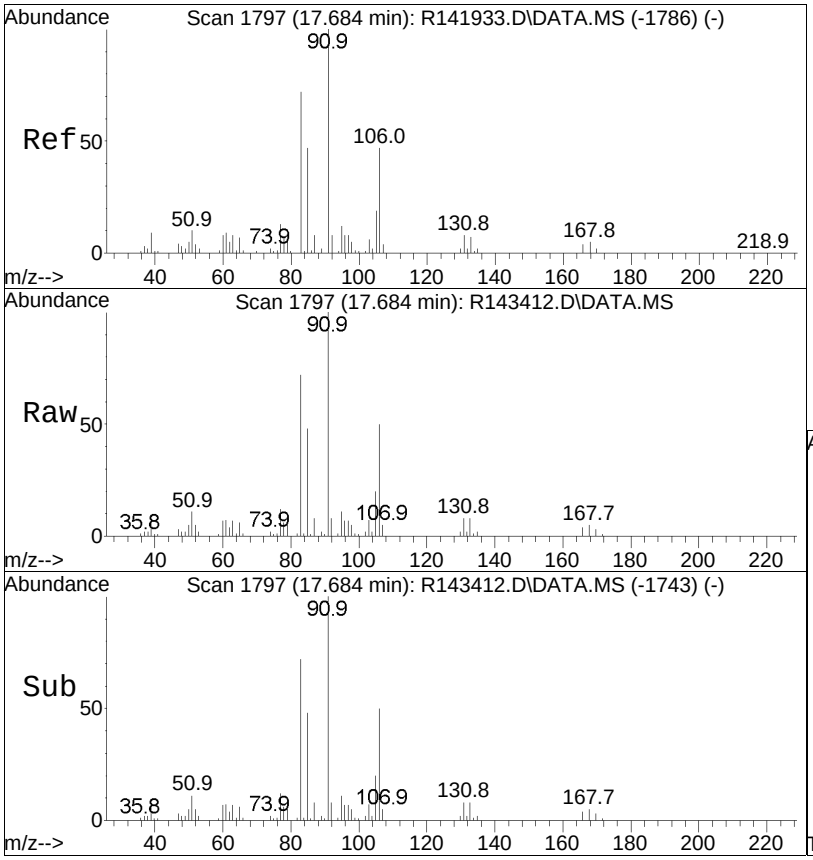


#86
1,1,2,2-tetrachloroethane
Concen: 10.64 ppbV
RT: 17.681 min Scan# 1796
Delta R.T. -0.004 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 83 Resp: 263321

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.8	77.6

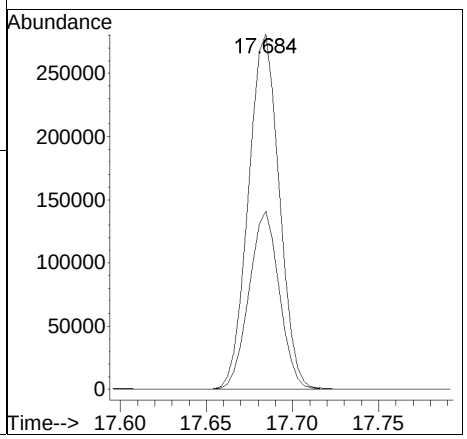


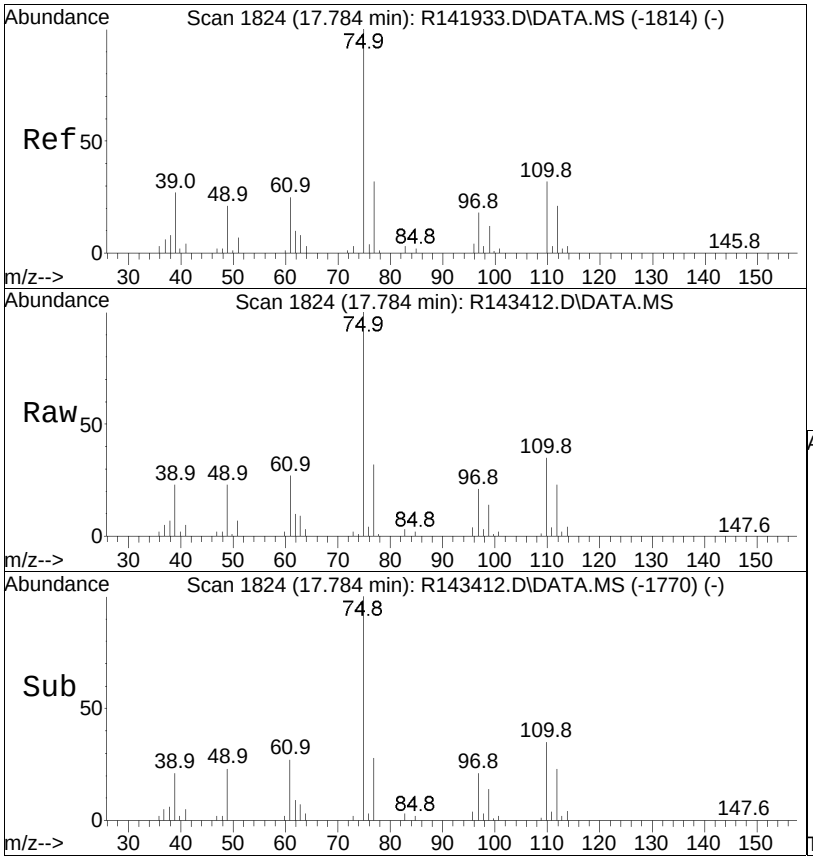


#87
o-xylene
Concen: 10.43 ppbV
RT: 17.684 min Scan# 1797
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 351468

Ion	Ratio	Lower	Upper
91	100		
106	50.1	39.2	58.8

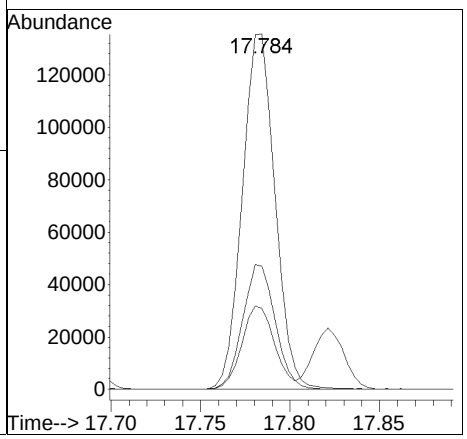


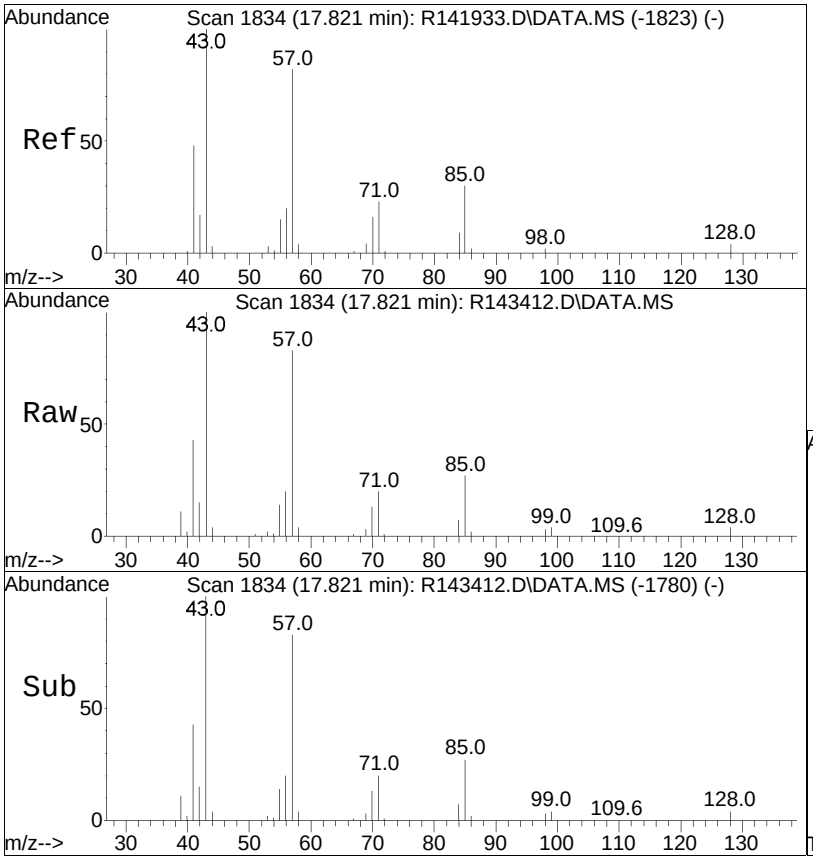


#88
1,2,3-trichloropropane
Concen: 9.46 ppbV
RT: 17.784 min Scan# 1824
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 75 Resp: 172622

Ion	Ratio	Lower	Upper
75	100		
110	34.7	27.8	41.8
39	22.8	19.1	28.7

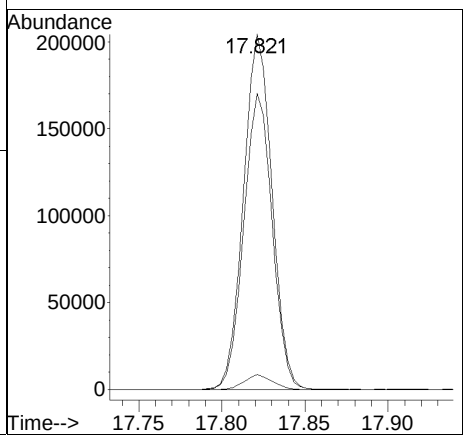


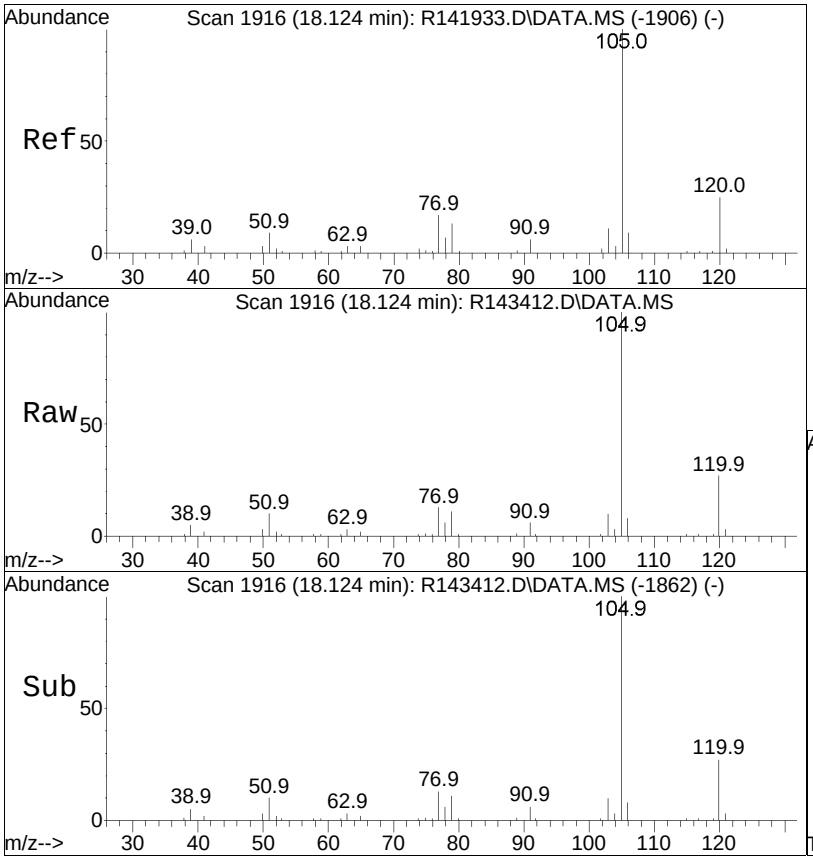


#89
nonane
Concen: 9.16 ppbV
RT: 17.821 min Scan# 1834
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 43 Resp: 244017

Ion	Ratio	Lower	Upper
43	100		
57	83.3	65.4	98.2
128	4.2	2.8	4.2#

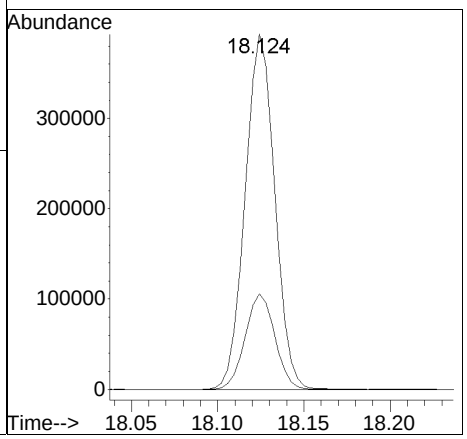


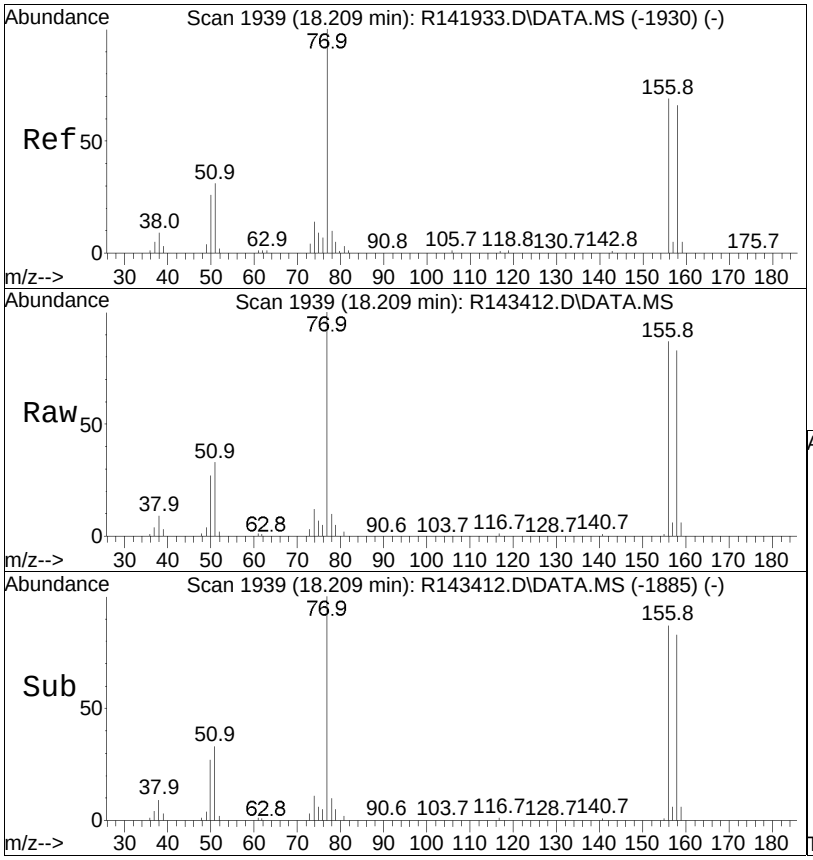


#91
isopropylbenzene
Concen: 9.98 ppbV
RT: 18.124 min Scan# 1916
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:105 Resp: 470079

Ion	Ratio	Lower	Upper
105	100		
120	26.9	21.7	32.5

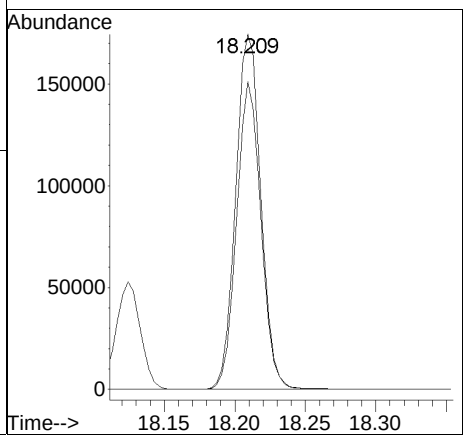


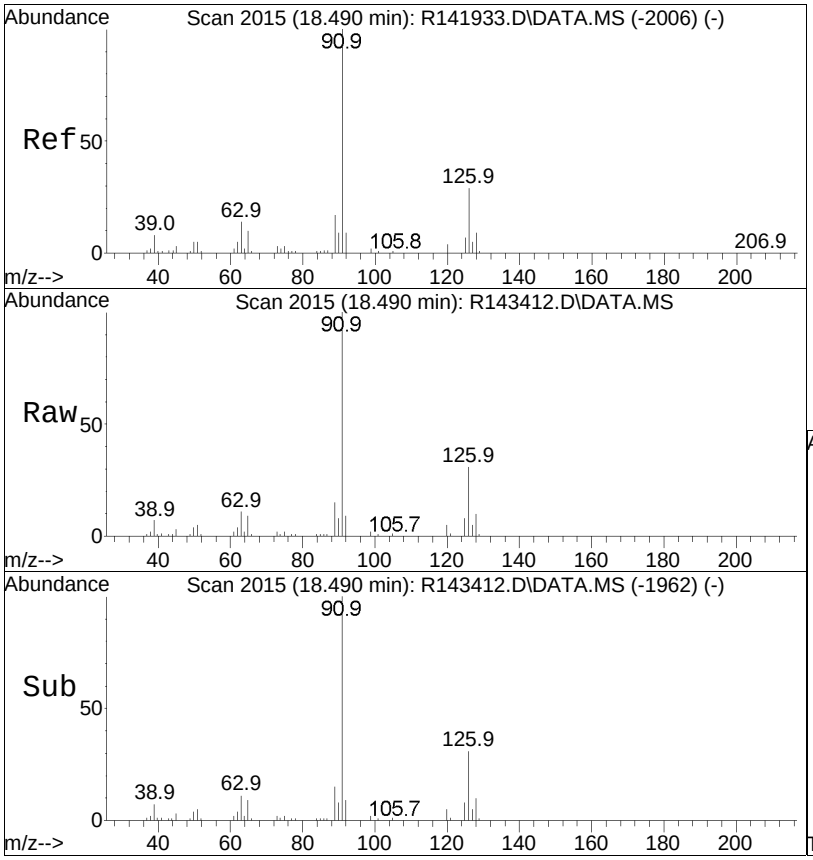


#92
bromobenzene
Concen: 9.48 ppbV
RT: 18.209 min Scan# 1939
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 77 Resp: 216348

Ion	Ratio	Lower	Upper
77	100		
156	86.7	64.9	97.3

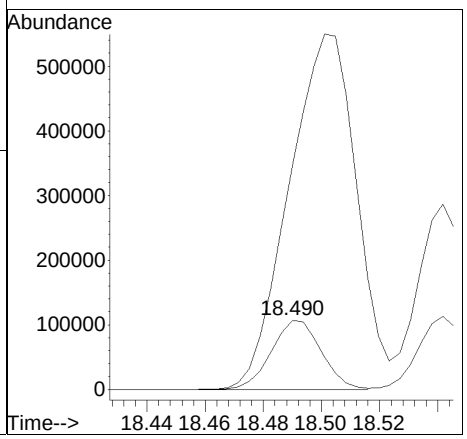


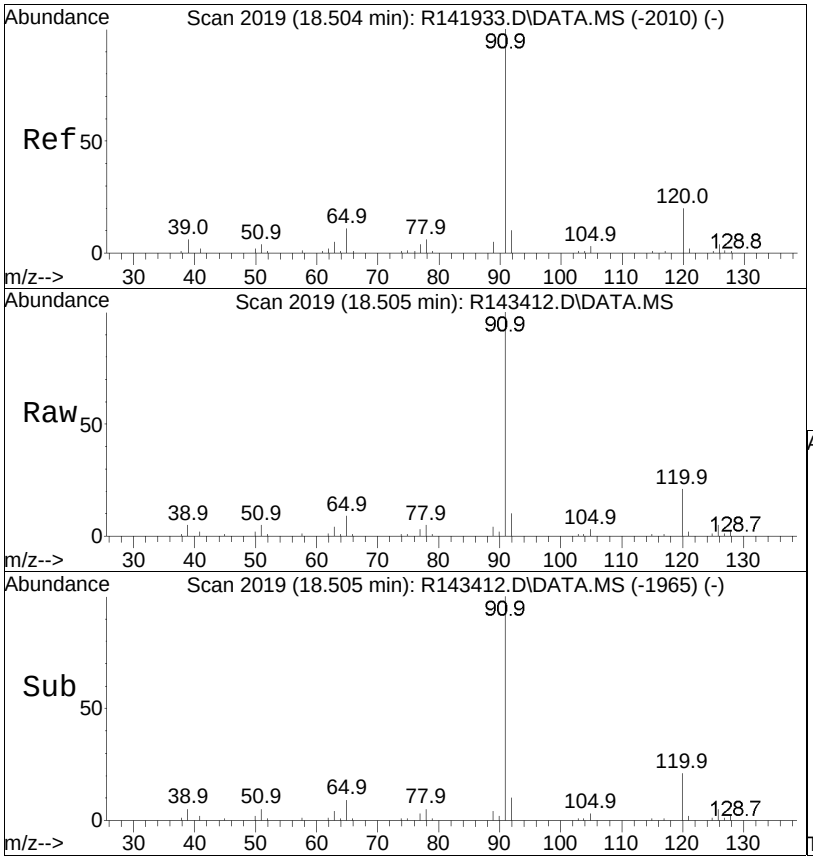


#93
2-chlorotoluene
Concen: 9.24 ppbV
RT: 18.490 min Scan# 2015
Delta R.T. -0.004 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:126 Resp: 127555

Ion	Ratio	Lower	Upper
126	100		
91	324.4	294.8	442.2

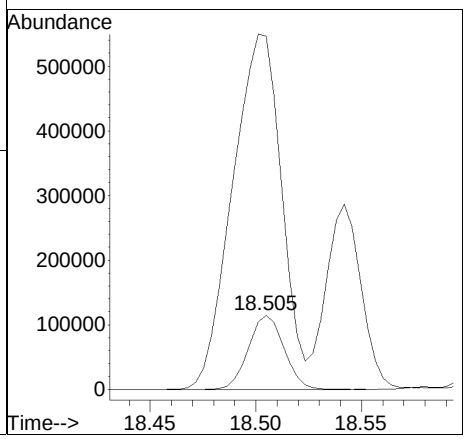


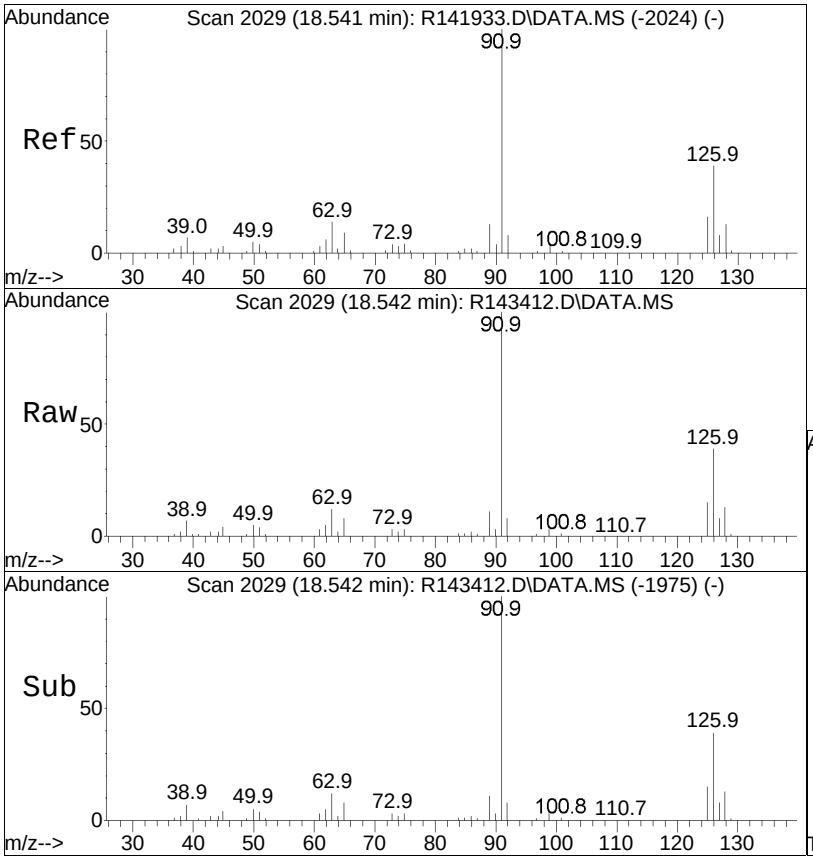


#94
n-propylbenzene
Concen: 9.55 ppbV
RT: 18.505 min Scan# 2019
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:120 Resp: 134033

Ion	Ratio	Lower	Upper
120	100		
91	477.5	382.5	573.7

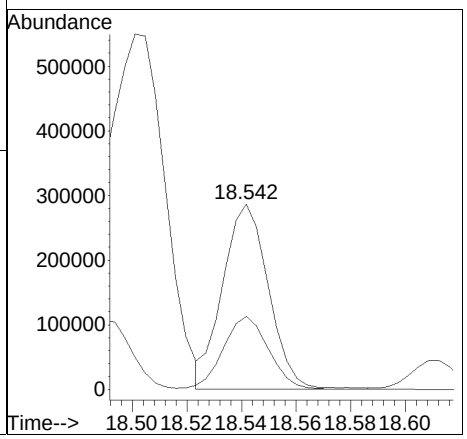


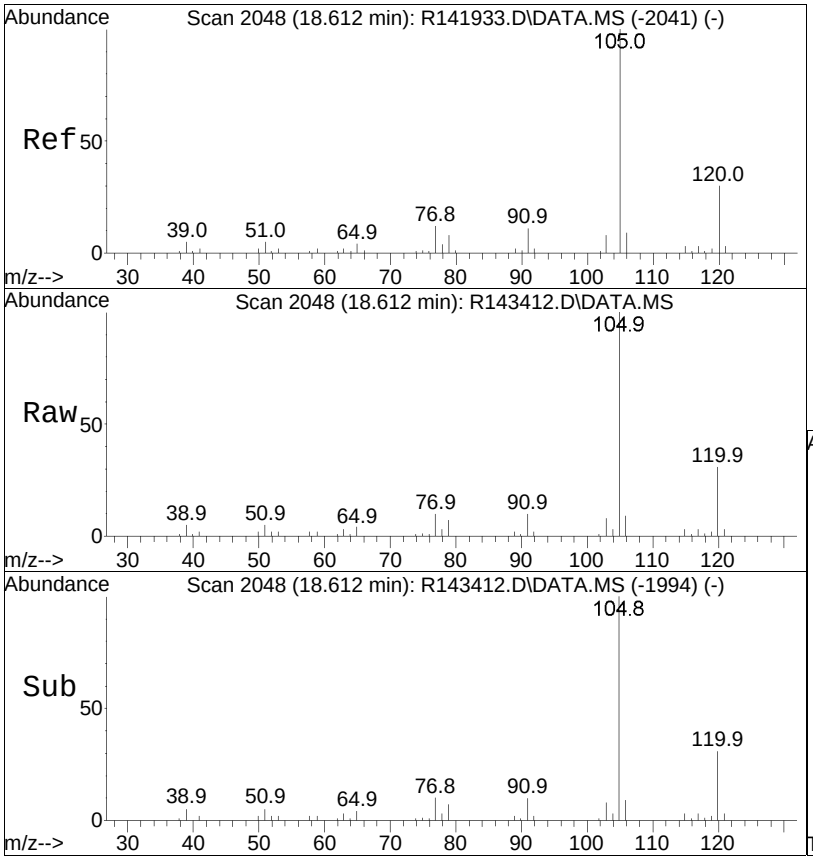


#95
4-chlorotoluene
Concen: 9.44 ppbV
RT: 18.542 min Scan# 2029
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 334006

Ion	Ratio	Lower	Upper
91	100		
126	39.4	31.0	46.4

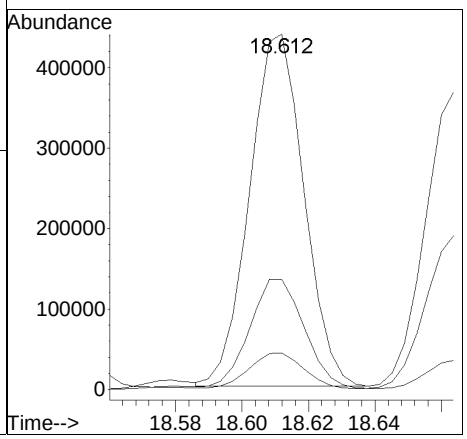


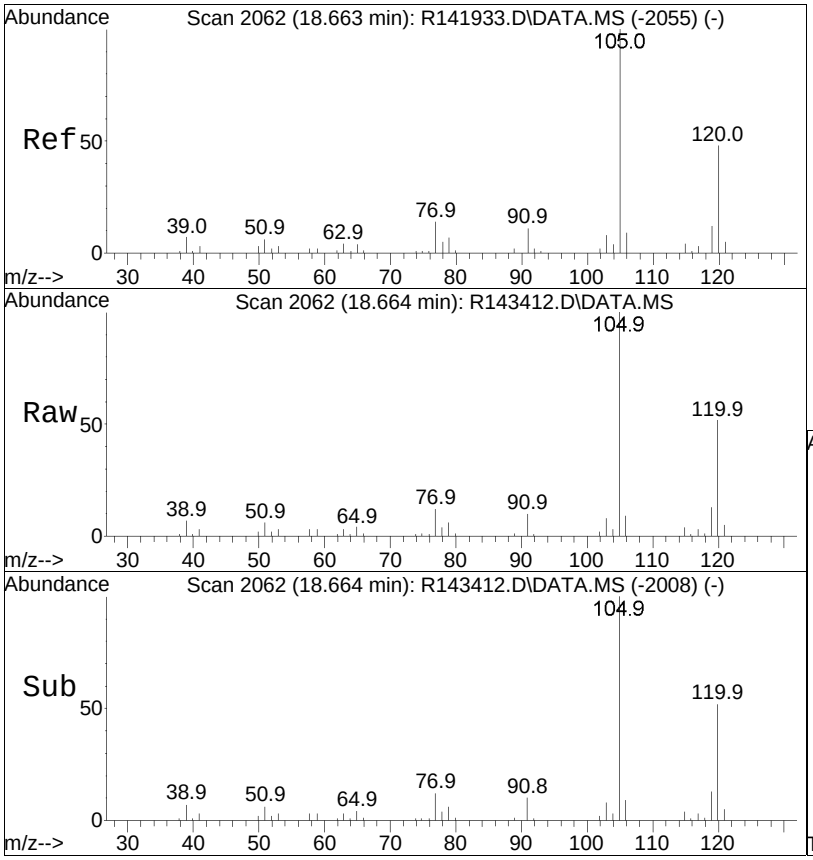


#96
4-ethyl toluene
Concen: 9.42 ppbV
RT: 18.612 min Scan# 2048
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:105 Resp: 497684

Ion	Ratio	Lower	Upper
105	100		
120	31.0	25.0	37.4
91	10.3	8.4	12.6

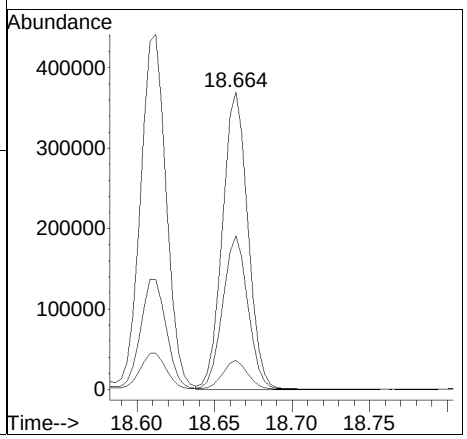


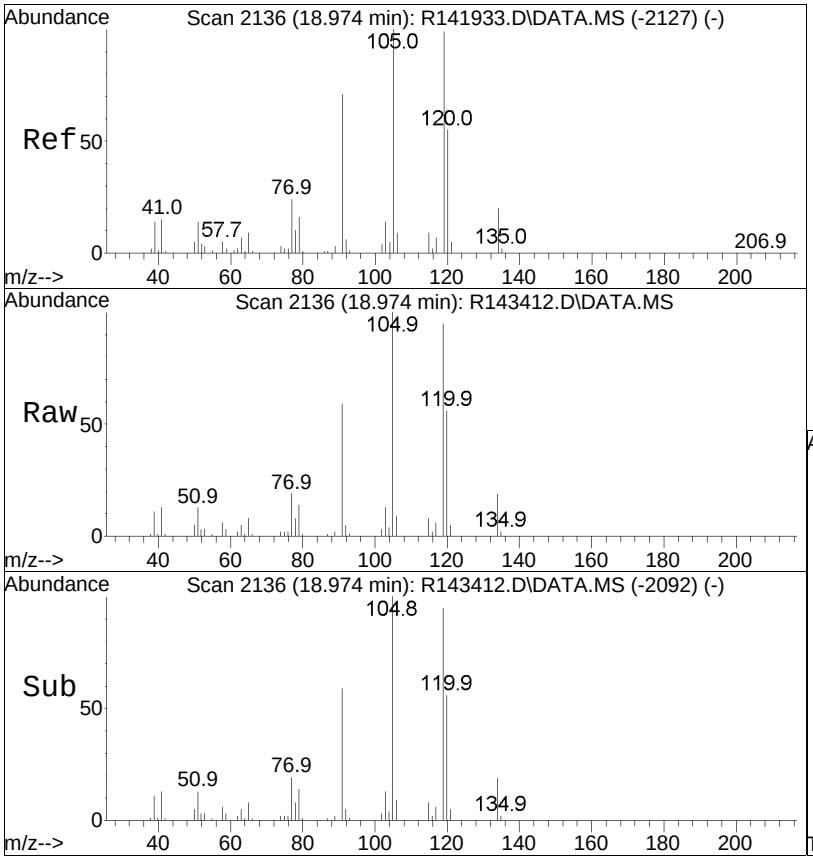


#97
1,3,5-trimethylbenzene
Concen: 10.13 ppbV
RT: 18.664 min Scan# 2062
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:105 Resp: 422976

Ion	Ratio	Lower	Upper
105	100		
120	51.7	41.0	61.6
91	9.8	7.9	11.9

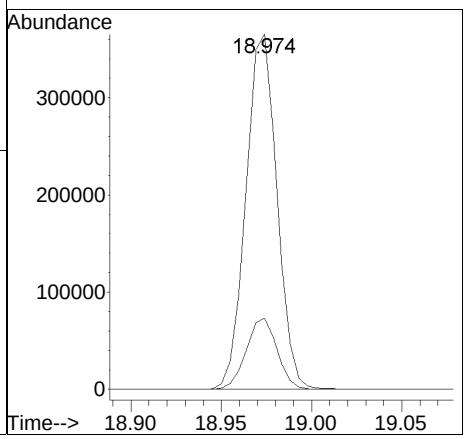


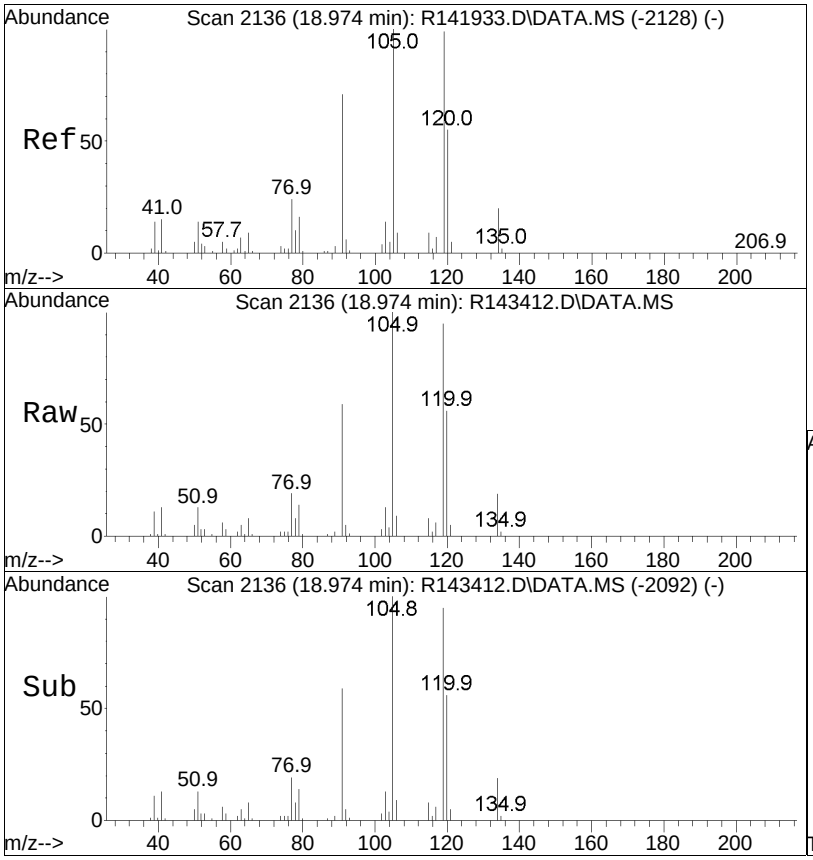


#98
tert-butylbenzene
Concen: 9.79 ppbV
RT: 18.974 min Scan# 2136
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:119 Resp: 437365

Ion	Ratio	Lower	Upper
119	100		
134	20.1	16.6	24.8

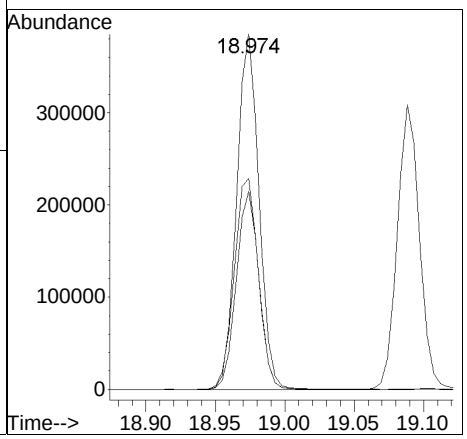


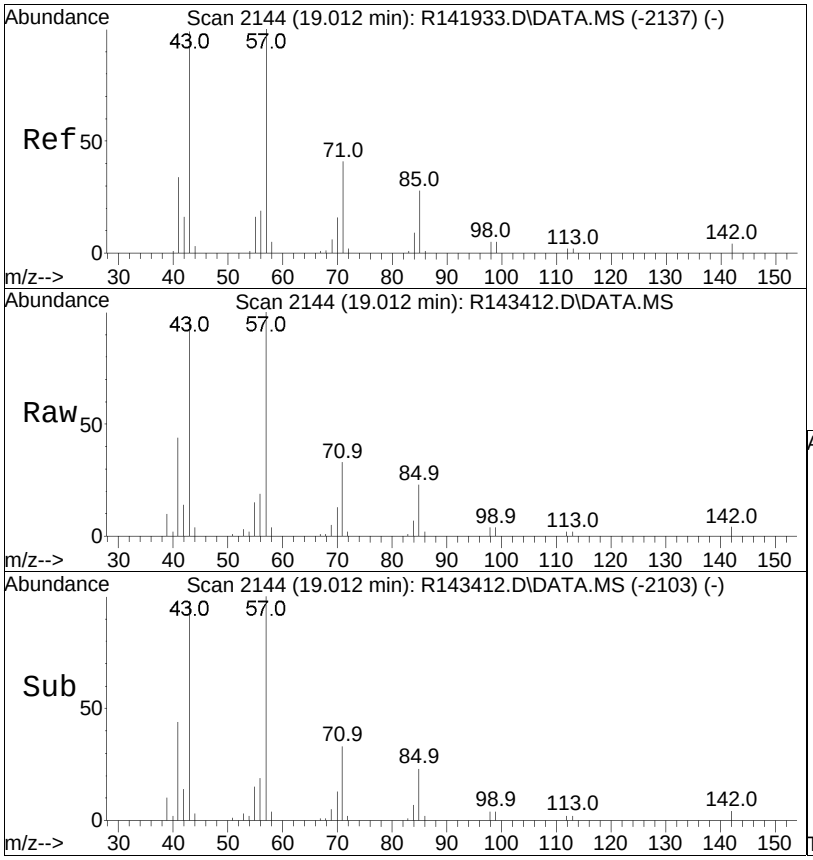


#99
1,2,4-trimethylbenzene
Concen: 10.55 ppbV
RT: 18.974 min Scan# 2136
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:105 Resp: 429897

Ion	Ratio	Lower	Upper
105	100		
120	55.7	45.4	68.0
91	59.4	53.7	80.5

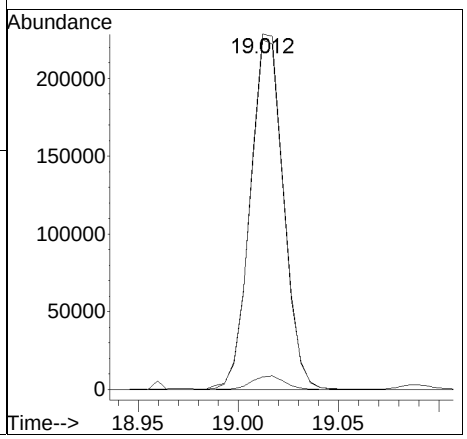


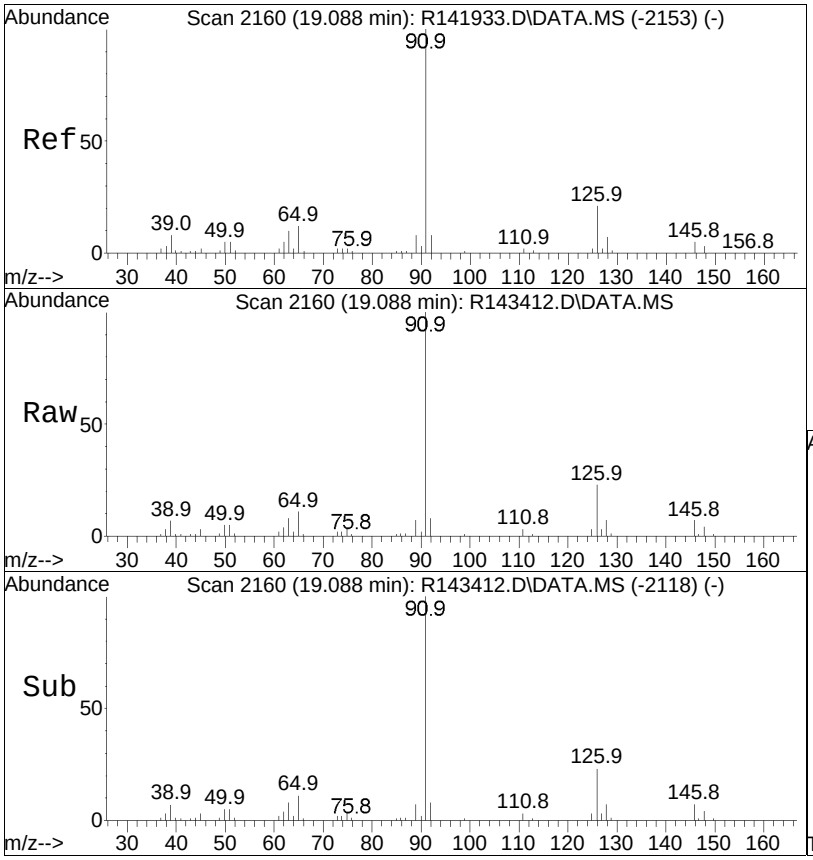


#100
decane
Concen: 9.65 ppbV
RT: 19.012 min Scan# 2144
Delta R.T. -0.005 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 57 Resp: 263409

Ion	Ratio	Lower	Upper
57	100		
43	98.4	80.4	120.6
142	3.5	2.8	4.2

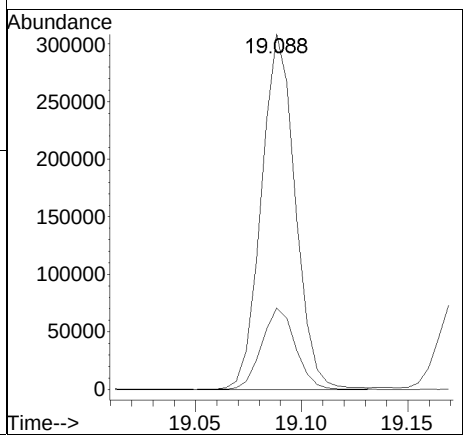


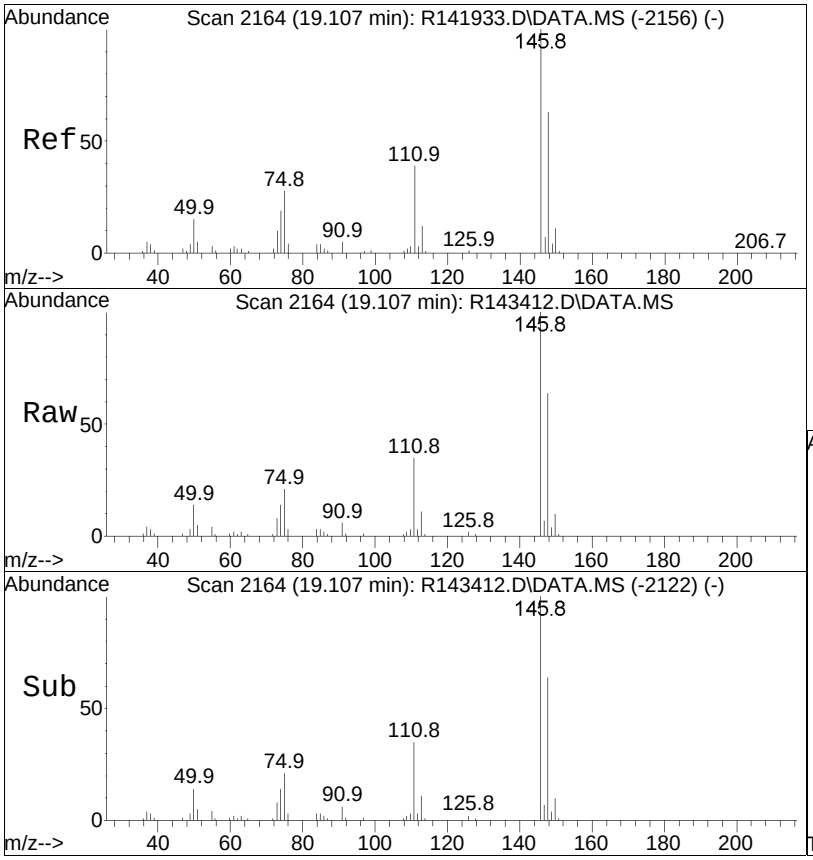


#101
Benzyl Chloride
Concen: 10.13 ppbV
RT: 19.088 min Scan# 2160
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 342700

Ion	Ratio	Lower	Upper
91	100		
126	22.9	18.8	28.2

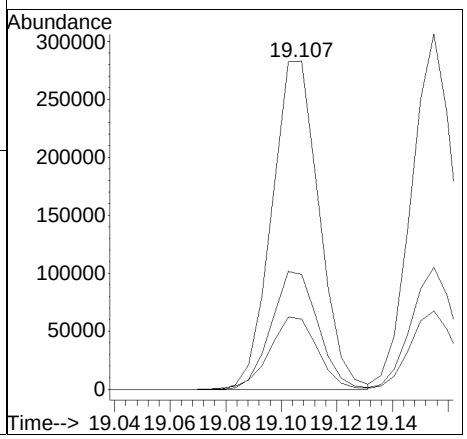


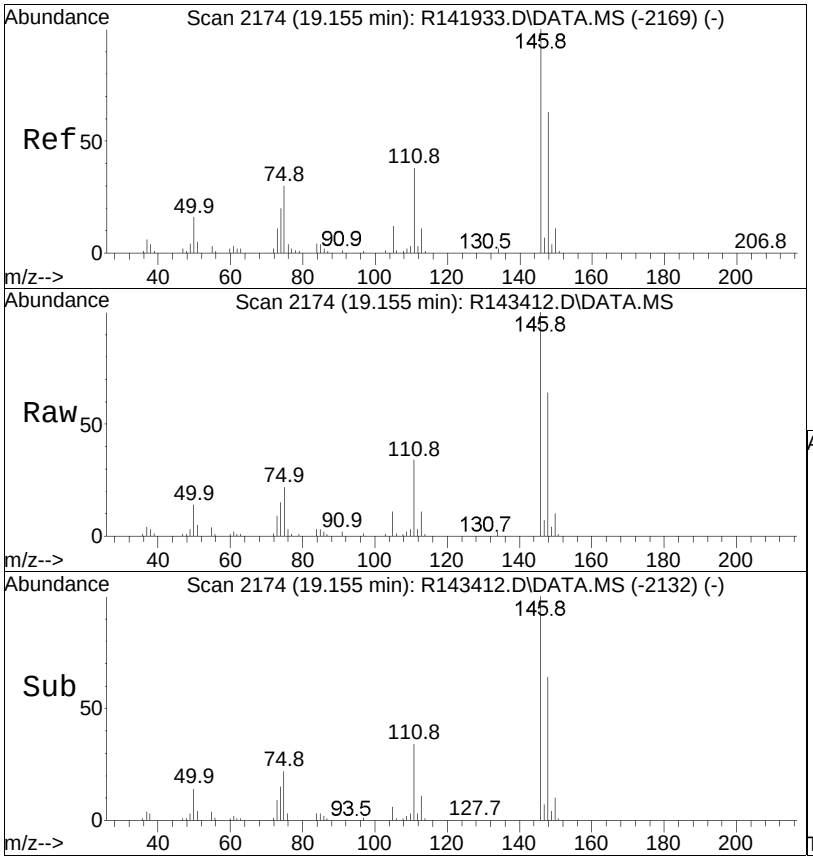


#102
1,3-dichlorobenzene
Concen: 10.50 ppbV
RT: 19.107 min Scan# 2164
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:146 Resp: 334410

Ion	Ratio	Lower	Upper
146	100		
111	35.0	28.6	42.8
75	21.4	17.6	26.4

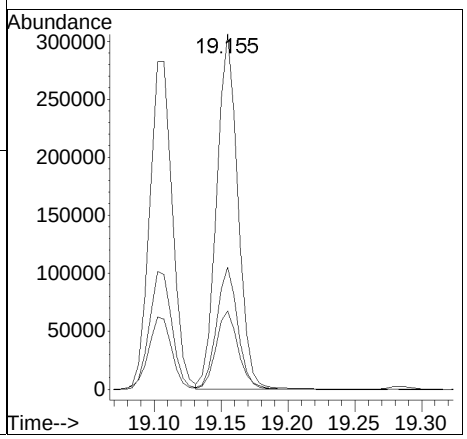


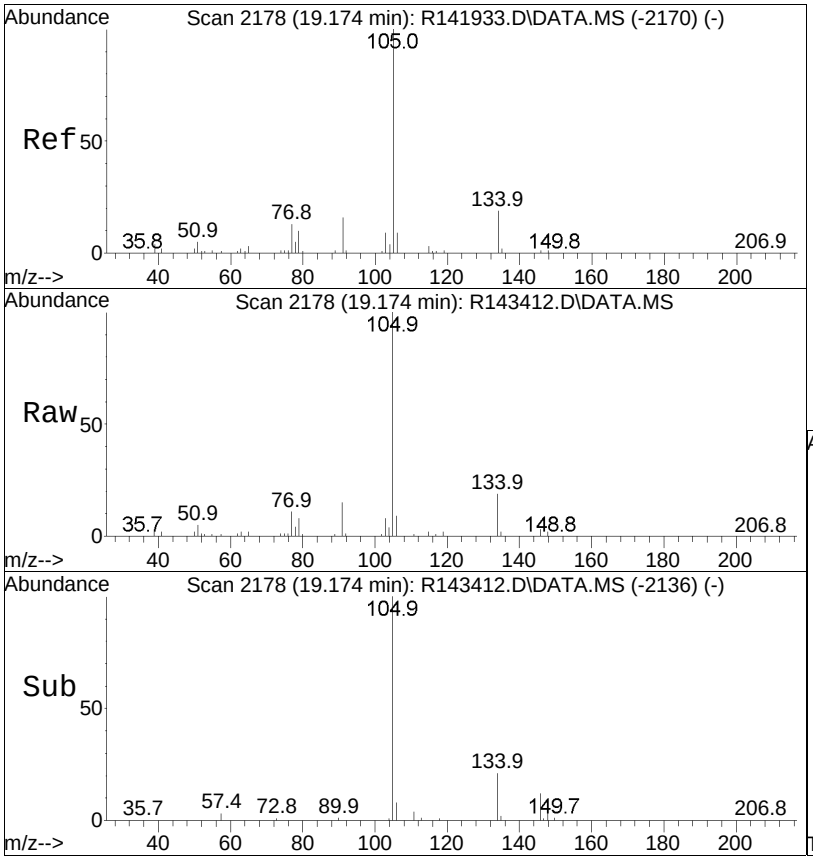


#103
1,4-dichlorobenzene
Concen: 10.49 ppbV
RT: 19.155 min Scan# 2174
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:146 Resp: 338738

Ion	Ratio	Lower	Upper
146	100		
111	34.4	28.1	42.1
75	22.1	18.7	28.1

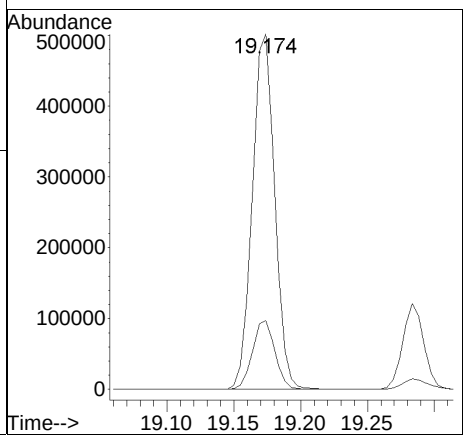


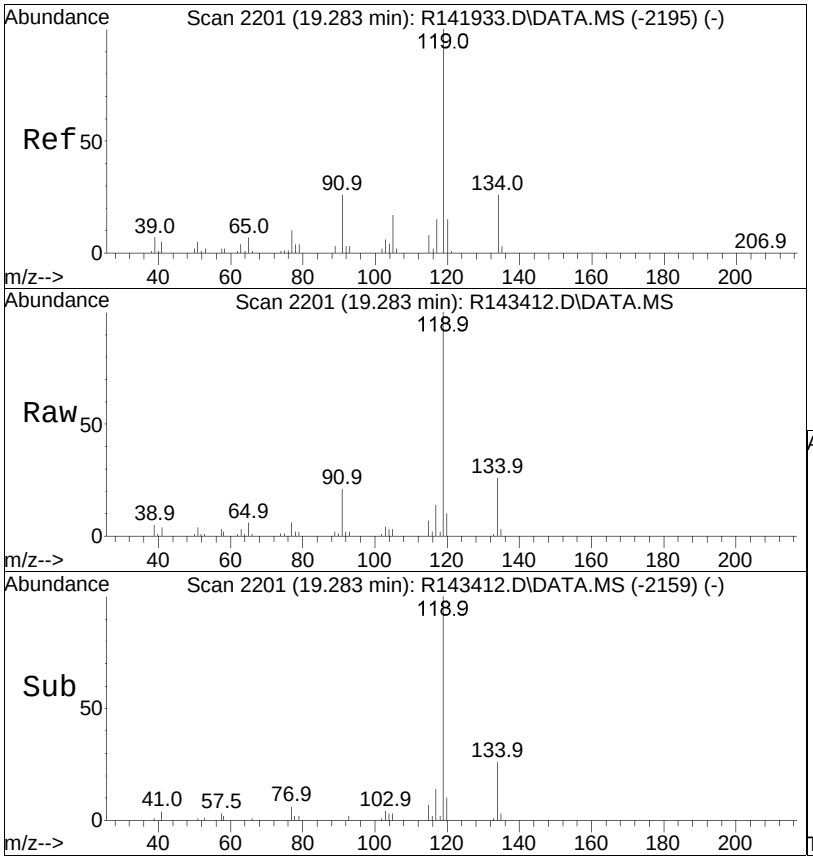


#104
sec-butylbenzene
Concen: 9.88 ppbV
RT: 19.174 min Scan# 2178
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:105 Resp: 584894

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

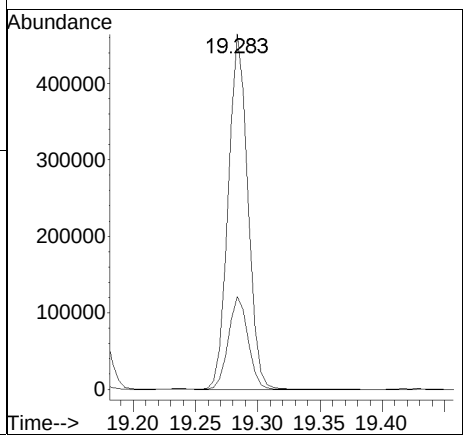


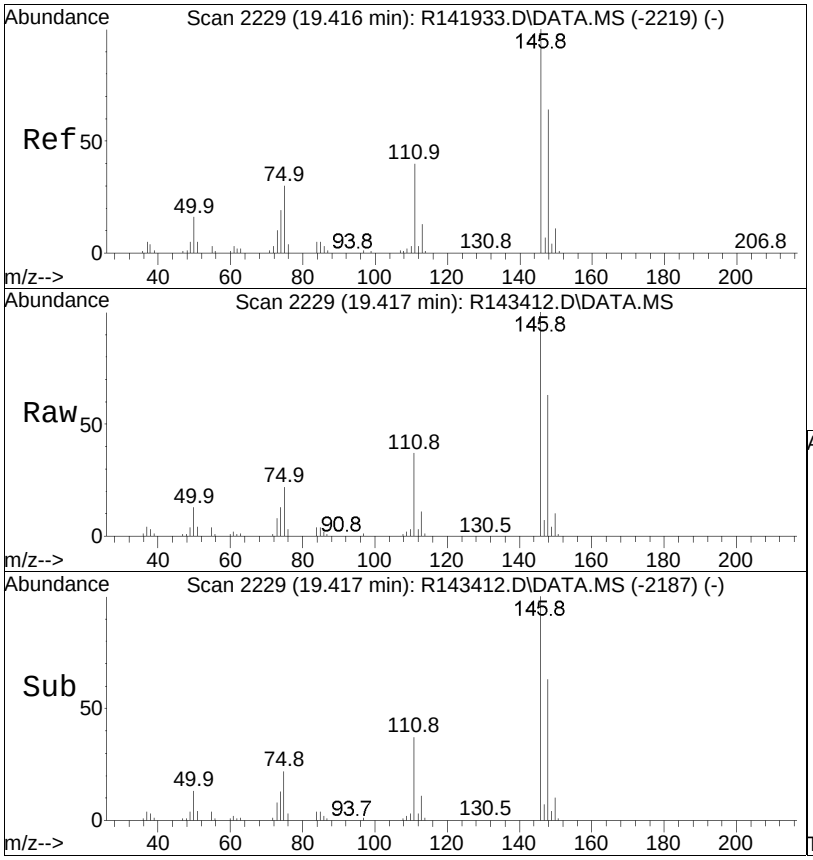


#106
p-isopropyltoluene
Concen: 9.32 ppbV
RT: 19.283 min Scan# 2201
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:119 Resp: 507667

Ion	Ratio	Lower	Upper
119	100		
134	26.1	20.5	30.7

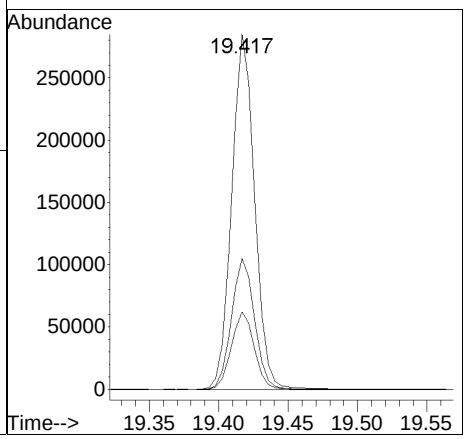


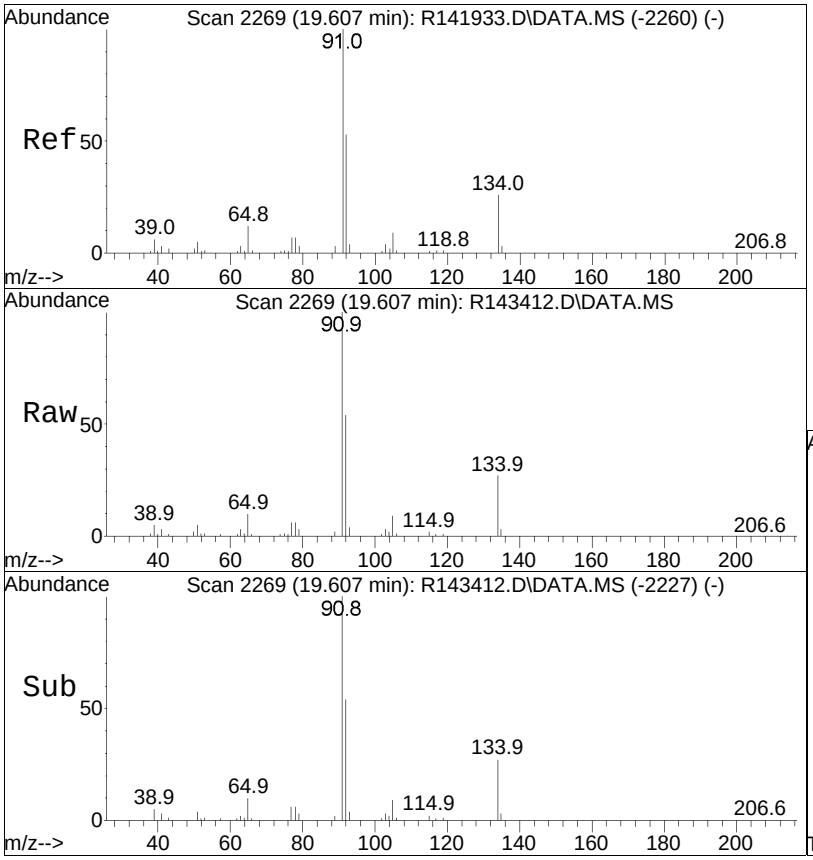


#107
1,2-dichlorobenzene
Concen: 10.60 ppbV
RT: 19.417 min Scan# 2229
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:146 Resp: 326928

Ion	Ratio	Lower	Upper
146	100		
111	36.9	30.1	45.1
75	21.8	18.8	28.2

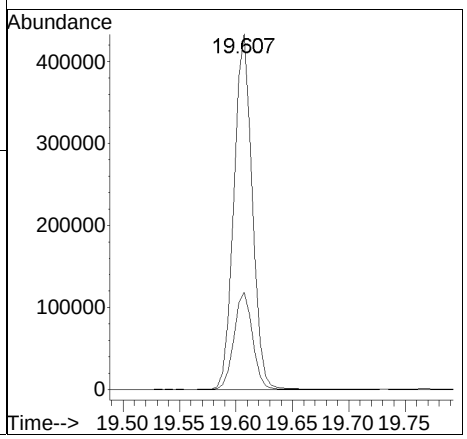


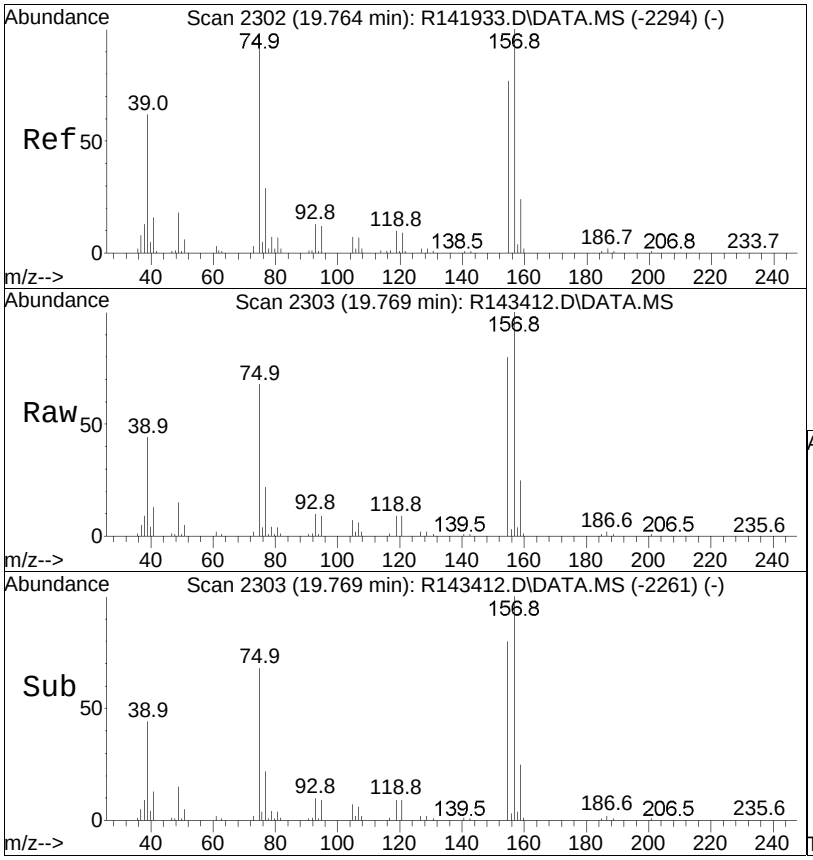


#108
n-butylbenzene
Concen: 10.28 ppbV
RT: 19.607 min Scan# 2269
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 91 Resp: 489213

Ion	Ratio	Lower	Upper
91	100		
134	27.3	21.6	32.4

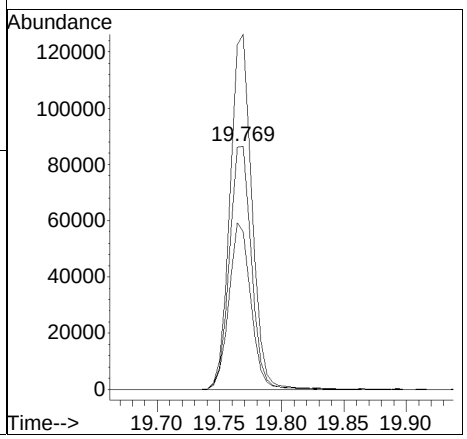


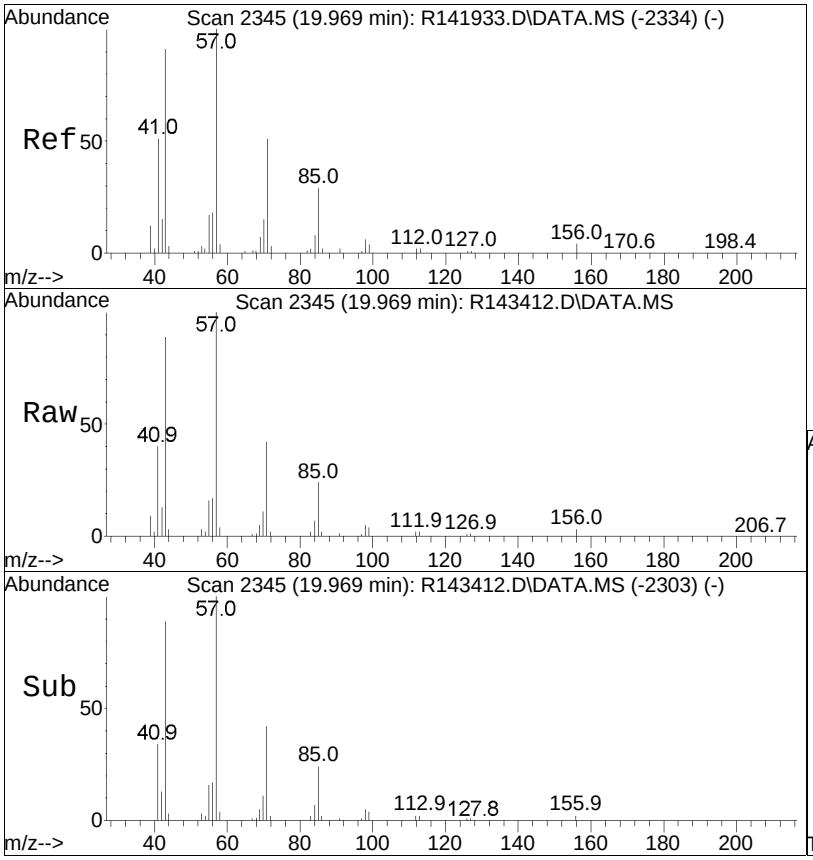


#111
1,2-dibromo-3-chloropropane
Concen: 9.64 ppbV
RT: 19.769 min Scan# 2303
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 75 Resp: 106501

Ion	Ratio	Lower	Upper
75	100		
157	146.0	117.0	175.4
39	64.8	54.3	81.5

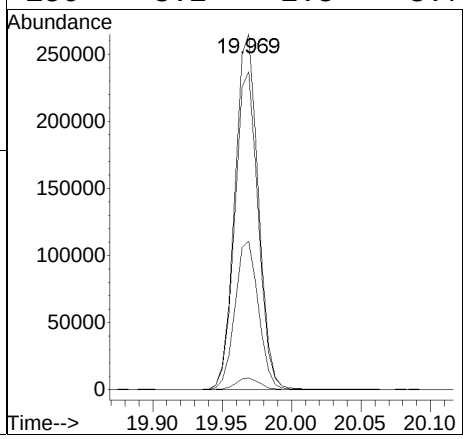


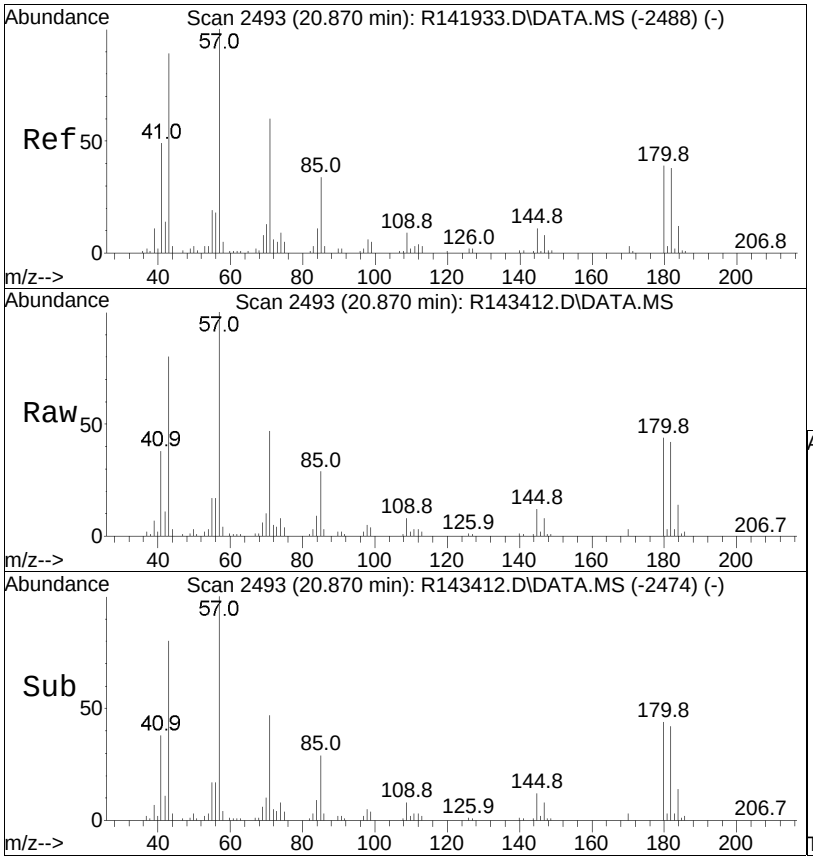


#112
undecane
Concen: 10.55 ppbV
RT: 19.969 min Scan# 2345
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 57 Resp: 311180

Ion	Ratio	Lower	Upper
57	100		
43	89.4	72.3	108.5
71	41.7	33.2	49.8
156	3.2	2.5	3.7

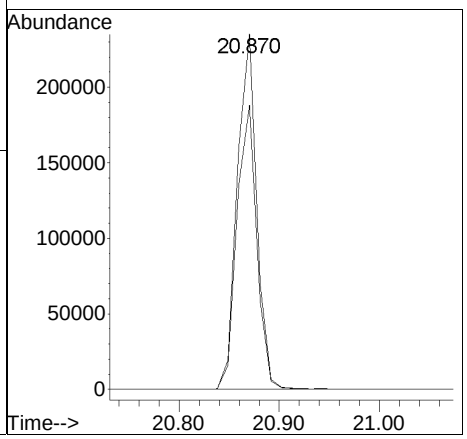


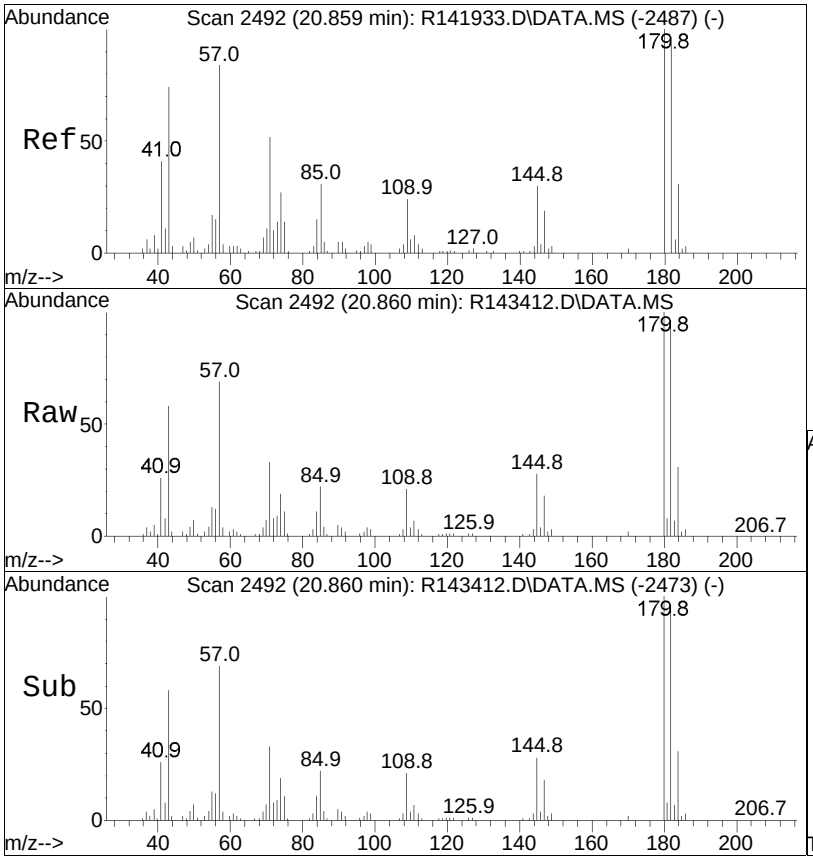


#114
dodecane
Concen: 12.97 ppbV
RT: 20.870 min Scan# 2493
Delta R.T. 0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion: 57 Resp: 318078

Ion	Ratio	Lower	Upper
57	100		
43	79.9	67.0	100.6

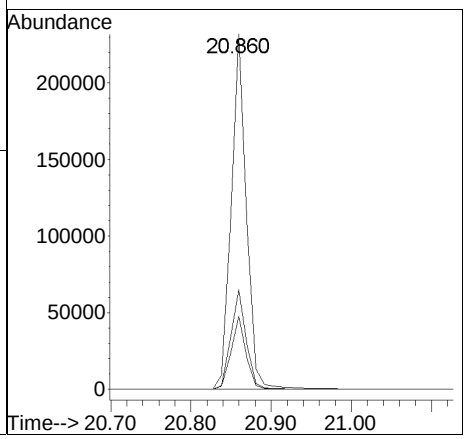


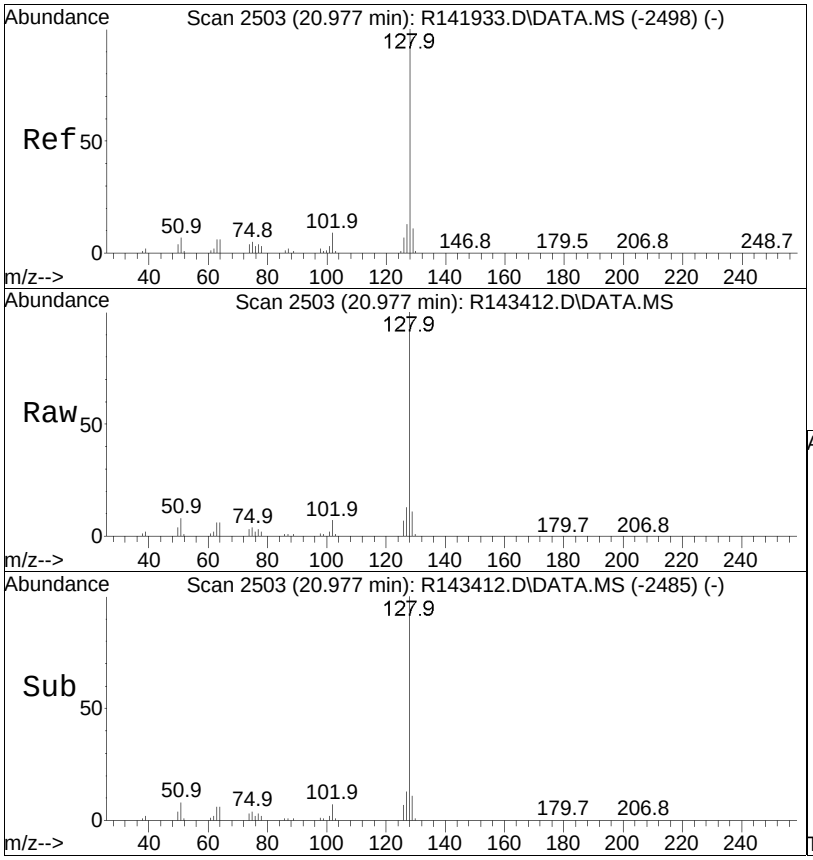


#115
1,2,4-trichlorobenzene
Concen: 12.21 ppbV
RT: 20.860 min Scan# 2492
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:180 Resp: 304967

Ion	Ratio	Lower	Upper
180	100		
145	28.1	22.7	34.1
109	20.6	16.5	24.7

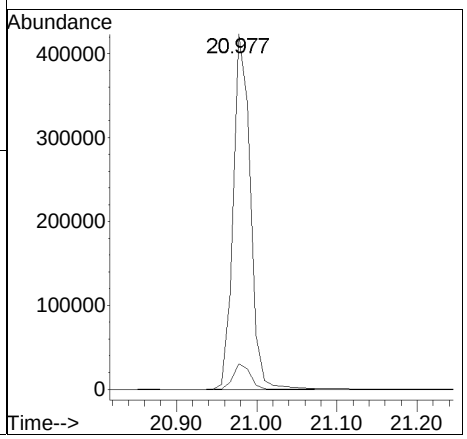


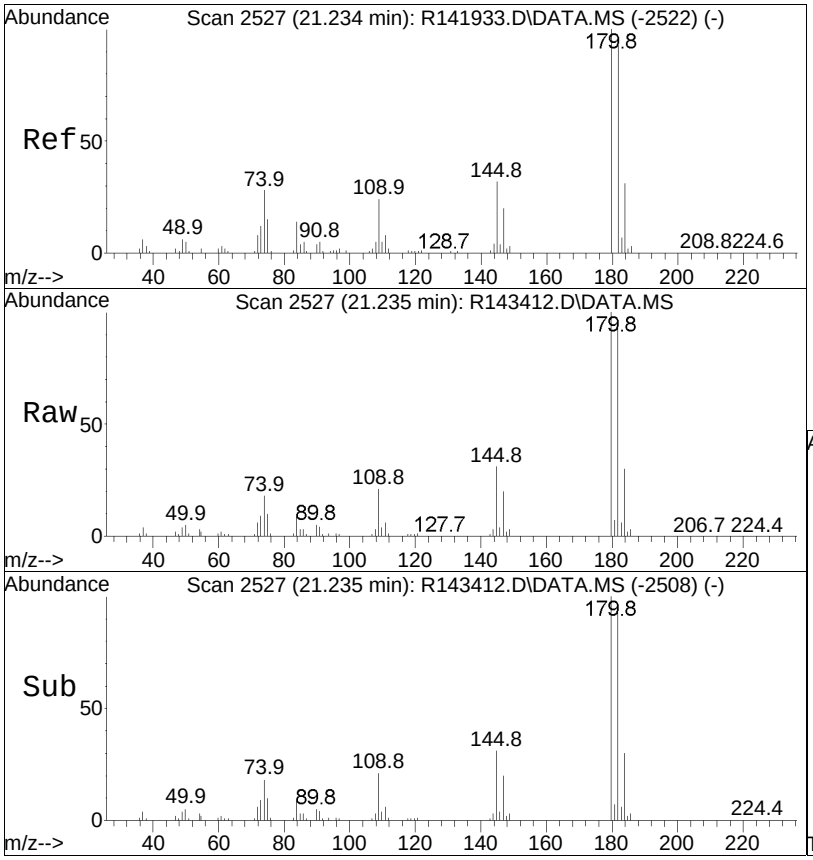


#116
naphthalene
Concen: 11.58 ppbV
RT: 20.977 min Scan# 2503
Delta R.T. -0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:128 Resp: 631461

Ion	Ratio	Lower	Upper
128	100		
102	7.2	5.8	8.8

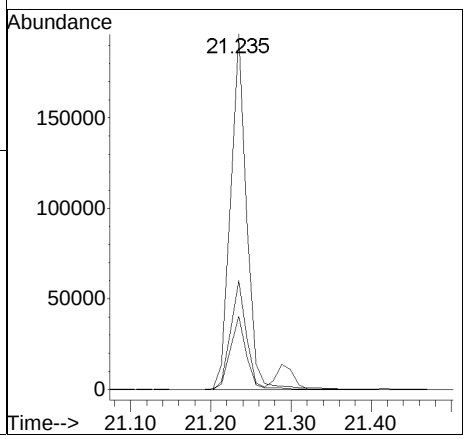


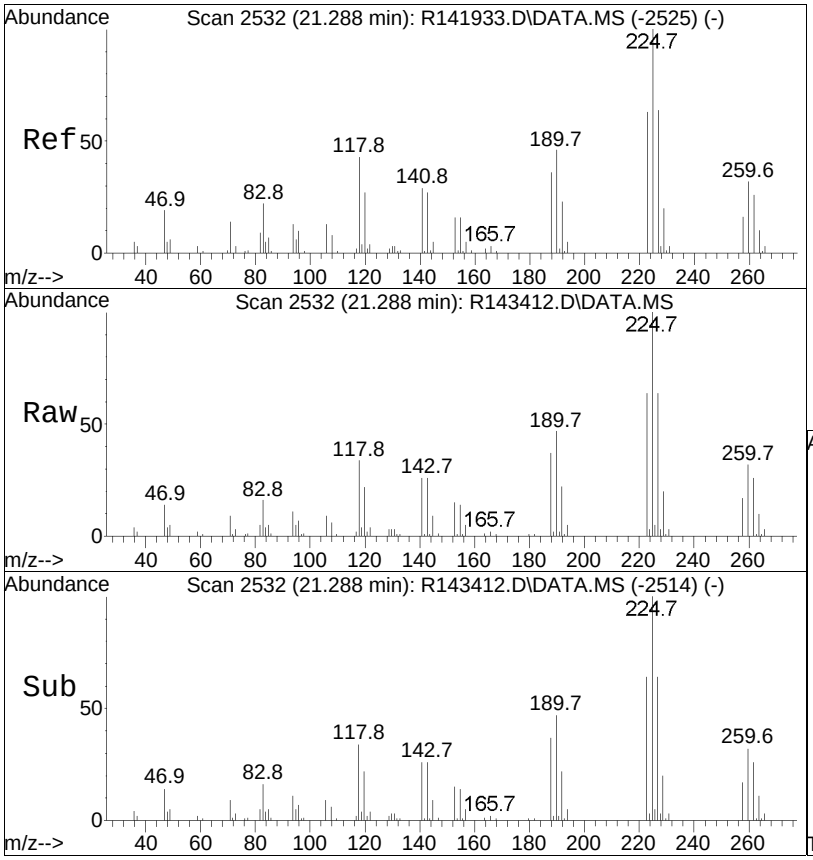


#117
1,2,3-trichlorobenzene
Concen: 11.80 ppbV
RT: 21.235 min Scan# 2527
Delta R.T. -0.000 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:180 Resp: 274716

Ion	Ratio	Lower	Upper
180	100		
145	30.6	24.6	37.0
109	20.6	16.8	25.2

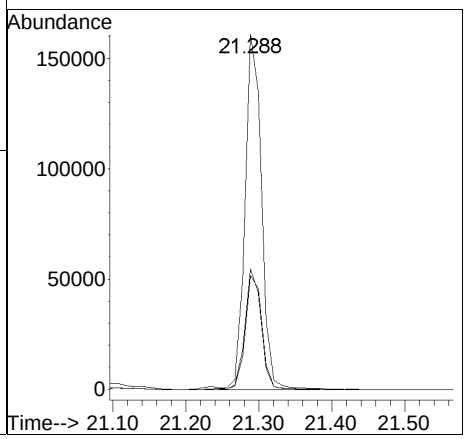




#119
hexachlorobutadiene
Concen: 11.60 ppbV
RT: 21.288 min Scan# 2532
Delta R.T. -0.011 min
Lab File: R143412.D
Acq: 13 Aug 2015 1:12 pm

Tgt Ion:225 Resp: 252657

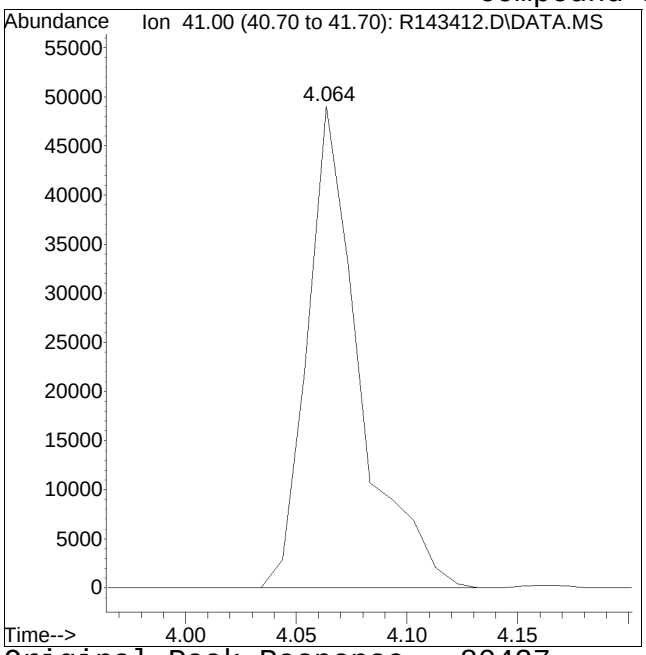
Ion	Ratio	Lower	Upper
225	100		
260	32.1	26.6	40.0
118	33.9	25.3	37.9

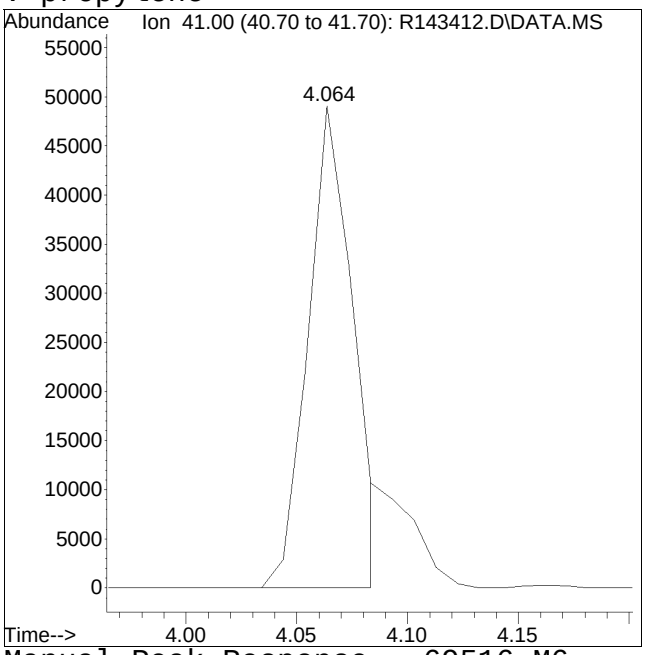


Manual Integration/Negative Proof Report

Data Path : O:\Forensics\Data\AIR1\2015\150810\ Method : TALL150710.M
Data File : R143412.D Operator : AIRPIANO1:RY
Date Inj'd : 8/13/2015 1:12 pm Instrument : Air Piano 1
Sample : WG811916-3,3,250,250 Quant Date : 8/13/2015 1:36 pm

Compound #3: propylene





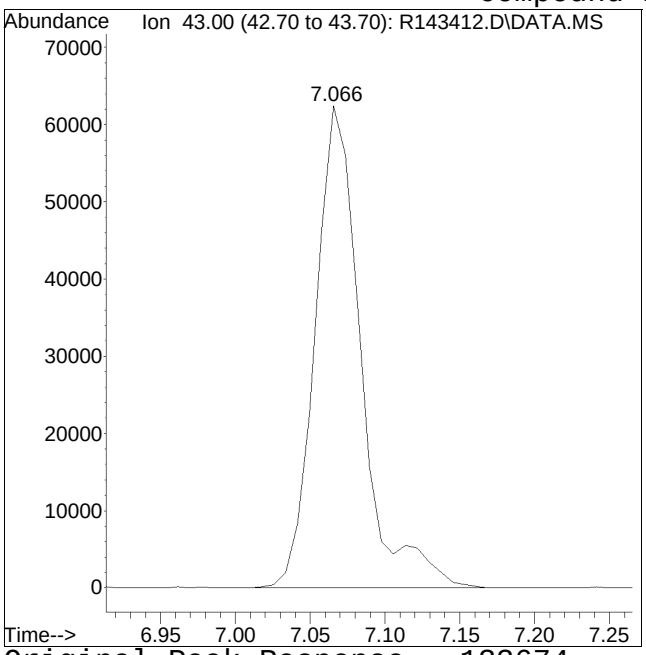
Original Peak Response = 80427 Manual Peak Response = 69516 M6
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

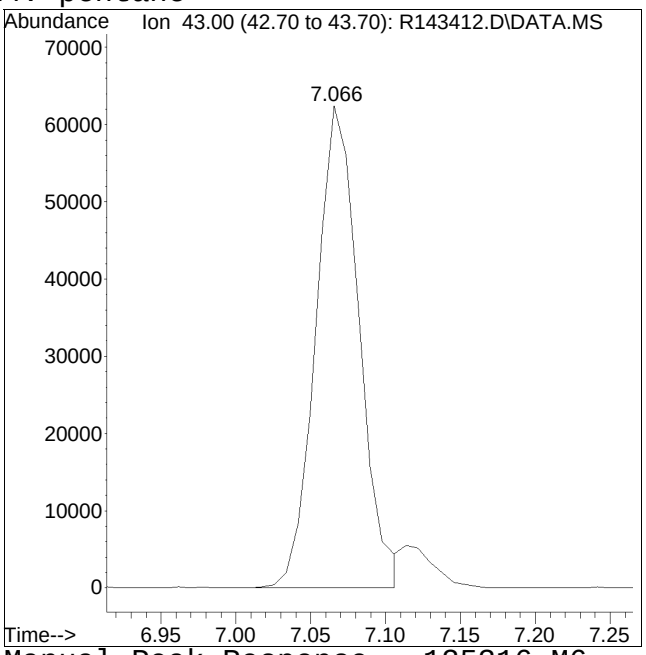
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143412.D
Date Inj'd : 8/13/2015 1:12 pm
Sample : WG811916-3,3,250,250

Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 8/13/2015 1:36 pm

Compound #24: pentane



Original Peak Response = 133674



Manual Peak Response = 125316 M6

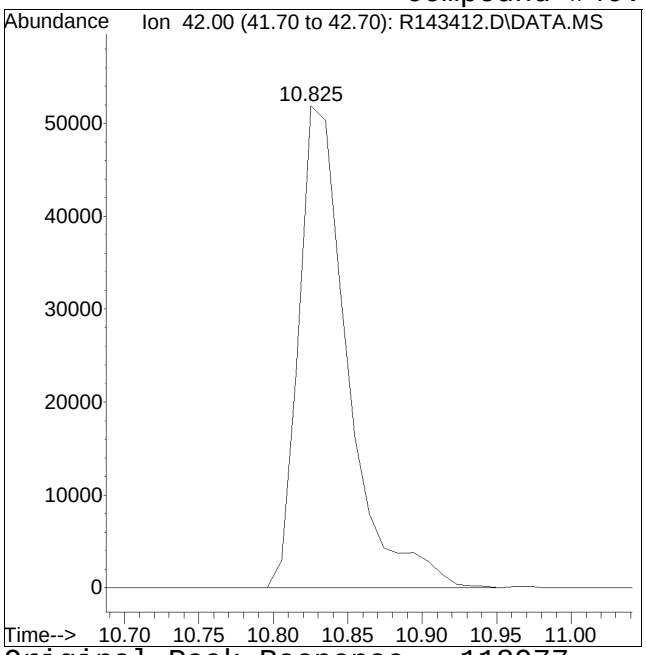
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration/Negative Proof Report

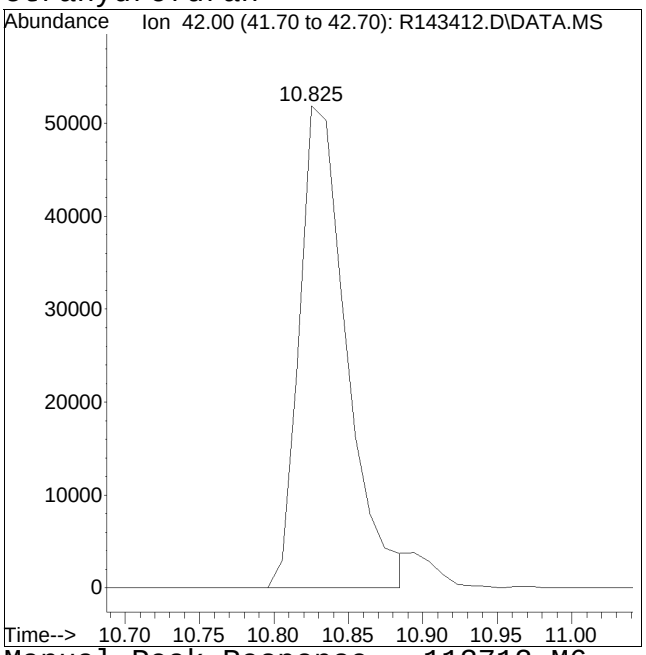
Data Path : O:\Forensics\Data\AIR1\2015Q
Data File : R143412.D
Date Inj'd : 8/13/2015 1:12 pm
Sample : WG811916-3,3,250,250

Method : TALL150710.M
Operator : AIRPIANO1:RY
Instrument : Air Piano 1
Quant Date : 8/13/2015 1:36 pm

Compound #40: Tetrahydrofuran



Original Peak Response = 118977



Manual Peak Response = 113712 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Duplicate Raw Data

Quantitation Report (QT Reviewed)

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811916-5,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 12:20:04 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

CCAL FILE : O:\Forensics\Data\AIR1\2015\150813T\R143412.D
Sub List : Geo_MCP2 - .

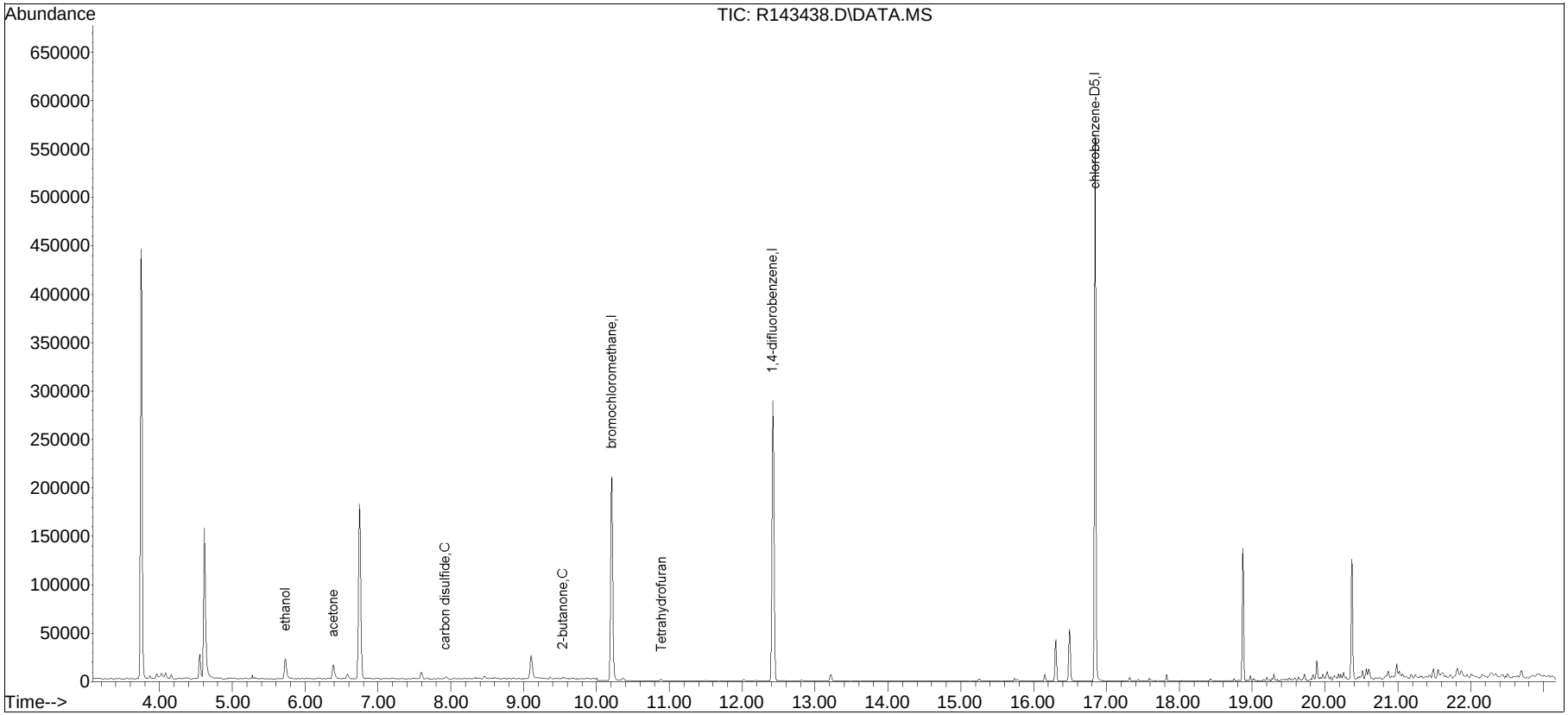
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) bromochloromethane	10.211	49	117060	10.000	ppbV	0.00
Standard Area = 146644			Recovery =		79.83%	
43) 1,4-difluorobenzene	12.419	114	266500	10.000	ppbV	0.00
Standard Area = 326890			Recovery =		81.53%	
67) chlorobenzene-D5	16.842	54	54293	10.000	ppbV	0.00
Standard Area = 60310			Recovery =		90.02%	
System Monitoring Compounds						
Target Compounds						Qvalue
3) propylene	4.064		0	N.D.		
15) ethanol	5.731	31	17514	5.469	ppbV	100
17) vinyl bromide	0.000		0	N.D.		
19) acetone	6.386	43	19654	2.296	ppbV #	97
22) isopropyl alcohol	0.000		0	N.D.	d	
29) 3-chloropropene	7.585		0	N.D.		
30) carbon disulfide	7.921	76	738	0.043	ppbV #	1
35) vinyl acetate	0.000		0	N.D.	d	
36) 2-butanone	9.540	43	2618	0.159	ppbV #	63
38) Ethyl Acetate	0.000		0	N.D.		
40) Tetrahydrofuran	10.894	42	1305	0.135	ppbV #	64
44) hexane	10.267		0	N.D.		
53) cyclohexane	0.000		0	N.D.	d	
58) 1,4-dioxane	0.000		0	N.D.		
60) 2,2,4-trimethylpentane	0.000		0	N.D.		
62) heptane	13.465		0	N.D.		
64) 4-methyl-2-pentanone	0.000		0	N.D.		
72) 2-hexanone	15.456		0	N.D.		
96) 4-ethyl toluene	18.608		0	N.D.		
101) Benzyl Chloride	18.970		0	N.D.		

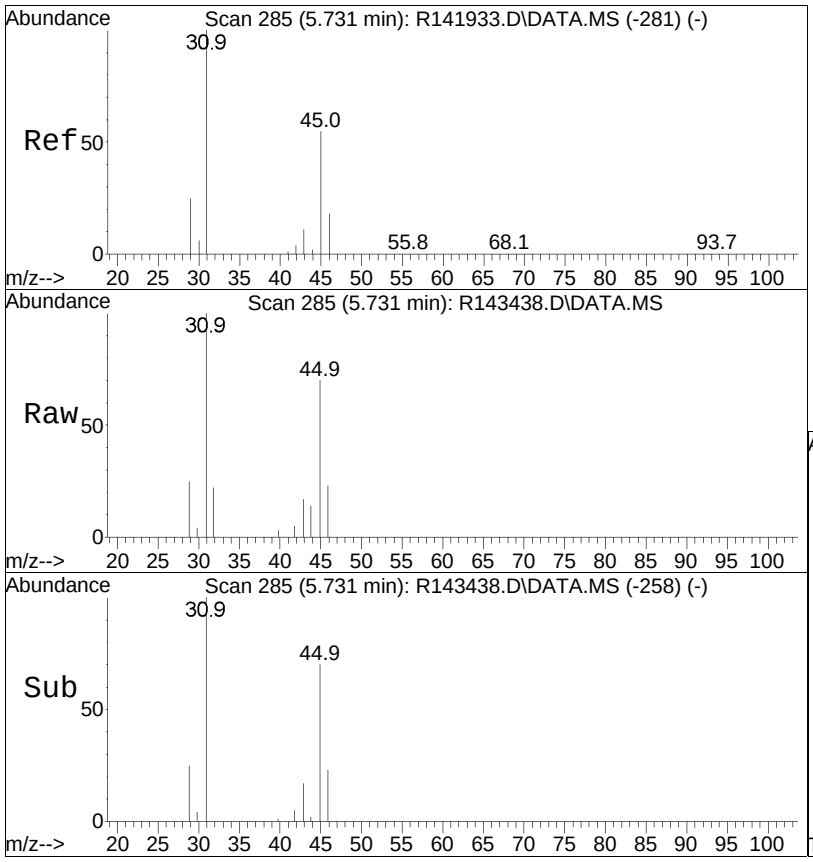
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Sub List : Geo_MCP2 - .\Data\AIR1\2015\150813T\R143412.D

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143438.D
Acq On : 14 Aug 2015 11:54 am
Operator : AIRPIANO1:MB
Sample : WG811916-5,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 12:20:04 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015
Response via : Initial Calibration

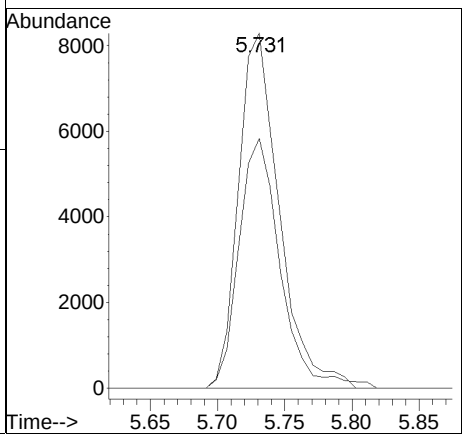


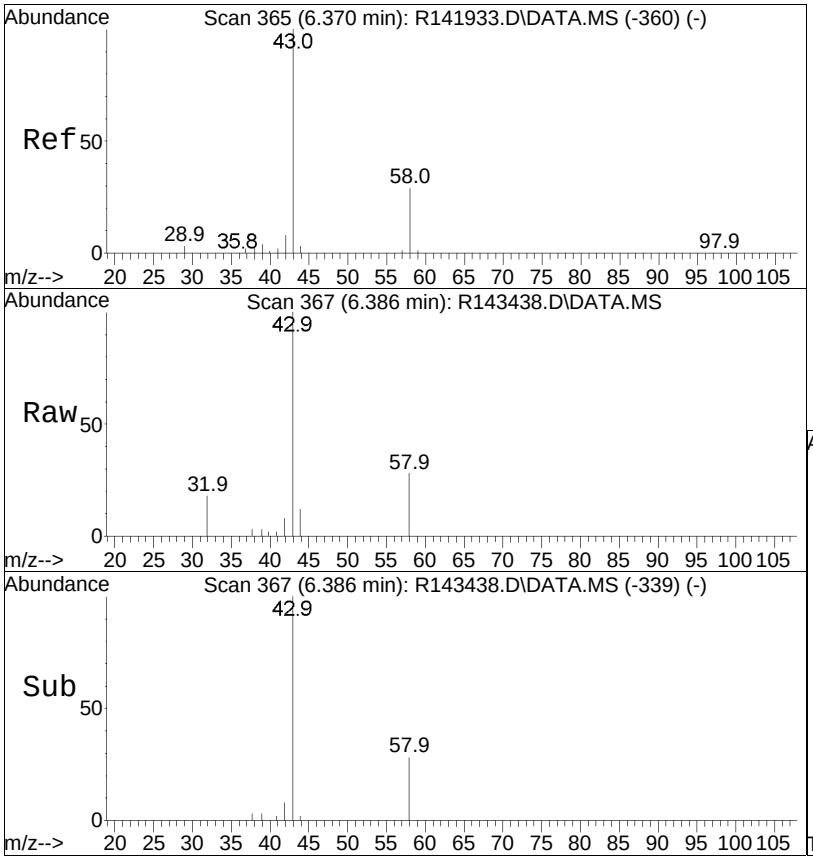


#15
ethanol
Concen: 5.47 ppbV
RT: 5.731 min Scan# 285
Delta R.T. 0.016 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 31 Resp: 17514

Ion	Ratio	Lower	Upper
31	100		
45	70.4	56.5	84.7

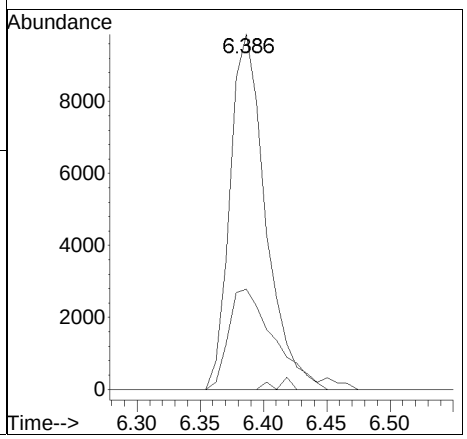


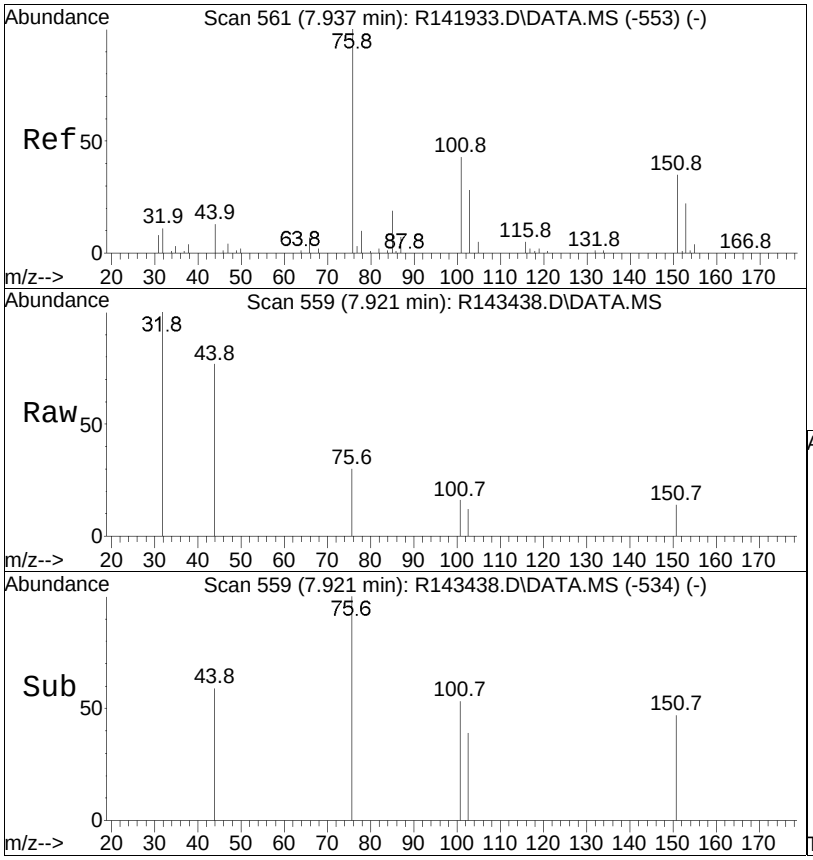


#19
acetone
Concen: 2.30 ppbV
RT: 6.386 min Scan# 367
Delta R.T. 0.024 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 43 Resp: 19654

Ion	Ratio	Lower	Upper
43	100		
58	28.2	24.1	36.1
57	0.0	0.7	1.1#

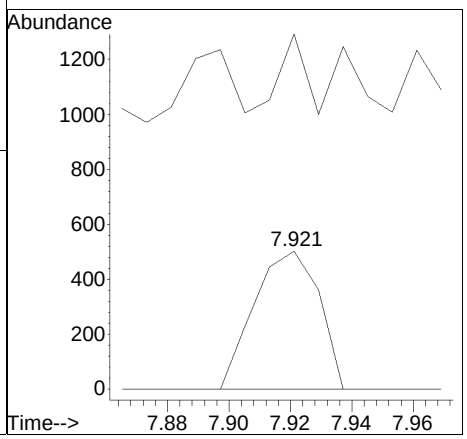


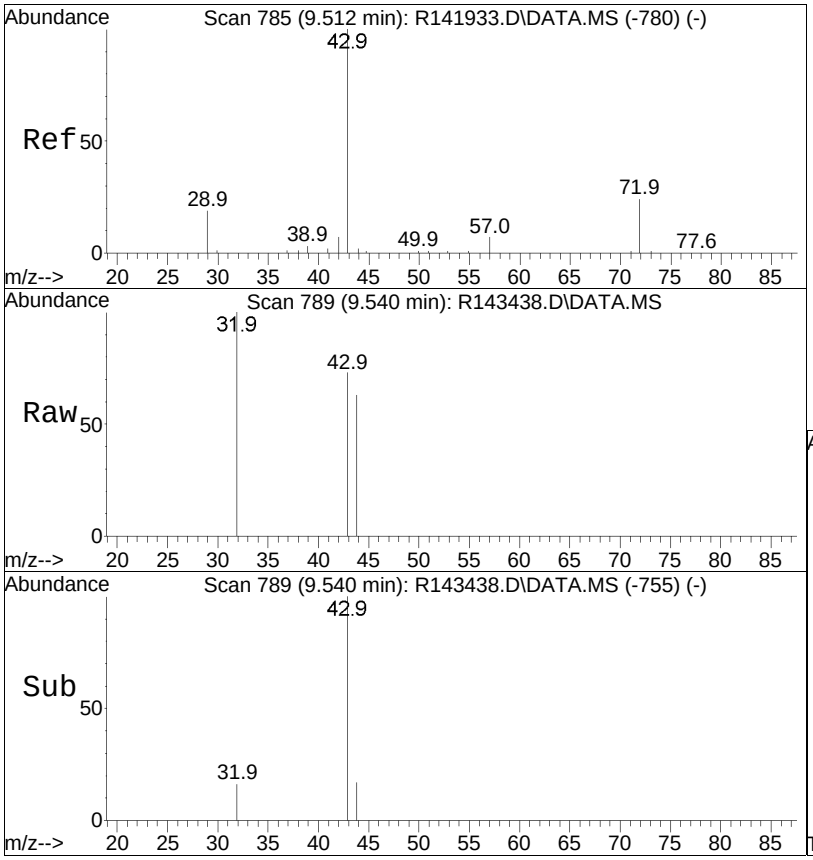


#30
carbon disulfide
Concen: 0.04 ppbV
RT: 7.921 min Scan# 559
Delta R.T. 0.000 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 76 Resp: 738

Ion	Ratio	Lower	Upper
76	100		
44	257.4	11.6	17.4#

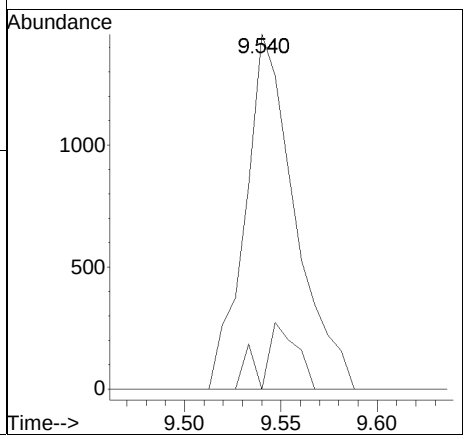


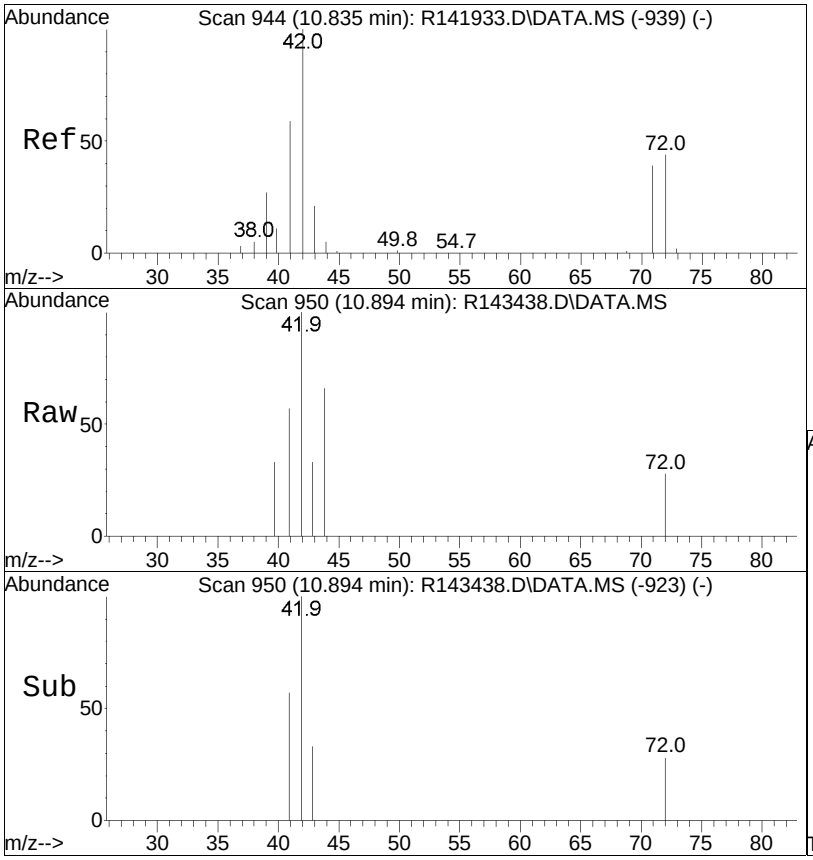


#36
2-butanone
Concen: 0.16 ppbV
RT: 9.540 min Scan# 789
Delta R.T. 0.034 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 43 Resp: 2618

Ion	Ratio	Lower	Upper
43	100		
72	0.0	15.4	23.0#
57	0.0	5.8	8.6#

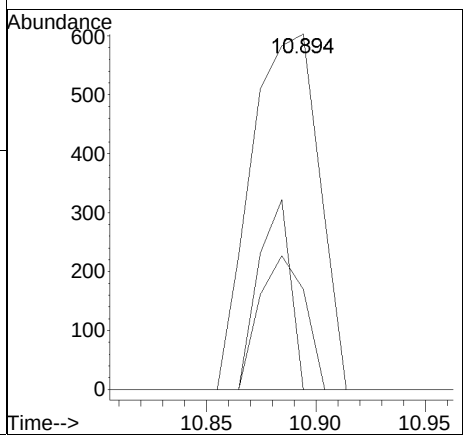




#40
Tetrahydrofuran
Concen: 0.14 ppbV
RT: 10.894 min Scan# 950
Delta R.T. 0.069 min
Lab File: R143438.D
Acq: 14 Aug 2015 11:54 am

Tgt Ion: 42 Resp: 1305

Ion	Ratio	Lower	Upper
42	100		
71	0.0	27.4	41.2#
72	28.2	28.4	42.6#



Manual Integration/Negative Proof Report

Data Path	: O:\Forensics\Data\AIR1\2015\150810\	Method	: TALL150710.M
Data File	: R143438.D	Operator	: AIRPIANO1:MB
Date Inj'd	: 8/14/2015 11:54 am	Instrument	: Air Piano 1
Sample	: WG811916-5,3,250,250	Quant Date	: 8/14/2015 12:19 pm

There are no manual integrations or false positives in this file.

Canister Dilution Worksheet

Alpha Analytical, Inc.
Canister Dilution Worksheet

	NJDEP Required Information							Pressurization Dilution				Can Dilution				Instrument Dilution				
Sample ID	Can size, L	P_1, in Hg	P_1, atm	V_1, L	P_2, in Hg	P_2, atm	V_2, L	P_1, psia	P_2, psia	Dilution factor	Gas Used*	Volume injected, mL	Final Pressure, psia	Volume of Dilution Gas in Can, L	Can dilution factor	Volume of Bag or Can Analyzed, mL	Instrument Dilution Factor	Final Dilution Factor	Final Volume Injected, mL	Analyst Initials
L1519114-08D	6.0	-23.82	0.20	1.23	-9.53	0.68	4.09	3.0	10.0	3.33	N2	1000	14.7	1.00	1.00	250	1.00	3.33	75.0000	RY

*N2 = Nitrogen and H2= Hydrogen

Analyst data input fields

Analyst Comments:

in Hg = ((psia/14.67)*29.94)-29.94 atm =psia/14.67 psig=psia - 14.67 psia = dilution instrument reading

Form# 117-05
8/18/2015 1:41 PM

Alpha Report

ANALYTICAL REPORT

Lab Number:	L1519114
Client:	FSL Associates 358 Chestnut Hill Ave. Brighton, MA 02135
ATTN:	Bruce Hoskins
Phone:	(617) 232-0001
Project Name:	CUMMINGS BEVERLY
Project Number:	CUMMINGS BEVERLY
Report Date:	08/18/15

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1519114-01	SG-1	SOIL_VAPOR	181 ELLIOTT STREET	08/07/15 07:47	08/11/15
L1519114-02	SG-2	SOIL_VAPOR	181 ELLIOTT STREET	08/07/15 07:10	08/11/15
L1519114-03	SG-3	SOIL_VAPOR	181 ELLIOTT STREET	08/07/15 07:29	08/11/15
L1519114-04	SG-4	SOIL_VAPOR	181 ELLIOTT STREET	08/07/15 08:14	08/11/15
L1519114-05	METHOD BLANK	AIR	181 ELLIOTT STREET	08/07/15 00:00	08/11/15
L1519114-06	METHOD BLANK AA	AIR	181 ELLIOTT STREET	08/07/15 00:00	08/11/15
L1519114-07	DUPLICATE	AIR	181 ELLIOTT STREET	08/08/15 10:47	08/11/15
L1519114-08	OUTDOOR CONTROL	AIR	181 ELLIOTT STREET	08/08/15 10:52	08/11/15
L1519114-09	S-157-J	AIR	181 ELLIOTT STREET	08/08/15 10:47	08/11/15
L1519114-10	S-157-J1	AIR	181 ELLIOTT STREET	08/08/15 10:46	08/11/15
L1519114-11	S-157-J2	AIR	181 ELLIOTT STREET	08/08/15 10:45	08/11/15
L1519114-12	UNUSED CAN#214	SOIL_VAPOR	181 ELLIOTT STREET		08/11/15
L1519114-13	UNUSED CAN#531	SOIL_VAPOR	181 ELLIOTT STREET		08/11/15
L1519114-14	UNUSED CAN#654	AIR	181 ELLIOTT STREET		08/11/15
L1519114-15	UNUSED CAN#582	AIR	181 ELLIOTT STREET		08/11/15

Project Name:	CUMMINGS BEVERLY	**Lab Number:**	L1519114
Project Number:	CUMMINGS BEVERLY	**Report Date:**	08/18/15

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	YES
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	YES
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	NO
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: CUMMINGS BEVERLY **Lab Number:** L1519114
Project Number: CUMMINGS BEVERLY **Report Date:** 08/18/15

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	CUMMINGS BEVERLY	**Lab Number:**	L1519114
Project Number:	CUMMINGS BEVERLY	**Report Date:**	08/18/15

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on August 5, 2015. The canister certification data is provided as an addendum.

Samples L1519114-01 through -03 and WG811916-5 Duplicate The presence of Isopropyl alcohol could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

TO15-SIM

The WG811918-5 Laboratory Duplicate RPD, performed on L1519114-01, is above the acceptance criteria for Dichlorodifluoromethane (28%); however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Petroleum Hydrocarbons in Air

In reference to question G:

One or more of the target analytes did not achieve the requested CAM reporting limits.

All significant concentrations of non-petroleum VOCs detected in the TO-15 analysis were subtracted from the corresponding hydrocarbon ranges.

Sample Receipt

The sample designated OUTDOOR CONTROL (L1519114-08) had a RPD for the pre- and post-flow

Project Name:	CUMMINGS BEVERLY	**Lab Number:**	L1519114
Project Number:	CUMMINGS BEVERLY	**Report Date:**	08/18/15

Case Narrative (continued)

controller calibration check (200% RPD) that was outside of the control limit (20% RPD). The initial flow rate for the flow controller was 3.1 mL/minute; the final flow rate was 0.0 mL/minute. The final pressure recorded by the laboratory of the associated canister was -22.8 inches of mercury.

The sample designated SG-3 (L1519114-03) was received with the valve in the open position. The analysis of the sample was cancelled by the client.

The canister vacuum measured on receipt at the laboratory was > 15 in. Hg. Prior to sample analysis, the canister was pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the sample. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Christopher J. Anderson

Title: Technical Director/Representative Date: 08/18/15

AIR

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-01
Client ID: SG-1
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/14/15 10:19
Analyst: RY

Date Collected: 08/07/15 07:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Ethanol	4.74	2.50	0.542	8.93	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	2.07	1.00	0.269	4.92	2.38	0.639		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.047	0.200	0.035	0.146	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	0.145	0.500	0.052	0.428	1.47	0.154	J	1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Tetrahydrofuran	0.155	0.500	0.062	0.457	1.47	0.183	J	1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-01	Date Collected:	08/07/15 07:47
Client ID:	SG-1	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	89		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	94		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-01
Client ID: SG-1
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/14/15 10:19
Analyst: RY

Date Collected: 08/07/15 07:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.226	0.200	0.006	1.12	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
Freon-114	0.014	0.050	0.005	0.098	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.014	0.020	0.007	0.037	0.053	0.019	J	1
Trichlorofluoromethane	0.234	0.050	0.008	1.31	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.498	0.500	0.250	1.73	1.74	0.869	J	1
Freon-113	0.068	0.050	0.006	0.521	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	0.013	0.020	0.007	0.053	0.081	0.028	J	1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	0.126	0.020	0.006	0.615	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	0.041	0.020	0.007	0.224	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	0.051	0.020	0.008	0.321	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
Trichloroethene	0.240	0.020	0.007	1.29	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-01
Client ID: SG-1
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/07/15 07:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.070	0.050	0.025	0.264	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.712	0.020	0.008	4.83	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.009	0.020	0.007	0.039	0.087	0.030	J	1
p/m-Xylene	0.032	0.040	0.009	0.139	0.174	0.039	J	1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.009	0.020	0.008	0.038	0.085	0.034	J	1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.019	0.020	0.008	0.083	0.087	0.035	J	1
1,3,5-Trimethybenzene	0.011	0.020	0.005	0.054	0.098	0.025	J	1
1,2,4-Trimethylbenzene	0.076	0.020	0.007	0.374	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	0.025	0.020	0.008	0.150	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.229	0.050	0.012	1.20	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	95		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-02
Client ID: SG-2
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 22:40
Analyst: RY

Date Collected: 08/07/15 07:10
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Ethanol	3.09	2.50	0.542	5.82	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	1.08	1.00	0.269	2.57	2.38	0.639		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	0.078	0.500	0.052	0.230	1.47	0.154	J	1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-02	Date Collected:	08/07/15 07:10
Client ID:	SG-2	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	82		60-140
Bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-02
Client ID: SG-2
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 22:40
Analyst: RY

Date Collected: 08/07/15 07:10
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.370	0.200	0.006	1.83	0.989	0.030		1
Chloromethane	0.058	0.200	0.048	0.120	0.413	0.099	J	1
Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.018	0.020	0.007	0.048	0.053	0.019	J	1
Trichlorofluoromethane	0.233	0.050	0.008	1.31	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.492	0.500	0.250	1.71	1.74	0.869	J	1
Freon-113	0.069	0.050	0.006	0.529	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	0.011	0.020	0.007	0.045	0.081	0.028	J	1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	0.126	0.020	0.006	0.615	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	0.015	0.020	0.007	0.082	0.109	0.038	J	1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	0.058	0.020	0.008	0.365	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	0.011	0.020	0.008	0.074	0.134	0.054	J	1
Trichloroethene	0.471	0.020	0.007	2.53	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-02
Client ID: SG-2
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/07/15 07:10
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.067	0.050	0.025	0.252	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.937	0.020	0.008	6.35	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	0.022	0.040	0.009	0.096	0.174	0.039	J	1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.009	0.020	0.008	0.038	0.085	0.034	J	1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.011	0.020	0.008	0.048	0.087	0.035	J	1
1,3,5-Trimethybenzene	0.007	0.020	0.005	0.034	0.098	0.025	J	1
1,2,4-Trimethylbenzene	0.018	0.020	0.007	0.089	0.098	0.034	J	1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	0.024	0.020	0.008	0.144	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.120	0.050	0.012	0.629	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-04
Client ID: SG-4
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 23:44
Analyst: RY

Date Collected: 08/07/15 08:14
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	17.9	0.500	0.093	30.8	0.861	0.160		1
Ethanol	3.49	2.50	0.542	6.58	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Isopropanol	0.859	0.500	0.114	2.11	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.088	0.200	0.035	0.274	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	1.09	0.500	0.052	3.21	1.47	0.154		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Tetrahydrofuran	0.120	0.500	0.062	0.354	1.47	0.183	J	1
n-Hexane	5.52	0.200	0.052	19.5	0.705	0.183		1
Cyclohexane	4.03	0.200	0.066	13.9	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	1.38	0.200	0.055	5.66	0.820	0.227		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-04	Date Collected:	08/07/15 08:14
Client ID:	SG-4	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	82		60-140
Bromochloromethane	85		60-140
chlorobenzene-d5	93		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-04
Client ID: SG-4
Sample Location: 181 ELLIOTT STREET
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 23:44
Analyst: RY

Date Collected: 08/07/15 08:14
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.057	0.200	0.006	0.282	0.989	0.030	J	1
Chloromethane	0.053	0.200	0.048	0.109	0.413	0.099	J	1
Freon-114	0.014	0.050	0.005	0.098	0.349	0.035	J	1
Vinyl chloride	0.097	0.020	0.007	0.248	0.051	0.018		1
1,3-Butadiene	0.021	0.020	0.006	0.047	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.032	0.020	0.007	0.084	0.053	0.019		1
Trichlorofluoromethane	0.020	0.050	0.008	0.112	0.281	0.045	J	1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.601	0.500	0.250	2.09	1.74	0.869		1
Freon-113	0.008	0.050	0.006	0.061	0.383	0.046	J	1
trans-1,2-Dichloroethene	0.023	0.020	0.006	0.091	0.079	0.024		1
1,1-Dichloroethane	0.117	0.020	0.007	0.474	0.081	0.028		1
Methyl tert butyl ether	0.347	0.200	0.004	1.25	0.721	0.014		1
cis-1,2-Dichloroethene	0.090	0.020	0.007	0.357	0.079	0.026		1
Chloroform	0.072	0.020	0.006	0.352	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	1.08	0.100	0.021	3.45	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
Trichloroethene	0.022	0.020	0.007	0.118	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-04
Client ID: SG-4
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/07/15 08:14
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.312	0.050	0.025	1.18	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.029	0.020	0.008	0.197	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.099	0.020	0.007	0.430	0.087	0.030		1
p/m-Xylene	0.315	0.040	0.009	1.37	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.014	0.020	0.008	0.060	0.085	0.034	J	1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.132	0.020	0.008	0.573	0.087	0.035		1
1,3,5-Trimethybenzene	0.172	0.020	0.005	0.846	0.098	0.025		1
1,2,4-Trimethylbenzene	0.180	0.020	0.007	0.885	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	0.031	0.020	0.008	0.186	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.310	0.050	0.012	1.63	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	89		60-140
chlorobenzene-d5	95		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-05
Client ID: METHOD BLANK
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 17:19
Analyst: RY

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Ethanol	ND	2.50	0.542	ND	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-05	Date Collected:	08/07/15 00:00
Client ID:	METHOD BLANK	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	102		60-140
Bromochloromethane	103		60-140
chlorobenzene-d5	105		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-05
Client ID: METHOD BLANK
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 17:19
Analyst: RY

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
Freon-114	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.014	0.020	0.007	0.037	0.053	0.019	J	1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.623	0.500	0.250	2.16	1.74	0.869		1
Freon-113	ND	0.050	0.006	ND	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-05
Client ID: METHOD BLANK
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.024	0.020	0.008	0.163	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	ND	0.050	0.012	ND	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	104		60-140
bromochloromethane	105		60-140
chlorobenzene-d5	106		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-06
Client ID: METHOD BLANK AA
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 17:51
Analyst: RY

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Ethanol	ND	2.50	0.542	ND	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-06
Client ID: METHOD BLANK AA
Sample Location: 181 ELLIOTT STREET
Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	92		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-06
Client ID: METHOD BLANK AA
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 17:51
Analyst: RY

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
Freon-114	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.013	0.020	0.007	0.034	0.053	0.019	J	1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.484	0.500	0.250	1.68	1.74	0.869	J	1
Freon-113	ND	0.050	0.006	ND	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-06
Client ID: METHOD BLANK AA
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/07/15 00:00
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	ND	0.050	0.012	ND	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	94		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-07
Client ID: DUPLICATE
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 18:55
Analyst: RY

Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	0.231	0.500	0.093	0.398	0.861	0.160	J	1
Ethanol	71.2	2.50	0.542	134	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	15.0	1.00	0.269	35.6	2.38	0.639		1
Isopropanol	21.1	0.500	0.114	51.9	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.040	0.200	0.035	0.125	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	1.01	0.500	0.052	2.98	1.47	0.154		1
Ethyl Acetate	0.307	0.500	0.131	1.11	1.80	0.472	J	1
Tetrahydrofuran	0.280	0.500	0.062	0.826	1.47	0.183	J	1
n-Hexane	0.125	0.200	0.052	0.441	0.705	0.183	J	1
Cyclohexane	0.076	0.200	0.066	0.262	0.688	0.226	J	1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	0.213	0.200	0.055	0.873	0.820	0.227		1
4-Methyl-2-pentanone	0.144	0.500	0.061	0.590	2.05	0.249	J	1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	0.082	0.200	0.078	0.403	0.983	0.381	J	1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-07	Date Collected:	08/08/15 10:47
Client ID:	DUPLICATE	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	89		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	94		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-07
Client ID: DUPLICATE
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 18:55
Analyst: RY

Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.429	0.200	0.006	2.12	0.989	0.030		1
Chloromethane	0.564	0.200	0.048	1.16	0.413	0.099		1
Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	0.016	0.020	0.006	0.035	0.044	0.013	J	1
Bromomethane	0.012	0.020	0.008	0.047	0.078	0.031	J	1
Chloroethane	0.025	0.020	0.007	0.066	0.053	0.019		1
Trichlorofluoromethane	0.217	0.050	0.008	1.22	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.594	0.500	0.250	2.06	1.74	0.869		1
Freon-113	0.068	0.050	0.006	0.521	0.383	0.046		1
trans-1,2-Dichloroethene	0.006	0.020	0.006	0.024	0.079	0.024	J	1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	0.032	0.020	0.007	0.127	0.079	0.026		1
Chloroform	0.059	0.020	0.006	0.288	0.098	0.029		1
1,2-Dichloroethane	0.018	0.020	0.008	0.073	0.081	0.032	J	1
1,1,1-Trichloroethane	0.027	0.020	0.007	0.147	0.109	0.038		1
Benzene	0.079	0.100	0.021	0.252	0.319	0.067	J	1
Carbon tetrachloride	0.066	0.020	0.008	0.415	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J	1
Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J	1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-07
Client ID: DUPLICATE
Sample Location: 181 ELLIOTT STREET
Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.969	0.050	0.025	3.65	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.102	0.020	0.008	0.692	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.091	0.020	0.007	0.395	0.087	0.030		1
p/m-Xylene	0.292	0.040	0.009	1.27	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.099	0.020	0.008	0.422	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.121	0.020	0.008	0.526	0.087	0.035		1
1,3,5-Trimethybenzene	0.082	0.020	0.005	0.403	0.098	0.025		1
1,2,4-Trimethylbenzene	0.275	0.020	0.007	1.35	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	0.008	0.020	0.008	0.048	0.120	0.048	J	1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.106	0.050	0.012	0.556	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	92		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	95		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-08 D
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 18:23
Analyst: RY

Date Collected: 08/08/15 10:52
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	1.67	0.310	ND	2.87	0.534		3.333
Ethanol	7.79	8.33	1.81	14.7	15.7	3.41	J	3.333
Vinyl bromide	ND	0.667	0.233	ND	2.92	1.02		3.333
Acetone	4.88	3.33	0.896	11.6	7.91	2.13		3.333
Isopropanol	0.560	1.67	0.380	1.38	4.10	0.934	J	3.333
3-Chloropropene	ND	0.667	0.271	ND	2.09	0.848		3.333
Carbon disulfide	ND	0.667	0.115	ND	2.08	0.358		3.333
Vinyl acetate	ND	3.33	0.189	ND	11.7	0.665		3.333
2-Butanone	0.310	1.67	0.174	0.914	4.93	0.513	J	3.333
Ethyl Acetate	ND	1.67	0.437	ND	6.02	1.57		3.333
Tetrahydrofuran	0.353	1.67	0.207	1.04	4.93	0.611	J	3.333
n-Hexane	ND	0.667	0.173	ND	2.35	0.610		3.333
Cyclohexane	1.59	0.667	0.219	5.47	2.30	0.754		3.333
1,4-Dioxane	ND	0.667	0.260	ND	2.40	0.937		3.333
2,2,4-Trimethylpentane	ND	0.667	0.220	ND	3.12	1.03		3.333
Heptane	ND	0.667	0.184	ND	2.73	0.754		3.333
4-Methyl-2-pentanone	ND	1.67	0.202	ND	6.84	0.828		3.333
2-Hexanone	ND	0.667	0.201	ND	2.73	0.824		3.333
4-Ethyltoluene	ND	0.667	0.259	ND	3.28	1.27		3.333
Benzyl chloride	ND	0.667	0.215	ND	3.45	1.11		3.333

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-08 D	Date Collected:	08/08/15 10:52
Client ID:	OUTDOOR CONTROL	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	87		60-140
Bromochloromethane	83		60-140
chlorobenzene-d5	91		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-08 D
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 18:23
Analyst: RY

Date Collected: 08/08/15 10:52
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.393	0.667	0.020	1.94	3.30	0.099	J	3.333
Chloromethane	0.610	0.667	0.160	1.26	1.38	0.330	J	3.333
Freon-114	0.017	0.167	0.017	0.117	1.17	0.117	J	3.333
Vinyl chloride	ND	0.067	0.023	ND	0.171	0.060		3.333
1,3-Butadiene	0.023	0.067	0.020	0.052	0.148	0.044	J	3.333
Bromomethane	ND	0.067	0.027	ND	0.259	0.104		3.333
Chloroethane	0.063	0.067	0.023	0.167	0.176	0.062	J	3.333
Trichlorofluoromethane	0.293	0.167	0.027	1.65	0.938	0.150		3.333
1,1-Dichloroethene	ND	0.067	0.023	ND	0.264	0.092		3.333
Methylene chloride	1.77	1.67	0.833	6.15	5.80	2.89		3.333
Freon-113	0.127	0.167	0.020	0.973	1.28	0.153	J	3.333
trans-1,2-Dichloroethene	ND	0.067	0.020	ND	0.264	0.079		3.333
1,1-Dichloroethane	ND	0.067	0.023	ND	0.270	0.094		3.333
Methyl tert butyl ether	ND	0.667	0.013	ND	2.40	0.048		3.333
cis-1,2-Dichloroethene	ND	0.067	0.022	ND	0.264	0.087		3.333
Chloroform	0.030	0.067	0.020	0.147	0.326	0.098	J	3.333
1,2-Dichloroethane	ND	0.067	0.027	ND	0.270	0.108		3.333
1,1,1-Trichloroethane	ND	0.067	0.023	ND	0.364	0.127		3.333
Benzene	0.110	0.333	0.070	0.351	1.06	0.224	J	3.333
Carbon tetrachloride	0.063	0.067	0.027	0.398	0.420	0.168	J	3.333
1,2-Dichloropropane	ND	0.067	0.020	ND	0.308	0.092		3.333
Bromodichloromethane	ND	0.067	0.027	ND	0.447	0.179		3.333
Trichloroethene	ND	0.067	0.023	ND	0.358	0.125		3.333
cis-1,3-Dichloropropene	ND	0.067	0.027	ND	0.303	0.121		3.333

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-08 D
Client ID: OUTDOOR CONTROL
Sample Location: 181 ELLIOTT STREET
Date Collected: 08/08/15 10:52
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.067	0.027	ND	0.303	0.121		3.333
1,1,2-Trichloroethane	ND	0.067	0.030	ND	0.364	0.164		3.333
Toluene	1.45	0.167	0.083	5.46	0.629	0.314		3.333
Dibromochloromethane	ND	0.067	0.027	ND	0.568	0.227		3.333
1,2-Dibromoethane	ND	0.067	0.027	ND	0.513	0.205		3.333
Tetrachloroethene	ND	0.067	0.027	ND	0.452	0.181		3.333
1,1,1,2-Tetrachloroethane	ND	0.067	0.013	ND	0.458	0.091		3.333
Chlorobenzene	ND	0.067	0.027	ND	0.307	0.123		3.333
Ethylbenzene	0.127	0.067	0.023	0.552	0.290	0.101		3.333
p/m-Xylene	0.340	0.133	0.030	1.48	0.578	0.130		3.333
Bromoform	ND	0.067	0.050	ND	0.690	0.517		3.333
Styrene	0.123	0.067	0.027	0.524	0.284	0.114		3.333
1,1,2,2-Tetrachloroethane	ND	0.067	0.023	ND	0.458	0.160		3.333
o-Xylene	0.137	0.067	0.027	0.595	0.290	0.116		3.333
1,3,5-Trimethybenzene	0.067	0.067	0.017	0.328	0.328	0.082		3.333
1,2,4-Trimethylbenzene	0.210	0.067	0.023	1.03	0.328	0.115		3.333
1,3-Dichlorobenzene	0.037	0.067	0.023	0.221	0.401	0.140	J	3.333
1,4-Dichlorobenzene	ND	0.067	0.027	ND	0.401	0.161		3.333
1,2-Dichlorobenzene	ND	0.067	0.023	ND	0.401	0.140		3.333
1,2,4-Trichlorobenzene	ND	0.167	0.033	ND	1.24	0.247		3.333
Naphthalene	0.087	0.167	0.040	0.454	0.876	0.210	J	3.333
Hexachlorobutadiene	ND	0.167	0.037	ND	1.78	0.391		3.333

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	87		60-140
chlorobenzene-d5	93		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-09
Client ID: S-157-J
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 19:27
Analyst: RY

Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	0.244	0.500	0.093	0.420	0.861	0.160	J	1
Ethanol	64.9	2.50	0.542	122	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	13.8	1.00	0.269	32.8	2.38	0.639		1
Isopropanol	15.6	0.500	0.114	38.3	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.047	0.200	0.035	0.146	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	0.674	0.500	0.052	1.99	1.47	0.154		1
Ethyl Acetate	0.222	0.500	0.131	0.800	1.80	0.472	J	1
Tetrahydrofuran	0.282	0.500	0.062	0.832	1.47	0.183	J	1
n-Hexane	0.202	0.200	0.052	0.712	0.705	0.183		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	0.074	0.200	0.066	0.346	0.934	0.308	J	1
Heptane	0.196	0.200	0.055	0.803	0.820	0.227	J	1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-09	Date Collected:	08/08/15 10:47
Client ID:	S-157-J	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	87		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-09
Client ID: S-157-J
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 19:27
Analyst: RY

Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.595	0.200	0.006	2.94	0.989	0.030		1
Chloromethane	0.580	0.200	0.048	1.20	0.413	0.099		1
Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J	1
Bromomethane	0.015	0.020	0.008	0.058	0.078	0.031	J	1
Chloroethane	0.029	0.020	0.007	0.077	0.053	0.019		1
Trichlorofluoromethane	0.220	0.050	0.008	1.24	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	6.34	0.500	0.250	22.0	1.74	0.869		1
Freon-113	0.073	0.050	0.006	0.560	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	0.037	0.020	0.007	0.147	0.079	0.026		1
Chloroform	0.065	0.020	0.006	0.317	0.098	0.029		1
1,2-Dichloroethane	0.019	0.020	0.008	0.077	0.081	0.032	J	1
1,1,1-Trichloroethane	0.019	0.020	0.007	0.104	0.109	0.038	J	1
Benzene	0.089	0.100	0.021	0.284	0.319	0.067	J	1
Carbon tetrachloride	0.066	0.020	0.008	0.415	0.126	0.050		1
1,2-Dichloropropane	0.006	0.020	0.006	0.028	0.092	0.028	J	1
Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J	1
Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J	1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-09
Client ID: S-157-J
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/08/15 10:47
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	1.01	0.050	0.025	3.81	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.116	0.020	0.008	0.787	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.084	0.020	0.007	0.365	0.087	0.030		1
p/m-Xylene	0.266	0.040	0.009	1.16	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.056	0.020	0.008	0.238	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.109	0.020	0.008	0.473	0.087	0.035		1
1,3,5-Trimethybenzene	0.069	0.020	0.005	0.339	0.098	0.025		1
1,2,4-Trimethylbenzene	0.199	0.020	0.007	0.978	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.016	0.050	0.012	0.084	0.262	0.063	J	1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	90		60-140
bromochloromethane	92		60-140
chlorobenzene-d5	94		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-10
Client ID: S-157-J1
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 19:59
Analyst: RY

Date Collected: 08/08/15 10:46
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	0.326	0.500	0.093	0.561	0.861	0.160	J	1
Ethanol	86.8	2.50	0.542	164	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	17.7	1.00	0.269	42.0	2.38	0.639		1
Isopropanol	24.2	0.500	0.114	59.5	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.042	0.200	0.035	0.131	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	1.02	0.500	0.052	3.01	1.47	0.154		1
Ethyl Acetate	0.369	0.500	0.131	1.33	1.80	0.472	J	1
Tetrahydrofuran	0.314	0.500	0.062	0.926	1.47	0.183	J	1
n-Hexane	0.145	0.200	0.052	0.511	0.705	0.183	J	1
Cyclohexane	0.145	0.200	0.066	0.499	0.688	0.226	J	1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	0.072	0.200	0.066	0.336	0.934	0.308	J	1
Heptane	0.205	0.200	0.055	0.840	0.820	0.227		1
4-Methyl-2-pentanone	0.219	0.500	0.061	0.897	2.05	0.249	J	1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	0.096	0.200	0.078	0.472	0.983	0.381	J	1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-10	Date Collected:	08/08/15 10:46
Client ID:	S-157-J1	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	82		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	90		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-10
Client ID: S-157-J1
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 19:59
Analyst: RY

Date Collected: 08/08/15 10:46
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.379	0.200	0.006	1.87	0.989	0.030		1
Chloromethane	0.621	0.200	0.048	1.28	0.413	0.099		1
Freon-114	0.016	0.050	0.005	0.112	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J	1
Bromomethane	0.014	0.020	0.008	0.054	0.078	0.031	J	1
Chloroethane	0.029	0.020	0.007	0.077	0.053	0.019		1
Trichlorofluoromethane	0.241	0.050	0.008	1.35	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.743	0.500	0.250	2.58	1.74	0.869		1
Freon-113	0.080	0.050	0.006	0.613	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	0.040	0.020	0.007	0.159	0.079	0.026		1
Chloroform	0.067	0.020	0.006	0.327	0.098	0.029		1
1,2-Dichloroethane	0.022	0.020	0.008	0.089	0.081	0.032		1
1,1,1-Trichloroethane	0.020	0.020	0.007	0.109	0.109	0.038		1
Benzene	0.087	0.100	0.021	0.278	0.319	0.067	J	1
Carbon tetrachloride	0.068	0.020	0.008	0.428	0.126	0.050		1
1,2-Dichloropropane	0.007	0.020	0.006	0.032	0.092	0.028	J	1
Bromodichloromethane	0.010	0.020	0.008	0.067	0.134	0.054	J	1
Trichloroethene	0.014	0.020	0.007	0.075	0.107	0.038	J	1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-10
Client ID: S-157-J1
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/08/15 10:46
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.940	0.050	0.025	3.54	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.119	0.020	0.008	0.807	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.100	0.020	0.007	0.434	0.087	0.030		1
p/m-Xylene	0.327	0.040	0.009	1.42	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.124	0.020	0.008	0.528	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.131	0.020	0.008	0.569	0.087	0.035		1
1,3,5-Trimethybenzene	0.099	0.020	0.005	0.487	0.098	0.025		1
1,2,4-Trimethylbenzene	0.340	0.020	0.007	1.67	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	0.008	0.020	0.008	0.048	0.120	0.048	J	1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.184	0.050	0.012	0.965	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	83		60-140
chlorobenzene-d5	92		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-11
Client ID: S-157-J2
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/13/15 20:31
Analyst: RY

Date Collected: 08/08/15 10:45
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Propylene	0.178	0.500	0.093	0.306	0.861	0.160	J	1
Ethanol	72.9	2.50	0.542	137	4.71	1.02		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acetone	15.7	1.00	0.269	37.3	2.38	0.639		1
Isopropanol	21.6	0.500	0.114	53.1	1.23	0.280		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	0.039	0.200	0.035	0.121	0.623	0.107	J	1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	0.861	0.500	0.052	2.54	1.47	0.154		1
Ethyl Acetate	0.267	0.500	0.131	0.962	1.80	0.472	J	1
Tetrahydrofuran	0.237	0.500	0.062	0.699	1.47	0.183	J	1
n-Hexane	0.126	0.200	0.052	0.444	0.705	0.183	J	1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Heptane	0.197	0.200	0.055	0.807	0.820	0.227	J	1
4-Methyl-2-pentanone	0.186	0.500	0.061	0.762	2.05	0.249	J	1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
4-Ethyltoluene	0.091	0.200	0.078	0.447	0.983	0.381	J	1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1

Project Name:	CUMMINGS BEVERLY	***Lab Number:***	L1519114
Project Number:	CUMMINGS BEVERLY	***Report Date:***	08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-11	Date Collected:	08/08/15 10:45
Client ID:	S-157-J2	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	86		60-140
Bromochloromethane	87		60-140
chlorobenzene-d5	90		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-11
Client ID: S-157-J2
Sample Location: 181 ELLIOTT STREET
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 20:31
Analyst: RY

Date Collected: 08/08/15 10:45
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	0.375	0.200	0.006	1.85	0.989	0.030		1
Chloromethane	0.585	0.200	0.048	1.21	0.413	0.099		1
Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J	1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J	1
Bromomethane	0.014	0.020	0.008	0.054	0.078	0.031	J	1
Chloroethane	0.030	0.020	0.007	0.079	0.053	0.019		1
Trichlorofluoromethane	0.233	0.050	0.008	1.31	0.281	0.045		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.843	0.500	0.250	2.93	1.74	0.869		1
Freon-113	0.091	0.050	0.006	0.697	0.383	0.046		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
cis-1,2-Dichloroethene	0.039	0.020	0.007	0.155	0.079	0.026		1
Chloroform	0.064	0.020	0.006	0.313	0.098	0.029		1
1,2-Dichloroethane	0.021	0.020	0.008	0.085	0.081	0.032		1
1,1,1-Trichloroethane	0.018	0.020	0.007	0.098	0.109	0.038	J	1
Benzene	0.084	0.100	0.021	0.268	0.319	0.067	J	1
Carbon tetrachloride	0.065	0.020	0.008	0.409	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1
Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J	1
Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J	1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID: L1519114-11
Client ID: S-157-J2
Sample Location: 181 ELLIOTT STREET

Date Collected: 08/08/15 10:45
Date Received: 08/11/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	0.773	0.050	0.025	2.91	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	0.120	0.020	0.008	0.814	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	0.095	0.020	0.007	0.413	0.087	0.030		1
p/m-Xylene	0.309	0.040	0.009	1.34	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	0.104	0.020	0.008	0.443	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	0.126	0.020	0.008	0.547	0.087	0.035		1
1,3,5-Trimethybenzene	0.093	0.020	0.005	0.457	0.098	0.025		1
1,2,4-Trimethylbenzene	0.325	0.020	0.007	1.60	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	0.189	0.050	0.012	0.991	0.262	0.063		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	89		60-140
bromochloromethane	88		60-140
chlorobenzene-d5	92		60-140

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/13/15 14:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811916-4								
Chlorodifluoromethane	ND	0.200	0.063	ND	0.707	0.221		1
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Propane	ND	0.500	0.114	ND	0.902	0.206		1
Dichlorodifluoromethane	ND	0.200	0.047	ND	0.989	0.230		1
Chloromethane	ND	0.200	0.096	ND	0.413	0.198		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	0.042	ND	1.40	0.293		1
Methanol	ND	5.00	0.736	ND	6.55	0.964		1
Vinyl chloride	ND	0.200	0.053	ND	0.511	0.136		1
1,3-Butadiene	ND	0.200	0.080	ND	0.442	0.177		1
Butane	ND	0.200	0.044	ND	0.475	0.105		1
Bromomethane	ND	0.200	0.070	ND	0.777	0.270		1
Chloroethane	ND	0.200	0.077	ND	0.528	0.202		1
Ethyl Alcohol	ND	2.50	0.542	ND	4.71	1.02		1
Dichlorofluoromethane	ND	0.200	0.057	ND	0.842	0.241		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acrolein	ND	0.500	0.114	ND	1.15	0.261		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Acetonitrile	ND	0.200	0.076	ND	0.336	0.128		1
Trichlorofluoromethane	ND	0.200	0.042	ND	1.12	0.234		1
iso-Propyl Alcohol	ND	0.500	0.114	ND	1.23	0.280		1
Acrylonitrile	ND	0.500	0.079	ND	1.09	0.171		1
Pentane	ND	0.200	0.048	ND	0.590	0.140		1
Ethyl ether	ND	0.200	0.059	ND	0.606	0.179		1
1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.224		1
tert-Butyl Alcohol	ND	0.500	0.060	ND	1.52	0.182		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/13/15 14:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811916-4								
Methylene chloride	ND	0.500	0.188	ND	1.74	0.653		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	0.051	ND	1.53	0.392		1
trans-1,2-Dichloroethene	ND	0.200	0.074	ND	0.793	0.293		1
1,1-Dichloroethane	ND	0.200	0.077	ND	0.809	0.312		1
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.163		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
cis-1,2-Dichloroethene	ND	0.200	0.059	ND	0.793	0.233		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Chloroform	ND	0.200	0.045	ND	0.977	0.221		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
2,2-Dichloropropane	ND	0.200	0.058	ND	0.924	0.269		1
1,2-Dichloroethane	ND	0.200	0.055	ND	0.809	0.223		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Isopropyl Ether	ND	0.200	0.066	ND	0.836	0.274		1
Ethyl-Tert-Butyl-Ether	ND	0.200	0.052	ND	0.836	0.215		1
1,1,1-Trichloroethane	ND	0.200	0.057	ND	1.09	0.311		1
1,1-Dichloropropene	ND	0.200	0.072	ND	0.908	0.325		1
Benzene	ND	0.200	0.054	ND	0.639	0.172		1
Carbon tetrachloride	ND	0.200	0.047	ND	1.26	0.296		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
Tertiary-Amyl Methyl Ether	ND	0.200	0.080	ND	0.836	0.332		1
Dibromomethane	ND	0.200	0.048	ND	1.42	0.338		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/13/15 14:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811916-4								
1,2-Dichloropropane	ND	0.200	0.070	ND	0.924	0.322		1
Bromodichloromethane	ND	0.200	0.066	ND	1.34	0.439		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1
Trichloroethene	ND	0.200	0.071	ND	1.07	0.382		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Methyl Methacrylate	ND	0.500	0.148	ND	2.05	0.606		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
cis-1,3-Dichloropropene	ND	0.200	0.075	ND	0.908	0.338		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
trans-1,3-Dichloropropene	ND	0.200	0.069	ND	0.908	0.315		1
1,1,2-Trichloroethane	ND	0.200	0.067	ND	1.09	0.364		1
Toluene	ND	0.200	0.063	ND	0.754	0.237		1
1,3-Dichloropropane	ND	0.200	0.078	ND	0.924	0.359		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
Dibromochloromethane	ND	0.200	0.075	ND	1.70	0.636		1
1,2-Dibromoethane	ND	0.200	0.078	ND	1.54	0.599		1
Butyl Acetate	ND	0.500	0.114	ND	2.38	0.542		1
Octane	ND	0.200	0.042	ND	0.934	0.197		1
Tetrachloroethene	ND	0.200	0.076	ND	1.36	0.514		1
1,1,1,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
Chlorobenzene	ND	0.200	0.079	ND	0.921	0.363		1
Ethylbenzene	ND	0.200	0.056	ND	0.869	0.241		1
p/m-Xylene	ND	0.400	0.139	ND	1.74	0.604		1
Bromoform	ND	0.200	0.052	ND	2.07	0.541		1
Styrene	ND	0.200	0.080	ND	0.852	0.340		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/13/15 14:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811916-4								
1,1,2,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
o-Xylene	ND	0.200	0.063	ND	0.869	0.274		1
1,2,3-Trichloropropane	ND	0.200	0.077	ND	1.21	0.462		1
Nonane (C9)	ND	0.200	0.064	ND	1.05	0.338		1
Isopropylbenzene	ND	0.200	0.043	ND	0.983	0.211		1
Bromobenzene	ND	0.200	0.079	ND	0.793	0.313		1
o-Chlorotoluene	ND	0.200	0.049	ND	1.04	0.252		1
n-Propylbenzene	ND	0.200	0.056	ND	0.983	0.275		1
p-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.396		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
1,3,5-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.287		1
tert-Butylbenzene	ND	0.200	0.040	ND	1.10	0.221		1
1,2,4-Trimethylbenzene	ND	0.200	0.069	ND	0.983	0.341		1
Decane (C10)	ND	0.200	0.048	ND	1.16	0.282		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1
1,3-Dichlorobenzene	ND	0.200	0.064	ND	1.20	0.383		1
1,4-Dichlorobenzene	ND	0.200	0.042	ND	1.20	0.251		1
sec-Butylbenzene	ND	0.200	0.073	ND	1.10	0.401		1
p-Isopropyltoluene	ND	0.200	0.061	ND	1.10	0.334		1
1,2-Dichlorobenzene	ND	0.200	0.061	ND	1.20	0.369		1
n-Butylbenzene	ND	0.200	0.064	ND	1.10	0.351		1
1,2-Dibromo-3-chloropropane	ND	0.200	0.074	ND	1.93	0.719		1
Undecane	ND	0.200	0.053	ND	1.28	0.338		1
Dodecane (C12)	ND	0.200	0.056	ND	1.39	0.393		1
1,2,4-Trichlorobenzene	ND	0.200	0.061	ND	1.48	0.454		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 08/13/15 14:46

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811916-4								
Naphthalene	0.048	0.200	0.043	0.252	1.05	0.227	J	1
1,2,3-Trichlorobenzene	ND	0.200	0.044	ND	1.48	0.324		1
Hexachlorobutadiene	ND	0.200	0.073	ND	2.13	0.781		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 15:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811918-4								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	0.015	0.020	0.007	0.040	0.053	0.019	J	1
Acetone	ND	1.00	0.133	ND	2.38	0.316		1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
Acrylonitrile	ND	0.500	0.015	ND	1.09	0.033		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	0.326	0.500	0.250	1.13	1.74	0.869	J	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	0.006	ND	0.383	0.046		1
Halothane	ND	0.050	0.008	ND	0.404	0.065		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
2-Butanone	ND	0.500	0.025	ND	1.47	0.073		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 15:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811918-4								
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
1,4-Dioxane	ND	0.100	0.050	ND	0.360	0.180		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
4-Methyl-2-pentanone	ND	0.500	0.042	ND	2.05	0.172		1
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
Isopropylbenzene	ND	0.200	0.046	ND	0.983	0.226		1
4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.048		1
1,3,5-Trimethylbenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 08/13/15 15:18

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811918-4								
sec-Butylbenzene	ND	0.200	0.047	ND	1.10	0.258		1
p-Isopropyltoluene	ND	0.200	0.048	ND	1.10	0.263		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
n-Butylbenzene	ND	0.200	0.045	ND	1.10	0.247		1
1,2,4-Trichlorobenzene	0.015	0.050	0.010	0.111	0.371	0.074	J	1
Naphthalene	0.020	0.050	0.012	0.105	0.262	0.063	J	1
1,2,3-Trichlorobenzene	ND	0.050	0.019	ND	0.371	0.141		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811916-3								
Chlorodifluoromethane	90		-		70-130	-		
Propylene	106		-		70-130	-		
Propane	78		-		70-130	-		
Dichlorodifluoromethane	86		-		70-130	-		
Chloromethane	102		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	105		-		70-130	-		
Methanol	93		-		70-130	-		
Vinyl chloride	104		-		70-130	-		
1,3-Butadiene	112		-		70-130	-		
Butane	92		-		70-130	-		
Bromomethane	100		-		70-130	-		
Chloroethane	100		-		70-130	-		
Ethyl Alcohol	99		-		70-130	-		
Dichlorofluoromethane	94		-		70-130	-		
Vinyl bromide	101		-		70-130	-		
Acrolein	102		-		70-130	-		
Acetone	103		-		70-130	-		
Acetonitrile	97		-		70-130	-		
Trichlorofluoromethane	99		-		70-130	-		
iso-Propyl Alcohol	109		-		70-130	-		
Acrylonitrile	101		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811916-3								
Pentane	94		-		70-130	-		
Ethyl ether	96		-		70-130	-		
1,1-Dichloroethene	99		-		70-130	-		
tert-Butyl Alcohol	95		-		70-130	-		
Methylene chloride	104		-		70-130	-		
3-Chloropropene	104		-		70-130	-		
Carbon disulfide	99		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	104		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	99		-		70-130	-		
Vinyl acetate	109		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	109		-		70-130	-		
Ethyl Acetate	99		-		70-130	-		
Chloroform	100		-		70-130	-		
Tetrahydrofuran	94		-		70-130	-		
2,2-Dichloropropane	90		-		70-130	-		
1,2-Dichloroethane	97		-		70-130	-		
n-Hexane	93		-		70-130	-		
Isopropyl Ether	92		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811916-3								
Ethyl-Tert-Butyl-Ether	89		-		70-130	-		
1,1,1-Trichloroethane	96		-		70-130	-		
1,1-Dichloropropene	91		-		70-130	-		
Benzene	94		-		70-130	-		
Carbon tetrachloride	101		-		70-130	-		
Cyclohexane	95		-		70-130	-		
Tertiary-Amyl Methyl Ether	90		-		70-130	-		
Dibromomethane	91		-		70-130	-		
1,2-Dichloropropane	96		-		70-130	-		
Bromodichloromethane	95		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	93		-		70-130	-		
Methyl Methacrylate	87		-		70-130	-		
Heptane	91		-		70-130	-		
cis-1,3-Dichloropropene	101		-		70-130	-		
4-Methyl-2-pentanone	94		-		70-130	-		
trans-1,3-Dichloropropene	87		-		70-130	-		
1,1,2-Trichloroethane	98		-		70-130	-		
Toluene	100		-		70-130	-		
1,3-Dichloropropane	93		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811916-3								
2-Hexanone	99		-		70-130	-		
Dibromochloromethane	103		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		
Butyl Acetate	99		-		70-130	-		
Octane	92		-		70-130	-		
Tetrachloroethene	102		-		70-130	-		
1,1,1,2-Tetrachloroethane	96		-		70-130	-		
Chlorobenzene	100		-		70-130	-		
Ethylbenzene	100		-		70-130	-		
p/m-Xylene	102		-		70-130	-		
Bromoform	104		-		70-130	-		
Styrene	102		-		70-130	-		
1,1,2,2-Tetrachloroethane	106		-		70-130	-		
o-Xylene	104		-		70-130	-		
1,2,3-Trichloropropane	95		-		70-130	-		
Nonane (C9)	92		-		70-130	-		
Isopropylbenzene	100		-		70-130	-		
Bromobenzene	95		-		70-130	-		
o-Chlorotoluene	92		-		70-130	-		
n-Propylbenzene	96		-		70-130	-		
p-Chlorotoluene	94		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811916-3								
4-Ethyltoluene	94		-		70-130	-		
1,3,5-Trimethylbenzene	101		-		70-130	-		
tert-Butylbenzene	98		-		70-130	-		
1,2,4-Trimethylbenzene	106		-		70-130	-		
Decane (C10)	96		-		70-130	-		
Benzyl chloride	101		-		70-130	-		
1,3-Dichlorobenzene	105		-		70-130	-		
1,4-Dichlorobenzene	105		-		70-130	-		
sec-Butylbenzene	99		-		70-130	-		
p-Isopropyltoluene	93		-		70-130	-		
1,2-Dichlorobenzene	106		-		70-130	-		
n-Butylbenzene	103		-		70-130	-		
1,2-Dibromo-3-chloropropane	96		-		70-130	-		
Undecane	105		-		70-130	-		
Dodecane (C12)	130		-		70-130	-		
1,2,4-Trichlorobenzene	122		-		70-130	-		
Naphthalene	116		-		70-130	-		
1,2,3-Trichlorobenzene	118		-		70-130	-		
Hexachlorobutadiene	116		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811918-3								
Dichlorodifluoromethane	77		-		70-130	-		25
Chloromethane	100		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	101		-		70-130	-		25
Vinyl chloride	101		-		70-130	-		25
1,3-Butadiene	106		-		70-130	-		25
Bromomethane	98		-		70-130	-		25
Chloroethane	94		-		70-130	-		25
Acetone	101		-		70-130	-		25
Trichlorofluoromethane	99		-		70-130	-		25
Acrylonitrile	92		-		70-130	-		25
1,1-Dichloroethene	99		-		70-130	-		25
Methylene chloride	104		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	99		-		70-130	-		25
Halothane	108		-		70-130	-		25
trans-1,2-Dichloroethene	90		-		70-130	-		25
1,1-Dichloroethane	96		-		70-130	-		25
Methyl tert butyl ether	97		-		70-130	-		25
2-Butanone	93		-		70-130	-		25
cis-1,2-Dichloroethene	110		-		70-130	-		25
Chloroform	99		-		70-130	-		25
1,2-Dichloroethane	93		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811918-3								
1,1,1-Trichloroethane	95		-		70-130	-		25
Benzene	91		-		70-130	-		25
Carbon tetrachloride	104		-		70-130	-		25
1,2-Dichloropropane	94		-		70-130	-		25
Bromodichloromethane	96		-		70-130	-		25
1,4-Dioxane	95		-		70-130	-		25
Trichloroethene	95		-		70-130	-		25
cis-1,3-Dichloropropene	102		-		70-130	-		25
4-Methyl-2-pentanone	94		-		70-130	-		25
trans-1,3-Dichloropropene	87		-		70-130	-		25
1,1,2-Trichloroethane	99		-		70-130	-		25
Toluene	96		-		70-130	-		25
Dibromochloromethane	100		-		70-130	-		25
1,2-Dibromoethane	102		-		70-130	-		25
Tetrachloroethene	98		-		70-130	-		25
1,1,1,2-Tetrachloroethane	94		-		70-130	-		25
Chlorobenzene	98		-		70-130	-		25
Ethylbenzene	96		-		70-130	-		25
p/m-Xylene	99		-		70-130	-		25
Bromoform	102		-		70-130	-		25
Styrene	102		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811918-3								
1,1,2,2-Tetrachloroethane	101		-		70-130	-		25
o-Xylene	96		-		70-130	-		25
Isopropylbenzene	96		-		70-130	-		25
4-Ethyltoluene	98		-		70-130	-		25
1,3,5-Trimethylbenzene	100		-		70-130	-		25
1,2,4-Trimethylbenzene	103		-		70-130	-		25
1,3-Dichlorobenzene	103		-		70-130	-		25
1,4-Dichlorobenzene	104		-		70-130	-		25
sec-Butylbenzene	96		-		70-130	-		25
p-Isopropyltoluene	90		-		70-130	-		25
1,2-Dichlorobenzene	104		-		70-130	-		25
n-Butylbenzene	106		-		70-130	-		25
1,2,4-Trichlorobenzene	124		-		70-130	-		25
Naphthalene	118		-		70-130	-		25
1,2,3-Trichlorobenzene	121		-		70-130	-		25
Hexachlorobutadiene	113		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811916-5 QC Sample: L1519114-01 Client ID: SG-1						
Propylene	ND	ND	ppbV	NC		25
Ethyl Alcohol	4.74	5.47	ppbV	14		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	2.07	2.30	ppbV	11		25
iso-Propyl Alcohol	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	0.047J	0.043J	ppbV	NC		25
Vinyl acetate	ND	ND	ppbV	NC		25
2-Butanone	0.145J	0.159J	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25
Tetrahydrofuran	0.155J	0.135J	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
2-Hexanone	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811916-5 QC Sample: L1519114-01 Client ID: SG-1					
Benzyl chloride	ND	ND	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811918-5 QC Sample: L1519114-01 Client ID: SG-1						
Dichlorodifluoromethane	0.226	0.299	ppbV	**28**	Q	25
Chloromethane	ND	ND	ppbV	NC		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.014J	0.015J	ppbV	NC		25
Vinyl chloride	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	0.014J	0.016J	ppbV	NC		25
Trichlorofluoromethane	0.234	0.264	ppbV	12		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
Methylene chloride	0.498J	0.566	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.068	0.074	ppbV	8		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	0.013J	0.014J	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
Chloroform	0.126	0.142	ppbV	12		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	0.041	0.044	ppbV	7		25
Benzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811918-5 QC Sample: L1519114-01 Client ID: SG-1					
Carbon tetrachloride	0.051	0.053	ppbV	4	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	0.008J	ppbV	NC	25
Trichloroethene	0.240	0.260	ppbV	8	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	0.070	0.071	ppbV	1	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	0.712	0.702	ppbV	1	25
1,1,1,2-Tetrachloroethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.009J	0.009J	ppbV	NC	25
p/m-Xylene	0.032J	0.034J	ppbV	NC	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	0.009J	0.008J	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.019J	0.020	ppbV	NC	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811918-5 QC Sample: L1519114-01 Client ID: SG-1					
1,3,5-Trimethylbenzene	0.011J	0.011J	ppbV	NC	25
1,2,4-Trimethylbenzene	0.076	0.076	ppbV	0	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	0.025	0.027	ppbV	8	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Naphthalene	0.229	0.228	ppbV	0	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-01	Date Collected:	08/07/15 07:47
Client ID:	SG-1	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Analytical Method:	96,APH		
Analytical Date:	08/14/15 10:19		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	42		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	33		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		50-200
Bromochloromethane	87		50-200
Chlorobenzene-d5	94		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-02	Date Collected:	08/07/15 07:10
Client ID:	SG-2	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 22:40		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	36		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	21		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		50-200
Bromochloromethane	82		50-200
Chlorobenzene-d5	90		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-04	Date Collected:	08/07/15 08:14
Client ID:	SG-4	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 23:44		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	3.8		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	1400		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	5000		ug/m3	14	14.	1
C9-C10 Aromatics Total	12		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		50-200
Bromochloromethane	82		50-200
Chlorobenzene-d5	93		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-05	Date Collected:	08/07/15 00:00
Client ID:	METHOD BLANK	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 17:19		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 2.7 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	100		50-200
Bromochloromethane	100		50-200
Chlorobenzene-d5	103		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-06	Date Collected:	08/07/15 00:00
Client ID:	METHOD BLANK AA	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 17:51		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		50-200
Bromochloromethane	91		50-200
Chlorobenzene-d5	92		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY
Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-07	Date Collected:	08/08/15 10:47
Client ID:	DUPLICATE	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 18:55		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	29		ug/m3	12	12.	1
Toluene	3.7		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	53		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		50-200
Bromochloromethane	86		50-200
Chlorobenzene-d5	93		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-08 D	Date Collected:	08/08/15 10:52
Client ID:	OUTDOOR CONTROL	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 18:23		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	200%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	6.6	6.6	3.3
Methyl tert butyl ether	ND		ug/m3	6.6	6.6	3.3
Benzene	ND		ug/m3	6.6	6.6	3.3
C5-C8 Aliphatics, Adjusted	40		ug/m3	40	40.	3.3
Toluene	ND		ug/m3	6.6	6.6	3.3
Ethylbenzene	ND		ug/m3	6.6	6.6	3.3
p/m-Xylene	ND		ug/m3	13	13.	3.3
o-Xylene	ND		ug/m3	6.6	6.6	3.3
Naphthalene	ND		ug/m3	6.6	6.6	3.3
C9-C12 Aliphatics, Adjusted	70		ug/m3	46	46.	3.3
C9-C10 Aromatics Total	ND		ug/m3	33	33.	3.3

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		50-200
Bromochloromethane	84		50-200
Chlorobenzene-d5	90		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-09	Date Collected:	08/08/15 10:47
Client ID:	S-157-J	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 19:27		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	15		ug/m3	12	12.	1
Toluene	3.9		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	36		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		50-200
Bromochloromethane	86		50-200
Chlorobenzene-d5	91		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-10	Date Collected:	08/08/15 10:46
Client ID:	S-157-J1	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 19:59		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	86		ug/m3	12	12.	1
Toluene	3.8		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	100		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	81		50-200
Bromochloromethane	77		50-200
Chlorobenzene-d5	90		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

SAMPLE RESULTS

Lab ID:	L1519114-11	Date Collected:	08/08/15 10:45
Client ID:	S-157-J2	Date Received:	08/11/15
Sample Location:	181 ELLIOTT STREET	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	08/13/15 20:31		
Analyst:	RY		

Quality Control Information

Sample Type:	Composite
Sample Container Type:	Canister - 6 Liter
Sampling Flow Controller:	Mechanical
Sampling Zone:	Unknown
Sampling Flow Meter RPD of pre & post-sampling calibration check:	<=20%
Were all QA/QC procedures REQUIRED by the method followed?	Yes
Were all performance/acceptance standards for the required procedures achieved?	Yes
Were significant modifications made to the method as specified in Sect 11.1.2?	No

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	27		ug/m3	12	12.	1
Toluene	3.0		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	68		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	84		50-200
Bromochloromethane	83		50-200
Chlorobenzene-d5	89		50-200

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 96,APH
Analytical Date: 08/13/15 14:46
Analyst: RY

Parameter	Result	Qualifier	Units	RL	MDL
Petroleum Hydrocarbons in Air - Mansfield Lab for sample(s): 01-02,04-11 Batch: WG811919-4					
1,3-Butadiene	ND		ug/m3	2.0	2.0
Methyl tert butyl ether	ND		ug/m3	2.0	2.0
Benzene	ND		ug/m3	2.0	2.0
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.
Toluene	ND		ug/m3	2.0	2.0
Ethylbenzene	ND		ug/m3	2.0	2.0
p/m-Xylene	ND		ug/m3	4.0	4.0
o-Xylene	ND		ug/m3	2.0	2.0
Naphthalene	ND		ug/m3	2.0	2.0
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.
C9-C10 Aromatics Total	ND		ug/m3	10	10.

Lab Control Sample Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-02,04-11 Batch: WG811919-3								
1,3-Butadiene	105		-		70-130	-		
Methyl tert butyl ether	99		-		70-130	-		
Benzene	98		-		70-130	-		
C5-C8 Aliphatics, Adjusted	95		-		70-130	-		
Toluene	101		-		70-130	-		
Ethylbenzene	100		-		70-130	-		
p/m-Xylene	99		-		70-130	-		
o-Xylene	101		-		70-130	-		
Naphthalene	110		-		50-150	-		
C9-C12 Aliphatics, Adjusted	100		-		70-130	-		
C9-C10 Aromatics Total	86		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVER

Lab Number: L1519114
Report Date: 08/18/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Petroleum Hydrocarbons in Air - Mansfield Lab Associated sample(s): 01-02,04-11 QC Batch ID: WG811919-5 QC Sample: L1519114-01 Client ID: SG-1						
1,3-Butadiene	ND	ND	ug/m3	NC		30
Methyl tert butyl ether	ND	ND	ug/m3	NC		30
Benzene	ND	ND	ug/m3	NC		30
C5-C8 Aliphatics, Adjusted	42	42	ug/m3	0		30
Toluene	ND	ND	ug/m3	NC		30
Ethylbenzene	ND	ND	ug/m3	NC		30
p/m-Xylene	ND	ND	ug/m3	NC		30
o-Xylene	ND	ND	ug/m3	NC		30
Naphthalene	ND	ND	ug/m3	NC		30
C9-C12 Aliphatics, Adjusted	33	33	ug/m3	0		30
C9-C10 Aromatics Total	ND	ND	ug/m3	NC		30

Project Name: CUMMINGS BEVERLY

Lab Number: L1519114

Project Number: CUMMINGS BEVERLY

Report Date: 08/18/15

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1519114-01	SG-1	0048	#30 SV	08/05/15	207445		-	-	-	Pass	72	71	1
L1519114-01	SG-1	2024	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.5	0.5	-	-	-	-
L1519114-02	SG-2	0349	#90 SV	08/05/15	207445		-	-	-	Pass	66	76	14
L1519114-02	SG-2	180	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.5	-2.1	-	-	-	-
L1519114-03	SG-3	0144	#90 SV	08/05/15	207445		-	-	-	Pass	68	69	1
L1519114-03	SG-3	403	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.4	-0.1	-	-	-	-
L1519114-04	SG-4	0488	#90 SV	08/05/15	207445		-	-	-	Pass	72	71	1
L1519114-04	SG-4	1727	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.4	-2.0	-	-	-	-
L1519114-05	METHOD BLANK	384	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.4	-29.0	-	-	-	-
L1519114-06	METHOD BLANK AA	1836	6.0L Can	08/05/15	207445	L1517986-02	Pass	-29.5	-29.2	-	-	-	-
L1519114-07	DUPLICATE	0145	#16 AMB	08/05/15	207445		-	-	-	Pass	3.3	3.0	10
L1519114-07	DUPLICATE	1898	6.0L Can	08/05/15	207445	L1517986-02	Pass	-29.4	0.6	-	-	-	-
L1519114-08	OUTDOOR CONTROL	0677	#16 AMB	08/05/15	207445		-	-	-	Pass	3.1	0.0	200
L1519114-08	OUTDOOR CONTROL	2062	6.0L Can	08/05/15	207445	L1517986-02	Pass	-29.5	-22.8	-	-	-	-
L1519114-09	S-157-J	0262	#16 AMB	08/05/15	207445		-	-	-	Pass	3.3	3.1	6

Project Name: CUMMINGS BEVERLY

Lab Number: L1519114

Project Number: CUMMINGS BEVERLY

Report Date: 08/18/15

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1519114-09	S-157-J	1616	6.0L Can	08/05/15	207445	L1517667-02	Pass	-29.1	-4.0	-	-	-	-
L1519114-10	S-157-J1	0028	#20 AMB	08/05/15	207445		-	-	-	Pass	3.3	3.1	6
L1519114-10	S-157-J1	1778	6.0L Can	08/05/15	207445	L1517986-02	Pass	-29.5	-6.8	-	-	-	-
L1519114-11	S-157-J2	0092	#16 AMB	08/05/15	207445		-	-	-	Pass	3.3	3.1	6
L1519114-11	S-157-J2	1680	6.0L Can	08/05/15	207445	L1517667-02	Pass	-29.6	-4.2	-	-	-	-
L1519114-12	UNUSED CAN#214	0216	#90 SV	08/05/15	207445		-	-	-	Pass	66	89	30
L1519114-12	UNUSED CAN#214	214	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.4	-29.1	-	-	-	-
L1519114-13	UNUSED CAN#531	0435	#30 SV	08/05/15	207445		-	-	-	Pass	72	79	9
L1519114-13	UNUSED CAN#531	531	2.7L Can	08/05/15	207445	L1517830-01	Pass	-29.5	-29.1	-	-	-	-
L1519114-14	UNUSED CAN#654	0359	#90 SV	08/05/15	207445		-	-	-	Pass	66	72	9
L1519114-14	UNUSED CAN#654	654	6.0L Can	08/05/15	207445	L1517986-02	Pass	-28.9	-28.6	-	-	-	-
L1519114-15	UNUSED CAN#582	0647	#30 AMB	08/05/15	207445		-	-	-	Pass	3.3	3.3	0
L1519114-15	UNUSED CAN#582	582	6.0L Can	08/05/15	207445	L1517986-02	Pass	-29.6	-29.2	-	-	-	-

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID:	L1517667-02	Date Collected:	07/28/15 18:00
Client ID:	CAN 739 SHELF 37	Date Received:	07/29/15
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	07/29/15 17:17		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	0.063	ND	0.707	0.221		1
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Propane	ND	0.500	0.114	ND	0.902	0.206		1
Dichlorodifluoromethane	ND	0.200	0.047	ND	0.989	0.230		1
Chloromethane	ND	0.200	0.096	ND	0.413	0.198		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	0.042	ND	1.40	0.293		1
Methanol	ND	5.00	0.736	ND	6.55	0.964		1
Vinyl chloride	ND	0.200	0.053	ND	0.511	0.136		1
1,3-Butadiene	ND	0.200	0.080	ND	0.442	0.177		1
Butane	ND	0.200	0.044	ND	0.475	0.105		1
Bromomethane	ND	0.200	0.070	ND	0.777	0.270		1
Chloroethane	ND	0.200	0.077	ND	0.528	0.202		1
Ethyl Alcohol	ND	2.50	0.542	ND	4.71	1.02		1
Dichlorofluoromethane	ND	0.200	0.057	ND	0.842	0.241		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acrolein	ND	0.500	0.114	ND	1.15	0.261		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Acetonitrile	ND	0.200	0.076	ND	0.336	0.128		1
Trichlorofluoromethane	ND	0.200	0.042	ND	1.12	0.234		1
iso-Propyl Alcohol	ND	0.500	0.114	ND	1.23	0.280		1
Acrylonitrile	ND	0.500	0.079	ND	1.09	0.171		1
Pentane	ND	0.200	0.048	ND	0.590	0.140		1
Ethyl ether	ND	0.200	0.059	ND	0.606	0.179		1
1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.224		1
tert-Butyl Alcohol	ND	0.500	0.060	ND	1.52	0.182		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02
Client ID: CAN 739 SHELF 37
Sample Location:

Date Collected: 07/28/15 18:00
Date Received: 07/29/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	0.188	ND	1.74	0.653		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	0.051	ND	1.53	0.392		1
trans-1,2-Dichloroethene	ND	0.200	0.074	ND	0.793	0.293		1
1,1-Dichloroethane	ND	0.200	0.077	ND	0.809	0.312		1
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.163		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
cis-1,2-Dichloroethene	ND	0.200	0.059	ND	0.793	0.233		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Chloroform	ND	0.200	0.045	ND	0.977	0.221		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
2,2-Dichloropropane	ND	0.200	0.058	ND	0.924	0.269		1
1,2-Dichloroethane	ND	0.200	0.055	ND	0.809	0.223		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Isopropyl Ether	ND	0.200	0.066	ND	0.836	0.274		1
Ethyl-Tert-Butyl-Ether	ND	0.200	0.052	ND	0.836	0.215		1
1,1,1-Trichloroethane	ND	0.200	0.057	ND	1.09	0.311		1
1,1-Dichloropropene	ND	0.200	0.072	ND	0.908	0.325		1
Benzene	ND	0.200	0.054	ND	0.639	0.172		1
Carbon tetrachloride	ND	0.200	0.047	ND	1.26	0.296		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
Tertiary-Amyl Methyl Ether	ND	0.200	0.080	ND	0.836	0.332		1
Dibromomethane	ND	0.200	0.048	ND	1.42	0.338		1
1,2-Dichloropropane	ND	0.200	0.070	ND	0.924	0.322		1
Bromodichloromethane	ND	0.200	0.066	ND	1.34	0.439		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02
Client ID: CAN 739 SHELF 37
Sample Location:

Date Collected: 07/28/15 18:00
Date Received: 07/29/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	0.071	ND	1.07	0.382		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Methyl Methacrylate	ND	0.500	0.148	ND	2.05	0.606		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
cis-1,3-Dichloropropene	ND	0.200	0.075	ND	0.908	0.338		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
trans-1,3-Dichloropropene	ND	0.200	0.069	ND	0.908	0.315		1
1,1,2-Trichloroethane	ND	0.200	0.067	ND	1.09	0.364		1
Toluene	ND	0.200	0.063	ND	0.754	0.237		1
1,3-Dichloropropane	ND	0.200	0.078	ND	0.924	0.359		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
Dibromochloromethane	ND	0.200	0.075	ND	1.70	0.636		1
1,2-Dibromoethane	ND	0.200	0.078	ND	1.54	0.599		1
Butyl Acetate	ND	0.500	0.114	ND	2.38	0.542		1
Octane	ND	0.200	0.042	ND	0.934	0.197		1
Tetrachloroethene	ND	0.200	0.076	ND	1.36	0.514		1
1,1,1,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
Chlorobenzene	ND	0.200	0.079	ND	0.921	0.363		1
Ethylbenzene	ND	0.200	0.056	ND	0.869	0.241		1
p/m-Xylene	ND	0.400	0.139	ND	1.74	0.604		1
Bromoform	ND	0.200	0.052	ND	2.07	0.541		1
Styrene	ND	0.200	0.080	ND	0.852	0.340		1
1,1,2,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
o-Xylene	ND	0.200	0.063	ND	0.869	0.274		1
1,2,3-Trichloropropane	ND	0.200	0.077	ND	1.21	0.462		1
Nonane (C9)	ND	0.200	0.064	ND	1.05	0.338		1
Isopropylbenzene	ND	0.200	0.043	ND	0.983	0.211		1
Bromobenzene	ND	0.200	0.079	ND	0.793	0.313		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02
Client ID: CAN 739 SHELF 37
Sample Location:

Date Collected: 07/28/15 18:00
Date Received: 07/29/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
o-Chlorotoluene	ND	0.200	0.049	ND	1.04	0.252		1
n-Propylbenzene	ND	0.200	0.056	ND	0.983	0.275		1
p-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.396		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
1,3,5-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.287		1
tert-Butylbenzene	ND	0.200	0.040	ND	1.10	0.221		1
1,2,4-Trimethylbenzene	ND	0.200	0.069	ND	0.983	0.341		1
Decane (C10)	ND	0.200	0.048	ND	1.16	0.282		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1
1,3-Dichlorobenzene	ND	0.200	0.064	ND	1.20	0.383		1
1,4-Dichlorobenzene	ND	0.200	0.042	ND	1.20	0.251		1
sec-Butylbenzene	ND	0.200	0.073	ND	1.10	0.401		1
p-Isopropyltoluene	ND	0.200	0.061	ND	1.10	0.334		1
1,2-Dichlorobenzene	ND	0.200	0.061	ND	1.20	0.369		1
n-Butylbenzene	ND	0.200	0.064	ND	1.10	0.351		1
1,2-Dibromo-3-chloropropane	ND	0.200	0.074	ND	1.93	0.719		1
Undecane	ND	0.200	0.053	ND	1.28	0.338		1
Dodecane (C12)	ND	0.200	0.056	ND	1.39	0.393		1
1,2,4-Trichlorobenzene	ND	0.200	0.061	ND	1.48	0.454		1
Naphthalene	ND	0.200	0.043	ND	1.05	0.227		1
1,2,3-Trichlorobenzene	ND	0.200	0.044	ND	1.48	0.324		1
Hexachlorobutadiene	ND	0.200	0.073	ND	2.13	0.781		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name:

Lab Number: L1517667

Project Number: CANISTER QC BAT

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02

Client ID: CAN 739 SHELF 37

Sample Location:

Date Collected: 07/28/15 18:00

Date Received: 07/29/15

Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	90		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID:	L1517667-02	Date Collected:	07/28/15 18:00
Client ID:	CAN 739 SHELF 37	Date Received:	07/29/15
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/29/15 17:17		
Analyst:	MB		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	ND	0.020	0.007	ND	0.053	0.019		1
Acetone	ND	1.00	0.133	ND	2.38	0.316		1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
Acrylonitrile	ND	0.500	0.015	ND	1.09	0.033		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	ND	0.500	0.250	ND	1.74	0.869		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	0.006	ND	0.383	0.046		1
Halothane	ND	0.050	0.008	ND	0.404	0.065		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
2-Butanone	ND	0.500	0.025	ND	1.47	0.073		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02
Client ID: CAN 739 SHELF 37
Sample Location:

Date Collected: 07/28/15 18:00
Date Received: 07/29/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
1,4-Dioxane	ND	0.100	0.050	ND	0.360	0.180		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
4-Methyl-2-pentanone	ND	0.500	0.042	ND	2.05	0.172		1
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
Isopropylbenzene	ND	0.200	0.046	ND	0.983	0.226		1
4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.048		1
1,3,5-Trimethylbenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
sec-Butylbenzene	ND	0.200	0.047	ND	1.10	0.258		1
p-Isopropyltoluene	ND	0.200	0.048	ND	1.10	0.263		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1

Project Name:

Project Number: CANISTER QC BAT

Lab Number: L1517667

Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517667-02
Client ID: CAN 739 SHELF 37
Sample Location:

Date Collected: 07/28/15 18:00
Date Received: 07/29/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	0.045	ND	1.10	0.247		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	ND	0.050	0.012	ND	0.262	0.063		1
1,2,3-Trichlorobenzene	ND	0.050	0.019	ND	0.371	0.141		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	91		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1517830
Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01
Client ID: CAN 512 SHELF 7
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 07/30/15 15:38
Analyst: RY

Date Collected: 07/29/15 18:00
Date Received: 07/30/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	0.063	ND	0.707	0.221		1
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Propane	ND	0.500	0.114	ND	0.902	0.206		1
Dichlorodifluoromethane	ND	0.200	0.047	ND	0.989	0.230		1
Chloromethane	ND	0.200	0.096	ND	0.413	0.198		1
Freon-114	ND	0.200	0.042	ND	1.40	0.293		1
Methanol	ND	5.00	0.736	ND	6.55	0.964		1
Vinyl chloride	ND	0.200	0.053	ND	0.511	0.136		1
1,3-Butadiene	ND	0.200	0.080	ND	0.442	0.177		1
Butane	ND	0.200	0.044	ND	0.475	0.105		1
Bromomethane	ND	0.200	0.070	ND	0.777	0.270		1
Chloroethane	ND	0.200	0.077	ND	0.528	0.202		1
Ethanol	ND	2.50	0.542	ND	4.71	1.02		1
Dichlorofluoromethane	ND	0.200	0.057	ND	0.842	0.241		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acrolein	ND	0.500	0.114	ND	1.15	0.261		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Acetonitrile	ND	0.200	0.076	ND	0.336	0.128		1
Trichlorofluoromethane	ND	0.200	0.042	ND	1.12	0.234		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
Acrylonitrile	ND	0.500	0.079	ND	1.09	0.171		1
Pentane	ND	0.200	0.048	ND	0.590	0.140		1
Ethyl ether	ND	0.200	0.059	ND	0.606	0.179		1
1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.224		1
Tertiary butyl Alcohol	ND	0.500	0.060	ND	1.52	0.182		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	0.188	ND	1.74	0.653		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
Freon-113	ND	0.200	0.051	ND	1.53	0.392		1
trans-1,2-Dichloroethene	ND	0.200	0.074	ND	0.793	0.293		1
1,1-Dichloroethane	ND	0.200	0.077	ND	0.809	0.312		1
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.163		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
cis-1,2-Dichloroethene	ND	0.200	0.059	ND	0.793	0.233		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Chloroform	ND	0.200	0.045	ND	0.977	0.221		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
2,2-Dichloropropane	ND	0.200	0.058	ND	0.924	0.269		1
1,2-Dichloroethane	ND	0.200	0.055	ND	0.809	0.223		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Diisopropyl ether	ND	0.200	0.066	ND	0.836	0.274		1
tert-Butyl Ethyl Ether	ND	0.200	0.052	ND	0.836	0.215		1
1,1,1-Trichloroethane	ND	0.200	0.057	ND	1.09	0.311		1
1,1-Dichloropropene	ND	0.200	0.072	ND	0.908	0.325		1
Benzene	ND	0.200	0.054	ND	0.639	0.172		1
Carbon tetrachloride	ND	0.200	0.047	ND	1.26	0.296		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
tert-Amyl Methyl Ether	ND	0.200	0.080	ND	0.836	0.332		1
Dibromomethane	ND	0.200	0.048	ND	1.42	0.338		1
1,2-Dichloropropane	ND	0.200	0.070	ND	0.924	0.322		1
Bromodichloromethane	ND	0.200	0.066	ND	1.34	0.439		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	0.071	ND	1.07	0.382		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Methyl Methacrylate	ND	0.500	0.148	ND	2.05	0.606		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
cis-1,3-Dichloropropene	ND	0.200	0.075	ND	0.908	0.338		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
trans-1,3-Dichloropropene	ND	0.200	0.069	ND	0.908	0.315		1
1,1,2-Trichloroethane	ND	0.200	0.067	ND	1.09	0.364		1
Toluene	ND	0.200	0.063	ND	0.754	0.237		1
1,3-Dichloropropane	ND	0.200	0.078	ND	0.924	0.359		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
Dibromochloromethane	ND	0.200	0.075	ND	1.70	0.636		1
1,2-Dibromoethane	ND	0.200	0.078	ND	1.54	0.599		1
Butyl acetate	ND	0.500	0.114	ND	2.38	0.542		1
Octane	ND	0.200	0.042	ND	0.934	0.197		1
Tetrachloroethene	ND	0.200	0.076	ND	1.36	0.514		1
1,1,1,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
Chlorobenzene	ND	0.200	0.079	ND	0.921	0.363		1
Ethylbenzene	ND	0.200	0.056	ND	0.869	0.241		1
p/m-Xylene	ND	0.400	0.139	ND	1.74	0.604		1
Bromoform	ND	0.200	0.052	ND	2.07	0.541		1
Styrene	ND	0.200	0.080	ND	0.852	0.340		1
1,1,2,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
o-Xylene	ND	0.200	0.063	ND	0.869	0.274		1
1,2,3-Trichloropropane	ND	0.200	0.077	ND	1.21	0.462		1
Nonane	ND	0.200	0.064	ND	1.05	0.338		1
Isopropylbenzene	ND	0.200	0.043	ND	0.983	0.211		1
Bromobenzene	ND	0.200	0.079	ND	0.793	0.313		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	0.049	ND	1.04	0.252		1
n-Propylbenzene	ND	0.200	0.056	ND	0.983	0.275		1
4-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.396		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
1,3,5-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.287		1
tert-Butylbenzene	ND	0.200	0.040	ND	1.10	0.221		1
1,2,4-Trimethylbenzene	ND	0.200	0.069	ND	0.983	0.341		1
Decane	ND	0.200	0.048	ND	1.16	0.282		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1
1,3-Dichlorobenzene	ND	0.200	0.064	ND	1.20	0.383		1
1,4-Dichlorobenzene	ND	0.200	0.042	ND	1.20	0.251		1
sec-Butylbenzene	ND	0.200	0.073	ND	1.10	0.401		1
p-Isopropyltoluene	ND	0.200	0.061	ND	1.10	0.334		1
1,2-Dichlorobenzene	ND	0.200	0.061	ND	1.20	0.369		1
n-Butylbenzene	ND	0.200	0.064	ND	1.10	0.351		1
1,2-Dibromo-3-chloropropane	ND	0.200	0.074	ND	1.93	0.719		1
Undecane	ND	0.200	0.053	ND	1.28	0.338		1
Dodecane	ND	0.200	0.056	ND	1.39	0.393		1
1,2,4-Trichlorobenzene	ND	0.200	0.061	ND	1.48	0.454		1
Naphthalene	ND	0.200	0.043	ND	1.05	0.227		1
1,2,3-Trichlorobenzene	ND	0.200	0.044	ND	1.48	0.324		1
Hexachlorobutadiene	ND	0.200	0.073	ND	2.13	0.781		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	92		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1517830
Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01
Client ID: CAN 512 SHELF 7
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 07/30/15 15:38
Analyst: RY

Date Collected: 07/29/15 18:00
Date Received: 07/30/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
Freon-114	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	ND	0.020	0.007	ND	0.053	0.019		1
Acetone	ND	1.00	0.133	ND	2.38	0.316		1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
Acrylonitrile	ND	0.500	0.015	ND	1.09	0.033		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	ND	0.500	0.250	ND	1.74	0.869		1
Freon-113	ND	0.050	0.006	ND	0.383	0.046		1
Halothane	ND	0.050	0.008	ND	0.404	0.065		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
2-Butanone	ND	0.500	0.025	ND	1.47	0.073		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
1,4-Dioxane	ND	0.100	0.050	ND	0.360	0.180		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
4-Methyl-2-pentanone	ND	0.500	0.042	ND	2.05	0.172		1
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
Isopropylbenzene	ND	0.200	0.046	ND	0.983	0.226		1
4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.048		1
1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
sec-Butylbenzene	ND	0.200	0.047	ND	1.10	0.258		1
p-Isopropyltoluene	ND	0.200	0.048	ND	1.10	0.263		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517830-01 Date Collected: 07/29/15 18:00

Client ID: CAN 512 SHELF 7 Date Received: 07/30/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	0.045	ND	1.10	0.247		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	ND	0.050	0.012	ND	0.262	0.063		1
1,2,3-Trichlorobenzene	ND	0.050	0.019	ND	0.371	0.141		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	93		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1517986
Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02
Client ID: CAN 940 SHELF 44
Sample Location:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 07/31/15 16:23
Analyst: RY

Date Collected: 07/30/15 18:00
Date Received: 07/31/15
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	0.063	ND	0.707	0.221		1
Propylene	ND	0.500	0.093	ND	0.861	0.160		1
Propane	ND	0.500	0.114	ND	0.902	0.206		1
Dichlorodifluoromethane	ND	0.200	0.047	ND	0.989	0.230		1
Chloromethane	ND	0.200	0.096	ND	0.413	0.198		1
Freon-114	ND	0.200	0.042	ND	1.40	0.293		1
Methanol	ND	5.00	0.736	ND	6.55	0.964		1
Vinyl chloride	ND	0.200	0.053	ND	0.511	0.136		1
1,3-Butadiene	ND	0.200	0.080	ND	0.442	0.177		1
Butane	ND	0.200	0.044	ND	0.475	0.105		1
Bromomethane	ND	0.200	0.070	ND	0.777	0.270		1
Chloroethane	ND	0.200	0.077	ND	0.528	0.202		1
Ethanol	ND	2.50	0.542	ND	4.71	1.02		1
Dichlorofluoromethane	ND	0.200	0.057	ND	0.842	0.241		1
Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306		1
Acrolein	ND	0.500	0.114	ND	1.15	0.261		1
Acetone	ND	1.00	0.269	ND	2.38	0.639		1
Acetonitrile	ND	0.200	0.076	ND	0.336	0.128		1
Trichlorofluoromethane	ND	0.200	0.042	ND	1.12	0.234		1
Isopropanol	ND	0.500	0.114	ND	1.23	0.280		1
Acrylonitrile	ND	0.500	0.079	ND	1.09	0.171		1
Pentane	ND	0.200	0.048	ND	0.590	0.140		1
Ethyl ether	ND	0.200	0.059	ND	0.606	0.179		1
1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.224		1
Tertiary butyl Alcohol	ND	0.500	0.060	ND	1.52	0.182		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02 Date Collected: 07/30/15 18:00

Client ID: CAN 940 SHELF 44 Date Received: 07/31/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	0.188	ND	1.74	0.653		1
3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254		1
Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107		1
Freon-113	ND	0.200	0.051	ND	1.53	0.392		1
trans-1,2-Dichloroethene	ND	0.200	0.074	ND	0.793	0.293		1
1,1-Dichloroethane	ND	0.200	0.077	ND	0.809	0.312		1
Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.163		1
Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200		1
2-Butanone	ND	0.500	0.052	ND	1.47	0.154		1
cis-1,2-Dichloroethene	ND	0.200	0.059	ND	0.793	0.233		1
Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472		1
Chloroform	ND	0.200	0.045	ND	0.977	0.221		1
Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183		1
2,2-Dichloropropane	ND	0.200	0.058	ND	0.924	0.269		1
1,2-Dichloroethane	ND	0.200	0.055	ND	0.809	0.223		1
n-Hexane	ND	0.200	0.052	ND	0.705	0.183		1
Diisopropyl ether	ND	0.200	0.066	ND	0.836	0.274		1
tert-Butyl Ethyl Ether	ND	0.200	0.052	ND	0.836	0.215		1
1,1,1-Trichloroethane	ND	0.200	0.057	ND	1.09	0.311		1
1,1-Dichloropropene	ND	0.200	0.072	ND	0.908	0.325		1
Benzene	ND	0.200	0.054	ND	0.639	0.172		1
Carbon tetrachloride	ND	0.200	0.047	ND	1.26	0.296		1
Cyclohexane	ND	0.200	0.066	ND	0.688	0.226		1
tert-Amyl Methyl Ether	ND	0.200	0.080	ND	0.836	0.332		1
Dibromomethane	ND	0.200	0.048	ND	1.42	0.338		1
1,2-Dichloropropane	ND	0.200	0.070	ND	0.924	0.322		1
Bromodichloromethane	ND	0.200	0.066	ND	1.34	0.439		1
1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02 Date Collected: 07/30/15 18:00

Client ID: CAN 940 SHELF 44 Date Received: 07/31/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	0.071	ND	1.07	0.382		1
2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308		1
Methyl Methacrylate	ND	0.500	0.148	ND	2.05	0.606		1
Heptane	ND	0.200	0.055	ND	0.820	0.227		1
cis-1,3-Dichloropropene	ND	0.200	0.075	ND	0.908	0.338		1
4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249		1
trans-1,3-Dichloropropene	ND	0.200	0.069	ND	0.908	0.315		1
1,1,2-Trichloroethane	ND	0.200	0.067	ND	1.09	0.364		1
Toluene	ND	0.200	0.063	ND	0.754	0.237		1
1,3-Dichloropropane	ND	0.200	0.078	ND	0.924	0.359		1
2-Hexanone	ND	0.200	0.060	ND	0.820	0.248		1
Dibromochloromethane	ND	0.200	0.075	ND	1.70	0.636		1
1,2-Dibromoethane	ND	0.200	0.078	ND	1.54	0.599		1
Butyl acetate	ND	0.500	0.114	ND	2.38	0.542		1
Octane	ND	0.200	0.042	ND	0.934	0.197		1
Tetrachloroethene	ND	0.200	0.076	ND	1.36	0.514		1
1,1,1,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
Chlorobenzene	ND	0.200	0.079	ND	0.921	0.363		1
Ethylbenzene	ND	0.200	0.056	ND	0.869	0.241		1
p/m-Xylene	ND	0.400	0.139	ND	1.74	0.604		1
Bromoform	ND	0.200	0.052	ND	2.07	0.541		1
Styrene	ND	0.200	0.080	ND	0.852	0.340		1
1,1,2,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376		1
o-Xylene	ND	0.200	0.063	ND	0.869	0.274		1
1,2,3-Trichloropropane	ND	0.200	0.077	ND	1.21	0.462		1
Nonane	ND	0.200	0.064	ND	1.05	0.338		1
Isopropylbenzene	ND	0.200	0.043	ND	0.983	0.211		1
Bromobenzene	ND	0.200	0.079	ND	0.793	0.313		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1517986
Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02
Client ID: CAN 940 SHELF 44
Sample Location:

Date Collected: 07/30/15 18:00
Date Received: 07/31/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	0.049	ND	1.04	0.252		1
n-Propylbenzene	ND	0.200	0.056	ND	0.983	0.275		1
4-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.396		1
4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381		1
1,3,5-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.287		1
tert-Butylbenzene	ND	0.200	0.040	ND	1.10	0.221		1
1,2,4-Trimethylbenzene	ND	0.200	0.069	ND	0.983	0.341		1
Decane	ND	0.200	0.048	ND	1.16	0.282		1
Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334		1
1,3-Dichlorobenzene	ND	0.200	0.064	ND	1.20	0.383		1
1,4-Dichlorobenzene	ND	0.200	0.042	ND	1.20	0.251		1
sec-Butylbenzene	ND	0.200	0.073	ND	1.10	0.401		1
p-Isopropyltoluene	ND	0.200	0.061	ND	1.10	0.334		1
1,2-Dichlorobenzene	ND	0.200	0.061	ND	1.20	0.369		1
n-Butylbenzene	ND	0.200	0.064	ND	1.10	0.351		1
1,2-Dibromo-3-chloropropane	ND	0.200	0.074	ND	1.93	0.719		1
Undecane	ND	0.200	0.053	ND	1.28	0.338		1
Dodecane	ND	0.200	0.056	ND	1.39	0.393		1
1,2,4-Trichlorobenzene	ND	0.200	0.061	ND	1.48	0.454		1
Naphthalene	ND	0.200	0.043	ND	1.05	0.227		1
1,2,3-Trichlorobenzene	ND	0.200	0.044	ND	1.48	0.324		1
Hexachlorobutadiene	ND	0.200	0.073	ND	2.13	0.781		1

	Results	**Qualifier**	**Units**	**RDL**	**Dilution Factor**
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02 Date Collected: 07/30/15 18:00

Client ID: CAN 940 SHELF 44 Date Received: 07/31/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	83		60-140
Bromochloromethane	84		60-140
chlorobenzene-d5	88		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID:	L1517986-02	Date Collected:	07/30/15 18:00
Client ID:	CAN 940 SHELF 44	Date Received:	07/31/15
Sample Location:		Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	07/31/15 16:23		
Analyst:	RY		

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030		1
Chloromethane	ND	0.200	0.048	ND	0.413	0.099		1
Freon-114	ND	0.050	0.005	ND	0.349	0.035		1
Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018		1
1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013		1
Bromomethane	ND	0.020	0.008	ND	0.078	0.031		1
Chloroethane	ND	0.020	0.007	ND	0.053	0.019		1
Acetone	ND	1.00	0.133	ND	2.38	0.316		1
Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045		1
Acrylonitrile	ND	0.500	0.015	ND	1.09	0.033		1
1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028		1
Methylene chloride	ND	0.500	0.250	ND	1.74	0.869		1
Freon-113	ND	0.050	0.006	ND	0.383	0.046		1
Halothane	ND	0.050	0.008	ND	0.404	0.065		1
trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024		1
1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028		1
Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014		1
2-Butanone	ND	0.500	0.025	ND	1.47	0.073		1
cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026		1
Chloroform	ND	0.020	0.006	ND	0.098	0.029		1
1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032		1
1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038		1
Benzene	ND	0.100	0.021	ND	0.319	0.067		1
Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050		1
1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02 Date Collected: 07/30/15 18:00

Client ID: CAN 940 SHELF 44 Date Received: 07/31/15

Sample Location: Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054		1
1,4-Dioxane	ND	0.100	0.050	ND	0.360	0.180		1
Trichloroethene	ND	0.020	0.007	ND	0.107	0.038		1
cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
4-Methyl-2-pentanone	ND	0.500	0.042	ND	2.05	0.172		1
trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036		1
1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049		1
Toluene	ND	0.050	0.025	ND	0.188	0.094		1
Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068		1
1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062		1
Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054		1
1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028		1
Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037		1
Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030		1
p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039		1
Bromoform	ND	0.020	0.015	ND	0.207	0.155		1
Styrene	ND	0.020	0.008	ND	0.085	0.034		1
1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048		1
o-Xylene	ND	0.020	0.008	ND	0.087	0.035		1
Isopropylbenzene	ND	0.200	0.046	ND	0.983	0.226		1
4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.048		1
1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025		1
1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034		1
1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1
1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048		1
sec-Butylbenzene	ND	0.200	0.047	ND	1.10	0.258		1
p-Isopropyltoluene	ND	0.200	0.048	ND	1.10	0.263		1
1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1517986
Report Date: 08/18/15

Air Canister Certification Results

Lab ID: L1517986-02
Client ID: CAN 940 SHELF 44
Sample Location:

Date Collected: 07/30/15 18:00
Date Received: 07/31/15
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	0.045	ND	1.10	0.247		1
1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074		1
Naphthalene	ND	0.050	0.012	ND	0.262	0.063		1
1,2,3-Trichlorobenzene	ND	0.050	0.019	ND	0.371	0.141		1
Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	83		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	90		60-140

AIR Petro Can Certification

Project Name: Not Specified **Lab Number:** L1517667

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

AIR CAN CERTIFICATION RESULTS

Lab ID:	L1517667-02	Date Collected:	07/28/15 18:00
Client ID:	CAN 739 SHELF 37	Date Received:	07/29/15
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	07/29/15 17:17		
Analyst:	MB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517830

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

AIR CAN CERTIFICATION RESULTS

Lab ID:	L1517830-01	Date Collected:	07/29/15 18:00
Client ID:	CAN 512 SHELF 7	Date Received:	07/30/15
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	07/30/15 15:38		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1517986

Project Number: CANISTER QC BAT **Report Date:** 08/18/15

AIR CAN CERTIFICATION RESULTS

Lab ID:	L1517986-02	Date Collected:	07/30/15 18:00
Client ID:	CAN 940 SHELF 44	Date Received:	07/31/15
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Air		
Analytical Method:	96,APH		
Analytical Date:	07/31/15 16:23		
Analyst:	RY		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Petroleum Hydrocarbons in Air - Mansfield Lab						
1,3-Butadiene	ND		ug/m3	2.0	2.0	1
Methyl tert butyl ether	ND		ug/m3	2.0	2.0	1
Benzene	ND		ug/m3	2.0	2.0	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	12.	1
Toluene	ND		ug/m3	2.0	2.0	1
Ethylbenzene	ND		ug/m3	2.0	2.0	1
p/m-Xylene	ND		ug/m3	4.0	4.0	1
o-Xylene	ND		ug/m3	2.0	2.0	1
Naphthalene	ND		ug/m3	2.0	2.0	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	14.	1
C9-C10 Aromatics Total	ND		ug/m3	10	10.	1

Project Name: CUMMINGS BEVERLY
Project Number: CUMMINGS BEVERLY

Lab Number: L1519114
Report Date: 08/18/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
N/A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1519114-01A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-02A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-03A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	CANCELLED()
L1519114-04A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-05A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-06A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-07A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-08A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-09A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-10A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-11A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	APH-10(30),TO15-LL(30),TO15-SIM(30)
L1519114-12A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	CLEAN-FEE()
L1519114-13A	Canister - 2.7 Liter	N/A	N/A	N/A	Y	Absent	CLEAN-FEE()
L1519114-14A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	CLEAN-FEE()
L1519114-15A	Canister - 6 Liter	N/A	N/A	N/A	Y	Absent	CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	CUMMINGS BEVERLY	**Lab Number:**	L1519114
Project Number:	CUMMINGS BEVERLY	**Report Date:**	08/18/15

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1	- The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	CUMMINGS BEVERLY	**Lab Number:**	L1519114
Project Number:	CUMMINGS BEVERLY	**Report Date:**	08/18/15

Data Qualifiers

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: CUMMINGS BEVERLY **Lab Number:** L1519114
Project Number: CUMMINGS BEVERLY **Report Date:** 08/18/15

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

96 Method for the Determination of Air-Phase Petroleum Hydrocarbons (APH), MassDEP, December 2009, Revision 1 with QC Requirements & Performance Standards for the Analysis of APH by GC/MS under the Massachusetts Contingency Plan, WSC-CAM-IXA, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

Last revised December 16, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

AIR ANALYSIS

PAGE 1 OF 2

CHAIN OF CUSTODY

ALPHA ANALYTICAL

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 8/11/15

ALPHA Job #: L519114

Project Information

Project Name: Cummings Beverly

Project Location: 181 Elliott Street

Project #:

Project Manager: Bruce Hoskins, LSP

ALPHA Quote #:

Turn-Around-Time

☒ Standard ☐ Rush (only confirmed if pre-approved)

Date Due: 08/18/2015 Time:

Client Information

Client: FSL Associates

Address: 358 Chestnut Hill Avenue

Boston, MA 02135

Phone: 617-232-0001

Fax: 617-232-7800

Email: bhoskins@fslassociates.com

☐ These samples have been Previously analyzed by Alpha

Report/Data Deliverables Information

☐ FAX ☒ EMAIL

☐ ADEx ☒ Add'l Deliverables Hard copy in mail

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

SIM analysis for TO-15: Where SIM not possible for analytes, use regular TO-15. Possibility of presence of VOCs and petroleum hydrocarbons.

Analysis

All Columns Below Must Be Filled Out

Alpha Lab Use Only	Sample ID	Collection Date	Collection Start Time	Collection End Time	Collection Initial Vac	Collection Final Vac	Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Specific Comments (i.e. PID)
19114.01	SG-1	08/07/15	7:07 am	7:47 am	-30.09	-0.41	SV		2.7L	2024	7248243	☐	☒	☒	☒	☐	☐	☐	
02	SG-2	08/07/15	6:38 am	7:10 am	-29.63	-2.54	SV		2.7L	180	7339502	☐	☒	☒	☒	☐	☐	☐	
03	SG-3	08/07/15	6:52 am	7:29 am	-29.42	0.16	SV		2.7L	403	7316948	☐	☒	☒	☒	☐	☐	☐	
04	SG-4	08/07/15	7:41 am	8:14 am	-29.7	-2.59	SV		2.7L	1727	7339901	☐	☒	☒	☒	☐	☐	☐	
05	Method Blank	08/07/15	N/A	N/A	N/A	N/A	SV		2.7L	384	N/A	☐	☒	☒	☒	☐	☐	☐	
06	Method Blank AA	08/07/15	N/A	N/A	N/A	N/A	AA		6.0L	1836	N/A	☐	☒	☒	☒	☐	☐	☐	
											Container Type	-	-	-	-	-	-	-	

***SAMPLE MATRIX CODES:**

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Relinquished By	Date/Time	Received By:	Date/Time
	8/11 11:47	MC	8/11/15 11:47
MC	8/11/15 18:00		8/11/15 1800
	8/12/15 0400		8/12/15 0400

Please print clearly & legibly and completely. Samples can not be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Form 101-02 (I)
Revised 29-Dec-09

AIR ANALYSIS

PAGE 2 OF 2

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 8/11/15

ALPHA Job #: L1519114

Client Information

Client: FSL Associates
Address: 358 Chestnut Hill Avenue
Boston, MA 02135
Phone: 617-232-0001
Fax: 617-232-7800
Email: bhoskins@fslassociates.com

Project Information

Project Name: Cummings Beverly
Project Location: 181 Elliott Street
Project #:
Project Manager: Bruce Hoskins, LSP
ALPHA Quote #:

Turn-Around-Time

☒ Standard ☐ Rush (only confirmed if pre-approved)

Date Due: 08/18/2015 Time:

Report/Data Deliverables Information

☐ FAX ☒ EMAIL
☐ ADEx ☒ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Criteria

☐ These samples have been Previously analyzed by Alpha

Other Project Specific Requirements/Comments:

Analysis

All Columns Below Must Be Filled Out

Alpha Lab Use Only	Sample ID	Collection Date	Collection Start Time	Collection End Time	Collection Initial Vac	Collection Final Vac	Sample Matrix*	Sampler Initials	Can Size	ID Can	ID Flow Controller	TO-14A by TO-15	TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Specific Comments (i.e. PID)
1 9114. 07	Duplicate	8/7/15-8/8/15	8:05 am 8/7/15	10:47 am 8/8/15	-30.43	-4.70	AA		6.0L	1898	7321922	☐	☒	☒	☒	☐	☐	☐	
08	Outdoor Control	08/07/15	10:17 am 8/7/15	10:52 am 8/8/15	-29.91	-23.64	AA		6.0L	2062	H/L56506	☐	☒	☒	☒	☐	☐	☐	
09	S-157-J	8/7/15-8/8/15	8:04 am 8/7/15	10:47 am 8/8/15	-30.03	-4.86	AA		6.0L	1616	7321921	☐	☒	☒	☒	☐	☐	☐	
10	S-157-J.1	8/7/15-8/8/15	7:59 am 8/7/15	10:46 am 8/8/15	-29.98	-7.61	AA		6.0L	1778	7249908	☐	☒	☒	☒	☐	☐	☐	
11	S-157-J.2	8/7/15-8/8/15	7:56 am 8/7/15	10:45 am 8/8/15	-30.03	-5.01	AA		6.0L	1680	7313580	☐	☒	☒	☒	☐	☐	☐	
												☐	☐	☐	☐	☐	☐	☐	
											Container Type	-	-	-	-	-	-	-	

SAMPLE MATRIX CODES:

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Relinquished By	Date/Time	Received By:	Date/Time
	8/11 11:47	MC	8/11/15 11:47
MC	8/11/15 18:00		8/11/15 18:00
	8/12/15 0400		8/12/15 0400

Please print clearly & legibly and completely. Samples can not be logged in and turn around time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

Form 101-02 (I)
Revised 29-Dec-09

Alpha
Summary Forms

Organic Summary Forms

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-01	Date Collected :	08/07/15 07:47
Client ID	: SG-1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/14/15 10:19
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143435	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	42	12	12.	42	12	12.	
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	33	14	14.	33	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-02	Date Collected :	08/07/15 07:10
Client ID	: SG-2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 22:40
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143427	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	36	12	12.	36	12	12.	
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	21	14	14.	21	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-04	Date Collected :	08/07/15 08:14
Client ID	: SG-4	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 23:44
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143429	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	3.8	2.0	2.0	3.8	2.0	2.0	
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	1400	12	12.	1400	12	12.	
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	5000	14	14.	5000	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	12	10	10.	12	10	10.	

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-05	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:19
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143417	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	ND	12	12.	ND	12.	12.	U
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	ND	14	14.	ND	14.	14.	U
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-06	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK AA	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:51
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143418	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	ND	12	12.	ND	12.	12.	U
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	ND	14	14.	ND	14.	14.	U
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-07	Date Collected :	08/08/15 10:47
Client ID	: DUPLICATE	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:55
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143420	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	29	12	12.	29	12	12.	
108-88-3	Toluene	3.7	2.0	2.0	3.7	2.0	2.0	
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	53	14	14.	53	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-08D	Date Collected :	08/08/15 10:52
Client ID	: OUTDOOR CONTROL	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:23
Sample Matrix	: AIR	Dilution Factor :	3.3
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143419	Instrument ID	: AIRPIANO1
Sample Amount	: 75.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	6.6	6.6	ND	6.6	6.6	U
1634-04-4	Methyl tert butyl ether	ND	6.6	6.6	ND	6.6	6.6	U
71-43-2	Benzene	ND	6.6	6.6	ND	6.6	6.6	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	40	40	40.	40	40	40.	
108-88-3	Toluene	ND	6.6	6.6	ND	6.6	6.6	U
100-41-4	Ethylbenzene	ND	6.6	6.6	ND	6.6	6.6	U
179601-23-1	p/m-Xylene	ND	13	13.	ND	13.	13.	U
95-47-6	o-Xylene	ND	6.6	6.6	ND	6.6	6.6	U
91-20-3	Naphthalene	ND	6.6	6.6	ND	6.6	6.6	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	70	46	46.	70	46	46.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	33	33.	ND	33.	33.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-09	Date Collected :	08/08/15 10:47
Client ID	: S-157-J	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:27
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143421	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	15	12	12.	15	12	12.	
108-88-3	Toluene	3.9	2.0	2.0	3.9	2.0	2.0	
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	36	14	14.	36	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-10	Date Collected :	08/08/15 10:46
Client ID	: S-157-J1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:59
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143422	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	86	12	12.	86	12	12.	
108-88-3	Toluene	3.8	2.0	2.0	3.8	2.0	2.0	
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	100	14	14.	100	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-11	Date Collected :	08/08/15 10:45
Client ID	: S-157-J2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 20:31
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143423	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	27	12	12.	27	12	12.	
108-88-3	Toluene	3.0	2.0	2.0	3.0	2.0	2.0	
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	68	14	14.	68	14	14.	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811919-4	Date Collected :	NA
Client ID	: WG811919-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2.0	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2.0	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2.0	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	ND	12	12.	ND	12.	12.	U
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2.0	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2.0	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4.0	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2.0	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2.0	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	ND	14	14.	ND	14.	14.	U
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10.	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811919-5	Date Collected :	08/07/15 07:47
Client ID	: SG-1DUP	Date Received :	08/11/15
Sample Location	:	Date Analyzed :	08/14/15 11:54
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 96,APH	Analyst	: RY
Lab File ID	: R143438	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-99-0	1,3-Butadiene	ND	2.0	2.0	ND	2.0	2	U
1634-04-4	Methyl tert butyl ether	ND	2.0	2.0	ND	2.0	2	U
71-43-2	Benzene	ND	2.0	2.0	ND	2.0	2	U
C5-C8-ALPHA-J	C5-C8 Aliphatics, Adjusted	42.	12	12.	42.	12.	12	
108-88-3	Toluene	ND	2.0	2.0	ND	2.0	2	U
100-41-4	Ethylbenzene	ND	2.0	2.0	ND	2.0	2	U
179601-23-1	p/m-Xylene	ND	4.0	4.0	ND	4.0	4	U
95-47-6	o-Xylene	ND	2.0	2.0	ND	2.0	2	U
91-20-3	Naphthalene	ND	2.0	2.0	ND	2.0	2	U
C9-C12-ALPHA-J	C9-C12 Aliphatics, Adjusted	33.	14	14.	33.	14.	14	
C9-C10-ALPHA-UJ	C9-C10 Aromatics Total	ND	10	10.	ND	10.	10	U

3B
LAB DUPLICATE
SOIL VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1519114 Matrix: Soil
Lab Sample ID : WG811919-5 Injected: 08/14/15 11:54 Lab File ID: R143438
Client Sample ID : SG-1

COMPOUND	SAMPLE CONCENTRATION (ug/m3)	DUP CONCENTRATION (ug/m3)	DUP % RPD	DUP RPD LIMIT
1,3-Butadiene	ND	ND	NC	30
Methyl tert butyl ether	ND	ND	NC	30
Benzene	ND	ND	NC	30
C5-C8 Aliphatics, Adjust	42	42	0	30
Toluene	ND	ND	NC	30
Ethylbenzene	ND	ND	NC	30
p/m-Xylene	ND	ND	NC	30
o-Xylene	ND	ND	NC	30
Naphthalene	ND	ND	NC	30
C9-C12 Aliphatics, Adjus	33	33	0	30
C9-C10 Aromatics Total	ND	ND	NC	30

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III APH-10

3B
LAB CONTROL SAMPLE RECOVERY
SOIL VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1519114 Matrix: Soil
Lab Control Sample: WG811919-3LCS Injected: 08/13/15 13:12 Lab File ID: R143412

COMPOUND	SPIKE ADDED ug/m3	SAMPLE CONC ug/m3	LCS CONC ug/m3	LCS % REC	LCSD CONC ug/m3	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
1,3-Butadiene	22.1	NA	23	105	-	-	-		70-130
Methyl tert butyl ether	36	NA	36	99	-	-	-		70-130
Benzene	32	NA	31	98	-	-	-		70-130
C5-C8 Aliphatics, Adjust	122	NA	120	95	-	-	-		70-130
Toluene	37.8	NA	38	101	-	-	-		70-130
Ethylbenzene	43.5	NA	43	100	-	-	-		70-130
m/p-xylenes	87	NA	86	99	-	-	-		70-130
o-Xylene	43.5	NA	44	101	-	-	-		70-130
Naphthalene	52.2	NA	58	110	-	-	-		50-150
C9-C12 Aliphatics, Adjus	174	NA	170	100	-	-	-		70-130
C9-C10 Aromatics Total	465	NA	400	86	-	-	-		70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III APH-10

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG811919-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143414 Lab Sample ID: WG811919-4

Date Analyzed: 08/13/15 Time Analyzed: 14:46

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WG811919-3LCS	WG811919-3	R143412	08/13/15 13:12
02	METHOD BLANK	L1519114-05	R143417	08/13/15 17:19
03	METHOD BLANK AA	L1519114-06	R143418	08/13/15 17:51
04	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15 18:23
05	DUPLICATE	L1519114-07	R143420	08/13/15 18:55
06	S-157-J	L1519114-09	R143421	08/13/15 19:27
07	S-157-J1	L1519114-10	R143422	08/13/15 19:59
08	S-157-J2	L1519114-11	R143423	08/13/15 20:31
09	SG-2	L1519114-02	R143427	08/13/15 22:40
10	SG-4	L1519114-04	R143429	08/13/15 23:44
11	SG-1	L1519114-01	R143435	08/14/15 10:19
12	SG-1DUP	WG811919-5	R143438	08/14/15 11:54

COMMENTS: _____

page 1 of 1

FORM IV APH-10 LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R142727_tune BFB Injection Date: 07/11/15

Instrument ID: AIRPIANO1 BFB Injection Time: 16:37

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	41.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0 of mass 95	100.8
175	5.0 - 9.0% of mass 174	7.3 (7.3)1
176	95.0 - 101% of mass 174	96 (95.2)1
177	5.0 - 9.0% of mass 176	6.4 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0.2	0.2	R142728	07/11/15	17:09
02	0.4	0.4	R142729	07/11/15	17:42
03	2.0	2.0	R142730	07/11/15	18:13
04	10	10	R142731	07/11/15	18:45
05	20	20	R142732	07/11/15	19:18
06	50	50	R142733	07/11/15	19:50
07	100.0	100.0	R142734	07/11/15	20:23
08	ICV QUANT REPORT	ICV QUANT REPO	R142737	07/11/15	22:04

page 1 of 1

FORM V APH-10

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143410_tune BFB Injection Date: 08/13/15

Instrument ID: AIRPIANO1 BFB Injection Time: 12:07

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	15.0 - 40.0% of mass 95	17.9
75	30.0 - 60.0% of mass 95	41.8
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.2 (.2)1
174	Greater than 50.0 of mass 95	103.8
175	5.0 - 9.0% of mass 174	7.4 (7.2)1
176	95.0 - 101% of mass 174	97.4 (93.9)1
177	5.0 - 9.0% of mass 176	6.4 (6.6)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	WG811919-2	R143411	08/13/15	12:38
02	WG811919-3LCS	WG811919-3	R143412	08/13/15	13:12
03	WG811919-4BLANK	WG811919-4	R143414	08/13/15	14:46
04	METHOD BLANK	L1519114-05	R143417	08/13/15	17:19
05	METHOD BLANK AA	L1519114-06	R143418	08/13/15	17:51
06	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15	18:23
07	DUPLICATE	L1519114-07	R143420	08/13/15	18:55
08	S-157-J	L1519114-09	R143421	08/13/15	19:27
09	S-157-J1	L1519114-10	R143422	08/13/15	19:59
10	S-157-J2	L1519114-11	R143423	08/13/15	20:31
11	SG-2	L1519114-02	R143427	08/13/15	22:40
12	SG-4	L1519114-04	R143429	08/13/15	23:44
13	SG-1	L1519114-01	R143435	08/14/15	10:19
14	SG-1DUP	WG811919-5	R143438	08/14/15	11:54

FORM V APH-10

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/11/15 07/11/15

Calibration Times: 17:09 20:23

Calibration Files
0.2 =R142728.D 0.4 =R142729.D 2.0 =R142730.D 10 =R142731.D 20 =R142732.D 50 =R142733.D
100 =R142734.D

		Compound	0.2	0.4	2.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------								
2)	T	1,3-butadiene	0.369	0.344	0.404	0.330	0.315	0.321	0.313	0.3423	9.72
3)		isopentane	2.641	2.187	2.316	1.816	1.740	1.748	1.652	2.0144	18.46
4)	T	methyl tert butyl ether	0.793	0.784	0.914	0.752	0.740	0.758	0.733	0.7820	7.95
5)		hexane	3.939	3.177	3.333	2.650	2.506	2.515	2.395	2.9308	19.49
6)		cyclohexane	2.561	2.126	2.772	2.234	2.157	2.232	2.130	2.3160	10.84
7)	I	1,4-difluorobenzene	----------ISTD----------								
8)		2,3-dimethylpentane	0.509	0.540	0.636	0.528	0.501	0.526	0.492	0.5332	9.05
9)	T	benzene	0.240	0.253	0.295	0.238	0.232	0.239	0.233	0.2471	8.97
10)		heptane	0.503	0.535	0.615	0.512	0.496	0.507	0.475	0.5205	8.75
11)	H	C5-C8 Aliphatics Total	0.615	0.565	0.648	0.525	0.504	0.518	0.485	0.5515	10.95
12)	I	chlorobenzene-D5	----------ISTD----------								
13)		toluene	1.558	1.434	1.746	1.426	1.367	1.378	1.311	1.4599	10.12
14)		n-octane	3.120	2.915	3.609	2.922	2.826	2.847	2.595	2.9764	10.73
15)		2,3-dimethylheptane	3.389	3.256	3.992	3.291	3.142	3.052	2.631	3.2504	12.60
16)	T	ethyl benzene	1.732	1.627	1.946	1.617	1.569	1.571	1.454	1.6451	9.52
17)	T	m+p-xylene	1.347	1.250	1.528	1.257	1.220	1.246	1.162	1.2872	9.29
18)		n-nonane	3.237	3.168	3.934	3.194	3.040	2.931	2.568	3.1532	13.10
19)	T	o-xylene	1.457	1.293	1.556	1.288	1.246	1.254	1.155	1.3213	10.41
20)		decane	3.129	3.248	4.080	3.453	3.320	3.113	2.560	3.2720	13.90
21)		butylcyclohexane	3.925	3.890	4.503	3.763	3.538	3.630	2.914	3.7375	12.80
22)		n-undecane	2.753	3.004	4.048	3.621	3.471	3.173	2.607	3.2398	15.68
23)	T	naphthalene	1.483	1.715	1.896	1.873	1.982	1.912	1.770	1.8044	9.30
24)		n-dodecane	1.241	1.977	2.934	3.422	3.442	3.211	2.688	2.7021	30.36
25)	H	C9-C12 Aliphatics Total	2.874	3.048	3.883	3.465	3.339	3.186	2.663	3.2082	12.56
27)		C9-C10 Aromatics Total	0.605	0.589	0.694	0.580	0.564	0.552	0.474	0.5797	11.34
28)	s	bromochloromethane (TIC)	8.532	8.332	8.218	8.041	7.777	7.599	7.444	7.9919	5.01
29)	s	1,4-difluorobenzene (TIC)	1.140	1.121	1.127	1.127	1.127	1.125	1.124	1.1272	0.55
30)	s	chlorobenzene-D5 (TIC)	1.463	1.438	1.451	1.448	1.459	1.462	1.441	1.4518	0.69
31)	s	1,2-dichloroethane-D4 (TIC)	3.866	3.735	3.745	3.766	3.665	3.674	3.780	3.7471	1.82
32)	s	toluene-D8 (TIC)	1.163	1.132	1.190	1.200	1.201	1.266	1.209	1.1945	3.48
33)	s	bromofluorobenzene (TIC)	1.433	1.392	1.418	1.416	1.409	1.398	1.422	1.4126	1.01

FORM VI-APH-10

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date: 08/13/2015 Time: 12:38

Lab File ID: R143411 Init. Calib. Date(s): 07/11/15 07/11/15

Sample No: WG811919-2,3,25 Init. Calib. Times : 17:09 20:23

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	90	0.00
2	T	1,3-butadiene	0.342	0.333	2.6	91	0.00
3		isopentane	2.014	1.869	7.2	93	0.00
4	T	methyl tert butyl ether	0.782	0.691	11.6	83	0.00
5		hexane	2.931	2.520	14.0	86	0.00
6		cyclohexane	2.316	2.167	6.4	87	0.00
7	I	1,4-difluorobenzene	1.000	1.000	0.0	88	0.00
8		2,3-dimethylpentane	0.533	0.520	2.4	87	0.00
9	T	benzene	0.247	0.239	3.2	88	0.00
10		heptane	0.520	0.495	4.8	85	0.00
11	H	C5-C8 Aliphatics Total	0.551	0.518	6.0	87	0.00
12	I	chlorobenzene-D5	1.000	1.000	0.0	86	0.00
13		toluene	1.460	1.423	2.5	85	0.00
14		n-octane	2.976	2.931	1.5	86	0.00
15		2,3-dimethylheptane	3.250	3.291	-1.3	86	0.00
16	T	ethyl benzene	1.645	1.642	0.2	87	0.00
17	T	m+p-xylene	1.287	1.270	1.3	86	0.00
18		n-nonane	3.153	3.231	-2.5	87	0.00
19	T	o-xylene	1.321	1.300	1.6	86	0.00
20		decane	3.272	3.411	-4.2	85	0.00
21		butylcyclohexane	3.738	3.797	-1.6	86	0.00
22		n-undecane	3.240	3.597	-11.0	85	0.00
23	T	naphthalene	1.804	1.951	-8.1	89	0.00
24		n-dodecane	2.702	3.559	-31.7#	89	0.00
25	H	C9-C12 Aliphatics Total	3.208	3.500	-9.1	86	0.00
27		C9-C10 Aromatics Total	0.580	0.595	-2.6	88	-0.72#
28	s	bromochloromethane (TIC)	7.992	8.526	-6.7	91	0.00
29	s	1,4-difluorobenzene (TIC)	11.272	11.526	-2.3	88	0.00
30	s	chlorobenzene-D5 (TIC)	14.518	14.792	-1.9	87	0.00
31	s	1,2-dichloroethane-D4 (TIC)	3.747	3.811	-1.7	87	0.00
32	s	toluene-D8 (TIC)	11.945	12.361	-3.5	88	0.00
33	s	bromofluorobenzene (TIC)	14.126	14.214	-0.6	86	0.00

* Evaluation of CC level amount vs concentration.

FORM VII APH-10

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID (Standard): R143411 Date Analyzed: 08/13/15

Instrument ID : AIRPIANO1 Time Analyzed: 12:38

		IS1(BRO) AREA	RT	IS2(1,4) AREA	RT	IS3(CBZ) AREA	RT
	12 HOUR STD	774218	10.21	3308768	12.43	607162	16.85
	UPPER LIMIT	1548436	10.71	6617536	12.93	1214324	17.35
	LOWER LIMIT	387109	9.71	1654384	11.93	303581	16.35
	EPA SAMPLE NO.						
01	WG811919-3LCS	778085	10.21	3255249	12.43	606044	16.85
02	WG811919-4BLANK	727003	10.21	3160387	12.43	574635	16.85
03	METHOD BLANK	775860	10.21	3314432	12.43	626849	16.85
04	METHOD BLANK AA	703427	10.21	2950774	12.42	555840	16.85
05	OUTDOOR CONTROL	647253	10.21	2809926	12.43	547996	16.85
06	DUPLICATE	662416	10.21	2907972	12.43	567413	16.85
07	S-157-J	664923	10.21	2820327	12.43	551324	16.84
08	S-157-J1	597441	10.21	2669276	12.43	544704	16.84
09	S-157-J2	638768	10.21	2786009	12.43	542050	16.85
10	SG-2	637627	10.21	2671299	12.43	545870	16.85
11	SG-4	637387	10.21	2663447	12.43	564791	16.84
12	SG-1	671018	10.21	2892787	12.43	568079	16.85
13	WG811919-5DUP	595642	10.21	2648687	12.43	543750	16.85

IS1(BRO) = BROMOCHLOROMETHANE
IS2(1,4) = 1,4-DIFLUOROBENZENE
IS3(CBZ) = CHLOROBENZENE-D5

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

* Values outside of QC limits.

page 1 of 1 FORM VIII - APH-10

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-01	Date Collected :	08/07/15 07:47
Client ID	: SG-1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/14/15 10:19
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143435	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.226	0.200	0.006	1.12	0.989	0.030	
74-87-3	Chloromethane	ND	0.200	0.048	ND	0.413	0.099	U
76-14-2	Freon-114	0.014	0.050	0.005	0.098	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.014	0.020	0.007	0.037	0.053	0.019	J
75-69-4	Trichlorofluoromethane	0.234	0.050	0.008	1.31	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.498	0.500	0.250	1.73	1.74	0.869	J
76-13-1	Freon-113	0.068	0.050	0.006	0.521	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	0.013	0.020	0.007	0.053	0.081	0.028	J
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026	U
67-66-3	Chloroform	0.126	0.020	0.006	0.615	0.098	0.029	
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	0.041	0.020	0.007	0.224	0.109	0.038	
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	0.067	U
56-23-5	Carbon tetrachloride	0.051	0.020	0.008	0.321	0.126	0.050	
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054	U
79-01-6	Trichloroethene	0.240	0.020	0.007	1.29	0.107	0.038	
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.070	0.050	0.025	0.264	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-01	Date Collected :	08/07/15 07:47
Client ID	: SG-1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/14/15 10:19
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143435	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.712	0.020	0.008	4.83	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.009	0.020	0.007	0.039	0.087	0.030	J
179601-23-1	p/m-Xylene	0.032	0.040	0.009	0.139	0.174	0.039	J
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.009	0.020	0.008	0.038	0.085	0.034	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.019	0.020	0.008	0.083	0.087	0.035	J
108-67-8	1,3,5-Trimethybenzene	0.011	0.020	0.005	0.054	0.098	0.025	J
95-63-6	1,2,4-Trimethylbenzene	0.076	0.020	0.007	0.374	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	0.025	0.020	0.008	0.150	0.120	0.048	
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.229	0.050	0.012	1.20	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-02	Date Collected :	08/07/15 07:10
Client ID	: SG-2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 22:40
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143427	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.370	0.200	0.006	1.83	0.989	0.030	
74-87-3	Chloromethane	0.058	0.200	0.048	0.120	0.413	0.099	J
76-14-2	Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.018	0.020	0.007	0.048	0.053	0.019	J
75-69-4	Trichlorofluoromethane	0.233	0.050	0.008	1.31	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.492	0.500	0.250	1.71	1.74	0.869	J
76-13-1	Freon-113	0.069	0.050	0.006	0.529	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	0.011	0.020	0.007	0.045	0.081	0.028	J
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026	U
67-66-3	Chloroform	0.126	0.020	0.006	0.615	0.098	0.029	
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	0.015	0.020	0.007	0.082	0.109	0.038	J
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	0.067	U
56-23-5	Carbon tetrachloride	0.058	0.020	0.008	0.365	0.126	0.050	
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	0.011	0.020	0.008	0.074	0.134	0.054	J
79-01-6	Trichloroethene	0.471	0.020	0.007	2.53	0.107	0.038	
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.067	0.050	0.025	0.252	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-02	Date Collected :	08/07/15 07:10
Client ID	: SG-2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 22:40
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143427	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.937	0.020	0.008	6.35	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030	U
179601-23-1	p/m-Xylene	0.022	0.040	0.009	0.096	0.174	0.039	J
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.009	0.020	0.008	0.038	0.085	0.034	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.011	0.020	0.008	0.048	0.087	0.035	J
108-67-8	1,3,5-Trimethybenzene	0.007	0.020	0.005	0.034	0.098	0.025	J
95-63-6	1,2,4-Trimethylbenzene	0.018	0.020	0.007	0.089	0.098	0.034	J
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	0.024	0.020	0.008	0.144	0.120	0.048	
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.120	0.050	0.012	0.629	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-04	Date Collected :	08/07/15 08:14
Client ID	: SG-4	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 23:44
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143429	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.057	0.200	0.006	0.282	0.989	0.030	J
74-87-3	Chloromethane	0.053	0.200	0.048	0.109	0.413	0.099	J
76-14-2	Freon-114	0.014	0.050	0.005	0.098	0.349	0.035	J
75-01-4	Vinyl chloride	0.097	0.020	0.007	0.248	0.051	0.018	
106-99-0	1,3-Butadiene	0.021	0.020	0.006	0.047	0.044	0.013	
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.032	0.020	0.007	0.084	0.053	0.019	
75-69-4	Trichlorofluoromethane	0.020	0.050	0.008	0.112	0.281	0.045	J
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.601	0.500	0.250	2.09	1.74	0.869	
76-13-1	Freon-113	0.008	0.050	0.006	0.061	0.383	0.046	J
156-60-5	trans-1,2-Dichloroethene	0.023	0.020	0.006	0.091	0.079	0.024	
75-34-3	1,1-Dichloroethane	0.117	0.020	0.007	0.474	0.081	0.028	
1634-04-4	Methyl tert butyl ether	0.347	0.200	0.004	1.25	0.721	0.014	
156-59-2	cis-1,2-Dichloroethene	0.090	0.020	0.007	0.357	0.079	0.026	
67-66-3	Chloroform	0.072	0.020	0.006	0.352	0.098	0.029	
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038	U
71-43-2	Benzene	1.08	0.100	0.021	3.45	0.319	0.067	
56-23-5	Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050	U
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054	U
79-01-6	Trichloroethene	0.022	0.020	0.007	0.118	0.107	0.038	
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.312	0.050	0.025	1.18	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-04	Date Collected :	08/07/15 08:14
Client ID	: SG-4	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 23:44
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143429	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.029	0.020	0.008	0.197	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.099	0.020	0.007	0.430	0.087	0.030	
179601-23-1	p/m-Xylene	0.315	0.040	0.009	1.37	0.174	0.039	
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.014	0.020	0.008	0.060	0.085	0.034	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.132	0.020	0.008	0.573	0.087	0.035	
108-67-8	1,3,5-Trimethybenzene	0.172	0.020	0.005	0.846	0.098	0.025	
95-63-6	1,2,4-Trimethylbenzene	0.180	0.020	0.007	0.885	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	0.031	0.020	0.008	0.186	0.120	0.048	
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.310	0.050	0.012	1.63	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-05	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:19
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143417	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030	U
74-87-3	Chloromethane	ND	0.200	0.048	ND	0.413	0.099	U
76-14-2	Freon-114	ND	0.050	0.005	ND	0.349	0.035	U
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.014	0.020	0.007	0.037	0.053	0.019	J
75-69-4	Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045	U
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.623	0.500	0.250	2.16	1.74	0.869	
76-13-1	Freon-113	ND	0.050	0.006	ND	0.383	0.046	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026	U
67-66-3	Chloroform	ND	0.020	0.006	ND	0.098	0.029	U
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038	U
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	0.067	U
56-23-5	Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050	U
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054	U
79-01-6	Trichloroethene	ND	0.020	0.007	ND	0.107	0.038	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	ND	0.050	0.025	ND	0.188	0.094	U
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-05	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:19
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143417	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.024	0.020	0.008	0.163	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030	U
179601-23-1	p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039	U
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	ND	0.020	0.008	ND	0.085	0.034	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	ND	0.020	0.008	ND	0.087	0.035	U
108-67-8	1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034	U
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048	U
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	ND	0.050	0.012	ND	0.262	0.063	U
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-06	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK AA	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:51
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143418	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030	U
74-87-3	Chloromethane	ND	0.200	0.048	ND	0.413	0.099	U
76-14-2	Freon-114	ND	0.050	0.005	ND	0.349	0.035	U
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.013	0.020	0.007	0.034	0.053	0.019	J
75-69-4	Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045	U
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.484	0.500	0.250	1.68	1.74	0.869	J
76-13-1	Freon-113	ND	0.050	0.006	ND	0.383	0.046	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026	U
67-66-3	Chloroform	ND	0.020	0.006	ND	0.098	0.029	U
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038	U
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	0.067	U
56-23-5	Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050	U
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054	U
79-01-6	Trichloroethene	ND	0.020	0.007	ND	0.107	0.038	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	ND	0.050	0.025	ND	0.188	0.094	U
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-06	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK AA	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:51
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143418	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030	U
179601-23-1	p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039	U
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	ND	0.020	0.008	ND	0.085	0.034	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	ND	0.020	0.008	ND	0.087	0.035	U
108-67-8	1,3,5-Trimethybenzene	ND	0.020	0.005	ND	0.098	0.025	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034	U
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048	U
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	ND	0.050	0.012	ND	0.262	0.063	U
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-07	Date Collected :	08/08/15 10:47
Client ID	: DUPLICATE	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:55
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143420	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.429	0.200	0.006	2.12	0.989	0.030	
74-87-3	Chloromethane	0.564	0.200	0.048	1.16	0.413	0.099	
76-14-2	Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	0.016	0.020	0.006	0.035	0.044	0.013	J
74-83-9	Bromomethane	0.012	0.020	0.008	0.047	0.078	0.031	J
75-00-3	Chloroethane	0.025	0.020	0.007	0.066	0.053	0.019	
75-69-4	Trichlorofluoromethane	0.217	0.050	0.008	1.22	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.594	0.500	0.250	2.06	1.74	0.869	
76-13-1	Freon-113	0.068	0.050	0.006	0.521	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	0.006	0.020	0.006	0.024	0.079	0.024	J
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	0.032	0.020	0.007	0.127	0.079	0.026	
67-66-3	Chloroform	0.059	0.020	0.006	0.288	0.098	0.029	
107-06-2	1,2-Dichloroethane	0.018	0.020	0.008	0.073	0.081	0.032	J
71-55-6	1,1,1-Trichloroethane	0.027	0.020	0.007	0.147	0.109	0.038	
71-43-2	Benzene	0.079	0.100	0.021	0.252	0.319	0.067	J
56-23-5	Carbon tetrachloride	0.066	0.020	0.008	0.415	0.126	0.050	
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J
79-01-6	Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.969	0.050	0.025	3.65	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-07	Date Collected :	08/08/15 10:47
Client ID	: DUPLICATE	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:55
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143420	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.102	0.020	0.008	0.692	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.091	0.020	0.007	0.395	0.087	0.030	
179601-23-1	p/m-Xylene	0.292	0.040	0.009	1.27	0.174	0.039	
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.099	0.020	0.008	0.422	0.085	0.034	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.121	0.020	0.008	0.526	0.087	0.035	
108-67-8	1,3,5-Trimethybenzene	0.082	0.020	0.005	0.403	0.098	0.025	
95-63-6	1,2,4-Trimethylbenzene	0.275	0.020	0.007	1.35	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	0.008	0.020	0.008	0.048	0.120	0.048	J
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.106	0.050	0.012	0.556	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-08D	Date Collected :	08/08/15 10:52
Client ID	: OUTDOOR CONTROL	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:23
Sample Matrix	: AIR	Dilution Factor :	3.333
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143419	Instrument ID	: AIRPIANO1
Sample Amount	: 75.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.393	0.667	0.020	1.94	3.30	0.099	J
74-87-3	Chloromethane	0.610	0.667	0.160	1.26	1.38	0.330	J
76-14-2	Freon-114	0.017	0.167	0.017	0.117	1.17	0.117	J
75-01-4	Vinyl chloride	ND	0.067	0.023	ND	0.171	0.060	U
106-99-0	1,3-Butadiene	0.023	0.067	0.020	0.052	0.148	0.044	J
74-83-9	Bromomethane	ND	0.067	0.027	ND	0.259	0.104	U
75-00-3	Chloroethane	0.063	0.067	0.023	0.167	0.176	0.062	J
75-69-4	Trichlorofluoromethane	0.293	0.167	0.027	1.65	0.938	0.150	
75-35-4	1,1-Dichloroethene	ND	0.067	0.023	ND	0.264	0.092	U
75-09-2	Methylene chloride	1.77	1.67	0.833	6.15	5.80	2.89	
76-13-1	Freon-113	0.127	0.167	0.020	0.973	1.28	0.153	J
156-60-5	trans-1,2-Dichloroethene	ND	0.067	0.020	ND	0.264	0.079	U
75-34-3	1,1-Dichloroethane	ND	0.067	0.023	ND	0.270	0.094	U
1634-04-4	Methyl tert butyl ether	ND	0.667	0.013	ND	2.40	0.048	U
156-59-2	cis-1,2-Dichloroethene	ND	0.067	0.022	ND	0.264	0.087	U
67-66-3	Chloroform	0.030	0.067	0.020	0.147	0.326	0.098	J
107-06-2	1,2-Dichloroethane	ND	0.067	0.027	ND	0.270	0.108	U
71-55-6	1,1,1-Trichloroethane	ND	0.067	0.023	ND	0.364	0.127	U
71-43-2	Benzene	0.110	0.333	0.070	0.351	1.06	0.224	J
56-23-5	Carbon tetrachloride	0.063	0.067	0.027	0.398	0.420	0.168	J
78-87-5	1,2-Dichloropropane	ND	0.067	0.020	ND	0.308	0.092	U
75-27-4	Bromodichloromethane	ND	0.067	0.027	ND	0.447	0.179	U
79-01-6	Trichloroethene	ND	0.067	0.023	ND	0.358	0.125	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.067	0.027	ND	0.303	0.121	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.067	0.027	ND	0.303	0.121	U
79-00-5	1,1,2-Trichloroethane	ND	0.067	0.030	ND	0.364	0.164	U
108-88-3	Toluene	1.45	0.167	0.083	5.46	0.629	0.314	
124-48-1	Dibromochloromethane	ND	0.067	0.027	ND	0.568	0.227	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-08D	Date Collected :	08/08/15 10:52
Client ID	: OUTDOOR CONTROL	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:23
Sample Matrix	: AIR	Dilution Factor :	3.333
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143419	Instrument ID	: AIRPIANO1
Sample Amount	: 75.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.067	0.027	ND	0.513	0.205	U
127-18-4	Tetrachloroethene	ND	0.067	0.027	ND	0.452	0.181	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.067	0.013	ND	0.458	0.091	U
108-90-7	Chlorobenzene	ND	0.067	0.027	ND	0.307	0.123	U
100-41-4	Ethylbenzene	0.127	0.067	0.023	0.552	0.290	0.101	
179601-23-1	p/m-Xylene	0.340	0.133	0.030	1.48	0.578	0.130	
75-25-2	Bromoform	ND	0.067	0.050	ND	0.690	0.517	U
100-42-5	Styrene	0.123	0.067	0.027	0.524	0.284	0.114	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.067	0.023	ND	0.458	0.160	U
95-47-6	o-Xylene	0.137	0.067	0.027	0.595	0.290	0.116	
108-67-8	1,3,5-Trimethybenzene	0.067	0.067	0.017	0.328	0.328	0.082	
95-63-6	1,2,4-Trimethylbenzene	0.210	0.067	0.023	1.03	0.328	0.115	
541-73-1	1,3-Dichlorobenzene	0.037	0.067	0.023	0.221	0.401	0.140	J
106-46-7	1,4-Dichlorobenzene	ND	0.067	0.027	ND	0.401	0.161	U
95-50-1	1,2-Dichlorobenzene	ND	0.067	0.023	ND	0.401	0.140	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.167	0.033	ND	1.24	0.247	U
91-20-3	Naphthalene	0.087	0.167	0.040	0.454	0.876	0.210	J
87-68-3	Hexachlorobutadiene	ND	0.167	0.037	ND	1.78	0.391	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-09	Date Collected :	08/08/15 10:47
Client ID	: S-157-J	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:27
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143421	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.595	0.200	0.006	2.94	0.989	0.030	
74-87-3	Chloromethane	0.580	0.200	0.048	1.20	0.413	0.099	
76-14-2	Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J
74-83-9	Bromomethane	0.015	0.020	0.008	0.058	0.078	0.031	J
75-00-3	Chloroethane	0.029	0.020	0.007	0.077	0.053	0.019	
75-69-4	Trichlorofluoromethane	0.220	0.050	0.008	1.24	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	6.34	0.500	0.250	22.0	1.74	0.869	
76-13-1	Freon-113	0.073	0.050	0.006	0.560	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	0.037	0.020	0.007	0.147	0.079	0.026	
67-66-3	Chloroform	0.065	0.020	0.006	0.317	0.098	0.029	
107-06-2	1,2-Dichloroethane	0.019	0.020	0.008	0.077	0.081	0.032	J
71-55-6	1,1,1-Trichloroethane	0.019	0.020	0.007	0.104	0.109	0.038	J
71-43-2	Benzene	0.089	0.100	0.021	0.284	0.319	0.067	J
56-23-5	Carbon tetrachloride	0.066	0.020	0.008	0.415	0.126	0.050	
78-87-5	1,2-Dichloropropane	0.006	0.020	0.006	0.028	0.092	0.028	J
75-27-4	Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J
79-01-6	Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	1.01	0.050	0.025	3.81	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-09	Date Collected :	08/08/15 10:47
Client ID	: S-157-J	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:27
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143421	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.116	0.020	0.008	0.787	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.084	0.020	0.007	0.365	0.087	0.030	
179601-23-1	p/m-Xylene	0.266	0.040	0.009	1.16	0.174	0.039	
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.056	0.020	0.008	0.238	0.085	0.034	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.109	0.020	0.008	0.473	0.087	0.035	
108-67-8	1,3,5-Trimethybenzene	0.069	0.020	0.005	0.339	0.098	0.025	
95-63-6	1,2,4-Trimethylbenzene	0.199	0.020	0.007	0.978	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048	U
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.016	0.050	0.012	0.084	0.262	0.063	J
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-10	Date Collected :	08/08/15 10:46
Client ID	: S-157-J1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:59
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143422	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.379	0.200	0.006	1.87	0.989	0.030	
74-87-3	Chloromethane	0.621	0.200	0.048	1.28	0.413	0.099	
76-14-2	Freon-114	0.016	0.050	0.005	0.112	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J
74-83-9	Bromomethane	0.014	0.020	0.008	0.054	0.078	0.031	J
75-00-3	Chloroethane	0.029	0.020	0.007	0.077	0.053	0.019	
75-69-4	Trichlorofluoromethane	0.241	0.050	0.008	1.35	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.743	0.500	0.250	2.58	1.74	0.869	
76-13-1	Freon-113	0.080	0.050	0.006	0.613	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	0.040	0.020	0.007	0.159	0.079	0.026	
67-66-3	Chloroform	0.067	0.020	0.006	0.327	0.098	0.029	
107-06-2	1,2-Dichloroethane	0.022	0.020	0.008	0.089	0.081	0.032	
71-55-6	1,1,1-Trichloroethane	0.020	0.020	0.007	0.109	0.109	0.038	
71-43-2	Benzene	0.087	0.100	0.021	0.278	0.319	0.067	J
56-23-5	Carbon tetrachloride	0.068	0.020	0.008	0.428	0.126	0.050	
78-87-5	1,2-Dichloropropane	0.007	0.020	0.006	0.032	0.092	0.028	J
75-27-4	Bromodichloromethane	0.010	0.020	0.008	0.067	0.134	0.054	J
79-01-6	Trichloroethene	0.014	0.020	0.007	0.075	0.107	0.038	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.940	0.050	0.025	3.54	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-10	Date Collected :	08/08/15 10:46
Client ID	: S-157-J1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:59
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143422	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.119	0.020	0.008	0.807	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.100	0.020	0.007	0.434	0.087	0.030	
179601-23-1	p/m-Xylene	0.327	0.040	0.009	1.42	0.174	0.039	
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.124	0.020	0.008	0.528	0.085	0.034	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.131	0.020	0.008	0.569	0.087	0.035	
108-67-8	1,3,5-Trimethybenzene	0.099	0.020	0.005	0.487	0.098	0.025	
95-63-6	1,2,4-Trimethylbenzene	0.340	0.020	0.007	1.67	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	0.008	0.020	0.008	0.048	0.120	0.048	J
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.184	0.050	0.012	0.965	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-11	Date Collected :	08/08/15 10:45
Client ID	: S-157-J2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 20:31
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143423	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.375	0.200	0.006	1.85	0.989	0.030	
74-87-3	Chloromethane	0.585	0.200	0.048	1.21	0.413	0.099	
76-14-2	Freon-114	0.015	0.050	0.005	0.105	0.349	0.035	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	0.018	0.020	0.006	0.040	0.044	0.013	J
74-83-9	Bromomethane	0.014	0.020	0.008	0.054	0.078	0.031	J
75-00-3	Chloroethane	0.030	0.020	0.007	0.079	0.053	0.019	
75-69-4	Trichlorofluoromethane	0.233	0.050	0.008	1.31	0.281	0.045	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.843	0.500	0.250	2.93	1.74	0.869	
76-13-1	Freon-113	0.091	0.050	0.006	0.697	0.383	0.046	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
156-59-2	cis-1,2-Dichloroethene	0.039	0.020	0.007	0.155	0.079	0.026	
67-66-3	Chloroform	0.064	0.020	0.006	0.313	0.098	0.029	
107-06-2	1,2-Dichloroethane	0.021	0.020	0.008	0.085	0.081	0.032	
71-55-6	1,1,1-Trichloroethane	0.018	0.020	0.007	0.098	0.109	0.038	J
71-43-2	Benzene	0.084	0.100	0.021	0.268	0.319	0.067	J
56-23-5	Carbon tetrachloride	0.065	0.020	0.008	0.409	0.126	0.050	
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	0.009	0.020	0.008	0.060	0.134	0.054	J
79-01-6	Trichloroethene	0.015	0.020	0.007	0.081	0.107	0.038	J
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	0.773	0.050	0.025	2.91	0.188	0.094	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-11	Date Collected :	08/08/15 10:45
Client ID	: S-157-J2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 20:31
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143423	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	0.120	0.020	0.008	0.814	0.136	0.054	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	0.095	0.020	0.007	0.413	0.087	0.030	
179601-23-1	p/m-Xylene	0.309	0.040	0.009	1.34	0.174	0.039	
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	0.104	0.020	0.008	0.443	0.085	0.034	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	0.126	0.020	0.008	0.547	0.087	0.035	
108-67-8	1,3,5-Trimethybenzene	0.093	0.020	0.005	0.457	0.098	0.025	
95-63-6	1,2,4-Trimethylbenzene	0.325	0.020	0.007	1.60	0.098	0.034	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048	U
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	0.074	U
91-20-3	Naphthalene	0.189	0.050	0.012	0.991	0.262	0.063	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811918-4	Date Collected :	NA
Client ID	: WG811918-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 15:18
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143415	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	ND	0.200	0.006	ND	0.989	0.030	U
74-87-3	Chloromethane	ND	0.200	0.048	ND	0.413	0.099	U
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	0.050	0.005	ND	0.349	0.035	U
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	0.018	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	0.013	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	0.031	U
75-00-3	Chloroethane	0.015	0.020	0.007	0.040	0.053	0.019	J
67-64-1	Acetone	ND	1.00	0.133	ND	2.38	0.316	U
75-69-4	Trichlorofluoromethane	ND	0.050	0.008	ND	0.281	0.045	U
107-13-1	Acrylonitrile	ND	0.500	0.015	ND	1.09	0.033	U
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	0.028	U
75-09-2	Methylene chloride	0.326	0.500	0.250	1.13	1.74	0.869	J
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	0.006	ND	0.383	0.046	U
151-67-7	Halothane	ND	0.050	0.008	ND	0.404	0.065	U
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	0.024	U
75-34-3	1,1-Dichloroethane	ND	0.020	0.007	ND	0.081	0.028	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	0.014	U
78-93-3	2-Butanone	ND	0.500	0.025	ND	1.47	0.073	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	0.026	U
67-66-3	Chloroform	ND	0.020	0.006	ND	0.098	0.029	U
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	0.032	U
71-55-6	1,1,1-Trichloroethane	ND	0.020	0.007	ND	0.109	0.038	U
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	0.067	U
56-23-5	Carbon tetrachloride	ND	0.020	0.008	ND	0.126	0.050	U
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	0.028	U
75-27-4	Bromodichloromethane	ND	0.020	0.008	ND	0.134	0.054	U
123-91-1	1,4-Dioxane	ND	0.100	0.050	ND	0.360	0.180	U
79-01-6	Trichloroethene	ND	0.020	0.007	ND	0.107	0.038	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811918-4	Date Collected :	NA
Client ID	: WG811918-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 15:18
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143415	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.042	ND	2.05	0.172	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	0.036	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	0.049	U
108-88-3	Toluene	ND	0.050	0.025	ND	0.188	0.094	U
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	0.068	U
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	0.062	U
127-18-4	Tetrachloroethene	ND	0.020	0.008	ND	0.136	0.054	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	0.028	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	0.037	U
100-41-4	Ethylbenzene	ND	0.020	0.007	ND	0.087	0.030	U
179601-23-1	p/m-Xylene	ND	0.040	0.009	ND	0.174	0.039	U
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	0.155	U
100-42-5	Styrene	ND	0.020	0.008	ND	0.085	0.034	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	0.048	U
95-47-6	o-Xylene	ND	0.020	0.008	ND	0.087	0.035	U
98-82-8	Isopropylbenzene	ND	0.200	0.046	ND	0.983	0.226	U
622-96-8	4-Ethyltoluene	ND	0.020	0.010	ND	0.098	0.048	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.020	0.005	ND	0.098	0.025	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.020	0.007	ND	0.098	0.034	U
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
106-46-7	1,4-Dichlorobenzene	ND	0.020	0.008	ND	0.120	0.048	U
135-98-8	sec-Butylbenzene	ND	0.200	0.047	ND	1.10	0.258	U
99-87-6	p-Isopropyltoluene	ND	0.200	0.048	ND	1.10	0.263	U
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	0.042	U
104-51-8	n-Butylbenzene	ND	0.200	0.045	ND	1.10	0.247	U
120-82-1	1,2,4-Trichlorobenzene	0.015	0.050	0.010	0.111	0.371	0.074	J
91-20-3	Naphthalene	0.020	0.050	0.012	0.105	0.262	0.063	J

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811918-4	Date Collected :	NA
Client ID	: WG811918-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 15:18
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143415	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
87-61-6	1,2,3-Trichlorobenzene	ND	0.050	0.019	ND	0.371	0.141	U
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	0.117	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811918-5	Date Collected :	08/07/15 07:47
Client ID	: SG-1DUP	Date Received :	08/11/15
Sample Location	:	Date Analyzed :	08/14/15 11:54
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143438	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-71-8	Dichlorodifluoromethane	0.299	0.200	0.006	1.48	0.989	.2	
74-87-3	Chloromethane	ND	0.200	0.048	ND	0.413	.2	U
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	0.015	0.050	0.005	0.105	0.349	.05	J
75-01-4	Vinyl chloride	ND	0.020	0.007	ND	0.051	.02	U
106-99-0	1,3-Butadiene	ND	0.020	0.006	ND	0.044	.02	U
74-83-9	Bromomethane	ND	0.020	0.008	ND	0.078	.02	U
75-00-3	Chloroethane	0.016	0.020	0.007	0.042	0.053	.02	J
75-69-4	Trichlorofluoromethane	0.264	0.050	0.008	1.48	0.281	.05	
75-35-4	1,1-Dichloroethene	ND	0.020	0.007	ND	0.079	.02	U
75-09-2	Methylene chloride	0.566	0.500	0.250	1.97	1.74	.5	
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.074	0.050	0.006	0.567	0.383	.05	
156-60-5	trans-1,2-Dichloroethene	ND	0.020	0.006	ND	0.079	.02	U
75-34-3	1,1-Dichloroethane	0.014	0.020	0.007	0.057	0.081	.02	J
1634-04-4	Methyl tert butyl ether	ND	0.200	0.004	ND	0.721	.2	U
156-59-2	cis-1,2-Dichloroethene	ND	0.020	0.007	ND	0.079	.02	U
67-66-3	Chloroform	0.142	0.020	0.006	0.693	0.098	.02	
107-06-2	1,2-Dichloroethane	ND	0.020	0.008	ND	0.081	.02	U
71-55-6	1,1,1-Trichloroethane	0.044	0.020	0.007	0.240	0.109	.02	
71-43-2	Benzene	ND	0.100	0.021	ND	0.319	.1	U
56-23-5	Carbon tetrachloride	0.053	0.020	0.008	0.333	0.126	.02	
78-87-5	1,2-Dichloropropane	ND	0.020	0.006	ND	0.092	.02	U
75-27-4	Bromodichloromethane	0.008	0.020	0.008	0.054	0.134	.02	J
79-01-6	Trichloroethene	0.260	0.020	0.007	1.40	0.107	.02	
10061-01-5	cis-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	.02	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.020	0.008	ND	0.091	.02	U
79-00-5	1,1,2-Trichloroethane	ND	0.020	0.009	ND	0.109	.02	U
108-88-3	Toluene	0.071	0.050	0.025	0.268	0.188	.05	
124-48-1	Dibromochloromethane	ND	0.020	0.008	ND	0.170	.02	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811918-5	Date Collected :	08/07/15 07:47
Client ID	: SG-1DUP	Date Received :	08/11/15
Sample Location	:	Date Analyzed :	08/14/15 11:54
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15-SIM	Analyst	: RY
Lab File ID	: R143438	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
106-93-4	1,2-Dibromoethane	ND	0.020	0.008	ND	0.154	.02	U
127-18-4	Tetrachloroethene	0.702	0.020	0.008	4.76	0.136	.02	
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.020	0.004	ND	0.137	.02	U
108-90-7	Chlorobenzene	ND	0.020	0.008	ND	0.092	.02	U
100-41-4	Ethylbenzene	0.009	0.020	0.007	0.039	0.087	.02	J
179601-23-1	p/m-Xylene	0.034	0.040	0.009	0.148	0.174	.04	J
75-25-2	Bromoform	ND	0.020	0.015	ND	0.207	.02	U
100-42-5	Styrene	0.008	0.020	0.008	0.034	0.085	.02	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.020	0.007	ND	0.137	.02	U
95-47-6	o-Xylene	0.020	0.020	0.008	0.087	0.087	.02	
108-67-8	1,3,5-Trimethylbenzene	0.011	0.020	0.005	0.054	0.098	.02	J
95-63-6	1,2,4-Trimethylbenzene	0.076	0.020	0.007	0.374	0.098	.02	
541-73-1	1,3-Dichlorobenzene	ND	0.020	0.007	ND	0.120	.02	U
106-46-7	1,4-Dichlorobenzene	0.027	0.020	0.008	0.162	0.120	.02	
95-50-1	1,2-Dichlorobenzene	ND	0.020	0.007	ND	0.120	.02	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.050	0.010	ND	0.371	.05	U
91-20-3	Naphthalene	0.228	0.050	0.012	1.20	0.262	.05	
87-68-3	Hexachlorobutadiene	ND	0.050	0.011	ND	0.533	.05	U

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1519114 Matrix: Air
Lab Sample ID : WG811918-5 Injected: 08/14/15 11:54 Lab File ID: R143438
Client Sample ID : SG-1

COMPOUND	SAMPLE CONCENTRATION (ppbV)	DUP CONCENTRATION (ppbV)	DUP % RPD	DUP RPD LIMIT
Dichlorodifluoromethane	0.226	0.299	28*	25
Chloromethane	ND	ND	NC	25
Freon-114	0.014J	0.015J	NC	25
Vinyl chloride	ND	ND	NC	25
1,3-Butadiene	ND	ND	NC	25
Bromomethane	ND	ND	NC	25
Chloroethane	0.014J	0.016J	NC	25
Trichlorofluoromethane	0.234	0.264	12	25
1,1-Dichloroethene	ND	ND	NC	25
Methylene chloride	0.498J	0.566	NC	25
Freon-113	0.068	0.074	8	25
trans-1,2-Dichloroethene	ND	ND	NC	25
1,1-Dichloroethane	0.013J	0.014J	NC	25
Methyl tert butyl ether	ND	ND	NC	25
cis-1,2-Dichloroethene	ND	ND	NC	25
Chloroform	0.126	0.142	12	25
1,2-Dichloroethane	ND	ND	NC	25
1,1,1-Trichloroethane	0.041	0.044	7	25
Benzene	ND	ND	NC	25
Carbon tetrachloride	0.051	0.053	4	25
1,2-Dichloropropane	ND	ND	NC	25
Bromodichloromethane	ND	0.008J	NC	25
Trichloroethene	0.240	0.260	8	25
cis-1,3-Dichloropropene	ND	ND	NC	25
trans-1,3-Dichloropropen	ND	ND	NC	25
1,1,2-Trichloroethane	ND	ND	NC	25
Toluene	0.070	0.071	1	25
Dibromochloromethane	ND	ND	NC	25
1,2-Dibromoethane	ND	ND	NC	25
Tetrachloroethene	0.712	0.702	1	25
1,1,1,2-Tetrachloroethan	ND	ND	NC	25
Chlorobenzene	ND	ND	NC	25
Ethylbenzene	0.009J	0.009J	NC	25
p/m-Xylene	0.032J	0.034J	NC	25
Bromoform	ND	ND	NC	25
Styrene	0.009J	0.008J	NC	25
1,1,2,2-Tetrachloroethan	ND	ND	NC	25
o-Xylene	0.019J	0.020	NC	25
1,3,5-Trimethybenzene	0.011J	0.011J	NC	25
1,2,4-Trimethylbenzene	0.076	0.076	0	25

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-SIM

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Sample ID : WG811918-5 Injected: 08/14/15 11:54 Lab File ID: R143438

Client Sample ID : SG-1

COMPOUND	SAMPLE CONCENTRATION (ppbV)	DUP CONCENTRATION (ppbV)	DUP % RPD	DUP RPD LIMIT
1,3-Dichlorobenzene	ND	ND	NC	25
1,4-Dichlorobenzene	0.025	0.027	8	25
1,2-Dichlorobenzene	ND	ND	NC	25
1,2,4-Trichlorobenzene	ND	ND	NC	25
Naphthalene	0.229	0.228	0	25
Hexachlorobutadiene	ND	ND	NC	25

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-SIM

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Control Sample: WG811918-3LCS Injected: 08/13/15 13:43 Lab File ID: R143413

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	5	NA	3.83	77	-	-	-	25	70-130
Chloromethane	5	NA	5.01	100	-	-	-	25	70-130
Freon-114	5	NA	5.04	101	-	-	-	25	70-130
Vinyl chloride	5	NA	5.05	101	-	-	-	25	70-130
1,3-Butadiene	5	NA	5.29	106	-	-	-	25	70-130
Bromomethane	5	NA	4.90	98	-	-	-	25	70-130
Chloroethane	5	NA	4.68	94	-	-	-	25	70-130
Acetone	25	NA	25.2	101	-	-	-	25	70-130
Trichlorofluoromethane	5	NA	4.97	99	-	-	-	25	70-130
Acrylonitrile	5	NA	4.59	92	-	-	-	25	70-130
1,1-Dichloroethene	5	NA	4.94	99	-	-	-	25	70-130
Methylene chloride	5	NA	5.22	104	-	-	-	25	70-130
Freon-113	5	NA	4.97	99	-	-	-	25	70-130
Halothane	5	NA	5.42	108	-	-	-	25	70-130
trans-1,2-Dichloroethene	5	NA	4.51	90	-	-	-	25	70-130
1,1-Dichloroethane	5	NA	4.82	96	-	-	-	25	70-130
Methyl tert butyl ether	5	NA	4.84	97	-	-	-	25	70-130
2-Butanone	5	NA	4.64	93	-	-	-	25	70-130
cis-1,2-Dichloroethene	5	NA	5.49	110	-	-	-	25	70-130
Chloroform	5	NA	4.95	99	-	-	-	25	70-130
1,2-Dichloroethane	5	NA	4.66	93	-	-	-	25	70-130
1,1,1-Trichloroethane	5	NA	4.76	95	-	-	-	25	70-130
Benzene	5	NA	4.56	91	-	-	-	25	70-130
Carbon tetrachloride	5	NA	5.20	104	-	-	-	25	70-130
1,2-Dichloropropane	5	NA	4.68	94	-	-	-	25	70-130
Bromodichloromethane	5	NA	4.82	96	-	-	-	25	70-130
1,4-Dioxane	5	NA	4.75	95	-	-	-	25	70-130
Trichloroethene	5	NA	4.75	95	-	-	-	25	70-130
cis-1,3-Dichloropropene	5	NA	5.08	102	-	-	-	25	70-130
4-Methyl-2-pentanone	5	NA	4.68	94	-	-	-	25	70-130
trans-1,3-Dichloropropen	5	NA	4.37	87	-	-	-	25	70-130
1,1,2-Trichloroethane	5	NA	4.93	99	-	-	-	25	70-130
Toluene	5	NA	4.81	96	-	-	-	25	70-130
Dibromochloromethane	5	NA	5.01	100	-	-	-	25	70-130
1,2-Dibromoethane	5	NA	5.09	102	-	-	-	25	70-130
Tetrachloroethene	5	NA	4.90	98	-	-	-	25	70-130
1,1,1,2-Tetrachloroethan	5	NA	4.68	94	-	-	-	25	70-130
Chlorobenzene	5	NA	4.92	98	-	-	-	25	70-130
Ethylbenzene	5	NA	4.80	96	-	-	-	25	70-130
p/m-Xylene	10	NA	9.86	99	-	-	-	25	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Control Sample: WG811918-3LCS Injected: 08/13/15 13:43 Lab File ID: R143413

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Bromoform	5	NA	5.11	102	-	-	-	25	70-130
Styrene	5	NA	5.09	102	-	-	-	25	70-130
1,1,2,2-Tetrachloroethan	5	NA	5.04	101	-	-	-	25	70-130
o-Xylene	5	NA	4.81	96	-	-	-	25	70-130
Isopropylbenzene	5	NA	4.81	96	-	-	-	25	70-130
4-Ethyltoluene	5	NA	4.90	98	-	-	-	25	70-130
1,3,5-Trimethybenzene	5	NA	5.02	100	-	-	-	25	70-130
1,2,4-Trimethylbenzene	5	NA	5.17	103	-	-	-	25	70-130
1,3-Dichlorobenzene	5	NA	5.15	103	-	-	-	25	70-130
1,4-Dichlorobenzene	5	NA	5.20	104	-	-	-	25	70-130
sec-Butylbenzene	5	NA	4.81	96	-	-	-	25	70-130
p-Isopropyltoluene	5	NA	4.48	90	-	-	-	25	70-130
1,2-Dichlorobenzene	5	NA	5.22	104	-	-	-	25	70-130
n-Butylbenzene	5	NA	5.32	106	-	-	-	25	70-130
1,2,4-Trichlorobenzene	5	NA	6.19	124	-	-	-	25	70-130
Naphthalene	5	NA	5.88	118	-	-	-	25	70-130
1,2,3-Trichlorobenzene	5	NA	6.03	121	-	-	-	25	70-130
Hexachlorobutadiene	5	NA	5.64	113	-	-	-	25	70-130

* Values outside of QC limits.

COMMENTS: _____

_____

FORM III TO15-SIM

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG811918-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143415 Lab Sample ID: WG811918-4

Date Analyzed: 08/13/15 Time Analyzed: 15:18

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WG811918-3LCS	WG811918-3	R143413	08/13/15 13:43
02	METHOD BLANK	L1519114-05	R143417	08/13/15 17:19
03	METHOD BLANK AA	L1519114-06	R143418	08/13/15 17:51
04	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15 18:23
05	DUPLICATE	L1519114-07	R143420	08/13/15 18:55
06	S-157-J	L1519114-09	R143421	08/13/15 19:27
07	S-157-J1	L1519114-10	R143422	08/13/15 19:59
08	S-157-J2	L1519114-11	R143423	08/13/15 20:31
09	SG-2	L1519114-02	R143427	08/13/15 22:40
10	SG-4	L1519114-04	R143429	08/13/15 23:44
11	SG-1	L1519114-01	R143435	08/14/15 10:19
12	SG-1DUP	WG811918-5	R143438	08/14/15 11:54

COMMENTS: _____

page 1 of 1

FORM IV TO15-SIM LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R142703_tune BFB Injection Date: 07/10/15

Instrument ID: AIRPIANO1 BFB Injection Time: 12:25

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	18.1
75	30.0 - 66.0% of mass 95	41.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	100.8
175	4.0 - 9.0% of mass 174	7.2 (7.1)1
176	93.0 - 101% of mass 174	94.5 (93.8)1
177	5.0 - 9.0% of mass 176	6.1 (6.5)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0.02	0.02	R142704	07/10/15	13:06
02	0.04	0.04	R142705	07/10/15	13:38
03	0.1	0.1	R142706	07/10/15	14:11
04	0.2	0.2	R142707	07/10/15	14:43
05	0.5	0.5	R142708	07/10/15	15:14
06	1.0	1.0	R142709	07/10/15	15:48
07	5.0	5.0	R142710	07/10/15	16:19
08	10.0	10.0	R142711	07/10/15	16:53
09	20.0	20.0	R142712	07/10/15	17:25
10	50.0	50.0	R142713	07/10/15	17:56
11	ICV QUANT REPORT	ICV QUANT REPO	R142718	07/11/15	09:45

page 1 of 1

FORM V TO15-SIM

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143410_tune BFB Injection Date: 08/13/15

Instrument ID: AIRPIANO1 BFB Injection Time: 12:07

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	17.9
75	30.0 - 66.0% of mass 95	42.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	104.7
175	4.0 - 9.0% of mass 174	7.2 (6.8)1
176	93.0 - 101% of mass 174	98.2 (93.7)1
177	5.0 - 9.0% of mass 176	6.4 (6.5)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	WG811918-2	R143413	08/13/15	13:43
02	WG811918-3LCS	WG811918-3	R143413	08/13/15	13:43
03	WG811918-4BLANK	WG811918-4	R143415	08/13/15	15:18
04	METHOD BLANK	L1519114-05	R143417	08/13/15	17:19
05	METHOD BLANK AA	L1519114-06	R143418	08/13/15	17:51
06	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15	18:23
07	DUPLICATE	L1519114-07	R143420	08/13/15	18:55
08	S-157-J	L1519114-09	R143421	08/13/15	19:27
09	S-157-J1	L1519114-10	R143422	08/13/15	19:59
10	S-157-J2	L1519114-11	R143423	08/13/15	20:31
11	SG-2	L1519114-02	R143427	08/13/15	22:40
12	SG-4	L1519114-04	R143429	08/13/15	23:44
13	SG-1	L1519114-01	R143435	08/14/15	10:19
14	SG-1DUP	WG811918-5	R143438	08/14/15	11:54

page 1 of 1

FORM V TO15-SIM

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/10/15 07/10/15

Calibration Times: 13:06 17:56

Calibration Files
0.02=R142704.D 0.04=R142705.D 0.1 =R142706.D 0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D
5.0 =R142710.D 10.0=R142711.D 20.0=R142712.D 50.0=R142713.D

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------											
2)		propylene			0.618	0.650	0.582	0.583	0.526	0.497	0.488	0.467	0.5515	12.05
3)		dichlorodifluoromethane	1.454	1.037	1.064	1.348	0.875	1.066	0.839	0.875	0.883	0.654	1.0097	23.96
4)	C	chloromethane		0.661	0.622	0.630	0.605	0.588	0.522	0.507	0.503	0.468	0.5673	12.06
5)		Freon-114	1.647	1.574	1.557	1.681	1.585	1.562	1.390	1.375	1.356	1.201	1.4927	10.27
6)	C	vinyl chloride	0.618	0.597	0.574	0.639	0.592	0.598	0.539	0.523	0.517	0.485	0.5682	8.74
7)	C	1,3-butadiene	0.499	0.465	0.432	0.504	0.449	0.445	0.412	0.400	0.395	0.364	0.4364	10.37
8)	C	bromomethane	0.623	0.577	0.560	0.620	0.556	0.552	0.498	0.486	0.479	0.450	0.5401	11.03
9)	C	chloroethane	0.417	0.343	0.286	0.310	0.277	0.269	0.245	0.238	0.234	0.216	0.2837	21.27
10)		ethanol			0.475	0.421	0.350	0.335	0.316	0.293	0.290	0.259	0.3423	21.18
11)	C	vinyl bromide	0.654	0.603	0.581	0.624	0.585	0.588	0.538	0.526	0.516	0.484	0.5699	9.27
12)		acetone			1.042	0.958	0.891	0.867	0.770	0.745	0.718	0.665	0.8319	15.54
13)		trichlorofluoromethane	1.552	1.448	1.433	1.566	1.450	1.441	1.326	1.290	1.264	1.192	1.3961	8.85
14)		isopropyl alcohol					1.208	1.113	0.953	0.895	0.893	0.833	0.9827	14.89
15)	C	acrylonitrile	0.649	0.540	0.455	0.454	0.424	0.424	0.405	0.395	0.390	0.367	0.4504	18.83
16)	C	1,1-dichloroethene	1.034	0.990	0.939	1.043	0.969	0.959	0.876	0.852	0.835	0.780	0.9278	9.53
17)		tertiary butyl alcohol			1.917	1.391	1.284	1.265	1.096	1.067	1.048	0.985	1.2566	23.95
18)	C	methylene chloride					1.012	0.888	0.702	0.674	0.659	0.609	0.7571	20.79
19)	C	3-chloropropene	0.897	0.759	0.747	0.831	0.777	0.773	0.717	0.695	0.684	0.635	0.7516	10.03
20)	C	carbon disulfide			1.986	1.925	1.709	1.659	1.513	1.466	1.430	1.342	1.6287	14.38
21)		Freon 113	1.293	1.225	1.204	1.302	1.224	1.218	1.114	1.082	1.050	0.986	1.1699	9.07
22)		Halothane	1.140	1.083	0.966	1.195	1.126	1.123	0.916	1.015	0.893	0.866	1.0324	11.30
23)		trans-1,2-dichloroethene	1.090	1.032	0.958	1.132	1.066	1.060	0.985	0.952	0.947	0.886	1.0107	7.63
24)	C	1,1-dichloroethane	1.322	1.246	1.222	1.347	1.258	1.257	1.154	1.121	1.108	1.029	1.2064	8.34
25)	C	MTBE	1.853	1.729	1.713	1.872	1.749	1.723	1.609	1.572	1.553	1.451	1.6824	7.98
26)	C	vinyl acetate			1.675	1.743	1.539	1.559	1.540	1.560	1.566	1.500	1.5853	5.13
27)	C	2-butanone	1.942	1.722	1.675	1.711	1.597	1.594	1.482	1.443	1.435	1.346	1.5947	11.06
28)		cis-1,2-dichloroethene	1.098	1.073	1.092	1.245	1.147	1.128	1.065	1.023	1.004	0.929	1.0803	7.95
29)		Ethyl Acetate			0.260	0.293	0.282	0.274	0.271	0.264	0.263	0.247	0.2694	5.27
30)	C	chloroform	1.612	1.517	1.496	1.656	1.564	1.529	1.415	1.376	1.357	1.267	1.4790	8.29
31)		Tetrahydrofuran			0.977	1.074	0.989	0.986	0.874	0.834	0.819	0.775	0.9159	11.39
32)	C	1,2-dichloroethane	0.995	0.922	0.915	0.964	0.909	0.898	0.829	0.810	0.796	0.748	0.8785	9.01
33)	I	1,4-difluorobenzene	----------ISTD----------											
34)	C	hexane	0.638	0.587	0.583	0.627	0.594	0.576	0.548	0.536	0.526	0.490	0.5705	8.04
35)	s	1,2-dichloroethane-D4	0.257	0.257	0.255	0.253	0.255	0.254	0.258	0.256	0.251	0.251	0.2547	1.00
36)	C	1,1,1-trichloroethane	0.577	0.555	0.532	0.583	0.563	0.554	0.530	0.522	0.520	0.500	0.5437	4.95
37)	C	benzene		0.934	0.865	0.927	0.864	0.851	0.810	0.788	0.780	0.748	0.8408	7.70
38)	C	carbon tetrachloride	0.401	0.393	0.425	0.502	0.502	0.517	0.527	0.528	0.534	0.519	0.4849	11.46
39)		cyclohexane	0.578	0.522	0.499	0.538	0.502	0.501	0.466	0.462	0.454	0.434	0.4954	8.76
40)		dibromomethane	0.500	0.409	0.352	0.366	0.338	0.328	0.312	0.309	0.306	0.294	0.3514	17.72
41)	C	1,2-dichloropropane	0.369	0.336	0.335	0.363	0.346	0.341	0.320	0.318	0.312	0.296	0.3335	6.78
42)		bromodichloromethane	0.640	0.557	0.560	0.638	0.599	0.596	0.590	0.587	0.579	0.565	0.5911	4.91
43)	C	1,4-dioxane		0.229	0.215	0.211	0.203	0.188	0.194	0.184	0.190	0.180	0.1994	8.10

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/10/15 07/10/15

Calibration Times: 13:06 17:56

		Compound	0.02	0.04	0.1	0.2	0.5	1.0	5.0	10.0	20.0	50.0	Avg	%RSD
44)	C	trichloroethene	0.453	0.434	0.423	0.452	0.436	0.428	0.406	0.397	0.390	0.367	0.4187	6.69
45)	C	2,2,4-trimethylpentane	1.700	1.613	1.606	1.719	1.630	1.576	1.518	1.480	1.440	1.349	1.5632	7.44
46)		heptane	0.716	0.635	0.633	0.673	0.625	0.621	0.590	0.571	0.558	0.523	0.6146	9.17
47)	C	cis-1,3-dichloropropene	1.651	1.561	1.587	1.769	1.696	1.686	1.701	1.699	1.716	1.665	1.6731	3.67
48)	C	4-methyl-2-pentanone	0.828	0.797	0.799	0.857	0.827	0.806	0.782	0.774	0.765	0.695	0.7930	5.57
49)		trans-1,3-dichloropropene	0.387	0.373	0.358	0.411	0.404	0.402	0.418	0.419	0.424	0.418	0.4013	5.54
50)	C	1,1,2-trichloroethane	0.360	0.346	0.352	0.388	0.368	0.363	0.349	0.342	0.338	0.325	0.3531	5.04
51)	I	chlorobenzene-D5	----------ISTD----------											
52)	C	toluene		6.399	5.992	6.321	5.914	5.805	5.387	5.377	5.367	5.044	5.7339	8.15
53)	s	toluene-D8	3.982	3.896	3.923	3.936	3.886	3.951	3.869	3.956	3.965	3.919	3.9284	0.93
54)		2-hexanone			3.836	3.840	3.905	3.965	3.811	3.849	3.845	3.434	3.8107	4.19
55)		dibromochloromethane	3.417	3.208	3.163	3.500	3.306	3.342	3.327	3.424	3.505	3.332	3.3525	3.36
56)	C	1,2-dibromoethane	3.015	2.871	2.880	3.182	3.041	3.020	2.939	2.937	2.958	2.812	2.9656	3.55
57)	C	tetrachloroethene	3.102	2.917	2.905	3.132	2.965	2.933	2.748	2.714	2.721	2.559	2.8695	6.33
58)		1,1,1,2-tetrachloroethane	2.509	2.384	2.365	2.579	2.501	2.462	2.385	2.395	2.404	2.260	2.4243	3.72
59)	C	chlorobenzene	5.023	4.861	4.857	5.288	4.962	4.904	4.653	4.608	4.595	4.205	4.7955	6.16
60)	C	ethylbenzene	8.410	7.559	7.432	8.036	7.536	7.470	7.020	7.003	7.035	6.535	7.4037	7.34
61)	C	m+p-xylene	6.385	5.827	5.733	6.221	5.874	5.826	5.470	5.457	5.452	4.901	5.7146	7.41
62)	C	bromoform	3.149	2.851	2.907	3.234	3.199	3.280	3.338	3.504	3.573	3.335	3.2371	7.09
63)	C	styrene	4.517	4.256	4.350	4.695	4.532	4.552	4.404	4.445	4.467	4.139	4.4358	3.57
64)	C	1,1,2,2-tetrachloroethane	4.400	4.040	4.058	4.403	4.130	4.112	4.004	3.961	3.960	3.518	4.0587	6.13
65)	C	o-xylene	6.664	6.315	6.059	6.516	6.074	5.959	5.657	5.511	5.553	4.800	5.9110	9.33
66)		1,2,3-trichloropropane	3.248	3.127	3.059	3.333	3.132	3.132	3.020	3.010	3.017	2.785	3.0862	4.82
67)	s	bromofluorobenzene	2.907	2.879	2.880	2.900	2.874	2.870	2.837	2.924	2.967	2.878	2.8916	1.22
68)	C	isopropylbenzene	9.155	8.291	8.018	8.778	8.185	8.246	7.716	7.713	7.642	6.941	8.0685	7.71
69)		bromobenzene	4.132	4.057	3.927	4.210	4.000	3.929	3.758	3.649	3.709	3.438	3.8811	6.17
70)		4-ethyl toluene	9.406	8.466	8.955	9.672	9.307	9.255	8.913	8.910	8.688	7.759	8.9330	6.10
71)		1,3,5-trimethylbenzene	7.648	7.055	7.044	7.674	7.372	7.328	6.991	6.914	6.648	6.185	7.0859	6.39
72)		tert-butylbenzene	8.102	7.556	7.658	8.251	7.880	7.959	7.485	7.422	7.014	5.935	7.5262	8.85
73)		1,2,4-trimethylbenzene	7.747	6.868	6.994	7.548	7.273	7.300	6.958	6.958	6.550	5.653	6.9850	8.34
74)	C	Benzyl Chloride	4.621	4.518	4.711	4.903	5.011	5.245	5.630	6.029	6.028	5.822	5.2518	11.14
75)		1,3-dichlorobenzene	5.262	5.028	5.203	5.759	5.542	5.565	5.352	5.381	5.081	4.609	5.2782	6.17
76)	C	1,4-dichlorobenzene	5.628	5.273	5.553	5.789	5.690	5.637	5.456	5.440	5.188	4.665	5.4318	6.02
77)		sec-butylbenzene	1.030	0.989	1.029	1.100	1.069	1.065	1.013	0.997	0.944	0.815	1.0052	7.99
78)		p-isopropyltoluene	9.732	8.924	9.288	9.937	9.726	9.640	9.372	9.337	8.546	7.603	9.2107	7.60
79)		1,2-dichlorobenzene	5.349	4.988	5.025	5.433	5.187	5.313	5.140	5.149	4.818	4.607	5.1008	4.93
80)		n-butylbenzene	7.054	6.882	7.494	8.020	8.262	8.422	8.258	8.227	7.371	6.931	7.6922	7.94
81)	C	1,2,4-trichlorobenzene		3.237	3.623	3.482	4.023	4.304	4.885	5.065	3.402	3.612	3.9592	16.70
82)		naphthalene		0.773	0.826	0.759	0.872	0.914	1.071	1.127	0.736	0.842	0.8801	15.55
83)		1,2,3-trichlorobenzene		2.986	3.378	3.138	3.658	3.950	4.538	4.775	2.974	3.400	3.6443	17.99
84)	C	hexachlorobutadiene		3.289	3.440	3.156	3.445	3.592	3.797	3.913	2.586	2.824	3.3380	12.94

FORM VI-TO15-SIM

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date: 08/13/2015 Time: 13:43

Lab File ID: R143413 Init. Calib. Date(s): 07/10/15 07/10/15

Sample No: WG811918-2,3,25 Init. Calib. Times : 13:06 17:56

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	80	0.00
3		dichlorodifluoromethane	1.010	0.773	23.5	74	0.00
4	C	chloromethane	0.567	0.568	-0.2	87	0.00
5		Freon-114	1.493	1.504	-0.7	86	0.00
6	C	vinyl chloride	0.568	0.574	-1.1	85	0.00
7	C	1,3-butadiene	0.436	0.462	-6.0	90	0.00
8	C	bromomethane	0.540	0.529	2.0	85	0.00
9	C	chloroethane	0.284	0.265	6.7	87	0.00
12		acetone	0.832	0.838	-0.7	87	0.00
13		trichlorofluoromethane	1.396	1.388	0.6	84	0.00
15	C	acrylonitrile	0.450	0.413	8.2	82	0.00
16	C	1,1-dichloroethene	0.928	0.917	1.2	84	0.00
18	C	methylene chloride	0.757	0.791	-4.5	90	0.00
21		Freon 113	1.170	1.162	0.7	83	0.00
22		Halothane	1.032	1.119	-8.4	98	0.00
23		trans-1,2-dichloroethene	1.011	0.911	9.9	74	0.00
24	C	1,1-dichloroethane	1.206	1.163	3.6	81	0.00
25	C	MTBE	1.682	1.627	3.3	81	0.00
27	C	2-butanone	1.595	1.480	7.2	80	0.00
28		cis-1,2-dichloroethene	1.080	1.185	-9.7	89	0.00
30	C	chloroform	1.479	1.464	1.0	83	0.00
32	C	1,2-dichloroethane	0.879	0.818	6.9	79	0.00
33	I	1,4-difluorobenzene	1.000	1.000	0.0	84	0.00
36	C	1,1,1-trichloroethane	0.544	0.518	4.8	82	0.00
37	C	benzene	0.841	0.768	8.7	80	0.00
38	C	carbon tetrachloride	0.485	0.504	-3.9	81	0.00
41	C	1,2-dichloropropane	0.334	0.312	6.6	82	0.00
42		bromodichloromethane	0.591	0.570	3.6	81	0.00
43	C	1,4-dioxane	0.199	0.189	5.0	82	0.00
44	C	trichloroethene	0.419	0.398	5.0	83	0.00
47	C	cis-1,3-dichloropropene	1.673	1.700	-1.6	84	0.00
48	C	4-methyl-2-pentanone	0.793	0.743	6.3	80	0.00
49		trans-1,3-dichloropropene	0.401	0.351	12.5	71	0.00
50	C	1,1,2-trichloroethane	0.353	0.348	1.4	84	0.00
51	I	chlorobenzene-D5	1.000	1.000	0.0	80	0.00
52	C	toluene	5.734	5.518	3.8	82	0.00
55		dibromochloromethane	3.353	3.358	-0.1	81	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813SIM\
Data File : R143413.D
Acq On : 13 Aug 2015 1:43 pm
Operator : AIRPIANO1:RY
Sample : WG811918-2,3,250,250
Misc : WG811918,ICAL11251
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 14:05:55 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813SIM\TSIM150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 10:23:19 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
56 C	1,2-dibromoethane	2.966	3.019	-1.8	82	0.00
57 C	tetrachloroethene	2.869	2.814	1.9	82	0.00
58	1,1,1,2-tetrachloroethane	2.424	2.269	6.4	76	0.00
59 C	chlorobenzene	4.796	4.715	1.7	81	0.00
60 C	ethylbenzene	7.404	7.102	4.1	81	0.00
61 C	m+p-xylene	5.715	5.633	1.4	83	0.00
62 C	bromoform	3.237	3.305	-2.1	79	0.00
63 C	styrene	4.436	4.519	-1.9	82	0.00
64 C	1,1,2,2-tetrachloroethane	4.059	4.088	-0.7	82	0.00
65 C	o-xylene	5.911	5.682	3.9	80	0.00
68 C	isopropylbenzene	8.069	7.761	3.8	81	0.00
70	4-ethyl toluene	8.933	8.751	2.0	79	0.00
71	1,3,5-trimethylbenzene	7.086	7.107	-0.3	81	0.00
73	1,2,4-trimethylbenzene	6.985	7.223	-3.4	83	0.00
75	1,3-dichlorobenzene	5.278	5.441	-3.1	81	0.00
76 C	1,4-dichlorobenzene	5.432	5.655	-4.1	83	0.00
77	sec-butylbenzene	10.052	9.666	3.8	76	0.00
78	p-isopropyltoluene	9.211	8.250	10.4	71	0.00
79	1,2-dichlorobenzene	5.101	5.325	-4.4	83	0.00
80	n-butylbenzene	7.692	8.189	-6.5	79	0.00
81 C	1,2,4-trichlorobenzene	3.959	4.901	-23.8	80	0.00
82	naphthalene	8.801	10.351	-17.6	77	0.00
83	1,2,3-trichlorobenzene	3.644	4.397	-20.7	78	0.00
84 C	hexachlorobutadiene	3.338	3.766	-12.8	79	0.00

* Evaluation of CC level amount vs concentration.

FORM VII TO15-SIM

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID (Standard): R143413 Date Analyzed: 08/13/15

Instrument ID : AIRPIANO1 Time Analyzed: 13:43

		IS1 AREA	RT	IS2 AREA	RT	IS3 AREA	RT
	24 HOUR STD	150943	10.20	371929	12.42	68865	16.84
	UPPER LIMIT	211320	10.53	520701	12.75	96411	17.17
	LOWER LIMIT	90566	9.87	223157	12.09	41319	16.51
	EPA SAMPLE NO.						
01	WG811918-3LCS	150943	10.20	371929	12.42	68865	16.84
02	WG811918-4BLANK	141348	10.20	366034	12.42	64913	16.84
03	METHOD BLANK	158060	10.20	385892	12.42	72841	16.84
04	METHOD BLANK AA	139669	10.20	348567	12.42	64467	16.84
05	OUTDOOR CONTROL	131515	10.20	334850	12.42	63993	16.84
06	DUPLICATE	139967	10.20	343026	12.42	65533	16.84
07	S-157-J	138781	10.20	335581	12.42	64492	16.84
08	S-157-J1	125611	10.20	316546	12.42	63568	16.84
09	S-157-J2	133179	10.20	330127	12.42	63470	16.84
10	SG-2	133875	10.20	312720	12.42	62988	16.84
11	SG-4	134155	10.20	315111	12.42	65506	16.84
12	SG-1	141803	10.20	341690	12.42	65111	16.84
13	WG811918-5DUP	125322	10.20	308361	12.42	63343	16.84

IS1 = BROMOCHLOROMETHANE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40 % of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

* Values outside of QC limits.

page 1 of 1 FORM VIII - TO15-SIM

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-01	Date Collected :	08/07/15 07:47
Client ID	: SG-1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/14/15 10:19
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143435	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	0.160	U
64-17-5	Ethanol	4.74	2.50	0.542	8.93	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	2.07	1.00	0.269	4.92	2.38	0.639	
67-63-0	Isopropanol	ND	0.500	0.114	ND	1.23	0.280	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.047	0.200	0.035	0.146	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	0.145	0.500	0.052	0.428	1.47	0.154	J
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
109-99-9	Tetrahydrofuran	0.155	0.500	0.062	0.457	1.47	0.183	J
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	0.183	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	0.227	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-02	Date Collected :	08/07/15 07:10
Client ID	: SG-2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 22:40
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143427	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	0.160	U
64-17-5	Ethanol	3.09	2.50	0.542	5.82	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	1.08	1.00	0.269	2.57	2.38	0.639	
67-63-0	Isopropanol	ND	0.500	0.114	ND	1.23	0.280	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107	U
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	0.078	0.500	0.052	0.230	1.47	0.154	J
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
109-99-9	Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183	U
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	0.183	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	0.227	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-04	Date Collected :	08/07/15 08:14
Client ID	: SG-4	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 23:44
Sample Matrix	: SOIL_VAPOR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143429	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	17.9	0.500	0.093	30.8	0.861	0.160	
64-17-5	Ethanol	3.49	2.50	0.542	6.58	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	ND	1.00	0.269	ND	2.38	0.639	U
67-63-0	Isopropanol	0.859	0.500	0.114	2.11	1.23	0.280	
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.088	0.200	0.035	0.274	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	1.09	0.500	0.052	3.21	1.47	0.154	
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
109-99-9	Tetrahydrofuran	0.120	0.500	0.062	0.354	1.47	0.183	J
110-54-3	n-Hexane	5.52	0.200	0.052	19.5	0.705	0.183	
110-82-7	Cyclohexane	4.03	0.200	0.066	13.9	0.688	0.226	
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	1.38	0.200	0.055	5.66	0.820	0.227	
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-05	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:19
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143417	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	0.160	U
64-17-5	Ethanol	ND	2.50	0.542	ND	4.71	1.02	U
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	ND	1.00	0.269	ND	2.38	0.639	U
67-63-0	Isopropanol	ND	0.500	0.114	ND	1.23	0.280	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107	U
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	ND	0.500	0.052	ND	1.47	0.154	U
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
109-99-9	Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183	U
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	0.183	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	0.227	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-06	Date Collected :	08/07/15 00:00
Client ID	: METHOD BLANK AA	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 17:51
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143418	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	0.160	U
64-17-5	Ethanol	ND	2.50	0.542	ND	4.71	1.02	U
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	ND	1.00	0.269	ND	2.38	0.639	U
67-63-0	Isopropanol	ND	0.500	0.114	ND	1.23	0.280	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107	U
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	ND	0.500	0.052	ND	1.47	0.154	U
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
109-99-9	Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183	U
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	0.183	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	0.227	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-07	Date Collected :	08/08/15 10:47
Client ID	: DUPLICATE	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:55
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143420	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	0.231	0.500	0.093	0.398	0.861	0.160	J
64-17-5	Ethanol	71.2	2.50	0.542	134	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	15.0	1.00	0.269	35.6	2.38	0.639	
67-63-0	Isopropanol	21.1	0.500	0.114	51.9	1.23	0.280	
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.040	0.200	0.035	0.125	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	1.01	0.500	0.052	2.98	1.47	0.154	
141-78-6	Ethyl Acetate	0.307	0.500	0.131	1.11	1.80	0.472	J
109-99-9	Tetrahydrofuran	0.280	0.500	0.062	0.826	1.47	0.183	J
110-54-3	n-Hexane	0.125	0.200	0.052	0.441	0.705	0.183	J
110-82-7	Cyclohexane	0.076	0.200	0.066	0.262	0.688	0.226	J
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	0.213	0.200	0.055	0.873	0.820	0.227	
108-10-1	4-Methyl-2-pentanone	0.144	0.500	0.061	0.590	2.05	0.249	J
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	0.082	0.200	0.078	0.403	0.983	0.381	J
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-08D	Date Collected :	08/08/15 10:52
Client ID	: OUTDOOR CONTROL	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 18:23
Sample Matrix	: AIR	Dilution Factor :	3.333
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143419	Instrument ID	: AIRPIANO1
Sample Amount	: 75.0 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	1.67	0.310	ND	2.87	0.534	U
64-17-5	Ethanol	7.79	8.33	1.81	14.7	15.7	3.41	J
593-60-2	Vinyl bromide	ND	0.667	0.233	ND	2.92	1.02	U
67-64-1	Acetone	4.88	3.33	0.896	11.6	7.91	2.13	
67-63-0	Isopropanol	0.560	1.67	0.380	1.38	4.10	0.934	J
107-05-1	3-Chloropropene	ND	0.667	0.271	ND	2.09	0.848	U
75-15-0	Carbon disulfide	ND	0.667	0.115	ND	2.08	0.358	U
108-05-4	Vinyl acetate	ND	3.33	0.189	ND	11.7	0.665	U
78-93-3	2-Butanone	0.310	1.67	0.174	0.914	4.93	0.513	J
141-78-6	Ethyl Acetate	ND	1.67	0.437	ND	6.02	1.57	U
109-99-9	Tetrahydrofuran	0.353	1.67	0.207	1.04	4.93	0.611	J
110-54-3	n-Hexane	ND	0.667	0.173	ND	2.35	0.610	U
110-82-7	Cyclohexane	1.59	0.667	0.219	5.47	2.30	0.754	
123-91-1	1,4-Dioxane	ND	0.667	0.260	ND	2.40	0.937	U
540-84-1	2,2,4-Trimethylpentane	ND	0.667	0.220	ND	3.12	1.03	U
142-82-5	Heptane	ND	0.667	0.184	ND	2.73	0.754	U
108-10-1	4-Methyl-2-pentanone	ND	1.67	0.202	ND	6.84	0.828	U
591-78-6	2-Hexanone	ND	0.667	0.201	ND	2.73	0.824	U
622-96-8	4-Ethyltoluene	ND	0.667	0.259	ND	3.28	1.27	U
100-44-7	Benzyl chloride	ND	0.667	0.215	ND	3.45	1.11	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-09	Date Collected :	08/08/15 10:47
Client ID	: S-157-J	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:27
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143421	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	0.244	0.500	0.093	0.420	0.861	0.160	J
64-17-5	Ethanol	64.9	2.50	0.542	122	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	13.8	1.00	0.269	32.8	2.38	0.639	
67-63-0	Isopropanol	15.6	0.500	0.114	38.3	1.23	0.280	
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.047	0.200	0.035	0.146	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	0.674	0.500	0.052	1.99	1.47	0.154	
141-78-6	Ethyl Acetate	0.222	0.500	0.131	0.800	1.80	0.472	J
109-99-9	Tetrahydrofuran	0.282	0.500	0.062	0.832	1.47	0.183	J
110-54-3	n-Hexane	0.202	0.200	0.052	0.712	0.705	0.183	
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	0.074	0.200	0.066	0.346	0.934	0.308	J
142-82-5	Heptane	0.196	0.200	0.055	0.803	0.820	0.227	J
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-10	Date Collected :	08/08/15 10:46
Client ID	: S-157-J1	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 19:59
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143422	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	0.326	0.500	0.093	0.561	0.861	0.160	J
64-17-5	Ethanol	86.8	2.50	0.542	164	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	17.7	1.00	0.269	42.0	2.38	0.639	
67-63-0	Isopropanol	24.2	0.500	0.114	59.5	1.23	0.280	
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.042	0.200	0.035	0.131	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	1.02	0.500	0.052	3.01	1.47	0.154	
141-78-6	Ethyl Acetate	0.369	0.500	0.131	1.33	1.80	0.472	J
109-99-9	Tetrahydrofuran	0.314	0.500	0.062	0.926	1.47	0.183	J
110-54-3	n-Hexane	0.145	0.200	0.052	0.511	0.705	0.183	J
110-82-7	Cyclohexane	0.145	0.200	0.066	0.499	0.688	0.226	J
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	0.072	0.200	0.066	0.336	0.934	0.308	J
142-82-5	Heptane	0.205	0.200	0.055	0.840	0.820	0.227	
108-10-1	4-Methyl-2-pentanone	0.219	0.500	0.061	0.897	2.05	0.249	J
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	0.096	0.200	0.078	0.472	0.983	0.381	J
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: L1519114-11	Date Collected :	08/08/15 10:45
Client ID	: S-157-J2	Date Received :	08/11/15
Sample Location	: 181 ELLIOTT STREET	Date Analyzed :	08/13/15 20:31
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143423	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	0.178	0.500	0.093	0.306	0.861	0.160	J
64-17-5	Ethanol	72.9	2.50	0.542	137	4.71	1.02	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
67-64-1	Acetone	15.7	1.00	0.269	37.3	2.38	0.639	
67-63-0	Isopropanol	21.6	0.500	0.114	53.1	1.23	0.280	
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	0.039	0.200	0.035	0.121	0.623	0.107	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	0.861	0.500	0.052	2.54	1.47	0.154	
141-78-6	Ethyl Acetate	0.267	0.500	0.131	0.962	1.80	0.472	J
109-99-9	Tetrahydrofuran	0.237	0.500	0.062	0.699	1.47	0.183	J
110-54-3	n-Hexane	0.126	0.200	0.052	0.444	0.705	0.183	J
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
142-82-5	Heptane	0.197	0.200	0.055	0.807	0.820	0.227	J
108-10-1	4-Methyl-2-pentanone	0.186	0.500	0.061	0.762	2.05	0.249	J
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
622-96-8	4-Ethyltoluene	0.091	0.200	0.078	0.447	0.983	0.381	J
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-4	Date Collected :	NA
Client ID	: WG811916-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
75-45-6	Chlorodifluoromethane	ND	0.200	0.063	ND	0.707	0.221	U
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	0.160	U
74-98-6	Propane	ND	0.500	0.114	ND	0.902	0.206	U
75-71-8	Dichlorodifluoromethane	ND	0.200	0.047	ND	0.989	0.230	U
74-87-3	Chloromethane	ND	0.200	0.096	ND	0.413	0.198	U
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethan	ND	0.200	0.042	ND	1.40	0.293	U
67-56-1	Methanol	ND	5.00	0.736	ND	6.55	0.964	U
75-01-4	Vinyl chloride	ND	0.200	0.053	ND	0.511	0.136	U
106-99-0	1,3-Butadiene	ND	0.200	0.080	ND	0.442	0.177	U
106-97-8	Butane	ND	0.200	0.044	ND	0.475	0.105	U
74-83-9	Bromomethane	ND	0.200	0.070	ND	0.777	0.270	U
75-00-3	Chloroethane	ND	0.200	0.077	ND	0.528	0.202	U
64-17-5	Ethyl Alcohol	ND	2.50	0.542	ND	4.71	1.02	U
75-43-4	Dichlorofluoromethane	ND	0.200	0.057	ND	0.842	0.241	U
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	0.306	U
107-02-8	Acrolein	ND	0.500	0.114	ND	1.15	0.261	U
67-64-1	Acetone	ND	1.00	0.269	ND	2.38	0.639	U
75-05-8	Acetonitrile	ND	0.200	0.076	ND	0.336	0.128	U
75-69-4	Trichlorofluoromethane	ND	0.200	0.042	ND	1.12	0.234	U
67-63-0	iso-Propyl Alcohol	ND	0.500	0.114	ND	1.23	0.280	U
107-13-1	Acrylonitrile	ND	0.500	0.079	ND	1.09	0.171	U
109-66-0	Pentane	ND	0.200	0.048	ND	0.590	0.140	U
60-29-7	Ethyl ether	ND	0.200	0.059	ND	0.606	0.179	U
75-35-4	1,1-Dichloroethene	ND	0.200	0.057	ND	0.793	0.224	U
75-65-0	tert-Butyl Alcohol	ND	0.500	0.060	ND	1.52	0.182	U
75-09-2	Methylene chloride	ND	0.500	0.188	ND	1.74	0.653	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	0.254	U
75-15-0	Carbon disulfide	ND	0.200	0.035	ND	0.623	0.107	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-4	Date Collected :	NA
Client ID	: WG811916-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
76-13-1	1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	0.051	ND	1.53	0.392	U
156-60-5	trans-1,2-Dichloroethene	ND	0.200	0.074	ND	0.793	0.293	U
75-34-3	1,1-Dichloroethane	ND	0.200	0.077	ND	0.809	0.312	U
1634-04-4	Methyl tert butyl ether	ND	0.200	0.045	ND	0.721	0.163	U
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	0.200	U
78-93-3	2-Butanone	ND	0.500	0.052	ND	1.47	0.154	U
156-59-2	cis-1,2-Dichloroethene	ND	0.200	0.059	ND	0.793	0.233	U
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	0.472	U
67-66-3	Chloroform	ND	0.200	0.045	ND	0.977	0.221	U
109-99-9	Tetrahydrofuran	ND	0.500	0.062	ND	1.47	0.183	U
594-20-7	2,2-Dichloropropane	ND	0.200	0.058	ND	0.924	0.269	U
107-06-2	1,2-Dichloroethane	ND	0.200	0.055	ND	0.809	0.223	U
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	0.183	U
108-20-3	Isopropyl Ether	ND	0.200	0.066	ND	0.836	0.274	U
637-92-3	Ethyl-Tert-Butyl-Ether	ND	0.200	0.052	ND	0.836	0.215	U
71-55-6	1,1,1-Trichloroethane	ND	0.200	0.057	ND	1.09	0.311	U
563-58-6	1,1-Dichloropropene	ND	0.200	0.072	ND	0.908	0.325	U
71-43-2	Benzene	ND	0.200	0.054	ND	0.639	0.172	U
56-23-5	Carbon tetrachloride	ND	0.200	0.047	ND	1.26	0.296	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	0.226	U
994-05-8	Tertiary-Amyl Methyl Ether	ND	0.200	0.080	ND	0.836	0.332	U
74-95-3	Dibromomethane	ND	0.200	0.048	ND	1.42	0.338	U
78-87-5	1,2-Dichloropropane	ND	0.200	0.070	ND	0.924	0.322	U
75-27-4	Bromodichloromethane	ND	0.200	0.066	ND	1.34	0.439	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	0.281	U
79-01-6	Trichloroethene	ND	0.200	0.071	ND	1.07	0.382	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	0.308	U
80-62-6	Methyl Methacrylate	ND	0.500	0.148	ND	2.05	0.606	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-4	Date Collected :	NA
Client ID	: WG811916-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	0.227	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.200	0.075	ND	0.908	0.338	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	0.249	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.200	0.069	ND	0.908	0.315	U
79-00-5	1,1,2-Trichloroethane	ND	0.200	0.067	ND	1.09	0.364	U
108-88-3	Toluene	ND	0.200	0.063	ND	0.754	0.237	U
142-28-9	1,3-Dichloropropane	ND	0.200	0.078	ND	0.924	0.359	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	0.248	U
124-48-1	Dibromochloromethane	ND	0.200	0.075	ND	1.70	0.636	U
106-93-4	1,2-Dibromoethane	ND	0.200	0.078	ND	1.54	0.599	U
123-86-4	Butyl Acetate	ND	0.500	0.114	ND	2.38	0.542	U
111-65-9	Octane	ND	0.200	0.042	ND	0.934	0.197	U
127-18-4	Tetrachloroethene	ND	0.200	0.076	ND	1.36	0.514	U
630-20-6	1,1,1,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376	U
108-90-7	Chlorobenzene	ND	0.200	0.079	ND	0.921	0.363	U
100-41-4	Ethylbenzene	ND	0.200	0.056	ND	0.869	0.241	U
179601-23-1	p/m-Xylene	ND	0.400	0.139	ND	1.74	0.604	U
75-25-2	Bromoform	ND	0.200	0.052	ND	2.07	0.541	U
100-42-5	Styrene	ND	0.200	0.080	ND	0.852	0.340	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.200	0.055	ND	1.37	0.376	U
95-47-6	o-Xylene	ND	0.200	0.063	ND	0.869	0.274	U
96-18-4	1,2,3-Trichloropropane	ND	0.200	0.077	ND	1.21	0.462	U
111-84-2	Nonane (C9)	ND	0.200	0.064	ND	1.05	0.338	U
98-82-8	Isopropylbenzene	ND	0.200	0.043	ND	0.983	0.211	U
108-86-1	Bromobenzene	ND	0.200	0.079	ND	0.793	0.313	U
95-49-8	o-Chlorotoluene	ND	0.200	0.049	ND	1.04	0.252	U
103-65-1	n-Propylbenzene	ND	0.200	0.056	ND	0.983	0.275	U
106-43-4	p-Chlorotoluene	ND	0.200	0.076	ND	1.04	0.396	U

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-4	Date Collected :	NA
Client ID	: WG811916-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	0.381	U
108-67-8	1,3,5-Trimethylbenzene	ND	0.200	0.058	ND	0.983	0.287	U
98-06-6	tert-Butylbenzene	ND	0.200	0.040	ND	1.10	0.221	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.200	0.069	ND	0.983	0.341	U
124-18-5	Decane (C10)	ND	0.200	0.048	ND	1.16	0.282	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	0.334	U
541-73-1	1,3-Dichlorobenzene	ND	0.200	0.064	ND	1.20	0.383	U
106-46-7	1,4-Dichlorobenzene	ND	0.200	0.042	ND	1.20	0.251	U
135-98-8	sec-Butylbenzene	ND	0.200	0.073	ND	1.10	0.401	U
99-87-6	p-Isopropyltoluene	ND	0.200	0.061	ND	1.10	0.334	U
95-50-1	1,2-Dichlorobenzene	ND	0.200	0.061	ND	1.20	0.369	U
104-51-8	n-Butylbenzene	ND	0.200	0.064	ND	1.10	0.351	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.200	0.074	ND	1.93	0.719	U
1120-21-4	Undecane	ND	0.200	0.053	ND	1.28	0.338	U
112-40-3	Dodecane (C12)	ND	0.200	0.056	ND	1.39	0.393	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.200	0.061	ND	1.48	0.454	U
91-20-3	Naphthalene	0.048	0.200	0.043	0.252	1.05	0.227	J
87-61-6	1,2,3-Trichlorobenzene	ND	0.200	0.044	ND	1.48	0.324	U
87-68-3	Hexachlorobutadiene	ND	0.200	0.073	ND	2.13	0.781	U

Tentatively Identified Compounds
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-4	Date Collected :	NA
Client ID	: WG811916-4BLANK	Date Received :	NA
Sample Location	:	Date Analyzed :	08/13/15 14:46
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143414	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

Number TICS found: 0

Concentration Units:

CAS Number	Compound Name	RT	EST. CONC.	Qualifier
	NO TENTATIVELY IDENTIFIED COMPOUNDS			J

Form 1
Volatile Organics

Client	: FSL Associates	Lab Number	: L1519114
Project Name	: CUMMINGS BEVERLY	Project Number:	CUMMINGS BEVERLY
Lab ID	: WG811916-5	Date Collected :	08/07/15 07:47
Client ID	: SG-1DUP	Date Received :	08/11/15
Sample Location	:	Date Analyzed :	08/14/15 11:54
Sample Matrix	: AIR	Dilution Factor :	1
Analytical Method	: 48,TO-15	Analyst	: RY
Lab File ID	: R143438	Instrument ID	: AIRPIANO1
Sample Amount	: 250 ml	GC Column	: RTX-1

		ppbV			ug/m3			
CAS NO.	Parameter	Results	RL	MDL	Results	RL	MDL	Qualifier
115-07-1	Propylene	ND	0.500	0.093	ND	0.861	.5	U
64-17-5	Ethyl Alcohol	5.47	2.50	0.542	10.3	4.71	2.5	
593-60-2	Vinyl bromide	ND	0.200	0.070	ND	0.874	.2	U
67-64-1	Acetone	2.30	1.00	0.269	5.46	2.38	1	
67-63-0	iso-Propyl Alcohol	ND	0.500	0.114	ND	1.23	.5	U
107-05-1	3-Chloropropene	ND	0.200	0.081	ND	0.626	.2	U
75-15-0	Carbon disulfide	0.043	0.200	0.035	0.134	0.623	.2	J
108-05-4	Vinyl acetate	ND	1.00	0.057	ND	3.52	1	U
78-93-3	2-Butanone	0.159	0.500	0.052	0.469	1.47	.5	J
141-78-6	Ethyl Acetate	ND	0.500	0.131	ND	1.80	.5	U
109-99-9	Tetrahydrofuran	0.135	0.500	0.062	0.398	1.47	.5	J
110-54-3	n-Hexane	ND	0.200	0.052	ND	0.705	.2	U
110-82-7	Cyclohexane	ND	0.200	0.066	ND	0.688	.2	U
123-91-1	1,4-Dioxane	ND	0.200	0.078	ND	0.721	.2	U
540-84-1	2,2,4-Trimethylpentane	ND	0.200	0.066	ND	0.934	.2	U
142-82-5	Heptane	ND	0.200	0.055	ND	0.820	.2	U
108-10-1	4-Methyl-2-pentanone	ND	0.500	0.061	ND	2.05	.5	U
591-78-6	2-Hexanone	ND	0.200	0.060	ND	0.820	.2	U
622-96-8	4-Ethyltoluene	ND	0.200	0.078	ND	0.983	.2	U
100-44-7	Benzyl chloride	ND	0.200	0.065	ND	1.04	.2	U

3

LAB DUPLICATE

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs
SDG No.: L1519114 Matrix: Air
Lab Sample ID : WG811916-5 Injected: 08/14/15 11:54 Lab File ID: R143438
Client Sample ID : SG-1

COMPOUND	SAMPLE CONCENTRATION (ppbV)	DUP CONCENTRATION (ppbV)	DUP % RPD	DUP RPD LIMIT
Propylene	ND	ND	NC	25
Ethanol	4.74	5.47	14	25
Vinyl bromide	ND	ND	NC	25
Acetone	2.07	2.30	11	25
Isopropanol	ND	ND	NC	25
3-Chloropropene	ND	ND	NC	25
Carbon disulfide	0.047J	0.043J	NC	25
Vinyl acetate	ND	ND	NC	25
2-Butanone	0.145J	0.159J	NC	25
Ethyl Acetate	ND	ND	NC	25
Tetrahydrofuran	0.155J	0.135J	NC	25
n-Hexane	ND	ND	NC	25
Cyclohexane	ND	ND	NC	25
1,4-Dioxane	ND	ND	NC	25
2,2,4-Trimethylpentane	ND	ND	NC	25
Heptane	ND	ND	NC	25
4-Methyl-2-pentanone	ND	ND	NC	25
2-Hexanone	ND	ND	NC	25
4-Ethyltoluene	ND	ND	NC	25
Benzyl chloride	ND	ND	NC	25

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Control Sample: WG811916-3LCS Injected: 08/13/15 13:12 Lab File ID: R143412

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Chlorodifluoromethane	10	NA	9.03	90	-	-	-		70-130
Propylene	10	NA	10.6	106	-	-	-		70-130
Propane	10	NA	7.76	78	-	-	-		70-130
Dichlorodifluoromethane	10	NA	8.64	86	-	-	-		70-130
Chloromethane	10	NA	10.2	102	-	-	-		70-130
Freon-114	10	NA	10.5	105	-	-	-		70-130
Methanol	50	NA	46.5	93	-	-	-		70-130
Vinyl chloride	10	NA	10.4	104	-	-	-		70-130
1,3-Butadiene	10	NA	11.2	112	-	-	-		70-130
Butane	10	NA	9.24	92	-	-	-		70-130
Bromomethane	10	NA	10.0	100	-	-	-		70-130
Chloroethane	10	NA	10.0	100	-	-	-		70-130
Ethanol	50	NA	49.6	99	-	-	-		70-130
Dichlorofluoromethane	10	NA	9.44	94	-	-	-		70-130
Vinyl bromide	10	NA	10.1	101	-	-	-		70-130
Acrolein	10	NA	10.2	102	-	-	-		70-130
Acetone	50	NA	51.4	103	-	-	-		70-130
Acetonitrile	10	NA	9.74	97	-	-	-		70-130
Trichlorofluoromethane	10	NA	9.92	99	-	-	-		70-130
Isopropanol	10	NA	10.9	109	-	-	-		70-130
Acrylonitrile	10	NA	10.1	101	-	-	-		70-130
Pentane	10	NA	9.35	94	-	-	-		70-130
Ethyl ether	10	NA	9.64	96	-	-	-		70-130
1,1-Dichloroethene	10	NA	9.93	99	-	-	-		70-130
Tertiary butyl Alcohol	10	NA	9.50	95	-	-	-		70-130
Methylene chloride	10	NA	10.4	104	-	-	-		70-130
3-Chloropropene	10	NA	10.4	104	-	-	-		70-130
Carbon disulfide	10	NA	9.94	99	-	-	-		70-130
Freon-113	10	NA	10.4	104	-	-	-		70-130
trans-1,2-Dichloroethene	10	NA	8.59	86	-	-	-		70-130
1,1-Dichloroethane	10	NA	8.99	90	-	-	-		70-130
Methyl tert butyl ether	10	NA	9.86	99	-	-	-		70-130
Vinyl acetate	10	NA	10.9	109	-	-	-		70-130
2-Butanone	10	NA	9.71	97	-	-	-		70-130
cis-1,2-Dichloroethene	10	NA	10.9	109	-	-	-		70-130
Ethyl Acetate	10	NA	9.93	99	-	-	-		70-130
Chloroform	10	NA	10.0	100	-	-	-		70-130
Tetrahydrofuran	10	NA	9.42	94	-	-	-		70-130
2,2-Dichloropropane	10	NA	9.01	90	-	-	-		70-130
1,2-Dichloroethane	10	NA	9.74	97	-	-	-		70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Control Sample: WG811916-3LCS Injected: 08/13/15 13:12 Lab File ID: R143412

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
n-Hexane	10	NA	9.26	93	-	-	-		70-130
Diisopropyl Ether	10	NA	9.17	92	-	-	-		70-130
tert-Butyl ethyl ether	10	NA	8.90	89	-	-	-		70-130
1,1,1-Trichloroethane	10	NA	9.56	96	-	-	-		70-130
1,1-Dichloropropene	10	NA	9.14	91	-	-	-		70-130
Benzene	10	NA	9.40	94	-	-	-		70-130
Carbon tetrachloride	10	NA	10.1	101	-	-	-		70-130
Cyclohexane	10	NA	9.53	95	-	-	-		70-130
tert-amyl methyl ether	10	NA	9.02	90	-	-	-		70-130
Dibromomethane	10	NA	9.12	91	-	-	-		70-130
1,2-Dichloropropane	10	NA	9.56	96	-	-	-		70-130
Bromodichloromethane	10	NA	9.49	95	-	-	-		70-130
1,4-Dioxane	10	NA	10.1	101	-	-	-		70-130
Trichloroethene	10	NA	9.63	96	-	-	-		70-130
2,2,4-Trimethylpentane	10	NA	9.30	93	-	-	-		70-130
Methyl Methacrylate	10	NA	8.68	87	-	-	-		70-130
Heptane	10	NA	9.09	91	-	-	-		70-130
cis-1,3-Dichloropropene	10	NA	10.1	101	-	-	-		70-130
4-Methyl-2-pentanone	10	NA	9.40	94	-	-	-		70-130
trans-1,3-Dichloropropen	10	NA	8.74	87	-	-	-		70-130
1,1,2-Trichloroethane	10	NA	9.84	98	-	-	-		70-130
Toluene	10	NA	10.0	100	-	-	-		70-130
1,3-Dichloropropane	10	NA	9.33	93	-	-	-		70-130
2-Hexanone	10	NA	9.94	99	-	-	-		70-130
Dibromochloromethane	10	NA	10.3	103	-	-	-		70-130
1,2-Dibromoethane	10	NA	10.4	104	-	-	-		70-130
Butyl Acetate	10	NA	9.89	99	-	-	-		70-130
Octane	10	NA	9.18	92	-	-	-		70-130
Tetrachloroethene	10	NA	10.2	102	-	-	-		70-130
1,1,1,2-Tetrachloroethan	10	NA	9.62	96	-	-	-		70-130
Chlorobenzene	10	NA	10.0	100	-	-	-		70-130
Ethylbenzene	10	NA	9.98	100	-	-	-		70-130
p/m-Xylene	20	NA	20.3	102	-	-	-		70-130
Bromoform	10	NA	10.4	104	-	-	-		70-130
Styrene	10	NA	10.2	102	-	-	-		70-130
1,1,2,2-Tetrachloroethan	10	NA	10.6	106	-	-	-		70-130
o-Xylene	10	NA	10.4	104	-	-	-		70-130
1,2,3-Trichloropropane	10	NA	9.46	95	-	-	-		70-130
Nonane	10	NA	9.16	92	-	-	-		70-130
Isopropylbenzene	10	NA	9.98	100	-	-	-		70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

3

LAB CONTROL SAMPLE RECOVERY

AIR VOLATILE ORGANICS

Lab Name: Alpha Analytical Labs

SDG No.: L1519114 Matrix: Air

Lab Control Sample: WG811916-3LCS Injected: 08/13/15 13:12 Lab File ID: R143412

COMPOUND	SPIKE ADDED ppbV	SAMPLE CONC ppbV	LCS CONC ppbV	LCS % REC	LCSD CONC ppbV	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC.
Bromobenzene	10	NA	9.48	95	-	-	-		70-130
2-Chlorotoluene	10	NA	9.24	92	-	-	-		70-130
n-Propylbenzene	10	NA	9.55	96	-	-	-		70-130
4-Chlorotoluene	10	NA	9.44	94	-	-	-		70-130
4-Ethyltoluene	10	NA	9.42	94	-	-	-		70-130
1,3,5-Trimethylbenzene	10	NA	10.1	101	-	-	-		70-130
tert-Butylbenzene	10	NA	9.79	98	-	-	-		70-130
1,2,4-Trimethylbenzene	10	NA	10.6	106	-	-	-		70-130
Decane	10	NA	9.65	96	-	-	-		70-130
Benzyl chloride	10	NA	10.1	101	-	-	-		70-130
1,3-Dichlorobenzene	10	NA	10.5	105	-	-	-		70-130
1,4-Dichlorobenzene	10	NA	10.5	105	-	-	-		70-130
sec-Butylbenzene	10	NA	9.88	99	-	-	-		70-130
p-Isopropyltoluene	10	NA	9.32	93	-	-	-		70-130
1,2-Dichlorobenzene	10	NA	10.6	106	-	-	-		70-130
n-Butylbenzene	10	NA	10.3	103	-	-	-		70-130
1,2-Dibromo-3-chloroprop	10	NA	9.64	96	-	-	-		70-130
Undecane	10	NA	10.5	105	-	-	-		70-130
Dodecane	10	NA	13.0	130	-	-	-		70-130
1,2,4-Trichlorobenzene	10	NA	12.2	122	-	-	-		70-130
Naphthalene	10	NA	11.6	116	-	-	-		70-130
1,2,3-Trichlorobenzene	10	NA	11.8	118	-	-	-		70-130
Hexachlorobutadiene	10	NA	11.6	116	-	-	-		70-130

* Values outside of QC limits.

COMMENTS: _____

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FORM III TO15-LL

4A

VOLATILE ORGANICS METHOD BLANK SUMMARY

SAMPLE NO.

WG811916-4BLANK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143414 Lab Sample ID: WG811916-4

Date Analyzed: 08/13/15 Time Analyzed: 14:46

Instrument ID: AIRPIANO1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	WG811916-3LCS	WG811916-3	R143412	08/13/15 13:12
02	METHOD BLANK	L1519114-05	R143417	08/13/15 17:19
03	METHOD BLANK AA	L1519114-06	R143418	08/13/15 17:51
04	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15 18:23
05	DUPLICATE	L1519114-07	R143420	08/13/15 18:55
06	S-157-J	L1519114-09	R143421	08/13/15 19:27
07	S-157-J1	L1519114-10	R143422	08/13/15 19:59
08	S-157-J2	L1519114-11	R143423	08/13/15 20:31
09	SG-2	L1519114-02	R143427	08/13/15 22:40
10	SG-4	L1519114-04	R143429	08/13/15 23:44
11	SG-1	L1519114-01	R143435	08/14/15 10:19
12	SG-1DUP	WG811916-5	R143438	08/14/15 11:54

COMMENTS: _____

page 1 of 1

FORM IV TO15-LL LOW

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R142703_tune BFB Injection Date: 07/10/15

Instrument ID: AIRPIANO1 BFB Injection Time: 12:25

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	18.1
75	30.0 - 66.0% of mass 95	41.7
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	100.8
175	4.0 - 9.0% of mass 174	7.2 (7.1)1
176	93.0 - 101% of mass 174	94.5 (93.8)1
177	5.0 - 9.0% of mass 176	6.1 (6.5)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0.2	0.2	R142707	07/10/15	14:43
02	0.5	0.5	R142708	07/10/15	15:14
03	1.0	1.0	R142709	07/10/15	15:48
04	5.0	5.0	R142710	07/10/15	16:19
05	10	10	R142711	07/10/15	16:53
06	20	20	R142712	07/10/15	17:25
07	50.0	50.0	R142713	07/10/15	17:56
08	100.0	100.0	R142714	07/10/15	18:30
09	ICV QUANT REPORT	ICV QUANT REPO	R142717	07/11/15	09:13

page 1 of 1

FORM V TO15-LL

5A
VOLATILE ORGANICS INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID: R143410_tune BFB Injection Date: 08/13/15

Instrument ID: AIRPIANO1 BFB Injection Time: 12:07

m/e	ION ABUNDANCE CRITERIA	% Relative Abundance
50	8.0 - 40.0% of mass 95	17.9
75	30.0 - 66.0% of mass 95	42.4
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0 (0)1
174	50.0 - 120.0% of mass 95	104.7
175	4.0 - 9.0% of mass 174	7.2 (6.8)1
176	93.0 - 101% of mass 174	98.2 (93.7)1
177	5.0 - 9.0% of mass 176	6.4 (6.5)2

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

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	WG811916-2	R143412	08/13/15	13:12
02	WG811916-3LCS	WG811916-3	R143412	08/13/15	13:12
03	WG811916-4BLANK	WG811916-4	R143414	08/13/15	14:46
04	METHOD BLANK	L1519114-05	R143417	08/13/15	17:19
05	METHOD BLANK AA	L1519114-06	R143418	08/13/15	17:51
06	OUTDOOR CONTROL	L1519114-08D	R143419	08/13/15	18:23
07	DUPLICATE	L1519114-07	R143420	08/13/15	18:55
08	S-157-J	L1519114-09	R143421	08/13/15	19:27
09	S-157-J1	L1519114-10	R143422	08/13/15	19:59
10	S-157-J2	L1519114-11	R143423	08/13/15	20:31
11	SG-2	L1519114-02	R143427	08/13/15	22:40
12	SG-4	L1519114-04	R143429	08/13/15	23:44
13	SG-1	L1519114-01	R143435	08/14/15	10:19
14	SG-1DUP	WG811916-5	R143438	08/14/15	11:54

FORM V TO15-LL

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/10/15 07/10/15

Calibration Times: 14:43 18:30

Calibration Files
0.2 =R142707.D 0.5 =R142708.D 1.0 =R142709.D 5.0 =R142710.D 10 =R142711.D 20 =R142712.D
50 =R142713.D 100 =R142714.D

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
1)	I	bromochloromethane	----------ISTD----------									
2)		chlorodifluoromethane	1.103	1.052	0.955	0.897	0.875	0.865	0.835	0.752	0.9168	12.56
3)		propylene		0.505	0.507	0.462	0.434	0.430	0.418	0.374	0.4468	10.74
4)		propane		0.602	0.526	0.415	0.409	0.414	0.377	0.329	0.4390	21.26
5)		dichlorodifluoromethane	1.210	0.843	1.027	0.786	0.827	0.836	0.630	0.620	0.8474	23.04
6)	C	chloromethane	0.579	0.570	0.583	0.484	0.477	0.470	0.439	0.402	0.5007	13.72
7)		Freon-114	1.535	1.535	1.505	1.332	1.307	1.288	1.144	1.040	1.3358	13.73
8)	C	methanol			0.183	0.145	0.136	0.133	0.121	0.107	0.1374	18.95
9)	C	vinyl chloride	0.551	0.553	0.561	0.506	0.499	0.491	0.466	0.421	0.5059	9.52
10)	C	1,3-butadiene	0.420	0.425	0.400	0.374	0.371	0.367	0.342	0.305	0.3756	10.63
11)		butane	1.200	0.933	0.879	0.759	0.702	0.701	0.647	0.558	0.7974	25.42
12)	C	acetaldehyde	0.333	0.258	0.244	0.202	0.193	0.189	0.164	0.135	0.2147	28.80
13)	C	bromomethane	0.665	0.593	0.564	0.509	0.479	0.474	0.450	0.407	0.5176	16.27
14)	C	chloroethane	0.310	0.275	0.285	0.242	0.228	0.225	0.211	0.193	0.2463	16.31
15)		ethanol		0.331	0.307	0.294	0.268	0.270	0.241	0.203	0.2736	15.53
16)		dichlorofluoromethane	1.215	1.143	1.097	0.991	0.960	0.958	0.904	0.819	1.0108	12.98
17)	C	vinyl bromide	0.625	0.592	0.575	0.532	0.516	0.513	0.485	0.437	0.5345	11.38
18)	C	acrolein	0.208	0.219	0.223	0.219	0.206	0.203	0.192	0.176	0.2058	7.67
19)		acetone	0.941	0.861	0.813	0.715	0.694	0.668	0.622	0.536	0.7312	18.13
20)	C	acetonitrile	0.636	0.509	0.513	0.433	0.419	0.409	0.374	0.326	0.4524	21.46
21)		trichlorofluoromethane	1.697	1.464	1.431	1.292	1.270	1.241	1.173	1.065	1.3292	14.80
22)		isopropyl alcohol		1.121	1.098	0.897	0.846	0.836	0.785	0.706	0.8984	17.34
23)	C	acrylonitrile	0.384	0.473	0.442	0.377	0.374	0.370	0.352	0.324	0.3869	12.37
24)		pentane	1.332	1.081	0.971	0.869	0.823	0.796	0.763	0.677	0.9140	22.98
25)		ethyl ether	0.630	0.613	0.552	0.537	0.505	0.491	0.449	0.395	0.5217	15.16
26)	C	1,1-dichloroethene	1.012	0.922	0.920	0.841	0.800	0.793	0.742	0.670	0.8377	13.14
27)		tertiary butyl alcohol		1.215	1.218	1.046	1.004	0.982	0.938	0.851	1.0362	13.23
28)	C	methylene chloride		0.908	0.830	0.656	0.631	0.627	0.580	0.517	0.6782	20.58
29)	C	3-chloropropene	0.933	0.805	0.768	0.674	0.653	0.642	0.602	0.531	0.7010	18.22
30)	C	carbon disulfide	1.842	1.628	1.556	1.457	1.414	1.379	1.306	1.153	1.4669	14.33
31)		Freon 113	1.256	1.233	1.219	1.093	1.070	1.034	0.982	0.870	1.0947	12.36
32)		trans-1,2-dichloroethene	1.006	0.973	0.960	0.918	0.894	0.883	0.833	0.662	0.8911	12.10
33)	C	1,1-dichloroethane	1.327	1.164	1.197	1.085	1.052	1.045	0.977	0.891	1.0923	12.44
34)	C	MTBE	1.696	1.663	1.629	1.480	1.456	1.441	1.358	1.248	1.4963	10.45
35)	C	vinyl acetate	1.868	1.528	1.506	1.432	1.457	1.458	1.406	1.291	1.4933	11.21
36)	C	2-butanone	1.711	1.556	1.518	1.393	1.344	1.342	1.259	1.137	1.4075	12.88
37)		cis-1,2-dichloroethene	1.221	1.067	1.047	1.010	0.979	0.996	0.919	0.845	1.0106	10.95
38)		Ethyl Acetate	0.298	0.279	0.270	0.258	0.256	0.257	0.245	0.218	0.2601	9.04
39)	C	chloroform	1.723	1.619	1.576	1.416	1.405	1.395	1.307	1.171	1.4514	12.30
40)		Tetrahydrofuran	0.924	0.950	0.959	0.822	0.771	0.770	0.733	0.657	0.8233	13.44
41)		2,2-dichloropropane	1.416	1.374	1.344	1.169	1.146	1.152	1.087	0.982	1.2086	12.63
42)	C	1,2-dichloroethane	0.864	0.849	0.817	0.769	0.747	0.743	0.702	0.643	0.7666	9.79
43)	I	1,4-difluorobenzene	----------ISTD----------									

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/10/15 07/10/15

Calibration Times: 14:43 18:30

	Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
44) C	hexane	0.753	0.607	0.592	0.585	0.565	0.559	0.512	0.494	0.5834	13.50
45)	diisopropyl ether	0.300	0.279	0.262	0.255	0.245	0.244	0.232	0.226	0.2554	9.63
46)	tert-butyl ethyl ether	0.984	0.896	0.912	0.856	0.831	0.805	0.784	0.770	0.8547	8.50
47) s	1,2-dichloroethane-D4	0.254	0.253	0.259	0.268	0.259	0.249	0.254	0.253	0.2560	2.30
48) C	1,1,1-trichloroethane	0.616	0.564	0.570	0.543	0.526	0.523	0.505	0.506	0.5441	6.99
49)	1,1-dichloropropene	0.423	0.418	0.398	0.400	0.388	0.377	0.357	0.368	0.3910	5.97
50) C	benzene	0.931	0.889	0.864	0.822	0.785	0.780	0.752	0.732	0.8195	8.55
51)	thiophene	0.533	0.532	0.549	0.521	0.507	0.502	0.484	0.468	0.5120	5.28
52) C	carbon tetrachloride	0.522	0.532	0.552	0.556	0.562	0.560	0.548	0.539	0.5465	2.56
53)	cyclohexane	0.471	0.502	0.508	0.467	0.463	0.455	0.436	0.424	0.4656	6.25
54)	tert-amyl methyl ether	0.786	0.774	0.777	0.751	0.721	0.713	0.687	0.665	0.7342	6.09
55)	dibromomethane	0.413	0.356	0.343	0.327	0.326	0.322	0.310	0.304	0.3376	10.28
56) C	1,2-dichloropropane	0.347	0.345	0.348	0.329	0.323	0.314	0.302	0.289	0.3248	6.83
57)	bromodichloromethane	0.703	0.652	0.636	0.620	0.608	0.596	0.584	0.571	0.6214	6.84
58) C	1,4-dioxane	0.166	0.192	0.179	0.194	0.188	0.189	0.182	0.173	0.1828	5.35
59) C	trichloroethene	0.504	0.456	0.428	0.435	0.415	0.411	0.390	0.369	0.4260	9.75
60) C	2,2,4-trimethylpentane	1.801	1.707	1.608	1.547	1.499	1.465	1.384	1.295	1.5382	10.79
61)	methyl methacrylate	0.486	0.439	0.426	0.407	0.403	0.404	0.386	0.370	0.4152	8.65
62)	heptane	0.712	0.697	0.614	0.604	0.585	0.570	0.534	0.502	0.6022	12.13
63) C	cis-1,3-dichloropropene	0.408	0.440	0.423	0.423	0.429	0.428	0.421	0.416	0.4237	2.24
64) C	4-methyl-2-pentanone	0.804	0.891	0.815	0.808	0.777	0.772	0.699	0.674	0.7800	8.79
65)	trans-1,3-dichloropropene	0.355	0.379	0.407	0.421	0.420	0.426	0.423	0.425	0.4071	6.41
66) C	1,1,2-trichloroethane	0.391	0.380	0.366	0.364	0.355	0.349	0.334	0.326	0.3582	6.08
67) I	chlorobenzene-D5	----------ISTD----------									
68) C	toluene	6.192	6.247	5.772	5.458	5.464	5.429	5.212	4.953	5.5908	8.10
69) s	toluene-D8	3.992	4.043	4.001	3.944	4.040	4.037	4.104	4.027	4.0235	1.15
70)	2-methylthiophene	5.194	4.922	4.967	4.483	4.514	4.507	4.383	4.128	4.6371	7.65
71)	1,3-dichloropropane	2.590	2.427	2.350	2.275	2.286	2.277	2.204	2.099	2.3135	6.38
72)	2-hexanone	4.268	4.054	4.117	3.840	3.940	3.889	3.538	2.984	3.8287	10.55
73)	3-methylthiophene	5.380	5.141	5.067	4.633	4.664	4.749	4.503	4.086	4.7779	8.55
74)	dibromochloromethane	3.727	3.595	3.633	3.646	3.748	3.795	3.687	3.553	3.6730	2.22
75) C	1,2-dibromoethane	3.297	3.026	3.119	3.100	3.075	3.064	3.005	2.844	3.0662	4.13
76)	butyl acetate	0.372	0.451	0.534	0.507	0.530	0.525	0.501	0.478	0.4873	11.14
77)	octane	1.704	1.582	1.547	1.419	1.426	1.409	1.373	1.280	1.4677	9.18
78) C	tetrachloroethene	3.551	3.334	3.128	2.978	3.002	2.961	2.850	2.630	3.0543	9.34
79)	1,1,1,2-tetrachloroethane	2.623	2.569	2.582	2.453	2.501	2.496	2.398	2.184	2.4757	5.59
80) C	chlorobenzene	5.350	5.018	4.948	4.588	4.645	4.636	4.350	3.913	4.6809	9.36
81) C	ethylbenzene	8.264	7.726	7.482	7.067	7.108	7.098	6.738	6.187	7.2087	8.72
82)	2-ethylthiophene	5.756	5.807	5.641	5.267	5.252	5.341	5.056	4.646	5.3457	7.27
83) C	m+p-xylene	6.271	5.962	5.790	5.453	5.526	5.483	5.096	4.560	5.5175	9.54
84) C	bromoform	3.777	3.677	3.820	3.863	4.063	4.151	3.928	3.564	3.8554	5.00
85) C	styrene	4.782	4.563	4.607	4.432	4.478	4.511	4.298	3.929	4.4500	5.67
86) C	1,1,2,2-tetrachloroethane	4.739	4.433	4.248	4.191	4.174	4.158	3.731	3.141	4.1018	11.71
87) C	o-xylene	6.403	6.059	5.988	5.665	5.576	5.651	5.023	4.348	5.5892	11.54
88)	1,2,3-trichloropropane	3.213	3.140	3.131	3.028	3.058	3.035	2.890	2.701	3.0245	5.36
89)	nonane	5.369	4.928	4.766	4.520	4.499	4.375	3.813	3.081	4.4188	15.90
90) s	bromofluorobenzene	2.887	2.913	2.906	2.862	2.924	2.962	2.921	2.926	2.9127	1.02

6A

VOLATILE ORGANICS ORGANICS INITIAL CALIBRATION DATA

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date(s): 07/10/15 07/10/15

Calibration Times: 14:43 18:30

		Compound	0.2	0.5	1.0	5.0	10	20	50	100	Avg	%RSD
91)	C	isopropylbenzene	8.909	8.285	8.147	7.789	7.832	7.728	7.204	6.607	7.8128	8.88
92)		bromobenzene	4.395	4.000	3.893	3.756	3.699	3.733	3.541	3.251	3.7836	8.85
93)		2-chlorotoluene	2.676	2.463	2.361	2.273	2.281	2.255	2.115	1.896	2.2901	10.06
94)		n-propylbenzene	2.737	2.444	2.493	2.355	2.328	2.308	2.127	1.818	2.3264	11.60
95)		4-chlorotoluene	6.629	6.416	6.137	5.899	5.768	5.733	5.428	4.912	5.8652	9.31
96)		4-ethyl toluene	9.567	9.343	9.208	8.887	9.004	8.784	8.123	7.202	8.7647	8.73
97)		1,3,5-trimethylbenzene	7.912	7.442	7.285	6.937	6.951	6.679	6.417	5.754	6.9220	9.56
98)		tert-butylbenzene	8.729	8.247	8.034	7.516	7.564	7.188	6.456	5.533	7.4084	13.83
99)		1,2,4-trimethylbenzene	7.606	7.361	7.331	6.943	7.052	6.614	6.027	5.097	6.7539	12.32
100)		decane	4.999	4.885	5.019	4.775	4.691	4.399	4.077	3.363	4.5260	12.54
101)	C	Benzyl Chloride	4.956	5.179	5.334	5.623	6.076	6.072	6.056	5.589	5.6106	7.74
102)		1,3-dichlorobenzene	5.746	5.659	5.733	5.420	5.526	5.192	4.813	4.170	5.2821	10.38
103)	C	1,4-dichlorobenzene	5.709	5.864	5.782	5.568	5.508	5.296	4.900	4.224	5.3564	10.29
104)		sec-butylbenzene	1.120	1.097	1.065	1.022	1.012	0.954	0.866	0.713	0.9812	13.80
105)		1,2,3-trimethylbenzene	6.855	6.724	6.665	6.256	6.158	5.908	5.537	4.773	6.1095	11.44
106)		p-isopropyltoluene	9.834	9.862	9.776	9.434	9.498	8.656	8.224	6.999	9.0354	11.22
107)		1,2-dichlorobenzene	5.398	5.456	5.461	5.215	5.263	4.929	4.840	4.353	5.1145	7.53
108)		n-butylbenzene	8.265	8.467	8.428	8.318	8.329	7.527	7.295	6.478	7.8883	9.11
109)		indan	7.407	7.684	7.437	6.955	6.992	6.724	6.463	5.681	6.9180	9.26
110)		indene	4.732	4.770	4.816	4.625	4.663	4.571	4.514	4.164	4.6069	4.46
111)	C	1,2-dibromo-3-chloropropane	1.761	1.839	1.812	1.881	1.980	1.745	1.869	1.763	1.8315	4.31
112)		undecane	4.455	5.081	5.274	5.640	5.736	4.489	4.598	3.862	4.8918	13.28
113)		1,2,4,5-tetramethylbenzene	1.157	1.230	1.229	1.233	1.240	0.986	1.050	0.940	1.1332	10.87
114)		dodecane	2.165	2.996	4.182	6.092	6.424	3.795	3.801	3.077	4.0664	36.67#
115)	C	1,2,4-trichlorobenzene	3.488	3.982	4.274	4.986	5.253	3.545	3.914	3.702	4.1430	15.85
116)		naphthalene	0.722	0.869	0.928	1.072	1.148	0.734	0.880	0.882	0.9045	16.34
117)		1,2,3-trichlorobenzene	3.054	3.685	4.083	4.632	4.983	3.050	3.631	3.758	3.8596	17.80
118)		benzothiophene	6.909	8.033	8.573	9.253	9.906	7.142	8.613	8.620	8.3810	11.98
119)	C	hexachlorobutadiene	3.246	3.766	3.915	4.230	4.398	2.913	3.297	3.120	3.6106	15.09
120)		2-methylnaphthalene			1.867	3.752	4.541	2.748	3.375	3.902	3.3639	28.03
121)		1-methylnaphthalene			2.622	3.499	3.937	2.681	3.248	3.705	3.2822	16.43

FORM VI-TO15-LL

7A
Volatile Organics CONTINUING CALIBRATION CHECK

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Instrument ID: AIRPIANO1 Calibration Date: 08/13/2015 Time: 13:12

Lab File ID: R143412 Init. Calib. Date(s): 07/10/15 07/10/15

Sample No: WG811916-2,3,25 Init. Calib. Times : 14:43 18:30

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	bromochloromethane	1.000	1.000	0.0	82	0.00
2		chlorodifluoromethane	0.917	0.828	9.7	77	0.00
3		propylene	0.447	0.474	-6.0	89	0.00
4		propane	0.439	0.341	22.3	68	0.00
5		dichlorodifluoromethane	0.847	0.732	13.6	72	0.00
6	C	chloromethane	0.501	0.509	-1.6	87	0.00
7		Freon-114	1.336	1.403	-5.0	88	-0.01
8	C	methanol	0.137	0.128	6.6	77	0.00
9	C	vinyl chloride	0.506	0.526	-4.0	86	0.00
10	C	1,3-butadiene	0.376	0.422	-12.2	93	0.00
11		butane	0.797	0.737	7.5	86	-0.01
13	C	bromomethane	0.518	0.519	-0.2	89	0.00
14	C	chloroethane	0.246	0.247	-0.4	89	0.00
15		ethanol	0.274	0.271	1.1	83	0.00
16		dichlorofluoromethane	1.011	0.954	5.6	81	0.00
17	C	vinyl bromide	0.534	0.538	-0.7	85	0.00
18	C	acrolein	0.206	0.211	-2.4	84	0.00
19		acetone	0.731	0.752	-2.9	89	0.00
20	C	acetonitrile	0.452	0.441	2.4	86	0.00
21		trichlorofluoromethane	1.329	1.319	0.8	85	0.00
22		isopropyl alcohol	0.898	0.978	-8.9	95	0.00
23	C	acrylonitrile	0.387	0.391	-1.0	86	0.00
24		pentane	0.914	0.855	6.5	85	0.00
25		ethyl ether	0.522	0.503	3.6	81	0.00
26	C	1,1-dichloroethene	0.838	0.832	0.7	85	0.00
27		tertiary butyl alcohol	1.036	0.985	4.9	80	0.00
28	C	methylene chloride	0.678	0.705	-4.0	92	0.00
29	C	3-chloropropene	0.701	0.733	-4.6	92	0.00
30	C	carbon disulfide	1.467	1.458	0.6	84	0.00
31		Freon 113	1.095	1.136	-3.7	87	0.00
32		trans-1,2-dichloroethene	0.891	0.765	14.1	70	0.00
33	C	1,1-dichloroethane	1.092	0.982	10.1	76	0.00
34	C	MTBE	1.496	1.475	1.4	83	0.00
35	C	vinyl acetate	1.493	1.634	-9.4	92	0.00
36	C	2-butanone	1.407	1.367	2.8	83	0.00
37		cis-1,2-dichloroethene	1.011	1.098	-8.6	92	0.00
38		Ethyl Acetate	0.260	0.258	0.8	82	0.00
39	C	chloroform	1.451	1.451	0.0	85	0.00
40		Tetrahydrofuran	0.823	0.775	5.8	82	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
41		2,2-dichloropropane	1.209	1.089	9.9	78	0.00
42	C	1,2-dichloroethane	0.767	0.747	2.6	82	0.00
43	I	1,4-difluorobenzene	1.000	1.000	0.0	84	0.00
44	C	hexane	0.583	0.540	7.4	81	0.00
45		diisopropyl ether	0.255	0.234	8.2	81	0.00
46		tert-butyl ethyl ether	0.855	0.760	11.1	77	0.00
48	C	1,1,1-trichloroethane	0.544	0.520	4.4	83	0.00
49		1,1-dichloropropene	0.391	0.357	8.7	78	-0.01
50	C	benzene	0.819	0.770	6.0	83	0.00
52	C	carbon tetrachloride	0.547	0.550	-0.5	83	-0.01
53		cyclohexane	0.466	0.444	4.7	81	0.00
54		tert-amyl methyl ether	0.734	0.662	9.8	77	0.00
55		dibromomethane	0.338	0.308	8.9	80	-0.01
56	C	1,2-dichloropropane	0.325	0.311	4.3	81	0.00
57		bromodichloromethane	0.621	0.589	5.2	82	0.00
58	C	1,4-dioxane	0.183	0.185	-1.1	83	0.00
59	C	trichloroethene	0.426	0.410	3.8	83	0.00
60	C	2,2,4-trimethylpentane	1.538	1.431	7.0	81	0.00
61		methyl methacrylate	0.415	0.360	13.3	75	0.00
62		heptane	0.602	0.547	9.1	79	0.00
63	C	cis-1,3-dichloropropene	0.424	0.429	-1.2	84	-0.02
64	C	4-methyl-2-pentanone	0.780	0.733	6.0	80	0.00
65		trans-1,3-dichloropropene	0.407	0.356	12.5	71	0.00
66	C	1,1,2-trichloroethane	0.358	0.353	1.4	84	0.00
67	I	chlorobenzene-D5	1.000	1.000	0.0	82	0.00
68	C	toluene	5.591	5.597	-0.1	84	0.00
71		1,3-dichloropropane	2.313	2.159	6.7	78	0.00
72		2-hexanone	3.829	3.805	0.6	80	0.00
74		dibromochloromethane	3.673	3.788	-3.1	83	0.00
75	C	1,2-dibromoethane	3.066	3.176	-3.6	85	0.00
76		butyl acetate	0.487	0.482	1.0	75	0.00
77		octane	1.468	1.348	8.2	78	0.00
78	C	tetrachloroethene	3.054	3.105	-1.7	85	0.00
79		1,1,1,2-tetrachloroethane	2.476	2.381	3.8	78	0.00
80	C	chlorobenzene	4.681	4.705	-0.5	83	0.00
81	C	ethylbenzene	7.209	7.191	0.2	83	0.00
83	C	m+p-xylene	5.518	5.591	-1.3	83	0.00

Evaluate Continuing Calibration Report

Data Path : O:\Forensics\Data\AIR1\2015\150813T\
Data File : R143412.D
Acq On : 13 Aug 2015 1:12 pm
Operator : AIRPIANO1:RY
Sample : WG811916-2,3,250,250
Misc : WG811916,ICAL11250
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 13 13:37:21 2015
Quant Method : O:\Forensics\Data\AIR1\2015\150813T\TALL150710.M
Quant Title : TO-14A/TO-15 SIM/Full Scan Analysis
QLast Update : Sat Jul 11 08:48:29 2015

Min. RRF : 0.000 Min. Rel. Area : 60% Max. R.T. Dev 0.33min
Max. RRF Dev : 30% Max. Rel. Area : 140%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
84	C	bromoform	3.855	3.998	-3.7	81	0.00
85	C	styrene	4.450	4.531	-1.8	83	0.00
86	C	1,1,2,2-tetrachloroethane	4.102	4.366	-6.4	86	0.00
87	C	o-xylene	5.589	5.828	-4.3	86	0.00
88		1,2,3-trichloropropane	3.025	2.862	5.4	77	0.00
89		nonane	4.419	4.046	8.4	74	0.00
91	C	isopropylbenzene	7.813	7.794	0.2	82	0.00
92		bromobenzene	3.784	3.587	5.2	80	0.00
93		2-chlorotoluene	2.290	2.115	7.6	76	0.00
94		n-propylbenzene	2.326	2.222	4.5	79	0.00
95		4-chlorotoluene	5.865	5.538	5.6	79	0.00
96		4-ethyl toluene	8.765	8.252	5.9	76	0.00
97		1,3,5-trimethylbenzene	6.922	7.013	-1.3	83	0.00
98		tert-butylbenzene	7.408	7.252	2.1	79	0.00
99		1,2,4-trimethylbenzene	6.754	7.128	-5.5	83	0.00
100		decane	4.526	4.368	3.5	77	0.00
101	C	Benzyl Chloride	5.611	5.682	-1.3	77	0.00
102		1,3-dichlorobenzene	5.282	5.545	-5.0	83	0.00
103	C	1,4-dichlorobenzene	5.356	5.617	-4.9	84	0.00
104		sec-butylbenzene	9.812	9.698	1.2	79	0.00
106		p-isopropyltoluene	9.035	8.418	6.8	73	0.00
107		1,2-dichlorobenzene	5.115	5.421	-6.0	85	0.00
108		n-butylbenzene	7.888	8.112	-2.8	80	0.00
111	C	1,2-dibromo-3-chloropropane	1.831	1.766	3.5	73	0.00
112		undecane	4.892	5.160	-5.5	74	0.00
114		dodecane	4.066	5.274	-29.7	68	0.00
115	C	1,2,4-trichlorobenzene	4.143	5.057	-22.1	79	0.00
116		naphthalene	9.045	10.470	-15.8	75	-0.01
117		1,2,3-trichlorobenzene	3.860	4.555	-18.0	75	0.00
119	C	hexachlorobutadiene	3.611	4.189	-16.0	79	-0.01

* Evaluation of CC level amount vs concentration.

FORM VII TO15-LL

8A

VOLATILE ORGANICS INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alpha Analytical Labs

SDG No.: L1519114

Lab File ID (Standard): R143412 Date Analyzed: 08/13/15

Instrument ID : AIRPIANO1 Time Analyzed: 13:12

		IS1 AREA	RT	IS2 AREA	RT	IS3 AREA	RT
	24 HOUR STD	146644	10.21	326890	12.42	60310	16.84
	UPPER LIMIT	205302	10.54	457646	12.75	84434	17.17
	LOWER LIMIT	87986	9.88	196134	12.09	36186	16.51
	EPA SAMPLE NO.						
01	WG811916-3LCS	146644	10.21	326890	12.42	60310	16.84
02	WG811916-4BLANK	136875	10.20	319542	12.42	57381	16.84
03	METHOD BLANK	150937	10.20	333674	12.42	63219	16.85
04	METHOD BLANK AA	133154	10.20	297560	12.42	55475	16.84
05	OUTDOOR CONTROL	122086	10.21	282987	12.42	54595	16.85
06	DUPLICATE	133052	10.21	292024	12.42	56697	16.84
07	S-157-J	130859	10.21	284167	12.42	55132	16.84
08	S-157-J1	116792	10.21	268528	12.42	54463	16.84
09	S-157-J2	127057	10.21	280396	12.42	54254	16.85
10	SG-2	125663	10.21	269210	12.42	54513	16.84
11	SG-4	124934	10.21	267689	12.42	56322	16.84
12	SG-1	132499	10.21	291228	12.42	56737	16.84
13	WG811916-5DUP	117060	10.21	266500	12.42	54293	16.84

IS1 = BROMOCHLOROMETHANE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40 % of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

* Values outside of QC limits.

page 1 of 1 FORM VIII - TO15-LL