

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
 Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 16-OCT-2015 18:12  
 Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	7.438	42	302M	0.022
43) 1,1,1-Trichloroethane	(1)	7.724	97	27281	0.200
44) Cyclohexane	(1)	7.822	56	5774	0.130
45) Carbon Tetrachloride	(1)	8.034	117	33493	0.217
46) Benzene	(2)	8.412	78	22399	0.199
47) 1,2-Dichloroethane	(2)	8.448	62	14831	0.228
48) Isooctane	(2)	8.673	57	10776	0.102
49) Tert-Amyl Methyl Ether	(2)	8.777	73	6381	0.104
50) Heptane	(2)	9.063	43	1370M	0.047
51) *1,4-Difluorobenzene	(2)	9.215	114	1834763	10.000
52) Trichloroethene	(2)	9.659	130	17161	0.223
53) Ethyl Acrylate	(2)	10.054	55	4111	0.130
54) 1,2-Dichloropropane	(2)	10.091	63	3543M	0.114
55) Dibromomethane	(2)	10.298	174	18615	0.243
56) 1,4-Dioxane	(2)	10.504	88	1181M	0.052
57) Methyl Methacrylate	(2)	10.504	69	2039	0.086
58) Bromodichloromethane	(2)	10.669	83	23969	0.209
59) cis-1,3-Dichloropropene	(2)	11.654	75	10074	0.165
60) 4-Methyl-2-Pentanone	(2)	12.098	43	2414M	0.083
61) Toluene	(3)	12.360	91	27032	0.226
64) 1,3-Dichloropropene (total)	(3)		75	23161	0.374
62) Octane	(3)	12.816	43	609M	0.019
63) trans-1,3-Dichloropropene	(3)	12.901	75	13087	0.208
65) Ethyl Methacrylate	(3)	13.272	69	3862M	0.115
66) 1,1,2-Trichloroethane	(3)	13.291	97	12865	0.253
67) Tetrachloroethene	(3)	13.577	166	18128	0.178
68) 2-Hexanone	(3)	14.002	43	7417	0.268
69) Dibromochloromethane	(3)	14.142	127	21577	0.220
70) 1,2-Dibromoethane	(3)	14.349	107	21409	0.246
71) *Chlorobenzene-d5	(3)	15.529	117	1529399	10.000
72) Chlorobenzene	(3)	15.590	112	29334	0.247
73) 1,1,1,2-Tetrachloroethane	(3)	15.846	131	16203	0.219
74) Ethylbenzene	(3)	15.955	91	12002	0.091
75) m/p-Xylene	(3)	16.272	91	14663	0.134
77) Xylene (total)	(3)		91	29520	0.264
76) o-Xylene	(3)	17.245	91	14857	0.129
78) Styrene	(3)	17.288	104	12562	0.122
79) Bromoform	(3)	17.628	173	27806	0.219

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

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 on 10/16/2015 at 18:17.  
 Target 3.5 esignature user ID: jeb07445

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Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

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Lab Sample ID: mdlv0.2

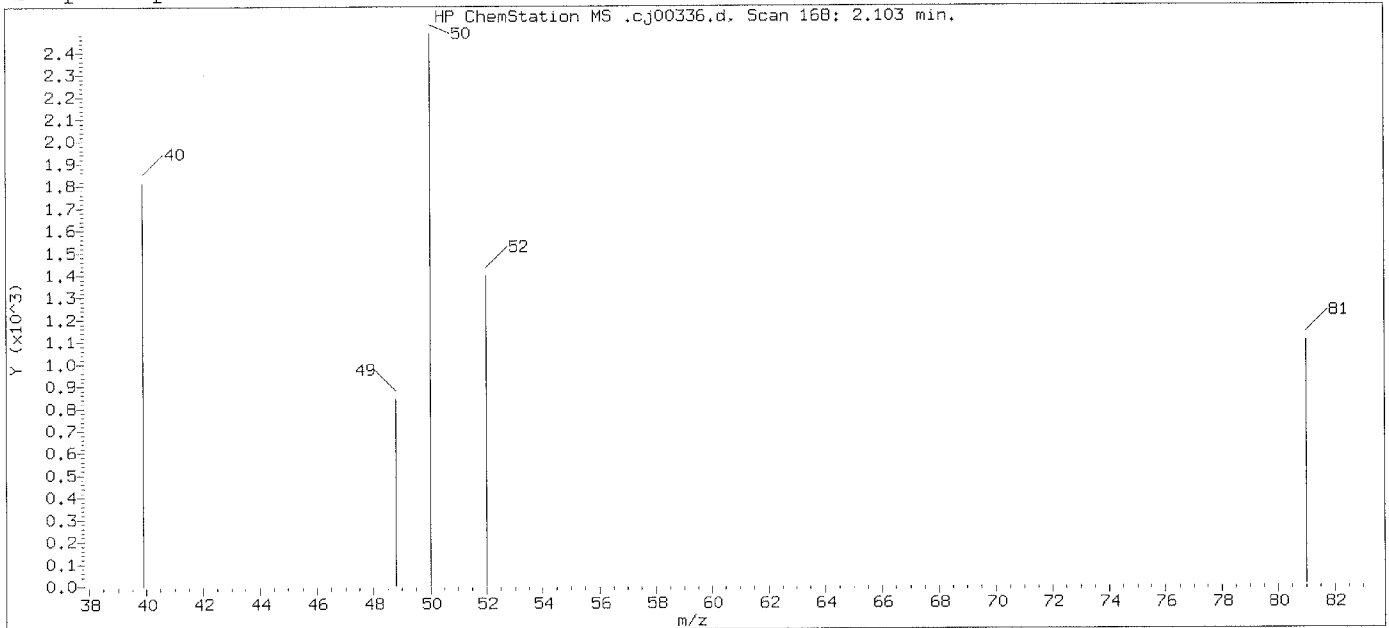
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
80) Cumene	(3)	18.255	105	19376	0.131
81) Bromobenzene	(3)	18.869	156	18212	0.220
82) 1,1,2,2-Tetrachloroethane	(3)	19.040	83	25407	0.262
83) 1,2,3-Trichloropropane	(3)	19.082	110	8893	0.240
84) n-Propylbenzene	(3)	19.350	120	5652	0.115
85) 2-Chlorotoluene	(3)	19.459	126	7663	0.141
86) 4-Ethyltoluene	(3)	19.666	105	20299	0.123
87) 1,3,5-Trimethylbenzene	(3)	19.843	105	17606	0.124
88) Alpha Methyl Styrene	(3)	20.445	118	10422	0.130
89) tert-Butylbenzene	(3)	20.694	119	15586	0.111
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	18371	0.125
91) sec-Butylbenzene	(3)	21.345	105	26556	0.137
92) 1,3-Dichlorobenzene	(3)	21.503	146	35063	0.240
93) 1,4-Dichlorobenzene	(3)	21.796	146	32458	0.212
94) p-Isopropyltoluene	(3)	21.850	119	21269	0.120
95) Benzyl Chloride	(3)	22.288	91	29922	0.226
96) 1,2-Dichlorobenzene	(3)	22.964	146	31259	0.226
97) n-Butylbenzene	(3)	23.176	91	21384	0.148
98) Hexachloroethane	(3)	23.633	117	19439	0.266
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	24106	0.321
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	32868	0.431
101) Hexachlorobutadiene	(3)	26.279	225	28778	0.345
102) Naphthalene	(3)	26.297	128	71352	0.452

page 3 of 3

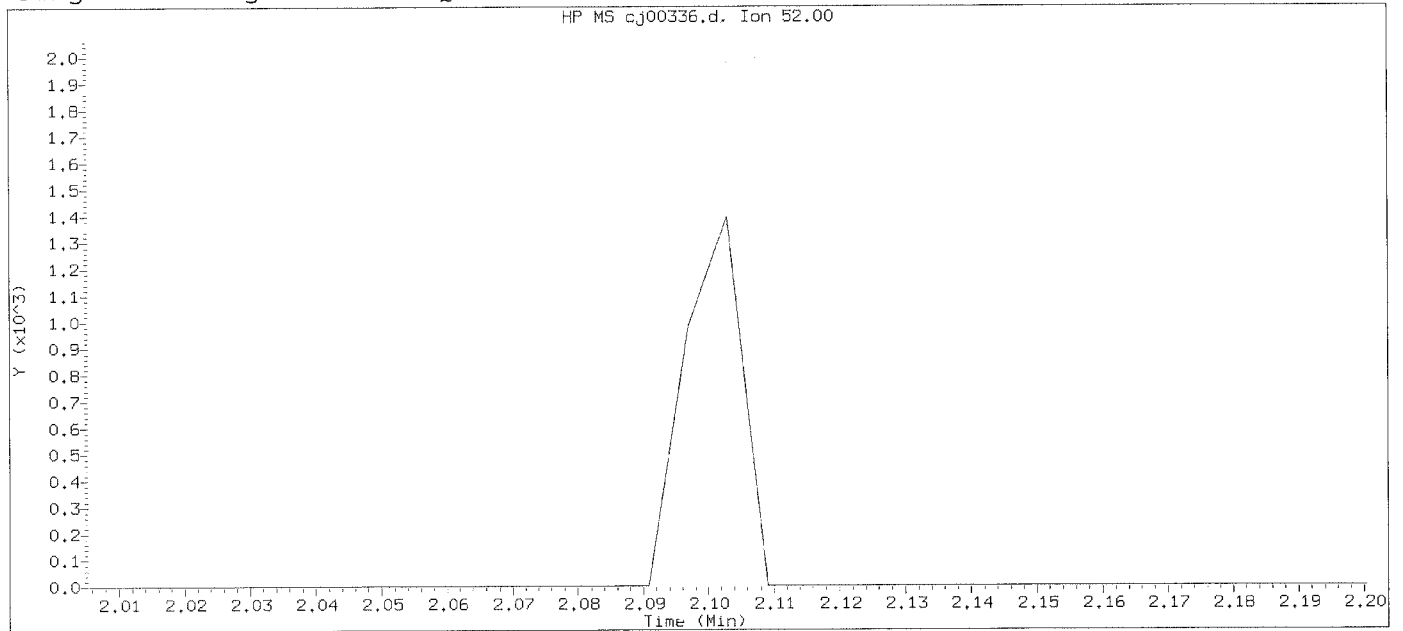
Digitally signed by Jacob E. Bailey  
 on 10/16/2015 at 18:17.  
 Target 3.5 esignature user ID: jeb07445



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 09:19      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

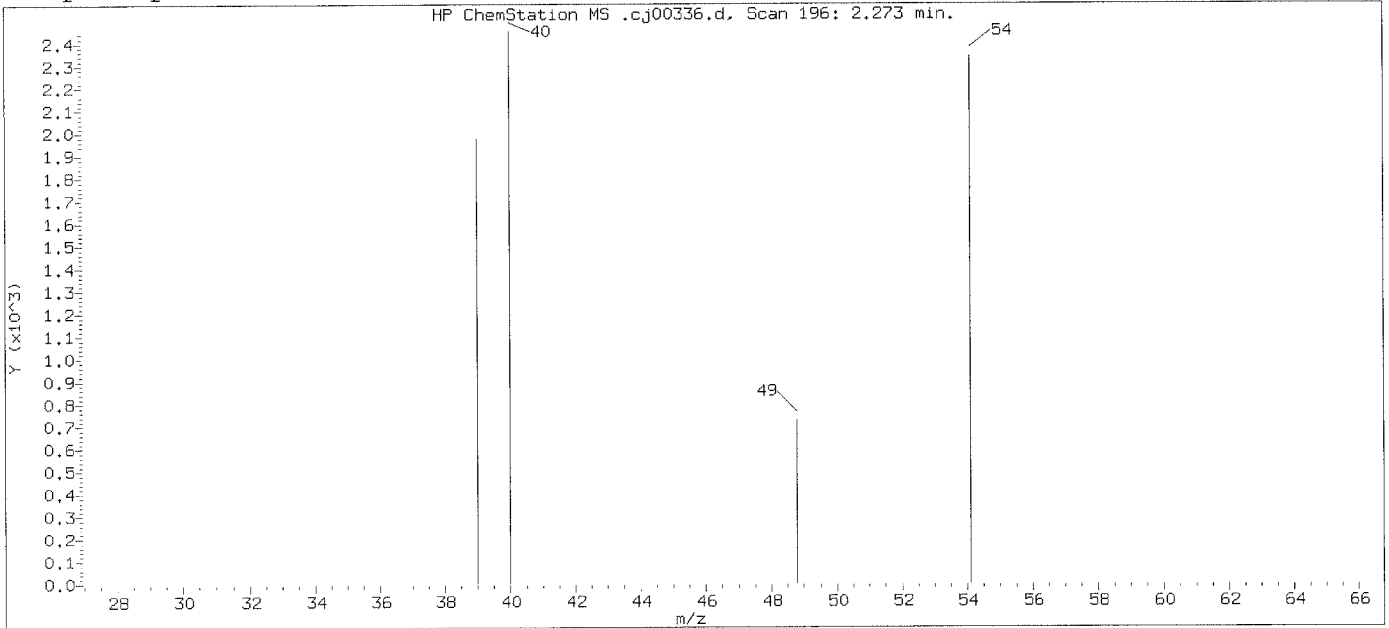
Sample Name: mdlv0.2      Lab Sample ID: mdlv0.2

Compound Number : 5  
Compound Name : Chloromethane  
Expected RT (minutes) : 2.103  
Quant Ion : 52.00

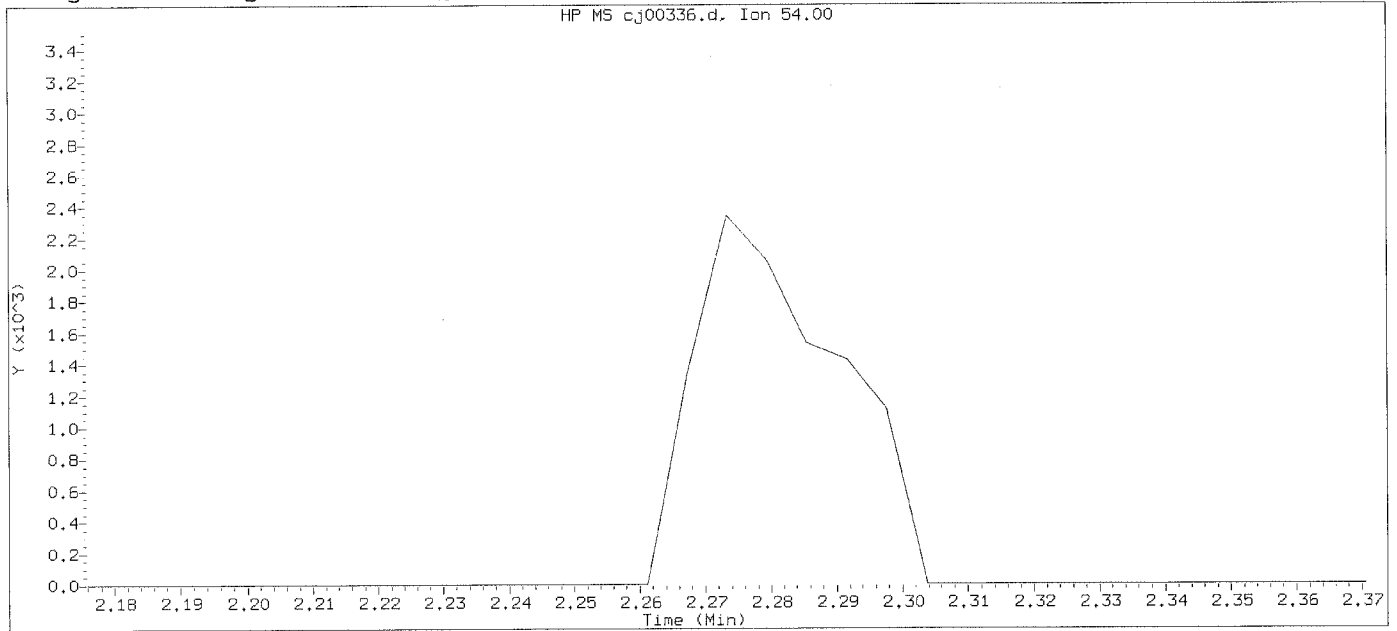
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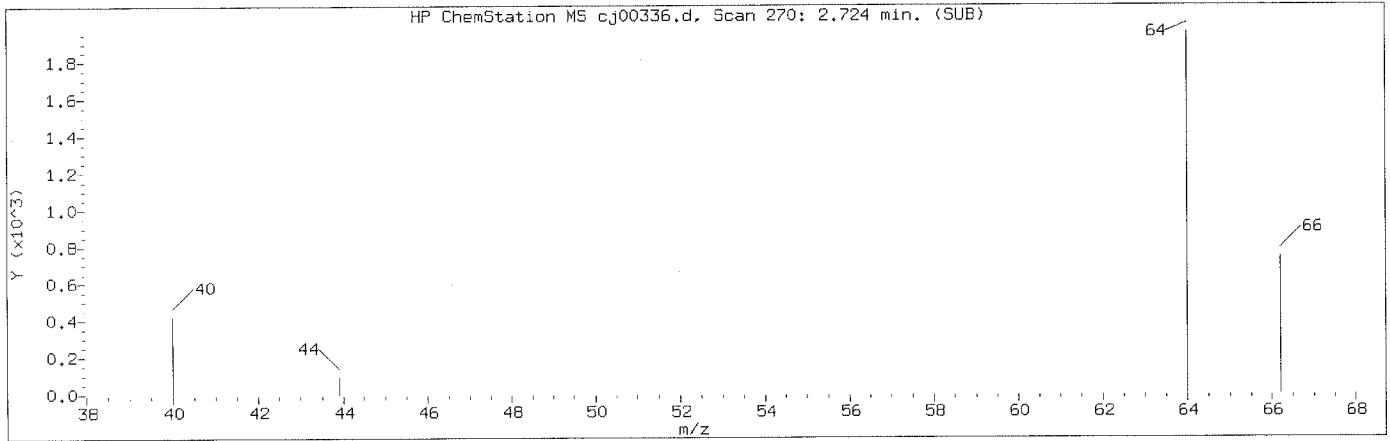
Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

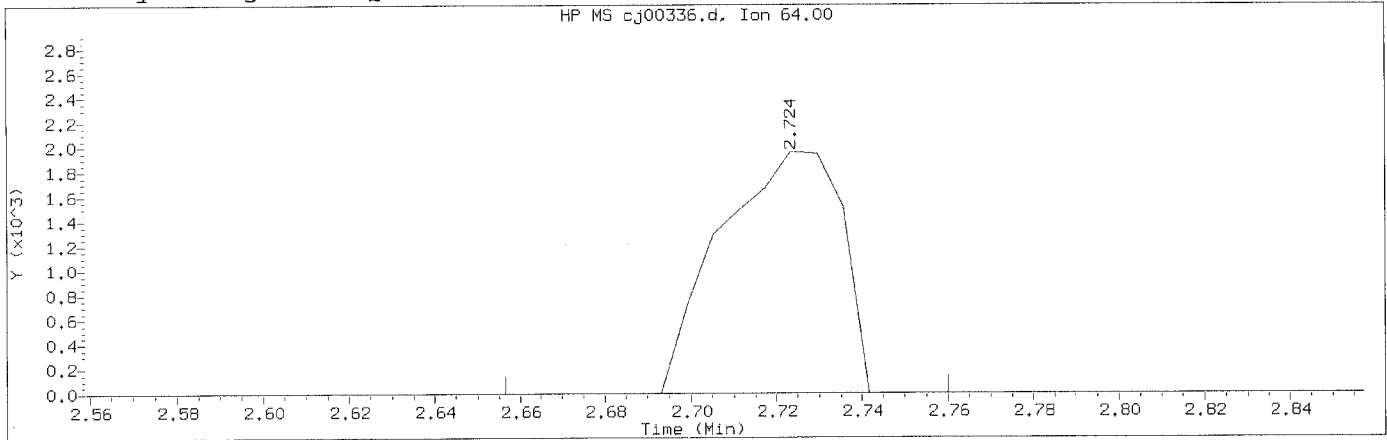
Compound Number : 7  
Compound Name : 1,3-Butadiene  
Expected RT (minutes) : 2.273  
Quant Ion : 54.00

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Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



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Method used: /chem/HP09464.i/15oct15.b/to-15.m      Sublist used: all  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2      Lab Sample ID: mdlv0.2

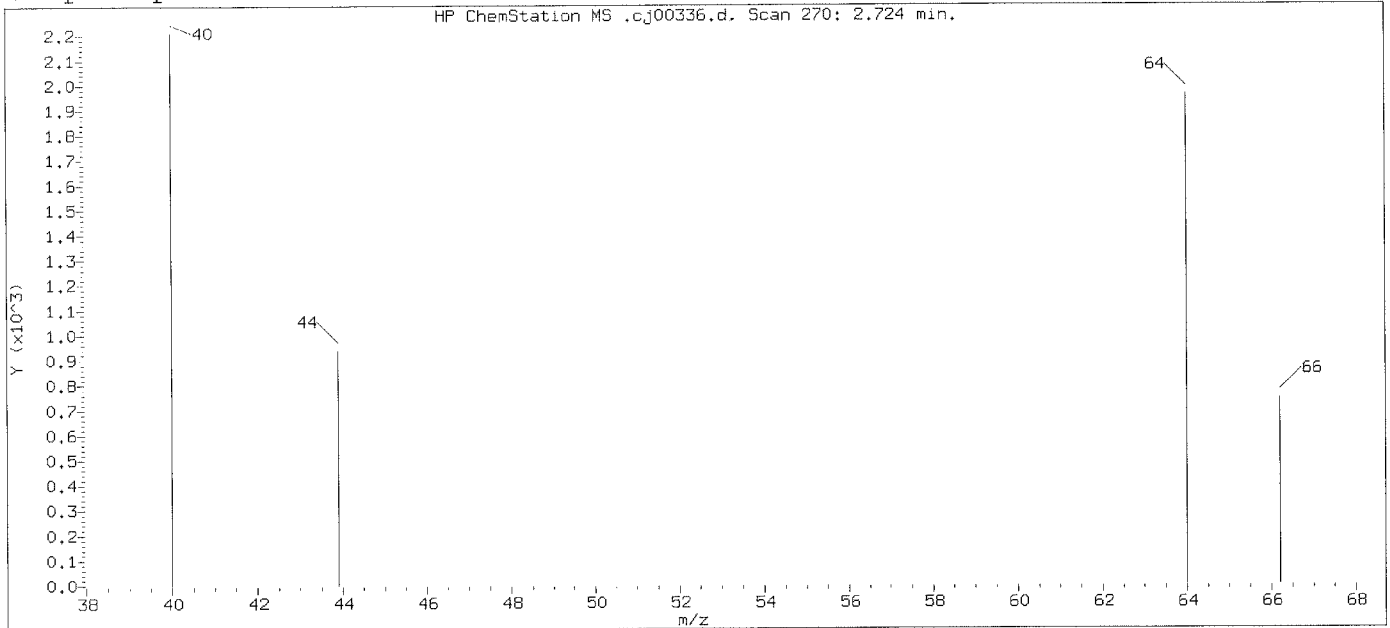
Compound Number : 9  
Compound Name : Chloroethane  
Scan Number : 270  
Retention Time (minutes): 2.724  
Quant Ion : 64.00  
Area (flag) : 3865M  
Concentration (ppb(v)) : 0.1733  
Integration start scan : 258      Integration stop scan: 275  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: missed peak

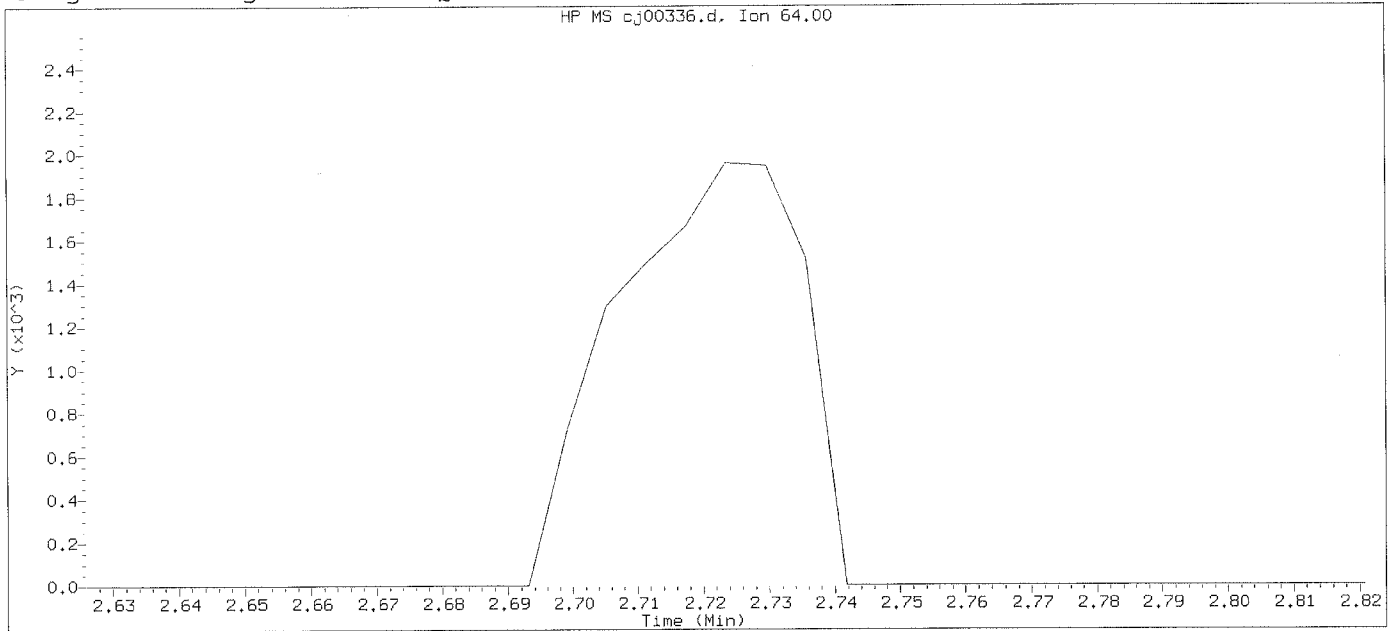
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mq01758 10/16/15

Sample Spectrum



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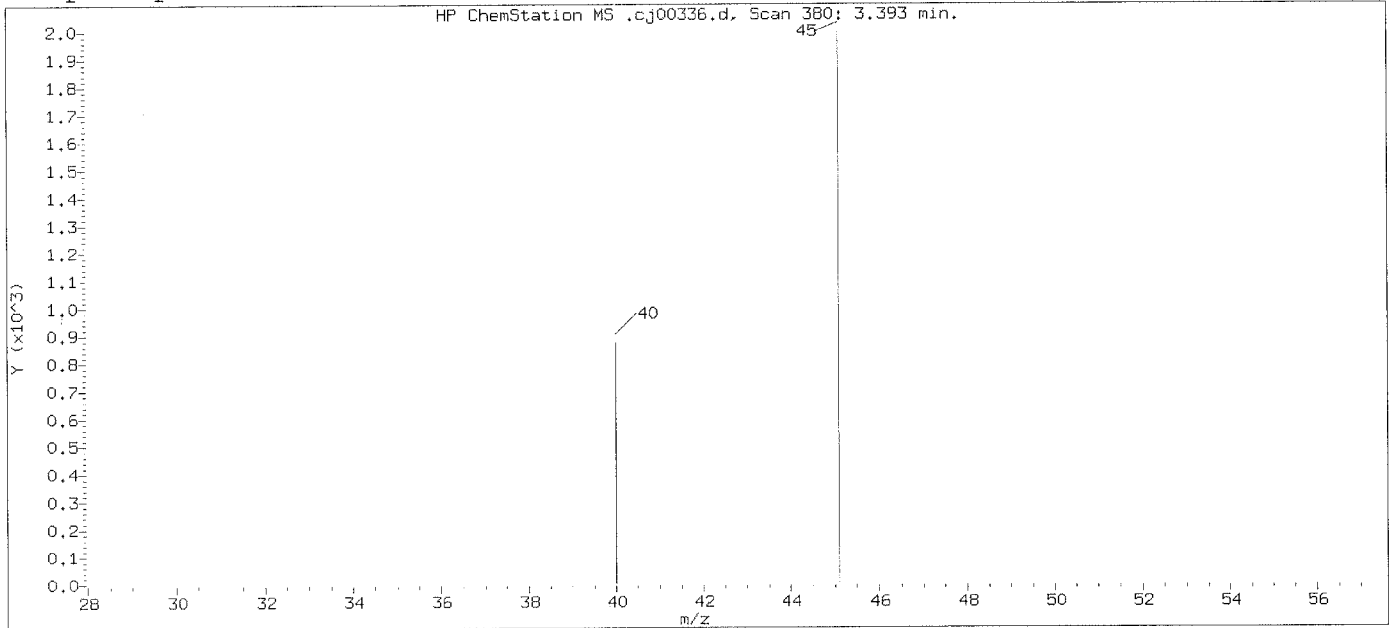
Compound Number : 9  
Compound Name : Chloroethane  
Expected RT (minutes) : 2.724  
Quant Ion : 64.00

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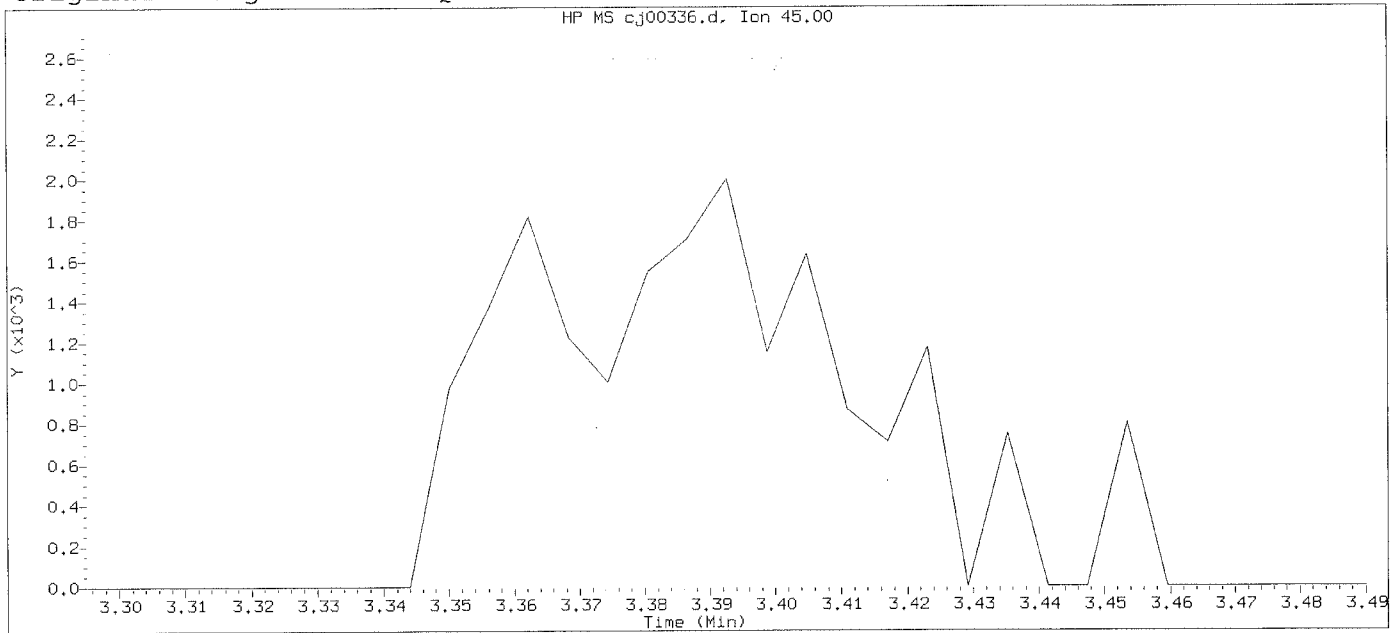




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Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

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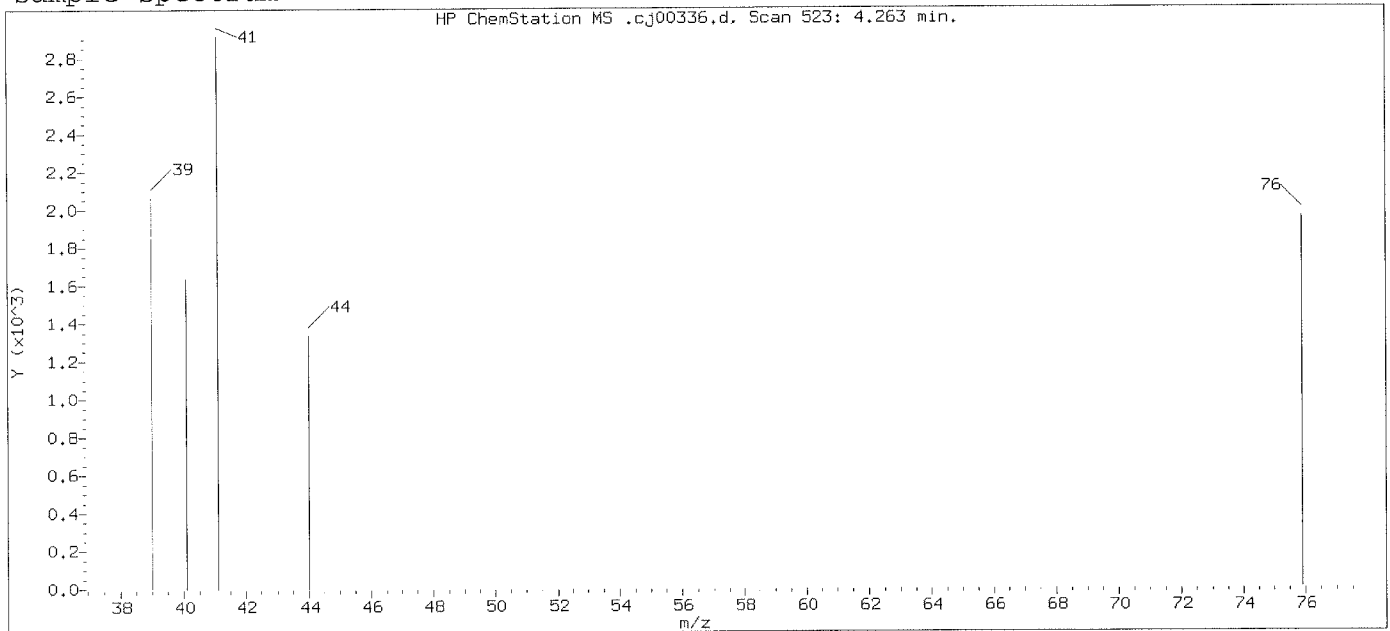
Lab Sample ID: mdlv0.2

Compound Number : 14  
Compound Name : Ethanol  
Expected RT (minutes) : 3.393  
Quant Ion : 45.00

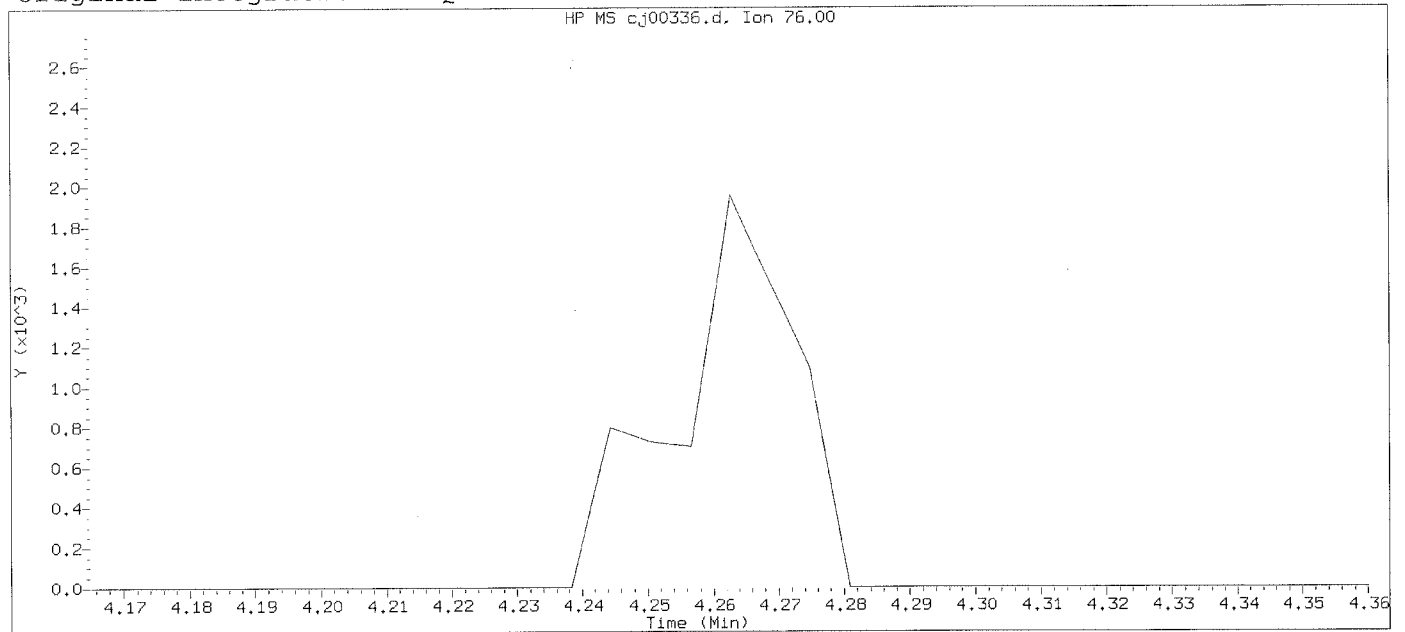
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Calibration date and time: 15-OCT-2015 19:21  
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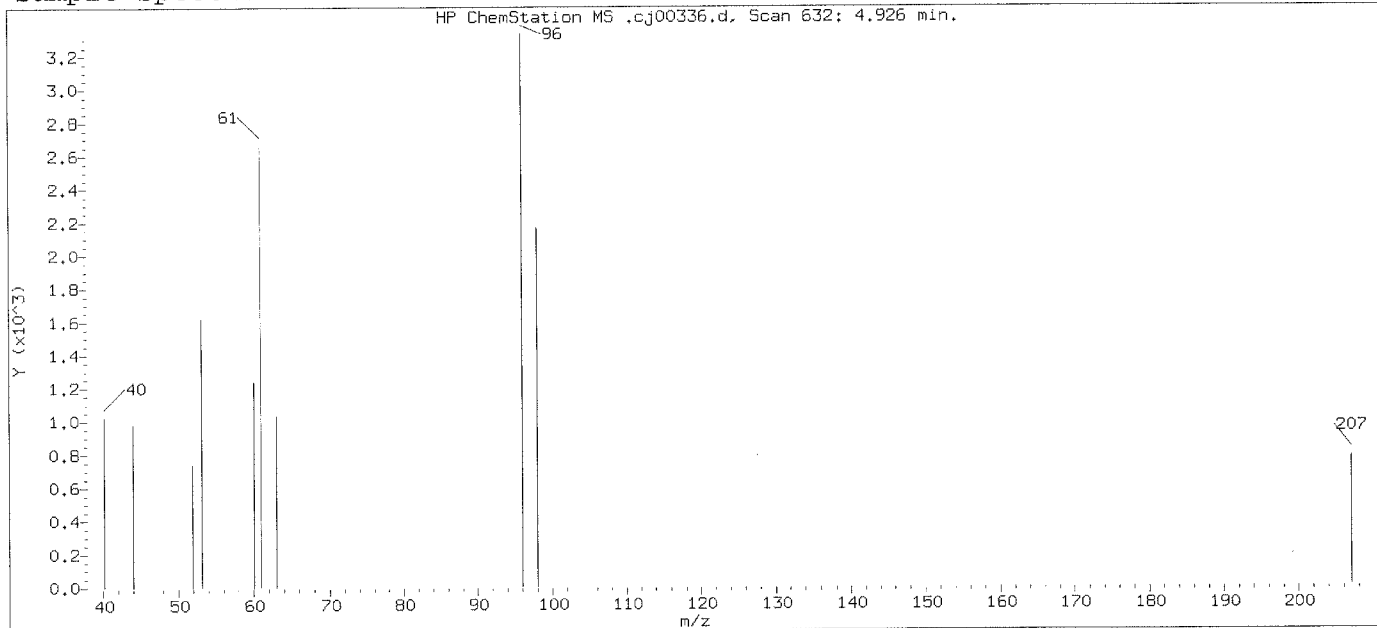
Sample Name: mdlv0.2    Lab Sample ID: mdlv0.2

Compound Number                      : 24  
Compound Name                         : 3-Chloropropene  
Expected RT (minutes)                : 4.263  
Quant Ion                                : 76.00

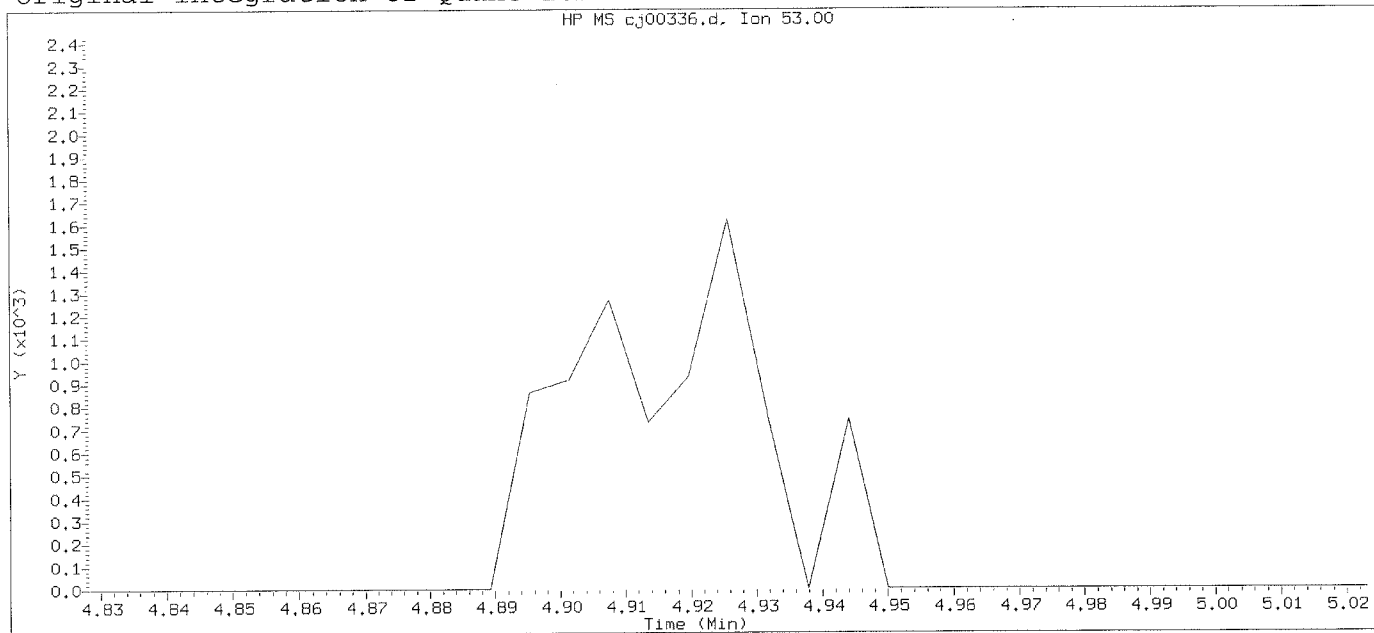
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Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

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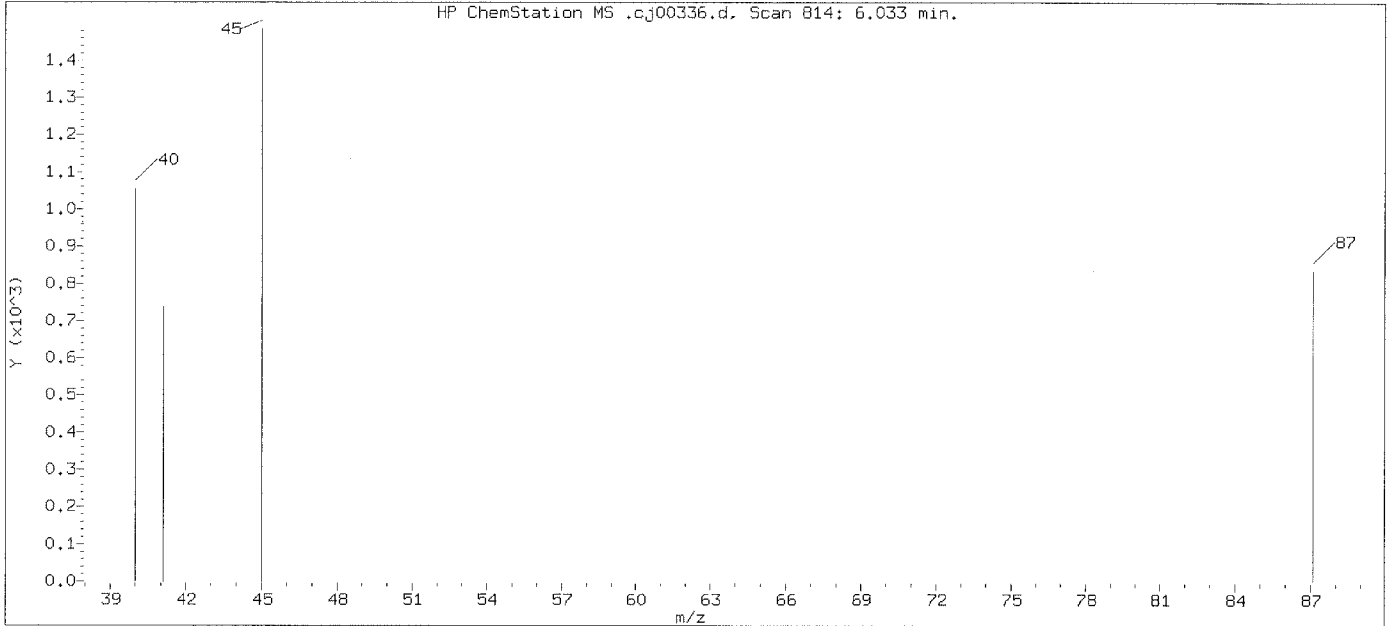
Lab Sample ID: mdlv0.2

Compound Number : 27  
Compound Name : Acrylonitrile  
Expected RT (minutes) : 4.926  
Quant Ion : 53.00

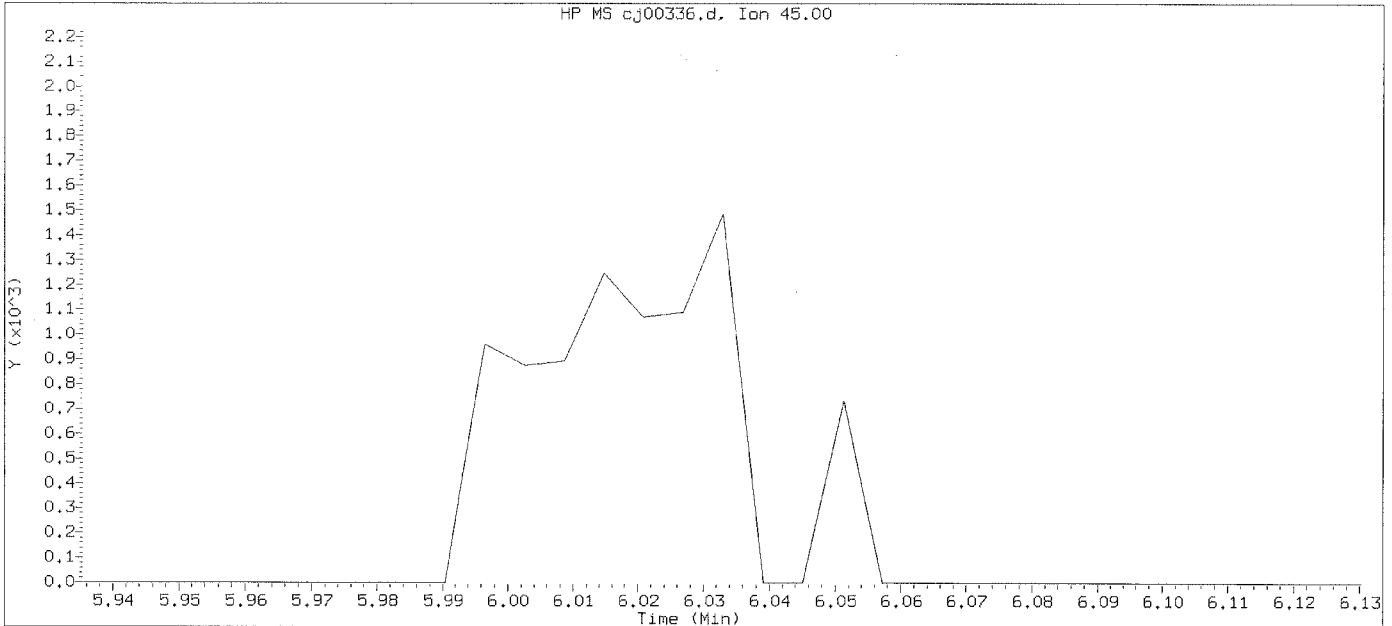
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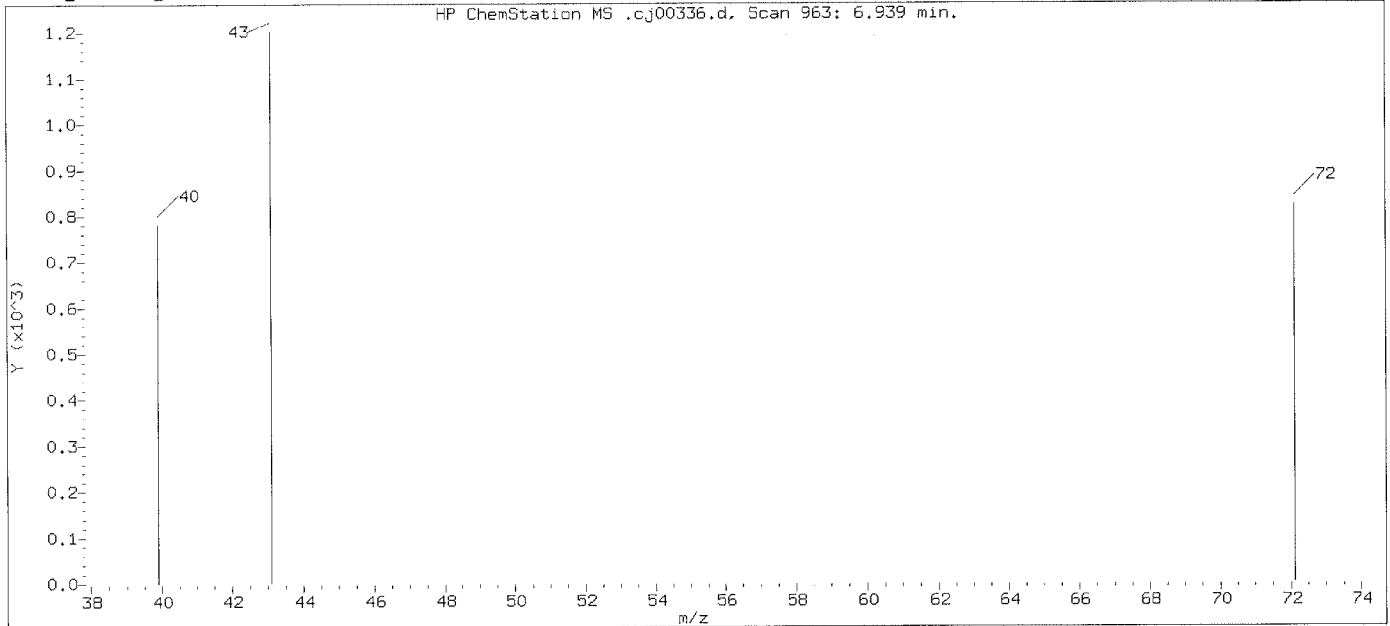
Compound Number : 33  
Compound Name : Di-Isopropyl Ether  
Expected RT (minutes) : 6.033  
Quant Ion : 45.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
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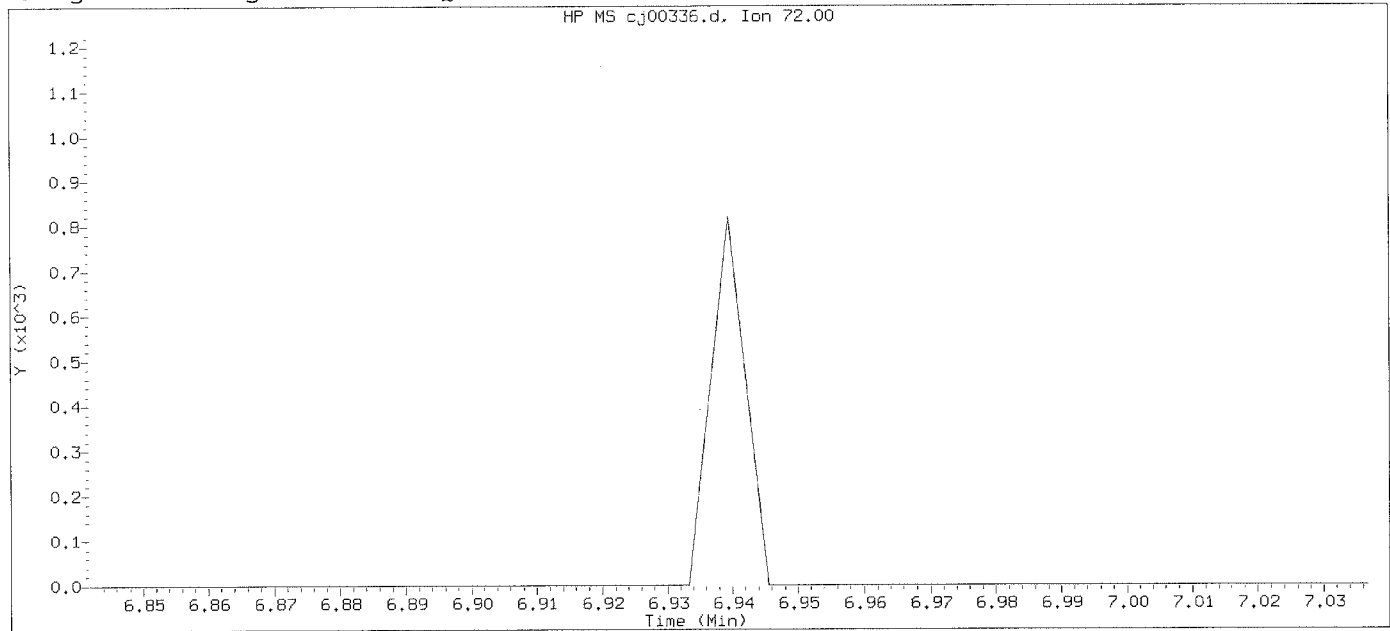




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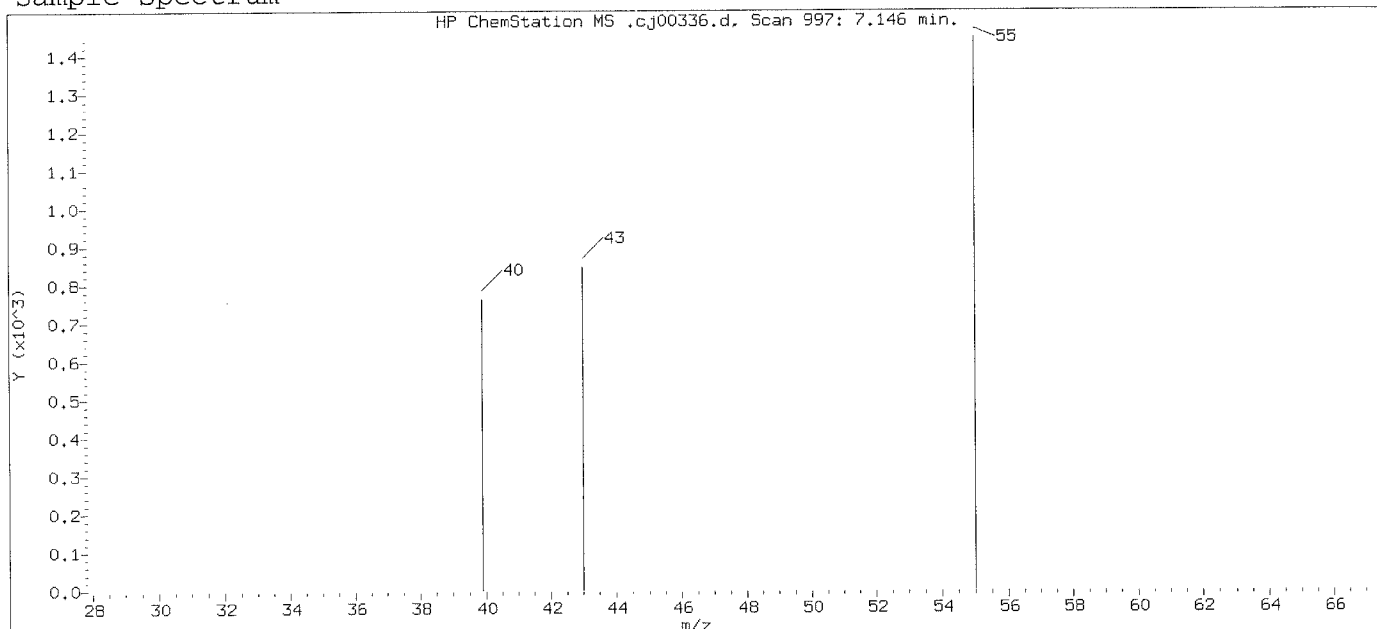
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Compound Number                      : 37  
Compound Name                         : 2-Butanone  
Expected RT (minutes)                 : 6.939  
Quant Ion                                : 72.00

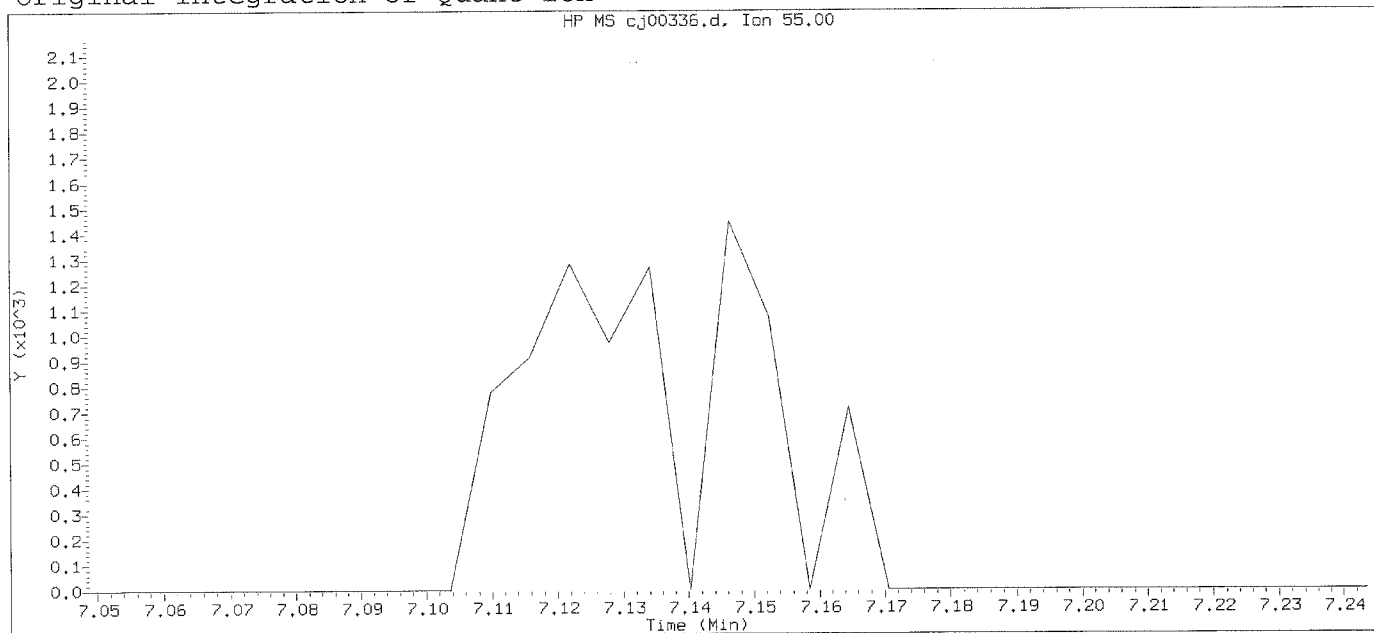
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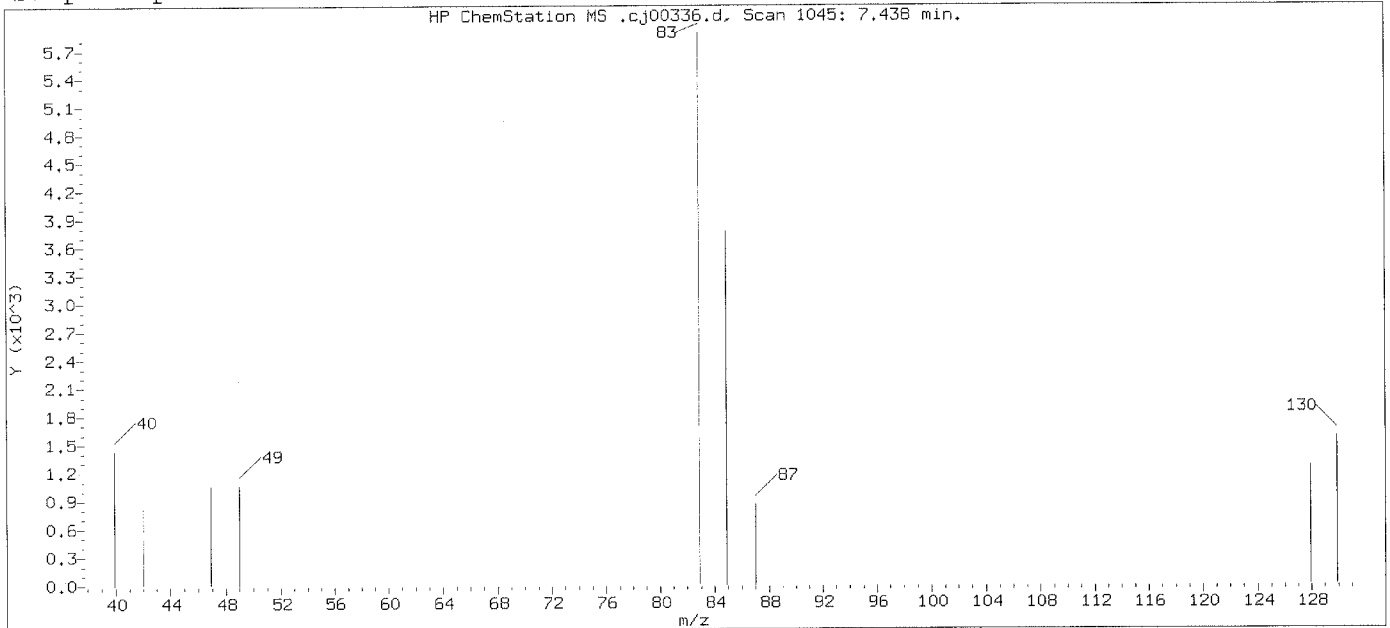
Lab Sample ID: mdlv0.2

Compound Number : 39  
Compound Name : Methyl Acrylate  
Expected RT (minutes) : 7.146  
Quant Ion : 55.00

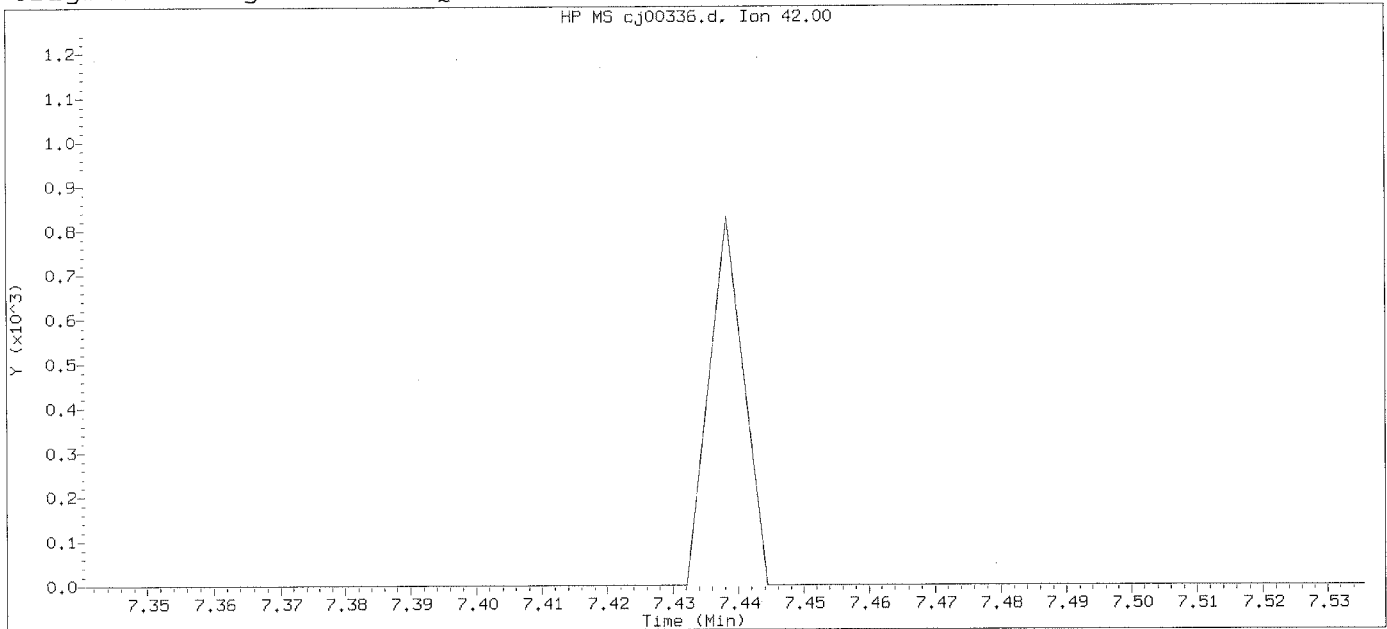
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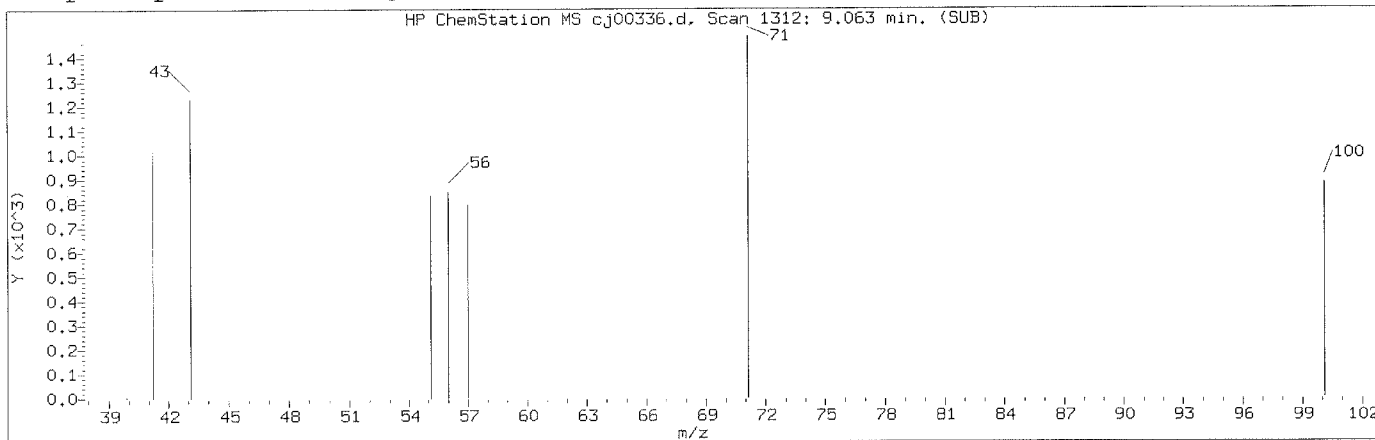
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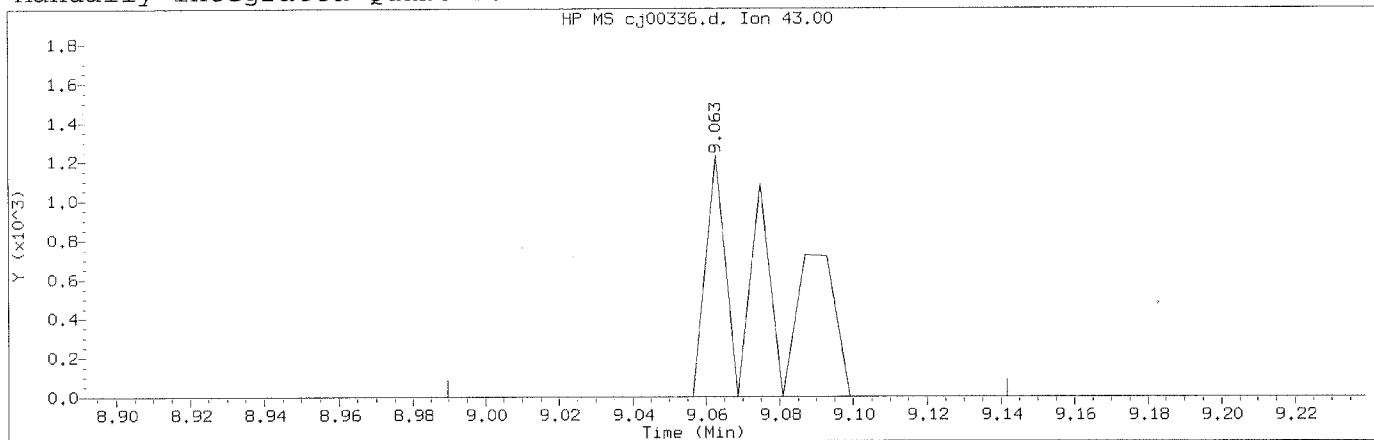
Compound Number      : 41  
Compound Name         : Tetrahydrofuran  
Expected RT (minutes) : 7.438  
Quant Ion              : 42.00

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Sublist used: all

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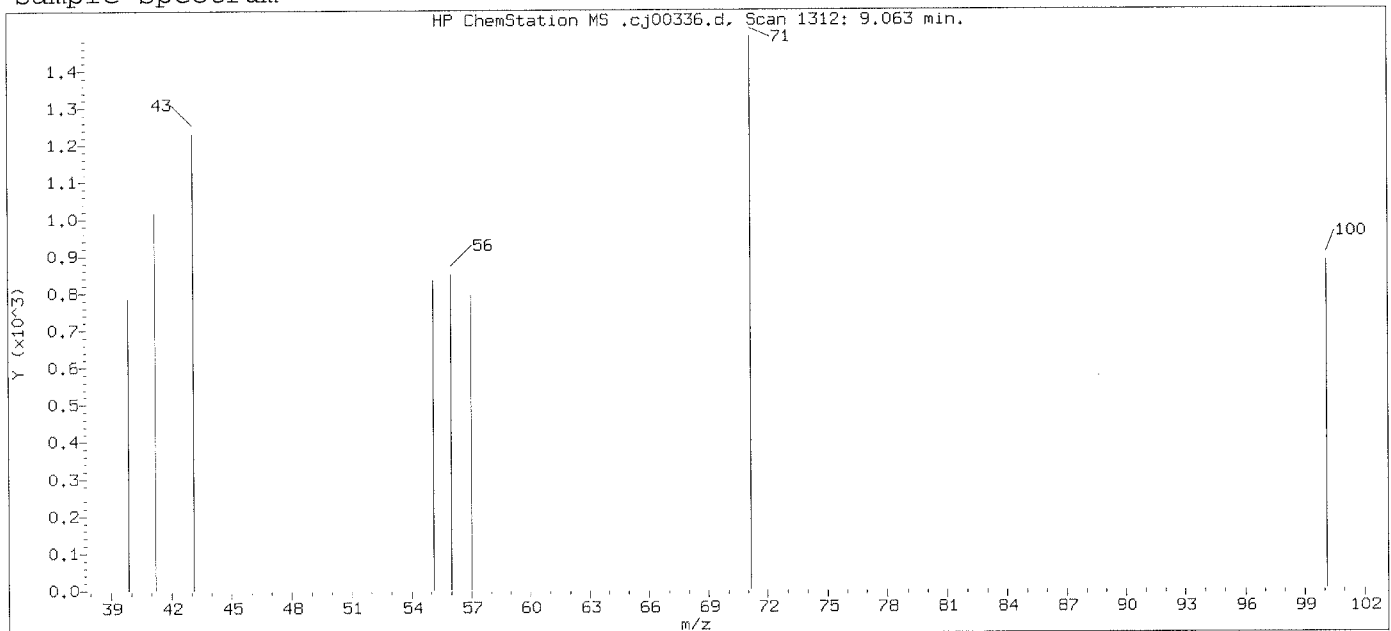
Compound Number : 50  
Compound Name : Heptane  
Scan Number : 1312  
Retention Time (minutes): 9.063  
Quant Ion : 43.00  
Area (flag) : 1370M  
Concentration (ppb(v)) : 0.0471  
Integration start scan : 1299      Integration stop scan: 1324  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: missed peak

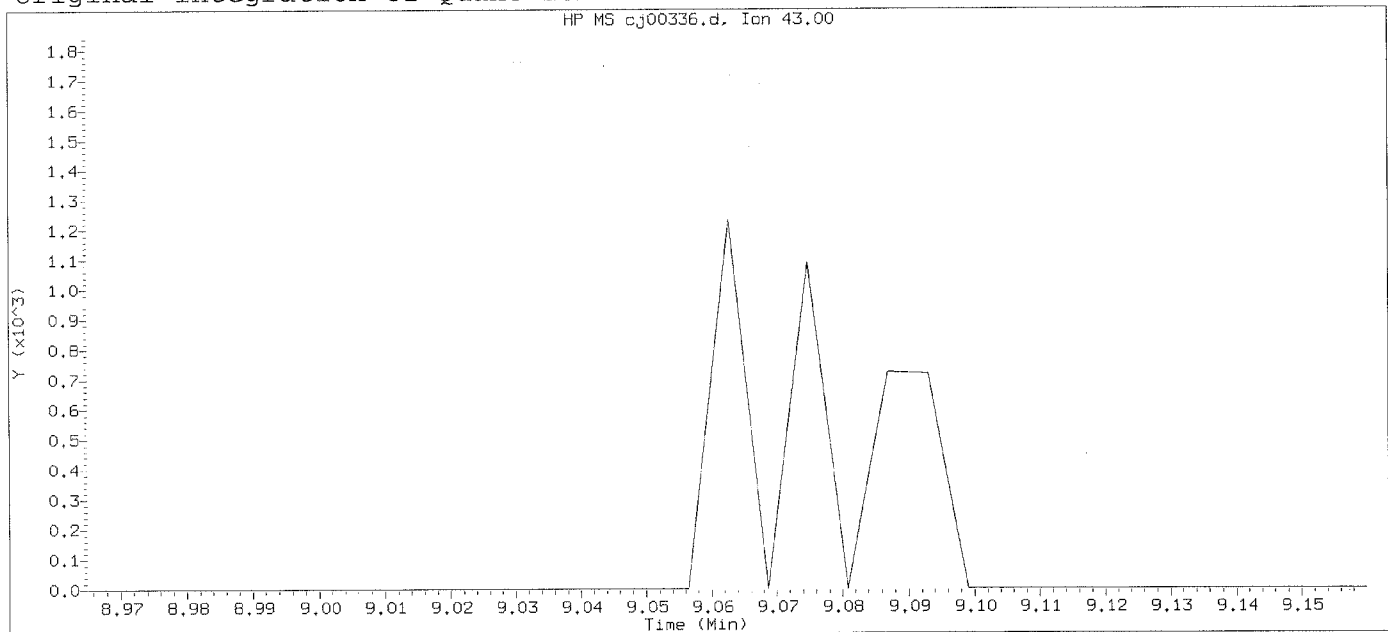
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
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GC/MS audit/management approval: MAP/758 10/21/15

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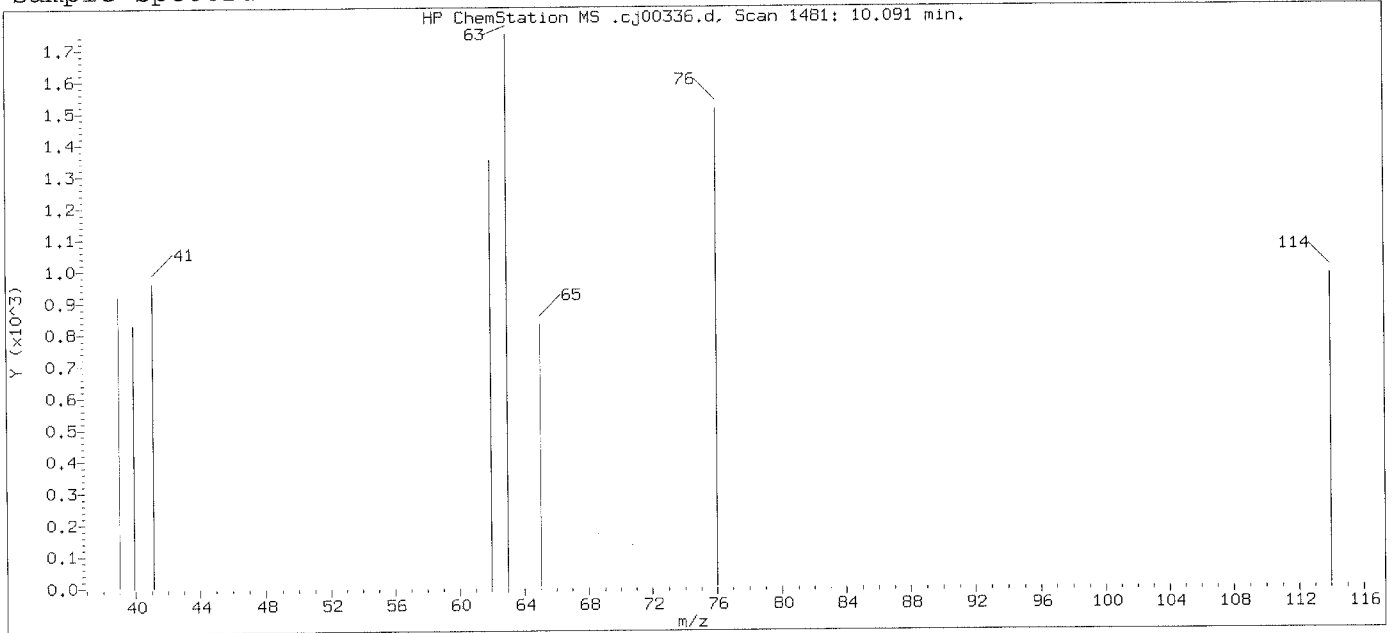
Compound Number : 50  
Compound Name : Heptane  
Expected RT (minutes) : 9.063  
Quant Ion : 43.00

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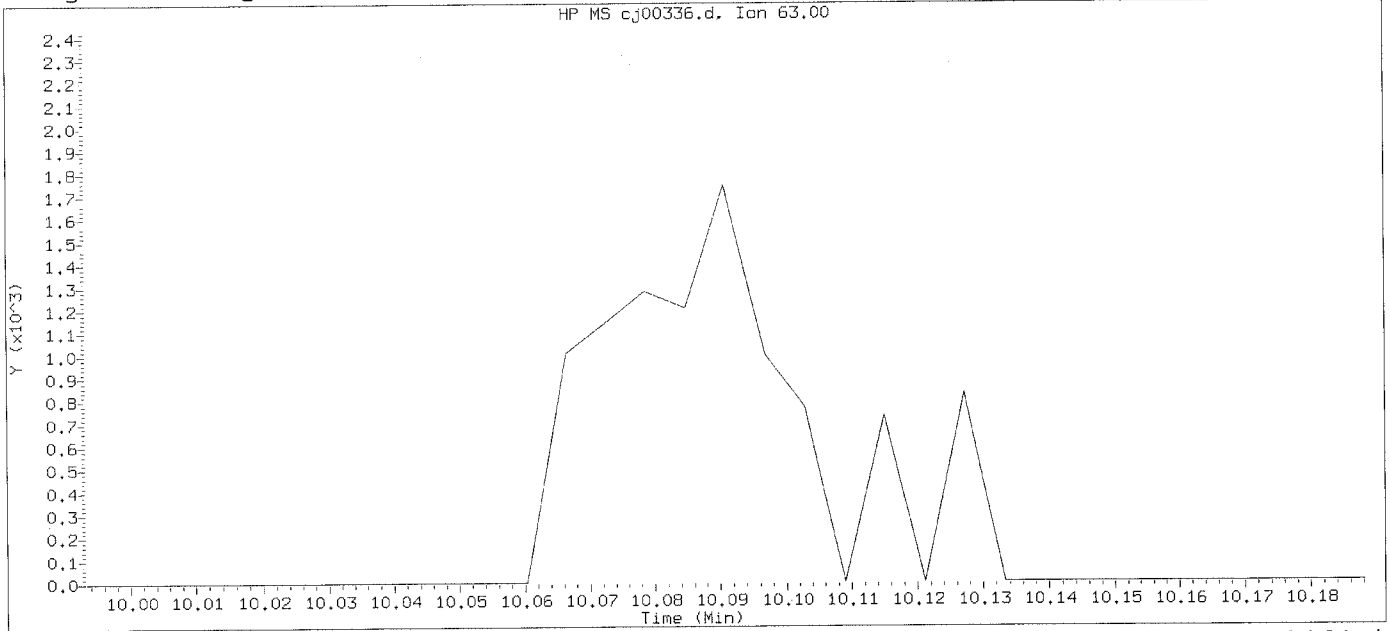




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Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2

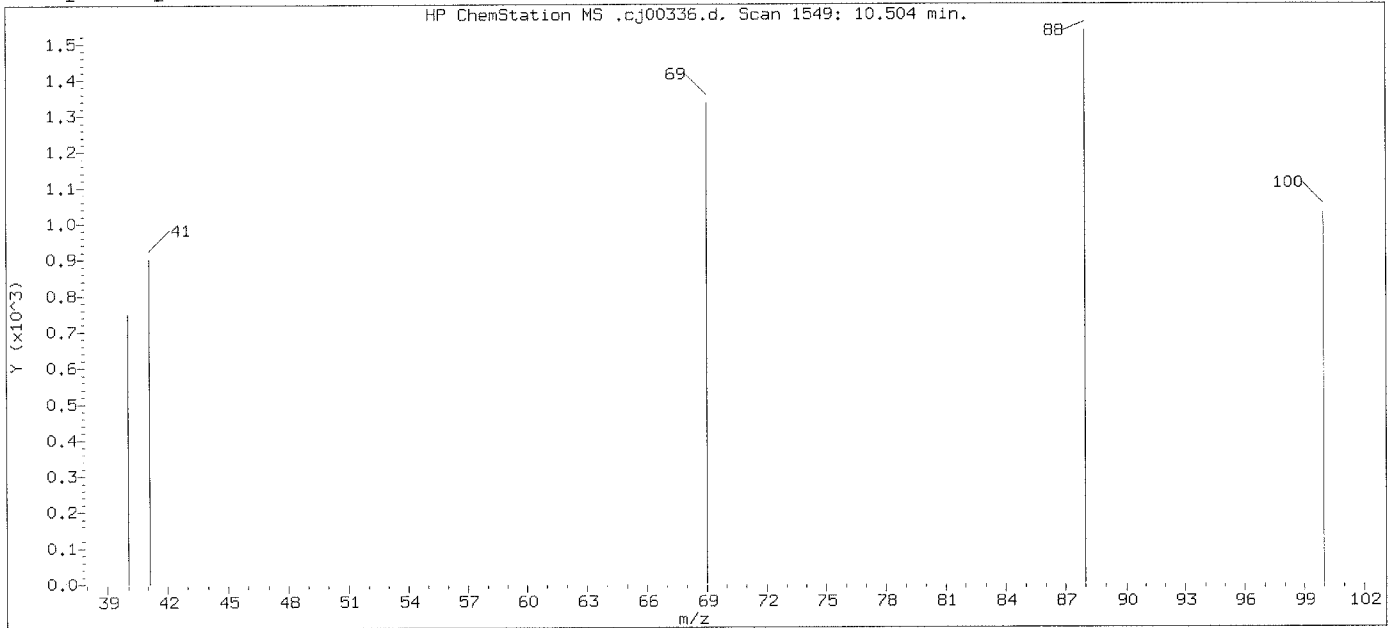
Lab Sample ID: mdlv0.2

Compound Number : 54  
Compound Name : 1,2-Dichloropropane  
Expected RT (minutes) : 10.091  
Quant Ion : 63.00

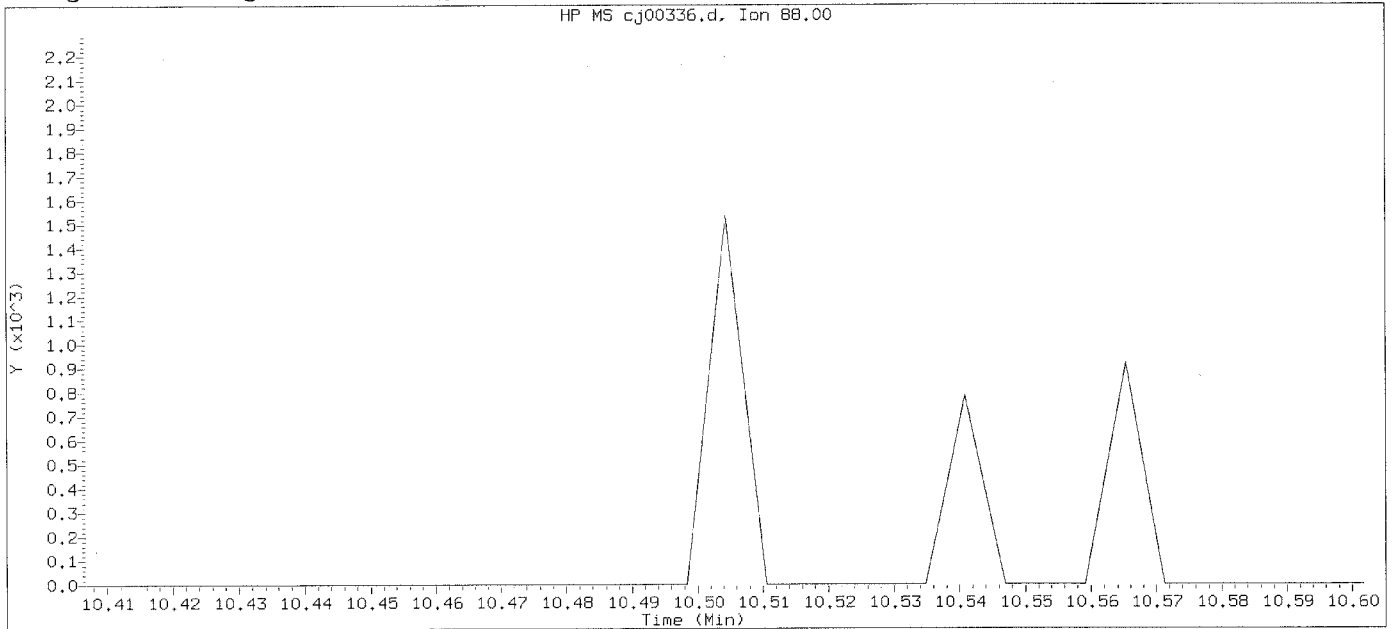
Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d

Instrument ID: HP09464.i

Injection date and time: 16-OCT-2015 09:19

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2

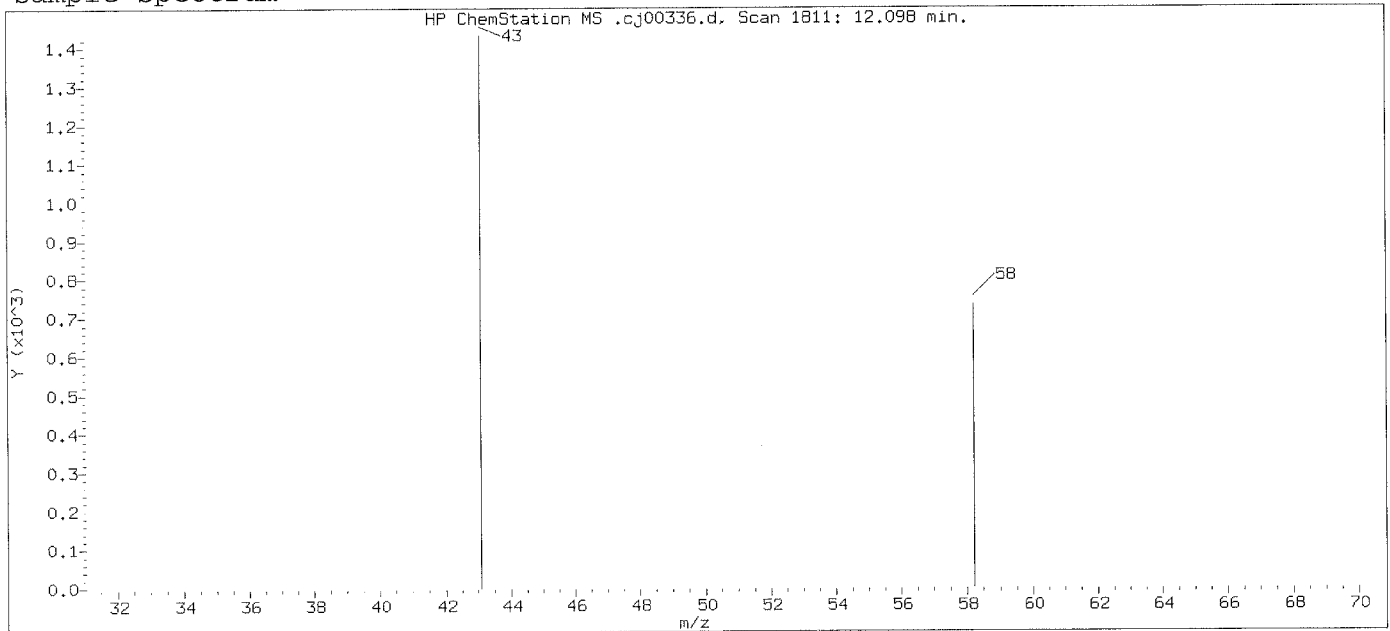
Lab Sample ID: mdlv0.2

Compound Number : 56  
Compound Name : 1,4-Dioxane  
Expected RT (minutes) : 10.504  
Quant Ion : 88.00

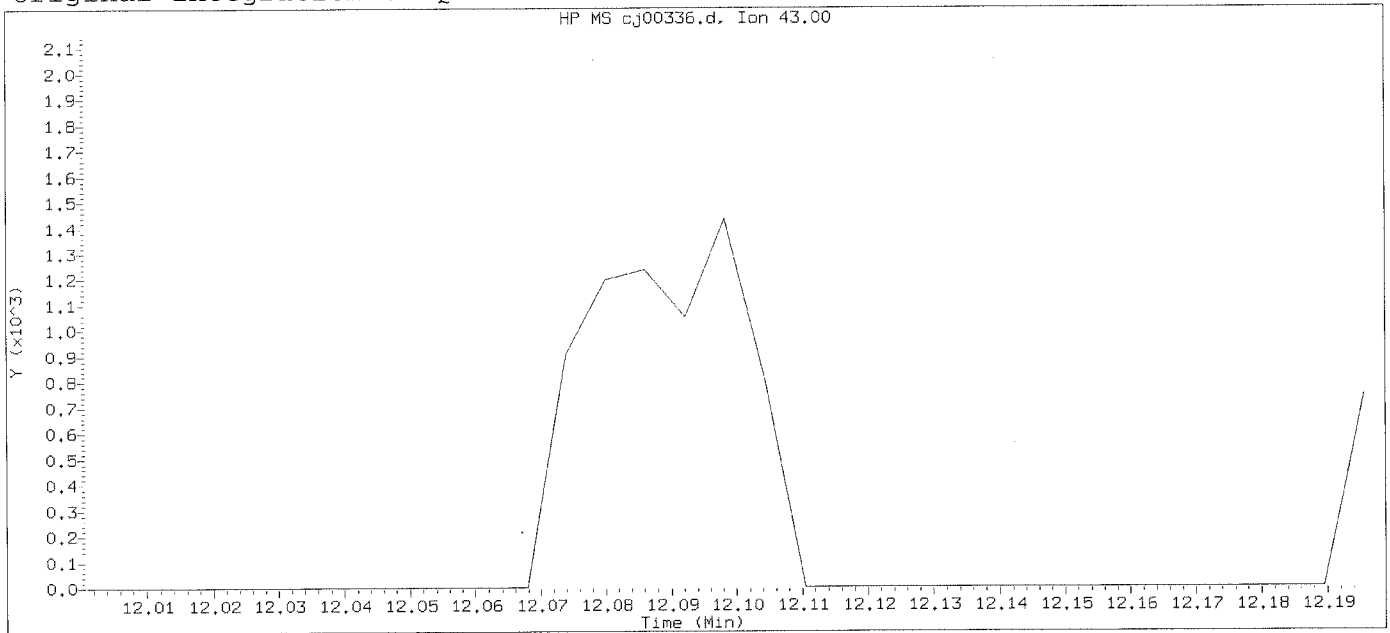
Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445



Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d

Instrument ID: HP09464.i

Injection date and time: 16-OCT-2015 09:19

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

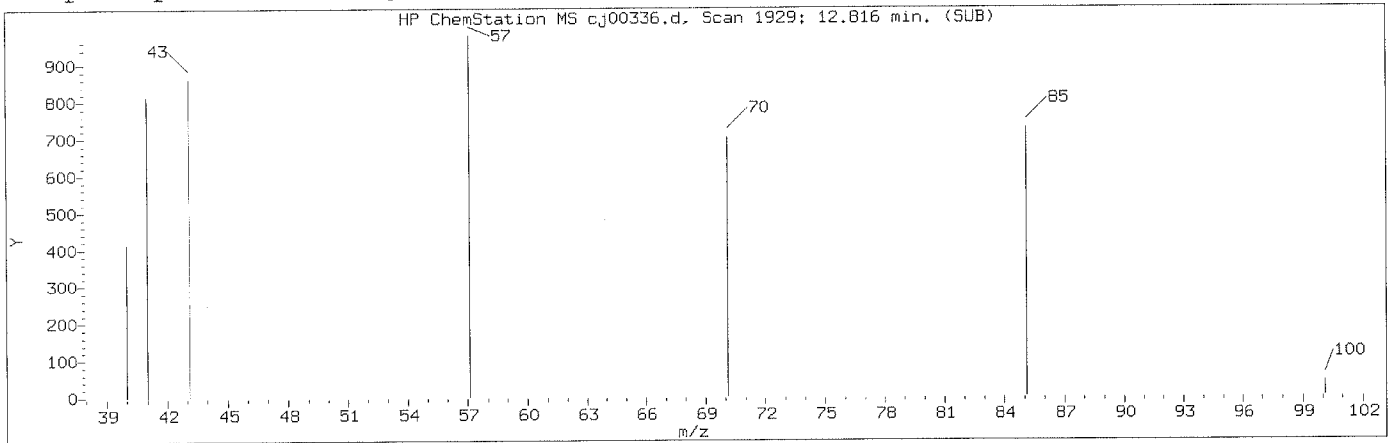
Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

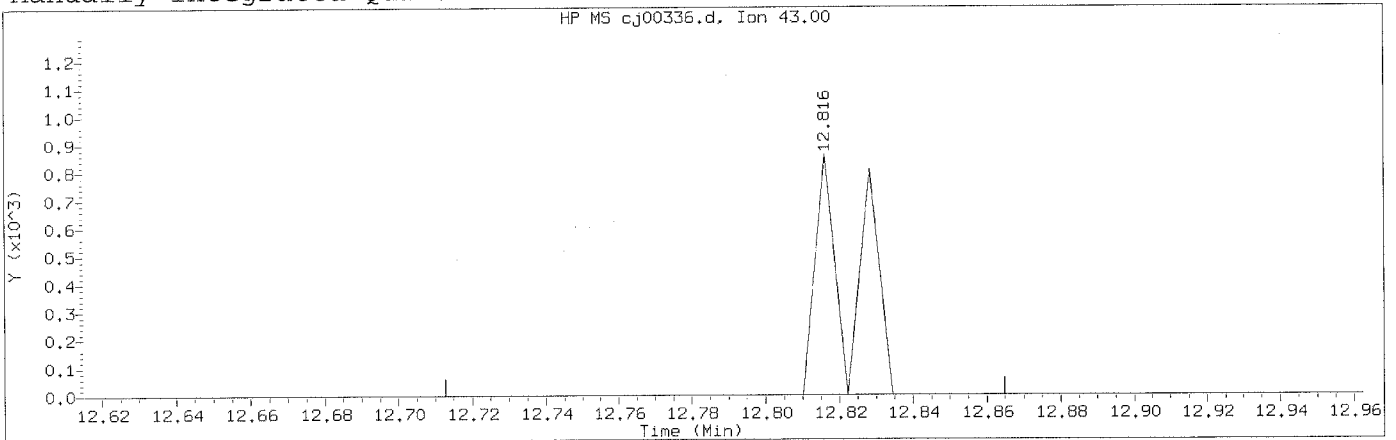
Compound Number : 60  
Compound Name : 4-Methyl-2-Pentanone  
Expected RT (minutes) : 12.098  
Quant Ion : 43.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

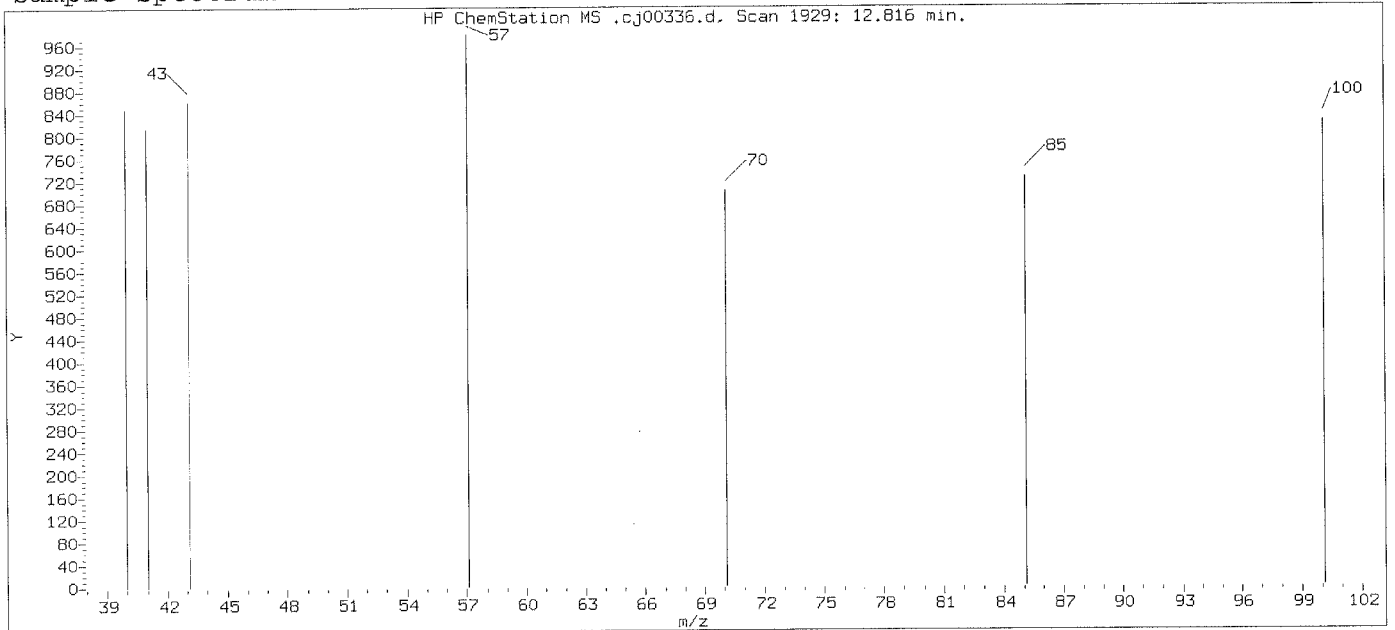
Compound Number : 62  
Compound Name : Octane  
Scan Number : 1929  
Retention Time (minutes): 12.816  
Quant Ion : 43.00  
Area (flag) : 609M  
Concentration (ppb(v)) : 0.0194  
Integration start scan : 1911      Integration stop scan: 1936  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: missed peak

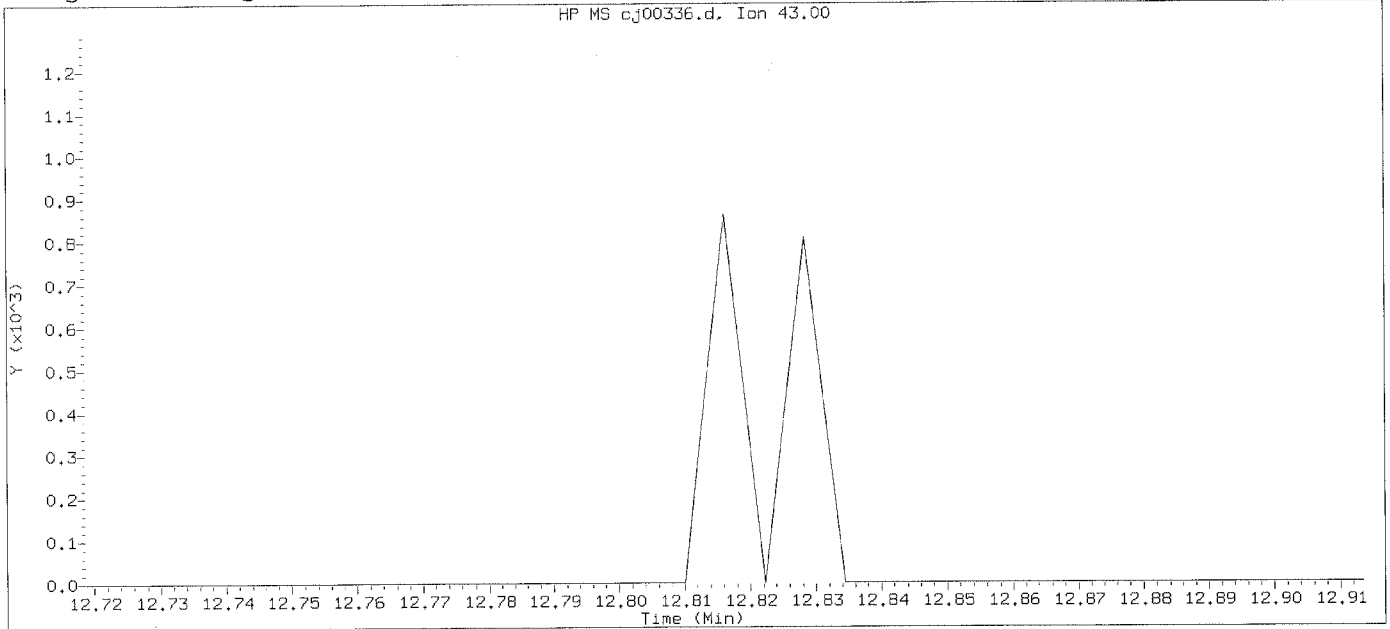
Digitally signed by Jacob E. Bailey  
Analyst responsible for change: on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp1758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d  
Injection date and time: 16-OCT-2015 09:19

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 15-OCT-2015 19:21  
Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2

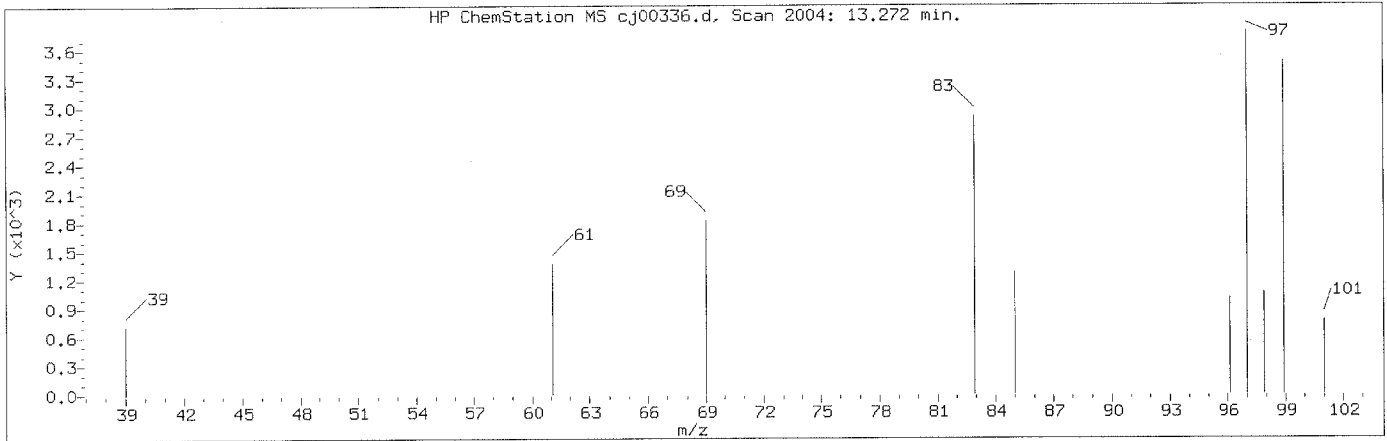
Lab Sample ID: mdlv0.2

Compound Number : 62  
Compound Name : Octane  
Expected RT (minutes) : 12.816  
Quant Ion : 43.00

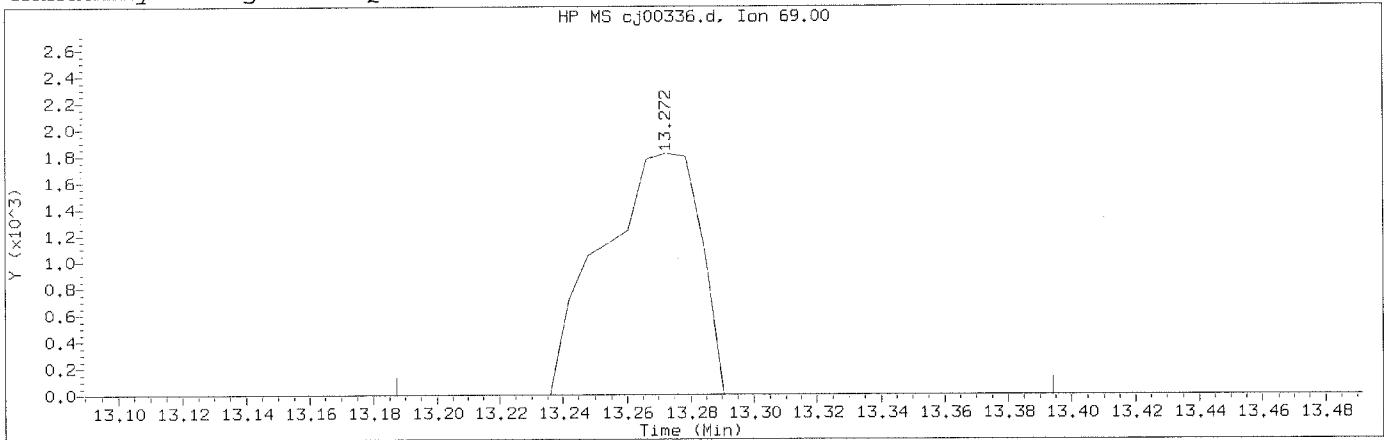
Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d                      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 09:19                      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m                      Sublist used: all  
Calibration date and time: 16-OCT-2015 18:12  
Date, time and analyst ID of latest file update: 16-Oct-2015 18:16 jeb07445

Sample Name: mdlv0.2                      Lab Sample ID: mdlv0.2

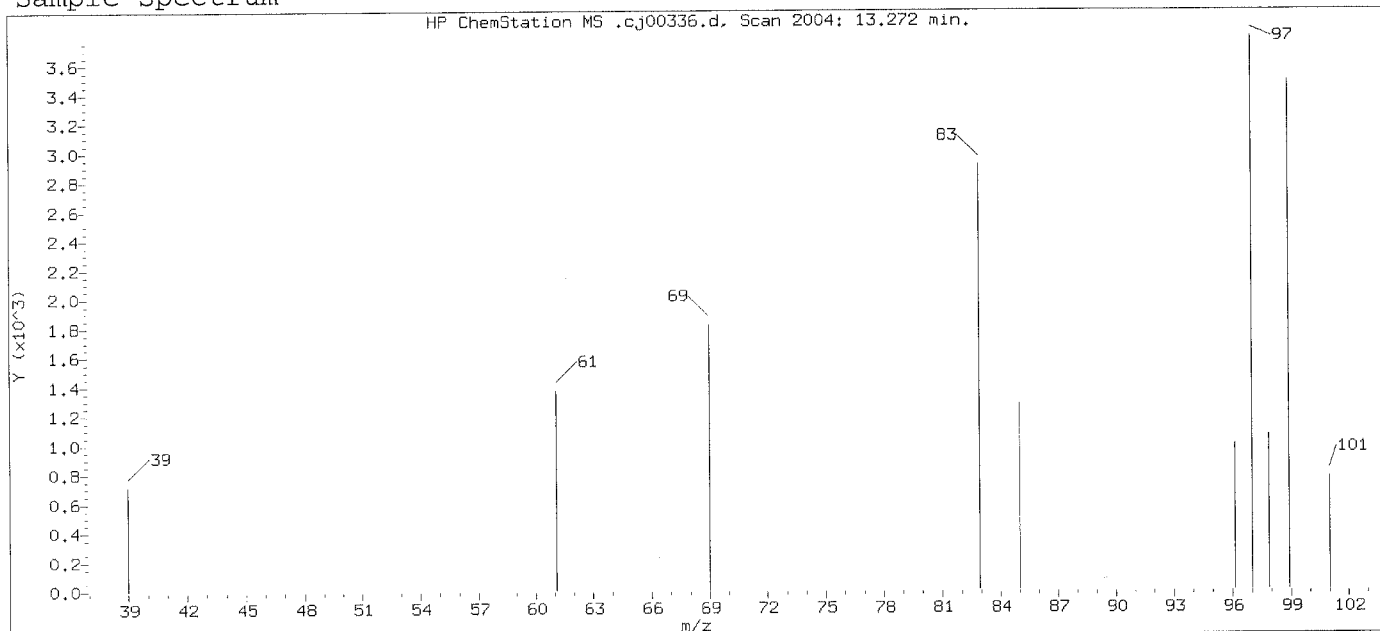
Compound Number	: 65	
Compound Name	: Ethyl Methacrylate	
Scan Number	: 2004	
Retention Time (minutes)	: 13.272	
Quant Ion	: 69.00	
Area (flag)	: 3862M	
Concentration (ppb(v))	: 0.1154	
Integration start scan	: 1989	Integration stop scan: 2023
Y at integration start	: 0	Y at integration end: 0

Reason for manual integration: missed peak

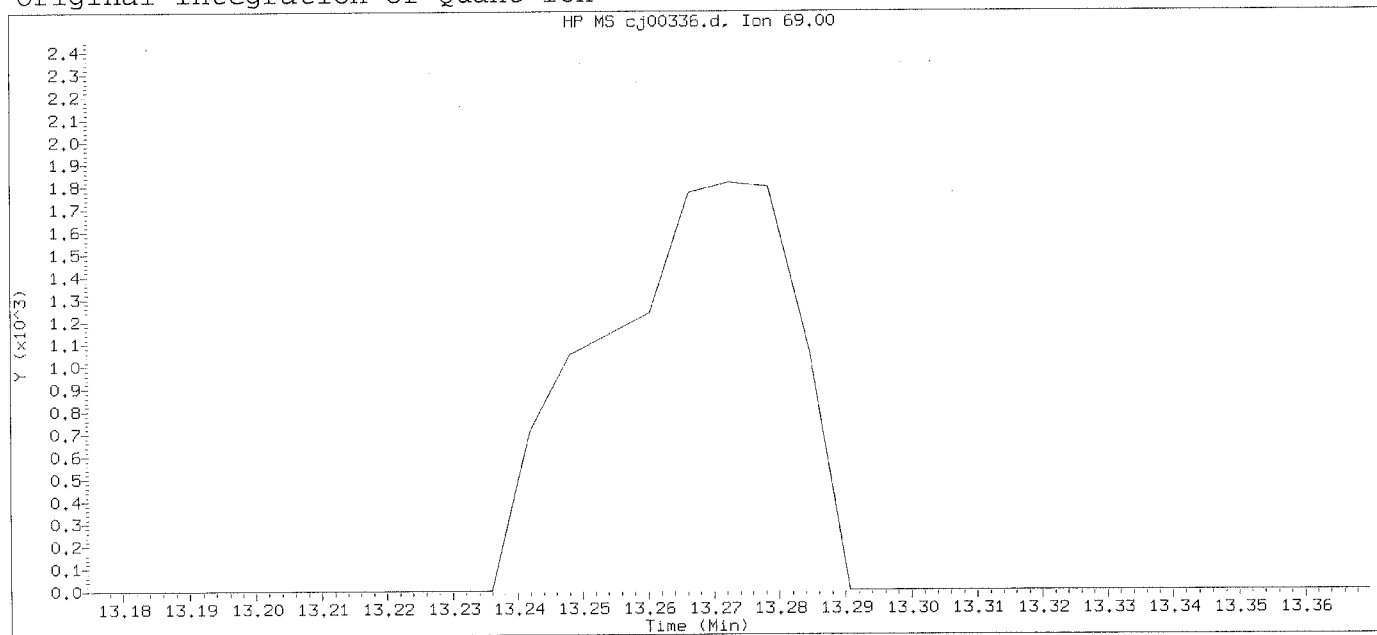
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval:                     mgp/758 10/21/15

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00336.d

Instrument ID: HP09464.i

Injection date and time: 16-OCT-2015 09:19

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m

Sublist used: all

Calibration date and time: 15-OCT-2015 19:21

Date, time and analyst ID of latest file update: 16-Oct-2015 10:00 Automation

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compound Number : 65  
Compound Name : Ethyl Methacrylate  
Expected RT (minutes) : 13.272  
Quant Ion : 69.00

Digitally signed by Jacob E. Bailey on 10/16/2015 at 18:17.  
Target 3.5 esignature user ID: jeb07445

SDG No.:

Lab File ID: cj00351.d

Calibration Date: 10/16/2015

Instrument ID: 09464

Calibration Time: 15:29

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.238	0.245	10.947	10.6	3
Dichlorodifluoromethane	2.943	2.514	8.715	10.2	-15
Chlorodifluoromethane	0.940	0.861	9.616	10.5	-8
Freon 114	2.648	2.447	8.871	9.6	-8
Chloromethane	0.140	0.142	10.191	10	2
Vinyl Chloride	0.623	0.586	9.397	10	-6
1,3-Butadiene	0.384	0.362	9.730	10.3	-6
Bromomethane	0.908	0.851	9.379	10	-6
Chloroethane	0.352	0.311	8.476	9.6	-12
Bromoethene	0.863	0.875	10.546	10.4	1
Dichlorofluoromethane	1.644	1.472	9.490	10.6	-10
Trichlorofluoromethane	3.172	2.859	9.463	10.5	-10
Pentane	0.539	0.515	10.019	10.5	-5
Ethanol	0.127	0.146	12.049	10.5	15
Freon123a	1.158	1.104	10.489	11	-5
Acrolein	0.119	0.129	11.844	10.9	9
1,1-Dichloroethene	1.034	0.946	9.611	10.5	-8
Freon 113	1.258	1.181	10.049	10.7	-6
Acetone	0.411	0.435	11.097	10.5	6
Methyl Iodide	2.713	2.731	10.573	10.5	1
Carbon Disulfide	2.125	1.804	8.490	10	-15
Isopropanol	0.486	0.437	10.421	11.6	-10
Acetonitrile	0.094	0.085	10.011	11	-9
3-Chloropropene	0.293	0.274	10.295	11	-6
Methylene Chloride	0.641	0.569	9.760	11	-11
tert-Butyl Alcohol	0.731	0.743	11.386	11.2	2
Acrylonitrile	0.221	0.264	12.542	10.5	19
trans-1,2-Dichloroethene	0.876	0.799	8.937	9.8	-9
Methyl t-Butyl Ether	1.132	1.212	11.135	10.4	7
Hexane	0.641	0.669	10.535	10.1	4
1,1-Dichloroethane	1.081	1.083	10.324	10.3	0
Vinyl Acetate *	0.113	0.151	14.764	11	34 *
Di-Isopropyl Ether	0.645	0.732	11.691	10.3	14
Ethyl Tert-Butyl Ether	0.900	1.028	11.651	10.2	14
cis-1,2-Dichloroethene	0.806	0.806	10.304	10.3	0
2-Butanone	0.200	0.220	11.550	10.5	10
Ethyl Acetate	0.091	0.107	12.137	10.3	18
Methyl Acrylate	0.506	0.604	12.436	10.43	19
Tetrahydrofuran	0.217	0.250	12.095	10.5	15

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Lab File ID: cj00351.d

Calibration Date: 10/16/2015

Instrument ID: 09464

Calibration Time: 15:29

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	1.895	1.821	9.899	10.3	-4
1,1,1-Trichloroethane	2.153	2.117	10.126	10.3	-2
Cyclohexane	0.702	0.712	10.340	10.2	1
Carbon Tetrachloride	2.435	2.331	10.052	10.5	-4
Benzene	0.612	0.611	10.473	10.5	0
1,2-Dichloroethane	0.355	0.340	9.970	10.4	-4
Isooctane	0.576	0.631	11.725	10.7	10
Tert-Amyl Methyl Ether	0.335	0.355	10.913	10.3	6
Heptane	0.159	0.168	11.032	10.4	6
Trichloroethene	0.419	0.402	9.679	10.1	-4
Ethyl Acrylate	0.172	0.193	12.005	10.7	12
1,2-Dichloropropane	0.170	0.181	11.013	10.3	7
Dibromomethane	0.417	0.369	9.107	10.3	-12
1,4-Dioxane	0.125	0.122	9.832	10.1	-3
Methyl Methacrylate	0.130	0.139	10.945	10.2	7
Bromodichloromethane	0.624	0.588	9.717	10.31	-6
cis-1,3-Dichloropropene	0.332	0.362	11.992	11	9
4-Methyl-2-Pentanone	0.159	0.167	10.559	10.1	5
Toluene	0.781	0.896	11.815	10.3	15
Octane	0.206	0.239	12.075	10.4	16
trans-1,3-Dichloropropene	0.411	0.441	10.851	10.1	7
Ethyl Methacrylate	0.219	0.243	11.428	10.3	11
1,1,2-Trichloroethane	0.333	0.349	10.782	10.3	5
Tetrachloroethene	0.665	0.594	8.750	9.8	-11
2-Hexanone	0.181	0.185	11.158	10.9	2
Dibromochloromethane	0.642	0.601	9.549	10.2	-6
1,2-Dibromoethane	0.570	0.581	10.405	10.2	2
Chlorobenzene	0.776	0.816	11.038	10.5	5
1,1,1,2-Tetrachloroethane	0.484	0.491	10.649	10.5	1
Ethylbenzene	0.863	1.019	12.283	10.4	18
m/p-Xylene	0.713	0.845	11.370	9.6	18
o-Xylene	0.751	0.847	11.510	10.2	13
Styrene	0.673	0.755	11.222	10	12
Bromoform	0.829	0.854	10.101	9.8	3
Cumene	0.964	1.068	11.297	10.2	11
Bromobenzene	0.542	0.550	10.656	10.5	1
1,1,2,2-Tetrachloroethane	0.634	0.599	9.631	10.2	-6
1,2,3-Trichloropropane	0.243	0.233	9.995	10.4	-4
n-Propylbenzene	0.321	0.340	10.512	9.9	6

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Lab File ID: cj00351.d

Calibration Date: 10/16/2015

Instrument ID: 09464

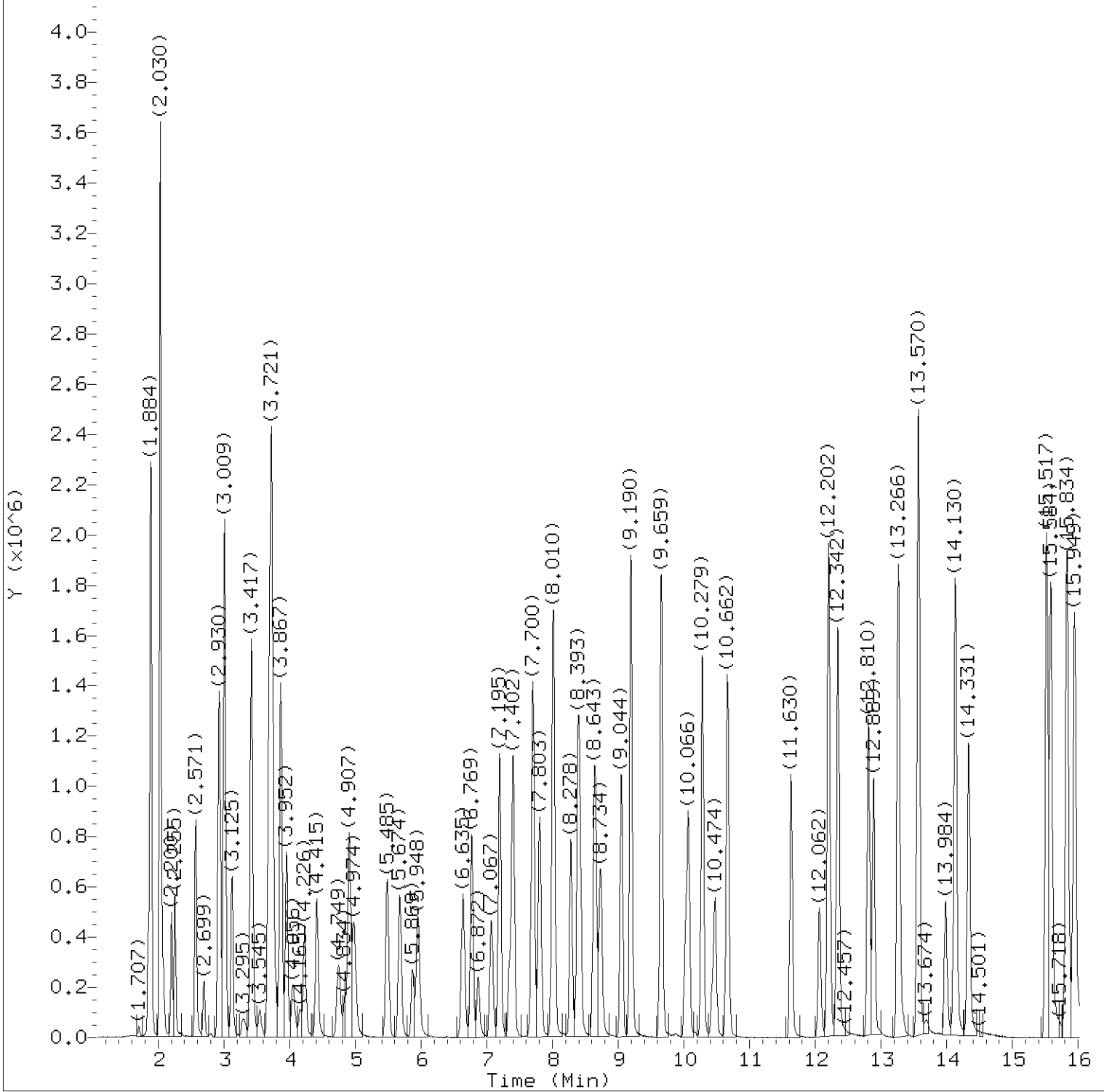
Calibration Time: 15:29

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.356	0.382	11.058	10.3	7
4-Ethyltoluene	1.075	1.207	11.341	10.1	12
1,3,5-Trimethylbenzene	0.926	1.019	11.002	10	10
Alpha Methyl Styrene	0.525	0.598	11.732	10.3	14
tert-Butylbenzene	0.915	1.017	11.231	10.1	11
1,2,4-Trimethylbenzene	0.961	1.103	11.589	10.1	15
sec-Butylbenzene	1.270	1.393	11.078	10.1	10
1,3-Dichlorobenzene	0.953	1.000	10.910	10.4	5
1,4-Dichlorobenzene	1.002	1.074	10.722	10	7
p-Isopropyltoluene	1.158	1.297	11.542	10.3	12
Benzyl Chloride	0.948	0.979	10.734	10.4	3
1,2-Dichlorobenzene	0.903	0.947	10.593	10.1	5
n-Butylbenzene	0.943	1.056	11.757	10.5	12
Hexachloroethane	0.478	0.538	11.819	10.5	13
1,2-Dibromo-3-chloropropane	0.491	0.451	9.646	10.5	-8
1,2,4-Trichlorobenzene	0.499	0.631	12.393	9.8	26
Hexachlorobutadiene	0.546	0.662	12.125	10	21
Naphthalene	1.032	1.207	12.636	10.8	17

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00351.d  
Injection date and time: 16-OCT-2015 15:29

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: all

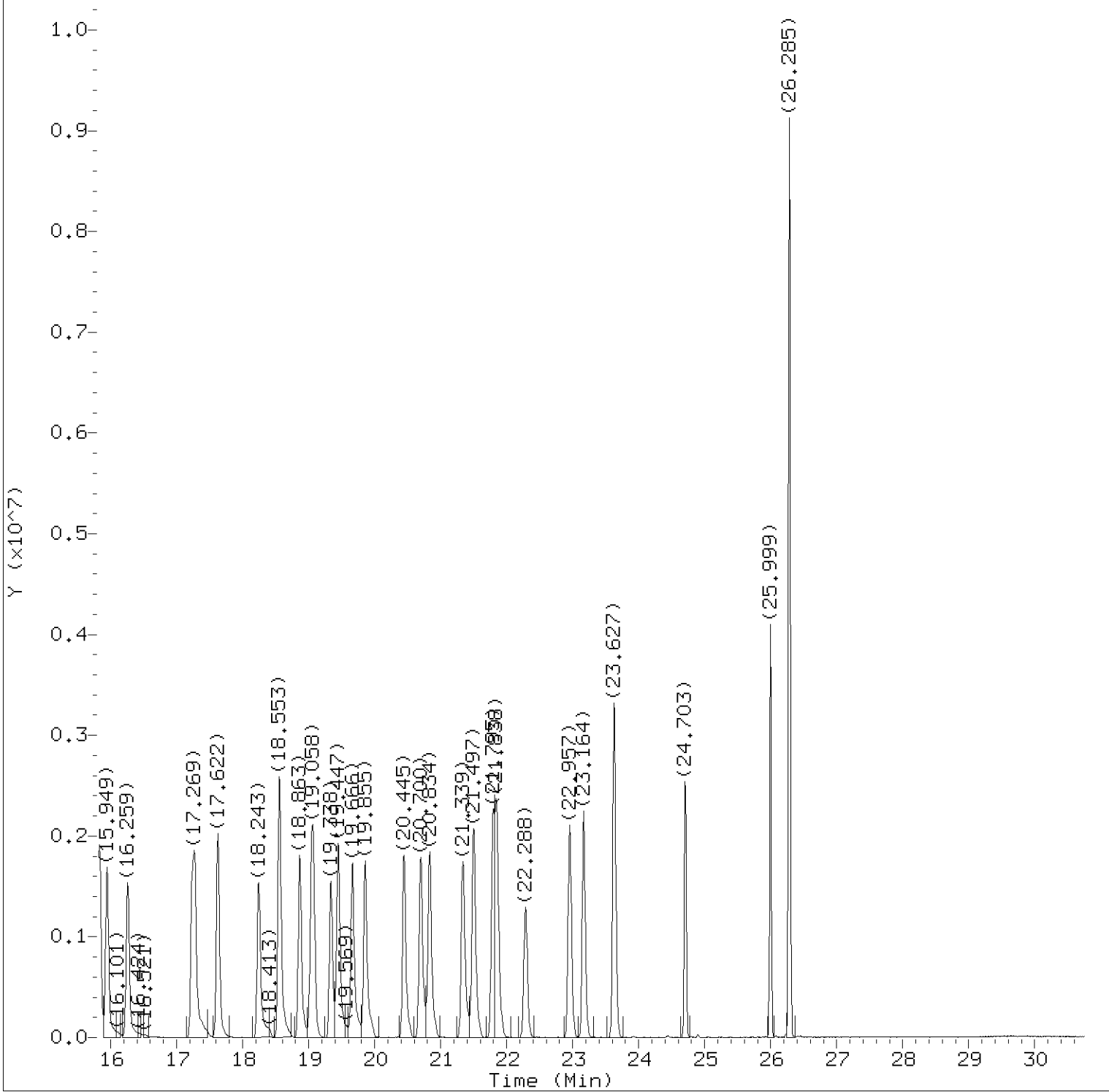
Date, time and analyst ID of latest file update: 21-Oct-2015 16:54 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:54.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00351.d  
Injection date and time: 16-OCT-2015 15:29

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:54

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:54 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:54.

Target 3.5 esignature user ID: jeb07445

## Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00351.d  
Injection date and time: 16-OCT-2015 15:29Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m

Sublist used: all

Calibration date and time: 21-OCT-2015 16:54

Date, time and analyst ID of latest file update: 21-Oct-2015 16:54 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.847	41	208140	10.947
2) Dichlorodifluoromethane	(1)	1.884	85	2052091	8.715
3) Chlorodifluoromethane	(1)	1.896	51	723589	9.616
4) Freon 114	(1)	2.030	85	1879643	8.871
5) Chloromethane	(1)	2.079	52	113905	10.191
6) Vinyl Chloride	(1)	2.200	62	468680	9.397
7) 1,3-Butadiene	(1)	2.255	54	298719	9.730
8) Bromomethane	(1)	2.571	94	681284	9.379
9) Chloroethane	(1)	2.699	64	238943	8.476
10) Bromoethene	(1)	2.912	106	727822	10.546
11) Dichlorofluoromethane	(1)	2.936	67	1248260	9.490
12) Trichlorofluoromethane	(1)	3.009	101	2402075	9.463
13) Pentane	(1)	3.125	43	432288	10.019
14) Ethanol	(1)	3.277	45	122501	12.049
15) Freon123a	(1)	3.417	67	971901	10.489
16) Acrolein	(1)	3.545	56	112543	11.844
17) 1,1-Dichloroethene	(1)	3.679	61	795094	9.611
18) Freon 113	(1)	3.721	103	1011349	10.049
19) Acetone	(1)	3.776	43	365145	11.097
20) Methyl Iodide	(1)	3.867	142	2294705	10.573
21) Carbon Disulfide	(1)	3.952	76	1443630	8.490
22) Isopropanol	(1)	4.056	45	405391	10.421
23) Acetonitrile	(1)	4.165	40	74965	10.011
24) 3-Chloropropene	(1)	4.226	76	241429	10.295
25) Methylene Chloride	(1)	4.415	84	500841	9.760
26) tert-Butyl Alcohol	(1)	4.749	59	665962	11.386
27) Acrylonitrile	(1)	4.847	53	221744	12.542
28) trans-1,2-Dichloroethene	(1)	4.901	61	626233	8.937
29) Methyl t-Butyl Ether	(1)	4.980	73	1008698	11.135
30) Hexane	(1)	5.485	57	540595	10.535
31) 1,1-Dichloroethane	(1)	5.674	63	892930	10.324
32) Vinyl Acetate	(1)	5.869	86	132940	14.764
33) Di-Isopropyl Ether	(1)	5.948	45	603577	11.691
36) 1,2-Dichloroethene (total)	(1)		61	1290694	19.240
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	838837	11.651
35) cis-1,2-Dichloroethene	(1)	6.769	61	664461	10.304
37) 2-Butanone	(1)	6.866	72	184618	11.550
38) Ethyl Acetate	(1)	7.055	70	88176	12.137

page 1 of 3

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:54.

Target 3.5 esignature user ID: jeb07445

SSX23 Page 440 of 1243



Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00351.d  
 Injection date and time: 16-OCT-2015 15:29

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:54 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.079	55	503683	12.436
40)*Bromochloromethane	(1)	7.201	130	800124	10.000
41) Tetrahydrofuran	(1)	7.347	42	210152	12.095
42) Chloroform	(1)	7.402	83	1501146	9.899
43) 1,1,1-Trichloroethane	(1)	7.700	97	1744679	10.126
44) Cyclohexane	(1)	7.803	56	580896	10.340
45) Carbon Tetrachloride	(1)	8.016	117	1958086	10.052
46) Benzene	(2)	8.393	78	1681765	10.473
47) 1,2-Dichloroethane	(2)	8.424	62	928480	9.970
48) Isooctane	(2)	8.643	57	1771479	11.725
49) Tert-Amyl Methyl Ether	(2)	8.734	73	957993	10.913
50) Heptane	(2)	9.044	43	459256	11.032
51)*1,4-Difluorobenzene	(2)	9.190	114	2623343	10.000
52) Trichloroethene	(2)	9.653	130	1063942	9.679
53) Ethyl Acrylate	(2)	10.024	55	541107	12.005
54) 1,2-Dichloropropane	(2)	10.066	63	490359	11.013
55) Dibromomethane	(2)	10.285	174	996998	9.107
56) 1,4-Dioxane	(2)	10.437	88	322311	9.832
57) Methyl Methacrylate	(2)	10.480	69	372735	10.945
58) Bromodichloromethane	(2)	10.662	83	1591650	9.717
59) cis-1,3-Dichloropropene	(2)	11.630	75	1044629	11.992
60) 4-Methyl-2-Pentanone	(2)	12.062	43	441383	10.559
61) Toluene	(3)	12.342	91	2204009	11.815
64) 1,3-Dichloropropene (total)	(3)		75	2109063	22.843
62) Octane	(3)	12.810	43	593584	12.075
63) trans-1,3-Dichloropropene	(3)	12.889	75	1064434	10.851
65) Ethyl Methacrylate	(3)	13.254	69	597758	11.428
66) 1,1,2-Trichloroethane	(3)	13.266	97	857659	10.782
67) Tetrachloroethene	(3)	13.570	166	1389636	8.750
68) 2-Hexanone	(3)	13.984	43	481543	11.158
69) Dibromochloromethane	(3)	14.130	127	1464019	9.549
70) 1,2-Dibromoethane	(3)	14.331	107	1415966	10.405
71)*Chlorobenzene-d5	(3)	15.517	117	2389136	10.000
72) Chlorobenzene	(3)	15.584	112	2047706	11.038
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	1231098	10.649
74) Ethylbenzene	(3)	15.949	91	2531458	12.283
75) m/p-Xylene	(3)	16.259	91	1937893	11.370
77) Xylene (total)	(3)		91	4002763	22.880

\* = Compound is an internal standard.

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 on 10/21/2015 at 16:54.  
 Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 441 of 1243

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00351.d  
 Injection date and time: 16-OCT-2015 15:29

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:54  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:54 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.233	91	2064870	11.510
78) Styrene	(3)	17.275	104	1804622	11.222
79) Bromoform	(3)	17.622	173	2000465	10.101
80) Cumene	(3)	18.243	105	2602830	11.297
81) Bromobenzene	(3)	18.863	156	1379065	10.656
82) 1,1,2,2-Tetrachloroethane	(3)	19.040	83	1459115	9.631
83) 1,2,3-Trichloropropane	(3)	19.082	110	579427	9.995
84) n-Propylbenzene	(3)	19.338	120	805065	10.512
85) 2-Chlorotoluene	(3)	19.447	126	940594	11.058
86) 4-Ethyltoluene	(3)	19.666	105	2913664	11.341
87) 1,3,5-Trimethylbenzene	(3)	19.855	105	2433925	11.002
88) Alpha Methyl Styrene	(3)	20.439	118	1472772	11.732
89) tert-Butylbenzene	(3)	20.700	119	2454903	11.231
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	2661949	11.589
91) sec-Butylbenzene	(3)	21.333	105	3362325	11.078
92) 1,3-Dichlorobenzene	(3)	21.503	146	2484895	10.910
93) 1,4-Dichlorobenzene	(3)	21.789	146	2565649	10.722
94) p-Isopropyltoluene	(3)	21.856	119	3192238	11.542
95) Benzyl Chloride	(3)	22.288	91	2431897	10.734
96) 1,2-Dichlorobenzene	(3)	22.957	146	2284678	10.593
97) n-Butylbenzene	(3)	23.164	91	2649163	11.757
98) Hexachloroethane	(3)	23.627	117	1350288	11.819
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	1130591	9.646
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	1476978	12.393
101) Hexachlorobutadiene	(3)	26.279	225	1580656	12.125
102) Naphthalene	(3)	26.291	128	3115549	12.636

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Target 3.5 esignature user ID: jeb07445

SDG No.:

Lab File ID: cj00385.d

Calibration Date: 10/19/2015

Instrument ID: 09464

Calibration Time: 15:16

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Propene	0.238	0.216	9.633	10.6	-9
Dichlorodifluoromethane	2.943	2.646	9.170	10.2	-10
Chlorodifluoromethane	0.940	0.797	8.896	10.5	-15
Freon 114	2.648	2.265	8.212	9.6	-14
Chloromethane	0.140	0.118	8.483	10	-15
Vinyl Chloride	0.623	0.527	8.451	10	-15
1,3-Butadiene	0.384	0.332	8.917	10.3	-13
Bromomethane	0.908	0.789	8.692	10	-13
Chloroethane	0.352	0.292	7.948	9.6	-17
Bromoethene	0.863	0.772	9.304	10.4	-11
Dichlorofluoromethane	1.644	1.352	8.720	10.6	-18
Trichlorofluoromethane	3.172	2.789	9.231	10.5	-12
Pentane	0.539	0.472	9.184	10.5	-13
Ethanol	0.127	0.133	10.999	10.5	5
Freon123a	1.158	0.917	8.709	11	-21
Acrolein	0.119	0.103	9.476	10.9	-13
1,1-Dichloroethene	1.034	0.901	9.154	10.5	-13
Freon 113	1.258	1.073	9.129	10.7	-15
Acetone	0.411	0.369	9.433	10.5	-10
Methyl Iodide	2.713	2.463	9.534	10.5	-9
Carbon Disulfide	2.125	1.754	8.252	10	-17
Isopropanol	0.486	0.401	9.558	11.6	-18
Acetonitrile	0.094	0.076	8.896	11	-19
3-Chloropropene	0.293	0.242	9.081	11	-17
Methylene Chloride	0.641	0.527	9.046	11	-18
tert-Butyl Alcohol	0.731	0.681	10.433	11.2	-7
Acrylonitrile	0.221	0.192	9.137	10.5	-13
trans-1,2-Dichloroethene	0.876	0.782	8.750	9.8	-11
Methyl t-Butyl Ether	1.132	1.086	9.975	10.4	-4
Hexane	0.641	0.579	9.119	10.1	-10
1,1-Dichloroethane	1.081	0.904	8.613	10.3	-16
Vinyl Acetate	0.113	0.115	11.234	11	2
Di-Isopropyl Ether	0.645	0.663	10.587	10.3	3
Ethyl Tert-Butyl Ether	0.900	0.930	10.543	10.2	3
cis-1,2-Dichloroethene	0.806	0.705	9.012	10.3	-13
2-Butanone	0.200	0.180	9.446	10.5	-10
Ethyl Acetate	0.091	0.092	10.450	10.3	1
Methyl Acrylate	0.506	0.470	9.691	10.43	-7
Tetrahydrofuran	0.217	0.206	9.960	10.5	-5

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Lab File ID: cj00385.d

Calibration Date: 10/19/2015

Instrument ID: 09464

Calibration Time: 15:16

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
Chloroform	1.895	1.669	9.070	10.3	-12
1,1,1-Trichloroethane	2.153	1.994	9.537	10.3	-7
Cyclohexane	0.702	0.668	9.711	10.2	-5
Carbon Tetrachloride	2.435	2.364	10.198	10.5	-3
Benzene	0.612	0.571	9.791	10.5	-7
1,2-Dichloroethane	0.355	0.327	9.578	10.4	-8
Isooctane	0.576	0.568	10.545	10.7	-1
Tert-Amyl Methyl Ether	0.335	0.355	10.920	10.3	6
Heptane	0.159	0.157	10.296	10.4	-1
Trichloroethene	0.419	0.416	10.034	10.1	-1
Ethyl Acrylate	0.172	0.162	10.118	10.7	-5
1,2-Dichloropropane	0.170	0.161	9.799	10.3	-5
Dibromomethane	0.417	0.394	9.717	10.3	-6
1,4-Dioxane	0.125	0.125	10.129	10.1	0
Methyl Methacrylate	0.130	0.123	9.670	10.2	-5
Bromodichloromethane	0.624	0.580	9.581	10.31	-7
cis-1,3-Dichloropropene	0.332	0.339	11.224	11	2
4-Methyl-2-Pentanone	0.159	0.165	10.434	10.1	3
Toluene	0.781	0.852	11.242	10.3	9
Octane	0.206	0.235	11.880	10.4	14
trans-1,3-Dichloropropene	0.411	0.423	10.413	10.1	3
Ethyl Methacrylate	0.219	0.226	10.625	10.3	3
1,1,2-Trichloroethane	0.333	0.345	10.684	10.3	4
Tetrachloroethene	0.665	0.683	10.074	9.8	3
2-Hexanone	0.181	0.203	12.220	10.9	12
Dibromochloromethane	0.642	0.664	10.561	10.2	4
1,2-Dibromoethane	0.570	0.608	10.888	10.2	7
Chlorobenzene	0.776	0.836	11.301	10.5	8
1,1,1,2-Tetrachloroethane	0.484	0.538	11.682	10.5	11
Ethylbenzene	0.863	0.992	11.956	10.4	15
m/p-Xylene	0.713	0.800	10.769	9.6	12
o-Xylene	0.751	0.825	11.213	10.2	10
Styrene	0.673	0.749	11.120	10	11
Bromoform	0.829	0.966	11.423	9.8	17
Cumene	0.964	1.135	12.003	10.2	18
Bromobenzene	0.542	0.587	11.385	10.5	8
1,1,2,2-Tetrachloroethane	0.634	0.620	9.966	10.2	-2
1,2,3-Trichloropropane	0.243	0.250	10.735	10.4	3
n-Propylbenzene	0.321	0.366	11.301	9.9	14

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Lab File ID: cj00385.d

Calibration Date: 10/19/2015

Instrument ID: 09464

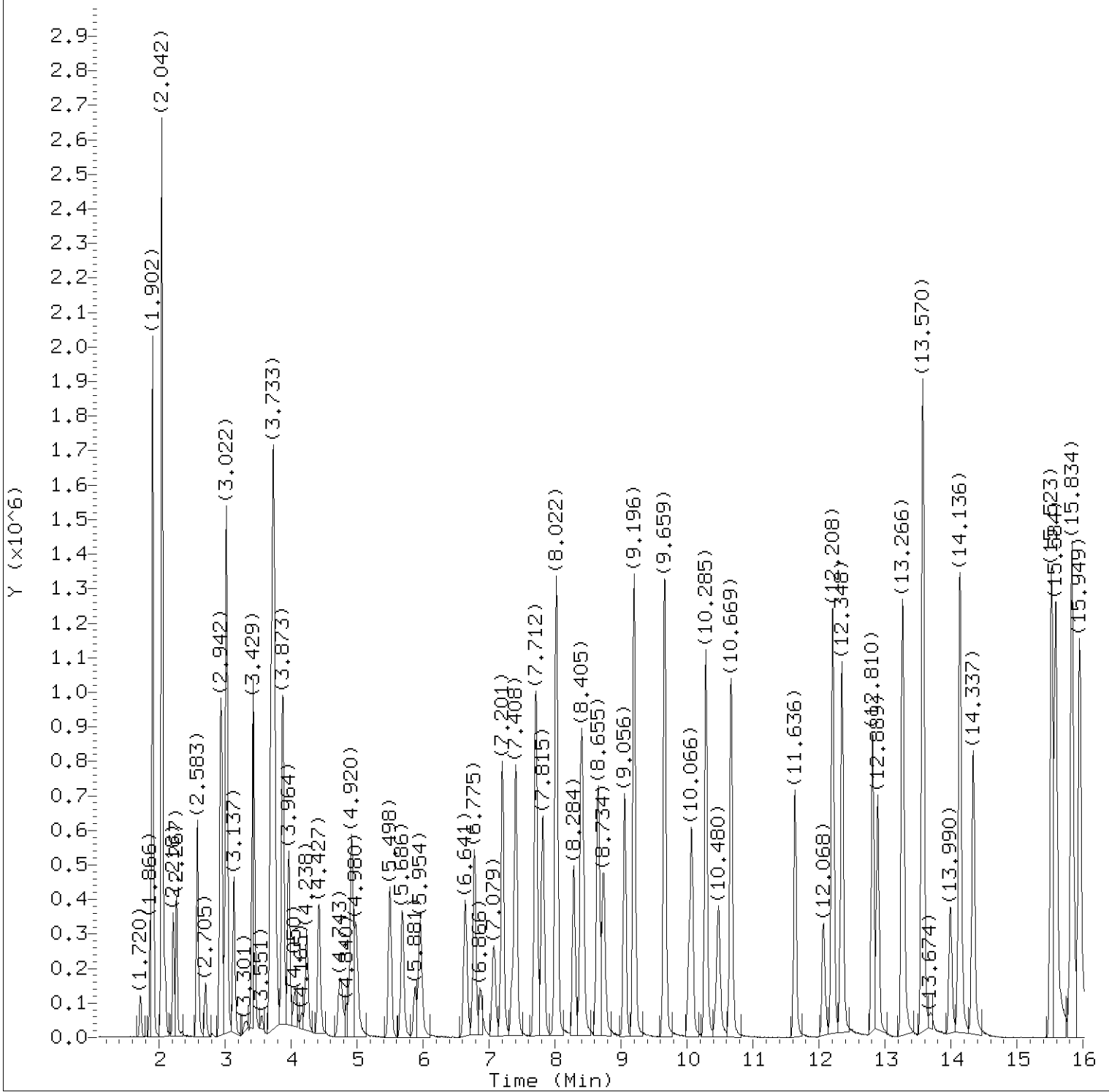
Calibration Time: 15:16

Init. Calib. Date(s): 10/16/2015

COMPOUND	RRF	RRF 10	ACTUAL CONC.	TRUE CONC.	%DRIFT
2-Chlorotoluene	0.356	0.396	11.457	10.3	11
4-Ethyltoluene	1.075	1.235	11.599	10.1	15
1,3,5-Trimethylbenzene	0.926	1.047	11.311	10	13
Alpha Methyl Styrene	0.525	0.586	11.486	10.3	12
tert-Butylbenzene	0.915	1.029	11.362	10.1	12
1,2,4-Trimethylbenzene	0.961	1.086	11.407	10.1	13
sec-Butylbenzene	1.270	1.469	11.679	10.1	16
1,3-Dichlorobenzene	0.953	1.065	11.619	10.4	12
1,4-Dichlorobenzene	1.002	1.159	11.575	10	16
p-Isopropyltoluene	1.158	1.366	12.156	10.3	18
Benzyl Chloride	0.948	1.042	11.430	10.4	10
1,2-Dichlorobenzene	0.903	0.980	10.962	10.1	9
n-Butylbenzene	0.943	1.011	11.255	10.5	7
Hexachloroethane	0.478	0.522	11.467	10.5	9
1,2-Dibromo-3-chloropropane	0.491	0.493	10.548	10.5	0
1,2,4-Trichlorobenzene	0.499	0.595	11.698	9.8	19
Hexachlorobutadiene	0.546	0.701	12.852	10	29
Naphthalene	1.032	1.121	11.731	10.8	9

\* Maximum %DRIFT = 30%.

# Average RRF for all compounds must be greater than 0.010.



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00385.d  
Injection date and time: 19-OCT-2015 15:16

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 21-OCT-2015 17:37  
Date, time and analyst ID of latest file update: 21-Oct-2015 17:37 jeb07445

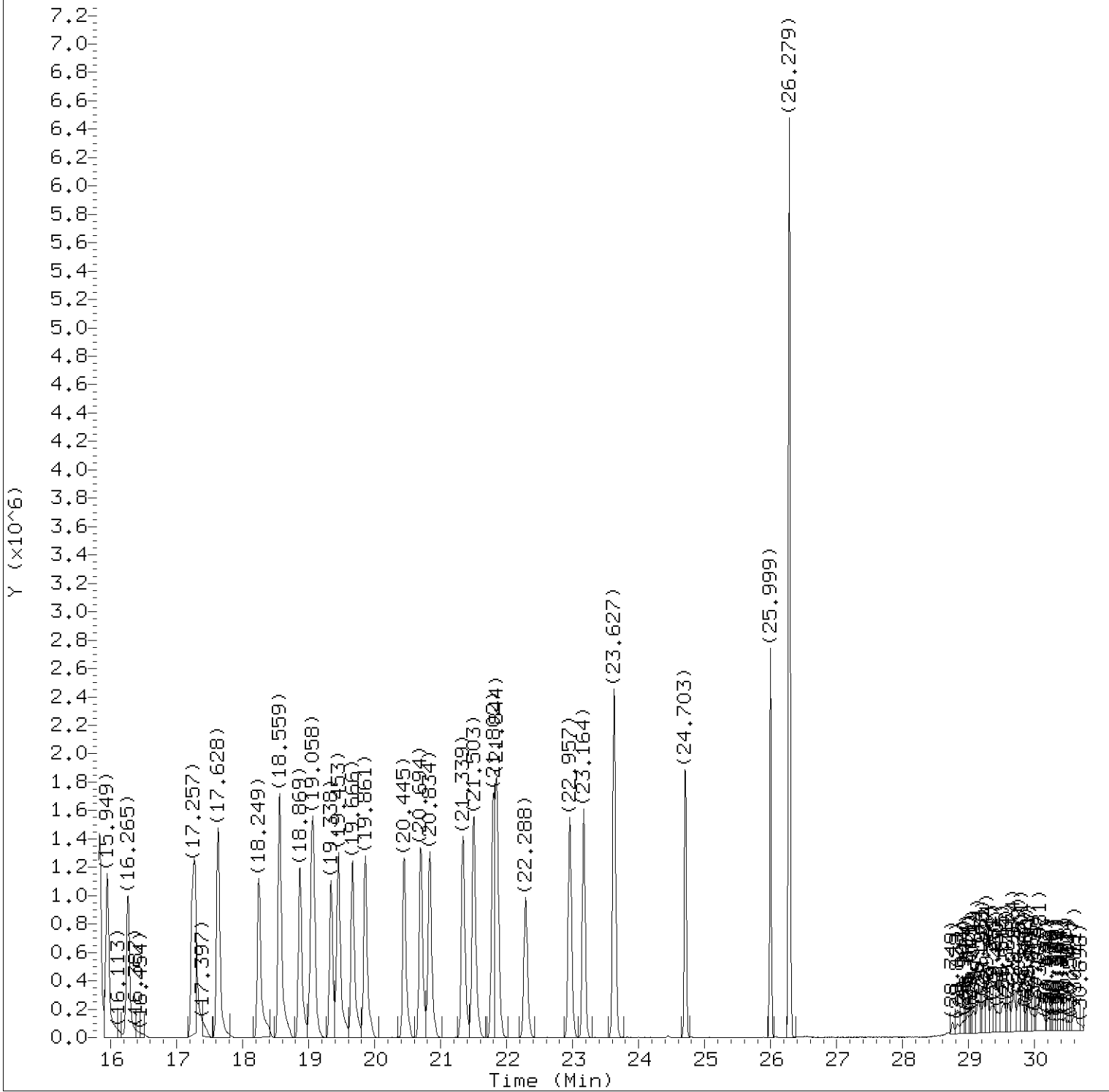
Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

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on 10/21/2015 at 17:37.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00385.d  
Injection date and time: 19-OCT-2015 15:16

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 21-OCT-2015 17:37

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 17:37 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 17:37.

Target 3.5 esignature user ID: jeb07445

## Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00385.d  
Injection date and time: 19-OCT-2015 15:16Instrument ID: HP09464.i  
Analyst ID: jbs01304Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 21-OCT-2015 17:37

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 17:37 jeb07445

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	140093	9.633
2) Dichlorodifluoromethane	(1)	1.902	85	1651697	9.170
3) Chlorodifluoromethane	(1)	1.914	51	512080	8.896
4) Freon 114	(1)	2.042	85	1330991	8.212
5) Chloromethane	(1)	2.091	52	72526	8.483
6) Vinyl Chloride	(1)	2.218	62	322453	8.451
7) 1,3-Butadiene	(1)	2.267	54	209416	8.917
8) Bromomethane	(1)	2.583	94	482938	8.692
9) Chloroethane	(1)	2.705	64	171391	7.948
10) Bromoethene	(1)	2.930	106	491192	9.304
11) Dichlorofluoromethane	(1)	2.948	67	877373	8.720
12) Trichlorofluoromethane	(1)	3.022	101	1792339	9.231
13) Pentane	(1)	3.137	43	303115	9.184
14) Ethanol	(1)	3.301	45	85543	10.999
15) Freon123a	(1)	3.429	67	617290	8.709
16) Acrolein	(1)	3.551	56	68878	9.476
17) 1,1-Dichloroethene	(1)	3.691	61	579292	9.154
18) Freon 113	(1)	3.739	103	702821	9.129
19) Acetone	(1)	3.782	43	237439	9.433
20) Methyl Iodide	(1)	3.873	142	1582895	9.534
21) Carbon Disulfide	(1)	3.964	76	1073357	8.252
22) Isopropanol	(1)	4.062	45	284441	9.558
23) Acetonitrile	(1)	4.159	40	50955	8.896
24) 3-Chloropropene	(1)	4.244	76	162899	9.081
25) Methylene Chloride	(1)	4.421	84	355106	9.046
26) tert-Butyl Alcohol	(1)	4.755	59	466812	10.433
27) Acrylonitrile	(1)	4.853	53	123574	9.137
28) trans-1,2-Dichloroethene	(1)	4.913	61	469057	8.750
29) Methyl t-Butyl Ether	(1)	4.980	73	691245	9.975
30) Hexane	(1)	5.504	57	357944	9.119
31) 1,1-Dichloroethane	(1)	5.686	63	569846	8.613
32) Vinyl Acetate	(1)	5.881	86	77374	11.234
33) Di-Isopropyl Ether	(1)	5.954	45	418097	10.587
36) 1,2-Dichloroethene (total)	(1)		61	913606	17.762
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	580640	10.543
35) cis-1,2-Dichloroethene	(1)	6.775	61	444549	9.012
37) 2-Butanone	(1)	6.872	72	115492	9.446
38) Ethyl Acetate	(1)	7.055	70	58076	10.450

page 1 of 3

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Target 3.5 esignature user ID: jeb07445

SSX23 Page 448 of 1243



Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00385.d  
 Injection date and time: 19-OCT-2015 15:16

Instrument ID: HP09464.i  
 Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 21-OCT-2015 17:37  
 Date, time and analyst ID of latest file update: 21-Oct-2015 17:37 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.079	55	300232	9.691
40)*Bromochloromethane	(1)	7.207	130	612057	10.000
41) Tetrahydrofuran	(1)	7.353	42	132379	9.960
42) Chloroform	(1)	7.408	83	1052165	9.070
43) 1,1,1-Trichloroethane	(1)	7.712	97	1257030	9.537
44) Cyclohexane	(1)	7.815	56	417333	9.711
45) Carbon Tetrachloride	(1)	8.022	117	1519500	10.198
46) Benzene	(2)	8.393	78	1150325	9.791
47) 1,2-Dichloroethane	(2)	8.430	62	652612	9.578
48) Isooctane	(2)	8.655	57	1165675	10.545
49) Tert-Amyl Methyl Ether	(2)	8.740	73	701376	10.920
50) Heptane	(2)	9.056	43	313597	10.296
51)*1,4-Difluorobenzene	(2)	9.202	114	1919381	10.000
52) Trichloroethene	(2)	9.659	130	806963	10.034
53) Ethyl Acrylate	(2)	10.018	55	333651	10.118
54) 1,2-Dichloropropane	(2)	10.072	63	319236	9.799
55) Dibromomethane	(2)	10.291	174	778361	9.717
56) 1,4-Dioxane	(2)	10.443	88	242952	10.129
57) Methyl Methacrylate	(2)	10.480	69	240962	9.670
58) Bromodichloromethane	(2)	10.669	83	1148166	9.581
59) cis-1,3-Dichloropropene	(2)	11.636	75	715362	11.224
60) 4-Methyl-2-Pentanone	(2)	12.062	43	319131	10.434
61) Toluene	(3)	12.348	91	1495038	11.242
64) 1,3-Dichloropropene (total)	(3)		75	1443582	21.637
62) Octane	(3)	12.810	43	416323	11.880
63) trans-1,3-Dichloropropene	(3)	12.889	75	728220	10.413
65) Ethyl Methacrylate	(3)	13.254	69	396202	10.625
66) 1,1,2-Trichloroethane	(3)	13.272	97	605850	10.684
67) Tetrachloroethene	(3)	13.576	166	1140583	10.074
68) 2-Hexanone	(3)	13.984	43	375963	12.220
69) Dibromochloromethane	(3)	14.136	127	1154275	10.561
70) 1,2-Dibromoethane	(3)	14.337	107	1056226	10.888
71)*Chlorobenzene-d5	(3)	15.523	117	1703163	10.000
72) Chlorobenzene	(3)	15.590	112	1494540	11.301
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	962719	11.682
74) Ethylbenzene	(3)	15.949	91	1756579	11.956
75) m/p-Xylene	(3)	16.265	91	1308459	10.769
77) Xylene (total)	(3)		91	2742468	21.982

\* = Compound is an internal standard.

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 on 10/21/2015 at 17:37.  
 Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 449 of 1243

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00385.d  
 Injection date and time: 19-OCT-2015 15:16

Instrument ID: HP09464.i  
 Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
 Calibration date and time: 21-OCT-2015 17:37  
 Date, time and analyst ID of latest file update: 21-Oct-2015 17:37 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.233	91	1434009	11.213
78) Styrene	(3)	17.275	104	1274861	11.120
79) Bromoform	(3)	17.628	173	1612759	11.423
80) Cumene	(3)	18.243	105	1971426	12.003
81) Bromobenzene	(3)	18.869	156	1050296	11.385
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	1076357	9.966
83) 1,2,3-Trichloropropane	(3)	19.076	110	443641	10.735
84) n-Propylbenzene	(3)	19.338	120	617023	11.301
85) 2-Chlorotoluene	(3)	19.459	126	694720	11.457
86) 4-Ethyltoluene	(3)	19.666	105	2124510	11.599
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	1783709	11.311
88) Alpha Methyl Styrene	(3)	20.451	118	1027895	11.486
89) tert-Butylbenzene	(3)	20.694	119	1770401	11.362
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	1867834	11.407
91) sec-Butylbenzene	(3)	21.333	105	2526977	11.679
92) 1,3-Dichlorobenzene	(3)	21.503	146	1886570	11.619
93) 1,4-Dichlorobenzene	(3)	21.795	146	1974523	11.575
94) p-Isopropyltoluene	(3)	21.850	119	2396830	12.156
95) Benzyl Chloride	(3)	22.288	91	1846066	11.430
96) 1,2-Dichlorobenzene	(3)	22.957	146	1685380	10.962
97) n-Butylbenzene	(3)	23.164	91	1807975	11.255
98) Hexachloroethane	(3)	23.627	117	933894	11.467
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	881349	10.548
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	993902	11.698
101) Hexachlorobutadiene	(3)	26.279	225	1194311	12.852
102) Naphthalene	(3)	26.291	128	2061998	11.731

Digitally signed by Jacob E. Bailey  
 on 10/21/2015 at 17:37.

Target 3.5 esignature user ID: jeb07445

**Raw QC Data**

**Volatile Organics in Air by GC/MS**

Date : 15-OCT-2015 21:05

Client ID: 50NGBFB

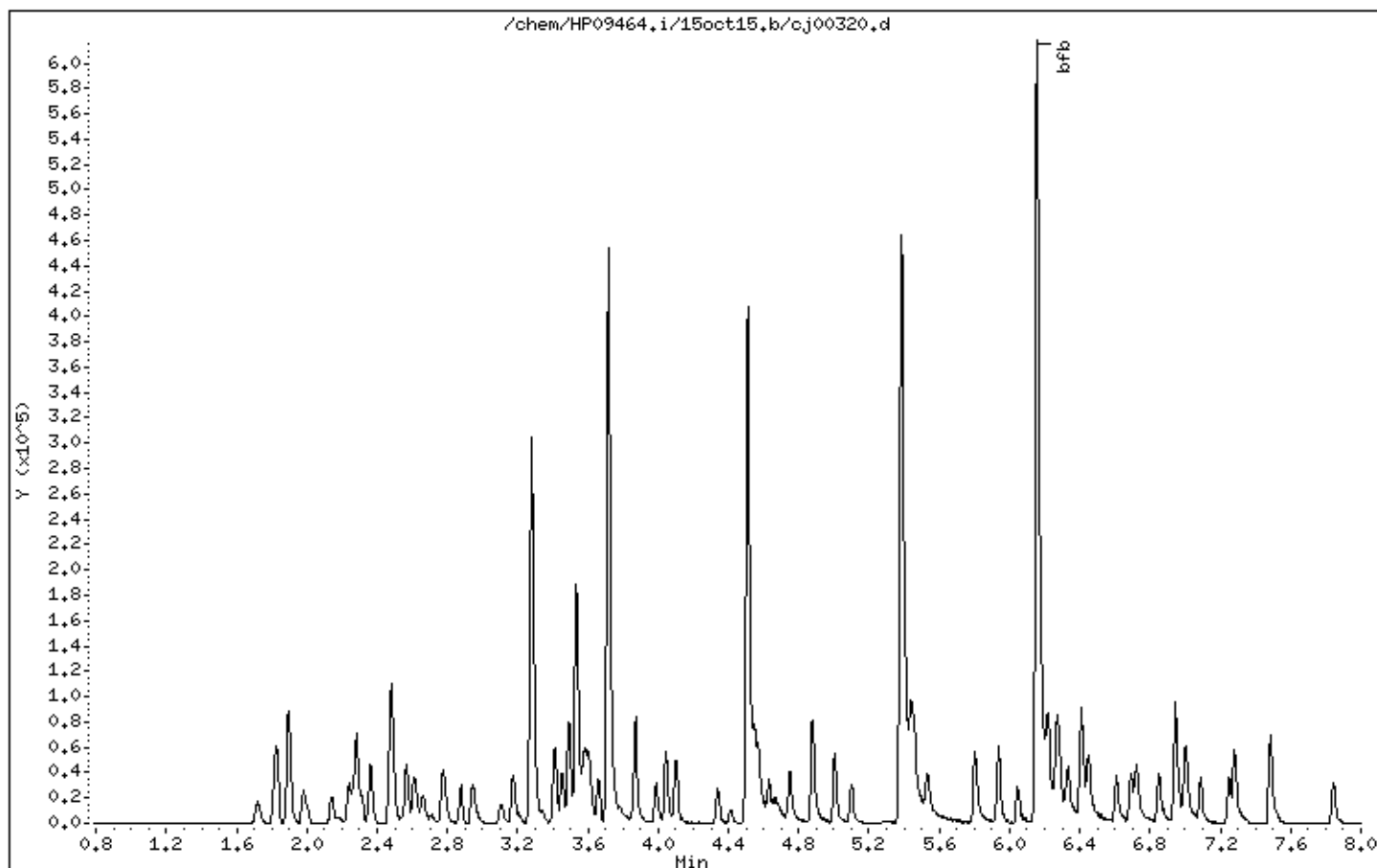
Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25



Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:58.  
Target 3.5 esignature user ID: jeb07445

Date : 15-OCT-2015 21:05

Client ID: 50NGBFB

Instrument: HP09464.i

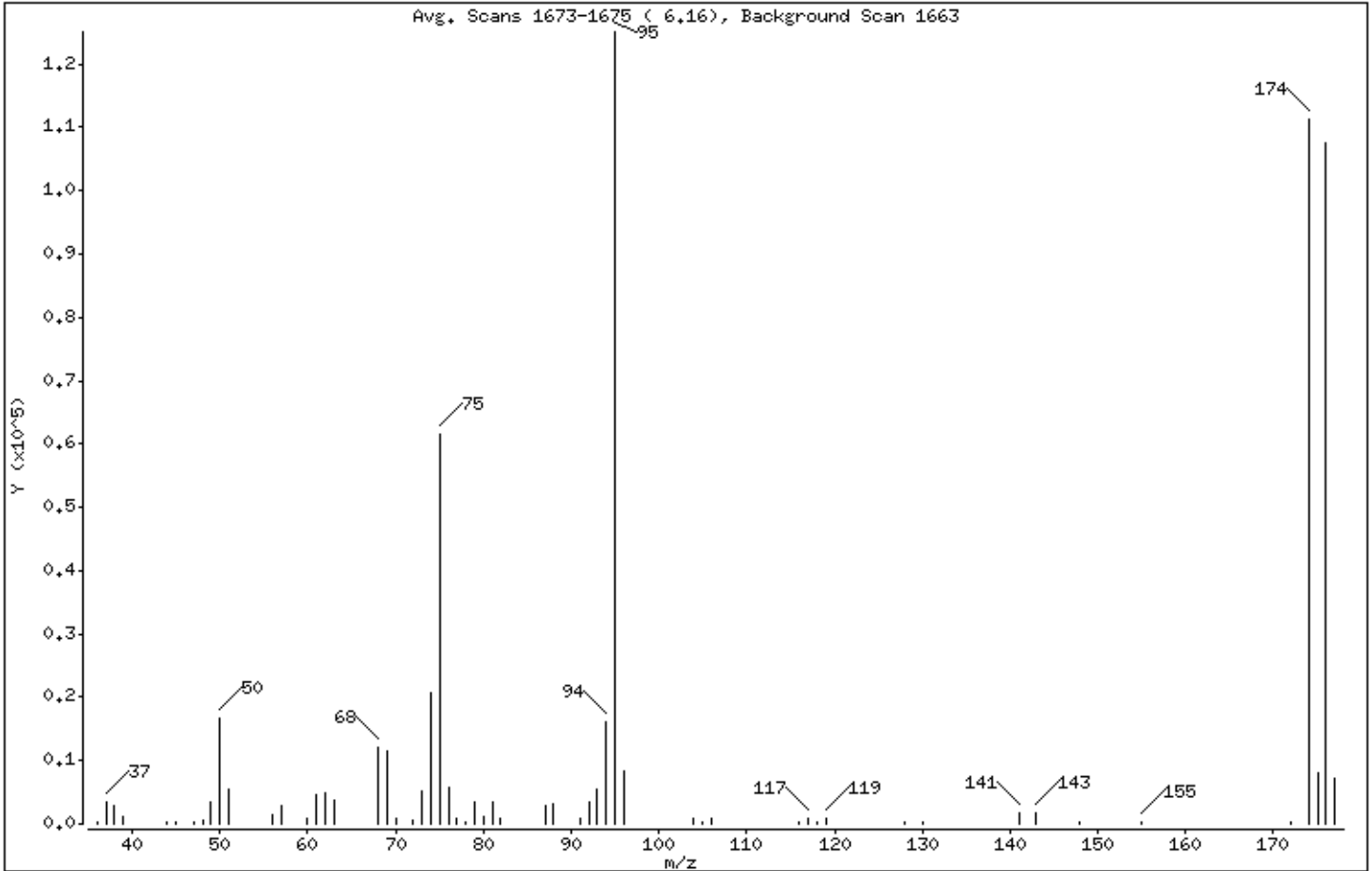
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	13,32
75	30,00 - 66,00% of mass 95	49,29
96	5,00 - 9,00% of mass 95	6,76
173	Less than 2,00% of mass 174	0,00 ( 0,00)
174	50,00 - 120,00% of mass 95	89,07
175	4,00 - 9,00% of mass 174	6,54 ( 7,34)
176	93,00 - 101,00% of mass 174	86,09 ( 96,65)
177	5,00 - 9,00% of mass 176	5,68 ( 6,60)

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:58.  
Target 3.5 esignature user ID: jeb07445

Date : 15-OCT-2015 21:05

Client ID: 50NGBFB

Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Data File: cj00320.d

Spectrum: Avg. Scans 1673-1675 ( 6.16), Background Scan 1663

Location of Maximum: 95,00

Number of points: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	366	62,00	4829	82,00	931	119,00	804
37,00	3343	63,00	3847	87,00	2973	128,00	394
38,00	2997	68,00	12069	88,00	3063	130,00	262
39,00	1161	69,00	11460	91,00	856	141,00	1644
44,00	350	70,00	986	92,00	3548	143,00	1766
45,00	189	72,00	645	93,00	5585	148,00	184
47,00	374	73,00	5136	94,00	16025	155,00	183
48,00	451	74,00	20688	95,00	125096	172,00	362
49,00	3496	75,00	61656	96,00	8453	174,00	111424
50,00	16656	76,00	5663	104,00	721	175,00	8176
51,00	5342	77,00	783	105,00	155	176,00	107696
56,00	1502	78,00	370	106,00	929	177,00	7106
57,00	2860	79,00	3437	116,00	231		
60,00	770	80,00	1030	117,00	957		
61,00	4675	81,00	3328	118,00	429		

Digitally signed by Jacob E. Bailey on 10/16/2015 at 17:58.  
Target 3.5 esignature user ID: jeb07445

Date : 16-OCT-2015 14:59

Client ID: 50NGBFB

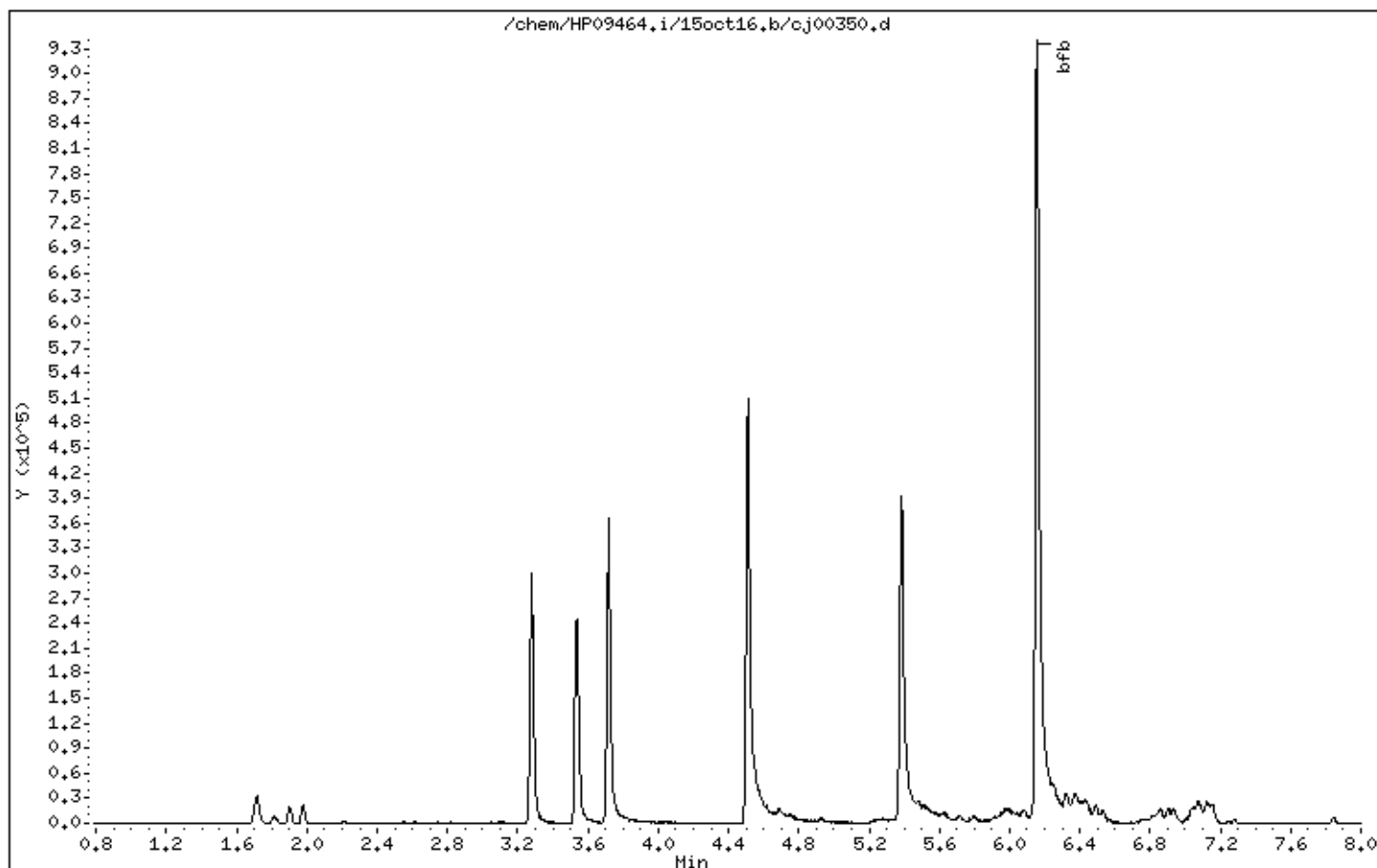
Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25



Digitally signed by Jacob E. Bailey on 10/19/2015 at 15:30.  
Target 3.5 esignature user ID: jeb07445

Date : 16-OCT-2015 14:59

Client ID: 50NGBFB

Instrument: HP09464.i

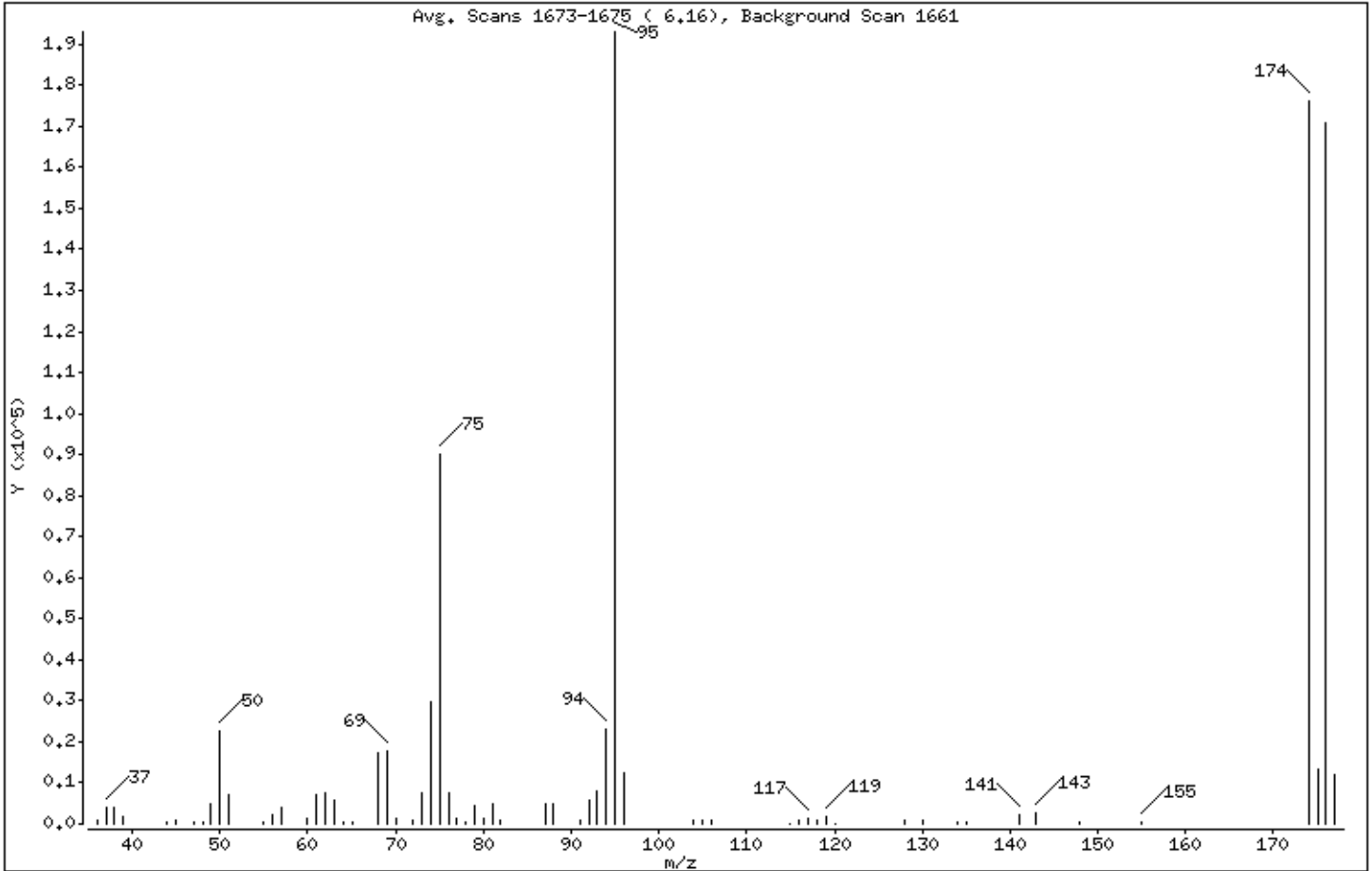
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	11,80
75	30,00 - 66,00% of mass 95	46,73
96	5,00 - 9,00% of mass 95	6,47
173	Less than 2,00% of mass 174	0,00 ( 0,00)
174	50,00 - 120,00% of mass 95	91,21
175	4,00 - 9,00% of mass 174	6,97 ( 7,64)
176	93,00 - 101,00% of mass 174	88,40 ( 96,91)
177	5,00 - 9,00% of mass 176	6,11 ( 6,92)

Digitally signed by Jacob E. Bailey on 10/19/2015 at 15:30.  
Target 3.5 esignature user ID: jeb07445



Date : 16-OCT-2015 14:59

Client ID: 50NGBFB

Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25

Data File: cj00350.d

Spectrum: Avg. Scans 1673-1675 ( 6.16), Background Scan 1661

Location of Maximum: 95,00

Number of points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	830	62,00	7467	81,00	4861	118,00	964
37,00	4170	63,00	5704	82,00	902	119,00	1985
38,00	3943	64,00	629	87,00	4891	120,00	74
39,00	1596	65,00	401	88,00	4794	128,00	801
44,00	455	68,00	17208	91,00	854	130,00	742
45,00	1038	69,00	17560	92,00	5686	134,00	356
47,00	635	70,00	1232	93,00	8015	135,00	562
48,00	430	72,00	941	94,00	23280	141,00	2079
49,00	4975	73,00	7546	95,00	193024	143,00	2459
50,00	22784	74,00	29928	96,00	12485	148,00	243
51,00	6975	75,00	90192	104,00	998	155,00	421
55,00	362	76,00	7749	105,00	1034	174,00	176064
56,00	2019	77,00	1522	106,00	921	175,00	13449
57,00	4104	78,00	581	115,00	202	176,00	170624
60,00	1506	79,00	4523	116,00	790	177,00	11800
61,00	6902	80,00	1316	117,00	1435		

Digitally signed by Jacob E. Bailey on 10/19/2015 at 15:30.  
Target 3.5 esignature user ID: jeb07445

Date : 19-OCT-2015 11:17

Client ID: 50NGBFB

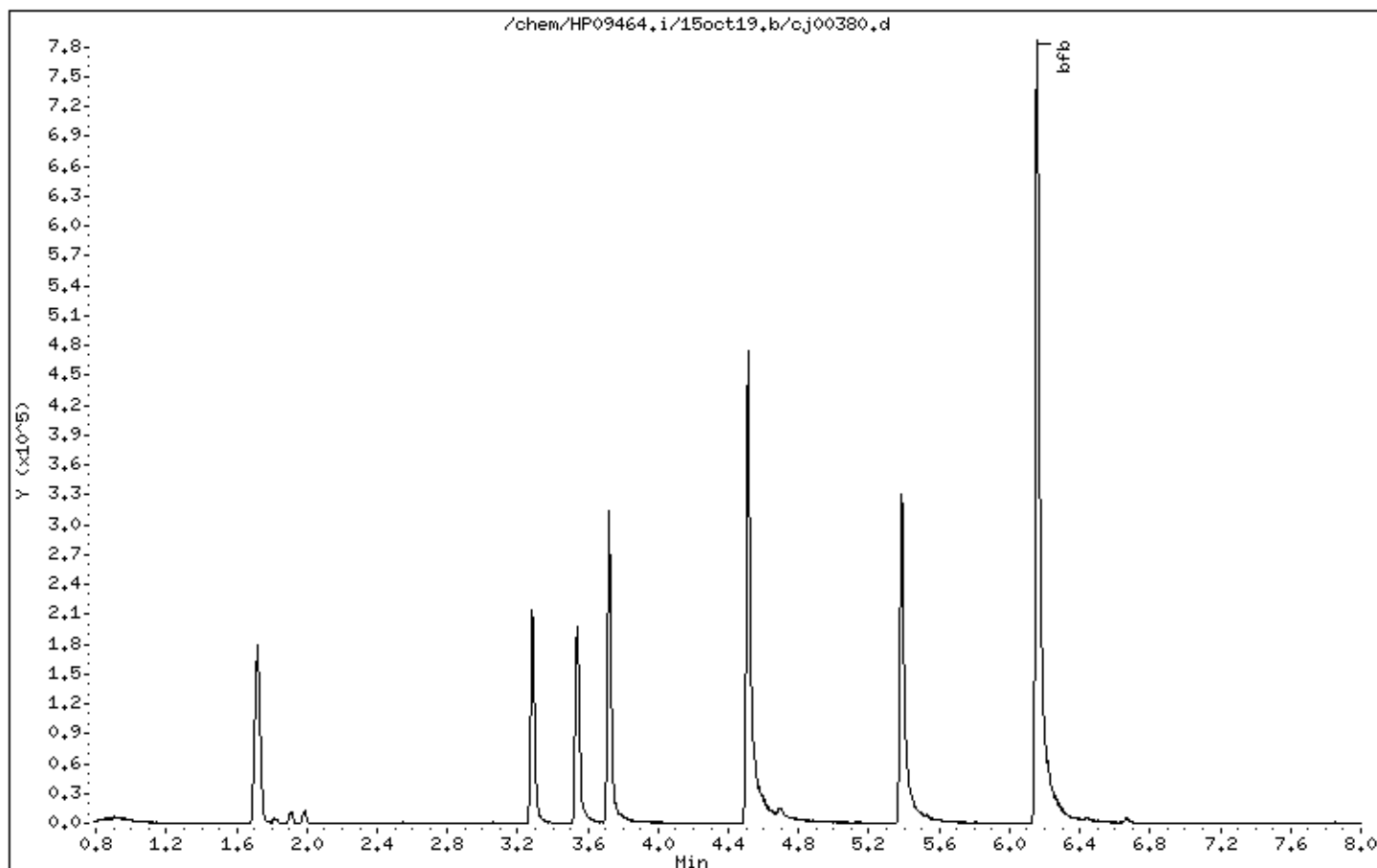
Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jbs01304

Column phase: DB-624

Column diameter: 0,25



Digitally signed by Jacob E. Bailey on 10/19/2015 at 18:16.  
Target 3.5 esignature user ID: jeb07445

Date : 19-OCT-2015 11:17

Client ID: 50NGBFB

Instrument: HP09464.i

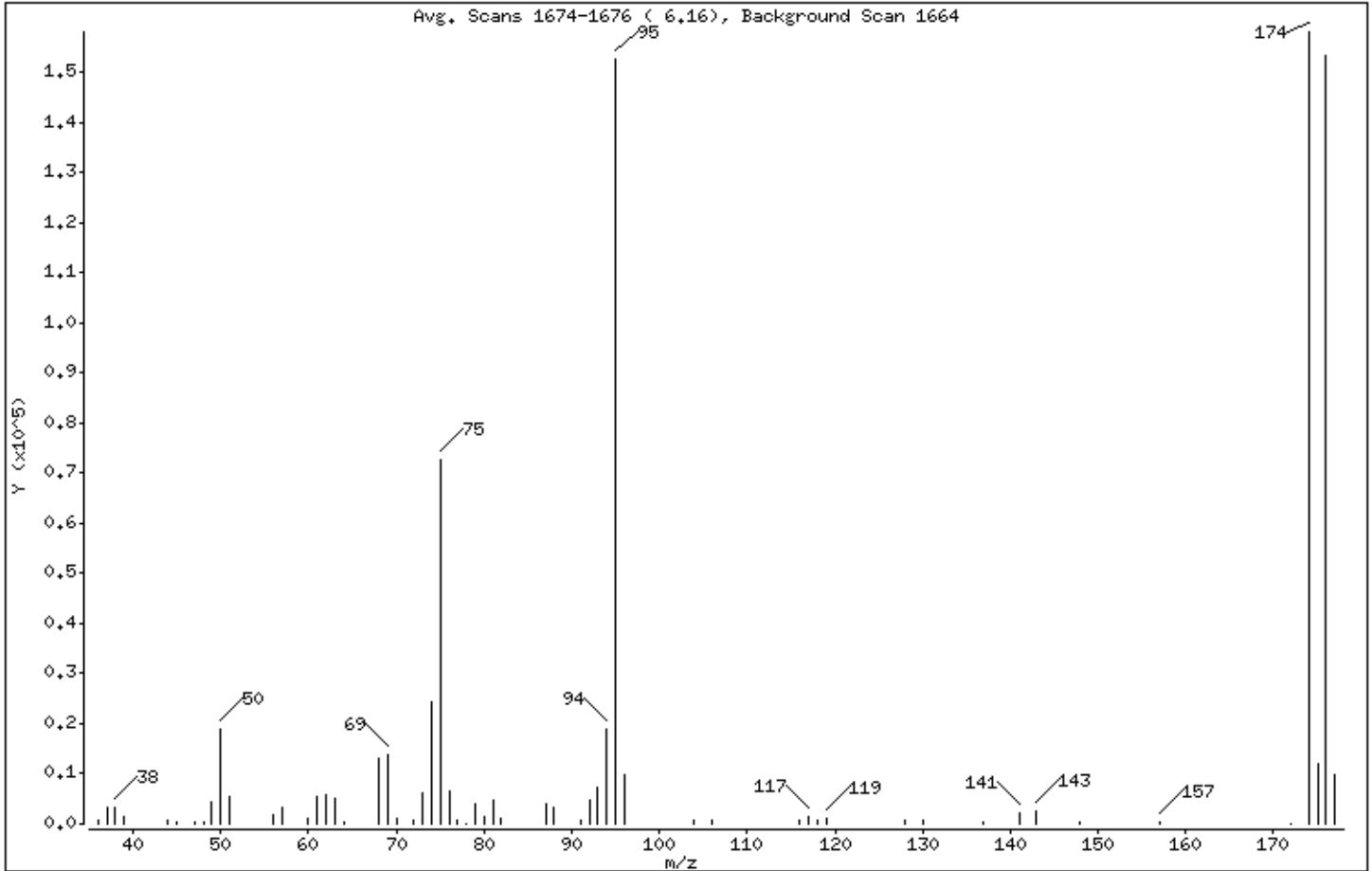
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jbs01304

Column phase: DB-624

Column diameter: 0,25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100,00
50	8,00 - 40,00% of mass 95	12,31
75	30,00 - 66,00% of mass 95	47,51
96	5,00 - 9,00% of mass 95	6,39
173	Less than 2,00% of mass 174	0,00 ( 0,00)
174	50,00 - 120,00% of mass 95	103,48
175	4,00 - 9,00% of mass 174	7,80 ( 7,53)
176	93,00 - 101,00% of mass 174	100,29 ( 96,92)
177	5,00 - 9,00% of mass 176	6,39 ( 6,37)

Digitally signed by Jacob E. Bailey on 10/19/2015 at 18:16.  
Target 3.5 esignature user ID: jeb07445

Date : 19-OCT-2015 11:17

Client ID: 50NGBFB

Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jbs01304

Column phase: DB-624

Column diameter: 0,25

Data File: cj00380.d  
 Spectrum: Avg. Scans 1674-1676 ( 6.16), Background Scan 1664  
 Location of Maximum: 174.00  
 Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36,00	721	62,00	5989	81,00	4550	119,00	1089
37,00	3151	63,00	5092	82,00	1188	128,00	662
38,00	3380	64,00	194	87,00	3872	130,00	723
39,00	1321	68,00	13085	88,00	3432	137,00	192
44,00	695	69,00	13677	91,00	589	141,00	2319
45,00	477	70,00	1092	92,00	4615	143,00	2453
47,00	432	72,00	803	93,00	7200	148,00	207
48,00	380	73,00	6189	94,00	19008	157,00	213
49,00	4321	74,00	24424	95,00	152704	172,00	174
50,00	18792	75,00	72544	96,00	9751	174,00	158016
51,00	5320	76,00	6549	104,00	566	175,00	11905
56,00	1761	77,00	595	106,00	750	176,00	153152
57,00	3247	78,00	177	116,00	660	177,00	9755
60,00	1075	79,00	4172	117,00	1539		
61,00	5536	80,00	1556	118,00	748		

Digitally signed by Jacob E. Bailey on 10/19/2015 at 18:16.  
 Target 3.5 esignature user ID: jeb07445

VBLKC06

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air VBLKC06

Data file: /chem/HP09464.i/15oct15.b/cj00339.d Injection date and time: 16-OCT-2015 12:23
Data file Sample Info. Line: VBLKC06;250;C1528830AA;VBLKC06;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AA
Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all
Calibration date and time (Last Method Edit): 16-OCT-2015 13:51
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Analysis Comments:

Table with 8 columns: Internal Standards, RT (+/-RT), Scan, QIon, Area(+/- %Change), Conc. (on column), QC Flag, QC Limits. Contains data for Bromochloromethane, 1,4-Difluorobenzene, and Chlorobenzene-d5.

Table with 12 columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit (in sample), LOQ. Lists 44 target compounds and their detection status.

Data file: /chem/HP09464.i/15oct15.b/cj00339.d Injection date and time: 16-OCT-2015 12:23  
 Data file Sample Info. Line: VBLKC06;250;C1528830AA;VBLKC06;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 16-OCT-2015 13:51  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit	LOQ
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)			Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
50) Heptane	(2)			Not Detected					0.5	1
52) Trichloroethene	(2)			Not Detected					0.2	1
53) Ethyl Acrylate	(2)			Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
56) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)			Not Detected					0.2	1
62) Octane	(3)			Not Detected					0.5	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
65) Ethyl Methacrylate	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1
70) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
74) Ethylbenzene	(3)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					0.2	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.2	1
80) Cumene	(3)			Not Detected					0.2	1
81) Bromobenzene	(3)			Not Detected					0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
84) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(3)			Not Detected					0.2	1
86) 4-Ethyltoluene	(3)			Not Detected					0.2	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.2	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(3)			Not Detected					0.2	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
94) p-Isopropyltoluene	(3)			Not Detected					0.2	1
95) Benzyl Chloride	(3)			Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) n-Butylbenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

VBLKC06

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Volatiles in Air VBLKC06

Data file: /chem/HP09464.i/15oct15.b/cj00339.d Injection date and time: 16-OCT-2015 12:23  
Data file Sample Info. Line: VBLKC06;250;C1528830AA;VBLKC06;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AA  
Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
Calibration date and time (Last Method Edit): 16-OCT-2015 13:51  
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

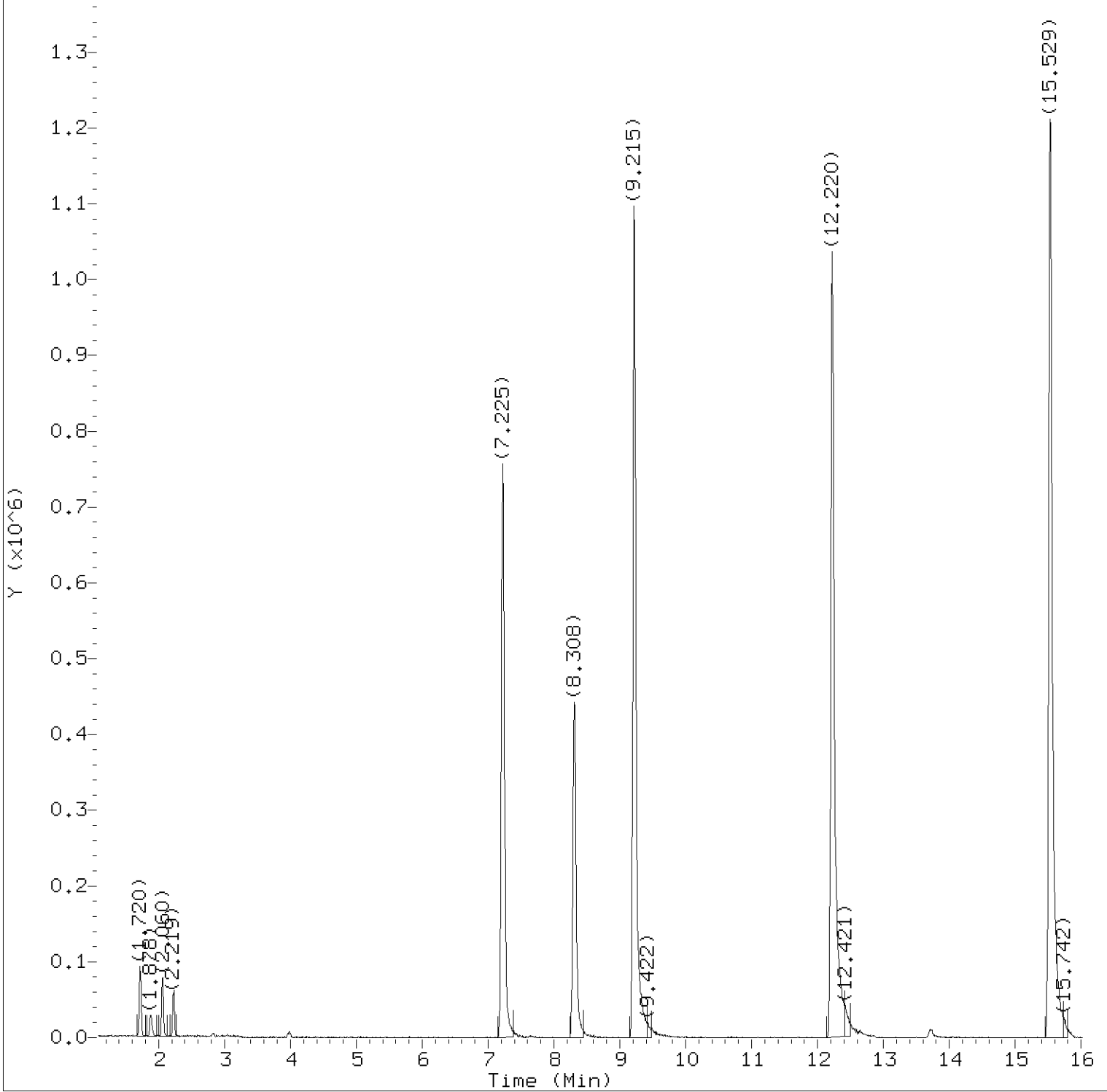
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
101) Hexachlorobutadiene	(3)			Not Detected					0.4	2
102) Naphthalene	(3)			Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 10/16/2015 at 14:37. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 08:57. Parallax ID: cmr00412



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00339.d  
Injection date and time: 16-OCT-2015 12:23

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 13:51

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

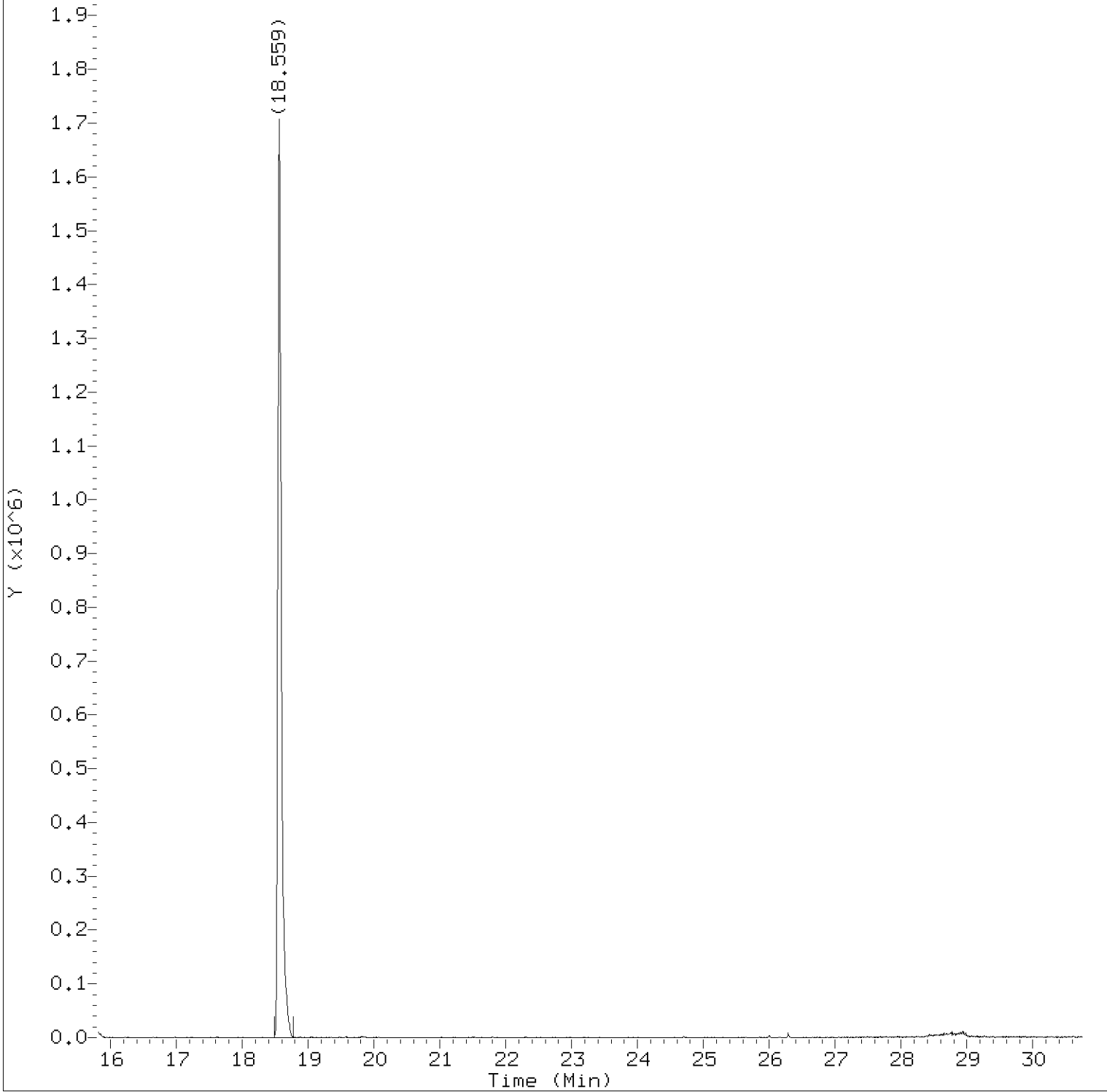
Sample Name: VBLKC06

Lab Sample ID: VBLKC06

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 14:37.

Target 3.5 esignature user ID: jeb07445





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00339.d  
Injection date and time: 16-OCT-2015 12:23

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 13:51

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

Sample Name: VBLKC06

Lab Sample ID: VBLKC06

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 14:37.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00339.d  
Injection date and time: 16-OCT-2015 12:23

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 16-OCT-2015 13:51

Sublist used: all

Date, time and analyst ID of latest file update: 16-Oct-2015 13:51 jbs01304

Sample Name: VBLKC06

Lab Sample ID: VBLKC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
===== 40)*Bromochloromethane	(1)	7.225	130	608341	10.000
51)*1,4-Difluorobenzene	(2)	9.215	114	1761339	10.000
71)*Chlorobenzene-d5	(3)	15.536	117	1753512	10.000

\* = Compound is an internal standard.

page 1 of 1

Digitally signed by Jacob E. Bailey  
on 10/16/2015 at 14:37.  
Target 3.5 esignature user ID: jeb07445

VBLKC07

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air VBLKC07

Data file: /chem/HP09464.i/15oct16.b/cj00353.d Injection date and time: 16-OCT-2015 17:03
Data file Sample Info. Line: VBLKC07;250;C1528830AB;VBLKC07;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AB
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: all
Calibration date and time (Last Method Edit): 19-OCT-2015 15:33
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Analysis Comments:

Table with 8 columns: Internal Standards, RT (+/-RT), Scan, QIon, Area(+/- %Change), Conc. (on column), QC Flag, QC Limits. Contains data for Bromochloromethane, 1,4-Difluorobenzene, and Chlorobenzene-d5.

Table with 12 columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit (in sample), LOQ. Lists 44 target compounds and their detection status.

VBLKC07

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air VBLKC07

Data file: /chem/HP09464.i/15oct16.b/cj00353.d Injection date and time: 16-OCT-2015 17:03
Data file Sample Info. Line: VBLKC07;250;C1528830AB;VBLKC07;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AB
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: all
Calibration date and time (Last Method Edit): 19-OCT-2015 15:33
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Table with columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit (in sample), LOQ. Lists 100 compounds such as Carbon Tetrachloride, Benzene, 1,2-Dichloroethane, etc., all marked as 'Not Detected'.

VBLKC07

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Volatiles in Air VBLKC07

Data file: /chem/HP09464.i/15oct16.b/cj00353.d Injection date and time: 16-OCT-2015 17:03  
Data file Sample Info. Line: VBLKC07;250;C1528830AB;VBLKC07;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AB  
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct16.b/cj00353.d

Method used: /chem/HP09464.i/15oct16.b/to-15.m Sublist used: all  
Calibration date and time (Last Method Edit): 19-OCT-2015 15:33  
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct16.b/cj00351.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

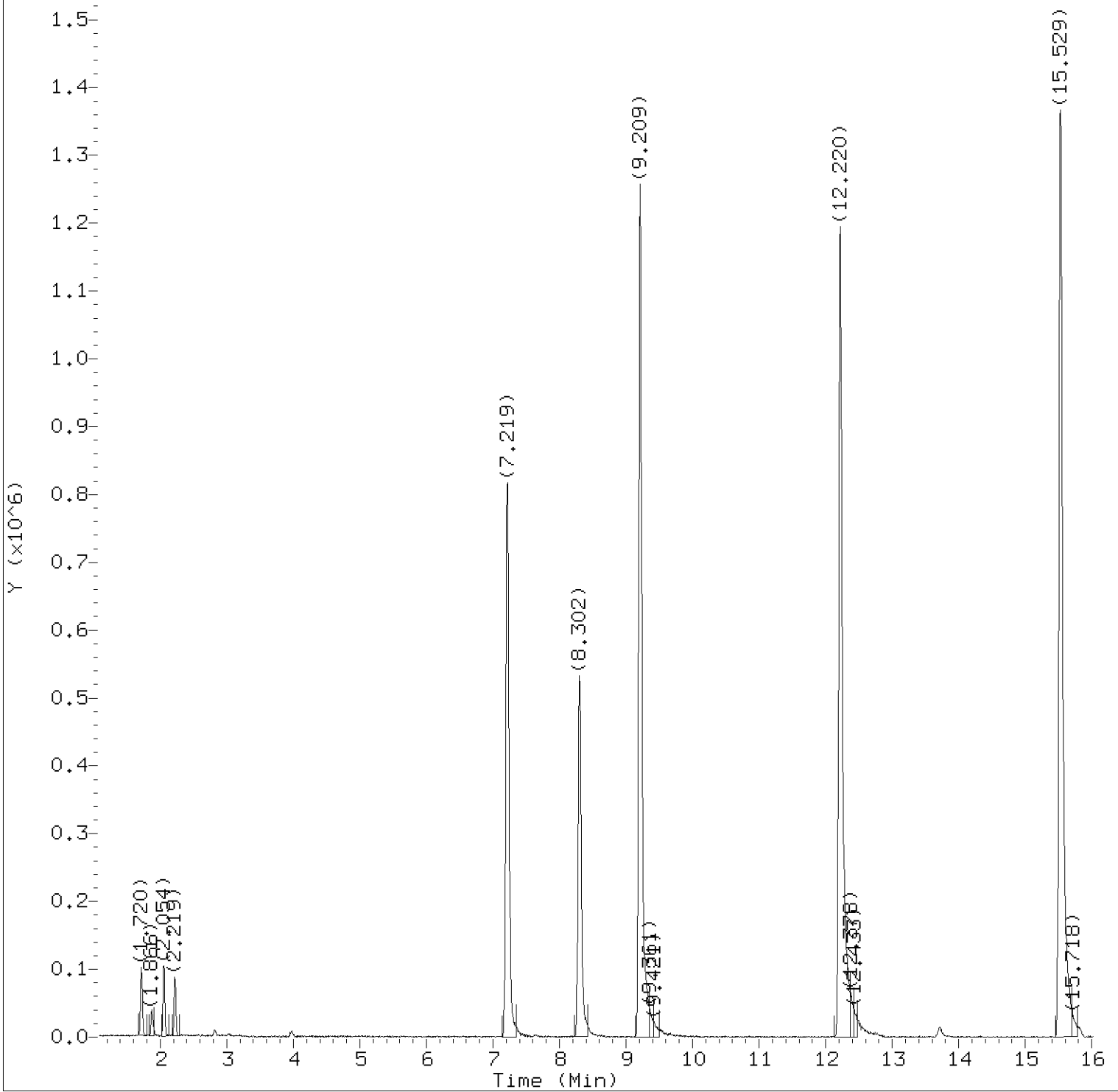
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
101) Hexachlorobutadiene	(3)			Not Detected					0.4	2
102) Naphthalene	(3)			Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:41. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Michele J. Smith on 10/30/2015 at 15:42. Parallax ID: mjs00758



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

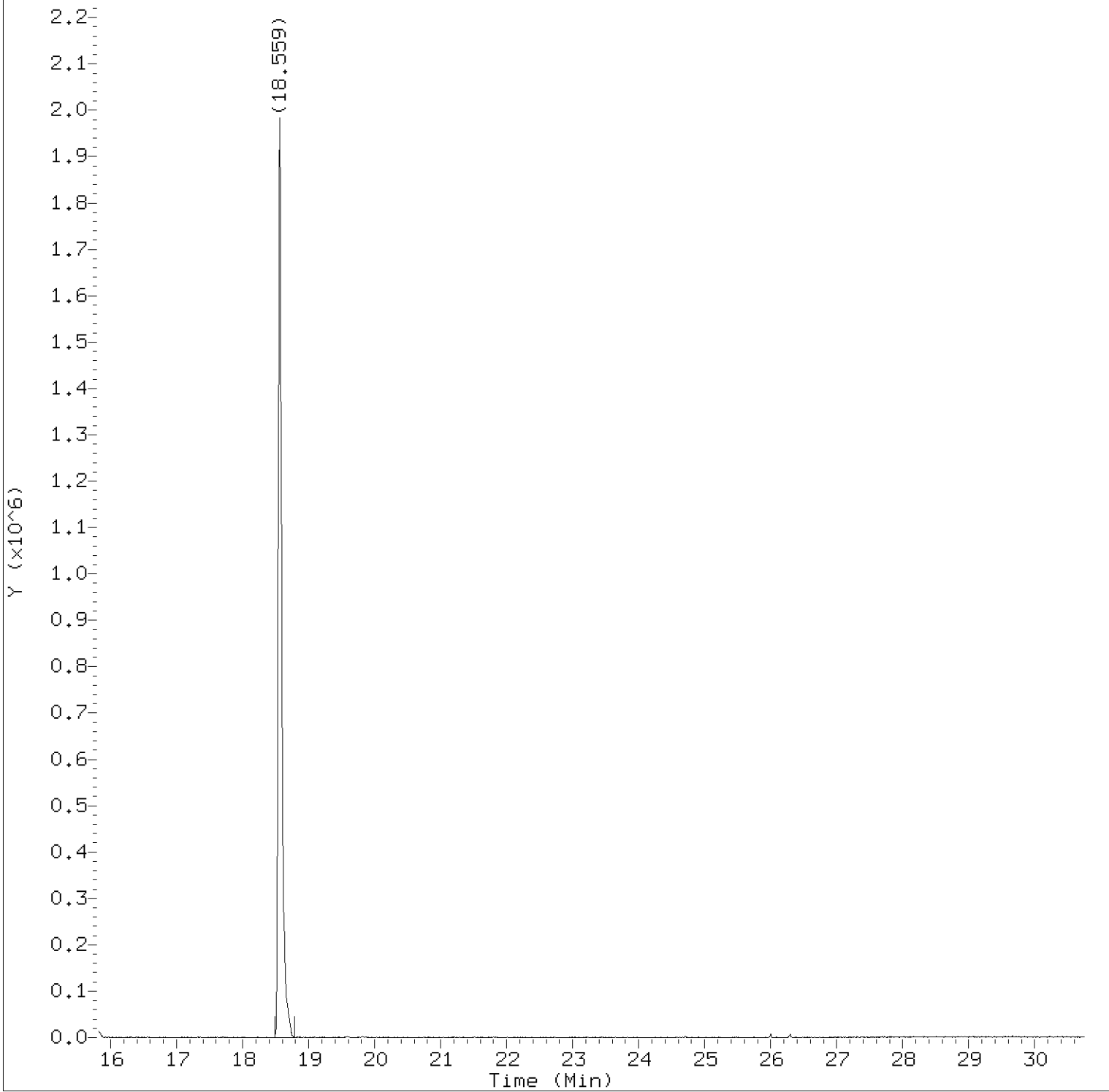
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.

Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

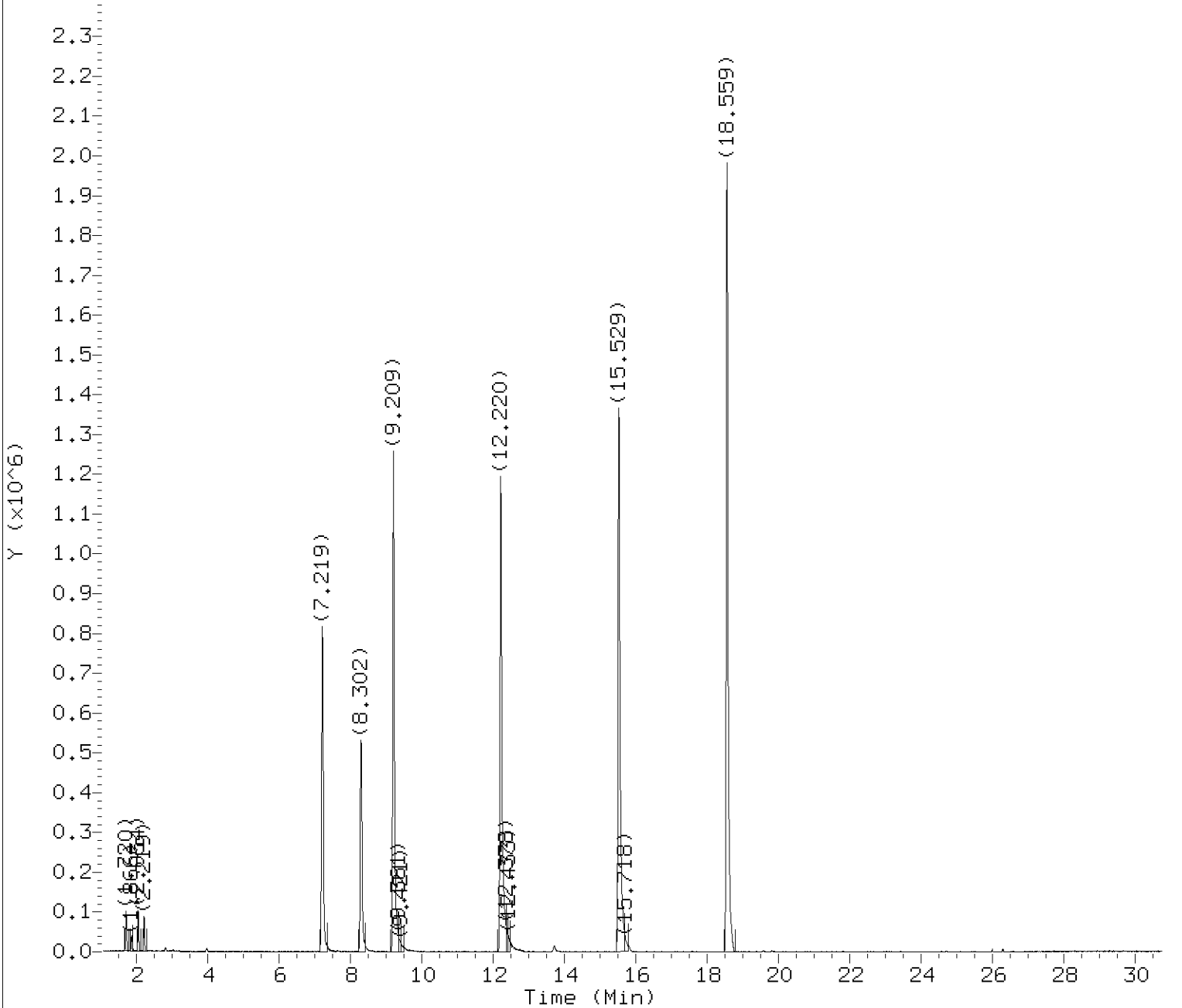
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
===== 40)*Bromochloromethane	(1)	7.219	130	653208	10.000
51)*1,4-Difluorobenzene	(2)	9.215	114	2074918	10.000
71)*Chlorobenzene-d5	(3)	15.529	117	1982784	10.000

\* = Compound is an internal standard.

page 1 of 1

Digitally signed by Jeffrey B. Smith  
on 10/29/2015 at 11:41.  
Target 3.5 esignature user ID: jbs01304





Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

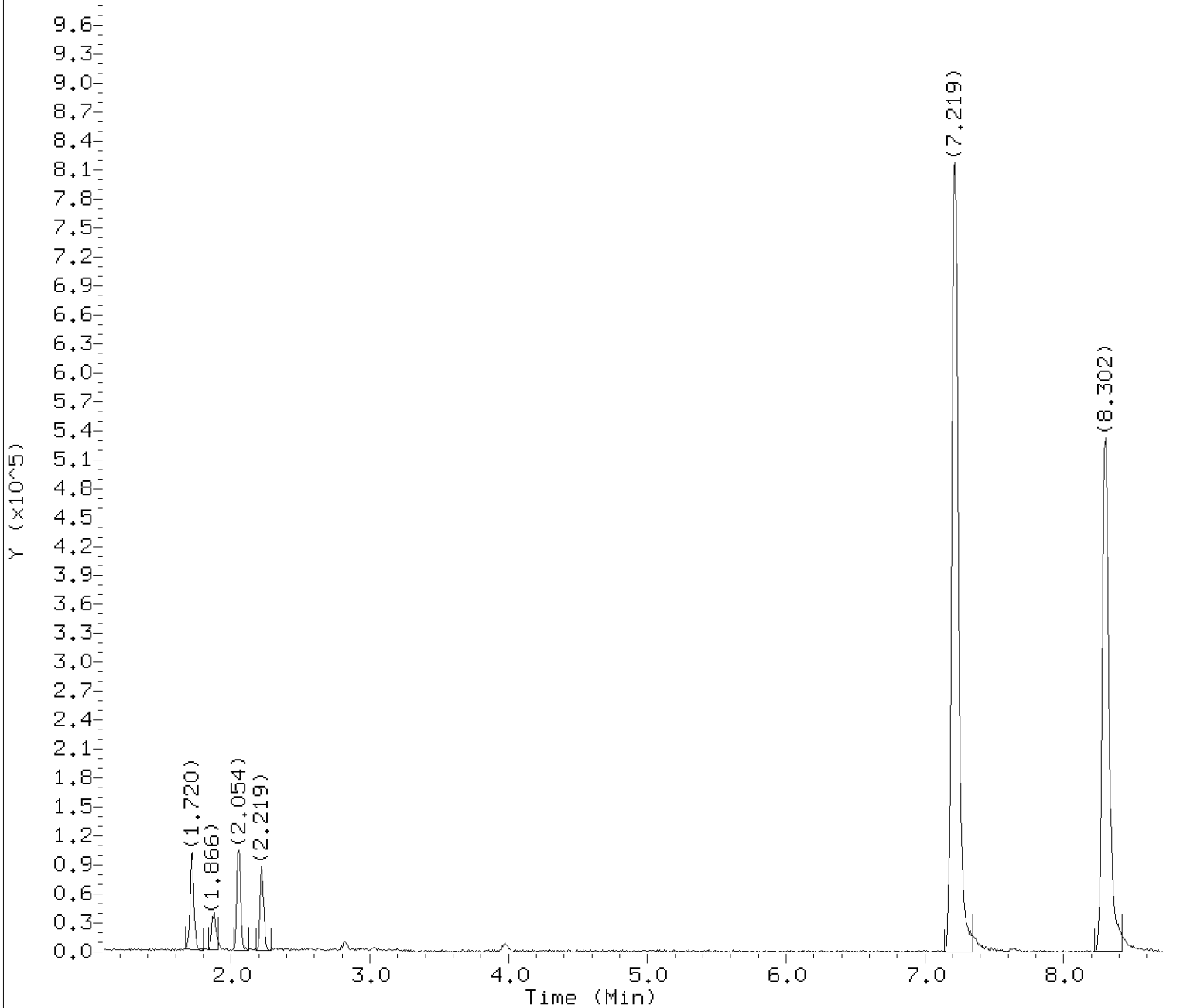
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 30.750

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:36.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

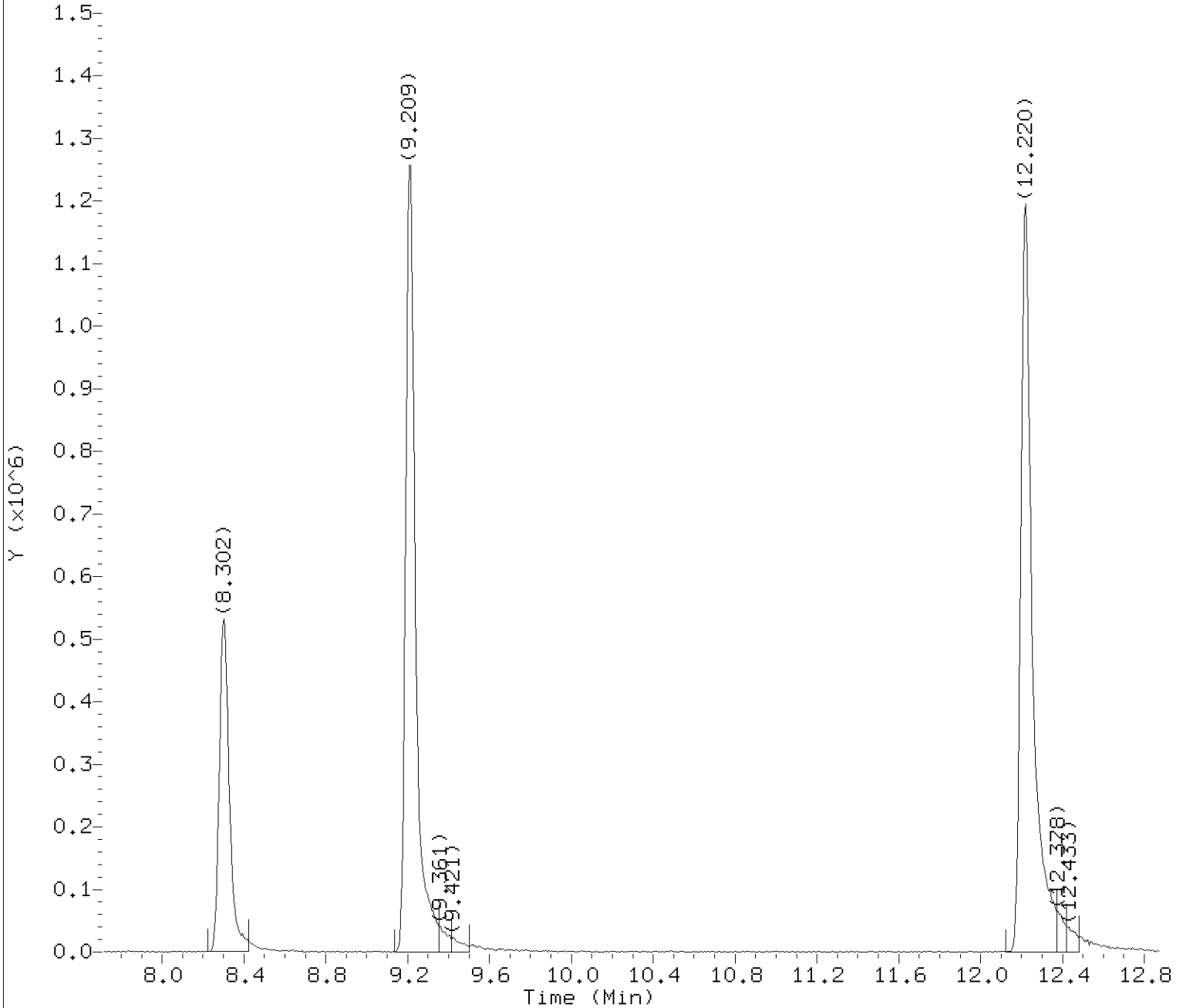
Lab Sample ID: VBLKC07

Internal Standard referenced: Bromochloromethane at 7.219 minutes

Chromatogram Start Time (min.): 1.087

Chromatogram End Time (min.): 8.217

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:36.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33

Sublist used: all

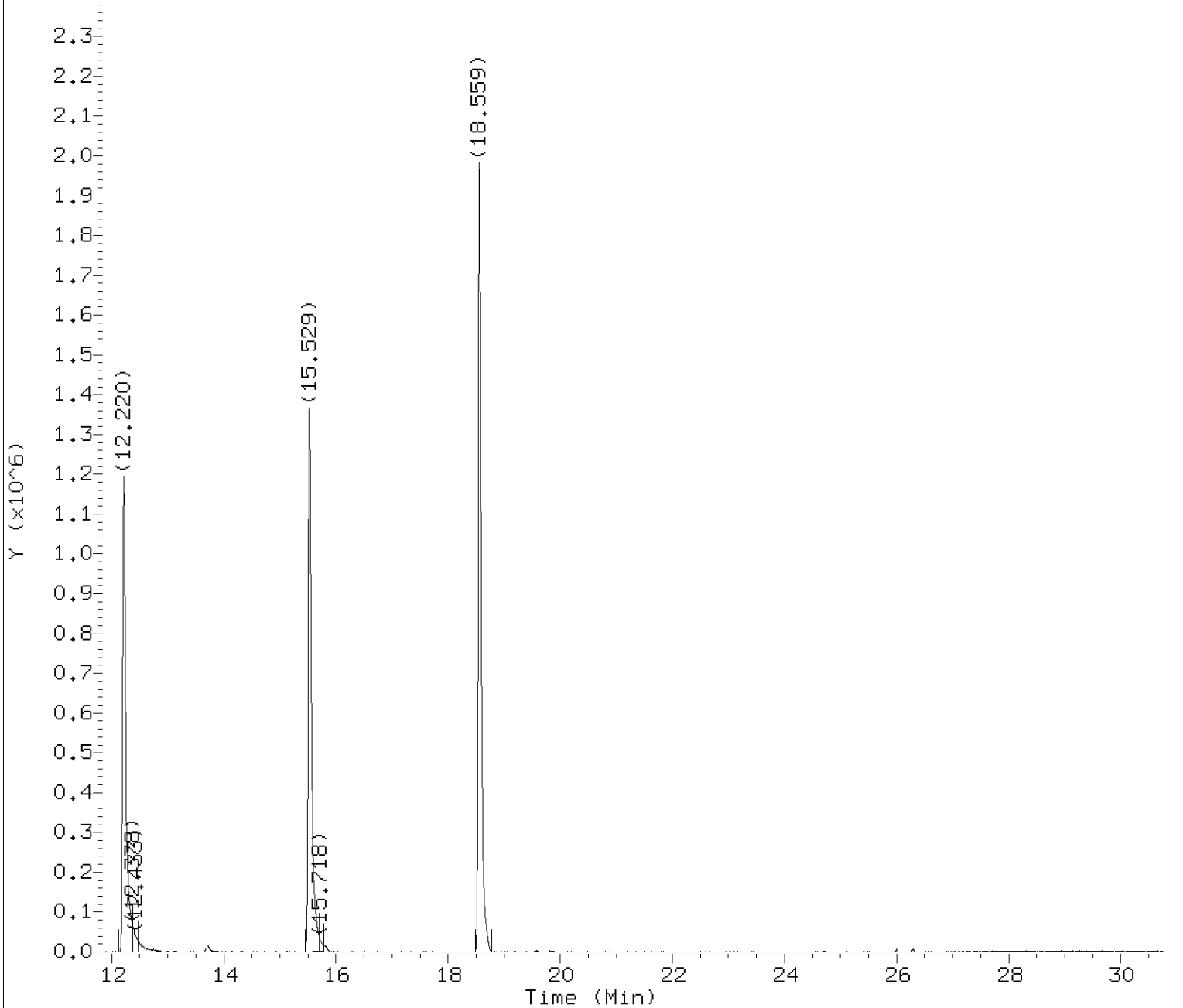
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

Internal Standard referenced: 1,4-Difluorobenzene at 9.215 minutes  
Chromatogram Start Time (min.): 8.217  
Chromatogram End Time (min.): 12.372

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:36.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct16.b/cj00353.d  
Injection date and time: 16-OCT-2015 17:03

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct16.b/to-15.m  
Calibration date and time: 19-OCT-2015 15:33  
Date, time and analyst ID of latest file update: 26-Oct-2015 14:20 jbs01304

Sublist used: all

Sample Name: VBLKC07

Lab Sample ID: VBLKC07

Internal Standard referenced: Chlorobenzene-d5 at 15.529 minutes  
Chromatogram Start Time (min.): 12.372  
Chromatogram End Time (min.): 30.750

Digitally signed by Jeffrey B. Smith on 10/29/2015 at 11:36.  
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct16.b/cj00353.d  
Lab Smp Id: VBLKC07 Client Smp ID: VBLKC07  
Inj Date : 16-OCT-2015 17:03  
Operator : jeb07445 Inst ID: HP09464.i  
Smp Info : VBLKC07;250;C1528830AB;VBLKC07;0;3;BLANK;  
Misc Info : ;;250;;;;  
Comment :  
Method : /chem/HP09464.i/15oct16.b/to-15.m  
Meth Date : 26-Oct-2015 14:20 jbs01304 Quant Type: ISTD  
Cal Date : 16-OCT-2015 10:21 Cal File: cj00337.d  
Als bottle: 3 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: d30cs01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

VBLKC15

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Volatiles in Air VBLKC15

Data file: /chem/HP09464.i/15oct19.b/cj00386.d Injection date and time: 19-OCT-2015 15:59
Data file Sample Info. Line: VBLKC15;;C1528830AC;VBLKC15;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AC
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: all
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Analysis Comments:

Table with 8 columns: Internal Standards, RT (+/-RT), Scan, QIon, Area(+/- %Change), Conc. (on column), QC Flag, QC Limits. Rows include Bromochloromethane, 1,4-Difluorobenzene, and Chlorobenzene-d5.

Table with 12 columns: Target Compounds, I.S. Ref., RT (+/-RRT), QIon, Area, Conc. (on-column), Conc. (in sample), Blank Conc., Qual., Reporting Limit (in sample), LOQ. Lists 44 target compounds and their detection status.

Data file: /chem/HP09464.i/15oct19.b/cj00386.d Injection date and time: 19-OCT-2015 15:59  
 Data file Sample Info. Line: VBLKC15;;C1528830AC;VBLKC15;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AC  
 Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 19-OCT-2015 16:04  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
45) Carbon Tetrachloride	(1)			Not Detected					0.2	1
46) Benzene	(2)			Not Detected					0.2	1
47) 1,2-Dichloroethane	(2)			Not Detected					0.2	1
48) Isooctane	(2)			Not Detected					0.2	1
49) Tert-Amyl Methyl Ether	(2)			Not Detected					0.2	1
50) Heptane	(2)			Not Detected					0.5	1
52) Trichloroethene	(2)			Not Detected					0.2	1
53) Ethyl Acrylate	(2)			Not Detected					0.2	1
54) 1,2-Dichloropropane	(2)			Not Detected					0.2	1
55) Dibromomethane	(2)			Not Detected					0.2	1
56) 1,4-Dioxane	(2)			Not Detected					0.5	1
57) Methyl Methacrylate	(2)			Not Detected					0.2	1
58) Bromodichloromethane	(2)			Not Detected					0.2	1
59) cis-1,3-Dichloropropene	(2)			Not Detected					0.2	1
60) 4-Methyl-2-Pentanone	(2)			Not Detected					0.5	2
61) Toluene	(3)			Not Detected					0.2	1
62) Octane	(3)			Not Detected					0.5	1
63) trans-1,3-Dichloropropene	(3)			Not Detected					0.2	1
64) 1,3-Dichloropropene (total)	(3)			Not Detected					0.2	1
65) Ethyl Methacrylate	(3)			Not Detected					0.2	1
66) 1,1,2-Trichloroethane	(3)			Not Detected					0.2	1
67) Tetrachloroethene	(3)			Not Detected					0.2	1
68) 2-Hexanone	(3)			Not Detected					0.5	2
69) Dibromochloromethane	(3)			Not Detected					0.2	1
70) 1,2-Dibromoethane	(3)			Not Detected					0.2	1
72) Chlorobenzene	(3)			Not Detected					0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)			Not Detected					0.2	1
74) Ethylbenzene	(3)			Not Detected					0.2	1
75) m/p-Xylene	(3)			Not Detected					0.2	1
76) o-Xylene	(3)			Not Detected					0.2	1
77) Xylene (total)	(3)			Not Detected					0.2	1
78) Styrene	(3)			Not Detected					0.2	1
79) Bromoform	(3)			Not Detected					0.2	1
80) Cumene	(3)			Not Detected					0.2	1
81) Bromobenzene	(3)			Not Detected					0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)			Not Detected					0.2	1
83) 1,2,3-Trichloropropane	(3)			Not Detected					0.2	1
84) n-Propylbenzene	(3)			Not Detected					0.5	1
85) 2-Chlorotoluene	(3)			Not Detected					0.2	1
86) 4-Ethyltoluene	(3)			Not Detected					0.2	1
87) 1,3,5-Trimethylbenzene	(3)			Not Detected					0.2	1
88) Alpha Methyl Styrene	(3)			Not Detected					0.2	1
89) tert-Butylbenzene	(3)			Not Detected					0.2	1
90) 1,2,4-Trimethylbenzene	(3)			Not Detected					0.2	1
91) sec-Butylbenzene	(3)			Not Detected					0.2	1
92) 1,3-Dichlorobenzene	(3)			Not Detected					0.2	1
93) 1,4-Dichlorobenzene	(3)			Not Detected					0.2	1
94) p-Isopropyltoluene	(3)			Not Detected					0.2	1
95) Benzyl Chloride	(3)			Not Detected					0.5	1
96) 1,2-Dichlorobenzene	(3)			Not Detected					0.2	1
97) n-Butylbenzene	(3)			Not Detected					0.2	1
98) Hexachloroethane	(3)			Not Detected					0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)			Not Detected					0.2	1
100) 1,2,4-Trichlorobenzene	(3)			Not Detected					0.5	2

VBLKC15

Lancaster Laboratories, Inc.  
Analysis Summary for GC/MS Volatiles in Air VBLKC15

Data file: /chem/HP09464.i/15oct19.b/cj00386.d Injection date and time: 19-OCT-2015 15:59  
Data file Sample Info. Line: VBLKC15;;C1528830AC;VBLKC15;0;3;BLANK; Instrument ID: HP09464.i Batch: C1528830AC  
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Blank Data file reference: /chem/HP09464.i/15oct19.b/cj00386.d

Method used: /chem/HP09464.i/15oct19.b/to-15.m Sublist used: all  
Calibration date and time (Last Method Edit): 19-OCT-2015 16:04  
Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct19.b/cj00385.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

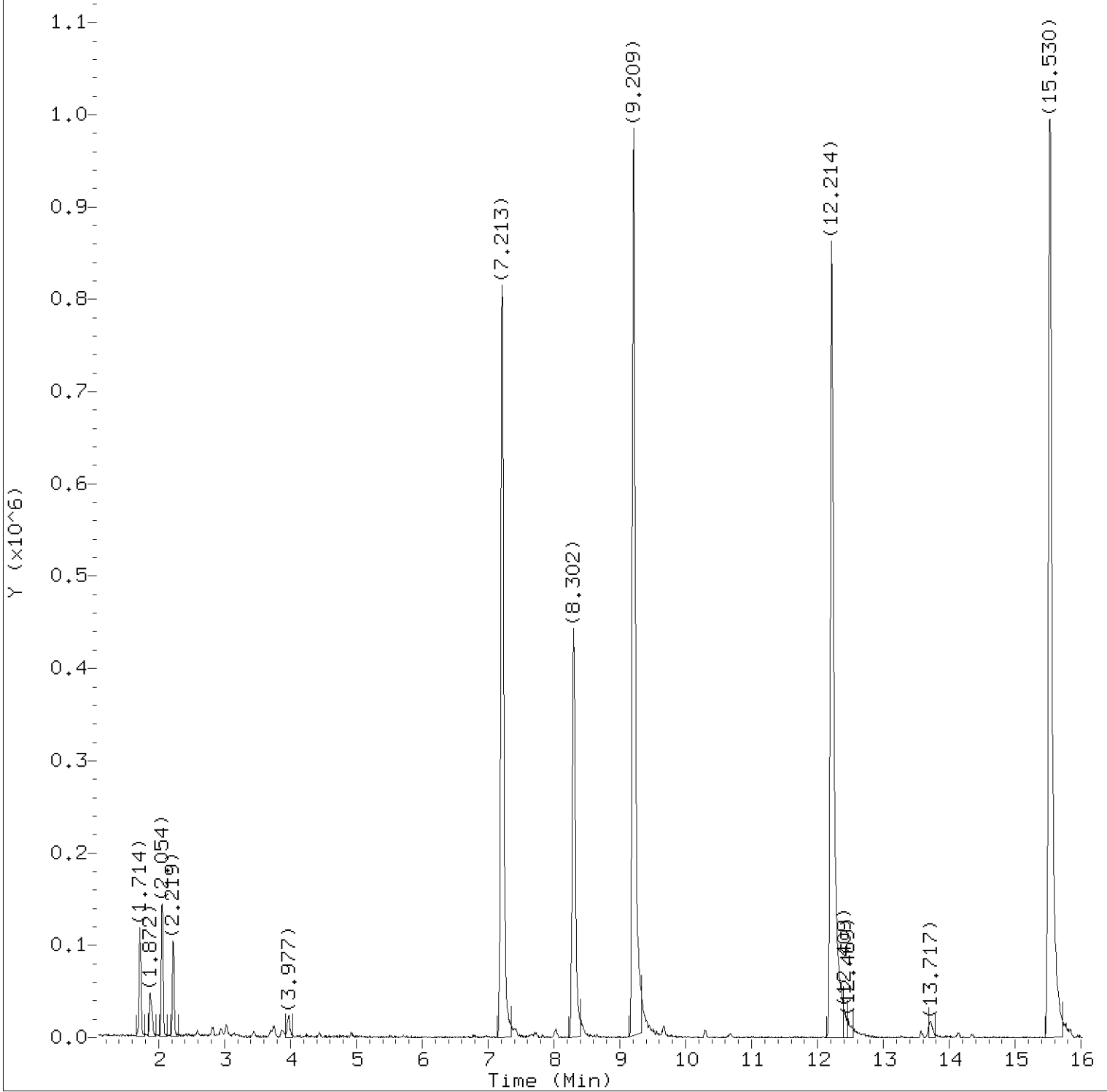
Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
101) Hexachlorobutadiene	(3)			Not Detected					0.4	2
102) Naphthalene	(3)			Not Detected					0.4	1

Total number of targets = 99

Digitally signed by Jeffrey B. Smith on 10/26/2015 at 12:35. Target 3.5 esignature user ID: jbs01304

Secondary review performed and digitally signed by Mark A. Ratcliff on 10/27/2015 at 10:01. Parallax ID: mar00486





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: all

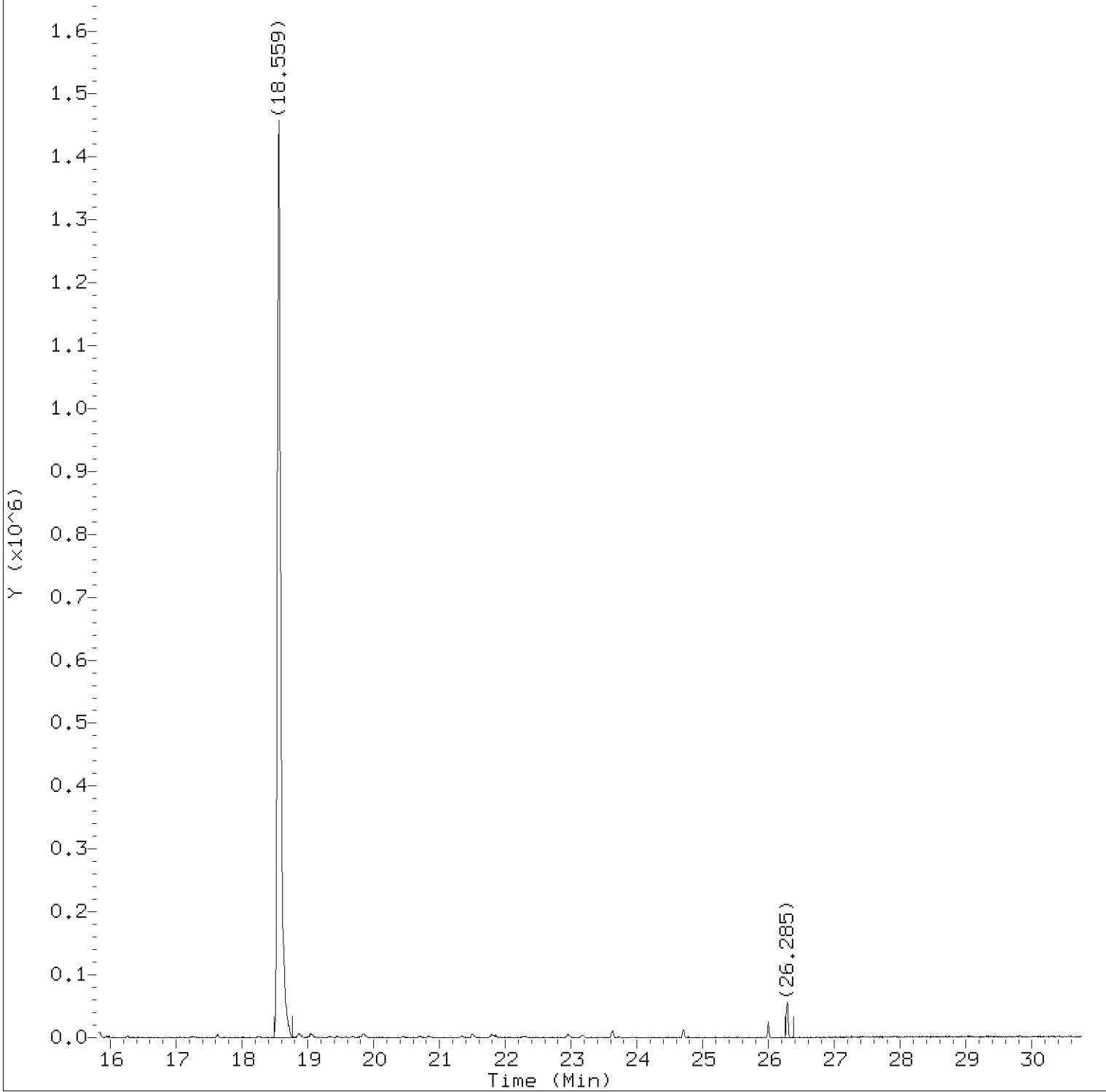
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Digitally signed by Jeffrey B. Smith  
on 10/26/2015 at 12:35.

Target 3.5 esignature user ID: jbs01304



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: all

Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Digitally signed by Jeffrey B. Smith  
on 10/26/2015 at 12:35.

Target 3.5 esignature user ID: jbs01304

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: all

Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sample Name: VBLKC15

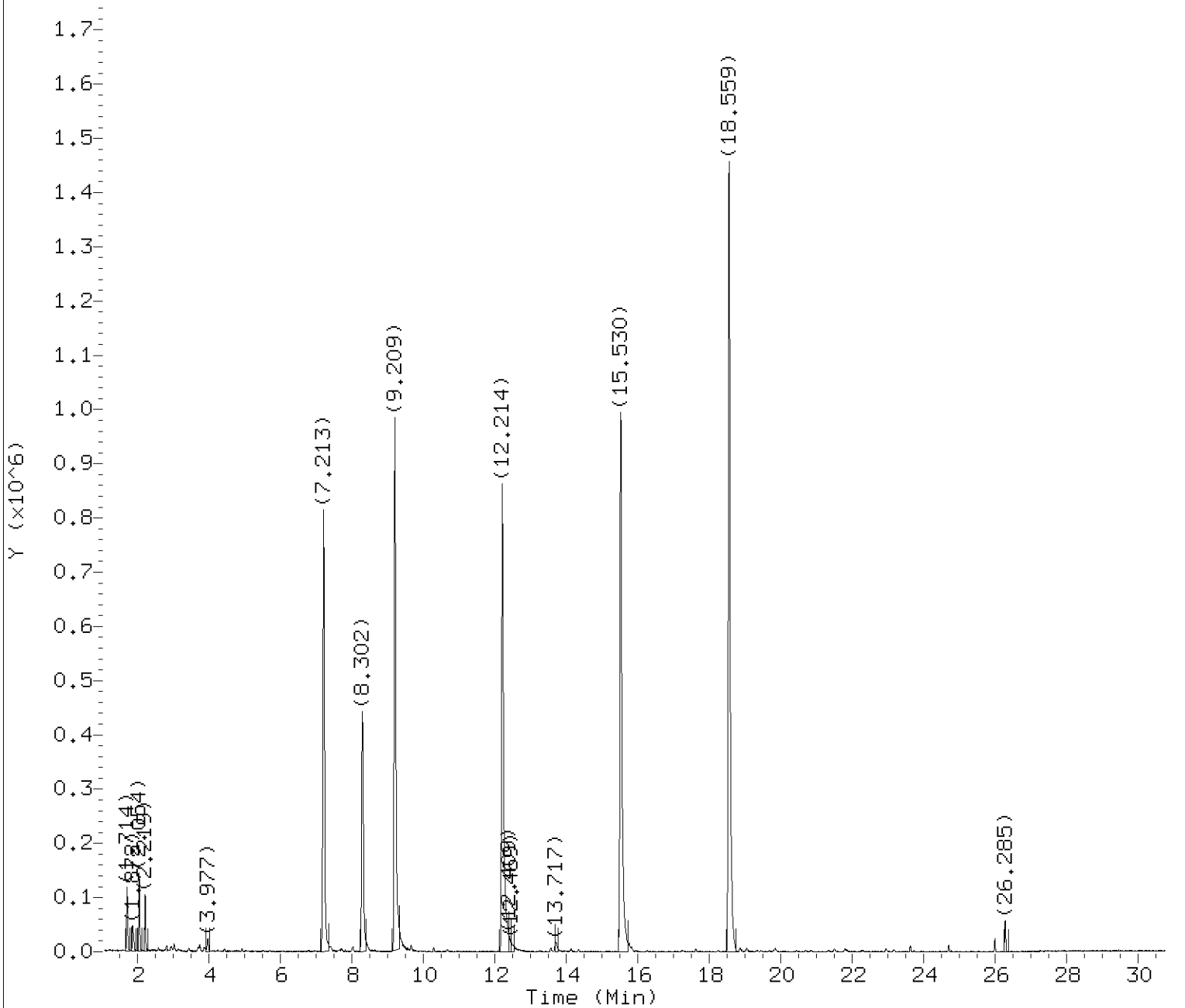
Lab Sample ID: VBLKC15

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
===== 40)*Bromochloromethane	(1)	7.213	130	638502	10.000
51)*1,4-Difluorobenzene	(2)	9.209	114	1684047	10.000
71)*Chlorobenzene-d5	(3)	15.523	117	1459692	10.000

\* = Compound is an internal standard.

page 1 of 1

Digitally signed by Jeffrey B. Smith  
on 10/26/2015 at 12:35.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04  
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

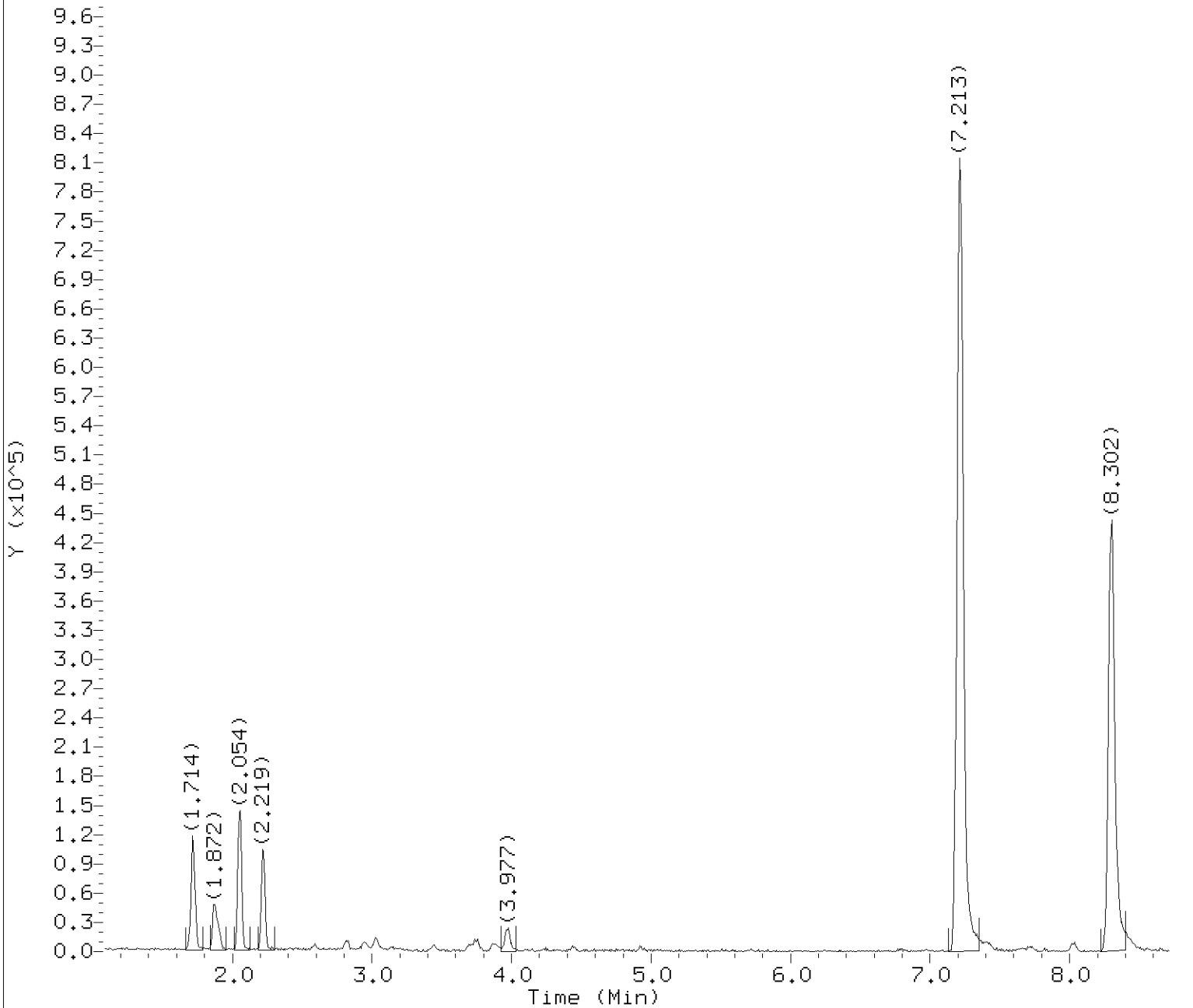
Sublist used: all

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/26/2015 at 12:34.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: all

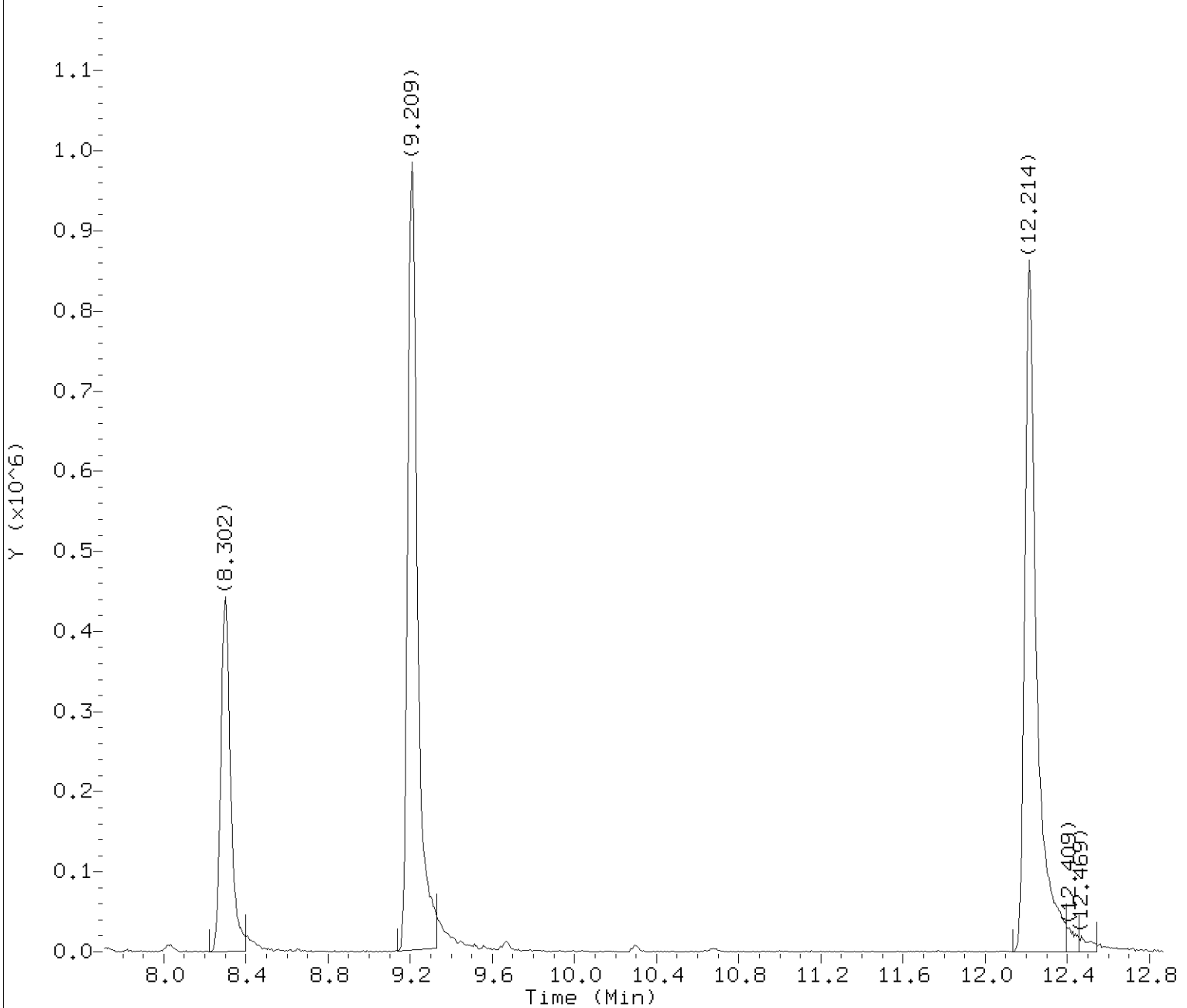
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Internal Standard referenced: Bromochloromethane at 7.213 minutes  
Chromatogram Start Time (min.): 1.087  
Chromatogram End Time (min.): 8.211

Digitally signed by Jeffrey B. Smith on 10/26/2015 at 12:34.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04

Sublist used: all

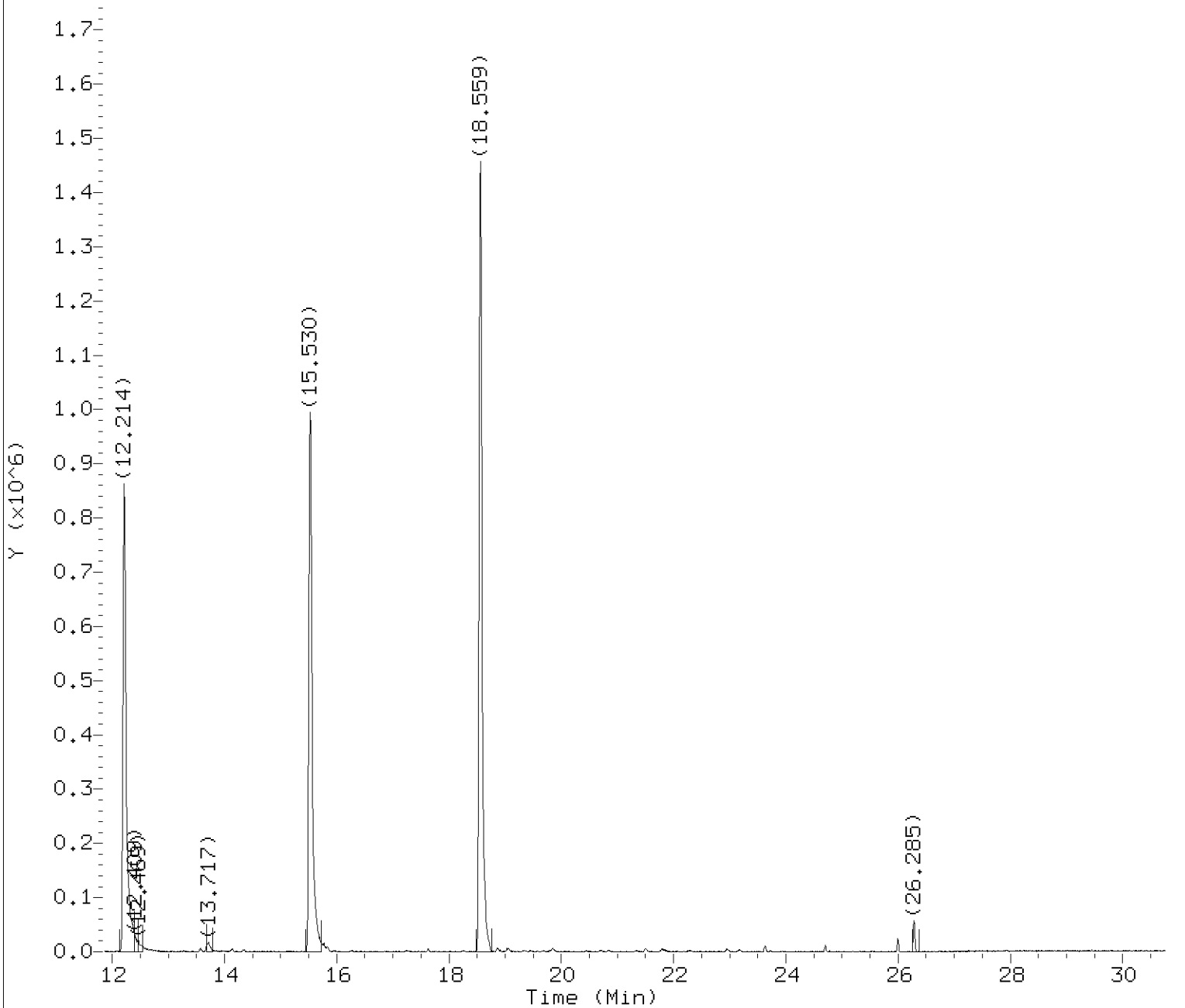
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Internal Standard referenced: 1,4-Difluorobenzene at 9.209 minutes  
Chromatogram Start Time (min.): 8.211  
Chromatogram End Time (min.): 12.366

Digitally signed by Jeffrey B. Smith on 10/26/2015 at 12:34.  
Target 3.5 esignature user ID: jbs01304



Tentatively Identified Compounds (TICs) Chromatograms

Target Revision 3.5

Data File: /chem/HP09464.i/15oct19.b/cj00386.d  
Injection date and time: 19-OCT-2015 15:59

Instrument ID: HP09464.i  
Analyst ID: jbs01304

Method used: /chem/HP09464.i/15oct19.b/to-15.m  
Calibration date and time: 19-OCT-2015 16:04  
Date, time and analyst ID of latest file update: 26-Oct-2015 12:33 jbs01304

Sublist used: all

Sample Name: VBLKC15

Lab Sample ID: VBLKC15

Internal Standard referenced: Chlorobenzene-d5 at 15.523 minutes  
Chromatogram Start Time (min.): 12.366  
Chromatogram End Time (min.): 30.751

Digitally signed by Jeffrey B. Smith on 10/26/2015 at 12:34.  
Target 3.5 esignature user ID: jbs01304

Lancaster Laboratories, Inc.

Data file : /chem/HP09464.i/15oct19.b/cj00386.d  
Lab Smp Id: VBLKC15 Client Smp ID: VBLKC15  
Inj Date : 19-OCT-2015 15:59  
Operator : jbs01304 Inst ID: HP09464.i  
Smp Info : VBLKC15;;C1528830AC;VBLKC15;0;3;BLANK;  
Misc Info : ;;250;;;;  
Comment :  
Method : /chem/HP09464.i/15oct19.b/to-15.m  
Meth Date : 26-Oct-2015 12:33 jbs01304 Quant Type: ISTD  
Cal Date : 16-OCT-2015 10:21 Cal File: cj00337.d  
Als bottle: 3 QC Sample: BLANK  
Dil Factor: 1.00000  
Integrator: Falcon Compound Sublist: all.sub  
Target Version: 3.50  
Processing Host: d30cs01

- NO TENTATIVELY IDENTIFIED COMPOUNDS -



Data file: /chem/HP09464.i/15oct15.b/cj00340.d Injection date and time: 16-OCT-2015 13:09  
 Data file Sample Info. Line: LCSC06;250;C1528830AA;LCSC06;0;3;LCS; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	674186 (-11)	10.00		454938 - 1061520
51) 1,4-Difluorobenzene	9.196( 0.006)	1334	114	2236255 (-13)	10.00		1538215 - 3589167
71) Chlorobenzene-d5	15.523( 0.000)	2374	117	2080241 (-10)	10.00		1383609 - 3228419

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.866( 0.000)	41	134315	8.384	8.38		0.5	1
2) Dichlorodifluoromethane	(1)	1.902( 0.000)	85	1728982	8.715	8.71		0.2	1
3) Chlorodifluoromethane	(1)	1.908( 0.000)	51	545352	8.601	8.60		0.2	1
4) Freon 114	(1)	2.042( 0.000)	85	1324434	7.418	7.42		0.2	1
5) Chloromethane	(1)	2.091( 0.000)	52	86515	9.187	9.19		0.2	1
6) Vinyl Chloride	(1)	2.212( 0.001)	62	347021	8.257	8.26		0.2	1
7) 1,3-Butadiene	(1)	2.261( 0.001)	54	221096	8.547	8.55		0.4	2
8) Bromomethane	(1)	2.583( 0.000)	94	493397	8.062	8.06		0.2	1
9) Chloroethane	(1)	2.705( 0.000)	64	183883	7.742	7.74		0.2	1
10) Bromoethene	(1)	2.924( 0.001)	106	516724	8.886	8.89		0.4	2
11) Dichlorofluoromethane	(1)	2.948( 0.000)	67	922134	8.320	8.32		0.2	1
12) Trichlorofluoromethane	(1)	3.022( 0.000)	101	1882216	8.800	8.80		0.2	1
13) Pentane	(1)	3.131( 0.001)	43	325364	8.950	8.95		0.5	1
14) Ethanol	(1)	3.314(-0.001)	45	31930	3.727	3.73		0.5	2
15) Freon123a	(1)	3.423( 0.001)	67	622565	7.974	7.97		0.2	1
16) Acrolein	(1)	3.575(-0.002)	56	35206	4.397	4.40		1	2
17) 1,1-Dichloroethene	(1)	3.691(-0.000)	61	585494	8.399	8.40		0.2	1
18) Freon 113	(1)	3.733( 0.000)	103	647517	7.636	7.64		0.5	2
19) Acetone	(1)	3.788( 0.000)	43	206359	7.443	7.44		0.5	2
20) Methyl Iodide	(1)	3.873( 0.000)	142	1348908	7.376	7.38		0.2	1
21) Carbon Disulfide	(1)	3.964( 0.000)	76	1117226	7.797	7.80		0.5	1
22) Isopropanol	(1)	4.068( 0.000)	45	219126	6.685	6.68		0.5	2
23) Acetonitrile	(1)	4.183(-0.000)	40	32853M	5.207	5.21		0.5	2
24) 3-Chloropropene	(1)	4.238( 0.000)	76	163844	8.292	8.29		0.2	1
25) Methylene Chloride	(1)	4.427( 0.000)	84	358571	8.293	8.29		0.2	1
26) tert-Butyl Alcohol	(1)	4.755(-0.000)	59	425879	8.641	8.64		0.5	1
27) Acrylonitrile	(1)	4.853(-0.000)	53	99869	6.704	6.70		0.5	2
28) trans-1,2-Dichloroethene	(1)	4.914( 0.001)	61	483641	8.191	8.19		0.2	1
29) Methyl t-Butyl Ether	(1)	4.986( 0.000)	73	592140	7.758	7.76		0.2	1
30) Hexane	(1)	5.498( 0.001)	57	363550	8.408	8.41		0.2	1
31) 1,1-Dichloroethane	(1)	5.692(-0.000)	63	573683	7.872	7.87		0.2	1
32) Vinyl Acetate	(1)	5.881( 0.000)	86	37355	4.924	4.92		1	1
33) Di-Isopropyl Ether	(1)	5.966(-0.000)	45	357595	8.220	8.22		0.2	1
34) Ethyl Tert-Butyl Ether	(1)	6.641( 0.000)	59	500212	8.246	8.25		0.2	1
35) cis-1,2-Dichloroethene	(1)	6.775( 0.001)	61	454015	8.356	8.36		0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	937656	16.547	16.55		0.2	1
37) 2-Butanone	(1)	6.872( 0.000)	72	109318	8.117	8.12		0.5	2
38) Ethyl Acetate	(1)	7.061(-0.000)	70	64475	10.533	10.53		0.5	1
39) Methyl Acrylate	(1)	7.085(-0.000)	55	259502	7.604	7.60		0.2	1
41) Tetrahydrofuran	(1)	7.353( 0.000)	42	114669	7.832	7.83		0.5	1
42) Chloroform	(1)	7.408( 0.000)	83	1006543	7.877	7.88		0.2	1
43) 1,1,1-Trichloroethane	(1)	7.712( 0.000)	97	1226372	8.447	8.45		0.2	1
44) Cyclohexane	(1)	7.815( 0.000)	56	426702	9.014	9.01		0.2	1

M = Compound was manually integrated.

Data file: /chem/HP09464.i/15oct15.b/cj00340.d Injection date and time: 16-OCT-2015 13:09  
 Data file Sample Info. Line: LCSC06;250;C1528830AA;LCSC06;0;3;LCS; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit	LOQ
45) Carbon Tetrachloride	(1)	8.022( 0.000)	117	1503026	9.157	9.16			0.2	1
46) Benzene	(2)	8.399(-0.000)	78	1072050	7.832	7.83			0.2	1
47) 1,2-Dichloroethane	(2)	8.424( 0.000)	62	623072	7.849	7.85			0.2	1
48) Isooctane	(2)	8.655(-0.000)	57	1119207	8.690	8.69			0.2	1
49) Tert-Amyl Methyl Ether	(2)	8.740(-0.000)	73	646122	8.635	8.63			0.2	1
50) Heptane	(2)	9.056( 0.000)	43	301082	8.484	8.48			0.5	1
52) Trichloroethene	(2)	9.665(-0.000)	130	732325	7.815	7.82			0.2	1
53) Ethyl Acrylate	(2)	10.024(-0.000)	55	330555	8.603	8.60			0.2	1
54) 1,2-Dichloropropane	(2)	10.078(-0.001)	63	288660	7.605	7.60			0.2	1
55) Dibromomethane	(2)	10.285(-0.000)	174	707290	7.579	7.58			0.2	1
56) 1,4-Dioxane	(2)	10.450(-0.000)	88	226117	8.091	8.09			0.5	1
57) Methyl Methacrylate	(2)	10.480(-0.000)	69	229549	7.907	7.91			0.2	1
58) Bromodichloromethane	(2)	10.668(-0.000)	83	1120999	8.029	8.03			0.2	1
59) cis-1,3-Dichloropropene	(2)	11.642(-0.000)	75	480746	6.474	6.47			0.2	1
60) 4-Methyl-2-Pentanone	(2)	12.068(-0.000)	43	297214	8.341	8.34			0.5	2
61) Toluene	(3)	12.348( 0.000)	91	1320017	8.127	8.13			0.2	1
62) Octane	(3)	12.810( 0.000)	43	377619	8.822	8.82			0.5	1
63) trans-1,3-Dichloropropene	(3)	12.889( 0.000)	75	596263	6.981	6.98			0.2	1
64) 1,3-Dichloropropene (total)	(3)		75	1077009	13.455	13.45			0.2	1
65) Ethyl Methacrylate	(3)	13.260( 0.000)	69	382712	8.403	8.40			0.2	1
66) 1,1,2-Trichloroethane	(3)	13.272( 0.000)	97	553239	7.988	7.99			0.2	1
67) Tetrachloroethene	(3)	13.570( 0.000)	166	1011815	7.317	7.32			0.2	1
68) 2-Hexanone	(3)	13.996(-0.000)	43	329147	8.759	8.76			0.5	2
69) Dibromochloromethane	(3)	14.136( 0.000)	127	1047047	7.844	7.84			0.2	1
70) 1,2-Dibromoethane	(3)	14.337( 0.000)	107	851078	7.183	7.18			0.2	1
72) Chlorobenzene	(3)	15.590(-0.000)	112	1266956	7.844	7.84			0.2	1
73) 1,1,1,2-Tetrachloroethane	(3)	15.834(-0.000)	131	792548	7.873	7.87			0.2	1
74) Ethylbenzene	(3)	15.949(-0.000)	91	1485873	8.280	8.28			0.2	1
75) m/p-Xylene	(3)	16.265(-0.000)	91	1095363	7.381	7.38			0.2	1
76) o-Xylene	(3)	17.233( 0.000)	91	1248967	7.996	8.00			0.2	1
77) Xylene (total)	(3)		91	2344330	15.377	15.38			0.2	1
78) Styrene	(3)	17.275( 0.000)	104	1094420	7.816	7.82			0.2	1
79) Bromoform	(3)	17.634(-0.000)	173	1294198	7.505	7.51			0.2	1
80) Cumene	(3)	18.249(-0.000)	105	1601699	7.984	7.98			0.2	1
81) Bromobenzene	(3)	18.863( 0.000)	156	869210	7.714	7.71			0.2	1
82) 1,1,2,2-Tetrachloroethane	(3)	19.046(-0.000)	83	1030227	7.810	7.81			0.2	1
83) 1,2,3-Trichloropropane	(3)	19.076( 0.000)	110	383230	7.592	7.59			0.2	1
84) n-Propylbenzene	(3)	19.338(-0.000)	120	510069	7.649	7.65			0.5	1
85) 2-Chlorotoluene	(3)	19.453( 0.000)	126	580956	7.844	7.84			0.2	1
86) 4-Ethyltoluene	(3)	19.666(-0.000)	105	1800497	8.048	8.05			0.2	1
87) 1,3,5-Trimethylbenzene	(3)	19.855( 0.000)	105	1518041	7.881	7.88			0.2	1
88) Alpha Methyl Styrene	(3)	20.445(-0.000)	118	817517	7.479	7.48			0.2	1
89) tert-Butylbenzene	(3)	20.700(-0.000)	119	1405914	7.387	7.39			0.2	1
90) 1,2,4-Trimethylbenzene	(3)	20.840(-0.000)	105	1598507	7.993	7.99			0.2	1
91) sec-Butylbenzene	(3)	21.339(-0.000)	105	1945840	7.363	7.36			0.2	1
92) 1,3-Dichlorobenzene	(3)	21.503(-0.000)	146	1528764	7.709	7.71			0.2	1
93) 1,4-Dichlorobenzene	(3)	21.795( 0.000)	146	1530858	7.348	7.35			0.2	1
94) p-Isopropyltoluene	(3)	21.856(-0.000)	119	1855357	7.704	7.70			0.2	1
95) Benzyl Chloride	(3)	22.288( 0.000)	91	1172305	5.943	5.94			0.5	1
96) 1,2-Dichlorobenzene	(3)	22.957(-0.000)	146	1340601	7.139	7.14			0.2	1
97) n-Butylbenzene	(3)	23.170(-0.000)	91	1404005	7.156	7.16			0.2	1
98) Hexachloroethane	(3)	23.626(-0.000)	117	775007	7.791	7.79			0.5	2
99) 1,2-Dibromo-3-chloropropane	(3)	24.709(-0.000)	157	555878	5.447	5.45			0.2	1
100) 1,2,4-Trichlorobenzene	(3)	25.999(-0.000)	180	426484	4.110	4.11			0.5	2

LCSC06

Lancaster Laboratories, Inc.  
 Analysis Summary for GC/MS Volatiles in Air LCSC06

Data file: /chem/HP09464.i/15oct15.b/cj00340.d Injection date and time: 16-OCT-2015 13:09  
 Data file Sample Info. Line: LCSC06;250;C1528830AA;LCSC06;0;3;LCS; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

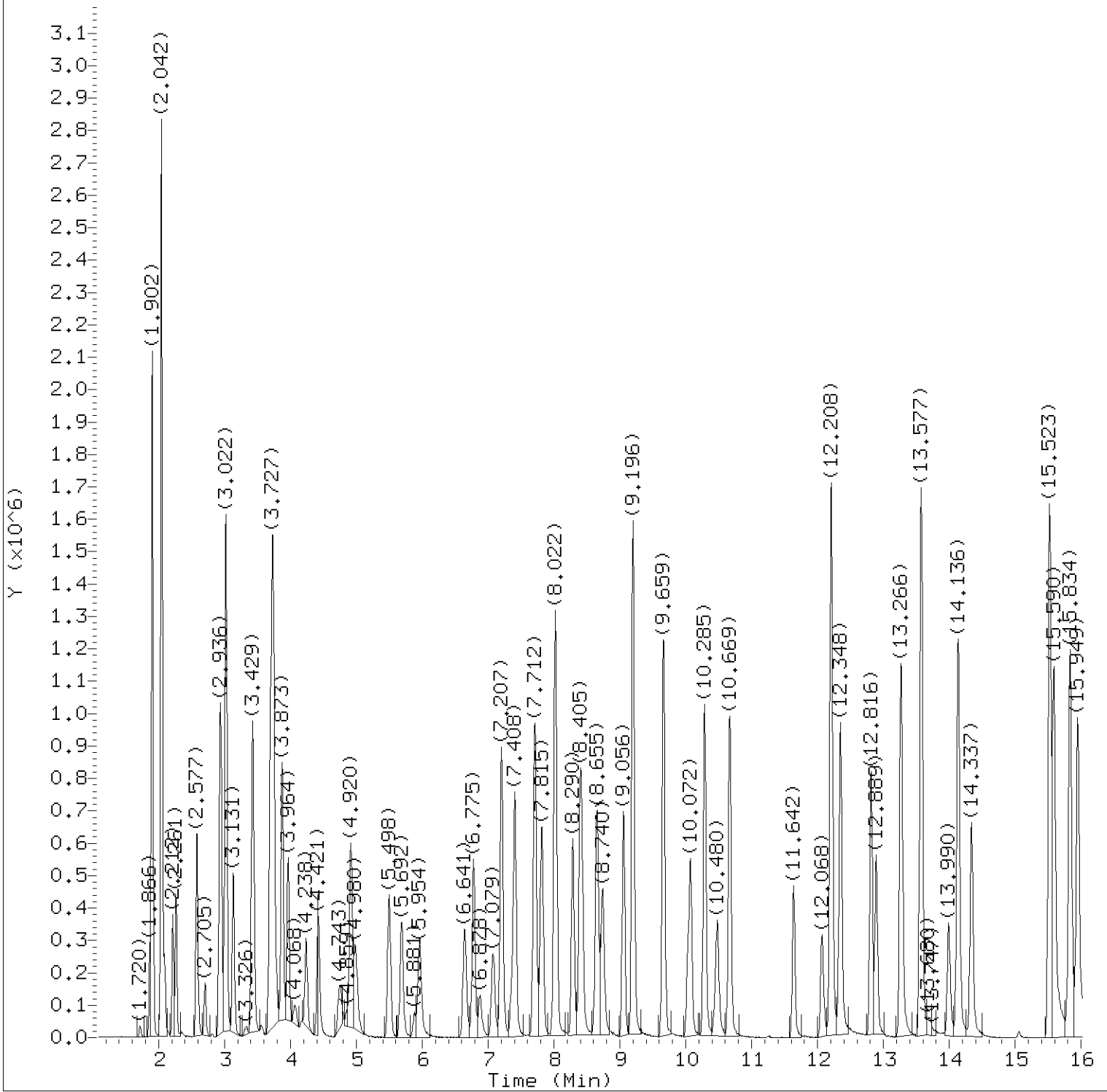
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	26.279(-0.000)	225	505492	4.454	4.45			0.4	2
102) Naphthalene	(3)	26.291( 0.000)	128	915788	4.266	4.27			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 10/21/2015 at 16:37. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 08:57. Parallax ID: cmr00412



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00340.d  
Injection date and time: 16-OCT-2015 13:09

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

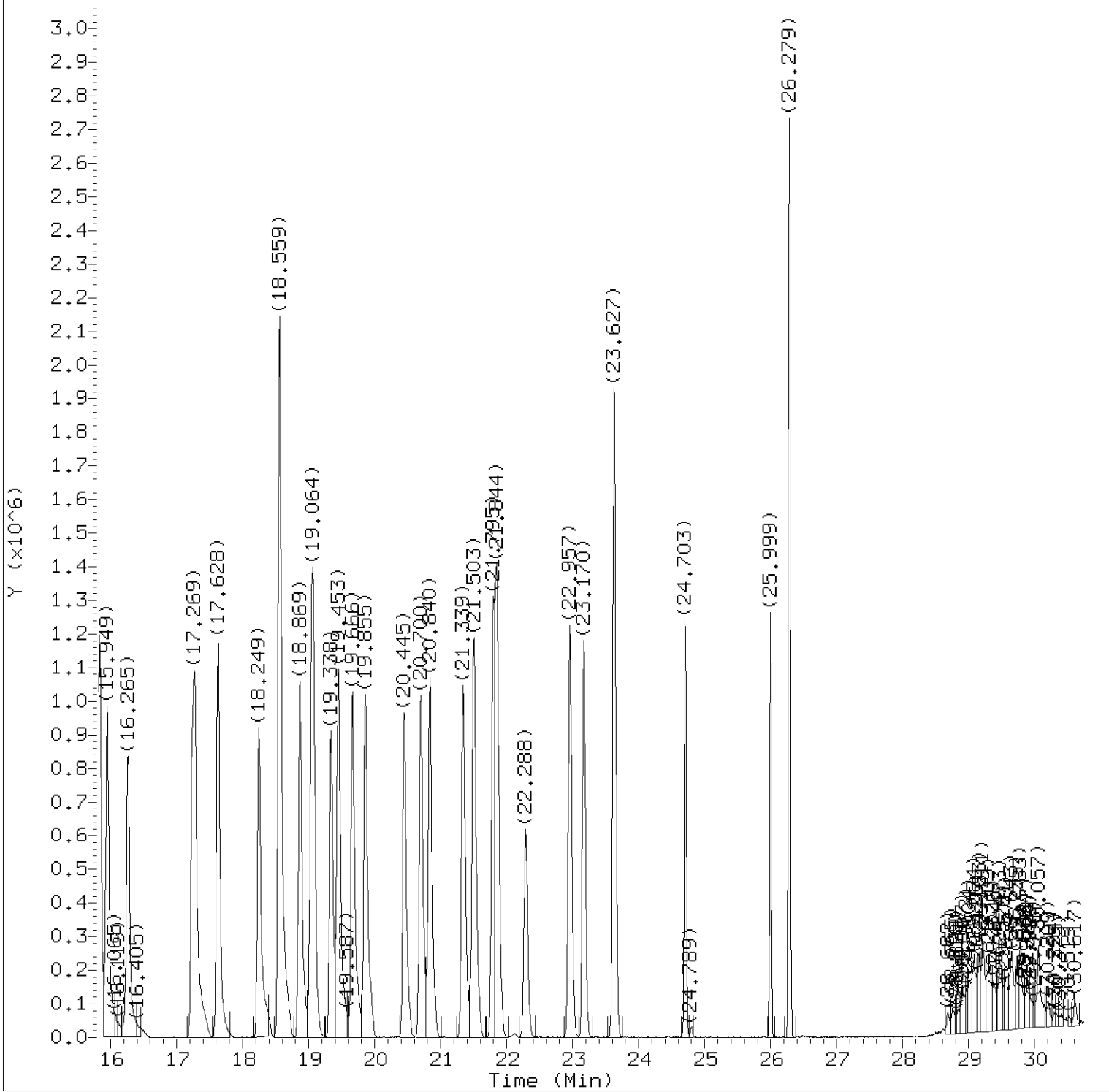
Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSC06

Lab Sample ID: LCSC06

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00340.d  
Injection date and time: 16-OCT-2015 13:09

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSC06

Lab Sample ID: LCSC06

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00340.d  
 Injection date and time: 16-OCT-2015 13:09

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:32  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sublist used: all

Sample Name: LCSC06

Lab Sample ID: LCSC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	134315	8.384
2) Dichlorodifluoromethane	(1)	1.902	85	1728982	8.715
3) Chlorodifluoromethane	(1)	1.908	51	545352	8.601
4) Freon 114	(1)	2.042	85	1324434	7.418
5) Chloromethane	(1)	2.091	52	86515	9.187
6) Vinyl Chloride	(1)	2.212	62	347021	8.257
7) 1,3-Butadiene	(1)	2.261	54	221096	8.547
8) Bromomethane	(1)	2.583	94	493397	8.062
9) Chloroethane	(1)	2.705	64	183883	7.742
10) Bromoethene	(1)	2.924	106	516724	8.886
11) Dichlorofluoromethane	(1)	2.949	67	922134	8.320
12) Trichlorofluoromethane	(1)	3.022	101	1882216	8.800
13) Pentane	(1)	3.131	43	325364	8.950
14) Ethanol	(1)	3.314	45	31930	3.727
15) Freon123a	(1)	3.423	67	622565	7.974
16) Acrolein	(1)	3.575	56	35206	4.397
17) 1,1-Dichloroethene	(1)	3.691	61	585494	8.399
18) Freon 113	(1)	3.733	103	647517	7.636
19) Acetone	(1)	3.788	43	206359	7.443
20) Methyl Iodide	(1)	3.873	142	1348908	7.376
21) Carbon Disulfide	(1)	3.964	76	1117226	7.797
22) Isopropanol	(1)	4.068	45	219126	6.685
23) Acetonitrile	(1)	4.183	40	32853M	5.207
24) 3-Chloropropene	(1)	4.238	76	163844	8.292
25) Methylene Chloride	(1)	4.427	84	358571	8.293
26) tert-Butyl Alcohol	(1)	4.755	59	425879	8.641
27) Acrylonitrile	(1)	4.853	53	99869	6.704
28) trans-1,2-Dichloroethene	(1)	4.914	61	483641	8.191
29) Methyl t-Butyl Ether	(1)	4.987	73	592140	7.758
30) Hexane	(1)	5.498	57	363550	8.408
31) 1,1-Dichloroethane	(1)	5.692	63	573683	7.872
32) Vinyl Acetate	(1)	5.881	86	37355	4.924
33) Di-Isopropyl Ether	(1)	5.966	45	357595	8.220
36) 1,2-Dichloroethene (total)	(1)		61	937656	16.547
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	500212	8.246
35) cis-1,2-Dichloroethene	(1)	6.775	61	454015	8.356
37) 2-Butanone	(1)	6.872	72	109318	8.117
38) Ethyl Acetate	(1)	7.061	70	64475	10.533

M = Compound was manually integrated.

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 on 10/21/2015 at 16:37.  
 Target 3.5 esignature user ID: jeb07445  
 SSX23 Page 494 of 1243

## Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00340.d  
Injection date and time: 16-OCT-2015 13:09Instrument ID: HP09464.i  
Analyst ID: jeb07445Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSC06

Lab Sample ID: LCSC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.085	55	259502	7.604
40)*Bromochloromethane	(1)	7.207	130	674186	10.000
41) Tetrahydrofuran	(1)	7.353	42	114669	7.832
42) Chloroform	(1)	7.408	83	1006543	7.877
43) 1,1,1-Trichloroethane	(1)	7.712	97	1226372	8.447
44) Cyclohexane	(1)	7.815	56	426702	9.014
45) Carbon Tetrachloride	(1)	8.022	117	1503026	9.157
46) Benzene	(2)	8.399	78	1072050	7.832
47) 1,2-Dichloroethane	(2)	8.424	62	623072	7.849
48) Isooctane	(2)	8.655	57	1119207	8.690
49) Tert-Amyl Methyl Ether	(2)	8.740	73	646122	8.635
50) Heptane	(2)	9.056	43	301082	8.484
51)*1,4-Difluorobenzene	(2)	9.196	114	2236255	10.000
52) Trichloroethene	(2)	9.665	130	732325	7.815
53) Ethyl Acrylate	(2)	10.024	55	330555	8.603
54) 1,2-Dichloropropane	(2)	10.078	63	288660	7.605
55) Dibromomethane	(2)	10.285	174	707290	7.579
56) 1,4-Dioxane	(2)	10.450	88	226117	8.091
57) Methyl Methacrylate	(2)	10.480	69	229549	7.907
58) Bromodichloromethane	(2)	10.669	83	1120999	8.029
59) cis-1,3-Dichloropropene	(2)	11.642	75	480746	6.474
60) 4-Methyl-2-Pentanone	(2)	12.068	43	297214	8.341
61) Toluene	(3)	12.348	91	1320017	8.127
64) 1,3-Dichloropropene (total)	(3)		75	1077009	13.455
62) Octane	(3)	12.810	43	377619	8.822
63) trans-1,3-Dichloropropene	(3)	12.889	75	596263	6.981
65) Ethyl Methacrylate	(3)	13.260	69	382712	8.403
66) 1,1,2-Trichloroethane	(3)	13.272	97	553239	7.988
67) Tetrachloroethene	(3)	13.570	166	1011815	7.317
68) 2-Hexanone	(3)	13.996	43	329147	8.759
69) Dibromochloromethane	(3)	14.136	127	1047047	7.844
70) 1,2-Dibromoethane	(3)	14.337	107	851078	7.183
71)*Chlorobenzene-d5	(3)	15.523	117	2080241	10.000
72) Chlorobenzene	(3)	15.590	112	1266956	7.844
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	792548	7.873
74) Ethylbenzene	(3)	15.949	91	1485873	8.280
75) m/p-Xylene	(3)	16.265	91	1095363	7.381
77) Xylene (total)	(3)		91	2344330	15.377

\* = Compound is an internal standard.

page 2 of 3

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on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445

SSX23 Page 495 of 1243

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00340.d  
 Injection date and time: 16-OCT-2015 13:09

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:32  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sublist used: all

Sample Name: LCSC06

Lab Sample ID: LCSC06

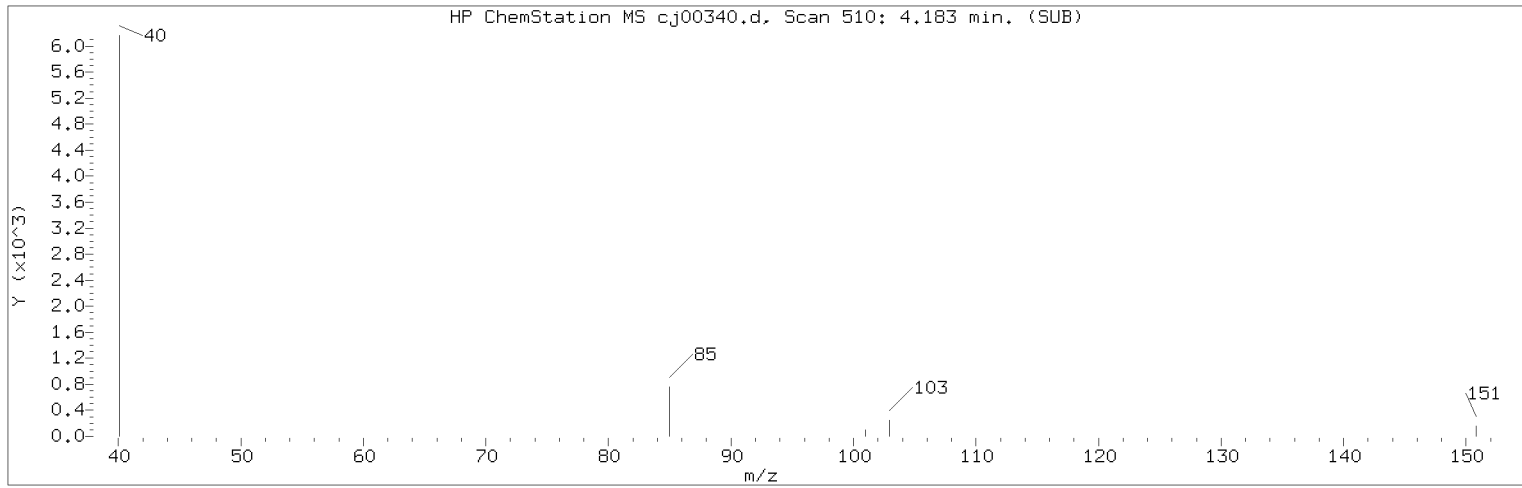
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.233	91	1248967	7.996
78) Styrene	(3)	17.275	104	1094420	7.816
79) Bromoform	(3)	17.634	173	1294198	7.505
80) Cumene	(3)	18.249	105	1601699	7.984
81) Bromobenzene	(3)	18.863	156	869210	7.714
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	1030227	7.810
83) 1,2,3-Trichloropropane	(3)	19.076	110	383230	7.592
84) n-Propylbenzene	(3)	19.338	120	510069	7.649
85) 2-Chlorotoluene	(3)	19.453	126	580956	7.844
86) 4-Ethyltoluene	(3)	19.666	105	1800497	8.048
87) 1,3,5-Trimethylbenzene	(3)	19.855	105	1518041	7.881
88) Alpha Methyl Styrene	(3)	20.445	118	817517	7.479
89) tert-Butylbenzene	(3)	20.700	119	1405914	7.387
90) 1,2,4-Trimethylbenzene	(3)	20.840	105	1598507	7.993
91) sec-Butylbenzene	(3)	21.339	105	1945840	7.363
92) 1,3-Dichlorobenzene	(3)	21.503	146	1528764	7.709
93) 1,4-Dichlorobenzene	(3)	21.795	146	1530858	7.348
94) p-Isopropyltoluene	(3)	21.856	119	1855357	7.704
95) Benzyl Chloride	(3)	22.288	91	1172305	5.943
96) 1,2-Dichlorobenzene	(3)	22.957	146	1340601	7.139
97) n-Butylbenzene	(3)	23.170	91	1404005	7.156
98) Hexachloroethane	(3)	23.627	117	775007	7.791
99) 1,2-Dibromo-3-chloropropane	(3)	24.709	157	555878	5.447
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	426484	4.110
101) Hexachlorobutadiene	(3)	26.279	225	505492	4.454
102) Naphthalene	(3)	26.291	128	915788	4.266

Digitally signed by Jacob E. Bailey  
 on 10/21/2015 at 16:37.

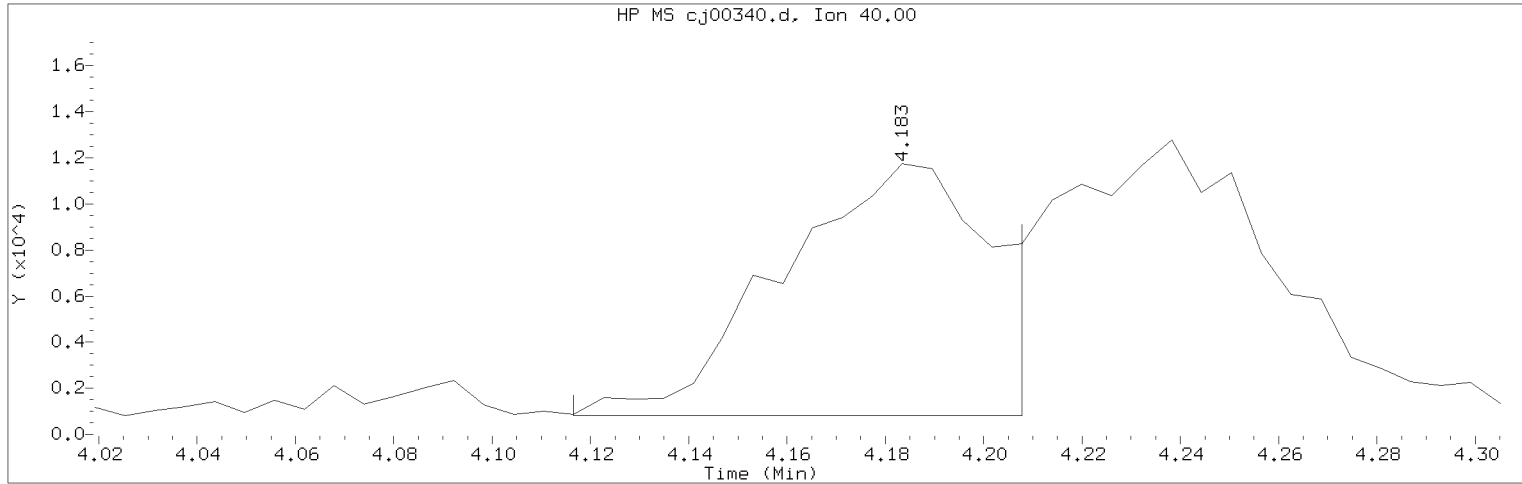
Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00340.d                      Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 13:09                      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m                      Sublist used: all  
Calibration date and time: 21-OCT-2015 16:32  
Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSC06                      Lab Sample ID: LCSC06

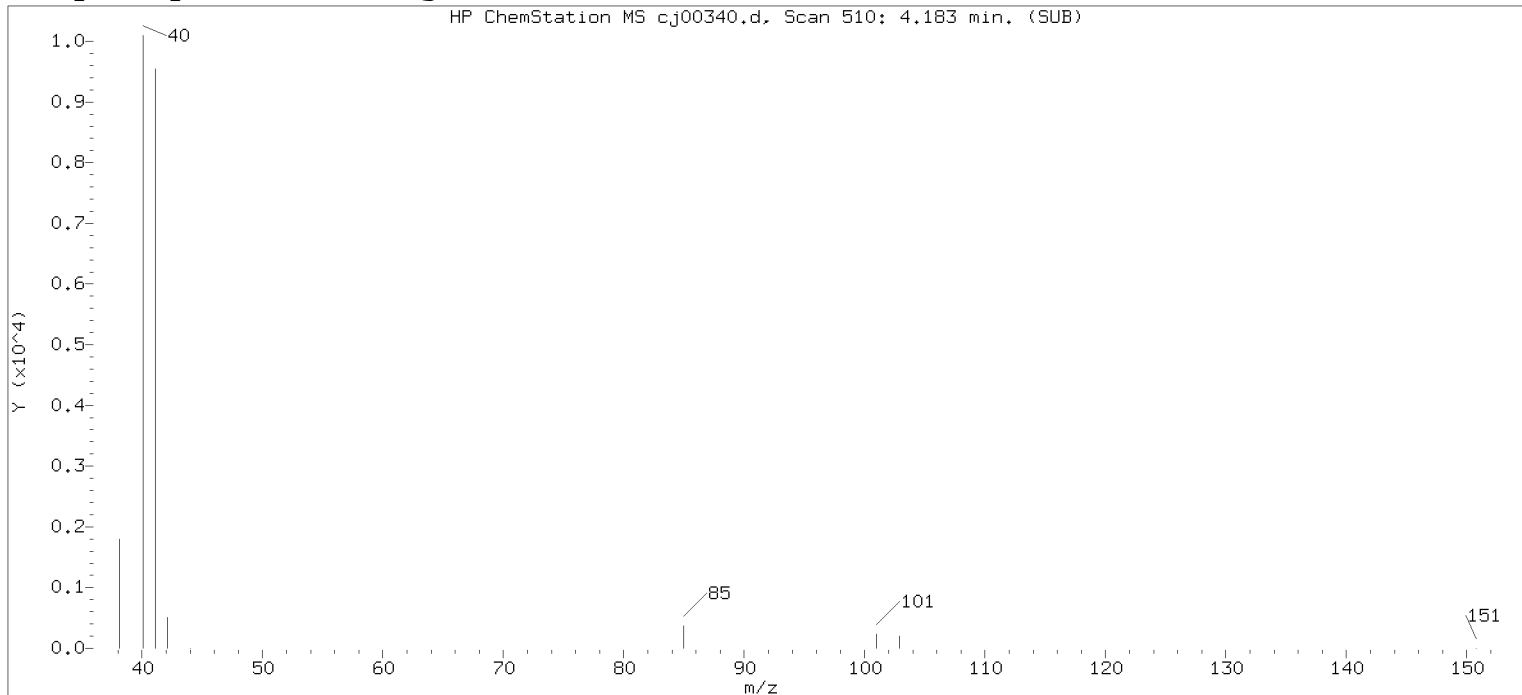
Compound Number                      : 23  
Compound Name                        : Acetonitrile  
Scan Number                            : 510  
Retention Time (minutes): 4.183  
Quant Ion                               : 40.00  
Area (flag)                            : 32853M  
Concentration (ppb(v))               : 5.2069  
Integration start scan                : 498                      Integration stop scan: 513  
Y at integration start                : 820                      Y at integration end: 820

Reason for manual integration: improper integration

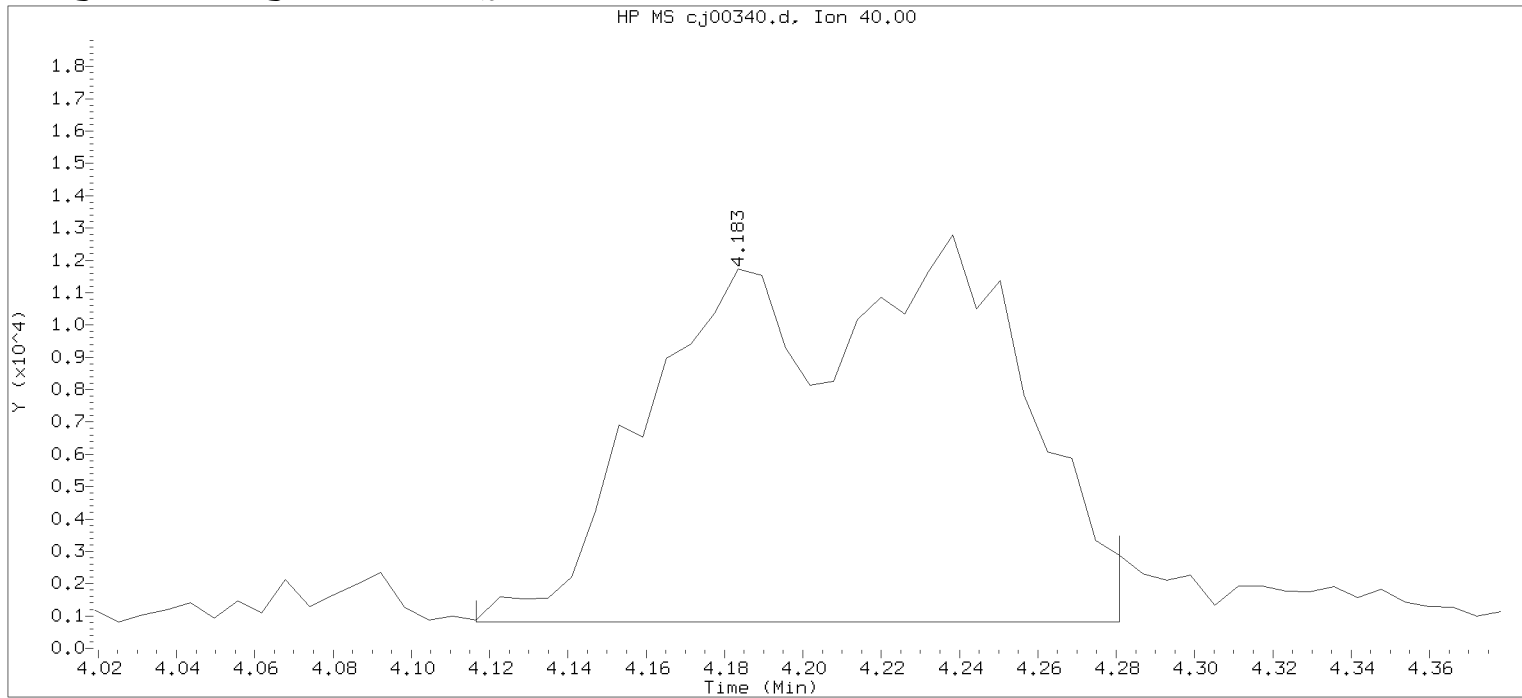
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:37.  
Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 08:57.  
Parallax ID: cmr00412

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15oct15.b/cj00340.d Instrument ID: HP09464.i  
Injection date and time: 16-OCT-2015 13:09 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
Calibration date and time: 16-OCT-2015 13:49  
Date, time and analyst ID of latest file update: 16-Oct-2015 13:50 Automation

Sample Name: LCSC06 Lab Sample ID: LCSC06

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 510  
Retention Time (minutes): 4.183  
Quant Ion : 40.00  
Area : 66721  
Concentration (ppb(v)) : 10.5749  
Integration start scan : 498 Integration stop scan: 525  
Y at integration start : 820 Y at integration end: 820

Data file: /chem/HP09464.i/15oct15.b/cj00341.d Injection date and time: 16-OCT-2015 13:54  
 Data file Sample Info. Line: LCSDC06;250;C1528830AA;LCSDC06;0;3;LCSDC; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on column)	QC Flag	QC Limits
40) Bromochloromethane	7.207(-0.006)	1007	130	672950 (-11)	10.00		454938 - 1061520
51) 1,4-Difluorobenzene	9.196( 0.006)	1334	114	2106045 (-18)	10.00		1538215 - 3589167
71) Chlorobenzene-d5	15.523( 0.000)	2374	117	1893441 (-18)	10.00		1383609 - 3228419

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Reporting Limit (in sample)	LOQ
1) Propene	(1)	1.866( 0.000)	41	167188	10.455	10.46		0.5	1
2) Dichlorodifluoromethane	(1)	1.902( 0.000)	85	1927981	9.736	9.74		0.2	1
3) Chlorodifluoromethane	(1)	1.914(-0.000)	51	617973	9.764	9.76		0.2	1
4) Freon 114	(1)	2.042( 0.000)	85	1548052	8.687	8.69		0.2	1
5) Chloromethane	(1)	2.091( 0.000)	52	104596	11.127	11.13		0.2	1
6) Vinyl Chloride	(1)	2.219( 0.000)	62	422194	10.064	10.06		0.2	1
7) 1,3-Butadiene	(1)	2.267( 0.000)	54	259337	10.043	10.04		0.4	2
8) Bromomethane	(1)	2.584( 0.000)	94	586841	9.606	9.61		0.2	1
9) Chloroethane	(1)	2.705( 0.000)	64	219715	9.267	9.27		0.2	1
10) Bromoethene	(1)	2.930( 0.000)	106	600236	10.341	10.34		0.4	2
11) Dichlorofluoromethane	(1)	2.949( 0.000)	67	1061791	9.598	9.60		0.2	1
12) Trichlorofluoromethane	(1)	3.022( 0.000)	101	2095363	9.815	9.81		0.2	1
13) Pentane	(1)	3.137( 0.000)	43	374419	10.318	10.32		0.5	1
14) Ethanol	(1)	3.308(-0.000)	45	36500	4.268	4.27		0.5	2
15) Freon123a	(1)	3.423( 0.001)	67	725398	9.308	9.31		0.2	1
16) Acrolein	(1)	3.557( 0.000)	56	40211	5.031	5.03		1	2
17) 1,1-Dichloroethene	(1)	3.691(-0.000)	61	676343	9.720	9.72		0.2	1
18) Freon 113	(1)	3.733( 0.000)	103	742118	8.767	8.77		0.5	2
19) Acetone	(1)	3.794(-0.000)	43	239495	8.654	8.65		0.5	2
20) Methyl Iodide	(1)	3.873( 0.000)	142	1506370	8.252	8.25		0.2	1
21) Carbon Disulfide	(1)	3.965( 0.000)	76	1271251	8.889	8.89		0.5	1
22) Isopropanol	(1)	4.068( 0.000)	45	263378	8.050	8.05		0.5	2
23) Acetonitrile	(1)	4.184(-0.000)	40	38262	6.075	6.08		0.5	2
24) 3-Chloropropene	(1)	4.232( 0.001)	76	182749	9.266	9.27		0.2	1
25) Methylene Chloride	(1)	4.421( 0.001)	84	403196	9.342	9.34		0.2	1
26) tert-Butyl Alcohol	(1)	4.762(-0.001)	59	490772	9.976	9.98		0.5	1
27) Acrylonitrile	(1)	4.853(-0.000)	53	115753	7.784	7.78		0.5	2
28) trans-1,2-Dichloroethene	(1)	4.914( 0.001)	61	548846	9.312	9.31		0.2	1
29) Methyl t-Butyl Ether	(1)	5.005(-0.001)	73	698570	9.169	9.17		0.2	1
30) Hexane	(1)	5.504( 0.000)	57	407728	9.448	9.45		0.2	1
31) 1,1-Dichloroethane	(1)	5.680( 0.001)	63	629468	8.653	8.65		0.2	1
32) Vinyl Acetate	(1)	5.881( 0.000)	86	48668	6.427	6.43		1	1
33) Di-Isopropyl Ether	(1)	5.966(-0.000)	45	421582	9.709	9.71		0.2	1
34) Ethyl Tert-Butyl Ether	(1)	6.641( 0.000)	59	582102	9.613	9.61		0.2	1
35) cis-1,2-Dichloroethene	(1)	6.781( 0.000)	61	508441	9.374	9.37		0.2	1
36) 1,2-Dichloroethene (total)	(1)		61	1057287	18.687	18.69		0.2	1
37) 2-Butanone	(1)	6.872( 0.000)	72	128690	9.573	9.57		0.5	2
38) Ethyl Acetate	(1)	7.067(-0.000)	70	77351	12.659	12.66		0.5	1
39) Methyl Acrylate	(1)	7.079( 0.000)	55	300475	8.821	8.82		0.2	1
41) Tetrahydrofuran	(1)	7.359(-0.000)	42	132659	9.078	9.08		0.5	1
42) Chloroform	(1)	7.408( 0.000)	83	1107742	8.685	8.69		0.2	1
43) 1,1,1-Trichloroethane	(1)	7.712( 0.000)	97	1317465	9.091	9.09		0.2	1
44) Cyclohexane	(1)	7.809( 0.000)	56	473443	10.020	10.02		0.2	1

Data file: /chem/HP09464.i/15oct15.b/cj00341.d Injection date and time: 16-OCT-2015 13:54  
 Data file Sample Info. Line: LCSDC06;250;C1528830AA;LCSDC06;0;3;LCSD; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting	
									Limit	LOQ
45) Carbon Tetrachloride	(1)	8.022( 0.000)	117	1578522	9.635	9.64		0.2	1	
46) Benzene	(2)	8.393( 0.000)	78	1213186	9.411	9.41		0.2	1	
47) 1,2-Dichloroethane	(2)	8.430(-0.000)	62	692928	9.269	9.27		0.2	1	
48) Isooctane	(2)	8.649( 0.000)	57	1222931	10.083	10.08		0.2	1	
49) Tert-Amyl Methyl Ether	(2)	8.740(-0.000)	73	750384	10.648	10.65		0.2	1	
50) Heptane	(2)	9.063(-0.000)	43	341049	10.205	10.20		0.5	1	
52) Trichloroethene	(2)	9.665(-0.000)	130	801807	9.086	9.09		0.2	1	
53) Ethyl Acrylate	(2)	10.030(-0.001)	55	370942	10.252	10.25		0.2	1	
54) 1,2-Dichloropropane	(2)	10.072(-0.000)	63	331810	9.282	9.28		0.2	1	
55) Dibromomethane	(2)	10.285(-0.000)	174	771699	8.780	8.78		0.2	1	
56) 1,4-Dioxane	(2)	10.456(-0.001)	88	271427	10.313	10.31		0.5	1	
57) Methyl Methacrylate	(2)	10.486(-0.001)	69	257139	9.405	9.40		0.2	1	
58) Bromodichloromethane	(2)	10.669(-0.000)	83	1236941	9.407	9.41		0.2	1	
59) cis-1,3-Dichloropropene	(2)	11.642(-0.000)	75	559189	7.996	8.00		0.2	1	
60) 4-Methyl-2-Pentanone	(2)	12.074(-0.001)	43	336391	10.024	10.02		0.5	2	
61) Toluene	(3)	12.348(-0.000)	91	1488120	10.066	10.07		0.2	1	
62) Octane	(3)	12.816(-0.000)	43	414566	10.641	10.64		0.5	1	
63) trans-1,3-Dichloropropene	(3)	12.895(-0.000)	75	687598	8.844	8.84		0.2	1	
64) 1,3-Dichloropropene (total)	(3)		75	1246787	16.840	16.84		0.2	1	
65) Ethyl Methacrylate	(3)	13.260( 0.000)	69	449684	10.848	10.85		0.2	1	
66) 1,1,2-Trichloroethane	(3)	13.272(-0.000)	97	620173	9.838	9.84		0.2	1	
67) Tetrachloroethene	(3)	13.577(-0.000)	166	1109020	8.811	8.81		0.2	1	
68) 2-Hexanone	(3)	13.990(-0.000)	43	376477	11.007	11.01		0.5	2	
69) Dibromochloromethane	(3)	14.130( 0.000)	127	1141134	9.392	9.39		0.2	1	
70) 1,2-Dibromoethane	(3)	14.337( 0.000)	107	964863	8.946	8.95		0.2	1	
72) Chlorobenzene	(3)	15.590( 0.000)	112	1446337	9.838	9.84		0.2	1	
73) 1,1,1,2-Tetrachloroethane	(3)	15.834( 0.000)	131	870340	9.499	9.50		0.2	1	
74) Ethylbenzene	(3)	15.955(-0.000)	91	1619866	9.917	9.92		0.2	1	
75) m/p-Xylene	(3)	16.260( 0.000)	91	1230306	9.108	9.11		0.2	1	
76) o-Xylene	(3)	17.233( 0.000)	91	1399242	9.842	9.84		0.2	1	
77) Xylene (total)	(3)		91	2629548	18.950	18.95		0.2	1	
78) Styrene	(3)	17.275( 0.000)	104	1236055	9.698	9.70		0.2	1	
79) Bromoform	(3)	17.628( 0.000)	173	1435801	9.148	9.15		0.2	1	
80) Cumene	(3)	18.249(-0.000)	105	1813922	9.934	9.93		0.2	1	
81) Bromobenzene	(3)	18.869( 0.000)	156	962106	9.381	9.38		0.2	1	
82) 1,1,2,2-Tetrachloroethane	(3)	19.046(-0.000)	83	1159487	9.657	9.66		0.2	1	
83) 1,2,3-Trichloropropane	(3)	19.070( 0.000)	110	420374	9.150	9.15		0.2	1	
84) n-Propylbenzene	(3)	19.338( 0.000)	120	564619	9.302	9.30		0.5	1	
85) 2-Chlorotoluene	(3)	19.447( 0.000)	126	648435	9.619	9.62		0.2	1	
86) 4-Ethyltoluene	(3)	19.666( 0.000)	105	1990720	9.777	9.78		0.2	1	
87) 1,3,5-Trimethylbenzene	(3)	19.861(-0.000)	105	1713322	9.773	9.77		0.2	1	
88) Alpha Methyl Styrene	(3)	20.451(-0.000)	118	868998	8.734	8.73		0.2	1	
89) tert-Butylbenzene	(3)	20.694( 0.000)	119	1513353	8.736	8.74		0.2	1	
90) 1,2,4-Trimethylbenzene	(3)	20.834( 0.000)	105	1737602	9.545	9.55		0.2	1	
91) sec-Butylbenzene	(3)	21.333( 0.000)	105	2139426	8.894	8.89		0.2	1	
92) 1,3-Dichlorobenzene	(3)	21.504(-0.000)	146	1675385	9.281	9.28		0.2	1	
93) 1,4-Dichlorobenzene	(3)	21.802( 0.000)	146	1669975	8.806	8.81		0.2	1	
94) p-Isopropyltoluene	(3)	21.850( 0.000)	119	2047571	9.341	9.34		0.2	1	
95) Benzyl Chloride	(3)	22.294(-0.000)	91	1333978	7.429	7.43		0.5	1	
96) 1,2-Dichlorobenzene	(3)	22.958(-0.000)	146	1529706	8.949	8.95		0.2	1	
97) n-Butylbenzene	(3)	23.170(-0.000)	91	1553014	8.697	8.70		0.2	1	
98) Hexachloroethane	(3)	23.627(-0.000)	117	839087	9.268	9.27		0.5	2	
99) 1,2-Dibromo-3-chloropropane	(3)	24.710( 0.000)	157	652238	7.021	7.02		0.2	1	
100) 1,2,4-Trichlorobenzene	(3)	25.999( 0.000)	180	652577	6.909	6.91		0.5	2	

Data file: /chem/HP09464.i/15oct15.b/cj00341.d Injection date and time: 16-OCT-2015 13:54  
 Data file Sample Info. Line: LCSDC06;250;C1528830AA;LCSDC06;0;3;LCSD; Instrument ID: HP09464.i Batch: C1528830AA  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Blank Data file reference: /chem/HP09464.i/15oct15.b/cj00339.d

Method used: /chem/HP09464.i/15oct15.b/to-15.m Sublist used: all  
 Calibration date and time (Last Method Edit): 21-OCT-2015 16:32  
 Mid Level Daily Calibration Standard Reference: /chem/HP09464.i/15oct15.b/cj00327.d

Sampling Media: Summa Canister Matrix: AIR On-Column Amount units: ppb(v) In Sample Concentration units: ppb(v)

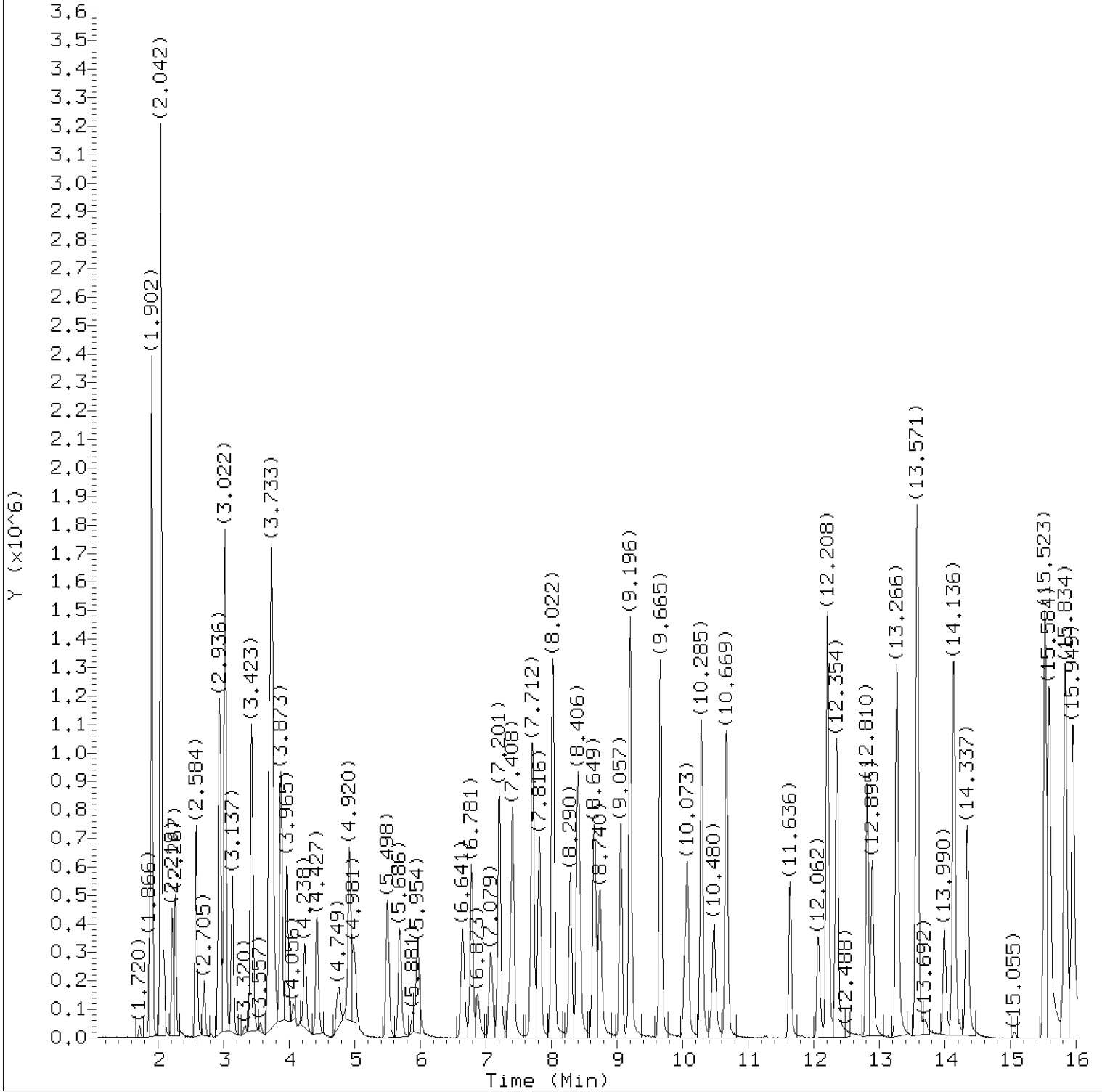
Sample Concentration Formula: On-Column Amount \* DF \* (Xa/Ya)\*(IVn/IVa) Dilution Factor (DF): 1  
 Canister Pressure after dilution (Xa): 14.7 psia Canister Pressure before dilution (Ya): 14.7 psia  
 Nominal Injection Volume (IVn): 250 cc Actual injection Volume (IVa): 250 cc

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
101) Hexachlorobutadiene	(3)	26.279( 0.000)	225	750191	7.261	7.26			0.4	2
102) Naphthalene	(3)	26.291( 0.000)	128	1371995	7.021	7.02			0.4	1

Total number of targets = 99

Digitally signed by Jacob E. Bailey on 10/21/2015 at 16:37. Target 3.5 esignature user ID: jeb07445

Secondary review performed and digitally signed by Christine M. Ratcliff on 10/22/2015 at 08:57. Parallax ID: cmr00412



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00341.d  
Injection date and time: 16-OCT-2015 13:54

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

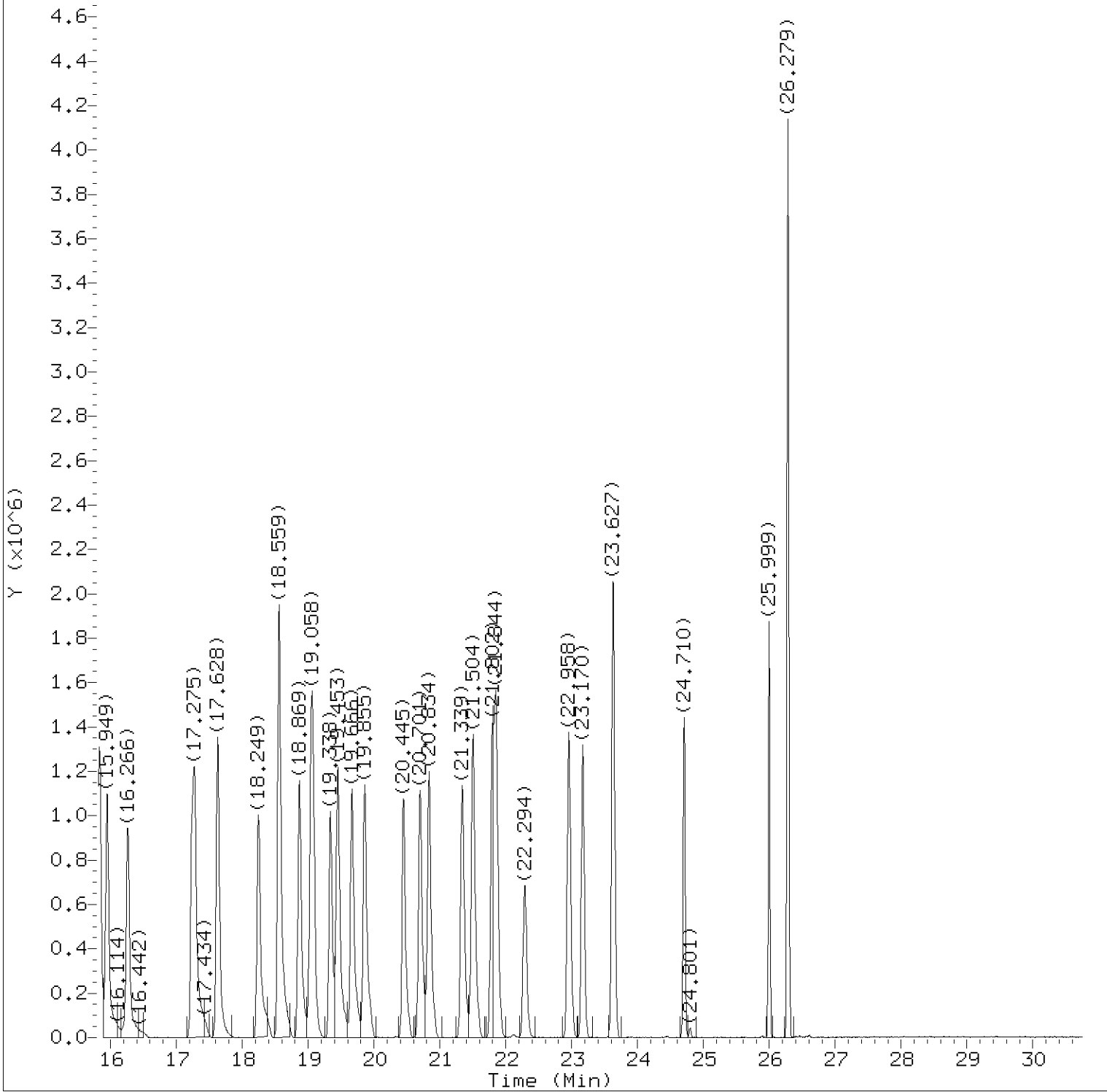
Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSDC06

Lab Sample ID: LCSDC06

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00341.d  
Injection date and time: 16-OCT-2015 13:54

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSDC06

Lab Sample ID: LCSDC06

Digitally signed by Jacob E. Bailey  
on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00341.d  
 Injection date and time: 16-OCT-2015 13:54

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:32  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sublist used: all

Sample Name: LCSDC06

Lab Sample ID: LCSDC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	167188	10.455
2) Dichlorodifluoromethane	(1)	1.902	85	1927981	9.736
3) Chlorodifluoromethane	(1)	1.914	51	617973	9.764
4) Freon 114	(1)	2.042	85	1548052	8.687
5) Chloromethane	(1)	2.091	52	104596	11.127
6) Vinyl Chloride	(1)	2.219	62	422194	10.064
7) 1,3-Butadiene	(1)	2.267	54	259337	10.043
8) Bromomethane	(1)	2.584	94	586841	9.606
9) Chloroethane	(1)	2.705	64	219715	9.267
10) Bromoethene	(1)	2.930	106	600236	10.341
11) Dichlorofluoromethane	(1)	2.949	67	1061791	9.598
12) Trichlorofluoromethane	(1)	3.022	101	2095363	9.815
13) Pentane	(1)	3.137	43	374419	10.318
14) Ethanol	(1)	3.308	45	36500	4.268
15) Freon123a	(1)	3.423	67	725398	9.308
16) Acrolein	(1)	3.557	56	40211	5.031
17) 1,1-Dichloroethene	(1)	3.691	61	676343	9.720
18) Freon 113	(1)	3.733	103	742118	8.767
19) Acetone	(1)	3.794	43	239495	8.654
20) Methyl Iodide	(1)	3.873	142	1506370	8.252
21) Carbon Disulfide	(1)	3.965	76	1271251	8.889
22) Isopropanol	(1)	4.068	45	263378	8.050
23) Acetonitrile	(1)	4.184	40	38262	6.075
24) 3-Chloropropene	(1)	4.232	76	182749	9.266
25) Methylene Chloride	(1)	4.421	84	403196	9.342
26) tert-Butyl Alcohol	(1)	4.762	59	490772	9.976
27) Acrylonitrile	(1)	4.853	53	115753	7.784
28) trans-1,2-Dichloroethene	(1)	4.914	61	548846	9.312
29) Methyl t-Butyl Ether	(1)	5.005	73	698570	9.169
30) Hexane	(1)	5.504	57	407728	9.448
31) 1,1-Dichloroethane	(1)	5.680	63	629468	8.653
32) Vinyl Acetate	(1)	5.881	86	48668	6.427
33) Di-Isopropyl Ether	(1)	5.966	45	421582	9.709
36) 1,2-Dichloroethene (total)	(1)		61	1057287	18.687
34) Ethyl Tert-Butyl Ether	(1)	6.641	59	582102	9.613
35) cis-1,2-Dichloroethene	(1)	6.781	61	508441	9.374
37) 2-Butanone	(1)	6.873	72	128690	9.573
38) Ethyl Acetate	(1)	7.067	70	77351	12.659

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 on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445



## Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00341.d  
Injection date and time: 16-OCT-2015 13:54Instrument ID: HP09464.i  
Analyst ID: jeb07445Method used: /chem/HP09464.i/15oct15.b/to-15.m  
Calibration date and time: 21-OCT-2015 16:32

Sublist used: all

Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sample Name: LCSDC06

Lab Sample ID: LCSDC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.079	55	300475	8.821
40)*Bromochloromethane	(1)	7.207	130	672950	10.000
41) Tetrahydrofuran	(1)	7.359	42	132659	9.078
42) Chloroform	(1)	7.408	83	1107742	8.685
43) 1,1,1-Trichloroethane	(1)	7.712	97	1317465	9.091
44) Cyclohexane	(1)	7.809	56	473443	10.020
45) Carbon Tetrachloride	(1)	8.022	117	1578522	9.635
46) Benzene	(2)	8.393	78	1213186	9.411
47) 1,2-Dichloroethane	(2)	8.430	62	692928	9.269
48) Isooctane	(2)	8.649	57	1222931	10.083
49) Tert-Amyl Methyl Ether	(2)	8.740	73	750384	10.648
50) Heptane	(2)	9.063	43	341049	10.205
51)*1,4-Difluorobenzene	(2)	9.196	114	2106045	10.000
52) Trichloroethene	(2)	9.665	130	801807	9.086
53) Ethyl Acrylate	(2)	10.030	55	370942	10.252
54) 1,2-Dichloropropane	(2)	10.073	63	331810	9.282
55) Dibromomethane	(2)	10.285	174	771699	8.780
56) 1,4-Dioxane	(2)	10.456	88	271427	10.313
57) Methyl Methacrylate	(2)	10.486	69	257139	9.405
58) Bromodichloromethane	(2)	10.669	83	1236941	9.407
59) cis-1,3-Dichloropropene	(2)	11.642	75	559189	7.996
60) 4-Methyl-2-Pentanone	(2)	12.074	43	336391	10.024
61) Toluene	(3)	12.348	91	1488120	10.066
64) 1,3-Dichloropropene (total)	(3)		75	1246787	16.840
62) Octane	(3)	12.816	43	414566	10.641
63) trans-1,3-Dichloropropene	(3)	12.895	75	687598	8.844
65) Ethyl Methacrylate	(3)	13.260	69	449684	10.848
66) 1,1,2-Trichloroethane	(3)	13.272	97	620173	9.838
67) Tetrachloroethene	(3)	13.577	166	1109020	8.811
68) 2-Hexanone	(3)	13.990	43	376477	11.007
69) Dibromochloromethane	(3)	14.130	127	1141134	9.392
70) 1,2-Dibromoethane	(3)	14.337	107	964863	8.946
71)*Chlorobenzene-d5	(3)	15.523	117	1893441	10.000
72) Chlorobenzene	(3)	15.590	112	1446337	9.838
73) 1,1,1,2-Tetrachloroethane	(3)	15.834	131	870340	9.499
74) Ethylbenzene	(3)	15.955	91	1619866	9.917
75) m/p-Xylene	(3)	16.260	91	1230306	9.108
77) Xylene (total)	(3)		91	2629548	18.950

\* = Compound is an internal standard.

page 2 of 3

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on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445

SSX23 Page 505 of 1243

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15oct15.b/cj00341.d  
 Injection date and time: 16-OCT-2015 13:54

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15oct15.b/to-15.m  
 Calibration date and time: 21-OCT-2015 16:32  
 Date, time and analyst ID of latest file update: 21-Oct-2015 16:35 jeb07445

Sublist used: all

Sample Name: LCSDC06

Lab Sample ID: LCSDC06

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.233	91	1399242	9.842
78) Styrene	(3)	17.275	104	1236055	9.698
79) Bromoform	(3)	17.628	173	1435801	9.148
80) Cumene	(3)	18.249	105	1813922	9.934
81) Bromobenzene	(3)	18.869	156	962106	9.381
82) 1,1,2,2-Tetrachloroethane	(3)	19.046	83	1159487	9.657
83) 1,2,3-Trichloropropane	(3)	19.070	110	420374	9.150
84) n-Propylbenzene	(3)	19.338	120	564619	9.302
85) 2-Chlorotoluene	(3)	19.447	126	648435	9.619
86) 4-Ethyltoluene	(3)	19.666	105	1990720	9.777
87) 1,3,5-Trimethylbenzene	(3)	19.861	105	1713322	9.773
88) Alpha Methyl Styrene	(3)	20.451	118	868998	8.734
89) tert-Butylbenzene	(3)	20.694	119	1513353	8.736
90) 1,2,4-Trimethylbenzene	(3)	20.834	105	1737602	9.545
91) sec-Butylbenzene	(3)	21.333	105	2139426	8.894
92) 1,3-Dichlorobenzene	(3)	21.504	146	1675385	9.281
93) 1,4-Dichlorobenzene	(3)	21.802	146	1669975	8.806
94) p-Isopropyltoluene	(3)	21.850	119	2047571	9.341
95) Benzyl Chloride	(3)	22.294	91	1333978	7.429
96) 1,2-Dichlorobenzene	(3)	22.958	146	1529706	8.949
97) n-Butylbenzene	(3)	23.170	91	1553014	8.697
98) Hexachloroethane	(3)	23.627	117	839087	9.268
99) 1,2-Dibromo-3-chloropropane	(3)	24.710	157	652238	7.021
100) 1,2,4-Trichlorobenzene	(3)	25.999	180	652577	6.909
101) Hexachlorobutadiene	(3)	26.279	225	750191	7.261
102) Naphthalene	(3)	26.291	128	1371995	7.021

Digitally signed by Jacob E. Bailey  
 on 10/21/2015 at 16:37.

Target 3.5 esignature user ID: jeb07445

Lancaster Laboratories  
 Volatiles in Air  
 Runlog for Agilent GC/MS System HP09464 \*\*HP #03\*\*

Data Directory Path is - C:\msdchem\1\data\15oct15\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
jeb07445	CJ00305.D	VBLKC05	10/15/2015	13:06	C1528630AB	
jeb07445	CJ00306.D	VBLKC05	10/15/2015	13:50	C1528630AB	
jeb07445	CJ00307.D	VBLKC05	10/15/2015	14:33	C1528630AB	
jeb07445	CJ00310.D	50NGBFB	10/15/2015	15:35		
jeb07445	CJ00311.D	VSTD010	10/15/2015	16:03		
jeb07445	CJ00312.D	VSTD010	10/15/2015	16:55		
jeb07445	CJ00313.D	VSTD010	10/15/2015	17:46		
jeb07445	CJ00314.D	VSTD010	10/15/2015	18:39		
jeb07445	CJ00315.D	VBLKC06	10/15/2015	19:30	C1528830AA	
jeb07445	CJ00316.D	VBLKC06	10/15/2015	20:13	C1528830AA	
jeb07445	CJ00320.D	50NGBFB	10/15/2015	21:05		
jeb07445	CJ00321.D	VSTD0.50	10/15/2015	22:12		
jeb07445	CJ00322.D	VSTD0.50	10/15/2015	22:56		
jeb07445	CJ00323.D	VSTD001	10/15/2015	23:42		
jeb07445	CJ00324.D	VSTD001	10/16/2015	00:26		
jeb07445	CJ00325.D	VSTD002	10/16/2015	01:09		
jeb07445	CJ00326.D	VSTD005	10/16/2015	01:51		
jeb07445	CJ00327.D	VSTD010	10/16/2015	02:34		
jeb07445	CJ00328.D	VSTD025	10/16/2015	03:17		
jeb07445	CJ00329.D	VSTD070	10/16/2015	04:03		
jeb07445	CJ00330.D	VBLKC06	10/16/2015	04:49	C1528830AA	
jeb07445	CJ00331.D	VBLKC06	10/16/2015	05:35	C1528830AA	
jeb07445	CJ00332.D	LCSC06	10/16/2015	06:21	C1528830AA	
jeb07445	CJ00333.D	LCSC06	10/16/2015	07:06	C1528830AA	
jeb07445	CJ00334.D	LCSC06	10/16/2015	07:51	C1528830AA	
jeb07445	CJ00335.D	mdlv0.5	10/16/2015	08:37	C1528830AA	
jeb07445	CJ00336.D	mdlv0.2	10/16/2015	09:19	C1528830AA	
jeb07445	CJ00337.D	VSTD001	10/16/2015	10:21		
jeb07445	CJ00338.D	VBLKC06	10/16/2015	11:35	C1528830AA	
jeb07445	CJ00339.D	VBLKC06	10/16/2015	12:23	C1528830AA	
jeb07445	CJ00340.D	LCSC06	10/16/2015	13:09	C1528830AA	
jeb07445	CJ00341.D	LCSC06	10/16/2015	13:54	C1528830AA	

Lancaster Laboratories  
 Volatiles in Air  
 Runlog for Agilent GC/MS System HP09464 \*\*HP #03\*\*

Data Directory Path is - C:\msdchem\1\data\15oct16\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
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jeb07445	CJ00351.D	VSTD010	10/16/2015	15:29		
jeb07445	CJ00352.D	VBLKC07	10/16/2015	16:20	C1528830AB	
jeb07445	CJ00353.D	VBLKC07	10/16/2015	17:03	C1528830AB	
jeb07445	CJ00354.D	8080655	10/16/2015	17:53	C1528830AB	
jeb07445	CJ00355.D	8080656	10/16/2015	18:37	C1528830AB	
jeb07445	CJ00356.D	8082701	10/16/2015	19:20	C1528830AB	
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jeb07445	CJ00358.D	8084057	10/16/2015	21:36	C1528830AB	
jeb07445	CJ00359.D	8084058	10/16/2015	22:24	C1528830AB	
jeb07445	CJ00360.D	8086674	10/16/2015	23:12	C1528830AB	
jeb07445	CJ00361.D	8086675	10/16/2015	23:59	C1528830AB	
jeb07445	CJ00362.D	8087194	10/17/2015	00:46	C1528830AB	100
jeb07445	CJ00363.D	8087710	10/17/2015	01:33	C1528830AB	
jeb07445	CJ00364.D	8087711	10/17/2015	02:21	C1528830AB	
jeb07445	CJ00365.D	8087712	10/17/2015	03:08	C1528830AB	
jeb07445	CJ00366.D	8087713	10/17/2015	03:56	C1528830AB	
jeb07445	CJ00367.D	8087714	10/17/2015	04:43	C1528830AB	
jeb07445	CJ00368.D	8087715	10/17/2015	05:30	C1528830AB	
jeb07445	CJ00369.D	8087716	10/17/2015	06:17	C1528830AB	
jeb07445	CJ00370.D	8089423	10/17/2015	07:01	C1528830AB	
jeb07445	CJ00371.D	8085446	10/17/2015	07:44	C1528830AB	100
jeb07445	CJ00372.D	8085447	10/17/2015	08:31	C1528830AB	
jeb07445	CJ00373.D	8085448	10/17/2015	09:18	C1528830AB	10000
jeb07445	CJ00374.D	8084057	10/17/2015	10:02	C1528830AB	

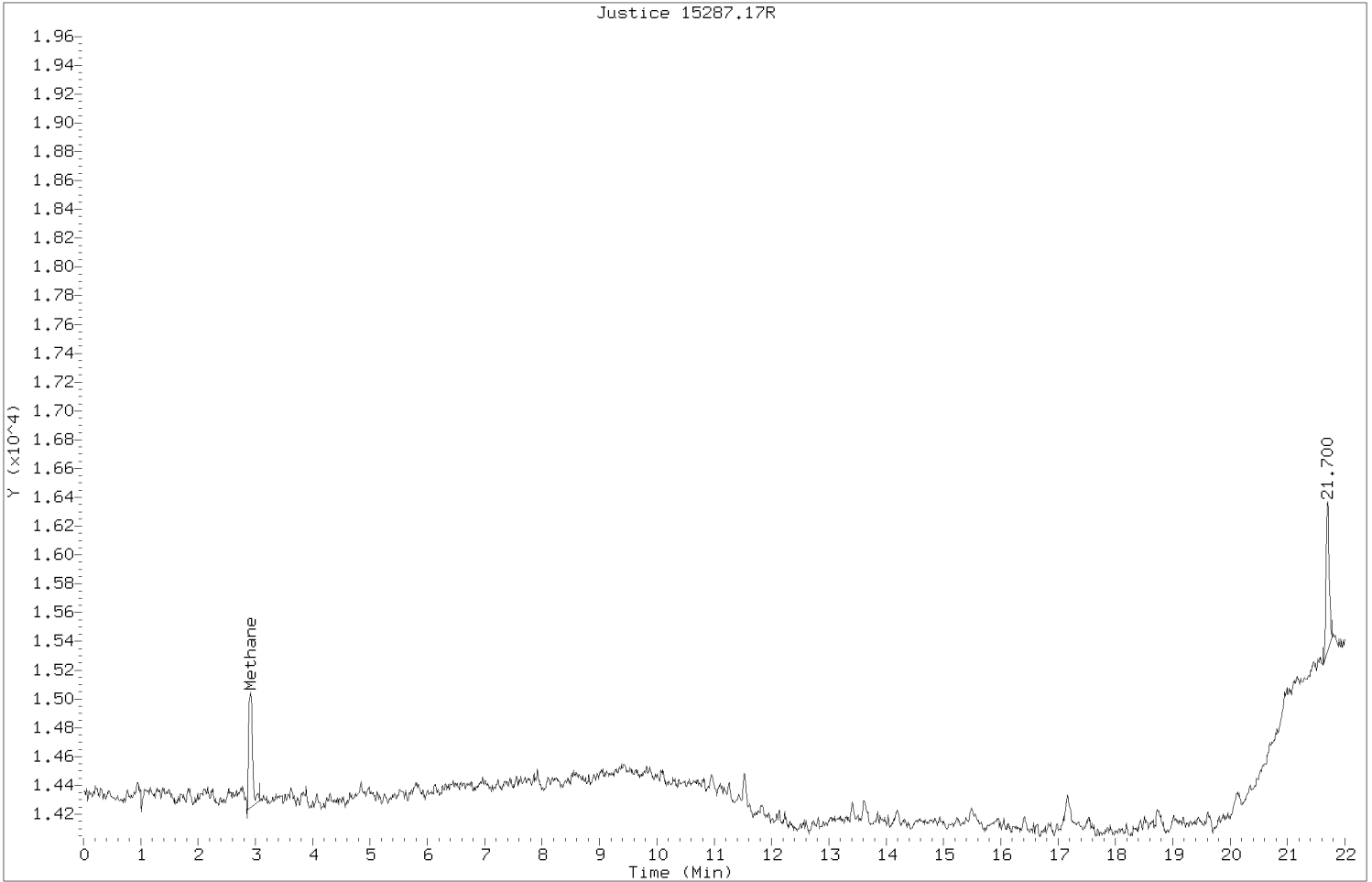
Lancaster Laboratories  
 Volatiles in Air  
 Runlog for Agilent GC/MS System HP09464 \*\*HP #03\*\*

Data Directory Path is - C:\msdchem\1\data\15oct19\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
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jbs01304	CJ00376.D	VBLKC14	10/19/2015	09:51	C1528830AB	
jbs01304	CJ00380.D	50NGBFB	10/19/2015	11:17		
jbs01304	CJ00381.D	VSTD010	10/19/2015	11:47		
jbs01304	CJ00382.D	VBLKC15	10/19/2015	12:30	C1528830AC	
jbs01304	CJ00383.D	VBLKC15	10/19/2015	13:43	C1528830AC	
jbs01304	CJ00384.D	VBLKC15	10/19/2015	14:27	C1528830AC	
jbs01304	CJ00385.D	VSTD010	10/19/2015	15:16		
jbs01304	CJ00386.D	VBLKC15	10/19/2015	15:59	C1528830AC	
jeb07445	CJ00387.D	8084058	10/19/2015	17:21	C1528830AC	
jeb07445	CJ00388.D	8086675	10/19/2015	18:07	C1528830AC	
jeb07445	CJ00389.D	8087194	10/19/2015	18:53	C1528830AC	100
jeb07445	CJ00390.D	8087712	10/19/2015	19:35	C1528830AC	
jeb07445	CJ00391.D	8087713DL	10/19/2015	20:18	C1528830AC	
jeb07445	CJ00392.D	8087714DL	10/19/2015	21:00	C1528830AC	
jeb07445	CJ00393.D	8089423DL	10/19/2015	21:47	C1528830AC	100
jeb07445	CJ00394.D	8079039DL	10/19/2015	22:33	C1528830AC	200
jeb07445	CJ00395.D	8079040DL	10/19/2015	23:20	C1528830AC	200
jeb07445	CJ00396.D	8079041DL	10/20/2015	00:07	C1528830AC	200
jeb07445	CJ00397.D	8081439DL	10/20/2015	00:50	C1528830AC	
jeb07445	CJ00398.D	8081440DL	10/20/2015	01:33	C1528830AC	
jeb07445	CJ00399.D	8081442DL	10/20/2015	02:16	C1528830AC	
jeb07445	CJ00400.D	8087194DL	10/20/2015	03:00	C1528830AC	100
jeb07445	CJ00401.D	cc1042	10/20/2015	03:44	C1528830ACcc1042	
jeb07445	CJ00402.D	cc880	10/20/2015	04:29	C1528830ACcc880	
jeb07445	CJ00403.D	mdlv0.5	10/20/2015	10:13		
jeb07445	CJ00404.D	FC1	10/20/2015	10:56		

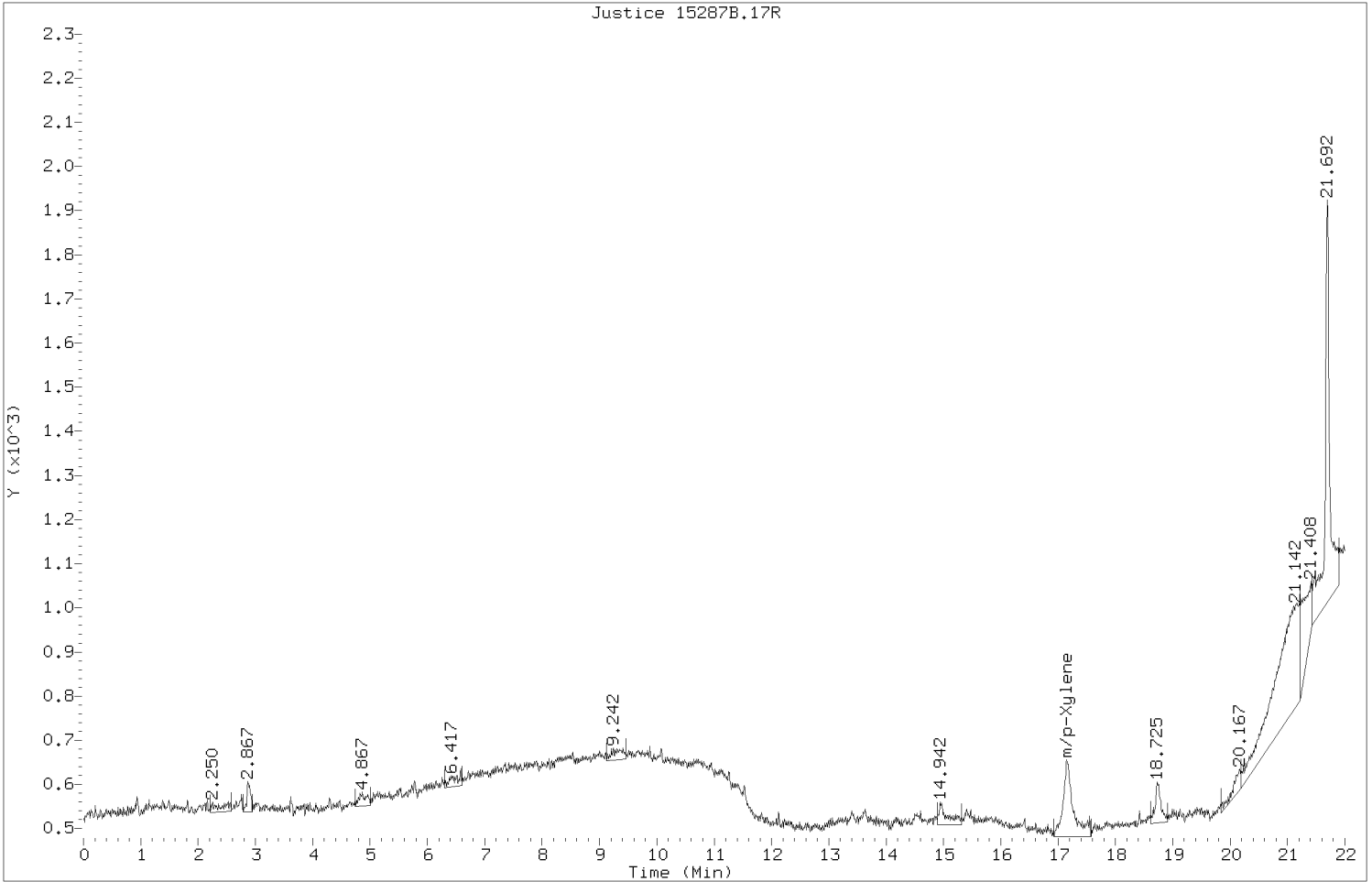
**Screening Data**

**Volatile Organics in Air by GC/MS**



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087710 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 20:28  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--FID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287-17R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m  
 Calibration Version: 14-OCT-2015 13:20

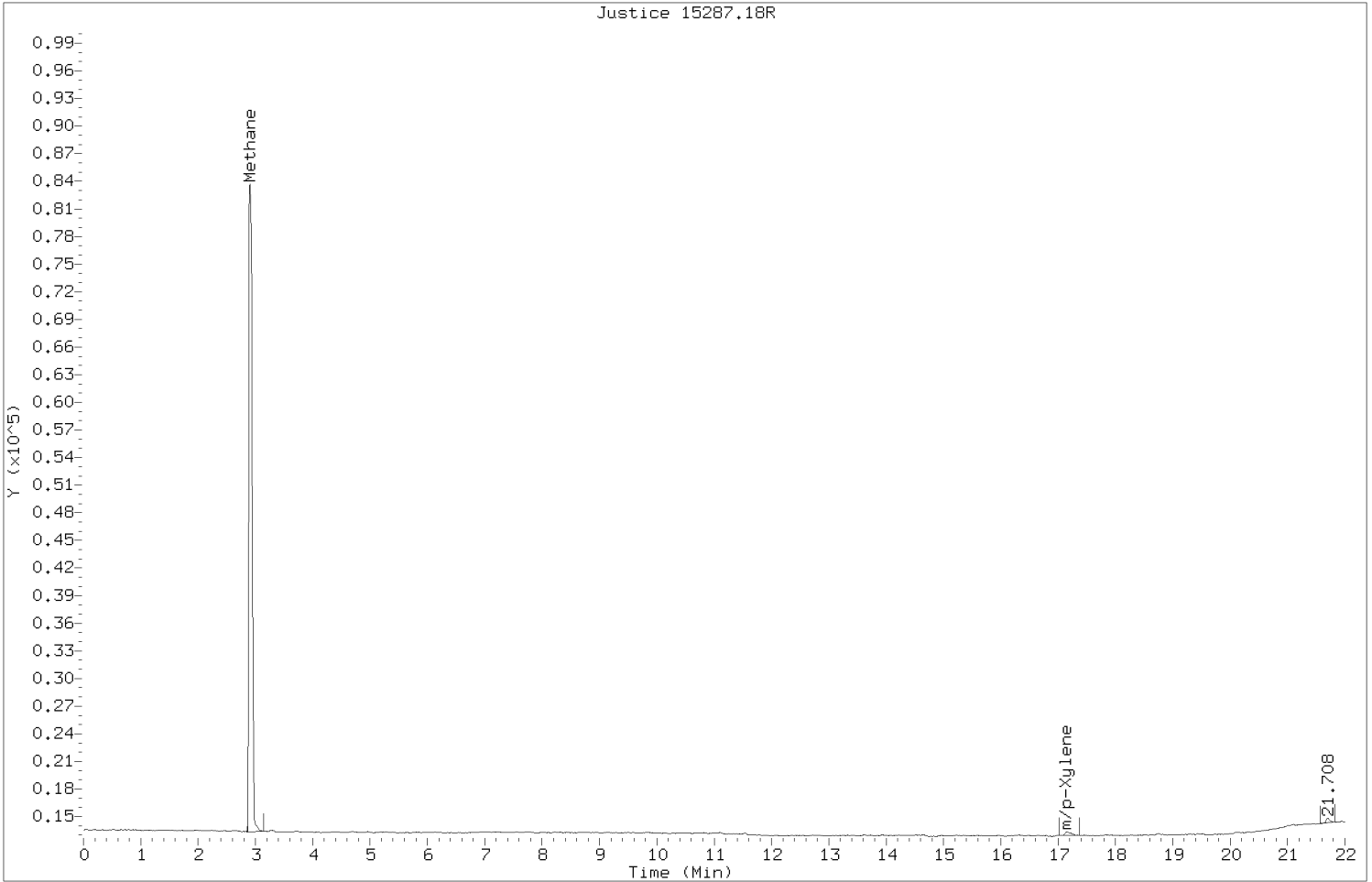
Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.917	3840	Methane	2.2994
21.700	3847		
Total Area: 7686.5000			



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087710 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 20:28  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-17R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

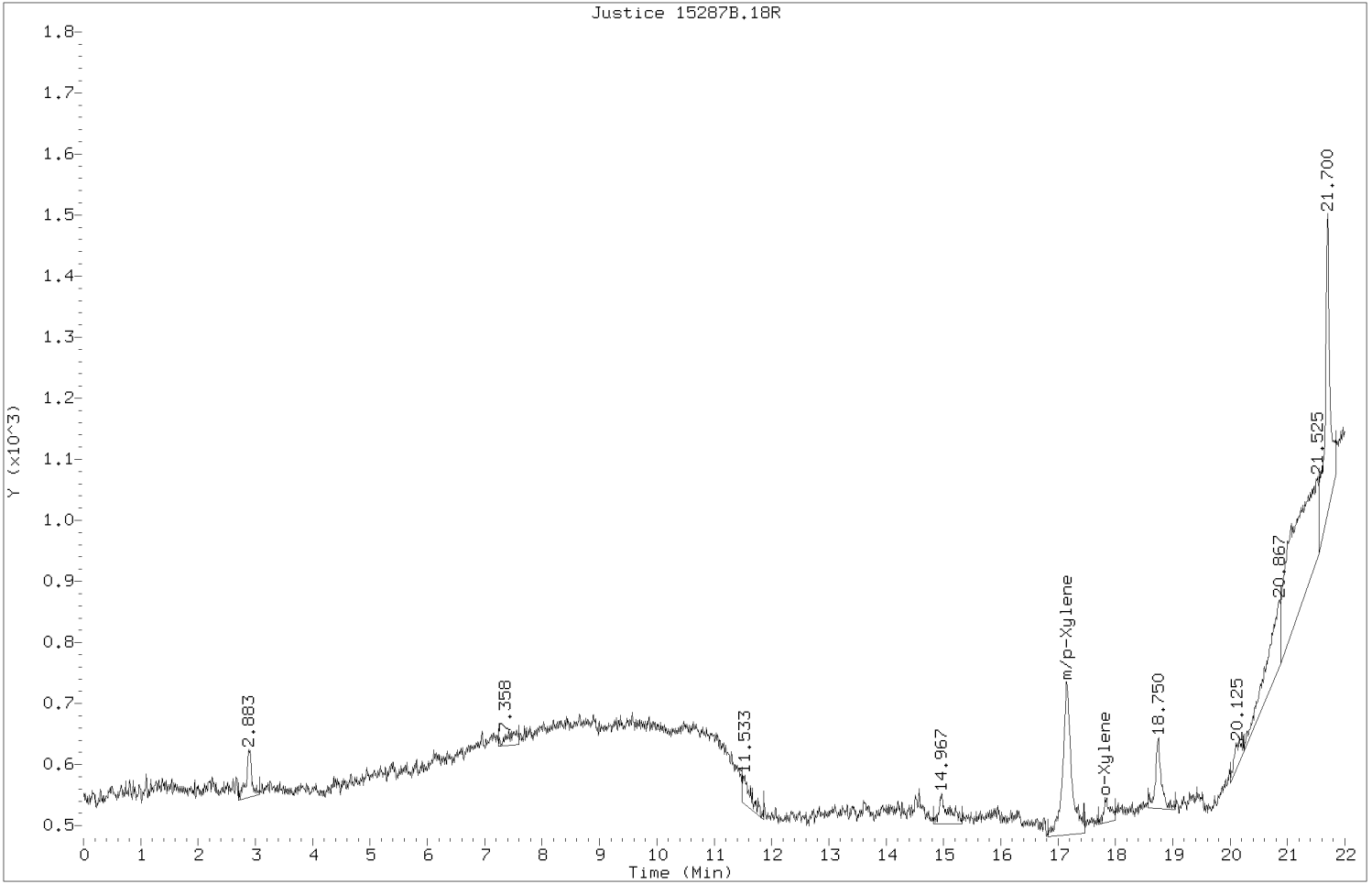
Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.250	288		
2.867	298		
4.867	284		
6.417	281		
9.242	324		
14.942	548		
17.150	2134	m/p-Xylene	0.7911
18.050	2134	Xylene (total)	0.7911
18.725	655		
20.167	443		
21.142	7408		
21.408	1817		
21.692	5362		
Total Area: 21975.7500			





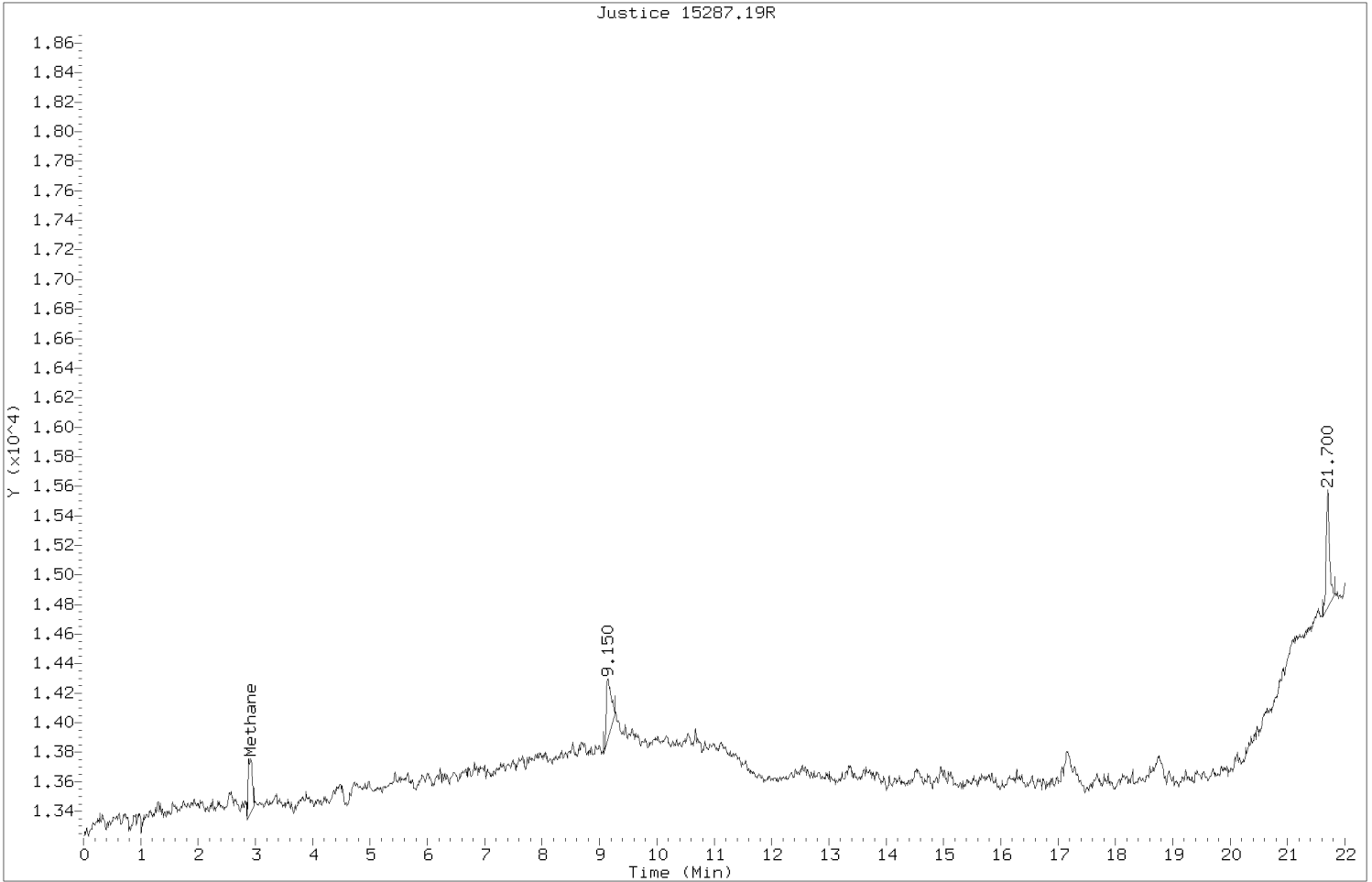
Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087711 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 20:58  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--FID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287-18R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m  
 Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.908	286934	Methane	171.8375
17.142	3102	m/p-Xylene	0.0000
18.050	3102	Xylene (total)	0.0000
21.708	2212		
Total Area: 295349.7500			



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087711 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 20:58  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-18R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

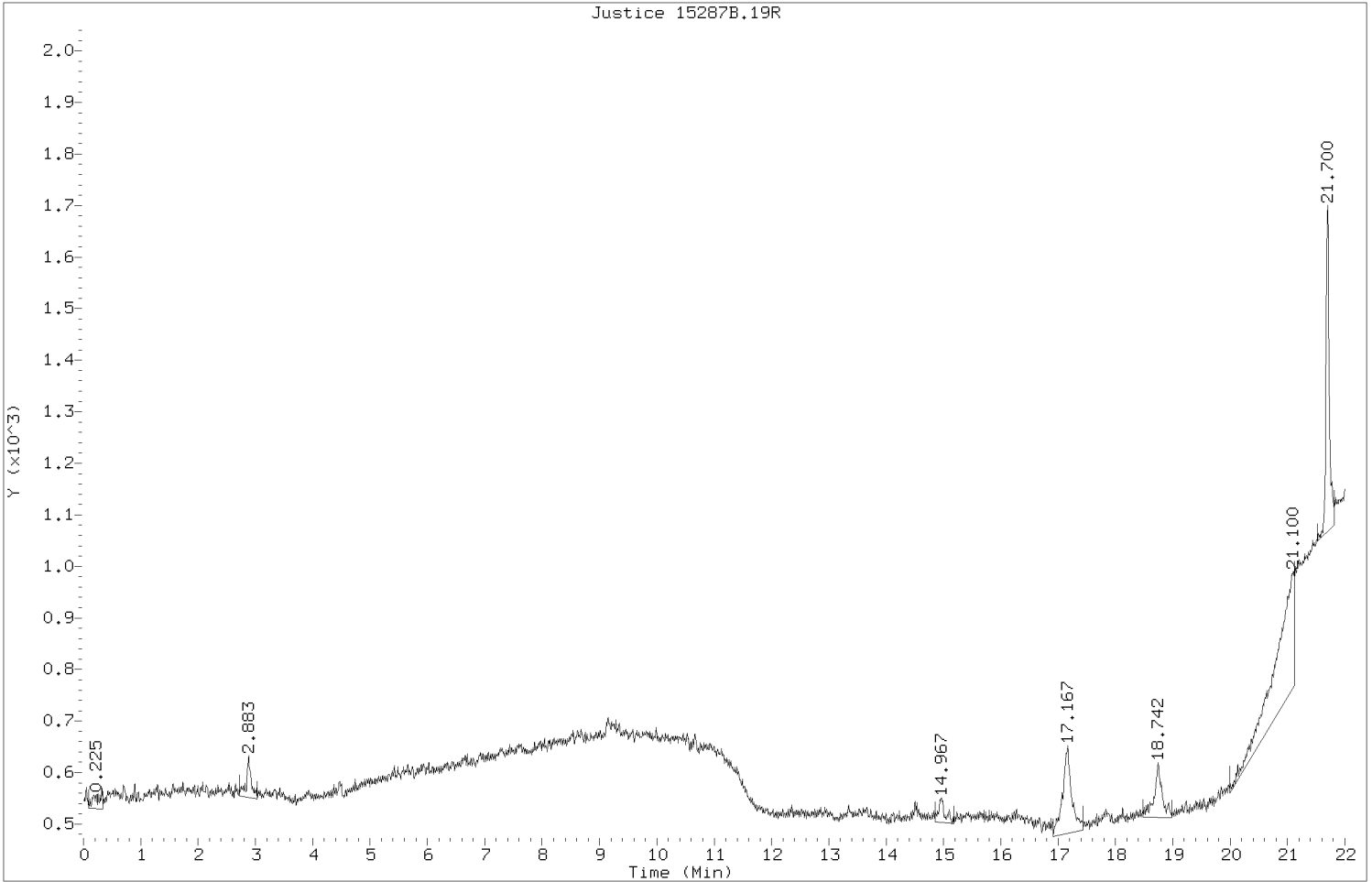
Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.883	533		
7.358	284		
11.533	502		
14.967	575		
17.150	2714	m/p-Xylene	1.0062
17.817	326	o-Xylene	0.1541
18.050	3040	Xylene (total)	1.1603
18.750	848		
20.125	367		
20.867	1914		
21.525	5762		
21.700	3067		
Total Area: 19930.5000			



Lancaster Laboratories  
Analysis Data Sheet  
ADS07818 Analysis:  
Sample No:  
Lab Sample: 8087712 BC095A +PRE  
Date Analyzed: 14-OCT-2015 21:27  
Nominal Vol: 100 uL  
Instr. ID: A58309--FID  
Lab File ID: /chem/A58309.i/15oct14.b/15287-19R.d  
Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m  
Calibration Version: 14-OCT-2015 13:20

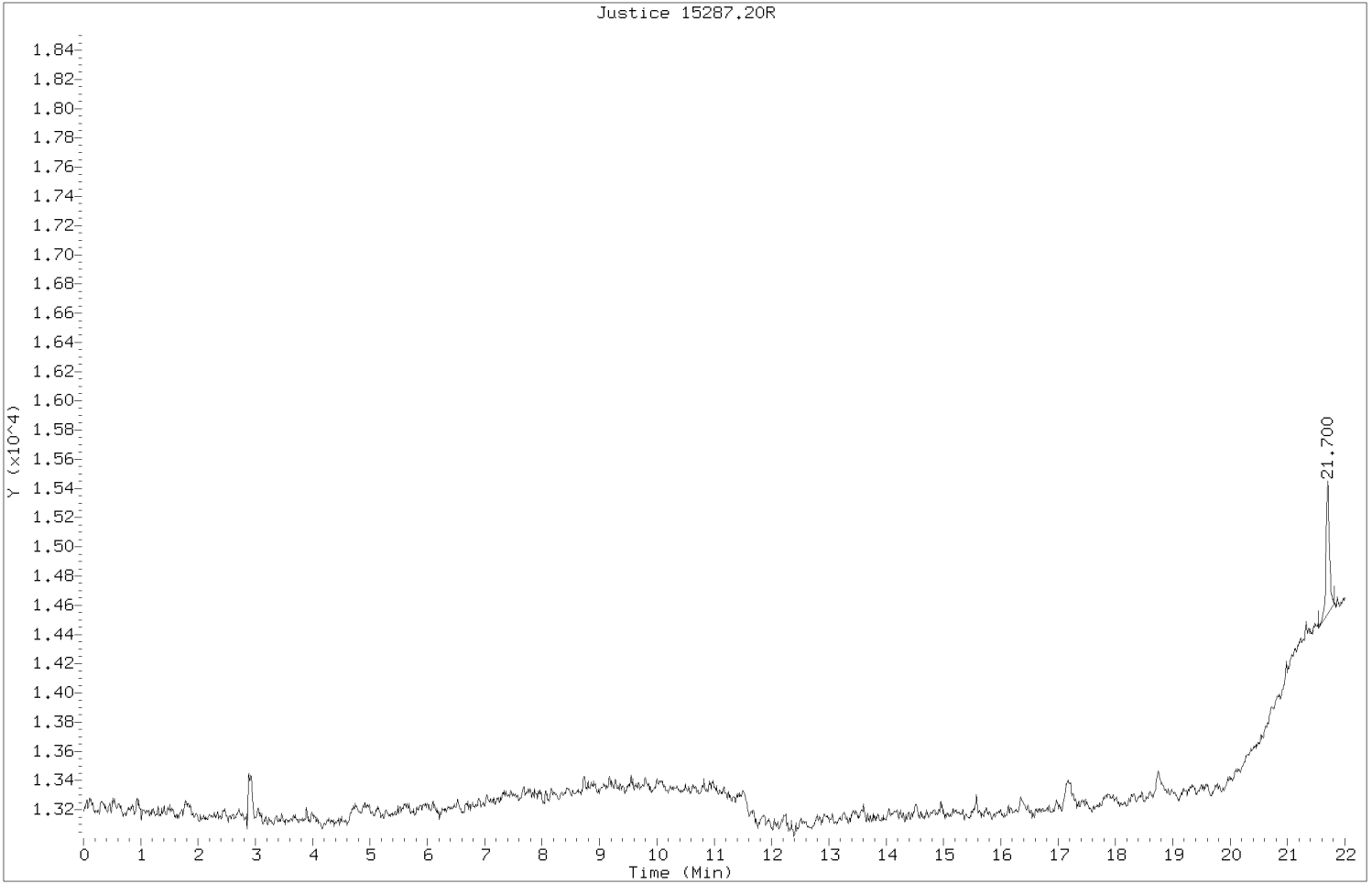
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Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.917	1816	Methane	1.0872
9.150	2393		
21.700	3161		
Total Area: 7369.5000			



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087712 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 21:27  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-19R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

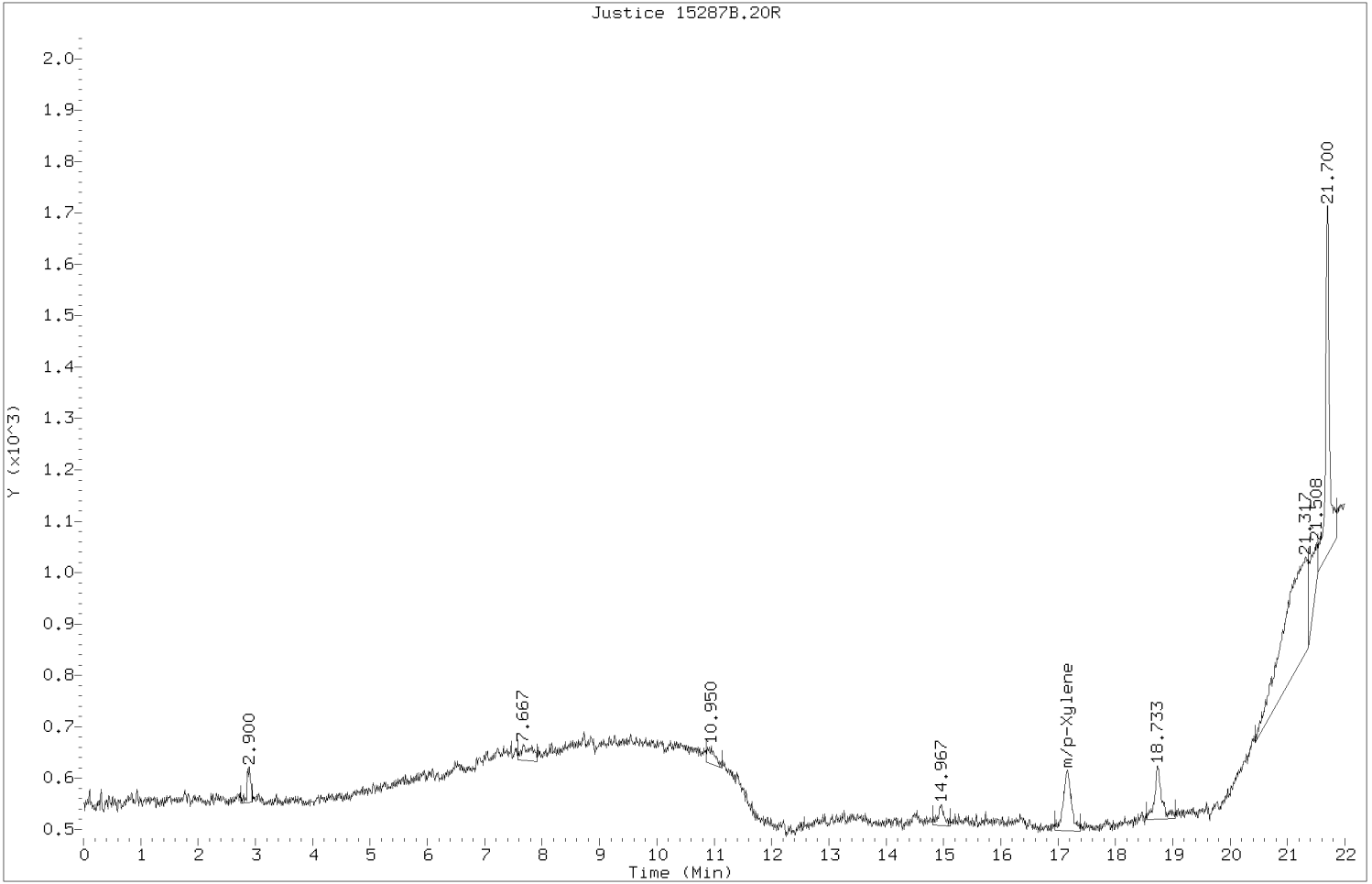
Ret Time (min)	Peak Area	Peak Name	Amount ppm
0.225	262		
2.883	474		
14.967	376		
17.167	1882		
18.742	1037		
21.100	5110		
21.700	2520		
Total Area: 11661.0000			



Lancaster Laboratories  
Analysis Data Sheet  
ADS07818 Analysis:  
Sample No:  
Lab Sample: 8087713 BC095A +PRE  
Date Analyzed: 14-OCT-2015 21:56  
Nominal Vol: 100 uL  
Instr. ID: A58309--FID  
Lab File ID: /chem/A58309.i/15oct14.b/15287-20R.d  
Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m  
Calibration Version: 14-OCT-2015 13:20

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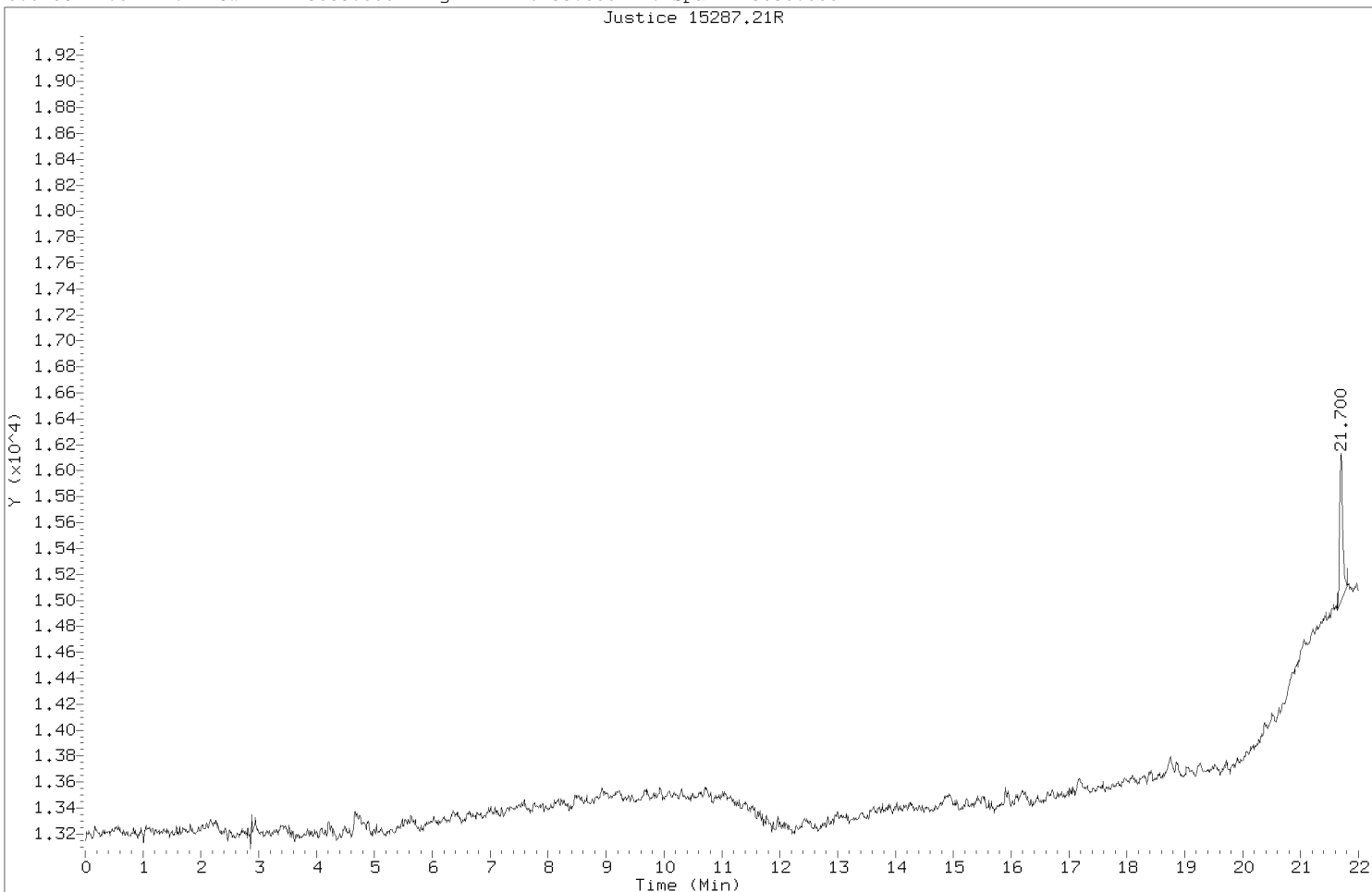
Ret Time (min)	Peak Area	Peak Name	Amount ppm
21.700	3732		
Total Area: 3732.0000			



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087713 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 21:56  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-20R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.900	312		
7.667	389		
10.950	290		
14.967	306		
17.158	1159	m/p-Xylene	0.4297
18.050	1159	Xylene (total)	0.4297
18.733	912		
21.317	6052		
21.508	1087		
21.700	3350		
Total Area: 15015.2500			

File = /chem/A58309.i/15oct14.b/15287-21R.d Date printed = 10/14/2015 Time = 22:58  
Sample Name = 8087714 BC095A +PRE  
0.0 to 22.0 min. Low Y = 13085.000 High Y = 16135.000 mv Span = 3050.000



Lancaster Laboratories

Analysis Data Sheet

ADS07818 Analysis:

Sample No:

Lab Sample: 8087714 BC095A +PRE

Date Analyzed: 14-OCT-2015 22:25

Nominal Vol: 100 uL

Instr. ID: A58309--FID

Lab File ID: /chem/A58309.i/15oct14.b/15287-21R.d

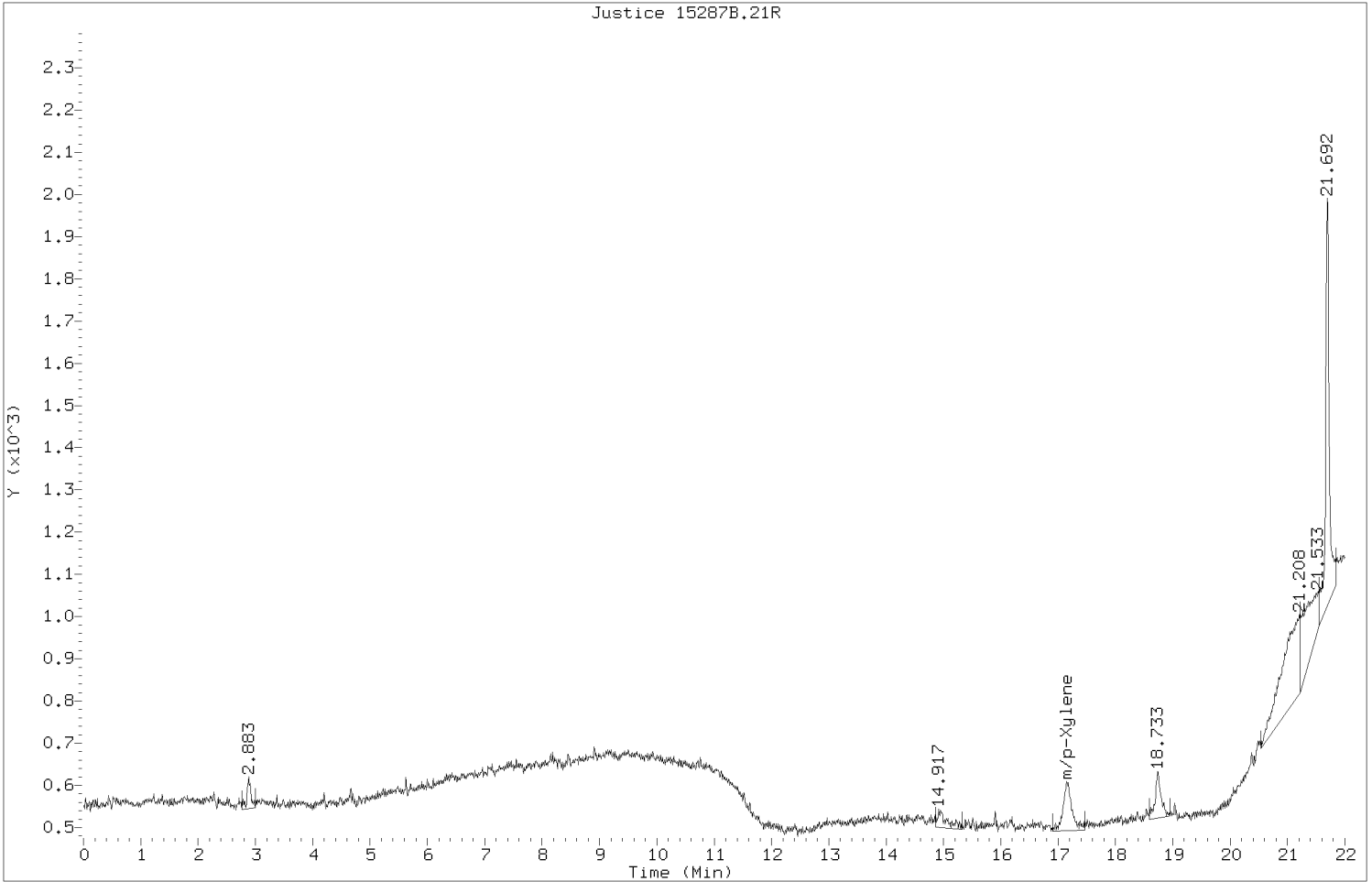
Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m

Calibration Version: 14-OCT-2015 13:20

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Ret Time (min)	Peak Area	Peak Name	Amount ppm
21.700	4165		
Total Area: 4165.0000			

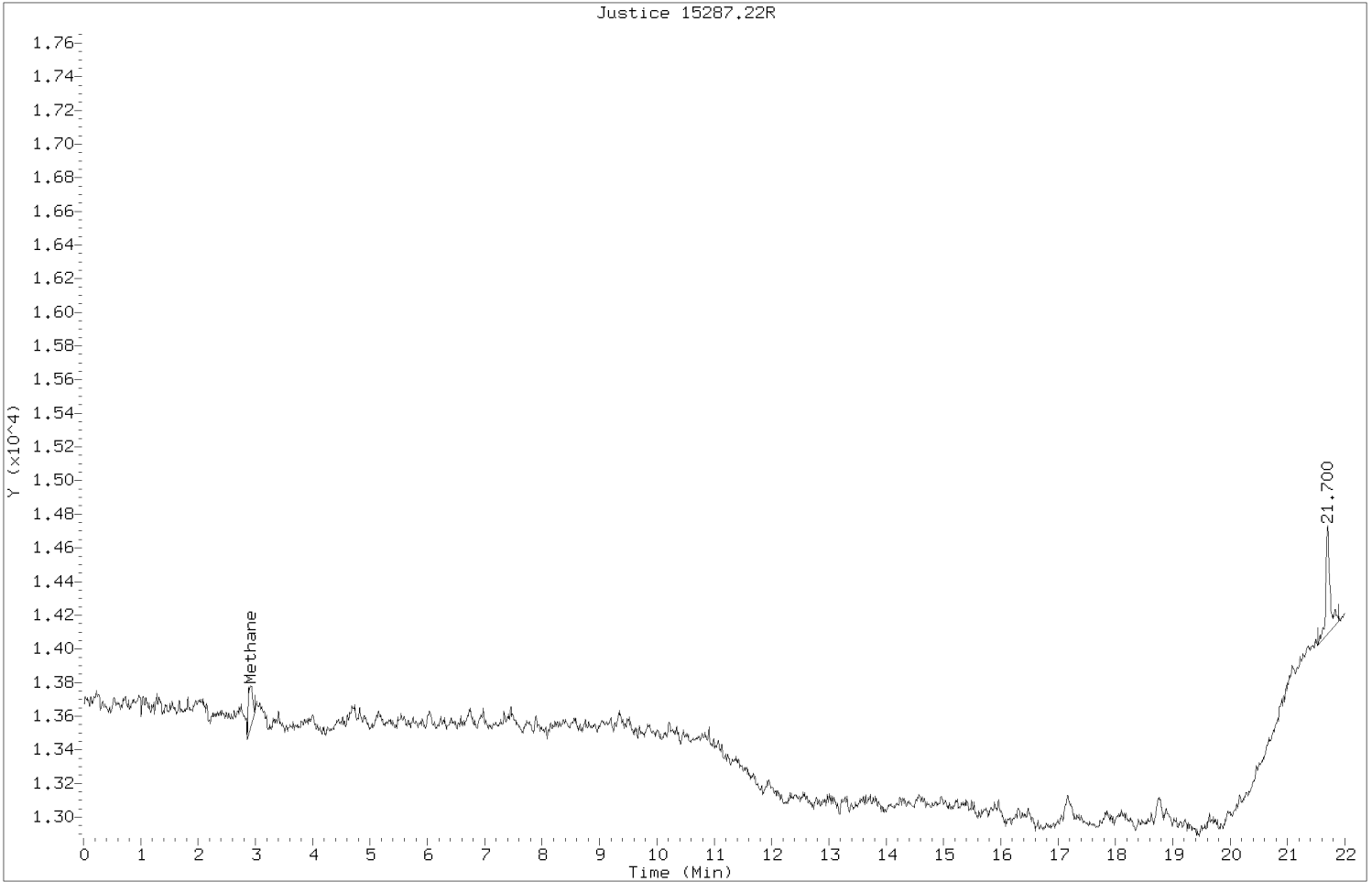
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Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087714 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 22:25  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-21R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

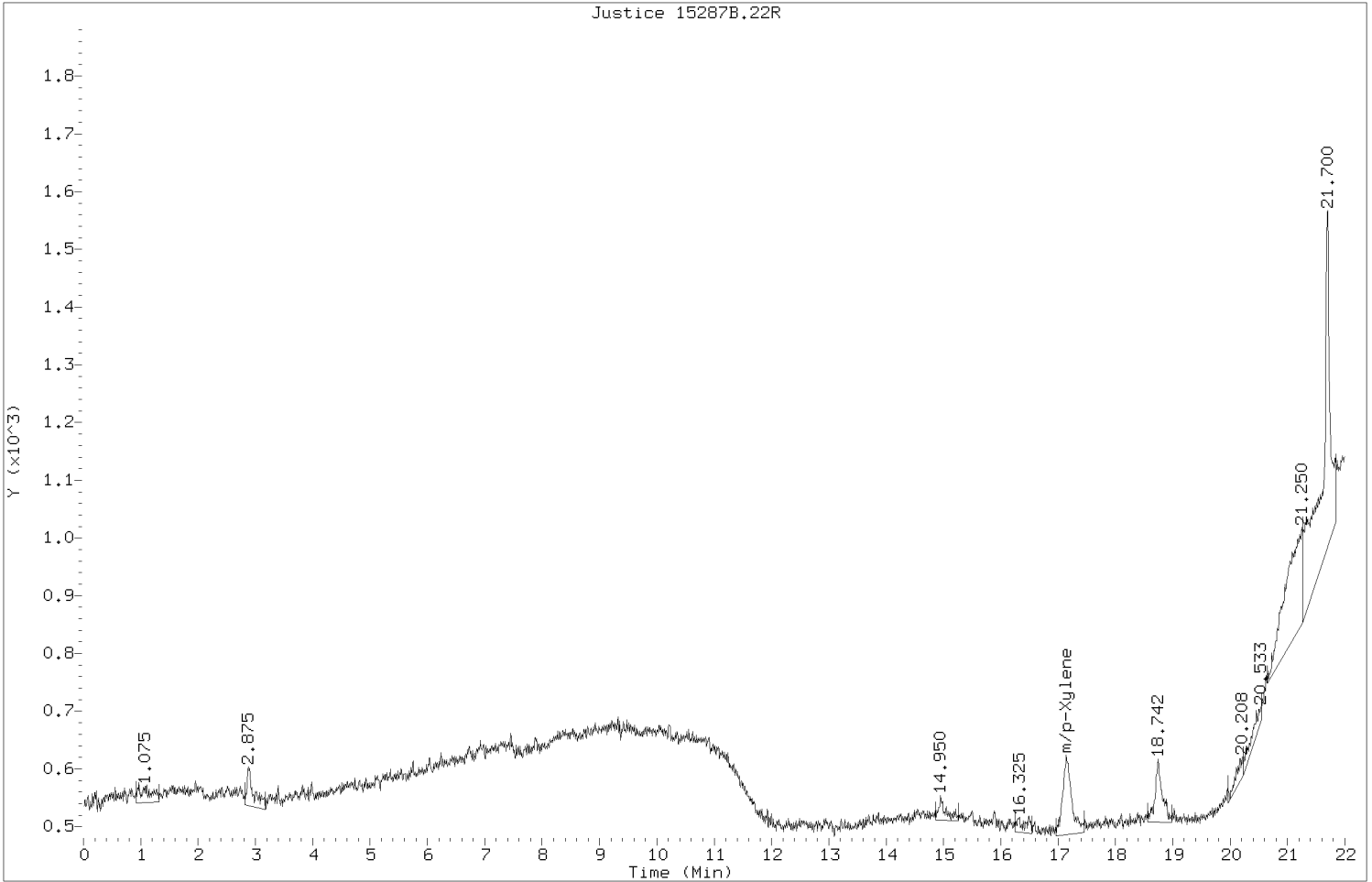
Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.883	375		
14.917	470		
17.150	1252	m/p-Xylene	0.4644
18.050	1252	Xylene (total)	0.4644
18.733	792		
21.208	4390		
21.533	2551		
21.692	4319		
Total Area: 15401.2500			





Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087715 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 22:54  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--FID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287-22R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m  
 Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.917	1325	Methane	0.7934
21.700	3285		
Total Area: 4609.7500			

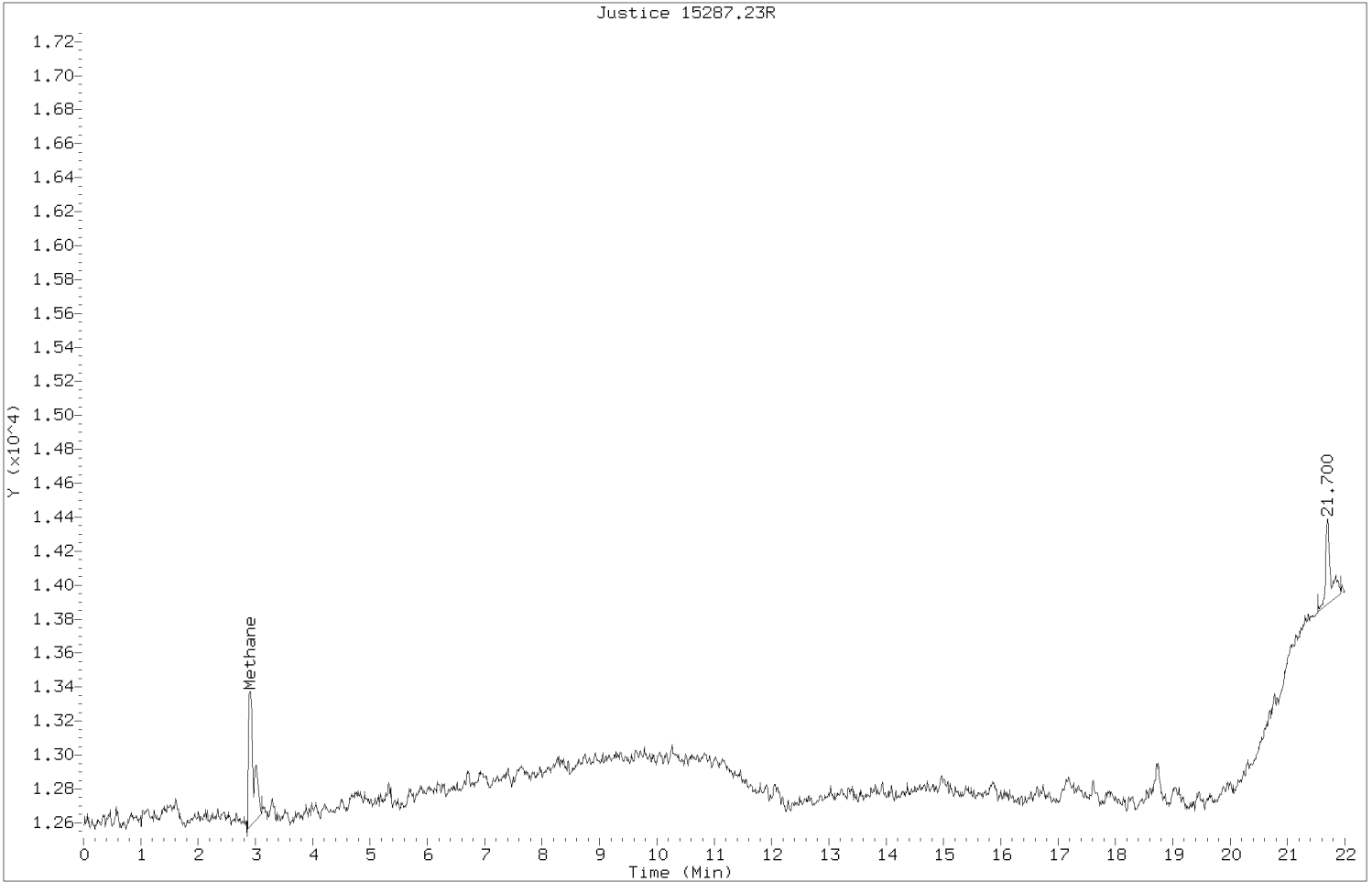


Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087715 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 22:54  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-22R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
1.075	412		
2.875	554		
14.950	369		
16.325	283		
17.142	1490	m/p-Xylene	0.5526
18.050	1490	Xylene (total)	0.5526
18.742	963		
20.208	306		
20.533	471		
21.250	3650		
21.700	6105		
Total Area: 16094.2500			

Sample Name = 8087716 BC095A +PRE

0.0 to 22.0 min. Low Y = 12520.000 High Y = 14393.000 mv Span = 1873.000



Lancaster Laboratories

Analysis Data Sheet

ADS07818 Analysis:

Sample No:

Lab Sample: 8087716 BC095A +PRE

Date Analyzed: 14-OCT-2015 23:24

Nominal Vol: 100 uL

Instr. ID: A58309--FID

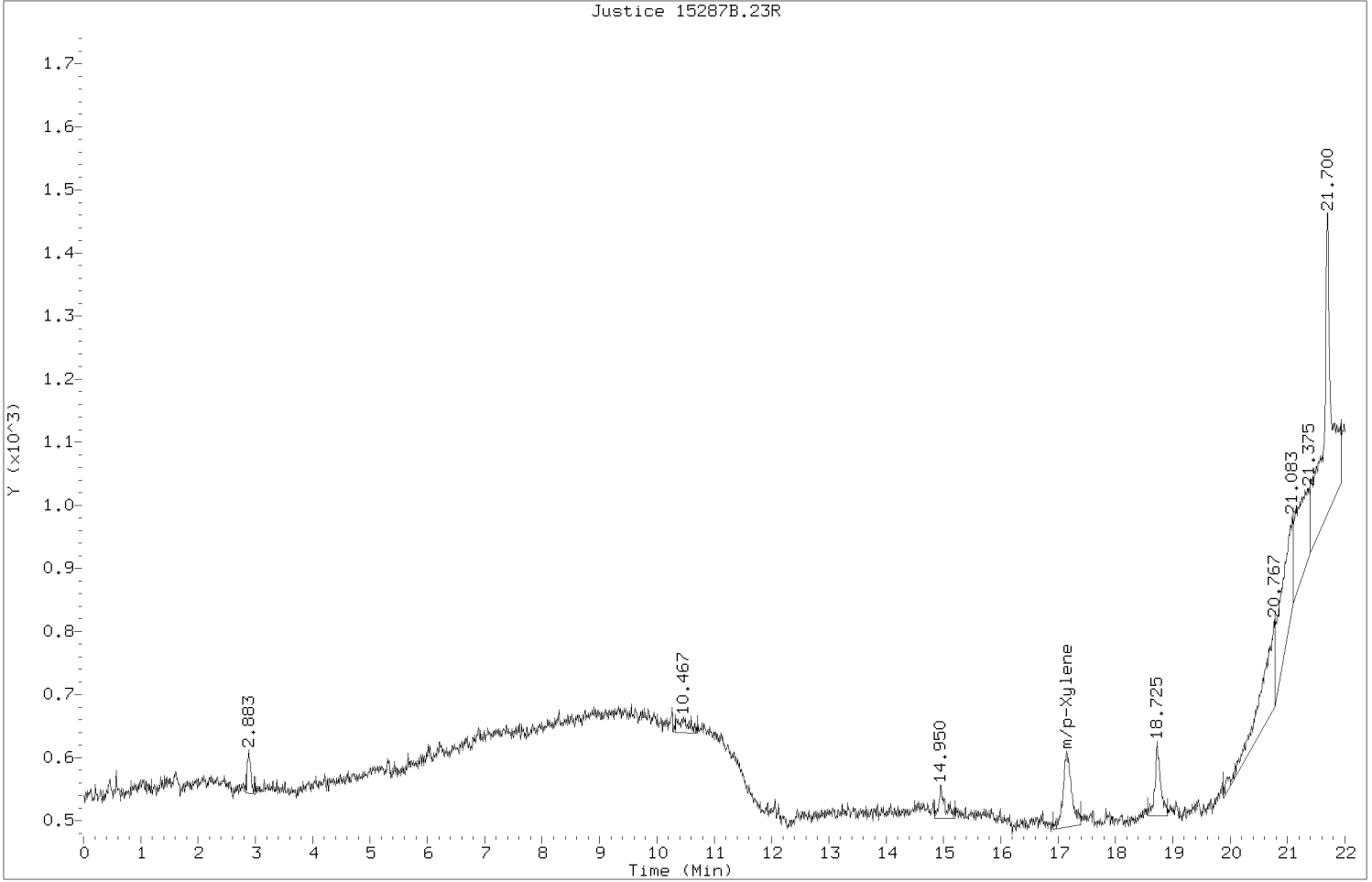
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Calibration File: /chem/A58309.i/15oct14.b/gc\_fid.m

Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.908	5135	Methane	3.0755
21.700	3170		
Total Area: 8305.2500			

Justice 15287B.23R



Lancaster Laboratories  
 Analysis Data Sheet  
 ADS07818 Analysis:  
 Sample No:  
 Lab Sample: 8087716 BC095A +PRE  
 Date Analyzed: 14-OCT-2015 23:24  
 Nominal Vol: 100 uL  
 Instr. ID: A58309--PID  
 Lab File ID: /chem/A58309.i/15oct14.b/15287B-23R.d  
 Calibration File: /chem/A58309.i/15oct14.b/gc\_pid.m  
 Calibration Version: 14-OCT-2015 13:20

Ret Time (min)	Peak Area	Peak Name	Amount ppm
2.883	295		
10.467	313		
14.950	408		
17.150	1230	m/p-Xylene	0.4562
18.050	1230	Xylene (total)	0.4562
18.725	783		
20.767	2382		
21.083	2492		
21.375	2110		
21.700	4877		
Total Area: 16122.0000			

# **Canister Dilution Calc/Pressure Gauge Readings**

## **Volatile Organics in Air by GC/MS**

## Summa Sample Prep Worksheet

<u>Sample</u>	<u>Can_ID</u>	<u>Initial Pressure</u>	<u>Units</u>	<u>Final Pressure (PSIG)</u>	<u>Dilution Factor</u>	<u>SDG</u>
8087710	1019	-2.0	"Hg	12.7	2	SSX23
8087711	1011	-1.6	"Hg	13.1	2	SSX23
8087712	1058	-2.3	"Hg	12.4	2	SSX23
8087713	1167	-2.0	"Hg	12.7	2	SSX23
8087714	985	-2.6	"Hg	12.1	2	SSX23
8087715	1014	-2.7	"Hg	12.0	2	SSX23
8087716	988	-2.0	"Hg	12.7	2	SSX23

**Clean Canister Certification Data**  
**Volatile Organics in Air by GC/MS**

Cleaning Data Summary  
SDG# SSX23

Sample #	Can ID	Certified File	Instrument #
8087710	1019	ci00180	HP09464
8087711	1011	ci00181	HP09464
8087712	1058	ci00176	HP09464
8087713	1167	ci00178	HP09464
8087714	985	ci00175	HP09464
8087715	1014	di00224	HP10145
8087716	988	cj00051	HP09464



Lancaster Laboratories  
 Volatiles in Air  
 Runlog for Agilent GC/MS System HP09464 \*\*HP #03\*\*

Data Directory Path is - C:\msdchem\1\data\15sep03\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
eb07445	CI00080.D	50NGBFB	09/03/2015	19:34		
eb07445	CI00081.D	VSTD001	09/03/2015	20:15		
eb07445	CI00082.D	VSTD001	09/03/2015	20:58		
eb07445	CI00083.D	VSTD002	09/03/2015	21:41		
eb07445	CI00084.D	VSTD005	09/03/2015	22:23		
eb07445	CI00085.D	VSTD010	09/03/2015	23:07		
eb07445	CI00086.D	VSTD025	09/03/2015	23:50		
eb07445	CI00087.D	VSTD070	09/04/2015	00:34		
eb07445	CI00088.D	VBLKC75	09/04/2015	01:17	C1524630AA	
eb07445	CI00089.D	VBLKC75	09/04/2015	02:01	C1524630AA	
eb07445	CI00090.D	LCSC75	09/04/2015	02:45	C1524630AA	
eb07445	CI00091.D	LCSC75	09/04/2015	03:28	C1524630AA	
eb07445	CI00092.D	LCSC75	09/04/2015	04:12	C1524630AA	
eb07445	CI00093.D	mdlv0.5	09/04/2015	04:56	C1524630AA	
eb07445	CI00094.D	mdlv0.2	09/04/2015	05:38	C1524630AA	
eb07445	CI00095.D	VBLKC75	09/04/2015	09:38	C1524630AA	
eb07445	CI00096.D	VBLKC75	09/04/2015	10:29	C1524630AA	
eb07445	CI00097.D	LCSC75	09/04/2015	11:20	C1524630AA	
eb07445	CI00098.D	LCSC75	09/04/2015	12:04	C1524630AA	
eb07445	CI00099.D	LCSC75	09/04/2015	12:57	C1524630AA	
eb07445	CI00100.D	LCSC75	09/04/2015	13:46	C1524630AA	
eb07445	CI00101.D	8007849	09/04/2015	15:05	C1524630AA	
eb07445	CI00102.D	8007851	09/04/2015	15:51	C1524630AA	
eb07445	CI00103.D	8002349	09/04/2015	16:37	C1524630AA	
eb07445	CI00104.D	8002350	09/04/2015	17:24	C1524630AA	
eb07445	CI00105.D	VBLKC75	09/04/2015	18:07	C1524630AA	
eb07445	CI00106.D	VBLKC75	09/04/2015	18:50	C1524630AA	
eb07445	CI00107.D	VBLKC75	09/04/2015	19:35	C1524630AA	
eb07445	CI00108.D	VBLKC75	09/04/2015	20:18	C1524630AA	
eb07445	CI00109.D	VBLKC75	09/04/2015	21:03	C1524630AA	
eb07445	CI00110.D	VBLKC75	09/04/2015	21:47	C1524630AA	
eb07445	CI00111.D	VBLKC75	09/04/2015	22:30	C1524630AA	
eb07445	CI00112.D	VBLKC75	09/04/2015	23:13	C1524630AA	
eb07445	CI00113.D	VBLKC75	09/04/2015	23:57	C1524630AA	
eb07445	CI00114.D	VBLKC75	09/05/2015	00:41	C1524630AA	
eb07445	CI00115.D	VBLKC75	09/05/2015	01:25	C1524630AA	
eb07445	CI00116.D	VBLKC75	09/05/2015	02:08	C1524630AA	

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKC75
Canister ID:	N/A	Lab File ID:	ci00096.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	250 cc	Analyzed Date:	09/04/2015
Injection Volume:	250 cc	Analyzed Time:	10:29
Instrument ID:	09464	Dilution Factor:	1

Concentration Units: ppb(v)

Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
115-07-1	Propene	0.50	U
75-71-8	Dichlorodifluoromethane	0.20	U
75-45-6	Chlorodifluoromethane	0.20	U
76-14-2	Freon 114	0.20	U
74-87-3	Chloromethane	0.20	U
75-01-4	Vinyl Chloride	0.20	U
106-99-0	1,3-Butadiene	0.40	U
74-83-9	Bromomethane	0.20	U
75-00-3	Chloroethane	0.20	U
593-60-2	Bromoethene	0.40	U
75-43-4	Dichlorofluoromethane	0.20	U
75-69-4	Trichlorofluoromethane	0.20	U
109-66-0	Pentane	0.50	U
64-17-5	Ethanol	0.50	U
107-02-8	Acrolein	1.0	U
75-35-4	1,1-Dichloroethene	0.20	U
76-13-1	Freon 113	0.50	U
67-64-1	Acetone	0.50	U
74-88-4	Methyl Iodide	0.20	U
75-15-0	Carbon Disulfide	0.50	U
67-63-0	Isopropanol	0.50	U
75-05-8	Acetonitrile	0.50	U
107-05-1	3-Chloropropene	0.20	U
75-09-2	Methylene Chloride	0.20	U

Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKC75
Canister ID:	N/A	Lab File ID:	ci00096.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	250 cc	Analyzed Date:	09/04/2015
Injection Volume:	250 cc	Analyzed Time:	10:29
Instrument ID:	09464	Dilution Factor:	1

Concentration Units: ppb(v)

Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
75-65-0	tert-Butyl Alcohol	0.50	U
107-13-1	Acrylonitrile	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.20	U
1634-04-4	Methyl t-Butyl Ether	0.20	U
110-54-3	Hexane	0.20	U
75-34-3	1,1-Dichloroethane	0.20	U
108-05-4	Vinyl Acetate	1.0	U
108-20-3	Di-Isopropyl Ether	0.20	U
637-92-3	Ethyl Tert-Butyl Ether	0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	U
540-59-0	1,2-Dichloroethene (total)	0.20	U
78-93-3	2-Butanone	0.50	U
141-78-6	Ethyl Acetate	0.50	U
96-33-3	Methyl Acrylate	0.20	U
109-99-9	Tetrahydrofuran	0.50	U
67-66-3	Chloroform	0.20	U
71-55-6	1,1,1-Trichloroethane	0.20	U
110-82-7	Cyclohexane	0.20	U
56-23-5	Carbon Tetrachloride	0.20	U
71-43-2	Benzene	0.20	U
107-06-2	1,2-Dichloroethane	0.20	U
540-84-1	Isooctane	0.20	U
994-05-8	Tert-Amyl Methyl Ether	0.20	U
142-82-5	Heptane	0.50	U

Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.



Lancaster Laboratories  
Environmental

FORM 01  
VOLATILE ORGANICS IN AIR  
SAMPLE DATA SHEET

SDG No.:

Sample Media: N/A Lab Sample ID: VBLKC75  
 Canister ID: N/A Lab File ID: ci00096.d  
 Pressure Received: 14.7 psia Date Collected:  
 Final Pressure: 14.7 psia Date Received:  
 Nominal Volume: 250 cc Analyzed Date: 09/04/2015  
 Injection Volume: 250 cc Analyzed Time: 10:29  
 Instrument ID: 09464 Dilution Factor: 1

Concentration Units: ppb(v)

Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
79-01-6	Trichloroethene	0.20	U
140-88-5	Ethyl Acrylate	0.20	U
78-87-5	1,2-Dichloropropane	0.20	U
74-95-3	Dibromomethane	0.20	U
123-91-1	1,4-Dioxane	0.50	U
80-62-6	Methyl Methacrylate	0.20	U
75-27-4	Bromodichloromethane	0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	U
108-10-1	4-Methyl-2-Pentanone	0.50	U
108-88-3	Toluene	0.20	U
111-65-9	Octane	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.20	U
542-75-6	1,3-Dichloropropene (total)	0.20	U
97-63-2	Ethyl Methacrylate	0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	U
127-18-4	Tetrachloroethene	0.20	U
591-78-6	2-Hexanone	0.50	U
124-48-1	Dibromochloromethane	0.20	U
106-93-4	1,2-Dibromoethane	0.20	U
108-90-7	Chlorobenzene	0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	U
100-41-4	Ethylbenzene	0.20	U
179601-23-1	m/p-Xylene	0.20	U
95-47-6	o-Xylene	0.20	U

Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.





Lancaster Laboratories  
Environmental

FORM 01  
VOLATILE ORGANICS IN AIR  
SAMPLE DATA SHEET

SDG No.:

Sample Media:	N/A	Lab Sample ID:	VBLKC75
Canister ID:	N/A	Lab File ID:	ci00096.d
Pressure Received:	14.7 psia	Date Collected:	
Final Pressure:	14.7 psia	Date Received:	
Nominal Volume:	250 cc	Analyzed Date:	09/04/2015
Injection Volume:	250 cc	Analyzed Time:	10:29
Instrument ID:	09464	Dilution Factor:	1

Concentration Units: ppb(v)

Limit: MDL

CAS NO.	COMPOUND	CONCENTRATION	Q
87-68-3	Hexachlorobutadiene	0.40	U
91-20-3	Naphthalene	0.40	U

Abbreviations:

- U = The compound is less than the limit being reported.
- B = The compound was found in blank with a result greater than the limit being reported.
- E = The compound exceeded the calibration limit.
- D = Analysis of diluted sample.
- J = The result is between the MDL and LOQ.

SDG No.:

Instrument ID: 09464      LCS File ID: ci00098.d      LCSD File ID: ci00100.d  
 Batch: C1524630AA      LCS Injected: 09/04/2015      LCSD Injected: 09/04/2015  
 Method: EPA TO-15      LCS Client ID: LCSC75      LCSD Client ID: LCSDC75  
 Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb (v))	LCSD CONC. (ppb (v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Propene	11.00	10.15	9.25	92	84	41-129	9	25	YES
Dichlorodifluoromethane	10.00	9.59	8.39	96	84	61-149	13	25	YES
Freon 114	10.20	10.00	8.78	98	86	63-123	13	25	YES
Chloromethane	10.30	8.55	7.70	83	75	54-118	10	25	YES
Vinyl Chloride	10.20	10.20	9.16	100	90	70-130	11	25	YES
1,3-Butadiene	10.50	9.60	8.66	91	83	57-138	10	25	YES
Bromomethane	10.10	9.19	8.04	91	80	70-130	13	25	YES
Chloroethane	10.00	8.88	7.90	89	79	63-119	12	25	YES
Trichlorofluoromethane	10.00	9.58	8.26	96	83	70-130	15	25	YES
Ethanol	10.60	7.54	6.65	71	63	10-175	13	25	YES
Acrolein	10.90	10.62	9.63	97	88	43-141	10	25	YES
1,1-Dichloroethene	10.60	10.60	9.36	100	88	61-128	12	25	YES
Freon 113	10.50	9.31	8.22	89	78	63-114	12	25	YES
Acetone	10.70	11.29	9.83	105	92	61-134	14	25	YES
Carbon Disulfide	10.20	9.50	8.39	93	82	55-121	12	25	YES
Isopropanol	11.00	9.92	8.60	90	78	55-152	14	25	YES
Methylene Chloride	10.60	10.81	9.43	102	89	70-130	14	25	YES
trans-1,2-Dichloroethene	10.50	9.15	7.96	87	76	66-121	14	25	YES
Methyl t-Butyl Ether	10.70	11.11	9.91	104	93	52-129	11	25	YES
Hexane	10.80	9.97	9.02	92	84	63-117	10	25	YES
1,1-Dichloroethane	10.50	8.88	8.07	85	77	67-124	10	25	YES
Vinyl Acetate	10.80	12.29	11.47	114	106	45-162	7	25	YES
cis-1,2-Dichloroethene	10.60	8.71	7.72	82	73	65-121	12	25	YES
2-Butanone	10.80	11.28	10.06	104	93	60-135	11	25	YES
Ethyl Acetate	10.60	9.65	8.83	91	83	51-131	9	25	YES
Tetrahydrofuran	10.90	11.26	10.37	103	95	53-134	8	25	YES
Chloroform	10.60	9.16	8.05	86	76	70-130	13	25	YES
1,1,1-Trichloroethane	10.50	9.27	8.19	88	78	70-130	12	25	YES
Cyclohexane	10.60	10.34	9.21	98	87	63-123	12	25	YES
Carbon Tetrachloride	10.40	10.03	8.63	96	83	70-130	15	25	YES
Benzene	10.50	10.29	9.50	98	90	70-130	8	25	YES
1,2-Dichloroethane	10.50	10.23	9.30	97	89	70-130	9	25	YES
Heptane	10.70	10.42	9.45	97	88	56-123	10	25	YES
Trichloroethene	10.50	8.49	7.59	81	72	70-130	11	25	YES
1,2-Dichloropropane	10.70	9.93	9.10	93	85	70-130	9	25	YES
1,4-Dioxane	10.50	12.71	11.27	121	107	43-149	12	25	YES

COMMENTS:  
Applies to Sample(s): 8007849

SDG No.:

Instrument ID: 09464      LCS File ID: ci00098.d      LCSD File ID: ci00100.d  
 Batch: C1524630AA      LCS Injected: 09/04/2015      LCSD Injected: 09/04/2015  
 Method: EPA TO-15      LCS Client ID: LCSC75      LCSD Client ID: LCSDC75  
 Dilution Factor: 1

COMPOUND	SPIKE LEVEL	LCS CONC. (ppb (v))	LCSD CONC. (ppb (v))	LCS %REC	LCSD %REC	RANGE	%RPD	RPD MAX	IN SPEC
Methyl Methacrylate	10.30	11.71	10.47	114	102	59-146	11	25	YES
Bromodichloromethane	10.50	10.36	9.03	99	86	62-129	14	25	YES
cis-1,3-Dichloropropene	10.90	12.05	11.32	111	104	64-136	6	25	YES
4-Methyl-2-Pentanone	10.80	13.12	11.50	121	107	53-140	13	25	YES
Toluene	10.70	10.72	11.11	100	104	70-130	4	25	YES
trans-1,3-Dichloropropene	10.00	9.73	9.91	97	99	61-126	2	25	YES
1,1,2-Trichloroethane	10.70	9.68	9.88	90	92	59-131	2	25	YES
Tetrachloroethene	10.40	8.00	8.05	77	77	70-130	1	25	YES
2-Hexanone	11.00	12.57	12.45	114	113	47-150	1	25	YES
Dibromochloromethane	10.80	9.91	9.83	92	91	65-127	1	25	YES
1,2-Dibromoethane	10.50	10.18	10.27	97	98	65-126	1	25	YES
Chlorobenzene	10.80	10.20	10.25	94	95	70-130	1	25	YES
Ethylbenzene	10.80	11.00	11.32	102	105	70-130	3	25	YES
m/p-Xylene	21.20	22.05	21.32	104	101	70-130	3	25	YES
o-Xylene	10.90	10.94	10.98	100	101	70-130	0	25	YES
Xylene (total)	32.10	32.98	32.31	103	101	70-130	2	25	YES
Styrene	10.80	11.05	11.06	102	102	64-130	0	25	YES
Bromoform	10.60	10.70	10.52	101	99	64-141	2	25	YES
1,1,2,2-Tetrachloroethane	10.90	10.10	10.14	93	93	58-133	0	25	YES
4-Ethyltoluene	10.70	10.01	10.30	94	96	59-126	3	25	YES
1,3,5-Trimethylbenzene	10.70	10.05	9.65	94	90	61-132	4	25	YES
1,2,4-Trimethylbenzene	10.80	9.55	9.64	88	89	60-128	1	25	YES
1,3-Dichlorobenzene	10.90	9.55	9.74	88	89	63-125	2	25	YES
1,4-Dichlorobenzene	10.70	9.29	9.46	87	88	63-127	2	25	YES
Benzyl Chloride	10.30	9.92	10.01	96	97	50-160	1	25	YES
1,2-Dichlorobenzene	10.80	9.41	9.46	87	88	62-132	0	25	YES
1,2,4-Trichlorobenzene	11.00	8.30	7.91	75	72	37-119	5	25	YES
Hexachlorobutadiene	11.00	8.33	8.01	76	73	43-120	4	25	YES
Naphthalene	10.40	9.73	9.45	94	91	35-153	3	25	YES

COMMENTS:  
Applies to Sample(s): 8007849





Lancaster Laboratories  
Environmental

FORM 04  
VOLATILE ORGANICS IN AIR  
METHOD BLANK SUMMARY

SDG No.:

Lab Sample ID: VBLKC75

Analyzed Date: 09/04/2015

Lab File ID: ci00096.d

Analyzed Time: 10:29

Instrument ID: 09464

THIS BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS AND LCSD:

LAB SAMPLE ID	LAB FILE ID	CANISTER ID	DATE ANALYZED	TIME ANALYZED
LCSC75	ci00098.d	N/A	09/04/2015	12:04
LCSDC75	ci00100.d	N/A	09/04/2015	13:46
8007849	ci00101.d	526	09/04/2015	15:05

COMMENTS:

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Lancaster Laboratories  
Environmental

FORM 05  
VOLATILE ORGANICS IN AIR  
INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

SDG No.:

Lab File ID: ci00080.d

BFB Injection Date: 09/03/2015

Instrument ID: 09464

BFB Injection Time: 19:34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0% - 40.0% of mass 95	22.4
75	30.0% - 66.0% of mass 95	55.6
95	Base peak, 100% relative abundance	100.0
96	5.0% - 9.0% of mass 95	6.8
173	< 2.0% of mass 174	0.0 (0.0)
174	> 50.0% of mass 95	53.1
175	4.0% - 9.0% of mass 174	4.0 (7.4)
176	93.0% - 101.0% of mass 174	50.2 (94.5)
177	5.0% - 9.0% of mass 176	3.3 (6.6)

THIS CHECK APPLIES TO THE FOLLOWING:

LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD001	ci00082.d	09/03/2015	20:58
VSTD002	ci00083.d	09/03/2015	21:41
VSTD005	ci00084.d	09/03/2015	22:23
VSTD010	ci00085.d	09/03/2015	23:07
VSTD025	ci00086.d	09/03/2015	23:50
VSTD070	ci00087.d	09/04/2015	00:34
mdlv0.5	ci00093.d	09/04/2015	04:56
mdlv0.2	ci00094.d	09/04/2015	05:38
VBLKC75	ci00096.d	09/04/2015	10:29
LCSC75	ci00098.d	09/04/2015	12:04
LCSDC75	ci00100.d	09/04/2015	13:46
8007849	ci00101.d	09/04/2015	15:05

SDG No.:

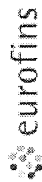
Instrument ID: 09464      Calibration Start Date: 09/03/2015      Calibration End Date: 09/04/2015  
 Calibration Start Time: 20:58      Calibration End Time: 00:34

LAB FILE IDs:

RRF 1 = ci00082.d    RRF 2 = ci00083.d    RRF 5 = ci00084.d    RRF 10 = ci00085.d    RRF 25 = ci00086.d  
 RRF 70 = ci00087.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
Propene	2.695	2.167	2.047	1.691	1.548	1.061	1.868	30	AVG
Dichlorodifluoromethane	6.333	5.249	5.060	4.106	3.606	****	4.871	22	AVG
Chlorodifluoromethane	5.187	4.201	3.979	3.196	2.842	****	3.881	24	AVG
Freon 114	5.665	4.737	4.546	3.757	3.546	****	4.450	19	AVG
Chloromethane	1.209	0.961	0.900	0.723	0.703	0.582	0.846	27	AVG
Vinyl Chloride	3.194	2.640	2.512	2.041	1.953	1.416	2.293	27	AVG
1,3-Butadiene	2.418	2.029	1.976	1.638	1.572	****	1.927	18	AVG
Bromomethane	2.208	1.796	1.763	1.414	1.430	****	1.722	19	AVG
Chloroethane	1.838	1.446	1.413	1.136	1.151	****	1.397	20	AVG
Bromoethene	1.850	1.510	1.473	1.235	1.358	1.222	1.441	16	AVG
Dichlorofluoromethane	6.608	5.412	4.931	4.000	3.847	****	4.960	23	AVG
Trichlorofluoromethane	6.321	5.201	4.941	3.941	3.717	****	4.824	22	AVG
Pentane	5.918	4.925	4.743	3.756	3.445	****	4.557	22	AVG
Ethanol	1.352	1.065	1.053	0.859	0.729	****	1.012	23	AVG
Freon123a	5.884	4.343	3.730	3.212	3.156	****	4.065	28	AVG
Acrolein	0.607	0.371	0.444	0.484	0.518	****	0.485	18	AVG
1,1-Dichloroethene	4.942	4.120	3.963	3.185	3.094	2.088	3.565	28	AVG
Freon 113	2.941	2.457	2.253	1.862	1.952	****	2.293	19	AVG
Acetone	2.380	1.752	1.746	1.692	1.266	1.319	1.693	24	AVG
Methyl Iodide	3.744	3.069	3.028	2.375	2.509	****	2.945	18	AVG
Carbon Disulfide	8.163	6.728	6.534	5.063	4.692	****	6.236	22	AVG
Isopropanol	3.562	2.820	2.950	2.434	2.298	****	2.813	18	AVG
Acetonitrile	0.879	0.329	0.419	0.507	0.439	0.498	0.512	37	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
 # Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 06  
VOLATILE ORGANICS IN AIR  
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464 Calibration Start Date: 09/03/2015 Calibration End Date: 09/04/2015  
Calibration Start Time: 20:58 Calibration End Time: 00:34

LAB FILE IDs:

RRF 1 = ci000082.d RRF 2 = ci000083.d RRF 5 = ci000084.d RRF 10 = ci000085.d RRF 25 = ci000086.d  
RRF 70 = ci000087.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
3-Chloropropene	1.339	0.993	0.876	0.754	0.791	****	0.950	25	AVG
Methylene Chloride	2.363	1.939	1.719	1.367	1.326	1.101	1.636	28	AVG
tert-Butyl Alcohol	3.450	2.747	2.914	2.338	2.338	****	2.757	17	AVG
Acrylonitrile	1.696	1.083	1.169	1.257	1.121	****	1.265	20	AVG
trans-1,2-Dichloroethene	5.279	4.365	3.989	3.231	2.891	****	3.951	24	AVG
Methyl t-Butyl Ether	2.957	2.256	2.722	2.694	2.321	2.622	2.595	10	AVG
Hexane	3.619	2.986	2.753	2.527	2.496	2.169	2.758	18	AVG
1,1-Dichloroethane	4.971	3.832	3.257	2.931	2.771	2.272	3.339	29	AVG
Vinyl Acetate	0.137	0.096	0.127	0.180	0.169	****	0.142	24	AVG
Di-Isopropyl Ether	3.256	2.619	3.239	3.453	2.966	3.080	3.102	9	AVG
Ethyl Tert-Butyl Ether	2.406	1.749	2.387	2.454	2.268	****	2.253	13	AVG
cis-1,2-Dichloroethene	3.483	2.713	2.396	2.210	2.070	****	2.574	22	AVG
2-Butanone	0.462	0.371	0.437	0.415	0.339	0.479	0.417	13	AVG
Ethyl Acetate	0.246	0.192	0.226	0.229	0.193	****	0.217	11	AVG
Methyl Acrylate	1.873	1.372	1.662	1.792	1.514	****	1.642	12	AVG
Tetrahydrofuran	1.342	1.076	1.235	1.303	1.115	****	1.214	10	AVG
Chloroform	4.778	3.438	3.104	2.802	2.637	2.194	3.159	28	AVG
1,1,1-Trichloroethane	3.936	3.099	2.681	2.454	2.348	2.109	2.771	24	AVG
Cyclohexane	3.920	3.283	3.122	2.785	2.642	2.260	3.002	19	AVG
Carbon Tetrachloride	3.819	3.097	2.721	2.447	2.292	2.016	2.732	24	AVG
Benzene	1.810	1.737	1.423	1.471	0.999	1.082	1.420	23	AVG
1,2-Dichloroethane	1.029	0.984	0.801	0.794	0.514	0.602	0.787	26	AVG
Isooctane	2.839	3.070	2.737	2.789	1.921	1.624	2.497	23	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.

SDG No.:

Instrument ID: 09464      Calibration Start Date: 09/03/2015      Calibration End Date: 09/04/2015  
 Calibration Start Time: 20:58      Calibration End Time: 00:34

LAB FILE IDs:  
 RRF 1 = ci00082.d      RRF 2 = ci00083.d      RRF 5 = ci00084.d      RRF 10 = ci00085.d      RRF 25 = ci00086.d  
 RRF 70 = ci00087.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
Tert-Amyl Methyl Ether	0.617	0.703	0.711	0.751	0.504	****	0.657	15	AVG
Heptane	1.342	1.315	1.189	1.210	0.834	0.800	1.115	21	AVG
Trichloroethene	0.727	0.745	0.547	0.504	0.395	****	0.584	26	AVG
Ethyl Acrylate	0.623	0.729	0.756	0.771	0.498	****	0.675	17	AVG
1,2-Dichloropropane	0.654	0.607	0.602	0.611	0.416	0.588	0.580	14	AVG
Dibromomethane	0.420	0.426	0.358	0.352	0.264	0.415	0.373	17	AVG
1,4-Dioxane	0.168	0.221	0.226	0.219	0.145	****	0.196	19	AVG
Methyl Methacrylate	0.311	0.356	0.359	0.367	0.234	****	0.325	17	AVG
Bromodichloromethane	1.291	1.355	1.222	1.137	0.799	0.878	1.114	20	AVG
cis-1,3-Dichloropropene	0.599	0.608	0.672	0.731	0.525	0.728	0.644	13	AVG
4-Methyl-2-Pentanone	0.749	1.037	1.105	1.034	0.698	0.839	0.910	19	AVG
Toluene	1.214	1.104	1.202	1.401	0.906	1.030	1.143	15	AVG
Octane	1.035	1.132	1.426	1.628	1.091	****	1.262	20	AVG
trans-1,3-Dichloropropene	0.655	0.666	0.722	0.794	0.543	0.688	0.678	12	AVG
Ethyl Methacrylate	0.429	0.539	0.606	0.641	0.486	****	0.540	16	AVG
1,1,2-Trichloroethane	0.453	0.465	0.492	0.531	0.367	0.534	0.474	13	AVG
Tetrachloroethene	0.601	0.583	0.537	0.571	0.463	0.664	0.570	12	AVG
2-Hexanone	0.909	1.031	1.182	1.161	0.773	****	1.011	17	AVG
Dibromochloromethane	0.579	0.647	0.669	0.696	0.513	0.680	0.631	11	AVG
1,2-Dibromoethane	0.691	0.702	0.710	0.760	0.533	0.700	0.683	11	AVG
Chlorobenzene	0.940	0.907	0.951	1.020	0.724	0.914	0.910	11	AVG
1,1,1,2-Tetrachloroethane	0.393	0.445	0.458	0.498	0.367	****	0.432	12	AVG
Ethylbenzene	1.040	1.110	1.268	1.577	1.080	1.209	1.214	16	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
 # Average RRF for all compounds must be greater than 0.010.

SDG No.:

Instrument ID: 09464 Calibration Start Date: 09/03/2015 Calibration End Date: 09/04/2015

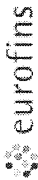
Calibration Start Time: 20:58 Calibration End Time: 00:34

LAB FILE IDs:

RRF 1 = ci00082.d RRF 2 = ci00083.d RRF 5 = ci00084.d RRF 10 = ci00085.d RRF 25 = ci00086.d  
RRF 70 = ci00087.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
m/p-Xylene	0.808	0.855	0.956	1.198	0.857	1.152	0.971	17	AVG
o-Xylene	0.849	0.916	1.013	1.285	0.911	1.184	1.026	17	AVG
Styrene	0.640	0.723	0.803	0.988	0.719	****	0.775	17	AVG
Bromoform	0.445	0.528	0.590	0.678	0.531	****	0.554	16	AVG
Cumene	0.901	1.000	1.079	1.464	1.062	****	1.101	19	AVG
Bromobenzene	0.368	0.398	0.415	0.494	0.364	****	0.408	13	AVG
1,1,2,2-Tetrachloroethane	0.998	1.094	1.107	1.252	0.849	****	1.060	14	AVG
1,2,3-Trichloropropane	0.226	0.250	0.247	0.285	0.192	****	0.240	14	AVG
n-Propylbenzene	0.276	0.297	0.307	0.409	0.302	****	0.318	16	AVG
2-Chlorotoluene	0.287	0.323	0.340	0.414	0.303	****	0.333	15	AVG
4-Ethyltoluene	1.055	1.128	1.200	1.533	1.081	****	1.199	16	AVG
1,3,5-Trimethylbenzene	0.927	1.008	0.934	1.274	0.917	****	1.012	15	AVG
Alpha Methyl Styrene	0.395	0.446	0.487	0.627	0.484	****	0.488	18	AVG
tert-Butylbenzene	0.737	0.805	0.820	1.079	0.826	****	0.853	15	AVG
1,2,4-Trimethylbenzene	0.966	1.061	1.073	1.312	0.950	****	1.072	13	AVG
sec-Butylbenzene	1.226	1.335	1.358	1.819	1.368	****	1.421	16	AVG
1,3-Dichlorobenzene	0.673	0.747	0.781	0.899	0.683	****	0.757	12	AVG
1,4-Dichlorobenzene	0.678	0.744	0.792	0.916	0.725	****	0.771	12	AVG
p-Isopropyltoluene	0.966	1.044	1.106	1.400	1.111	****	1.125	15	AVG
Benzyl Chloride	0.982	1.087	1.177	1.377	1.025	****	1.130	14	AVG
1,2-Dichlorobenzene	0.644	0.679	0.718	0.835	0.639	****	0.703	11	AVG
n-Butylbenzene	1.244	1.307	1.300	1.583	1.201	****	1.327	11	AVG
Hexachloroethane	0.344	0.400	0.421	0.517	0.438	****	0.424	15	AVG

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 06  
VOLATILE ORGANICS IN AIR  
INITIAL CALIBRATION DATA

SDG No.:

Instrument ID: 09464      Calibration Start Date: 09/03/2015      Calibration End Date: 09/04/2015  
Calibration Start Time: 20:58      Calibration End Time: 00:34

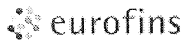
LAB FILE IDs:

RRF 1 = ci00082.d    RRF 2 = ci00083.d    RRF 5 = ci00084.d    RRF 10 = ci00085.d    RRF 25 = ci00086.d  
RRF 70 = ci00087.d

COMPOUND	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF 70	RRF	% RSD	CAL. METHOD
1,2-Dibromo-3-chloropropane	0.318	0.345	0.349	0.396	0.300	****	0.342	11	AVG
1,2,4-Trichlorobenzene	0.405	0.411	0.379	0.400	0.389	****	0.397	3	AVG
Hexachlorobutadiene	0.329	0.320	0.333	0.424	0.430	****	0.367	15	AVG
Naphthalene	1.049	1.092	1.076	1.093	0.904	****	1.043	8	AVG

Average % RSD: 18

\* Maximum %RSD = 30%. Two may exceed Maximum %RSD of 30% but must be less than 40%.  
# Average RRF for all compounds must be greater than 0.010.



Lancaster Laboratories  
Environmental

FORM 08  
VOLATILE ORGANICS IN AIR  
INSTRUMENT STANDARD AREA AND RETENTION TIME SUMMARY

SDG No.:

Lab Sample ID: VSTD010

Analyzed Date: 09/03/2015

Lab File ID: ci00085.d

Analyzed Time: 23:07

Instrument ID: 09464

	Bromochloromethane		1,4-Difluorobenzene		Chlorobenzene-d5	
	Area	R.T.	Area	R.T.	Area	R.T.
24 HOUR STANDARD	629399	7.23	1618895	9.22	1513887	15.55
UPPER LIMIT	881159	7.56	2266453	9.55	2119442	15.88
LOWER LIMIT	377639	6.90	971337	8.89	908332	15.22
LAB SAMPLE ID						
mdlv0.5	501901	7.24	1229272	9.23	1295906	15.55
mdlv0.2	509237	7.24	1227682	9.24	1313768	15.56
VBLKC75	489337	7.24	1686652	9.24	1681592	15.56
LCSC75	478092	7.23	1262882	9.22	1308224	15.55
LCSDC75	582185	7.23	1521207	9.23	1400700	15.55
8007849	605155	7.23	1959791	9.22	1866128	15.55

\* = Outside of the QC Limits.

AREA: Upper limit: +40% of the internal standard area.  
Lower Limit: -40% of the internal standard area.  
R.T.: Upper limit: +0.33 of the internal standard R.T.  
Lower limit: -0.33 of the internal standard R.T.



Date : 03-SEP-2015 19:34

Client ID: 50NGBFB

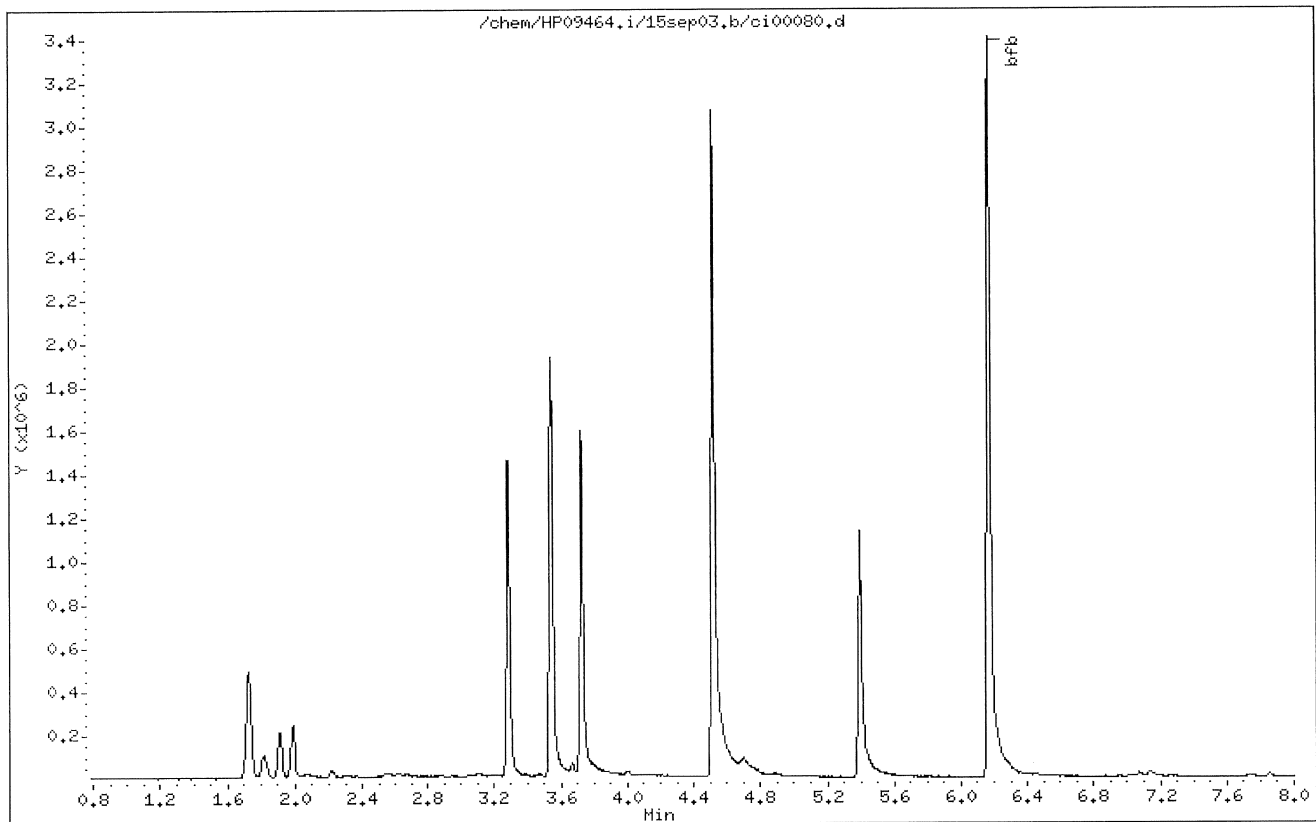
Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB:0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0,25



Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:51.  
Target 3.5 esignature user ID: jeb07445

Date : 03-SEP-2015 19:34

Client ID: 50NGBFB

Instrument: HP09464.i

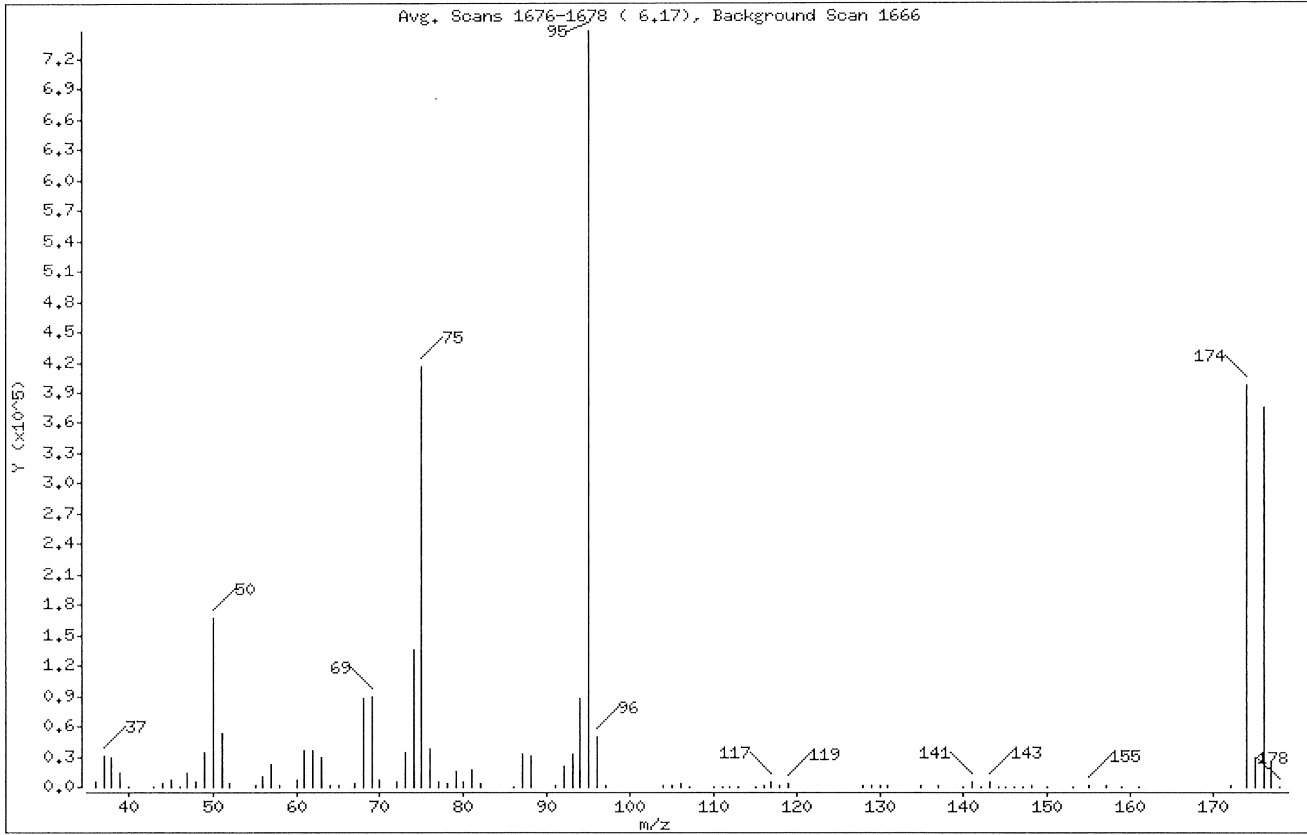
Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

Column phase: DB-624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	22.38
75	30.00 - 66.00% of mass 95	55.63
96	5.00 - 9.00% of mass 95	6.77
173	Less than 2.00% of mass 174	0.00 ( 0.00)
174	50.00 - 120.00% of mass 95	53.13
175	4.00 - 9.00% of mass 174	3.95 ( 7.44)
176	93.00 - 101.00% of mass 174	50.21 ( 94.52)
177	5.00 - 9.00% of mass 176	3.32 ( 6.61)

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:51.  
Target 3.5 esignature user ID: jeb07445

Date : 03-SEP-2015 19:34

Client ID: 50NGBFB

Instrument: HP09464.i

Sample Info: 50NGBFB;;;BFB;0;;;

Operator: jeb07445

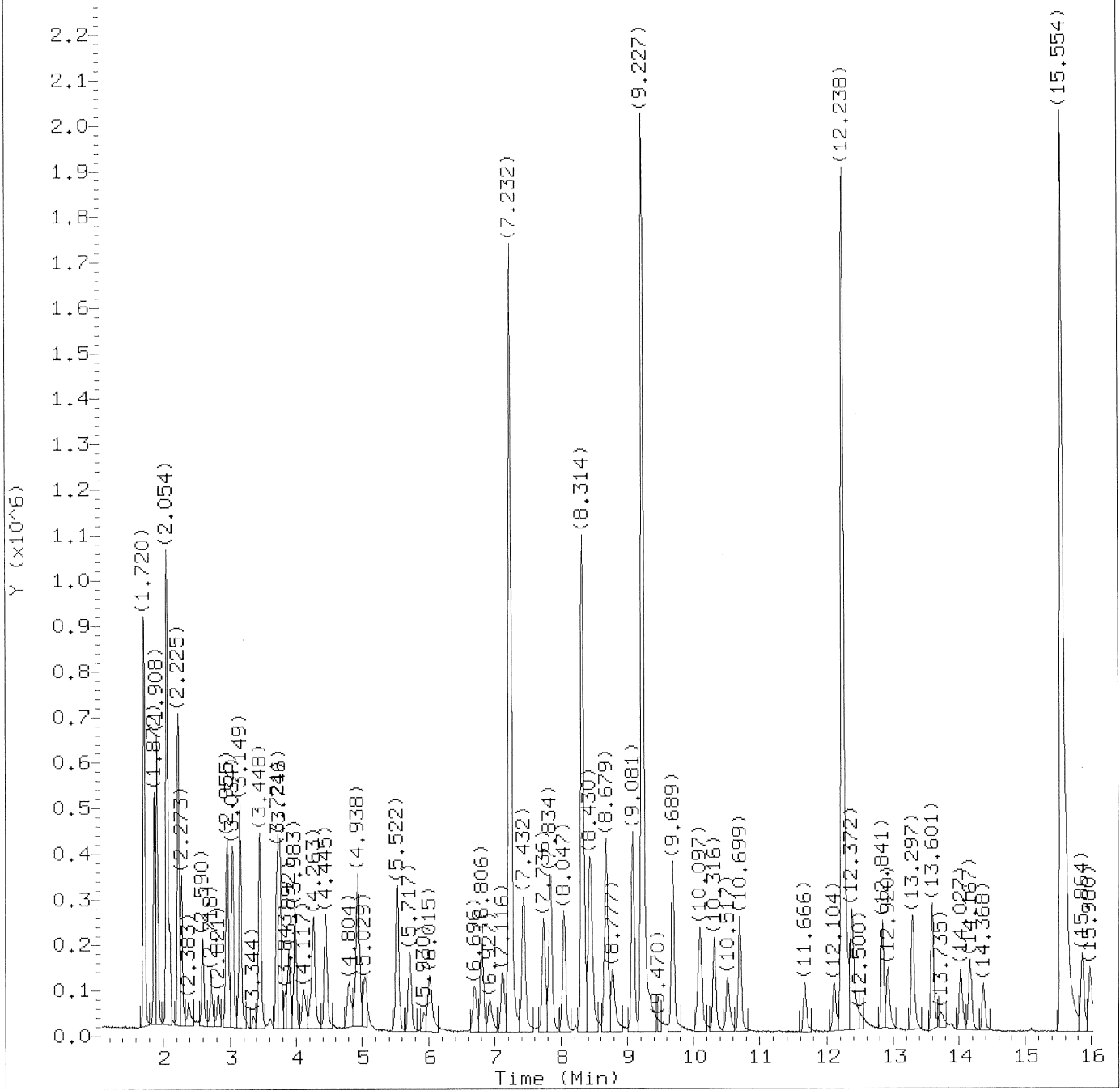
Column phase: DB-624

Column diameter: 0.25

Data File: ci00080.d  
 Spectrum: Avg. Scans 1676-1678 ( 6.17), Background Scan 1666  
 Location of Maximum: 95.00  
 Number of points: 90

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	5488	64.00	2512	94.00	87656	140.00	401
37.00	31160	65.00	1314	95.00	747392	141.00	5177
38.00	29664	67.00	2616	96.00	50576	142.00	661
39.00	13288	68.00	87032	97.00	1690	143.00	5900
40.00	362	69.00	88528	104.00	2413	144.00	206
43.00	544	70.00	6973	105.00	1082	145.00	414
44.00	3127	72.00	4738	106.00	2749	146.00	697
45.00	6715	73.00	34848	107.00	416	147.00	204
46.00	696	74.00	135936	110.00	170	148.00	1583
47.00	12906	75.00	415908	111.00	369	150.00	702
48.00	4748	76.00	38016	112.00	194	153.00	366
49.00	34368	77.00	5000	113.00	194	155.00	1352
50.00	167232	78.00	3500	115.00	634	157.00	1087
51.00	53408	79.00	15444	116.00	2223	159.00	598
52.00	2647	80.00	4749	117.00	4804	161.00	661
55.00	1882	81.00	17160	118.00	2334	172.00	1054
56.00	11165	82.00	3630	119.00	3356	174.00	397056
57.00	22840	86.00	744	128.00	1836	175.00	29528
58.00	1042	87.00	32392	129.00	1143	176.00	375296
60.00	7264	88.00	31544	130.00	2493	177.00	24824
61.00	36368	91.00	2240	131.00	901	178.00	774
62.00	36640	92.00	20760	135.00	1017		
63.00	29448	93.00	32136	137.00	1133		

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:51.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00082.d  
Injection date and time: 03-SEP-2015 20:58

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

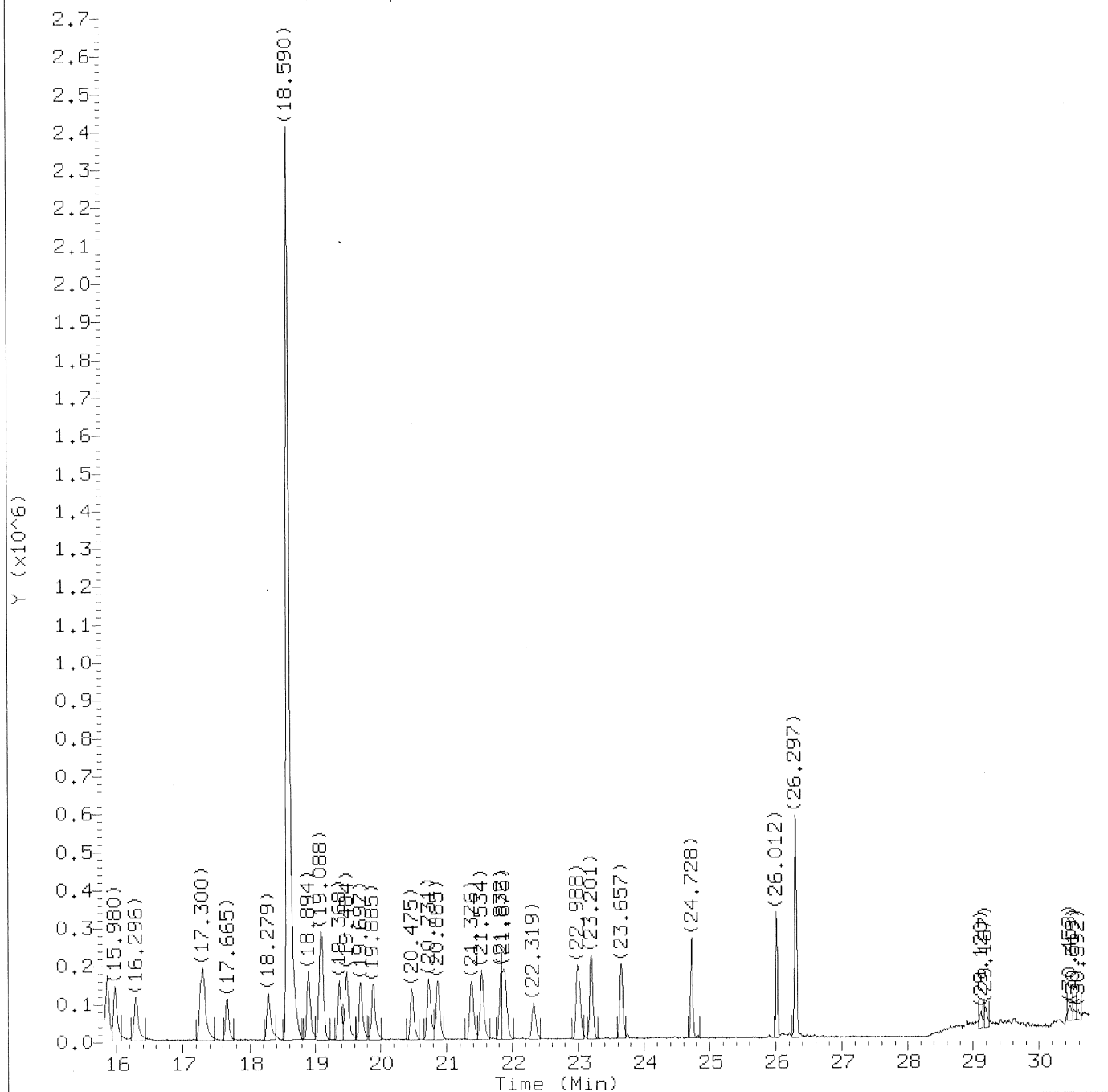
Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00082.d  
Injection date and time: 03-SEP-2015 20:58

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00082.d  
 Injection date and time: 03-SEP-2015 20:58

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.872	41	181105	1.471
2) Dichlorodifluoromethane	(1)	1.908	85	421387	1.313
3) Chlorodifluoromethane	(1)	1.914	51	365678	1.430
4) Freon 114	(1)	2.048	85	384441	1.311
5) Chloromethane	(1)	2.097	52	82032	1.471
6) Vinyl Chloride	(1)	2.225	62	212547	1.407
7) 1,3-Butadiene	(1)	2.273	54	162517	1.280
8) Bromomethane	(1)	2.590	94	142558	1.257
9) Chloroethane	(1)	2.718	64	117471	1.276
10) Bromoethene	(1)	2.937	106	129230	1.361
11) Dichlorofluoromethane	(1)	2.961	67	457152	1.399
12) Trichlorofluoromethane	(1)	3.034	101	420609	1.323
13) Pentane	(1)	3.149	43	409411	1.364
14) Ethanol	(1)	3.350	45	51671	0.775
15) Freon123a	(1)	3.448	67	426445	1.592
16) Acrolein	(1)	3.606	56	29984	0.939
17) 1,1-Dichloroethene	(1)	3.709	61	325566	1.386
18) Freon 113	(1)	3.752	103	187936	1.244
19) Acetone	(1)	3.837	43	167774	1.505
20) Methyl Iodide	(1)	3.898	142	258975	1.335
21) Carbon Disulfide	(1)	3.983	76	537819	1.309
22) Isopropanol	(1)	4.117	45	225302	1.216
23) Acetonitrile	(1)	4.238	40	57356M	1.700
24) 3-Chloropropene	(1)	4.257	76	97047	1.550
25) Methylene Chloride	(1)	4.445	84	171253	1.589
26) tert-Butyl Alcohol	(1)	4.804	59	250003	1.376
27) Acrylonitrile	(1)	4.902	53	110634	1.327
28) trans-1,2-Dichloroethene	(1)	4.938	61	347784	1.336
29) Methyl t-Butyl Ether	(1)	5.048	73	198730	1.162
30) Hexane	(1)	5.528	57	243206	1.338
31) 1,1-Dichloroethane	(1)	5.717	63	327513	1.489
32) Vinyl Acetate	(1)	5.936	86	6856	0.734
33) Di-Isopropyl Ether	(1)	6.015	45	223095	1.092
36) 1,2-Dichloroethene (total)	(1)		61	588711	2.757
34) Ethyl Tert-Butyl Ether	(1)	6.690	59	160129	1.079
35) cis-1,2-Dichloroethene	(1)	6.806	61	240927	1.421
37) 2-Butanone	(1)	6.933	72	31656	1.152
38) Ethyl Acetate	(1)	7.104	70	17808	1.245

M = Compound was manually integrated.

Digitally signed by Jacob E. Bailey  
 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00082.d  
 Injection date and time: 03-SEP-2015 20:58

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.134	55	128309	1.186
40) *Bromochloromethane	(1)	7.232	130	658824	10.000
41) Tetrahydrofuran	(1)	7.408	42	88402	1.105
42) Chloroform	(1)	7.438	83	317965	1.528
43) 1,1,1-Trichloroethane	(1)	7.736	97	267089	1.463
44) Cyclohexane	(1)	7.834	56	266021	1.345
45) Carbon Tetrachloride	(1)	8.047	117	261663	1.454
46) Benzene	(2)	8.424	78	424100	1.351
47) 1,2-Dichloroethane	(2)	8.454	62	236565	1.359
48) Isooctane	(2)	8.685	57	658980	1.194
49) Tert-Amyl Methyl Ether	(2)	8.777	73	146078	1.005
50) Heptane	(2)	9.087	43	311502	1.264
51) *1,4-Difluorobenzene	(2)	9.227	114	2210952	10.000
52) Trichloroethene	(2)	9.689	130	165612	1.283
53) Ethyl Acrylate	(2)	10.066	55	148834	0.997
54) 1,2-Dichloropropane	(2)	10.097	63	151761	1.184
55) Dibromomethane	(2)	10.316	174	97609	1.185
56) 1,4-Dioxane	(2)	10.498	88	38282	0.885
57) Methyl Methacrylate	(2)	10.517	69	69369	0.964
58) Bromodichloromethane	(2)	10.699	83	293908	1.194
59) cis-1,3-Dichloropropene	(2)	11.666	75	125766	0.884
60) 4-Methyl-2-Pentanone	(2)	12.104	43	168974	0.840
61) Toluene	(3)	12.378	91	261695	1.126
64) 1,3-Dichloropropene (total)	(3)		75	260177	1.859
62) Octane	(3)	12.841	43	216748	0.845
63) trans-1,3-Dichloropropene	(3)	12.920	75	134411	0.975
65) Ethyl Methacrylate	(3)	13.297	69	87981	0.801
66) 1,1,2-Trichloroethane	(3)	13.309	97	97623	1.014
67) Tetrachloroethene	(3)	13.601	166	130758	1.129
68) 2-Hexanone	(3)	14.027	43	201435	0.980
69) Dibromochloromethane	(3)	14.167	127	115399	0.900
70) 1,2-Dibromoethane	(3)	14.368	107	140437	1.012
71) *Chlorobenzene-d5	(3)	15.554	117	2032880	10.000
72) Chlorobenzene	(3)	15.615	112	202461	1.095
73) 1,1,1,2-Tetrachloroethane	(3)	15.864	131	84633	0.964
74) Ethylbenzene	(3)	15.986	91	224042	0.908
75) m/p-Xylene	(3)	16.302	91	161013	0.816
77) Xylene (total)	(3)		91	345773	1.701

\* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey  
 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00082.d  
 Injection date and time: 03-SEP-2015 20:58

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD001

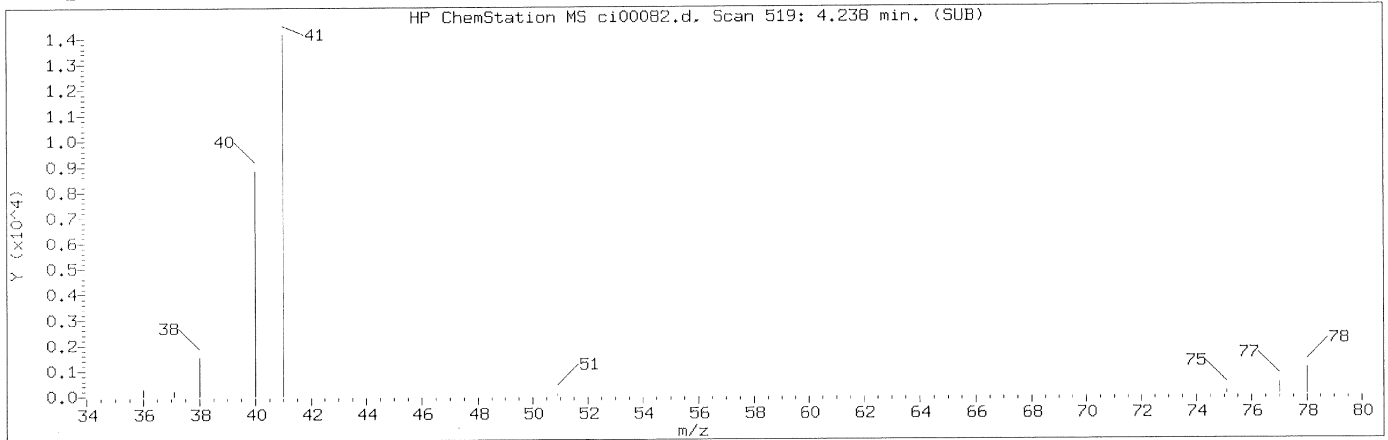
Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.276	91	184760	0.885
78) Styrene	(3)	17.300	104	135412	0.860
79) Bromoform	(3)	17.653	173	90478	0.803
80) Cumene	(3)	18.279	105	190591	0.851
81) Bromobenzene	(3)	18.900	156	79304	0.956
82) 1,1,2,2-Tetrachloroethane	(3)	19.064	83	217042	1.007
83) 1,2,3-Trichloropropane	(3)	19.107	110	46892	0.961
84) n-Propylbenzene	(3)	19.368	120	56181	0.869
85) 2-Chlorotoluene	(3)	19.478	126	60078	0.887
86) 4-Ethyltoluene	(3)	19.697	105	216679	0.889
87) 1,3,5-Trimethylbenzene	(3)	19.885	105	194116	0.944
88) Alpha Methyl Styrene	(3)	20.482	118	79513	0.802
89) tert-Butylbenzene	(3)	20.737	119	152734	0.881
90) 1,2,4-Trimethylbenzene	(3)	20.871	105	200339	0.919
91) sec-Butylbenzene	(3)	21.376	105	251630	0.871
92) 1,3-Dichlorobenzene	(3)	21.534	146	143612	0.934
93) 1,4-Dichlorobenzene	(3)	21.826	146	140670	0.897
94) p-Isopropyltoluene	(3)	21.893	119	198432	0.867
95) Benzyl Chloride	(3)	22.319	91	169750	0.739
96) 1,2-Dichlorobenzene	(3)	22.988	146	132141	0.925
97) n-Butylbenzene	(3)	23.195	91	257858	0.956
98) Hexachloroethane	(3)	23.651	117	76271	0.885
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	62137	0.894
100) 1,2,4-Trichlorobenzene	(3)	26.012	180	79083	0.981
101) Hexachlorobutadiene	(3)	26.291	225	66266	0.888
102) Naphthalene	(3)	26.310	128	221838	1.047

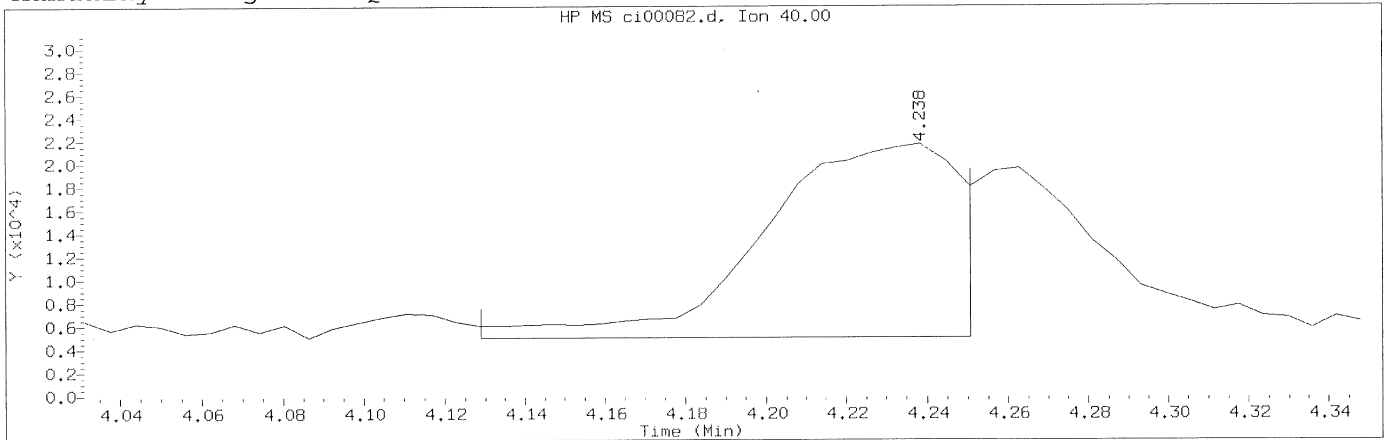
Digitally signed by Jacob E. Bailey  
 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00082.d      Instrument ID: HP09464.i  
Injection date and time: 03-SEP-2015 20:58      Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m      Sublist used: all  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sample Name: VSTD001      Lab Sample ID: VSTD001

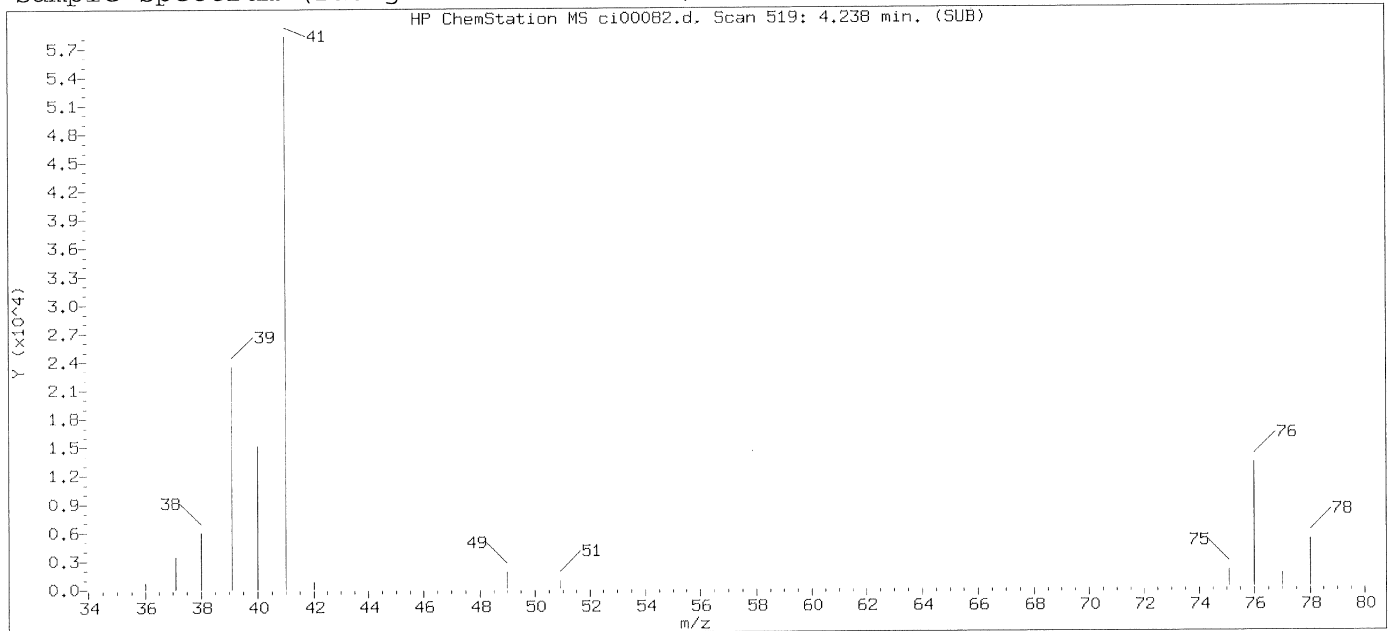
Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 519  
Retention Time (minutes): 4.238  
Quant Ion : 40.00  
Area (flag) : 57356M  
Concentration (ppb(v)) : 1.6999  
Integration start scan : 500      Integration stop scan: 520  
Y at integration start : 5022      Y at integration end: 5022

Reason for manual integration: improper integration

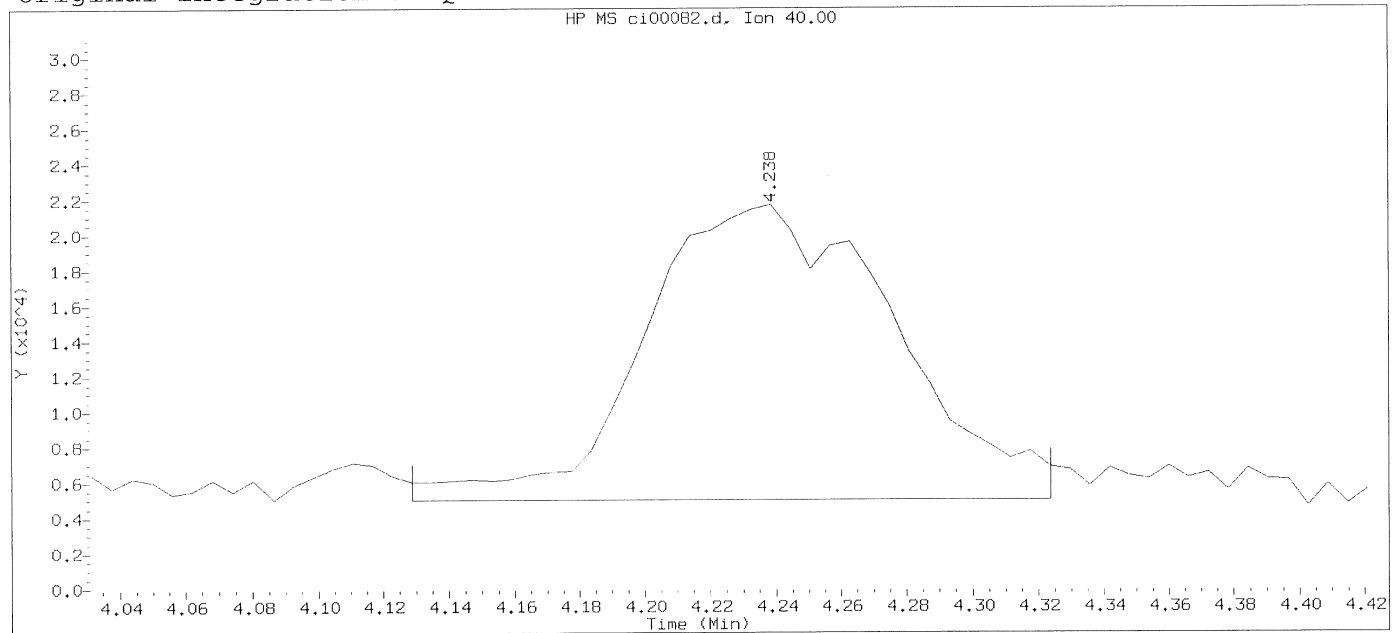
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mgp/758 9/8/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00082.d

Instrument ID: HP09464.i

Injection date and time: 03-SEP-2015 20:58

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m

Sublist used: all

Calibration date and time: 03-SEP-2015 20:54

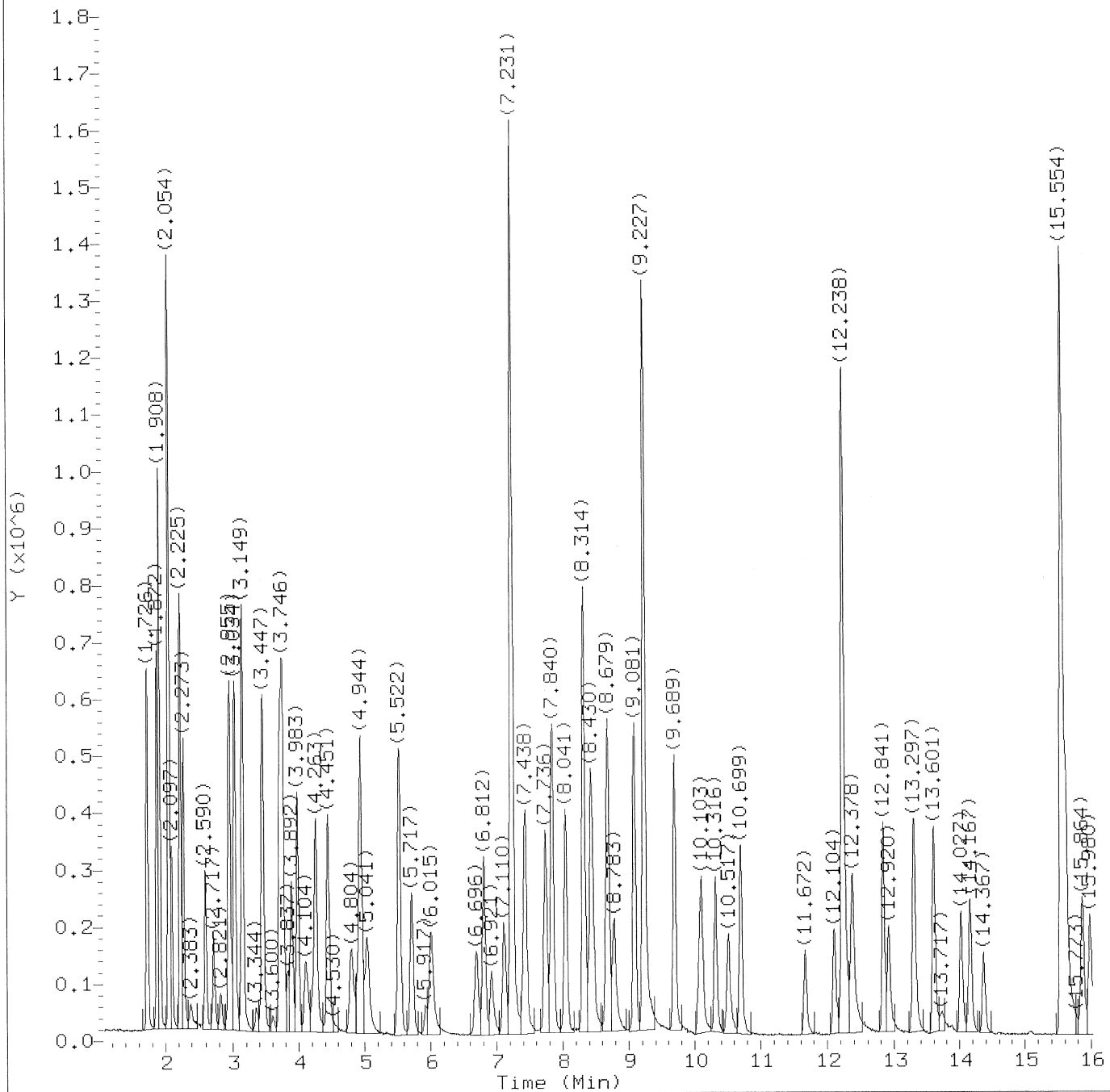
Date, time and analyst ID of latest file update: 03-Sep-2015 21:37 Automation

Sample Name: VSTD001

Lab Sample ID: VSTD001

Compound Number	: 23		
Compound Name	: Acetonitrile		
Scan Number	: 519		
Retention Time (minutes)	: 4.238		
Quant Ion	: 40.00		
Area	: 88171		
Concentration (ppb(v))	: 1.4700		
Integration start scan	: 500	Integration stop scan:	532
Y at integration start	: 5022	Y at integration end:	5022

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

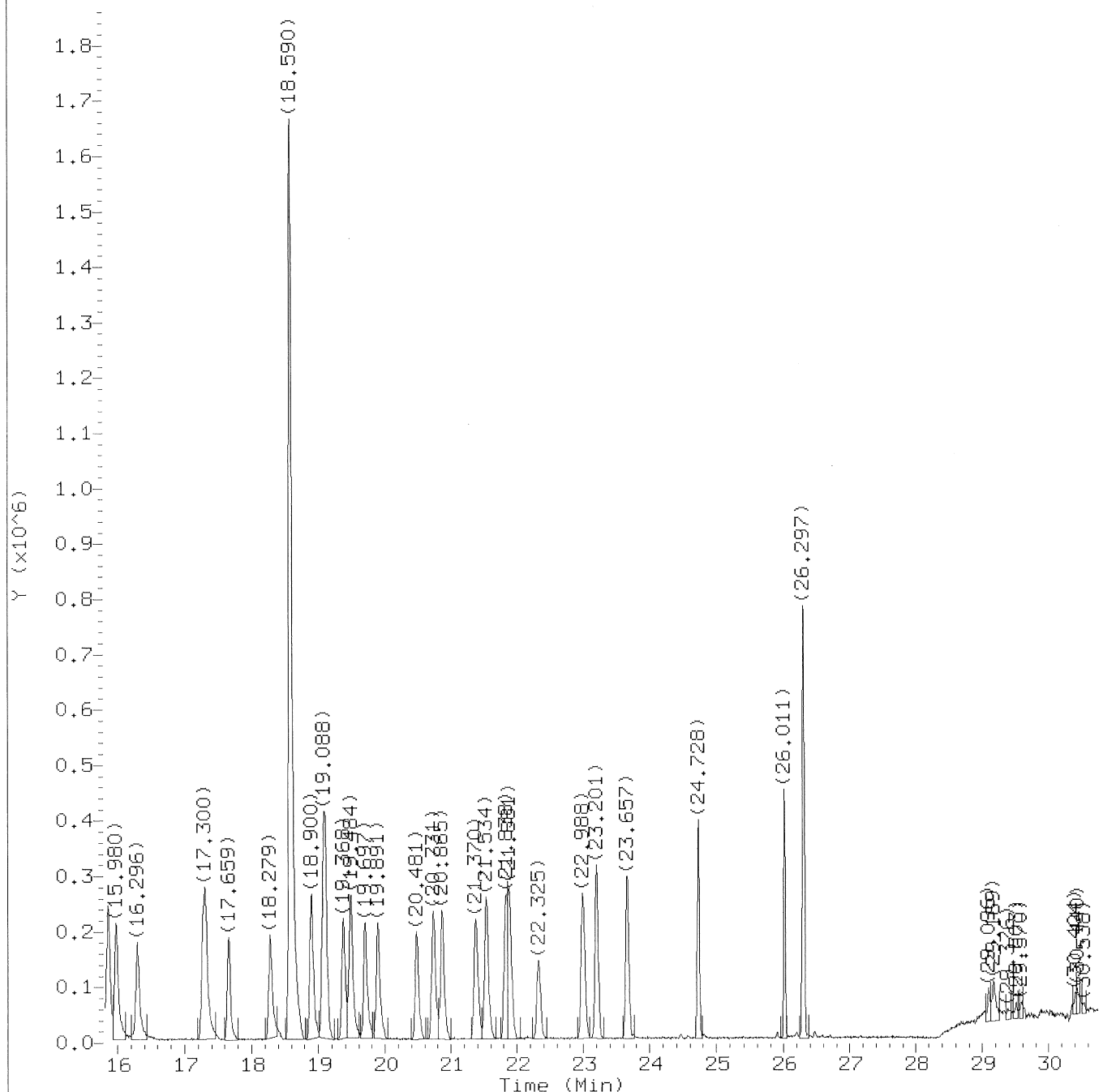
Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
 Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.872	41	271713	2.366
2) Dichlorodifluoromethane	(1)	1.908	85	651758	2.177
3) Chlorodifluoromethane	(1)	1.914	51	552589	2.316
4) Freon 114	(1)	2.048	85	599859	2.193
5) Chloromethane	(1)	2.097	52	121715	2.340
6) Vinyl Chloride	(1)	2.225	62	327800	2.326
7) 1,3-Butadiene	(1)	2.273	54	254413	2.148
8) Bromomethane	(1)	2.596	94	216412	2.045
9) Chloroethane	(1)	2.724	64	172473	2.009
10) Bromoethene	(1)	2.936	106	196725	2.220
11) Dichlorofluoromethane	(1)	2.961	67	698524	2.291
12) Trichlorofluoromethane	(1)	3.034	101	645808	2.178
13) Pentane	(1)	3.149	43	635715	2.269
14) Ethanol	(1)	3.350	45	75958	1.222
15) Freon123a	(1)	3.447	67	587305	2.350
16) Acrolein	(1)	3.600	56	34167	1.147
17) 1,1-Dichloroethene	(1)	3.709	61	506483	2.311
18) Freon 113	(1)	3.752	103	292983	2.079
19) Acetone	(1)	3.837	43	230438	2.215
20) Methyl Iodide	(1)	3.892	142	396153	2.188
21) Carbon Disulfide	(1)	3.983	76	827084	2.158
22) Isopropanol	(1)	4.117	45	332855	1.925
23) Acetonitrile	(1)	4.220	40	40080M	1.273
24) 3-Chloropropene	(1)	4.263	76	134220	2.298
25) Methylene Chloride	(1)	4.445	84	262205	2.608
26) tert-Butyl Alcohol	(1)	4.804	59	371470	2.192
27) Acrylonitrile	(1)	4.901	53	131782	1.694
28) trans-1,2-Dichloroethene	(1)	4.944	61	536575	2.209
29) Methyl t-Butyl Ether	(1)	5.041	73	282853	1.773
30) Hexane	(1)	5.528	57	374386	2.208
31) 1,1-Dichloroethane	(1)	5.717	63	471027	2.295
32) Vinyl Acetate	(1)	5.936	86	8984	1.031
33) Di-Isopropyl Ether	(1)	6.003	45	334856	1.756
36) 1,2-Dichloroethene (total)	(1)		61	886816	4.423
34) Ethyl Tert-Butyl Ether	(1)	6.696	59	217221	1.569
35) cis-1,2-Dichloroethene	(1)	6.812	61	350241	2.213
37) 2-Butanone	(1)	6.921	72	47474	1.851
38) Ethyl Acetate	(1)	7.110	70	25906	1.942

M = Compound was manually integrated.

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
 Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.128	55	175367	1.737
40) *Bromochloromethane	(1)	7.231	130	614664	10.000
41) Tetrahydrofuran	(1)	7.402	42	132290	1.773
42) Chloroform	(1)	7.438	83	426842	2.198
43) 1,1,1-Trichloroethane	(1)	7.736	97	392392	2.304
44) Cyclohexane	(1)	7.840	56	415757	2.253
45) Carbon Tetrachloride	(1)	8.041	117	395940	2.358
46) Benzene	(2)	8.424	78	516466	2.593
47) 1,2-Dichloroethane	(2)	8.460	62	287013	2.600
48) Isooctane	(2)	8.679	57	903951	2.582
49) Tert-Amyl Methyl Ether	(2)	8.783	73	211054	2.289
50) Heptane	(2)	9.081	43	387351	2.477
51) *1,4-Difluorobenzene	(2)	9.227	114	1402279	10.000
52) Trichloroethene	(2)	9.689	130	215314	2.631
53) Ethyl Acrylate	(2)	10.066	55	220913	2.333
54) 1,2-Dichloropropane	(2)	10.103	63	178768	2.200
55) Dibromomethane	(2)	10.316	174	125448	2.401
56) 1,4-Dioxane	(2)	10.504	88	63798	2.325
57) Methyl Methacrylate	(2)	10.517	69	100954	2.212
58) Bromodichloromethane	(2)	10.699	83	391364	2.506
59) cis-1,3-Dichloropropene	(2)	11.666	75	162009	1.795
60) 4-Methyl-2-Pentanone	(2)	12.104	43	296582	2.324
61) Toluene	(3)	12.378	91	318591	2.049
64) 1,3-Dichloropropene (total)	(3)		75	345089	3.779
62) Octane	(3)	12.841	43	317326	1.847
63) trans-1,3-Dichloropropene	(3)	12.926	75	183080	1.984
65) Ethyl Methacrylate	(3)	13.297	69	148271	2.017
66) 1,1,2-Trichloroethane	(3)	13.297	97	134203	2.082
67) Tetrachloroethene	(3)	13.601	166	169723	2.189
68) 2-Hexanone	(3)	14.021	43	305815	2.223
69) Dibromochloromethane	(3)	14.161	127	172534	2.010
70) 1,2-Dibromoethane	(3)	14.367	107	190995	2.057
71) *Chlorobenzene-d5	(3)	15.554	117	1360675	10.000
72) Chlorobenzene	(3)	15.621	112	261775	2.115
73) 1,1,1,2-Tetrachloroethane	(3)	15.864	131	128436	2.185
74) Ethylbenzene	(3)	15.980	91	320275	1.939
75) m/p-Xylene	(3)	16.296	91	227987	1.726
77) Xylene (total)	(3)		91	494856	3.636

\* = Compound is an internal standard.

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
 Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sample Name: VSTD002

Lab Sample ID: VSTD002

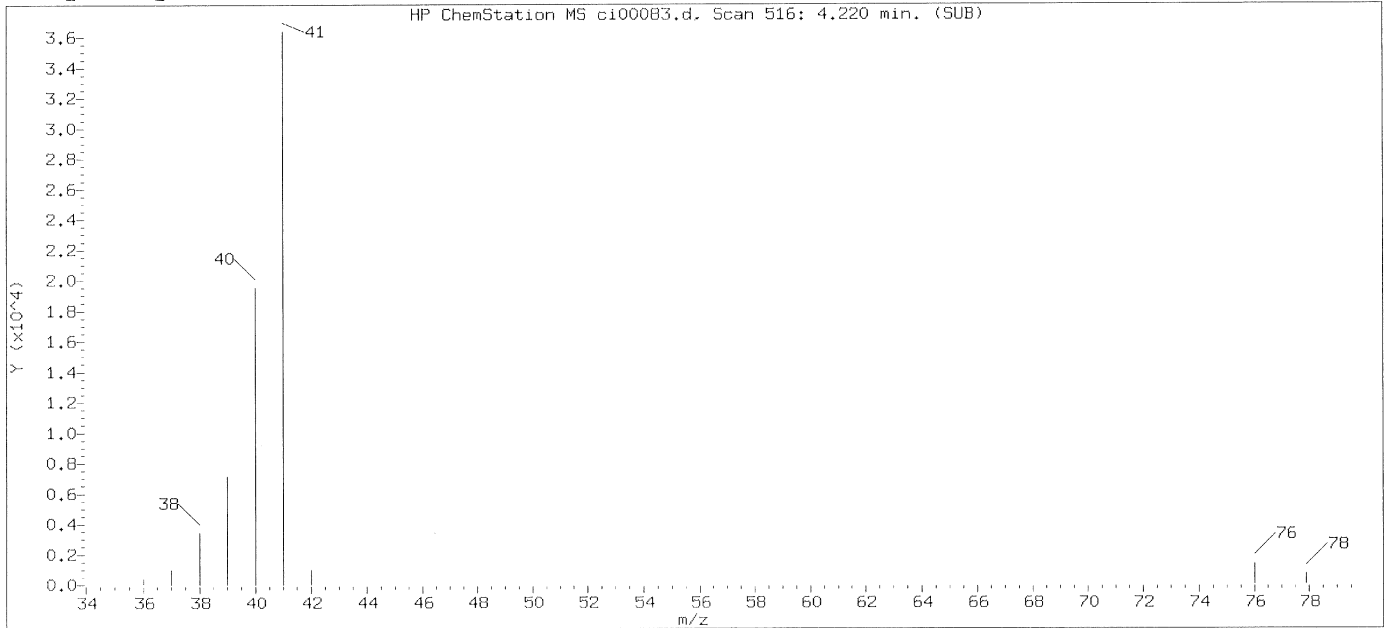
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.269	91	266869	1.911
78) Styrene	(3)	17.312	104	204719	1.942
79) Bromoform	(3)	17.659	173	143632	1.904
80) Cumene	(3)	18.279	105	283022	1.889
81) Bromobenzene	(3)	18.900	156	114878	2.069
82) 1,1,2,2-Tetrachloroethane	(3)	19.070	83	318458	2.208
83) 1,2,3-Trichloropropane	(3)	19.107	110	69272	2.121
84) n-Propylbenzene	(3)	19.368	120	80766	1.865
85) 2-Chlorotoluene	(3)	19.484	126	90658	1.999
86) 4-Ethyltoluene	(3)	19.697	105	309940	1.899
87) 1,3,5-Trimethylbenzene	(3)	19.891	105	282478	2.051
88) Alpha Methyl Styrene	(3)	20.475	118	120147	1.810
89) tert-Butylbenzene	(3)	20.731	119	223465	1.925
90) 1,2,4-Trimethylbenzene	(3)	20.865	105	294578	2.019
91) sec-Butylbenzene	(3)	21.370	105	366796	1.897
92) 1,3-Dichlorobenzene	(3)	21.534	146	213432	2.073
93) 1,4-Dichlorobenzene	(3)	21.826	146	206450	1.968
94) p-Isopropyltoluene	(3)	21.893	119	286962	1.874
95) Benzyl Chloride	(3)	22.325	91	251433	1.636
96) 1,2-Dichlorobenzene	(3)	22.988	146	186634	1.952
97) n-Butylbenzene	(3)	23.195	91	362676	2.009
98) Hexachloroethane	(3)	23.657	117	118658	2.057
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	90075	1.937
100) 1,2,4-Trichlorobenzene	(3)	26.011	180	107283	1.987
101) Hexachlorobutadiene	(3)	26.291	225	86185	1.725
102) Naphthalene	(3)	26.310	128	308988	2.178

Digitally signed by Jacob E. Bailey  
 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

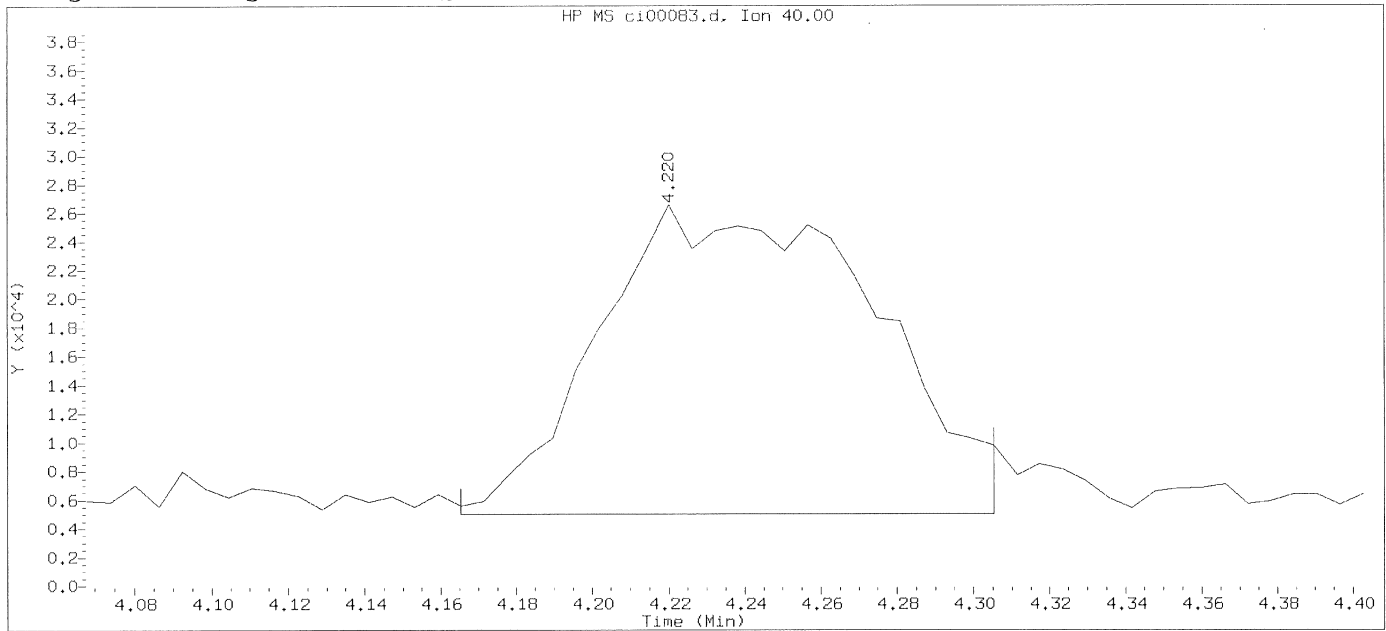




Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00083.d  
Injection date and time: 03-SEP-2015 21:41

Instrument ID: HP09464.i  
Analyst ID: jeb07445

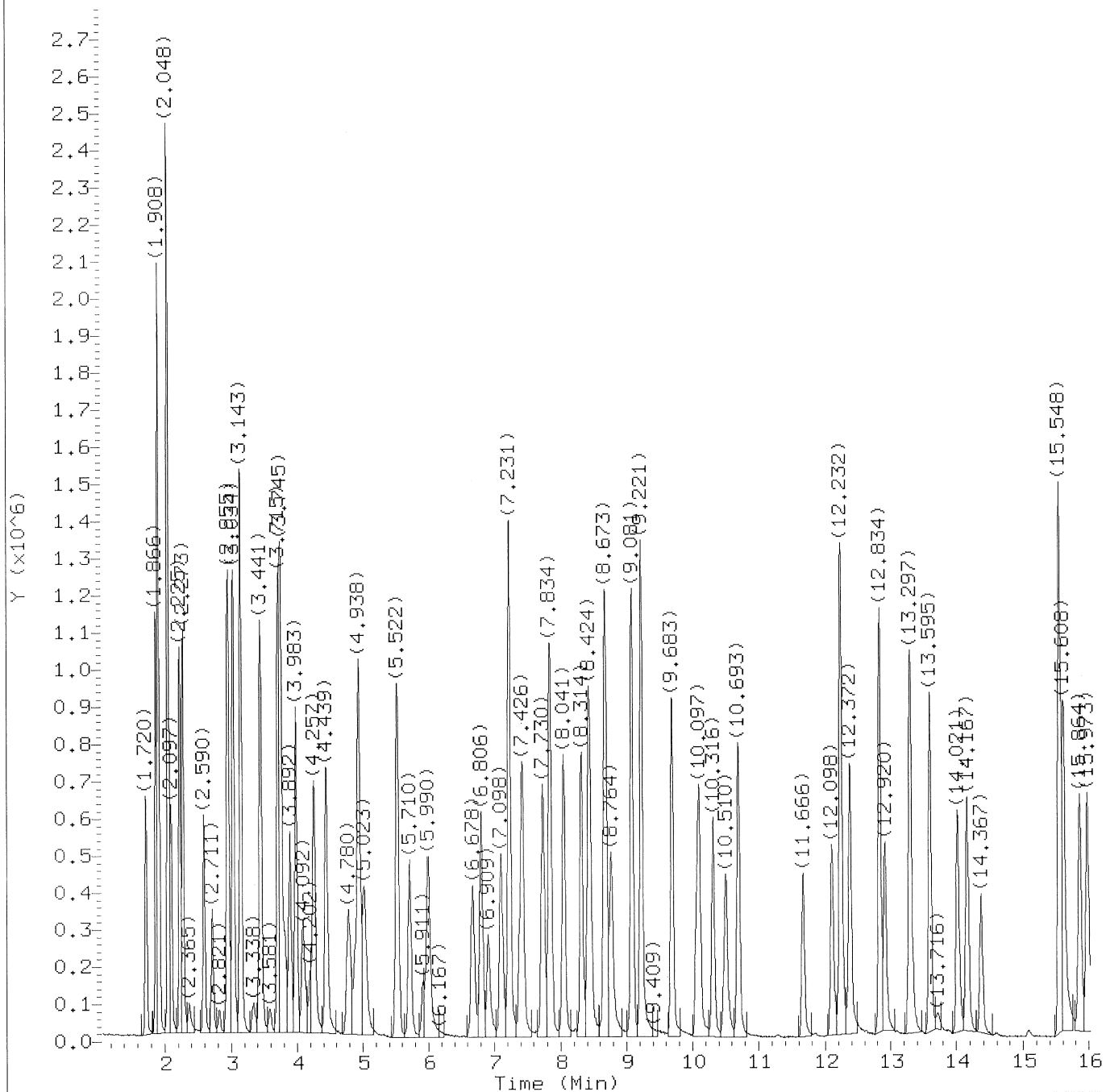
Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 03-SEP-2015 20:54  
Date, time and analyst ID of latest file update: 03-Sep-2015 22:20 Automation

Sample Name: VSTD002

Lab Sample ID: VSTD002

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 516  
Retention Time (minutes): 4.220  
Quant Ion : 40.00  
Area : 106771  
Concentration (ppb(v)) : 1.9080  
Integration start scan : 506 Integration stop scan: 529  
Y at integration start : 5023 Y at integration end: 5023

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00084.d

Injection date and time: 03-SEP-2015 22:23

Instrument ID: HP09464.i

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m

Calibration date and time: 08-SEP-2015 14:45

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sample Name: VSTD005

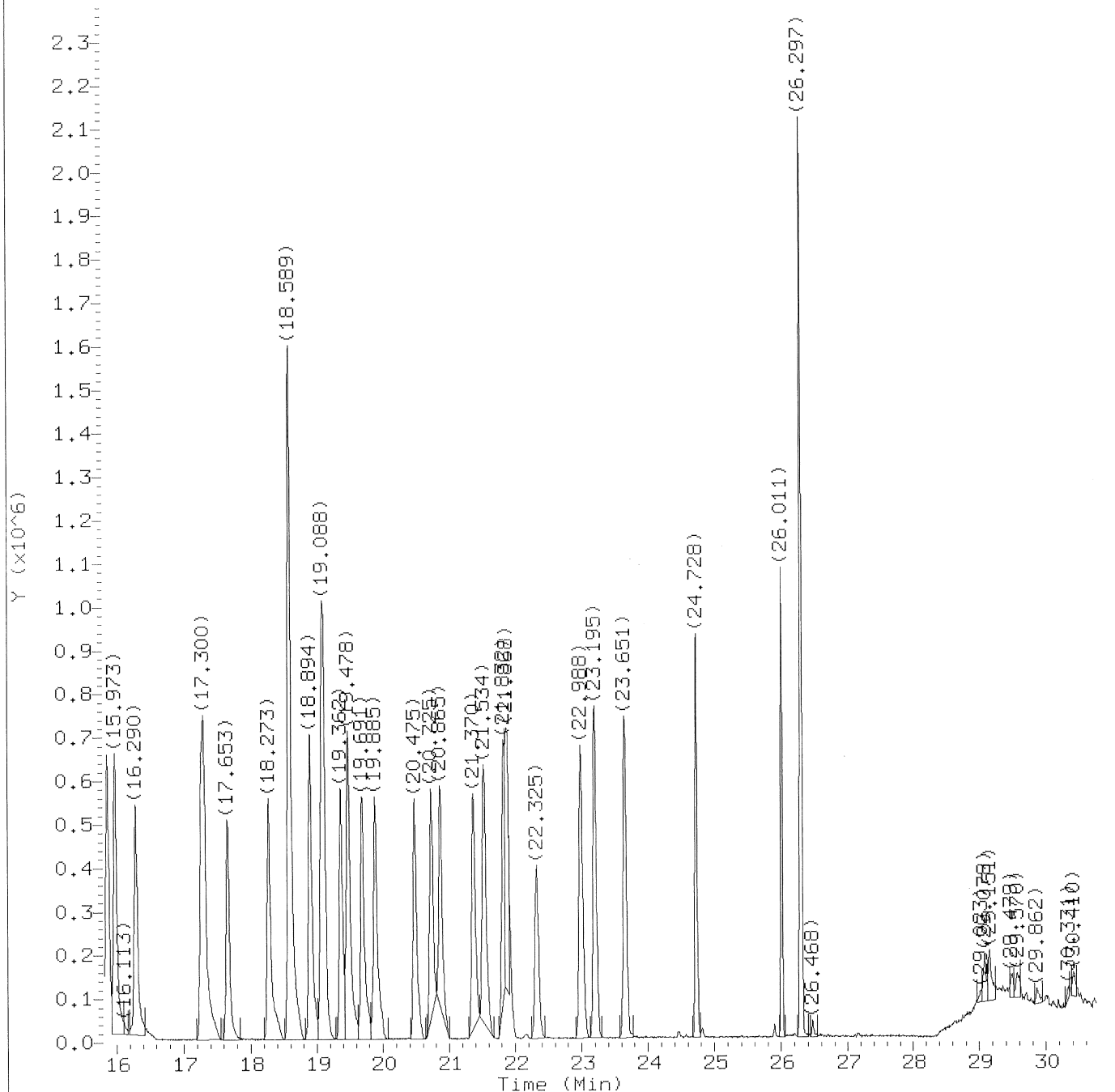
Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey

on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

page 1 of 2



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00084.d  
Injection date and time: 03-SEP-2015 22:23

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00084.d  
 Injection date and time: 03-SEP-2015 22:23

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	553767	5.589
2) Dichlorodifluoromethane	(1)	1.902	85	1355413	5.247
3) Chlorodifluoromethane	(1)	1.914	51	1129145	5.485
4) Freon 114	(1)	2.048	85	1241771	5.261
5) Chloromethane	(1)	2.091	52	245699	5.474
6) Vinyl Chloride	(1)	2.225	62	672767	5.533
7) 1,3-Butadiene	(1)	2.273	54	534497	5.231
8) Bromomethane	(1)	2.590	94	458110	5.016
9) Chloroethane	(1)	2.711	64	363420	4.905
10) Bromoethene	(1)	2.936	106	414033	5.416
11) Dichlorofluoromethane	(1)	2.961	67	1373174	5.220
12) Trichlorofluoromethane	(1)	3.034	101	1323316	5.172
13) Pentane	(1)	3.143	43	1320777	5.464
14) Ethanol	(1)	3.326	45	161939	3.018
15) Freon123a	(1)	3.441	67	1088115	5.047
16) Acrolein	(1)	3.581	56	88276	3.434
17) 1,1-Dichloroethene	(1)	3.703	61	1050831	5.557
18) Freon 113	(1)	3.745	103	579576	4.766
19) Acetone	(1)	3.812	43	495536	5.520
20) Methyl Iodide	(1)	3.892	142	843128	5.398
21) Carbon Disulfide	(1)	3.983	76	1732736	5.239
22) Isopropanol	(1)	4.086	45	751096	5.034
23) Acetonitrile	(1)	4.202	40	110033	4.051
24) 3-Chloropropene	(1)	4.257	76	255494	5.069
25) Methylene Chloride	(1)	4.445	84	501467	5.780
26) tert-Butyl Alcohol	(1)	4.786	59	849991	5.812
27) Acrylonitrile	(1)	4.883	53	307012	4.575
28) trans-1,2-Dichloroethene	(1)	4.938	61	1057806	5.048
29) Methyl t-Butyl Ether	(1)	5.023	73	736322	5.349
30) Hexane	(1)	5.522	57	744591	5.090
31) 1,1-Dichloroethane	(1)	5.710	63	863859	4.878
32) Vinyl Acetate	(1)	5.911	86	25646	3.410
33) Di-Isopropyl Ether	(1)	5.996	45	893247	5.429
36) 1,2-Dichloroethene (total)	(1)		61	1724913	9.934
34) Ethyl Tert-Butyl Ether	(1)	6.678	59	639373	5.351
35) cis-1,2-Dichloroethene	(1)	6.806	61	667107	4.886
37) 2-Butanone	(1)	6.903	72	120512	5.447
38) Ethyl Acetate	(1)	7.098	70	66012	5.734

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00084.d  
 Injection date and time: 03-SEP-2015 22:23

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.116	55	458328	5.262
40) *Bromochloromethane	(1)	7.231	130	530385	10.000
41) Tetrahydrofuran	(1)	7.390	42	327434	5.085
42) Chloroform	(1)	7.432	83	831514	4.963
43) 1,1,1-Trichloroethane	(1)	7.736	97	732226	4.982
44) Cyclohexane	(1)	7.834	56	852739	5.356
45) Carbon Tetrachloride	(1)	8.041	117	750571	5.180
46) Benzene	(2)	8.424	78	1058505	5.309
47) 1,2-Dichloroethane	(2)	8.454	62	585017	5.293
48) Isooctane	(2)	8.673	57	2017541	5.756
49) Tert-Amyl Methyl Ether	(2)	8.771	73	534199	5.787
50) Heptane	(2)	9.081	43	876168	5.597
51) *1,4-Difluorobenzene	(2)	9.221	114	1403961	10.000
52) Trichloroethene	(2)	9.689	130	395652	4.828
53) Ethyl Acrylate	(2)	10.054	55	572936	6.042
54) 1,2-Dichloropropane	(2)	10.097	63	443412	5.450
55) Dibromomethane	(2)	10.316	174	264027	5.046
56) 1,4-Dioxane	(2)	10.486	88	163215	5.941
57) Methyl Methacrylate	(2)	10.510	69	254560	5.572
58) Bromodichloromethane	(2)	10.693	83	883433	5.650
59) cis-1,3-Dichloropropene	(2)	11.666	75	447902	4.955
60) 4-Methyl-2-Pentanone	(2)	12.098	43	791252	6.191
61) Toluene	(3)	12.378	91	869584	5.575
64) 1,3-Dichloropropene (total)	(3)		75	945558	10.333
62) Octane	(3)	12.834	43	1002377	5.818
63) trans-1,3-Dichloropropene	(3)	12.920	75	497656	5.378
65) Ethyl Methacrylate	(3)	13.291	69	417525	5.663
66) 1,1,2-Trichloroethane	(3)	13.303	97	356114	5.508
67) Tetrachloroethene	(3)	13.601	166	391743	5.038
68) 2-Hexanone	(3)	14.021	43	879191	6.371
69) Dibromochloromethane	(3)	14.161	127	447060	5.193
70) 1,2-Dibromoethane	(3)	14.367	107	484248	5.199
71) *Chlorobenzene-d5	(3)	15.548	117	1364711	10.000
72) Chlorobenzene	(3)	15.621	112	688015	5.543
73) 1,1,1,2-Tetrachloroethane	(3)	15.858	131	331356	5.619
74) Ethylbenzene	(3)	15.980	91	917410	5.537
75) m/p-Xylene	(3)	16.290	91	639117	4.823
77) Xylene (total)	(3)		91	1378419	10.101

\* = Compound is an internal standard.

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00084.d  
 Injection date and time: 03-SEP-2015 22:23

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45

Sublist used: all

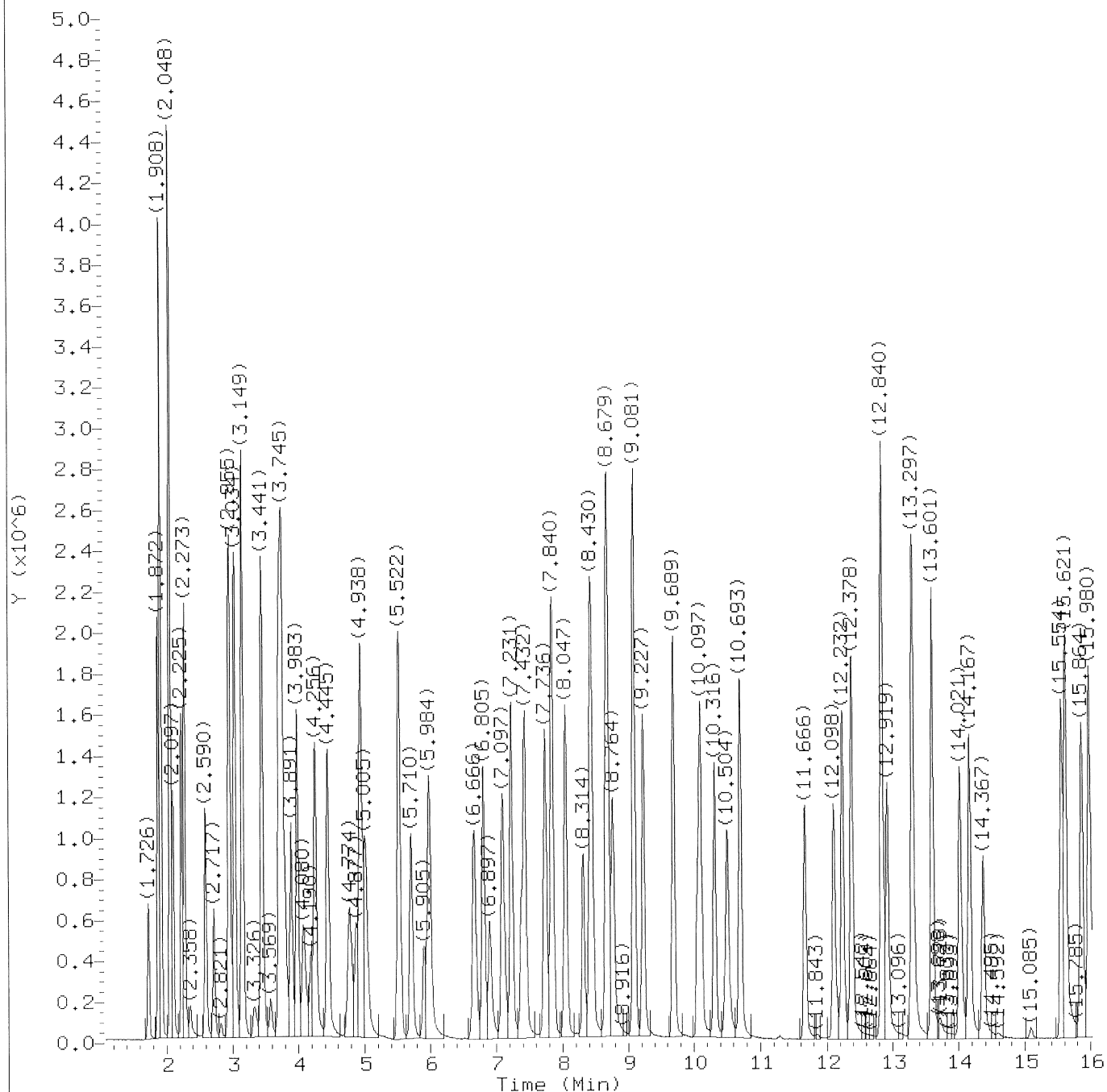
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sample Name: VSTD005

Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.263	91	739302	5.278
78) Styrene	(3)	17.306	104	569624	5.389
79) Bromoform	(3)	17.665	173	402875	5.325
80) Cumene	(3)	18.273	105	765553	5.094
81) Bromobenzene	(3)	18.900	156	300354	5.394
82) 1,1,2,2-Tetrachloroethane	(3)	19.070	83	808428	5.589
83) 1,2,3-Trichloropropane	(3)	19.100	110	172196	5.256
84) n-Propylbenzene	(3)	19.368	120	209378	4.822
85) 2-Chlorotoluene	(3)	19.478	126	238661	5.247
86) 4-Ethyltoluene	(3)	19.691	105	827025	5.052
87) 1,3,5-Trimethylbenzene	(3)	19.885	105	656512	4.753
88) Alpha Methyl Styrene	(3)	20.475	118	329207	4.946
89) tert-Butylbenzene	(3)	20.731	119	570797	4.902
90) 1,2,4-Trimethylbenzene	(3)	20.865	105	746746	5.102
91) sec-Butylbenzene	(3)	21.370	105	935723	4.825
92) 1,3-Dichlorobenzene	(3)	21.528	146	559528	5.419
93) 1,4-Dichlorobenzene	(3)	21.826	146	551254	5.238
94) p-Isopropyltoluene	(3)	21.887	119	762373	4.964
95) Benzyl Chloride	(3)	22.325	91	682686	4.428
96) 1,2-Dichlorobenzene	(3)	22.988	146	494513	5.156
97) n-Butylbenzene	(3)	23.201	91	904506	4.996
98) Hexachloroethane	(3)	23.657	117	312864	5.407
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	228678	4.903
100) 1,2,4-Trichlorobenzene	(3)	26.011	180	247943	4.579
101) Hexachlorobutadiene	(3)	26.291	225	224918	4.487
102) Naphthalene	(3)	26.309	128	763432	5.365

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 Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
 Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

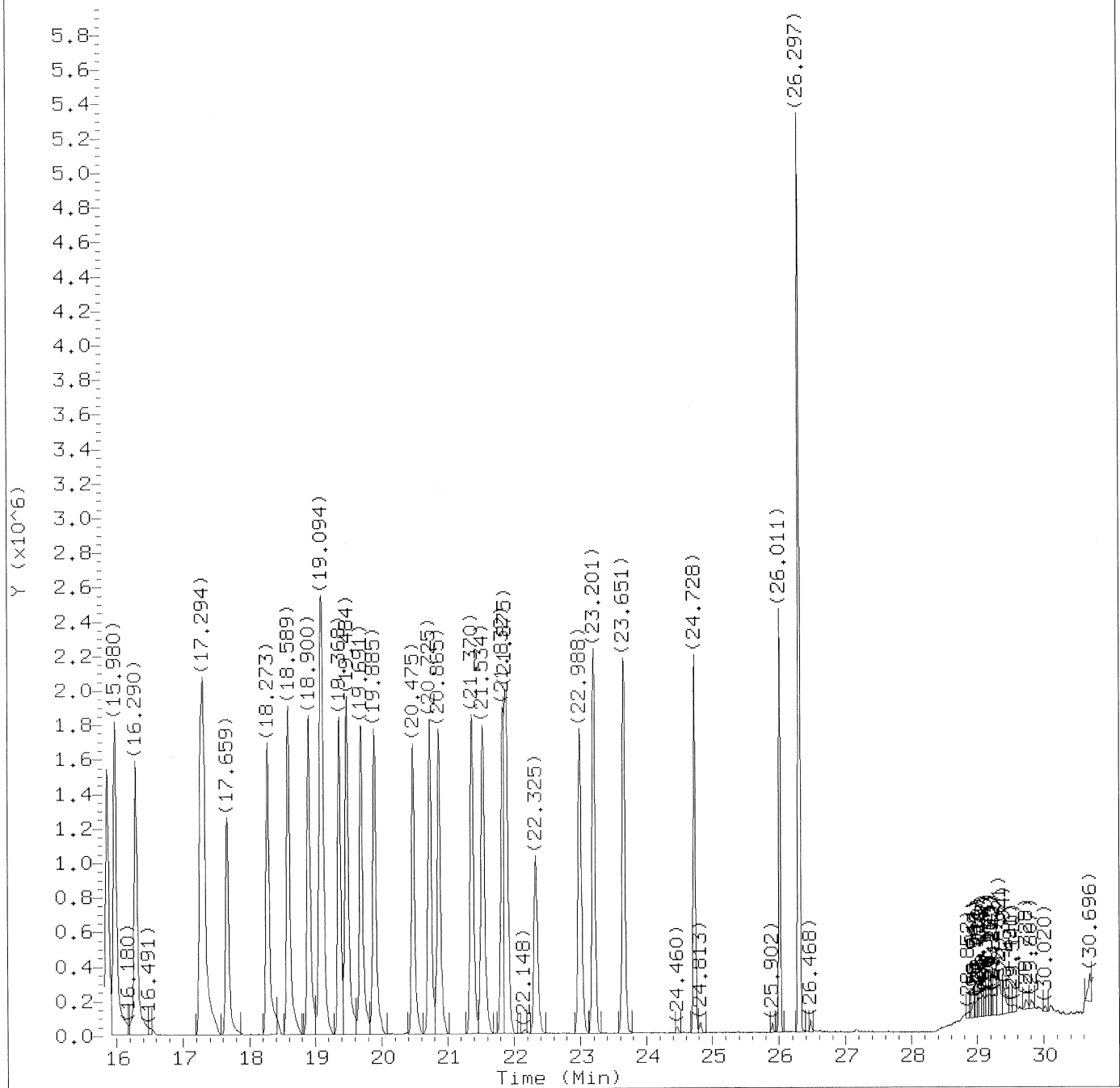
Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

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 on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

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on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445



Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
 Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.872	41	1085868	9.235
2) Dichlorodifluoromethane	(1)	1.908	85	2609992	8.513
3) Chlorodifluoromethane	(1)	1.920	51	2152439	8.811
4) Freon 114	(1)	2.048	85	2435552	8.695
5) Chloromethane	(1)	2.097	52	468568	8.797
6) Vinyl Chloride	(1)	2.225	62	1297240	8.990
7) 1,3-Butadiene	(1)	2.273	54	1051485	8.671
8) Bromomethane	(1)	2.590	94	871885	8.044
9) Chloroethane	(1)	2.717	64	693702	7.890
10) Bromoethene	(1)	2.936	106	823780	9.080
11) Dichlorofluoromethane	(1)	2.961	67	2643234	8.467
12) Trichlorofluoromethane	(1)	3.034	101	2505474	8.251
13) Pentane	(1)	3.149	43	2482325	8.654
14) Ethanol	(1)	3.320	45	313504	4.924
15) Freon123a	(1)	3.441	67	2224030	8.692
16) Acrolein	(1)	3.569	56	228308	7.484
17) 1,1-Dichloroethene	(1)	3.709	61	2004835	8.934
18) Freon 113	(1)	3.752	103	1136856	7.878
19) Acetone	(1)	3.800	43	1139763	10.699
20) Methyl Iodide	(1)	3.891	142	1569474	8.467
21) Carbon Disulfide	(1)	3.983	76	3186695	8.119
22) Isopropanol	(1)	4.080	45	1470605	8.306
23) Acetonitrile	(1)	4.190	40	316186M	9.809
24) 3-Chloropropene	(1)	4.256	76	521827	8.724
25) Methylene Chloride	(1)	4.445	84	946706	9.195
26) tert-Butyl Alcohol	(1)	4.780	59	1619006	9.328
27) Acrylonitrile	(1)	4.877	53	783535	9.839
28) trans-1,2-Dichloroethene	(1)	4.938	61	2033707	8.178
29) Methyl t-Butyl Ether	(1)	5.005	73	1729519	10.588
30) Hexane	(1)	5.522	57	1621997	9.343
31) 1,1-Dichloroethane	(1)	5.710	63	1844696	8.778
32) Vinyl Acetate	(1)	5.905	86	86146	9.652
33) Di-Isopropyl Ether	(1)	5.984	45	2260454	11.577
36) 1,2-Dichloroethene (total)	(1)		61	3494043	17.191
34) Ethyl Tert-Butyl Ether	(1)	6.672	59	1559678	10.999
35) cis-1,2-Dichloroethene	(1)	6.805	61	1460336	9.013
37) 2-Butanone	(1)	6.897	72	271635	10.346
38) Ethyl Acetate	(1)	7.085	70	158339	11.591

M = Compound was manually integrated.

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
 Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.110	55	1172734	11.345
40) *Bromochloromethane	(1)	7.231	130	629399	10.000
41) Tetrahydrofuran	(1)	7.383	42	819850	10.729
42) Chloroform	(1)	7.432	83	1781165	8.958
43) 1,1,1-Trichloroethane	(1)	7.736	97	1591147	9.123
44) Cyclohexane	(1)	7.840	56	1805558	9.556
45) Carbon Tetrachloride	(1)	8.047	117	1601689	9.315
46) Benzene	(2)	8.424	78	2524915	10.982
47) 1,2-Dichloroethane	(2)	8.454	62	1336081	10.483
48) Isooctane	(2)	8.679	57	4740664	11.730
49) Tert-Amyl Methyl Ether	(2)	8.764	73	1300657	12.220
50) Heptane	(2)	9.081	43	2057447	11.398
51) *1,4-Difluorobenzene	(2)	9.221	114	1618895	10.000
52) Trichloroethene	(2)	9.689	130	839877	8.888
53) Ethyl Acrylate	(2)	10.054	55	1347337	12.323
54) 1,2-Dichloropropane	(2)	10.103	63	1038624	11.071
55) Dibromomethane	(2)	10.316	174	598089	9.914
56) 1,4-Dioxane	(2)	10.480	88	364550	11.508
57) Methyl Methacrylate	(2)	10.510	69	600663	11.402
58) Bromodichloromethane	(2)	10.693	83	1896639	10.520
59) cis-1,3-Dichloropropene	(2)	11.666	75	1123977	10.784
60) 4-Methyl-2-Pentanone	(2)	12.098	43	1707577	11.588
61) Toluene	(3)	12.378	91	2248115	12.992
64) 1,3-Dichloropropene (total)	(3)		75	2338665	22.617
62) Octane	(3)	12.840	43	2537997	13.280
63) trans-1,3-Dichloropropene	(3)	12.919	75	1214688	11.833
65) Ethyl Methacrylate	(3)	13.291	69	980129	11.985
66) 1,1,2-Trichloroethane	(3)	13.303	97	851526	11.873
67) Tetrachloroethene	(3)	13.601	166	925203	10.726
68) 2-Hexanone	(3)	14.021	43	1916549	12.519
69) Dibromochloromethane	(3)	14.167	127	1033070	10.819
70) 1,2-Dibromoethane	(3)	14.367	107	1150973	11.139
71) *Chlorobenzene-d5	(3)	15.554	117	1513887	10.000
72) Chlorobenzene	(3)	15.621	112	1637003	11.889
73) 1,1,1,2-Tetrachloroethane	(3)	15.864	131	798616	12.209
74) Ethylbenzene	(3)	15.980	91	2529851	13.765
75) m/p-Xylene	(3)	16.290	91	1777914	12.095
77) Xylene (total)	(3)		91	3859617	25.492

\* = Compound is an internal standard.

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
 Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:45  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD010

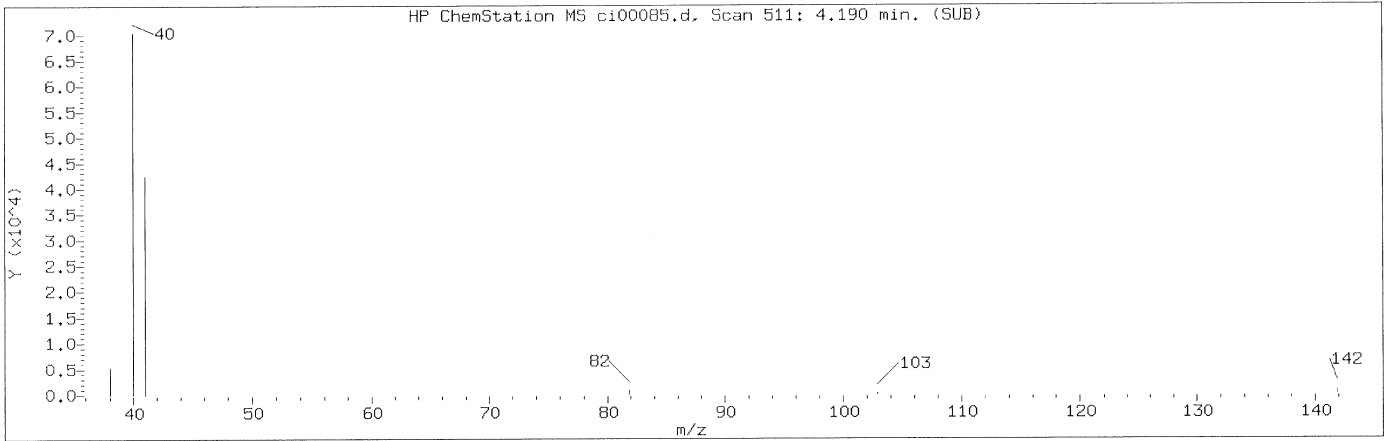
Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.269	91	2081703	13.397
78) Styrene	(3)	17.306	104	1555033	13.261
79) Bromoform	(3)	17.659	173	1026260	12.229
80) Cumene	(3)	18.273	105	2305142	13.827
81) Bromobenzene	(3)	18.900	156	793420	12.846
82) 1,1,2,2-Tetrachloroethane	(3)	19.076	83	2027767	12.636
83) 1,2,3-Trichloropropane	(3)	19.106	110	440028	12.108
84) n-Propylbenzene	(3)	19.368	120	619365	12.858
85) 2-Chlorotoluene	(3)	19.484	126	645576	12.794
86) 4-Ethyltoluene	(3)	19.691	105	2344687	12.912
87) 1,3,5-Trimethylbenzene	(3)	19.885	105	1986202	12.964
88) Alpha Methyl Styrene	(3)	20.475	118	939313	12.721
89) tert-Butylbenzene	(3)	20.731	119	1666253	12.899
90) 1,2,4-Trimethylbenzene	(3)	20.865	105	2025728	12.477
91) sec-Butylbenzene	(3)	21.370	105	2781539	12.930
92) 1,3-Dichlorobenzene	(3)	21.534	146	1428554	12.473
93) 1,4-Dichlorobenzene	(3)	21.826	146	1414437	12.117
94) p-Isopropyltoluene	(3)	21.887	119	2140236	12.561
95) Benzyl Chloride	(3)	22.325	91	1772080	10.362
96) 1,2-Dichlorobenzene	(3)	22.988	146	1276480	11.998
97) n-Butylbenzene	(3)	23.201	91	2444131	12.170
98) Hexachloroethane	(3)	23.651	117	853696	13.300
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	576244	11.138
100) 1,2,4-Trichlorobenzene	(3)	26.011	180	581442	9.681
101) Hexachlorobutadiene	(3)	26.291	225	635825	11.435
102) Naphthalene	(3)	26.309	128	1720824	10.901

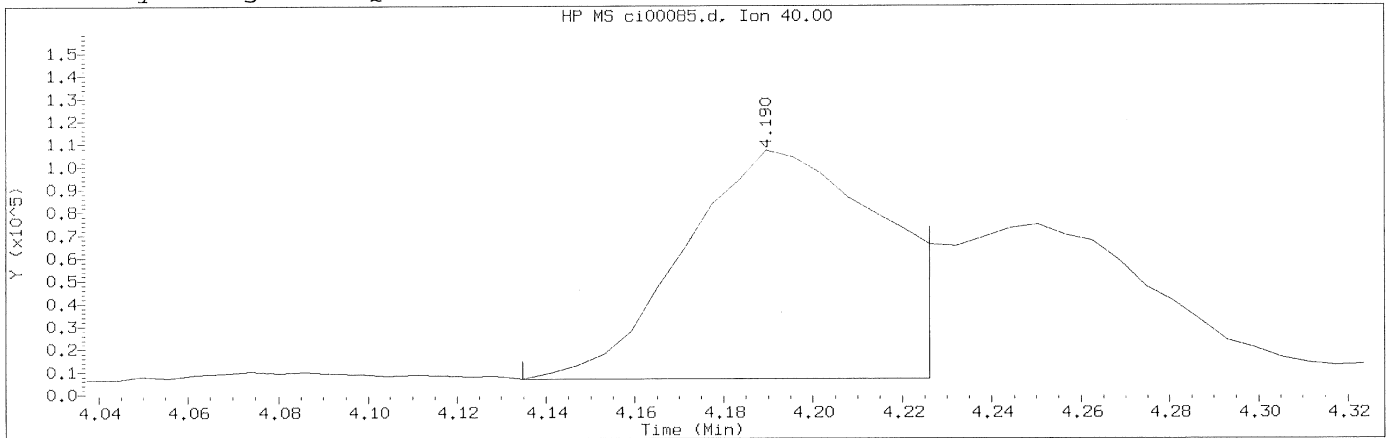
page 3 of 3

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 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:45  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:45 jeb07445

Sublist used: all

Sample Name: VSTD010

Lab Sample ID: VSTD010

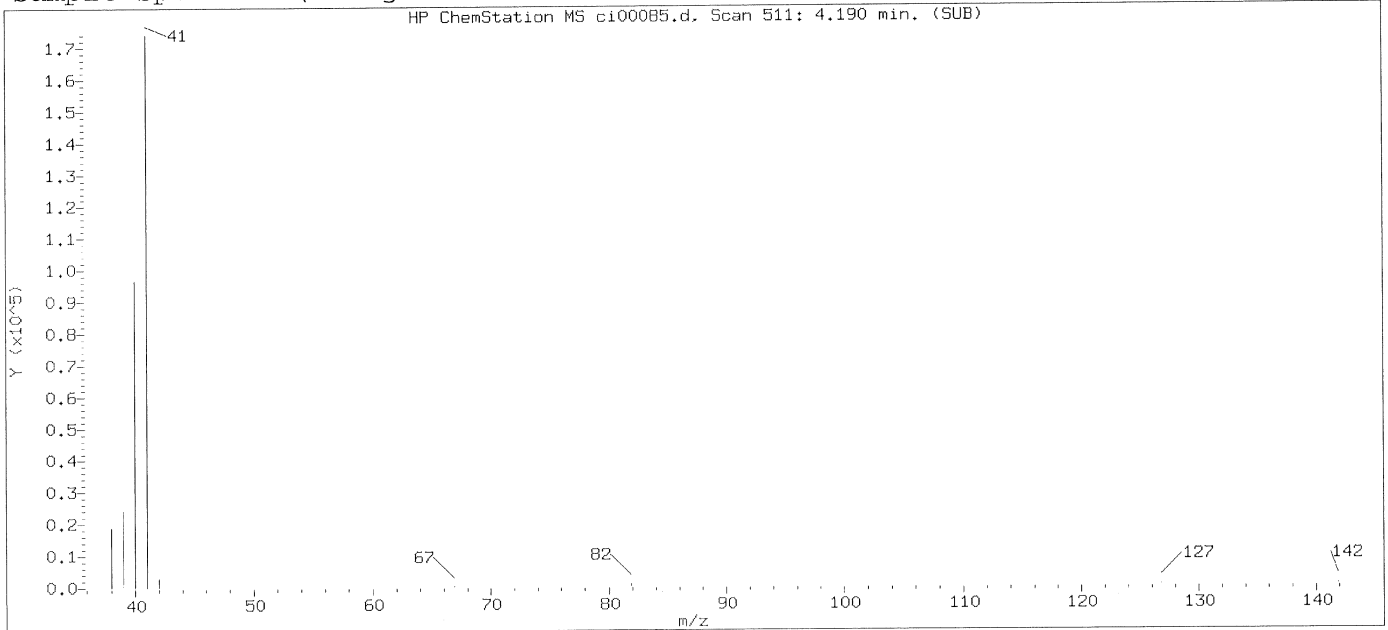
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Compound Name : Acetonitrile  
Scan Number : 511  
Retention Time (minutes): 4.190  
Quant Ion : 40.00  
Area (flag) : 316186M  
Concentration (ppb(v)) : 9.8091  
Integration start scan : 501      Integration stop scan: 516  
Y at integration start : 6874      Y at integration end: 6874

Reason for manual integration: improper integration

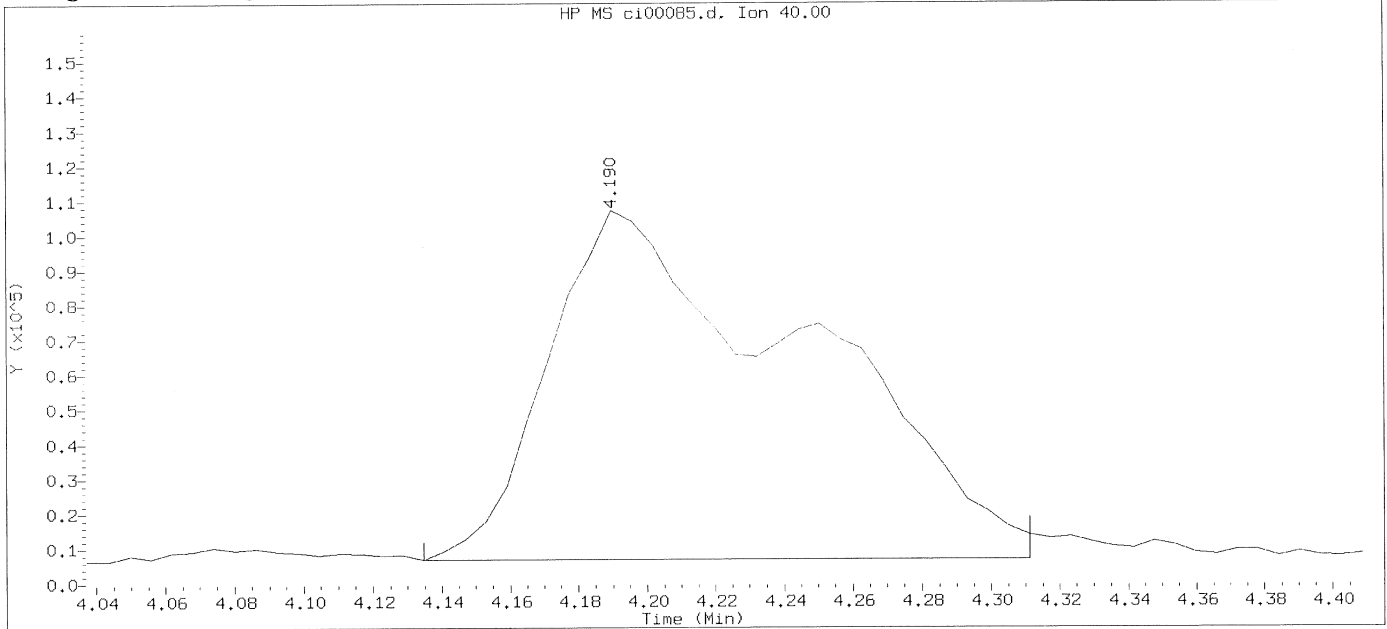
Analyst responsible for change: Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mpo/758 9/8/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00085.d  
Injection date and time: 03-SEP-2015 23:07

Instrument ID: HP09464.i  
Analyst ID: jeb07445

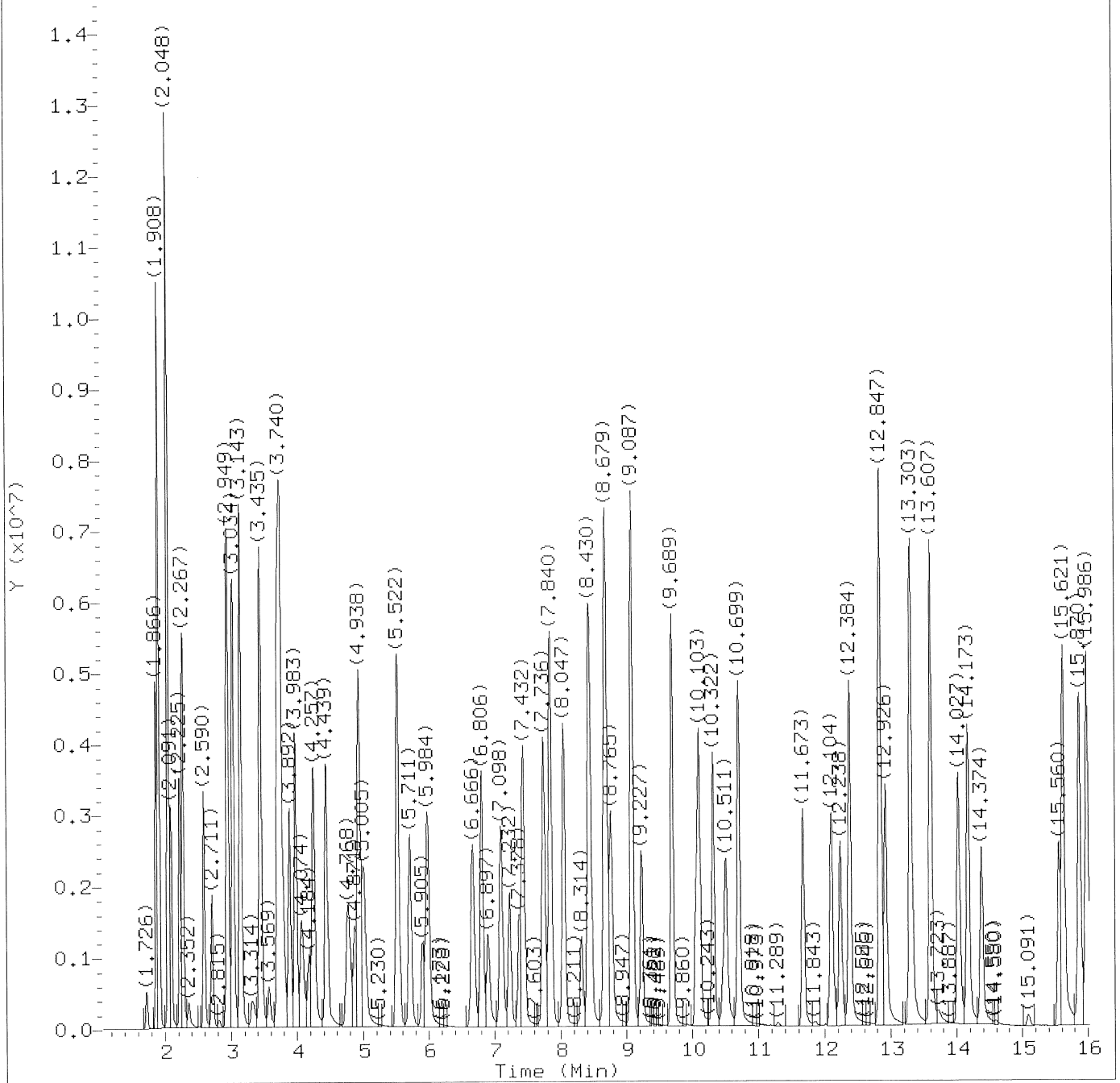
Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 03-SEP-2015 20:54  
Date, time and analyst ID of latest file update: 03-Sep-2015 23:46 Automation

Sample Name: VSTD010

Lab Sample ID: VSTD010

Compound Number : 23  
Compound Name : Acetonitrile  
Scan Number : 511  
Retention Time (minutes): 4.190  
Quant Ion : 40.00  
Area : 525555  
Concentration (ppb(v)) : 9.1717  
Integration start scan : 501  
Integration stop scan: 530  
Y at integration start : 6874  
Y at integration end: 6874

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
Analyst ID: jeb07445

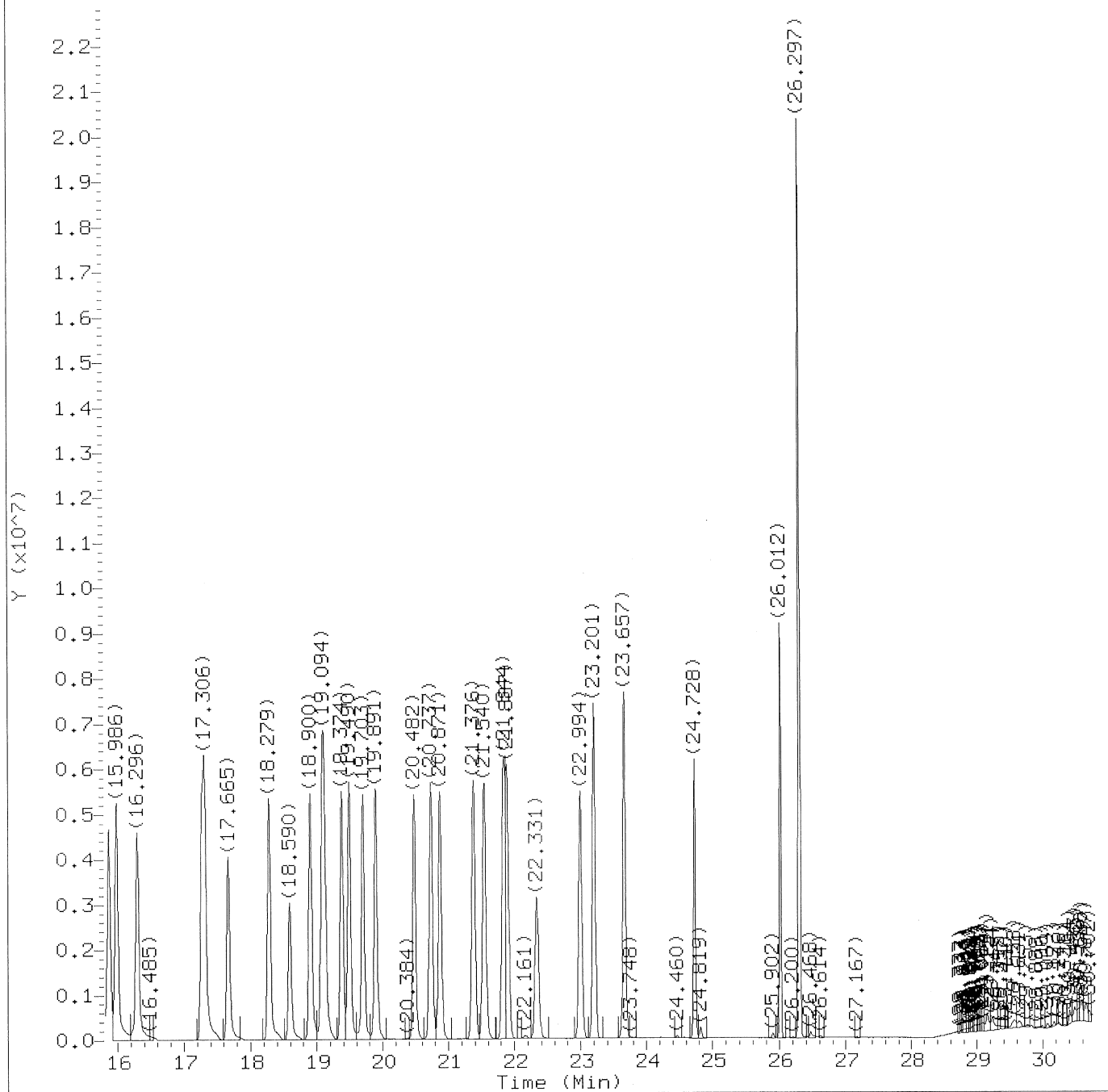
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Calibration date and time: 08-SEP-2015 14:46  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.  
Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:46  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
 Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	2779041	21.134
2) Dichlorodifluoromethane	(1)	1.908	85	6408872	18.694
3) Chlorodifluoromethane	(1)	1.914	51	5351301	19.589
4) Freon 114	(1)	2.048	85	6427124	20.518
5) Chloromethane	(1)	2.097	52	1273438	21.380
6) Vinyl Chloride	(1)	2.219	62	3470368	21.507
7) 1,3-Butadiene	(1)	2.267	54	2820960	20.803
8) Bromomethane	(1)	2.590	94	2465411	20.341
9) Chloroethane	(1)	2.711	64	1964234	19.978
10) Bromoethene	(1)	2.937	106	2533744	24.975
11) Dichlorofluoromethane	(1)	2.955	67	7108429	20.363
12) Trichlorofluoromethane	(1)	3.034	101	6606667	19.457
13) Pentane	(1)	3.143	43	6364053M	19.840
14) Ethanol	(1)	3.308	45	743651	10.445
15) Freon123a	(1)	3.435	67	6108208	21.348
16) Acrolein	(1)	3.569	56	684225	20.058
17) 1,1-Dichloroethene	(1)	3.703	61	5444716	21.698
18) Freon 113	(1)	3.746	103	3330995	20.640
19) Acetone	(1)	3.794	43	2382821	20.003
20) Methyl Iodide	(1)	3.892	142	4636261	22.367
21) Carbon Disulfide	(1)	3.983	76	8256752	18.811
22) Isopropanol	(1)	4.074	45	3882503	19.609
23) Acetonitrile	(1)	4.184	40	765274	21.230
24) 3-Chloropropene	(1)	4.257	76	1530303	22.878
25) Methylene Chloride	(1)	4.439	84	2566943	22.294
26) tert-Butyl Alcohol	(1)	4.768	59	4526285	23.321
27) Acrylonitrile	(1)	4.871	53	1951945	21.918
28) trans-1,2-Dichloroethene	(1)	4.938	61	5087299	18.294
29) Methyl t-Butyl Ether	(1)	5.011	73	4165405	22.802
30) Hexane	(1)	5.522	57	4479864	23.076
31) 1,1-Dichloroethane	(1)	5.711	63	4875190	20.745
32) Vinyl Acetate	(1)	5.905	86	225490	22.592
33) Di-Isopropyl Ether	(1)	5.984	45	5427207	24.856
36) 1,2-Dichloroethene (total)	(1)		61	8912028	39.403
34) Ethyl Tert-Butyl Ether	(1)	6.666	59	4030318	25.417
35) cis-1,2-Dichloroethene	(1)	6.806	61	3824729	21.109
37) 2-Butanone	(1)	6.897	72	620436	21.131
38) Ethyl Acetate	(1)	7.092	70	373430	24.445

M = Compound was manually integrated.

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445



Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
 Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.110	55	2770695	23.969
40) *Bromochloromethane	(1)	7.232	130	703840	10.000
41) Tetrahydrofuran	(1)	7.371	42	1962577	22.966
42) Chloroform	(1)	7.432	83	4686834	21.079
43) 1,1,1-Trichloroethane	(1)	7.736	97	4255291	21.817
44) Cyclohexane	(1)	7.840	56	4788117	22.661
45) Carbon Tetrachloride	(1)	8.047	117	4195081	21.816
46) Benzene	(2)	8.424	78	6676919	18.632
47) 1,2-Dichloroethane	(2)	8.460	62	3371699	16.973
48) Isooctane	(2)	8.679	57	12722681	20.196
49) Tert-Amyl Methyl Ether	(2)	8.765	73	3404369	20.522
50) Heptane	(2)	9.087	43	5525175	19.638
51) *1,4-Difluorobenzene	(2)	9.227	114	2523292	10.000
52) Trichloroethene	(2)	9.689	130	2566660	17.426
53) Ethyl Acrylate	(2)	10.054	55	3392875	19.909
54) 1,2-Dichloropropane	(2)	10.103	63	2752929	18.827
55) Dibromomethane	(2)	10.322	174	1750172	18.612
56) 1,4-Dioxane	(2)	10.474	88	942581	19.090
57) Methyl Methacrylate	(2)	10.517	69	1488001	18.123
58) Bromodichloromethane	(2)	10.699	83	5194283	18.485
59) cis-1,3-Dichloropropene	(2)	11.673	75	3149122	19.386
60) 4-Methyl-2-Pentanone	(2)	12.104	43	4488885	19.544
61) Toluene	(3)	12.384	91	5841402	21.003
64) 1,3-Dichloropropene (total)	(3)		75	6484322	39.598
62) Octane	(3)	12.841	43	6836946	22.256
63) trans-1,3-Dichloropropene	(3)	12.926	75	3335200	20.213
65) Ethyl Methacrylate	(3)	13.297	69	2987743	22.729
66) 1,1,2-Trichloroethane	(3)	13.309	97	2364985	20.516
67) Tetrachloroethene	(3)	13.607	166	3010819	21.717
68) 2-Hexanone	(3)	14.027	43	5123532	20.821
69) Dibromochloromethane	(3)	14.173	127	3060053	19.937
70) 1,2-Dibromoethane	(3)	14.374	107	3241816	19.520
71) *Chlorobenzene-d5	(3)	15.554	117	2433328	10.000
72) Chlorobenzene	(3)	15.621	112	4670876	21.105
73) 1,1,1,2-Tetrachloroethane	(3)	15.870	131	2364168	22.486
74) Ethylbenzene	(3)	15.986	91	6964808	23.577
75) m/p-Xylene	(3)	16.296	91	5110303	21.629
77) Xylene (total)	(3)		91	11041514	45.377

\* = Compound is an internal standard.

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
 Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD025

Lab Sample ID: VSTD025

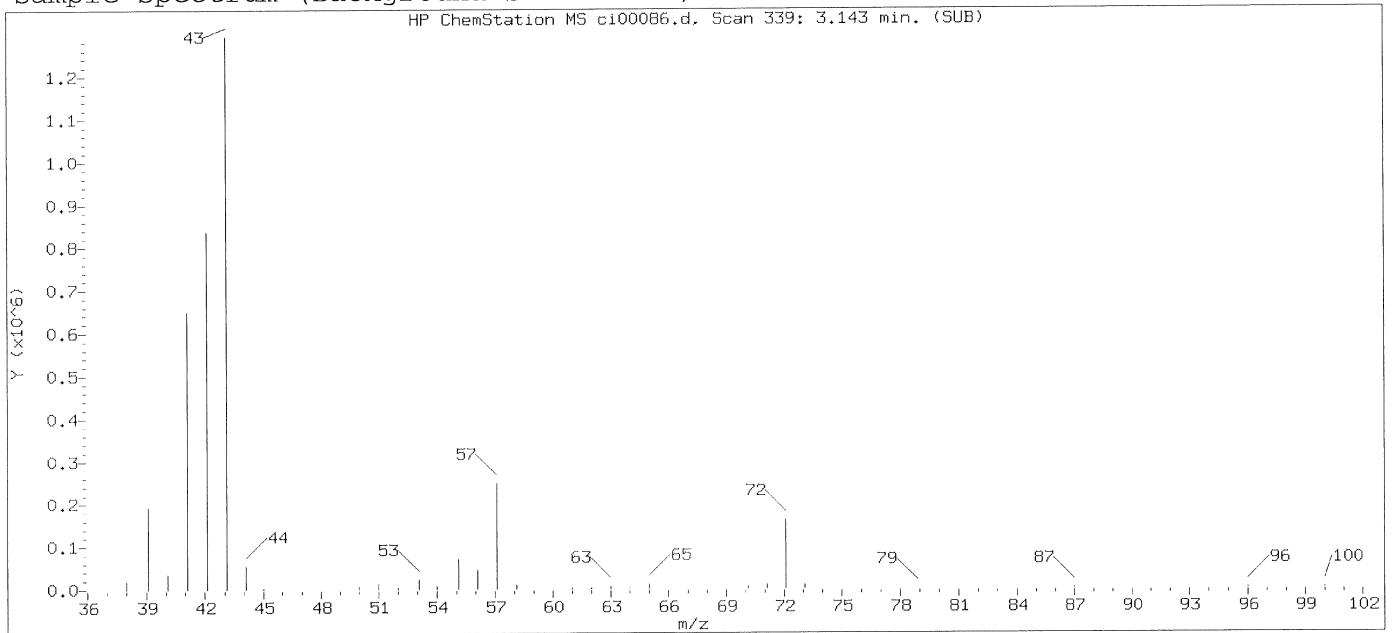
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.269	91	5931211	23.748
78) Styrene	(3)	17.312	104	4547387	24.126
79) Bromoform	(3)	17.665	173	3227365	23.926
80) Cumene	(3)	18.279	105	6716647	25.066
81) Bromobenzene	(3)	18.906	156	2347012	23.641
82) 1,1,2,2-Tetrachloroethane	(3)	19.082	83	5529044	21.436
83) 1,2,3-Trichloropropane	(3)	19.113	110	1192545	20.416
84) n-Propylbenzene	(3)	19.374	120	1836218	23.716
85) 2-Chlorotoluene	(3)	19.490	126	1896267	23.380
86) 4-Ethyltoluene	(3)	19.703	105	6641926	22.756
87) 1,3,5-Trimethylbenzene	(3)	19.891	105	5748405	23.343
88) Alpha Methyl Styrene	(3)	20.482	118	2913074	24.544
89) tert-Butylbenzene	(3)	20.737	119	5122828	24.673
90) 1,2,4-Trimethylbenzene	(3)	20.871	105	5896501	22.594
91) sec-Butylbenzene	(3)	21.376	105	8405855	24.310
92) 1,3-Dichlorobenzene	(3)	21.546	146	4364309	23.708
93) 1,4-Dichlorobenzene	(3)	21.838	146	4500675	23.986
94) p-Isopropyltoluene	(3)	21.893	119	6825223	24.922
95) Benzyl Chloride	(3)	22.331	91	5298092	19.275
96) 1,2-Dichlorobenzene	(3)	22.994	146	3925383	22.954
97) n-Butylbenzene	(3)	23.201	91	7450595	23.080
98) Hexachloroethane	(3)	23.657	117	2902571	28.133
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	1752011	21.068
100) 1,2,4-Trichlorobenzene	(3)	26.012	180	2273379	23.548
101) Hexachlorobutadiene	(3)	26.291	225	2589954	28.980
102) Naphthalene	(3)	26.310	128	5719024	22.539

page 3 of 3

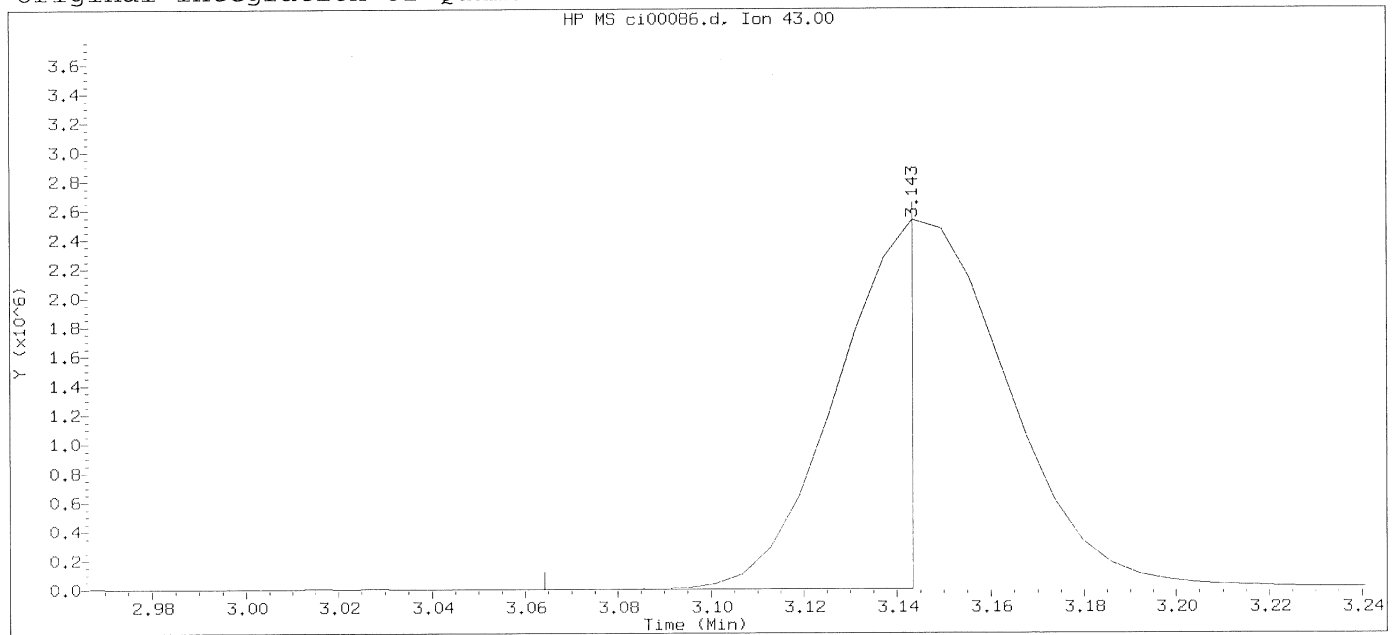
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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00086.d  
 Injection date and time: 03-SEP-2015 23:50

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

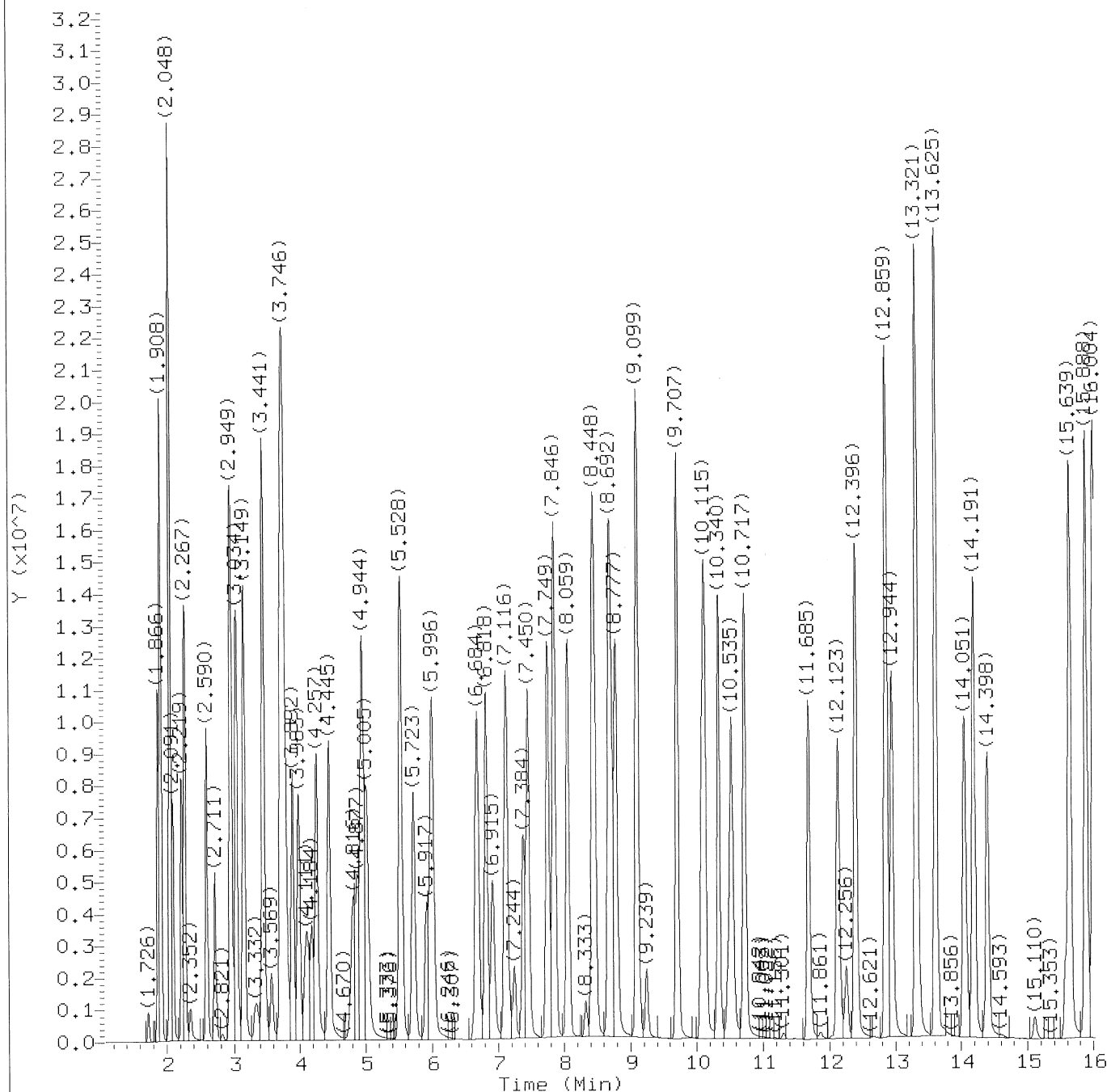
Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 03-SEP-2015 20:54  
 Date, time and analyst ID of latest file update: 04-Sep-2015 00:29 Automation

Sample Name: VSTD025

Lab Sample ID: VSTD025

Compound Number : 13  
 Compound Name : Pentane  
 Scan Number : 339  
 Retention Time (minutes): 3.143  
 Quant Ion : 43.00  
 Area : 2756253  
 Concentration (ppb(v)) : 8.6402  
 Integration start scan : 325  
 Y at integration start : 953  
 Integration stop scan: 338  
 Y at integration end: 953

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 Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:46  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

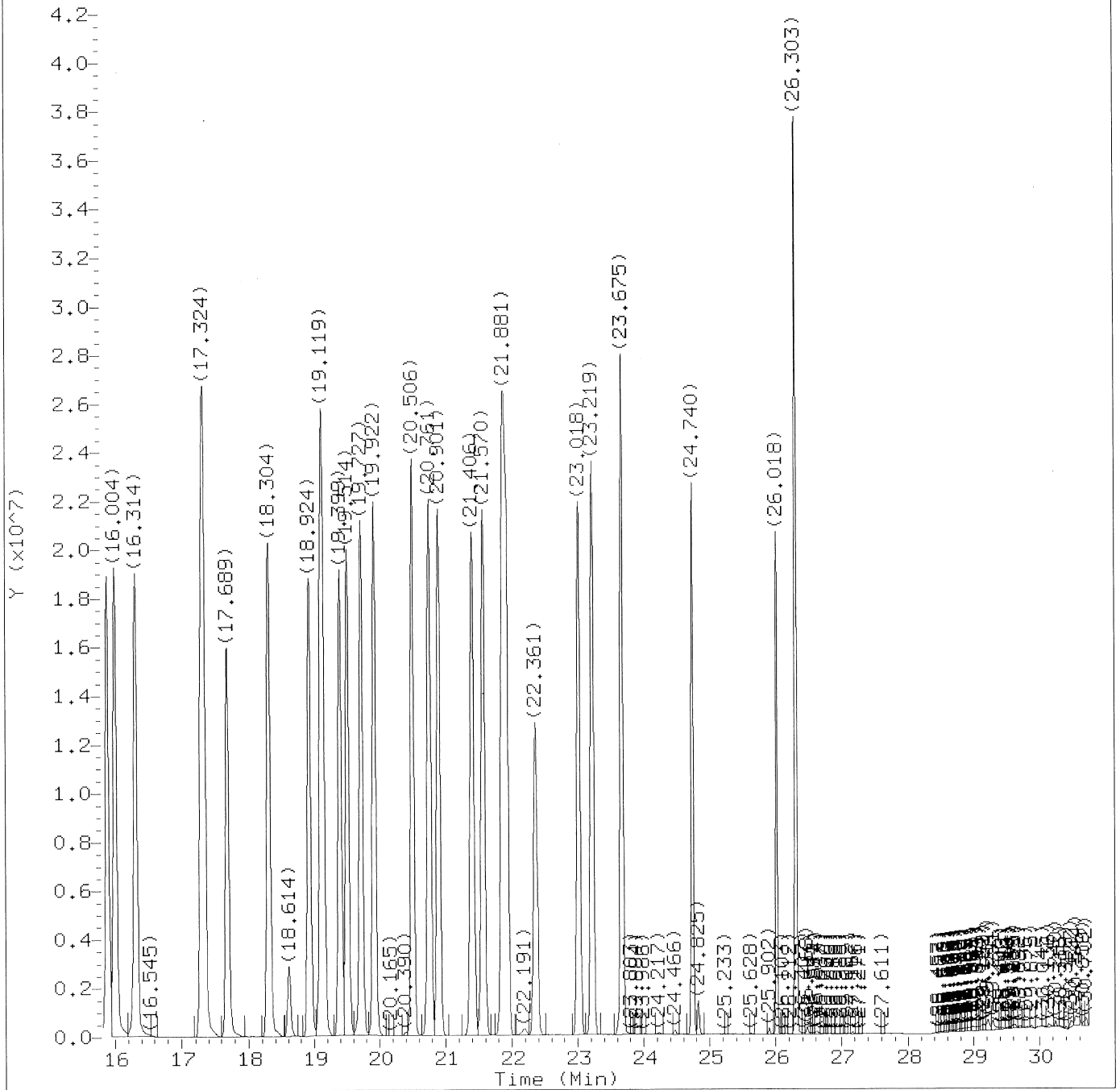
Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

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on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:46  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:46.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
 Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.866	41	6497518	40.531
2) Dichlorodifluoromethane	(1)	1.908	85	11402325	27.281
3) Chlorodifluoromethane	(1)	1.920	51	9817978	29.480
4) Freon 114	(1)	2.048	85	11782880	30.855
5) Chloromethane	(1)	2.091	52	3603037	49.619
6) Vinyl Chloride	(1)	2.219	62	8591017	43.671
7) 1,3-Butadiene	(1)	2.267	54	7386311	44.680
8) Bromomethane	(1)	2.590	94	7169624	48.520
9) Chloroethane	(1)	2.711	64	5611397	46.815
10) Bromoethene	(1)	2.936	106	7781989	62.918
11) Dichlorofluoromethane	(1)	2.955	67	14319844	33.648
12) Trichlorofluoromethane	(1)	3.034	101	13897266	33.571
13) Pentane	(1)	3.149	43	12796430	32.722
14) Ethanol	(1)	3.320	45	2566724	29.570
15) Freon123a	(1)	3.441	67	14823171	42.495
16) Acrolein	(1)	3.569	56	2625971	63.142
17) 1,1-Dichloroethene	(1)	3.709	61	12540301	40.991
18) Freon 113	(1)	3.752	103	10296367	52.332
19) Acetone	(1)	3.800	43	8476470	58.365
20) Methyl Iodide	(1)	3.892	142	12838514	50.805
21) Carbon Disulfide	(1)	3.989	76	16966689	31.707
22) Isopropanol	(1)	4.111	45	11423656	47.326
23) Acetonitrile	(1)	4.190	40	2963003	67.424
24) 3-Chloropropene	(1)	4.263	76	4786626	58.696
25) Methylene Chloride	(1)	4.445	84	7272912	51.811
26) tert-Butyl Alcohol	(1)	4.816	59	14003222	59.181
27) Acrylonitrile	(1)	4.883	53	6914557	63.687
28) trans-1,2-Dichloroethene	(1)	4.944	61	12199253	35.983
29) Methyl t-Butyl Ether	(1)	5.011	73	16066337	72.142
30) Hexane	(1)	5.528	57	13288847	56.148
31) 1,1-Dichloroethane	(1)	5.723	63	13644307	47.624
32) Vinyl Acetate	(1)	5.917	86	1100976	90.479
33) Di-Isopropyl Ether	(1)	5.996	45	19240640	72.282
36) 1,2-Dichloroethene (total)	(1)		61	23502139	87.151
34) Ethyl Tert-Butyl Ether	(1)	6.684	59	16689749	86.335
35) cis-1,2-Dichloroethene	(1)	6.812	61	11302886	51.167
37) 2-Butanone	(1)	6.915	72	2990053	83.531
38) Ethyl Acetate	(1)	7.110	70	2135274	114.650

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
 Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
39) Methyl Acrylate	(1)	7.128	55	12435476	88.241
40) *Bromochloromethane	(1)	7.244	130	858079	10.000
41) Tetrahydrofuran	(1)	7.384	42	8320682	79.868
42) Chloroform	(1)	7.450	83	13312283	49.110
43) 1,1,1-Trichloroethane	(1)	7.749	97	13046399	54.867
44) Cyclohexane	(1)	7.846	56	13980075	54.271
45) Carbon Tetrachloride	(1)	8.059	117	12592248	53.714
46) Benzene	(2)	8.442	78	18638439	56.530
47) 1,2-Dichloroethane	(2)	8.473	62	10174009	55.666
48) Isooctane	(2)	8.692	57	27710847	47.812
49) Tert-Amyl Methyl Ether	(2)	8.777	73	15410931	100.971
50) Heptane	(2)	9.099	43	13643259	52.707
51) *1,4-Difluorobenzene	(2)	9.239	114	2321519	10.000
52) Trichloroethene	(2)	9.707	130	8771353	64.729
53) Ethyl Acrylate	(2)	10.079	55	14401822	91.852
54) 1,2-Dichloropropane	(2)	10.121	63	10033548	74.581
55) Dibromomethane	(2)	10.340	174	7084829	81.893
56) 1,4-Dioxane	(2)	10.492	88	3957897	87.127
57) Methyl Methacrylate	(2)	10.535	69	7628700	100.986
58) Bromodichloromethane	(2)	10.717	83	14692403	56.829
59) cis-1,3-Dichloropropene	(2)	11.685	75	11238324	75.194
60) 4-Methyl-2-Pentanone	(2)	12.123	43	13902139	65.788
61) Toluene	(3)	12.402	91	18632590	66.856
64) 1,3-Dichloropropene (total)	(3)		75	23107560	146.979
62) Octane	(3)	12.859	43	16128076	52.392
63) trans-1,3-Dichloropropene	(3)	12.944	75	11869236	71.785
65) Ethyl Methacrylate	(3)	13.315	69	12179623	92.463
66) 1,1,2-Trichloroethane	(3)	13.327	97	9668962	83.703
67) Tetrachloroethene	(3)	13.625	166	12131749	87.324
68) 2-Hexanone	(3)	14.051	43	14245872	57.774
69) Dibromochloromethane	(3)	14.191	127	11378693	73.982
70) 1,2-Dibromoethane	(3)	14.398	107	11940539	71.748
71) *Chlorobenzene-d5	(3)	15.572	117	2438373	10.000
72) Chlorobenzene	(3)	15.645	112	16545731	74.604
73) 1,1,1,2-Tetrachloroethane	(3)	15.888	131	9861816	93.603
74) Ethylbenzene	(3)	16.004	91	21877327M	73.904
75) m/p-Xylene	(3)	16.320	91	19262685	81.358
77) Xylene (total)	(3)		91	40879419	167.730

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

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 on 09/08/2015 at 14:46.  
 Target 3.5 esignature user ID: jeb07445



Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
 Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:46  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:46 jeb07445

Sublist used: all

Sample Name: VSTD070

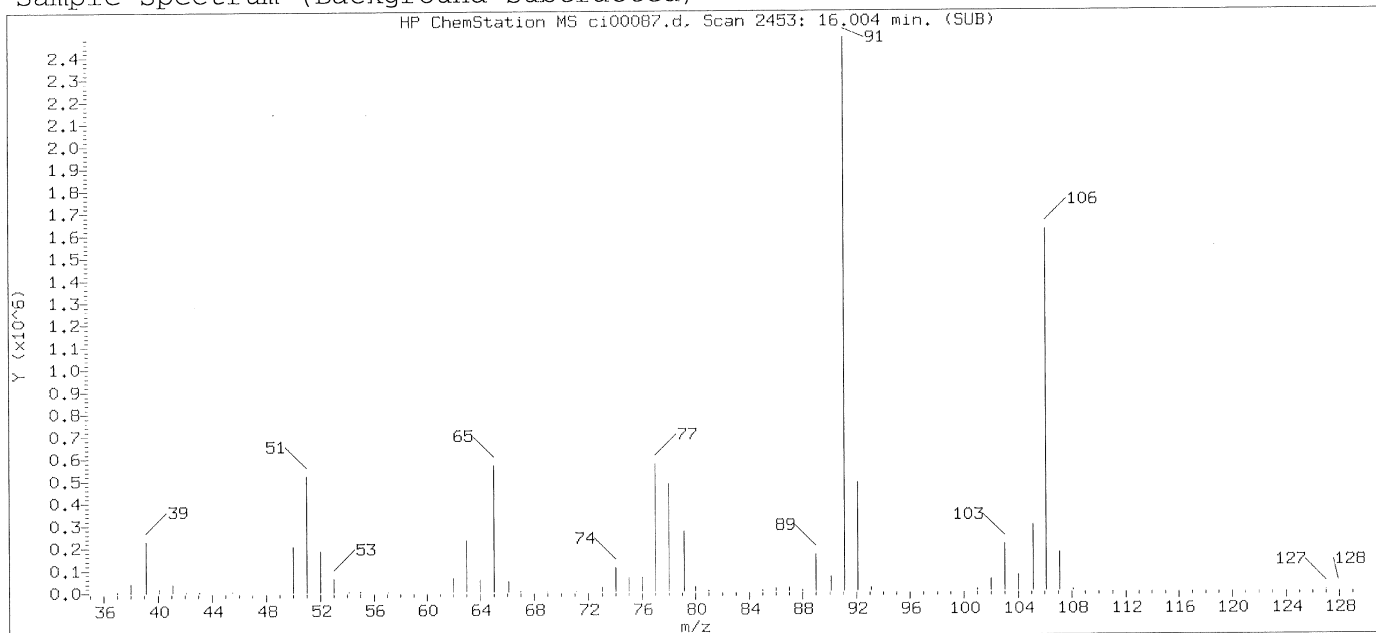
Lab Sample ID: VSTD070

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
76) o-Xylene	(3)	17.294	91	21616734	86.372
78) Styrene	(3)	17.336	104	18129727	95.989
79) Bromoform	(3)	17.689	173	12907858	95.494
80) Cumene	(3)	18.304	105	22684300	84.481
81) Bromobenzene	(3)	18.924	156	10490578	105.452
82) 1,1,2,2-Tetrachloroethane	(3)	19.101	83	18488844	71.533
83) 1,2,3-Trichloropropane	(3)	19.137	110	5709526	97.542
84) n-Propylbenzene	(3)	19.399	120	9972556	128.534
85) 2-Chlorotoluene	(3)	19.514	126	8992943	110.648
86) 4-Ethyltoluene	(3)	19.727	105	22368976	76.480
87) 1,3,5-Trimethylbenzene	(3)	19.922	105	20545845	83.259
88) Alpha Methyl Styrene	(3)	20.506	118	13903009	116.897
89) tert-Butylbenzene	(3)	20.761	119	20351224	97.813
90) 1,2,4-Trimethylbenzene	(3)	20.901	105	20642799	78.936
91) sec-Butylbenzene	(3)	21.406	105	25982637	74.987
92) 1,3-Dichlorobenzene	(3)	21.570	146	17169309	93.074
93) 1,4-Dichlorobenzene	(3)	21.862	146	17897892	95.190
94) p-Isopropyltoluene	(3)	21.923	119	24298501	88.542
95) Benzyl Chloride	(3)	22.361	91	20265669	73.574
96) 1,2-Dichlorobenzene	(3)	23.018	146	15540374	90.687
97) n-Butylbenzene	(3)	23.219	91	20804662	64.314
98) Hexachloroethane	(3)	23.669	117	10787374	104.341
99) 1,2-Dibromo-3-chloropropane	(3)	24.740	157	8063863	96.767
100) 1,2,4-Trichlorobenzene	(3)	26.018	180	5247763	54.245
101) Hexachlorobutadiene	(3)	26.297	225	5734042	64.027
102) Naphthalene	(3)	26.310	128	9774181	38.441

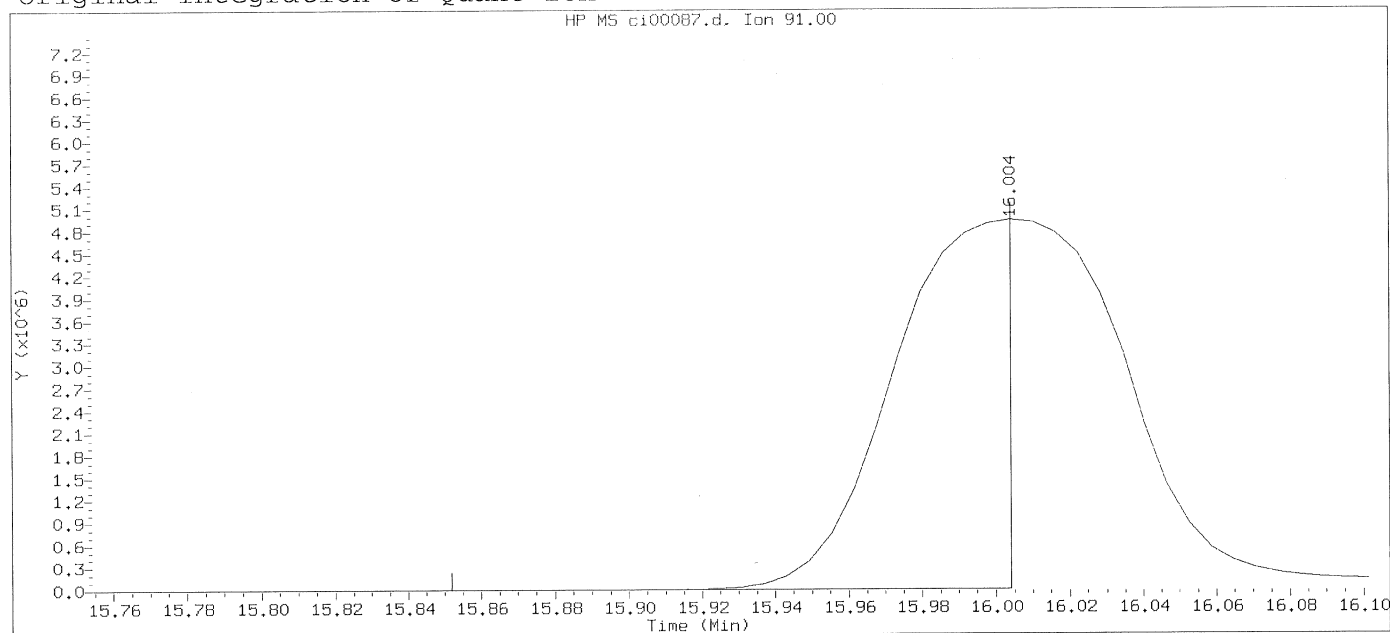
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 Target 3.5 esignature user ID: jeb07445



Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00087.d  
 Injection date and time: 04-SEP-2015 00:34

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

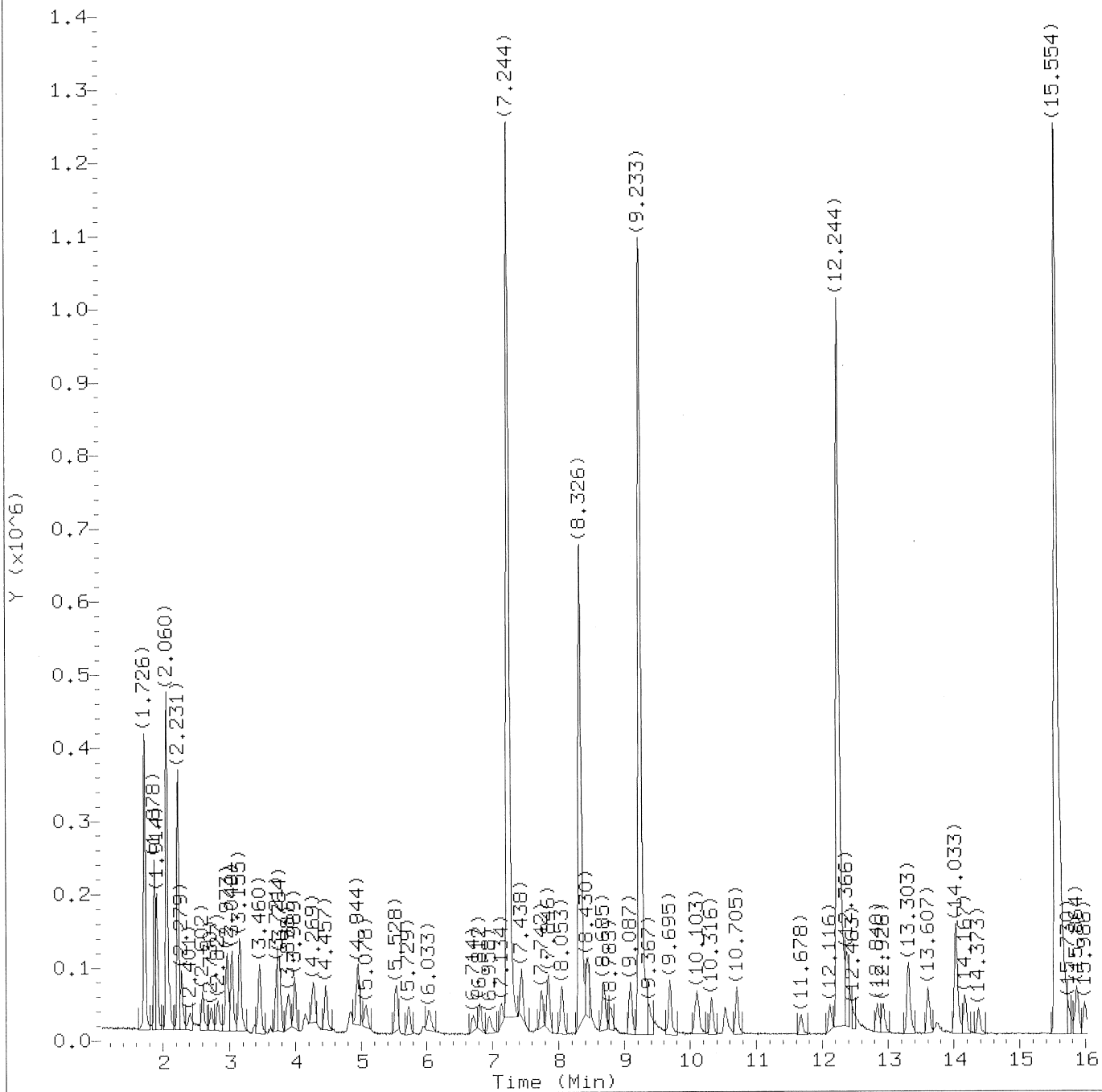
Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 03-SEP-2015 20:54  
 Date, time and analyst ID of latest file update: 04-Sep-2015 01:13 Automation

Sample Name: VSTD070

Lab Sample ID: VSTD070

Compound Number : 74  
 Compound Name : Ethylbenzene  
 Scan Number : 2453  
 Retention Time (minutes): 16.004  
 Quant Ion : 91.00  
 Area : 10461640  
 Concentration (ppb(v)) : 38.4608  
 Integration start scan : 2427 Integration stop scan: 2452  
 Y at integration start : 713 Y at integration end: 713

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 Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00093.d  
Injection date and time: 04-SEP-2015 04:56

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:57  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

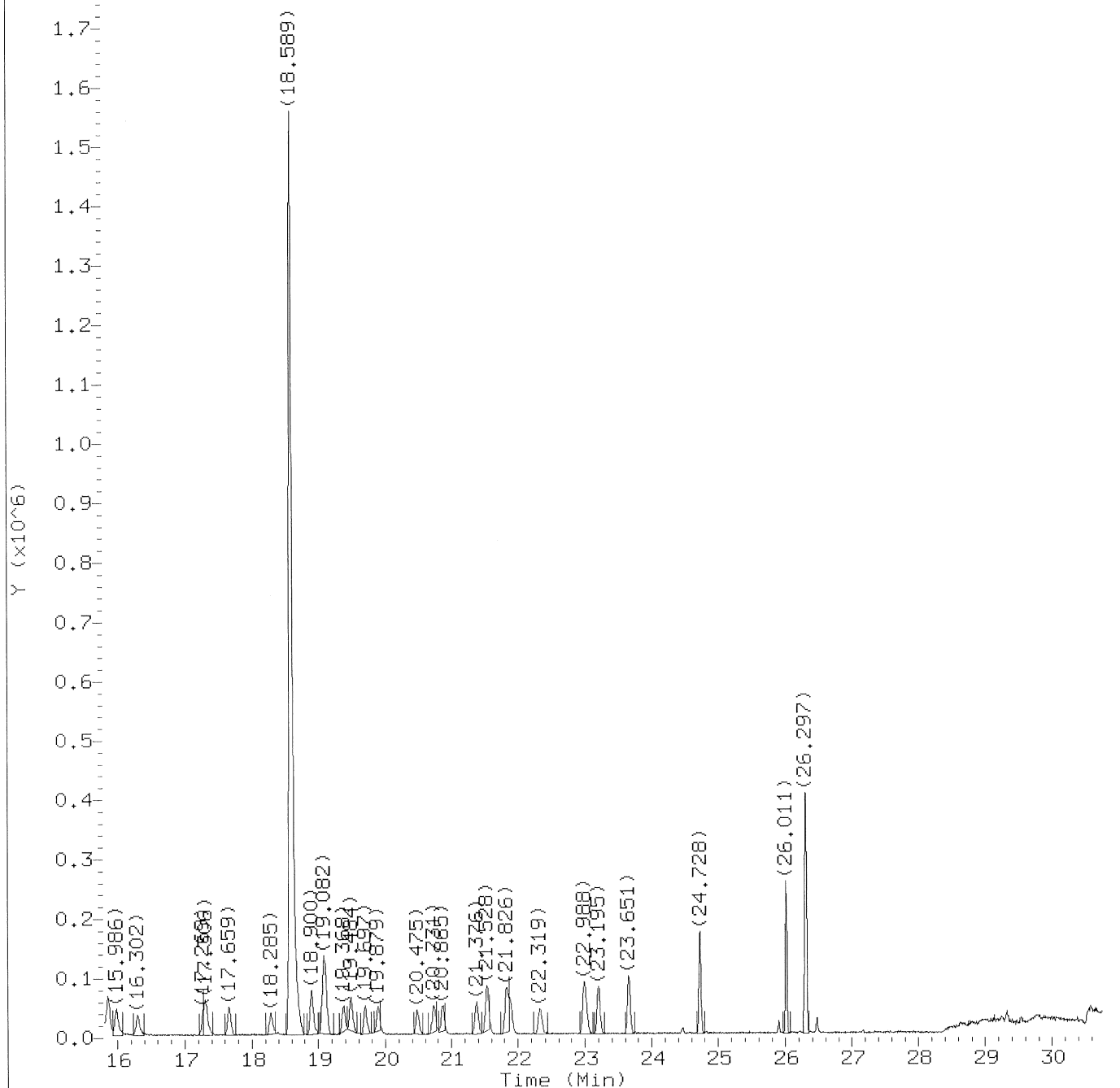
Sublist used: all

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

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on 09/08/2015 at 14:57.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00093.d

Injection date and time: 04-SEP-2015 04:56

Instrument ID: HP09464.i

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m

Sublist used: all

Calibration date and time: 08-SEP-2015 14:57

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Digitally signed by Jacob E. Bailey  
on 09/08/2015 at 14:57.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00093.d  
 Injection date and time: 04-SEP-2015 04:56

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.872	41	51268	0.547
2) Dichlorodifluoromethane	(1)	1.914	85	123282	0.504
3) Chlorodifluoromethane	(1)	1.920	51	101605	0.522
4) Freon 114	(1)	2.054	85	105230	0.471
5) Chloromethane	(1)	2.103	52	21124	0.497
6) Vinyl Chloride	(1)	2.231	62	57829	0.503
7) 1,3-Butadiene	(1)	2.285	54	39234	0.406
8) Bromomethane	(1)	2.602	94	37057	0.429
9) Chloroethane	(1)	2.730	64	29132	0.416
10) Bromoethene	(1)	2.949	106	31610	0.437
11) Dichlorofluoromethane	(1)	2.973	67	123788	0.497
12) Trichlorofluoromethane	(1)	3.040	101	114734	0.474
13) Pentane	(1)	3.155	43	105725	0.462
14) Ethanol	(1)	3.374	45	24842	0.489
15) Freon123a	(1)	3.460	67	98584	0.483
16) Acrolein	(1)	3.630	56	10429	0.429
17) 1,1-Dichloroethene	(1)	3.715	61	83564	0.467
18) Freon 113	(1)	3.764	103	47093	0.409
19) Acetone	(1)	3.873	43	70546	0.830
20) Methyl Iodide	(1)	3.904	142	65577	0.444
21) Carbon Disulfide	(1)	3.989	76	150436	0.481
22) Isopropanol	(1)	4.153	45	68442	0.485
23) Acetonitrile	(1)	4.256	40	38558	1.500
24) 3-Chloropropene	(1)	4.287	76	21238	0.445
25) Methylene Chloride	(1)	4.457	84	42196	0.514
26) tert-Butyl Alcohol	(1)	4.834	59	70835	0.512
27) Acrylonitrile	(1)	4.926	53	39140	0.616
28) trans-1,2-Dichloroethene	(1)	4.956	61	90734	0.458
29) Methyl t-Butyl Ether	(1)	5.072	73	56405	0.433
30) Hexane	(1)	5.540	57	46602	0.337
31) 1,1-Dichloroethane	(1)	5.729	63	78812	0.470
33) Di-Isopropyl Ether	(1)	6.039	45	57312	0.368
36) 1,2-Dichloroethene (total)	(1)		61	140470	0.842
34) Ethyl Tert-Butyl Ether	(1)	6.720	59	39171	0.346
35) cis-1,2-Dichloroethene	(1)	6.812	61	49736	0.385
37) 2-Butanone	(1)	6.952	72	10492	0.501
38) Ethyl Acetate	(1)	7.134	70	4782	0.439
39) Methyl Acrylate	(1)	7.152	55	42086	0.511

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00093.d  
 Injection date and time: 04-SEP-2015 04:56

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
40) *Bromochloromethane	(1)	7.244	130	501901	10.000
41) Tetrahydrofuran	(1)	7.438	42	25201	0.414
42) Chloroform	(1)	7.450	83	73456	0.463
43) 1,1,1-Trichloroethane	(1)	7.742	97	64062	0.461
44) Cyclohexane	(1)	7.852	56	51990	0.345
45) Carbon Tetrachloride	(1)	8.053	117	65322	0.476
46) Benzene	(2)	8.430	78	95671	0.548
47) 1,2-Dichloroethane	(2)	8.466	62	56938	0.588
48) Isooctane	(2)	8.685	57	108616	0.354
49) Tert-Amyl Methyl Ether	(2)	8.783	73	35876	0.444
50) Heptane	(2)	9.093	43	52504	0.383
51) *1,4-Difluorobenzene	(2)	9.233	114	1229272	10.000
52) Trichloroethene	(2)	9.695	130	30997	0.432
53) Ethyl Acrylate	(2)	10.066	55	53268	0.642
54) 1,2-Dichloropropane	(2)	10.115	63	36327	0.510
55) Dibromomethane	(2)	10.322	174	23068	0.504
56) 1,4-Dioxane	(2)	10.523	88	14689	0.611
57) Methyl Methacrylate	(2)	10.523	69	21206	0.530
58) Bromodichloromethane	(2)	10.705	83	77183	0.564
59) cis-1,3-Dichloropropene	(2)	11.678	75	33451	0.423
60) 4-Methyl-2-Pentanone	(2)	12.116	43	67183	0.600
61) Toluene	(3)	12.384	91	74369	0.502
64) 1,3-Dichloropropene (total)	(3)		75	79792	0.950
62) Octane	(3)	12.834	43	39496	0.241
63) trans-1,3-Dichloropropene	(3)	12.932	75	46341	0.527
65) Ethyl Methacrylate	(3)	13.297	69	43246	0.618
66) 1,1,2-Trichloroethane	(3)	13.303	97	33782	0.550
67) Tetrachloroethene	(3)	13.607	166	28016	0.379
68) 2-Hexanone	(3)	14.033	43	235000	1.793
69) Dibromochloromethane	(3)	14.167	127	39142	0.479
70) 1,2-Dibromoethane	(3)	14.373	107	48369	0.547
71) *Chlorobenzene-d5	(3)	15.554	117	1295906	10.000
72) Chlorobenzene	(3)	15.621	112	61435	0.521
73) 1,1,1,2-Tetrachloroethane	(3)	15.876	131	31564	0.564
74) Ethylbenzene	(3)	15.986	91	76451	0.486
75) m/p-Xylene	(3)	16.302	91	55849	0.444
77) Xylene (total)	(3)		91	115059	0.889
76) o-Xylene	(3)	17.269	91	59210	0.445

\* = Compound is an internal standard.

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 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00093.d  
 Injection date and time: 04-SEP-2015 04:56

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

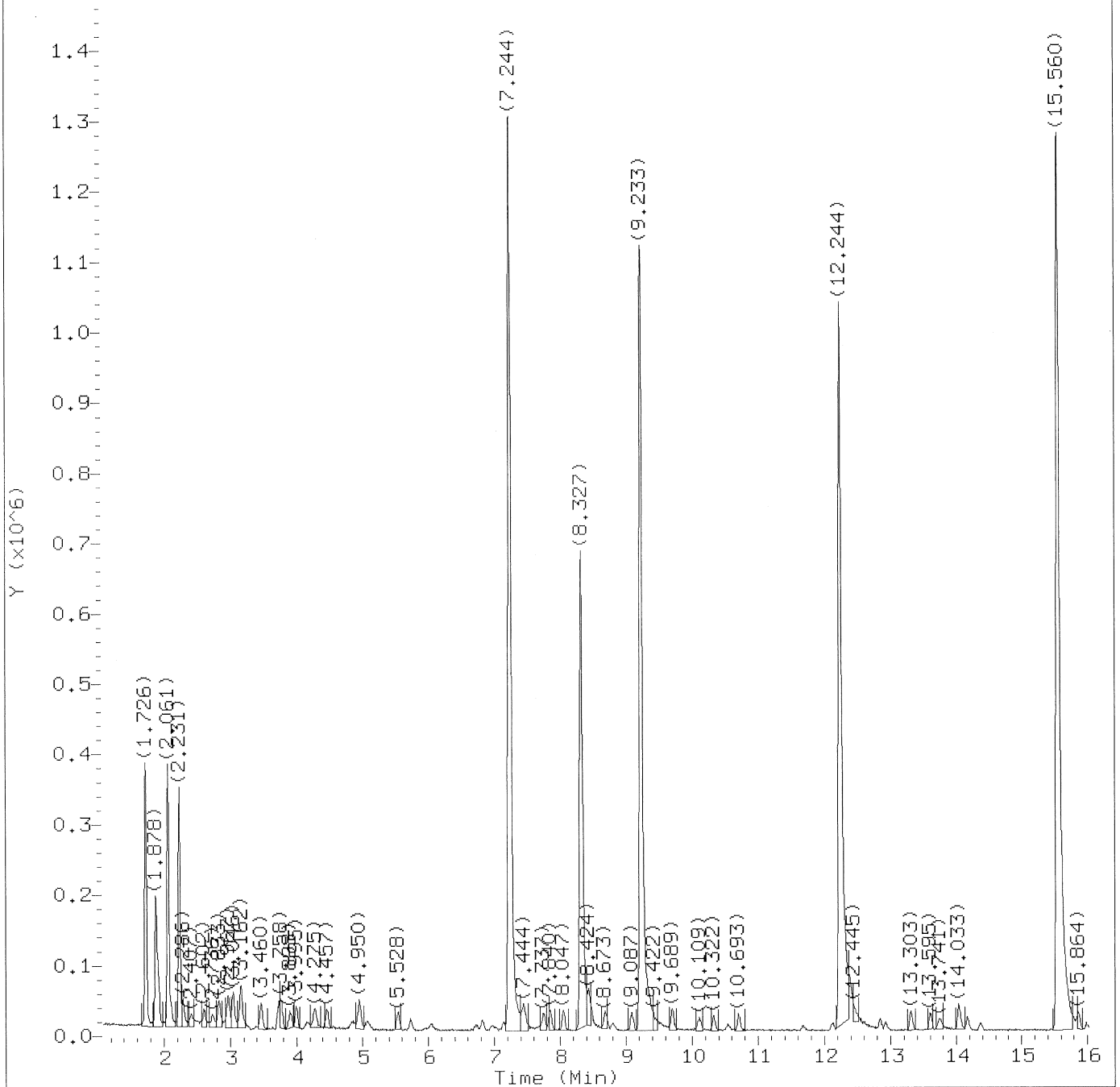
Sample Name: mdlv0.5

Lab Sample ID: mdlv0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
78) Styrene	(3)	17.312	104	45605	0.454
79) Bromoform	(3)	17.659	173	39958	0.556
80) Cumene	(3)	18.279	105	61498	0.431
81) Bromobenzene	(3)	18.900	156	28788	0.544
82) 1,1,2,2-Tetrachloroethane	(3)	19.076	83	103196	0.751
83) 1,2,3-Trichloropropane	(3)	19.107	110	18798	0.604
84) n-Propylbenzene	(3)	19.368	120	15801	0.383
85) 2-Chlorotoluene	(3)	19.484	126	20909	0.484
86) 4-Ethyltoluene	(3)	19.703	105	73184	0.471
87) 1,3,5-Trimethylbenzene	(3)	19.891	105	65316	0.498
88) Alpha Methyl Styrene	(3)	20.475	118	26854	0.425
89) tert-Butylbenzene	(3)	20.743	119	47309	0.428
90) 1,2,4-Trimethylbenzene	(3)	20.859	105	66799	0.481
91) sec-Butylbenzene	(3)	21.376	105	84144	0.457
92) 1,3-Dichlorobenzene	(3)	21.540	146	68408	0.698
93) 1,4-Dichlorobenzene	(3)	21.832	146	66207	0.663
94) p-Isopropyltoluene	(3)	21.893	119	64468	0.442
95) Benzyl Chloride	(3)	22.319	91	80079	0.547
96) 1,2-Dichlorobenzene	(3)	22.994	146	63288	0.695
97) n-Butylbenzene	(3)	23.195	91	95048	0.553
98) Hexachloroethane	(3)	23.657	117	36284	0.660
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	39574	0.894
100) 1,2,4-Trichlorobenzene	(3)	26.011	180	60544	1.178
101) Hexachlorobutadiene	(3)	26.291	225	37832	0.795
102) Naphthalene	(3)	26.309	128	194108	1.436

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 Target 3.5 esignature user ID: jeb07445





Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:57  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

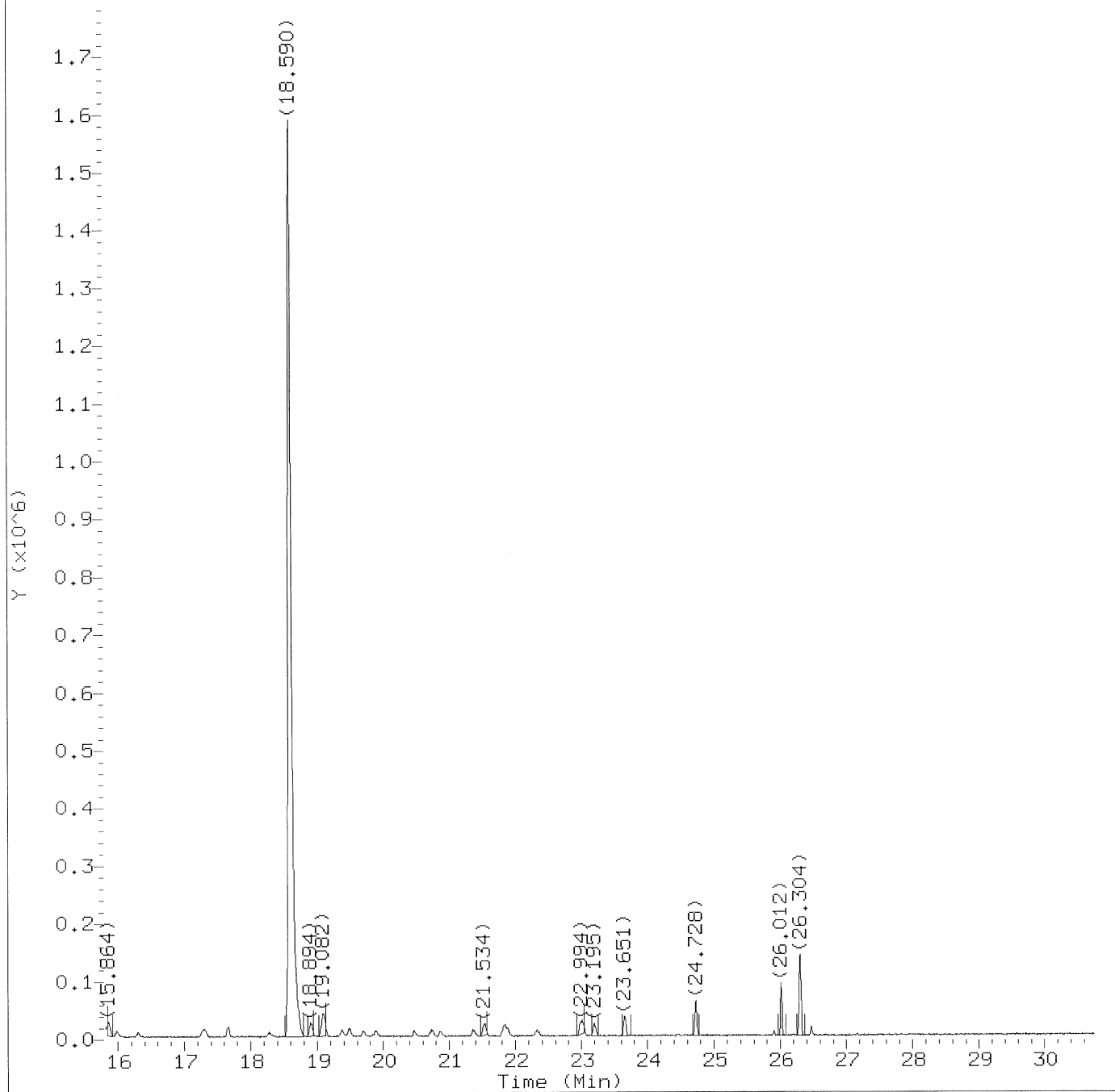
Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

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on 09/08/2015 at 14:57.

Target 3.5 esignature user ID: jeb07445



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00094.d

Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i

Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m

Calibration date and time: 08-SEP-2015 14:57

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

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on 09/08/2015 at 14:57.

Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
 Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
1) Propene	(1)	1.872	41	25195	0.265
2) Dichlorodifluoromethane	(1)	1.908	85	56860	0.229
3) Chlorodifluoromethane	(1)	1.921	51	46242	0.234
4) Freon 114	(1)	2.054	85	46753	0.206
5) Chloromethane	(1)	2.109	52	9422	0.219
6) Vinyl Chloride	(1)	2.231	62	24591	0.211
7) 1,3-Butadiene	(1)	2.292	54	15861	0.162
8) Bromomethane	(1)	2.602	94	15812	0.180
9) Chloroethane	(1)	2.730	64	12701	0.179
10) Bromoethene	(1)	2.949	106	11353	0.155
11) Dichlorofluoromethane	(1)	2.973	67	54483	0.216
12) Trichlorofluoromethane	(1)	3.046	101	49776	0.203
13) Pentane	(1)	3.156	43	44097	0.190
14) Ethanol	(1)	3.387	45	9506	0.185
15) Freon123a	(1)	3.460	67	41257	0.199
16) Acrolein	(1)	3.630	56	2378	0.096
17) 1,1-Dichloroethene	(1)	3.715	61	34782	0.192
18) Freon 113	(1)	3.758	103	20544	0.176
19) Acetone	(1)	3.880	43	27828	0.323
20) Methyl Iodide	(1)	3.904	142	27754	0.185
21) Carbon Disulfide	(1)	3.995	76	67383	0.212
22) Isopropanol	(1)	4.165	45	34705M	0.242
23) Acetonitrile	(1)	4.269	40	13200	0.506
24) 3-Chloropropene	(1)	4.281	76	8859	0.183
25) Methylene Chloride	(1)	4.464	84	19512	0.234
26) tert-Butyl Alcohol	(1)	4.847	59	30437M	0.217
27) Acrylonitrile	(1)	4.938	53	11813	0.183
28) trans-1,2-Dichloroethene	(1)	4.956	61	38307	0.190
29) Methyl t-Butyl Ether	(1)	5.090	73	17286	0.131
30) Hexane	(1)	5.528	57	17828	0.127
31) 1,1-Dichloroethane	(1)	5.729	63	31931	0.188
33) Di-Isopropyl Ether	(1)	6.051	45	15241	0.096
36) 1,2-Dichloroethene (total)	(1)		61	56014	0.325
34) Ethyl Tert-Butyl Ether	(1)	6.714	59	9099M	0.079
35) cis-1,2-Dichloroethene	(1)	6.818	61	17707	0.135
37) 2-Butanone	(1)	6.946	72	1422M	0.067
39) Methyl Acrylate	(1)	7.159	55	8870M	0.106
40) *Bromochloromethane	(1)	7.244	130	509237	10.000

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

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 on 09/08/2015 at 14:57.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
 Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57  
 Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
41) Tetrahydrofuran	(1)	7.438	42	6818	0.110
42) Chloroform	(1)	7.444	83	30689	0.191
43) 1,1,1-Trichloroethane	(1)	7.743	97	26525	0.188
44) Cyclohexane	(1)	7.840	56	17187	0.112
45) Carbon Tetrachloride	(1)	8.053	117	27437	0.197
46) Benzene	(2)	8.436	78	31846M	0.183
47) 1,2-Dichloroethane	(2)	8.467	62	20065M	0.208
48) Isooctane	(2)	8.686	57	37242M	0.122
49) Tert-Amyl Methyl Ether	(2)	8.795	73	9266	0.115
50) Heptane	(2)	9.093	43	16164	0.118
51) *1,4-Difluorobenzene	(2)	9.239	114	1227682	10.000
52) Trichloroethene	(2)	9.695	130	13816	0.193
53) Ethyl Acrylate	(2)	10.091	55	16002M	0.193
54) 1,2-Dichloropropane	(2)	10.115	63	12414M	0.174
55) Dibromomethane	(2)	10.328	174	9509	0.208
57) Methyl Methacrylate	(2)	10.541	69	4127M	0.103
56) 1,4-Dioxane	(2)	10.565	88	1217M	0.051
58) Bromodichloromethane	(2)	10.693	83	27399	0.200
59) cis-1,3-Dichloropropene	(2)	11.679	75	10008	0.127
60) 4-Methyl-2-Pentanone	(2)	12.111	43	19901	0.178
61) Toluene	(3)	12.384	91	27035M	0.180
64) 1,3-Dichloropropene (total)	(3)		75	23162	0.274
62) Octane	(3)	12.841	43	11198M	0.068
63) trans-1,3-Dichloropropene	(3)	12.926	75	13154	0.148
65) Ethyl Methacrylate	(3)	13.303	69	11146	0.157
66) 1,1,2-Trichloroethane	(3)	13.309	97	11043	0.177
67) Tetrachloroethene	(3)	13.601	166	12029	0.161
68) 2-Hexanone	(3)	14.033	43	61894	0.466
69) Dibromochloromethane	(3)	14.161	127	14367	0.173
70) 1,2-Dibromoethane	(3)	14.374	107	16397	0.183
71) *Chlorobenzene-d5	(3)	15.560	117	1313768	10.000
72) Chlorobenzene	(3)	15.621	112	24124	0.202
73) 1,1,1,2-Tetrachloroethane	(3)	15.858	131	9279	0.163
74) Ethylbenzene	(3)	15.986	91	20882M	0.131
75) m/p-Xylene	(3)	16.308	91	14825	0.116
77) Xylene (total)	(3)		91	29776	0.227
76) o-Xylene	(3)	17.276	91	14951	0.111
78) Styrene	(3)	17.318	104	10372M	0.102

M = Compound was manually integrated.  
 \* = Compound is an internal standard.

Digitally signed by Jacob E. Bailey  
 on 09/08/2015 at 14:57.  
 Target 3.5 esignature user ID: jeb07445

Quant Report

Target Revision 3.5

Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
 Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
 Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
 Calibration date and time: 08-SEP-2015 14:57

Sublist used: all

Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sample Name: mdlv0.2

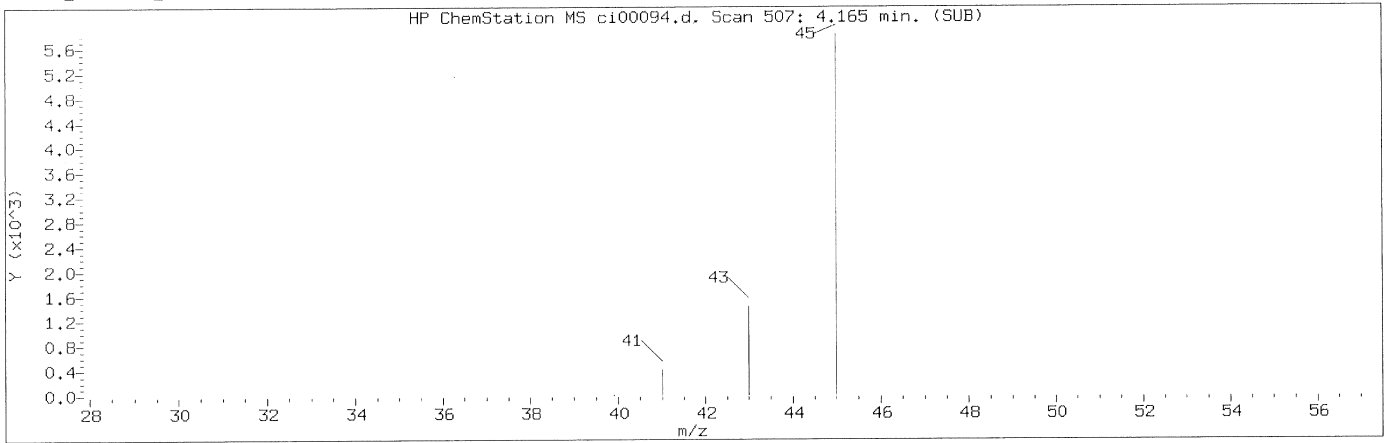
Lab Sample ID: mdlv0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Concentration (ppb(v))
79) Bromoform	(3)	17.653	173	12866	0.177
80) Cumene	(3)	18.298	105	15799M	0.109
81) Bromobenzene	(3)	18.888	156	9885	0.184
82) 1,1,2,2-Tetrachloroethane	(3)	19.070	83	34948	0.251
83) 1,2,3-Trichloropropane	(3)	19.113	110	6485	0.206
84) n-Propylbenzene	(3)	19.368	120	3339M	0.080
85) 2-Chlorotoluene	(3)	19.484	126	4975	0.114
86) 4-Ethyltoluene	(3)	19.691	105	19392	0.123
87) 1,3,5-Trimethylbenzene	(3)	19.892	105	17458	0.131
88) Alpha Methyl Styrene	(3)	20.463	118	6552	0.102
89) tert-Butylbenzene	(3)	20.743	119	12822	0.114
90) 1,2,4-Trimethylbenzene	(3)	20.871	105	16908	0.120
91) sec-Butylbenzene	(3)	21.382	105	22784	0.122
92) 1,3-Dichlorobenzene	(3)	21.534	146	19917	0.200
93) 1,4-Dichlorobenzene	(3)	21.832	146	19850	0.196
94) p-Isopropyltoluene	(3)	21.881	119	16833	0.114
95) Benzyl Chloride	(3)	22.325	91	24173	0.163
96) 1,2-Dichlorobenzene	(3)	22.982	146	20215	0.219
97) n-Butylbenzene	(3)	23.195	91	28861	0.166
98) Hexachloroethane	(3)	23.651	117	12285	0.221
99) 1,2-Dibromo-3-chloropropane	(3)	24.728	157	13612	0.303
100) 1,2,4-Trichlorobenzene	(3)	26.012	180	22936	0.440
101) Hexachlorobutadiene	(3)	26.291	225	14596	0.302
102) Naphthalene	(3)	26.310	128	66246	0.484

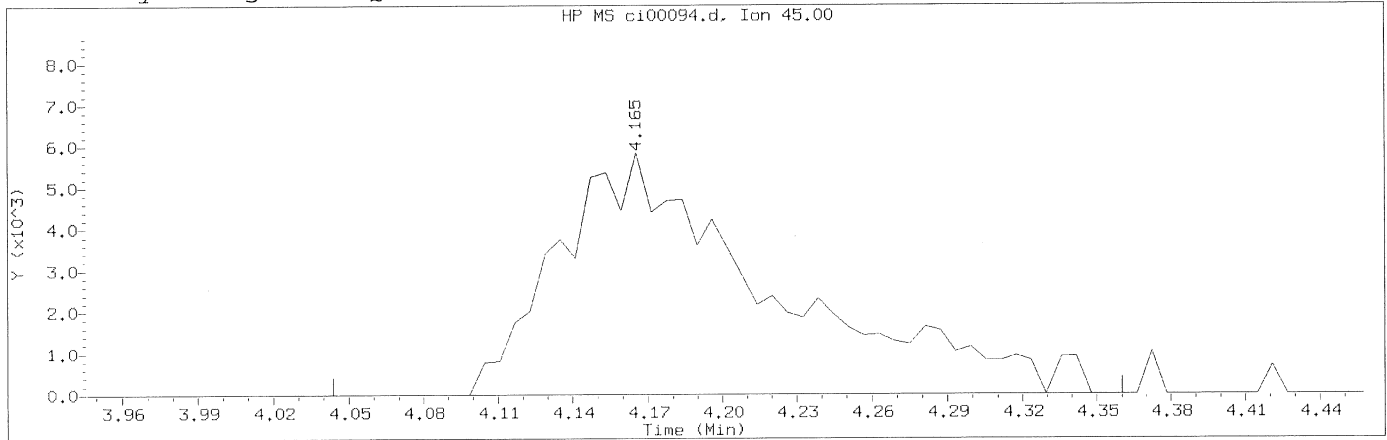
M = Compound was manually integrated.

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 on 09/08/2015 at 14:57.  
 Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:57  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

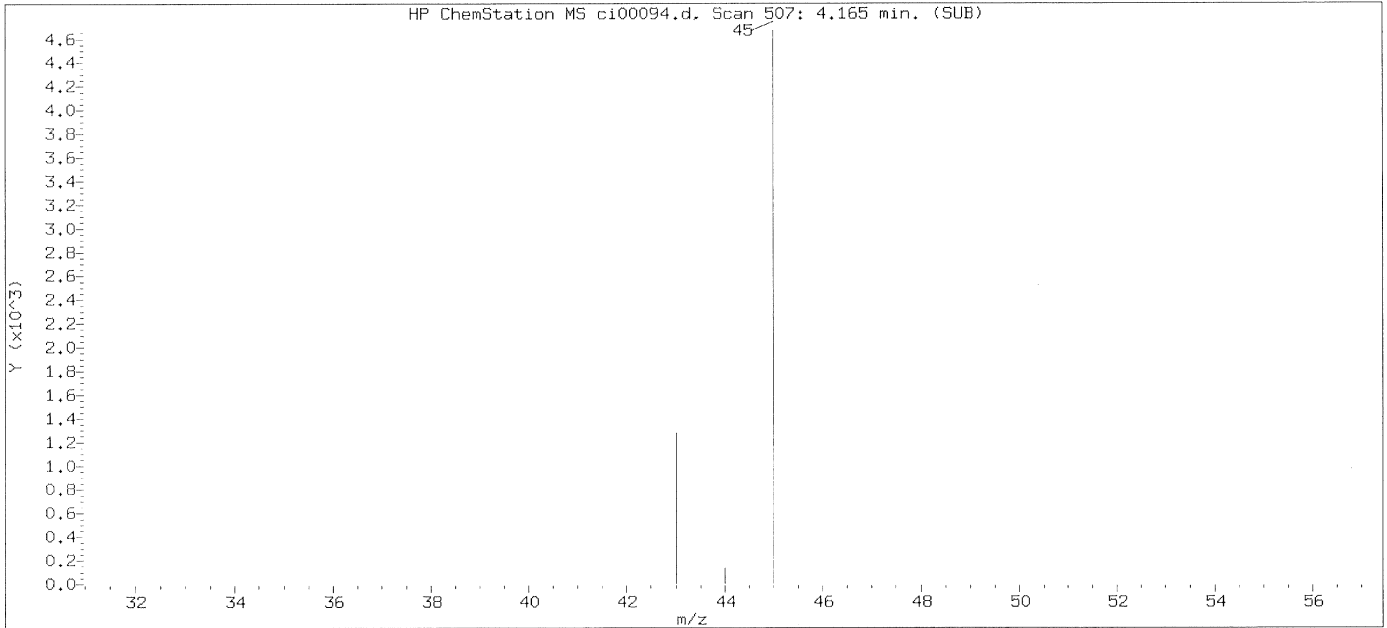
Compound Number : 22  
Compound Name : Isopropanol  
Scan Number : 507  
Retention Time (minutes): 4.165  
Quant Ion : 45.00  
Area (flag) : 34705M  
Concentration (ppb(v)) : 0.2423  
Integration start scan : 486      Integration stop scan: 538  
Y at integration start : 0      Y at integration end: 0

Reason for manual integration: improper integration

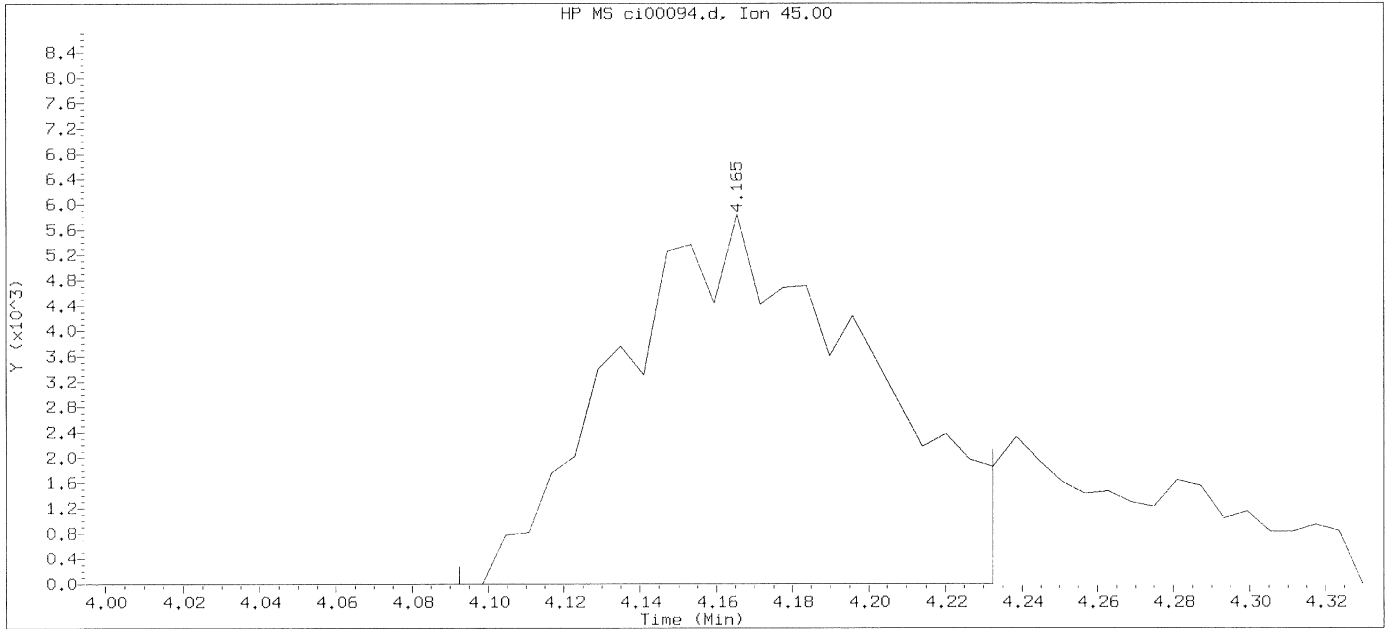
Digitally signed by Jacob E. Bailey  
Analyst responsible for change: on 09/08/2015 at 14:57.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: mp/1758 9/8/15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 03-SEP-2015 20:54  
Date, time and analyst ID of latest file update: 04-Sep-2015 06:17 Automation

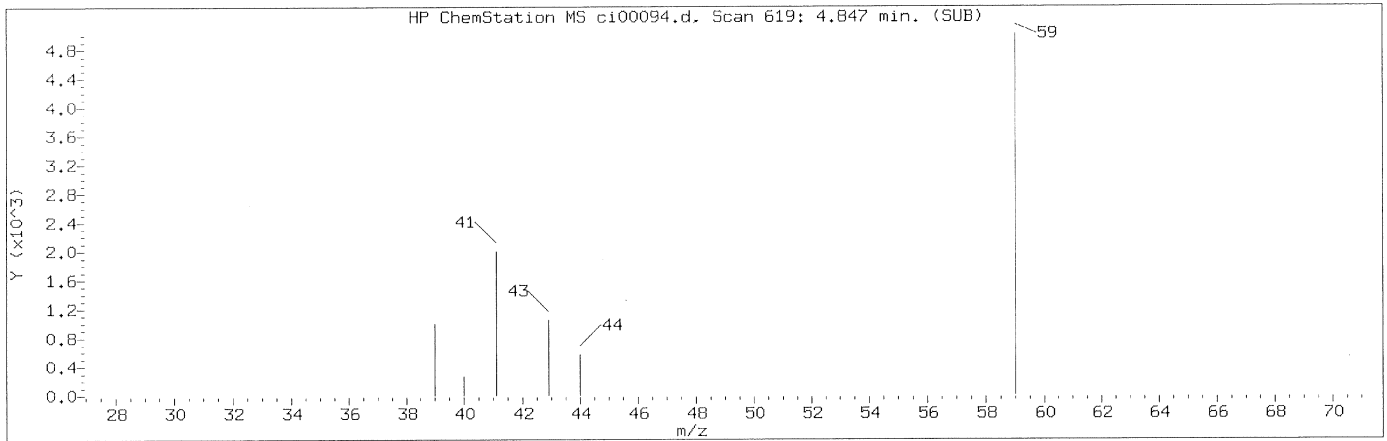
Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

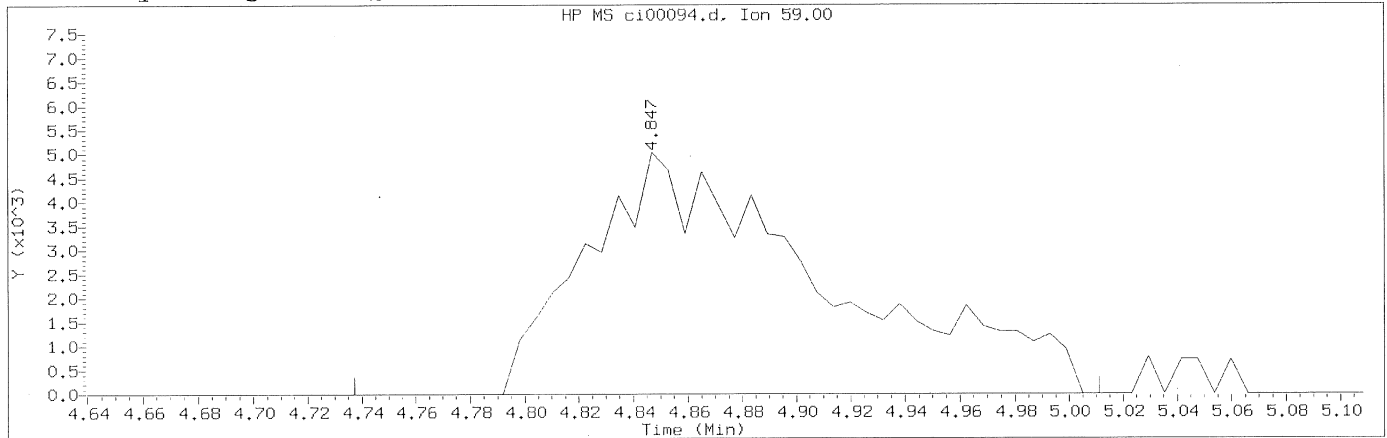
Compound Number : 22  
Compound Name : Isopropanol  
Scan Number : 507  
Retention Time (minutes): 4.165  
Quant Ion : 45.00  
Area : 26368  
Concentration (ppb(v)) : 0.1721  
Integration start scan : 494 Integration stop scan: 517  
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jacob E. Bailey on 09/08/2015 at 14:57.  
Target 3.5 esignature user ID: jeb07445

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP09464.i/15sep03.b/ci00094.d  
Injection date and time: 04-SEP-2015 05:38

Instrument ID: HP09464.i  
Analyst ID: jeb07445

Method used: /chem/HP09464.i/15sep03.b/to-15.m  
Calibration date and time: 08-SEP-2015 14:57  
Date, time and analyst ID of latest file update: 08-Sep-2015 14:57 jeb07445

Sublist used: all

Sample Name: mdlv0.2

Lab Sample ID: mdlv0.2

Compound Number : 26  
Compound Name : tert-Butyl Alcohol  
Scan Number : 619  
Retention Time (minutes): 4.847  
Quant Ion : 59.00  
Area (flag) : 30437M  
Concentration (ppb(v)) : 0.2168  
Integration start scan : 600 Integration stop scan: 645  
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

Digitally signed by Jacob E. Bailey  
Analyst responsible for change: on 09/08/2015 at 14:57.  
Target 3.5 esignature user ID: jeb07445

GC/MS audit/management approval: MP1758 9/8/15